

## Greetings from MoDOT



**Roberta Broeker, CPA**  
MoDOT Interim Director

MoDOT's Tracker celebrates our legacy of being accountable to Missourians as good stewards of our transportation system. The true story behind Tracker speaks to the commitment and passion of our employees to provide the best value for every dollar spent.

The pages that follow directly reflect that commitment and passion. These are not just charts, graphs and numbers. Tracker is the story of our continued growth as an organization and our progress toward providing excellent customer service to the state of Missouri.

MoDOT understands the critical link between Missouri's long-term insufficient transportation funding challenge and citizens receiving the services and transportation options they need and want. We remain committed to maintaining our system in the best condition we can, for as long as we can, with the resources that have been made available to us.

We have a new opportunity to improve our tangible results due to Executive Order 15-06, signed by Governor Nixon in October. After completion of a statewide disparity study in 2014 and the Disparity Study Oversight Review Committee report to the Governor in January 2015, the executive order sets new goals for the purchase of goods and services from minority and women-owned businesses. The goals of 10 percent each for minority- and women-owned businesses puts another tool in MoDOT's toolbox as we work to increase opportunity for small businesses that can do much to provide employment and grow our economy. This ties in perfectly with our tangible result Advance Economic Development, and complements the federal disadvantaged business enterprise program that applies to our construction program.

At MoDOT, there is never a shortage of things to do. On a daily basis, we accomplish things that are difficult, sometimes to the point that it might seem as if these difficult things are routine. But they are not routine. They represent innovation, creativity, diligence and determination. The women and men of MoDOT are pleased to present you with the latest summary of the important work we do on behalf of the citizens of Missouri.

Sincerely,

A handwritten signature in black ink that reads "Roberta Broeker". The signature is written in a cursive, flowing style.

### Mission

*Our mission is to provide a world-class transportation experience that delights our customers and promotes a prosperous Missouri.*

## TANGIBLE RESULTS

- *Keep Customers and Ourselves Safe*
- *Keep Roads and Bridges in Good Condition*
- *Provide Outstanding Customer Service*
- *Deliver Transportation Solutions of Great Value*
- *Operate a Reliable and Convenient  
Transportation System*
- *Use Resources Wisely*
- *Advance Economic Development*

## VALUE STATEMENTS

### *Live MoDOT Values -*

- *Be Safe,*
- *Be Accountable,*
- *Be Respectful,*
- *Be Inclusive,*
- *Be Bold,*
- *Be Better, and*
- *Be One Team*

***So we can be a  
great organization.***

# TABLE OF CONTENTS

<b>Keep Customers and Ourselves Safe - Eileen Rackers</b>			
Number and rate of fatalities and serious injuries	Quarterly	Bill Whitfield	1a
Number of vulnerable roadway user fatalities and serious injuries	October	Bill Whitfield	1b
Number of fatalities and serious injuries resulting from the most frequent crash causes	October	John Miller	1c
Number of fatalities and serious injuries in work zones	Quarterly	Julie Stotlemeyer	1d
Percent of seat belt/passenger vehicle restraint use	October	Scott Jones	1e
Number of commercial motor vehicle crashes resulting in fatalities and serious injuries	Quarterly	Mark Biesemeyer	1f
Number of lost workdays	Quarterly	Roberta Jacobson	1g
Total and rate of MoDOT recordable incidents	Quarterly	Jeff Padgett	1h
General liability claims and costs	Quarterly	Steve Patterson	1i
<b>Keep Roads and Bridges in Good Condition - Dennis Heckman</b>			
Percent of major highways in good condition	April	Brian Reagan	2a
Percent of minor highways in good condition	April	Brian Reagan	2b
Condition of state bridges	April	David Koenig	2c
Percent of structurally deficient deck area on National Highway System	April	David Koenig	2d
<b>Provide Outstanding Customer Service - Dan Niec</b>			
Percent of overall customer satisfaction	July	Tammy Wallace	3a
Percent of customers who view MoDOT as Missouri's transportation expert	July	Jennifer Williams	3b
Percent of customers who trust MoDOT to keep its commitments to the public	July	Melissa Black	3c
Percent of customers who feel MoDOT provides timely, accurate and understandable information	July	Jennifer Williams	3d
Percent of customers satisfied with MoDOT's customer service	Quarterly	Melissa Black	3e
Customer communication engagement	Quarterly	Patrick Wood	3f
<b>Deliver Transportation Solutions of Great Value - David Silvester</b>			
Percent of programmed project cost as compared to final project cost	Quarterly	Renate Wilkinson	4a
Percent of projects completed on time	Quarterly	Jay Bestgen	4b
Percent of change for finalized contracts	Quarterly	Jeremy Kampeter	4c
Innovative contracting methods	July	David Simmons	4d
Value engineering	January/July	Llans Taylor	4e
Average highway lane-mile and bridge construction costs	January	Jason Vanderfeltz	4f
<b>Operate a Reliable and Convenient Transportation System - Paula Gough</b>			
Travel times and reliability on major routes	Quarterly	Jon Nelson	5a
Cost and impact of traffic congestion	April	Jeanne Olubogun	5b
Average time to clear traffic incident	Quarterly	Randy Johnson	5c
Traffic incident impacts on major interstate routes	Quarterly	Rick Bennett	5d
Work zone impacts to the traveling public	Quarterly	Jerica Holtsclaw	5e
Effectiveness of improving air quality	October	Mike Henderson	5f
Time to meet winter storm event performance objectives	January/April	Tim Chojnacki	5g
Bike/pedestrian and ADA transition plan improvements	Quarterly	Ron Effland	5h
Use and connectivity of transportation modes	Quarterly	Amy Ludwig	5i
<b>Use Resources Wisely - Brenda Morris</b>			
Number of full-time equivalencies expended	Quarterly	Steve Meystrik	6a
Level of job satisfaction	October	Rudy Nickens	6b
Rate of employee turnover	Quarterly	Aaron Kincaid	6c
State and federal revenue projections	Quarterly	Todd Grosvenor	6d
Number of dollars generated through cost-sharing and partnering agreements for transportation	October	Frank Miller	6e
Percent of state funds invested in other modes of transportation	October	Dion Knipp	6f
Percent of local program funds committed to projects	Quarterly	Kenny Voss	6g
Percent of inactive projects	Quarterly	Sunny Wilde	6h
Amount of advance construction	January	Doug Hood	6i
Fleet usage and fuel efficiency	Quarterly	Kevin James	6j
Number of tons of recycled material	April	Jay Bestgen	6k
Number of environmental warnings and violations	Quarterly	Gayle Unruh	6l
Number of stormwater violations	January	Eric Kopinski	6m

# TABLE OF CONTENTS

<b>Advance Economic Development - Machelles Watkins</b>			
Economic return from transportation investment	October	Eva Voss	7a
National ranking of transportation infrastructure	July	Ben Reeser	7b
National ranking in revenue per mile	July	Tona Bowen	7c
Goods movement competitiveness	January	Cheryl Ball	7d
Freight tonnage by mode	April/October	Eric Curtit	7e
Annual hours of truck delay	April	Aaron Hubbard	7f
Truck reliability index	April	Chuck Gohring	7g
Jobs created by projects funded through the economic development program	January	Doug Hood	7h
Percent of minorities and females employed	Quarterly	Ida Mitchell	7i
Percent of disadvantaged business enterprise participation on construction and engineering projects	Quarterly	Lester Woods	7j
Expenditures made to certified minority, women and disadvantaged business enterprises	Quarterly	Rebecca Jackson	7k

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## KEEP CUSTOMERS AND OURSELVES SAFE

*Eileen Rackers, State Traffic and Highway Safety Engineer*



# Tracker

MEASURES OF DEPARTMENTAL PERFORMANCE



Safety is a daily commitment for all MoDOT employees. From design and construction to operations and maintenance of the state transportation system, the safety of our customers, partners, and employees is our top priority. We work with our safety partners to promote safe behavior for all users and modes of transportation so everyone goes home safe every day.

**RESULT DRIVER:**  
Eileen Rackers  
State Traffic and Highway  
Safety Engineer

# KEEP CUSTOMERS AND OURSELVES SAFE

## Number and rate of fatalities and serious injuries – 1a

**MEASUREMENT  
DRIVER:**  
Bill Whitfield  
Highway Safety Director

**PURPOSE OF  
THE MEASURE:**  
The fatal and serious injury  
number measures track  
quarterly, annual and five-year  
average trends resulting from  
traffic crashes on all Missouri  
roadways.

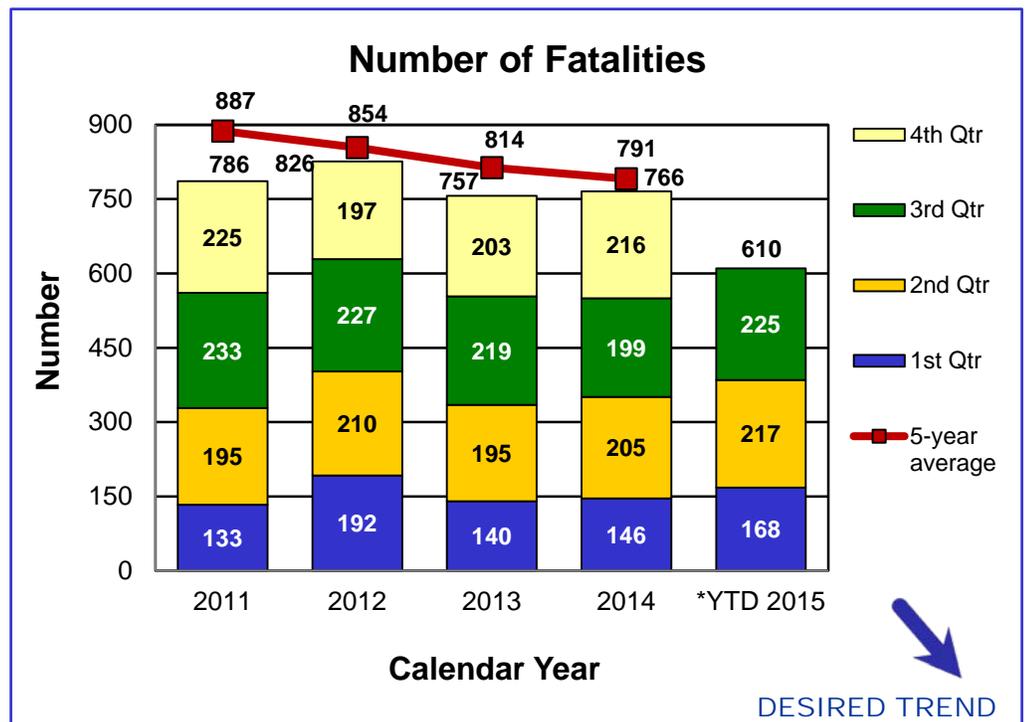
**MEASUREMENT  
AND DATA  
COLLECTION:**  
Missouri law enforcement  
agencies submit a vehicle  
accident report form to the  
Missouri State Highway Patrol  
to be entered into a statewide  
traffic crash database. The  
database automatically  
updates MoDOT's crash  
database system, which is part  
of the Transportation  
Management System. The rate  
of fatal and serious injury  
charts display annual and five-  
year average fatality and injury  
rates per 100 million vehicle  
miles traveled for these same  
crashes. In addition, the fatality  
rate chart includes the national  
average.

Traffic crash prevention is one of MoDOT's highest priorities. Between 2005 and 2014 Missouri experienced a 40 percent reduction in fatalities (37 percent of which was accomplished between 2005 and 2010, then began leveling off in 2011 resulting in only a 3 percent decrease through 2014). This fatality plateauing/increase has continued into 2015. Missouri fatal crashes also revealed 63 percent of the fatalities were unbuckled when the crash occurred. This unbuckled trend has fluctuated from a high of 71 percent in 2013 to current levels of 63 percent.

A review of crash data from 2010 to 2014 showed the leading contributing circumstances that can be attributed to driver behavior were substance impaired driving, driving too fast for conditions, exceeding the speed limit, distraction/inattention, following too close and fatigue. Crash statistics also showed impaired drivers had an unbuckled fatality rate of 87 percent. This group of drivers makes two deadly decisions to drive impaired and unbelted.

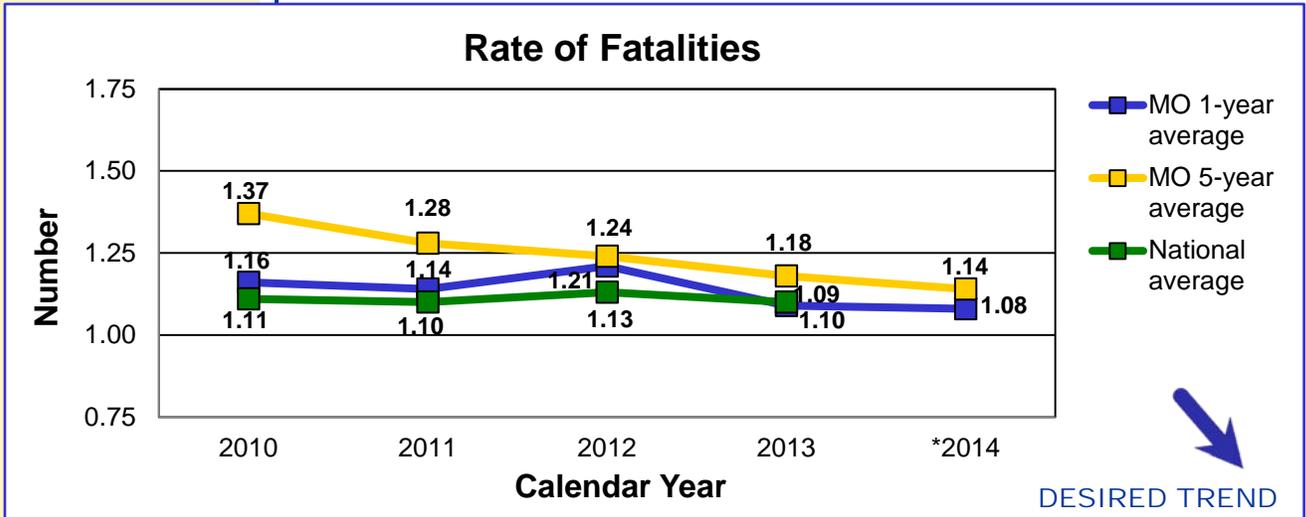
MoDOT has awarded 454 contracts for federal fiscal year 2016 in the areas of education, enforcement and engineering. The goal of these contracts is to prevent and reduce the number and severity of traffic crashes occurring on Missouri's roadways.

With a long-term insufficient funding challenge, it will be difficult for MoDOT to deliver system-wide safety improvements in the future.

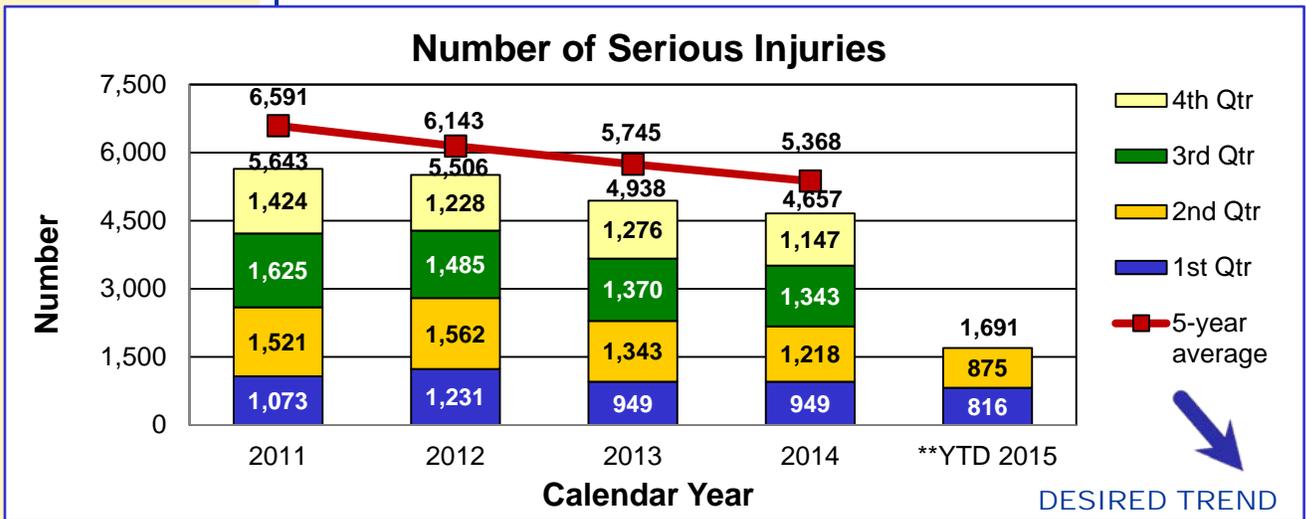


\*YTD 2015 – Third quarter fatalities were derived from MSHP radio reports.

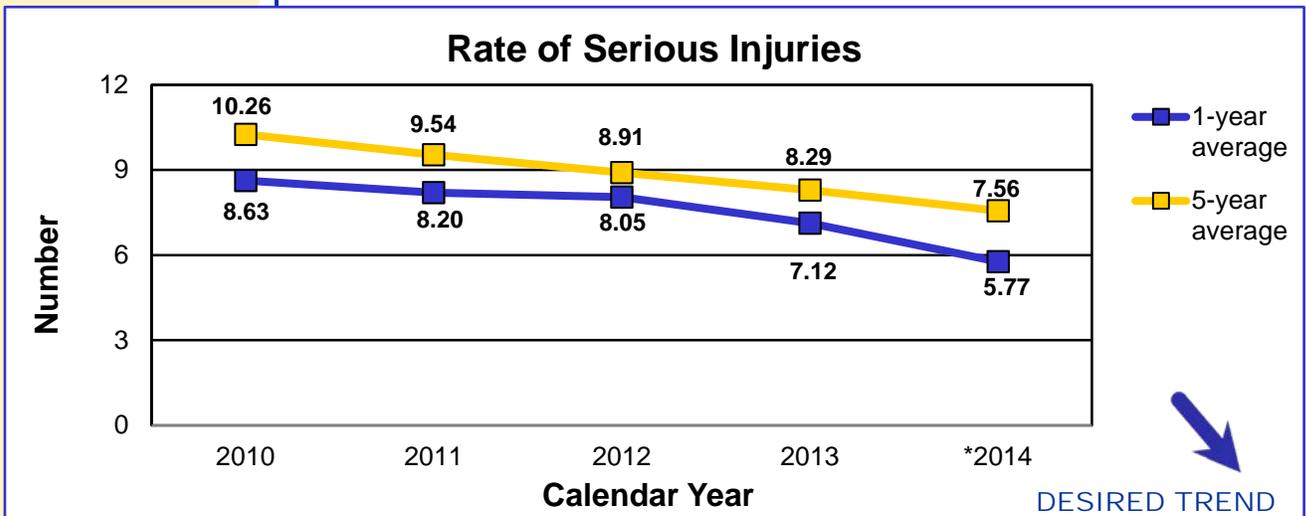
# KEEP CUSTOMERS AND OURSELVES SAFE



The rates of fatalities and serious injuries are based on average rates per 100 million vehicle miles traveled for crashes. \*The rate of fatalities and serious injuries for 2014 has not been finalized by MSHP.



\*\*YTD 2015 - Due to a backlog of crash reports into STARS, the serious injury measure only includes data derived from TMS. Third quarter 2015 data is not available on the MSHP radio reports and is incomplete in TMS.



**RESULT DRIVER:**  
Eileen Rackers  
State Traffic and Highway  
Safety Engineer

**MEASUREMENT  
DRIVER:**  
Bill Whitfield  
Highway Safety Director

**PURPOSE OF  
THE MEASURE:**  
The vulnerable roadway user  
measure tracks annual trends  
in fatalities and serious injuries  
of motorcyclists, pedestrians  
and bicyclists. These roadway  
users are at risk for death or  
serious injury when involved in  
a motor-vehicle-relate crash.

**MEASUREMENT  
AND DATA  
COLLECTION:**  
Missouri law enforcement  
agencies submit a vehicle  
accident report form to the  
Missouri State Highway Patrol  
to be entered into a statewide  
traffic crash database. The  
database automatically  
updates MoDOT's crash  
database system, which is part  
of the Transportation  
Management System.

## KEEP CUSTOMERS AND OURSELVES SAFE

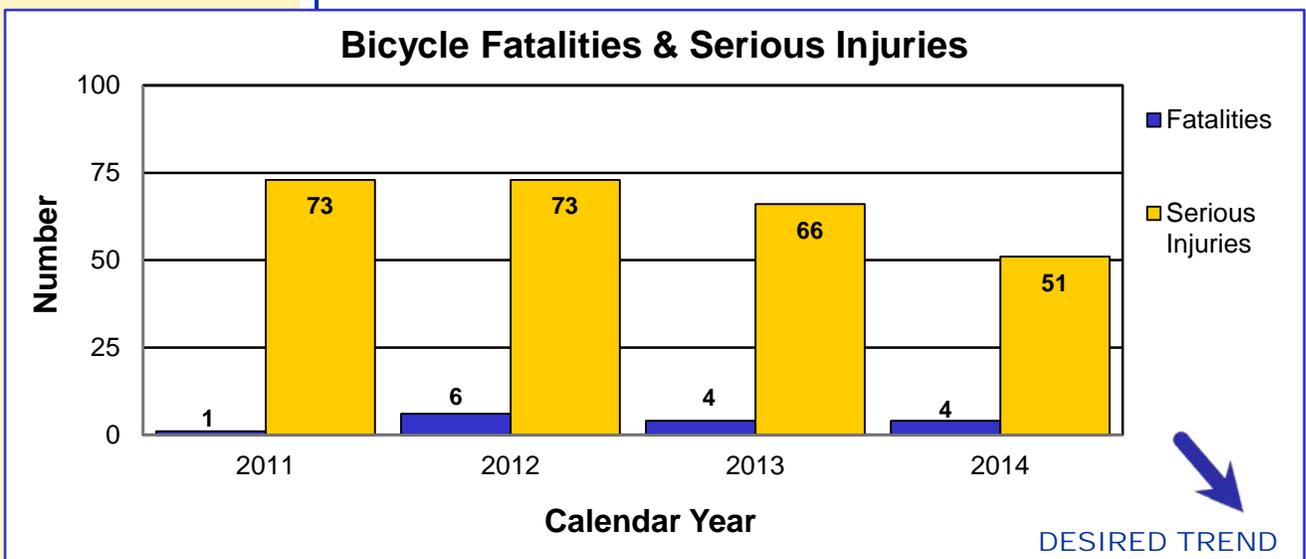
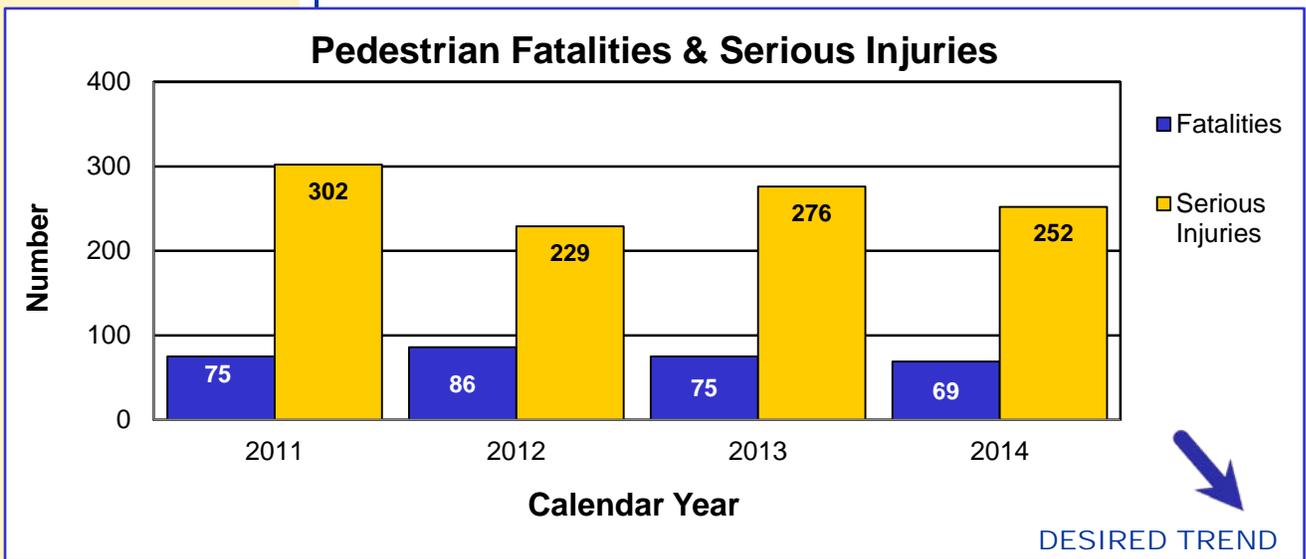
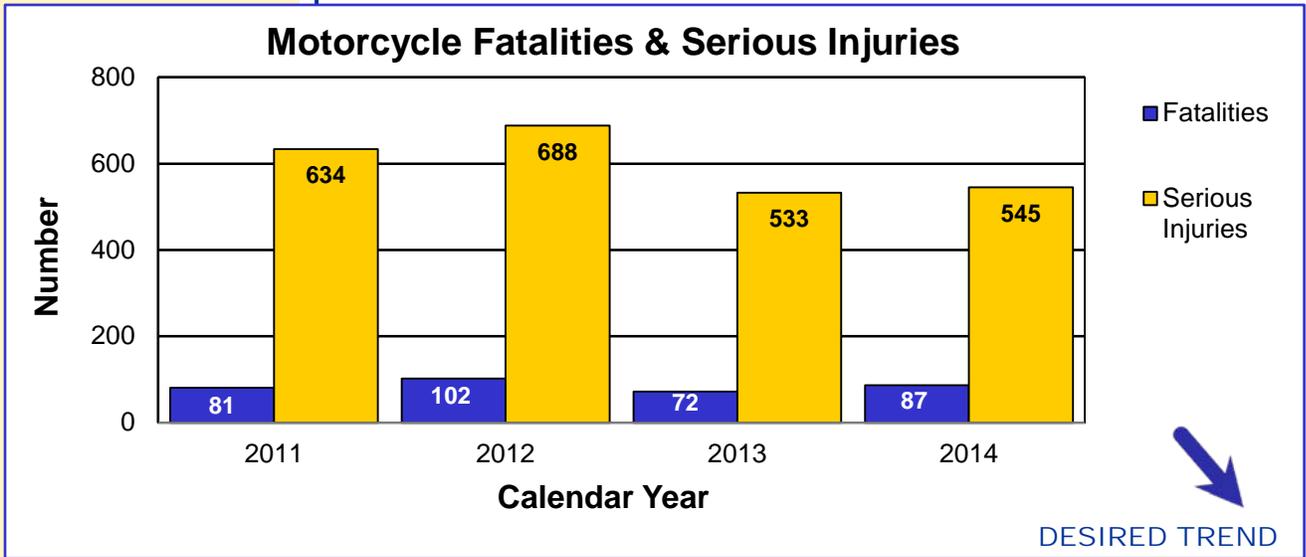
### *Number of vulnerable roadway user fatalities and serious injuries – 1b*

In 2014, vulnerable roadway users were 21 percent of the total number of fatalities. Pedestrian fatalities decreased in 2014 by 8 percent. Motorcycle fatalities increased by 21 percent and bicycle fatalities remained unchanged. Fatality data for 2015 are incomplete.

Motorcycle, pedestrian and bicycle serious injuries experienced a downward trend in 2014. Serious injury data for 2015 are incomplete.



# KEEP CUSTOMERS AND OURSELVES SAFE



**RESULT DRIVER:**  
Eileen Rackers  
State Traffic and Highway  
Safety Engineer

**MEASUREMENT  
DRIVER:**  
John Miller  
Traffic Liaison Engineer

**PURPOSE OF  
THE MEASURE:**  
The measure tracks annual trends in motor-vehicle-related fatal and serious injuries resulting from the most common contributing factors or highway features. This data represents six of the top focus areas presented in Missouri's Blueprint to Save More Lives.

**MEASUREMENT  
AND DATA  
COLLECTION:**  
Missouri law enforcement agencies submit a vehicle accident report form to the Missouri State Highway Patrol to be entered into a statewide traffic crash database. The database automatically updates MoDOT's crash database system, which is part of the Transportation Management System. MoDOT staff query and analyze this data to determine the number of unrestrained occupants in crashes, how often aggressive driving, alcohol and other drugs contribute to crashes, and whether or not the vehicles ran off the road or the crash occurred at an intersection or within a curve.

## KEEP CUSTOMERS AND OURSELVES SAFE

### *Number of fatalities and serious injuries resulting from the most frequent crash causes – 1c*

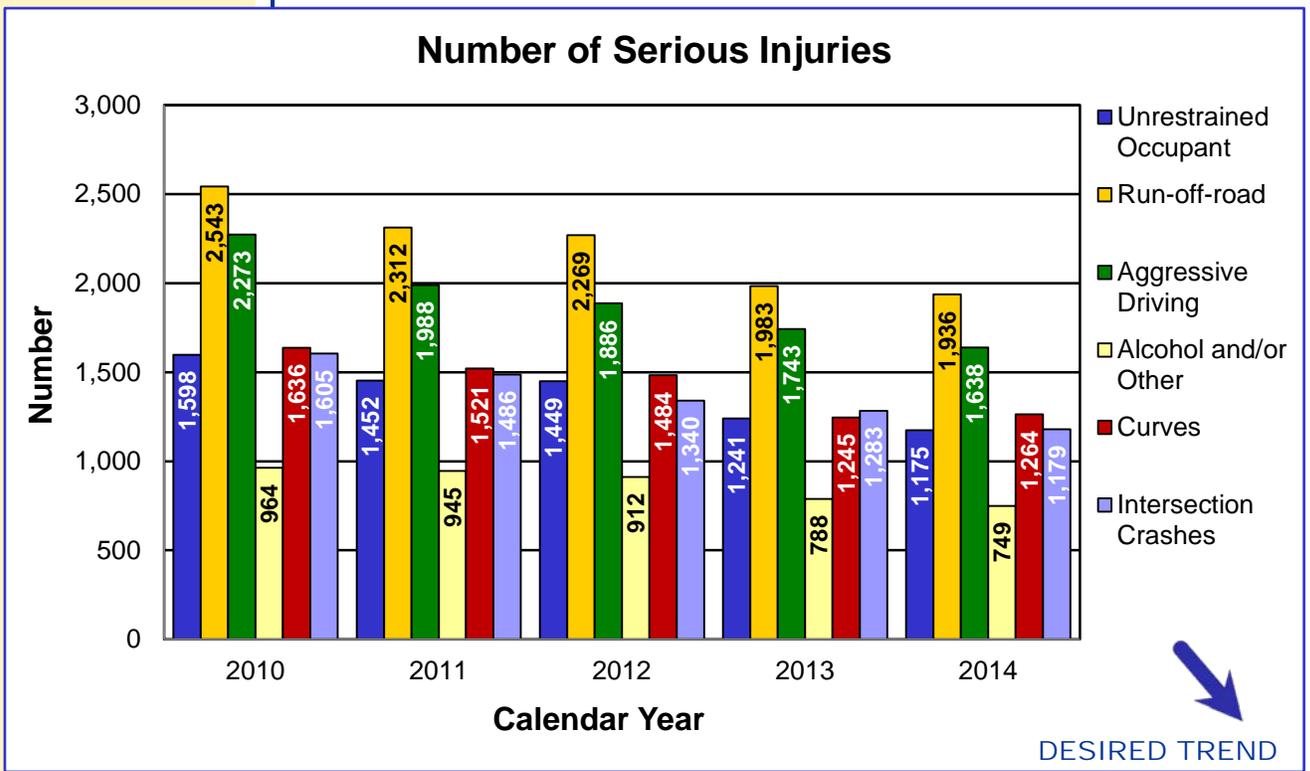
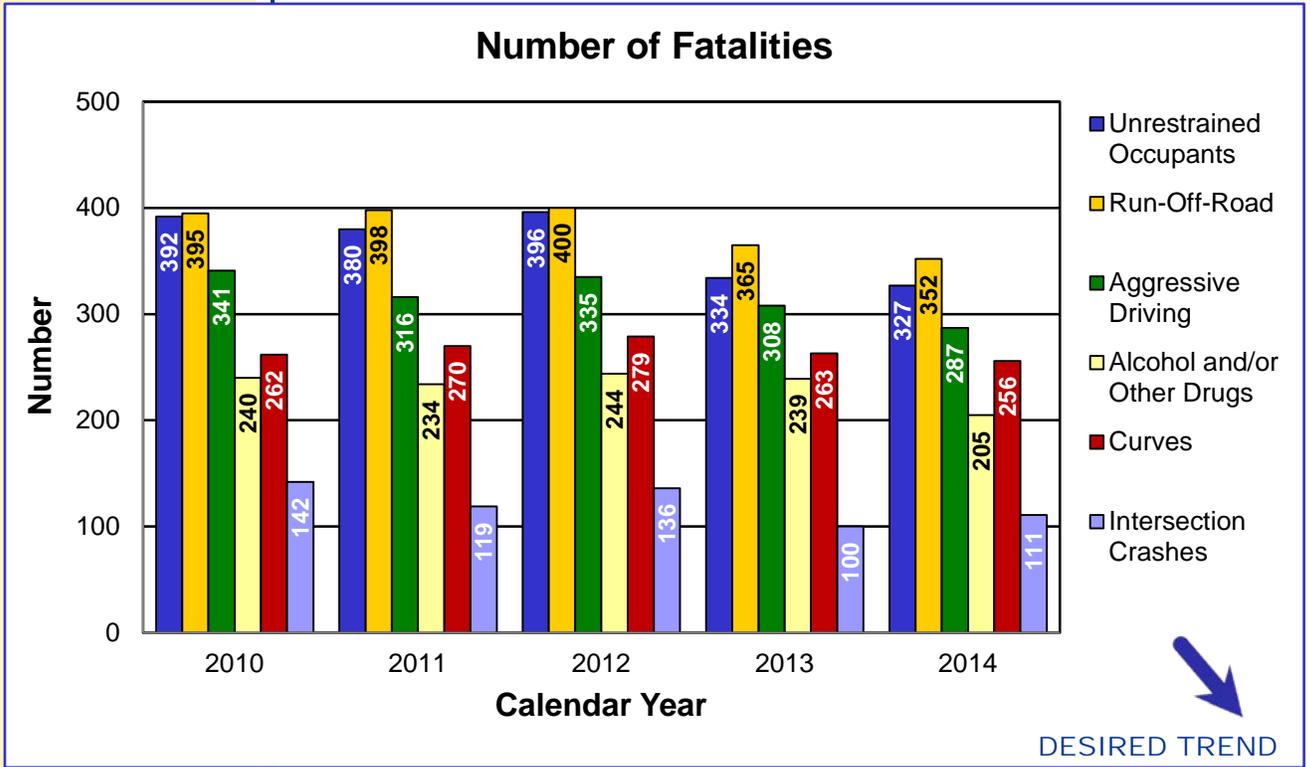
Recording and monitoring crash data is an important part of improving safety for Missouri drivers. But without looking at the causes of these incidents, the data is nothing but numbers. Looking for the reasons why an incident occurs is MoDOT's best approach to address the problem. With that approach, the department finds the most frequent causes continue to be a mix of engineering and behavioral issues.

The general trend for both fatalities and serious injuries has declined for the last five years. Comparing the number of fatalities in 2013 to 2014 shows the following results: 2 percent reduction in unrestrained occupants, 4 percent reduction in run-off-road, 7 percent reduction in aggressive driving, 14 percent reduction in alcohol and/or other drugs, 3 percent reduction in curve related, and an 11 percent increase in intersection related. Comparing the number of serious injuries in 2013 to 2014 shows the following results: 5 percent reduction in unrestrained occupants, 2 percent reduction in run-off-road, 6 percent reduction in aggressive driving, 5 percent reduction in alcohol and/or other drugs, a 2 percent increase in curve related, and an 8 percent reduction in intersection related.

With a long-term insufficient funding challenge, it will be difficult to maintain the downward trends for each of these causes, because there will be less money available for significant system-wide safety improvements. The primary current initiatives include adding shoulders and rumble strips to minor roads and improving intersection safety. While driver behavior is difficult to correct, MoDOT continues to focus on using funds to target locations and behaviors based on crash data analysis.



# KEEP CUSTOMERS AND OURSELVES SAFE



**RESULT DRIVER:**  
Eileen Rackers  
State Traffic and Highway  
Safety Engineer

# KEEP CUSTOMERS AND OURSELVES SAFE

## Number of fatalities and serious injuries in work zones – 1d

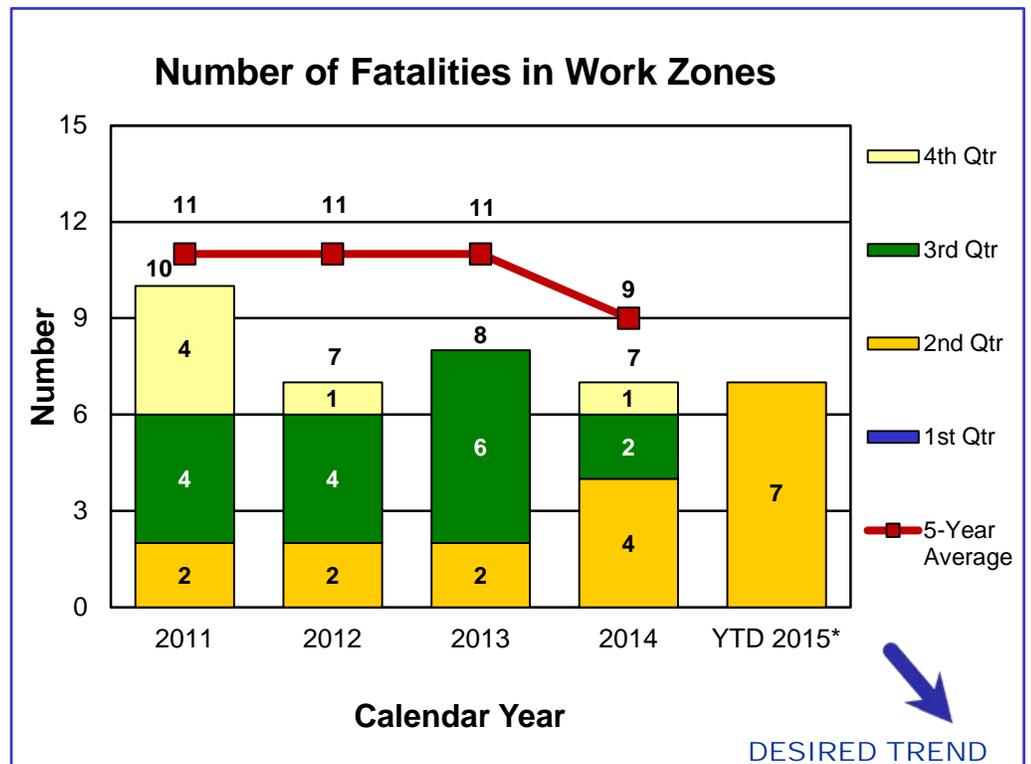
**MEASUREMENT  
DRIVER:**  
Julie Stotlemeyer  
Traffic Liaison Engineer

**PURPOSE OF  
THE MEASURE:**  
This measure tracks the  
number of traffic-related and  
non-traffic-related fatalities,  
injuries and overall crashes  
occurring in work zones on  
state-owned roadways.

**MEASUREMENT  
AND DATA  
COLLECTION:**  
Missouri law enforcement  
agencies submit a vehicle  
accident report form to the  
Missouri State Highway Patrol  
to be entered into a statewide  
traffic crash database. The  
database automatically  
updates MoDOT's crash  
database system, which is part  
of the Transportation  
Management System. MoDOT  
staff query and analyze this  
data to identify work zone  
related crash statistics. MSHP  
prioritizes entry of the crash  
reports by fatality, serious  
injury and then property  
damage only.

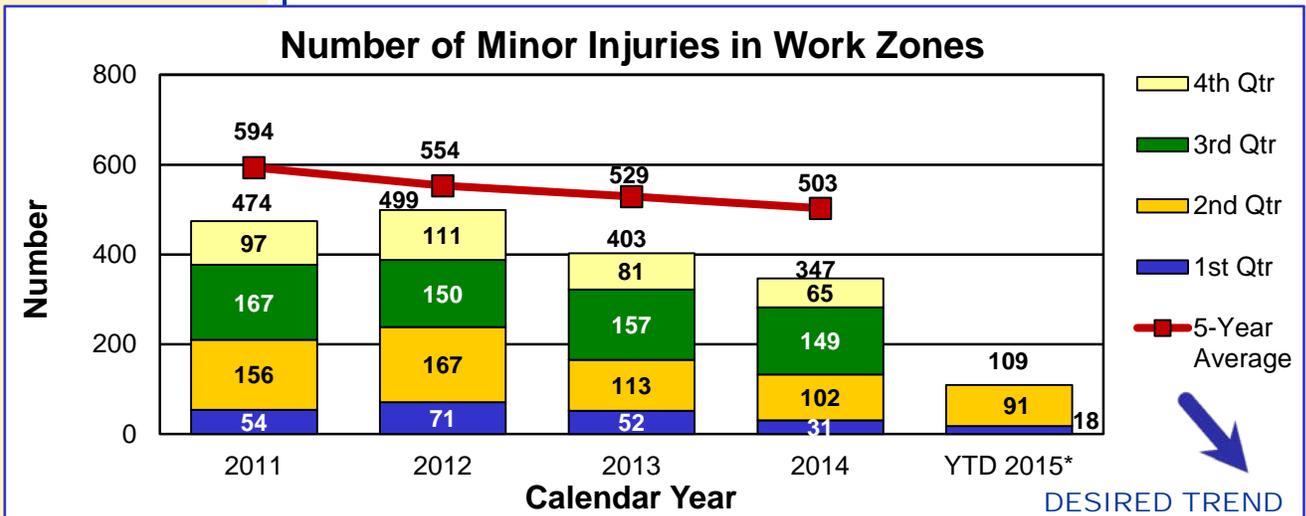
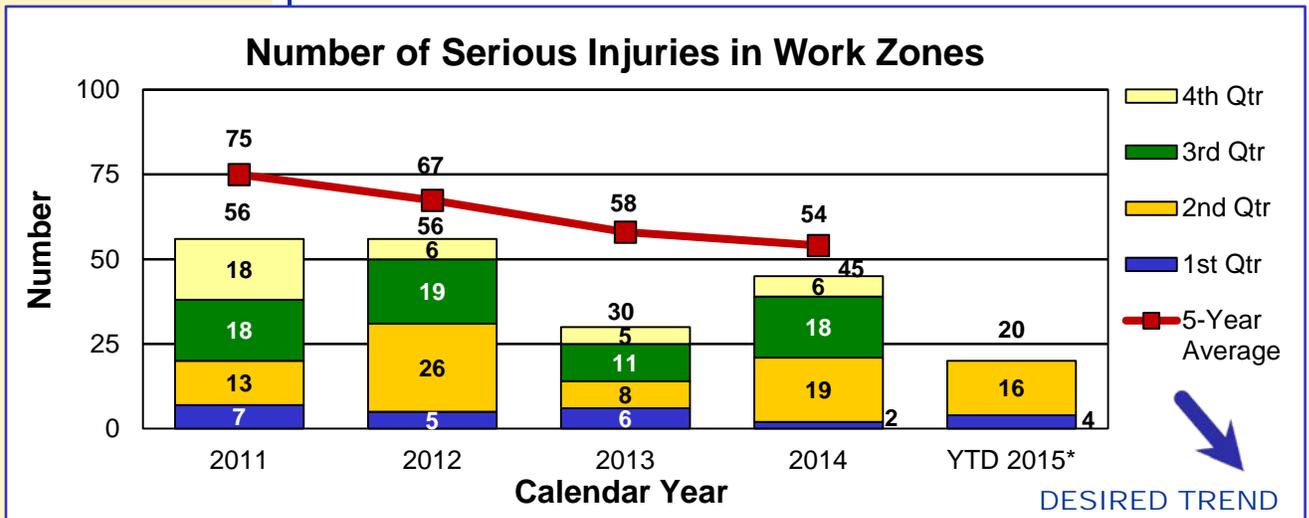
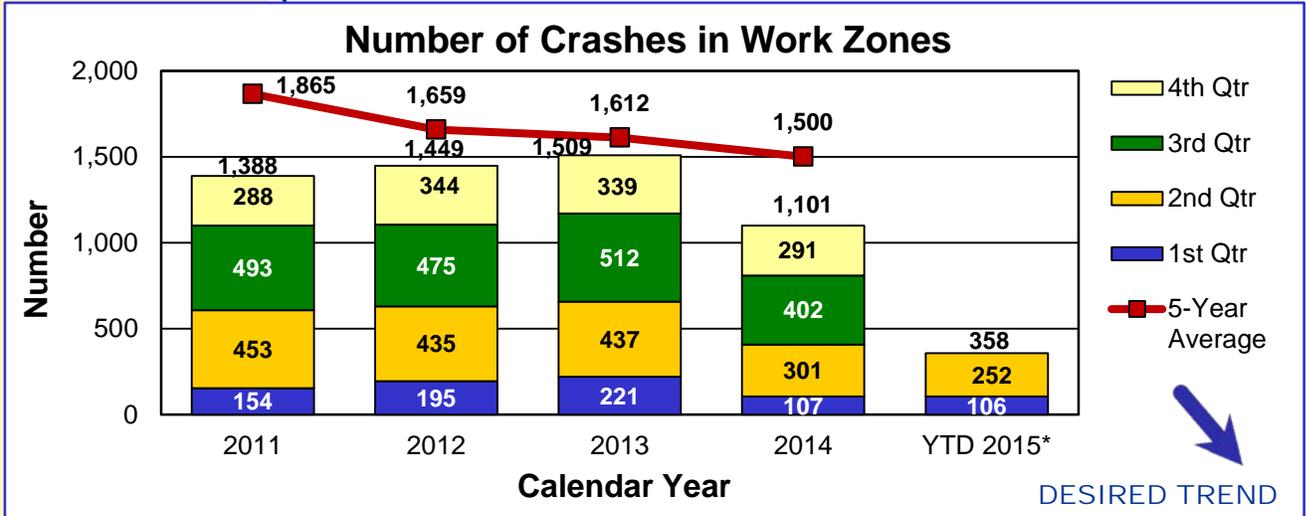
Work zone safety is at the center of MoDOT's safety culture. It is a driving force in all maintenance and construction work. Just as MoDOT expects its crews to be safe and visible, it also expects contractors and utility companies to provide safe work zones and visible workers. This is demonstrated by the partnership MoDOT has with contractors and utility companies using the same personal protection equipment it uses. Staying safe in work zones is also a partnership the department shares with the driving public. MoDOT wants everyone to get home safely. While MoDOT makes every effort to work safely, motorists need to pay attention, buckle up and drive without distractions.

From information currently available for the third quarter of 2015, seven fatalities and 20 serious injuries have occurred in Missouri work zones. For crash reports entered to date for 2014, seven people were killed in Missouri work zones. Three of those killed were not buckled. Forty-five people were seriously injured, which is 15 more than 2013.



\*YTD 2015 – First, second and third quarter fatalities derived from TMS.

# KEEP CUSTOMERS AND OURSELVES SAFE



\*YTD 2015 – Due to a backlog of crash reports into STARS, these measures will only illustrate data derived from TMS. Third quarter 2015 data is unavailable through the MSHP radio reports and is incomplete in TMS.

**RESULT DRIVER:**  
Eileen Rackers  
State Traffic and Highway  
Safety Engineer

# KEEP CUSTOMERS AND OURSELVES SAFE

## Percent of seat belt/passenger vehicle restraint use – 1e

**MEASUREMENT DRIVER:**  
Scott Jones  
Highway Safety Program  
Manager

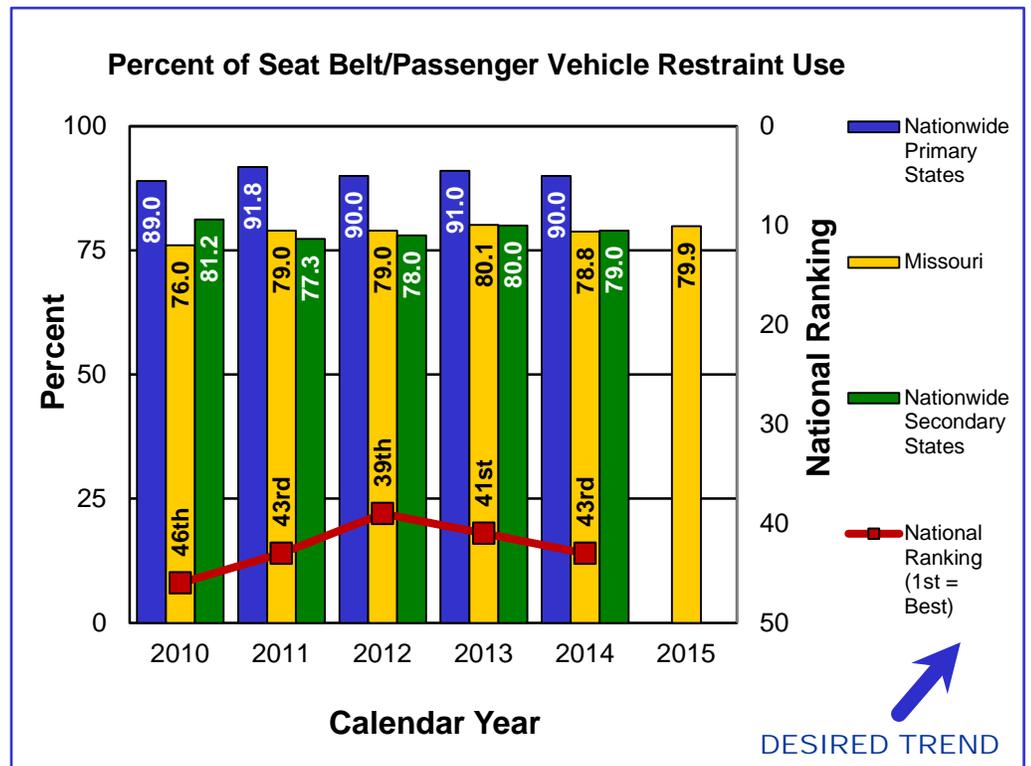
**PURPOSE OF THE MEASURE:**  
This measure tracks annual trends in seat belt use in passenger vehicles. This data drives the development and focus of the Missouri Highway Safety Plan and supports Missouri's Blueprint to Save More Lives.

**MEASUREMENT AND DATA COLLECTION:**  
Each June, a statewide survey is conducted at 560 preselected locations in 28 counties. The data collected is calculated into a seat belt usage rate using a formula approved by the National Highway Traffic Safety Administration. Data collection locations represent 85 percent of the state's vehicle occupant fatalities. The data collection plan is the same each year for consistency and compliance with NHTSA guidelines.

Seat belts save lives. But getting people to use them – even to protect their own lives – is a challenge. Public education is one way to keep the issue in front of motorists. Legislation is another. MoDOT supports both approaches, attacking the problem with focused marketing campaigns and reinforcing it with hard facts to back legislative efforts. Several municipalities across the state are taking matters into their own hands enacting primary ordinances within city limits. Missouri currently has 46 municipalities and two counties that have adopted primary seat belt ordinances, representing 23.3 percent of the state's population.

Seat belt use in Missouri for 2015 was 80 percent. The national average for seat belt use in 2014 was 87 percent. Missouri's national ranking is currently 43rd. Only seven states rank lower in seat belt use than Missouri.

Missouri's seat belt use has plateaued. States with a primary seat belt law rank highest on seat belt use nationwide. States that have a secondary law continue to rate lowest in national rankings.



**RESULT DRIVER:**  
Eileen Rackers  
State Traffic and Highway  
Safety Engineer

## KEEP CUSTOMERS AND OURSELVES SAFE

### *Number of commercial motor vehicle crashes resulting in fatalities and serious injuries – 1f*

**MEASUREMENT  
DRIVER:**  
Mark Biesemeyer  
Motor Carrier Services  
Program Manager

**PURPOSE OF  
THE MEASURE:**  
This measure tracks the  
number of Commercial Motor  
Vehicles involved in fatal and  
serious injury crashes. MoDOT  
uses the information to target  
education, enforcement and  
improvement of safety  
features.

**MEASUREMENT  
AND DATA  
COLLECTION:**  
Missouri law enforcement  
agencies submit a vehicle  
accident report form to the  
Missouri State Highway Patrol  
to be entered into a statewide  
traffic crash database. This  
measure reports the number of  
CMVs involved in crashes in  
which one or more people are  
seriously injured or die as a  
result of the crash. Preliminary  
results for the current year are  
reported quarterly.

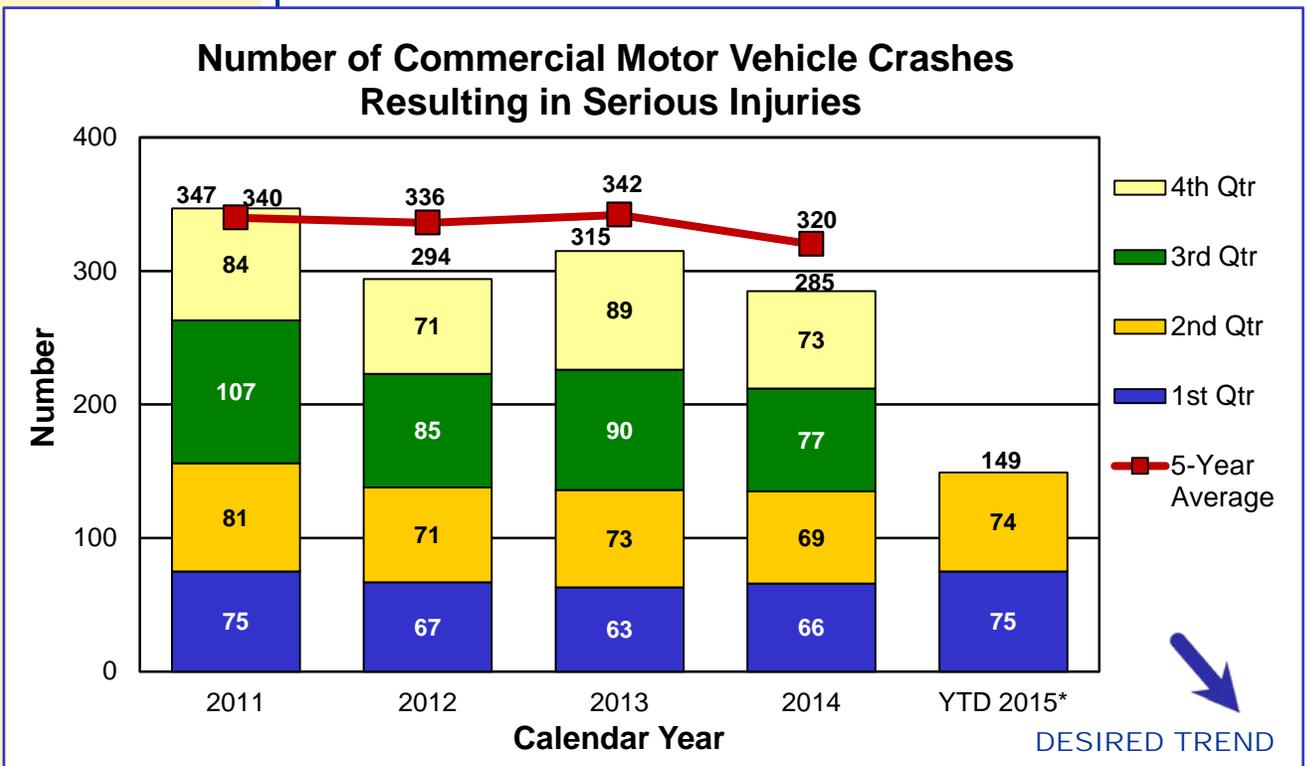
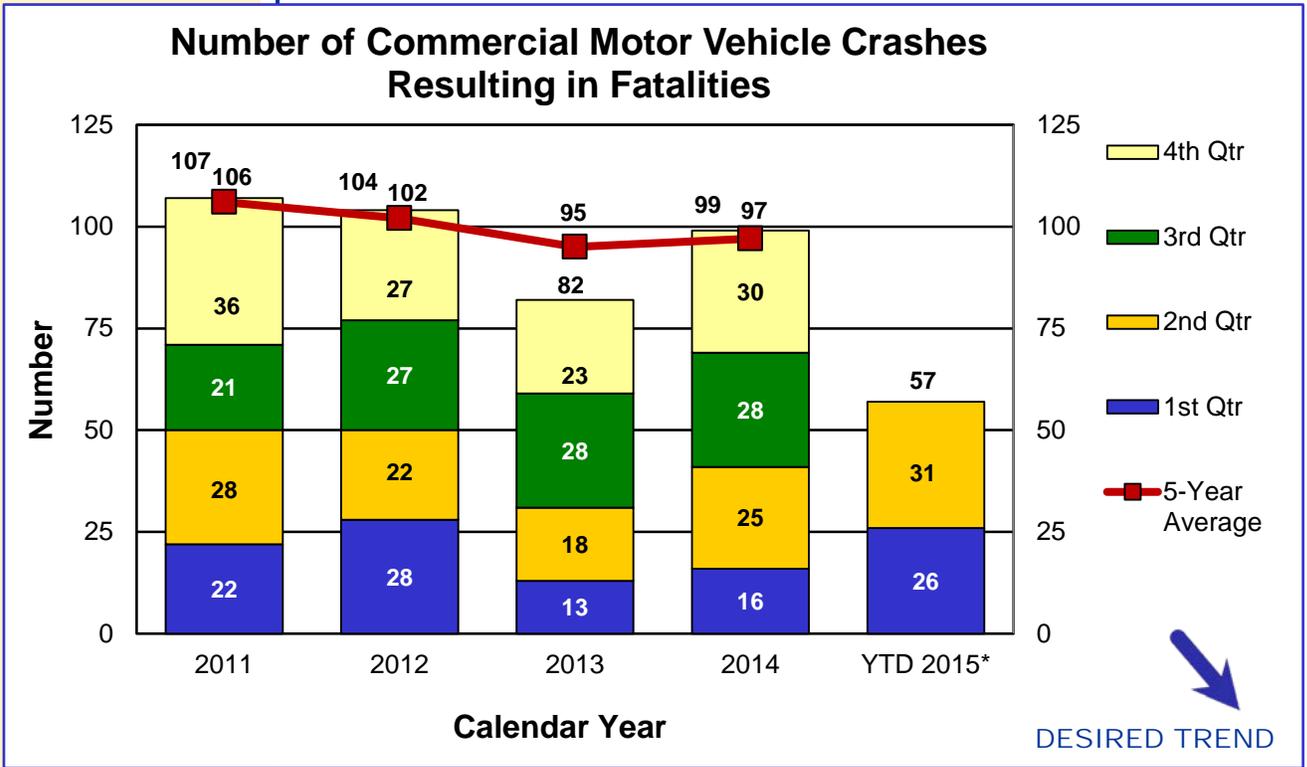
Commercial motor vehicles are the lifeblood of Missouri's economy. They transport the goods and materials that keep the nation moving. Partnering with the Missouri State Highway Patrol and St. Louis and Kansas City police departments, MoDOT does everything in its power to keep CMV drivers safe and their vehicles on the road. By tracking the number of CMV crashes resulting in fatalities and serious injuries, MoDOT can target educational and enforcement efforts, and also improve safety features such as highway signs, reflective pavement markings, guard cables, rumble strips and incident management alert signs.

These efforts are making a difference in the number of fatality and serious injury crashes. Between 2011 and 2014, fatal crashes involving a CMV decreased by 7.5 percent. However, in 2014 the 99 fatality crashes Missouri experienced was 2 percent higher than what Missouri averaged over the most recent five years. The number of fatal crashes reported through the second quarter of 2015 is 57, which is 16 more than the same period in 2014. This is an increase of 39 percent.

Between 2011 and 2014, CMV serious injury crashes decreased by 17.9 percent and the 285 serious injury crashes Missouri experienced in 2014 was 10.9 percent lower than the most recent five-year average. The number of serious injury crashes reported through the second quarter of 2015 is 149, which is 14 more than the same period in 2014. This is an increase of 10.4 percent. Diminished funding may hamper the department's ability to make significant safety improvements in the future.



# KEEP CUSTOMERS AND OURSELVES SAFE



\*YTD 2015 – Due to a backlog of crash reports into STARS, these measures will only illustrate data derived from TMS.

**RESULT DRIVER:**  
Eileen Rackers  
State Traffic and Highway  
Safety Engineer

# KEEP CUSTOMERS AND OURSELVES SAFE

## Number of lost workdays – 1g

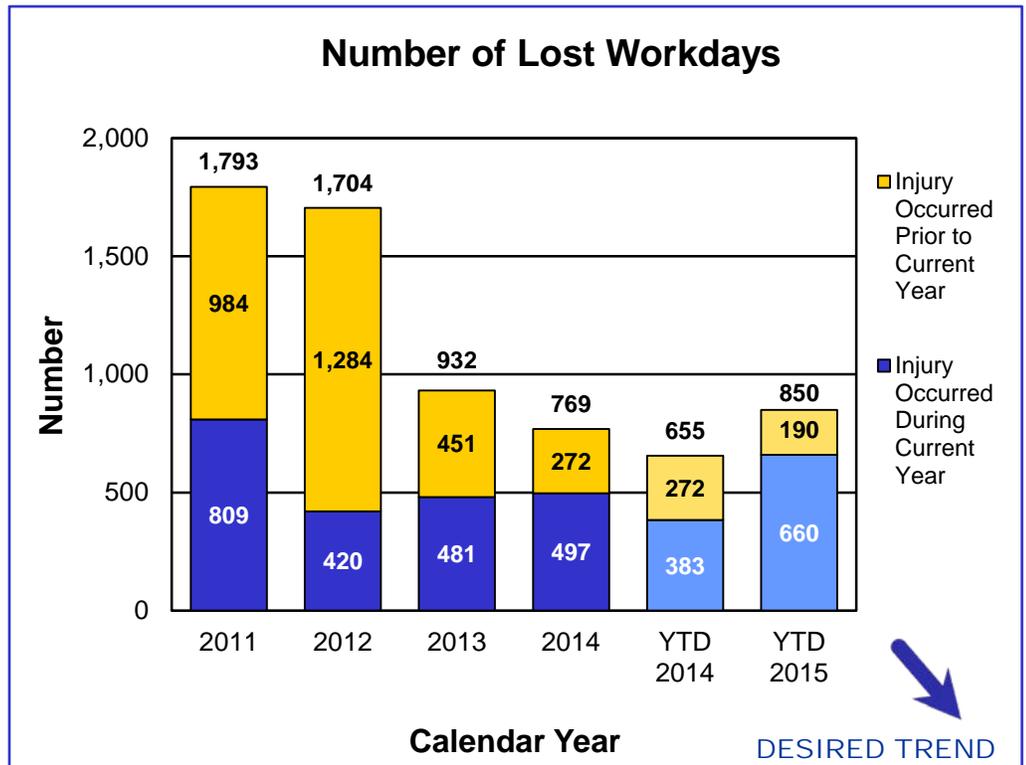
**MEASUREMENT DRIVER:**  
Roberta Jacobson  
Claims Administration Manager

**PURPOSE OF THE MEASURE:**  
This measure tracks the actual number of days employees cannot work due to work-related injuries.

**MEASUREMENT AND DATA COLLECTION:**  
The data for this measure is collected from Riskmaster, the department's risk management claims administration software.

The impact of work-related injuries cannot be underestimated. Employees injured at work not only affect the department, but can disrupt the personal lives of MoDOT employees and their families. Measuring lost workdays shows more than a number on a chart. These are people whose lives can be changed by a split second of inattention or poor preparation. Watching this number fall over the years, shows that something is going right.

For the first three quarters of 2015, the total number of lost workdays increased 30 percent from the same time period in 2014. There were four incidents in which employees were lifting MoDOT equipment or materials, accounting for 37 percent of the lost workdays. Another 15 percent of the lost workdays were attributable to three incidents involving weed or brush cutting activities. One incident involving snow removal accounted for 10 percent of the lost workdays, while two motor vehicle injuries involving another party accounted for 9 percent of the lost workdays.



**RESULT DRIVER:**  
Eileen Rackers  
State Traffic and Highway  
Safety Engineer

## KEEP CUSTOMERS AND OURSELVES SAFE

### *Total and rate of MoDOT recordable incidents – 1h*

**MEASUREMENT  
DRIVER:**  
Jeff Padgett  
Risk and Benefits  
Management Director

**PURPOSE OF  
THE MEASURE:**  
This measure tracks the  
number of recordable injuries,  
in total and as a rate of injuries  
per 100 workers.

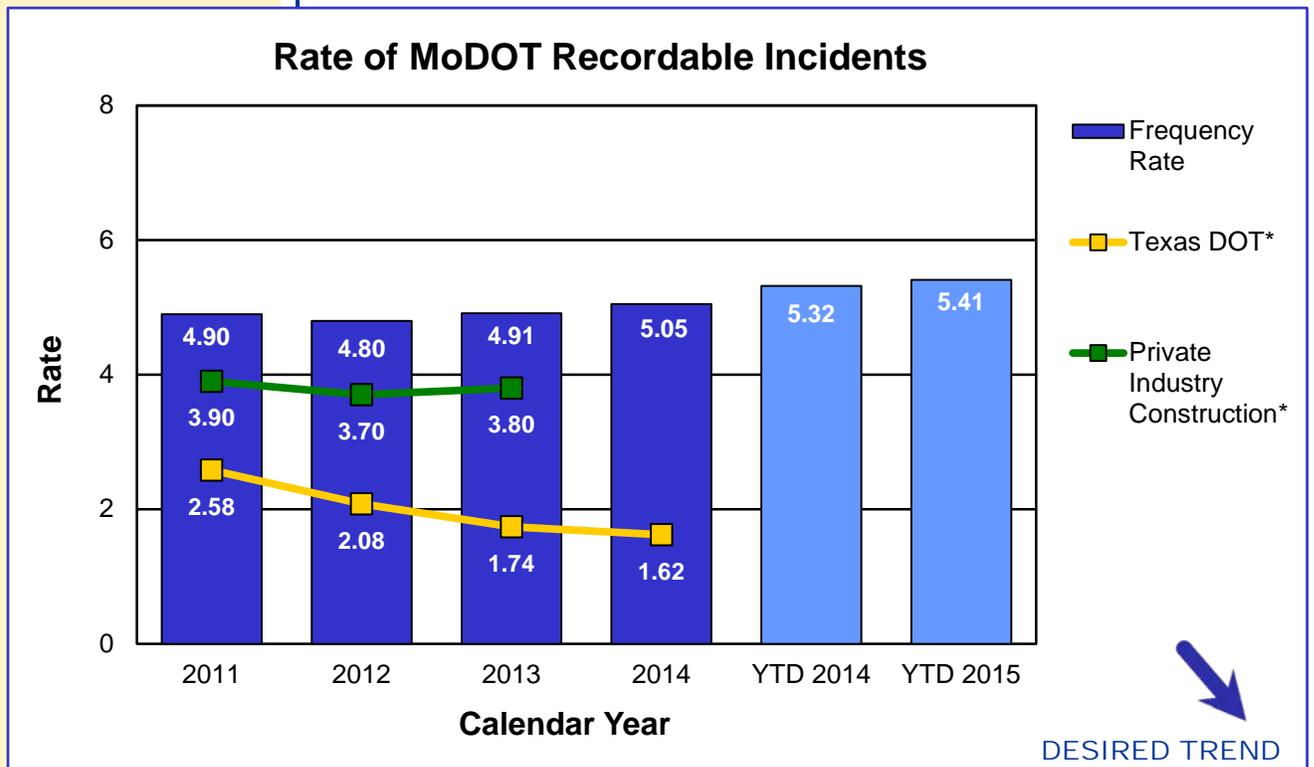
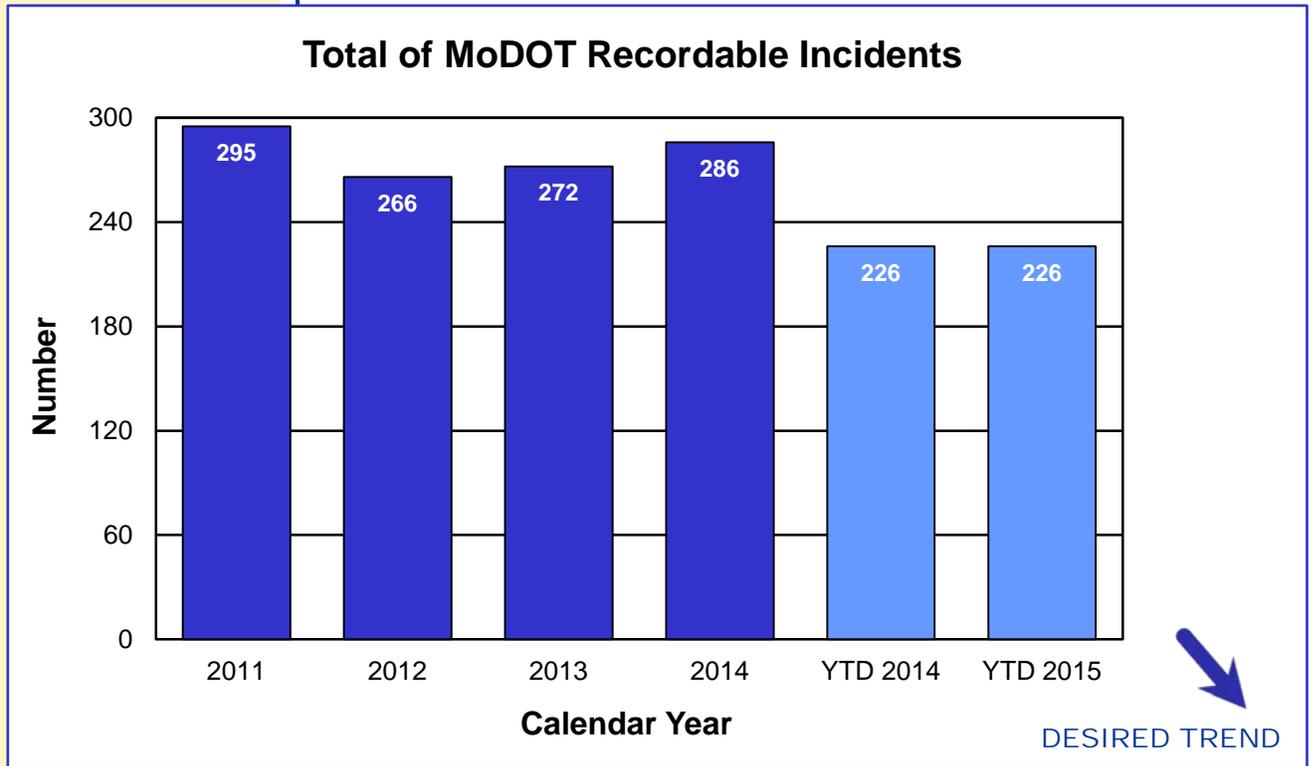
MoDOT is dedicated to employee safety. Getting home safely is a responsibility every employee shares. To reinforce this value, the “Safety Begins with Me” program was launched in 2013 to remind all employees that safety is a personal responsibility.

The number of recordable incidents has remained constant while the rate of recordable incidents has increased for the first three quarters of 2015 compared to the same time period in 2014. Leading causes of incidents during this reporting period were: slips, trips and falls at 19 percent; struck or injured at 14 percent; and cut/puncture and strain or injury by at 13 percent each. When looking at the work activity the employee was doing at the time of the incident, 26 percent of these injuries were equipment related. Another 15 percent were related to mowing/brush cutting, and materials activities had 10 percent.

**MEASUREMENT  
AND DATA  
COLLECTION:**  
The calculation for incidence  
rate is the number of  
recordables times 200,000  
divided by the number of hours  
worked. The 200,000 used in  
the calculation is the base for  
100 full-time workers (working  
40 hours per week, 50 weeks  
per year). MoDOT defines a  
recordable incident as a work-  
related injury or illness that  
results in death, days away  
from work or medical treatment  
resulting in cost to the  
department. The injury data is  
collected from Riskmaster, the  
department’s risk management  
claims administration software.  
The number of hours worked is  
taken from MoDOT’s payroll  
data.



# KEEP CUSTOMERS AND OURSELVES SAFE



\*OSHA private industry data is not yet available for 2014.

RESULT DRIVER:  
Eileen Rackers  
State Traffic and Highway  
Safety Engineer

## KEEP CUSTOMERS AND OURSELVES SAFE

### *General liability claims and costs – 1i*

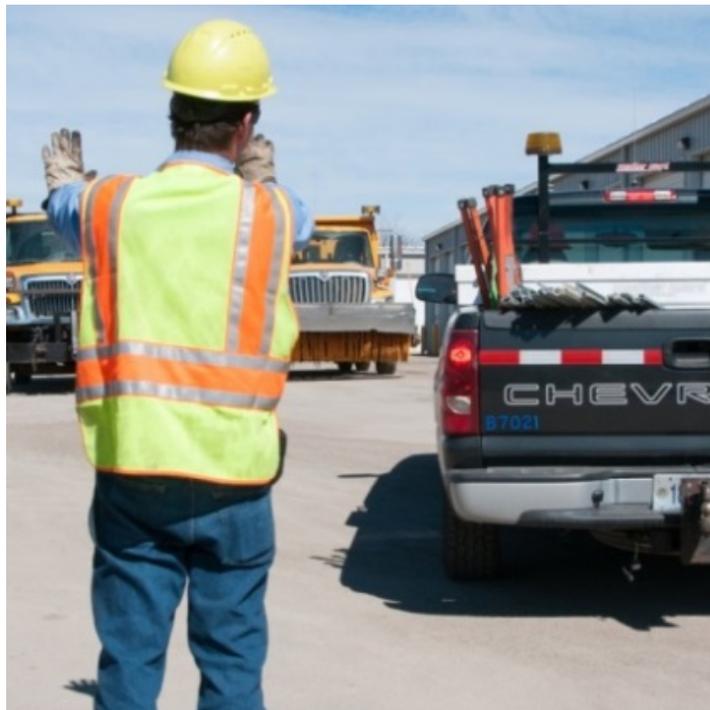
MEASUREMENT  
DRIVER:  
Steve Patterson  
Safety and Claims Manager

PURPOSE OF  
THE MEASURE:  
This measure tracks the  
number of general liability  
claims and the amount paid.

MEASUREMENT  
AND DATA  
COLLECTION:  
General liability claims arise  
from allegations of  
injuries/damages caused by  
the dangerous condition on  
MoDOT property and the  
injury/damage that directly  
resulted from the dangerous  
condition. In addition, an  
employee must be negligent  
and create the dangerous  
condition or MoDOT must  
have actual or constructive  
notice of the dangerous  
condition in sufficient time  
prior to the injury/damage  
to have taken measures to  
protect the public against  
the dangerous condition.  
Claims data is collected  
from Riskmaster, the  
department's risk management  
claims administration software.

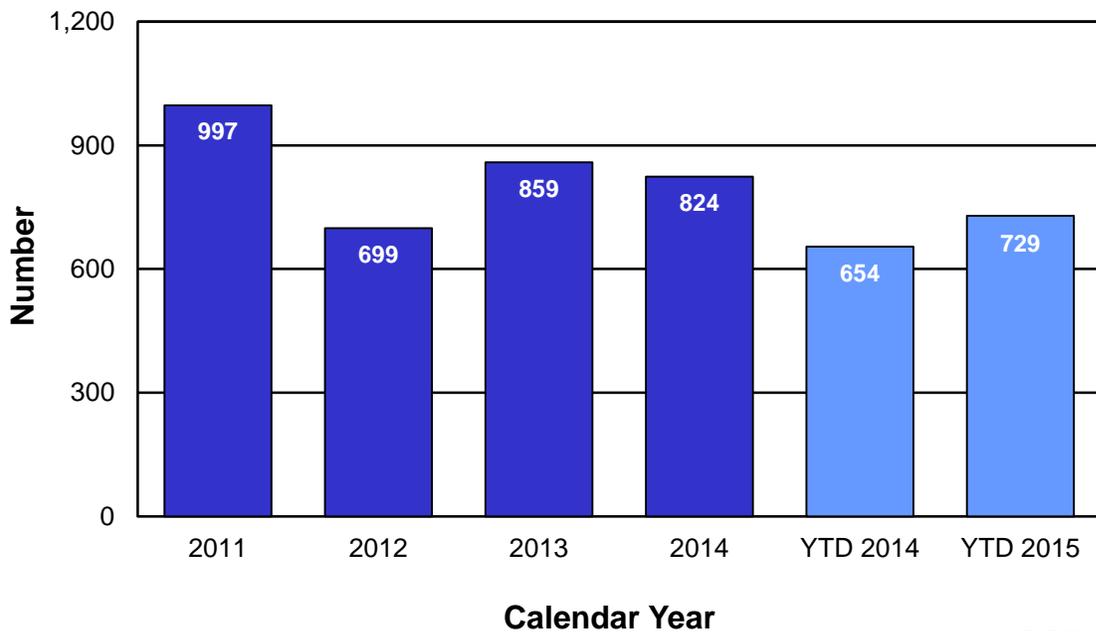
Keeping ourselves and the public safe is MoDOT's top priority. Controlling damage to vehicles and reducing personal injury in work zones, right of way and other areas under department control helps MoDOT accomplish this goal. Compared to the first three quarters of 2014, there was an increase of 12 percent in the number of claims. The majority of claims for the first three quarters of 2015 were attributed to pavement defects. During the same timeframe, there was a 22 percent increase in the amount paid. This quarter, payment was made on 154 claims against the department totaling \$1,520,041.

Two claims accounted for 41 percent of this quarter's payments. The department settled a claim occurring in 2008 based on a dangerous condition of water runoff from an exit ramp on I-44. The incident took place when a pedestrian was struck by a vehicle that hydroplaned resulting in severe injuries. The claim was settled for \$300,200. In the other claim, the department also settled based on dangerously low friction levels and pooling of water on a curve. The incident occurred in 2009 when a driver lost control and struck a pedestrian resulting in multiple severe injuries. The claim was settled for \$337,342.



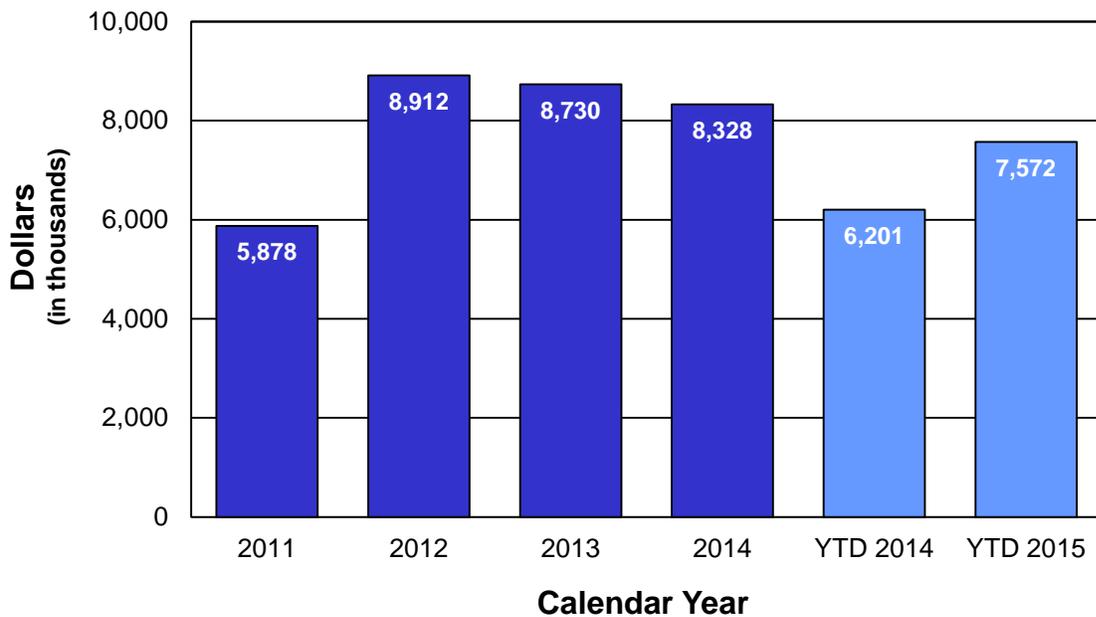
# KEEP CUSTOMERS AND OURSELVES SAFE

## Number of Claims for General Liability



DESIRED TREND

## Amount Paid in Claims for General Liability



DESIRED TREND



# KEEP ROADS AND BRIDGES IN GOOD CONDITION

*Dennis Heckman, State Bridge Engineer*



# Tracker

MEASURES OF DEPARTMENTAL PERFORMANCE



Missourians have said they want MoDOT to keep roads and bridges in good condition. Customers are looking for smooth pavements and bridges that can safely handle growing traffic demands. With 33,891 miles of highway and 10,376 bridges on the state system, the challenges are great; however, we are focused on using our limited resources to keep Missouri's roads and bridges in good condition.

**RESULT DRIVER:**  
Dennis Heckman,  
State Bridge Engineer

**MEASUREMENT DRIVER:**  
Brian Reagan  
Transportation System  
Analysis Engineer

**PURPOSE OF THE MEASURE:**  
This measure tracks the condition of Missouri's major highways.

**MEASUREMENT AND DATA COLLECTION:**  
Missouri's major highway system contains the state's busiest highways, including interstates and most U.S. routes. It also includes busy routes in urban areas, particularly where vehicles travel between business districts and residential areas. There are 5,530 total miles on the major highway system, and the condition of these roadways is determined using a variety of measures. While it can be difficult to compare one state's roadways to another's, MoDOT uses Georgia as a comparable system because it has a similar amount of major highways and also bases its evaluation on the smoothness of the roadways. Missouri measures the condition of its roadways using smoothness as one factor, but also considers physical distresses such as cracking.

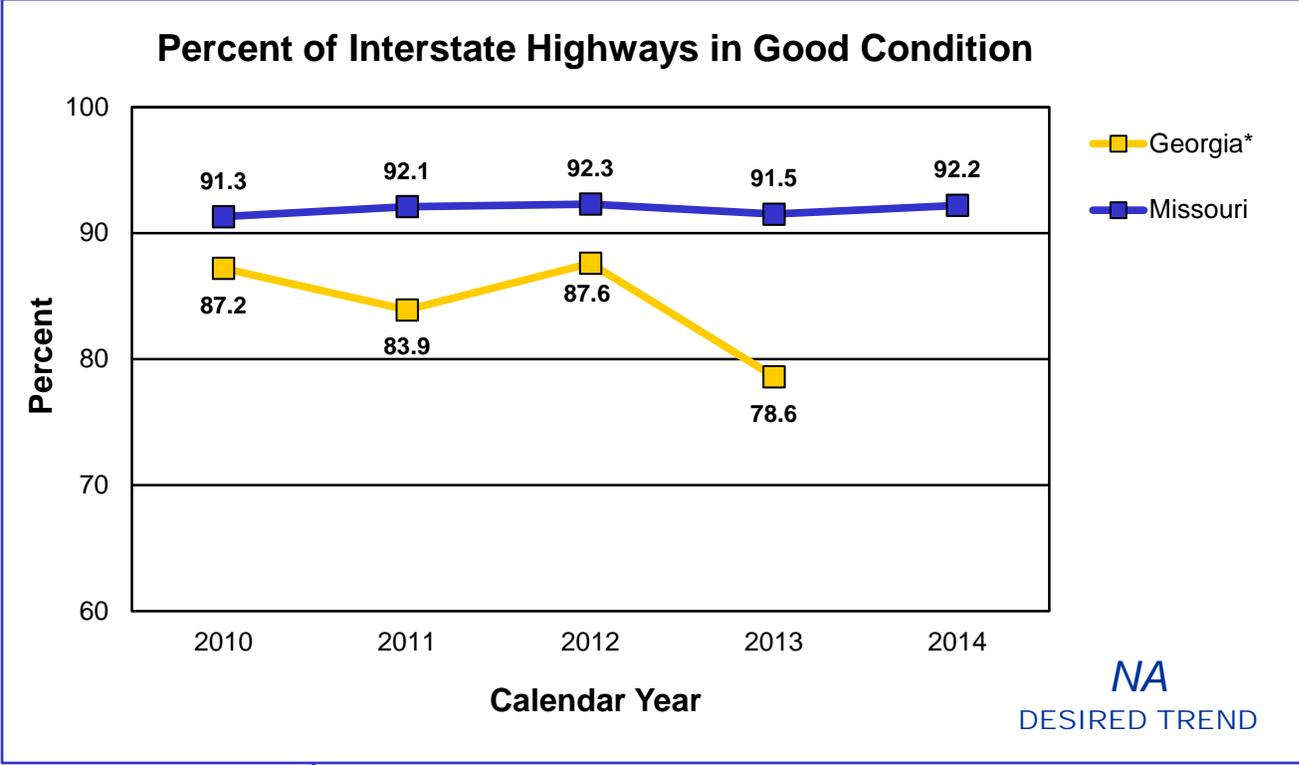
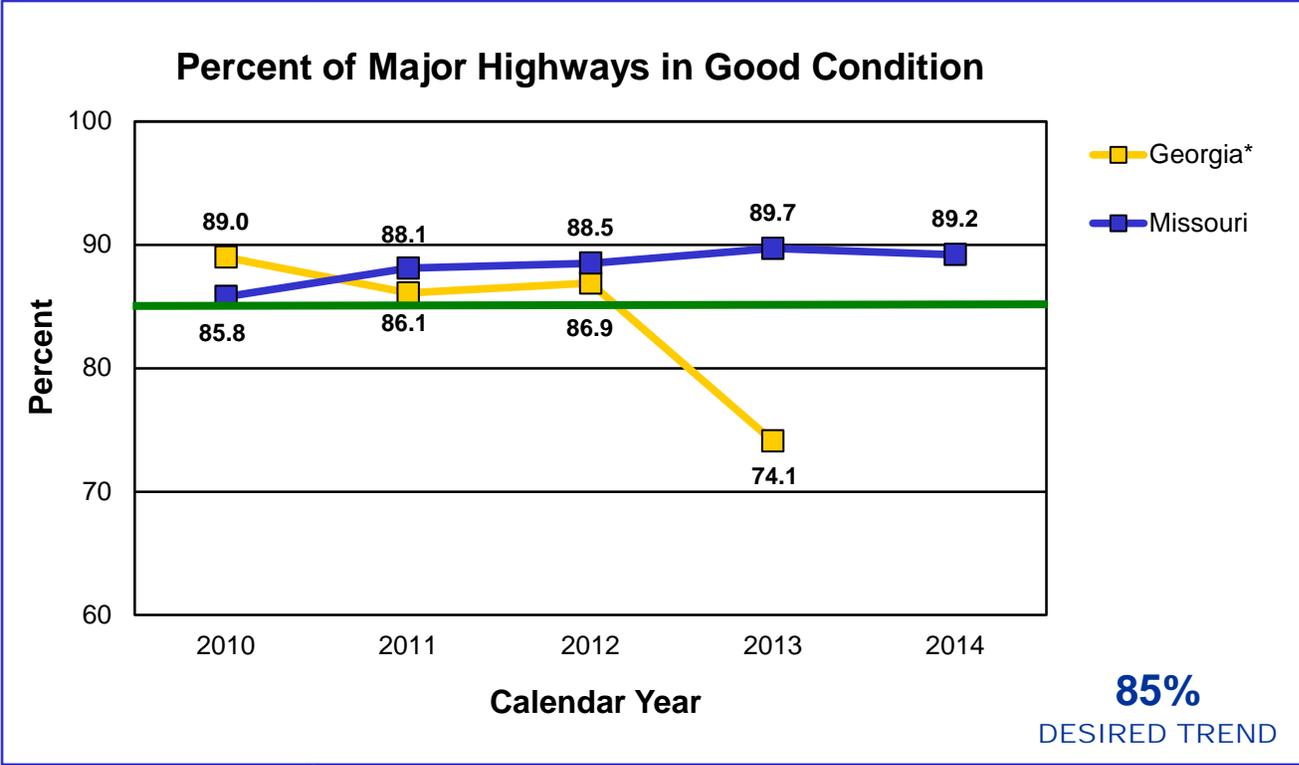
## KEEP ROADS AND BRIDGES IN GOOD CONDITION

### *Percent of major highways in good condition – 2a*

Missourians have repeatedly told MoDOT keeping roads smooth is a top priority. Over the years, MoDOT has been able to fund pavement improvement programs greatly improving pavement conditions on the thousands of miles of state highways. Currently, more than 89 percent of major highways are rated in good condition. However, with annual contractor awards dropping to their lowest level since 1997 in 2017, it will be increasingly difficult to maintain this condition level.



# KEEP ROADS AND BRIDGES IN GOOD CONDITION



\*Source data for Georgia comes from FHWA highway statistics. Full data sets are collected every two years. The data set for 2013 is not a full data set. Georgia data is based only on pavement smoothness (IRI) submitted as part of the Highway Performance Monitoring System.

## RESULT DRIVER:

Dennis Heckman  
State Bridge Engineer

## MEASUREMENT DRIVER:

Brian Reagan  
Transportation System  
Analysis Engineer

## PURPOSE OF THE MEASURE:

This measure tracks the condition of Missouri's minor highways.

## MEASUREMENT AND DATA COLLECTION:

Missouri's minor highway system consists of its less-traveled state highways, including those routes that mainly serve local transportation needs. The minor highway system includes most lettered routes. There are 28,361 miles of minor highways in Missouri. The condition of these routes is determined using a variety of measures.

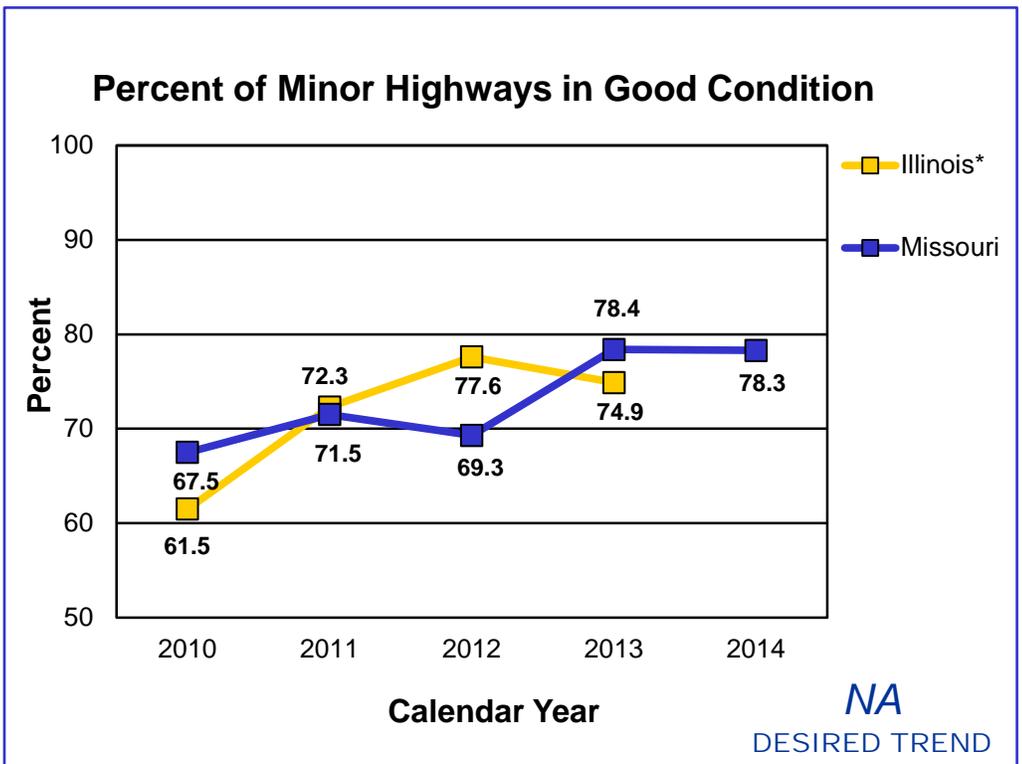
While it can be difficult to compare one state's roadways to another's, MoDOT uses Illinois as a comparable system because it has a similar number of minor highways and has the highest percentage of routes in good condition. Missouri measures the condition of its roadways using smoothness as one factor, but also considers physical distresses such as cracking.

# KEEP ROADS AND BRIDGES IN GOOD CONDITION

## Percent of minor highways in good condition – 2b

Although minor roads are less traveled, Missourians still say keeping them in good condition is a priority. During the early 2000s, MoDOT's focus was on improving major highways. This resulted in less work being done on minor roads and lower condition ratings. Over the past few years, success on major highways has allowed the department to focus more time and funding on improving minor highways.

Currently, 78 percent of Missouri's minor roads are in good condition, which is level from 2013. However, with annual contractor awards dropping to their lowest level since 1997 in 2017, it will be increasingly difficult to maintain this condition level.



\*Source data for Illinois comes from FHWA highway statistics. Data for 2014 is not available at the time of publication. Data is based on a combination of pavement condition and smoothness as submitted as part of the Highway Performance Monitoring System.

## RESULT DRIVER:

Dennis Heckman  
State Bridge Engineer

# KEEP ROADS AND BRIDGES IN GOOD CONDITION

## *Condition of state bridges – 2c*

## MEASUREMENT

### DRIVER:

David Koenig  
Bridge Management Engineer

## PURPOSE OF THE MEASURE:

This measure tracks progress toward improving the condition of Missouri's bridges.

## MEASUREMENT AND DATA COLLECTION:

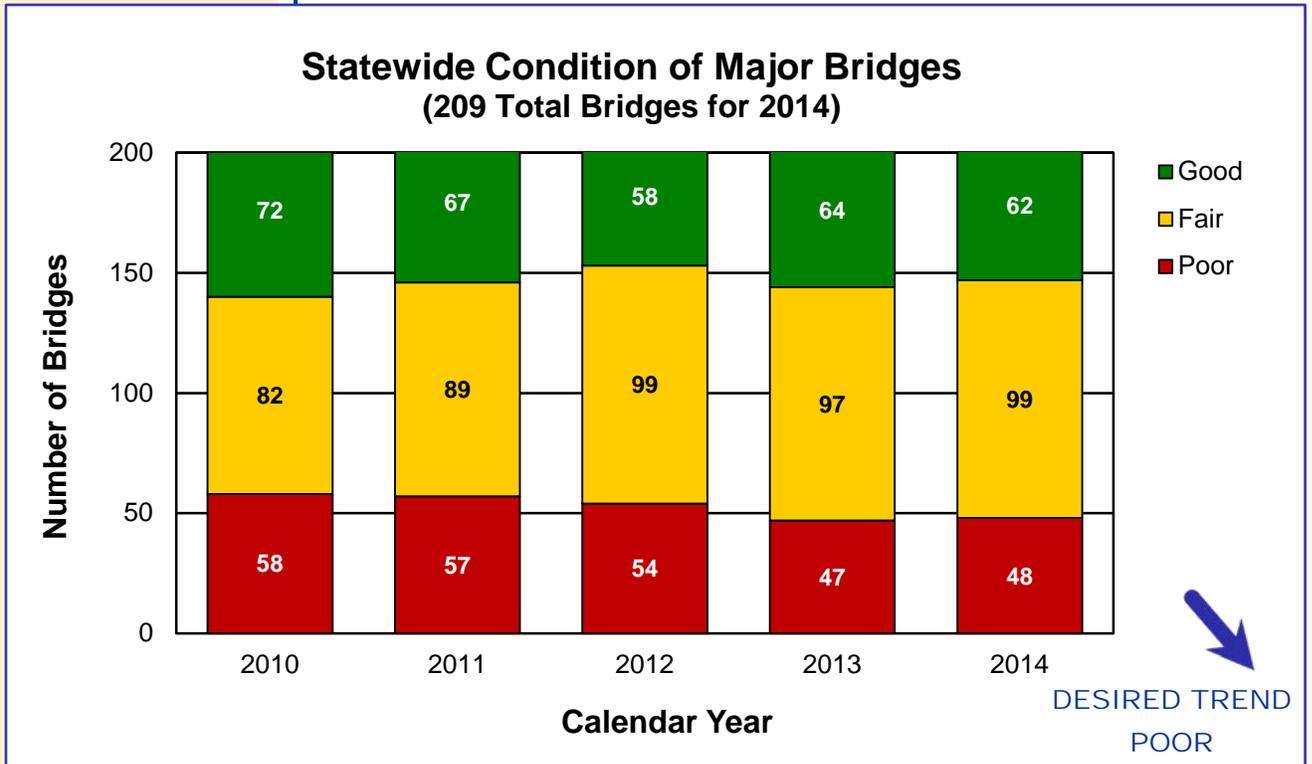
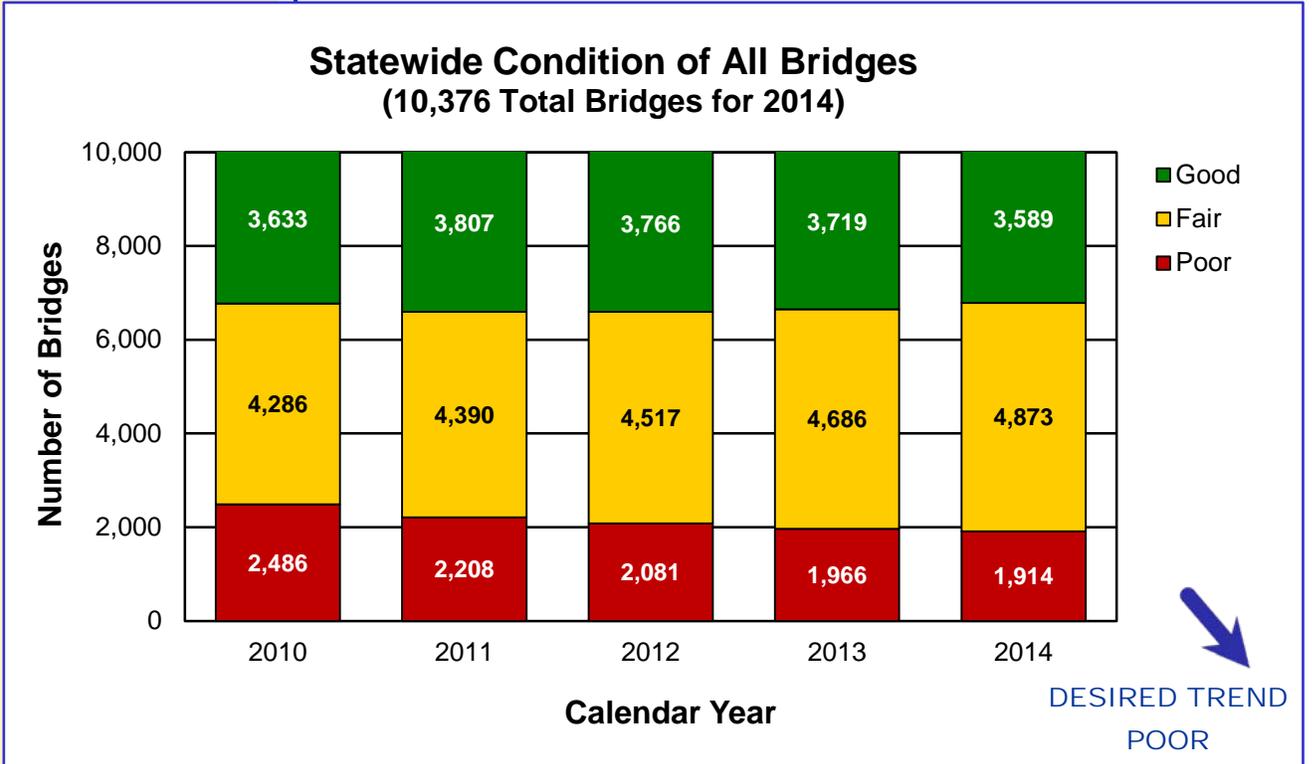
This measure is updated in April based on MoDOT inspections conducted the prior year. Data is presented for all state bridges and major bridges. Major bridges are typically those that cross large rivers and lakes and are longer than 1,000 feet. Of the 10,376 bridges on state highways, 209 are major. Bridges are categorized as being in good, fair or poor condition. Good means no significant condition-related problems exist. Fair indicates moderate problems that may require minor rehabilitation or maintenance to return the structure to good condition. Poor indicates a structure that is deficient, requiring either replacement or a major rehabilitation.

The public has indicated the condition of Missouri's existing roadway system should be one of the state's highest priorities. Currently, 1,914 (48 major) structures are in poor condition, 4,873 (99 major) structures are in fair condition and 3,589 (62 major) structures are in good condition.

Statewide, the number of structures in poor condition has dramatically decreased over the last five years, but the rate of decline is slowing down. The number of structures in good condition moderately improved through 2011 but has started to decline over the last two years. Improvements in these numbers were heavily impacted by the Safe & Sound Bridge Improvement Program that was completed in 2012 and by the increased construction program that resulted from the passage of Amendment 3 in 2004. The recent decline in good bridges can be attributed to MoDOT's reduced construction program as the result of funding constraints. It should be noted that while the number of poor-condition bridges dropped by 572 over this five-year period, the number in good condition has only decreased by 44. The number in fair condition has significantly increased by 587 over this period which is reflective of MoDOT's aging bridge population with many structures at the point where they need minor maintenance or rehabilitation. With the decrease in funds available for the construction program, continued improvements in reducing the number of structures in poor condition will be difficult.

For major bridges, the number of structures in the poor category has generally been dropping over the last five years because of an aggressive focus on these structures in the STIP, but despite a significant investment in major bridges, the number of structures in good condition generally dropped over the five-year period while the number in fair condition significantly increased. Work on major bridges is very expensive with rehabilitations costing \$10 to \$20 million and replacements ranging from \$20 million to \$200 million. With annual contractor awards dropping to their lowest level since 1997 in 2017, it will be increasingly difficult to make significant improvements in the condition of major bridges.

# KEEP ROADS AND BRIDGES IN GOOD CONDITION



## RESULT DRIVER:

Dennis Heckman,  
State Bridge Engineer

# KEEP ROADS AND BRIDGES IN GOOD CONDITION

## Percent of structurally deficient deck area on National Highway System – 2d

## MEASUREMENT

### DRIVER:

David Koenig  
Bridge Management Engineer

## PURPOSE OF THE MEASURE:

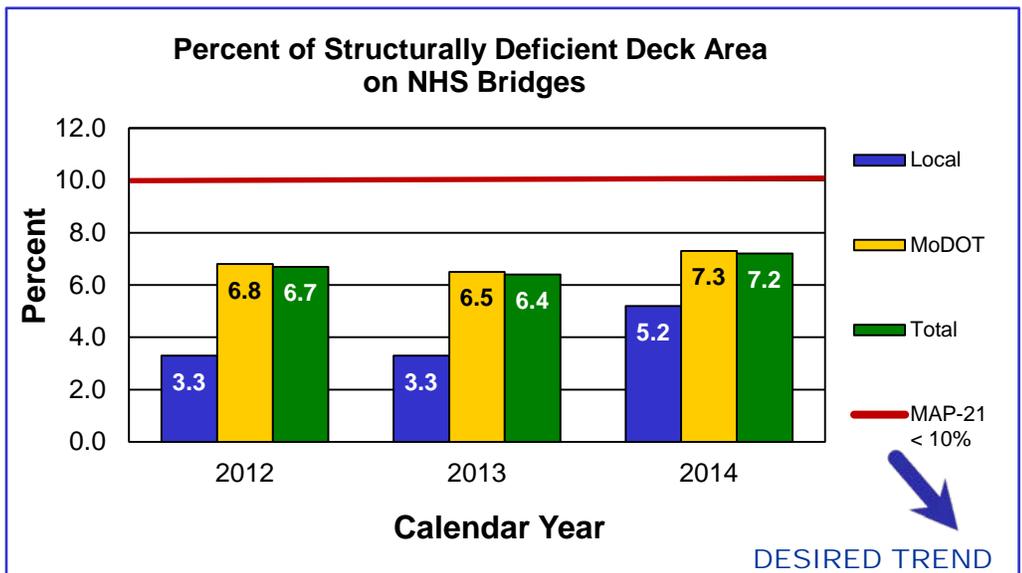
This measure tracks the percent of structurally deficient deck area for bridges on the National Highway System.

## MEASUREMENT AND DATA COLLECTION:

The NHS is defined by federal law and consists of all roadways functionally classified as principal arterials as well as some routes that serve as major connections to multimodal freight-type facilities and some locally owned roadways. Historically, structurally deficient consists of bridges that are in bad condition or have insufficient load capacity when compared to modern design standards. With MAP-21, there are some proposed adjustments in how structurally deficiency is determined and this measure has been created based on these proposed adjustments. Moving Ahead for Progress in the 21st Century, the federal Surface Transportation Act, requires states to track the structurally deficient deck area with a national performance goal of less than 10 percent.

The public has indicated keeping Missouri's existing roads and bridges in good condition should be one of the state's highest priorities. MAP-21 set a national performance goal to have the structurally deficient deck areas of National Highway System bridges be less than 10 percent. The local system has 84 NHS structures (two SD) and the MoDOT system has 3,600 NHS structures (145 SD). MoDOT currently meets the national performance goal with the total at 7.2 percent, which is attributable to aggressive efforts undertaken with construction on major bridges over the last 10 years, as well as other accelerated construction from MoDOT's bonding program. The ability to continue to meet this goal will become more difficult with a reduced construction program. The ability to continue to meet this goal will become more difficult with a reduced construction program.

This measure is also heavily influenced by major bridges because one structure has the ability to impact this measure +/-0.5 percent. The majority of the change from 2013 to 2014 is attributable to the addition of two major bridges and the removal of one major bridge from the SD category. Additionally, on the local system there was a significant reduction in the number of NHS structures as the result of functional class changes on roadways across the state. The majority of these changes happened in the Kansas City District. Both of the local system structures that are currently SD are in St. Louis, with a replacement project for one of them scheduled to start in 2015. With annual contractor awards dropping to their lowest level since 1997 in 2017, MoDOT's ability to keep up with the replacement and rehabilitation needs of major bridges will be limited.





## PROVIDE OUTSTANDING CUSTOMER SERVICE

*Dan Niec, District Engineer*

The logo for 'Tracker' features a stylized circle with a crosshair on the left side. The word 'Tracker' is written in a bold, green, sans-serif font.

# Tracker

MEASURES OF DEPARTMENTAL PERFORMANCE



Every MoDOT employee is responsible for delivering outstanding customer service. We strive to be respectful, responsive, and clear in all our communication. We want to build strong relationships with our transportation partners, our customers and each other.

**RESULT DRIVER:**

Dan Niec  
District Engineer

# PROVIDE OUTSTANDING CUSTOMER SERVICE

## Percent of overall customer satisfaction – 3a

**MEASUREMENT DRIVER:**

Tammy Wallace  
Senior Communications Specialist

**PURPOSE OF THE MEASURE:**

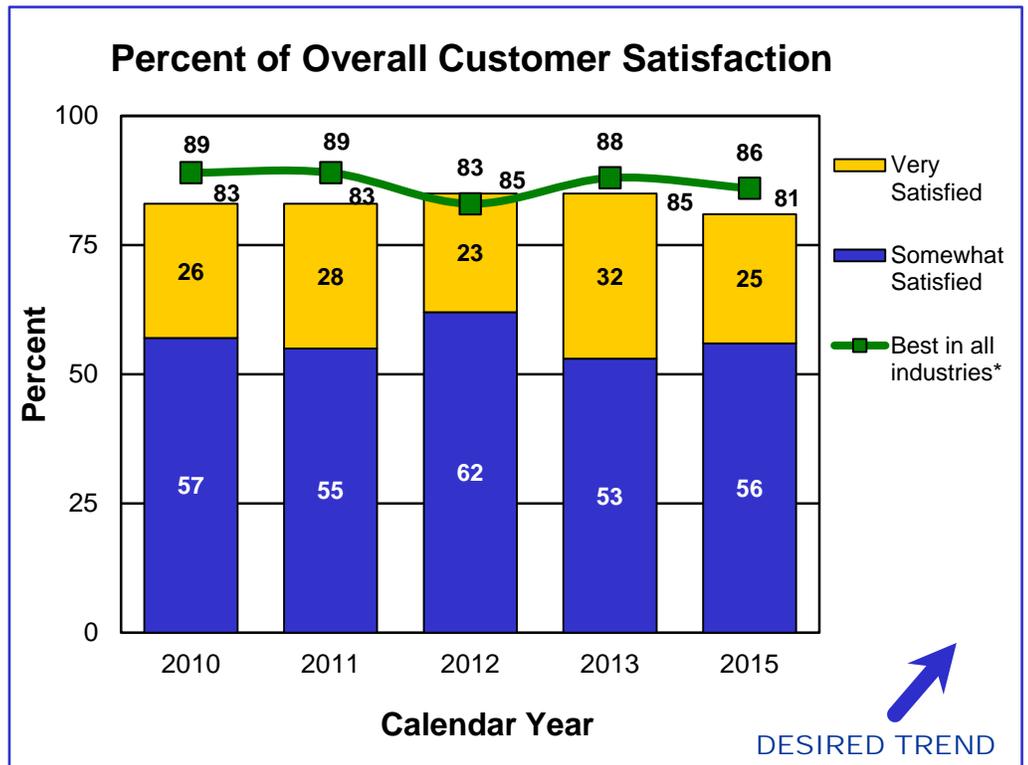
This measure tracks MoDOT's progress toward the mission of delighting its customers.

**MEASUREMENT AND DATA COLLECTION:**

Data is collected through a telephone survey of approximately 3,500 randomly selected Missourians. Benchmarking data is provided by the American Customer Service Index.

Over the past few years, customer satisfaction has remained high. In 2015, 81 percent of Missourians surveyed said they were satisfied with the job MoDOT is doing, which is a 4 percent decline from 2013. There also was a 7 percent decline in very satisfied customers. Data compiled by the American Customer Satisfaction Index in 2015 shows Chick-fil-A having the highest customer satisfaction rate – 86 percent – out of the hundreds of companies and government agencies the ACSI scores.

The condition of our roads and bridges and customer satisfaction are closely tied together. In the 2015 Report Card from Missourians, customers told MoDOT the condition of roads and bridges were the most important transportation service to them. However, even with present system conditions remaining good, the department's message of declining system conditions and limited funds to maintain it in the next few years potentially impacted customer perceptions and satisfaction scores.



\*2010-11 – Lincoln Mercury, 2012 – Apple, Inc., 2013 – Mercedes Benz, 2015 – Chick-fil-A.

**RESULT DRIVER:**

Dan Niec  
District Engineer

# PROVIDE OUTSTANDING CUSTOMER SERVICE

**MEASUREMENT DRIVER:**

Jennifer Williams  
Communications Manager

**PURPOSE OF THE MEASURE:**

This measure tracks the percent of customers who view MoDOT as a leader and expert in transportation issues. The measure shows how effectively MoDOT conveys its expertise to the traveling public.

**MEASUREMENT AND DATA COLLECTION:**

Data is collected through a telephone survey of approximately 3,500 randomly selected Missourians.

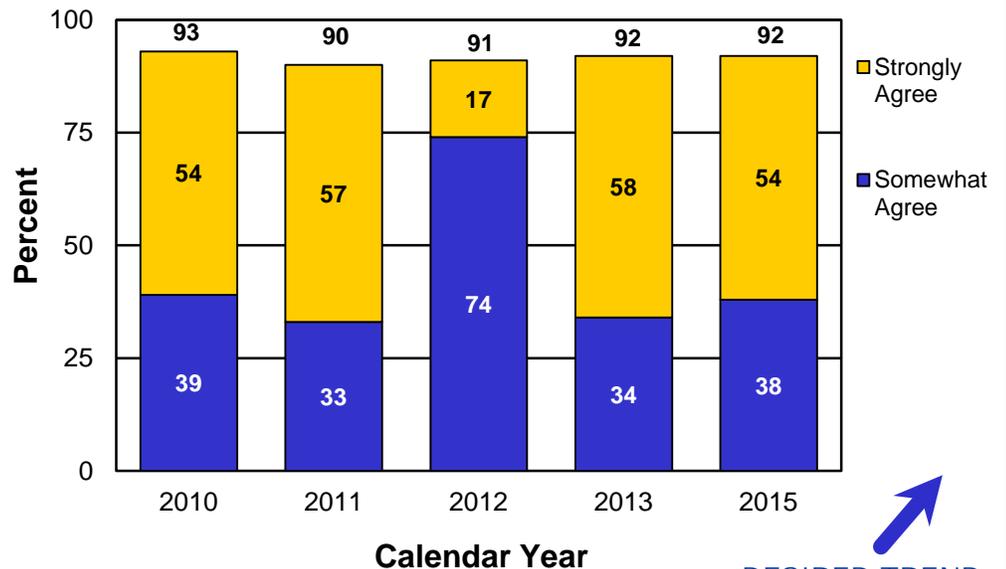
## *Percent of customers who view MoDOT as Missouri's transportation expert – 3b*

As the agency responsible for transportation in Missouri, MoDOT must hold its lead as an expert in the field. The department should serve as the frontrunner – representing the best transportation options for Missouri and partnering with state and national organizations and others to deliver a strong transportation system.

The 2015 survey shows an overwhelming majority of customers perceive the department as Missouri's transportation expert. Ninety-two percent of those surveyed agreed MoDOT serves this role, a percentage the department has consistently maintained since 2009. Of the 92 percent, 54 percent of respondents "strongly agreed" and 38 percent "somewhat agreed" MoDOT serves as the state's primary transportation expert.

The department continues to work on improving partnerships with all Missourians, including local government, legislators and other elected officials, and transportation-related groups and organizations. The suspension of the cost-share program coupled with Missouri's insufficient transportation funding issues means these relationships will likely face further challenges.

**Percent of Customers Who View MoDOT as Missouri's Primary Transportation Expert**



**RESULT DRIVER:**  
Dan Niec  
District Engineer

## PROVIDE OUTSTANDING CUSTOMER SERVICE

**MEASUREMENT DRIVER:**  
Melissa Black  
Communications Manager

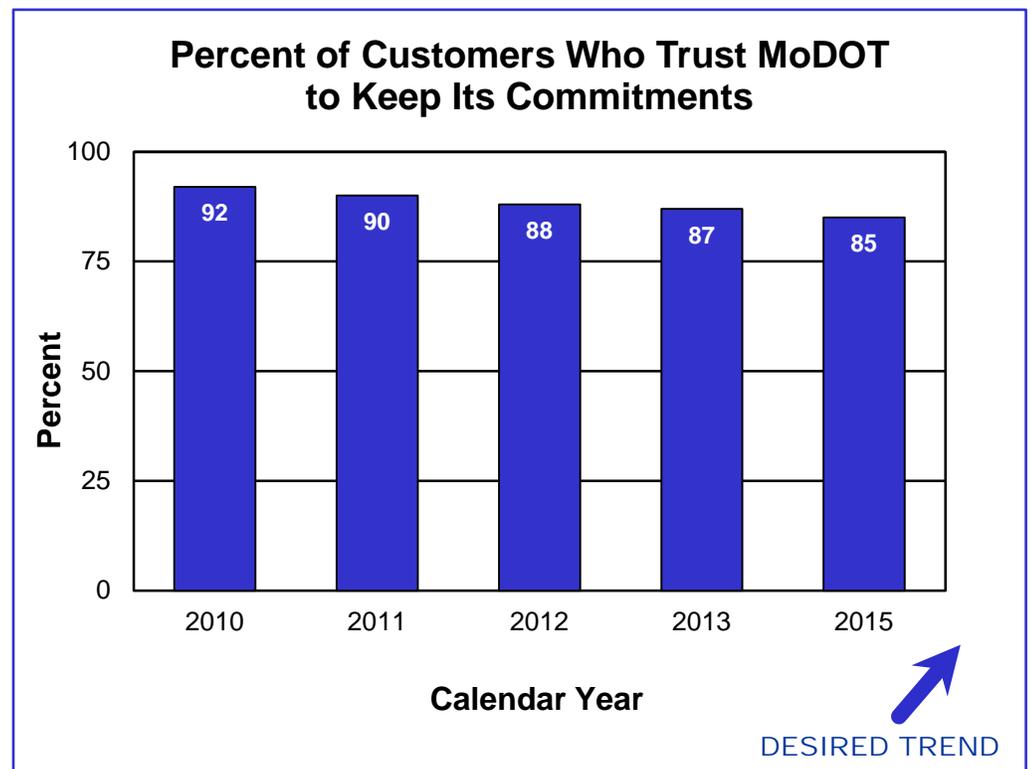
**PURPOSE OF THE MEASURE:**  
This measure tracks the percent of customers who trust MoDOT to keep its commitments. Public trust is an important component in building support for transportation issues.

**MEASUREMENT AND DATA COLLECTION:**  
Data is collected through a telephone survey of approximately 3,500 randomly selected Missourians.

### *Percent of customers who trust MoDOT to keep its commitments to the public – 3c*

Gaining and keeping the public's trust is key to MoDOT's overall success. The best way MoDOT can accomplish this is to deliver on the commitments it makes. The department's annual construction program has steadily decreased in recent years, making it difficult to maintain and care for its system due to insufficient funding. Missourians tell MoDOT they want more from their transportation system, but the reality is they are going to get less – and what they have will get worse. MoDOT has spent years educating the public, legislators and media on the reality of transportation funding and what insufficient funding means to Missouri's system. With less funding, fewer projects and opportunities to meet the needs of our customers, the percentage of customers who trust us to keep our commitments is likely to decrease.

This year's report card indicated 85 percent of the residents trust MoDOT to keep its commitments to the public compared to 87 percent in the previous survey. Although this is only a two percent decrease, it is the lowest score ever recorded on this measure. Furthermore, there is a continued five-year downward trend from 92 percent in 2010 that is statistically significant.



## RESULT DRIVER:

Dan Niec  
District Engineer

# PROVIDE OUTSTANDING CUSTOMER SERVICE

*Percent of customers who feel MoDOT provides timely, accurate and understandable information – 3d*

## MEASUREMENT DRIVER:

Jennifer Williams  
Communications Manager

## PURPOSE OF THE MEASURE:

This measure tracks whether customers feel MoDOT provides timely, accurate and understandable information about road projects, highway conditions and work zones.

Just like well-maintained roads and bridges, MoDOT delivers information. The citizens of Missouri expect timely, accurate and understandable information from their department of transportation. Whether it's a press release, e-update, text alert or a notice of a public meeting, MoDOT makes every effort to get the word out as quickly and as clearly as possible. The results of this effort are public trust and respect. With numbers consistently above 90 percent agreement for the past five years, this measure shows that the department meets our customers' high expectations.

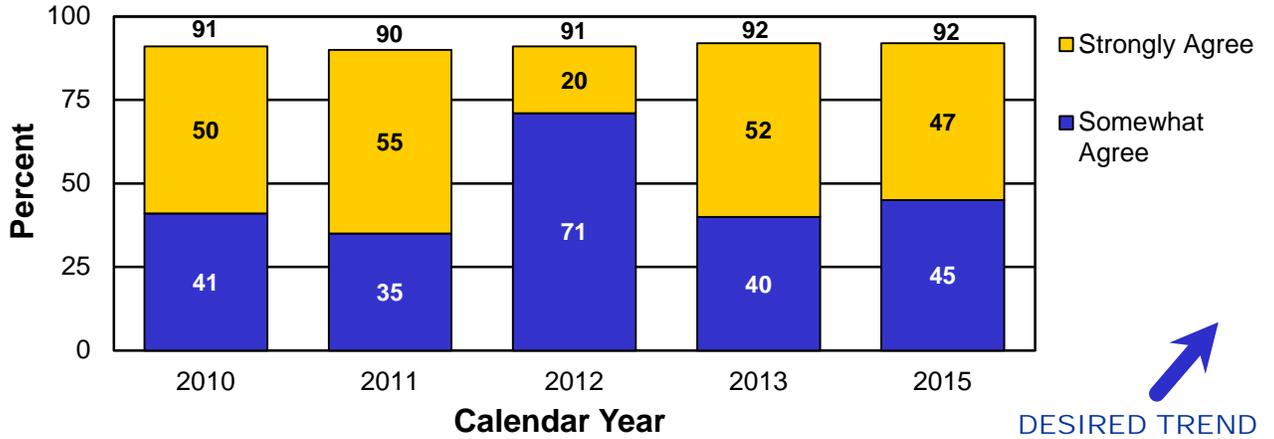
## MEASUREMENT AND DATA COLLECTION:

Data is collected through a telephone survey of approximately 3,500 randomly selected Missourians.

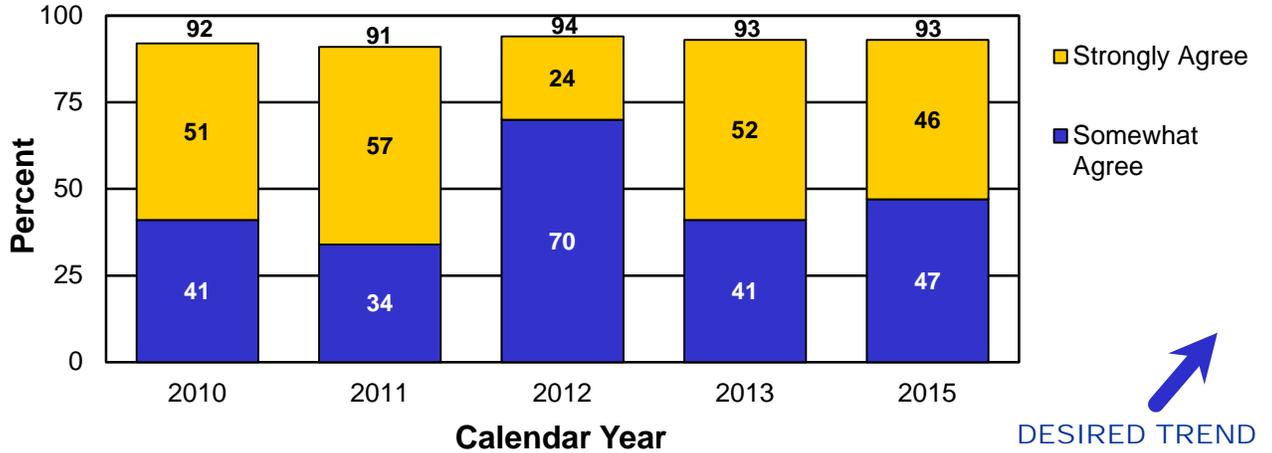


# PROVIDE OUTSTANDING CUSTOMER SERVICE

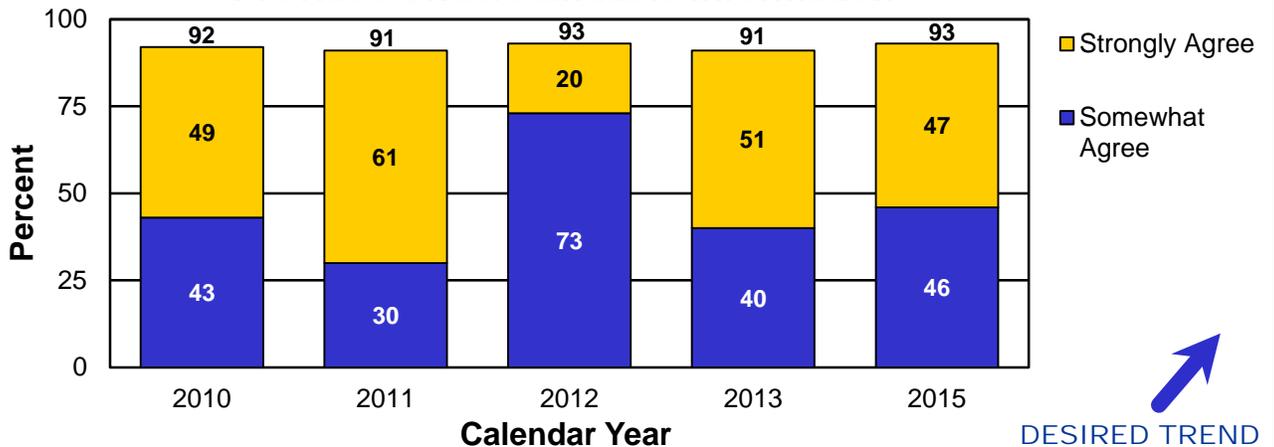
## Percent of Customers Who Feel MoDOT Provides Timely Information



## Percent of Customers Who Feel MoDOT Provides Accurate Information



## Percent of Customers Who Feel MoDOT Provides Understandable Information



**RESULT DRIVER:**  
Dan Niec,  
District Engineer

**MEASUREMENT DRIVER:**  
Melissa Black  
Communications Manager

**PURPOSE OF THE MEASURE:**  
This measure shows how satisfied customers who contact MoDOT are with the politeness, clarity and responsiveness they receive.

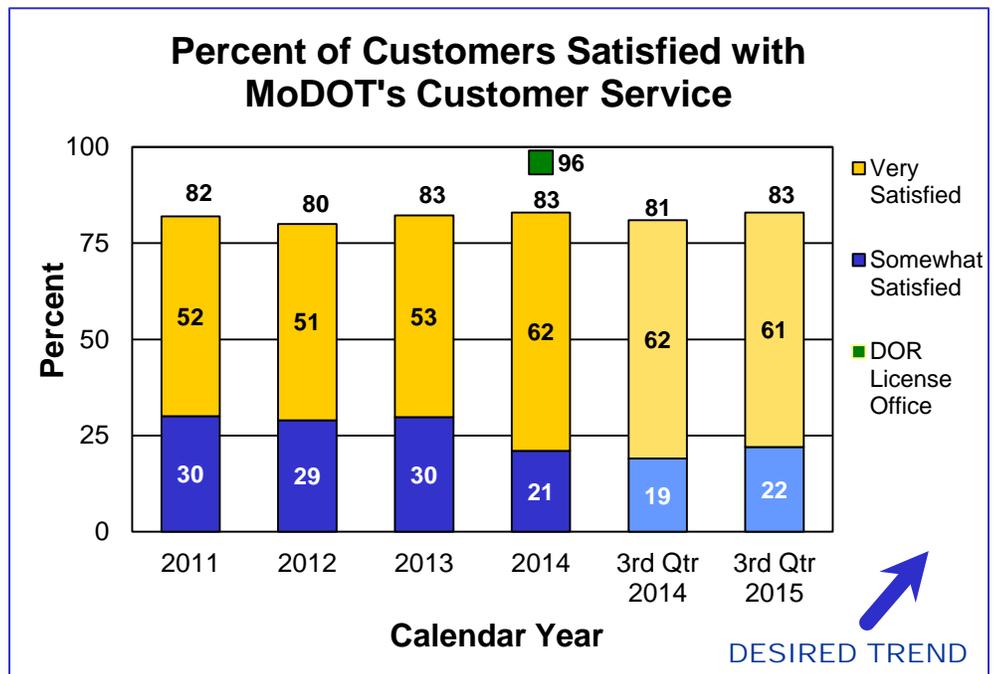
**MEASUREMENT AND DATA COLLECTION:**  
Data for this measure comes from a monthly telephone and e-mail survey of 200 customers who contacted a MoDOT customer service center in the previous month. The customer contacts come from call reports logged into the customer service database. Survey participants are asked to respond on an agreement scale regarding three qualities of their experiences. A fourth question is asked regarding their overall satisfaction. This measure also includes the time to complete requests logged into the customer service database. Requests requiring more than 30 days to complete are removed to prevent skewing of the overall results.

## PROVIDE OUTSTANDING CUSTOMER SERVICE

### Percent of customers satisfied with MoDOT's customer service – 3e

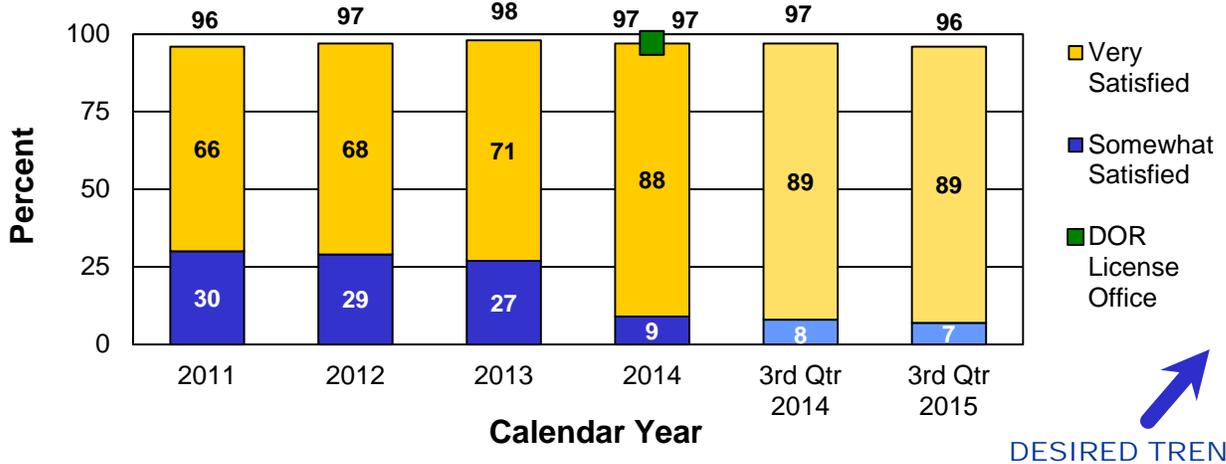
MoDOT actively seeks feedback from the people it serves. In 2012, MoDOT created a statewide call system and enhanced its online call report system that enables customer service representatives to work across seven district boundaries in a one-team approach. Since implementation, customer perceptions of MoDOT's politeness, responsiveness and clarity increased, resulting in an overall improved customer satisfaction.

Overall, when compared to the third quarter of 2015 to the third quarter of 2014, most of the results remain relatively consistent. Customers surveyed indicated 83 percent satisfaction with MoDOT's customer service as compared to 81 percent in the same quarter of 2014. Customers who were satisfied with politeness of responses decreased slightly to 96 percent from 97 percent. Clarity of responses increased slightly from 86 percent to 87 percent. Satisfaction with responsiveness decreased from 90 percent to 87 percent. The average time to complete customer requests during this quarter increased from 1.8 to 2.1 days.

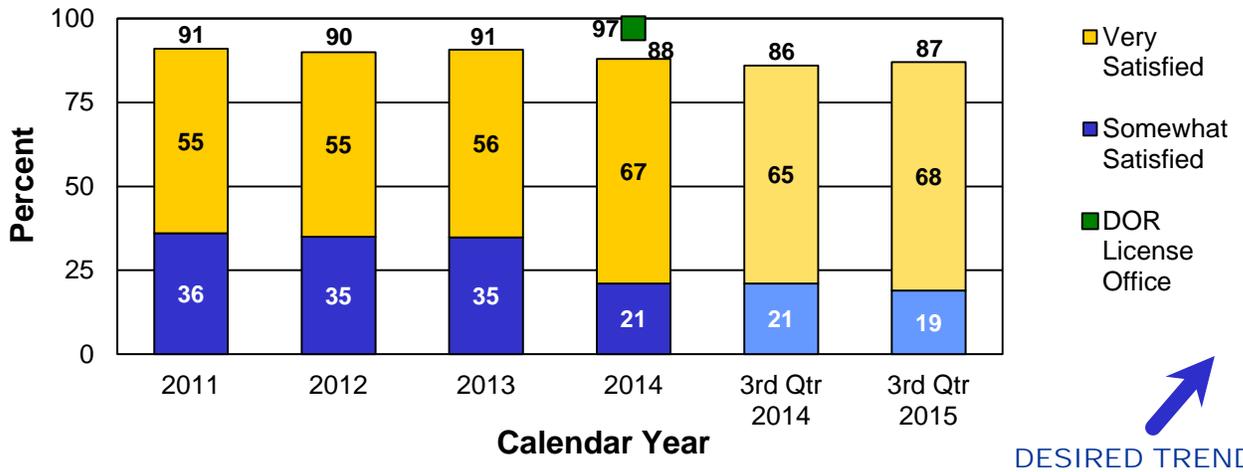


# PROVIDE OUTSTANDING CUSTOMER SERVICE

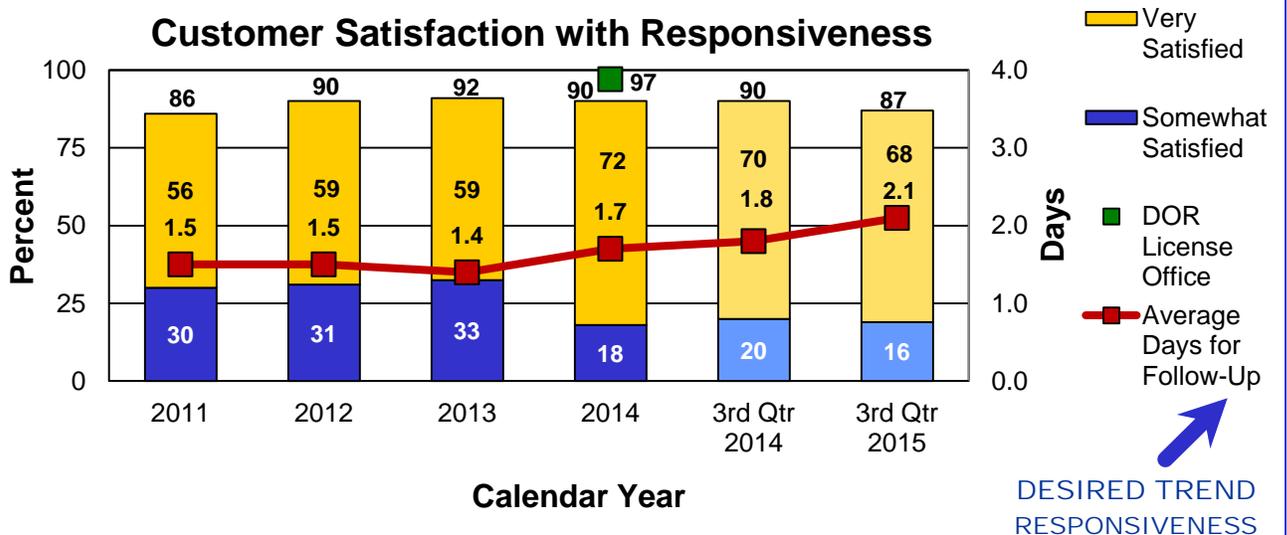
## Customer Satisfaction with Politeness of Staff



## Customer Satisfaction with Clarity of Response



## Customer Satisfaction with Responsiveness



RESULT DRIVER:  
Dan Niec  
District Engineer

## PROVIDE OUTSTANDING CUSTOMER SERVICE

### *Customer communication engagement – 3f*

MEASUREMENT  
DRIVER:  
Patrick Wood  
Communications Specialist

PURPOSE OF  
THE MEASURE:  
This measure tracks the  
number of MoDOT customers  
hitting the department's social  
media and website information.

MEASUREMENT  
AND DATA  
COLLECTION:  
MoDOT gathers information for  
his measure from a variety of  
sources including Google  
Analytics. Website traffic and  
YouTube information are  
cumulative totals based on  
visits. Facebook and Twitter  
information is based on  
account followers.

Good organizations share information with the people they serve. The best, most trusted organizations engage customers in conversation. MoDOT often interacts with its customers through Internet-based social media networking websites and applications.

MoDOT's social media accounts continue to attract followers. When comparing the first quarters of fiscal years 2015 and 2016, there was a growth of 40,676 followers on Facebook statewide and 22,887 additional followers to Twitter statewide. During the first quarter, the Facebook post with the highest reach, or highest viewership, was a DMS message reaching 1,975,033 people with 98,087 total likes and 22,970 total shares. The second most popular post was a humorous reminder to watch for deer which reached 1,127,879 people with 28,940 total likes and 14,182 total shares. Posts containing images and wording from the statewide DMS messages continue to cultivate the highest engagement for the accounts outside of weather related messaging.

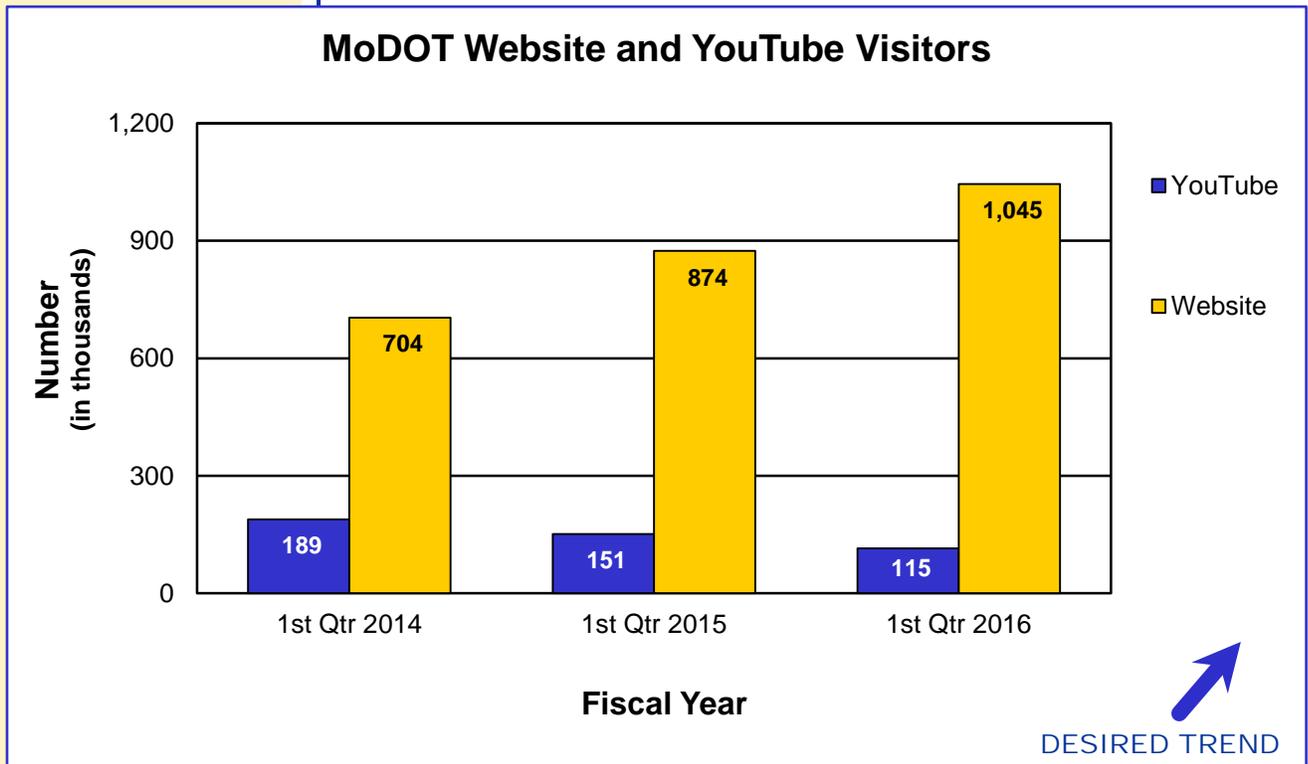
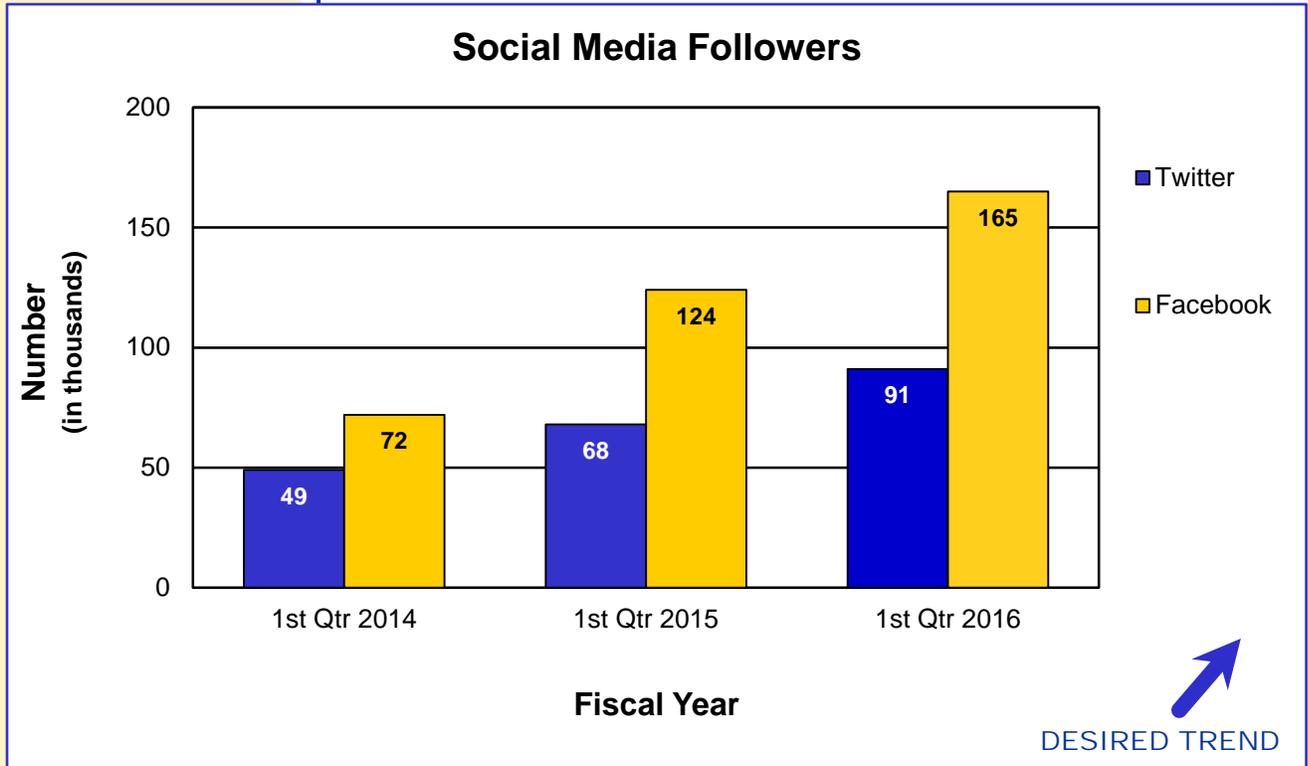
MoDOT's websites had over 1,045,444 sessions in first quarter 2016. This was an increase of 171,744 over the first quarter 2015 sessions. In the last quarter, the top five pages on MoDOT's website were:

- Traveler Information Map
- MoDOT Homepage
- Job Listings
- Save MO Lives – Drive Sober Get Pulled Over
- St. Louis Road Construction Weekly Update

MoDOT videos on YouTube were viewed 115,448 times in the first quarter of 2016. The top videos viewed in the last quarter were:

- Tow Plow Action Missouri
- MoDOT Tow Plow in Action
- All About a Roundabout
- What Does A Diverging Diamond Interchange Look Like
- Flashing Yellow Traffic Lights
- What is a J-Turn

# PROVIDE OUTSTANDING CUSTOMER SERVICE



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# DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

*David Silvester, District Engineer*

# Tracker

MEASURES OF DEPARTMENTAL PERFORMANCE



MoDOT customers expect transportation solutions delivered on time and within budget. We manage our projects to get them completed quickly and at the best possible value. We work with our transportation partners to leverage innovation in improving our products and how we work. We pledge to honor our commitments and deliver the best, most cost-effective solutions.

## RESULT DRIVER:

David Silvester  
District Engineer

## MEASUREMENT

### DRIVER:

Renate Wilkinson  
Planning and Programming  
Engineer

## PURPOSE OF THE MEASURE:

The measure determines how close total project costs are to the programmed costs. The programmed cost is considered the project budget.

## MEASUREMENT AND DATA COLLECTION:

Completed project costs are reported during the fiscal year in which a project is completed. Road and bridge project costs include design, right-of-way purchases, utilities, construction, inspection and other miscellaneous costs. The programmed cost is based on the amount included in the most recently approved Statewide Transportation Improvement Program. Completed costs include actual expenditures. Multimodal and local public agency project costs typically reflect state and/or federal funds, but not local funding contributed toward such projects.

# DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

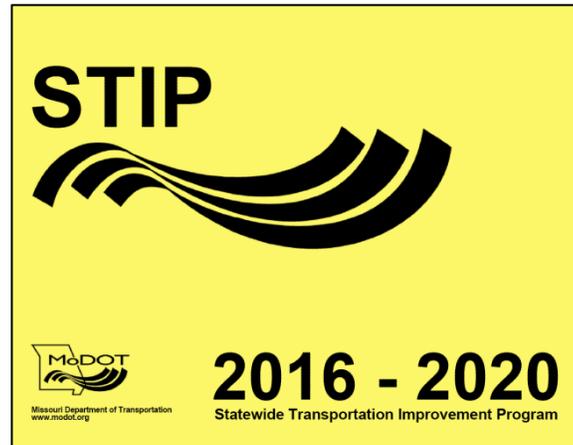
## *Percent of programmed project cost as compared to final project cost – 4a*

The focus on accurate program cost estimates has become increasingly important due to decreasing transportation funding and increasing costs. As of September 30, 2015, 214 road and bridge projects were completed in fiscal year 2016 at a cost of \$483 million. This represents a deviation of 2.08 percent (or \$10 million) less than the programmed cost of \$493 million. Of the 214 road and bridge projects completed, 51 percent were completed within or below budget. In comparison, 62 percent of projects were completed within or below budget as of the same date a year ago. The largest component of

project savings comes from awards at \$14 million.

Miscellaneous savings (right-of-way purchases, utilities and other costs) were \$8 million. Engineering savings were \$1 million. Construction-phase overruns were \$12 million.

In addition, 19 multimodal projects were completed at a cost of \$9.086 million, 4.50 percent or \$391,000 more than the programmed cost of

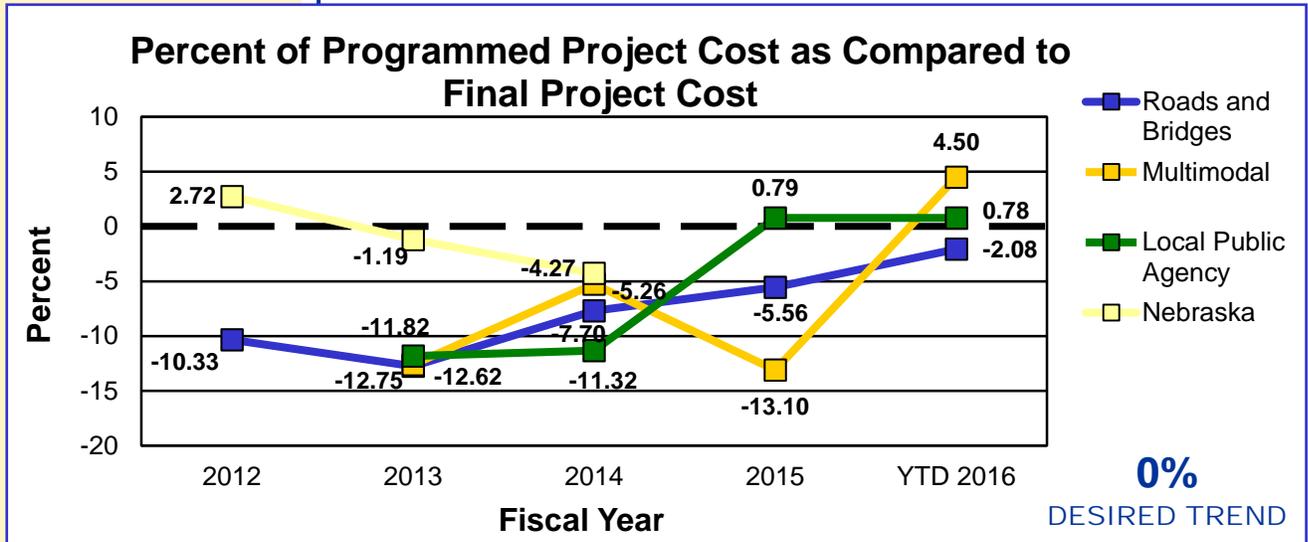


\$8.695 million. A total of 49 local public agency projects were completed at a cost of \$28.975 million, 0.78 percent or \$223,000 more than the programmed cost of \$28.752 million.

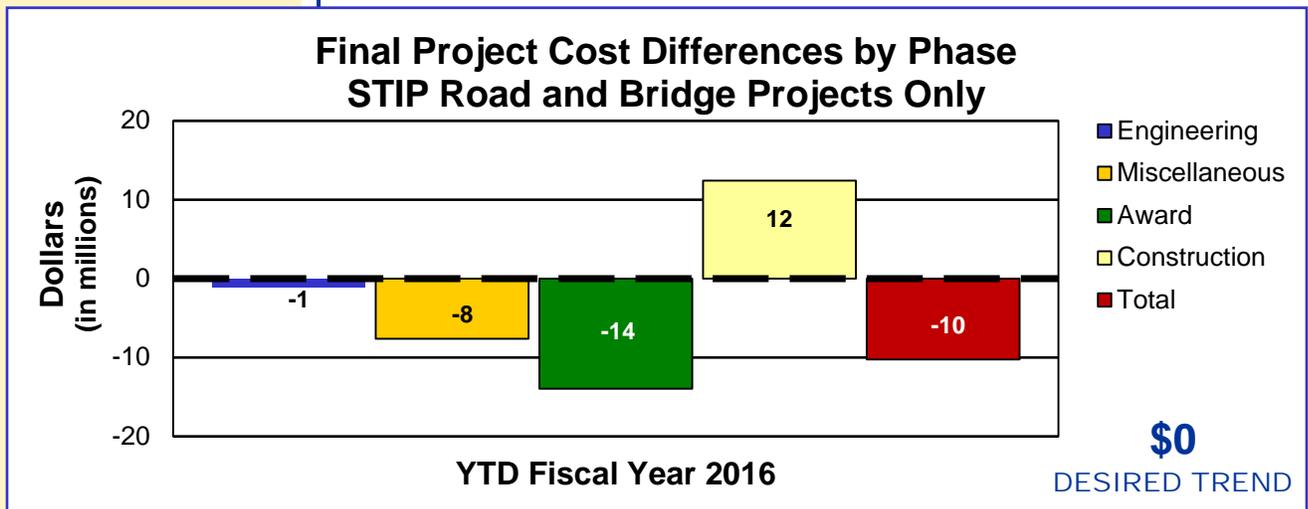
For fiscal year 2015, the final cost of 349 road and bridge projects completed was \$1.4565 billion. This represents a deviation of 5.56 percent (or \$85.7 million) less than the programmed cost of \$1.5422 billion. The multimodal final project cost for fiscal year 2015 was \$38.865 million. This represents a deviation of -13.10 percent or \$5.868 million less than the programmed cost of \$44.723 million. In addition, the local public agency final project cost for fiscal year 2015 was \$76.195 million. This represents a deviation of 0.79 percent or \$599,000 more than the programmed cost of \$75.596 million.

MoDOT uses this historical data as a guide for programming future projects. Projects awarded in FY 2014 and 2015 were 1 percent higher and 2 percent lower, respectively, than programmed values. Consequently, the 2015-2019 and 2016-2020 STIPs were developed assuming no significant award savings. Projects awarded in FY 2016 through September were 11 percent less than programmed values.

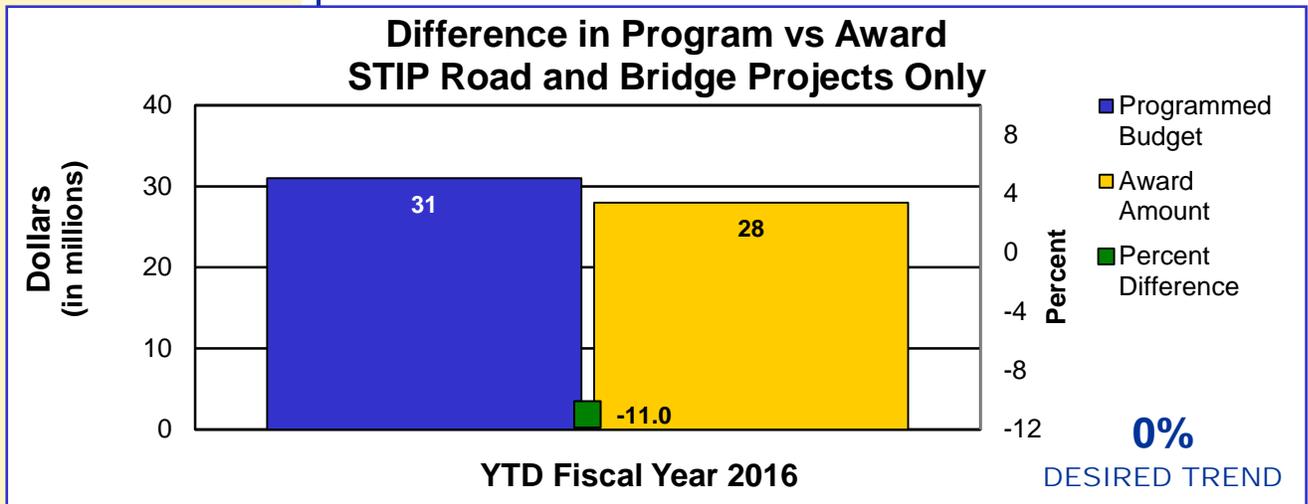
# DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE



Positive numbers indicate the final (completed) cost was higher than the programmed cost. Comparative data is from Nebraska Department of Roads, one-year schedule of highway improvement projects.



Negative numbers indicate savings. Miscellaneous includes right-of-way purchases, utilities and other costs.



Amounts include STIP road and bridge projects with 2 percent construction contingency applied.

## RESULT DRIVER:

David Silvester  
District Engineer

# DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

## *Percent of projects completed on time – 4b*

## MEASUREMENT DRIVER:

Jay Bestgen  
Assistant Construction and Materials Engineer

## PURPOSE OF THE MEASURE:

This measure tracks the percentage of projects completed by the commitment date established in the contract. This includes road, bridge, local public agency and multimodal projects – rail, aviation, waterway and transit.

## MEASUREMENT AND DATA COLLECTION:

For road and bridge projects, the project manager collaborates with the project team to establish the project completion date, and the resident engineer uses the SiteManager system to track and document the work. Local public agencies and multimodal agencies use staff or consultant resources to set contract completion dates and track performance.

MoDOT's customers expect transportation improvements to be completed quickly with minimal impact to their lives. Delivering projects by the contract completion date is the target for all projects and is considered a commitment to Missourians and users. Completing projects on time helps maintain credibility which is of utmost importance to maintaining Missourians' long-term support for times when more resources are needed to adequately maintain the transportation system. Completing projects on time minimizes user exposure to work zones and provides facilities in good condition that improve safety and reduce vehicle maintenance costs.

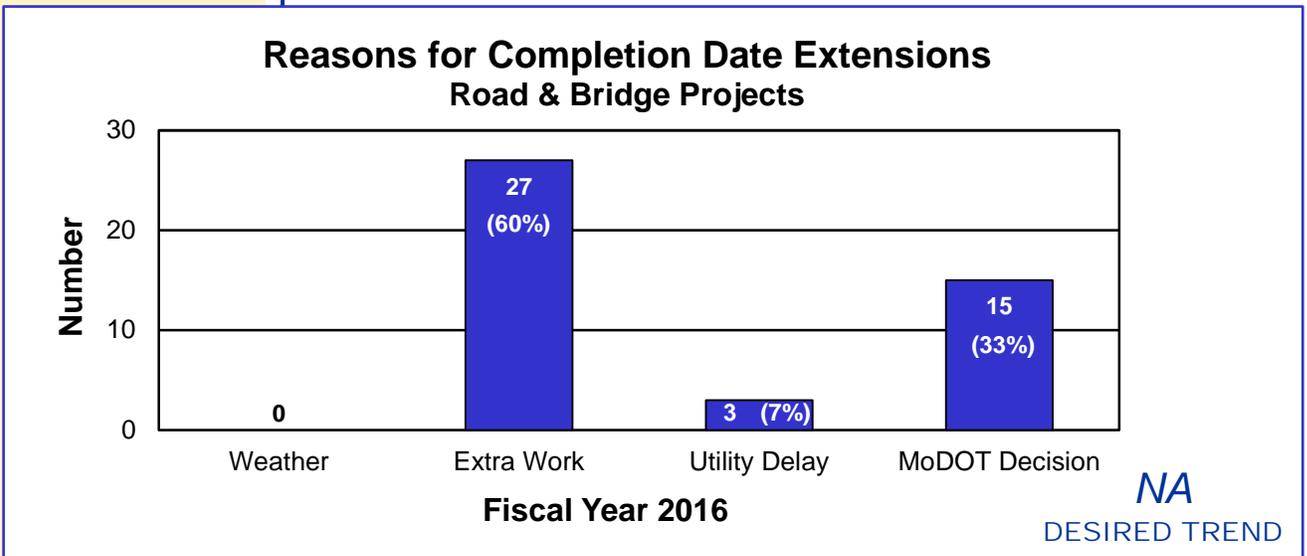
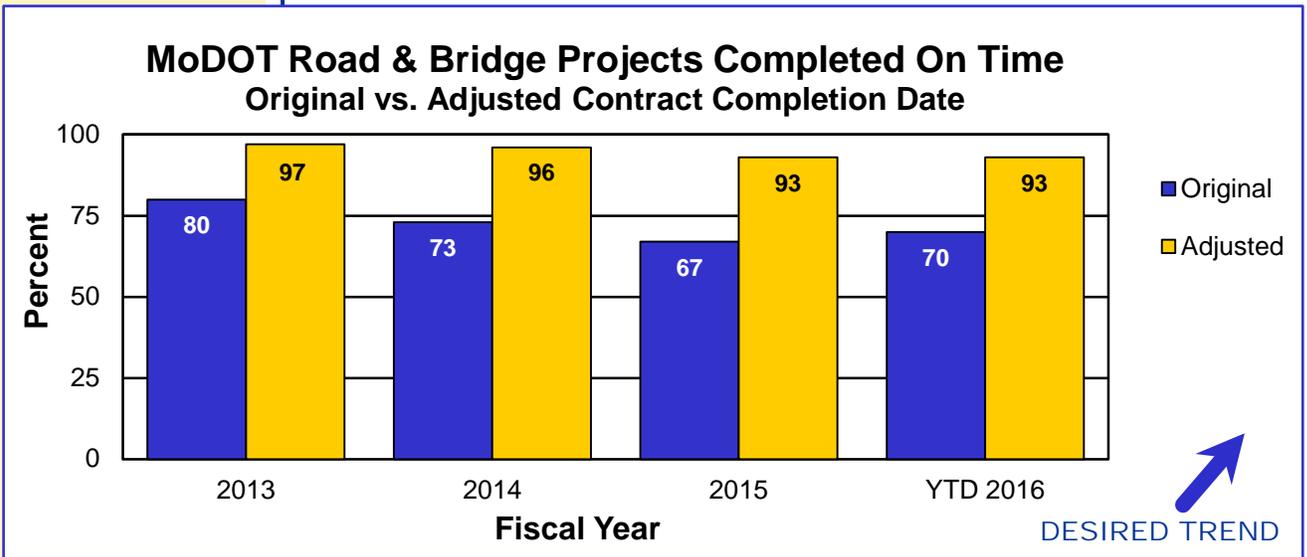
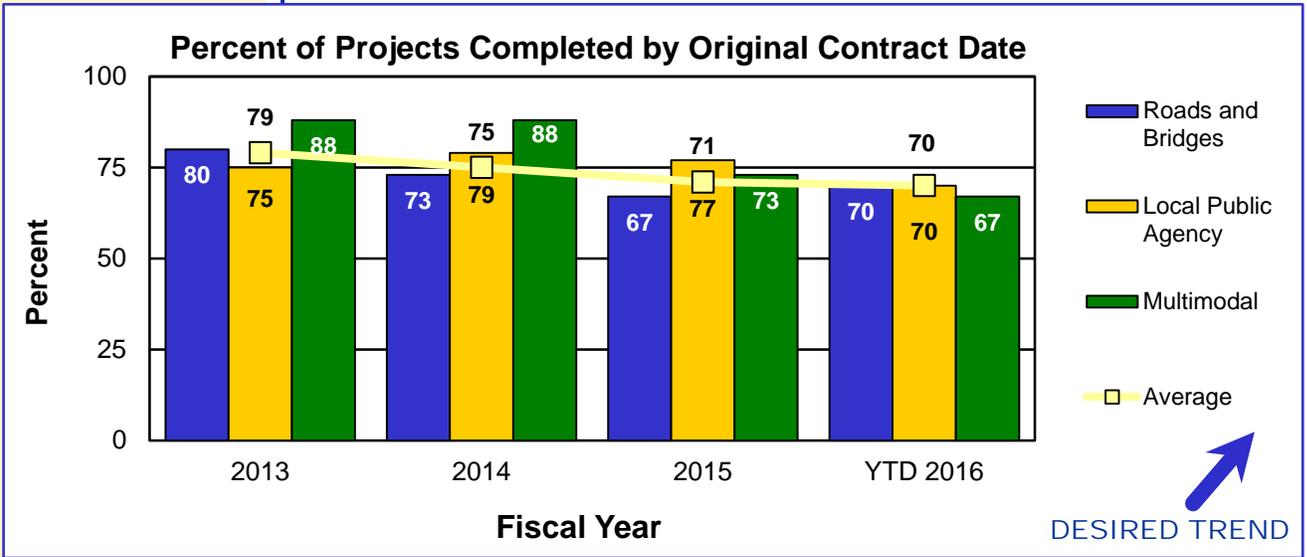
Sometimes, unusual weather or additional contract work necessitates an extension of the completion date. There also are times when a contractor misses the project completion date and the contract may have damages assessed. To date in fiscal year 2016, 70 percent of the closed out projects were completed on or ahead of schedule.

MoDOT works to meet the original completion date by preparing accurate plans and quantities, setting aggressive but reasonable completion dates and setting liquidated damages to reinforce completion dates without undue bid risks. Staff also works with the contracting industry to set potential completion times before letting and with project contractors to maintain schedules.

Of the road and bridge projects completed in the first quarter of fiscal year 2016 with approved time extensions, 60 percent were for extra work, seven percent experienced utility delays and 33 percent were extended due to a decision by MoDOT.

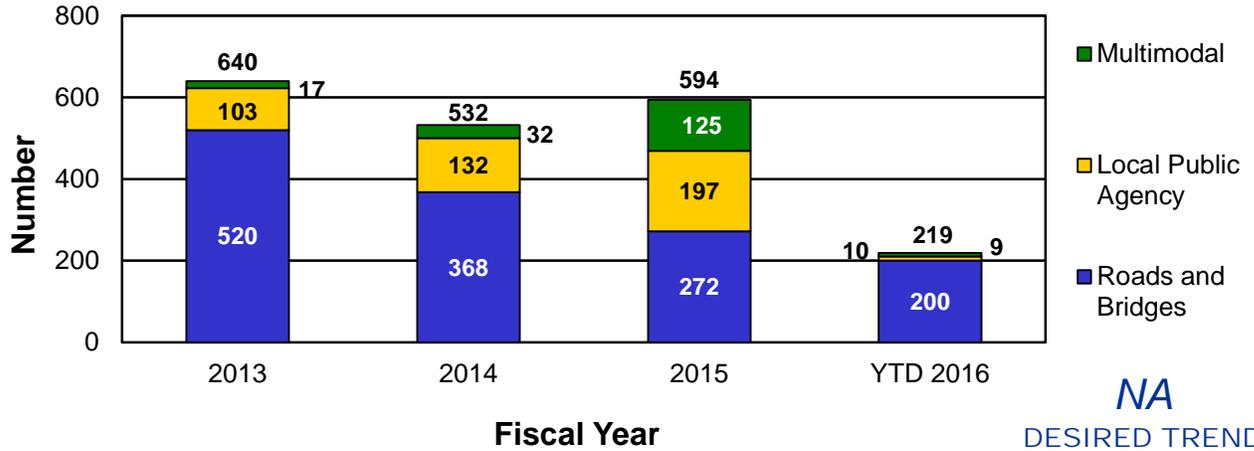


# DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

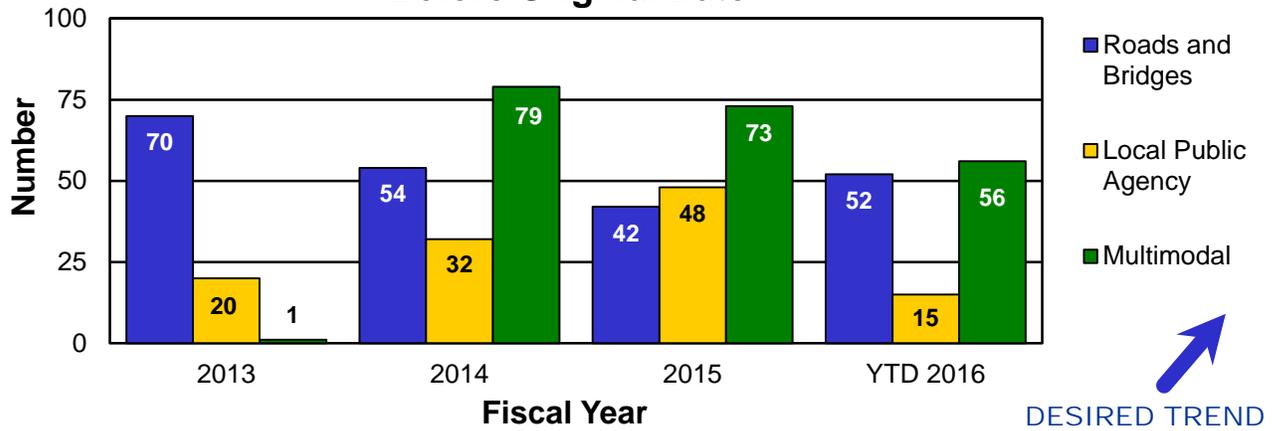


# DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

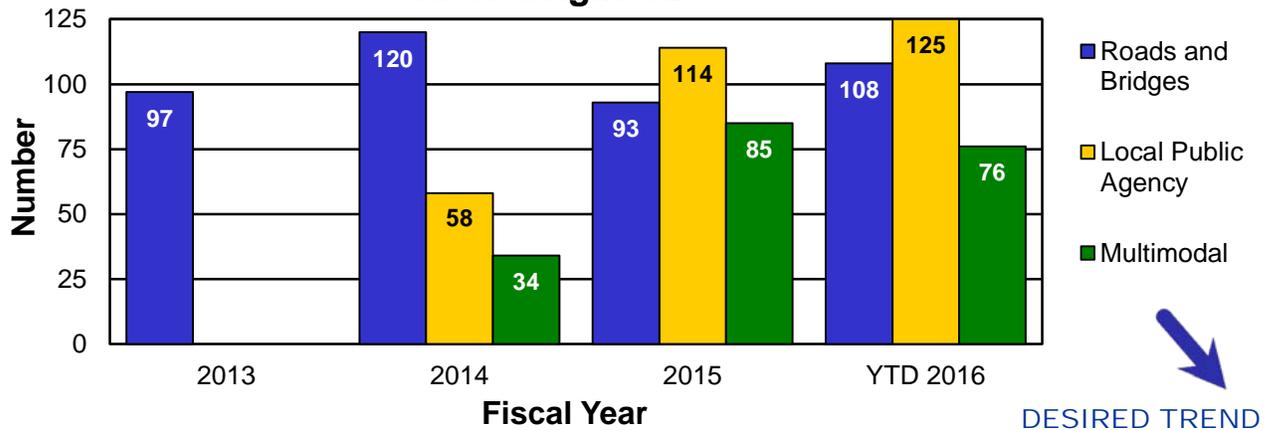
## Total Number of Projects Completed



## Average Number of Days Completed Before Original Date



## Average Number of Days Completed After Original Date



## RESULT DRIVER:

David Silvester  
District Engineer

## MEASUREMENT DRIVER:

Jeremy Kampeter  
Construction Management  
System Administrator

## PURPOSE OF THE MEASURE:

This measure tracks the percentage difference of total construction payouts to the original contract award amounts. This indicates how many changes are made on projects after they are awarded to the contractor for road, bridge, local public agency and multimodal projects – rail, aviation, waterway and transit.

## MEASUREMENT AND DATA COLLECTION:

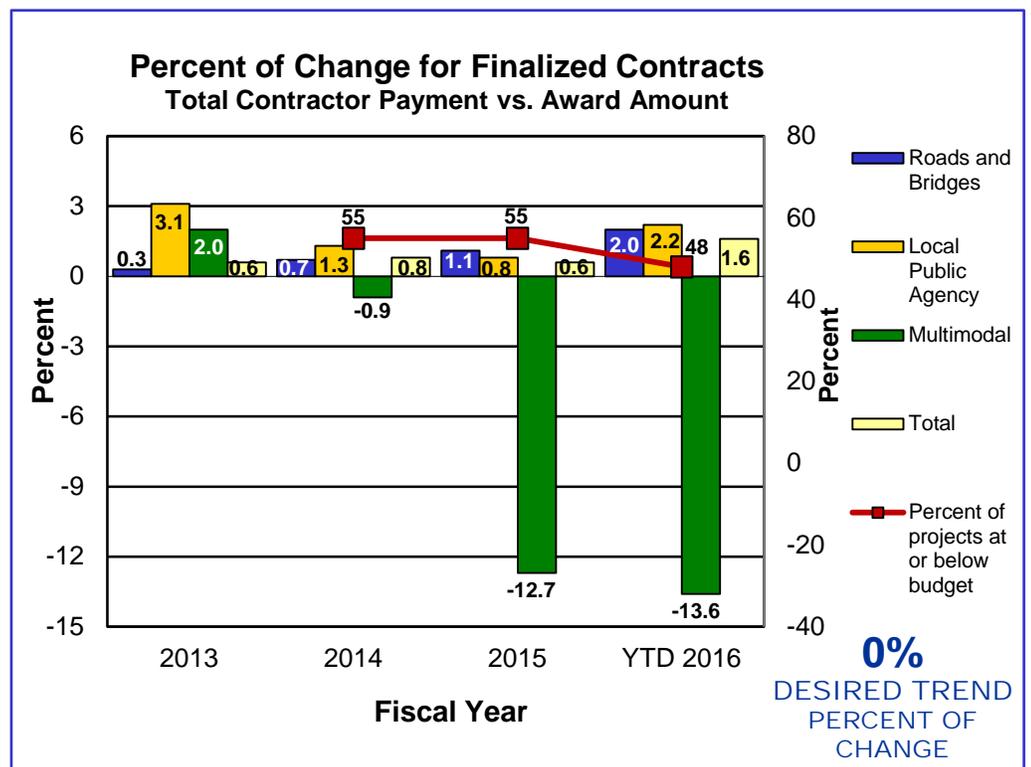
For road and bridge projects, contractor payments are generated through MoDOT's SiteManager database and processed in the financial management system for payment. Change orders document the underrun/overrun of the original contract cost. Local public agencies and multimodal agencies use staff or consultant resources to set contract completion dates and track performance.

# DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

## Percent of change for finalized contracts – 4c

By limiting overruns on contracts, MoDOT can continue to keep its maintenance and construction commitments. Decreased transportation funding coupled with increased costs of products such as asphalt, concrete and steel has placed an even stronger emphasis on keeping construction projects within budget. This emphasis combined with the use of practical design and value engineering has contributed to limiting overruns on contracts. MoDOT's performance in fiscal year 2016 was 1.6 percent (\$416 million worth of projects completed \$6.6 million over the award amount).

Many factors can affect the ability to complete a project within two percent of the award amount. These factors can include design changes, differing conditions, additional work items and administrative decisions. For MoDOT Road & Bridge projects completed in the first quarter of fiscal year 2016, an additional \$850,000 of contract costs on 36 projects were incurred due to a decision to replace guardrail end treatments on the state highway system. Another project with a \$10.7 million bid amount had an overrun of \$2.5 million to add sound walls. These change orders amount to \$3.3 million of the total \$6.6 million in cost overruns, which is 0.8% of the total.



## RESULT DRIVER:

David Silvester  
District Engineer

# DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

## *Innovative contracting methods – 4d*

## MEASUREMENT

### DRIVER:

David Simmons  
Transportation Project  
Manager

## PURPOSE OF THE MEASURE:

This measure tracks the use of innovative contracting methods on MoDOT projects including: A + B contracts, alternate technical concept contracts, and design-build contracts.

## MEASUREMENT AND DATA COLLECTION:

MoDOT projects utilizing innovative contracting methods are reported during the fiscal year in which they are awarded. Contract award values are collected through MoDOT's bid opening summaries and project records.

With the forecast of limited transportation funding and increasing costs, MoDOT looks to implement non-traditional methods and practices in contract procurements to improve efficiency, increase flexibility, and maximize value for its customers. By executing innovative contracting tools, MoDOT is better able to mitigate limited resources, meet each project's unique challenges and maximize collaboration with the public and private sectors. MoDOT uses innovative contracting to ensure the public receives maximum value for every tax dollar invested in Missouri's transportation system. MoDOT continues to capitalize the use of Design-Build by shifting its focus to smaller projects.

When selecting a project delivery method and innovative contracting options, MoDOT takes into account project characteristics (risks) such as project size (cost), type (preservation, rehabilitation or reconstruction) and complexity (urban or rural, significant traffic impact, number of project elements). Innovative contracts promote accelerated project completion or facilitate achievement of other performance objectives. MoDOT's A+B, ATC, and Design-Build contracting methods change how projects are procured and delivered. The advantages of MoDOT's innovative contracting methods are as follows:

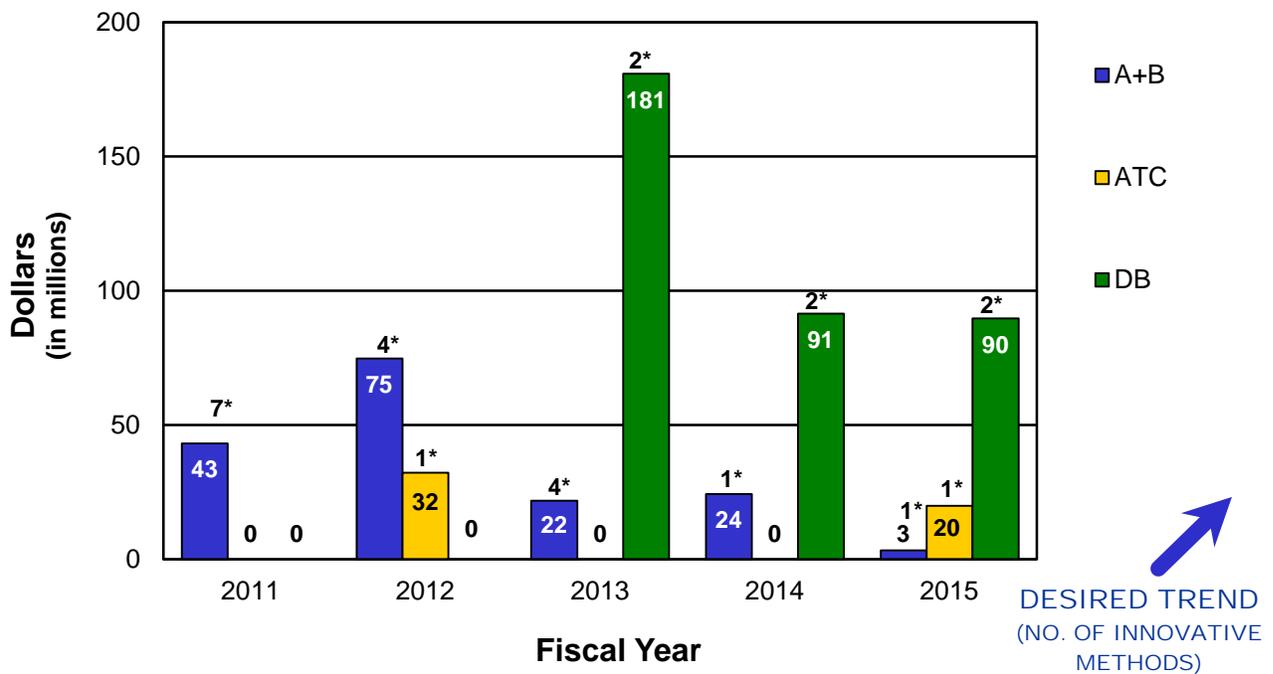
- Cost-plus-time bidding (A + B) aims to expedite project completion through competitive bidding on construction time (days).
- Alternate Technical Concepts (ATCs) give the contractor the opportunity to provide more cost-effective alternative design prior to the bid. ATC discussions are held in a confidential environment which maximizes competitive bidding. The low bid is awarded the contract.
- Design-Build (DB) contracts include design and construction under one contract, which is procured using a two-phased, contractor-selection process. MoDOT scores proposals using a best-value or "build-to-budget" scoring scenario. Nationally, Design-Build projects are completed 33 percent faster and 6 percent cheaper than conventional Design-Bid-Build projects.

In fiscal year 2015, MoDOT delivered four out of 279 projects using innovative contracting methods, with two delivered as Design-Build, one delivered as A + B, and one delivered using the ATC process. The four projects accounted for \$113.2 million of the \$767.77 million program.

# DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE



**Project Value by Contracting Method**



\*Reflects total number of projects for each innovative contract method.

## RESULT DRIVER:

David Silvester  
District Engineer

# DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

## *Value Engineering – 4e*

## MEASUREMENT DRIVER:

Llans Taylor  
Innovations Engineer

## PURPOSE OF THE MEASURE:

This measure tracks the use of value engineering during design and construction on traditional MoDOT projects including: value analysis during the design phase, construction value engineering proposals, and implementation of best practice into standards and policies.

## MEASUREMENT AND DATA COLLECTION:

Information on value analysis during design is gathered from MoDOT's Statewide Transportation Improvement Program information management system. Construction value engineering change proposal information is gathered from MoDOT's Value Engineering Change Proposals database. Implementation of best practice progress is tracked by MoDOT staff.

The goal of value engineering is to build the right project at the right time, meeting the project need with appropriate project scope. MoDOT uses the VE program to ensure the public receives great value for every tax dollar invested in Missouri's transportation system. Due to limited funding, MoDOT is increasingly focused on smaller, maintenance-type projects that are not traditionally targeted by the VE program. Still, MoDOT must be innovative in utilizing the VE process to search for solutions to reduce project costs and provide additional value.

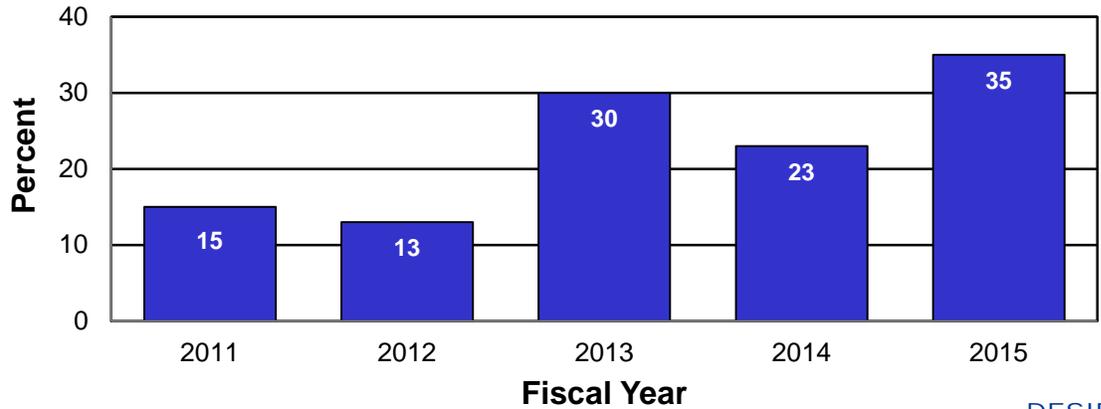
MoDOT uses design-phase value analysis to remove unnecessary scope, reduce project costs and improve project flexibility. For fiscal year 2015, 35 percent of projects underwent some form of value analysis during design. Programmatic value analysis studies associated with the level-course and chip-seal programs accounted for the largest portion of this percentage. In an effort to improve in this area, a self-led practical value analysis tool was distributed to district staff to assist them in considering and documenting their efforts to find alternative solutions within projects on which value analysis would not otherwise occur.

MoDOT partners with industry to find more cost-effective solutions during the construction phase. Value Engineering Change Proposals engage contractor ideas to deliver improved projects. For fiscal year 2015, 31 VE proposals were approved resulting in MoDOT savings of \$1.1 million. This represents a 74 percent approval rate. Outreach continues in an effort to improve in this area and to find innovative approaches to grow this program.

A successful VECP program incorporates approved VECPs into future projects, in order for MoDOT to realize all of the affiliated savings. To date, 202 approved VECPs have been reviewed by a multidisciplinary team resulting in five revisions to policy and 16 potential items still being investigated, with one of these potential items being included in the most recent ballot. The team continues to review approved VECPs for potential implementation and looks for opportunities to implement improved policies.

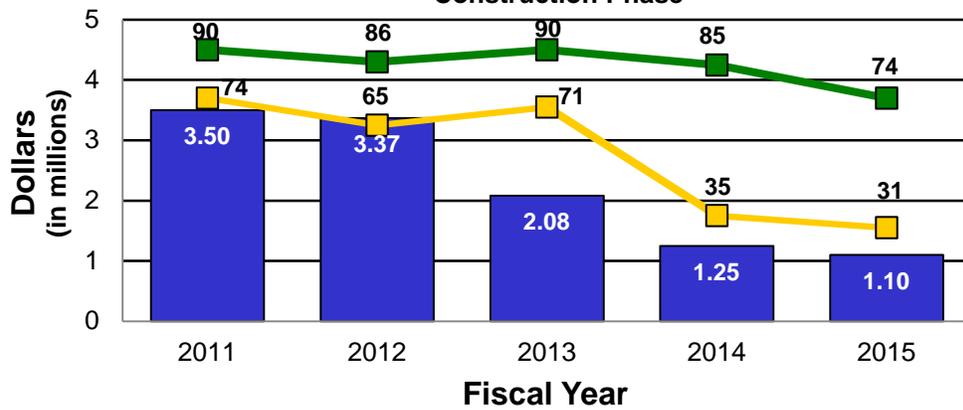
# DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

## Percent of Awarded Projects with Value Analysis Design Phase



DESIRED TREND

## Value Engineering Change Proposals by Dollar and Number Construction Phase



DESIRED TREND

## RESULT DRIVER:

David Silvester  
District Engineer

## MEASUREMENT DRIVER:

Jason Vanderfelt  
Bidding and Contract Services  
Engineer

## PURPOSE OF THE MEASURE:

This measure tracks the costs to construct a variety of common highway and bridge construction projects including the costs for equipment, labor and fringe benefits and materials to construct a project.

## MEASUREMENT AND DATA COLLECTION:

Data is collected from MoDOT bid opening prices. Construction costs for 1992 are used for comparison because that was the year Missouri's fuel tax was increased to the current rate of 17 cents per gallon. Costs for chip seal and minor road one-inch asphalt resurfacing include the pavement, traffic control and temporary pavement marking. Costs for major highway and interstate asphalt resurfacing include the pavement, traffic control, permanent pavement marking, rumble strips, pavement repair, guardrail and signing. New two- and four-lane construction costs include grading, drainage, pavement, bridge and all incidental costs. The average cost per square-foot of bridge is tabulated and applied to the area of the average bridge on the state system to simplify comparison.

# DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

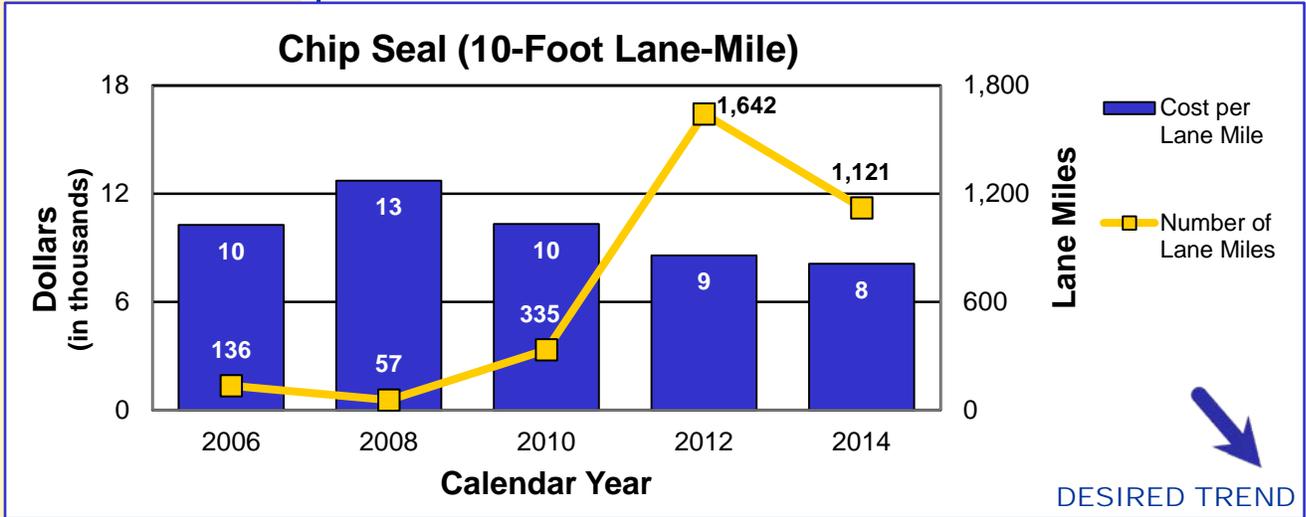
## *Average highway lane-mile and bridge construction costs – 4f*

A great many factors affect the cost of road and bridge projects, some can be managed by MoDOT, and others are affected by the economy. For example, Missouri's highway system has long depended on fuel taxes, but consumers look for ways to decrease their personal transportation costs by driving less and turning to smaller, more fuel-efficient vehicles. Since these vehicles cost less, sales taxes are lower, resulting in lower transportation revenues. Meanwhile, inflation has increased the cost of projects, resulting in reduced purchasing power for MoDOT. Minor road asphalt resurfacing costs have increased in recent years due to a combination of fluctuating fuel and oil prices and increased material costs. Overall, the prices of asphalt, concrete and steel are double or triple what they were 20 years ago.

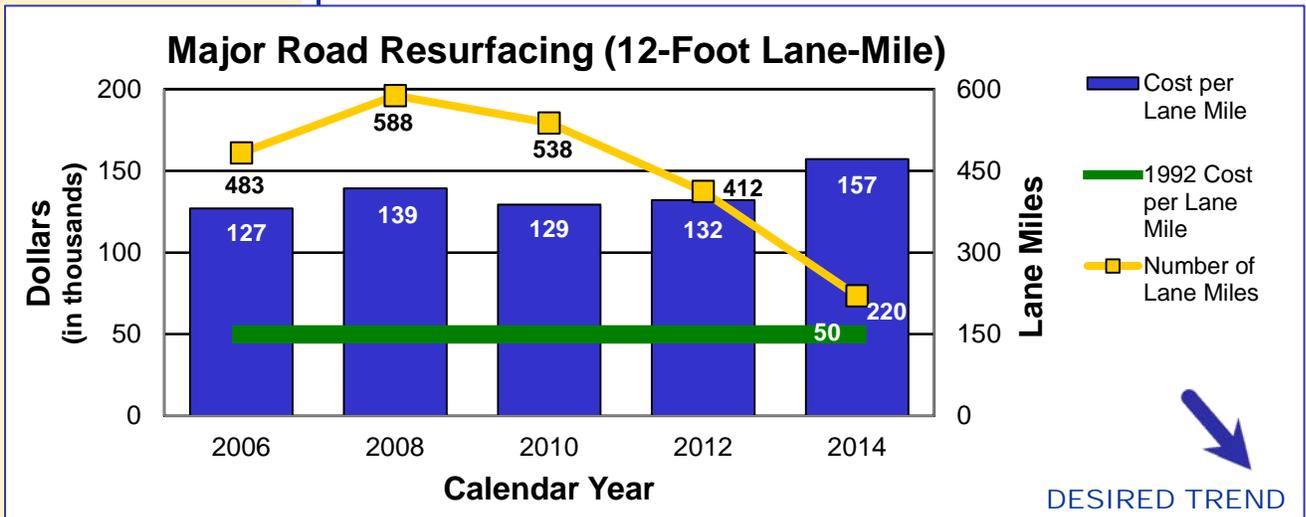
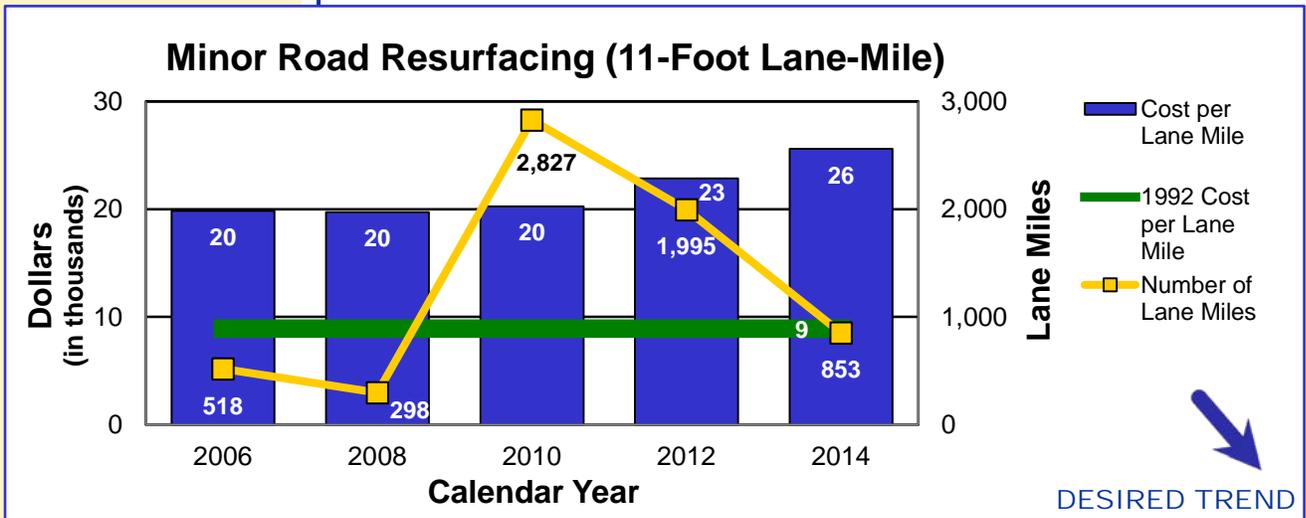
With MoDOT's construction program having dropped from \$1.3 billion in 2009 to \$720 million in fiscal year 2015, few complex two- and four-lane projects have been available for contractors to bid. For the larger, more robust projects, MoDOT continues to partner with industry to allow flexibility and encourage innovation while strategically scheduling bid openings to spread out the amount of work and financial obligation for the bidders. With decreasing revenue and increasing costs, MoDOT is challenged to make improvements to the existing system. MoDOT is being challenged just to maintain the system of roads and bridges Missourians enjoy today.



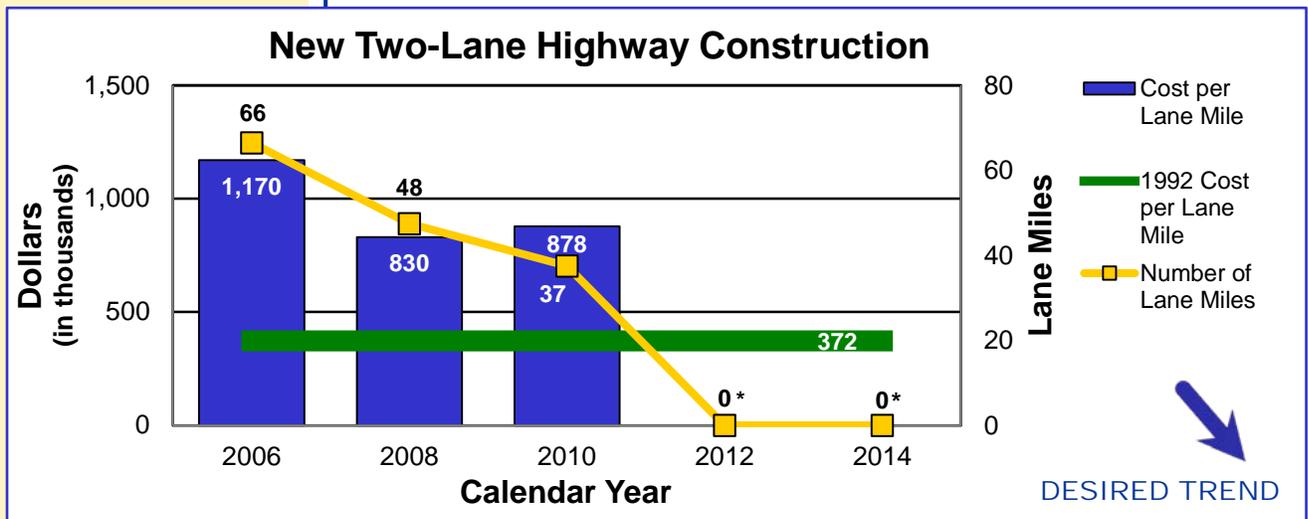
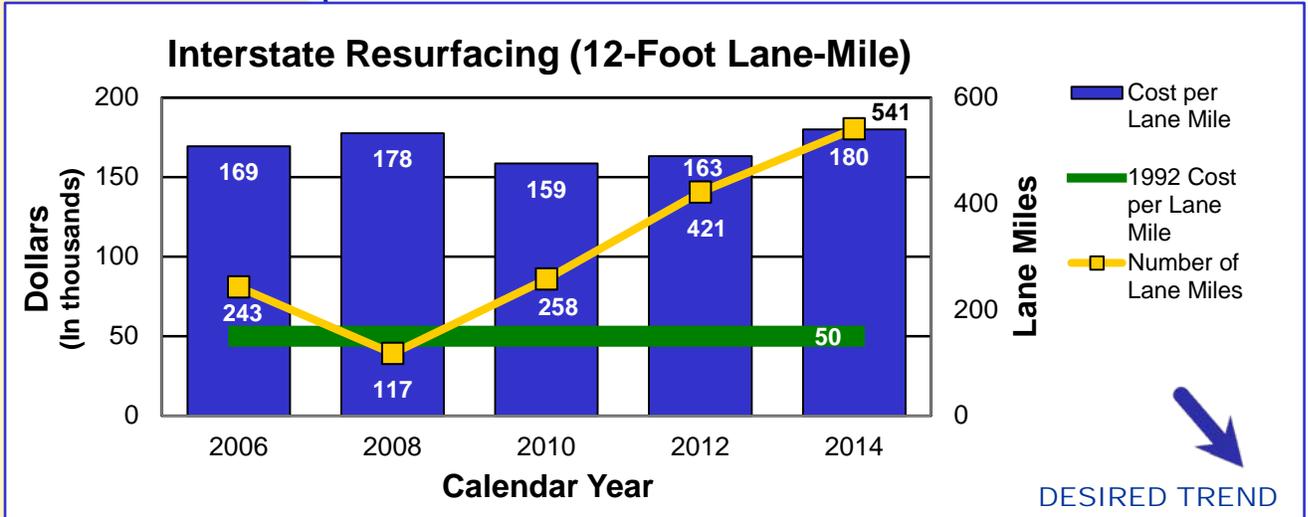
# DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE



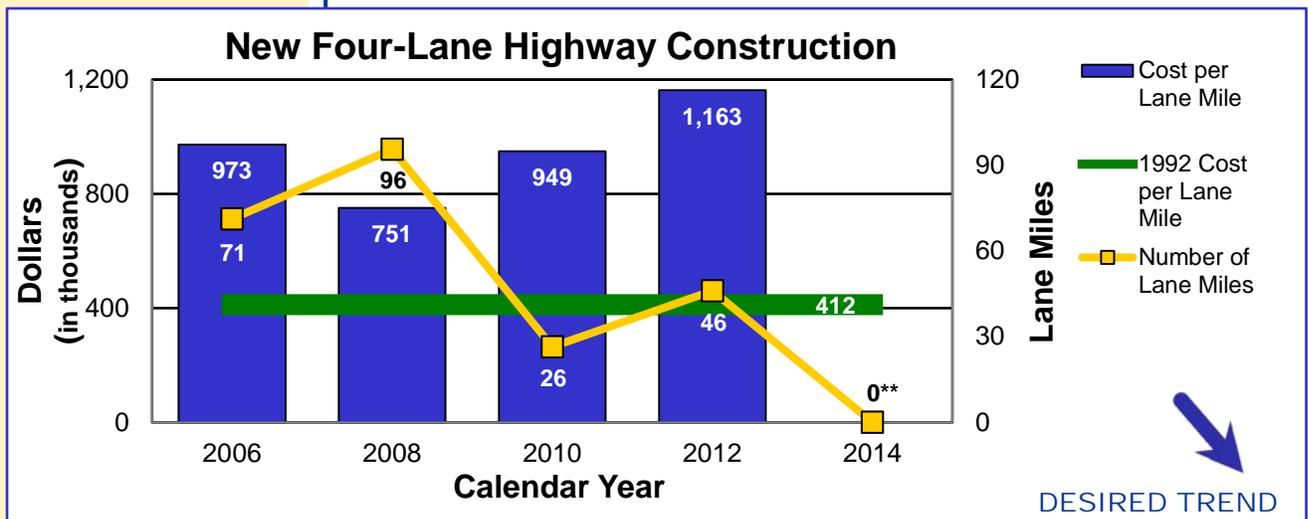
Note: There were no contract chip seal projects in 1992.



# DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

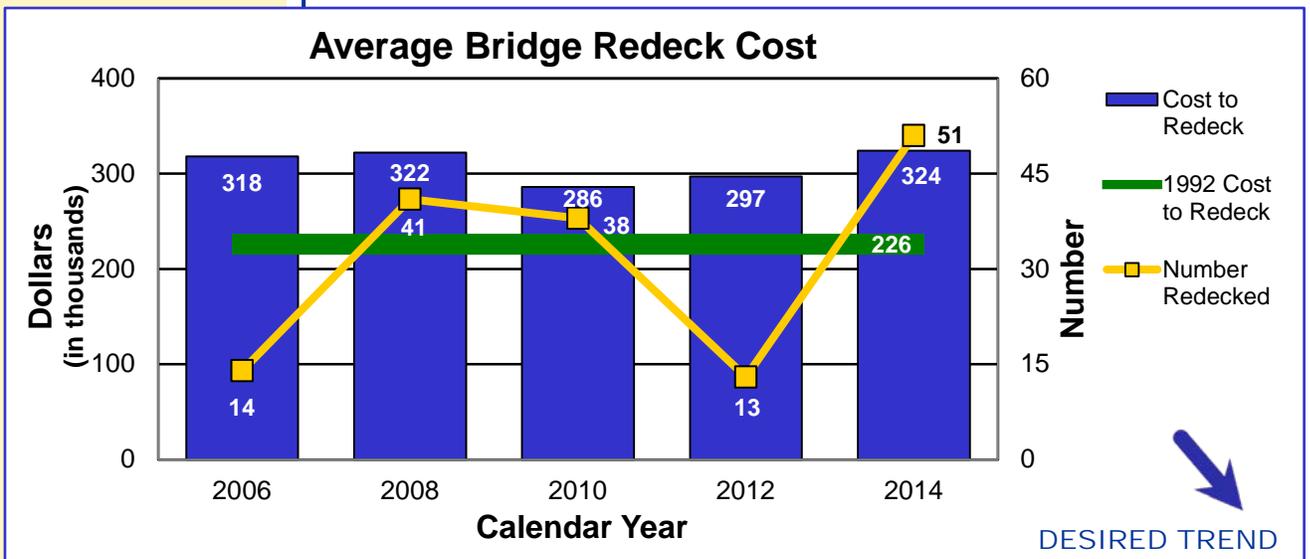
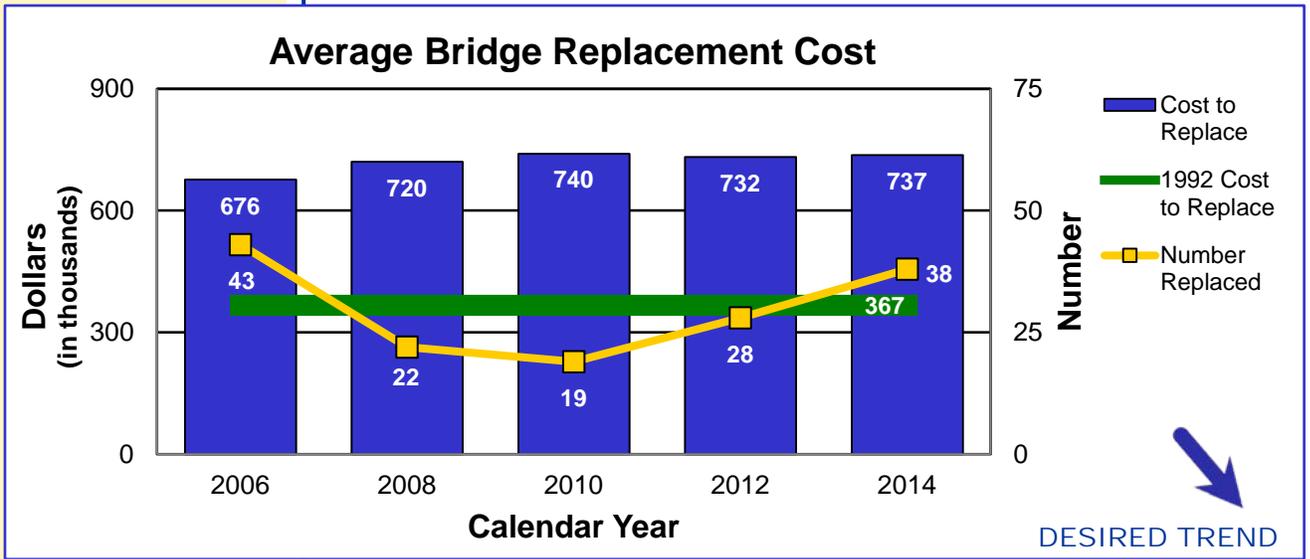


\* There were no two-lane projects bid in 2012, 2013 and 2014.



\*\*There were no four-lane projects bid in 2013 and 2014.

# DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE





# OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM

*Paula Gough, District Engineer*

## Tracker

MEASURES OF DEPARTMENTAL PERFORMANCE



Missourians expect to get to their destinations on time, without delay regardless of their choice of travel mode. We coordinate and collaborate with our transportation partners throughout the state to keep people and goods moving freely and efficiently. We also maintain and operate the transportation system in a manner to minimize the impact to our customers and partners.

## RESULT DRIVER:

Paula Gough  
District Engineer

## MEASUREMENT DRIVER:

Jon Nelson  
Traffic Safety Engineer

## PURPOSE OF THE MEASURE:

This measure tracks the mobility of significant state routes in St. Louis, Kansas City, Springfield and Columbia.

## MEASUREMENT AND DATA COLLECTION:

Travel time data is collected continuously via wireless technology. To assess mobility, MoDOT compares travel times during rush hour to free-flow conditions where vehicles can travel at the posted speed limit. This measure also assesses reliability, an indicator of how variable those travel times are on a daily basis. The charts in this measure show the average travel time and the 95th percentile travel time, which is the time motorists should plan in order to reach their destinations on time 95 percent of the time. The maps display the mobility of specific sections of roadways during rush hour.

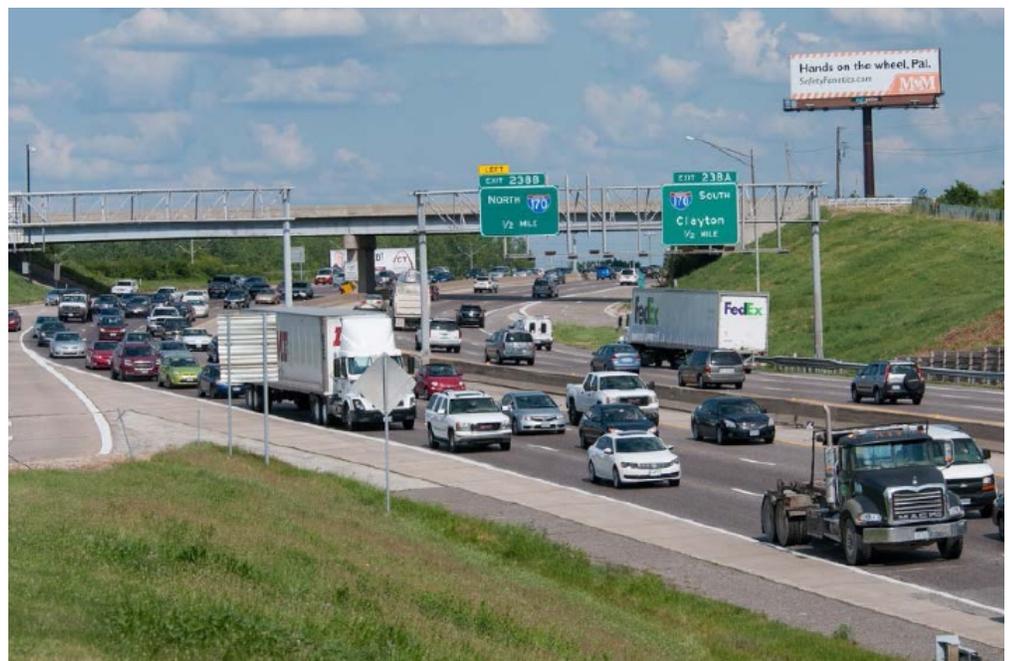
# OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM

## *Travel times and reliability on major routes – 5a*

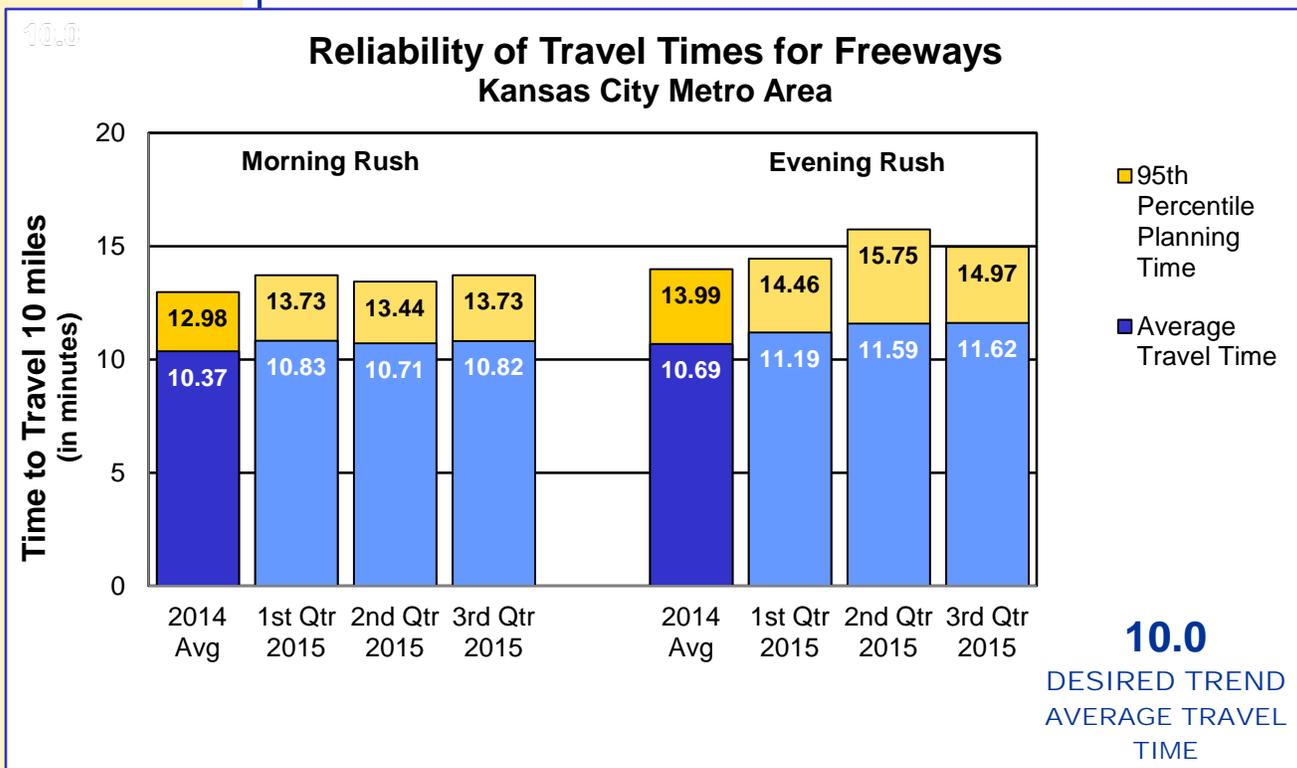
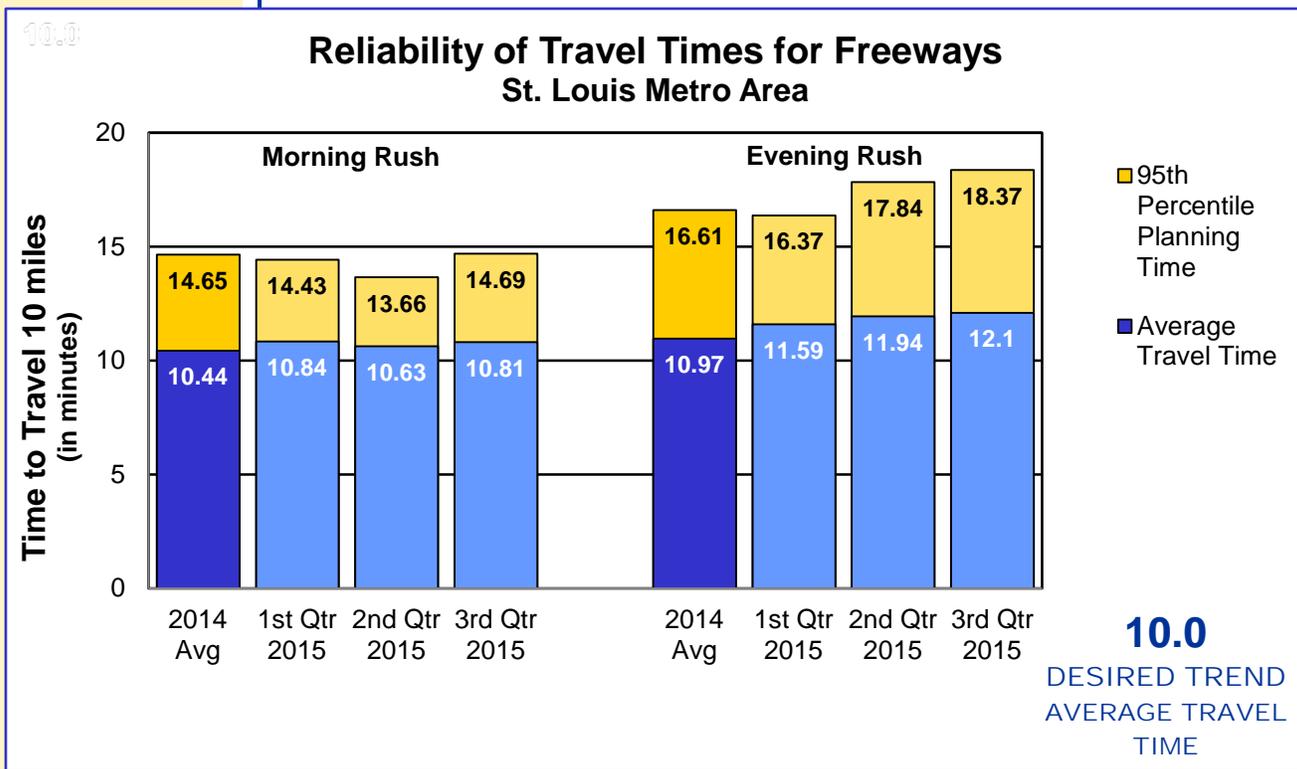
Overall from July to September 2015, average travel times increased during both the morning and evening rush hours. The average 10-mile travel time in St. Louis was 10.81 minutes during the morning and 12.1 minutes during the evening. For Kansas City, the average travel time was 10.82 minutes during the morning and 11.62 minutes during the evening. These travel times represent average rush-hour speeds between 50 and 55 mph.

The planning times account for unexpected delays and indicate how long customers needed to plan in order to arrive on time 95 percent of the time. In St. Louis, the average 10-mile planning times were 14.69 minutes during the morning and 18.37 minutes during the evening. In Kansas City, the average planning times were 13.73 minutes during the morning and 14.97 minutes during the evening. These planning times represent average rush-hour speeds between 32 and 44 mph.

Individual freeway segments within the regions experienced longer travel times than the regional averages as depicted in the maps. The maps also depict rush hour conditions on arterial routes compared to normal traffic flow during non-peak traffic conditions.

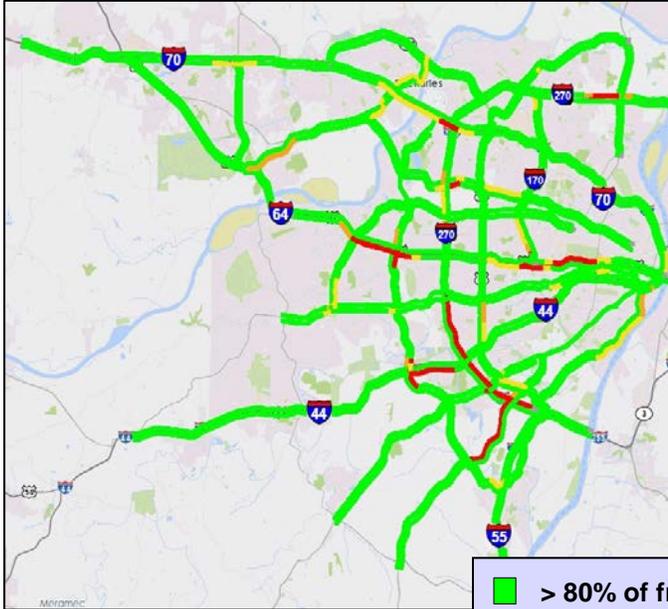


# DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE



# DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

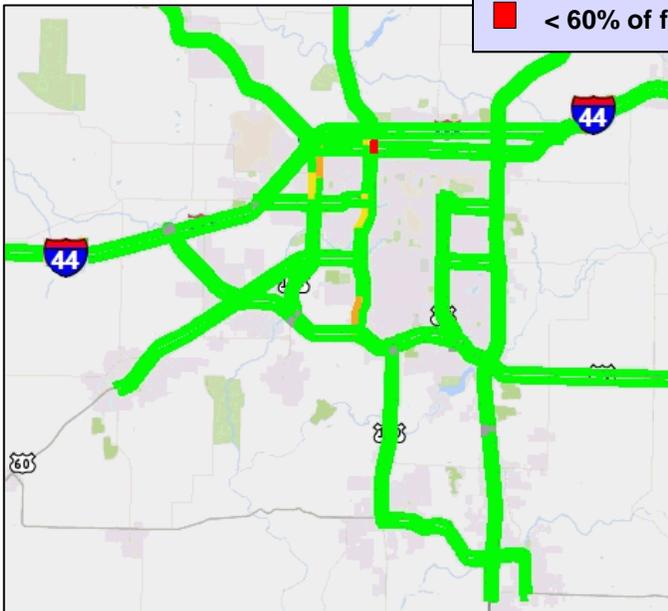
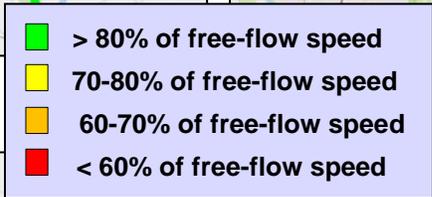
## A.M. Mobility



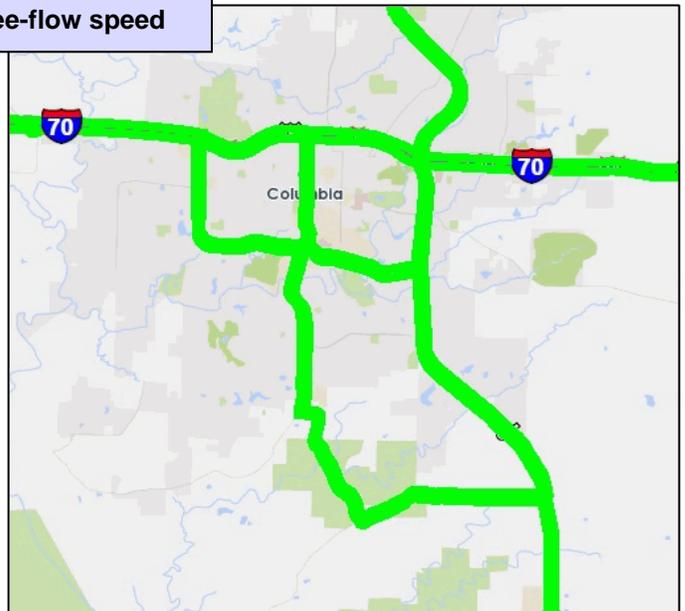
**St. Louis Area**



**Kansas City Area**



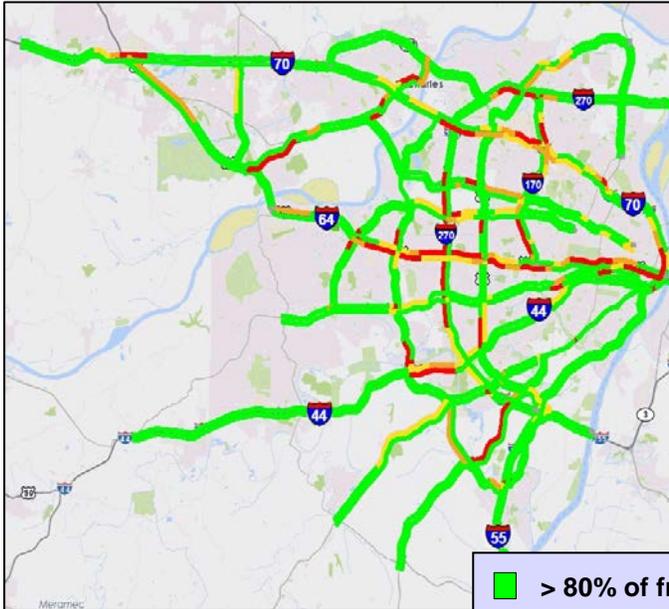
**Springfield Area**



**Columbia Area**

# DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

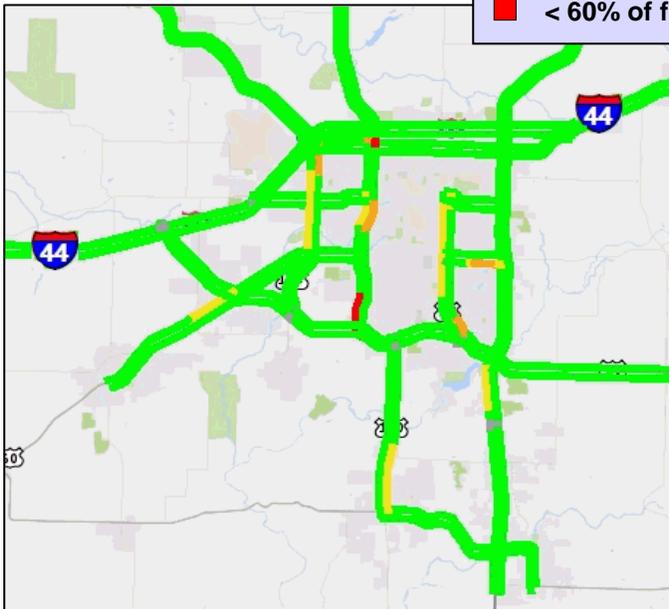
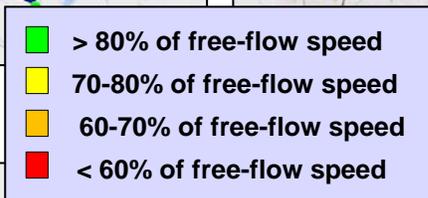
## P.M. Mobility



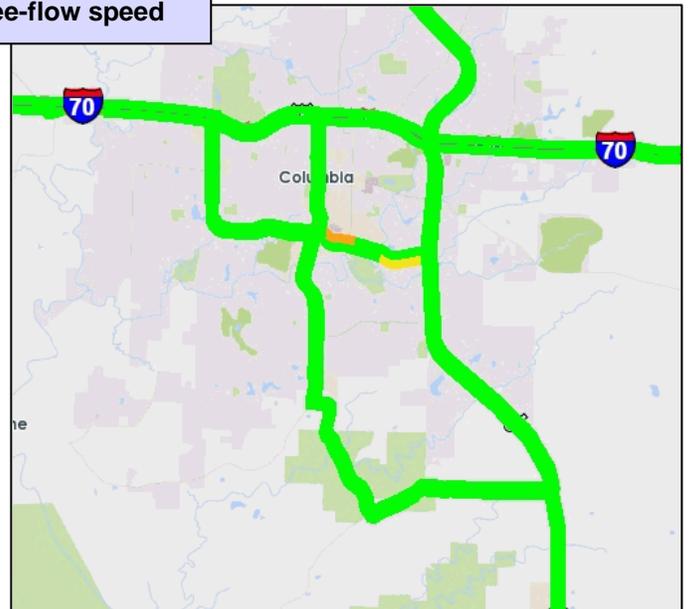
St. Louis Area



Kansas City Area



Springfield Area



Columbia Area

## RESULT DRIVER:

Paula Gough  
District Engineer

## MEASUREMENT DRIVER:

Jeanne Olubogun  
District Traffic Engineer

## PURPOSE OF THE MEASURE:

This measure tracks the annual cost and impact of traffic congestion to motorists for motorist delay, travel time, excess fuel consumed per auto commuter and congestion cost per auto commuter.

## MEASUREMENT AND DATA COLLECTION:

A reporting tool available in the Regional Integrated Transportation Information System looks at user delay costs. This data, in combination with industry standard costs for passenger cars and trucks, reflects the overall costs of congestion. RITIS also includes historic data so trend lines can be tracked and evaluated. The unit cost per passenger car is \$16.79 per hour and is obtained from the Texas A&M Transportation Institute. The unit cost per truck is \$65.29 obtained from the American Transportation Research Institute, which specializes in tracking freight mobility and provides the best source of data related to freight costs. For previous reporting, the department used data provided by the TTI, which annually produces the Urban Mobility Report.

# OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM

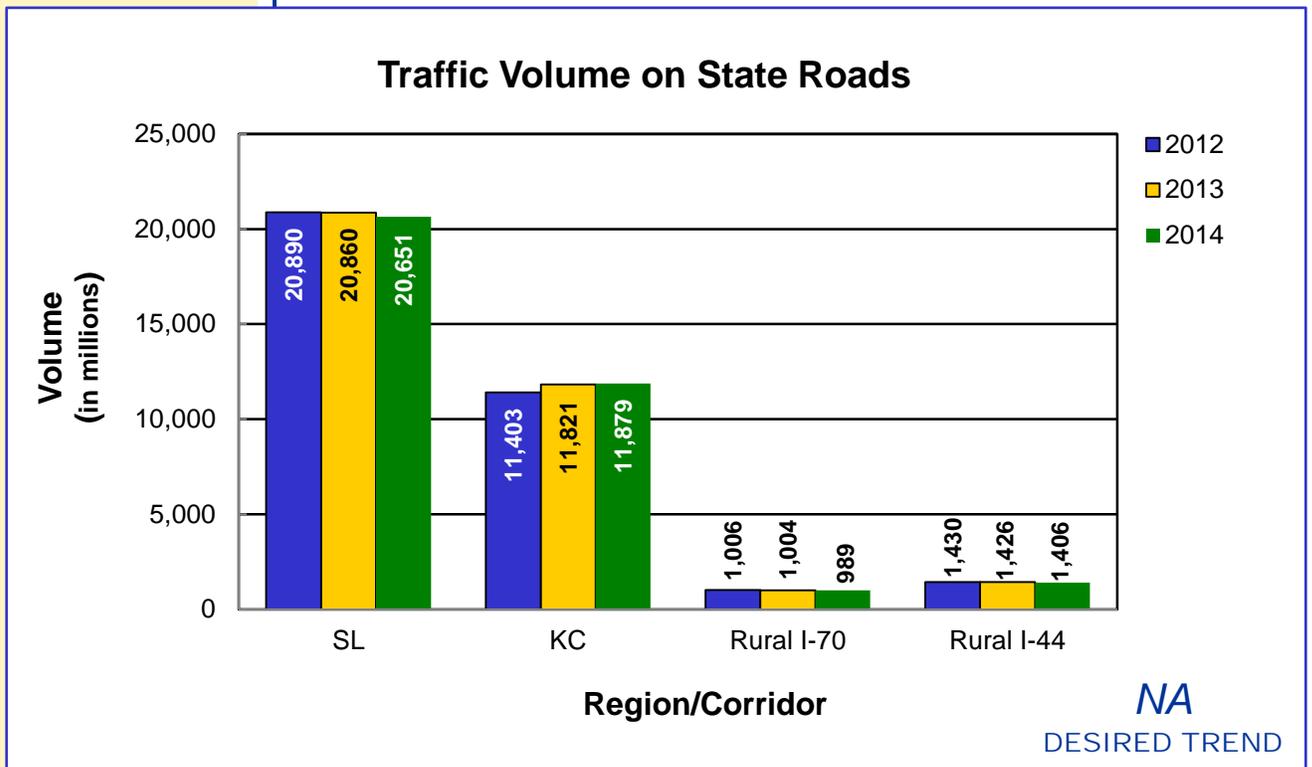
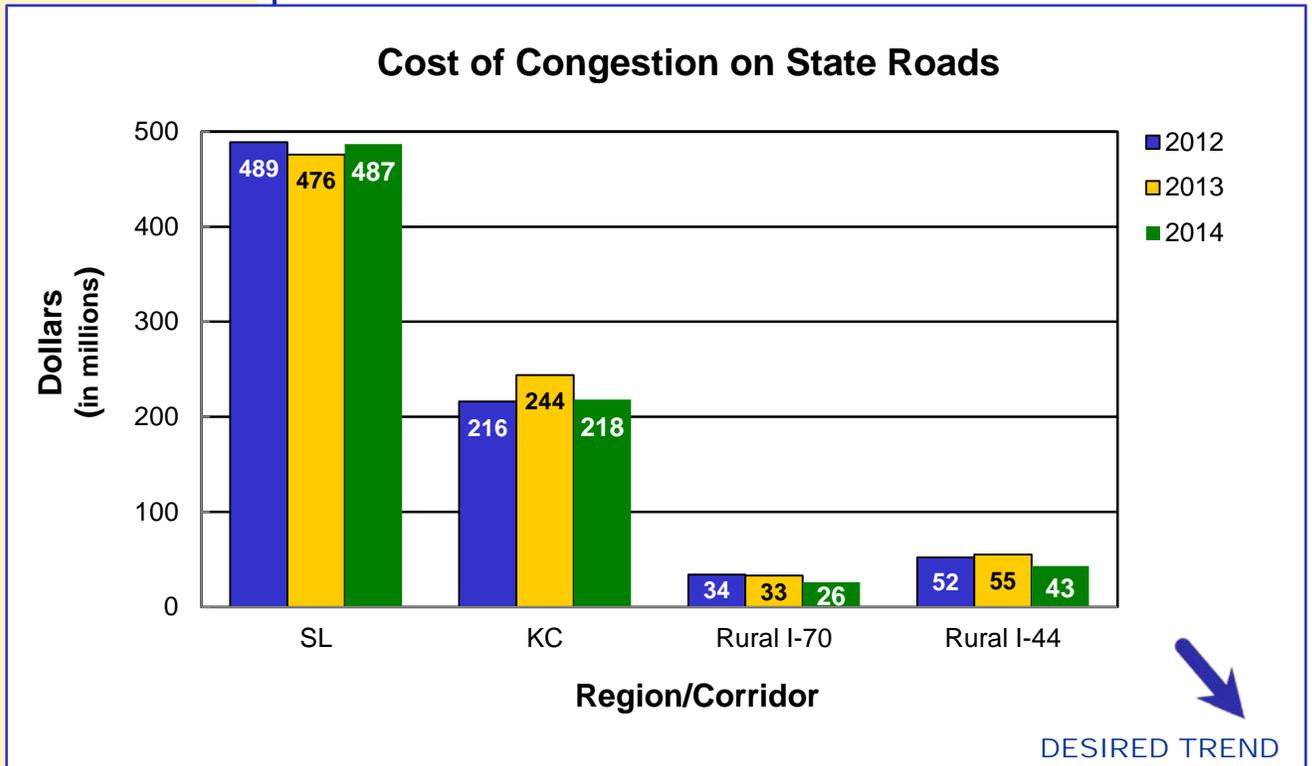
## *Cost and impact of traffic congestion – 5b*

Recurring congestion occurs at regular times, although the traffic jams are not necessarily consistent day-to-day. Nonrecurring congestion is an unexpected traffic crash or natural disaster that affects traffic flow. When either occurs, the time required for a given trip becomes unpredictable. This unreliability is costly for commuters and truck drivers moving goods, which results in higher prices to consumers.

While the desired trend for both costs is downward, challenges exist in Missouri's metropolitan regions to continue toward this desired outcome. A comprehensive look at congestion is needed, looking beyond typical solutions of adding capacity. As the department adapts to limited revenue streams, the capacity for adding projects will be scarce. Using smarter technology to help guide motorists is a must. Still, the desired outcome is lower congestion costs and an indication that traffic is moving more efficiently.



# OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM



## RESULT DRIVER:

Paula Gough  
District Engineer

# OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM

## *Average time to clear traffic incident – 5c*

## MEASUREMENT DRIVER:

Randy Johnson  
Traffic Center Manager

## PURPOSE OF THE MEASURE:

This measure is used to determine the trends in incident clearance on the state highway system.

A traffic incident is an unplanned event that blocks travel lanes and temporarily reduces the number of vehicles that can travel on the road. The speed of incident clearance is essential to the highway system returning back to normal conditions. Responding to and quickly addressing the incident (crashes, flat tires and stalled vehicles) improves system performance.

St. Louis recorded 897 incidents in July, 965 in August and 936 in September. The average time to clear traffic incidents was 23.1 minutes, an increase of 5 percent compared to the third quarter of 2014.

Kansas City recorded 638 incidents in July, 573 in August and 546 in September. The average time to clear traffic incidents was 24.3 minutes, an increase of 5 percent from the third quarter of 2014.

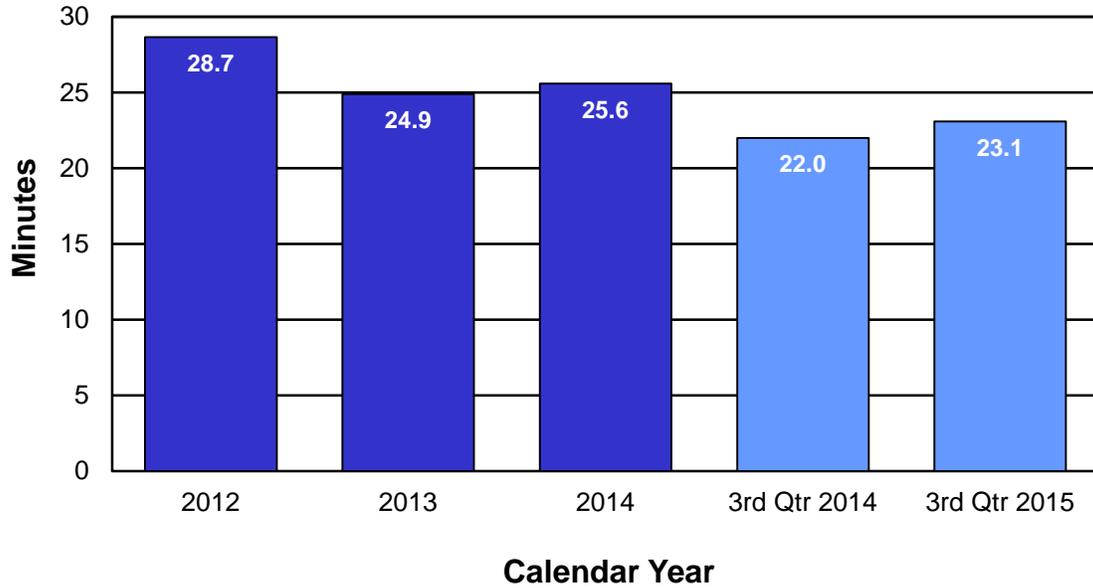
## MEASUREMENT AND DATA COLLECTION:

Advanced transportation management systems are used by the Kansas City and St. Louis traffic management centers to record incident start time and the time when all lanes are declared cleared.



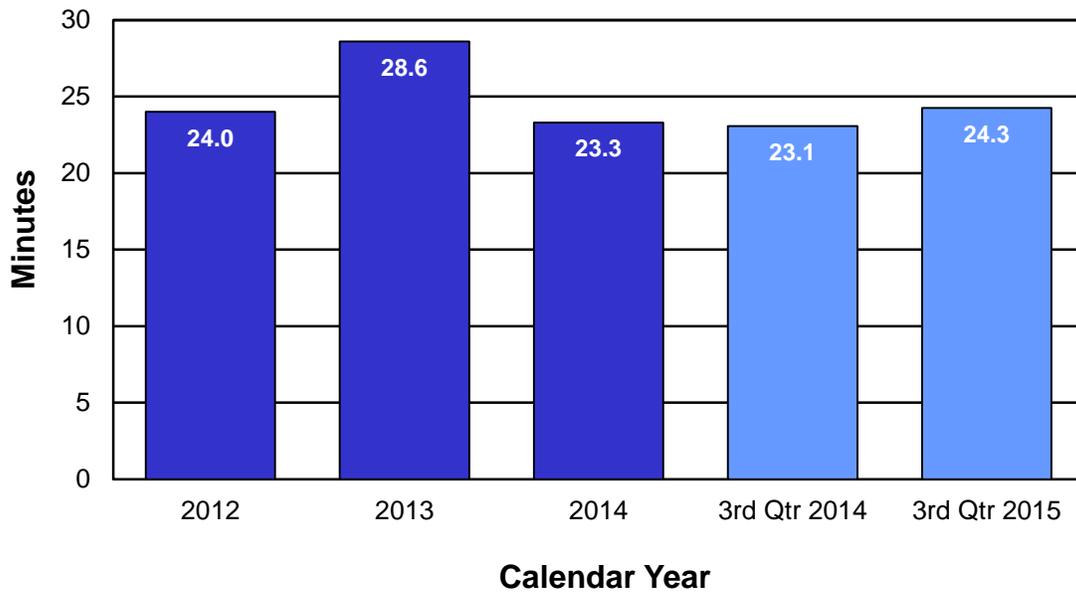
# OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM

## Average Time to Clear Traffic Incident St. Louis



↓  
DESIRED TREND

## Average Time to Clear Traffic Incident Kansas City



↓  
DESIRED TREND

## RESULT DRIVER:

Paula Gough  
District Engineer

## MEASUREMENT

### DRIVER:

Rick Bennett  
Traffic Liaison Engineer

## PURPOSE OF THE MEASURE:

This measure tracks the traffic incident impacts on Interstate 70 and Interstate 44 due to highway incidents.

## MEASUREMENT AND DATA COLLECTION:

Interstate route closures having an actual or expected duration of 30 minutes or more are entered into MoDOT's Transportation Management System for display on the Traveler Information Map. By using the incident locations identified from the Traveler Information Map data along with the Regional Integrated Transportation Information System, real-time durations and delays for these incidents can be identified. The impact duration is the total amount of time that there was a noticeable impact on traffic speeds as a result of the incident regardless of how long the actual incident closure lasted. The maximum delay is the longest delay that an individual traveler would have experienced as a result of the incident. What is important about these measurements is that they represent the impacts that are "felt" by our customers resulting from incident closures.

# OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM

## Traffic incident impacts on major interstate routes – 5d

Interstates are the arteries that connect our nation and keep people and commerce flowing. When they shut down in Missouri, the country is cut in half. Keeping interstates free-flowing is a top priority for MoDOT, but sometimes vehicle crashes affect the department's ability to keep the interstates moving.

The I-70 and I-44 charts give a comparison of the duration of the incidents and the actual delay experienced by the travelers as provided by the RITIS tool. An incident with a long duration may not create a long delay. This can occur when at least one lane remains open or if there is a good detour route around the incident. The time of day and traffic volumes on the corridor also can be a factor. The final map provides a picture of where the incidents are occurring over a full year to see the areas with higher concentrations of incidents.

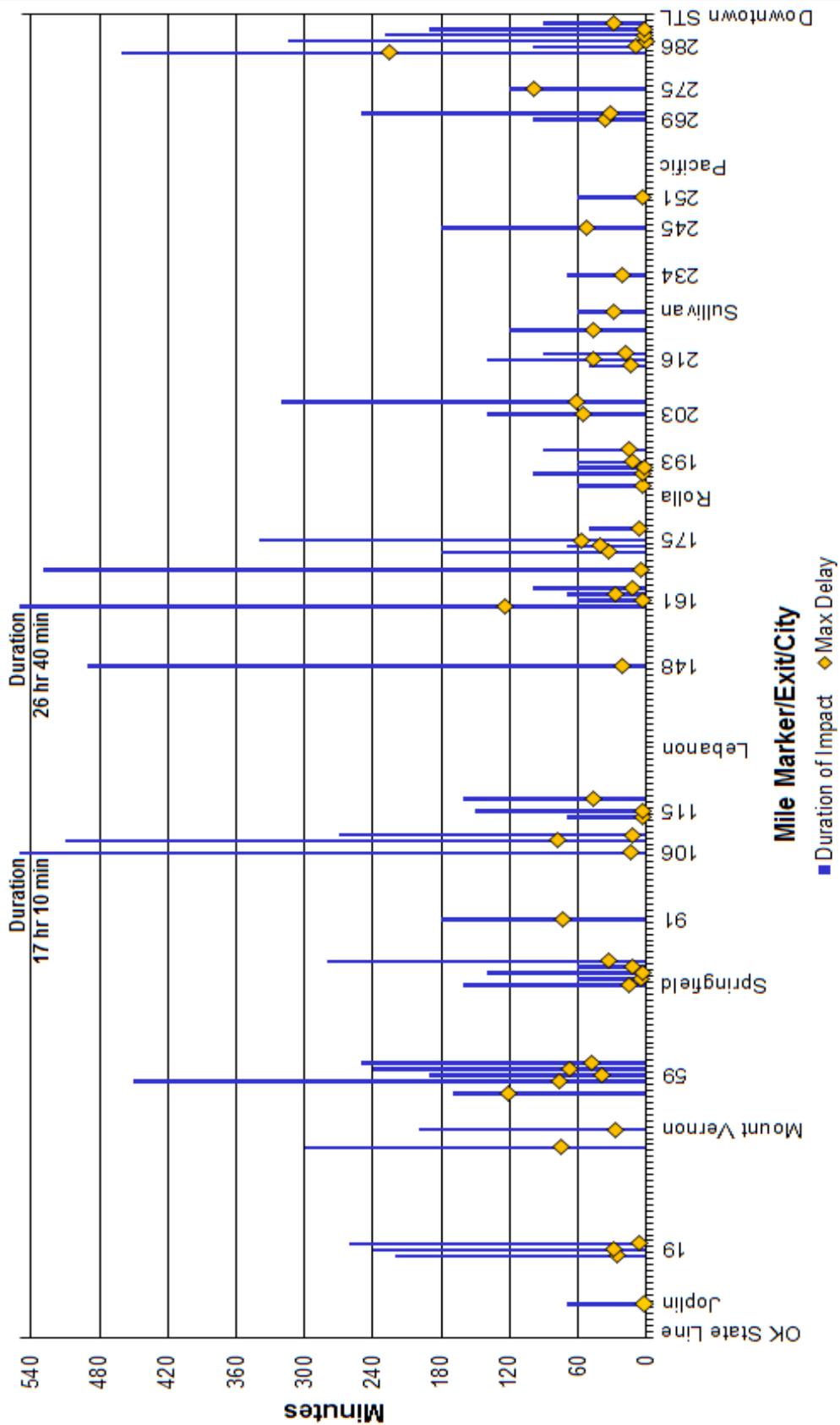
MoDOT continues to work with emergency responder partners to minimize the delay caused by closures on the interstate system. This Tracker measure provides more information so staff can focus on the incidents with higher "real" impact to travelers. This information is used to develop and implement strategies and best practices to reduce the impacts to travelers.

### Top 10 Incidents by Delay July – September 2015

Route	County	Dir.	Mile Marker	Date	Impact Duration (hrs:min)	Max. Delay (hrs:min)
I-70	Montgomery	W	171	7/15	8:40	7:31
I-70	St. Charles	W	210	9/25	6:10	5:34
I-70	Lafayette	W	53	9/2	7:50	4:18
I-44	St. Louis City	E	286	9/21	7:40	3:45
I-70	Boone	W	133	7/5	2:20	2:20
I-44	Pulaski	E	161	7/23	26:40	2:04
I-44	Lawrence	W	54	9/30	2:50	2:01
I-70	Boone	W	132	7/1	4:50	1:47
I-70	Saline	W	78	7/20	3:00	1:39
I-44	St. Louis	E	275	9/3	2:00	1:39

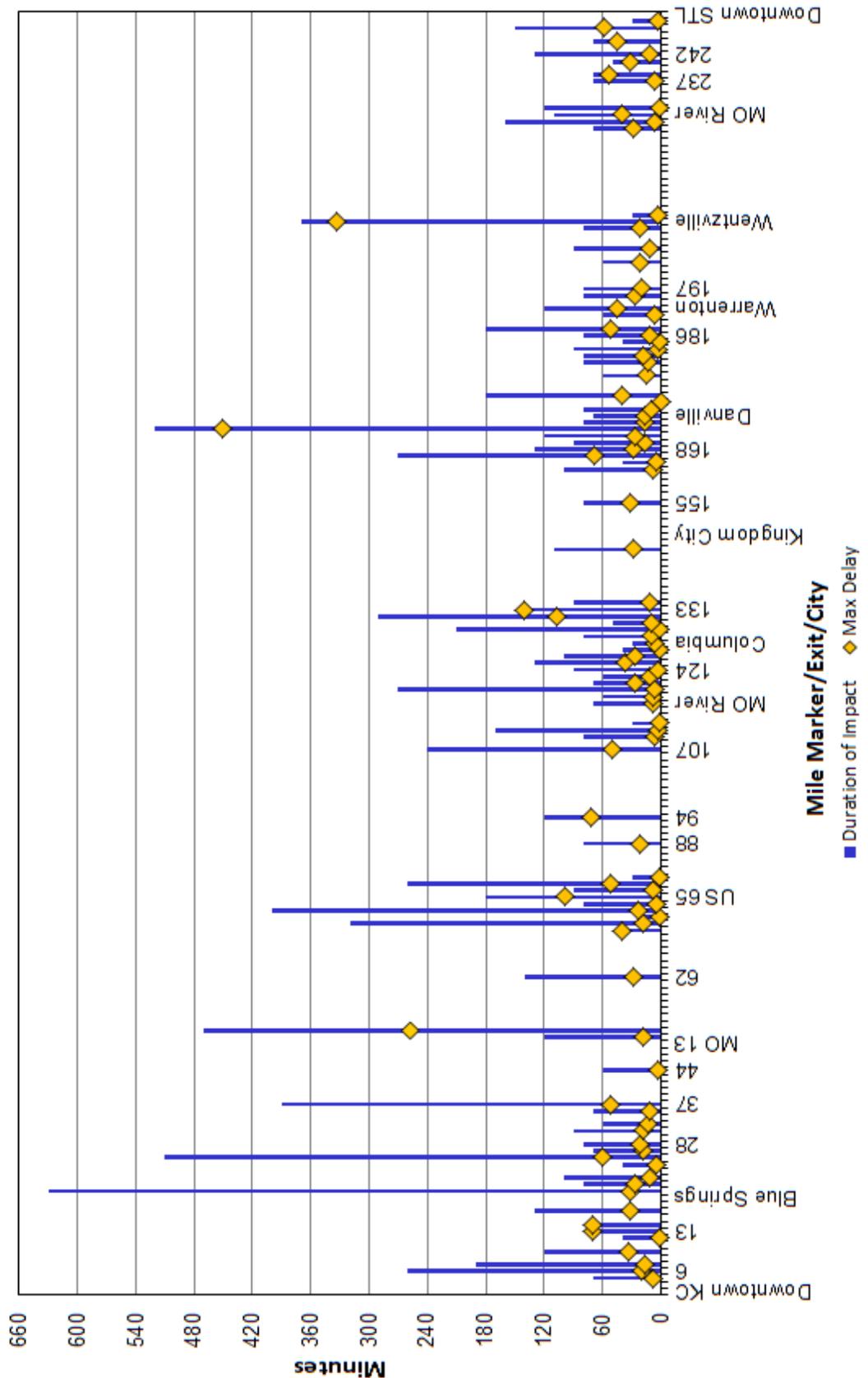
# OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM

**Traffic Impacts on I-44  
July - September 2015**



# OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM

Traffic Impacts on I-70  
July - September 2015



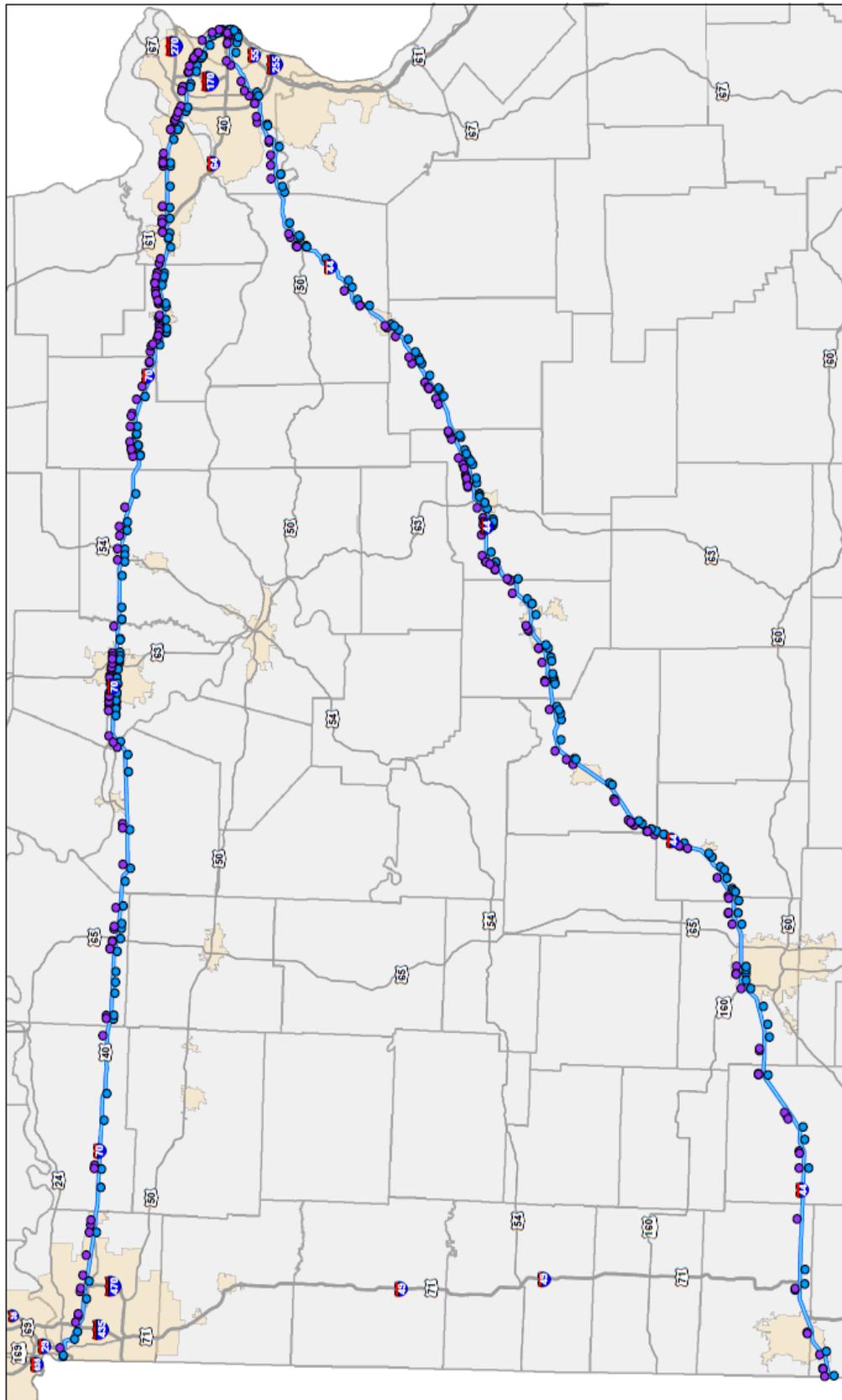
# DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

I-44 and I-70 Traffic Impacts  
CY 2014



**All Impact Locations**

- I-70 W
- I-70 E
- I-44 W
- I-44 E



## RESULT DRIVER:

Paula Gough  
District Engineer

## MEASUREMENT DRIVER:

Jerica Holtsclaw  
Design Liaison Engineer

## PURPOSE OF THE MEASURE:

Work zones are designed to allow the public to travel through safely and with minimal disruptions. This measure indicates how well significant work zones perform.

## MEASUREMENT AND DATA COLLECTION:

Work zone impacts are collected by conducting visual observations or using automated data collection. Recent updates to traffic data collection methods allow for more work zones to be evaluated. An impact is defined as the additional time a work zone adds to normal travel. They are categorized into three levels: a minor impact that lasts less than 10 minutes; a moderate impact that lasts 10 to 14 minutes; and a major impact that lasts 15 minutes or more.

# OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM

## *Work zone impacts to the traveling public – 5e*

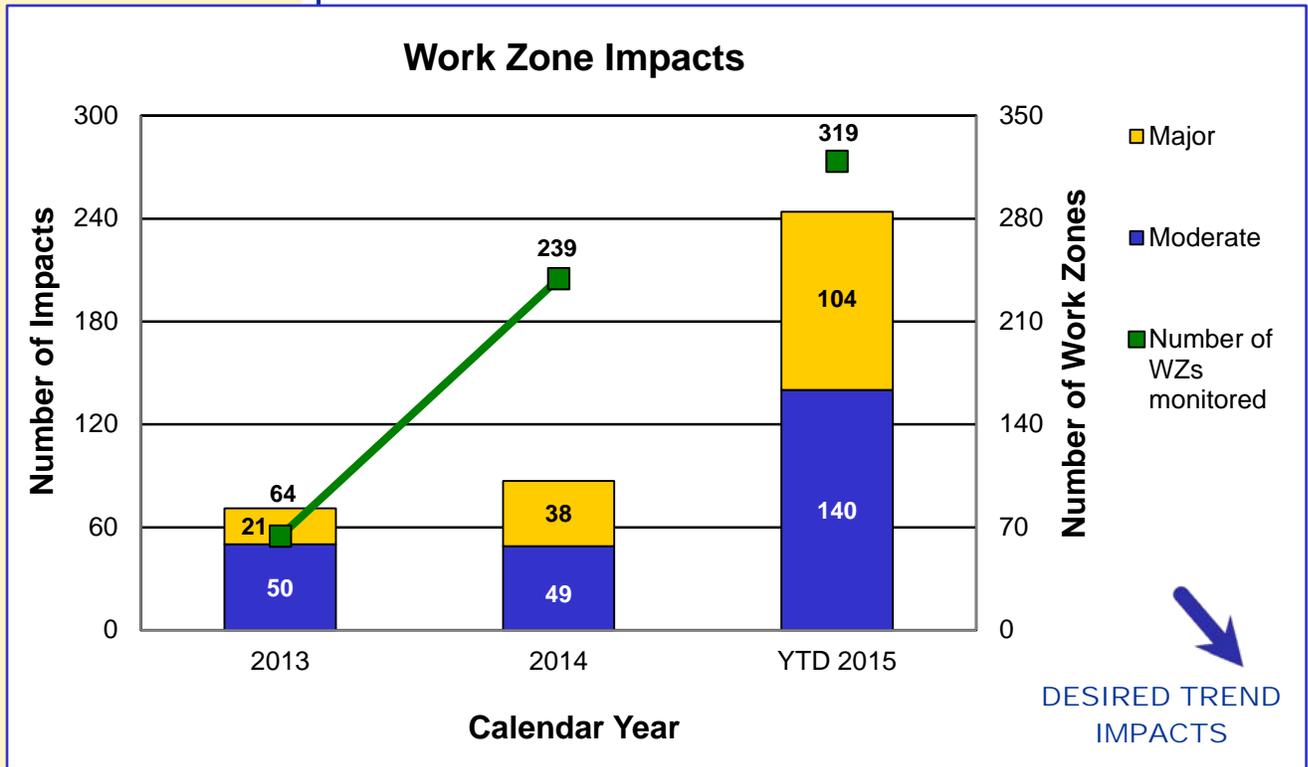
Motorists want to get through work zones with as little inconvenience as possible. MoDOT tries to minimize the travel impacts by shifting work to nighttime hours or during times when there are fewer impacts to the traveling public. To get a wider range of data and a better understanding of the impact work zones have on motorists, the department has increased the number of work zones it monitors each quarter.

MoDOT monitored 121 significant work zones this quarter, with 71 major impacts and 125 moderate impacts. This brings the calendar year-to-date totals to 104 major and 140 moderate impacts, with a total of 319 work zones analyzed. The significant projects this quarter that accounted for the most impacts were the Blackwater and Sni-A-Bar bridge projects, both on Interstate 70 in the Kansas City District. These work zones accounted for 58 major and 92 moderate impacts, nearly 77 percent of all the impacts. The St. Louis District had 11 major impacts and 26 moderate impacts. The majority of the impacts in St. Louis were realized on three different work zones on I-44 that consisted of lane drops for bridge work and emergency maintenance asphalt repair.

Based on work zone surveys received this quarter, 41 percent of motorists are satisfied with timeliness when traveling in a work zone.



# OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM



**RESULT DRIVER:**

Paula Gough  
District Engineer

# OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM

## *Effectiveness of improving air quality – 5f*

**MEASUREMENT DRIVER:**

Mike Henderson  
Transportation Planning Specialist

**PURPOSE OF THE MEASURE:**

This measure tracks concentrations of pollutants in on-road mobile source emissions. In other words, the department is tracking pollution caused by vehicles on the roads.

MoDOT is committed to improving air quality through modifying its daily operations, incorporating employee actions and education, providing information to the public, leading air quality improvements, managing congestion to reduce emissions, providing alternative choices for commuters and promoting the use of environmentally friendly fuels and vehicles.

**MEASUREMENT AND DATA COLLECTION:**

MoDOT is still determining what pollutants to track and what concentration levels will align with the U.S. Environmental Protection Agency's air quality standards. At this time, the department collects data on oxides of nitrogen, volatile organic compounds, fine particulate matter and carbon monoxide. Because this measure is part of the latest federal surface transportation act's performance requirements, guidance for measurement and data collection will be established in 2015.

### Effectiveness of Improving Air Quality

**UNDER DEVELOPMENT**

## RESULT DRIVER:

Paula Gough  
District Engineer

# OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM

## MEASUREMENT

### DRIVER:

Tim Chojnacki  
Maintenance Liaison Engineer

## *Time to meet winter storm event performance objectives – 5g*

## PURPOSE OF THE MEASURE:

This measure tracks the amount of time needed to perform MoDOT's snow and ice removal efforts.

Knowing the time it takes to clear roads after a winter storm can help the department better analyze the costs associated with that work. MoDOT's response rate to winter events provides good customer service for the traveling public while keeping costs as low as possible. While the first half of this winter was light, Missouri experienced many winter storms in January and February of 2015. It took an average of 3.1 hours to meet MoDOT's objective for continuous operations routes, and an average of 4.4 hours for non-continuous routes. These numbers compare favorably with the type of storms received, but MoDOT still spent 574,000 hours fighting these snow and ice events at a cost of \$49.0 million through the end of March. Winter operations, on average, cost about \$47.6 million dollars per year. The money and time spent on clearing the roads of snow and ice means funds are not available to maintain the roadways in the spring, such as surface improvements, sign repair, brush cutting and drainage work.

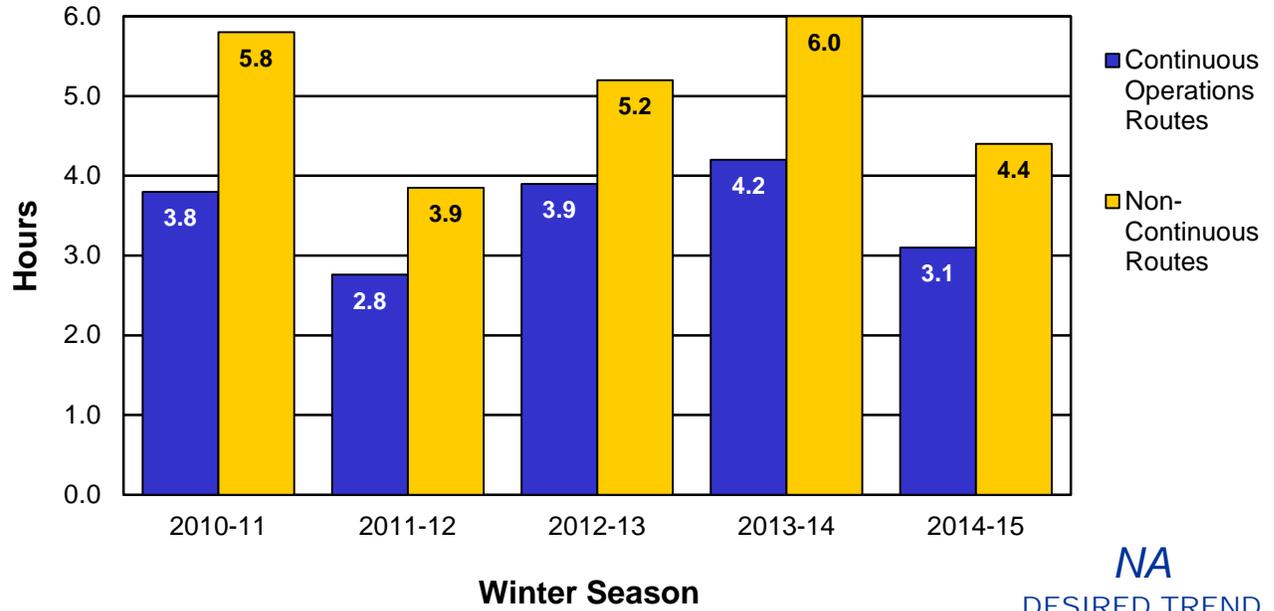
## MEASUREMENT AND DATA COLLECTION:

For major highways and regionally significant routes, the objective is to restore them to a mostly clear condition as soon as possible after the storm has ended. MoDOT calls these "continuous operations" routes. State routes with lower traffic volumes should be opened to two-way traffic and treated with salt or abrasives at critical areas such as intersections, hills and curves. These are called "non-continuous operations" routes. After each winter event, maintenance personnel submit reports indicating how much time it took to meet the objectives for both route classifications.

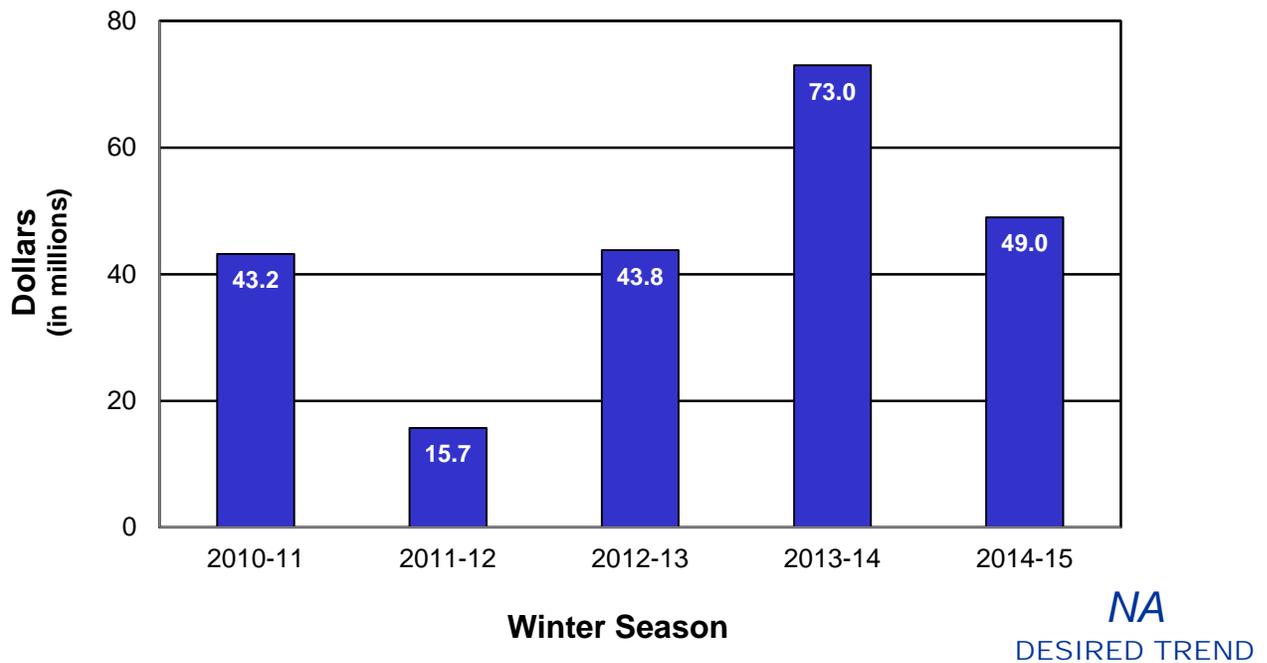


# OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM

## Time to Meet Winter Storm Event Performance Objectives



## Average Cost of Winter Operations



## RESULT DRIVER:

Paula Gough  
District Engineer

# OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM

## *Bike/pedestrian and ADA transition plan improvements – 5h*

## MEASUREMENT

### DRIVER:

Ron Effland  
Non-motorized Transportation  
Engineer

## PURPOSE OF THE MEASURE:

This measure tracks MoDOT's investment in pedestrian facilities and progress toward removing barriers. Accessibility needs occur both within the right of way, such as sidewalks and traffic signals, and within department buildings, parking lots and restrooms. Removal of the barriers listed in MoDOT's 2010 Transition Plan is required as part of the department's compliance with the Americans with Disabilities Act.

## MEASUREMENT AND DATA

### COLLECTION:

Tracking of MoDOT's investment in pedestrian facilities is done by collecting awarded contract amounts for the 20 most common construction elements used on pedestrian projects each year. Transition Plan progress is based upon completed work that has corrected defective items reported in the August 2010 Transition Plan inventory. The dollar amounts are based on unadjusted estimates from 2008 and will not reflect actual expenditures. This avoids impacts from inflation or changing field conditions.

MoDOT has been responsive to public requests for improved accessibility and has been proactive in many areas to make systematic improvements when opportunities arise and limited funding allows. MoDOT has improved more than \$15.5 million of deficient ADA facilities in the right of way since 2008. Additional work totaling more than \$135.8 million is still necessary to complete the 2010 ADA Transition Plan inventory.

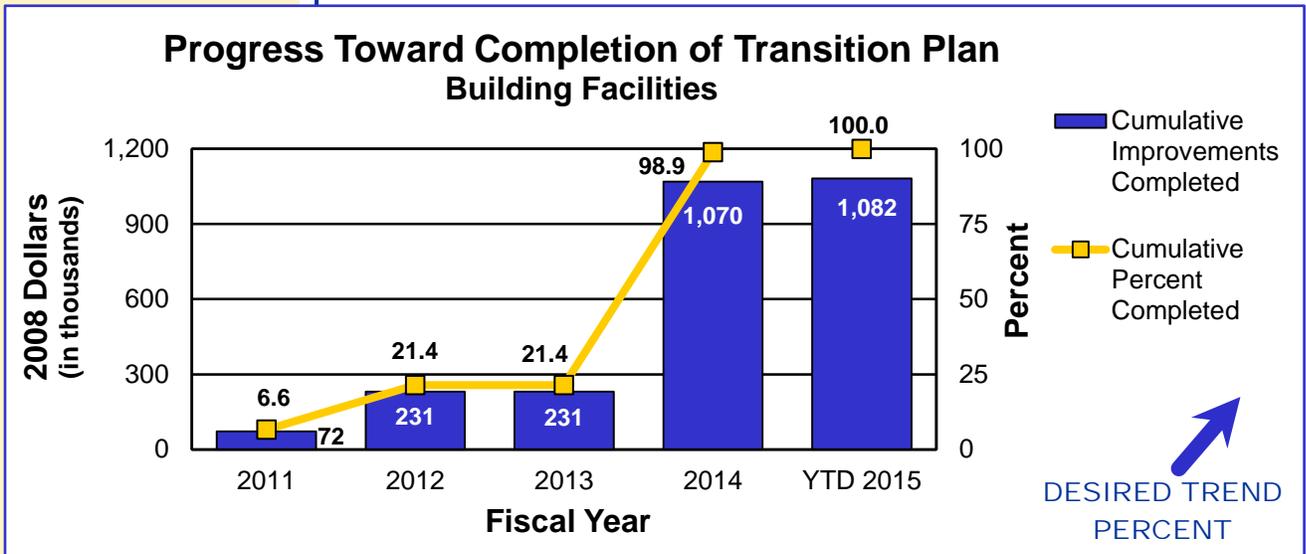
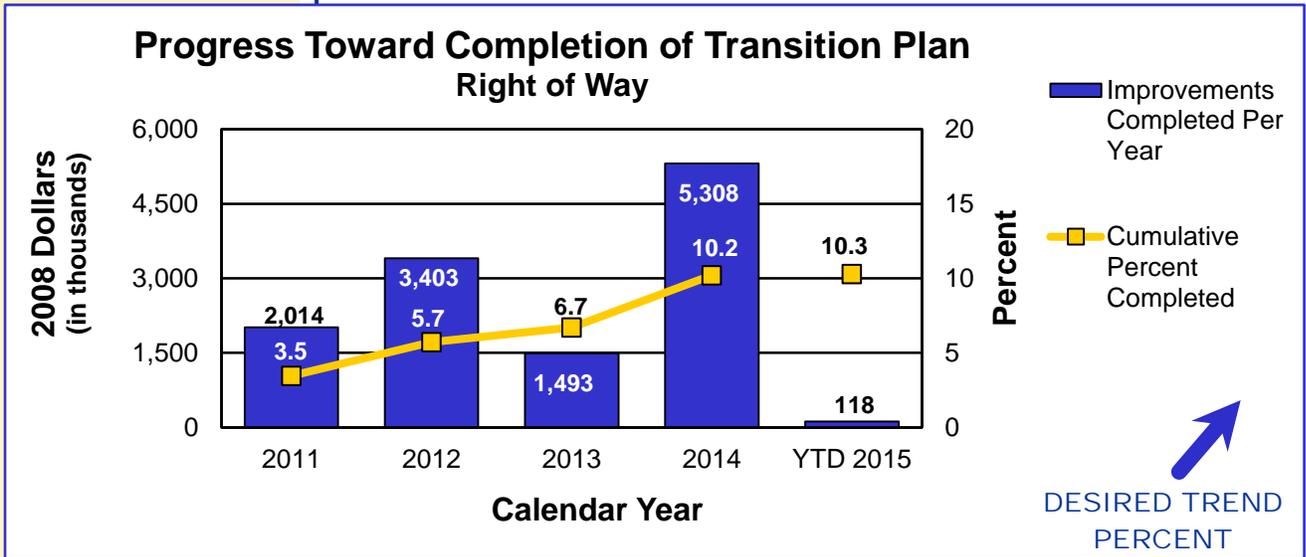
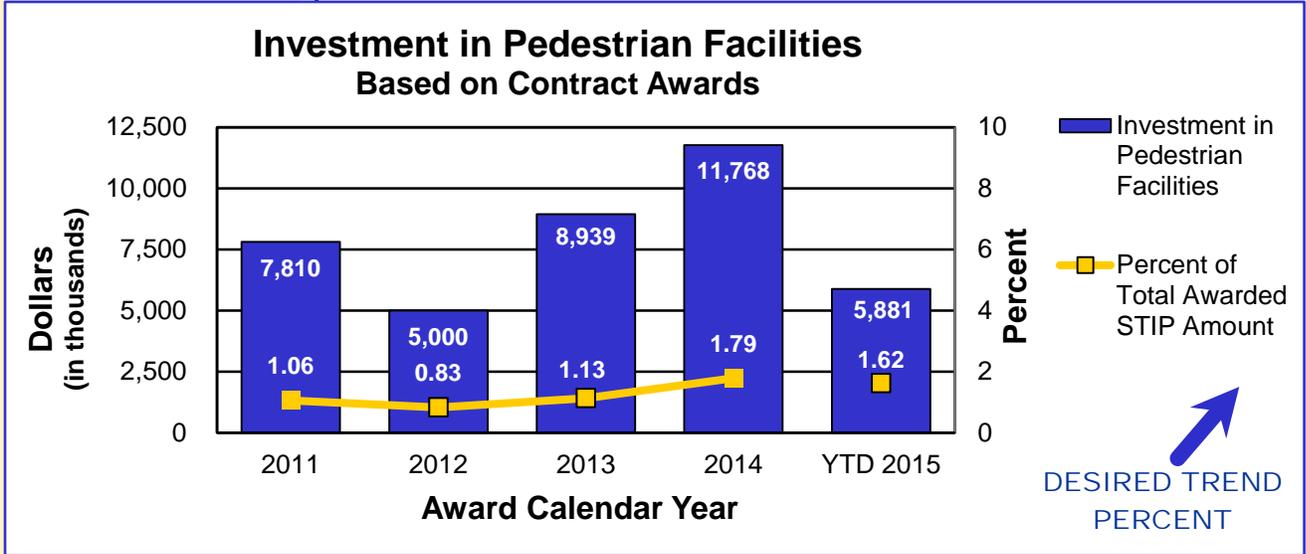
Unfortunately, limited revenue for construction projects at both state and federal levels makes it difficult to even maintain existing facilities. Additional funding sources will need to be developed before significant progress can be made in developing the improved pedestrian facilities that Missourians desire.

MoDOT's investment in pedestrian facilities through September 2015 totals \$5.88 million. In 2014, the annual investment was \$11.76 million. MoDOT has committed to complete ADA improvements, including cross slope corrections, as work is being done on the adjacent roadway section. The future of this commitment is being reviewed as MoDOT considers the tough choices necessary to operate the state's highway system on limited funding.

Americans with Disability Act compliance in MoDOT facilities has reached completion with all of the seven districts showing 100 percent of ADA improvement projects now being completed.



# OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM



## RESULT DRIVER:

Paula Gough  
District Engineer

# OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM

## *Use and connectivity of transportation modes – 5i*

## MEASUREMENT

### DRIVER:

Amy Ludwig  
Administrator of Aviation

## PURPOSE OF THE MEASURE:

This measure tracks passenger use of modes other than highways in Missouri.

## MEASUREMENT AND DATA COLLECTION:

Airline passenger counts are obtained from the Federal Aviation Administration and from individual airports. The state of Washington is the benchmark due to its comparable population. Ferry passenger data is compiled from the New Bourbon and Mississippi County ferryboats, services owned and operated by Missouri public port authorities. Amtrak supplies Missouri River Runner passenger counts. Urban and rural transit services provide transit passenger data, with Wisconsin as the benchmark. Aviation and transit data is updated annually – in January and October, respectively – while ferryboat and rail data is updated quarterly.

Planes, trains, ferries and transit are vital means of transport for Missourians. Alternative modes of transportation connect Missourians to work, healthcare and other necessary activities. They also are used to grow Missouri's economy and create jobs. Missouri's current transportation funding for these modes is inadequate and unreliable. The state is unable to meet even the existing needs for these important transportation system components.

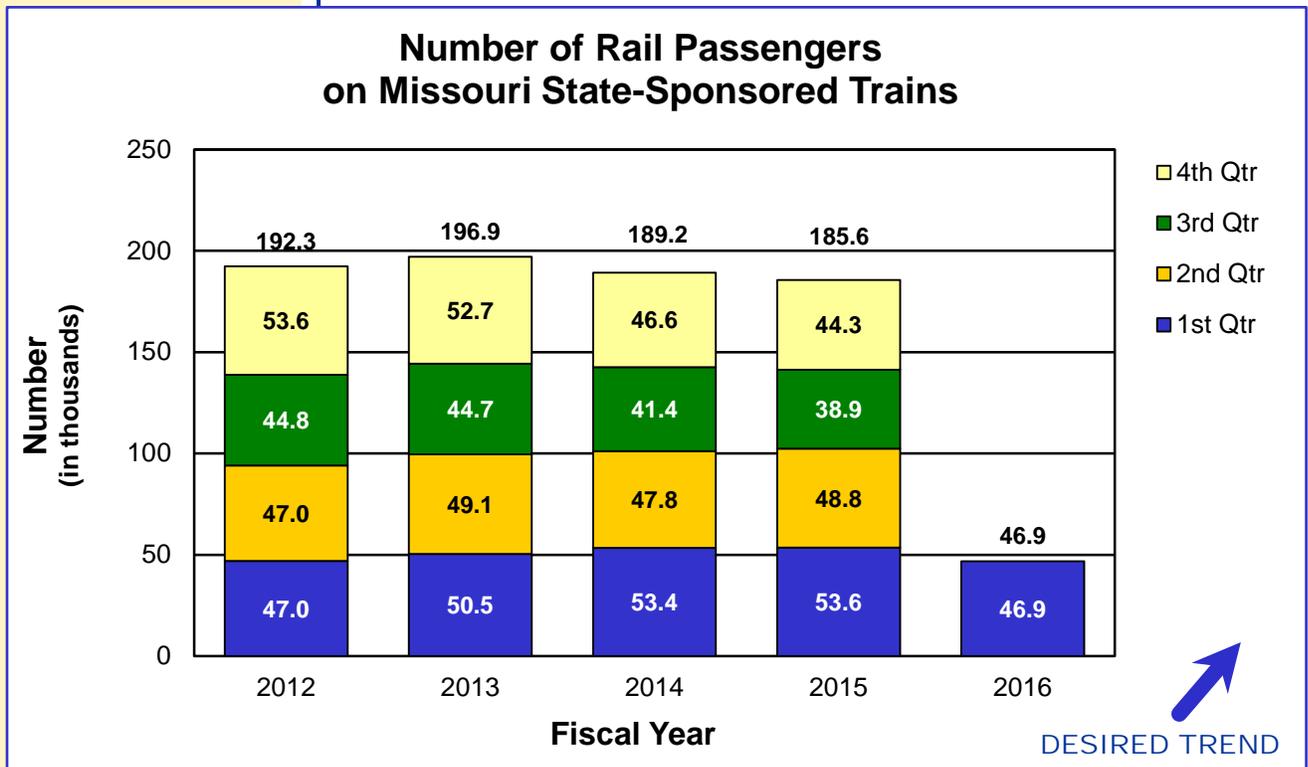
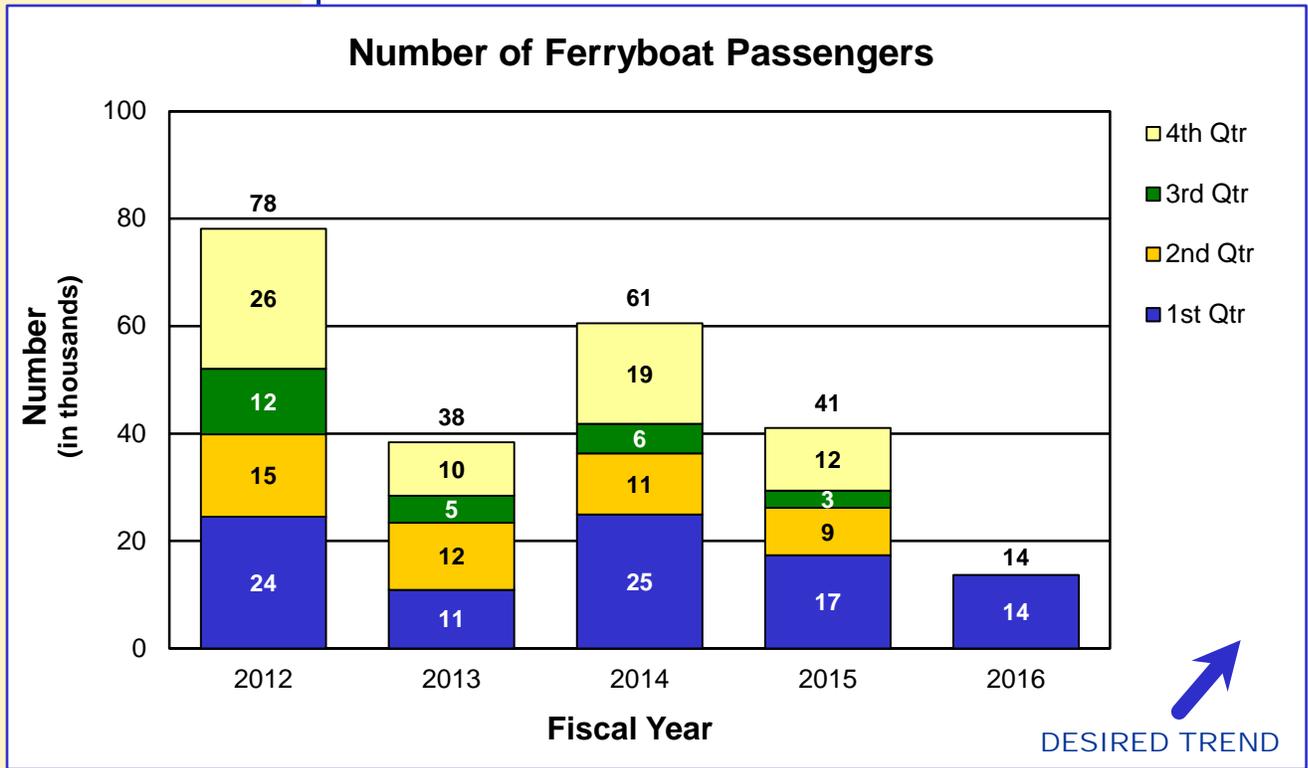
The number of ferry boat passengers in the first quarter of FY 2016 totaled 13,701, a decrease from the 17,331 passengers in the first quarter of FY 2015. Both ferry boat services saw a decline in passengers this quarter due to both operations being closed for the majority of July due to flooding and high water on the Mississippi River.

Ridership continues to decline on Missouri River Runner trains. There were 46,937 passengers in the first quarter of FY 2016, compared to 53,613 in the same period of FY 2015. Low gas prices continue to impact ridership nationwide. However, on-time performance has improved significantly, with 86 percent of trains arriving on time this quarter, versus just 80 percent during this period in FY 2015.

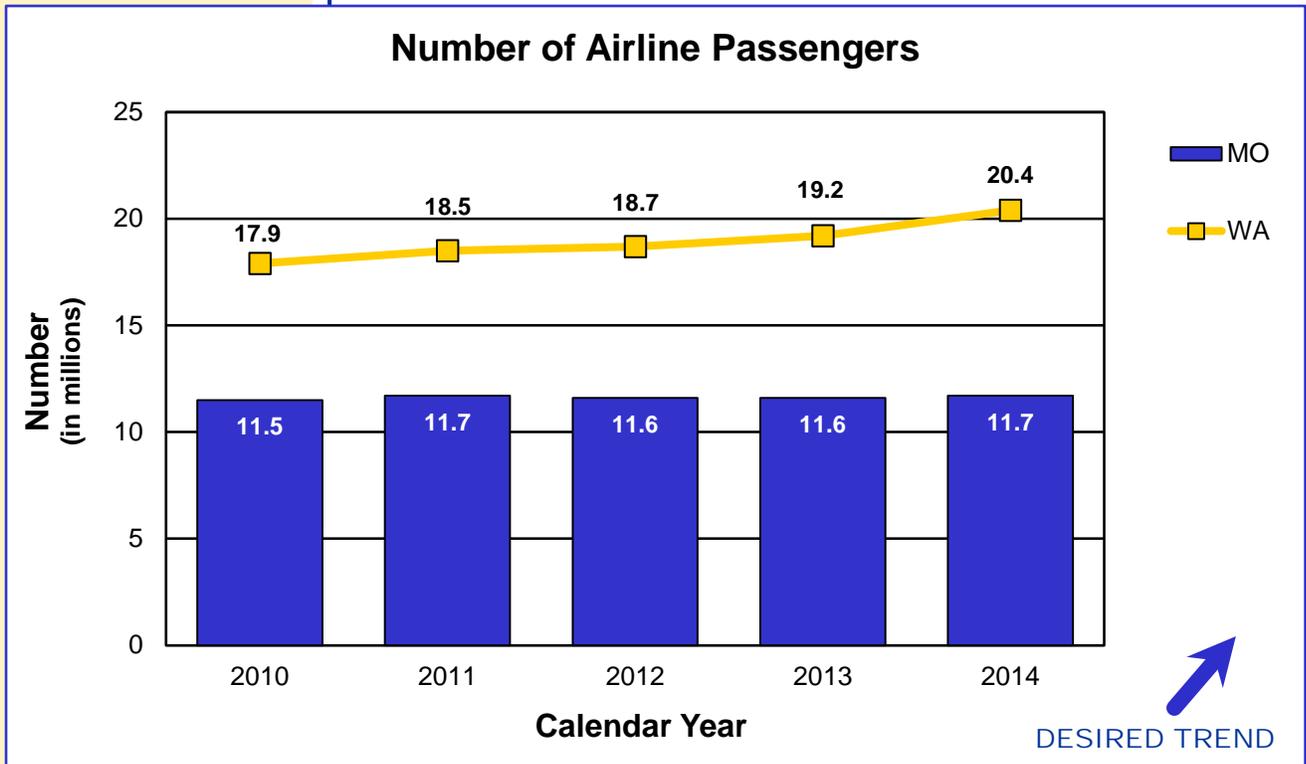
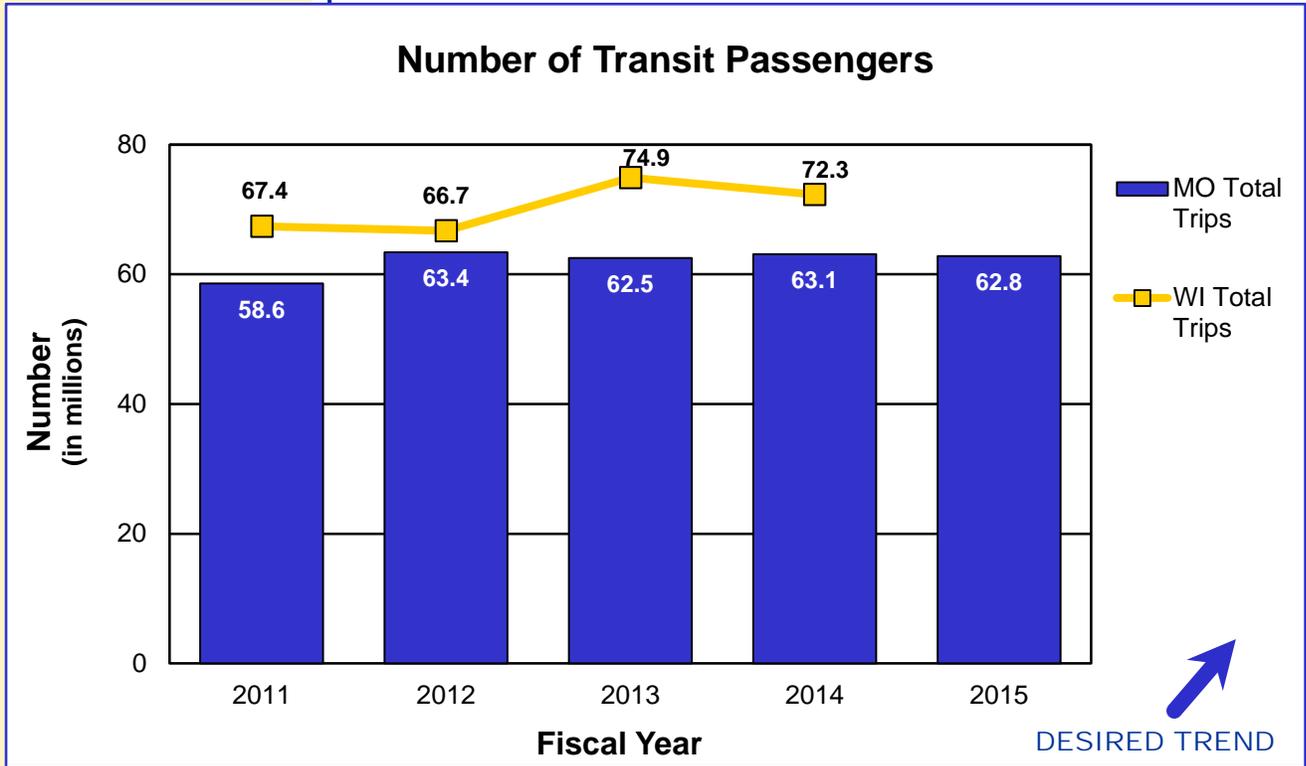
Transit ridership (passenger boardings) showed a slight decrease from 63.1 million trips in FY 2014 to 62.8 million trips in FY 2015. Urban ridership, which accounts for over 95 percent of the ridership totals for the state, decreased 0.5 percent in FY 2015, while non-urban ridership increased 2 percent in FY 2015. The overall decrease in ridership in FY 2016 can be attributed to low gas prices.

The number of airline passengers has remained fairly steady from 2010 to 2014, with a slight increase in passenger enplanements (boardings) for 2014. Due to increasing state Aviation Trust Fund revenues, in March 2015 MoDOT issued grants to commercial service airports for the air service program. These grants can be used for air service promotion and marketing and to study potential new routes.

# OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM



# DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE





## USE RESOURCES WISELY

*Brenda Morris, Financial Services Director*

# Tracker

MEASURES OF DEPARTMENTAL PERFORMANCE



MoDOT has access to many resources including people, funding, supplies and equipment. Taxpayers trust MoDOT is a good steward of these limited resources while limiting the impact on our environment. We are accountable for everything we do.

**RESULT DRIVER:**  
 Brenda Morris  
 Financial Services Director

# USE RESOURCES WISELY

## Number of full-time equivalencies expended – 6a

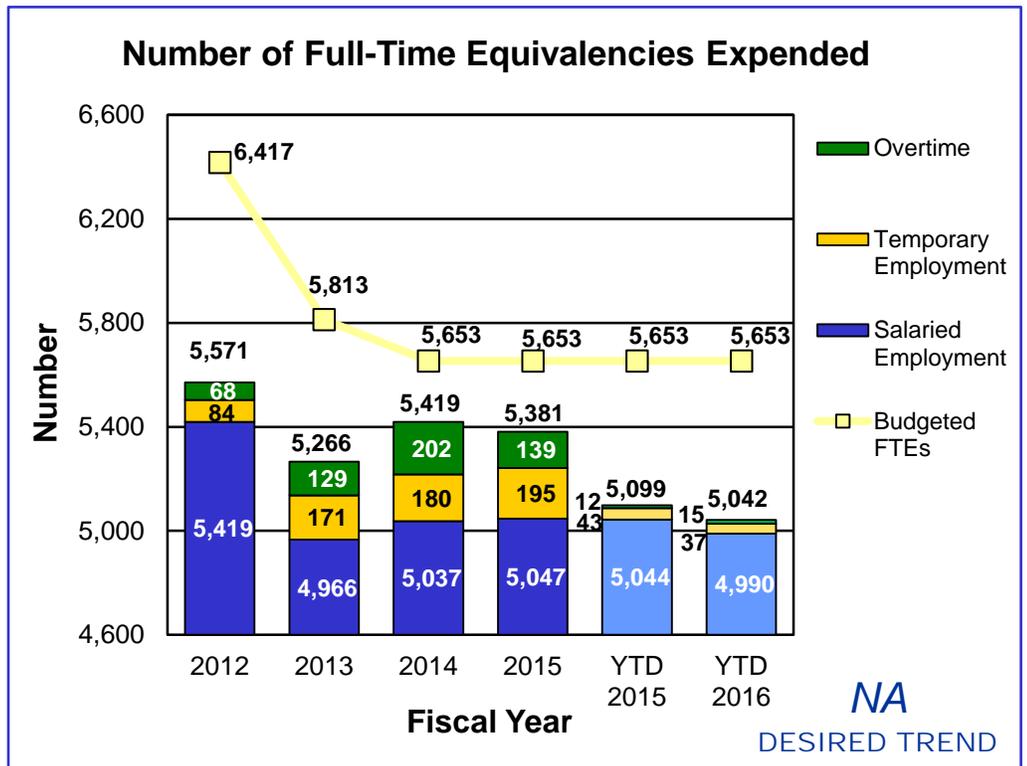
**MEASUREMENT DRIVER:**  
 Steve Meystrik  
 Special Projects Coordinator

**PURPOSE OF THE MEASURE:**  
 This measure tracks the change in the number of full-time equivalencies (a calculation of hours) expended within the department and compares it to the number of FTEs in the legislative budget.

**MEASUREMENT AND DATA COLLECTION:**  
 This measure converts the regular hours worked or on paid leave of temporary and salaried employees, as well as overtime worked (minus any hours that are flexed during the workweek), to FTEs. In order to calculate FTEs, the total number of hours worked or on paid leave is divided by 2,080. For comparison purposes, data for salaried employment is annualized, whereas temporary employment and overtime data represent actual year-to-date calculations. Salaried headcount is different than FTEs and is not included in the chart.

Having the right number of employees to provide outstanding customer service and respond to the state’s transportation needs, especially during emergency situations, is an important part of MoDOT’s efforts to use resources wisely.

During fiscal year 2016, the FTE levels for salaried and temporary employment have decreased compared to the same time last fiscal year. FTEs resulting from overtime worked have increased slightly, in part due to emergency flood response.



**RESULT DRIVER:**  
Brenda Morris  
Financial Services Director

## USE RESOURCES WISELY

### *Level of job satisfaction – 6b*

**MEASUREMENT DRIVER:**  
Rudy Nickens  
Equal Opportunity and Diversity Director

**PURPOSE OF THE MEASURE:**  
This measure tracks the level of employee satisfaction throughout the department at specific points in time.

**MEASUREMENT AND DATA COLLECTION:**  
Employee satisfaction is measured with an annual employee survey. Employees rate items related to their satisfaction with MoDOT using a five-point scale, with one indicating low satisfaction and five indicating high satisfaction. Society for Human Resources Management best practice data was gathered from an SHRM report of an annual job satisfaction survey of 55 Fortune 500 companies.

MoDOT wants employees to be satisfied with their work and workplace and feel like they are a good fit for their jobs. Employee satisfaction can be a driver of overall organizational performance. The more satisfied and engaged employees are with the workplace, the more discretionary effort they are willing to put forth on the job.

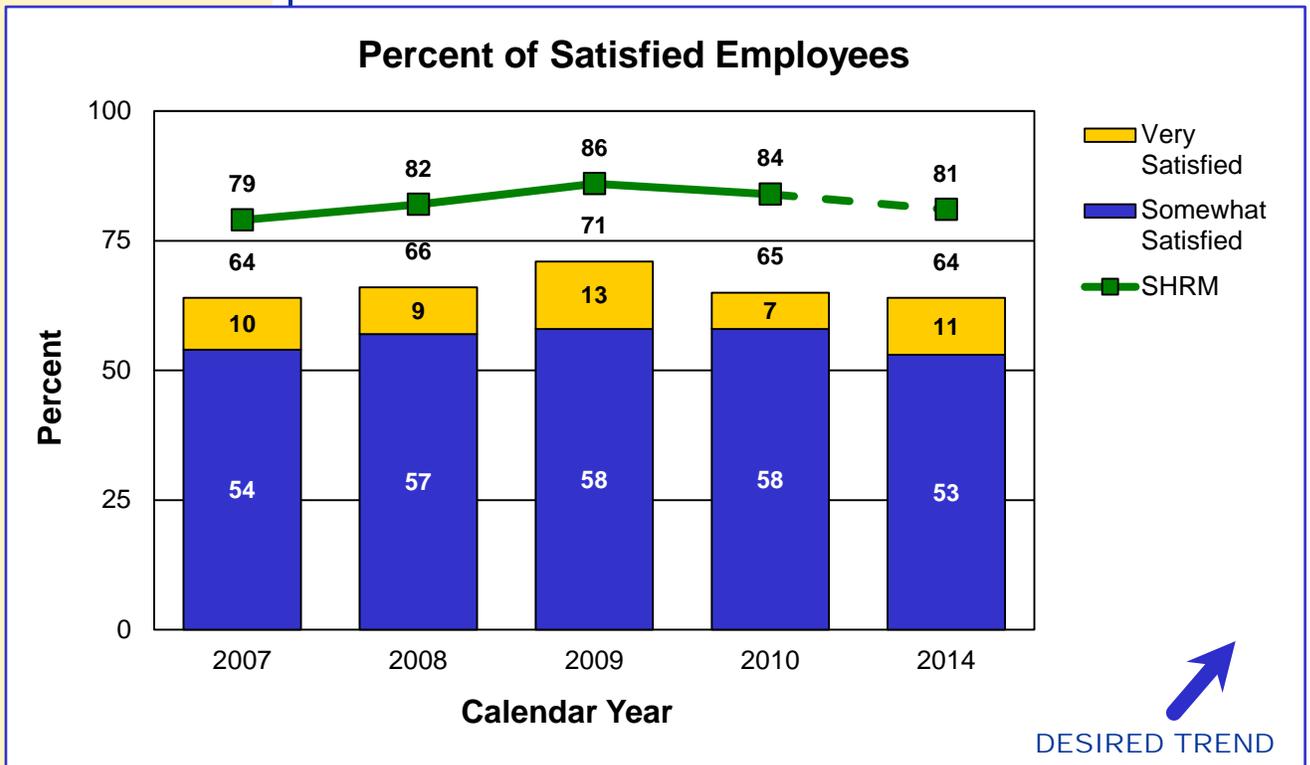
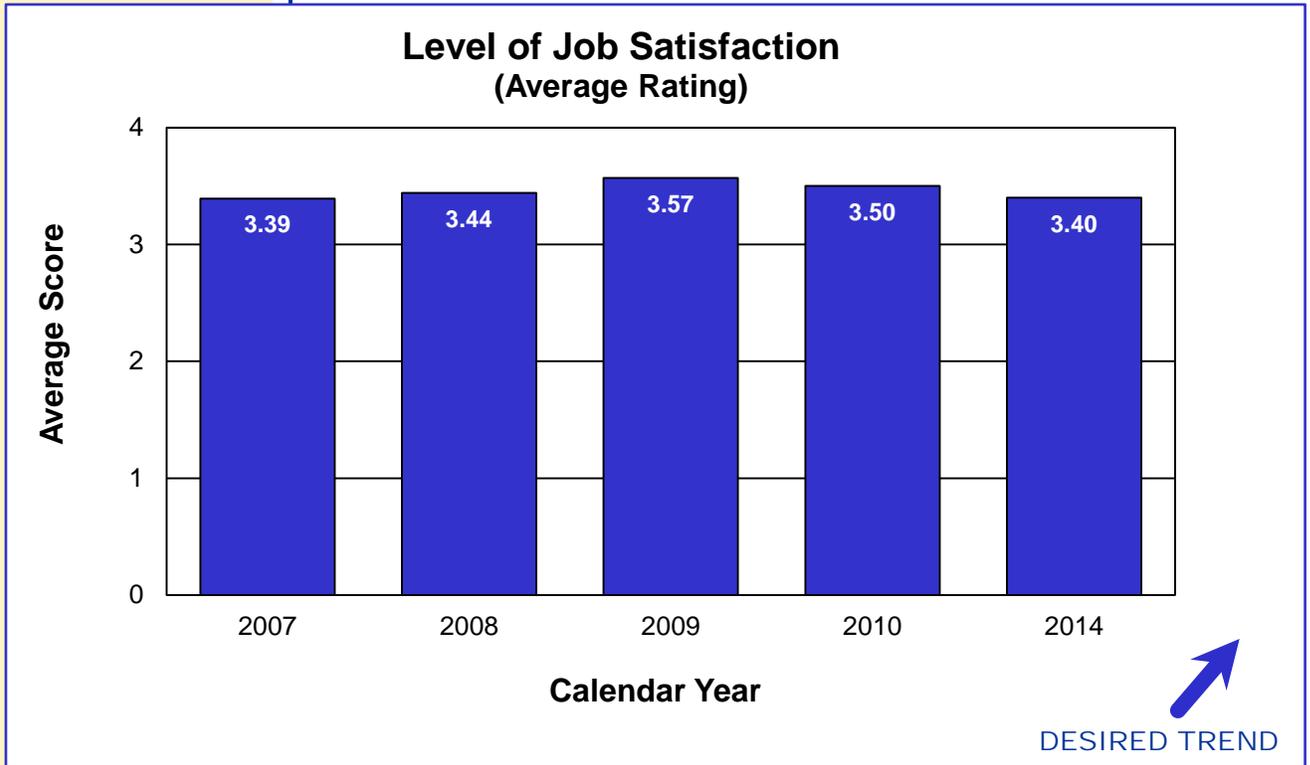
Between 2005 and 2010, the average employee satisfaction ratings and percent of satisfied employees both showed upward trends with peaks in 2009. Following a four-year break, the employee survey was conducted this past spring. Overall job satisfaction has dipped slightly from 3.5 in 2010 to 3.4 in 2014. The percentage of satisfied employees also experienced a slight decline from 65 percent in 2010 to 64 percent in 2014. However, the percentage of very satisfied employees increased from 7 percent in 2010 to 11 percent in 2014.

Areas of low satisfaction center on not seeking out employee suggestions, making employees feel valued and having opportunities to advance at MoDOT. The lack of salary increases was scored low on most surveys and dominated the written comments. Areas of high satisfaction revolve around being treated with respect by coworkers, having supervisors support needs to balance work and family, knowing how daily work relates to MoDOT goals and priorities and having cooperation within work units.

Following the last survey, five employee-led teams worked to develop a series of recommendations in response to the concerns employees raised in the survey. The recommendations were presented to senior management and are in various stages of implementation.



# USE RESOURCES WISELY



**RESULT DRIVER:**  
Brenda Morris  
Financial Services Director

## USE RESOURCES WISELY

### Rate of employee turnover – 6c

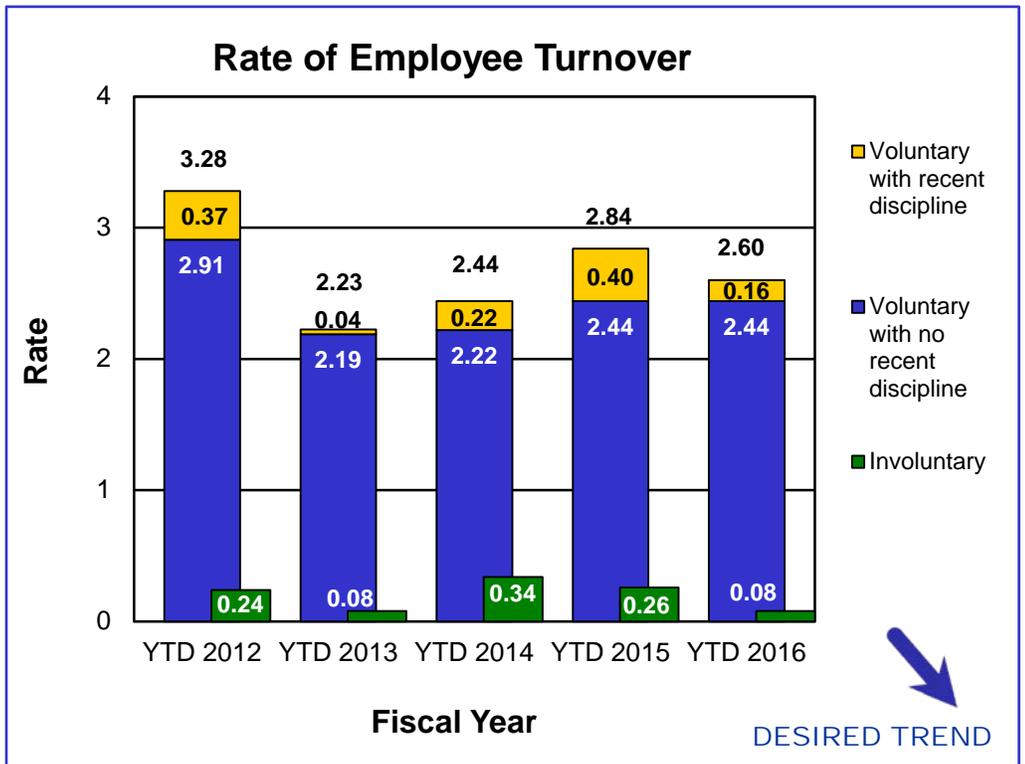
**MEASUREMENT DRIVER:**  
Aaron Kincaid  
Employment Manager

**PURPOSE OF THE MEASURE:**  
This measure tracks the percentage of employees who leave MoDOT. Turnover rates as shown in this measure include voluntary and involuntary separations.

**MEASUREMENT AND DATA COLLECTION:**  
The data is collected statewide from SAM II Advantage HR system and includes only salaried employees. Voluntary turnover includes resignations and retirements. Involuntary turnover reflects dismissals. Data is reported quarterly, with current year-to-date data included.

When employees leave MoDOT, the department loses a large investment in recruiting, hiring and training its workforce. Historically, MoDOT has a relatively low employee turnover rate, which relates to the high percentage of employees who stay until retirement. While some turnover is desired, such as releasing poor performers, MoDOT needs to retain a great workforce that has the knowledge and specialized skills to deliver the department's commitments and provide outstanding customer service.

During the first quarter of fiscal year 2016, voluntary turnover rates (48 retirements and 82 resignations) are showing a slight downward trend. First-year and maintenance turnover remains high and is the focus for the department's employee retention efforts through the onboarding program and the cost-neutral salary adjustments that took effect July 1, 2015. Involuntary turnover rates have decreased from the first quarter of FY 2015 (13 involuntary separations), with four involuntary separations (dismissals) in the first quarter of FY 2016.



RESULT DRIVER:  
Brenda Morris  
Financial Services Director

MEASUREMENT  
DRIVER:  
Todd Grosvenor  
Special Projects Coordinator

PURPOSE OF  
THE MEASURE:  
This measure shows the  
precision of state and federal  
revenue projections.

MEASUREMENT  
AND DATA  
COLLECTION:  
State revenue for roads and  
bridges include motor fuel  
taxes, motor vehicle and driver  
licensing fees, and motor  
vehicle sales taxes paid by  
highway users, interest  
earnings and miscellaneous  
revenues. State revenue for  
other modes includes motor  
vehicle sales taxes, aviation  
fuel taxes, jet fuel sales taxes,  
motor vehicle licensing fees,  
railroad assessments,  
appropriations from General  
Revenue and interest  
earnings. The measure  
provides the cumulative, year-  
to-date percent variance of  
actual state revenue versus  
projected state revenue by  
state fiscal year. Federal  
revenue for roads and bridges  
is the amount available to  
commit in a federal fiscal year  
of federal funds. Federal funds  
are distributed to states via  
federal law. Federal revenue  
for other modes is the amount  
reimbursed to MoDOT for  
expenses incurred in a state  
fiscal year.

## USE RESOURCES WISELY

### *State and federal revenue projections – 6d*

State and federal revenue projections help MoDOT staff do a better job of budgeting limited funds for its operations and capital program. The desired trend is for actual revenue to match projections with no variance. MoDOT staff adjusts future operating and capital budgets to account for these variances, if needed.

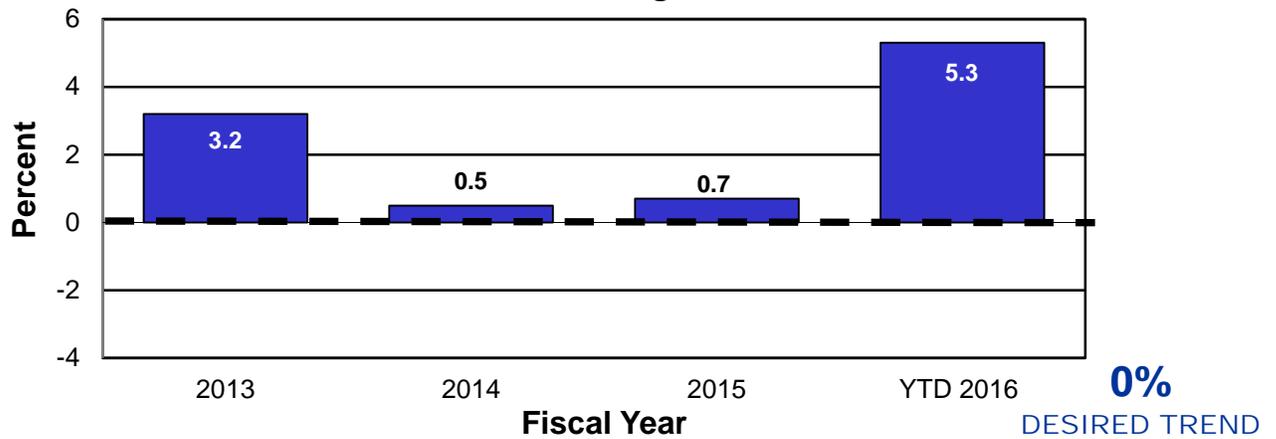
The actual state revenue for road and bridge is slightly higher than projected and is also higher for other modes than projected for fiscal year 2016. The actual state revenue for road and bridge from motor fuel taxes, motor vehicle and driver licensing fees, and motor vehicle sales taxes is more than projected and miscellaneous is less than projected. The positive variance of 5.6 percent for other modes is mostly attributable to the jet fuel and motor vehicle sales taxes.

The largest source of transportation revenue is from the federal government. Funding is received through various federal transportation agencies including Federal Highway, Transit, Aviation and Railroad administrations. Federal funding is uncertain. In June 2012, Congress passed a two-year federal transportation reauthorization act entitled Moving Ahead for Progress in the 21st Century Act. MAP-21 reduced the amount of road and bridge funding for all state DOTs. MAP-21 expired on Sept. 30, 2014. However, Congress passed legislation to extend MAP-21 until Oct. 29, 2015. Federal revenue for other modes is reliant on the timing of project expenditures.

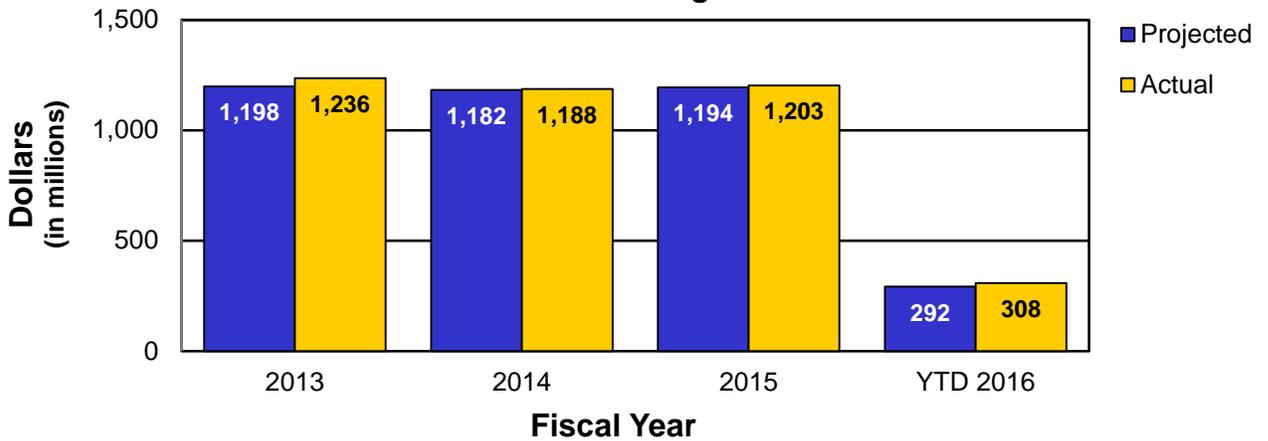
The primary source of federal and state revenue is motor fuel tax. The motor fuel tax rates have not changed in more than 20 years, while the costs for materials and labor have doubled, and even tripled for some materials, in the same timeframe.

# USE RESOURCES WISELY

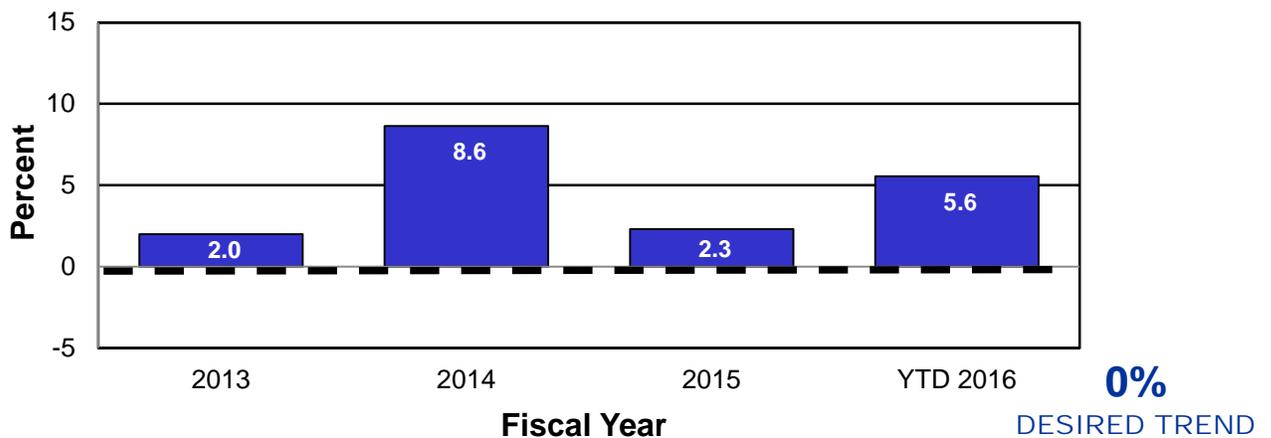
### Percent Variance of State Revenue Projections Road and Bridge



### Projected vs. Actual State Revenue Comparison Road and Bridge

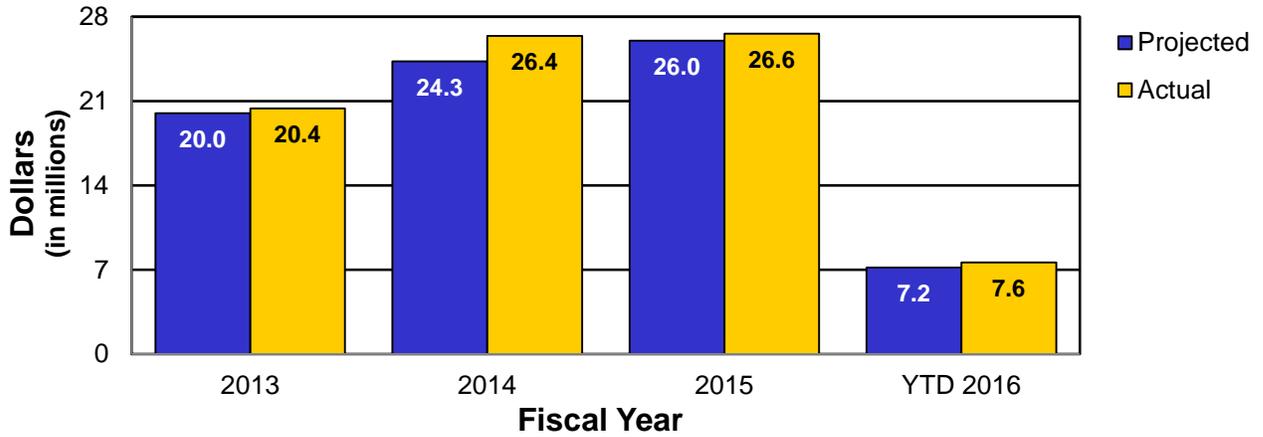


### Percent Variance of State Revenue Projections Other Modes

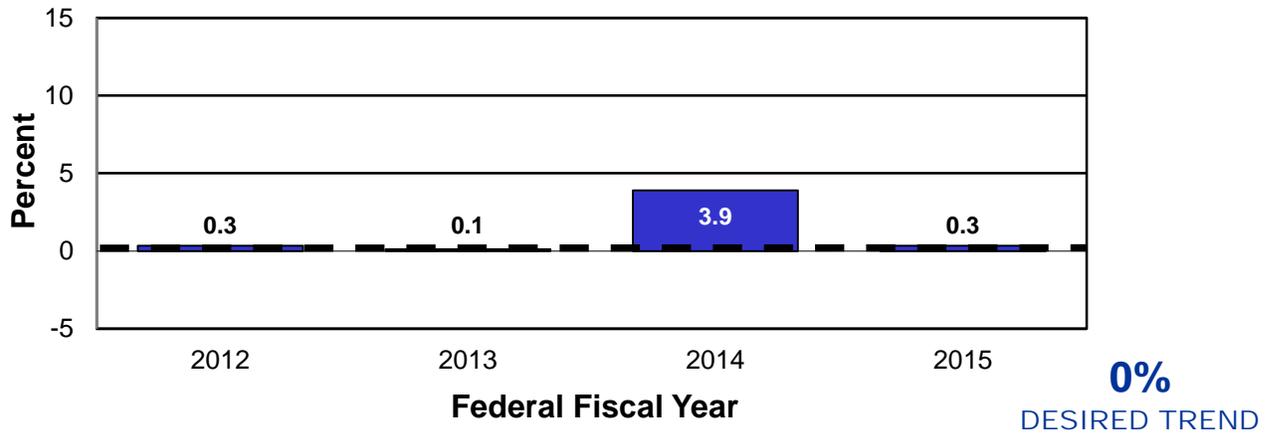


# USE RESOURCES WISELY

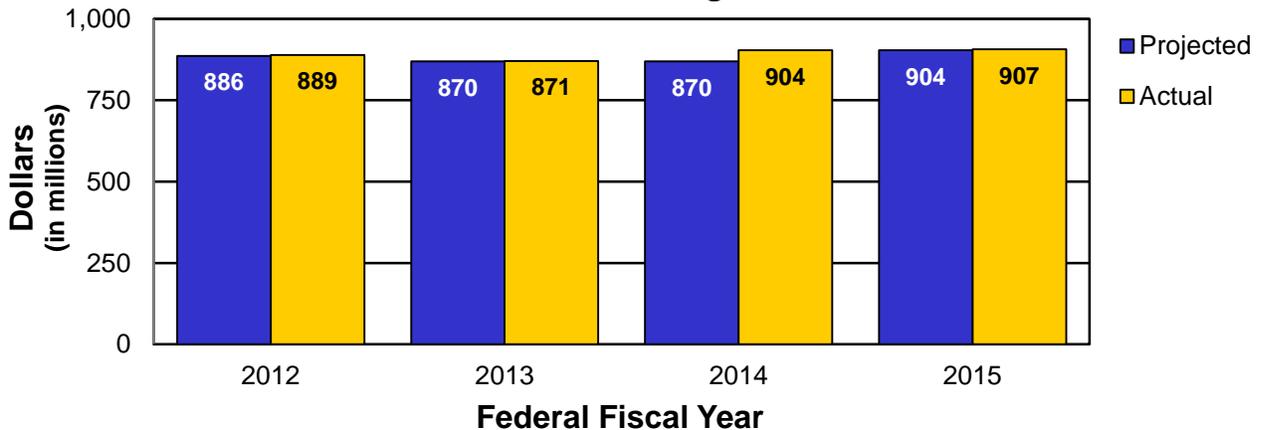
## Projected vs. Actual State Revenue Comparison Other Modes



## Percent Variance of Federal Revenue Projections Road and Bridge

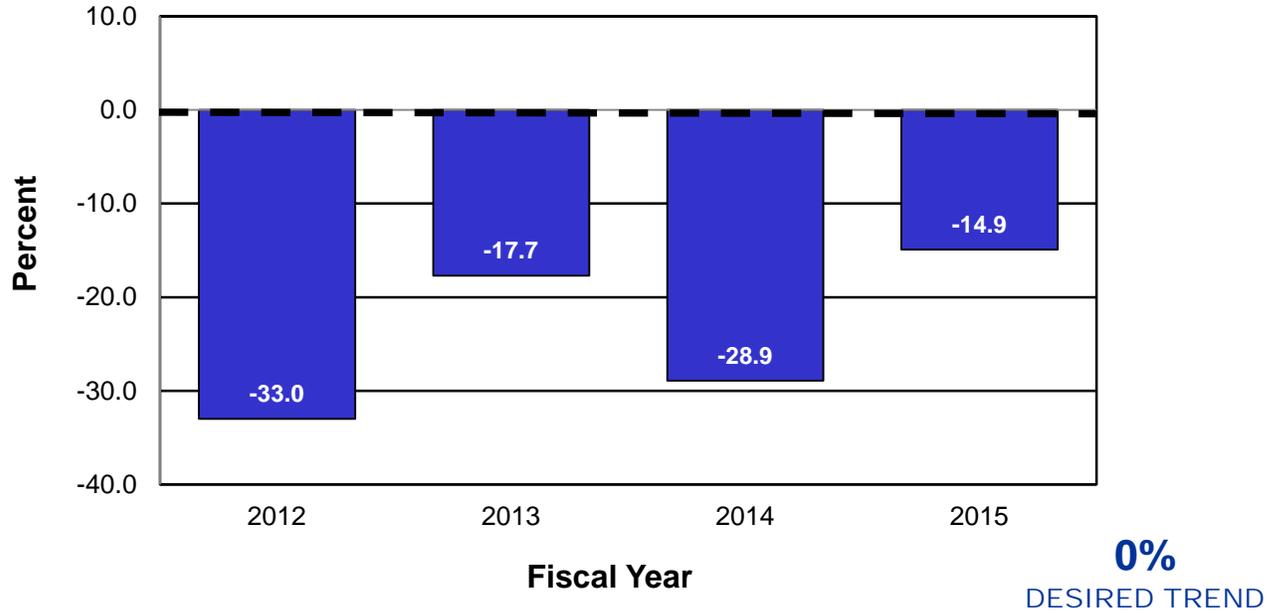


## Projected vs. Actual Federal Revenue Comparison Road and Bridge

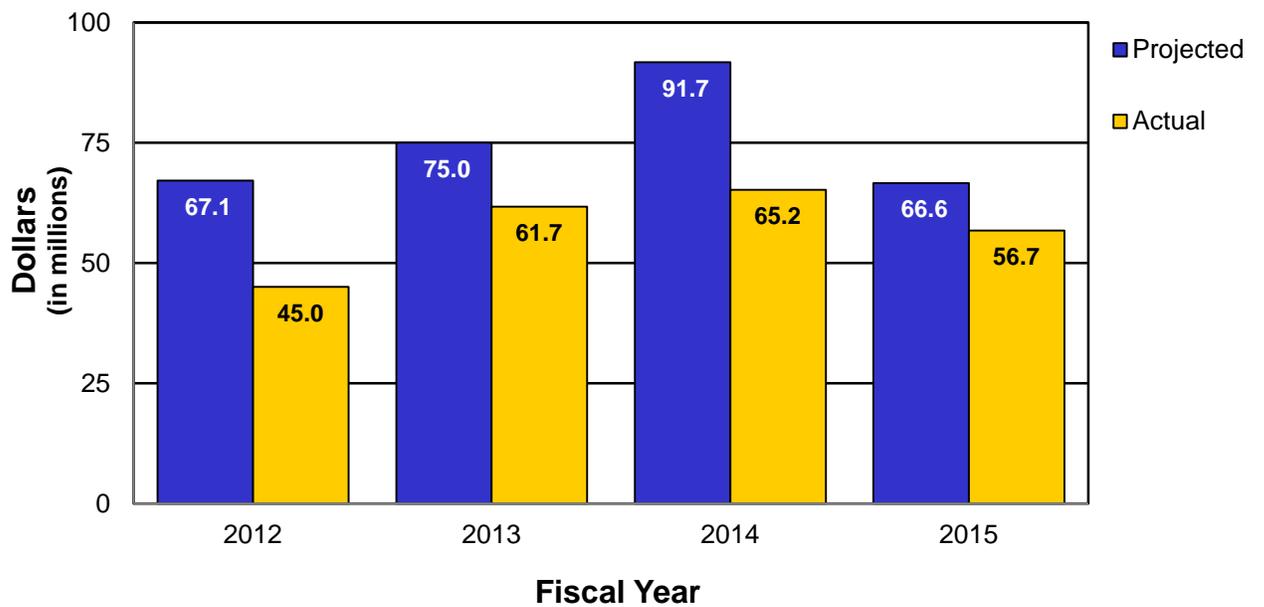


# USE RESOURCES WISELY

## Percent Variance of Federal Revenue Projections Other Modes



## Projected vs. Actual Federal Revenue Comparison Other Modes



RESULT DRIVER:  
Brenda Morris  
Financial Services Director

## USE RESOURCES WISELY

### *Number of dollars generated through cost-sharing and partnering agreements for transportation – 6e*

MEASUREMENT DRIVER:  
Frank Miller  
District Planning Manager

PURPOSE OF THE MEASURE:  
This measurement monitors the effectiveness of MoDOT's cost-sharing and partnering programs.

MEASUREMENT AND DATA COLLECTION:  
MoDOT collects this data from the Statewide Transportation Improvement Program and the permits database. The dollars are shown in the fiscal year in which construction contracts are awarded and permit jobs are issued. The percent is the number of cost-sharing projects divided by the total number of projects per year in the STIP.

MoDOT works with public agencies to leverage its limited resources to implement projects that might not otherwise be built. Cost-share projects are transportation improvements in which costs are shared by MoDOT and other public agencies such as cities and counties. For the Cost Share Program, MoDOT allocated \$30.0 million for fiscal year 2011, \$37.5 million for FY 2012, \$47.5 million for FY 2013, \$45.7 million for FY 2014 and \$45.4 million for FY 2015 partnership projects. The Missouri Highways and Transportation Commission suspended the Cost Share Program at its January 2014 meeting. MoDOT also may receive funding from cities and counties for projects not part of the formal Cost Share program, from other states for projects of mutual interest such as border bridges and from federal agencies through competitive discretionary programs. In addition, MoDOT also partners with developers and other private entities to make improvements to the state transportation system through the permitting process.

The amount of partnership funding is up significantly in 2015. There has been a slight increase in funding from permit projects - projects where a third party makes an improvement to the state transportation system – from \$9.4 million in 2014 to \$11.2 million in 2015. There has been a much larger increase in partnership funding on MoDOT projects from \$66.7 million in 2014 to \$131.8 million in 2015. One 2015 project stands out – the Kansas Department of Transportation contributed \$36.7 million for the Fairfax Bridge connecting Kansas and Missouri.

The percent of projects in the Statewide Transportation Improvement Program with partnership funding also has increased in the past year, from 13.4 percent in 2014 to 17.8 percent in 2015. However, the overall number of projects has decreased, and the actual number of projects with partnership contributions is down. In 2014, there were 101 projects with funds from partnership agencies, but in 2015, that number decreased to 82.

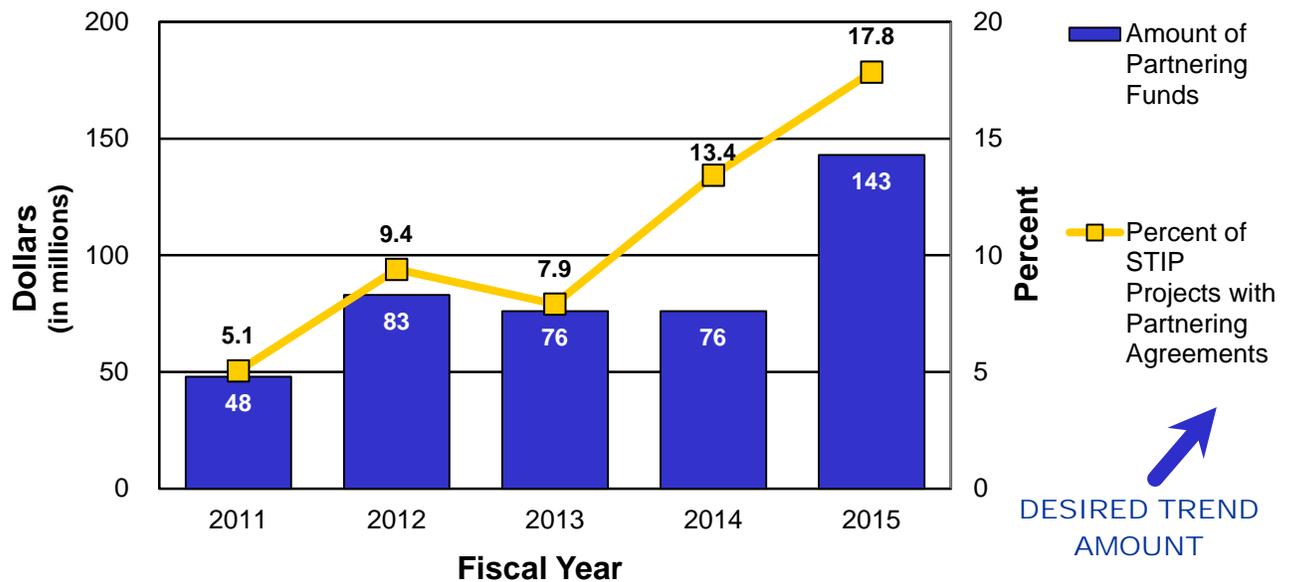
Total partnership funding is up because of larger funding contributions from partnering agencies in 2015. In 2014, the average partner contribution to MoDOT projects was \$660,000. In 2015, that average increased to \$1.6 million.

As a greater share of MoDOT funds are focused on taking care of the system, partner contributions to MoDOT projects are expected to decline. The value of permit projects may increase if the economy continues to improve and public and private entities fund expansion projects to address emerging needs that MoDOT cannot address with its limited project funds.

# USE RESOURCES WISELY



### Number of Dollars Generated Through Cost-sharing and Partnering Agreements for Highway and Bridge Projects



RESULT DRIVER:  
Brenda Morris  
Financial Services Director

## USE RESOURCES WISELY

### *Percent of state funds invested in other modes of transportation – 6f*

MEASUREMENT DRIVER:  
Dion Knipp  
Administrator of Transit

PURPOSE OF THE MEASURE:  
This measurement provides the percent of state funds invested in other modes of transportation. Modes include aviation, rail, transit, waterways and freight.

MEASUREMENT AND DATA COLLECTION:  
Investments in other modes of transportation represent the state and federal dollars spent on aviation, rail, transit, waterways and freight. Federal investments represent the amount spent on MoDOT-administered programs only. Investments are limited to the amounts appropriated by the state legislature each year.

During the long-range planning process, “On the Move,” Missourians chose more transportation choices as a top priority. MoDOT works closely with its multimodal partners to provide more choices within the available funding amounts. In fiscal year 2015, state and federal expenditures for multimodal programs increased \$4.6 million and \$300,000, respectively.

Aviation - State expenditures increased by \$2.4 million to \$6.5 million, but federal expenditures decreased by \$4.8 million to \$21 million. In FY 2015, state funds were 23 percent of total funds invested. Local funds in FY 2015 totaled \$3.1 million. Federal Aviation Administration and State Aviation Trust funds require a minimum local match of 10 percent.

Rail - State expenditures increased by \$1.6 million to \$11.7 million, and federal expenditures decreased by \$1.5 million to \$17.9 million. In FY 2015, state funds were 60 percent of total funds invested. Non-federal and non-state expenditures accounted for at least 20 percent of rail programs in FY 2015.

Transit - State expenditures increased by \$600,000 to \$4.0 million, and federal expenditures increased by \$6.6 million to \$32.6 million. In FY 2015, state funds were 11 percent of total funds invested. FTA funds require a local match of varying percentages depending on the program.

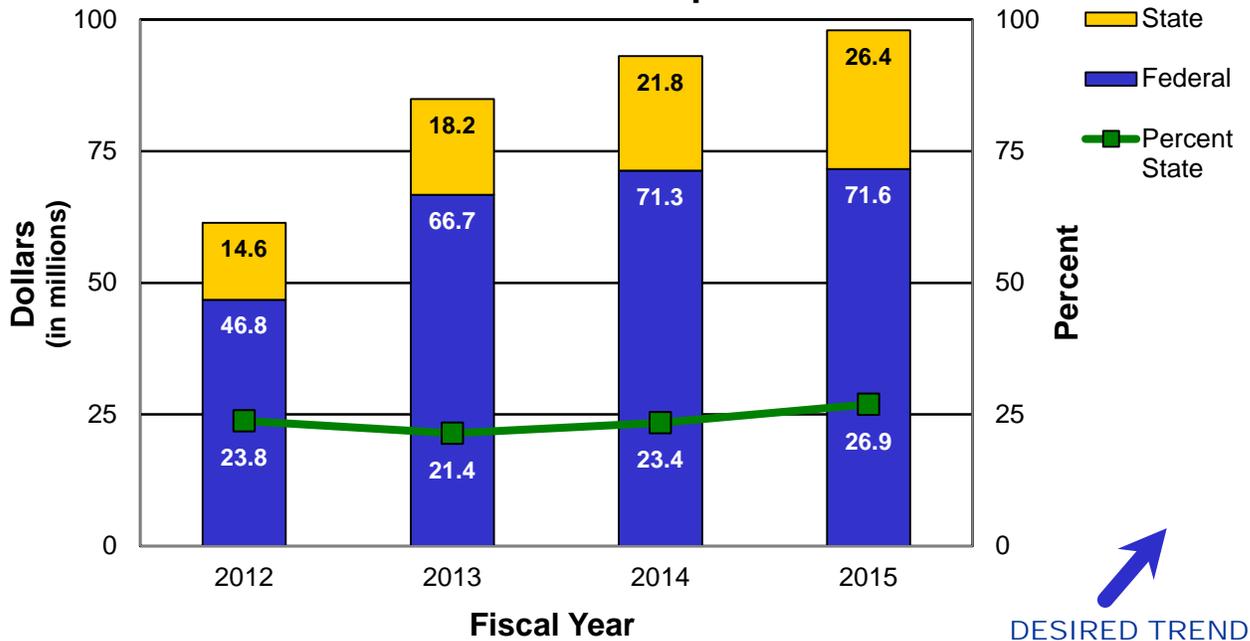
Waterways – State expenditures remained steady at \$3.5 million in FY 2015. Prior years did not include \$200,000 of State Ferry Boat Assistance. Federal expenditures remained at zero dollars. Local funds in FY 2015 totaled \$600,000. The waterways capital improvement program requires a minimum local match of 20 percent.

Freight - State expenditures decreased by \$200,000 to \$650,000 and federal expenditures were zero dollars. Local funds in FY 2015 totaled \$130,000. The freight enhancement program requires a minimum local match of 20 percent.

# USE RESOURCES WISELY



### Percent of State Funds Invested in Other Modes of Transportation



**RESULT DRIVER:**  
Brenda Morris  
Financial Services Director

## USE RESOURCES WISELY

### Percent of local program funds committed to projects – 6g

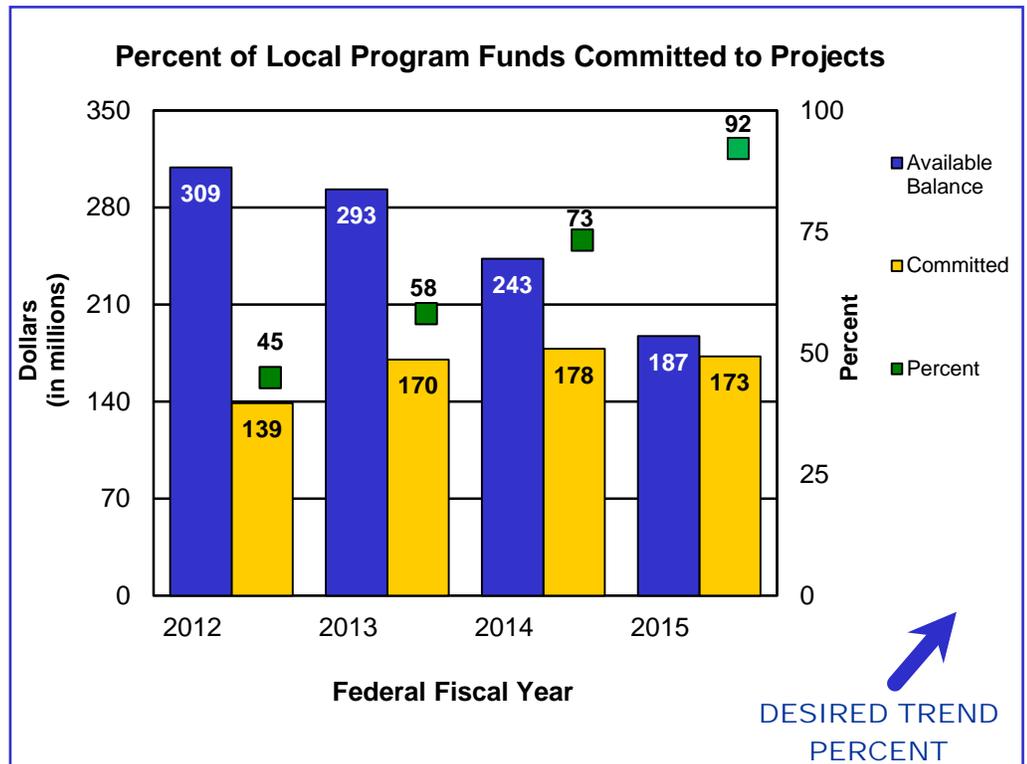
**MEASUREMENT DRIVER:**  
Kenny Voss  
Local Program Administrator

**PURPOSE OF THE MEASURE:**  
This measure tracks the percent of available Local Program funds committed to projects.

Some of the federal funds MoDOT receives are required to be passed through to local entities, such as cities and counties. Available funds for local entities include those that are allocated this year and those that have not been committed in prior years. When local entities use federal funds, they provide the matching funds. Matching funds provided by local entities help MoDOT use all the transportation federal funding available to Missouri.

For federal fiscal year 2015, 92 percent (\$173 million) of the \$187 million in available funds has been committed to local projects. This represents a 19 percent increase compared to FFY 2014. Since FFY 2012, the percent of local program funds committed to projects has increased from 45 percent to 92 percent. MoDOT has met its goal of 90 percent of local program funds committed to projects for FFY 2015.

**MEASUREMENT AND DATA COLLECTION:**  
The data is obtained from Federal Highway Administration's Fiscal Management Information System and based on the federal fiscal year from Oct. 1 through Sept. 30. The committed amounts represent what FHWA will reimburse for the project. The available amounts represent the federal program funds distributed to local sponsors. The goal of this measure is to commit all federal funds available to local public projects.



**RESULT DRIVER:**  
Brenda Morris  
Financial Services Director

**MEASUREMENT DRIVER:**  
Sunny Wilde  
Resource Management Specialist

**PURPOSE OF THE MEASURE:**  
This measure tracks the percent of inactive federal projects.

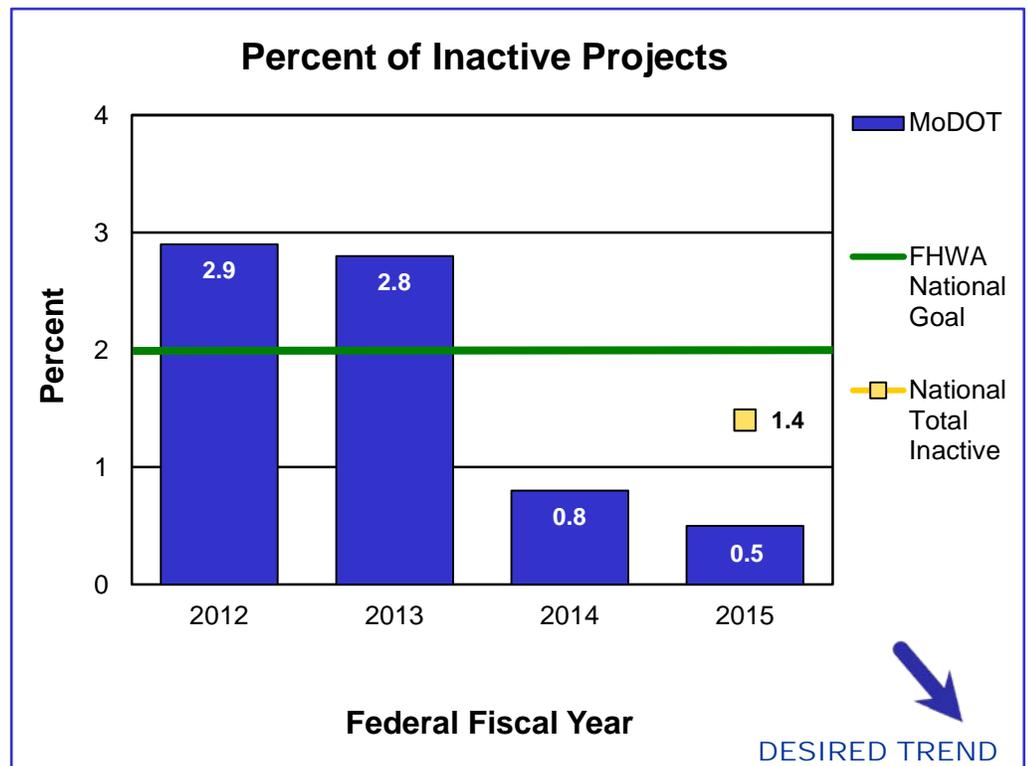
**MEASUREMENT AND DATA COLLECTION:**  
The data is obtained from Federal Highway Administration's quarterly inactive projects report and is based on the federal fiscal year from October 1 through September 30. The inactive report includes projects with no expenditure activity for more than one year. MoDOT uses a tracking database to assist in the analysis and reporting of inactive projects.

## USE RESOURCES WISELY

### Percent of inactive projects – 6h

Project funds must be spent for taxpayers to benefit from their transportation investments. As resources continue to dwindle, ensuring available resources are committed to active projects is essential to maintaining the existing transportation system. Due to project schedule delays or lags in receiving project invoices, funds sometimes do not get spent in a timely manner. When this happens, MoDOT analyzes projects to determine why there has been no activity and what steps need to be taken to move the project forward. Discussions with local project sponsors often are used to ensure invoices are submitted on a timely basis.

Due to MoDOT's continued efforts, inactive projects have declined from 2.9 percent in federal fiscal year 2012 to 0.5 percent (\$4.4 million) in federal fiscal year 2015. For the fourth quarter of FFY 2015, Missouri's inactive projects were below FHWA's national goal of 2 percent and below the national total inactive percentage of 1.4 percent. MoDOT's continued efforts to identify projects that will potentially become inactive in the coming months and taking any necessary actions on those projects has ensured the funds committed to projects are valid.



RESULT DRIVER:  
Brenda Morris  
Financial Services Director

## USE RESOURCES WISELY

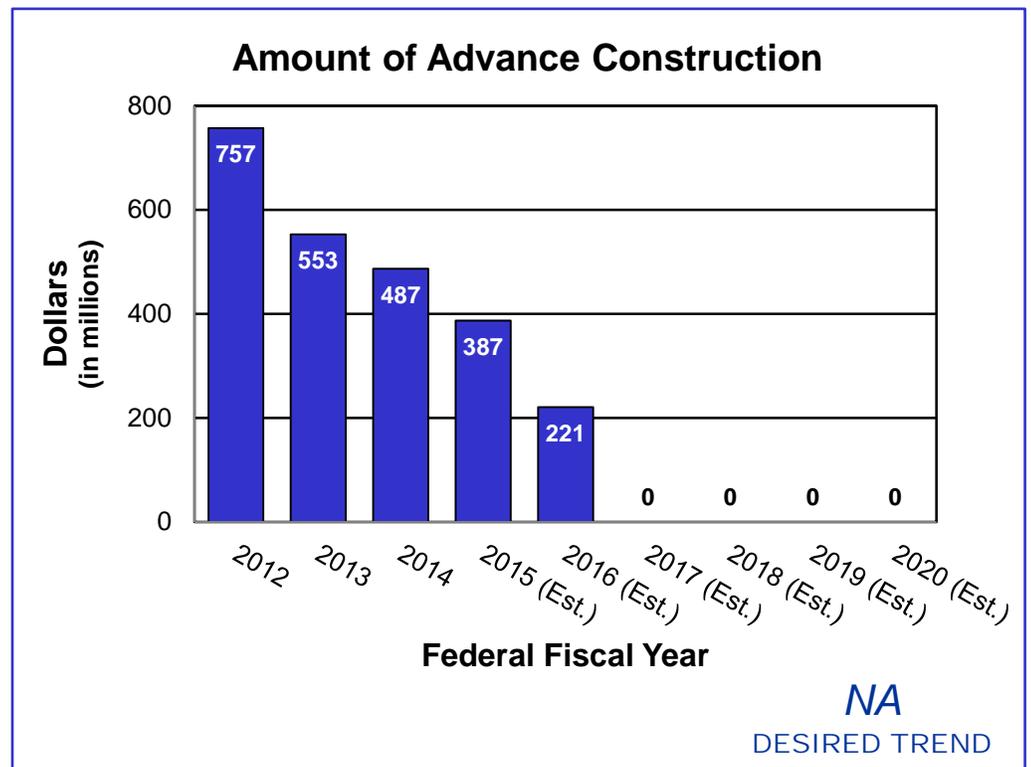
### Amount of advance construction – 6i

MEASUREMENT  
DRIVER:  
Doug Hood  
Financial Services  
Administrator

PURPOSE OF  
THE MEASURE:  
This measure tracks the  
amount of advance  
construction funds.

Advance construction is an innovative finance tool MoDOT uses to more efficiently manage its limited resources. Advance construction helps provide the 20 percent match required for federal funds. Without advance construction, MoDOT would be unable to match federal funds today. As the amount of advance construction declines, MoDOT's ability to match federal funds becomes more difficult.

MEASUREMENT  
AND DATA  
COLLECTION:  
MoDOT collects this data from  
Federal Highway  
Administration's Fiscal  
Management Information  
System. The federal fiscal  
year is from October 1 to  
September 30. Fiscal years  
2016-2020 are estimates from  
the current financial forecast.  
The amount of advance  
construction is based on the  
total estimated project costs.



**RESULT DRIVER:**  
Brenda Morris  
Financial Services Director

## USE RESOURCES WISELY

### *Fleet usage and fuel efficiency – 6j*

**MEASUREMENT DRIVER:**  
Kevin James  
Assistant District Engineer

**PURPOSE OF THE MEASURE:**  
This measure tracks progress of fleet usage compared to department thresholds based on annual mileage over the life of the equipment. The measure also tracks fuel efficiency for the five vehicle classes representing the majority of fleet expenditures and miles driven.

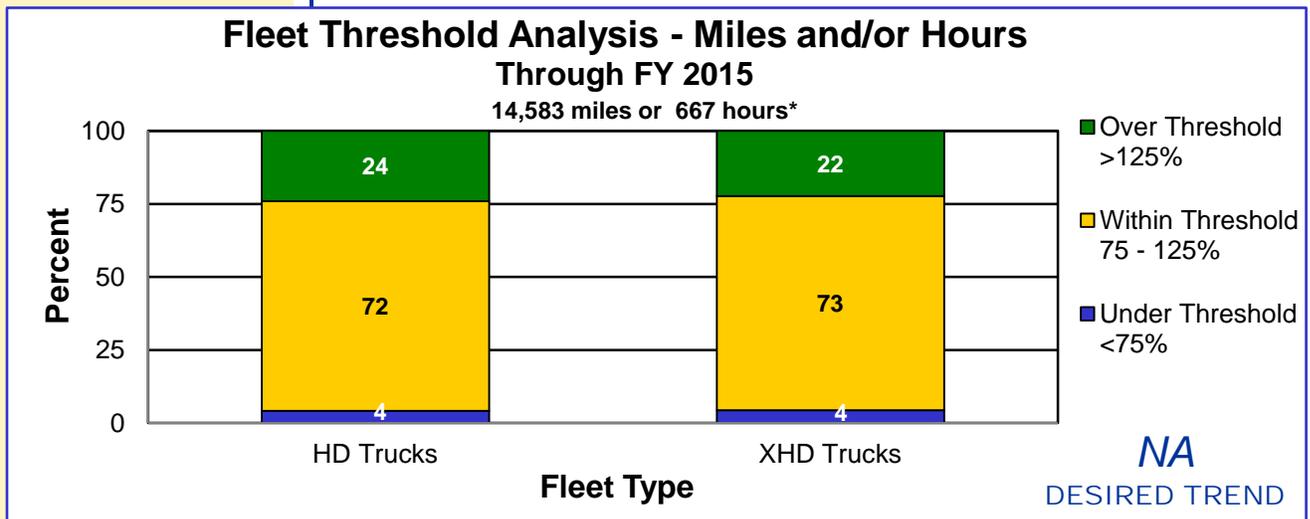
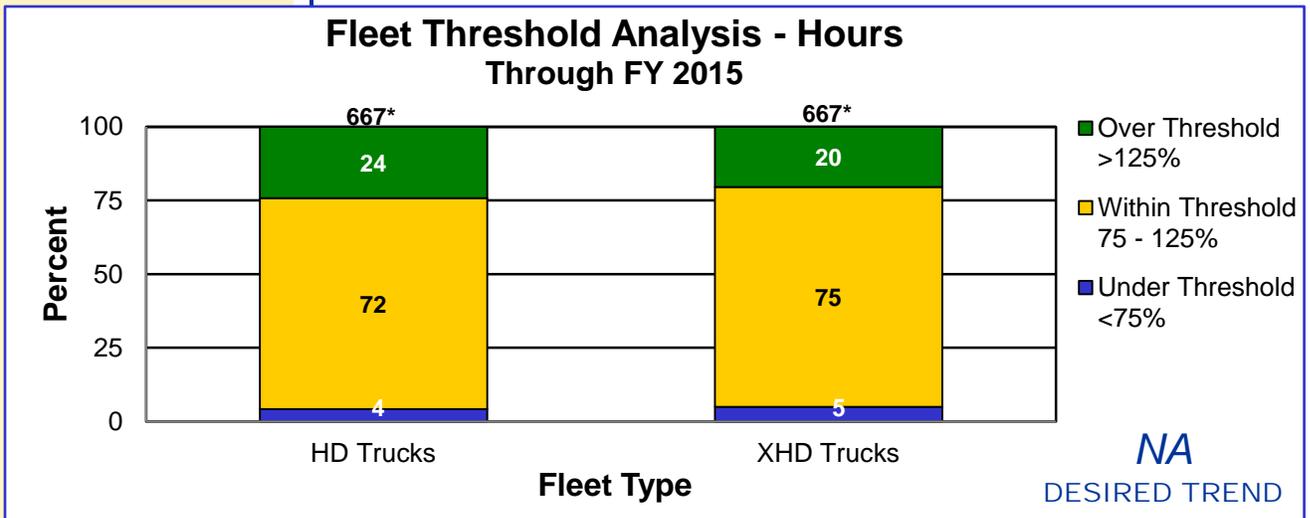
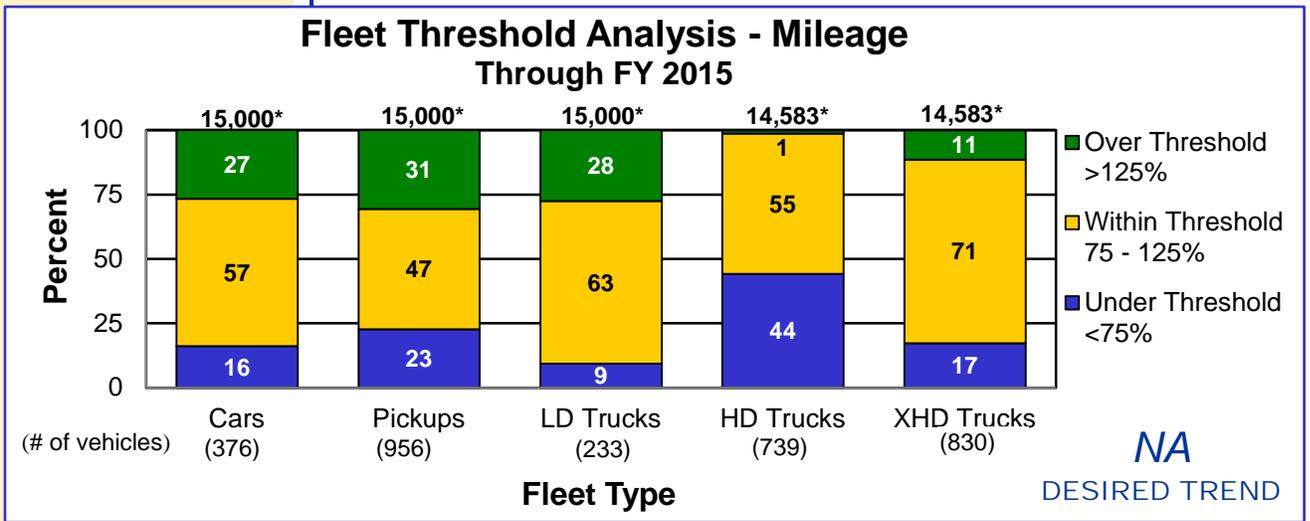
**MEASUREMENT AND DATA COLLECTION:**  
Data reflects performance for the vehicle based on its age. Ideal fleet usage falls within 75 to 125 percent of the vehicle's threshold. For example, a passenger car has a threshold of 15,000 miles per year. If a car is three years old, the mileage should be between 33,750 to 56,250 miles. The fleet threshold analysis graphs are updated in January and July. This measure also reports MoDOT's total fuel consumed and shows how fleet choices can affect fuel economy. The fuel data is collected in the statewide financial system. Mileage data is obtained from MoDOT's fleet management system, FASTER.

The fuel consumption and fuel-efficiency measures show fairly consistent results for the first quarters of FY 2015 and FY 2016. Fuel consumption so far in FY 2016 has decreased by 37,393 gallons compared to FY 2015. Mileage recorded for these five vehicle classes in FY 2016 has reduced 318,770 miles compared to FY 2015. During the first quarter of FY 2016, more gallons were used to perform chip sealing and flood restoration, while fewer gallons were used to perform asphalt pavement repair and construction inspection. Changes in fuel use by activity resulted in a decrease in fuel efficiency of 0.14 miles per gallon from the same period last year.

The fleet threshold measure will be updated in January 2016.

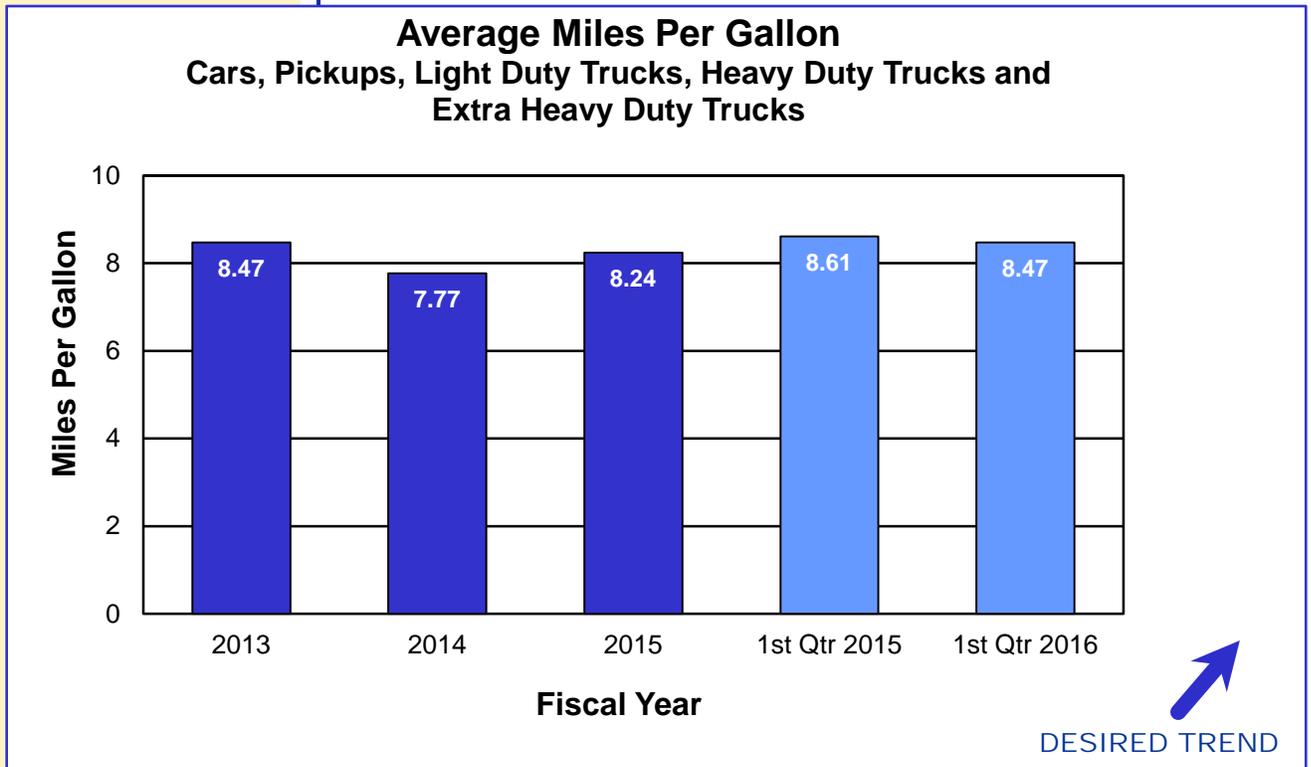
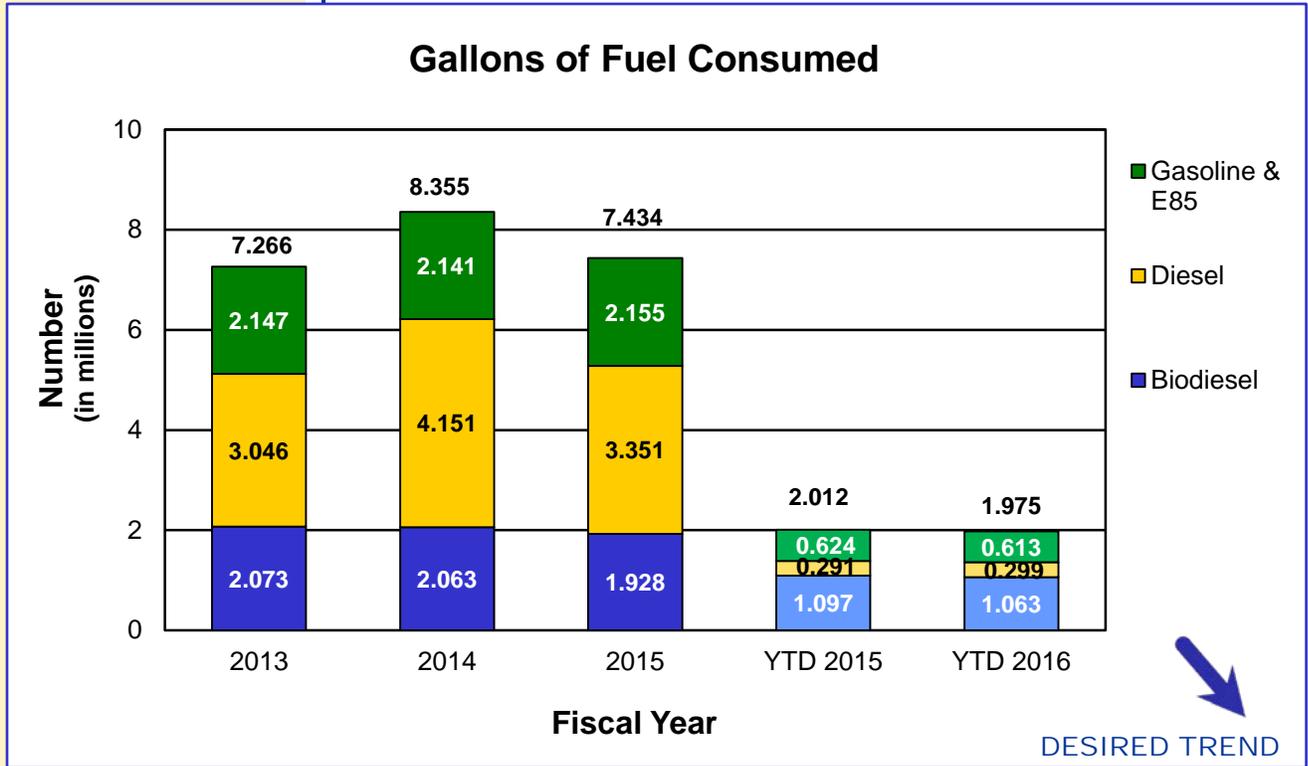


# USE RESOURCES WISELY



Fleet threshold analysis based on life of vehicle. \*Annual miles and/or hours threshold

# USE RESOURCES WISELY



RESULT DRIVER:  
Brenda Morris  
Financial Services Director

## USE RESOURCES WISELY

*Number of tons of recycled material – 6k*

### MEASUREMENT DRIVER:

Jay Bestgen  
Assistant State Construction  
and Materials Engineer

### PURPOSE OF THE MEASURE:

This measure tracks MoDOT's recycling efforts in construction projects and internal operations.

### MEASUREMENT AND DATA COLLECTION:

The recycled material used in construction projects is measured through MoDOT's SiteManager database, which tracks material incorporated into projects. Data is collected on an annual basis due to the seasonal nature of construction. Recycled material from internal MoDOT operations, are captured from the annual Missouri State Recycling Program report and from other internal records.

In 2004, MoDOT started incorporating recycled asphalt pavements and roof shingles into new asphalt pavements to help offset increasing costs. While the cost of rock, sand, liquid asphalt, labor, fuel and equipment have increased since 2004, recycling efforts have helped offset the cost increases. In 2014, 31 percent of the 2.9 million tons of new asphalt pavement constructed came from recycled components. This saved MoDOT and taxpayers about \$9 per ton, or \$23.8 million overall. The \$23.8 million savings would be equivalent to improving over 500 miles of a two-lane roadway with a thin overlay.

MoDOT also engages in internal recycling efforts. The amount of recycled materials has decreased steadily since 2011, resulting from the consolidation of facilities and reduction of stockpiled materials. The majority of the recycled products come from aluminum, cardboard, office paper, scrap rubber/tires, scrap metal, motor oil and wood pallets. In fiscal year 2014, 1,700 tons of scrap metal made up the majority of the recycling, followed by 360 tons of rubber/tires (equivalent to about 32,000 passenger car tires) and 330 tons of motor oil (equivalent to over 84,000 gallons). In FY 2014, it cost more than \$240,000 to recycle some items, such as scrap rubber/tires and to shred documents. However, other recycling efforts returned more than \$850,000 in revenue. The result was slightly more than \$610,000 in net revenue.

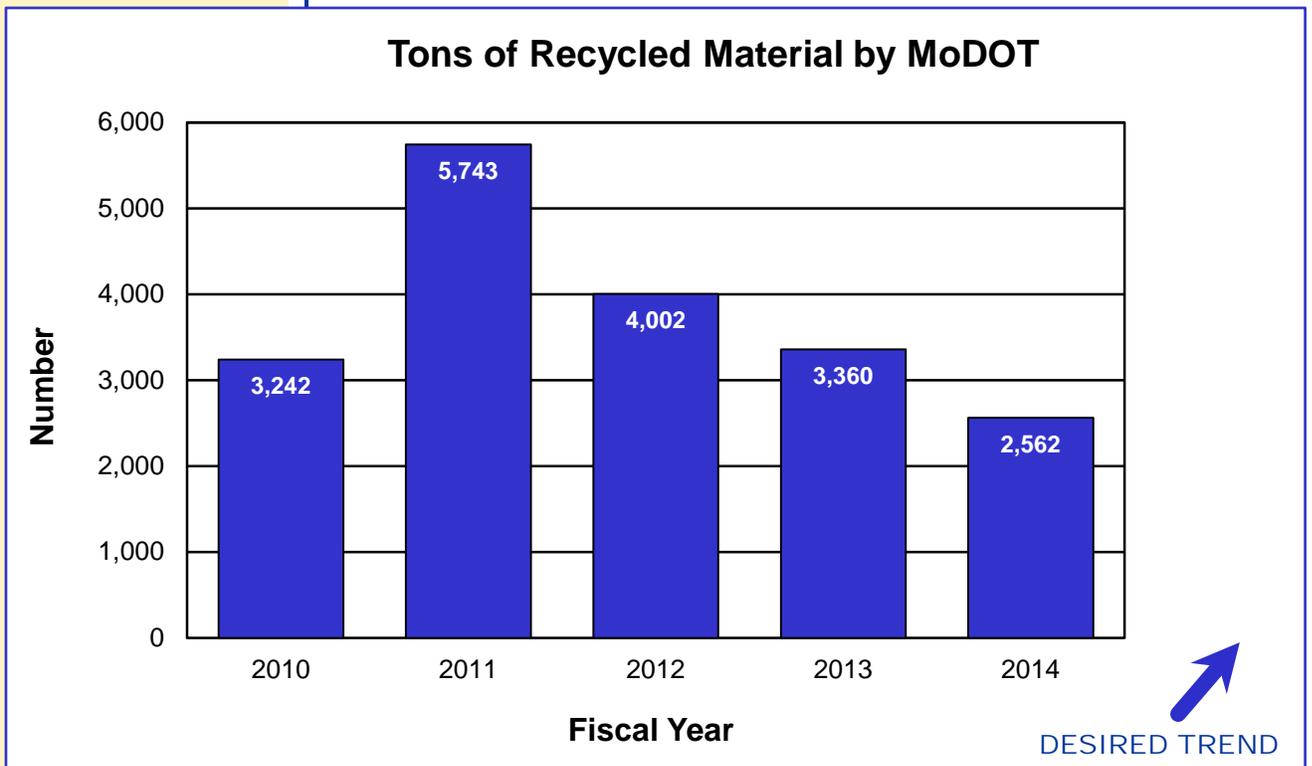
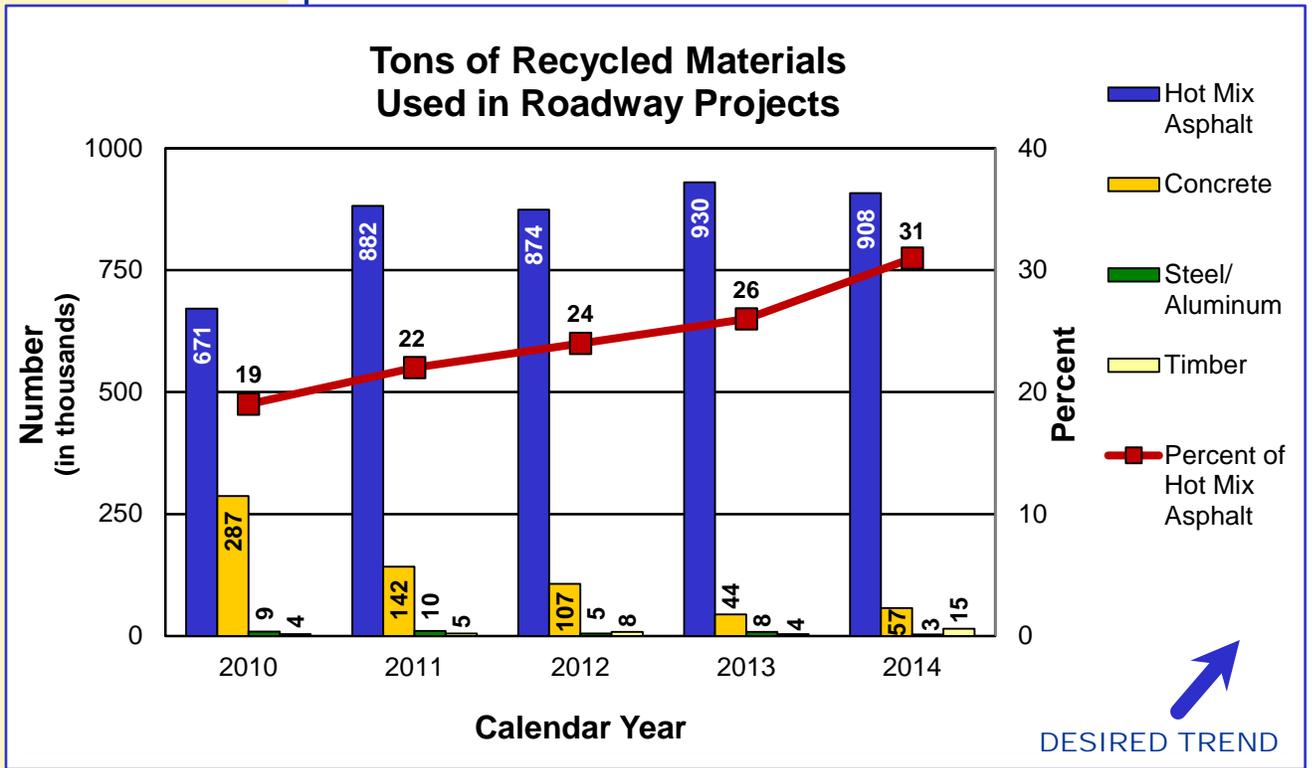
Recycling is good for the environment and helps stretch limited funding. With costs continuing to increase, fuel tax revenues declining and federal funding being uncertain, it is important to focus on increasing recycling efforts.



### Roofs to Roads

MoDOT is among the first state agencies in the nation to recycle shingles to resurface or rebuild highways.

# USE RESOURCES WISELY



RESULT DRIVER:  
Brenda Morris  
Financial Services Director

## USE RESOURCES WISELY

### *Number of environmental warnings and violations – 61*

MEASUREMENT  
DRIVER:  
Gayle Unruh  
Environmental and Historic  
Preservation Manager

PURPOSE OF  
THE MEASURE:  
This measure tracks the  
annual trend of compliance  
with environmental laws and  
regulations, which includes  
obtaining and abiding by  
specific requirements  
contained in various permits.

MEASUREMENT  
AND DATA  
COLLECTION:  
Notices of Violation are similar  
to a traffic ticket as they are  
written to indicate you are  
operating outside of legal  
limits. A Letter of Warning  
indicates that there are  
problems and if not corrected  
could lead to an NOV. Issued  
by environmental regulatory  
agencies, NOVs, LOWs and  
letters of satisfactory  
inspections are collected and  
tracked by location and/or  
project. The measure reports  
by calendar year the number of  
NOVs, LOWs and satisfactory  
inspections received by the  
department for any activity.

MoDOT seeks to reduce its impact on Missouri natural resources by complying with environmental laws and regulations. The department is serious about protecting human health, air, water, wildlife and ecosystems. Compliance with environmental laws and regulations helps to prevent and counteract possible damage from MoDOT activities. Under current funding constraints, it is also important to avoid violations. Violations with fines assessed against MoDOT result in less funding for transportation projects.

MoDOT has a zero-tolerance policy toward any NOV from regulating agencies, such as the Missouri Department of Natural Resources or the Environmental Protection Agency. Department employees study the situations that lead to NOVs and LOWs and then take action to prevent future occurrences.

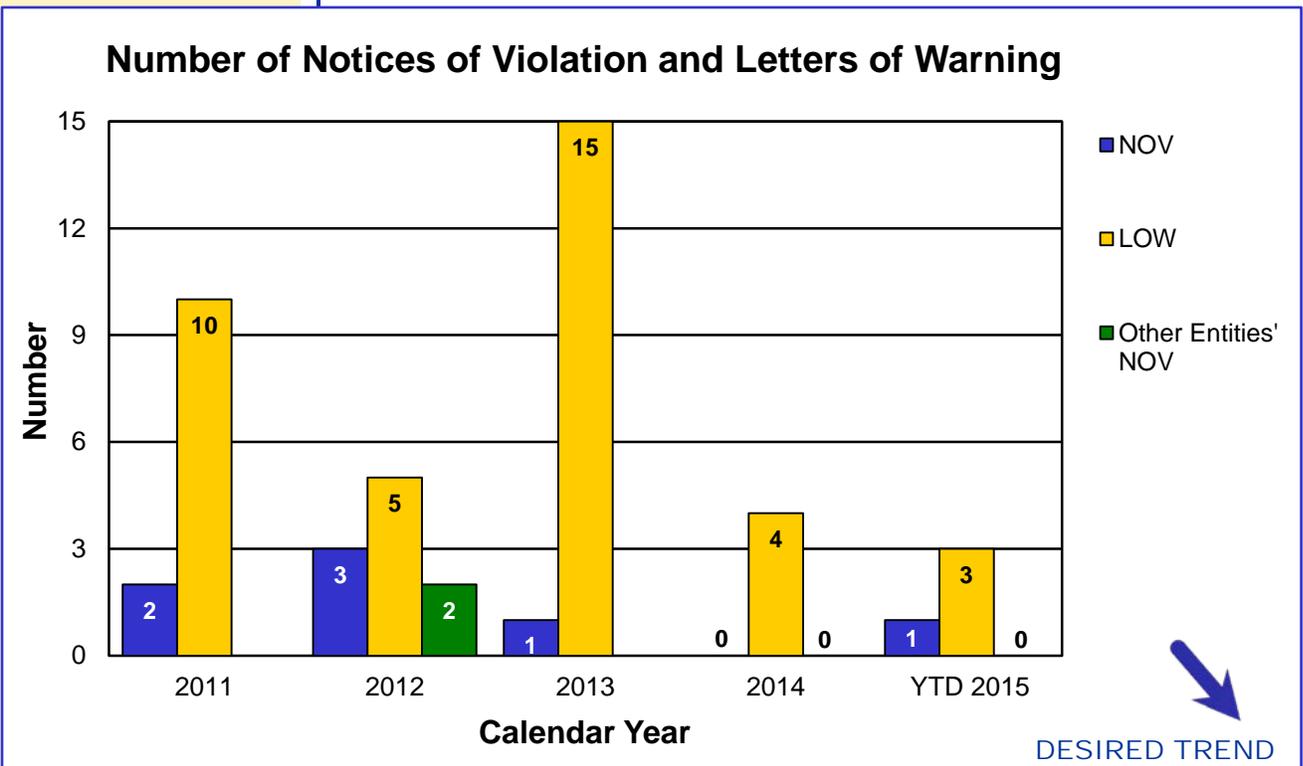
There were no NOVs this quarter. However last quarter one NOV was received for exceedance of ammonia and biological oxygen demand regulatory limits in the septic system at a welcome center. Early October results from septic system sampling are within regulatory limitations. The number of NOVs during the past five years (2011-2015) has ranged from zero to three, trending downward.

For the year-to-date, MoDOT received three LOWs from DNR. The first was for a sewer overflow in a location where it is reasonably certain to cause pollution of waters. The second was for exceeding effluent limitations at the welcome center. The third LOW occurred in this quarter for placing an erosion control structure into the waters of the state without meeting Missouri Department of Natural Resources' 401 Water Quality Certification requirements. LOWs have ranged from four to 15 in the past five years. They were significantly down in 2014 from a high in 2013.

The department received one letter of satisfactory inspection from DNR for compliance with land disturbance requirements on a construction project.

MoDOT continues to work with facility supervisors and construction inspectors through training, inspections, and dialog to help with permit compliance.

# USE RESOURCES WISELY



**Note:** There is no benchmark for this measure because MoDOT has a zero-tolerance policy toward NOV's. So regardless of what other states are doing, MoDOT's desired results are zero NOV's.

RESULT DRIVER:  
Brenda Morris  
Financial Services Director

## USE RESOURCES WISELY

### *Number of stormwater violations – 6m*

MEASUREMENT  
DRIVER:  
Eric Kopinski  
Stormwater Compliance  
Coordinator

MoDOT is devoted to ensuring all project are within environmental compliance. The department is committed to ensuring that any land disturbance within its right of way utilizes adequate erosion and sediment control practices.

PURPOSE OF  
THE MEASURE:  
This measure is to help MoDOT track compliance with its stormwater permit and court ordered consent decree, which resulted from stormwater violations in 2010 and 2011. The consent decree establishes requirements for MoDOT projects where greater than one acre of land is disturbed.

MEASUREMENT  
AND DATA  
COLLECTION:  
A stormwater compliance database will be used to record the compliance of MoDOT and construction contractors with the following requirements:

- to maintain personnel in stormwater oversight positions,
- to obtain the required stormwater training,
- to ensure timely stormwater inspections,
- and to ensure the resulting stormwater control repairs are completed within the require time.

The database also tracks the fines that result from not meeting the requirements of the decree. The data reported in this measure will be both the number of failures to meet the requirements and the dollar amount of the stipulated penalties that result during each quarter of the calendar year for the next three years.

#### Number of stormwater violations

**UNDER DEVELOPMENT**

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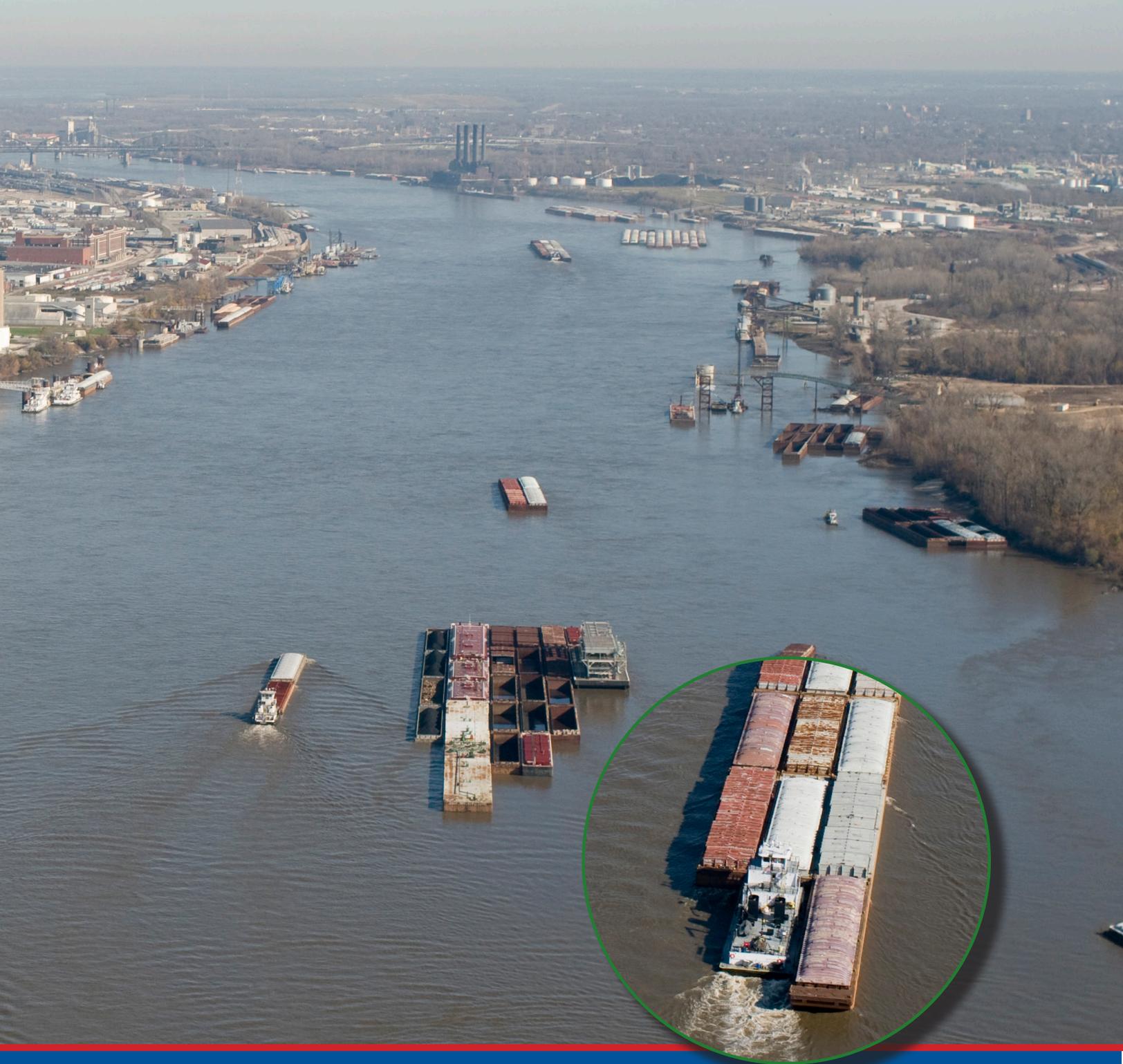


# ADVANCE ECONOMIC DEVELOPMENT

*Machelle Watkins, Transportation Planning Director*

# Tracker

MEASURES OF DEPARTMENTAL PERFORMANCE



Missouri's transportation system has a direct impact on the state's economy. Missouri businesses depend on our roadways, rail, waterways and airports to move their products and services both nationally and globally. An efficient, well-connected transportation system helps attract new businesses to our communities and helps existing businesses maintain a competitive edge with easy customer access, minimal shipping costs and strong links to a diverse workforce. We believe investments in transportation should create jobs and provide opportunities for advancement to all Missouri citizens. An investment in transportation should provide a positive economic impact on both the citizens we serve and the communities in which they live.

## RESULT DRIVER:

Machelle Watkins  
Transportation Planning  
Director

## MEASUREMENT

### DRIVER:

Eva Voss  
Senior Transportation Planner

## PURPOSE OF THE MEASURE:

This measure tracks the economic impact resulting from the state's transportation investments.

## MEASUREMENT AND DATA COLLECTION:

MoDOT works with the Economic Development Research Group to perform economic impact analyses for the state's transportation investments. The analyses are performed using a model called the Transportation Economic Development Impact System. The TREDIS model results demonstrate a strong link between transportation investment and economic development.

# ADVANCE ECONOMIC DEVELOPMENT

## *Economic return from transportation investment – 7a*

Investment in transportation improvements have long been held as a major economic engine that drives growth in job creation, personal income and new value added to Missouri's economy. However, diminishing transportation funding and rising costs have caused the levels of economic return to decrease.

Based on MoDOT's 2016-2020 Statewide Transportation Improvement Program investment of \$3 billion, the program is estimated to create 2,836 jobs. Transportation investments are expected to contribute \$7.2 billion of economic output during the next 20 years, resulting in a \$2.44 return on every \$1 invested in transportation.

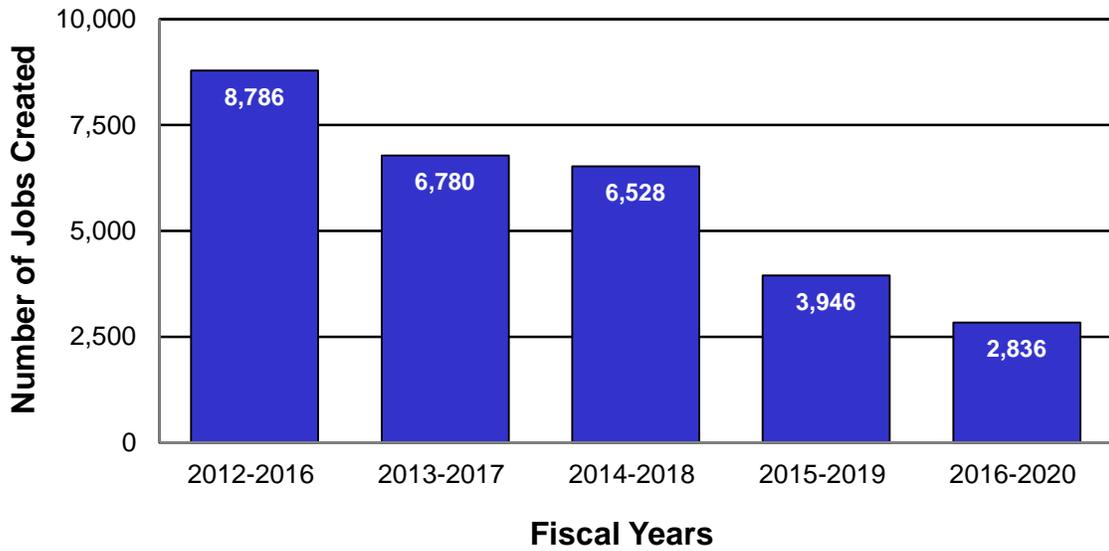
The economic return decreased compared to the previous analysis because of decreasing construction investments for highway and bridge improvements and updating the transit methodology. The figures tell a powerful story of economic success, but are also a sign of missed opportunity. When compared to the previous year's STIP (2015-2019), the number of estimated jobs created decreased 28 percent.

The levels of economic return continue to decline as transportation funding gradually drops and costs increase.



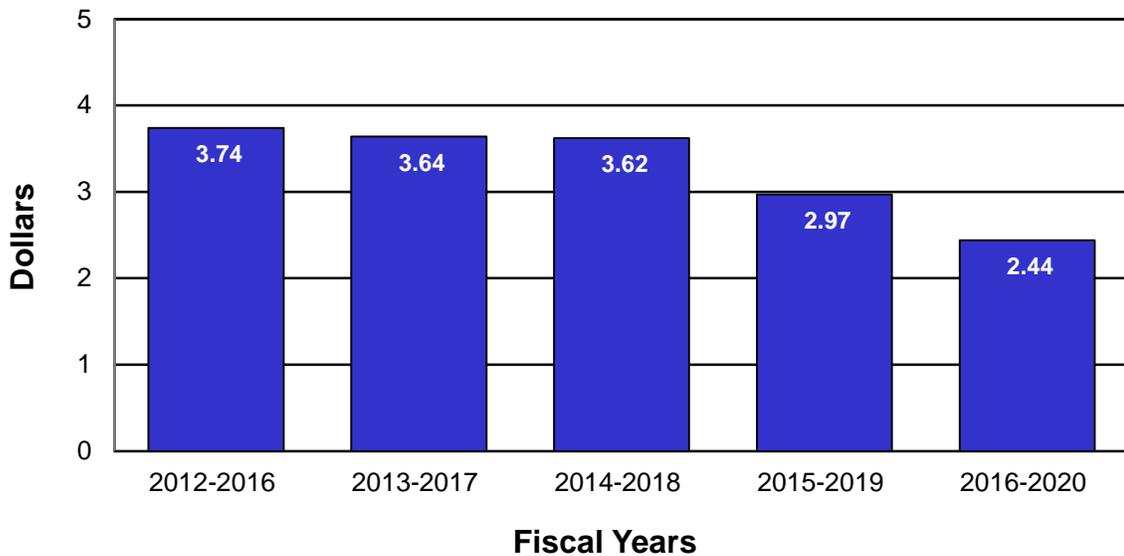
# ADVANCE ECONOMIC DEVELOPMENT

## Economic Return from Transportation Investments Annual Employment Benefit



 DESIRED TREND

## Economic Return from Transportation Investments 20-Year Benefit Ratio for Every Dollar Invested



 DESIRED TREND

## RESULT DRIVER:

Machelle Watkins  
Transportation Planning  
Director

## MEASUREMENT

### DRIVER:

Ben Reeser  
Long-Range Transportation  
Planning Coordinator

## PURPOSE OF THE MEASURE:

This measure analyzes the strength of Missouri's transportation infrastructure for conducting business.

## MEASUREMENT AND DATA COLLECTION:

Data for this measure is obtained from an annual study conducted by the Consumer News and Business Channel. The study scores all 50 states on more than 60 measures of competitiveness developed collaboratively with business groups including the National Association of Manufacturers and the Council on Competitiveness, as well as the states themselves. Metrics are separated into 10 weighted categories, including infrastructure. The infrastructure category receives the second highest weight and measures the following for each state:

- Value of goods shipped by air, waterways, roads and rail (2013 based on quantity of goods shipped, not value)
- Availability of air travel
- Quality of roads and bridges
- Time it takes to commute to work (added in 2012)
- Supply of safe drinking water (added in 2013).

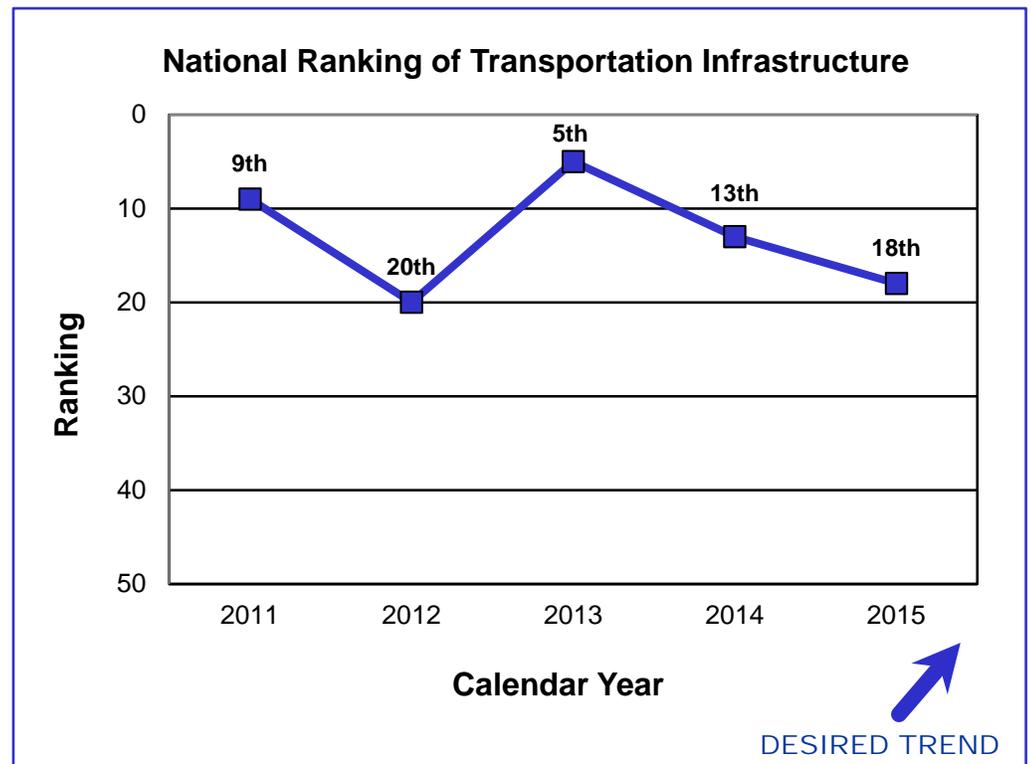
# ADVANCE ECONOMIC DEVELOPMENT

## National ranking of transportation infrastructure – 7b

Transportation infrastructure leads to the attraction of new businesses and of employers looking to expand. These actions lead to new jobs, new opportunities and new revenue for states. A robust transportation infrastructure allows manufacturers to distribute their products quickly and inexpensively and allows citizens to get to work and to conduct business efficiently.

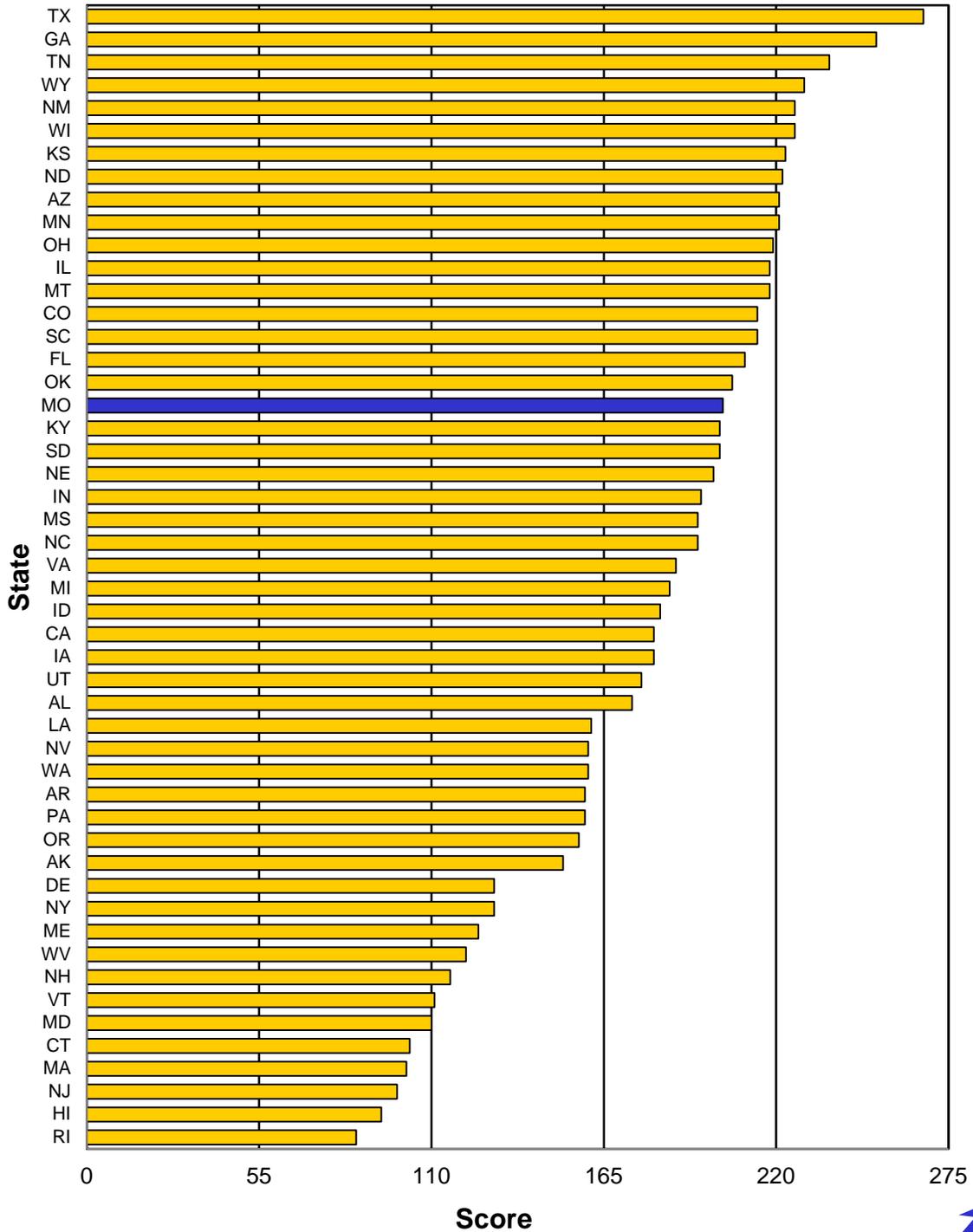
Prior to 2012, Missouri's national rank in transportation infrastructure was in the top nine. In 2012, Missouri decreased to 20th in the national rankings as the measure added time it takes to commute to work. The ranking improved in 2013 as the measure changed to quantity of goods shipped instead of value. Missouri's ranking declined beginning in 2014 as the measure changed back to value of goods shipped instead of quantity.

Missouri's current national ranking has declined to 18<sup>th</sup> and will be challenging to maintain as the state's annual transportation infrastructure funding decreased from \$1.2 billion to \$700 million beginning in 2011. In fiscal year 2017 at slightly more than of \$500 million it will be the lowest since 1997. At that point, MoDOT will struggle to keep the transportation system in the shape it is in today. Many factors used to rank transportation infrastructure in Missouri are expected to decline.



# ADVANCE ECONOMIC DEVELOPMENT

## 2015 Transportation Infrastructure Scores by State



DESIRED TREND

## RESULT DRIVER:

Machelle Watkins  
Transportation Planning  
Director

# ADVANCE ECONOMIC DEVELOPMENT

## *National ranking in revenue per mile – 7c*

## MEASUREMENT

### DRIVER:

Tona Bowen  
Financial Services  
Administrator

## PURPOSE OF THE MEASURE:

This measure reports how Missouri's state highway system funding situation compares to that of other states.

MoDOT stretches transportation revenue as far as it can in order to put as much as possible into roads and bridges. The cost to build and maintain roads and bridges increased sharply during the past 10 years due to inflation. In contrast, revenues from fuel taxes decreased as vehicles became more fuel efficient and people drove less while fuel prices were high.

In fiscal year 2013, the national average for revenue per mile was \$215,107. Missouri's revenue per mile of \$51,203 currently ranks 47th in the nation. Missouri's ranking has continually declined since fiscal year 2011 when Missouri was ranked 40th.

Missouri's state highway system, consisting of 33,891 miles, is the seventh largest system in the nation. In addition, Missouri ranks sixth nationally in number of bridges with 10,376 bridges. New Jersey's revenue per mile of \$1,677,141 ranks first. However, its state highway system includes only 2,341 miles and 2,426 bridges.

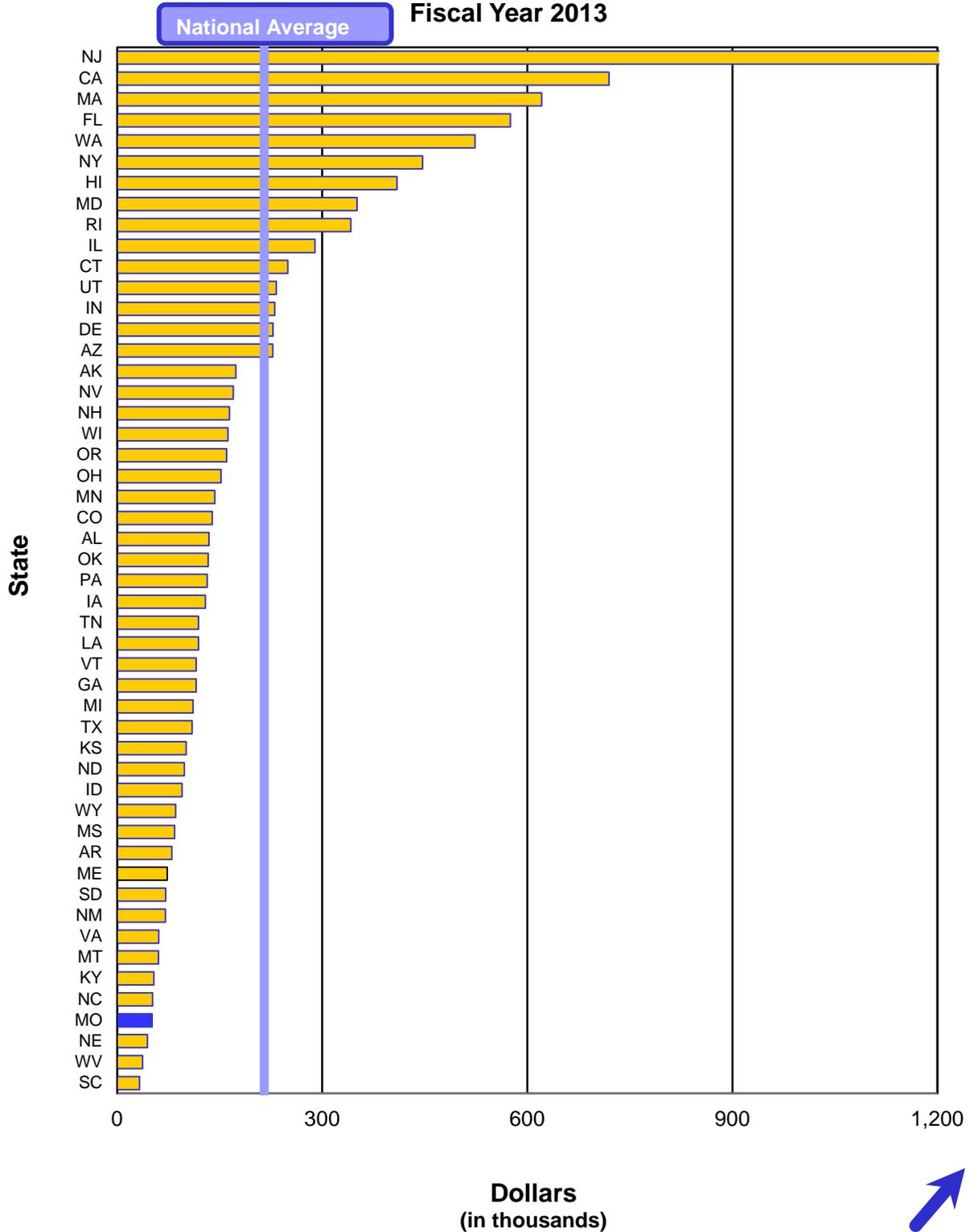
## MEASUREMENT AND DATA COLLECTION:

The state revenue and highway mileage counts used in this measure are gathered from Federal Highway Administration annual reports. The information is updated as the data becomes available from FHWA. The bridge count information was received from Better Roads magazine.



# ADVANCE ECONOMIC DEVELOPMENT

**MoDOT National Ranking in Revenue per Mile**  
**Fiscal Year 2013**



## RESULT DRIVER:

Machelle Watkins  
Transportation Planning  
Director

# ADVANCE ECONOMIC DEVELOPMENT

## *Goods movement competitiveness – 7d*

## MEASUREMENT

### DRIVER:

Cheryl Ball  
Administrator of Freight and  
Waterways

## PURPOSE OF THE MEASURE:

This measure tracks the estimated cost of transporting representative Missouri products from key economic industries (chemical manufacturing, transportation equipment and agriculture) to top destinations as compared to shipping the same products from competitor states. The relative costs for these illustrative products serve as a proxy for Missouri's competitiveness on transport costs as a whole.

## MEASUREMENT AND DATA COLLECTION:

Transearch 2011 freight data was used to identify products representative of Missouri's economic drivers, as well as the top origins, destinations and modes of transport. Estimates of the transport costs are calculated using different external sources for the modes: (1) The 2014 American Transportation Research Institute report, An Analysis of the Operational Costs of Trucking, (2) AAA's diesel on-highway price data, (3) the Bureau of Labor Statistics wage data, (4) the Surface Transportation Board's Uniform Railroad Costing System, and (5) the USDA's Average Weekly River Barge Rates.

Product transportation costs vary depending on the efficiency, reliability, safety and modal options in a state's transportation system. Accumulation of the cost to transport in each step in the supply chain starting at product origination, travel to the production facility, and finally to market directly impacts the final cost and how competitive the product is in the global market. Transportation costs account for 9 percent to 14 percent of a product's market price. Therefore, maintaining low transportation costs is critical to retain and expand current businesses in Missouri and attracting new businesses to create new employment.

The three key Missouri products (soybeans, finished motor vehicles and chemical manufacturing) analyzed on the accompanying graphs combined account for more than \$7 billion in revenue annually while employing more than 300,000 Missouri workers. Missouri producers of these products compete with other states and other countries for customers. The graphs compare Missouri transportation costs to those of the closest domestic competitors. At this time, Missouri's transportation cost is among the lowest of these competitors. Maintaining low transportation costs is critical for Missouri's continued success in all markets.

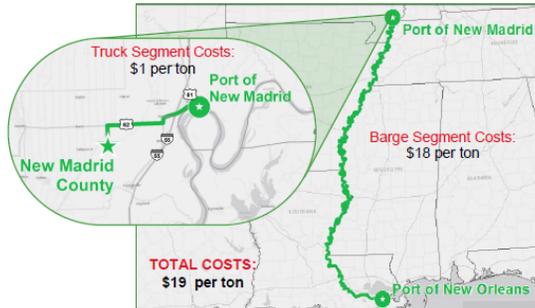
Deterioration of any of the factors influencing transportation cost not only impacts the competitiveness of Missouri products in external markets, it also influences the cost to bring products into Missouri, which controls the prices at local stores.

MoDOT plays an active role in keeping costs low by working with existing businesses to identify transportation barriers that reduce their competitiveness regardless of transportation mode. These barriers can include bridges with load postings, closed bridges, rough pavement, at-grade rail crossings, congestion, and inability to access a port or airport. MoDOT continually aims to find solutions for these barriers, but Missouri's transportation funding situation limits the agency's ability to fully respond to those needs.

# ADVANCE ECONOMIC DEVELOPMENT

## SOYBEANS

The Route from New Madrid County to New Orleans



The Route from Competitor States to New Orleans

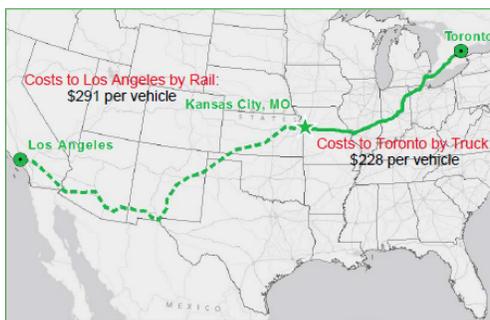


The Cost of Shipping One Ton of Soybeans to New Orleans (largely by barge)



## FINISHED MOTOR VEHICLES

The Route from Kansas City to Toronto by Truck and Los Angeles by Rail



The Route from Competitor States to Toronto by Truck and Los Angeles by Rail



The Cost of Shipping One Motor Vehicle



# ADVANCE ECONOMIC DEVELOPMENT

## CROP PROTECTION PRODUCTS (CHEMICALS)

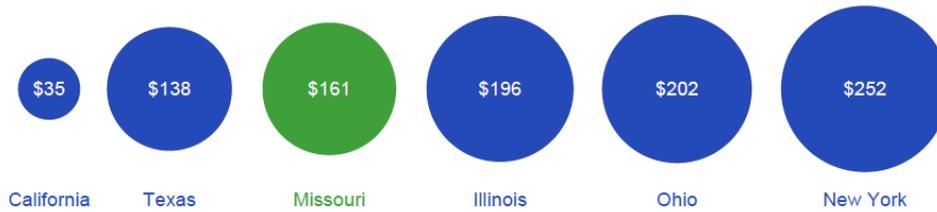
The Route from Hannibal to Los Angeles by Truck



The Route from Competitor States to Los Angeles by Truck



The Cost of Shipping One Ton of Crop Protection Products to Los Angeles by Truck



## RESULT DRIVER:

Machelle Watkins  
Transportation Planning  
Director

## MEASUREMENT

### DRIVER:

Eric Curtit  
Administrator of Railroads

## PURPOSE OF THE MEASURE:

This measure tracks the amount of freight moved by Missouri's largest transportation modes.

## MEASUREMENT AND DATA COLLECTION:

Twice a year, a freight tonnage estimator is used to calculate the amount of freight moved by railroads and highways. The estimator provides timely information for Missouri's primary freight movers. Freight data for aviation and waterways is a combination of direct surveys and trend analysis. This measure's data is estimated yet provides an indication of current trends and movements.

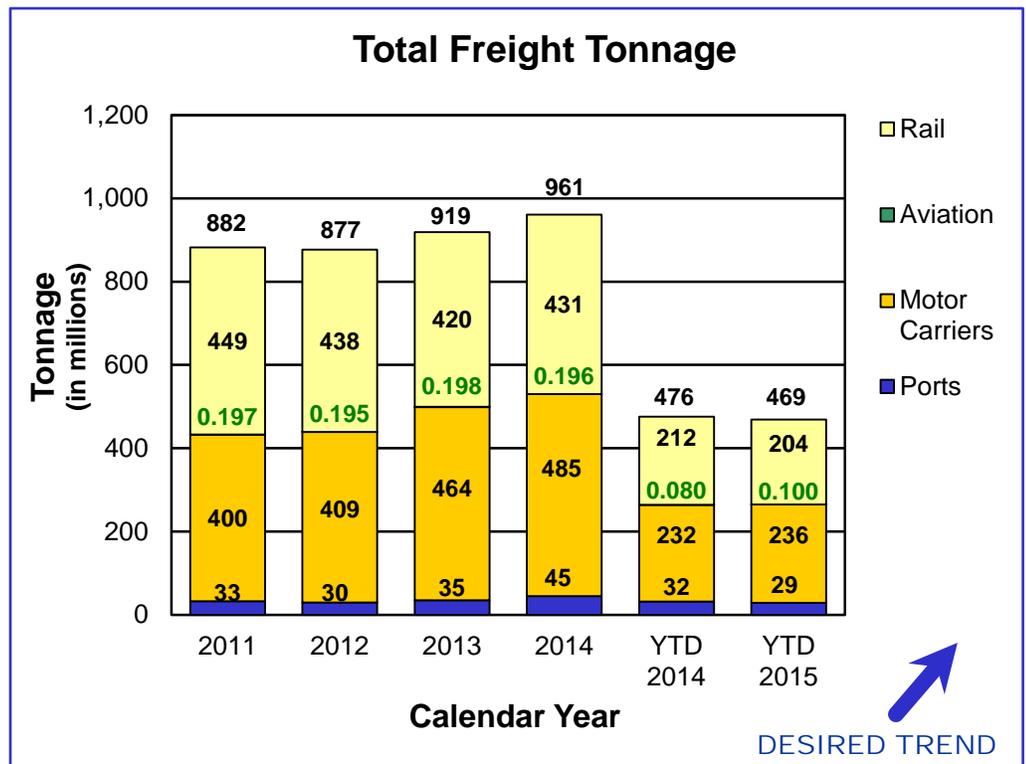
# ADVANCE ECONOMIC DEVELOPMENT

## Freight tonnage by mode – 7e

Everything comes from somewhere. How it gets from place to place depends on a number of factors. These modes experience volume shifts from year to year, often based on the health of the national economy and shifts in consumer preferences. A key element to a healthy economy is a robust transportation system.

Unfortunately, transportation funding is decreasing, making it difficult to maintain highways and bridges in their current condition. State funding cannot address transportation needs other than highways and bridges. Moving 961 million tons of freight a year requires thoughtful improvements of transportation facilities such as ports, railroads and airports, yet many of these needs remain underfunded.

During the first half of 2015, Missouri experienced a slight decrease in movements as compared to the same period last year. Railroad tonnage was down slightly due to lower shipments in crude oil and intermodal shipments. Motor carriers hauled the most tonnage, which can be attributed to continued increases in durable good shipments. Durable goods, such as appliances and furniture, tend to move by truck. Aviation maintained tonnage similar to previous levels. Public ports experienced decreased tonnage, which is attributed to fewer crude oil shipments.



## RESULT DRIVER:

Machelle Watkins  
Transportation Planning  
Director

## MEASUREMENT

### DRIVER:

Aaron Hubbard  
Motor Carrier Services Project  
Manager

## PURPOSE OF THE MEASURE:

This measure is proposed to be used as a Moving Ahead for Progress in the 21st Century Act national freight performance measure.

## MEASUREMENT AND DATA COLLECTION:

Annual hours of truck delay quantifies the extra time spent by commercial motor vehicles on an interstate corridor based upon a state-determined threshold. Missouri's threshold is set at 55 mph in St. Louis and Kansas City. All other rural areas have a threshold of 65 mph. Speeds below that rate indicate congestion and/or other delay factors for trucks. Missouri chose this threshold because many commercial trucks are governed at 65 mph even though the posted speed limit for most interstate highways is 70 mph. Commercial vehicle delay on the interstate system may be caused by congestion due to factors such as traffic, severe weather, safety inspections or roadway geometrics. AHTD is composed of vehicle miles traveled by trucks, speed of travel and the desired speed of travel.

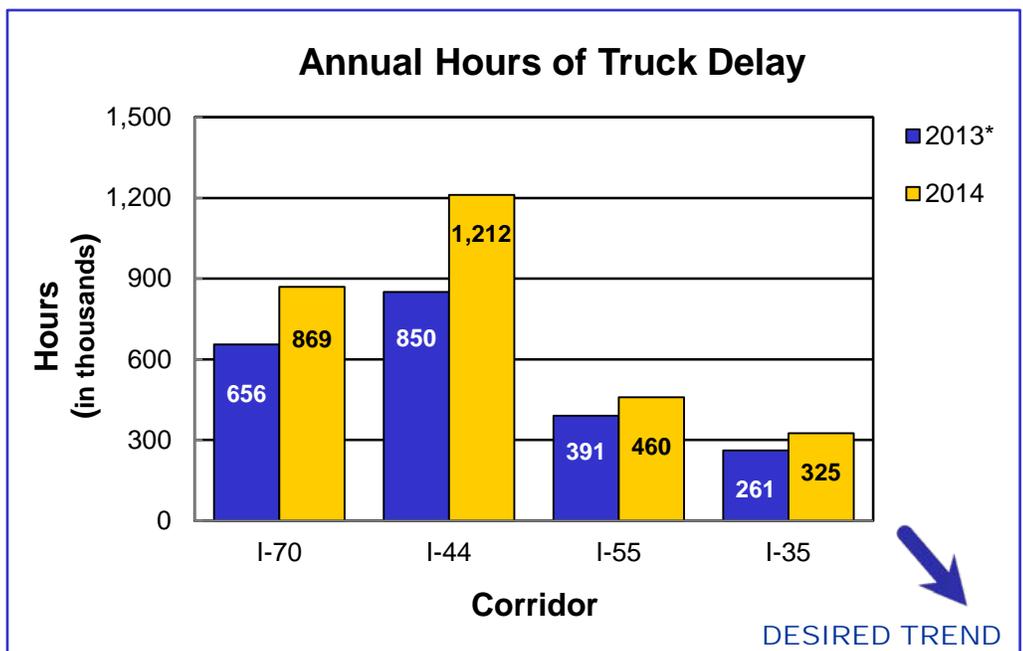
# ADVANCE ECONOMIC DEVELOPMENT

## Annual hours of truck delay – 7f

Time is money. Delay impacts the cost of goods and reduces an organization's ability to compete on a global basis. American businesses require more operators and equipment to deliver goods when delays lengthen shipping time. Businesses must hold more inventory in more distribution centers to deliver products quickly when lengthier trips are unreliable and slow. Slow traffic also affects the local economy by reducing the number of workers and job sites within easy reach of a location.

Growth in freight volumes is a major contributor to congestion in urban areas and on intercity routes. Long-distance freight movements are often a significant contributor to local congestion, and local congestion typically impedes freight to the detriment of local and distant economic activity. Unfortunately, Missouri's construction budget is falling to a point that will make it very difficult for MoDOT to address congestion factors in the future. In fiscal year 2017, MoDOT's construction budget will be its lowest since 1997, making it difficult just to maintain the transportation system in today's condition.

On average, those shipping by truck can expect a delay of 25.7 minutes per trip on I-70, 21.5 minutes on I-44, 11.9 minutes on I-55 and 8.9 minutes on I-35. The annual cost of delay for the trucking industry on I-70 is \$56.7 million, \$79.1 million on I-44, \$30.0 million on I-55, and \$21.2 million on I-35.



\*2013 data only contains July through December.

## RESULT DRIVER:

Machelle Watkins  
Transportation Planning  
Director

## MEASUREMENT

### DRIVER:

Chuck Gohring  
Motor Carrier Services  
Assistant Director

## PURPOSE OF THE MEASURE:

This reliability measure is proposed to be used as a Moving Ahead for Progress in the 21st Century national freight performance measure. By annually comparing the reliability index number for each corridor, MoDOT can determine if the corridor has become less or more reliable. A lower index for a succeeding year means reliability has improved.

## MEASUREMENT AND DATA

### COLLECTION:

This measure uses the Truck Reliability Index, a ratio of the total truck travel time needed to ensure on-time arrival four out of five times to the agency-determined threshold speed of 55 mph in St. Louis and Kansas City, and 65 mph in all other rural areas. The ratio is used to gauge consistency in truck freight travel times. Further guidance about data requirements and measure methodology will be forthcoming from the Federal Highway Administration.

# ADVANCE ECONOMIC DEVELOPMENT

## *Truck reliability index – 7g*

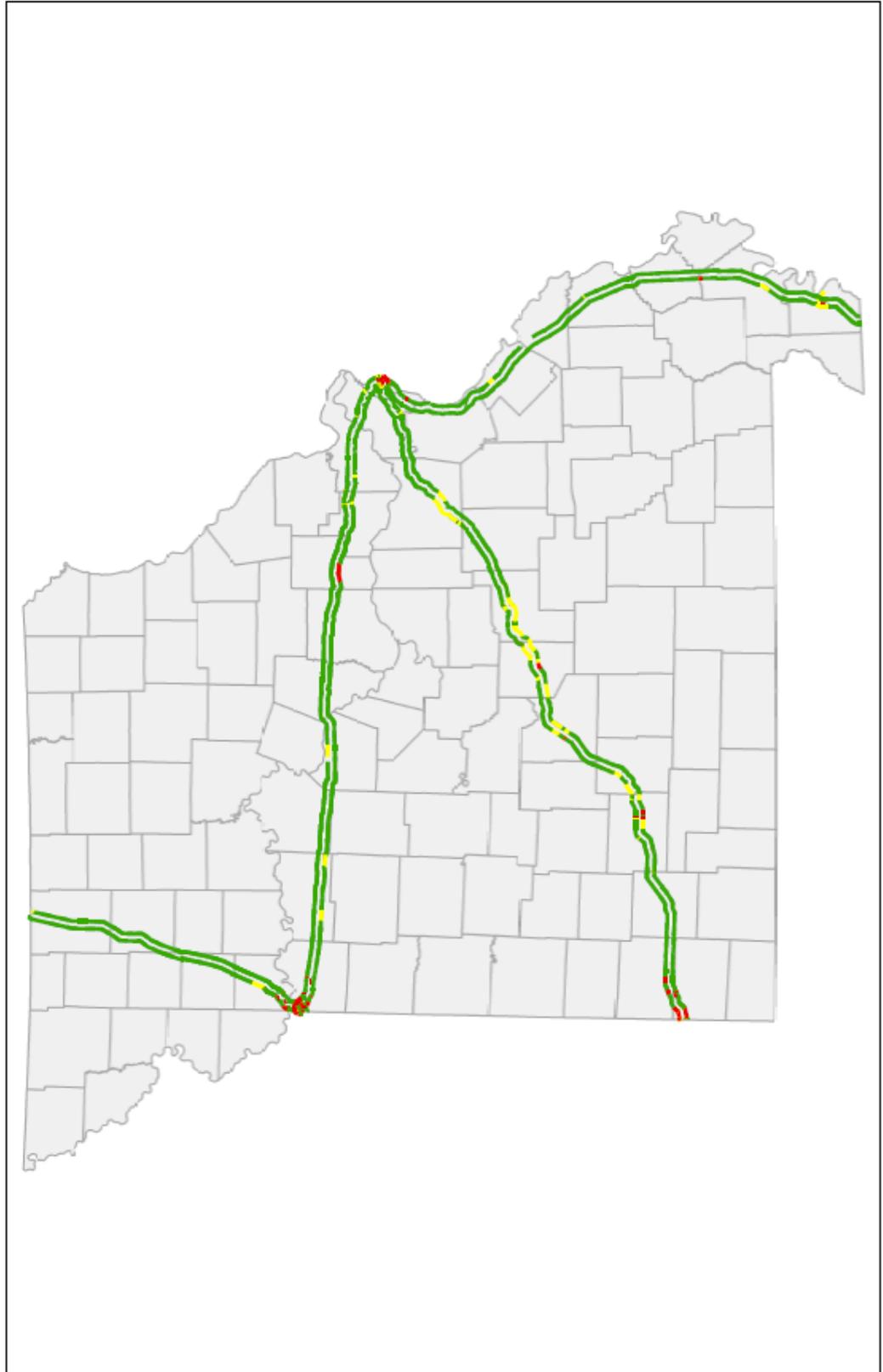
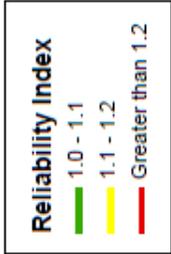
The reliable movement of goods by truck is critical to Missouri's economy. Travel time reliability is the variation of travel time for the same trip from day to day. When the variability is large, the travel time is unreliable; and, vice versa, when there is little to no variability, the travel time is reliable. Variable or unpredictable travel times make it more difficult for motor carriers and shippers to plan their travel, often forcing them to add extra time to protect themselves against the uncertainty of arrival times. This uncertainty can lead to unproductive travel decisions that waste time and money. The map includes four freight-significant corridors: I-70, I-44, I-55 and I-35. The color green indicates the most reliable travel times; yellow slightly less reliable; and red the least reliable of travel times.

MoDOT continually seeks ways to deliver the infrastructure to support reliable trips for drivers and to help keep costs down. Many new strategies and technologies for operating highway systems are emerging that can help improve travel-time reliability. However with declining state and federal transportation funding and increasing costs to do business, MoDOT is unable to make needed reliability investments.



# ADVANCE ECONOMIC DEVELOPMENT

**Truck Reliability Index  
CY 2014**



## RESULT DRIVER:

Machelle Watkins  
Transportation Planning  
Director

# ADVANCE ECONOMIC DEVELOPMENT

## MEASUREMENT

### DRIVER:

Doug Hood  
Financial Services  
Administrator

## PURPOSE OF THE MEASURE:

This measure tracks the number of jobs created through MoDOT's economic development program.

## MEASUREMENT AND DATA COLLECTION:

Data for this measure is collected from a partnership development database. This measure is based on the state fiscal year – July 1 to June 30.

## *Jobs created by projects funded through the economic development program – 7h*

The Cost Share/Economic Development Program builds partnerships with local entities to pool efforts and limited resources in order to deliver state highway and bridge projects. In the past, MoDOT allocated \$45 million of Cost Share/Economic Development funds annually, based on the funding distribution formula set by the Missouri Highways and Transportation Commission. Each year, a minimum of \$5 million were set aside for projects that demonstrated economic development through job creation. MoDOT contributed up to 100 percent of the total cost for projects on the state highway system if the Missouri Department of Economic Development verified the project created jobs. Retail development projects were not eligible.

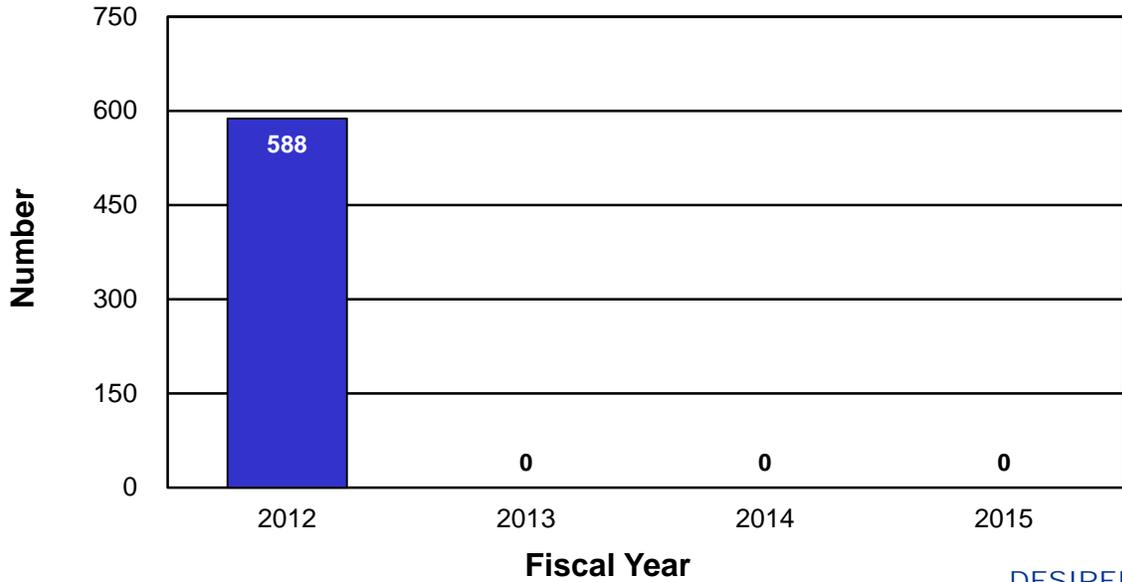
In light of a plummeting 2016-2020 construction program, the Missouri Highways and Transportation Commission suspended the Cost Share/Economic Development Program on January 8, 2014. Unfortunately, Missouri's construction budget is falling to a point that will make it very difficult for MoDOT to maintain the existing system, much less pursue projects that add to the system. Projects already reviewed and approved by the cost share committee are eligible to move forward. However, no additional projects will be considered for funding.

In fiscal year 2012, Edward Jones created 588 verified new jobs in conjunction with interchange improvements at I-270 and Dorsett Road in St. Louis County.



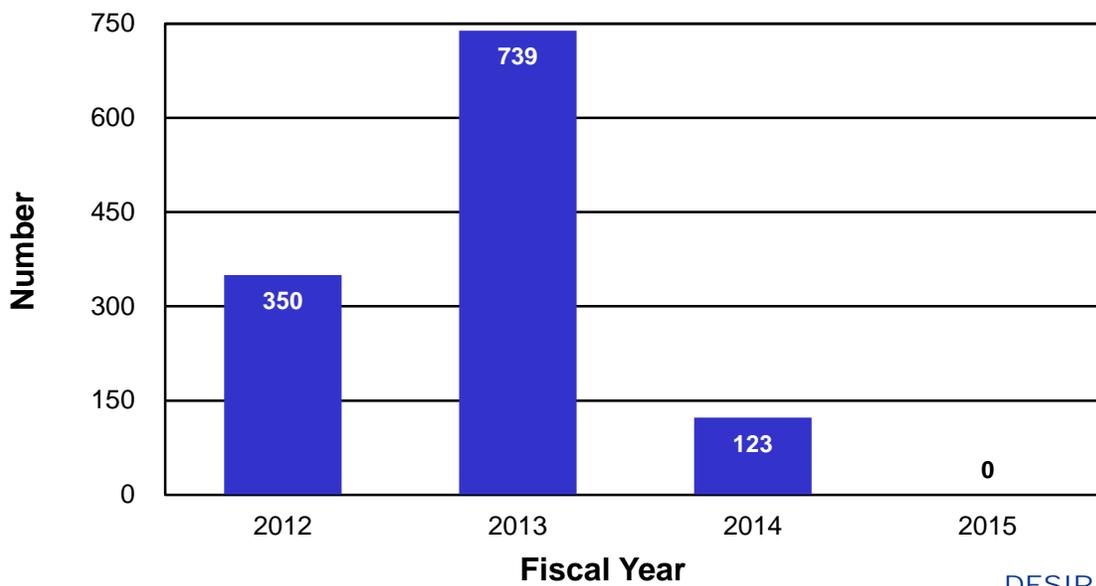
# ADVANCE ECONOMIC DEVELOPMENT

### Jobs Created by Projects Funded Through the Economic Development Program



DESIRED TREND

### Economic Development Projects Approved with Estimated Future Job Creation



DESIRED TREND

## RESULT DRIVER:

Machelle Watkins  
Transportation Planning  
Director

## MEASUREMENT

### DRIVER:

Ida Mitchell  
Senior Human Resources  
Specialist

## PURPOSE OF THE MEASURE:

This measure tracks minority and female employment in MoDOT's workforce and compares it with availability data from the Missouri 2010 Census report.

## MEASUREMENT AND DATA COLLECTION:

The SAM II database is used to collect data. The Missouri 2010 Census data is used as the benchmark for this measurement.

# ADVANCE ECONOMIC DEVELOPMENT

## *Percent of minorities and females employed – 7i*

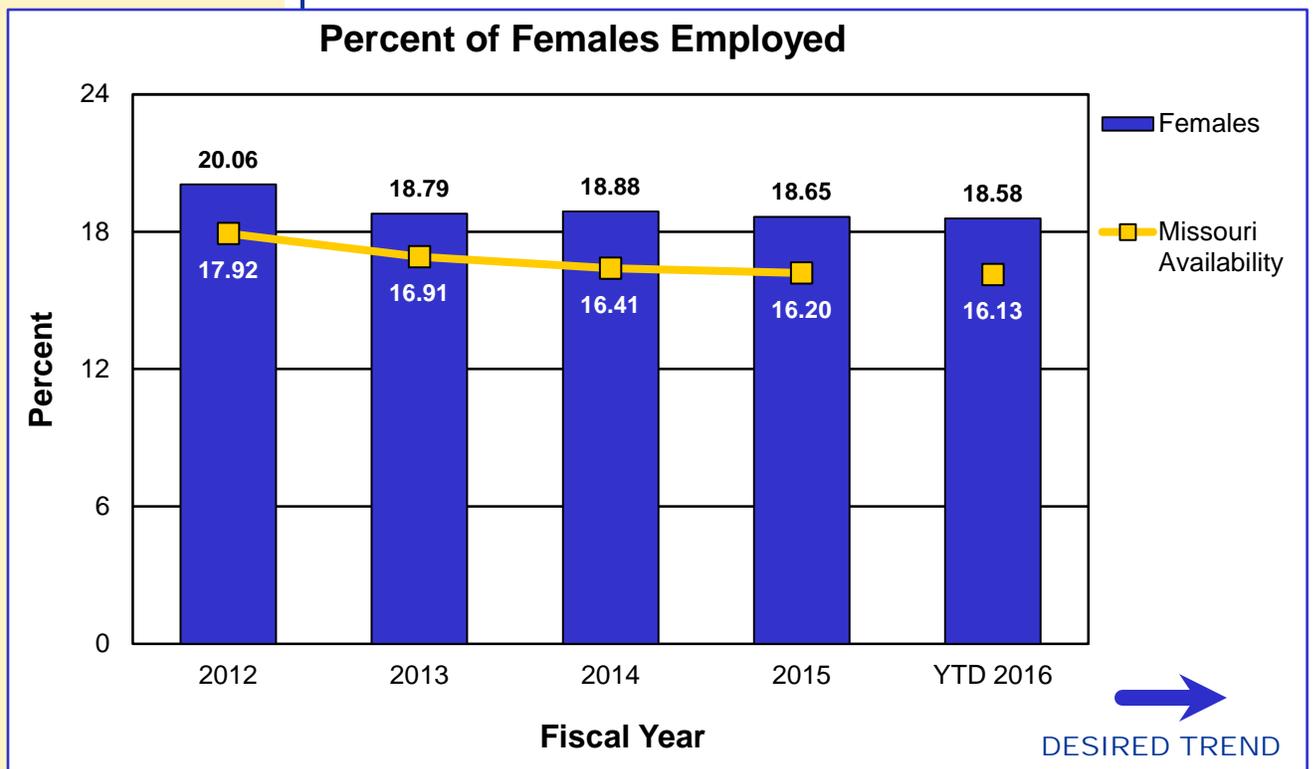
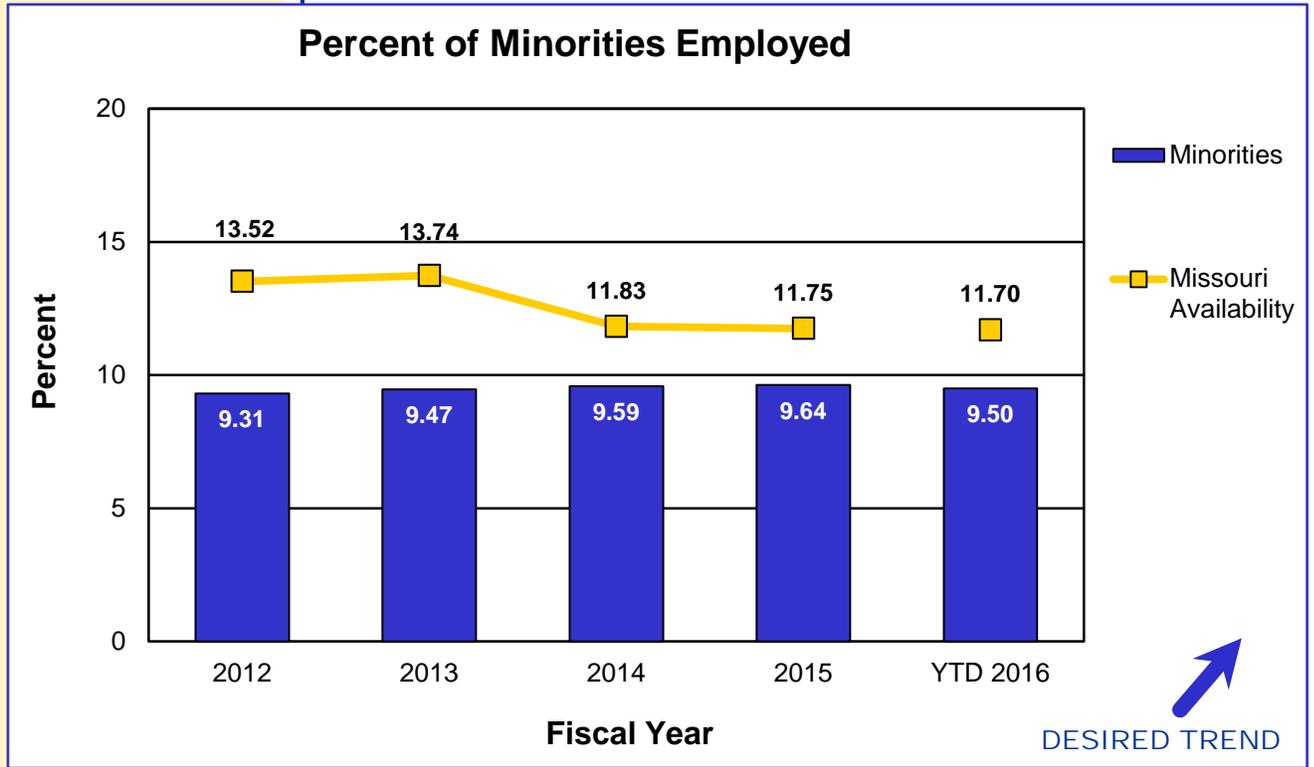
By placing the right people in the right position, MoDOT can better serve its customers and help fulfill its responsibilities to taxpayers.

The number of minority employees decreased by 1.9 percent (484 to 475) from the fourth quarter of fiscal year 2015 to the first quarter of FY 2016. The number of female employees decreased by 6 percent from fourth quarter of FY 2015 to first quarter of FY 2016 (937 to 881). When compared to overall employment, the percent of females decreased (18.65 to 18.58) but is still above Missouri availability of 16.13 percent. The percent of minorities also decreased (9.64 to 9.50), but is below Missouri availability of 11.70 percent. Total full-time employment during this quarter decreased from 5,023 to 5,000.

For many areas of MoDOT, the focus this quarter has been on the hiring of seasonal maintenance employees. In order to ensure a qualified applicant pool, department staff has been conducting community CDL courses, MoDOT career fairs, and providing job announcements to publications and media outlets that are geared towards minorities and females.



# ADVANCE ECONOMIC DEVELOPMENT



**RESULT DRIVER:**

Machelle Watkins  
Transportation Planning  
Director

# ADVANCE ECONOMIC DEVELOPMENT

**MEASUREMENT  
DRIVER:**

Lester Woods, Jr.  
External Civil Rights Director

## *Percent of disadvantaged business enterprise participation on construction and engineering projects – 7j*

**PURPOSE OF  
THE MEASURE:**

This measure tracks the percent of Disadvantaged Business Enterprise use on construction and engineering projects.

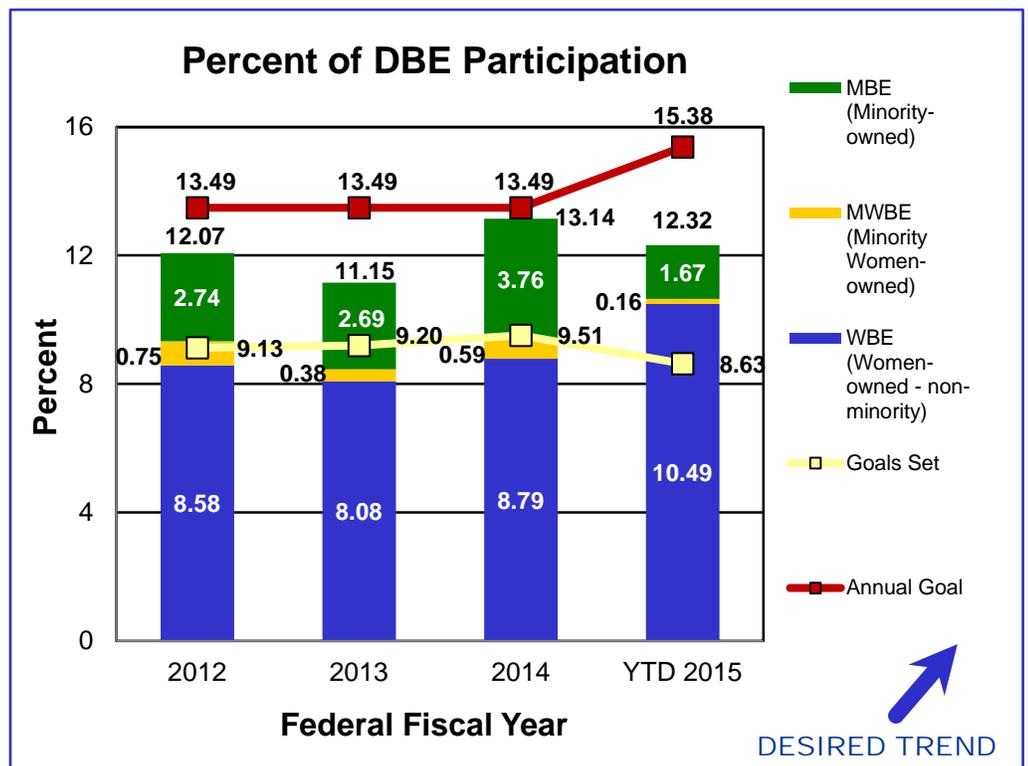
MoDOT believes it is good business to support diversity among its contractors, subcontractors and suppliers. Contractors, subcontractors and suppliers working on construction projects that receive federal aid or federal financial participation are required to take reasonable steps to ensure DBEs have an opportunity to compete for and participate in project contracts and subcontracts.

The overall DBE goal for FFY 2015 is 15.38 percent. The DBE participation for the first three quarters of FFY 2015 is 12.32 percent. This is a 0.82 percent decrease from FFY 2014. Of the 12.32 percent utilization, 1.67 percent is participation from minority-owned DBE firms, 0.16 percent is participation from minority women-owned DBE firms and 10.49 percent is participation from women-owned DBE firms. The collective goals set for projects closed during this period amounted to 8.63 percent.

**MEASUREMENT  
AND DATA  
COLLECTION:**

Data is collected through Site Manager for each construction project. The overall DBE goal is a yearly target established by MoDOT and the Federal Highway Administration regarding the expected total DBE participation on all federally-funded construction projects. Individual DBE project goals are determined by subcontract opportunity, project location and available DBE firms that can perform the scope of work. DBE utilization is tracked for each construction project identifying the prime contractor, contract amount, the established goal and how the prime contractor fulfilled the goal. This measure is based on the federal fiscal year, which is October 1 through September 30. Collection of data of the DBE classifications began in FFY 2012.

MoDOT continues to support diversity among its contractors, subcontractors and suppliers even as funding available for the construction program declines.



**RESULT DRIVER:**

Machelle Watkins  
Transportation Planning  
Director

# ADVANCE ECONOMIC DEVELOPMENT

**MEASUREMENT DRIVER:**

Rebecca Jackson  
General Services Manager

## Expenditures made to certified minority, women and disadvantaged business enterprises – 7k

**PURPOSE OF THE MEASURE:**

This measure tracks the department's non-program spending with certified minority, women, and disadvantaged business enterprises (MWDBE).

Ensuring MoDOT spending is representative of Missouri communities advances economic development for all business enterprises. Historical data helps identify opportunities for improvement. Improvement efforts include training staff who have procurement authority, outreach to MWDBE vendors to encourage them to become certified and focused inclusion efforts.

Fiscal year 2016 first quarter results show an increase of \$900,000 in MWDBE disbursements compared to FY 2015. Compared to first quarter FY 2015, the FY 2016 percentage of MWDBE expenditures spent increased by 2 percent.

With declining state and federal transportation funding and the increasing costs to do business, the dollars spent with all vendors, including MWDBE vendors, are expected to fall. This measure will continue to track the department's efforts to ensure the vendor pool is representative of the business community as a whole.

**MEASUREMENT AND DATA COLLECTION:**

Data is obtained from the statewide financial accounting system expenditure reports and United Missouri Bank purchasing card reports. Certified vendors are maintained in a statewide procurement vendor database. Vendors may be certified through the Office of Administration as well as the Missouri Regional Certification Committee. Included in these expenditures are items such as materials, equipment, tools and supplies. Program spending, including construction, design consultants, local agencies, highway safety and multimodal programs and exempted activities such as utilities, postage, organizational memberships, conferences and travel are excluded from total dollars spent.

