APRIL 2016

Tracker

MEASURES OF DEPARTMENTAL PERFORMANCE

MoDOT Missouri Department of Transportation

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Greetings from MoDOT

When I came to MoDOT as director late last year, I was pleased to find in place a system of performance metrics that validate our commitment to the citizens of Missouri. MoDOT has a proud legacy of wisely managing our system and meeting challenges in order to delight our customers and promote a prosperous Missouri.

Whether managing floods, repairing roads and bridges or fighting snow, the men and women of MoDOT work tirelessly to keep our citizens and themselves safe as we maintain 34,000 miles of roads and 10,400 bridges. While this report highlights the measures used to monitor our commitment of a world-class transportation experience for Missourians, it is really a testament to the bold ingenuity of our employees who design, build, maintain and operate our $50 billion transportation assets.

Despite limited resources, MoDOT has been diligent about maintaining our system in the best condition we can for as long as we can. However, citizens have asked for more transportation options, and I believe they deserve more. It is critical to build a 21st century transportation system today in order to fuel our economy and retain our workforce.

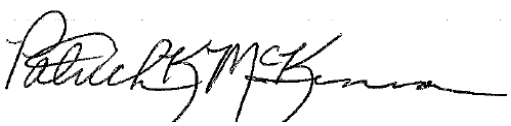
In December 2015, the federal government passed a five-year transportation bill, the FAST Act, which provides us some long-term federal funding stability. Since these funds require a one-to-four match with state money, it makes additional funding from our state critical if we are to take care of and advance our transportation system.

While some will say that our roads and bridges appear to be in good condition today, inspections beneath the surface tell a different story. For instance, of our 10,400 bridges, about 60 percent are older than their intended useful life of 50 years. And since many of our bridges were built between 1960 and 1969, in the coming years a large number of bridges will need to be replaced at the same time.

With 641 critical-condition bridges and upwards of 1,300 weight-restricted bridges, the needs are greater than available resources. We must address this and other issues head-on because bridges connect our communities and are vital to urban and rural economies.

The pages that follow will highlight many innovations and improvements. But there is more to be done. I ask that you join me in making the transportation system in our great state all that it can and needs to be.

With warm regards,



Patrick K. McKenna

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.

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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.

KEEP CUSTOMERS AND OURSELVES SAFE

Number and rate of fatalities and serious injuries – 1a

RESULT DRIVER:
Eileen Rackers
State Traffic and Highway Safety Engineer

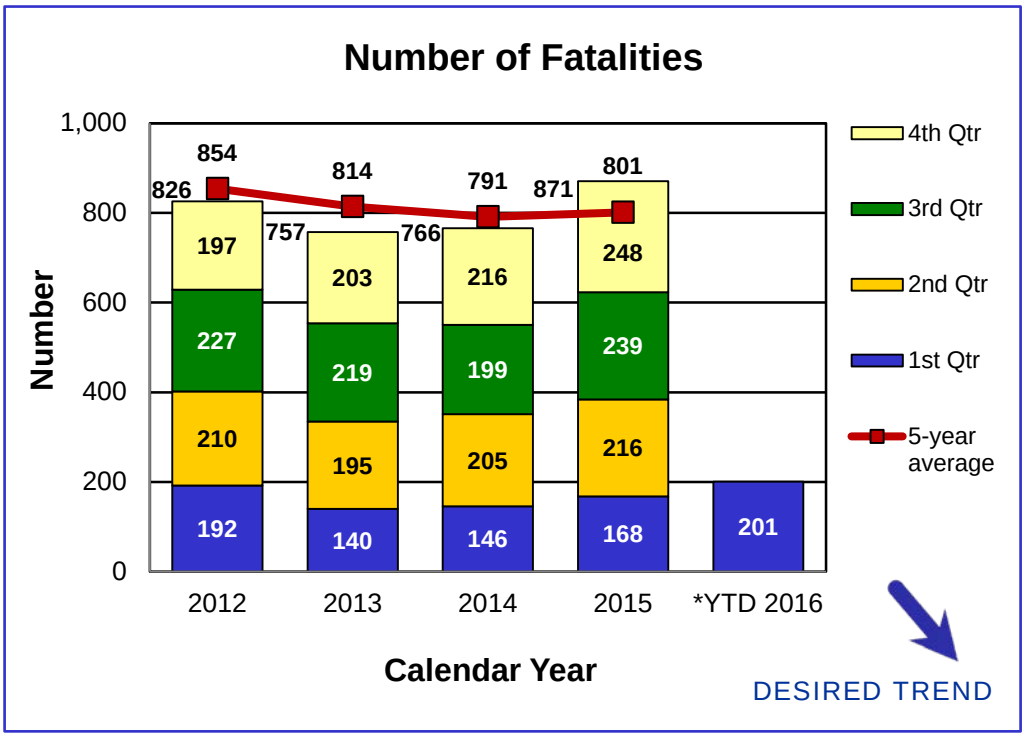
MEASUREMENT DRIVER:
Bill Whitfield
Highway Safety Director

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.

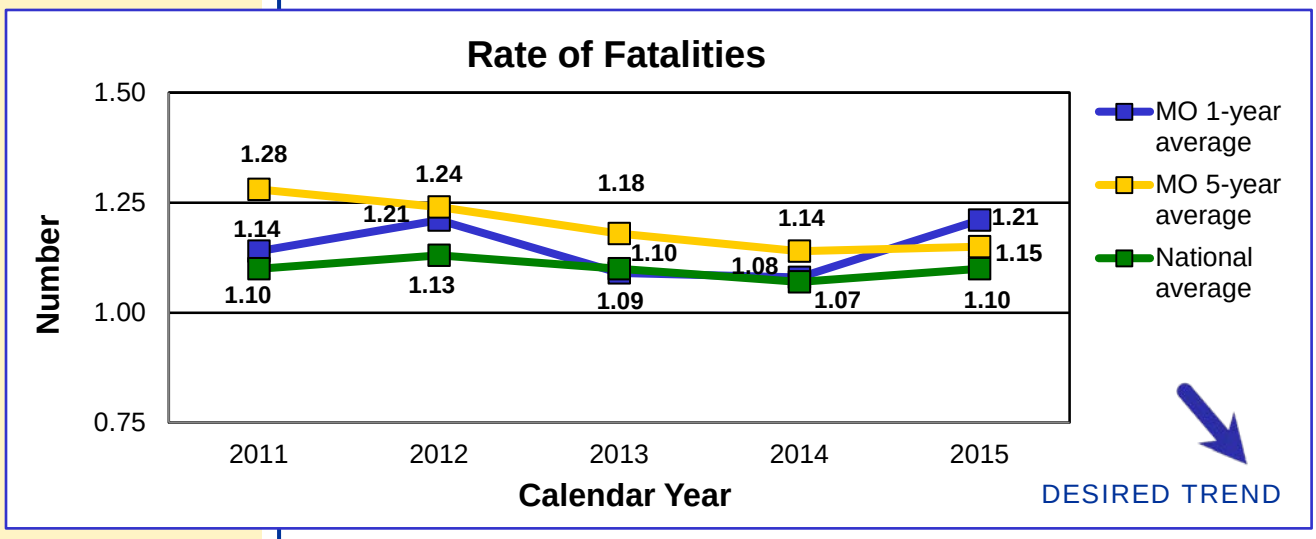
Traffic crash prevention is one of MoDOT's highest priorities. In 2015, Missouri experienced 871 fatalities, resulting in a 14 percent increase over 2014. Of those fatalities, 63 percent were unbuckled when the crash occurred. This unbuckled trend has fluctuated from a high of 71 percent in 2013 to current levels. The rate of fatalities also rose by 12 percent in 2015 compared to 4 percent nationally.

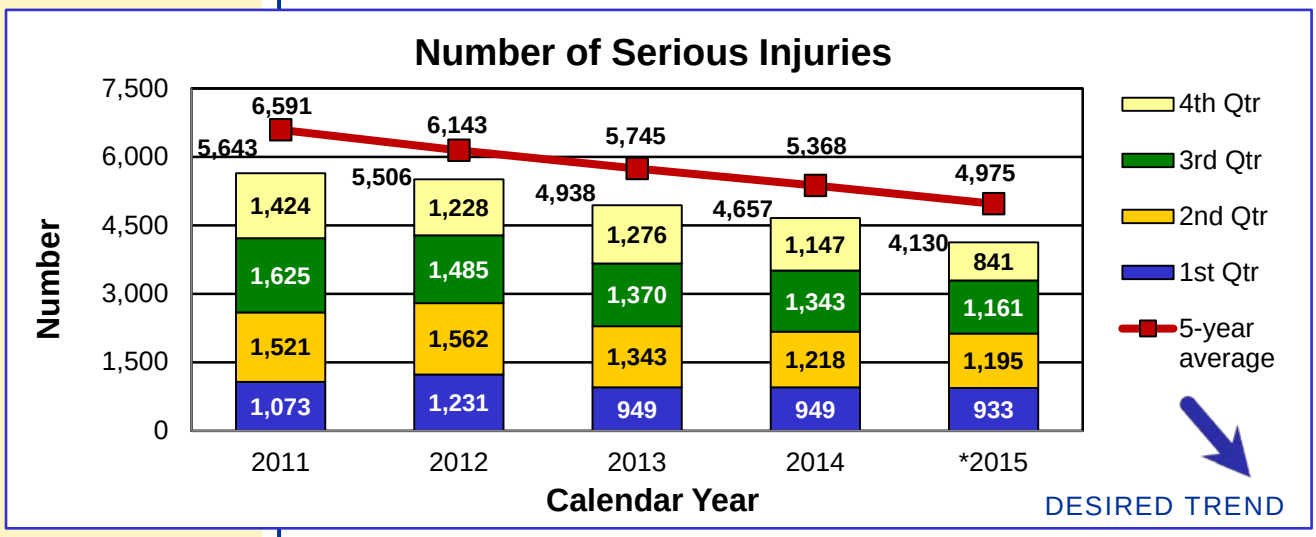
Crash data from 2010 to 2014 showed the leading contributing circumstances that can be attributed to driver behavior were substance impaired driving, driving too fast for conditions, exceeding the speed limit, distraction/inattention, following too closely and fatigue. Crash statistics also showed impaired drivers had an unbuckled fatality rate of 87 percent. This group of drivers makes two deadly decisions: to drive impaired and unbelted. Once 2015 MSHP crash files are closed, more extensive analysis will be completed.



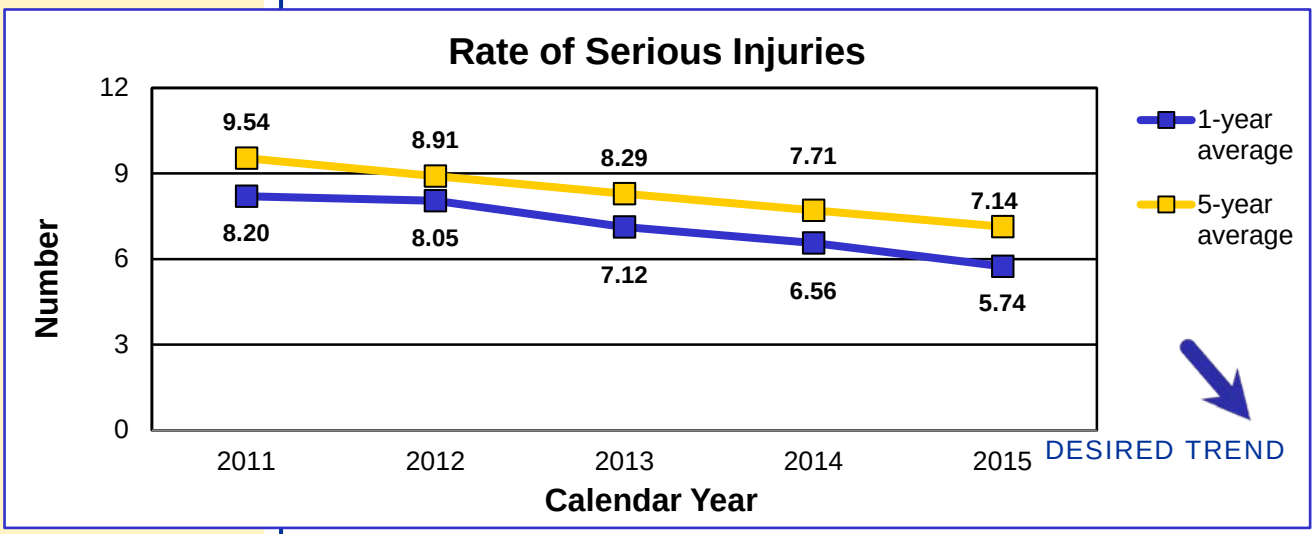
***YTD 2016 – First quarter fatalities were derived from MSHP radio reports.**

KEEP CUSTOMERS AND OURSELVES SAFE





***2015 – Due to a backlog of crash reports into STARS, the serious-injury measure only includes data derived from TMS. First quarter 2016 data is not available on the MSHP radio reports and is incomplete in TMS.**



KEEP CUSTOMERS AND OURSELVES SAFE

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

RESULT DRIVER:
Eileen Rackers
State Traffic and Highway Safety Engineer

MEASUREMENT DRIVER:
Bill Whitfield
Highway Safety Director

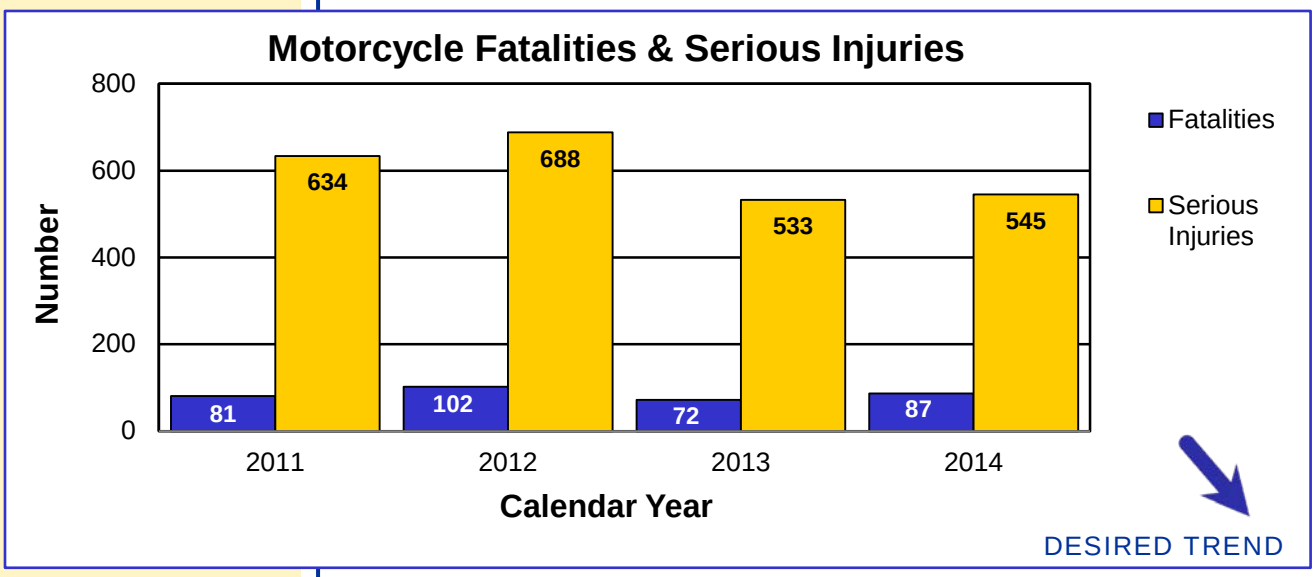
PURPOSE OF THE MEASURE:
The vulnerable roadway user measure tracks annual trends in fatalities and serious injuries of motorcyclists, pedestrians and bicyclists. These roadway users are at risk for death or serious injury when involved in a motor-vehicle-relate crash.

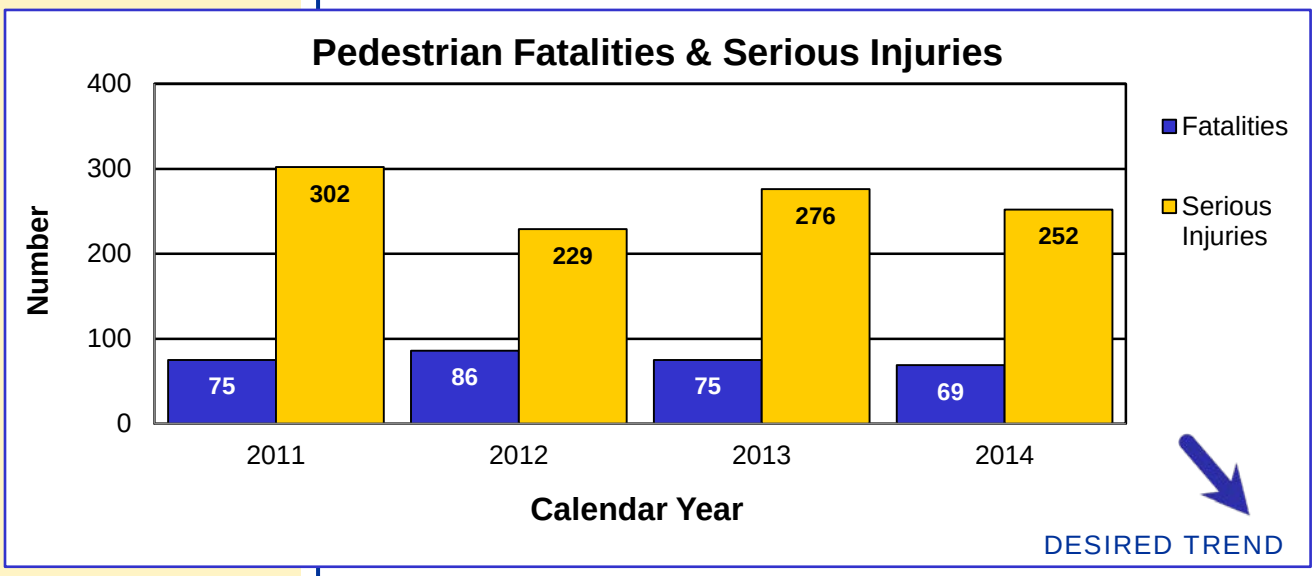
MEASUREMENT AND DATA COLLECTION:
Missouri law enforcement agencies submit a vehicle accident report form to the Missouri State Highway Patrol to be entered into a statewide traffic crash database. The database automatically updates MoDOT's crash database system, which is part of the Transportation Management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

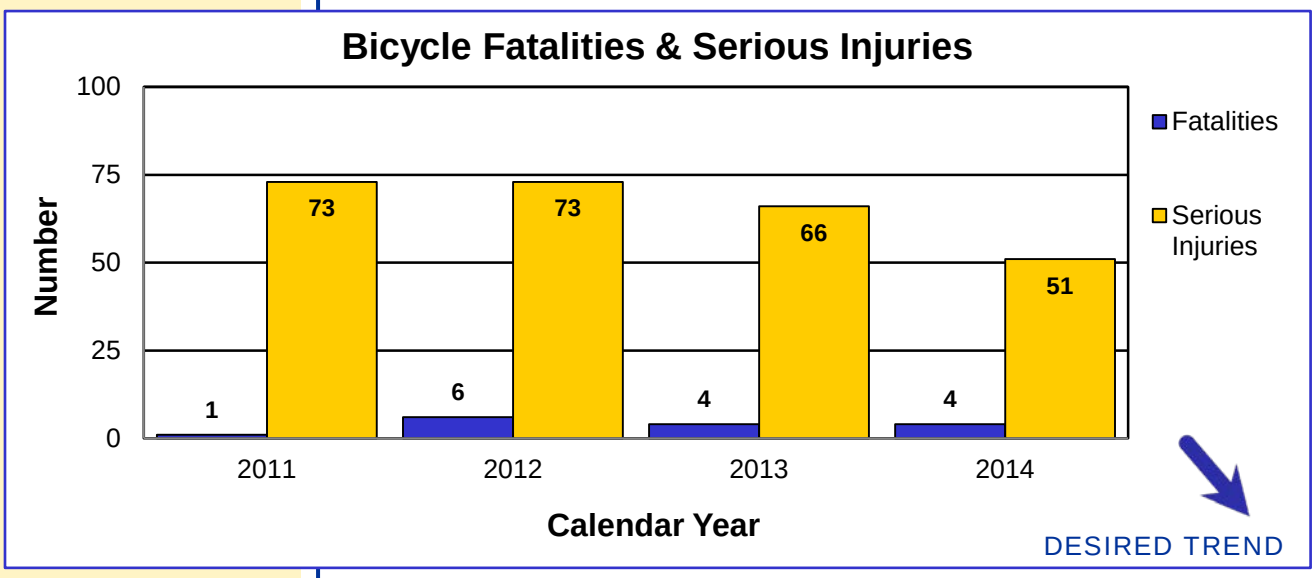
In 2014, vulnerable roadway users were 21 percent of the total number of fatalities. Pedestrian fatalities decreased in 2014 by 8 percent. Motorcycle fatalities increased by 21 percent and bicycle fatalities remained unchanged. Fatality data for 2015 are incomplete.

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

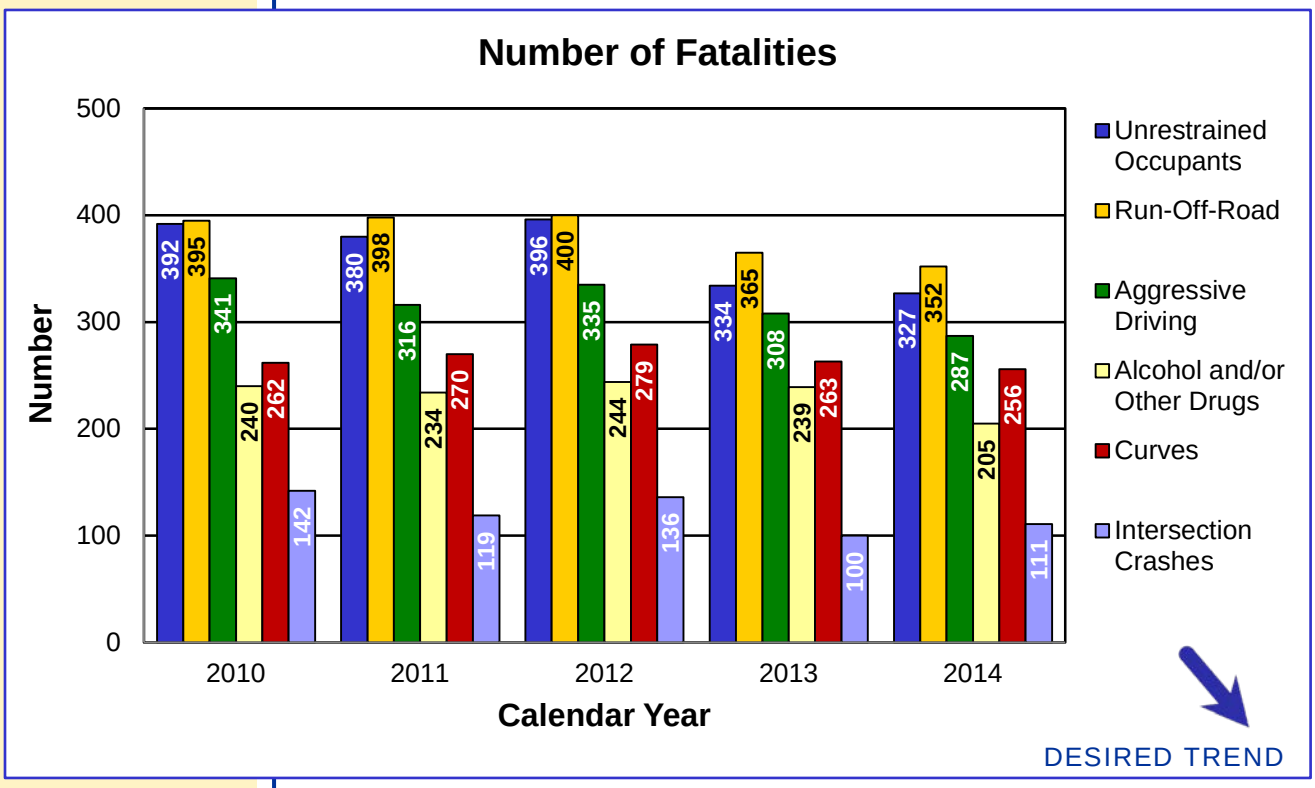
Number of fatalities and serious injuries resulting from the most frequent crash causes – 1c

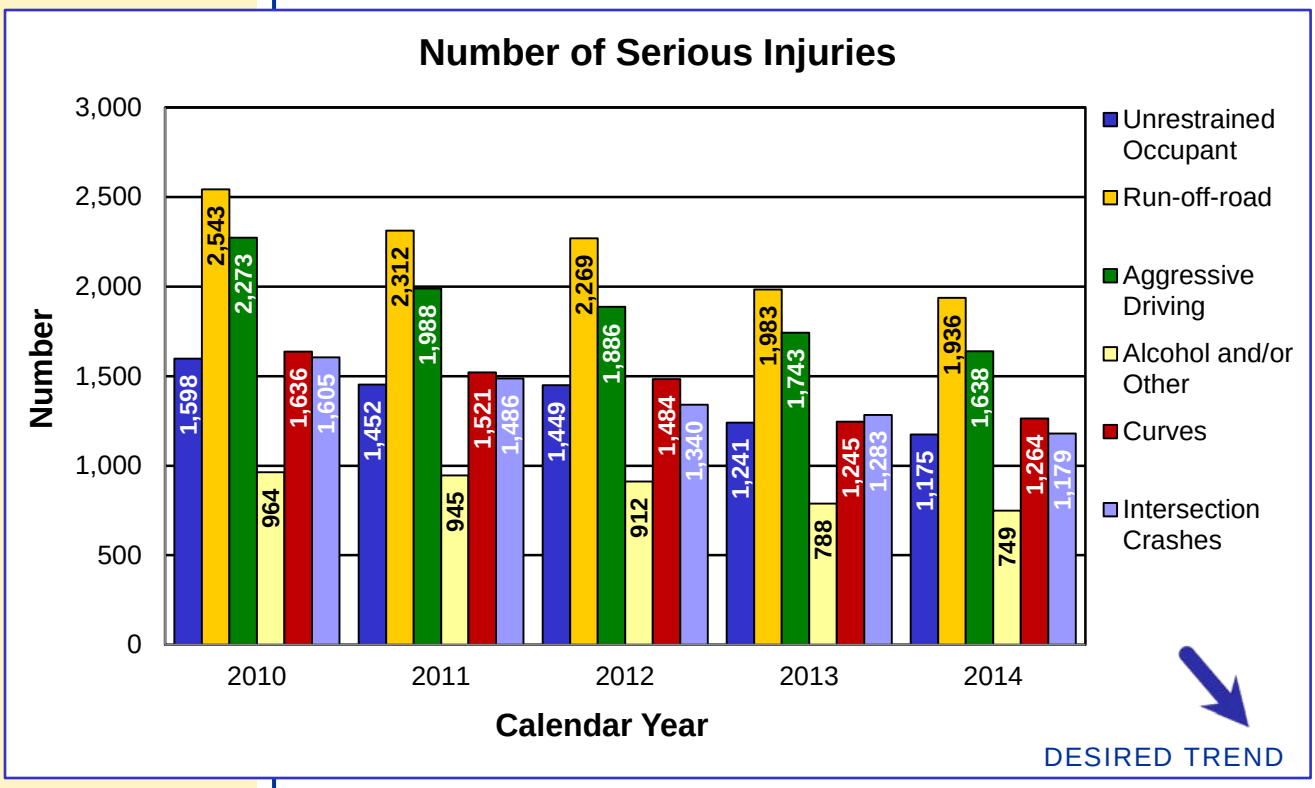
Recording and monitoring crash data is an important part of improving safety for Missouri drivers. But without looking at the causes of these incidents, the data is nothing but numbers. Looking for the reasons why an incident occurs is MoDOT's best approach to address the problem. With that approach, 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

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.

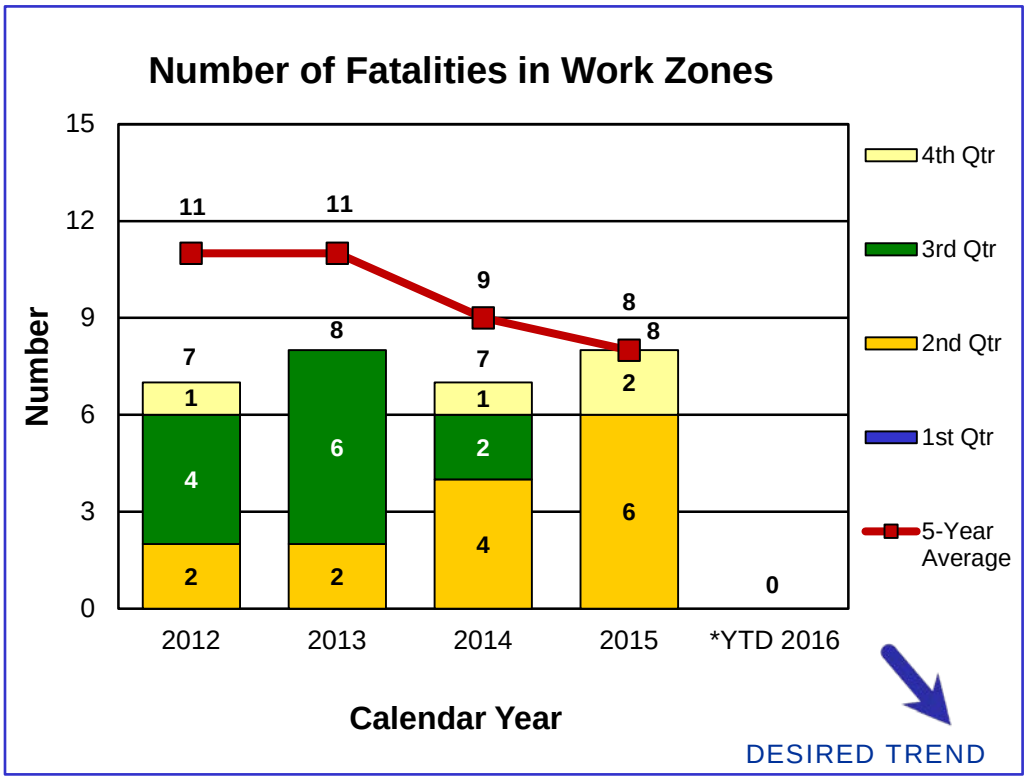
MEASUREMENT AND DATA COLLECTION:
Missouri law enforcement agencies submit a vehicle accident report form to the Missouri State Highway Patrol to be entered into a statewide traffic crash database. The database automatically updates MoDOT's crash database system, which is part of the Transportation Management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

KEEP CUSTOMERS AND OURSELVES SAFE

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

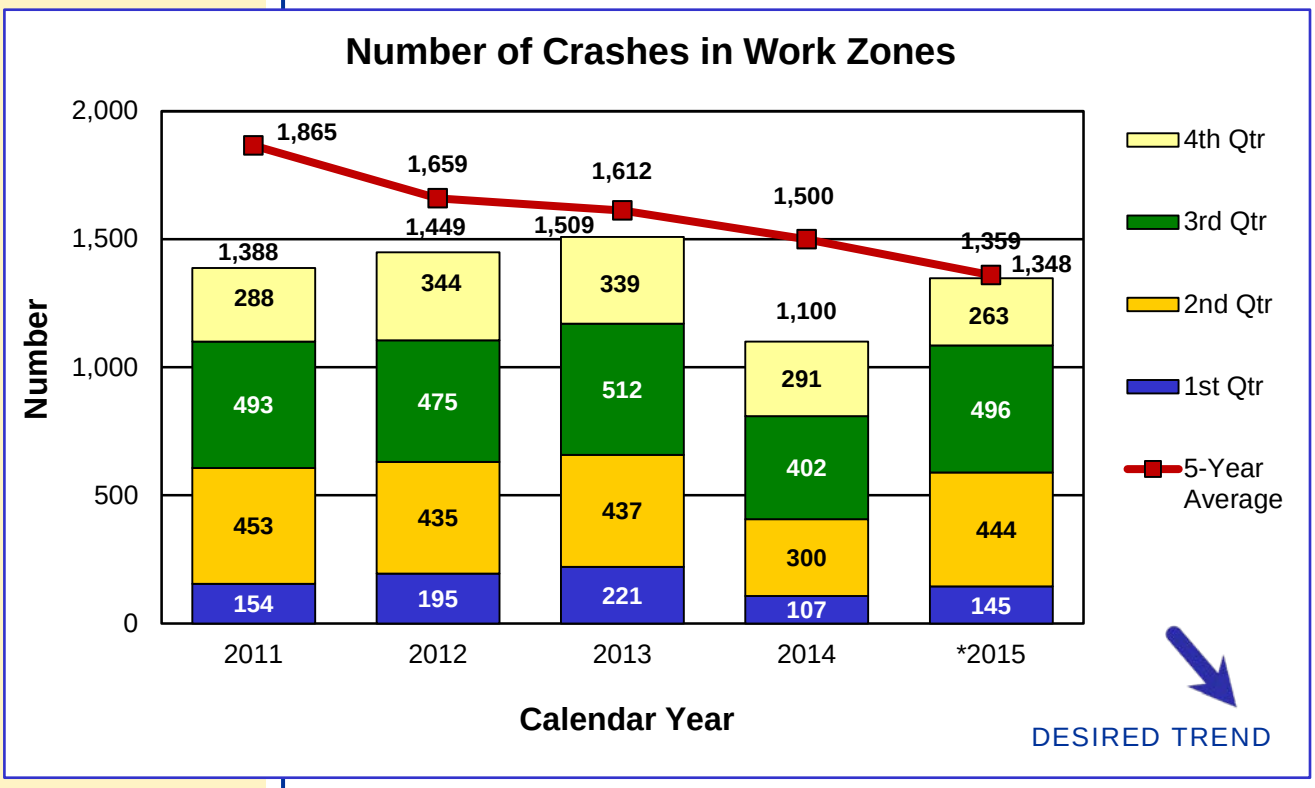
Work zone safety is at the center of MoDOT's safety culture. It is a driving force in all maintenance and construction work. Just as MoDOT expects its crews to be safe and visible, it also expects contractors and utility companies to provide safe work zones and visible workers. This is demonstrated by the partnership MoDOT has with contractors and utility companies using the same personal protection equipment it uses. Staying safe in work zones also is 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, slow down, move over, buckle up and drive without distractions.

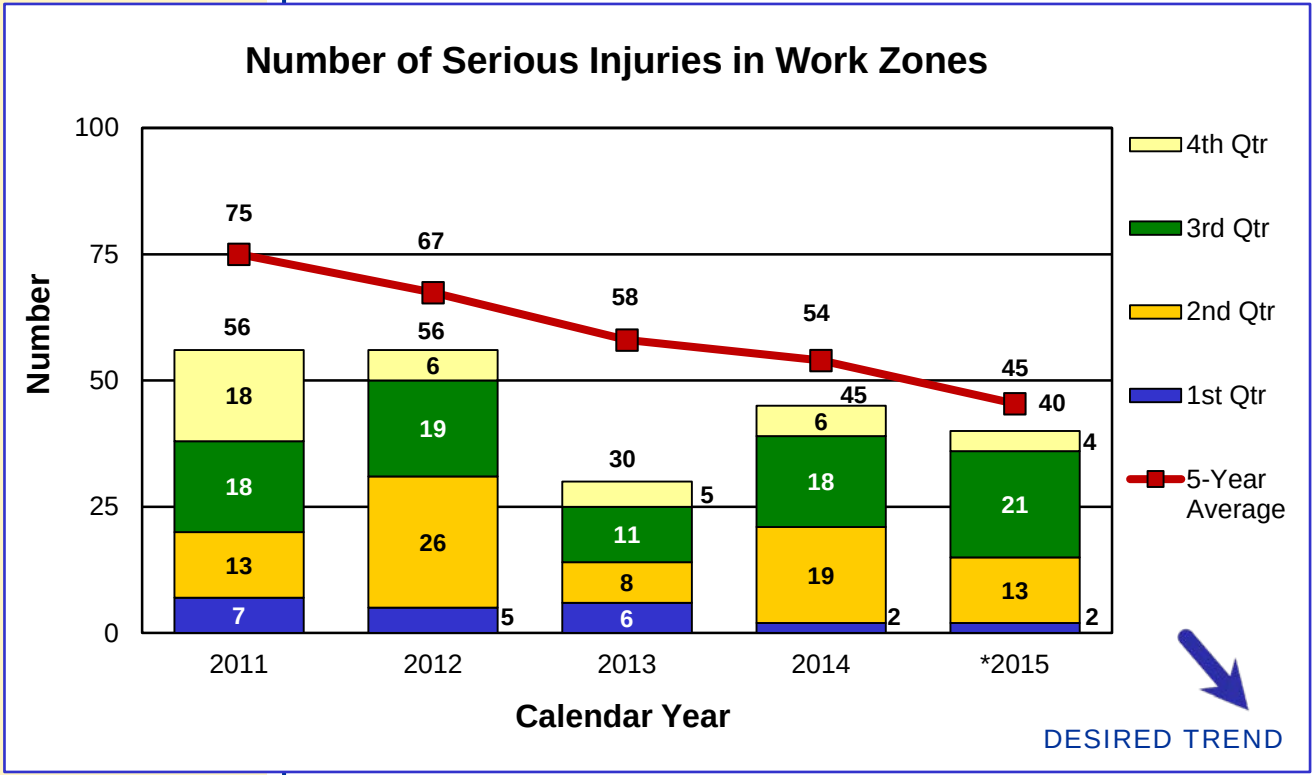
In 2015, eight fatalities and 40 serious injuries have occurred in Missouri work zones. Of the fatalities that occurred in work zones, three were pedestrians, three involved motorcycles, five involved large trucks, four occurred on divided highways, six were on roadways with a speed limit of 55 mph or greater and two were rear-end type crashes.



***YTD 2016 – Fatalities derived from TMS.**

KEEP CUSTOMERS AND OURSELVES SAFE





***2015 – Due to a backlog of crash reports into STARS, these measures are not final and only illustrate data derived from TMS. First quarter 2016 data is unavailable through the MSHP radio reports and is incomplete in TMS.**

RESULT DRIVER:
Eileen Rackers
State Traffic and Highway Safety Engineer

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.

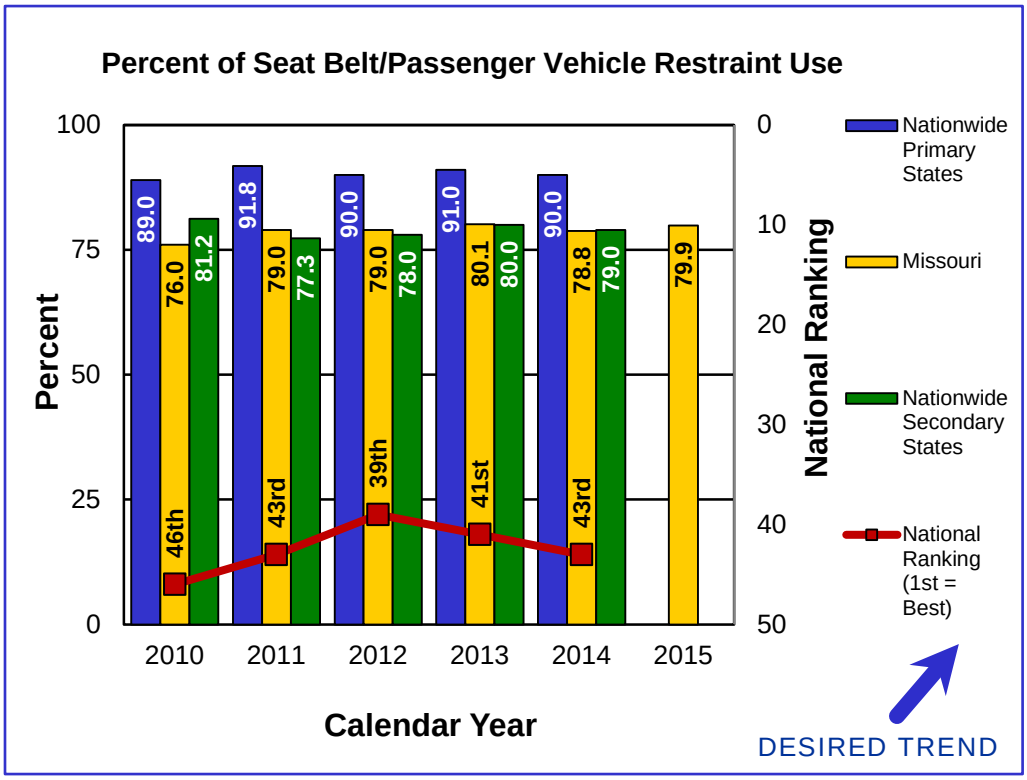
KEEP CUSTOMERS AND OURSELVES SAFE

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

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

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 and compares those annual totals to the number of vehicle miles traveled annually by commercial motor vehicles. MoDOT uses the information to target education, enforcement and improvement of safety.

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 a part of the Transportation Management System. The rate of fatal and serious-injury charts display the annual fatality and injury rates per 100 million vehicle miles traveled for commercial motor vehicles for these same crashes. Crash rate data is reported annually.

KEEP CUSTOMERS AND OURSELVES SAFE

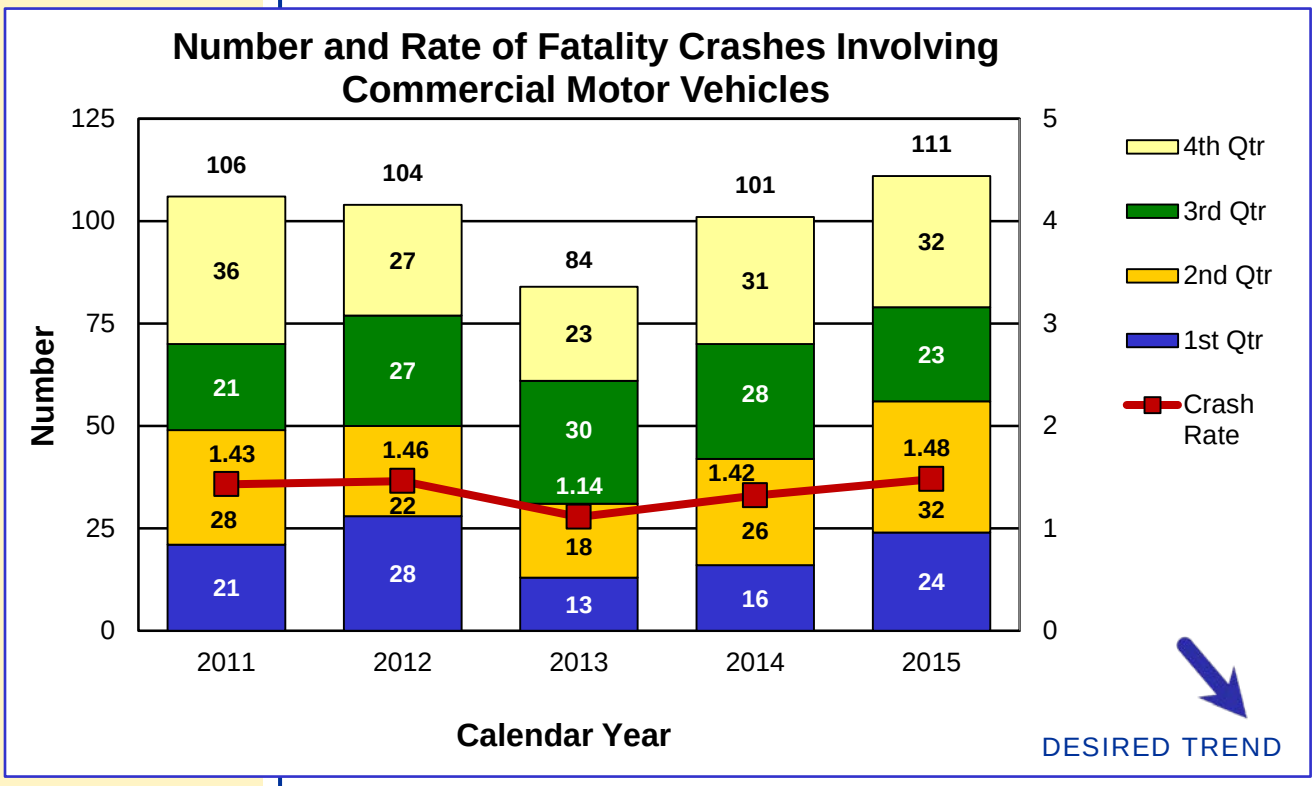
Number and rate of fatalities and serious injuries for commercial motor vehicle crashes – 1f

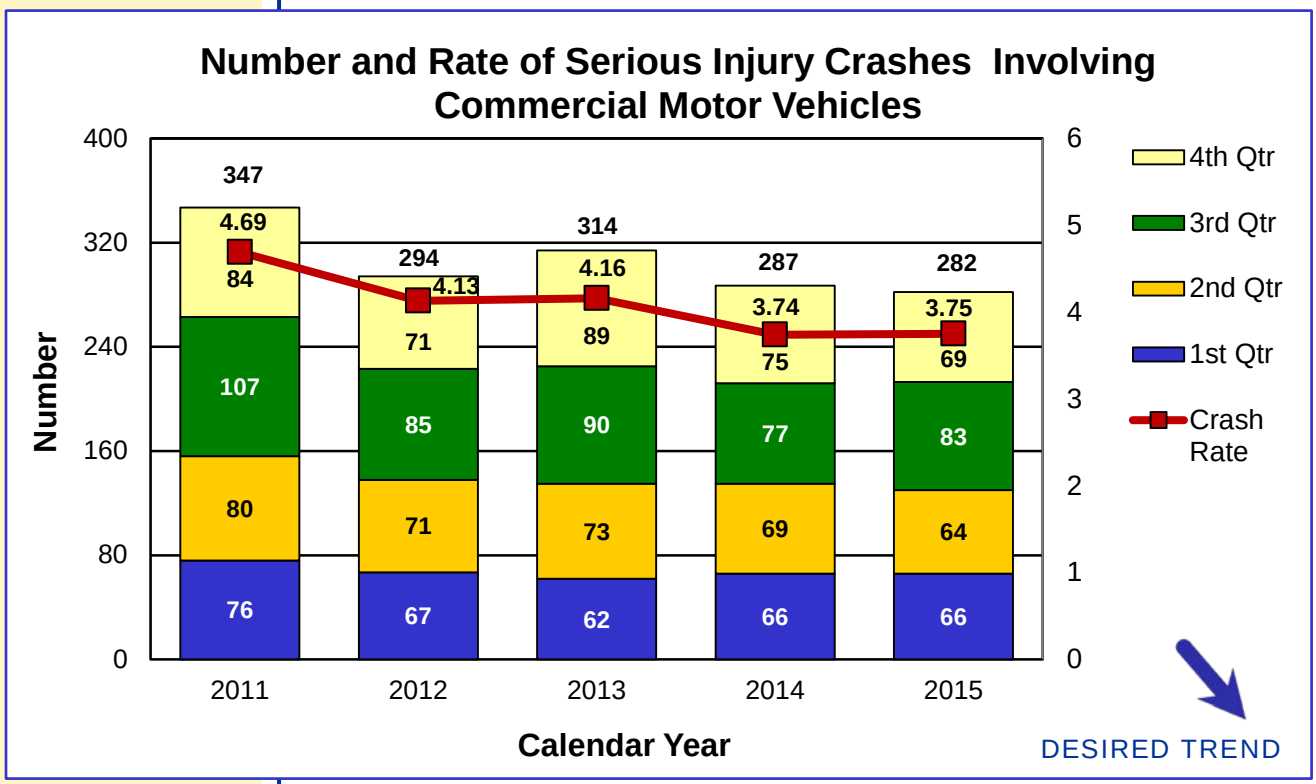
Commercial motor vehicles are the lifeblood of Missouri's economy. They transport the goods and materials that keep the nation moving. Partnering with the Missouri State Highway Patrol and St. Louis and Kansas City police departments, MoDOT does everything in its power to keep CMV drivers safe and their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

Between 2011 and 2015, fatal crashes involving a CMV increased by 4.7 percent, and the fatality crash rate increased from 1.43 to 1.48 per 100 million CMV vehicle miles traveled. In 2015 the 111 fatality crashes Missouri experienced is 10 more than 2014 or a 9.9 percent increase. This resulted in a 2015 crash rate of 1.48 as compared to the 1.42 rate for 2014.

Serious-injury crashes involving a CMV decreased by 18.7 percent and the serious-injury crash rate dropped from 4.69 to 3.75 per 100 million CMV vehicle miles traveled between 2011 and 2015. The 282 serious-injury crashes Missouri experienced in 2015 is five fewer than reported for 2014 or a 1.7 percent decrease. This resulted in a 2015 crash rate of 3.75 as compared to the 3.74 rate for 2014.

KEEP CUSTOMERS AND OURSELVES SAFE





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

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.

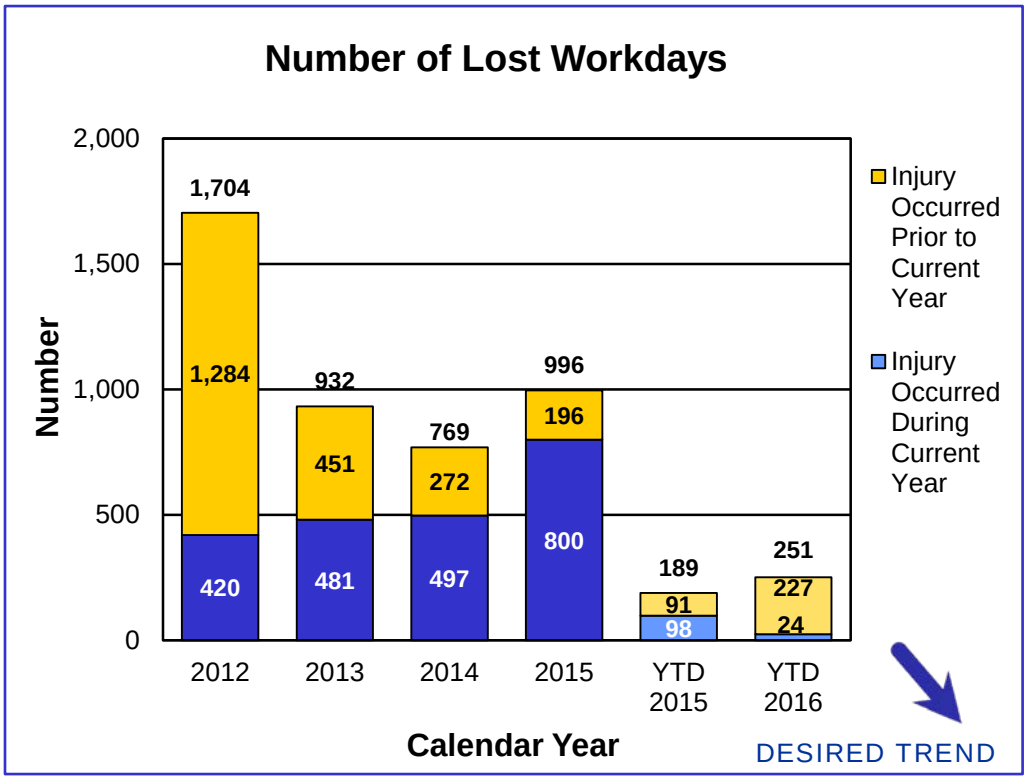
MEASUREMENT AND DATA COLLECTION:
The data for this measure is collected from Riskmaster, the department's risk management claims administration software.

KEEP CUSTOMERS AND OURSELVES SAFE

Number of lost workdays – 1g

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.

For the first quarter of 2016, the total number of lost workdays increased 33 percent from the same period in 2015. There were two incidents in which employees were lifting equipment or materials, accounting for 35 percent of the lost workdays. Another 26 percent of the lost workdays were attributable to one motor vehicle incident involving another party. One incident involving brush cutting activities accounted for 13 percent of the lost workdays.



RESULT DRIVER:
Eileen Rackers
State Traffic and Highway Safety Engineer

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.

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.

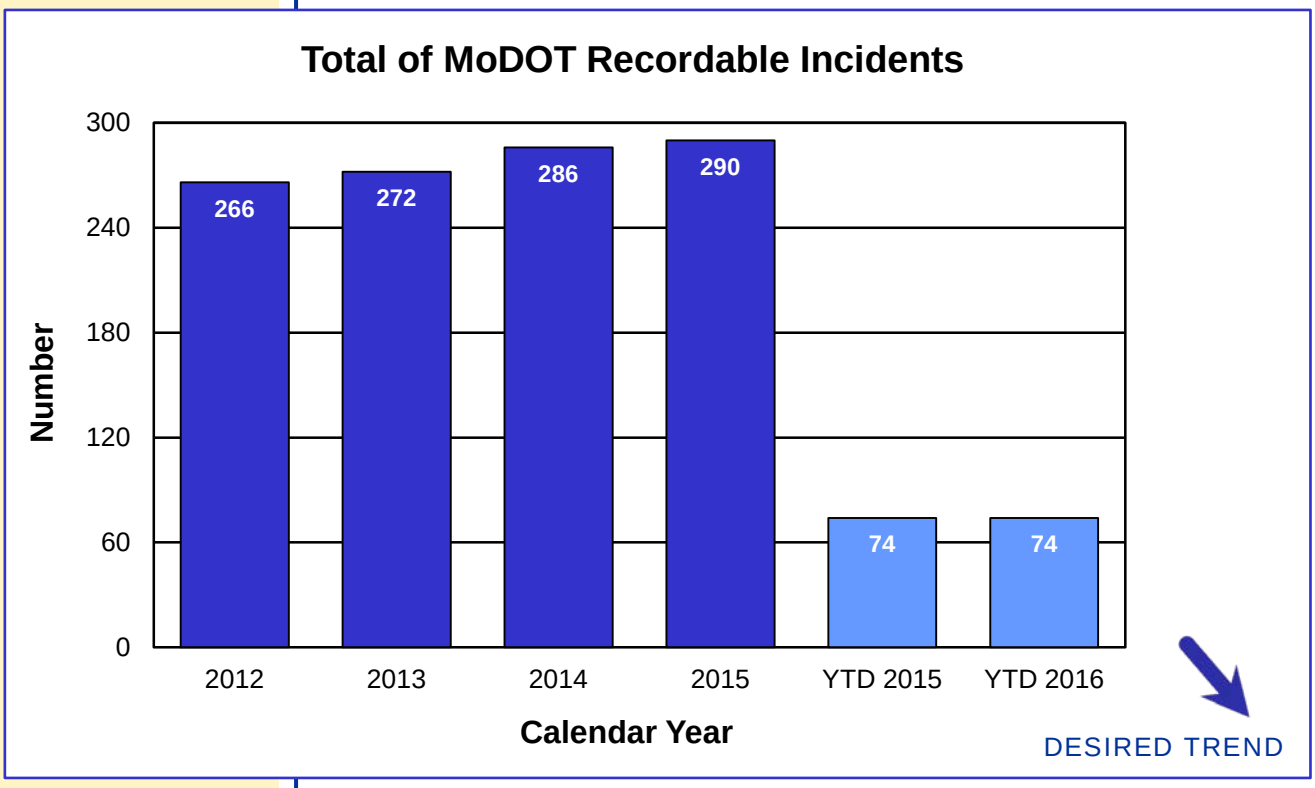
KEEP CUSTOMERS AND OURSELVES SAFE

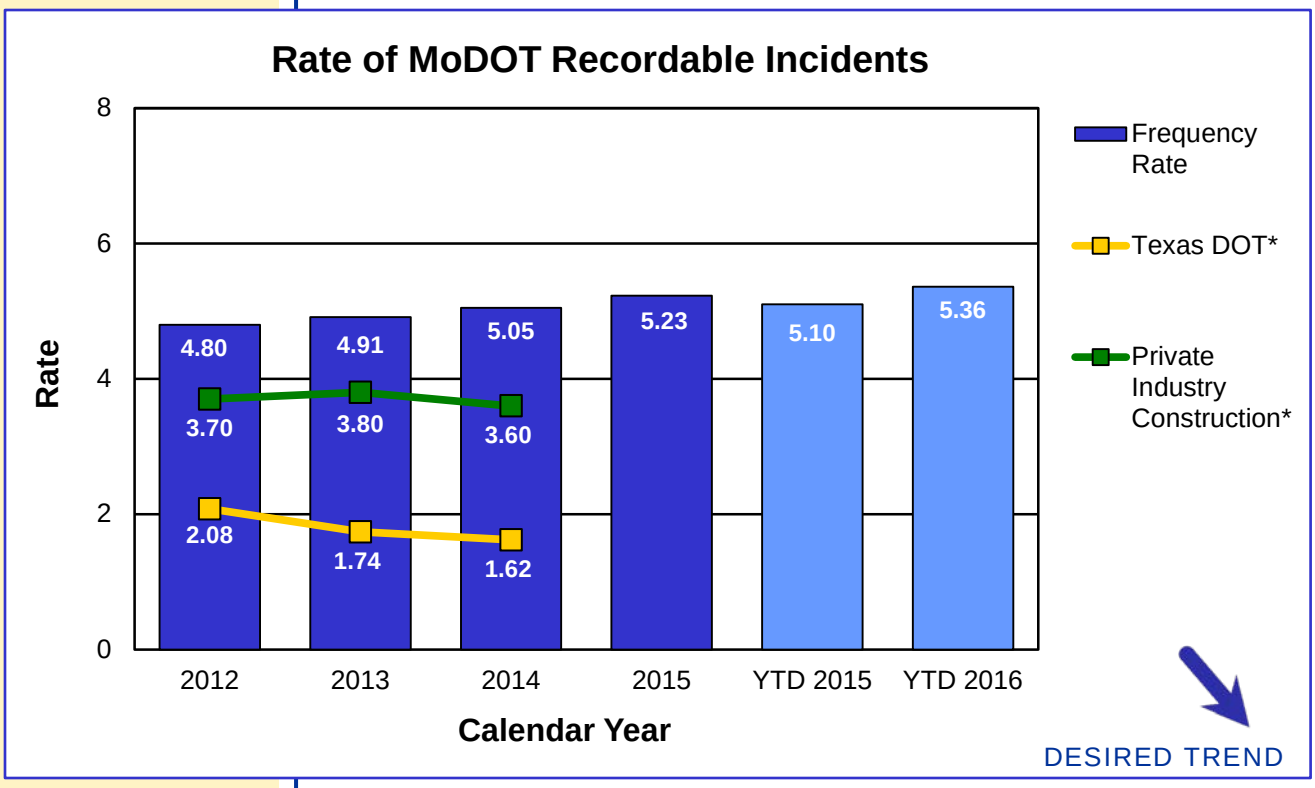
Total and rate of MoDOT recordable incidents – 1h

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 reminds all employees that safety is a personal responsibility.

The number of recordable incidents remained constant while the rate of recordable incidents increased for the first quarter of 2016 compared to the same period in 2015. Leading causes of incidents during this reporting period were: slips, trips and falls at 21 percent; strains or injuries at 19 percent; cuts/punctures at 17 percent and struck or injured by at 12 percent. When looking at the work activity the employee was doing at the time of the incident, 32 percent of these injuries were equipment related. Another 16 percent were related to bridge work. Snow and ice removal and mowing/brush cutting had 8 percent each.

KEEP CUSTOMERS AND OURSELVES SAFE





***OSHA private industry and Texas DOT data is not yet available for 2015.**

RESULT DRIVER:
Eileen Rackers
State Traffic and Highway Safety Engineer

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.

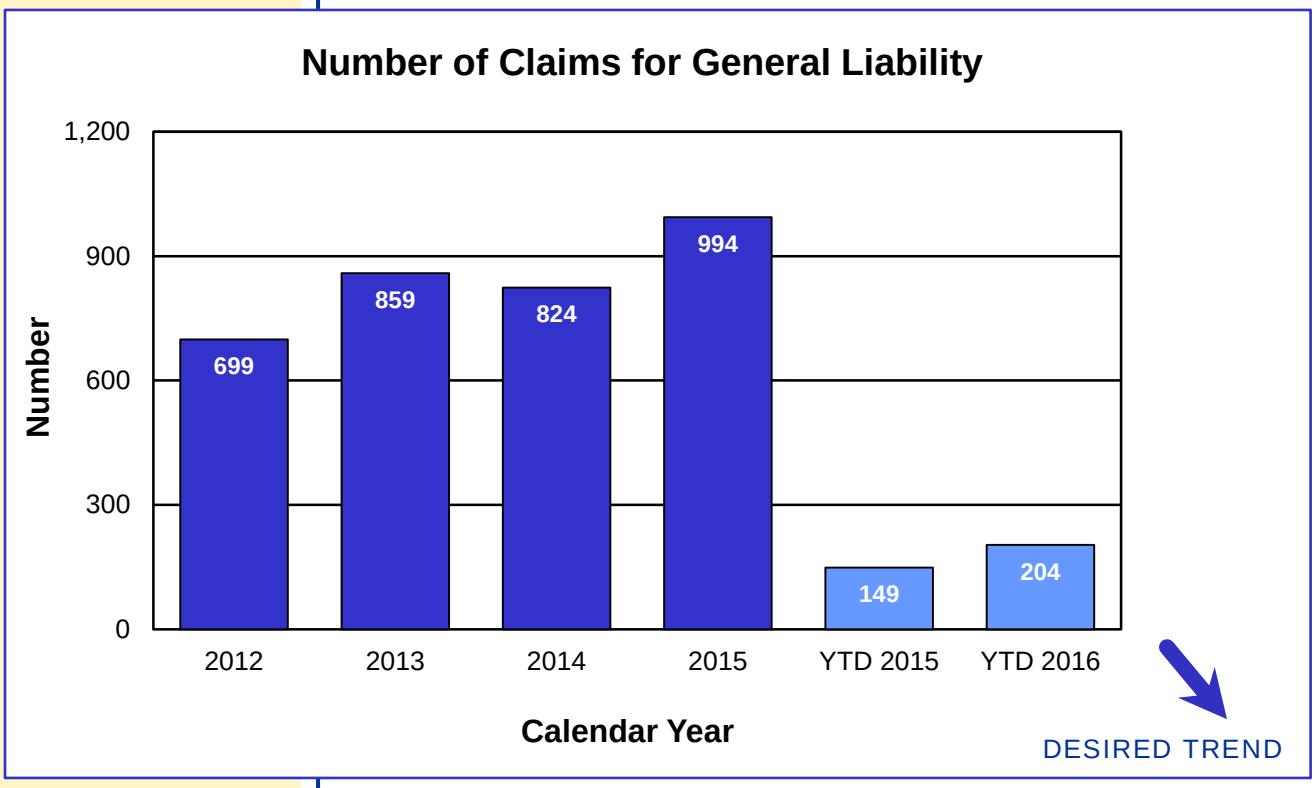
KEEP CUSTOMERS AND OURSELVES SAFE

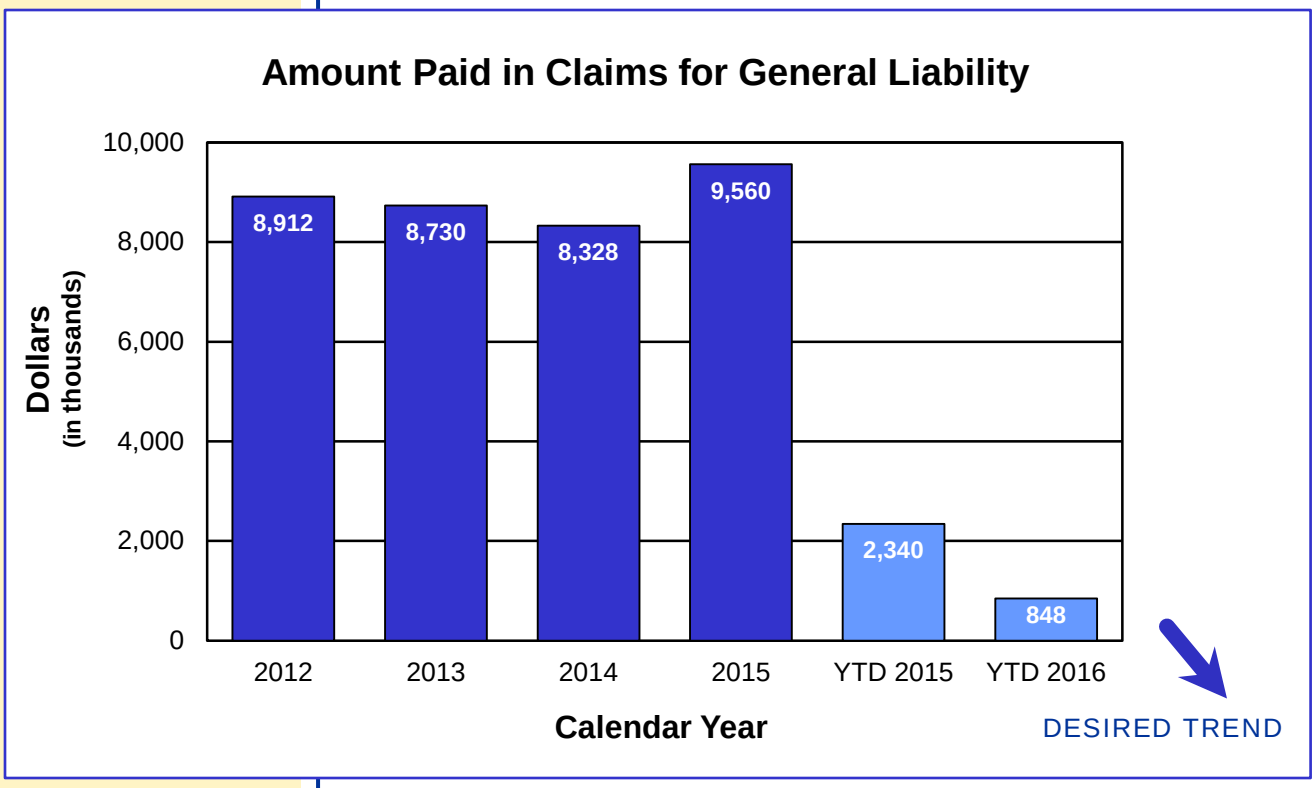
General liability claims and costs – 1i

Keeping ourselves and the public safe is MoDOT's top priority. Controlling damage to vehicles and reducing personal injury in work zones, on right of way and other areas under department control helps MoDOT accomplish this goal. Compared to the first quarter 2015, there was a 37 percent increase in the number of claims. The majority of claims for 2016 are attributed to pavement defects. During the same timeframe, there was a 64 percent decrease in the amount paid. The decrease is attributed to the lack of multiple large claims being settled this quarter. This quarter, payment was made on 116 claims against the department totaling $847,595.23.

Two claims accounted for 65 percent of this quarter's payments. The department settled a claim occurring in 2010 based on alleged faulty design and poor maintenance that created a dangerous condition. The claimant hit black ice and lost control of her vehicle resulting in permanent severe injuries. This claim was settled for $360,000. Another claim occurring in 2015 was settled where a claimant struck a previously damaged guardrail resulting in a fatality. This claim was settled for $190,000 because the guardrail was not repaired in a reasonable amount of time.

KEEP CUSTOMERS AND OURSELVES SAFE





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 33,873 miles of highway and 10,394 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.

KEEP ROADS AND BRIDGES IN GOOD CONDITION

Percent of major highways in good condition – 2a

RESULT DRIVER:
Dennis Heckman,
State Bridge Engineer

MEASUREMENT DRIVER:
Brian Reagan
Transportation System Analysis Engineer

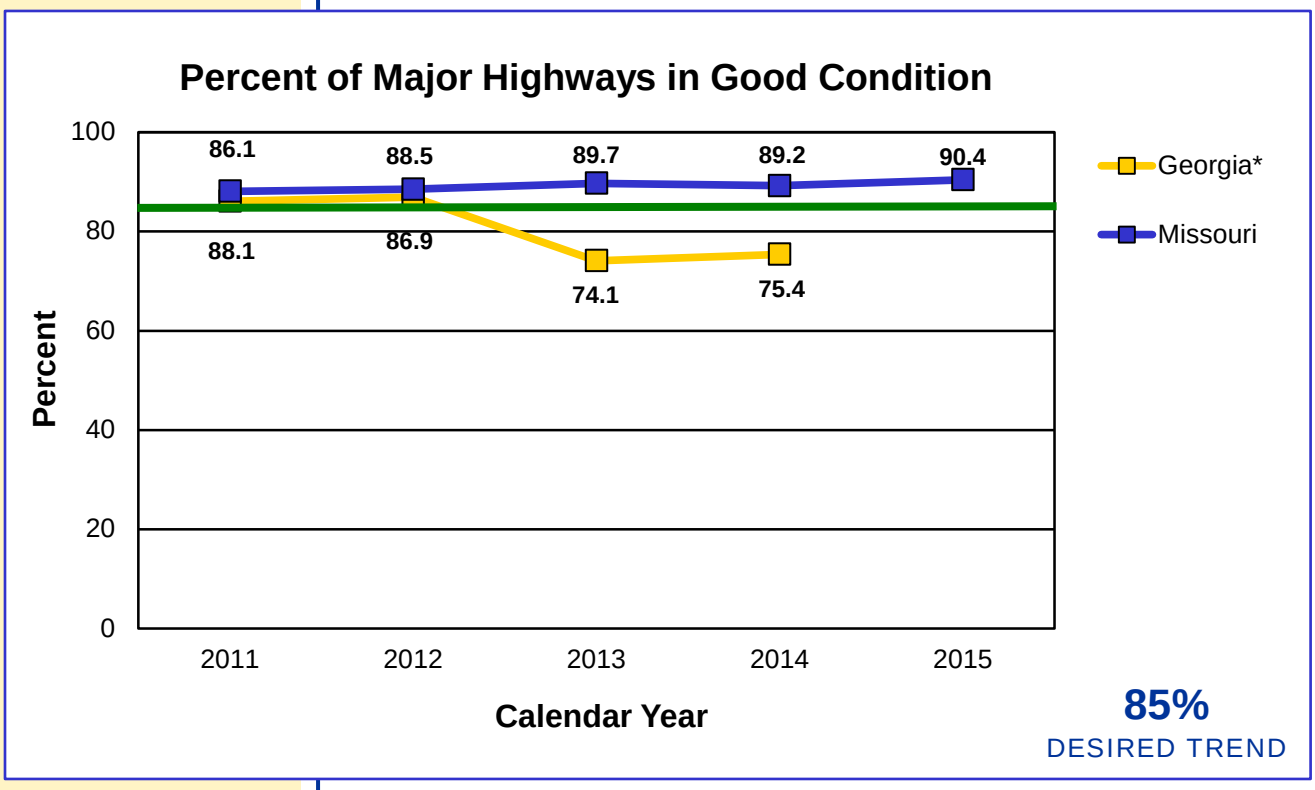
PURPOSE OF THE MEASURE:
This measure tracks the condition of Missouri's major highways.

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 5,494 total miles on the major highway system, and the condition of these roadways is determined using a variety of measures.

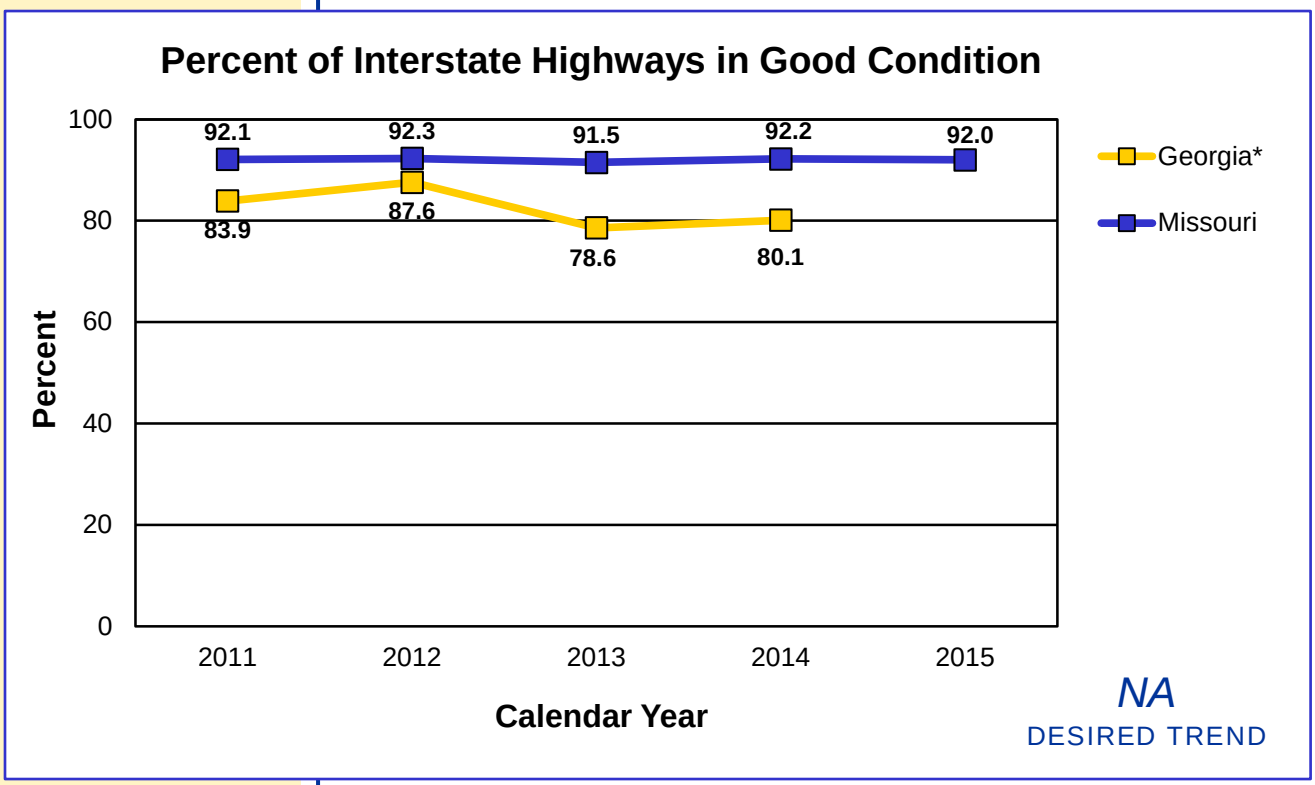
While it can be difficult to compare one state's roadways to another's, MoDOT uses Georgia as a comparable system because it has a similar amount of major highways and also bases its evaluation on the smoothness of the roadways. Missouri measures the condition of its roadways using smoothness as one factor, but also considers physical distresses such as cracking.

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 90 percent of major highways are rated in good condition.

KEEP ROADS AND BRIDGES IN GOOD CONDITION



85%
DESIRED TREND



NA
DESIRED TREND

***Source data for Georgia comes from FHWA highway statistics. Full data sets are collected every two years. The data set for 2014 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 28,379 miles of minor highways in Missouri. The condition of these routes is determined using a variety of measures.

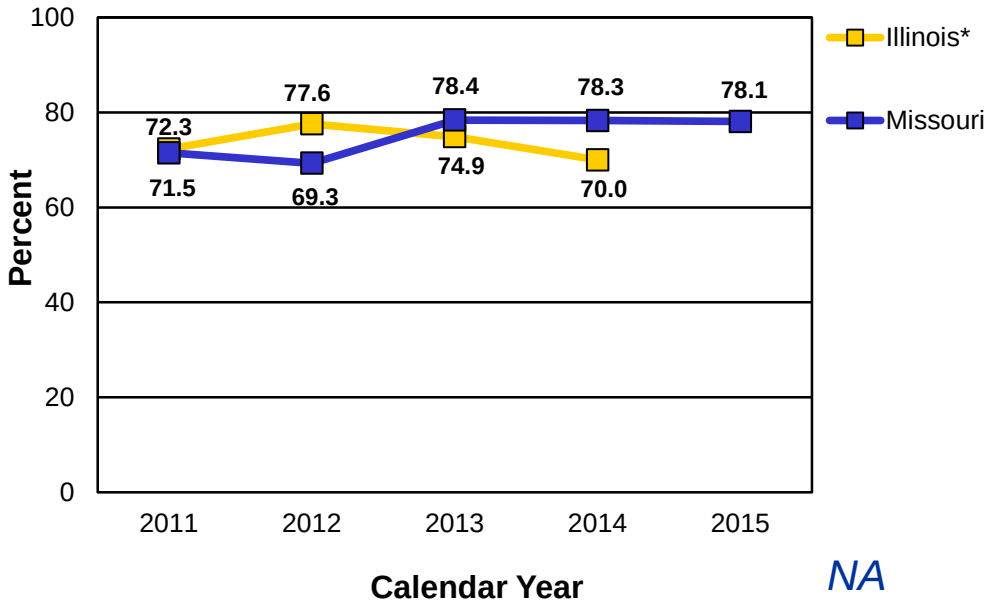
While it can be difficult to compare one state's roadways to another's, MoDOT uses Illinois as a comparable system because it has a similar number of minor highways. Missouri measures the condition of its roadways using smoothness as one factor, but also considers physical distresses such as cracking.

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 declining 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 highways are in good condition, which is slightly below 2014.



NA
DESIRED TREND

***Source data for Illinois comes from FHWA highway statistics. Data for 2015 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

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 10,394 bridges on state highways, 206 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.

KEEP ROADS AND BRIDGES IN GOOD CONDITION

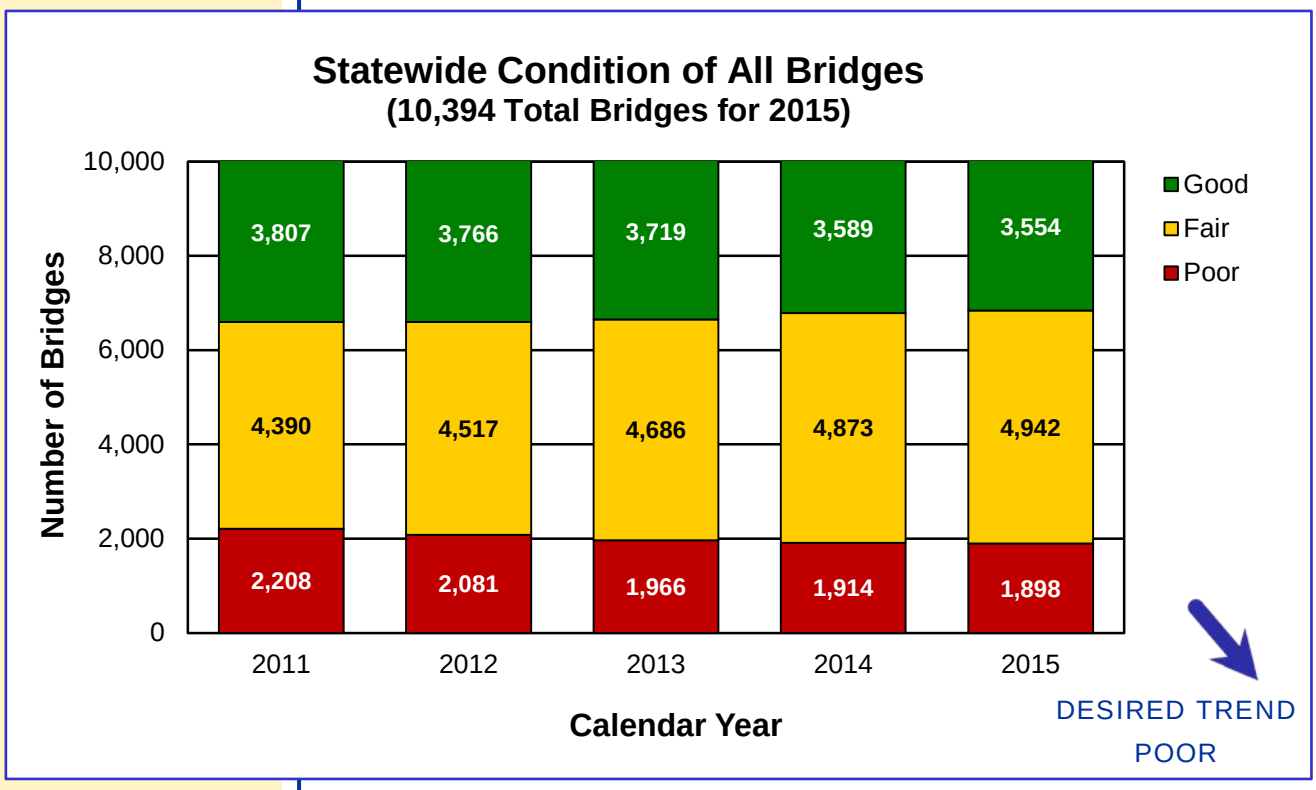
Condition of state bridges – 2c

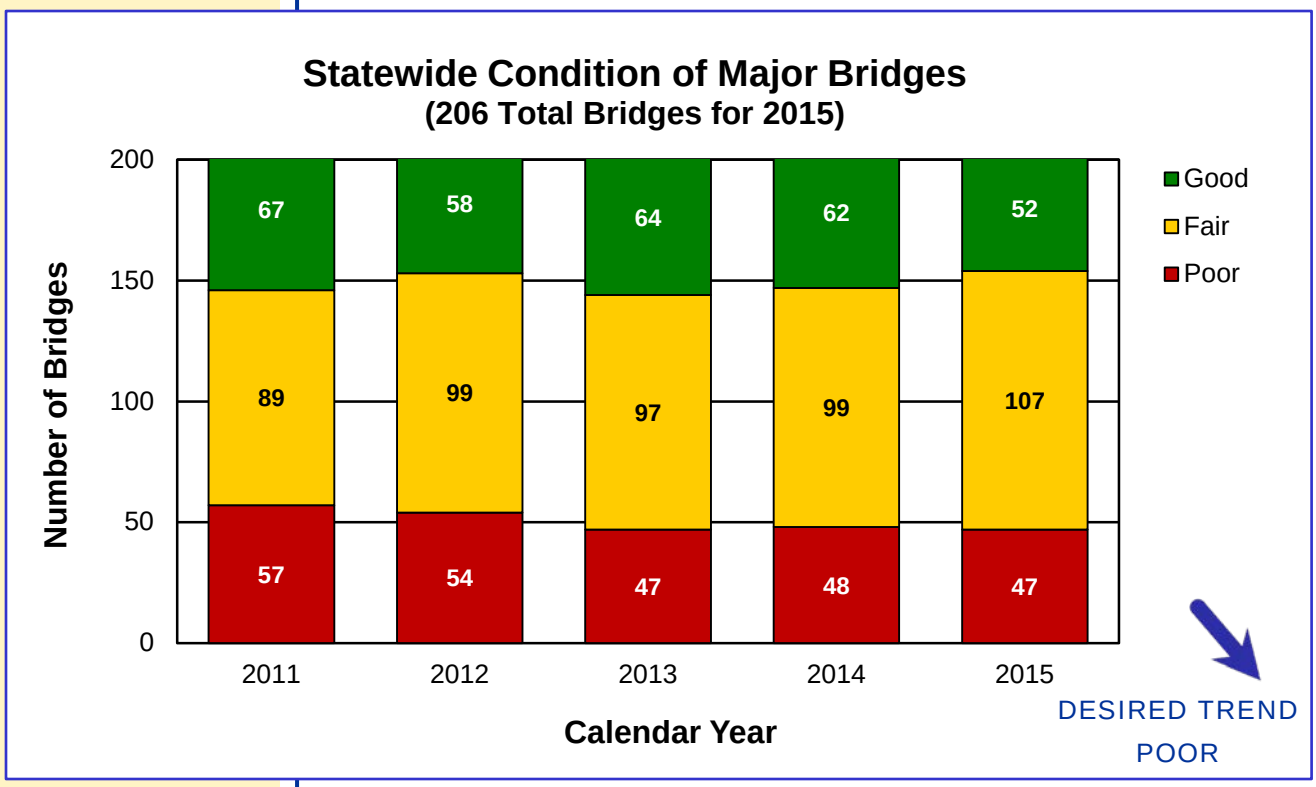
The public has indicated the condition of Missouri's existing roadway system should be one of the state's highest priorities. Currently, 1,898 (47 major) structures are in poor condition, 4,942 (107 major) structures are in fair condition and 3,554 (52 major) structures are in good condition.

Statewide, the number of structures in poor condition has steadily decreased over the last five years, but the rate of decline is slowing down. The number of structures in good condition peaked in 2011 and has been declining since. The gradual decrease in the number of poor condition structures is attributable to a significant focus in the STIP on taking care of the worst bridges with the limited funds available. The decline in good bridges demonstrates the fact that the construction program has slowed down with the number of bridges being taken care of within a year being fairly close to the number that are becoming poor condition. This is shown by comparing the drop in poor condition bridges of 310 to the drop in good condition bridges of 253 over the five-year period. The number in fair condition continues to significantly increase which is reflective of MoDOT's aging bridge population with many structures at the point where they need minor maintenance or rehabilitation.

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. However, 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 expensive with rehabilitations costing $10 to $20 million and replacements ranging from $20 million to $200 million.

KEEP ROADS AND BRIDGES IN GOOD CONDITION





RESULT DRIVER:
Dennis Heckman,
State Bridge Engineer

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.

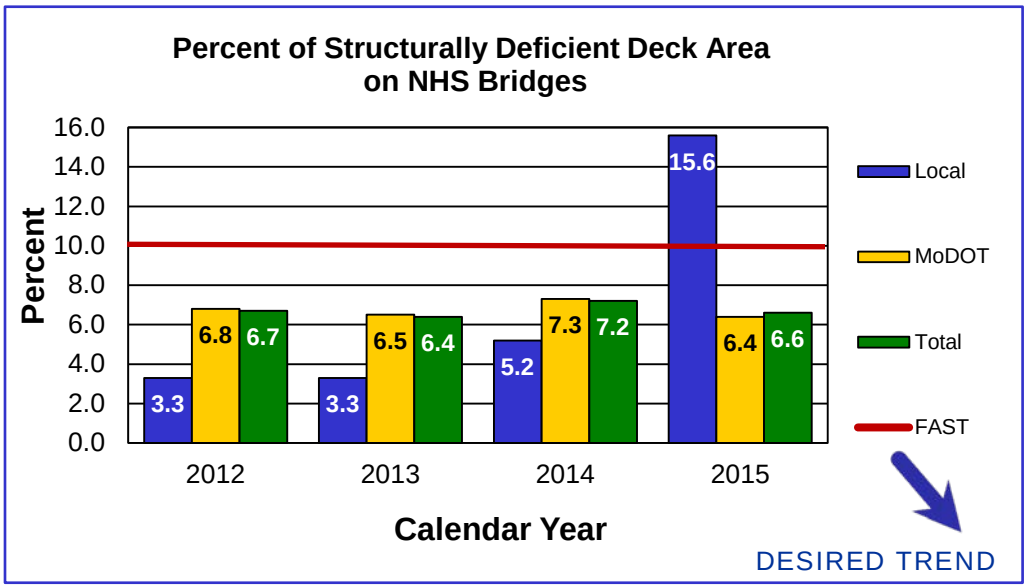
MEASUREMENT AND DATA COLLECTION:
The NHS is defined by federal law and consists of all roadways functionally classified as principal arterials as well as some routes that serve as major connections to multimodal freight-type facilities and some locally owned roadways. Historically, structurally deficient consists of bridges that are in bad condition or have insufficient load capacity when compared to modern design standards. The Fixing America's Surface Transportation Act, requires states to track the structurally deficient deck area. FAST has a penalty clause that kicks in if the percentage of structurally deficient deck area within a state exceeds 10 percent.

KEEP ROADS AND BRIDGES IN GOOD CONDITION

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

The public has indicated keeping Missouri's existing roads and bridges in good condition should be one of the state's highest priorities. The FAST Act established a 10 percent penalty threshold for states. When the threshold is exceeded, the state is required to focus money on bridges until they were back under 10 percent. The local system has 82 NHS structures (three SD) and the MoDOT system has 3,562 NHS structures (138 SD). Missouri currently falls below the penalty threshold with the total at 6.6 percent. This is attributable to the continued efforts at focusing on major bridges when funding is available as well as the increase focus on dealing with the critical condition bridges within the STIP.

Statewide, this measure also is heavily influenced by major bridges because one structure has the ability to impact this measure +/-0.5 percent. When looking at the local system, a large bridge can have a very dramatic impact because of the small number of local structures that are part of the NHS. This is evident in the dramatic change on the local system from 2014 to 2015, which was the result of one newly deficient large structure. The changes on the state system resulted from 48 structures with a large percentage of this change coming from nine structures. The roadways that are included on the NHS are still seeing some minor adjustments, but these changes should have insignificant impacts on the overall numbers.



PROVIDE OUTSTANDING CUSTOMER SERVICE

Dan Niec, District Engineer

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

MEASUREMENT DRIVER:
Tammy Wallace
Senior Communications Specialist

PURPOSE OF THE MEASURE:
This measure tracks MoDOT's progress toward the mission of delighting its customers.

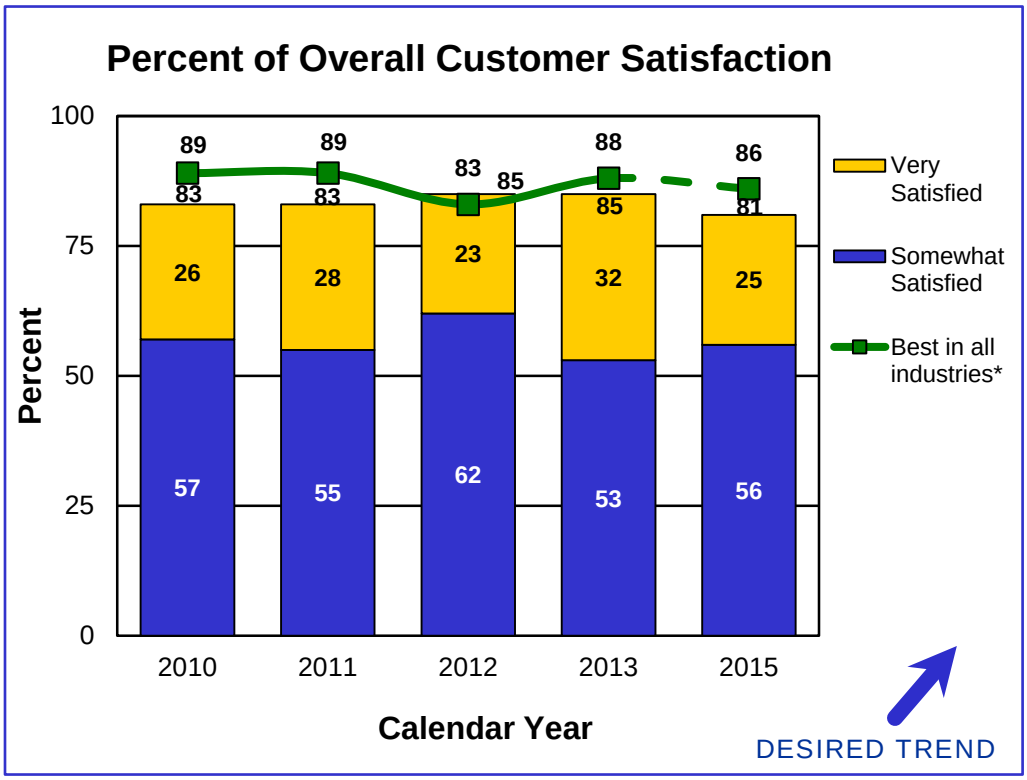
MEASUREMENT AND DATA COLLECTION:
Data is collected through a telephone survey of approximately 3,500 randomly selected Missourians. Benchmarking data is provided by the American Customer Service Index.

PROVIDE OUTSTANDING CUSTOMER SERVICE

Percent of overall customer satisfaction – 3a

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.



***2010-2011 – Lincoln Mercury, 2012 – Apple, Inc., 2013 – Mercedes Benz, 2015 – Chick-fil-A**

RESULT DRIVER:
Dan Niec
District Engineer

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.

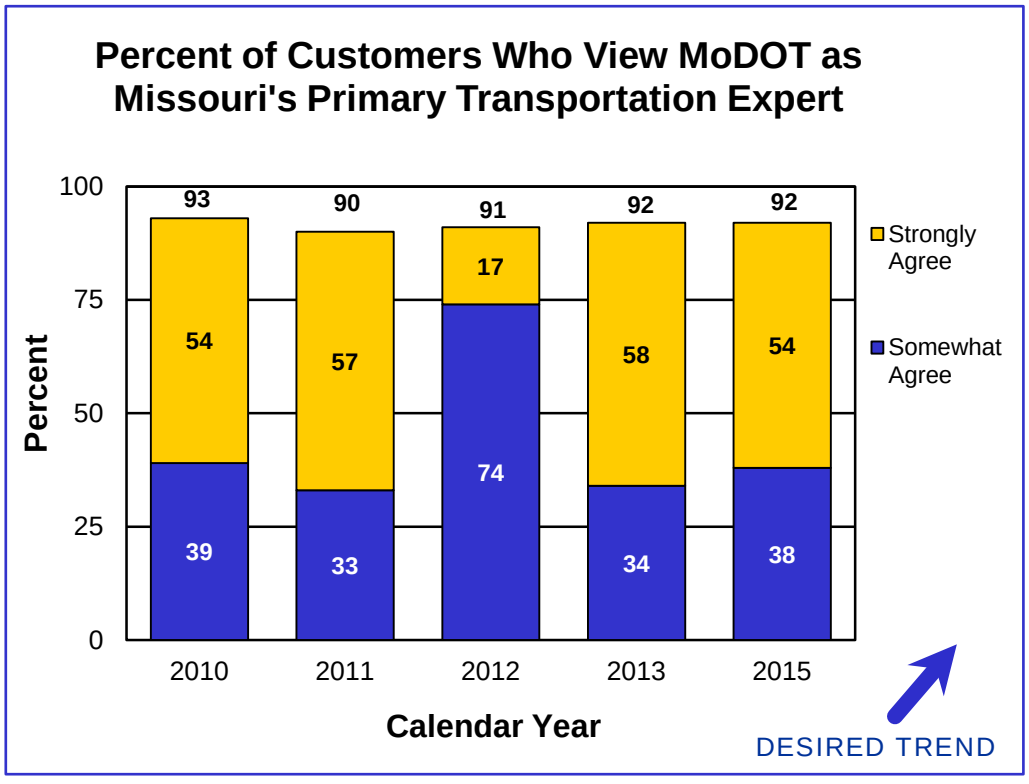
PROVIDE OUTSTANDING CUSTOMER SERVICE

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 long-term insufficient transportation funding issues mean these relationships will likely face further challenges.



RESULT DRIVER:
Dan Niec
District Engineer

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.

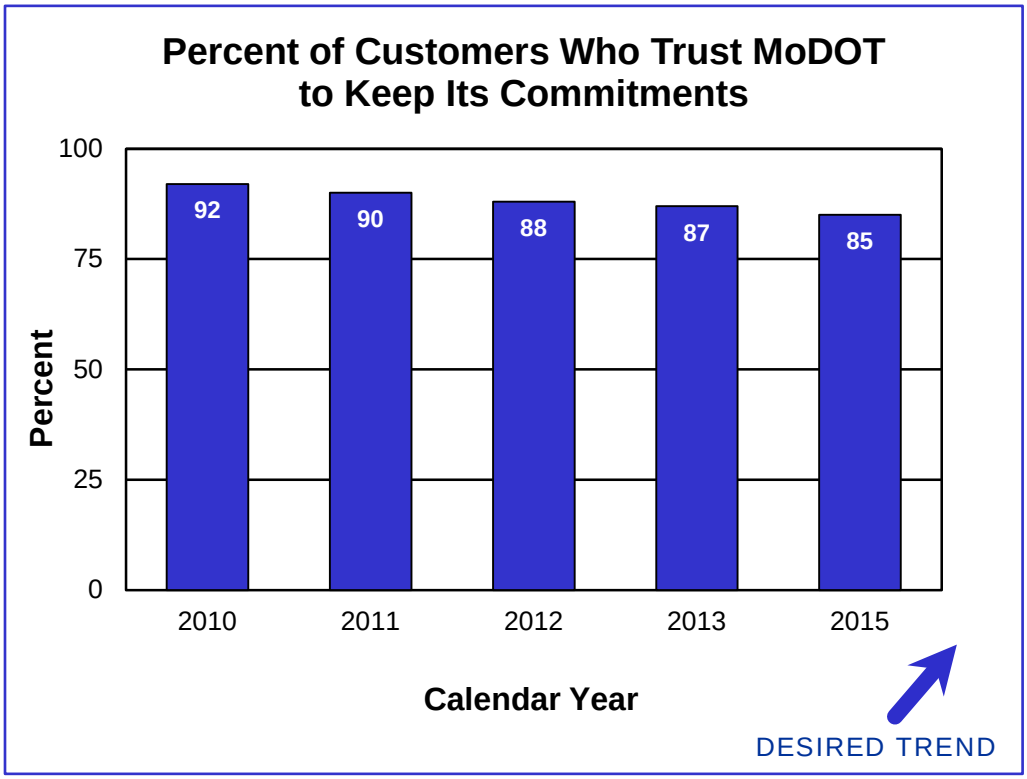
MEASUREMENT AND DATA COLLECTION:
Data is collected through a telephone survey of approximately 3,500 randomly selected Missourians.

PROVIDE OUTSTANDING CUSTOMER SERVICE

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 long-term insufficient funding mean to Missouri's system.

The 2015 survey results 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

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.

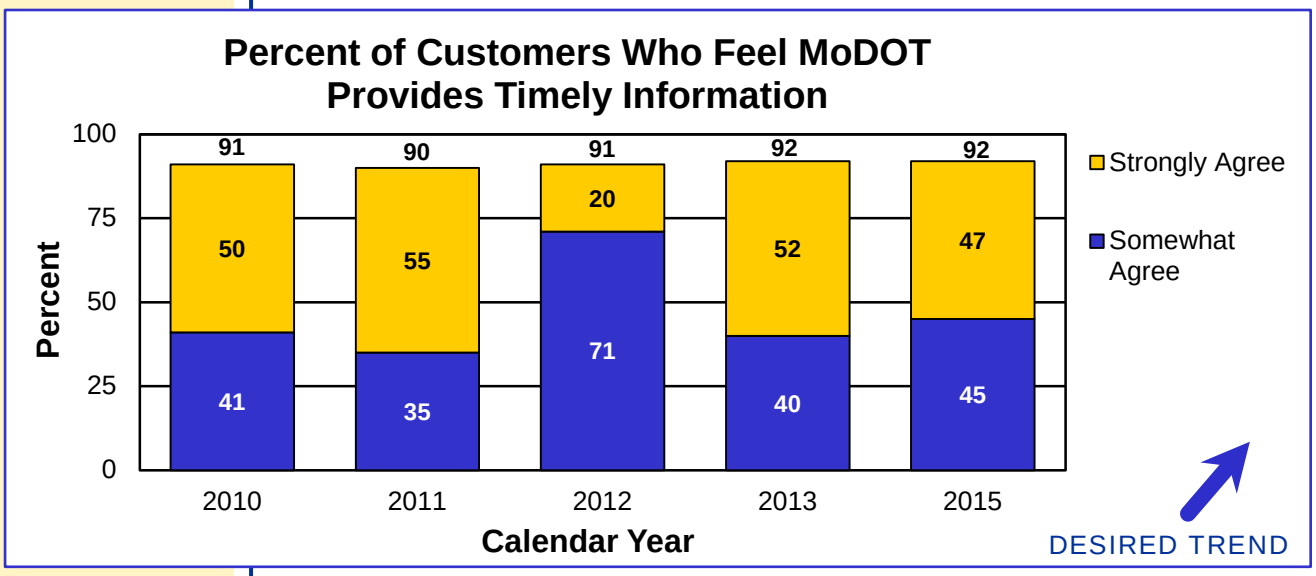
MEASUREMENT AND DATA COLLECTION:
Data is collected through a telephone survey of approximately 3,500 randomly selected Missourians.

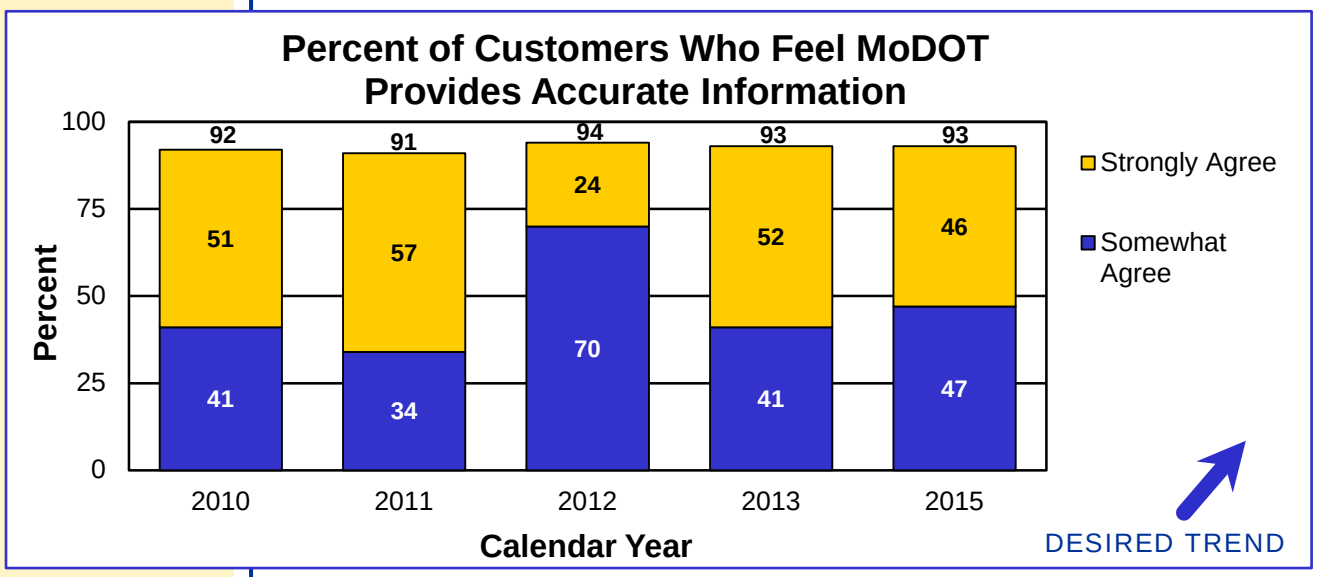
PROVIDE OUTSTANDING CUSTOMER SERVICE

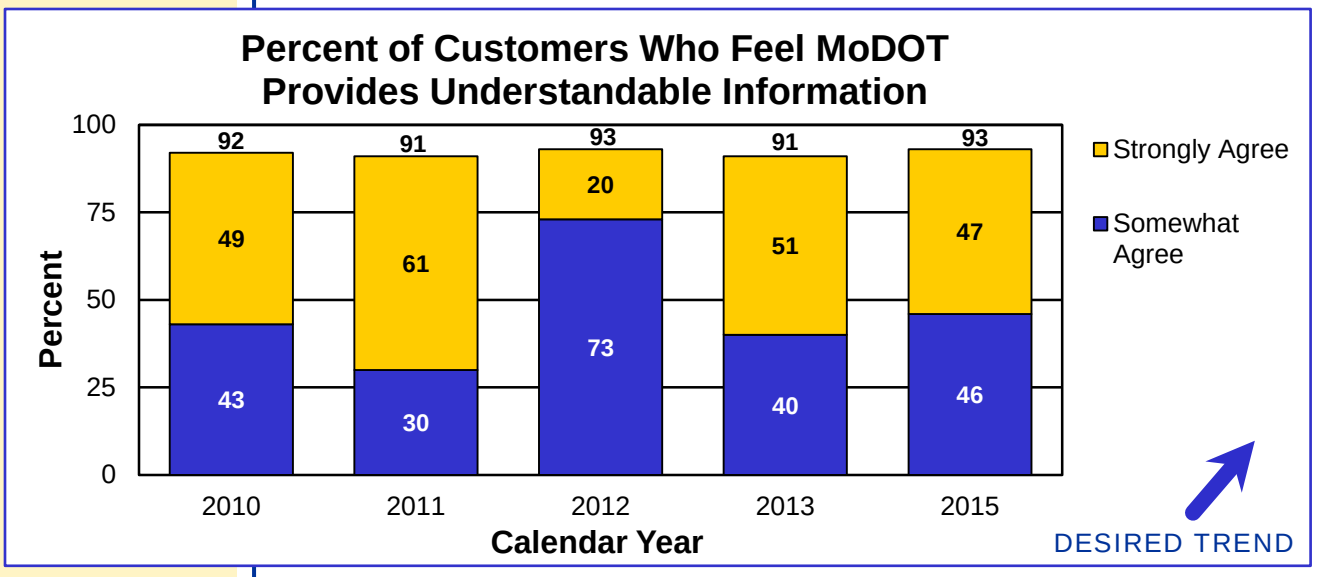
Percent of customers who feel MoDOT provides timely, accurate and understandable information – 3d

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.

PROVIDE OUTSTANDING CUSTOMER SERVICE







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.

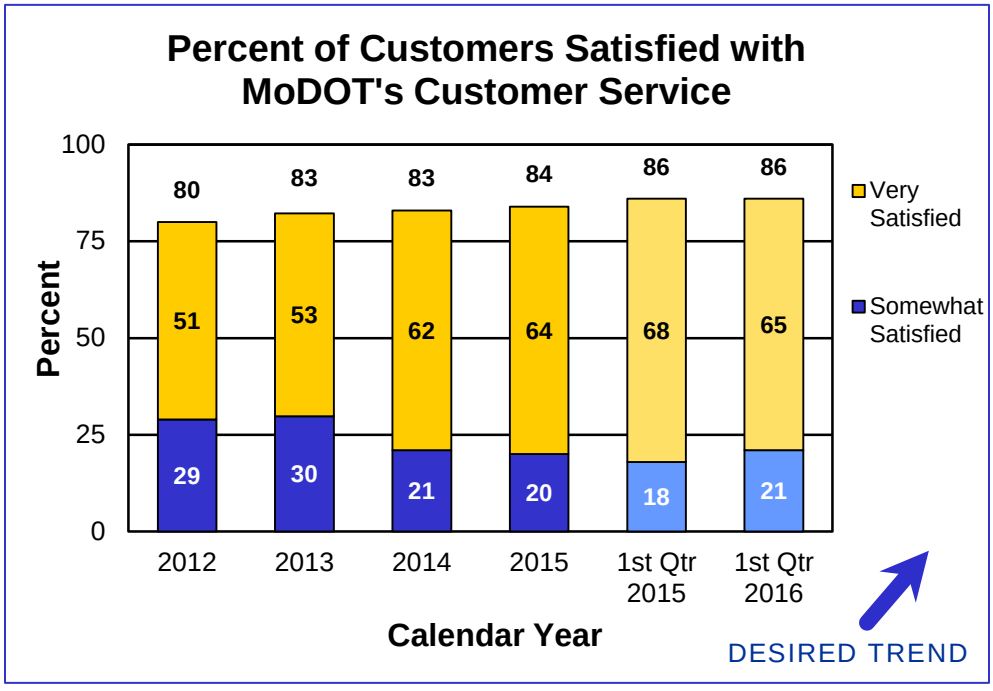
MEASUREMENT AND DATA COLLECTION:
Data for this measure comes from a monthly telephone and e-mail survey of 200 customers who contacted a MoDOT customer service center in the previous month. The customer contacts come from call reports logged into the customer service database. Survey participants are 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 the overall results.

PROVIDE OUTSTANDING CUSTOMER SERVICE

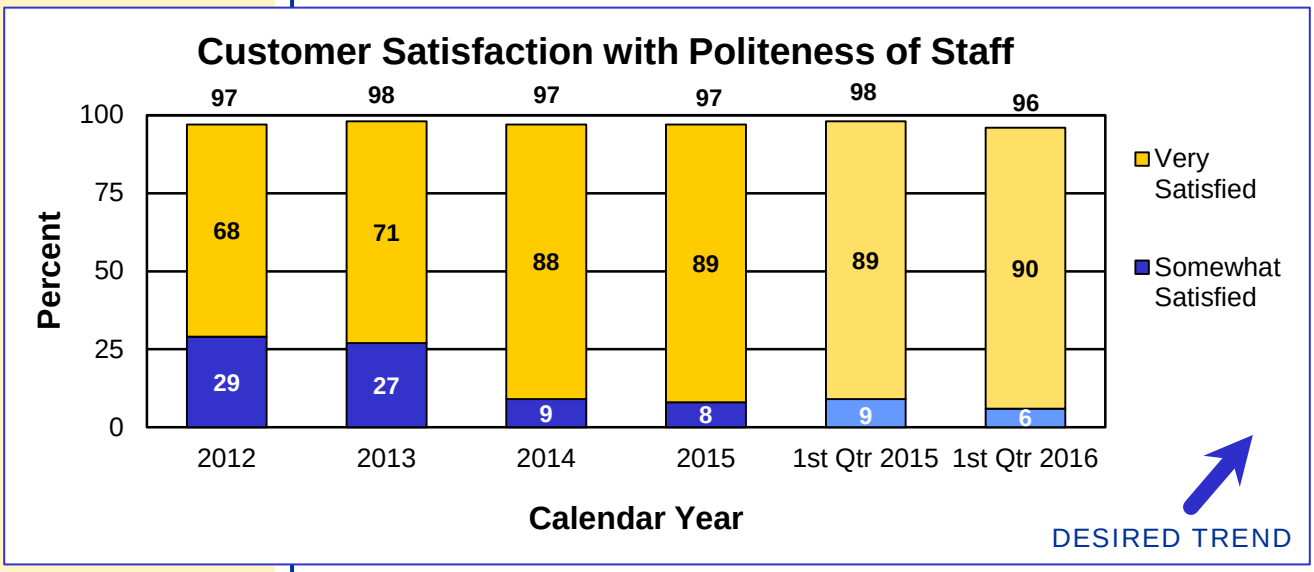
Percent of customers satisfied with MoDOT's customer service – 3e

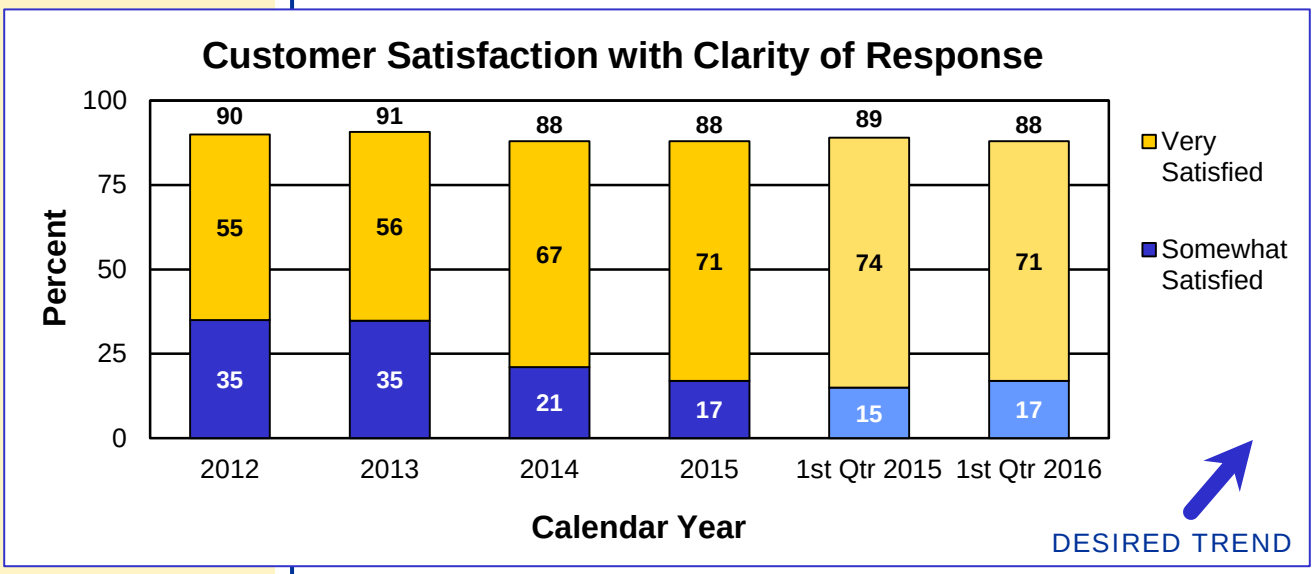
MoDOT actively seeks feedback from the customers it serves. In 2012, MoDOT created a statewide call system and enhanced its online call report system that enables customer service representatives to work across seven district boundaries in a one-team approach. Since implementation, customer perceptions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

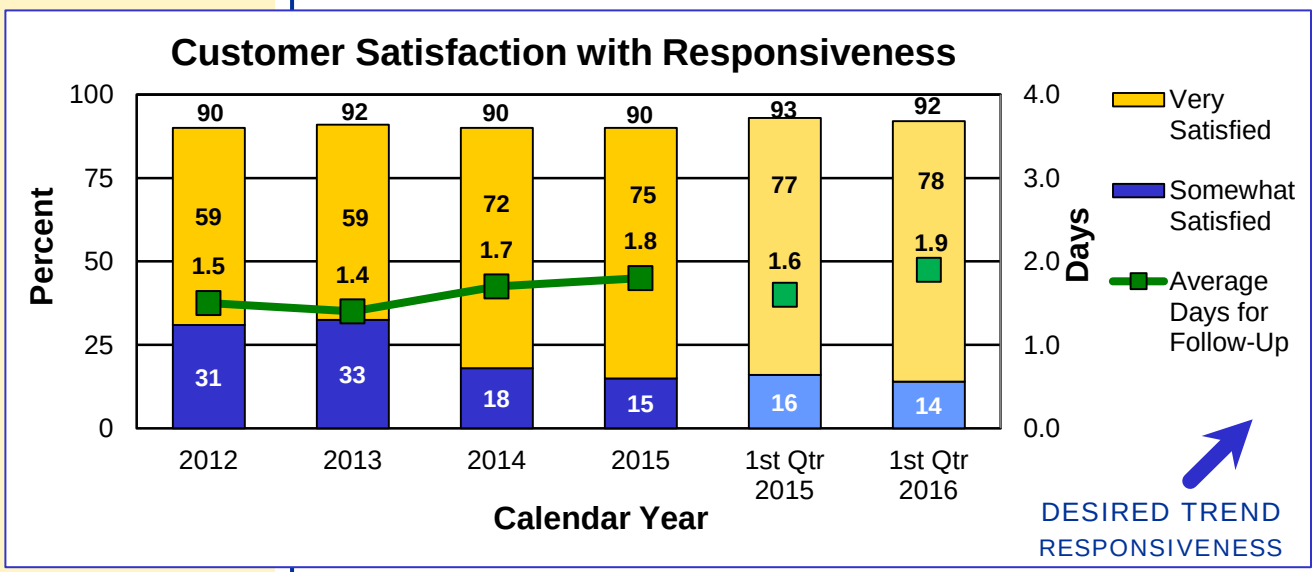
When comparing the first quarter of 2016 with the first quarter of 2015, the numbers are pretty similar but down slightly in almost every category except overall satisfaction. Customers who were satisfied with politeness of responses decreased slightly from 98 percent to 96 percent. Clarity of responses decreased from 89 percent to 88 percent. Satisfaction with responsiveness decreased slightly from 93 percent to 92 percent, but still higher than the 2015 average. The average time to complete customer requests during this quarter decreased from 2.0 days to 1.9 days.



PROVIDE OUTSTANDING CUSTOMER SERVICE







RESULT DRIVER:
Dan Niec
District Engineer

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.

PROVIDE OUTSTANDING CUSTOMER SERVICE

Customer communication engagement – 3f

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 third quarters of fiscal years 2015 and 2016, there was a growth of 62,958 followers on Facebook statewide and 25,008 additional followers to Twitter statewide. During the third quarter, the most popular post was a road-alert message noting a closure of eastbound I-44 near Lebanon in January. The post reached 185,048 people with 3,591 separate engagements to the post including reactions, comments and shares. The second-most popular post was a humorous seat belt safety image that had a reach of 116,282 and 3,035 separate engagements to the post including reactions, comments and shares.

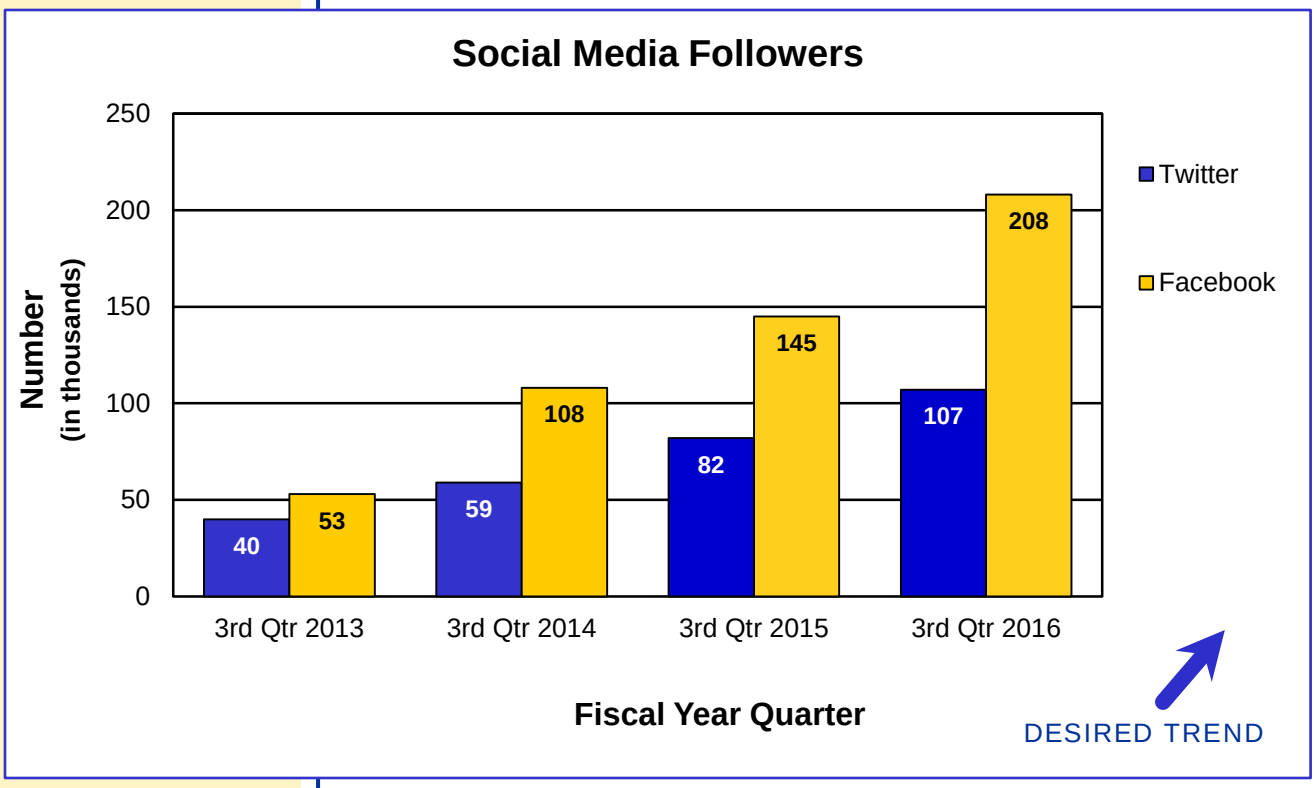
MoDOT's websites had 1.9 million sessions in third quarter 2016. In the last quarter, the top five pages on MoDOT's website were:

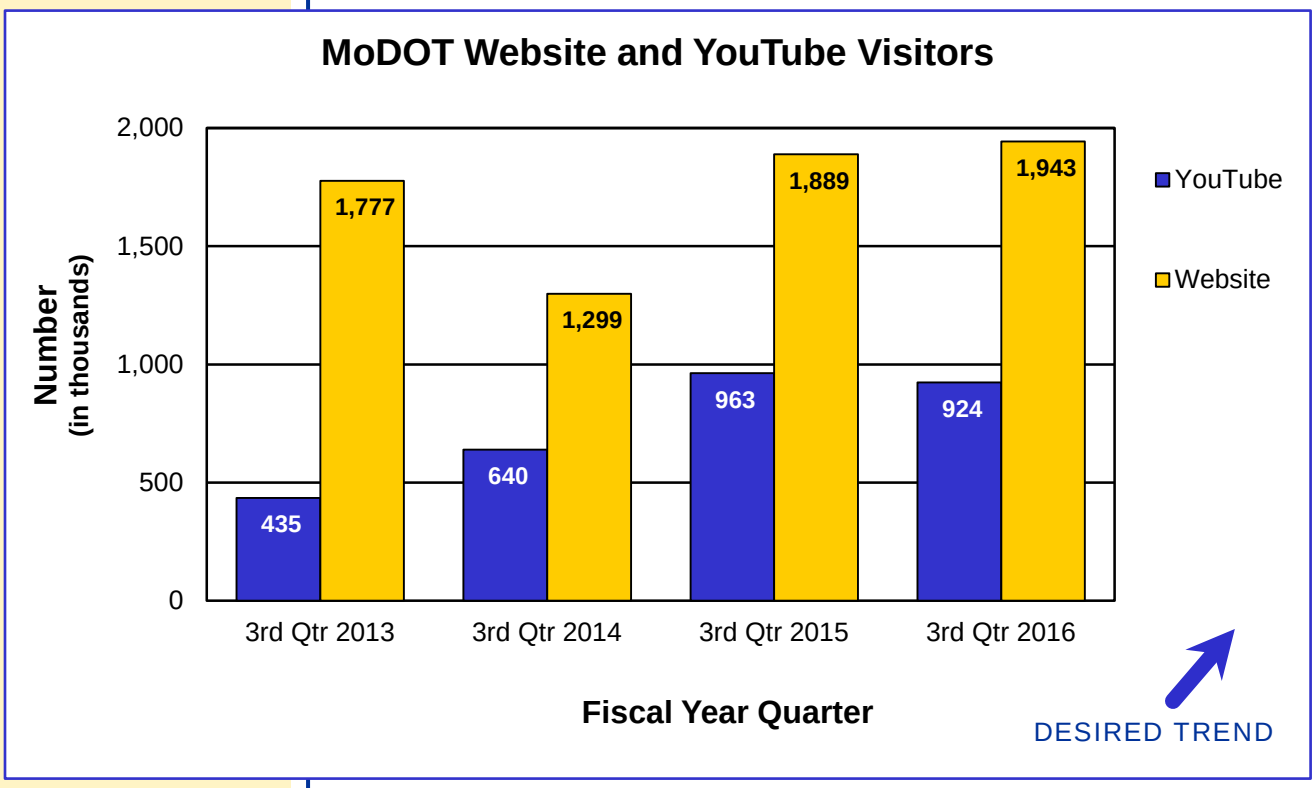
- Traveler Information Map
- MoDOT Homepage
- KC Scout Homepage
- Gateway Guide Homepage
- Job Listings

MoDOT videos on YouTube were viewed 924,436 times in the third quarter of 2016. The top five videos viewed in the last quarter were:

- Tow Plow Action Missouri
- MoDOT Tow Plow in Action
- Snow Shoveling Secrets
- St. Louis Boone Bridge
- MoDOT Traveler Information Map

PROVIDE OUTSTANDING CUSTOMER SERVICE





RESULT DRIVER:
Dan Niec
District Engineer

MEASUREMENT DRIVER:
Nicole Hood
Assistant State Design Engineer

PURPOSE OF THE MEASURE:
This measure provides information regarding the public's perception of MoDOT's performance in providing the right transportation solutions.

MEASUREMENT AND DATA COLLECTION:
Data for this measure is collected through an annual survey sent to users of projects completed and opened to traffic within the previous year. The districts identify 21 projects – three per district – in three categories: large, medium and small. Large projects are defined as those involving a major route or one that is funded through major project dollars. Medium projects are of district-wide importance. Small projects have only local significance. A sample of residents is drawn from zip code areas adjoining the recently completed project. The samples include 600 addresses per project area.

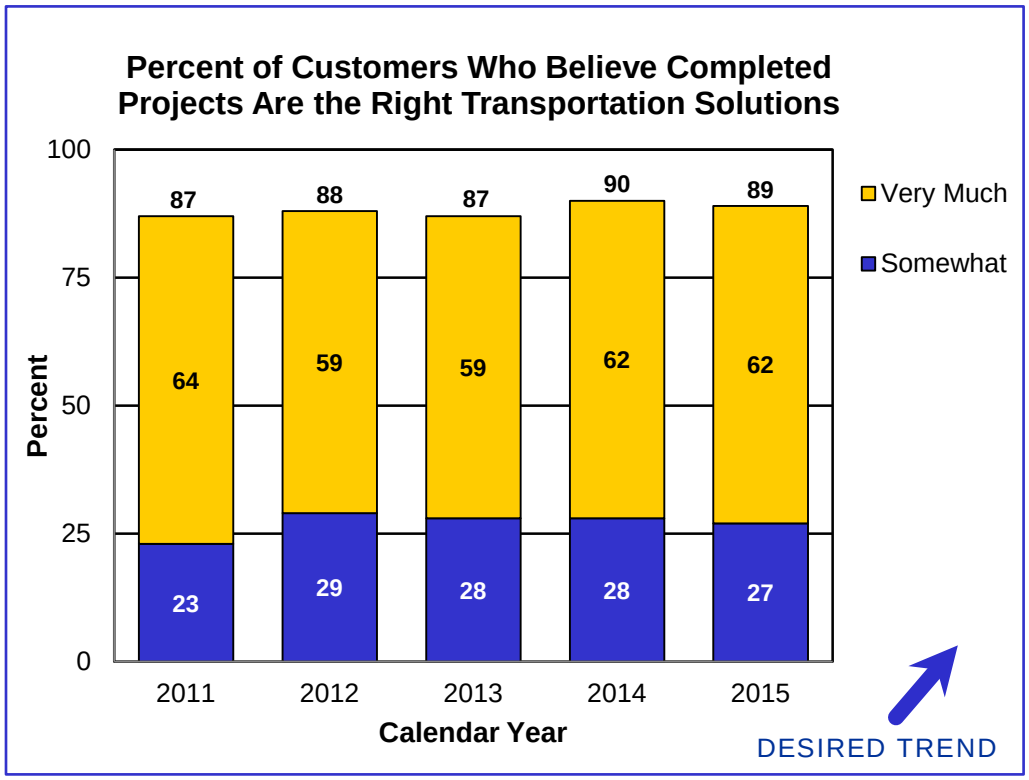
PROVIDE OUTSTANDING CUSTOMER SERVICE

Percent of customers who believe completed projects are the right transportation solutions – 3g

One of the most prominent products MoDOT delivers to its customers is a highway construction project. While the department tries to involve local residents in planning and designing local projects, the real impact of the project isn't known until people actually use the results of the project. The 2015 survey results continue to show most Missourians are very satisfied with local projects and believe that MoDOT provides the right transportation solutions.

The majority of respondents thought the project made the roadway: safer (90.7 percent), more convenient (83.7 percent), less congested (72.7 percent), easier to travel (86.7 percent), better marked (87.1 percent), and considered the project the right transportation solution (89.3 percent).

As part of the questionnaire, each respondent has the opportunity to provide comments about why the local project was – or was not – the right transportation solution. Each comment is shared with the local district for evaluation and to guide future projects.



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.

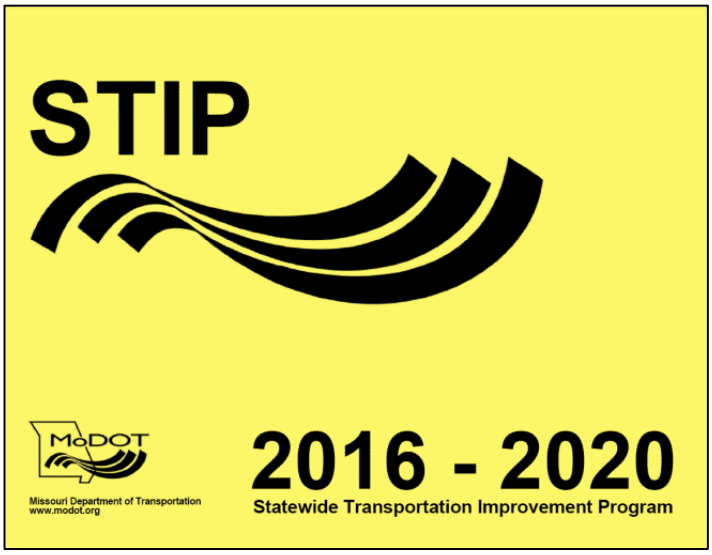
DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

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

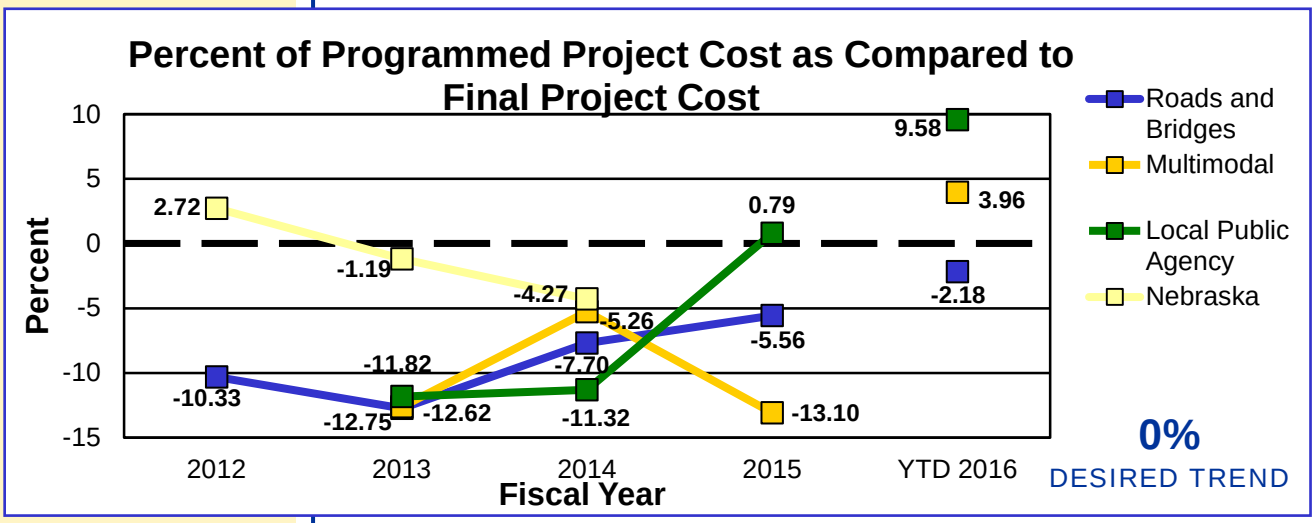
Accurate program cost estimates help MoDOT deliver more improvements for taxpayers. As of March 31, 2016, 445 road and bridge projects were completed in fiscal year 2016 at a cost of $922.16 million. This represents a deviation of 2.18 percent (or $21 million) less than the programmed cost of $942.71 million. Of the 445 road and bridge projects completed, 52 percent were completed within or below budget. In comparison, 65 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 $16 million. Miscellaneous savings (right-of-way purchases, utilities and other costs) were $11 million. Construction-phase overruns were $7 million.

In addition, 47 multimodal projects were completed at a cost of $15.98 million, 3.96 percent or $609,000 more than the programmed cost of $15.371 million. A total of 160 local public agency projects were completed at a cost of $104.667 million, 9.58 percent or $9.150 million more than the programmed cost of $95.517 million.

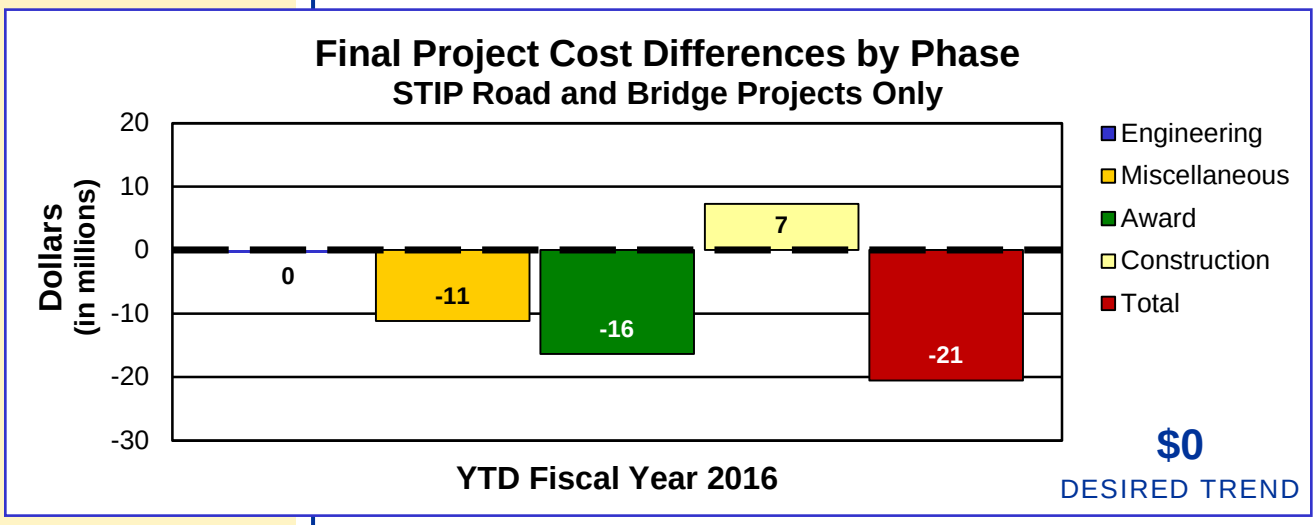
MoDOT uses this historical data as a guide for programming future projects. Projects awarded in FY 2014 and 2015 were 1 percent higher and 2 percent lower, respectively, than programmed values. Consequently, the 2015-2019 and 2016-2020 STIPs were developed assuming no significant award savings. Projects awarded in FY 2016 through March were 13 percent less than programmed values.



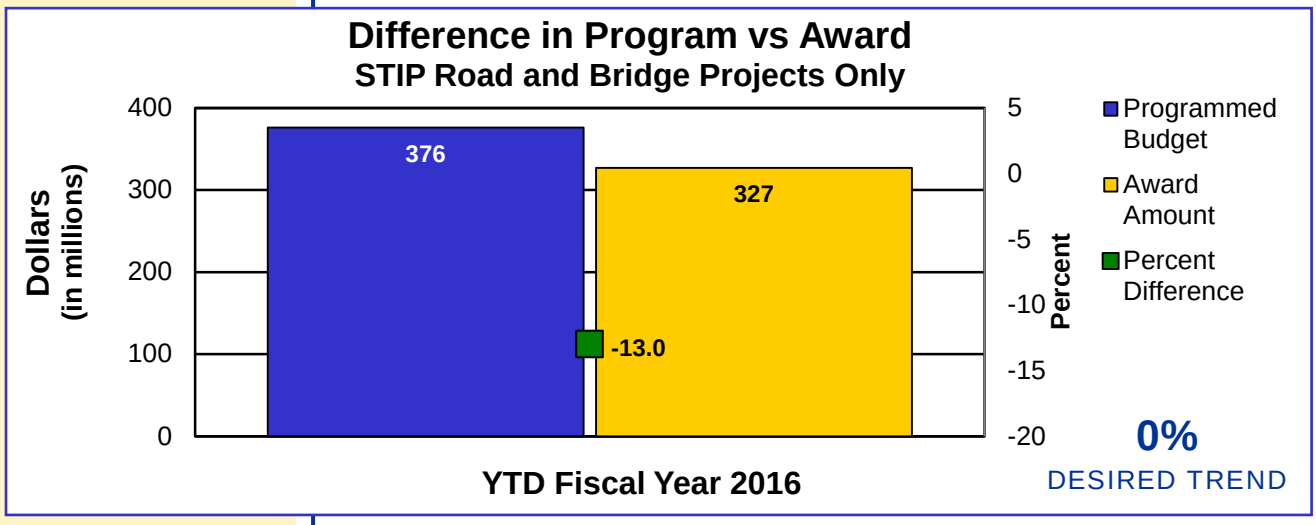
DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE



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. 2015 data is not yet available.



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

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.

DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

Percent of projects completed on time – 4b

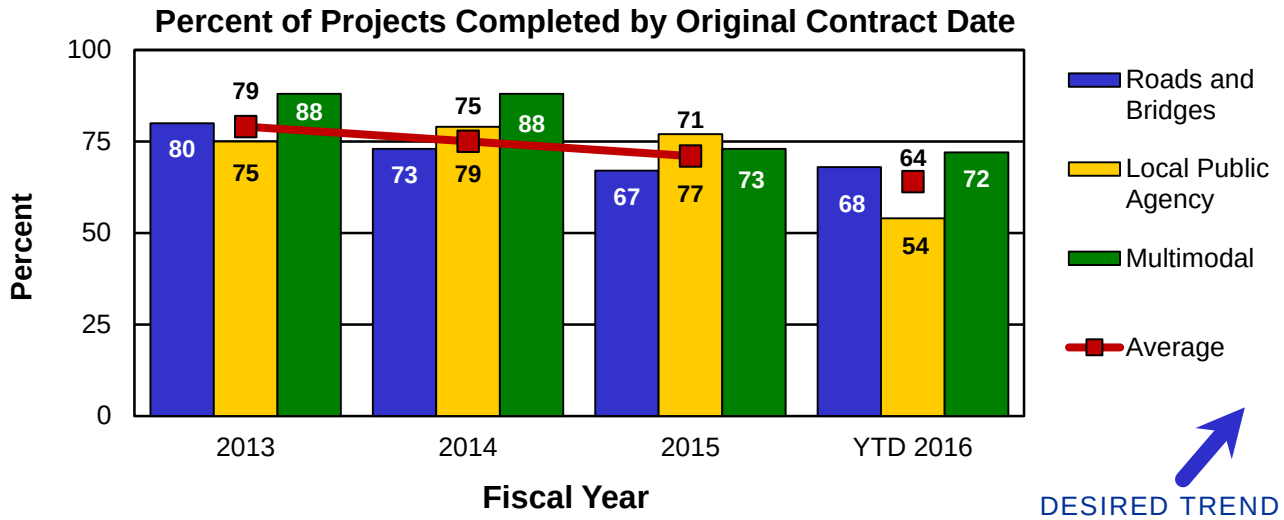
MoDOT's customers expect transportation improvements to be completed quickly with minimal impact to their lives. Delivering projects by the contract completion date is the target for all projects and is considered a commitment to Missourians and drivers. Completing projects on time helps maintain credibility with Missourians. Completing projects on time minimizes drivers' exposure to work zones and provides facilities in good condition that improve safety and reduce vehicle maintenance costs.

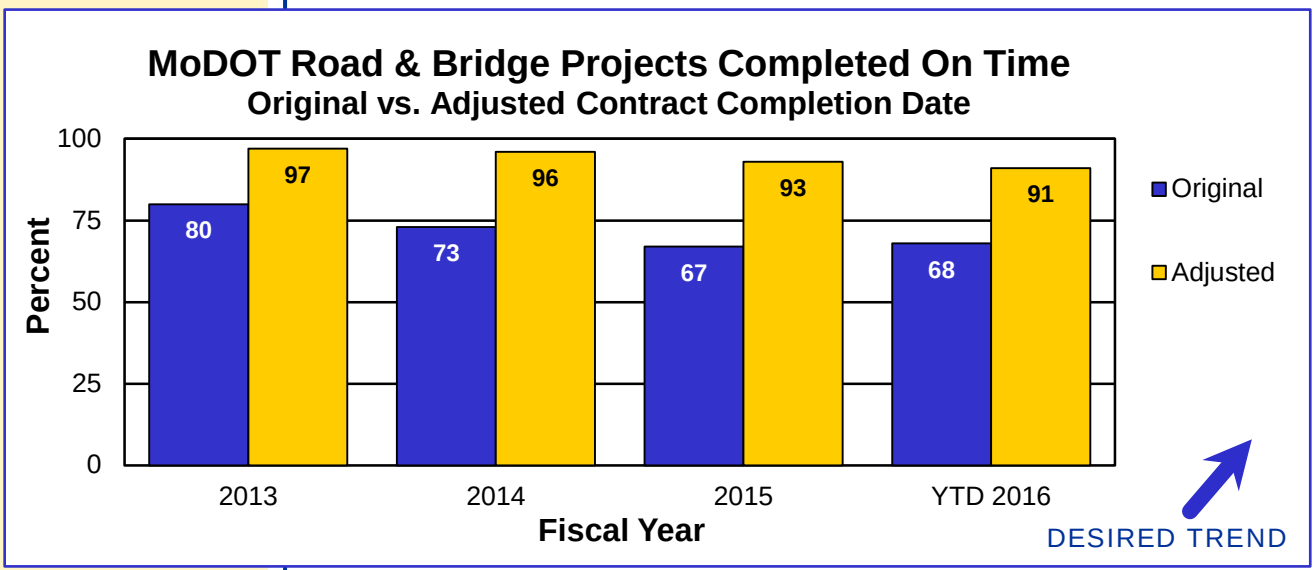
Sometimes, unusual weather or additional contract work necessitates an extension of the completion date. There also are times when a contractor misses the project completion date and the contractor may be assessed damages. To date in fiscal year 2016, 64 percent of the closed-out projects were completed on or ahead of schedule.

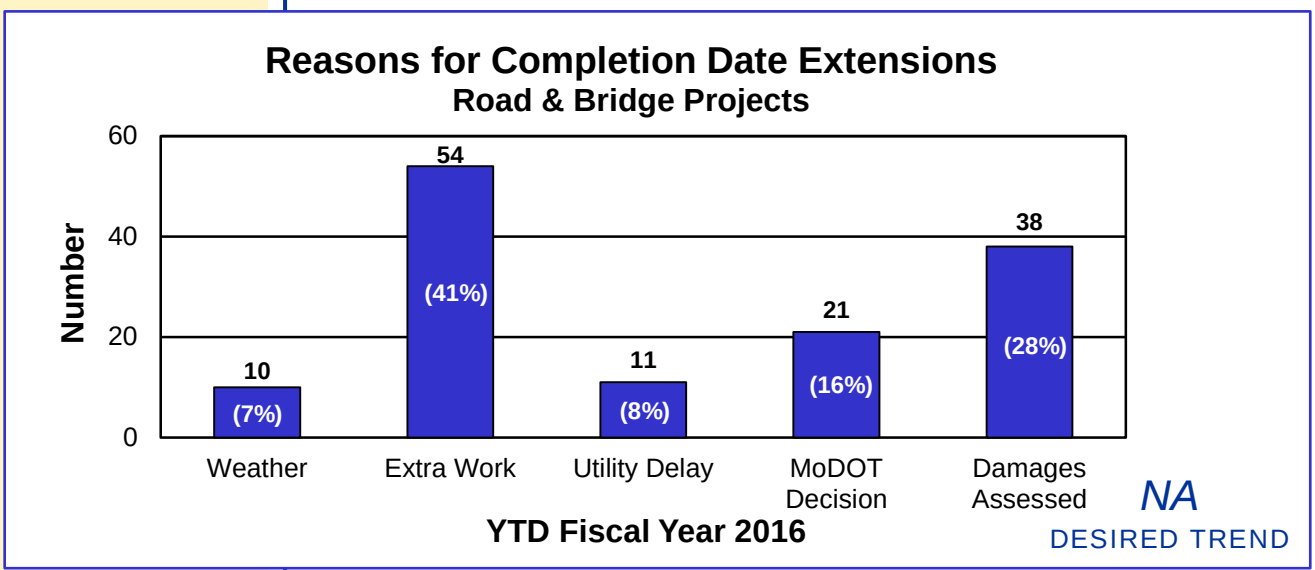
MoDOT works to meet the original completion date by preparing accurate plans and quantities, setting aggressive but reasonable completion dates and setting liquidated damages to reinforce completion dates without undue bid risks.

Of the road and bridge projects completed in the first three quarters of fiscal year 2016 that did not meet the original contract date, 7 percent were extended due to weather delays, 41 percent were extended due to extra work, 8 percent experienced utility delays, 16 percent were extended by MoDOT and 28 percent missed the completion date with damages assessed.

DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

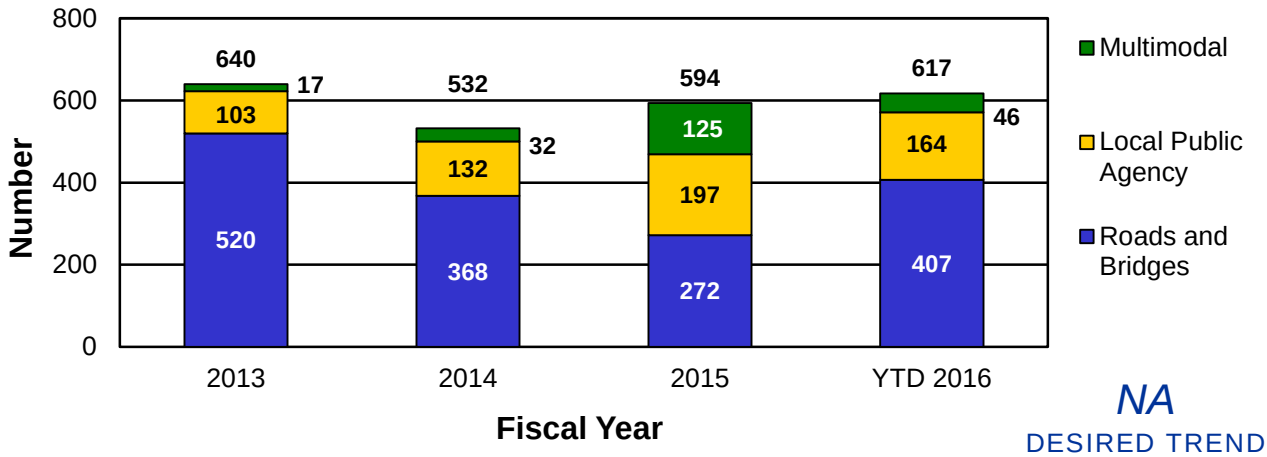






DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

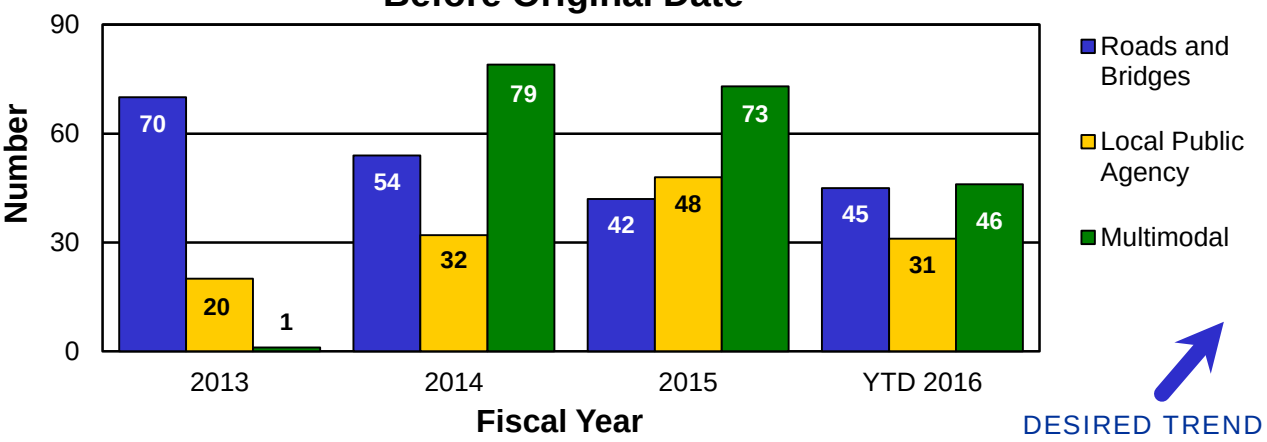
Total Number of Projects Completed



NA

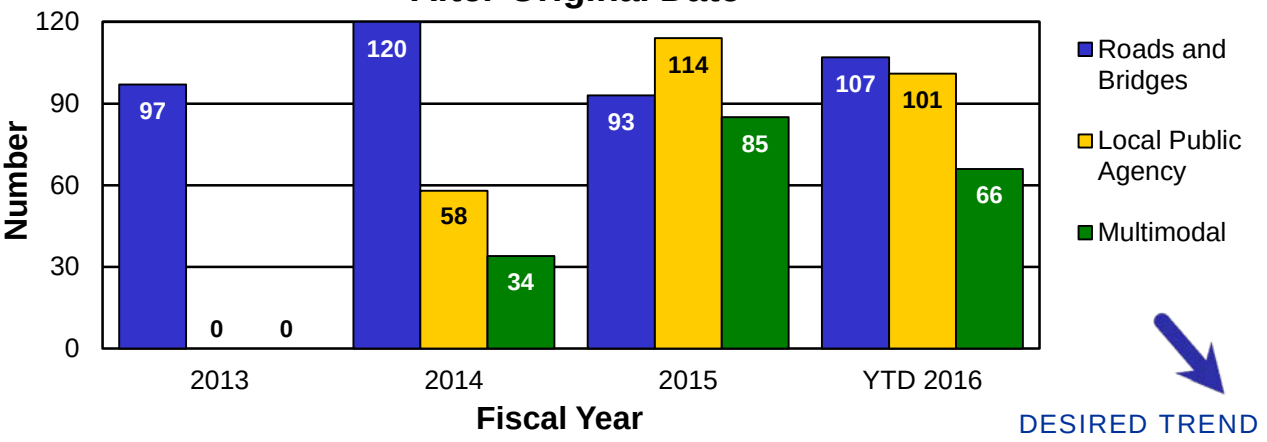
DESIRED TREND

Average Number of Days Completed Before Original Date



DESIRED TREND

Average Number of Days Completed After Original Date



DESIRED TREND

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.

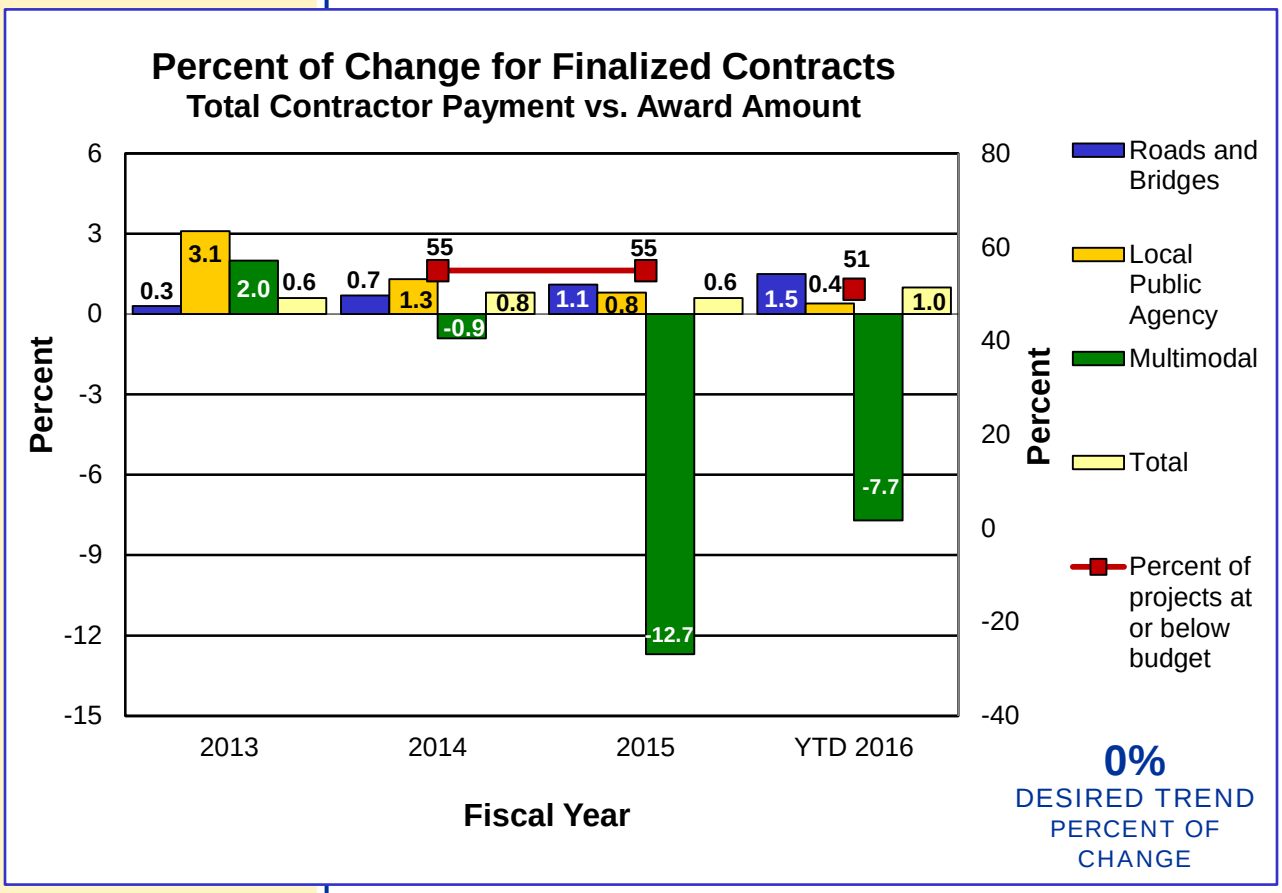
DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

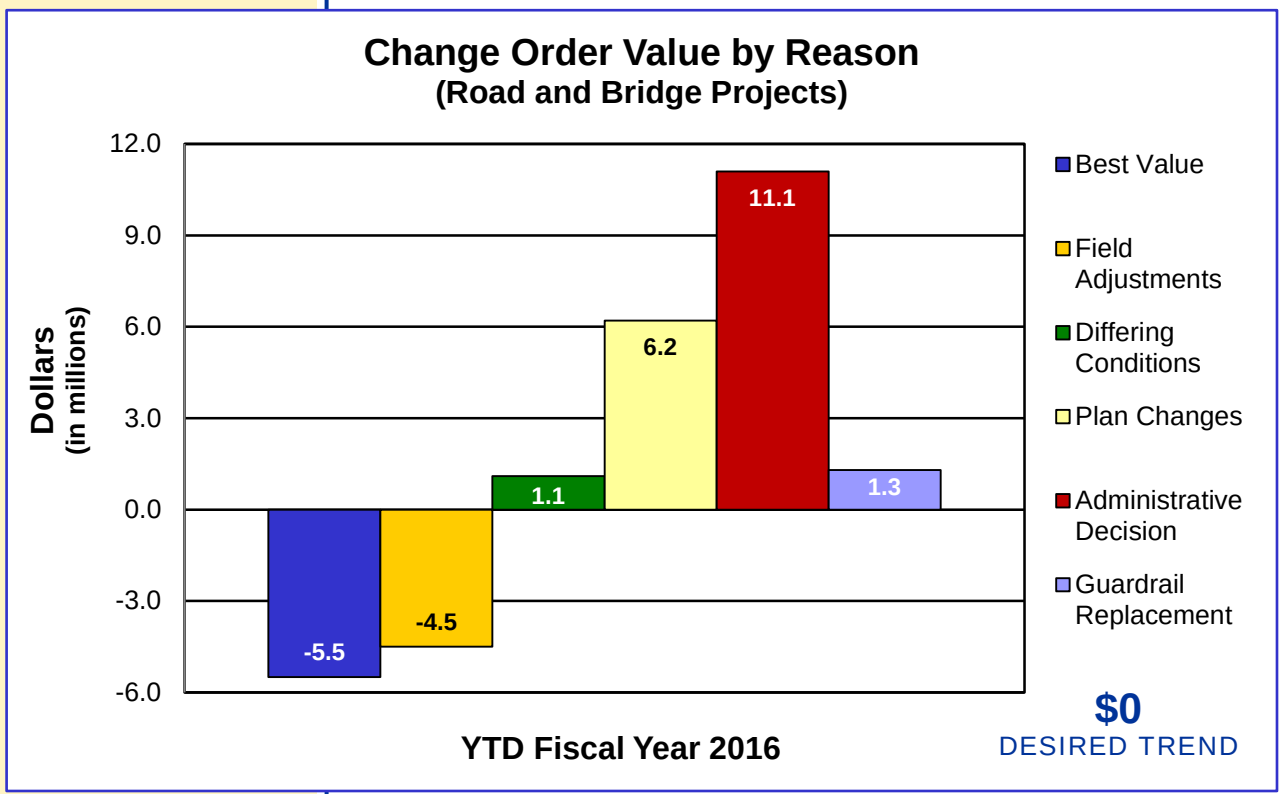
Percent of change for finalized contracts – 4c

By limiting overruns on contracts, MoDOT can continue to keep its maintenance and construction commitments. This emphasis combined with the use of practical design and value engineering has contributed to limiting overruns on contracts. MoDOT's performance so far in fiscal year 2016 is 1 percent over ($8.8 million over the award amount of $870 million worth of projects completed) with 51 percent of the projects being completed below the original amount.

Many factors can affect the ability to complete a project within 2 percent of the award amount. These factors can include design changes, differing conditions, additional work items and administrative decisions. For MoDOT road and bridge projects completed in the third quarter of fiscal year 2016, an additional $1.3 million of contract costs on 36 projects were incurred due to a decision to replace guardrail end treatments on the state highway system. One project with a $10.7 million bid amount had an overrun of $2.5 million to add sound walls and a $29.2 million bridge rehab project had an overrun of $2.3 million. These change orders amount to $6.1 million of the total $8.8 million in cost overruns, or 69 percent of the total.

DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE





RESULT DRIVER:
David Silvester
District Engineer

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.

DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

Innovative contracting methods – 4d

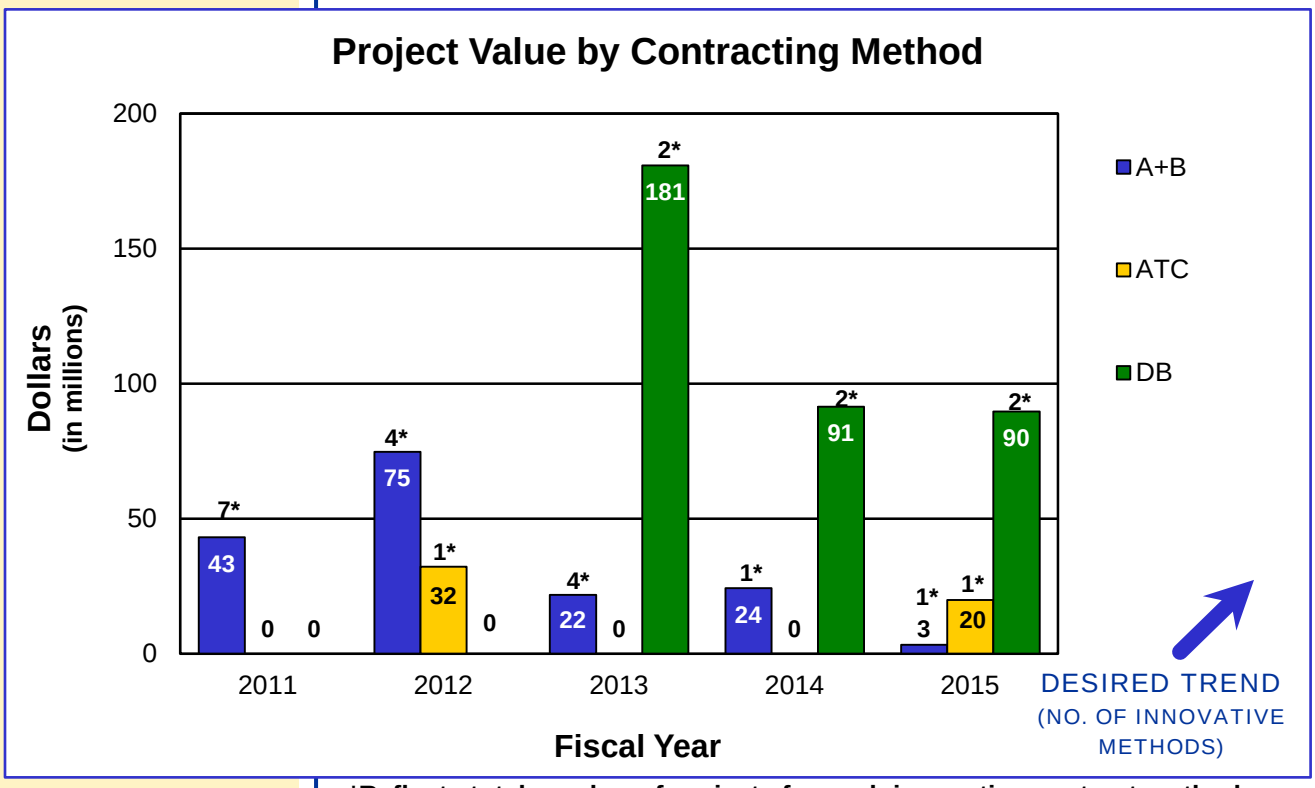
MoDOT looks to implement non-traditional methods and practices in contract procurements to improve efficiency, increase flexibility, and maximize value for its customers. By executing innovative contracting tools, MoDOT is better able to mitigate limited resources, meet each project's unique challenges 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



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

RESULT DRIVER:
David Silvester
District Engineer

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.

DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

Value engineering – 4e

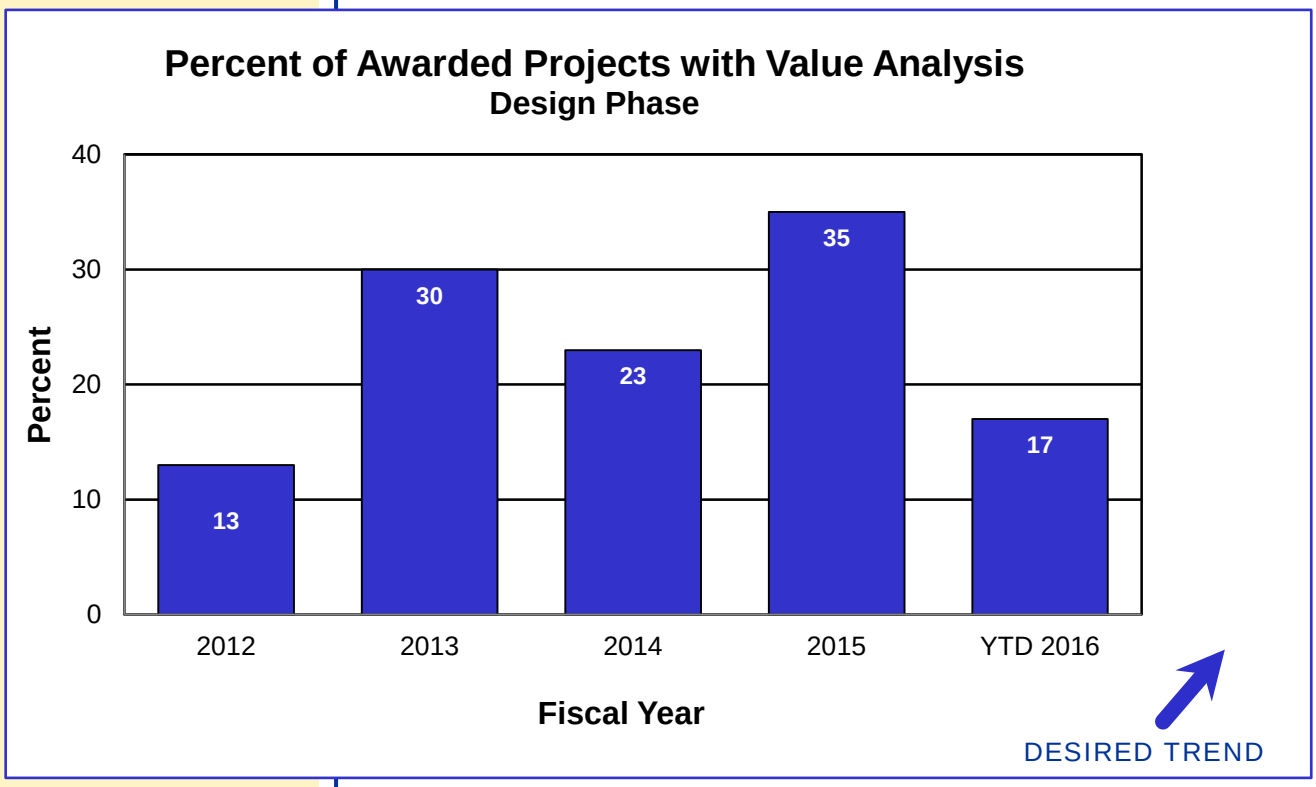
The goal of value engineering is to build the right project at the right time, meeting the project need with appropriate project scope. MoDOT uses the VE program to ensure the public receives great value for every tax dollar invested in Missouri's transportation system. MoDOT has been increasingly focused 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.

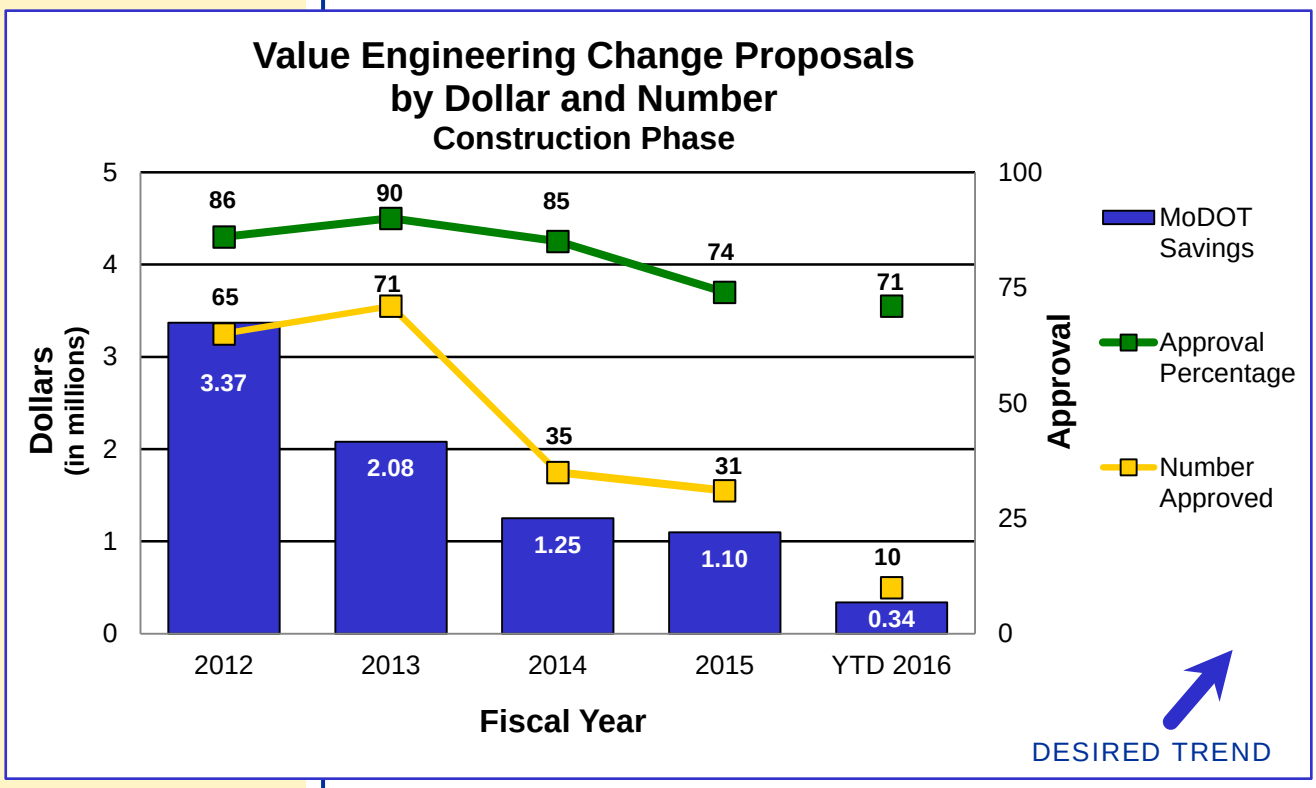
MoDOT uses design-phase value analysis to remove unnecessary scope, reduce project costs and improve project flexibility. So far for fiscal year 2016, 17 percent of projects underwent some form of value analysis during design. Programmatic value analysis studies associated with the level-course and chip-seal programs accounted for the largest portion of this percentage. Outreach continues in an effort to improve in this area and to find innovative approaches to grow this program.

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. So far for fiscal year 2016, 10 VE proposals were approved resulting in MoDOT savings of $337,000. This represents a 71 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, 212 approved VECPs have been reviewed by a multidisciplinary team resulting in five revisions to policy and 17 potential items still being investigated. The team continues to review approved VECPs for potential implementation and looks for opportunities to implement improved policies.

DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE





DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

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

RESULT DRIVER:
David Silvester
District Engineer

MEASUREMENT DRIVER:
Jason Vanderfeltz
Bidding and Contract Services Engineer

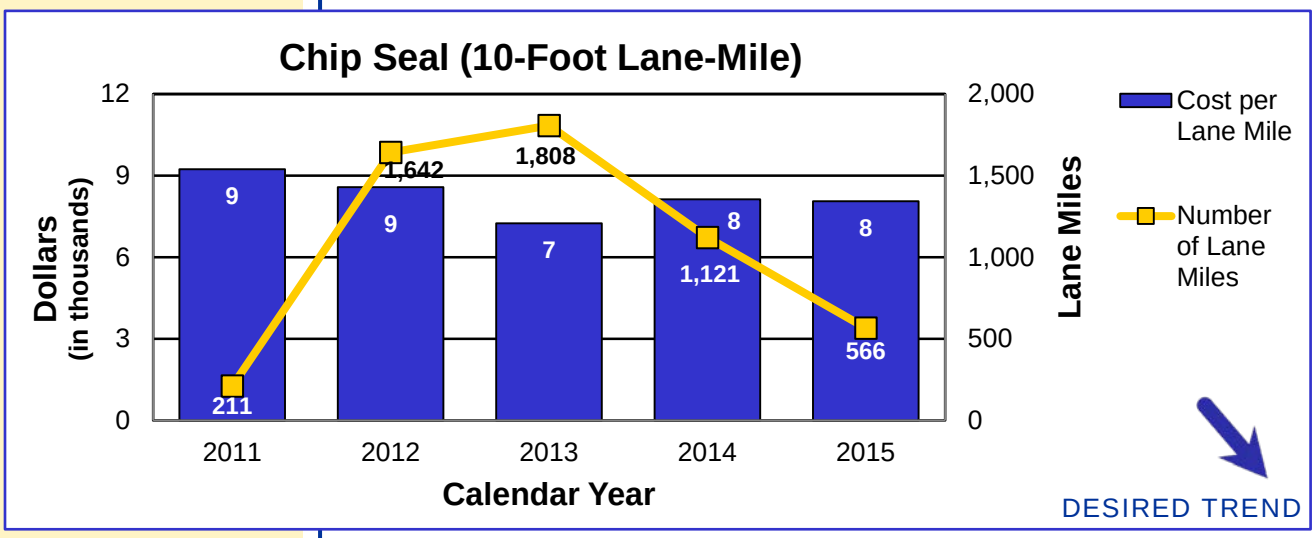
PURPOSE OF THE MEASURE:
This measure tracks the costs to construct a variety of common highway and bridge construction projects including the costs for equipment, labor and fringe benefits and materials to construct a project.

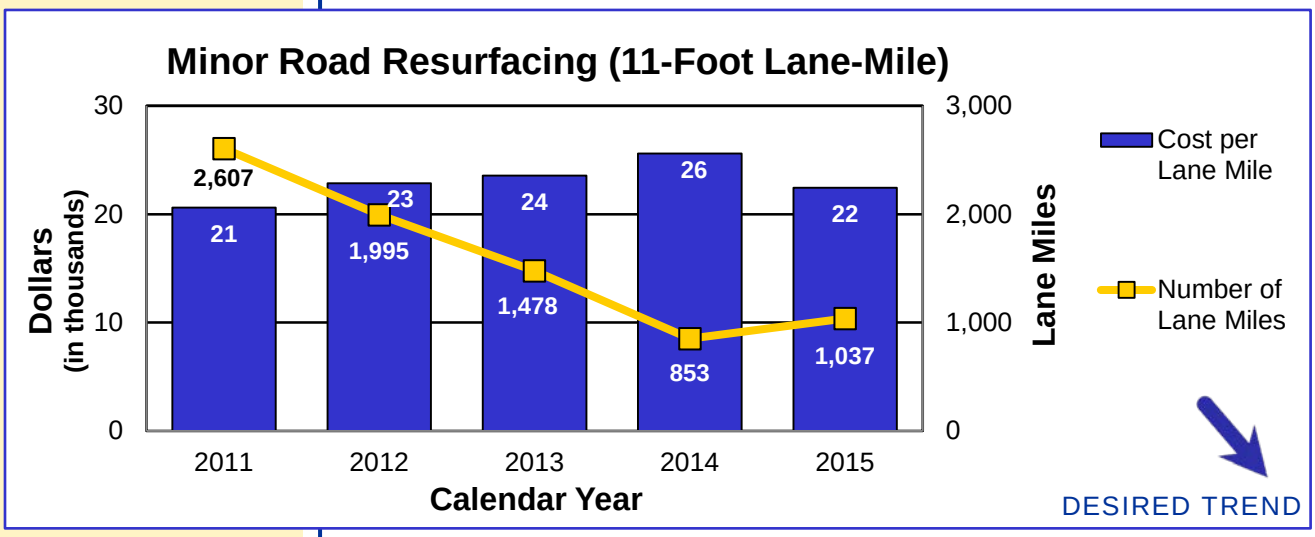
MEASUREMENT AND DATA COLLECTION:
Data is collected from MoDOT bid opening prices. Construction costs for 1992 are used for comparison because that was the year Missouri's fuel tax was increased to the current rate of 17 cents per gallon. Costs for chip seal and minor road one-inch asphalt resurfacing 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.

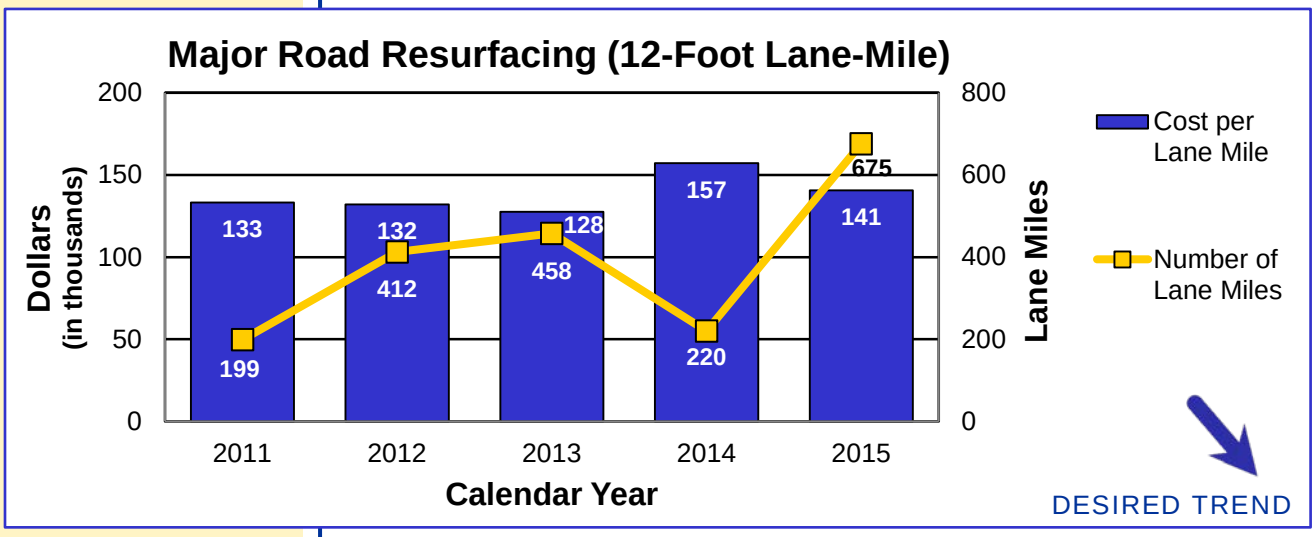
A great many factors affect the cost of road and bridge projects, some can be managed by MoDOT, and others are affected by the economy. For example, Missouri's highway system has long depended on fuel taxes, but consumers are turning to smaller, more fuel-efficient vehicles, and when fuel prices are high, they look for ways to decrease their personal transportation costs by driving less. Many of these smaller vehicles cost less, meaning that sales taxes are lower and consequently so are 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 $596 million in fiscal year 2016, 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.

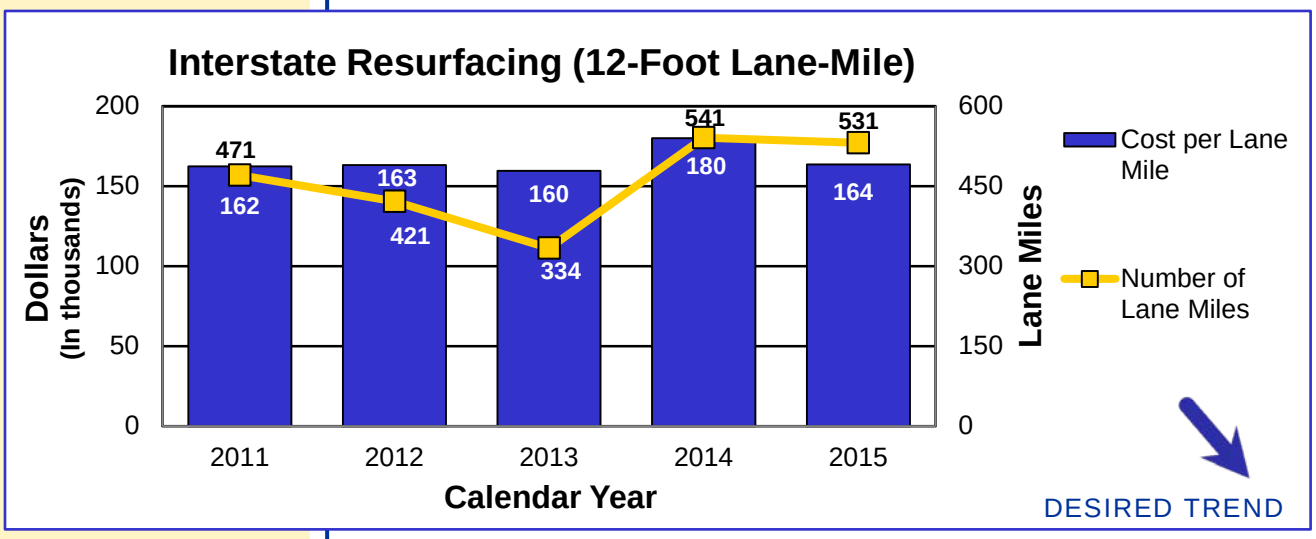
DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE

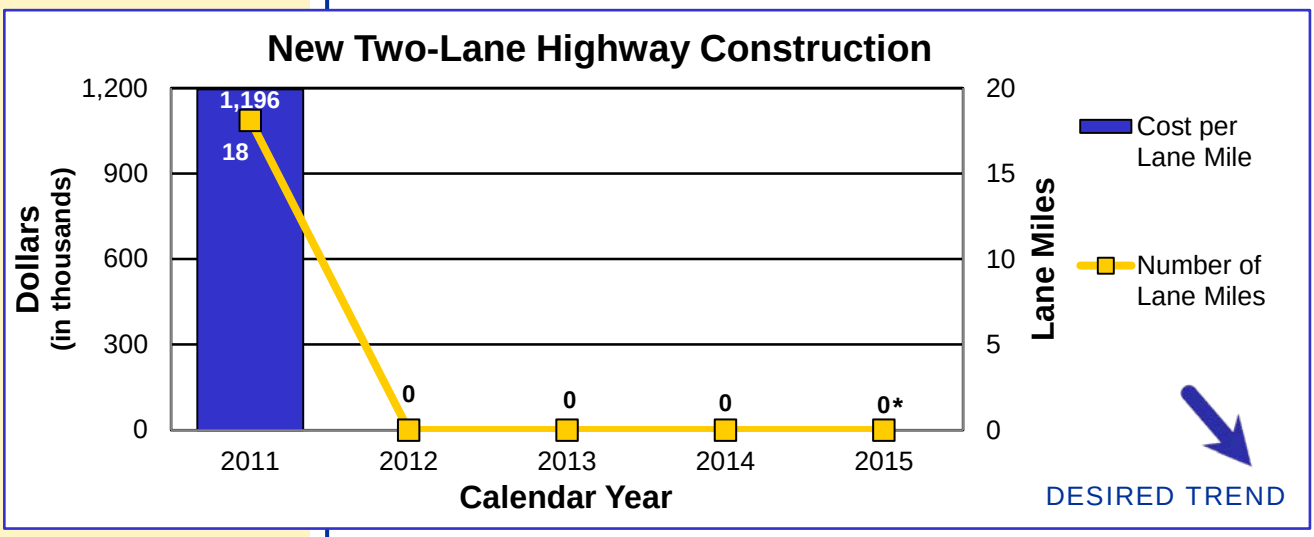




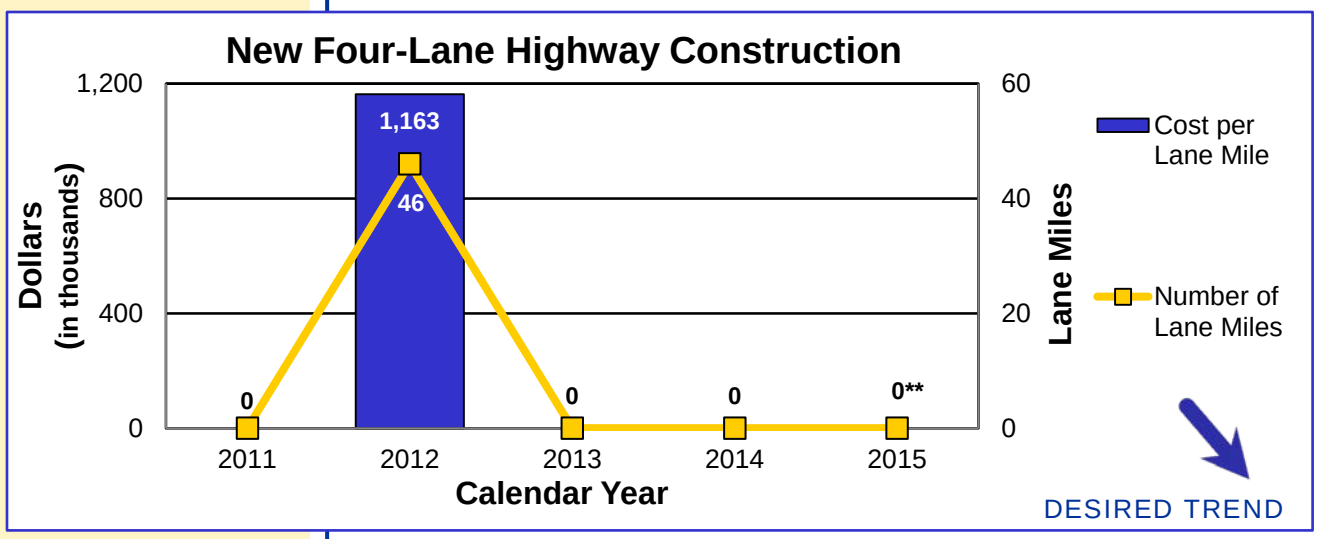


DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE



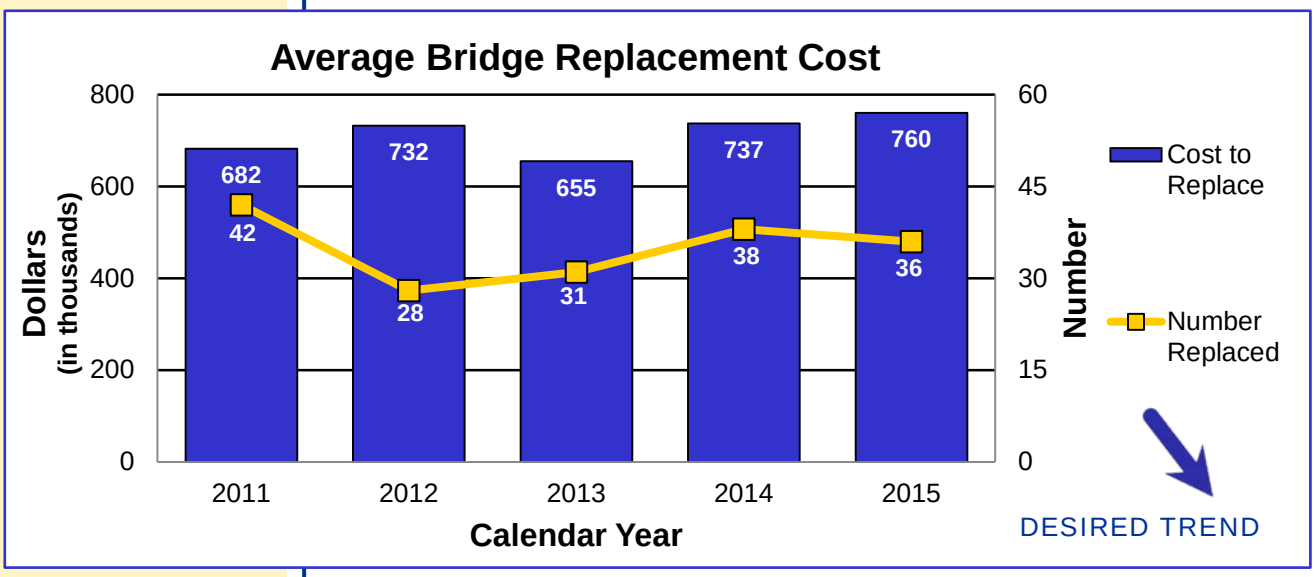


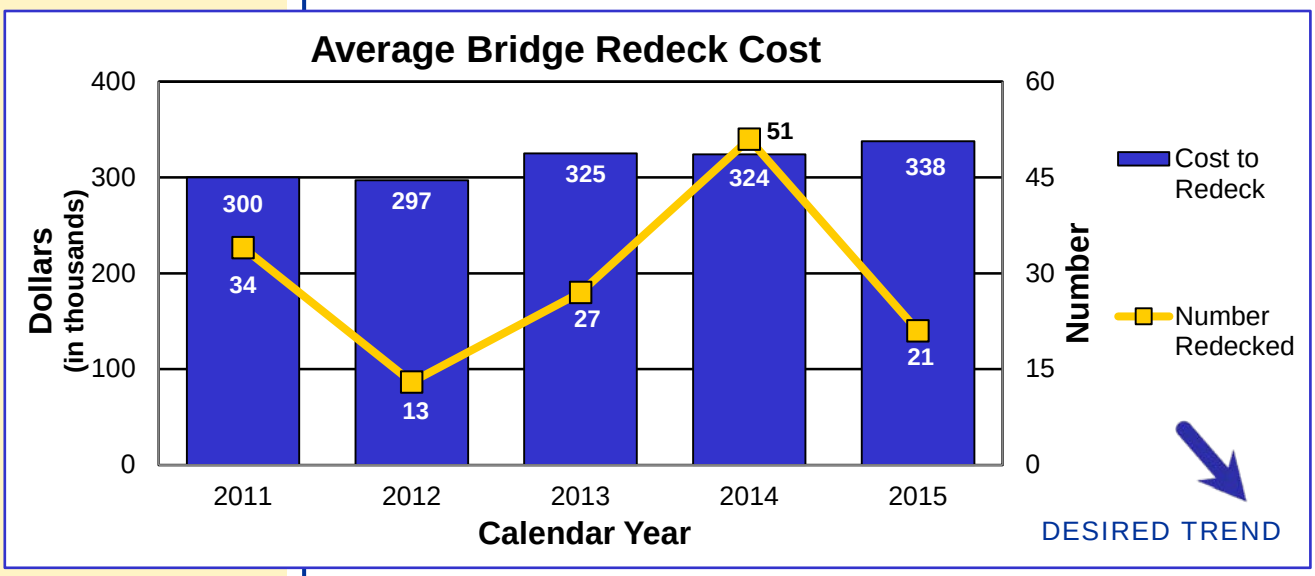
*** There were no two-lane projects bid in 2012, 2013, 2014 and 2015.**



****There were no four-lane projects bid in 2011, 2013, 2014 and 2015.**

DELIVER TRANSPORTATION SOLUTIONS OF GREAT VALUE





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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:
Alex Wassman
Senior Traffic Studies Specialist

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

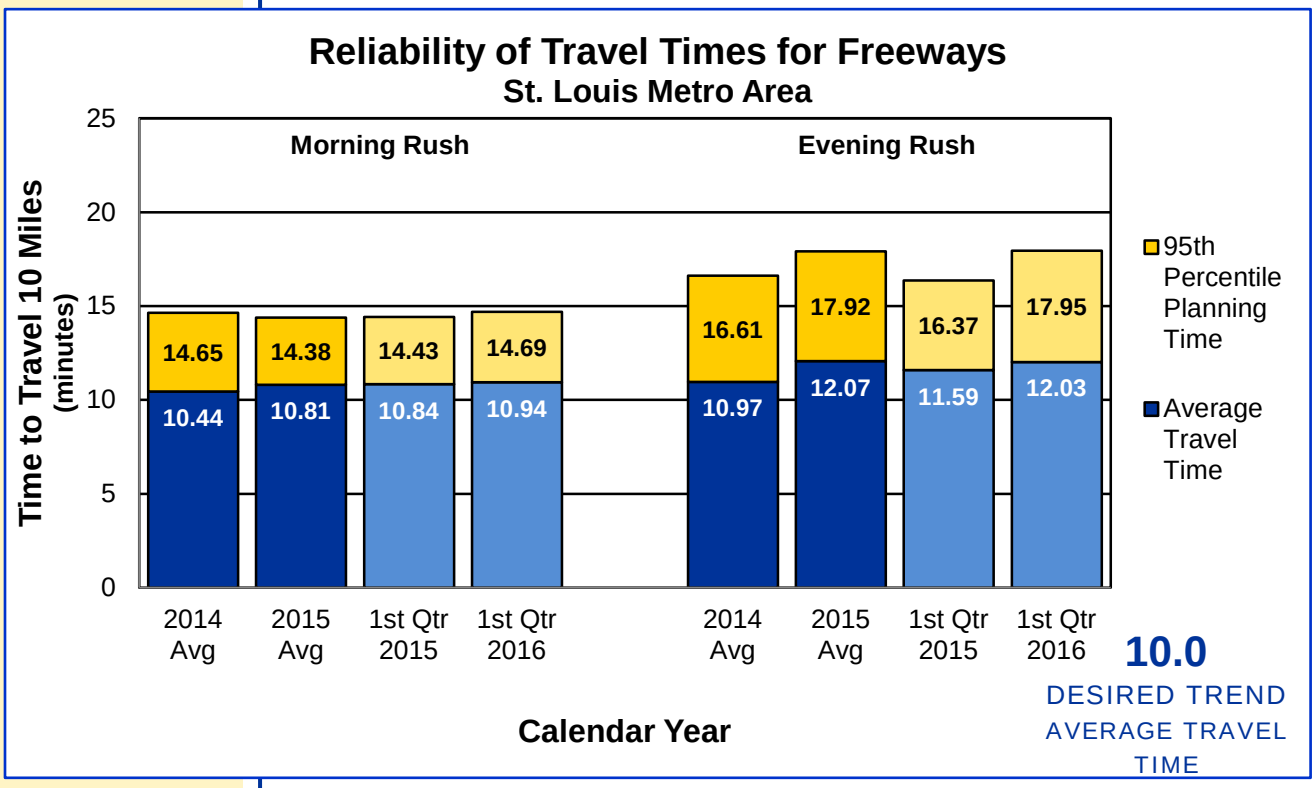
Travel times and reliability on major routes – 5a

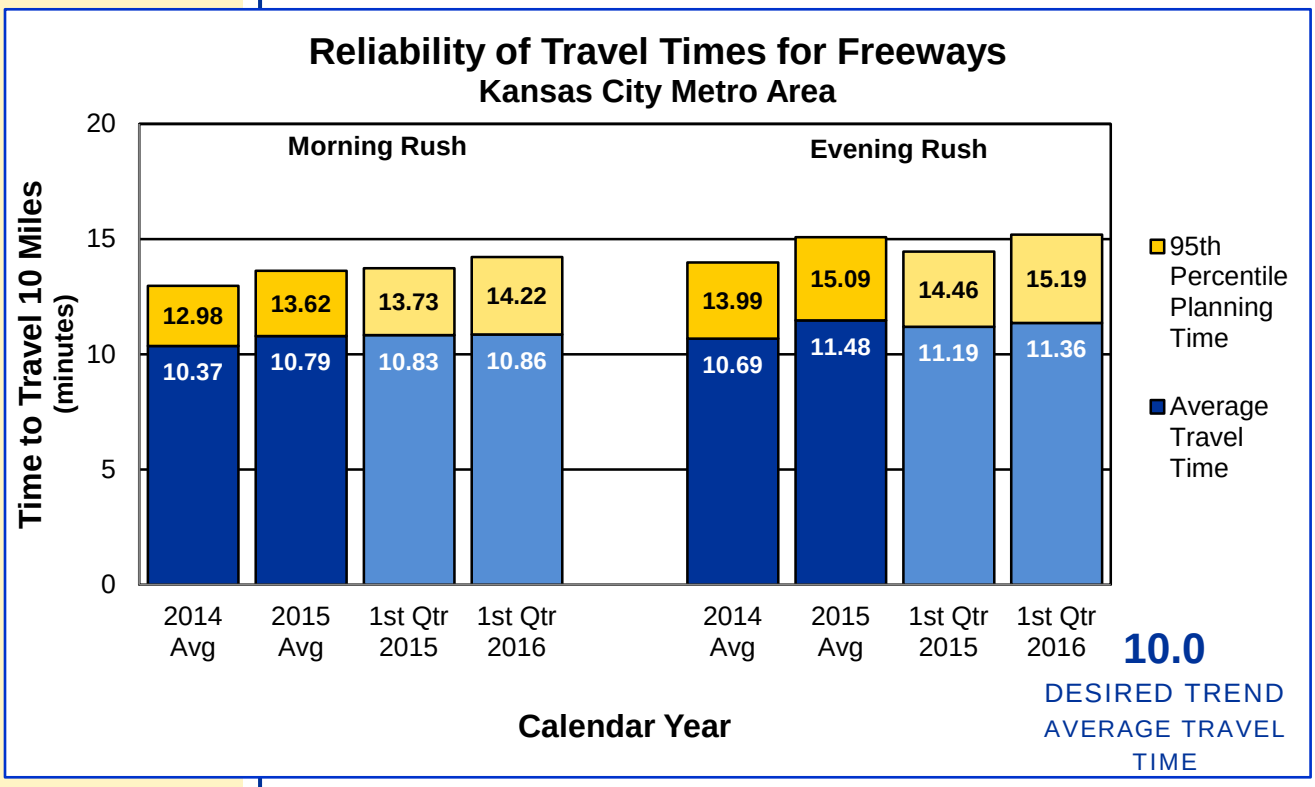
From January to March 2016, travel times in St. Louis and Kansas City increased compared to the same period in 2015. For first quarter 2016, the average 10-mile travel time in St. Louis was 10.94 minutes during the morning and 12.03 minutes during the evening. For Kansas City, the average travel time was 10.86 minutes during the morning and 11.36 minutes during the evening. Overall, average speeds ranged 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 17.95 minutes during the evening. Customers in the St. Louis evening rush needed to plan about eight minutes more for a 10-mile trip than they would need in free-flow conditions. In Kansas City, the average planning times were 14.22 minutes during the morning and 15.19 minutes during the evening. The planning times in St. Louis and Kansas City represent average rush-hour speeds between 33 and 43 mph.

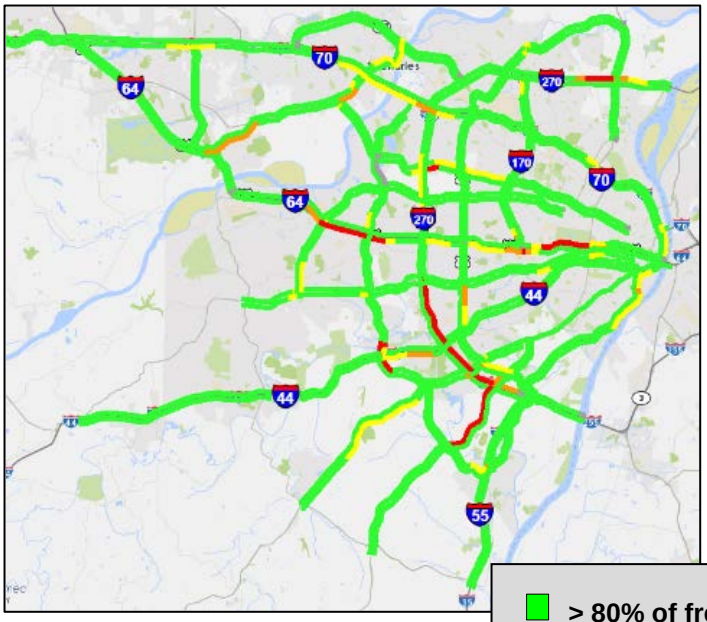
Individual freeway segments within the regions experienced longer travel times than the regional averages as depicted in the maps. The maps also depict rush-hour conditions on arterial routes compared to normal traffic flow during non-peak traffic conditions.

OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM

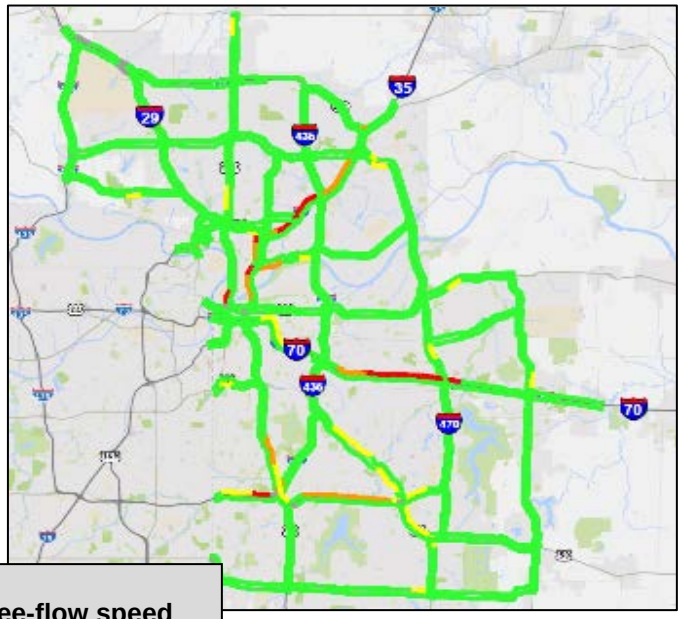




A.M. Mobility

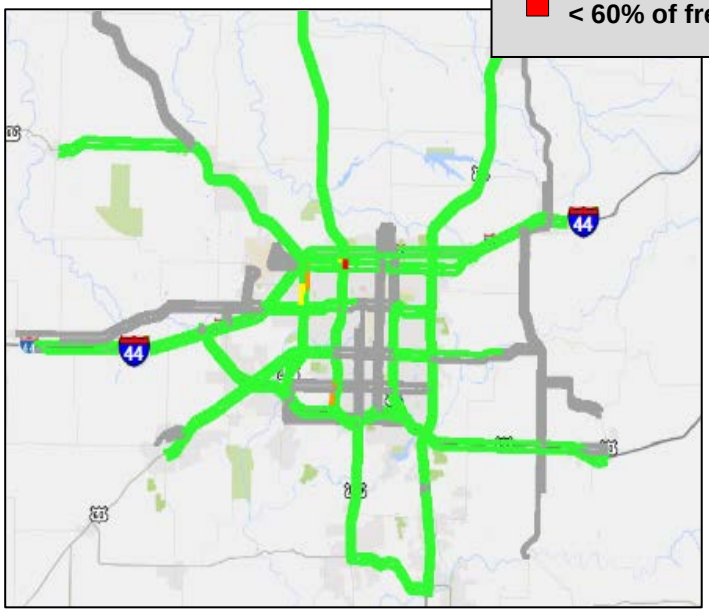


St. Louis Area

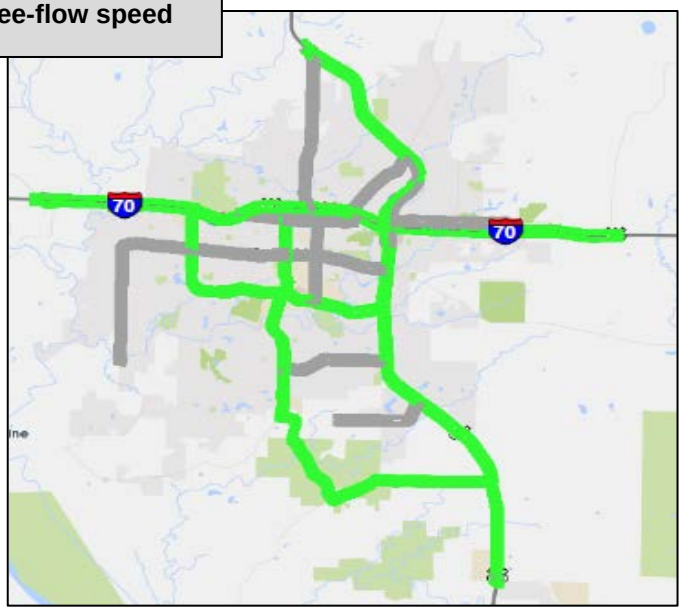


Kansas City Area

- > 80% of free-flow speed
- 70-80% of free-flow speed
- 60-70% of free-flow speed
- < 60% of free-flow speed

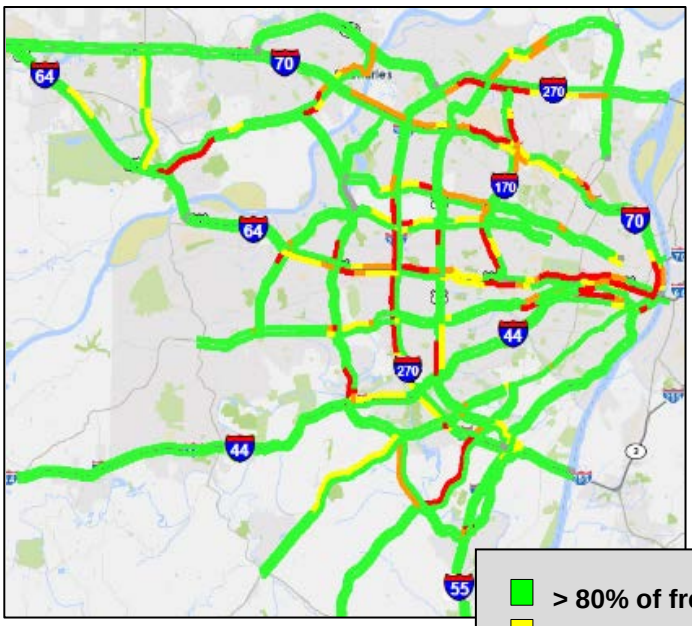


Springfield Area

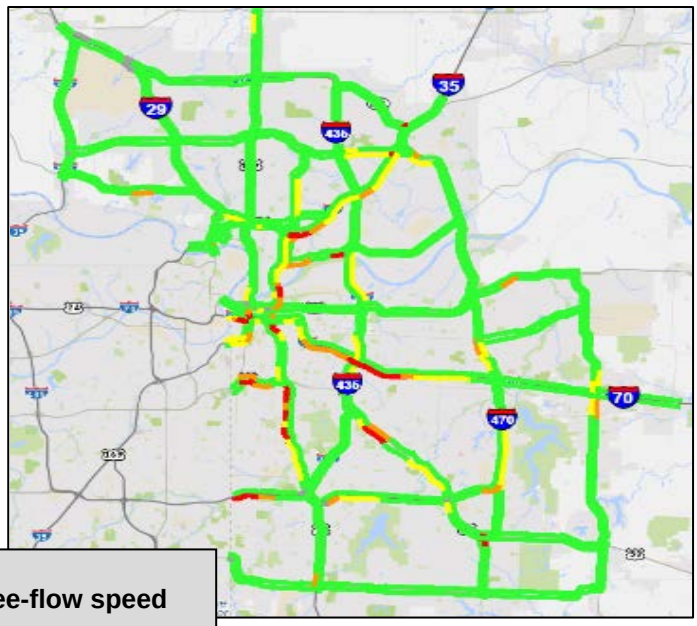


Columbia Area

P.M. Mobility



St. Louis Area



Kansas City Area

- > 80% of free-flow speed
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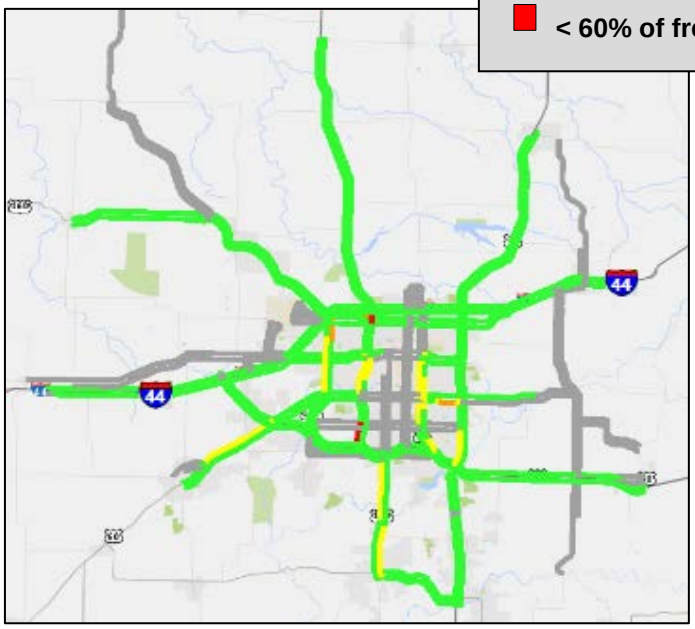
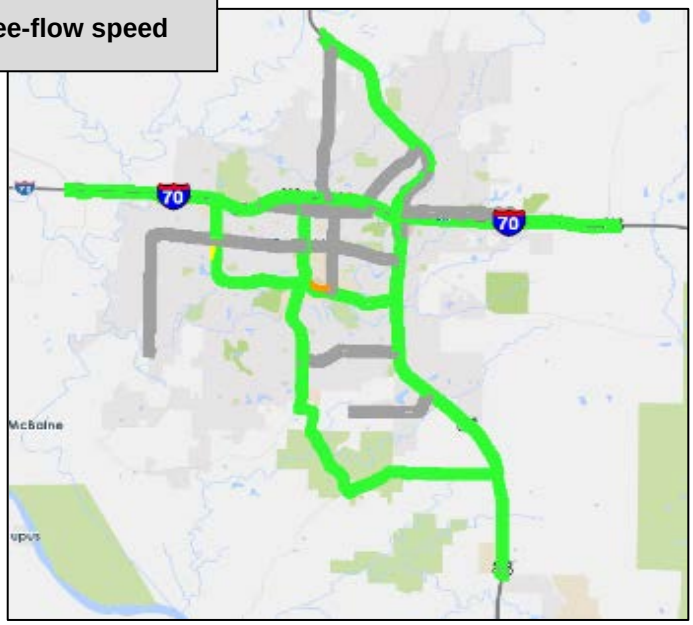


Springfield Area



Columbia Area

OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM

Cost and impact of traffic congestion – 5b

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.

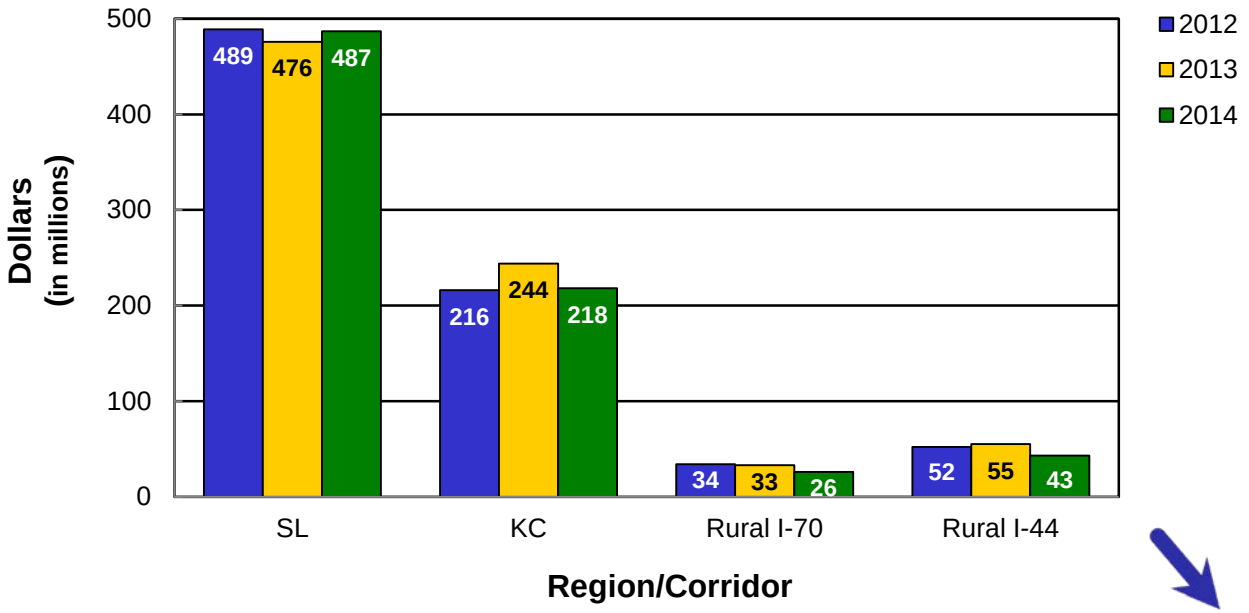
MEASUREMENT AND DATA COLLECTION:
A reporting tool available in the Regional Integrated Transportation Information System looks at user delay costs. This data, in combination with industry standard costs for passenger cars and trucks, reflects the overall costs of congestion. RITIS also includes historic 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.

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.

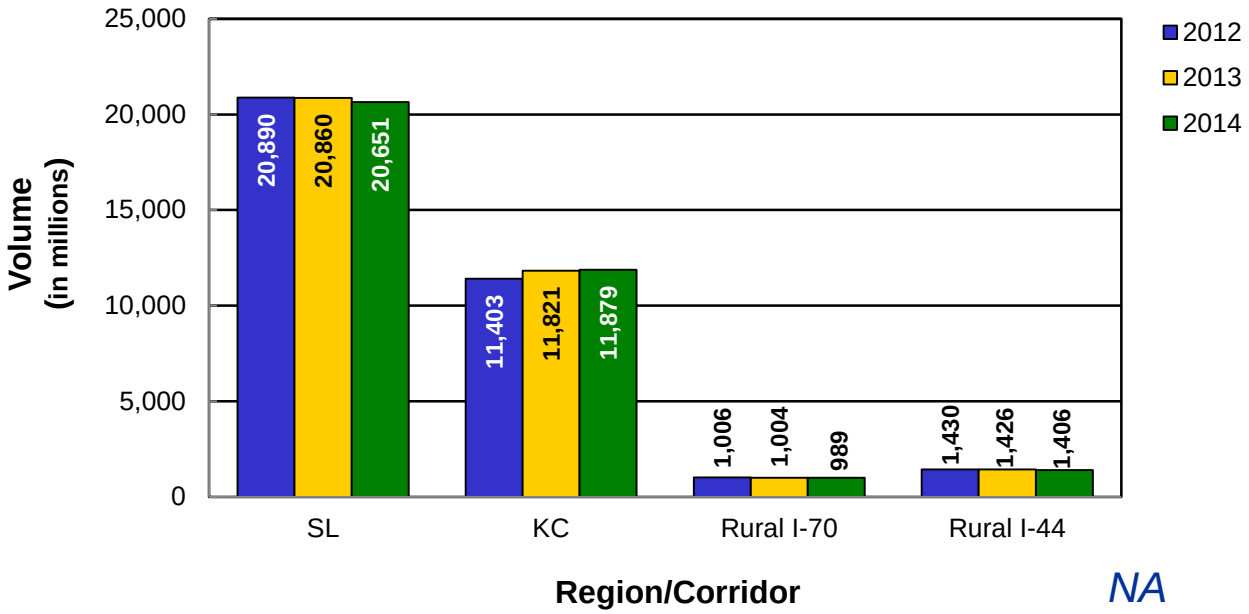
OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM

Cost of Congestion on State Roads



DESIRED TREND

Traffic Volume on State Roads



NA

DESIRED TREND

OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM

Average time to clear traffic incident – 5c

RESULT DRIVER:
Paula Gough
District Engineer

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.

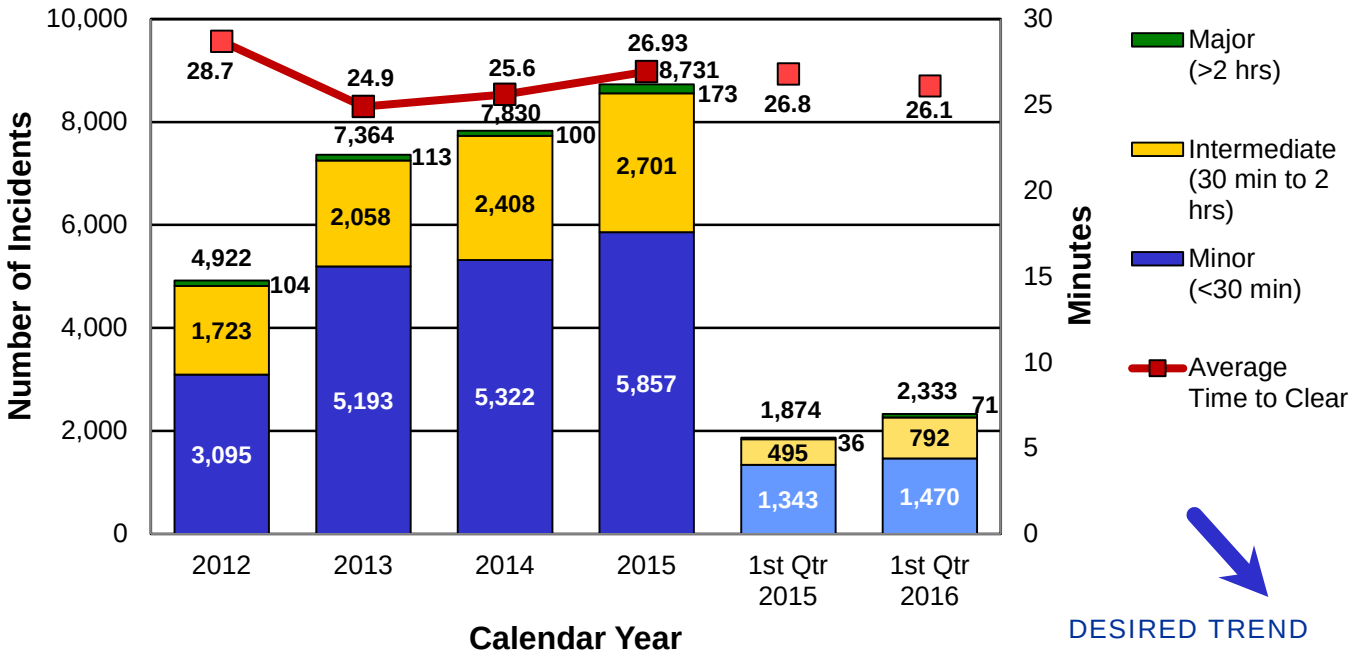
MEASUREMENT AND DATA COLLECTION:
Advanced transportation management systems are used by the Kansas City and St. Louis traffic management centers to record incident start time and the time when all lanes are declared cleared. Traffic incidents can be divided into three general classes of duration set forth by the Manual on Uniform Traffic Control Devices that include minor, intermediate and major. Each class has unique traffic control characteristics and needs.

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.

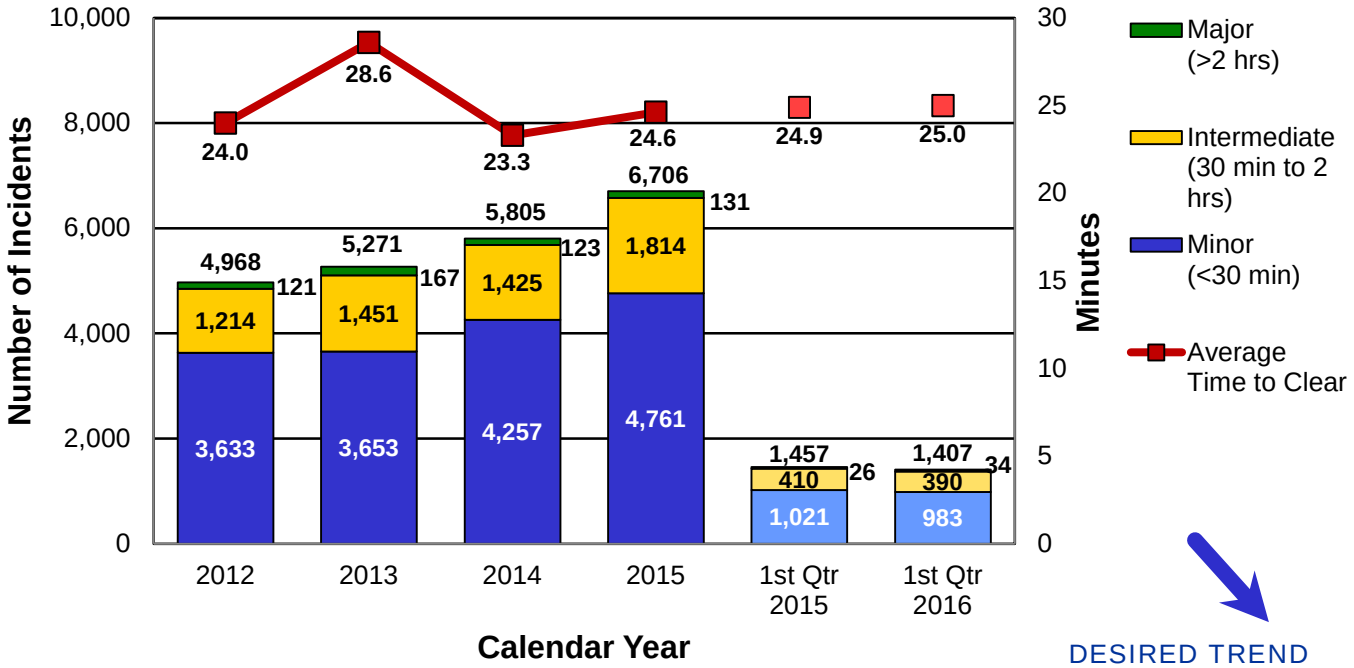
St. Louis recorded 704 incidents in January, 782 in February and 847 in March. The average time to clear traffic incidents was 26.1 minutes, a decrease of 2.7 percent compared to the first quarter of 2015.

Kansas City recorded 493 incidents in January, 417 in February and 497 in March. The average time to clear traffic incidents was 25 minutes, an increase of 0.4 percent from the first quarter of 2015.

Average Time to Clear Traffic Incident
St. Louis



Average Time to Clear Traffic Incident
Kansas City



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

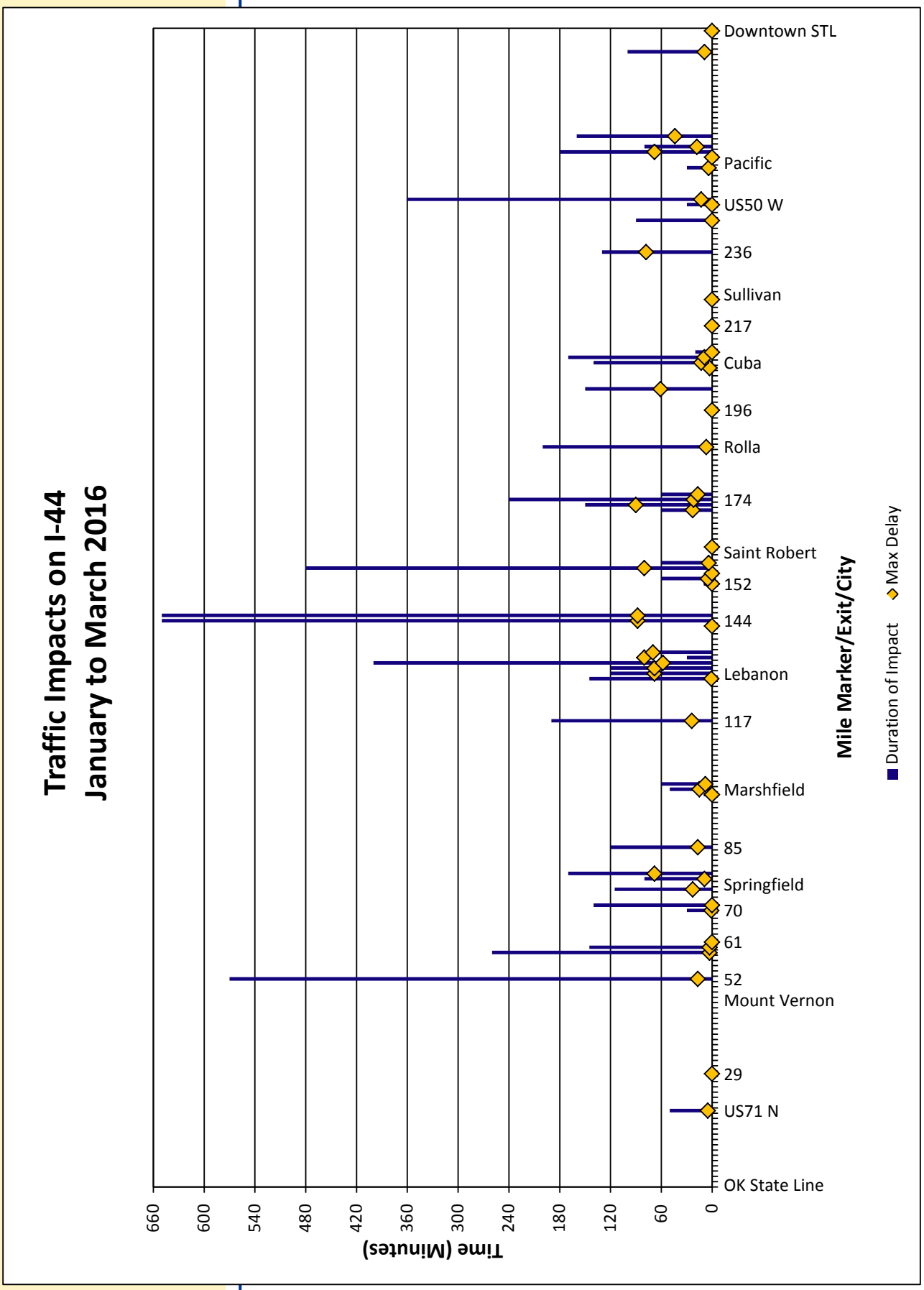
Interstates are the arteries that connect our nation and keep people and commerce flowing. When they shut down in Missouri, the country is cut in half. Keeping interstates free-flowing is a top priority for MoDOT, but sometimes vehicle crashes affect the department's ability to keep the interstates moving.

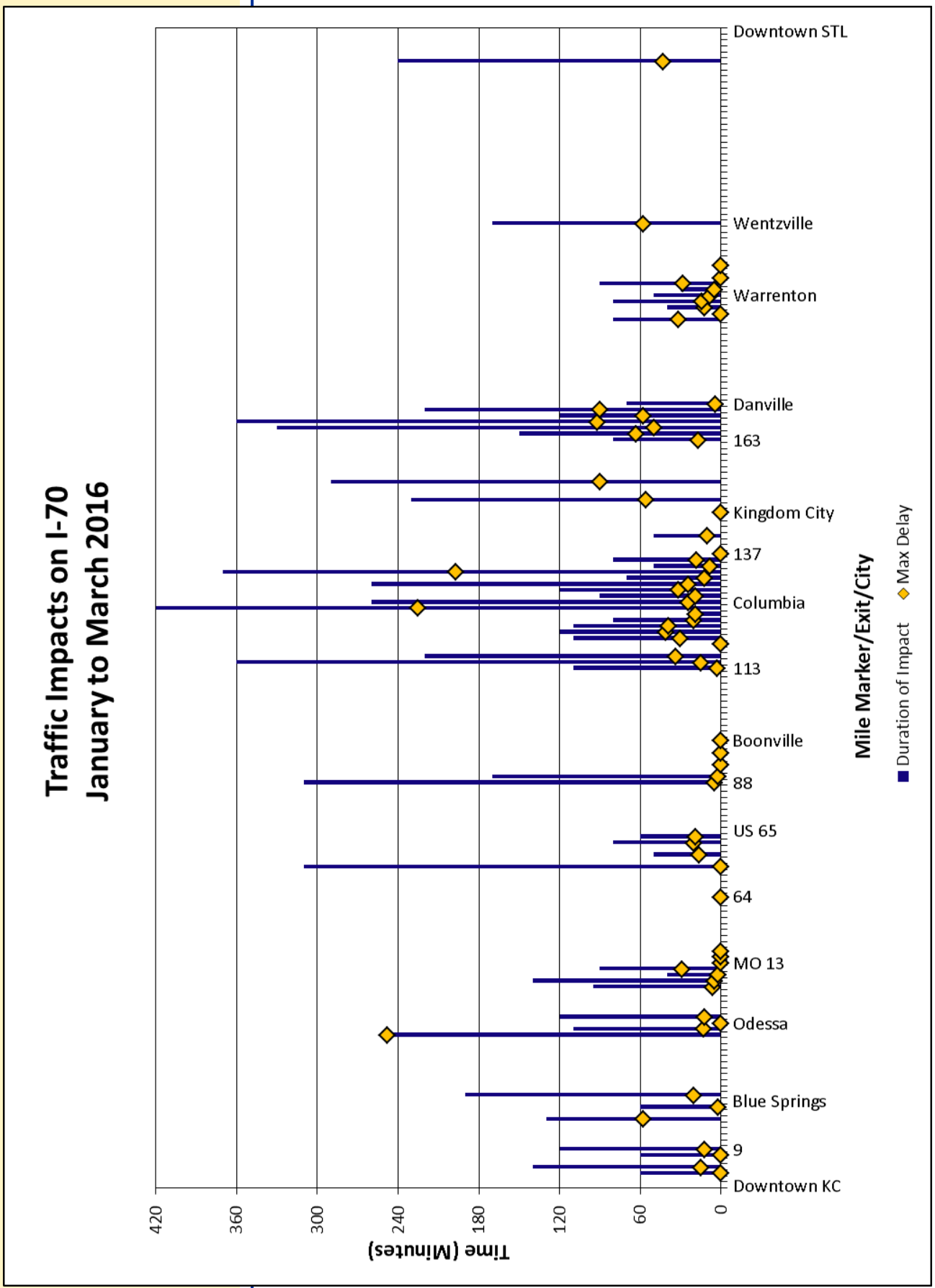
The I-70 and I-44 charts give a comparison of the duration of the incidents and the actual delay experienced by the travelers as provided by the RITIS tool. An incident with a long duration may not create a long delay. This can occur when at least one lane remains open or if there is a good detour route 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.

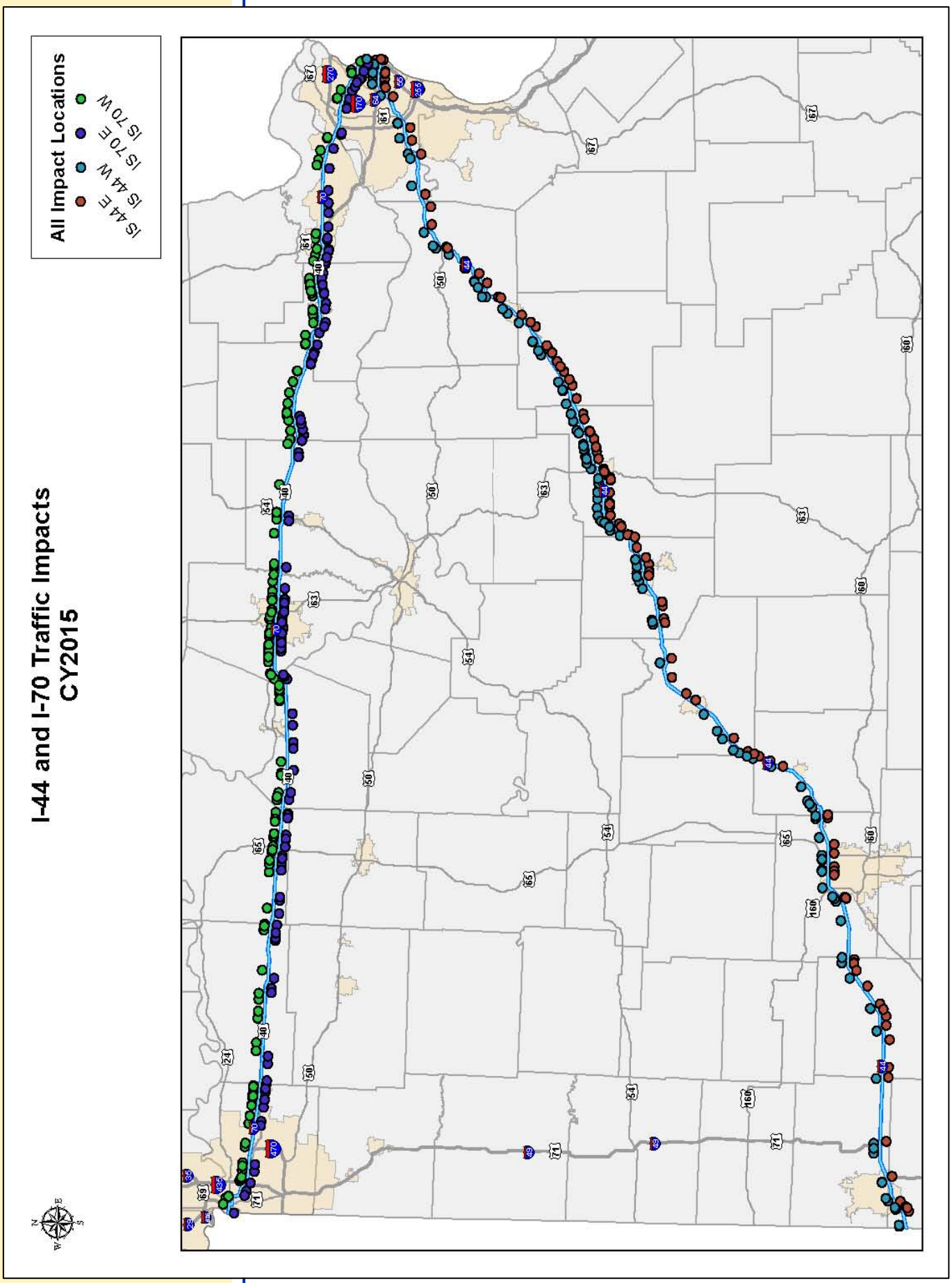
MoDOT continues to work with emergency responder partners to minimize the delay caused by closures on the interstate system. This measure provides more information so staff can focus on the incidents with higher "real" impact to travelers. This information is used to develop and implement strategies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

Top 10 Incidents by Delay
January - March 2016

Route	County	Dir	Mile Marker	Date	Impact Duration (hrs:min)	Max Delay (hrs:min)
I-70	LAFAYETTE	E	34	1/5/2016	4:10	4:08
I-70	BOONE	W	126	1/19/2016	7:00	3:45
I-70	BOONE	W	128	1/19/2016	6:10	3:17
I-70	MONTGOMERY	E	167	2/10/2016	6:00	1:32
I-70	CALLAWAY	W	154	1/19/2016	4:50	1:30
I-70	MONTGOMERY	E	169	3/25/2016	3:40	1:30
I-44	PHELPS	W	174	3/30/2016	2:30	1:30
I-44	LACLEDE	E	144	1/19/2016	10:50	1:28
I-44	LACLEDE	E	144	1/19/2016	10:50	1:28
I-44	PULASKI	W	156	1/19/2016	8:00	1:20


Traffic Impacts on I-44
January to March 2016
Mile Marker/Exit/City
Duration of Impact
Max Delay
Time (Minutes)
660
600
540
480
420
360
300
240
180
120
60
0
Downtown STL
Pacific
US50 W
236
Sullivan
217
Cuba
196
Rolla
174
Saint Robert
152
144
Lebanon
117
Marshfield
85
Springfield
70
61
52
Mount Vernon
29
US71 N
OK State Line


Traffic Impacts on I-70
January to March 2016
Downtown STL
Wentzville
Warrenton
Danville
163
Kingdom City
137
Columbia
113
Boonville
88
US 65
64
MO 13
Odessa
Blue Springs
9
Downtown KC
Mile Marker/Exit/City
Duration of Impact
Max Delay
420
360
300
240
180
120
60
0
Time (Minutes)


All Impact Locations
I44E
I44W
I70E
I70W
I-44 and I-70 Traffic Impacts
CY2015

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

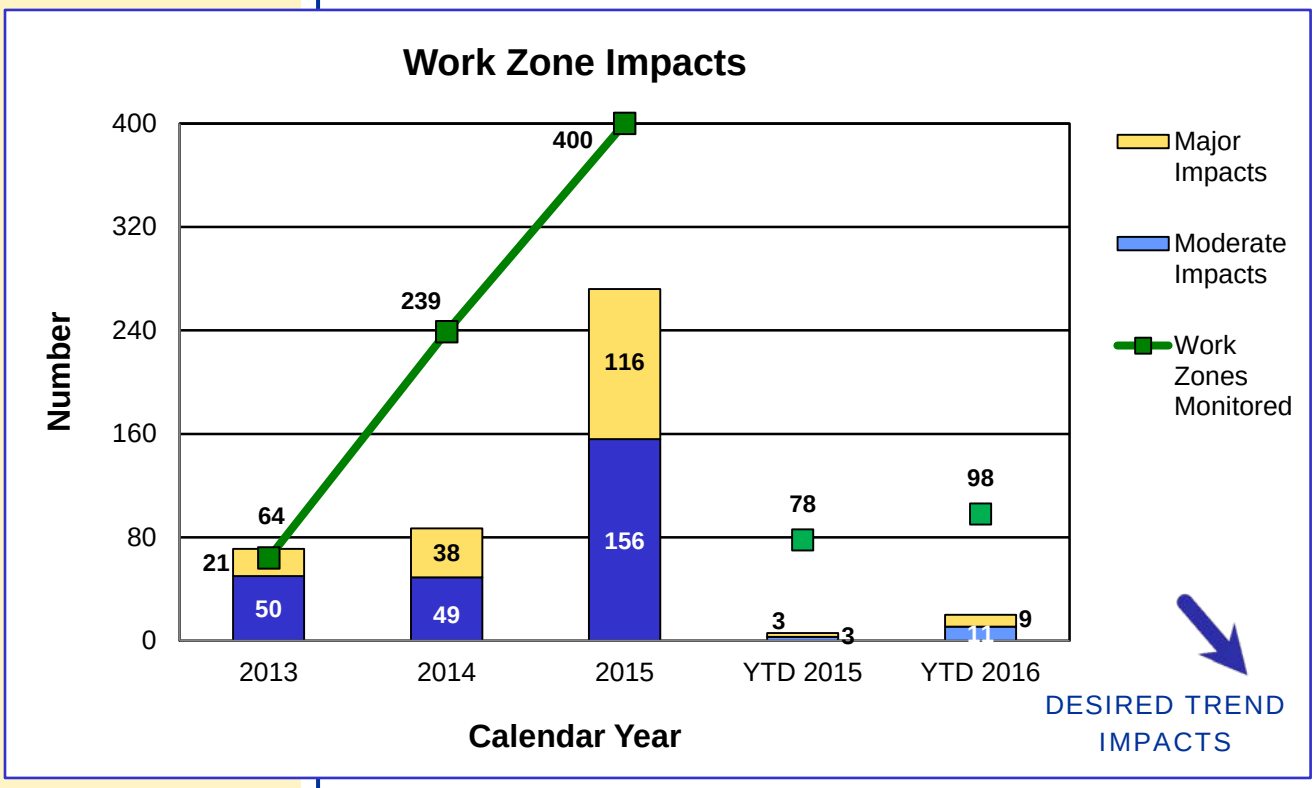
Work zone impacts to the traveling public – 5e

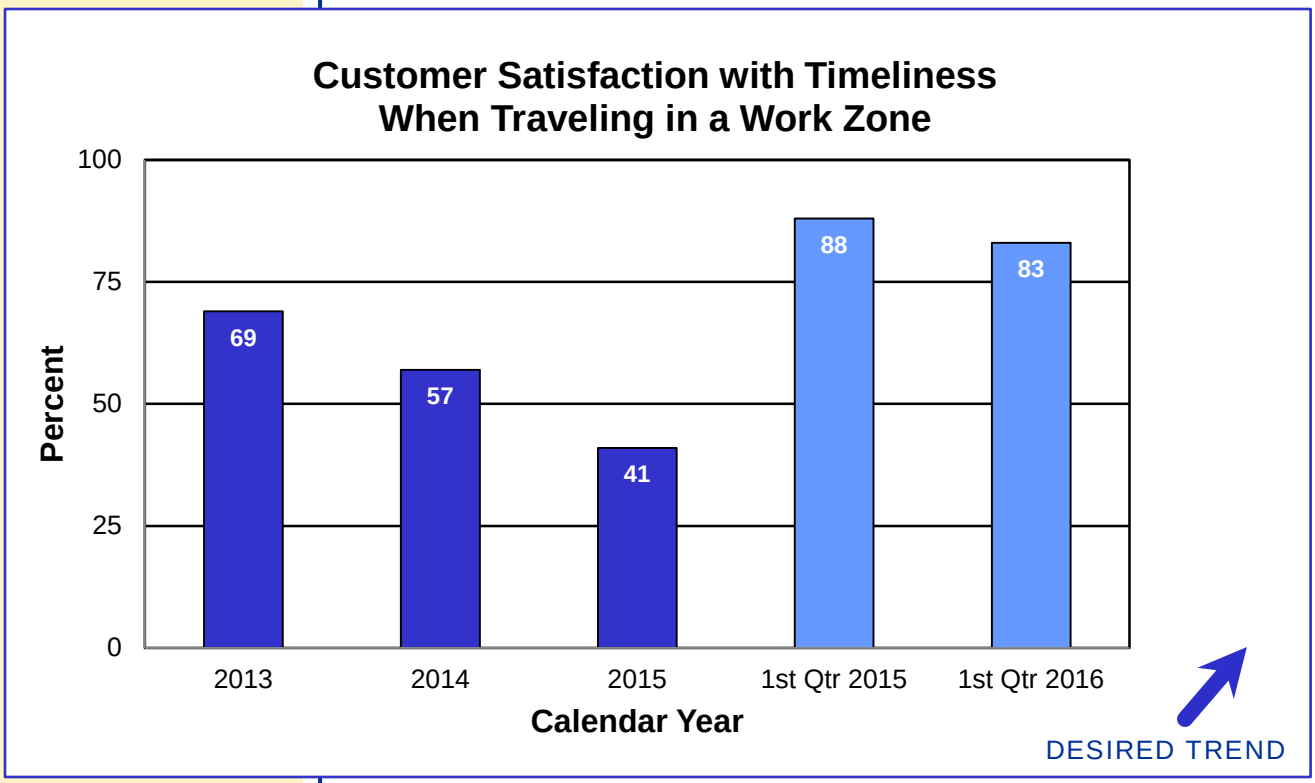
Motorists want to get through work zones with as little inconvenience as possible. MoDOT tries to minimize the travel impacts by shifting work to nighttime hours or during times when there are fewer impacts to the traveling public. To get a wider range of data and a better understanding of the impact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

MoDOT monitored 98 significant work zones this quarter, with nine major impacts and 11 moderate impacts. Two work zones accounted for all of the impacts this quarter: the Design Build Project on I-70 in Central District and the Daniel Boone Bridge in St. Louis.

Based on work zone surveys received through this year, 83 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

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.

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.

OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM

Effectiveness of improving air quality – 5f

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.

Effectiveness of Improving Air Quality

RESULT DRIVER:
Paula Gough
District Engineer

MEASUREMENT DRIVER:
Tim Chojnacki
Maintenance Liaison Engineer

PURPOSE OF THE MEASURE:
This measure tracks the amount of time needed to perform MoDOT's snow and ice removal efforts.

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 – 5g

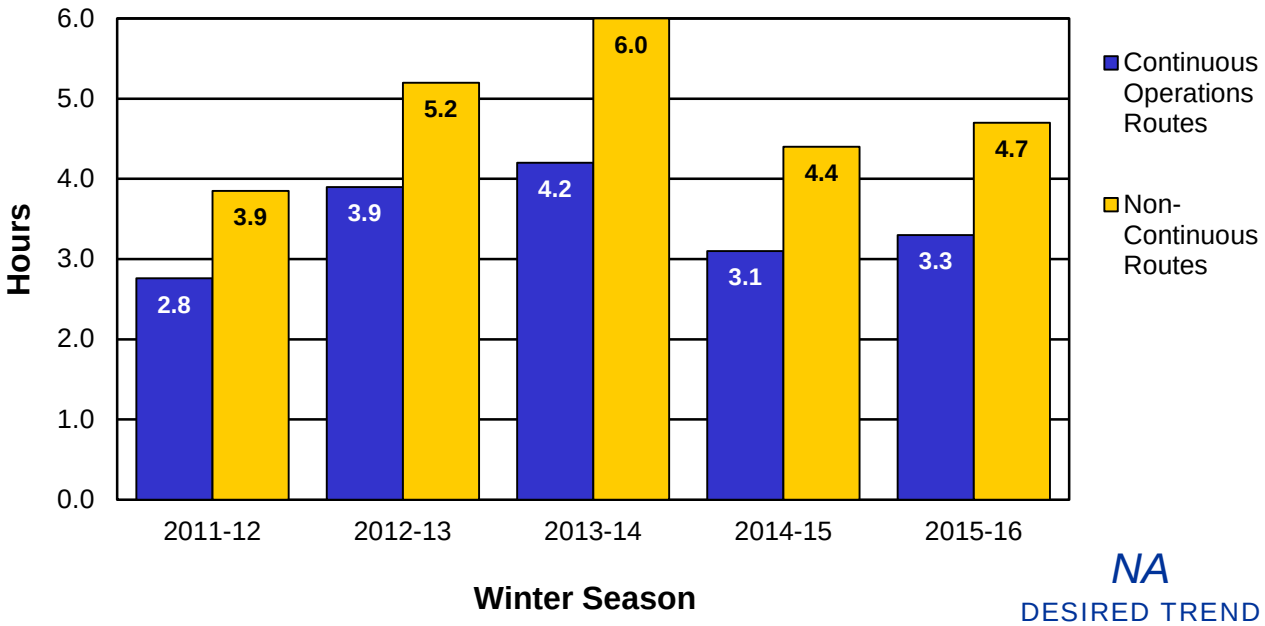
Knowing the time it takes to clear roads after a winter storm can help the department better analyze the costs associated with that work. MoDOT's response rate to winter events provides good customer service for the traveling public while keeping costs as low as possible.

The 2015-2016 winter was relatively light with less than average winter precipitation. It took an average of 3.3 hours to meet MoDOT's objective for continuous operations routes, and an average of 4.7 hours for non-continuous routes. These numbers compare favorably with the type of storms received and our historical performance.

Winter operations, on average, cost about $46.8 million dollars per year. As of March 31, 2016, MoDOT has expended $22.9 million dollars responding to events this winter. 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.

OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM

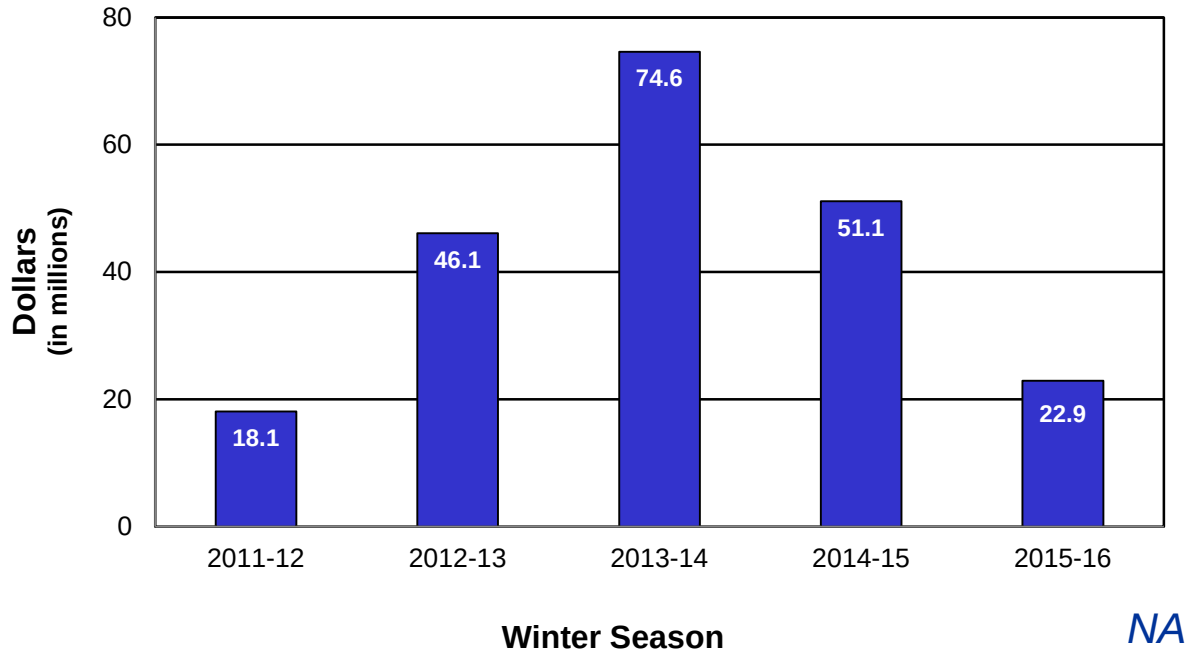
Average Time to Meet Winter Storm Event Performance Objectives



NA

DESIRED TREND

Average Cost of Winter Operations



NA

DESIRED TREND

RESULT DRIVER:
Paula Gough
District Engineer

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.

OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM

Bike/pedestrian and ADA transition plan improvements – 5h

MoDOT continues to be 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.

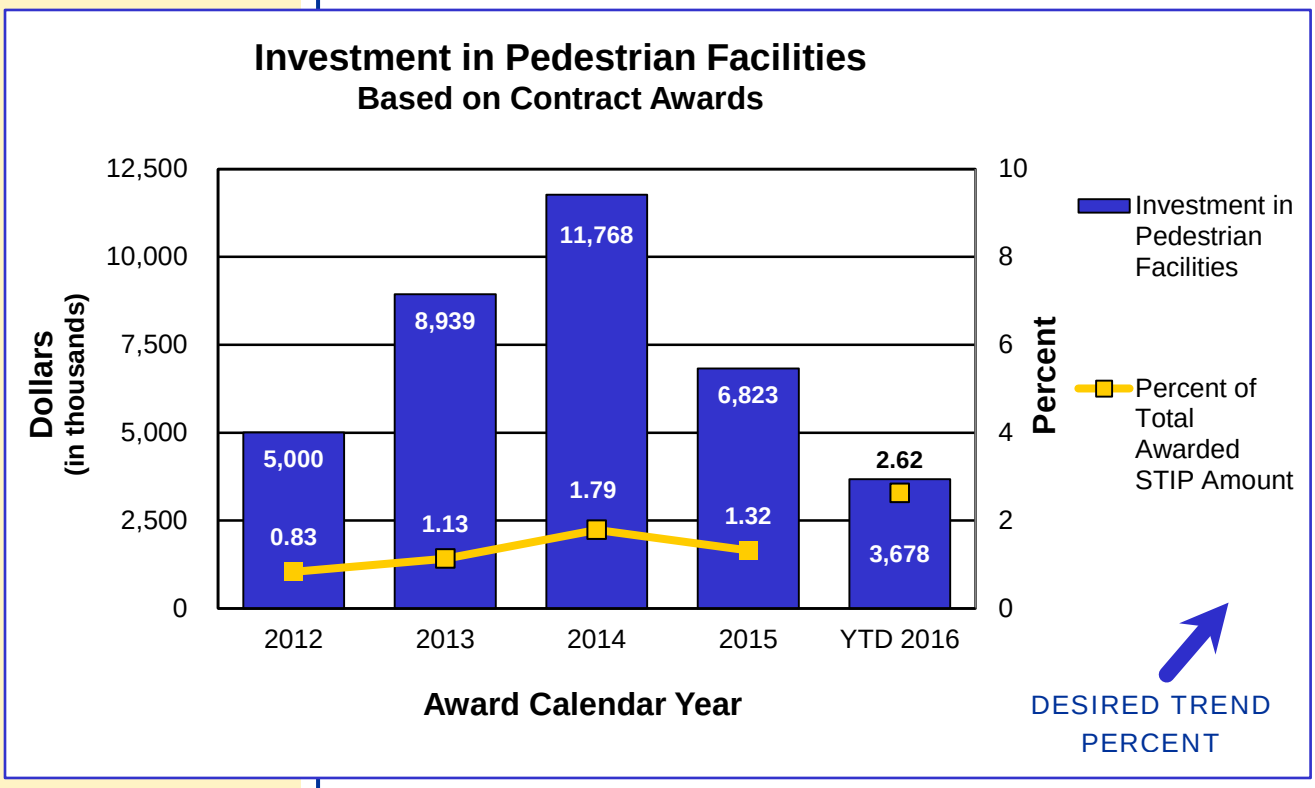
MoDOT has improved more than $16.2 million of deficient ADA facilities in the right of way since 2008. Additional work totaling more than $135.3 million is still necessary to complete the 2010 ADA Transition Plan inventory.

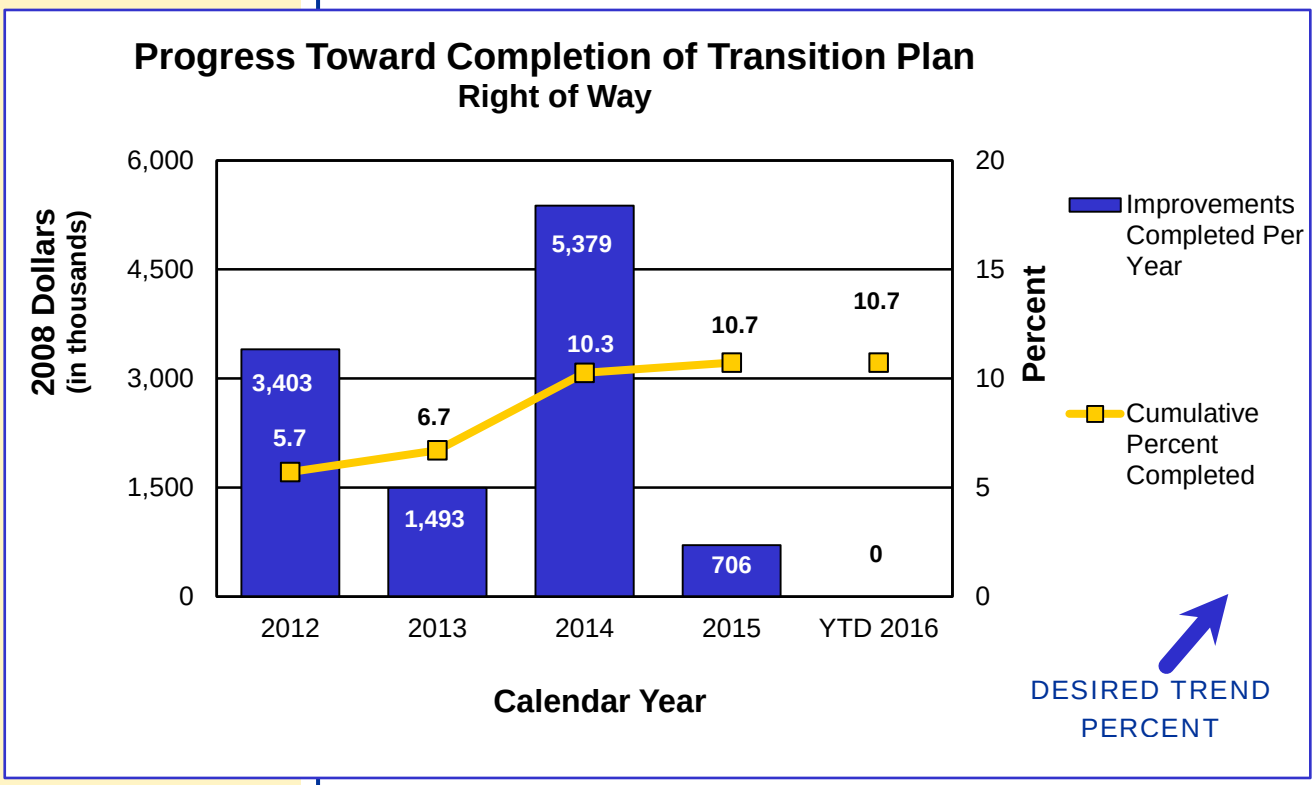
In February 2016, the Commission increased funding available to the districts for use on correcting ADA transition plan items by $5 million annuallly. This new funding source will assist districts in making the improvements to pedestrian facilities that Missourians desire.

MoDOT's annual investment in pedestrian facilities for the first quarter of 2016 totaled $3.68 million. For 2015, the total annual investment was $6.82 million. In 2014, the annual investment was an all time high of $11.77 million. Since 2008, MoDOT has invested over $62.7 million in pedestrian facilities statewide.

MoDOT has committed to complete the ADA transition plan improvements, including cross slope corrections, as work is being done on the adjacent roadway section or by standalone projects by 2027.

OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM





RESULT DRIVER:
Paula Gough
District Engineer

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. 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 October while ferryboat and rail data is updated quarterly.

OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM

Use and connectivity of non-highway modes of transportation – 5i

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.

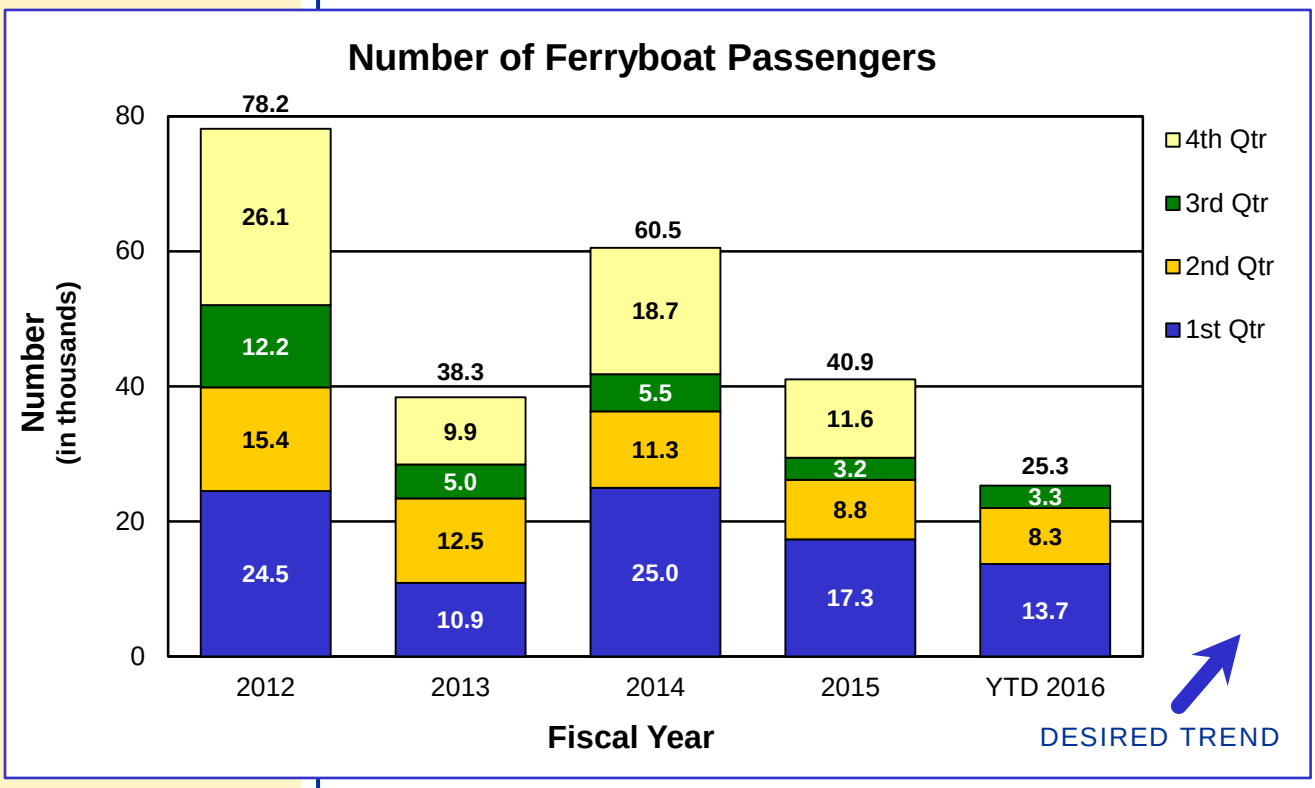
The number of ferryboat passengers in the third quarter of fiscal year 2016 totaled 3,341, an increase from the 3,247 passengers in the third quarter of FY 2015. The third quarter typically sees lower numbers of ferryboat passengers than the other quarters of the year. In addition, the Mississippi County ferry was damaged after striking a submerged object and was only operational for nine days at the beginning of the quarter.

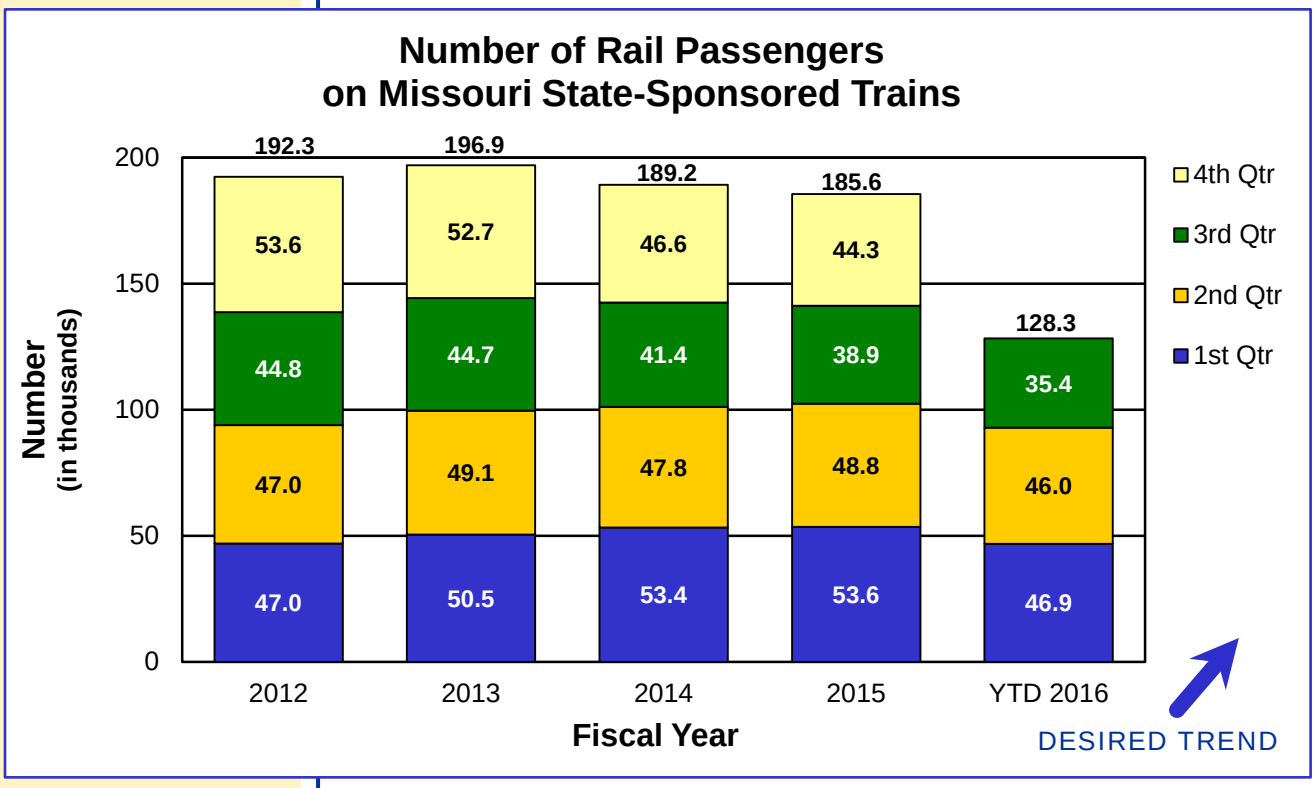
Ridership continues to decline on Missouri River Runner trains. There were 35,383 passengers in the third quarter of FY 2016, compared to 38,856 passengers in the same period of FY 2015. Year to date, ridership has declined 9 percent, primarily due to low gas prices and recurrent bus bridges due to construction on the high-speed rail corridor between St. Louis and Chicago.

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 2015 can be attributed to low gas prices.

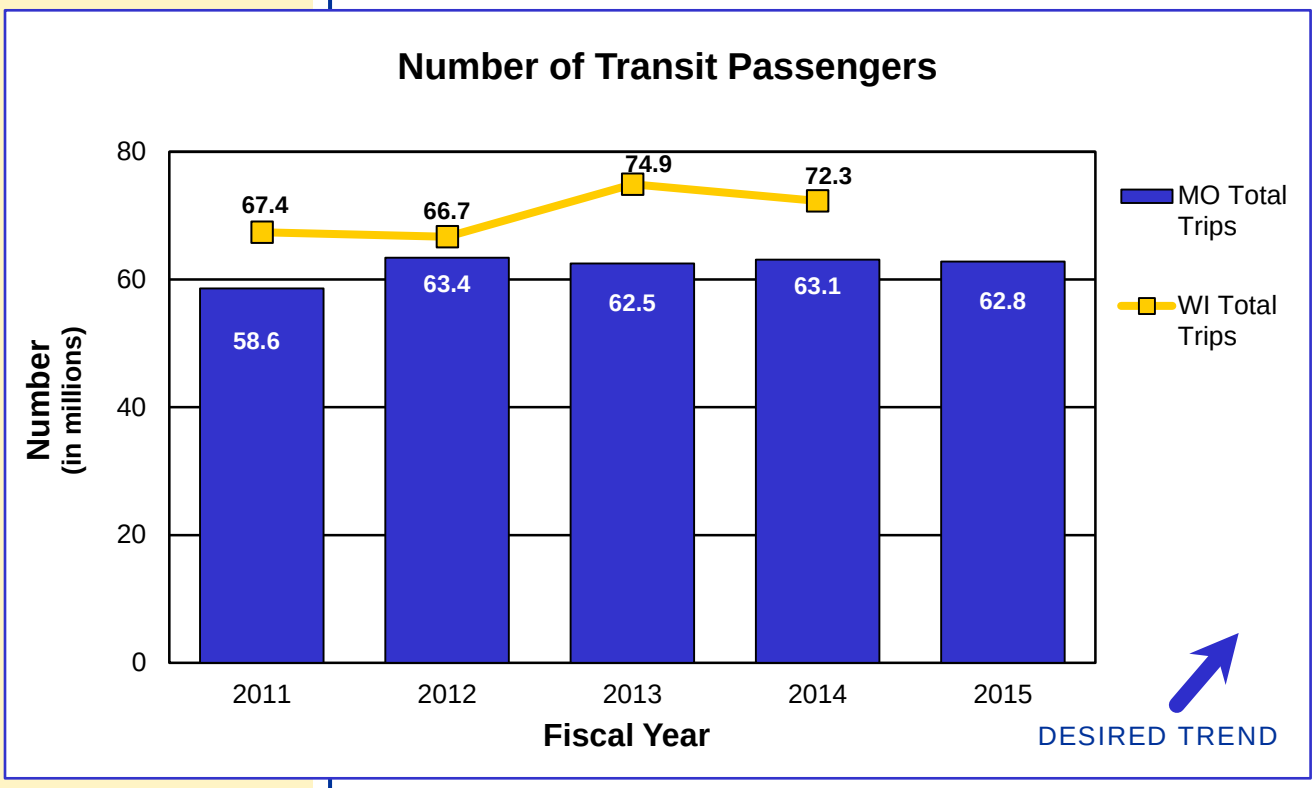
The number of airline passengers has remained fairly steady from 2010 to 2014, with a slight increase in passenger enplanements (boardings) for 2014. Due to increasing state Aviation Trust Fund revenues, in March 2015 MoDOT issued grants to commercial service airports for the air service program. These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

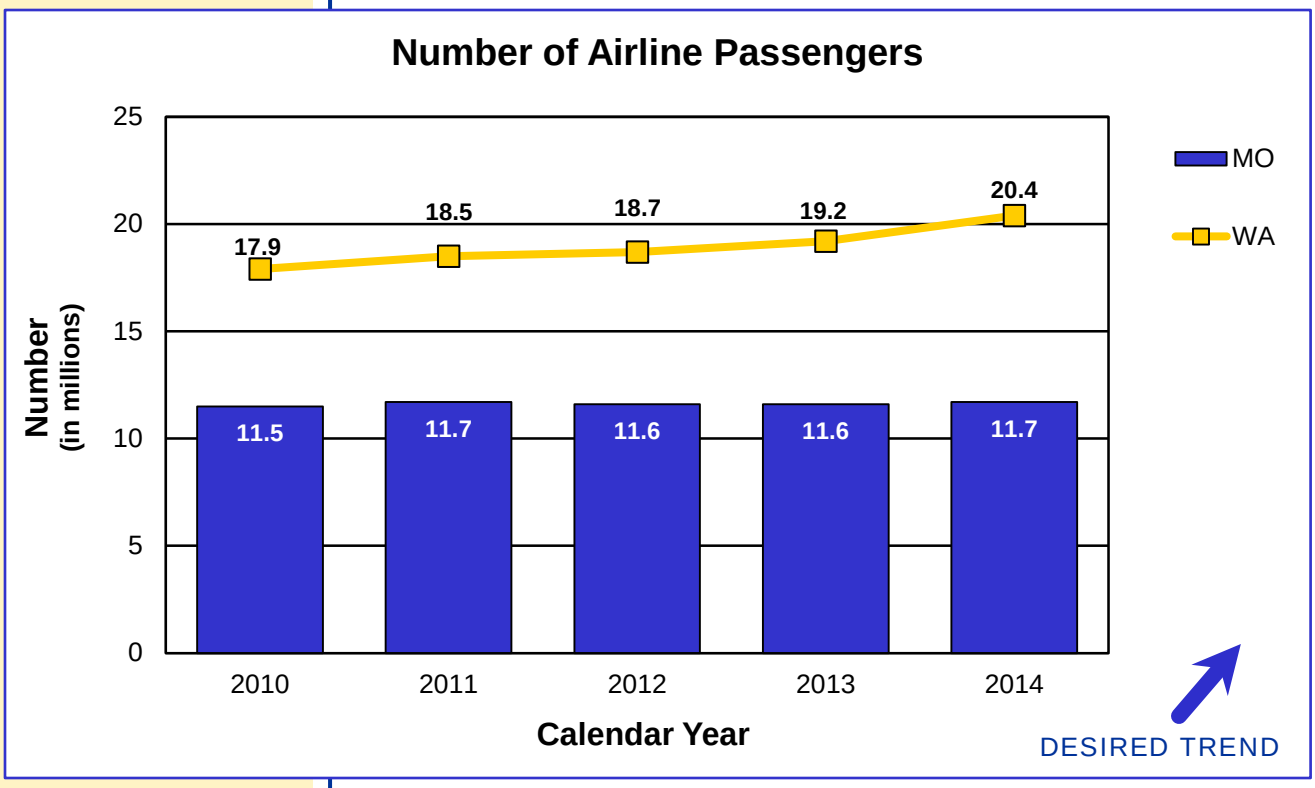
OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM





OPERATE A RELIABLE AND CONVENIENT TRANSPORTATION SYSTEM





2015 data is not available until October 2016.

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

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.

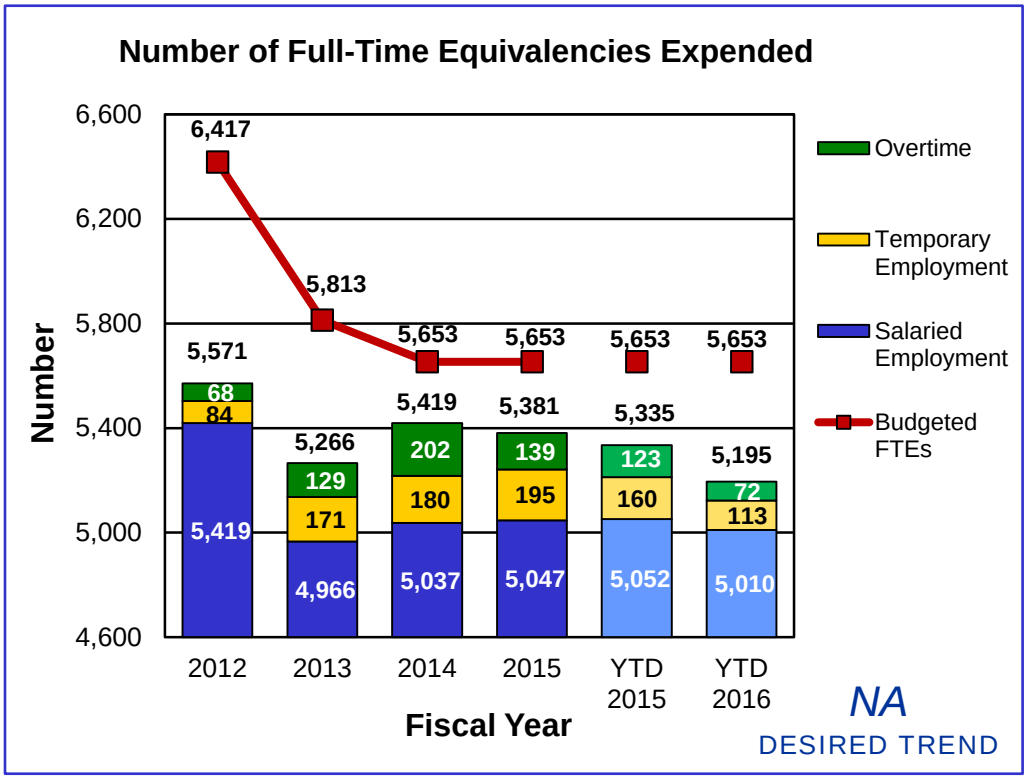
MEASUREMENT AND DATA COLLECTION:
This measure converts the regular hours worked or on paid leave of temporary and salaried employees, as well as overtime worked (minus any hours that are flexed during the workweek), to FTEs. In order to calculate FTEs, the total number of hours worked or on paid leave 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.

USE RESOURCES WISELY

Number of full-time equivalencies expended – 6a

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 effort to use resources wisely.

During the first three quarters of fiscal year 2016, the FTE levels for salaried and temporary employment, as well as FTEs expended for overtime, have decreased compared to the same time last fiscal year. During the first three quarters of FY 2016, MoDOT employees worked over 20,000 more hours of overtime in response to flooding than during the same period last fiscal year.



NA

DESIRED TREND

RESULT DRIVER:
Brenda Morris
Financial Services Director

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.

USE RESOURCES WISELY

Level of job satisfaction – 6b

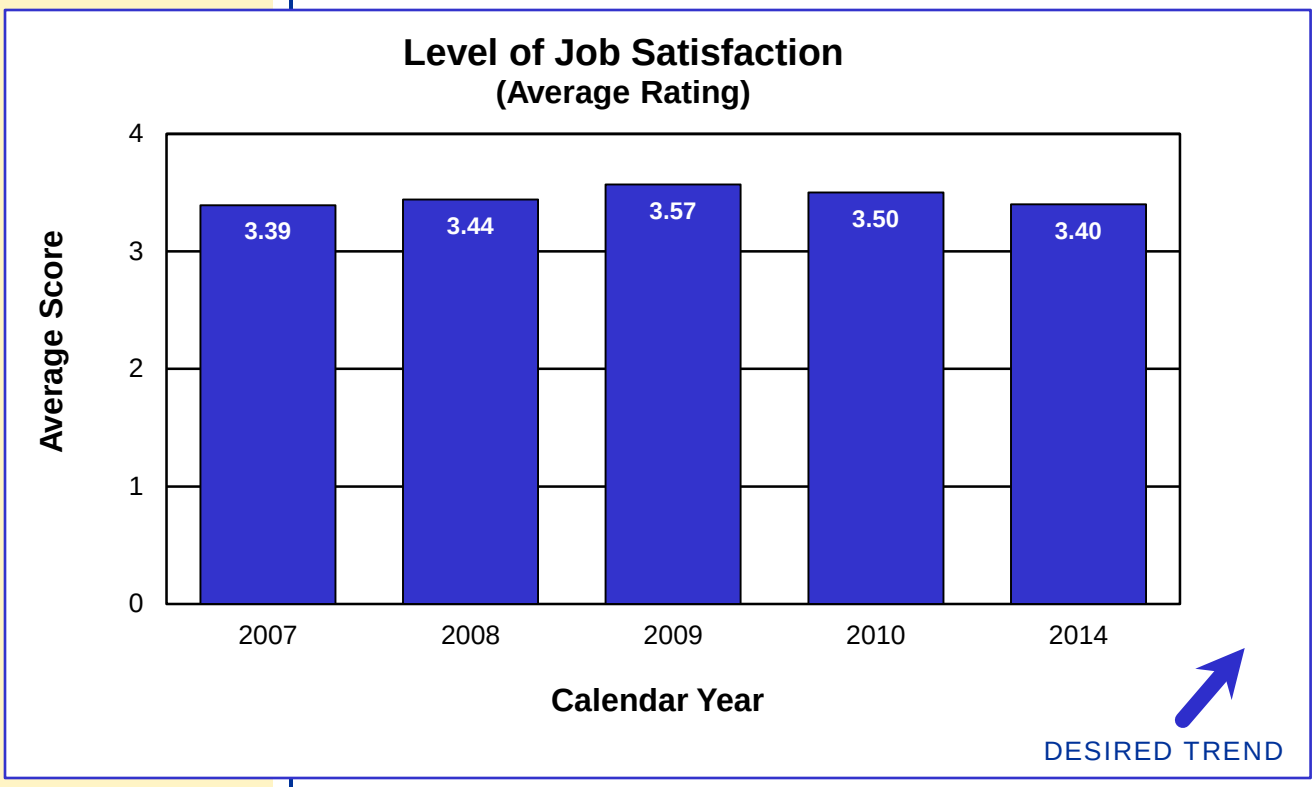
MoDOT wants employees to be satisfied with their work and workplace and feel like they are a good fit for their jobs. Employee satisfaction can be a driver of overall organizational performance. The more satisfied and engaged employees are with the workplace, the more discretionary effort they are willing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

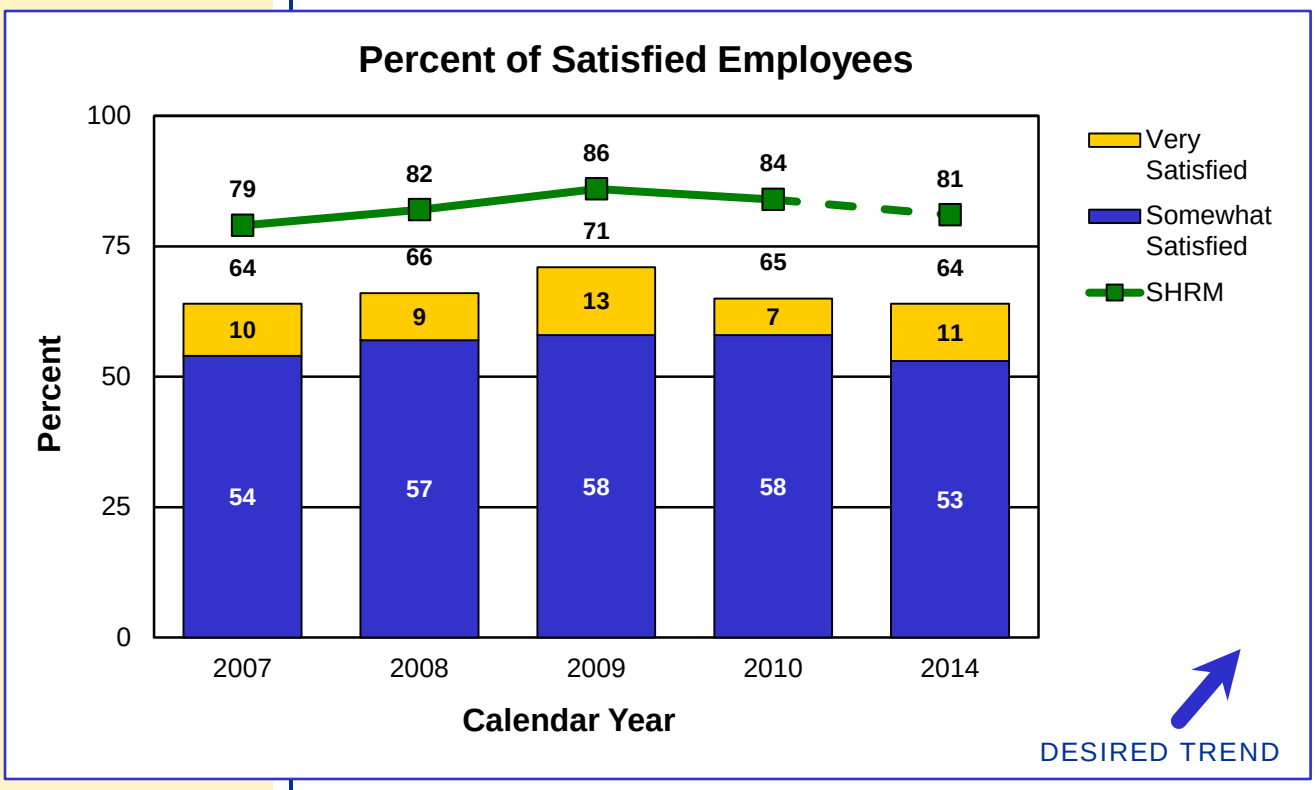
Between 2005 and 2010, the average employee satisfaction ratings and percent of satisfied employees both showed upward trends with peaks in 2009. Following a four-year break, the employee survey was conducted this past spring. Overall job satisfaction has dipped slightly from 3.5 in 2010 to 3.4 in 2014. 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

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. For benchmarked data, the turnover is averaged for surrounding state departments of transportation (Arkansas, Iowa, Kansas, Kentucky, Tennessee, Illinois, Nebraska and Oklahoma). The turnover rate is based on 2015 data and was provided through a survey of respective departments of transportation.

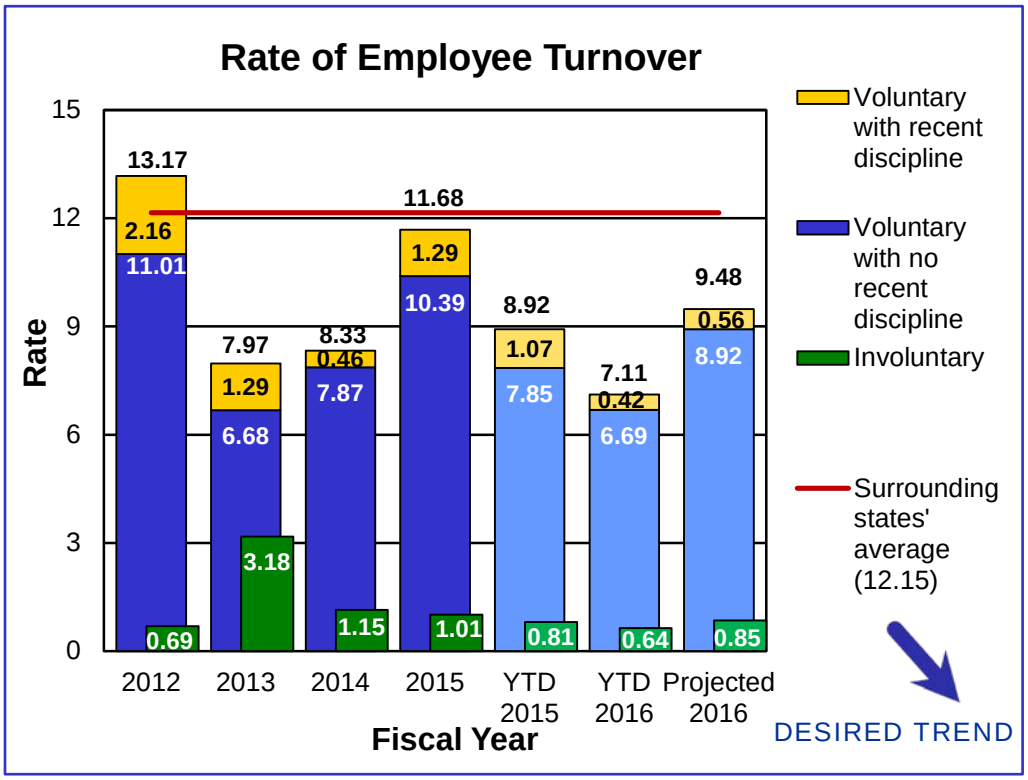
USE RESOURCES WISELY

Rate of employee turnover – 6c

When employees leave MoDOT, the department loses a large investment in recruiting, hiring, and training its workforce. While some turnover is appropriate, 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.

Overall turnover, combining the voluntary and involuntary turnover rates in the charts below, has decreased from 9.73 percent in the first three quarters of fiscal year 2015 to 7.75 percent through the first three quarters of FY 2016. During the first three quarters of FY 2016, voluntary turnover rates (131 retirements and 225 resignations) are showing a downward trend. Involuntary turnover is also showing a downward trend from the first three quarters of FY 2015 (41 involuntary separations), with 32 involuntary separations (dismissals) in the first three quarters of FY 2016.

The decrease in overall turnover can be attributed to the cost-neutral salary adjustments that took effect July 1, 2015. First-year turnover remains high and is the focus for the department's employee retention efforts through the onboarding program.



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

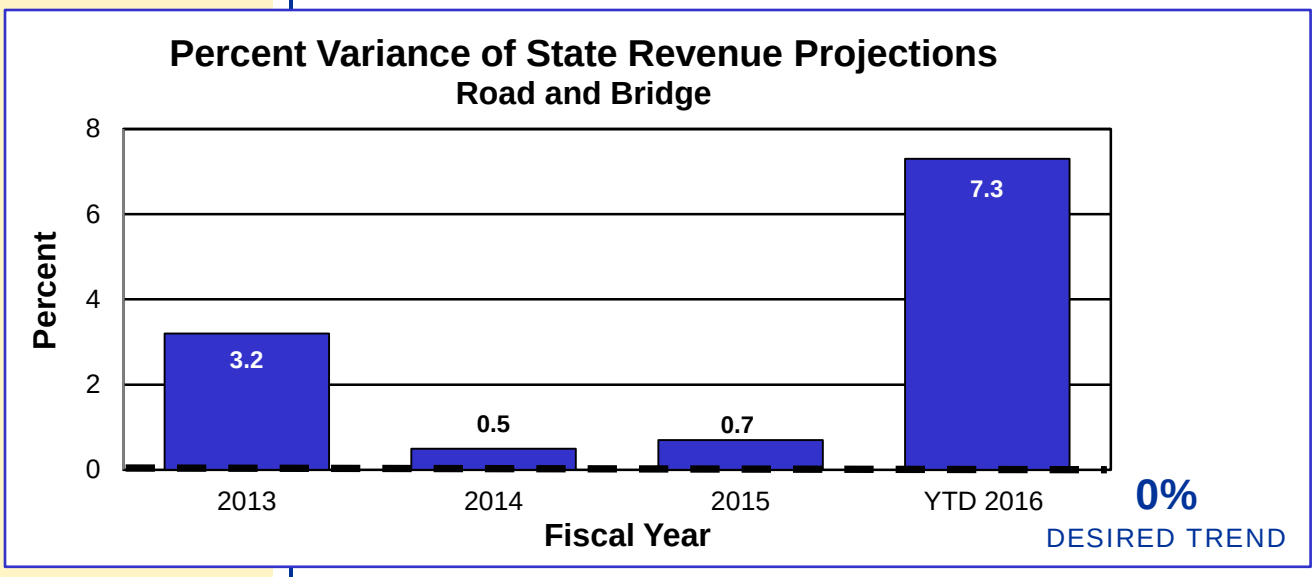
State and federal revenue projections help MoDOT staff do a better job of budgeting limited funds for its operations and capital program. The desired trend is for actual revenue to match projections with no variance.

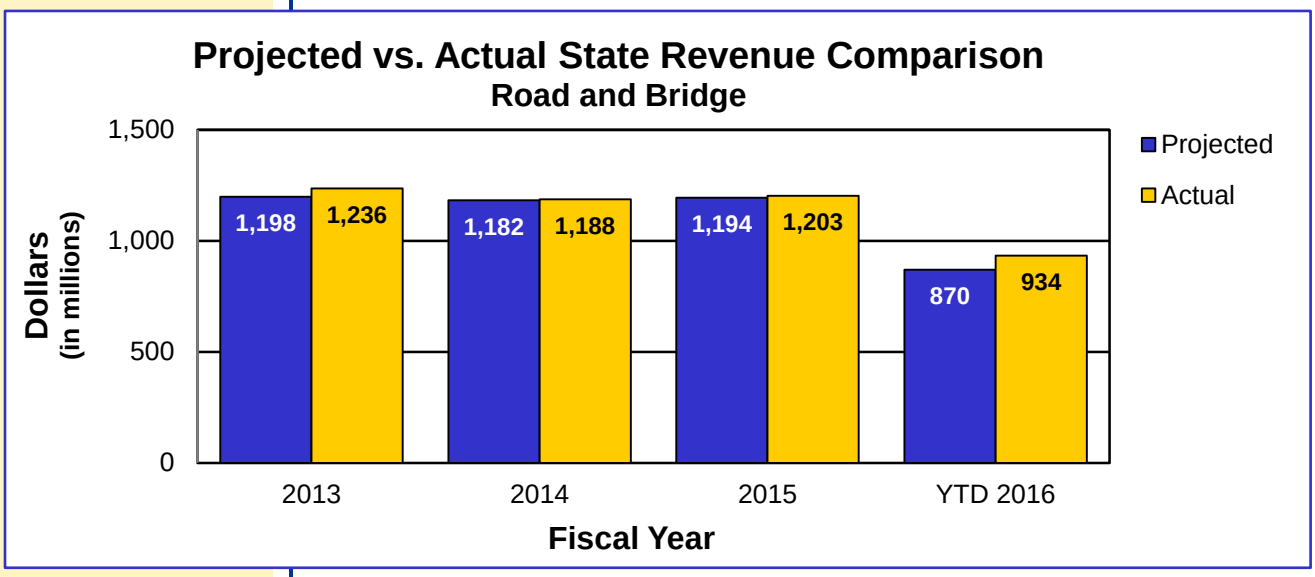
The actual year-to-date state revenue is higher than projected for the third quarter of fiscal year 2016. The actual state revenue for road and bridge from motor fuel taxes, motor vehicle sales taxes, motor vehicle and driver licensing fees, and miscellaneous is more than projected. The positive variance of 0.5 percent for other modes is mostly attributable to the jet fuel and motor vehicle sales taxes.

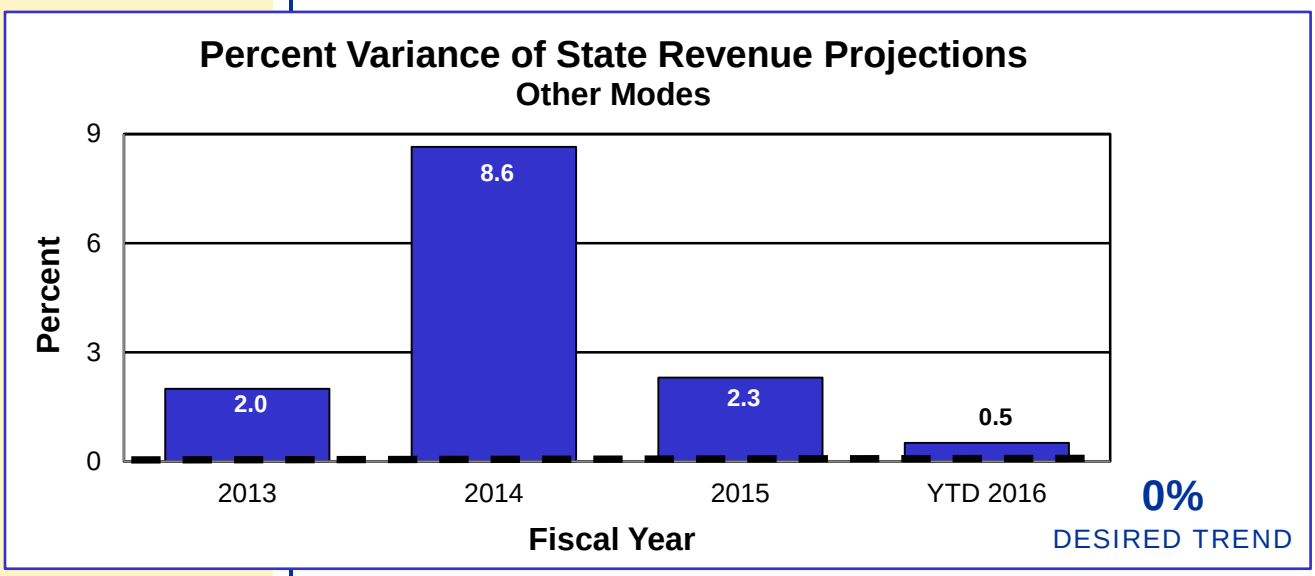
The largest source of transportation revenue is from the federal government. Funding is received through various federal transportation agencies including Federal Highway, Transit, Aviation and Railroad Administrations. In December 2015, Congress passed a five-year federal transportation reauthorization act entitled Fixing America's Surface Transportation Act. The FAST Act increases the amount of road and bridge funding for all state DOTs. 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.

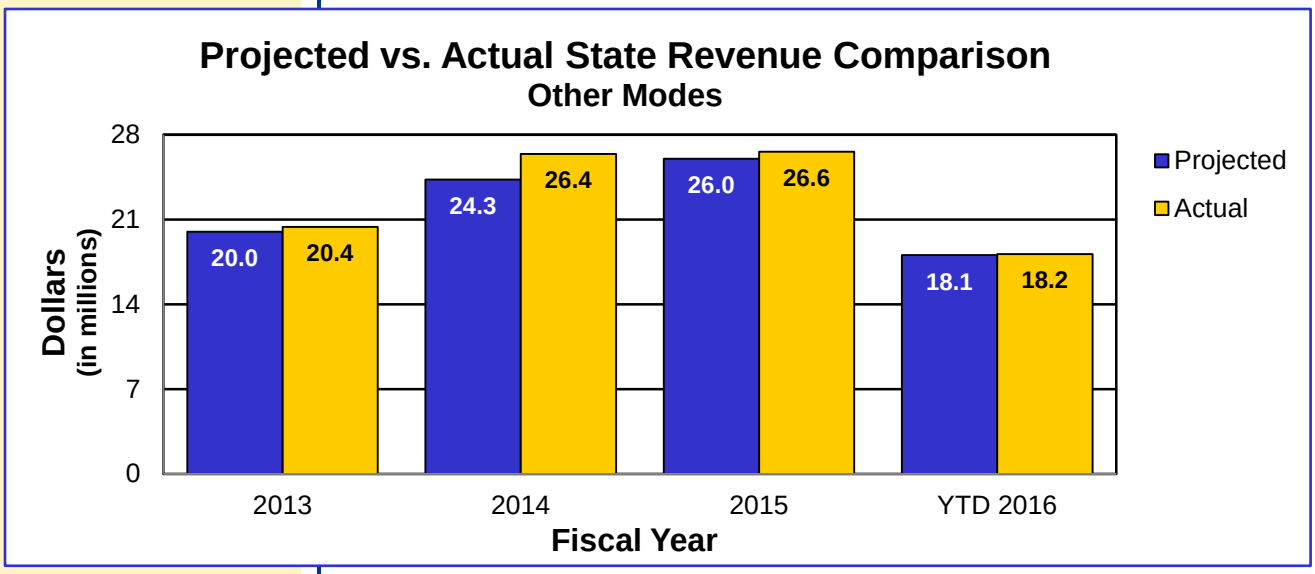
USE RESOURCES WISELY

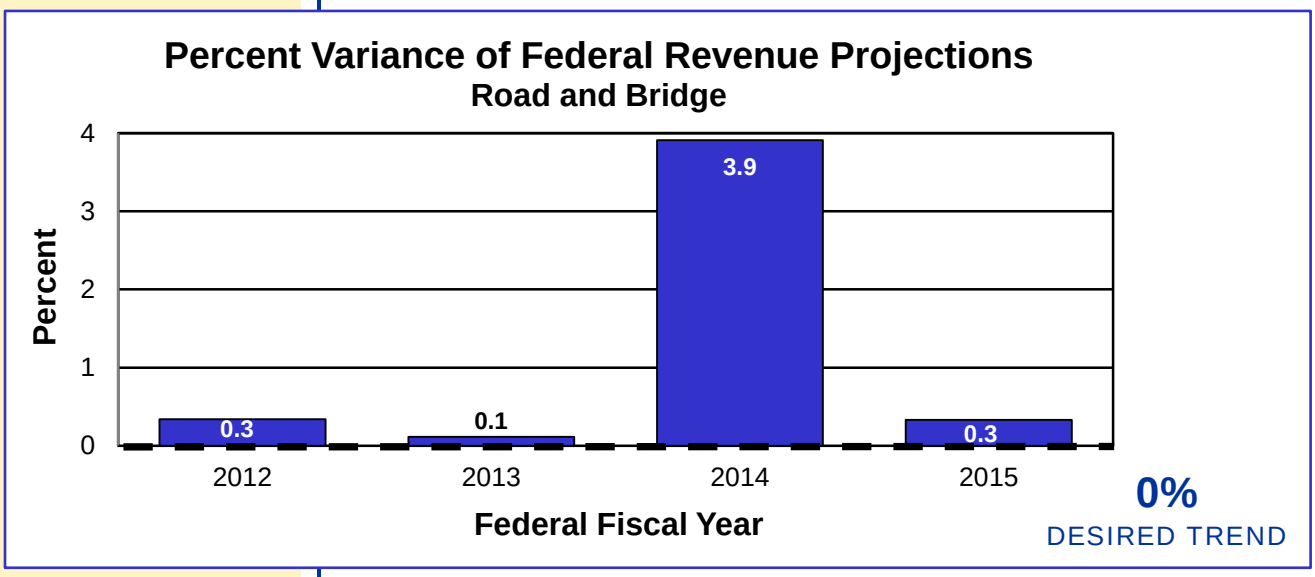


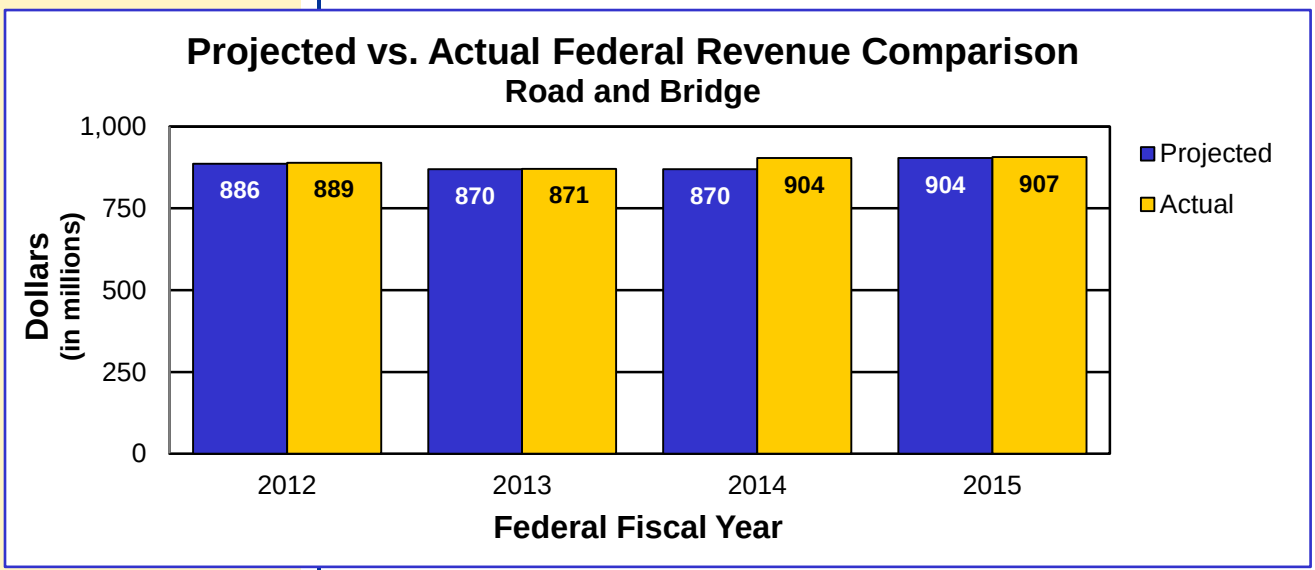


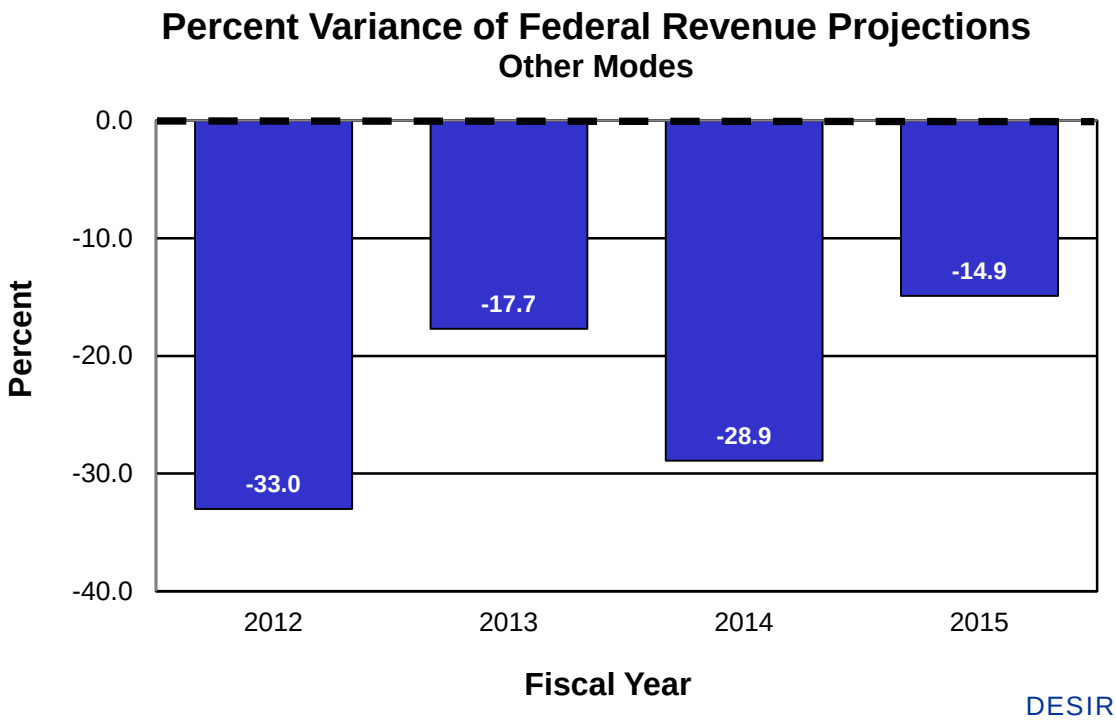


USE RESOURCES WISELY

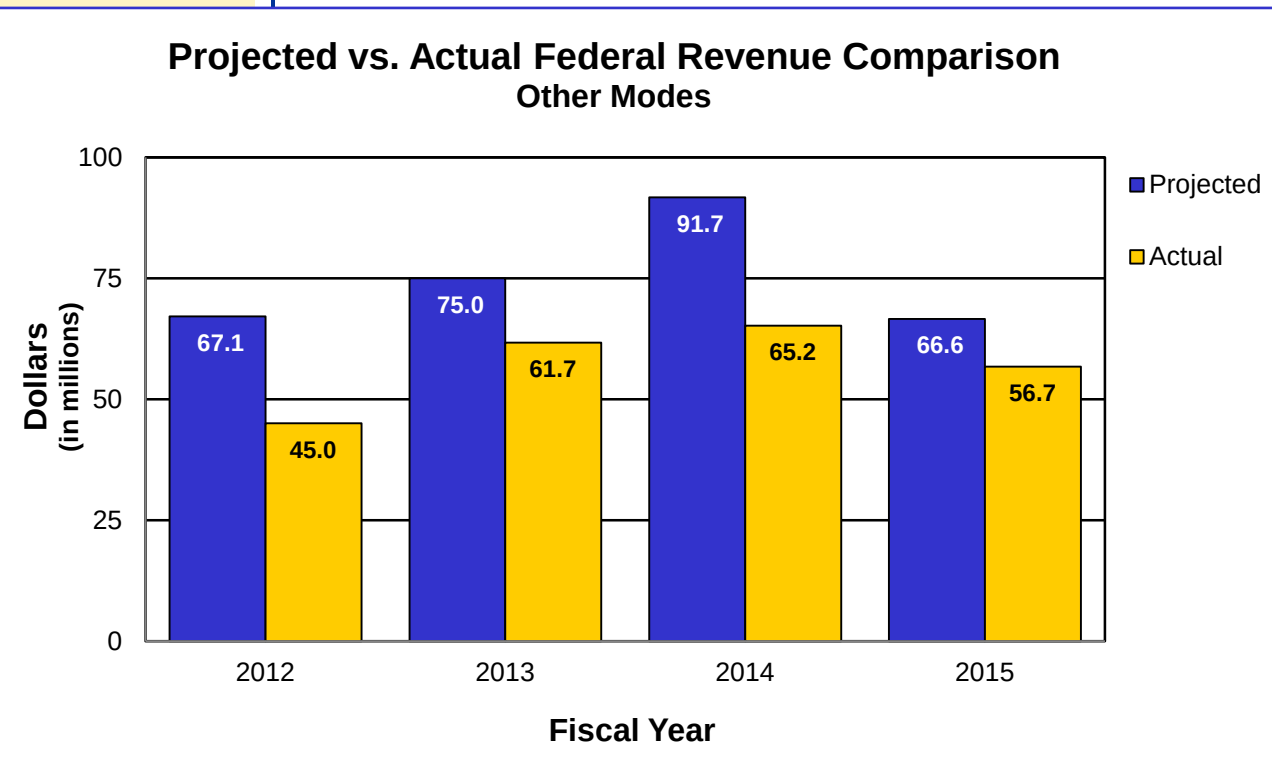








0%
DESIRED TREND



RESULT DRIVER:
Brenda Morris
Financial Services Director

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.

USE RESOURCES WISELY

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

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.

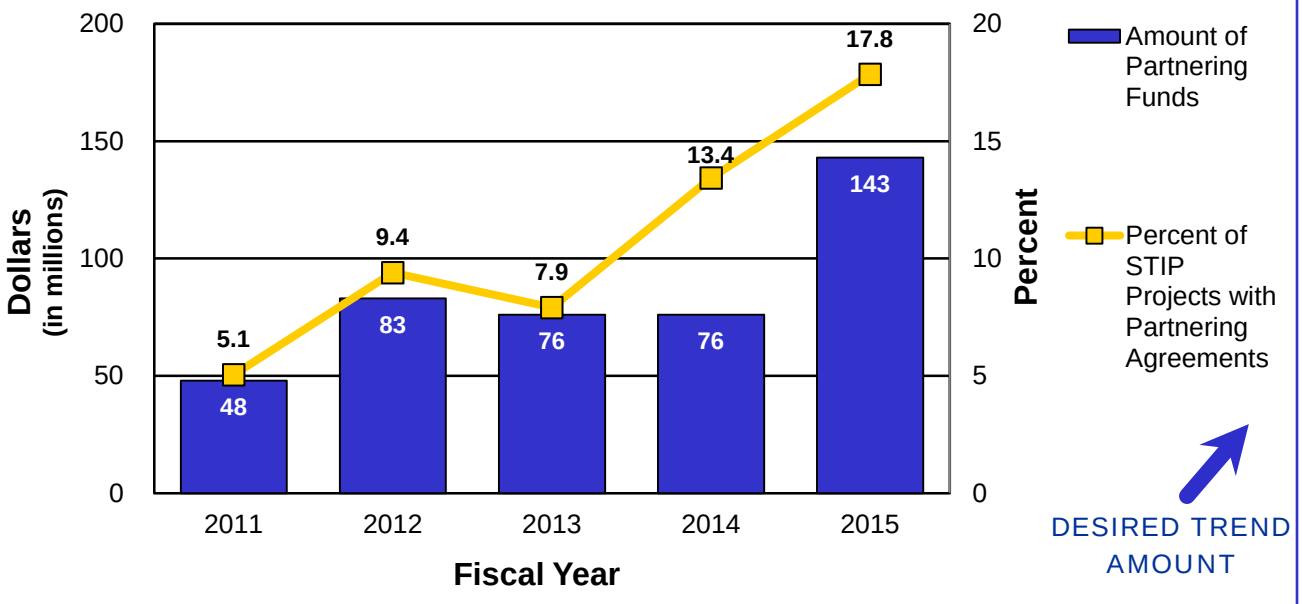
The amount of partnership funding is up significantly in 2015. There has been a slight increase in funding from permit projects - projects where a third party makes an improvement to the state transportation system – from $9.4 million in 2014 to $11.2 million in 2015. There has been a much larger increase 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.

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

MEASUREMENT DRIVER:
Dion Knipp
Administrator of Transit

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

MEASUREMENT AND DATA COLLECTION:
Investments in non-highway 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.

USE RESOURCES WISELY

Percent of state funds invested in non-highway modes of transportation – 6f

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.

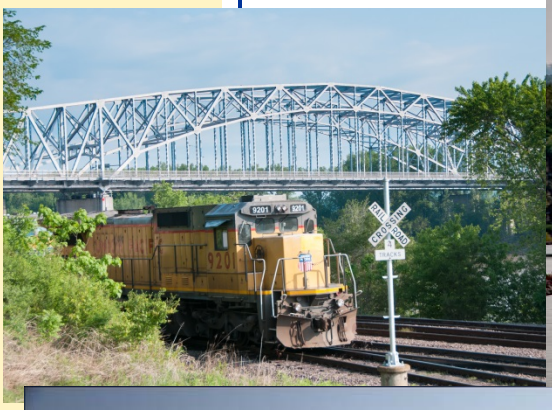
Rail – State expenditures increased by $1.6 million to $11.7 million, and federal expenditures decreased by $1.5 million to $17.9 million. In FY 2015, state funds were 60 percent of total funds invested. Non-federal and non-state expenditures accounted for at least 20 percent of rail programs in FY 2015.

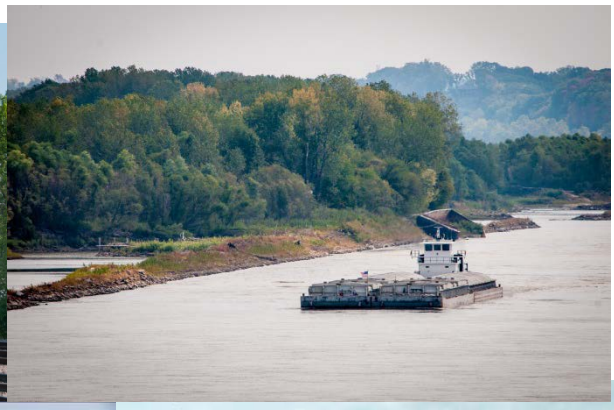
Transit – State expenditures increased by $600,000 to $4 million, and federal expenditures increased by $6.6 million to $32.6 million. In FY 2015, state funds were 11 percent of total funds invested. FTA funds require a local match of varying percentages depending on the program.

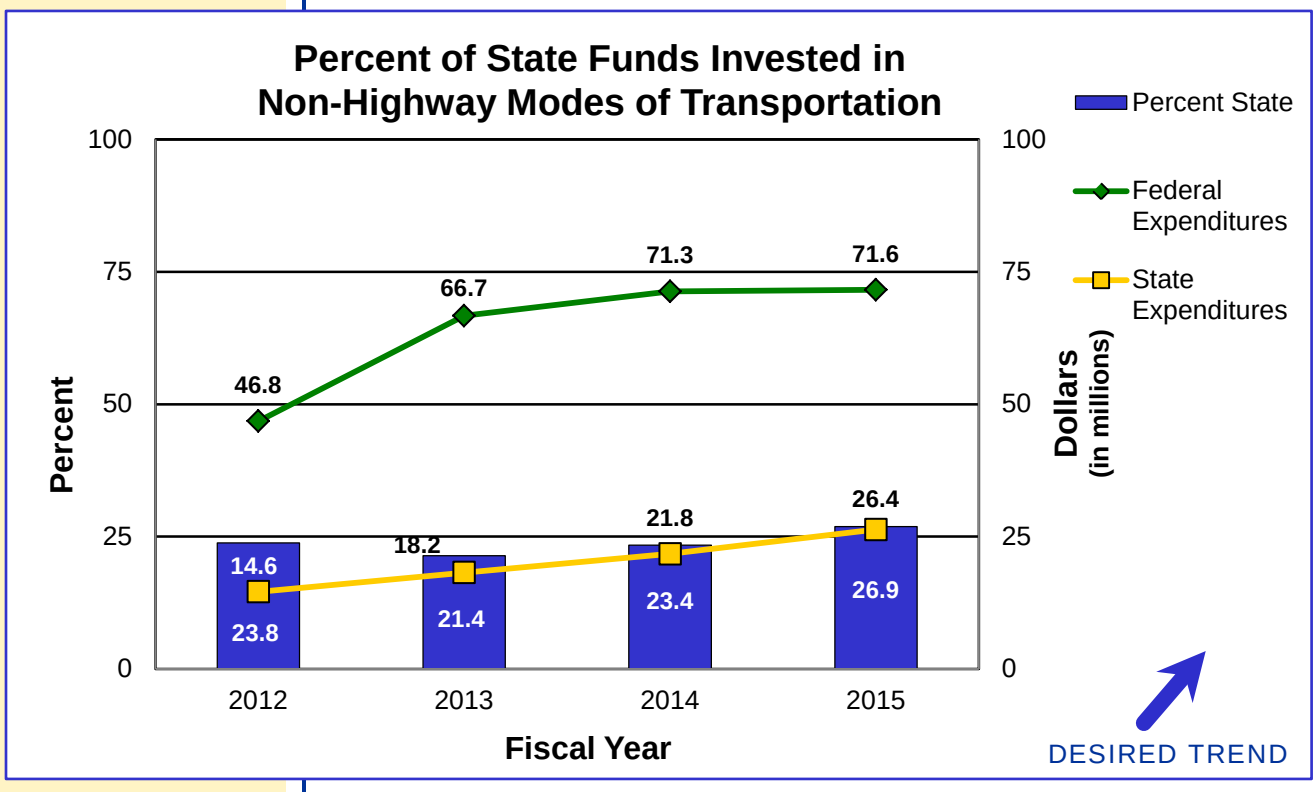
Waterways – State expenditures remained steady at $3.5 million in FY 2015. Prior years did not include $200,000 of State Ferry Boat Assistance. Federal expenditures remained at zero dollars. Local funds in FY 2015 totaled $600,000. The waterways capital improvement program requires a minimum local match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







RESULT DRIVER:
Brenda Morris
Financial Services Director

MEASUREMENT DRIVER:
Kenny Voss
Local Program Administrator

PURPOSE OF THE MEASURE:
This measure tracks the percent of available local program funds committed to projects.

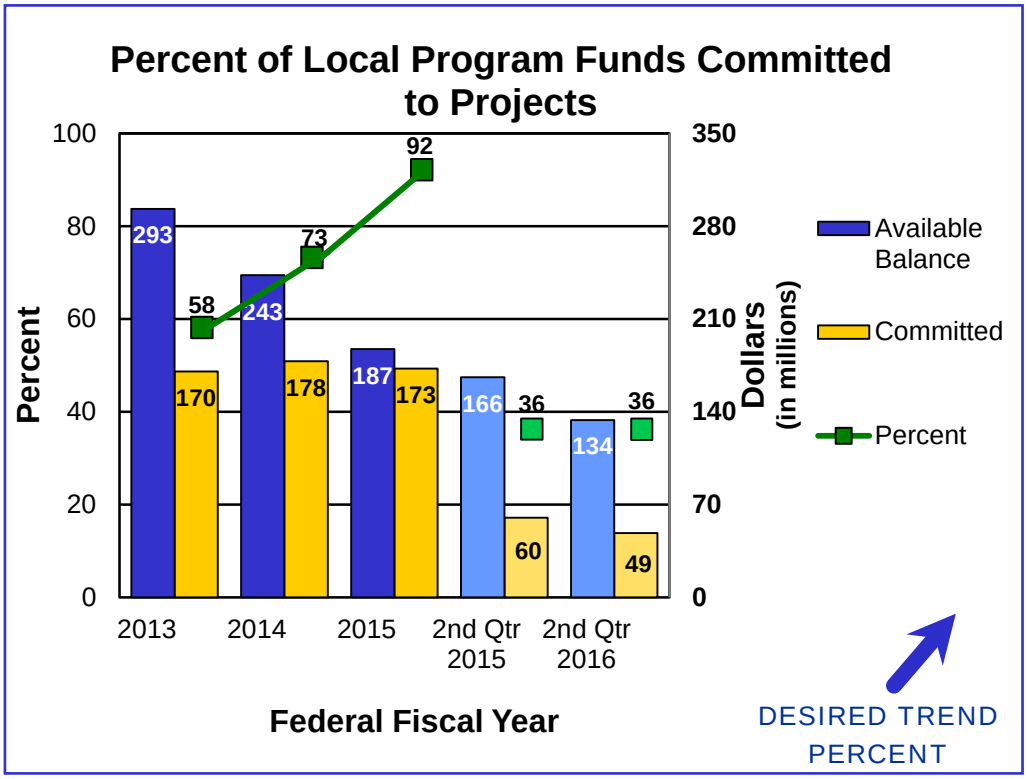
MEASUREMENT AND DATA COLLECTION:
The data is obtained from the Federal Highway Administration's Fiscal Management Information System and based on the federal fiscal year from Oct. 1 through Sept. 30. The committed amounts represent what FHWA will reimburse for the project. The available amounts represent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

USE RESOURCES WISELY

Percent of local program funds committed to projects – 6g

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.

So far in federal fiscal year 2016, 36 percent ($49 million) of the $134 million in available funds has been committed to local projects. This represents an $11 million decrease in commitments compared to the same period in FFY 2015. Since FFY 2013, the percent of local program funds committed to projects has increased from 58 percent to 92 percent. MoDOT has set a goal of committing 100 percent of local program funds to projects for FFY 2016.



RESULT DRIVER:
Brenda Morris
Financial Services Director

MEASUREMENT DRIVER:
Sunny Wilde
Financial Services Coordinator

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

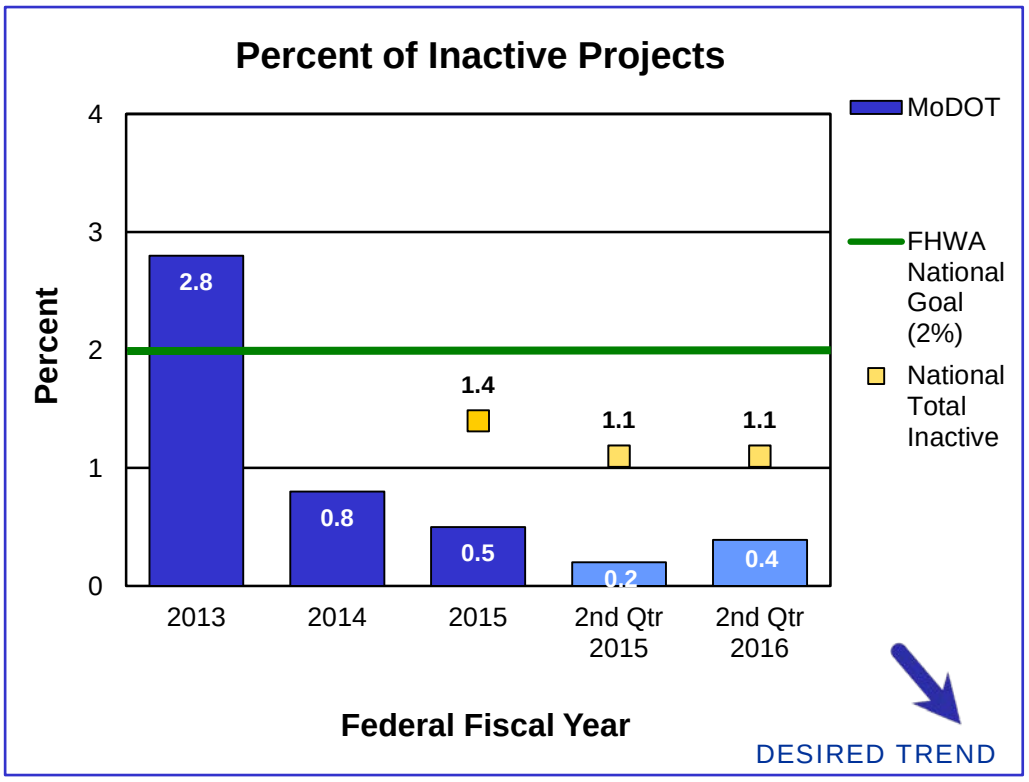
MEASUREMENT AND DATA COLLECTION:
The data is obtained from Federal Highway Administration's quarterly inactive projects report and is based on the federal fiscal year from Oct. 1 through Sept. 30. The inactive report includes projects with no expenditure activity for more than one year. MoDOT uses a 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. 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.

MoDOT's continued efforts have led to a decrease in the inactive projects since federal fiscal year 2013 when the inactive percent was 2.8 percent. For the second quarter of FFY 2016, inactive projects were 0.4 percent ($3.7 million) which reflects an improvement from the previous quarter of 1.1 percent. Missouri's inactive projects continue to stay below FHWA's national goal of 2 percent and below the national total inactive percentage of 1.1 percent. MoDOT's 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

MEASUREMENT DRIVER:
Doug Hood
Financial Services Administrator

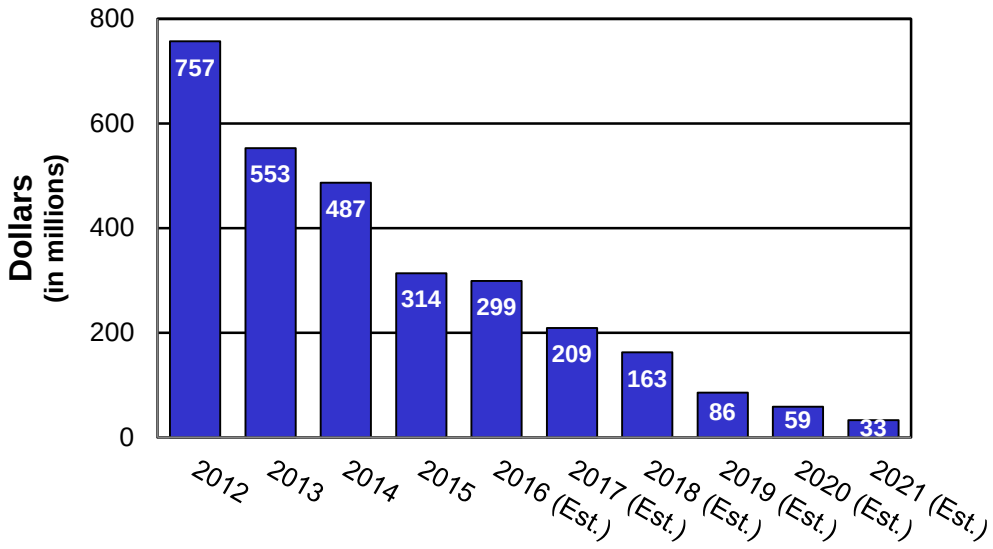
PURPOSE OF THE MEASURE:
This measure tracks the amount of advance construction funds.

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. Estimated Advance Construction balance for fiscal years 2016-2021 are estimates from the 2017-2021 financial forecast. The amount of advance construction is based on the total estimated project costs.

USE RESOURCES WISELY

Amount of advance construction – 6i

Advance construction is an innovative finance tool MoDOT uses to more efficiently manage its limited resources. Advance construction provides states the ability to move forward with projects utilizing state resources, while preserving the ability to apply and receive federal reimbursement at a later date. Advance construction helps provide the 20 percent match required for federal funds. Without advance construction, MoDOT would have had difficulty matching federal funds in the last several years.



NA
DESIRED TREND

RESULT DRIVER:
Brenda Morris
Financial Services Director

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 five vehicle classes: cars, pickups, light-duty trucks, heavy duty trucks and extra-heavy duty trucks. These classes represent 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.

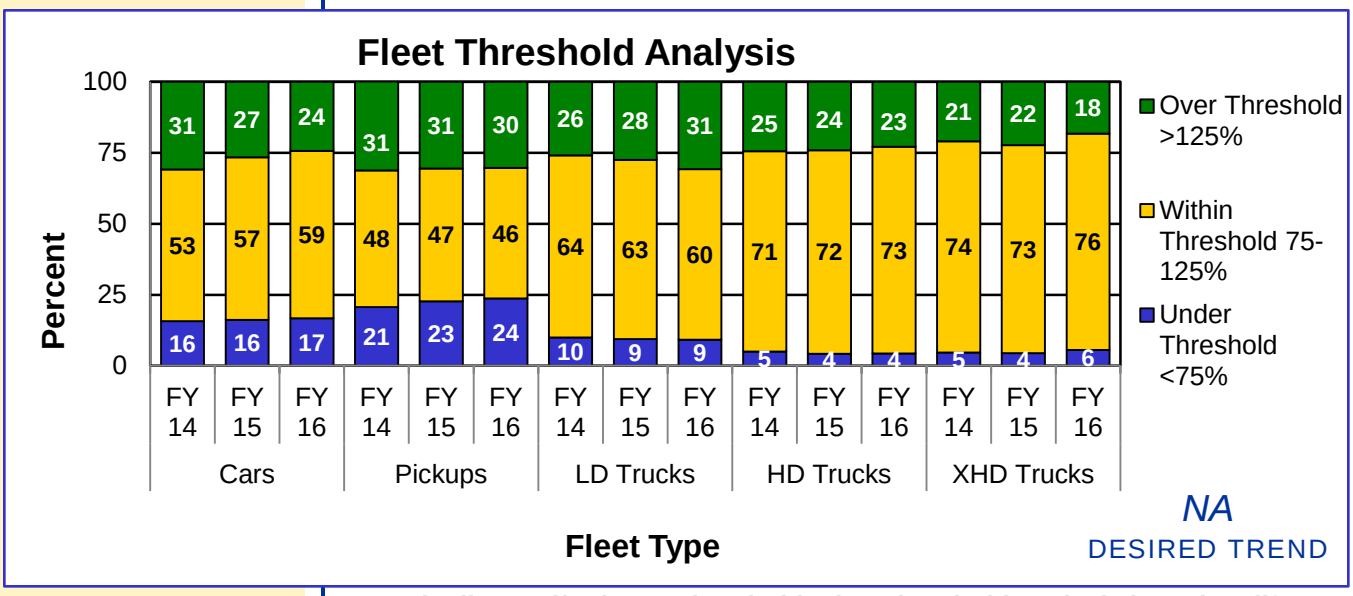
USE RESOURCES WISELY

Fleet usage and fuel efficiency – 6j

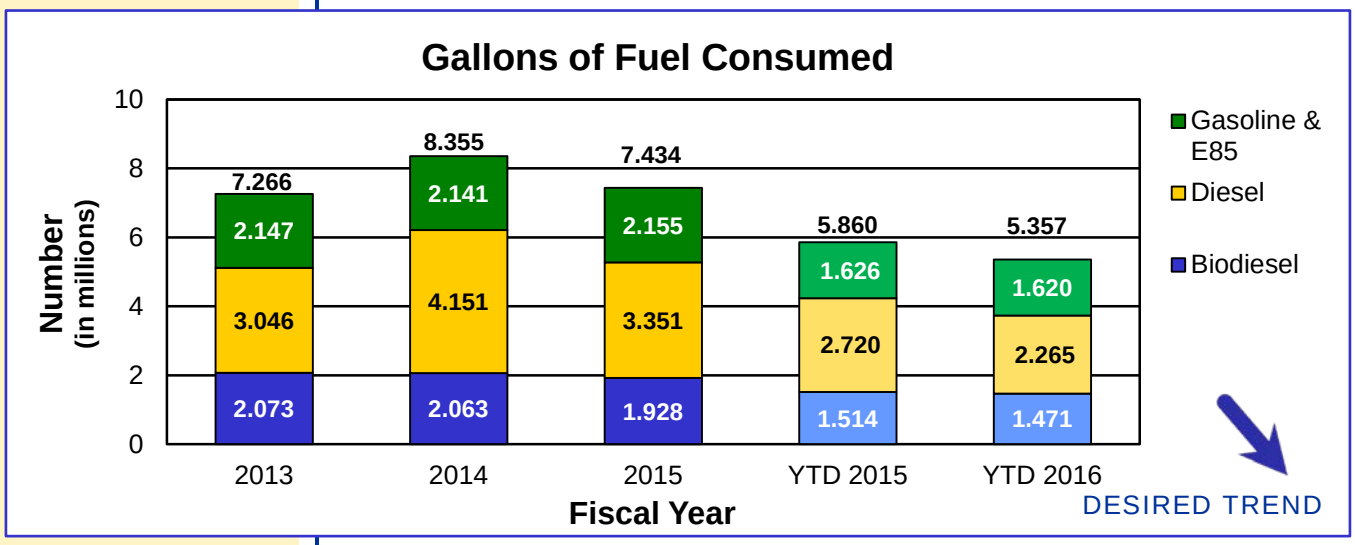
So far in fiscal year 2016, the fleet threshold measure shows 59 percent for cars, 46 percent for pickups, 60 percent for LD trucks, 73 percent for HD trucks, and 76 percent for XHD trucks being within threshold. An increase in threshold equipment will result in equipment requiring replacement before its expected life.

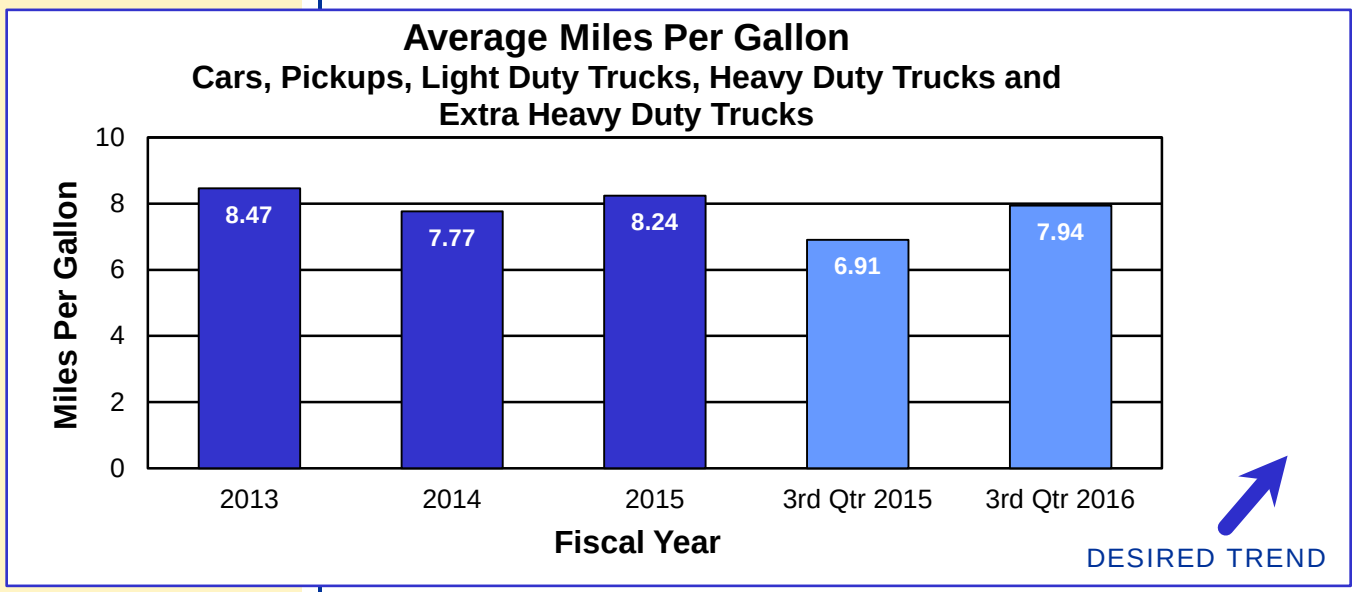
The fuel consumption and fuel-efficiency measures are following the desired trend for the first three quarters of fiscal year 2016. Fuel consumption so far in FY 2016 has decreased by 502,643 gallons compared to FY 2015. Mileage recorded for these five vehicle classes in FY 2016 has reduced 2,676,333 miles compared to FY 2015. During the third quarter of FY 2016, fewer gallons were used to perform snow and ice removal. Changes in fuel use by activity resulted in an increase in fuel efficiency of 1.03 miles per gallon compared to the same period last year.

USE RESOURCES WISELY



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





USE RESOURCES WISELY

Number of tons of recycled material – 6k

RESULT DRIVER:
Brenda Morris
Financial Services Director

MEASUREMENT DRIVER:
Sarah Kleinschmit
Field 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.

For more than a decade, MoDOT has incorporated 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, recycling efforts have helped offset the cost increases. In 2015, 27 percent of the 3.8 million tons of new asphalt pavement constructed came from recycled components. Based on tonnages bid in 2015, this saved MoDOT and taxpayers about $7 per ton, or $15.5 million overall. The $15.5 million savings would be equivalent to improving more than 350 miles of a two-lane roadway with a thin overlay.

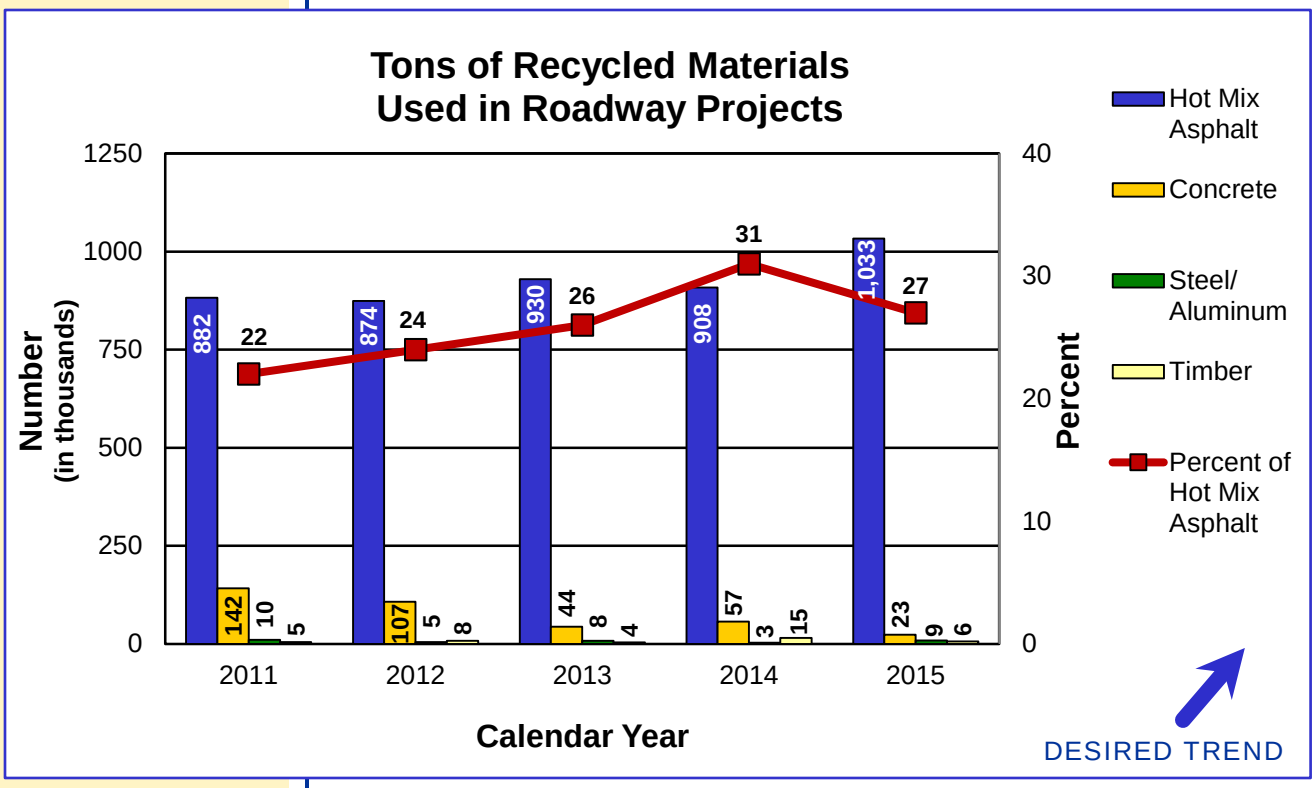
MoDOT also engages in internal recycling efforts. The amount of recycled materials has decreased steadily since 2011; however, in 2015 rose slightly compared to 2014. The majority of the recycled products come from aluminum, cardboard, office paper, scrap rubber/tires, scrap metal, motor oil and antifreeze. In fiscal year 2015, 1,900 tons of scrap metal made up the majority of the recycling, followed by 330 tons of motor oil (equivalent to more than 73,000 gallons) and 220 tons of rubber/tires (equivalent to about 20,000 passenger car tires). In FY 2015, it cost more than $236,000 to recycle some items, such as scrap rubber/tires and to shred documents. Other recycling efforts returned more than $456,000 in revenue. The result was slightly more than $220,000 in net revenue.

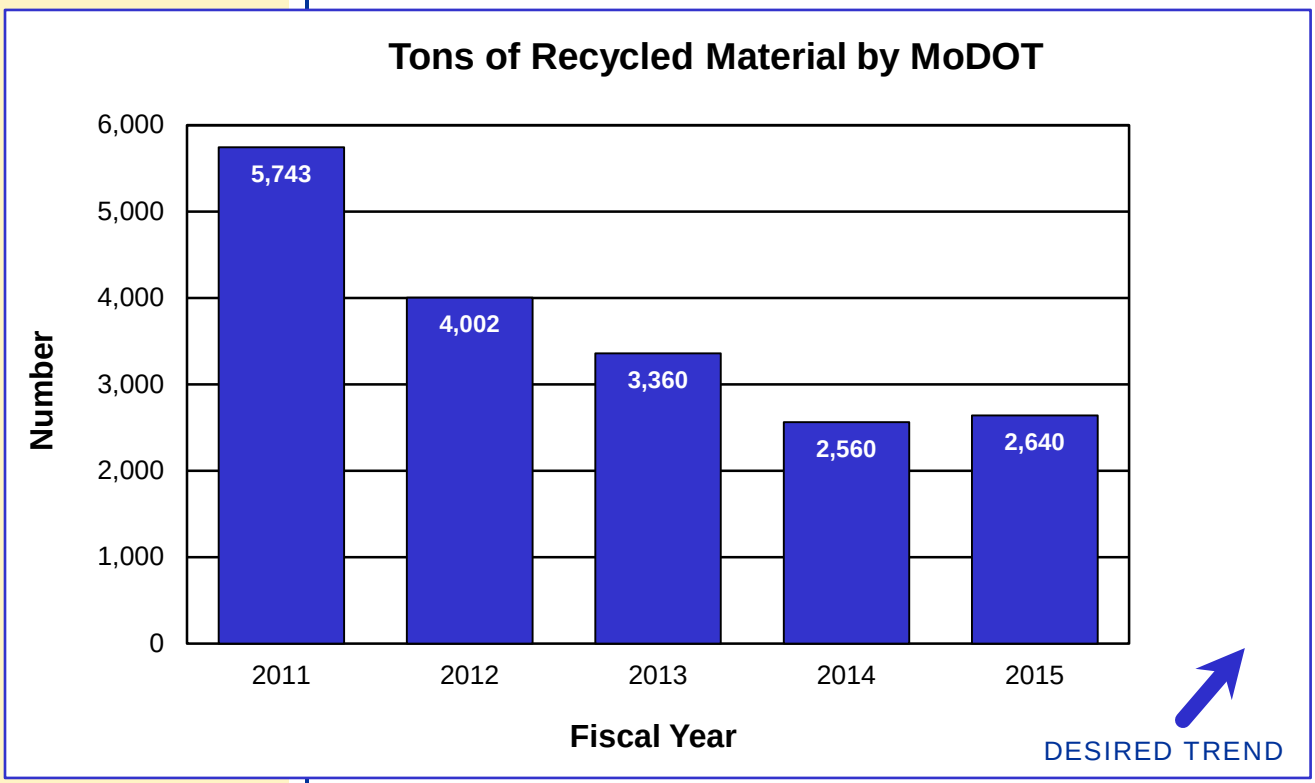
Recycling is good for the environment and helps continue to stretch available funds.

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

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.

USE RESOURCES WISELY

Number of environmental warnings and violations – 6l

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. In addition, 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.

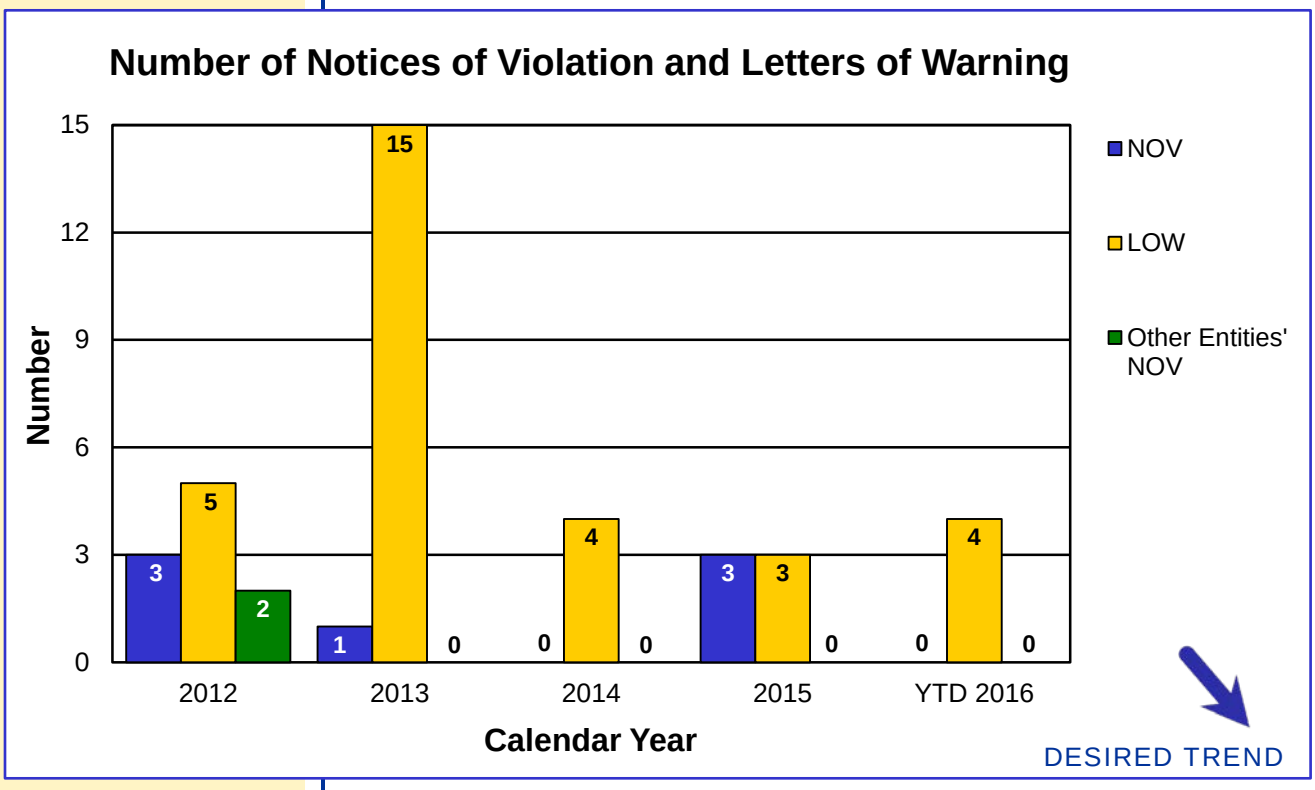
In the first quarter of calendar year 2016, MoDOT received four DNR LOWs for a welcome center. Two were for failure to submit in the prescribed timeframe an Operation and Maintenance Report for the sewage treatment system. A third and fourth LOW were for monitoring failures of collecting routine drinking water samples for testing of total coliform bacteria and nitrates, respectively.

LOWs have ranged from three to 15 in the past five years. They have been significantly down the last two years.

In March the department received a letter of compliance with the Safe Drinking Water Law from DNR for the welcome center that had in previous months received the LOWs.

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 NOVs. So regardless of what other states are doing, MoDOT's desired results are zero NOVs.

USE RESOURCES WISELY

Number of stormwater violations – 6m

RESULT DRIVER:
Brenda Morris
Financial Services Director

MEASUREMENT DRIVER:
Eric Kopinski
Stormwater Compliance Coordinator

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.

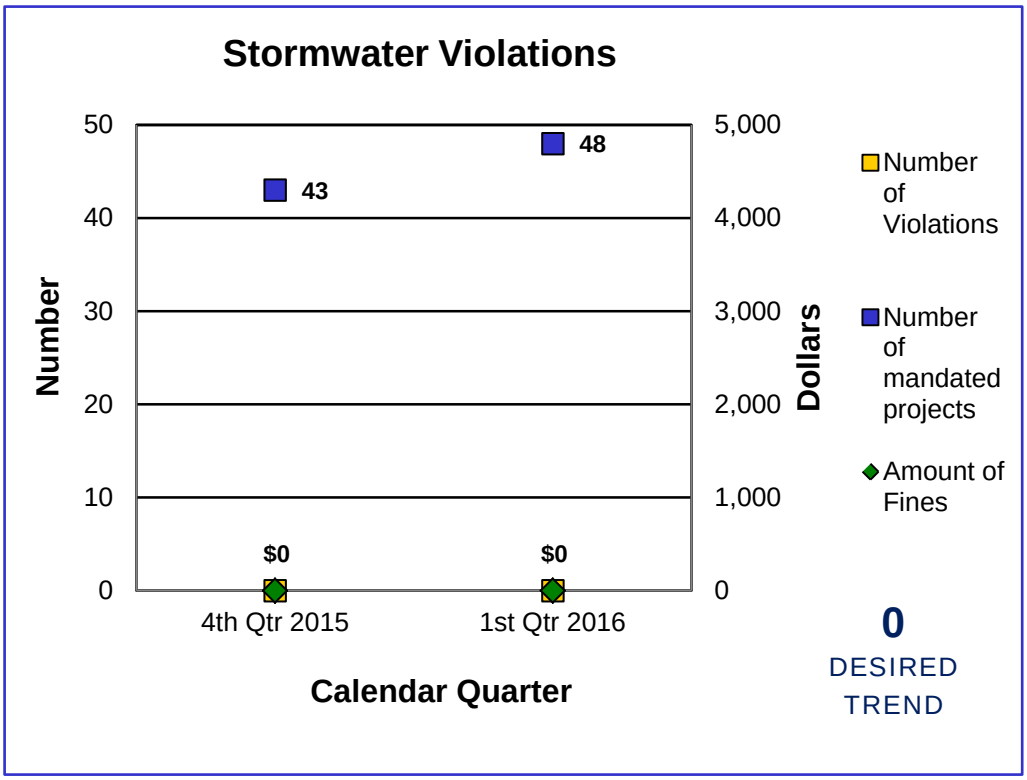
MEASUREMENT AND DATA COLLECTION:
A stormwater compliance database will be used to record the compliance of MoDOT and construction contractors with the following requirements:

- maintain personnel in stormwater oversight positions;
- obtain the required stormwater training;
- ensure timely stormwater inspections and;
- ensure the resulting stormwater control repairs are completed within the required 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. Data collection began in the last quarter of 2015.

MoDOT is devoted to ensuring all land disturbance projects are in compliance with environmental laws through the use of adequate erosion and sediment control practices.

A total of zero Consent Decree violations occurred in the first quarter of 2016 for the 48 projects with greater than one acre of land disturbance on MoDOT's right-of-way. A well-developed reporting database combined with a comprehensive checks and balance system allowed the department to be successful. Having an uncommonly low amount of precipitation also aided in the compliance effort. This is the second quarter that the Consent Decree has been in effect and there have been no violations.



Note: There is no benchmark data presented with this measure. MoDOT has a zero-tolerance policy toward stormwater violations. Therefore, regardless of what other states are doing, MoDOT's desired results are zero violations and zero penalties.

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.

ADVANCE ECONOMIC DEVELOPMENT

Economic return from transportation investment – 7a

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.

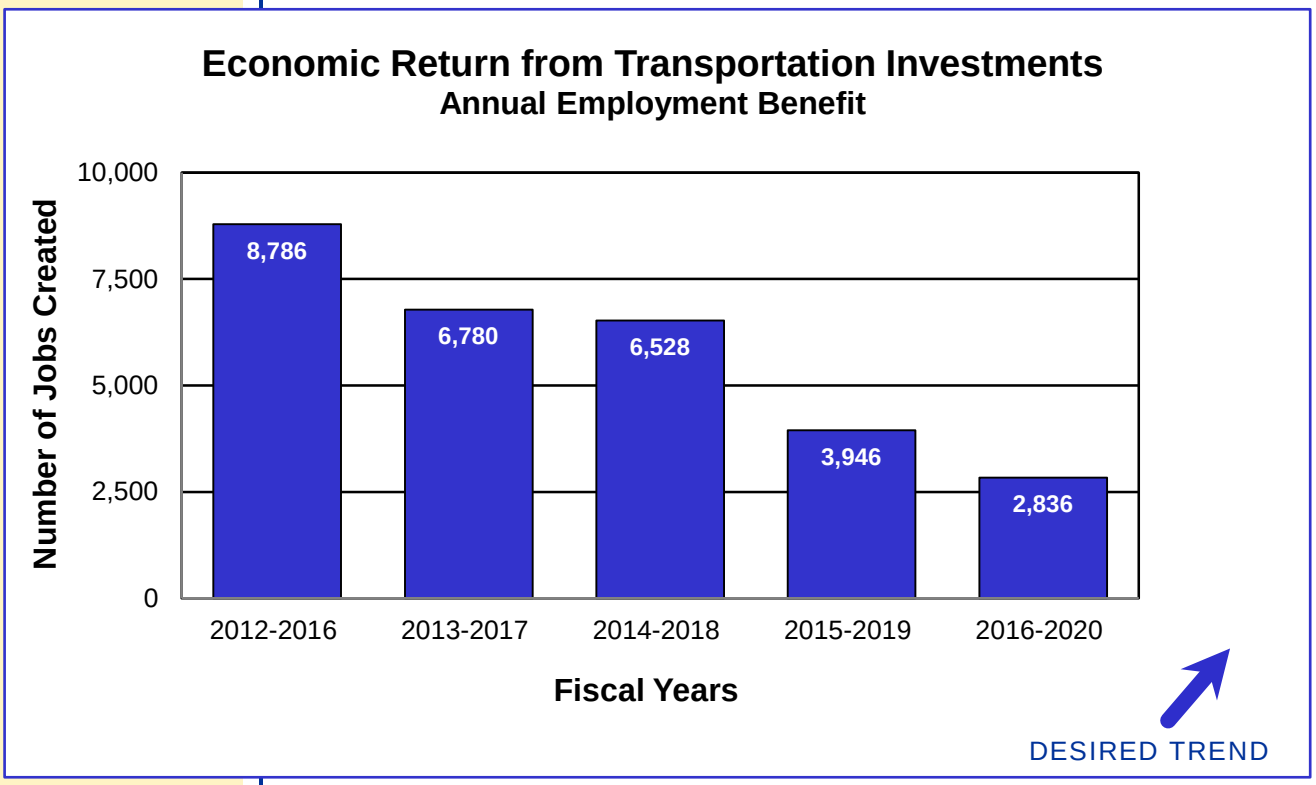
MEASUREMENT AND DATA COLLECTION:
MoDOT works with the Economic Development Research Group to perform economic impact analyses for the state's transportation investments. The analyses are performed using a model called the Transportation Economic Development Impact System. The TREDIS model results demonstrate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

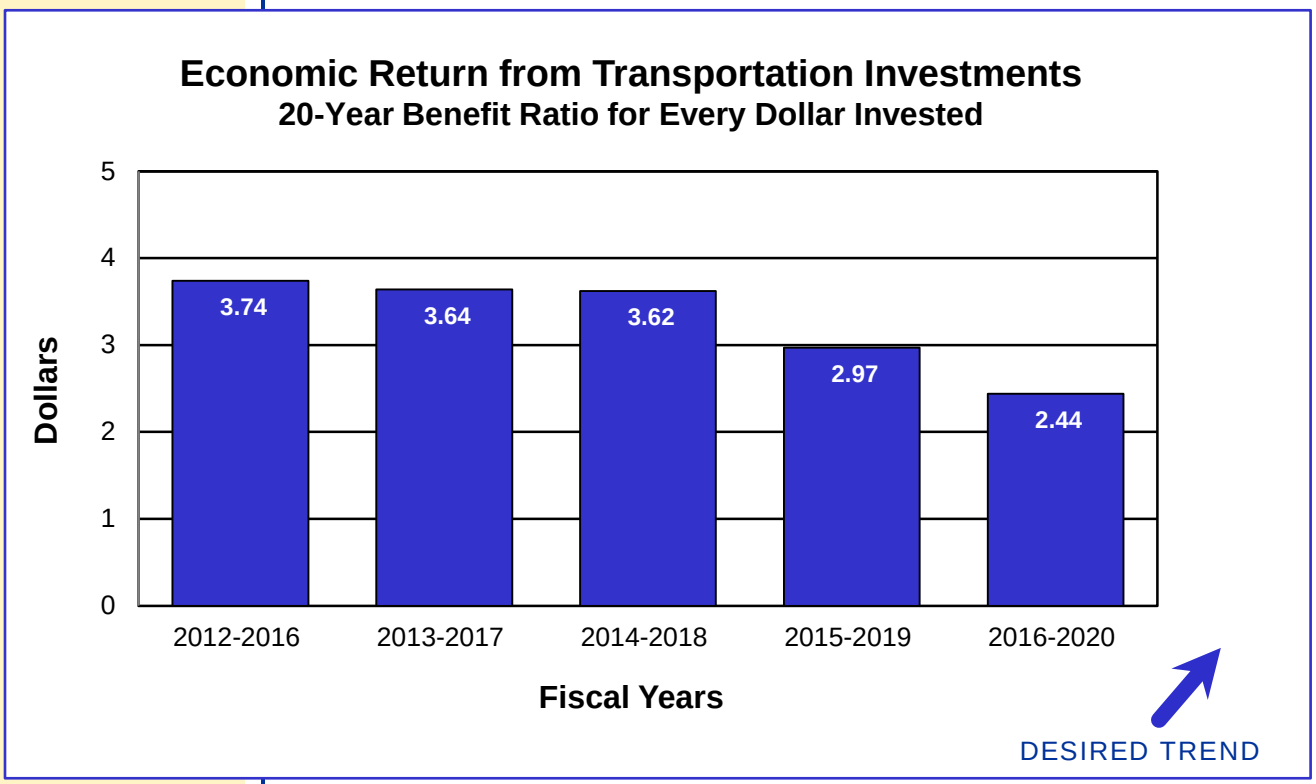
Investment in transportation improvements have long been held as a major economic engine that drives growth in job creation, personal income and new value added to Missouri's economy.

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.

ADVANCE ECONOMIC DEVELOPMENT





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).

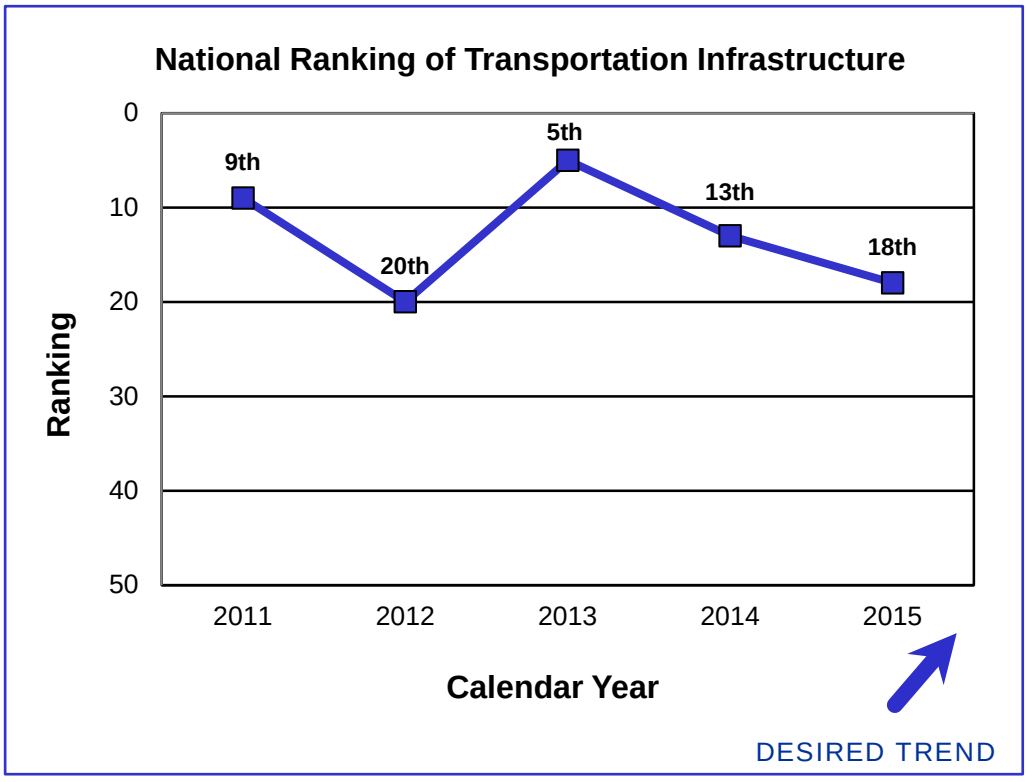
ADVANCE ECONOMIC DEVELOPMENT

National ranking of transportation infrastructure – 7b

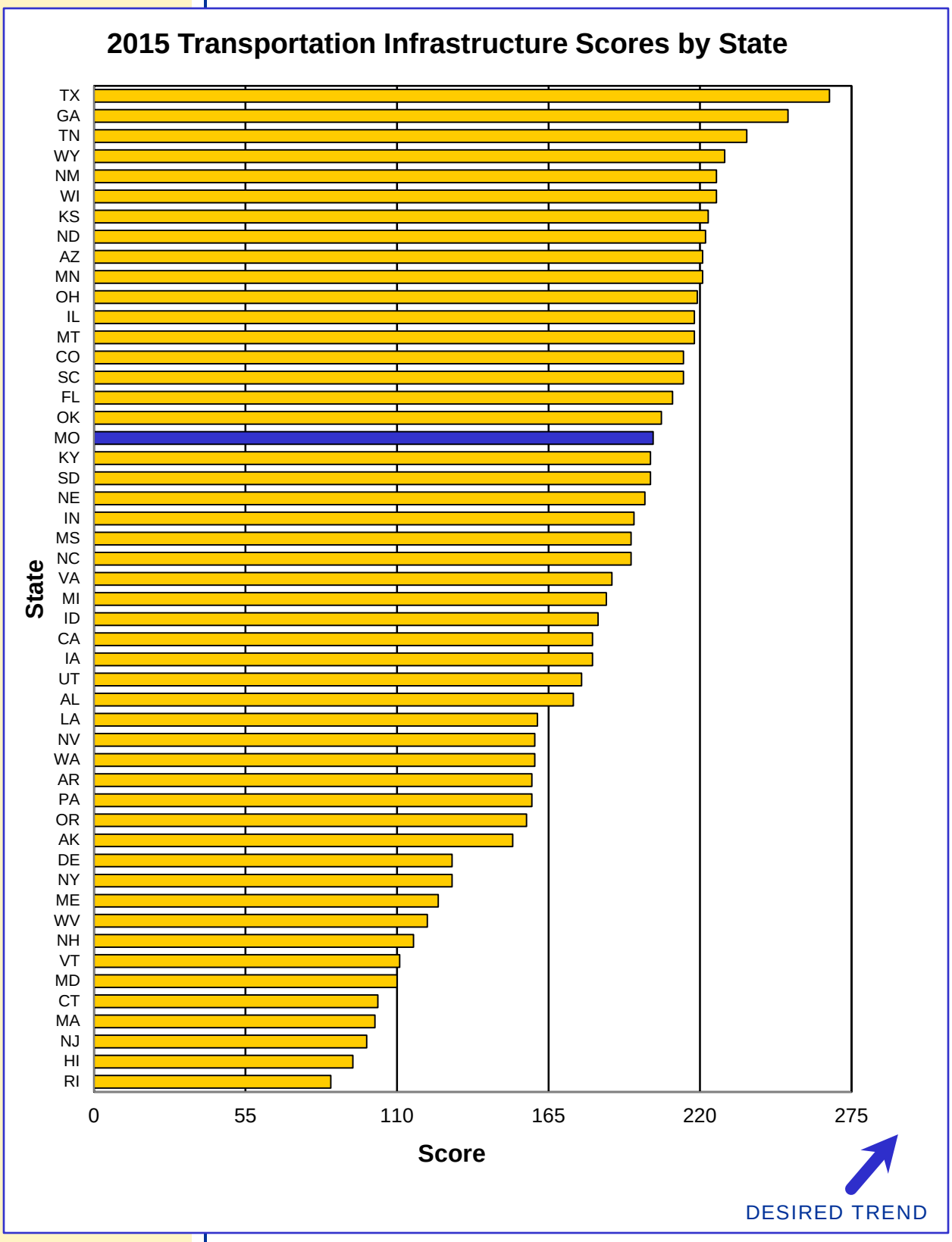
Transportation infrastructure leads to the attraction of new businesses and of employers looking to expand. These actions lead to new jobs, new opportunities and new revenue for states. A robust transportation infrastructure allows manufacturers to distribute their products quickly and inexpensively 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 18th and will likely remain about the same without a solution to the state's long-term insufficient transportation funding challenge.



ADVANCE ECONOMIC DEVELOPMENT



RESULT DRIVER:
Machelle Watkins
Transportation Planning Director

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.

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.

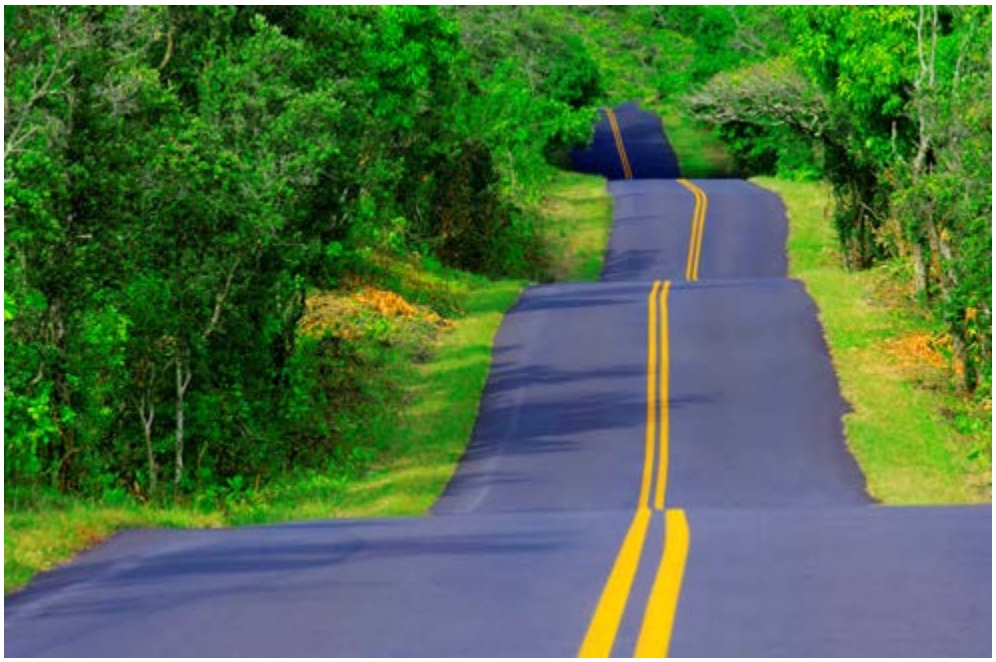
ADVANCE ECONOMIC DEVELOPMENT

National ranking in revenue per mile – 7c

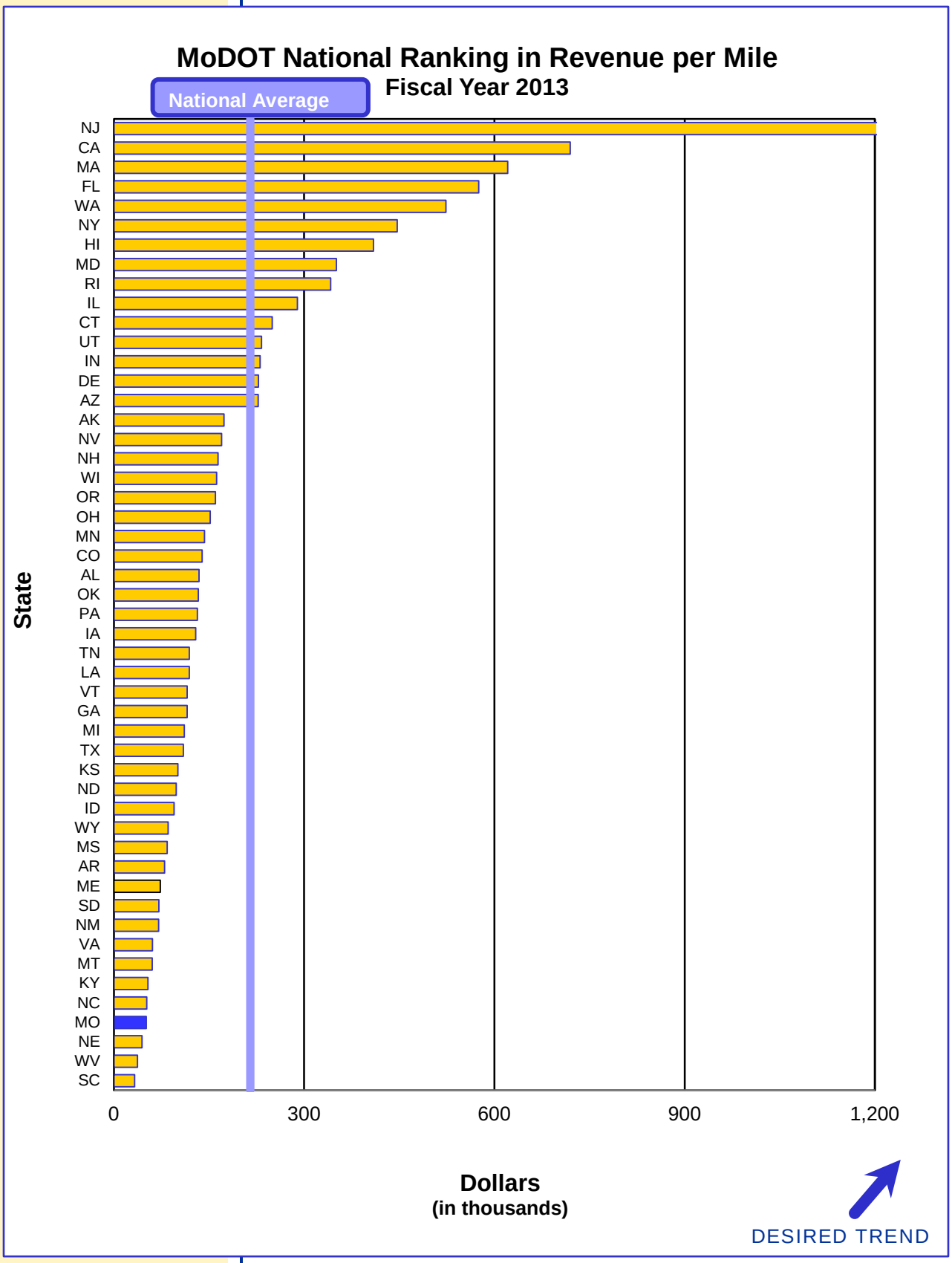
MoDOT stretches transportation revenue as far as it can in order to put as much as possible into roads and bridges. The cost to build and maintain roads and bridges increased sharply during the past 10 years due to inflation. In contrast, revenues from fuel taxes decreased as vehicles became more fuel 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 33,873 miles, is the seventh largest system in the nation. In addition, Missouri ranks sixth nationally in number of bridges with 10,394 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.



ADVANCE ECONOMIC DEVELOPMENT



ADVANCE ECONOMIC DEVELOPMENT

Goods movement competitiveness – 7d

RESULT DRIVER:
Machelle Watkins
Transportation Planning Director

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 costs to transport in each step in the supply chain starting at product origination, to 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 - 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 $8 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.

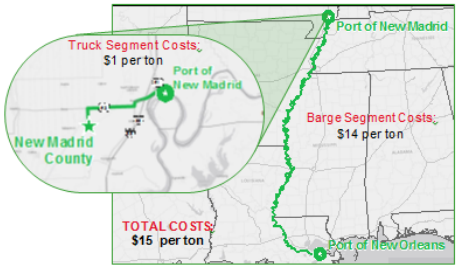
Deterioration of any of the factors influencing transportation cost not only impacts the competitiveness of Missouri products in external markets, it also influences the cost to bring products into Missouri, which controls the prices at local stores.

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 does not allow the agency's ability to fully respond to those needs.

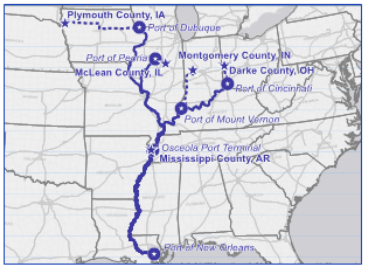
ADVANCE ECONOMIC DEVELOPMENT

SOYBEANS

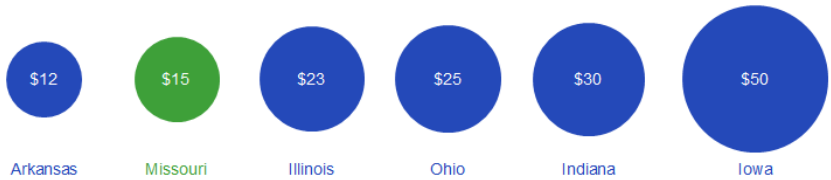
The Route from New Madrid County to New Orleans



The Route from Competitor States to New Orleans

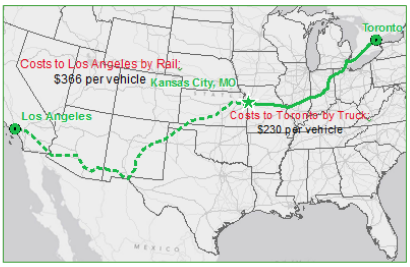


The Cost of Shipping One Ton of Soybeans to New Orleans
(largely by barge)



FINISHED MOTOR VEHICLES

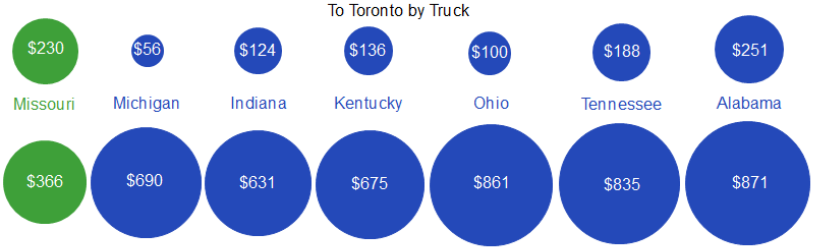
The Route from Kansas City to
Toronto by Truck and Los Angeles by Rail



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

The Cost of Shipping One Motor Vehicle

To Toronto by Truck



To Los Angeles by Rail

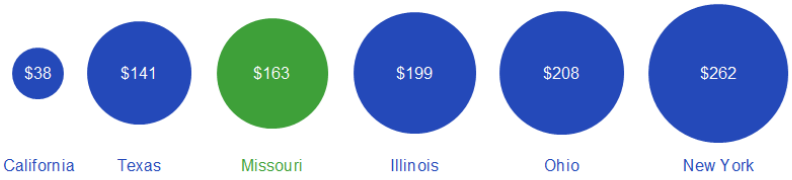
ADVANCE ECONOMIC DEVELOPMENT

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:
Bryan Ross
Senior Multimodal Operations Specialist

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.

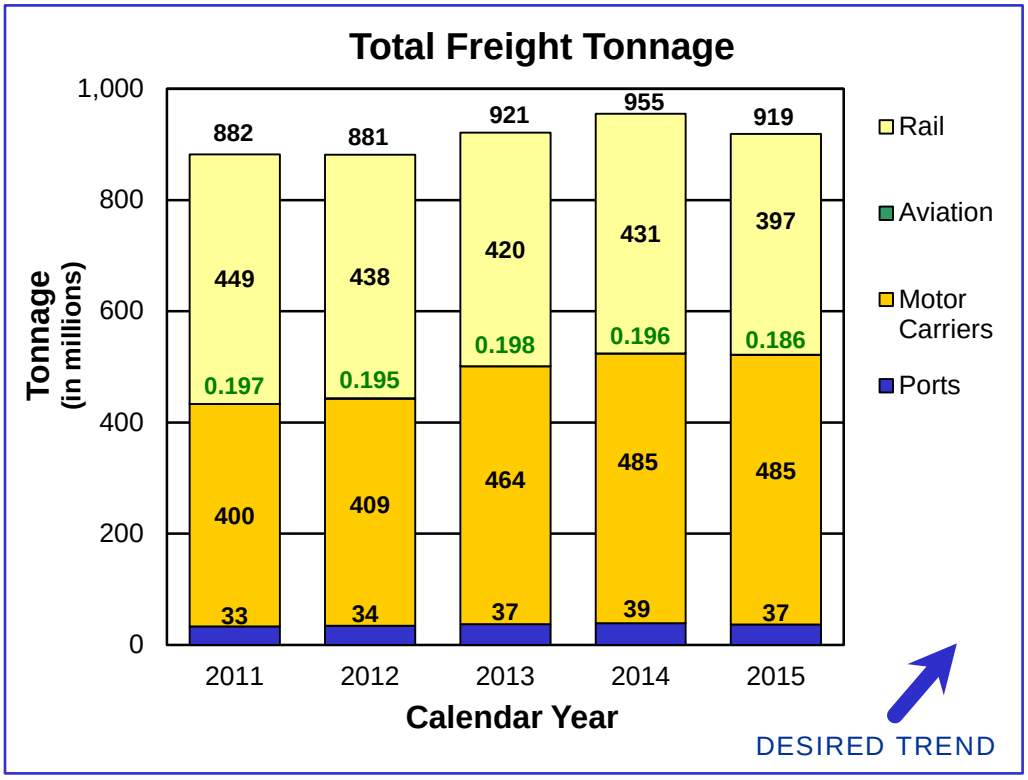
ADVANCE ECONOMIC DEVELOPMENT

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.

State funding cannot address transportation needs other than highways and bridges. Moving in excess of 900 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 2015, Missouri experienced an approximate 4 percent decrease in freight movements as compared to the previous year. Railroad tonnage decreased 8 percent due to lower shipments in metals, crude oil and coal shipments. Motor carriers continued to haul the most tonnage, which can be attributed to continued demand for durable goods shipments. Durable goods, such as appliances and furniture, tend to move by truck. Aviation and ports both experienced an approximate 5 percent decrease in tonnage. Missouri's public ports' decreased tonnage is attributed to fewer crude oil shipments.



ADVANCE ECONOMIC DEVELOPMENT

Annual hours of truck delay – 7f

RESULT DRIVER:
Machelle Watkins
Transportation Planning Director

MEASUREMENT DRIVER:
Aaron Hubbard
Motor Carrier Services Project Manager

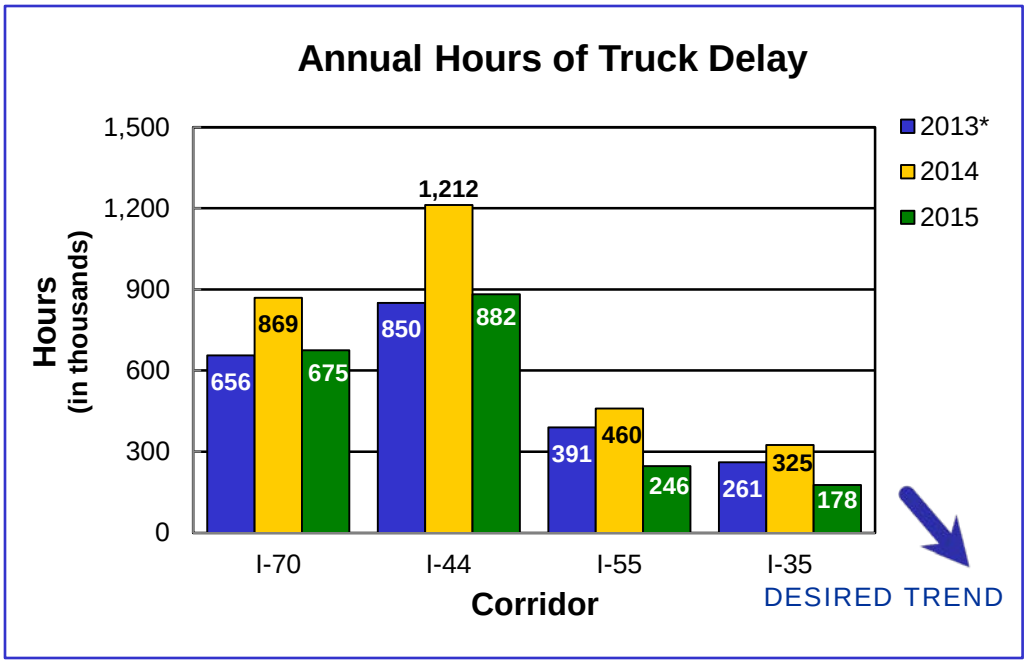
PURPOSE OF THE MEASURE:
This measure is proposed to be used as a Fixing America's Surface Transportation Act national freight performance measure.

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.

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 inventories 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 long-term transportation funding is insufficient to address congestion factors.

On average, those shipping by truck can expect a delay of 13.3 minutes per trip on I-70, 29.2 minutes on I-44, 12.7 minutes on I-55 and 8.6 minutes on I-35. The annual cost of delay for the trucking industry on I-70 is $45.7 million, $58.1 million on I-44, $16.9 million on I-55, and $12.3 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 Fixing America's Surface Transportation Act 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

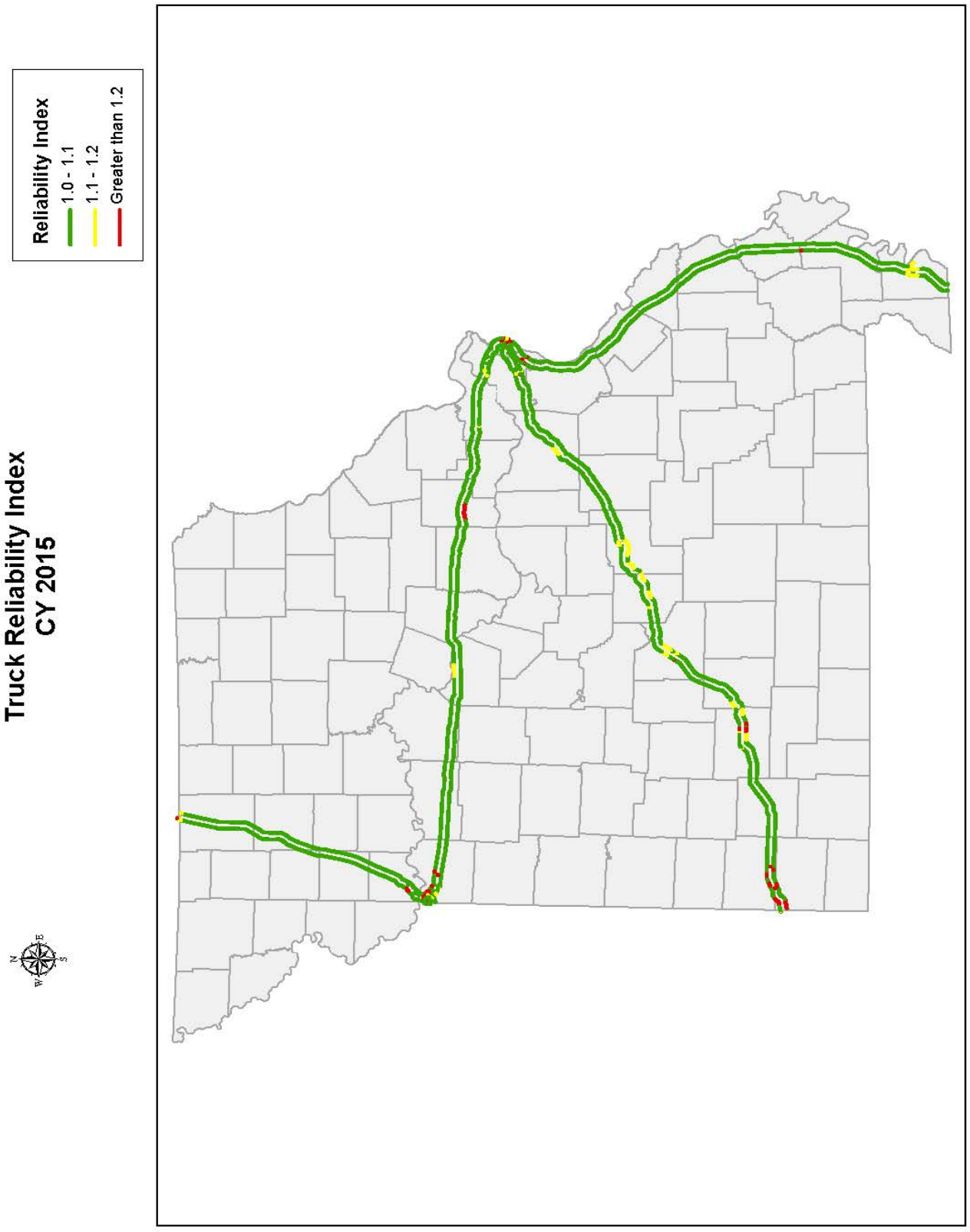
Truck reliability index – 7g

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.

In calendar year 2015 Kansas City and St. Louis metropolitan areas both improved truck travel time reliability reducing previously identified red areas. Springfield and Joplin were unchanged. I-35 South improved in Clay County near Liberty from yellow to green. I-70 East improved in Lafayette County at both Odessa and Concordia from yellow to green. I-44 East improved in Pulaski County near Waynesville from red to yellow and Franklin County near St. Clair from yellow to green. I-55 South improved in New Madrid County near Marston from yellow to green and Pemiscot County near Caruthersville from red to yellow.

MoDOT continually seeks ways to deliver the infrastructure to support reliable trips for drivers and to help keep costs down and improve travel-time reliability.

ADVANCE ECONOMIC DEVELOPMENT



RESULT DRIVER:
Machelle Watkins
Transportation Planning Director

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.

ADVANCE ECONOMIC DEVELOPMENT

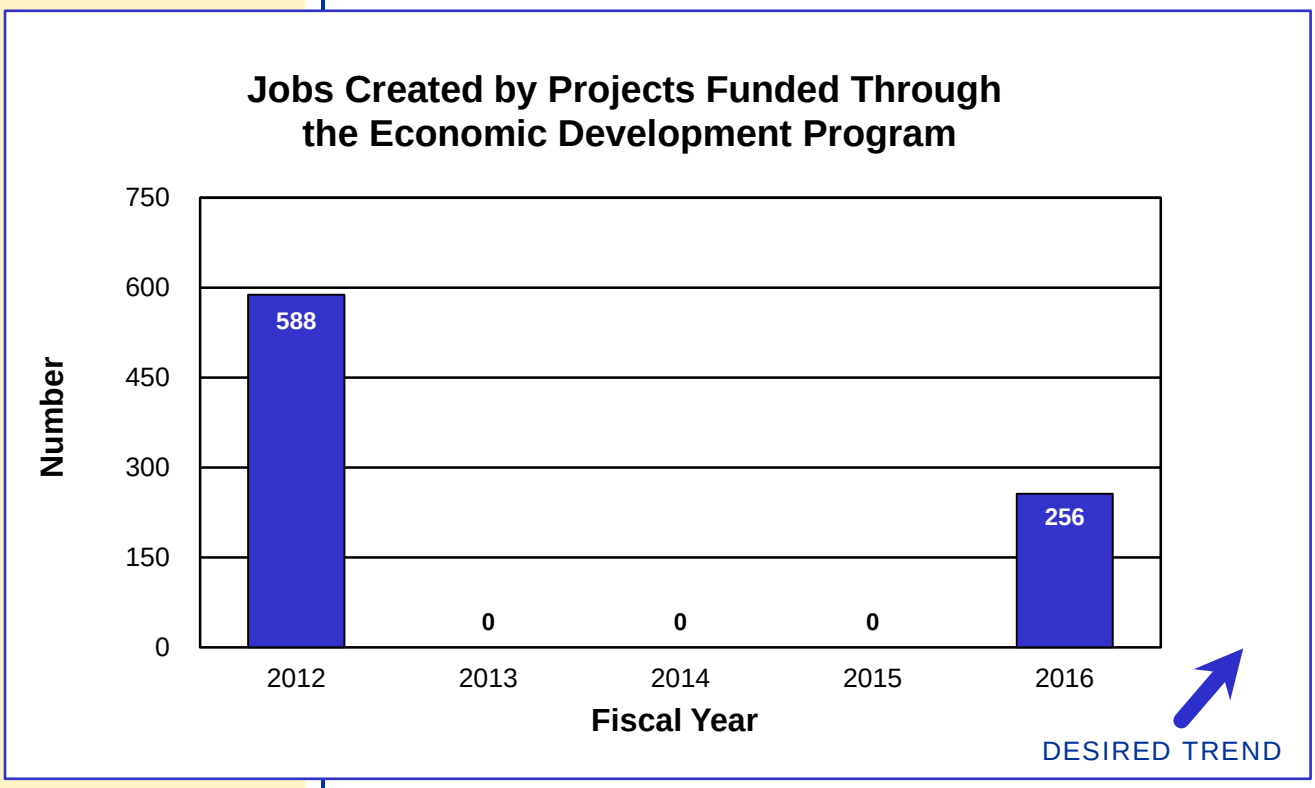
Jobs created by projects funded through the economic development program – 7h

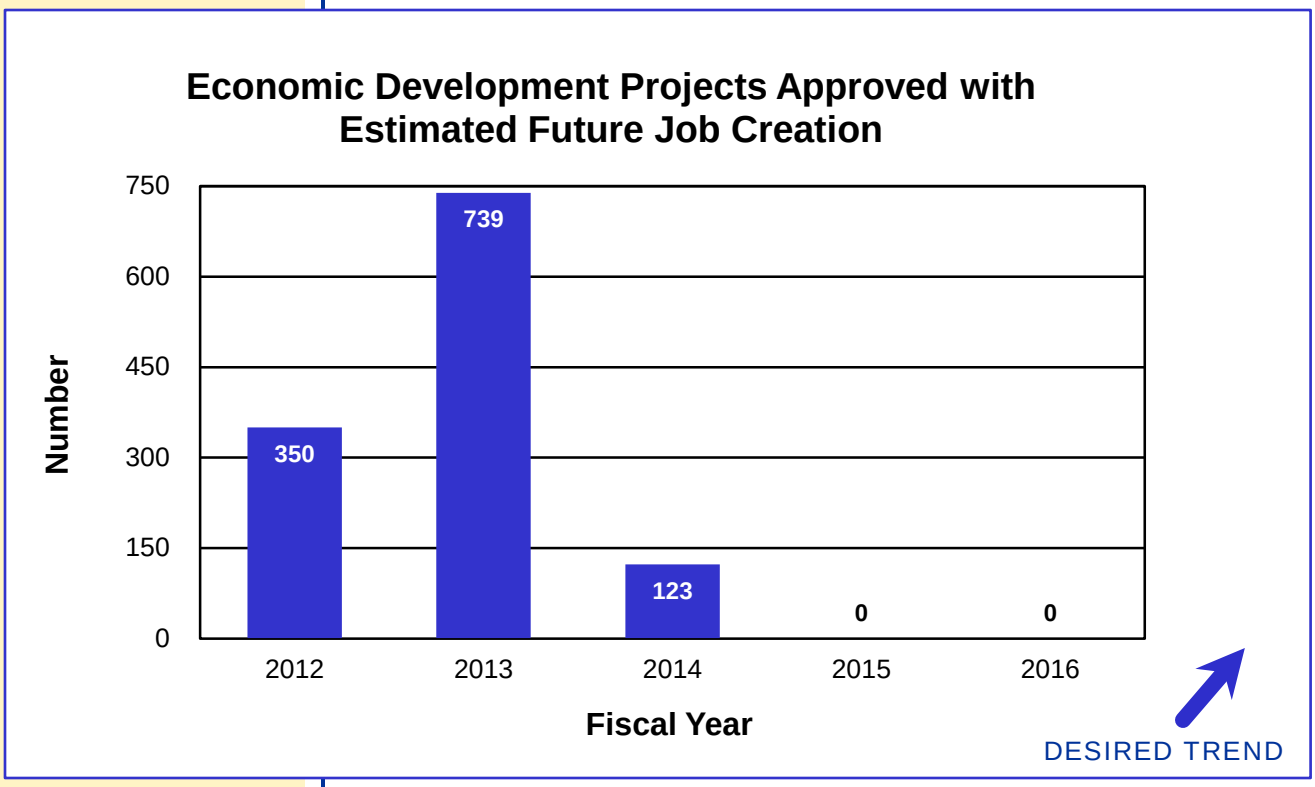
The Cost Share/Economic Development Program builds partnerships with local entities to pool efforts and limited resources in order to deliver state highway and bridge projects. In the past, MoDOT allocated $45 million of Cost Share/Economic Development funds annually based on the funding distribution formula set by the Missouri Highways and Transportation Commission. Each year, a minimum of $5 million was 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 that the project created jobs. Retail development projects were not eligible.

The Missouri Highways and Transportation Commission suspended the Cost Share/Economic Development Program on Jan. 8, 2014. 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 2016, Ford Motor Company created 256 verified new jobs in conjunction with interchange improvements at Interstate 35 and U.S. Route 69 in Clay County.

ADVANCE ECONOMIC DEVELOPMENT





RESULT DRIVER:
Machelle Watkins
Transportation Planning Director

MEASUREMENT DRIVER:
Rebecca Brietzke
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. This measure is based on the state fiscal year – July 1 to June 30.

ADVANCE ECONOMIC DEVELOPMENT

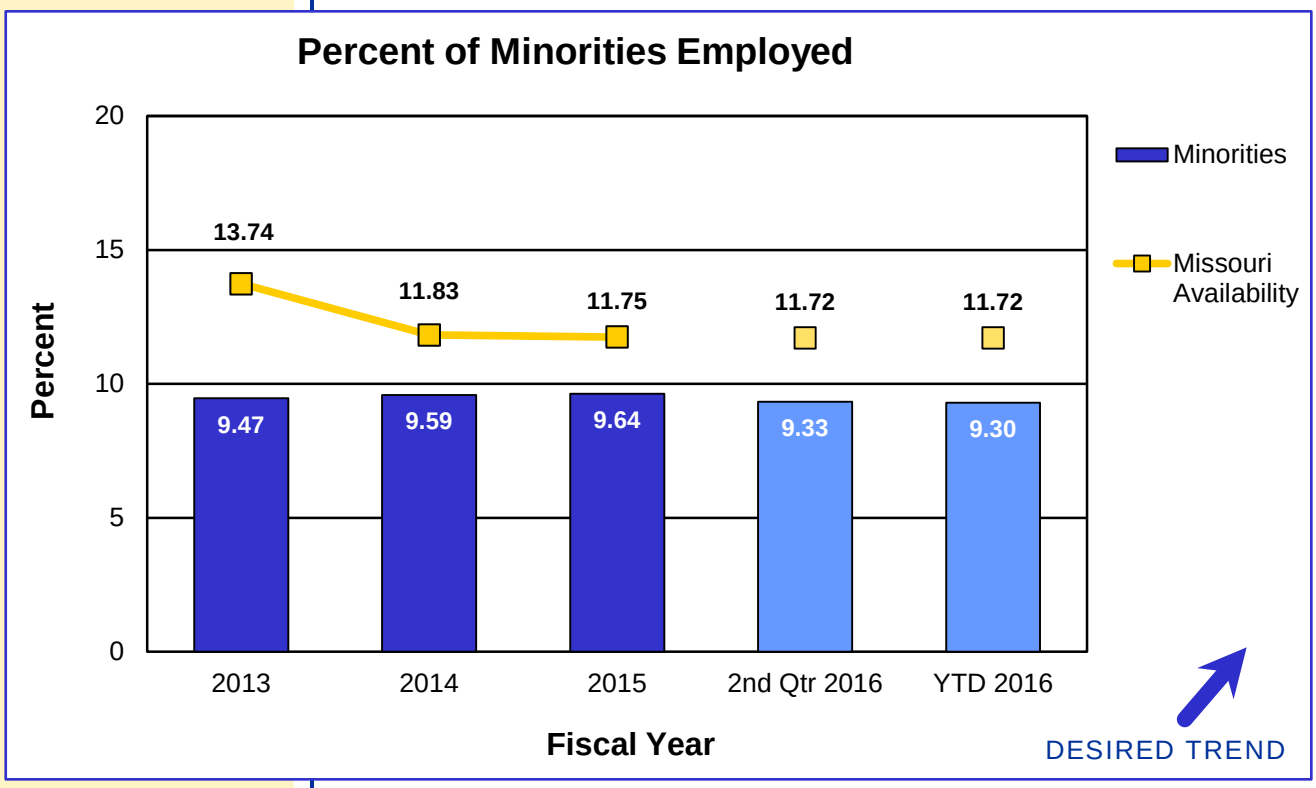
Percent of minorities and females employed – 7i

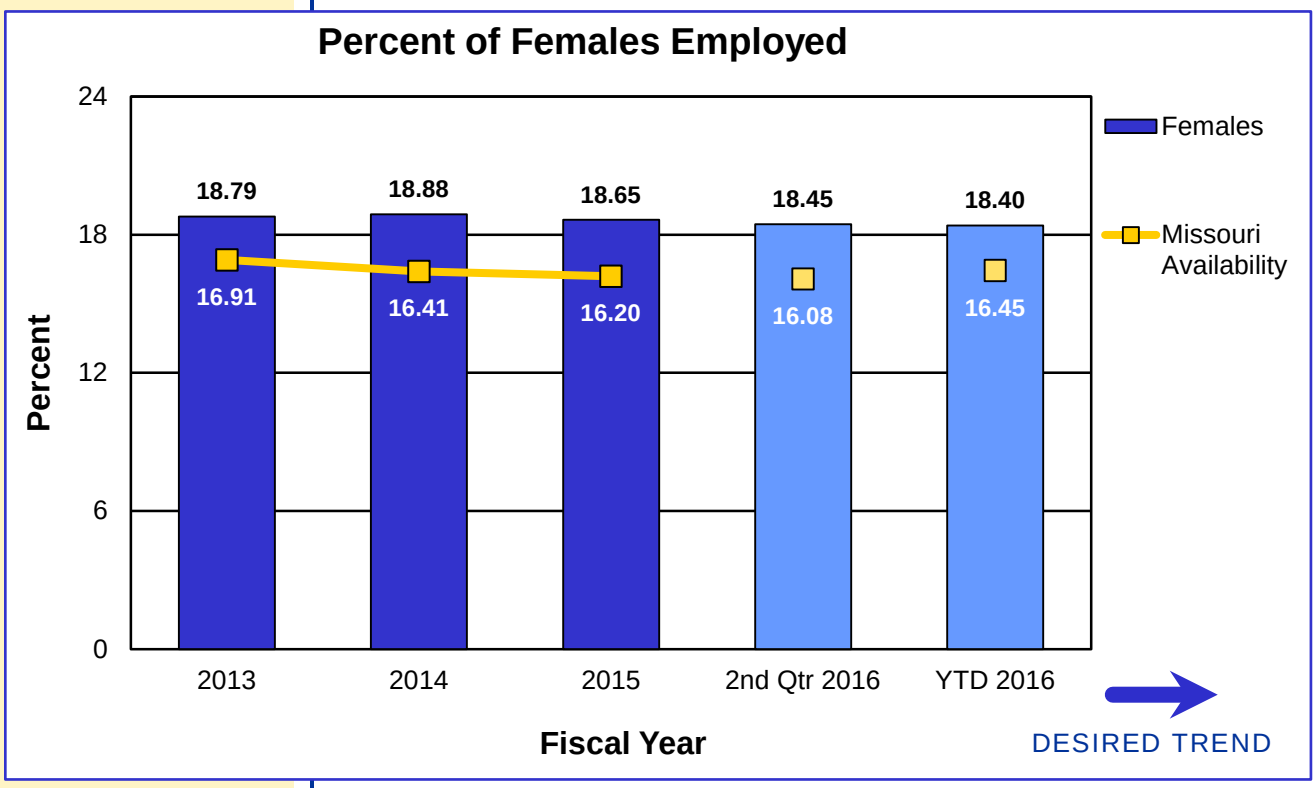
By placing the right people in the right position, MoDOT can better serve its customers and help fulfill its responsibilities to taxpayers.

The number of minority employees increased by 0.4 percent (466 to 468) from the second quarter of fiscal year 2016 to the third quarter of FY 2016. The number of female employees increased by 0.4 percent from second quarter of FY 2016 to third quarter of FY 2016 (922 to 926). When compared to overall employment, the percent of females decreased (18.45 to 18.40) but is still above Missouri availability of 16.45 percent. The percent of minorities also decreased (9.33 to 9.30) but is below Missouri availability of 11.72 percent. Total full-time employment during this quarter increased from 4,997 to 5,033.

During the third quarter of FY 2016, MoDOT has been developing new relationships with organization and universities that are geared toward minorities and females. MoDOT has been working with Lincoln University to expand the partnership to include employment preparedness training opportunities and increased presence in discipline-specific classrooms. These good faith efforts will aid in increasing an applicant pool of qualified minorities and females.

ADVANCE ECONOMIC DEVELOPMENT





ADVANCE ECONOMIC DEVELOPMENT

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

RESULT DRIVER:
Machelle Watkins
Transportation Planning Director

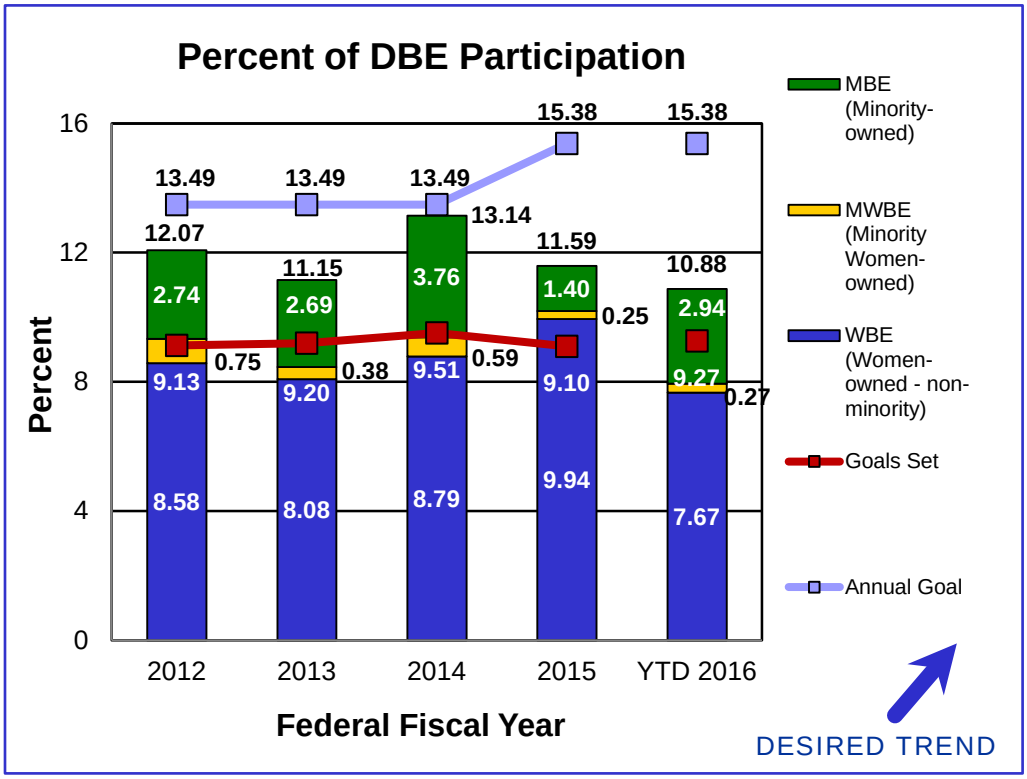
MEASUREMENT DRIVER:
Lester Woods, Jr.
External Civil Rights Director

PURPOSE OF THE MEASURE:
This measure tracks the percent of Disadvantaged Business Enterprise use on construction and engineering projects.

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 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 federal fiscal year 2015 is 15.38 percent. The DBE participation for the first quarter of FFY 2016 is 10.88 percent. This is a 0.71 percent decrease from FFY 2015. Of the 10.88 percent utilization, 2.94 percent is participation from minority-owned DBE firms, 0.27 percent is participation from minority women-owned DBE firms and 7.67 percent is participation from women-owned DBE firms. The collective goals set for projects closed during this period amounted to 9.27 percent.



RESULT DRIVER:
Machelle Watkins
Transportation Planning Director

MEASUREMENT DRIVER:
Rebecca Jackson
General Services Manager

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

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.

ADVANCE ECONOMIC DEVELOPMENT

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

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 third quarter results show no change in MWDBE disbursements compared to third quarter FY 2015 results. Compared to third quarter FY 2015, the FY 2016 percentage of MWDBE expenditures spent increased by 0.1 percent.

This measure will continue to track the department's efforts to ensure the vendor pool is representative of the business community as a whole.