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:
David Fleming
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

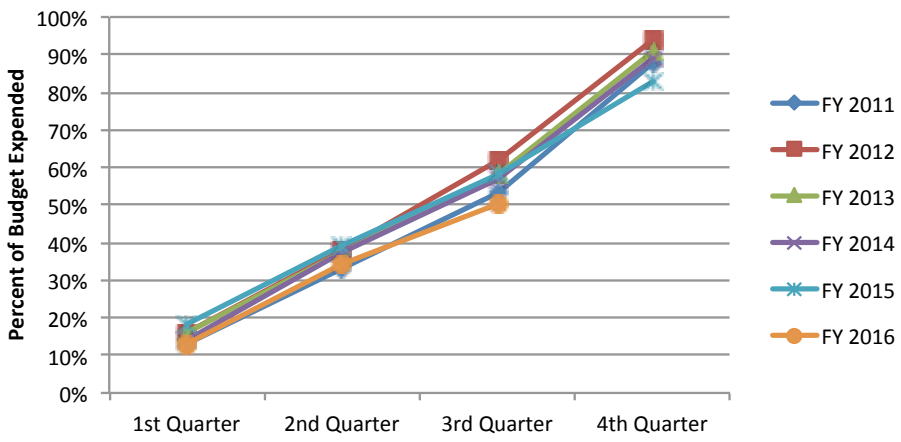
NATIONAL BENCHMARK:
N/A

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.

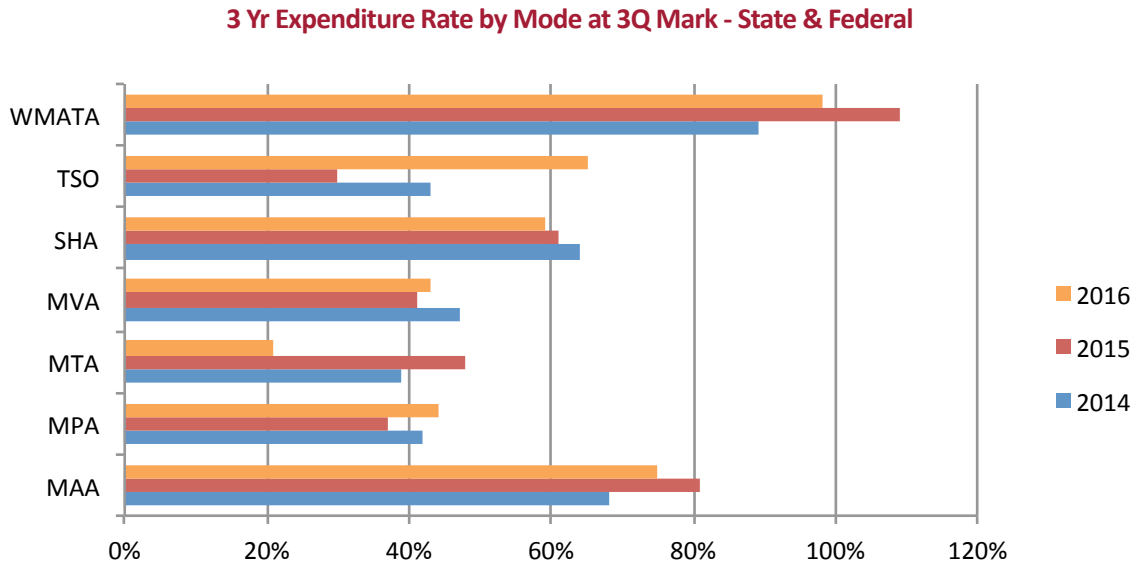
At the third quarter (3Q) FY 2016 mark, MDOT's capital program spending rate is lagging behind all previous years used as the benchmark. The five-year average is 58% of the appropriation being spent at the 3Q mark. MDOT's current FY 2016 expenditure rate at the 3Q mark is at 50%. This is largely a result of the funding changes made to MTA's FY 2016 Red and Purple Line Budgets.

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



PERFORMANCE MEASURE 2.1

Percent Capital Dollars Spent as Programmed



MTA and WMATA currently have the lowest spend percentage compared to their five-year averages. Analysis indicates the primary reason for the low rates is due more to the timing of invoice payments being recorded in the quarter rather than a lack of spending.

PERFORMANCE MEASURE 2.1
Percent Capital Dollars Spent as Programmed

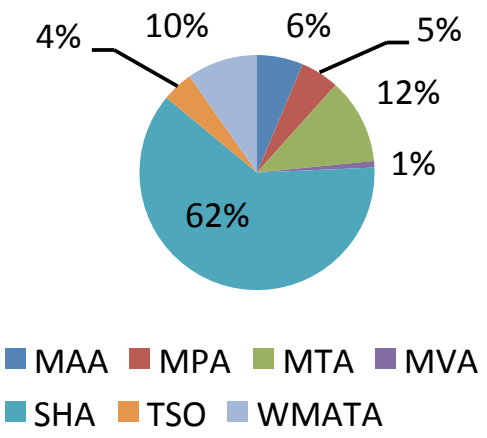
FY16 3Q Expenditures - State & Federal

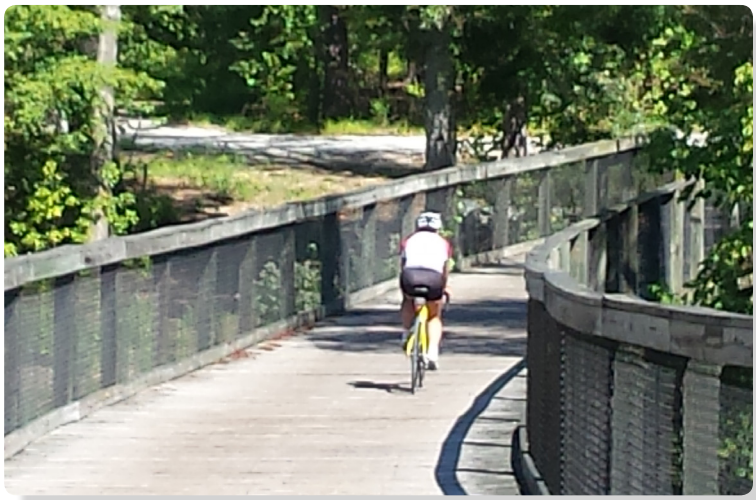
Mode	FY16 Budget	FY16 1Q Expended
MAA	$113,239,000	$84,468,696
MPA	$159,516,000	$70,412,135
MTA	$741,537,000	$156,960,897
MVA	$27,249,000	$11,825,922
SHA	1,396,243,000	$820,731,933
TSO	$87,329,000	$56,815,920
WMATA	$132,091,000	$129,659,546
TOTAL	**2,657,204,000**	**$1,330,875,049**

FY16 % Expended vs. 5-Year Average at 3Q Mark

Mode	FY16	5 Yr Avg
MAA	75%	78%
MPA	44%	40%
MTA	21%	48%
MVA	43%	35%
SHA	59%	61%
TSO	65%	33%
WMATA	98%	98%
TOTAL	**50%**	**58%**

Modal % of FY 2016 Expenditures to Date





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

PERFORMANCE MEASURE DRIVER:
David Fleming
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% 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
Projects using 10% 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%

ROVE

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% Engaged employees

50.8% not engaged

17.2% 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.

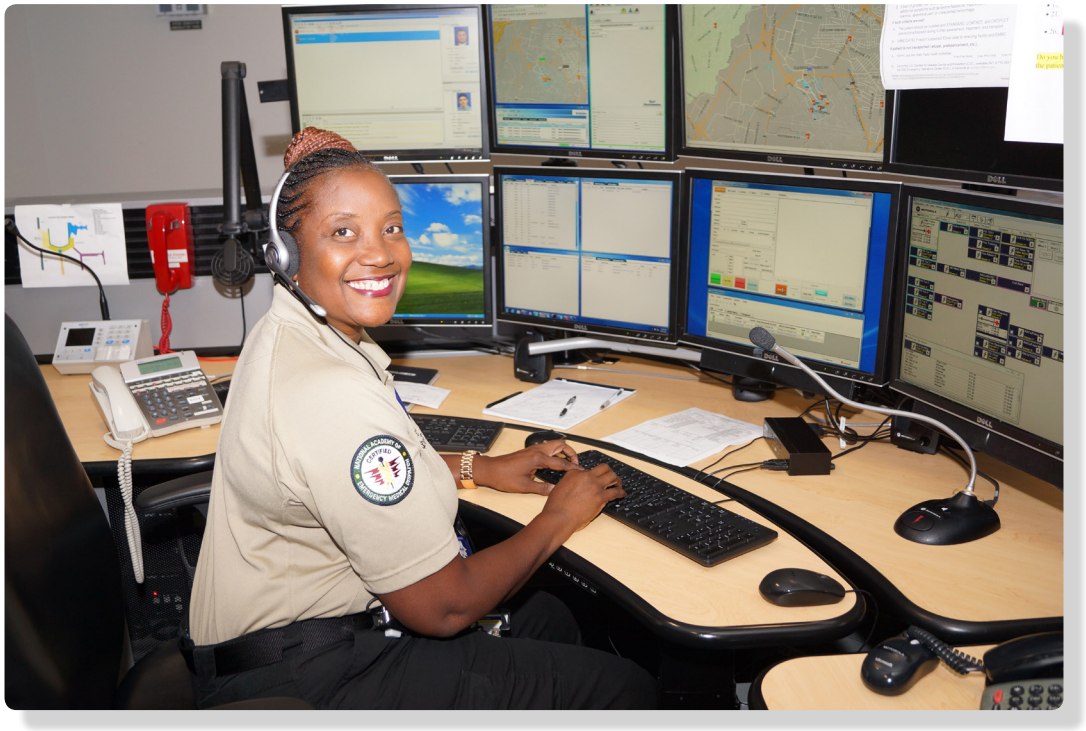
Combining talent, effort and resources under one, comprehensive, agency-wide survey would allow MDOT to ensure a systematic and consistent approach to employee engagement while avoiding overlaps and minimizing expense. By partnering with an outside entity to administer the survey, MDOT can:

- Ease employee concerns regarding anonymity;
- Provide survey access across multiple platforms and devices;
- Ensure all TBUs can actively monitor engagement activities with the same level of resources and effectiveness;
- Analyze results quickly with minimal impact to internal personnel resources, and;
- Focus internal staff on developing best practices and implementing new initiatives aimed at increasing employee satisfaction, productivity and retention.

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 Spring 2016	No	Yes TBD	Yes Feb 2016



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

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

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

FREQUENCY:
Quarterly

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

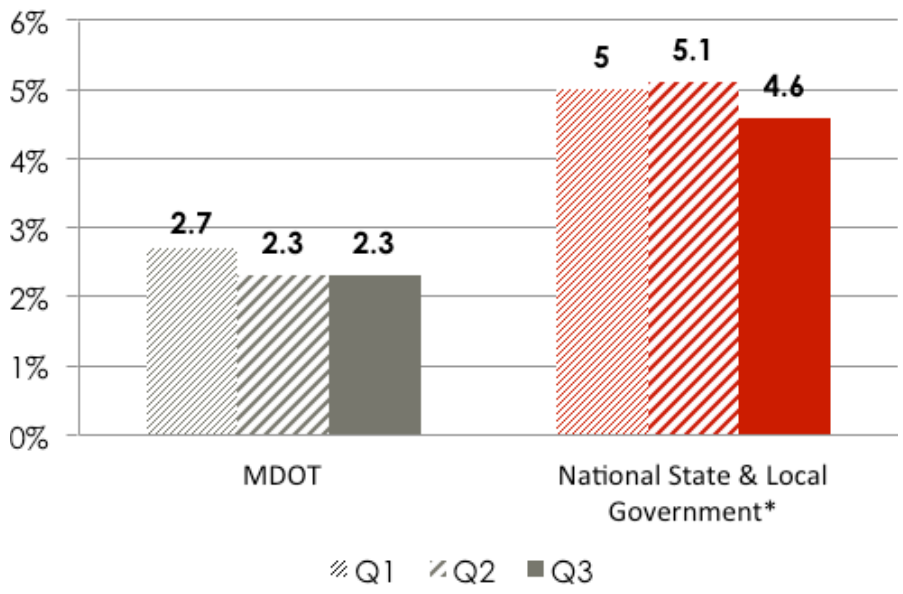
NATIONAL BENCHMARK:
U.S. Department of Labor (DOL) Bureau of Labor Statistics for U.S. State and Local Governments

PERFORMANCE MEASURE 2.4
Employee Turnover Rate

Annual employee turnover rate is the ratio of total separations, both voluntary and involuntary, compared to the average number of employees during the given timeframe, expressed as a percentage. The Human Resource Information System (HRIS) Unit in the Human Resources Division of The Secretary's Office (TSO) provided the total number of employees and total number of separations for each Transportation Business Unit (TBU) in the 1st, 2nd and 3rd quarters (Q1, Q2 and Q3) of Fiscal Year 2016 (FY16). 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 has increased slightly over the last three fiscal years while still remaining consistently below the national turnover average for state and local governments.

FY16 Employee Turnover Rate Comparison



* *Information retrieved from the U.S. Dept. of Labor, Bureau of Labor Statistics for total employee separations in U.S. State and Local Government, excluding education (seasonally adjusted)*

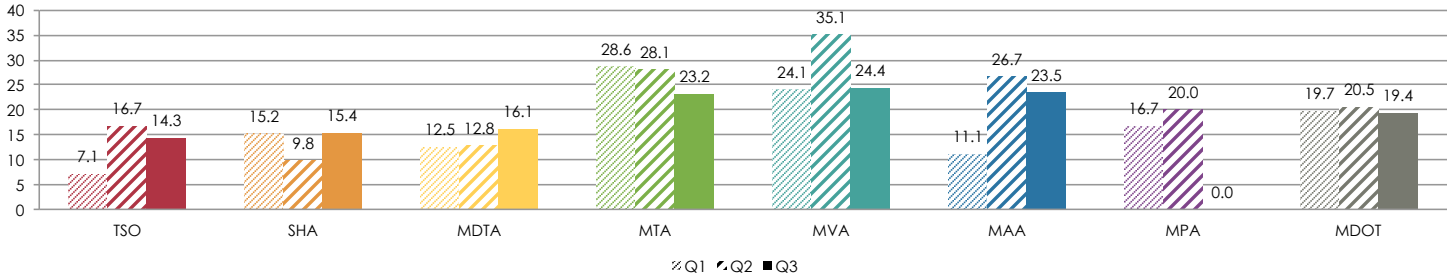
PERFORMANCE MEASURE 2.4
Employee Turnover Rate

The next table illustrates employee turnover rates for each MDOT Business Unit over the last three quarters of 2016. Most notably, a steady increase in employee turnover is reported for the Maryland Aviation Administration (MAA) while a steady decline is reported for The Secretary's Office (TSO).

FY2016 Employee Turnover by TBU

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 20% of all employee separations throughout MDOT in Q1, Q2 and Q3 for FY2016 occurred within one year from the date of hire. To better understand the causes for this trend, an analysis of the separation reason code entered into the HRIS employee personnel record can be conducted on a regular basis. Monitoring these codes may lead to identifying trends throughout the agency. In addition, employee exit interviews can also provide constructive information. A review of current exit interview practices would be greatly beneficial in identifying best practices and areas for improvement.

Separations Within One Year From 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 HR Directors

NATIONAL BENCHMARK:
N/A

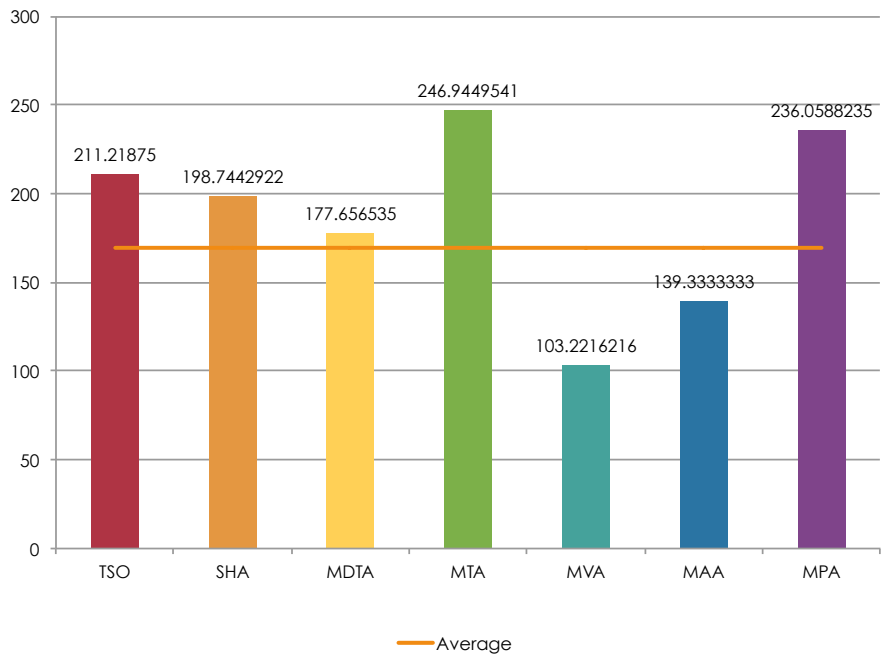
PERFORMANCE MEASURE 2.5
Time to Fill Vacancies

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.

A Process Improvement Team has been formed with Human Resources and Recruitment representatives from each TBU. The performance measure has been refined to include only Career Service vacancies since these follow a set recruitment process. Each TBU and TSO has its own method for tracking recruitment milestones and the Team is developing a standard tracking methodology development is in process to allow consistent collection of data in order to identify opportunities for improvement and develop strategies.

Average time to fill Career Services vacancies for the period January 1, 2015 through March 31, 2016 is 169.5 days.

Average Days to Fill by TBU



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

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

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

FREQUENCY:
Annually (in October)

DATA COLLECTION METHODOLOGY:
Data will be collected when the business units conduct Annual Fixed Asset Physical Inventories

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.6

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

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

Results will be presented in a bar chart that displays data for the given year by TBU. Percentages will be calculated as shown below:

$$\frac{\textit{Number of Fixed Asset Units Counted}}{\textit{Number of Fixed Asset Units Recorded in the Business Unit's Fixed Asset Inventory Records}}$$

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

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

PURPOSE OF MEASURE:
Provide an overview which shows how TBU's 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.

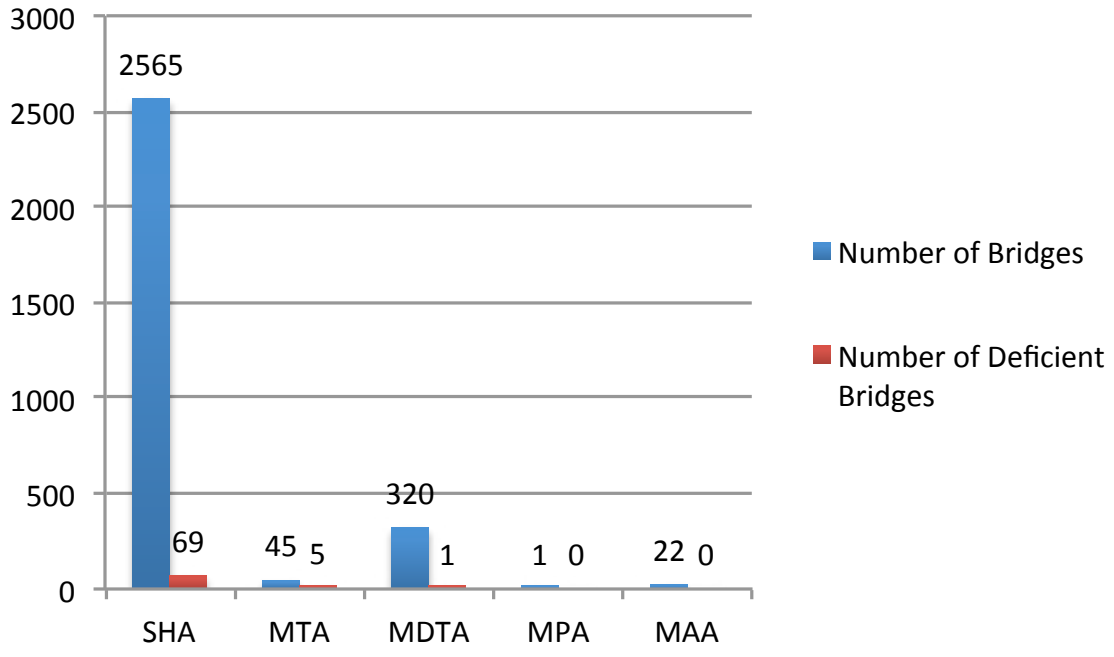
MTA monitors rail conditions for MTA Metro and Light Rail systems using TERM Lite evaluation software to evaluate guideway, track work and special structures. Evaluation will occur during an annual asset inventory.

MPA utilizes US 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

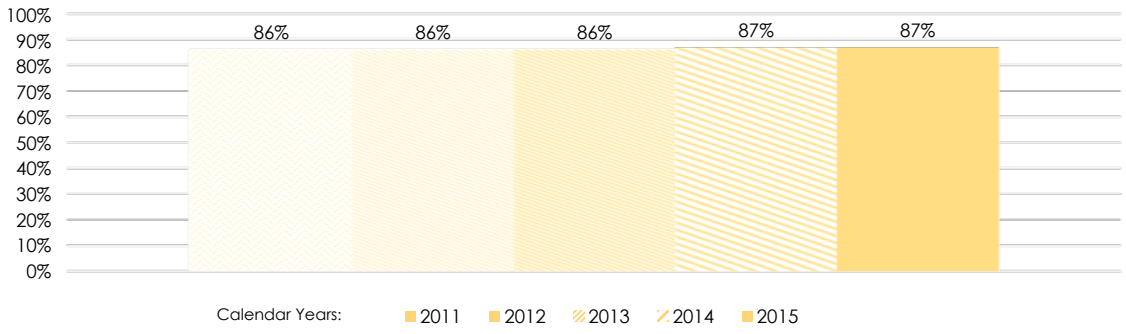
TBU	Active Asset Mgt	Criteria Basis	Assets Managed	Inspection Intervals	Performance Measures
Multiple	Yes	Bridge condition	Structurally deficient bridges	Annual	2.7a - % of structurally deficient bridges
MTA	Yes	Rail condition	Light and heavy rail	Annual	2.7c - % of MTA owned rail in good quality based 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

2.7 A: Number of Structurally Deficient Bridges CY 2015*

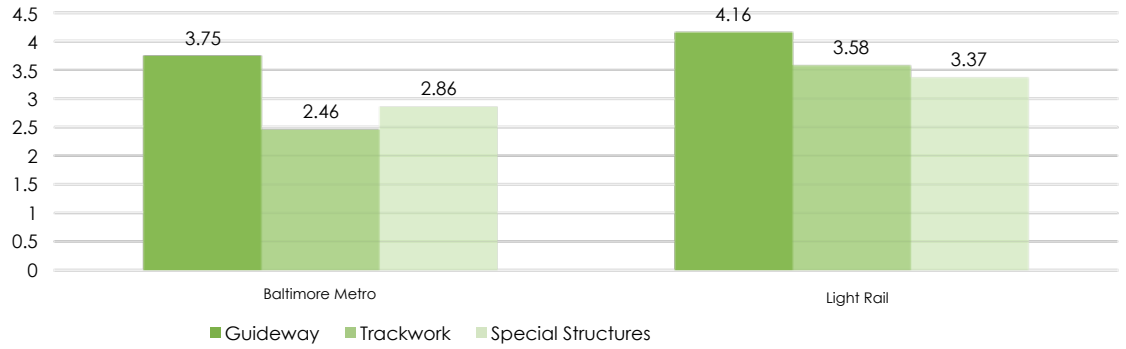


PERFORMANCE MEASURE 2.7
Managing Capital Assets

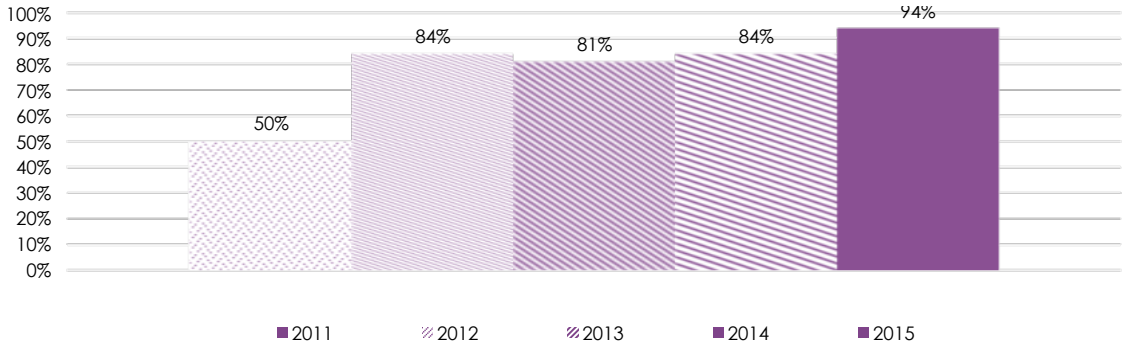
2.7 B: Percent of SHA and MDTA Roadway Miles with Acceptable (Smooth) Ride Quality



2.7 C: Rating of Rail in "Good" Condition

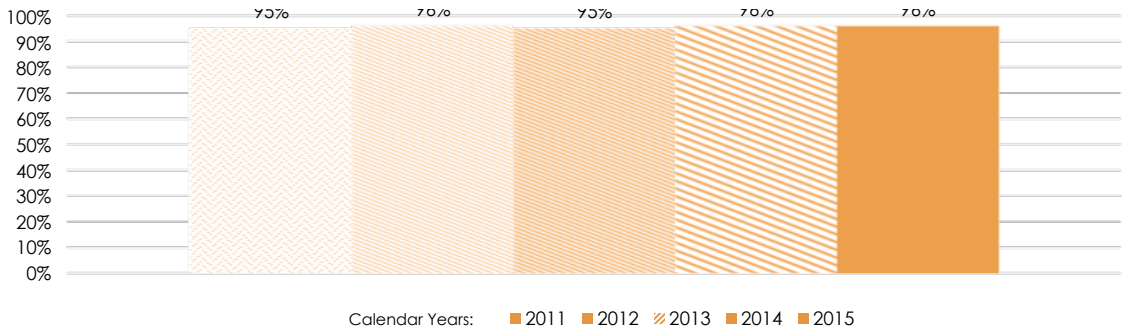


2.7 D: Percent of Bay Channel Inspected

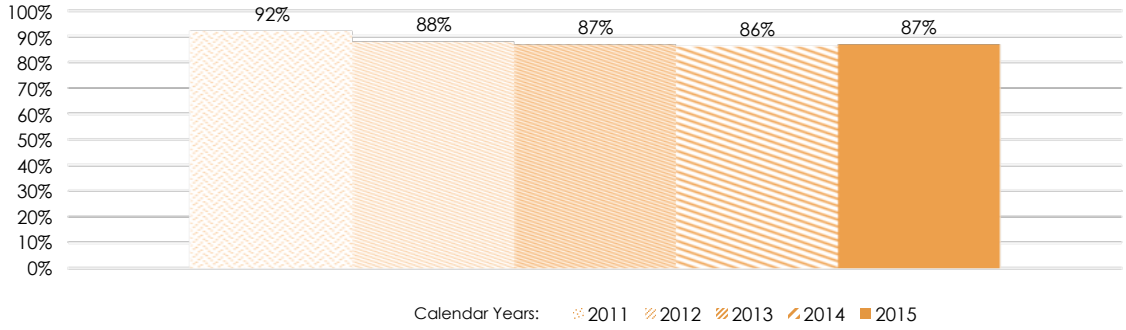


PERFORMANCE MEASURE 2.7
Managing Capital Assets

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



2.7 F: Percent of Non-Interstate NHS 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

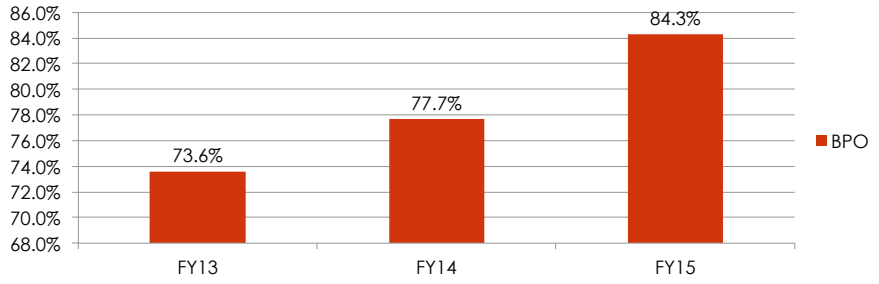
NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.8
Percent of Procurement on Time and on Budget

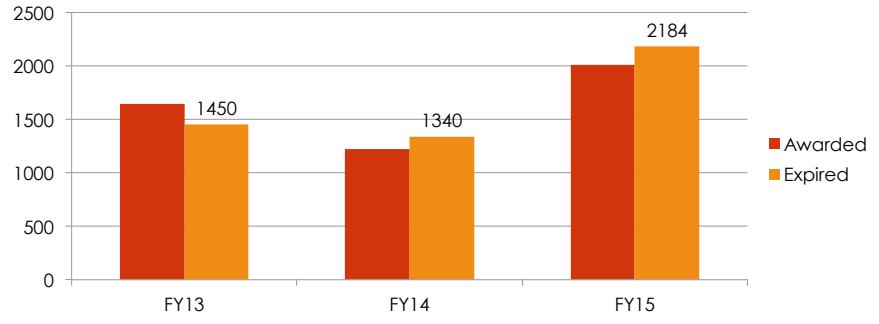
The purpose of this measure is to encourage all managers to proactively monitor and manage each of their procurements to make sure that they are in line with the project and budget in an effort to improve overall contracting efficiencies. Over time, managers will do a better job at setting timelines 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.

It is difficult to accurately define the timeline or budget for projects primarily because of the unknowns associated with projects in general. As such, if the problem is identified early and a change order is executed and approved by all parties before the deadline, the timelines and/or budgets can be adjusted accordingly.

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

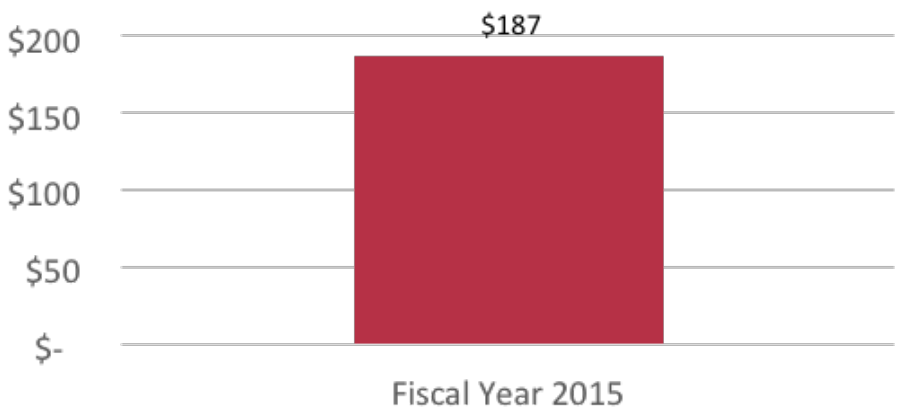
NATIONAL BENCHMARK:
N/A

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.

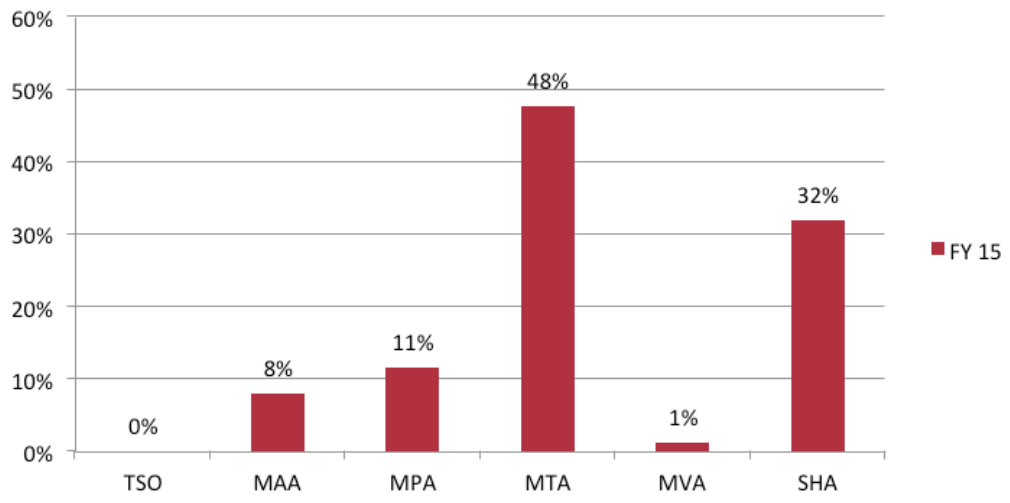
Value of Unanticipated Contract Modifications in Millions of Dollars



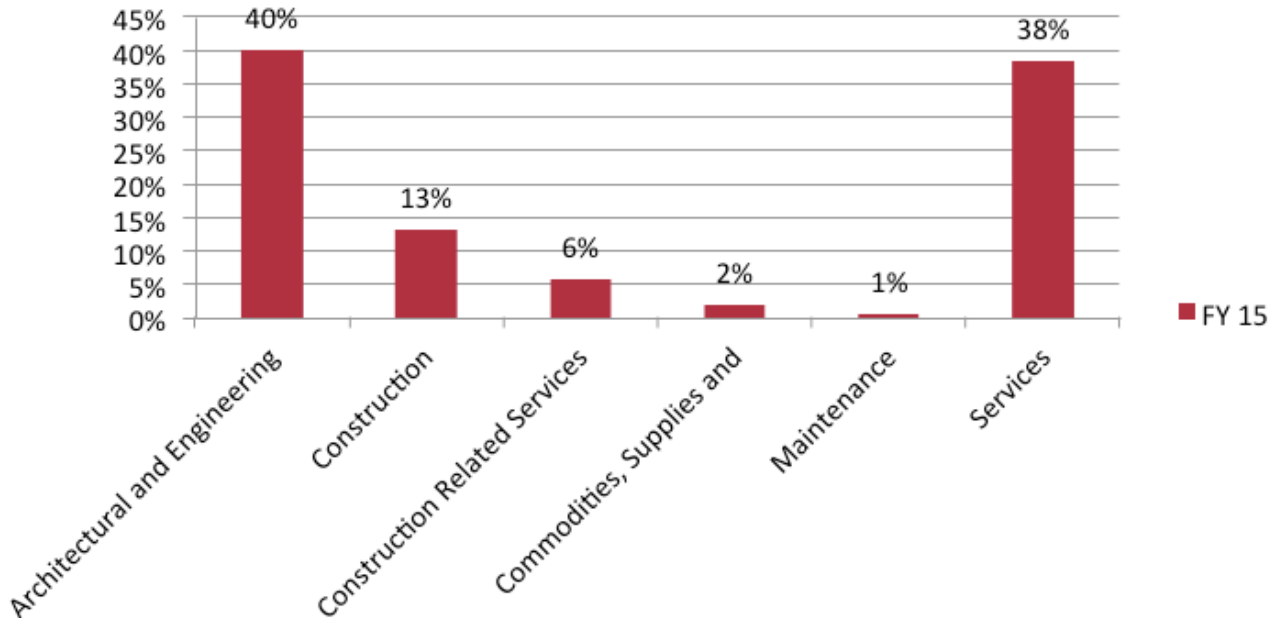
PERFORMANCE MEASURE 2.9

Percent and Value of Unanticipated Contract Modifications

Percent of Unanticipated Contract Modification Dollars Spent by TBU in Fiscal Year 2015



Percent of Unanticipated Contract Modification Dollars Spent by Category of Work in FY 2015



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

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

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

FREQUENCY:
Quarterly

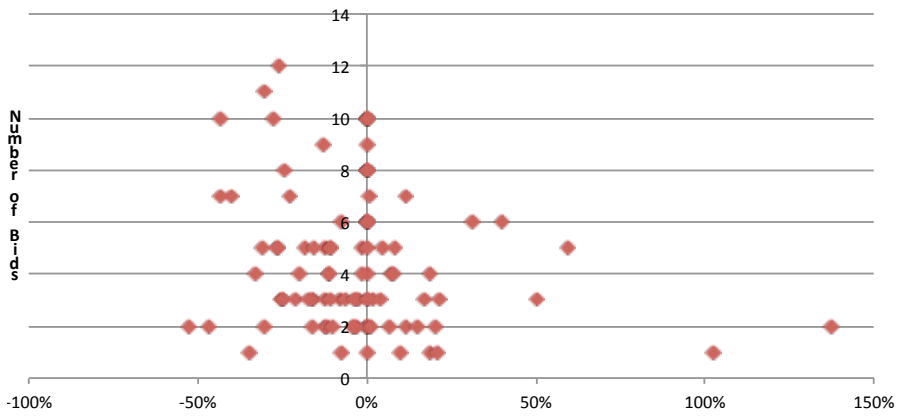
DATA COLLECTION METHODOLOGY:
Data was collected on each TBU procurement contract over $200,000 during the third quarter of FY 2016. Sole Source, Emergency, and Intergovernmental Cooperative Purchasing procurements were not included. Procurement contract ID, number of bids, estimated cost and final contract 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% - 0%). 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 Cost Estimate to Final Contract Amount



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

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.

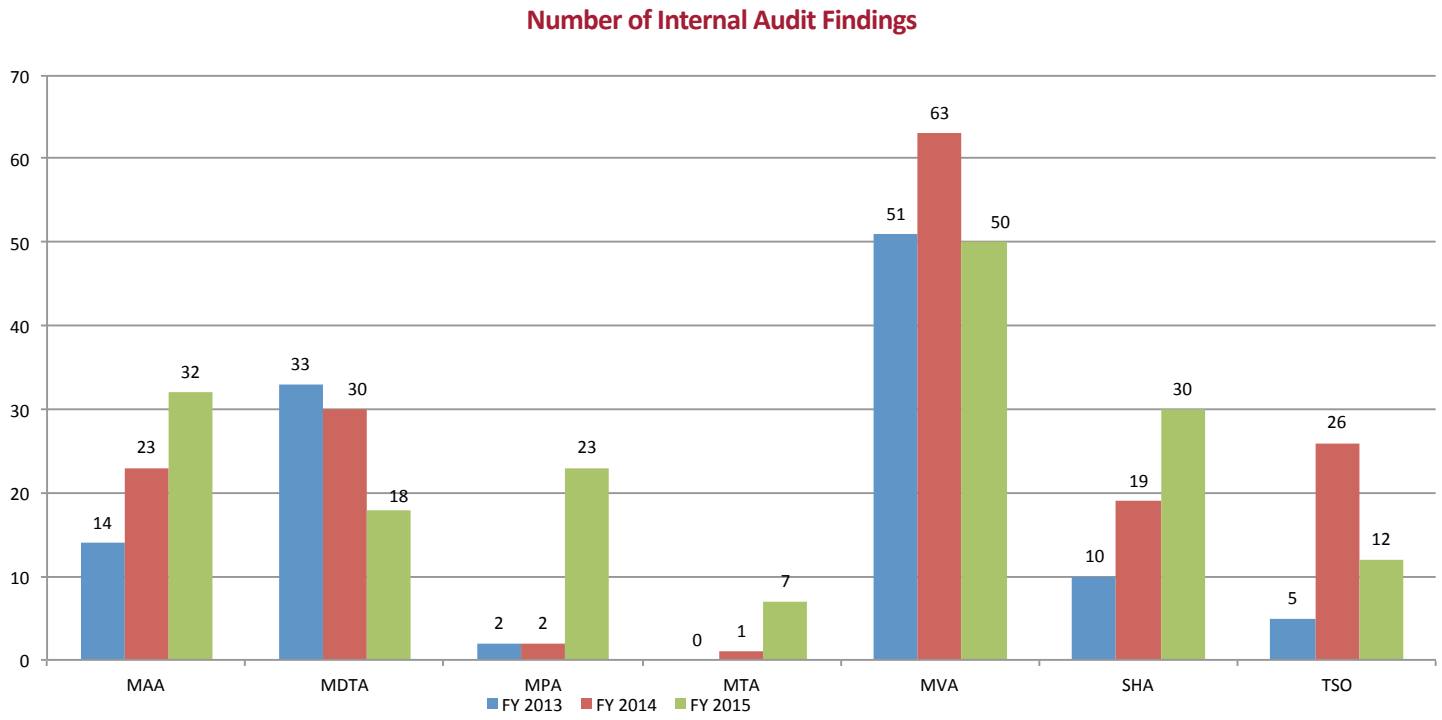
Data will be presented by TBU in the number of audit findings and repeat audit findings on an annual basis. This will encourage MDOT and each TBU to avoid audit and repeat audit findings.

In FY 2013-2015, there were 451 total Internal Findings. The number of Repeat Internal Audit Findings totaled 19 in FY 2013 – FY2015, dealing with periodic inventory reviews of sensitive items (four findings), promotional expense documentation and authorizations (five findings) and materials and supplies management (ten findings). The materials and supplies management findings include items such 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.

Six of nineteen Repeat Internal Audit Findings have been resolved. Of the remaining unresolved 13 Repeat Internal Audit Findings, 12 are made of the same six findings in two different audit years and one additional repeat finding.

PERFORMANCE MEASURE 2.11

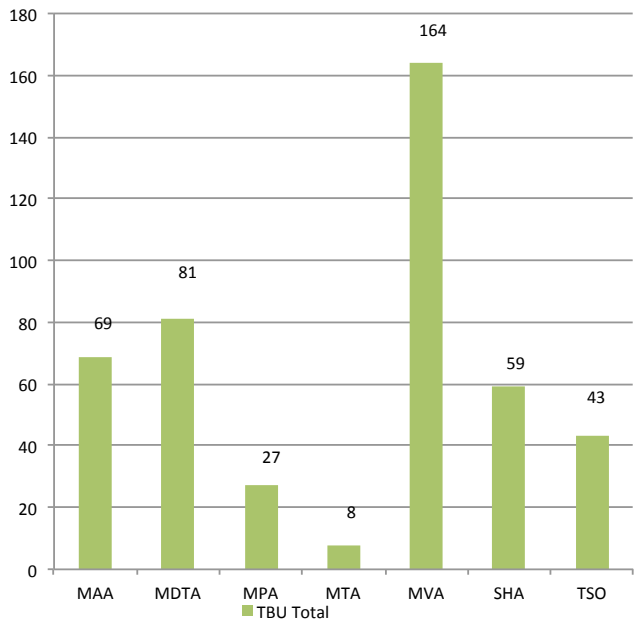
Number of Internal Audit Findings and Number of Repeat Internal Audit Findings



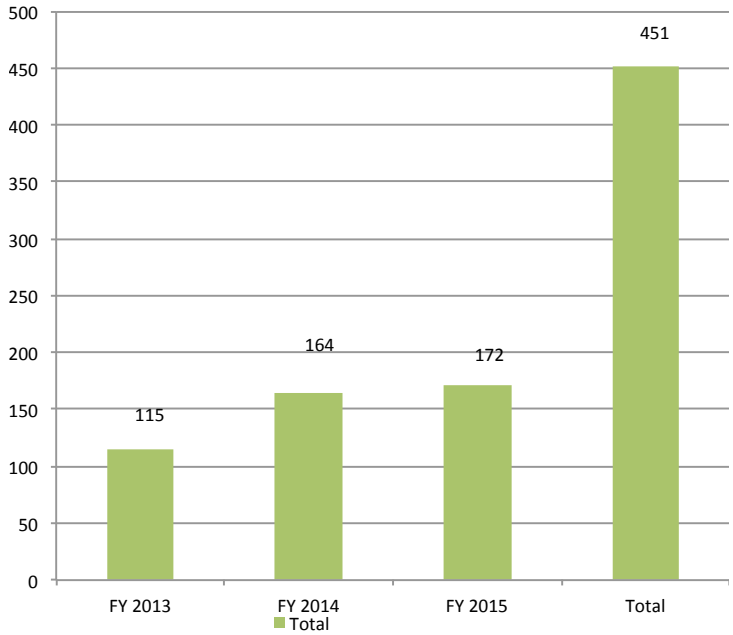
PERFORMANCE MEASURE 2.11

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

Number of Total Internal Audit Findings by TBU for FY13-15

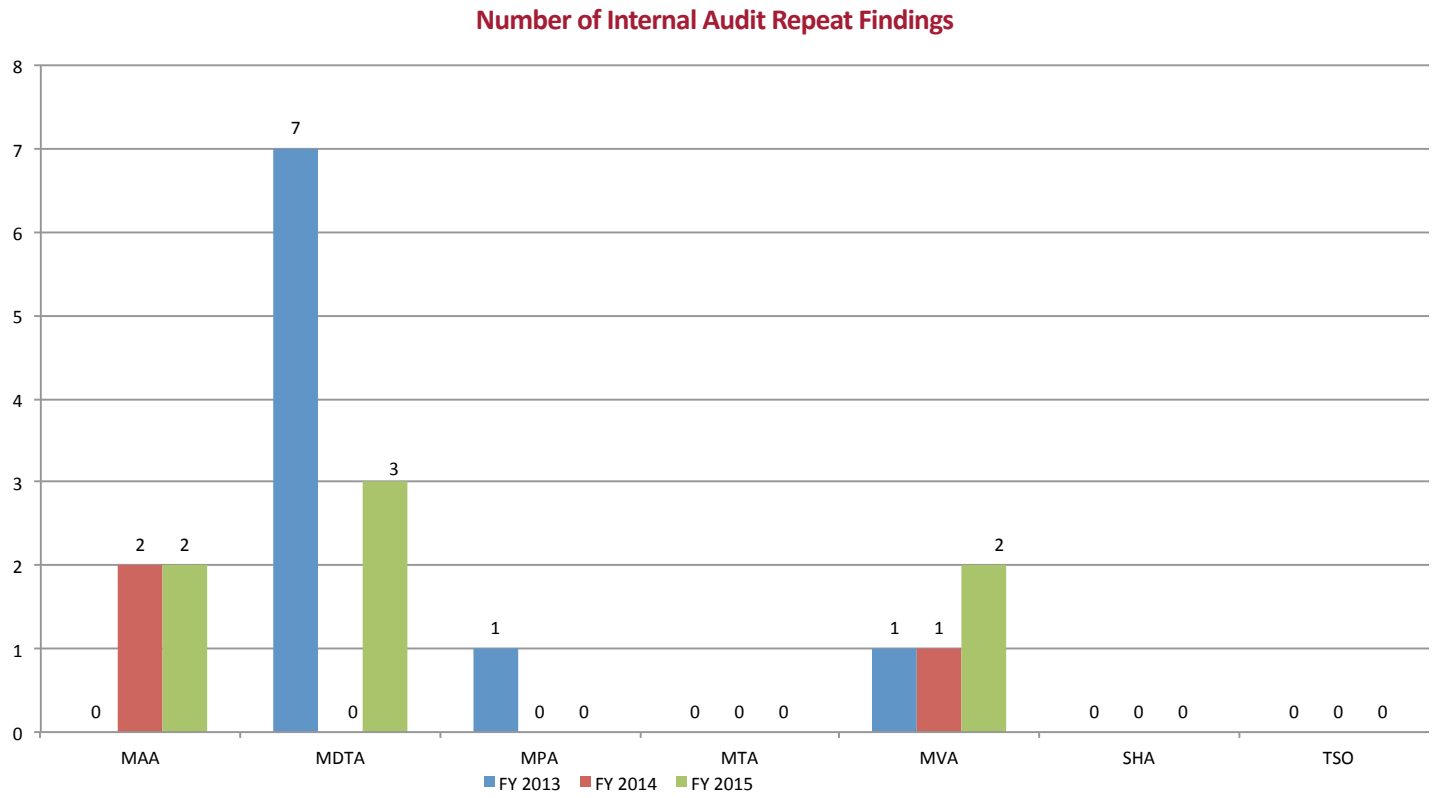


Trend in Total Internal Audit Findings



PERFORMANCE MEASURE 2.11

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



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

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

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

FREQUENCY:
Annually

DATA COLLECTION METHODOLOGY:
Information collected from TBU Audit databases

NATIONAL BENCHMARK:
N/A

PERFORMANCE MEASURE 2.12
Number of Legislative Repeat Audit Findings

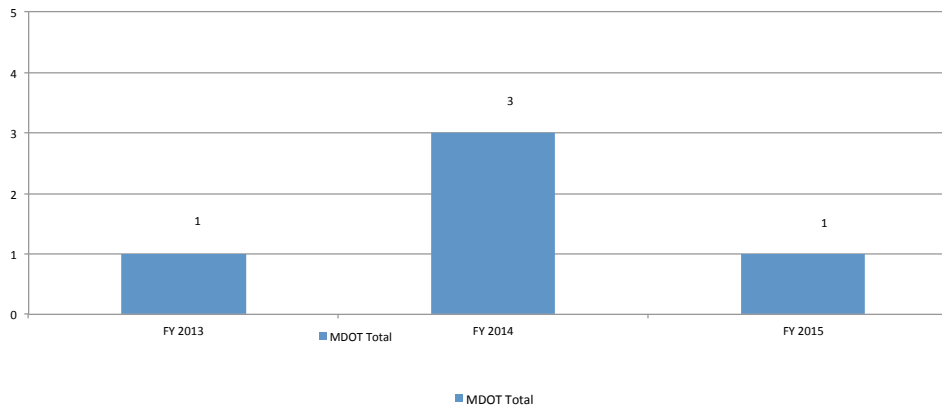
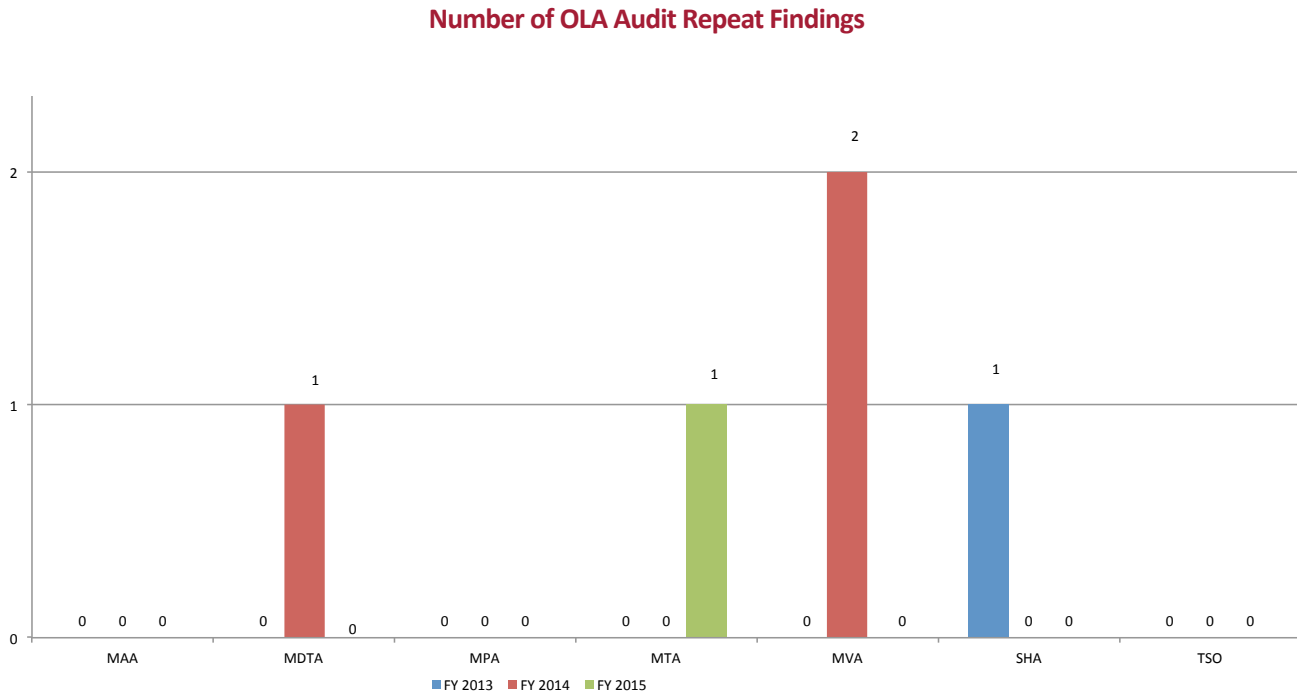
Transparent, informative, and accurate financial reporting is essential for our customers to have confidence in MDOT's ability to manage resources. Legislative audits provide an external view of our current systems and areas for improvement.

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 Audits



PERFORMANCE MEASURE 2.12
Number of Legislative Repeat Audit Findings