

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 Stottlemeyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Dan Favarulo
The Secretary's Office (TSO)

PURPOSE OF MEASURE:

To track the efficiency of capital spending.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Track capital project spending versus the Consolidated Transportation Plan appropriated funds.

NATIONAL BENCHMARK:

N/A

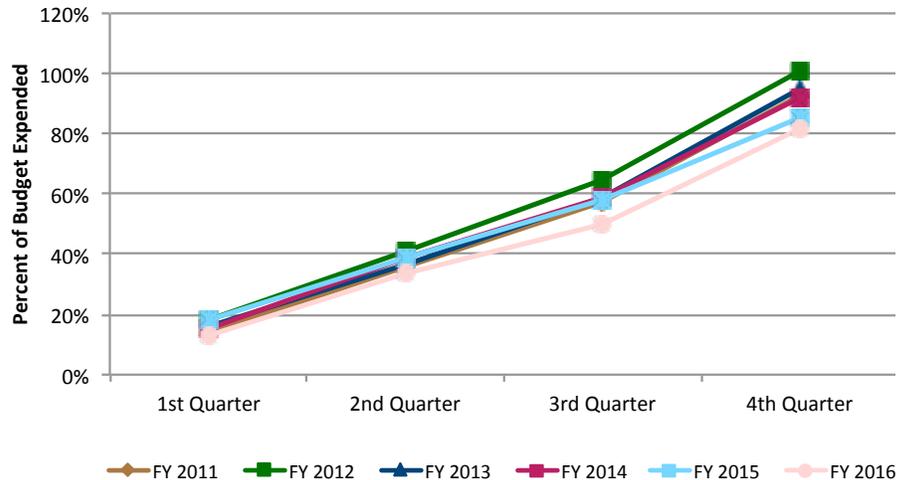
PERFORMANCE MEASURE 2.1

Percent Capital Dollars Spent as Programmed

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

In FY 2016, MDOT's capital program spending rate was lagging behind all previous years used as the benchmark. The five-year average is 89 percent of the appropriation being spent. MDOT's FY 2016 expenditure rate was 82 percent. This is largely a result of the funding changes made to MTA's FY 2016 Red and Purple Line Budgets. If you exclude those projects MDOT's FY16 capital expenditure rate was 93 percent.

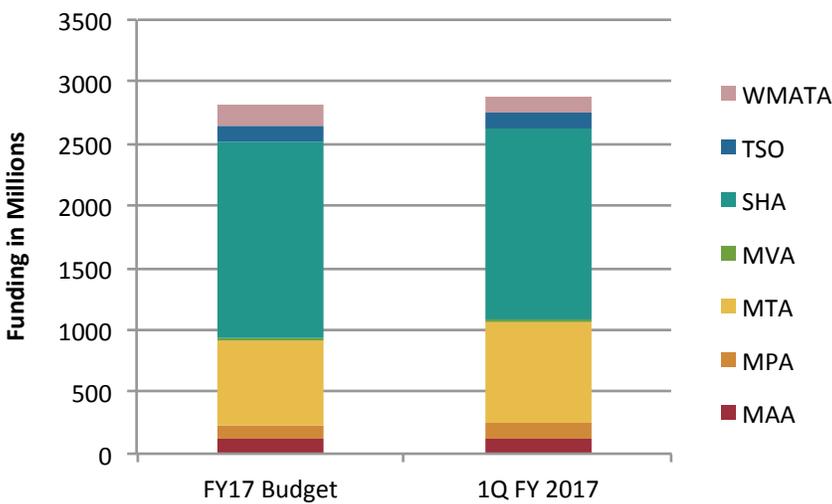
5 Yr Capital Program Expenditure Rate Trend Line - State & Federal



PERFORMANCE MEASURE 2.1

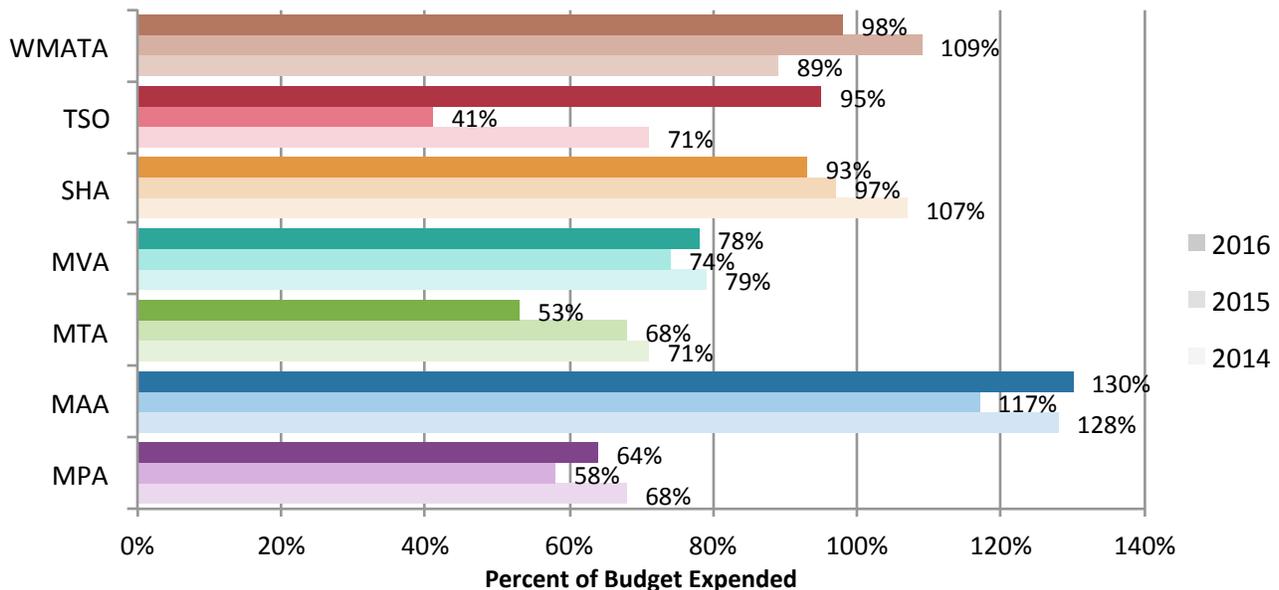
Percent Capital Dollars Spent as Programmed

FY17 Budget vs. 1Q Programmed – Federal & State



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

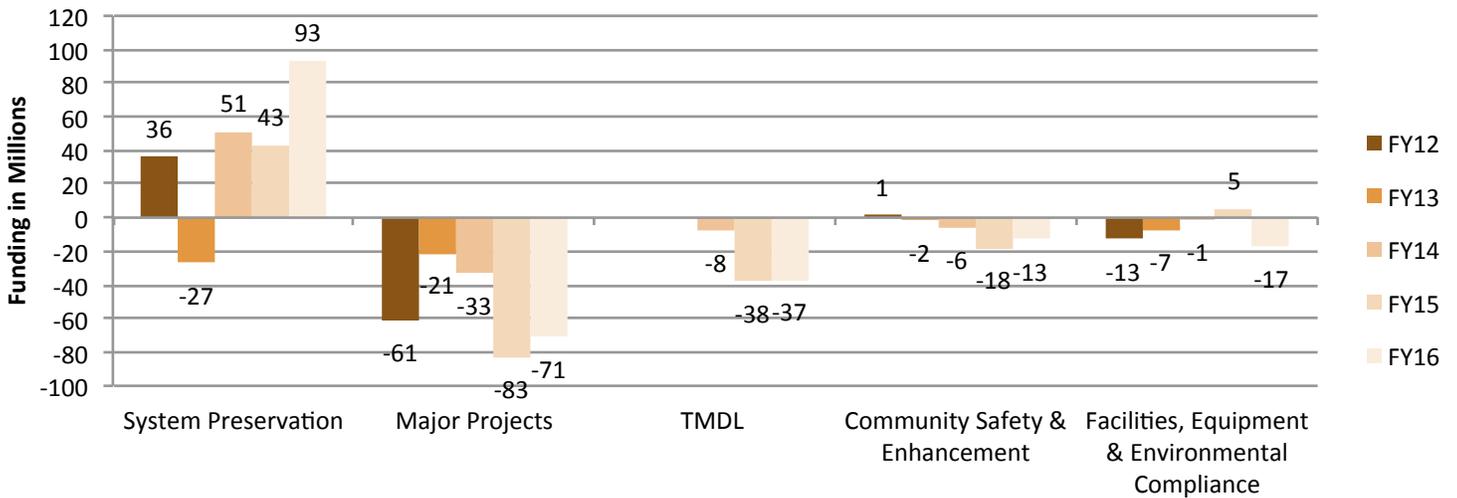
3 Yr Expenditure Rate by Mode at Year End - State & Federal



PERFORMANCE MEASURE 2.1

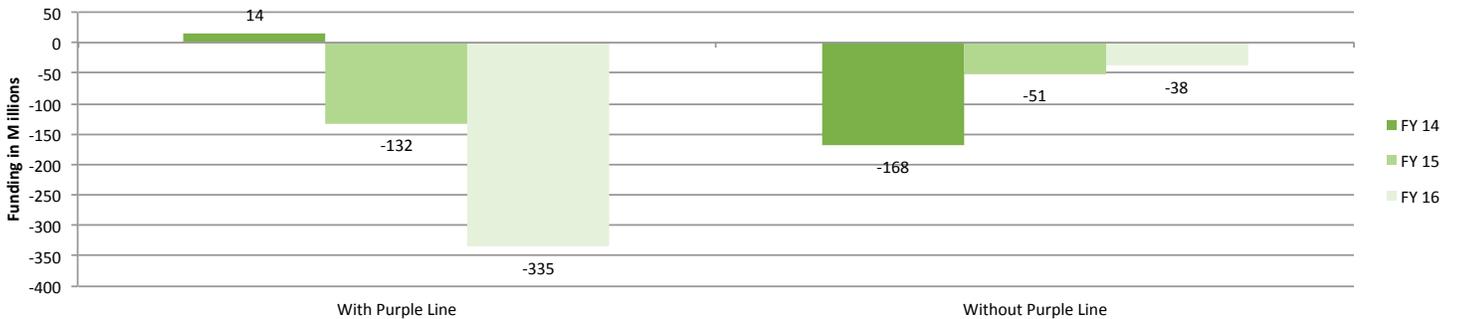
Percent Capital Dollars Spent as Programmed

SHA – Spending Performance by Programs



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

MTA – Purple Line Impact on Expenditure Rate



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

TANGIBLE RESULT DRIVER:

Corey Stottleyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Dan Favarulo
The Secretary's Office (TSO)

PURPOSE OF MEASURE:

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

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

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

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 2.2

Percent of Projects Leveraging Other Funding Sources

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

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

As a Percentage of Projects

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

As a Percentage of Funding

Source	Funding	% of Funding
Total	\$15,817,983	100%
State	\$9,647,987	61%
Federal	\$4,956,488	31%
Other	\$1,213,508	8%

TANGIBLE RESULT DRIVER:

Corey Stottlemyer

The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Amber Harvey

Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

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

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

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

NATIONAL BENCHMARK:

*GALLUP 2015 national engagement percentages:

32 percent Engaged employees

50.8 percent not engaged

17.2 percent actively disengaged

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

PERFORMANCE MEASURE 2.3

Employee Engagement

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

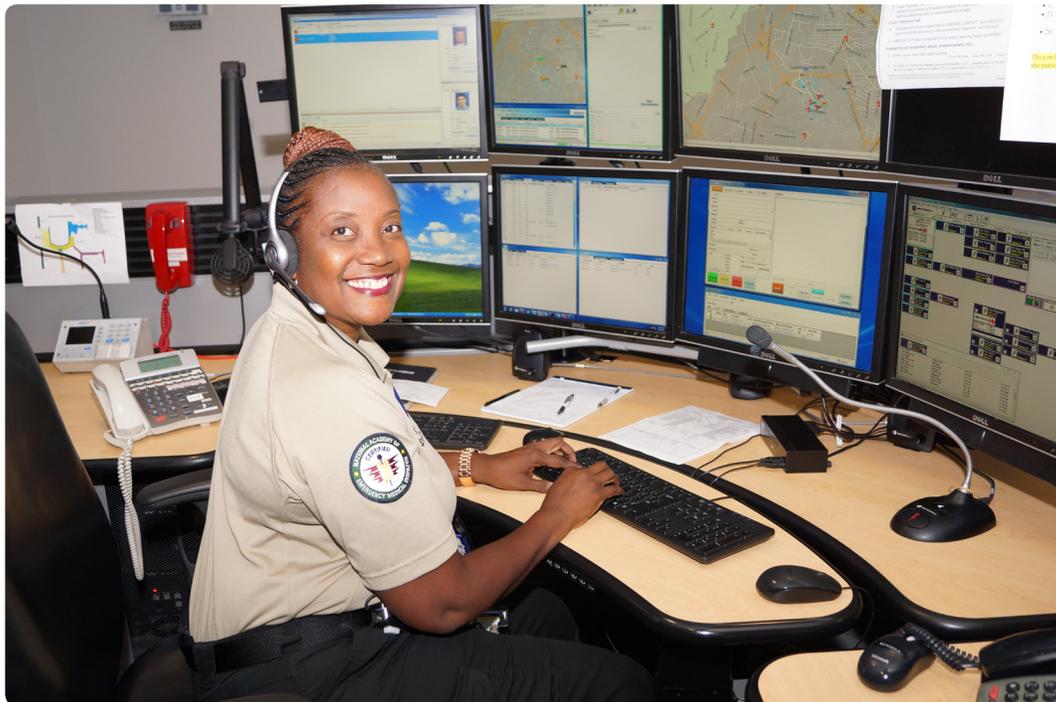
MDOT's TBUs acknowledge the importance of employee engagement initiatives. Recent practices elicit workforce feedback through the use of employee surveys. Table 1.1 (MDOT Employee Surveys at a Glance) shows an overview of these efforts. Throughout the TBUs, fluctuations in staff and financial limitations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

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

PERFORMANCE MEASURE 2.3 Employee Engagement

Table 1.1 MDOT Employee Surveys at a Glance

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



TANGIBLE RESULT DRIVER:

Corey Stottleyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Amber Harvey
Maryland Transportation Authority (MDTA)

PURPOSE OF MEASURE:

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

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

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

NATIONAL BENCHMARK:

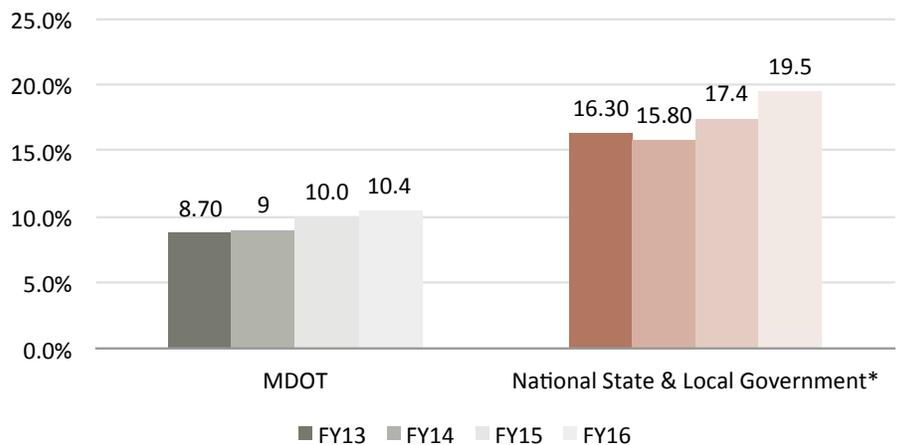
U.S. Department of Labor (DOL) Bureau of Labor Statistics for U.S. State and Local Governments

PERFORMANCE MEASURE 2.4 Employee Turnover Rate

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

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

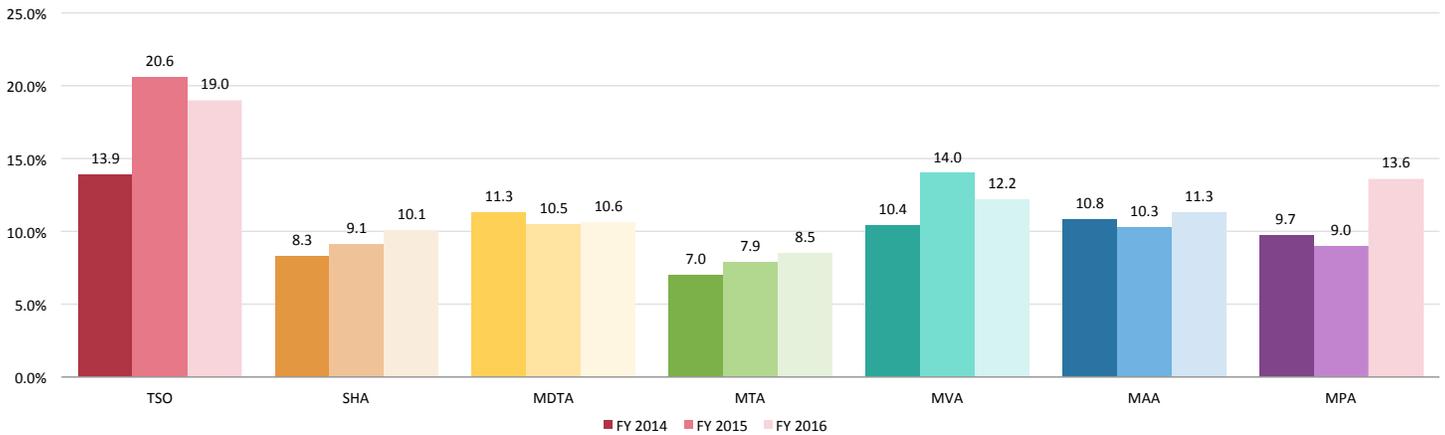
Annual Turnover Rate Comparison



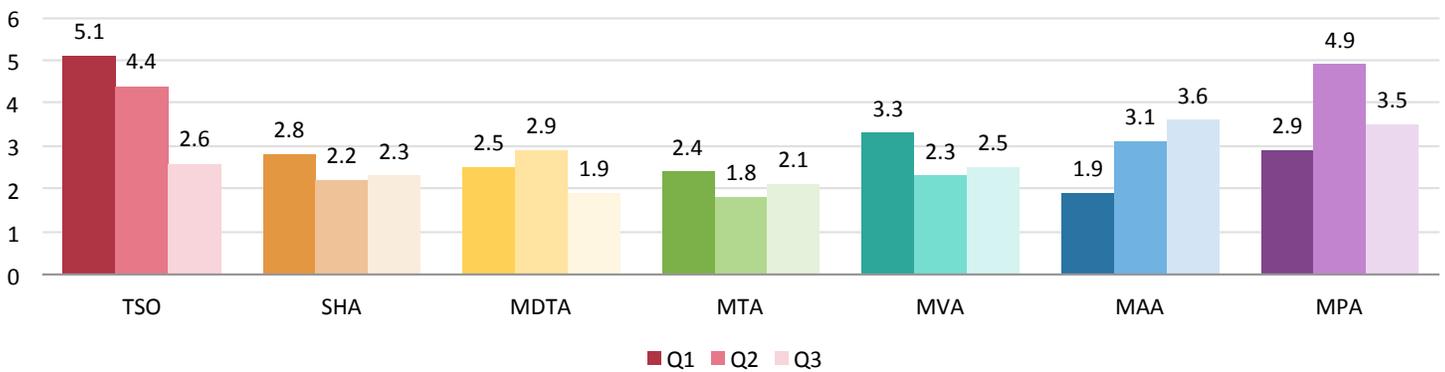
PERFORMANCE MEASURE 2.4 Employee Turnover Rate

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

Annual Turnover by TBU



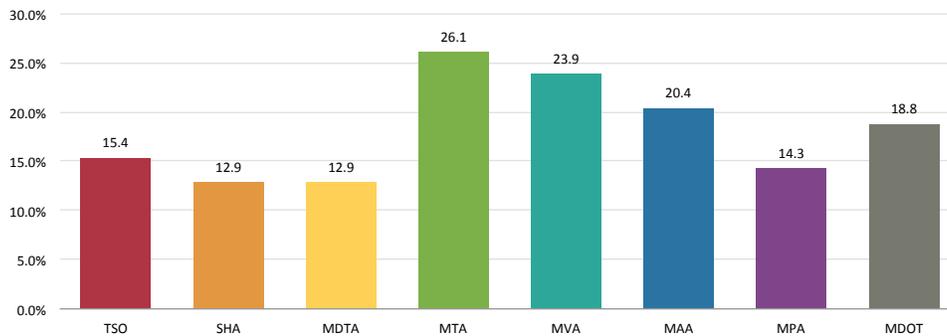
MDOT Turnover by TBU (Q1-Q3)



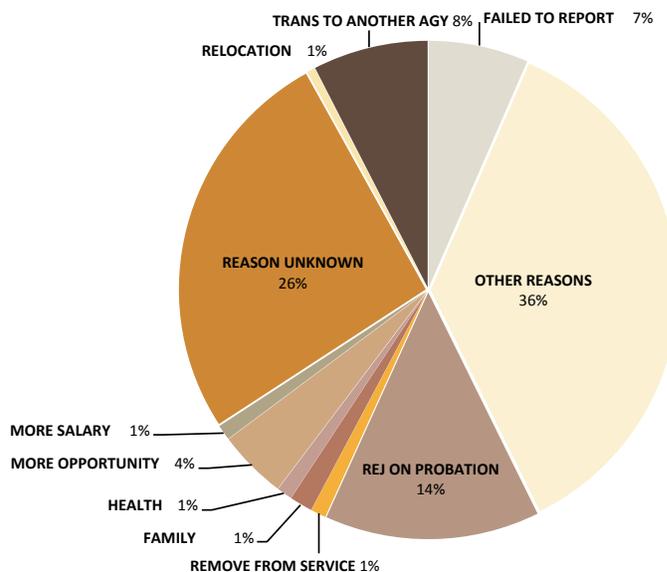
PERFORMANCE MEASURE 2.4 Employee Turnover Rate

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

FY16 Separations Within One Year of Hire



FY16 Separation Reasons (Within 1 Yr of Hire)



TANGIBLE RESULT DRIVER:

Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Deborah Hammel
State Highway Administration (SHA)

PURPOSE OF MEASURE:

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

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

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

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 2.5

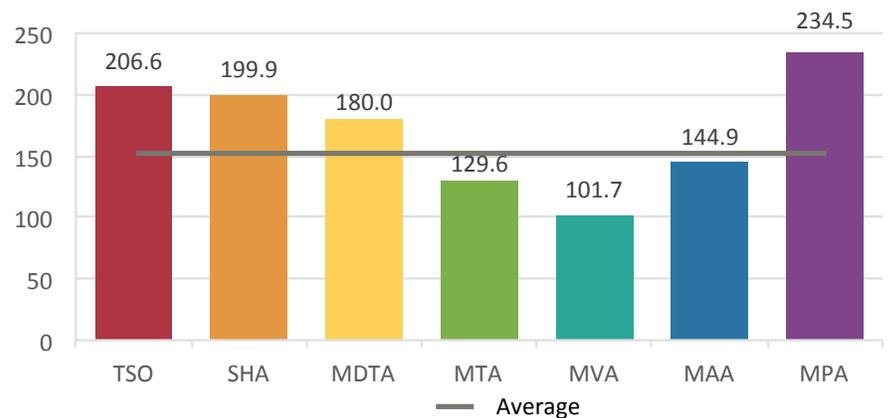
Time to Fill Vacancies

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

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

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

Average Days to Fill by TBU



TANGIBLE RESULT DRIVER:

Corey Stottlemeyer

The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Bill Bertrand

State Highway Administration (SHA)

PURPOSE OF MEASURE:

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

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

Data will be collected when the business units conduct annual fixed asset physical inventories.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 2.6

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

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

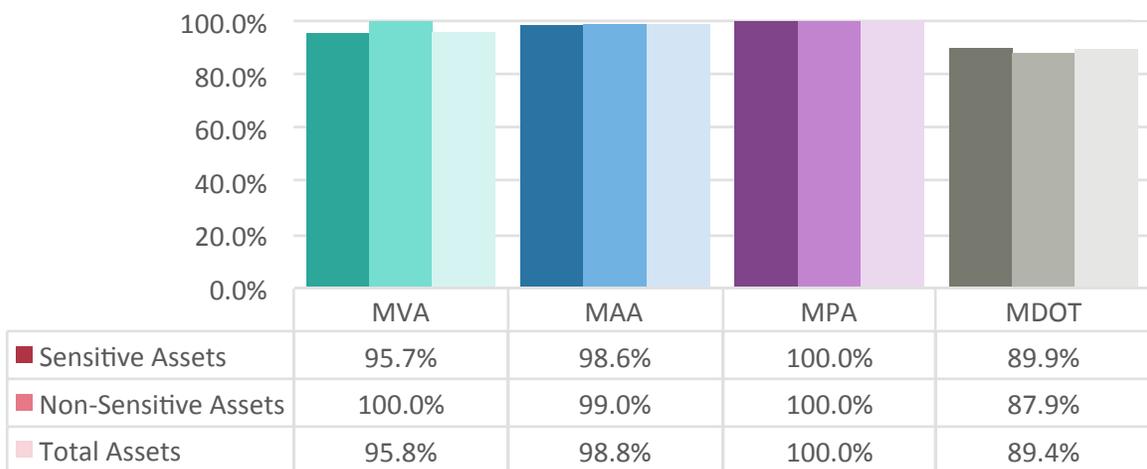
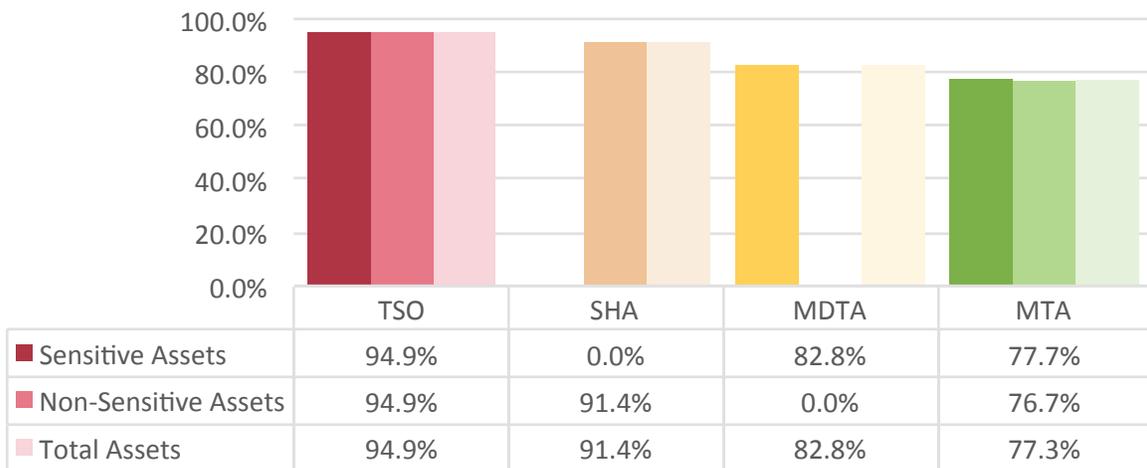
A regularly-conducted physical inventory of fixed assets ensures accurate information for the management of assets and discourages fraud.

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

PERFORMANCE MEASURE 2.6

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

Assets Measured - 2015



TANGIBLE RESULT DRIVER:

Corey Stottlemeyer

The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Tony Moore

Maryland Port Administration (MPA)

Nicole Katsikides

State Highway Administration (SHA)

PURPOSE OF MEASURE:

Provide an overview which shows how TBUs monitor asset management activities.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

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

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 2.7

Managing Capital Assets

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

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

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

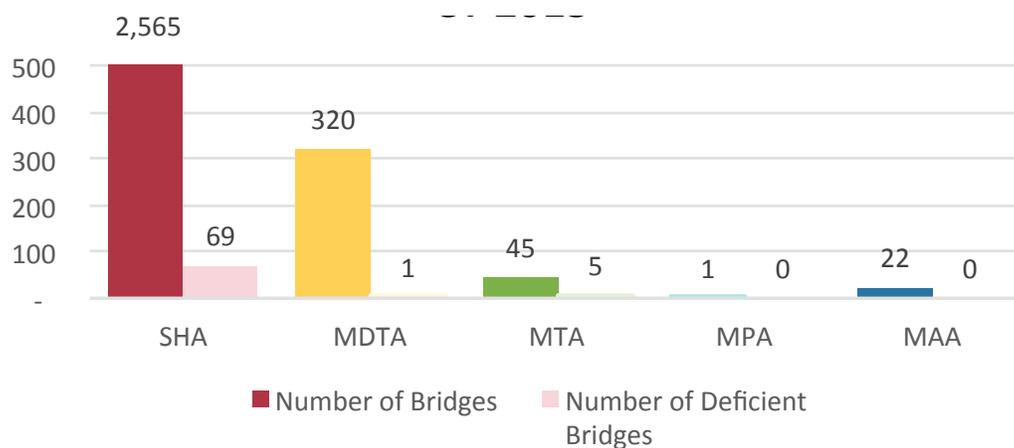
MTA monitors rail conditions for MTA Metro and Light Rail systems using TERM Lite evaluation software to evaluate guideway, track work and special structures. Evaluation will occur during an annual asset inventory.

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

PERFORMANCE MEASURE 2.7 Managing Capital Assets

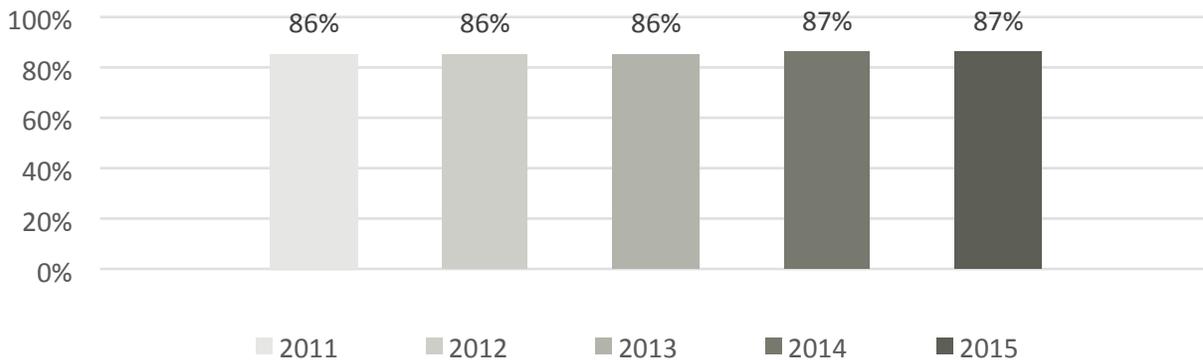
TBU	Active Asset Mgt	Criteria Basis	Assets Managed	Inspection Intervals	Performance Measures
Multiple	Yes	Bridge condition	Structurally deficient bridges	Annual	2.7a - % of structurally deficient bridges
MTA	Yes	Rail condition	Light and heavy rail	Annual	2.7c - % of MTA owned rail in good quality based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

2.7A – Number of Structurally Deficient Bridges CY 2015*



PERFORMANCE MEASURE 2.7 Managing Capital Assets

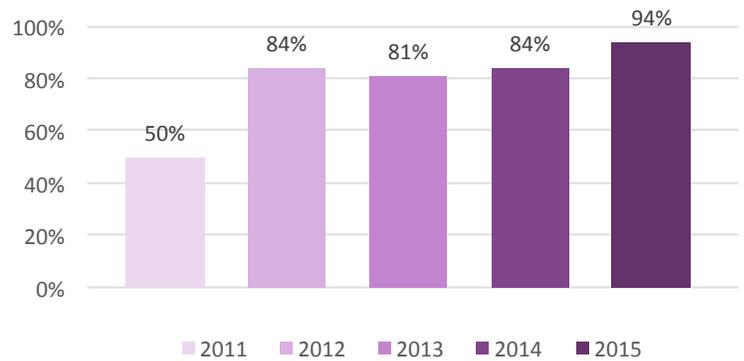
2.7B – Percent of SHA and MDTA Roadway Miles with Acceptable (Smooth) Rides



2.7C – Rating of Rail in “Good” Condition

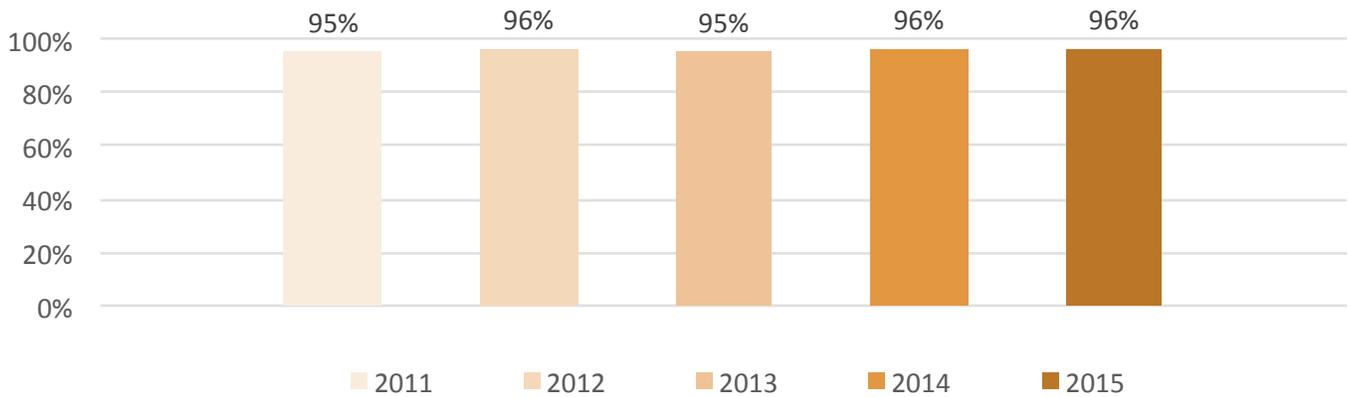


2.7D – Percent of Bay Channel Inspected

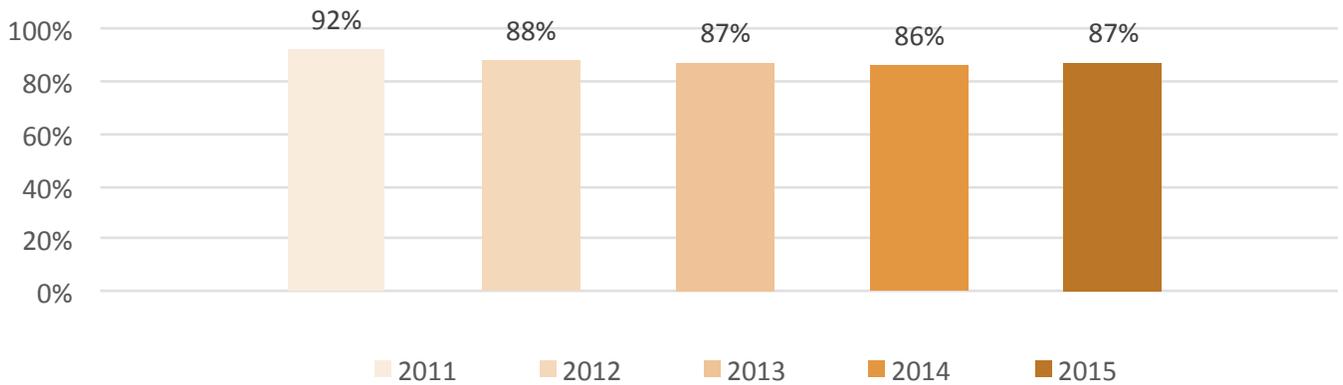


PERFORMANCE MEASURE 2.7 Managing Capital Assets

2.7E – Percent of Interstate Pavement in “Acceptable” Condition



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



TANGIBLE RESULT DRIVER:

Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Pretam Harry
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

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

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

Focus reports MDOT wide showing all active BPO for the fiscal year.

NATIONAL BENCHMARK:

N/A

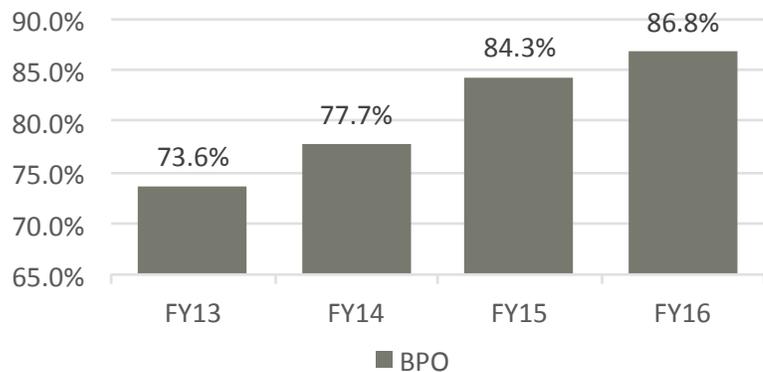
PERFORMANCE MEASURE 2.8

Percent of Procurement on Time and on Budget

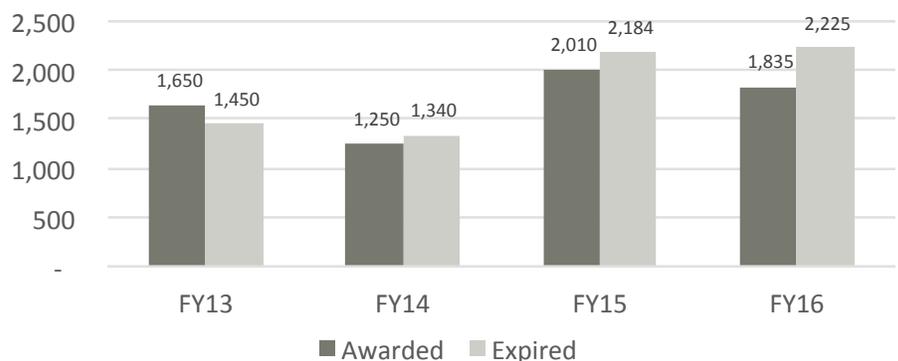
The purpose of this measure is to encourage all managers to proactively monitor and manage each of their procurements to make sure that they are in line with the project and budget in an effort to improve overall contracting efficiencies. Over time, managers will do a better job at setting timelines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

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

Percent of Blanket Purchase Orders (BPO) Expired



Number of Blanket Purchase Order (BPO) Awards and Expires



TANGIBLE RESULT DRIVER:

Corey Stottlemyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Pretam Harry
Motor Vehicle Administration (MVA)

PURPOSE OF MEASURE:

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

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

MDOT wide showing active unanticipated contract modifications equal to or greater than \$1 million.

NATIONAL BENCHMARK:

N/A

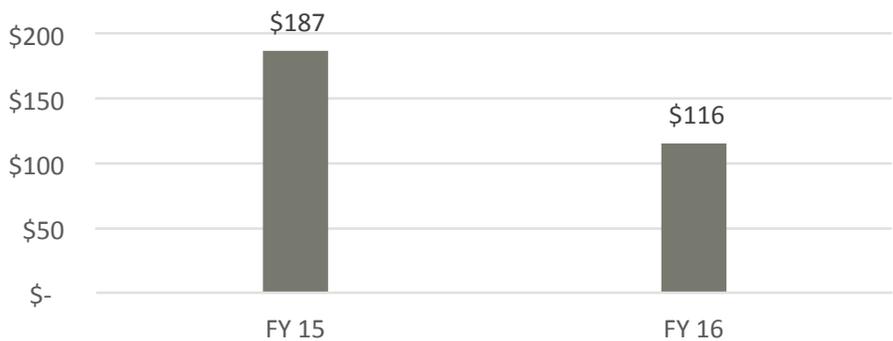
PERFORMANCE MEASURE 2.9

Percent and Value of Unanticipated Contract Modifications

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

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

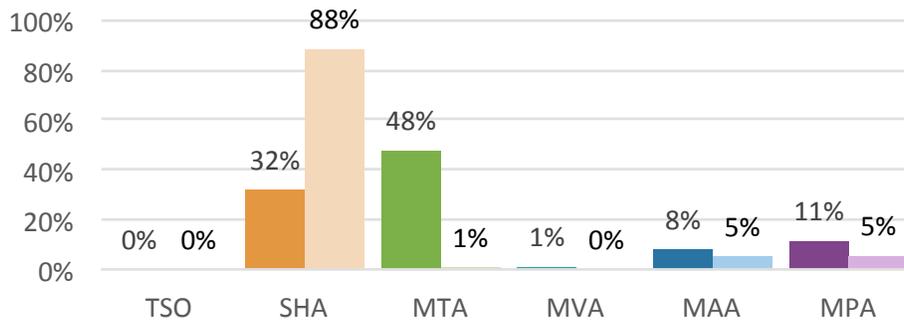
Value of Unanticipated Contract Modifications in Millions of Dollars



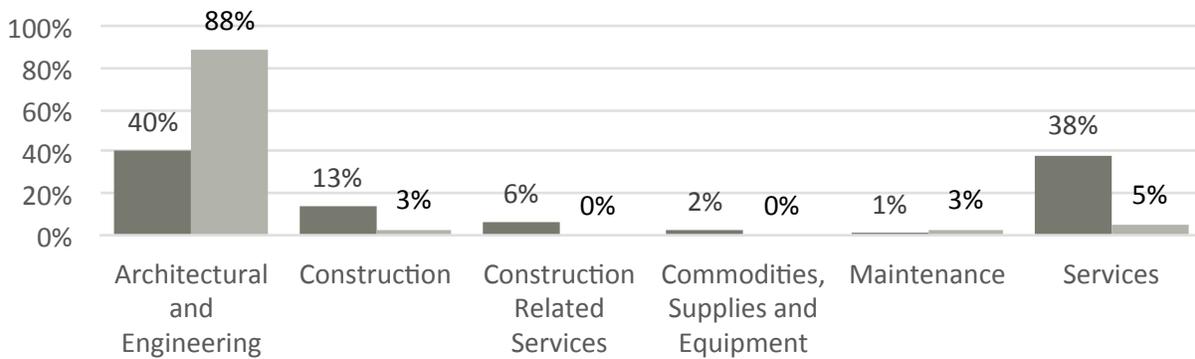
PERFORMANCE MEASURE 2.9

Percent and Value of Unanticipated Contract Modifications

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



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



TANGIBLE RESULT DRIVER:

Corey Stottleyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Laura Getty
Maryland Transit Administration (MTA)

PURPOSE OF MEASURE:

To understand how procurement competition impacts MDOT resources

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

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

NATIONAL BENCHMARK:

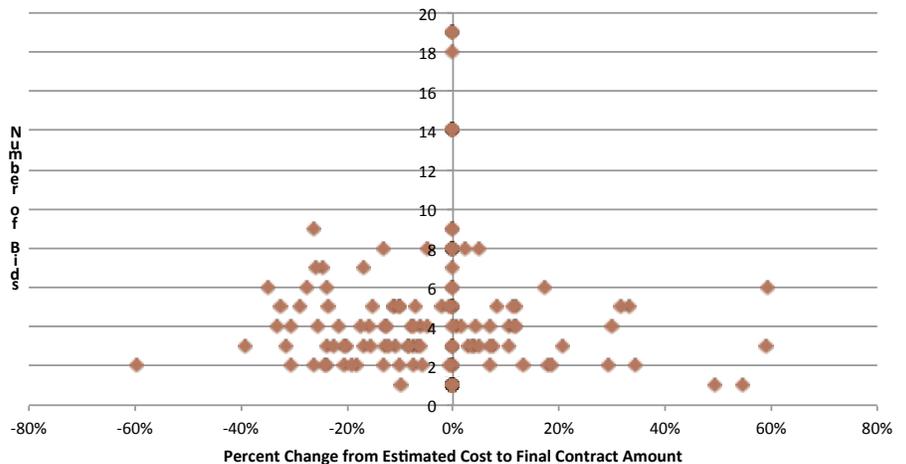
N/A

PERFORMANCE MEASURE 2.10

Relationship Between Procurement Competition and Cost

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

Percent Change from Estimated Cost to Final Contract Amount



TANGIBLE RESULT DRIVER:

Corey Stottlemeyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Patrick Bradley
Maryland Aviation Administration

PURPOSE OF MEASURE:

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

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

Information collected from TBU audit databases.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 2.11

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

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

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

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

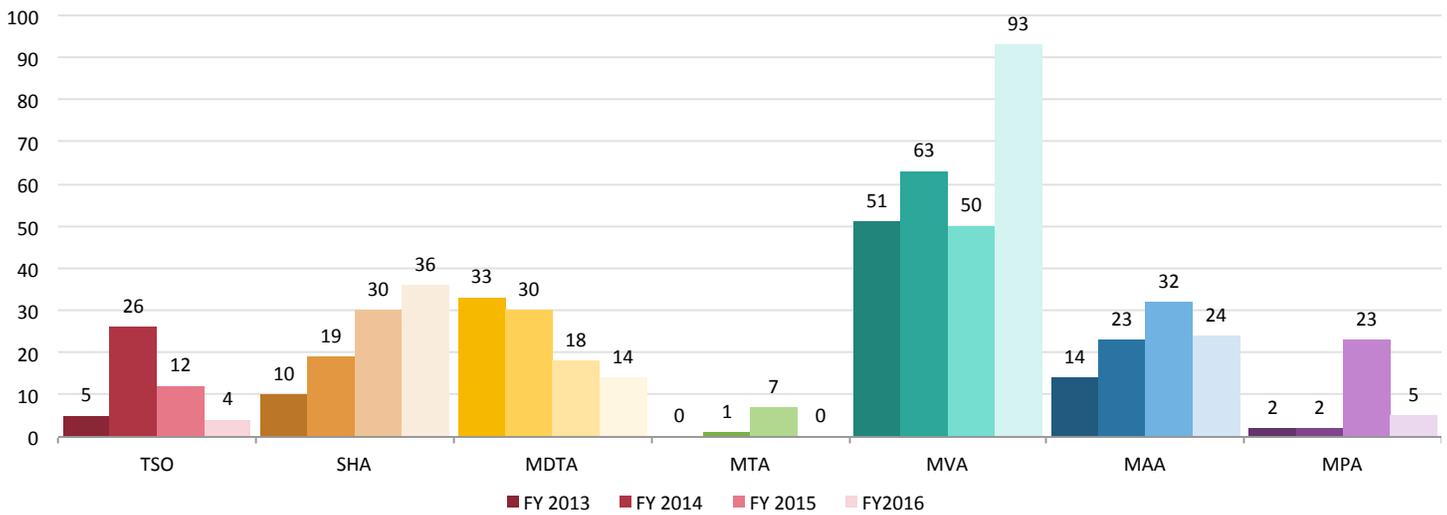
The materials and supplies management repeat audit findings include such items as segregation of duties, access to storeroom, non-signed receipts, perpetual inventory records not being accurate, documentation issues and inventory turning over less than three times per year.

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

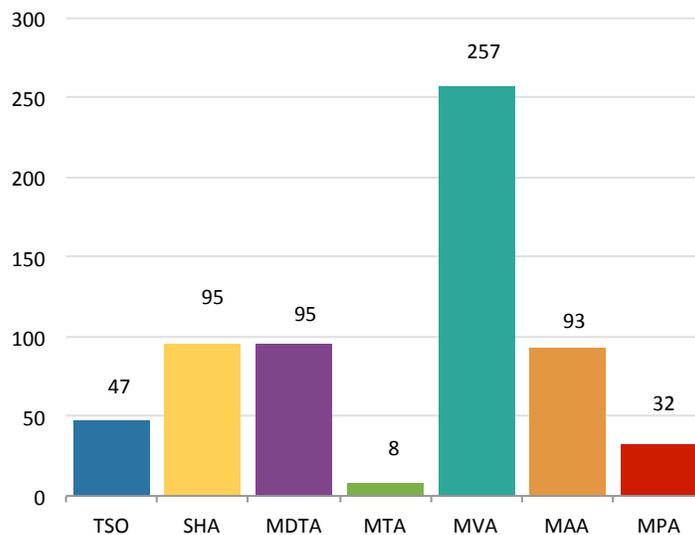
PERFORMANCE MEASURE 2.11

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

Number of Internal Audit Findings



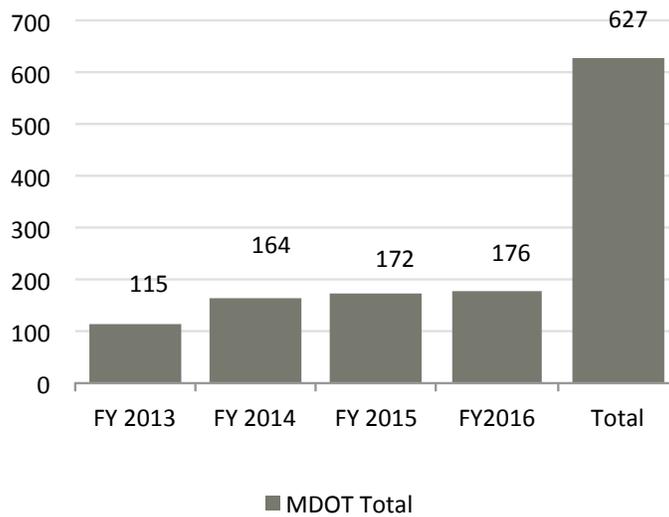
Number of Total Internal Audit Findings by TBU for FY13-16



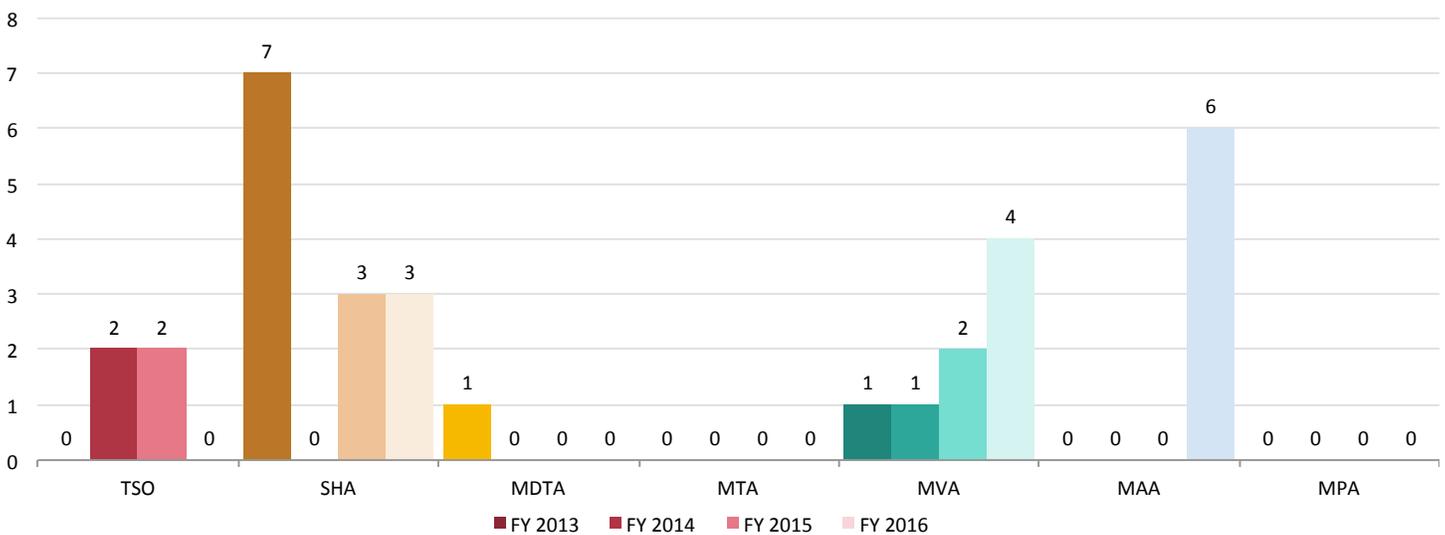
PERFORMANCE MEASURE 2.11

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

Trend in Total Internal Audit Findings



Number of Internal Audit Repeat Findings



TANGIBLE RESULT DRIVER:

Corey Stottleyer
The Secretary's Office (TSO)

PERFORMANCE MEASURE DRIVER:

Patrick Bradley
Maryland Aviation Administration (MAA)

PURPOSE OF MEASURE:

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

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

Information collected from TBU audit databases.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE 2.12

Number of Legislative Repeat Audit Findings

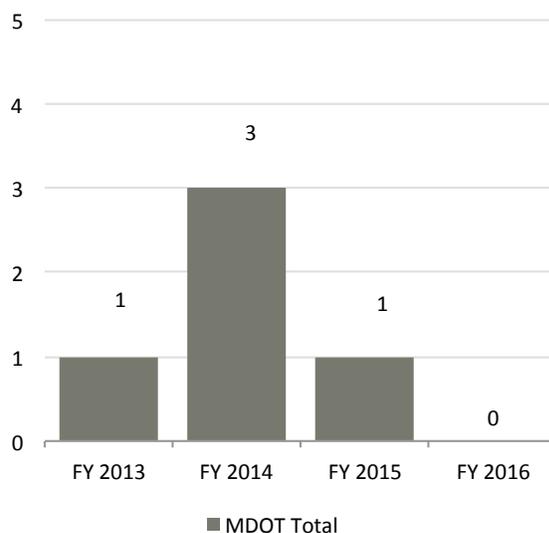
Transparent, informative, and accurate financial reporting is essential for our customers to have confidence in MDOT's ability to manage resources. Legislative audits provide an external view of our current systems and areas for improvement.

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

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

All five Legislative Repeat Audit Findings have been resolved.

Number of Legislative Repeat Audit Findings



PERFORMANCE MEASURE 2.12

Number of Legislative Repeat Audit Findings

Number of OLA Audit Repeat Findings

