MDOT EXCELLERATOR

Performance Management System

Quarterly Report
October 2016

Final

Maryland Department of Transportation

State of Maryland

A Message From the Governor

"Our administration is committed to developing innovative solutions that deliver what Marylanders want – an affordable and reliable transportation system. By implementing a comprehensive program of accountability and continual improvements, we will deliver a better transportation system for the citizens of Maryland."

"This is another step our administration is taking to Change Maryland for the Better!"

– **Larry Hogan**, *Governor*

CHANGING
Maryland
for the Better

The Maryland Department of Transportation and its
Transportation Business Units proudly present the official mission statement.

Maryland Department of Transportation

"The Maryland Department of Transportation is a customer-driven leader that delivers safe, sustainable, intelligent, and exceptional transportation solutions in order to connect our customers to life's opportunities."

A Message From the Secretary

My Fellow Marylanders,

Pete K. Rahn
Secretary

I am pleased to present the Maryland Department of Transportation (MDOT) Excellerator Performance Management System. I have been a longtime proponent of performance measures as a critical ingredient which drives organizations to exceptional standards to meet the transportation demands of our customers. At MDOT, we have embarked on a dedicated journey of creating performance measures that are important to all who live in and travel throughout the State of Maryland.

MDOT, and its Transportation Business Units (TBUs), created a single focused Mission Statement, which is the guiding light for all of our transportation products and services. We are wholeheartedly committed to being driven by the needs of our customers and to exceed their expectations. Whether our customers fly out of the Baltimore/Washington International Thurgood Marshall Airport, take a cruise out of the Port of Baltimore, ride one of our buses or rail lines, register their vehicles, or travel our highways and bridges, we all stand together as MDOT.

Our Excellerator program is comprised of 10 tangible results. Those results, which are critical components for the organization and will drive our daily business decisions. How we achieve those results will be an organization-wide process of developing measures and strategies to achieve the optimum level of performance. The public we serve is able to see the results of our performance every quarter. This program is a living, evolving performance process that is in a constant state of evaluation, analysis and action. Some quarters may be better than others, but with the appropriate measures in place, we will have a constant finger on the pulse of the products and services we deliver to the citizens of Maryland. Whether we are being a good neighbor or facilitating economic opportunities within our State, we, MDOT, are working together every day to improve our performance and strive to reach exceptional customer service.

We thank you for this opportunity to share our initiative and are excited to embark upon a program of constant progress towards outstanding results.

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Tangible Results		Frequency	Driver
Tangible Result # 1: Provide Exceptional Customer Service			**Leslie Dews, MVA**
1.1	Percent of Overall Customer Satisfaction	Annually (April)	Sean Adgerson, MTA
1.2	Responsiveness to MDOT Customer Correspondence		Patrick Corcoran, MAA
	1.2a - Average Number of Days for Correspondence in the MDOT IQ System	Quarterly	Patrick Corcoran, MAA
	1.2b - Percent of First Contact Resolution	Quarterly	Rick Powers, MPA
1.3	Customer Satisfaction with Receiving Goods and Services		Darol Smith, MDTA
	1.3a - Percent of Abandoned Calls at Call Centers	Quarterly	Darol Smith, MDTA
	1.3b - Average Call Wait Times at Call Centers	Quarterly	Darol Smith, MDTA
	1.3c - Level of Satisfaction with Resolving Call Inquiries at Call Centers	Quarterly	Darol Smith, MDTA
1.4	Customer Satisfaction with Interactions with MDOT Representatives	Annually (April)	Sabrina Bass, TSO
1.5	Customer Satisfaction with Website Information and Navigation of the MDOT Websites		Mark Crampton, SHA
	1.5a - Percent of Customer Who Felt MDOT Websites Met Their Needs	Annually (April)	Mark Crampton, SHA
	1.5b - Percent of Customers Who Felt that it was Easy to Find Desired Information on MDOT Websites	Annually (April)	Mark Crampton, SHA
Tangible Result # 2: Use Resources Wisely			**Corey Stottlemyer, TSO**
2.1	Percent Capital Dollars Spent as Programmed	Quarterly	Dan Favarulo, TSO
2.2	Percent of Projects Leveraging Other Funding Sources	Annually (April)	Dan Favarulo, TSO
2.3	Employee Engagement	Annually (Jan.)	Amber Harvey, MDTA
2.4	Employee Turnover Rate	Quarterly	Amber Harvey, MDTA
2.5	Time to Fill Vacancies	Quarterly	Debbie Hammel, SHA
2.6	Percentage of Fixed Asset Units Identified or Accounted for During the Annual Physical Inventory of Fixed Assets	Annually (Oct.)	Bill Bertrand, SHA
2.7	Managing Capital Assets		Tony Moore, MPA
	2.7a - MDOT Structurally Deficient Bridges	Annually (Jan.)	Tony Moore, MPA
	2.7b - Percent of SHA and MDTA Roadway Miles with Acceptable (Smooth) Rides	Annually (April)	Nicole Katsikides, SHA
	2.7c - Rating of Rail in “Good” Condition	Annually (April)	Tony Moore, MPA
	2.7d - Percent of Bay Channel Inspected	Annually (April)	Tony Moore, MPA
	2.7e - Percent of Interstate Pavement in "Acceptable" Condition	Annually (July)	Nicole Katsikides, SHA
	2.7f - Percent of Non-Interstate NHS Pavement in "Acceptable" Condition	Annually (July)	Nicole Katsikides, SHA
2.8	Percent of Procurements on Time and on Budget	Annually (Oct.)	Pretam Harry, MVA
2.9	Percent and Value of Unanticipated Contract Modifications	Annually (Oct.)	Pretam Harry, MVA
2.10	Relationship Between Procurement Competition and Cost	Quarterly	Laura Getty, MTA

2.11	Number of Internal Audit Findings and Number of Repeat Internal Audit Findings	Annually (Oct.)	Patrick Bradley, MAA
2.12	Number of Legislative Repeat Audit Findings	Annually (Jan.)	Patrick Bradley, MAA
Tangible Result # 3: Provide a Safe and Secure Transportation Infrastructure			**Sarah Clifford, MDTA**
3.1	Number of Crimes Against Persons and Property Committed at MDOT Facilities	Quarterly	Bud Frank, TSO
3.2	Number of Traffic-Related Fatalities on All Roads	Quarterly	Thomas Gianni, MVA
3.3	Maryland Traffic-Related Fatality Rate (Highways)	Annually (Jan.)	Thomas Gianni, MVA
3.4	Number of Traffic-Related Serious Injuries on All Roads	Quarterly	Thomas Gianni, MVA
3.5	Maryland Traffic-Related Serious Injury Rate (Highways)	Annually (Jan.)	Thomas Gianni, MVA
3.6	Maryland Seat Belt Usage Rate	Annually (Jan.)	Gina Watson, MPA
3.7	Disabled Motorist Assisted by MDOT	Quarterly	Cedric Ward, SHA
3.8	Number of Employee Injuries Reported (First Report of Injury)	Quarterly	Cedric Johnson, MAA
3.9	Number of Employee Lost Work Days Due to Injuries	Quarterly	Cedric Johnson, MAA
3.10	Number of Customer Incidents on MDOT Facilities	Quarterly	Phil Thomas, MTA
Tangible Result # 4: Deliver Transportation Solutions and Services of Great Value			**Jason Ridgway, SHA**
4.1	Percent of Estimated Project Budget as Compared to Final Project Award	Annually (Oct.)	Terri Lins, MVA
4.2	Percent of Change for Finalized Contracts	Annually (Oct.)	Brian Miller, MPA
4.3	On Time Services and Solutions – Percent of Projects Completed by Original Contract Date	Annually (Oct.)	Bill Appold, TSO
4.4	Average Cost of Common Solutions and Services		Pat Keller, MTA
	4.4a - Minor Road Resurfacing	Annually (July)	Pat Keller, MTA
	4.4b - Major Road Resurfacing	Annually (July)	Pat Keller, MTA
	4.4c - Interstate Resurfacing	Annually (July)	Pat Keller, MTA
	4.4d - Average Bridge Replacement Cost	Annually (July)	Pat Keller, MTA
	4.4e - Average Bridge Redecking Cost	Annually (July)	Pat Keller, MTA
	4.4f - Operating Cost Per Passenger Trip	Annually (Jan.)	Pat Keller, MTA
	4.4g - Operating Cost Per Revenue Vehicle Mile	Annually (Jan.)	Pat Keller, MTA
	4.4h - Passenger Trip Per Revenue Vehicle Mile	Annually (Jan.)	Pat Keller, MTA
	4.4i - Farebox Recovery Ratio	Annually (Jan.)	Wayne Schuster, MAA
	4.4j - Cost Per Transaction (MVA)	Annually (Jan.)	Wayne Schuster, MAA

Tangible Result # 5: Provide An Efficient, Well Connected Transportation Experience			Phil Sullivan, MTA
5.1	Reliability of the Transportation Experience		John O'Neill, MDTA
	5.1a - Average Volume at the Peak	Quarterly	John O'Neill, MDTA
	5.1b - Average Truck Turn Time per container transaction	Annually (Jan.)	Dave Thomas, MPA
	5.1c - Average Wait Time MVA	Quarterly	Dave Thomas, MPA
	5.1d - On Time Performance MTA & MAA	Quarterly	Robert Pond, MTA
	5.1e - Planning Time Index for Highway Travel	Annually (April)	John O'Neill, MDTA
5.2	Restoring Transportation Services		Glenn McLaughlin, SHA
	5.2a - Restoring Transportation Services - Average Time to Restore Normal Operations After Disruptions	Annually (April)	Glenn McLaughlin, SHA
	5.2b - Restoring Transportation Services - Average Time to Restore Normal Operations After a Weather Event	Annually (April)	Glenn McLaughlin, SHA
5.3	Percent of Transportation Services and Products Provided Through Alternate Service Delivery Methods	Semi-Annually (April & Oct.)	Sharon Rutzebeck, MVA
5.4	Functionality of Real-Time Information Systems (RTIS)		Ralign Wells, MAA
	5.4a - Percent of Functional Real-Time Information Systems Provided	Quarterly	Ralign Wells, MAA
	5.4b - Customer Satisfaction with the Accuracy of Real-Time Information Systems Provided	Annually (July)	Ralign Wells, MAA
Tangible Result # 6: Communicate Effectively With Our Customers			**Diane Langhorne, TSO**
6.1	Communicate Effectively Utilizing Social Media		Katie Bennett, MDTA Richard Scher, MPA
	6.1a - Social Reach	Quarterly	Katie Bennett, MDTA
	6.1b - Social Engagement	Quarterly	Richard Scher, MPA
6.2	Satisfaction with Communication at Public Meetings	Quarterly	Chuck Brown, MVA
6.3	Communicate Effectively through News Releases		Annette Fisher, MAA Valerie Burnette Edgar, SHA
	6.3a - Number of News Stories Generated from Major Releases	Quarterly	Annette Fisher, MAA
	6.3b - Earned Media Value of Print and Broadcast Coverage Generated by News Releases	Quarterly	Valerie Burnette Edgar, SHA
	6.3c - Earned Media Value of Print and Broadcast Coverage Generated by News Releases	Quarterly	Valerie Burnette Edgar, SHA
6.4	Communicate Effectively to Customers with English Language Barriers at Public Meetings	Quarterly	Lisa Dickerson, TSO

Tangible Result # 7: Be Fair and Reasonable To Our Partners			Wanda Dade, SHA
7.1	Percentage of Minority Business Enterprise (MBE) Participation Achieved by each Transportation Business Unit	Quarterly	Angela Martin, MAA
7.2	Number and Percent of Contracts Awarded to MBE Firms as the Prime Contractor	Quarterly	Angela Martin, MAA
7.3	Percent of Payments Awarded to Small Business Reserve (SBR) Contracts	Quarterly	Wonza Spann-Nicholas, MPA
7.4	Percent of Veteran Owned Small Business Enterprise (VSBE) Participation	Annually (Jan.)	William Ward, MVA
7.5	Level of Satisfaction of Our Business Partners	Quarterly	Donna Dicerbo, MDTA
7.6	Number and Percent of Invoices Properly Paid to Our Partners in Compliance with State Requirements	Quarterly	David Lynch, MTA
7.7	Number of MDOT Procurement Protests Filed and Percent of Protests Upheld by the Board of Contract Appeals	Quarterly	Mike Zimmerman, TSO
Tangible Result # 8: Be a Good Neighbor			**Simon Taylor, MAA**
8.1	Percent of MDOT Facilities that Meet or Exceed our Neighbor's Expectations	Annually (April)	Anthony Crawford, SHA Dennis Simpson, MDTA John Trueschler, TSO
8.2	Level of Satisfaction with Educational/Civic Outreach Efforts with our Neighbors		Michael Phennicie, MAA Kathy Broadwater, MPA
	8.2a - Number of Educational/Civic Outreach Efforts with our Neighbors	Quarterly	Michael Phennicie, MAA Kathy Broadwater, MPA
	8.2b - Satisfaction with the Educational/Civic Outreach Efforts	Annually (April)	Michael Phennicie, MAA
8.3	Percent of MDOT Facilities that are ADA Compliant	Annually (April)	Jim Hoover, MTA Natalie Grasso, MVA
Tangible Result # 9: Be a Good Steward of Our Environment			**Dorothy Morrison, TSO**
9.1	Water Quality Treatment to Protect and Restore the Chesapeake Bay	Annually (Oct.)	Sonal Sanghavi, SHA
9.2	Fuel Efficiency		Paul Truntich, MDTA
	9.2a - Miles Per Gallon (PM Retained)	Annually (April)	Paul Truntich, MDTA
	9.2b - Total Gallons Consumed	Annually (Oct.)	Paul Truntich, MDTA
9.3	Percent of Maryland Recycling Act Materials Recycled	Annually (April)	Hargurpreet Singh, MVA
9.4	Recycled/Reused Materials from Maintenance Activities and Construction/Demolition Projects	Annually (April)	Barbara McMahon, MPA
9.5	Compliance with Environmental Requirements	Annually (Oct.)	Robin Bowie, MAA
9.6	Environmental Impacts and Community Enhancements	Quarterly	Robert Frazier, MTA
9.7	Energy Consumption	Quarterly	Laura Rogers, TSO

Tangible Result # 10: Facilitate Economic Opportunity in Maryland			Jim Dwyer, MPA
10.1	Economic Return from Transportation Investment (change in data measured from programmed capital program budget figures to programmed spending)	Annually (Jan.)	John Thomas, SHA
10.2	National Ranking of Maryland's Transportation Infrastructure	Annually (Oct.)	John Thomas, SHA
10.3	Freight Mobility		Juan Torrico, MTA Deborah Rogers, MDTA
	10.3a - Freight Analysis Framework (FAF) Tonnage and Value of Freight	Annually (April)	Juan Torrico, MTA
	10.3b - Port of Baltimore Total International Cargo Tonnage Port-Wide, Market Share and Rankings	Quarterly	Juan Torrico, MTA
	10.3c - MPA Total General Cargo Tonnage including Containers, Autos, RoRos and Imported Forest Product	Monthly	Juan Torrico, MTA
10.4	Number and Percentage of Bridges on the State System that are Weight-Posted	Annually (July)	Rafael Espinoza, MDTA
10.5	Change in Market Access due to Improvements in the Transportation Network	Annually (Jan.)	Corey Stottlemyer, TSO
10.6	Change in Productivity due to Improvements in the Transportation Network	Annually (Jan.)	Corey Stottlemyer, TSO
10.7	Total User Cost Savings for the Traveling Public Due to Congestion Management	Annually (Jan.)	John Thomas, SHA
10.8	Percent of Vehicles Miles Traveled (VMT) in Congested Conditions on Maryland Freeways and Arterials in the AM/PM Peak Hours	Annually (Jan.)	John Thomas, SHA
10.9	Market Share		Jack Cahalan, MAA
	10.9a – Percent of Nonstop Markets Served Relative to Benchmark Airports	Monthly	Jack Cahalan, MAA
	10.9b - Martin State Airport's Regional Market Share	Quarterly	Jack Cahalan, MAA
	10.9c - Number of Passengers and Departing Flights Relative to Benchmark Airports	Quarterly	Jack Cahalan, MAA
	10.9d - Mid-Atlantic International Cruise Market Share	Quarterly	Jack Cahalan, MAA
10.10	Percent of Roadway Access Permits Issued within 21 Days or Less	Annually (Jan.)	Del Adams, TSO

TANGIBLE RESULT #1

Provide Exceptional Customer Service

Every MDOT employee is responsible for delivering exceptional customer service by providing our customers with respectful, timely and knowledgeable responses to all inquiries and interactions.

RESULT DRIVER:

Leslie Dews

Motor Vehicle Administration (MVA)

Provide Exceptional Customer Service

TANGIBLE RESULT DRIVER:
Leslie Dews
Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:
Sean Adgerson
Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:
To track MDOT's progress towards its mission of providing exceptional customer service.

FREQUENCY:
Annually (in April)

DATA COLLECTION METHODOLOGY:
Data is collected through a standardized survey of randomly selected Marylanders.

NATIONAL BENCHMARK:
American Customer Service Index

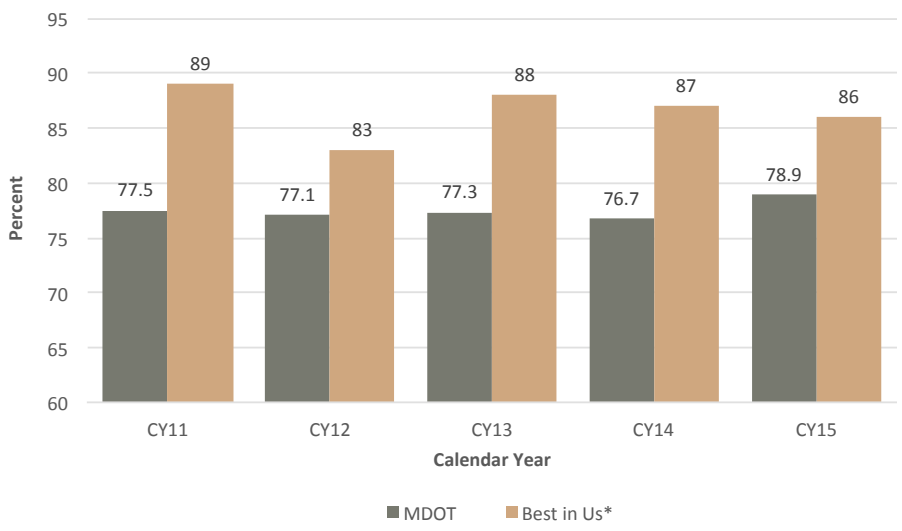
PERFORMANCE MEASURE 1.1
Percent of Overall Customer Satisfaction

Overall customer satisfaction plays an important role at the Maryland Department of Transportation (MDOT). The information gained from conducting the customer satisfaction research provides insight we need to make informed decisions in order to meet or exceed customer expectations.

Over the past few years we have been conducting customer satisfaction surveys at the business units (SHA, MVA, MTA, etc.). Specifically, data from the various surveys was normalized and then averaged to determine overall MDOT customer satisfaction. Overall MDOT's customer satisfaction has remained relatively consistent at approximately 77%. Increasing customer satisfaction is a top priority as MDOT continually strives to tailor delivery of products and services to its customers.

MDOT is creating a new survey to capture consistent and complete data across all Transportation Business Units (TBUs) to measure overall satisfaction.

Percent of Overall MDOT Customer Satisfaction



TANGIBLE RESULT DRIVER:
Leslie Dews
Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:
Patrick Corcoran
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:
To track responsiveness to customer inquiries.

FREQUENCY:
Quarterly (Data is Monthly)

DATA COLLECTION METHODOLOGY:
MDOT IQ system

NATIONAL BENCHMARK:
10 days (MDOT established benchmark)

PERFORMANCE MEASURE 1.2A

Responsiveness to MDOT Customer Correspondence: Average Number of Days for Correspondence in the MDOT IQ System

The MDOT is committed to providing customers a timely response to all correspondence. Accordingly, MDOT policy requires responses to incoming customer correspondence be completed and signed by the Secretary within 30 days of receipt.

Currently, MDOT uses Internet Quorum (IQ) software to process customer and other internal and external correspondence submitted to the Secretary's Office. Letters tracked in IQ may originate in MDOT, respond to correspondence sent directly to MDOT or are assigned by the Governor's office for an MDOT response.

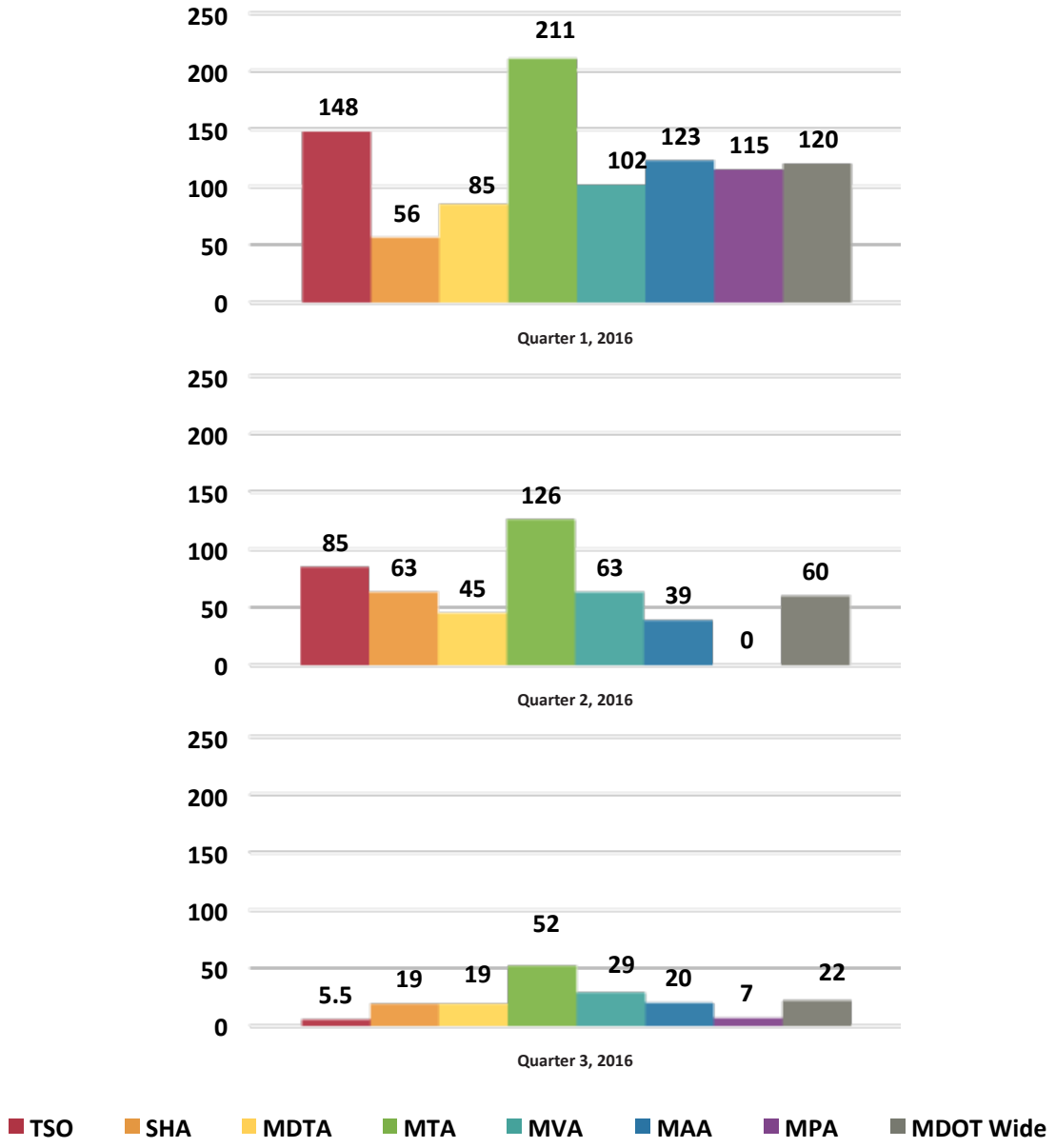
IQ software has a component which MDOT can use for this measure which is reflected in the chart below. As reported previously, MDOT provided training to Correspondence Managers at the TBUs to ensure that correspondence is properly managed in the system and improvement in customer responsiveness. As shown in the chart below, TBUs have made significant gains in performance in this area in the first two months of the third quarter (Q3) of 2016 compared to previous periods. MDOT continues to work diligently to identify ways to expand this measure to capture customer correspondence across all TBUs to further ensure that all customer correspondence, regardless of how it is received, is addressed in a timely manner.

PERFORMANCE MEASURE 1.2A

Responsiveness to MDOT Customer Correspondence: Average Number of Days for Correspondence in the MDOT IQ System

Average Number of Days for Correspondence in the MDOT IQ System

(Currently, data reflects only MDOT correspondence assigned by the Governor's office.)



TANGIBLE RESULT DRIVER:
Leslie Dews
Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:
Richard Powers
Maryland Port Administration (MPA)

PURPOSE OF MEASURE:
To track the rate of first contact resolution to MDOT customer correspondence to ensure responsiveness to our customer needs.

FREQUENCY:
Quarterly (Data is Monthly)

DATA COLLECTION METHODOLOGY:
MDOT IQ system

NATIONAL BENCHMARK:
N/A

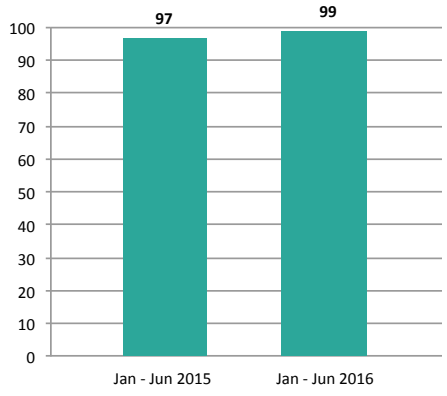
PERFORMANCE MEASURE 1.2B
Responsiveness to MDOT Customer Correspondence: Percent of First Contact Resolution

MDOT is responsible for providing knowledgeable and timely responses to all customer correspondence. Exceptional customer service ensures that all customer requests are resolved upon initial engagement.

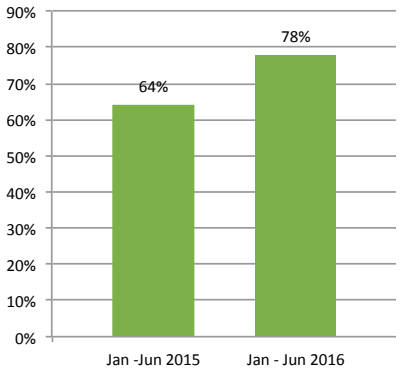
As reported previously, the IQ system is not configured to capture data to first contact resolution. Currently, the MVA and MTA are the only TBUs with reportable data for this measure. The data illustrated in the charts below shows that the MVA has few repeat contacts and MTA has a high percentage of contacts closed out on the first day of receipt.

MDOT continues to work on the development of a systematic approach for measuring first contact resolution across TBUs to improve overall customer service. A review of existing external systems used by TBUs to track customer correspondence is underway. The ultimate solution must be comprehensive enough to capture the varying ways in which the organization interacts with customers to ensure consistent customer first contact resolution.

MVA Percent of First Contact Resolution



MTA First Contact Resolution



Provide Exceptional Customer Service

TANGIBLE RESULT DRIVER:
Leslie Dews
Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:
Darol Smith
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:
To identify the percentage of customers not connecting or speaking with call centers resulting from not receiving goods or services from MDOT.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Database metrics provided by TBUs. Calculated formula abandoned calls divided by total inbound calls – in percent.

NATIONAL BENCHMARK:
Eight percent average sampled industry leader (no national industry standard available)

PERFORMANCE MEASURE 1.3A

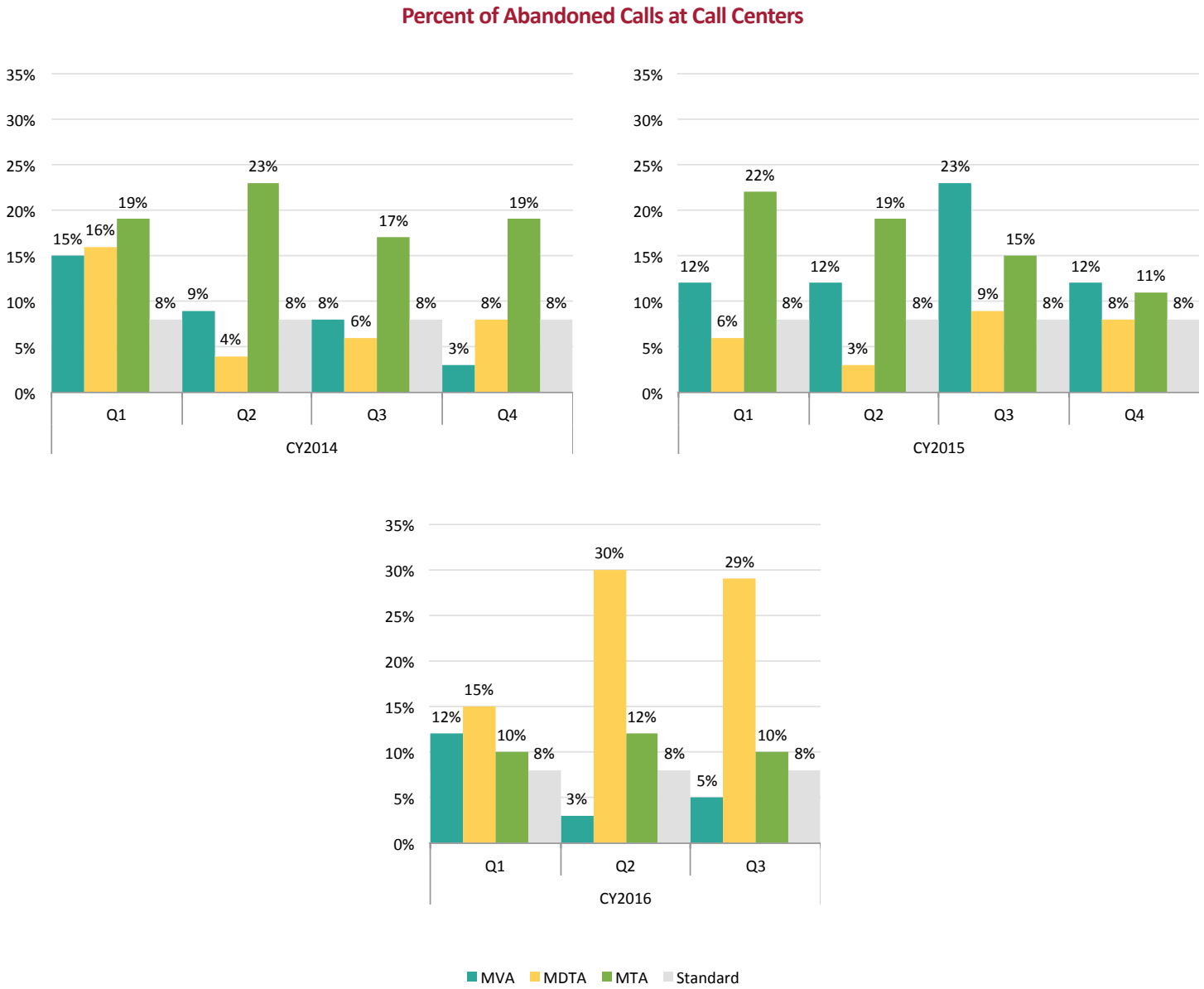
Customer Satisfaction with Receiving Goods and Services: Percent of Abandoned Calls at Call Centers

MDOT offers customers various ways to interact with the organization based on their preferences. Call centers across MDOT's TBUs represent one contact point for customers to interact with MDOT to obtain information, resolve issues and complaints, and conduct other business. The longer the time customers have to wait before being connected to a call center agent, the higher the abandon rate. The inability of customers to connect with MDOT representatives negatively impacts their level of satisfaction with the goods and services received from the organization.

The combined MDOT CY 2016 second quarter (Q2) result of 15% and two months of Q3 result of 22% remains higher than the desired benchmark of 8%. The performance of the two previous quarters continues to be higher than the benchmark, trends remains unfavorable with little improvement, particularly with two TBUs that have largely influenced the overall results. Targeted process improvements and other changes are underway at individual TBUs to improve performance in call center operations.

PERFORMANCE MEASURE 1.3A

Customer Satisfaction with Receiving Goods and Services: Percent of Abandoned Calls at Call Centers



TANGIBLE RESULT DRIVER:
Leslie Dews
Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:
Darol Smith
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:
To collect and evaluate the time it takes the average customer to wait before speaking with the call center to answer phone inquiries.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Database metrics provided by TBUs. Average amount of time caller waits.

NATIONAL BENCHMARK:
60 seconds average sampled industry leaders (no national industry standards available)

PERFORMANCE MEASURE 1.3B

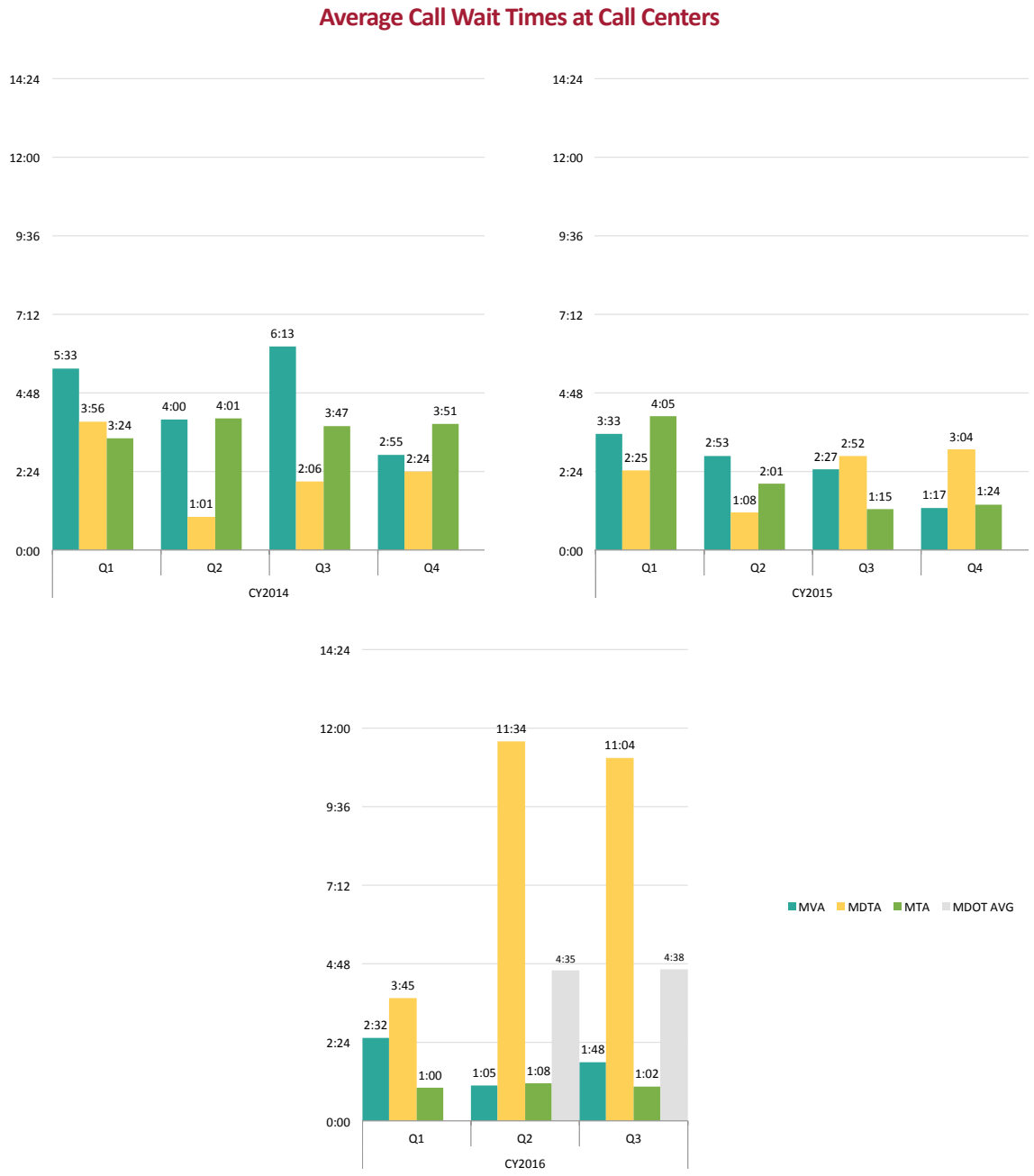
Customer Satisfaction with Receiving Goods and Services: Average Call Wait Times at Call Centers

Providing consistent and responsive service to customers contacting MDOT call centers is a top priority for the organization. Customers expect to reach representatives within a reasonable amount of time when contacting call centers. The length of time they wait to speak to a representative often shapes their perception of MDOT's customer service and their level of satisfaction. The longer customers wait to speak to a call center representative, the more dissatisfied they become with the goods and services obtained.

The average wait time for customers contacting the call center during the CY 2016 second quarter (Q2) was 4:35 minutes and 4:38 minutes for the first two months of the third quarter (Q3). The results are significantly higher than the benchmark of 60 seconds. All TBUs have engaged in strategic development and process improvement. As a result, two of the three TBUs are experiencing a positive trend. Efforts are underway to ensure continuous improvement in call center operations and ultimately the achievement of the 60 second benchmark for customer wait time.

PERFORMANCE MEASURE 1.3B

Customer Satisfaction with Receiving Goods and Services: Average Call Wait Times at Call Centers



TANGIBLE RESULT DRIVER:
Leslie Dews
Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:
Darol Smith
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:
To assess customer satisfaction with call centers in resolving call inquiries.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Phone survey of call center customers.

NATIONAL BENCHMARK:
82 percent average sampled industry Leaders (no national industry standard available)

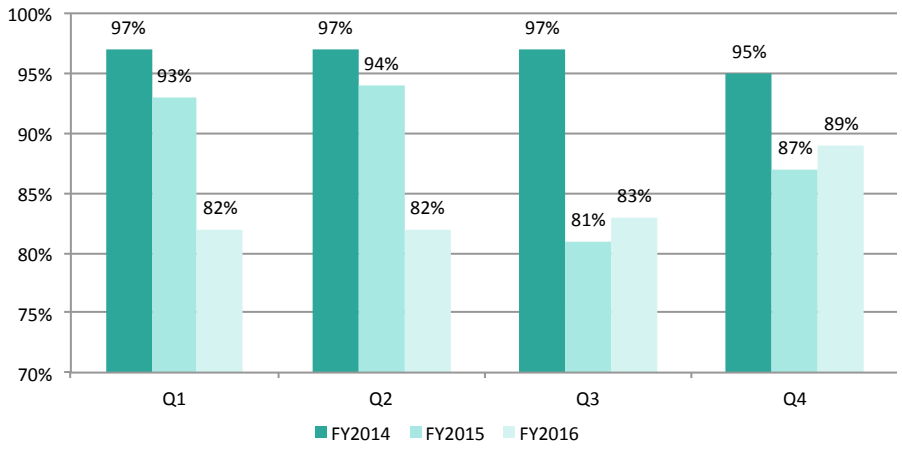
PERFORMANCE MEASURE 1.3C

Customer Satisfaction with Receiving Goods and Services: Level of Satisfaction with Resolving Call Inquiries at Call Centers

The level of satisfaction with resolving call inquiries is an indicator of whether MDOT is meeting customers' expectations. MVA is currently the only call center that has a data collection mechanism in place for this performance measure.

Results from FY 2016 fourth quarter (Q4) for MVA is favorable at 89% against a benchmark of 82%. FY 2016 Q3 and Q4 data shows a trend back to prior TBU achievement levels that are better than the benchmark in place today. Current attainment results that are above the benchmark indicate the need to reevaluate industry benchmark standards that will emphasize striving for exceptional customer service once all TBUs have the mechanism in place to collect data for this performance measure.

MVA Level of Satisfaction with Resolving Call Inquires



TANGIBLE RESULT DRIVER:
Leslie Dews
Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:
Sabrina Bass
The Secretary's Office (TSO)

PURPOSE OF MEASURE:
To better determine how satisfied MDOT customers are when interacting with MDOT representatives.

FREQUENCY:
Annually (in April)

DATA COLLECTION METHODOLOGY:
Data is collected through a survey design utilizing an on-site, in-person intercept method, complemented by online surveys.

NATIONAL BENCHMARK:
Highest American Customer Satisfaction Index (ACSI) rate -86 percent.

PERFORMANCE MEASURE 1.4
Customer Satisfaction with Interactions with MDOT Representatives

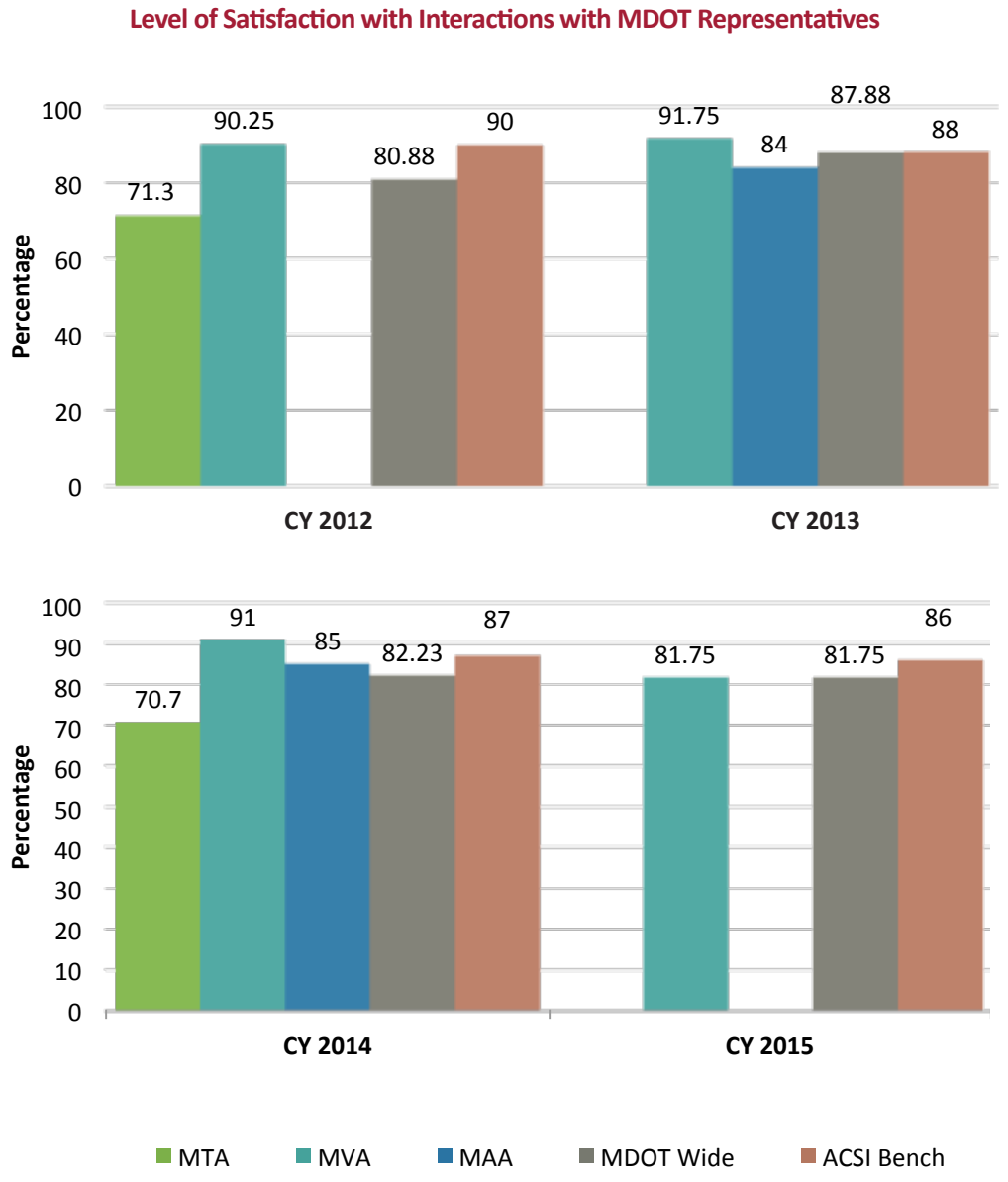
As a multifaceted transportation organization, MDOT plays a significant role in the lives of its customers. MDOT employees interact with a diverse customer base on a daily basis and are expected to provide a level of customer service that is responsive, timely and delivered in a courteous and professional manner. Those interactions shape customer satisfaction and overall perception of MDOT.

Given the vast nature of the MDOT organization, our representatives interact with their customers using a variety of methods (e.g., in person, phone, email, etc.). Regardless of the method, consistent delivery of service by competent and courteous MDOT representatives is essential l for a positive customer experience.

Current survey data from four business units indicate that on average, 75% of MDOT customers report that they were satisfied with their interactions. Data from five TBUs indicate on average, 80% of our customers report that they were treated professionally and respectfully by MDOT employees. These achievements fall short of the highest corporate national ACSI average of 86% and demonstrates the need to improve the level and consistency of customer services provided by MDOT employees across all TBUs.

PERFORMANCE MEASURE 1.4

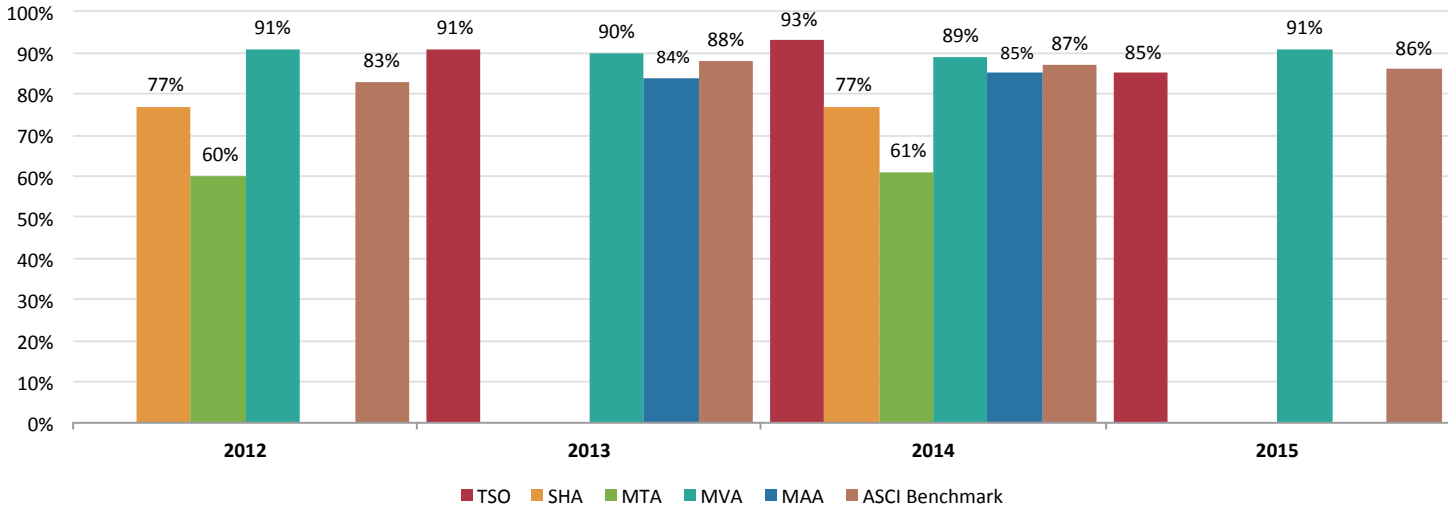
Customer Satisfaction with Interactions with MDOT Representatives



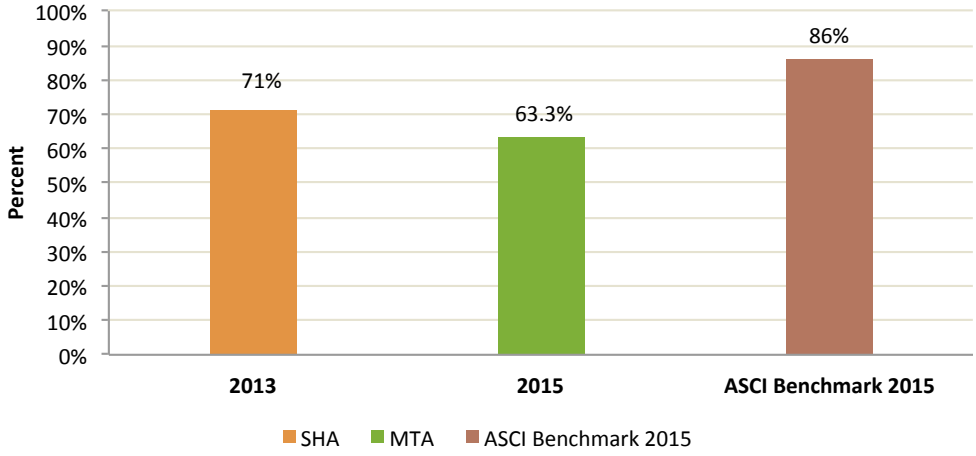
PERFORMANCE MEASURE 1.4

Customer Satisfaction with Interactions with MDOT Representatives

Customer Expectations Met or Exceeded based on Employee Professionalism and Respectfulness



Percent of Complaint Resolutions that Met or Exceeded Customer Expectations for Professional and Respectful Communication



TANGIBLE RESULT DRIVER:
Leslie Dews
Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:
Mark Crampton
State Highway Administration (SHA)

PURPOSE OF MEASURE:
To show how satisfied MDOT customers are when interacting with the website and usefulness of the information.

FREQUENCY:
Annually (in April)

DATA COLLECTION METHODOLOGY:
On-line Survey

NATIONAL BENCHMARK:
ACSI e business report average of highest annual scores for social media, portal/ search engine and news/ opinion websites.

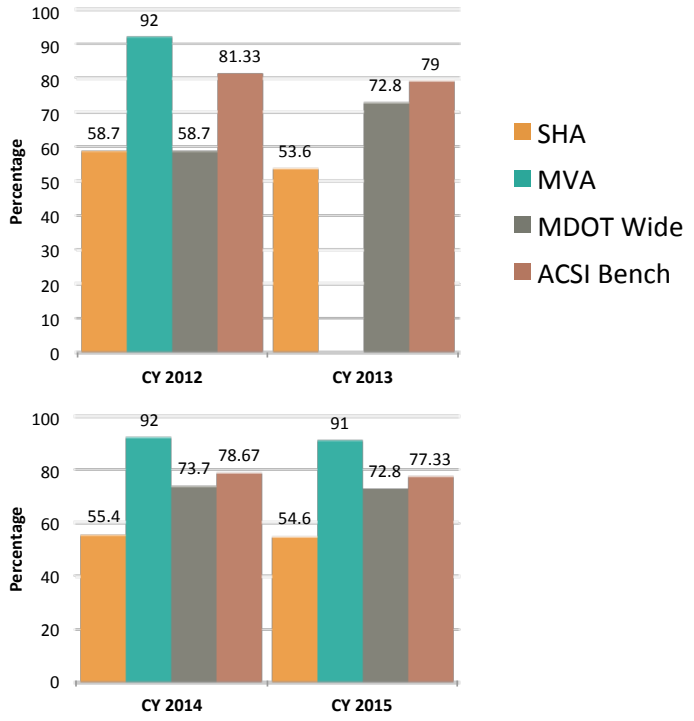
PERFORMANCE MEASURE 1.5A
Percent of Customers Who Felt MDOT Websites Met Their Needs

Customers expect 21st century interactions with MDOT and its TBUs. MDOT's websites provide customers with an alternative interaction point to make inquiries, access information and process transactions. Customers expect the information contained on the website to be accessible, useful, timely and easily understood.

Information derived from a State Highway Administration (SHA) survey of customer website usage indicates that 48.5 percent of customers believe the website is helpful. MVA offers customers the eMVA service to complete online transactions. The eMVA customer survey data suggests 92 percent of users would recommend the service to a friend. In 2015, the ACSI average for this area was 77.33 percent.

This preliminary data demonstrates the need for improvement and development of a comprehensive approach to evaluating the efficacy of websites across the organization in meeting the needs of our customers.

Percent of Customers Who Felt MDOT Websites Met Their Needs



TANGIBLE RESULT DRIVER:
Leslie Dews
Motor Vehicle Administration (MVA)

PERFORMANCE MEASURE DRIVER:
Mark Crampton
State Highway Administration (SHA)

PURPOSE OF MEASURE:
To show how satisfied MDOT customers are when interacting with the website and usefulness of the information.

FREQUENCY:
Annually (in April)

DATA COLLECTION METHODOLOGY:
On-line Survey

NATIONAL BENCHMARK:
ACSI e business report average of highest annual scores for social media, portal/search engine and news/opinion websites with specifics on ease of use, ease of navigation and site performance.

PERFORMANCE MEASURE 1.5B

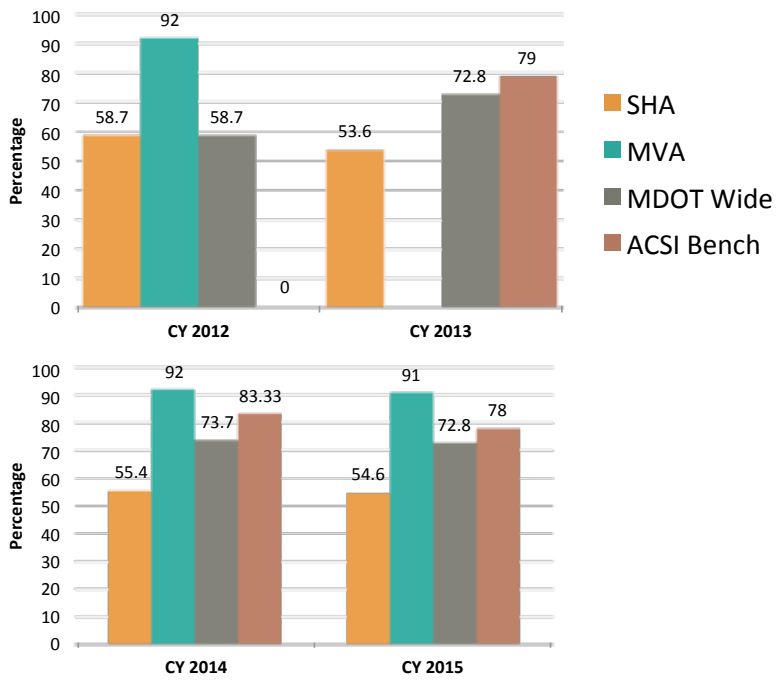
Percent of Customers Who Felt that it was Easy to Find Desired Information on MDOT Websites

MDOT's considerable online presence enables customers to report and obtain information on our goods and services as well as process transactions. The quality of our websites is a key component in providing exceptional customer service. The information architecture and ease of navigation of TBU websites must be as such that information is structured and presented in a way that customers can readily access the wide range of data contained therein and quickly find desired content.

While the data presented below suggests the need for improvement in MDOT website performance, currently TBUs are not capturing data to determine if customers felt that their attempts to find desired information on MDOT websites was effortless.

MDOT must incorporate in its comprehensive efforts to improve the overall quality of TBU websites a component to measure, from the perspective of our customers, if preferred information can be easily obtained.

Percent of Customers Who Felt that it was Easy to Find Desired Information on MDOT Websites



TANGIBLE RESULT #2

Use Resources Wisely

MDOT receives resources from our customers and they expect products and services in return. To better serve our customers, MDOT must maximize the value of every dollar we spend.

RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Dan Favarulo
The Secretary's Office (TSO)

PURPOSE OF MEASURE:
To track the efficiency of capital spending.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Track capital project spending versus the Consolidated Transportation Plan appropriated funds.

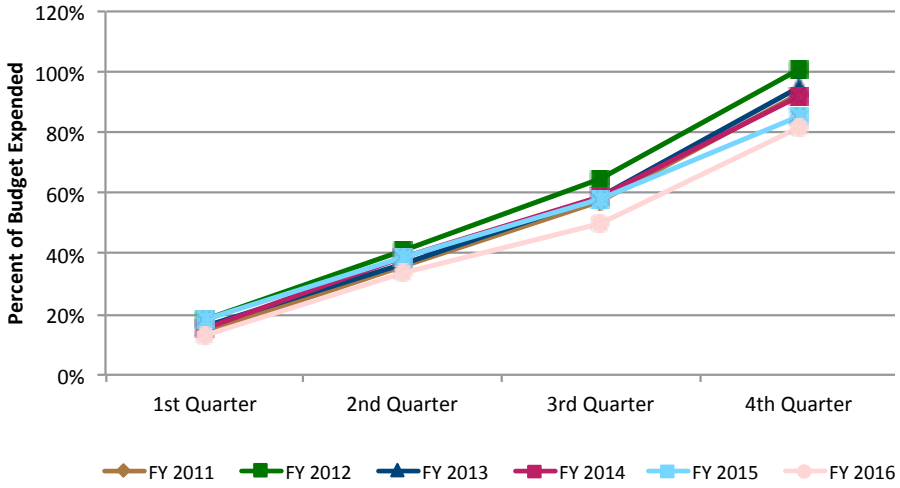
NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.1
Percent Capital Dollars Spent as Programmed

The purpose of this measure is to show MDOT's customers that each TBU is spending its allocated capital dollars on a quarterly basis with the goal of efficiently meeting its allocation by the end of the fiscal year. Dollars spent divided by dollars appropriated will be compared to the same time period from previous fiscal years.

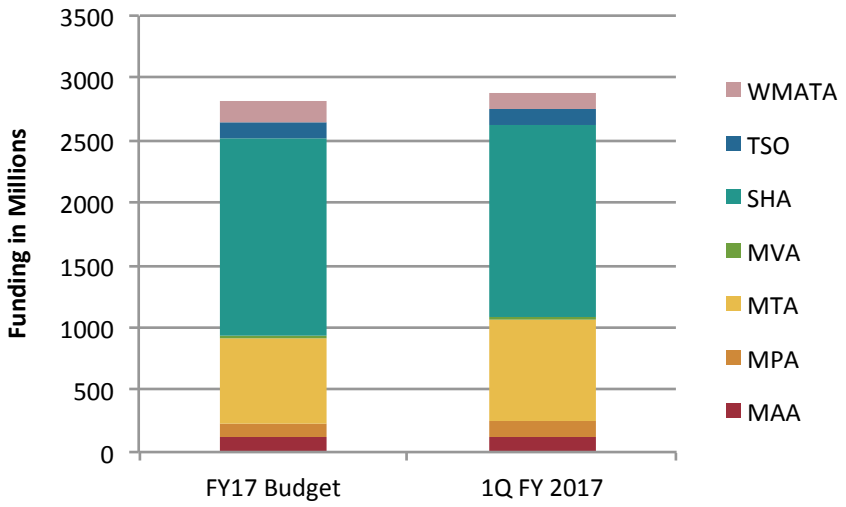
In FY 2016, MDOT's capital program spending rate was lagging behind all previous years used as the benchmark. The five-year average is 89 percent of the appropriation being spent. MDOT's FY 2016 expenditure rate was82 percent. This is largely a result of the funding changes made to MTA's FY 2016 Red and Purple Line Budgets. If you exclude those projects MDOT's FY16 capital expenditure rate was 93 percent.

5 Yr Capital Program Expenditure Rate Trend Line - State & Federal



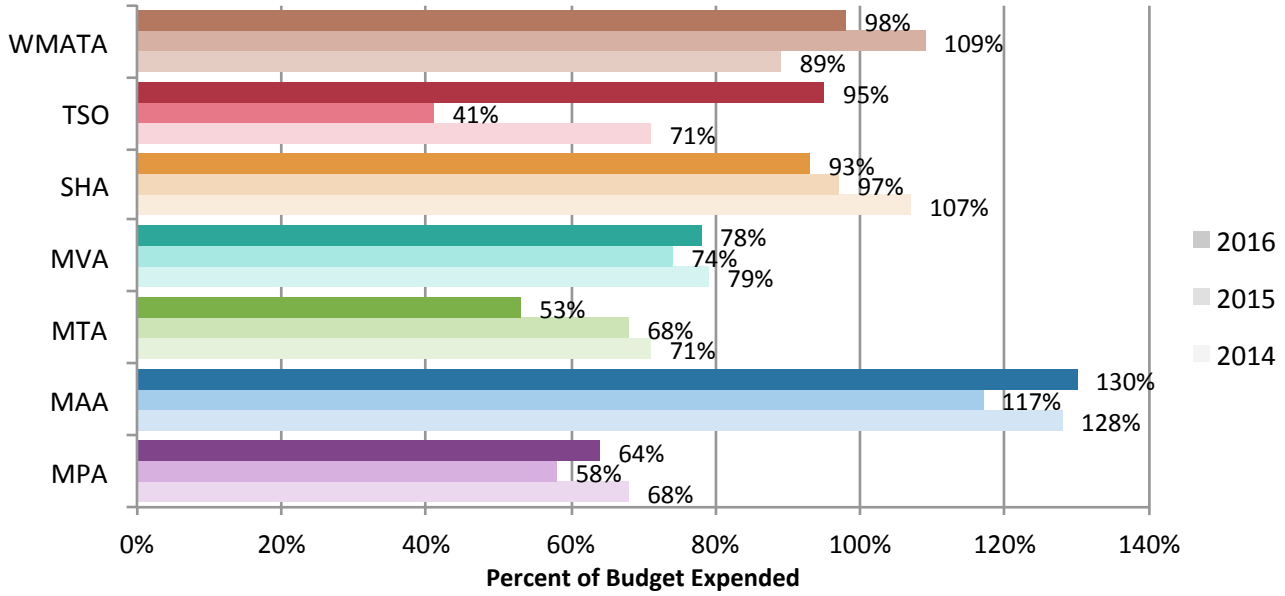
PERFORMANCE MEASURE 2.1
Percent Capital Dollars Spent as Programmed

FY17 Budget vs. 1Q Programmed – Federal & State

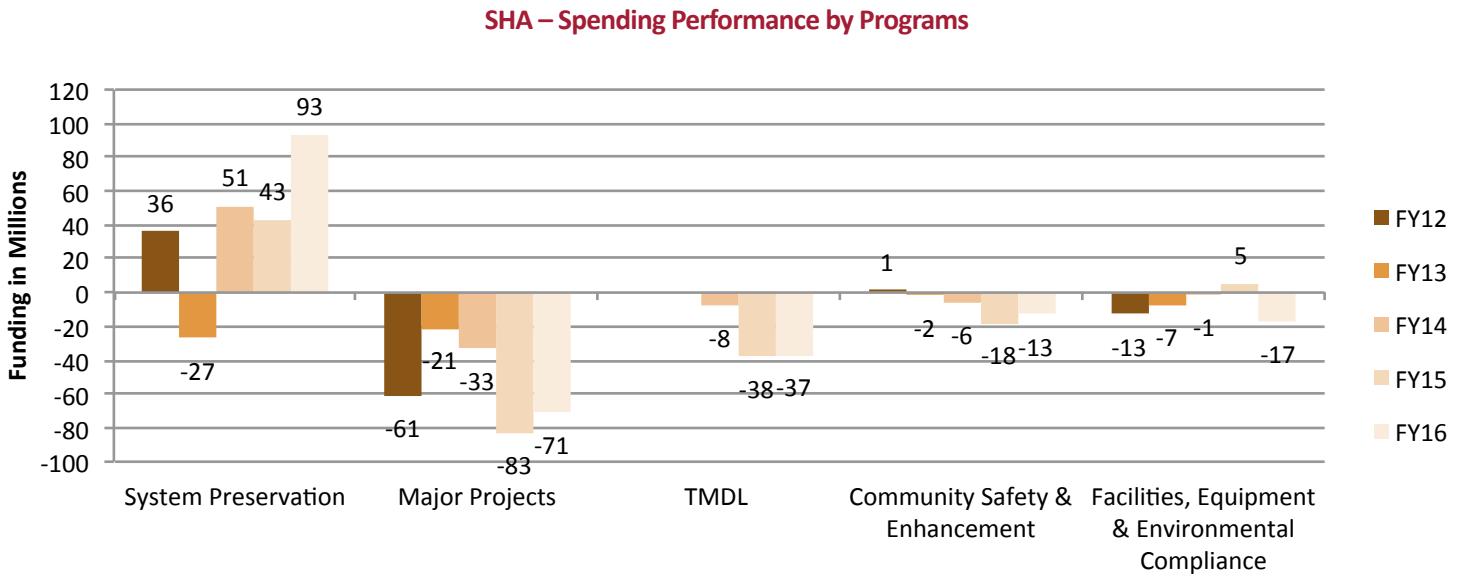


First Quarter FY17 expenditures are not yet available but updated programming numbers can illustrate new anticipated expenditure levels. Current FY17 programming levels indicate that we are anticipated to spend $68M over the FY17 appropriated level. However, MTA and MPA have increased programmed levels that are offsetting other TBU decreases which are unlikely given past expenditure performance of these TBUs. Taking this into account, MDOT is projecting to be at a 95 percent expenditure rate.

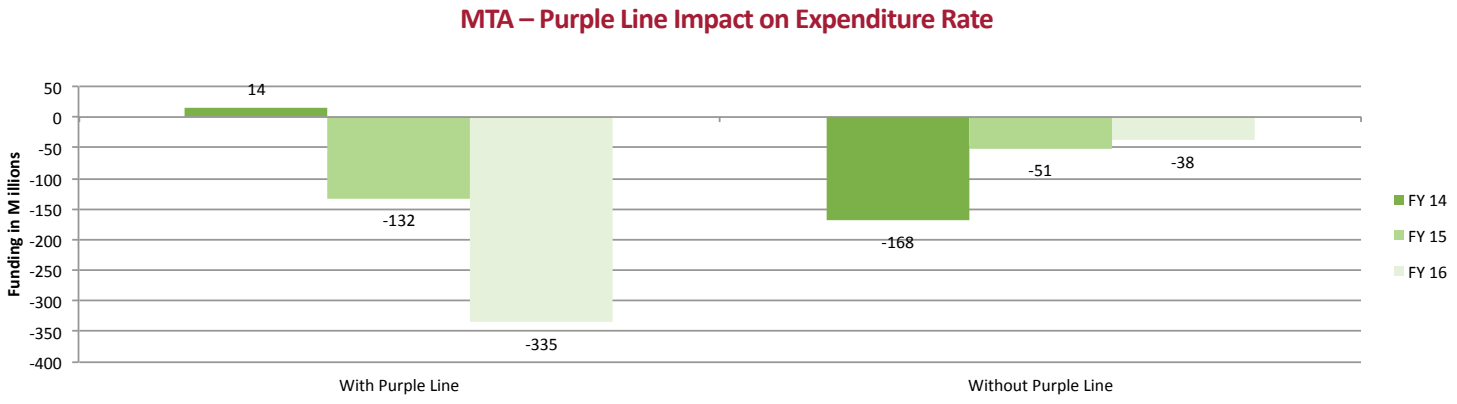
3 Yr Expenditure Rate by Mode at Year End - State & Federal



PERFORMANCE MEASURE 2.1
Percent Capital Dollars Spent as Programmed



SHA's spending performance has been around 90% and has largest impact on MDOT's overall expenditure rate. Historically, their major projects have under spent. Cash flowing these projects is a challenge due to the various project variables at play.



MTA's low expenditure rates over the last two years have greatly impacted MDOT's overall expenditure level. The Purple Line's expenditure performance has been the primary cause. Establishing an accurate cash flow for the Purple Line is a major challenge and due to the large funding associated with this project it is hard to mitigate with programming strategies.

TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Dan Favarulo
The Secretary's Office (TSO)

PURPOSE OF MEASURE:
To measure the amount of other sources of dollars utilized to fund capital projects as an indicator of MDOT's efforts to leverage its finite resources.

FREQUENCY:
Annually (in April)

DATA COLLECTION METHODOLOGY:
This measure will track capital projects using 10 percent or more of funds from other sources.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.2
Percent of Projects Leveraging Other Funding Sources

The purpose of this measure is to track and highlight incidences to leverage Transportation Trust Fund (TTF) dollars with local and private dollars in an effort to better understand how MDOT is using its finite financial resources. Only projects that have at least 10 percent of the cost being covered by partners is included under this measure. Information is presented in two values: percent of projects and percent of additional dollars contributed from partners.

FY 2016 – FY 2021 Consolidated Transportation Program (CTP) Projects Using 10 Percent or More Funds from Other Sources

As a Percentage of Projects

Number	Projects	% of Projects
Total Projects	1,389	100%
Projects w/No Other Funding	1,328	96%
Projects w/ Other Funding	61	4%

As a Percentage of Funding

Source	Funding	% of Funding
Total	$15,817,983	100%
State	$9,647,987	61%
Federal	$4.956.488	31%
Other	**$1,213,508**	8%

TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Amber Harvey
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:
To track the commitment of our employees in furthering MDOT's reputation, mission and interests by identifying key motivators and obstacles in the workplace.

FREQUENCY:
Annually (in January)

DATA COLLECTION METHODOLOGY:
Develop and implement one MDOT employee engagement survey administered to all employees. Online and hard copies will be made available. Cloud-based and mobile platforms are a consideration.

NATIONAL BENCHMARK:
*GALLUP 2015 national engagement percentages:

32 percent Engaged employees

50.8 percent not engaged

17.2 percent actively disengaged

**International Public Management Association for Human Resources 2012 and 2014 data available*

PERFORMANCE MEASURE 2.3
Employee Engagement

Engagement accounts for the emotional commitment an employee has for an organization and the amount of discretionary effort the employee expends on behalf of that organization. Engaged employees go beyond what they "have to do" to what they "want to do" for their employer and customers.

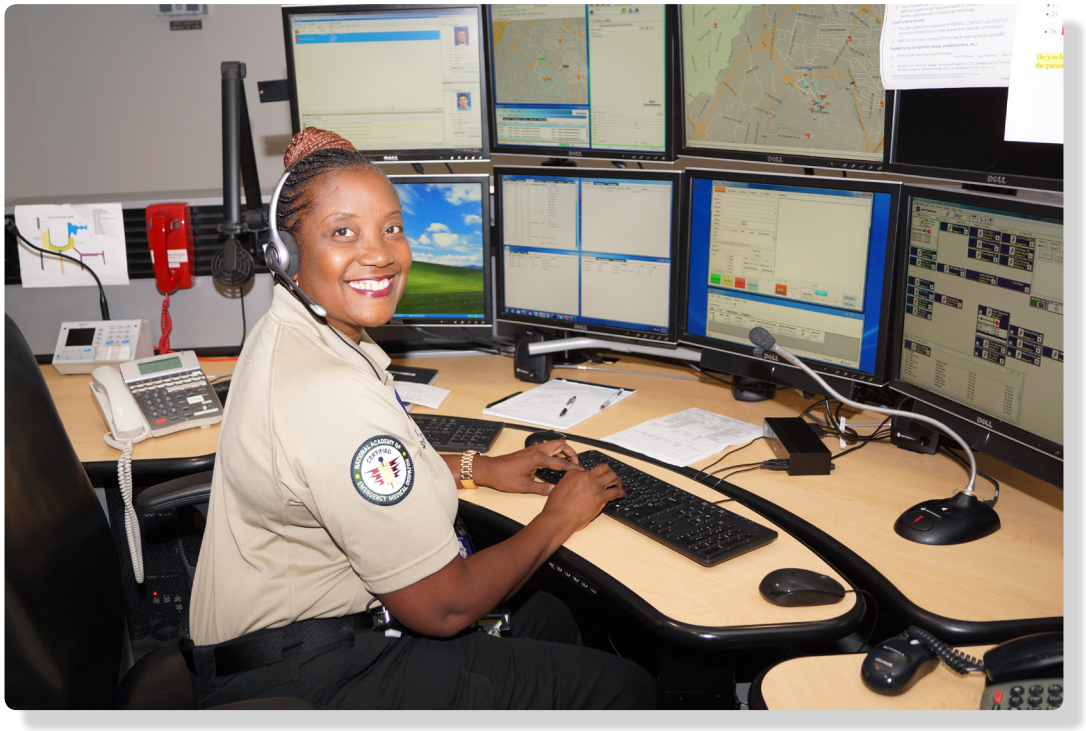
MDOT's TBUs acknowledge the importance of employee engagement initiatives. Recent practices elicit workforce feedback through the use of employee surveys. Table 1.1 (MDOT Employee Surveys at a Glance) shows an overview of these efforts. Throughout the TBUs, fluctuations in staff and financial limitations in recent years have been noted as a challenge for employee engagement efforts.

Combining talent, effort and resources under one, comprehensive, agency-wide survey would allow MDOT to ensure a systematic and consistent approach to employee engagement while avoiding overlaps and minimizing expense. In July 2016, a scope of work was developed and provided to multiple third-party research and survey entities to solicit project proposals. In August 2016, the vendor was selected and a MDOT project committee was formed consisting of one (1) representative from each of the seven (7) TBUs. In September 2016, the committee and vendor are coordinating efforts to design the survey questionnaire, formalize survey administration processes, and develop internal marketing strategies for communicating to employees.

PERFORMANCE MEASURE 2.3
Employee Engagement

Table 1.1 MDOT Employee Surveys at a Glance

	TSO	SHA	MPA	MVA	MTA	MAA	MDTA
Last Survey	N/A	Oct 2015	2006	April 2015	July 2012	Nov 2015	Feb 2015
Method	N/A	Intranet application	Not available	Survey Monkey	Consultant	Consultant	Survey Monkey
Summary Results Available	N/A	Yes	No	Yes	Yes	Yes	Yes
2016 Plan	N/A	No	No	Yes Fall 2016	No	Yes TBD	Yes Feb 2016



TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Amber Harvey
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:
To identify the percentage of employees who leave MDOT and analyze trends in voluntary and involuntary separations.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Quarterly reports of employee separations are provided by TSO HRIS Unit. These reports show the number of separations during a given period of time for each TBU broken down by all available separation codes (i.e. reasons).

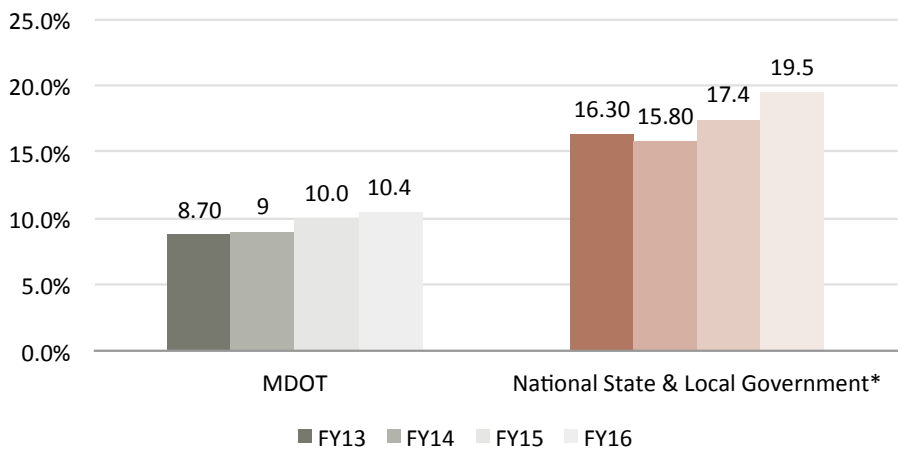
NATIONAL BENCHMARK:
U.S. Department of Labor (DOL) Bureau of Labor Statistics for U.S. State and Local Governments

PERFORMANCE MEASURE 2.4
Employee Turnover Rate

Annual employee turnover rate is the ratio of total separations, both voluntary and involuntary, compared to the average number of employees during the given timeframe, expressed as a percentage. The Human Resource Information System (HRIS) Unit in the Human Resources Division of the TSO provided the total number of employees and total number of separations for each Transportation Business Unit (TBU) on a quarterly basis for FY 2016. The national benchmark was determined by utilizing the U.S. Bureau of Labor Statistics' Job Opening and Labor Turnover Survey (JOLTS) data for U.S. state and local governments total employee separations.

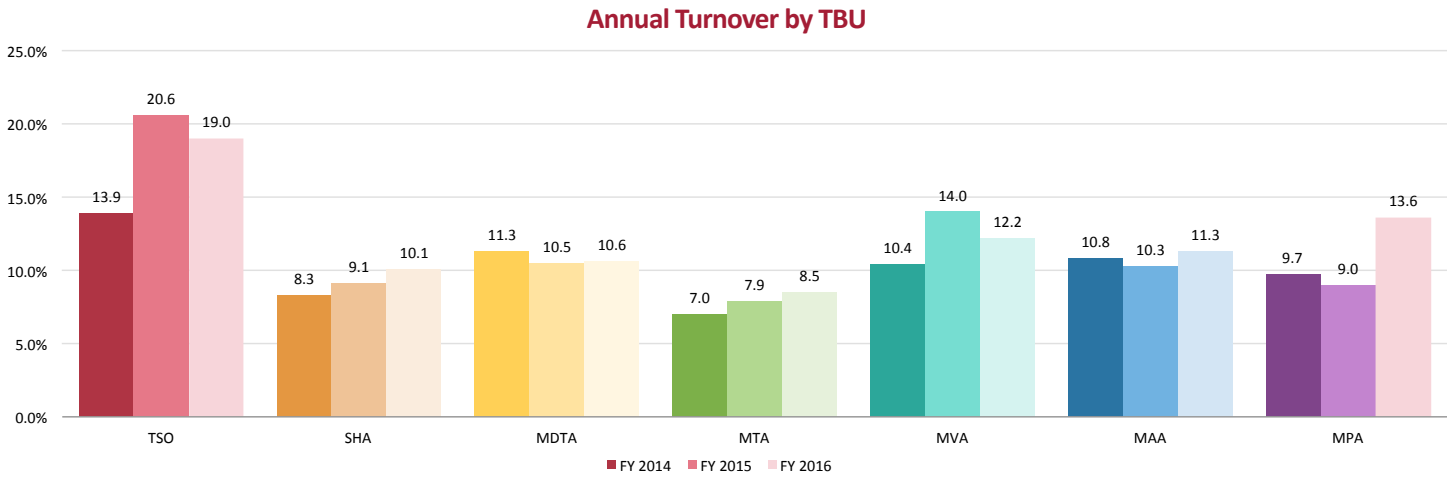
As shown in the chart below, the MDOT annual employee turnover rate reflects a gradual but consistent increase over the last four (4) fiscal years while still remaining well below the national turnover average for state and local governments.

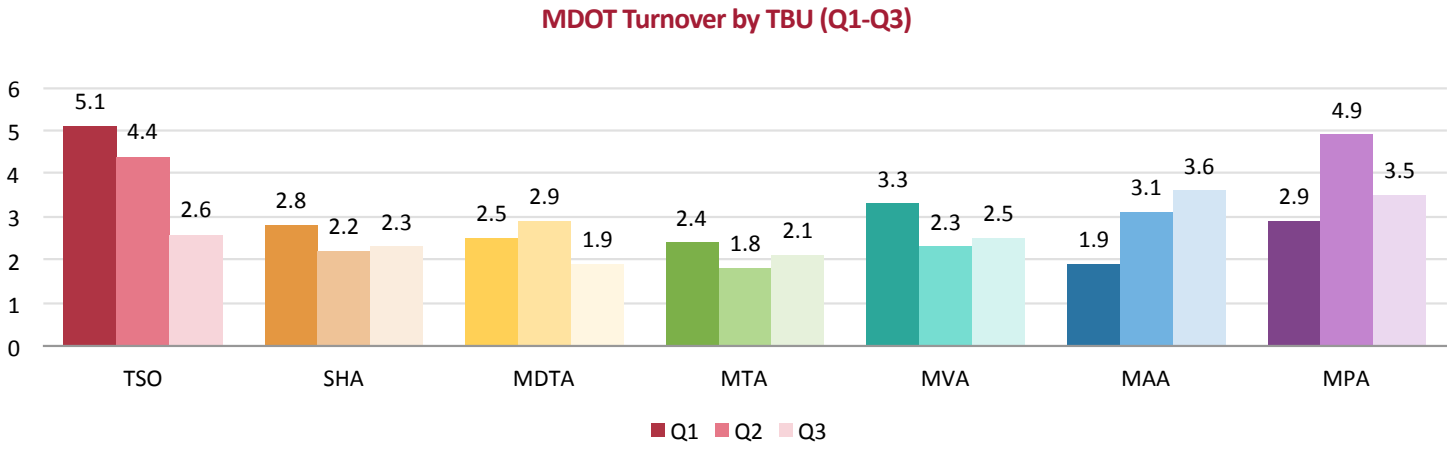
Annual Turnover Rate Comparison



PERFORMANCE MEASURE 2.4
Employee Turnover Rate

The next table illustrates employee turnover rates for each MDOT Business Unit over the last three fiscal years.

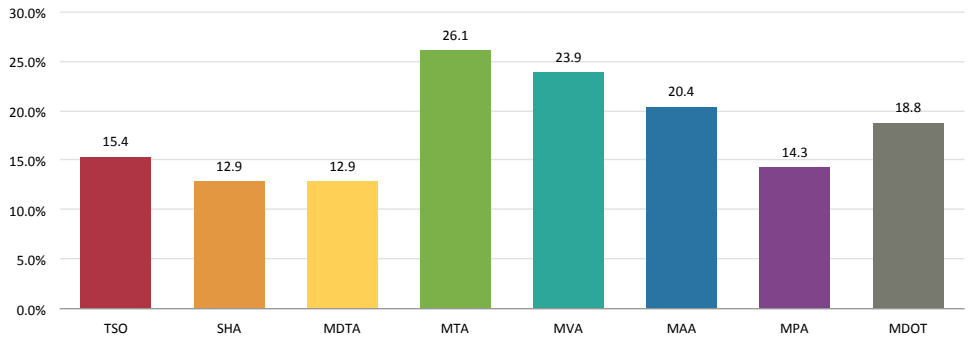




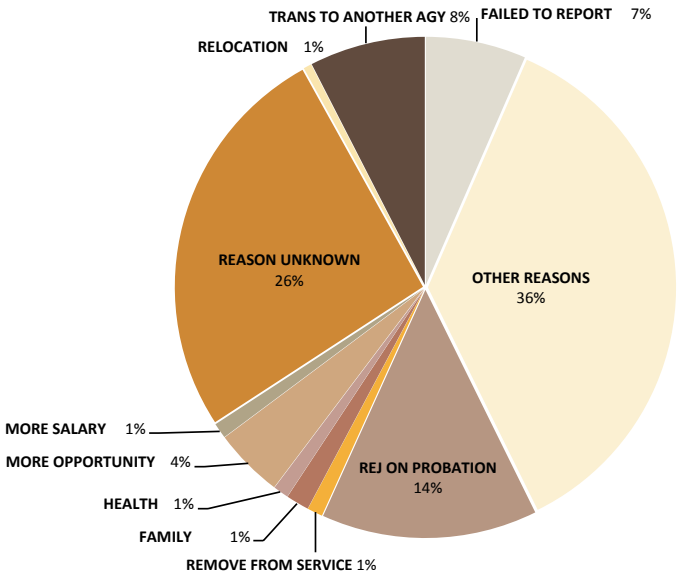
PERFORMANCE MEASURE 2.4
Employee Turnover Rate

Whether employee separations are due to business necessity or natural attrition, monitoring turnover rates can provide a wealth of information about an organization's workforce and its position in the industry. Understanding the reasons employees leave and the obstacles they face while employed at MDOT is a key element in structuring business practices to develop and retain a healthy workforce and control the associated costs. One particularly notable element for analyzing turnover is the amount that occurs within one year from the date of hire. The following chart illustrates the employee separations that occurred within one year from hire for each TBU and the combined average for MDOT. This data reflects that approximately 19% percent of all employee separations throughout MDOT in FY2016 occurred within one year from the date of hire.

FY16 Separations Within One Year of Hire



FY16 Separation Reasons (Within 1 Yr of Hire)



TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Deborah Hammel
State Highway Administration (SHA)

PURPOSE OF MEASURE:
To demonstrate efficient use of available positions and identify opportunities for improvement in our recruitment and selection processes.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Quarterly report for MDOT and each TBU from HRIS housed at TSO, with input from TBU Human Resource Directors.

NATIONAL BENCHMARK:
N/A

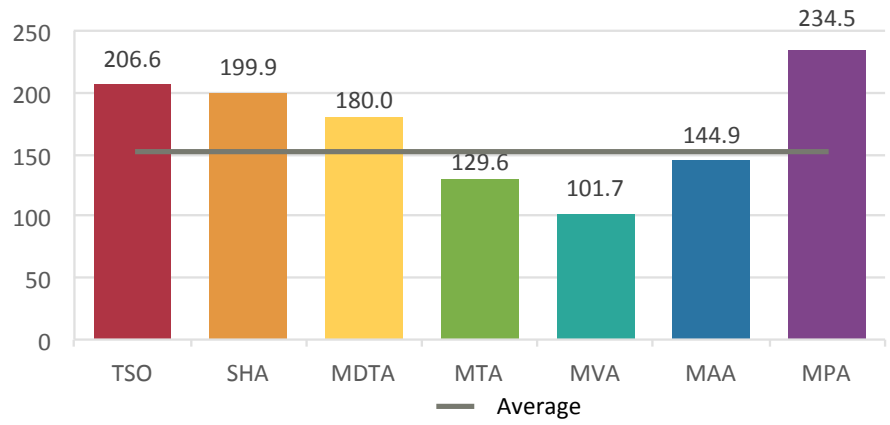
PERFORMANCE MEASURE 2.5
Time to Fill Vacancies

Reducing the time it takes to fill our vacant positions will increase MDOT's staffing levels, improving the ability to deliver projects on time and rapidly address emergencies affecting the transportation system.

We are going forward with having all TBUs enter vacancy activity in the Human Resource Information System (HRIS) housed at TSO. The data developed from consistent tracking in one system MDOT-wide will result in the identification of opportunities to improve and streamline processes to reduce the amount of time it takes to fill our vacant positions. However, because of the time involved to update the HRIS, we began are using an excel spreadsheet July 1, 2016 to track recruiting milestones.

Average time to fill Career Service and MTA Union vacancies for the period January 1, 2015 –June 30, 2016 was 152.16 days MDOT-wide.

Average Days to Fill by TBU



TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Bill Bertrand
State Highway Administration (SHA)

PURPOSE OF MEASURE:
To calculate the percentage of Fixed Asset Units counted during the Annual Physical Inventory of Fixed Assets as an indicator of how well MDOT records, safeguards, and efficiently controls fixed assets.

FREQUENCY:
Annually (in October)

DATA COLLECTION METHODOLOGY:
Data will be collected when the business units conduct annual fixed asset physical inventories.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.6

Percentage of Fixed Asset Units Identified or Accounted for During the Annual Physical Inventory of Fixed Assets

This performance measure is intended to emphasize the importance of stewardship and internal controls with respect to fixed assets owned by each of MDOT's business units. This performance measure reports the percentage of fixed assets counted by each business unit during its annual fixed asset physical inventory versus the number of fixed assets recorded in each business unit's official inventory records.

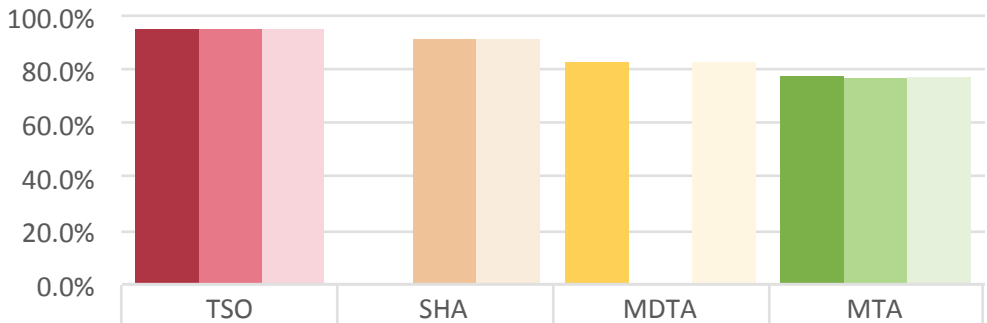
A regularly-conducted physical inventory of fixed assets ensures accurate information for the management of assets and discourages fraud.

Currently, five of seven business units conduct a full inventory of Non-Sensitive Items once every three years and a full inventory of Sensitive Items annually. The remaining business units, MAA and SHA, conduct a full inventory of both sensitive and non-sensitive items annually.

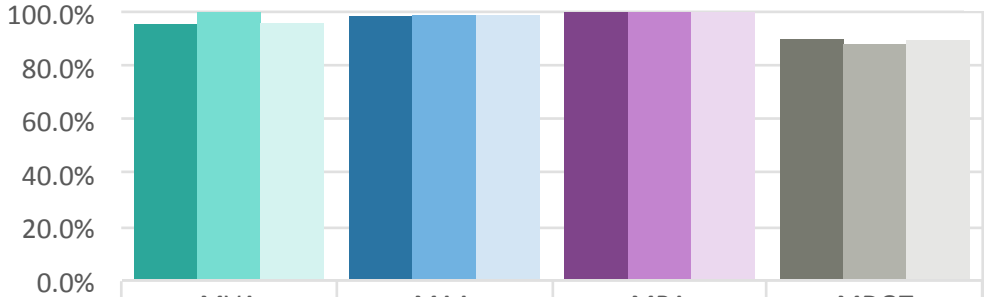
PERFORMANCE MEASURE 2.6

Percentage of Fixed Asset Units Identified or Accounted for During the Annual Physical Inventory of Fixed Assets

Assets Measured - 2015



	TSO	SHA	MDTA	MTA
Sensitive Assets	94.9%	0.0%	82.8%	77.7%
Non-Sensitive Assets	94.9%	91.4%	0.0%	76.7%
Total Assets	94.9%	91.4%	82.8%	77.3%



	MVA	MAA	MPA	MDOT
Sensitive Assets	95.7%	98.6%	100.0%	89.9%
Non-Sensitive Assets	100.0%	99.0%	100.0%	87.9%
Total Assets	95.8%	98.8%	100.0%	89.4%

TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Tony Moore
Maryland Port Administration (MPA)

Nicole Katsikides
State Highway Administration (SHA)

PURPOSE OF MEASURE:
Provide an overview which shows how TBUs monitor asset management activities.

FREQUENCY:
Annually (in January)

DATA COLLECTION METHODOLOGY:
Asset inspection condition and asset life-cycle cost analyses are compiled at the TBU level.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.7
Managing Capital Assets

Our customers deserve to know that MDOT is strategically managing its diverse capital assets. Each Transportation Business Unit maintains its physical assets according to policies that minimize asset life-cycle cost while avoiding negative impacts on the delivery of transit services.

MTA, SHA, MAA, MDTA and MPA perform annual bridge inspections per Federal guidelines to assess a rating, which is used to determine if any remedy is required to keep bridges structurally sound.

SHA and MDTA monitor the condition of pavement and road ride smoothness; monitoring is performed by annual road inspections.

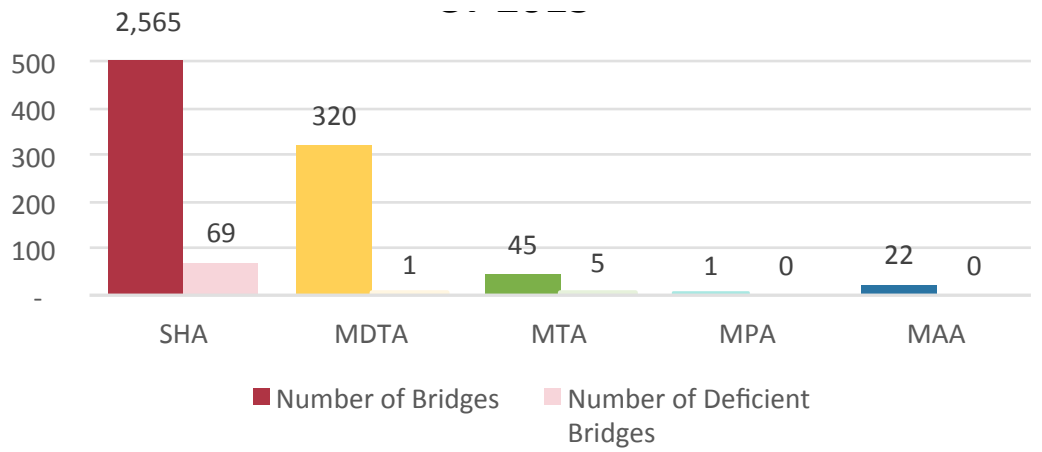
MTA monitors rail conditions for MTA Metro and Light Rail systems using TERM Lite evaluation software to evaluate guideway, track work and special structures. Evaluation will occur during an annual asset inventory.

MPA utilizes U.S. Army Corps of Engineers bay channel annual inspection surveys to monitor the dredging depth for shipping access channels to the Port of Baltimore.

PERFORMANCE MEASURE 2.7
Managing Capital Assets

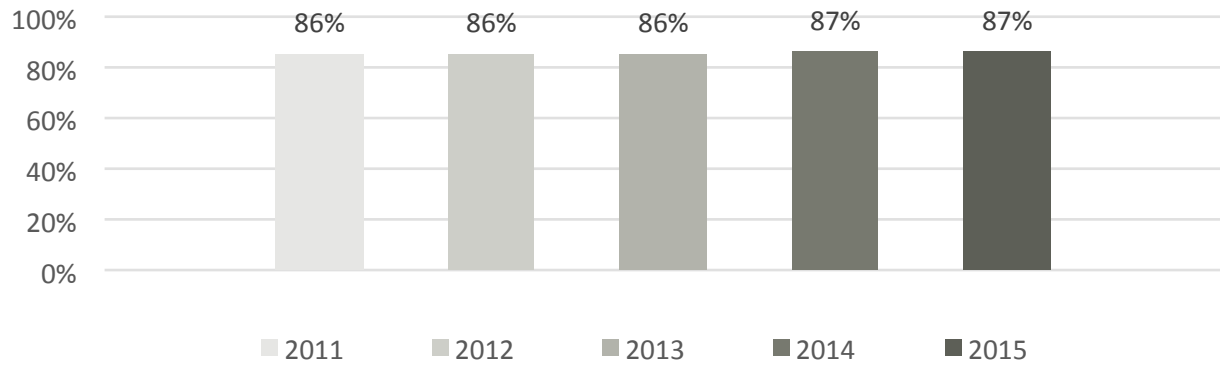
TBU	Active Asset Mgt	Criteria Basis	Assets Managed	Inspection Intervals	Performance Measures
Multiple	Yes	Bridge condition	Structurally deficient bridges	Annual	2.7a - % of structurally deficient bridges
MTA	Yes	Rail condition	Light and heavy rail	Annual	2.7c - % of MTA owned rail in good quality based on FTA ranking guide lines
SHA/MDTA	Yes	Roadway ride condition	Roadways - With acceptable (smooth) rides	Annual	2.7b - % of roadway miles with acceptable (smooth) ride quality
SHA	Yes	Interstate pavement condition (good or not good).	Interstates and non-interstate pavement	Annual	2.7e/2.7f - % of interstate and non-interstate pavement which are in good condition
MPA	Yes	Bay channel dredging priority	Shipping channel depth	Annual	2.7d - % of channel depth inspections

2.7A – Number of Structurally Deficient Bridges CY 2015*

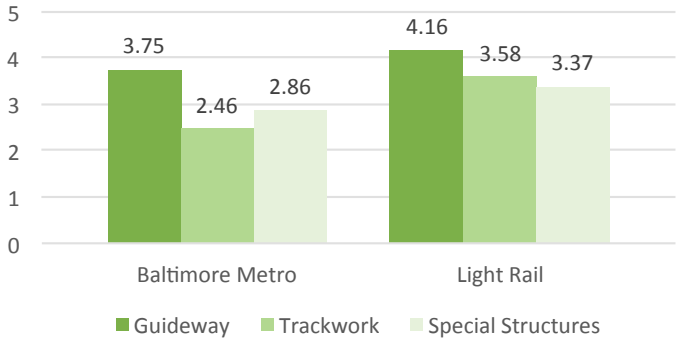


PERFORMANCE MEASURE 2.7
Managing Capital Assets

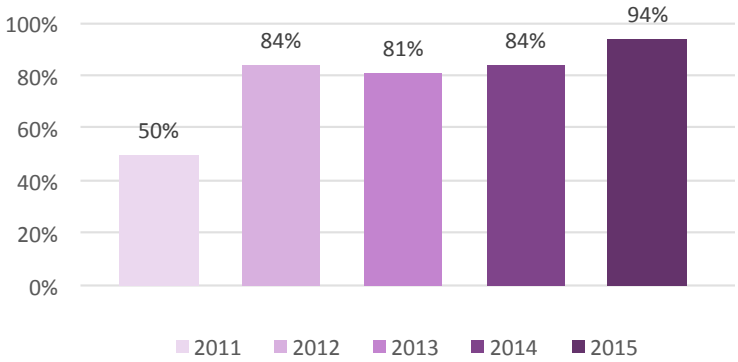
2.7B – Percent of SHA and MDTA Roadway Miles with Acceptable (Smooth) Rides



2.7C – Rating of Rail in "Good" Condition

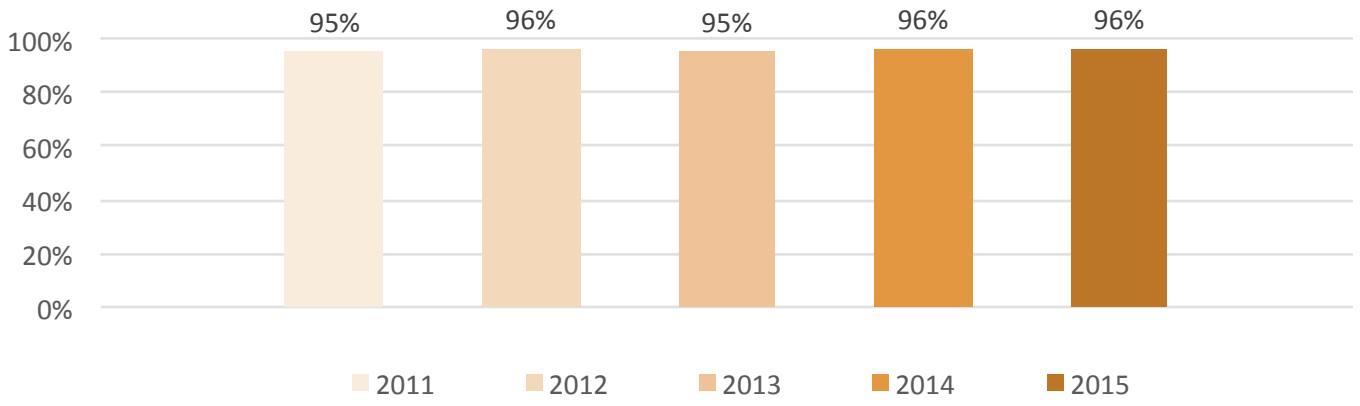


2.7D – Percent of Bay Channel Inspected

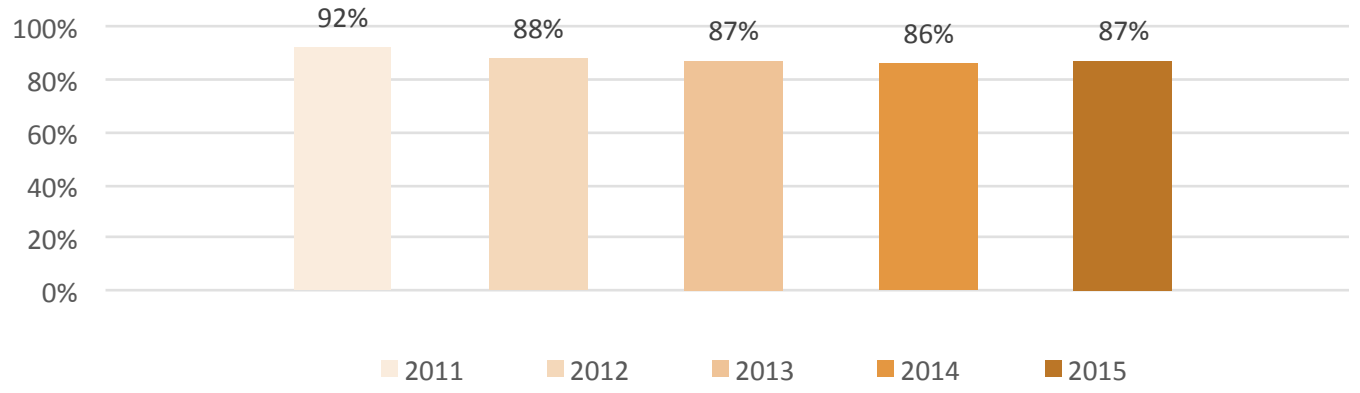


PERFORMANCE MEASURE 2.7
Managing Capital Assets

2.7E – Percent of Interstate Pavement in "Acceptable" Condition



2.7F – Percent of Non-Interstate Pavement in "Acceptable" Condition



TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Pretam Harry
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:
To track the timeliness and ability to match the budgets of the procurement process to be more efficient in our contracts.

FREQUENCY:
Annually (in October)

DATA COLLECTION METHODOLOGY:
Focus reports MDOT wide showing all active BPO for the fiscal year.

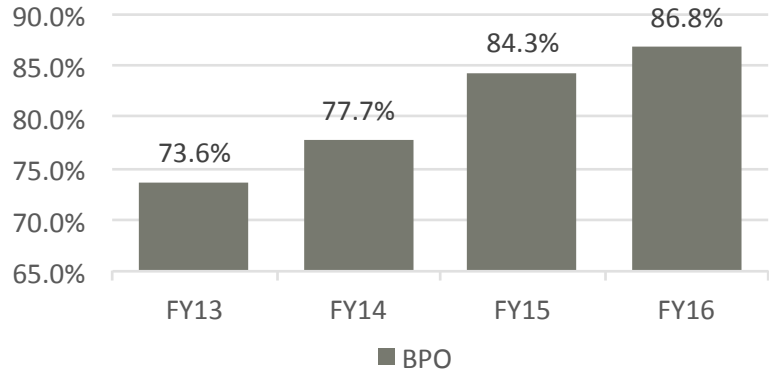
NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.8
Percent of Procurement on Time and on Budget

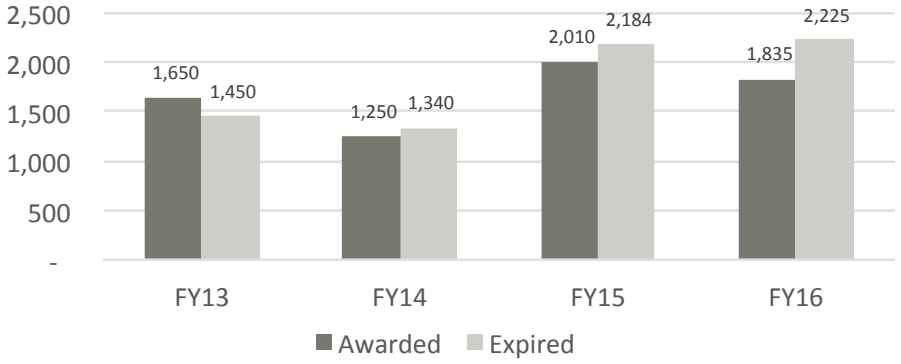
The purpose of this measure is to encourage all managers to proactively monitor and manage each of their procurements to make sure that they are in line with the project and budget in an effort to improve overall contracting efficiencies. Over time, managers will do a better job at setting timelines and budgets for projects. Managers will report the project status accurately and in a timely manner so that problems are identified early and corrective action taken swiftly.

While the trend is improving, we have not addressed underlying issues. The focus must remain on identifying those contracts with issues. The process improvement team is working to understand the systemic problems that prevent contracts that should have been closed in FY2016 from being closed.

Percent of Blanket Purchase Orders (BPO) Expired



Number of Blanket Purchase Order (BPO) Awards and Expires



TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Pretam Harry
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:
To measure (a) the percent of occurrences and (b) the dollar value of unanticipated contract modifications on procurement contracts.

FREQUENCY:
Annually (in October)

DATA COLLECTION METHODOLOGY:
MDOT wide showing active unanticipated contract modifications equal to or greater than $1 million.

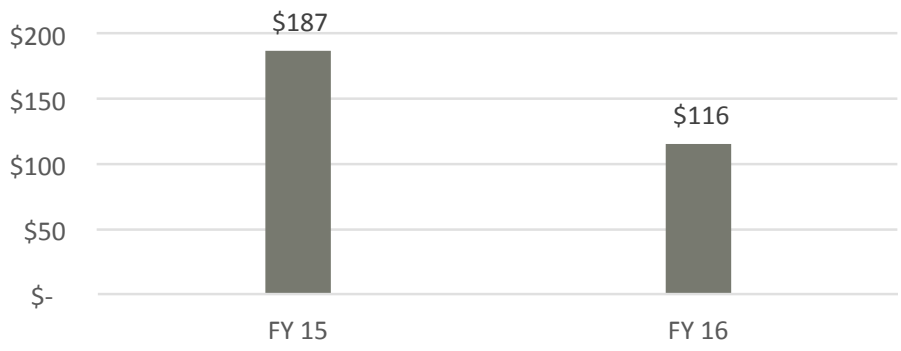
NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.9
Percent and Value of Unanticipated Contract Modifications

The purpose of this measure is to encourage all managers to proactively monitor and manage each of their procurements to make sure that they are minimizing the value and amount of unanticipated contract modifications. In addition, it will encourage project staff to use timely and accurate reports that managers can analyze to examine trends in unanticipated contract modifications.

The amount and value of contract modifications will vary from one transportation business unit to another depending on the type of project. For example, construction contracts, because of the uncertainties due to weather conditions or soil conditions, may require more contract modifications than building maintenance contracts. Similarly, an IT development contract may require more contract modifications than an IT maintenance contract.

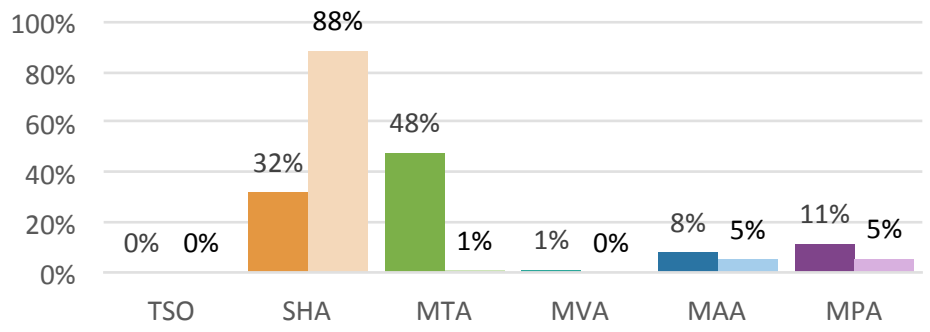
Value of Unanticipated Contract Modifications in Millions of Dollars



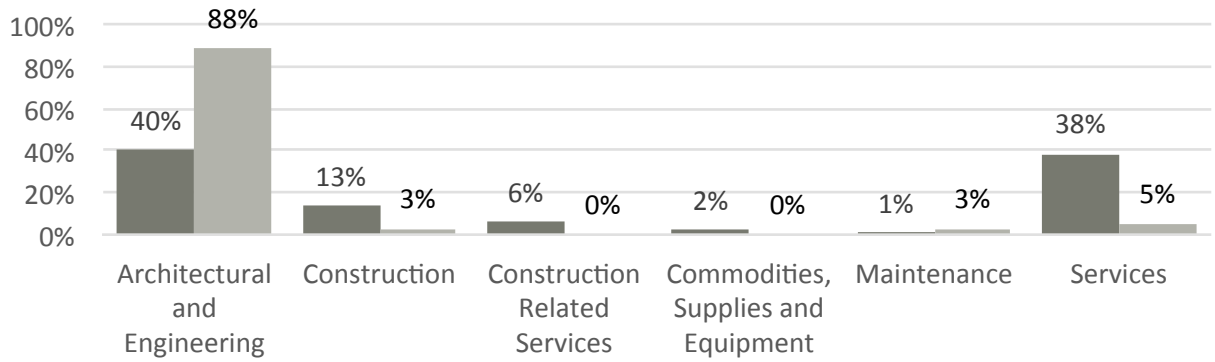
PERFORMANCE MEASURE 2.9

Percent and Value of Unanticipated Contract Modifications

Percent of Unanticipated Contract Modification Dollars Spent by TBU FY 15 & FY 16



Percent of Unanticipated Contract Modification Dollars Spent by Category of Work in FY 15 & FY 16



TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Laura Getty
Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:
To understand how procurement competition impacts MDOT resources

FREQUENCY:
Quarterly

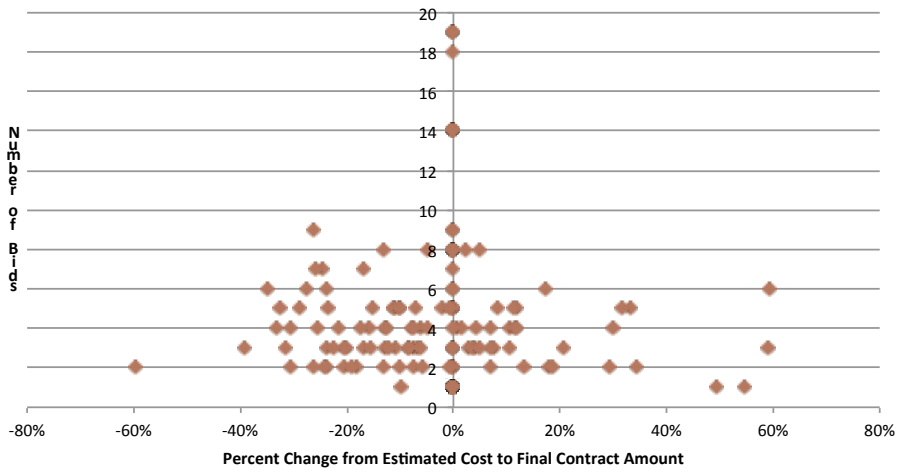
DATA COLLECTION METHODOLOGY:
Data was collected on each TBU procurement contract over $200,000 during the fourth quarter of FY 2016. Sole source, emergency, and intergovernmental purchasing procurements were not included, as they have their own processes for determination. Procurement contract ID, number of bids, estimated cost and final contract amount were the used data points.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.10
Relationship Between Procurement Competition and Cost

The purpose of this performance measure is to assess the impact of procurement competitiveness on contract costs, testing the hypothesis that increased competition leads to a better price. The chart below suggests that, as the number of bids increase, procurement contracts come in at or below cost estimate (-100 percent -0 percent). The procurements that increased in cost had a low number of bids. The data trend presents an opportunity to develop an MDOT-wide initiative to track cost estimates on procurement contracts and to evaluate the process for determining estimates.

Percent Change from Estimated Cost to Final Contract Amount



TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Patrick Bradley
Maryland Aviation Administration

PURPOSE OF MEASURE:
To monitor compliance with State and organizational operating processes and procedures each year by tracking the number of Internal Audit Findings and Repeat Internal Audit Findings.

FREQUENCY:
Annually (in October)

DATA COLLECTION METHODOLOGY:
Information collected from TBU audit databases.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.11
Number of Internal Audit Findings and Number of Repeat Internal Audit Findings

Transparent, informative, and accurate financial reporting is essential for our customers to have confidence in MDOT's ability to manage resources. Audits provide a window into current systems and areas for improvement.

Data will be presented by TBU in the number of audit findings and repeat audit findings on an annual basis. This will encourage MDOT and each TBU to avoid audit and repeat audit findings.

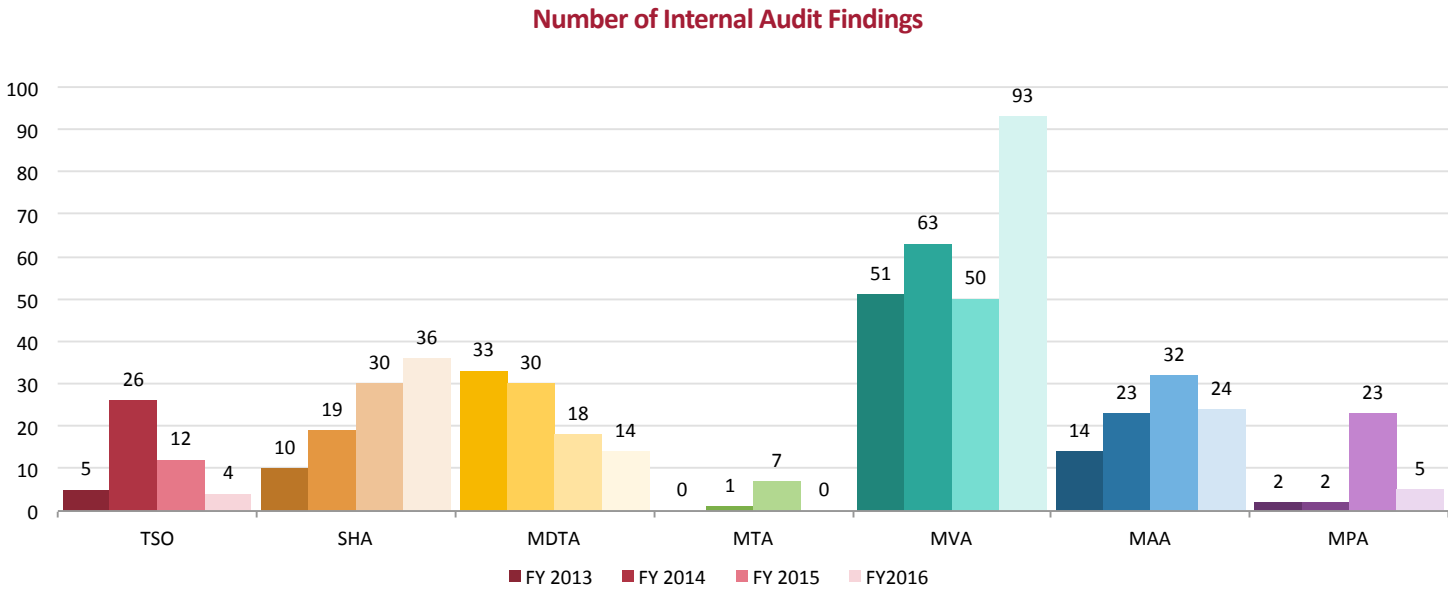
In FY 2013-2016, there were 627 total Internal Findings. The number of Repeat Internal Audit Findings totaled 32 in FY 2013 – FY2016, dealing with materials and supplies management (16 findings), fixed asset inventories (6 findings), promotional expense documentation and authorization (5 findings), MBE subcontractors reporting and compliance reviews (2 findings), and one finding each on the COMAR competitive bid process, overtime approvals not being documented and improper auto title lien documentation.

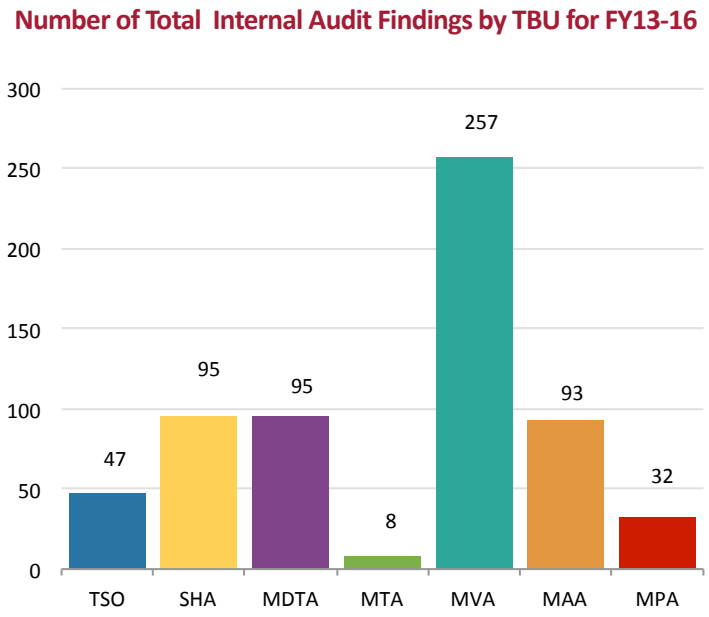
The materials and supplies management repeat audit findings include such items as segregation of duties, access to storeroom, non-signed receipts, perpetual inventory records not being accurate, documentation issues and inventory turning over less than three times per year.

Thirteen of thirty-two Repeat Internal Audit Findings have been resolved. Of the remaining unresolved nineteen Repeat Internal Audit Findings, thirteen are FY 2016 findings which are unresolved as the Audit staff haven't confirmed implementation of the changes. The remaining six items are three findings repeated in both FY 2013 and FY 2015 which are scheduled to be resolved Spring 2017.

PERFORMANCE MEASURE 2.11

Number of Internal Audit Findings and Number of Repeat Internal Audit Findings

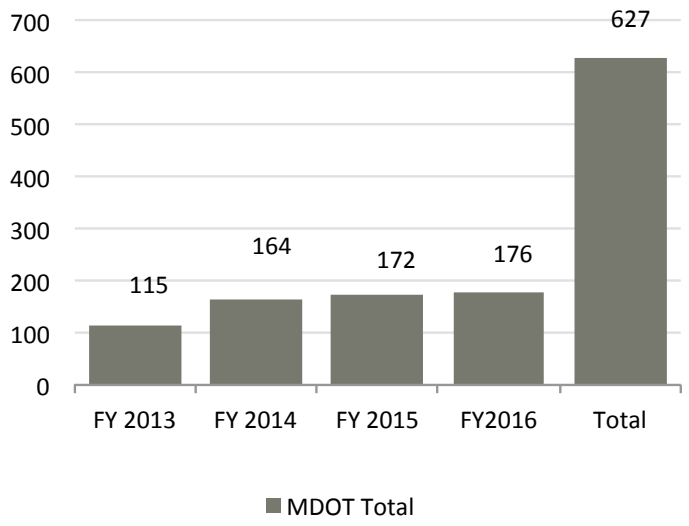




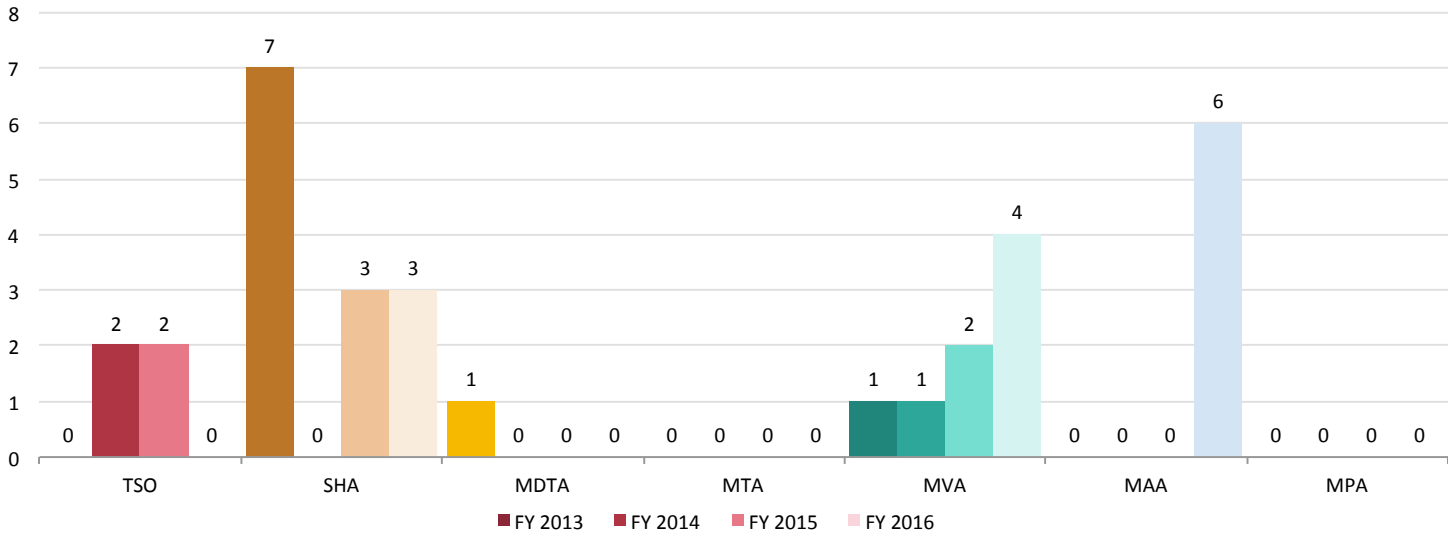
PERFORMANCE MEASURE 2.11

Number of Internal Audit Findings and Number of Repeat Internal Audit Findings

Trend in Total Internal Audit Findings



Number of Internal Audit Repeat Findings



TANGIBLE RESULT DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Patrick Bradley
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:
To monitor compliance with State and organizational operating processes and procedures each year by tracking the number of Legislative Repeat Audit Findings.

FREQUENCY:
Annually (in January)

DATA COLLECTION METHODOLOGY:
Information collected from TBU audit databases.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.12
Number of Legislative Repeat Audit Findings

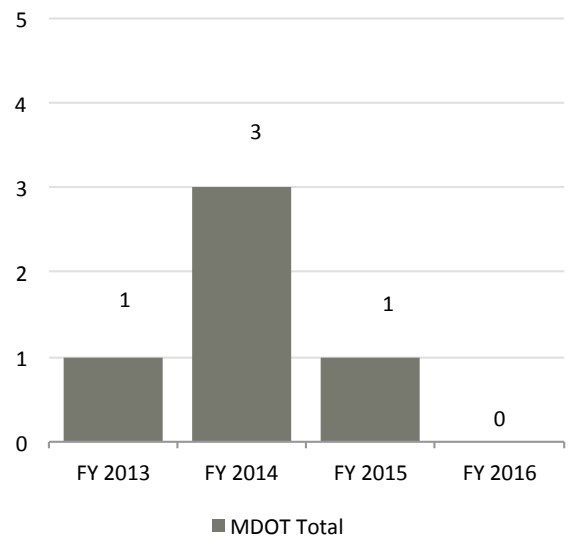
Transparent, informative, and accurate financial reporting is essential for our customers to have confidence in MDOT's ability to manage resources. Legislative audits provide an external view of our current systems and areas for improvement.

The purpose of this performance measure is to track the number of Legislative Repeat Audit Findings. Data will be presented MDOT-wide in the number of legislative repeat audit findings on an annual basis. This will encourage MDOT and each TBU to avoid legislative repeat audit findings.

In FY2013-FY2015 there were five total Office of Legislative Audit (OLA) Repeat Audit Findings dealing with proper internal controls over items purchased not being maintained, access to fare collection equipment and money rooms not being controlled, access controls to critical database security logs, files and transactions lacking, a lack of controls over critical virtual servers, and the process for determining the propriety of architectural and engineering contract billings not being comprehensive.

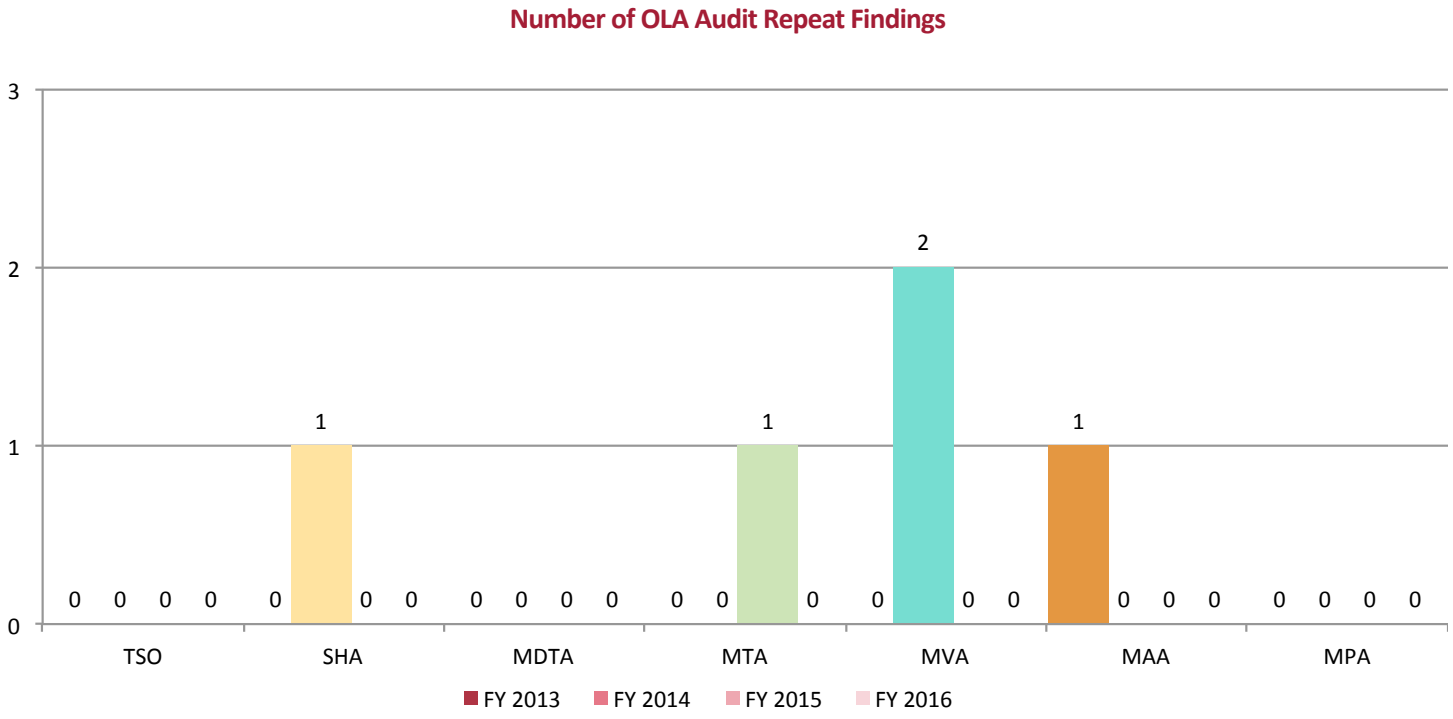
All five Legislative Repeat Audit Findings have been resolved.

Number of Legislative Repeat Audit Findings



PERFORMANCE MEASURE 2.12

Number of Legislative Repeat Audit Findings



TANGIBLE RESULT #3

Provide a Safe and Secure Transportation Infrastructure

MDOT will not compromise on our commitment to continually improve the safety and security of our customers and partners in everything we do.

RESULT DRIVER:
Sarah Clifford
Maryland Transportation Authority (MDTA)

TANGIBLE RESULT DRIVER:
Sarah Clifford
Maryland Transportation Authority (MDTA)

PERFORMANCE MEASURE DRIVER:
Bud Frank
The Secretary's Office (TSO)

PURPOSE OF MEASURE:
To track crime trends and adjust strategies/staffing/ response to protect customers, employees, and State property.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
MTA Police and MDTA Police will report directly to Measure Driver. SHA and MVA will compile information and also report directly to Measure Driver. Measure Driver will report to Project Management Team.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 3.1

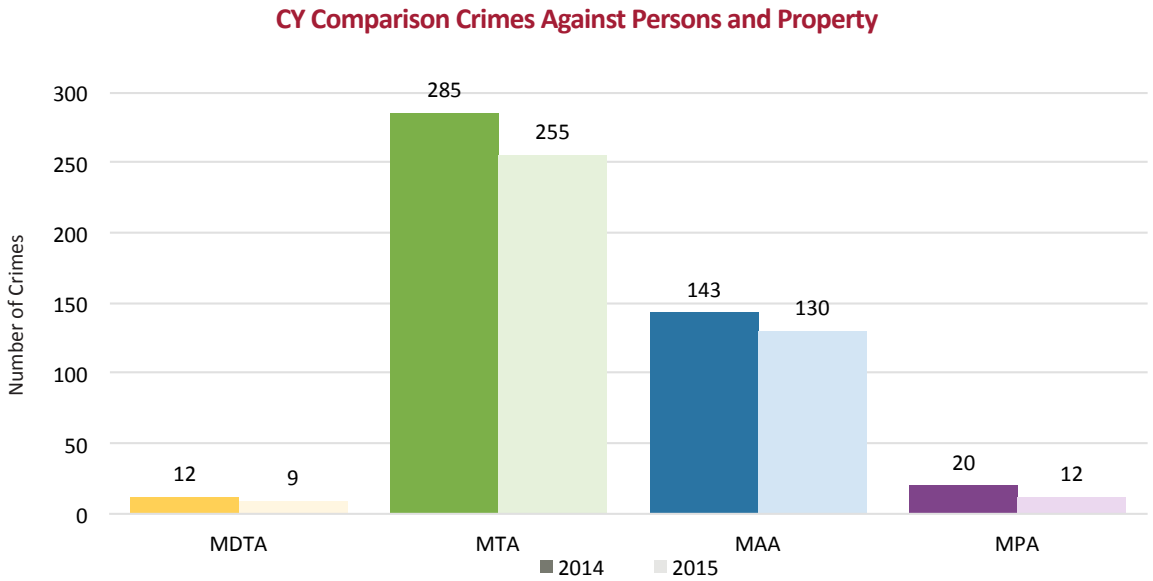
Number of Crimes Against Persons and Property Committed at MDOT Facilities

This measure includes all Part I offenses and select Part II offenses as defined in the FBI Uniform Crime Report (UCR). The UCR is a national standard used by law enforcement for the collection and comparison of crime data nationwide. Part I offenses include homicide, forcible rape, robbery, aggravated assault, burglary, larceny, motor vehicle theft and arson. Part II offenses include less serious offenses including other assaults, vandalism, disorderly conduct, and other sex offenses.

This reporting will show first and second quarter reporting for Calendar Year 2016 for each of the Transportation Business Units.

PERFORMANCE MEASURE 3.1

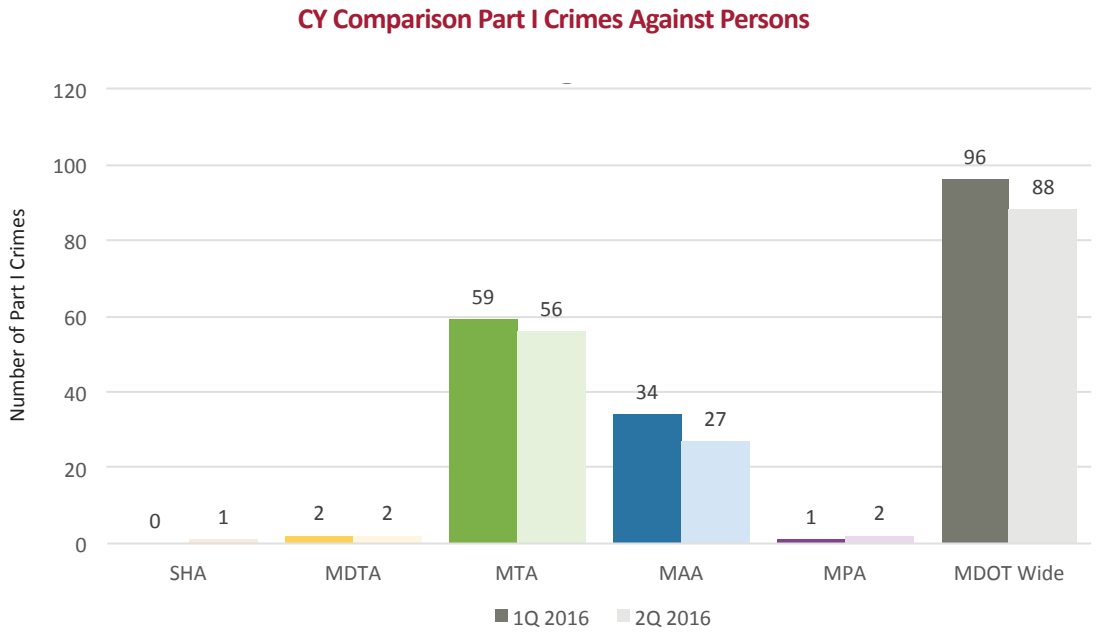
Number of Crimes Against Persons and Property Committed at MDOT Facilities



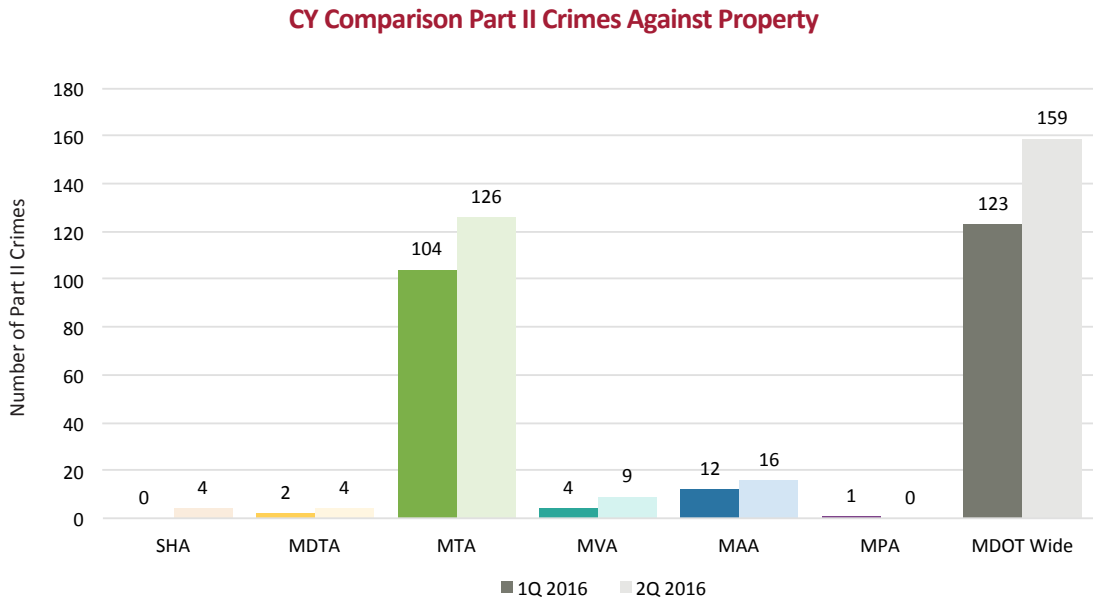
NOTE: SHA and MVA did not collect data during this reporting period

PERFORMANCE MEASURE 3.1

Number of Crimes Against Persons and Property Committed at MDOT Facilities



NOTE: MVA did not collect data during this reporting period



TANGIBLE RESULT DRIVER:
Sarah Clifford
Maryland Transportation Authority (MDTA)

PERFORMANCE MEASURE DRIVER:
Thomas Gianni
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:
To track quarterly and annual trends in the number of persons killed in motor vehicle crashes.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Based on Collected Police Data submitted to MSP through Automated Crash Reporting System (ACRS).

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 3.2
Number of Traffic-Related Fatalities on All Roads

MDOT strives to implement programs that will increase driver safety by reducing traffic-related crashes that result in both serious injuries and death. One key measure is to track the number of fatalities on all roads and analyze related trends. Maryland's Strategic Highway Safety Plan (SHSP) is a comprehensive set of emphasis areas and strategies designed to reduce highway fatalities and serious injuries through the implementation of behavioral and engineering safety countermeasures. It is based on the "Toward Zero Deaths" approach to reduce fatalities by 50 percent by 2030 from the 2008 baseline of 592 fatalities. Interim goals include 475 in 2015 and 387 in 2020.

Over the past decade, there has been a significant decrease in Maryland highway fatalities. In 2014, the number of fatalities (443) was the lowest since 1948. Unfortunately this trend was reversed in 2015 with a 17.6 percent increase in highway fatalities (521); the largest single-year increase in 30 years. During the first two quarters of 2016 this trend in Maryland appears to be following the same course as the previous year with a similar number of highway deaths.

This alarming increase has also been experienced nationally as the total number of deaths on our nation's highways increased by 7.2% to 35,092 fatalities in 2015, the larger single increase in 50 years. The National Highway Traffic Safety Administration attributes some of the cause of this increase to relatively inexpensive gasoline, a sharp increase in miles driven and an improved economy.

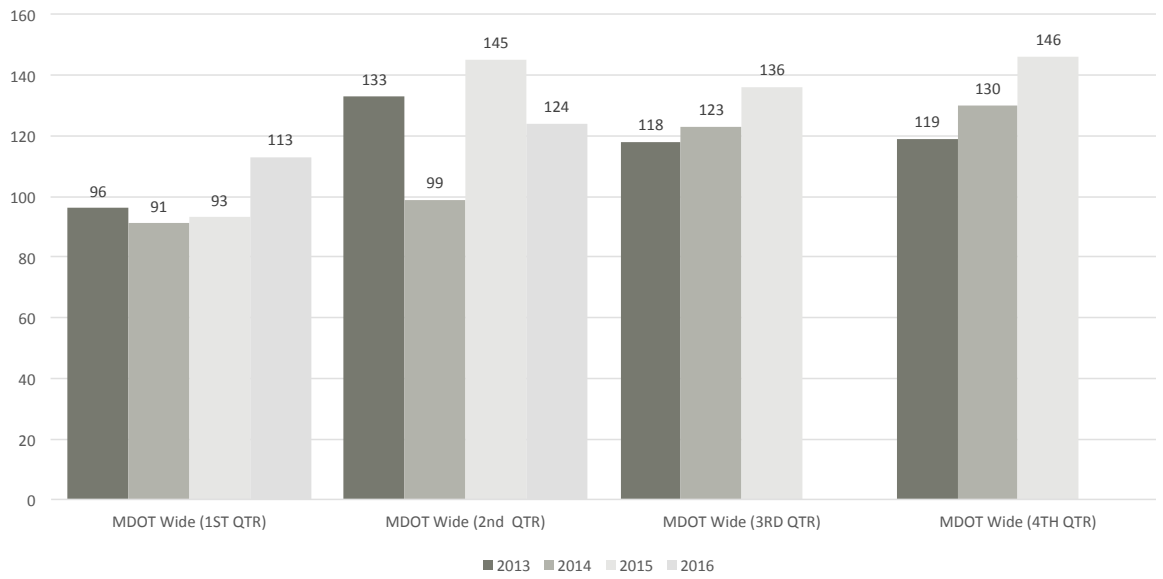
According to U.S. DOT calculations, Maryland had the largest increases in Vehicle Miles Traveled (8.1 percent) from March, 2015 to March, 2016. Although the complete analysis of 2015 data remains incomplete, increased exposure (more miles driven) may have been a significant reason for the increase in highway fatalities.

Bicyclists typically account for approximately one percent of all fatalities annually. Bicycle fatalities hover around five to six per year. Bicycle deaths in 2015 were double the annual average (12).

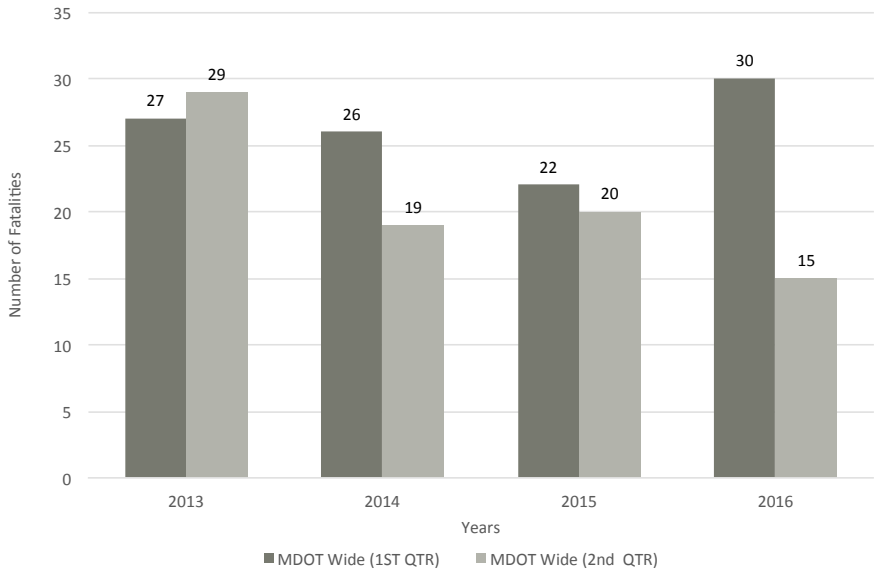
Pedestrian deaths typically account for approximately 20 percent of all traffic-related fatalities. Pedestrian fatalities consistently measure approximately 100 per year. Analysis of pedestrian fatal crashes indicates that a majority of those pedestrians were in a place where a driver would not expect them to be (e.g., not in a crosswalk). Despite a substantial increase in total highway fatalities in 2015, pedestrian crash deaths went down very slightly (99 in 2015) from the previous year and is tracking at about the same number for the first two quarters of 2016.

PERFORMANCE MEASURE 3.2
Number of Traffic-Related Fatalities on All Roads

Comparison Traffic Related Fatalities on All Roads

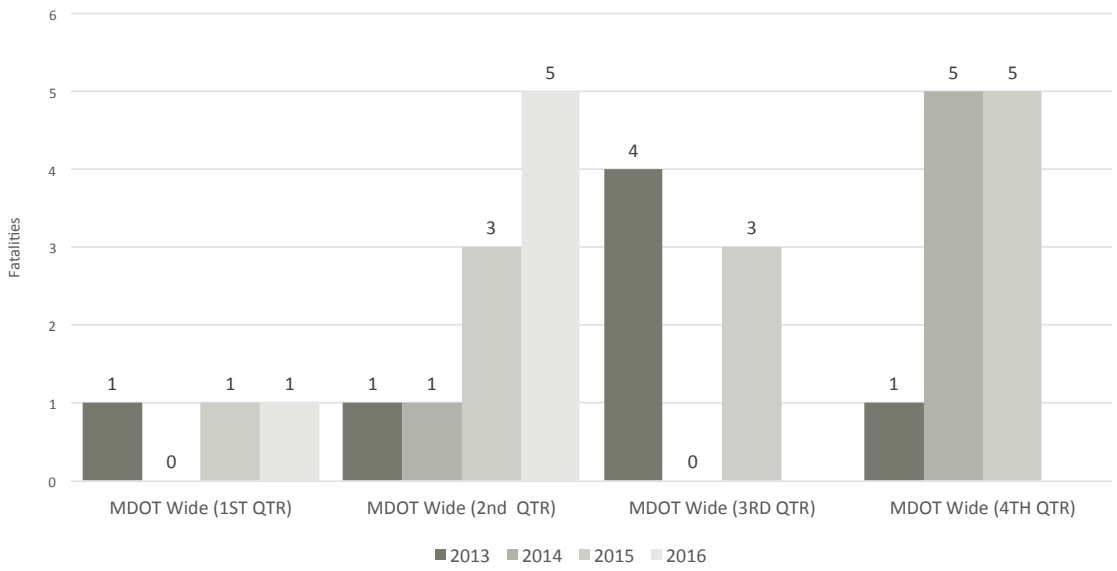


Quarterly Comparison Traffic Related Pedestrian Fatalities on All Roads

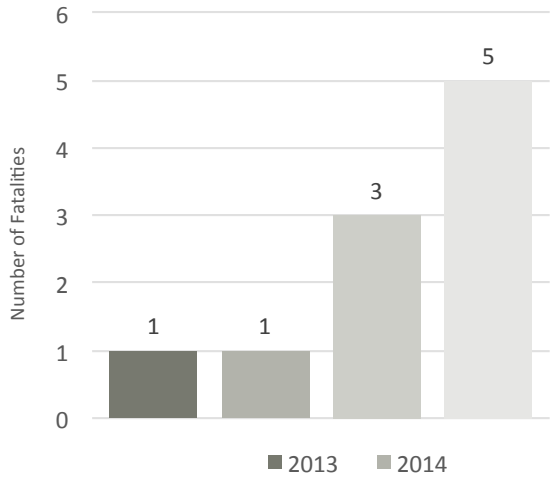


PERFORMANCE MEASURE 3.2
Number of Traffic-Related Fatalities on All Roads

CY Comparison Traffic Related Bicycle Fatalities on All Roads



2nd Quarterly Comparison Traffic Related Bicycle Fatalities on All Roads



NOTE: 2016 data is through first 2 Qtrs as of August 31, 2016

TANGIBLE RESULT DRIVER:
Sarah Clifford
Maryland Transportation Authority (MDTA)

PERFORMANCE MEASURE DRIVER:
Thomas Gianni
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:
To track trends in the number of persons killed in motor vehicle crashes per vehicle miles traveled (VMT).

FREQUENCY:
Annually (in January)

DATA COLLECTION METHODOLOGY:
Traveled (VMT) data based on highway counts on roadways across the state. Fatality data is collected by the Maryland State Police (MSP) through its Automated Crash Reporting System (ACRS). The Maryland Highway Safety Office (MHSO) collects the data from these two agencies.

NATIONAL BENCHMARK:
National Highway Fatality Rate of 1.07 in 2014

PERFORMANCE MEASURE 3.3
Maryland Traffic-Related Fatality Rate (Highways)

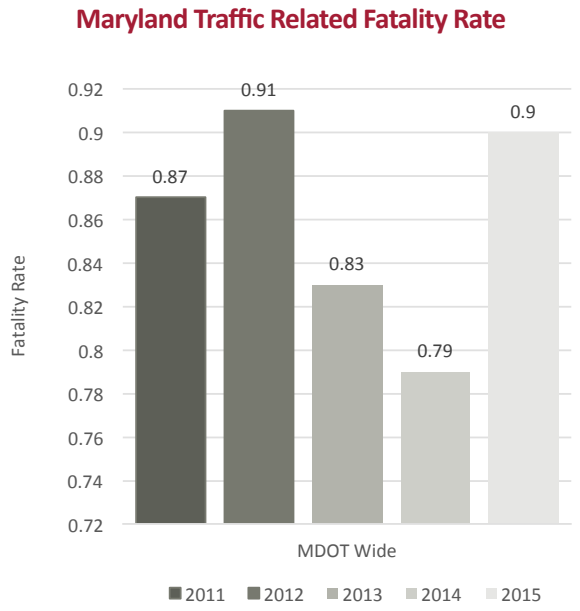
Maryland's fatality rate compares favorably to the national fatality rate. While the U.S. fatality rate has never dipped below one death per 100 million vehicle miles traveled (VMT), Maryland's rate has remained below one percent for the past six years. The rate has also trended downward for the past three years. Maryland's SHSP is a comprehensive set of emphasis areas and strategies designed to reduce highway fatalities and serious injuries through the implementation of behavioral and engineering safety countermeasures. It is based on the "Toward Zero Deaths" approach to reduce fatalities (and the associated fatality rate) by 50 percent by 2030 from the 2008 baseline of 592 fatalities.

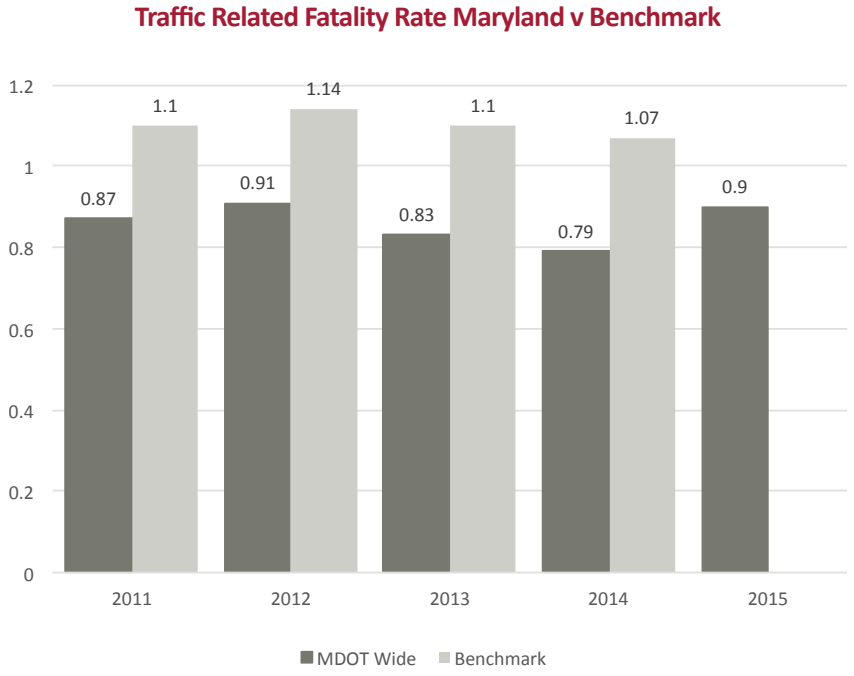
The fatality rate is affected by two distinctly different measures a) the number of persons killed in a traffic-related crash, and b) the amount of VMT in the state. The fatality rate is a ratio of the persons killed for every 100 million VMT.

While behavioral and engineering efforts may affect the number of persons killed annually, the VMT is most affected by the state of the economy. Historically, as the nation's and/or the state's economy grows people tend to drive more, increasing both the state's VMT and a person's risk for being in a crash. Opportunities to lower the fatality rate are best achieved by decreasing the number of traffic-related fatalities, as VMT is more difficult to influence.

PERFORMANCE MEASURE 3.3

Maryland Traffic-Related Fatality Rate (Highways)





TANGIBLE RESULT DRIVER:
Sarah Clifford
Maryland Transportation Authority (MDTA)

PERFORMANCE MEASURE DRIVER:
Thomas Gianni
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:
To track quarterly and annual trends in the number of persons seriously injured in motor vehicle crashes.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Based on Collected Police Data submitted to MSP through Automated Crash Reporting System (ACRS).

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 3.4
Number of Traffic-Related Serious Injuries on all Roads

The number of traffic-related serious injuries is a count of persons sustaining an incapacitating injury in a crash. It is determined by a responding police officer investigating the crash and gathered from the injury severity code entered on the crash report. Maryland's SHSP is based on the "Toward Zero Deaths" approach: to reduce fatalities by 50 percent by 2030 from the 2008 baseline. Serious Injury Goals have been set with a similar methodology. Interim Goals include 2015: 3,945; and 2020: 2,939.

Over the past 10 years there has been a significant decrease in traffic-related serious injuries, including a 33 percent decline since 2008. After a slight rise in crash related serious injuries in 2014 (to 3,053 from 2,961 in 2013), preliminary data indicates another significant decrease in the number of serious injuries reported in 2015 (2,602).

Through the first two quarters of 2016 preliminary data seems to indicate that while the number of fatalities in 2015 and 2016 have increased significantly, serious injuries have either stayed relatively the same or continued the downward trend. With the institution of new electronic crash reporting in 2015, epidemiologists are working to determine if this downward trend is valid or an anomaly of the reporting itself.

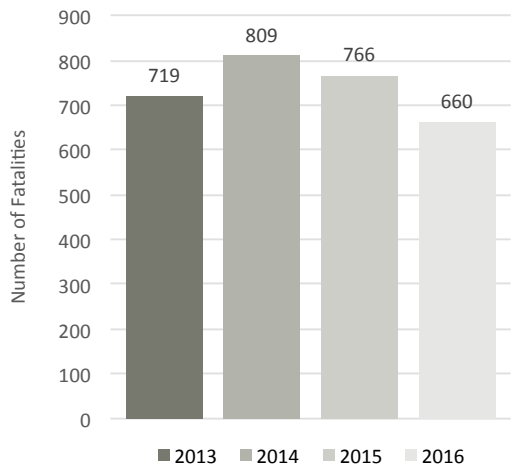
Since fatality data is only a small portion of the entire crash picture in Maryland, serious injuries, and their frequency, help to provide more robust data in determining crash trends across the State. Additionally, striving to minimize crashes that result in serious injuries serves to reduce a motorist's risk for suffering their accompanying life-altering consequences.

Since serious injuries are defined differently from state-to-state there is no national or common benchmark.

PERFORMANCE MEASURE 3.4

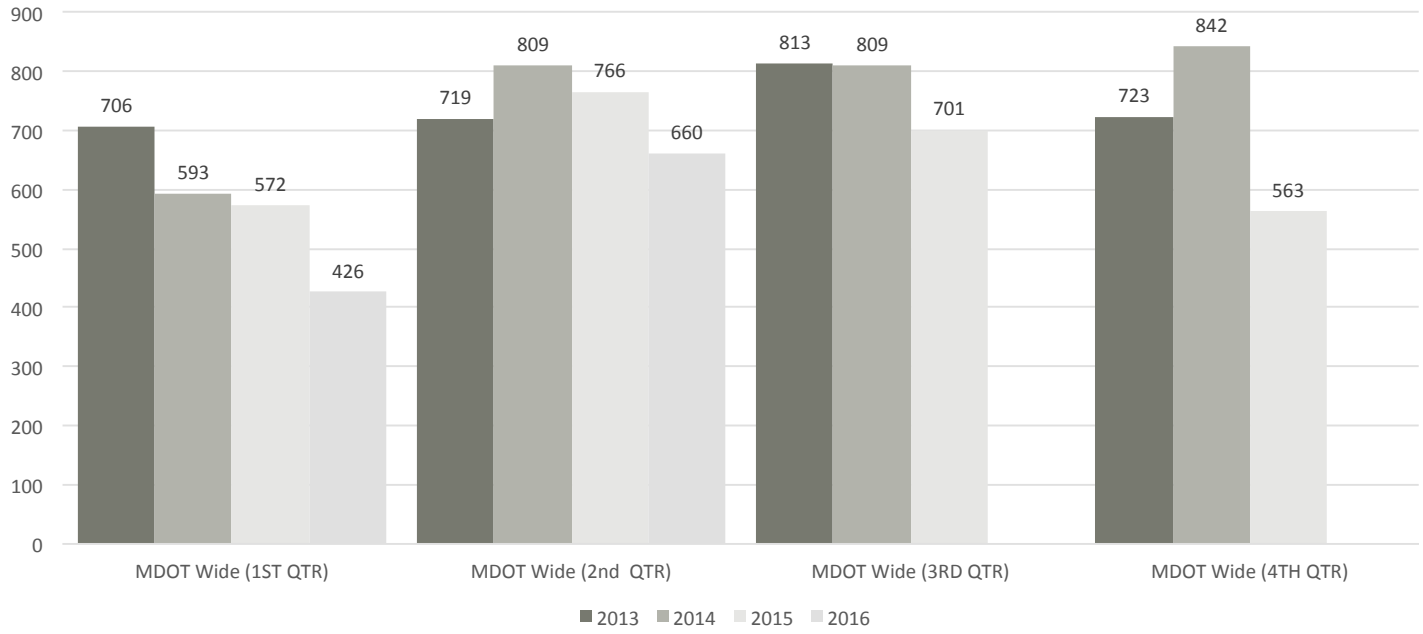
Number of Traffic-Related Serious Injuries on all Roads

2nd Quarterly Comparison Traffic Related Serious Injuries on All Roads



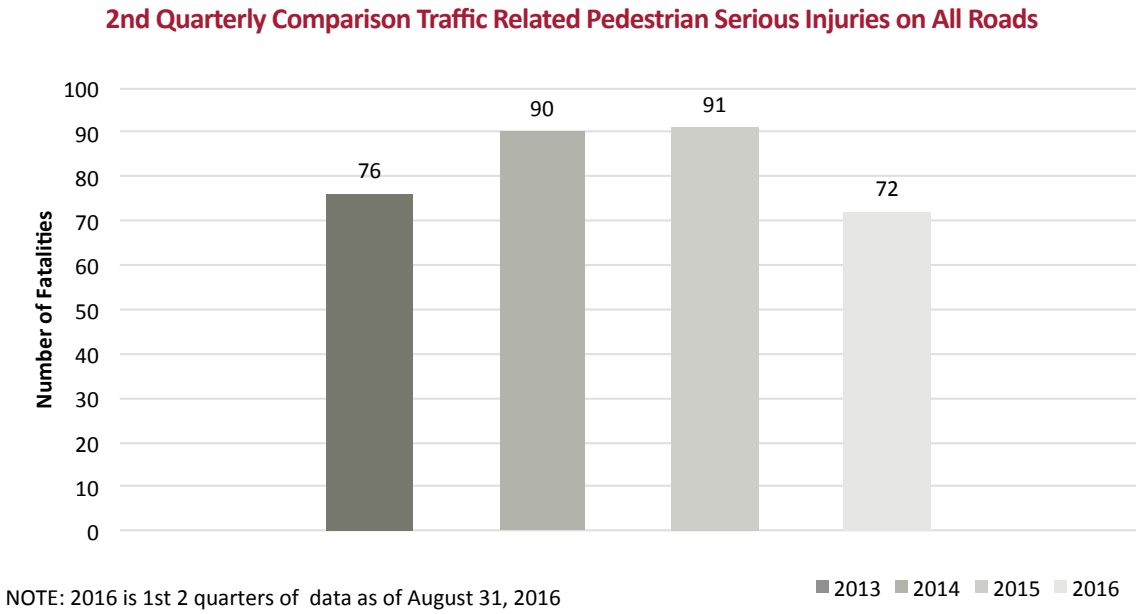
NOTE: 2016 1st 2 quarters of data as of August 31, 2016

Comparison Traffic Related Serious Injuries on All Roads

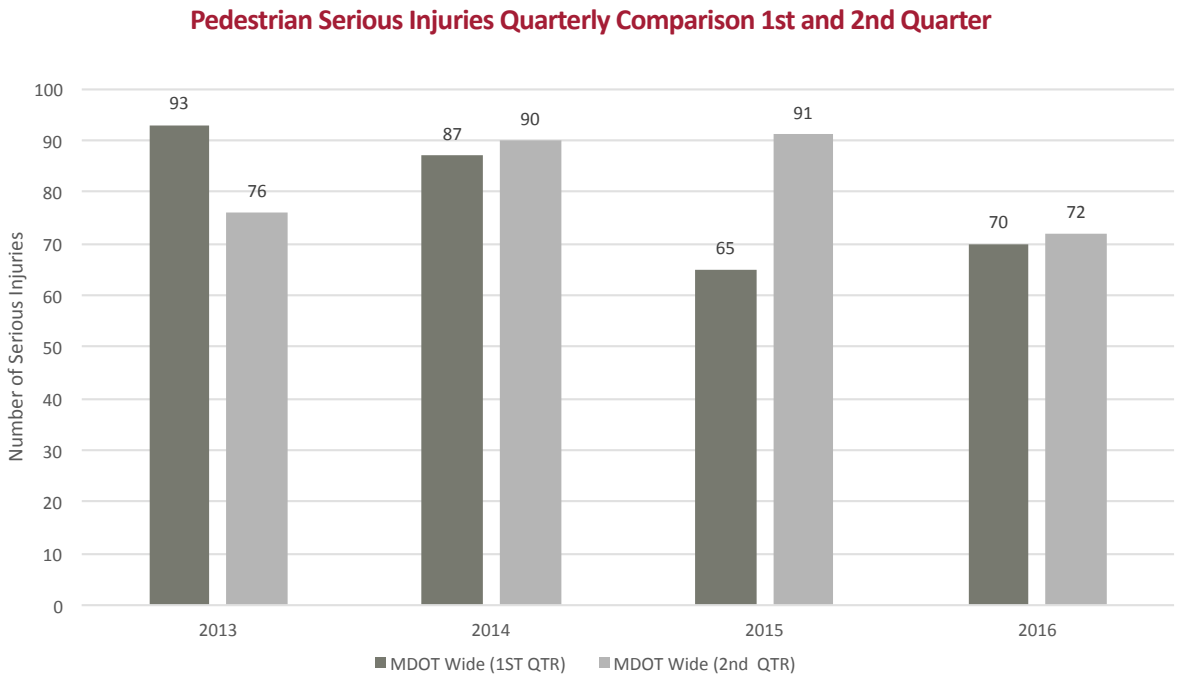


PERFORMANCE MEASURE 3.4

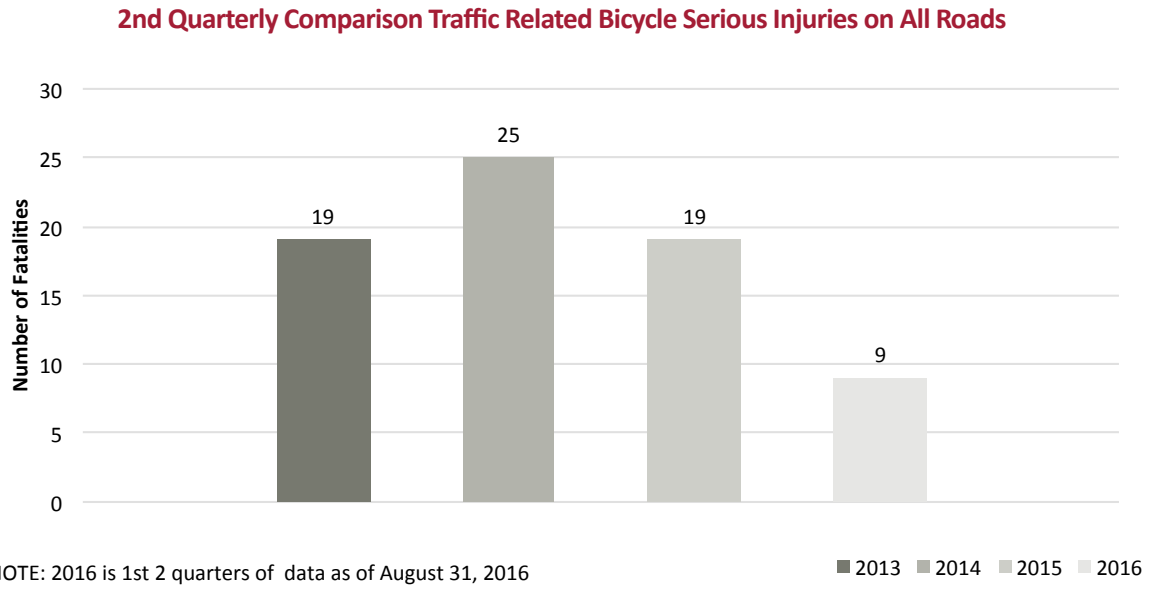
Number of Traffic-Related Serious Injuries on all Roads



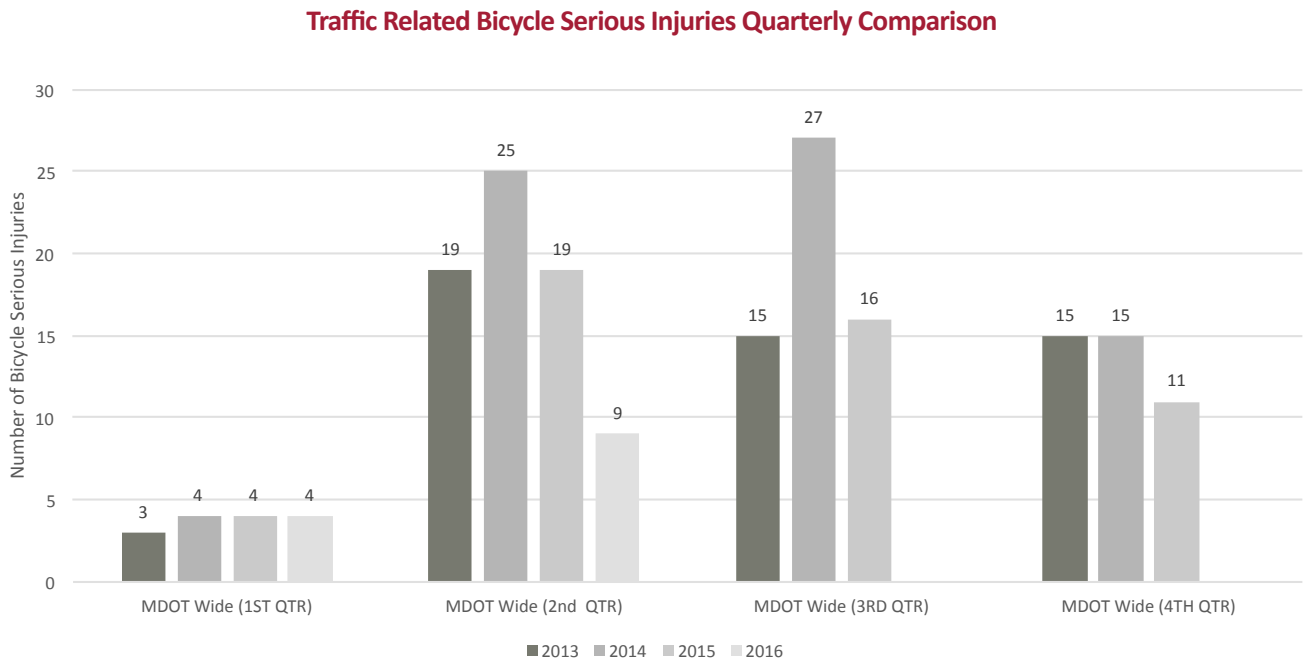
NOTE: 2016 is 1st 2 quarters of data as of August 31, 2016



PERFORMANCE MEASURE 3.4
Number of Traffic-Related Serious Injuries on all Roads



NOTE: 2016 is 1st 2 quarters of data as of August 31, 2016



TANGIBLE RESULT DRIVER:
Sarah Clifford
Maryland Transportation Authority (MDTA)

PERFORMANCE MEASURE DRIVER:
Thomas Gianni
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:
To track trends in the number of persons seriously injured in motor vehicle crashes per VMT.

FREQUENCY:
Annually (in January)

DATA COLLECTION METHODOLOGY:
State Highway Administration collects VMT data based on highway counts on roadways across the state. The serious injury data is collected by the Maryland State Police (MSP) through its Automated Crash Reporting System (ACRS). The Maryland Highway Safety Office (MHSO) collects the data from these two agencies. The rate is based on persons seriously injured in crashes per 100 VMT.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 3.5

Maryland Traffic-Related Serious Injury Rate (Highways)

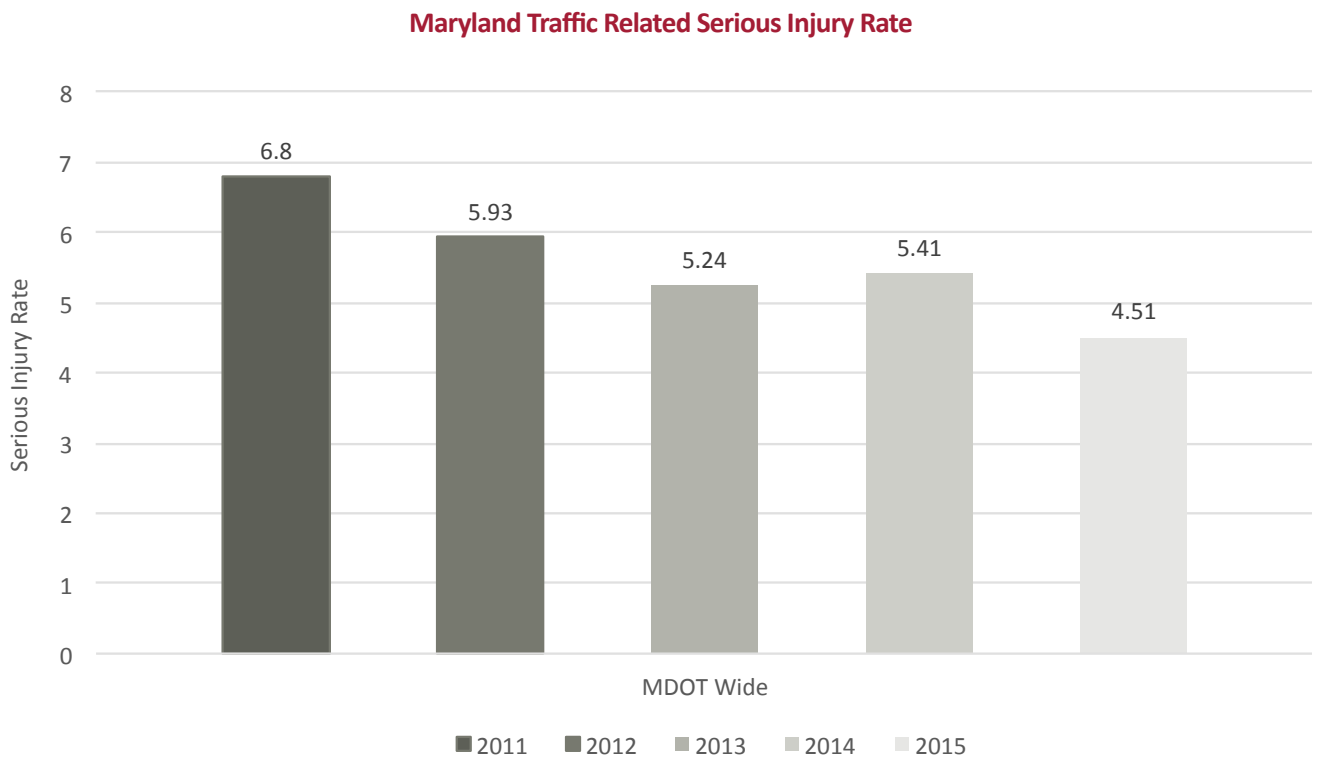
Maryland's serious injury rate is based on a similar measure as the fatality rate (number of persons seriously injured in a traffic-related crash per 100 million VMT). Over the past seven years both the number of serious injuries and the corresponding rate have dropped dramatically, by over 33 percent. The SHSP is based on the "Toward Zero Deaths" approach, and Serious Injury Rate goals have been set with a similar methodology. The SHSP interim goal for the Serious Injury Rate is 5.21.

The serious injury rate is determined by the same measurements used to determine the fatality rate: VMT and number of persons seriously injured in a traffic-related crash.

As engineering advances have resulted in safer vehicles and safer highways, it might be expected that a reduction in fatality rates would result in an increase in the serious injury rate. Over the past several years this has not been the case in Maryland, as both the number of traffic-related fatalities and serious injuries (and their corresponding rates) have declined significantly.

PERFORMANCE MEASURE 3.5

Maryland Traffic-Related Serious Injury Rate (Highways)



TANGIBLE RESULT DRIVER:
Sarah Clifford
Maryland Transportation Authority (MDTA)

PERFORMANCE MEASURE DRIVER:
Gina Watson
Maryland Port Administration (MPA)

PURPOSE OF MEASURE:
To track trends in seat belt use in Maryland and assess how Maryland ranks against the national rate as an indicator of how well seatbelt use is encouraged.

FREQUENCY:
Annually (in January)

DATA COLLECTION METHODOLOGY:
Observational Survey conducted by MVA Maryland Highway Safety Office (MHSO).

NATIONAL BENCHMARK:
Nationwide rate provided by National Highway Traffic Safety Administration (NHTSA) reached 88.5 percent in 2015.

PERFORMANCE MEASURE 3.6
Maryland Seat Belt Usage Rate

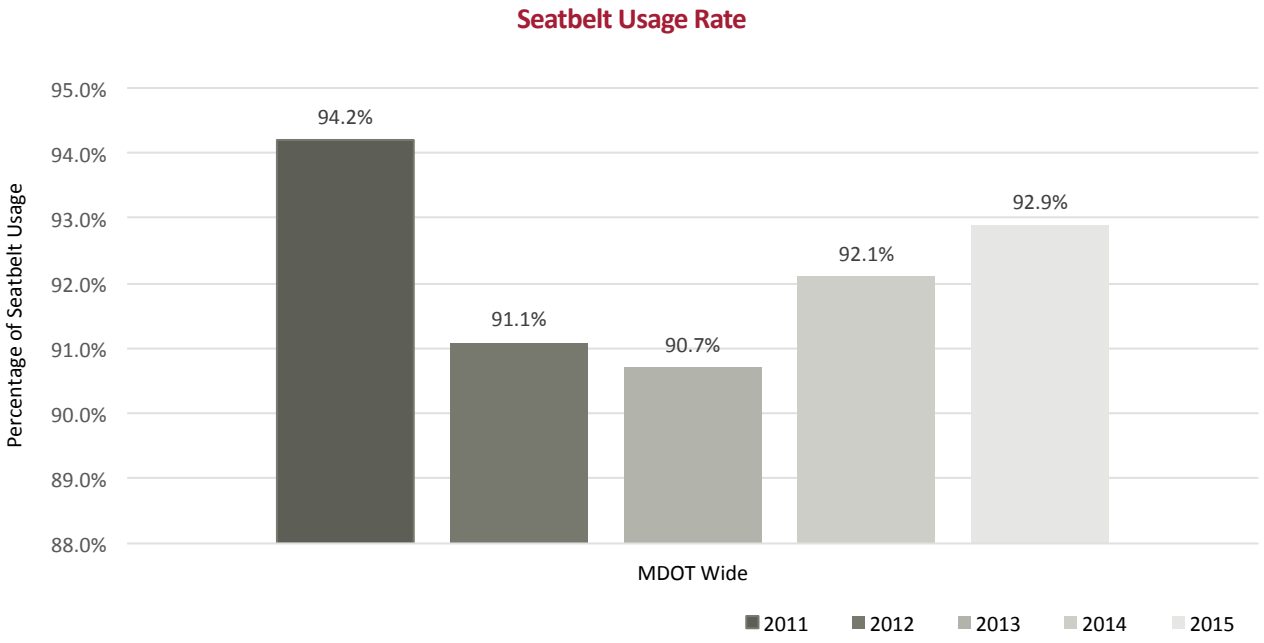
The use of seat belts greatly reduces the severity of personal injury and occupant fatalities in crashes. States with primary and secondary seat belt enforcement laws exhibit higher seat belt usage rates.

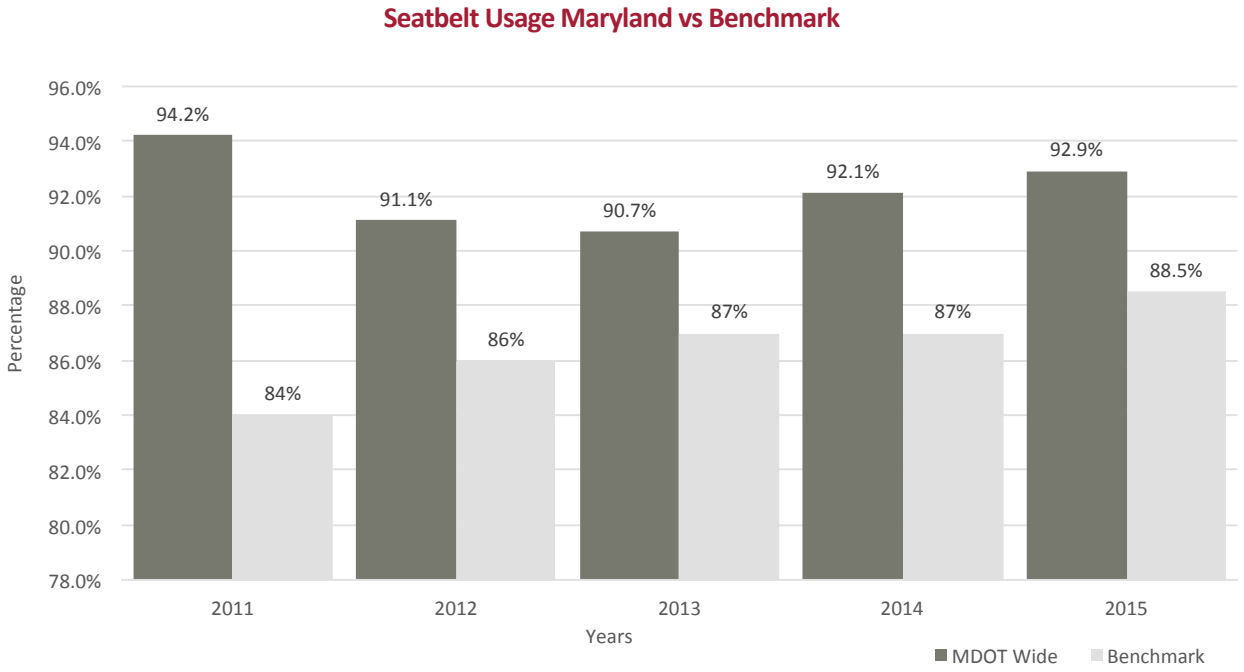
Maryland's seat belt usage rate is collected by an observational survey methodology approved by the NHTSA. Maryland's 2015 seat belt usage rate was 92.9 percent in comparison to the national rate of 88.5 percent.

The Maryland Highway Safety Office goal for seat belt usage for 2015 was 92.7 percent.

Seat belt use in Maryland has shown an increase for 2014 and 2015 following a two-year negative trend in 2012 and 2013, which was impacted by National Highway Traffic Safety Administration's (NHTSA) newly implemented uniform survey criteria in 2013. The established new uniform criteria for surveys include more stringent survey design requirements.

PERFORMANCE MEASURE 3.6
Maryland Seat Belt Usage Rate





TANGIBLE RESULT DRIVER:
Sarah Clifford
Maryland Transportation Authority (MDTA)

PERFORMANCE MEASURE DRIVER:
Cedric Ward
State Highway Administration (SHA)

PURPOSE OF MEASURE:
To track and assess the performance of MDOT's incident management programs to respond to customer needs while traveling.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Data is collected from centralized reporting to CHART for roadway data. MPA and MAA data are collected individually.

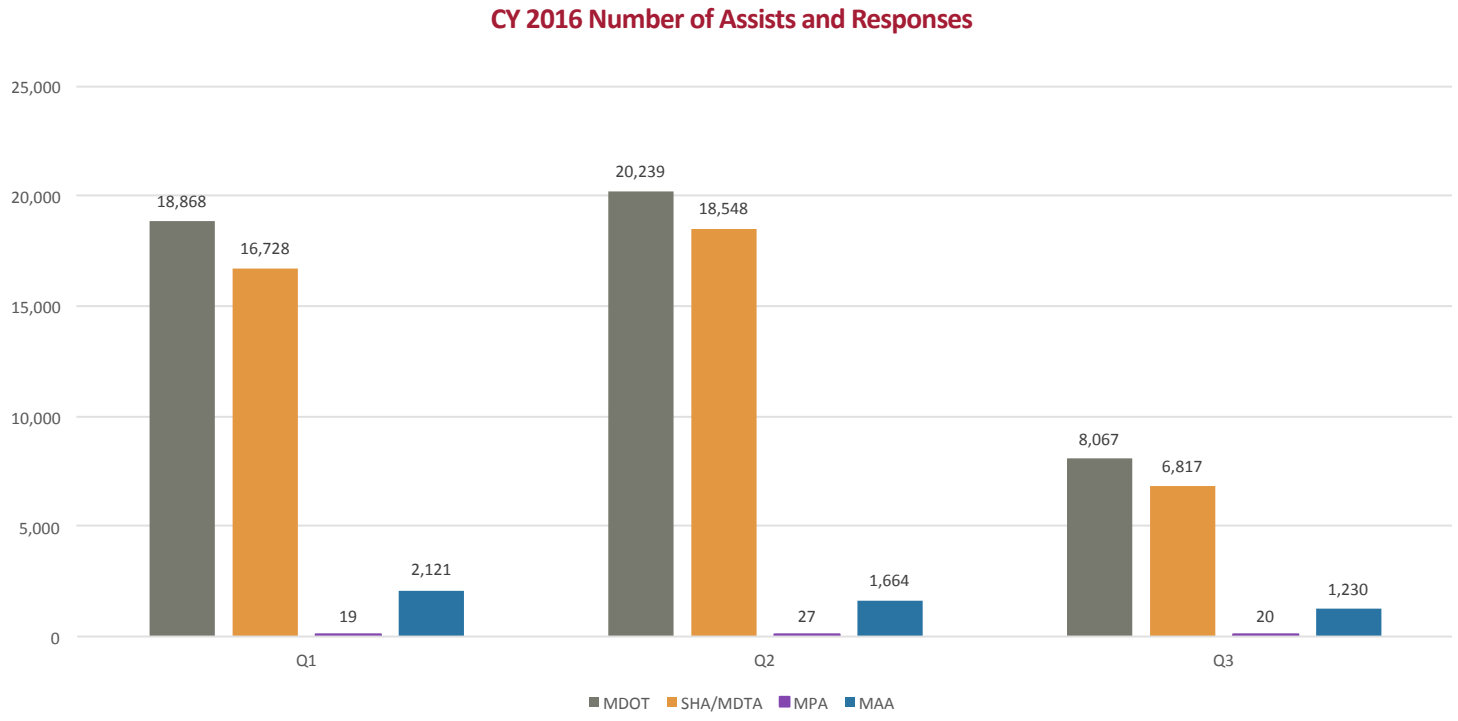
NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 3.7
Disabled Motorist Assisted by MDOT

The Coordinated Highways Action Response Team (CHART) is a joint effort of MDOT, the Maryland State Police, and numerous other Federal, State and Local agencies. CHART provides assistance to disabled motorists and responds to traffic incidents throughout Maryland. In the Baltimore and Washington metropolitan areas, patrols are operated twenty-four hours per day, seven days per week. In addition to services on highways, the MPA and MAA provide assistance to their customers who experience vehicle issues. These services provide an added value to MDOT customers who otherwise may need to rely on paid service providers.

As of 2016, MDOT has helped 47,174 disabled motorists. We saw an increase in assists and responses between first and second quarter for MDOT wide. Additionally, CHART provides real-time traffic conditions through its website: http://www.chart.state.md.us/.

PERFORMANCE MEASURE 3.7
Disabled Motorist Assisted by MDOT



TANGIBLE RESULT DRIVER:
Sarah Clifford
Maryland Transportation Authority (MDTA)

PERFORMANCE MEASURE DRIVER:
Cedric Johnson
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:
To track injury reporting trends at MDOT TBUs.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Collected by Chesapeake Employers' Insurance (formerly Injured Workers Insurance Fund (IWIF)) and sent to agencies as a report.

NATIONAL BENCHMARK:
N/A

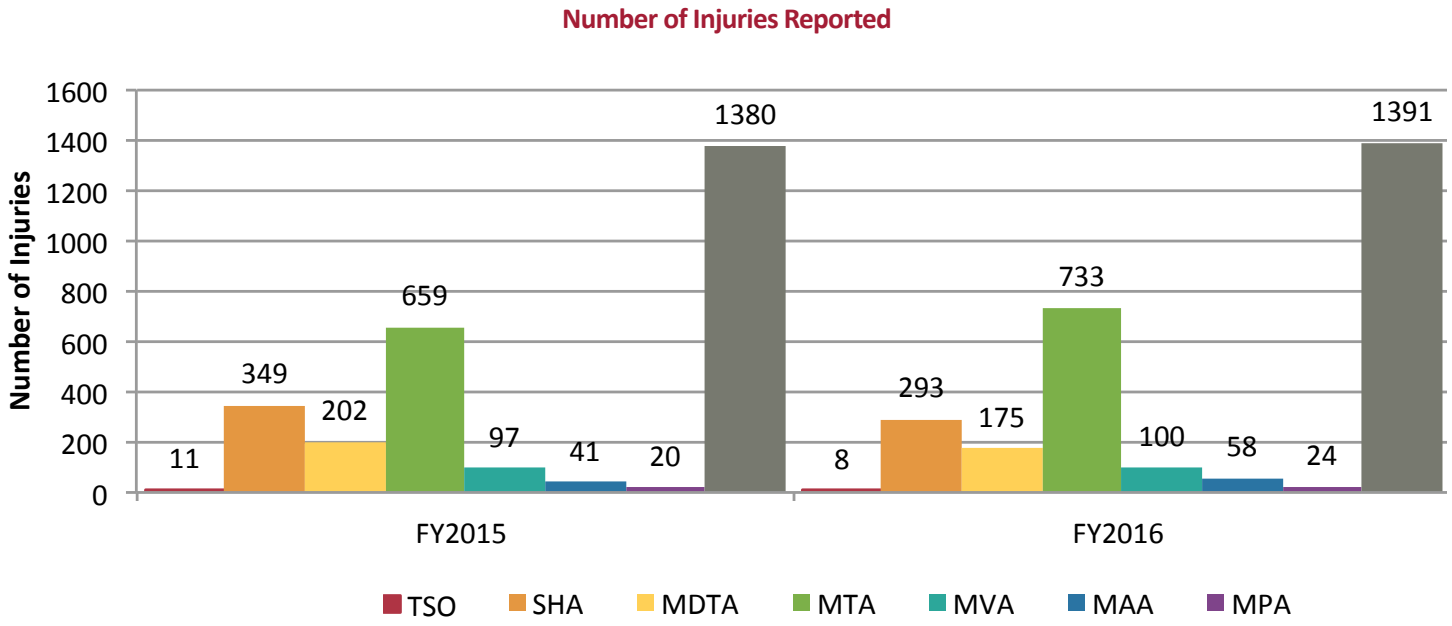
PERFORMANCE MEASURE 3.8

Number of Employee Injuries Reported (First Report of Injury)

This measure includes all first reports of injury (FROI) to the Chesapeake Employers' Insurance (formerly Injured Workers Insurance Fund (IWIF). This is an annual comparison of FY2015 versus FY2016. The overall number of injuries is essentially unchanged. The data from the injury reports are used for analysis and the development and implementation of risk mitigation strategies and employee training programs. Strategies for reducing employee injuries include the timely submission of injury reports.

PERFORMANCE MEASURE 3.8

Number of Employee Injuries Reported (First Report of Injury)



TANGIBLE RESULT DRIVER:
Sarah Clifford
Maryland Transportation Authority (MDTA)

PERFORMANCE MEASURE DRIVER:
Cedric Johnson
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:
To track, trend, and mitigate lost work days.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Data is collected through multiple MDOT timekeeping systems.

NATIONAL BENCHMARK:
N/A

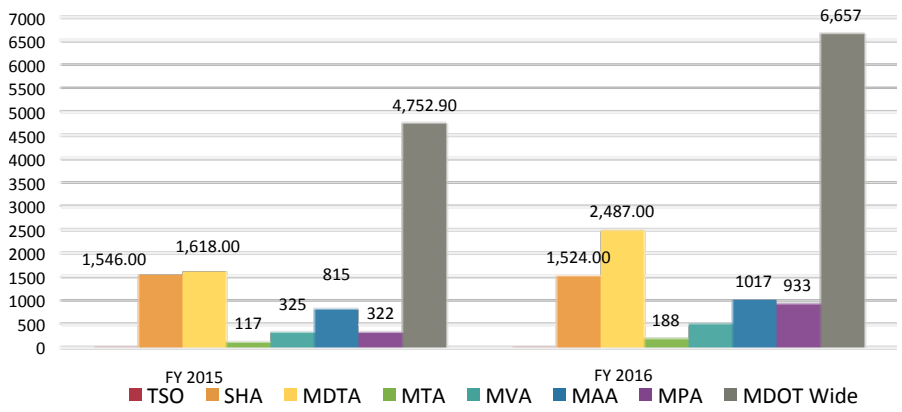
PERFORMANCE MEASURE 3.9
Number of Employee Lost Work Days Due to Injuries

Employee safety is a top priority to MDOT. However, injuries do occur on the job and work days are sometimes lost as a result. Lost work days reduce the effectiveness of TBUs and are an indirect measure of employee health and welfare. Safety practices such as personal protective equipment, safety training, and safety policies are employed to reduce employee injuries and lost work days.

This measure only includes lost work days due to on the job, work-related injuries. Note that lost work days are associated with the number of injuries reported in Performance Measure 3.8. Factors affecting this measure include varying work conditions and environments, and differing risk profiles amongst employees across TBUs, as well as inconsistent leave coding policies and practices across MDOT's payroll systems.

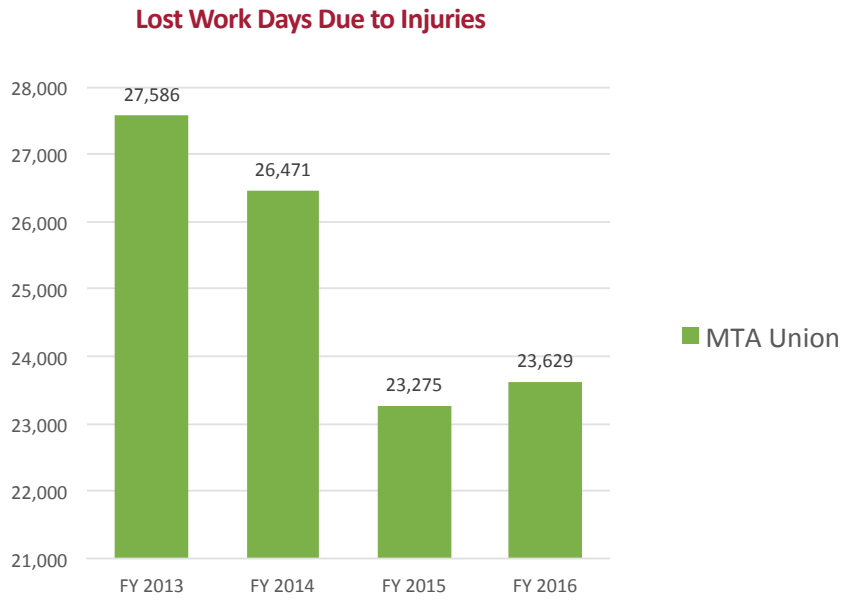
An annual comparison of all TBUs for FY 2016 versus FY 2015 reflect significant increases during the current fiscal year. It is important to note that there are varying work environments, inconsistent employee injury leave policies and two (2) separate payroll systems.

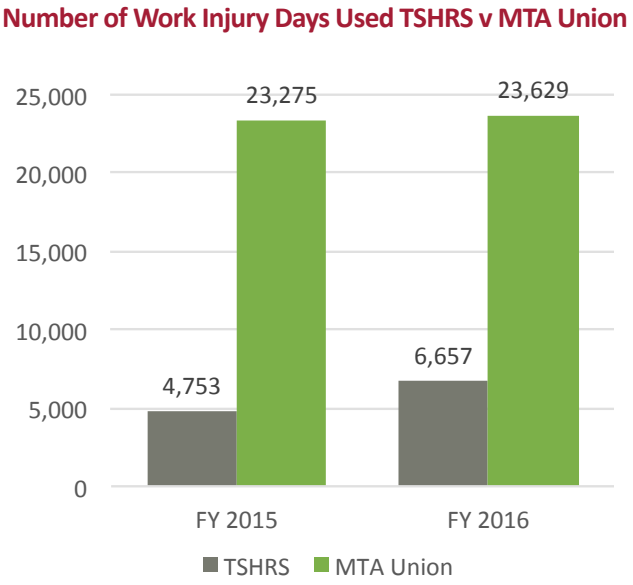
Number of Work Injury Days Used



PERFORMANCE MEASURE 3.9

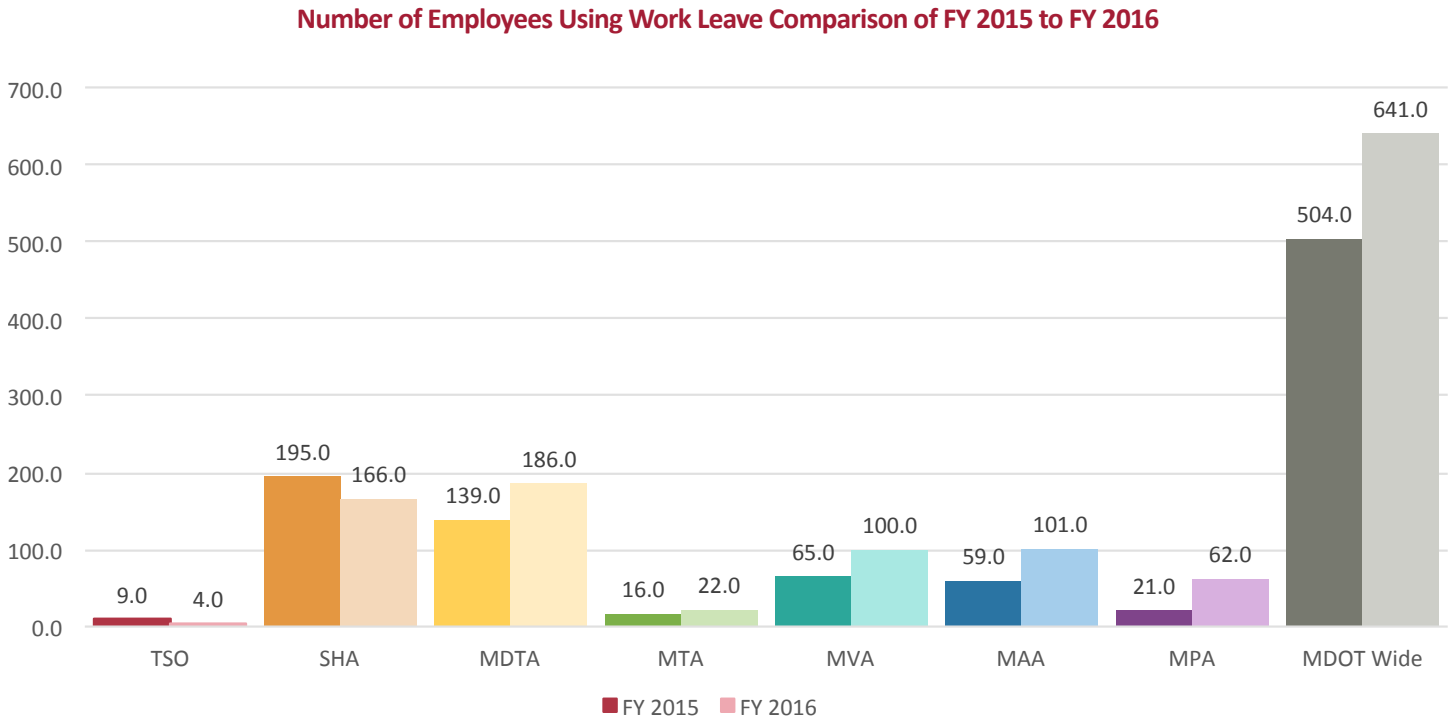
Number of Employee Lost Work Days Due to Injuries





PERFORMANCE MEASURE 3.9

Number of Employee Lost Work Days Due to Injuries



TANGIBLE RESULT DRIVER:
Sarah Clifford
Maryland Transportation Authority (MDTA)

PERFORMANCE MEASURE DRIVER:
Phil Thomas
Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:
To track customer incidents within MDOT facilities where customers are rendered a service to ensure our customers that MDOT facilities are safe for our customers.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
TBUs track using their existing processes and report to the driver via phone or email.

NATIONAL BENCHMARK:
N/A

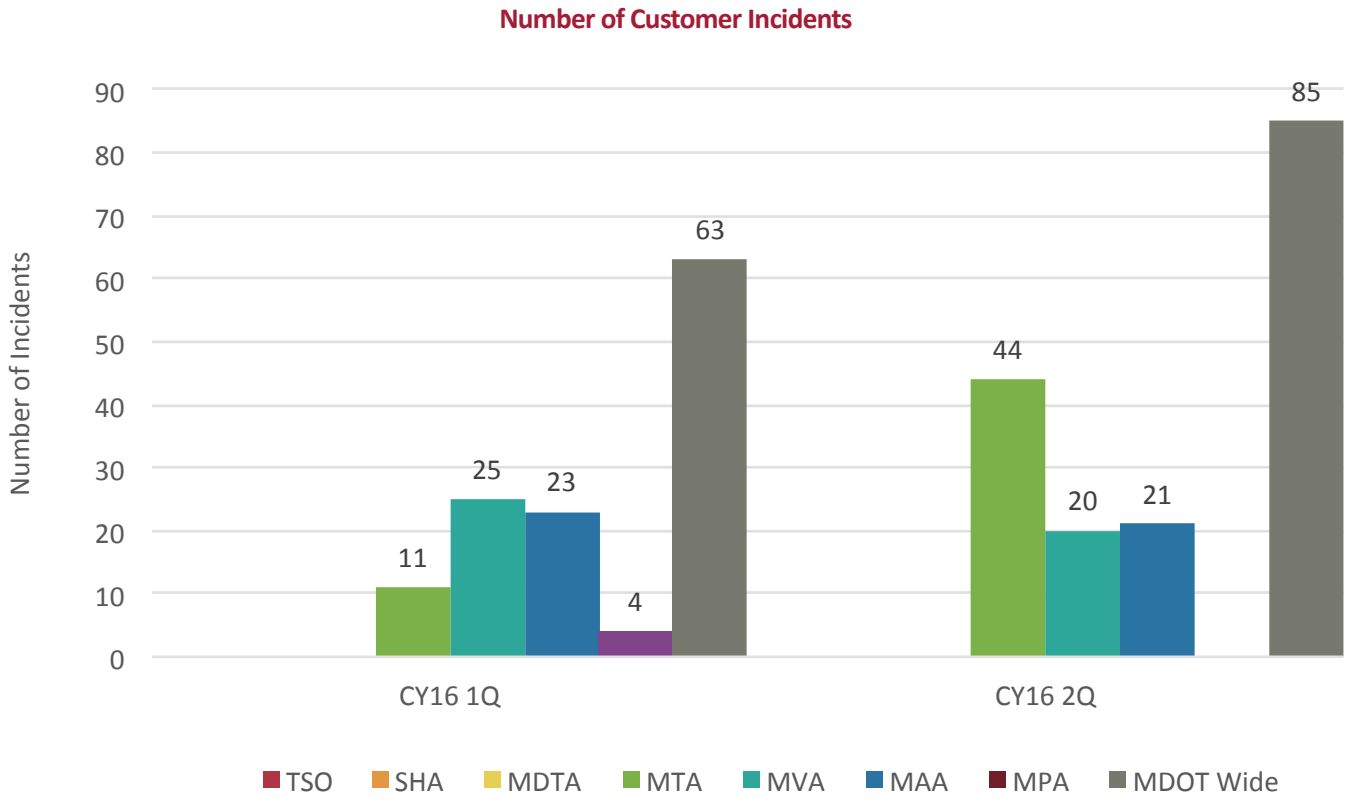
PERFORMANCE MEASURE 3.10
Number of Customer Incidents at MDOT Facilities

MDOT has programs in place to ensure the safety and security of its facilities and its customers. This is still a new measure and we are working with each TBU to ensure that customer incidents are being tracked. This measure has allowed for some TBUs to implement new programs and processes to ensure customer incident tracking is occurring. An example is identifying and tracking the number of incidents at MDOT facilities where we conduct business. Identifying and tracking incidents and associated trending offers data for the basis of implementing corrective actions; thereby reducing hazards and minimizing risk for MDOT and our customers.

It is important for MDOT to provide customers safe areas and facilities to complete their day to day transportation needs. MDOT understands the importance of mitigating and reducing all hazards.

PERFORMANCE MEASURE 3.10

Number of Customer Incidents at MDOT Facilities



TANGIBLE RESULT #4

Deliver Transportation Solutions and Services of Great Value

MDOT will deliver transportation solutions on time and within budget. We will use strategies to ensure that the transportation solution meets the needs of our customers and eliminates unnecessary costs.

RESULT DRIVER:
Jason Ridgway
State Highway Administration (SHA)

TANGIBLE RESULT DRIVER:
Jason Ridgway
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:
Terri Lins
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:
To gauge the accuracy of capital project estimates in order to more efficiently manage the Departments capital program.

FREQUENCY:
Annually (In October)

DATA COLLECTION METHODOLOGY:
Through the Capital Program Management System (CPMS); the CTP; TSO & TBU's Procurement Offices.

NATIONAL BENCHMARK:
14% Nat'l Average –as reported in the NCHRP Report 20-24 (37) A (01) , 04/2011 which focuses on construction schedule & budget performance.

PERFORMANCE MEASURE 4.1

Percent of Estimated Project Budget as Compared to Final Project Award

The Consolidated Transportation Plan (CTP) is the 6 year investment plan for MDOT and its six Transportation Business Units (TBU's). The CTP solidifies the Department's planned projects and programs, both major and minor. The plan is built working with stakeholders such as Maryland citizens, local jurisdictions and the local and State delegations.

The purpose of this measure is to track the percent difference between the estimated project budget as compared to the amount given in the awarded contract. This is a valuable measure as it fosters more accuracy and better budget management of the State's limited transportation funding.

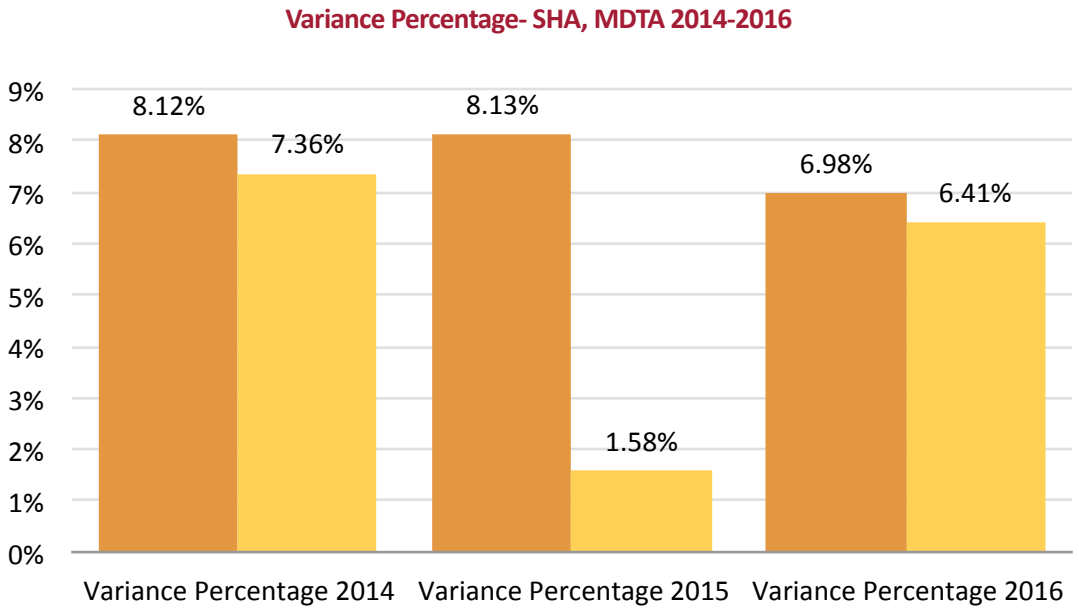
Accurate estimating enables MDOT to provide better services to its customers whether it is infrastructure improvements to Maryland roadways and bridges; increasing and retaining the commerce going in / out of the Port of Baltimore; attracting / retaining airlines and travelers at BWI Marshall; providing more alternative service options to Maryland citizens to conduct their MVA transaction remotely; or improving Maryland's transit services throughout the State.

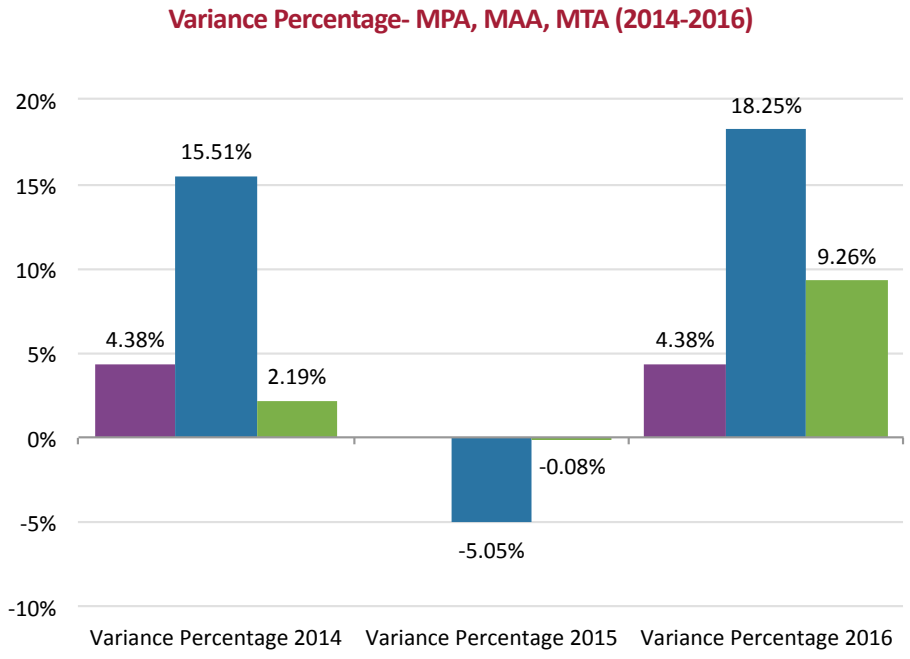
Given the diverse contract types e.g., highway construction vs information technology (IT) software development, the data has been divided into (3) groups by project similarity, e.g., IT (MVA, TSO). The following graphs represent TBU data for FY's 14, 15 & 16 using similar projects within the capital budgets that best represent the business units' financial thresholds for capital projects as follows:

- $ All - (SHA & MDTA)
- $10M - (MPA, MAA & MTA)
- $400K - IT (TSO & MVA)

PERFORMANCE MEASURE 4.1

Percent of Estimated Project Budget as Compared to Final Project Award

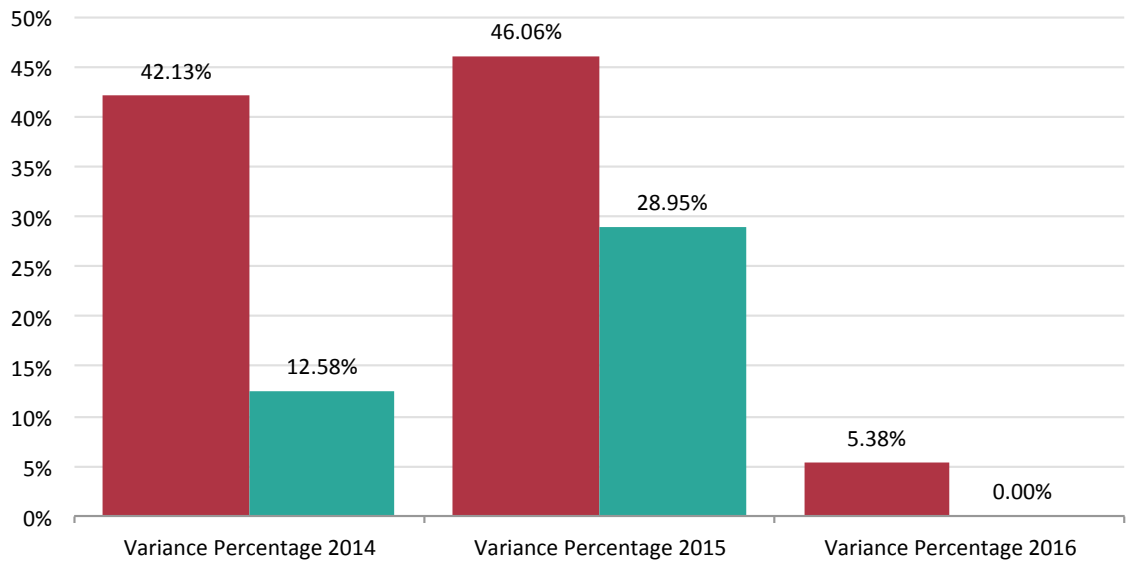




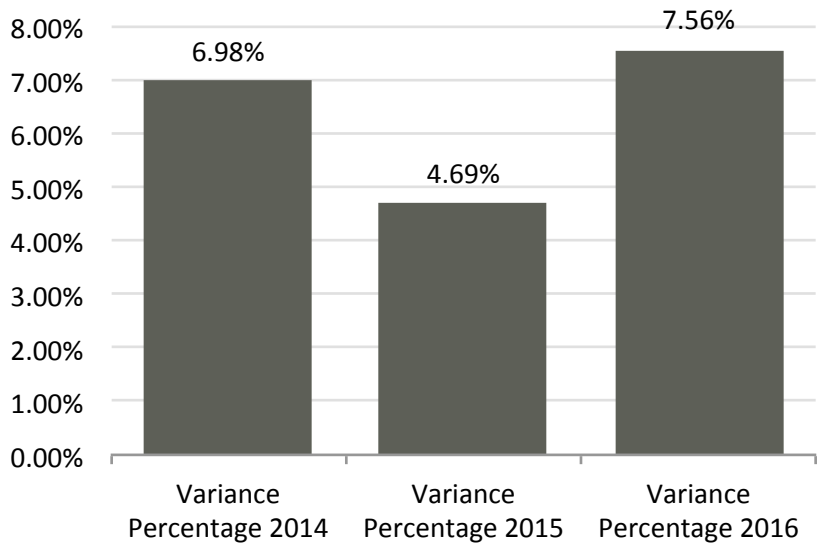
PERFORMANCE MEASURE 4.1

Percent of Estimated Project Budget as Compared to Final Project Award

Variance Percentage- TSO, MVA (2014-2016)



Variance Percentage- MDOT (2014-2016)



TANGIBLE RESULT DRIVER:
Jason Ridgway
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:
Brian W. Miller
Maryland Port Administration (MPA)

PURPOSE OF MEASURE:
To measure the difference in contract amount from Notice to Proceed (NTP) to final contractor payout. This is done in order to determine the effectiveness of contract management.

FREQUENCY:
Annually (in October)

DATA COLLECTION METHODOLOGY:
Collect data from MDOT TBUs for Fiscal Years 2013 to 2016. Data will reflect contracts that closed out in each respective Fiscal Year. Data will be reflected in a bar graph for each Fiscal Year.

NATIONAL BENCHMARK:
14% National Average Amount over Original Budget for Over Budget Projects Only, NCHRP Report 20-24 (37) A (01) Measuring Performance Among State DOTS: Sharing Best Practices – Construction Schedule and Budget Performance Update

PERFORMANCE MEASURE 4.2
Percent of Change for Finalized Contracts

It is important to assess how well we manage the budgeted and awarded amount during the duration of Department contracts. This is done to ensure we are getting what we paid for and not adding unnecessary or unbudgeted costs to our transportation projects. This will facilitate better contract performance and better management of contracts which will add overall value to the project and ensure worthwhile expenditures of taxpayer dollars.

The primary issue that could arise would be for contracts that exceed the award amount at final payout.

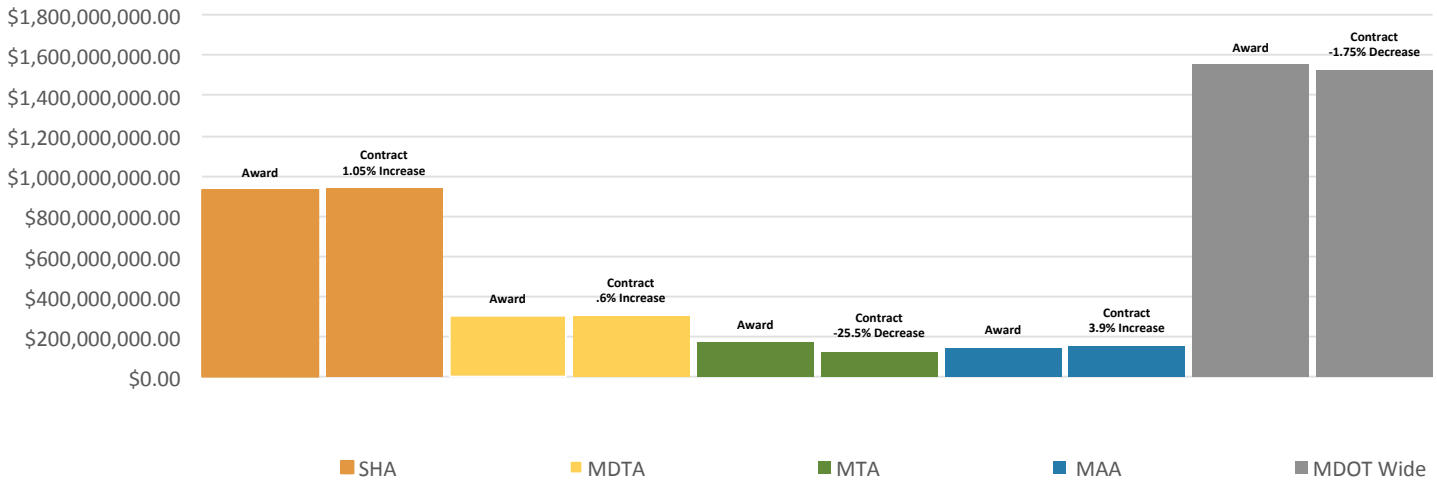
TBUs will have to monitor contracts and justify any overages through contract changes and justifications for those changes.

Individual TBUs may not have data from a fiscal year if no contract(s) closed during the respective fiscal year.

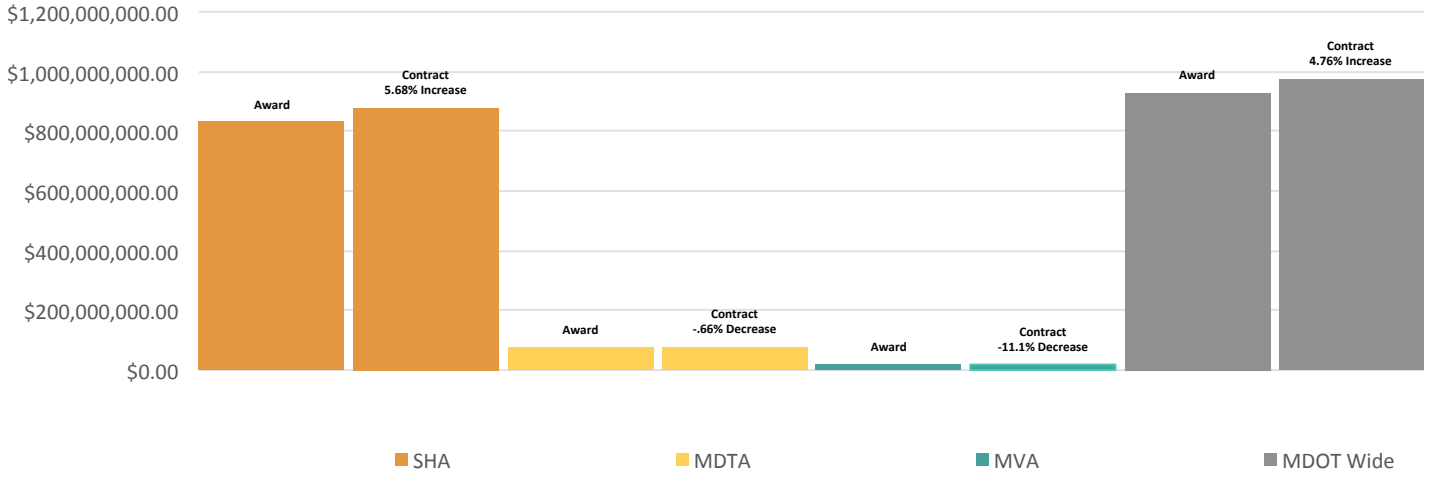
MDOT & TBU Totals for fiscal years 13 through 16 are well below the national benchmark of 14%; therefore no corrective actions are needed at this time.

PERFORMANCE MEASURE 4.2
Percent of Change for Finalized Contracts

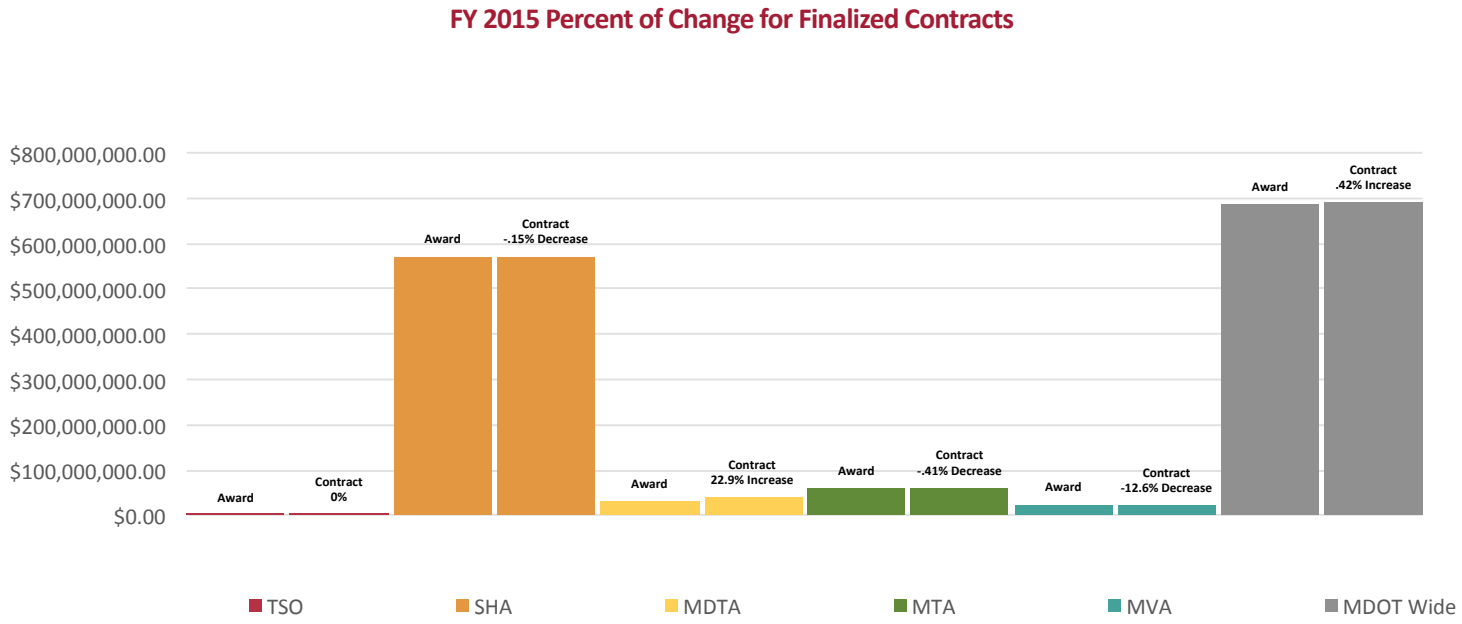
FY 2013 Percent of Change for Finalized Contracts



FY 2014 Percent of Change for Finalized Contracts

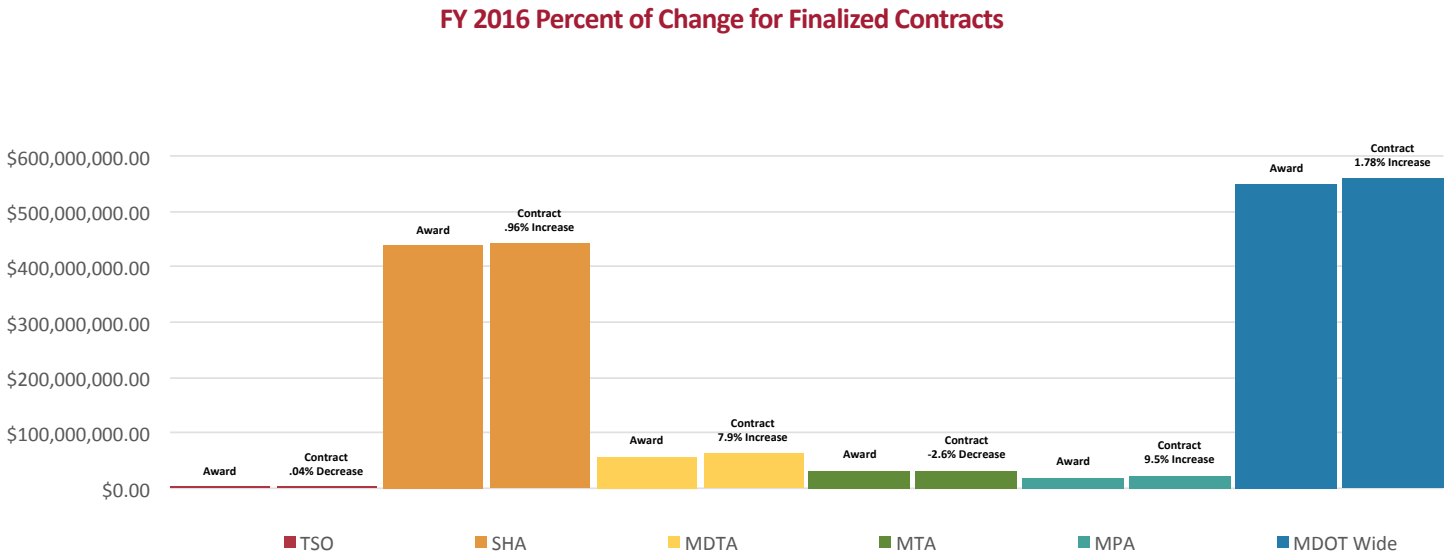


PERFORMANCE MEASURE 4.2
Percent of Change for Finalized Contracts



PERFORMANCE MEASURE 4.2

Percent of Change for Finalized Contracts



TANGIBLE RESULT DRIVER:
Jason Ridgway
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:
Bill Appold
The Secretary's Office (TSO)

PURPOSE OF MEASURE:
To determine if MDOT is efficiently managing and delivering contracts and services.

FREQUENCY:
Annually (in October)

DATA COLLECTION METHODOLOGY:
Information will be provided by the MDOT Offices of Construction, Planning and Finance.

NATIONAL BENCHMARK:
85%

PERFORMANCE MEASURE 4.3

On-time Services and Solutions: Percent of Projects Completed by Original Contract Date

When MDOT awards a contract or agrees to provide a service, it establishes a commitment date which is the date the contract or service begins providing benefits to MDOT's stakeholders.

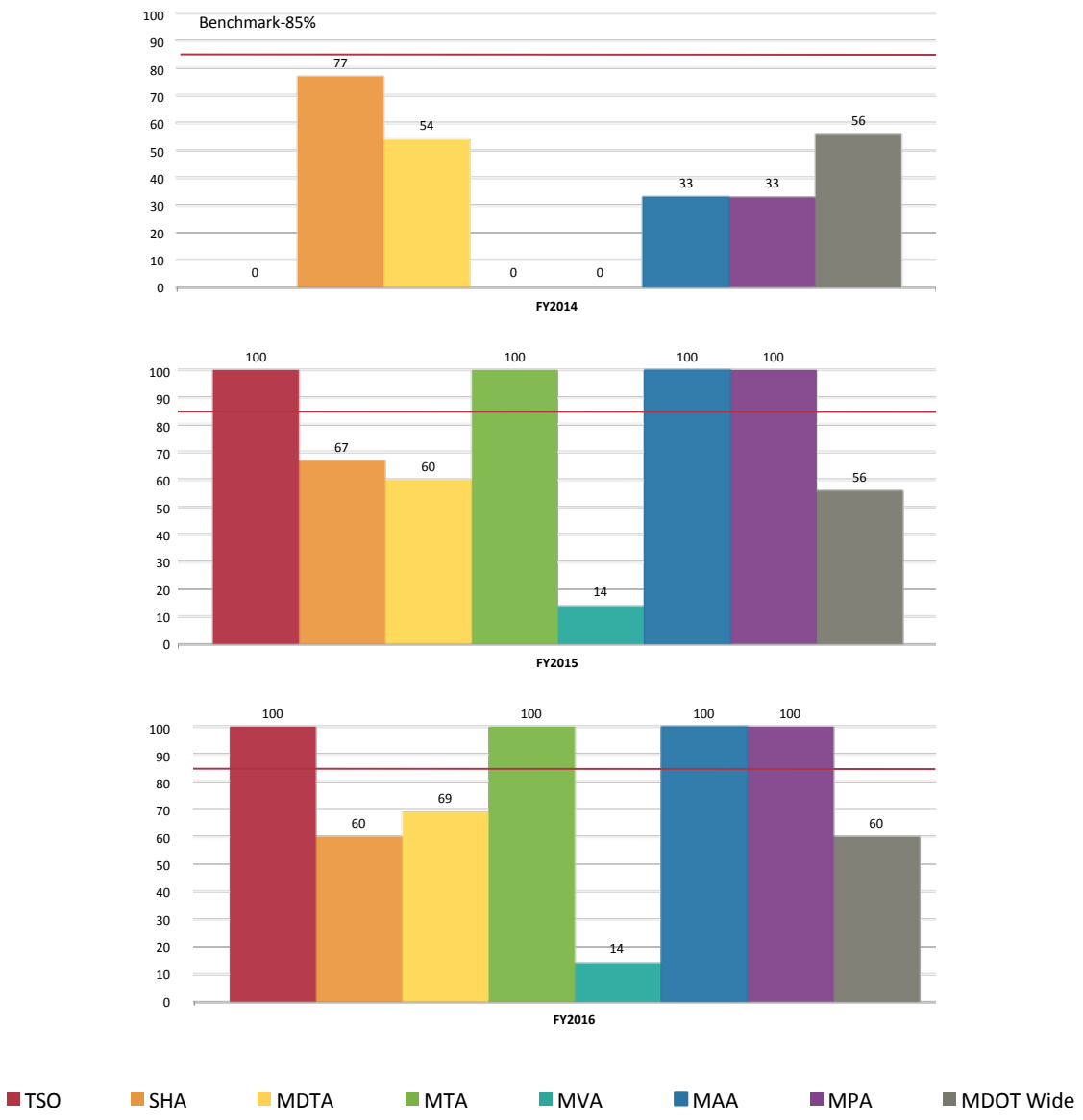
The purpose of this performance measure is to track MDOT'S accuracy in estimating if contracts and services committed to are completed and open to service by the commitment date specified in the contract. The performance measure will also determine if there are common factors that make contracts go over their budgeted time and whether or not these factors can be mitigated.

Overall MDOT increased the percentage of contracts completed in a timely basis from 56% in FY 14 and FY 15 to an FY 16 total of 60%. This is due to an increase in timely completions from MDTA and also a large increase in total contracts closed by SHA increasing the weight of their overall percentage.

PERFORMANCE MEASURE 4.3

On-time Services and Solutions: Percent of Projects Completed by Original Contract Date

On time Services and Solutions: Percent of Projects Completed by Original Contract Date



TANGIBLE RESULT DRIVER:
Jason Ridgway
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:
Pat Keller
Maryland Transit Administration (MTA)

Jim Harkness
Maryland Transportation Authority (MDTA)

Wayne Schuster
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:
To track the average cost of common transportation services and solutions, in order to make decisions as to where to reduce costs, as appropriate.

FREQUENCY:
Annually (in January and July)

DATA COLLECTION METHODOLOGY:
Through the Capital Program Management System (CPMS); The Consolidated Transportation Plan (CTP) and MDOT Capital Budget, Finance and Procurement Offices.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 4.4
Average Cost of Common Transportation Solutions and Services

It is MDOT's responsibility to provide transportation solutions and services to the public that are of great value.

The purpose of these measures is to track, access, and analyze data that will help reveal solutions for reducing the cost of transportation services. Tracking data that is grouped by shared services across business units will allow comparison across TBUs, and also insight into ways to reduce the cost of our services to the public.

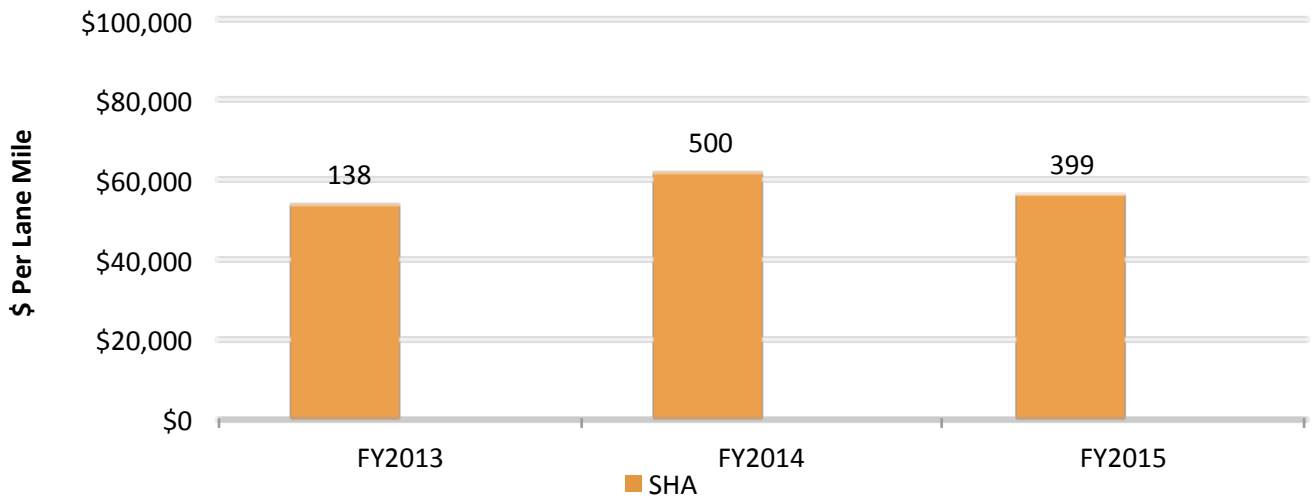
Performance measure 4.4 has 10 separate measurements. These measurements include minor and major road resurfacing cost, interstate road resurfacing cost, bridge replacement cost and major bridge redecking cost. Other measurements include operating cost per passenger trip, operating cost per revenue vehicle mile, passenger trips per revenue vehicle mile, farebox recovery and cost per transaction.

Tracking of these measures is based upon actual costs associated with contracts issued for various road and bridge projects. Because data for these projects is tracked annually, in any given year there may not be an award for this type of project as can be seen from some of the MDTA data. Regardless, the data will provide our customers with insights into how Maryland transportation projects compare to national averages.

Benchmarks are sought to gauge how Maryland solutions and services compare with national averages as well as who is considered the best in this category. Based on year to year data comparisons, the goal is to identify ways to reduce costs to the citizens of Maryland.

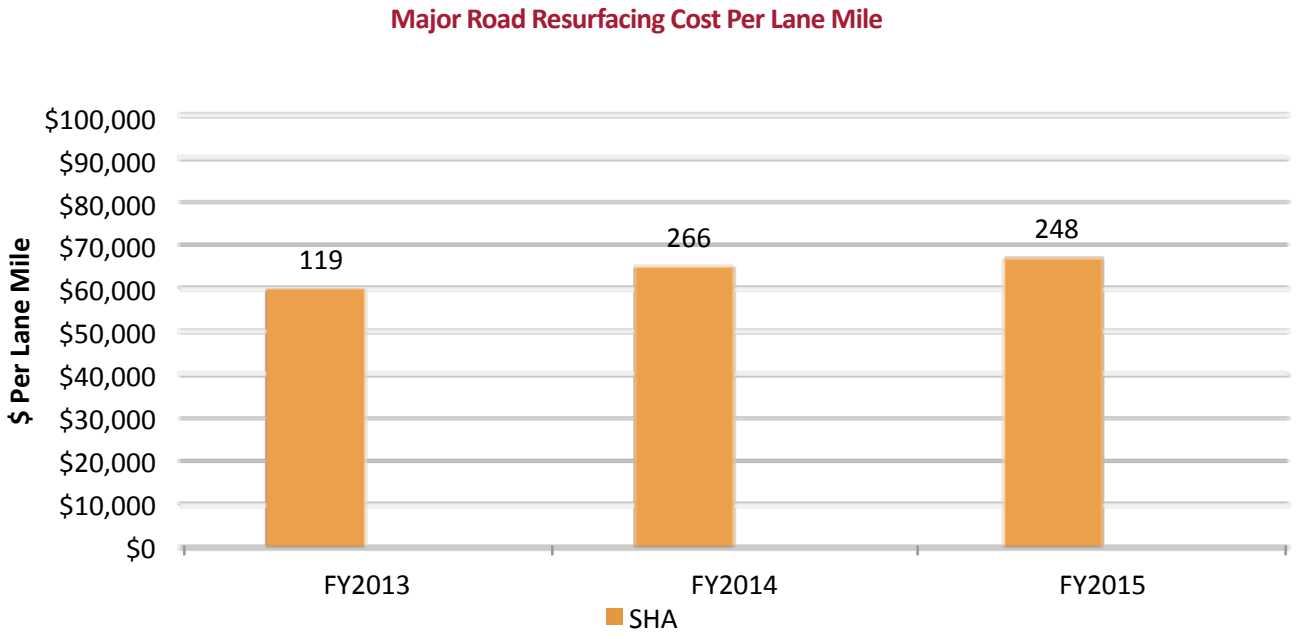
PERFORMANCE MEASURE 4.4A

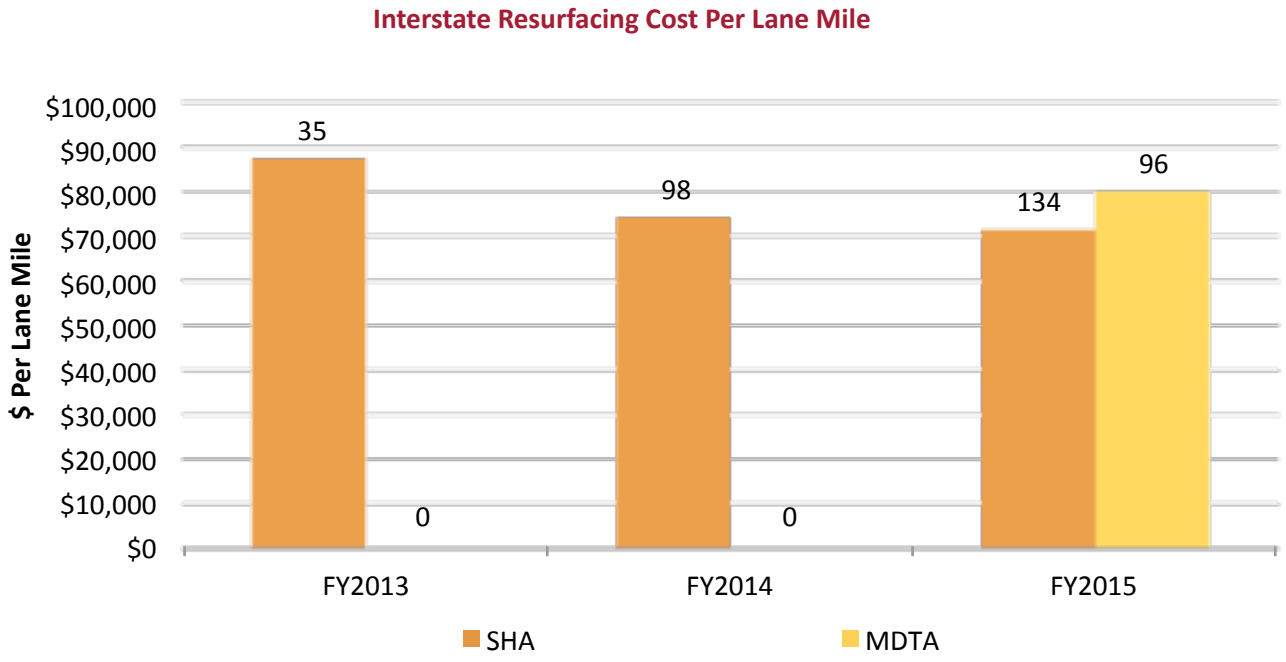
Minor Road Resurfacing Cost



PERFORMANCE MEASURE 4.4B AND C

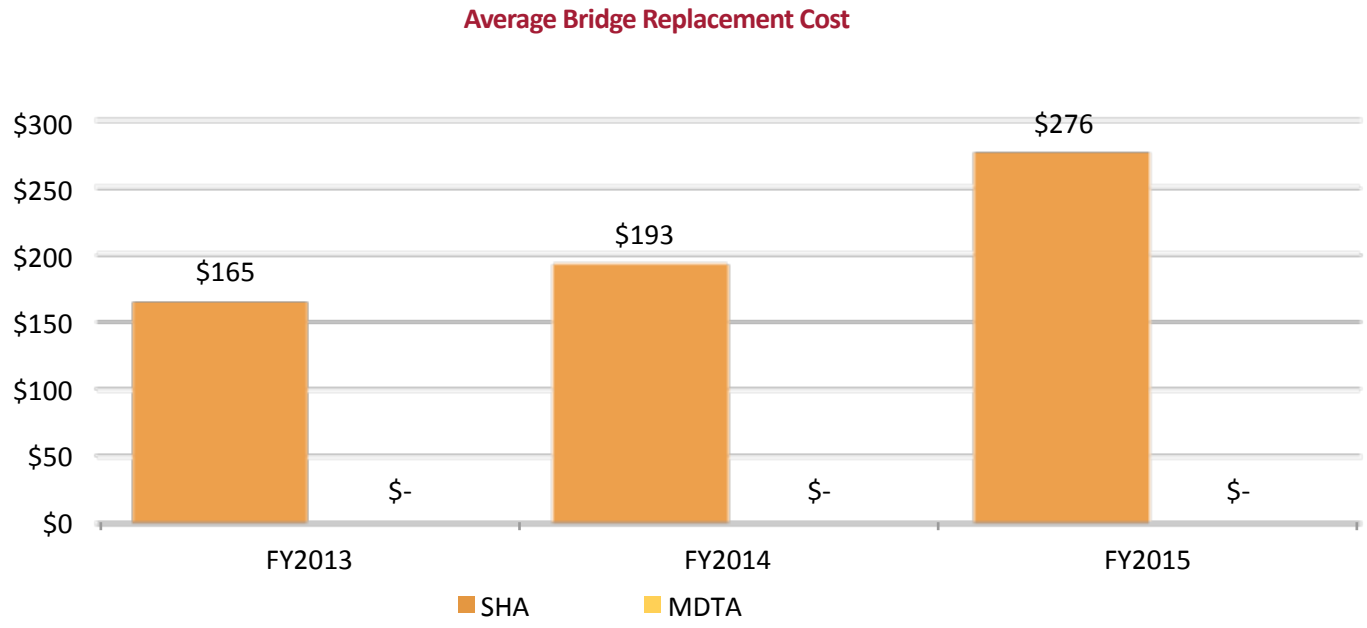
Major Road Resurfacing Cost and Interstate Resurfacing Cost

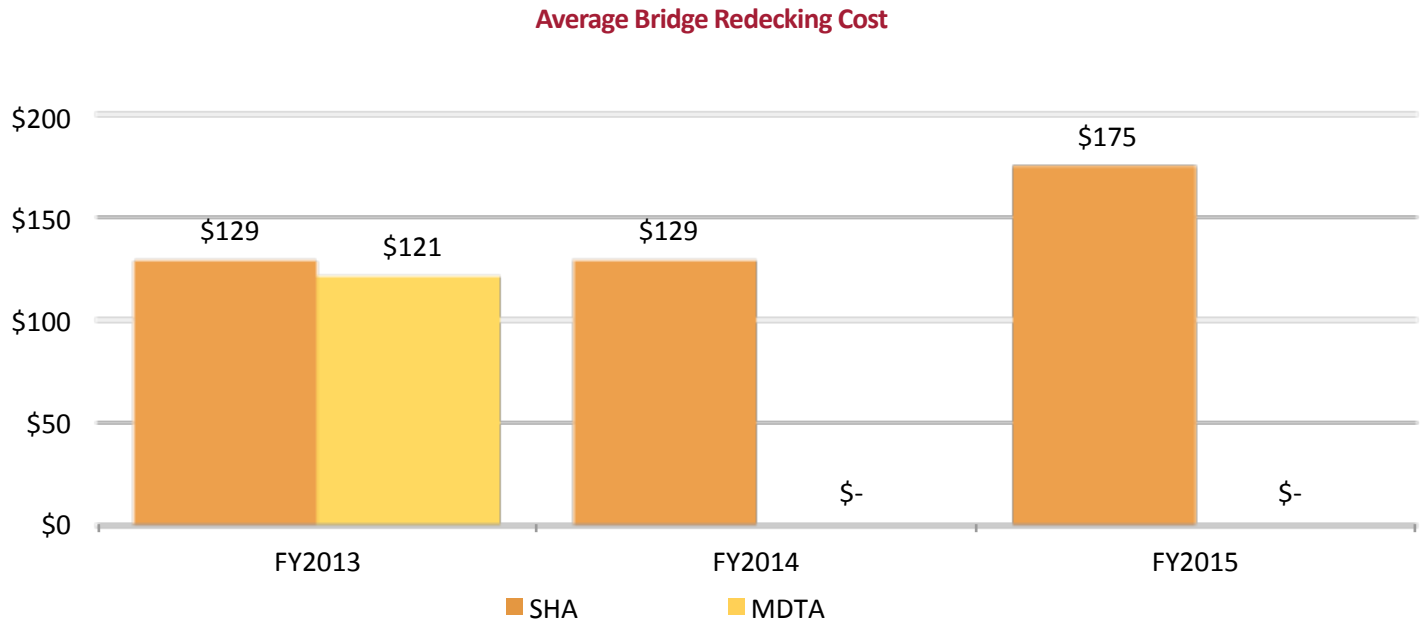




PERFORMANCE MEASURE 4.4D AND E

Average Bridge Replacement Cost and Average Bridge Redecking Cost



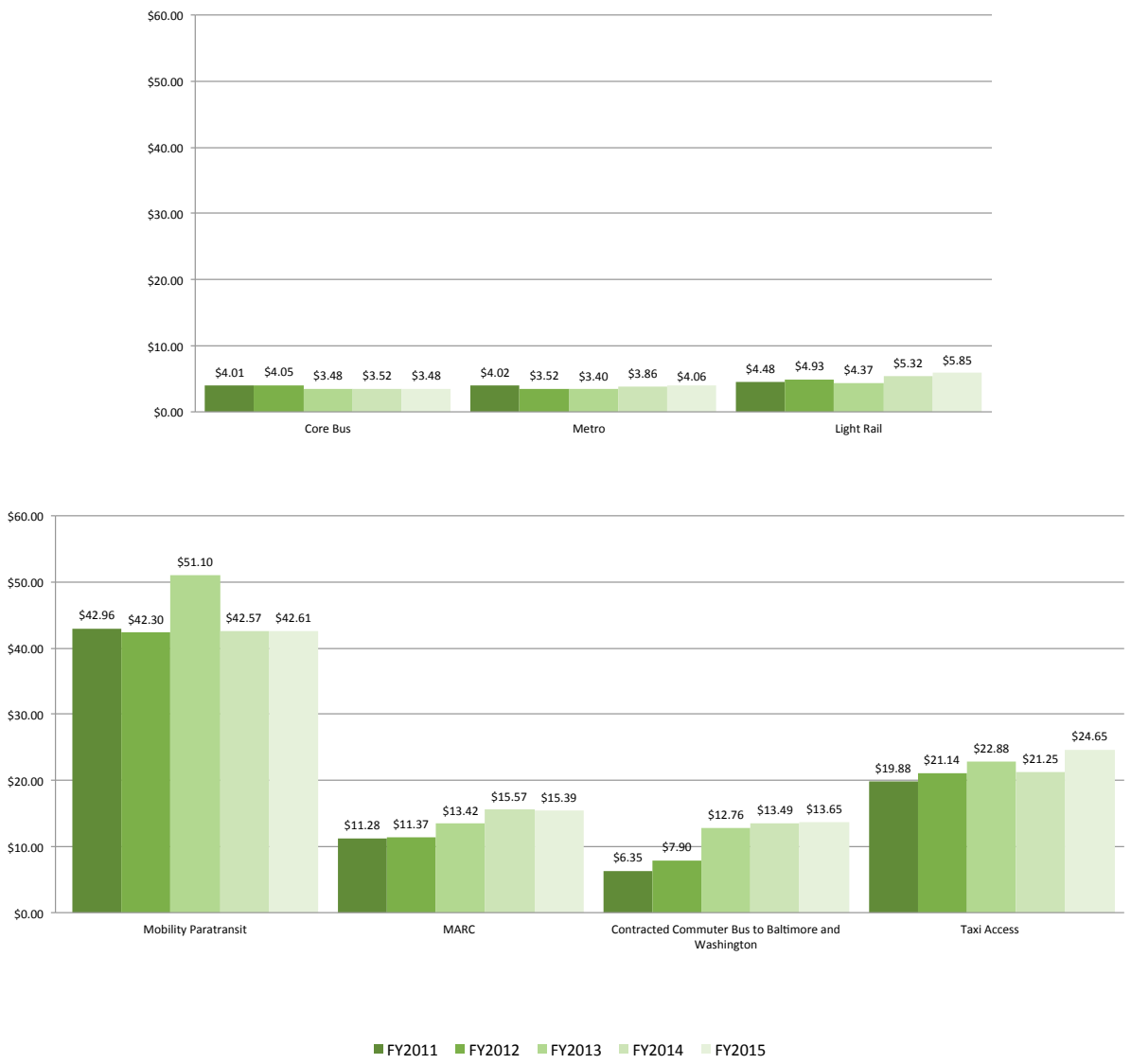


PERFORMANCE MEASURE 4.4F

Average Cost of Common Transportation Solutions: Operating Cost per Passenger Trip (MTA)

Operating cost per passenger trip is an indication of how effectively and efficiently the MTA is producing service given the operating costs. Ideally, a lower operating cost per passenger trip demonstrates the ability to move passengers in an efficient and effective manner.

Operating Cost Per Passenger Trip

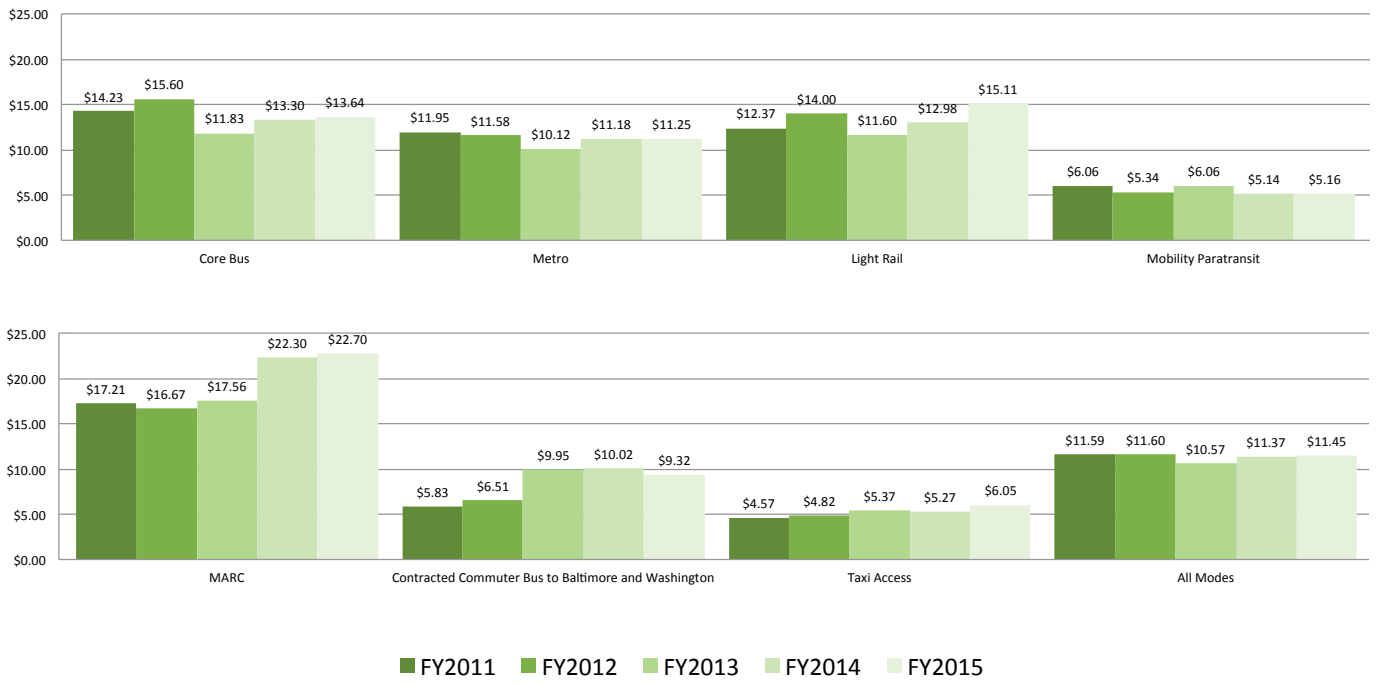


PERFORMANCE MEASURE 4.4G

Average Cost of Common Transportation Solutions: Operating Cost per Revenue Vehicle Mile (MTA)

Operating cost per revenue vehicle mile is an indication of the cost efficiency of the MTA in producing service given operating costs and scheduling of service. Ideally, when a transit vehicle is in operation, the goal is to be in revenue service vs. deadhead or repair. A lower operating cost per revenue vehicle mile demonstrates an efficient, well scheduled service and maintained fleet.

Operating Cost Per Revenue Vehicle Mile

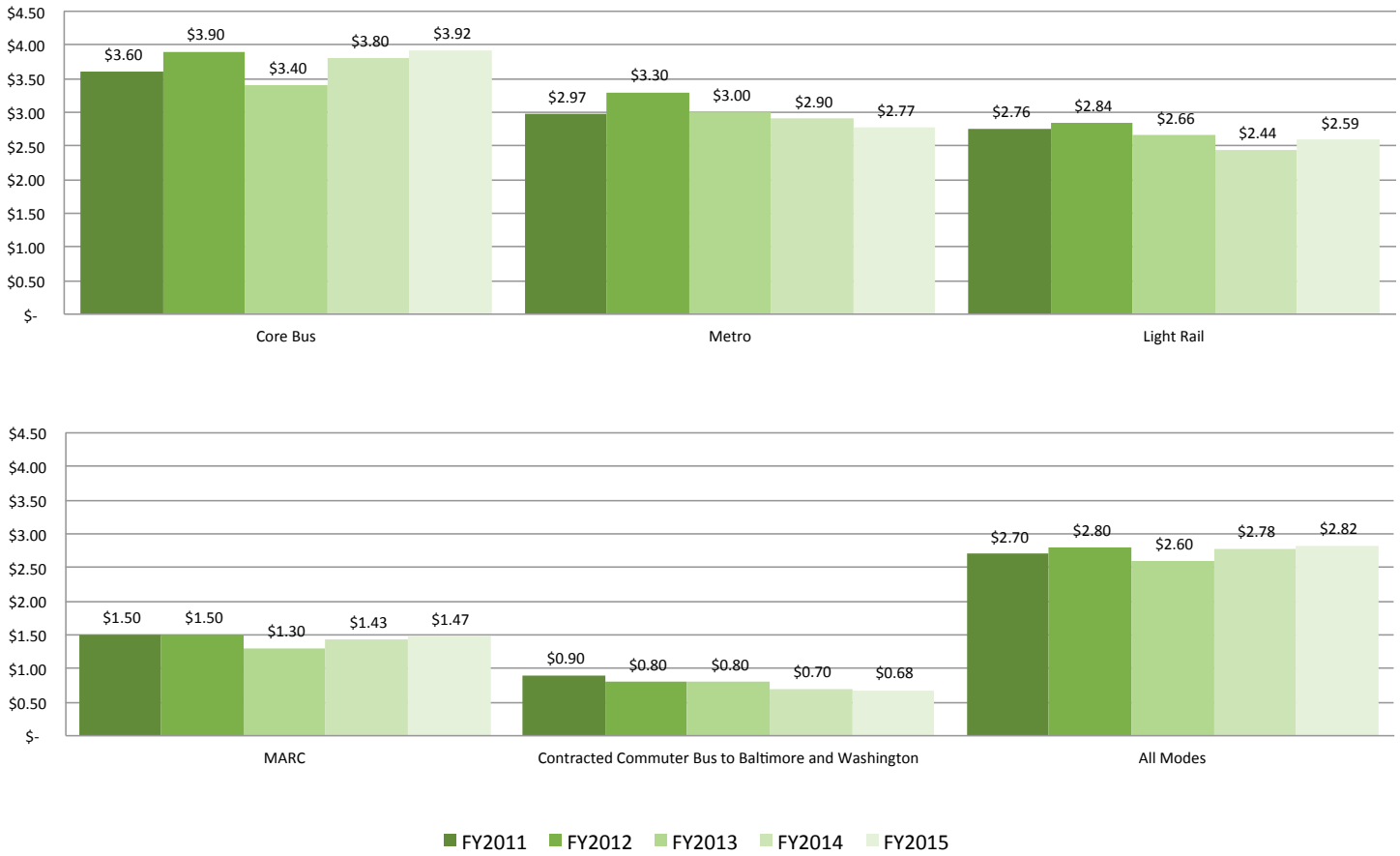


PERFORMANCE MEASURE 4.4H

Average Cost of Common Transportation Solutions: Passenger Trip per Revenue Vehicle Mile (MTA)

Passenger trips per revenue vehicle mile demonstrates the effectiveness of the transit's operating schedule showing scheduled service in such a way as to carry as many passengers as practicable without overcrowding the service.

Passenger Trips Per Revenue Vehicle Mile

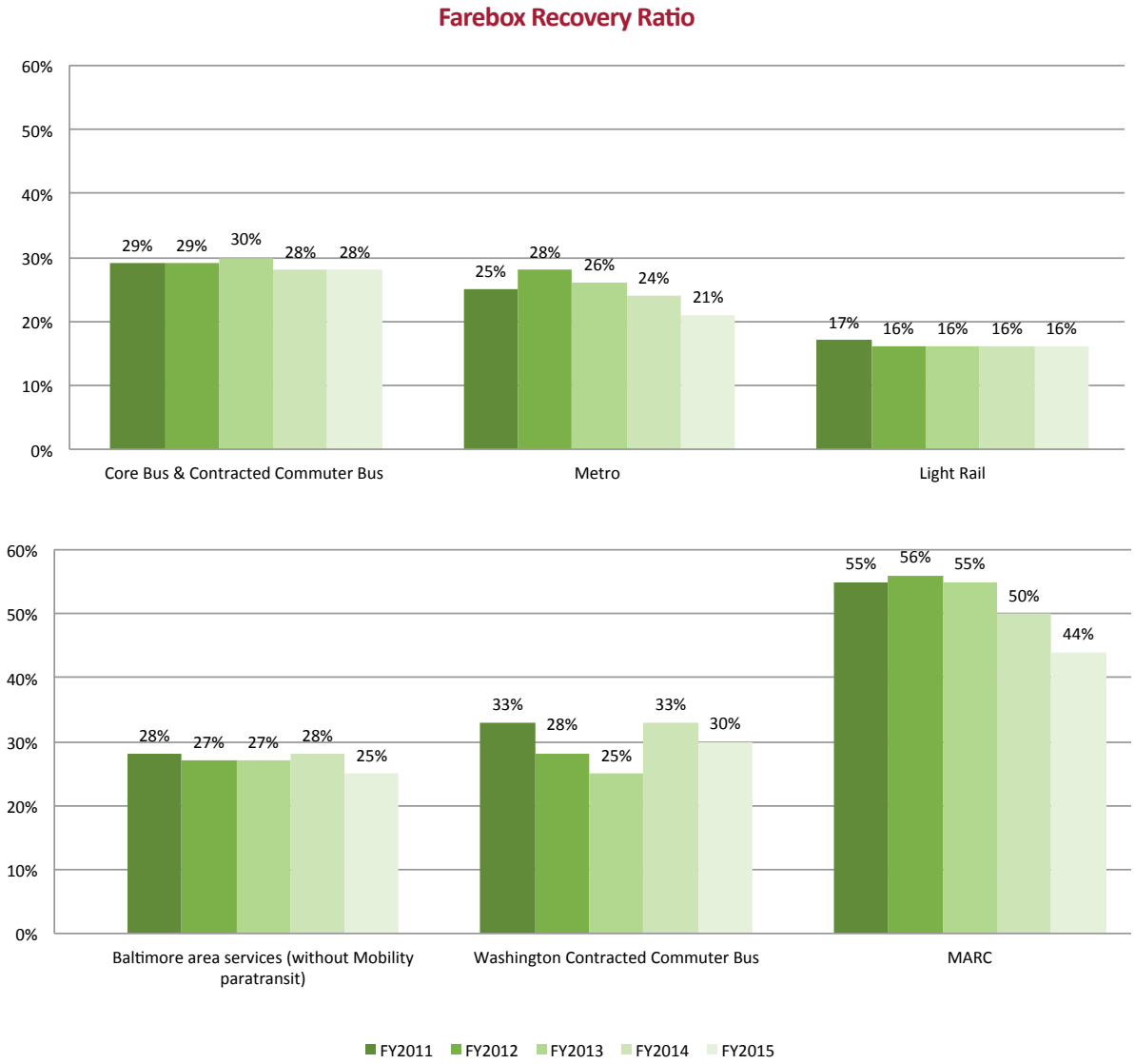


PERFORMANCE MEASURE 4.4I

Average Cost of Common Transportation Solutions: Farebox Recovery Ratio (MTA)

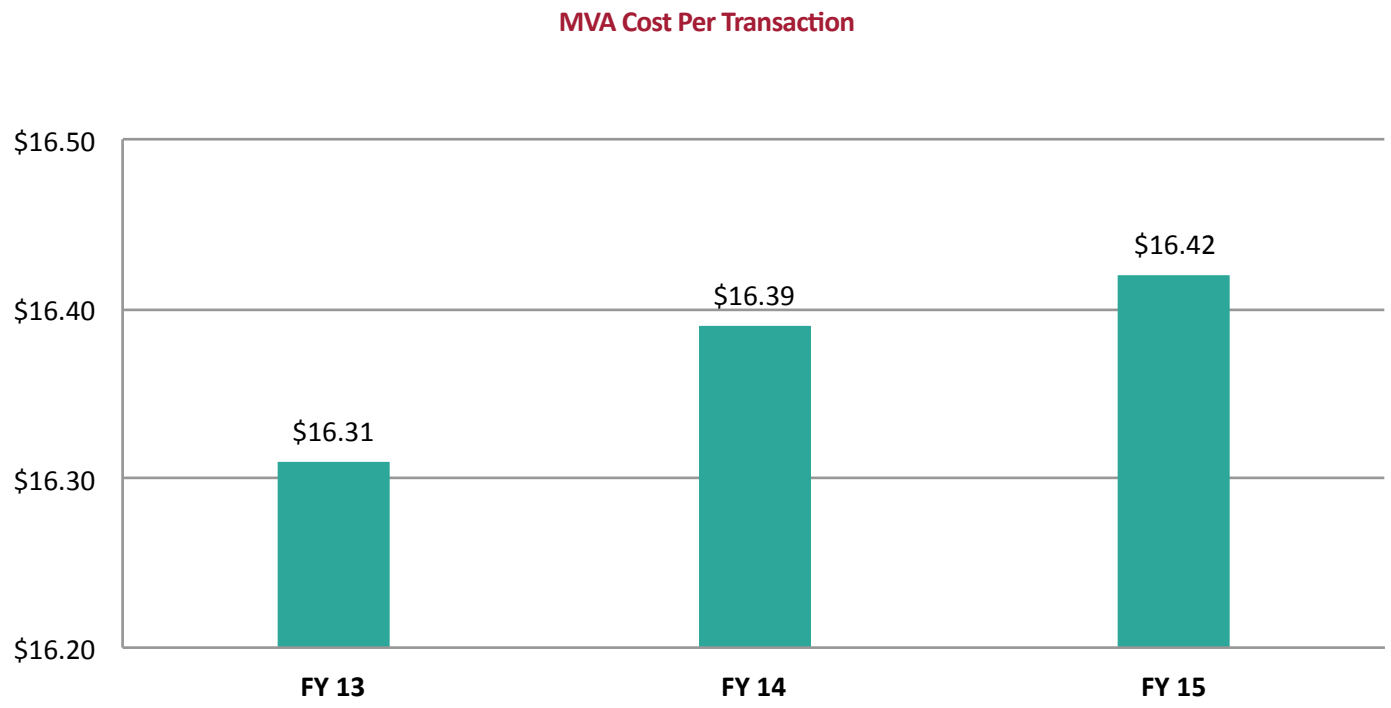
Farebox recovery ratio measures the percent of operating costs recovered through fares. Various factors affect the recovered operating costs such as fare price, ridership levels, and operating costs such as labor, fuel, and repair.

State law mandates that MTA achieve a 35 percent Farebox Recovery Ratio.



PERFORMANCE MEASURE 4.4J

Average Cost of Common Transportation Solutions: Cost Per Transaction (MVA)



Deliver Transportation Solutions and Services of Great Value

TANGIBLE RESULT #5

Provide an Efficient, Well-Connected Transportation Experience

MDOT will provide an easy, reliable transportation experience throughout the system. This includes good connections and world class transportation facilities and services.

RESULT DRIVER:
Phil Sullivan
Maryland Transit Administration (MTA)

TANGIBLE RESULT DRIVER:
Phil Sullivan
Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:
John O'Neill
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:
To assess average wait time at facilities.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Verification of average wait times at facilities for services based on MDTA reporting the number of vehicles that pass through toll facilities.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 5.1A

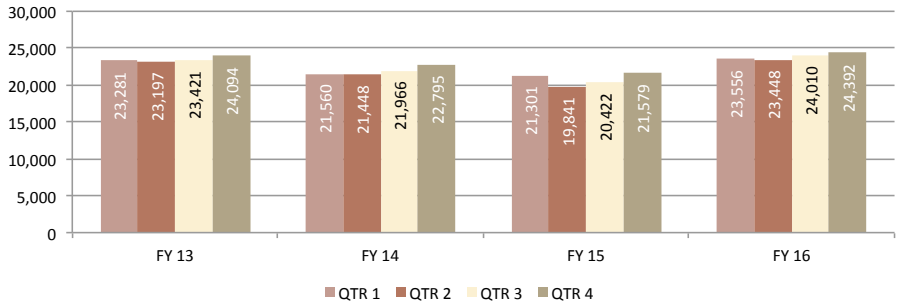
Reliability of the Transportation Experience: Average Volume at the Peak

Customers of MDOT services expect reasonable wait times to obtain needed services. The reliability if transportation experiences were assessed through average wait times for service at MDOT facilities.

This measure will allow MDOT to monitor and improve wait times for service at the facilities and the data will be reported and reviewed quarterly.

The MDTA will report on the number of vehicles that pass through the mixed (Cash and Electronic payment) toll facilities per hour. The number of vehicles that pass through toll facilities per hour tells the level of congestion at the tolls. More vehicles per hour equals less delay. This measure will exclude the MDTA's All Electronic Facilities (ICC and I95 ETLs).

Average Volume, Peak Hours All Mixed Facilities



TANGIBLE RESULT DRIVER:
Phil Sullivan
Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:
David Thomas
Maryland Port Administration (MPA)

PURPOSE OF MEASURE:
To assess average turn time at facilities to ensure an efficient transportation experience for our customers.

FREQUENCY:
Annually (in January)

DATA COLLECTION METHODOLOGY:
Verification of average turn times at port facilities for services.

NATIONAL BENCHMARK:
There is not a National Benchmark. However, in researching through Trade and Industry Publications and Trucking Associations 45 minutes can be established as an efficient turn time.

PERFORMANCE MEASURE 5.1B

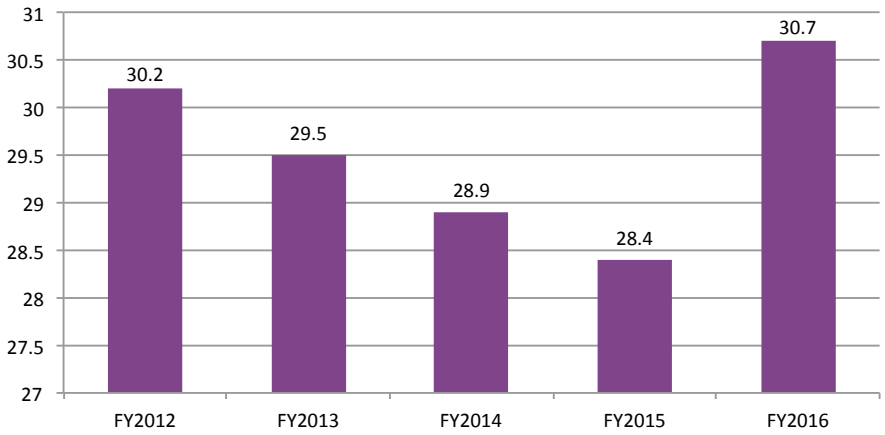
Reliability of the Transportation Experience: Average Truck Turn Time per container transaction

Customers of MDOT Port facilities expect reasonable turn times to obtain needed services. The reliability of transportation experience was assessed through average truck transaction turn times at facilities to ensure that customers have an efficient transportation experience.

This measure will allow MDOT to monitor and improve turn times for service at facilities. The data will be reported and reviewed annually.

The MPA is reporting on the truck wait (truck turn-around) time for containers handled at Seagirt Marine Terminal by fiscal year. The gate turnaround time is determined by the gate in and gate out time (pedestal to pedestal). The primary objective of the Port is to reduce the truck turnaround times through improving gate processing efficiencies.

Average Volume, Peak Hours All Mixed Facilities



TANGIBLE RESULT DRIVER:
Phil Sullivan
Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:
David Thomas
Maryland Port Administration (MPA)

PURPOSE OF MEASURE:
To assess average wait time at our facilities.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Verification of average wait times at our facilities for services.

NATIONAL BENCHMARK:
N/A

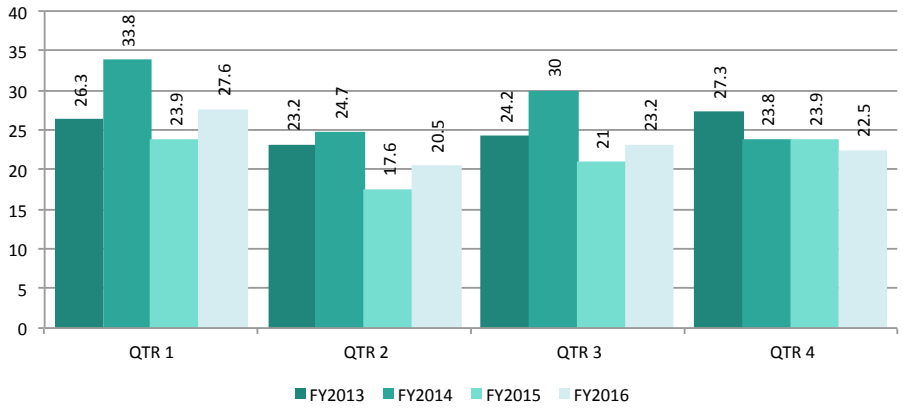
PERFORMANCE MEASURE 5.1C
Reliability of the Transportation Experience: Average Wait Time (MVA)

Customers of MDOT services expect reasonable wait times to obtain needed services. The reliability of transportation experiences was assessed through average wait times for service at our facilities.

This measure will allow MDOT to monitor and improve wait times for service at branch office facilities. The data will be reported and reviewed quarterly.

The MVA will report the average wait time for customers to obtain services at the branches. The goal is 25 minutes, in FY2016, MVA reported an average statewide wait time of 23.5 minutes.

Average Wait Time (MVA)



TANGIBLE RESULT DRIVER:
Phil Sullivan
Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:
Robert Pond
Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:
To assess the percent of on-time performance of our transportation service by mode to ensure a more reliable transportation experience for our customer.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Varies by Mode:

- Bus Data is collected by the CAD/AVL System.
- Rail Mode data is collected by the modal control rooms.
- Paratransit data is transmitted by on-board MDT to the Scheduling System or validated by a call from vehicle to a Manager upon rider pick up.

NATIONAL BENCHMARK:
Per APTA Standards Modal OTP Benchmarks are as follows:

Bus – 78 percent

Rail – 90 percent

Para-Transit – 92 percent

PERFORMANCE MEASURE 5.1D
Reliability of the Transportation Experience: On-Time Performance (MTA & MAA)

Reliability of transportation services is important to MDOT customers. Many rely on posted arrival and departure times to make needed connections and for critical appointments. This measure will allow the TBUs to focus resources where needed to improve on-time performance.

The public timetable has been referred to as "our contract with our riders." On-Time Performance (OTP) is the measurement of our adherence to that contract. Maintaining a high level of OTP is of critical importance when providing ground transportation.

Whether a customer has a one-seat ride or needs to make a complex intermodal connection, the rider has an expectation that services will be provided reliably and as scheduled. MTA and MAA schedule adherence drives not only customer perception of the service we provide directly, but our efficient use of taxpayer dollars, management processes, and the efficiency and reliability of State Government.

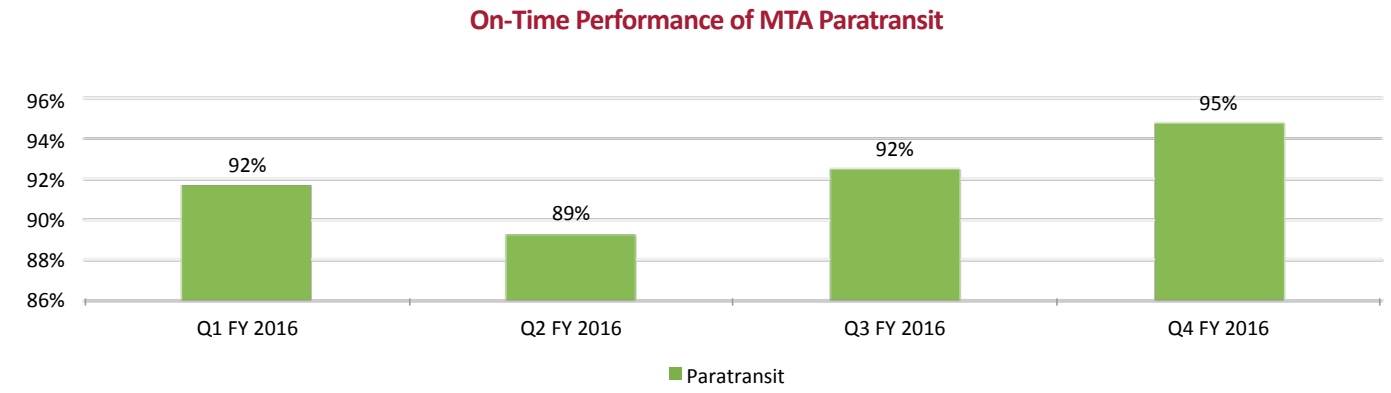
Our commitment to continual improvement of OTP is evident in our current efforts to build routes that travel more efficiently throughout our service area utilizing schedules that accurately reflect passenger travel times.

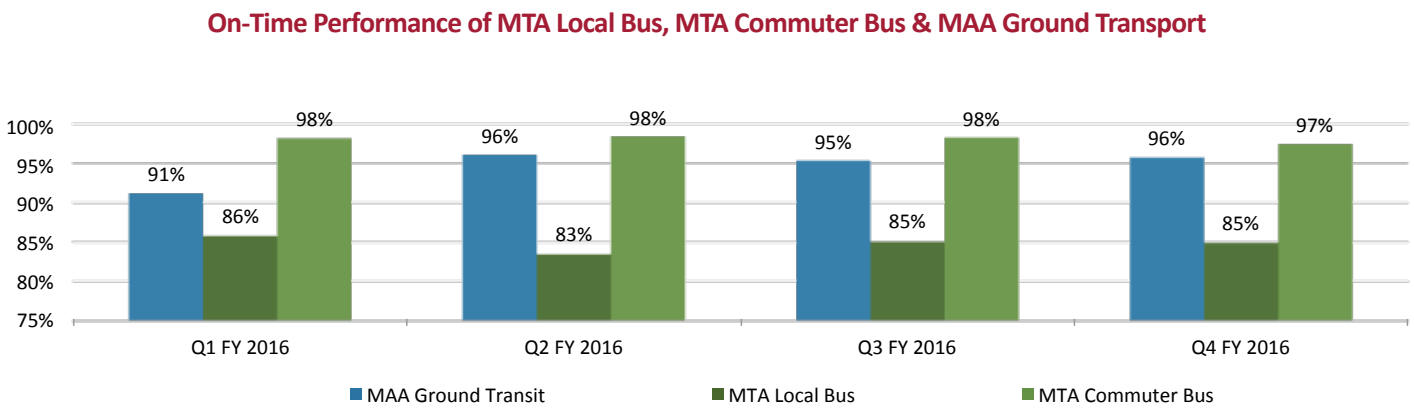
The implementation of the BaltimoreLink bus system will result in bus service that is easier for riders to use, while simultaneously being easier to manage and get "back on time" in the event that challenges related to delivering urban mass transit cause service disruptions.

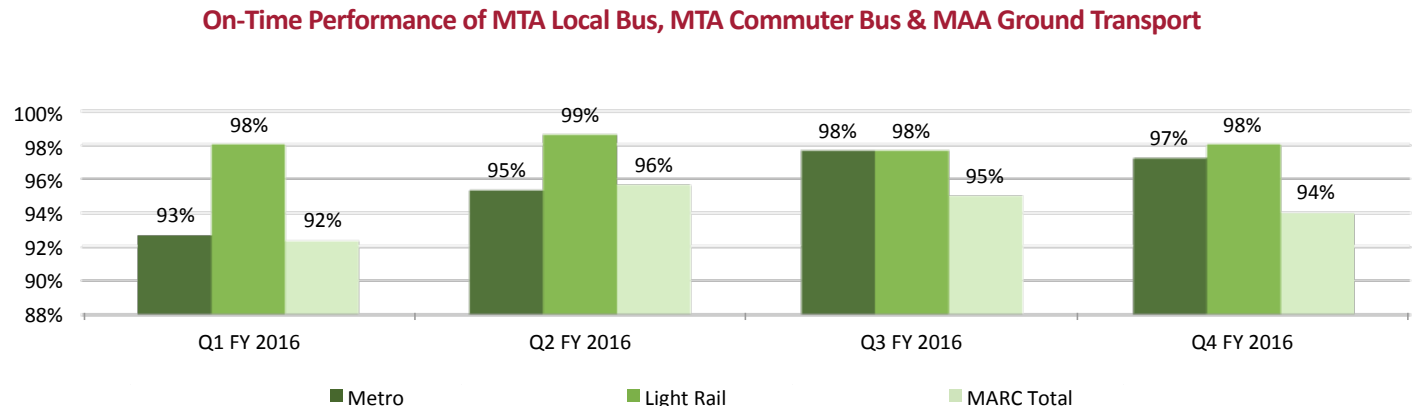
The results will be a more user-friendly, reliable system, as well as marked improvement in service delivery and the perception of mass transit services.

PERFORMANCE MEASURE 5.1D

Reliability of the Transportation Experience: On-Time Performance (MTA & MAA)







TANGIBLE RESULT DRIVER:
Phil Sullivan
Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:
John O'Neill
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:
To provide customers reliable travel times on State highways to key destinations.

FREQUENCY:
Annually (in January)

DATA COLLECTION METHODOLOGY:
Formula based

NATIONAL BENCHMARK:
A Planning Time Index (PTI) which is < = 1.5

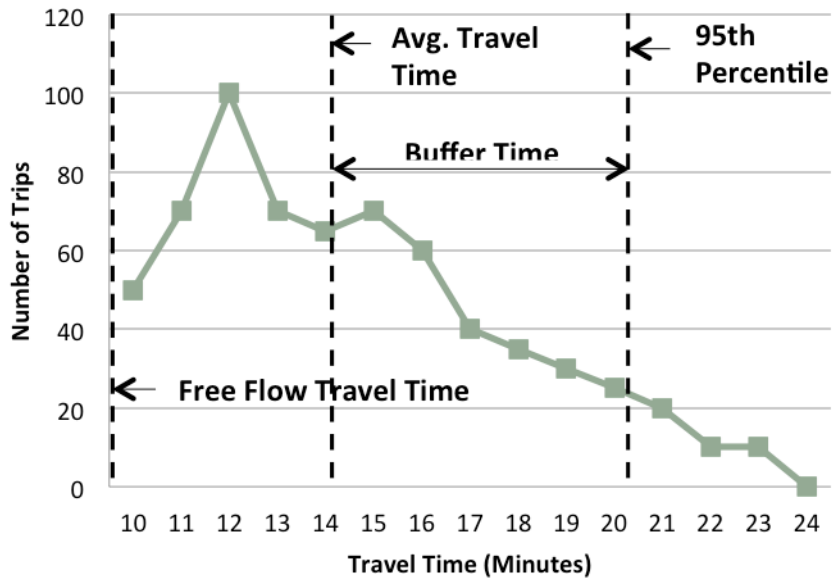
PERFORMANCE MEASURE 5.1E

Reliability of the Transportation Experience: Planning Time Index for Highway Travel

MDOT highway customers expect reliable travel times on State highways to reach key destinations. Customers make decisions on when to depart for daily commute, travel connections and critical appointments based on the highway travel times.

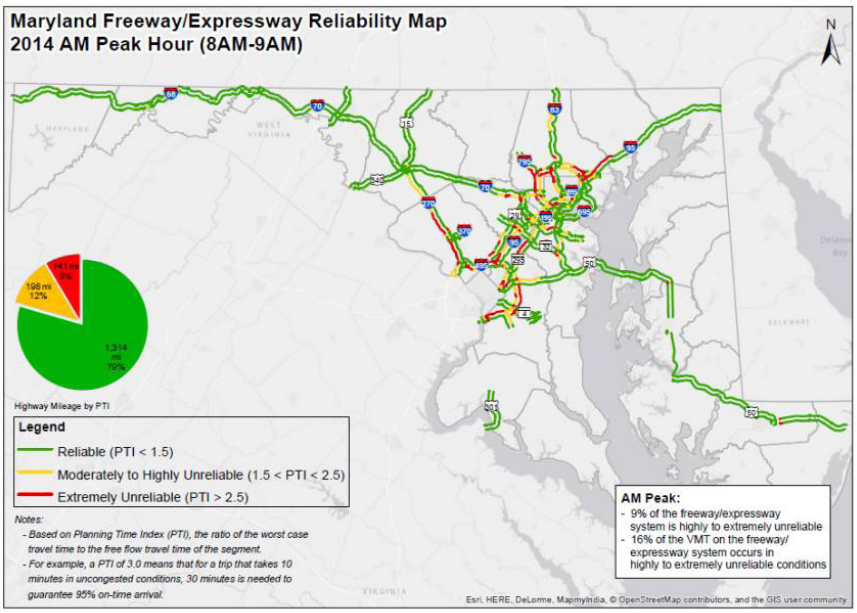
The planning time index is a good tool to gauge the reliability of travel on these heavily utilized routes. Providing an index for travel times allows customers to plan extra time if the Planning Time Index is higher to arrive at their destination on time.

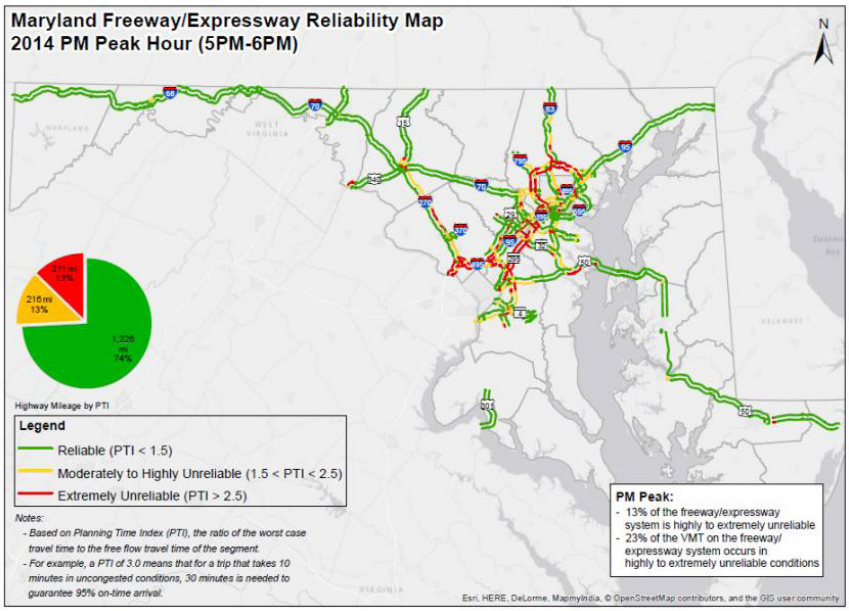
A PTI of < 1.5 is considered reliable and a PTI >1.5 and < 2.5 is considered moderately unreliable and a PTI of > 2.5 is considered highly to extremely unreliable. The goal is to maintain travel times for customers to less than 1.5 times the expected free flow travel time for peak periods.



PERFORMANCE MEASURE 5.1E

Reliability of the Transportation Experience: Planning Time Index for Highway Travel





TANGIBLE RESULT DRIVER:
Phil Sullivan
Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:
Glenn McLaughlin
State Highway Administration (SHA)

PURPOSE OF MEASURE:
To understand the impact on efficiency of quickly restoring transportation services after incidents for customers.

FREQUENCY:
Annually (in April)

DATA COLLECTION METHODOLOGY:
The methodology involves an analysis of operational records collected in real-time, and results are contingent on the scale, number and types of incident/disruptions.

NATIONAL BENCHMARK:
North Carolina – 69 minutes

California – 90 minutes

Connecticut – 45 minutes

Florida – 90

Minnesota – 35 minutes

Missouri – 24 minutes

PERFORMANCE MEASURE 5.2A

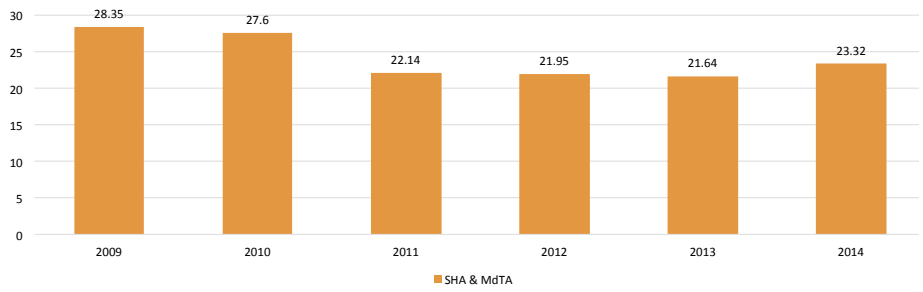
Restoring Transportation Services: Average Time to Restore Normal Operations After Disruptions

MDOT's customers expect a safe, well-maintained, efficient and reliable transportation system with minimal disruption to travel and rapid response to and management/clearance of incidents/disruptions when they occur. Efforts to enhance operations, improve coordination and cooperation among TBUs, and regional contribution to the reduction in response times and the overall average incident duration, restores the road more quickly for our customers.

To better understand the performance of the agency, SHA, through its Office of CHART and ITS Development, collects (through both in-house and independent evaluations) the average duration of incidents occurring on Maryland highways. The "average incident duration" is a measure of the time it takes a response unit to arrive, plus the elapsed time between the arrival of the first unit and the time stamp in the CHART system denoting the restoration of normal operating conditions. This data is tracked and recorded in real-time by Operators and the CHART system, and is reported on an annual basis. Other business units use various methods to monitor their response to service disruptions.

As shown in the figure below, the average incident duration between calendar years 2009 and 2014 has consistently been less than 30 minutes, and has been less than the lower benchmark value (24 minutes – Missouri) for the last four years (2011 – 2014). The desired short-term goal is to continue to identify strategies that will maintain the downward trend and facilitate further improvement in this area.

Average Highway Incident Duration (minutes)



TANGIBLE RESULT DRIVER:
Phil Sullivan
Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:
Glenn McLaughlin
State Highway Administration (SHA)

PURPOSE OF MEASURE:
To understand the impact on efficiency of quickly restoring transportation services after weather events.

FREQUENCY:
Annually (in April)

DATA COLLECTION METHODOLOGY:
The methodology involves an analysis of operational records collected in real-time, and results are contingent on the scale, number and types of weather events.

NATIONAL BENCHMARK:
Minnesota – 3 hours

Washington, DC – 18 hours

Missouri – 3.8 hours

PERFORMANCE MEASURE 5.2B

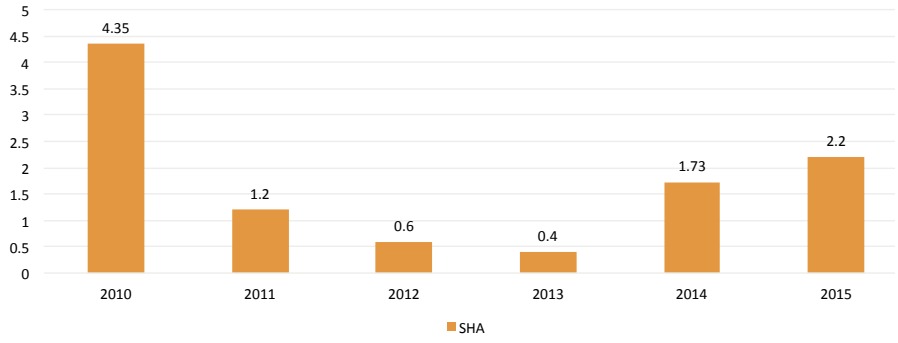
Restoring Transportation Services: Average Time to Restore Normal Operations After a Weather Event

MDOT's customers expect a safe, well-maintained, efficient and reliable transportation system with minimal disruption to travel. Disruptions in travel due to inclement weather (snow, ice, etc.) require specialized operations experience and rapid response to restore normal operating conditions. This is important to customers who need to do business or take care of family and need access to the transportation system.

To better understand the performance of the agency, SHA, through its Office of Maintenance, collects data on the "average time to restore normal operations after weather events." Performance is tracked and measured against prior years to identify trends and improve statewide and local operations. The performance measure is calculated by identifying the lapse in time from the ending of frozen precipitation in a maintenance shop's area of responsibility and the occurrence of bare (wet or dry) pavements on the interstate and primary highways it maintains. The latest SHA-wide datum reported was for FY 2015 and is 2.2 hours (4 hours was the target). Other business units use various methods to monitor their response to service disruptions.

As shown in the figure below, the average time to restore normal operations after weather events for the years 2011 through 2014 have consistently been less than the benchmark value (3.8 hours –Missouri). Considering this, the desired short-term goal is to continue to identify strategies to reduce time to restore normal operations after these events.

Time to Regain Bare Pavement After Snow (hours)



TANGIBLE RESULT DRIVER:
Phil Sullivan
Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:
Sharon Rutzebeck
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:
To measure percentage of services through alternate methods other than in-person visit as an indicator of easy and reliable access to MDOT services and products.

FREQUENCY:
Semi-Annually (in April and October)

DATA COLLECTION METHODOLOGY:
Formula accounts for total customer transportation services and products compared to those acquired by alternate methods.

NATIONAL BENCHMARK:
FY2018 - 68%

PERFORMANCE MEASURE 5.3

Percent of Transportation Services and Products Provided Through Alternative Service Delivery (ASD) Methods

MDOT customers want easy and reliable access to acquire transportation services and products. According to a 2015 Pew Research Center study, 42 percent of Americans use the internet to get government services and/or information and 22 percent use the internet to make or receive payments. In general, it is anticipated that 68 percent of MDOT customers will use alternate methods to access our services and goods.

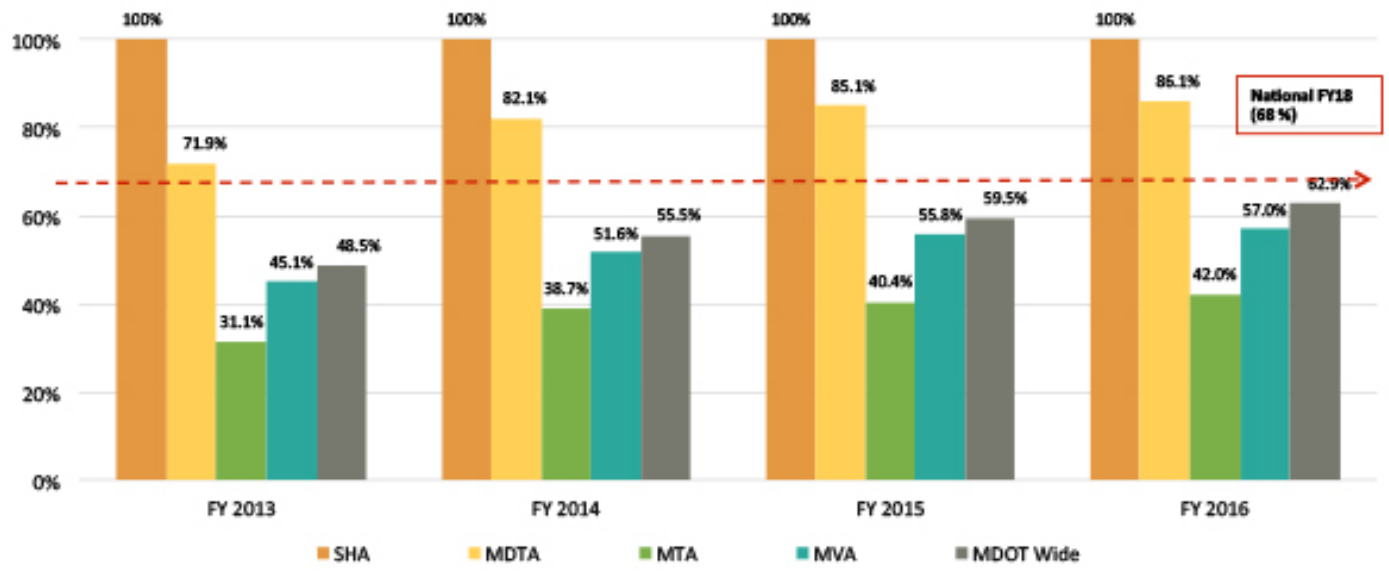
Presently, SHA, MDTA, MTA and MVA provide transportation related services and products to customers through alternative service delivery (ASD) methods such as web, kiosk, call service center/IVR and mail-in. MAA and MPA have mid-term projects in the planning stages to offer pre-pay parking options to airport and cruise terminal customers.

For the reporting period FY 2016 (July 2015 – June 2016) SHA conducted 100 percent; MDTA achieved 86 percent; MTA realized 42 percent and MVA achieved 57 percent of its total eligible services and products via alternate methods. Combined, these TBUs achieved an ASD rate of 63 percent which is nearing the FY 2018 national standard of 68 percent.

PERFORMANCE MEASURE 5.3

Percent of Transportation Services and Products Provided Through Alternative Service Delivery (ASD) Methods

Percent of Transportation Services Provided Through Alternative Delivery Methods



TANGIBLE RESULT DRIVER:
Phil Sullivan
Maryland Transit Administration (MTA)

PERFORMANCE MEASURE DRIVER:
Ralign T. Wells
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:
To assess the functionality and value of real-time signage and information systems offered.

FREQUENCY:
Quarterly for functionality. Annually for customer satisfaction (in July)

DATA COLLECTION METHODOLOGY:
Sampling of real-time signage or IVR systems to determine a percentage of functionality. Survey users to assess their opinion of usefulness and satisfaction with Real-Time Information Systems.

NATIONAL BENCHMARK:
85%-90% Functionality[1]

[1] According to Clever Devices, Industry experts on Real-Time Information technologies

PERFORMANCE MEASURE 5.4A AND 5.4B

Percent of Functional Real-Time Information Systems Provided; Reliance and Customer Satisfaction with the Accuracy of Real-Time Signage Provided

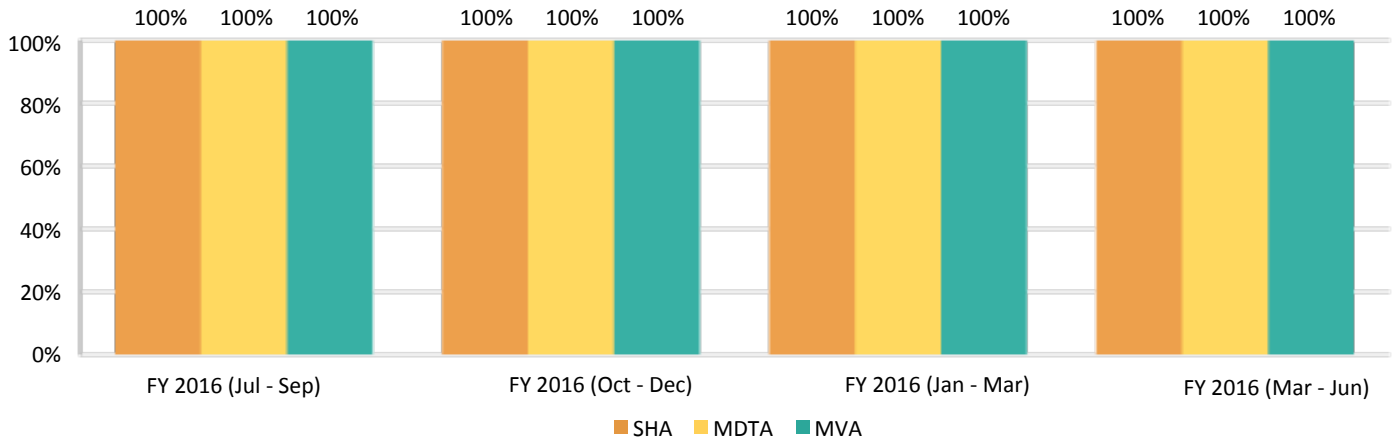
MDOT customers of MTA, MVA, MAA, SHA and MDTA, benefit from "real-time" information systems installed throughout the transportation network offering users the most accurate information available to help them prepare for, and manage their time while using, statewide transportation services. For example, MTA Light Rail and bus services and MAA shuttles have or will soon offer next vehicle arrival information signage. MVA offers Interactive Voice Response (IVR) systems, providing users with predicted wait time information. CHART, a joint effort of MDOT, MDTA, SHA and the Maryland State Police (MSP) in cooperation with federal, state and local agencies, uses a teamwork approach and state of the art technology to provide "real-time" travel information to highway network users.

These real-time systems must be operational at all times to ensure that users have access to the best available information. System inspections are critical to ensuring that the information systems are functioning as designed. Further, annual surveys are being developed to assess customer satisfaction with the real-time information systems.

PERFORMANCE MEASURE 5.4A AND 5.4B

Percent of Functional Real-Time Information Systems Provided; Reliance and Customer Satisfaction with the Accuracy of Real-Time Signage Provided

Percent (%) of Functional Real-Time Information Systems Provided FY 2016



TANGIBLE RESULT #6

Communicate Effectively With Our Customers

Every MDOT employee has to communicate with customers, some on a daily basis. It is critical that we communicate clearly, concisely, timely and accurately with customers.

RESULT DRIVER:
Diane Langhorne
The Secretary's Office (TSO)

TANGIBLE RESULT DRIVER:
Diane Langhorne
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Katie Bennett
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:
To examine and analyze the social media activities of each MDOT TBU to gauge if we are communicating effectively with our customers/followers.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
MDOT gathers social media analytics for this measure from MDOT Twitter and Facebook accounts

NATIONAL BENCHMARK:
N/A

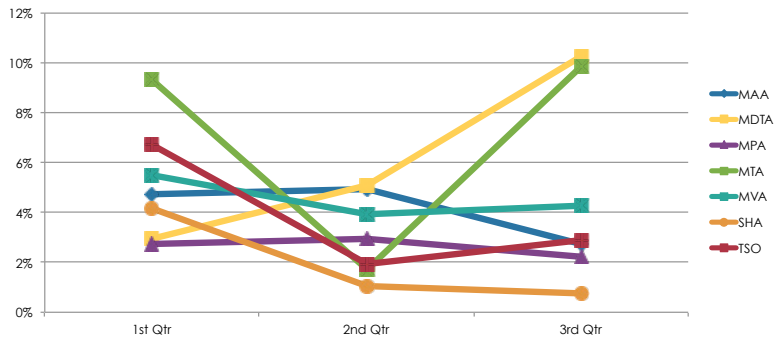
PERFORMANCE MEASURE 6.1A
Communicate Effectively Utilizing Social Media: Social Reach

Social media has become a standard method for businesses to communicate with their customers. MDOT TBUs use social media channels to disburse clear and accurate information to their customers and the media in a timely manner.

"Social Reach" measures the number of customers who have seen a message. MDOT strives to reach customers through the channels they use. Efforts are focused on developing social media strategic skills and programs MDOT-wide to enhance social reach.

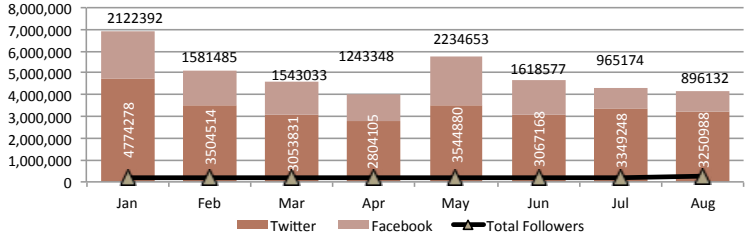
This quarter, Social Media Managers from each TBU attended a social media strategic workshop. In 2016 MDOT attracted over 50,000 new followers. To date, there are over 200,000 customers following MDOT social pages. Follower growth steadily increased at an average of 3.7% each month MDOT-wide.

MDOT Social Media Follower Growth Rate



** Overall MDOT-wide growth has increased on average 3.7% each month.*

Number of Customers Reached Through Social Media (2016)



TANGIBLE RESULT DRIVER:
Diane Langhorne
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Richard Scher
Maryland Port Administration (MPA)

PURPOSE OF MEASURE:
To examine and analyze the social media activities of each MDOT TBU to gauge if we are communicating effectively with our customers/followers.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
MDOT gathers social media analytics for this measure from all MDOT Twitter and Facebook accounts

NATIONAL BENCHMARK:
N/A

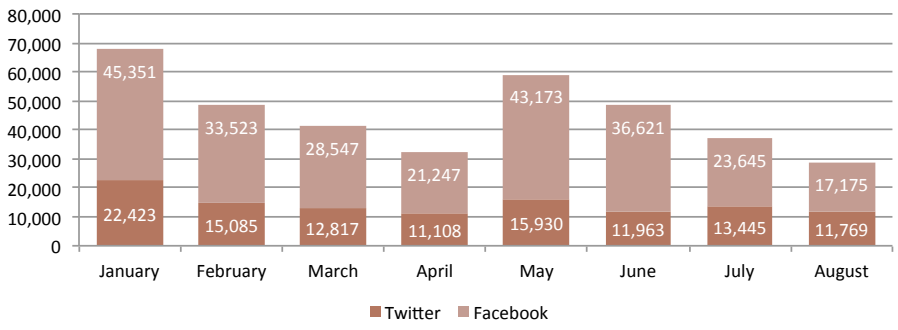
PERFORMANCE MEASURE 6.1B
Communicate Effectively Utilizing Social Media: Social Engagement

While "social reach" measures the total number of people who have seen a message, "social engagement" recognizes how followers engaged with that message. Engagements initiate opportunities to communicate interactively with customers.

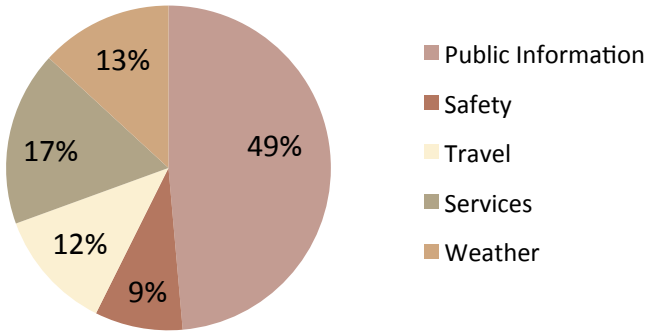
To determine the effectiveness of its social media communication, MDOT measures social engagement across all MDOT social media accounts, looking for trends in likes, comments and shares in order to better provide content its followers will enjoy and find informative. Through education and training, MDOT staff are determined to heighten the social experience of their customers.

MDOT continues to learn the interests of its customers through social media channels in order to provide the content customers expect.

Number of Customer Engagements Through Social Media (2016)



Top Customer Engagement Topics



TANGIBLE RESULT DRIVER:
Diane Langhorne
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Chuck Brown
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:
To track how clearly and effectively MDOT communicates with customers at public meetings.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Data will be collected via survey at all public meetings hosted by MDOT business units. The data will be owned and housed by the business unit in charge of the public meetings and sent to TSO on a quarterly basis.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 6.2
Satisfaction with Communication at Public Meetings

Effective communication during public meetings can mean the difference between a project that moves forward and a project that ends up on the shelf. Transportation planners, engineers and construction professionals may unknowingly use language, graphics, maps and renderings that can be difficult for MDOT customers to understand.

When MDOT fails to effectively communicate important project details, misinformation can lead to the demise of the most beneficial projects. Effective communication also includes the ability to listen to customers to ensure they are heard and have the opportunity to comment. Through the use of a standardized survey across all TBUs, MDOT will measure and track customer perception of how clearly and effectively MDOT personnel communicate at public meetings, which will ensure that the Department is providing the right solution for everyone involved. The intent of survey feedback is to allow MDOT to adjust its presentation to better meet the needs of its customers.

TANGIBLE RESULT DRIVER:
Diane Langhorne
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Annette Fisher
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:
To track number of stories generated to ensure maximum customer reach.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Data can be derived through software systems.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 6.3A

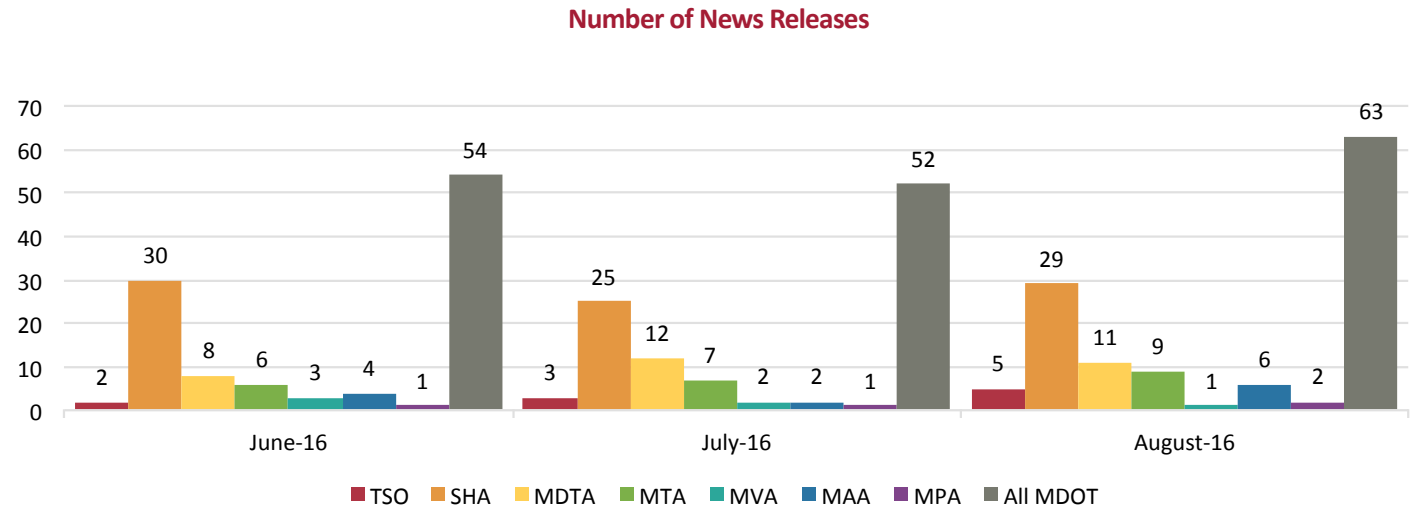
Communicate Effectively Through News Releases: Number of News Stories Generated from Major Releases

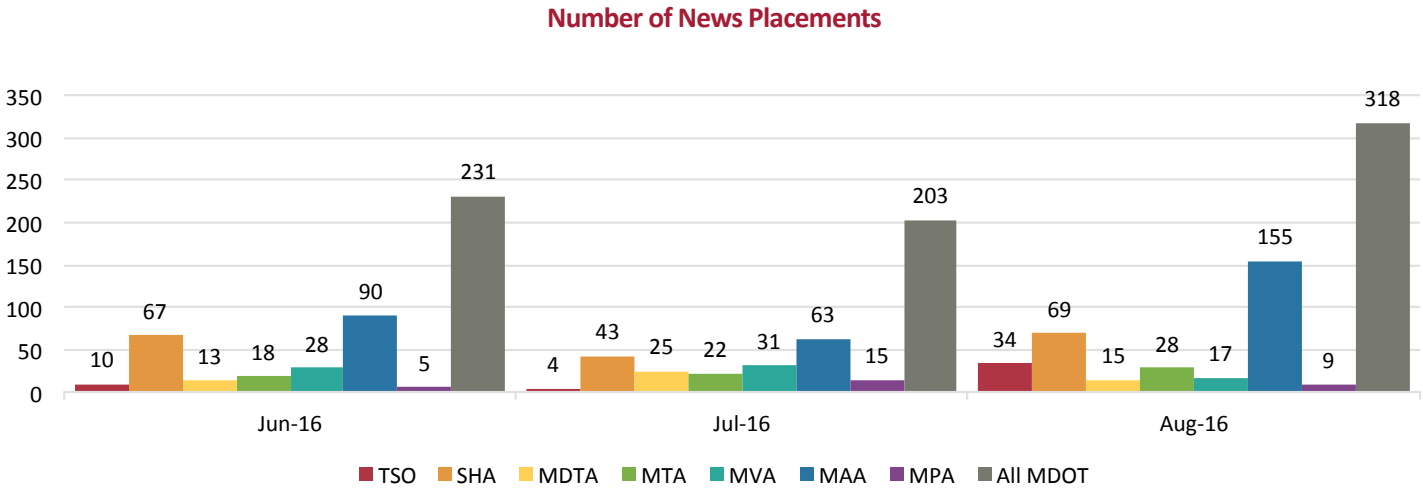
News releases being picked up and editorialized by large news media outlets are still the most commonly used method by which customers receive information about MDOT products and services. This process also acts as an incredible cost-savings. News stories generated as a result of an MDOT release provide savings to the taxpayer and allows MDOT to maximize every transportation dollar.

The agencies responsible for providing transportation access to the citizens of Maryland inform customers about "News You Can Use," i information they need regarding transportation services and projects. This measure shows the value of news releases by determining the reach of news releases, thereby saving taxpayer dollars (reaching customers with news and information without purchasing advertising).

PERFORMANCE MEASURE 6.3A

Communicate Effectively Through News Releases: Number of News Stories Generated from Major Releases





TANGIBLE RESULT DRIVER:
Diane Langhorne
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Valerie Burnette Edgar
State Highway Administration (SHA)

PURPOSE OF MEASURE:
To evaluate the effectiveness of the news releases issued by MDOT. Demonstrates cost effectiveness of releasing public information to media outlets vs. buying advertising space/time.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Data can be derived through software systems and some of the data is calculated per news story by individuals using advertising rates of media outlets.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 6.3B

Communicate Effectively Through News Releases: Earned Media Value of Print and Broadcast Coverage Generated by News Releases

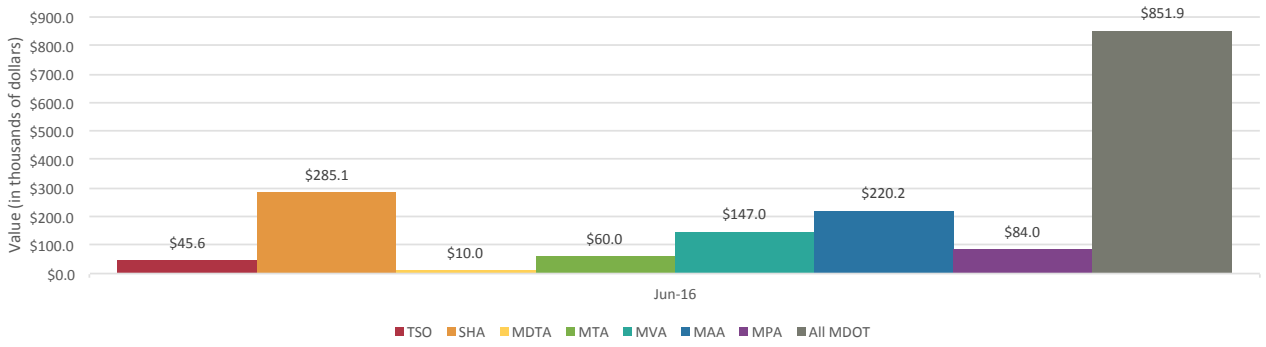
Print and broadcast media are the industry standard for business to customer communication. To reach its customers, MDOT has the option to buy ad space in the market or to issue news releases that are then picked up and editorialized by large publications. The later offers a significant cost-savings to MDOT and the tax-paying public while allowing for MDOT messages to reach more customers quickly and efficiently.

MDOT issues news releases to inform customers of important information they need regarding transportation services and projects. This measure shows the value of print and broadcast stories generated by news releases to determine the cost effectiveness of news releases (reaching customers with news and information without purchasing advertising for public notice).

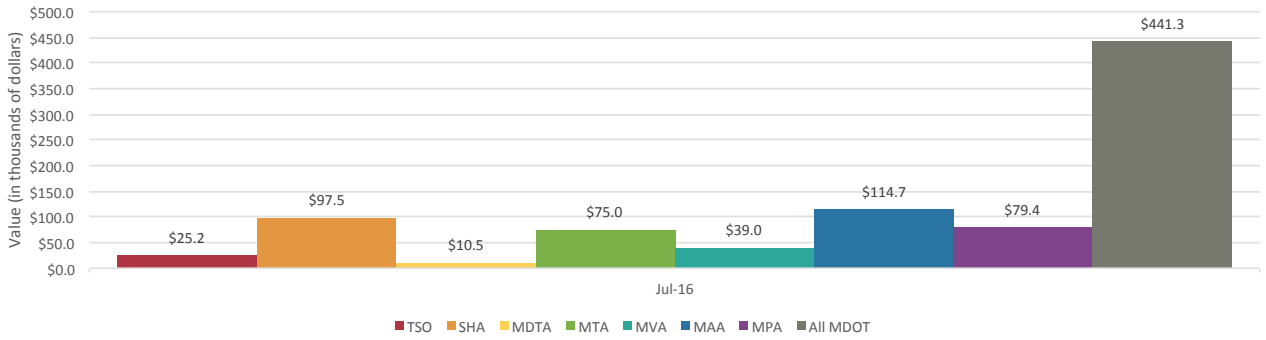
PERFORMANCE MEASURE 6.3B

Communicate Effectively Through News Releases: Earned Media Value of Print and Broadcast Coverage Generated by News Releases

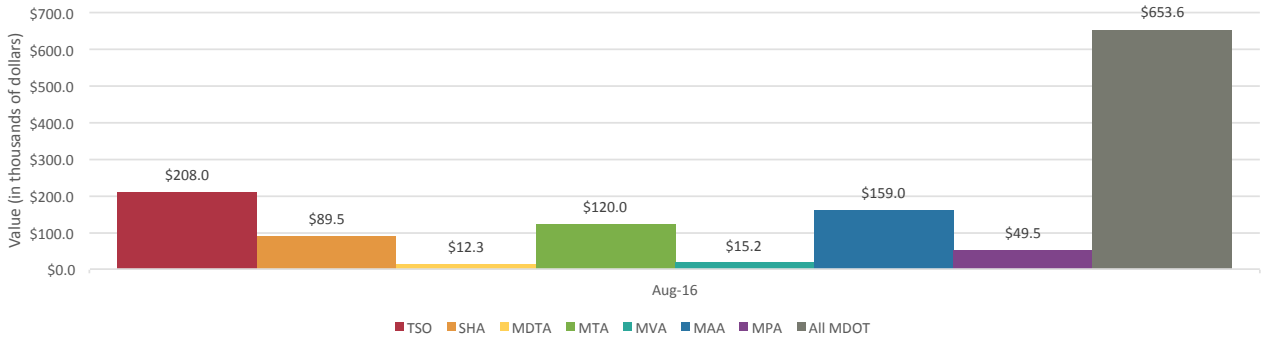
June 2016 Earned Media Value



July 2016 Earned Media Value



August 2016 Earned Media Value



TANGIBLE RESULT DRIVER:
Diane Langhorne
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Valerie Burnette Edgar
State Highway Administration (SHA)

PURPOSE OF MEASURE:
To evaluate the tone of media coverage resulting from news releases.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
MDOT's team will use software that tracks releases and news generated to evaluate tone of news stories.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 6.3C

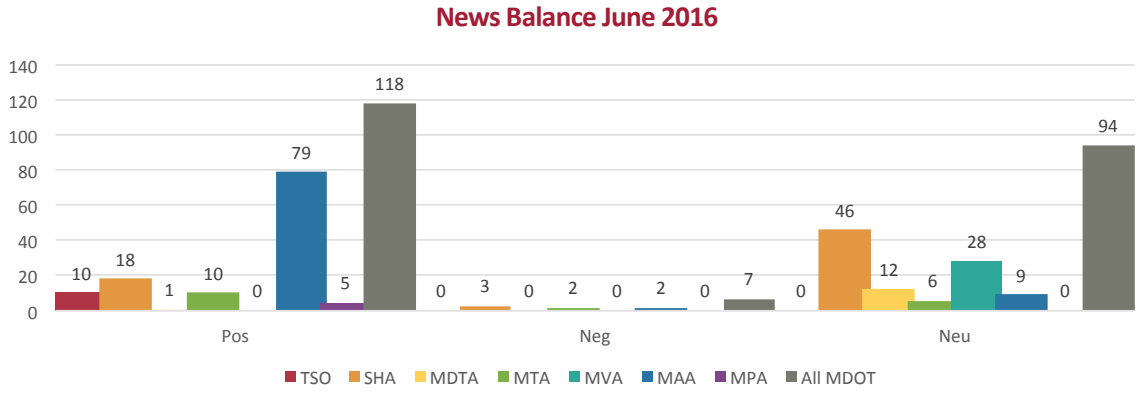
Communicate Effectively Through New Releases: Evaluate Tone of News Stories by Publications Generated from MDOT Releases

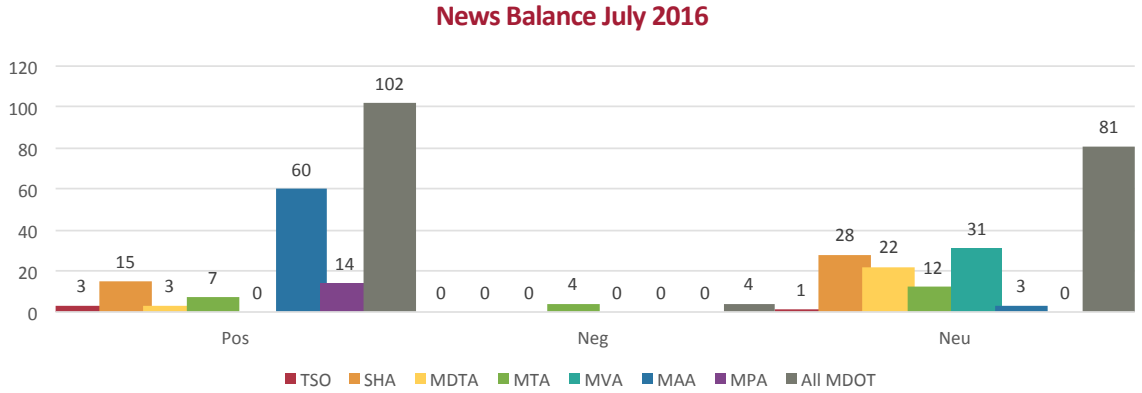
MDOT has a responsibility to inform customers about important information they need relating to services, transportation options and improvements in their communities. One way MDOT shares information is through issuing news releases to the media.

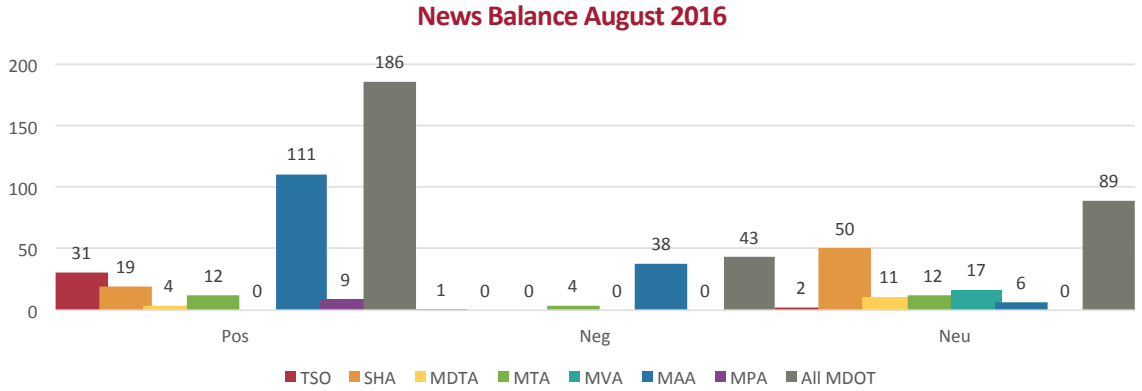
This measure helps MDOT evaluate the tone of print and broadcast news stories that are directly related to MDOT news releases to determine if there is balanced coverage for customers. It also helps MDOT determine if more, less or different information is needed to ensure customers are receiving factual information via news outlets.

PERFORMANCE MEASURE 6.3C

Communicate Effectively Through New Releases: Evaluate Tone of News Stories by Publications Generated from MDOT Releases







TANGIBLE RESULT DRIVER:
Diane Langhorne
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Lisa Dickerson
The Secretary's Office (TSO)

PURPOSE OF MEASURE:
To assess effective communication via translators at public meetings.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Translated customer survey deployed at the conclusion of each public meeting.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 6.4

Communicate Effectively to Customers with English Language Barriers at Public Meetings

Customers, regardless of their proficiency in English, should be able to actively participate in public meetings and review public documents. MDOT is working to provide translation services at all public meetings to ensure that public meetings meet the needs of all of customers, including those with limited English proficiency.

Public meetings are a valuable communication tool for MDOT and its customers. Whether it is a new project that will impact their community or new products and services that impact their transportation experience, public meetings are a place for MDOT customers to receive helpful information.

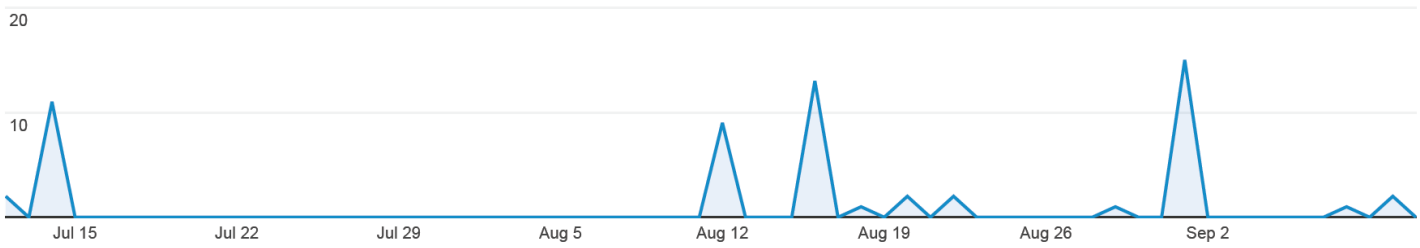
MDOT is maximizing the use of electronic and social media to achieve this performance measure. Significant progress was made to web sites throughout all of MDOT in July 2016. MDOT web sites currently allows for translation of over 160 languages and dialects via "Google Translation". Over two months, we tracked 135 Google Translations performed for those TBUs reporting more than 2 months. The top three translations were Spanish, Chinese, and French. Translations on the SHA web site appeared to coincide prior to high-travel weekends. Additionally, MDOT interpreted and posted the "Notice to the Public", "Complaint Procedures", and "Complaint Forms" documents, exceeding our legal requirement to communicate effectively with our customers with Limited English Proficiency.

MDOT is in the process of streamlining efforts so all TBUs are over the same services and collecting the same data.

PERFORMANCE MEASURE 6.4

Communicate Effectively to Customers with English Language Barriers at Public Meetings

Total Translations on SHA Web Site



TANGIBLE RESULT #7

Be Fair and Reasonable to Our Partners

MDOT will provide an easy, reliable procurement experience throughout the system.

RESULT DRIVER:
Wanda Dade
State Highway Administration (SHA)

TANGIBLE RESULT DRIVER:
Wanda Dade
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:
Angela Martin
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:
To track MBE participation achieved on contracts within MDOT.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
MDOT TBUs report the data on a quarterly basis to Governor's Office of Minority Affairs (GOMA) and MDOT. The information will be provided by MDOT from that report.

NATIONAL BENCHMARK:
N/A

The state goal/benchmark is 29 percent.

PERFORMANCE MEASURE 7.1

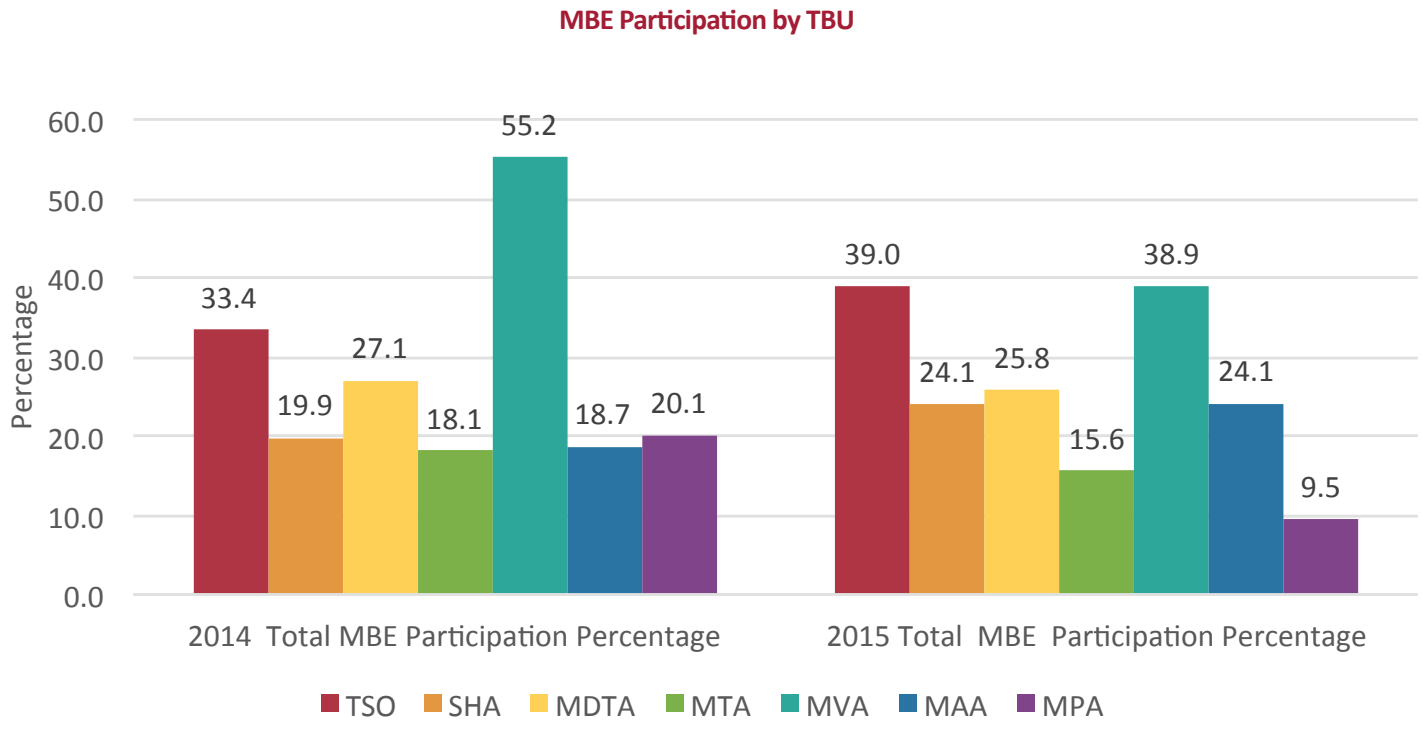
Percentage of Minority Business Enterprise (MBE) Participation Achieved by Each TBU

The MBE program is a statewide program to facilitate minority business participation on contracts. Each MDOT TBU tracks MBE participation data for internal program monitoring. Participation is reported on a quarterly year to date basis.

- MDOT MBE participation for FY 2016 was 18.72 percent (average of all TBUs and TSO), reflecting a slight increase from the average of the first three quarters. Participation at the TBUs ranged from 14.07 percent to 22.01 percent.
- MDOT MBE Participation for FY 2014 was 27.5 percent (average of TBUs and TSO).
- MDOT MBE Participation for FY 2015 was 25.2 percent (average of all TBUs and TSO).

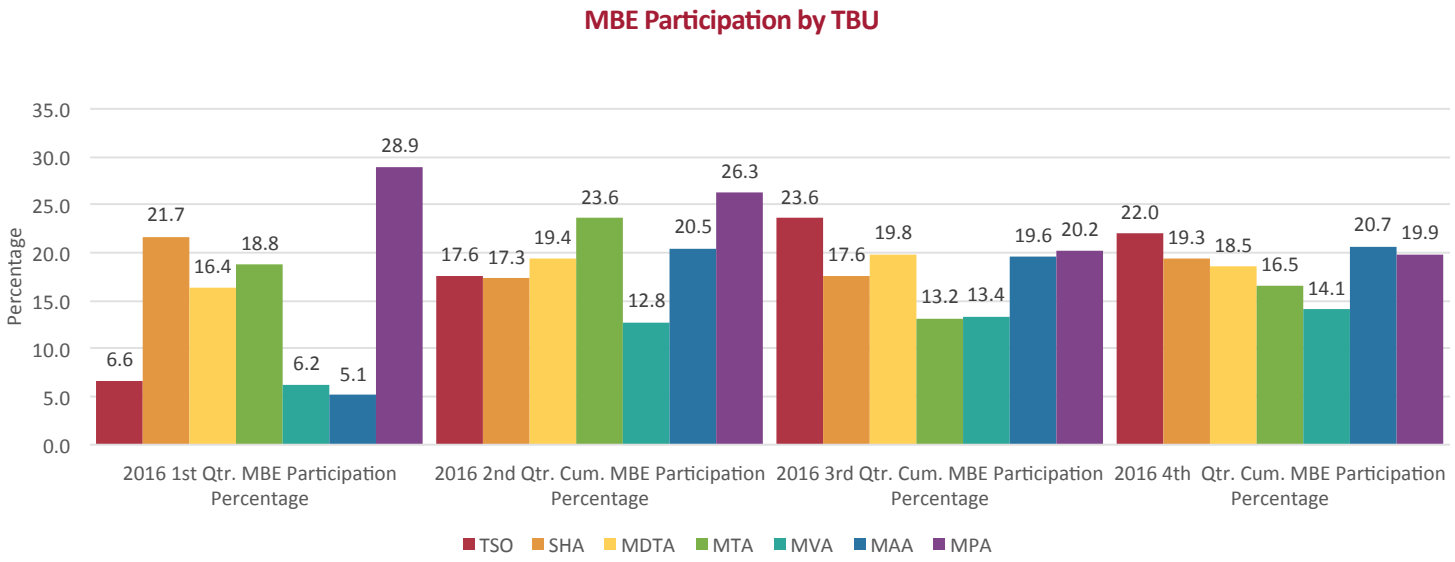
PERFORMANCE MEASURE 7.1

Percentage of Minority Business Enterprise (MBE) Participation Achieved by Each TBU



PERFORMANCE MEASURE 7.1

Percentage of Minority Business Enterprise (MBE) Participation Achieved by Each TBU



TANGIBLE RESULT DRIVER:
Wanda Dade
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:
Angela Martin
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:
To track MBE prime contractor participation achieved on contracts within MDOT to ensure MDOT provides opportunities to all of business partners.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Data will be collected from MDOT and TBUs.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 7.2

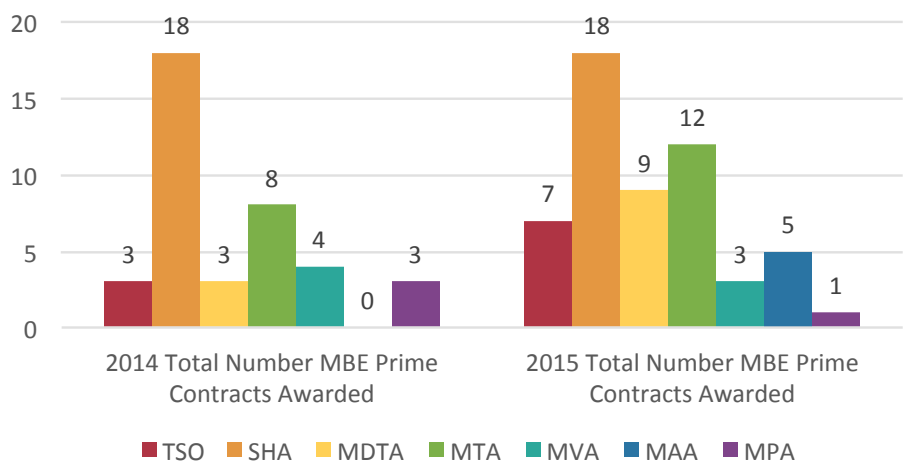
Number and Percent of Contracts Awarded to MBE Firms as the Prime Contractor

Participation of MBE firms as a prime contractor is important to facilitate their growth and enable them to compete in the general marketplace after graduation. MBE firms "graduate" from the program when reaching designated thresholds (re. company gross receipts and personal net worth of owners).

The information reported in this measure is the number of MBE prime contractors awarded contracts at/above $500,000. It does not include small purchases. The number of contracts awarded remains fairly low (0 – 12 awards for the fourth quarter).

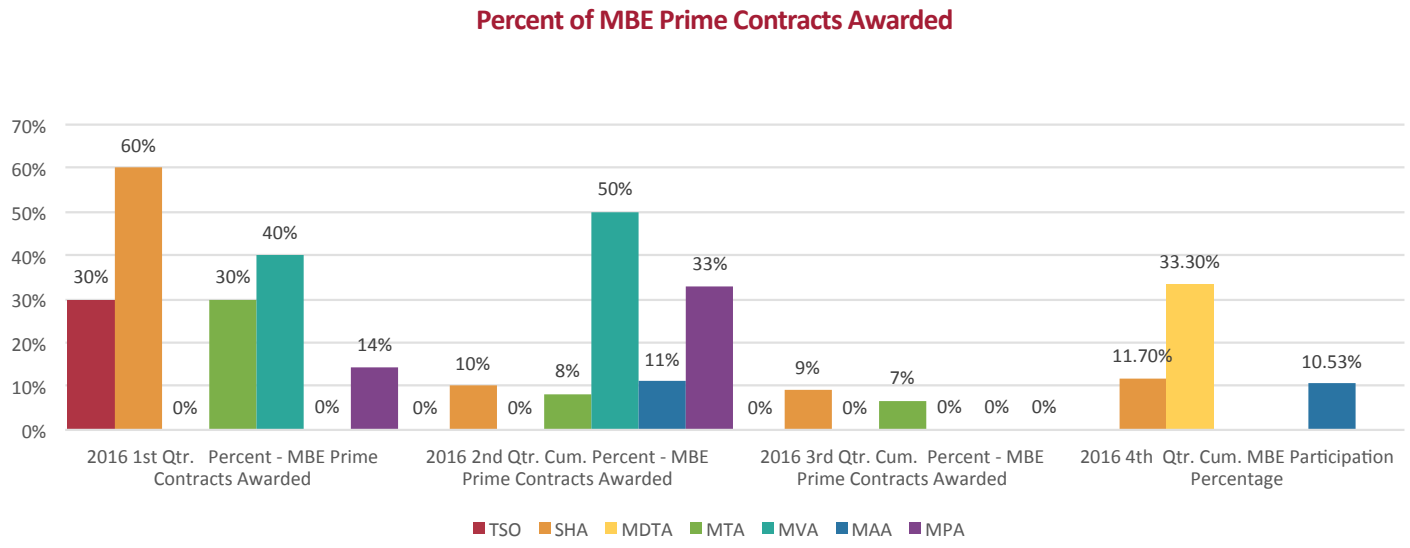
The contracts cover a variety of areas including construction, architectural, engineering, maintenance and services.

Number of MBE Prime Contracts Awarded



PERFORMANCE MEASURE 7.2

Number and Percent of Contracts Awarded to MBE Firms as the Prime Contractor



TANGIBLE RESULT DRIVER:
Wanda Dade
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:
Wonza Spann-Nicholas
Maryland Port Administration (MPA)

PURPOSE OF MEASURE:
Track compliance with State mandate for awarding 10% of MDOT's total eligible procurement expenditures to certified Small Business Reserve contracts.

FREQUENCY:
Quarterly, compiled Annually

DATA COLLECTION METHODOLOGY:
SBR goal is calculated quarterly from eligible contracts and expenditure data exported from FMIS, iFMIS and US Bank for Corporate Credit Card data.

NATIONAL BENCHMARK:
The Governor's Office on Minority Affairs maintains the State's official record of SBR designation and spending across 23 participating agencies, including MDOT's TBUs.

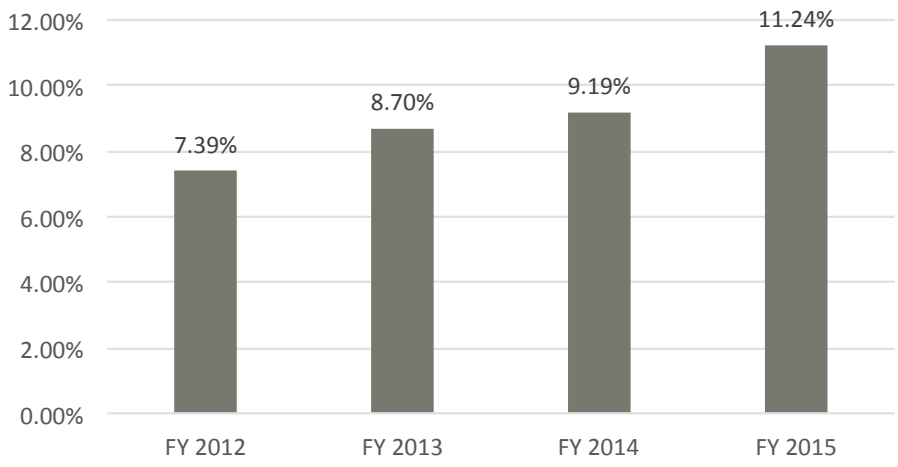
The State's mandate is 10% or better.

PERFORMANCE MEASURE 7.3
Percent of Payments Awarded to Small Business Reserve (SBR) Contracts

Maryland's economy is powered by the jobs and innovative resources generated by small businesses. The SBR Program is a race-and gender-neutral program that provides small businesses with the opportunity to participate as prime contractors on State contracts and procurements by competing with other small businesses instead of larger, more established firms.

Each TBU is required to participate in the SBR Program by spending at least 10% of their annual fiscal year eligible procurement expenditures with qualified small businesses. For the first time since the SBR Program was established in 2004, MDOT achieved a 11.2% participation rate in FY2015.

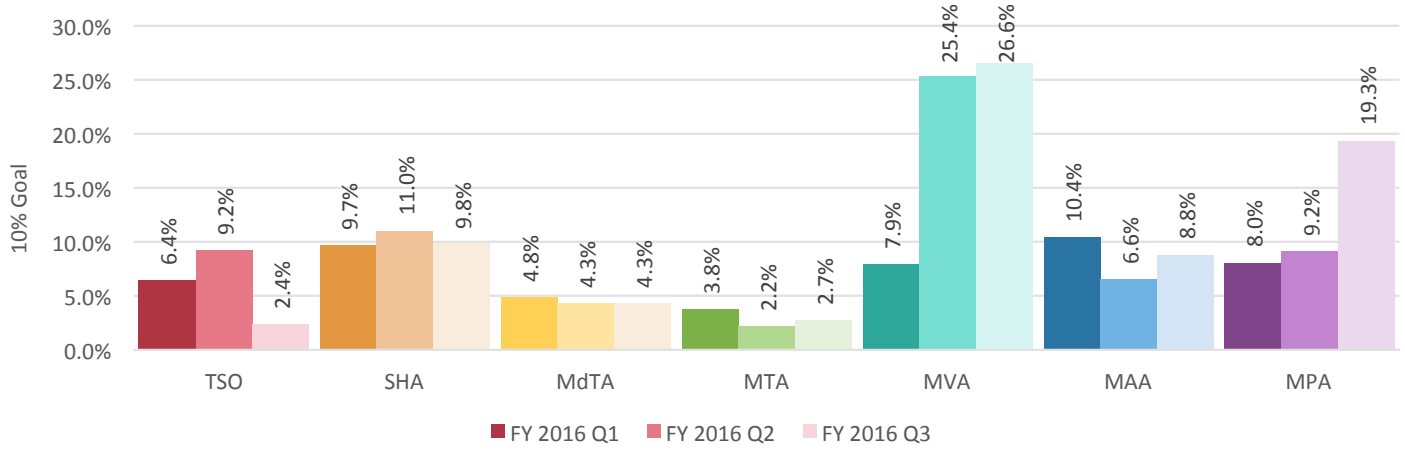
MDOT SBR Achievement Rates



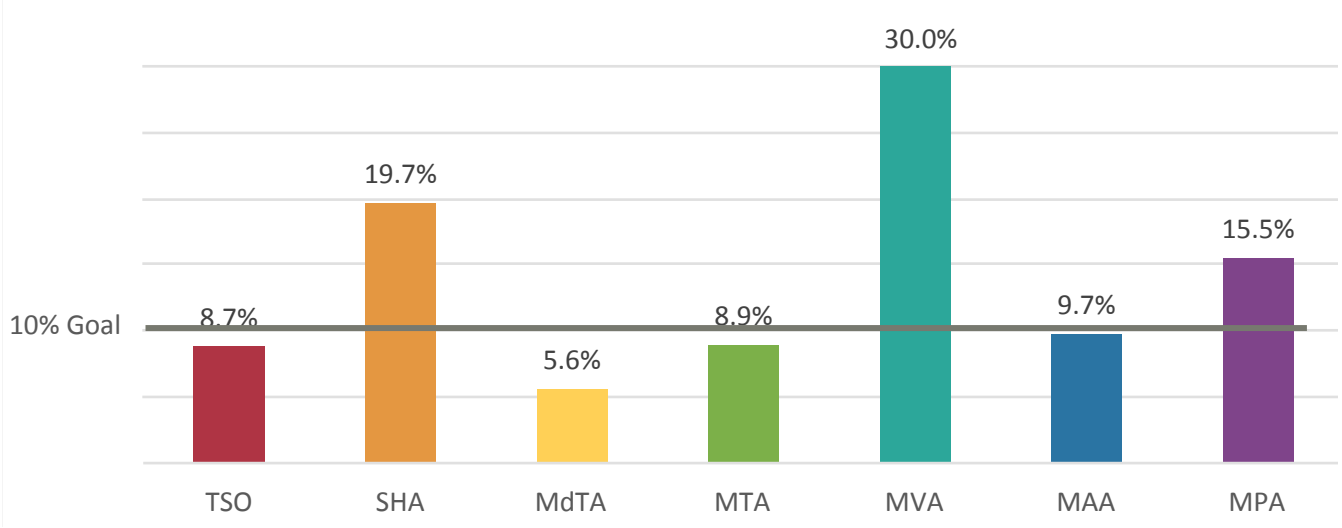
PERFORMANCE MEASURE 7.3

Percent of Payments Awarded to Small Business Reserve (SBR) Contracts

FY 2016 Quarterly - SBR% of Payments



FY 2015 Annual SBR Rate- 11.24%



TANGIBLE RESULT DRIVER:
Wanda Dade
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:
William P. Ward
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:
To track the percent of VSBE contract values to ensure that MDOT continues a contractual relationship with VSBs in Maryland.

FREQUENCY:
Annually (in January)

DATA COLLECTION METHODOLOGY:
Using the Financial Management system at MDOT

NATIONAL BENCHMARK:
N/A

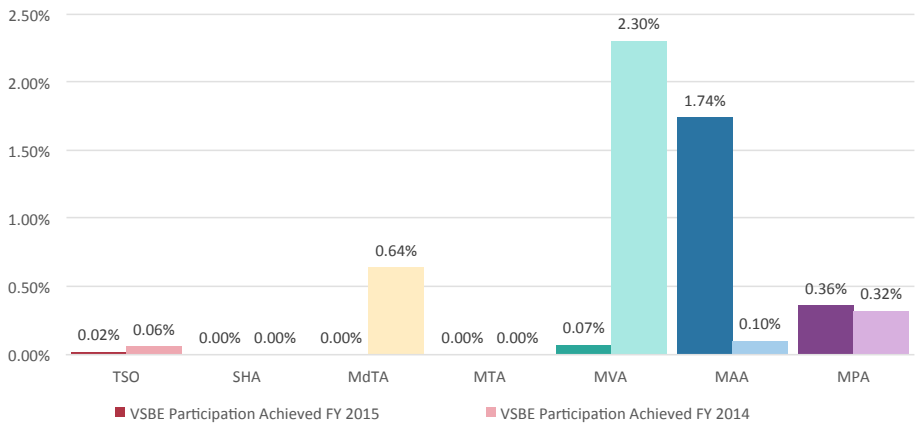
The State's mandate is 1% or better of its total dollar value of procurement contracts.

PERFORMANCE MEASURE 7.4

Percent of Veteran Owned Small Business Enterprise (VSBE) Participation

MDOT considers small business, especially veteran owned small businesses, to be an important sector of the business community. Procurement opportunities for this business segment are directly linked to the socioeconomic well-being of the State of Maryland. MDOT is committed to attaining or exceeding the State mandated goal for veteran businesses.

VSBE Percentage Across MDOT



TANGIBLE RESULT DRIVER:
Wanda Dade
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:
Donna DiCerbo
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:
To determine the level of satisfaction of business partners that attend outreach events, seminars; and satisfaction with processes MDOT-wide.

FREQUENCY:
Quarterly for outreach, etc.; and Annually for MDOT-wide

DATA COLLECTION METHODOLOGY:
The TBU Data Drivers report provides the data to the MDTA Performance Measure Driver where it is compiled on an Excel spreadsheet and analyzed. The results are provided to MDOT management.

NATIONAL BENCHMARK:
TBD

PERFORMANCE MEASURE 7.5
Level of Satisfaction of Our Business Partners

Tracking business partner satisfaction will allow MDOT to determine how satisfied partners are with current business processes. Partners include contractors, consultants, vendors, other state agencies, Federal, State, and local governments, trade associations, commissions, etc. This data can be used to improve those processes that may be ambiguous or cumbersome, and make them more user- friendly. It is important that people who avail themselves of this opportunity know that their comments are taken seriously, and that MDOT is committed to meeting or exceeding business partner expectations.

As reported in April 2015, three (3) MDOT business units had conducted business partner surveys. For all of the surveys conducted, data was compiled, analyzed, and as a result improvements were made to future outreach events that were held; however, with such a low response, we questioned whether the initial request for data reached the appropriate staff within all TBUs.

Reaching out again, we clarified that the ultimate goal is to track what types of businesses are attending these events, if they are getting information they need, and if the event was successful in helping to connect potential partners with new opportunities.

As a result five (6) MDOT business units had conducted surveys. Those TBUs were TSO with four surveys; MDTA with two surveys; MTA with two surveys; MVA with six surveys; and MAA and SHA with one survey.

Phase II of this measure is to conduct one MDOT-wide survey annually. It is anticipated that the survey will be launched in the April of 2017.

PERFORMANCE MEASURE 7.5
Level of Satisfaction of Our Business Partners

In this quarter, we have received more substantial Point of Service Survey Responses from the TBU's, including:

TSO

- **Office of Small & Minority Business Policy** – *Application Assistance Workshop* – Made improvements to next outreach events based on survey comments.
- **SBE Overview & Workshop** – Received ways to improve the overall work and address needs/concerns of participants.
- **Office of Human Resources** – *In-House Training & Workshop* – Used to evaluate/improve employee development programs.
- **Office of Diversity** - *Business Opportunities & Entrepreneurial Training Summit* – Used to determine overall effectiveness of workshops, presenters, and to inform planning for prospective Summits. Surveys were collect at the end of each workshop session and Post Session survey was also distributed to attendees using Survey Monkey.

MDTA

- **Office of Human Resources** – *College Fair Vendor Outreach* – The purpose of the vendor fair is to promote college enrollment for employees and their dependents and to familiarize employees with the benefits of tuition reimbursement through the Career Development Program. MDTA surveyed the participating
- MDTA surveyed the participating colleges as our business partners. Surveys provided information that assisted in providing better service at the next college fair.
- This reported 15 new Undergraduate enrollments; 6 new Graduate enrollments; and an increase from 61 to 82 active Career Development Program participants from the 2015 College Fair.
- **Civil Rights & Fair Practices** – *MBE Quarterly Outreaches* – The results of this survey enables us to make improvements to our next outreach event(s).

MTA

- **Office of Equal Opportunity & Civil Rights** – *MDOT Training Seminar* – Provided information on current contracts & copies presentations to participants.
- **Office of Equal Opportunity & Civil Rights** – *Breakfast with Champions* (for primes and subs) – Sent contract information to all participants; included participants in a weekly blast.

SHA

- **Office of Procurement & Contracting Management** – *Contract Management Training Seminar* – Made improvements to next outreach events based on survey comments.

MAA

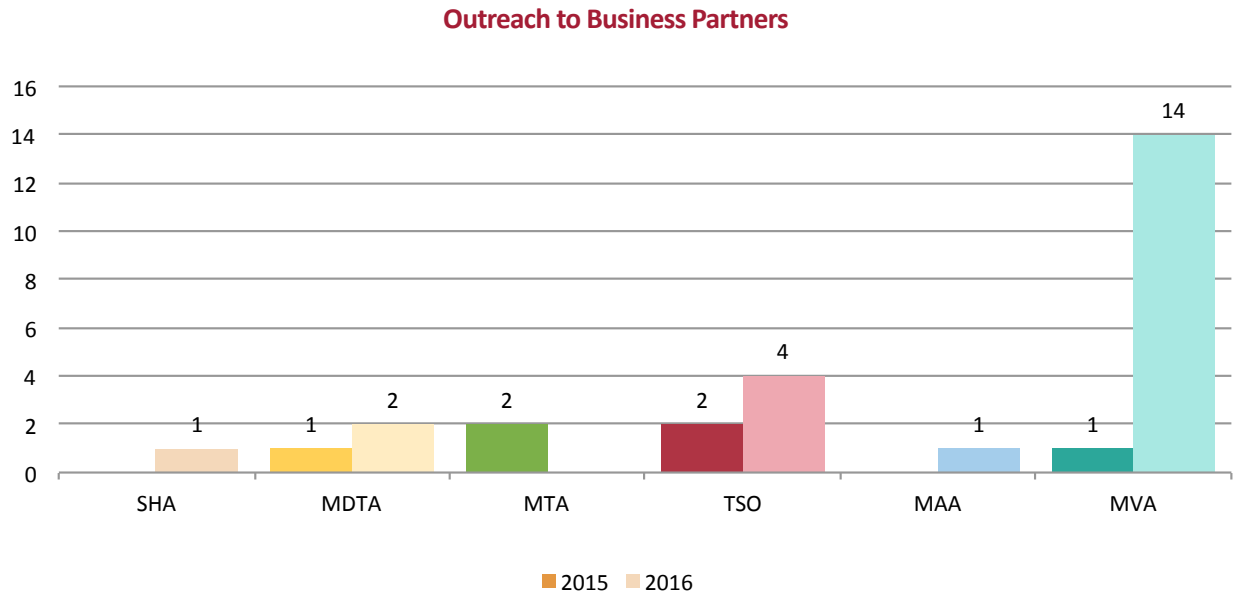
- **Office of Civil Rights & Fair Practices** – *Learning How to Do Business with MAA* – Made improvements to the next outreach events based on survey comments.

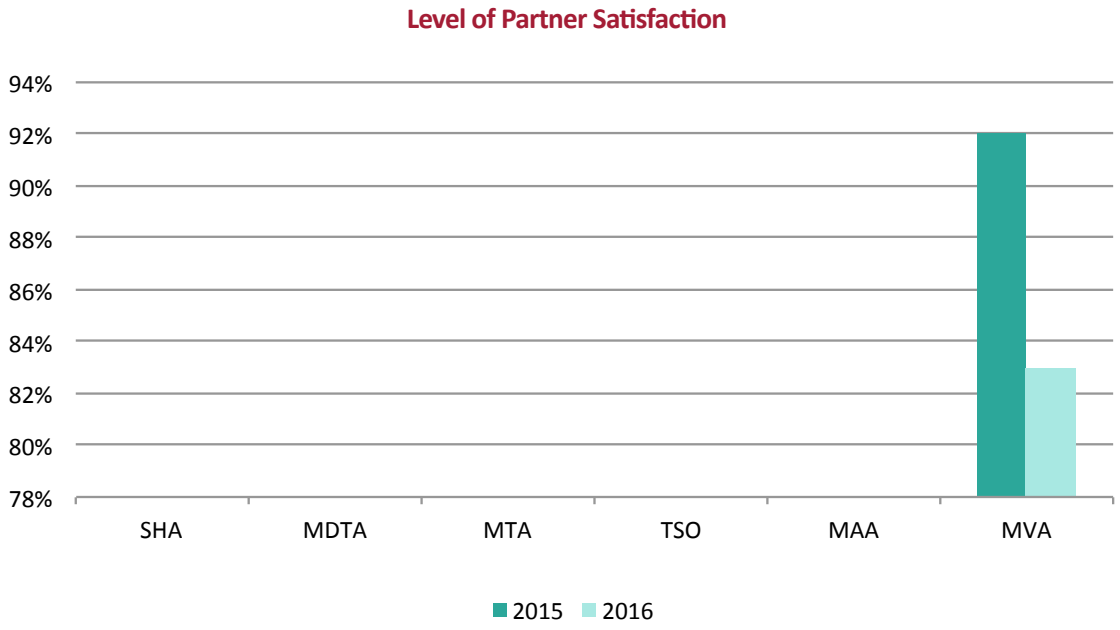
MVA

- **Smooth Operator Law Enforcement Partner Survey** – Results used to get agency participation feedback on the program contents, location, and improvements for the public education aspect.
- **Maryland MVA Driver Education Curriculum Review** – Driver instructors survey results of student unit materials enable the MVA to make improvements before final publication.
- **Maryland Impaired Driving Conference Vendors –** Surveys provide information that assist in future events.

PERFORMANCE MEASURE 7.5

Level of Satisfaction of Our Business Partners





TANGIBLE RESULT DRIVER:
Wanda Dade
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:
David Lynch
Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:
To assess the number and percent of invoices properly paid to MDOT's partners in compliance with state requirements so MDOT can be responsive to business partners' needs.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
MDOT Finance reports data monthly by TBUs.

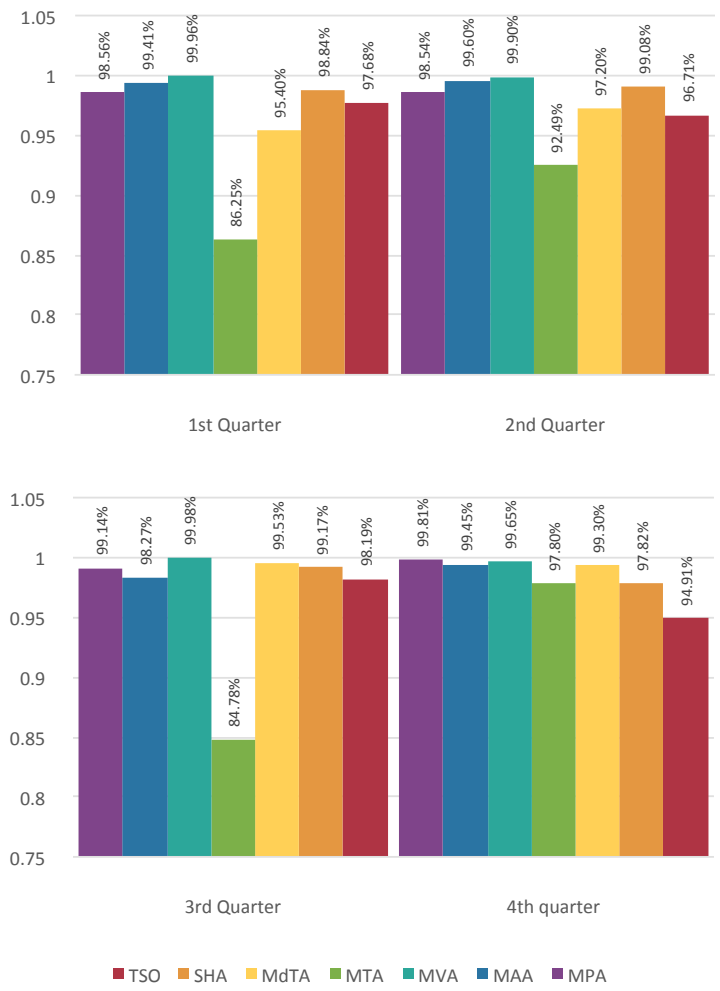
NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 7.6

Number and Percent of Invoices Properly Paid to Our Partners in Compliance with State Requirements

MDOT will treat contractors fairly by promptly paying invoices. Contractors should be able to trust MDOT's TBUs consistency of payment. With a goal of paying invoices within 30 calendar days 99% of the time. For the year MDOT achieved 98.62 % on time.

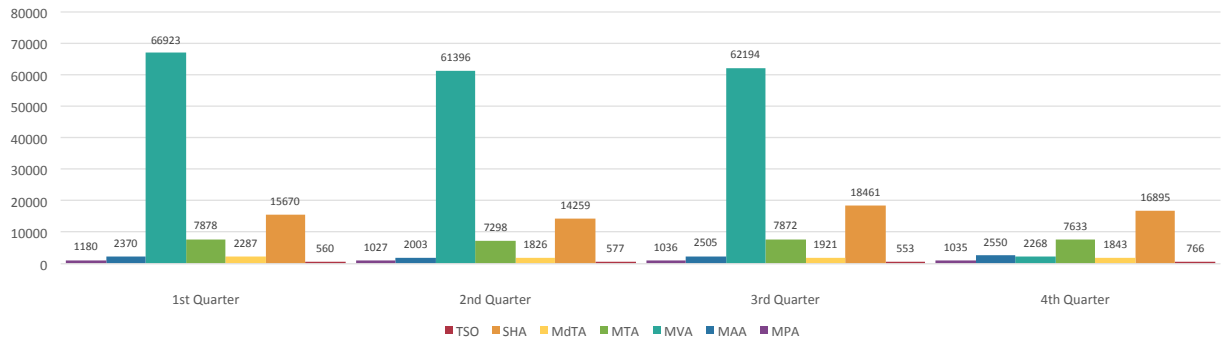
Percent of Invoices Properly Paid Within 30 Days of Invoices First, Second, and Third Quarters of Fiscal Year 2016



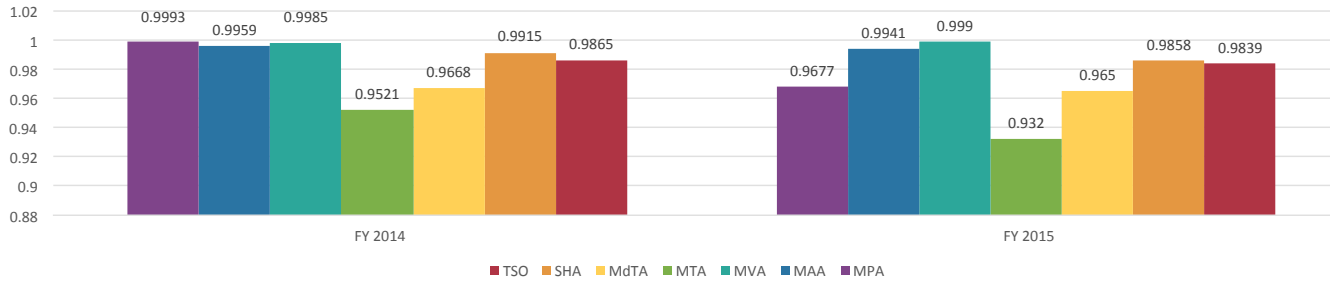
PERFORMANCE MEASURE 7.6

Number and Percent of Invoices Properly Paid to Our Partners in Compliance with State Requirements

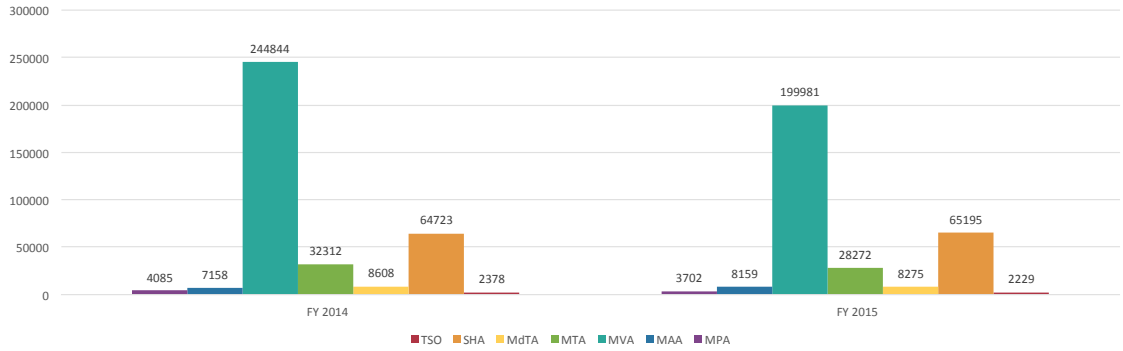
Percent of Invoices Properly Paid - Total Number of Invoices First, Second, and Third Quarters of Fiscal Year 2016



Percentage of Invoice Paid within Thirty Days Time FY 2014 and FY 2015



Total Number of Invoices FY 2014 and FY 2015



TANGIBLE RESULT DRIVER:
Wanda Dade
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:
Mike Zimmerman
The Secretary's Office (TSO)

PURPOSE OF MEASURE:
To determine what percentage of protests are legitimate and how MDOT can reduce the number of non-legitimate protests to create better solicitations for business partners.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
MDOT TBU procurement departments report protest data to TSO Procurement on a monthly basis. Data is aggregated for reporting purposes.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 7.7

Number of MDOT Procurement Protests Filed and Percent of Protests Upheld by the Board of Contract Appeals

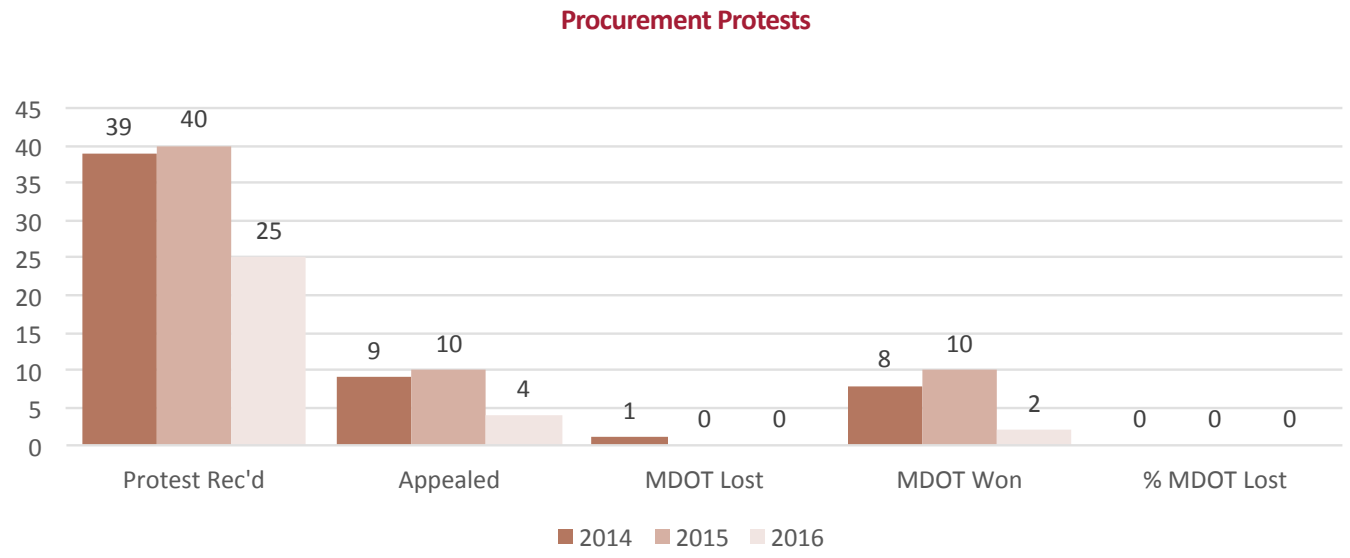
Minimizing protests and understanding how to avoid non-legitimate protests will enable MDOT to develop better solicitations and foster better relationships with business partners. Tracking contract protests will allow MDOT to determine how many protests are being filed without warrant and how many are truly legitimate. This data can be used to create clearer, more concise solicitations for partners.

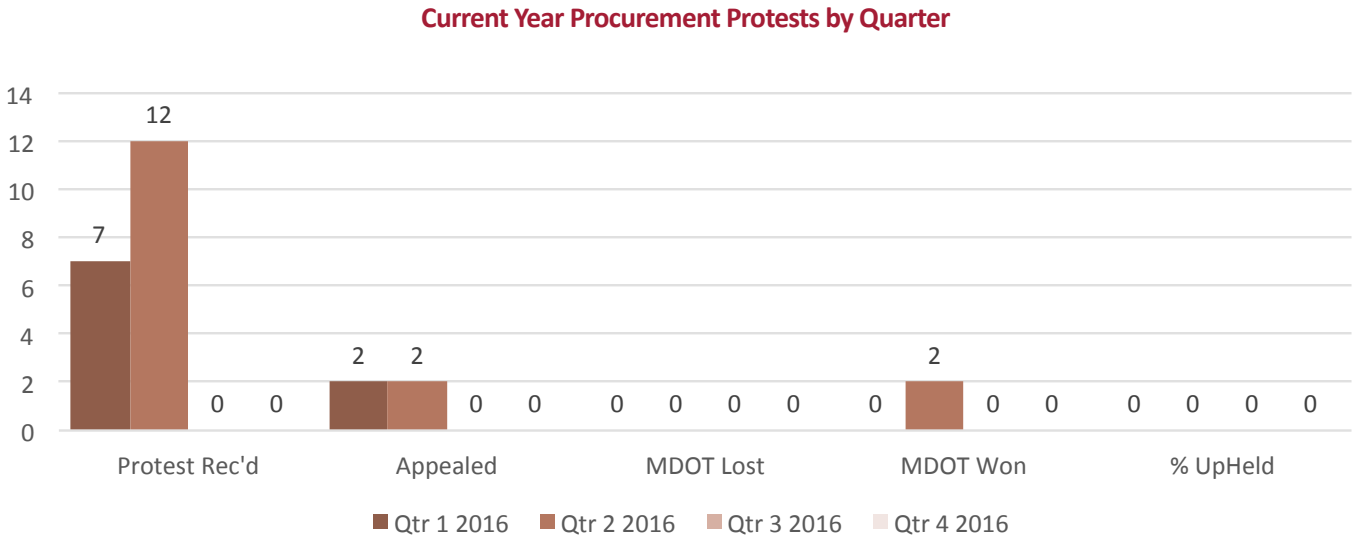
The protest process is important because it allows a company doing business with the State to have confidence in the State's solicitation process by understanding that an aggrieved entity has the ability to be heard.

The State, however, has experienced a number of frivolous protests over the years which delay the award of a procurement and hinders the ability of the State to move forward with the new contract. Often this is the result of an incumbent who is seeking to achieve a longer contract period and more revenue while the protest plays out. Tracking protests gives MDOT the tools necessary to mitigate protests, both frivolous and good, through proactive corrective/preventive action.

PERFORMANCE MEASURE 7.7

Number of MDOT Procurement Protests Filed and Percent of Protests Upheld by the Board of Contract Appeals





TANGIBLE RESULT #8

Be a Good Neighbor

As the owner of statewide transportation facilities, MDOT must work with our neighbors to find solutions that work for our customers and are sensitive to our neighbors.

RESULT DRIVER:
Simon Taylor
Maryland Aviation Administration (MAA)

TANGIBLE RESULT DRIVER:
Simon Taylor
Maryland Aviation Administration (MAA)

PERFORMANCE MEASURE DRIVER:
Anthony Crawford
State Highway Administration (SHA)

Dennis Simpson
Maryland Transportation Authority (MDTA)

John Trueschler
The Secretary's Office (TSO)

PURPOSE OF MEASURE:
To ensure that MDOT maintains attractive and clean facilities with amenities benefiting their neighbors.

FREQUENCY:
Annually (April)

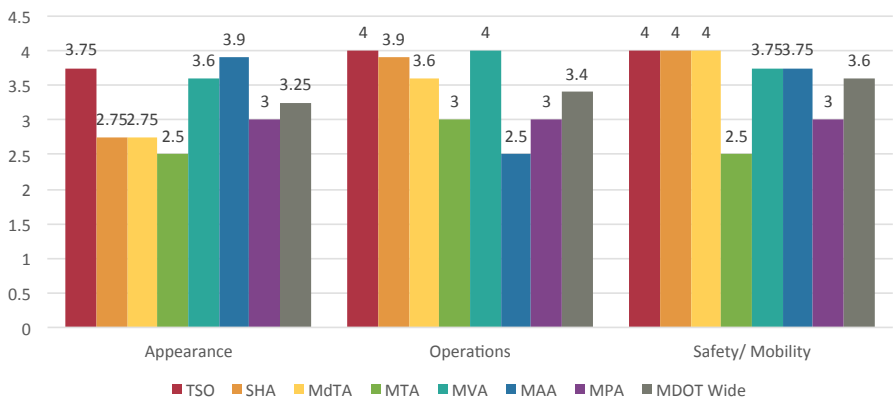
DATA COLLECTION METHODOLOGY:
This will be assessed through an internal assessment and satisfaction survey developed by staff with neighbor input including cleanliness, appearance, operations, access, and safety at our facilities.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 8.1
Percent of MDOT Facilities that Meet or Exceed Our Neighbor's Expectations

Attractive, efficient, and safe operations of MDOT facilities directly affect the surrounding neighbors and communities. MDOT values the relationships we have with neighbors and is committed to ensure the Department meets or exceed their expectations through an internal self-assessment and neighbor satisfaction survey. MDOT will be one of the first to engage our neighbors through staff outreach to better understand what impact facilities have on communities and how the Department can be a better neighbor.

MDOT Facilities Assessment Ratings for Appearance, Operations, and Safety/Mobility



TANGIBLE RESULT DRIVER:
Simon Taylor
Maryland Aviation Administration (MAA)

PERFORMANCE MEASURE DRIVER:
Michael Phennicie
Maryland Aviation Administration (MAA)

Kathy Broadwater
Maryland Port Administration (MPA)

PURPOSE OF MEASURE:
To expand and strengthen community outreach programs to continuously improve relationships with neighbors.

FREQUENCY:
Quarterly & Annually

DATA COLLECTION METHODOLOGY:
Data on the number of outreach activities is tallied and reported by each business unit on a quarterly basis. A team of data drivers from each unit meets quarterly with the PM Driver to review the submitted data and discuss types of activities and lessons learned.

Satisfaction surveys are tallied after each event and overall results reported annually.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 8.2A AND B

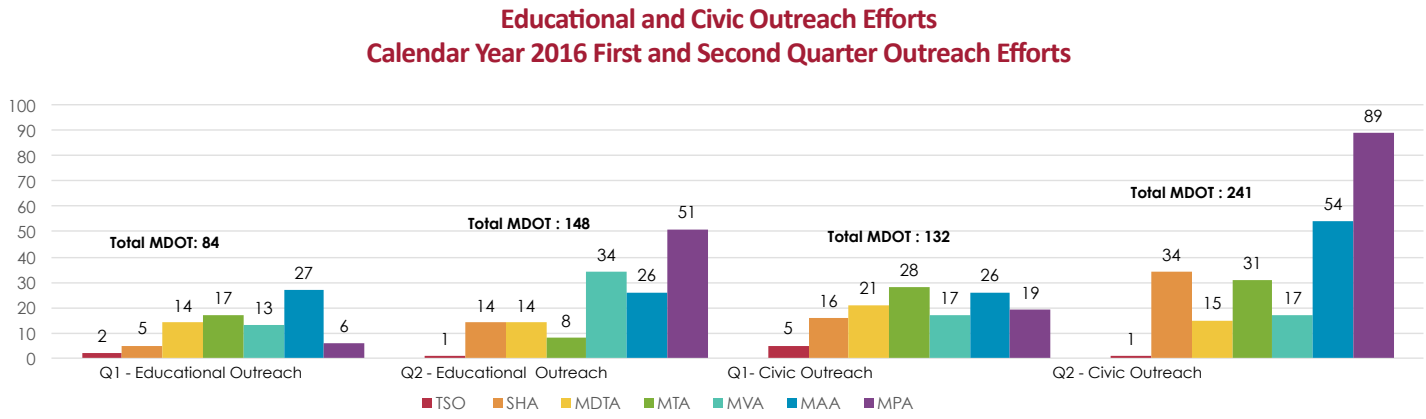
Level of Satisfaction with Educational/ Civic Outreach Efforts with Our Neighbors: Number of Educational/Civic Outreach Efforts; Satisfaction with the Educational/Civic Outreach Efforts

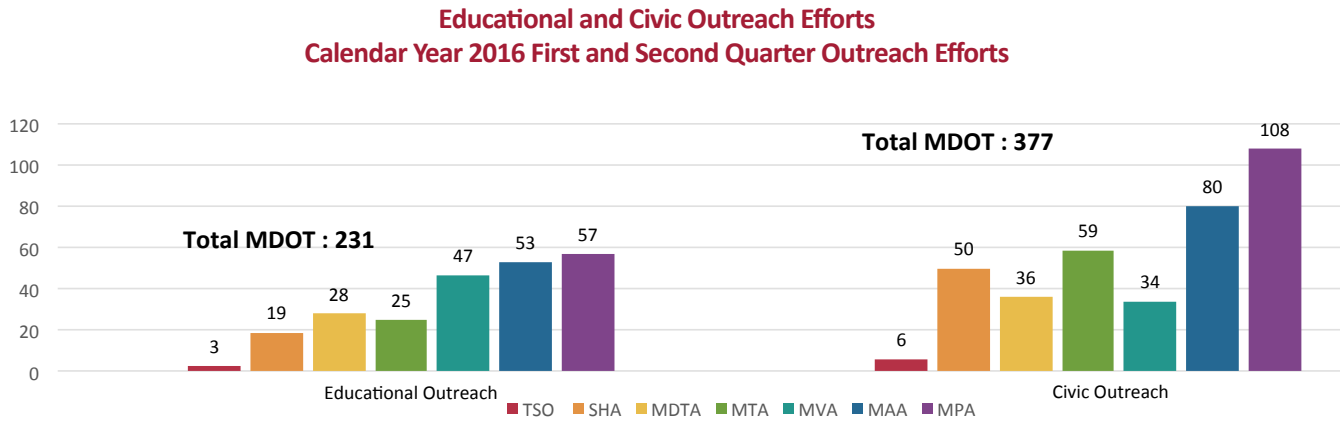
Being a good neighbor requires opportunities for shared experiences and face-to-face interactions. Community outreach programs can vary greatly in topic, size, and scope, particularly across the various MDOT business units. These diverse activities establish good relationships, the sharing of information, and ultimately spread good will throughout the community.

By documenting the number, scope, and level of satisfaction with these activities, and sharing experiences with one another, each transportation business unit can expand and enhance its community outreach efforts while maintaining and strengthening relationships with those Marylanders who live in close proximity to our various transportation facilities.

PERFORMANCE MEASURE 8.2A AND B

Level of Satisfaction with Educational/ Civic Outreach Efforts with Our Neighbors: Number of Educational/Civic Outreach Efforts; Satisfaction with the Educational/Civic Outreach Efforts





TANGIBLE RESULT DRIVER:
Simon Taylor
Maryland Aviation Administration (MAA)

PERFORMANCE MEASURE DRIVER:
Jim Hoover
Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:
To assess the percent of facilities that meet or exceed ADA accessibility mandates and to ensure access to our facilities by all.

FREQUENCY:
Annually (in April)

DATA COLLECTION METHODOLOGY:
Data on the number of owned and occupied facilities along with the number of facilities that are ADA compliant are tallied and reported by each business unit on an annual basis.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 8.3
Percent of MDOT Facilities that are ADA Compliant

Compiling and charting data for seven business units on the percent of facilities/buildings that are owned and occupied that meet or exceed Americans With Disabilities Act (ADA) mandates is essential to MDOT's customers and more importantly to MDOT's neighbors to ensure everyone can visit MDOT facilities. Data collected will help to inform each business unit across MDOT on how and where to focus resources to meet ADA compliance and make facilities more accommodating to all of customers and neighbors who visit facilities.

A. Percent of owned and occupied facilities/buildings that are ADA Compliant:

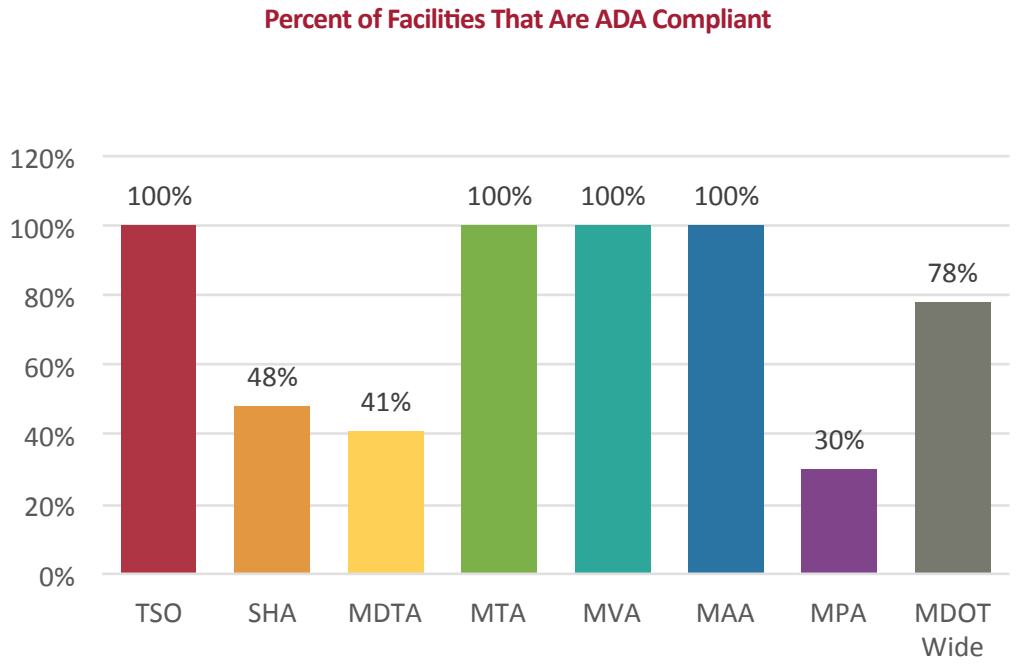
   Each Tangible Business Unit is rated individually:

   1. TSO – 01 owned and occupied; 01 compliant = (100 percent)
   2. SHA – 56 owned and occupied; 27 compliant = (48 percent)
   3. MDTA – 27 owned and occupied; 11 compliant = (41 percent)
   4. MTA – 16 owned and occupied; 16 compliant = (100 percent)
   5. MVA – 33 owned and occupied; 33 compliant = (100 percent)
   6. MAA – 61 owned and occupied; 61 compliant = (100 percent)
   7. MPA – 05 owned and occupied; 03 compliant = (60 percent)
   8. MDOT WIDE – 78 percent compliant

MDOT owned properties include several different elements that should meet the ADA requirements. The first report is related to buildings only. Additional elements such as bus stops, rail platforms, parking lots, rest areas, bike/walking paths, and many other elements will be added to the performance measure in future reports.

PERFORMANCE MEASURE 8.3

Percent of MDOT Facilities that are ADA Compliant



TANGIBLE RESULT #9

Be a Good Steward of Our Environment

MDOT will be accountable to our customers for the wise use of limited resources and our impacts on the environment when designing, building, operating and maintaining a transportation system.

RESULT DRIVER:
Dorothy Morrison
The Secretary's Office (TSO)

TANGIBLE RESULT DRIVER:
Dorothy Morrison
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Sonal Ram
State Highway Administration (SHA)

PURPOSE OF MEASURE:
To evaluate the health of the Chesapeake Bay by measuring how well MDOT is achieving compliance with impervious surface restoration as required by the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer system (MS4) permit.

FREQUENCY:
Annually (in October)

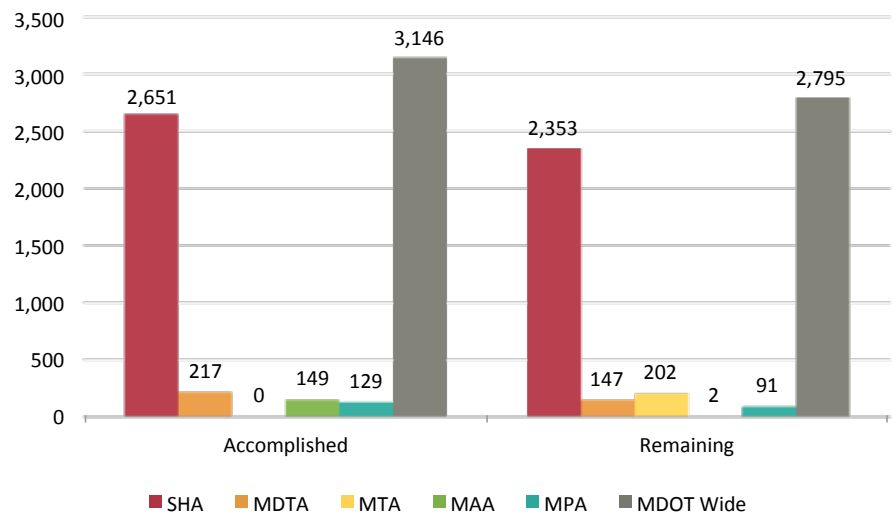
DATA COLLECTION METHODOLOGY:
MDOT is tracking all Bay restoration projects and impervious surface treatment associated with those projects to determine overall progress toward the 20 percent goal during their five-year permit term.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 9.1
Water Quality Treatment to Protect and Restore the Chesapeake Bay

Maryland's environmental and economic success is tied to the health of the Chesapeake Bay. The fastest growing source of Bay pollution is stormwater runoff, intensified by impervious surfaces like pavement, roads, rooftops and parking lots. Prior to the 1980s, the majority of infrastructure development in Maryland was built without stormwater controls. Under the federal and state mandated stormwater permit, acreage equivalent to 20 percent of MDOT's impervious surface that has not been previously treated by stormwater management controls will be treated through a variety of restoration efforts. MDOT will track incremental progress towards the 20 percent goal to be achieved within the five-year permit term to ensure progress towards a cleaner Bay and healthier State of Maryland.

Impervious Restoration



TANGIBLE RESULT DRIVER:
Dorothy Morrison
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Paul Truntich Jr.
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:
To track overall fuel economy of fleet vehicles and ensure better air quality through the use of state vehicles. It is important to track miles per gallon in a meaningful manner to ensure that State vehicles are fuel efficient and not detrimental to our State air quality. Fuel economy data will be used to evaluate driving patterns as well as when the procurement of new fleet vehicles is considered

FREQUENCY:
Annually (in April)

DATA COLLECTION METHODOLOGY:
Fleet MPG data will be obtained from the State of Maryland's fuel service vendor.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 9.2A
Fuel Efficiency: Miles Per Gallon

Currently, there is no uniform approach to evaluating miles per gallon (MPG) of MDOT fleet vehicles. Mansfield Oil Company (statewide fueling vendor) has been contacted regarding developing a means of tracking this data. While reducing fuel consumption through improved fleet fuel economy is a benefit to tracking this data (cost savings and resource conservation), it does not come without significant limitations. Incorrect vehicle mileage entry at the time of vehicle refueling will skew all resulting MPG data for the vehicle in question. Additionally, police vehicles, snow fighting equipment, courtesy patrol vehicles and maintenance of traffic equipment, depending on their situation, can spend significant amounts of time idling which also taints MPG data. Finally, traditional heavy equipment does not always refuel at a dispenser, but are refueled by intermediate methods, so in these instances Mansfield Oil would have no means of tracking and recording MPG. While monitoring fuel efficiency via tracking MPG data appears to be a sound approach, inclusion of all fleet vehicles in such a tracking regime is not practical at this time. Therefore, at the outset of this performance measure, only light-duty vehicles, or a segment thereof, will be measured. As light-duty vehicles comprise approximately 48% of MDOT's total fleet, this data should be beneficial in evaluating driving patterns as well as developing measures to increase overall fuel mileage in this segment me of MDOT's fleet.

TANGIBLE RESULT DRIVER:
Dorothy Morrison
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Paul Truntich Jr.
Maryland Transportation Authority

PURPOSE OF MEASURE:
To track overall fuel consumption of fleet vehicles as well as fixed-equipment in an effort to use less of our resources with State vehicles and equipment. Consumption patterns will be evaluated for improving fuel efficiency and shifting towards use of renewable fuels.

FREQUENCY:
Annually (in October)

DATA COLLECTION METHODOLOGY:
Fleet vehicle data will be obtained from the State of Maryland's fuel service vendor. Fixed-equipment data will be supplied from Fleet and Facility Managers at the TBUs.

NATIONAL BENCHMARK:
N/A

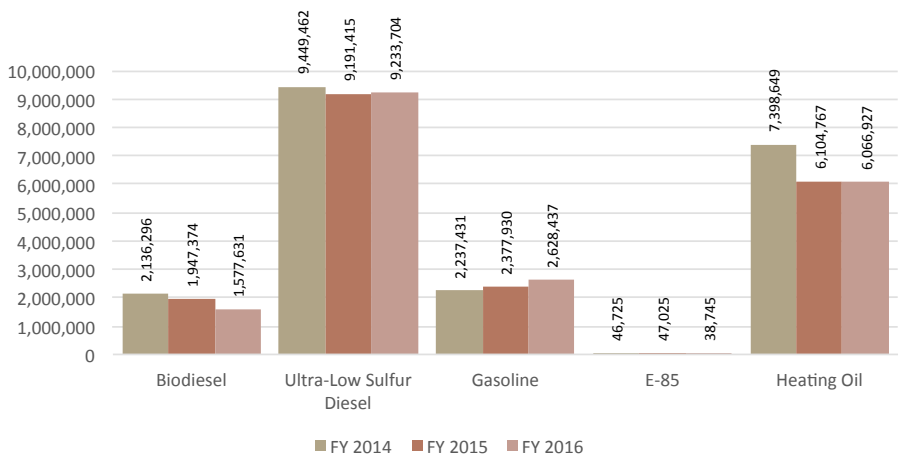
PERFORMANCE MEASURE 9.2B
Fuel Efficiency: Total Gallons Consumed

Analyzing fuel consumption patterns enables Fleet and Facility Managers to budget more effectively and use resources more efficiently. This data also will be beneficial as fleet acquisition purchases are considered and facility heating upgrades are considered. Additionally, identifying opportunities for reducing fuel consumption not only benefits the environment via resource conservation and reduced emissions, but also results in true cost-savings through reduced fuel costs.

Fiscal Years 2014 through 2016 indicate relatively constant ultra-low sulfur diesel consumption with the MTA contributing to the majority of fuel consumed via its bus fleet and MARC trains.

Heating oil consumption experienced a significant reduction during the reporting period. While consumption is weather influenced, the MPA converted from oil-fired to natural gas HVAC systems at several facilities which contributed to the reduction. Furthermore, MDTA and MTA have similar construction projects either fully underway or within the design process. Biodiesel and gasoline experienced nearly identical reductions and increases, respectively. This is attributed to SHA's transitioning of its light and medium-duty fleet from diesel to gasoline for vehicle maintenance issues.

Total Gallons of Fuel Consumed



TANGIBLE RESULT DRIVER:
Dorothy Morrison
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Hargurpreet Singh, P.E.
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:
To track the percentage of waste diverted from the landfill or incineration through recycling to minimize negative impacts on the environment.

FREQUENCY:
Annually (in April)

DATA COLLECTION METHODOLOGY:
Maryland Department of the Environment All State Agency Recycling (All StAR) reporting.

NATIONAL BENCHMARK:
Virginia – 35 percent by 2010

Washington DC – 45 percent

Florida – 75 percent by 2020 (recycle rate in 2014 was 50 percent)

California – 75 percent by 2020 (4 cities achieved highest reporting recycling rates in 2014 with 74.85 percent average)

PERFORMANCE MEASURE 9.3
Percent of Maryland Recycling Act Materials Recycled

Activities and operations within MDOT are subject to various Federal, State, and Local environmental rules and regulations. Compliance to these various environmental rules and regulations helps minimize negative impact on the environment.

In 1988, the Maryland Recycling Act (MRA) authorized Maryland Department of the Environment to reduce the disposal of solid waste in Maryland through management, education and regulation.

Recycling Goals were set at:

- 20 percent - For Jurisdictions with populations greater than 150,000; and
- 15 percent - For Jurisdictions with populations less than 150,000;
- But in no case will the recycling rate be less than 10 percent.

In 2012, Maryland State Legislature set new Statewide Recycling Goals of:

- 30 percent in 2014
- 40 percent in 2015

MDOT recycles and cares about recycling because of the following benefits:

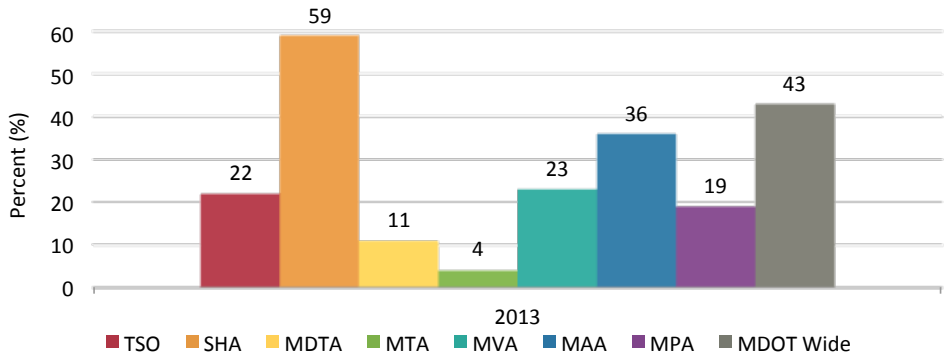
- Conserves Resources
  - When we recycle, used materials are converted into new products, reducing the need to consume natural resources.
- Saves Energy
  - Using recycled materials in the manufacturing process uses considerably less energy than that required for producing new products from raw materials.
- Helps Protect the Environment
  - Recycling reduces the need for extracting, refining and processing raw materials all of which create substantial air and water pollution.
  - As recycling saves energy, it also reduces greenhouse gas emissions, which helps to tackle climate change.
- Reduces Landfill

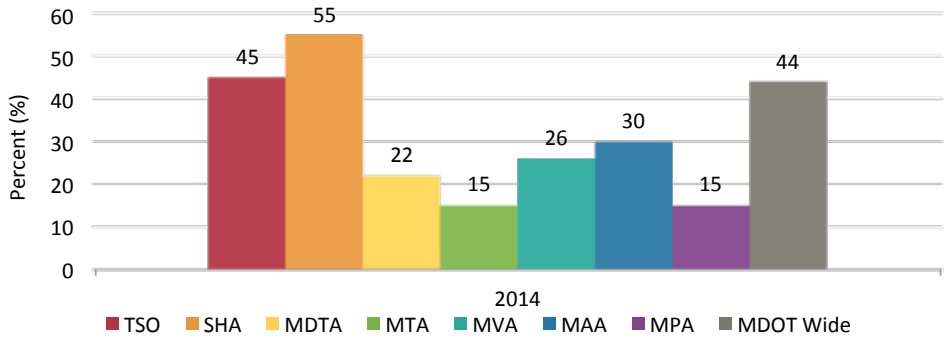
Recycling ensures recyclable materials are reprocessed into new products, and as a result the amount of rubbish sent to landfill sites reduces.

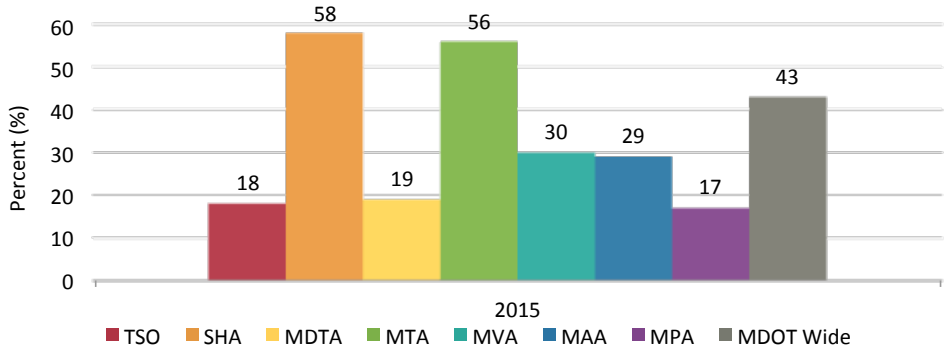
PERFORMANCE MEASURE 9.3

Percent of Maryland Recycling Act Materials Recycled

Percent Waste Recycled by Business Unit







TANGIBLE RESULT DRIVER:
Dorothy Morrison
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Barbara McMahon
Maryland Port Administration (MPA)

PURPOSE OF MEASURE:
To reduce TBU impact on solid waste landfill through recycling/reuse of steel, asphalt and concrete.

FREQUENCY:
Annually (in April)

DATA COLLECTION METHODOLOGY:
The data collection methodology will include disposal weights (via bill of ladings) by Business Unit's Facility Maintenance and Engineering Departments. The data are and/or should be reported on the annual Non-Maryland Recycling Act Report

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 9.4

Recycled/Reused Materials from Maintenance Activities and Construction/Demolition Projects

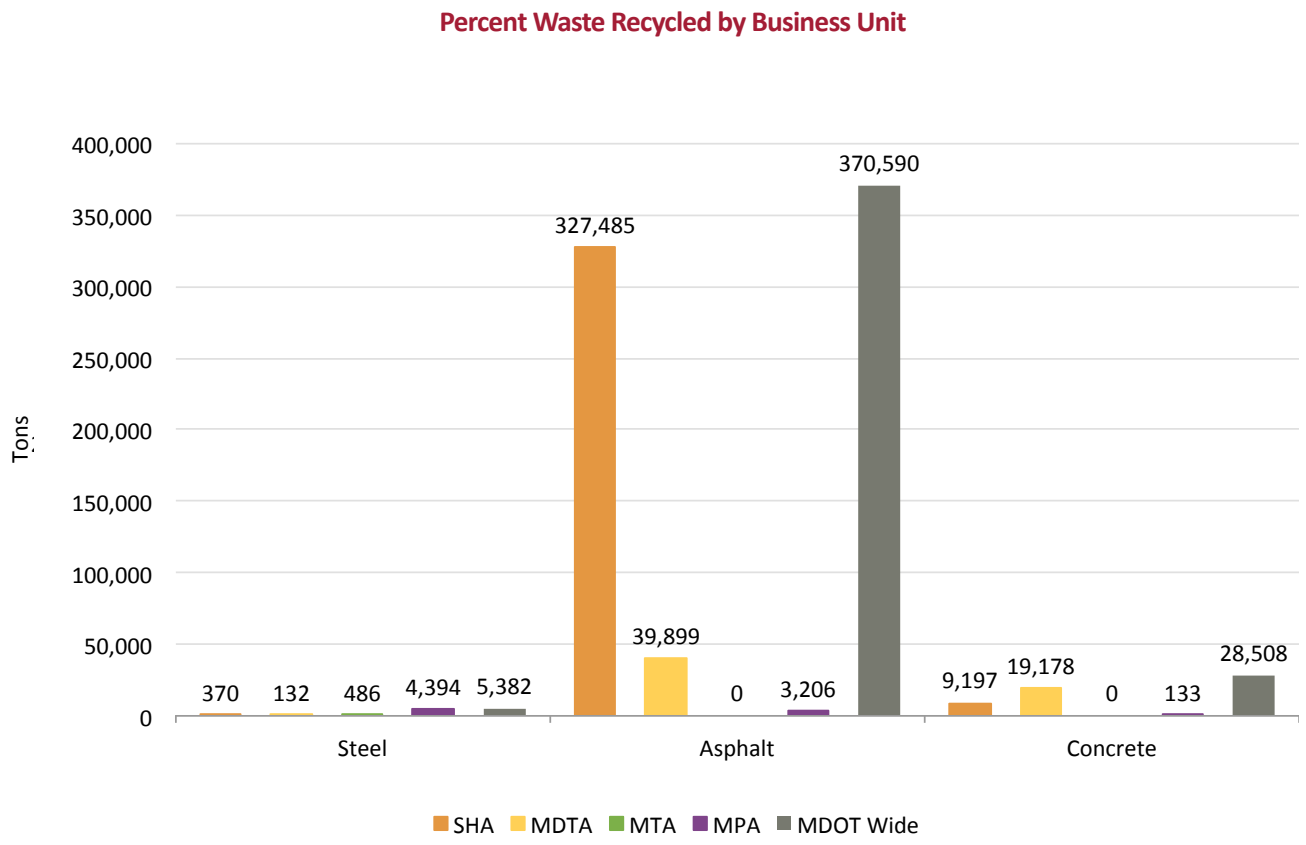
MDOT is committed to reducing its impact on solid waste, non-hazardous landfills, potentially resulting in reduction of the number of waste disposal facilities in Maryland as stated in the Maryland Department of the Environment's "Zero Waste" Action Plan. If not already in place, the TBUs will establish policy and procedures to recycle and/or reuse their solid waste: steel, asphalt and concrete. These materials are generated during maintenance/repair activities and capital construction/demolition projects. In both instances of generation of these materials, the policy/procedure should require the TBUs to collect, weigh and recycle; this will generally result in a payment by a recycler to the TBU, in particular steel. The benefits of recycling/reusing these materials include saving energy and natural resources, preserving the capacity of landfills, reducing waste disposal costs, generating revenue for materials and reducing pollutants generated by landfill process.

There are several possible barriers to success, including the following:

- Recognizing that there will be variability among reporting periods and TBUs. Some may have more maintenance and construction/demolition activities than others.
- Establishing data collection mechanisms in each TBU.
- Developing contractual language that requires contractors to segregate, collect, weigh and recycle these materials.
- Ensuring commitment to this goal and its positive impact on the environment, including training employees and contractors.

PERFORMANCE MEASURE 9.4

Recycled/Reused Materials from Maintenance Activities and Construction/ Demolition Projects



TANGIBLE RESULT DRIVER:
Dorothy Morrison
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Robin Bowie
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:
To provide consistent monitoring of TBU compliance with environmental requirements and to ensure MDOT meets Federal, state and local environmental regulations.

FREQUENCY:
Annually (in October)

DATA COLLECTION METHODOLOGY:
Enterprise Environmental Information Management System

NATIONAL BENCHMARK:
International Organization for Standardization (ISO) 14001 ISO has a requirement to "evaluate compliance." The standard does not dictate the frequency but states that an organization's "process needs to determine how often you will check each level of compliance."

PERFORMANCE MEASURE 9.5
Compliance with Environmental Requirements

MDOT activities and operations are subject to various Federal, state, and local environmental regulations. Adherence to the environmental requirements minimizes the potential for activities and operations of transportation facilities to adversely impact the environment and the surrounding communities. Compliance with the environmental requirements that govern MDOT activities and operations is key to being a good steward of the environment. Conducting audits is an effective mechanism for monitoring compliance with environmental requirements. Tracking audits and reporting audit results further demonstrates MDOT's commitment of environmental stewardship, which benefits not only the natural environment but also the citizens of Maryland.

MDOT participated in third party audits as part of an agreement with Environmental Protection Agency (EPA) Region 3. As noted in the data, the frequency of audits conducted since the EPA third party audits have varied for each TBU. This initial round of information collection and review also revealed a difference in the type (internal vs. external) of audits that have been conducted by each TBU. Several TBUs are in the process of formalizing audit processes and/or procuring audit contracts. Strategies put into place to bring the TBU's into a more consistent reporting method include standardizing audit activities across MDOT, developing a comprehensive environmental compliance audit checklist for use during audits and developing an enterprise environmental management system (EEIMS) module for reporting audit information. On an annual basis, MDOT will share audit results.

Be a Good Steward of Our Environment

TANGIBLE RESULT DRIVER:
Dorothy Morrison
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Robert Frazier
Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:
To make improvements beyond the environmental permit requirements (air quality and storm water Industrial Discharge permits 12-SW) enhances the positive environmental impacts on land and water resources of MDOT's surrounding communities and neighborhoods.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Quarterly visual monitoring. Age and fuel type of air emissions sources.

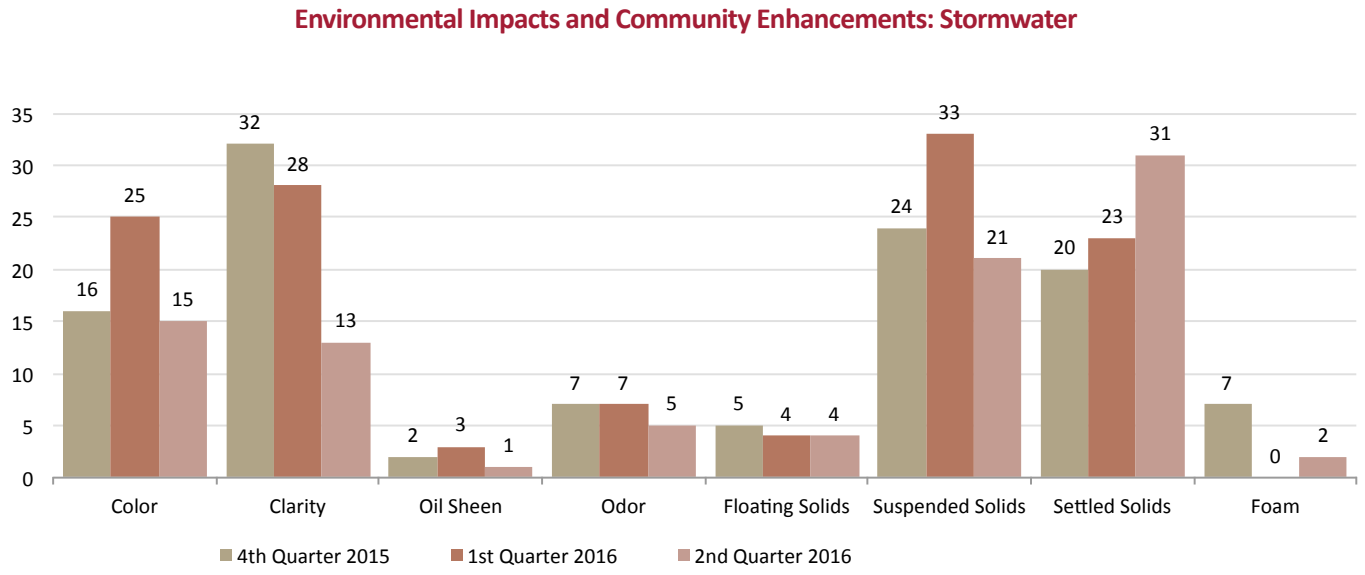
NATIONAL BENCHMARK:
Best for the World Impact Assessment, a comprehensive assessment of an organization's impact on its workers, community, and the environment.

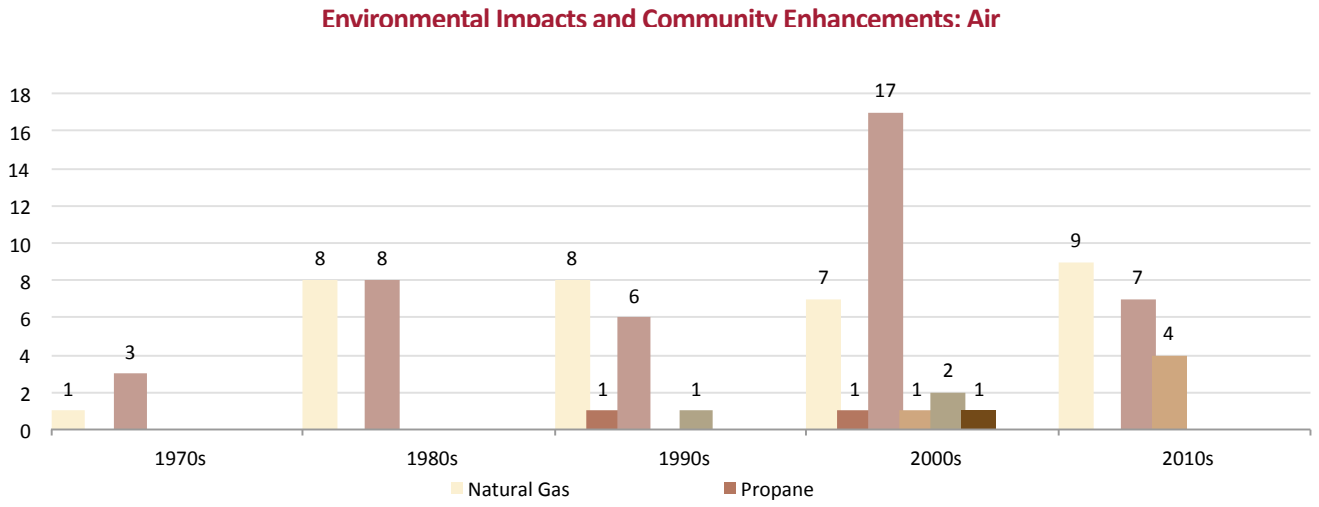
PERFORMANCE MEASURE 9.6
Environmental Impacts and Community Enhancements

The presence of MDOT facilities in communities throughout Maryland has an impact on the environment. MDOT industrial facilities operating under a 12-SW storm water discharge permit perform quarterly visual monitoring of storm water quality leaving those properties. Eight parameters are viewed and recorded per quarter per facility outfall. Variations from the parameters can impact the watersheds in which the permit is located. Data from the monitoring indicates facilities requiring improvements to best management practices such as increased lot sweeping and installation of bio-swales improving water quality.

MDOT permitted air sources operate in communities within permit parameters. Air sources include paint booths, boilers, generators and petroleum storage tanks. This equipment varies widely in age and operating efficiencies. Identifying and replacing/retrofitting older, less efficient pieces of equipment with new and more efficient pieces of equipment will have a positive effect on the community.

PERFORMANCE MEASURE 9.6
Environmental Impacts and Community Enhancements





TANGIBLE RESULT DRIVER:
Dorothy Morrison
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:
Laura Rogers
The Secretary's Office (TSO)

PURPOSE OF MEASURE:
To reduce our consumption of energy through efficiency measures and use of renewable energy sources.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Data for all of MDOT's electric, natural gas, propane, oil #2, steam, and chilled water usage collected on EnergyCAP Online will be evaluated. Data for energy efficiency measures and renewable energy sources utilized by MDOT will be collected from the TBU Energy Manager. Emissions calculated based on the amount and type of energy used.

NATIONAL BENCHMARK:
Renewable Energy:

Federal agencies - 30% by 2015

Delaware - 25% by 2025, solar 3.5% by 2025

West Virginia - 25% by 2025

New Jersey - 22.5% by 2021

Washington DC - 20% by 2020, 50% by 2032, solar 2.5% by 2023

PERFORMANCE MEASURE 9.7
Energy Consumption

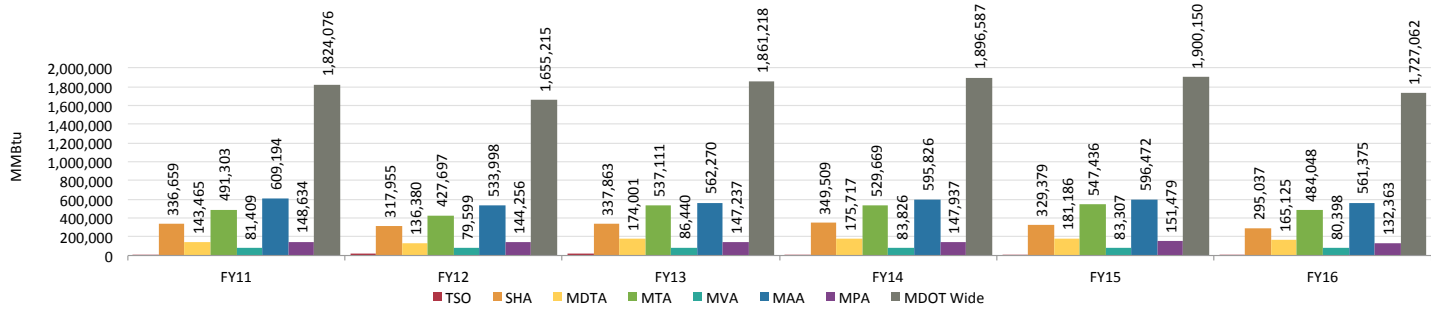
Reducing our energy consumption through energy efficiency and use of renewable energy sources saves Maryland money and reduces GHG emissions. Measuring and analyzing energy consumption enables Energy Managers to budget more effectively and use resources more efficiently. MDOT uses approximately 1,600,000-1,900,000 million British Thermal Units (MMBtu) of energy, spends approximately $30,000,000-$47,000,000, and generates approximately 270,000 metric tons of greenhouse gases (GHG) annually.

MDOT's buildings consume the majority of energy. Many energy efficiency measures have already been implemented at MDOT, including lighting retrofits, replacement of old equipment with energy efficient equipment, and installation of building automation systems. These measures have attained high rates of return on investment.

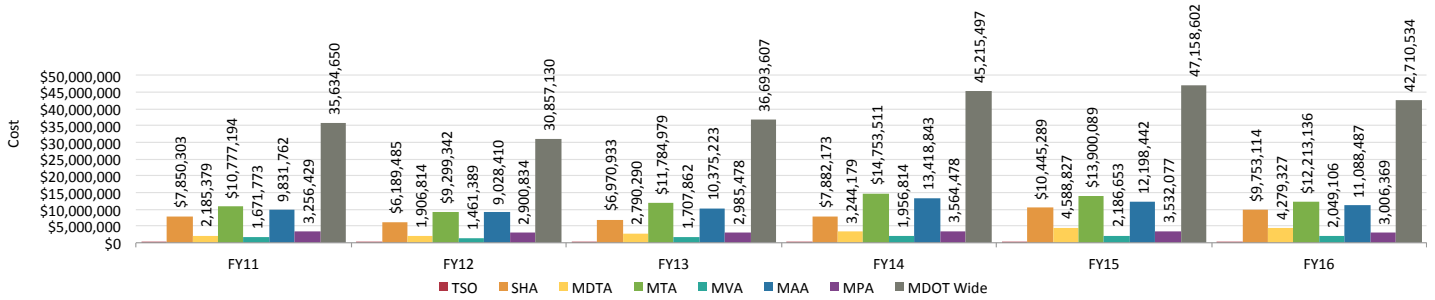
MDOT owns and manages considerable real estate, a portion of which could support renewable energy systems without hindering its core functionality. By increasing installation and use of renewable energy, MDOT can generate revenue, save taxpayers money, and reduce harmful air emissions while also helping Maryland meet its clean energy and GHG reduction goals. As of August 2016, MDOT has installed solar, wind, and geothermal energy systems at MAA, MDTA, MPA, MTA, and SHA facilities. These systems generate approximately 218,000 kilowatt hours/year, saving about $265,000 and 153 metric tons of carbon dioxide annually.

PERFORMANCE MEASURE 9.7
Energy Consumption

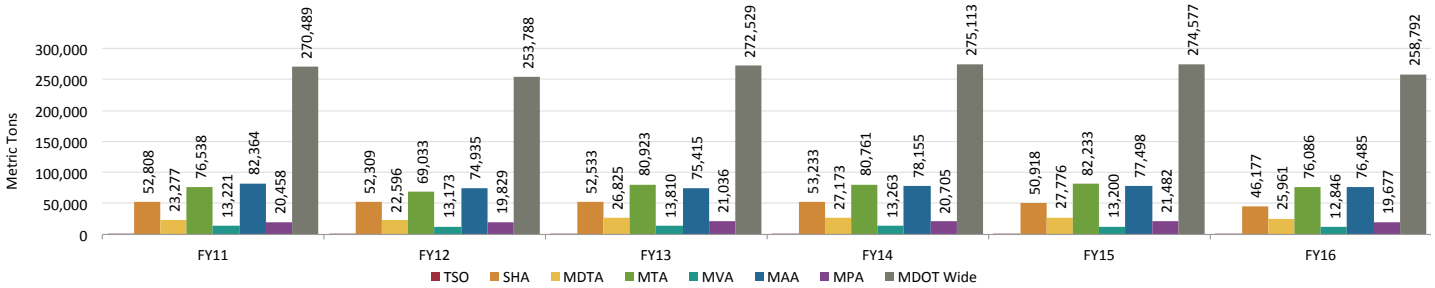
Total Energy Use



Total Energy Cost



Greenhouse Gas Emissions



TANGIBLE RESULT #10

Facilitate Economic Opportunity in Maryland

Maryland's transportation system is essential to the State's economy. An efficient transportation system provides a competitive advantage to businesses in a regional, national and global marketplace. Transportation directly impacts the viability of a region as a place where people want to live, work and raise families, all critical to attracting a competent workforce.

RESULT DRIVER:
Jim Dwyer
Maryland Port Administration (MPA)

TANGIBLE RESULT DRIVER:
Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:
John Thomas
State Highway Administration (SHA)

PURPOSE OF MEASURE:
To track direct, indirect and induced jobs generated by annual construction investments as an indicator of transportation projects contribution of economic return.

FREQUENCY:
Annually (in October)

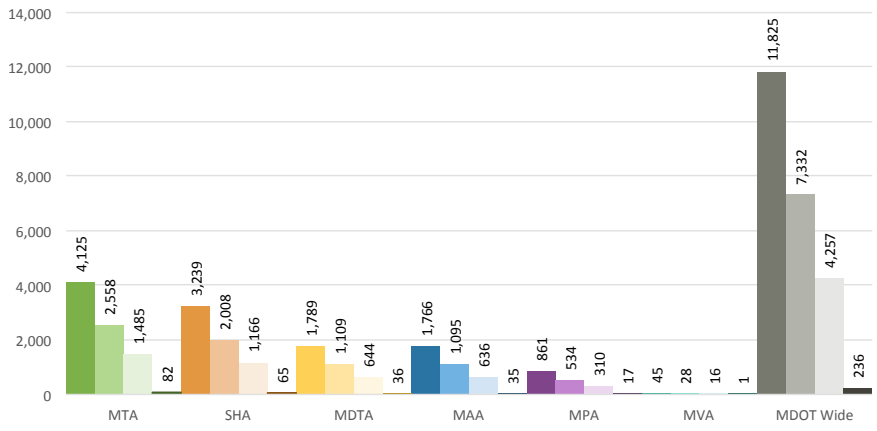
DATA COLLECTION METHODOLOGY:
MDOT compiles the necessary data through the annual CTP process.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 10.1
Economic Return from Transportation Investment

Construction spending on transportation projects has a significant economic impact on people and businesses throughout the state. Economic return from transportation investment is assessed based on the estimated number of jobs created as a result of MDOT investments in capital projects. The annual CTP is used to identify planned investments by each MDOT TBU on major construction projects. Construction projects generate three types of jobs: direct jobs are those generated by the actual construction activity; indirect jobs are supported by the business purchases necessary for the project's construction; and induced jobs are a result of local purchases of goods and services by the direct employees. Capital investments in transportation infrastructure support economic activity across a wider region, beyond the specific project location.

FY 2016 Estimate Jobs Created by Business Unit Constructor Program



TANGIBLE RESULT DRIVER:
Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:
John Thomas
State Highway Administration (SHA)

PURPOSE OF MEASURE:
To compare Maryland against other states' economic activity based on access to and condition of the infrastructure.

FREQUENCY:
Annually (in October)

DATA COLLECTION METHODOLOGY:
Using publicly available data, CNBC assesses every states' infrastructure including value of goods movement; availability of air travel; road and bridge conditions; and commute times.

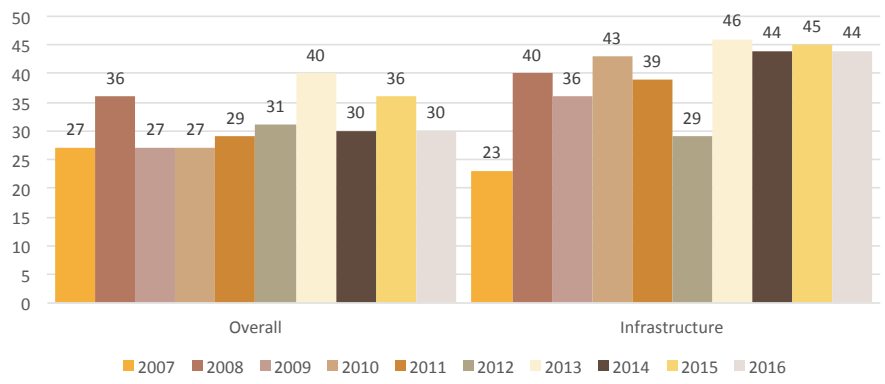
NATIONAL BENCHMARK:
CNBC annual ranking

Web link: http://www.cnbc.com/2016/07/12/americas-top-states-for-business-2016-the-list-and-ranking.html

PERFORMANCE MEASURE 10.2
Maryland's Ranking in National Transportation Infrastructure Assessment

The CNBC business news media group uses publicly available data on 60 measures of competitiveness to score each state. The metrics are organized into 10 broad categories and weighted based on how frequently each is used as a selling point in state economic development marketing materials. The infrastructure category is a measure of a state's transportation system and supply of safe drinking water. It includes metrics to compare the value of goods shipped by air, waterways, roads and rail within a state, the quality of roads and bridges, and commute times. The annual rankings can be used as a national benchmark for economic activity over time as a means for comparing Maryland's standing versus other states. From 2015 to 2016, Maryland's overall score moved up from 36 to 30 out of 50 states. As of 2016, Maryland moved up slightly from 2015 in 'Infrastructure", (44 out 50 in 2016 up from 45 in 2015) but remains in the bottom 10 because of the inclusion of mobility calculations in the metric.

10.2 America's Top States for Business
Annual Rankings for Maryland in Select Categories



Source: CNBC. America's Top States for Business 2016.

TANGIBLE RESULT DRIVER:
Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:
Juan Torrico
Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:
To assess freight mobility and the amount and value of freight originating and terminating in Maryland as an indicator of how supportive transportation infrastructure is for freight and Maryland's economy.

FREQUENCY:
Annually (in April)

DATA COLLECTION METHODOLOGY:
U.S. Department of Transportation Freight Analysis Framework (FAF3) Version 3 and MPA.

NATIONAL BENCHMARK:
N/A

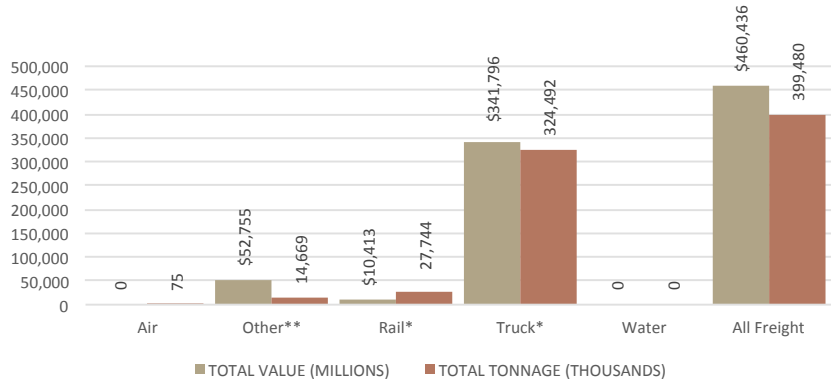
PERFORMANCE MEASURE 10.3A

Freight Mobility: Freight Analysis Framework (FAF) Tonnage and Value of Freight

Efficient and interconnected multimodal freight movement is essential to the State's economy. Maryland manufacturers depend on the freight system to move raw materials and finished goods between production facilities, distribution centers and retail outlets in Maryland and throughout the U.S. and the world. Freight-dependent industries account for over one million jobs in Maryland.

- Water and rail are well-suited to cost-effectively haul goods long distances. Commercial ships utilize the Port of Baltimore to transfer waterborne goods to land, at which point trucks and rail haul these imported goods to communities around the nation.
- Trucks carry nearly every type of commodity, from consumer products to chemicals to machinery.
- High value and time-sensitive products are commonly shipped via air. The top air freight commodities shipped out of MAA facilities include mail, machinery and transportation equipment.

2015 Freight Originating and Terminating in Maryland



TANGIBLE RESULT DRIVER:
Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:
Juan Torrico
Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:
To track public and private international waterborne cargo activity in the Port of Baltimore, which is a strong indicator of jobs generated and economic activity.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
U.S. Census data via website – USA Trade Online

NATIONAL BENCHMARK:
Baltimore ranks third in Mid-Atlantic ports in international cargo.

PERFORMANCE MEASURE 10.3B

Freight Mobility: Port of Baltimore Total International Cargo Port-Wide, Market Share and Rankings

Cargo tons through the Port of Baltimore declined 8% in the 2nd quarter due to a 14% drop in bulk commodities (imports and exports). The Port's general cargo was up 5%. Coal exports were the main reason behind the POB's 3% drop in export bulk tons in Q2. Imported salt and sugar are the cause behind the drop in import bulk tons. Salt import tons YTD are down 42% while imported sugar tons YTD are down 20%.

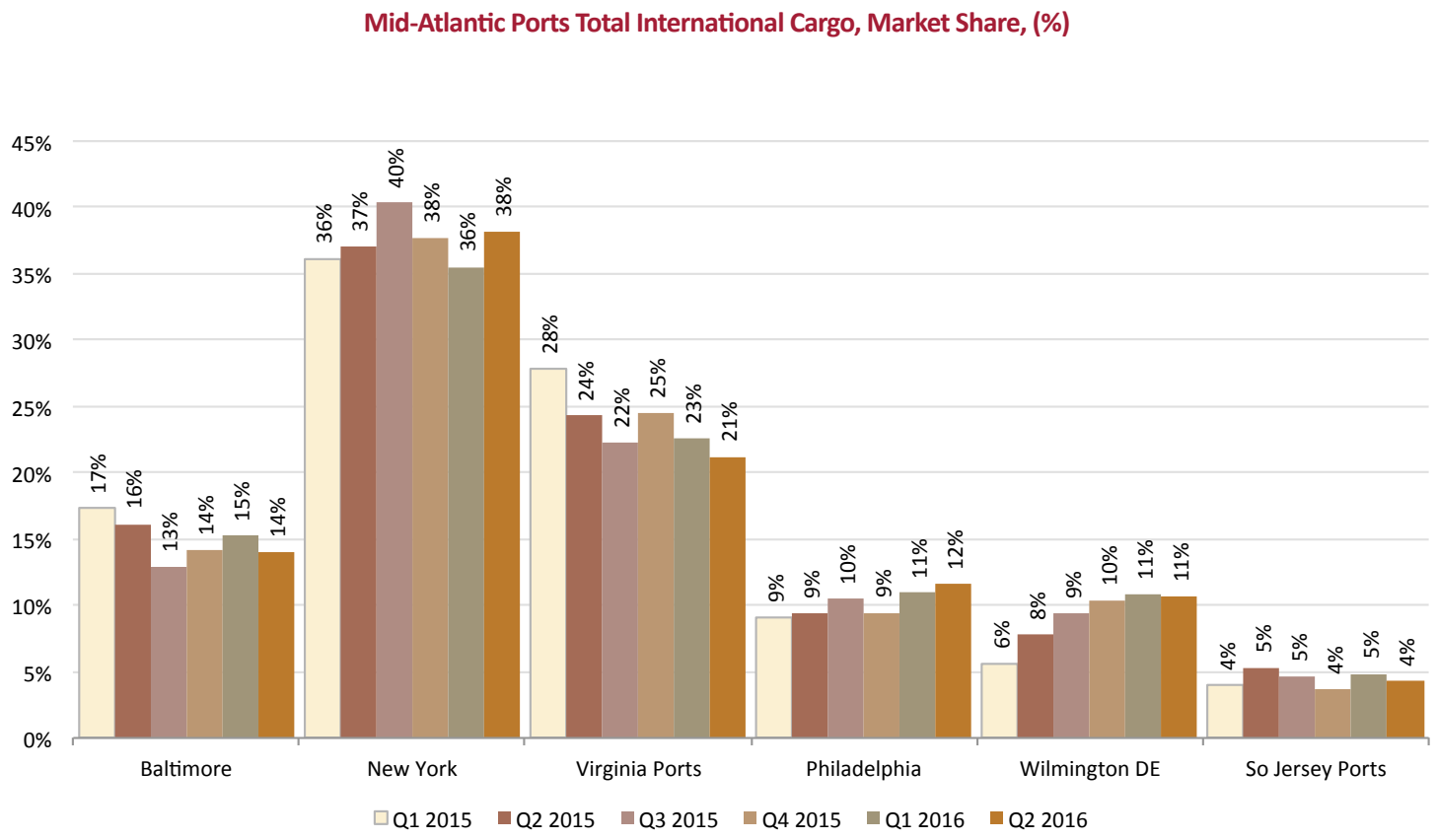
Of all the Mid-Atlantic ports, Baltimore saw the largest percentage increase in general cargo at 5.2%. Wilmington was the only other port that saw a gain in general cargo tons albeit only 0.1%. Baltimore's increase in general cargo tons was primarily driven by an increase in container traffic as well as increases in imported automobiles and paper. Norfolk's general cargo increases were mainly in containerized goods such as furniture and beverages, while containerized exports across a variety of products produced a decrease in overall general cargo export tons. New York's general cargo imports decreased as goods shipped via containers dropped.

Concerning the bulk market place - New York, Philadelphia and Wilmington all saw large increases in bulk import tons as lower oil prices have curtailed domestic crude oil production. With less domestic oil available, refineries are now importing cheap foreign oil. Philadelphia saw increases in their bulk exports – mainly in petroleum products such as propane gas and non-crude oils. New York, Philadelphia and Wilmington also saw large decreases in salt imports. Salt imports YTD June through these ports was down 22%, 37% and 44% respectively. Like Baltimore, Norfolk's bulk exports continue to suffer as coal exports were still decreasing. Coal exports through Norfolk dropped 16% in Q2 and are down 27% YTD June.

Baltimore ranks third in container market share, second for imported Forest Products and first in Autos and Roll-on/Roll-off heavy equipment. For total international cargo, Baltimore ranks third for the Mid-Atlantic ports.

PERFORMANCE MEASURE 10.3B

Freight Mobility: Port of Baltimore Total International Cargo Port-Wide, Market Share and Rankings



TANGIBLE RESULT DRIVER:
Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:
Juan Torrico
Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:
Data shows level of activity at Public Marine Terminals.

FREQUENCY:
Monthly

DATA COLLECTION METHODOLOGY:
Data obtained from MPA cargo billing reporting and statistical system (BRASS). Historical data is available back to 1998.

NATIONAL BENCHMARK:
N/A

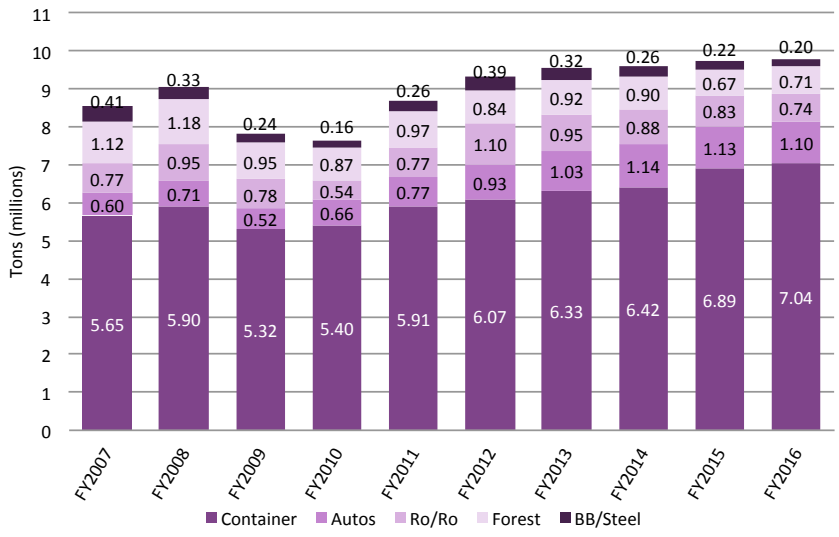
PERFORMANCE MEASURE 10.3C

MPA Total General Cargo Tonnage including the following strategic commodities: Containers, Autos, RoRo and Imported Forest Products

As a rule of thumb, general cargo generates more jobs per ton than bulk commodities. The public terminals' total tonnage for the past three months was greater than the previous three months and greater than the same period of the prior year. Strong import auto tonnage from Fiat made Baltimore the largest import port on the East Coast. Baltimore saw Japanese auto imports increase by 40,000 tons due to increases from Mitsubishi and Subaru. Although low commodity prices on both agricultural products and minerals keep sales of farm and mining equipment suppressed and the strong US dollar discourages exports, Baltimore remains the top Ro/Ro port on the East Coast. Imported paper volumes increased; however, it was somewhat offset by a slight reduction in imported wood pulp.

MPA's general cargo tonnage is up over 3% for the first seven months of 2016. This trend is likely to continue for the rest of the busy summer season as retailers get ready for the holidays.

MPA General Cargo, FY2007 to FY2016



TANGIBLE RESULT DRIVER:
Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:
Rafael Espinoza
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:
To minimize the number of weight-posted bridges to facilitate the improvement in movement of goods to businesses, communities and the economy.

FREQUENCY:
Annually (in July)

DATA COLLECTION METHODOLOGY:
Data reflects Federal reporting in April of each year. The number of bridges on the State System that are weight-posted are reported in the Structure Inventory and Appraisal (SI&A) report. That number is then divided by the total number of SHA and MDTA bridges, resulting in the calculation of the percentage of weight-posted bridges on the State system.

NATIONAL BENCHMARK:
N/A

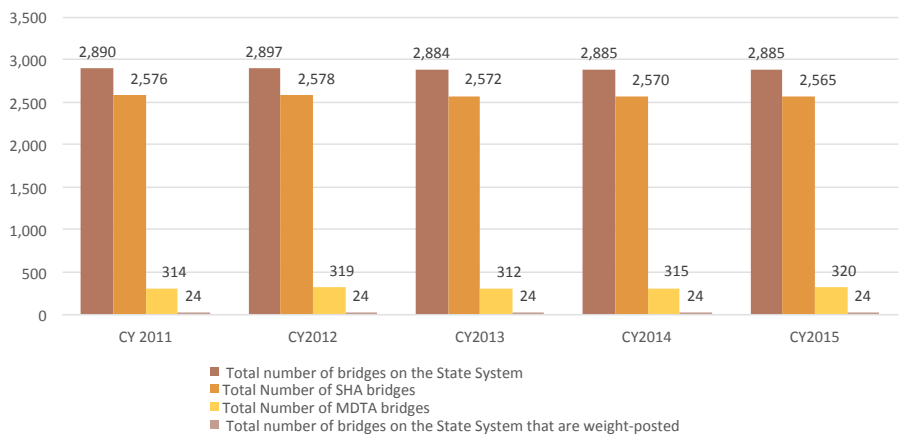
PERFORMANCE MEASURE 10.4

Number and Percentage of Bridges on the State System that are Weight-Posted

Weight-posted bridges are those that are determined unable to safely carry the maximum weight of a legally loaded vehicle (80,000 lbs. for tractor trailers and 70,000 lbs. for dump trucks). Weight-posted bridges adversely affect movement of goods to businesses and communities, and can impact daily commercial operations and business growth. Allowing all legally-loaded vehicles to traverse the bridges on the State system is essential to commerce in Maryland, facilitating the movement of goods and provision of services efficiently throughout the State. Minimizing weight-posted bridges ensures the safety of the traveling public and facilitates emergency response time by avoiding the need to establish detour routes. If a bridge cannot safely carry all legal loads, due to its present condition or original design criteria, it will be evaluated and a vehicle weight will be established that it can safely carry. This lower vehicle weight (which is less than the legal weight) will be placed on signs alerting all potential users of the maximum load that the bridge should carry.

Less than 1% of SHA and MDTA bridges have a weight restriction.

Weight Posted Bridges



TANGIBLE RESULT DRIVER:
Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PURPOSE OF MEASURE:
To quantify the impacts of changes in the transportation network on the state's economy due to completed transportation projects providing businesses with access to labor, customers, and suppliers. Improved access leads to greater opportunities.

FREQUENCY:
Annually (in January)

DATA COLLECTION METHODOLOGY:
As transportation projects are completed and the transportation network is enhanced, changes in travel demand and user choice will be modeled using a transportation economic impact model; this is a multimodal measure.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 10.5

Change in Market Access due to Improvements in the Transportation Network

Improving access within Maryland's transportation network is a critical role MDOT plays in facilitating economic opportunity for the citizens of Maryland, its businesses and those who come here to do business. Currently, MDOT does not measure the impact of changes to the transportation network and its effect on market access. This measure would allow MDOT to look at how improvements in roads and multimodal access is affecting Maryland's economy and assess whether businesses have better access to labor, customers, suppliers and international markets.

This measure includes potential impacts from:

- Business Relocation – Improved market access has the effect of strengthening an economy's competitiveness in attracting and retaining business relative to other locations.
- Productivity Growth – Increasing an economy's accessibility and connectivity generates agglomeration benefits from returns to scale in production, knowledge spillovers, and better matching of suppliers and employees to businesses.
- Increased Import/Export Activity – Improving an economy's access to international gateways can enable new import/export activity.

The Process Improvement Team for this measure has met. The tool used to measure the market access has been secured. We are currently developing a standardized approach to modeling projects. We expect to have data in January.

TANGIBLE RESULT DRIVER:
Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:
Corey Stottlemyer
The Secretary's Office (TSO)

PURPOSE OF MEASURE:
To quantify the impacts of changes in the transportation network on the productivity of people and businesses in Maryland.

FREQUENCY:
Annually (in July)

DATA COLLECTION METHODOLOGY:
As transportation projects are completed and the transportation network is enhanced, changes in travel demand and user choice will be modeled using a transportation economic impact model; this is a multimodal measure.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 10.6
Change in Productivity due to Improvements in the Transportation Network

Productivity gains are essential to economic growth as businesses and people have to do more with fewer resources. The transportation network is similar to the Internet and other innovations that allow people and businesses to be more productive. Currently, MDOT does not measure the impact of changes to the transportation network and its effect on productivity.

Using a transportation economic impact model, MDOT will be able to assess four types of productivity benefits to ensure it helps to facilitate business opportunities throughout Maryland:

1. Travel cost savings;
2. Reliability benefits for industry;
3. Delivery logistics and supply chain benefits; and
4. Agglomeration effects on access to specialized skills and services.

The Process Improvement Team for this measure has met. The tool used to measure the productivity has been secured. We are currently developing a standardized approach to modeling projects. We expect to have data in January.

TANGIBLE RESULT DRIVER:
Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:
John Thomas
State Highway Administration (SHA)

PURPOSE OF MEASURE:
To estimate benefits to highway users due to Coordinated Highway Action Response Team (CHART) incident management, major/minor capital improvements, signal retiming, HOV lane, and park-and-ride operations as an indicator of cost savings due to reduced delay.

FREQUENCY:
Annually (in January)

DATA COLLECTION METHODOLOGY:
MDOT collects and maintains data on travel speeds, traffic volumes, incidents, and facility usage to develop user cost savings.

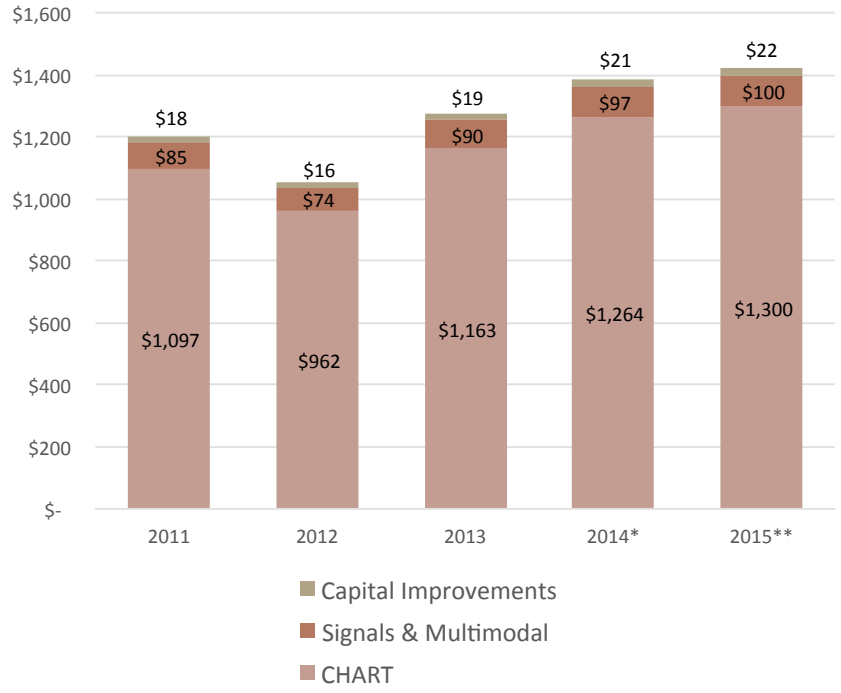
NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 10.7

Total User Cost Savings for the Traveling Public due to Congestion Management

The SHA and MDTA implement various projects, programs and policies to reduce congestion and enhance mobility on their facilities. The SHA focuses on both recurrent and non-recurrent aspects of congestion. These include CHART, Incident Management and Intelligent Transportation Systems (ITS) programs, major/minor roadway geometric improvements, traffic signal system optimization, and multimodal strategies like HOV lane operations and park-and-ride facilities. The congestion management solutions implemented by SHA and MDTA result in significant user cost savings (e.g. delay reduction, fuel savings) to automobile and truck traffic. MDOT continues to implement operational strategies, including a Transportation Systems Management and Operations (TSM&O) Strategic Plan, and provides Traffic Incident Management training to partner organizations, while also exploring local, regional and state incident management coordination opportunities. Reductions in travel times directly results in savings in roadway user costs.

Annual User Cost Savings Through CHART Incident Management[1]



TANGIBLE RESULT DRIVER:
Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:
John Thomas
State Highway Administration (SHA)

PURPOSE OF MEASURE:
To quantify the degree of congestion experienced by highway users when traveling during peak hours.

FREQUENCY:
Annually (in January)

DATA COLLECTION METHODOLOGY:
Includes private sector vehicle probe speed data, and traffic count data on average weekdays.

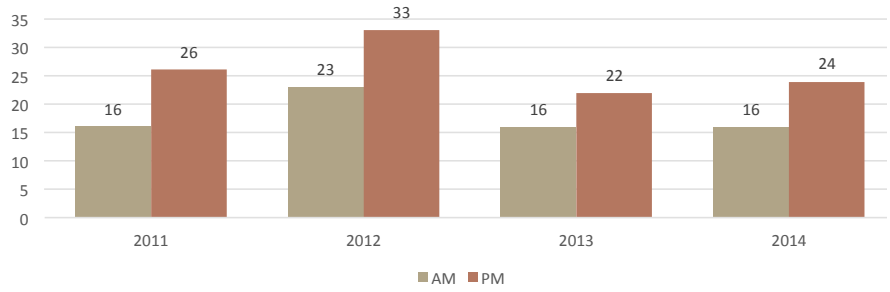
NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 10.8

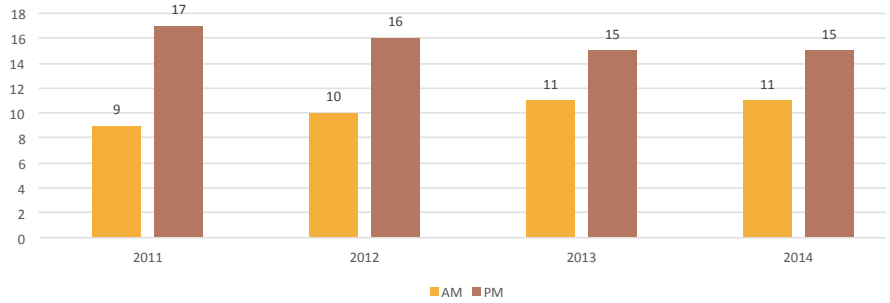
Percent of VMT in Congested Conditions on Maryland Freeways and Arterials in the AM/PM Peak Hours

This measure represents the percentage of peak hour VMT on Maryland highways that occur in congested conditions. Congestion on freeways is said to occur when the travel time index (TTI) ratio is greater than 1.3 (traffic travels at 25 percent slower than the free flow speed). Congestion on arterials is said to occur when the traffic Level of Service (LOS) is rated E, or worse, on a scale of A through F. These congestion metrics are a good indicator of customers' experience on roadways in morning and evening peak hours. The share of VMT on the freeways/expressways which occurred in congested conditions is generally higher than the share for arterial roadways. Peak hour congestion is dominated by non-discretionary trips including goods movement, commute and school trips. Reduced congestion and enhancing the reliability of peak hour trips make Maryland more attractive for economic development and provide users with a high quality safe, efficient and reliable highway system.

Average Share of VMT in Congested Conditions – Freeways



Average Share of VMT in Congested Conditions – Arterials



TANGIBLE RESULT DRIVER:
Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:
Jack Cahalan
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:
To demonstrate the percent of scheduled nonstop destinations served by BWI Marshall against the total number of nonstop destinations served by the region's three major airports.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Air service schedule analysis

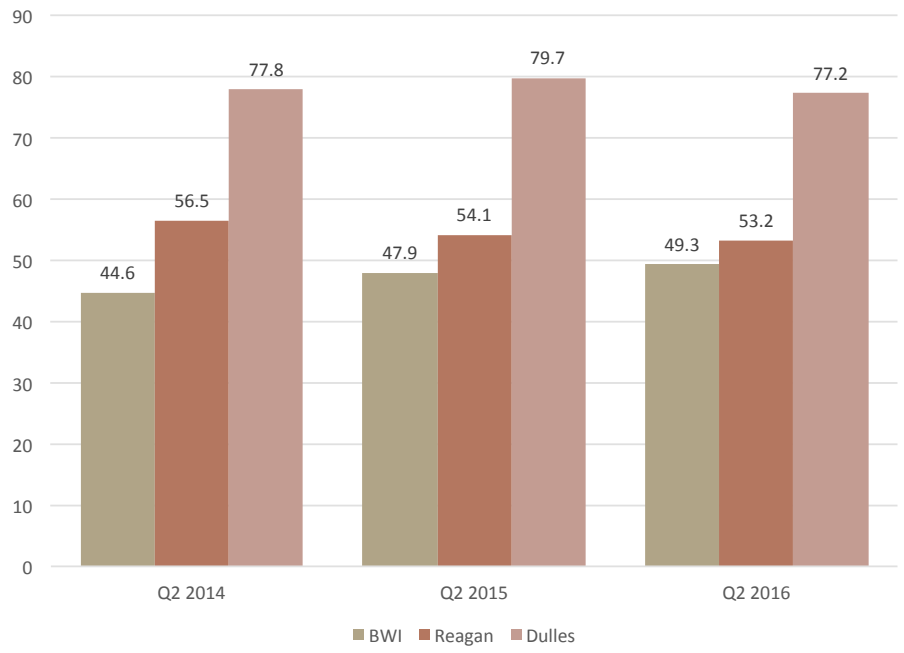
NATIONAL BENCHMARK:
Reagan National Airport; Dulles International Airport

PERFORMANCE MEASURE 10.9A

Market Share: Percent of Nonstop Markets Served Relative to Benchmark Airports

The Washington-Baltimore region is served by three primary airports. They include: Baltimore/Washington International (BWI) Thurgood Marshall Airport; Ronald Reagan National Airport; and Dulles International Airport. More than 23.8 million passengers flew through BWI Marshall in 2015, an all-time record for passenger traffic at BWI Marshall. This upward trend continued in the second quarter of 2016. In June 2016, 2,347,077 passengers flew through BWI Marshall Airport. That figure was an increase of 7.6 percent over the same month in 2015 and a new passenger record for the month of June. It was the twelfth-straight monthly record for BWI Marshall. International passenger traffic climbed by 15 percent in June. The chart below demonstrates that BWI Marshall serves nearly 50 percent of the total number of nonstop destinations served by the region's three airports. The number of nonstop destinations an airport serves is an important metric, as nonstop service is preferred by passengers.

Percent of Nonstop Markets Served Relative to Benchmark Airports



TANGIBLE RESULT DRIVER:
Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:
Jack Cahalan
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:
To demonstrate Martin State Airport's share of the general aviation business in the Baltimore region.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Operations Network Data compiled by the Federal Aviation Administration

NATIONAL BENCHMARK:
General aviation activity at BWI Marshall's general aviation facility

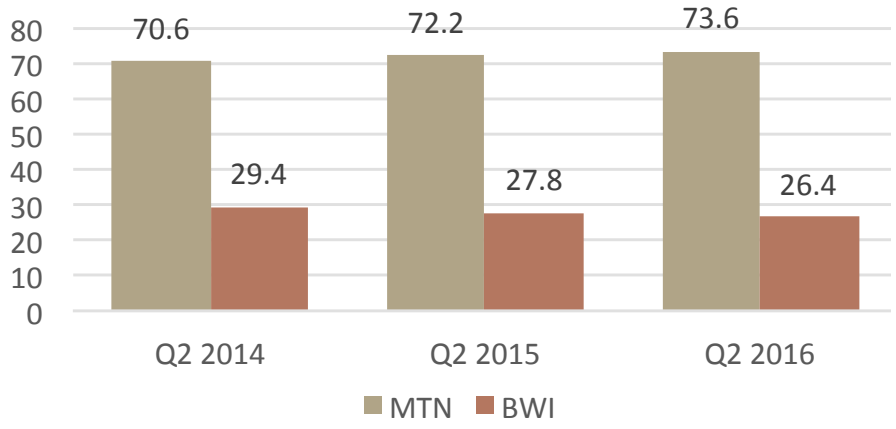
PERFORMANCE MEASURE 10.9B

Market Share: Martin State Airport's Regional Market Share

Martin State Airport is a general aviation facility located in eastern Baltimore County, Maryland serving the general aviation needs of the Baltimore region. It is owned and operated by the State of Maryland. This performance measure gauges the percentage of itinerant general aviation activity at Martin State Airport as compared to the itinerant general aviation activity at BWI Marshall. Itinerant general aviation activity is defined as a flight where its origin or destination takes it beyond the electronic control of the local control tower. This measure captures the amount of discretionary use of Martin State Airport by the business and general aviation community flying in and out of the Baltimore region.

The volume of itinerant general aviation operations is an indicator of how much business traffic Martin State Airport is, or is not, attracting. The more itinerant operations, the more in potential fuel sales and other support operations occur at Martin State Airport. Such operations generate revenue and support existing jobs at the airport among support services, as well as supporting jobs within the general area surrounding Martin State Airport (hotels, restaurants, rental car, etc.).

Percent of Q2 Itinerant General Aviation Activity 2014-2016



TANGIBLE RESULT DRIVER:
Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:
Jack Cahalan
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:
To determine market share in Baltimore/Washington region by tracking number of passengers and departing flights at BWI Marshall compared to other airports in the region.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Air service schedule analysis

NATIONAL BENCHMARK:
Reagan National Airport; Dulles International Airport

PERFORMANCE MEASURE 10.9C

Market Share: Number of Passengers and Departing Flights Relative to Benchmark Airports

The Washington-Baltimore region is served by three primary airports. They include: Baltimore/Washington International (BWI) Thurgood Marshall Airport; Ronald Reagan National Airport; and Dulles International Airport. More than 23.8 million passengers flew through BWI Marshall Airport in 2015, an all-time record for passenger traffic. This upward trend continued in the second quarter of 2016. Due to the seasonal nature of air service schedules, the most valid way to track performance is a comparison of identical quarters in prior calendar years. BWI Marshall Airport's percentage of both passengers served and departing flights steadily increased between the second quarter of 2014 and the same time period in 2016. The increases were due primarily to continued growth by Southwest, jetBlue and Spirit airlines. In the second quarter of 2016, BWI Marshall Airport served more passengers than any other airport in the region.

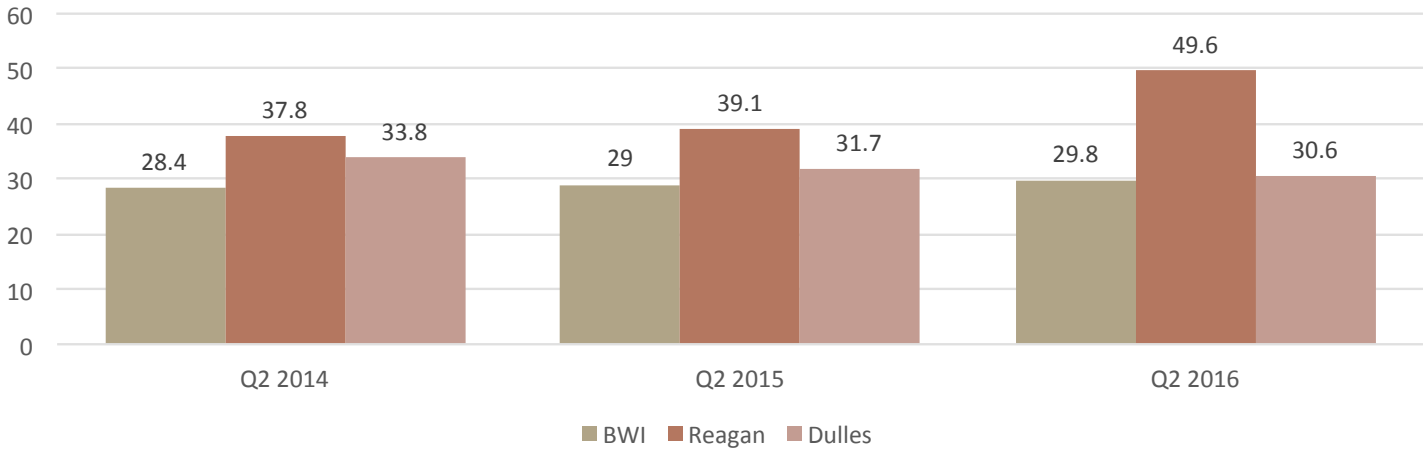
BWI is first in market share of passengers and third in market share of number of departing flights. This is because Reagan National handles a great deal of commuter flights which use smaller aircraft and carry fewer passengers. This fact results in a larger number of overall departures at Reagan than BWI Marshall. This "commuter factor" is also present, to a lesser degree, at Dulles. By comparison, BWI Marshall handles relatively few commuter flights.

By contrast, the overwhelming majority of flights at BWI Marshall involve regularly scheduled longer distance flights using standard size commercial aircraft like the Boeing 737 flown by Southwest Airlines, which is responsible for 70 percent of the traffic at BWI Marshall. As an example, a commuter jet may carry 50 passengers where a 737-800 model aircraft flown by Southwest will carry 175.

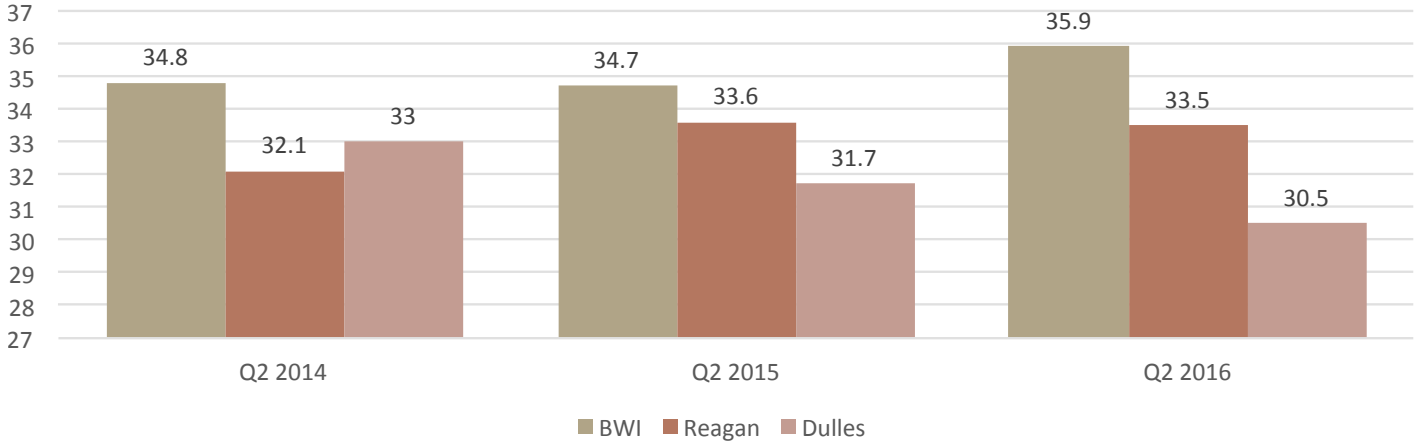
PERFORMANCE MEASURE 10.9C

Market Share: Number of Passengers and Departing Flights Relative to Benchmark Airports

Percent Total Daily Departures at the Region's Airports Q2 2014-2016



Percent Total Passengers Served by the Region's Airports Q2 2014-2016



TANGIBLE RESULT DRIVER:
Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:
Jack Cahalan
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:
To demonstrate how the cruise operation at the Port of Baltimore performs against the number of cruise ship arrivals at other mid-Atlantic ports.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Self-reporting by the various cruise terminals

NATIONAL BENCHMARK:
New York, NY; Bayonne, NJ; Norfolk, VA

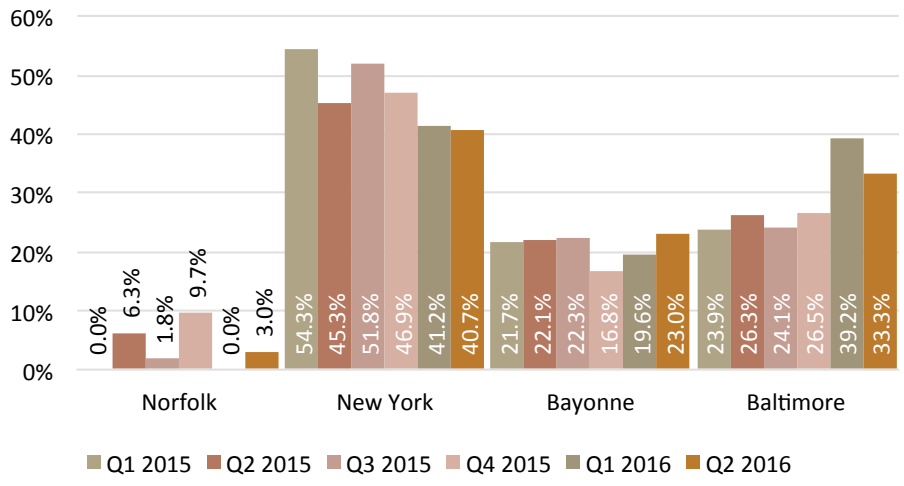
PERFORMANCE MEASURE 10.9D

Market Share: Mid-Atlantic International Cruise Market Share

The Port of Baltimore is one of four mid-Atlantic ports that offer passenger cruise service to destinations including the Caribbean, Bahamas, and Bermuda. Other ports include: New York, NY; Bayonne, NJ; and Norfolk, VA. Both Royal Caribbean and Carnival cruise lines offer diverse, year-round sailings from Baltimore. In the first half of 2016, Baltimore's international cruise ship arrivals outperformed the market compared to the same period of the prior year. Baltimore's increase was due to Carnival Pride's return with winter cruises after being repositioned from Tampa, FL. New York's numbers declined as they saw fewer cruise ship calls because Disney and MSC did not return in 2016. The Port Liberty Terminal in Bayonne, NJ was flat with the same number of cruises. Baltimore is 2nd in the Mid-Atlantic, and its market share is on a positive trend. Located just 2.5 miles from Baltimore's Inner Harbor and 10 miles from BWI Marshall Airport, the Port of Baltimore is easily accessible to the Baltimore/ Washington -Northern Virginia region, recognized as one of the most populated and affluent in the nation.

Strategies underway at POB to attract additional cruise business and increase market share include: replace damaged gangway; construct VIP Lounge; install new PA and alarm system; A/C improvements to the breezeway; and exterior signage/circulation improvements.

Market Share, Mid-Atlantic International Cruise Ship Arrivals, (Calendar Year Quarters)



TANGIBLE RESULT DRIVER:
Jim Dwyer
Maryland Port Administration (MPA)

PERFORMANCE MEASURE DRIVER:
Del T. Adams
The Secretary's Office (TSO)

PURPOSE OF MEASURE:
To improve customer service with a predictable, consistent and transparent process for obtaining an access permit for development in Maryland.

FREQUENCY:
Annually (in January)

DATA COLLECTION METHODOLOGY:
Reviews, permits and delivery times are tracked in the Access Management Database.

NATIONAL BENCHMARK:
N/A

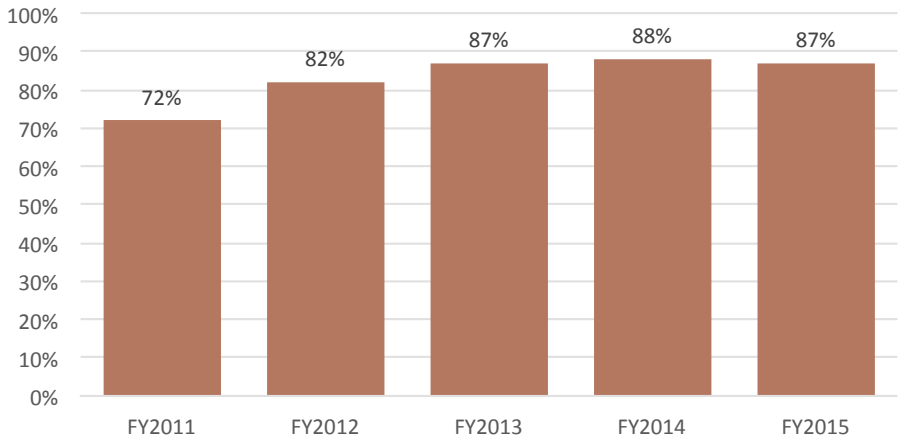
PERFORMANCE MEASURE 10.10

Percent of Roadway Access Permits Issued within 21 Days or Less

An access permit is used to help promote safe and efficient roads for travel while supporting economic growth for jobs and businesses. Issuing access permits and construction of roadway and entrance improvements by developers are some of the last steps before opening businesses and/or selling commercial or residential properties for occupancy. This contributes to a larger tax base for the State, creation of jobs for businesses and redevelopment of vacant properties.

This measure tracks SHA efforts to improve customer service with a predictable, consistent and transparent process for obtaining an access permit in Maryland. The target percentage is at least 90 percent of permits issued within 21 days (after receipt of a complete application package). In the recent past, between 125 and 150 completed applications have been received annually.

Percent of Permits Issued in 21 Days



Facilitate Economic Opportunity in Maryland

Glossary

All Electronic Tolling (AET) – Collection of tolls at highway speeds using *E-ZPass* transponders or video tolling; no toll booths or cash collection.

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) and 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.

Calendar Year (CY) – The period of 12 months beginning January 1 and ending December 31 of each reporting year.

Coordinated Highways Action Response Team (CHART) – CHART is an incident management system aimed at improving real-time travel conditions on Maryland's highway system. CHART is a joint effort of the State Highway Administration, Maryland Transportation Authority and the Maryland State Police, in cooperation with other federal, state and local agencies.

Consolidated Transportation Program (CTP) – A six-year program of capital projects, which is updated annually to add new projects and reflect changes in financial commitments.

Fiscal Year (FY) – A yearly accounting period covering the time frame between July 1 and June 30 of each reporting year.

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).

MAA – Maryland Aviation Administration operates Baltimore/Washington International Thurgood Marshall Airport (BWI Marshall) and Martin State Airport, a general aviation/reliever airport northeast of Baltimore.

MDTA – Maryland Transportation Authority operates and maintains the State's eight toll facilities.

Mode - Form of transportation used to move people or cargo (e.g., truck, rail, air).

MPA – Maryland Port Administration promotes the Port of Baltimore as a leading east coast hub for cargo and cruise activity.

MTA – Maryland Transit Administration provides Local Bus, Light Rail, Metro Rail, Paratransit services and regional services through commuter rail (MARC) and Commuter Bus, as well as grant funding and technical assistance.

MVA – Motor Vehicle Administration serves as the gateway to Maryland's transportation infrastructure, providing a host of services for drivers and vehicles, including registration, licensing and highway safety initiatives.

SHA – State Highway Administration manages the State's highway system which includes 17,117 lane miles of roads and 2,564 bridges

TBU – Transportation Business Unit

TSO – The Secretary's Office

Vehicle Miles of Travel (VMT) – A measurement of the total miles traveled by all vehicles.

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