

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)*

# Provide a Safe and Secure Transportation Infrastructure

## 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 performance 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.

The comparison of crimes against persons and property for calendar year 2014 to 2015, shows a decline across the TBUs. Each reporting TBU shows a decline of at least 9% or more year over year, for 2014 to 2015.

SHA and MVA have begun to collect the data, which allows for a comparison across all TBUs in the future.

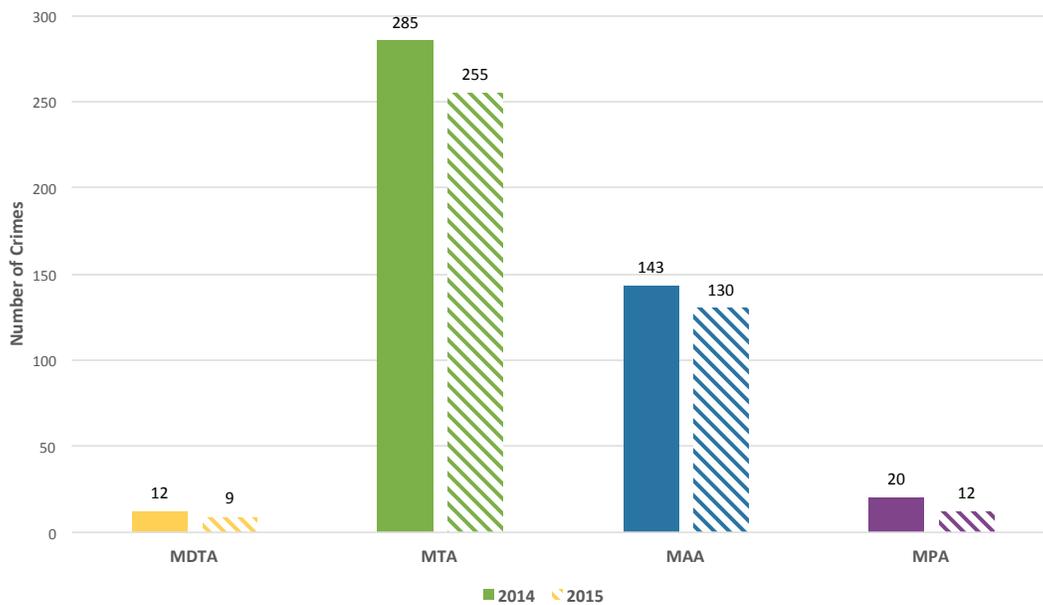


# Provide a Safe and Secure Transportation Infrastructure

## PERFORMANCE MEASURE 3.1

### Number of Crimes Against Persons and Property Committed at MDOT Facilities

CY Comparison Crimes Against Persons and Property



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



# Provide a Safe and Secure Transportation Infrastructure

## TANGIBLE RESULT DRIVER:

Sarah Clifford  
Maryland Transportation Authority  
(MDTA)

## PERFORMANCE MEASURE DRIVER:

Thomas Gianni  
Motor Vehicle Administration (MVA)

## PURPOSE OF MEASURE:

To track quarterly and annual trends in the number of persons killed in motor vehicle crashes

## FREQUENCY:

Quarterly

## DATA COLLECTION METHODOLOGY:

Based on Collected Police Data submitted to MSP through Automated Crash Reporting System (ACRS)

## NATIONAL BENCHMARK:

N/A

## PERFORMANCE MEASURE 3.2

### Number of Traffic-Related Fatalities on All Roads

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

Over the past several years, there has been a significant decrease in Maryland highway fatalities. In 2014, the number of fatalities (443) was the lowest since 1948.

Unfortunately this trend was reversed in 2015 with a 17.6% increase in highway fatalities (521); the largest single-year increase in over 30 years. According to U.S. DOT calculations, Maryland had the largest increases in Vehicle Miles Traveled (8.1%) from March, 2015 to March, 2016. Although the complete analysis of 2015 data remains incomplete, increased exposure (more miles driven) may have been a significant reason for the increase in highway fatalities.

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

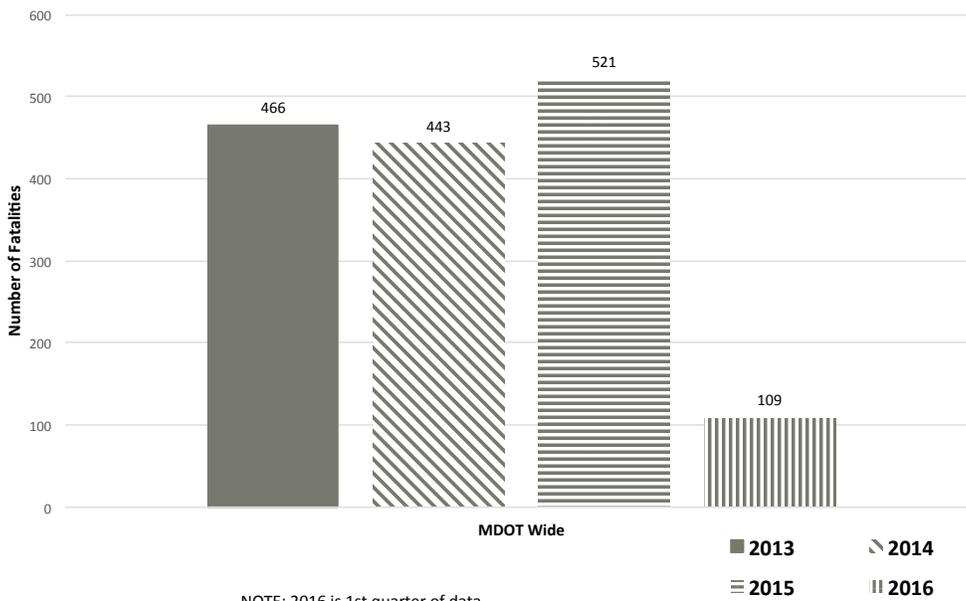
Bicyclists typically account for approximately 1% of all fatalities annually. Bicycle fatalities hover around five to six per year. Bicycle deaths in 2015 were double the annual average (12).

# Provide a Safe and Secure Transportation Infrastructure

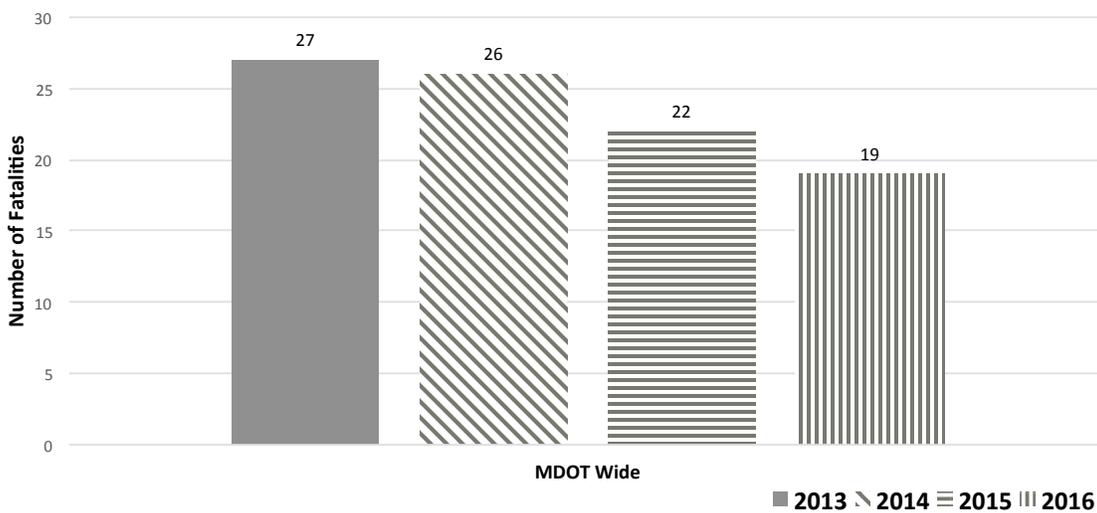
## PERFORMANCE MEASURE 3.2

### Number of Traffic-Related Fatalities on All Roads

CY Comparison Traffic Related Fatalities on All Roads



1st Quarter Comparison Traffic Related Pedestrian Fatalities on All Roads

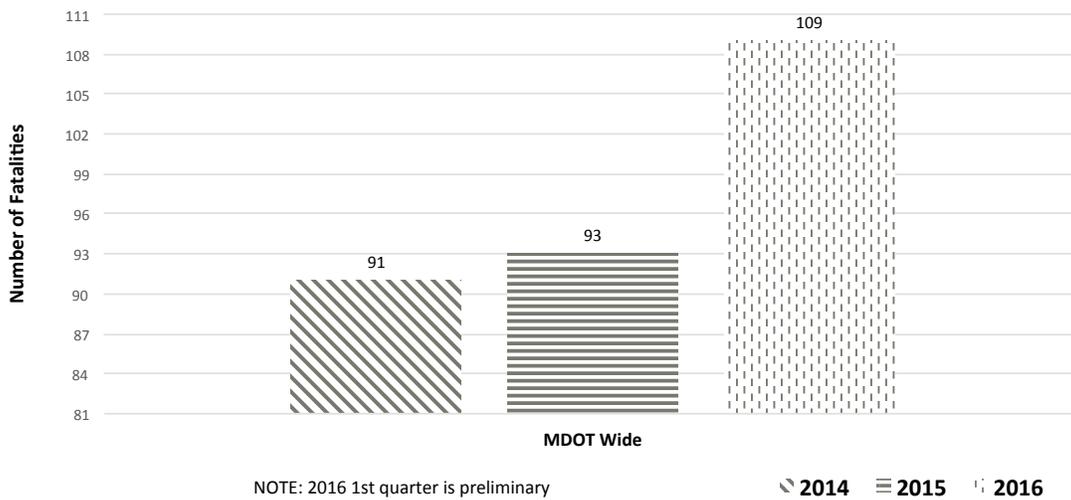


# Provide a Safe and Secure Transportation Infrastructure

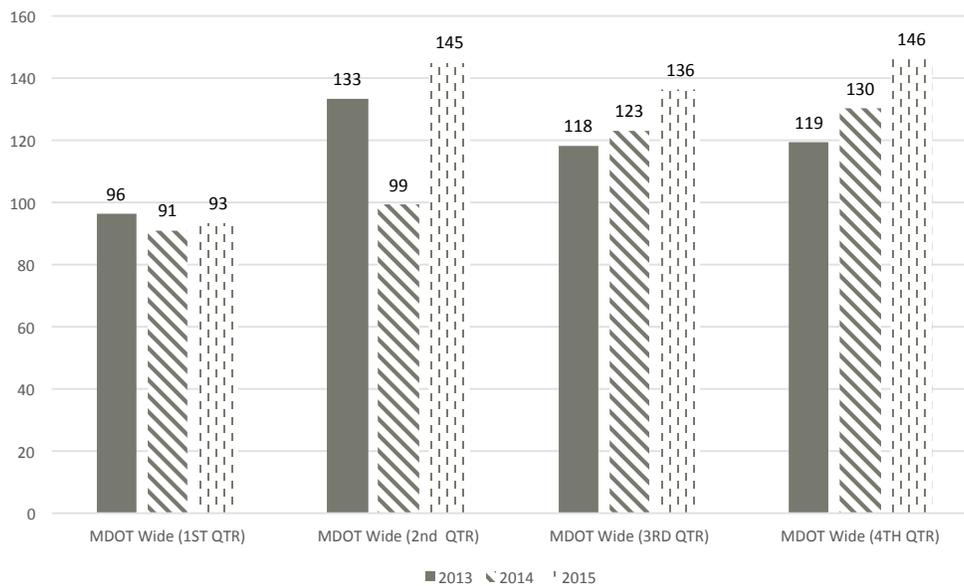
## PERFORMANCE MEASURE 3.2

### Number of Traffic-Related Fatalities on All Roads

1st Quarter Comparison Traffic Related Fatalities on All Roads



Quarterly Comparison- Traffic Related Fatalities on All Roads

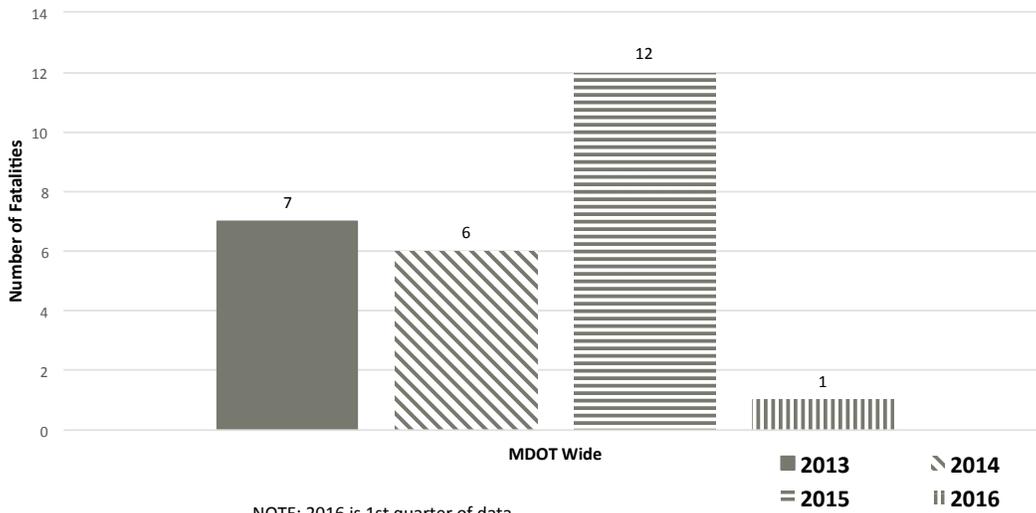


# Provide a Safe and Secure Transportation Infrastructure

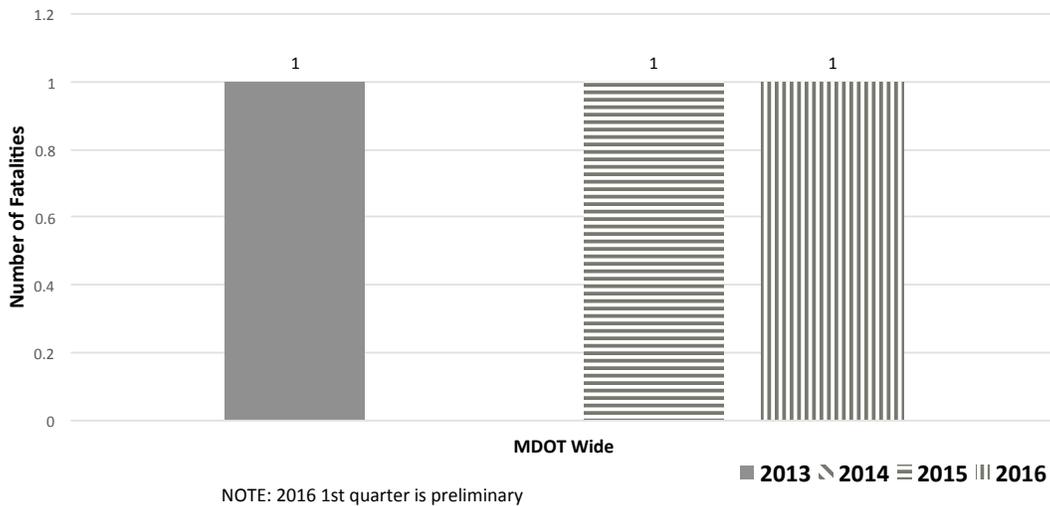
## PERFORMANCE MEASURE 3.2

### Number of Traffic-Related Fatalities on All Roads

CY Comparison Traffic Related Bicycle Fatalities on All Roads



1st Quarter Comparison Traffic Related Bicycle Fatalities on All Roads



# Provide a Safe and Secure Transportation Infrastructure



# Provide a Safe and Secure Transportation Infrastructure

## TANGIBLE RESULT DRIVER:

Sarah Clifford  
Maryland Transportation Authority  
(MDTA)

## PERFORMANCE MEASURE DRIVER:

Thomas Gianni  
Motor Vehicle Administration (MVA)

## PURPOSE OF MEASURE:

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

## FREQUENCY:

Annually (in January)

## DATA COLLECTION METHODOLOGY:

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

## NATIONAL BENCHMARK:

National Highway Fatality Rate of 1.07 in 2014

## PERFORMANCE MEASURE 3.3

### Maryland Traffic-Related Fatality Rate (Highways)

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



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

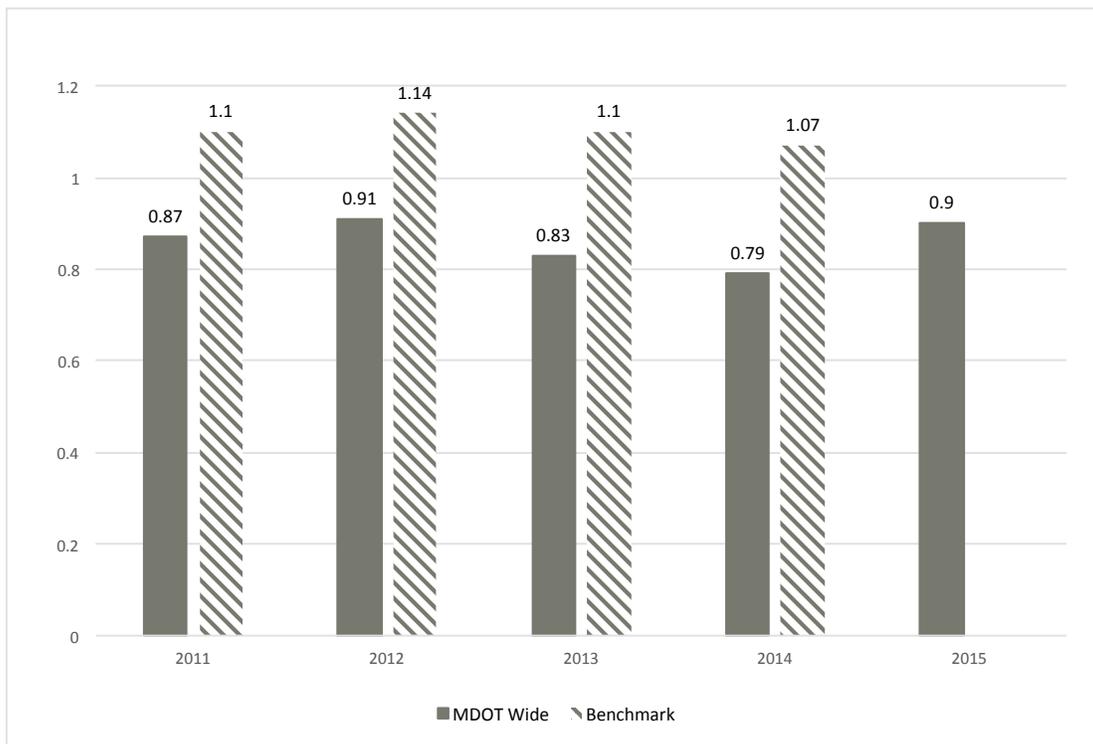
While behavioral and engineering efforts may affect the number of persons killed annually, the VMT is most affected by the state of the economy. Historically, as the nation's and/or the state's economy grows people tend to drive more, increasing both the state's VMT and a person's risk for being in a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

# Provide a Safe and Secure Transportation Infrastructure

## PERFORMANCE MEASURE 3.3

### Maryland Traffic-Related Fatality Rate (Highway)

Traffic Related Fatality Rate Maryland v Benchmark



2015 State Rate is Preliminary Estimate  
2015 National Rate Not Yet Available

# Provide a Safe and Secure Transportation Infrastructure

## TANGIBLE RESULT DRIVER:

Sarah Clifford  
Maryland Transportation Authority  
(MDTA)

## PERFORMANCE MEASURE DRIVER:

Thomas Gianni  
Motor Vehicle Administration (MVA)

## PURPOSE OF MEASURE:

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

## FREQUENCY:

Quarterly

## DATA COLLECTION METHODOLOGY:

Based on Collected Police Data submitted to MSP through Automated Crash Reporting System (ACRS)

## NATIONAL BENCHMARK:

N/A

## PERFORMANCE MEASURE 3.4

### Number of Traffic-Related Serious Injuries on all Roads

The number of traffic-related serious injuries is a count of persons sustaining an incapacitating injury in a crash. It is determined by a responding police officer investigating the crash and gathered from the injury severity code entered on the crash report.

Maryland's Strategic Highway Safety Plan (SHSP) is based on the "Toward Zero Deaths" approach: to reduce fatalities by 50% by 2030 from the 2008 baseline. Serious Injury Goals have been set with a similar methodology. Interim Goals include 2015: 3,945; and 2020: 2,939.

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

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

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

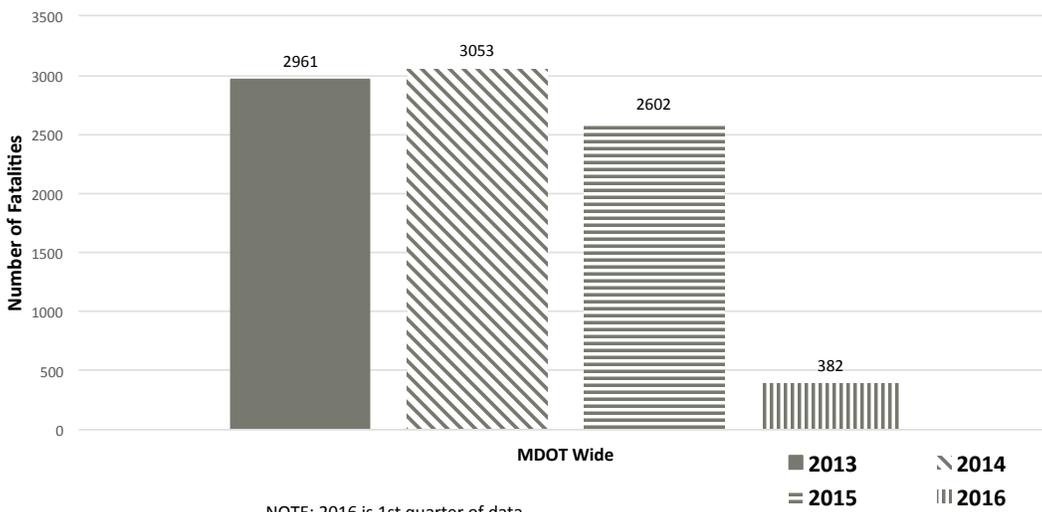


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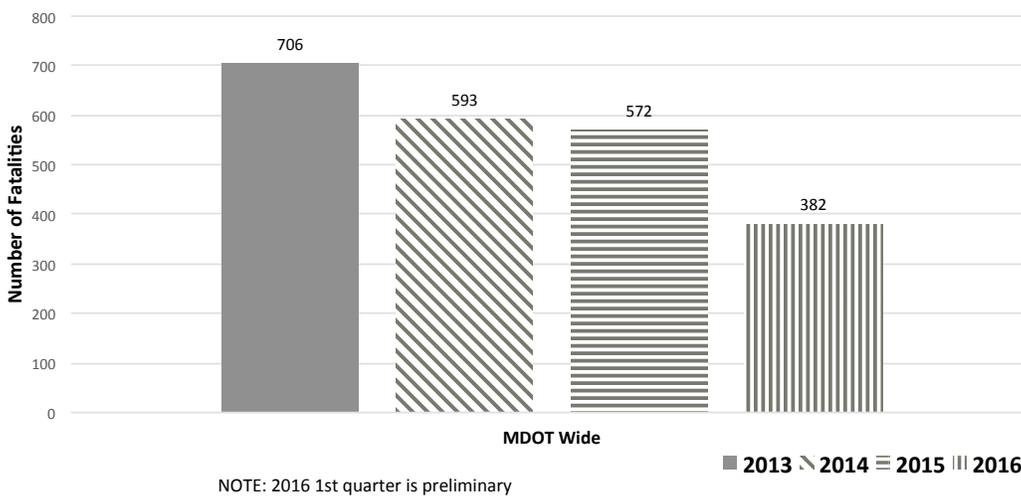
## PERFORMANCE MEASURE 3.4

### Number of Traffic-Related Serious Injuries on all Roads

3.4 a: CY Comparison Traffic Related Serious Injuries on All Roads



3.4 b: 1st Quarter Comparison Traffic Related Serious Injuries on All Roads

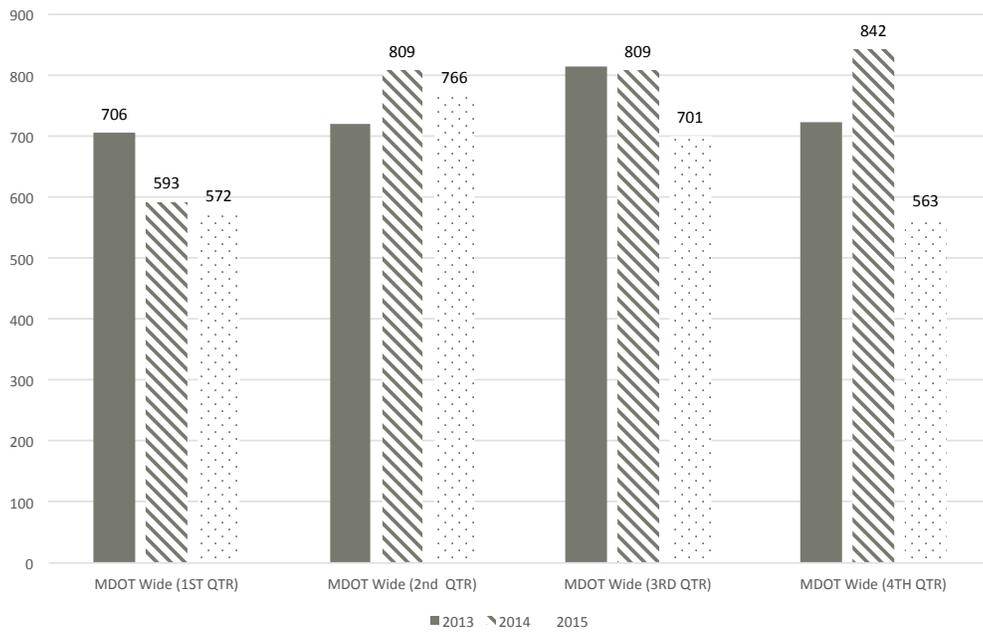


# Provide a Safe and Secure Transportation Infrastructure

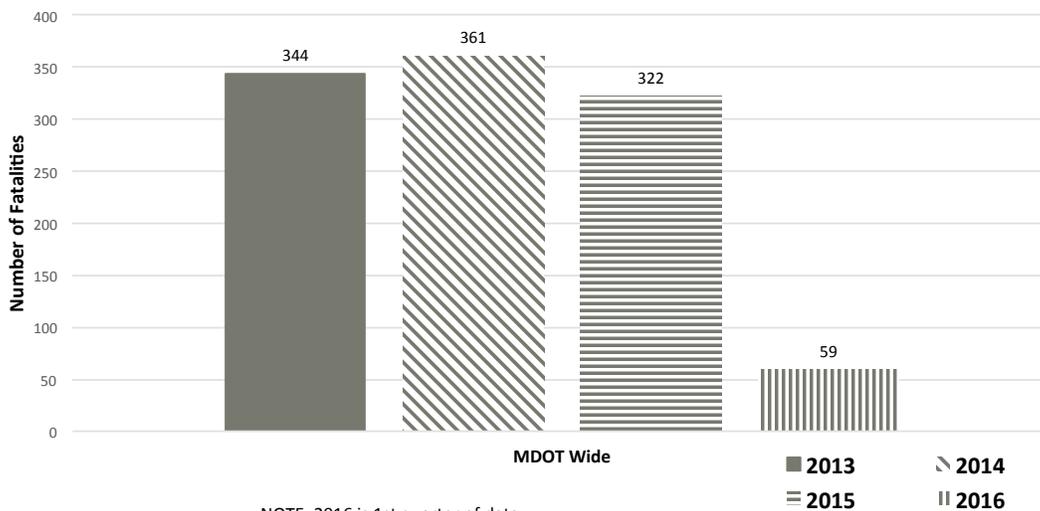
## PERFORMANCE MEASURE 3.4

### Number of Traffic-Related Serious Injuries on all Roads

3.4 c: Comparison Traffic Related Serious Injuries on All Roads



3.4 d: CY Comparison Traffic Related Pedestrian Serious Injuries on All Roads

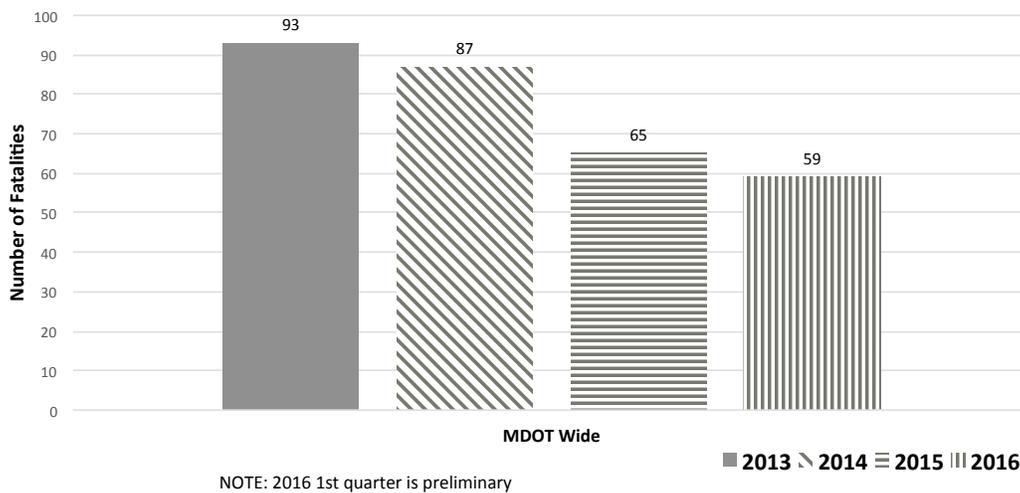


# Provide a Safe and Secure Transportation Infrastructure

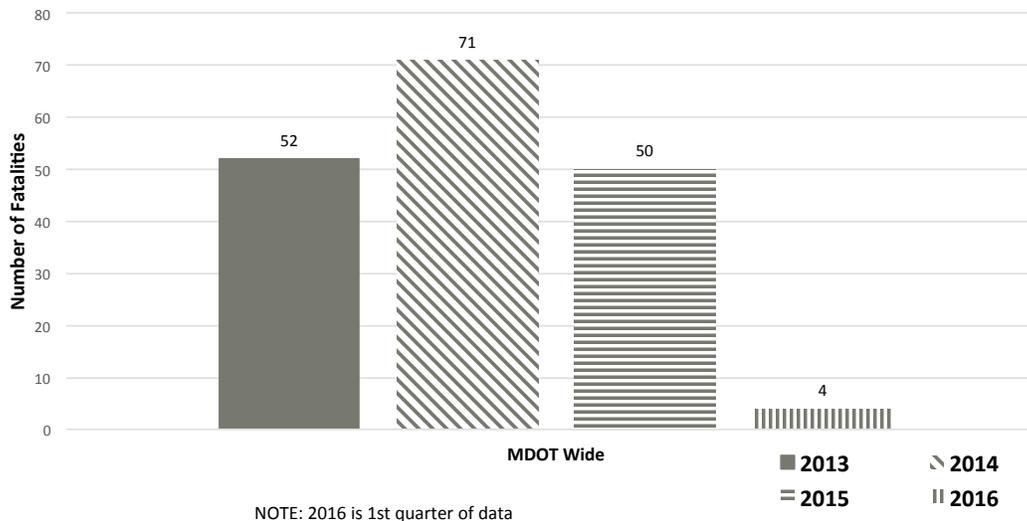
## PERFORMANCE MEASURE 3.4

### Number of Traffic-Related Serious Injuries on all Roads

3.4 e: 1st Quarter Comparison Traffic Related Pedestrian Serious Injuries on All Roads



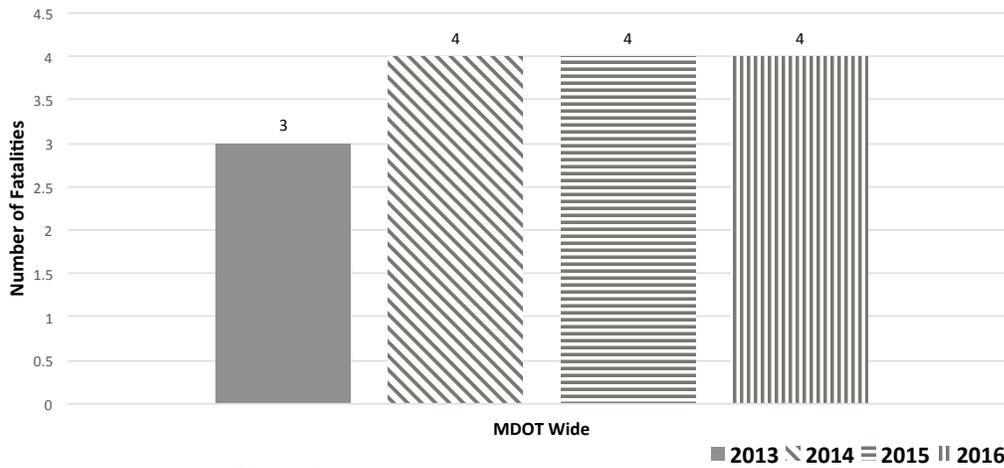
3.4 f: CY Comparison Traffic Related Bicycle Serious Injuries on All Roads



## PERFORMANCE MEASURE 3.4

### Number of Traffic-Related Serious Injuries on all Roads

3.4 g: 1st Quarter Comparison Traffic Related Bicycle Serious Injuries on All Roads



# Provide a Safe and Secure Transportation Infrastructure

## TANGIBLE RESULT DRIVER:

Sarah Clifford  
Maryland Transportation Authority  
(MDTA)

## PERFORMANCE MEASURE DRIVER:

Thomas Gianni  
Motor Vehicle Administration (MVA)

## PURPOSE OF MEASURE:

To track trends in the number of persons seriously injured in motor vehicle crashes per vehicle miles traveled (VMT)

## FREQUENCY:

Annually (in January)

## DATA COLLECTION METHODOLOGY:

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

## NATIONAL BENCHMARK:

N/A

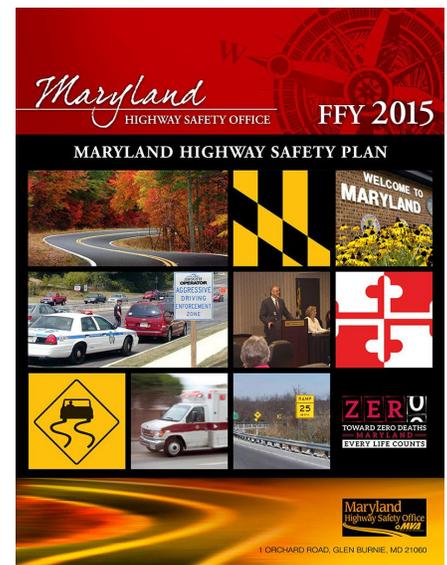
## PERFORMANCE MEASURE 3.5

### Maryland Traffic-Related Serious Injury Rate (Highways)

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

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

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

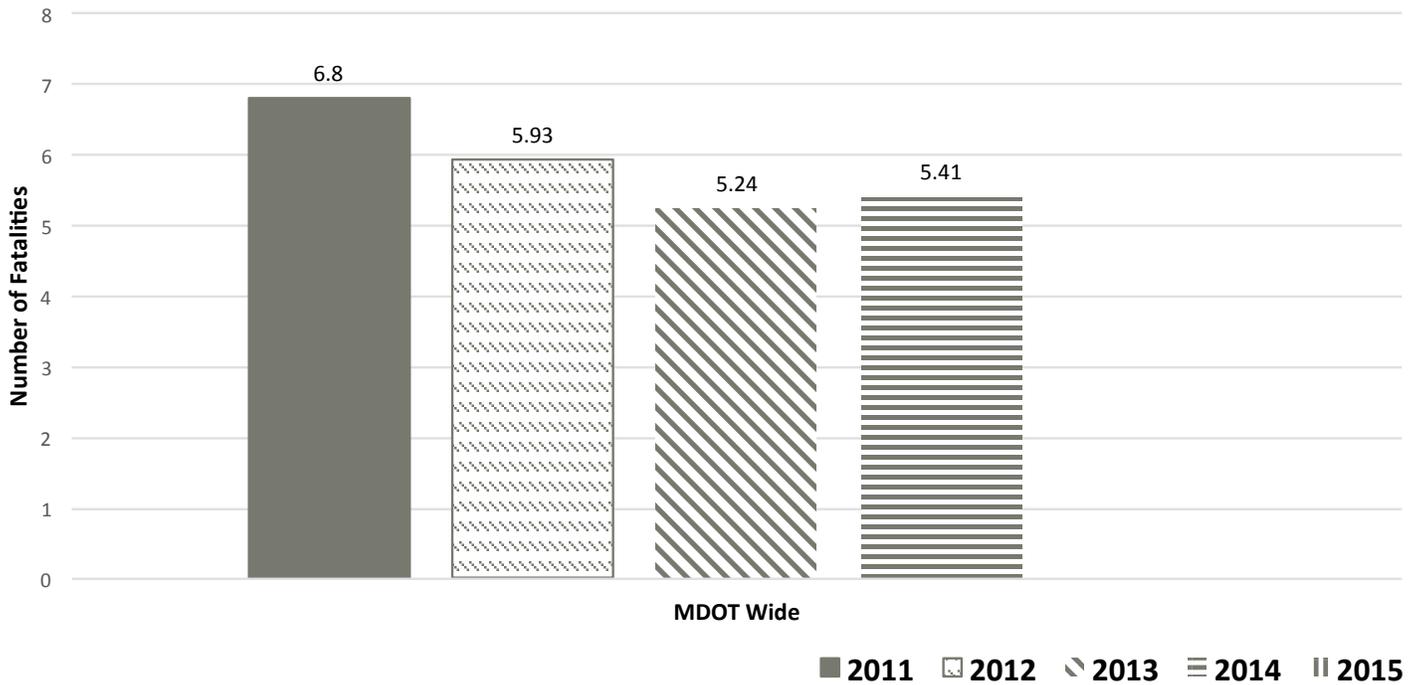


# Provide a Safe and Secure Transportation Infrastructure

## PERFORMANCE MEASURE 3.5

### Maryland Traffic-Related Serious Injury Rate (Highways)

Maryland Traffic-Related Serious Injury Rate



2015 State Rate is a preliminary estimate

# Provide a Safe and Secure Transportation Infrastructure

## 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 October)

## DATA COLLECTION METHODOLOGY:

Observational Survey conducted by MVA Maryland Highway Safety Office (MHSO)

## NATIONAL BENCHMARK:

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

## PERFORMANCE MEASURE 3.6

### Maryland Seat Belt Usage Rate

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

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

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

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

On May 24, 2016, MDOT held a Click-it or Ticket press event was held demonstrating a T-bone crash and the consequences of not wearing a seat belt, while emphasizing "buckle up in every seat, every time, day and night".

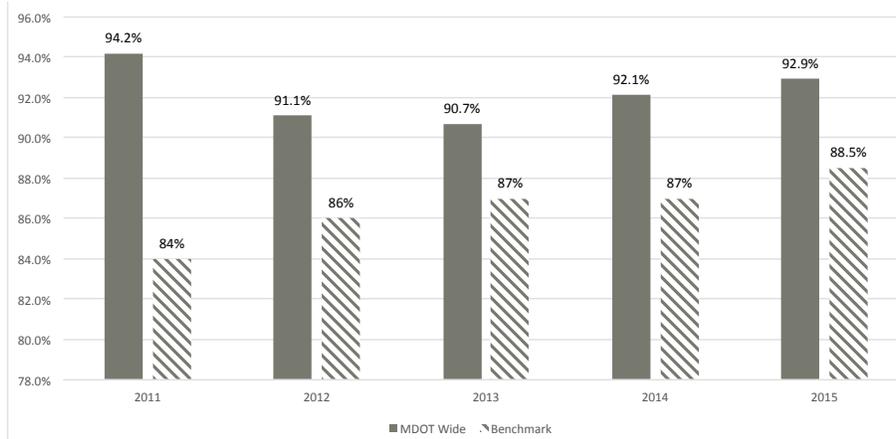


# Provide a Safe and Secure Transportation Infrastructure

## PERFORMANCE MEASURE 3.6

### Maryland Seat Belt Usage Rate

Seatbelt Usage in Maryland



# Provide a Safe and Secure Transportation Infrastructure

## TANGIBLE RESULT DRIVER:

Sarah Clifford  
Maryland Transportation Authority  
(MDTA)

## PERFORMANCE MEASURE DRIVER:

Cedric Ward  
State Highway Administration (SHA)

## PURPOSE OF MEASURE:

To track and assess the performance of MDOT's incident management programs to respond to customer needs while traveling

## FREQUENCY:

Quarterly

## DATA COLLECTION METHODOLOGY:

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

## NATIONAL BENCHMARK:

N/A

## PERFORMANCE MEASURE 3.7

### Disabled Motorist Assisted by MDOT

The Coordinated Highways Action Response Team (CHART) is a joint effort of MDOT, the Maryland State Police, and numerous other Federal, State and Local agencies. CHART provides assistance to disabled motorists and responds to traffic incidents throughout Maryland. In the Baltimore and Washington metropolitan areas, patrols are operated twenty-four hours per day, seven days per week. In 2015, CHART responded to 77,843 incidents. Additionally, CHART provides real-time traffic conditions through its website: <http://www.chart.state.md.us/>

In addition to services on highways, the Maryland Port Administration (MPA) and Maryland Aviation Administration (MAA) provide assistance to their customers who experience vehicle issues. These services provide an added value to MDOT customers who otherwise may need to rely on paid service providers.

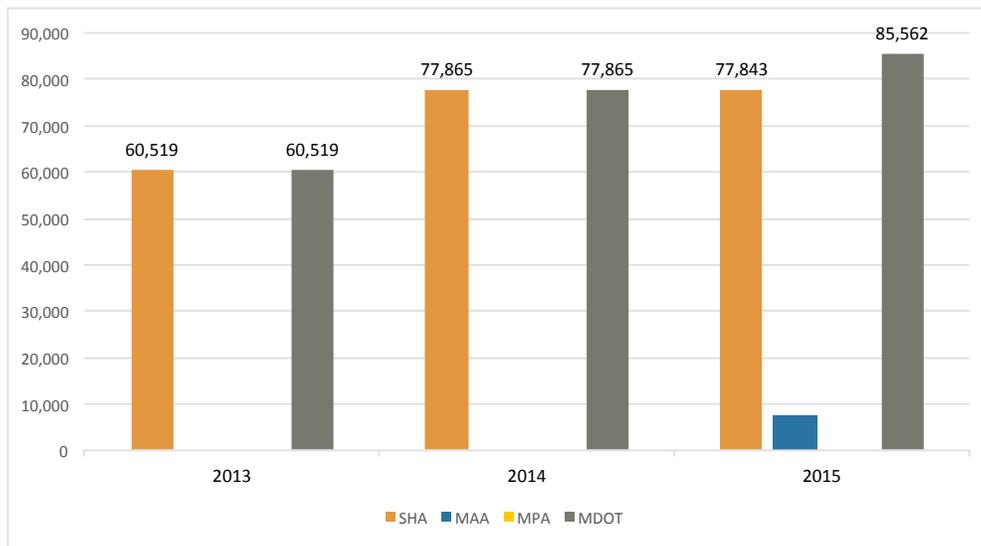


# Provide a Safe and Secure Transportation Infrastructure

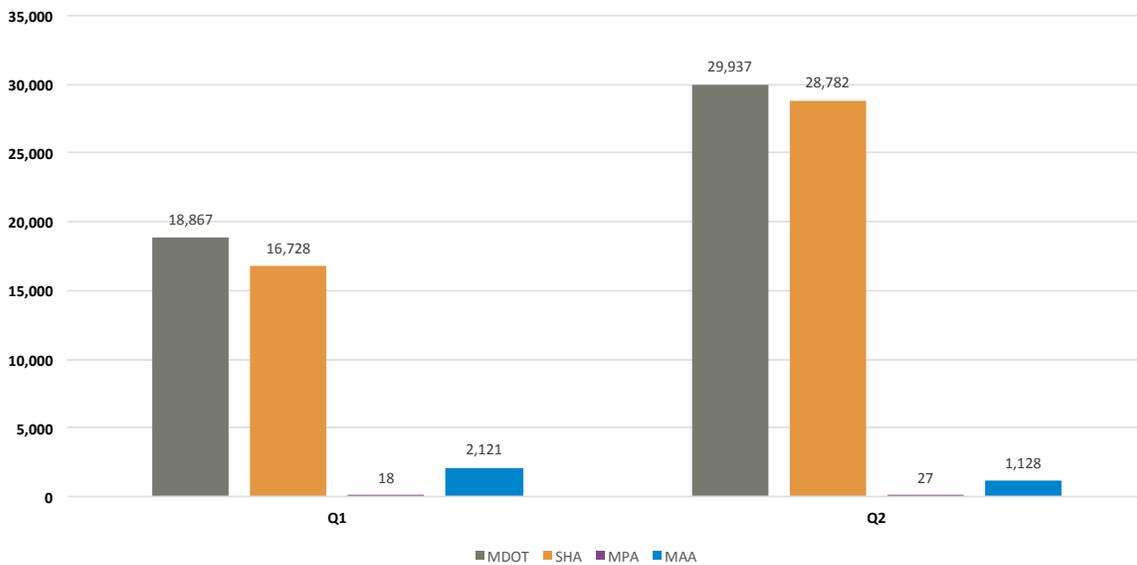
## PERFORMANCE MEASURE 3.7

### Disabled Motorist Assisted by MDOT

Number of Assists and Responses



CY 2016 Number of Assists and Responses



# Provide a Safe and Secure Transportation Infrastructure

## TANGIBLE RESULT DRIVER:

Sarah Clifford  
Maryland Transportation Authority  
(MDTA)

## PERFORMANCE MEASURE DRIVER:

Cedric Johnson  
Maryland Aviation Administration  
(MAA)

## PURPOSE OF MEASURE:

To track injury reporting trends at MDOT TBUs

## FREQUENCY:

Quarterly

## DATA COLLECTION METHODOLOGY:

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

## NATIONAL BENCHMARK:

N/A

## PERFORMANCE MEASURE 3.8

### Number of Employee Injuries Reported (First Report of Injury)

This measure includes all first reports of injury (FROI) to the Chesapeake Employers' Insurance (formerly Injured Workers Insurance Fund (IWIF)). This comparison is confined to the first nine months

of FY2015 versus FY2016. The overall number of injuries is essentially unchanged. The data from the injury reports are used for analysis and the development and implementation of risk mitigation strategies and employee training programs. Strategies for reducing employee injuries include the timely submission of injury reports, as this information can facilitate the development of strategies to reduce employee injuries.

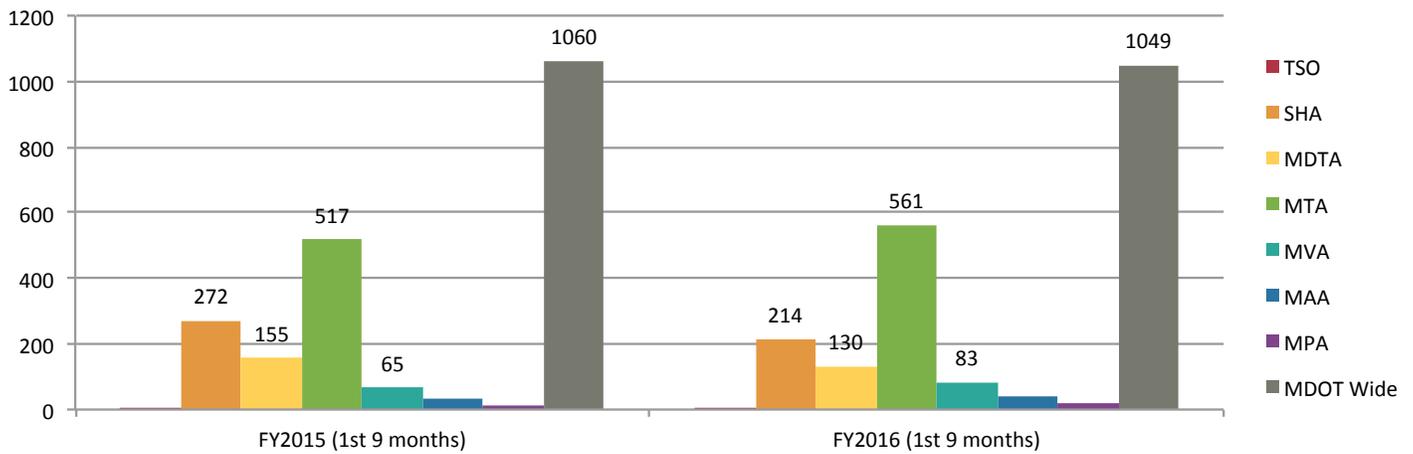


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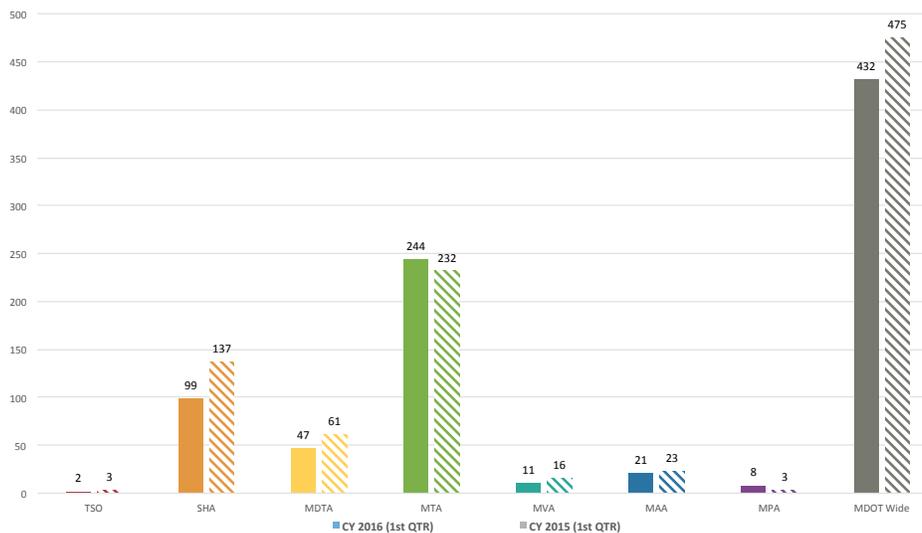
## PERFORMANCE MEASURE 3.8

### Number of Employee Injuries Reported (First Report of Injury)

First Report of Injuries - Fiscal Year 2015 vs. Fiscal Year 2016



Same Day Reporting 1st Quarter for 15 v 16

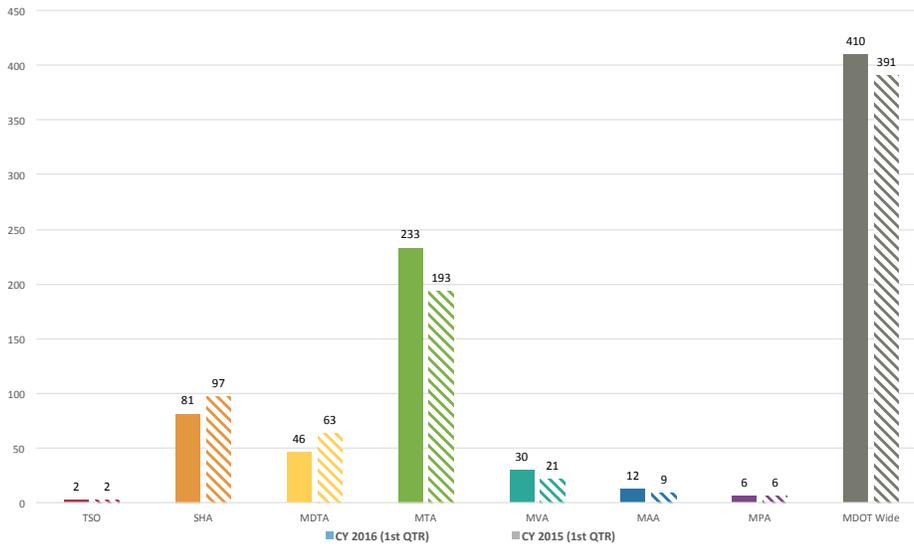


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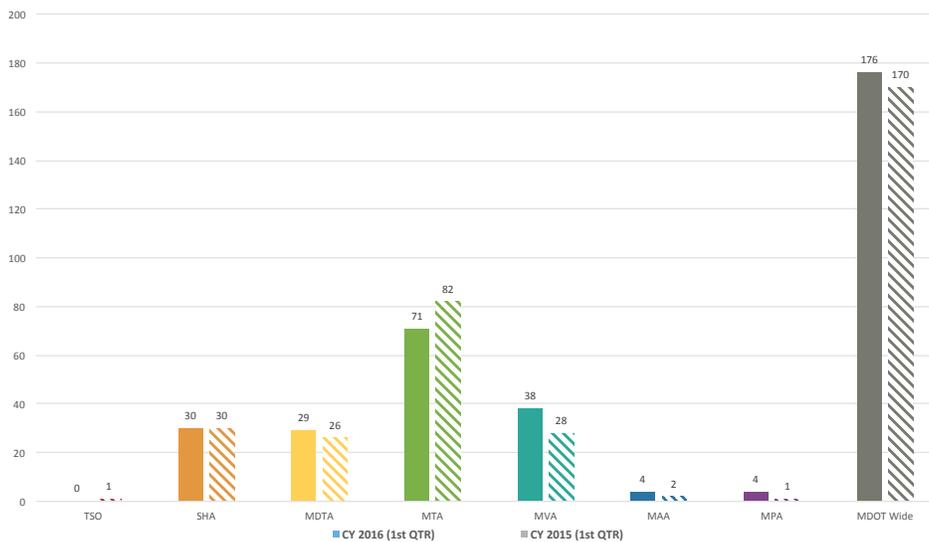
## PERFORMANCE MEASURE 3.8

Number of Employee Injuries Reported (First Report of Injury)

Day 1-3 Reporting 1st Quarter for 15 v 16



4 Days or more Reporting 1st Quarter 15 v 16



# Provide a Safe and Secure Transportation Infrastructure

## TANGIBLE RESULT DRIVER:

Sarah Clifford  
Maryland Transportation Authority  
(MDTA)

## PERFORMANCE MEASURE DRIVER:

Cedric Johnson  
Maryland Aviation Administration  
(MAA)

## PURPOSE OF MEASURE:

To track, trend, and mitigate lost work days

## FREQUENCY:

Quarterly

## DATA COLLECTION METHODOLOGY:

Data is collected through multiple MDOT timekeeping systems

## NATIONAL BENCHMARK:

N/A

## PERFORMANCE MEASURE 3.9

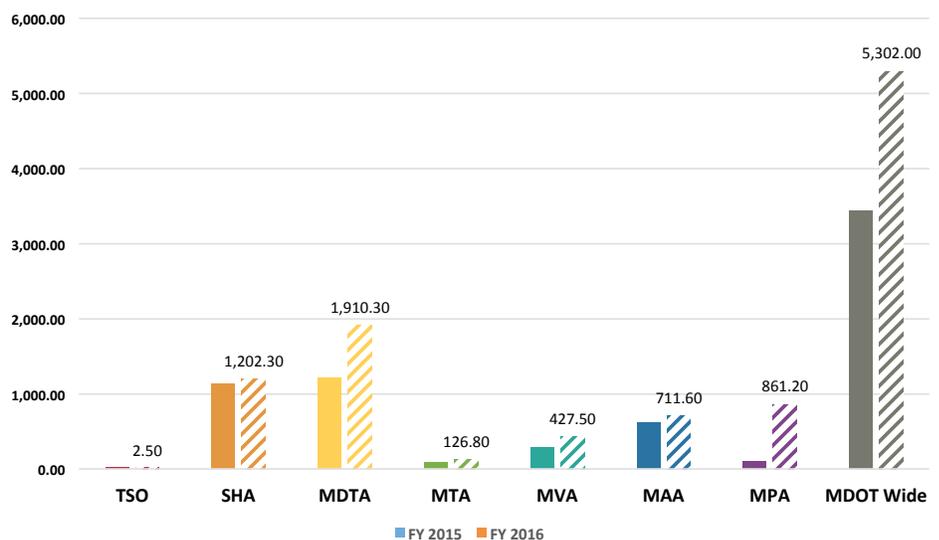
### Number of Employee Lost Work Days Due to Injuries

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

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

A comparison of all TBUs for the first nine months of FY 2016 versus the same period during FY 2015 reflect significant increases during the current fiscal year.

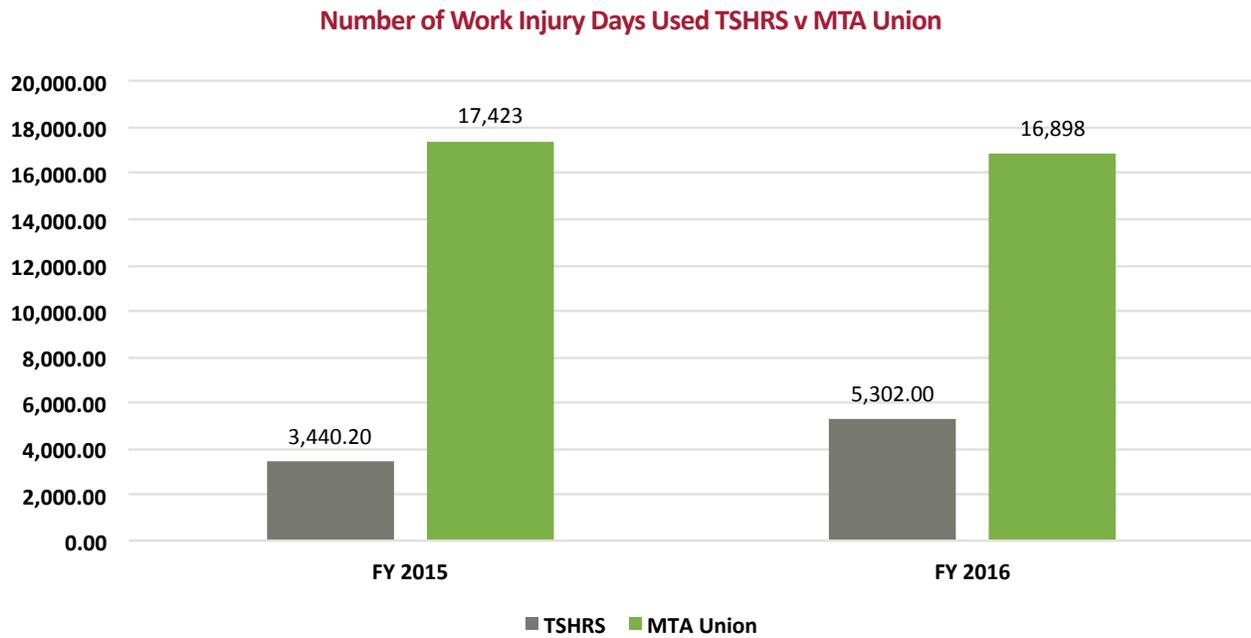
**Number of Work Injury Days Used per TSHRS – Comparison of FY 2015 to FY 2016 (\*1st 9months of FY)**



# Provide a Safe and Secure Transportation Infrastructure

## PERFORMANCE MEASURE 3.9

### Number of Employee Lost Work Days Due to Injuries



# Provide a Safe and Secure Transportation Infrastructure

## TANGIBLE RESULT DRIVER:

Sarah Clifford  
Maryland Transportation Authority  
(MDTA)

## PERFORMANCE MEASURE DRIVER:

Bernadette Bridges  
Maryland Transit Administration (MTA)

## PURPOSE OF MEASURE:

To track customer incidents within facilities where customers are rendered services to make MDOT facilities safer for our customers

## FREQUENCY:

Quarterly

## DATA COLLECTION METHODOLOGY:

TBUs track using their existing processes and report to the driver via phone or email

## NATIONAL BENCHMARK:

N/A

## PERFORMANCE MEASURE 3.10

### Number of Customer Incidents at MDOT Facilities

MDOT has programs in place to ensure the safety and security of its facilities and its customers. This is a simple count of the total number of incidents within MDOT facilities where the TBU's render services to customers. This is a quarterly measure and the data at this time is trending in the right direction. MDOT understands the importance of mitigating and reducing all hazards.



# Provide a Safe and Secure Transportation Infrastructure

## PERFORMANCE MEASURE 3.10

### Number of Customer Incidents at MDOT Facilities

