MARYLAND DEPARTMENT OF TRANSPORTATION

EXCELLERATOR

Performance Management System

Quarterly Report

July 2018

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

MISSION STATEMENT

"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 proud that the Maryland Department of Transportation Excellerator Performance Management System is in its third year. We have made great strides in developing and implementing performance measures, refining strategies and focusing on delivering results for our customers.

We have created more than 150 individual performance measures that touch every aspect of our business throughout the organization. Whether we are building and maintaining our roads and bridges, running safe and efficient bus and rail systems, operating an international port and airport or improving the vehicle and driver registration process for Marylanders, we stand strong in our commitment and responsibility to deliver the best transportation products and services for our customers.

Every quarter we review our progress and share our results online for public inspection and within the organization through a live stream of our quarterly review meeting. This allows all 10,271 MDOT employees the opportunity to see the impact of the work they do each day and how they contribute to running a safe and secure transportation system.

Most importantly, we are delivering results. As we respond faster to customer inquiries, become increasingly efficient in using our resources wisely and providing a stronger foundation for economic development for the State, we will continue to deliver exceptional customer service and create more value for those who live and travel throughout Maryland.

I invite you to continue to review our MDOT Excellerator program as we continue down the path 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 (Oct.)	Sean Adgerson, MTA
1.2	Responsiveness to MDOT Customer Correspondence:		
	1.2a - Average Number of Days for Correspondence in the MDOT IQ System	Quarterly	Trey Hanna, MAA
	1.2b - Percent of Customer Contact Responded to within 24 hours (One Business Day)	Quarterly	Richard Powers, MPA
1.3	Customer Satisfaction with Receiving Goods and Services		
	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 (Oct.)	Sabrina Bass, TSO
1.5	Customer Satisfaction with Website Information and Navigation of the MDOT Websites		
	1.5a - Percent of Customers Who Felt MDOT Websites Met Their Needs	Annually (April)	Lindsey Franey, SHA
	1.5b - Percent of Customers Who Felt that it was Easy to Find Desired Information on MDOT Websites	Annually (April)	Lindsey Franey, SHA
Tangible Result # 2: Use Resources Wisely			**Corey Stottlemyer, TSO**
2.1	Percent Capital Dollars Spent as Programmed	Quarterly	Laurie Brown, MTA
2.2	Percent of Projects Leveraging Other Funding Sources	Annually (Oct.)	Tony Moore, MPA
2.3	Employee Engagement	Annually	Ellery Loomis, MVA
2.4	Employee Turnover Rate	Quarterly	Bret A. Dousharm, MDTA
2.5	Time to Fill Vacancies	Quarterly	Krystel Wilson, MAA
2.6	Percentage of Fixed Asset Units Identified or Accounted for During the Annual Physical Inventory of Fixed Assets	Annually (Oct.)	Dan Ruth, SHA
2.7	Managing Capital Assets		
	2.7a - Inventory of MDOT Assets	Annually (Oct.)	Dan Favarulo, TSO
	2.7b - Pavement Condition	Annually (July)	Dan Favarulo, TSO
	2.7c - Structure Condition	Annually (July)	Dan Favarulo, TSO
	2.7d - Percent of Structurally Deficient Bridges on MDOT Network	Annually (Oct.)	Sejal Barot, SHA
	2.7e - Overall Condition/Satisfaction with MDOT Road Network	Annually (Oct.)	Dan Favarulo, TSO
	2.7f - Rating of Rail in “Good” Condition	Annually (Oct.)	Dan Favarulo, TSO
2.8	Percent of Procurements on Time and on Budget	Annually (Oct.)	Jessica Mettle, MDTA
2.9	Percent and Value of Unanticipated Contract Modifications	Annually (Oct.)	Pretam Harry, MVA
2.10	Relationship Between Procurement Competition and Cost	Quarterly	Scott Schell, 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
2.13	MDOT Fleet Vehicle On-Time Preventive Maintenance	Quarterly	Dave Sharpless, MDTA
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	Kelly Melhem, MVA
3.3	Maryland Traffic-Related Fatality Rate (Highways)	Annually (April)	Kelly Melhem, MVA
3.4	Number of Traffic-Related Serious Injuries on all Roads	Quarterly	Kelly Melhem, MVA
3.5	Maryland Traffic-Related Serious Injury Rate (Highways)	Annually (April)	Kelly Melhem, MVA
3.6	Maryland Seat Belt Usage Rate	Annually (Jan.)	Gina Watson, MPA
3.7	Travelers Assisted by MDOT	Quarterly	Cedric Ward, SHA
3.8	Number of Employees Trained Under National Incident Management System (NIMS)	Annually (Oct.)	Bud Frank, TSO
3.9	Number of Employee Lost Work Days Due to Injuries		
	3.9a - Number of Employee Injuries Reported	Quarterly	Bernadette Bridges, MAA
	3.9b - Number of Employee Lost Work Days Due to Injuries	Quarterly	Bernadette Bridges, MAA
	3.9c - Incident Rate, Cost of Injuries and Predominant Injuries by Event	Quarterly	Troy Palmer, MDTA
3.10	Number of Customer Incidents at MDOT Facilities	Quarterly	Leah Visakowitz, 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.)	Aviva Brown, 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 Transportation Solutions and Services		
	4.4a - Minor Road Resurfacing	Annually (July)	Jim Harkness, MDTA
	4.4b - Major Road Resurfacing	Annually (July)	Jim Harkness, MDTA
	4.4c - Interstate Preservation	Annually (July)	Jim Harkness, MDTA
	4.4d - Average Bridge Replacement Cost	Annually (July)	Jim Harkness, MDTA
	4.4e - Average Bridge Redecking Cost	Annually (July)	Jim Harkness, MDTA
	4.4f - Operating Cost Per Revenue Vehicle Mile	Annually (Jan.)	Ross Turlington, MTA
	4.4g - Operating Cost Per Passenger Trip	Annually (Jan.)	Ross Turlington, MTA
	4.4h - Passenger Trip Per Revenue Vehicle Mile	Annually (Jan.)	Ross Turlington, MTA
	4.4i - Farebox Recovery Ratio	Annually (Jan.)	Ross Turlington, MTA
	4.4j - Cost Per Transaction (MVA)	Annually (Jan.)	Shawn Ames, MAA

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Tangible Result # 5: Provide An Efficient, Well Connected Transportation Experience			**Phil Sullivan, MTA**
5.1	Reliability of the Transportation Experience		
	5.1a - Percentage of Tolls Collected as Cash	Quarterly	Samuel Walters, MDTA
	5.1b - Average Truck Turn Time per Container Transaction	Annually (Jan.)	Jeffrey Gutowski, MPA
	5.1c - Average Wait Time (MVA)	Quarterly	Jeffrey Gutowski, MPA
	5.1d - On-Time Performance (MTA & MAA)	Quarterly	Kokuei Chen, MTA
	5.1e - Planning Time Index for Highway Travel	Annually (April)	Meredith Hill, SHA
5.2	Restoring Transportation Services		
	5.2a - Average Time to Restore Normal Operations After Disruptions	Annually (April)	Joseph Sagal, SHA
	5.2b - Average Time to Restore Normal Operations After a Weather Event	Annually (April)	Joseph Sagal, SHA
5.3	Percent of Transportation Services and Products Provided Through Alternative Service Delivery (ASD) Methods	Semi-Annually (April & Oct.)	Negash Assefa, MVA
5.4	Functionality of Real-Time Information Systems (RTIS)		
	5.4a - Percent of Functional Real-Time Information Systems Provided	Annually (Jan.)	Ralign Wells, MAA
	5.4b - Customer Satisfaction with Helpfulness and Accuracy of Real-Time 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		
	6.1a - Social Reach	Quarterly	Katie Bennett, MDTA
	6.1b - Social Engagement	Quarterly	Richard Scher, MPA
6.2	Satisfaction with Communication at Public Meetings	Semi-Annually (Jan. & July)	Juan Torrico, MTA
6.3	Communicate Effectively through News Releases		
	6.3a - Number of News Stories Generated from Major Releases	Quarterly	Jonathan Dean, MAA
	6.3b - Earned Media Value of Print and Broadcast Coverage Generated by News Releases	Quarterly	Valerie Burnette Edgar, SHA
	6.3c - Evaluate Tone of News Stories by Publications Generated from MDOT Releases	Quarterly	Valerie Burnette Edgar, SHA
6.4	News Customers Can Use – Proactive Media		
	6.4a - Telling the Story of MDOT – Proactive Media	Quarterly	Jonathan Dean, MAA
	6.4b - Telling the Story of MDOT – Proactive Media	Quarterly	Jonathan Dean, MAA
	6.4c - Telling the Story of MDOT – Proactive Media	Quarterly	Jonathan Dean, MAA
	6.4d - Interactions with Proactive Posts on Social Media	Quarterly	Jonathan Dean, MAA

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 TBU	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	Trisha O'Neal, MPA
7.4	Percent of Veteran Owned Small Business Enterprise (VSBE) Participation	Annually (Jan.)	Cheryl Stambaugh, MVA
7.5	Level of Satisfaction of Our Business Partners	Quarterly	George Zurek, MDTA
7.6	Number and Percent of Invoices Properly Paid to 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			**Anthony Crawford, SHA**
8.1	Percent of MDOT Facilities that Meet or Exceed Our Neighbor's Expectations	Annually (July)	Anthony Crawford, SHA
8.2	Percent of MDOT Facilities that are ADA Compliant	Annually (April)	Priya Iyer, MTA Terri Whitehead, MVA
8.3	Property Damage Claims		
	8.3a - Number of Property Damage Claims	Annually (Jan.)	Jill Lemke, MPA Melissa Bogden, MDTA
	8.3b - Percent of Customers Satisfied with How Their Property Claim was Handled	Annually (Jan.)	Jill Lemke, MPA Melissa Bogden, MDTA
8.4	Number of Traffic Violations While Driving a State Vehicle	Quarterly	Dave Seman, TSO
8.5	Charity Campaign Participation	Annually (July)	Jill Lemke, MPA
Tangible Result # 9: Be a Good Steward of Our Environment			**Dorothy Morrison, TSO**
9.1	Water Quality		
	9.1a - Water Quality Treatment to Protect and Restore the Chesapeake Bay	Annually (Oct.)	Sonal Ram, SHA
	9.1b - Stormwater Cleanup – Street Sweeping and Inlet Cleaning	Semi-Annually (Jan. & July)	Mark Williams, MAA
	9.1c - Bay Restoration Program Spending	Quarterly	Sandy Hertz, TSO
9.2	Land Pollution Prevention		
	9.2a - Office Waste Recycled	Annually (April)	Hargurpreet Singh, MVA
	9.2b - Non-Office Waste Recycled	Annually (April)	Hargurpreet Singh, MVA
	9.2c - Recycled/Reused Materials from Maintenance Activities and Construction/ Demolition Projects	Annually (April)	Chandra Chithaluru, MPA
9.3	Energy Management		
	9.3a - Energy: Miles Per Gallon	Annually (April)	Paul Truntich Jr., MDTA
	9.3b - Energy: Total Gallons Consumed	Annually (Oct.)	Paul Truntich Jr., MDTA

	9.3c - Utility Electricity Use	Quarterly	Laura Rogers, TSO
	9.3d - Renewable Energy Generation	Quarterly	Colleen Turner, TSO
9.4	Air Quality		
	9.4b - Air Quality Emissions	Quarterly	Colleen Turner, TSO
Tangible Result # 10: Facilitate Economic Opportunity in Maryland			**Jim Dwyer, MPA**
10.1	Economic Return from Transportation Investment (Jobs Generated by Total Capital Program Construction Investments)	Annually (Oct.)	Karuna R. Pujara, SHA
10.2	Maryland's Ranking in National Transportation Infrastructure Assessment	Annually (Oct.)	Karuna R. Pujara, SHA
10.3	Freight Mobility		
	10.3a - Freight Analysis Framework (FAF) Tonnage and Value of Freight	Annually (April)	Cole Greene, MTA
	10.3b - Port of Baltimore International Cargo Market Share and Rankings	Quarterly	Cole Greene, MTA
	10.3c - MPA Total General Cargo Tonnage including these Strategic Commodities: Containers, Autos, RoRo and Imported Forest Products	Monthly	Deborah Rogers, MVA
10.4	Number and Percentage of Bridges on the State-Owned System that are Weight-Posted	Annually (April)	Rafael Espinoza, MDTA
10.5	Change in Market Access due to Improvements in the Transportation Network	Annually (Oct.)	Corey Stottlemyer, TSO
10.6	Change in Productivity due to Improvements in the Transportation Network	Annually (Oct.)	Corey Stottlemyer, TSO
10.7	Total User Cost Savings		
	10.7a - Total User Cost Savings for the Traveling Public due to Congestion Management	Annually (Jan.)	Karuna R. Pujara, SHA
	10.7b - Average Cost per Branch Customer due to Wait Time	Annually (Jan.)	Deborah Rogers, MVA
	10.7c - Opportunity Cost Savings to Customer for ASD Usage	Annually (Jan.)	Deborah Rogers, MVA
10.8	Percent of VMT in Congested Conditions on Maryland Freeways and Arterials in the AM/PM Peak Hours	Annually (Jan.)	Karuna R. Pujara, SHA
10.9	Market Share		
	10.9a - Martin State Airport's Regional Market Share	Quarterly	Jack Cahalan, MAA
	10.9b - Percent of Nonstop Markets Served Relative to Benchmark Airports	Quarterly	Jack Cahalan, MAA
	10.9c - Percent of Passengers and Departing Flights Relative to Benchmark Airports	Quarterly	Jack Cahalan, MAA
10.10	Percent of Roadway Access Permits Issued within 21 Days or Less	Quarterly	Glen Carter, TSO

TANGIBLE RESULT #1

Provide Exceptional Customer Service

Every MDOT employee is responsible for delivering exceptional customer service by providing 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 October)

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

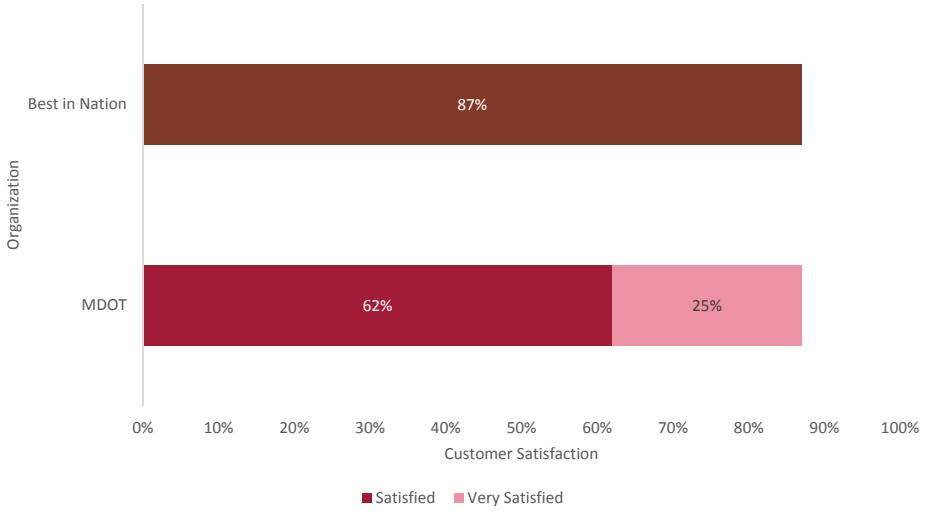
Marylanders expect that MDOT delivers exceptional services and products. Measuring our percent of overall customer satisfaction is the best way to determine how we are doing in our effort to deliver exceptional customer service. It also identifies areas of strength and areas of opportunities or weaknesses that we need to address.

From June 10-July 31, 2017, a survey was conducted by the Schaefer Center for Public Policy at the University of Baltimore for the purpose of gauging the satisfaction with and opinions of MDOT services across the State. Almost 900 Marylanders over the age of 18 participated in the telephone survey.

The results of the survey revealed that 87 percent of Marylanders are satisfied with the services received from MDOT. As compared to the American Customer Service Index (ACSI), MDOT's rating is equal to the highest ranked company of Chick-fil-a. This reflects MDOT's commitment to improving the products and services it offers.

In addition to the overall customer satisfaction results, we were able obtain more information on the MDOT services that matter the most to Marylanders. Services such as providing a safe highway system and clearing of roadways during snow storms are key to MDOT's customer satisfaction rating.

Chart 1.1.1: Overall MDOT Customer Satisfaction Rating CY2017



Provide Exceptional Customer Service

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

PERFORMANCE MEASURE DRIVER:
Trey Hanna
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:
To track responsiveness to customer inquiries.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
MDOT IQ system.

NATIONAL BENCHMARK:
30 days (MDOT established benchmark).

PERFORMANCE MEASURE 1.2A

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

Timely response to customer correspondence communicates the importance MDOT places on addressing customer needs and demonstrates the organization's commitment to exceptional customer service. Inquiries, service requests, ideas, and concerns conveyed in customer correspondence often identify opportunities to improve the overall customer experience and satisfaction with MDOT.

For the period of April 1, 2018 through June 30, 2018, MDOT crafted 1,115 responses to customer correspondence assigned by the Governor's Office. The average number of days for MDOT response was 36 days compared to 59 days in Q1 2018. In comparison to the same period in the previous year, total volume increased by 547 letters and the average number of days for MDOT response increased by 21 days.

Several variables have a role in determining MDOT response time to customer correspondence. Factors such as legislative initiatives and other complexities can affect MDOT's ability to respond in a timely manner. These variables tend to lengthen response times.

MDOT continues to explore ways to improve responsiveness to customer correspondence. In this quarter, MDOT reallocated personnel to reduce the backlog of letters and identify bottlenecks in the process and to reduce review and edit times. These changes have significantly reduced the average response times from the previous quarter.

Also, MDOT recently developed an online training module designed to improve knowledge of the correspondence guidelines for all users. This training combined with the upcoming annual correspondence meeting illustrates MDOT's committment to enhancing management standards and best practices.

PERFORMANCE MEASURE 1.2A

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

Chart 1.2A.1: Average Number of Days to Respond to Correspondence in MDOT IQ System by TBU CY2018

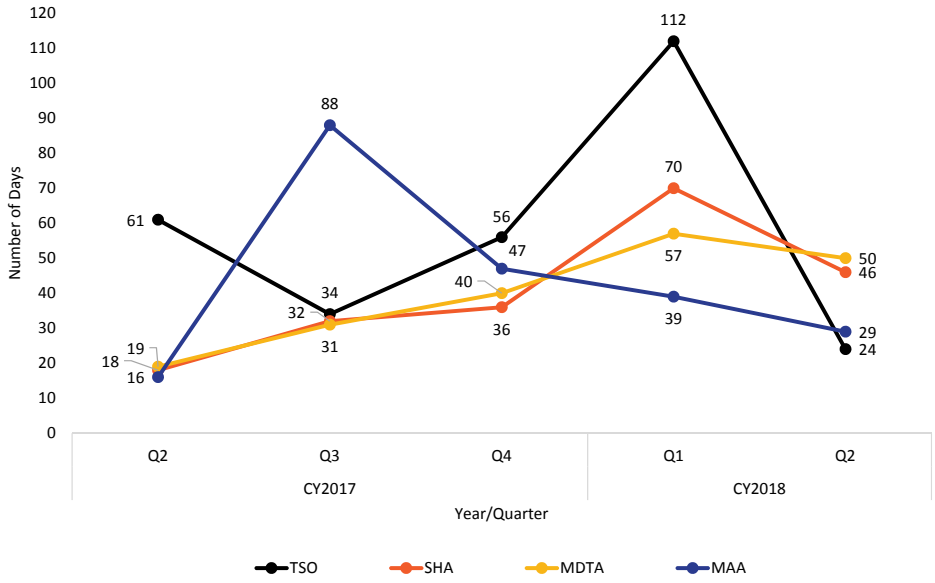
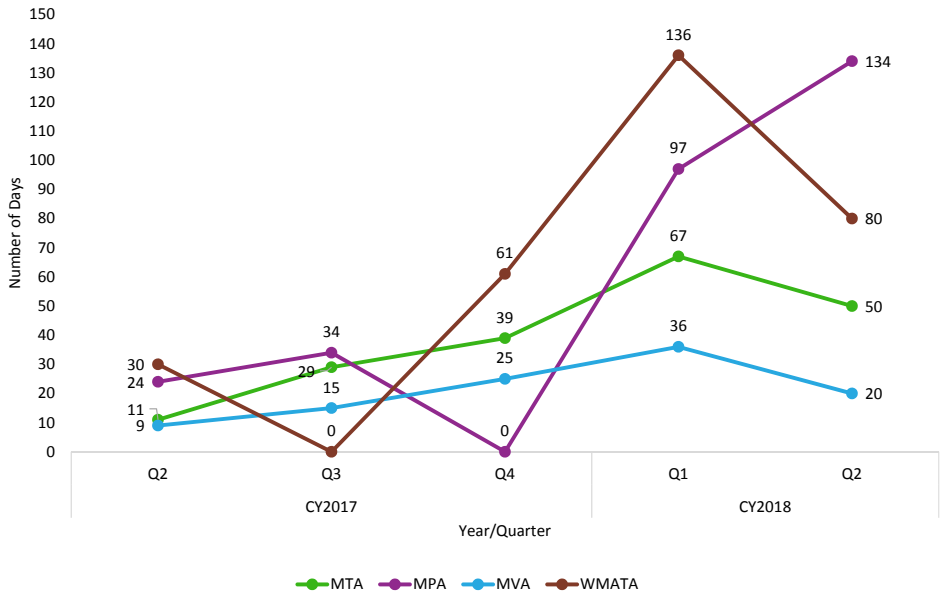


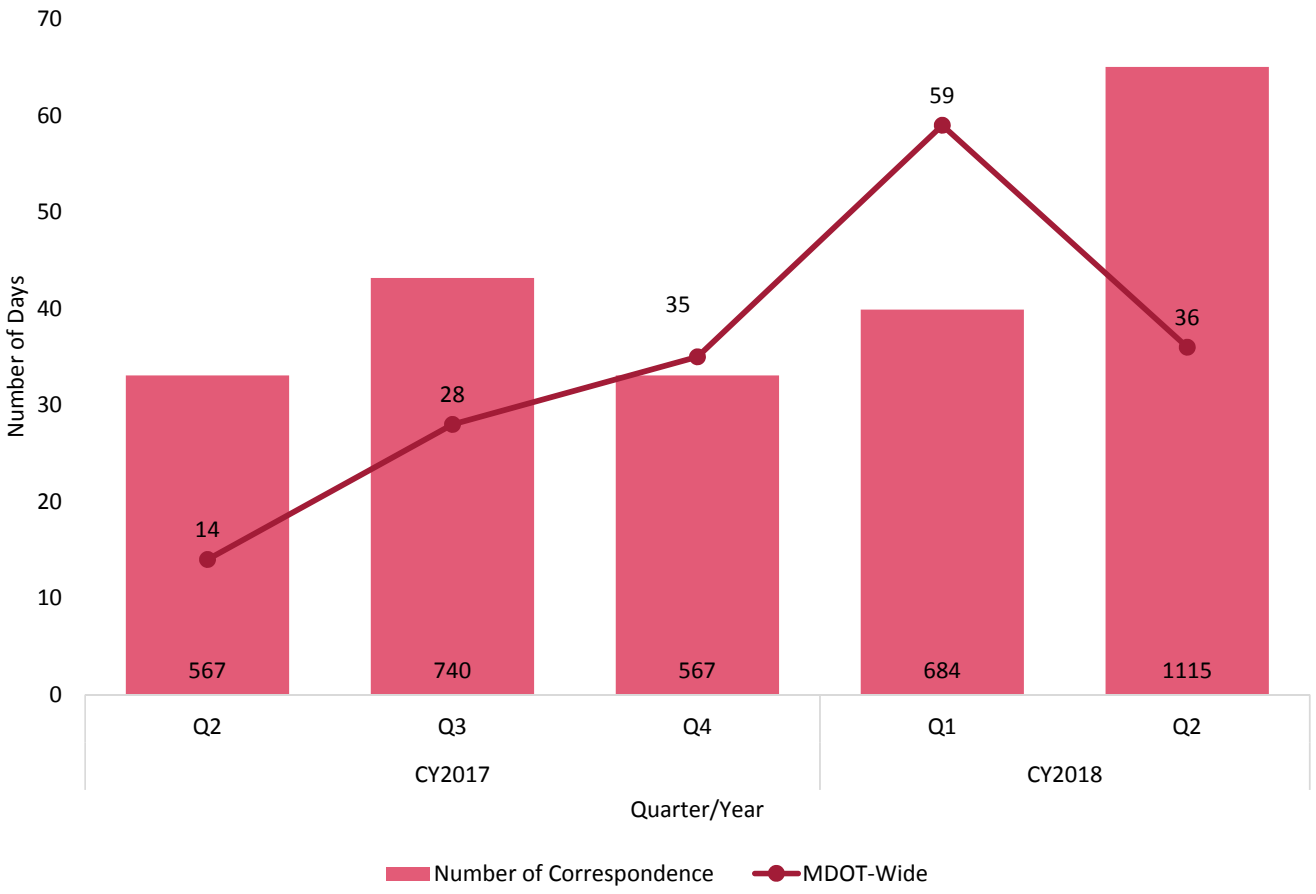
Chart 1.2A.2:Average Number of Days to Respond to Correspondence in MDOT IQ System by TBU CY2018



PERFORMANCE MEASURE 1.2A

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

Chart 1.2A.3: Average Number of Days to Respond to Correspondence in MDOT IQ System MDOT-Wide CY2018



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 the responsiveness to direct customer contact.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Database metrics provided by TBUs.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 1.2B

Responsiveness to MDOT Customer Correspondence: Percent of Customer Contact Responded to within 24 hours (One Business Day)

MDOT customers interact directly with TBUs in many ways (e.g., phone, email, letters, social media, etc.) each with an accompanying set of expectations for response time. Regardless of the contact method, MDOT is committed to ensuring a rapid and accurate response to customer inquiries, requests and issues. As such, MDOT intends to respond to customers within one business day regardless of their method of communication.

The establishment of a standard of 24 hours/one business day for response to all customer contact and achieving that goal demonstrates to customers the organization's commitment to exceptional customer service and ultimately ensure a workforce that is highly proficient in and knowledgeable about our business and truly focused on the needs of our customers.

The realization of this standard will be challenging given that TBUs currently use different systems for collecting and reporting and have varying standards for response to customer contact. It will, however, set the organization on a sustainable path of exceptional customer service.

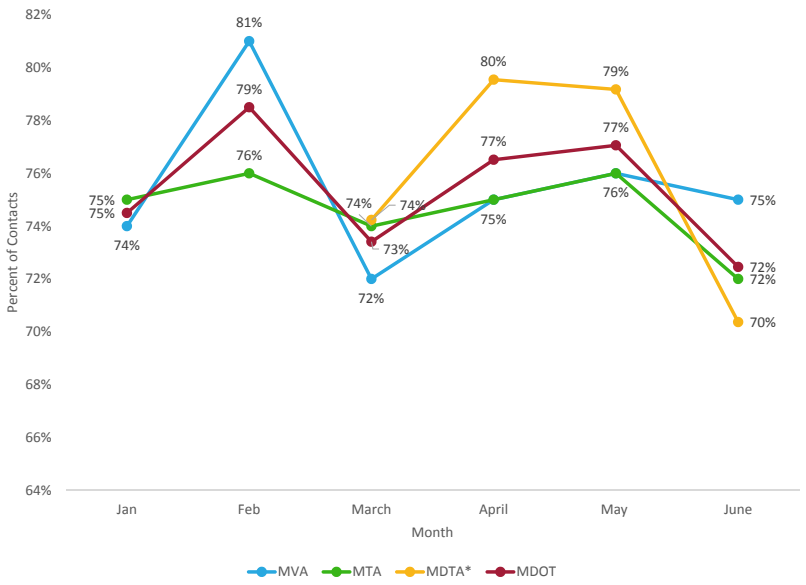
Analysis of existing systems, policies and procedures has been ongoing so MDOT will ultimately have reportable data for all TBUs regarding our performance in responding to customer contact. For Q1 2018, MDOT was able to report on the performance of two TBUs (MDOT MVA and MDOT MTA) related to this measure. For Q2 2018, one additional TBU (MDTA) had reportable data. The charts below show MDOT performance in responding to customer contact within 24 hours related to phone calls, email/web contact and social media for January through June CY2018. For Q2 2018, 75 percent of telephone contacts, 59 percent of email/web contacts and 100 percent of social media contacts were responded to within 24 hours.

MDOT continues to work on both short-term and long-term solutions to develop a comprehensive approach for managing customer contact across all TBUs. MDOT continues to work to provide consistent, exceptional service to our customers in a manner that is responsive and timely. This work entails analysis of existing systems, policies and procedures and other barriers to the achievement of this measure.

PERFORMANCE MEASURE 1.2B

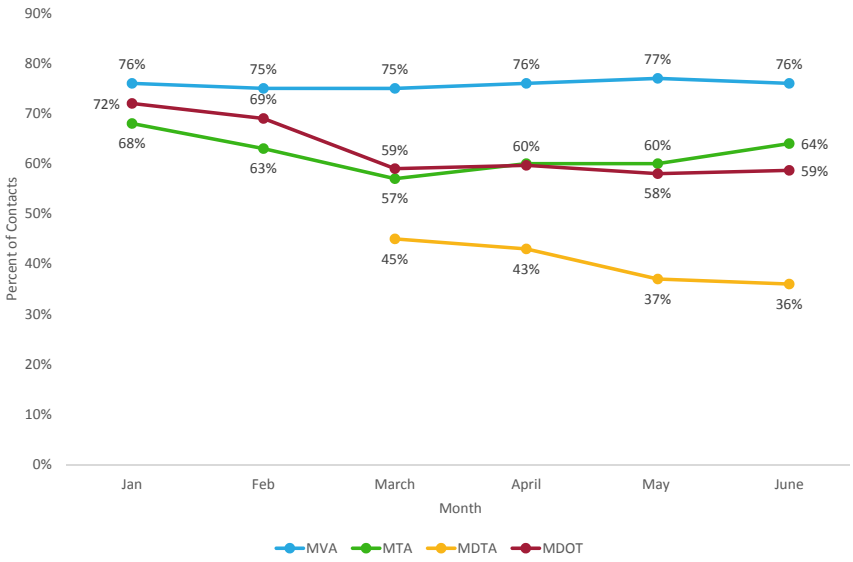
Responsiveness to MDOT Customer Correspondence: Percent of Customer Contact Responded to within 24 hours (One Business Day)

Chart 1.2B.1: Percent of Customer Telephone Contacts Responded to within 24 Hours (One Business Day) CY2018



*MDTA Data reflect E-ZPass only.

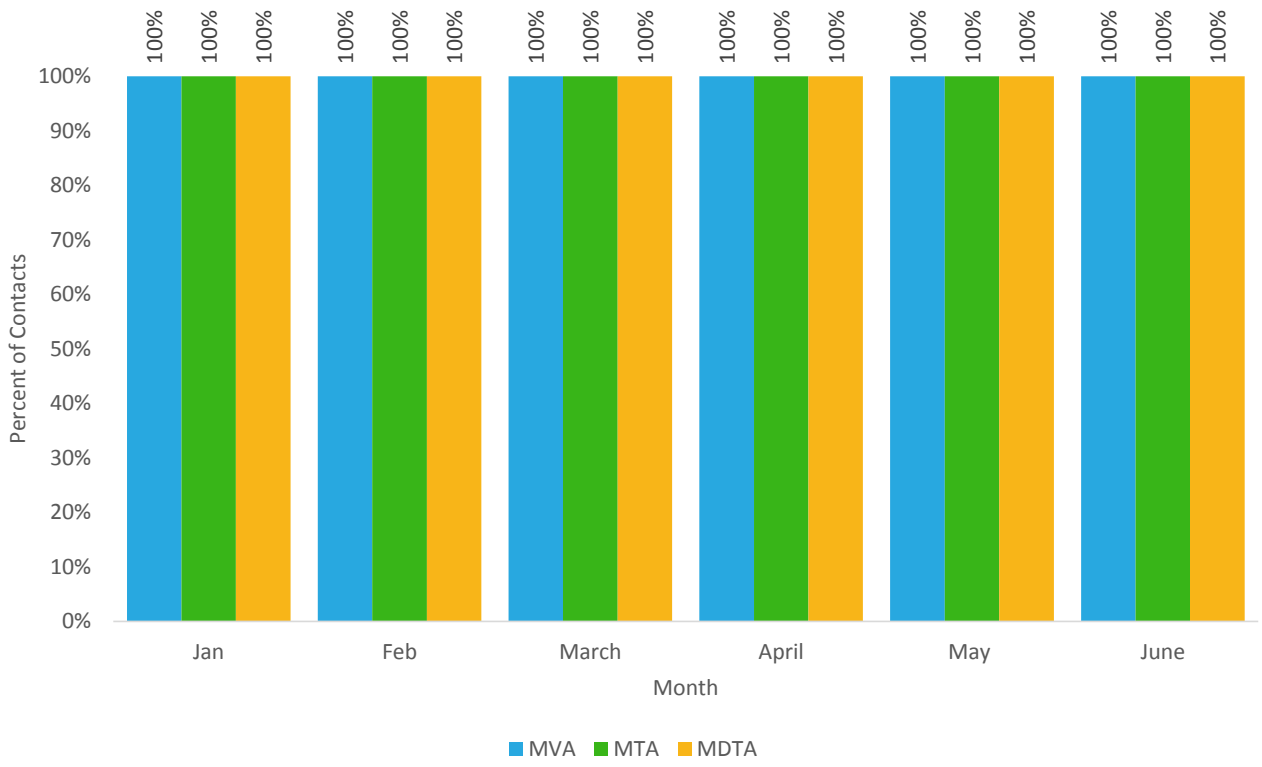
Chart 1.2B.2: Percent of Customer Email/EWeb Contacts Responded to within 24 Hours (One Business Day) CY2018



PERFORMANCE MEASURE 1.2B

Responsiveness to MDOT Customer Correspondence: Percent of Customer Contact Responded to within 24 hours (One Business Day)

Chart 1.2B.3: Percent of Customer Social Media Contacts Responded to within 24 Hours (One Business Day) CY2018



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:
Seven 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

Reducing the rate of abandoned calls to MDOT call centers will ensure that more customers reach MDOT to address their needs. The longer the time customers must 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.

As shown in Chart 1.3A.1, the abandonment rate for Q1 CY2018 was 7 percent and 6 percent for the period of April 1 – June 30, 2018. MDOT continues to maintain a positive trend in the call abandonment rate. Current performance rate of 6 percent is lower than the benchmark of 7 percent. Moreover, in comparison to previous years, CY2018 average abandonment rate of 6 percent was a substantial improvement in comparison to CY2016 with an abandonment rate of 12 percent.

Targeted process improvements and other changes are influencing the positive results at individual TBU call center operations. Changes implemented to enhance the performance of MDOT call center operations include:

- Conducting biweekly meetings with call center representatives across all TBUs;
- Continuing triage process to reduce call wait times;
- Revamping Interactive Voice Response (IVRs) so that customers can reach agents or conduct phone transactions more rapidly; and
- Expanding hours.

PERFORMANCE MEASURE 1.3A

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

Chart 1.3A.1: Percent Abandoned Calls at MDOT Call Centers in Q2 CY2015-CY2018

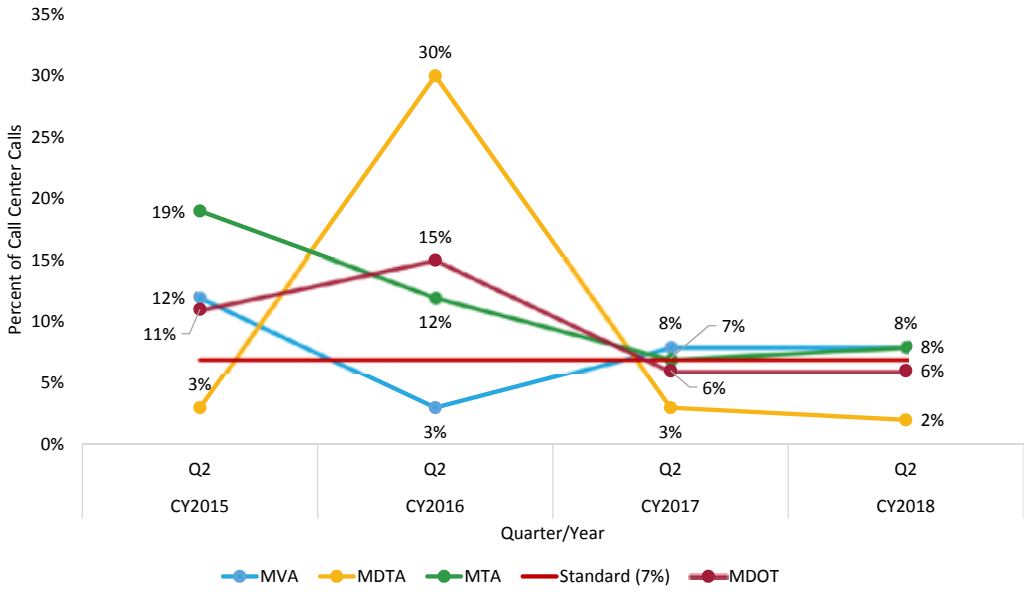
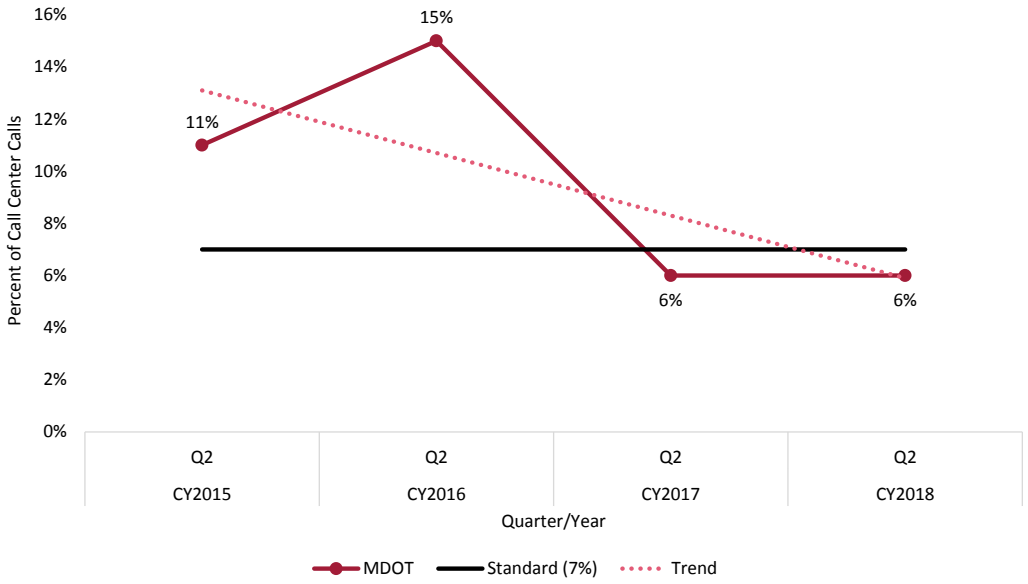


Chart 1.3A.2: MDOT Percent of Abandoned Calls at Call Centers vs. Call Center Volume in Q2 CY2015-CY2018



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.

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 our customers is a top priority for the organization. Reducing the time it takes for customers to reach MDOT call center representatives ensures customer needs are addressed more rapidly and increases their satisfaction with the support and overall customer service provided by MDOT. It can also identify areas of opportunity for improvement in call center operations.

For CY2017, Chart 1.3B.1 shows that the average call wait time was 1:24 compared to 3:23 in CY2016. The current performance result of 1:30 for Q2 2018 remains higher than the benchmark of 60 seconds, however, it was favorable to the 1:42 results for Q1 2018. MDOT collectively continues a positive performance trend in this critical measure of customer service.

As previously mentioned, targeted process improvements such as collaboration across TBU call centers, staff augmentation, adoption of best practices and other operational and technology changes are influencing the positive direction for MDOT call center operations.

PERFORMANCE MEASURE 1.3B

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

Chart 1.3B.1: Average Call Wait Times at MDOT Call Centers in Q2 CY2015-CY2018

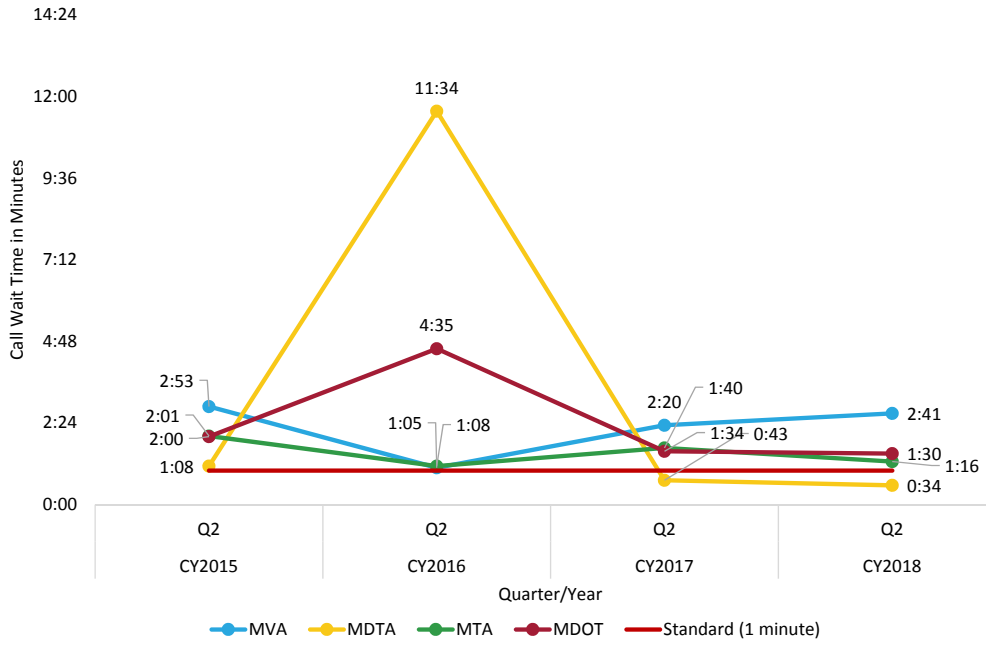
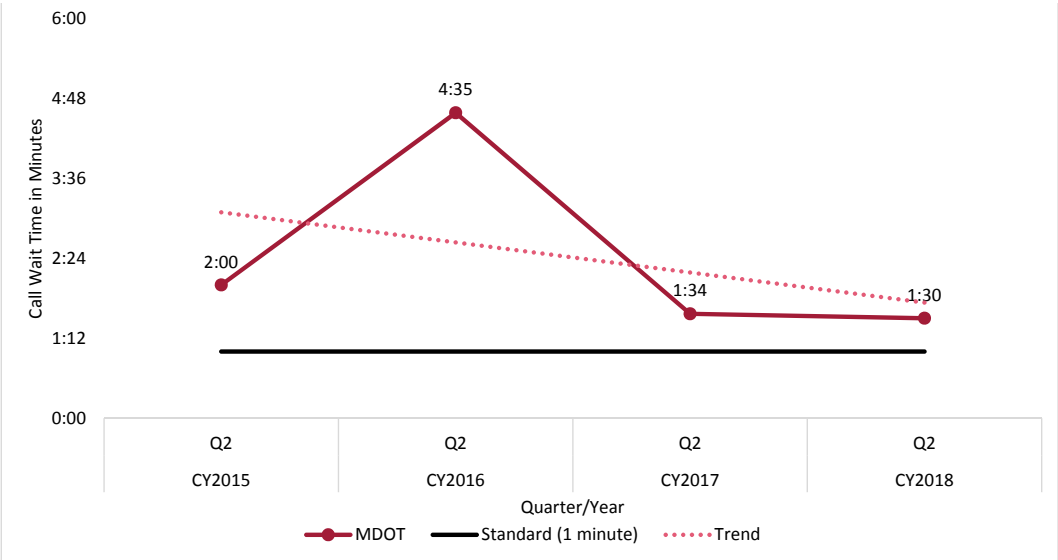


Chart 1.3B.2: Average Call Wait Times at MDOT Call Centers MDOT-Wide in Q2 CY2015-CY2018



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.

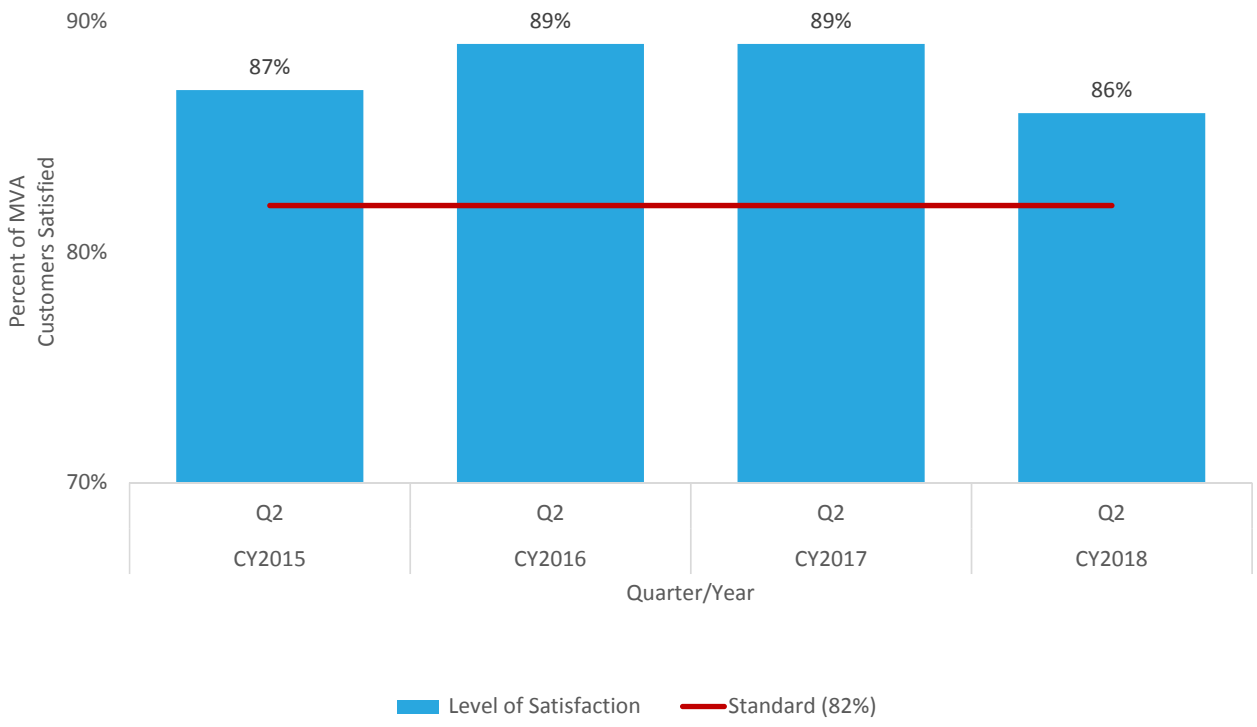
As shown in Chart 1.3C.1, for CY2017, MVA achieved 89 percent, 87 percent in Q1 2018 and 86 percent in Q2 2018 average level of satisfaction with resolving call inquiries which is favorable to the benchmark of 82 percent. This data continues to trend positive to prior TBU achievement levels that are better than the benchmark in place today. Q2 2018 result of 86 percent is below the past three years percentages and does take seasonality into consideration.

As mentioned previously, focus on process improvement and other changes are influencing the positive results at MDOT call centers. We continue to work on a mechanism to capture customer satisfaction for all TBU call centers. Changes to the MVA call center to enhance customer service and performance include consolidating call center operations, expanding hours and implementing a call triage process to reduce call wait times.

PERFORMANCE MEASURE 1.3C

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

Chart 1.3C.1: Level of Satisfaction with Resolving MVA Call Inquiries in Q2 CY2015-CY2018



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 October)

DATA COLLECTION METHODOLOGY:
Data was collected through a survey conducted by the University of Baltimore utilizing a telephone survey.

NATIONAL BENCHMARK:
Best in Nation -87 percent.

PERFORMANCE MEASURE 1.4
Customer Satisfaction with Interactions with MDOT Representatives

Ensuring that every customer contacting MDOT has access to knowledgeable, professional and courteous MDOT representatives improves overall customer experience and builds trust in the organization and its products and services.

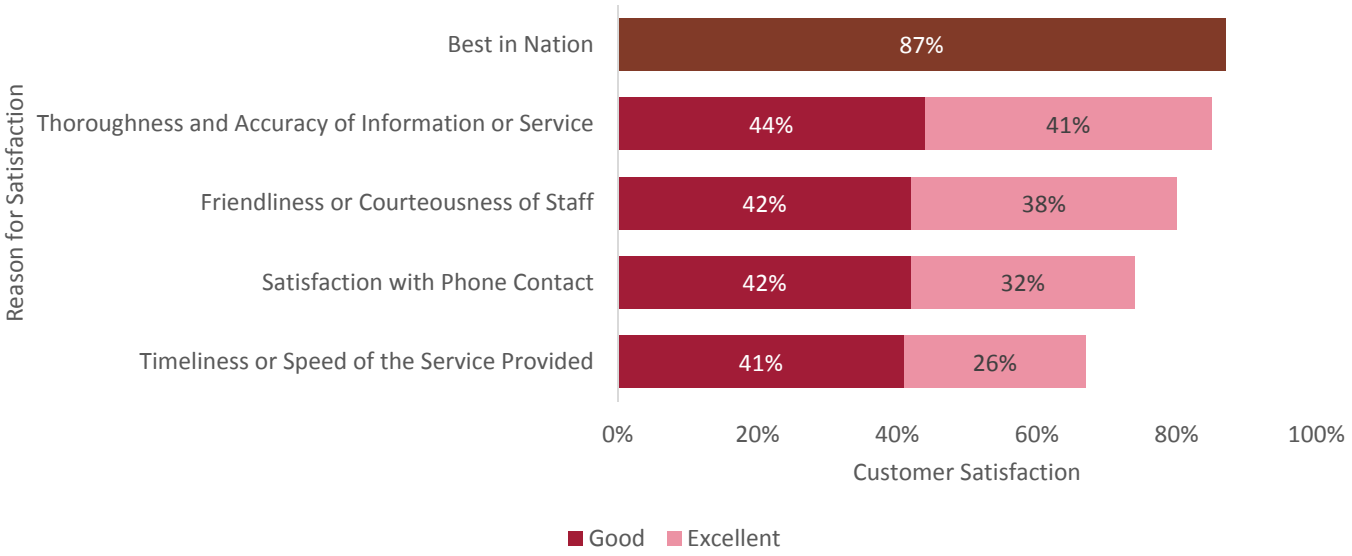
As reported, the Schaefer Center for Public Policy at the University of Baltimore conducted a survey to gauge the satisfaction with and opinions of MDOT services across the State. Chart 1.4.1 shows that 80 percent of respondents believed MDOT personnel provided friendly and courteous service, 85 percent rated the thoroughness and accuracy of information provided by MDOT representatives as good or excellent and 74 percent of respondents who contacted MDOT by phone were satisfied or very satisfied with their experience. The survey, however, revealed the need for improvement in the timeliness in our services with 67 percent of respondents rating the speed of service provided as good or excellent. Best in Nation benchmark is 87 percent.

MDOT continues to implement strategies to improve customer service. Each TBU has a customer service plan that includes mandatory customer service training for all employees, which aligns with the Governor's statewide customer service initiative. The results will be used to enhance training and improve customer service provided by MDOT representatives.

PERFORMANCE MEASURE 1.4

Customer Satisfaction with Interactions with MDOT Representatives

Chart 1.4.1: Customer Satisfaction with MDOT Representatives CY2017



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

PERFORMANCE MEASURE DRIVER:
Lindsey Franey
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. Improving the quality of MDOT websites ensures customers have access to information, can request services and process transactions at their convenience. This further enhances the level of customer service provided by the organization.

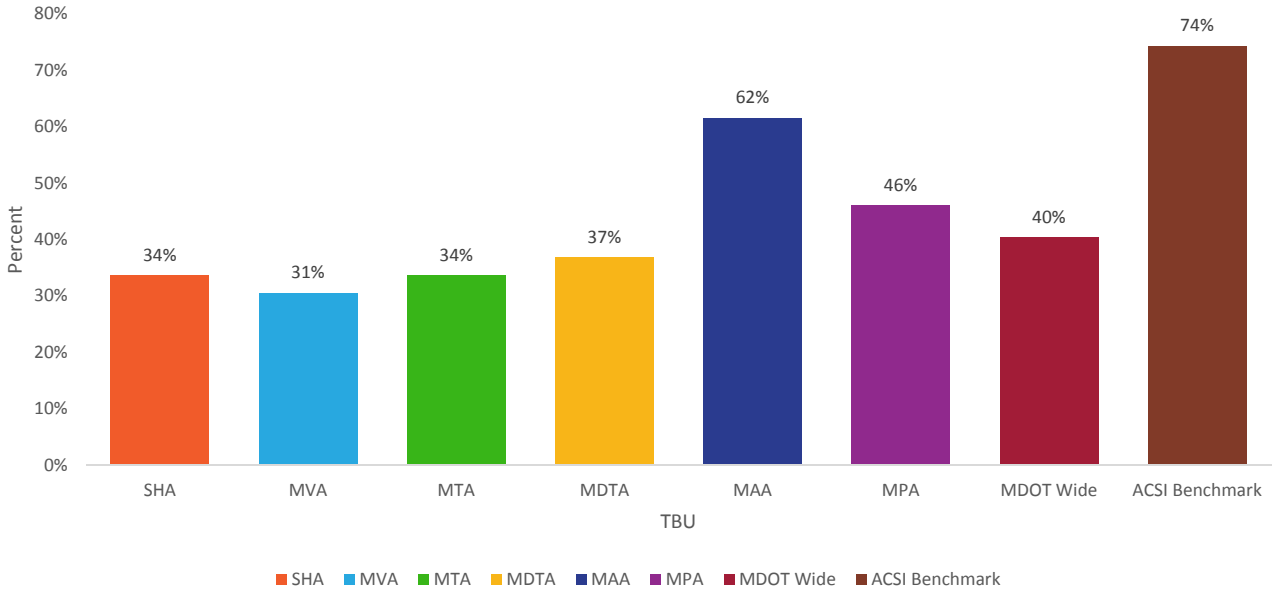
For CY2017, an MDOT survey was placed on each TBU website to gather feedback from customers regarding their satisfaction with MDOT websites. Results from the survey revealed that customer satisfaction levels related to MDOT websites meeting their needs ranged from 30.5 percent to 61.5 percent. Compared to the ACSI benchmark of 74.3 percent favorability, there is opportunity for improvement.

To ensure continuous improvement representatives from each TBU met to discuss survey results and to develop strategies to ensure MDOT websites meet the needs of customers. The working team has reviewed survey data and implemented survey modifications to obtain more precise data and better mirror the ACSI benchmark. CY2017 survey results indicated that MDOT websites were difficult to navigate, not mobile device friendly, and that it was difficult to locate basic information such as contact information or hours of operations. Customers also expressed concerns about technical jargon, difficulty finding job notices and expressed that TBU websites are in general not user friendly. Each TBU is making strides to improve their websites, including adding functionality for mobile devices.

PERFORMANCE MEASURE 1.5A

Percent of Customers Who Felt MDOT Websites Met Their Needs

Chart 1.5A.1: Percent of Customers Who Felt MDOT Websites Met Their Needs CY2017



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

PERFORMANCE MEASURE DRIVER:
Lindsey Franey
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. To improve customer satisfaction, websites must be structured, and information presented, in a way to ensure the ease of navigation for customers to find what they want quickly.

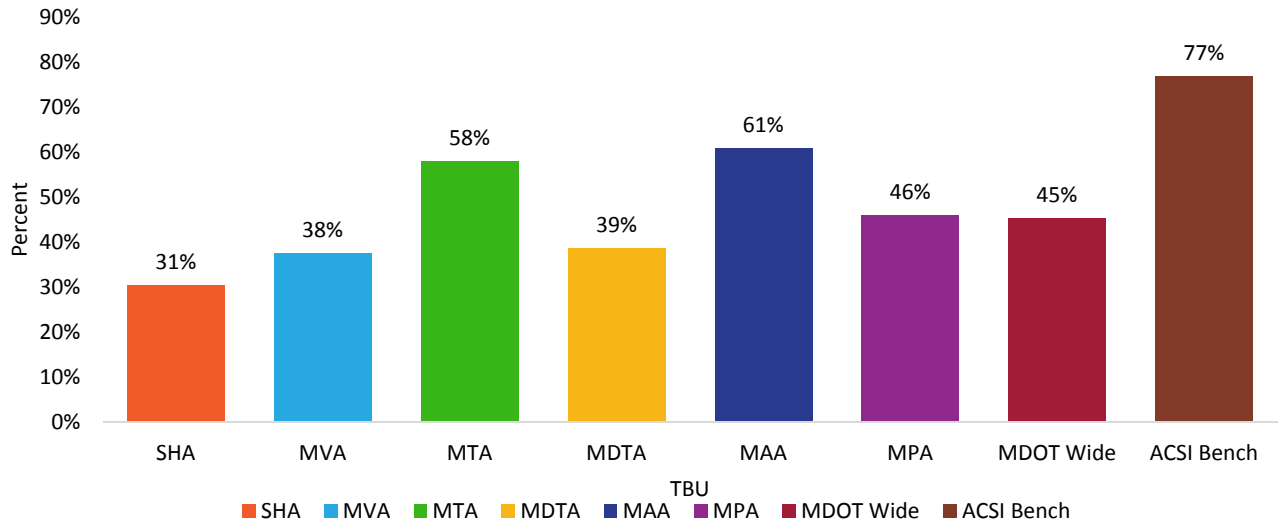
Results of the CY2017 survey reveal that the percent of MDOT customers who felt that it was easy to find the information they were looking for on MDOT websites ranged from 31 percent to 60.9 percent. Compared to the ACSI benchmark of 77 percent, MDOT websites require considerable improvement to ensure customers can easily retrieve desired information.

As mentioned previously, representatives from each TBU are working together to address survey feedback from customers and the identification of strategies to improve our websites, with focus on those issues the survey identified such as the challenges with navigation and finding basic information concerning MDOT operations. Recommendations for improvement from the working team will be shared across TBUs to ensure continuous improvement in MDOT websites.

PERFORMANCE MEASURE 1.5B

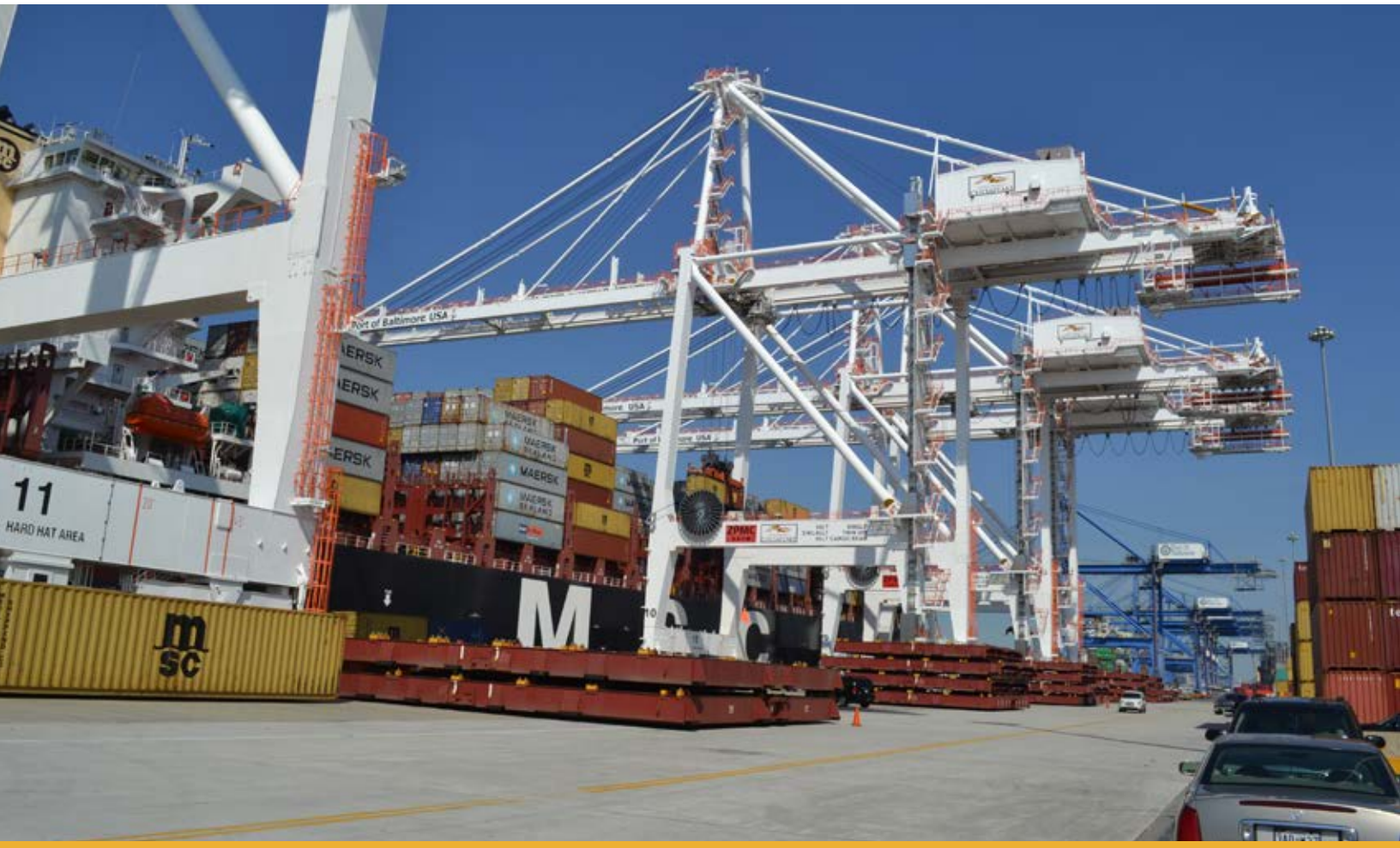
Percent of Customers Who Felt that it was Easy to Find Desired Information on MDOT Websites

Chart 1.5B.1: Percent of Customers Who Felt that it was Easy to Find Desired Information on MDOT Websites CY2017



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:
Laurie Brown
Maryland Transit Administration (MTA)

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

FREQUENCY:
Quarterly

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

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.1
Percent Capital Dollars Spent as Programmed

"What we need to do is paint a vision for customers, promise them deliverables, and go hit at it." — Sanjay Kumar

The purpose of this measure is to show MDOT's customers that MDOT is delivering on the capital projects and funding programmed in the annual Consolidated Transportation Program (CTP). MDOT evaluates this measure by tracking capital funding expenditure rates and monitoring the reasons why expenditure levels are falling short or exceeding CTP programmed amounts.

At the close of FY2018 Q3, MDOT's capital program spending rate was at 59 percent of CTP forecasted funds expended, which is 3 percent lower than this time last year.

PERFORMANCE MEASURE 2.1
Percent Capital Dollars Spent as Programmed

Chart 2.1.1: 6-Year Expenditure Rate Analysis, (Federal & State) FY2013-FY2018

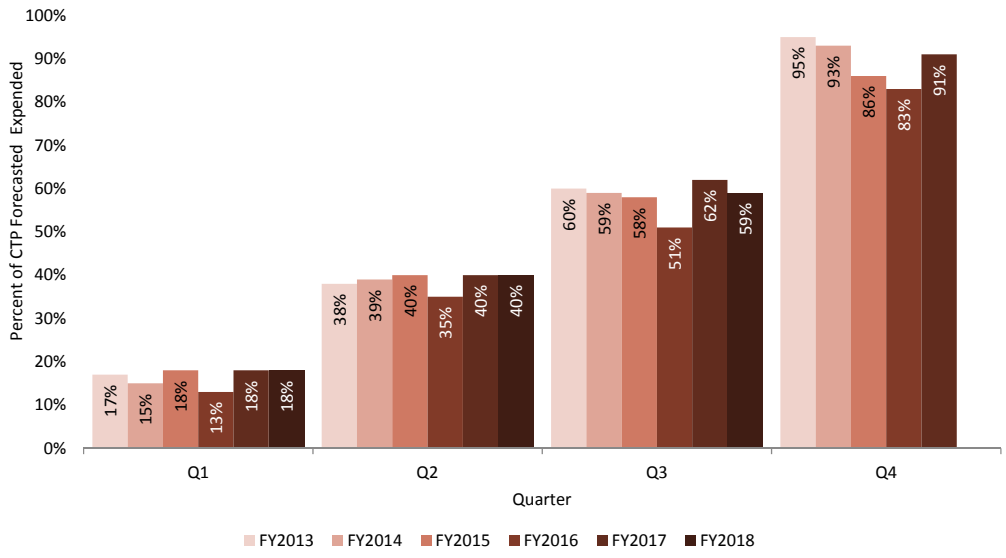
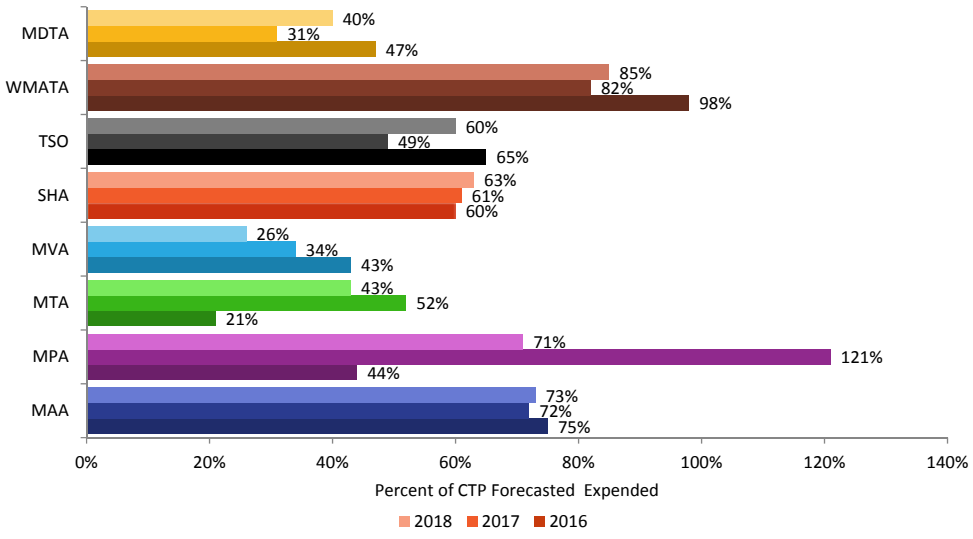


Chart 2.1.2: 3-Year Expenditure Rate By TBU at Q3 Mark, State/Federal/Toll FY2016-FY2018



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

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

PURPOSE OF MEASURE:
To track other sources of dollars utilized to fund capital projects as an indicator of MDOT's success at leveraging its finite resources.

FREQUENCY:
Annually (in October)

DATA COLLECTION METHODOLOGY:
This measure tracks county/ local contributions, private contributions, and federal discretionary funding received each year towards projects.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.2

Percent of Projects Leveraging Other Funding Sources

"When we leverage, we aggregate and organize existing resources to achieve success." — Richie Norton

The purpose of this measure is to track and highlight successes at leveraging Transportation Trust Fund (TTF) dollars with federal, local, and private dollars.

MDOT leveraged $117M in other funding in FY2016. This represents roughly 5 percent of the total FY2017 capital program expended. Most of this funding was leveraged by SHA through private contributions, MTA through Purple Line enabling projects, as well as TSO through the award of discretionary funding for the Maglev project.

Of the $117M in other funding leveraged in FY2016, $51M was received from successfully competing for discretionary federal funding. Another $34M was leveraged from private contributions towards roadway improvements on SHA right-of-way. This is down from $74M in FY2015. In addition, there was another $32M in local/county contributions in the form of funding or enabling projects.

PERFORMANCE MEASURE 2.2

Percent of Projects Leveraging Other Funding Sources

Chart 2.2.1: Other Funding Leveraged by TBU FY2015-FY2016

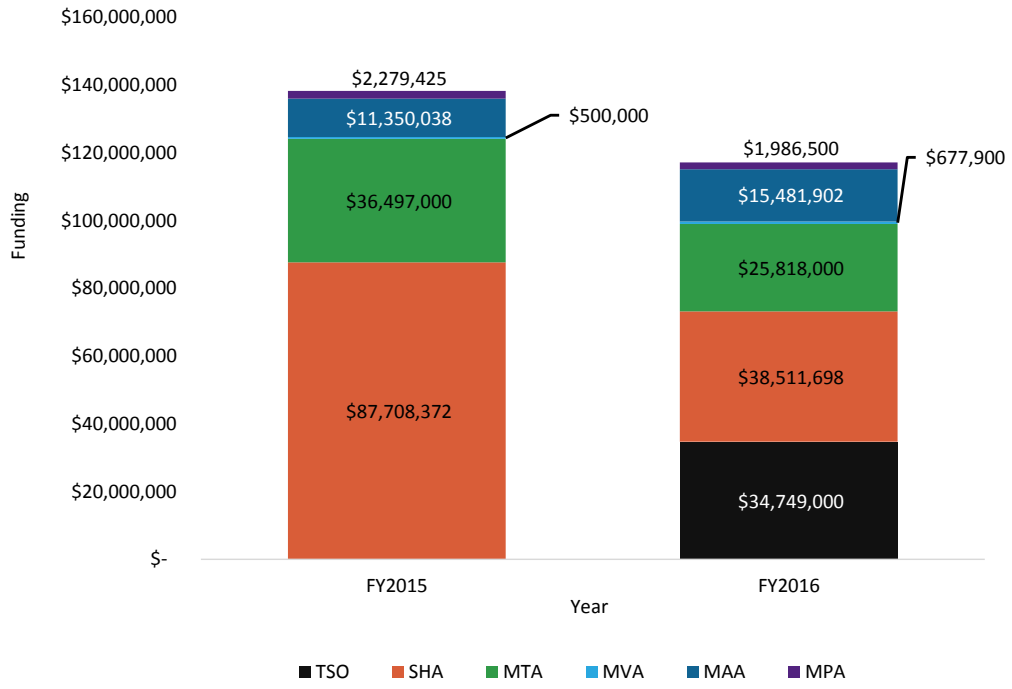
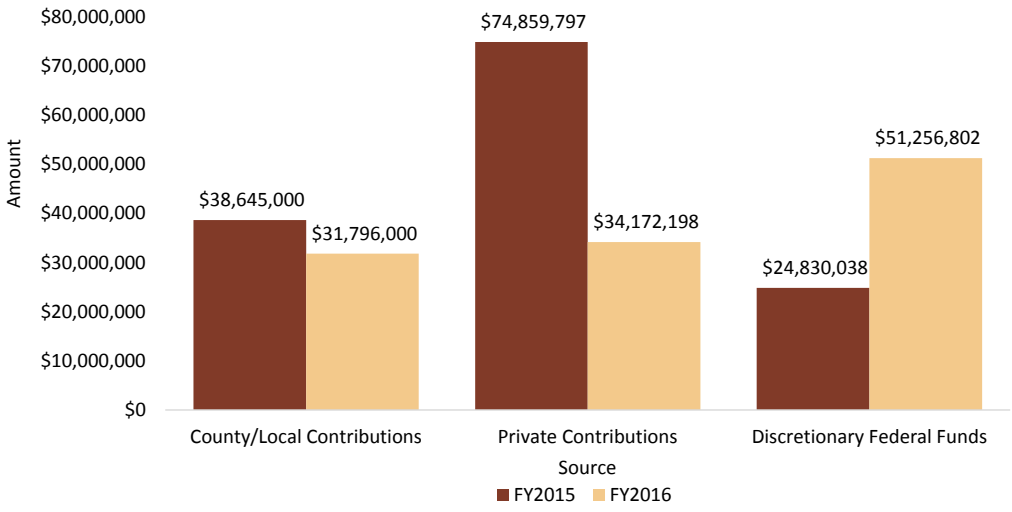


Chart 2.2.2: Amount of Other Funding Leveraged By Source FY2015-FY2016



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

PERFORMANCE MEASURE DRIVER:
Ellery Loomis
Maryland Vehicle Administration (MVA)

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

DATA COLLECTION METHODOLOGY:
MDOT employee feedback survey administered to all employees.

NATIONAL BENCHMARK:
*GALLUP 2015 national engagement percentages:

32 percent engaged employees

50.8 percent not engaged

17.2 percent actively disengaged

PERFORMANCE MEASURE 2.3
Employee Engagement

There are only three measurements that tell you nearly everything you need to know about your organization's overall performance: employee engagement, customer satisfaction, and cash flow." — Jack Welch

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

MDOT completed its first ever department-wide Employee Feedback Survey that eliminated redundant efforts and minimized expense by combining talent and resources, ensured a systematic and consistent approach to employee engagement across all TBUs, and accurately gauged the workforce climate to develop and prioritize new business strategies. The results of the survey were positive, but also pointed to areas of improvement on which to focus strategies.

PERFORMANCE MEASURE 2.3
Employee Engagement

Chart 2.3.1: Responses to "Would You Consider MDOT to Have a Positive Workplace Environment?" CY2017

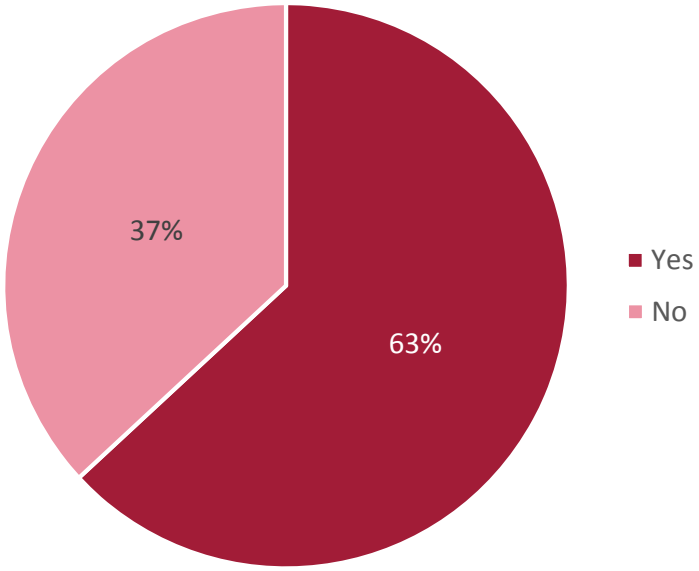
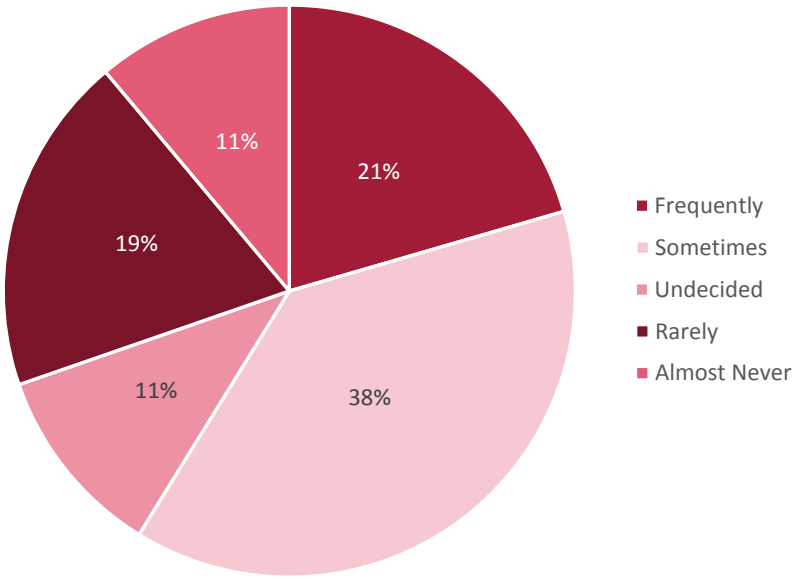


Chart 2.3.2: Responses to "How Often Do You Feel Valued at Work?" CY2017



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

PERFORMANCE MEASURE DRIVER:
Bret A. Dousharm
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

"Having to re-recruit, rehire, and retrain, and wait for a new employee to get up to speed is devastating in terms of cost." – Patrick Lencioni

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 TBU on a quarterly basis. 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 (excluding education, seasonally adjusted) total employee separations.

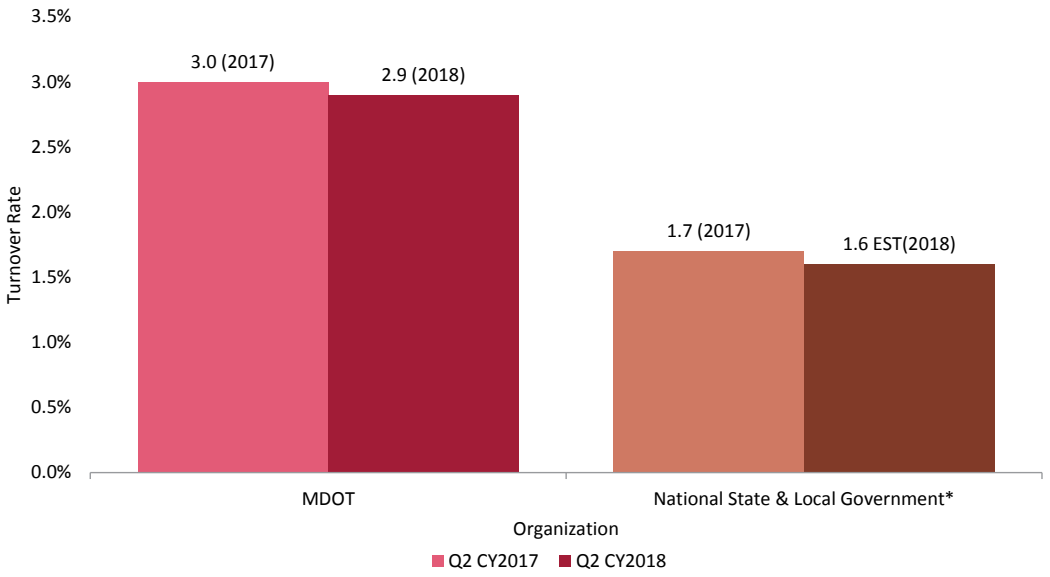
Chart 2.4.1 compares the turnover rate of each TBU for the 2nd Quarter (Q2) of CY2017 and CY2018. Chart 2.4.2 compares the MDOT total turnover rate to the national average for state and local governments. MDOT is over 1.3 percent above the national average.

One notable element that continues to be important in analyzing MDOT turnover is the employee separations that occur within one year from the date of hire. The following chart illustrates the number of newly hired employees that have separated from MDOT in comparison to all other separations occurring in Q2 of CY2018. This data reflects that during Q2 approximately 25.1 percent of all employee separations during this timeframe occurred within the first year of hire. This is a 2.5 percent decrease from Q1 of CY2018.

PERFORMANCE MEASURE 2.4
Employee Turnover Rate

Chart 2.4.1: Employee Turnover Rate by TBU (Total Employees), Seasonal Comparison of Q2 CY2017-CY2018

Chart 2.4.2: Employee Turnover Rate, Seasonal Comparison Q2 CY2017-CY2018



PERFORMANCE MEASURE 2.4
Employee Turnover Rate

Chart 2.4.3: Employee Separations Q2 CY2018

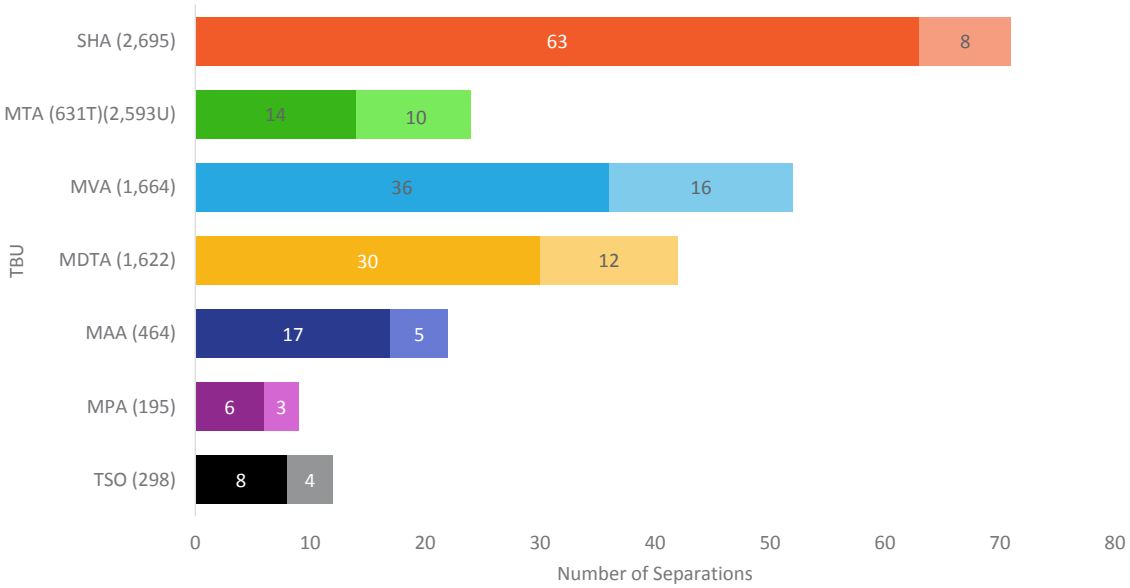
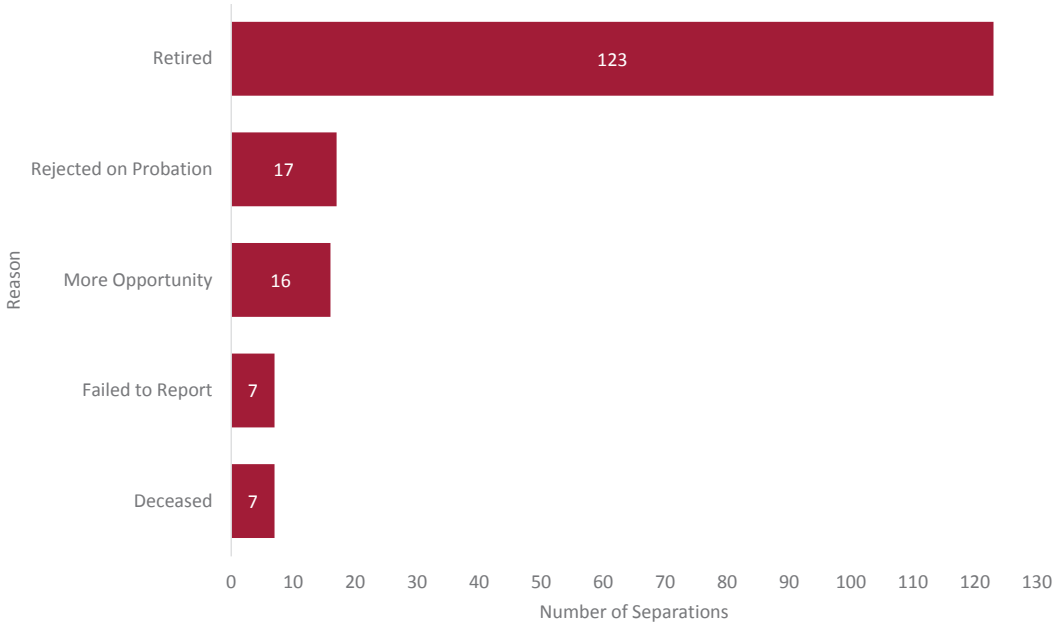


Chart 2.4.4: Top 5 Most Frequent Separation Reasons MDOT-Wide Q2 CY2018



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

PERFORMANCE MEASURE DRIVER:
Krystel Wilson
Maryland Aviation Administration (MAA)

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 TSO HRIS and spreadsheets completed by TBU Human Resource Offices.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.5
Time to Fill Vacancies

"You should take your time making new hires, I'll give you that -- but how much time do you really have? The people you're interviewing have lives." – Liz Ryan

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.

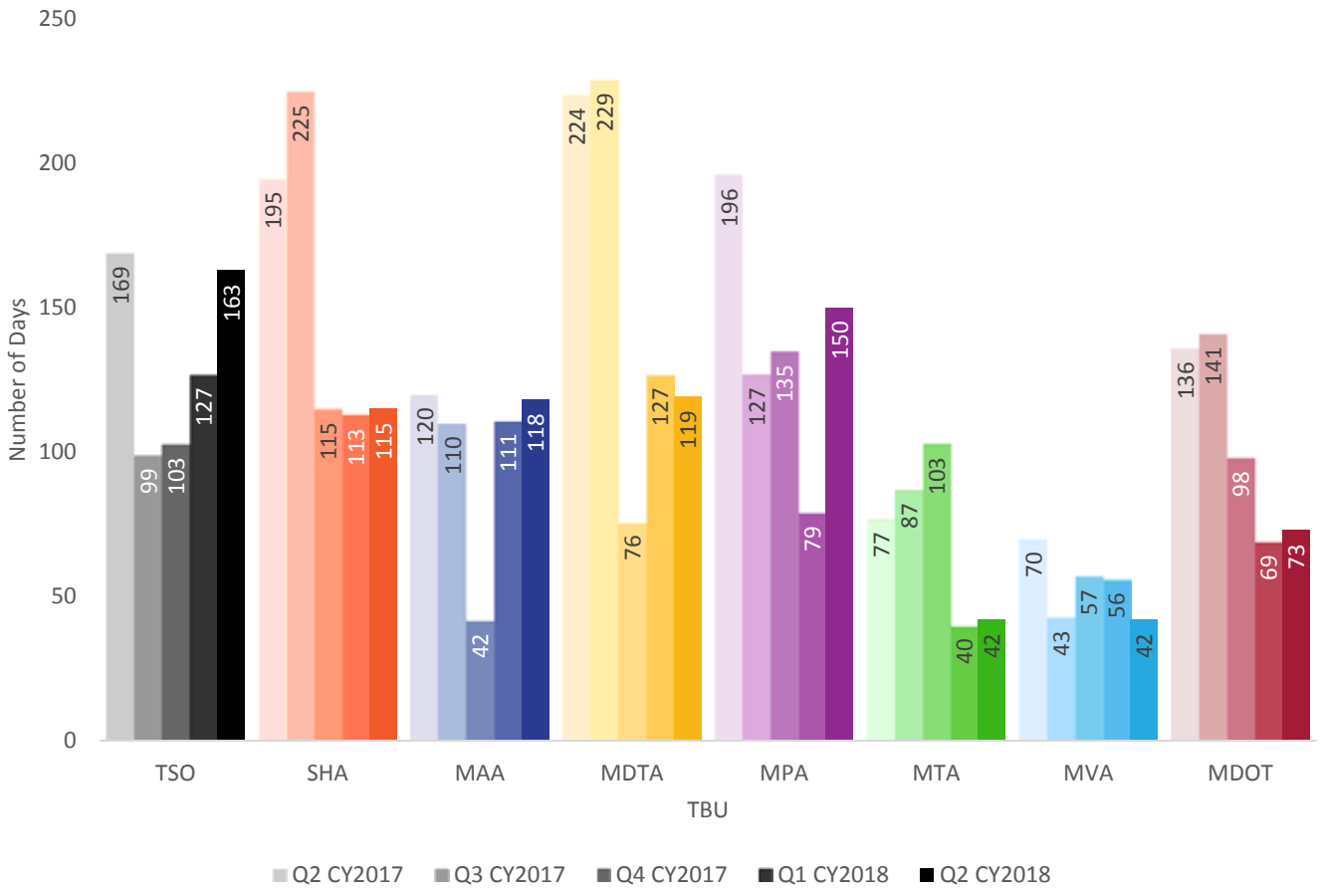
MDOT-wide the median for Q2 CY2018 was 73 days, slightly up from Q1 CY2017's median of 69 days.

Data for Q2 CY2017 and Q2 CY2018 were compared. In Q2 CY2018, 94% vacancies were filled in less than 180 days, compared to 55% vacancies filled in Q2 CY2017 in less than 180 days.

The Agile HR workgroup on recruitment processes has been meeting to map the process across all TBUs and identify ways to streamline/standardize the process and eliminate unnecessary or redundant activities. As this work progresses, it is critical that all parties remain fully engaged in the recruitment process so that we can fill vacancies quickly and with high quality candidates.

PERFORMANCE MEASURE 2.5
Time to Fill Vacancies

Chart 2.5.1: Median Time to Fill Vacancies by TBU CY2017-CY2018



PERFORMANCE MEASURE 2.5
Time to Fill Vacancies

Chart 2.5.2 Median Time to Fill Executive Service Vacancies Q2 CY2018

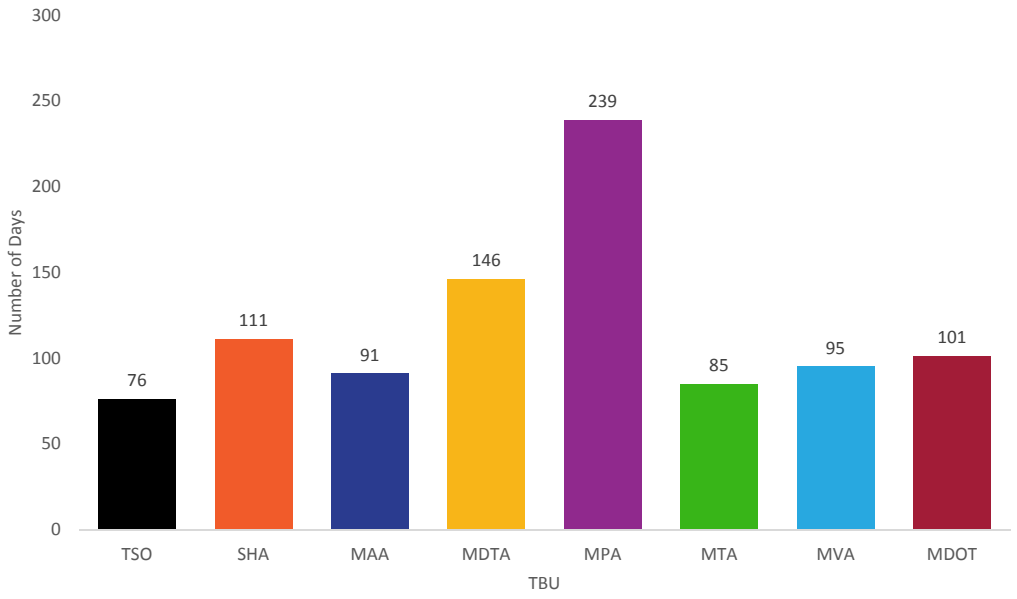
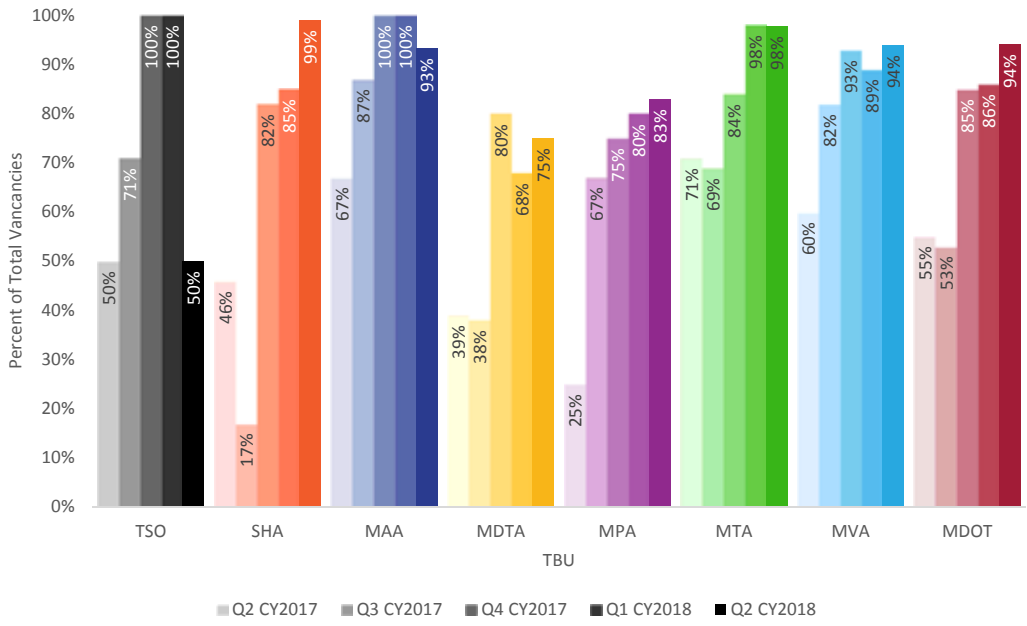
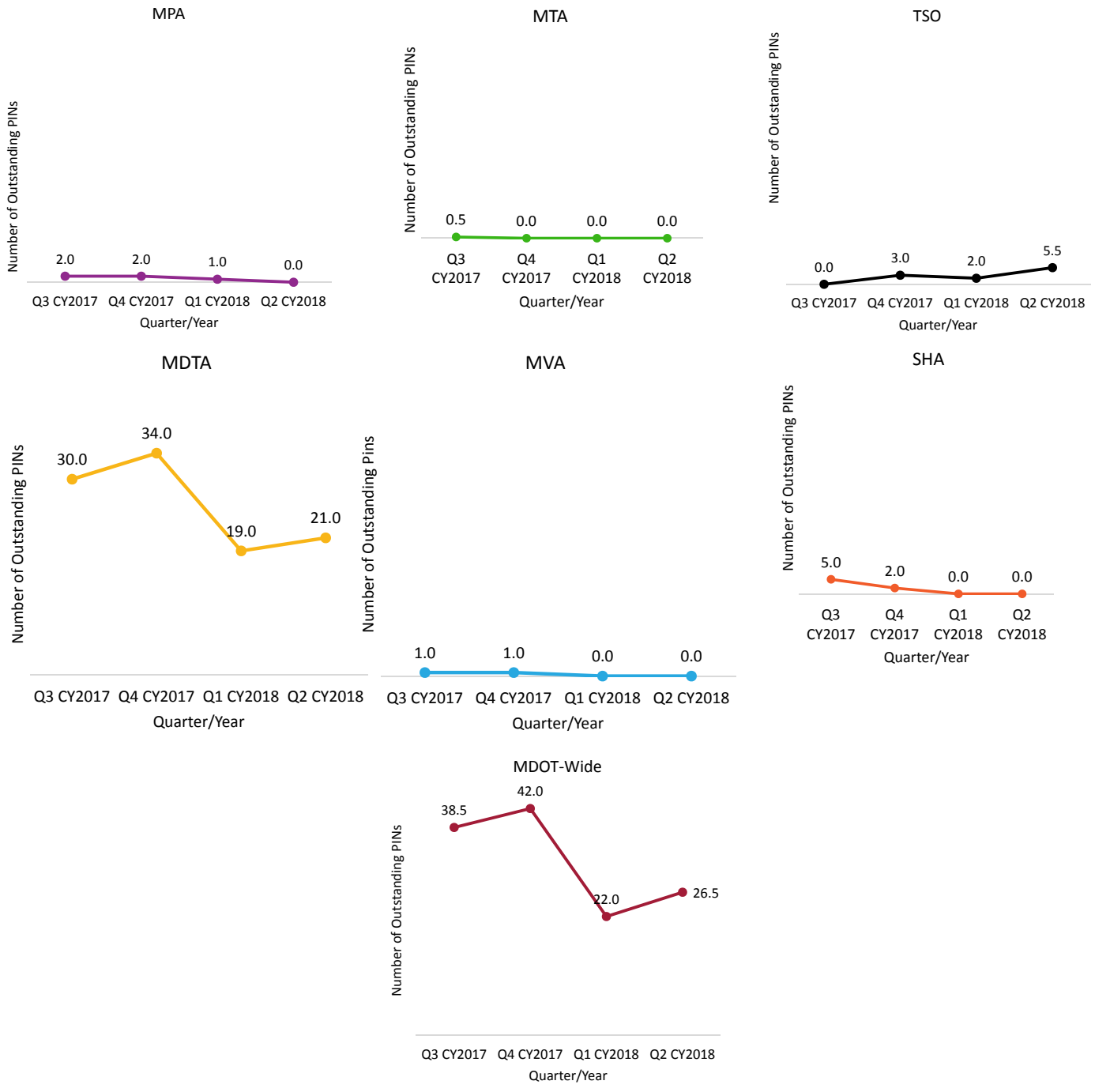


Chart 2.5.3: Percent of Vacancies Filled in Less Than 180 Days



PERFORMANCE MEASURE 2.5
Time to Fill Vacancies

Chart 2.5.4: Outstanding PINs (6 months or older) by TBU Q3 CY2017 – Q2 CY2018



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

PERFORMANCE MEASURE DRIVER:
Dan Ruth
State Highway Administration (SHA)

PURPOSE OF MEASURE:
To measure 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

"You can't control what you can't measure." — Tom Demarco

This measure emphasizes the importance of stewardship and internal controls with respect to fixed assets owned by each of the TBUs. 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 nonsensitive 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.

Table 2.6.1: Physical Inventory by TBU - 2015- 2016

	Sensitive Assets		Non-Sensitive Assets		Total Assets	
	2015	**2016**	**2015**	**2016**	**2015**	**2016**
MAA	98.6%	98.9%	99.0%	96.2%	98.8%	98.8%
MDTA	82.8%	100.0%	-	100.0%	82.8%	100.0%
MPA	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
MTA	77.7%	94.8%	76.7%	94.0%	77.3%	94.4%
MVA*	95.7%	86.9%	93.2%	87.1%	95.6%	86.9%
SHA	-	97.7%	91.4%	98.8%	91.4%	98.5%
TSO	94.9%	94.4%	94.9%	-	94.9%	94.4%
MDOT	**89.9%**	**93.3%**	**87.6%**	**97.2%**	**89.3%**	**94.8%**

**Note: MVA Non-Sensitive Asset percentage for 2015 restated from prior year.*

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

PERFORMANCE MEASURE DRIVER:
Sejal Barot
State Highway Administration (SHA)

Dan Favarulo
The Secretary's Office (TSO)

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

FREQUENCY:
Annually

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

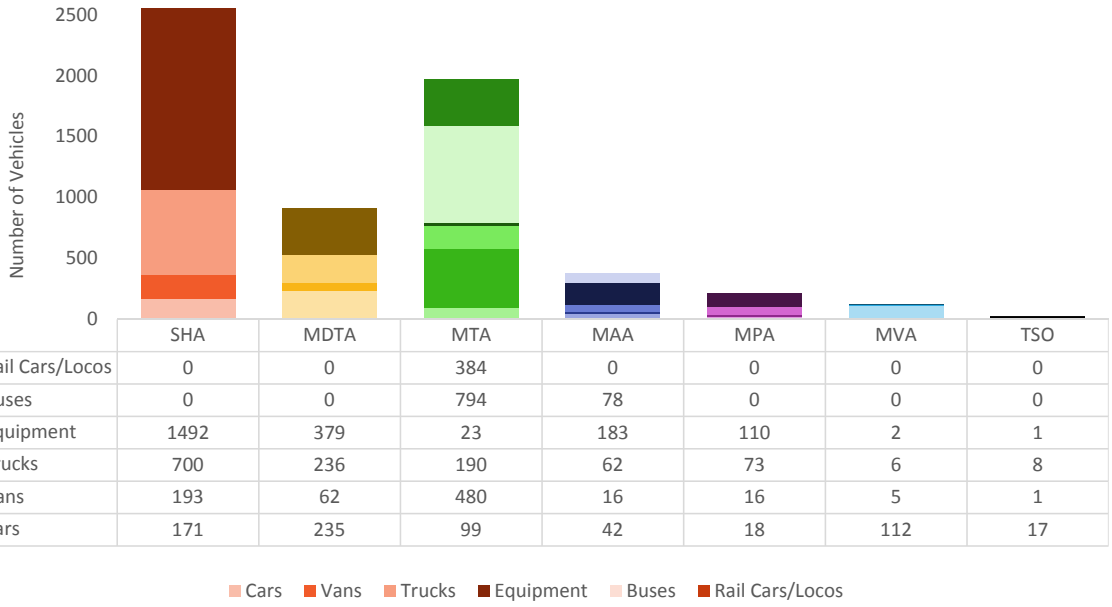
"One of the great responsibilities that I have is to manage my assets wisely, so that they create value." — Alice Walton

Customers deserve to know that MDOT is strategically managing its diverse capital assets. Each TBU maintains its physical assets according to policies that minimize asset life-cycle cost while avoiding negative impacts on the delivery of transportation services. As part of this measure, MDOT has embarked on a Department Asset Management Program to maintain an accurate inventory of assets, monitor the condition and performance of the assets and develop a plan for state of good repair that is grounded in performance-based analytics and decision-making processes.

The Department's Asset Management Program's scope is currently centered around the following critical assets: structures, pavement, facilities, vehicle fleet/equipment, rail, tunnels and major IT Systems. This measure reports on the condition of MDOT's critical assets based on condition assessment protocols the Department has established. All condition protocols are scaled to a Good, Fair and Poor rating for purposes of this reporting requirement.

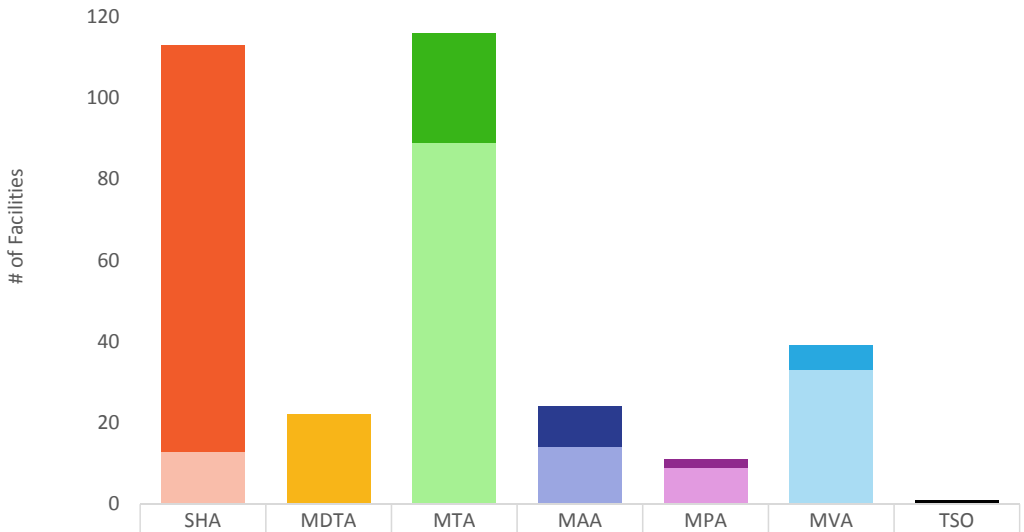
PERFORMANCE MEASURE 2.7
Managing Capital Assets

Chart 2.7A.1: Vehicles/Equipment by TBU CY2017



	SHA	MDTA	MTA	MAA	MPA	MVA	TSO
Rail Cars/Locos	0	0	384	0	0	0	0
Buses	0	0	794	78	0	0	0
Equipment	1492	379	23	183	110	2	1
Trucks	700	236	190	62	73	6	8
Vans	193	62	480	16	16	5	1
Cars	171	235	99	42	18	112	17

Chart 2.7A.2: Number of Facilities by TBU CY2017



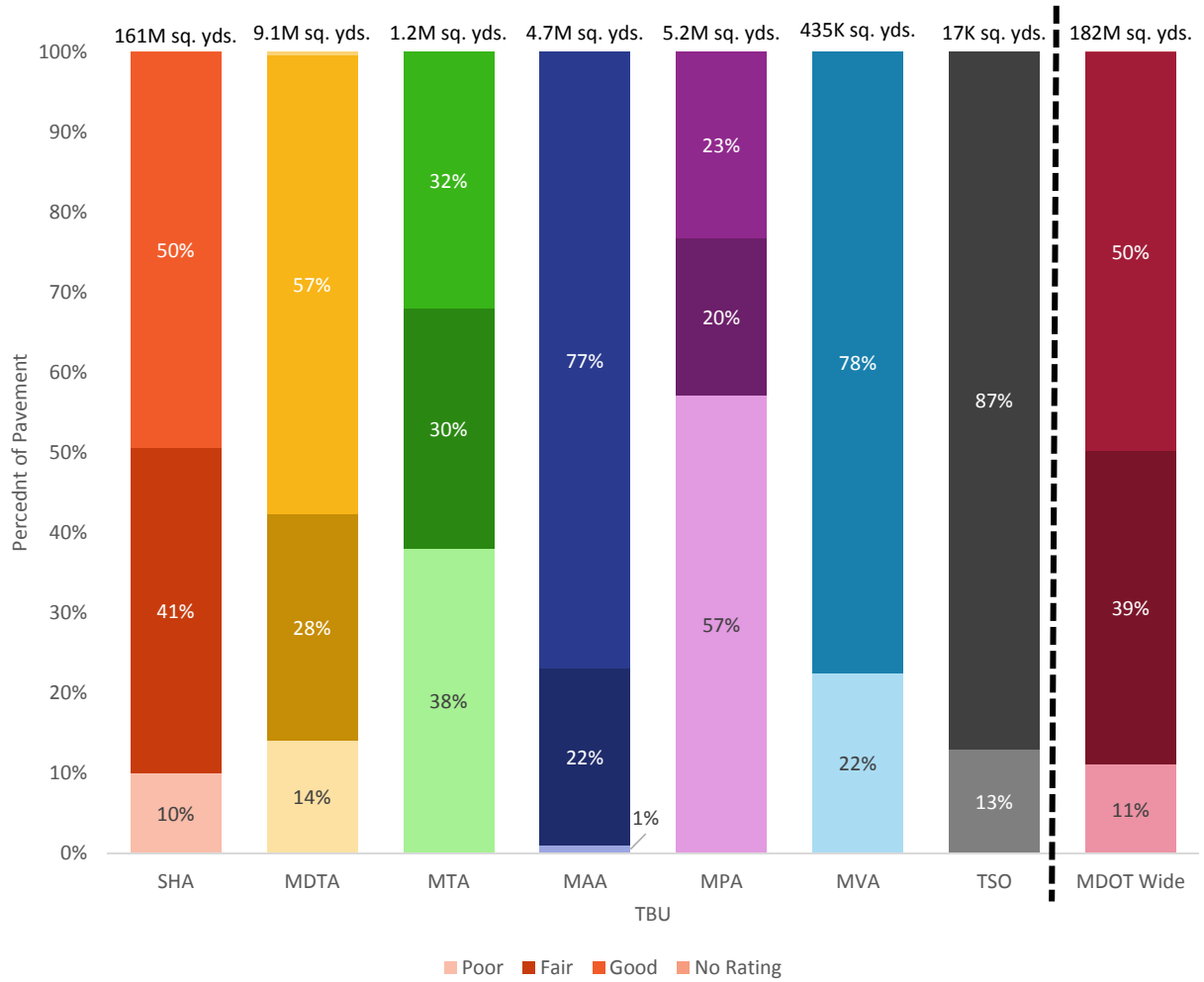
	SHA	MDTA	MTA	MAA	MPA	MVA	TSO
Maintenance/Administrative	100	22	27	10	2	6	1
Customer	13	0	89	14	9	33	0

PERFORMANCE MEASURE 2.7
Managing Capital Assets

MDOT manages 182 million square yards of pavement across its Transportation Business Units. While the majority of pavement is roadways, MDOT also maintains airfield as well as parking/storage pavement at facilities. Overall 89 percent of MDOT's pavement assets are in fair or better condition.

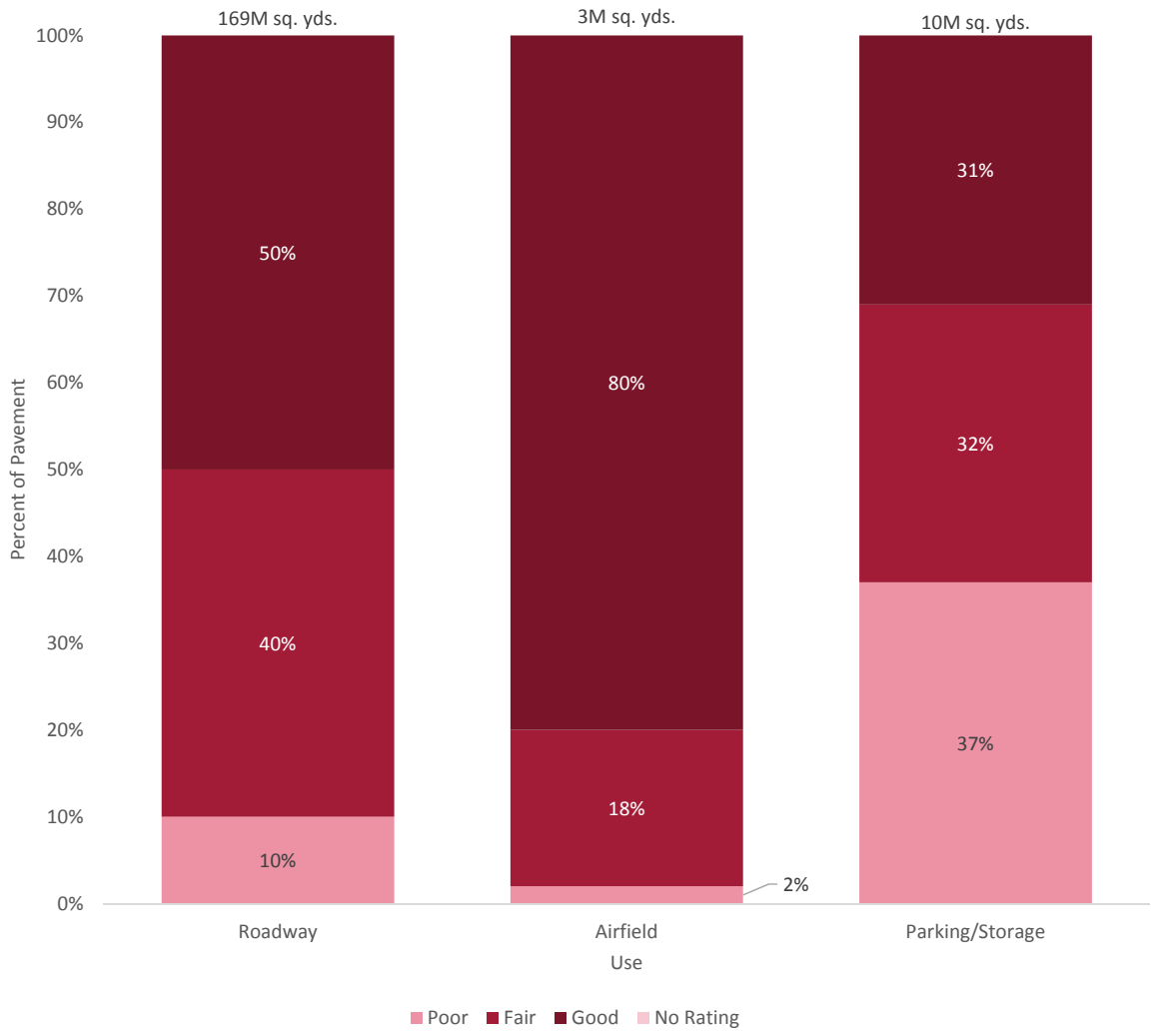
MDOT's 169 million square yards of roadway pavement across TBUs is maintained at 90 percent in fair or better condition. MDOT's 3 million square yards of airfield pavement is maintained at 98 percent in fair or better condition. The remaining 10 million square yards of pavement that MDOT maintains is located at parking lots, storage lots and facilities. Currently, 63 percent of parking/storage pavement is rated in fair or better condition.

Chart 2.7B.1: Pavement Condition by TBU CY2018



PERFORMANCE MEASURE 2.7
Managing Capital Assets

Chart 2.7B.2: Pavement Condition by Use MDOT-Wide CY2018



PERFORMANCE MEASURE 2.7
Managing Capital Assets

MDOT manages 11,254 critical structures across its Transportation Business Units. Critical structure assets include bridges, small structures, sign structures, retaining walls, nosie walls and shipping berths/piers. Currently 4% of MDOT structures are in fair or better condition.

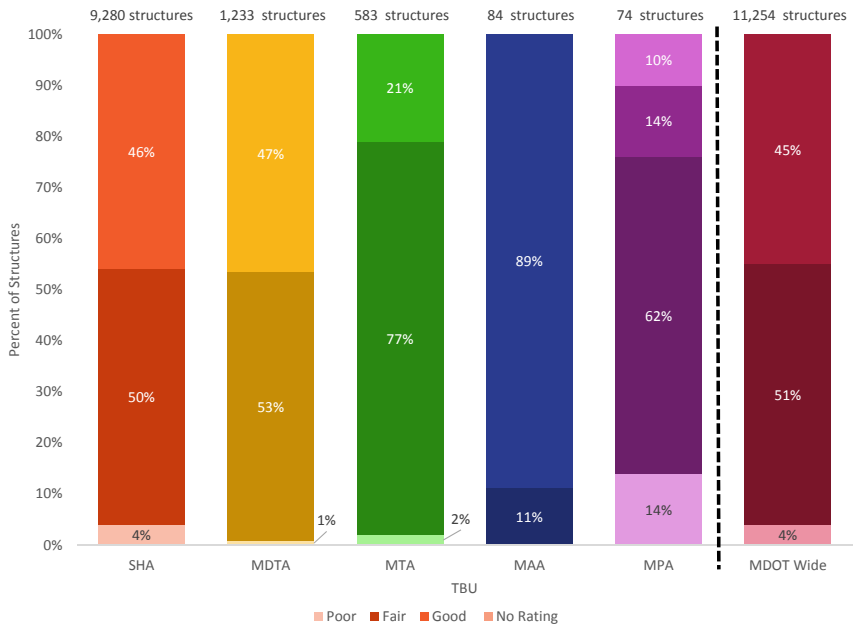
Bridge structures maintained across the Department are in 98% fair or better condition. According to FHWA, 95 percent of the nation's bridges are maintained at 95% fair or better condition, making MDOT 3% better than the national rating. MDOT maintains 3,445 small structures that range from culverts over 3 feet to bridges less than 20 feet. Currently 97% of MDOT's small structures are in fair or better condition.

MDOT maintains roughly 3,040 sign structures, which are defined here as overhead or cantilever sign structures that extend over roadways. Overall 94% of MDOT's sign structures are in fair or better condition.

MDOT has 670,702 feet of noise walls and 421,640 feet of retaining walls that both maintained across the Department at 98% fair or better condition.

In addition, MPA maintains shipping berth structures that are critical to operations. Currently, 86% of berth/pier structures are in fair or better condition.

Chart 2.7C.1: Structure Condition Ratings by TBU CY2018



PERFORMANCE MEASURE 2.7
Managing Capital Assets

Chart 2.7C.2: Large Bridge Condition Ratings by TBU CY2018

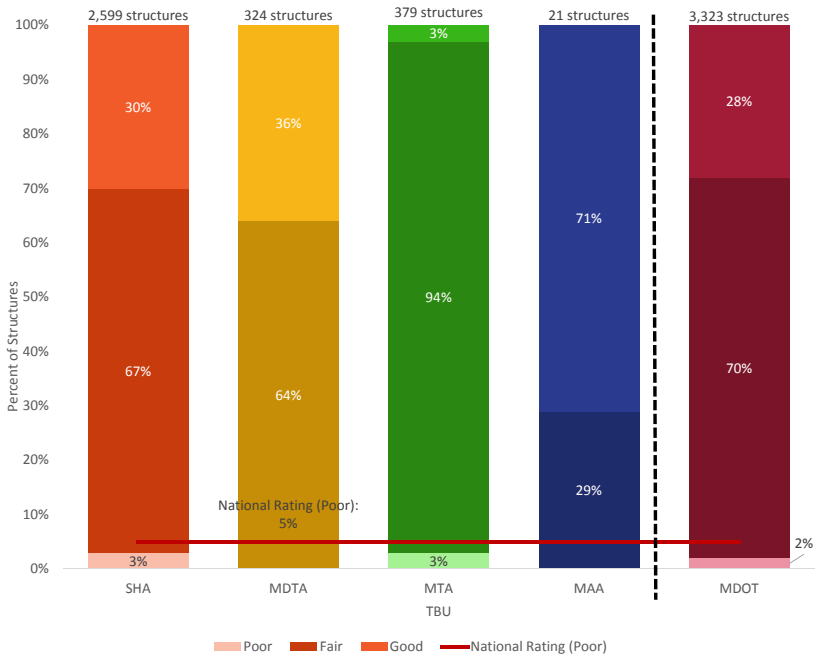
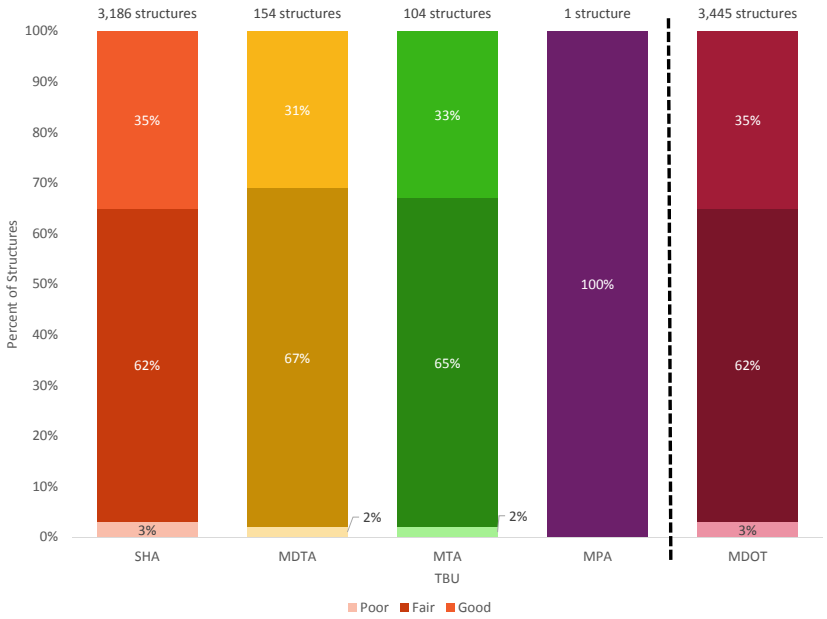


Chart 2.7C.3: Small Structure Condition Ratings by TBU CY2018



PERFORMANCE MEASURE 2.7
Managing Capital Assets

Chart 2.7C.4: Sign Structure Condition Ratings by TBU CY2018

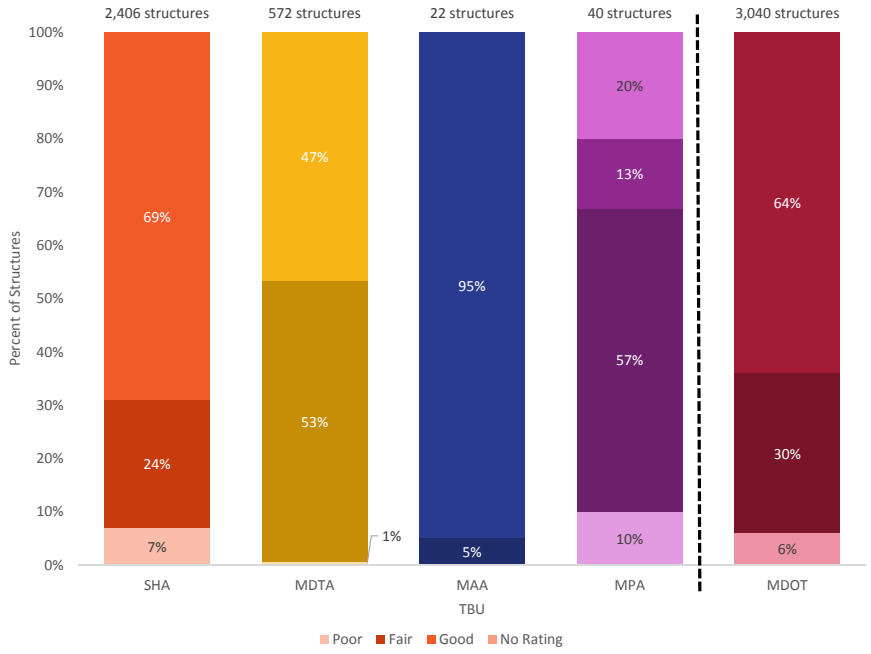
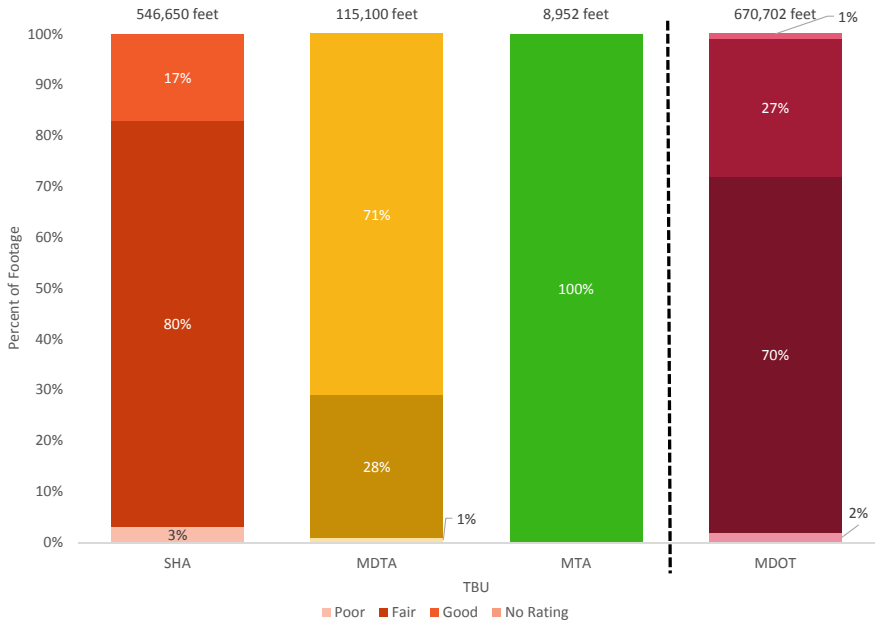
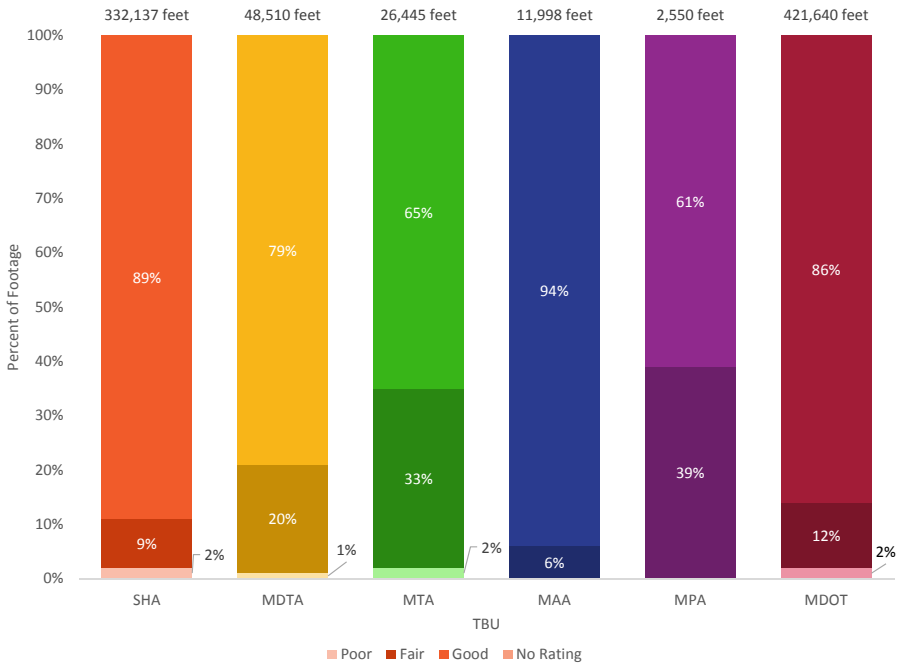


Chart 2.7C.5: Noise Wall Condition Ratings by TBU CY2018



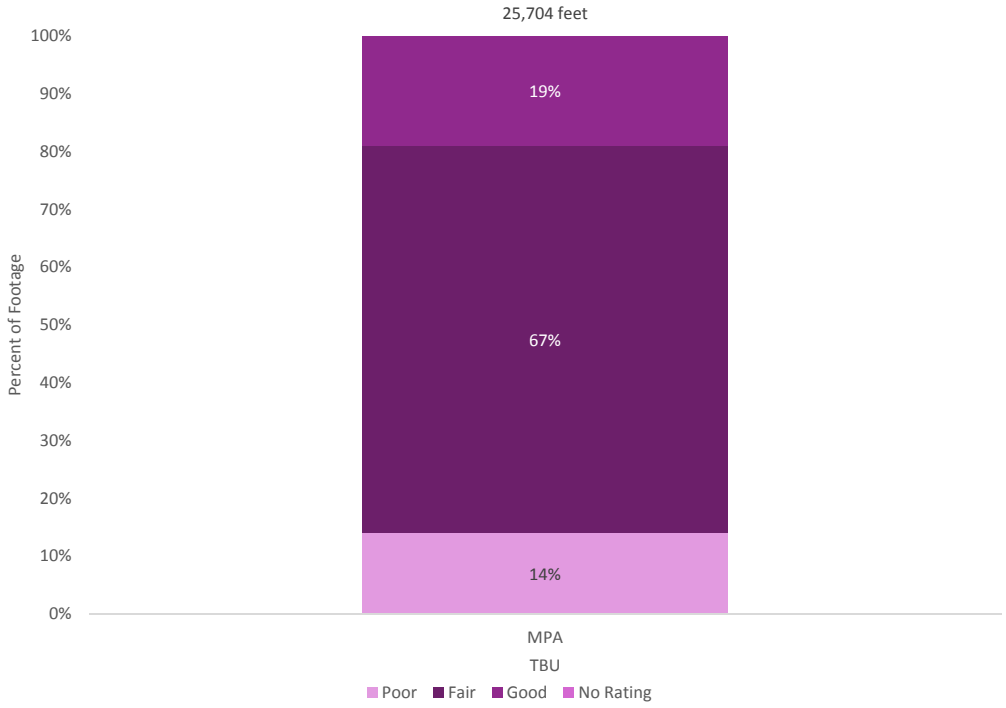
PERFORMANCE MEASURE 2.7
Managing Capital Assets

Chart 2.7C.6: Retaining Wall Condition Ratings by TBU CY2018



PERFORMANCE MEASURE 2.7
Managing Capital Assets

Chart 2.7C.7: Berth/Pier Condition Ratings CY2018



PERFORMANCE MEASURE 2.7
Managing Capital Assets

Chart 2.7D.1: Percent (and Number) of Structurally Deficient Bridges CY2017

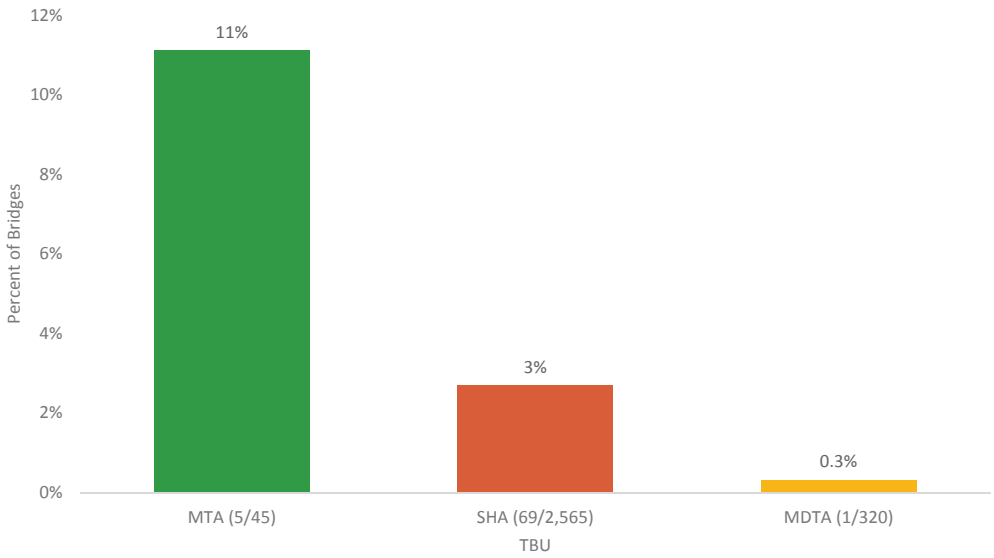
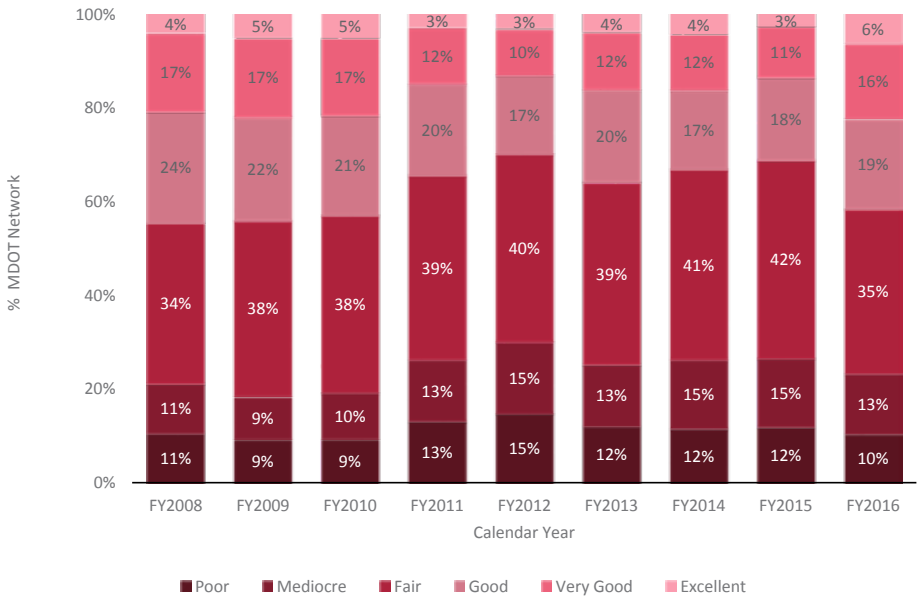


Chart 2.7E.1: Condition of MDOT Road Network CY2008-CY2016



PERFORMANCE MEASURE 2.7
Managing Capital Assets

Chart 2.7E.2: Satisfaction with Smoothness of State Roads CY2017

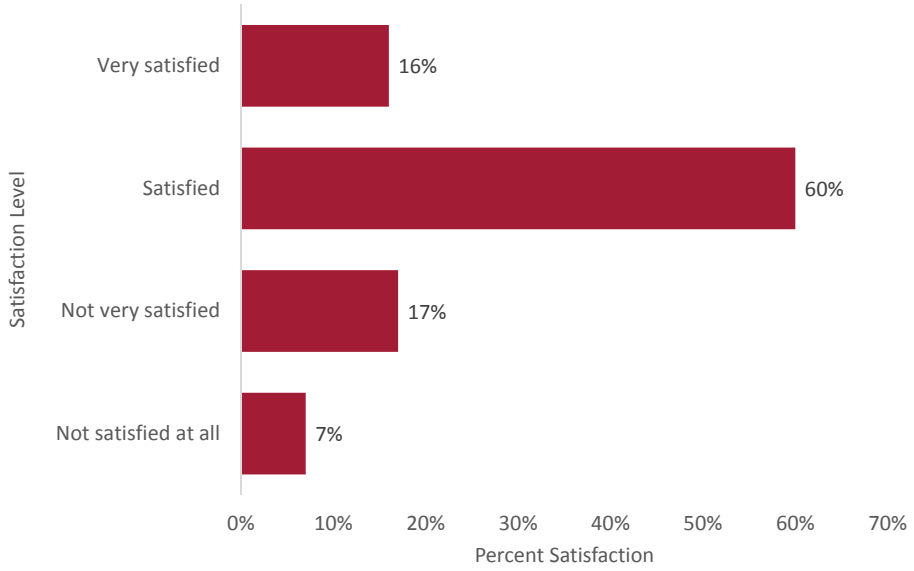
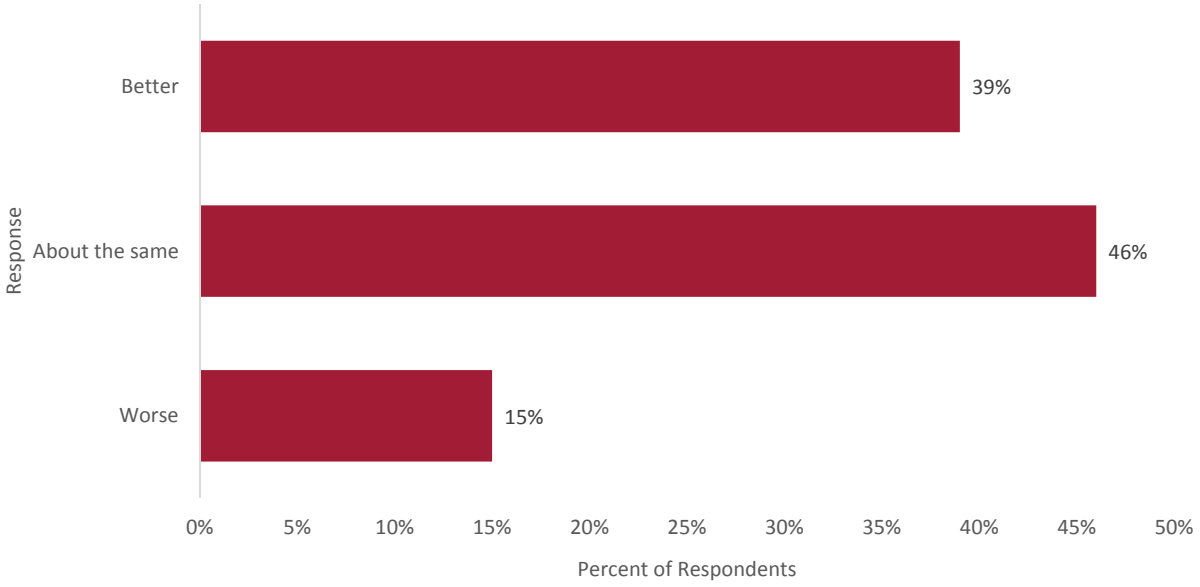


Chart 2.7E.3: Perception of Maryland's Roads Compared to Other States CY2017



PERFORMANCE MEASURE 2.7
Managing Capital Assets

Chart 2.7F.1: Rating of Baltimore Metro Rail in "Good" Condition (>2.5) FY2015-FY2016

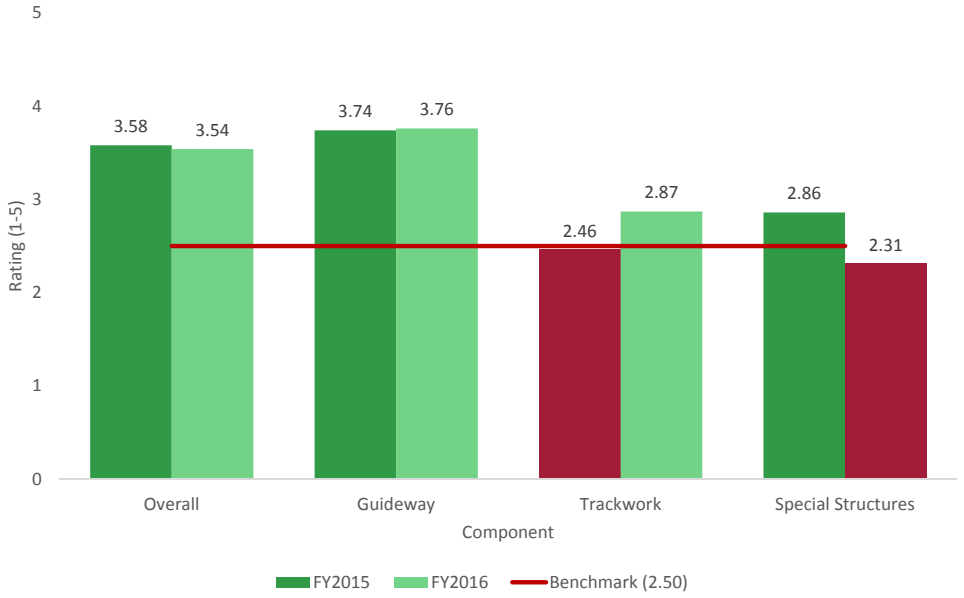
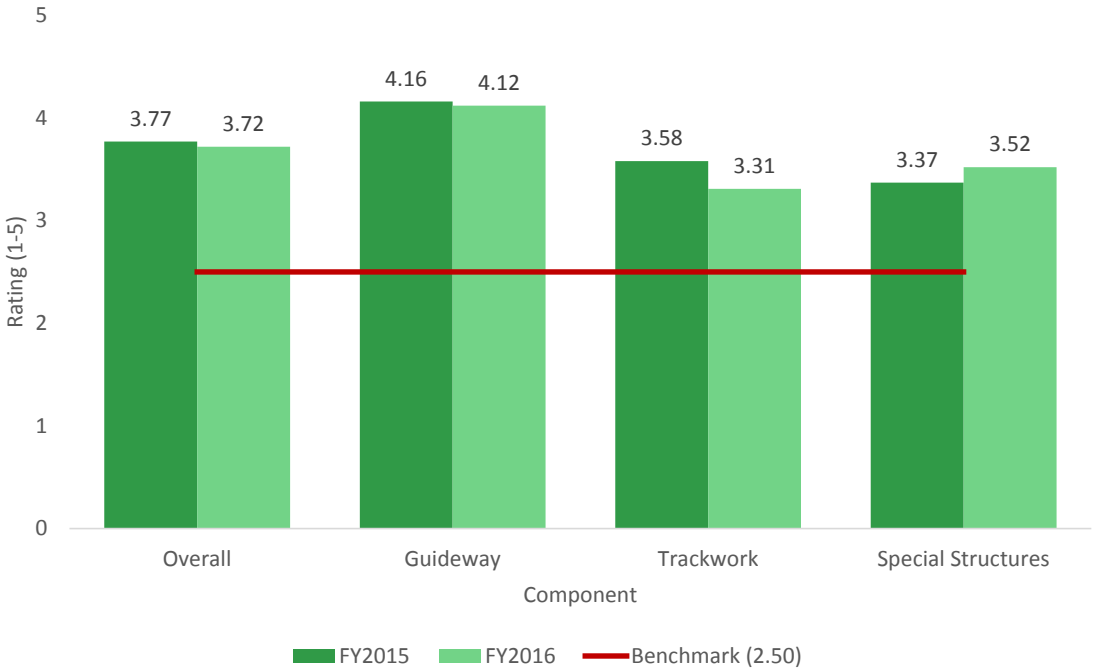


Chart 2.7F.2: Rating of Light Rail in "Good" Condition (>2.5) FY2015-FY2016



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

PERFORMANCE MEASURE DRIVER:
Jessica Mettle
Maryland Transportation Authority (MDTA)

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 Blanket Purchase Orders (BPO) for the fiscal year.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.8

Percent of Procurement on Time and on Budget

"Price is what you pay. Value is what you get."— Warren Buffett

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, and the focus must remain on identifying those contracts with concerns. The process improvement team made recommendations to Executive Staff which are now currently being implemented, specifically the creation of Office of Project Quality Assurance.

PERFORMANCE MEASURE 2.8

Percent of Procurement on Time and on Budget

Chart 2.8.1: Percent of Blanket Purchase Orders (BPO) Expired FY2014-FY2017

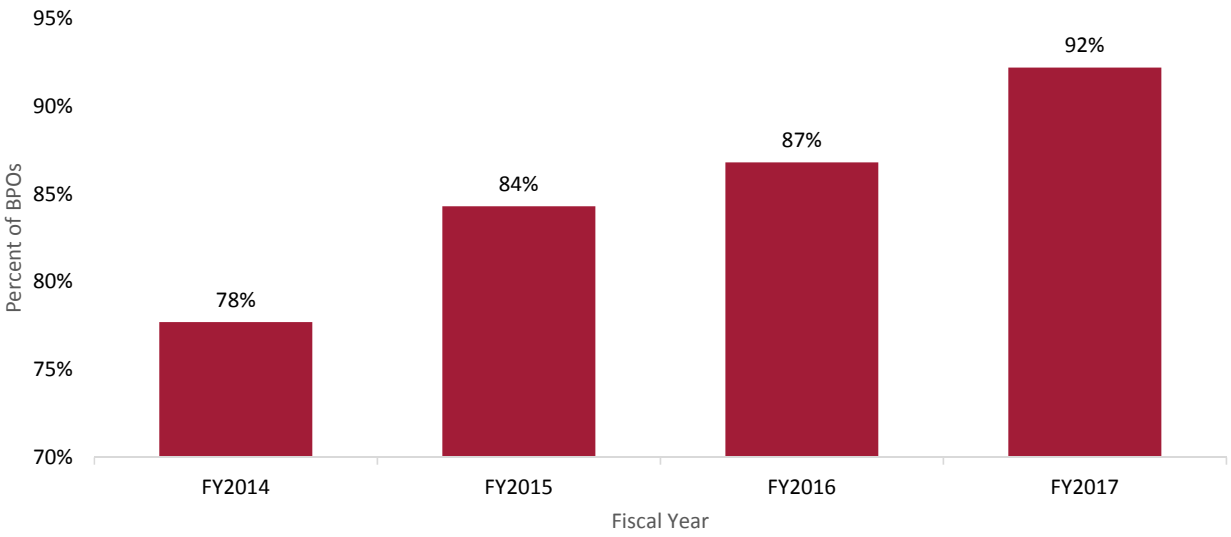
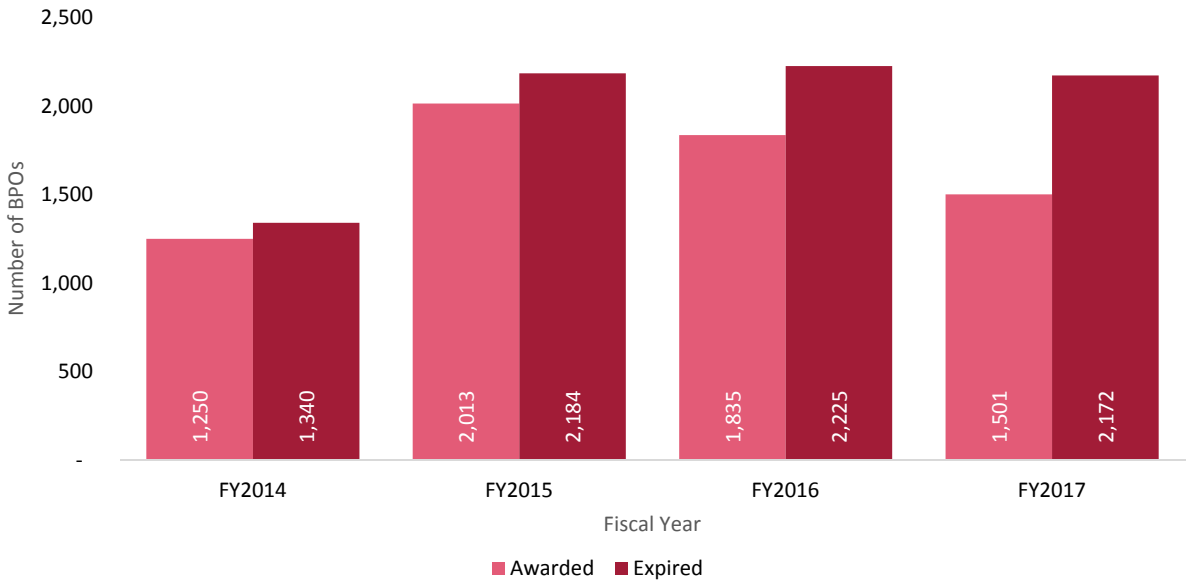


Chart 2.8.2: Number of Blanket Purchase Orders (BPOs) Awarded and Expired MDOT-Wide FY2014-FY2017



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

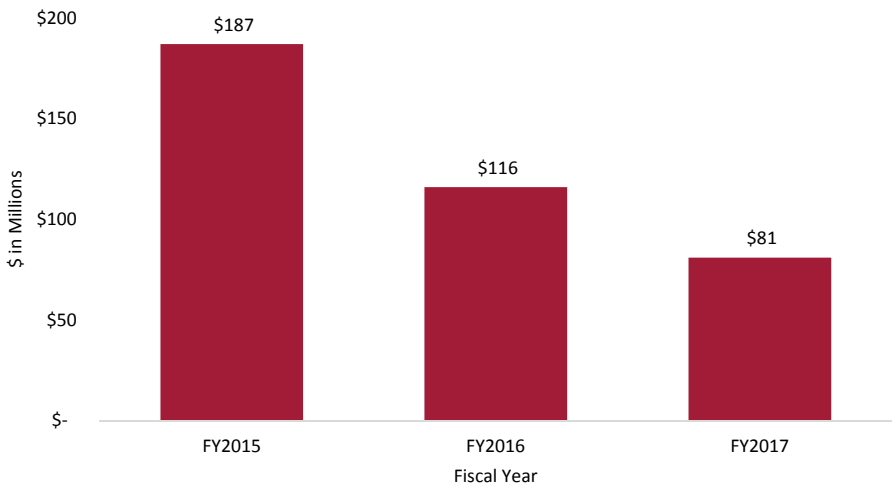
PERFORMANCE MEASURE 2.9
Percent and Value of Unanticipated Contract Modifications

"The comptroller and I — it's no secret — complain every single meeting about retroactive contracts and extension requests in order to complete new procurements." — Governor Larry Hogan

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 TBU 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.

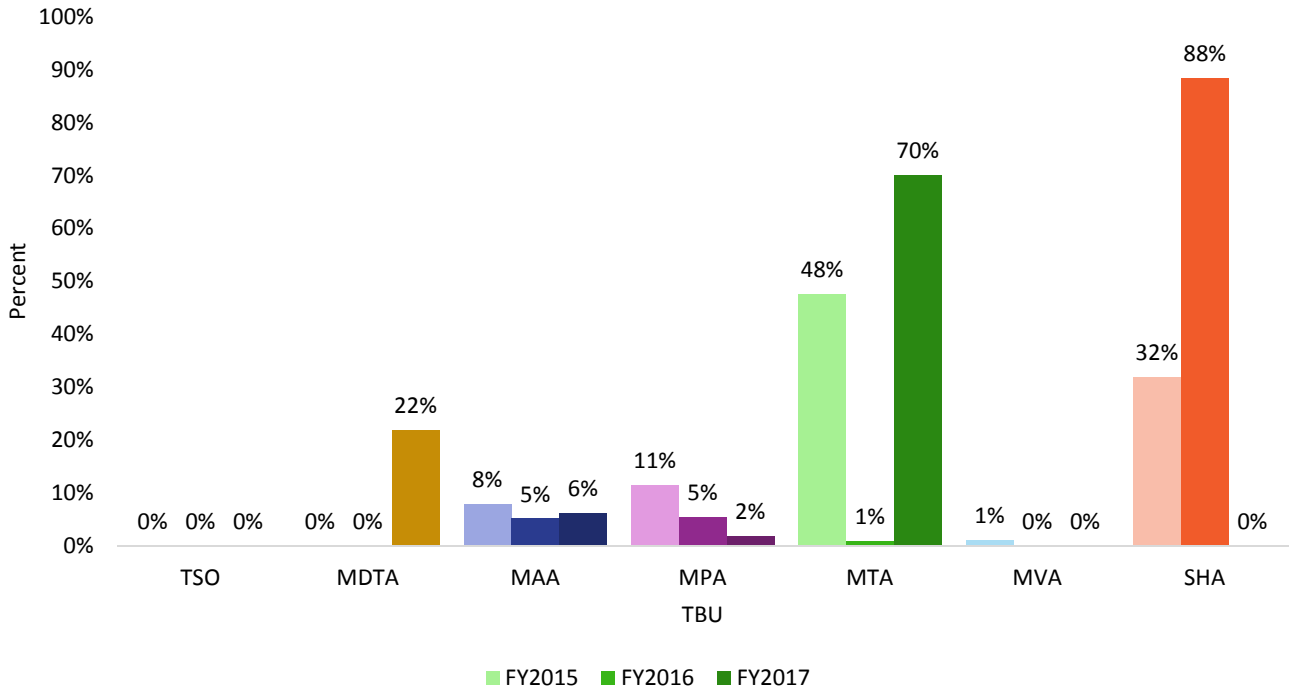
Chart 2.9.1: Value of Unanticipated Contract Modifications in Millions of Dollars MDOTWide FY2015-FY2017



PERFORMANCE MEASURE 2.9

Percent and Value of Unanticipated Contract Modifications

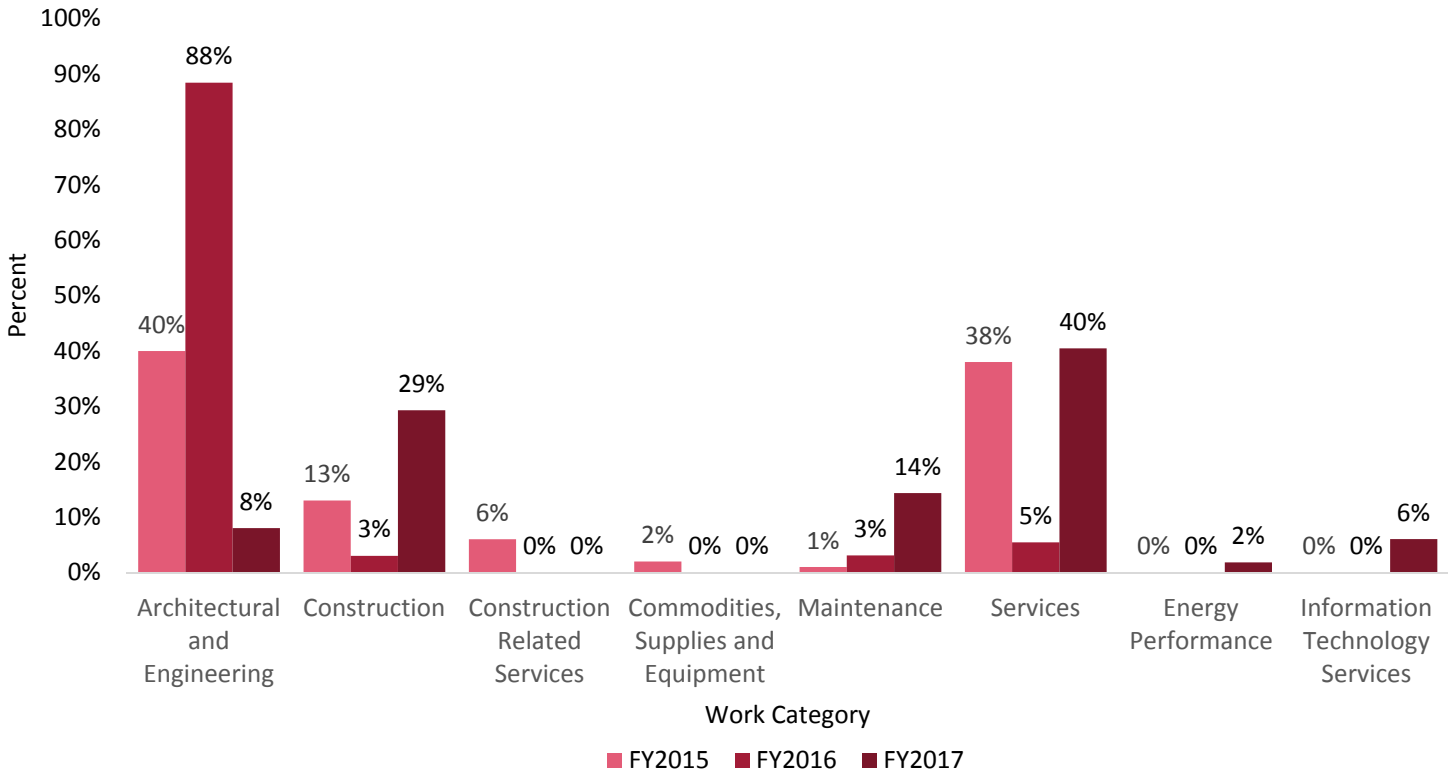
Chart 2.9.2: Percent of Unanticipated Contract Modification Dollars Spent by TBU FY2015 - FY2017



PERFORMANCE MEASURE 2.9

Percent and Value of Unanticipated Contract Modifications

Chart 2.9.3: Percent of Unanticipated Contract Modification Dollars Spent by Category of Work FY2015 - FY2017



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

PERFORMANCE MEASURE DRIVER:
Scott Schell
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 first quarter of FY2018. 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

"Competition is the keen cutting edge of business, always shaving away at costs." — Henry Ford

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, in most cases as the number of bids increase, procurement contracts come in at or below cost estimate. The procurements that increased in cost had a low number of bids.

The data trend revealed the need to develop an MDOT-wide initiative to track cost estimates on procurement contracts and to evaluate the process for determining estimates.

In Q4 of 2017, an MDOT wide project improvement team forwarded to the Secretary recommendations for many standardized process and procedures that are proposed to provide more consistency throughout all MDOT TBU's. Recommendations include development of a standardized (ICE) price estimate procedure, a more comprehensive centralized database for contract information.

PERFORMANCE MEASURE 2.10

Relationship Between Procurement Competition and Cost

Chart 2.10.1: Actual Versus Estimates by TBU Q1 CY2018

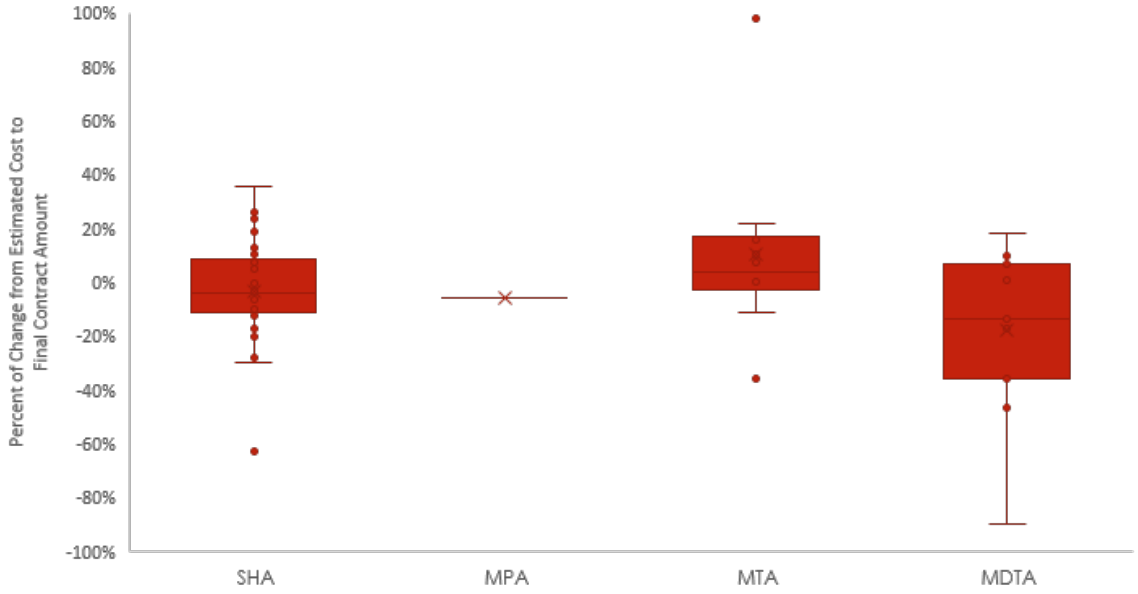
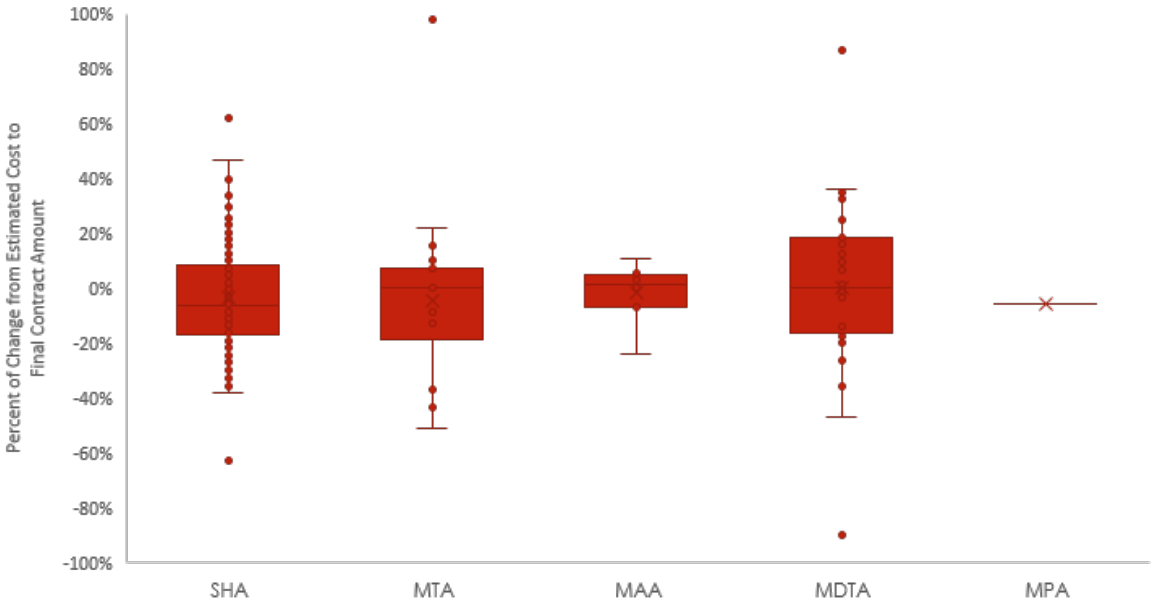


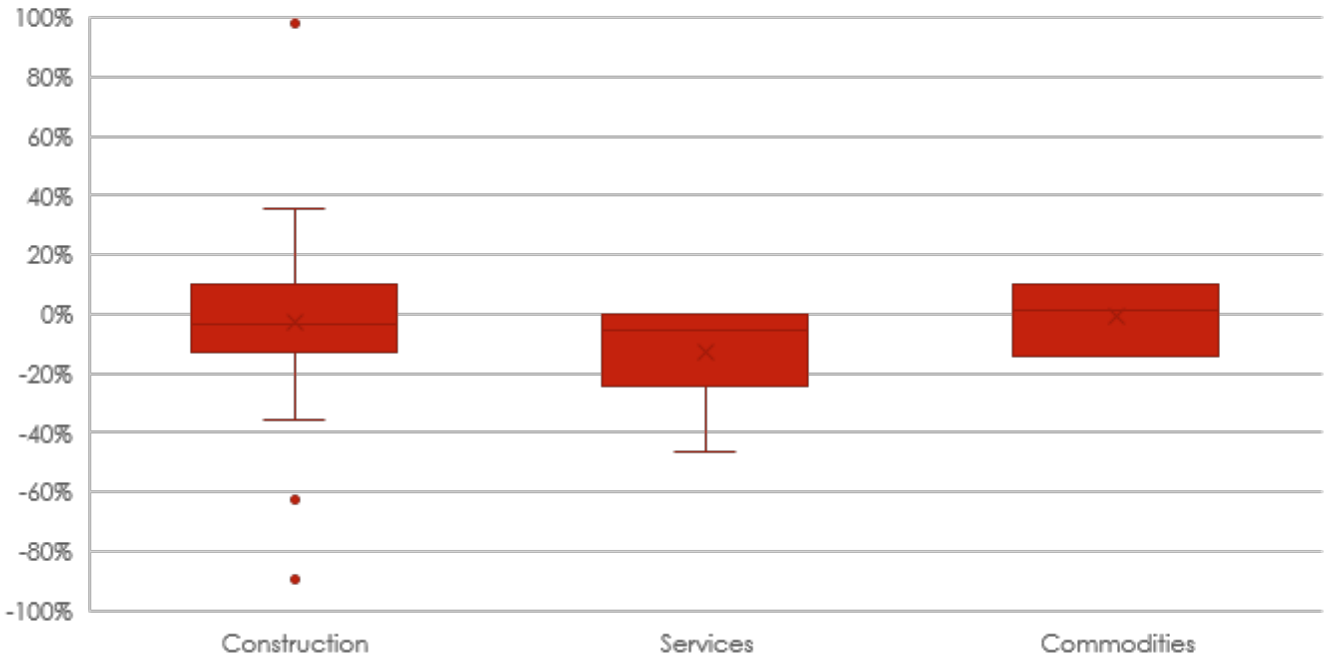
Chart 2.10.2: Actual Versus Estimates by TBU from Q2 CY2017 - Q1 CY2018



PERFORMANCE MEASURE 2.10

Relationship Between Procurement Competition and Cost

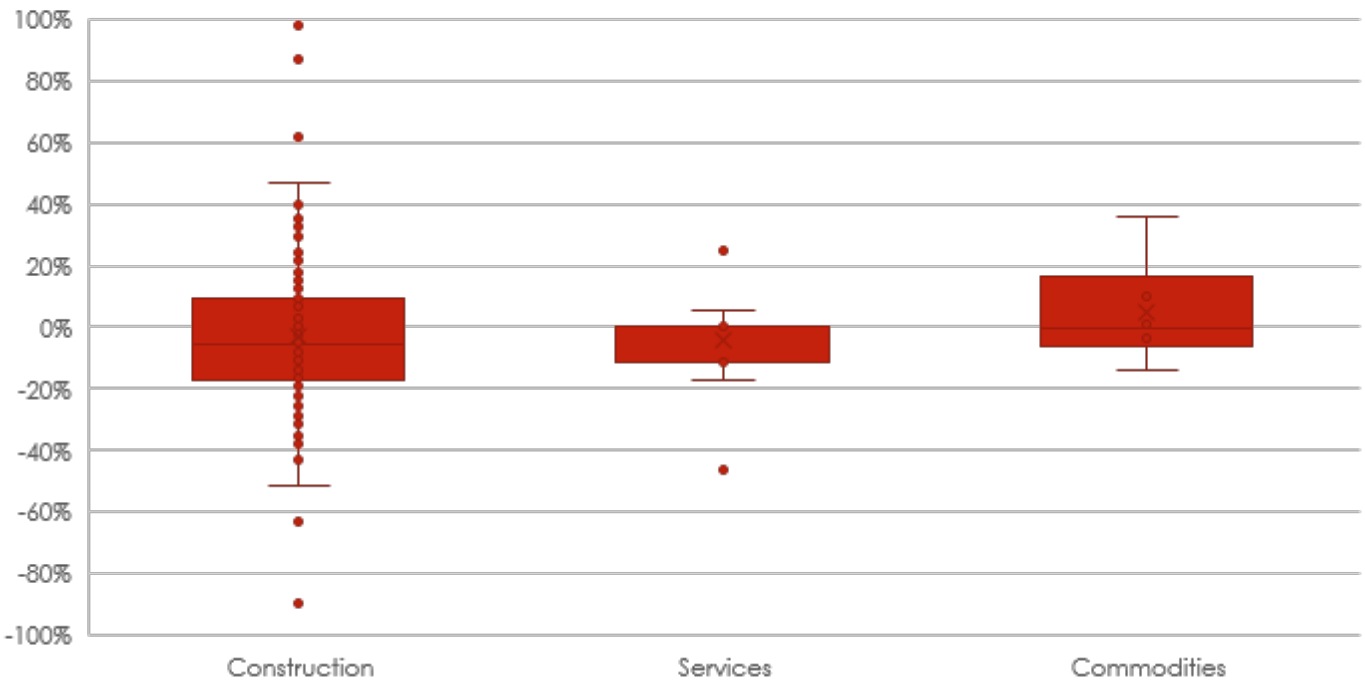
Chart 2.10.3: Actual Versus Estimated by Contract Type Q1 CY2018



PERFORMANCE MEASURE 2.10

Relationship Between Procurement Competition and Cost

Chart 2.10.4: Actual vs. Estimates by Contract Type from Q2 CY2017 to Q1 CY2018



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 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

"Internal audit . . . the coolest profession in the world." — Tom Peters

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.

Legislative Audits are tracked on a fiscal year basis (July of current year though June of the following year). From FY2013-FY2017, there were 844 Internal Audit Findings. The number of Repeat Internal Audit Findings totaled 44 from FY2013-FY2017. These repeat findings dealt with materials and supplies management (22 findings), promotional expense documentation and authorization (9 findings), fixed asset inventories (6 findings), MBE subcontractors reporting and compliance reviews (2 findings), overtime approvals not being documented (2 findings), one finding each on the COMAR competitive bid process, unsigned quality assurance reviews, and improper auto title lien documentation.

The repeat audit findings of materials and supplies management 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.

From FY2013-FY2016, of 627 total Internal Audit Findings, 32 were Repeat Internal Audit Findings or 5.1 percent.

From FY2013-FY2016, of 844 total Internal Audit Findings, 44 were Repeat Internal Audit Findings or 5.2 percent.

PERFORMANCE MEASURE 2.11

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

Chart 2.11.1: Number of Internal Audit Findings by TBU FY2013-FY2017

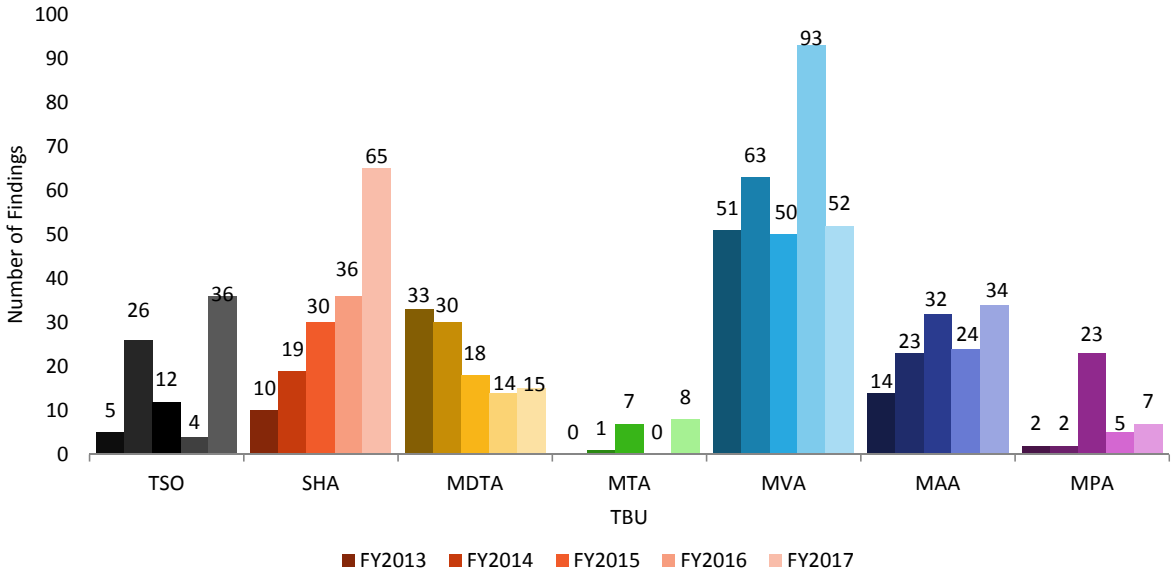
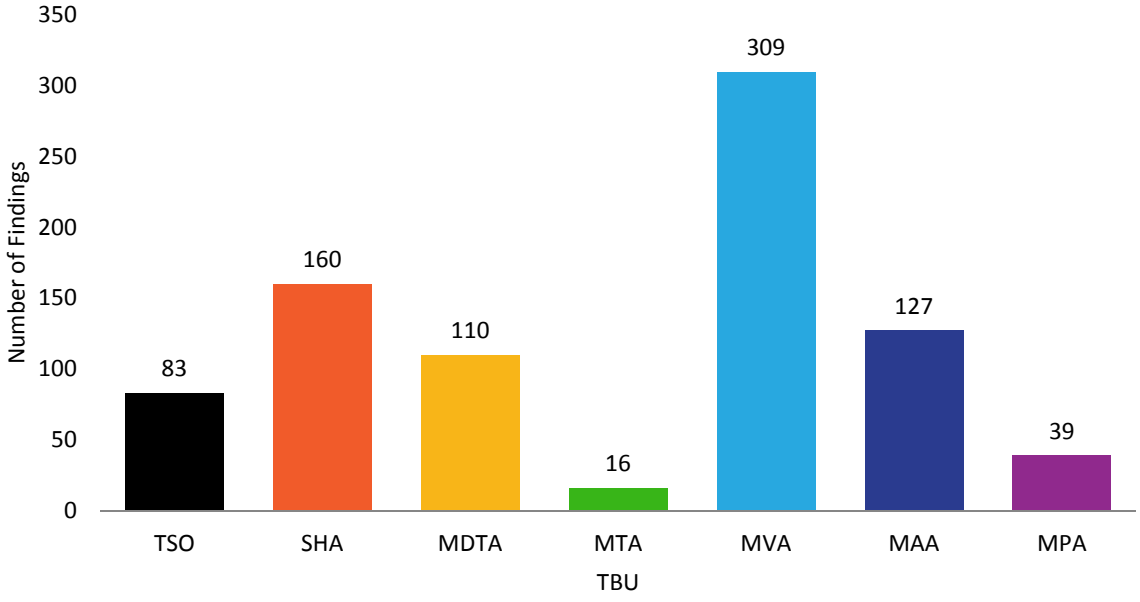


Chart 2.11.2: Number of Total Internal Audit Findings by TBU FY2013-FY2017



PERFORMANCE MEASURE 2.11

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

Chart 2.11.3: Total Internal Audit Findings MDOT-Wide FY2013-FY2017

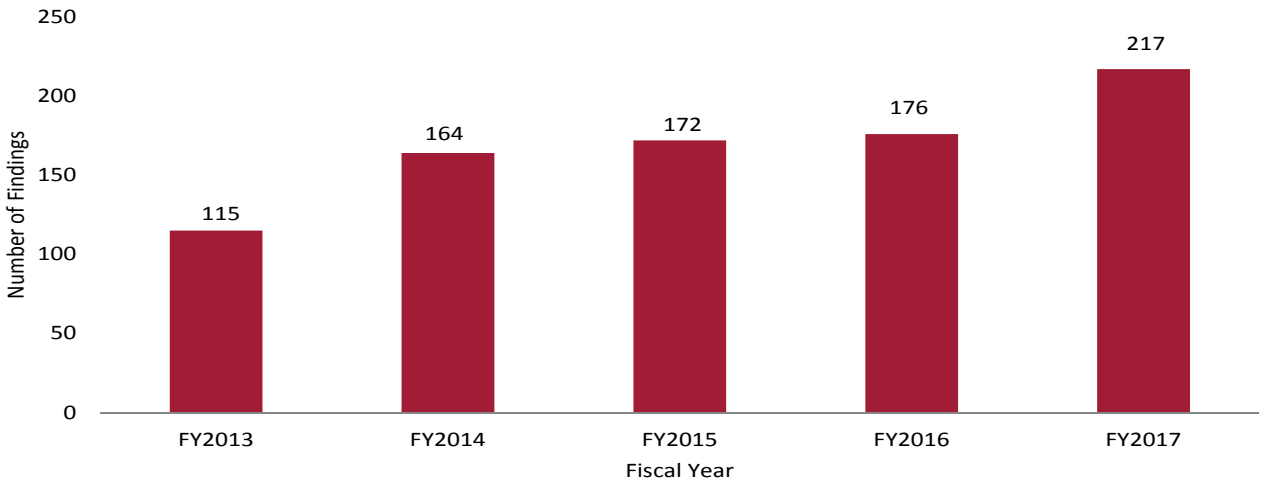
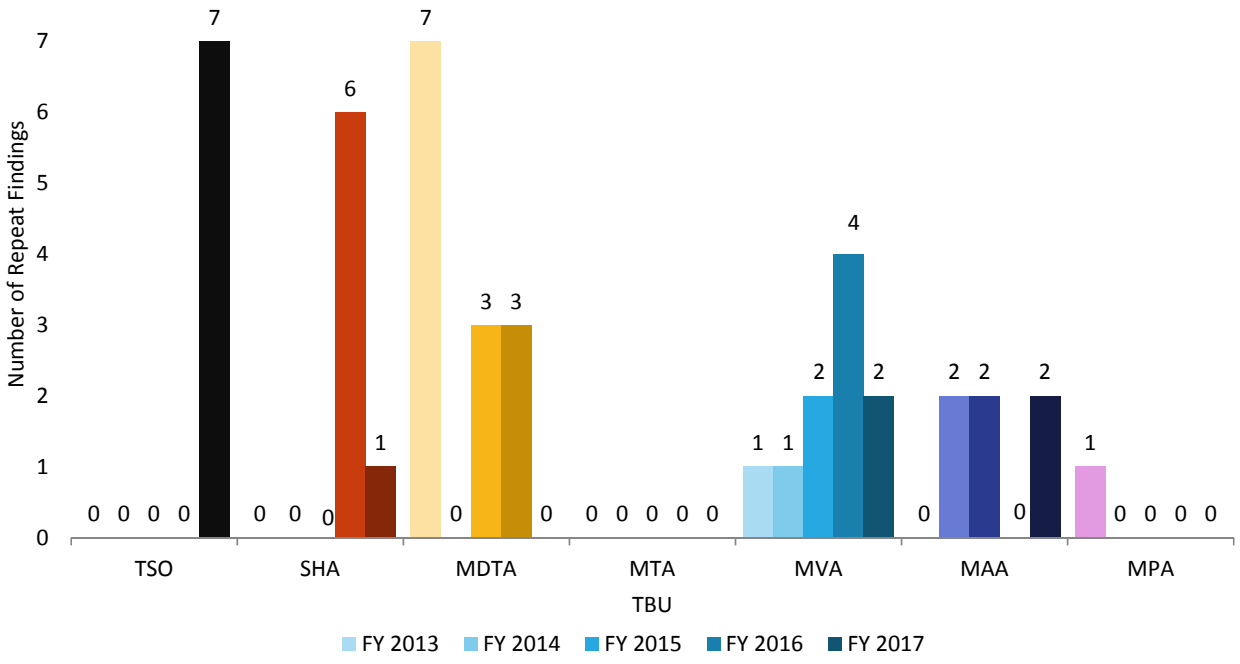


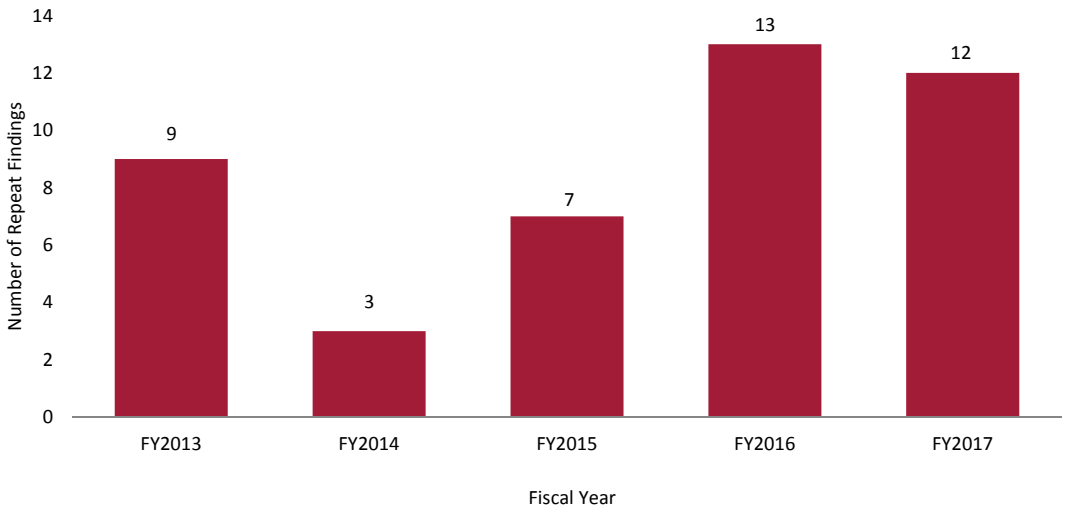
Chart 2.11.4: Number of Internal Audit Repeat Findings FY2013-FY2017



PERFORMANCE MEASURE 2.11

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

Chart 2.11.5: Trend in Total Internal Audit Repeat Findings MDOT-Wide FY2013-FY2017



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

"Fraud is a binary issue where the only good number is zero."
— Rob Norman

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 these findings.

Legislative Audits are performed by the Maryland Department of Legislative Services and tracked on a fiscal year basis (July of current year though June of the following year).From FY2013 through FY2017, there were six 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, the process for determining the propriety of architectural and engineering contract billings not being comprehensive and a lack of internal controls to ensure independent approvals for purchasing and disbursement transactions.

Five Legislative Repeat Audit Findings occurred in FY2013-FY2017 and have been resolved.

There were zero Legislative Repeat Audit Findings in FY2016.

There was one Legislative Repeat Audit Finding in FY2017 which has been resolved.

PERFORMANCE MEASURE 2.12

Number of Legislative Repeat Audit Findings

Chart 2.12.1: Number of OLA Findings & Repeat Findings by TBU FY2013 – FY2017

	Fiscal Year											
	2013		2014		2015		2016		2017		Total	
TSO	4	0					3	0			7	0
SHA	10	1					2	0			12	1
MDTA			2	1					0	0	2	1
MTA					9	1					9	1
MVA			9	2							9	2
MAA	8	0							4	1	12	1
MPA					2	0					2	0
Total Findings	22		11		11		5		4		53	
Total Repeat Findings		1		3		1		0		1		6

Audit Finding Repeat Audit Finding

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

PERFORMANCE MEASURE DRIVER:
Dave Sharpless
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:
To monitor and ensure regularly scheduled preventive maintenance is conducted on time and in accordance with each TBU's guidelines. Reduce the percentage of vehicles which have not been maintained within prescribed time, mileage or hours requirements. MDTA also reduces the percent of vehicles reaching the critical zone for preventive maintenance.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Maximo

NATIONAL BENCHMARK:
N/A, mix of equipment does not lend itself to one standard benchmark.

PERFORMANCE MEASURE 2.13
MDOT Fleet Vehicle On-Time Preventive Maintenance

"Take care of your car in the garage, and the car will take care of you on the road." – Amit Kalantri

The Preventive Maintenance (PM) Programs at each TBU is designed to ensure preventative maintenance is performed that will support efficient and effective vehicle/equipment service on a daily basis. Effective servicing leads to reliability, operating efficiency and optimizes the number of vehicles/equipment available to meet service demand functions/ customer service throughout MDOT.

These objectives must be achieved with proper balance of vehicle/ equipment preventive maintenance and fiscal constraints. It is recognized that preventive maintenance has associated costs however, vehicle/ equipment resources are a significant investment and must be a protected asset.

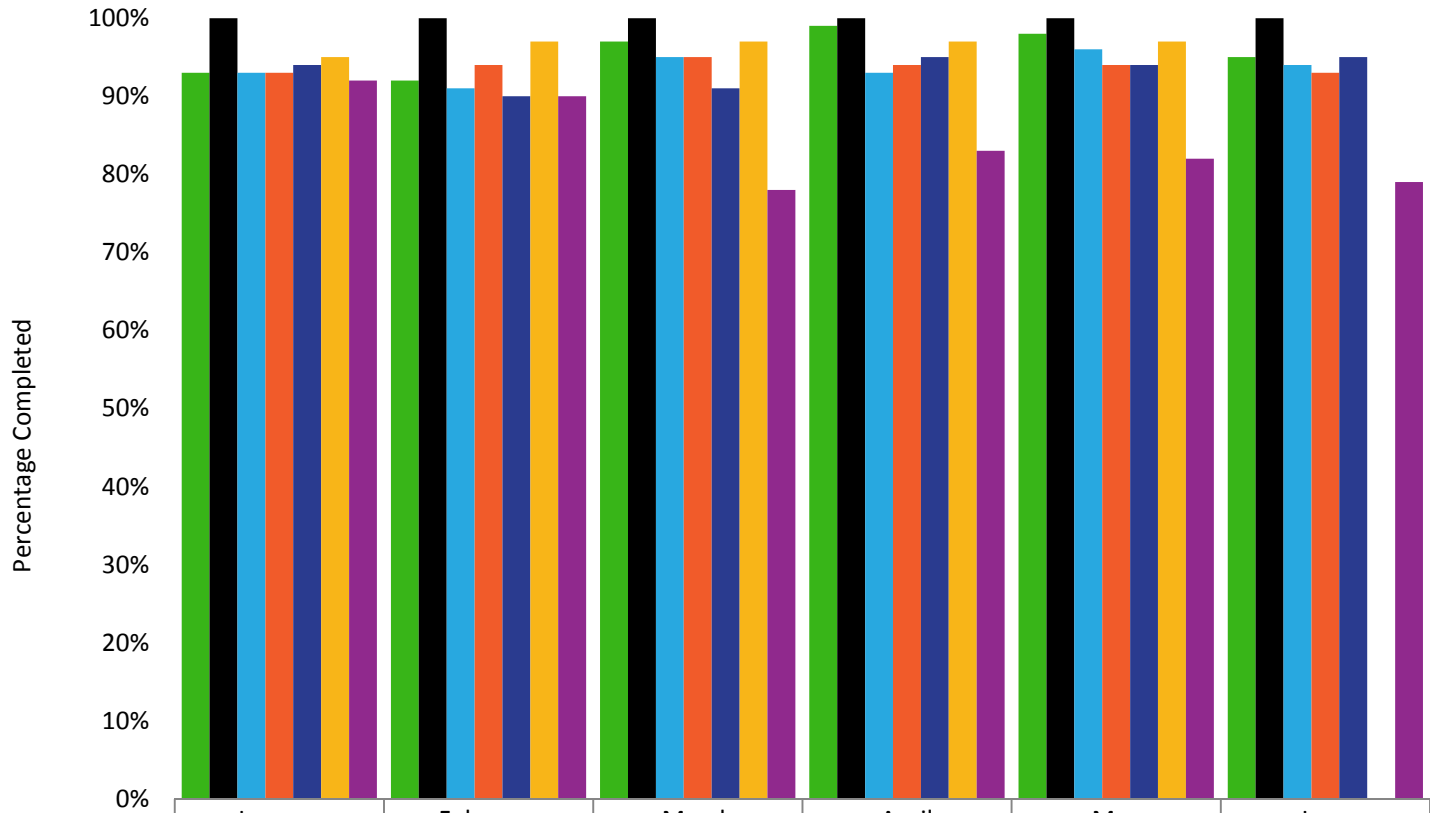
In August 2017, the decision was made to add all TBUs to this Performance Measure and transfer it to Excellerator TR2. Both items were accomplished in September, 2017 and the new TR is now identified as Performance Measure 2.13, Use Resources Wisely, "MDOT Fleet Vehicle On-Time Preventive Maintenance." The previous measure, "Critical Zone" PM's is exclusive to MDTA and will continue to be reported individually. An initial meeting was conducted with all fleet representatives in September 2017. Reporting criteria was shared and agreed on. Each TBU discussed their ability to retrieve requested data in time for the October Excellerator meeting. Data challenges: All TBUs may not be able to retrieve a year of data since there have been recent changes in their collection systems. We will report on available data in October with a continued pursuit to collect additional/future data. Information will be supplied by month but reported as quarterly data.

MDTA was able to increase the vehicle replacement mileage from 100,000 to 150,000 through its PM program without compromise to safety and equipment availability. This extends the life of the vehicle while avoiding overall replacement costs.

PERFORMANCE MEASURE 2.13

MDOT Fleet Vehicle On-Time Preventive Maintenance

Chart 2.13.1: MDOT On-Time Preventative Maintenance by TBU CY2018



	January	February	March	April	May	June
MTA (1268)	93%	92%	97%	99%	98%	95%
TSO (26)	100%	100%	100%	100%	100%	100%
MVA (126)	93%	91%	95%	93%	96%	94%
SHA (3,020)	93%	94%	95%	94%	94%	93%
MAA (451)	94%	90%	91%	95%	94%	95%
MDTA (913)	95%	97%	97%	97%	97%	
MPA (223)	92%	90%	78%	83%	82%	79%

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 are less serious offenses including other assaults, vandalism, disorderly conduct, and other sex offenses.

The following charts show a comparison CY2016, CY2017, and 1st and 2nd quarter for CY2018, for Part I and Part II crimes. The charts are listed in three categories; MTA, MAA, and the remaining TBUs combined.

Law enforcement reviews this data on a weekly and bi-weekly basis for resource allocation and targeted enforcement activities. The data is also used to determine areas of security concern.

PERFORMANCE MEASURE 3.1

Number of Crimes Against Persons and Property Committed at MDOT Facilities

Chart 3.1.1: Part I Crimes CY2016 - CY2018

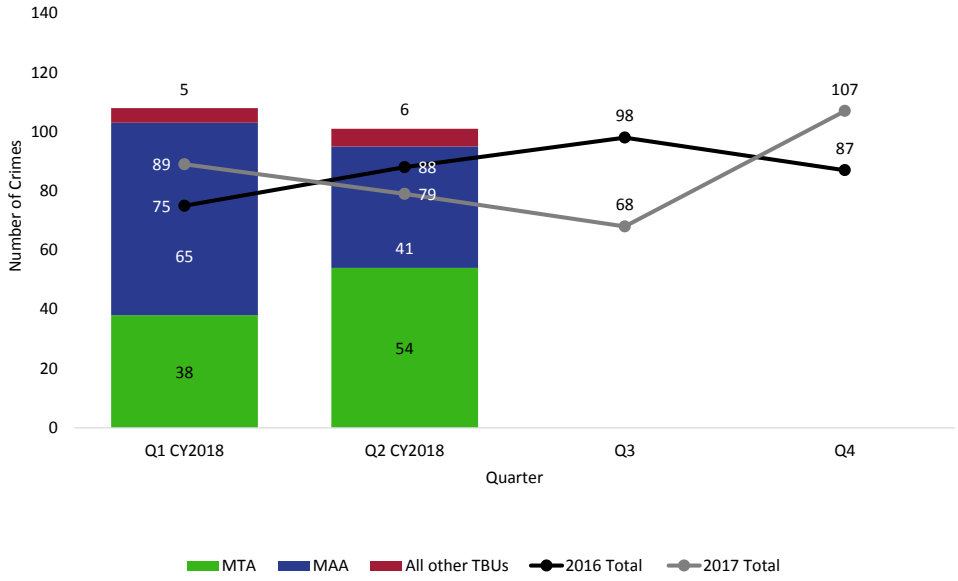
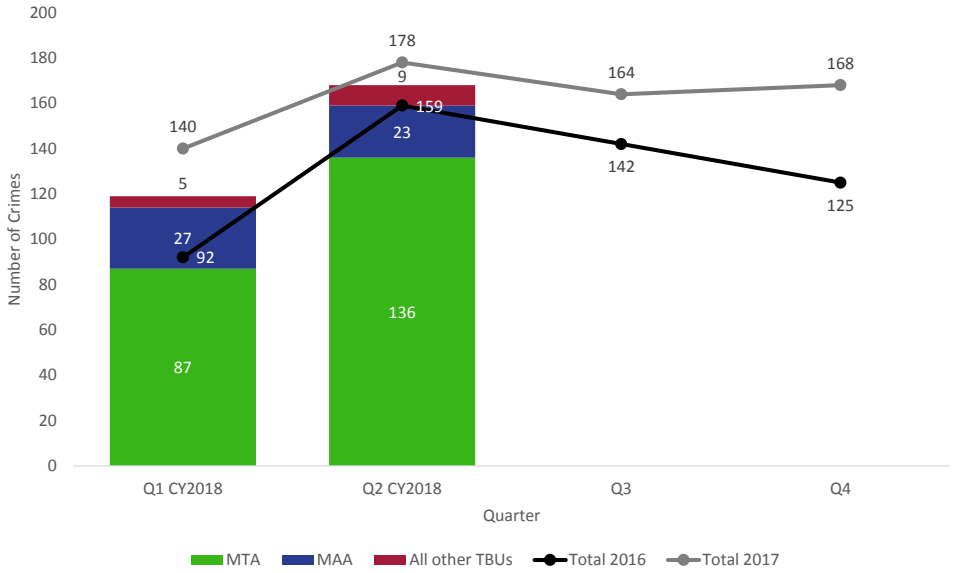


Chart 3.1.2: Part II Crimes CY2016 - CY2018



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

PERFORMANCE MEASURE DRIVER:
Kelly Melhem
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 collective police data submitted to Maryland State Police (MSP) through Automated Crash Reporting System (ACRS).

NATIONAL BENCHMARK:
N/A

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

Behind every number is a person, a family, and a community changed forever.

MDOT strives to increase motorist safety by reducing traffic crashes that result in serious injuries and deaths. One key measure is tracking the number of fatalities on all roads and analyzing specific causes and related trends. Maryland's Strategic Highway Safety Plan (SHSP) – administered by the MDOT MVA's Maryland Highway Safety Office (MHSO) – is our roadmap driving us Toward Zero Deaths. Its goal is to reduce the number of traffic fatalities 50 percent by 2030 from the 2008 baseline (592 fatalities) using behavioral and engineering safety strategies. Drivers remain the single most important safety feature inside a vehicle.

In 2014, the number of fatalities (443) was the lowest since 1948; but in 2015, the State experienced a 17.6 percent increase in highway fatalities (521), the largest single-year increase in 30 years. Although the number of highway deaths remained steady in 2016 (522), traffic fatalities across the State increased by seven percent in 2017 (557).

The total number of deaths on our nation's highways also is increasing – by 5.6 percent in 2016 to 37,461 fatalities and by 8.4 percent from 2014 to 2015. The National Highway Traffic Safety Administration (NHTSA) attributes some of the cause to relatively inexpensive gasoline, a sharp increase in vehicle miles traveled (VMT) and an improved economy. VMT in Maryland increased by two percent from 2016 to 2017. This increased exposure, coupled with risky driving behaviors and a failure to use seat belts, is believed to be a significant reason for the increasing number of highway fatalities in Maryland.

Maryland's preliminary 2017 crash data also indicates:

- An increase in bicyclist fatalities from 2016.
- An increase in pedestrian fatalities from 2016. One in five traffic deaths is a pedestrian.
- A significant increase in motorcyclist fatalities, which increased by 14 percent from 2016.

Early data for the first half of 2018 shows a preliminary decline in both traffic fatalities (229) and in VMT compared to the same timeframe in 2017 (258).

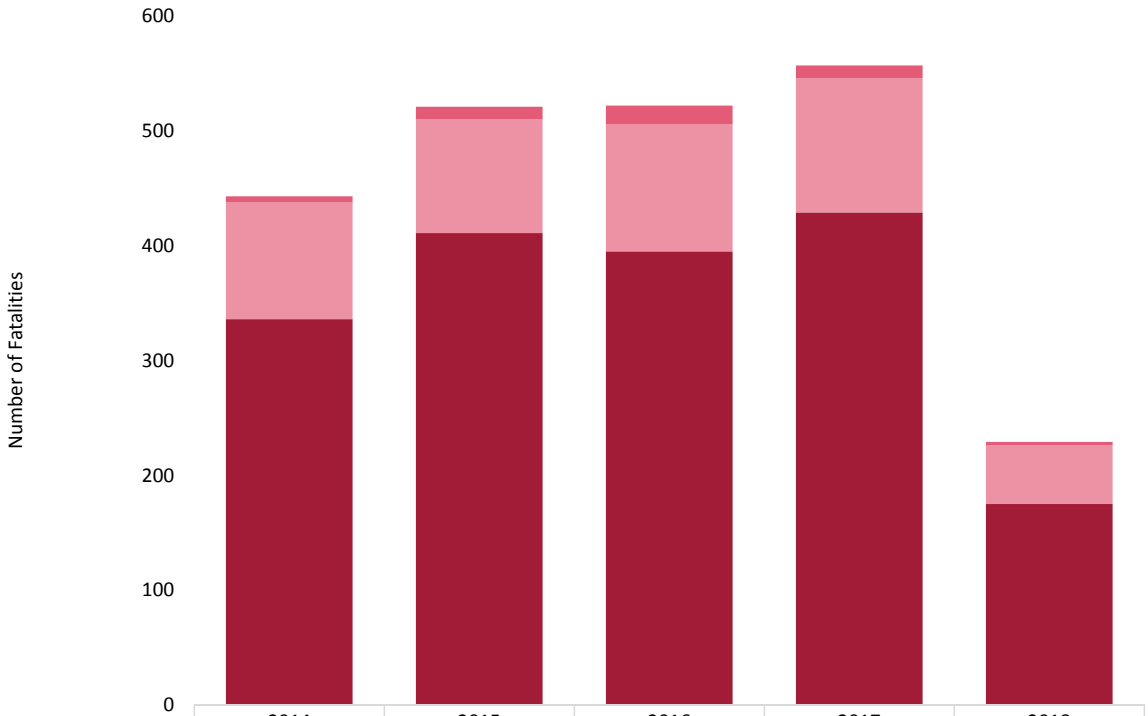
PERFORMANCE MEASURE 3.2

Number of Traffic-Related Fatalities on All Roads

Maryland's SHSP (2016-2020) establishes six specific emphasis areas along with long-term goals and mid-range reduction targets to help save lives on Maryland roads. The five-year plan was developed by a diverse group of partners and stakeholders representing all 4-Es of highway safety (Engineering, Enforcement, Education and Emergency Medical Services). Emphasis Area Teams (Aggressive Driving, Distracted Driving, Impaired Driving, Occupant Protection, Highway Infrastructure Safety, and Pedestrian and Bicycle Safety) are comprised of a broad range of safety officials and stakeholders who design action plans for implementing the SHSP's strategies. These teams meet regularly to gauge progress and determine what changes need to be made to better implement the safety strategies.

The SHSP is managed by an Executive Council of high-ranking officials responsible for public and highway safety. This group meets semi-annually to review overall progress and to discuss possible amendments to the plan as necessitated by changing dynamics. The SHSP is administered by the MDOT MVA's Maryland Highway Safety Office (MHSO).

Chart 3.2.1: Annual Comparison of All Fatalities CY2014-CY2018 (YTD)

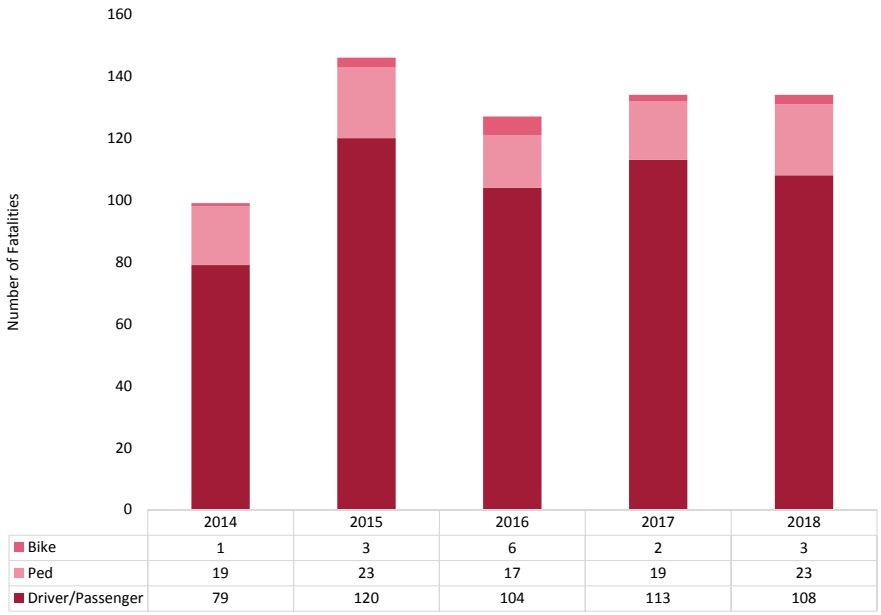


	2014	2015	2016	2017	2018
Bike	5	11	16	11	3
Ped	102	99	111	117	51
Driver/Passenger	336	411	395	429	175

PERFORMANCE MEASURE 3.2

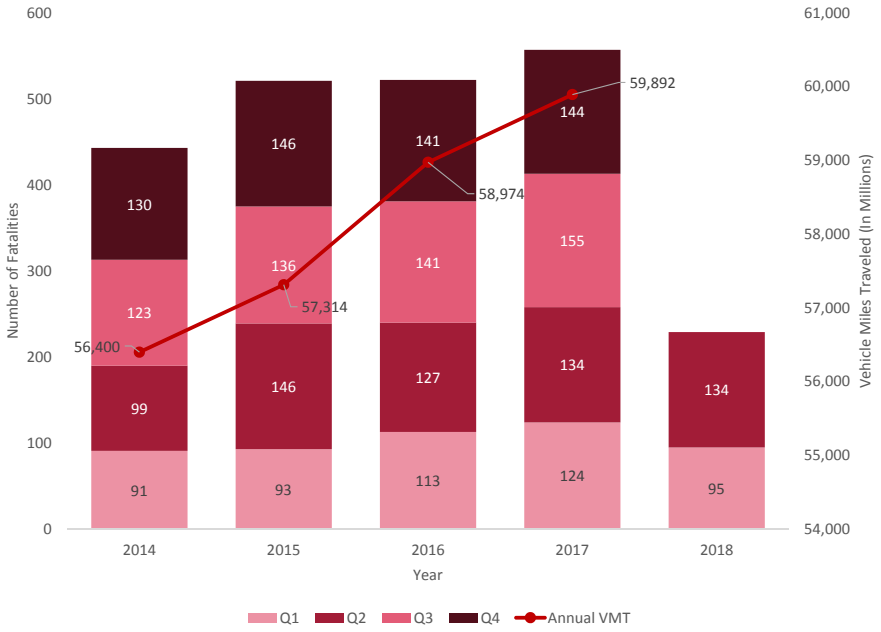
Number of Traffic-Related Fatalities on All Roads

Chart 3.2.2: Annual Comparison of All Fatalities Q2 CY2014- Q2 CY2018 (YTD)



	2014	2015	2016	2017	2018
Bike	1	3	6	2	3
Ped	19	23	17	19	23
Driver/Passenger	79	120	104	113	108

Chart 3.2.3: Annual Comparison of All Fatalities CY2014-CY2018



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

PERFORMANCE MEASURE DRIVER:
Kelly Melhem
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 April)

DATA COLLECTION METHODOLOGY:
MDOT SHA collects 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 MDOT Maryland Highway Safety Office (MHSO) collects the data from these two agencies.

NATIONAL BENCHMARK:
National Highway Fatality Rate of 1.18 in 2016.

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

Behind every number is a person, a family, and a community changed forever.

The annual fatality rate is a measure of the number of persons killed in a traffic-related crash for every 100 million VMT on all roads in the State.

Maryland's traffic-fatality rate compares favorably to the national fatality rate. While the U.S. fatality rate never has dipped below one death per 100 million VMT, Maryland's rate has remained below one for the past eight years, increasing slightly from 0.89 in 2016 to 0.93 in 2017.

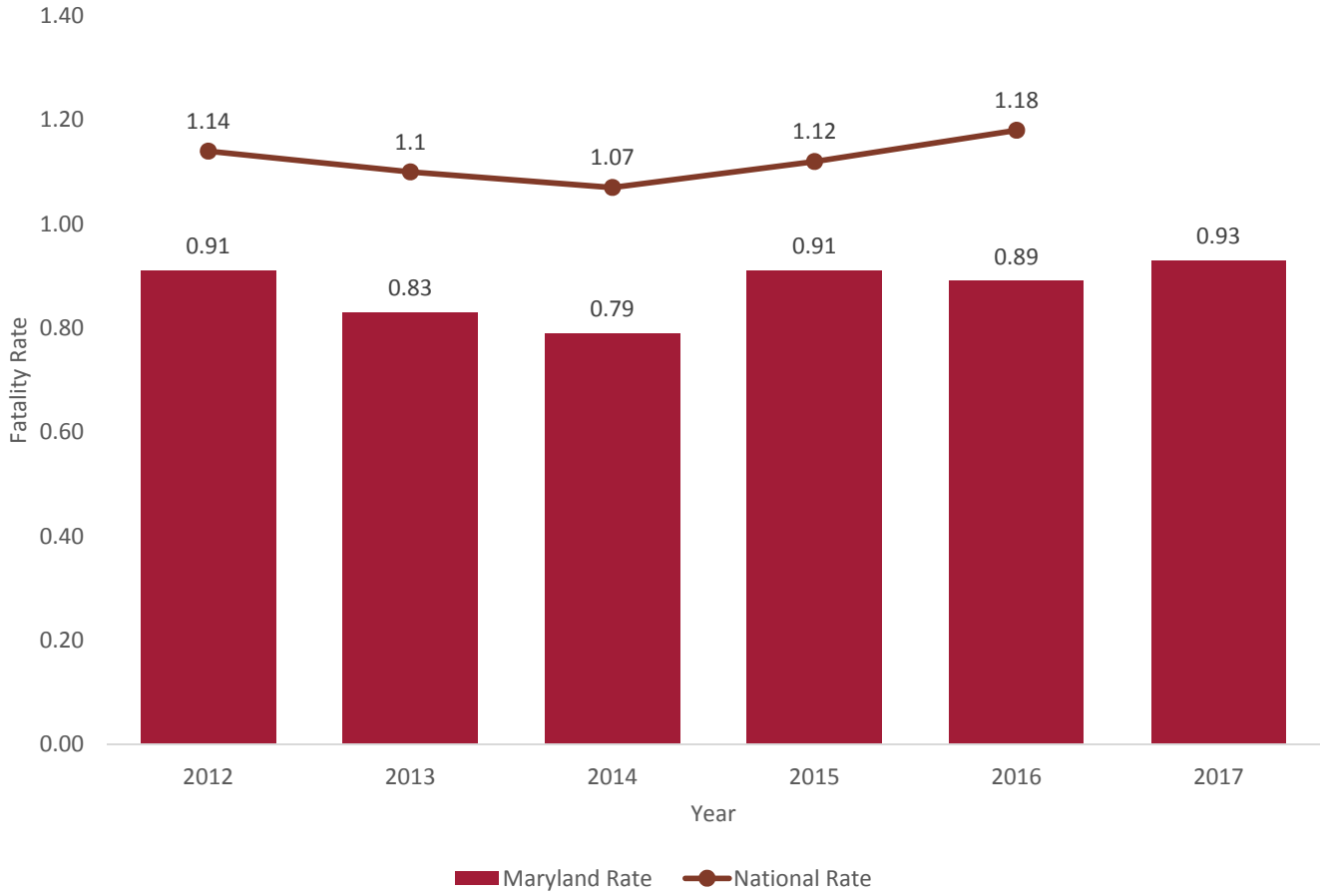
This slight increase corresponds with a smaller rise in Maryland's VMT coupled with more traffic deaths between 2016 and 2017. Due to the federal reporting cycle, the national rate for 2017 was unavailable at the time of printing.

Historically, as the nation's and/or 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. Since VMT is more difficult to influence, decreasing the number of traffic fatalities is the best opportunity to lower the fatality rate.

PERFORMANCE MEASURE 3.3

Maryland Traffic-Related Fatality Rate (Highways)

Chart 3.3.1: Traffic-Related Fatality Rate, Maryland vs. National Benchmark CY2012 - CY2017



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

PERFORMANCE MEASURE DRIVER:
Kelly Melhem
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 collective 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

Behind every number is a person, a family, and a community changed forever.

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.

Following a significant 10-year decline, the number of serious injuries on Maryland roadways in 2016 increased by 16 percent. In 2017, the number of serious injuries increased slightly from 2016, while early data for the first half of 2018 (1,035 serious injuries) shows a preliminary decline from the same period in 2017 (1,630 serious injuries).

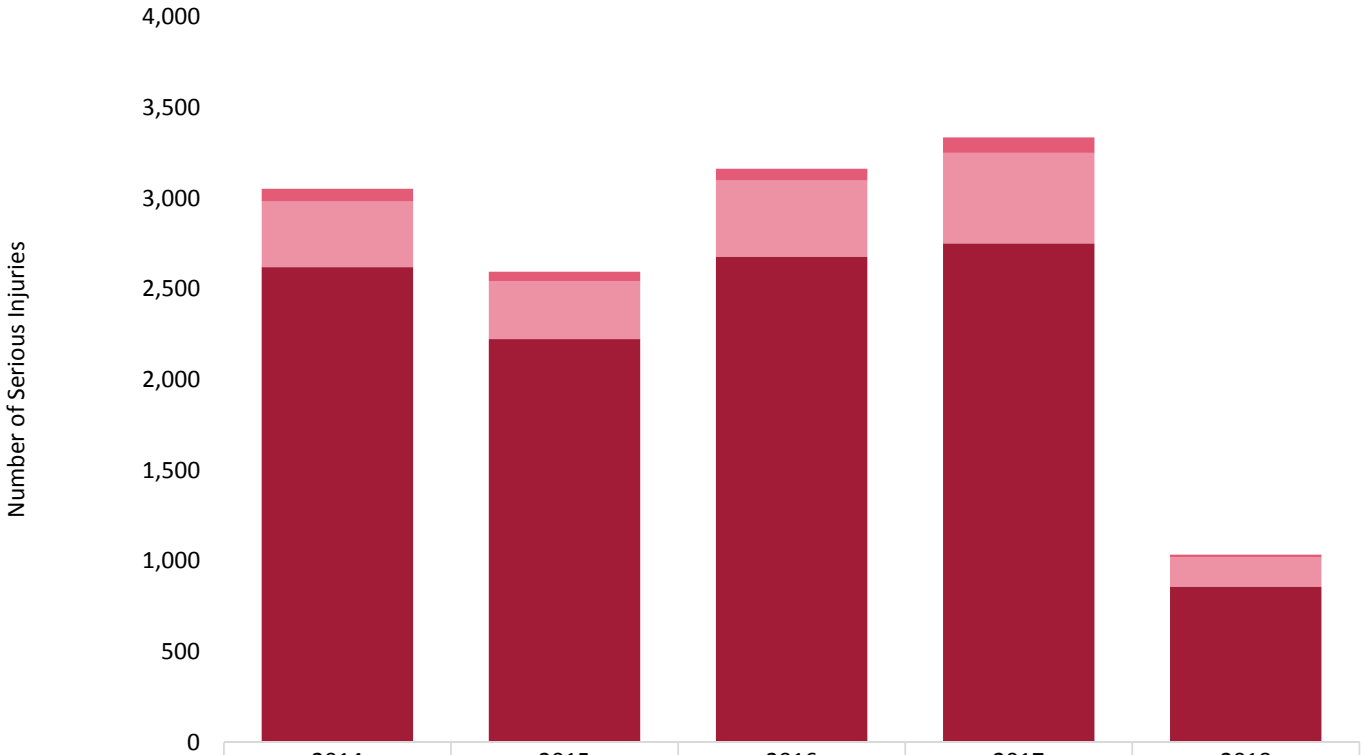
Striving to minimize crashes that result in serious injuries serves to reduce a motorist's risk for suffering life-altering consequences. Maryland's SHSP – described in Performance Measure 3.2 – is based on the Toward Zero Deaths approach to reduce the number of fatalities and serious injuries from traffic crashes by 50 percent by 2030. The SHSP brings together federal, state and local partners to help reach this goal by reducing impaired, distracted and aggressive driving; improving pedestrian, bicyclist and motorcyclist safety; reaching 100 percent seat belt use; and engineering safer roads.

Since serious injuries are defined differently from state to state, there is no national benchmark.

PERFORMANCE MEASURE 3.4

Number of Traffic-Related Serious Injuries on all Roads

Chart 3.4.1: Annual Comparison of All Serious Injuries CY2014-CY2018 (YTD)

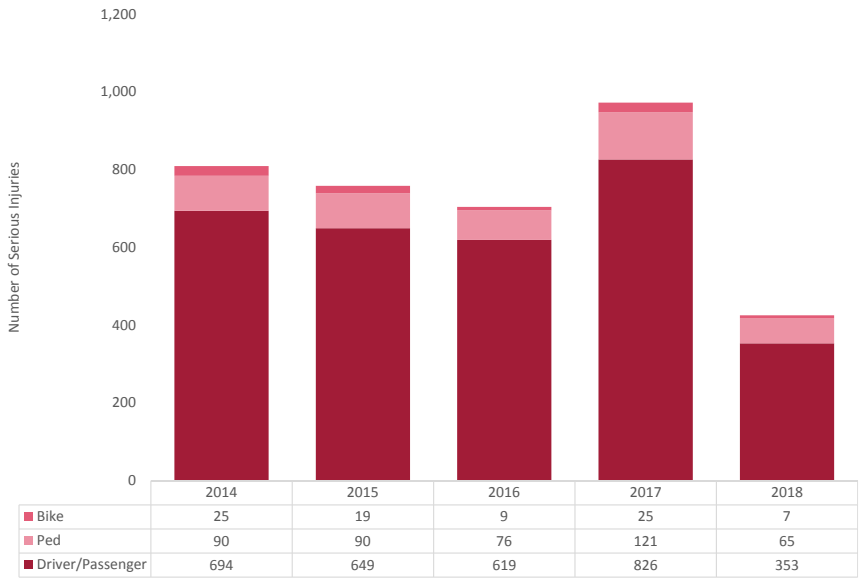


	2014	2015	2016	2017	2018
Bike	71	51	65	85	14
Ped	361	320	419	499	162
Driver/Passenger	2,621	2,224	2,679	2,752	859

PERFORMANCE MEASURE 3.4

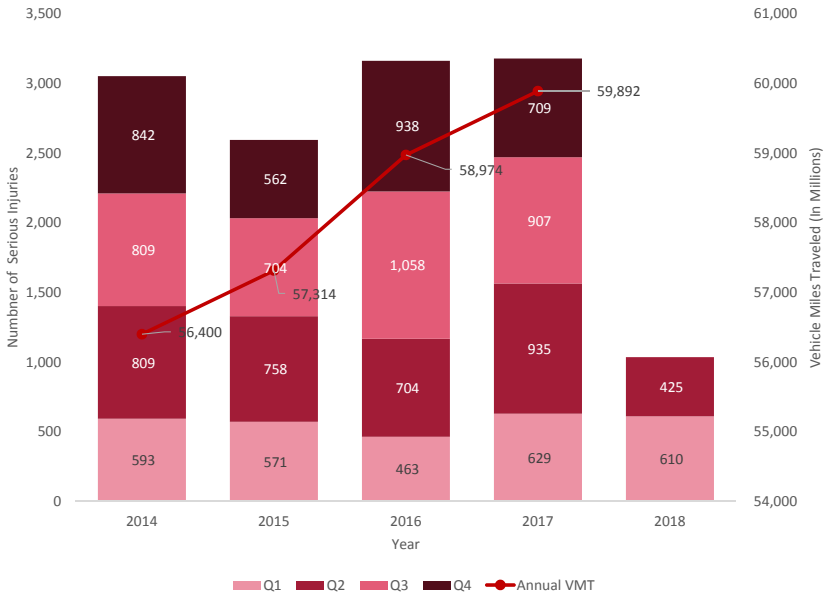
Number of Traffic-Related Serious Injuries on all Roads

Chart 3.4.2: Comparison of All Serious Injuries Q2 CY2014- Q2 CY2018 (YTD)



	2014	2015	2016	2017	2018
Bike	25	19	9	25	7
Ped	90	90	76	121	65
Driver/Passenger	694	649	619	826	353

Chart 3.4.3: Annual Comparison of All Serious Injuries CY2014-CY2018



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

PERFORMANCE MEASURE DRIVER:
Kelly Melhem
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 April)

DATA COLLECTION METHODOLOGY:
MDOT SHA 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 MDOT Maryland Highway Safety Office (MHSO) collects the data from these two agencies.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 3.5
Maryland Traffic-Related Serious Injury Rate (Highways)

Behind every number is a person, a family, and a community changed forever.

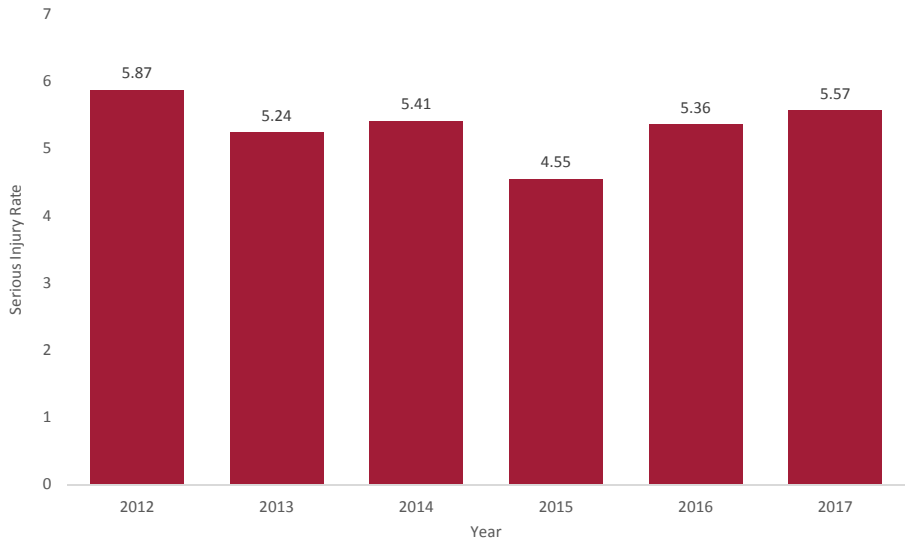
Maryland's serious injury rate is based on a measure similar to the fatality rate (number of persons seriously injured annually in a traffic-related crash per 100 million VMT).

After a 33-percent drop in both the number of serious injuries and the corresponding rate between 2008 and 2015, Maryland's serious injury rate increased from 4.55 in 2015 to 5.36 in 2016 and to 5.57 in 2017. These higher rates correspond with the increased number of serious injuries between 2015 and 2017, as well as the increases in VMT in Maryland.

Serious injury or death is not an acceptable consequence of driving. The SHSP contains strategies intended to reduce risky driving behaviors statewide that result in the types of crashes leading to serious injury or death. Engineering advances in safer vehicles and highways, and immediate critical care from emergency medical providers, have contributed significantly to the declines in traffic-related serious injuries (and their corresponding rates) during several recent years.

Since serious injuries are defined differently from state to state, there is no national benchmark rate.

Chart 3.5.1: Maryland Traffic-Related Serious Injury Rate CY2012-CY2017



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 usage rate provided by National Highway Traffic Safety Administration (NHTSA) reached 90.1 percent in 2016.

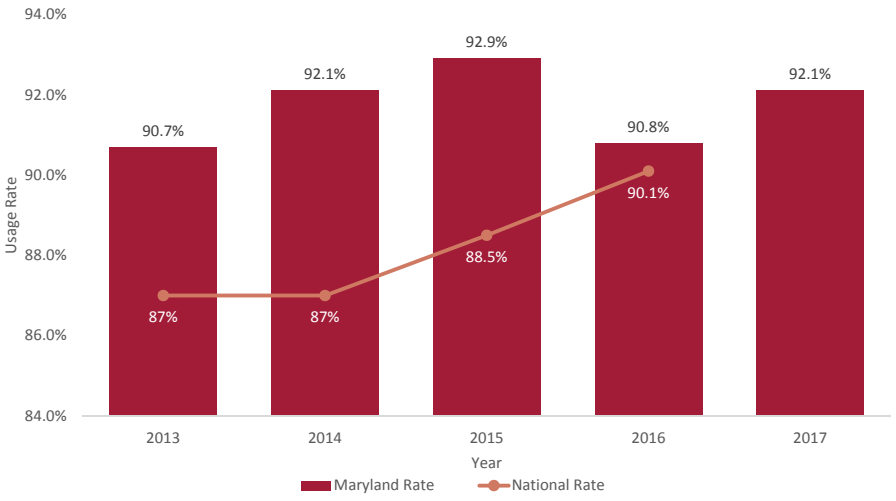
PERFORMANCE MEASURE 3.6
Maryland Seat Belt Usage Rate

The use of seat belts by Maryland drivers greatly reduces the severity of personal injury and occupant fatalities in crashes. States such as Maryland 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 National Highway Traffic Safety Administration. The overall seat belt usage rate in Maryland was 92.1 percent for 2017 representing a 1.3 percent increase over the previous year. The MHSO goal for seat belt usage for 2017 was 94.1 percent. However, the nationwide seat belt usage rate was 89.7 percent in 2017 versus 90.1 percent in 2016.

In an effort to increase awareness and usage of seat belts among young drivers and passengers, several Maryland schools participated in the Making it Click program which ran January through May 2018. Participants conducted observational seat belt surveys; created posters, videos, and flyers; signed pledge cards; and shared ideas about increasing seat belt use and improving highway safety at school and through social media.

Chart 3.6.1: Maryland Seatbelt Usage Rate vs. National Benchmark Rate CY2013-CY2017



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

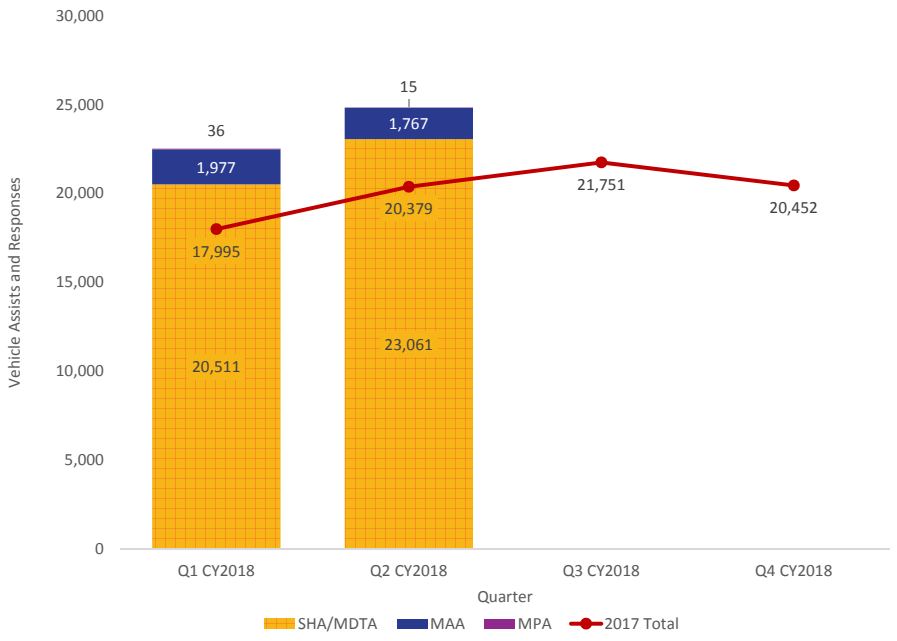
PERFORMANCE MEASURE 3.7
Travelers Assisted by MDOT

The Coordinated Highways Action Response Team (CHART) is a joint effort of MDOT, MSP, 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 24 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 might otherwise need to rely on paid service providers. Customers can access this service by dialing *77 or through the normal 911 emergency dispatch.

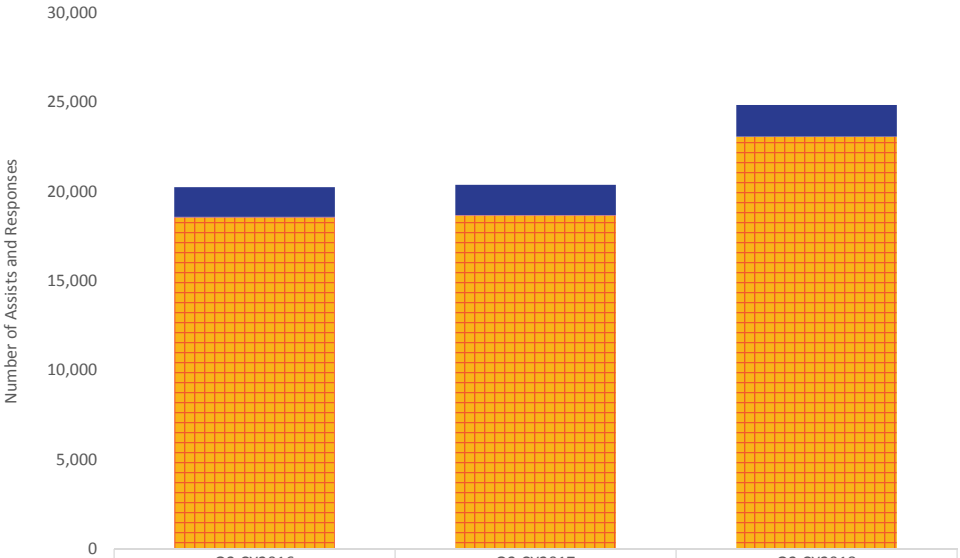
For the 2018 calendar year so far, MDOT has helped 47,920 disabled motorists. Additionally, CHART provides real-time traffic conditions through its website: http://www.chart.state.md.us/.

Chart 3.7.1: Number of Assists and Responses CY2018



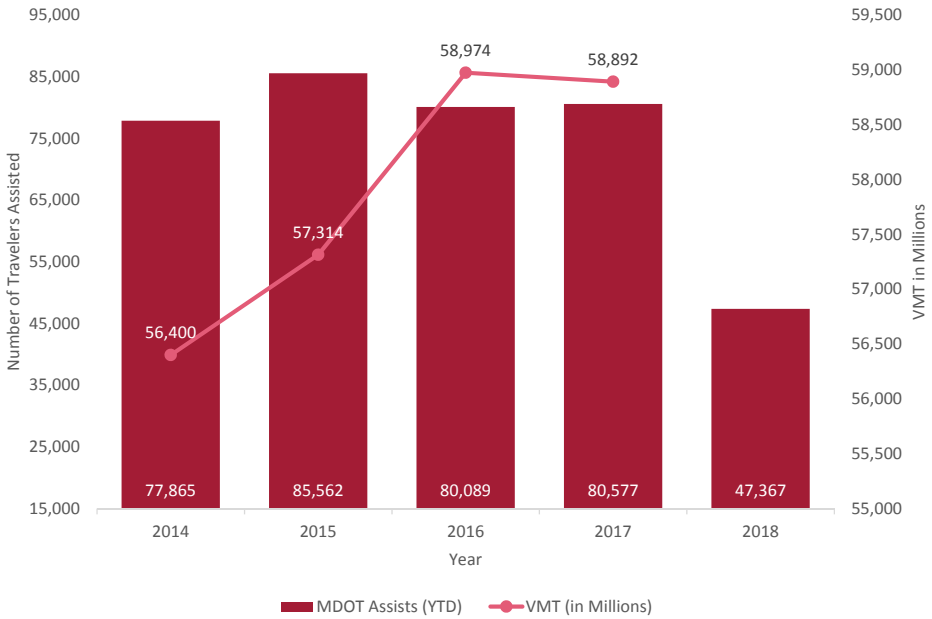
PERFORMANCE MEASURE 3.7
Disabled Vehicles Assisted by MDOT

Chart 3.7.2: Number of Assists and Responses Q2 CY2016-CY2018



	Q2 CY2016	Q2 CY2017	Q2 CY2018
MAA	1,664	1,692	1,767
MPA	32	25	15
SHA/MDTA	18,548	18,662	23,061

Chart 3.7.3: MDOT Travelers Assisted Compared to VMT CY2014-CY2018



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

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

PURPOSE OF MEASURE:
To track the readiness of MDOT emergency personnel for responding to emergency incidents by ensuring awareness and understanding of the National Incident Management System and Incident Command System.

FREQUENCY:
Annually (in October)

DATA COLLECTION METHODOLOGY:
Individual TBUs will identify emergency response positions that require NIMS/ICS training and the completion of training.

NATIONAL BENCHMARK:
Internal MDOT benchmark is 90 percent of emergency response positions will have completed the required NIMS/ICS training.

PERFORMANCE MEASURE 3.8

Number of Employees Trained Under National Incident Management System (NIMS)

In 2003, Homeland Security Presidential Directive #5 (HSPD-5) was issued that discussed the management of domestic incidents. Part of Directive #5 was the issuance of the National Incident Management System (NIMS) and the tasking of training individuals in the use of the Incident Command System (ICS). This resulted in the creation of single-integrated comprehensive approach to domestic incident management, crisis management, and consequence management became a single-integrated approach.

NIMS is a consistent nationwide approach for government agencies at all levels, along with non-government agencies, to work effectively and efficiently in all incidents (all-hazards approach). In HSPD-5 all states were required to adopt and implement the NIMS/ICS protocol. The Maryland NIMS/ICS Strategic Plan was developed in 2004 and identified the need for State agencies to adopt NIMS/ICS.

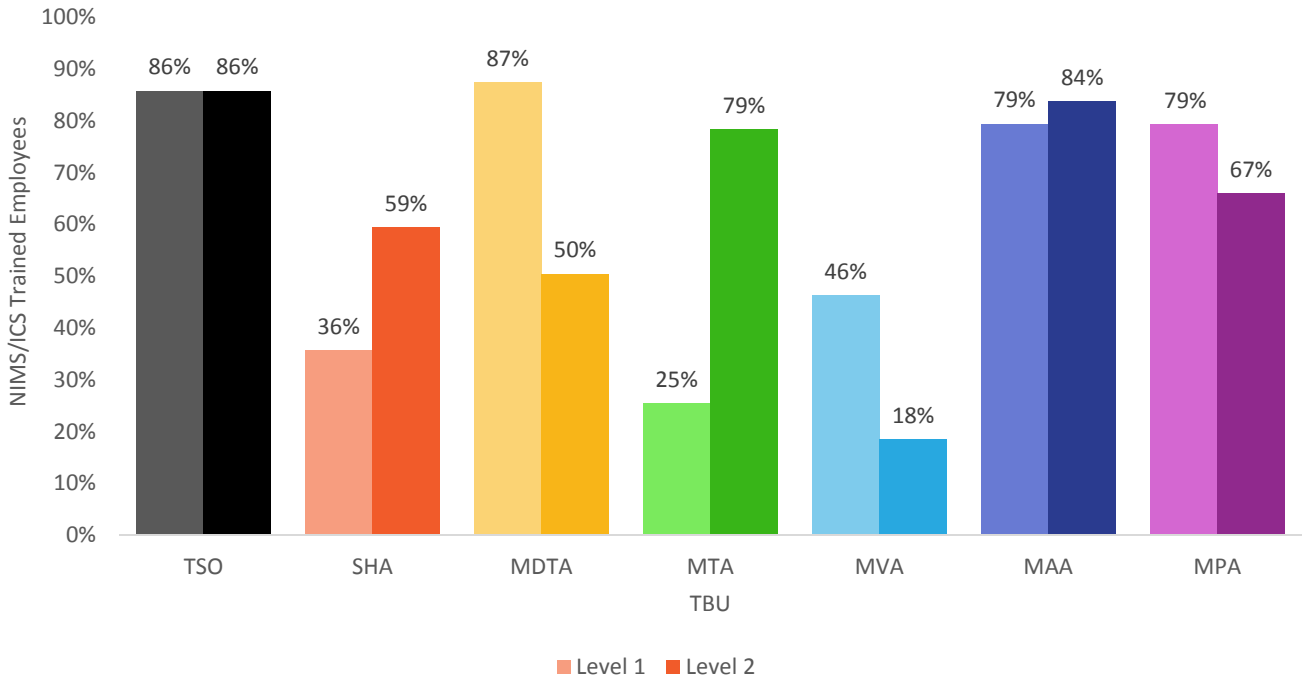
This plan determined that NIMS/ICS was the best tool to use for coordination and control of domestic (MD) incident management activities regardless of the cause, size, or complexity of the incident. It uses a "common operation platform" for all agencies, organizations, or entities, public or private.

TBUs have historically trained their personnel in NIMS/ICS, mainly because most TBUs are operationally oriented and incidents occur in their respective areas of responsibility. Many times they must work with other emergency responders (fire/police/EMS) and private stakeholders or partners that operate on their property or as part of their business model. For many years, the training of MDOT personnel in NIMS/ICS was a reportable item to the Federal Emergency Management Agency (FEMA) on an annual basis. Several years ago, this required annual reporting was discontinued by FEMA, and thus no longer tracked by MDOT.

PERFORMANCE MEASURE 3.8

Number of Employees Trained Under National Incident Management System (NIMS)

3.8.1: Percent of NIMS/ICS Training (Level 1 and 2) for Required Personnel Completed FY2017



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

PERFORMANCE MEASURE DRIVER:
Bernadette Bridges
Maryland Aviation Administration (MAA)

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

FREQUENCY:
Quarterly

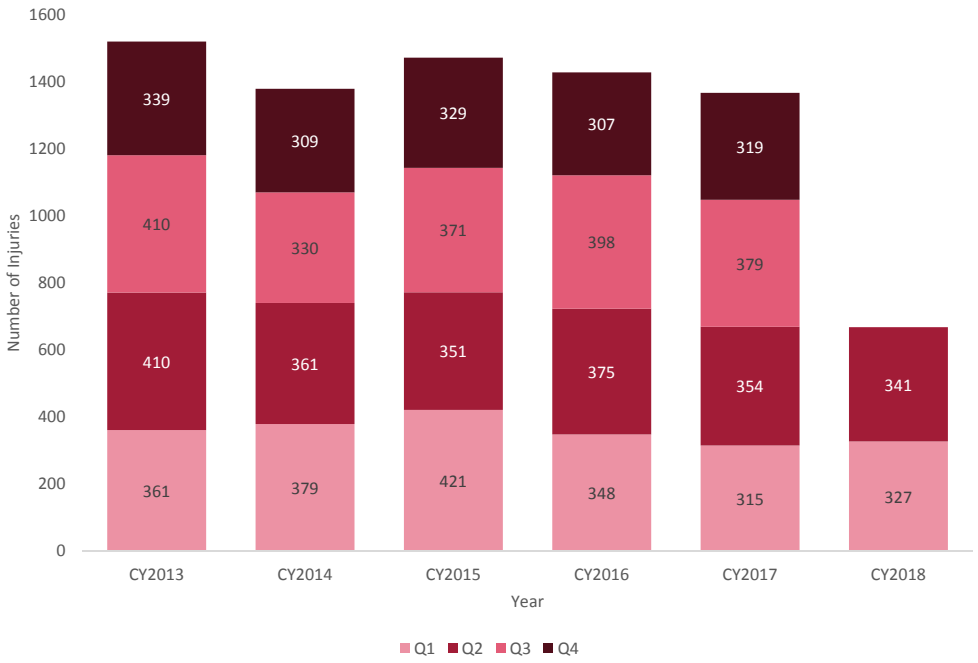
DATA COLLECTION METHODOLOGY:
Data is collected through multiple MDOT timekeeping systems.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 3.9A
Number of Employee Injuries Reported

Employee safety is a top priority to MDOT. 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. The quarterly comparison of data from all MDOT TBUs for CY2013-CY2018 is included in the chart below.

Chart 3.9A.1: Number of Injuries (FROI) Reported MDOT-Wide CY2013-CY2018



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

PERFORMANCE MEASURE DRIVER:
Bernadette Bridges
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 3.9B
Number of Employee Lost Work Days Due to Injuries

Employee safety is a top priority to MDOT. 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.

This measure only includes quarterly lost work days due to on the job, work-related injuries. Lost work days are not associated with the number of injuries reported. Performance Measure 3.9 factors affecting this measure include varying work conditions and environments, and differing risk profiles among employees across TBUs. The goal of this performance measure is to have consistent leave coding policies and practices across MDOT's payroll systems.

Included in this measure are MTA Union Employee Lost Work Days highlighted in Chart 3.9B.3 and then compared to TSHRS employees in Chart 3.9B.4.

MDOT Risk Managers meet quarterly to develop strategies to reduce and mitigate risk throughout the TBUs.

PERFORMANCE MEASURE 3.9B

Number of Employee Lost Work Days Due to Injuries

Chart 3.9B.1: Number of Employees Coding LY (Work Injury Leave) by Quarter CY2013-CY2018

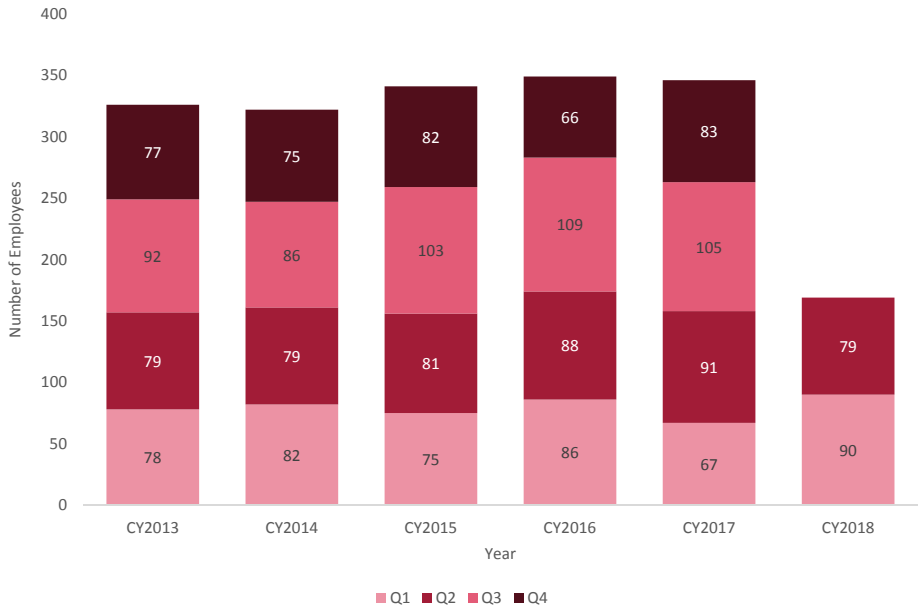
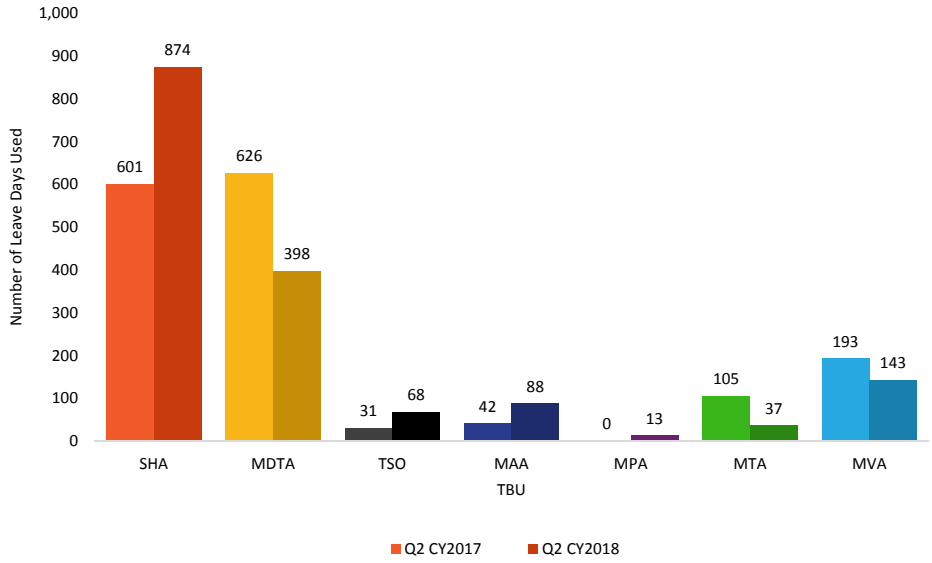


Chart 3.9B.2: Number of Work Injury Leave (LY) Days Used Q2 CY2017 - Q2 CY2018



PERFORMANCE MEASURE 3.9B

Number of Employee Lost Work Days Due to Injuries

Chart 3.9B.3: MTA Union Lost Work Days Due to Injuries
Q2 CY2013 - Q2 CY2018 April-June

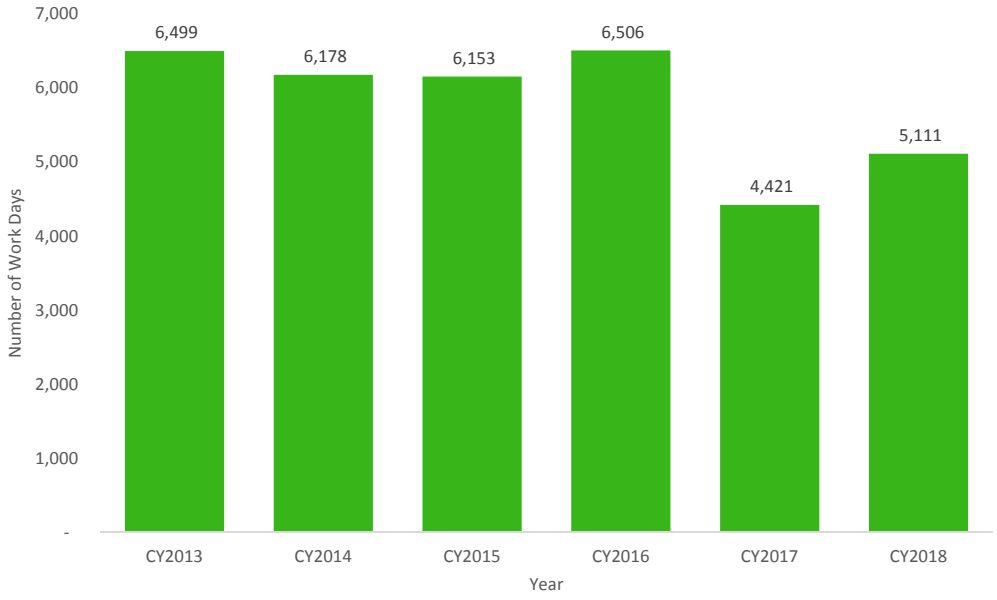
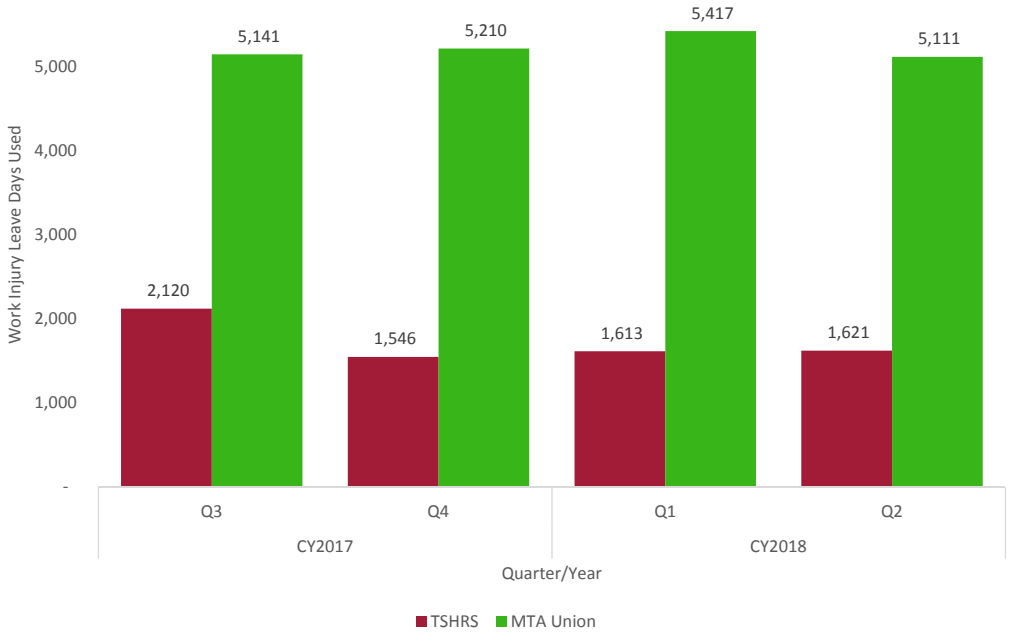


Chart 3.9B.4: Number of Work Injury Days Used, TSHRS and MTA Union Q2 CY2017 - Q2 CY2018 April-June



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

PERFORMANCE MEASURE DRIVER:
Troy Palmer
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:
To facilitate continuous safety improvement.

FREQUENCY:
Quarterly

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

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 3.9C
Incident Rate, Cost of Injuries and Predominant Injuries by Event

Employee safety is a top priority to MDOT. Although injuries seem to be inevitable at times and a part of doing business, even one injury is too many. To determine how safe our workplaces are, MDOT calculates its incident rate. This measure represents how many OSHA recordable injuries experienced per 100 full time employees. The lower the number, the safer the workplace has been.

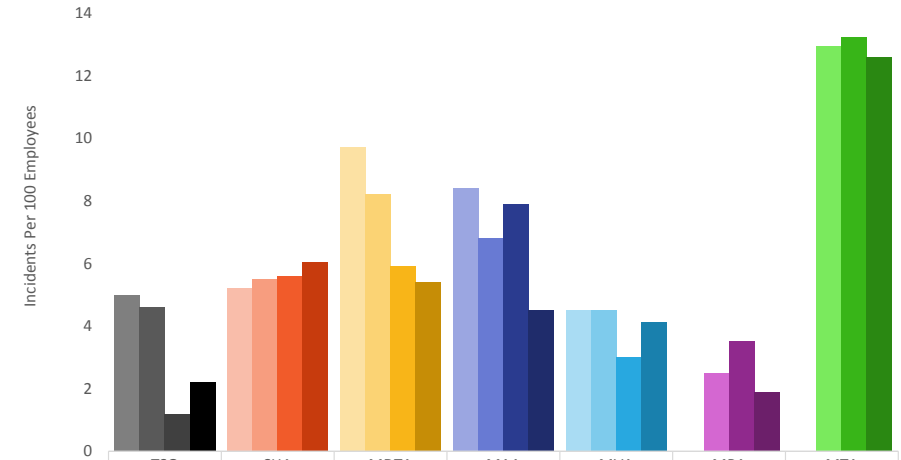
To better understand how injuries impact MDOT, we review costs of those injuries to include potential future costs. Looking at these costs helps us understand how important it is to prevent injuries instead of just accepting them as a part of business.

We can intelligently focus our resources at those events that drive our injury experience and strategize to eliminate those injuries. Identifying the predominant injury event allows each TBU to assess tasks that are likely to contribute to those events.

PERFORMANCE MEASURE 3.9C

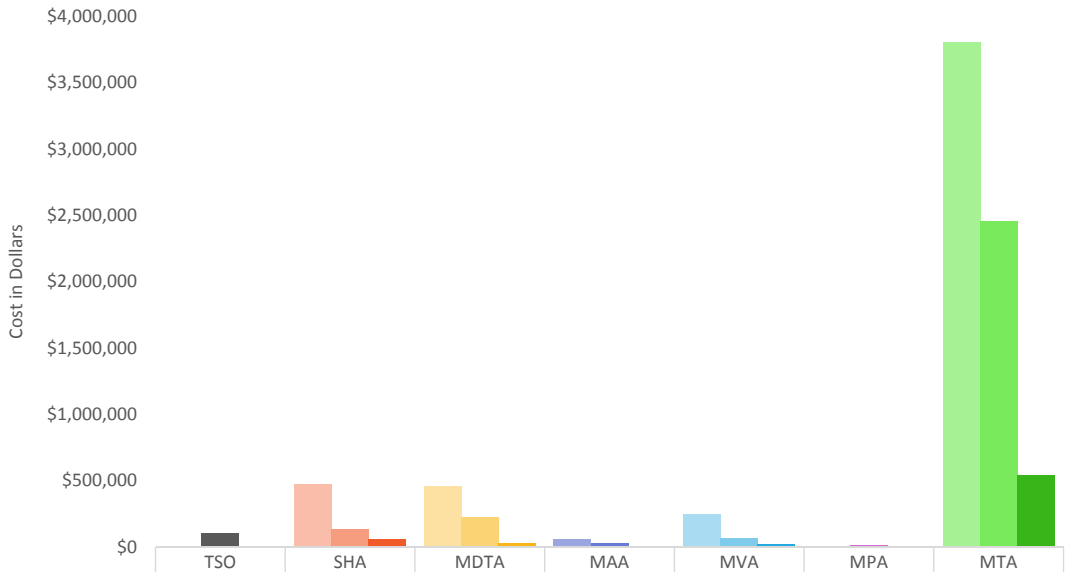
Incident Rate, Cost of Injuries and Predominant Injuries by Event

Chart 3.9C.1: Cummulative Incident Rate by Quarter CY2017 - CY2018



	TSO	SHA	MDTA	MAA	MVA	MPA	MTA
Q3 CY2017	5	5.2	9.7	8.4	4.5		
Q4 CY2017	4.6	5.5	8.2	6.8	4.5	2.5	12.95
Q1 CY2018	1.2	5.6	5.9	7.9	3	3.51	13.22
Q2 CY2018	2.21	6.05	5.41	4.5	4.12	1.89	12.59

Chart 3.9C.2: Paid Medical & Indemnity Injury Costs Q2 CY2016 - Q2 CY2018

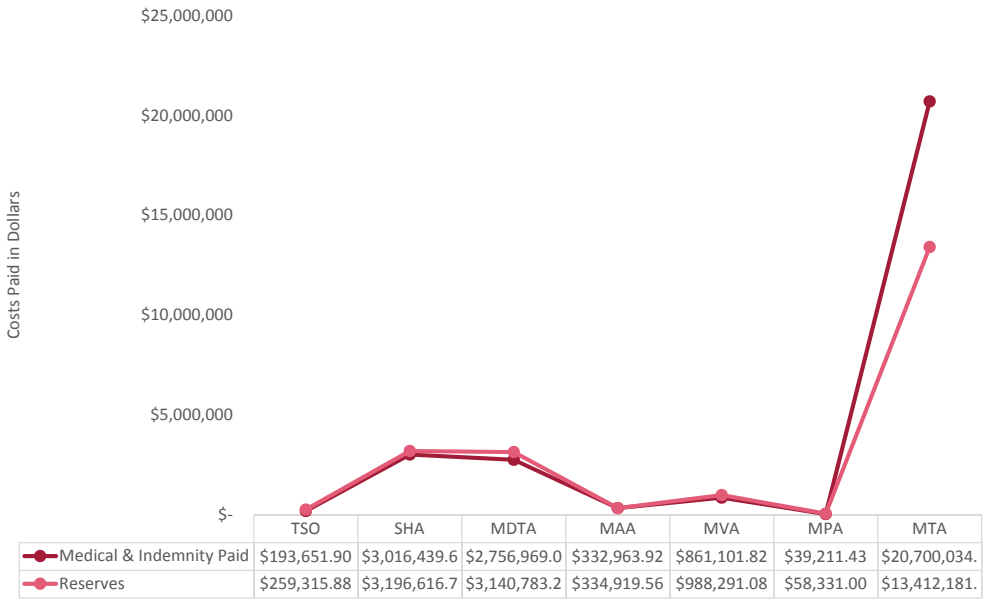


	TSO	SHA	MDTA	MAA	MVA	MPA	MTA
Q2 CY 2016	$1,354.62	$470,335.02	$459,214.51	$56,644.02	$247,244.79	$1,683.29	$3,804,218.7
Q2 CY 2017	$102,750.03	$129,705.35	$221,935.92	$27,633.84	$66,895.34	$10,420.76	$2,453,957.1
Q2 CY 2018	$0.00	$56,505.19	$25,403.09	$6,166.89	$17,059.24	$5,537.76	$538,704.68

PERFORMANCE MEASURE 3.9C

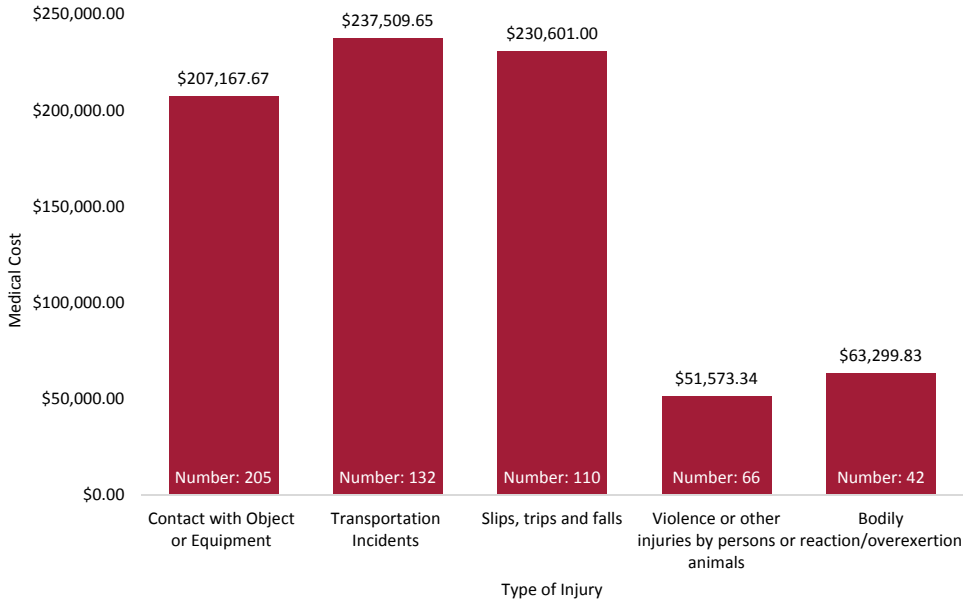
Incident Rate, Cost of Injuries and Predominant Injuries by Event

Chart 3.9C.3: Injury Costs Paid and Reserves for CY2016 - CY2018



	TSO	SHA	MDTA	MAA	MVA	MPA	MTA
Medical & Indemnity Paid	$193,651.90	$3,016,439.6	$2,756,969.0	$332,963.92	$861,101.82	$39,211.43	$20,700,034.
Reserves	$259,315.88	$3,196,616.7	$3,140,783.2	$334,919.56	$988,291.08	$58,331.00	$13,412,181.

Chart 3.9C.4: MDOT Top 5 Injuries by Event for Q2 CY2018



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

PERFORMANCE MEASURE DRIVER:
Leah Visakowitz
Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:
To track customers (non-MDOT employees) who have sustained an injury or incident at MDOT buildings.

FREQUENCY:
Quarterly

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

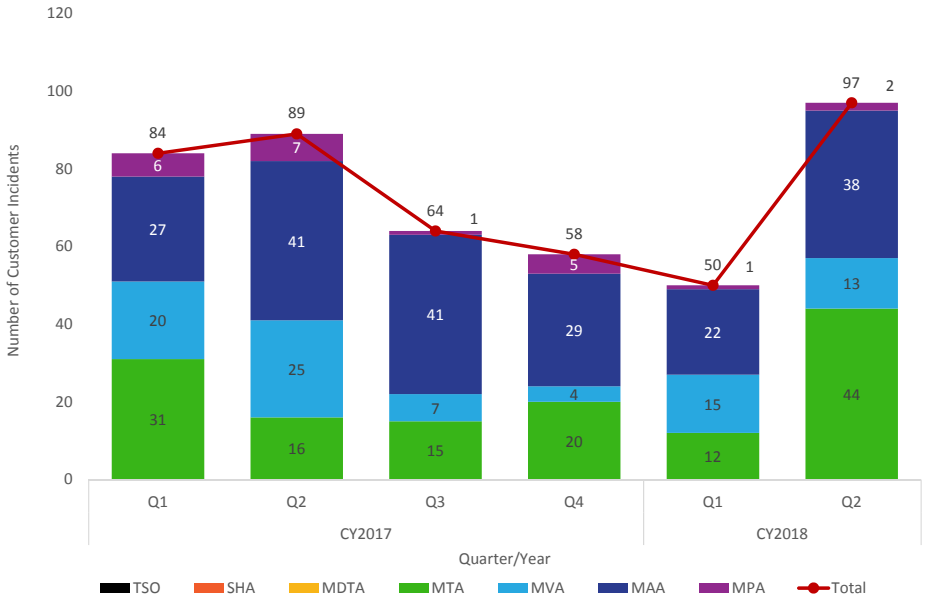
NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 3.10
Number of Customer Incidents at MDOT Facilities

MDOT is committed to providing a safe and secure environment for its customers. With the many services that MDOT and its TBUs provide to the public, there are programs in place to ensure the safety and security of its facilities and customers. Observing and measuring unplanned incidents that may result in injury, which occur in and around buildings where MDOT provides a service to customers (i.e. MVA centers, Stop in Centers), is key in developing these programs.

Although this is an important topic for MDOT to acknowledge, the TBUs have only been measuring it for the past year. Recently, risk managers re-evaluated how customer incidents and injuries are tracked and reported. A standard definition was determined and agreed upon by all TBUs. To continually ensure that all processes are consistent, the TBUs are working together to produce standard policies and forms, while educating all staff on how to report any incidents and injuries they witness at their facilities.

Chart 3.10.1: Number of Customer Incidents at MDOT Buildings CY2017-CY2018



PERFORMANCE MEASURE 3.10
Number of Customer Incidents at MDOT Facilities

Chart 3.10.2: Number of Customer Incidents per 100,000 Customers Visited CY2017-CY2018

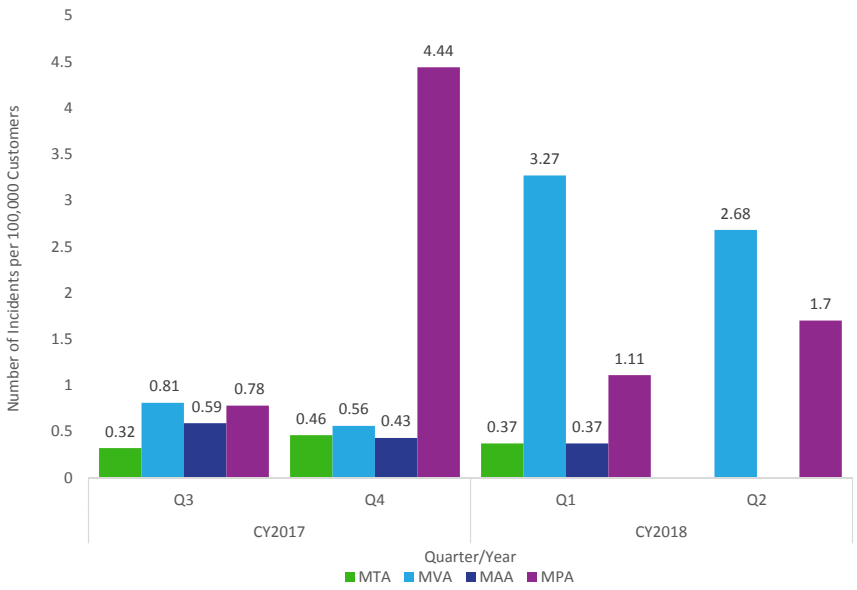
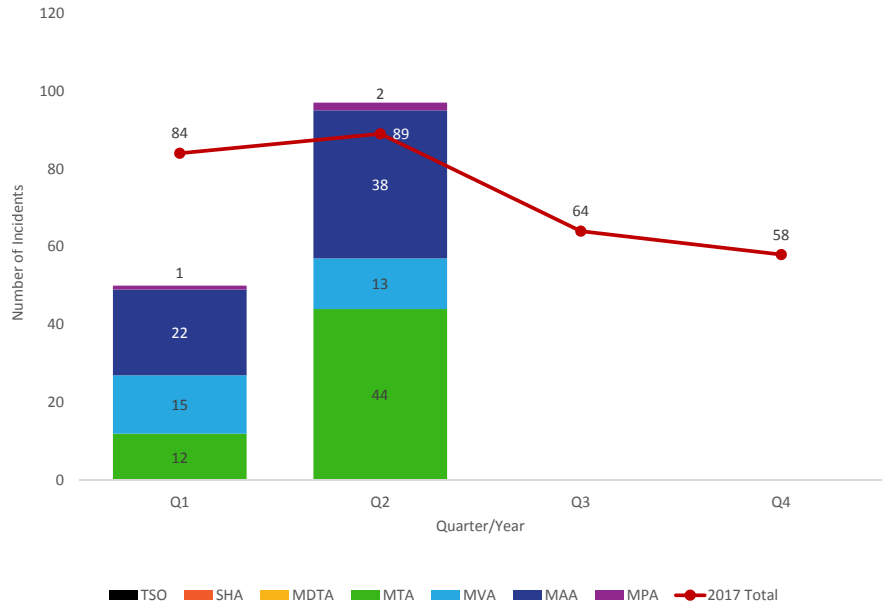


Chart 3.10.3: Number of Customer Incidents at MDOT Buildings CY2017-CY2018



TANGIBLE RESULT #4

Deliver Transportation Solutions and Services of Great Value

MDOT will deliver transportation solutions on time and within budget. The Department will use strategies to ensure that the transportation solution meets the needs of 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:
Aviva Brown
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:
To gauge the accuracy of capital project estimates to manage the Department's Capital Program more efficiently.

FREQUENCY:
Annually (In October)

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

NATIONAL BENCHMARK:
+/- 5% This mirrors the benchmark as reported by Nebraska's Dept. of Roads, Fiscal Responsibility for the Accuracy of Project Estimates. Further, while MDOT has not specified a benchmark per se, they use Nebraska's 5% as the bench for the best.

Note: This benchmark applies to capital construction projects. So far and with extensive research, we have been unable to find a benchmark for IT projects.

PERFORMANCE MEASURE 4.1
Percent of Estimated Project Budget as Compared to Final Project Award

This performance measure 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 State roadways and bridges; increasing and retaining the commerce going in and out of the Port of Baltimore; attracting and retaining airlines and travelers at BWI Marshall; providing more alternative service options to Maryland citizens to conduct their MVA transactions remotely; or improving transit services throughout the State.

Given the diverse differences between construction and IT projects, we have separated into two categories with specific budget parameters:

- $1M+ construction type projects: SHA, MDTA, MPA, MAA and MTA
- $400K+ IT projects: TSO and MVA

For FY's 2014, 2015 and 2016, the range in variance between the estimated project budgets and the final project awards was from 4.7% to 7.6%. While the range is within the +/- 5% and the estimates vs award are very good, the goal is to continue working on strategies to obtain the +/- 5% consistently.

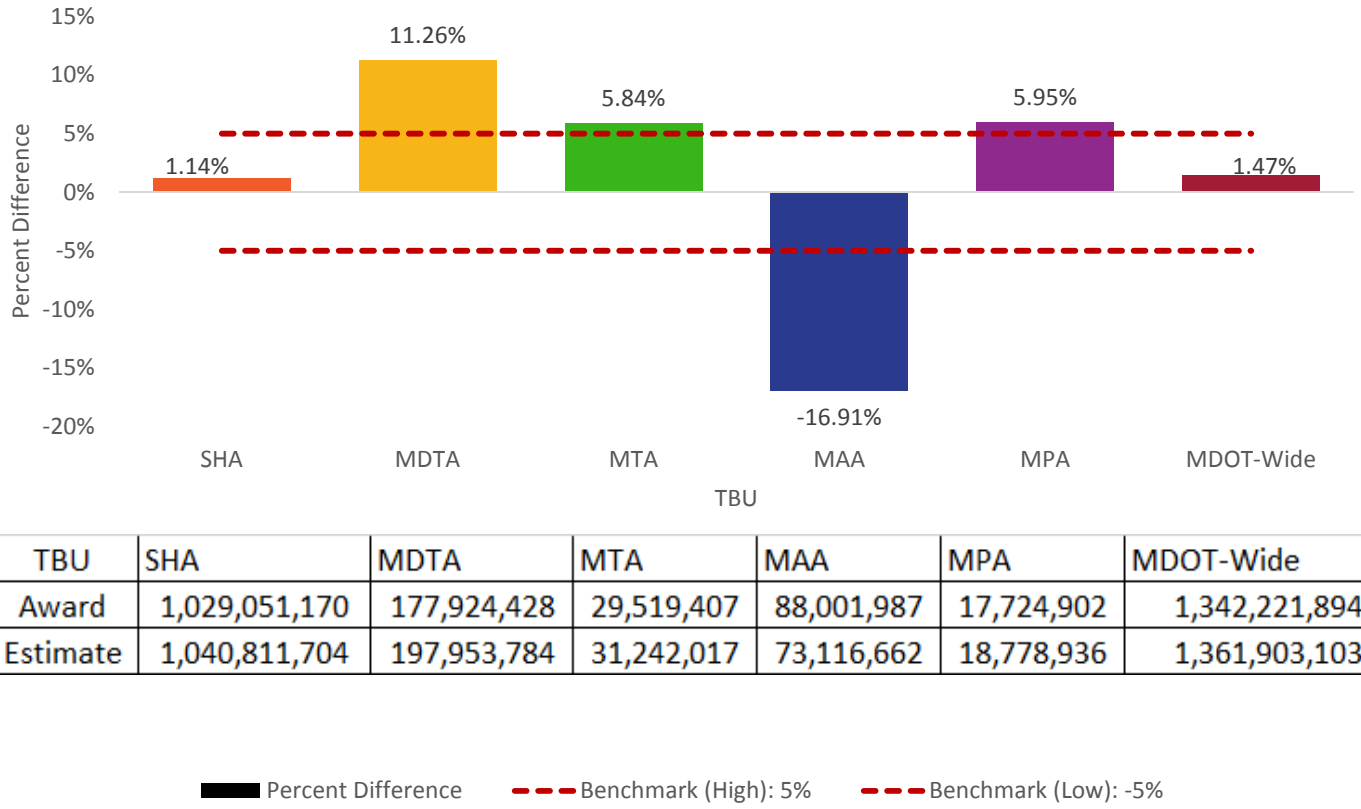
To improve the outcomes of this measure, MDOT is engaged in the following activities:

- Team expansion with subject matter experts (SME's) from each TBU;
- Use of estimating tool;
- Creation of excel spreadsheet to ensure consistency in gathering data for PM 4.1 – PM 4.3;
- Clarifying definitions with TBU's; and
- Modified dataset for construction contracts to $1M (MAA, SHA, MDTA, MPA and MTA).

PERFORMANCE MEASURE 4.1

Percent of Estimated Project Budget as Compared to Final Project Award

Chart 4.1.1: Percent of Estimated Project Budget as Compared to Final Project Award FY2017

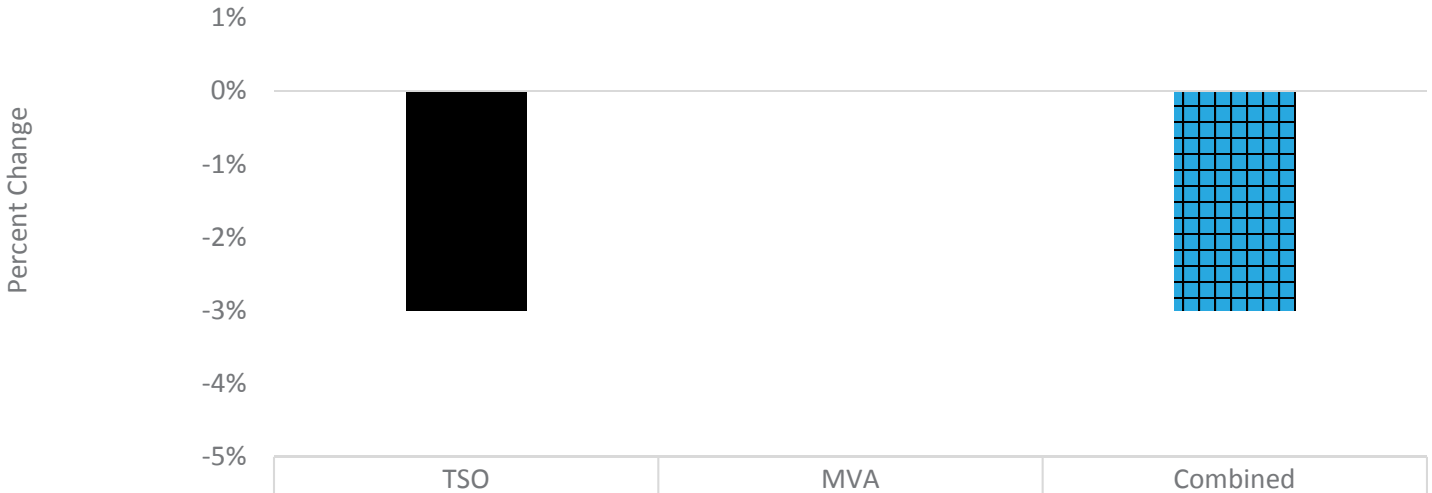


TBU	SHA	MDTA	MTA	MAA	MPA	MDOT-Wide
Award	1,029,051,170	177,924,428	29,519,407	88,001,987	17,724,902	1,342,221,894
Estimate	1,040,811,704	197,953,784	31,242,017	73,116,662	18,778,936	1,361,903,103

PERFORMANCE MEASURE 4.1

Percent of Estimated Project Budget as Compared to Final Project Award

Chart 4.1.2: Percent of Estimated Project Budget as Compared to Final Project Award TSO and MVA FY2017



	TSO	MVA	Combined
Percent Difference	-3.00%	0.00%	-3.00%
Award	$515,852	0.00%	$515,852
Estimate	$500,000	0	$500,000

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

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

PURPOSE OF MEASURE:
To measure the difference in the contract amount from NTP to final contractor payout.

FREQUENCY:
Annually (in October)

DATA COLLECTION METHODOLOGY:
Collect data from MDOT TBUs for FY2013 to FY2016. Data will reflect contracts that closed out in each respective fiscal year. Data will be shown as a bar graph for each fiscal year.

NATIONAL BENCHMARK:
2%

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.

Strategy development meetings have been held with TBU representatives throughout the reporting year to review data and address any issues that exist in order to meet the 2% benchmark for compliance. Data for FY2017 illustrates a collective effort for benchmark compliance by TBU. This is reflected for FY2017 by TBU compliance across the board.

Issue that could arise as this TR moves forward would be contracts that exceed the award amount by 2% at final payout.

TBU's will have to monitor contracts and justify overages through contract changes and justifications for those changes.

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

PERFORMANCE MEASURE 4.2

Percent of Change for Finalized Contracts

Chart 4.2.1: Percent Change for Finalized Contracts by TBU FY2014

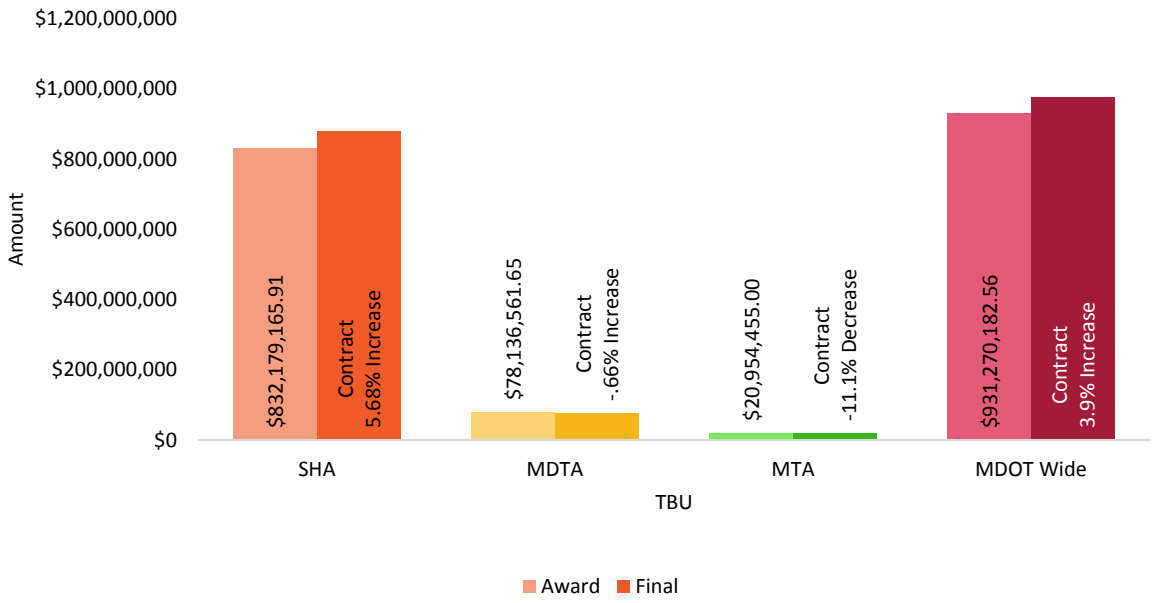
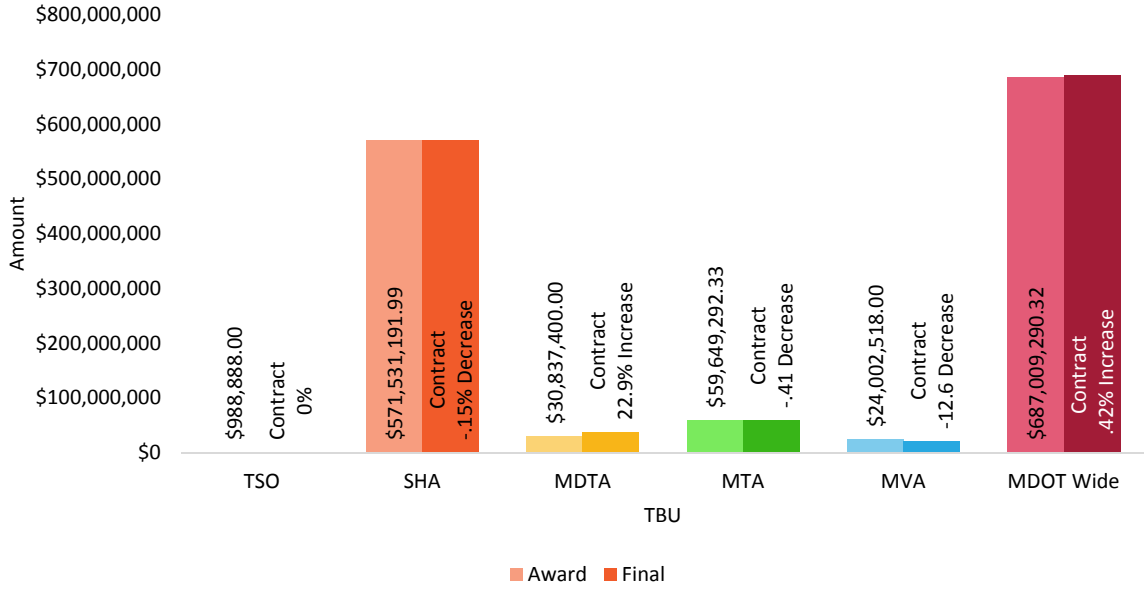


Chart 4.2.2: Percent Change for Finalized Contracts by TBU FY2015



PERFORMANCE MEASURE 4.2

Percent of Change for Finalized Contracts

Chart 4.2.3: Percent Change for Finalized Contracts by TBU FY2016

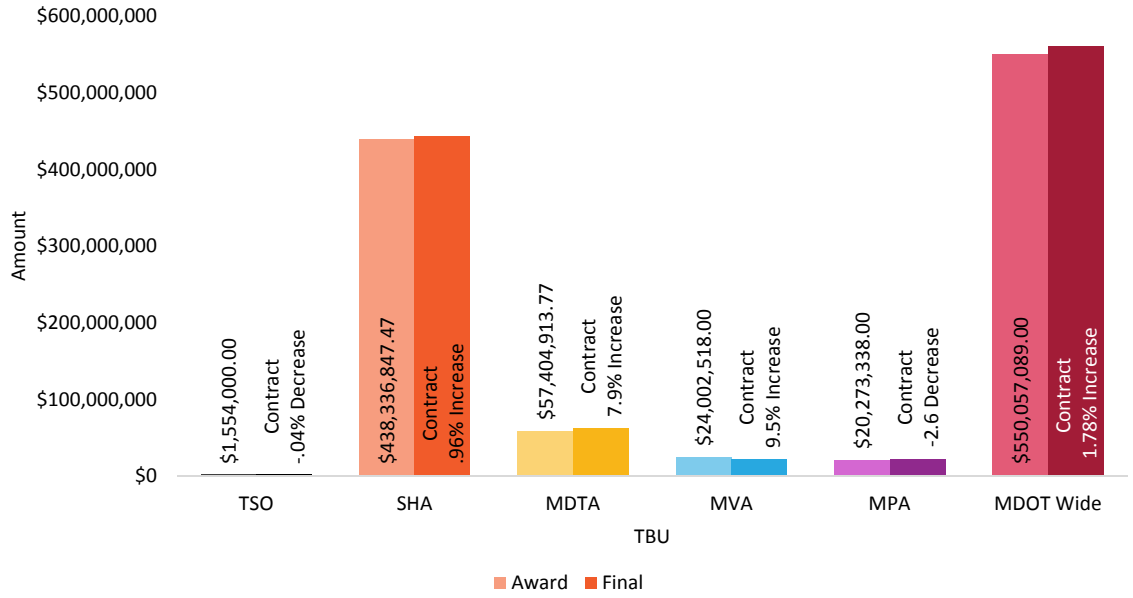
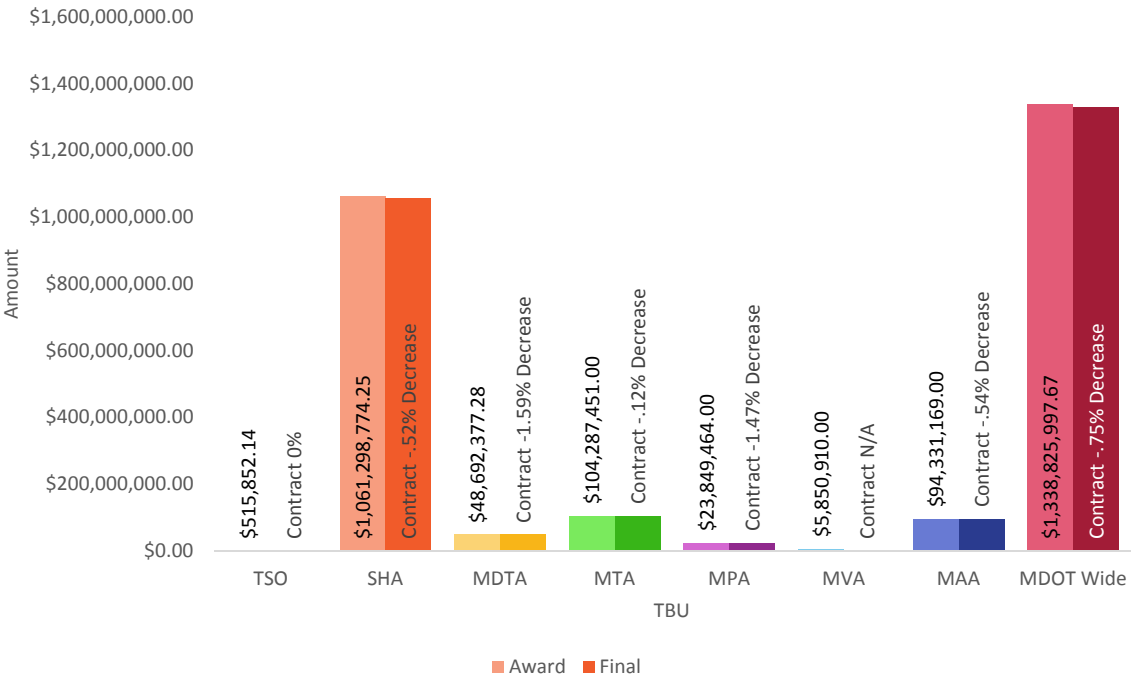


Chart 4.2.4: percent Change for Finalized Contacts by TBU FY2017



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:
87%

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 these factors can be mitigated.

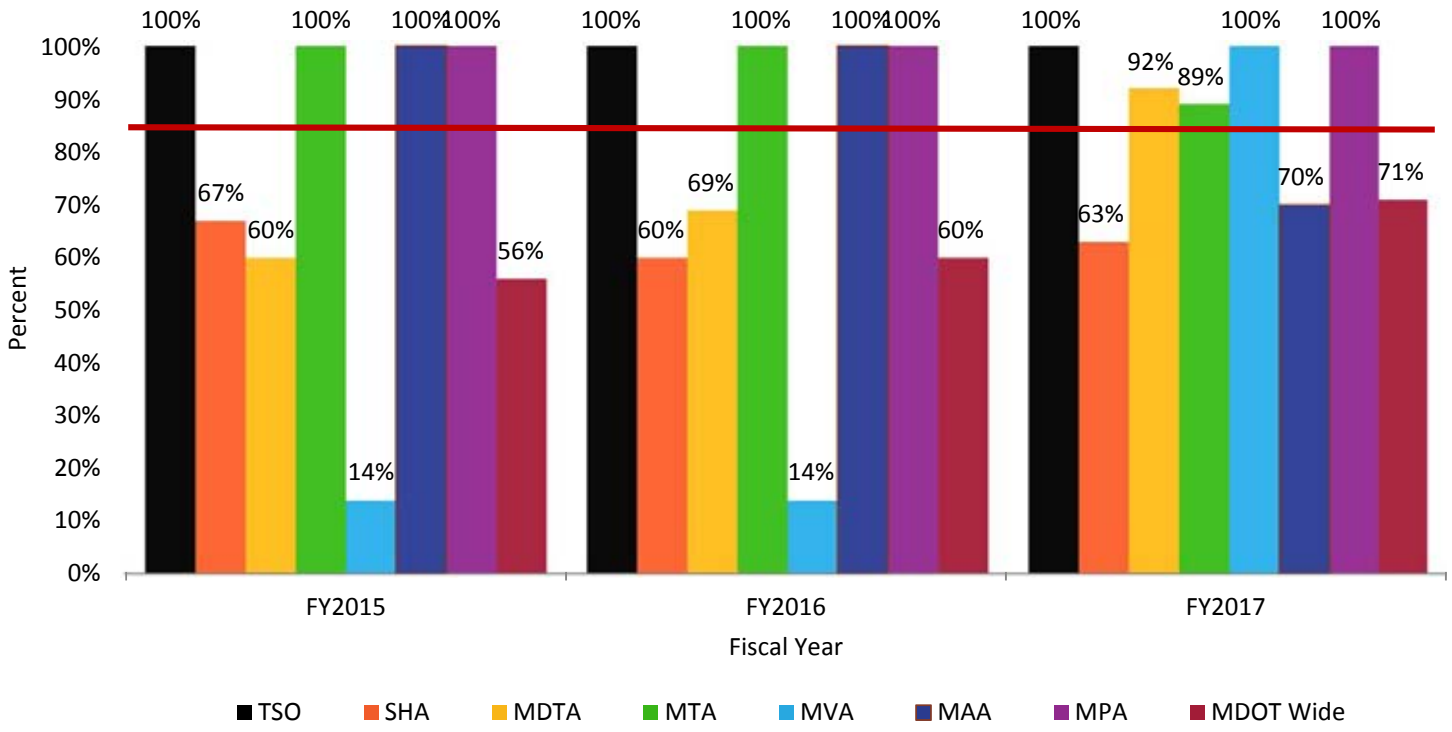
Overall MDOT increased the percentage of contracts completed in a timely basis from 56 percent in FY2015 and 60 percent in FY2016 to a FY2017 total of 71 percent. This is largely due to a new standard that measures project completion based on when our stakeholders start receiving "beneficial use" from the project. This aligns with MDOT's focus on its customers.

Another reason for the improved performance is the adoption of strategies designed to limit delays in the completion of contracts. These strategies include the implementation of A + B Bidding, Time of Year Letting strategies, a lessons learned process post-completion and having design changes undergo administrator review and approval.

PERFORMANCE MEASURE 4.3

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

Chart 4.3.1: On-Time Services and Solutions, Percent of Projects Completed by Original Contract Date FY2015-FY2017



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

PERFORMANCE MEASURE DRIVER:
Ross Turlington
Maryland Transit Administration (MTA)

Jim Harkness
Maryland Transportation Authority (MDTA)

Shawn Ames
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 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.

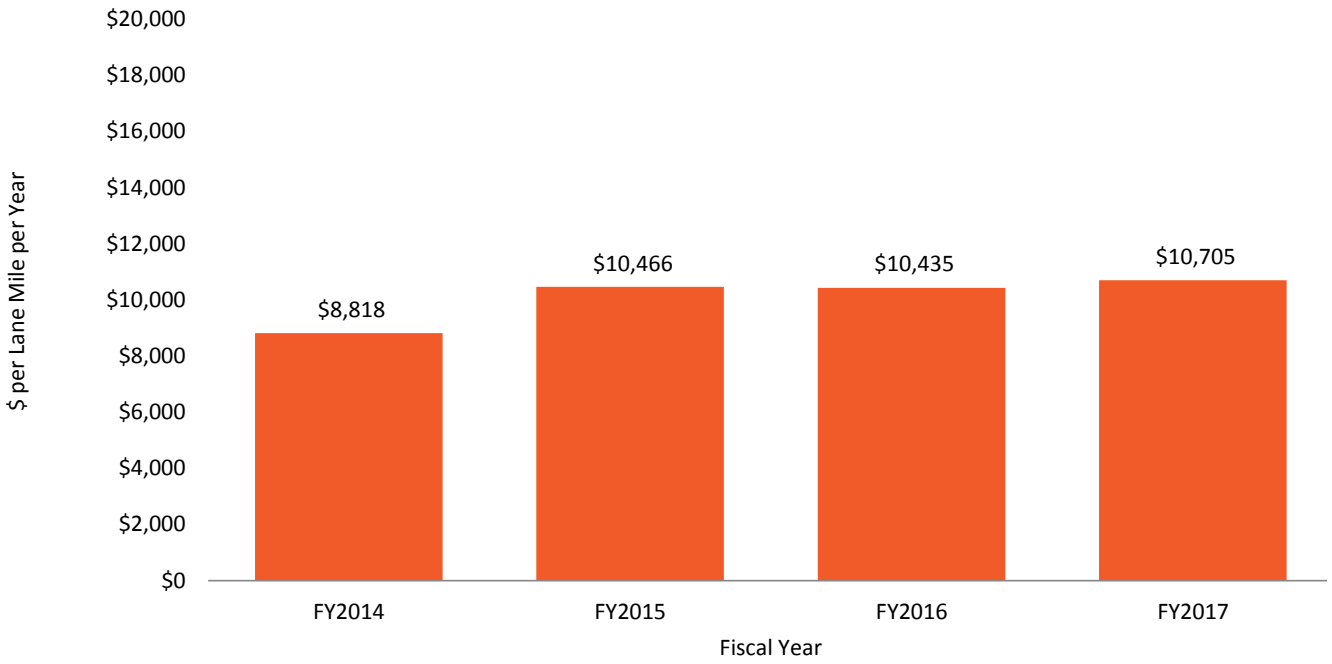
Tracking of these measures is based upon actual costs associated with contracts issued for various road and bridge projects. Because data for these projects is tracked annually, in any given year there may not be an award for this type of project as can be seen from some of the MDTA data.

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

Average Cost of Common Transportation Solutions and Services

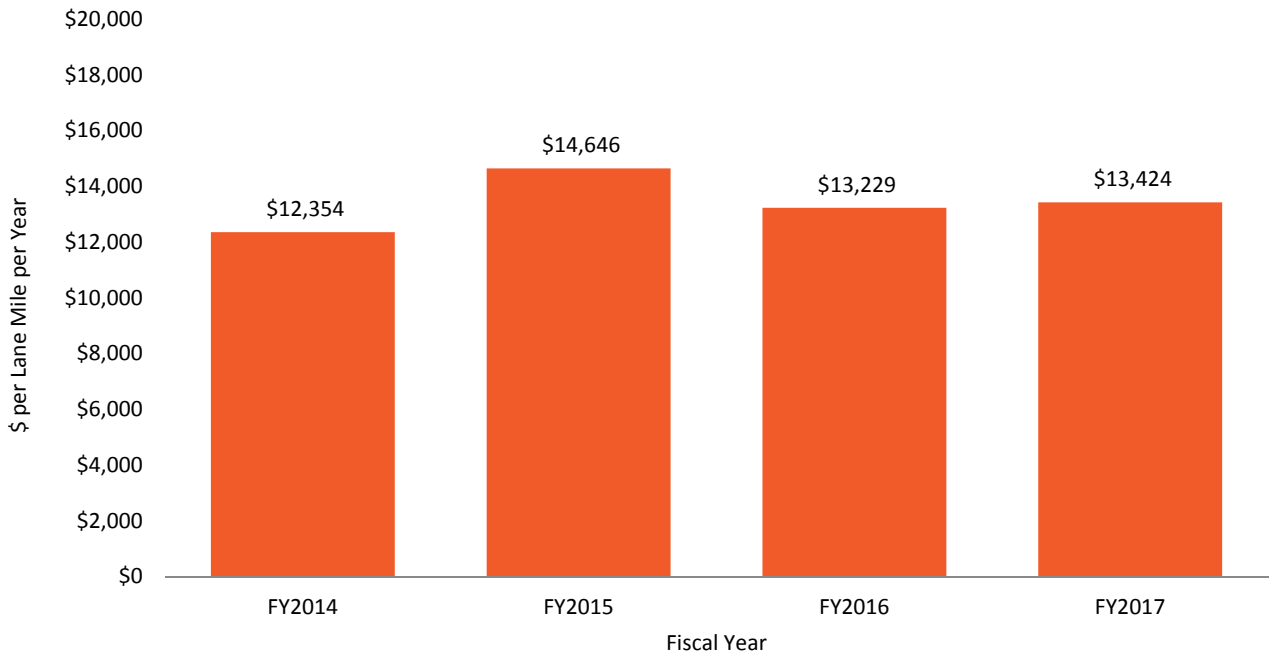
Chart 4.4A: Minor Road Preservation Life Cycle Cost FY2014-FY2017



PERFORMANCE MEASURE 4.4B

Average Cost of Common Transportation Solutions and Services

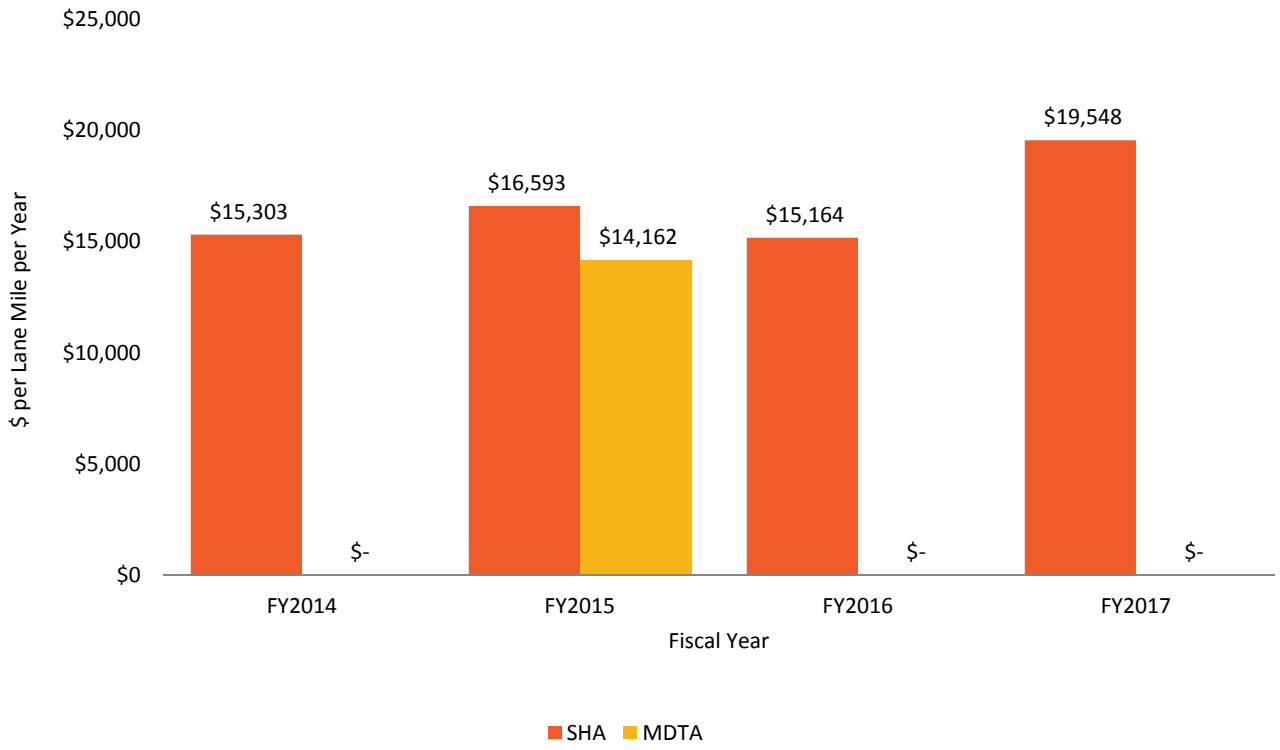
Chart 4.4B: Major Road Preservation Life Cycle Cost FY2014-FY2017



PERFORMANCE MEASURE 4.4C

Average Cost of Common Transportation Solutions and Services

Chart 4.4C: Interstate Preservation Life Cycle Cost FY2014-FY2017



PERFORMANCE MEASURE 4.4D AND E

Average Cost of Common Transportation Solutions and Services

Chart 4.4D: Average Bridge Replacement Cost FY2015-FY2018

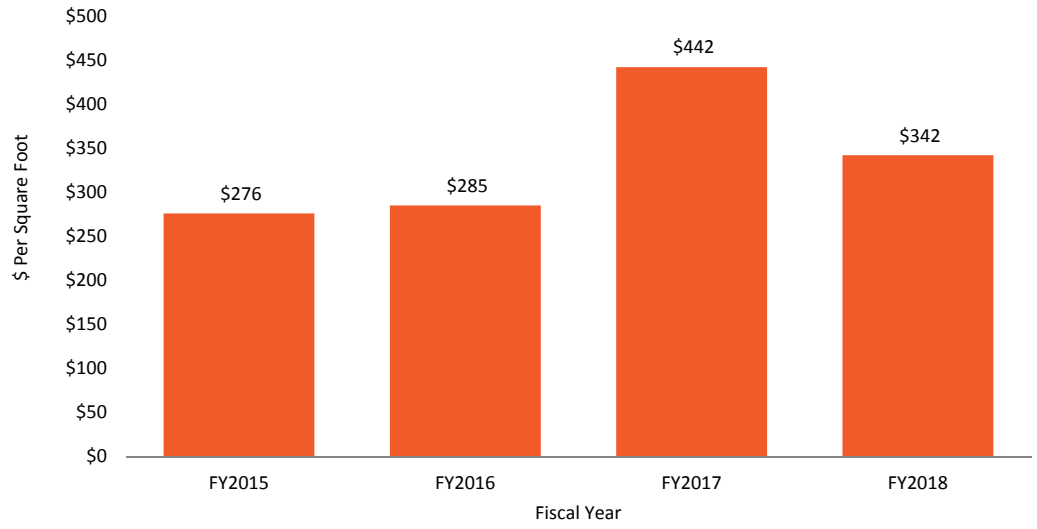
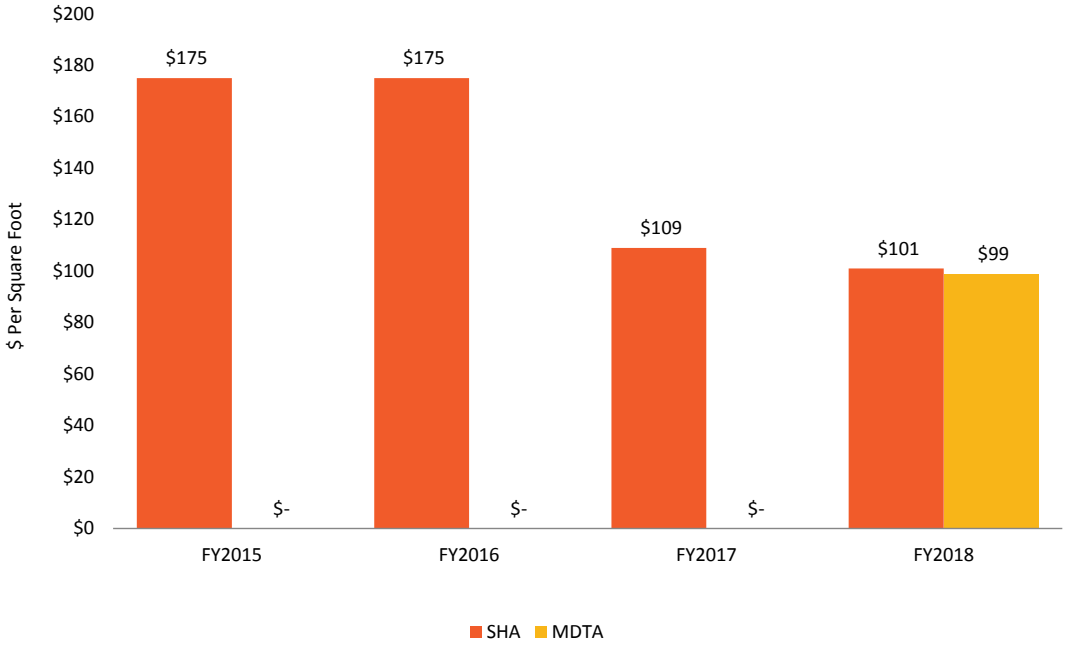


Chart 4.4E: Average Bridge Redecking Cost FY2015-FY2018

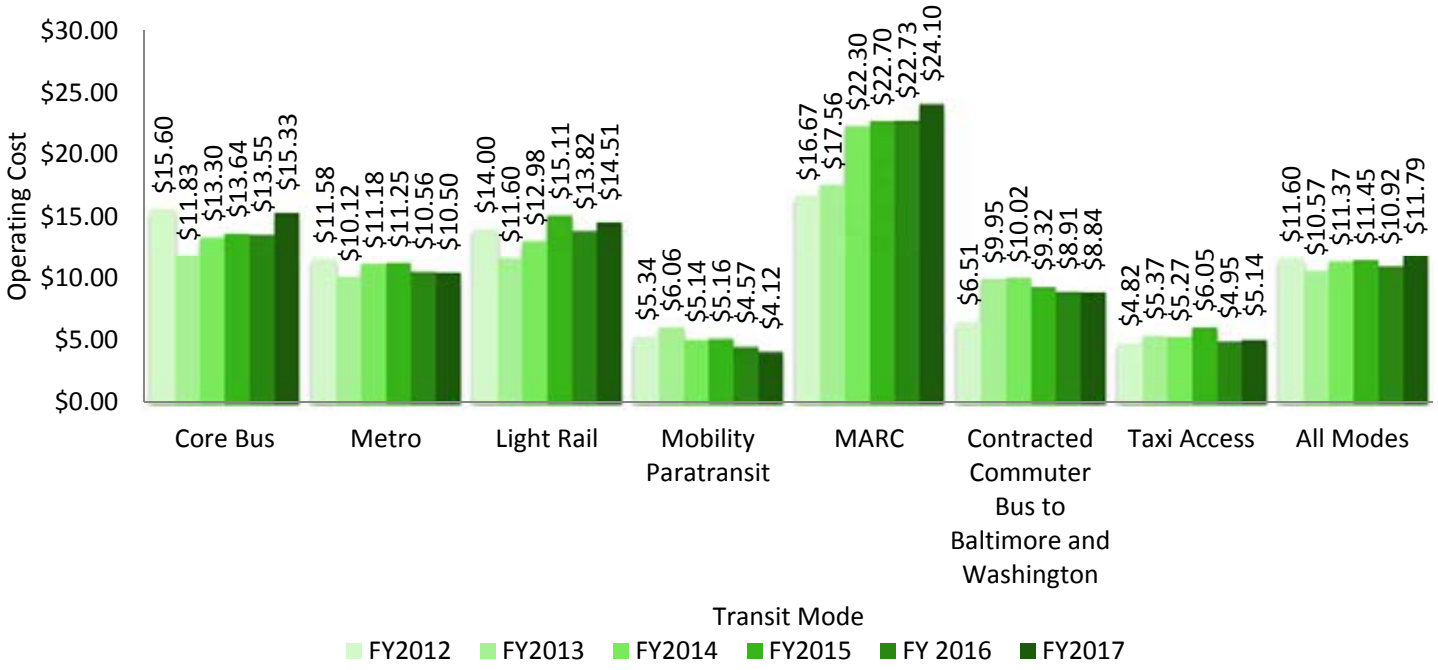


PERFORMANCE MEASURE 4.4F

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

Operating cost per passenger trip is calculated by dividing the total modal operating cost by the amount of passenger trips taken. Passenger trips does not represent the number of riders, it illustrates the amount of overall trips our riders take during a specified period of time. This metric provides MDOT MTA another way of assessing the performance an efficiency of our services by attributing a monetary value to the amount of trips taken.

Chart 4.4F.1: Operating Cost Per Revenue Vehicle Mile FY2012-FY2017

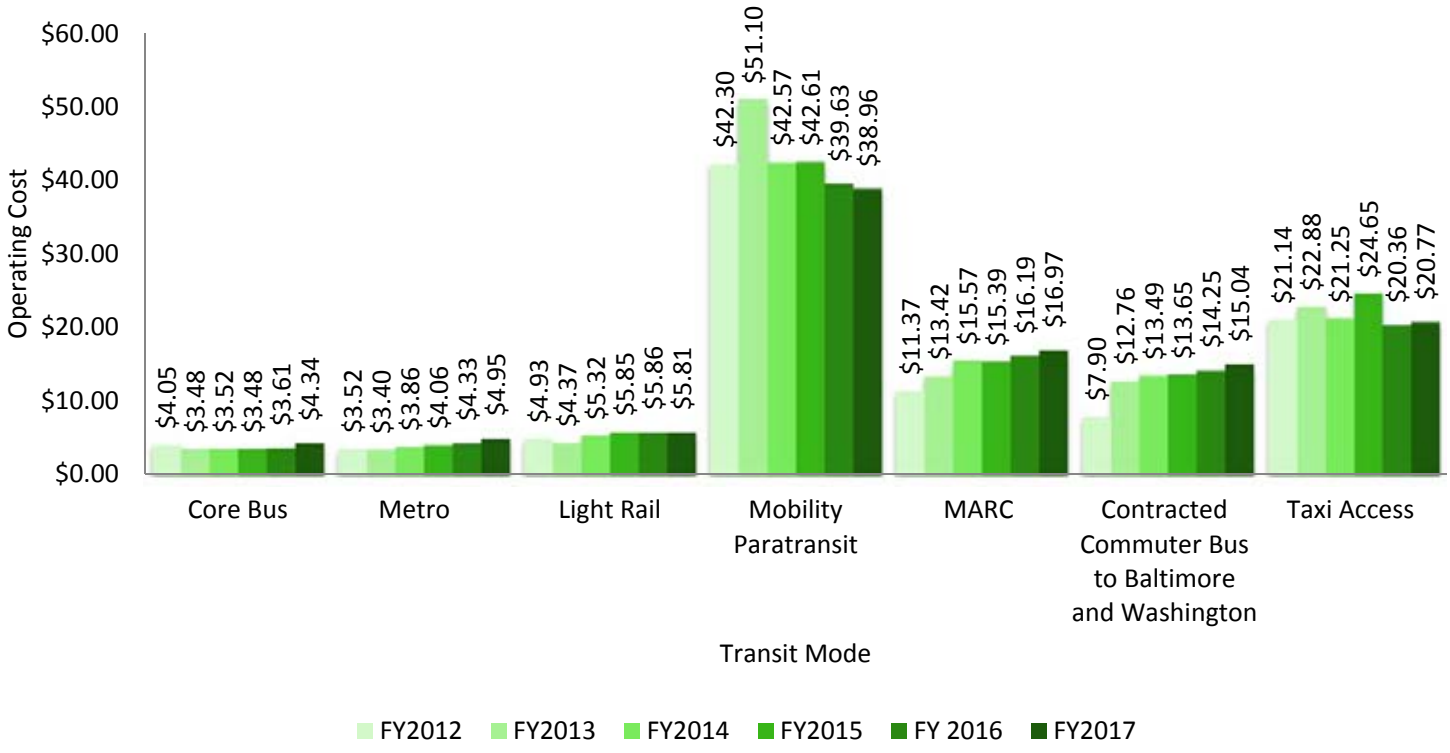


PERFORMANCE MEASURE 4.4G

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

Operating cost per revenue vehicle mile is calculated by dividing the total modal operating cost by the amount of revenue vehicle miles traveled. This measure enables MDOT MTA to better understand the modal cost efficiencies of our transit services. Operating costs include vehicle maintenance, operator wages, fuel, etc.

Chart 4.4G.1: Operating Cost Per Passenger Trip FY2012-FY2017

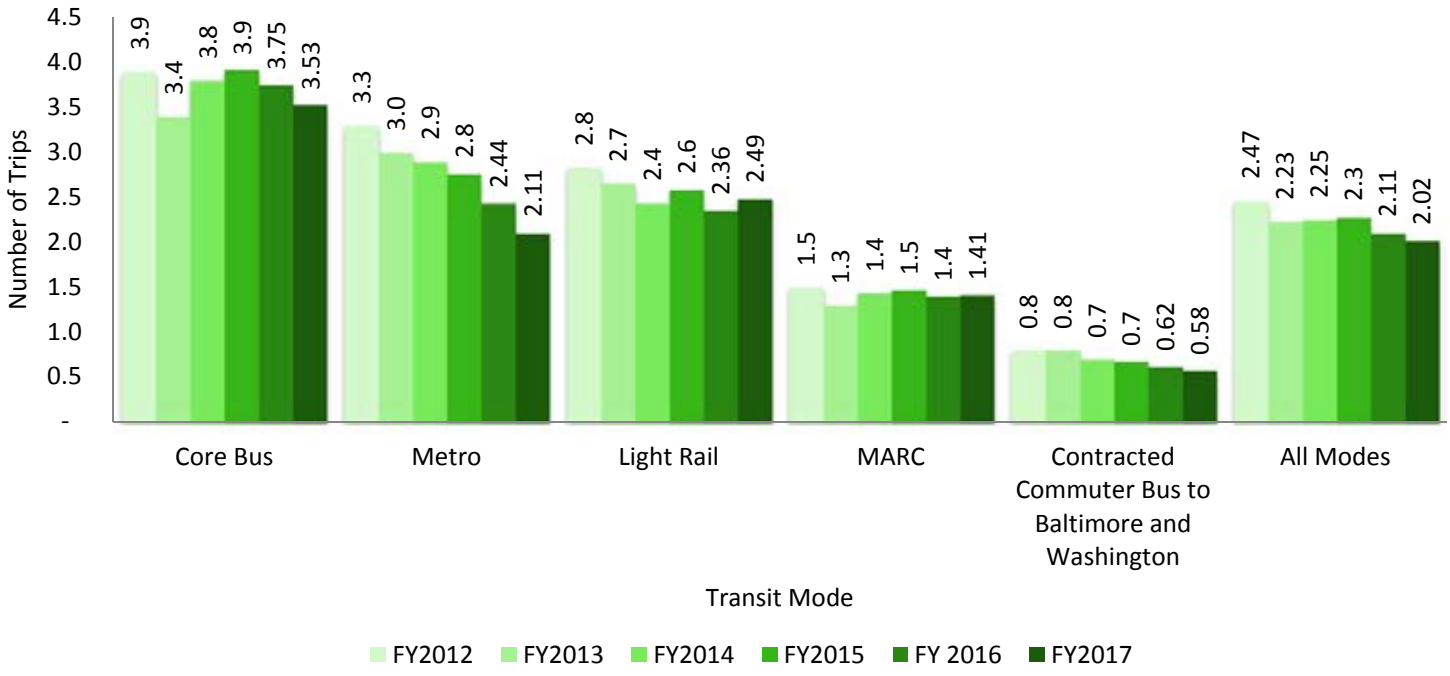


PERFORMANCE MEASURE 4.4H

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

Passenger trips per revenue vehicle mile is calculated by dividing the number of passenger trips by the amount of revenue vehicle miles traveled. This measure enables the MTA to understand the number of rides relative to the amount of service provided for each mode. This measure allows MDOT MTA to access the rider demand and the appropriate volume of service.

Chart 4.4H.1: Passenger Trips Per Revenue Vehicle Mile FY2012-FY2017

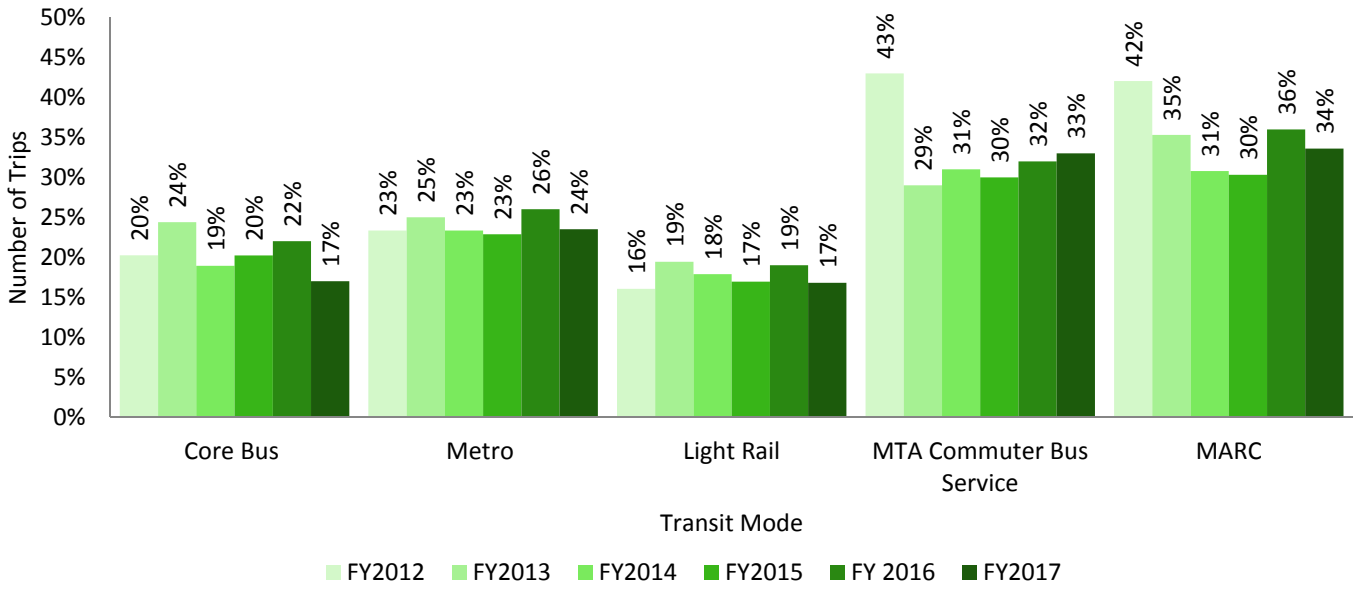


PERFORMANCE MEASURE 4.4I

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

Farebox Recovery Ratio is calculated by dividing the modal operating costs by the amount of fare revenue collected through passenger fare purchases. This measure helps MDOT MTA assess the cost efficacy and financial sustainability of operating each mode of transit service.

Chart 4.4I.1: Farebox Recovery Ratio FY2012-FY2017



PERFORMANCE MEASURE 4.4J

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

The cost per transaction includes those costs that directly affect an MVA product. It is based on the operating expense, compared to the total number of customer transactions completed by visiting one of the MVA locations, mailing in a request, or completing a transaction through an alternative service delivery. The operating expense is inclusive of salaries, overtime and wages, and all other expenses related to completing a customer transaction.

Operating expense does not include the administrative costs, costs for IT system enhancements, and onetime start-up costs for new product development. Also, not included are costs for MHSO and Capital Programs.

Costs that directly affect a transaction were $11.44 in 2015, $11.96 in 2016 and $12.08 in 2017. The change in 2016 and 2017 is primarily due to salaries and benefits increasing by 2.5% in 2017 and 1.8% in 2016. Salaries and benefits comprise about 64% of the total operating budget. All branch costs are considered in the cost per transaction calculation. The janitorial and ground maintenance costs are captured in the total branch costs, and have increased by a small amount because of the change in minimum wage, and this will rise in 2018 and 2019 as contracts expire and are renegotiated.

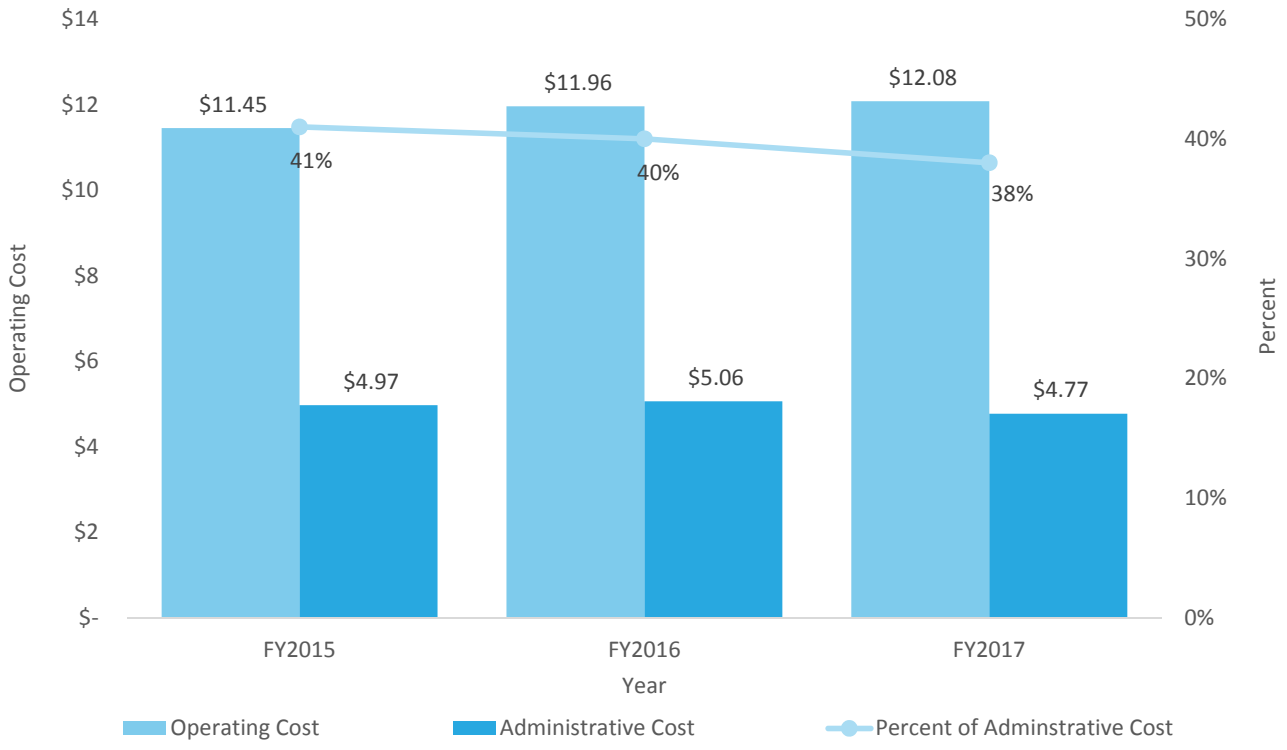
Another factor impacting cost per transaction is the shift from branch to alternative service delivery. In 2015 the branch transactions were 38% of total transactions, in 2016 the branch transactions were 34% and in 2017, the branch transactions were 33%. MVA anticipates that more customers will utilize alternative service delivery and branch transactions will continue to decrease. Trends in cost per transaction can vary when new technologies are implemented allowing customers to complete more transactions online and through kiosks.

Branch facilities will continue to drive the cost per transaction calculation. The MVA has been collaborating with other state agencies to utilize MVA locations to offer more opportunities for Maryland customers. Currently, MVA is adding the ease of completing transactions for DNR, EZPass, Charm Cards, Vital Records, TWIC Card and TSA precheck to the list of services offered inside the MVA facilities. MVA staff are manning the TWIC and TSA pre-check counters. As this scenario continues, MVA will be able to quantify the percentage of other state agencies utilizing MVA branches, and this will affect the MVA cost per transaction.

PERFORMANCE MEASURE 4.4J

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

Chart 4.4J.1: MVA Operating & Administrative Cost Per Transaction FY2015-FY2017



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)

Provide an Efficient, Well-Connected Transportation Experience

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

PERFORMANCE MEASURE DRIVER:
Sam Walters
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 percentage of tolls collected via cash payment at toll facilities.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 5.1A

Reliability of the Transportation Experience: Percentage of Tolls Collected as Cash

Customers expect limited congestion and minimal wait times, particularly at paid toll facilities. A decrease in this measure indicates more free flow traffic using electronic means of payment. Currently we are trending positively, as our measure has been decreasing over the past year.

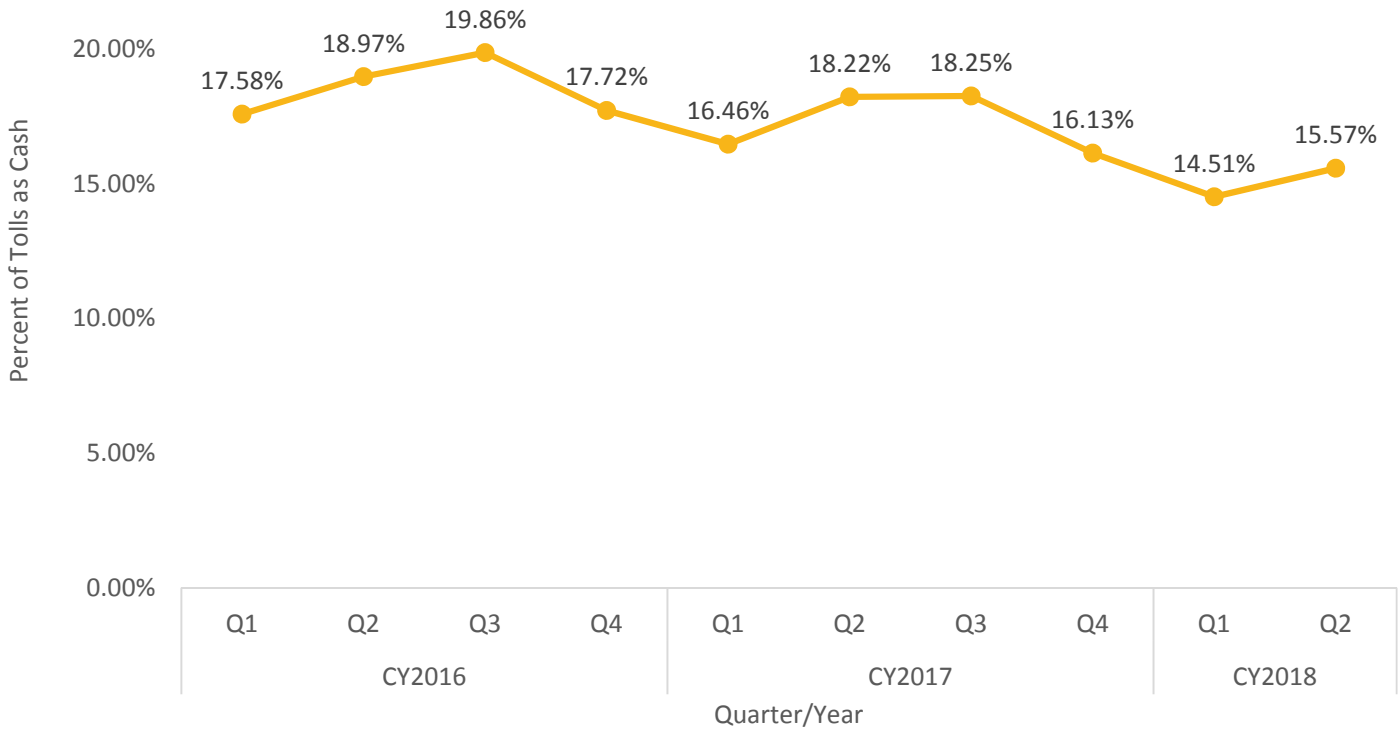
As of Q2 CY2018 we are at 15.57 percent of tolls collected as cash. This is a decrease of 2.65 percent from Q2 CY2017. Cash tolls cause more congestion and longer wait times at toll facilities.

MDOT continues to market electronic toll collection.

PERFORMANCE MEASURE 5.1A

Reliability of the Transportation Experience: Percentage of Tolls Collected as Cash

Chart 5.1A.1: Percent of Tolls Collected as Cash for All Mixed Facilities Q1 CY2016 - Q2 CY2018



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

PERFORMANCE MEASURE DRIVER:
Jeffrey Gutowski
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

This performance measure is important because customers of the Port facilities expect reasonable turn times to obtain needed services. The reliability of the transportation experience is 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 the service provider and improve turn times at our container facility. The data will be reported and reviewed annually.

The MPA is reporting on container transaction turn time handled by trucks at Seagirt Marine Terminal by fiscal year. The gate turnaround time is determined by the accumulated time that each truck remains on the terminal to complete its transaction. The primary objective of the Port is to maintain industry leading turn times of 45 minutes or less. Turn times have increased in FY2017 from 30.7 minutes to 44.0 minutes per transaction. The increase is directly attributable to four factors:

1. The Panama Canal expansion allows for larger vessels to call at the facility.
2. Irregular schedules of these larger vessels contribute to vessel bunching.
3. An unexpected surge in container volume on average of 13 percent since January 2017 has stressed Seagirt's historical operating methodology, labor and equipment.
4. A change in the metric for applying this data. Prior to 2017, turn times were measured at the beginning of the business transaction to the end of said transaction, the industry term for this measurement is "pedestal to pedestal." It was requested by the trucking community for turn times to more accurately reflect the actual time a driver is waiting to be serviced; not just the drivers actual time at the terminal. With the implementation of RFID technology over the past year, turn times can now be measured from the time a truck passes through the first security checkpoint until it passes through the final security checkpoint prior to exiting the terminal. It is important to note when comparing to prior reporting periods that the time from the first security checkpoint to the processing center which begins the business transaction is approximately eight to ten minutes, and this time was not reflected in prior reports.

PERFORMANCE MEASURE 5.1B

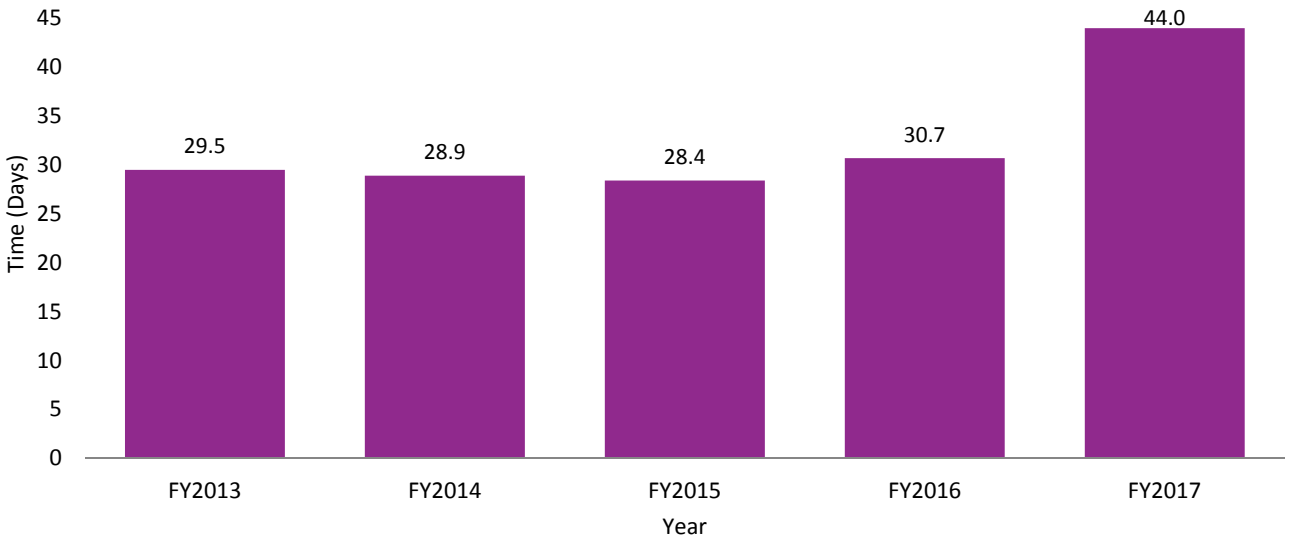
Reliability of the Transportation Experience: Average Truck Turn Time per Container Transaction

Continual improvement of the trucker experience is important to MPA as well as the terminal operator. The terminal operator has implemented the following to improve the truck turnaround times through:

1. Streamlining gate processes, including implementation of RFID technology.
2. Terminal infrastructure investments to include opening of a second truck gate.
3. Extending gate operating hours in coordination with CBP resources.
4. Deploying new technologies and expanding existing technologies including updating the NAVIS terminal operating system that is currently being installed.
5. Investing in new container handling equipment with the delivery of 6 new RTG (Rubber Tire Gantry) on January 28, 2018 to better service over the road.
6. Implementation of a port-wide chassis pool near the dock empty container yard and a new Terminal operating system.

Lastly maintaining active lines of communication with the Maryland Motor Truck Association, Longshoreman's Association, Customs and Border Protection and United States Coast Guard all are very effective ways to eliminate unnecessary and unwarranted delays in the processing of trucks.

Chart 5.1B.1: Average Annual Truck Turnaround Time per Unit (Box) at Seagirt Marine Terminal FY2013-FY2017



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

PERFORMANCE MEASURE DRIVER:
Jeffrey Gutowski
Maryland Port Administration (MPA)

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

FREQUENCY:
Quarterly

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

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 5.1C

Reliability of the Transportation Experience: Average Wait Time (MVA)

MDOT customers expect reasonable wait times to obtain needed services and products. For performance measure 5.1C, the reliability of customer transportation experiences was assessed through monitoring of average wait times at MVA facilities. The data will be reported and reviewed quarterly.

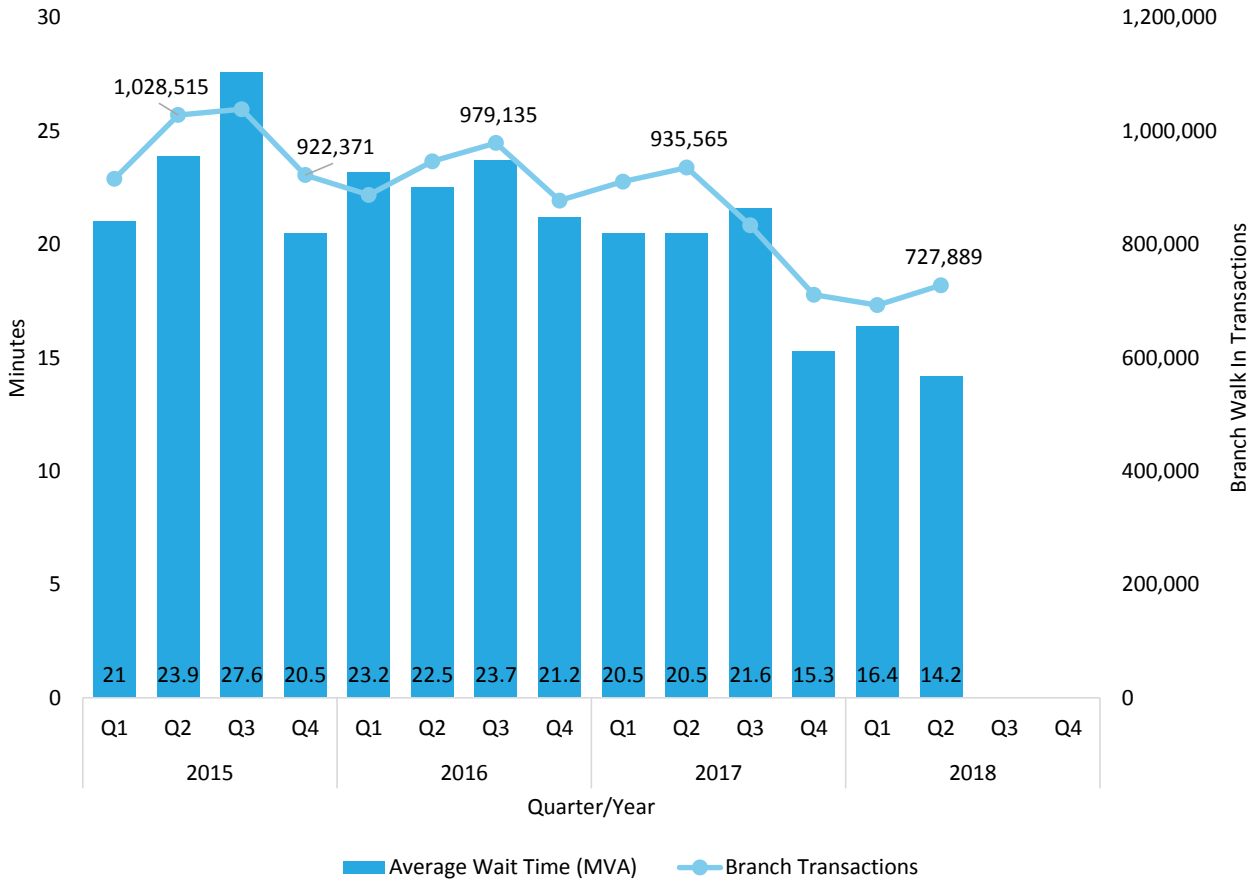
Currently, the MVA reports the average wait time for customers to obtain services and products at all branch offices. The statewide average wait time goal is 14.8 minutes. In the Q2 CY2018 reporting period, MVA average statewide wait time was 14.2 minutes. The average total wait time for the calendar year to date is 15.3 minutes.

Recently, the MVA has enhanced the eligibility check criteria for the use of web and kiosk services to push past warnings that do not prevent the renewal of licenses. Additionally, the eligibility check that prevented previous CDL holders from using web and kiosk alternative services has been enhanced. Both improvements will allow for more transactions to be moved to alternative services.

PERFORMANCE MEASURE 5.1C

Reliability of the Transportation Experience: Average Wait Time (MVA)

Chart 5.1C.1: Average Wait Time (MVA) CY2015-CY2018



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

PERFORMANCE MEASURE DRIVER:
Kokuei Chen
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 customers.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Varies by mode. Most modes use GPS tracking to compare performance to the schedule and in a few cases field observations are used to assess reliability.

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.

As an organization, MDOT continues to strive to meet or exceed APTA benchmarks for OTP across bus (78 percent), rail (90 percent), and paratransit (92 percent) modes. Our commitment to continual improvement of OTP is evident in our efforts to provide a transit network that allows passengers to travel more efficiently throughout our service area utilizing schedules that accurately reflect passenger travel times, driving down service related complaints and resulting in a better passenger experience.

As of April, 2018, new GPS tracking units have been installed on all MDOT MTA Core Buses. The new GPS units and the associated software is replacing less robust passenger counting system that had been used to calculate MTA Core Bus On Time Performance. The MTA core bus system contains three services: CityLink, LocalLink, and ExpressLink. LocalLink and ExpressLink service uses a schedule adherence system (with a two minute early, seven minute late window) to calculate "On Time" percentage while CityLink service uses a headway system (with an advertised headway + five minutes window) to calculate "On Time" percentage.

PERFORMANCE MEASURE 5.1D

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

Chart 5.1D.1: On-Time Performance of MTA Commuter Bus & MAA Ground Transport CY2017-CY2018

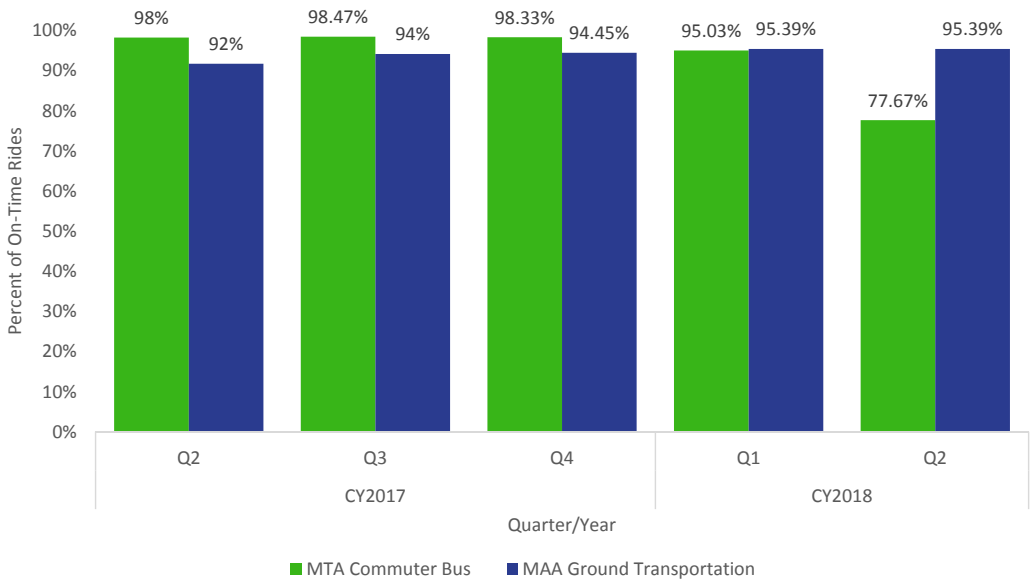
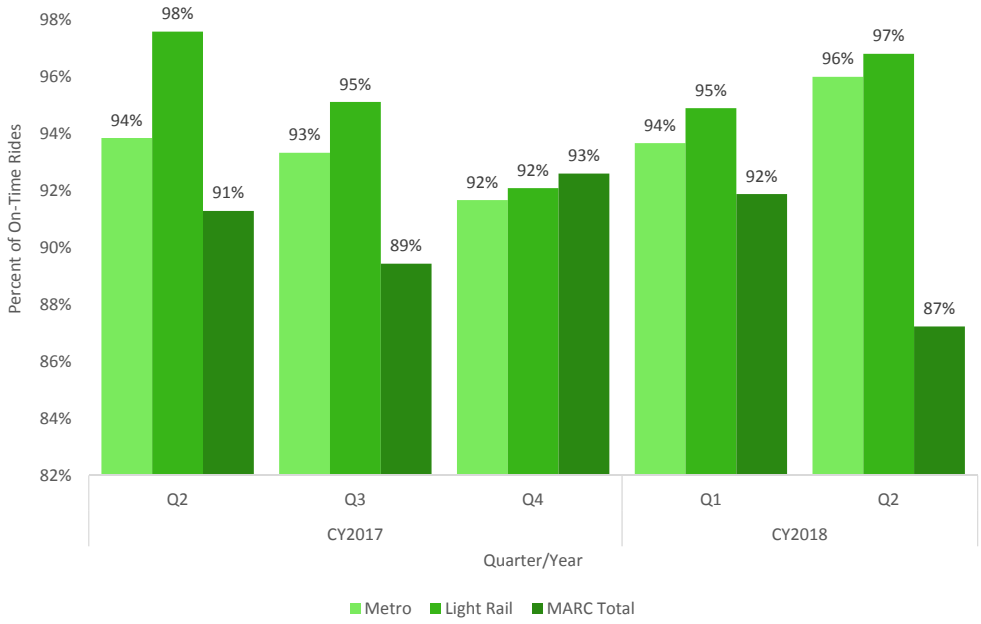


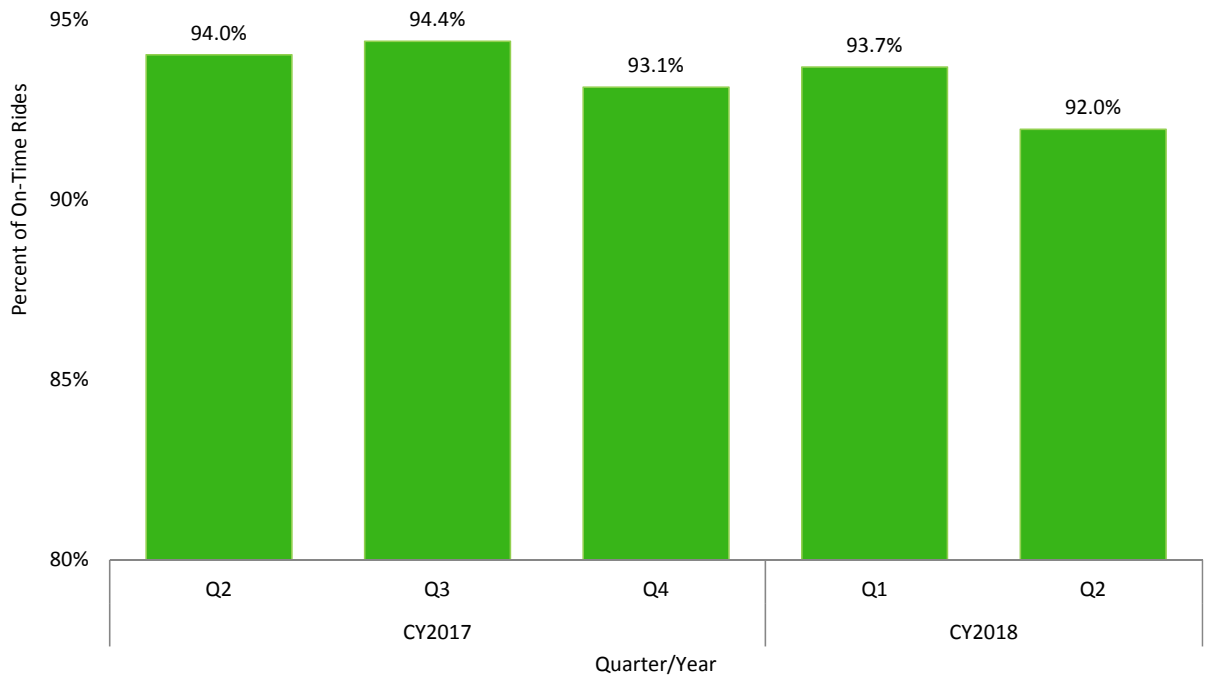
Chart 5.1D.2: On-Time Performance of MTA SubwayLink, Light RailLink, & MARC CY2017-CY2018



PERFORMANCE MEASURE 5.1D

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

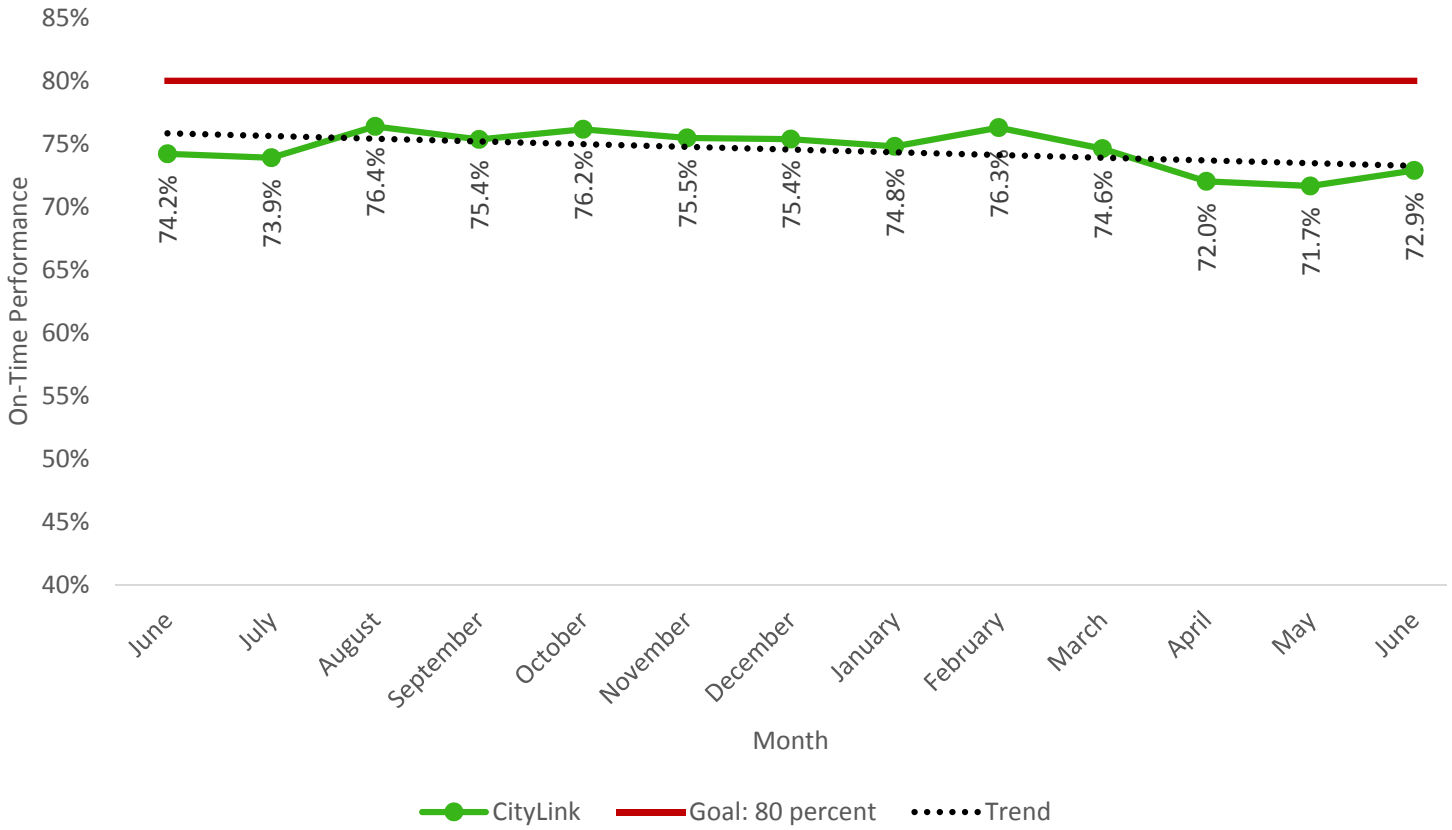
Chart 5.1D.3: On-Time Performance of MTA Paratransit CY2017-CY2018



PERFORMANCE MEASURE 5.1D

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

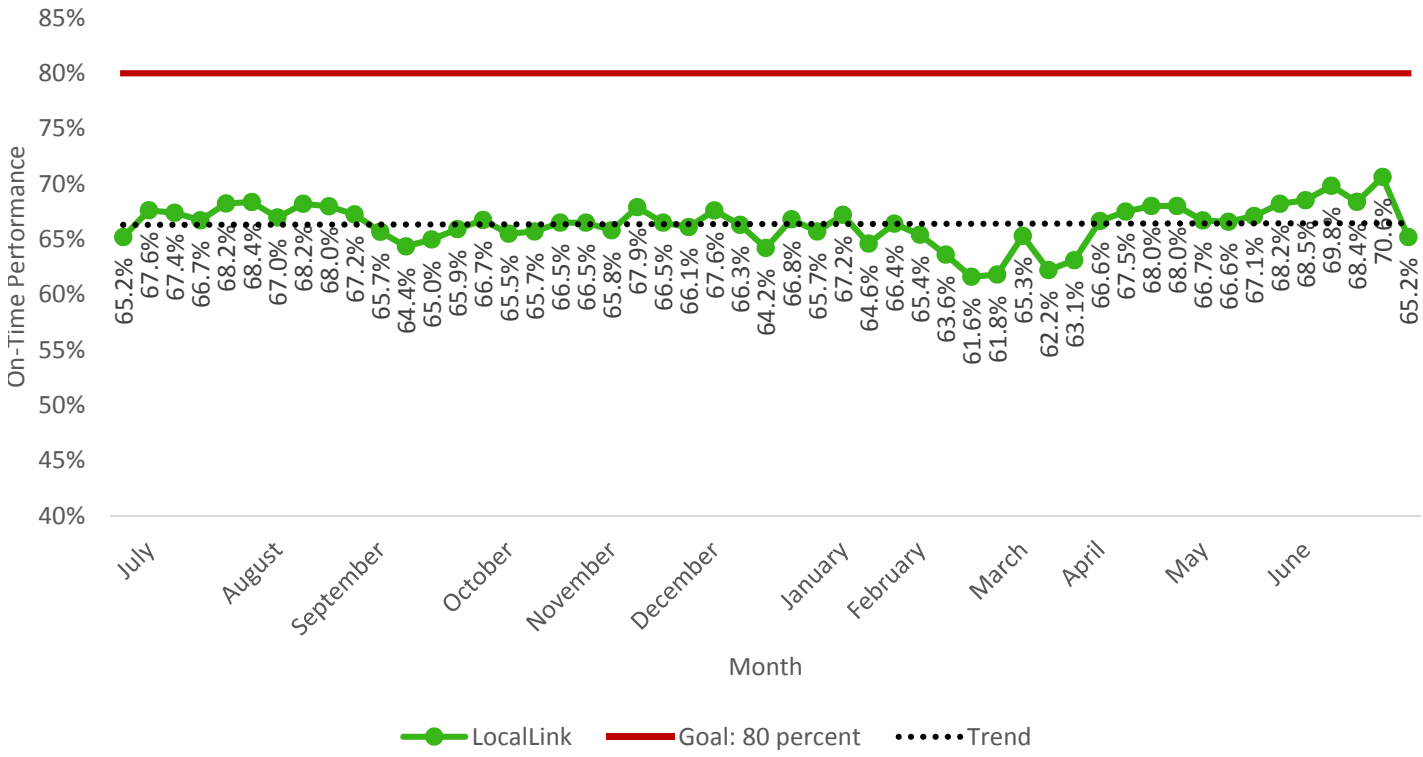
Chart 5.1D.4: CityLink (All Lines) Weekly Headway Performance CY2017-CY2018



PERFORMANCE MEASURE 5.1D

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

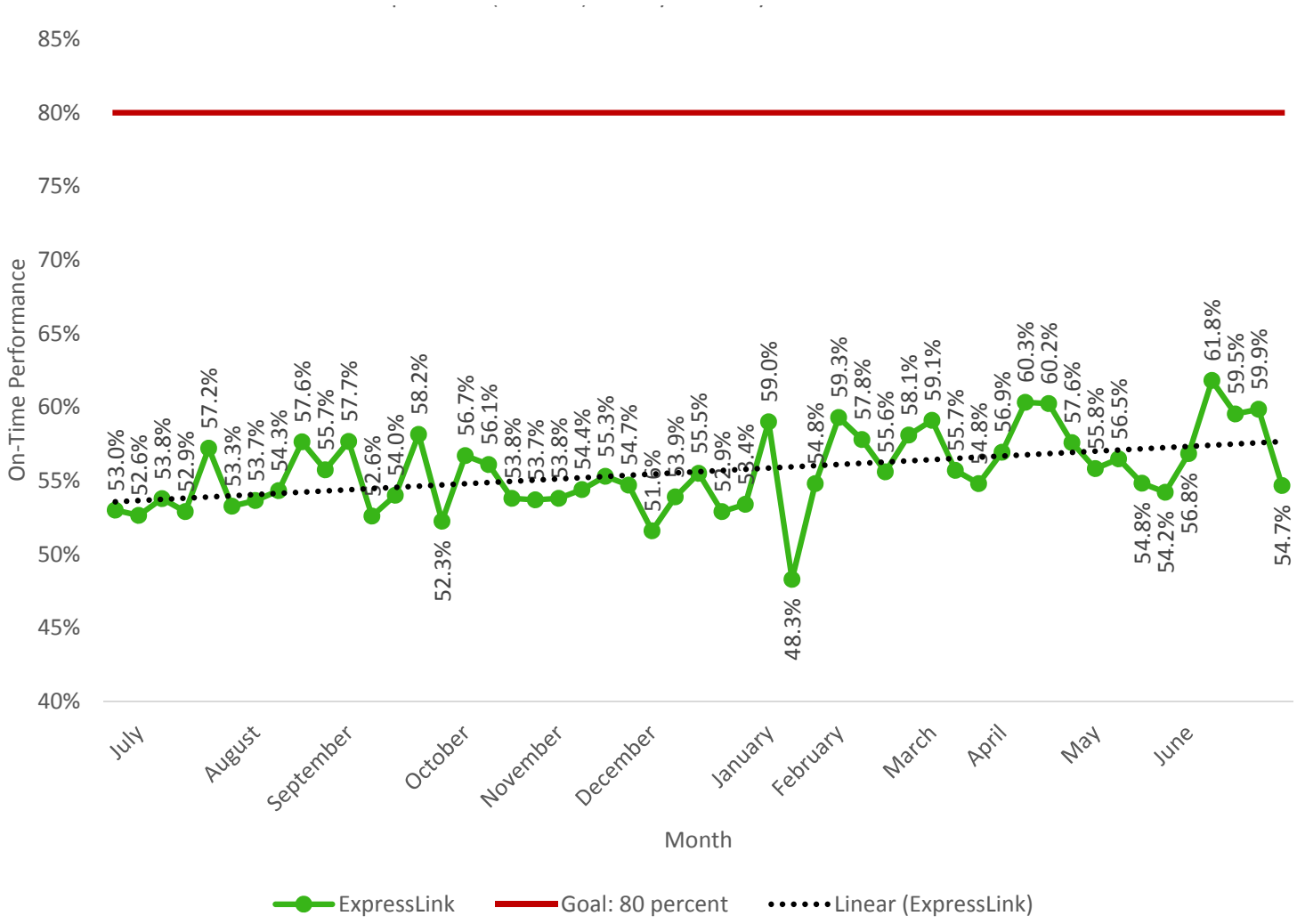
Chart 5.1D.5: LocalLink (All Lines) Weekly Headway Performance CY2017-CY2018



PERFORMANCE MEASURE 5.1D

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

Chart 5.1D.6: ExpressLink (All Lines) Weekly Headway Performance CY2017-CY2018



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

PERFORMANCE MEASURE DRIVER:
Meredith Hill
State Highway Administration (SHA)

PURPOSE OF MEASURE:
To provide customers with a gauge by which to assess travel time reliability on the State's highway system.

FREQUENCY:
Annually (in April)

DATA COLLECTION METHODOLOGY:
Formula based.

NATIONAL BENCHMARK:
A Planning Time Index (PTI) which is <1.5 for 80th percentile travel time.

Maryland uses 95th percentile travel time for reliability.

PERFORMANCE MEASURE 5.1E

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

Customers want reliable travel times when traveling on Maryland's highway system. The planning time index (PTI) is a metric that gauges the reliability of travel times on heavily used freeways and expressways during peak congestion.

For example, if a trip during uncongested, free-flowing traffic conditions takes a traveler 15 minutes; a PTI of 2.0 would indicate that the same trip during a heavily congested period could be expected to take up to 30 minutes. MDOT uses the following PTI ranges to describe the varying degrees of travel time reliability:

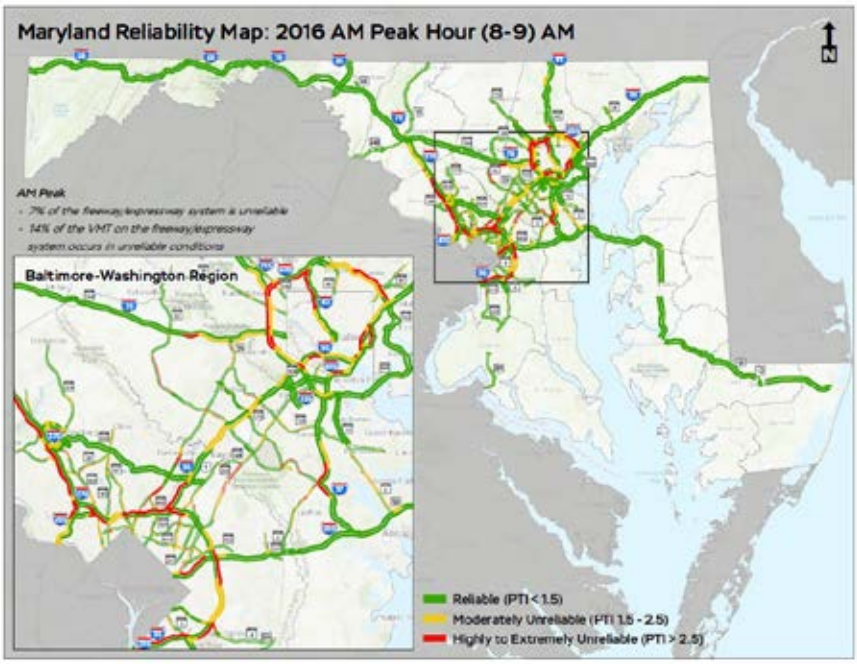
PTI < 1.5 = Reliable
1.5 < PTI < 2.5 = Moderately Unreliable
PTI > 2.5 = Extremely Unreliable

In 2016, travel time on 7 percent (AM Peak) to 12 percent (PM Peak) of the freeways and expressways was assessed as "extremely unreliable" during congested periods on an average weekday. This was an improvement over 2015 travel times by 1 and 2 percent, respectively.

When compared to 2015, the 2016 travel reliability results improved despite an increase of 2.9 percent in VMT. Capacity improvements, CHART's response to incidents, and increased use of projects such as the InterCounty connector support the improvement.

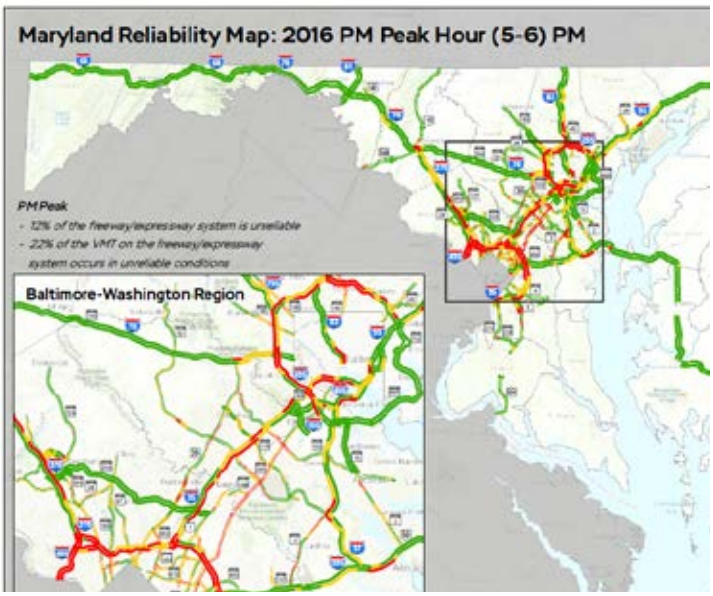
Changes to the PTI that result from completed highway projects are reflected in the PTI analysis over time. For example, the I-95 Express Toll Lane project in Baltimore opened in December 2014. Before the I-95 Express Toll Lanes were built the freeway operated under moderately to extremely unreliable conditions (PTI >2.5). Since the completed construction, the freeway operates as a reliable facility (PTI <1.5).

PERFORMANCE MEASURE 5.1E
Planning Time Index for Highway Travel



When compared to 2015, motorists in the AM Peak hour experienced a 1 percent ↓ in the number of freeway and expressway miles with a PTI > 2.5.

This amounts to a 4 percent ↓ in VMT that occur in extremely unreliable conditions.



When compared to 2015, motorists in the PM Peak hour experienced a 2 percent ↓ in the number of freeway and expressway miles with a PTI > 2.5.

This amounts to a 4 percent ↓ in VMT that occur in extremely unreliable conditions.

Source: 2017 Maryland State Highway Mobility Report

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

PERFORMANCE MEASURE DRIVER:
Joseph Sagal
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 incidents causing disruptions.

NATIONAL BENCHMARK:
North Carolina – 75 minutes

Connecticut – 45 minutes

Iowa – 53 minutes

Minnesota – 35 minutes

Missouri – 25.3 minutes

New Jersey – 43 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. Rapid response to effectively manage and clear incidents that disrupt highway travel is one strategy that is essential in meeting these expectations. Efforts to improve coordination and cooperation among TBUs and emergency responders facilitate the reduction in response times and the overall average incident duration, restoring travel more quickly for our customers. 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 advanced traffic management system denoting the restoration of normal operating conditions.

As shown in chart 5.2A.1, the average incident duration between calendar years 2010 and 2015 has consistently been less than 30 minutes, and has been less than the lowest benchmark value (25.3 minutes – Missouri) for the last five years (2012 – 2016). The slight increase in average incident duration in calendar years 2015 and 2016 is likely due to the addition of overnight and weekend patrol hours. During the night and weekend hours, most incidents tend to take a slightly longer time to clear than they would during weekdays, since emergency responding agencies operate at reduced staffing levels, or depend on "on-call" staff. However, performance measures show that night and weekend patrols have a significant positive impact on reducing travel delays.

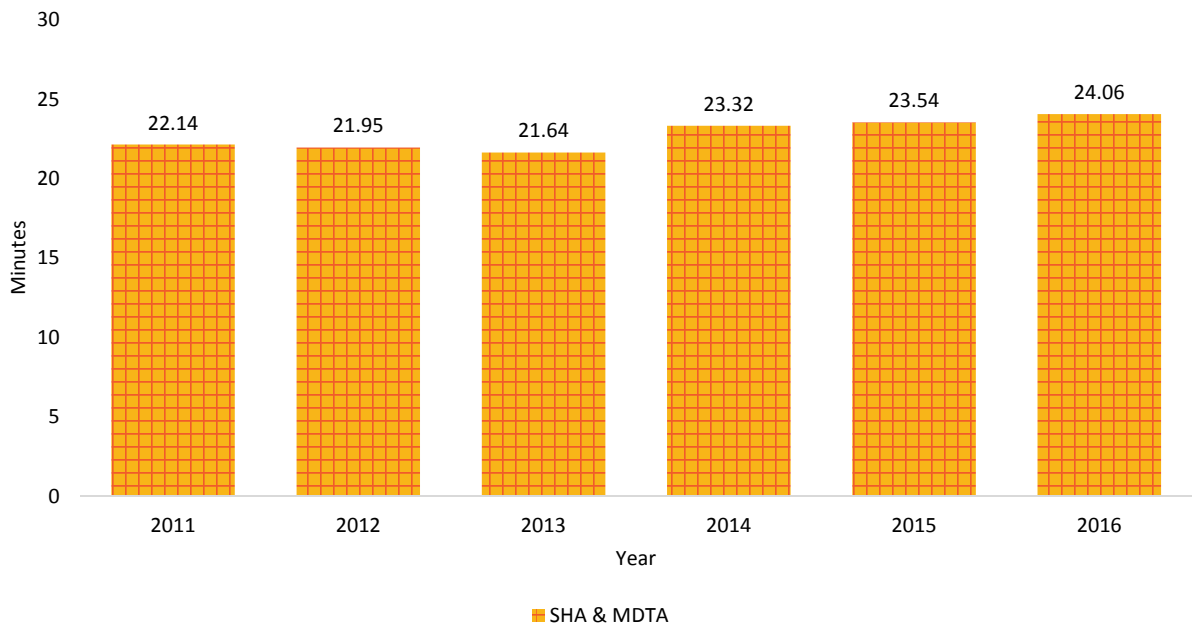
PERFORMANCE MEASURE 5.2A

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

The primary strategies for improving Traffic Incident Management focus on assuring that emergency responders have well established coordination procedures, effective communications, thorough training and the resources available to address any type of incident. Just some of the current efforts to implement these strategies in Maryland include:

- MDOT is leading three Initiatives to improve coordination with the Maryland State Police (MSP) including:
  - Formalizing working relationships with the heavy tow industry, including a performance incentive program;
  - Organizational modifications to better support inter-agency coordination between MSP and MDOT; and
  - Enhancing data collection on reported crashes, including the identification of preventable secondary incidents.
- Supporting the deployment of the Maryland First radio system statewide to improve inter-agency emergency communication.
- Standardized Incident Management training, to raise the level of emergency preparedness and safety of emergency responders, who manage incidents on the transportation system.

Chart 5.2A.1: Average Highway Incident Duration (minutes) CY2011-CY2016



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

PERFORMANCE MEASURE DRIVER:
Joseph Sagal
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. To better understand the performance during winter storms, MDOT collects data on the "average time to restore normal operations after weather events." 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 highways.

As shown in chart 5.2B.1, the average time to restore normal operations after weather events for the years 2012 through 2015 was consistently less than the benchmark value (3.8 hours –Missouri). The Average Time to Restore Normal Operations after a Weather Event increased to 6 hours in FY2016, mostly due to the impacts of Winter Storm Jonas which occurred over the period of January 22-24, 2016. Recognizing that a large winter event such as Jonas presented unique challenges, MDOT initiated a major after-action initiative, which identified 30 tasks for improving Maryland's winter storm preparedness. Some of the major tasks included:

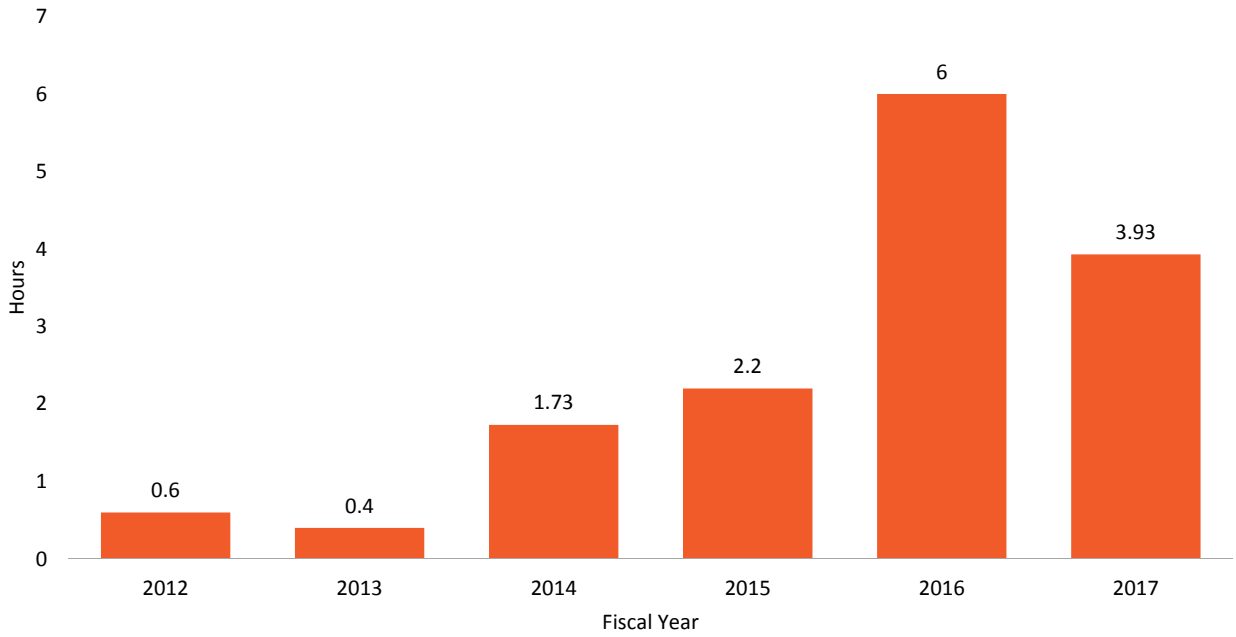
- Compiling and maintaining winter storm emergency contact lists;
- Updating emergency procurement procedures for obtaining necessary resources (e.g. food, lodging and supplies) during major weather events;
- Developing the capability of displaying automated emergency weather warning for programmable highway message signs;
- Identifying resources for transporting personnel during heavy snow conditions; and
- Documenting and distributing lists of "pre-identified" snow disposal areas.

PERFORMANCE MEASURE 5.2B

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

All after-action tasks were accomplished between February 2016 and October 2016. In 2017, the average time returned to 3.93 hours, close to the benchmark and within the MDOT SHA target average of 4.0 hours. Another major action item was to incorporate contracts for private, heavy-tow services under the emergency snow removal procurement regulations. These services are used to recover and relocate trucks stranded in the snow from traveled lanes, to maintain a clear roadway and facilitate overall snow removal efforts.

Chart 5.2B.1: Time to Regain Bare Pavement After Snow (hours) FY2012-FY2017



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

PERFORMANCE MEASURE DRIVER:
Negash Assefa
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 strives to provide premier customer service by offering easy and reliable access to transportation services and products. A 2015 Pew Research Center study, shows 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. Considering the projected increase in use of smart phones, it is estimated that up to 68 percent of MDOT customers have the potential to complete transactions at their leisure perhaps even without having to visit MDOT offices.

MDOT's Service Delivery Channel (SDC) for ASD includes web, kiosk, call center/IVR and mail-in. At present MDTA, MTA, MVA, SHA, TSO and MPA combined report on 67 ASD transactions.

For the current reporting period, January 2018 to June 2018, the MDOT wide result came at 71.9% which is a new record and 8.5% higher than same period last year. In volume, 9.08 million out of 12.63 million transactions were completed using ASD. Overall transaction volume compared to same period last year is lower by 36%.

The strategy to grow ASD continues to include marketing to effect behavior change, looking for services to be added to ASD and capturing services that may not be reported.

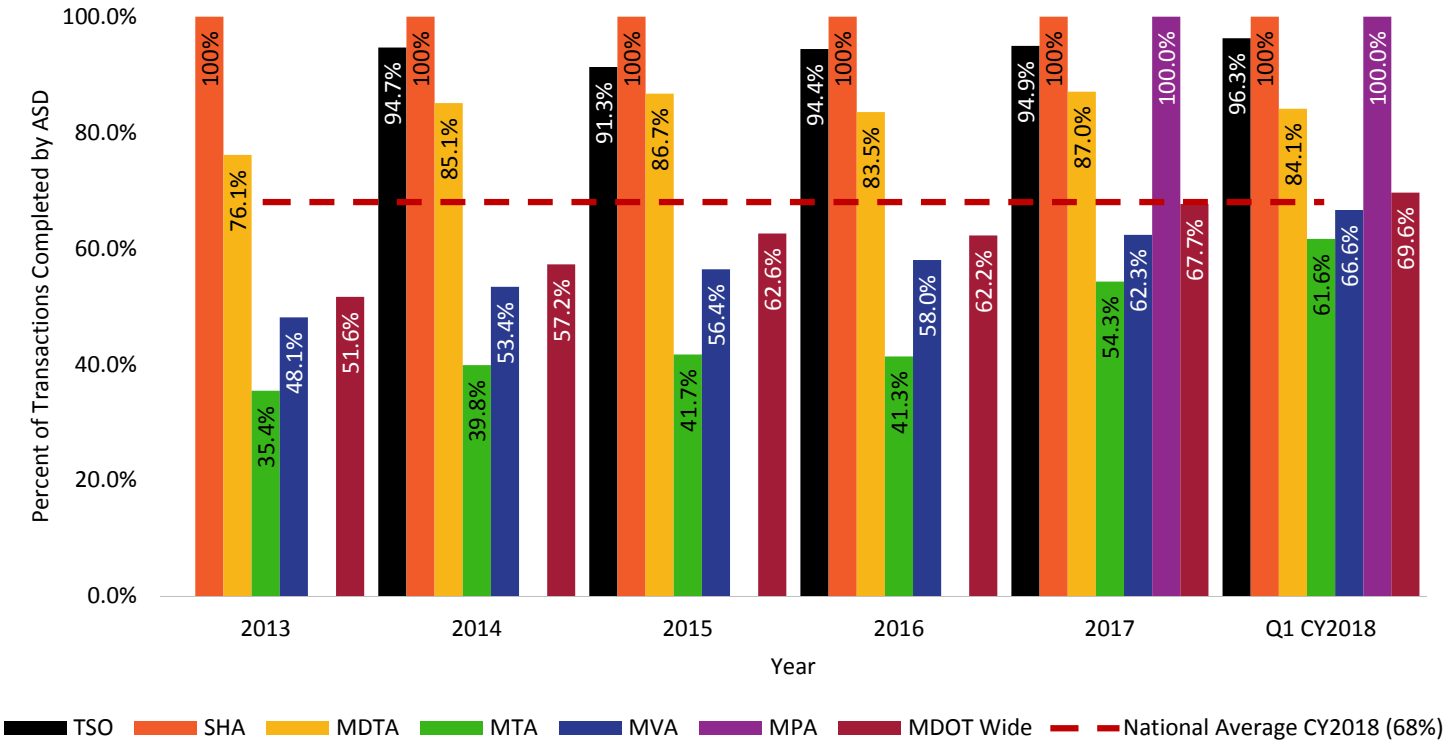
PERFORMANCE MEASURE 5.3

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

PERFORMANCE MEASURE 5.3

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

Chart 5.3.1: Alternative Service Delivery by TBU CY2013-Q1 CY2018



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:
Annually (in January).

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

Percent of Functional Real-Time Information Systems Provided

MDOT's customers benefit from "real-time" information systems installed throughout the transportation network offering travelers the most accurate and up-to-date information available. These systems help customers prepare for and manage their time while using statewide transportation services.

Currently, all TBUs have processes in place to ensure that any system failures are immediately addressed to ensure near 100 percent functionality at any given time. Systems will continually be monitored to ensure continued stellar "up-time" performance of these systems.

PERFORMANCE MEASURE 5.4A

Percent of Functional Real-Time Information Systems Provided

Chart 5.4.1: Percent of Functional Real-Time Information Systems Provided Q3 CY2017- Q2 CY2018

TBU	Q3 CY2017	Q4 CY2017	Q1 CY2018	Q2 CY2018
MVA Wait Time	100%	100%	100%	100%
MTA Mobility	100%	100%	100%	100%
MTA Bus Tracker	100%	100%	100%	100%
MTA MARC Tracker	99.4%	100%	99.5%	99.5%
MTA Light Rail	100%	100%	100%	100%
MAA Flight Info	100%	100%	100%	100%
MAA NVA	97%	91%	95%	94%
CHART (SHA)	98.90%	99.48%	99.04%	99.15
CHART (MDTA)	98.66%	98.5%	96%	98.33

100% <100% <90%

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:
Annually for customer satisfaction (in July).

DATA COLLECTION METHODOLOGY:
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 5.4B
Customer Satisfaction with Helpfulness and Accuracy of Real-Time Systems 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 "real-time" information available to help them prepare for and manage their time while using statewide transportation services to pursue life's opportunities.

It is important to understand how customers feel about the accuracy and usefulness of those systems to ensure that adjustments are made to these systems for continuous improvement.

MTA offers Real-Time Information Systems for most of its modes of transportation. Due to MTA's ongoing improvement efforts, surveys on helpfulness and accuracy, indicate a significant increase in customer satisfaction over the previous year.

SHA and MDTA (CHART) have DMS signage throughout the State, which continues to recognize over 95% customer satisfaction with both usefulness and accuracy of those systems since 2017.

Table 5.4B.1: MVA Wait Time Website Q2 CY2018

	SATISFIED	NOT SATISFIED
Satisfaction with the helpfulness of wait time information	73%	27%
Satisfaction with the accuracy of wait time information	65%	35%

Table 5.4B.2: MTA Customer Satisfaction with Helpfulness and Accuracy of Core Bus Tracker System CY2018

	SATISFIED	NOT SATISFIED
Satisfaction with the helpfulness of wait time information	80%	20%
Satisfaction with the accuracy of wait time information	72%	28%

PERFORMANCE MEASURE 5.4B

Customer Satisfaction with Helpfulness and Accuracy of Real-Time Systems Provided

Table 5.4B.3 MTA Customer Satisfaction with Helpfulness and Accuracy of Light Rail Next Train Arrival System CY2018

	SATISFIED	NOT SATISFIED
Satisfaction with the helpfulness of wait time information	83%	17%
Satisfaction with the accuracy of wait time information	82%	18%

Table 5.4B.4 MTA Customer Satisfaction with Helpfulness and Accuracy of MARC Next Train Arrival System CY2018

	SATISFIED	NOT SATISFIED
Satisfaction with the helpfulness of wait time information	75%	25%
Satisfaction with the accuracy of wait time information	72%	28%

Table 5.4B.5 MTA Customer Satisfaction with Helpfulness and Accuracy of Commuter Bus Tracker System CY2018

	SATISFIED	NOT SATISFIED
Satisfaction with the helpfulness of wait time information	75%	25%
Satisfaction with the accuracy of wait time information	69%	31%

Table 5.4B.6 CHART (SHA &MDTA) Customer Satisfaction with Helpfulness and Accuracy of DMS CY2018

	SATISFIED	NOT SATISFIED
Satisfaction with the helpfulness of wait time information	94%	6%
Satisfaction with the accuracy of wait time information	96%	4%

TANGIBLE RESULT #6

Communicate Effectively With Our Customers

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

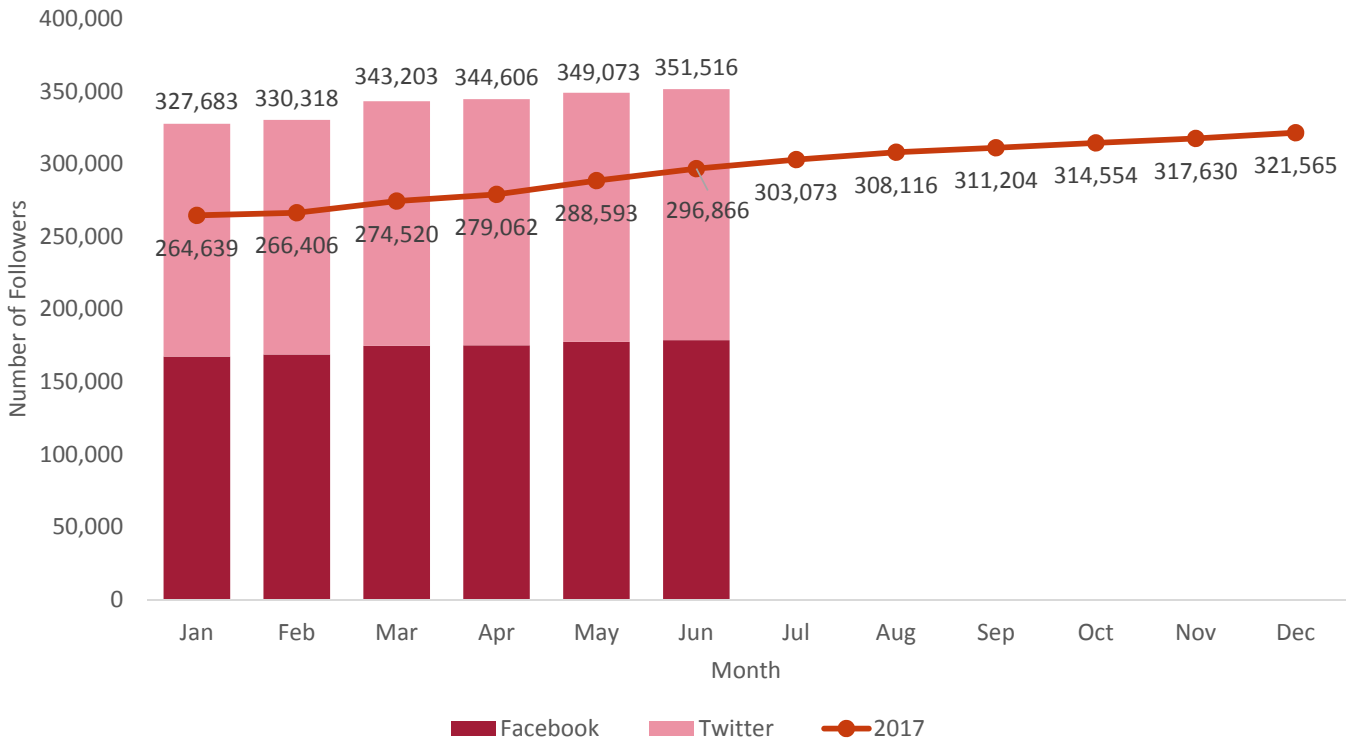
Social media offers MDOT powerful avenues to disseminate important information directly to its customers and to interact with them in real-time. Each of our transportation business units continues to grow its social media following and expand its reach.

"Social Reach" measures the number of customers who have seen our message on Facebook and Twitter. 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. To date, MDOT proudly has over 350,000 fans on social media and continues to grow. During the last quarter, MDOT TBUs reached nearly 16 million users through Facebook and Twitter. Providing real-time information during weather events and incidents is essential for MDOT customers. MDOT reached an average of 5.3 million users each month, a 16% increase from 2017.

PERFORMANCE MEASURE 6.1A

Communicate Effectively Utilizing Social Media: Social Reach

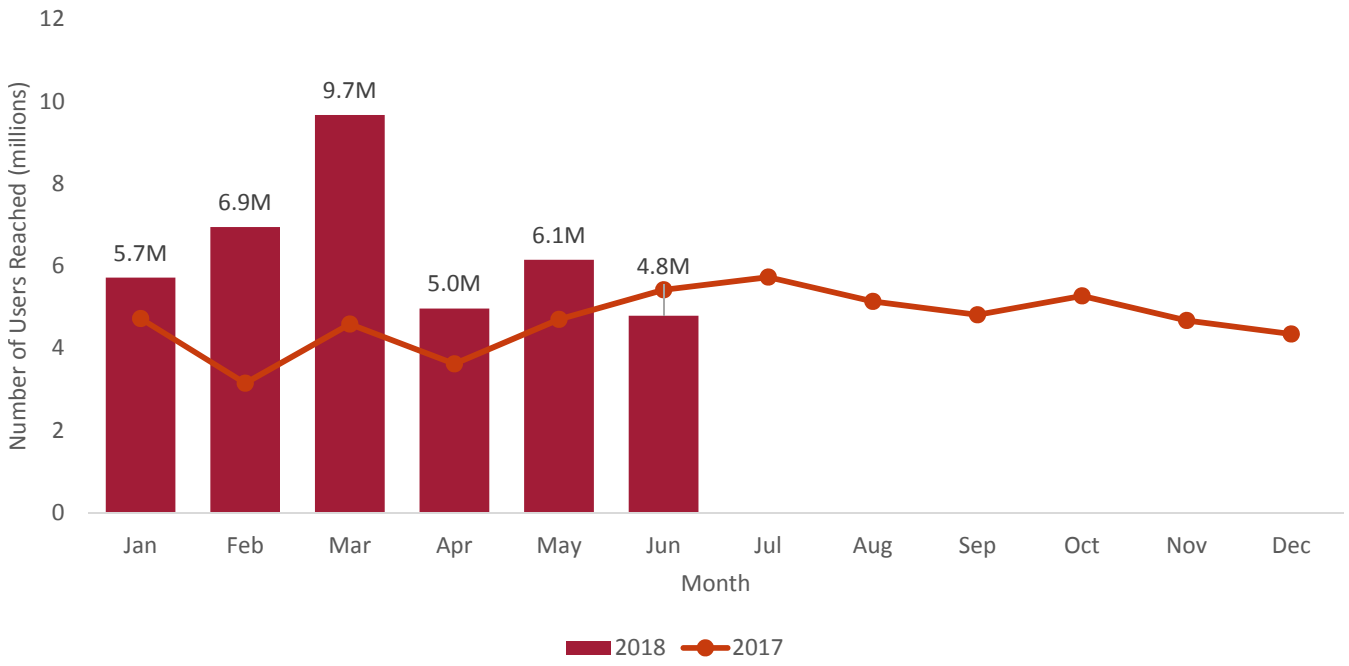
Chart 6.1A.1: Total MDOT Social Media Followers CY2018



PERFORMANCE MEASURE 6.1A

Communicate Effectively Utilizing Social Media: Social Reach

Chart 6.1A.2: Total MDOT Social Media Reach CY2018



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.

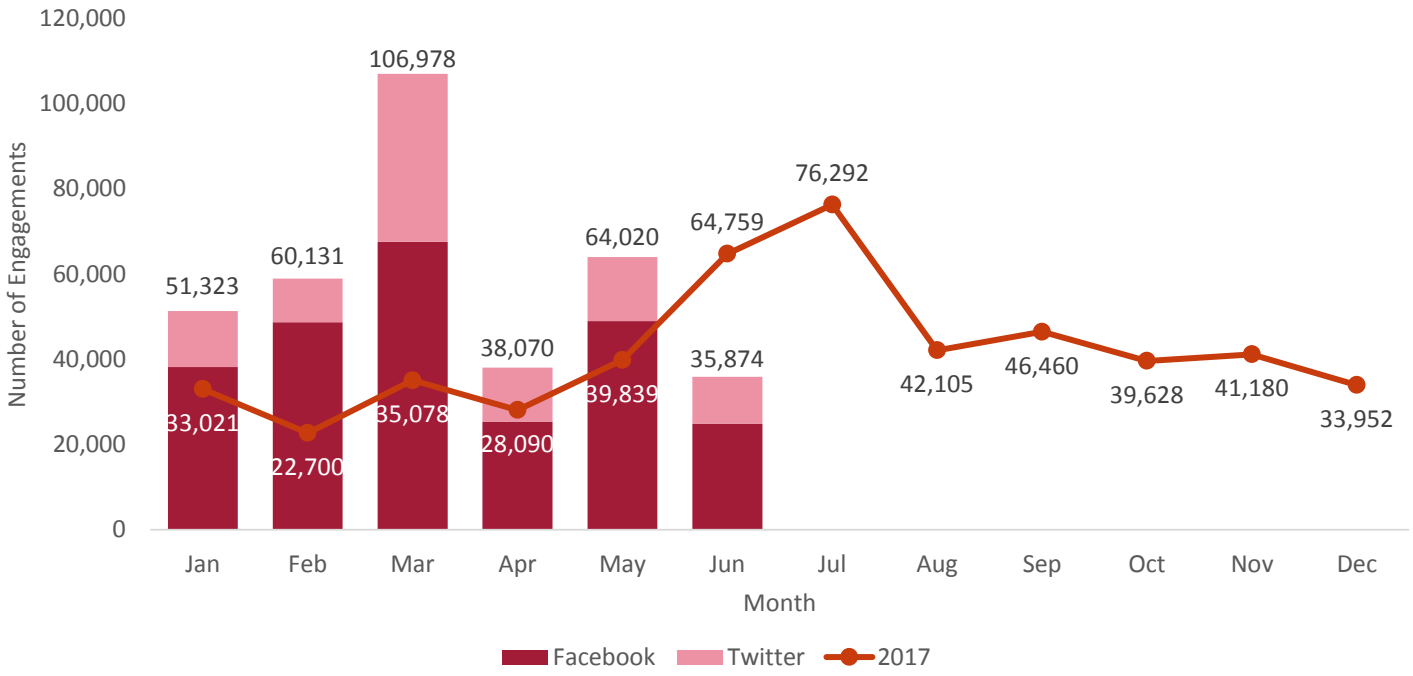
To determine the effectiveness of its social media communication, MDOT measures social engagement across all MDOT social media accounts, looking for trends in likes, comments and shares in order to better provide content its followers will enjoy and find informative. Through education and training, MDOT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

PERFORMANCE MEASURE 6.1B

Communicate Effectively Utilizing Social Media: Social Engagement

Chart 6.1B.1: Total MDOT Social Media Engagements CY2018



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

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

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

FREQUENCY:
Semi-Annually (January and July)

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

NATIONAL BENCHMARK:
84% (American Customer Service Index)

PERFORMANCE MEASURE 6.2
Satisfaction with Communication at Public Meetings

The Maryland Department of Transportation (MDOT) is committed to providing valuable and easily understandable information to its customers during public meetings. Public feedback can influence Maryland transportation programs and projects. As a result, MDOT encourages customer feedback from all of its customers which include residents, community leaders and stakeholders.

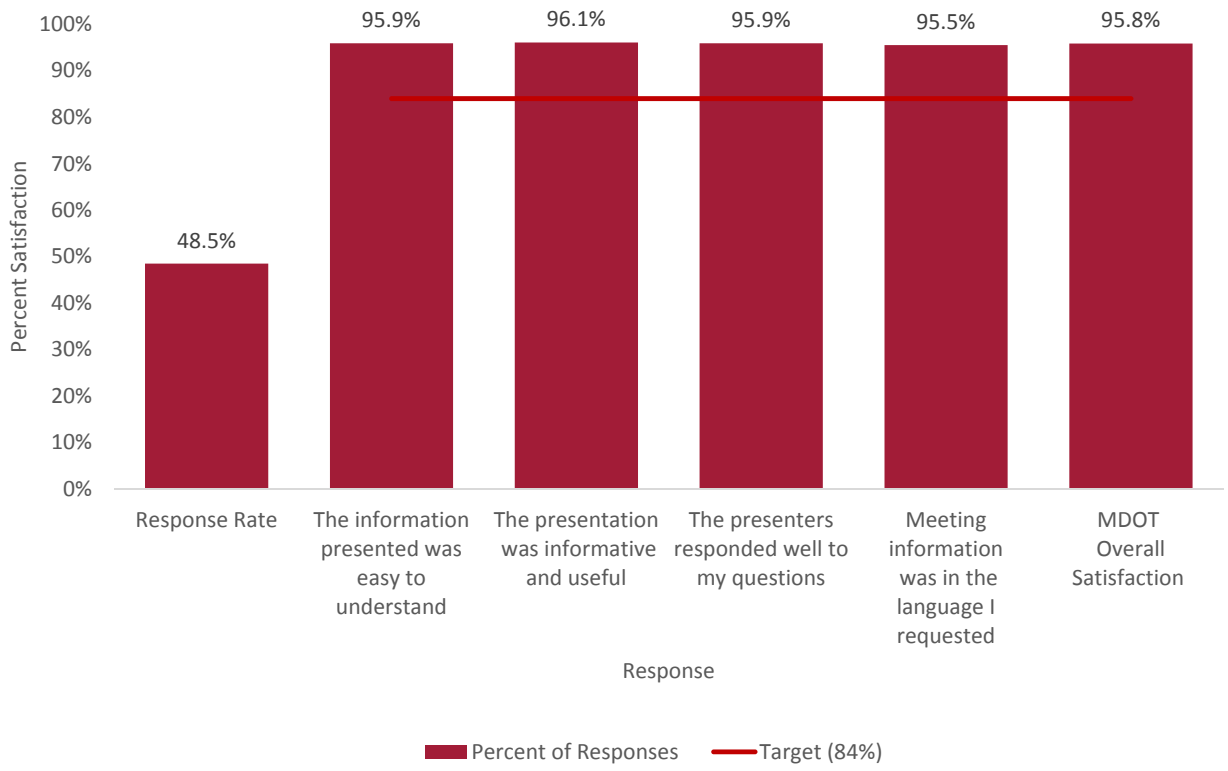
From January 2018 – June 2018, MDOT achieved an overall 95.8 percent satisfaction rating from 1072 customers who indicated that MDOT effectively communicated during 40 separate MDOT-hosted public events. We are proud to once again exceed the national benchmark of 84 percent, but MDOT will continue to explore and implement enhanced communication methods and techniques.

In an effort to increase opportunities for customer outreach during this past quarter, the Customer Feedback mechanism was revised, which can be electronically accessed by visiting Survey Monkey MDOT Public Events CY2018. In addition, language translation of the Customer Feedback indicator form can now be accessed at MDOT's Public Meeting page. Translation is available by using the Google Translate link on MDOT's website. For customer convenience, a listing of MDOT Public Meetings can also be found at MDOT's Public Meeting page.

PERFORMANCE MEASURE 6.2

Satisfaction with Communication at Public Meetings

Chart 6.2.1: Overall MDOT Customer Satisfaction with Communication at Public Meetings CY2018



Communicate Effectively With Our Customers

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

PERFORMANCE MEASURE DRIVER:
Jonathan Dean
Maryland Aviation Administration (MAA)

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

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Data gathered, measured, and analyzed with software system.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 6.3A

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

MDOT communications and media relations professionals work to showcase the important work performed by employees across MDOT on behalf of our customers. These public information specialists use their skills, experience, and knowledge to represent MDOT and serve as spokespersons before the news media.

Performance measure 6.3A encourages each MDOT TBU to monitor and analyze the news that it creates and disseminates. Press releases remain an important tool to distribute news to Maryland residents, businesses, and visitors. This performance measure examines the number of press releases issued each month and the corresponding number of news stories that resulted from the press releases.

The press releases created by MDOT TBUs continue to result in broad reach across local, national, international, and transportation trade media.

PERFORMANCE MEASURE 6.3A

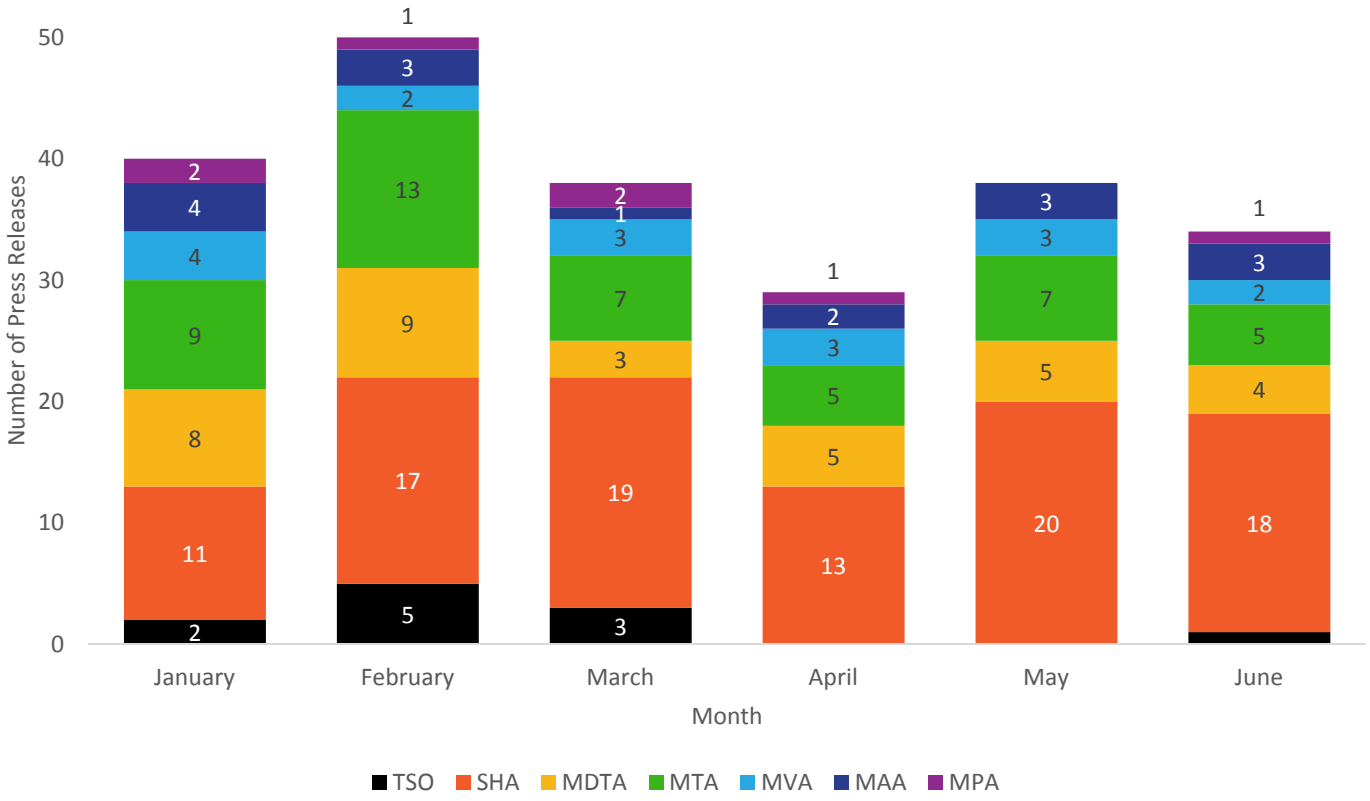
Communicate Effectively Through News Releases: Number of News Stories Generated from Major Releases

Chart 6.3A.1: 2018 MDOT Press Releases and News Placements CY2018

PERFORMANCE MEASURE 6.3A

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

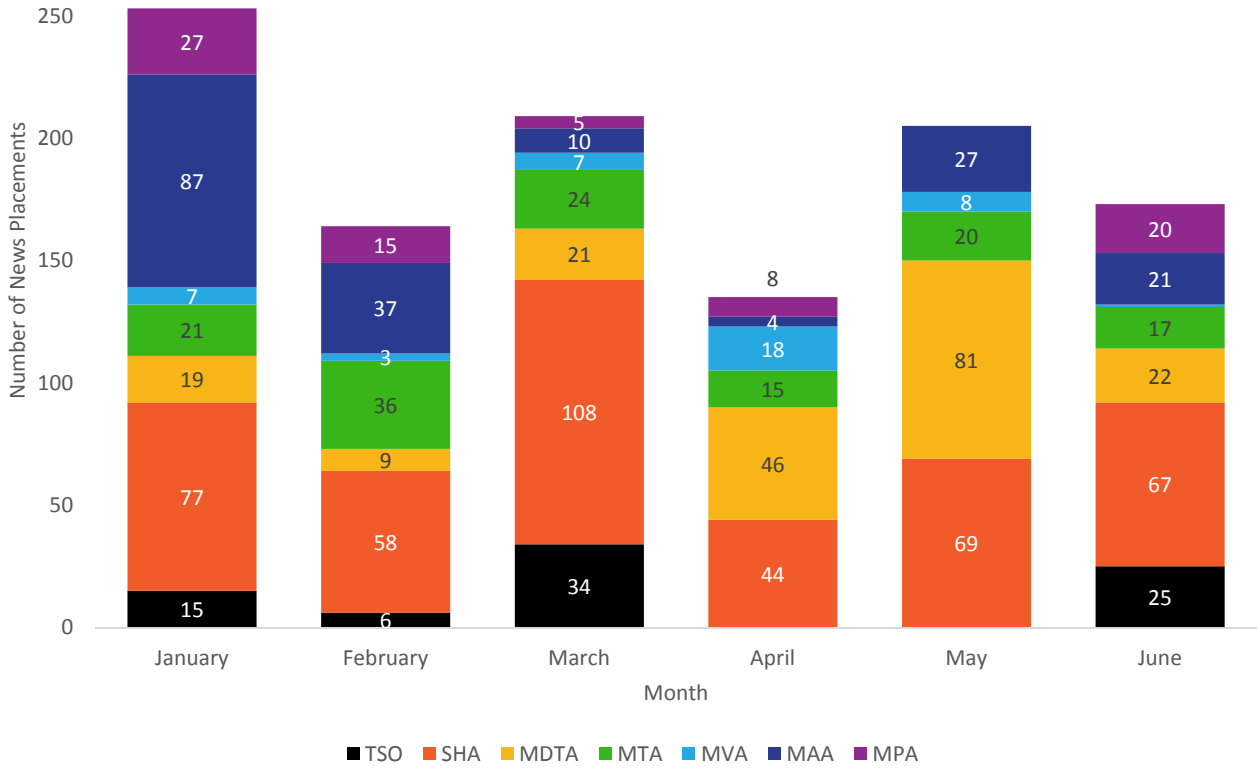
Chart 6.3A.2a: Press Releases by TBU CY2018



PERFORMANCE MEASURE 6.3A

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

Chart 6.3A.2b: Number of News Placements by TBU CY2018



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

Reaching customers with important news can be a challenge in today's information overloaded world. MDOT uses a variety of modern and traditional methods, including buying advertising space or time. Alternatively, news releases offer a significant cost-savings to MDOT and the tax-paying public while allowing 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).

This quarter shows a challenge with earned media coverage – when national or local breaking news occurs, the media coverage will be dominated by other topics. When this happens, staff members can follow up after the news cycle and pitch the news release that was not covered. However, news conferences and events will not generate the amount of coverage anticipated. MDOT social media managers can also push out the information as an alternative way to reach people.

MDOT staff follows up with media outlets to assure the right person is receiving the news releases and encourage coverage, particularly in small media markets where transportation projects and programs are typically of great interest to customers.

PERFORMANCE MEASURE 6.3B

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

Chart 6.3B.1: Earned Media Value of Print and Broadcast Coverage Generated by News Releases MDOTWide CY2017-CY2018

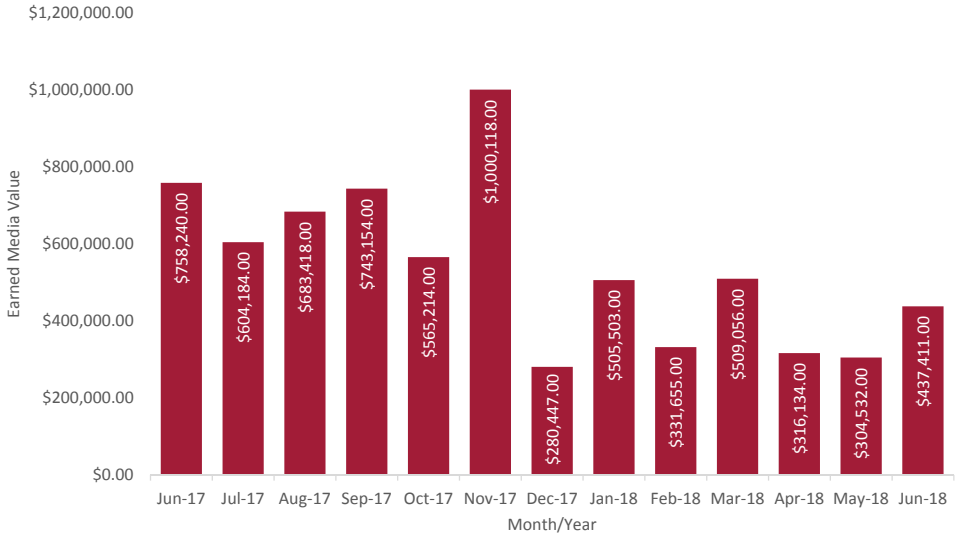
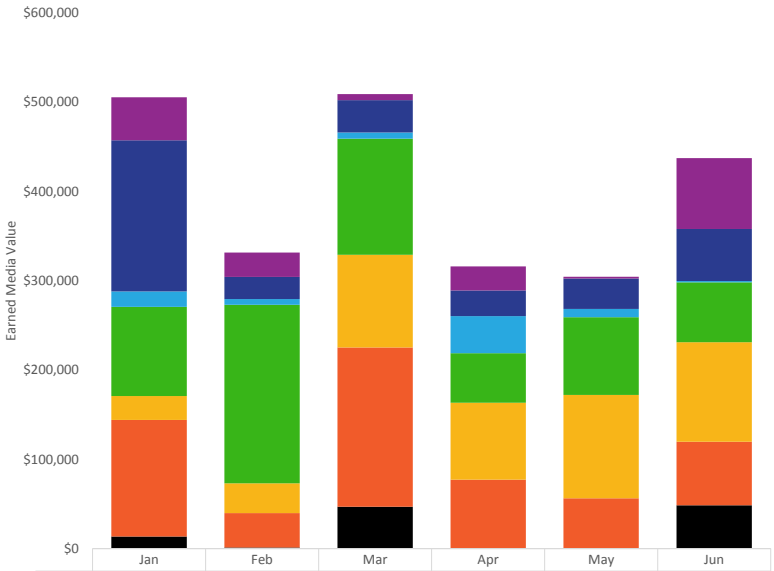


Chart 6.3B.2: Earned Media Value YTD June CY2017 - June CY2018



	Jan	Feb	Mar	Apr	May	Jun
MPA	$48,100	$27,386	$6,850	$26,918	$2,100	$79,493
MAA	$169,351	$24,714	$36,214	$28,750	$34,051	$58,250
MVA	$17,223	$6,450	$6,900	$41,550	$9,300	$1,500
MTA	$100,000	$200,000	$130,000	$55,500	$87,000	$67,000
MDTA	$26,764	$33,405	$103,758	$86,182	$115,675	$111,399
SHA	$130,415	$38,500	$178,489	$77,234	$56,406	$71,162
TSO	$13,650	$1,200	$46,845	$0	$0	$48,607

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

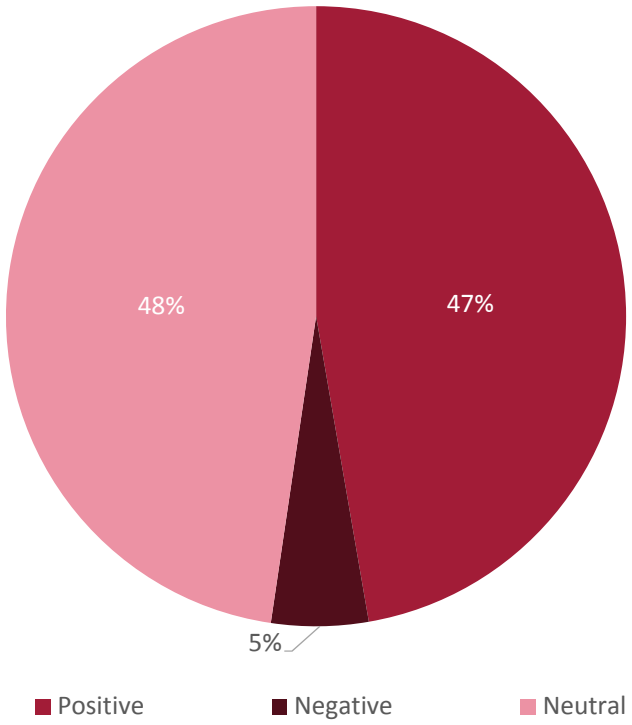
PERFORMANCE MEASURE 6.3C

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 our customers. It also helps MDOT determine if more, less or different information is needed to ensure customers are receiving factual information via news outlets.

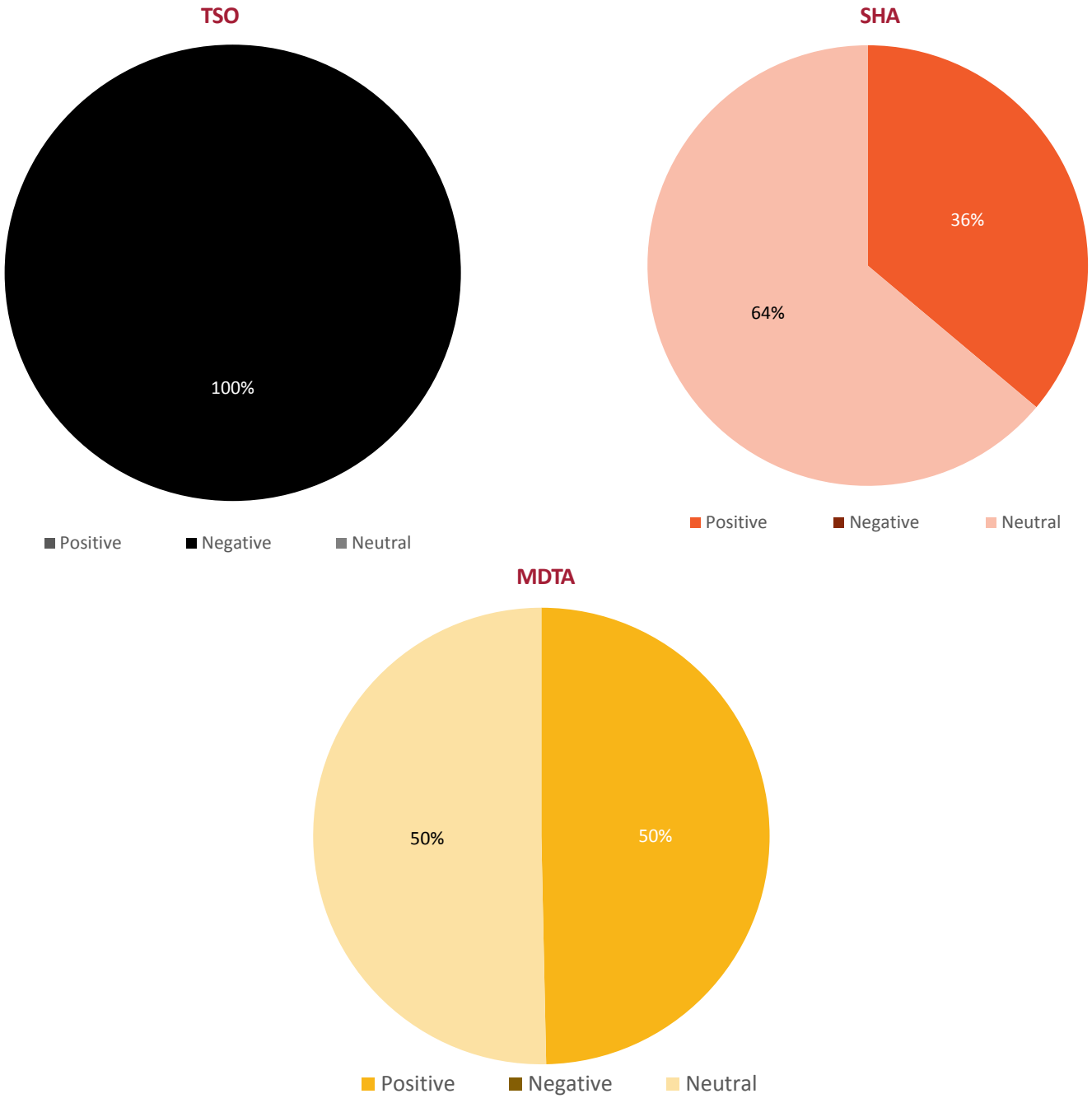
Chart 6.3C.1: "News Tone" MDOT-Wide April 2018 - June 2018



PERFORMANCE MEASURE 6.3C

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

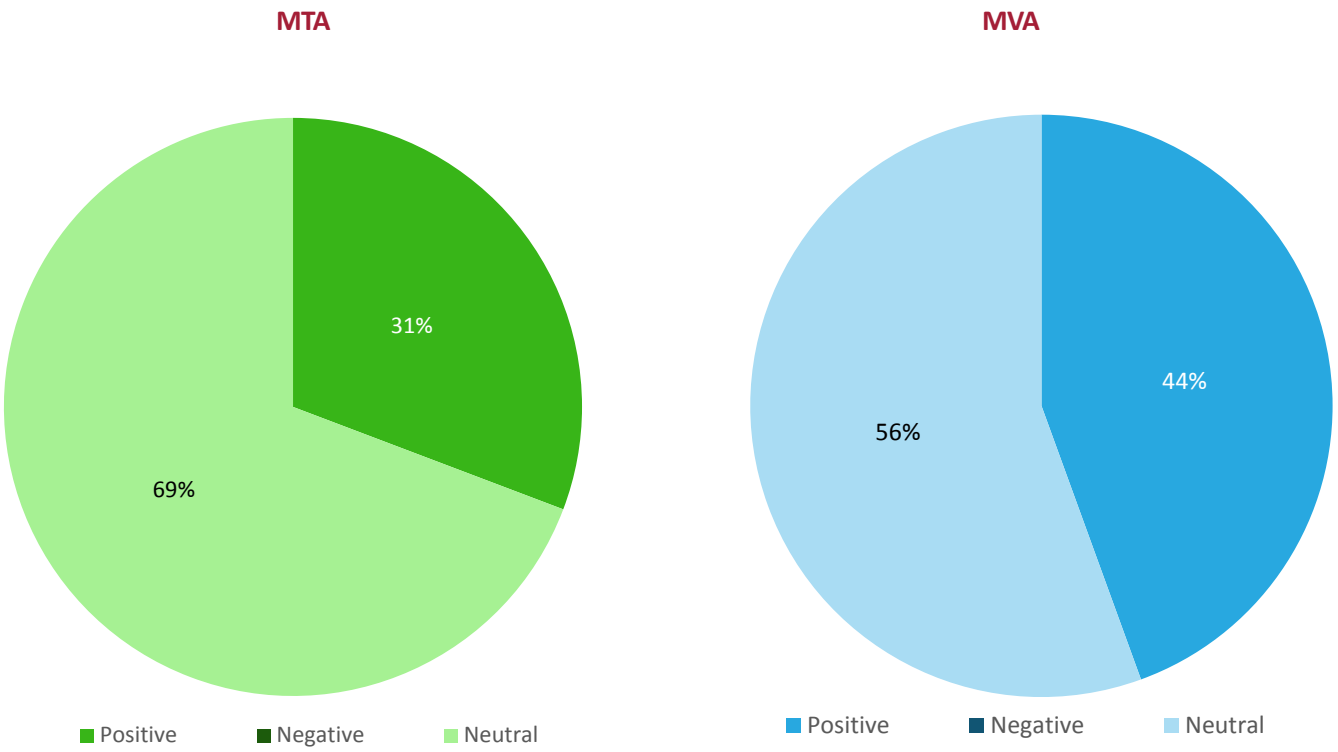
Chart 6.3C.1: "News Tone" by TBU April 2018 - June 2018



PERFORMANCE MEASURE 6.3C

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

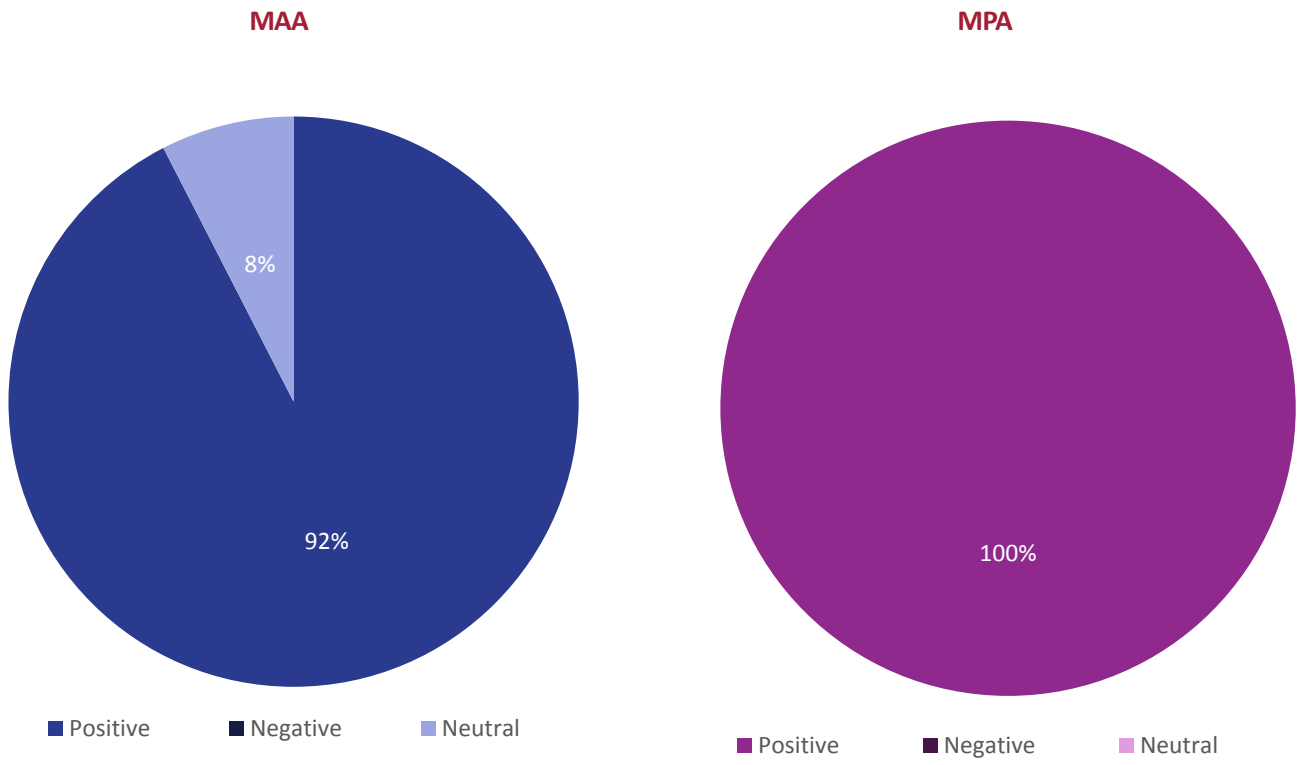
Chart 6.3C.1: "News Tone" by TBU April 2018 - June 2018



PERFORMANCE MEASURE 6.3C

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

Chart 6.3C.1: "News Tone" by TBU April 2018 - June 2018



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

PERFORMANCE MEASURE DRIVER:
Jonathan Dean
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:
To measure the number of customers that read, viewed, or listened to MDOT proactive stories in the news media.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Data gathered, measured, and analyzed.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 6.4A
Telling the Story of MDOT – Proactive Media

MDOT produces content to highlight important, distinctive and positive initiatives for our customers. Performance Measure 6.4A measures the number of people who read, viewed or listened to proactive media stories.

Proactive media helps our customers understand transportation initiatives by telling MDOT's own story. Proactive media goes beyond press releases to share unique stories of the organization.

By tracking the exposure of those unique stories, MDOT can properly evaluate if the messages are reaching the consumer. The number of exposures are calculated by compiling the number of times they were delivered to a customer through a newspaper article, online news website, radio or TV show.

During the second quarter of 2018, MDOT reached 2,388,260 people with proactive media placements. This was a 93 percent drop from the first quarter of the year. While the reach was significantly down, it's important to note that the actual number of pickups was small in both quarters - 41 and 16.

The main difference in the second quarter of 2018 was that far fewer TV and radio stations picked up our stories, and these media have the largest reach. For example, the Port had a story on its Ro-Ro Rodeo picked up by WJZ-TV in May, reaching 820,000 people.

PERFORMANCE MEASURE 6.4A

Telling the Story of MDOT – Proactive Media

Chart 6.4A.1a: Audience for Proactive Stories Picked Up By Media Q1 CY2018

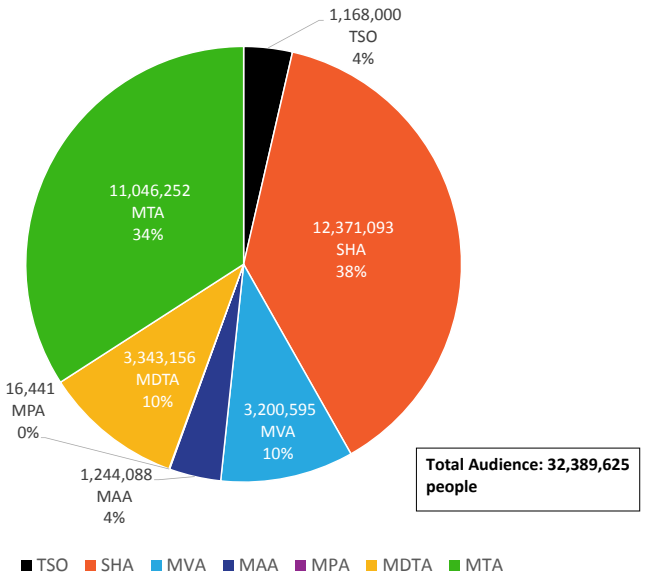
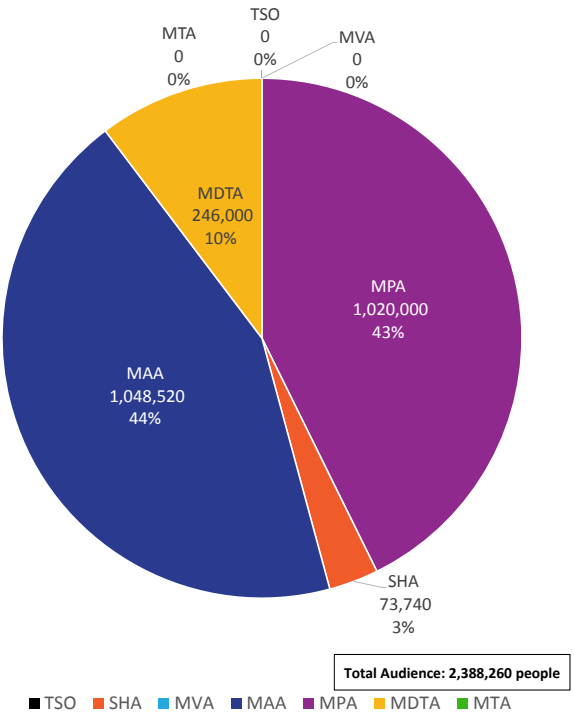


Chart 6.4A.1b: Audience for Proactive Stories Picked Up By Media Q2 CY2018



PERFORMANCE MEASURE 6.4A

Telling the Story of MDOT – Proactive Media

Chart 6.4A.2a: Type of Media that Picked Up Proactive Stories Q1 CY2018

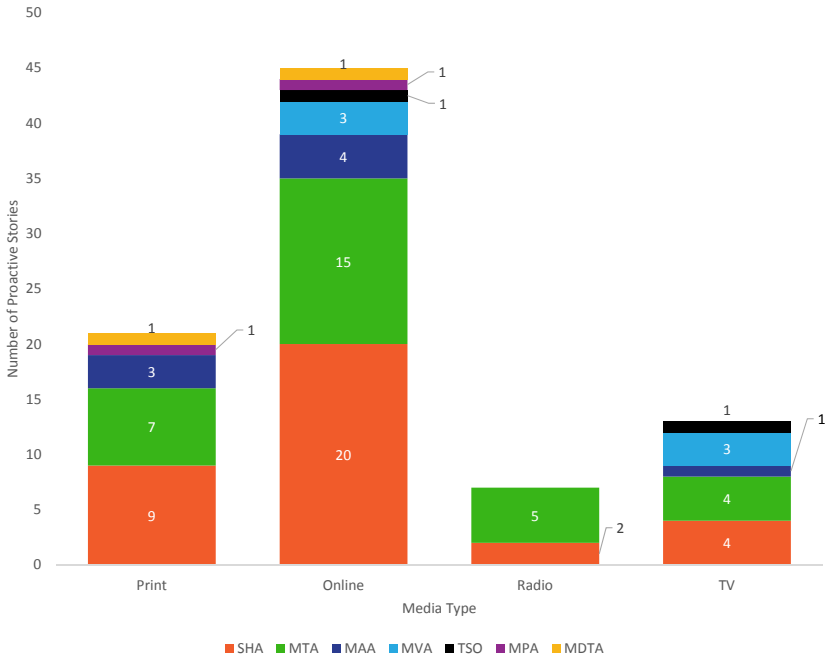
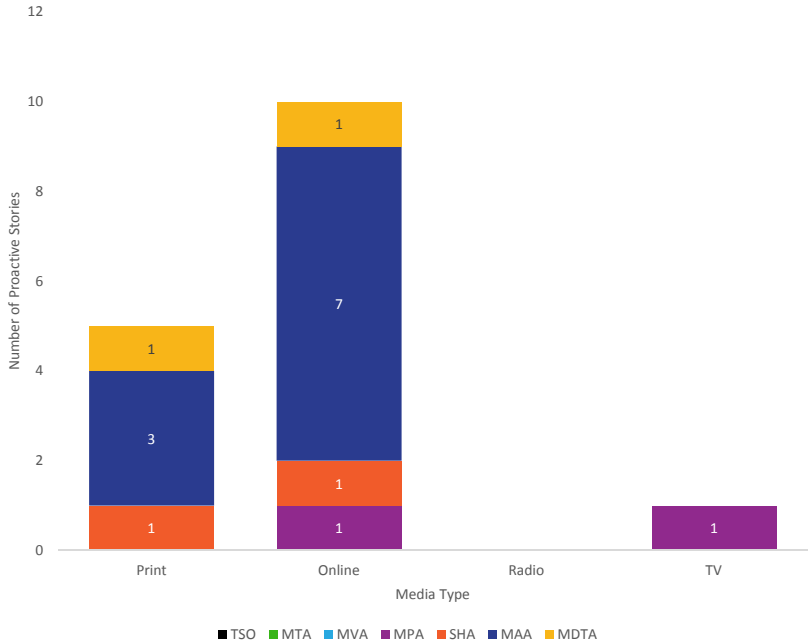


Chart 6.4A.2b: Type of Media That Picked Up Proactive Stories Q2 CY2018



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

PERFORMANCE MEASURE DRIVER:
Jonathan Dean
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:
To track the number of people that viewed proactive content produced by MDOT TBUs.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Data gathered, measured, and analyzed.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 6.4B
Telling the Story of MDOT – Proactive Media

MDOT produces its proactive content to showcase its own stories without relying on traditional press releases. This proactive content includes magazines, broadcasts, newsletters, photo albums and sound bites.

The stories told in these items tell the positive impact of MDOT Performance Measure 6.4b measures the number of people looking at the content MDOT produced on its own and made available to subscribers, listeners and readers. This measure will guide how MDOT can best package proactive stories for each category of media. Through this measure, MDOT can see how large an audience it is reaching through internally produced items and compare that audience with Performance Measure 6.4a to analyze what categories of external media are placing MDOT-produced content.

MDOT reached 31,286 people in the second quarter of 2018 with its own internally produced content – a 48 percent increase from the first quarter of the year, meaning we are telling our own stories more than ever.

The good news here is that proactive pickups are largely an untapped market to get media outlets to tell our stories.

PERFORMANCE MEASURE 6.4B

Telling the Story of MDOT – Proactive Media

Chart 6.4B.1a: Audience for MDOT-Produced Proactive Content Q1 CY2018

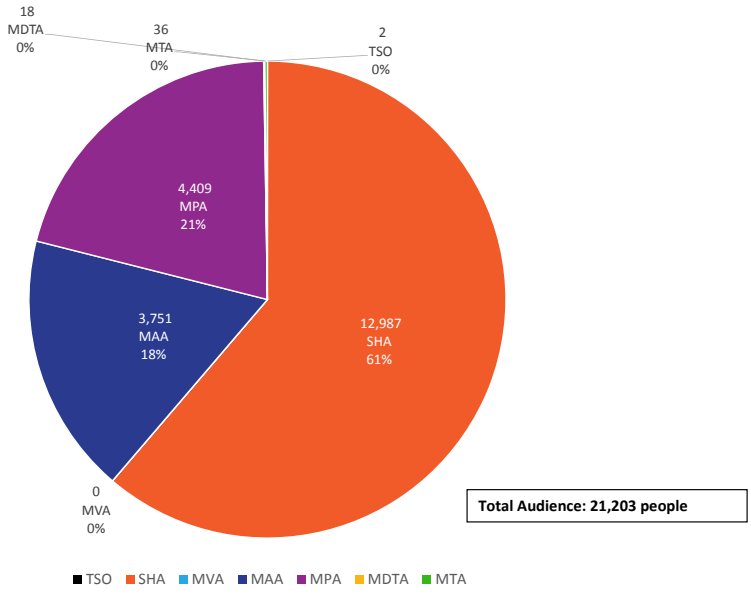
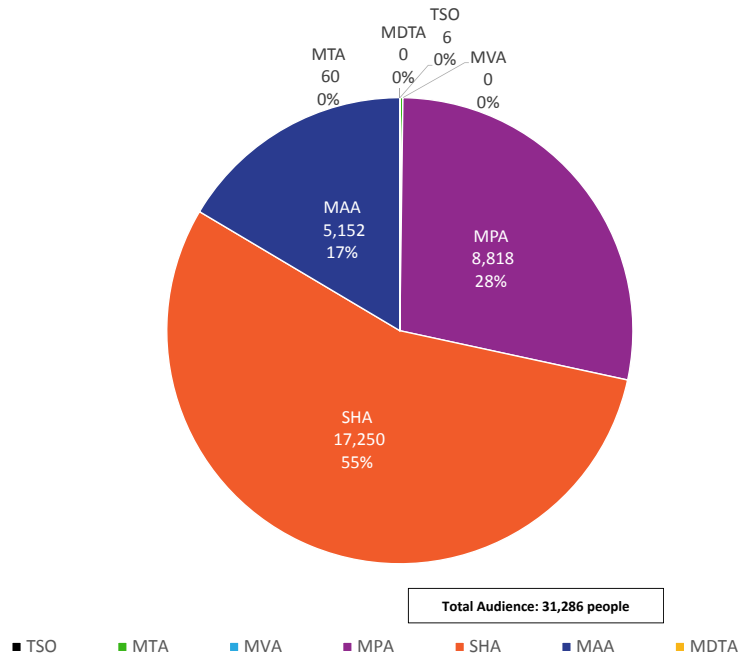


Chart 6.4B.1b: Audience for MDOT-Produced Proactive Content Q2 CY2018



PERFORMANCE MEASURE 6.4B

Telling the Story of MDOT – Proactive Media

Chart 6.4B.2a: Type of MDOT-Produced Proactive Content Q1 CY2018

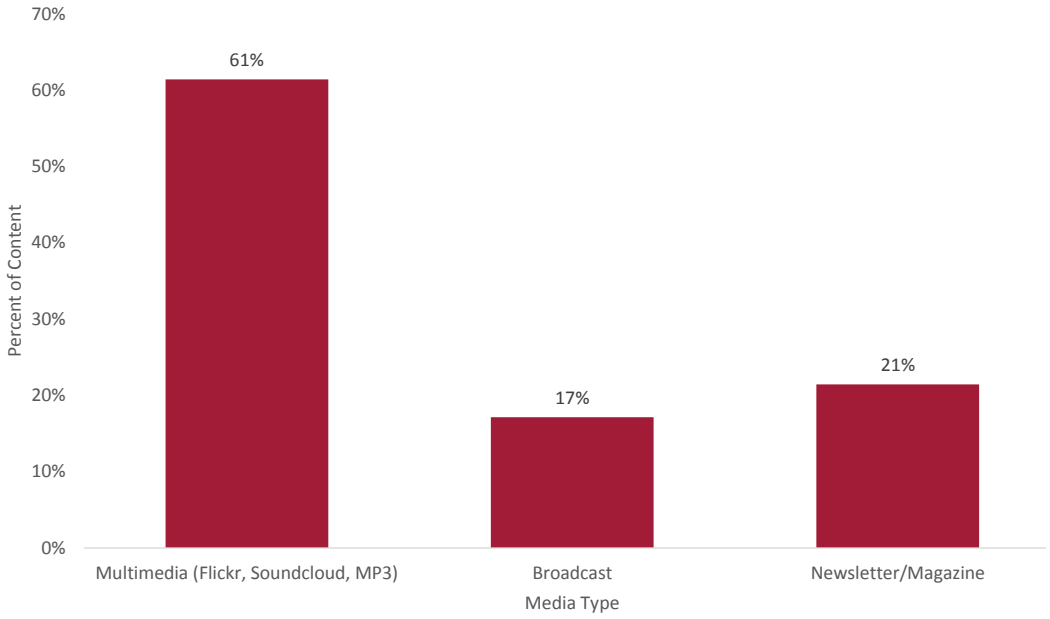
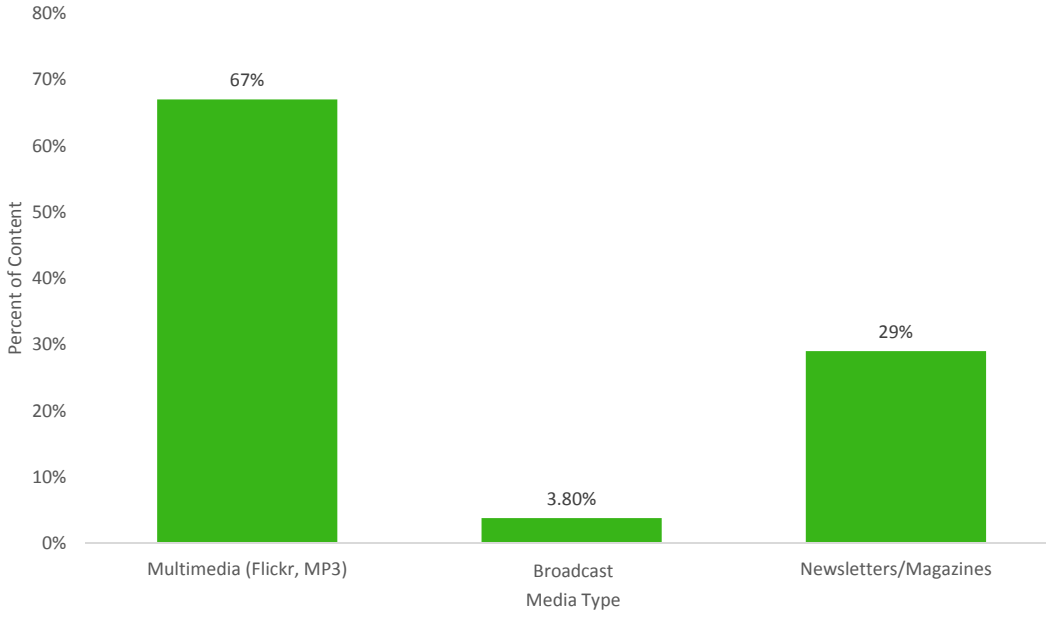


Chart 6.4B.2b: Type of MDOT-Produced Proactive Content Q2 CY2018



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

PERFORMANCE MEASURE DRIVER:
Jonathan Dean
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:
To measure the number of social media users reached by MDOT proactive content.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Data gathered, measured, and analyzed.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 6.4C
Telling the Story of MDOT – Proactive Media

MDOT posts proactive content on social media to allow for speedy and wide distribution of positive stories and extras from press conferences and events, as well as campaigns. The posting of this content on social media is a subset of MDOT's overall social media posts, but is an important component and takes an exerted effort to coordinate.

This measure looks at the number of customers we reach with proactive stories distributed through social media channels. This audience is defined by the number of times the proactive items show up in social media feeds.

During the second quarter of 2018, the total audience for proactive MDOT items on social media was 2,485,390, a 6.8 percent decrease from the first quarter of the year. It should be noted that while the total dropped slightly, people are spending more time engaging with our posts.

PERFORMANCE MEASURE 6.4C

Telling the Story of MDOT – Proactive Media

Chart 6.4C.1a: Audience of Proactive Stories Published on Social Media Q1 CY2018

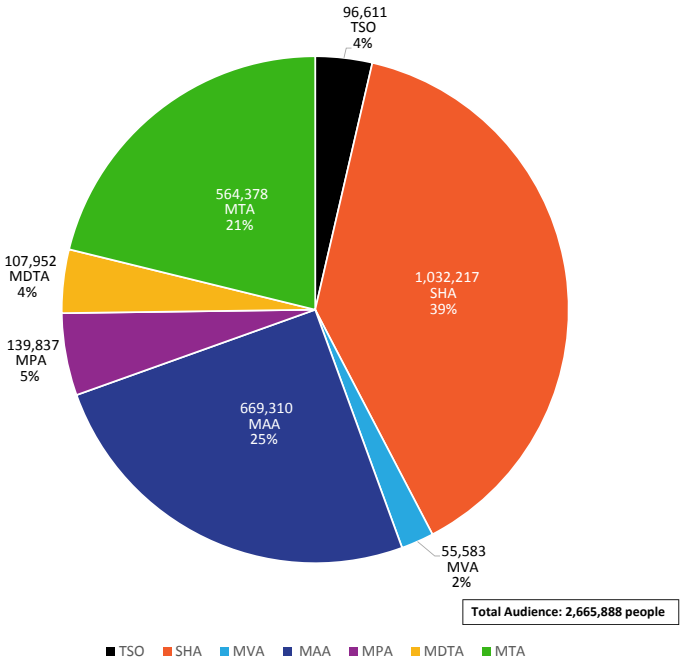
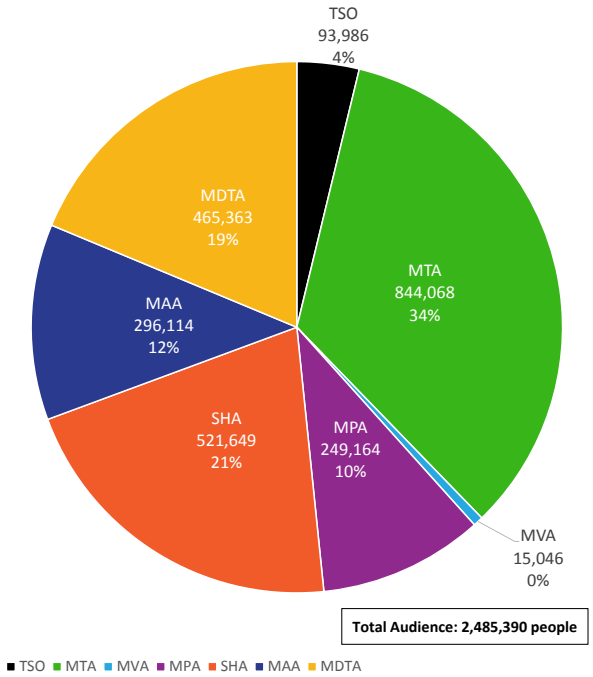


Chart 6.4C.1b: Audience of Proactive Stories Published on Social Media Q2 CY2018



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

PERFORMANCE MEASURE DRIVER:
Jonathan Dean
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:
To analyze the number of user interactions with social media content produced by MDOT.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Data gathered, measured, and analyzed.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 6.4D
Interactions with Proactive Posts on Social Media

MDOT communications offices produce content to highlight important, distinctive, and positive stories for our customers. This measures the number of times someone saw a proactive message that was distributed on social media and interacted with it. Interactions are direct confirmation that someone has viewed and comprehended MDOT's proactive message. These include likes, comments, retweets and clicks.

Social media is an important tool for the agency to spread its own proactive stories, which could lead to media pickups that would increase the audience on each proactive item. This measure provides feedback on the effectiveness of proactive stories on social media.

During the second quarter of 2018, the total audience was 114,811 people, a 44 percent increase from the first quarter of 2018. One example was a Facebook post with photos from April about MDTA Police responding to a call about a bird in distress. More than 11,000 people engaged with the post, meaning they liked it, clicked on a picture, commented or shared it with friends.

PERFORMANCE MEASURE 6.4D

Interactions with Proactive Posts on Social Media

Chart 6.4D.1a: Interactions with Proactive Posts on Social Media Q1 CY2018

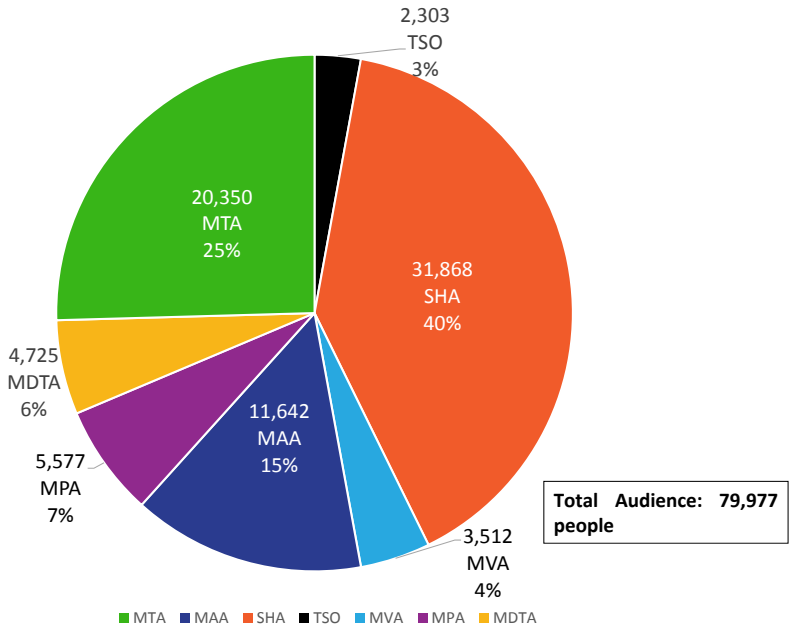
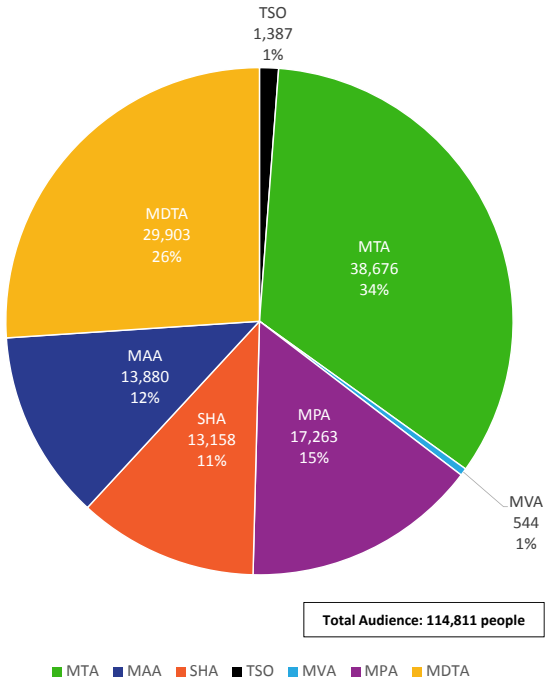


Chart 6.4D.1b: Interactions with Proactive Posts on Social Media Q2 CY2018



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 Small, Minority and Women Business Affairs (GOSBA) 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 the third quarter of FY2018 was approximately 15.46 percent (average of all TBUs) reflecting a slight decrease from the second quarter FY2018, which was approximately 16.15 percent. Participation is reported as year-to-date participation, so Q3 represents participation for FY 2018 (July 2017 – March 2018). Participation at the TBUs ranged from 9.41 percent to 24.81 percent.

- MBE participation is important as MDOT is subject to the statewide MBE goal of 29 percent as are all state agencies. Participation has been up and down during the last fiscal year, but overall the participation has not been at that level.

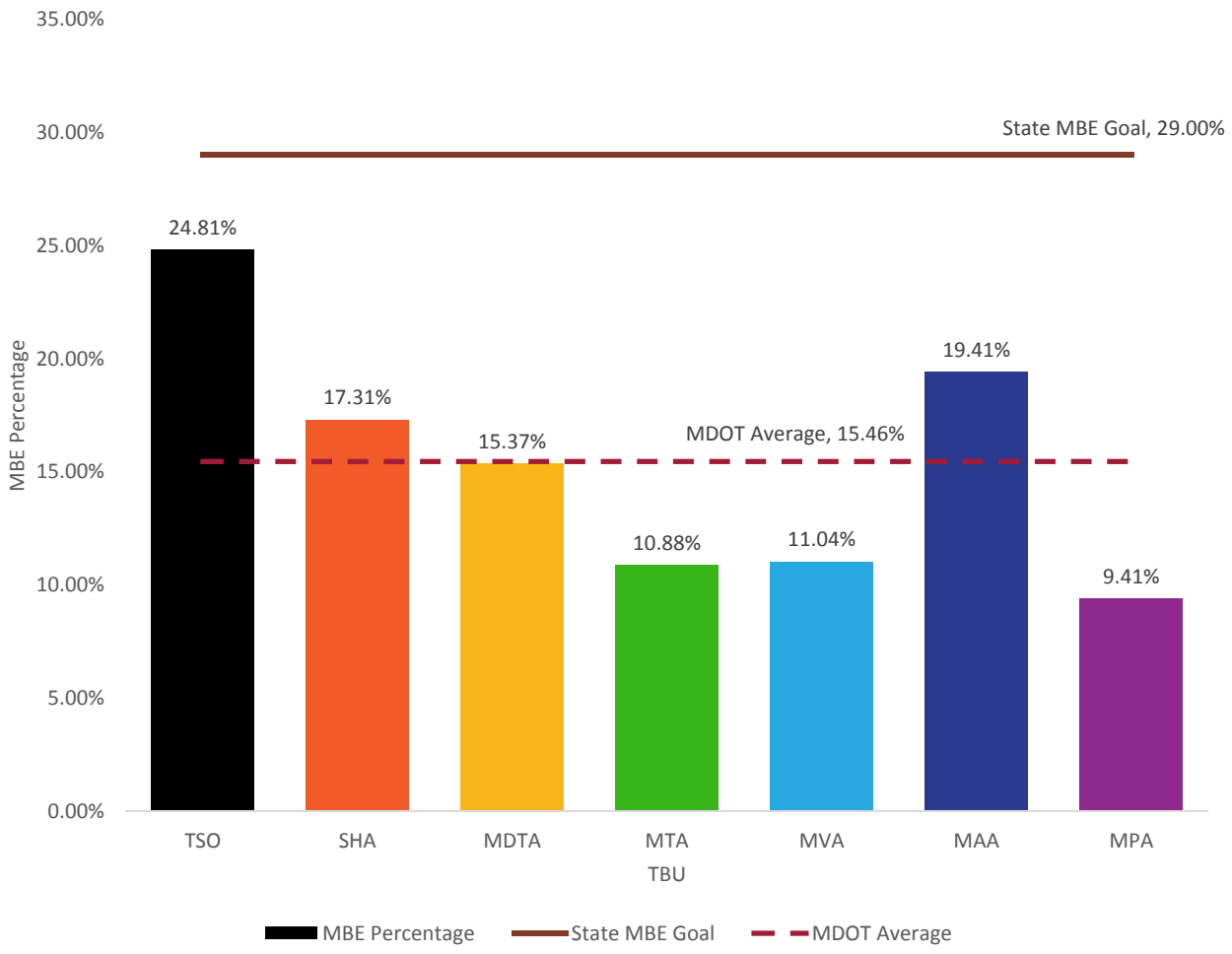
- Per the strategic plan, input was obtained from MDOT Procurement and Fair Practices staff regarding approaches to positively impact the goal. Unbundling of contracts, an increase in the number of smaller contracts and increased/enhanced outreach efforts are items that were recommended. Implementation of these items is on-going and should have a positive impact on participation.

- MDOT MBE Participation for FY 2017 was approximately 22.52 percent (average of all TBUs).

PERFORMANCE MEASURE 7.1

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

Chart 7.1.1: MBE Percentage Q3 FY2018



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).

Information on the total number of prime contracts awarded as well as the number of MBE prime contracts awarded is reported. This approach reflects the information that is reported to the Governor's Office of Small, Minority and Women Business Affairs (GOSBA). The year-to-date percentage of MBE prime contractors for MDOT for the third quarter of FY 2018 (January – March 2018) was approximately 5 percent. The percentages for the MDOT TBUs ranged from 1 percent to 9 percent.

Per the strategic plan, input from the Procurement and Fair Practices staff was obtained regarding approaches to increase the number of MBE primes. Unbundling of contracts, increasing the number of smaller contracts in areas with high levels of MBE firms and increased/enhanced outreach and technical assistance to these MBE firms are items that were recommended. Implementation of these changes is on-going and should have a positive impact on the participation of MBE firms as prime contractors.

PERFORMANCE MEASURE 7.2

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

Chart 7.2.1: MDOT Prime Contracts vs. MDE Prime Contracts by TBU Q3 FY2018

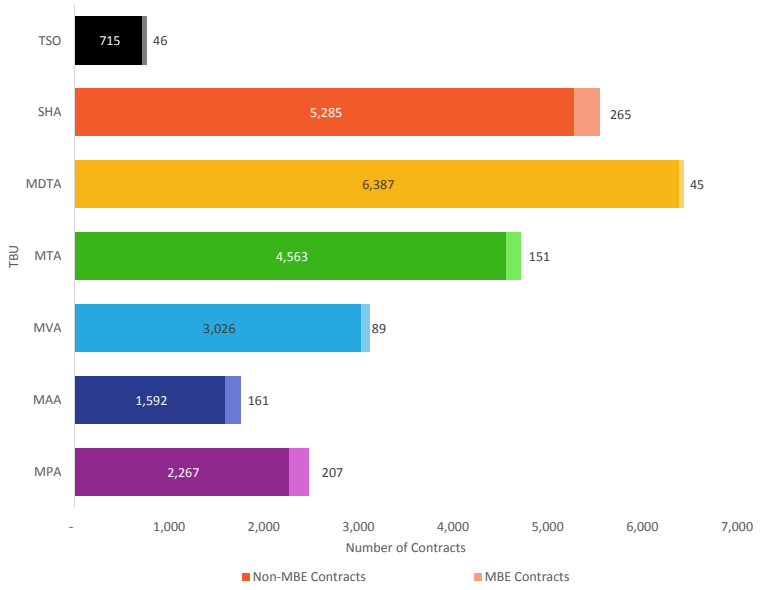
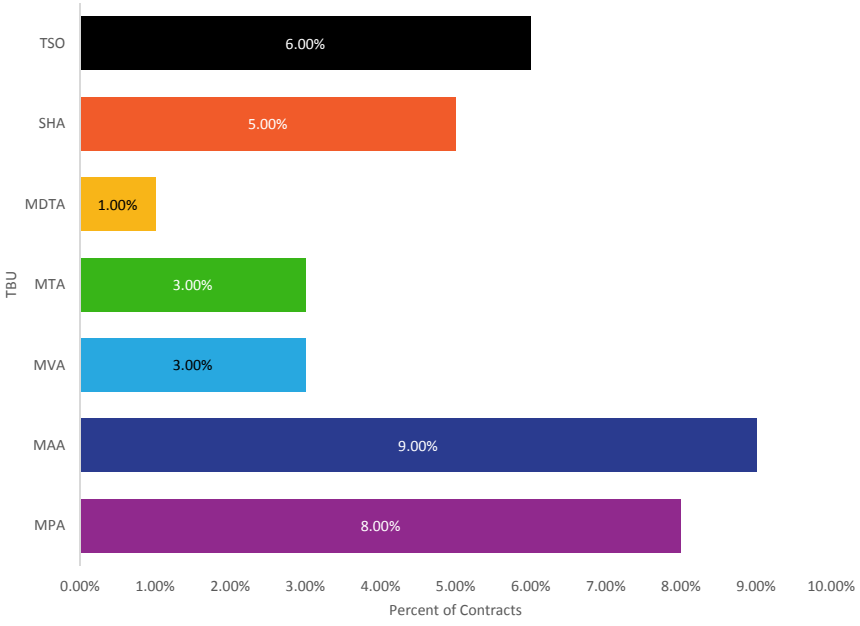


Chart 7.2.2: Percent of MBE Prime of Total Contracts by TBU for Q3 FY2018



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

PERFORMANCE MEASURE DRIVER:
Trisha O'Neal
Maryland Port Administration (MPA)

PURPOSE OF MEASURE:
Track compliance with State mandate for awarding 15 percent of MDOT's total eligible procurement expenditures on SBR designated contracts.

FREQUENCY:
Quarterly

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 of Women, Small, Minority Business Affairs maintains the State's official record of SBR designation and spending across 77 participating agencies, including MDOT's TBUs. The State's mandate is 15% 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 Small Business Reserve (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.

To ensure compliance with State regulations, each TBU is required to participate in the SBR Program by spending at least 15 percent of its annual fiscal year eligible procurement expenditures on SBR designated contracts. SBR designated contracts are only awarded to Maryland certified small businesses.

For Q1 CY2018, MDOT achieved 9.37 percent participation, which is an increase of 1.04 percent from Q4 CY2017. 9.37 percent of its eligible procurement expenditures were spent with Maryland certified small businesses; however only 3.38 percent of its eligible procurement expenditures were spent on SBR designated contracts.

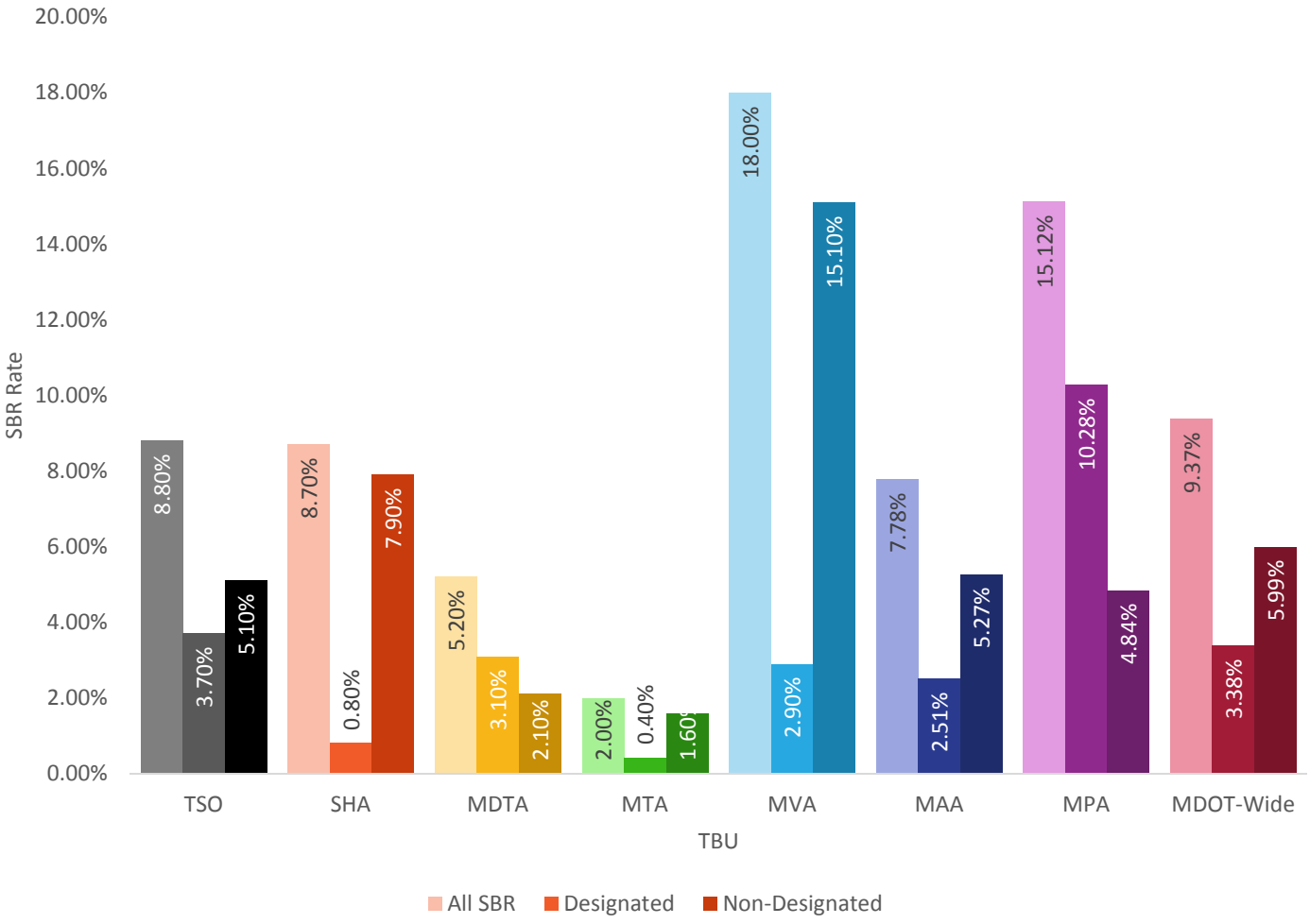
To increase the SBR Program participation rates, MDOT provided documented policy guidelines to all TBUs. These guidelines focus on increasing the SBR participation rate by requiring an annual strategic plan from each TBU. Some strategies include:

- Require Procurement Review Group's approval of SBR designation;
- Create a SBR liaison and reporting expert;
- Train and work closely with purchasing card holders to emphasize Maryland certified small businesses; and
- Increase small business outreach and vendor education.

PERFORMANCE MEASURE 7.3

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

Chart 7.3.1: Annual Small Business Reserve Rate by TBU Q1 CY2018



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

PERFORMANCE MEASURE DRIVER:
Cheryl Stambaugh
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

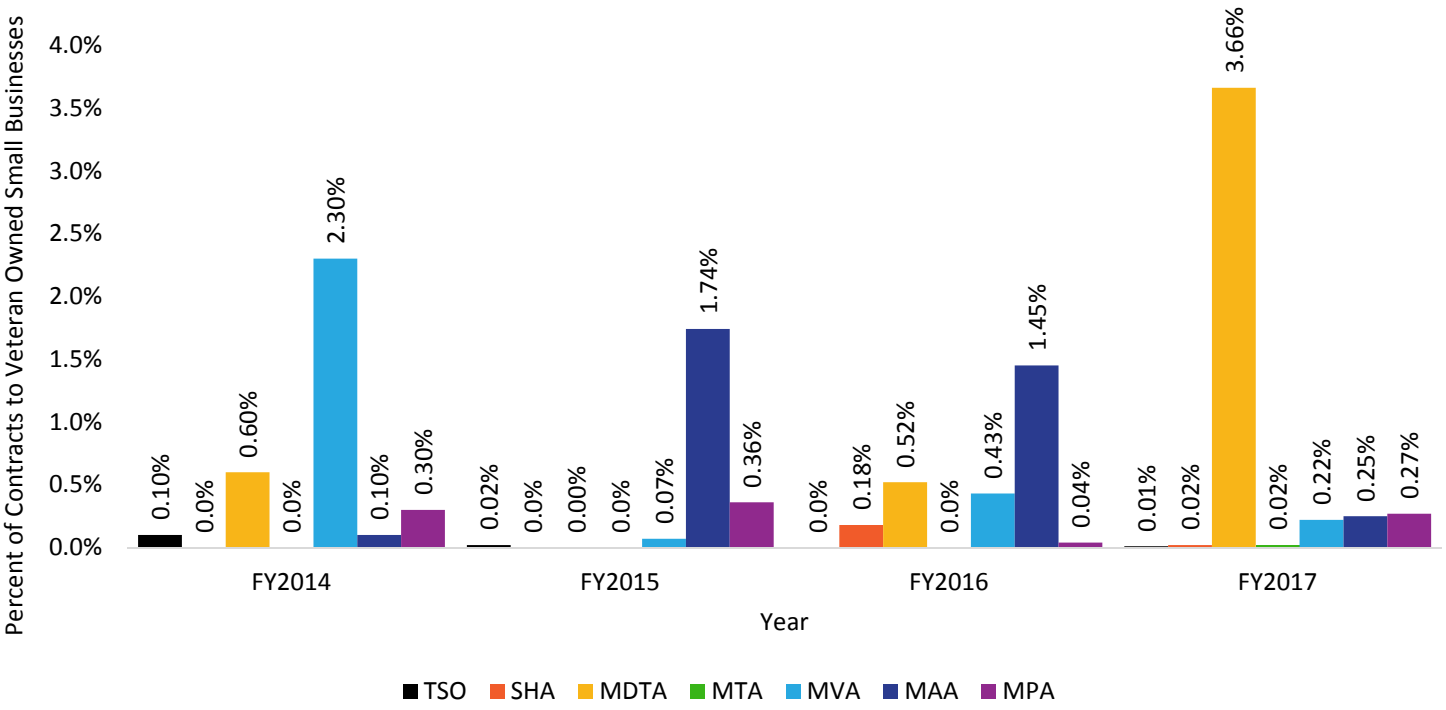
Percent of Veteran Owned Small Business Enterprise (VSBE) Participation

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. MDOT is committed to attaining or exceeding the State mandated goal for veteran businesses.

PERFORMANCE MEASURE 7.4

Percent of Veteran Owned Small Business Enterprise (VSBE) Participation

Chart 7.4.1: Veteran Owned Small Business Enterprise Participation by TBU FY2014-FY2017



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

PERFORMANCE MEASURE DRIVER:
George Zurek
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:
To determine the level of satisfaction of our business partners with processes MDOT-wide.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
The PM Driver administers a Level of Satisfaction survey to MDOT's partners. After the survey cutoff date, the data is then compiled and analyzed. An Outlook email address has been established for easier quarterly reporting.

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. This performance measure is crucial to gauging MDOT's effectiveness in being fair and reasonable to its business partners. 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.

This performance measure captures MDOT's business partner satisfaction through quarterly surveys. Each quarter, a certain business segment (i.e. construction, IT, A&E, etc.) is selected to be surveyed and the results are then reported. Each business segment will be surveyed one time per year. This quarter we surveyed MDOT's Architectural and Engineering business partners. Surveys are distributed via Survey Monkey.

PERFORMANCE MEASURE 7.5
Level of Satisfaction of Our Business Partners

Chart 7.5.1: A&E MDOT Partner Responses to "How satisfied are you with the timeliness of payments after your invoice has been submitted?" Q2 CY2018

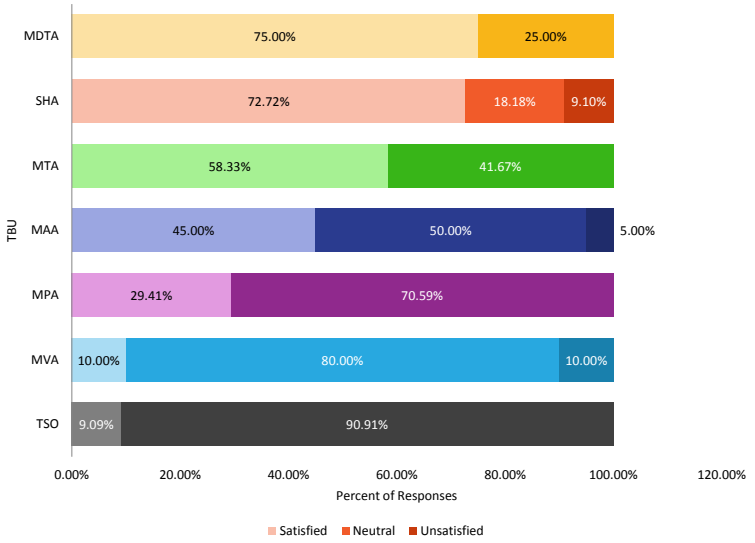
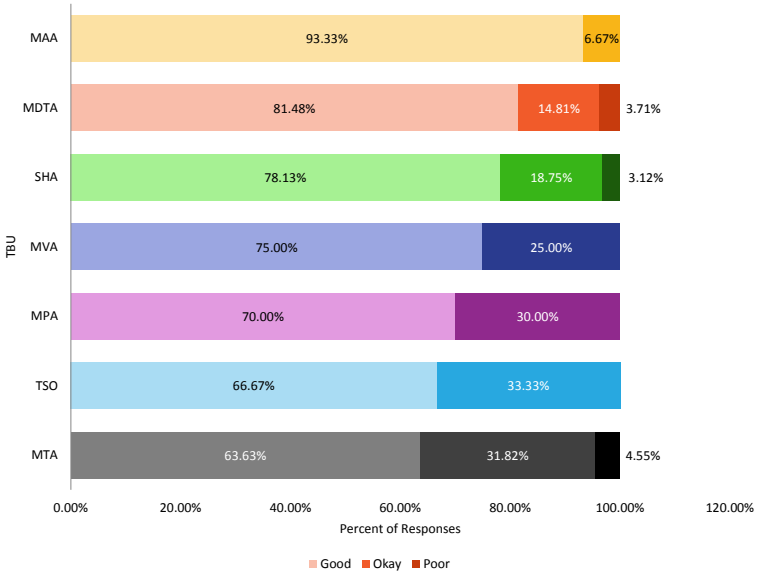


Chart 7.6.2: A&E MDOT Partner Responses to "Please rate MDOT transportation business units on how fair and reasonable they are in the management of MDOT contracts." Q2 CY2018



PERFORMANCE MEASURE 7.5
Level of Satisfaction of Our Business Partners

Chart 7.5.3: A&E MDOT Partner Responses to "Is the procurement process transparent?" Q2 CY2018

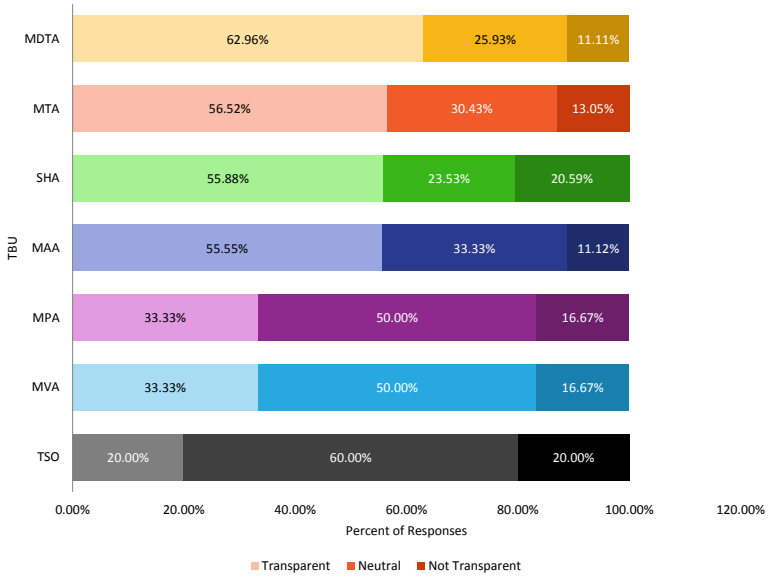
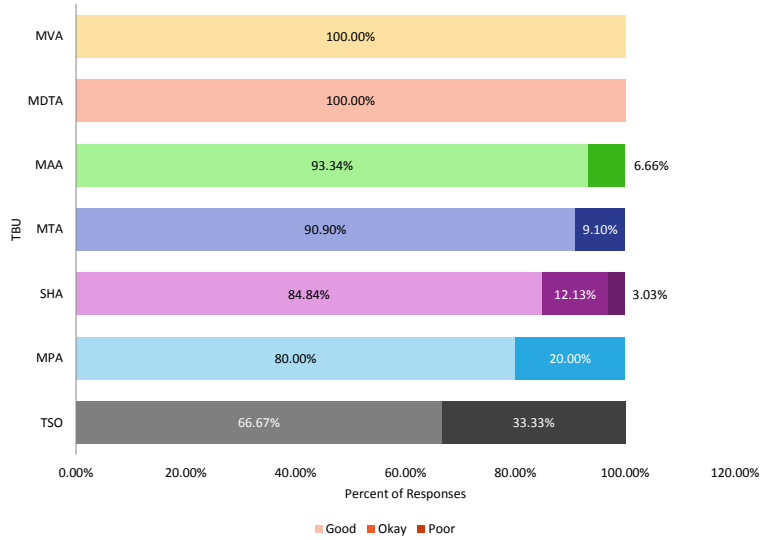


Chart 7.5.4: A&E MDOT Partner Responses to "Please rate the MDOT transportation business units as business partners." Q2 CY2018



Be Fair and Reasonable to Our 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

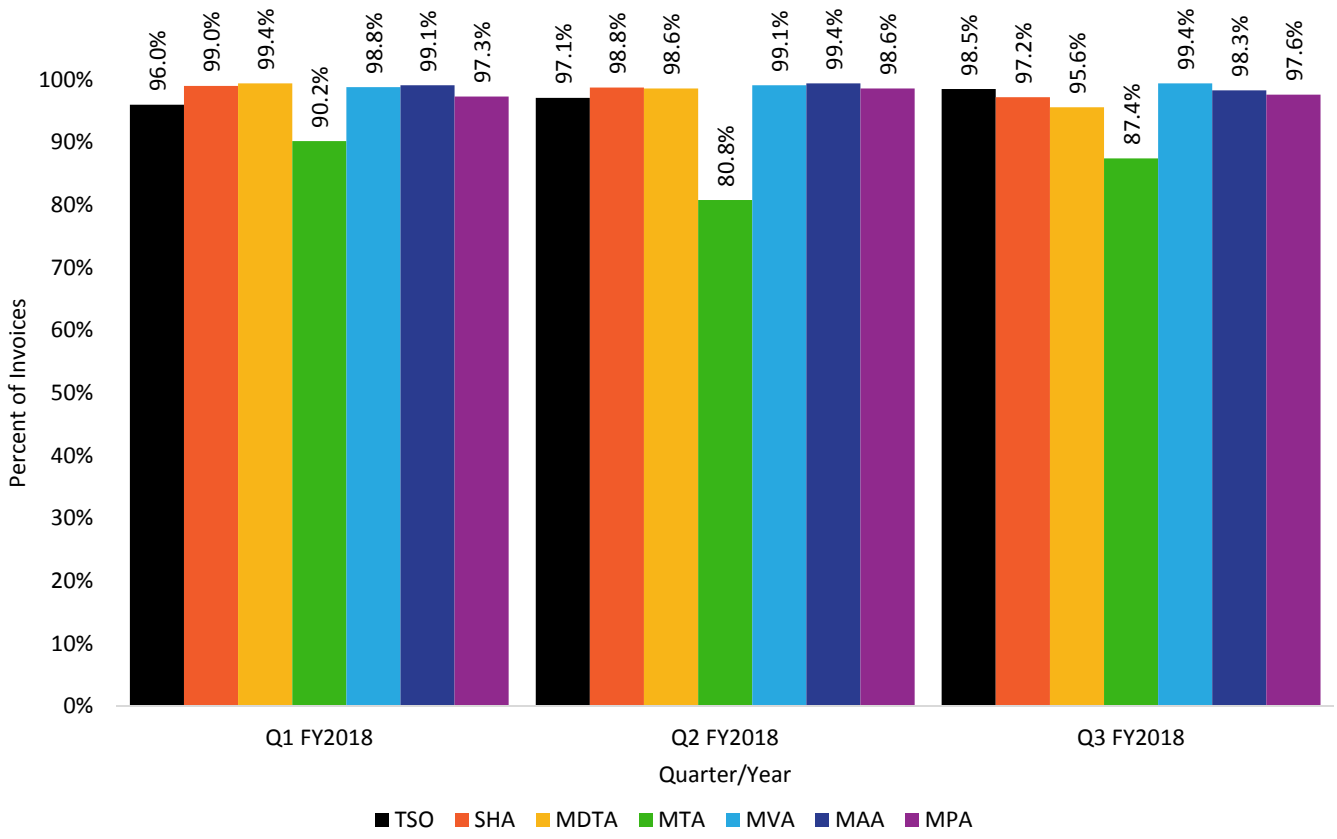
Number and Percent of Invoices Properly Paid to Our Partners in Compliance with State Requirements

MDOT will treat contractors fairly by promptly paying invoices. Contractors should be able to trust MDOT TBUs consistency of payment with a goal of paying invoices within 30 calendar days 99 percent of the time. January through March of 2018 MDOTs on time percentage is 96.1%.

PERFORMANCE MEASURE 7.6

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

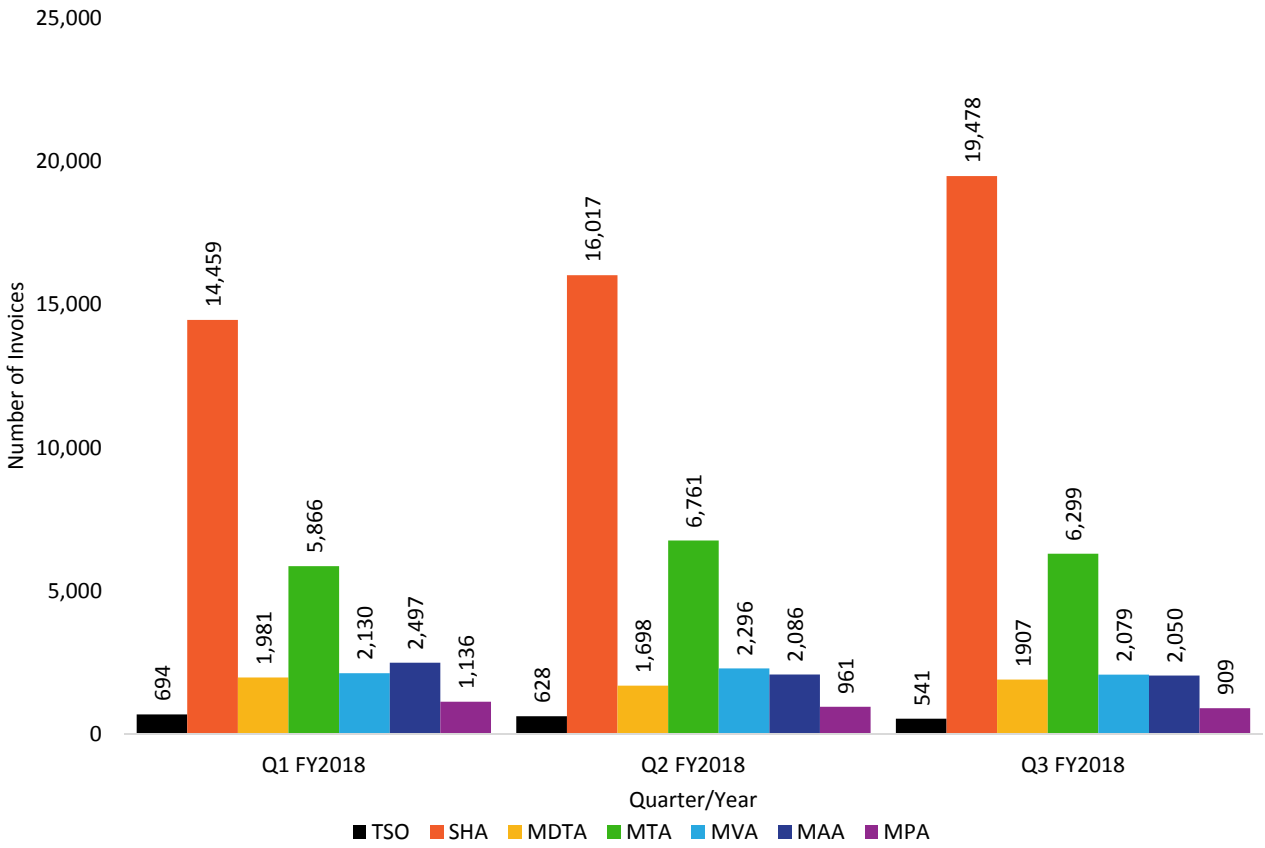
Chart 7.6.1: Percent of Invoices Properly Paid Within 30 Days of Invoices Q1-Q3 FY2018



PERFORMANCE MEASURE 7.6

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

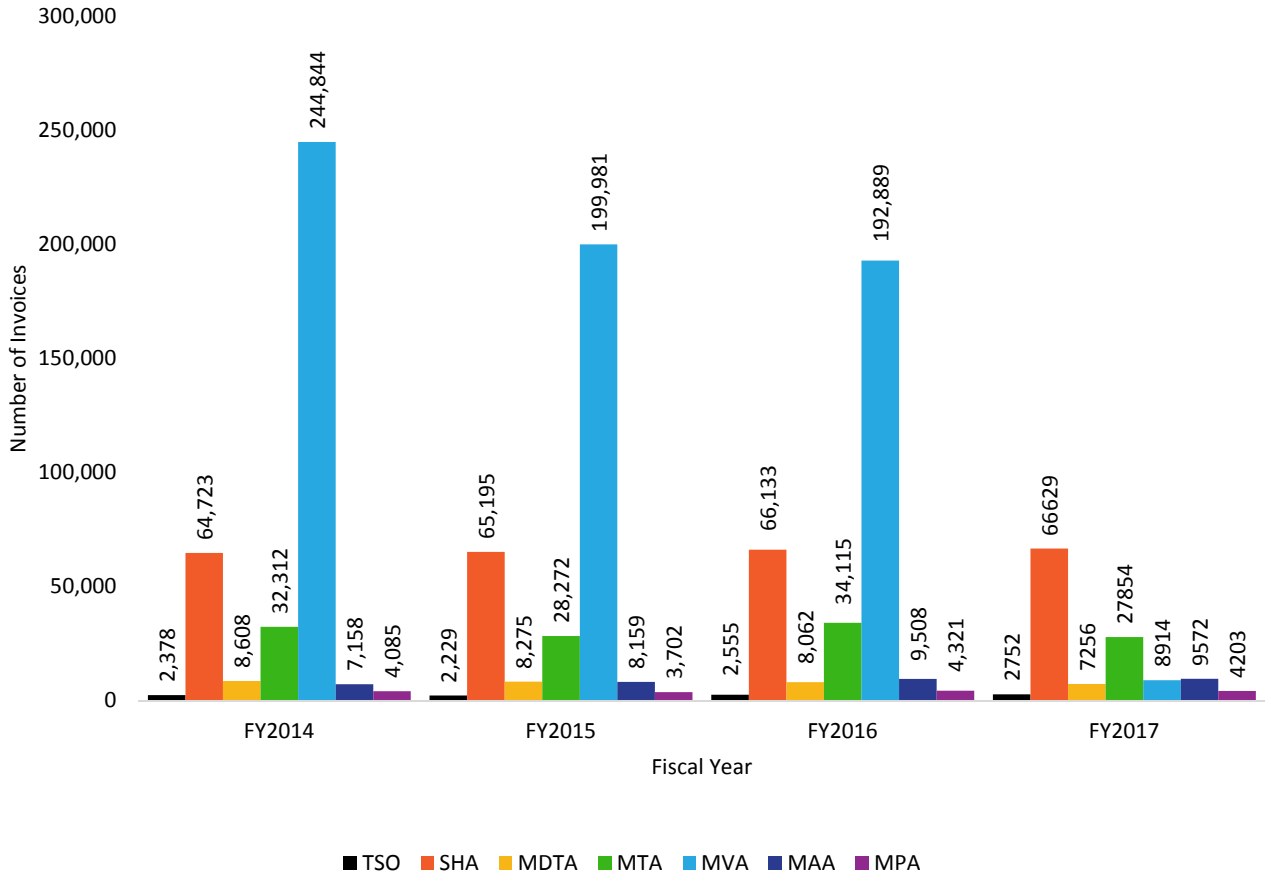
Chart 7.6.2: Total Number of Invoices Paid by Q3 FY2018



PERFORMANCE MEASURE 7.6

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

Chart 7.6.3: Total Number of Invoices by TBU FY2014-FY2017



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, how many are legitimate, and how MDOT can create 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 TSO Office of Procurement (OOP) is collecting data from all the TBUs and is documenting the number of protests as well as the reason for the protest.

The TSO OOP will collect data regarding protests so that it may administer a root cause analysis and implement corrective/preventive actions. Currently there is not enough detail to determine the root cause.

PERFORMANCE MEASURE 7.7

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

Chart 7.7.1: Running Twelve Month Procurement Protests by Quarter CY2017 - CY2018

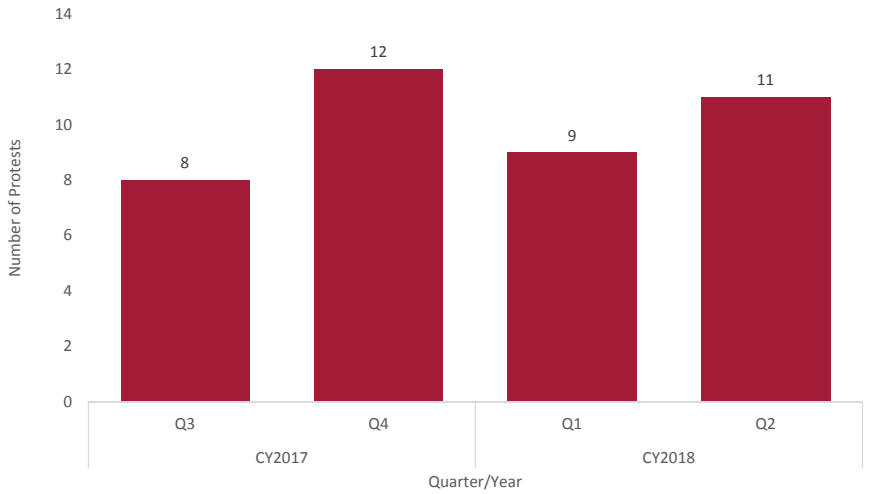


Chart 7.7.2: Q2 CY2018 Protests Appealed/Not Appealed

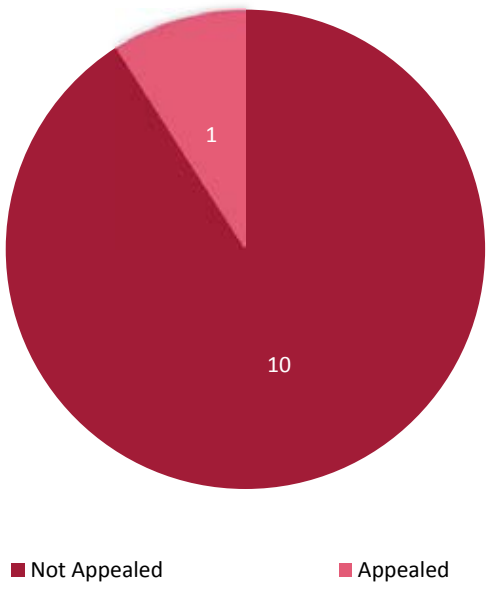
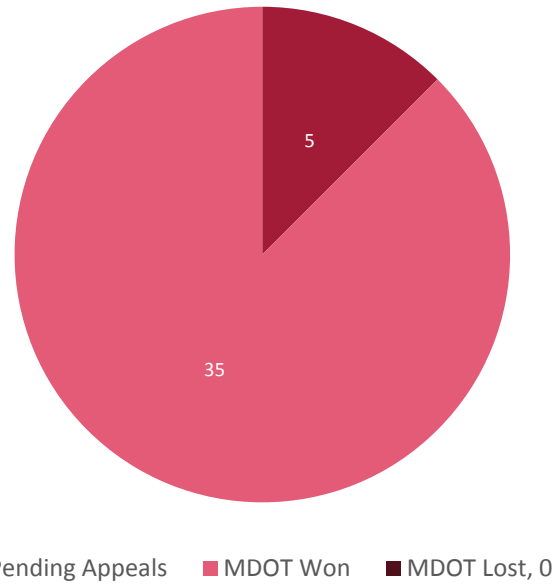


Chart 7.7.3: Running 12-Month Appeals Won/Lost/Pending, CY2017-CY2018



TANGIBLE RESULT #8

Be a Good Neighbor

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

RESULT DRIVER:
Anthony Crawford
State Highway Administration (SHA)

TANGIBLE RESULT DRIVER:
Anthony Crawford
State Highway Administration (SHA)

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

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

FREQUENCY:
Annually (July)

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 relationships with its neighbors and commits to meeting or exceeding their expectations. MDOT engaged neighbors through a survey and outreach to better understand the impact its facilities have on communities and how the agency can be a better neighbor.

MDOT just completed the second round of Internal Facility Assessments this Spring. The assessments ensure we are meeting or exceeding our own standards by evaluating each facility's overall appearance and cleanliness. Each facility was rated on a scale of 0-Very Poor to 100%-Very Good for overall appearance and cleanliness. The TBU's 2018 results ranged from 79% to 96%, resulting in an average of 87%. This is slightly higher than the 2016 average of 85%.

The most significant improvements were reflected in the facilities' landscape features and the organization of equipment and materials. Areas identified as opportunities for improvement include perimeter fence/screening, facility signs, and facility flags. As a result of the recent assessment, MDOT SHA replaced all worn flags prior to the July 4th Independence Day Holiday.

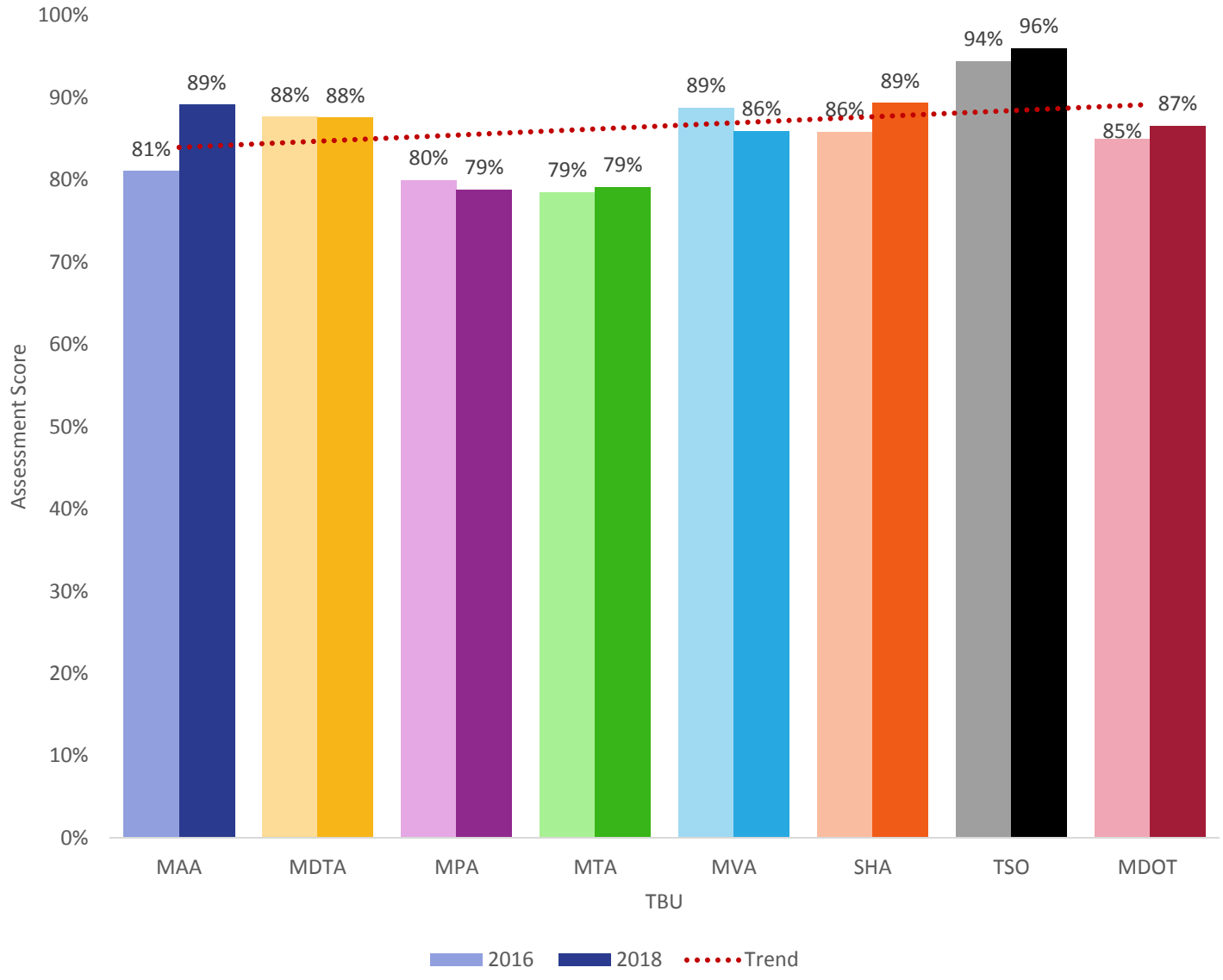
Facility Improvement Plans are currently being implemented to address the assessment and survey results. Areas of focus include overall facility appearance, perimeter fence/screening, noise reduction, and improved traffic operations. MDOT TBUs continue to expand our neighbor outreach by attending community meetings and hosting open house events.

MDOT will continue to use the results of the neighbor surveys, internal facility assessments, and feedback from the community to ensure we continue to meet or exceed our neighbor's expectations.

PERFORMANCE MEASURE 8.1

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

Chart 8.1.1: Internal Facility Assessments by TBU, CY2016 and CY2018



TANGIBLE RESULT DRIVER:
Anthony Crawford
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:
Priya Iyer
Maryland Transit Administration (MTA)

Terri Whitehead
Maryland Vehicle Administration (MVA)

PURPOSE OF MEASURE:
To assess the percent of our administrative buildings that meet or exceed ADA compliancy mandates, to ensure access by all.

FREQUENCY:
Annually (in April)

DATA COLLECTION METHODOLOGY:
Data on the number of owned and occupied administrative buildings along with the number of administrative buildings that are ADA compliant are tallied and reported by each business unit on a yearly basis.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 8.2
Percent of MDOT Facilities that are ADA Compliant

Compiling and charting data for seven (7) TBUs on the percent of their administrative buildings that are owned and occupied daily that meet or exceed 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 TBU on how and where to focus their resources to meet ADA compliance and make our administrative buildings more accommodating to all our customers and neighbors.

MDOT owned properties include several different elements that meet or exceed the ADA requirements. Our report is related to administrative buildings only, that are owned and occupied daily.

A. For the 2017 reporting each TBU provided self-reported data on the percent of owned and occupied administrative buildings that are ADA Compliant. Data was used to individually rate each TBU:

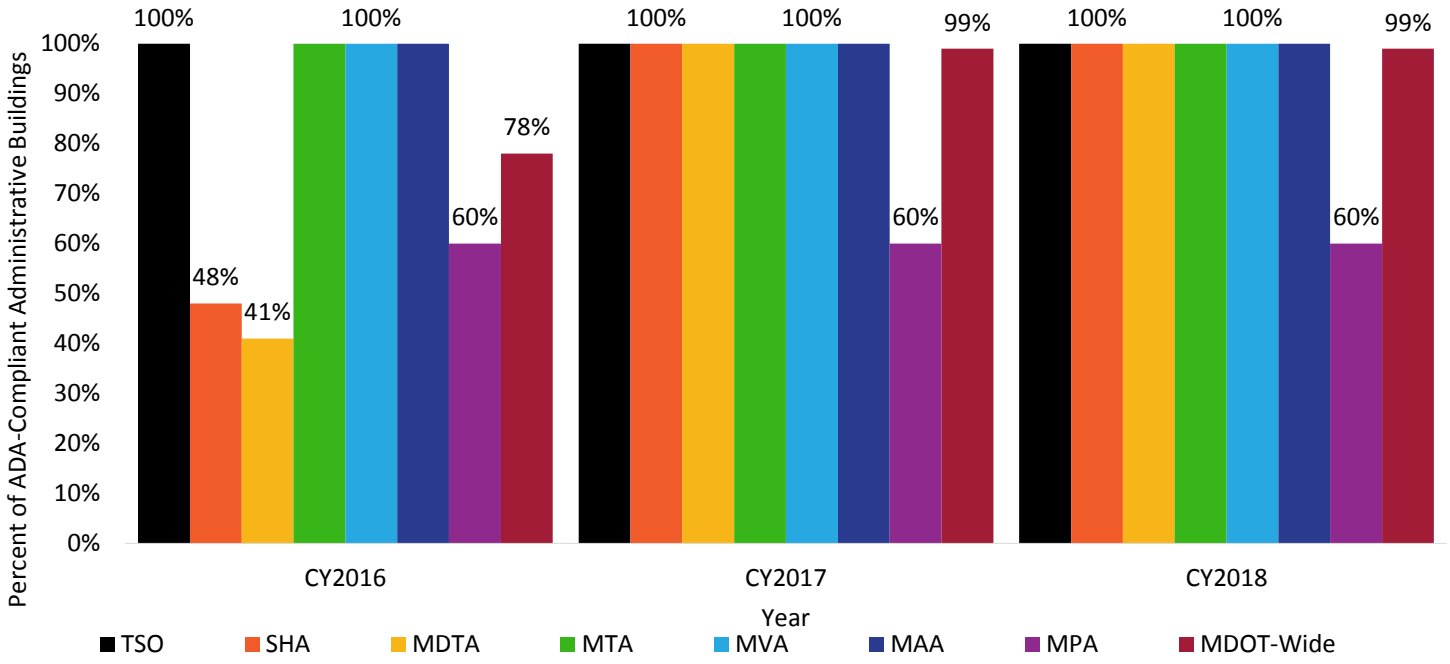
   1. TSO - 01 owned and occupied; 01 compliant = (100 percent)
   2. SHA - 33 owned and occupied; 33 compliant = (100 percent)
   3. MDTA - 12 owned and occupied; 12 compliant = (100 percent)
   4. MTA - 16 owned and occupied; 16 compliant = (100 percent)
   5. MVA - 33 owned and occupied; 33 compliant = (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 – 161 owned and occupied; 159 compliant = (99 percent)

B. The 2018 report verified the self-reported data collected to identify any change. No change reported from 2017 to 2018.

PERFORMANCE MEASURE 8.2

Percent of MDOT Facilities that are ADA Compliant

Chart 8.2.1: Percent of Administrative Buildings that are ADA Compliant by TBU CY2016-CY2018



TANGIBLE RESULT DRIVER:
Anthony Crawford
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:
Jill Lemke
Maryland Port Administration (MPA)

Melissa Bogden
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:
Understand how many property damage claims are being made by neighbors against MDOT TBU's and how satisfied the customer is with how the claim was handled.

FREQUENCY:
Annually (in January)

DATA COLLECTION METHODOLOGY:
Maryland Treasurer's Office records on State department property damage claims.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 8.3A AND B

Number of Property Damage Claims and Percent of Customers Satisfied with How Their Property Claim was Handled

Measuring the number of property damage claims by neighbors adjacent to MDOT facilities informs each TBU where extra awareness can keep claims from occurring.

In March 2017, this measure was added to TR 8. After requesting information on claims submitted by neighbors from the Treasurer's office and then each TBU, the data showed there were few instances of property damage being filed by neighbors. The vast majority of claims were "slip and falls" or a special circumstance such as a mailbox being knocked over by a snow plow in western Maryland.

The initial performance measure did not include claims like rocks hitting windshields while a road is being milled prior to paving. In mid-June, a decision was made to expand the measure to all property damage claims, which will include but is not limited to rocks in windshields, side swipes on parked (or moving vehicles) by TBU vehicles, and possible water contamination issues from salting the roads in the winter.

Further investigation has found that these types of property damage claims are extremely rare and the cost impact to MDOT and the TBU's is negligible.

TANGIBLE RESULT DRIVER:
Anthony Crawford
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:
David Seman
The Secretary's Office (TSO)

PURPOSE OF MEASURE:
Tracking traffic violations will enable MDOT to better assess its impact on communities and contribute to improved public safety.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Traffic violation data provide individual TBU fleet managers.

NATIONAL BENCHMARK:
N/A

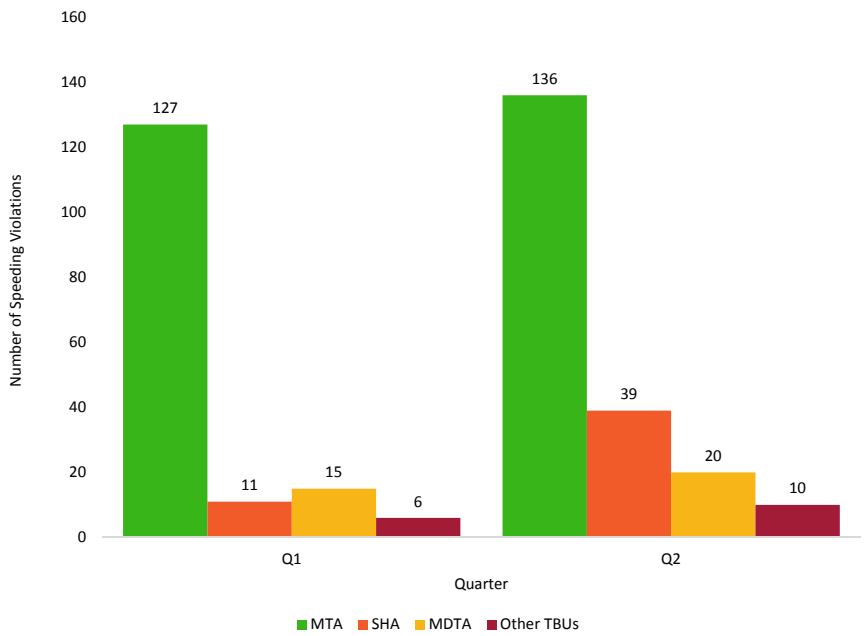
PERFORMANCE MEASURE 8.4
Number of Traffic Violations While Driving a State Vehicle

Tracking vehicle citations by TBU will give MDOT the ability to strengthen driver education training and direct corrective action. This will show that MDOT employees care about public safety by reducing instances of violations. MDOT's mission is to ensure safe and dependable modes of transportation to the community and lead by example.

Although data collection for this measure continues to improve, the initial analysis of available data shows that MTA and SHA, TBUs with the largest vehicle fleets in MDOT, account for the majority of all traffic violations, including speeding and red light running. MDOT also collects data on parking and other violations and will report findings after they have been verified for accuracy.

To improve MDOT's understanding of traffic violation patterns and trends, TBUs will work toward a more standardized collection and reporting method. More accurate reporting will help MDOT to limit risk, ensure safe performance of MDOT's fleet vehicles, and keep the public and MDOT employees safe during daily operations.

Chart 8.4.1: Speeding Violations by TBU CY2018



PERFORMANCE MEASURE 8.4

Number of Traffic Violations While Driving a State Vehicle

Chart 8.4.2: Red Light Camera Violations by TBU CY2018

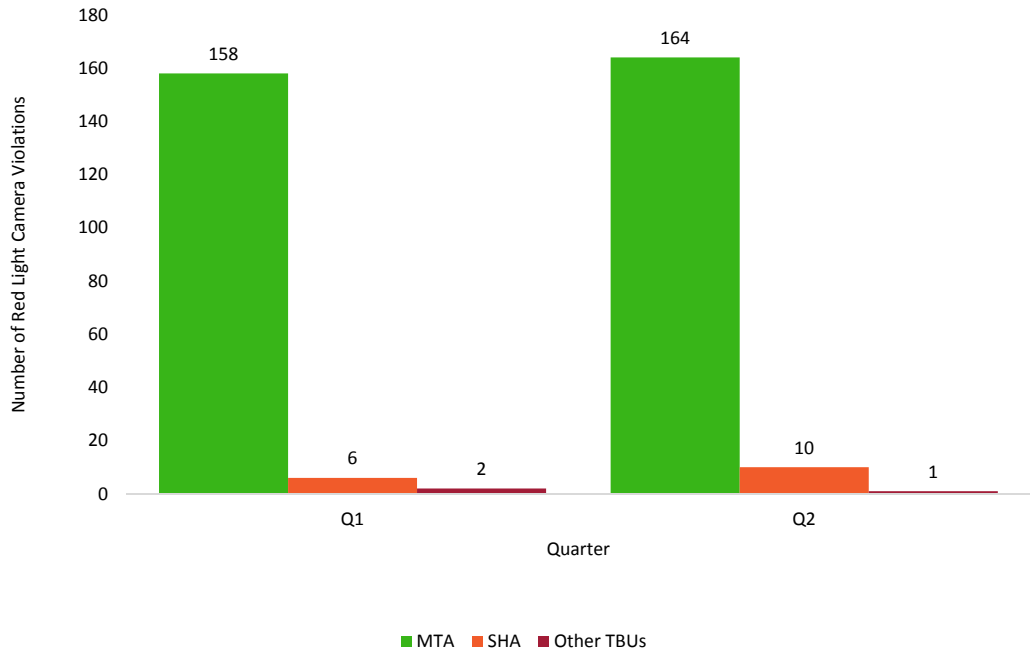
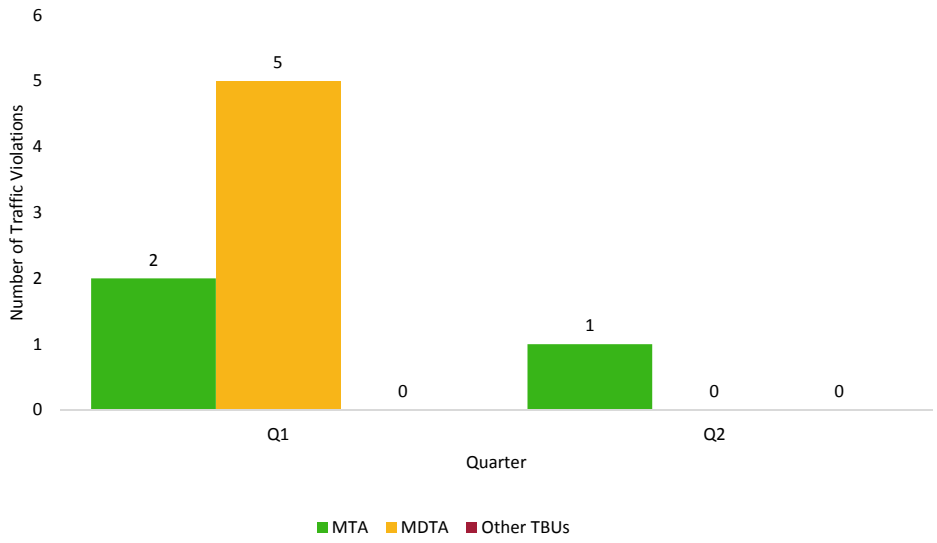


Chart 8.4.3: All Other Traffic Violations by TBU CY2018



TANGIBLE RESULT DRIVER:
Anthony Crawford
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:
Jill Lemke
Maryland Port Administration (MPA)

PURPOSE OF MEASURE:
To track participation in the Maryland Charity Campaign by TBU.

FREQUENCY:
Annually (in July)

DATA COLLECTION METHODOLOGY:
Solicit annual participation data from the Maryland Secretary of State and MDOT Combined Charity TBU Coordinators.

NATIONAL BENCHMARK:
Participation in the Federal Combined Charity Campaign was 10.7% in 2016.

PERFORMANCE MEASURE 8.5
Charity Campaign Participation

Maryland Charity Campaign gives us an opportunity to make a lasting impact on our neighbors and our communities. Like our great state, the Maryland Charity Campaign offers rich variety and provides us many reasons to be Maryland Proud." — Governor Larry Hogan, 2017 MCC Video Message

The Maryland Charity Campaign (MCC) is a workplace charitable giving program that offers State Employees and Retirees the opportunity to contribute to charities using the convenience of payroll deduction. The campaign is co-chaired by the Governor and Lt. Governor, and is managed by the Maryland Secretary of State.

The participating charities serve the citizens of Maryland, the United States, and people of other countries in a variety of ways. Donating through the Maryland Charity Campaign provides meals to the hungry, services to the disabled, funds to research disease, technology to clean the environment, and many other worthwhile causes. State employees are asked to donate each fall, and in 2017 raised nearly 3 million dollars through the Maryland Charity Campaign.

Each fall, pledge cards and the Maryland Charity Campaign Agency Guide and Directory are distributed to all State employees and retirees. This card enables donors to specify their charitable organization(s) and their desired monetary contribution as well as the method in which they choose to contribute (payroll deduction, cash, check, or charge).

PERFORMANCE MEASURE 8.5
Charity Campaign Participation

Chart 8.5.1: MDOT-Wide Percent of Charitable Goal Raised CY2015-CY2017

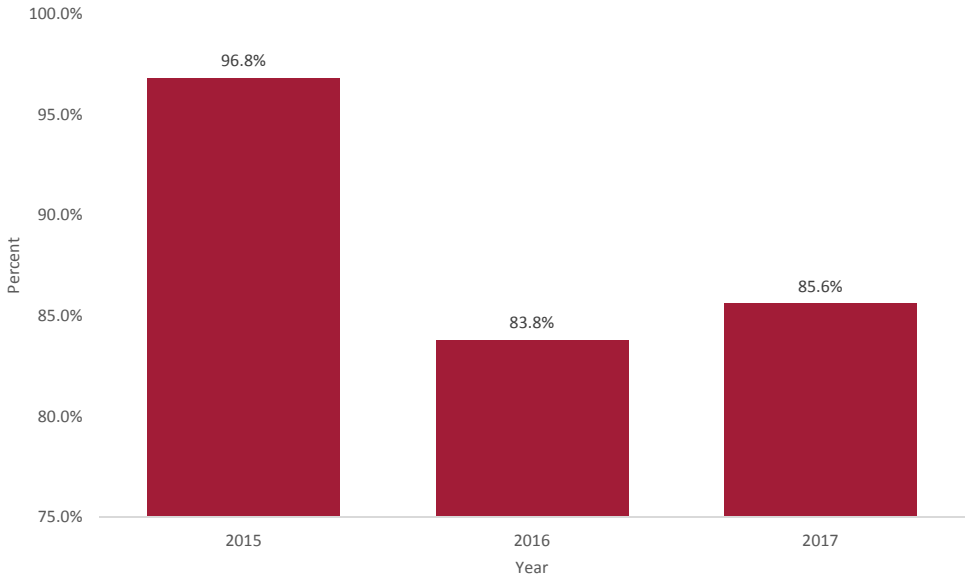
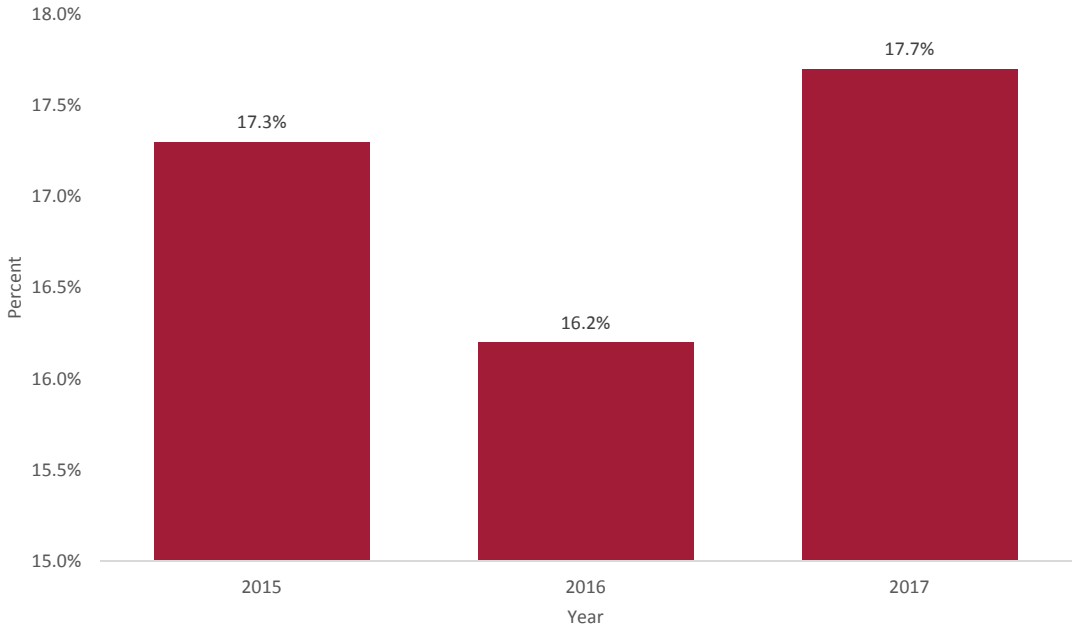


Chart 8.5.2: MDOT-Wide Employee Participation Rate in Charity Campaign CY2015-CY2017



TANGIBLE RESULT #9

Be a Good Steward of Our Environment

MDOT will be accountable to customers for the wise use of resources and 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 9.1A
Water Quality Treatment to Protect and Restore the Chesapeake Bay

The fastest growing source of pollution in the Chesapeake Bay is stormwater runoff. Urbanization intensifies runoff by increasing paved surfaces and decreasing areas where rainfall can seep into the ground. Stormwater runoff increases delivery of pollutants including trash, organic debris, and sediment, from impervious areas to urban streams.

Restoration efforts for 20 percent of MDOT's existing impervious surfaces, will increase infiltration and reduce stormwater runoff. MDOT uses restoration practices such as installing new and upgrading existing stormwater management facilities, stream restoration, tree planting, and operations like street sweeping and inlet cleaning. This will improve conditions in urban streams, and reduce pollution in the Chesapeake Bay.

Chart 9.1.1 compares the impervious restoration accomplished by each TBU with the remaining acreage to be treated in order to meet the 20 percent restoration goal.

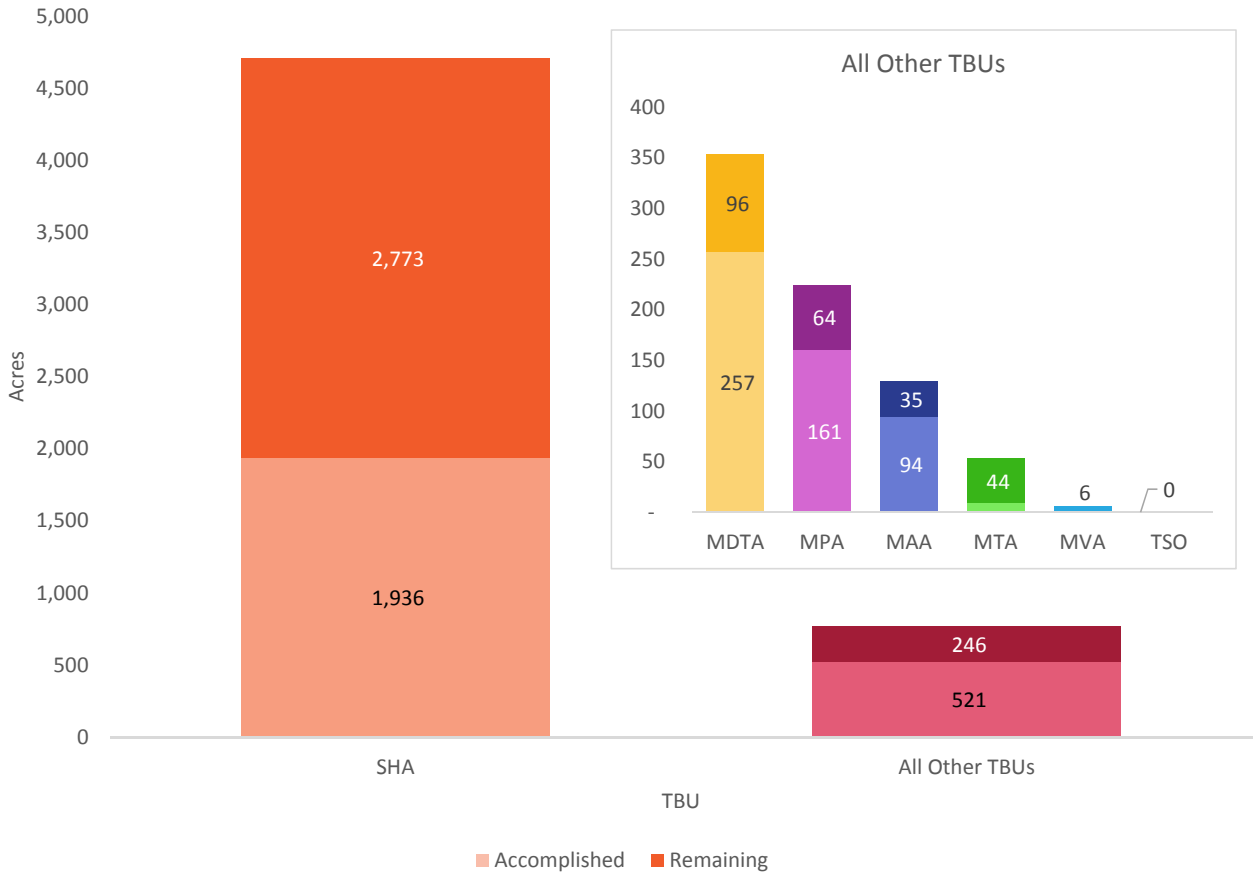
Approaching the 20 percent restoration requirements with a holistic One-MDOT strategy will include:

- Increased collaboration and data sharing between TBUs;
- Intelligent analysis of cost and restoration strategy to determine the most economical opportunities for impervious restoration across all MDOT; and
- Close coordination and collaboration to ensure all TBUs are adequately tracking and implementing Bay restoration projects and impervious surface treatment.

PERFORMANCE MEASURE 9.1A

Water Quality Treatment to Protect and Restore the Chesapeake Bay

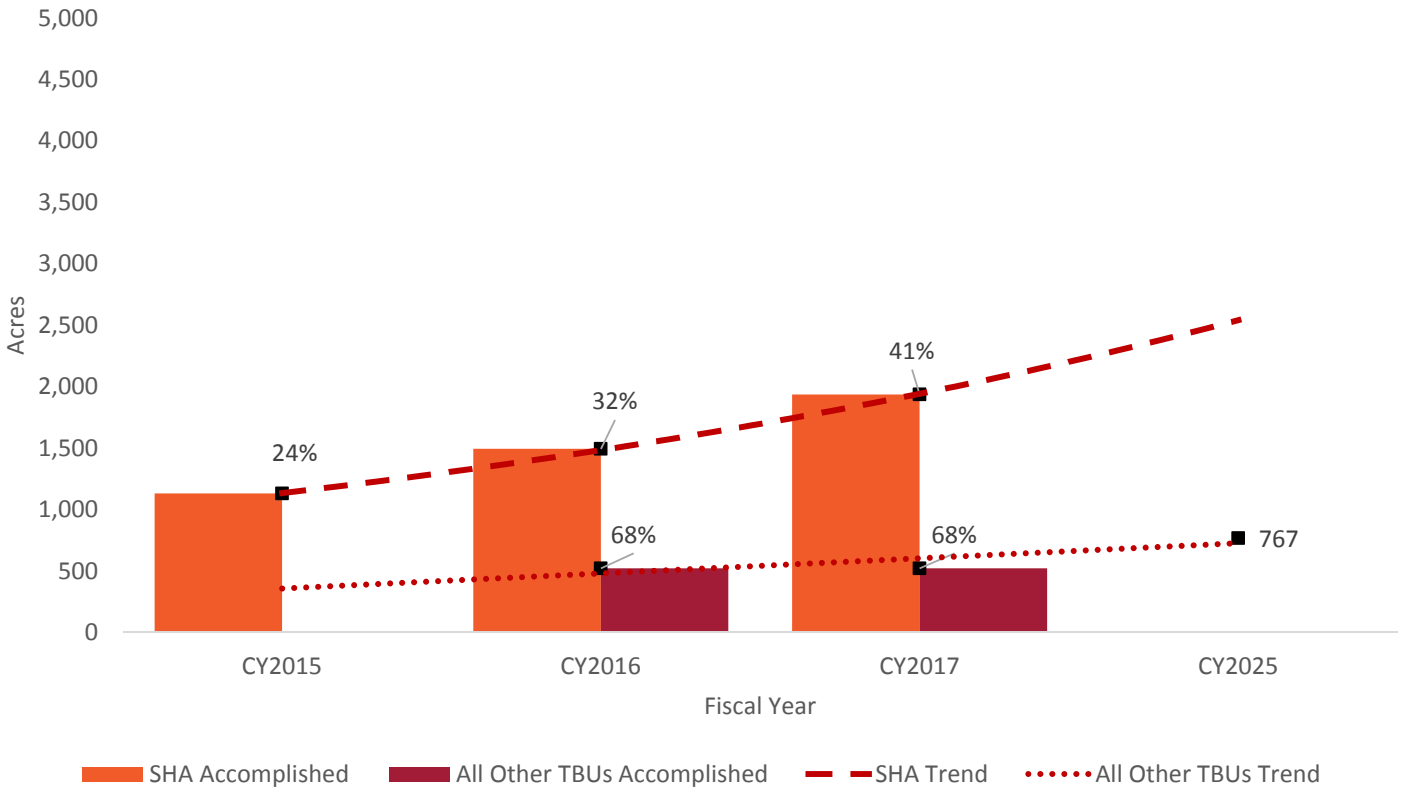
Chart 9.1A.1: MDOT Impervious Restoration in Acres YTD October 2017



PERFORMANCE MEASURE 9.1A

Water Quality Treatment to Protect and Restore the Chesapeake Bay

Chart 9.1A.2: MDOT Impervious Restoration Trend FY2015-FY2025



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

PERFORMANCE MEASURE DRIVER:
Mark Williams
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:
To measure and track the amount of stormwater pollution reduction achieved from street sweeping and inlet cleaning operational activities

FREQUENCY:
Semi-Annually (January and July)

DATA COLLECTION METHODOLOGY:
Data is collected and reported manually by the TBUs

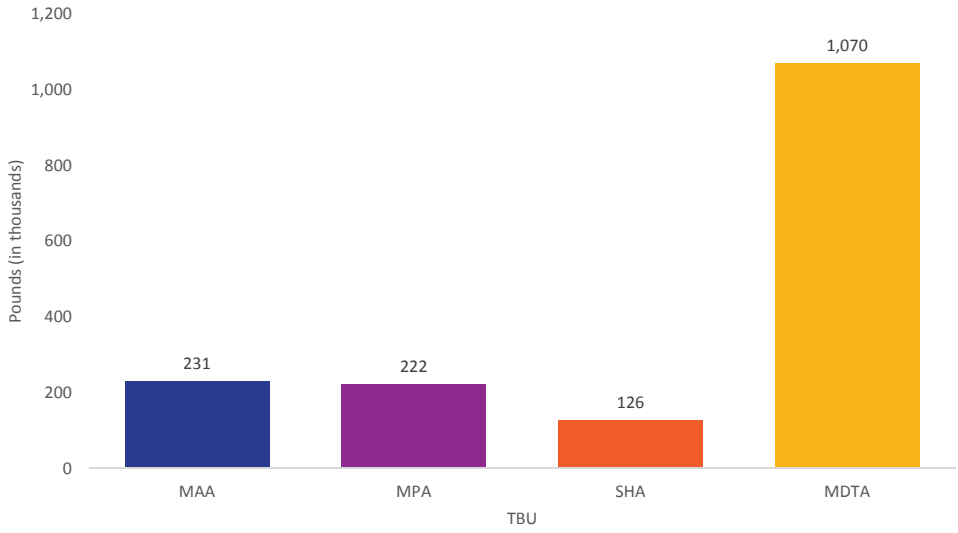
NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 9.1B
Stormwater Cleanup – Street Sweeping and Inlet Cleaning

Street sweeping and inlet cleaning are operational activities performed by MDOT MAA, MDOT MPA, MDOT SHA, and MDTA. Street sweeping and inlet cleaning remove trash and other debris from roadways, ramp areas, and runways, providing for safe operation of our transportation system. In addition, these activities remove pollutants such as suspended solids (i.e., sediment), nitrogen, and phosphorous from impervious surfaces before they can enter Maryland's rivers, streams, and the Chesapeake Bay.

Street sweeping and inlet cleaning are valuable because they are considered an alternative stormwater treatment by the Maryland Department of Environment (MDE), which allows "Impervious Surface Area Treatment" credits for these ongoing activities. These credits help MDOT meet its 20 percent restoration compliance requirement mandated by the Municipal Separate Storm Sewer (MS4) permits.

Chart 9.1B.1: Total Dry Weight of Street Sweeping Material Collected CY2017



PERFORMANCE MEASURE 9.1B

Stormwater Cleanup – Street Sweeping and Inlet Cleaning

Chart 9.1B.2: Total Nitrogen & Phosphorus Reduction CY2017

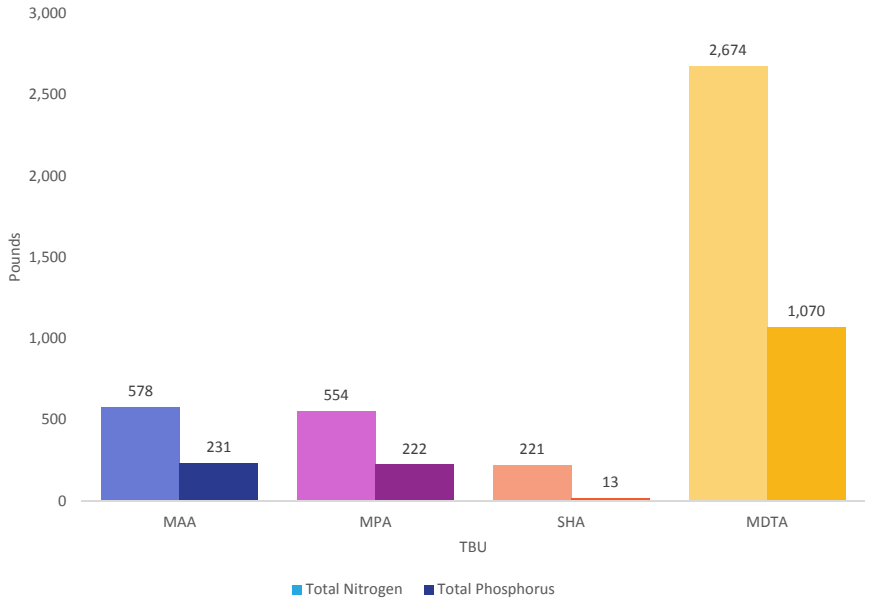
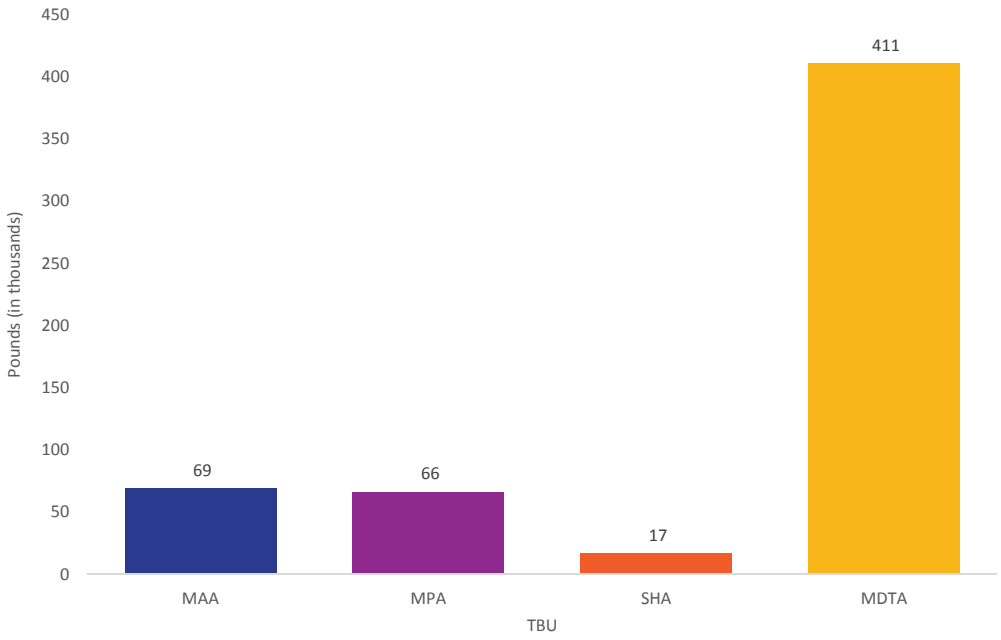


Chart 9.1B.3: Total Suspended Solids Reduction CY2017



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

PERFORMANCE MEASURE DRIVER:
Sandy Hertz
The Secretary's Office (TSO)

PURPOSE OF MEASURE:
To better communicate MDOT's contribution towards Chesapeake Bay Restoration efforts and improve reporting at a State level.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
MDOT TBUs track Bay Restoration project expenditures to be incorporated into Appendix S of the Governor's Annual Budget Book.

NATIONAL BENCHMARK:
N/A

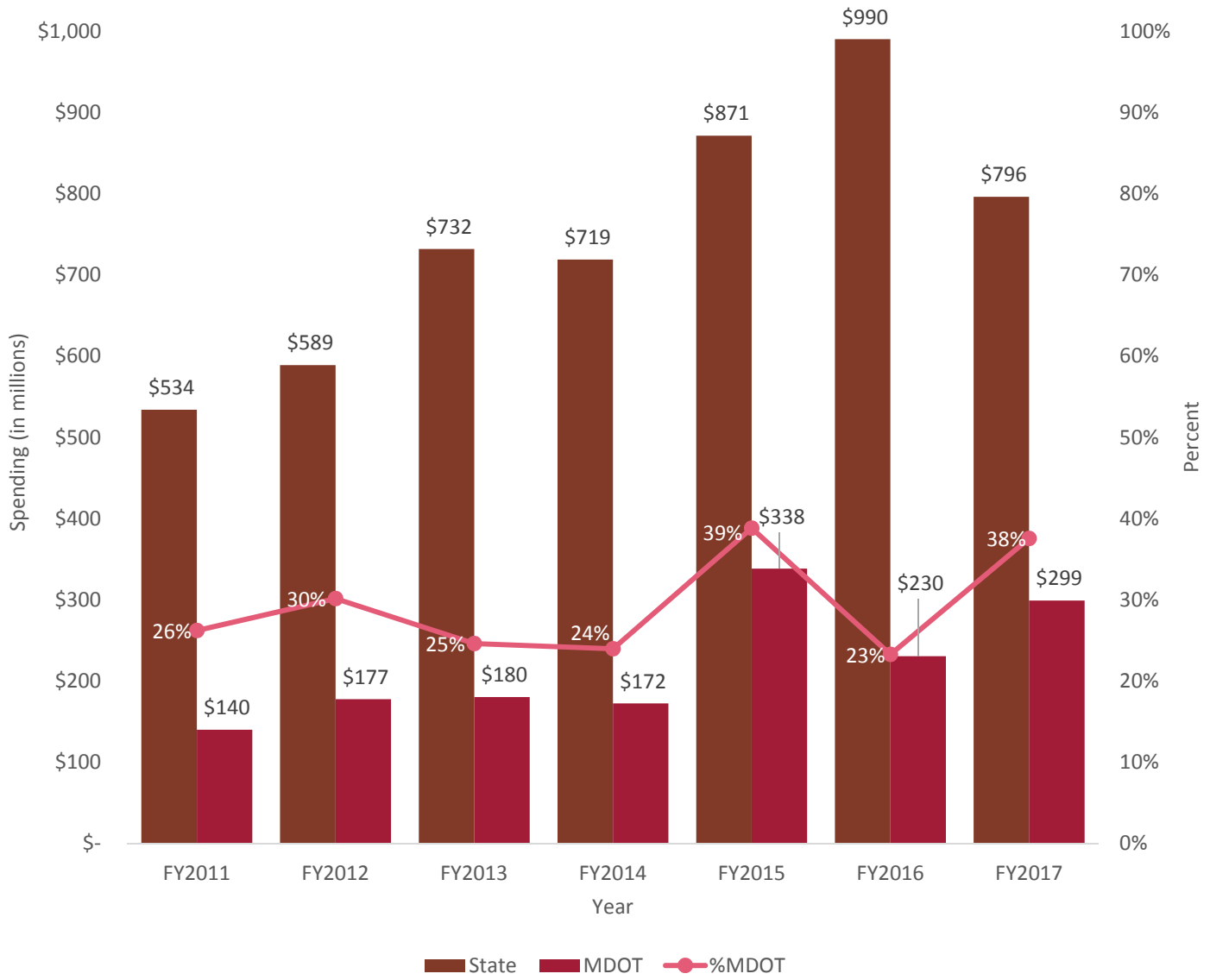
PERFORMANCE MEASURE 9.1C
Bay Restoration Program Spending

The Chesapeake Bay has been referred to as "Maryland's National Treasure". It provides countless environmental, social, and economic benefits for the citizens of our State. For decades, water quality in the Bay has been impaired by pollution. Maryland, along with Delaware, New York, Pennsylvania, Virginia, West Virginia, and the District of Columbia, is working to address pollution sources entering the Bay.

Along with the impervious surface restoration efforts that are required by the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit, MDOT contributes annually to statewide Chesapeake Bay Restoration Activities. Since 2011, total spending has been tracked statewide based on 10 restoration categories: Land Preservation, Septic Systems, Wastewater Treatment, Urban Stormwater, Agricultural Best Management Practices (BMPs), Oyster Restoration, Transit and Sustainable Transportation Alternatives, Living Resources, Education and Research, and Other. This information is shared annually within the Governor's Fiscal Year Budget Highlights document. Historically, MDOT contributions have been incorrectly categorized as Transit and Sustainable Transportation Alternatives, which diminished our involvement in Urban Stormwater, Living Resources, and other restoration categories. This measure will help quantify our relative contribution to Bay restoration and will improve reporting at a State level.

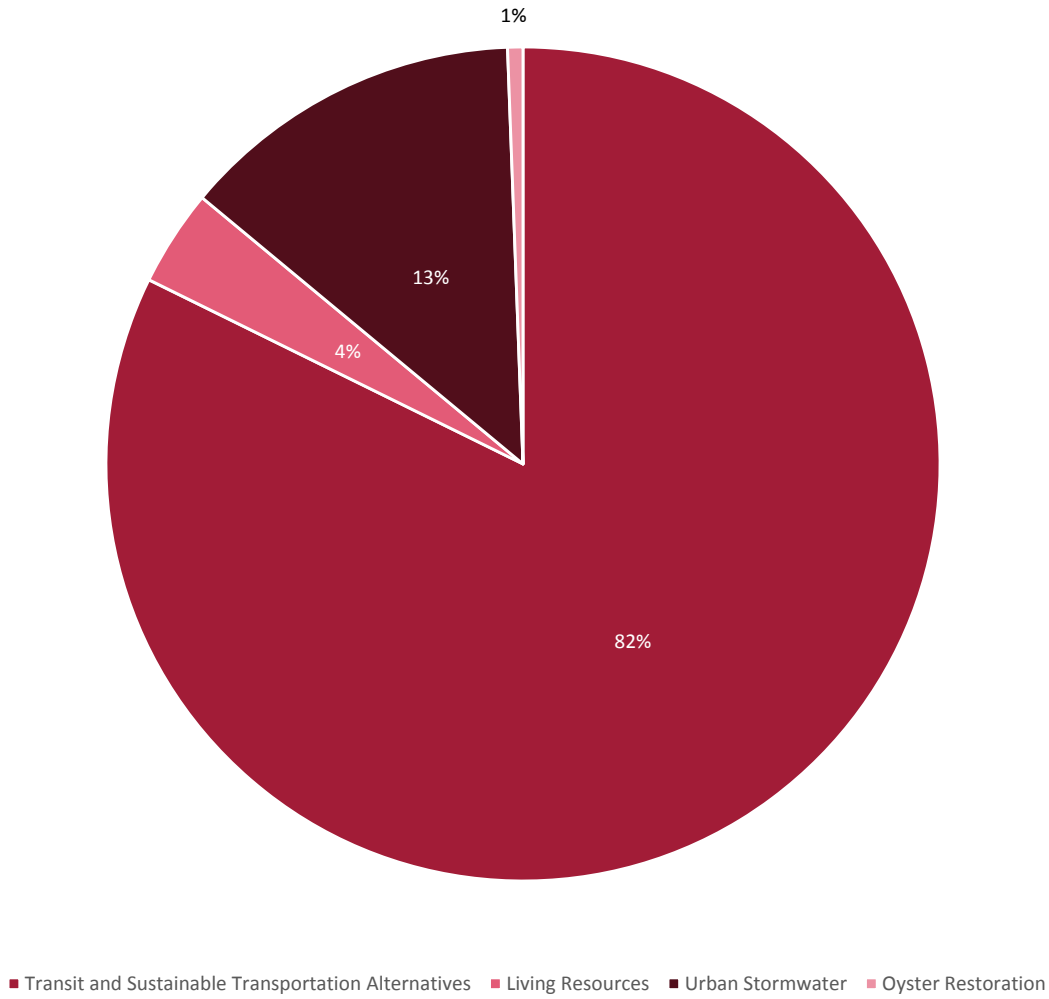
PERFORMANCE MEASURE 9.1C
Bay Restoration Program Spending

Chart 9.1C.1: Bay Restoration Program Spending FY2011-FY2017



PERFORMANCE MEASURE 9.1C
Bay Restoration Program Spending

Chart 9.1C.2: Percent Contribution to Bay Restoration Program by Category FY2015-FY2017



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 office waste diverted from the landfill or incineration through recycling.

FREQUENCY:
Annually (in April)

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

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 9.2A
Office Waste Recycled

Why this Performance Measure Matters?

Recycling helps protect the environment and reduces the amount of waste sent to landfills. It conserves resources, saves energy, reduces greenhouse gas emissions, and carbon footprint.

And, it is the right thing to do!

Office Waste Includes:

- Commingled containers (glass, metal, and plastic);
- Glass (fluorescent light tubes, mixed glass containers);
- Metals (mixed cans, and tin/steel cans);
- Paper (corrugated cardboard, mixed paper, shredded paper and newspaper);
- Plastic (mixed plastic bottles, other plastics);
- Electronics; and
- Printer cartridges.

What is the Status of this Performance Measure?

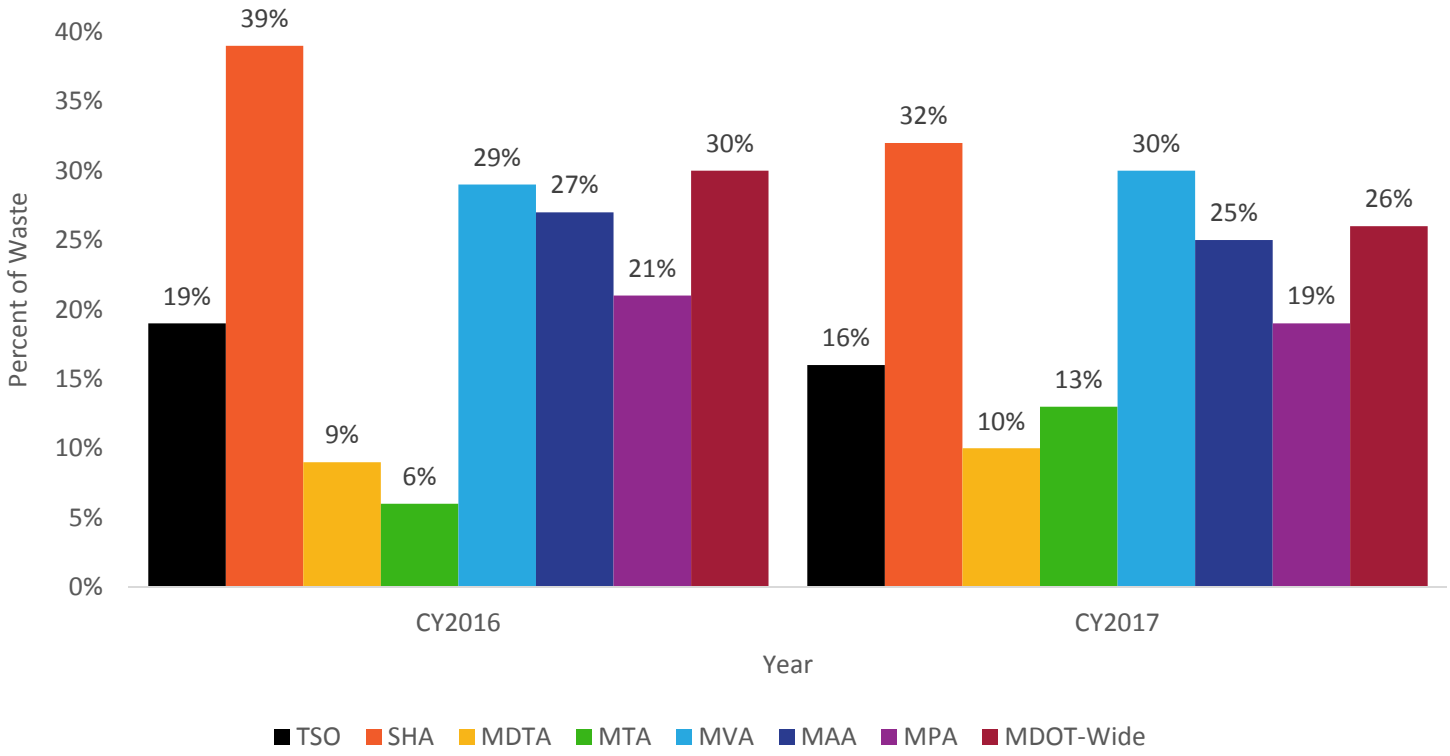
CY	RECYCLED OFFICE WASTE
2016	30%
2017	26%

What is Being Done to Affect Change?

- Continuing awareness training;
- Continuing to evaluate dumpster size and frequency of trash collection services; and
- Single stream recycling.

PERFORMANCE MEASURE 9.2A
Office Waste Recycled

Chart 9.2A.1: Percent of Office Waste Recycled by TBU CY2016-CY2017



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 non-office waste diverted from the landfill or incineration through recycling.

FREQUENCY:
Annually (in April)

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

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 9.2B
Non-Office Waste Recycled

Why this Performance Measure Matters?

Recycling helps protect the environment. It reduces the amount of waste sent to landfills, conserve resources, saves energy, reduces greenhouse gas emissions, and carbon footprint.

And, it is the right thing to do!

Non-Office Waste Includes:

- Lead-acid batteries (vehicle);
- Compostables (grass, leaves, brush, branches, mixed yard trimmings, food waste, and other);
- Metals (white goods - refrigerators, stoves, washing machines, dryers, water heaters, and air conditioners);
- Animal protein/solid fat;
- Tires;
- Antifreeze;
- Industrial fluids;
- Motor oil;
- Scrap automobiles; and
- Scrap metals.

What is the Status of this Performance Measure?

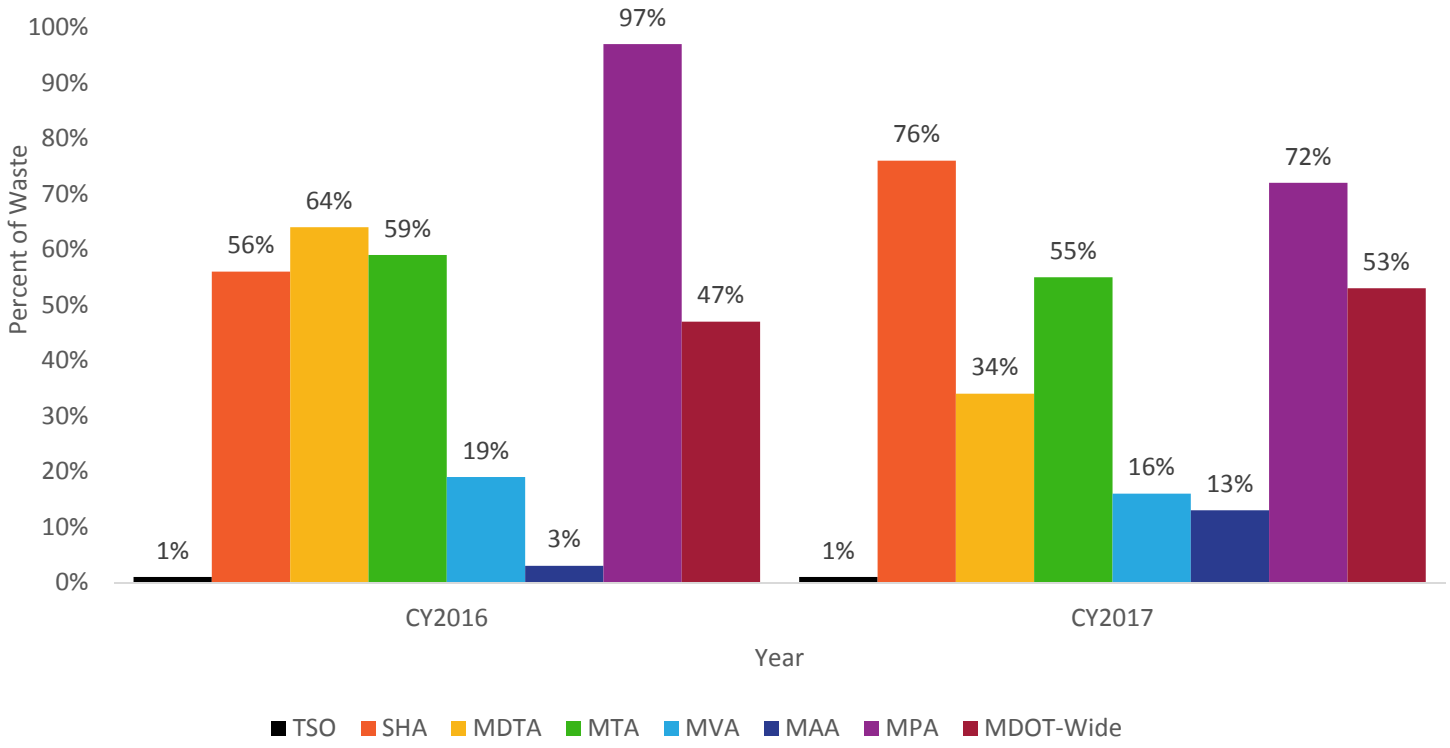
CY	RECYCLED NON-OFFICE WASTE
2016	47%
2017	53%

What is Being Done to Affect Change?

- Continuing awareness training;
- Continuing to evaluate dumpster size and frequency of trash collection services; and
- Single stream recycling.

PERFORMANCE MEASURE 9.2B
Non-Office Waste Recycled

Chart 9.2B.1: Percent of Non-Office Waste Recycled by TBU CY2016-CY2017



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

PERFORMANCE MEASURE DRIVER:
Chandra Chithaluru
Maryland Port Administration (MPA)

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

FREQUENCY:
Annually (in April)

DATA COLLECTION METHODOLOGY:
The data collection methodology will include disposal weights (via bill of ladings) by TBUs' 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 9.2C

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. The TBUs established plans to recycle and/or reuse their solid waste: metal, asphalt and concrete. These materials are to be collected, weighed and recycled/reused. Benefits include saving energy and natural resources, preserving the capacity of landfills, reducing waste disposal costs, generating revenue for materials and reducing pollutants generated by the landfill process.

Due to the number and type construction/demolition activities and projects, we recognize that there may be variability among reporting periods and TBUs, but positive change can still occur by implementing some or all the following:

- Establish central data collection mechanisms and procedures in each TBU;
- Require contractors to segregate, collect, weigh and recycle these materials and provide information to each TBU; and
- Ensure commitment to this goal and its positive impact on the environment by making employees and contractors aware of this performance measure.

PERFORMANCE MEASURE 9.2C

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

Chart 9.2C.1: Recycled/Reused Materials from Maintenance Activities & Construction/Demolition Projects CY2015-CY2017

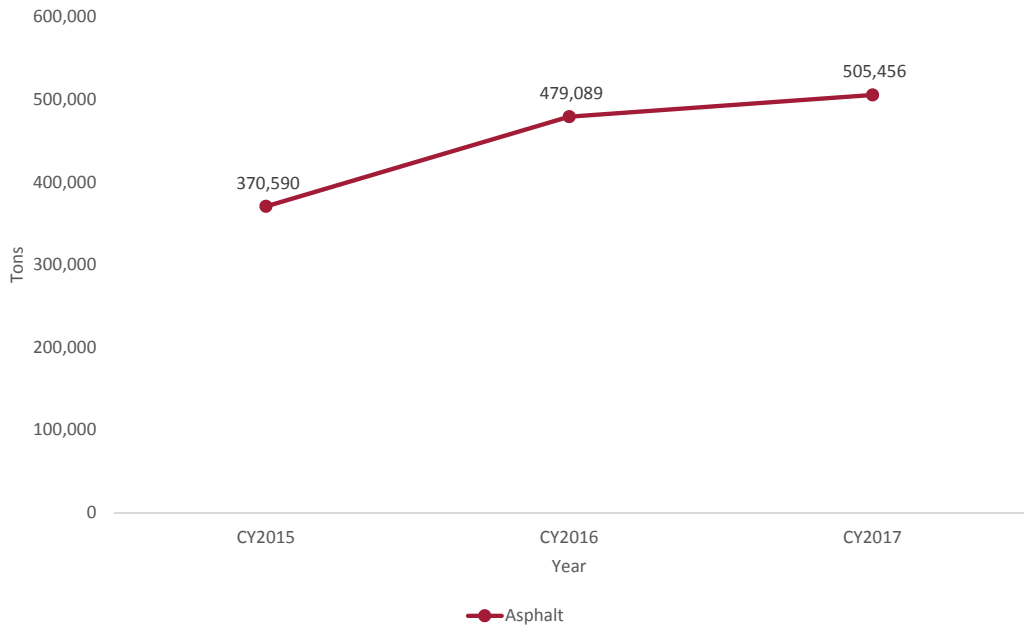
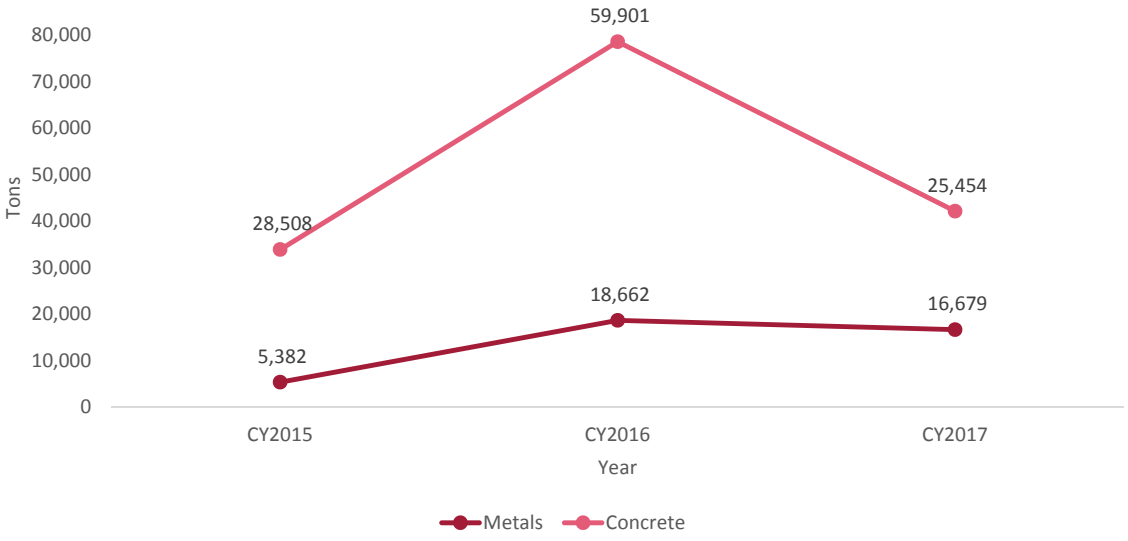


Chart 9.2C.2: Recycled/Reused Materials from Maintenance Activities & Construction/Demolition Projects CY2015-CY2017



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

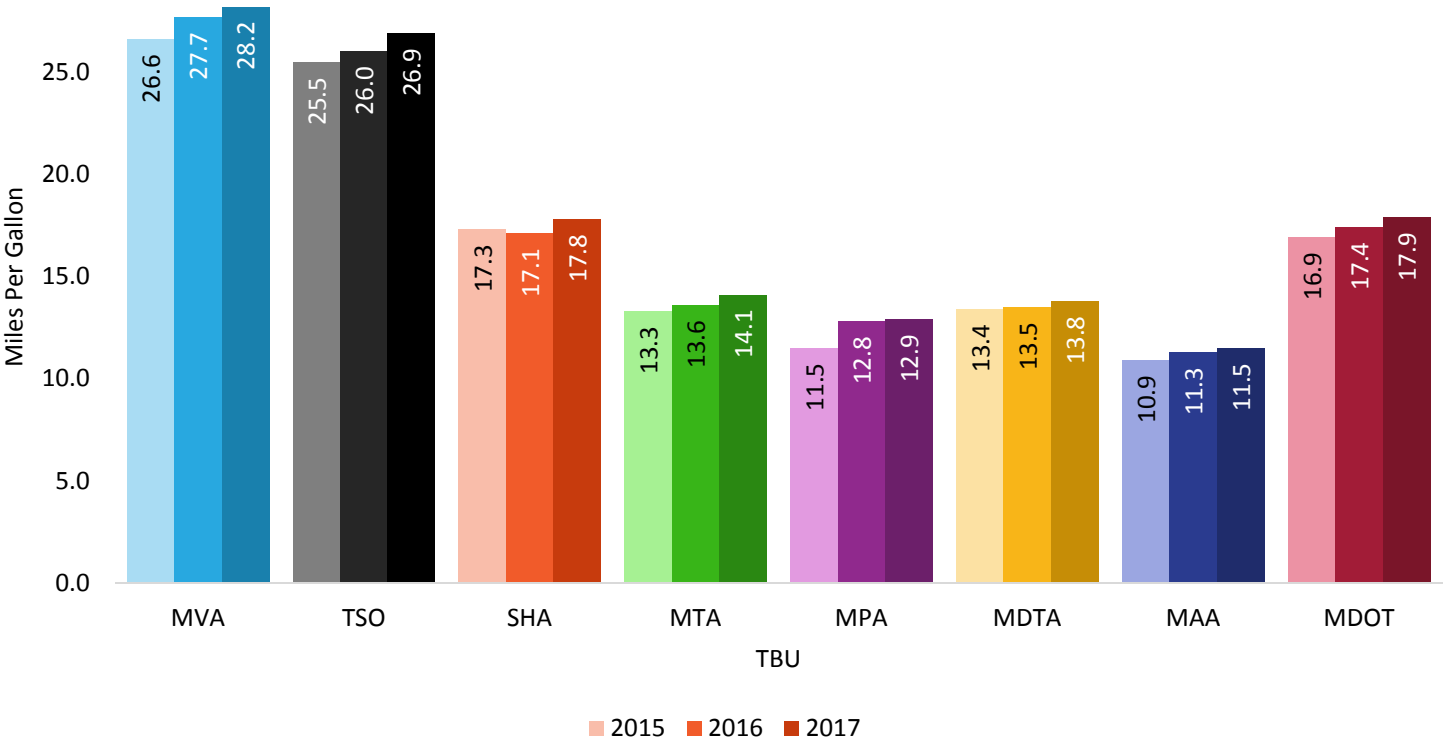
PERFORMANCE MEASURE 9.3A
Energy: Miles Per Gallon

Reduced fuel costs and conservation of petroleum-based resources are the direct results of a more fuel-efficient fleet (as determined through increases in vehicle miles per gallon [MPG] calculations). Efforts with Mansfield Oil Company (statewide fueling vendor) have resulted in developing a means of tracking MPG data for our light-duty fleet throughout all TBUs. MPG data for CY2015 thru CY2017 has been calculated and presented on Chart 9.3A.1. In the three years of data presented, MDOT's fuel efficiency has increased by 1.0 MPG from 2015 (16.9 MPG) to 2017 (17.9 MPG). Vehicle replacement practices represent the largest factor affecting change to this measure. At pre-determined age or mileage thresholds, our fleet vehicles are replaced. Since the presumption is that newer models are more fuel efficient than their predecessors, MPG calculations for each TBU and the Agency as a whole should increase from year-to-year through fleet replacement activities. However, in addition to fleet replacement, strategies such as encouraging carpooling to meetings and other functions and modifying State vehicle purchasing contract requirements are being evaluated as additional means of improving fleet MPG.

PERFORMANCE MEASURE 9.3A

Energy: Miles Per Gallon

Chart 9.3A.1: MDOT TBU Light-Duty Vehicle Average MPG CY2015-CY2017



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 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 9.3B
Energy: 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.

While ultra-low sulfur diesel continues to be the most consumed fuel for fiscal years FY2014 – FY2017, a distinct reduction (approximately 198,000 gallons) in consumption was noted from FY2016 to FY2017. This reduction is attributed to the MTA's procurement of 172 clean diesel busses which replaced older, less fuel-efficient models.

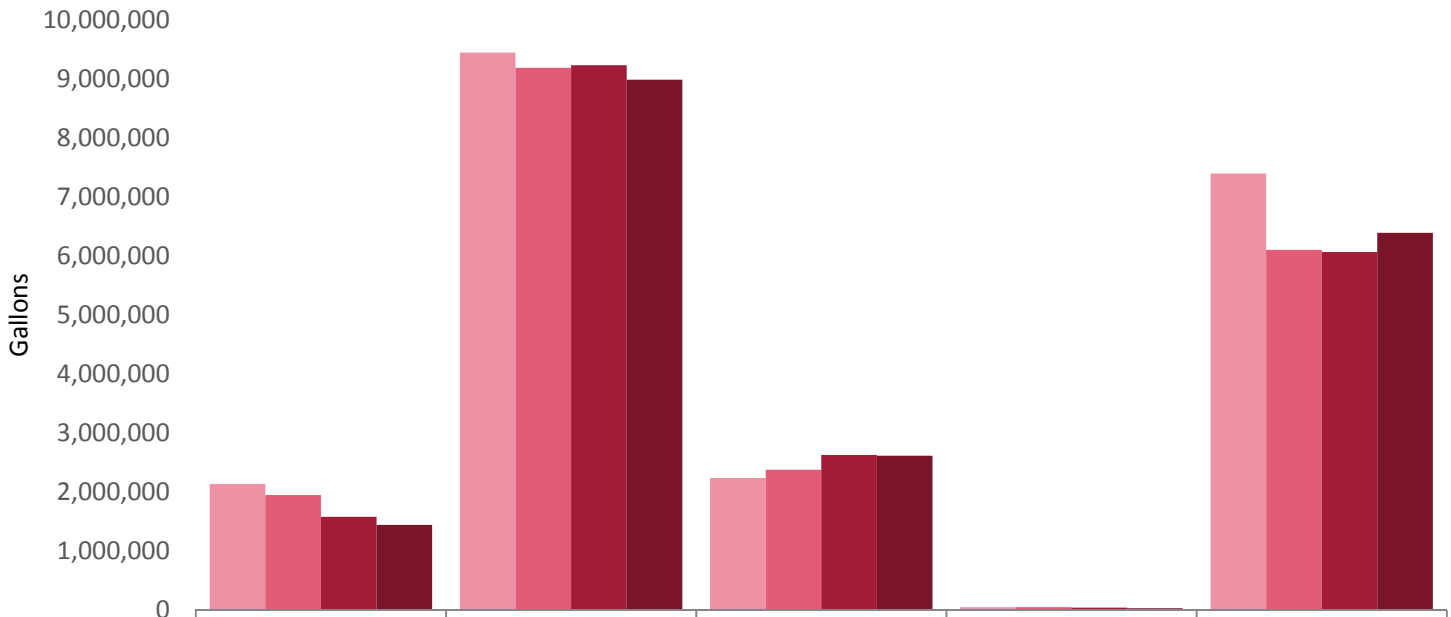
Heating oil consumption experienced a slight increase from FY2016 to FY2017. A portion of the increase is attributed to procurement strategies several TBUs used to purchase fuel where some were able to defer or minimize purchases during FY2016, but were required to make greater purchases in FY2017 to maintain appropriate on-hand fuel quantities. Furthermore, the inverse relationship between biodiesel and gasoline continued its trend in FY2017 as fleet managers transitioned from diesel to gasoline powered vehicles.

The consumption of E-85 continued its downward trend in FY2017. As this is a renewable energy source, the desired outcome would be to achieve an overall increase in consumption. As an agency, MDOT needs to evaluate its overall commitment towards E-85 and possibly institute an overarching policy regarding its use throughout the TBUs.

PERFORMANCE MEASURE 9.3B

Energy: Total Gallons Consumed

Chart 9.3B.1: Total Gallons of Fuel Consumed FY2014-FY2017



	Biodiesel	Ultra-Low Sulfur Diesel	Gasoline	E-85	Heating Oil
FY 2014	2,136,296	9,449,462	2,237,431	46,725	7,398,649
FY 2015	1,947,374	9,191,415	2,377,930	47,025	6,104,767
FY 2016	1,577,631	9,233,704	2,628,437	38,745	6,066,927
FY 2017	1,440,903	8,990,230	2,614,529	28,994	6,394,179

FY2017 Total Fuel Cost: $34,723,110

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 conventional energy through efficiency measures and renewable energy sources.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Data for electricity usage is collected using EnergyCAP, the State of Maryland's comprehensive utility management database.

NATIONAL BENCHMARK:
American Council for an Energy Efficient Economy ranked Maryland number 10 in the 2017 State Energy Efficiency Scorecard. Massachusetts was rated number 1.

PERFORMANCE MEASURE 9.3C
Utility Electricity Use

Reducing our consumption of utility electricity through energy efficiency measures and use of renewable energy can save Maryland taxpayers money and reduce harmful air emissions while also helping Maryland meet its clean energy and greenhouse gas reduction goals.

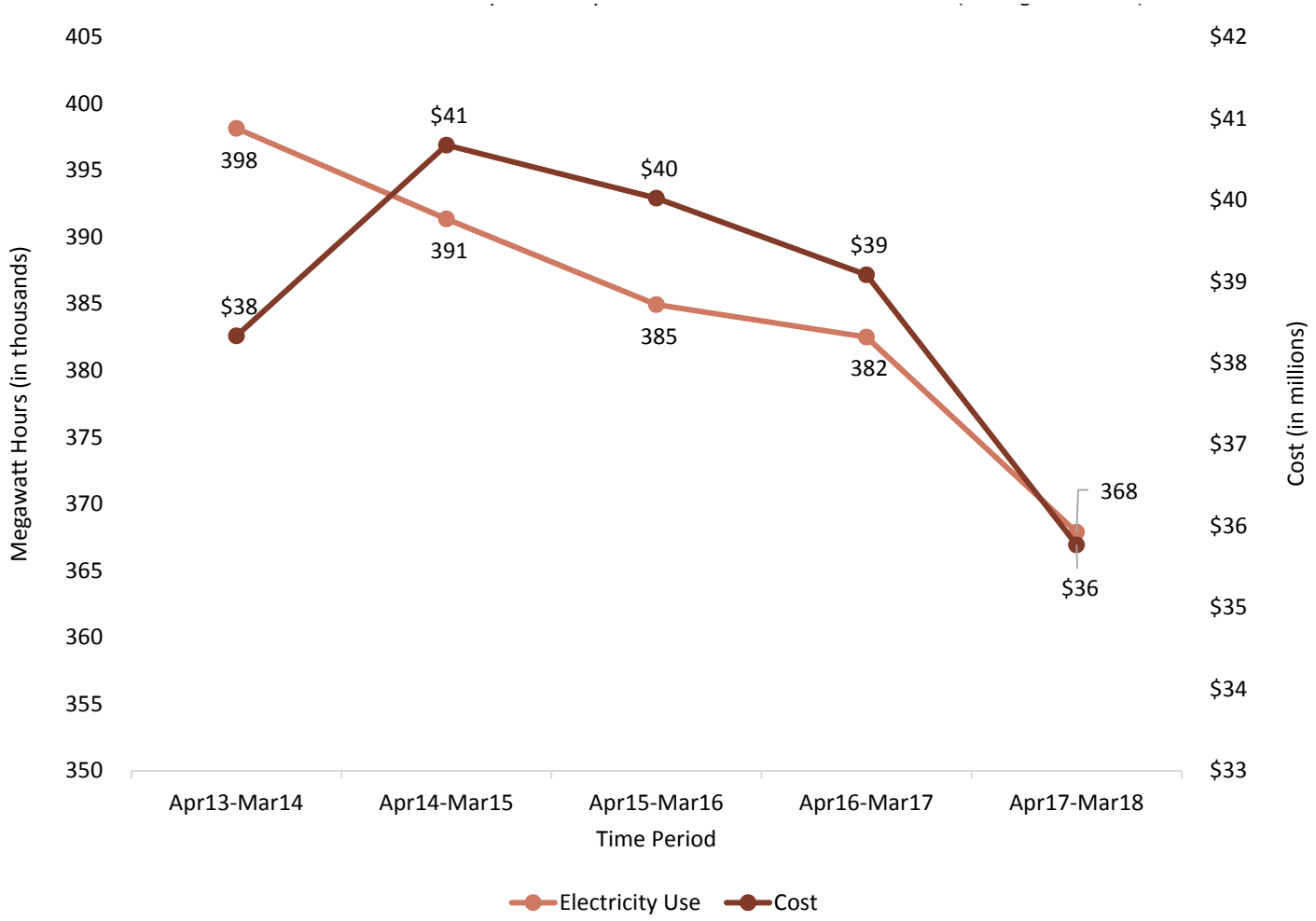
The desired trend for utility electricity use and cost is to decrease. Electricity use and cost during the April 2017 – March 2018 rolling 12-month period decreased by 14,000 megawatt hours and $3 million, as compared to the previous rolling 12-month period (April 2016 – March 2017).

MDOT is undertaking many strategies to increase energy efficiency. Each TBU has completed a comprehensive Energy Plan that details its energy consuming entities, existing and future energy conservation strategies, and future energy conservation goals. Many of the energy conservation measures MDOT implements also realize secondary benefits, such as improved lighting quality, lower operation and maintenance expenses, increased life span of equipment, improved indoor air quality, and enhanced tenant comfort.

In 2017, MDOT established an Energy Managers Workgroup with representatives from all TBUs that meets bimonthly to discuss current trends and challenges, share best practices, and determine ways to efficiently leverage MDOT resources.

PERFORMANCE MEASURE 9.3C
Utility Electricity Use

Chart 9.3C.1: Total MDOT Utility Electricity Use & Cost Q2 CY2013-Q1 CY2018 (Rolling 12-Month)



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

PERFORMANCE MEASURE DRIVER:
Colleen Turner
The Secretary's Office (TSO)

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

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Data for renewable energy sources collected from Pepco Energy Services ABB Plant Portfolio Manager and from TBU Energy Managers.

NATIONAL BENCHMARK:
Renewable Energy Consumption as a share of state total (2014): Oregon, 49.3%; Washington, 47.1%; Maine, 38.3%

PERFORMANCE MEASURE 9.3D
Renewable Energy Generation

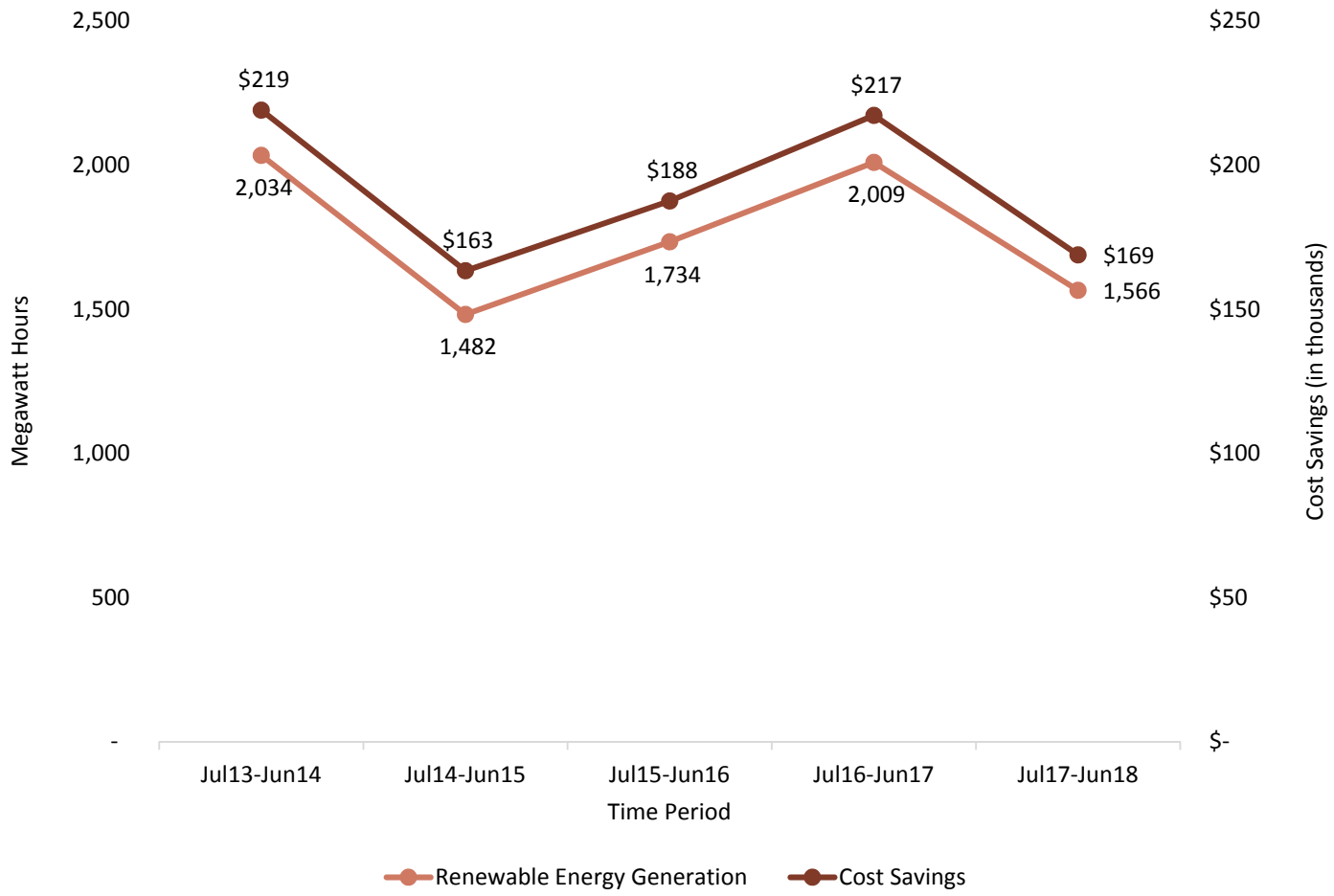
Reducing our conventional energy consumption through energy efficiency measures and use of renewable energy can generate revenue, save Maryland taxpayers money, and reduce harmful air emissions while also helping Maryland meet its clean energy and greenhouse gas reduction goals.

The desired trend for renewable energy generation and cost avoidance is to increase. Renewable energy generation and cost avoidance during the July 2017 – June 2018 rolling 12-month period decreased by 451 megawatt hours and $49,000 as compared to the previous rolling 12-month period (July 2016 – June 2017). The decrease was because the meters for the photovoltaic (PV) systems at MDOT MPA Shed 10 and MDOT MAA BWI were out of service May – June 2018. The PV systems continued to operate during this timeframe and the data will be updated when the meters are repaired.

MDOT released a Renewable Energy Development Request for Proposal on June 20, 2017, and received proposals on August 17, 2017. MDOT recommended award to six Master Contractors. The Board of Public Works approved the project on February 7, 2018. MDOT is evaluating 35 locations throughout the State for development under Phase I of the project.

PERFORMANCE MEASURE 9.3D
Renewable Energy Generation

Chart 9.3D.1: Total MDOT Renewable Energy Generation & Cost Savings Q3 CY2013-Q2 CY2018 (Rolling 12-Month)



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

PERFORMANCE MEASURE DRIVER:
Colleen Turner
The Secretary's Office (TSO)

PURPOSE OF MEASURE:
To reduce our emissions through efficiency measures and renewable energy sources.

FREQUENCY:
Quarterly

DATA COLLECTION METHODOLOGY:
Data for electricity usage is collected using EnergyCAP, the State of Maryland's comprehensive utility management database. Fleet vehicle data is obtained from the State of Maryland's fuel service vendor. Fixed-equipment data is supplied from fleet and facility managers at the TBUs.

NATIONAL BENCHMARK:
Washington D.C., reduce GHG emissions from 2006 levels 50% by 2032, 80% by 2050

New York, reduce GHG emissions from 1990 levels 40% by 2030, 80% by 2050

California, reduce GHG emissions from 1990 levels 80% by 2050

PERFORMANCE MEASURE 9.4B
Air Quality Emissions

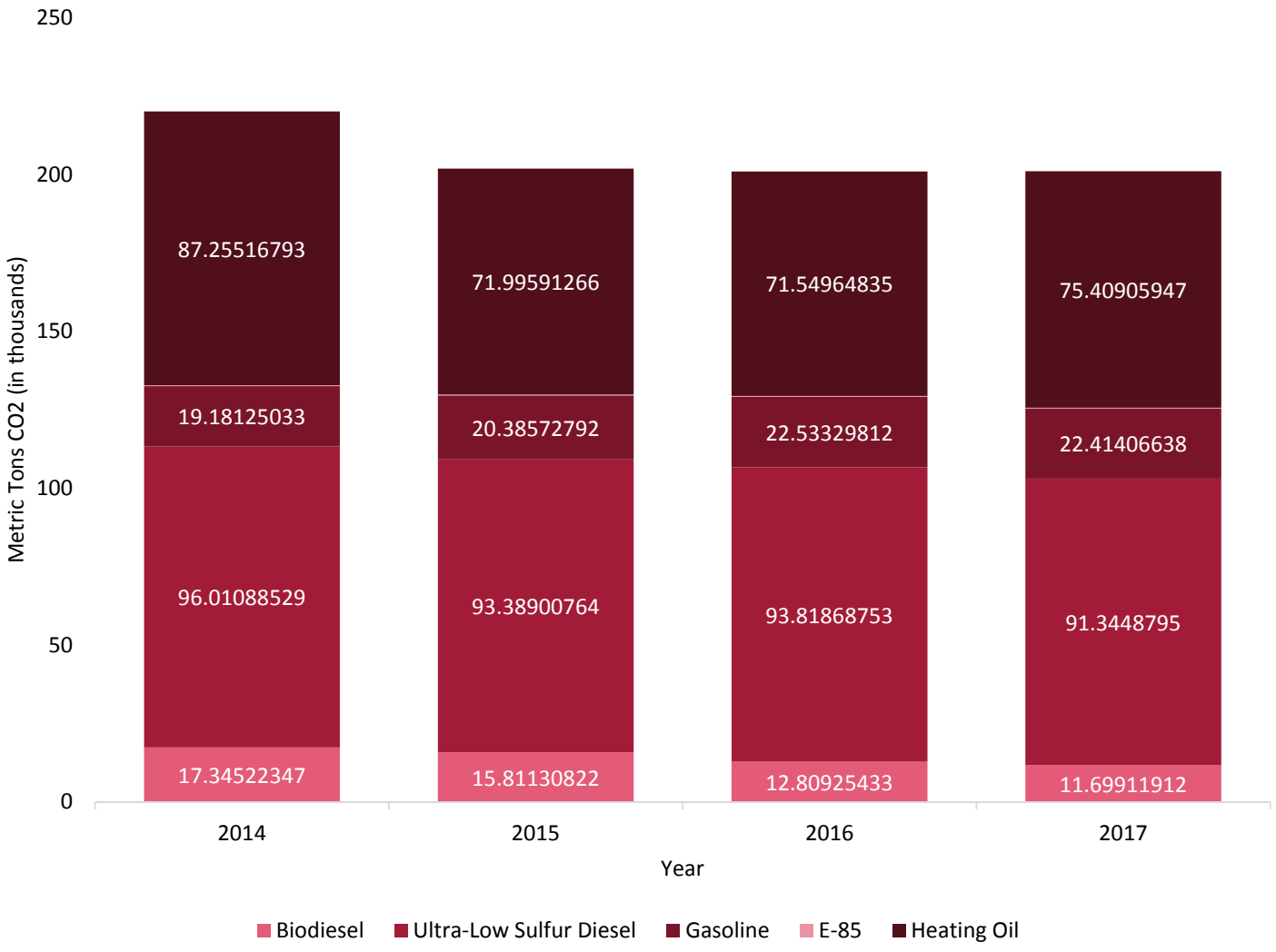
The State of Maryland has made substantial progress in combating air pollution and greenhouse gas (GHG) emissions, with transportation policies and investments playing a key role in these improvements. MDOT is committed to improving air quality and reducing GHG emissions by reducing energy use through more efficient vehicles and building materials, as well as switching to cleaner fuels and renewable energy.

The desired trend for emissions from utility electricity is to decrease. CO2 emissions during the April 2017 – March 2018 rolling 12-month period decreased by almost 9,000 metric tons (MT) as compared to the previous rolling 12-month period (April 2016 – March 2017). Over the past five 12-month periods, CO2 emissions have decreased by about 19,000 MT.

The desired trend for emissions from fuel consumption is to decrease. While CO2 emissions during CY2017 increased slightly from CY2016 (95 MT, or less than 0.05%) due to an increase in heating oil consumption, CO2 emissions have decreased by 19,000 MT since CY2014.

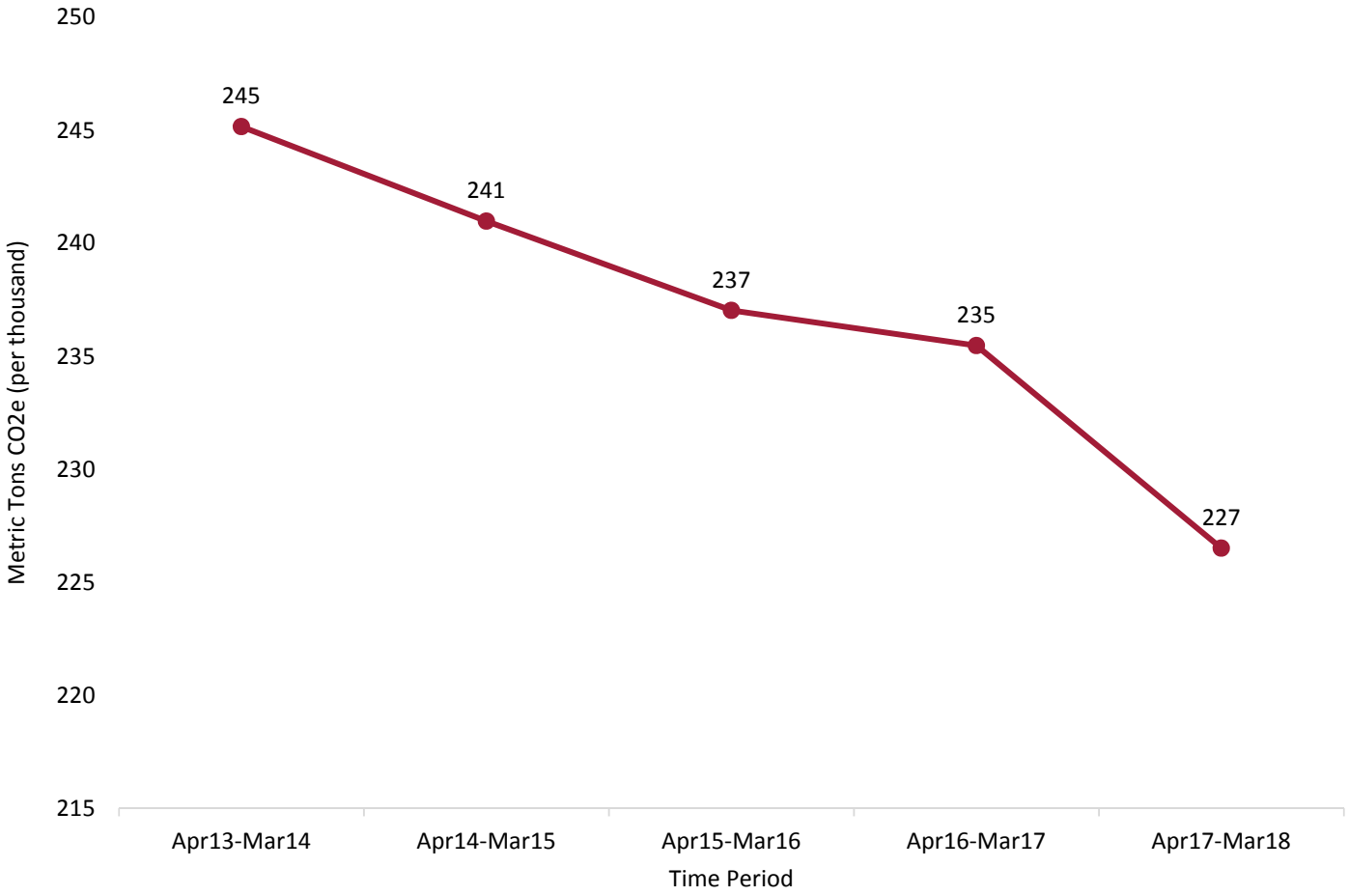
PERFORMANCE MEASURE 9.4B
Air Quality Emissions

Chart 9.4B.1: CO2 Emissions by Fuel Type CY2014-CY2017



PERFORMANCE MEASURE 9.4B
Air Quality Emissions

Chart 9.4B.2: CO2e Emissions From Electricity Use Q2 CY2013-Q1 CY2018 (Rolling 12-Month)



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, and is 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:
Karuna R. Pujara
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 (Jobs Generated by Total Capital Program Construction Investments)

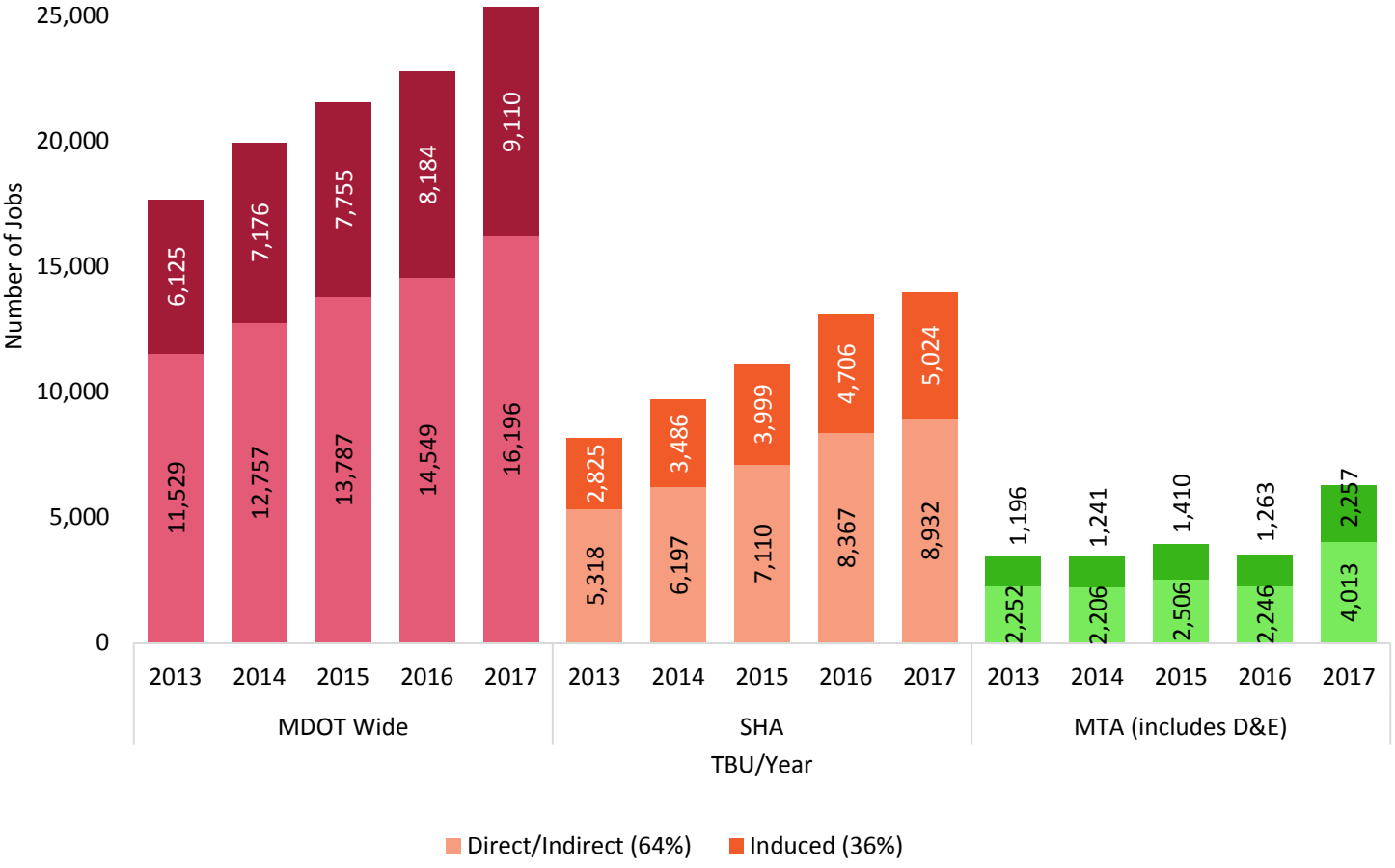
Construction spending on transportation projects has a significant economic impact on people and businesses throughout the State. Economic return from transportation investment is based on the estimated number of jobs created as a result of MDOT investments in capital projects. FY2017, over 25,000 jobs were created by MDOT which is an increase of nearly 2,600 over FY2016.

The annual CTP is used to identify planned investments by each 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.

PERFORMANCE MEASURE 10.1

Economic Return from Transportation Investment (Jobs Generated by Total Capital Program Construction Investments)

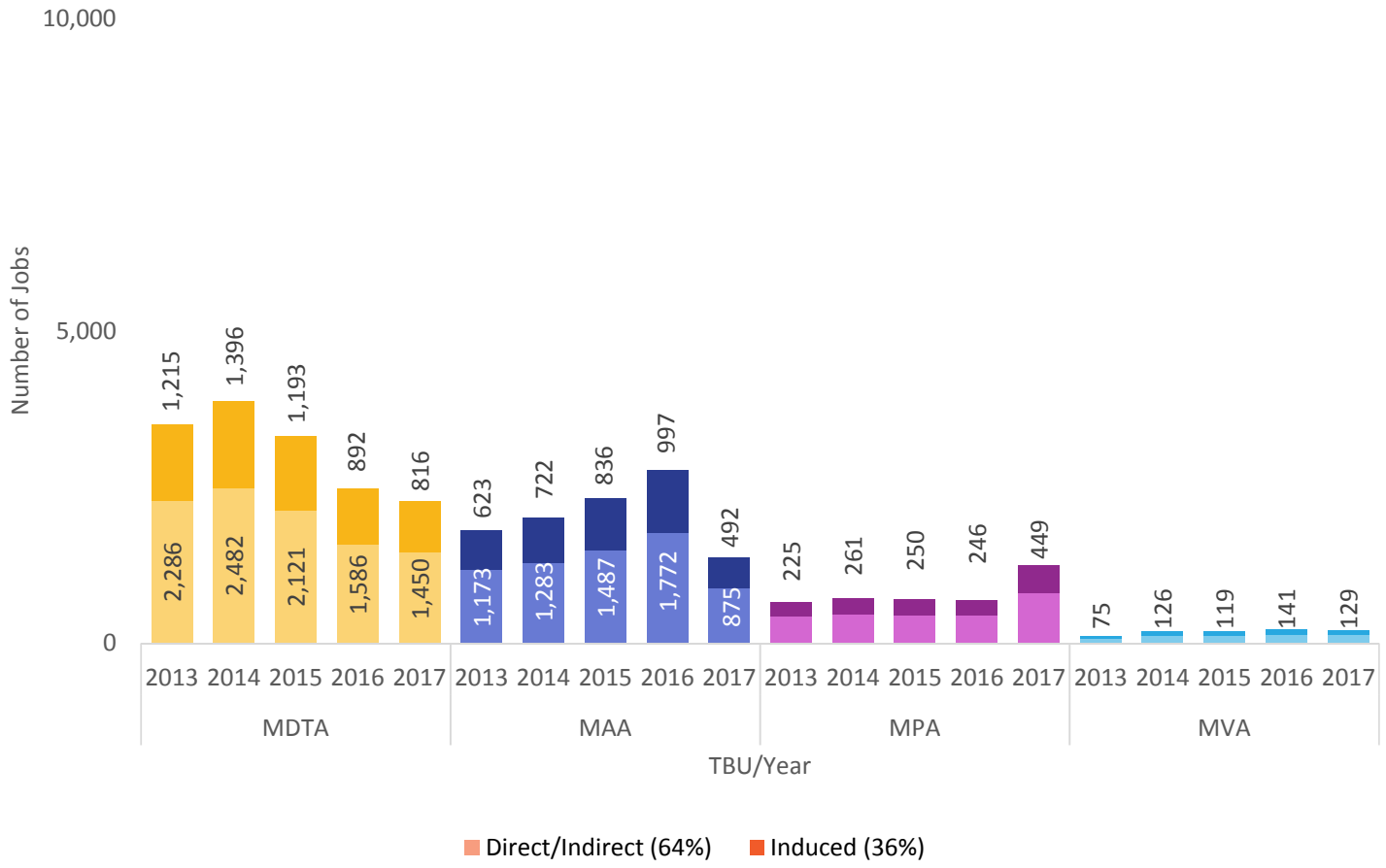
Chart 10.1.1: Estimated Number of Jobs Created by TBU Capital/Construction Programs FY2013-FY2017



PERFORMANCE MEASURE 10.1

Economic Return from Transportation Investment (Jobs Generated by Total Capital Program Construction Investments)

Chart 10.1.2: Estimated Number of Jobs Created by TBU Capital/Construction Programs FY2013-FY2017



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

PERFORMANCE MEASURE DRIVER:
Karuna R. Pujara
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

SOURCE:
https://www.cnbc.com/2017/07/11/top-states-for-business-25-maryland.html

PERFORMANCE MEASURE 10.2

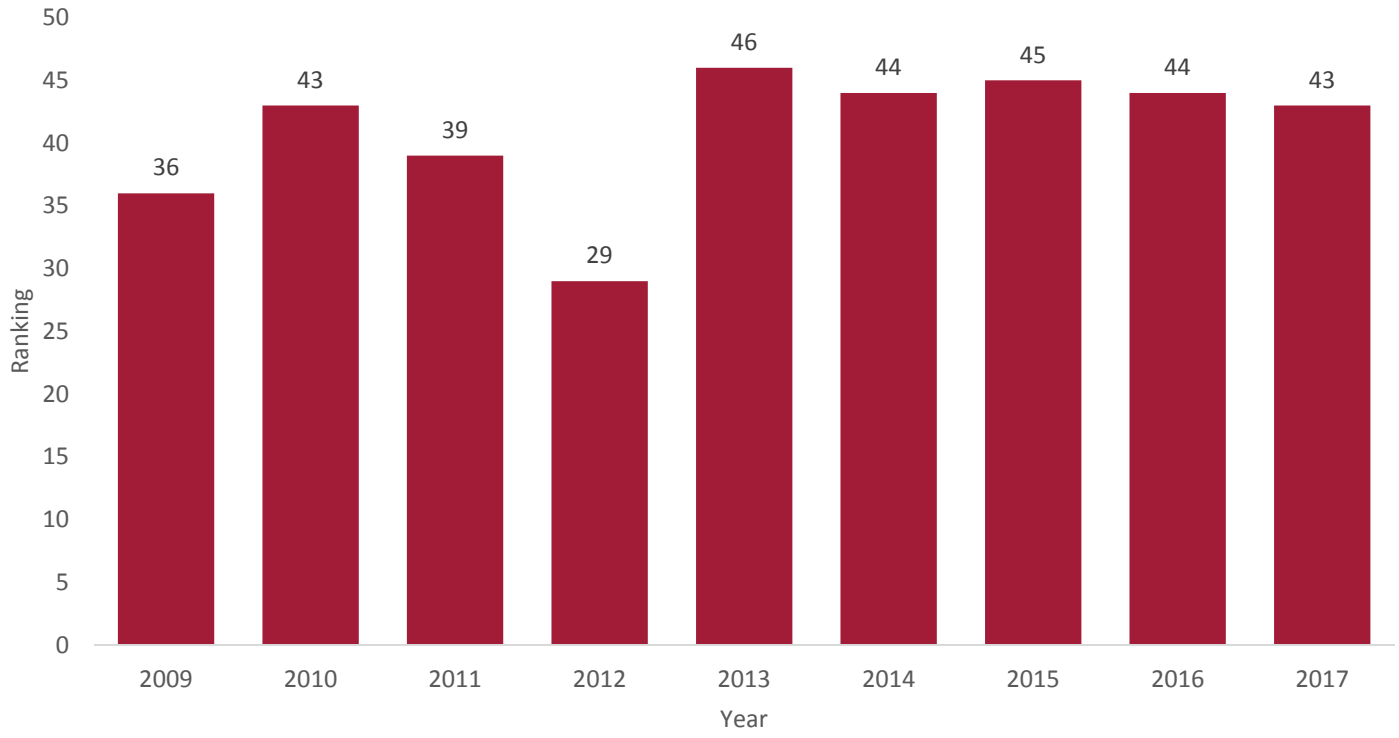
Maryland's Ranking in National Transportation Infrastructure Assessment

The CNBC business news media group uses publicly available data on 60 measures of competitiveness to score each state. The metrics are organized into ten 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 infrastructure conditions over time as a means of comparing Maryland's standing versus other states. For 2017, Maryland is ranked 43rd, which is a three-point improvement since 2013. Maryland ranks in the bottom ten because of the mobility/congestion components used to compute the infrastructure metric.

PERFORMANCE MEASURE 10.2

Maryland's Ranking in National Transportation Infrastructure Assessment

Chart 10.2.1: America's Top State for Business Annual Rankings for Maryland in Infrastructure CY2008-CY2017



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

PERFORMANCE MEASURE DRIVER:
Cole Greene
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 (FAF4) Version 4 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 because freight is the economy-in-motion. 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.

PERFORMANCE MEASURE 10.3A

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

Chart 10.3A: Freight Analysis Framework (FAF) Tonnage and Value of Freight

METHOD FOR MOVING FREIGHT	TOTAL VALUE (MILLIONS)	TOTAL TONNAGE (THOUSANDS)
Air*	$13,646	144
Pipeline & Other**	$73,990	40,278
Rail*	$15,364	26,730
Truck*	$324,435	218,603
Water***	$53,893	38,444
All Freight	$481,328	324,199

**Source: U.S. Department of Transportation on Freight Analysis Framework (FAF4). Other, Multiple Modes and Mail, Rail, and Truck value and tonnage data is estimated based on FAF4 data. The data is based on 2012 actual data collected by FHWA and is factored by FHWA through 2015. MDOT adjusts the yearly by a 2% annual growth rate that reflects a conservative estimate of domestic and international freight growth given current economic conditions.*

***Pipeline and other freight consists largely pipeline, postal and courier shipments weighing less than 100 pounds and other intermodal combinations. Represents a combination of FAF4 Pipeline, other, unknown, multiple modes and mail categories.*

**** International cargo through the Port of Baltimore in 2017 Source: MPA.*

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

PERFORMANCE MEASURE DRIVER:
Cole Greene
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:
Mid-Atlantic ports' international cargo.

PERFORMANCE MEASURE 10.3B

Freight Mobility: Port of Baltimore International Cargo Market Share and Rankings

Cargo through the Port of Baltimore is an indicator of the region's commercial health. Freight is the economy-in-motion; if freight is not moving, then neither is the economy. International tonnage in Baltimore increased 1.6 million tons, or 19% in Q1 CY2018 compared to Q1 CY2017. This is due to strong exported coal and LNG volumes. Bulk imports also grew as the Port saw increases in salt, sugar and slag in the first quarter. Baltimore's general cargo tonnage was up 10.2% due to containers and construction equipment. Market Share increased two percentage points compared to the Q1 CY2017.

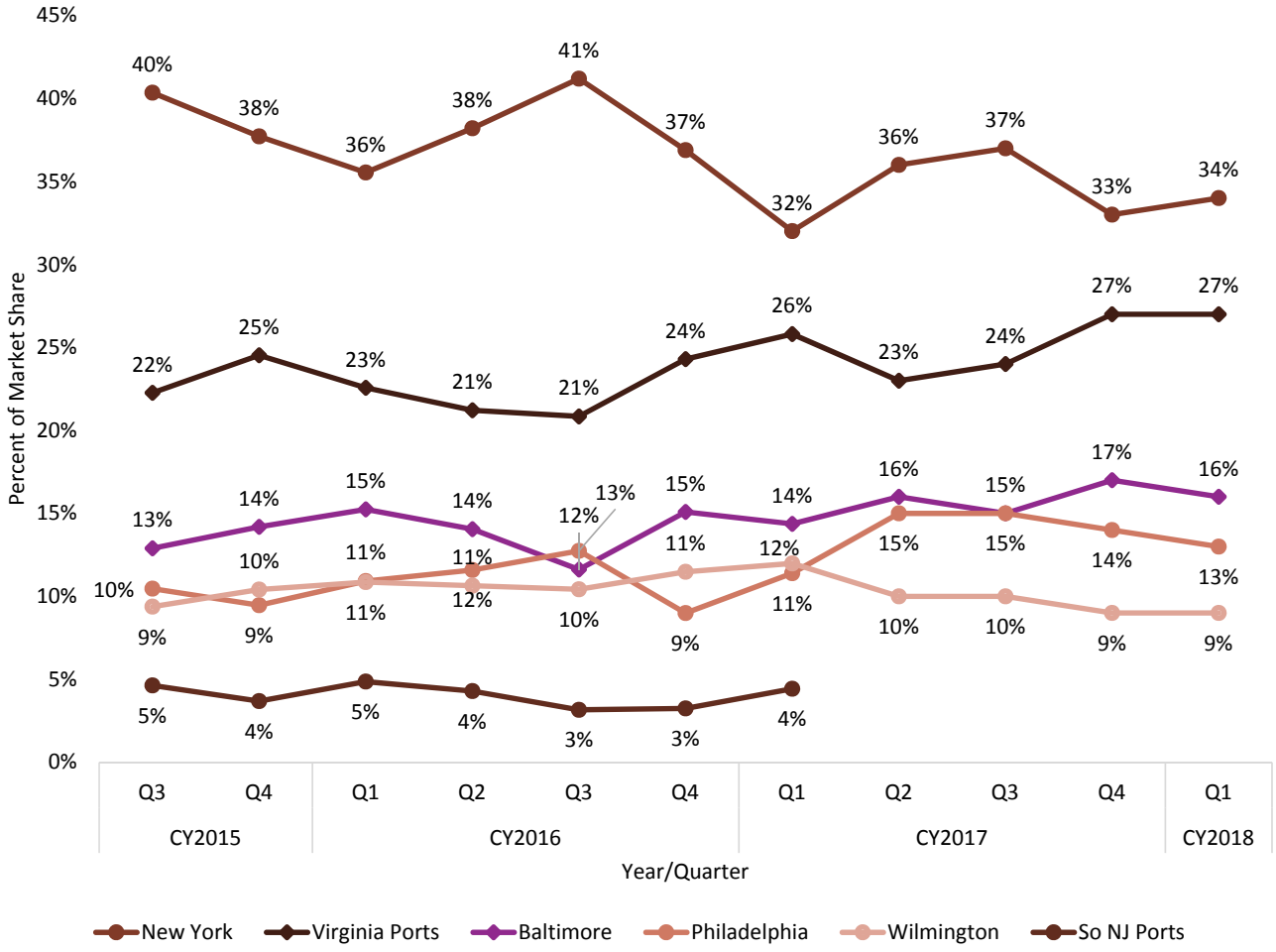
Port's overall ranking for Q1 remained at 3rd with 16% market share. This compares well to the first quarters of prior years.

MPA is an active partner with the Corps of Engineers to ensure the navigation channels are dredged to allow the world's fleets easy access between the Port and global markets.

PERFORMANCE MEASURE 10.3B

Freight Mobility: Port of Baltimore International Cargo Market Share and Rankings

Chart 10.3B.1: Market Share, Mid-Atlantic Ports CY2015-CY2018

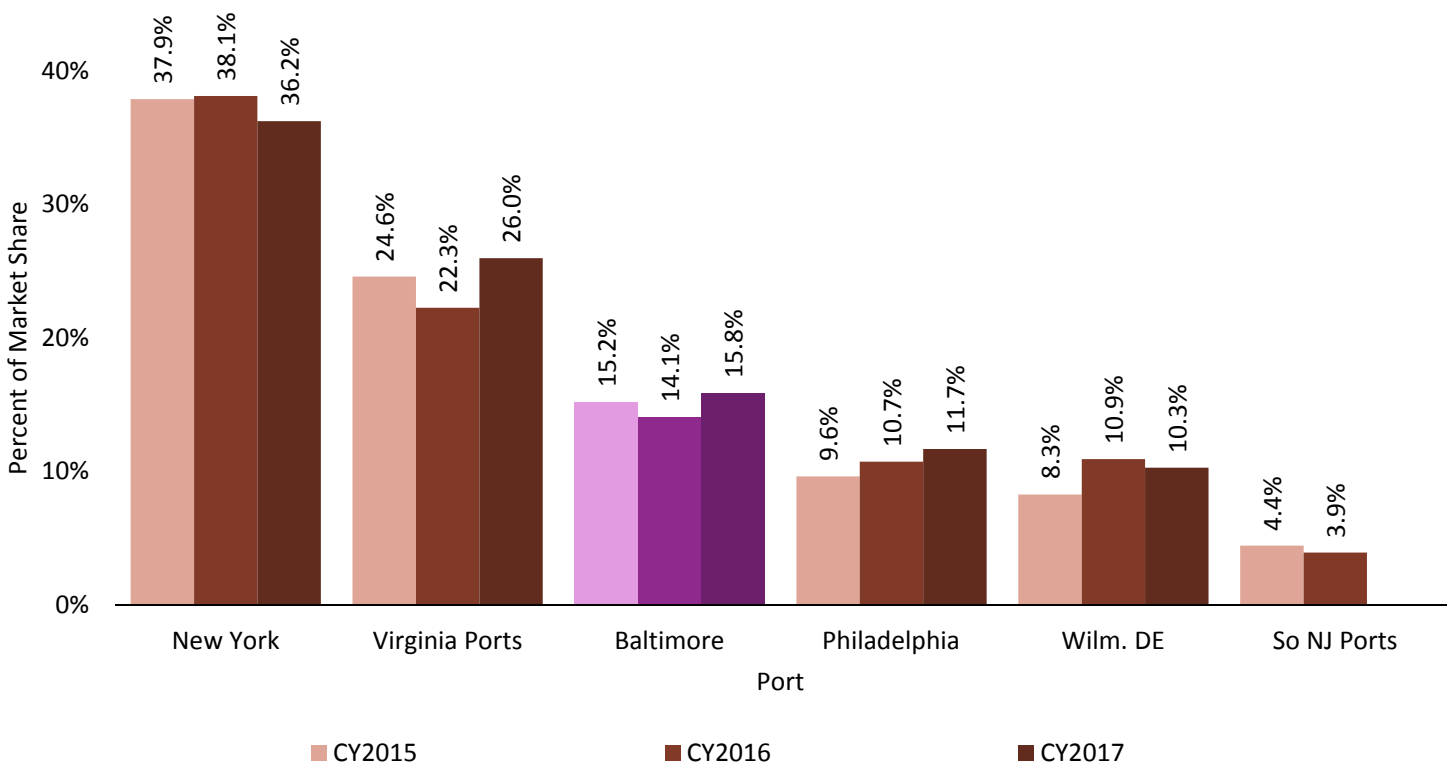


After Q1 2017,
So NJ Ports were combined with Philadelphia.

PERFORMANCE MEASURE 10.3B

Freight Mobility: Port of Baltimore International Cargo Market Share and Rankings

Chart 10.3B.2: Mid-Atlantic Ports Annual Market Share CY2015-CY2017



CY2017 Philadelphia and South Jersey Ports data are combined.

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

PERFORMANCE MEASURE DRIVER:
Deborah Rogers
Maryland Vehicle Administration (MVA)

PURPOSE OF MEASURE:
Data shows level of cargo activity at the State owned marine terminals.

FREQUENCY:
Monthly

DATA COLLECTION METHODOLOGY:
Data obtained from MPA cargo Billing Reporting and Statistical System (BRASS). Historical data is available to 1998.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 10.3C

MPA Total General Cargo Tonnage including these Strategic Commodities: Containers, Autos, RoRo and Imported Forest Products

As a rule of thumb, general cargo generates more jobs per ton than bulk commodities. Although international general cargo is one-third of the Port's total tonnage, it accounts for 94 percent of the Port's cargo value, and the State's public terminals handle most of the general cargo. Therefore, it is an important measure to track. In addition, freight is the economy-in-motion and marine terminals are a hive of job generating activity.

The MPA set a record of 10.7 million tons of general cargo in CY2017. General cargo tons in May 2018 was the third highest monthly total and was up 3.3% from April; however, it was 4.4% less than May 2017, which remains the monthly all-time record. for the first five months of CY2018, general cargo tonnage at the State's terminals is 5.3% greater than the same period in CY2017.

Containers showed the strongest growth followed by Roll-on; Roll-off heavy equipment, (i.e. farm, construction and mining equipment) and imported paper. Some global economies are improving and MPA's exported autos have increased 5% through May 2018.

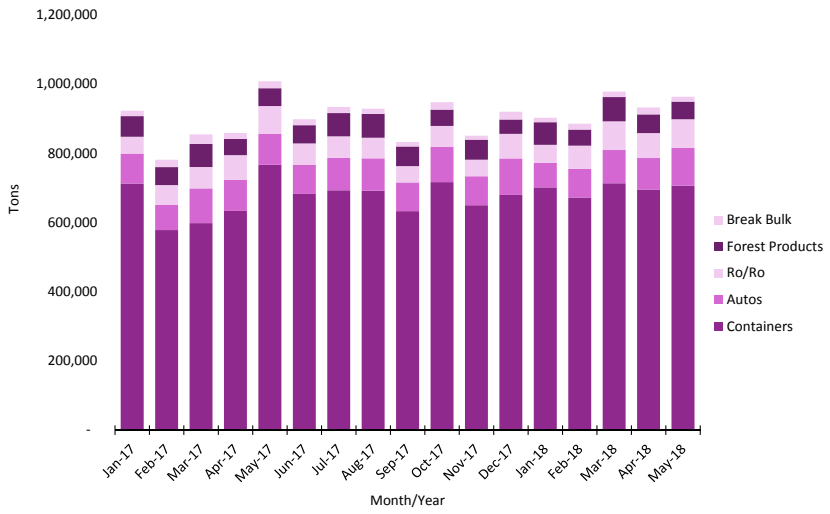
MPA conducts a multi-pronged effort to sustain and expand cargo volumes. For example, emphasizing long term contracts with favorable rates; marketing for the whole Port; facilitating ways to improve efficiency at Seagirt Marine Terminal to increase truck productivity; managing the capital program to focus on system preservation to keep current customers; enhancements to keep pace with the evolving global logistics and ever-increasing fleet size; and vessel sharing agreements.

The impact of increased tariffs by various nations on internationally traded commodities remains to be seen; however, it is likely to have a negative effect on global cargo volumes if it is not resolved in a timely manner.

PERFORMANCE MEASURE 10.3C

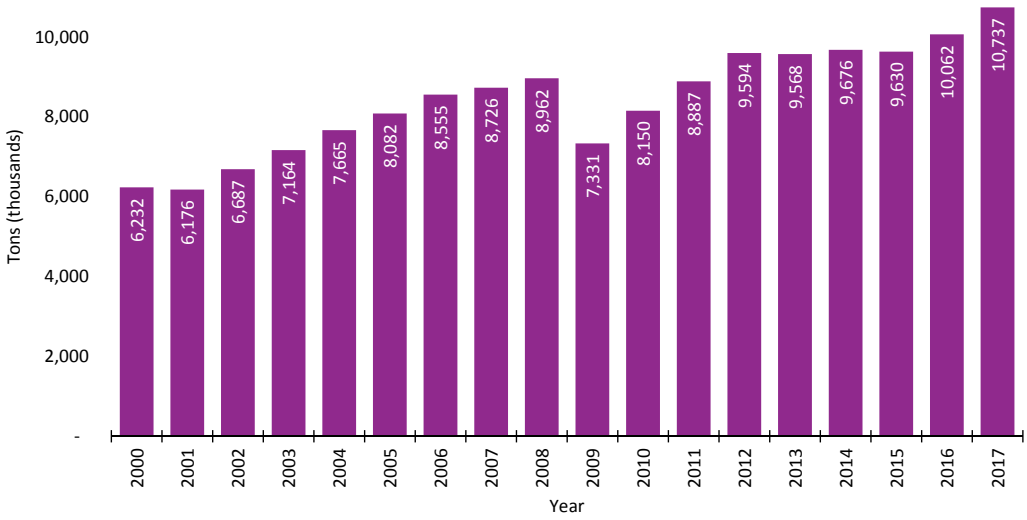
MPA Total General Cargo Tonnage including these Strategic Commodities: Containers, Autos, RoRo and Imported Forest Products

Chart 10.3C.1: MPA Total General Cargo, January 2017-May 2018



The graph below shows MPA's long term general cargo tonnage had steady growth before and after the Great Recession. Between 2012 and 2015, cargo volumes were stable. Cargo is increasing again over the past two years, due to larger ship size, vessel sharing agreements, and increased shipping from the expanded Panama Canal.

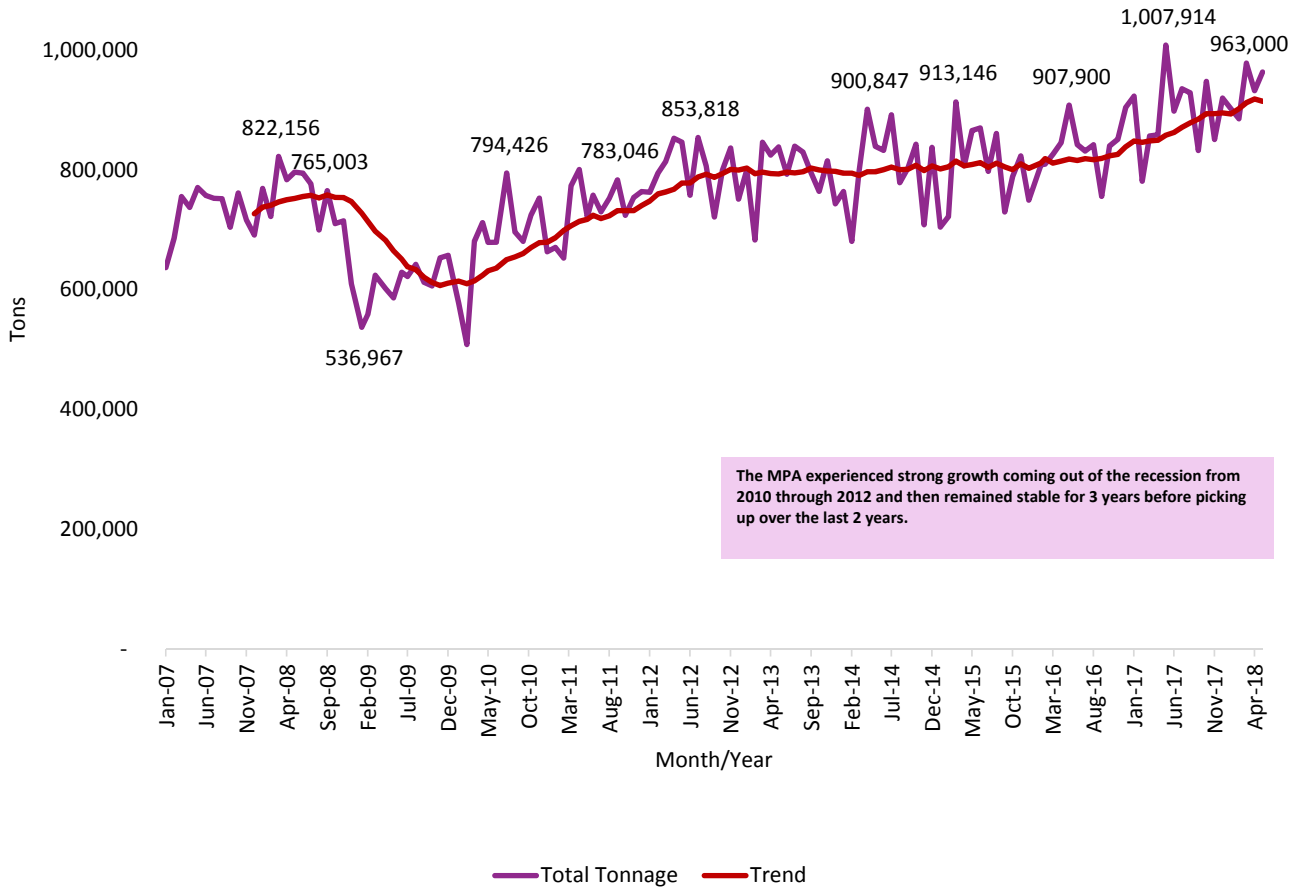
Chart 10.3C.2: MPA Total General Cargo CY2000-CY2017



PERFORMANCE MEASURE 10.3C

MPA Total General Cargo Tonnage including these Strategic Commodities: Containers, Autos, RoRo and Imported Forest Products

Chart 10.3C.3: MPA Total Monthly General Cargo Tonnage CY2007-CY2018



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 April)

DATA COLLECTION METHODOLOGY:
Data reflects federal reporting in April of each year. The number of bridges on the State-owned 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-Owned System that are Weight-Posted

Weight-posted bridges are those that are 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 for 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 for detour routes.

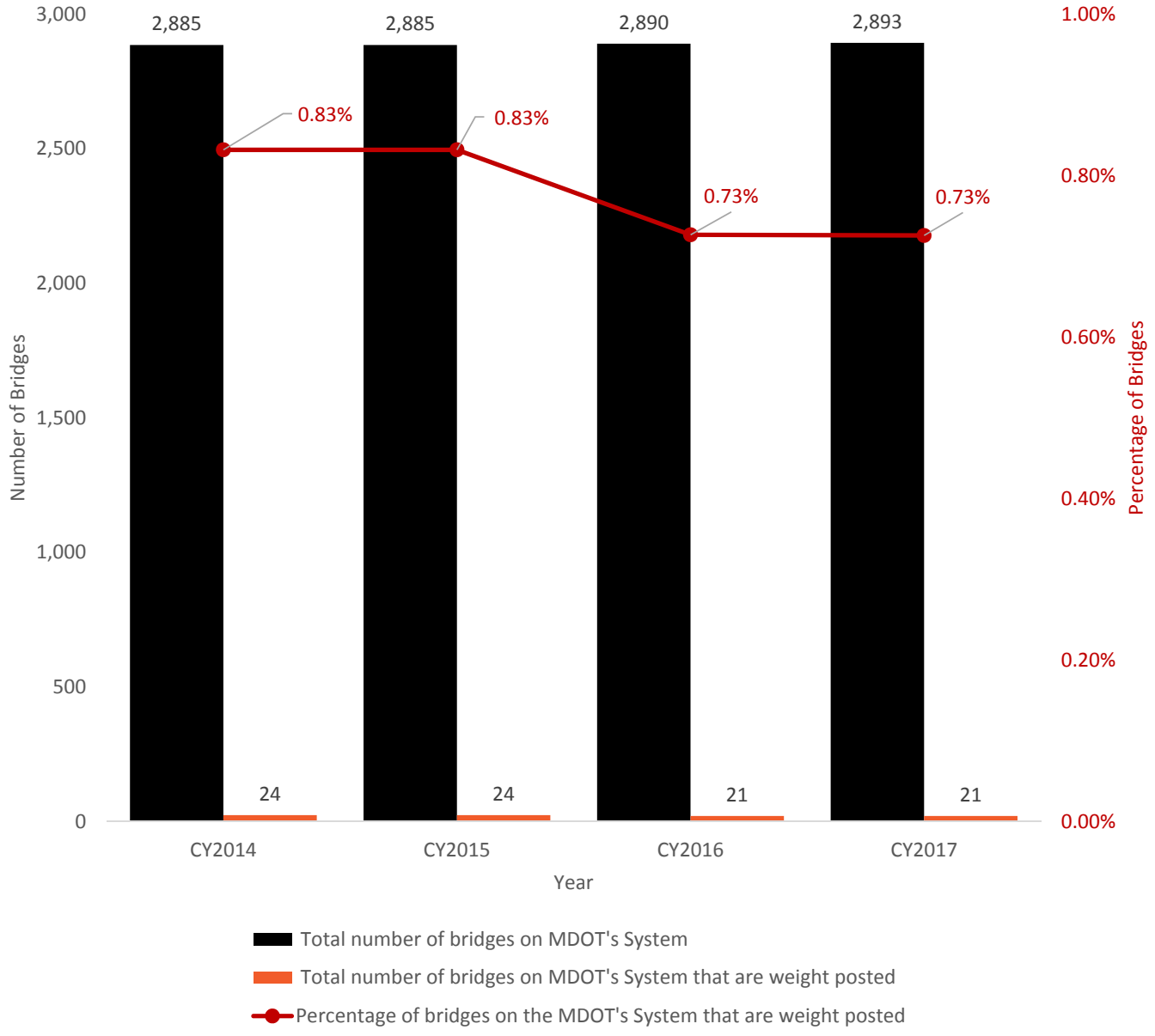
If a bridge cannot safely carry all legal loads, due to its present condition or original design criteria, it will be evaluated and a vehicle weight will be established that it can safely carry. This lower vehicle weight (which is less than the legal weight) will be placed on signs alerting all potential users of the maximum load that the bridge should carry.

Whenever inspections of weight-posted bridges or structurally deficient bridges indicate that repairs are necessary to prevent a weight posting or the lowering of the existing allowable weight restriction, the work to prevent this will be given top priority, and where possible, complete actual construction 18 months from the date when the need for the work was established. Less than 1 percent of SHA and MDTA bridges have a weight restriction.

PERFORMANCE MEASURE 10.4

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

Chart 10.4.1: Number & Percentage of Bridges on MDOT's System that are Weight-Posted CY2014-CY2017



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 October)

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 to the State 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 Multimodal Process Improvement Team for this measure has met and the tool used to measure the market access has been secured. MDOT has developed a standardized approach to modeling projects and is running test simulations to ensure consistency.

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 October)

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 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 Multimodal Process Improvement Team for this measure has met and the tool used to measure the productivity has been secured. MDOT has developed a standardized approach to modeling projects and is running test simulations to ensure consistency.

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

PERFORMANCE MEASURE DRIVER:
Karuna R. Pujara
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 10.7A

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

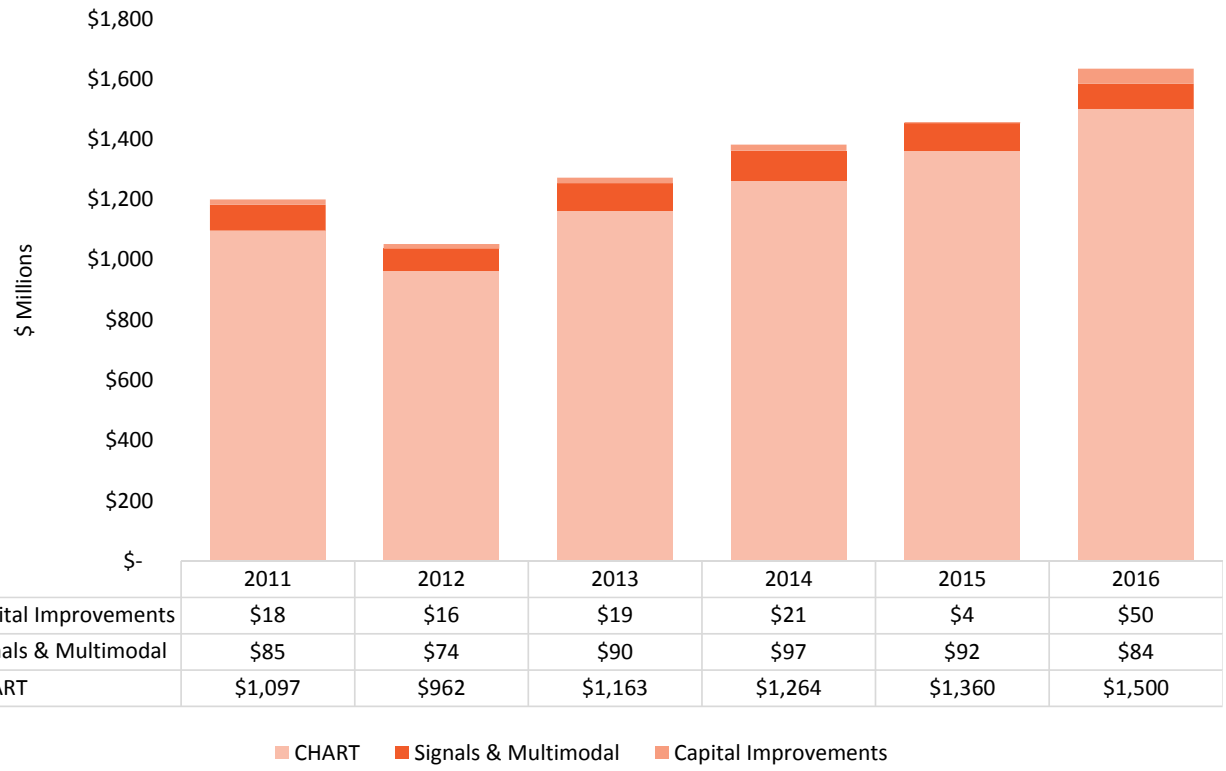
SHA and MDTA implement various projects, programs and policies to reduce congestion and enhance mobility on their facilities. SHA focuses on both recurrent and non-recurrent aspects of congestion. These include CHART, Incident Management and Intelligent Transportation Systems (ITS) programs, major/minor 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 result in roadway user cost savings.

PERFORMANCE MEASURE 10.7A

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

Chart 10.7A.1: Annual User Cost Savings Through MDOT Congestion Management Efforts CY2011-CY2016



	2011	2012	2013	2014	2015	2016
Capital Improvements	$18	$16	$19	$21	$4	$50
Signals & Multimodal	$85	$74	$90	$97	$92	$84
CHART	$1,097	$962	$1,163	$1,264	$1,360	$1,500

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

PERFORMANCE MEASURE DRIVER:
Deborah Rogers
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:
To measure the impact of wait time cost to MVA customers visting a branch.

FREQUENCY:
Annually (in January)

DATA COLLECTION METHODOLOGY:
Wait time is calculated by the Customer Traffic Monitoring (CTM) system. Average Branch Wait Time is determined by the CTM analysis. Research is completed on the Maryland median income and calculation is compledted to detmine cost of waiting.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 10.7B

Average Cost per Branch Customer due to Wait Time

MVA recognizes the value of our customers' time and therefore the goal is to decrease the time that customers spend waiting for goods and services. MVA continually implements process improvements and business policies which build efficiencies and therefore reduce the wait time for customers at our branch offices.

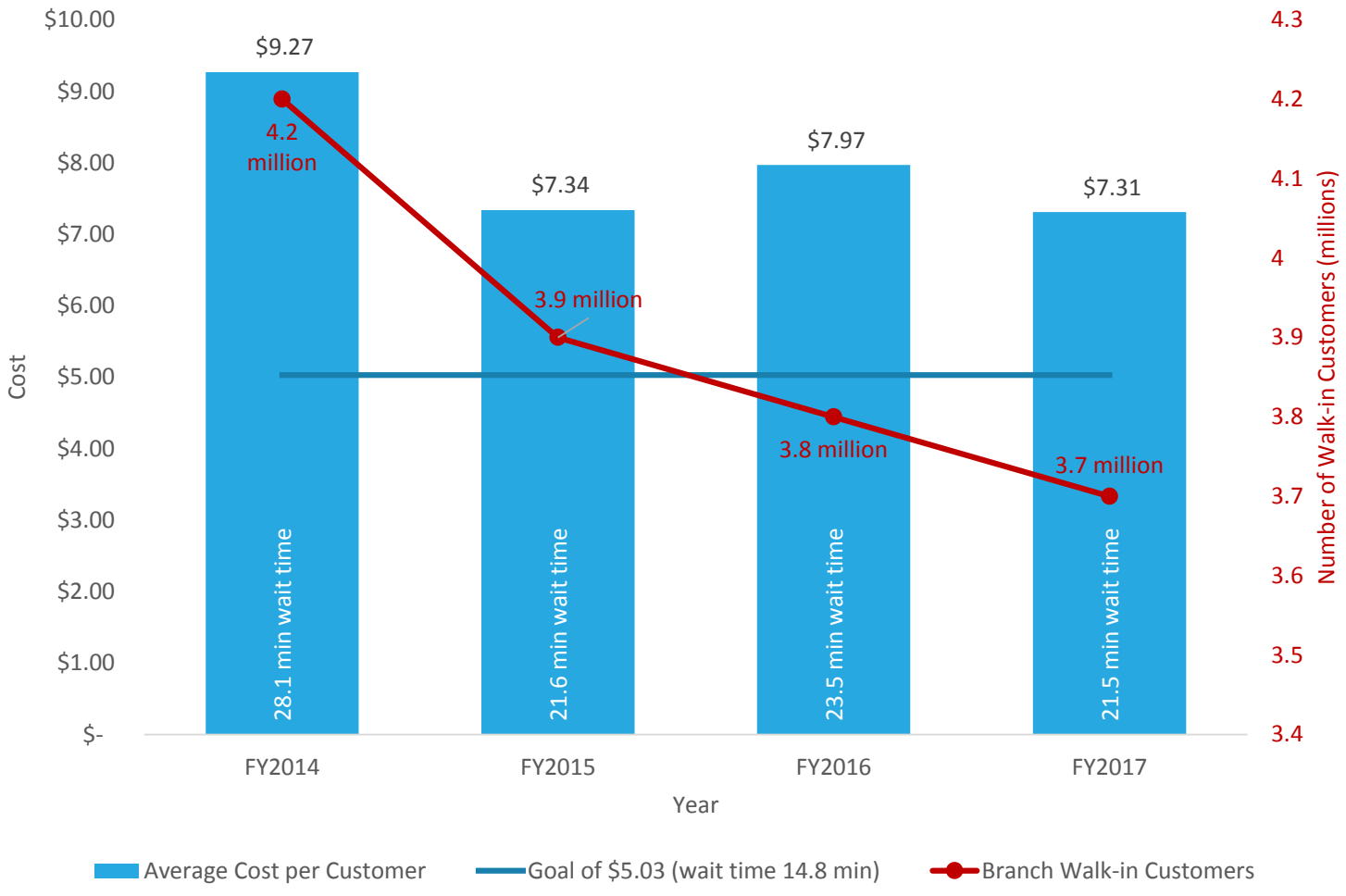
The graph shows that wait times are going down which means the cost to the customer waiting in line is going down. The economic vitality to the State is dependent on the ability to use resources and time in a manner that is beneficial for customers. The calculation is determined by Wait Time and Median Hourly Wage.

The goal for this measure is to trend downward. MVA would like to decrease the cost of wait time to our customers and provide secure and efficient services.

PERFORMANCE MEASURE 10.7B

Average Cost per Branch Customer due to Wait Time

Chart 10.7B.1: Average Cost to Customer due to Branch Office Wait Time FY2014-FY2017



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

PERFORMANCE MEASURE DRIVER:
Deborah Rogers
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:
To identify costs savings to the customer based on the type of alternative service delivery method they choose to use to complete their MVA transactions.

FREQUENCY:
Annually (in January)

DATA COLLECTION METHODOLOGY:
MVA compiles the number of transactions for each type of ASD method. Average Wait Time is determined by the CTM analysis. Research is completed on the Maryland Median Hourly Wage. Calculation is completed to determine customer cost savings based on wait time savings, travel time savings and IRS mileage reimbursement.

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 10.7C
Opportunity Cost Savings to Customer for ASD Usage

Over the past several years, MVA has been able to shift most customer transactions from branch walk-in (40 percent) to alternative service delivery (ASD) (60 percent). The method of ASD chosen is often dependent on the customer or the transaction. However, ASD has proved to be an overall benefit to the customer which saves time, money and offers convenience. This measure calculates the opportunity cost savings to the customer for their usage of ASD. Each ASD method will offer a different savings. The savings calculation is determined by wait time savings, Maryland average hourly wage, travel time savings, and IRS mileage reimbursement.

The largest customer savings of over $60 is from the use of internet and mail. These ASD methods do not require travel to an MVA Branch office nor is there a wait time associated with these transactions. Furthermore, the customer convenience is highest. The least customer savings is from the use of kiosk and tablet. With an opportunity cost savings of over $7.00, the customer would still have associated travel times and wait times with the kiosk and tablet ASD usage.

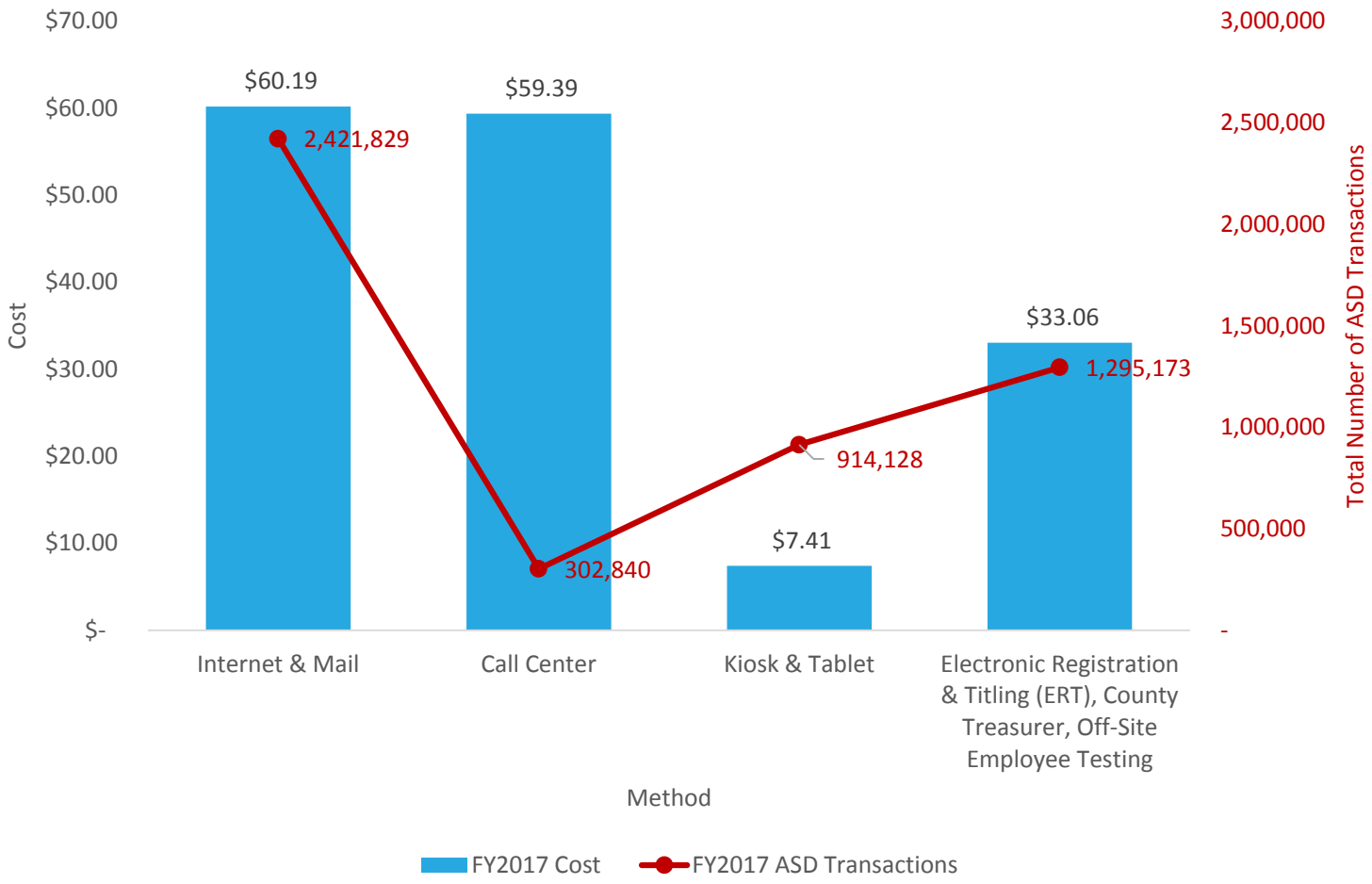
MVA continues to build process and system efficiencies that will support the use of ASD. Over the past year, MVA has implemented several ASD enhancements that support the convenience of customer transactions.

- Redesigned emails for renewal notices to customers for example adding the option of “one-click” to complete to complete vehicle registration renewals.
- Provided tablets in our branch office that can triage customers for services as well as complete Tag Return transactions.
- Implemented Vision Screening Stations in our branch offices which allows a customer to complete their vision test for driver’s license renewals and then the remainder of their transaction can be completed at the kiosk or their home computer.

PERFORMANCE MEASURE 10.7C

Opportunity Cost Savings to Customer for ASD Usage

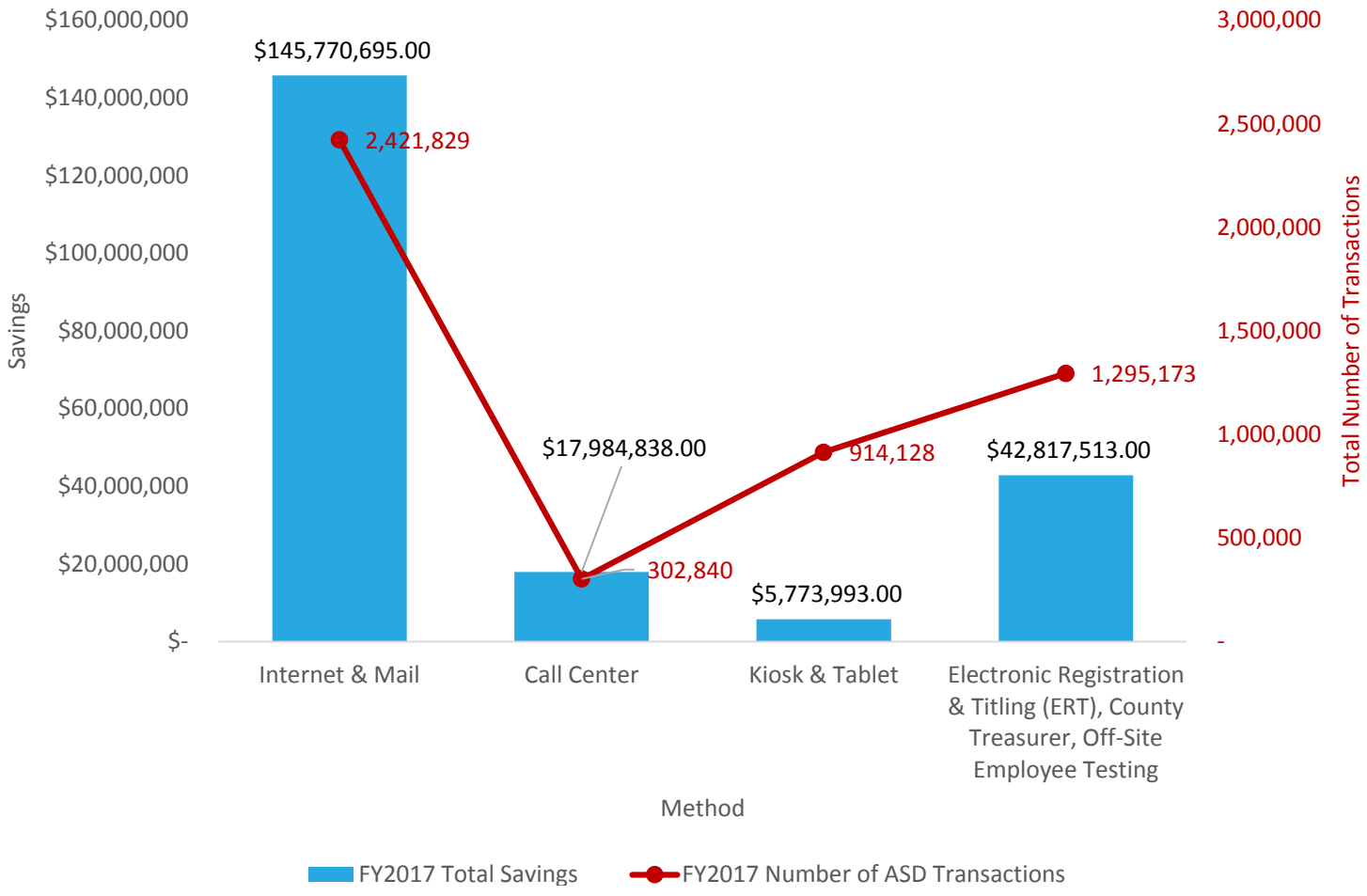
Chart 10.7C.1: Opportunity Cost Savings to Customer for Alternative Service Delivery (ASD) Usage - Individual Customer FY2017



PERFORMANCE MEASURE 10.7C

Opportunity Cost Savings to Customer for ASD Usage

Chart 10.7C.2: Opportunity Cost Savings to Customer for Alternative Service Delivery (ASD) Usage - Total Customers FY2017



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

PERFORMANCE MEASURE DRIVER:
Karuna R. Pujara
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

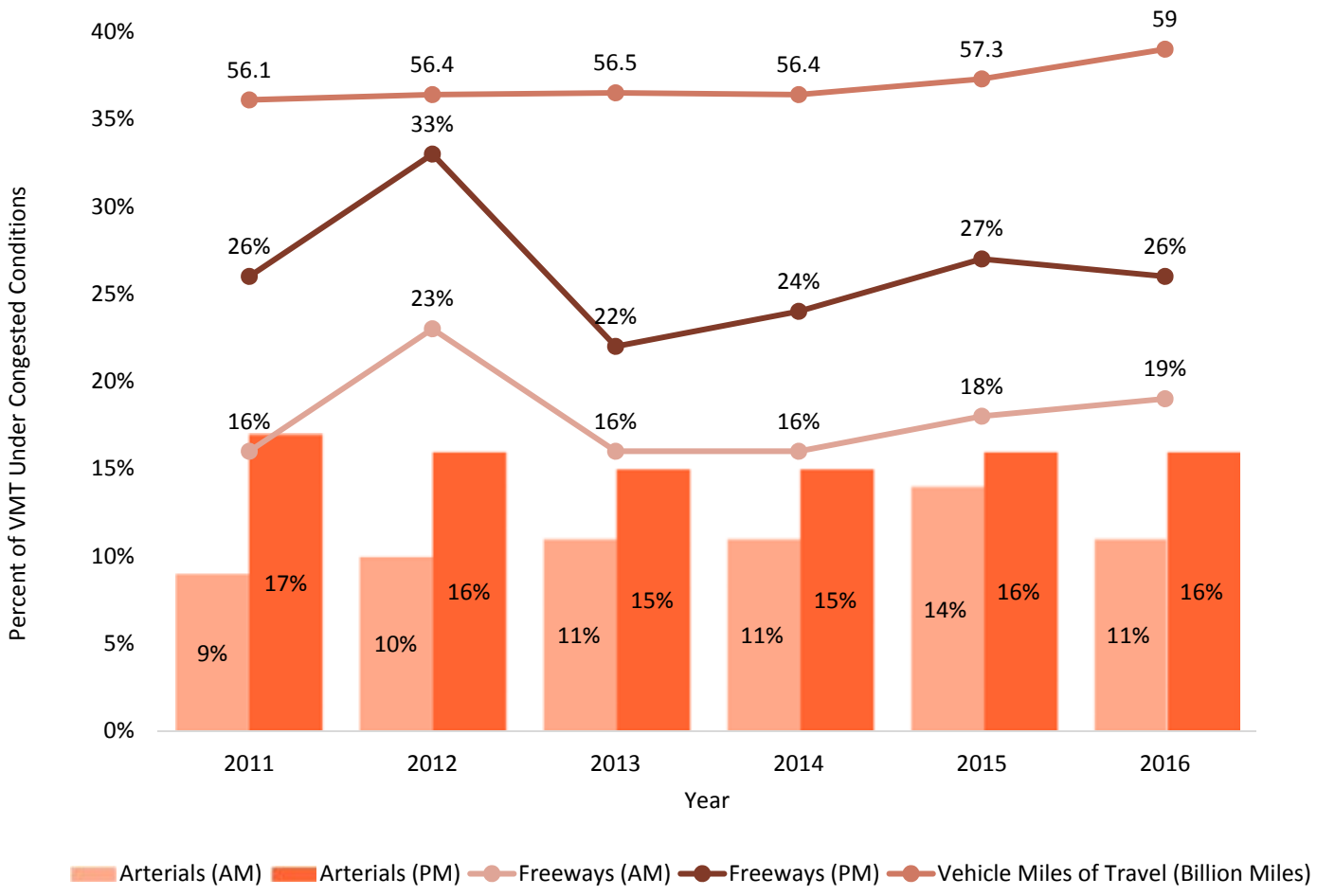
This measure represents the percentage of peak hour VMT on Maryland highways that occur in congested conditions. Congestion on freeways is said to occur when the travel time index (TTI) ratio is greater than 1.3 (traffic travels at 25 percent slower than the free flow speed). Congestion on arterials 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 customer 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 nondiscretionary trips including goods movement, commute and school trips.

Reducing 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 while supporting State's economic growth.

PERFORMANCE MEASURE 10.8

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

Chart 10.8.1: Peak Hour Congested VMT Trends on Maryland Roadways CY2011-CY2016



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 10.9A

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 as compared to the general aviation facility at BWI Marshall. Itinerant general aviation activity is defined as a non-local 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 by the business and general aviation community flying in and out of the Baltimore region.

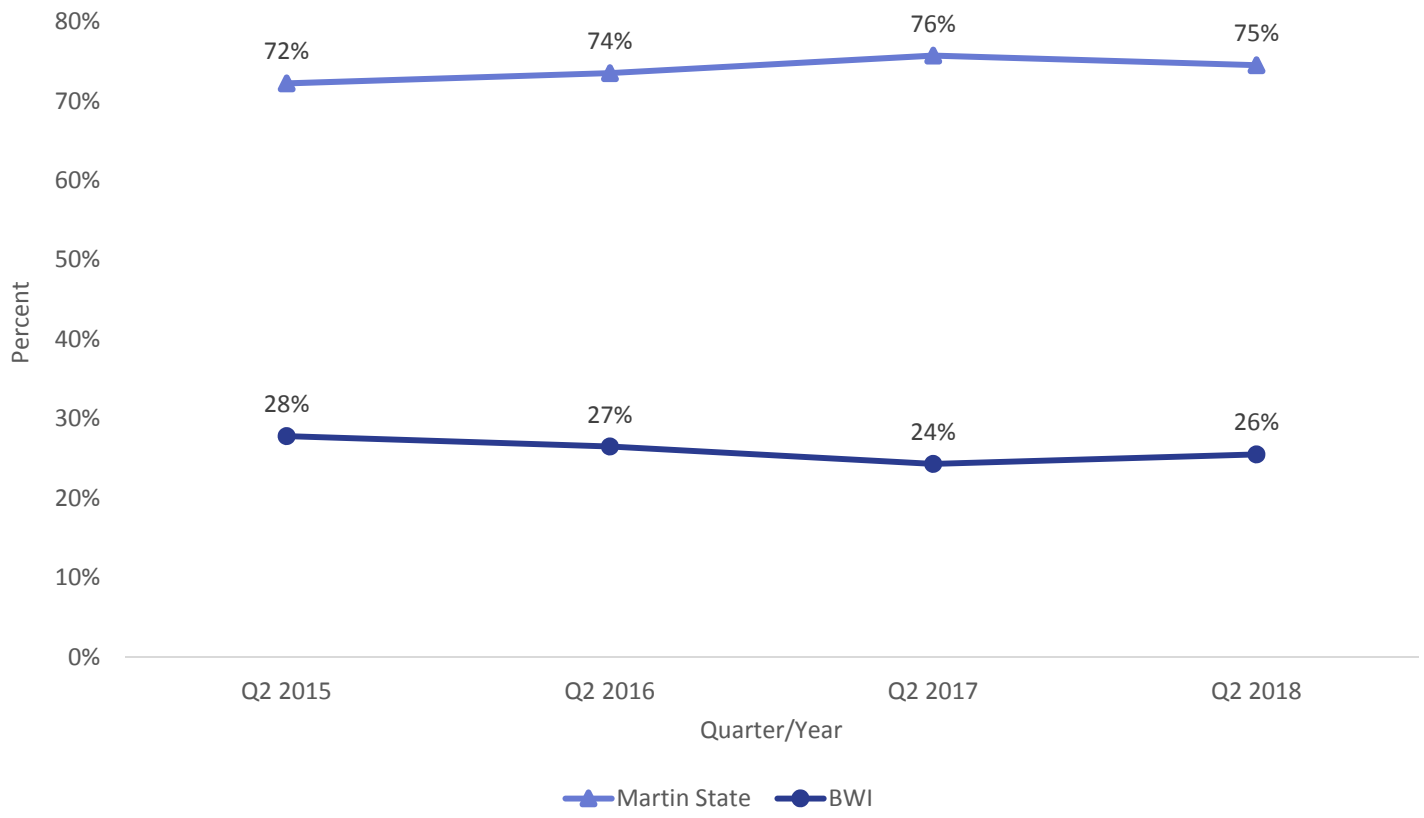
The volume of non-local general aviation operations is an indicator of how much business traffic Martin State Airport is, or is not, attracting. The more non-local operations, the more in potential fuel sales and other support operations occur at the airport. Such operations generate revenue and support existing jobs at, and around, Martin State. Strong market share also indicates Martin State is adequately performing one of its primary missions, serving as a "reliever airport" for BWI Marshall. A reliever airport is one that attracts general aviation traffic away from a region's primary commercial airport, reducing demand on the congested airspace surrounding the commercial airport.

Martin State Airport is performing well. From Q2 CY2015 to Q2 CY2018, Martin State has demonstrated strong growth in market share of non-local general aviation operations, increasing from 72 percent to nearly 75 percent during that period while similar general aviation activity at BWI Marshall declined from 28 percent to 25 percent.

PERFORMANCE MEASURE 10.9A

Market Share: Martin State Airport's Regional Market Share

10.9A.1: Percent of all General Aviation Operations other than Local Operations Q2 CY2015-CY2018



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 10.9B

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

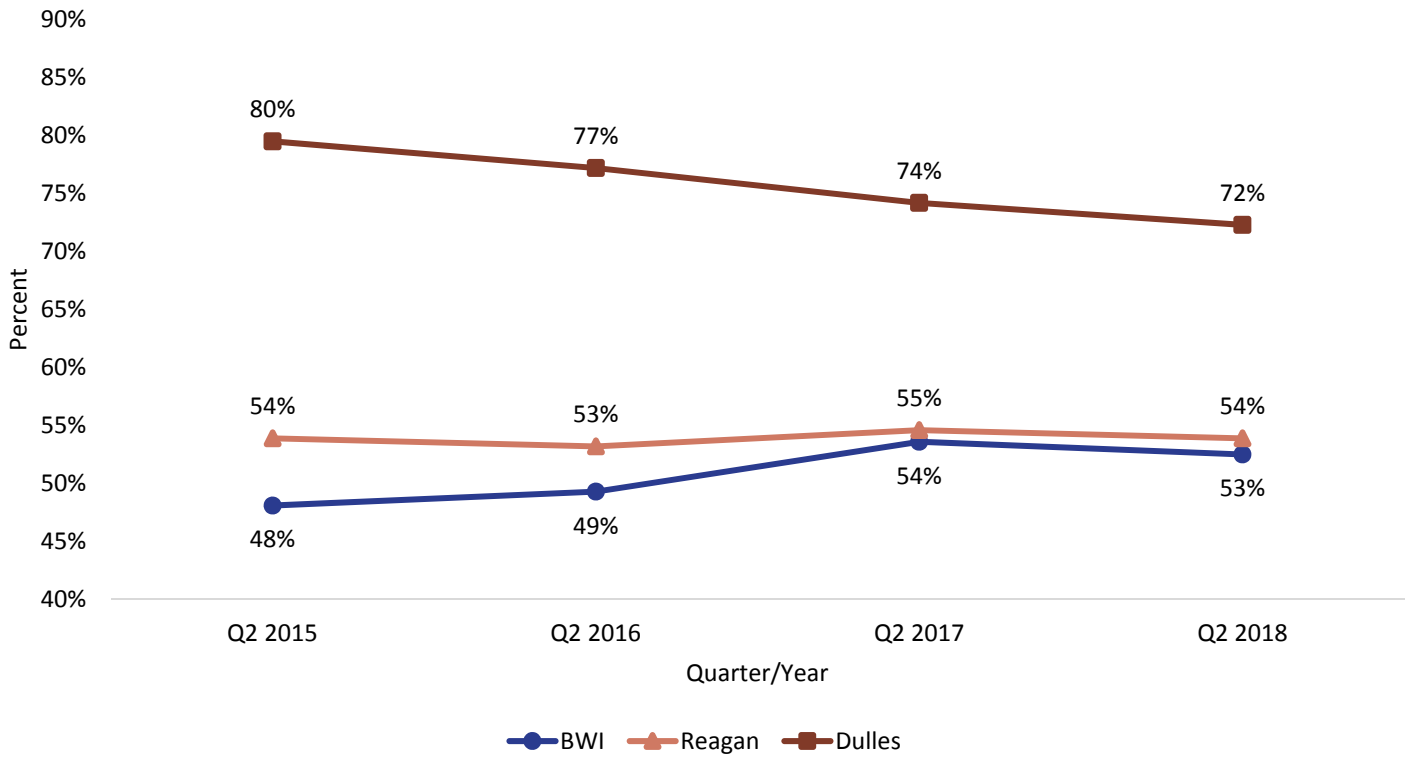
The Washington-Baltimore region is served by three primary airports. They include: Baltimore/Washington International (BWI) Thurgood Marshall Airport; Ronald Reagan National Airport; and Dulles International Airport. More than 26 million passengers flew through BWI Marshall Airport in 2017, an all-time record for passenger traffic. International passenger traffic reached 1.1 million passengers in 2017. It is the third straight year with more than one million international passengers. This positive trend continues in 2018. In fact, through April 2018, BWI Marshall has posted monthly passenger records in 33 of the last 34 months. Only two strong hurricanes in September 2017 that negatively impacted air travel to the southern United States and the Caribbean stood in the way of an unbroken streak.

The number of nonstop destinations served by an airport is an important performance metric, as nonstop service is preferred by passengers. Due to the seasonal nature of air travel, the way to evaluate performance is by comparing how an airport performs in a particular quarter one year compared to that same quarter in another year. Chart 10.9B.1 demonstrates that BWI Marshall has produced a steady increase in nonstop destinations when comparing the second quarter of CY2015 through the second quarter of CY2018. The number of nonstop destinations served by BWI Marshall leveled off in CY2018 due to a slight reduction in markets served by commuter airlines utilizing the airport. Today, BWI Marshall has nonstop service to more than 52 percent of all markets served by the region's three airports. That figure is up from 48 percent in the second quarter of CY2015. BWI Marshall Airport now offers service to more than 90 domestic and international destinations.

PERFORMANCE MEASURE 10.9B

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

Chart 10.9B.1: Percent of Nonstop Markets Served Relative to Benchmark Airports in Q2 CY2015-CY2018



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: Percent 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.

In 2017, 26.4 million passengers flew through BWI Marshall Airport, an all-time-record for passenger traffic. International passenger traffic during the same period reached 1.1 million passengers, the third-straight year with more than one million international passengers. BWI Marshall has posted passenger records in 33 of the past 34 months through April 2018. Only back-to-back hurricanes that negatively impacted the southeast United States and the Caribbean in September 2017 got in the way of the streak.

Due to the seasonal nature of air service schedules, the valid way to track service performance is a comparison of identical quarters in prior calendar years. As seen in the following charts, BWI Marshall Airport's percentage of departing flights steadily increased between the second quarter of CY2015 and the same time-period in CY2018. This positive performance is due primarily to continued recent growth by Spirit, Alaska and United Airlines. BWI Marshall is now second place in market share of number of departing flights. Reagan National maintains the number one position in the first quarter of CY2018 because it handles a large number of commuter flights. This fact results in a larger number of overall departures at Reagan than BWI Marshall.

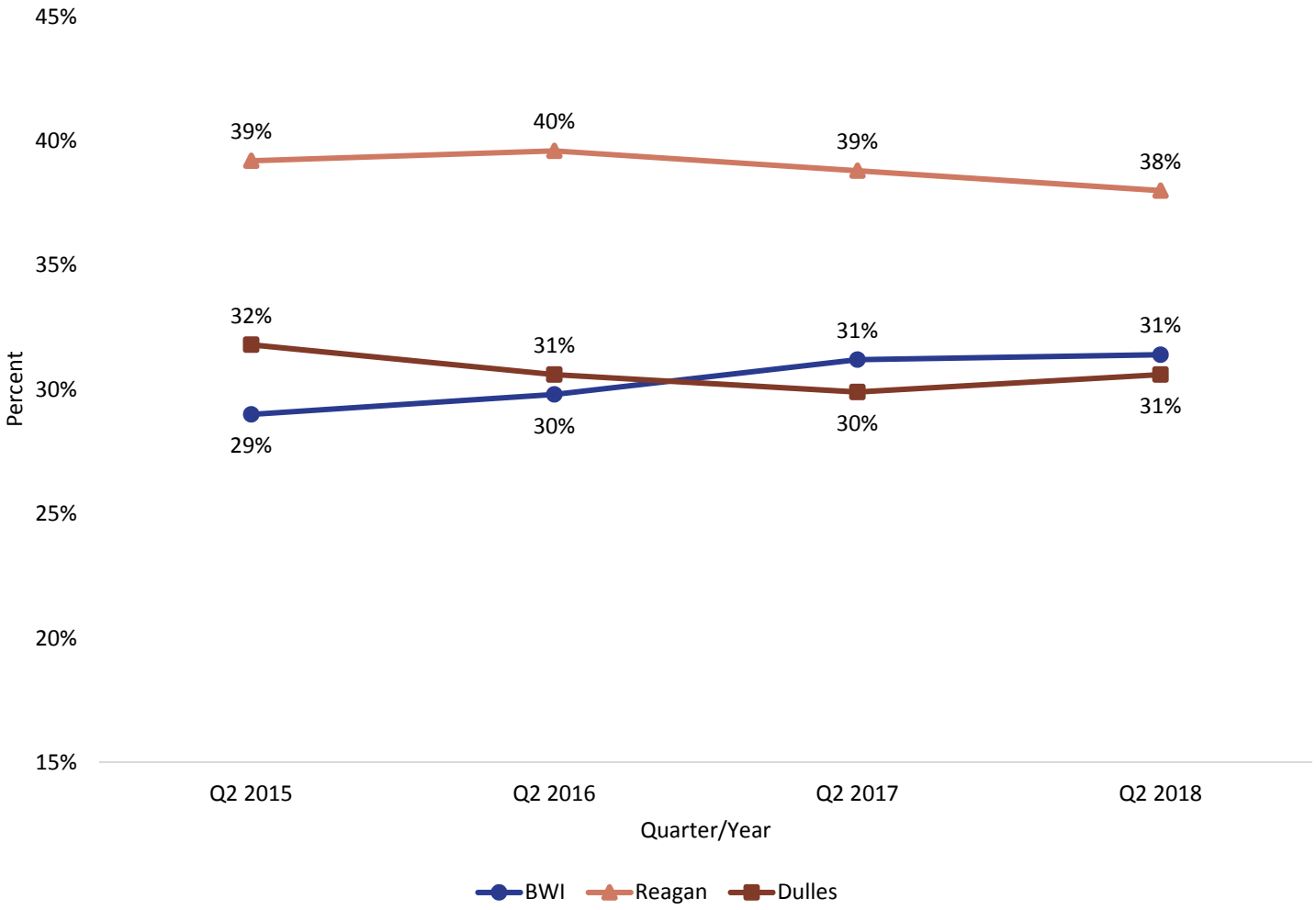
By contrast, the overwhelming majority of flights at BWI Marshall involve regularly scheduled, longer distance flights using standard size commercial aircraft like the Boeing 737 flown by Southwest Airlines. Southwest is responsible for 68 percent of the traffic at BWI Marshall. As an example, a commuter jet may carry 50 passengers where a 737-800 model aircraft flown by Southwest will carry 175.

BWI Marshall continues to serve more passengers than any other airport in the region. During the first quarter of CY2018, the most recent quarter where passenger numbers are available, BWI Marshall remains first in market share of total passengers served by the region's airports.

PERFORMANCE MEASURE 10.9C

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

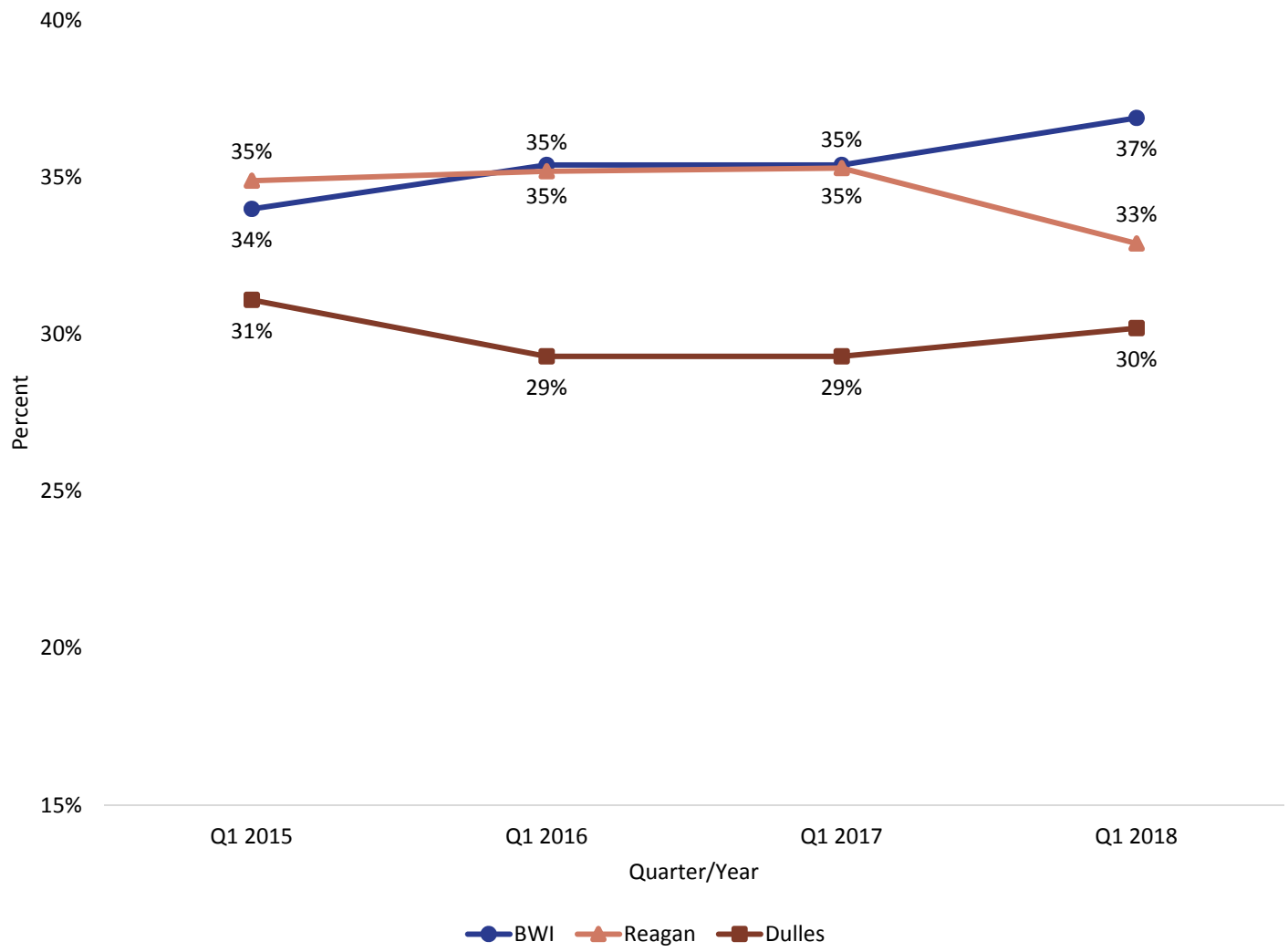
Chart 10.9C.1: Percent of Total Daily Departures at the Region's Airports Q2 CY2015-CY2018



PERFORMANCE MEASURE 10.9C

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

Chart 10.9C.2: Percent of Passengers Using Region's Airports Q1 CY2015-CY2018



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

PERFORMANCE MEASURE DRIVER:
Glen Carter
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:
Quarterly

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

Access permits help promote safe and efficient roads for travel while supporting economic development and growth in jobs and businesses. The issuance of access permits, and the resulting construction of roadway and entrance improvements by developers, are some of the last steps before opening a business or selling commercial or residential properties for occupancy. This activity contributes to the creation of new jobs, businesses and development/redevelopment opportunities.

This measure tracks MDOT-SHA efforts to improve customer service with a predictable, consistent and transparent process for obtaining an access permit. The performance target is 100 percent of permits that are issued within 21 days (after receipt of a complete application package). In FY2018, 100 percent of the permits were issued within 21 days.

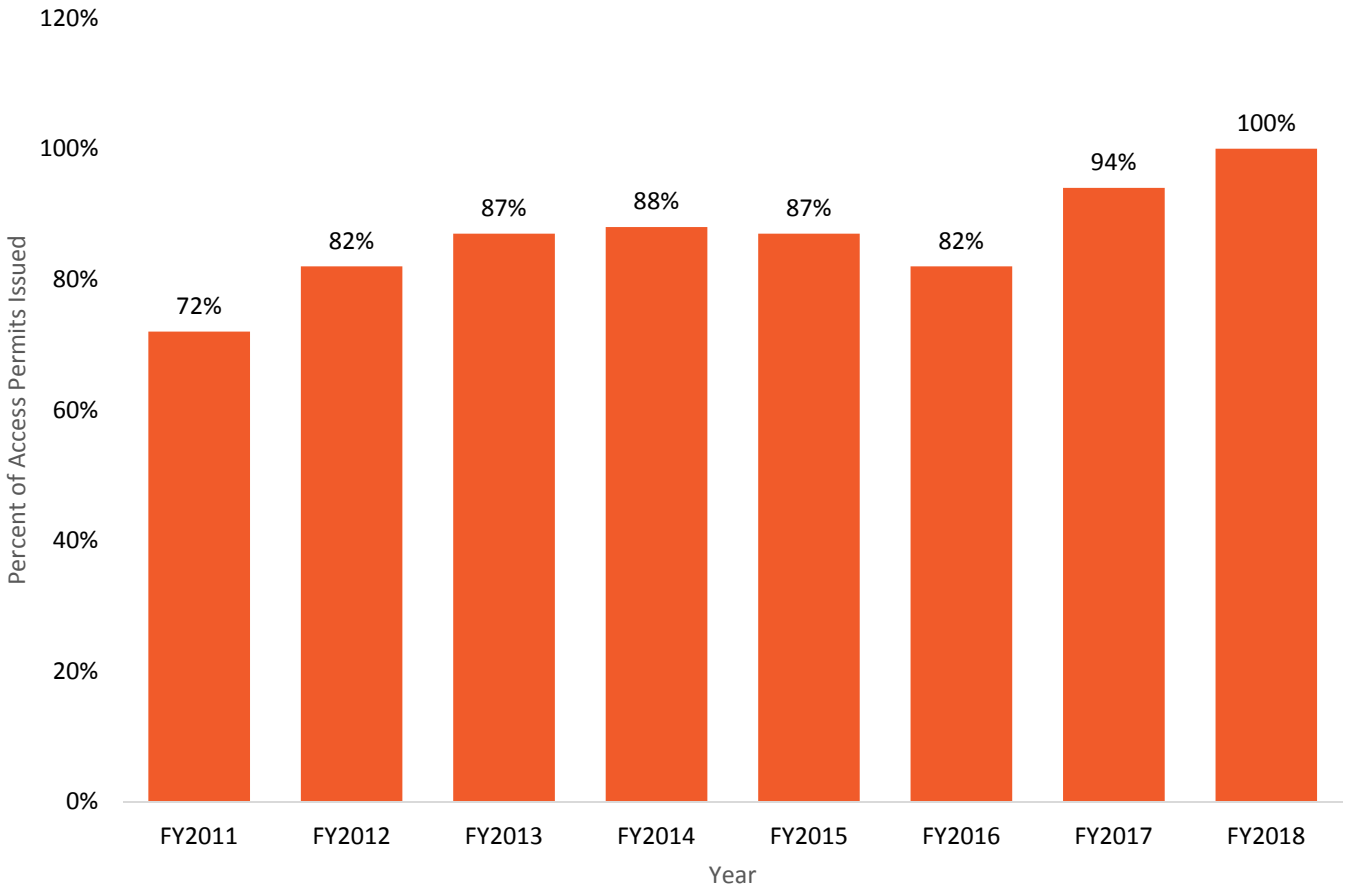
Ongoing practices include:

- Meeting with stakeholders in working group to establish clear expectations;
- Weekly project status alerts to the District Access Management Team;
- An electronic submittal process was deployed in April 1, 2018.

PERFORMANCE MEASURE 10.10

Percent of Roadway Access Permits Issued within 21 Days or Less

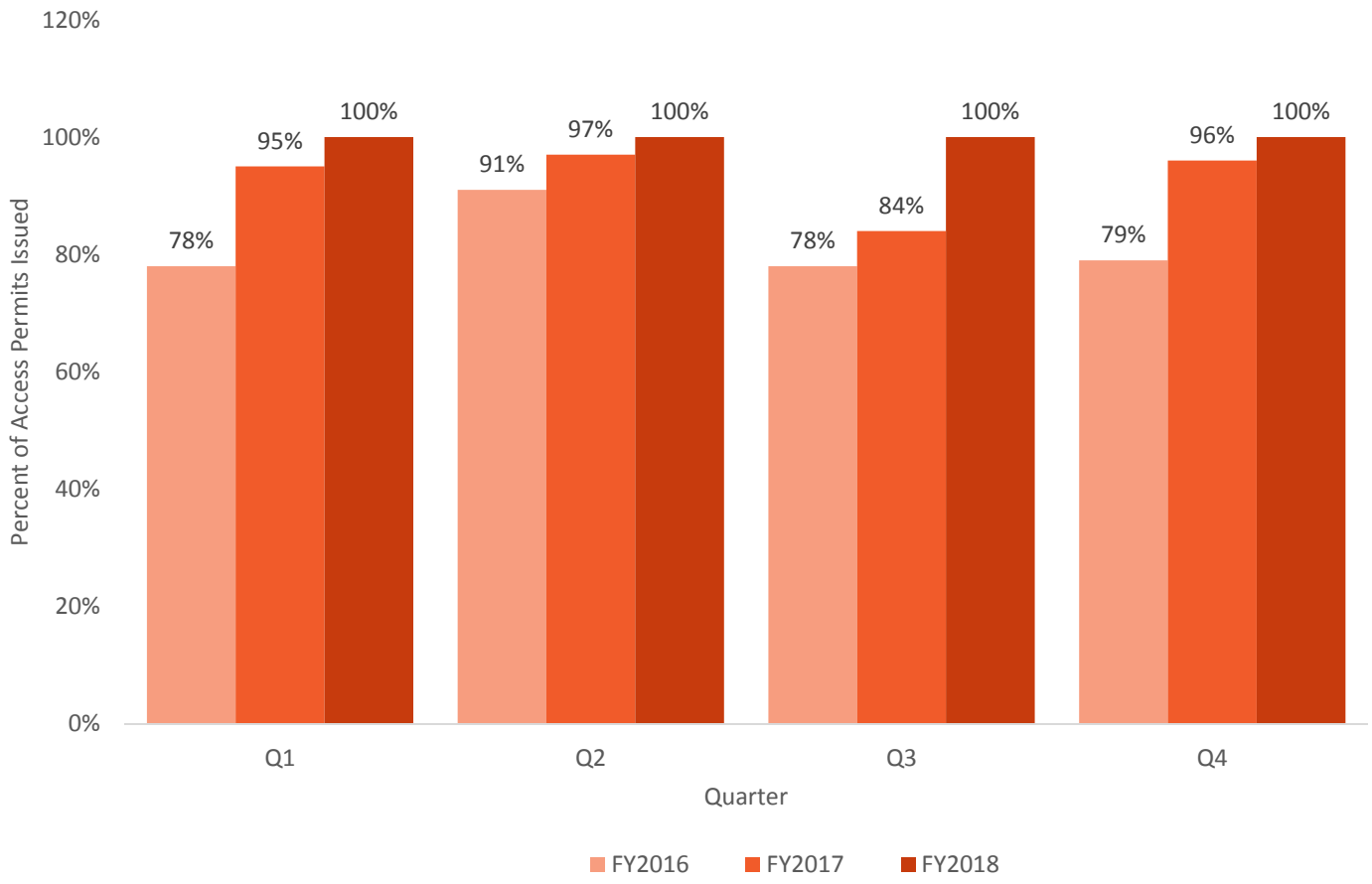
Chart 10.10.1: Percent of Permits Issued Within 21 Days FY2011-FY2018 YTD



PERFORMANCE MEASURE 10.10

Percent of Roadway Access Permits Issued within 21 Days or Less

Chart 10.10.2: Percent of Permits Issued Within 21 Days by Quarter FY2016-FY2018



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.

The data contained herein is impacted by a number of variables and may vary and evolve depending on those variables.

Boyd K. Rutherford
Lt. Governor

Larry Hogan
Governor

Pete K. Rahn
Secretary of Transportation

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