

APRIL 2011



# TRACKER

MEASURES OF DEPARTMENTAL PERFORMANCE



Missouri Department  
of Transportation

# GREETINGS FROM MoDOT

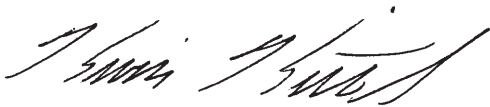
The Missouri Department of Transportation is committed to full transparency and accountability in its business of preserving, managing and developing our transportation system. It's our belief that you have a right to see how we are performing and we want you to know what we are doing well and where we need to improve. For over five years, the Tracker has been one way that Missourians can hold us accountable for delivering the most efficient and practical transportation services possible.

Today, perhaps more than ever, Missouri depends on a safe and strong transportation system for the commerce and mobility to support economic stability and job growth. You have high expectations of us and we want to exceed those expectations. You expect us to keep the good roads maintained and safe and to fix bad roads and bridges. Most importantly, you expect us to get the absolute best value out of every tax dollar we spend.

We share your expectations and have built the Tracker around 18 Tangible Results. These results are outcomes that you expect to see and they guide us in making decisions every day. The performance measures in the Tracker are designed to help us focus on the progress we are making to achieve these results.

The Tracker is published quarterly to ensure accountability and to allow you to see how we are measuring up. It is available in a printed format and on our website at [www.modot.org](http://www.modot.org). We encourage you to look it over and let us know how we are doing.

Sincerely,



## **Mission**

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



KEVIN KEITH, DIRECTOR  
MISSOURI DEPARTMENT OF  
TRANSPORTATION

# TANGIBLE RESULTS

- Uninterrupted Traffic Flow
- Smooth and Unrestricted Roads and Bridges
- Safe Transportation System
- Roadway Visibility
- Outstanding Customer Service
- Partner With Others to Deliver Transportation Services
- Advance Economic Development
- Innovative Transportation Solutions
- Fast Projects That Are of Great Value
- Environmentally and Socially Responsible
- Efficient Movement of Goods
- Easily Accessible Modal Choices
- Customer Involvement in Transportation Decision-Making
- Accommodating Roadsides
- Best Value for Every Dollar Spent
- Advocate for Transportation Issues
- Proactive Transportation Information

# VALUE STATEMENTS

## MoDOT

- supports and develops employees because we believe they are the key to our success.
- is flexible because we believe one size does not fit all.
- honors our commitments because we believe in integrity.
- encourages risk and accepts failure because we believe in getting better.
- is responsive and courteous because we believe in delighting our customers.
- empowers employees because we trust them to make timely and innovative decisions.
- does not compromise safety because we believe in the well-being of employees and customers.
- provides the best value for every dollar spent because we're taxpayers too.
- values diversity and inclusiveness because we believe in the power of our differences.
- is one team because we all share the same mission and teamwork produces the best results.
- fosters an enjoyable and productive workplace because we care about each other and our mission.
- is open and honest because we must be trustworthy.
- listens and seeks to understand because we value everyone's opinion.
- treats everyone with respect because we value their dignity.
- seeks out and welcomes any idea that increases our options because we don't have all the answers.
- always strives to do our job better, faster, and cheaper because we want to meet more of Missouri's needs.

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Note: Tangible Results are not listed in order of importance.



# UNINTERRUPTED TRAFFIC FLOW

*Tangible Result Driver – Ed Hassinger, District Engineer*

Missouri drivers expect to get to their destinations on time, without delays. Traffic, changes in weather, work zones and highway incidents can all impact their travel. MoDOT works to ensure that motorists travel as efficiently as possible on the state system by better managing work zones, snow removal and highway incidents, and by using the latest technology to inform motorists of possible delays and available options. Better traffic flow means fewer crashes.

435  
4 BRUNT  
TOWNSHIP  
4 MIN  
6 MIN  
10 MIN

KANSAS CITY  
SCOUT  
getting you there

WWW.KCSCOUT.NET

CAR P

WEST  
70  
WILL  
12  
2



TRACKER  
MEASURES OF DEPARTMENTAL PERFORMANCE



### Average travel times on selected freeway sections-1a

**Result Driver:** Ed Hassinger, District Engineer

**Measurement Driver:** Troy Pinkerton, Traffic Liaison Engineer

#### Purpose of the Measure:

This measure uses the average travel index values to calculate the 10-mile travel times during the morning and evening peaks on various freeway sections. The desired trend is to travel ten miles per ten minutes on a 60 mph freeway. The desired travel index is to remain at or near a value of 1.00. A value of 1.00 is representative of a free-flow condition. The travel index is directly related to the average speed and represents the level of congestion by taking into consideration not only average speed but also the traffic volumes.

The travel index is calculated according to the following equation:

$$\text{Travel Index} = \text{Average speed} / \text{Free flow speed}$$

The ten-mile Travel Time is calculated using this equation:

$$\text{10-Mile Travel Time} = 10 \text{ miles} / \text{Travel Index}$$

Average speeds are taken from sensor data. The free-flow speed is constant and is equal to the highest hourly average speed for any hour in that data set.

#### Measurement and Data Collection:

Data from the St. Louis and Kansas City regions are provided by MoDOT's traffic management centers. Information about the St. Louis traffic management center, Gateway Guide, can be found at <http://www.gatewayguide.com> and information about the traffic management center in Kansas City, KC Scout, can be found at <http://www.kcscout.net/>. Data for the St. Louis region is also provided through a partnership with *Traffic.com*. Data for each location is updated quarterly.

#### Improvement Status:

##### Kansas City metropolitan region:

The morning peak ten-mile travel time in Kansas City increased from 10.81 in the second quarter of fiscal year 2011 to 11.43 for this reporting period. The evening peak travel index decreased slightly from 11.36 in the second quarter of fiscal year 2011 to 11.08 for this reporting period. Travelers

experienced only minor delays during their peak commutes and are due to the normal recurring congestion.

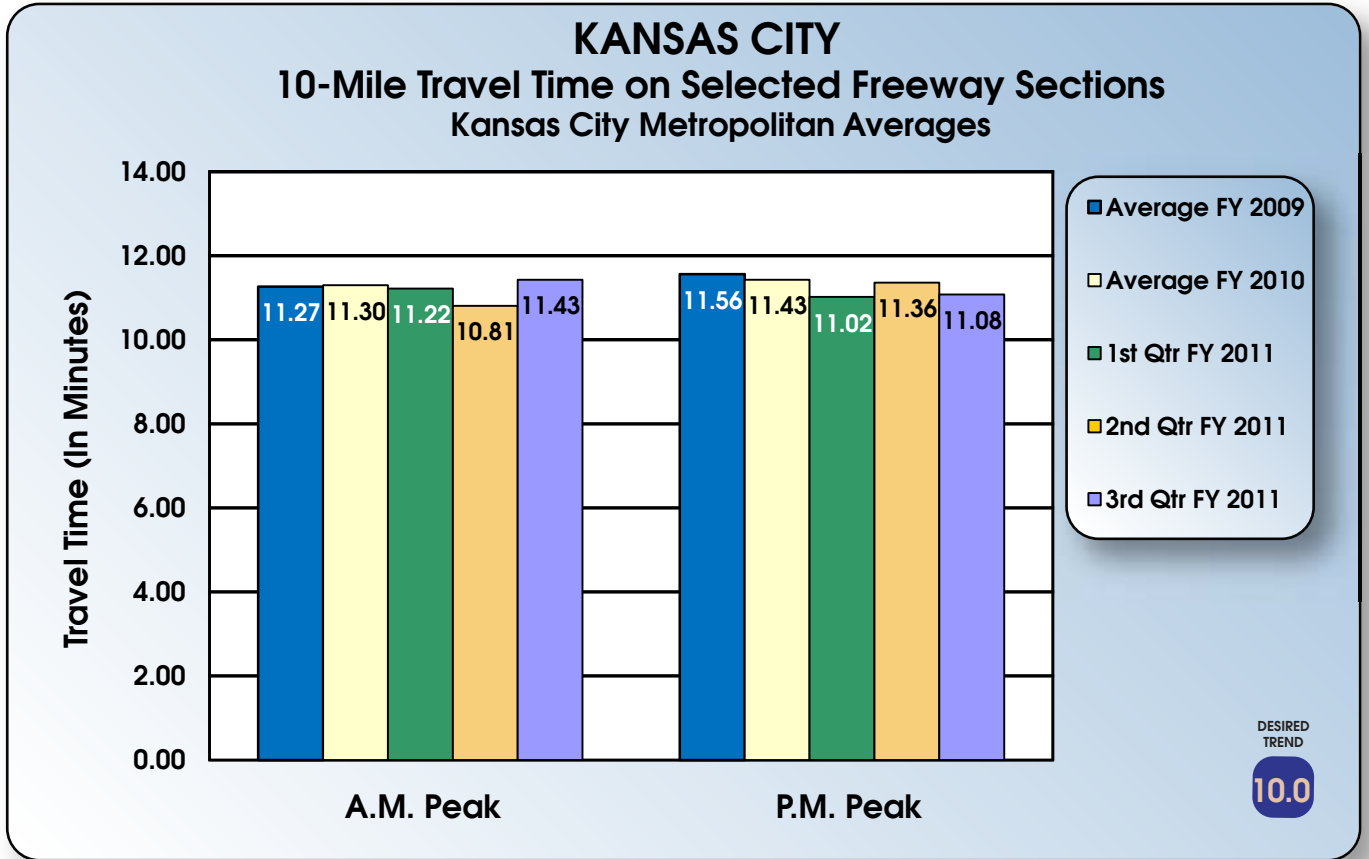
Improvements to mobility are shown along the I-29/I-35 section that has long been impacted by the construction activities associated with the kcICON project. Traffic patterns were returned to a normal condition back in December of last year. The intersection construction at I-435 and I-70 is currently the area with the greatest impact to mobility. Lane closures along I-70 associated with several bridge projects were recently reconfigured due to some feedback provided through the "Rate our Work Zone" Customer Surveys. These changes were timely and provided an improvement to the safety and mobility of this corridor.

Customers are encouraged to "Rate our Work Zones" at [www.modot.org](http://www.modot.org).

##### St. Louis metropolitan region:

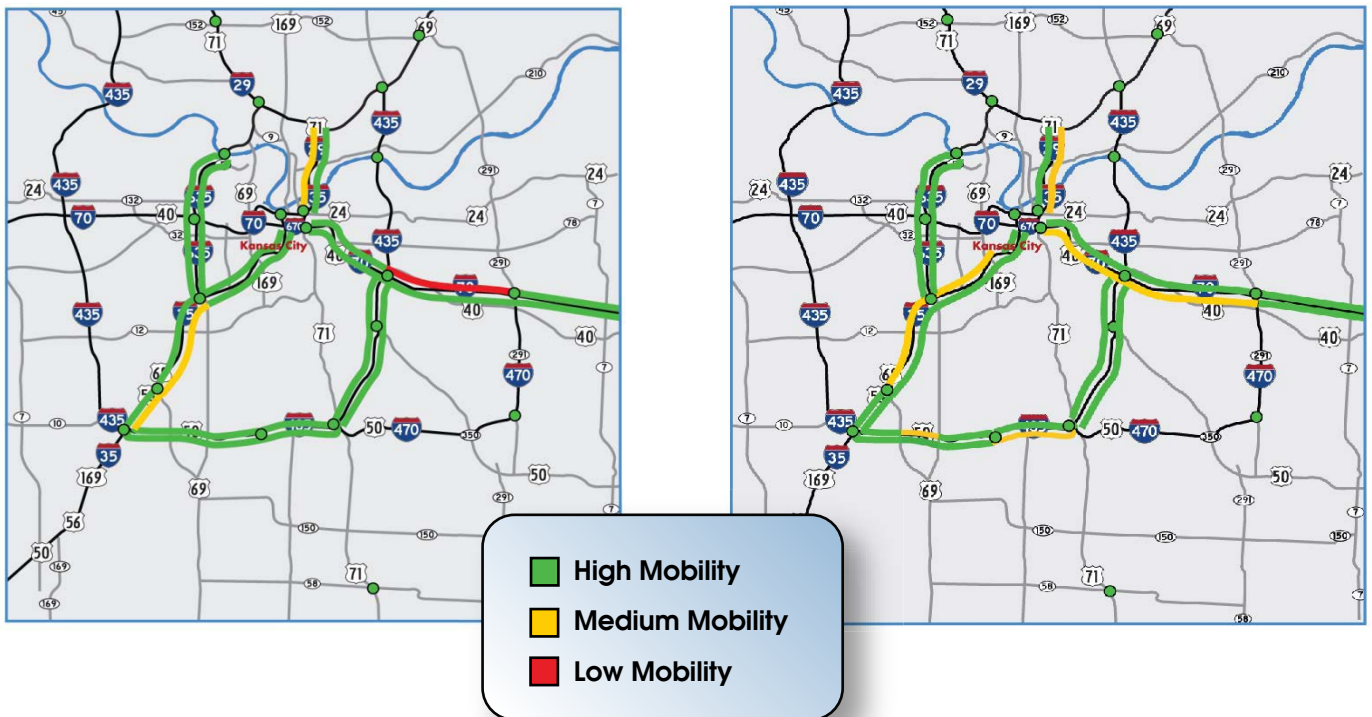
The morning peak ten-mile travel time in St. Louis slightly increased from 10.87 in the second quarter of the fiscal year to 10.92 in this reporting period. The performance of the system in the evening peak slightly decreased to 11.12 for this reporting period, down from 11.49 in the previous reporting period.

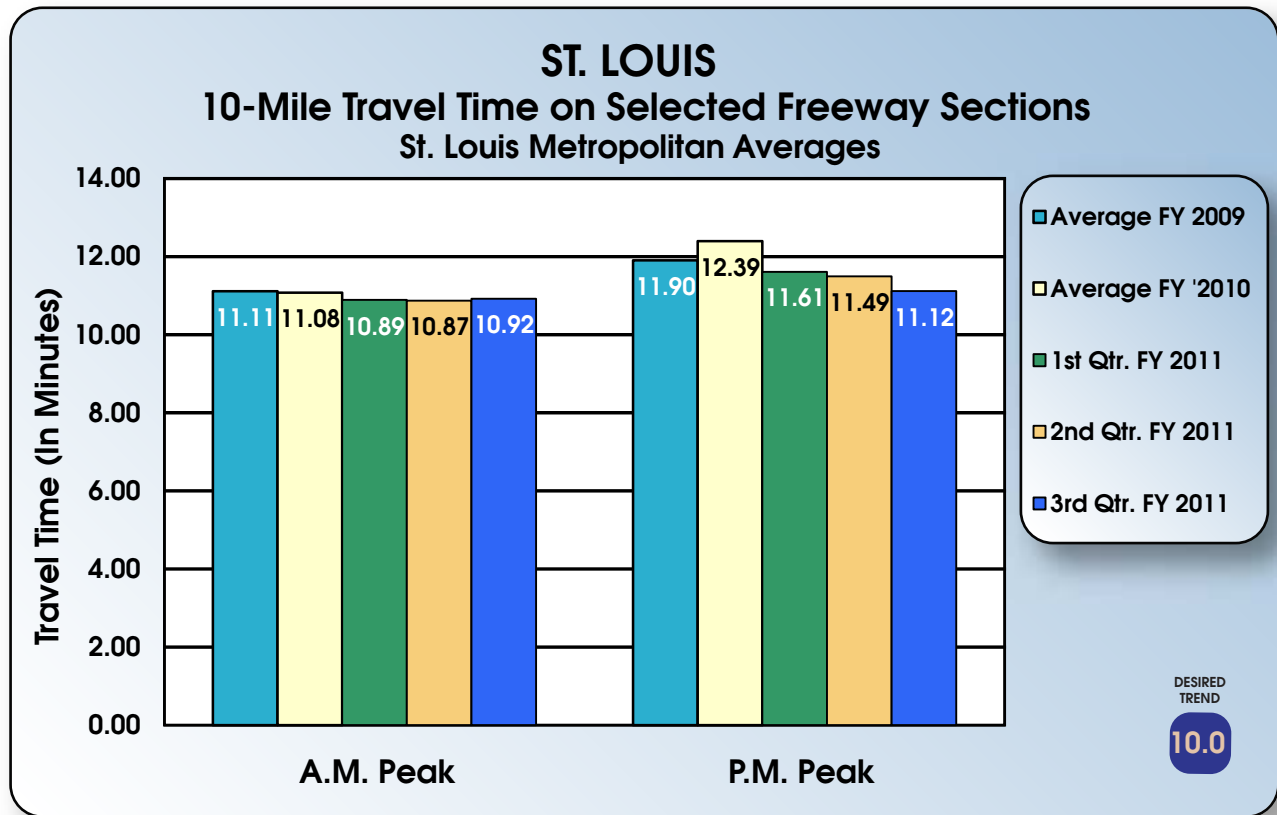
The regional mobility maps show improvements in a few locations as compared to the previous quarter. The morning movements along northbound I-270 at I-44 and the eastbound movement along 40/61 at I-270 experienced the most significant slowdowns due to recurring congestion. MoDOT's traffic management center, Gateway Guide, now offers a new and improved website. Nearly 300 live camera images, real time information on incidents and work zones with lane closures, personalized MY STL Traffic alerts customized to meet your needs, as well as a mobile friendly version of the site can all be found at [www.gatewayguide.com](http://www.gatewayguide.com).



AM – Regional Mobility

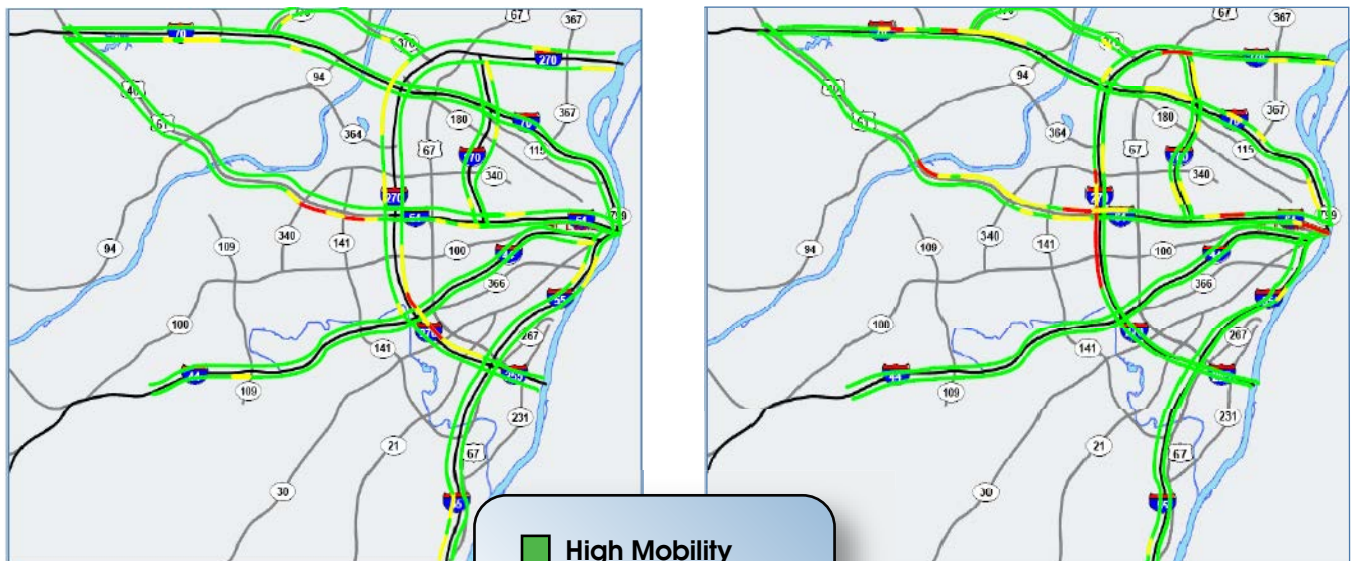
PM – Regional Mobility





AM – Regional Mobility

PM – Regional Mobility



- High Mobility
- Medium Mobility
- Low Mobility

## Average rate of travel on signalized routes-1b

**Result Driver:** Ed Hassinger, District Engineer

**Measurement Driver:** Julie Stotlemeyer, Traffic Liaison Engineer

### Purpose of the Measure:

This measure indicates how well random arterials across the state are operating during peak traffic times. As improvements are made, such as signal timing or access management, this measure will show the effects of those efforts and decisions on the arterial system.

### Measurement and Data Collection:

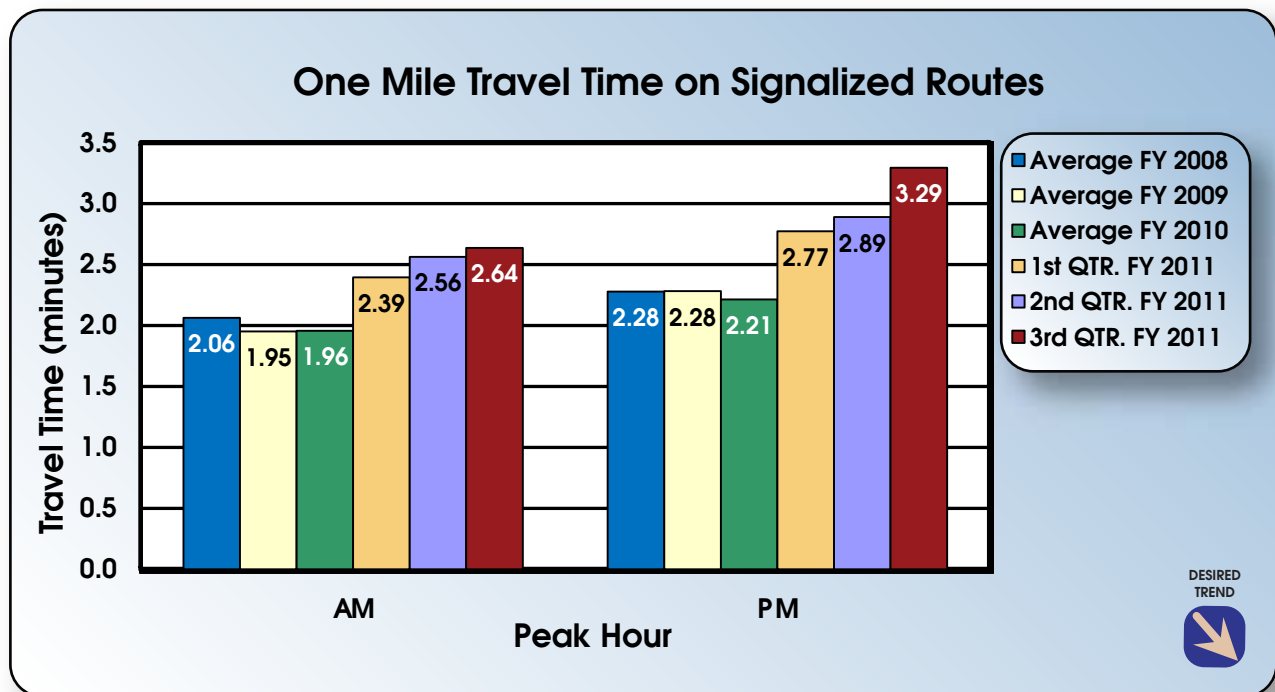
Travel times are measured on random arterials. Travel times are collected by driving each route twice in each direction during a.m. and p.m. peak times and timing how long it takes to traverse the route. The travel time is divided by the length of the route and then all routes averaged together to determine the statewide a.m. and p.m. peak performance for arterials. The measure indicates the time, in minutes, to travel one mile. This is a yearly measure, but data is updated quarterly.

### Improvement Status:

The average travel times for fiscal year 2008, 2009, and 2010 are based on travel times collected on the same 17 routes each quarter, whereas the travel times for first quarter fiscal year 2011 are based on 29 random routes, 48 random routes for second quarter, and 50 random routes for third quarter fiscal year 2011.

For third quarter fiscal year 2011, the average statewide travel time per mile is 2.64 minutes for a.m. peak and p.m. peak is 3.29 minutes. This equates to an average speed of 23 mph for a.m. and 18 mph for p.m. The a.m. peak travel time is five mph faster than p.m. peak travel time.

The average rate of travel on random signalized routes has changed due to construction, timing changes, and variations in traffic flow.



## Average time to clear traffic incident-1c

**Result Driver:** Ed Hassinger, District Engineer

**Measurement Driver:** Rick Bennett, Traffic Liaison Engineer

### Purpose of the Measure:

This measure is used to determine the trends in incident clearance on the state highway system. A traffic incident is an unplanned event that creates a temporary reduction in the number of vehicles that can travel on the road. The sooner an incident is removed, the sooner the highway system returns to normal capacity. Therefore, responding to and quickly addressing the incidents (crashes, flat tires and stalled vehicles) improves system performance.

### Measurement and Data Collection:

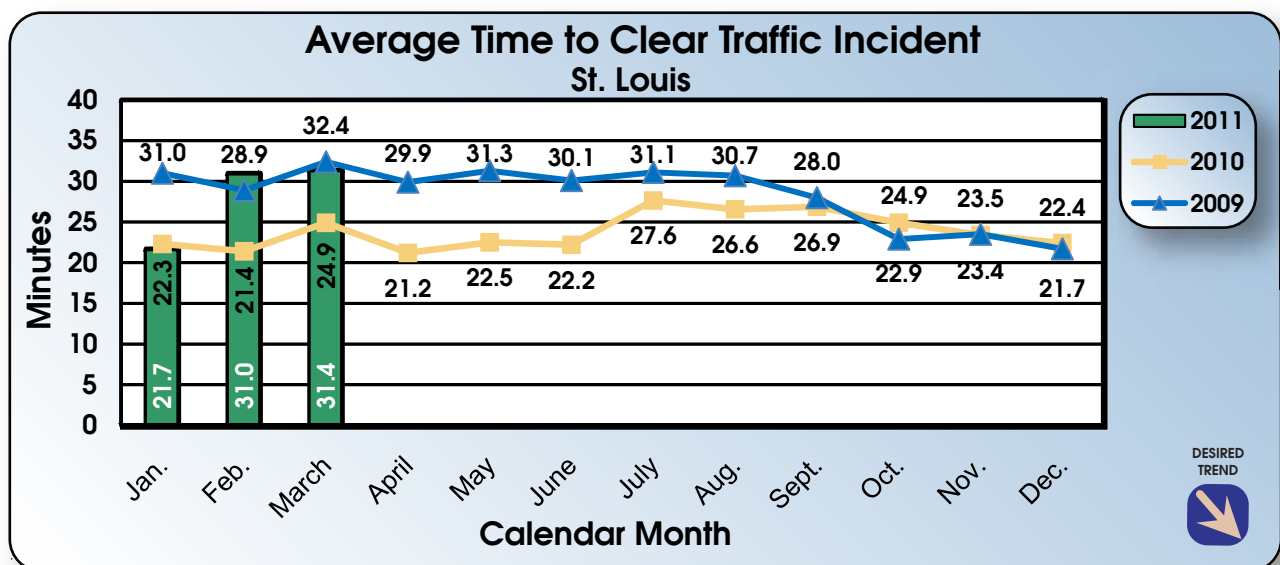
Advanced Transportation Management Systems (ATMS) are used by both the Kansas City and St. Louis traffic management centers to record “incident start time” and the time for “all lanes cleared.” In February of 2011, St. Louis moved to a new ATMS software program. In January of 2009, about 20 additional miles of I-70, I-470, and I-435 were added and became operational in the Kansas City urban area.

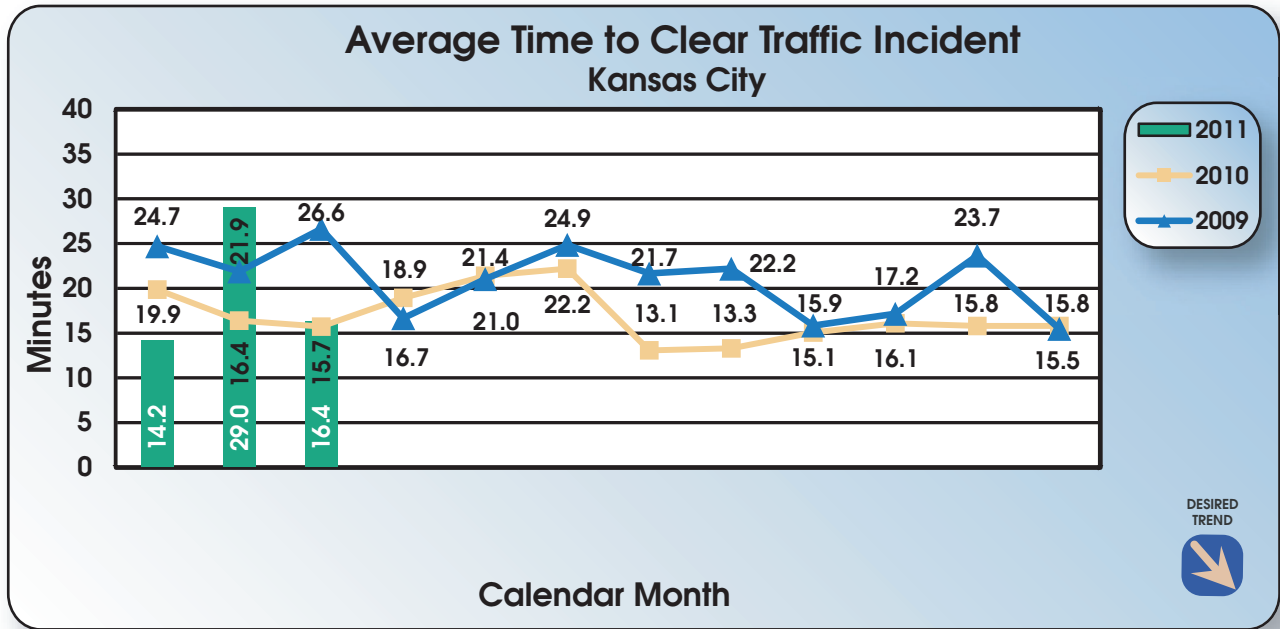
On September 1, 2009, Kansas City moved to a new software and hardware platform, (TranSuite and SQL), giving them the ability to do more detailed tracking of time to clear incidents, Motorist Assist activities and interoperability with Operation Greenlight and the arterial signal systems. In July 2010, Kansas City Scout went to retrieving 100 percent of its data from the TranSuite SQL databases.

### Improvement Status:

St. Louis recorded 553, 491 and 396 incidents respectively for the months of January, February and March 2011. The calculated time to clear incidents has increased. In February, the increase can primarily be attributed to winter weather issues and ten major incidents that took more than two hours to clear. In March, there were seven major incidents that took more than two hours to clear. These incidents drove the average for those months up by nearly four minutes. In addition, the increase can be attributed to the operators’ unfamiliarity to the new ATMS software program that was installed in February. The number of reported incidents in St. Louis has decreased because St. Louis is only reporting incidents that occur on the mainline of the Interstate routes.

Kansas City collected data on 733, 770, and 718 incidents respectively for the months of January, February and March 2011. The increase in time to clear incidents in the Kansas City area for February can be attributed to the large number of incidents that had an increase in clearance time due to the heavy storm events, the tow truck communities inability to respond and response time of emergency responders.





## Number of closures on major routes-1d

**Result Driver:** Ed Hassinger, District Engineer

**Measurement Driver:** Rick Bennett, Traffic Liaison Engineer

### Purpose of the Measure:

This measure tracks the number of closures on major routes due to traffic incidents and weather related events. A traffic incident is any unplanned event that creates a temporary reduction in the number of vehicles that can travel on the road and includes floods, winter weather and traffic impacts such as traffic crashes, utility damage, bridge and pavement damage, special events and police emergencies.

### Measurement and Data Collection:

Major route closures that have an actual or expected duration of one hour or more are entered into MoDOT's Transportation Management System (TMS) for display on the Traveler Information Map on MoDOT's website. The numbers of closure events are tracked in the TMS system.

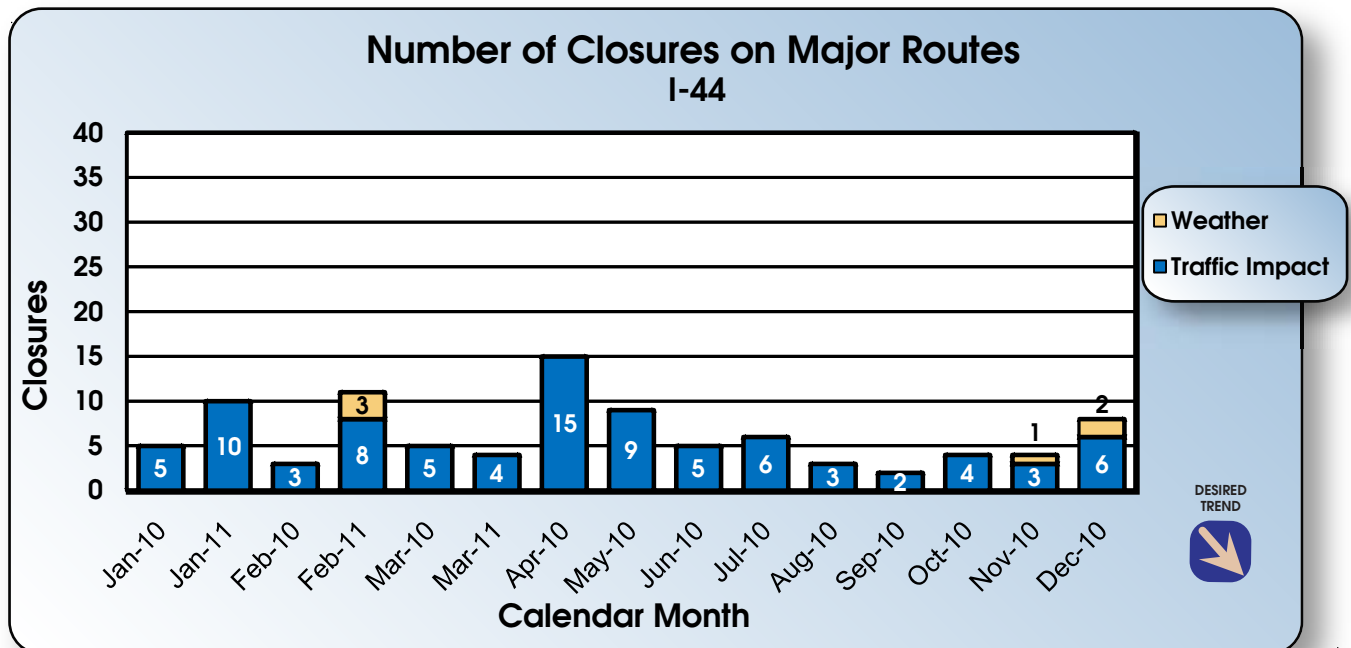
### Improvement Status:

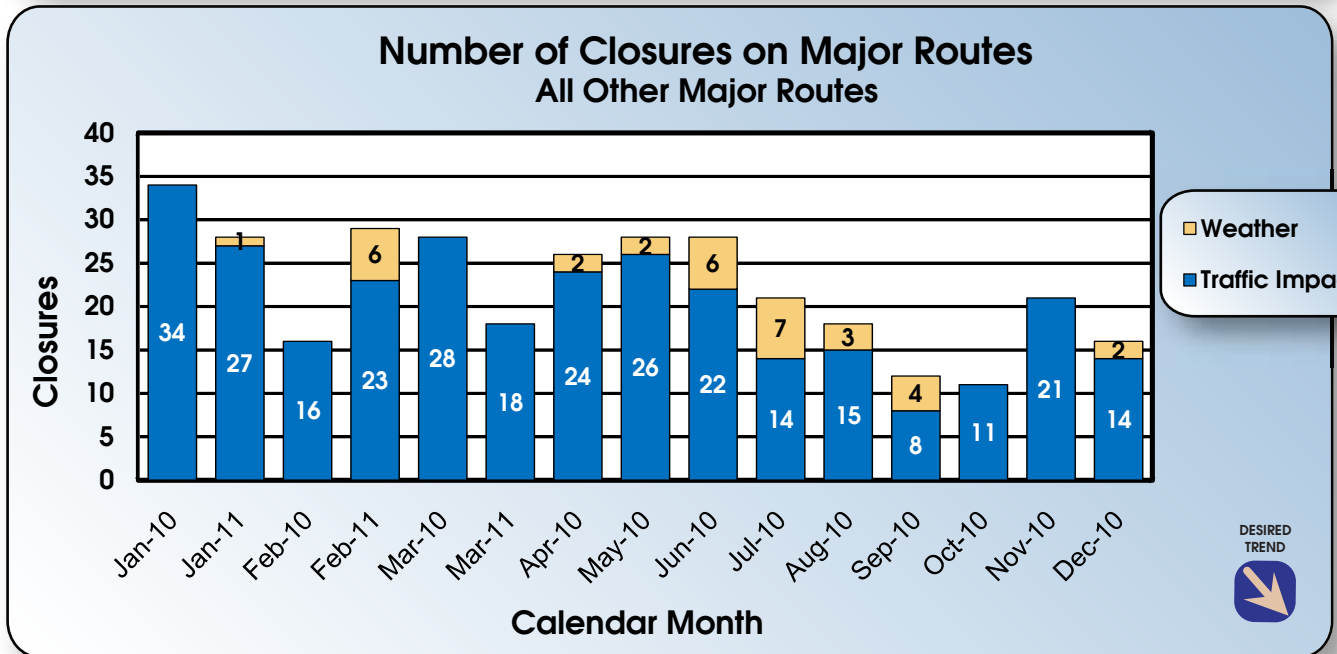
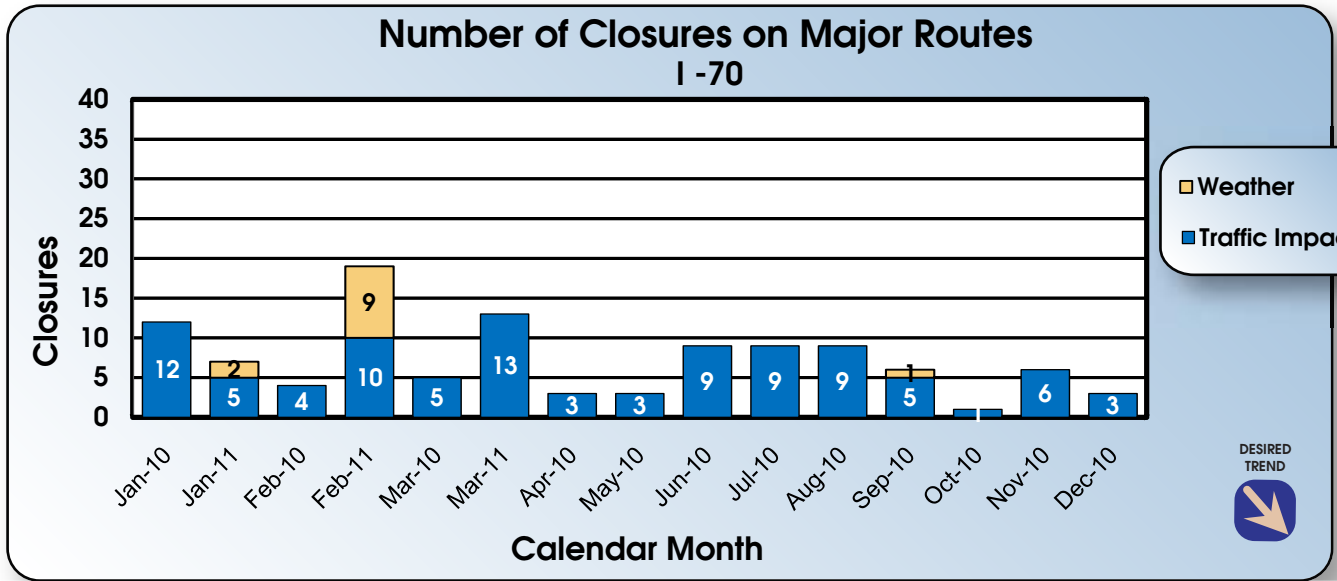
All weather closures on major routes are winter weather closures associated with the major winter storm that impacted the state of Missouri at the end of January and beginning of February 2011.

On I-44, a majority of the closures in the first quarter of calendar year 2011 were related to traffic crashes or utility damage.

On I-70 all of the traffic impact closures were related to traffic crashes except one, which was a police emergency.

In addition to traffic crashes, police emergencies, debris on the roadway, utility damage and other closures attributed to the traffic impact closures on all other major routes.





#### Traveler Information Map

For work zone location, flooding information and weather-related road conditions visit MoDOT's [Traveler Information Map](#). It's your first source of information when planning your trip across the Show-Me state.  
[Statewide text report of road closures](#)

[Tips for using the map](#)





## Percent of work zones meeting expectations for traffic flow-1e

**Result Driver:** Ed Hassinger, District Engineer

**Measurement Driver:** Dan Smith, Traffic Management & Operations Engineer

### Purpose of the Measure:

An important factor in evaluating the department's performance in temporary traffic control design, deployment, operation and maintenance is the measurement of work zones' affect on the mobility of highway users. This measure tracks how well the department meets customer expectations of traffic flow in, around and through work zones on state highways.

### Measurement and Data Collection:

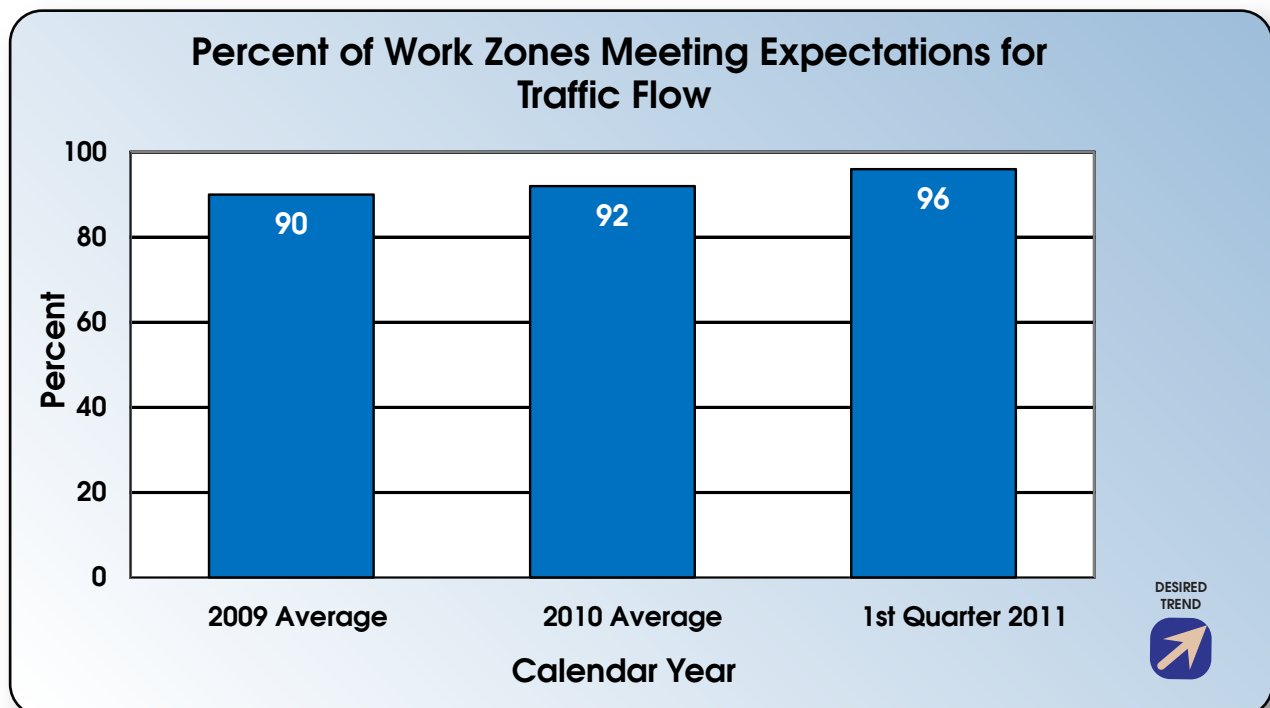
On January 1, 2009, MoDOT provided a Work Zone Customer Survey for the traveling public to provide evaluation of the mobility in work zones across the state. Each survey has several questions that address the sign and flagger instructions, speed limit, travel time, and travel safety. The evaluator assigns a yes,

no, or n/a rating to each of the questions. The overall ratings are compiled quarterly and reported via this measurement. The survey is on the MoDOT website at the following address:

<http://www.modot.gov/workzones/Comments.htm>.

### Improvement Status:

Compilation of the 560 surveys performed by the traveling public and MoDOT staff between January and March of this calendar year resulted in a positive satisfaction rating of 96 percent for work zone traffic flow. This is a 4 percent increase in customer satisfaction from the 92 percent customer satisfaction reported for the calendar year 2010.



## Time to meet winter storm event performance objectives-1f

**Result Driver:** Ed Hassinger, District Engineer

**Measurement Driver:** Tim Jackson, Maintenance Liaison Engineer

### Purpose of the Measure:

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

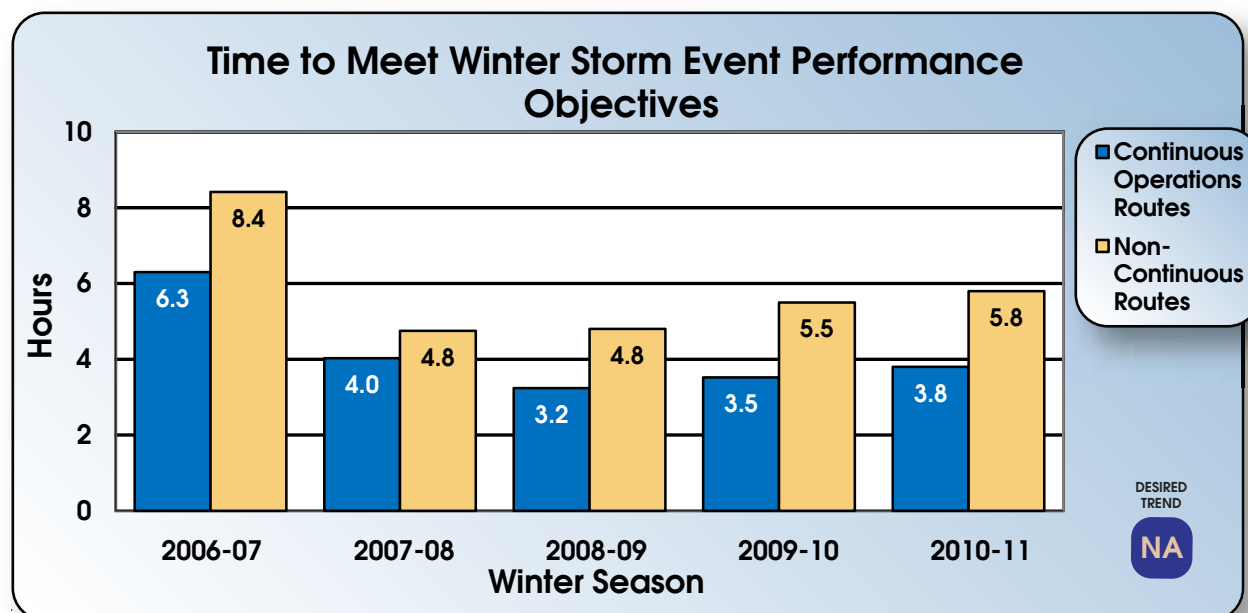
### Measurement and Data Collection:

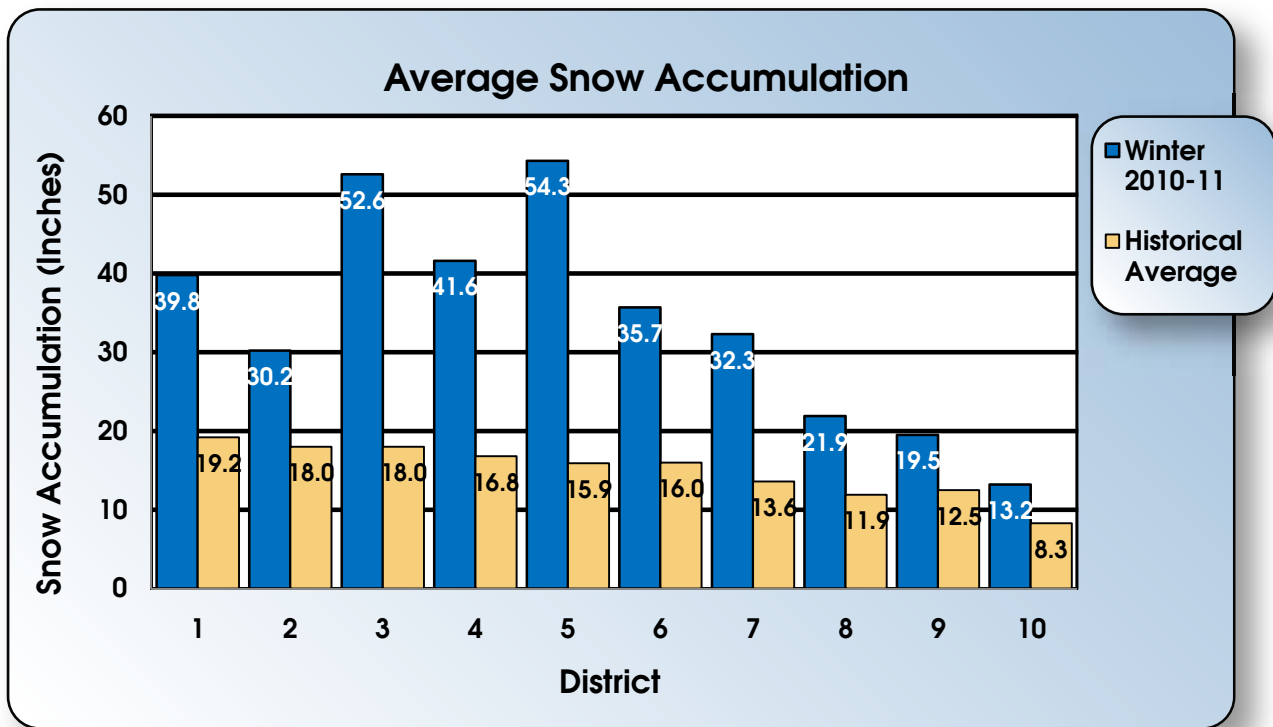
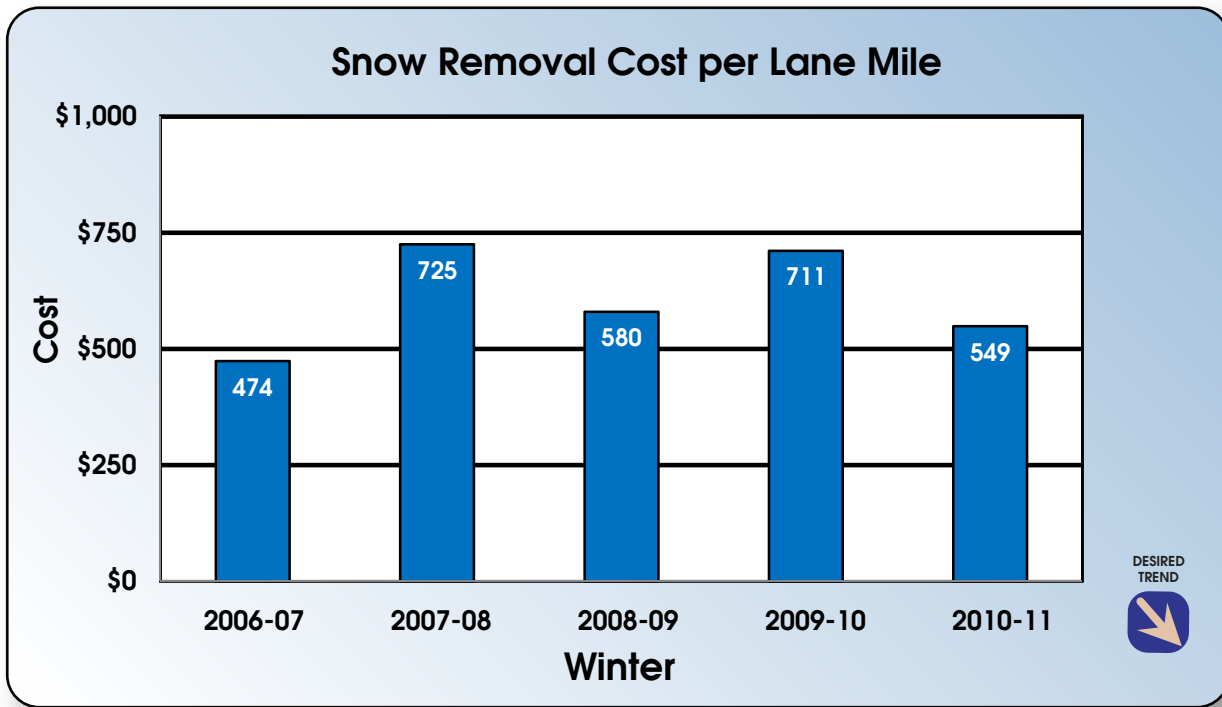
This data is collected in the winter event database. This measurement tracks the average time involved in this process so improvements can be made. After each winter event, such as a snow or ice storm, area maintenance personnel submit a report indicating how much time it took to meet the performance objectives for the continuous and non-continuous operations routes. The continuous operations routes consist of all major highways and regionally significant minor highways. The non-continuous operations routes are all remaining lower volume minor highways. After a storm ends, the objectives are to restore the continuous operations routes to a mostly clear condition as soon as possible and have the lower-volume, non-continuous operations routes open to two-way traffic and treated with salt and/or abrasives at critical areas such as intersections, hills and curves as soon as possible. The end of the storm is defined as when freezing precipitation stops accumulating on the roadways, either from falling or drifting conditions. Data collection for this measure runs from November through March of each winter

season, and is updated in the January and April Tracker publications. The time in hours is the statewide average for the entire winter season. The costs per lane mile and the accumulation by district are also provided to help evaluate the winter performance.

### Improvement Status:

The average time to meet the performance objectives on both the continuous operations highways and the non-continuous operations highways were slightly more than the previous winter. This winter produced an average of 11 events across the state with at least a trace of accumulation in each district. The actual number of events per district varied from seven to 15. The storm of January 31 to February 2, with around 20 inches of snow, did take a longer time to meet the performance objectives and was a reason the numbers were higher this winter. The time to meet the performance objectives will vary based on the amount of snow received, the duration and the intensity of the storm. Strategies to improve these numbers include implementing best practices, pursuing equipment enhancements, testing new materials and continued training of snow removal employees.





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# SMOOTH AND UNRESTRICTED ROADS AND BRIDGES

*Tangible Result Driver – Dennis Heckman, State Bridge Engineer*

MoDOT's customers have said they want smooth roads. Smoother roads mean less wear on vehicles, safer travel and greater opportunity for economic development. MoDOT will delight its customers by providing smooth and unrestricted roads and bridges. MoDOT recognizes that road projects built and maintained to a high standard of smoothness will be more efficient. MoDOT must provide customers with smooth roads – because everyone riding on a road can feel whether it is smooth or not!

### 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 highway road surfaces. The public has indicated the condition of Missouri's existing state roadway system should be one of the state's highest priorities. MoDOT places a high priority on improving the condition of state highways.

#### **Measurement and Data Collection:**

The major highway system is defined as all routes functionally classified as principal arterials. By definition, the principal arterial system provides for statewide or interstate movement of traffic. Examples include the Interstate System and most U.S. routes such as 63, 54 or 36.

In urban areas, principal arterials carry traffic entering or leaving the urban area and serve movement of vehicles between central business districts and suburban residential areas. Examples include Business 50 (Missouri Blvd.) in Jefferson City, MO, 740 (Stadium Blvd.) in Columbia, and Route D (Page Ave.) in St. Louis.

The major roads in Missouri total approximately 5,573 centerline miles. This figure reflects mileage based on statewide review of the highway system. Good condition is defined using a combination of criteria. On high-speed routes (speed limits greater than 50 mph), the International Roughness Index (IRI) is used. For lower-speed routes (mostly urban areas) where smoothness is less critical, a condition (PASER) rating is used in combination with the smoothness component.

Direct comparison to other states is difficult because of differences in measurement methodologies. However, a general order-of-magnitude comparison is possible given certain assumptions. For example, there are five states that report mileage for major highways within 10 percent of that maintained by MoDOT. Of these five, Georgia, with 5,875 miles, currently has the highest percentage of these highways classified in good condition based on smoothness only. The Missouri definition of good

uses smoothness as one factor; however, it also includes other condition factors such as physical distress to determine quality. While the comparison is not exact, it does indicate the level of performance possible on a system of Missouri's size. This is an annual measure updated in January to reflect the prior calendar-year ratings.

#### **Improvement Status:**

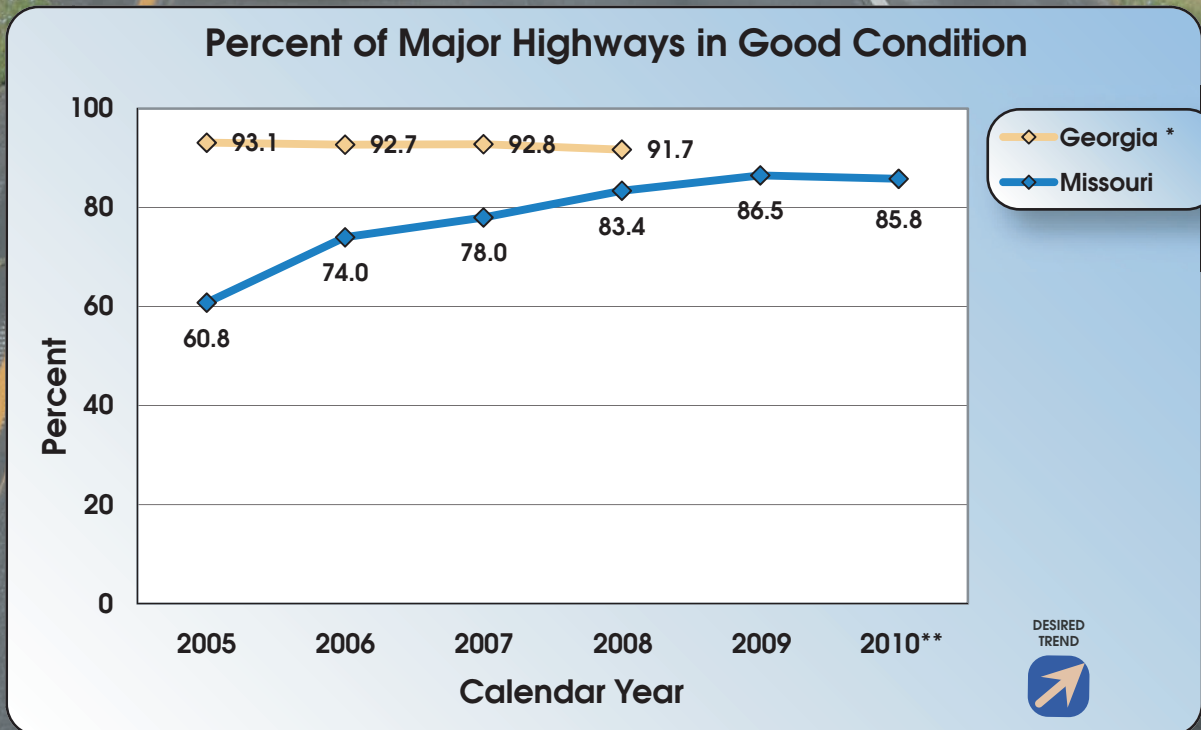
At the beginning of Better Roads, Brighter Futures (BRBF) in January 2007, 74 percent of major highways were in good condition. By January 1, 2010, one full year ahead of schedule, the goal of 85 percent of major roads in good condition had been achieved. Nearly 86 percent of major highways are currently rated in good condition. The slight decline in condition from 2009 is due in part to those miles improved under the Smooth Road Initiative nearing the end of their expected life.

MoDOT will continue to emphasize maintenance of the miles improved through the Smooth Roads Initiative and BRBF. Over time, all 5,573 miles will benefit from improved safety features such as shouldering, wider striping and brighter signing. There are currently more than 170 projects in the 2011-2015 STIP that will address more than 1,500 major highway miles.

The Interstate System is the backbone of the major highway network. While it includes only about 7 percent of the state highway mileage, it accounts for more than half the total state vehicle miles traveled. The increased emphasis on maintenance and operation of interstate highways that began in 2008 will continue into the future. The Interstate Maintenance Plan sets specific goals, standards and responsibilities for the condition of these vital highways.

More than \$435 million per year is dedicated to taking care of the existing highway system. Of this total, \$125 million is reserved for work on the Interstate System and major bridges.

# SMOOTH AND UNRESTRICTED ROADS AND BRIDGES



\* Source data for Georgia is "Highway Statistics" published by FHWA. Data for 2009 is not available at the time of publication. Georgia data is based only on pavement smoothness (IRI) submitted as part of the Highway Performance Monitoring System.



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

**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 highway road surfaces. The public has indicated the condition of Missouri's existing state roadway system should be one of the state's highest priorities. MoDOT places a high priority on improving the condition of highways in the state system.

#### **Measurement and Data Collection:**

The minor highway system consists of all routes functionally classified as minor arterials or collectors. These routes mainly serve local transportation needs and include highways commonly referred to as lettered routes, such as Route A, Route C and Route DD. The public sometimes refers to these routes as farm-to-market roads. The minor roads in Missouri total approximately 27,000 centerline miles.

Good condition is defined using a combination of criteria. Smoothness is evaluated using the International Roughness Index (IRI). Pavements below the prescribed threshold are considered good. However, public surveys have shown that physical condition is more important than ride on lower speed, lower volume roadways. A condition rating of visual distress (PASER) is also evaluated and if those criteria are met, the roadway is considered good.

Direct comparison to other states is difficult because of differences in measurement methodologies. However, a general order-of-magnitude comparison is possible given certain assumptions. For example, there are six states that report mileage for minor highways within 10 percent of that maintained by MoDOT. Of these six, Georgia, with 24,707 miles, currently has the highest percentage of these highways classified in good condition. The ratings reported by states as part of the Highway Performance Monitoring System for roads classified

as minor more closely relate to Missouri's rating system. The Federal Highway Administration allows conditions on minor highways to be reported on either IRI or Present Serviceability Index (PSI). PSI includes an assessment of physical distress similar to Missouri's definition. The Missouri definition of good uses smoothness as one factor. However, it also includes other condition factors such as physical distress to determine quality. This is an annual measure updated in January to reflect the prior calendar-year ratings.

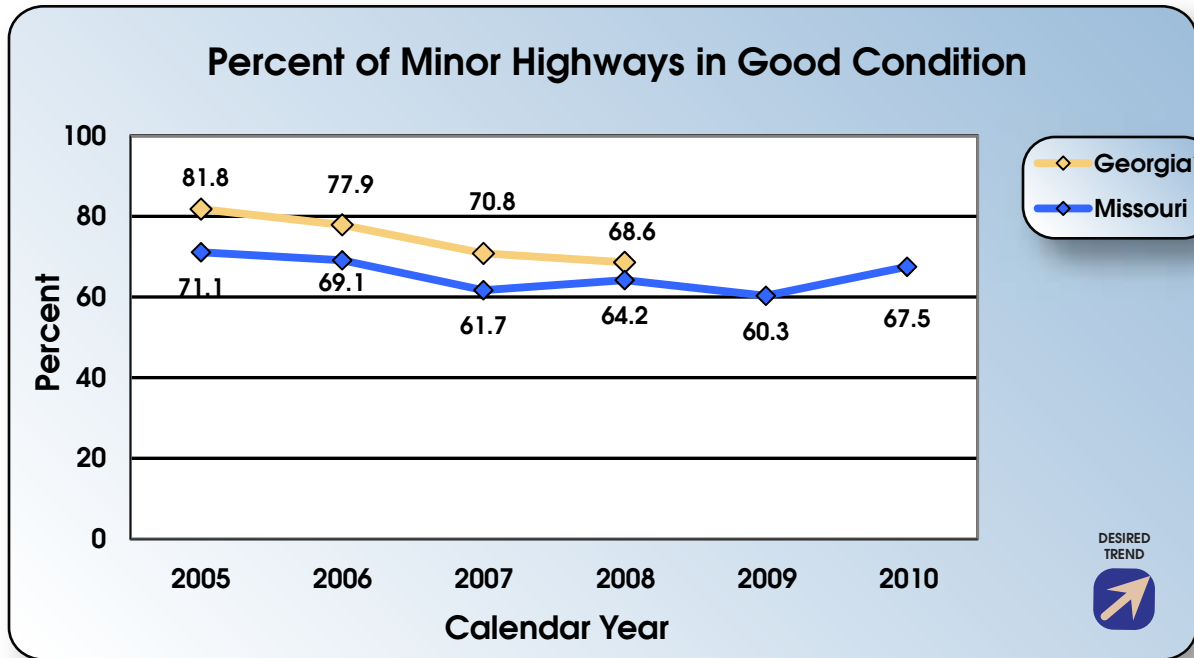
#### **Improvement Status:**

MoDOT's five year direction provides for improvement of the minor roads condition. Work on the minor highway system will emphasize the use of MoDOT maintenance forces and some contractual work. Treatments primarily consist of routine patching, crack sealing and chip seals.

2010 did see an increased effort on minor highways. The American Recovery and Reinvestment Act (ARRA) allowed additional funds to be applied to "Taking Care of the System" (TCOS) activities. In addition, approximately \$34 million was applied to minor roads from internal operational savings.

Some of the increase shown in 2010 is assumed due to a change in rating methods. A switch to a more general, less technical method was adopted during this survey year. In addition, 2010 was the first year that the entire minor road system was collected by automated equipment. The percentages shown below may change over the next year as more input is gathered with respect to acceptable condition levels for low volume minor roads.

## SMOOTH AND UNRESTRICTED ROADS AND BRIDGES



\* Source data for Georgia is "Highway Statistics" published by the Federal Highway Administration. Georgia data for 2009 was not available at time of publication. Data is based on a combination of pavement smoothness - IRI or PSR - as submitted as part of the Highway Performance Monitoring System.



### Percent of vehicle miles traveled on major highways in good condition-2c

**Result Driver:** Dennis Heckman, State Bridge Engineer

**Measurement Driver:** Brian Reagan, Transportation System Analysis Engineer

#### Purpose of the Measure:

This measure tracks the percent of vehicle miles traveled (VMT) on Missouri's major highway system that take place on highways in good condition. The public has indicated the condition of Missouri's existing state roadway system should be one of the state's highest priorities. Emphasizing work on the major highway system insures that the majority of travel takes place on highways in good condition.

#### Measurement and Data Collection:

The major highway system is defined as all routes functionally classified as principal arterials. By definition, the principal arterial system provides for statewide or interstate movement of traffic. Examples include the interstate system and most U.S. routes such as 63, 54 or 36.

In urban areas, principal arterials carry traffic entering or leaving the urban area and serve movement of vehicles between central business districts and suburban residential areas. Examples include Business 50 (Missouri Blvd.) in Jefferson City, MO, 740 (Stadium Blvd.) in Columbia, and Route D (Page Ave.) in St. Louis.

The major roads in Missouri total approximately 5,573 centerline miles. Good condition is defined using a combination of criteria. On high-speed routes (speed limits greater than 50 mph) the International Roughness Index (IRI) is used. For lower-speed routes (mostly urban areas) where smoothness is less critical, a condition (PASER) rating is used.

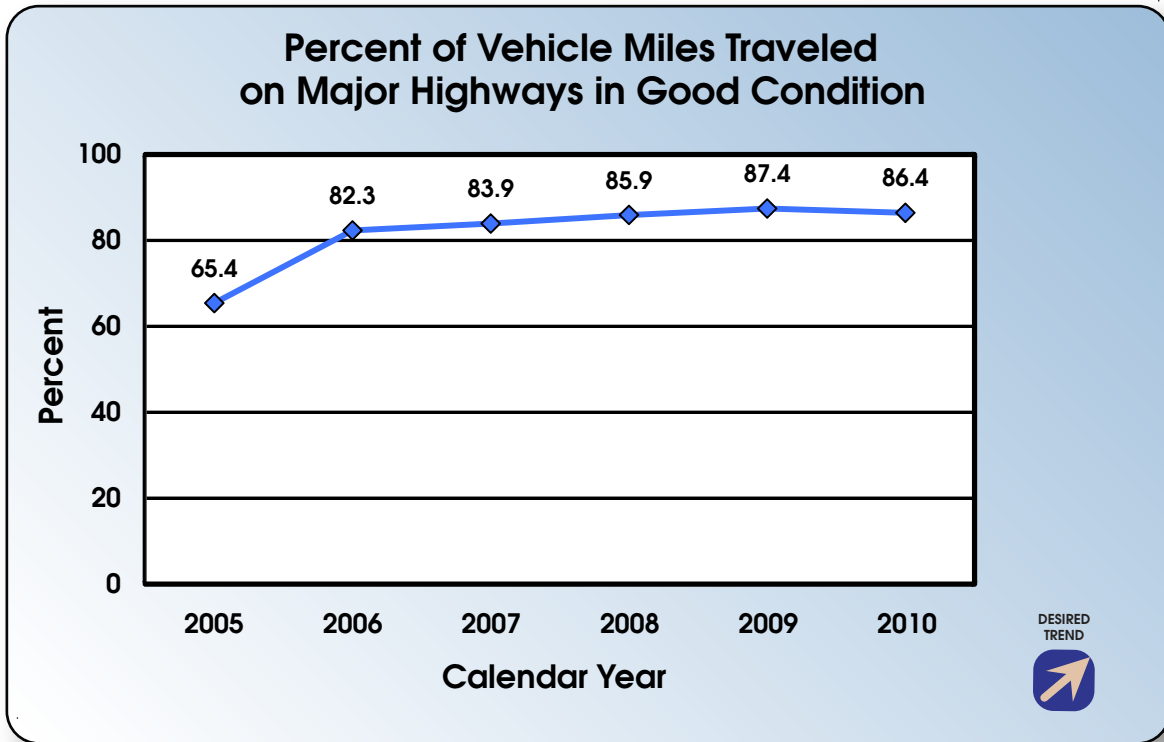
VMT is determined by multiplying the traffic volume on a given route by the route length. For this measure, the VMT is calculated on those routes in good condition and then divided by the total VMT for major routes to determine the percentage shown below. While the system of major highways in Missouri comprises only about 17 percent of the total system mileage, it carries more than 75 percent of all traffic on the state highway system. This is an annual measure updated each January.

#### Improvement Status:

Completion of the Smooth Roads Initiative resulted in a significant improvement in pavement condition. At the beginning of Better Roads, Brighter Futures (BRBF) in January 2007, 74 percent of major highways were in good condition (as shown in 2b: Percent of major highways that are in good condition). By January 1, 2010, one full year ahead of schedule, the goal of 85 percent of major roads in good condition had been achieved. Nearly 86 percent of major highways are currently rated in good condition. The slight decline in condition from 2009 is due in part to those miles improved under the Smooth Road Initiative nearing the end of their expected life.

More than \$430 million per year is dedicated to taking care of the existing highway system. Funding for the BRBF program will come from existing TCOS funds in accordance with the current funding allocation directed by the Commission.

# SMOOTH AND UNRESTRICTED ROADS AND BRIDGES



## Percent of bridges on major highways in good condition-2d

**Result Driver:** Dennis Heckman, State Bridge Engineer

**Measurement Driver:** David Koenig, Structural Services Engineer

### Purpose of the Measure:

This measure tracks progress toward improving the condition of Missouri's bridges on major highways. The public has indicated the condition of Missouri's existing roadway system should be one of the state's highest priorities.

### Measurement and Data Collection:

The major highway system is defined as all routes functionally classified as principal arterials. By definition, the principal arterial system provides for statewide or interstate movement of traffic. Examples include the Interstate System and most U.S. routes such as 63, 54 or 36.

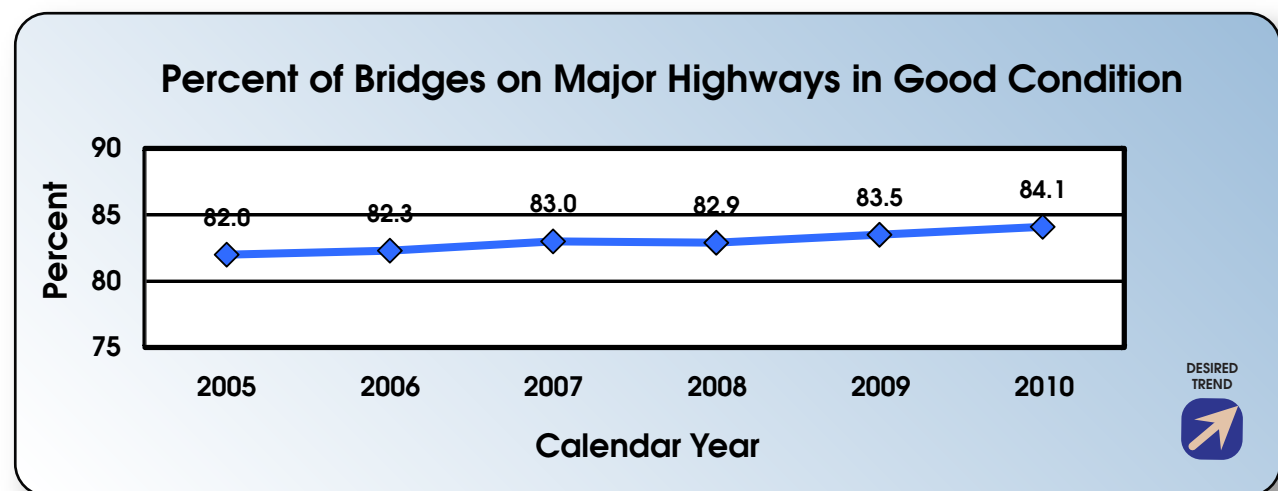
In urban areas, major highways carry traffic entering or leaving the urban area and serve the movement of vehicles between central business districts and suburban residential areas. Examples include Business Route 50 (Missouri Blvd.) in Jefferson City, Route 740 (Stadium Blvd.) in Columbia, and Route D (Page Ave.) in St. Louis.

A bridge is considered "good" if it is not deficient. Deficient means it is either structurally deficient (SD)

or functionally obsolete (FO) as defined using Federal Highway Administration criteria. A SD bridge is in poor condition or has insufficient load capacity when compared to modern design standards. A FO bridge has poor roadway alignment or has clearance or width restrictions that no longer meet the usual criteria for the system it serves. MoDOT staff inspects all state-owned bridges. There are currently 3,589 bridges on major highways. This is an annual measure and data is updated each April based on the prior year's inspections.

### Improvement Status:

Bridge conditions on major highways have taken a solid step forward over the last two years. The improvement in this measure is attributable to the significant amount of bridge work in the STIP over the last several years. The Safe & Sound program has also had an impact on the improvement in this measure over the last two years, even though this program is primarily focused on the minor highway system.



## Percent of bridges on minor highways in good condition-2e

**Result Driver:** Dennis Heckman, State Bridge Engineer

**Measurement Driver:** David Koenig, Structural Services Engineer

### Purpose of the Measure:

This measure tracks progress toward improving the condition of Missouri’s bridges on minor highways. The public has indicated the condition of Missouri’s existing roadway system should be one of the state’s highest priorities.

### Measurement and Data Collection:

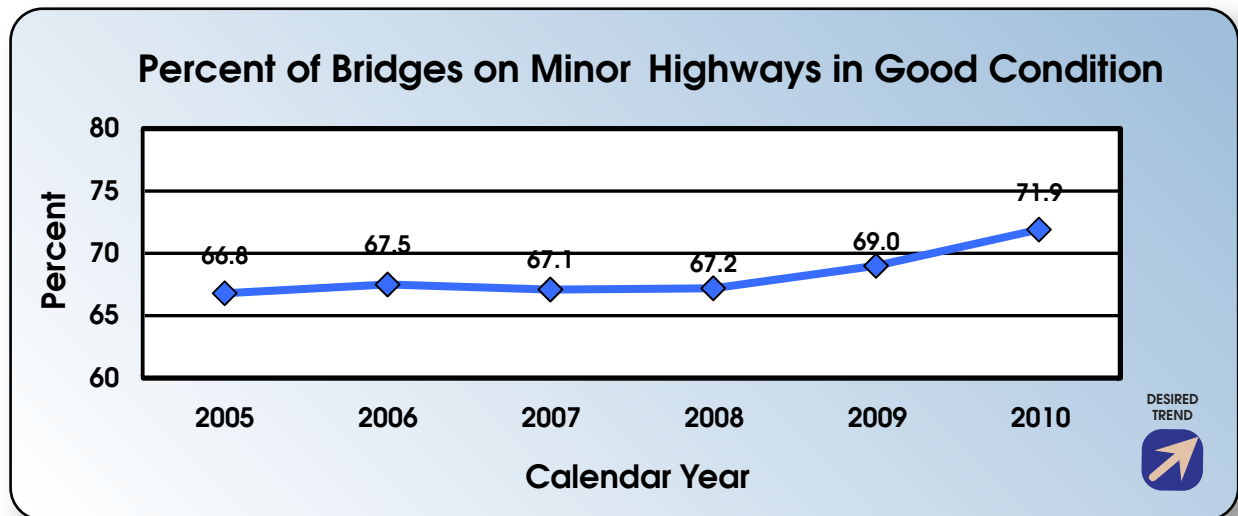
The minor highway system consists of all routes functionally classified as minor arterials or collectors. These routes serve more local transportation needs and include highways commonly referred to as lettered routes, such as Route A, Route C and Route DD. The public sometimes refers to these routes as farm-to-market roads.

A bridge is considered “good” if it is not deficient. Deficient means it is either structurally deficient (SD) or functionally obsolete (FO) as defined using Federal Highway Administration criteria. A SD bridge is in poor condition or has insufficient load capacity when compared to modern design standards.

A FO bridge has poor roadway alignment or has clearance or width restrictions that no longer meet the usual criteria for the system it serves. MoDOT staff inspects all state-owned bridges. There are currently 6,816 bridges on minor highways. This is an annual measure and data is updated each April based on the prior year’s inspections.

### Improvement Status:

Bridge conditions on minor highways have shown a very large improvement over the last two years, with the measure increasing 4.7 percentage points. The majority of the recent improvement in this measure is directly attributable to the Safe & Sound program, which is entering its third full year of construction. Additional impacts on the improvement of this measure have resulted from normal STIP activity on bridges.



## Number of deficient bridges on the state system (major and minor highways)-2f

**Result Driver:** Dennis Heckman, State Bridge Engineer  
**Measurement Driver:** David Koenig, Structural Services Engineer

### Purpose of the Measure:

This measure tracks progress toward improving the condition of Missouri’s bridges. The public has indicated the condition of Missouri’s existing roadway system should be one of the state’s highest priorities.

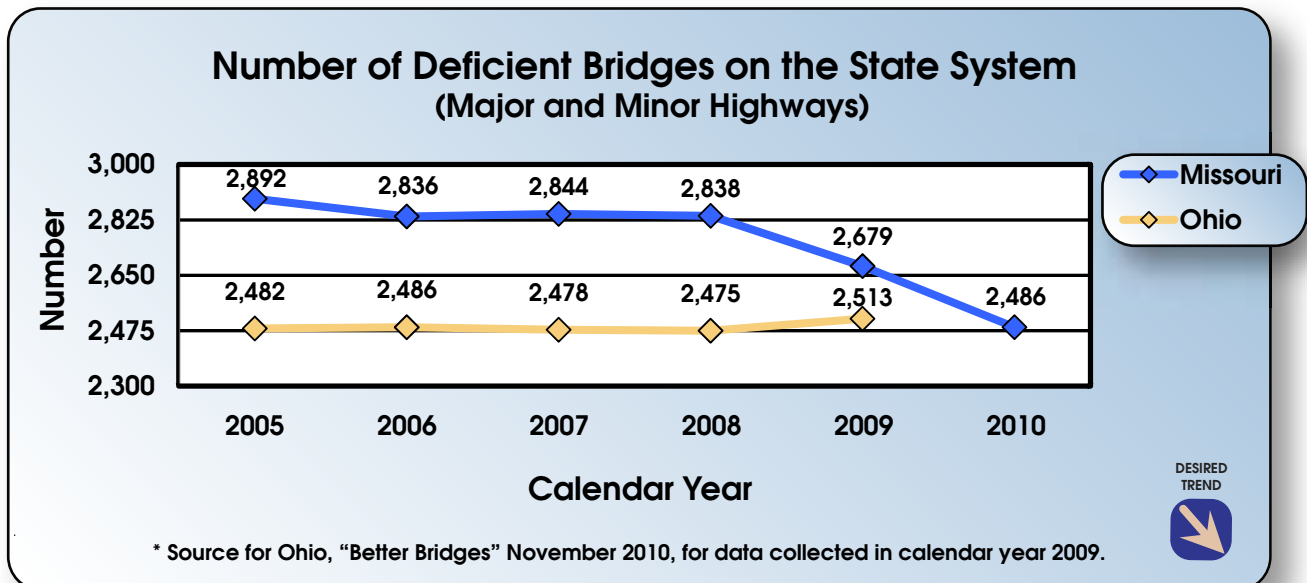
This is an annual measure and data is taken from FHWA’s National Bridge Inventory. Missouri data is available in April of each calendar year and is updated in the April Tracker. The data for other states is not published until the following year.

### Measurement and Data Collection:

A bridge is considered deficient if it is either structurally deficient (SD) or functionally obsolete (FO) as defined using Federal Highway Administration (FHWA) criteria. A SD bridge is in poor condition or has insufficient load capacity when compared to modern design standards. A FO bridge has poor roadway alignment or has clearance or width restrictions that no longer meet the usual criteria for the system it serves. MoDOT staff inspects all state-owned bridges. There are currently a total of 10,405 bridges on the state highway system.

### Improvement Status:

Bridge conditions on Missouri highways made a big leap forward over the last two years. The long-term trend on this measure has been a steady downward reduction with some leveling off from 2006 thru 2008. Over the last two years, this measure has made a sharp downward turn. This downward turn predominately resulted from the efforts of the Safe & Sound program, but was also impacted by other STIP activity. Of the 2,486 deficient bridges, 1,028 are functionally obsolete and 1,458 are structurally deficient.



## Percent of major bridges in good condition-2g

**Result Driver:** Dennis Heckman, State Bridge Engineer

**Measurement Driver:** David Koenig, Structural Services Engineer

### Purpose of the Measure:

This measure tracks the percent of major bridges that are in good condition. The public has indicated the condition of Missouri's existing roadway system should be one of the state's highest priorities.

### Measurement and Data Collection:

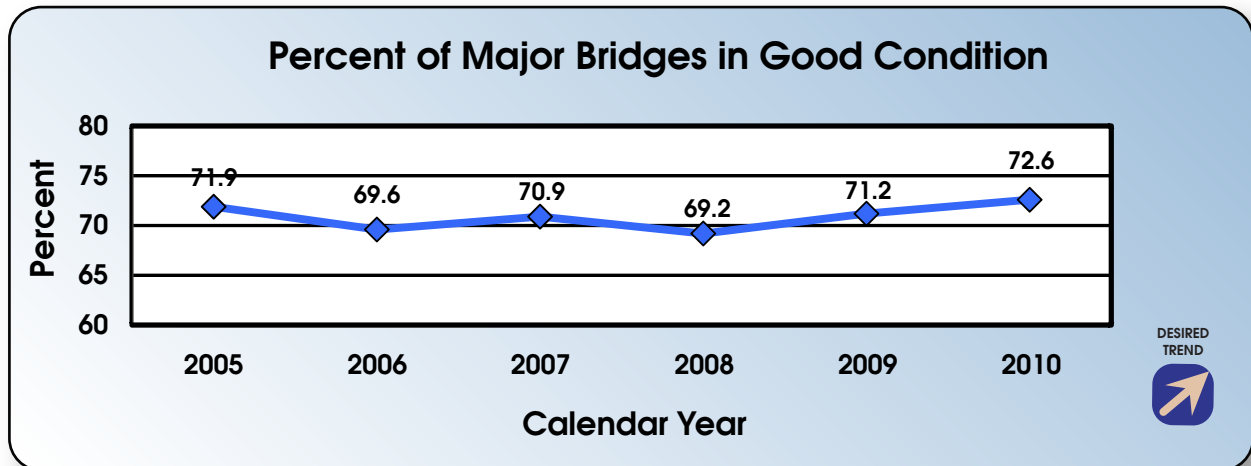
A major bridge is defined as any structure with a length greater than 1,000 feet. There are currently 212 such structures on the MoDOT system. While they make up only 2 percent of the number of bridges, they represent 25 percent of our bridge deck area.

A bridge is considered in good condition if it is not deficient. Deficient means it is either structurally deficient (SD) or functionally obsolete (FO) as

defined using Federal Highway Administration criteria. A SD bridge is in poor condition or has insufficient load capacity when compared to modern design standards. A FO bridge has poor roadway alignment or has clearance or width restrictions that no longer meet the usual criteria for the system it serves. This is an annual measure and data is updated each April based on the prior year's inspections.

### Improvement Status:

Major bridges in good condition have increased 3.4 percentage points over the last two years. This increase is primarily due to a one-time infusion of \$26.4 million in special money received from Congress as well as ARRA money used for major bridges.







# SAFE TRANSPORTATION SYSTEM

*Tangible Result Driver – Leanna Depue, Highway Safety Director*

MoDOT works closely with other safety advocates to make our roads and work zones safer. The department supports educational programs that encourage safe driving practices and enforcement efforts that increase adherence to traffic laws. MoDOT will not compromise safety because it believes in the well-being of its employees and customers.

## Number of fatalities and disabling injuries-3a

**Result Driver:** Leanna Depue, Highway Safety Director

**Measurement Driver:** Bill Whitfield, Highway Safety Program Administrator

### Purpose of the Measure:

This measure tracks annual trends in fatal and disabling injuries resulting from traffic crashes on all Missouri roadways. This data drives the development and focus of the Missouri Highway Safety Plan. This plan is required annually by the National Highway Traffic Safety Administration and outlines key strategies to reduce these losses. In addition, this data supports Missouri's Blueprint to Arrive Alive. This document identifies the statewide initiatives with a goal of reducing fatalities to 850 or fewer by 2012.

### Measurement and Data Collection:

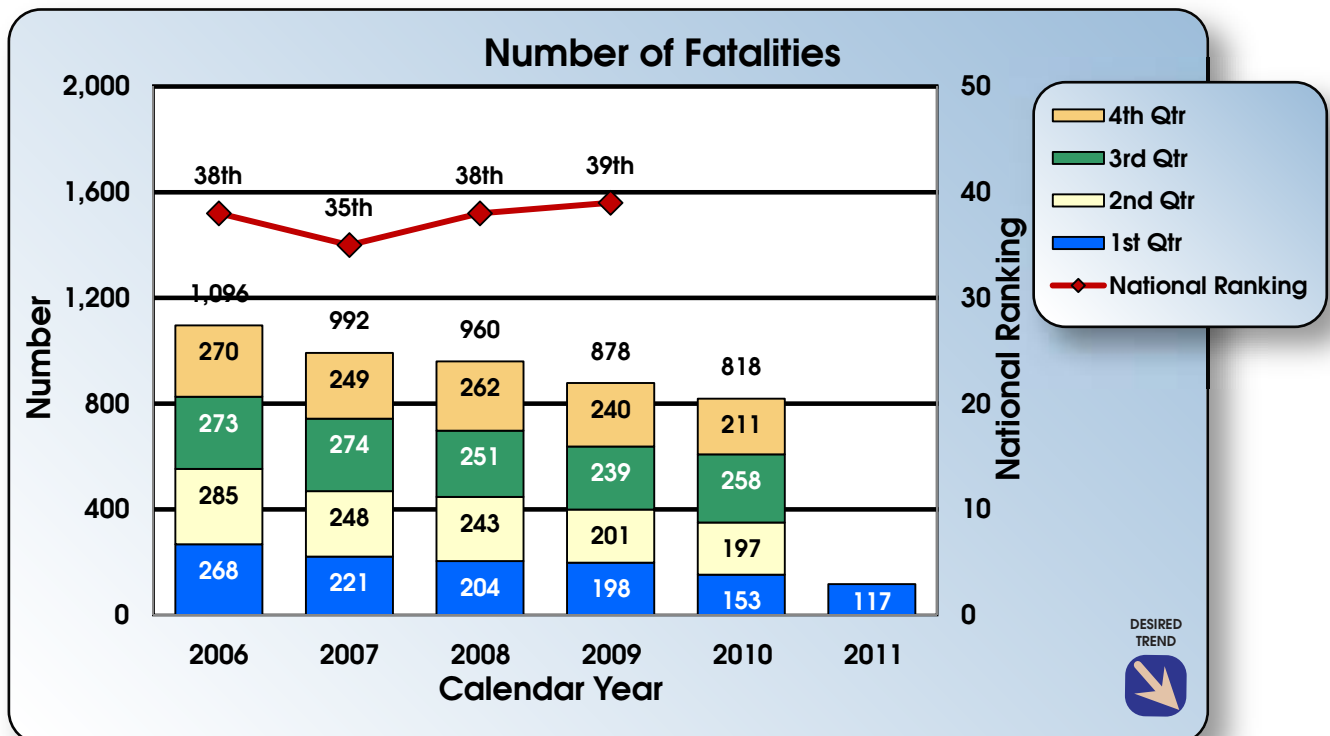
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT's traffic management system. Crash data reports are available to law enforcement and traffic safety advocates for crash analysis through both databases. Final data is collected on an annual basis and is updated in July of the following year.

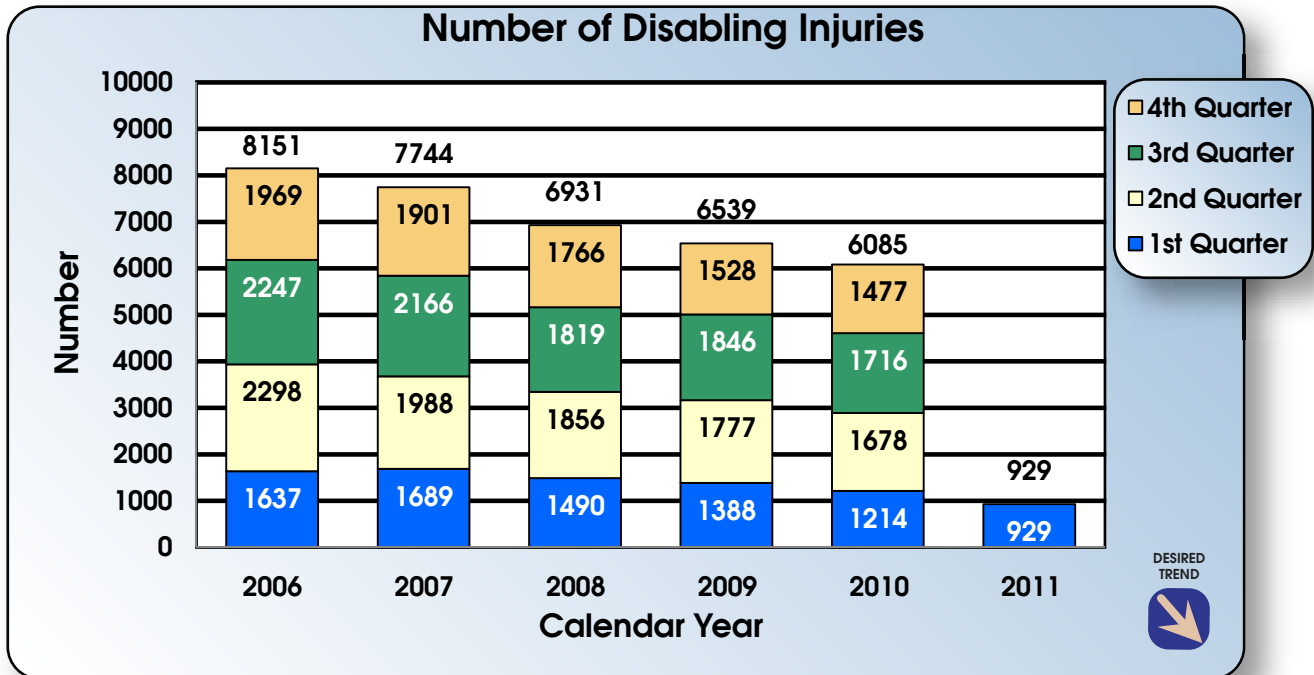
**Note:** The 2010 quarterly fatalities are not final numbers.

### Improvement Status:

Fatalities decreased approximately 25 percent from 2006 to 2010 in a continued downward trend. In 2010 there were 817 fatalities, the lowest number since 1950. The Missouri Coalition for Roadway Safety achieved its goal of reducing fatalities to 850 or fewer by 2012, two years ahead of its target date.

In spite of the decrease in fatalities, the national data comparison shows that Missouri moved from 35<sup>th</sup> in 2008 to 38<sup>th</sup> in 2009 for total fatalities. Disabling injuries continue to show a decreasing trend with a reduction of over 2,000 when comparing 2010 numbers to 2006 numbers. Fatalities and disabling injuries are decreasing due in part to engineering enhancements such as roadway shoulders, three-strand guard cable, rumble strips, and enhanced delineation. Strong safety belt and impaired driving public information campaigns combined with increased law enforcement participation in statewide campaigns have also contributed to this decline.





“Our new goal is 850 or fewer fatalities by 2012.”

—The Executive Committee

## Number of impaired driver-related fatalities and disabling injuries-3b

**Result Driver:** Leanna Depue, Highway Safety Director

**Measurement Driver:** Bill Whitfield, Highway Safety Program Administrator

### Purpose of the Measure:

This measure tracks annual trends in fatalities and injuries resulting from traffic crashes on all Missouri roadways involving drivers who are impaired by alcohol and/or drugs. This data drives the development and focus of the Missouri Highway Safety Plan. This plan is required annually by the National Highway Traffic Safety Administration and outlines key strategies to reduce these losses. In addition, this data supports Missouri’s Blueprint to Arrive Alive. This document identifies the statewide initiatives with a goal of reducing fatalities to 850 or fewer by 2012.

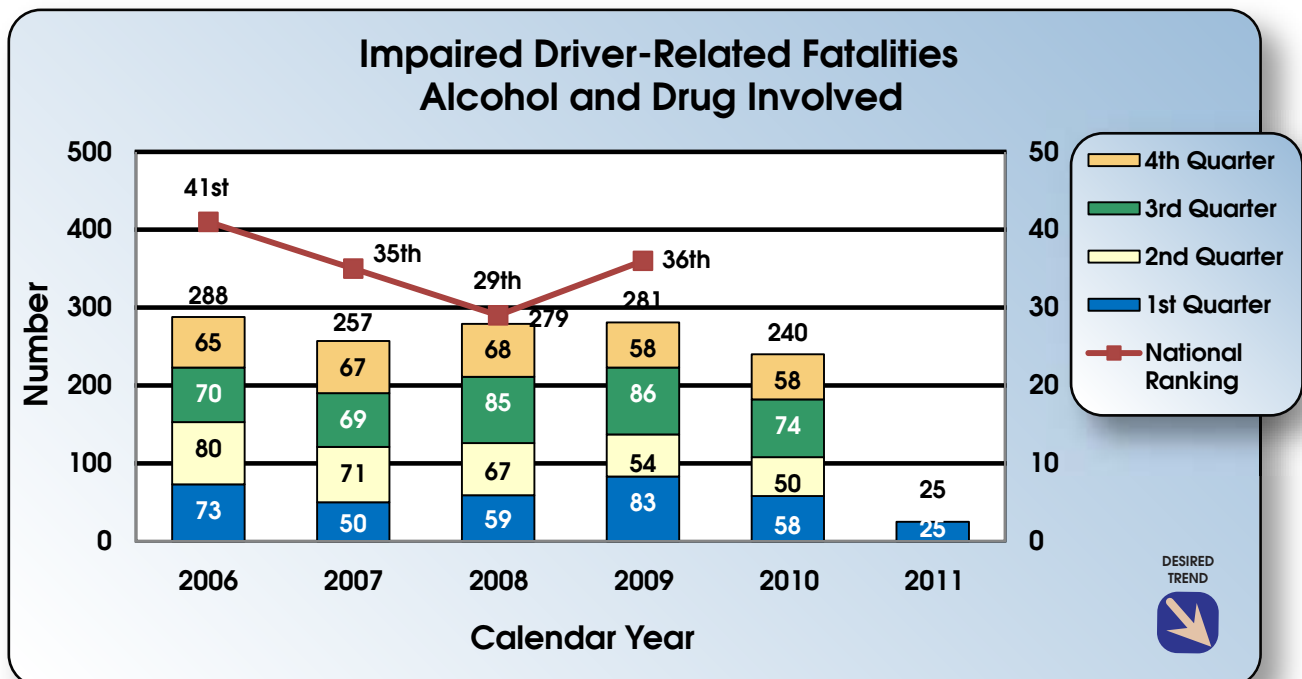
### Measurement and Data Collection:

Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT’s traffic management system. Crash data reports are available to law enforcement and traffic safety advocates for crash analysis through both databases. Final data is collected on an annual basis and is updated in July of the following year.

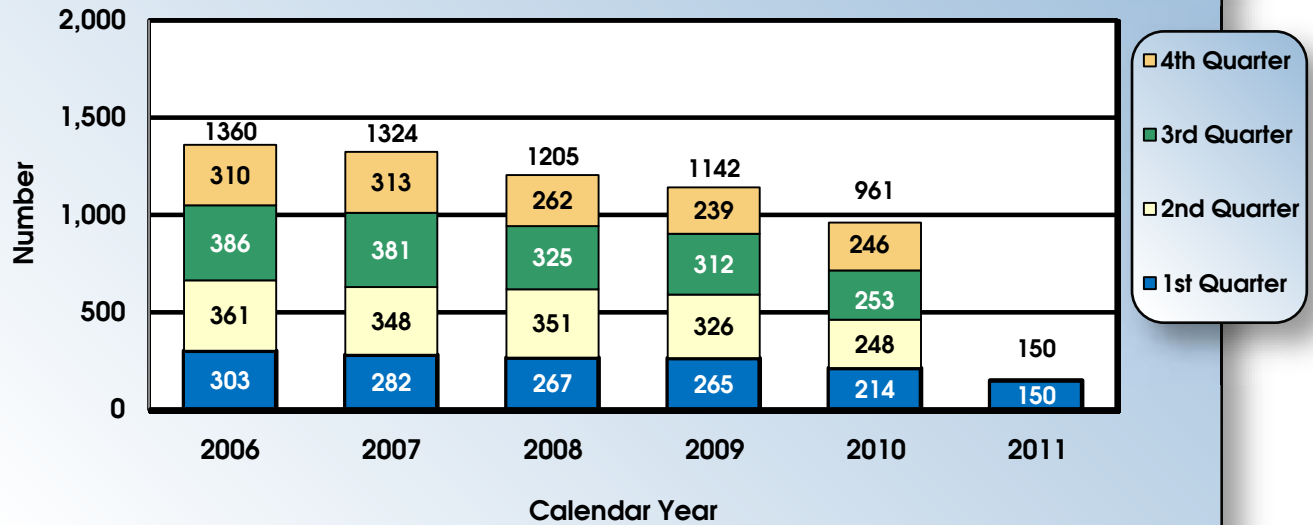
**Note:** The 2010 numbers are not yet final.

### Improvement Status:

After remaining essentially stagnant from 2008 to 2009, alcohol and drug-related fatalities decreased sharply in 2010. Disabling injuries decreased for the fifth year in a row. Several strategies are being implemented to combat our state’s impaired driving problem. In addition to Missouri participating in the national “You Drink and Drive, You Lose” campaign; the Missouri Law Enforcement Traffic Safety Advisory Council holds four DWI mobilizations each year. Public information and education has been directed at high-risk drivers ages 21 to 35. Law enforcement efforts have been concentrated on high-crash corridors, increasing the number of sobriety checkpoints and expanding DWI units in selected locations. An increasing number of people who work in liquor establishments are completing the online server training modules that were first developed in 2005. These efforts are designed to reduce impaired driving crashes overall and move the fatalities in a downward trend.



**Impaired Driver-Related Disabling Injuries  
Alcohol and Drug Involved**



**Going Out Tonight?  
So Are We.**



**You Drink & Drive.  
You Lose.**

[www.saveMOlives.com](http://www.saveMOlives.com)

**ARRIVE ALIVE**

## Percent of safety belt/passenger vehicle restraint use-3c

**Result Driver:** Leanna Depue, Highway Safety Director

**Measurement Driver:** Bill Whitfield, Highway Safety Program Administrator

### Purpose of the Measure:

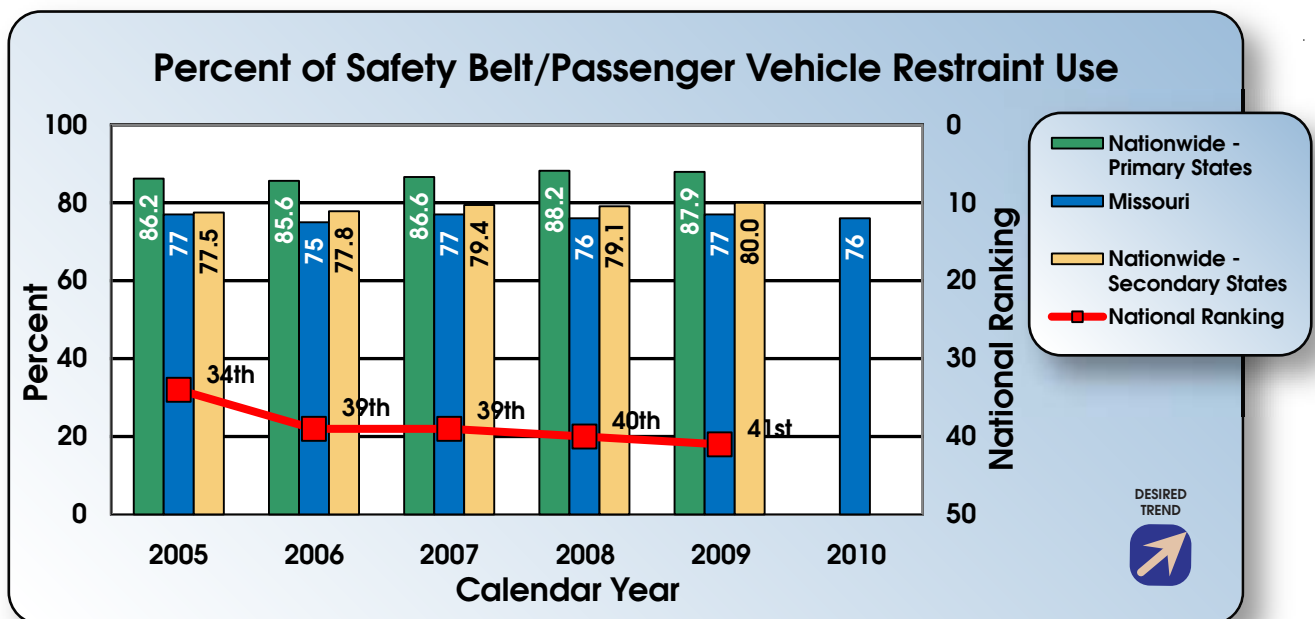
This measure tracks annual trends in safety belt usage by persons in passenger vehicles. This data drives the development and focus of the Missouri Highway Safety Plan. This plan is required annually by the National Highway Traffic Safety Administration and outlines key strategies to reduce these losses. In addition, this data supports Missouri’s Blueprint to Arrive Alive. This document identifies the statewide initiatives with a goal of reducing fatalities to 850 or fewer by 2012.

### Measurement and Data Collection:

Each June, a statewide survey is conducted at 460 pre-selected locations in 20 counties. The data collected at these sites is calculated into a safety belt usage rate by using a formula approved by the National Highway Traffic Safety Administration. The safety belt usage survey enables data collection from locations representative of 85 percent of the state’s population. The data collection plan is the same each year for consistency and compliance with the National Highway Traffic Safety Administration guidelines. Data is collected on an annual basis and is updated in August of the following year. Annual information for the national rankings may not be available from all 50 states

### Improvement Status:

Safety belt use in Missouri has remained fairly constant for the past seven years, between 75-77 percent. In the 2009 national comparison, Missouri ranked 41<sup>st</sup> in safety belt usage, slipping one spot for the second year in a row. The national average for safety belt use for 2010 is 85 percent. Missouri currently has a secondary safety belt law, which means law enforcement may not stop a vehicle solely to determine safety belt compliance. Law enforcement must observe another driving violation to stop a vehicle and issue a safety belt citation. Many states have a primary safety belt law, which means law enforcement may stop a vehicle if they observe an occupant is not wearing a safety belt. Missouri continues to focus efforts through public information and education and law enforcement participation in the national “Click It or Ticket” campaign. The Law Enforcement Traffic Safety Advisory Council (LETSAC) added additional quarterly safety belt enforcement dates through December 2011. “Battle of the Belts” and “Get Your Buckle On” focus on increasing safety belt use among teenagers. Promoting the passage of local primary safety belt ordinances is another strategy to increase safety belt use. MoDOT continues to promote the need for our state to pass a primary safety belt law.



## Number of bicycle and pedestrian fatalities and disabling injuries-3d

**Result Driver:** Leanna Depue, Highway Safety Director

**Measurement Driver:** Bill Whitfield, Highway Safety Program Administrator

### Purpose of the Measure:

This measure tracks annual trends in fatalities and disabling injuries resulting from traffic crashes with bicycles and pedestrians. This data drives the development and focus of the Missouri Highway Safety Plan. This plan is required annually by the National Highway Traffic Safety Administration and outlines key strategies to reduce these losses. In addition, this data supports Missouri's Blueprint to Arrive Alive. This document identifies the statewide initiatives with a goal of reducing fatalities to 850 or fewer by 2012.

### Measurement and Data Collection:

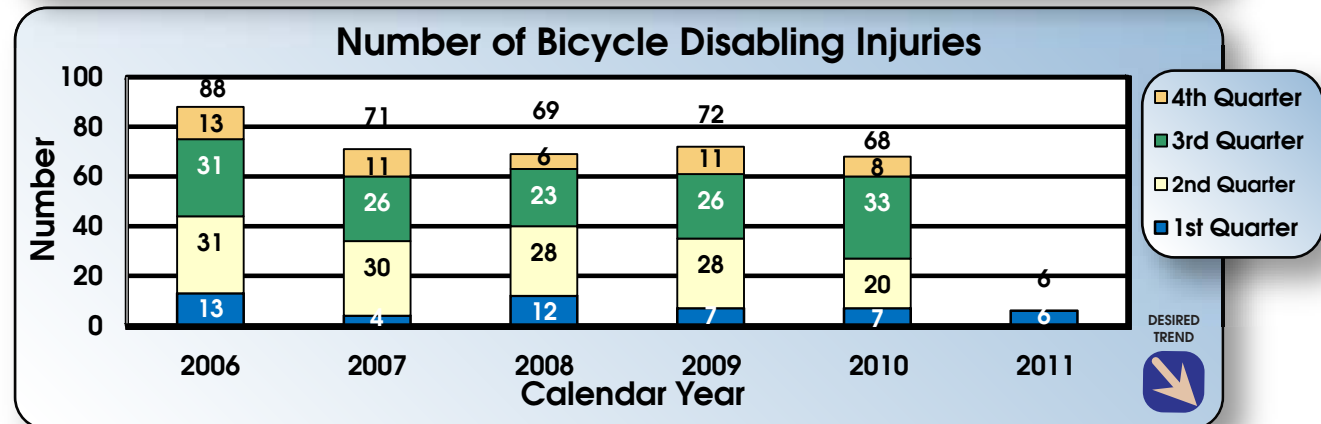
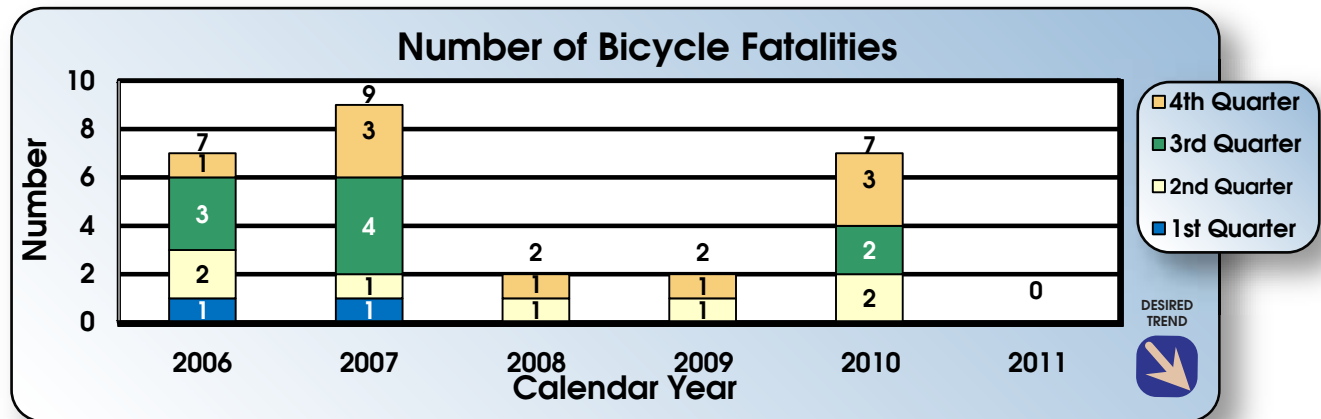
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT's traffic management system. Crash data reports are available to law enforcement and traffic safety advocates for crash analysis through

both databases. Final data is collected on an annual basis and updated in July of the following year.

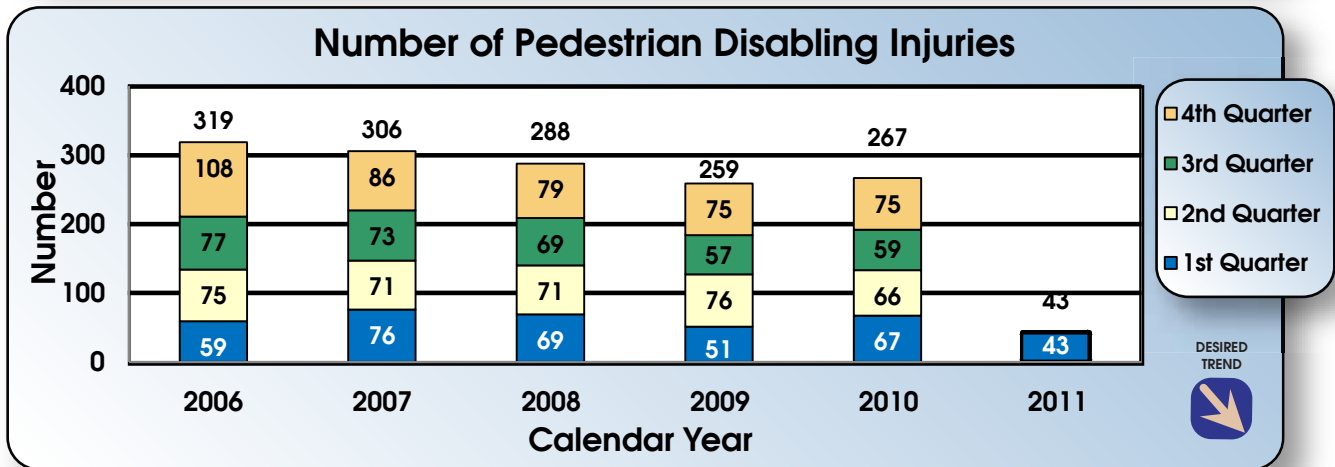
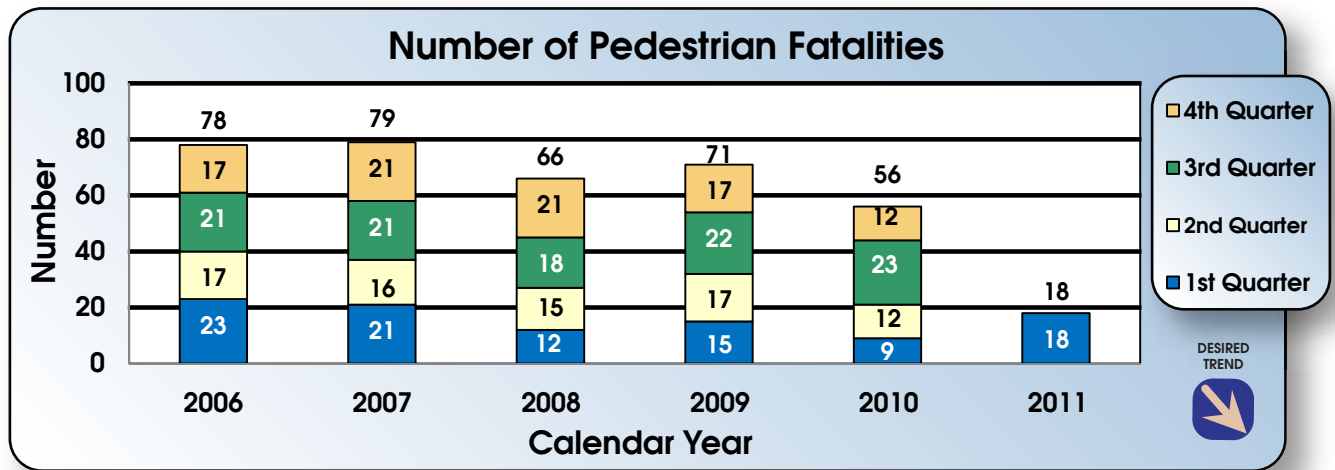
**Note:** The 2010 numbers are not yet final.

### Improvement Status:

This data reflects the number of fatalities and disabling injuries occurring when a motor vehicle is involved in a crash with a bicycle or pedestrian. After two years of decreased bicyclist fatalities in 2008 and 2009, there were seven fatalities in calendar year 2010. The number of disabling injuries related to bicycle accidents fell in 2010. Pedestrian fatalities decreased by almost 20 percent in 2010 while disabling injuries increased. MoDOT has worked to make pedestrians safer by implementing signaling and dedicated crossing area improvements. Funds have also been dedicated to support the Bicycle/Pedestrian Advisory Committee.







www.pedbikeimages.org/Dan Burden

## Number of motorcycle fatalities and disabling injuries-3e

**Result Driver:** Leanna Depue, Highway Safety Director

**Measurement Driver:** Bill Whitfield, Highway Safety Program Administrator

### Purpose of the Measure:

This measure tracks annual trends in fatalities and disabling injuries of motorcyclists on all Missouri roadways. This data drives the development and focus of the Missouri Highway Safety Plan. This plan is required annually by the National Highway Traffic Safety Administration and outlines key strategies to reduce these losses. In addition, this data supports the Missouri's Blueprint to Arrive Alive. This document identifies the statewide initiatives with a goal of reducing fatalities to 850 or fewer by 2012.

### Measurement and Data Collection:

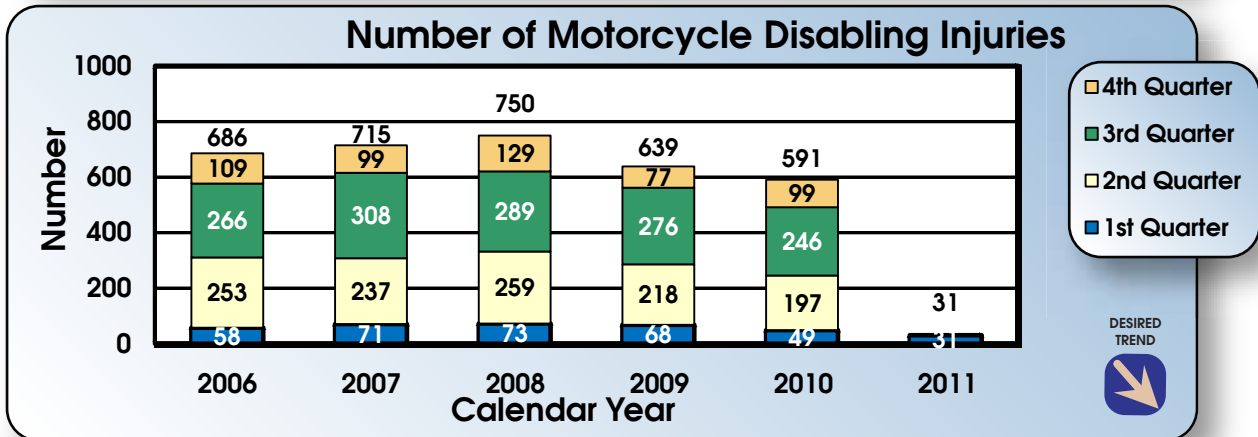
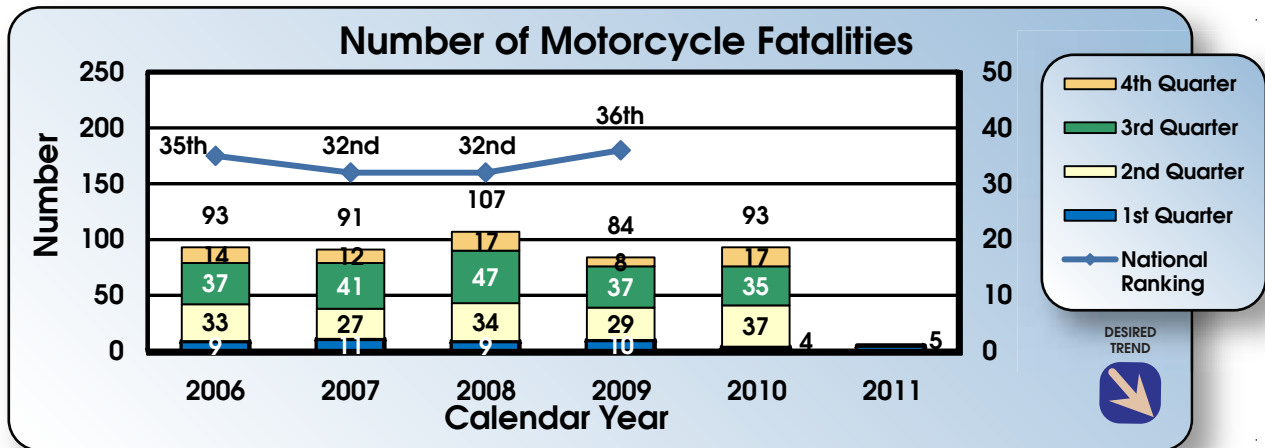
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT's traffic management system. Crash data reports are available to law enforcement and traffic safety advocates for crash analysis through

both databases. Final data is collected on an annual basis and updated in July of the following year.

**Note:** The 2010 numbers are not yet final.

### Improvement Status:

After a significant decrease in motorcycle fatalities in 2009, this measure increased in 2010. However, disabling injuries due to motorcycle accidents decreased approximately 7.5 percent. Longer riding seasons and an increase in the number of licensed motorcycles and riders has increased the exposure rate in recent years. Rider education classes are offered within one hour's driving time throughout Missouri. More than 5,000 riders at 28 sites are trained each year. In 2010, a statewide public information campaign focused on sharing the road with motorcyclists was implemented for the second year in a row.



## Number of commercial motor vehicle crashes resulting in fatalities and injuries -3f

**Result Driver:** Leanna Depue, Highway Safety Director

**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 injury crashes each year. MoDOT uses the information to target educational and enforcement efforts.

### Measurement and Data Collection:

The Missouri State Highway Patrol collects and records the crash statistics used in this measure. The data used in this measure reports the number of commercial motor vehicles involved in a crash where one or more people die within 30 days or receive serious or minor injuries as a result of the crash. This is an annual measure, updated each July for the previous year. Preliminary results for the current year are reported quarterly.

### Improvement Status:

The preliminary number of fatal crashes reported for 2011 is 16. This is one less than reported at this point in 2010, a decrease of 5.9 percent. Between 2006 and 2010, the number of Missouri commercial motor vehicle fatal crashes dropped from 133 to 92, a 30.8 percent decrease.

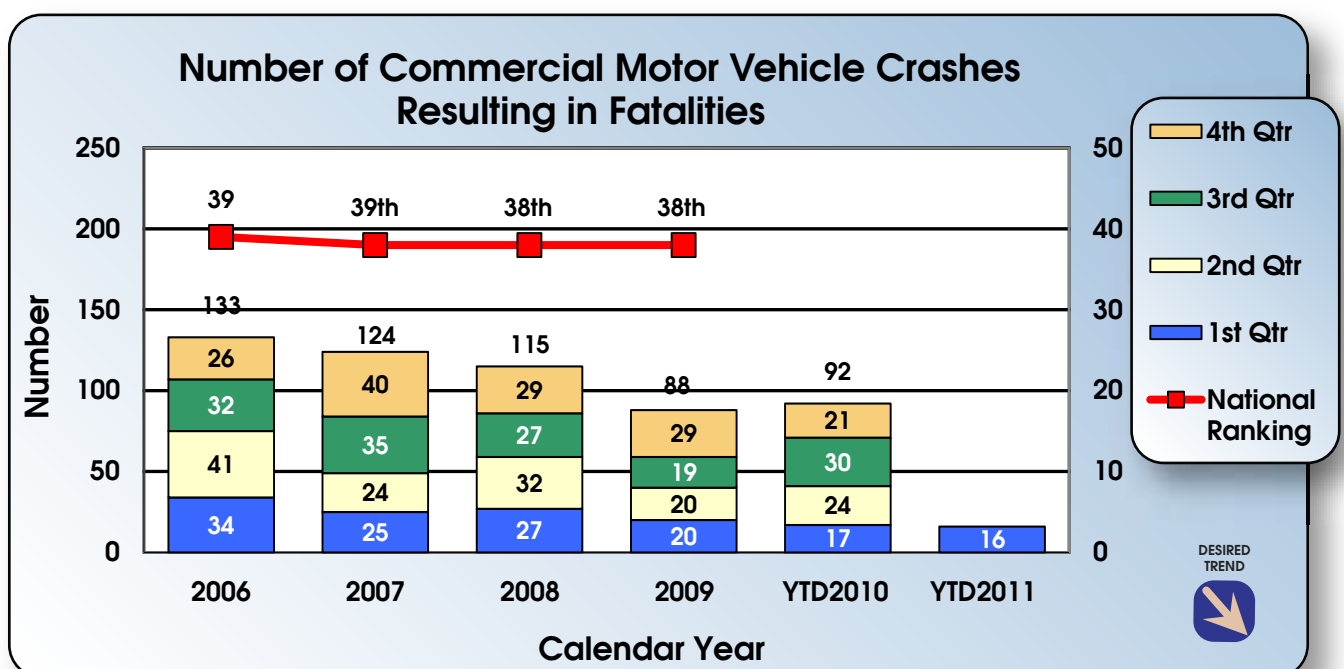
The preliminary number of injury crashes reported for 2011 is 395. This is 88 less than reported at this point

in 2010, a decrease of 18.2 percent. Between 2006 and 2010, the number of Missouri commercial motor vehicle injury crashes dropped from 2,363 to 2,095, a 11.3 percent decrease.

MoDOT coordinates its efforts to reduce fatal and injury crashes with its federal and state partners. MoDOT efforts include the installation of larger highway signs, highly reflective pavement markings, cable guardrails, roundabout intersections, incident management alert signs, roadside rumble strips, and intelligent transportation systems at scales.

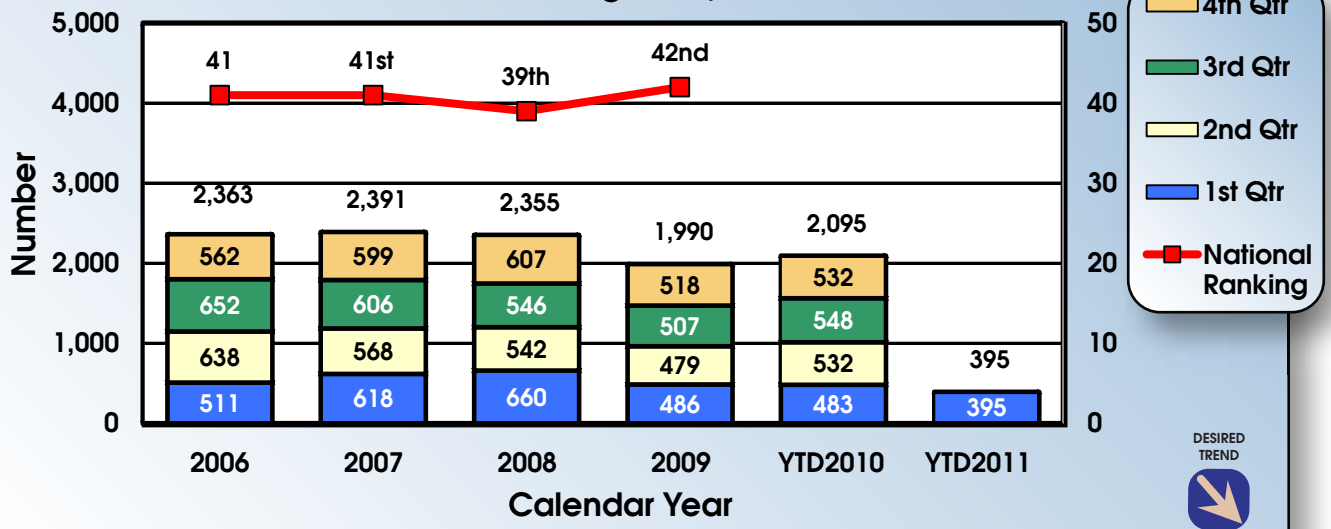
MoDOT conducts carrier safety training, regulation compliance reviews, safety audits of new motor carrier firms and truck inspections at terminals and destinations. The Missouri State Highway Patrol, St. Louis and Kansas City police departments conduct commercial vehicle roadside inspections in order to remove unsafe drivers and vehicles from the road.

Missouri ranked 38<sup>th</sup> from the top in the number of fatality crashes and 42<sup>nd</sup> from the top in the number of injury crashes nationwide in 2009.





Number of Commercial Motor Vehicle Crashes Resulting in Injuries



## Number of fatalities and injuries in work zones-3g

**Result Driver:** Leanna Depue, Highway Safety Director

**Measurement Driver:** Troy Pinkerton, Traffic Liaison Engineer

### Purpose of the Measure:

An important factor in evaluating the safety of Missouri’s transportation system is determining the safety of work zones on the state’s roads. This measure tracks the number of traffic-related fatalities, injuries, and overall crashes occurring in work zones on any Missouri public road.

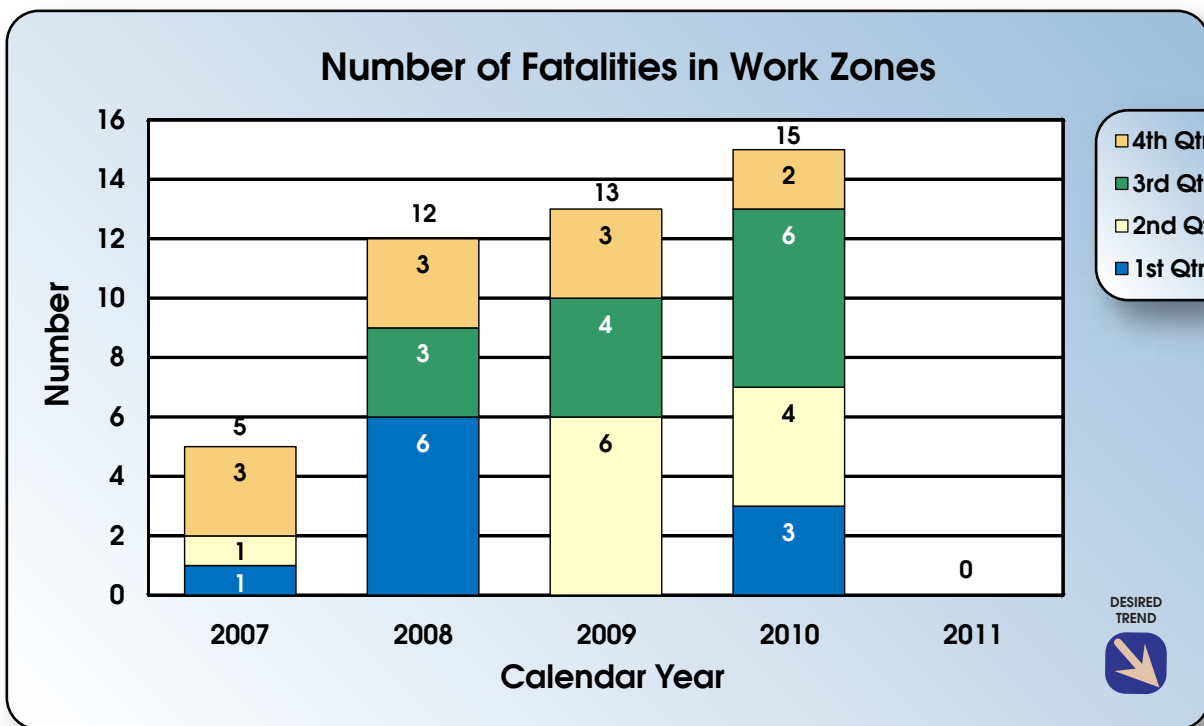
### Measurement and Data Collection:

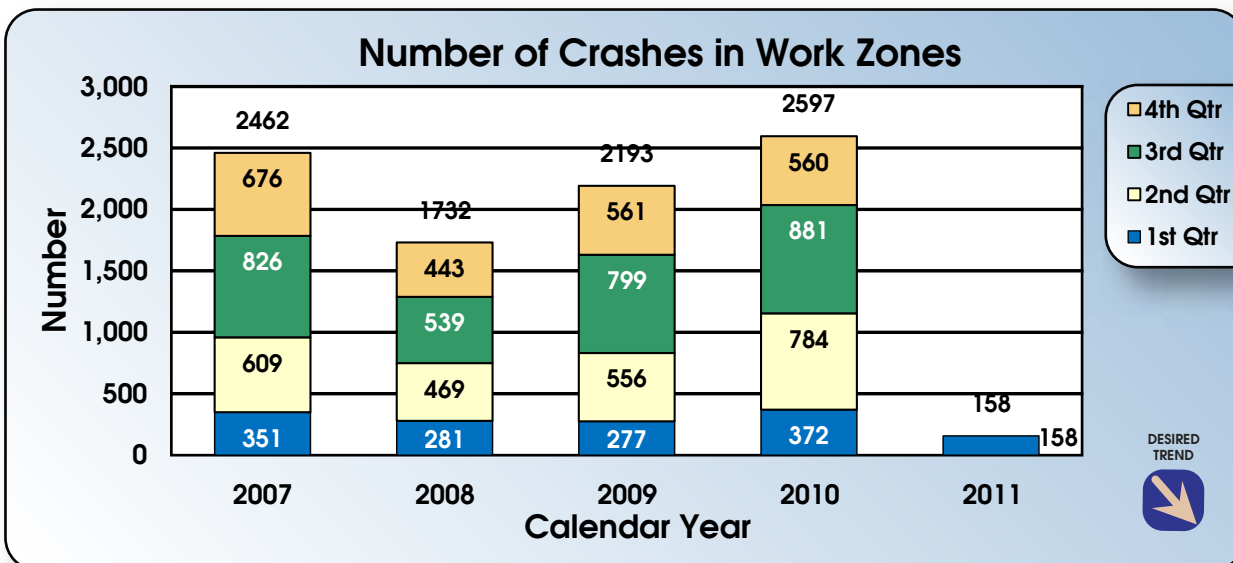
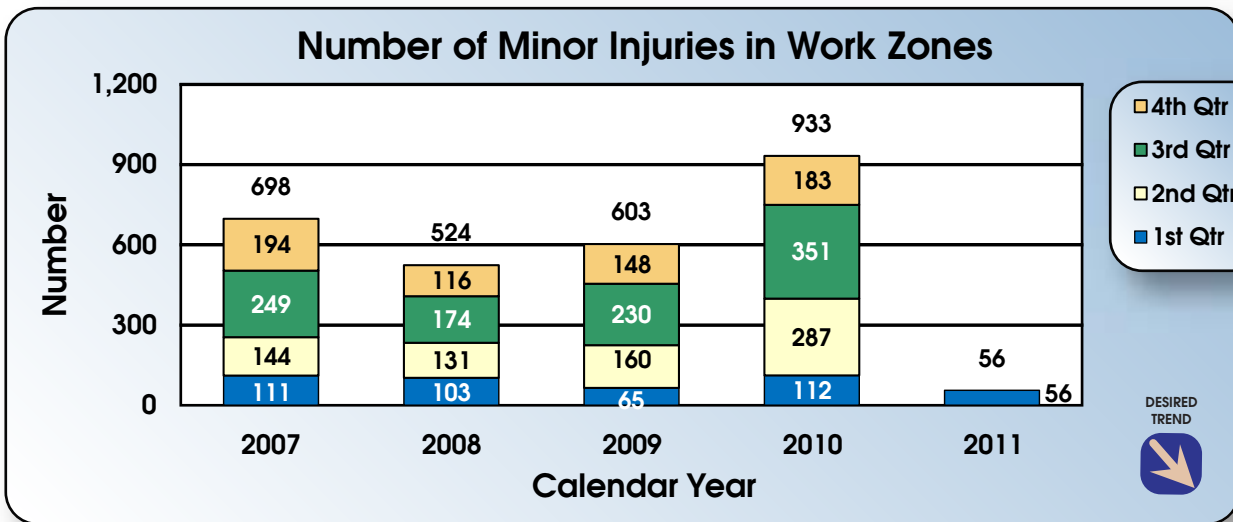
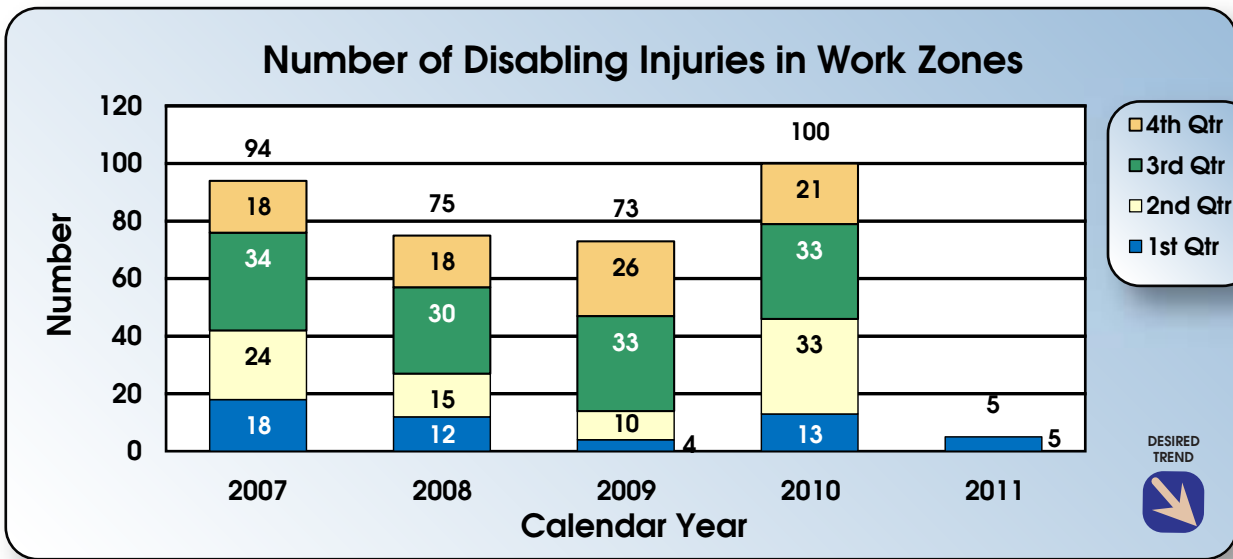
Missouri law enforcement agencies are required to report crashes by submitting a standardized vehicle accident report form to the Missouri State Highway Patrol. MSHP personnel enter these reports into a statewide traffic crash database. MoDOT staff query and analyze this data to identify work zone-related crash statistics quarterly and report the results via this measurement.

### Improvement Status:

In the first quarter of 2011, there were no reported fatality accidents. The number of fatalities, disabling injuries, minor injuries and work zone crashes are down significantly from the same reporting time last year.

Please be reminded that MoDOT needs your feedback to help keep work zones safe and traffic moving efficiently. The Work Zone Survey is available to the public and can be submitted online at: <http://www.modot.mo.gov/workzones/Comments.htm>





## Number of highway-rail crossing fatalities and collisions-3h

**Results Driver:** Leanna Depue, Highway Safety Director

**Measurement Driver:** Rod Massman, Administrator of Railroads

### Purpose of the Measure:

This measure tracks annual trends in fatalities and collisions resulting from train-vehicle crashes at public railroad crossings in Missouri. This data drives the development and focus of a portion of the Missouri Highway Safety Plan. This plan is required annually by the National Highway Traffic Safety Administration and outlines key strategies to reduce these losses. In addition, this data supports the Missouri Blueprint for Safer Roadways. This document identifies the statewide initiatives with a goal of reducing fatalities in all areas of highway safety, including highway-rail crossing safety.

### Measurement and Data Collection:

MoDOT collects crash data and enters it in a railroad safety information system, which also updates MoDOT's traffic management system. This does not include fatalities or collisions from those on railroad property at areas other than at public railroad crossings, which are tabulated separately. Missouri is also ranked with all other states using data from the Federal Railroad Administration that consists of the numbers of collisions and fatalities in each state, but the ranking from the FRA is three months behind the state data. For this reason, the rankings only pertain to the previous quarter's data. Data is updated quarterly.

### Improvement Status:

For the year to date 2011 calendar year there have been two crossing fatalities and nine collisions. With train traffic continuing to rise to pre-recession levels,

the number of opportunities for collisions also increases at each crossing.

The overall number of fatalities per year has generally remained the same since 2006, but MoDOT continues to focus on driving the overall number of fatalities and collisions to a lower average number. In order to accomplish this MoDOT has increased public outreach efforts, implemented engineering improvements, and encourages active enforcement of laws relating to crossing safety. In addition, MoDOT has participated in various kinds of safety fairs, renewed efforts to present rail crossing information at driver's education courses and other high school and grade school classes, and certified more MoDOT employees to give Operation Lifesaver presentations. During this quarter, MoDOT posted rail safety messages on the passenger rail website and our Facebook page. MoDOT also co-sponsored its annual Highway-Rail Safety conference with the state of Kansas Department of Transportation. The conference sponsored a number of topics relating to rail and crossing safety and was a great forum for improving the safety of those on rail properties and at railroad crossings.

MoDOT also continued its interactions with cities and counties for improvements in various heavily-served railroad areas in which the city/area as a whole is studied and all of the crossings in each city/area are evaluated.

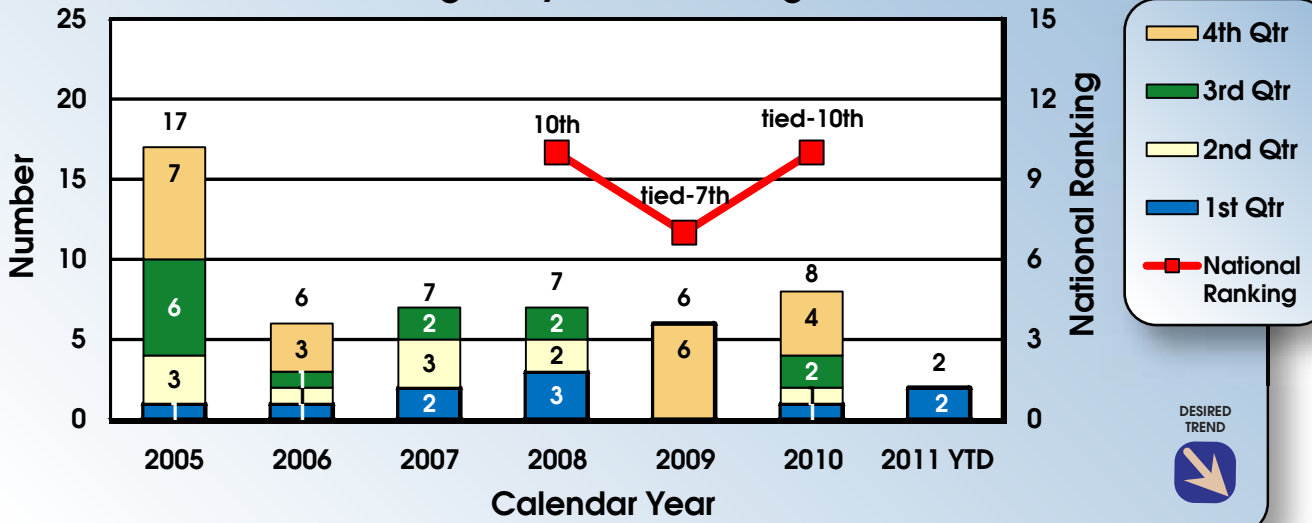
**OPERATION LIFESAVER Missouri**

LOOK, LISTEN...LIVE!

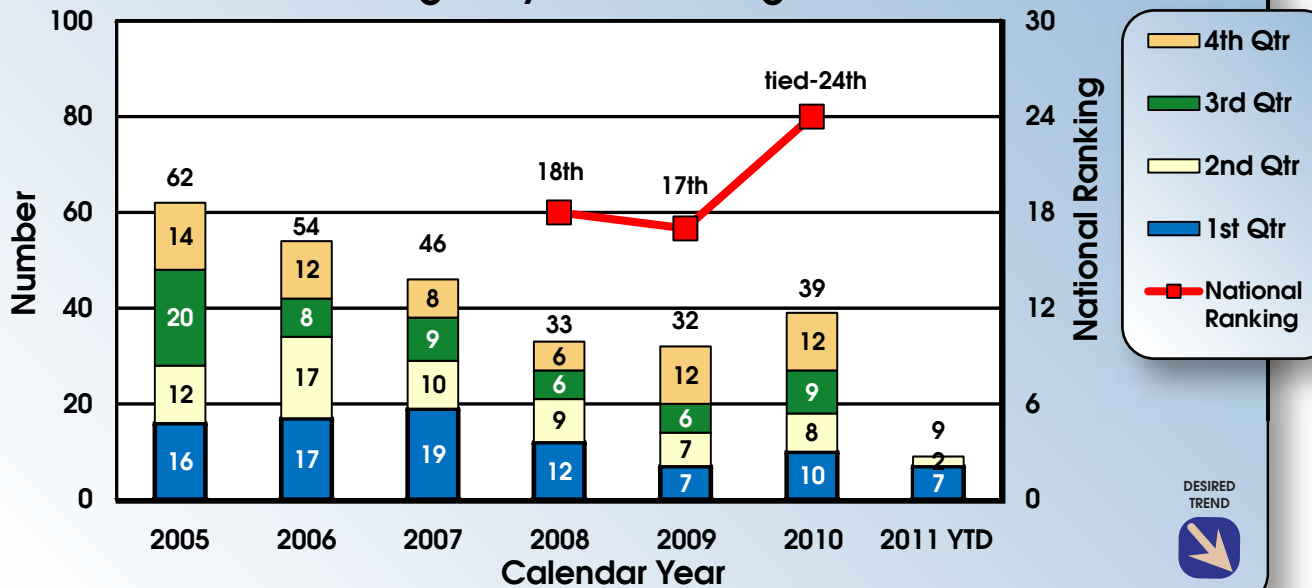
**showmeOL.org**  
THE OFFICIAL WEBSITE FOR MISSOURI OPERATION LIFESAVER

- operation lifesaver**
  - what is operation lifesaver?
  - visit oli.org
  - contact state coordinator
  - other key links
- safety info**
  - safety stats
  - media press kit
  - highway-rail facts
  - exempt crossing locations
- education**
  - presentation request form
  - take the safety quiz
  - curriculum & activities
- multimedia**
  - tv & radio psa's
  - safety video clips
  - missouri railroad photos

### Number of Highway-Rail Crossing Fatalities



### Number of Highway-Rail Crossing Collisions



Note : On charts above, FRA National Ranking is based on numbers from January 2011







# ROADWAY VISIBILITY

*Tangible Result Driver – Eileen Rackers, State Traffic Engineer*

Good roadway visibility in all weather and light conditions is critical to safe and efficient travel. MoDOT will delight its customers by using top-quality and highly visible stripes and signs.



## Number of nighttime crashes-4a

**Result Driver:** Eileen Rackers, State Traffic Engineer

**Measurement Driver:** Mike Curtit, Assistant State Traffic Engineer

### Purpose of the Measure:

This measure tracks the types of crashes where visibility of stripes and signs may be a contributing crash factor.

### Measurement and Data Collection:

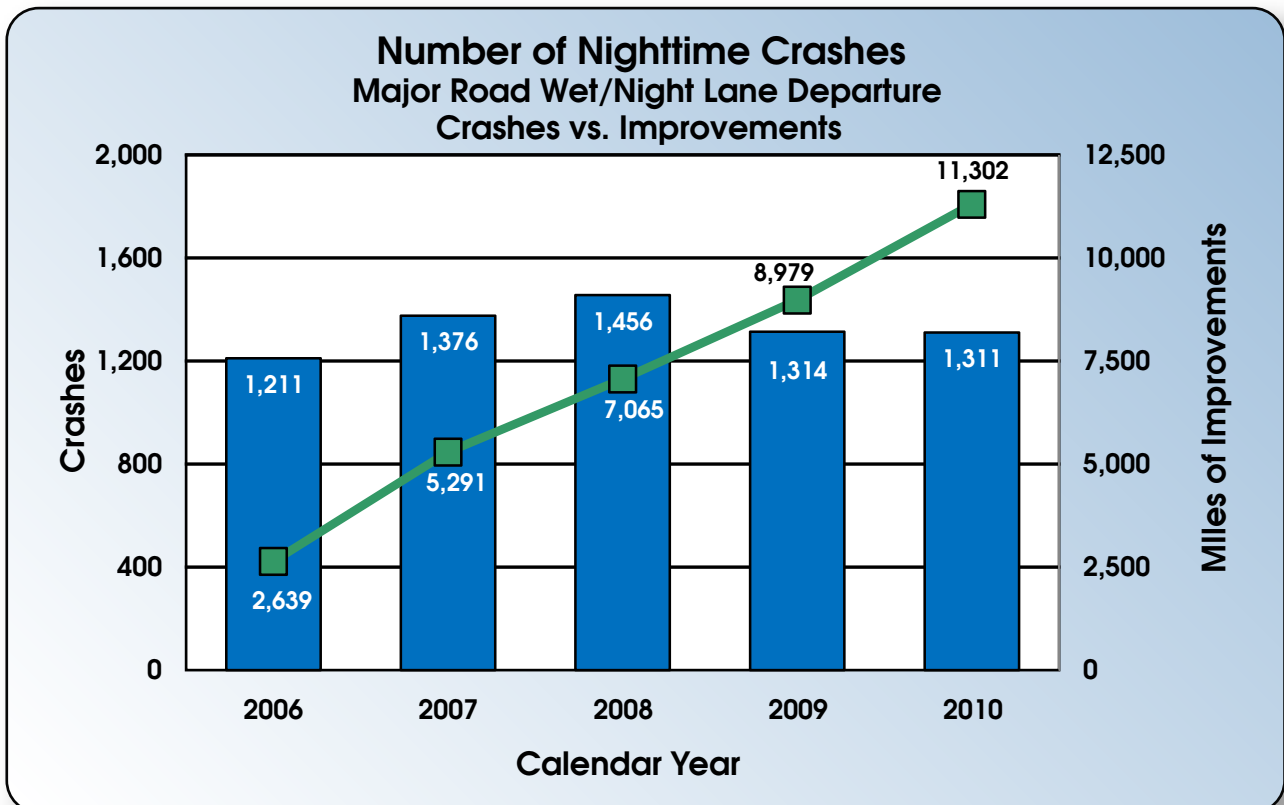
For major roads, data is collected from the statewide crash database to identify and measure the number of lane departure crashes that occur during nighttime with wet pavement conditions. For minor roads this data is collected for daytime and nighttime conditions for rural segments (speeds greater than 45 mph). Major roadways are generally used for statewide or interstate travel and minor roadways are generally used for local traffic needs. This is an annual measure with the data updated each April.

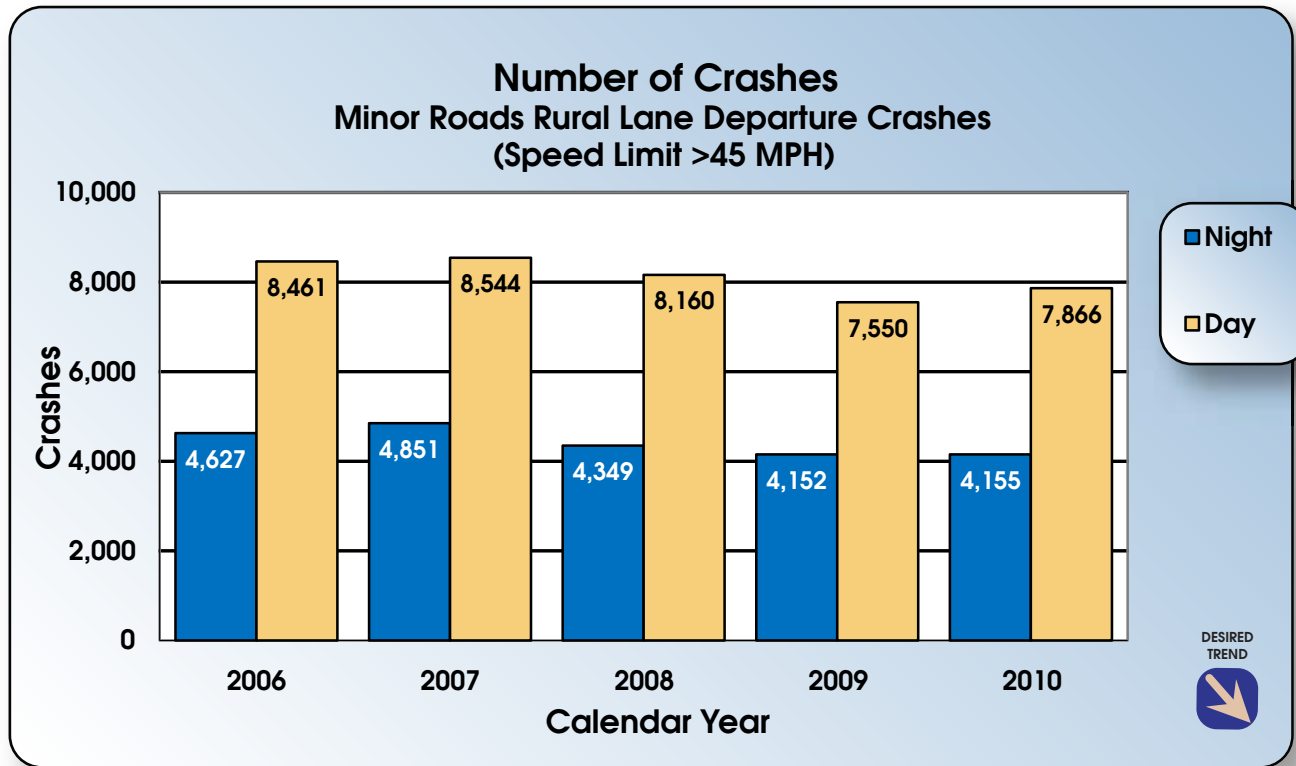
### Improvement Status:

The number of wet/night lane departure crashes on major roads decreased very slightly in 2010. The

trend for the last five years is increasing slightly. The number of lane departure crashes on rural minor roads increased very slightly at night. In 2010 crashes increased 4 percent during the daytime on rural minor roads.

As part of the improvements included in the Better Roads, Brighter Future program, over 1,600 miles of edgeline and centerline rumble stripes were installed in 2010. In addition, just over 300 miles of minor roads have had an edgeline installed. In 2010, nearly 100 percent of the stripes on major roads were in good condition prior to Memorial Day for the heavy summer travel season. Signs are inspected every year to determine nighttime visibility and are replaced if bad.





Edgeline Rumble Strips

## Percent of signs that meet customers' expectations-4b

**Result Driver:** Eileen Rackers, State Traffic Engineer

**Measurement Driver:** Mike Curtit, Assistant State Traffic Engineer

### Purpose of the Measure:

This measure will track whether the department's sign policy, design standards and sign replacement policy are resulting in visible signs that meet customers' expectations.

### Measurement and Data Collection:

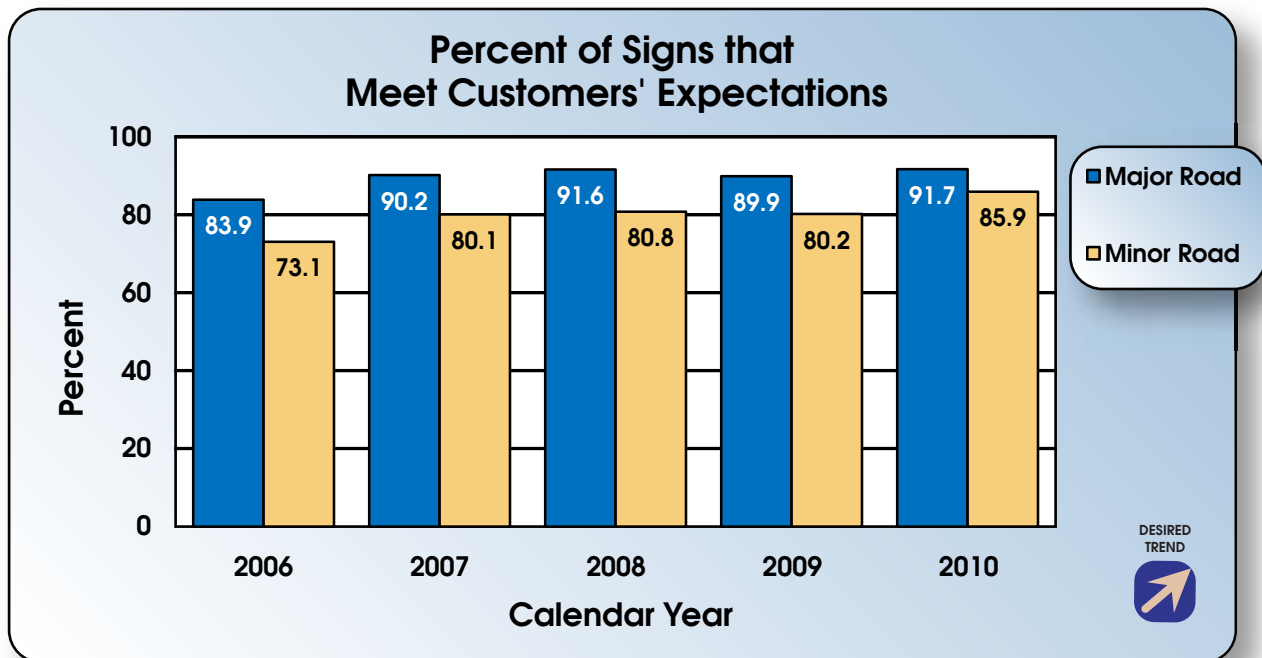
Sign-quality attributes that define user expectations have been developed based on an industry-wide literature review. The attributes selected for this measure are those that can be captured during a night sign log. A night sign log is conducted on randomly generated road segments. MoDOT employees drive a road at night, recording the location and condition of the signs, particularly how visible the signs are with

headlights. MoDOT employees collect the data annually in the fall, and update it each October.

### Improvement Status:

Almost 92 percent of signs on major highways are in good condition. Nearly 86 percent of the signs on minor roads are in good condition. This represents a 2 percent increase from last year for major roads and a 7 percent increase for minor roads.

In the last twelve months, MoDOT's sign shop has produced almost 79,000 new signs for the districts. MoDOT continues to perform annual inspections of every sign in Missouri and does random quality assurance reviews targeted at signing.



## Percent of stripes that meet customers' expectations-4c

**Result Driver:** Eileen Rackers, State Traffic Engineer

**Measurement Driver:** Jim Brocksmith, Traffic Liaison Engineer

### Purpose of the Measure:

This measure tracks whether MoDOT's striping policy, processes and materials used are resulting in visible stripes that meet customers' expectations.

### Measurement and Data Collection:

Striping quality attributes that define user expectations have been developed based on an industry-wide literature review. The attribute selected for this measure is the brightness of the striping at night.

MoDOT conducts an annual Statewide Telephone Customer Satisfaction Survey. For the 2010 survey, two new questions about pavement markings were included. The survey asked the customers to respond to the following statements: "The striping on MoDOT highways is bright enough for you to see" and "How satisfied are you with MoDOT's effort to provide visible roadside / centerline striping."

### Improvement Status:

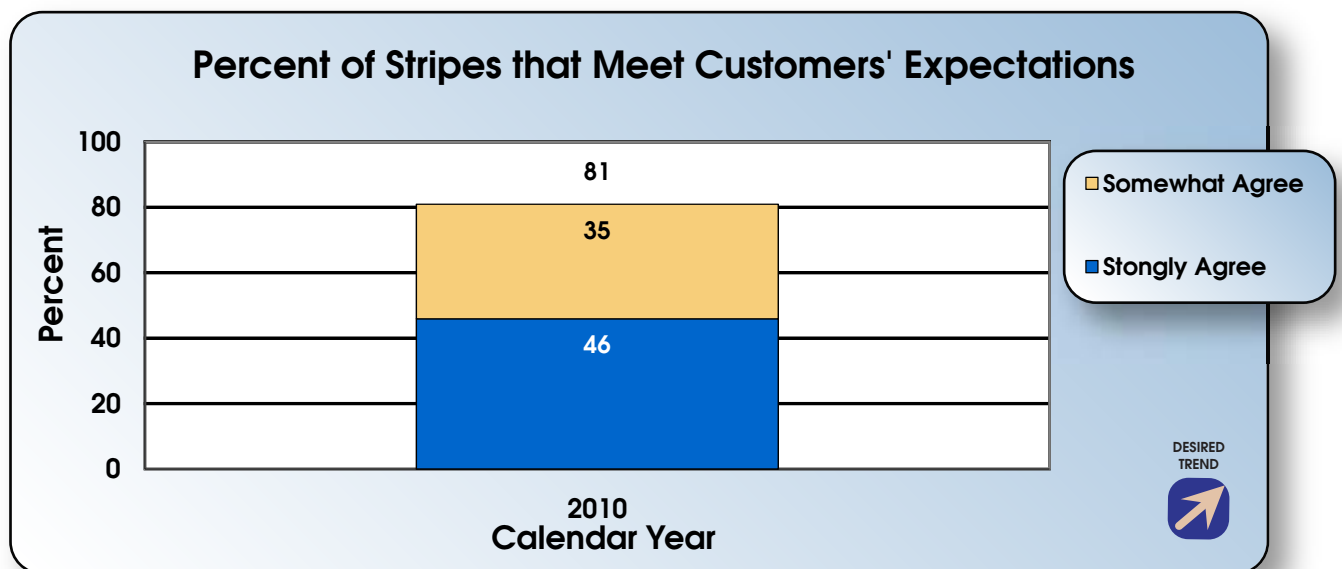
This is a significant revision of the way this measure is reported. In the past retroreflectivity data was collected on random samples of roads to determine how they compared to benchmarks that had been established. Retroreflectivity is measured as the amount of light from vehicle headlights that is returned to the driver. This is the first report of this

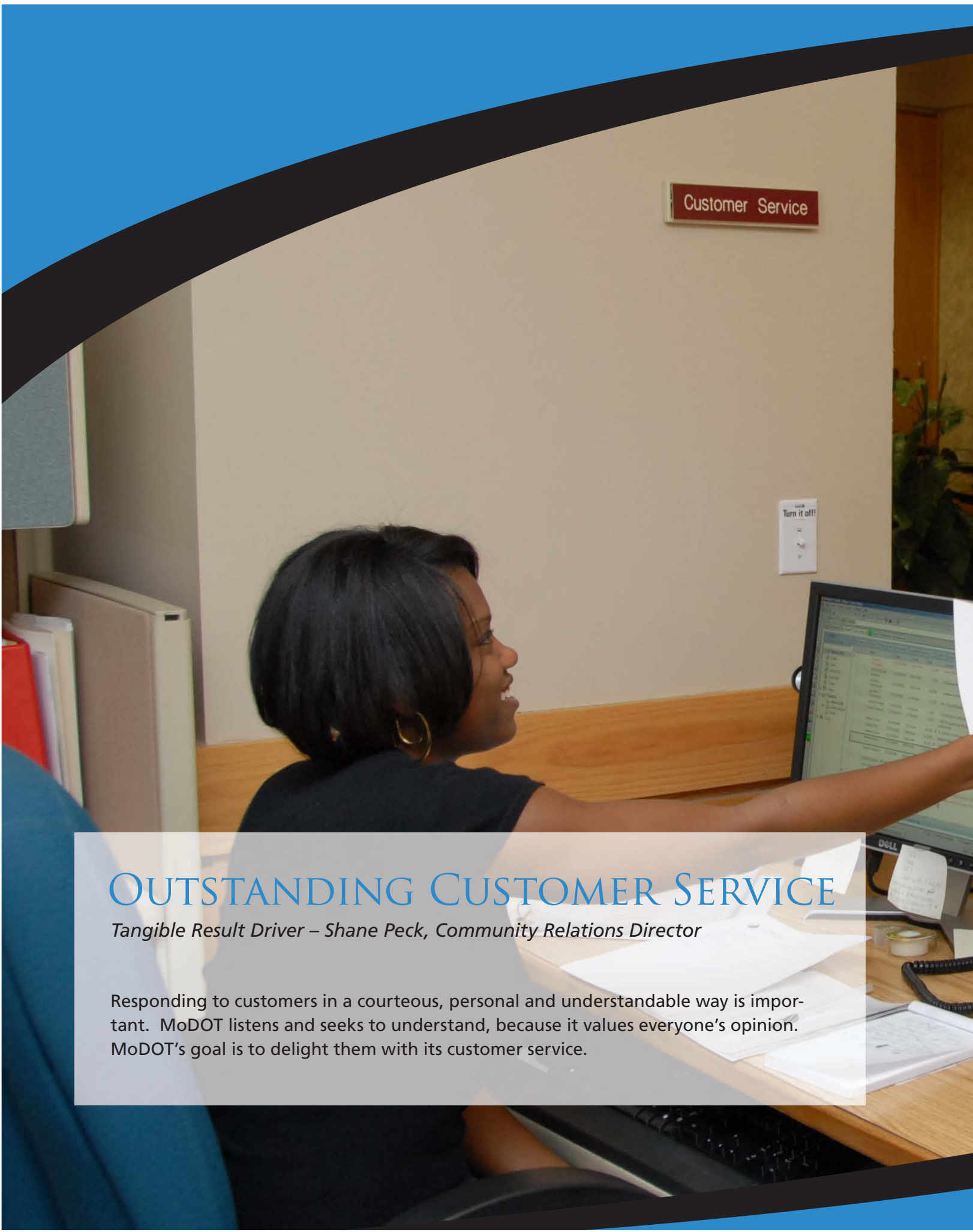
measure to use the results of the Statewide Telephone Customer Satisfaction Survey to gauge how the traveling public views the quality of MoDOT pavement markings.

The results from the survey were positive. The responses to the brightness question are 46 percent strongly agree, 35 percent somewhat agree, 14 percent somewhat disagree and 6 percent strongly disagree. Overall 81 percent of the respondents agreed that the pavement markings are bright enough for them.

These results compare favorably to the spring 2009 retroreflectivity readings of 74.2 percent on major roads and 77.8 percent on minor roads meeting expectations.

MoDOT continues expanding the use of wet reflective markings on major highways. A new system using a liquid applied pavement marking is being installed in a groove. This system also includes the use of a wet reflective optics system to provide increased visibility on rainy nights. Inlaid pavement markers are being installed on two sections of interstate highways to better evaluate their effectiveness and durability.





## OUTSTANDING CUSTOMER SERVICE

*Tangible Result Driver – Shane Peck, Community Relations Director*

Responding to customers in a courteous, personal and understandable way is important. MoDOT listens and seeks to understand, because it values everyone's opinion. MoDOT's goal is to delight them with its customer service.



**TRACKER**  
MEASURES OF DEPARTMENTAL PERFORMANCE



## Percent of overall customer satisfaction-5a

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Sally Oxenhandler, Community Relations Manager

**Purpose of the Measure:**

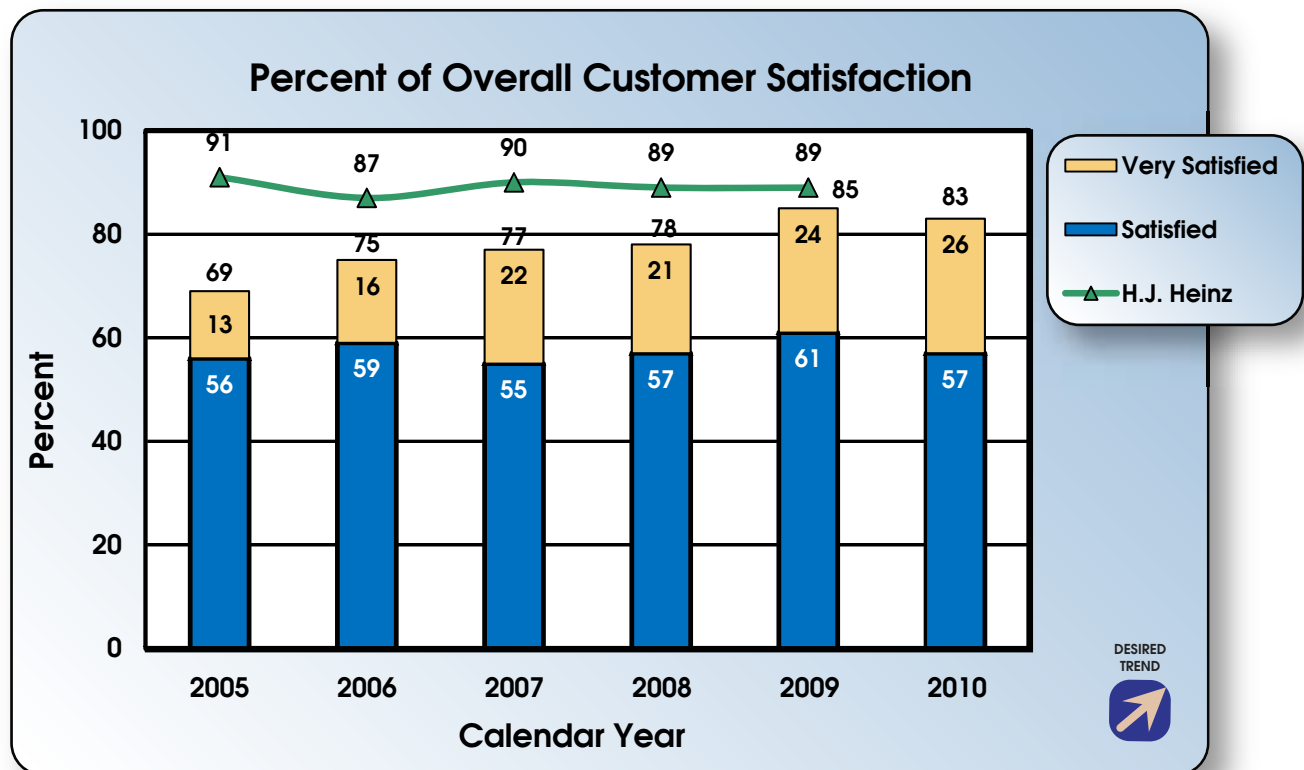
This measure tracks MoDOT’s progress toward the mission of delighting its customers.

**Measurement and Data Collection:**

This is an annual measure. Data is collected from telephone interviews with more than 3,500 randomly selected adult Missourians each May. MoDOT is using H.J. Heinz as the benchmark for this measure. Based on information compiled by the American Customer Satisfaction Index, Heinz has the highest customer satisfaction rate – 89 percent – out of the 200 companies and government agencies that the ACSI scores.

**Improvement Status:**

Customer satisfaction with MoDOT dropped slightly – two percentage points – but remains high at 83 percent and is just six percentage points below H.J. Heinz, the national benchmark. The percentage of people who are very satisfied with MoDOT rose from 24 percent in 2009 to 26 percent in 2010, while those who are satisfied dropped slightly from 61 percent to 57 percent. MoDOT’s continued efforts to improve road conditions, decrease highway fatalities, bring projects in on time and within budget, be open and transparent and provide timely, accurate and understandable information have helped keep customer satisfaction ratings up. The challenge now is to maintain our customer service levels in the face of decreasing revenue for transportation projects.



## Percent of customers who contacted MoDOT that felt they were responded to politely, quickly and clearly-5b

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Sally Oxenhandler, Community Relations Manager

### Purpose of the Measure:

This measure indicates how satisfied customers who contact MoDOT are with the courtesy, speed and clarity of the service they receive.

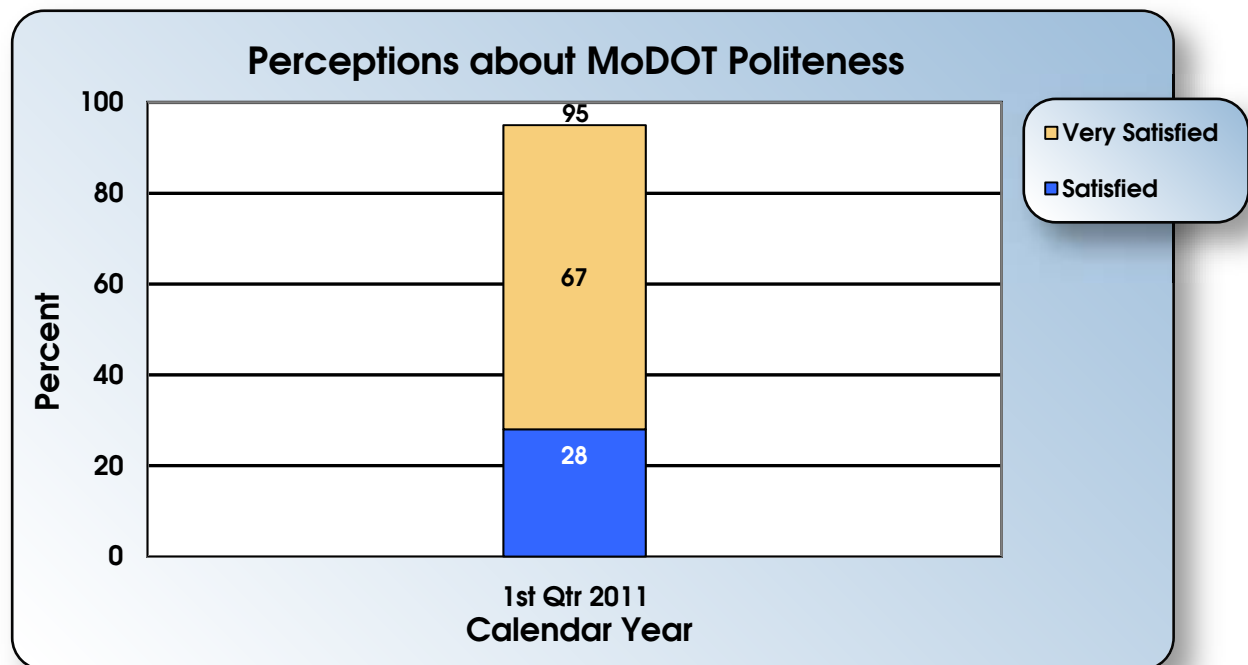
### Measurement and Data Collection:

The data for this measure is obtained from a monthly telephone survey of 200 customers who contacted MoDOT in the previous month. The customer contacts come from district and Central Office call reports generated from the customer service database. Customers participating in the survey are asked to respond on a strongly agree to strongly disagree scale as to how politely they were treated, how quickly MoDOT responded to their question or concern and how clearly MoDOT answered their question or concern. If they respond to any of the questions saying they disagree or strongly disagree, they are asked to provide additional comments. A fourth question asks how satisfied they were overall with how MoDOT handled their question or concern. The last question gives customers the option to provide

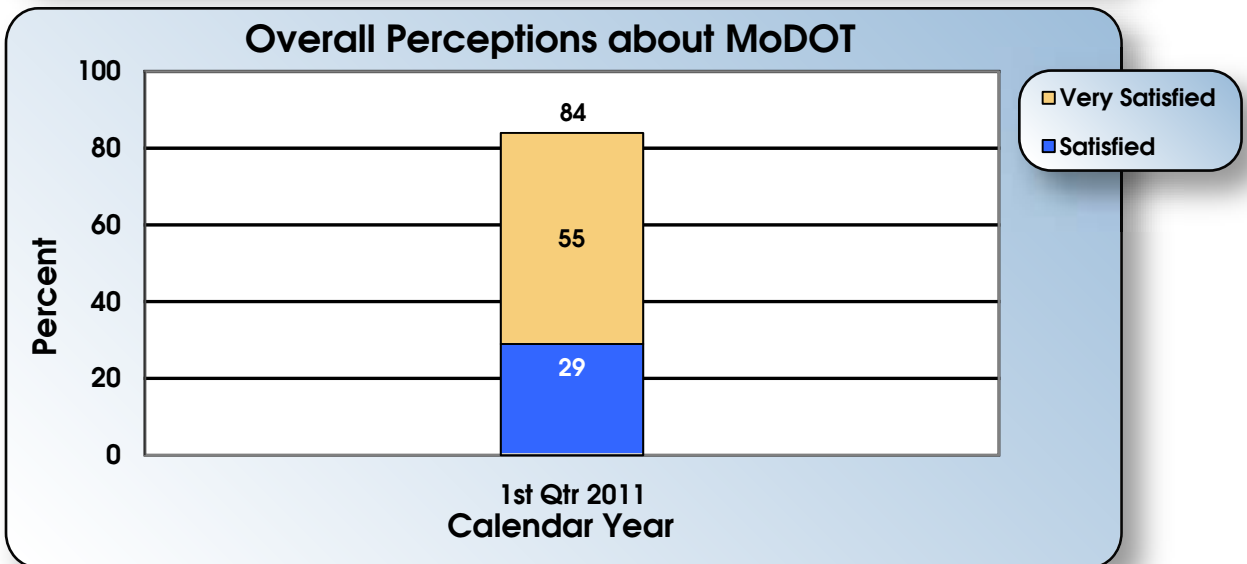
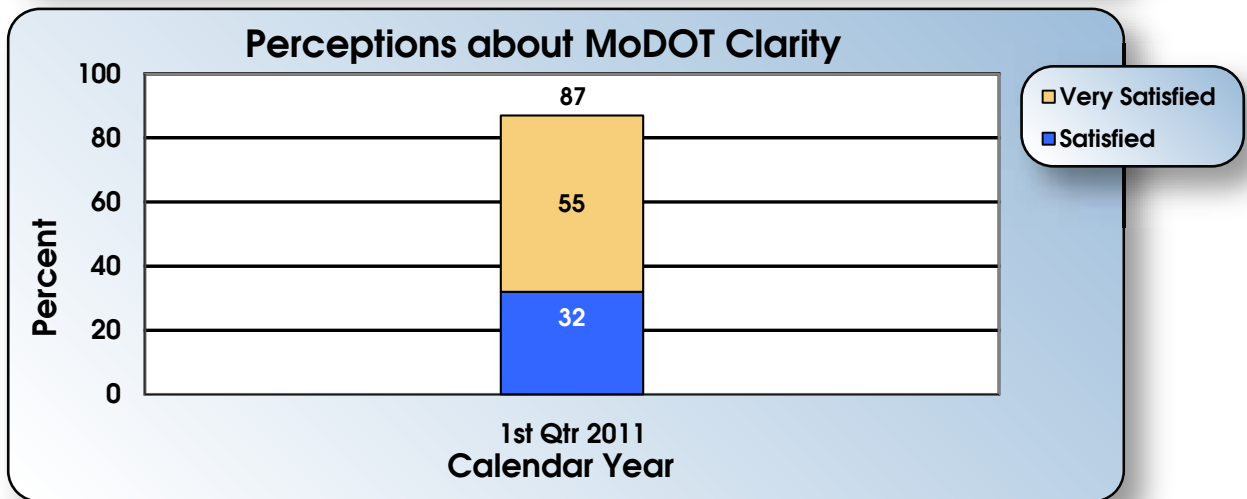
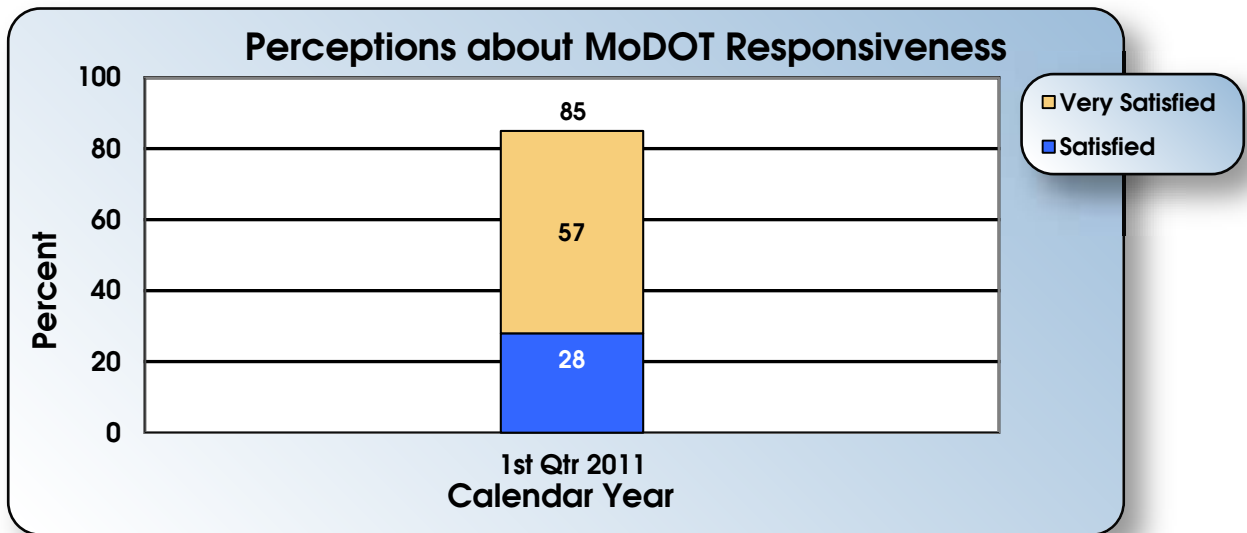
more information about their experience with MoDOT.

### Improvement Status:

This is the first quarter for reporting data using the telephone survey to gather customer service feedback from throughout the department, not just the customer service centers. Almost 95 percent of the customers surveyed reported they were satisfied or very satisfied with how politely they were treated. 85 percent of those surveyed were satisfied or very satisfied with the promptness of the response they received. 87 percent felt they received a clear, understandable answer. Overall, 84 percent of customers indicated they were either satisfied or very satisfied with how MoDOT handled their question or concern. The largest percentage of those responding in all four areas were very satisfied with the service they received. The results, including comments, for all three months of the first quarter have been shared with district engineers and division heads.



# OUTSTANDING CUSTOMER SERVICE



## Average completion time on requests requiring follow up-5c

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Sally Oxenhandler, Community Relations Manager

### Purpose of the Measure:

This measure tracks MoDOT's responsiveness to customer inquiries that are received through the customer service centers and documented in the database.

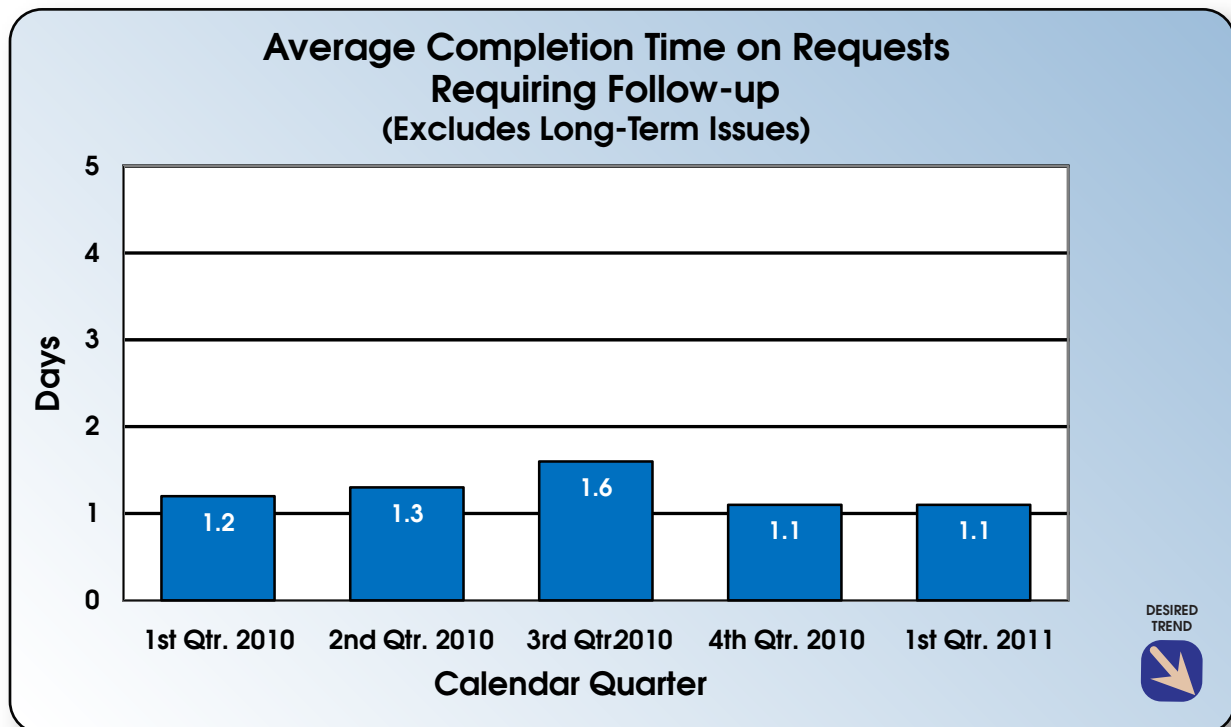
### Measurement and Data Collection:

Customer requests in the customer service database are tracked for average completion time. Longer-term requests that require more than 30 days to complete are removed from the results because longer-term requests would skew the overall results.

Time is measured in working days; weekends and holidays are excluded.

### Improvement Status:

The time to complete customer requests remained steady at 1.1 days in the first quarter of 2011. This remains the lowest turn-around time since MoDOT began tracking the data. There were 7,616 customer requests this quarter – about 900 more than last quarter.



## Average completion time on constituent issues from federal and state elected officials-5d

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Amy Niederhelm, Governmental Relations Specialist

### Purpose of the Measure:

The purpose of this measurement is to track the average completion time to complete constituent issues that are received by MoDOT from Missouri's Congressional Members, Statewide Elected Officials, State Legislators or their staff members who seek a department response on behalf of their constituency.

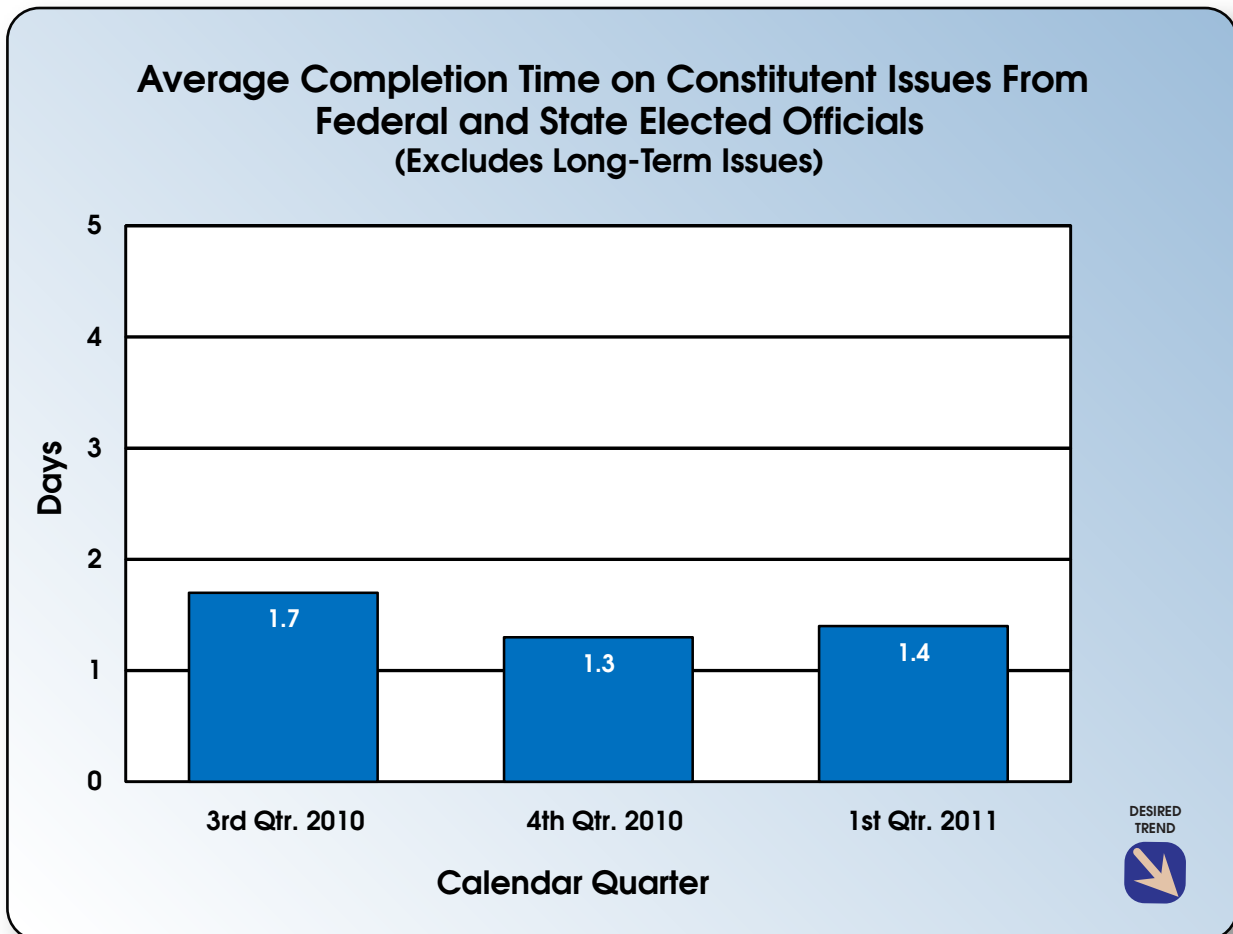
The information reported in this measurement will change from quarter to quarter based upon the average completion time to complete constituent issues that are received from federal and state elected officials. This is a quarterly measure.

### Measurement and Data Collection:

District Community Relations Managers and Central Office Divisions collect constituent issue information and send it to Governmental Relations; where data is combined to create a statewide report.

### Improvement Status:

The time to complete constituent issues received from federal and state elected officials averaged 1.4 days in the first quarter of 2011. There were 299 constituent issues from federal and state elected officials this quarter.



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# PARTNER WITH OTHERS TO DELIVER TRANSPORTATION SERVICES

*Tangible Result Driver – Mabelle Watkins, Transportation Planning Director*

To be an effective leader in transportation, MoDOT must work with agencies and branches of government, including state, county, private industry and municipalities to deliver a quality transportation system that meets the needs of everyone. A coordinated transportation system requires partnerships to ensure compatible decisions are made. Partnering builds trust and ensures quality results.



## Percent of partner satisfaction-6a

**Results Driver:** Machelles Watkins, Transportation Planning Director

**Measurement Driver:** Sue Cox, Special Projects Coordinator

### Purpose of the Measure:

This measure tracks MoDOT’s progress toward the goal of increasing the level of partner satisfaction with MoDOT in delivering transportation services.

### Measurement and Data Collection:

Transportation Planning works with Organizational Results and Heartland Market Research LLC to administer an annual survey of MoDOT’s 11 partner groups each January. An additional partner group is surveyed quarterly by Motor Carrier Services, and these results are included in the summary shown below. The survey collects data from the previous calendar year, so the measure is updated annually in April.

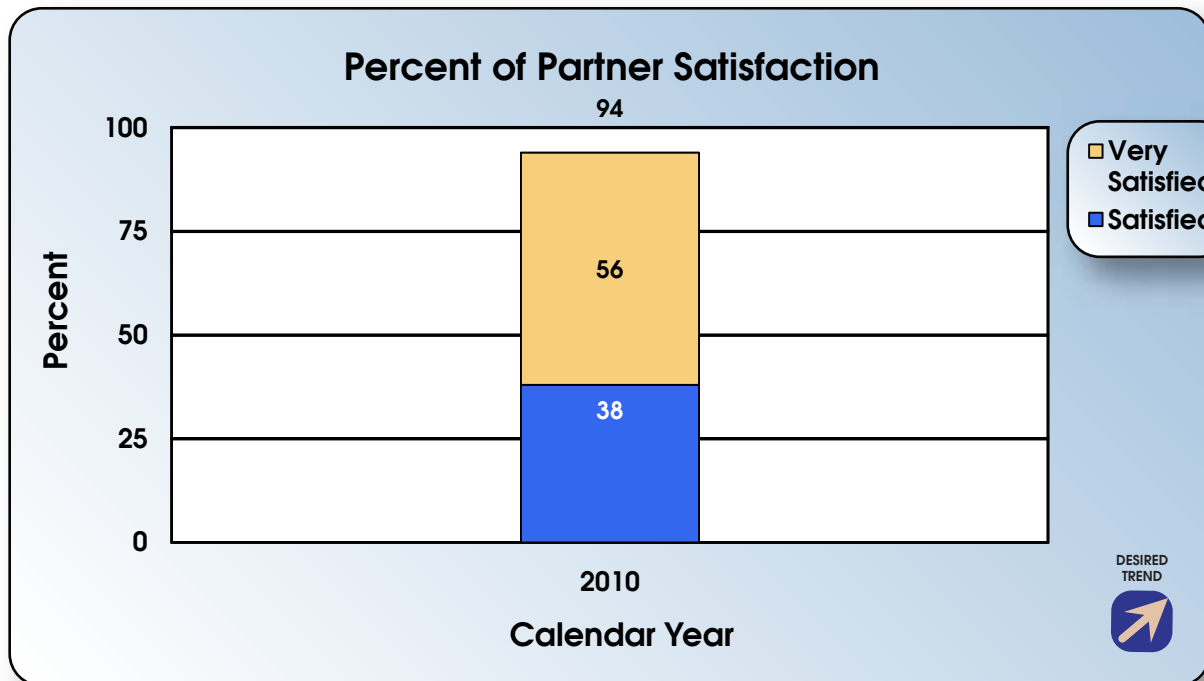
The survey groups include agencies and industries representing: bidding, business, construction, design consultants, environmental, highway safety, local public entities, minority- and women- owned

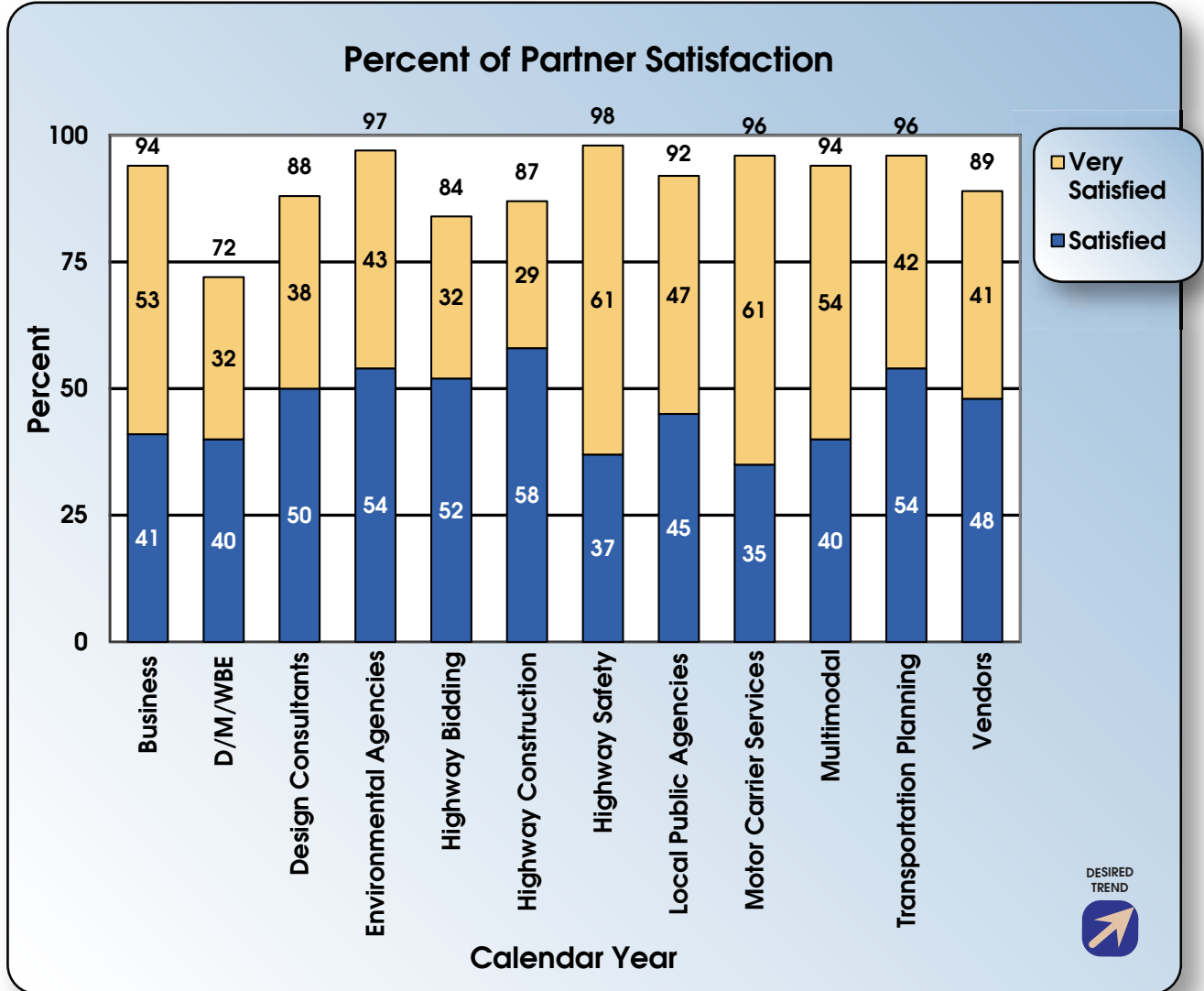
construction and consultant enterprises, motor carrier services, multimodal, transportation planning and vendors.

Through the survey, MoDOT is able to gauge the partners’ overall satisfaction in delivering transportation services. The survey scale measures those who are satisfied, very satisfied, dissatisfied and very dissatisfied. MoDOT publicized the survey through emails, website links and postcards.

### Improvement Status:

This is a new measure, and the first survey – evaluating calendar year 2010 – received 1,091 responses from 3,795 invitations to partners resulting in an approximate response rate of 29.3 percent. The percent of very satisfied and satisfied answers is 94 percent.





## Percent of earmarked dollars that represent MoDOT's high priority highway projects-6b

**Result Driver:** Mabelle Watkins, Transportation Planning Director

**Measurement Driver:** Todd Grosvenor, Financial Resource Administrator

### Purpose of the Measure:

This measure shows the percent of earmarked dollars that represent MoDOT's high priority highway projects.

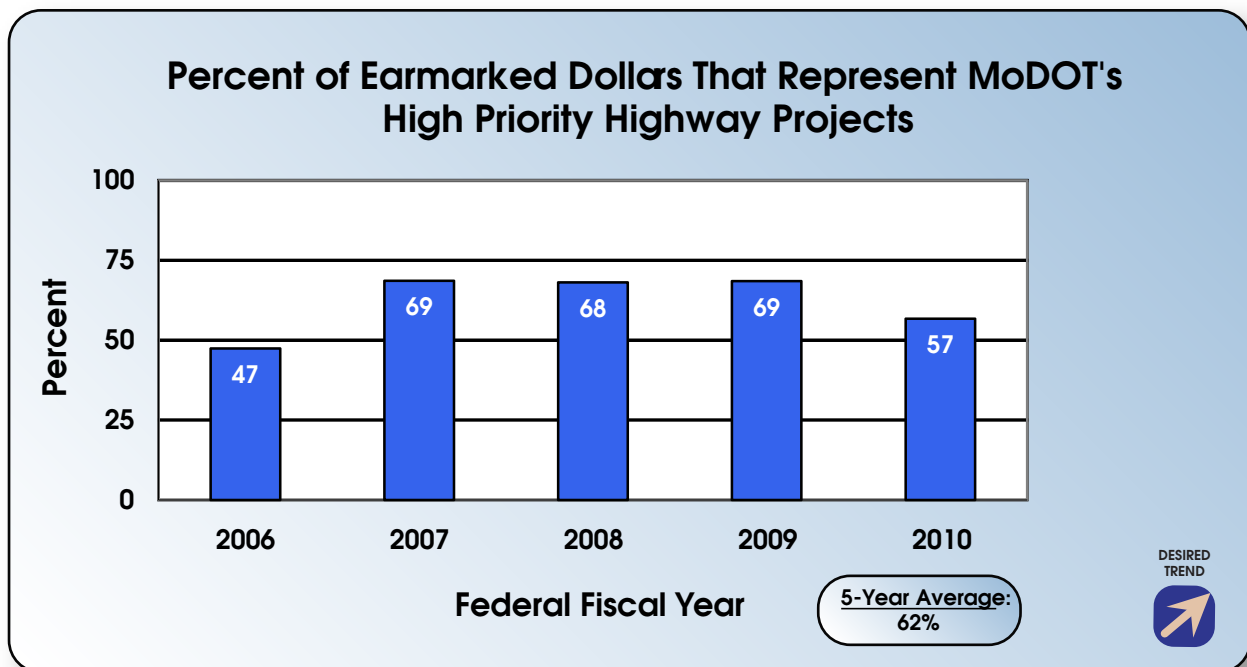
### Measurement and Data Collection:

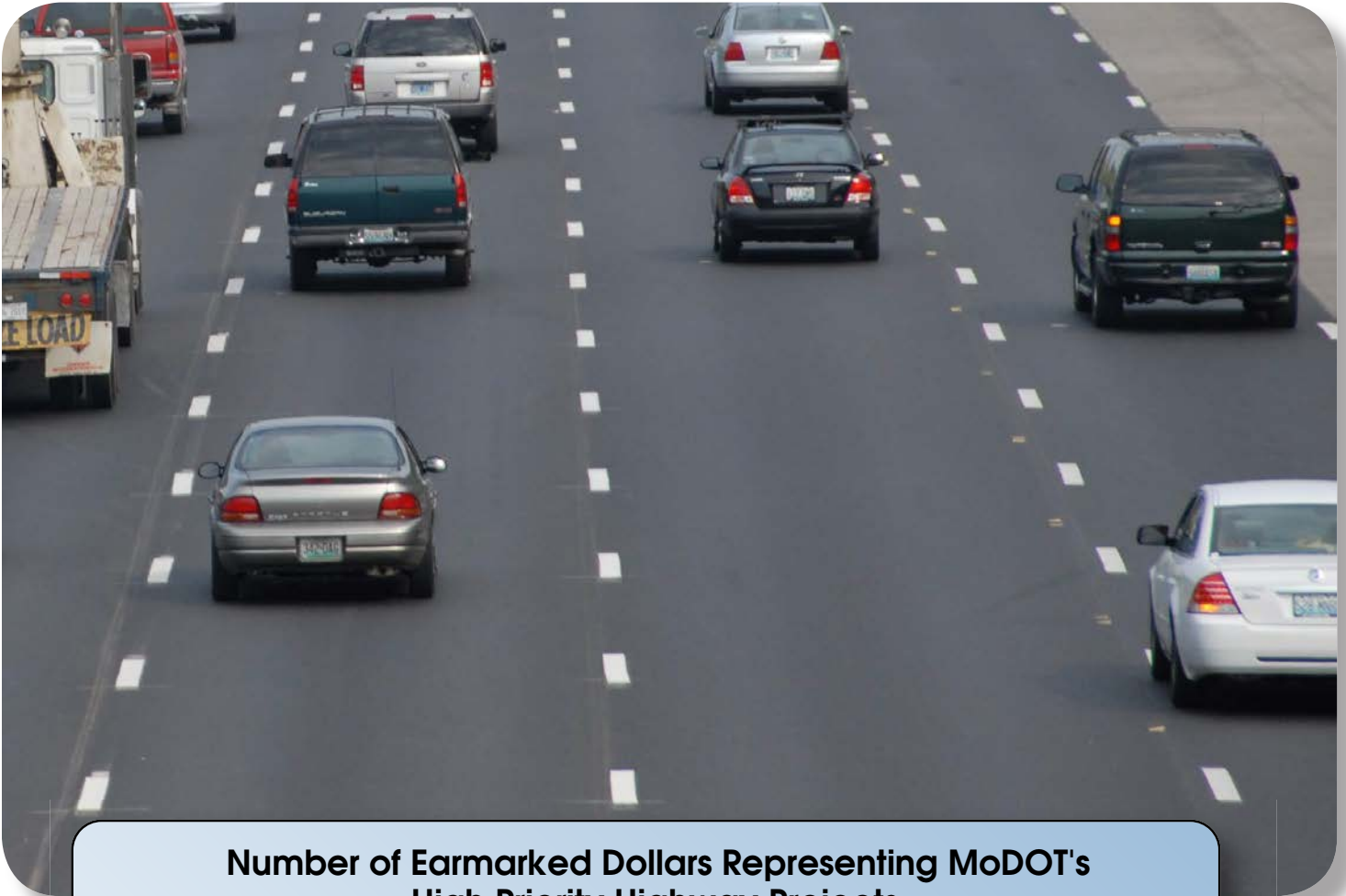
This is an annual measure updated each October. Earmarked dollars are federal funds allocated to states for specific highway projects. These funds are distributed administratively for programs that do not have statutory distribution formulas. States compete for these funds, which are above the formula apportionments. Resource Management collects this information from the Federal Highway Administration. MoDOT's high priority highway projects are identified in the Federal Priorities list that is prepared by Governmental Relations. This list is provided to Missouri's congressional delegates.

### Improvement Status:

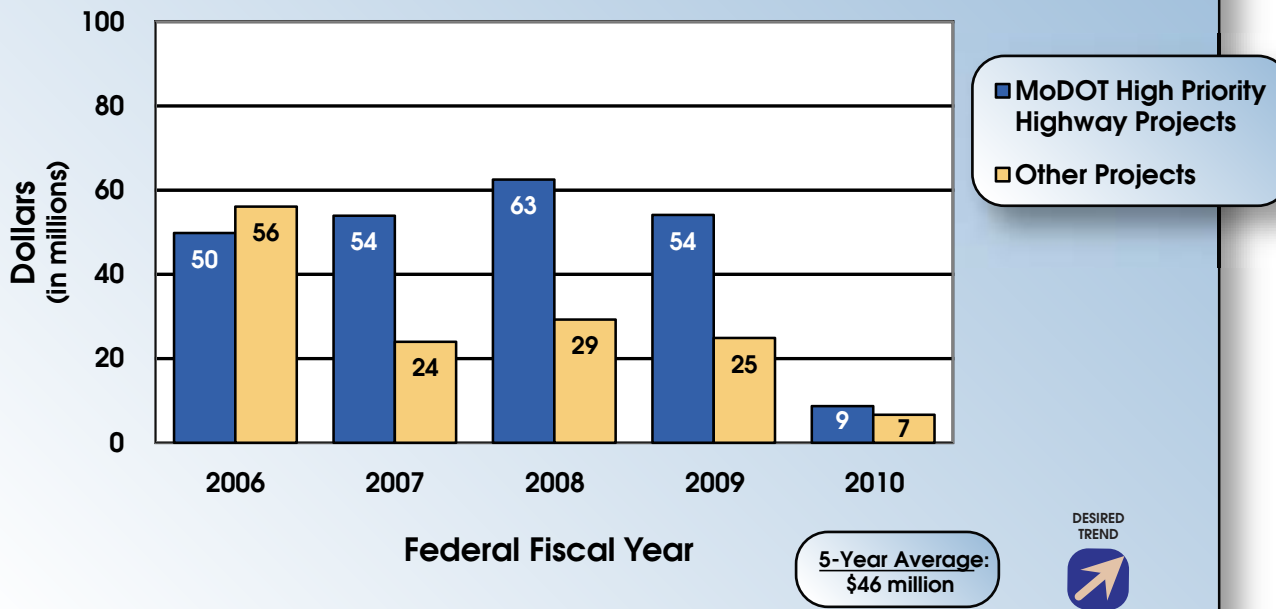
Missouri's earmarked dollars for specific highway projects decreased significantly in 2010 due to the expiration of the current Highway Act, SAFETEA-LU, on September 30, 2009. SAFETEA-LU was extended until December 31, 2010 but above formula earmarks for the Bridge Discretionary and Transportation Improvements programs were not extended. The percent of earmarked dollars that represent MoDOT's high priority highway projects also decreased. Over the last five years, MoDOT's high priority highway projects received 62 percent of the earmarked dollars.

MoDOT works closely with Missouri's congressional delegates to identify MoDOT's high priority highway projects that are good candidates for earmarked dollars.





Number of Earmarked Dollars Representing MoDOT's High Priority Highway Projects



## Number of dollars generated through cost-sharing and other partnering agreements-6c

**Result Driver:** Mabelle Watkins, Transportation Planning Director

**Measurement Driver:** Todd Grosvenor, Financial Resource Administrator

### Purpose of the Measure:

This measure shows the number of dollars invested by cities, counties, transportation corporations, transportation development districts and others for state highway system improvements. It monitors the effectiveness of MoDOT's cost-sharing and partnering programs. MoDOT allocates \$30 million per year for projects proposed by entities willing to assist in a project's funding that will benefit the state highway system.

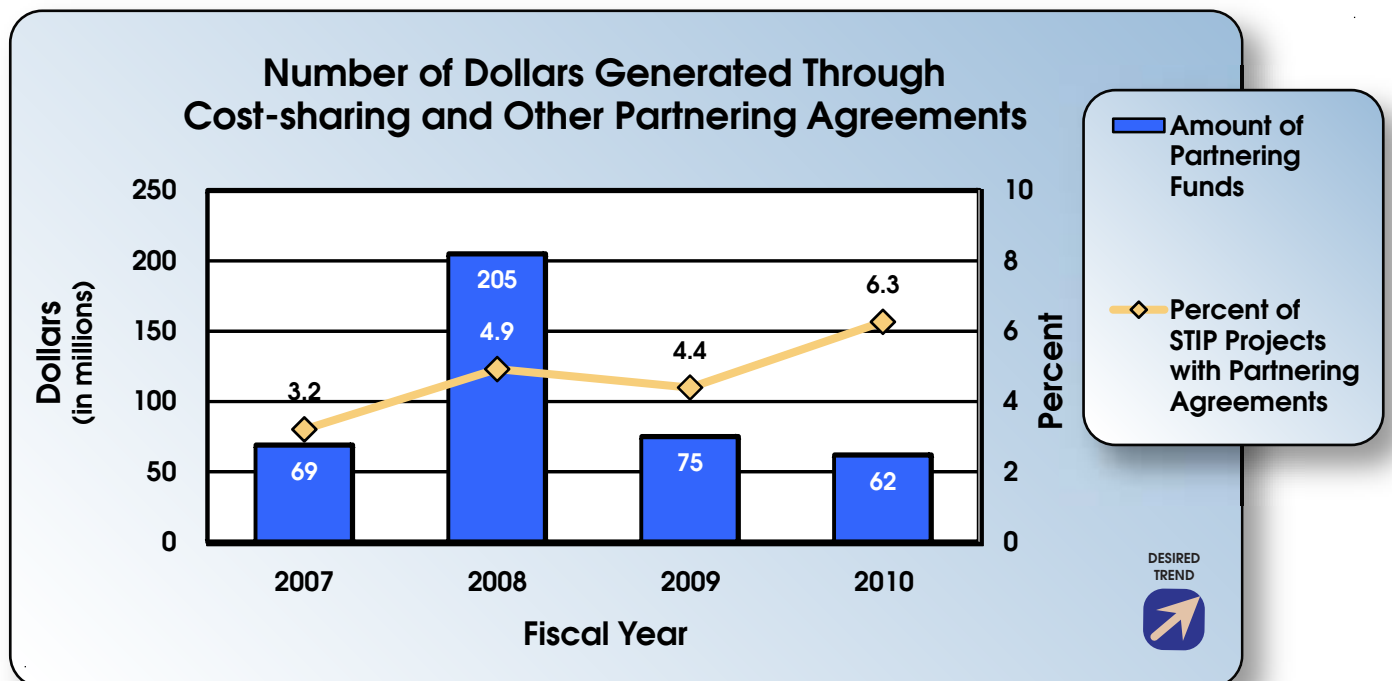
### Measurement and Data Collection:

This is an annual measure updated each October. Resource Management collects this data from the Statewide Transportation Improvement Program (STIP) and Permits databases. The dollars are shown in the state fiscal year in which construction contracts are awarded and permits are issued. The percent is the number of cost-sharing projects divided by the total number of projects per year in the STIP.

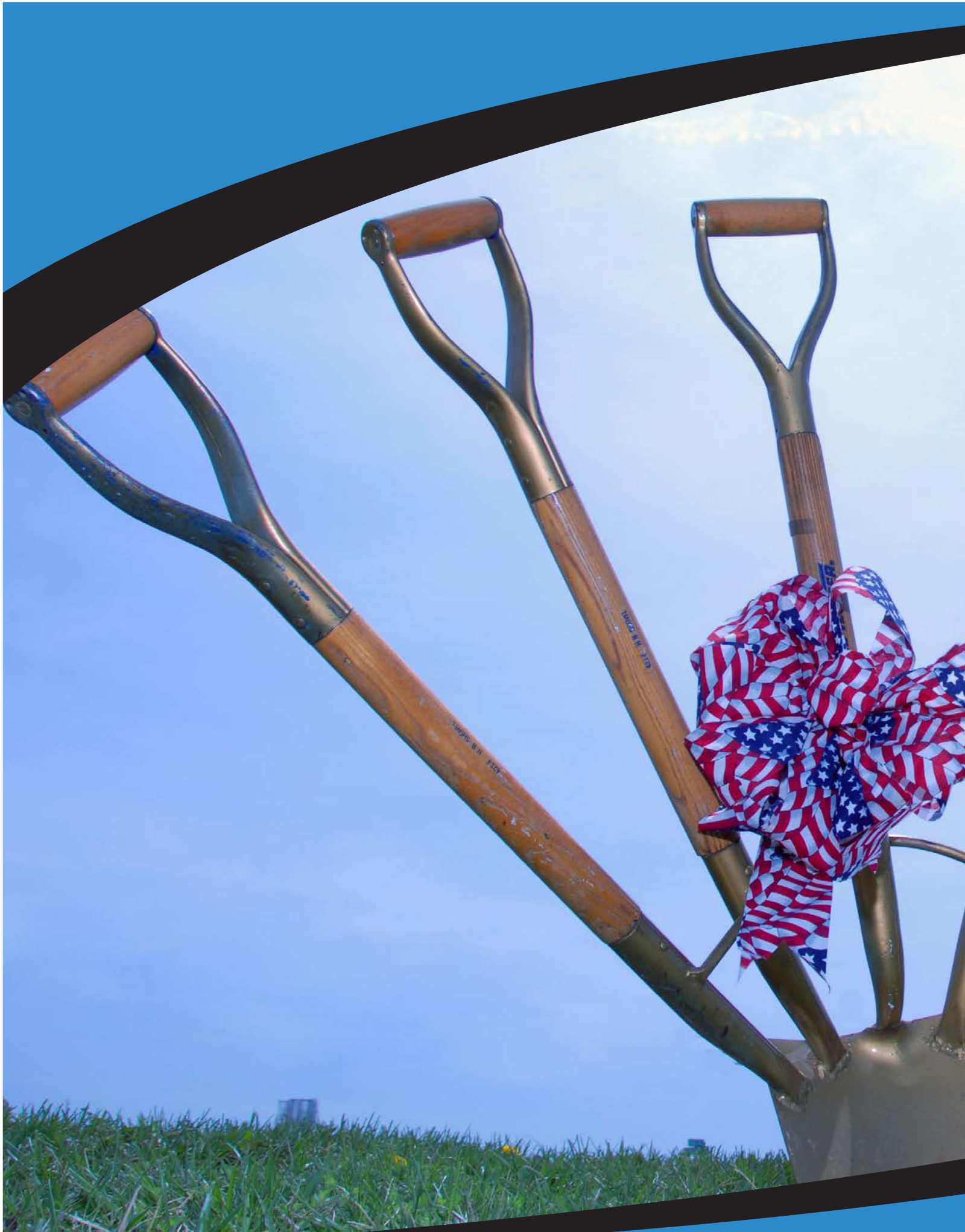
### Improvement Status:

The number of dollars decreased and the percent of projects increased in fiscal year 2010 compared to fiscal year 2009. In fiscal year 2010, construction contracts were awarded for the following cost-share projects: Route 45 in Platte County, Route 270 in St. Louis County, Route 60 in Greene County, Route 67 in St. Francois County and others. The significant increase in fiscal year 2008 is due to the construction contract awards of some major cost-share projects such as Route 36 in Macon, Marion, Monroe and Shelby counties; Route 100 in Franklin County and Route 67 in Madison and Wayne counties totaling \$115 million.

MoDOT markets the cost sharing and partnering programs throughout the state to build partnerships with entities to pool efforts and resources to accomplish what may have previously seemed unlikely.



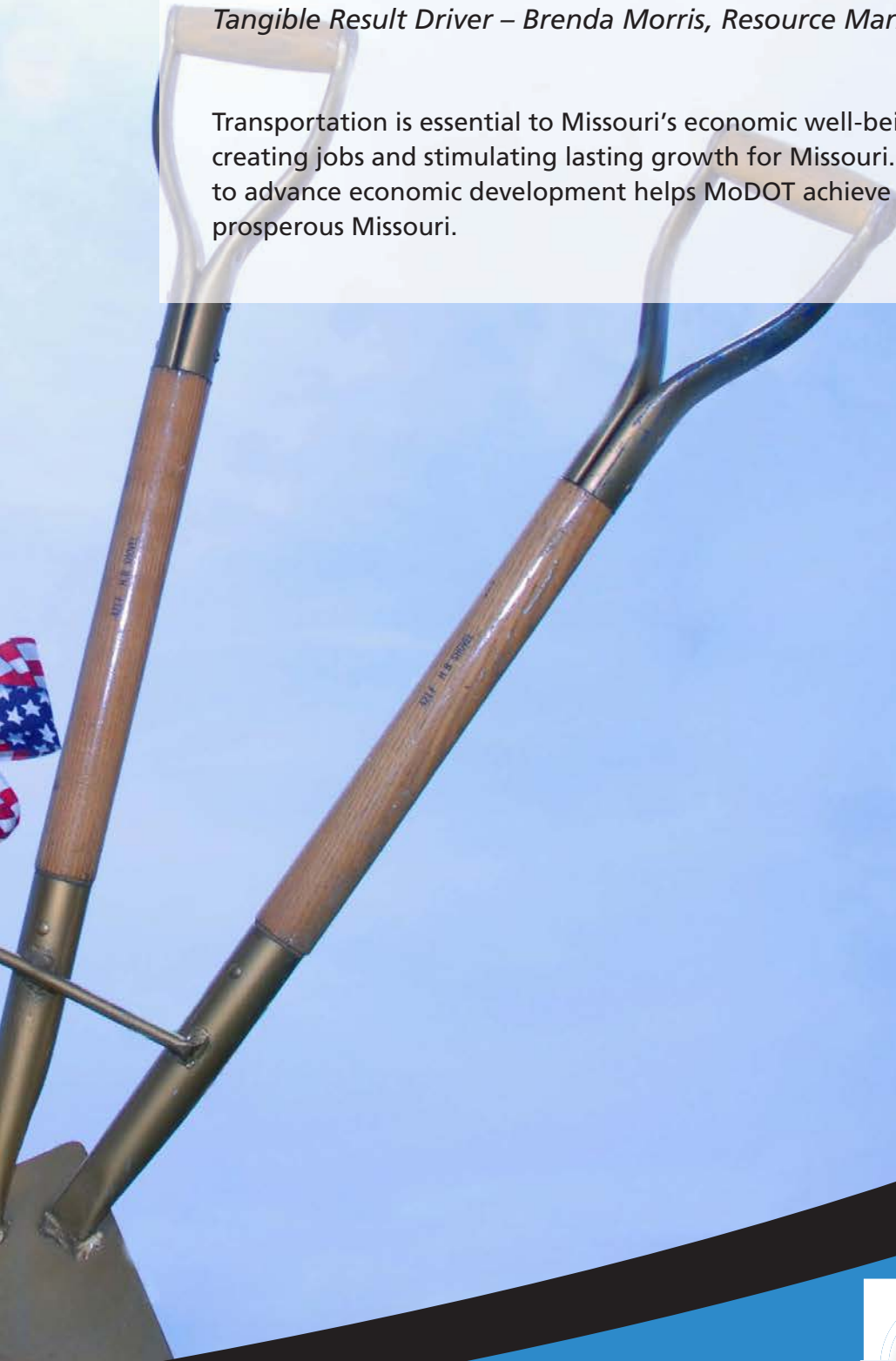
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# ADVANCE ECONOMIC DEVELOPMENT

*Tangible Result Driver – Brenda Morris, Resource Management Director*

Transportation is essential to Missouri's economic well-being. It plays a critical role in creating jobs and stimulating lasting growth for Missouri. In addition, focusing on ways to advance economic development helps MoDOT achieve its mission of promoting a prosperous Missouri.





## MoDOT national ranking in revenue per mile-7a

**Result Driver:** Brenda Morris, Resource Management Director

**Measurement Driver:** Amy Binkley, Resource Management Specialist

### Purpose of the Measure:

The measure shows Missouri’s national ranking in the amount of revenue per mile that is available to spend on the state highway system.

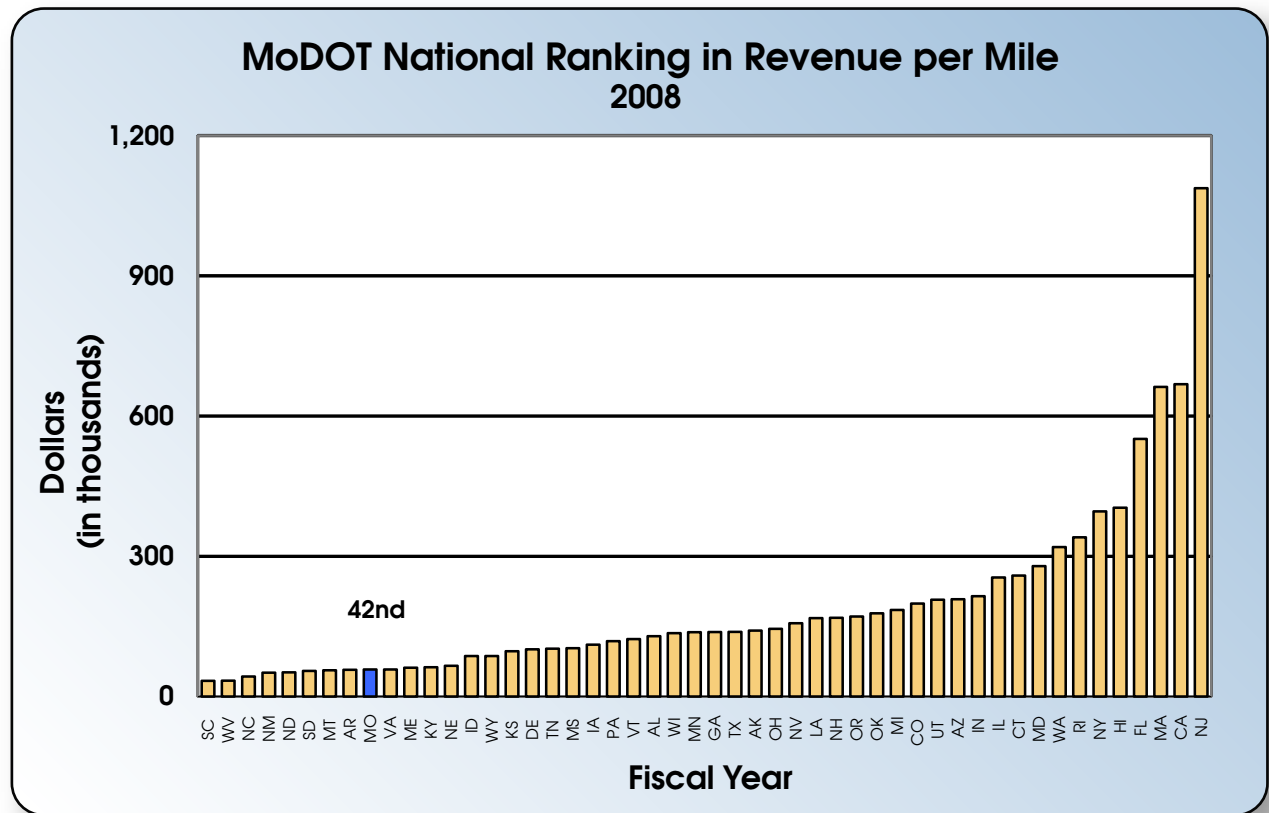
becomes available from the Federal Highway Administration.

### Measurement and Data Collection:

Revenue is the total receipts less bond proceeds as reported in the Federal Highway Administration’s 2008 annual highway statistics report entitled “Revenues Used By States For State-Administered Highways.” The mileage is the state highway agency miles as reported in the Federal Highway Administration’s 2008 annual highway statistics report entitled “State Highway Agency-Owned Public Roads.” Resource Management collects this information from the Federal Highway Administration. This measure is updated as the data

### Improvement Status:

Missouri’s revenue per mile of \$57,843 currently ranks 42<sup>nd</sup> in the nation. Missouri has a very large state highway system, consisting of 33,677 miles, which is the seventh largest system in the nation. New Jersey’s revenue per mile of \$1,087,618 ranks first. However, its state highway system contains only 2,324 miles. MoDOT staff continues to communicate the need for additional transportation funding to the public. Missouri’s transportation needs greatly exceed current available funding.



## Economic return from transportation investment-7b

**Result Driver:** Brenda Morris, Resource Management Director

**Measurement Driver:** Ben Reeser, Financial Resource Administrator

### Purpose of the Measure:

This measure tracks the economic impact resulting from the state’s transportation investments. Economists have found that transportation investments affect employment and economic output.

### Measurement and Data Collection:

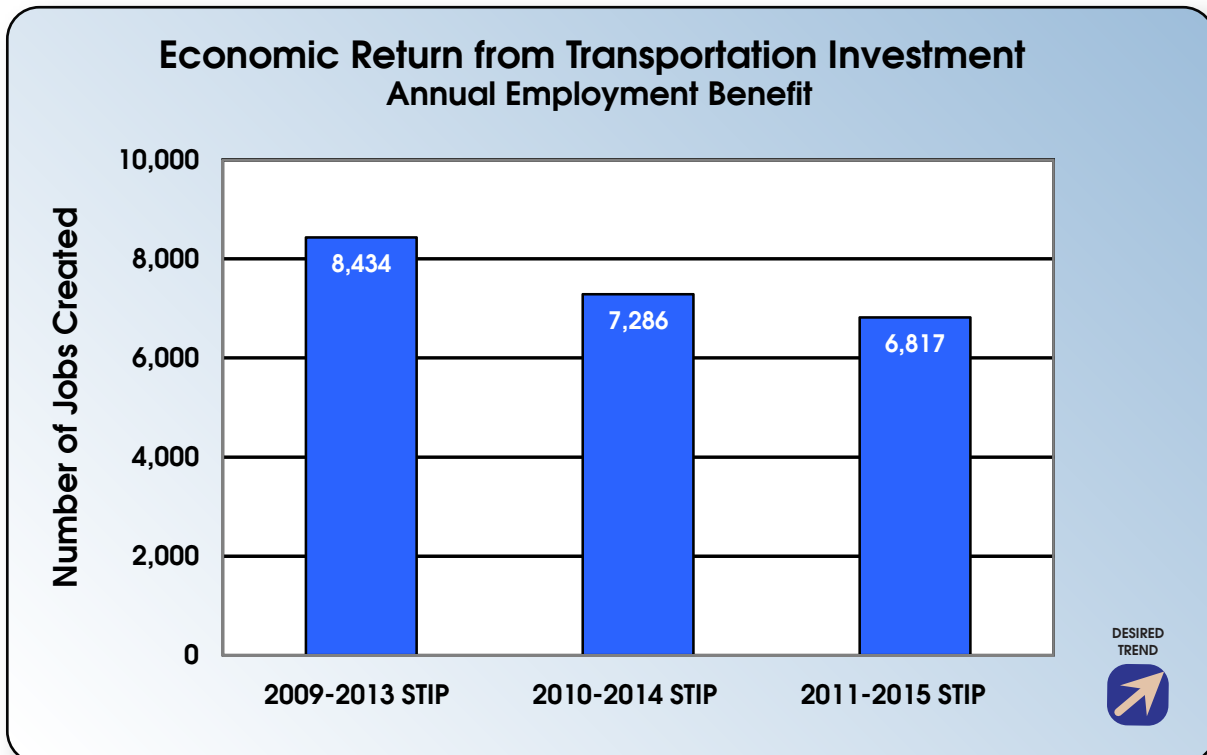
MoDOT works with the Department of Economic Development (DED) to perform economic impact analyses for the state’s transportation investments. The analyses are performed using a model called the Regional Economic Modeling, Inc. (REMI). Through these efforts, the department can provide state and regional estimates to demonstrate economic benefits related to specific projects, corridors and program expenditures. This annual measure is updated each October.

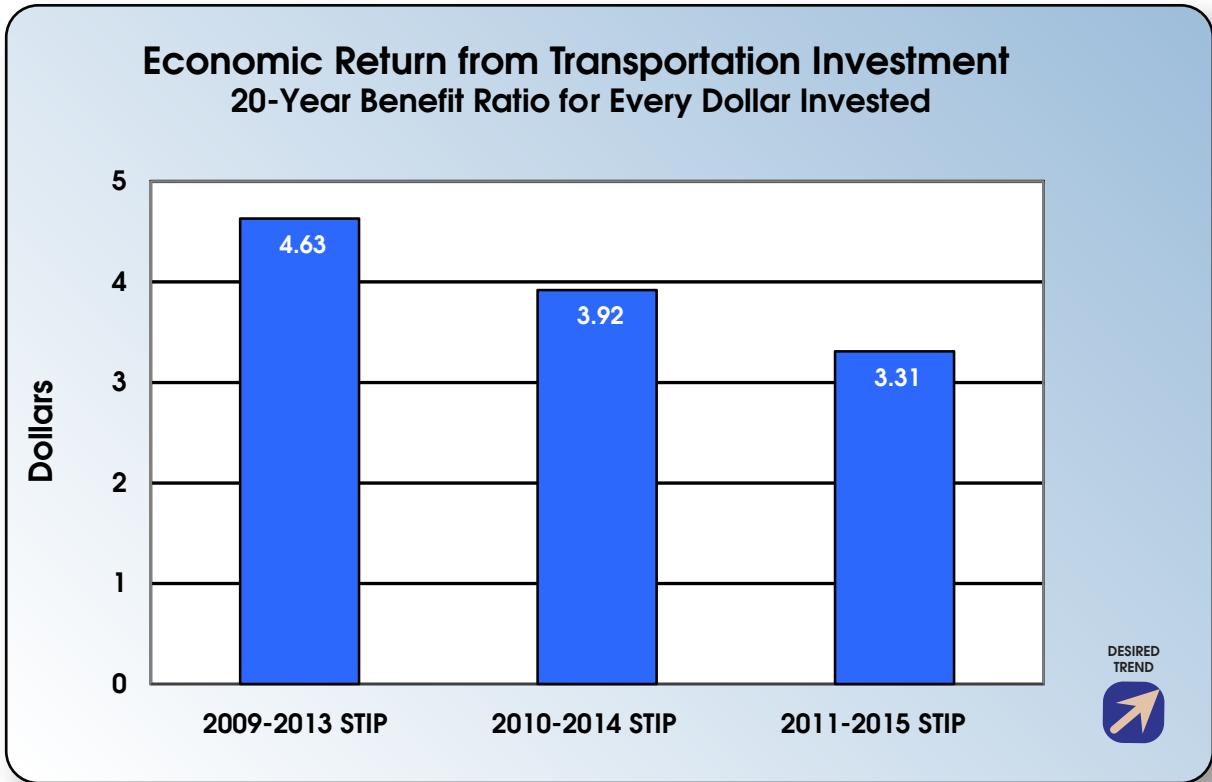
### Improvement Status:

The REMI model results demonstrate the strong link between transportation investment and economic development. An analysis of the Statewide Transportation Improvement Program (STIP) provides a summary of economic benefits related to

transportation investments over the next 20 years. The 2011-2015 STIP will invest approximately \$4 billion into highway and bridge projects across the state. On average, these STIP investments will create approximately 6,817 new jobs with an average wage of \$30,785 per job. The 2011-2015 STIP projects will contribute \$636 million of economic output for the state per year totaling \$12.7 billion over the next 20 years. This equates to a \$3.31 return on every \$1 invested in transportation.

The 2011-2015 STIP has a lower economic return compared to previous STIPs due to decreased transportation investments and transitioning from large, major corridor improvement projects, to smaller, taking care of the existing highway system projects. MoDOT continues to work with DED to conduct economic impact analyses for the various transportation investments throughout the state. Additional studies can be found online <http://www.modot.mo.gov/newsandinfo/EconomicImpactAnalysis.htm>.





## Impacts of job creation for selected industries-7c

**Result Driver:** Brenda Morris, Resource Management Director

**Measurement Driver:** Ben Reeser, Financial Resource Administrator

**Purpose of the Measure:**

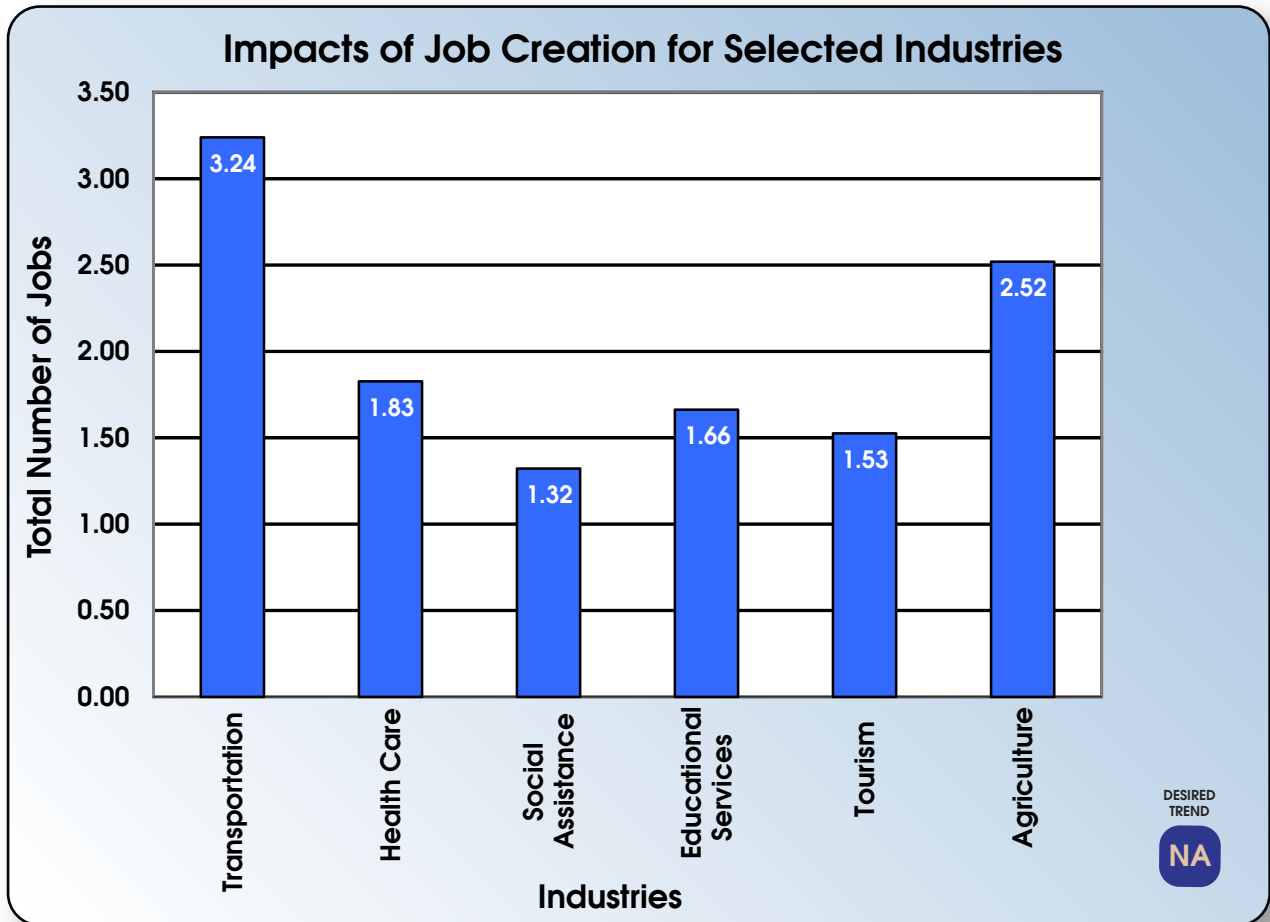
The measure tracks the impacts of job creation for selected industries.

**Measurement and Data Collection:**

The tool for estimating impacts of job creation for selected industries is the regional input-output model (RIMS II), which is produced every five years and updated annually by the Bureau of Economic Analysis, a division of U.S. Department of Commerce. The input-output model produces multipliers that can be used to estimate the economic impacts of changes on employment for the Missouri region. Multipliers for a given region are influenced by the economic structure as well as price levels. The regional economic multipliers are widely used by both the public and private sectors to study economic impacts.

**Improvement Status:**

The multiplier for transportation employment is 3.24, which indicates that every new transportation job will create an additional 2.24 jobs (a total impact of 3.24 jobs) throughout Missouri’s economy. For example, when Missouri increases its investment into transportation and as a consequence the transportation industry adds 100 jobs, there will be an additional 224 jobs created (a total impact of 324 jobs). The latest data shows transportation investments create more jobs than investments in educational services, health care, social assistance and tourism.



## Percent of public support by transportation funding source-7d

**Result Driver:** Brenda Morris, Resource Management Director

**Measurement Driver:** Beth Wright, District Engineer

**Purpose of the Measure:**

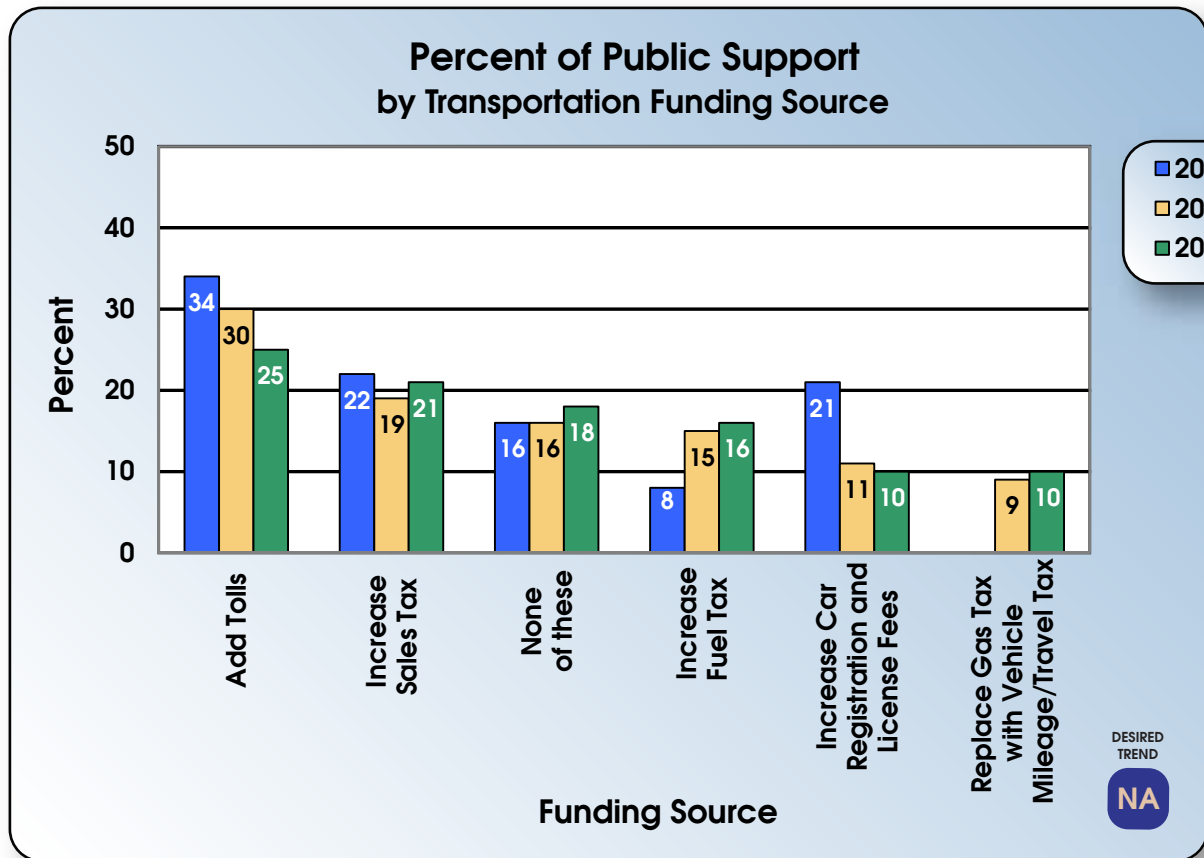
This measure tracks the public’s preference in transportation funding sources.

**Measurement and Data Collection:**

MoDOT asks Missourians through an annual customer satisfaction survey, “If it was determined that the state needs to increase revenues to adequately fund Missouri state highways and roads, which one of the following methods would be most acceptable to you?”. In 2009, the revenue source option of replacing the gas tax with vehicle mileage/travel tax was added to the survey. The 2010 survey contained the same questions asked in the 2009 survey. This is an annual measure updated in July.

**Improvement Status:**

The survey reveals the public prefers an increase in transportation funding from tolls or sales tax. For the past three years both tolls and an increase in sales tax have come in first and second, respectively. In 2008 and 2009, 16 percent of citizens polled did not support any of the funding sources and that number increased to 18 percent in 2010.



## Number of jobs and businesses in freight industry-7e

**Result Driver:** Brenda Morris, Resource Management Director

**Measurement Driver:** Ernie Perry, Administrator of Freight Development

### Purpose of the Measure:

This measure tracks the number of jobs and businesses that are classified within the freight transportation industry. The data reflects the expansion or contraction of jobs and businesses as freight development and the associated employment continues in the state.

Truckload (LTL) trucking, specialized freight, heavy duty truck manufacturing, metal container manufacturing, truck trailer manufacturing, railroad rolling stock, ship building and warehousing. These businesses combined form the Freight Transportation Industry cluster.

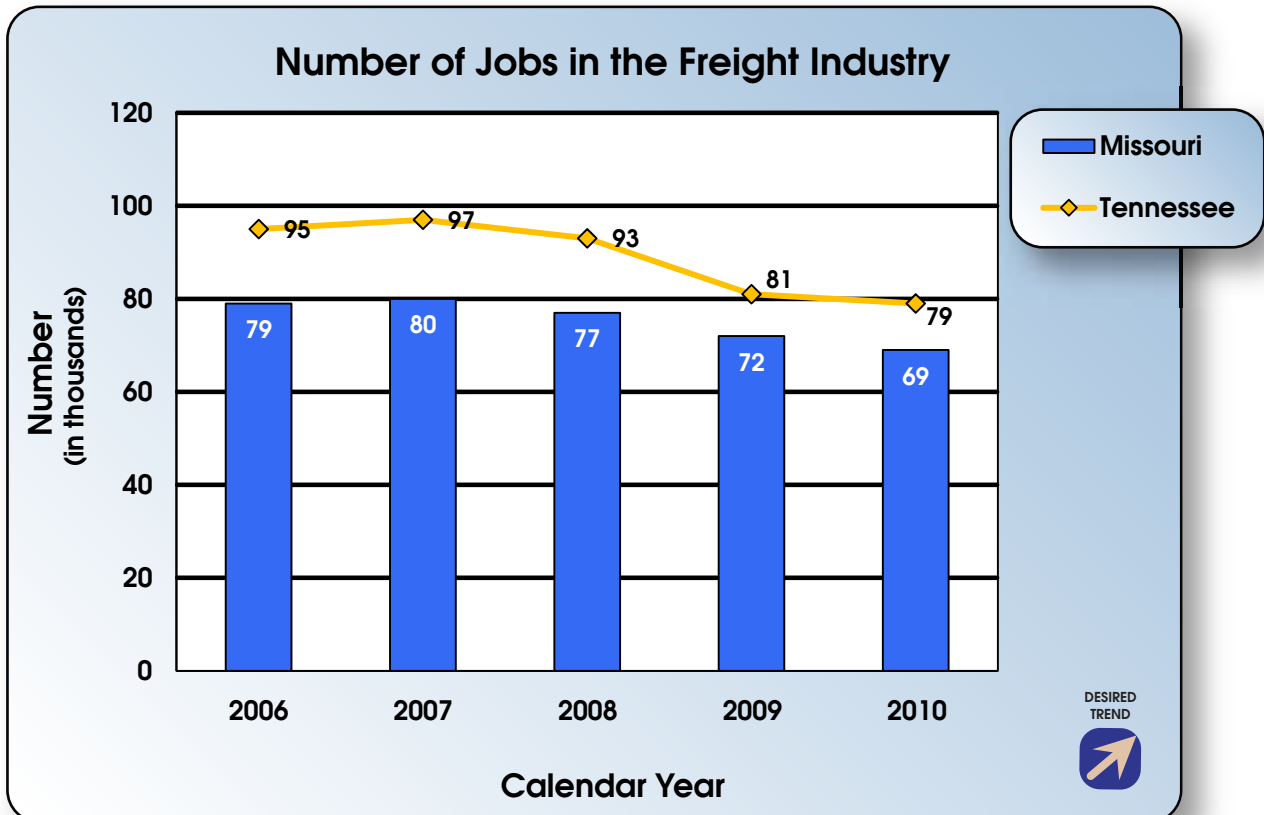
### Measurement and Data Collection:

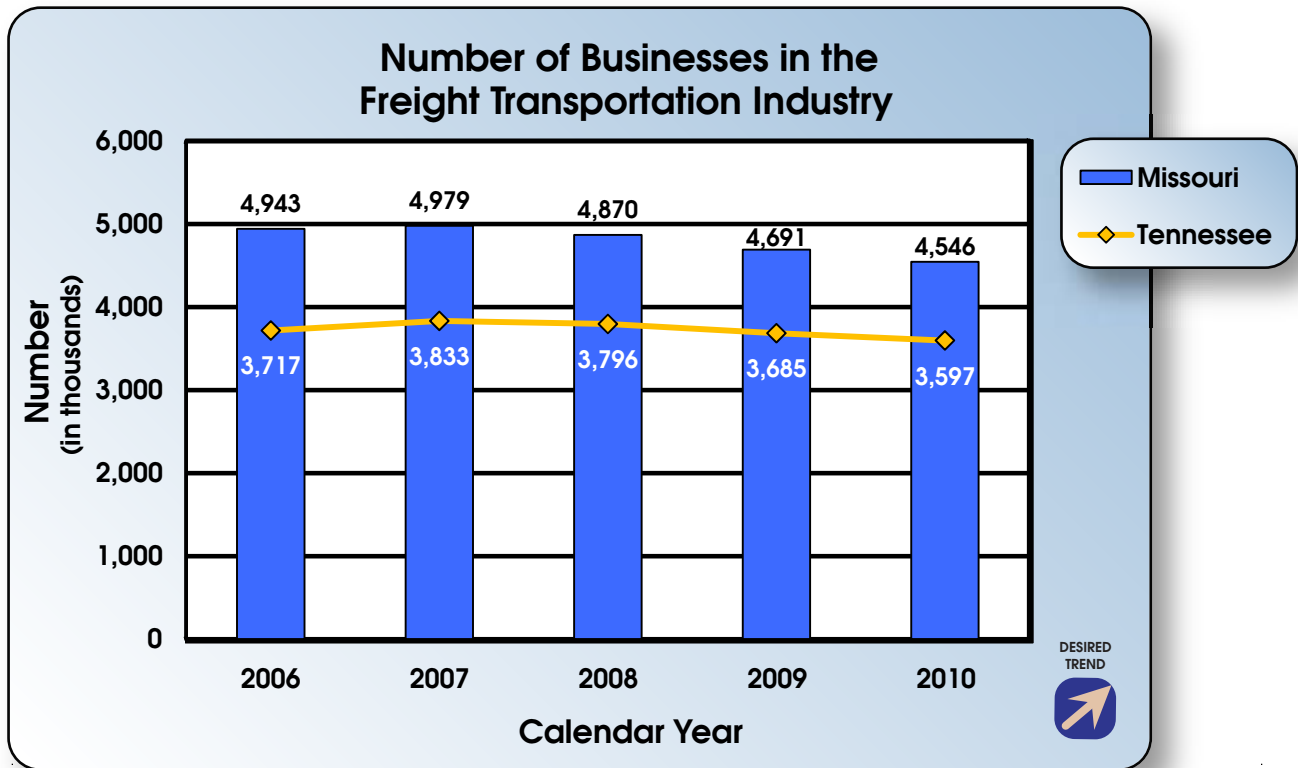
This measure is extracted from quarterly employment data collected by the US Department of Labor and managed and provided by the Missouri Department of Economic Development. Employment and businesses that fall within the freight business cluster include the employment classifications of: scheduled and non scheduled air freight, line and short haul railroads, inland water freight transportation, freight trucking – local and long distance, Less-Than-

This measure is updated in the July and January editions.

### Improvement Status:

A decrease in employment and business numbers continues and reflects the downturn in the economy in late 2007. As the economy re-establishes, the number of jobs and businesses in the freight industry can be expected to increase, to service the growing economy.





## **FREIGHT** *Development*

## *Missouri's Economy* *in Motion*



**Freight Development Unit**  
–to encourage freight development that results in a more prosperous Missouri.

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# INNOVATIVE TRANSPORTATION SOLUTIONS

*Tangible Result Driver – Mara Campbell, Organizational Results Director*

MoDOT values innovation. The department empowers employees and seeks input from stakeholders to generate innovative ideas. Collaboration with staff, academia and industry makes unique concepts come to life so MoDOT can serve its customers better, faster and at less expense to the taxpayer.

## Number of external awards received-8a

**Result Driver:** Mara Campbell, Organizational Results Director

**Measurement Driver:** Rebecca Geyer, Organizational Performance Specialist

### Purpose of the Measure:

This measure tracks the number of external awards received by the department. These awards display the department's dedication and efforts towards efficiency, innovation and quality throughout the organization. This information enables the department to measure progress and encourage further participation in award programs. It also provides opportunities for the department to increase public awareness of department activities.

### Measurement and Data Collection:

Each district and division office tracks the awards presented to the department by external organizations. This includes all awards presented to individuals, teams, districts, divisions and MoDOT as a whole. Data for this measure is updated quarterly.

### Improvement Status:

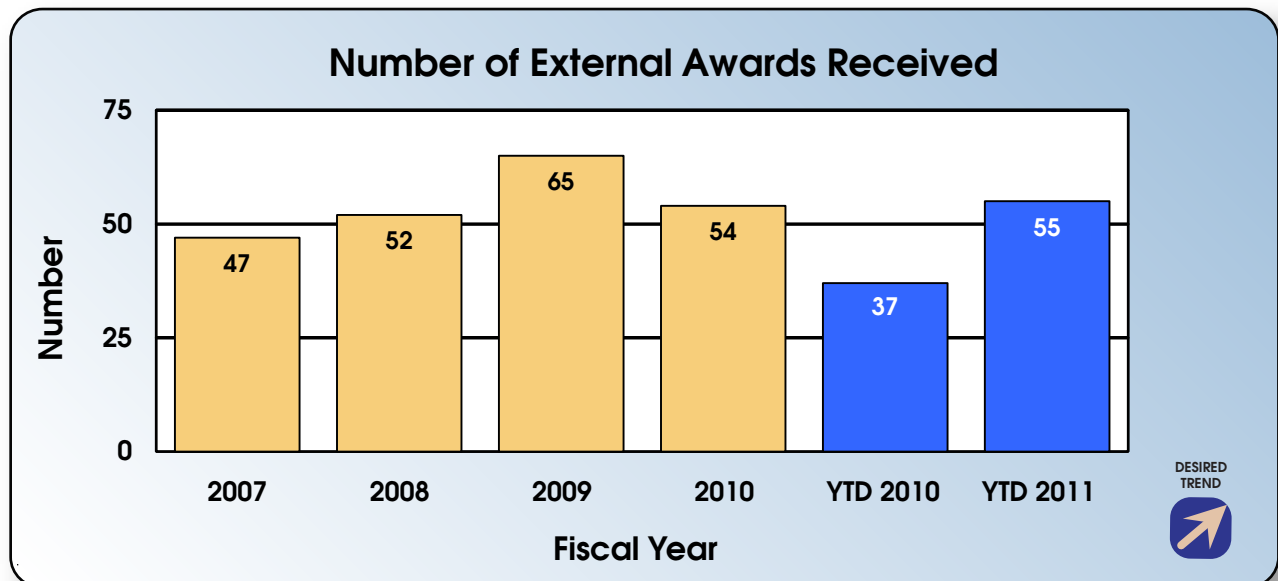
In the third quarter of fiscal year 2011, MoDOT received 17 awards. This brings the total awards received this fiscal year to 55.

This quarter, MoDOT was recognized for excellence mainly in the areas of operations and engineering.

Most notably, the American Council of Engineering Companies awarded three MoDOT projects with prestigious awards. The kcICON bridge was recognized as the 2011 Engineering Excellence Grand Conceptor Award winner, while District 5 and the Bridge Division were recognized for their Engineering Excellence for the US 50/MO-179/Business 50 project and the Miami and Glasgow bridge superstructure replacement project.

MoDOT is also honored to have multiple projects recognized this quarter by the American Concrete Pavement Association due to the continued excellence in concrete paving. Additionally, Ron Morris, Construction and Materials Liaison Engineer in the St. Louis District, was awarded the 2011 Making a Difference Award by the Missouri University of Science and Technology.

MoDOT continues to enter various competitions to have its work judged against the efforts of other organizations.



## Number of innovative reports published-8b

**Result Driver:** Mara Campbell, Organizational Results Director

**Measurement Driver:** Bill Stone, Organizational Performance Administrator

### Purpose of the Measure:

The number of reports published is an indication of how well Organizational Results is completing its research projects, sharing results within the department and making information available for future use. Reports are an important part of the unit's overall effort to implement innovative transportation solutions at MoDOT.

### Measurement and Data Collection:

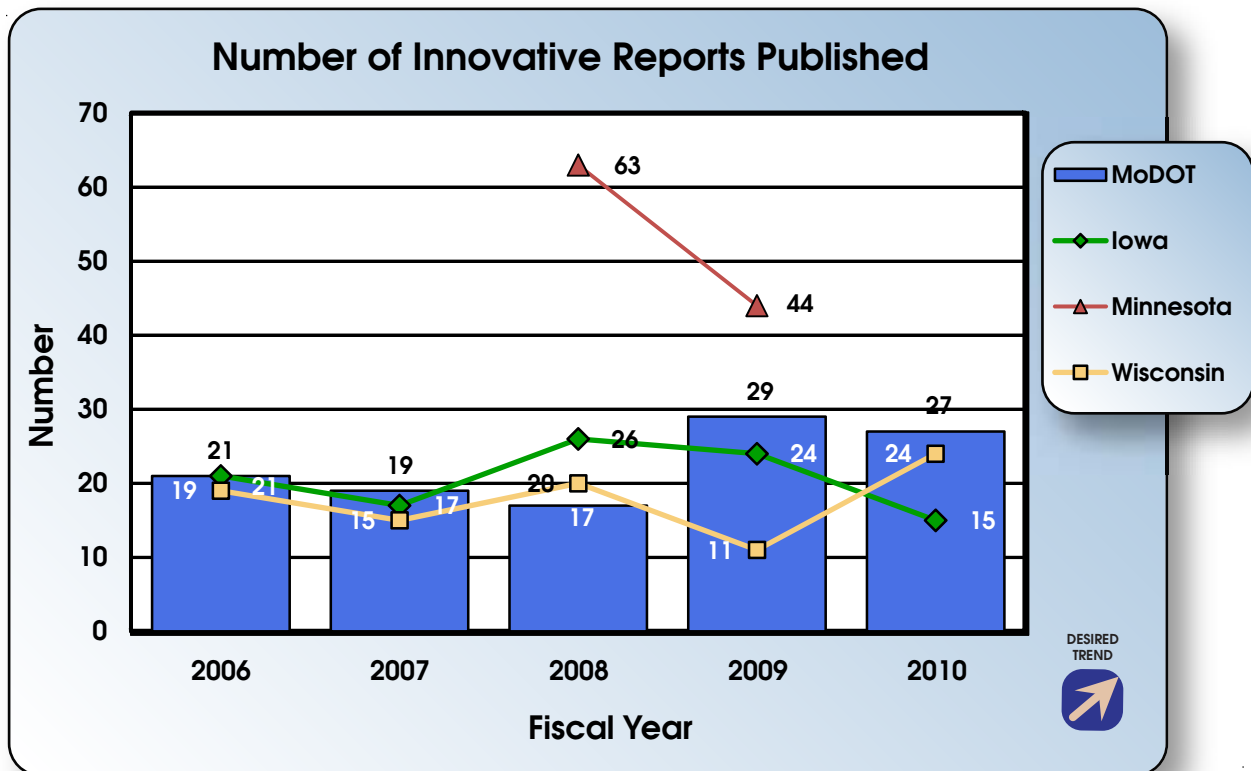
Organizational Results staff maintains a research publications spreadsheet that is updated as research is published. 'Published' is defined as a research document printed or electronically prepared for distribution. Staff summaries, bulletins, and research updates are not included in this count. Innovative reports provide solutions and discuss research activities. Innovations include both engineering and

non-engineering best practices. Three state benchmarks are provided with the data obtained from each state's research division's annual report. This is an annual measure updated in July.

### Improvement Status:

During fiscal year 2010, a total of 27 innovative reports were published. This is only two less than the all-time high of 29 in 2009. The higher totals for the past two years are the result of increased communication efforts for innovative solutions.

For fiscal year 2009, the benchmark states allocated different amounts to research: Minnesota - \$6,227,990; Iowa - \$2,959,388; Wisconsin - \$1,606,918; in comparison to Missouri's \$3,319,747.



## Number of new product evaluations completed and approved for use-8c

**Result Driver:** Mara Campbell, Organizational Results Director

**Measurement Driver:** Jen Harper, Organizational Performance Engineer

### Purpose of the Measure:

This measure tracks the number of new products evaluated and approved for use. This data is used to help determine if MoDOT is continuing to review new and innovative products.

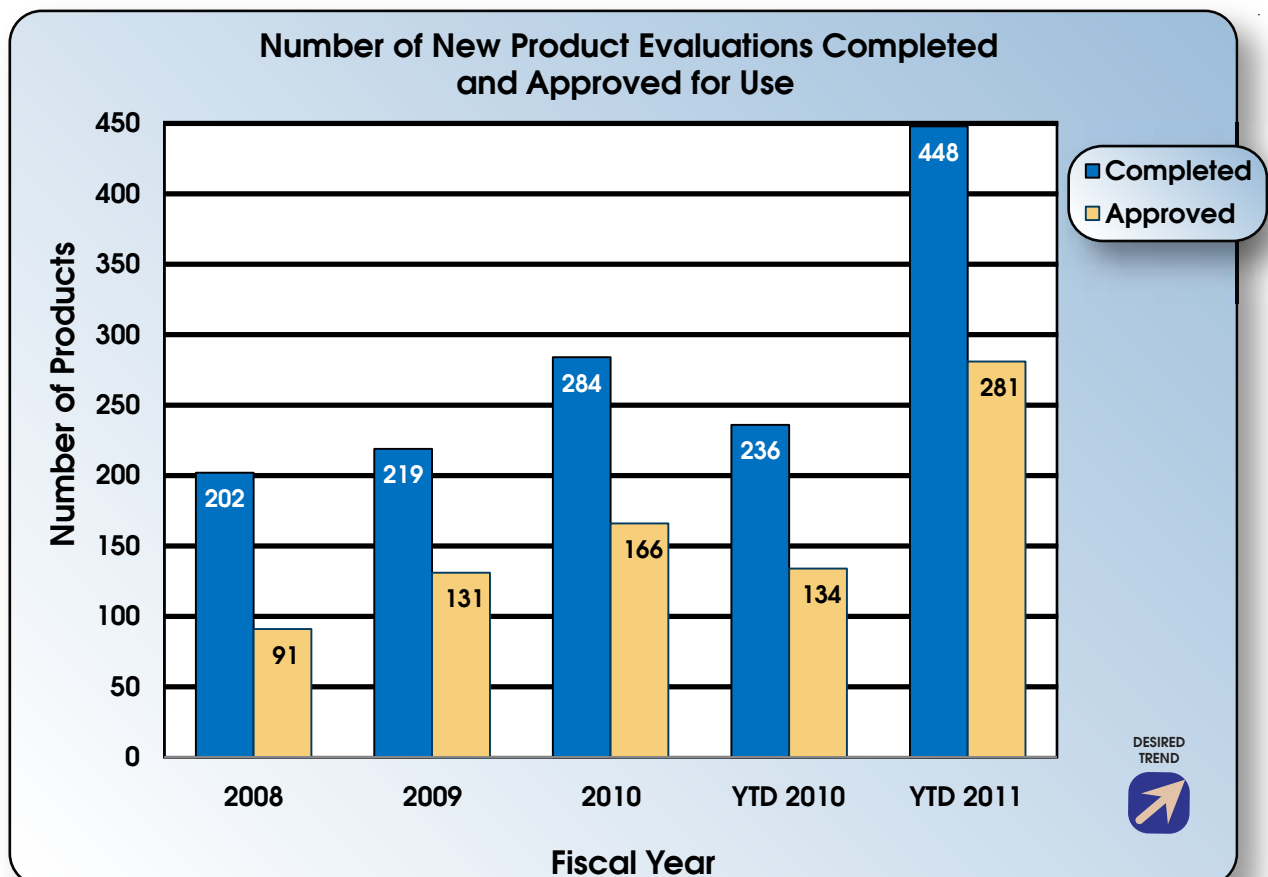
### Measurement and Data Collection:

All new products considered for use on MoDOT projects or by MoDOT personnel are submitted for evaluation by the Organizational Results Unit. Each new product received is assigned a number and tracked in a database. The time necessary to process a new product evaluation varies with each product depending upon whether or not testing is required. Data is collected from the new product database to determine the total number of new products submitted for evaluation, the total number of products being evaluated and the total number of new product evaluations completed. New product evaluations completed is a count of the number of

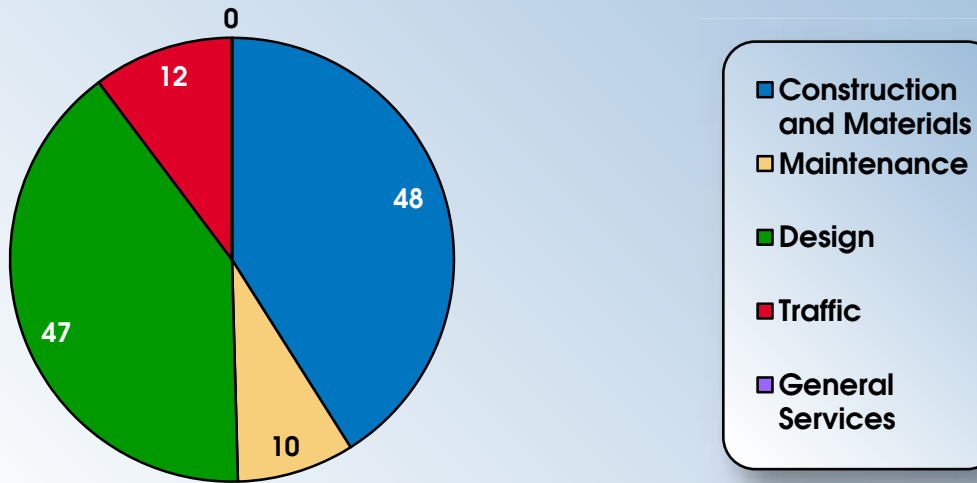
product usages approved, not approved or declined to evaluate. This measure is updated quarterly.

### Improvement Status:

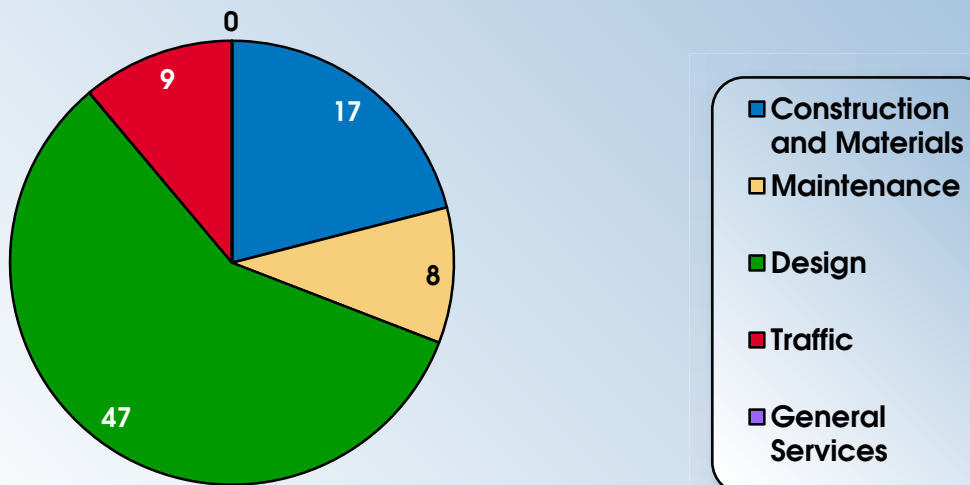
The trend for the increasing number of new products has continued into the third quarter of fiscal year 2011. The increase is attributed to both continuous improvements to the new products process as well as working with more divisions. There was a large increase this quarter in the number of environmentally friendly cleaning and erosion control products evaluated through the new product process. Three notable products approved by MoDOT are the GeoRidge Ditch Check (erosion control), Universal Lubricants (recycled oil), and the Falcon Asphalt Hot Box (asphalt heater/recycler). One product of note that did not perform well during field evaluations is the UltraCure DOT curing blanket.



Number of New Product Evaluations Completed  
3rd Qtr FY11



Number of New Products Approved  
3rd Qtr FY11



## Number of innovative technologies implemented in Program Delivery-8d

**Result Driver:** Mara Campbell, Organizational Results Director

**Measurement Driver:** Travis Koestner, Assistant State Construction and Materials Engineer

### Purpose of the Measure:

This measure tracks the number of innovative technologies implemented during construction of projects.

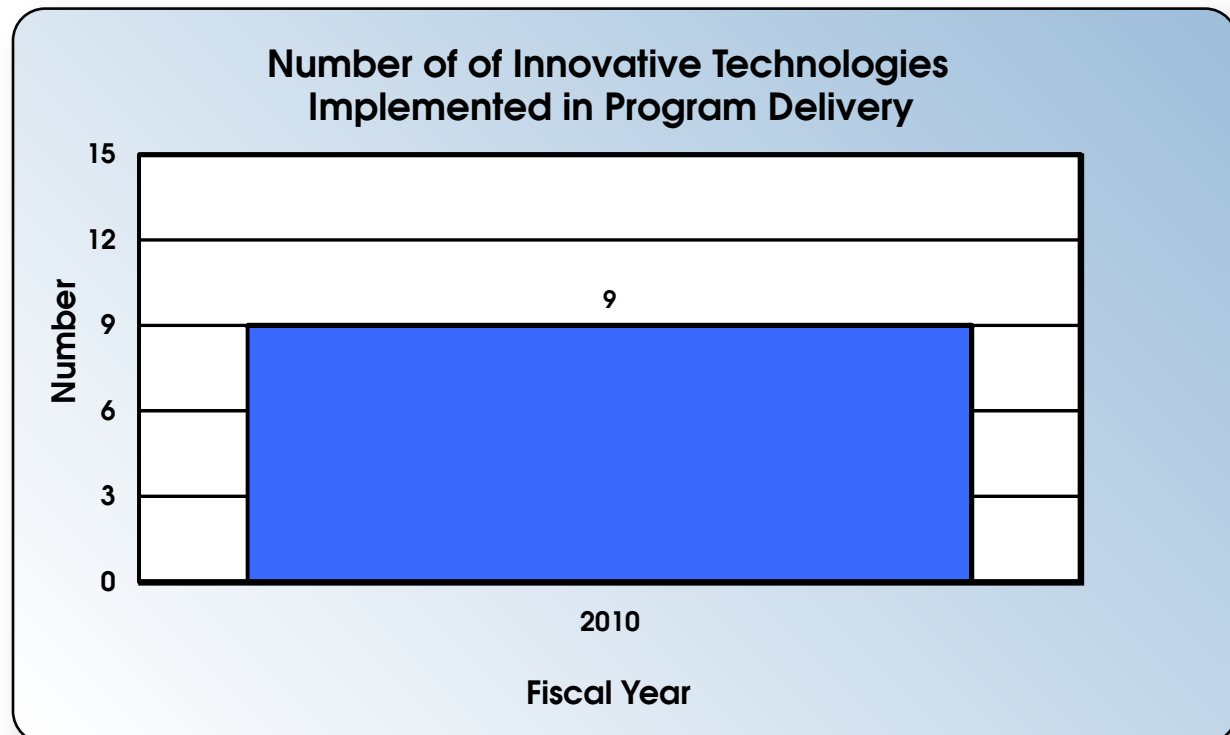
### Measurement and Data Collection:

An innovative practice is counted once it has been incorporated into a project. The data is collected from submissions from MoDOT Resident Engineer's Offices, Organizational Results projects and Construction and Materials Division. This is an annual measure reported in July.

### Improvement Status:

MoDOT encourages contractors to present innovative techniques that can increase the efficiency of projects

and save taxpayers money. Several of the innovative practices such as project wide quality control/quality assurance and bobsled techniques for concrete joints were initiated by MoDOT and presented to the industry for use on projects. Contractor initiated items include Tire Rubber Surface Sealer using recycled tires and a unique interchange configuration for a value engineering concept on the I-270/Dorsett Interchange. There are several techniques in the planning stages at this time that will be counted once the construction actually takes place. Examples include self-cleaning concrete, dynamic compaction and various pavement treatment combinations.



## Number of innovative solutions implemented for maintenance operations-8e

**Result Driver:** Mara Campbell, Organizational Results Director

**Measurement Driver:** Tim Chojnacki, Maintenance Liaison Engineer

**Purpose of the Measure:**

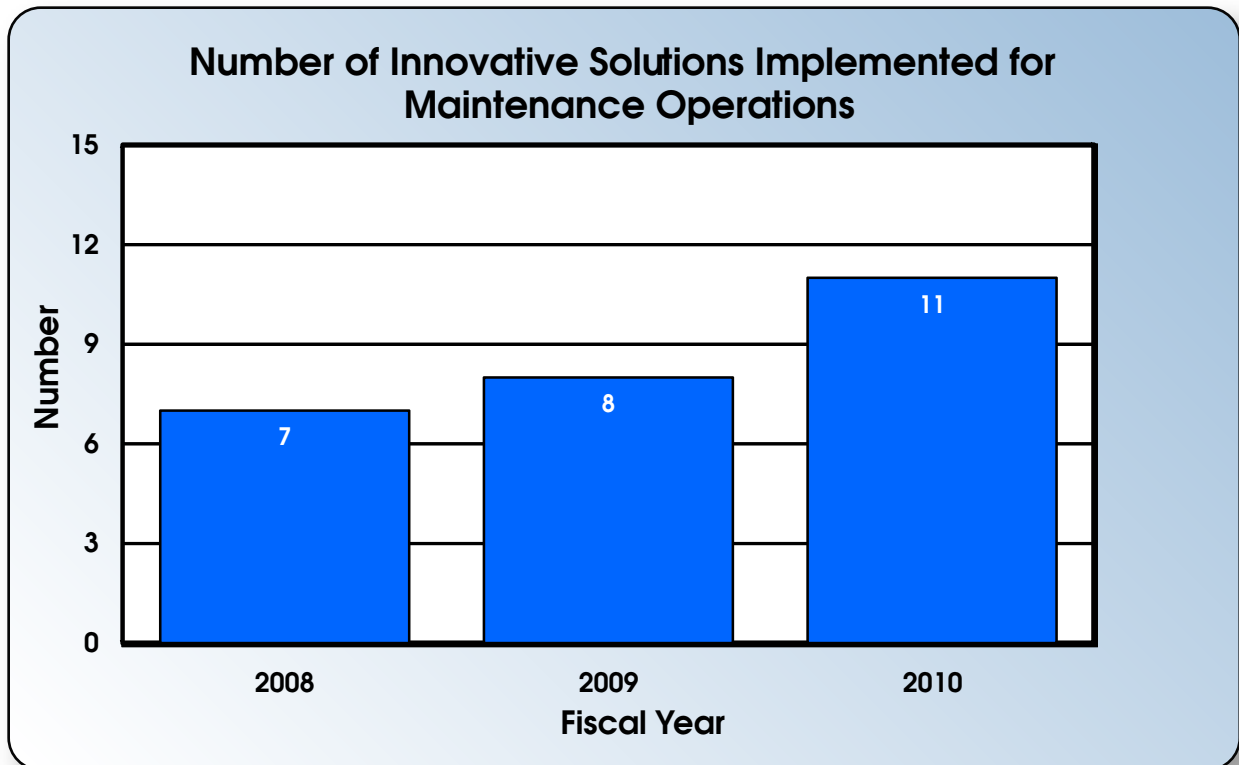
This measure tracks the number of innovative solutions implemented for maintenance operations. Best practices show how MoDOT employees are applying innovation to improve daily operations.

**Measurement and Data Collection:**

Innovative solutions are identified and shared with district managers through the Solutions at Work program, the Innovation Challenge, research projects and benchmarking with other organizations. The Maintenance Division conducts an annual survey to assess the number of innovative solutions implemented in district operations. This is an annual measure reported in July.

**Improvement Status:**

During fiscal year 2010 a total of 11 innovative solutions were identified and shared for district maintenance operations. The majority of those solutions (six) came from the Tool and Equipment Challenge statewide winners. Another two innovations identified were non-winning entries in the challenge. The former Tool and Equipment Challenge, now the Innovations Challenge has been expanded to focus on the six emphasis areas for maintenance in MoDOT's five-year direction.





## Number of innovative revisions and dollars saved-8f

**Result Driver:** Mara Campbell, Organizational Results Director

**Measurement Driver:** Joe Jones, Engineering Policy Administrator

### Purpose of the Measure:

This measure tracks the number of innovative engineering policy revisions to MoDOT's *Engineering Policy Guide*, *Missouri Standard Specifications for Highway Construction* and the *Missouri Standard Plans for Highway Construction* and the dollars saved. Policies and standards are a necessary part of highway construction; without them, there would be no way to ensure quality in the product MoDOT delivers to the public. The standards and policies should be practical in nature, that is to say they shouldn't be overly prescriptive and should have a positive fiscal impact (represent money saved). It is important to remember that the philosophy of Practical Design is not limited to the Design Division. Vigilance against inflated standards is an excellent way to help this value take hold throughout the entire department. This measure tracks the number of innovative cost control measures implemented during the design stage of projects.

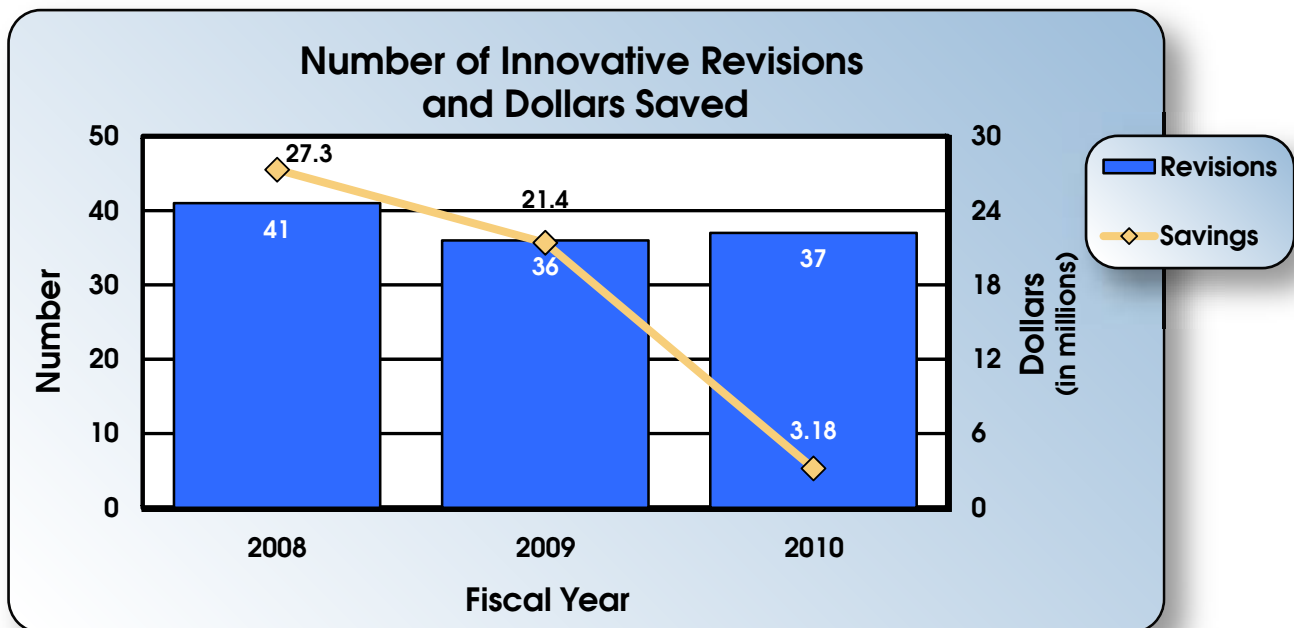
### Measurement and Data Collection:

The staff responsible for coordinating the standards revisions collects the data. Measurement is based

upon the fiscal impact reported with each bi-monthly engineering policy ballot. The fiscal impact per unit is multiplied by the total number of units of the particular bid item that were used in the previous year. For example, an anticipated savings for reducing guardrail posts from 9 feet to 7 feet was estimated at \$1.53 per linear foot of guardrail. With 258,102 linear feet of Type A Guardrail installed the previous year, the estimated savings would be \$394,896. This is an annual measure reported in July.

### Improvement Status:

Success in this measure is defined as a positive savings of any amount. Improvement would be a larger savings, but since that is based entirely on the number of revisions being proposed by outside sources, it is beyond the control of the Engineering Policy Group. The fiscal impacts reported for FY10 represent a positive fiscal impact (savings) of \$3.18 million. While this savings is substantially lower than those reported in years closer to the inception of practical design, a \$3.18 million dollar savings clearly shows that standards, in aggregate, are not resulting in higher costs to MoDOT.



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# FAST PROJECTS THAT ARE OF GREAT VALUE

*Tangible Result Driver – Dave Nichols, Chief Engineer*

MoDOT customers expect that transportation projects be completed quickly and provide major improvements for travelers. MoDOT will honor project commitments because it believes in integrity.

### Percent of programmed project cost as compared to final project cost-9a

**Result Driver:** Dave Nichols, Chief Engineer

**Measurement Driver:** Renate Wilkinson, Planning and Programming Engineer

#### Purpose of the Measure:

This measure determines how close MoDOT's total project completion costs are to the programmed costs. The programmed cost is considered the project budget.

#### Measurement and Data Collection:

MoDOT determines the completed project costs and compares them to the programmed costs. The completed project costs are reported during the fiscal year in which the project is completed.

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. The costs do not include those that might result from any legal claims, which are rare occurrences, regarding the projects after they are completed. Positive numbers indicate the final (completed) cost was higher than the programmed cost.

In November of each year, this data is provided to the Missouri Legislature through the Report to the Joint Committee on Transportation Oversight. This measure is updated each quarter.

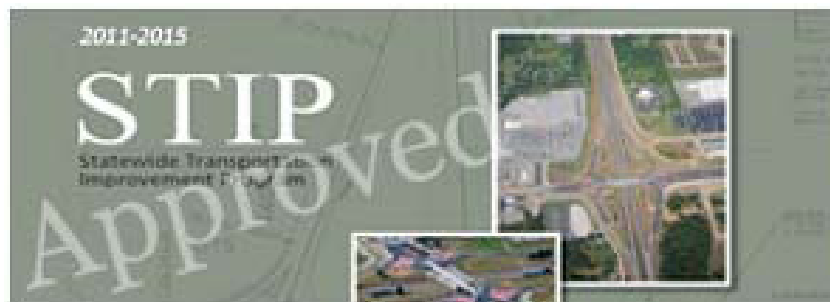
#### Improvement Status:

As of March 31, 2011, for fiscal year 2011, a total of 262 projects were completed at a cost of \$598 million. This represents a deviation of -15.9 percent or \$113 million less than the programmed cost of \$711 million.

For fiscal year 2010, the final value is 487 projects completed at a cost of \$1.183 billion. This represents a deviation of -11.48 percent or \$153 million less than the estimated cost of \$1.336 billion.

District construction budgets are adjusted based on variation from programmed costs. The ideal status is no deviation in the programmed vs. final project cost, or 0 percent. For projects completed in the five-year period from 2006 to 2010, final costs of \$6.613 billion were within -2.82 percent of programmed costs, or \$192.2 million less than the programmed cost of \$6.805 billion.

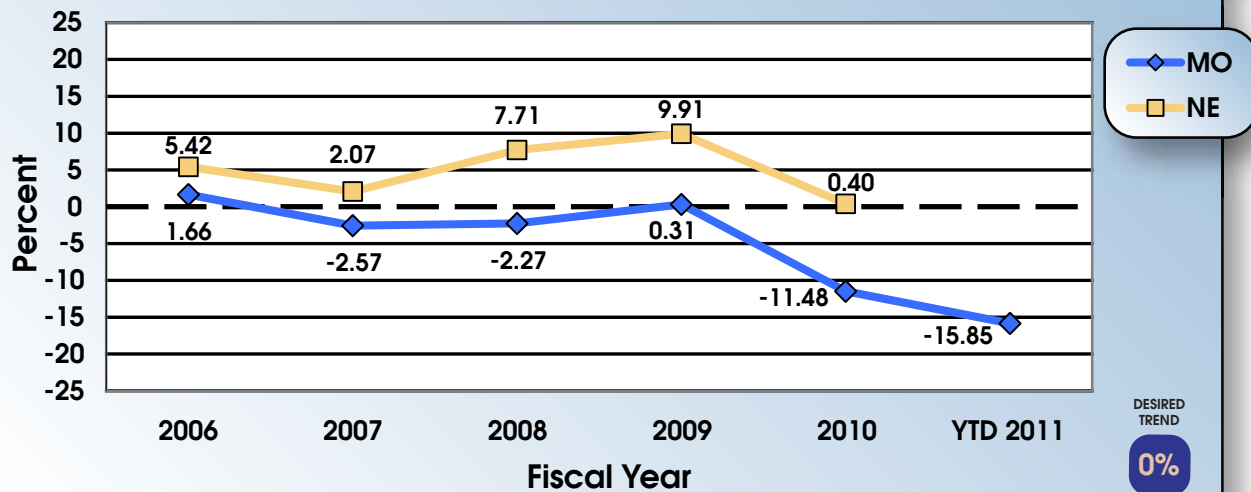
While a number of states track construction costs, few provide data for total project costs. Fewer still compare programmed total project costs to final total project cost. The following graph shows how MoDOT performance compares with neighboring Nebraska. In 2006, both states were within 4 percent of each other. In other years, it varied close to 10 percent. Data for Nebraska is updated annually.



## FAST PROJECTS THAT ARE OF GREAT VALUE



### Percent of Programmed Project Cost as Compared to Final Project Cost



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

## Percent of projects completed within programmed amount-9b

**Results Driver:** Dave Nichols, Chief Engineer

**Measurement Driver:** Dave Ahlvers, State Construction & Materials Engineer

### Purpose of the Measure:

The measure tracks the percentage of projects completed within the programmed amount. It includes separate categories for projects over and under one million dollars.

### Measurement and Data Collection:

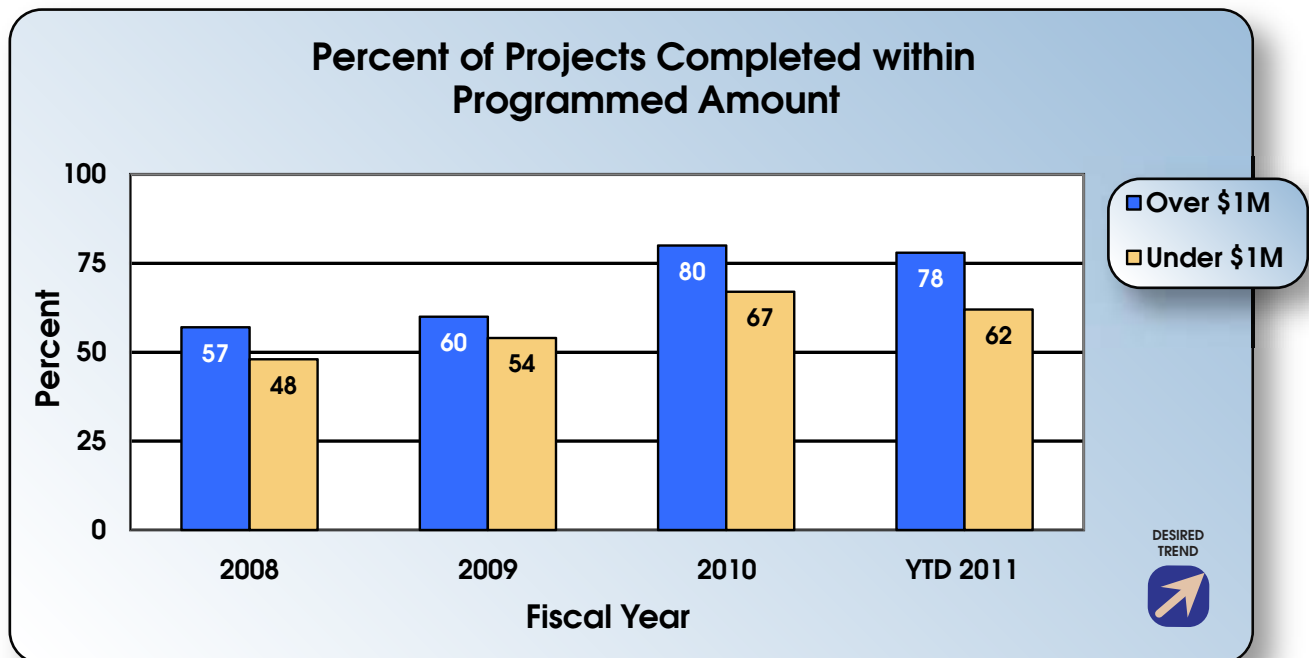
The completed project cost is compared to the estimated cost for each project. The percentage of projects completed within the estimated cost is gathered from across the state.

Project costs include design, right-of-way purchases, utilities, construction payments, inspection and other miscellaneous costs.

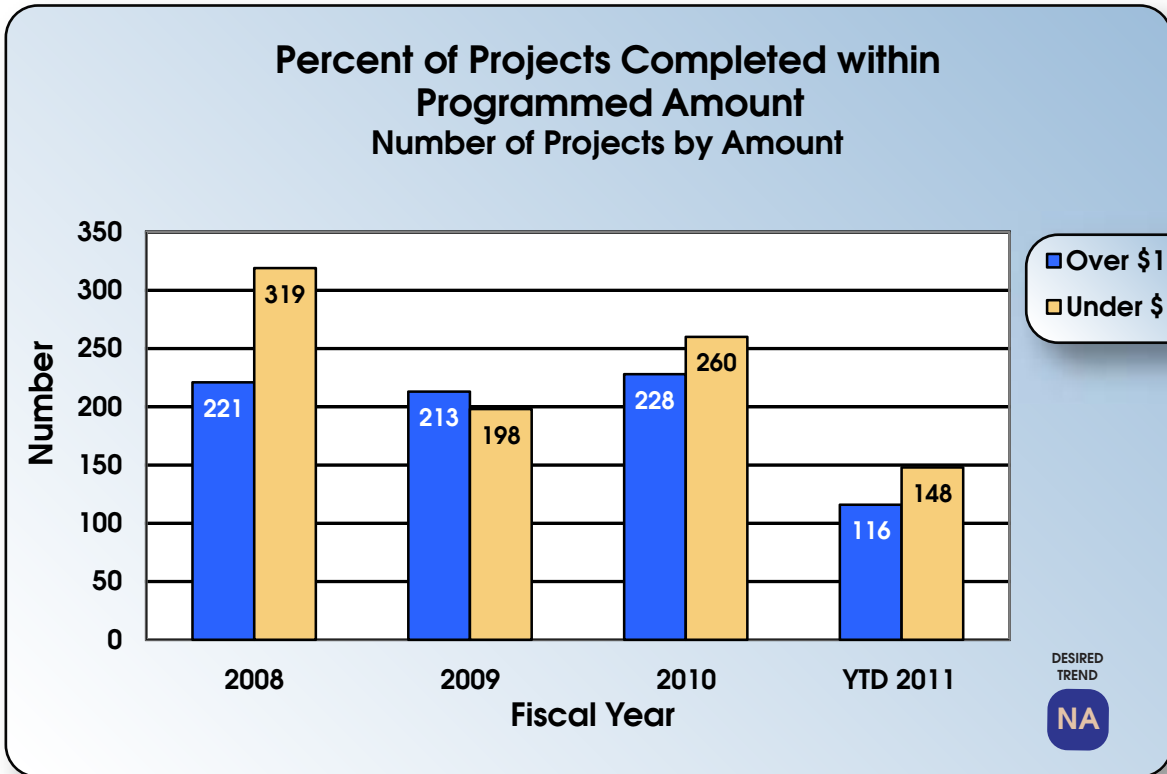
This is an annual measure updated each quarter.

### Improvement Status:

MoDOT desires that all projects be completed within the programmed amount, thereby allowing the greatest number of projects to be built with the funding available. The data indicates that there is a great deal of deviation among individual projects. In fiscal year 2011, 78 percent of projects programmed over \$1 million have been completed within the budgeted amount, while 62 percent of projects under \$1 million came in at or below budget. Emphasis has been placed on scoping projects and developing estimates that represent the true cost of project delivery. MoDOT is striving to deliver quality projects cheaper by using practical design and by encouraging the use of value engineering.



## FAST PROJECTS THAT ARE OF GREAT VALUE





## FAST PROJECTS THAT ARE OF GREAT VALUE

### Percent of projects completed on time-9c

**Results Driver:** Dave Nichols, Chief Engineer

**Measurement Driver:** Dave Ahlvers, State Construction & Materials Engineer

#### **Purpose of the Measure:**

This measure tracks the percentage of projects completed by the commitment date established in the contract. Adjustments to the completion date are made when additional work is required or for unusual weather occurrences. It indicates MoDOT's ability to complete projects by the agreed upon date.

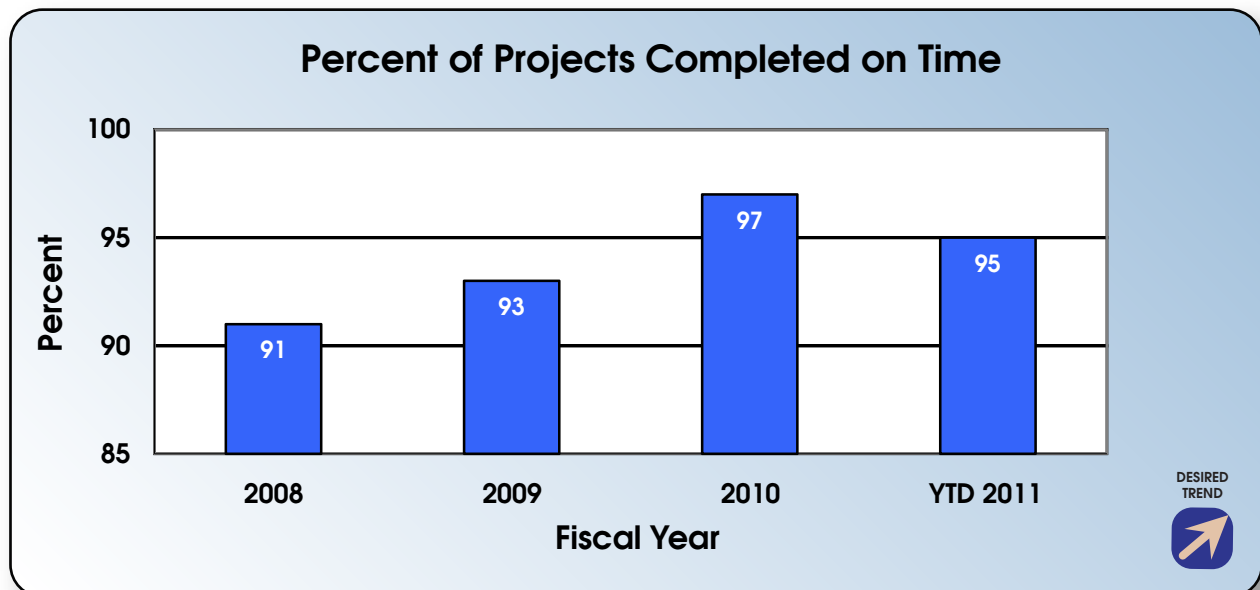
#### **Measurement and Data Collection:**

The project manager will establish project completion dates for each project. They are documented in MoDOT's SiteManager and STIP databases, and become part of the Plans, Specifications & Estimates submittal. The actual completion date is documented by the resident engineer and placed in MoDOT's project management system.

This is an annual measure updated each quarter.

#### **Improvement Status:**

The results indicate that 95 percent of projects completed in fiscal year 2011 have been on time. MoDOT has focused on reducing the number of days available for construction in order to reduce congestion and inconvenience to the traveling public, while stressing the importance of completing projects on time. To achieve timely completion of improvement projects, an emphasis has been placed on reviewing construction schedules and assessing liquidated damages.



## Percent of change for finalized contracts-9d

**Results Driver:** Dave Nichols, Chief Engineer

**Measurement Driver:** Dave Ahlvers, State Construction & Materials Engineer

### Purpose of the Measure:

The 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.

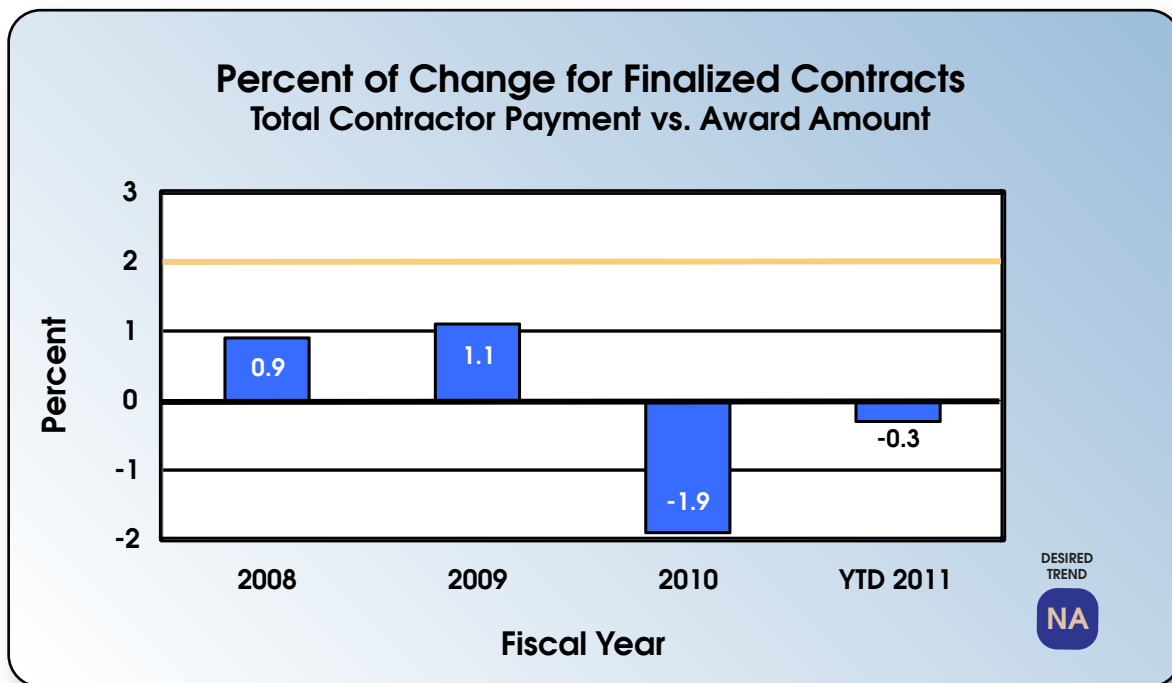
### Measurement and Data Collection:

Contractor payments are generated through MoDOT's SiteManager database and processed in the financial management system for payment. Change orders document the under run/over run of the original contract.

### Improvements Status:

MoDOT's performance of -0.3 percent in fiscal year 2011 is below the target of 2 percent. The overall improvement is a result of a strong emphasis placed on constructing projects within budget and the use of practical design and value engineering. By limiting overruns on contracts, MoDOT can deliver more projects, leading to an overall improvement of the entire highway system.

This is an annual measure updated each quarter.



## Average number of days from sponsor project selection to construction obligation-9e

**Result Driver:** Dave Nichols, Chief Engineer

**Measurement Driver:** Andy Mueller, Local Program Administrator

### Purpose of the Measure:

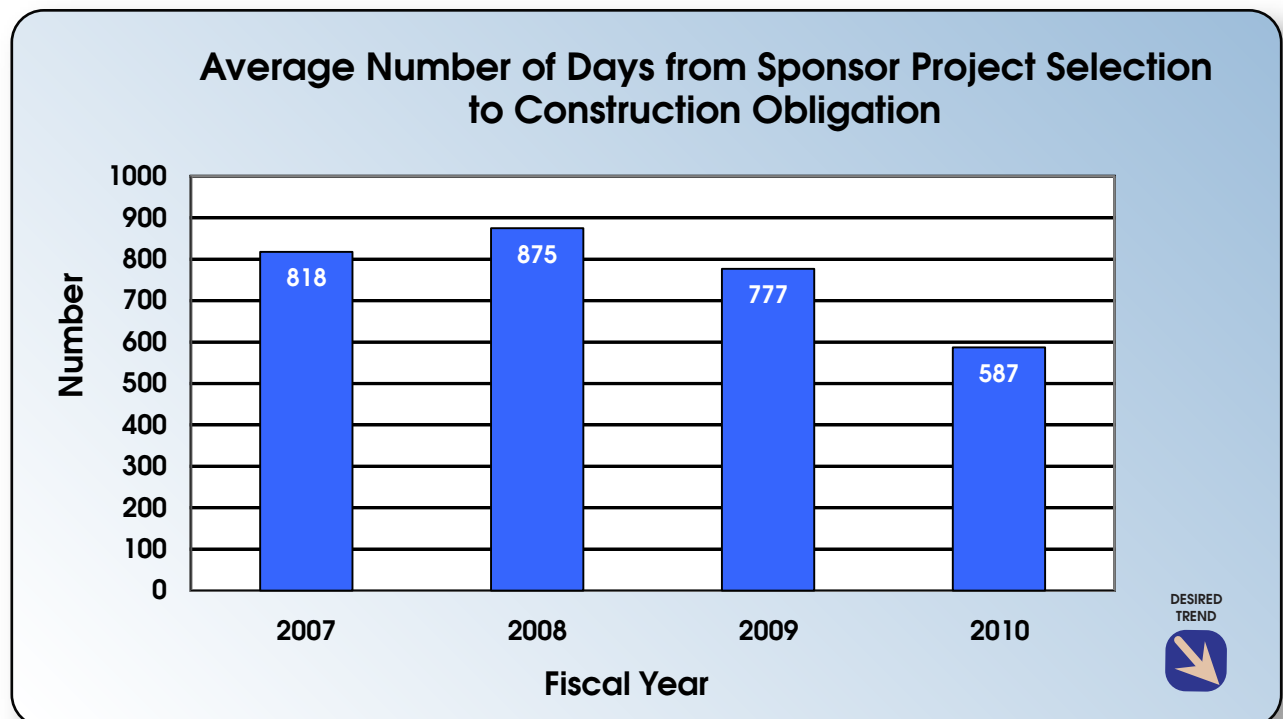
This measure monitors how quickly projects go from the programmed commitment to obligation of a construction project.

### Measurement and Data Collection:

MoDOT compares how long it takes from when the project is selected to when the project is obligated. This is an annual measure updated each quarter.

### Improvement Status:

In the past three years, the average number of days has consistently decreased. This improvement is a direct result of more aggressive schedules for local projects and an increased focus by MoDOT staff and local public agencies to deliver federally funded projects faster.



## Percent of LPA projects completed within engineer's estimate-9f

**Results Driver:** Dave Nichols, Chief Engineer

**Measurement Driver:** Andy Mueller, Local Program Administrator

### Purpose of the Measure:

This measure tracks the percentage of projects completed at or below the original engineer's estimate.

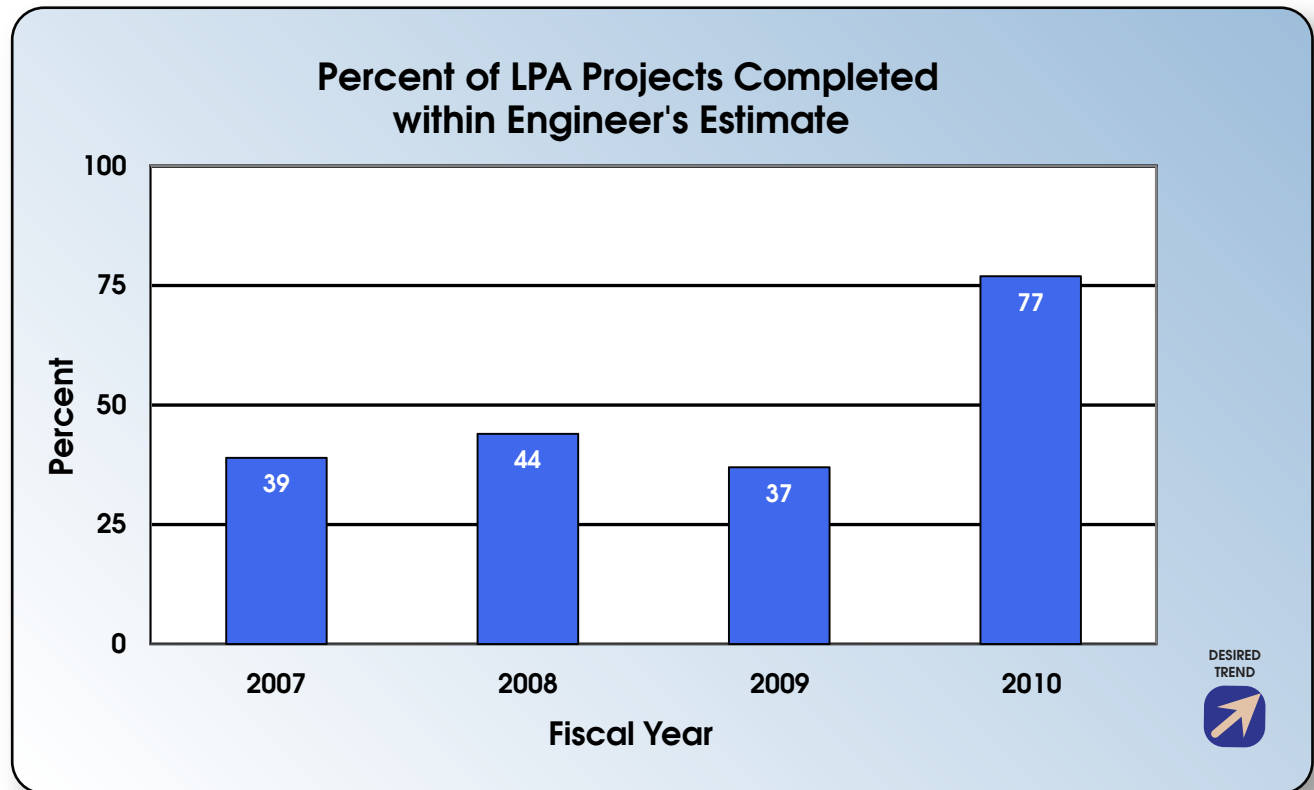
### Measurement and Data Collection:

The completed project cost is compared to the estimated cost for each project. The percentage of projects completed within the estimated cost is gathered from across the state.

This is an annual measure updated each quarter.

### Improvement Status:

MoDOT desires that all projects be completed within the programmed amount, thereby allowing the greatest number of projects to be built with the funding available. The data indicates that the majority of projects obligated in 2010 are being completed within their original programmed amount. There is a substantial increase from past years to 2010 indicating the sponsors had a better indication, in the programming stage, of the cost of a project.



## FAST PROJECTS THAT ARE OF GREAT VALUE

### Percent of LPA projects completed on time-9g

**Results Driver:** Dave Nichols, Chief Engineer

**Measurement Driver:** Andy Mueller, Local Program Administrator

#### Purpose of the Measure:

This measure tracks the percentage of projects completed by the commitment date established in the contract. Adjustments to the completion date are made when additional work is required or for unusual weather occurrences. It indicates the local sponsor's ability to complete projects by the agreed upon date.

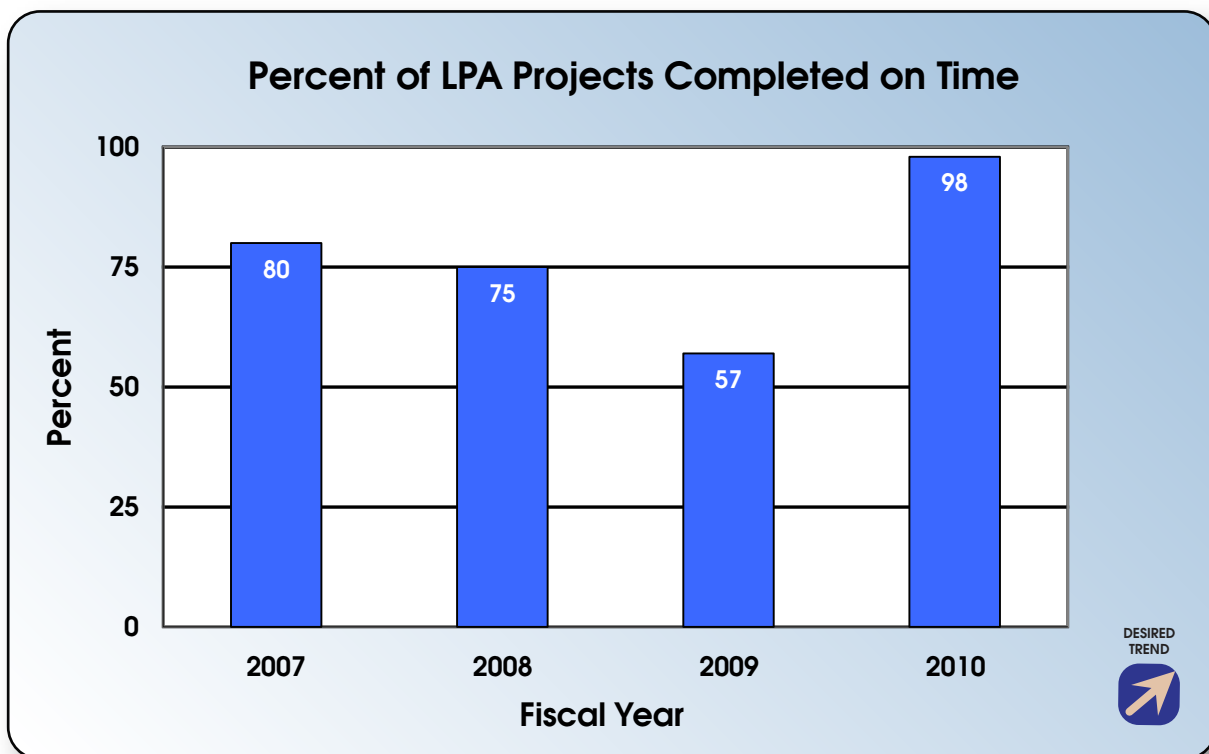
#### Measurement and Data Collection:

The local sponsor will establish project completion dates for each project. They are documented in each project's contract and in district databases, and become part of the Plans, Specifications & Estimates submittal. The actual completion date is documented by the project sponsor and also placed in the district

database. This is an annual measure updated each quarter.

#### Improvement Status:

The results indicate that 98 percent of projects obligated in 2010 that are now complete, have been on time. MoDOT has focused on reducing the number of days available for construction in order to reduce congestion and inconvenience to the traveling public, while stressing the importance of completing projects on time. To achieve timely completion of improvement projects, an emphasis has been placed on reviewing construction schedules and assessing liquidated damages.



## Percent of change for LPA finalized contracts-9h

**Results Driver:** Dave Nichols, Chief Engineer

**Measurement Driver:** Andy Mueller, Local Program Administrator

### Purpose of the Measure:

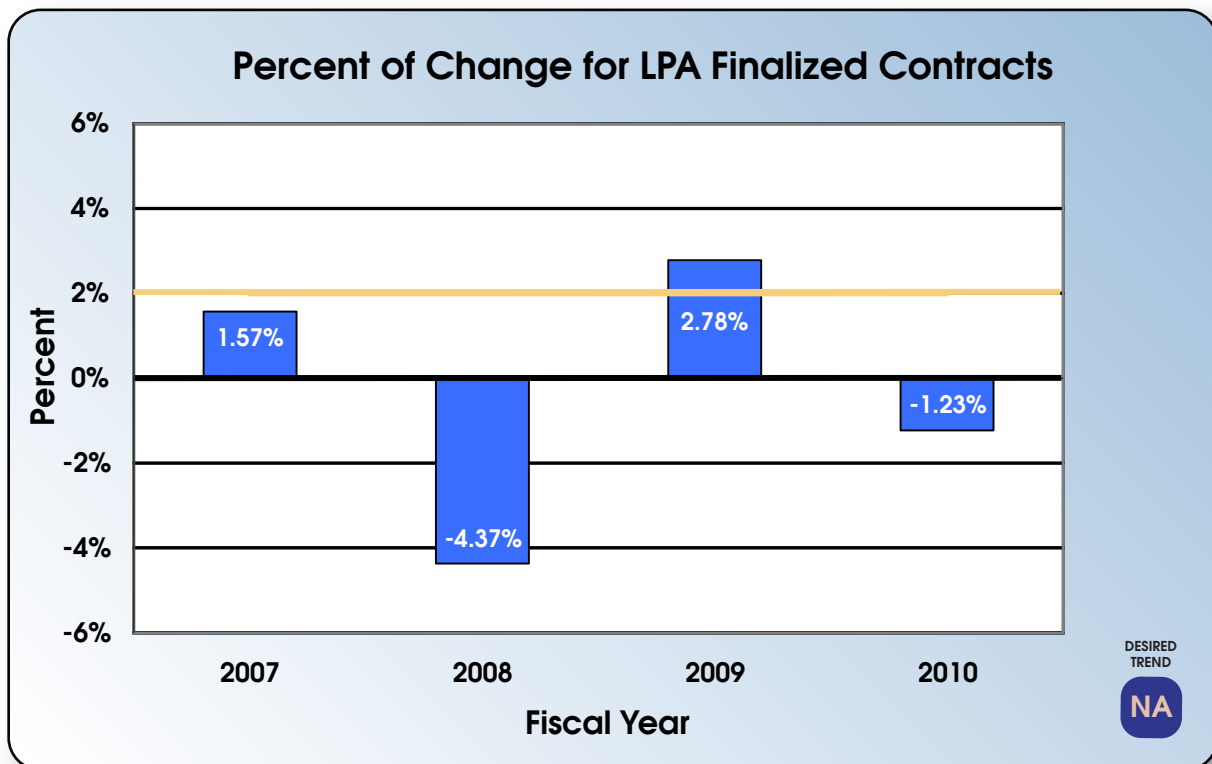
The measure tracks the percentage difference of total construction payouts to the original contract award amounts. This indicates how many changes are made on projects after they are awarded to the contractor.

### Measurement and Data Collection:

Local agency payments are generated and reimbursements processed in the financial management system for payment. Change orders document the under run/over run of the original contract. This is an annual measure updated each quarter.

### Improvements Status:

The Local Public Agencies' (LPA's) performance of -1.23 percent in 2010 is within the target of 2 percent. The overall improvement is the result of a strong emphasis placed on constructing projects within budget and the use of practical design and value engineering. By limiting overruns on contracts, LPA's can deliver more projects leading to an overall improvement of the entire highway system.



## Cumulative savings due to cost containment-9i

**Result Driver:** Dave Nichols, Chief Engineer

**Measurement Driver:** Joe Jones, Engineering Policy Administrator

### Purpose of the Measure:

This measure provides information regarding the comparison between baseline per-mile and per-bridge costs of projects completed prior to 2005 to projects awarded since 2005 and their awarded per-mile and per-bridge amounts. This component of the measurement captures the savings of applying practical design concepts and value engineering studies to project development, in addition to the award savings from contractor competition due to the economy and MoDOT's bid letting strategies. Some of these bid letting strategies include optional bidding packages, packaging and scheduling bids for maximum competition and Advance Technical Concept proposal opportunities in bidding. In addition to this, the savings realized from Value Engineering Change Proposals after the award of the contract has been added. Some examples of optional bidding packages include optional pavement, optional grading, schedule incentives and optional pipe products. The Alternate Technical Concept proposal is a new process in which prospective bidders on a project can submit, in confidence, an alternate concept. This concept is then reviewed and possibly approved prior to the letting. This process has proven to be a powerful initiative for competition among the contracting community.

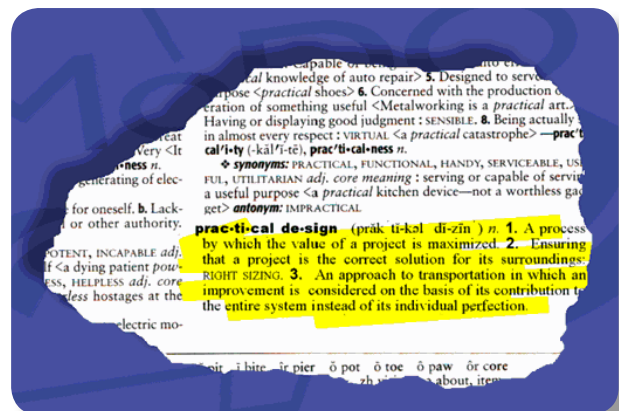
### Measurement and Data Collection:

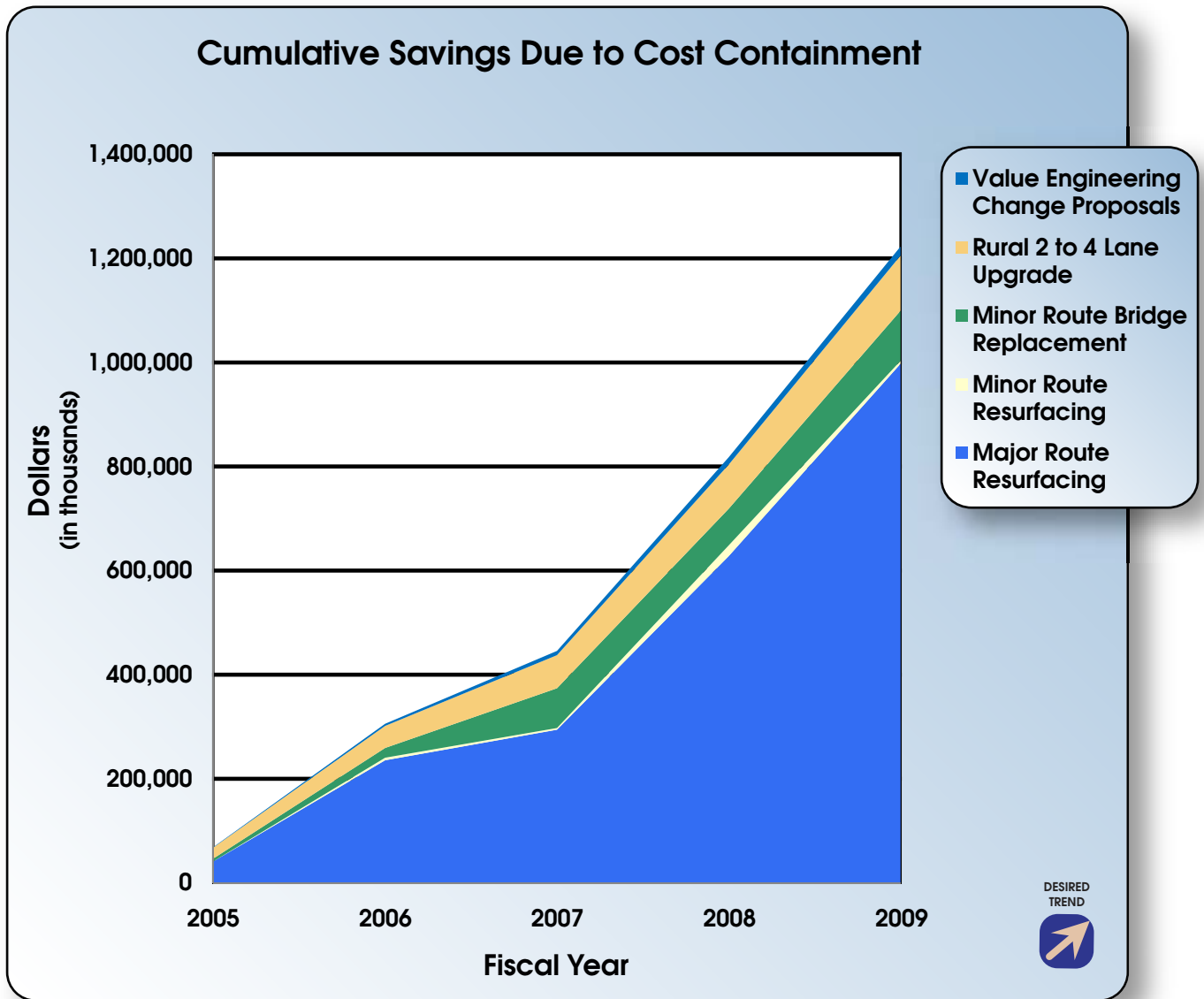
The baseline cost per mile and per bridge was determined by querying STIP Information Management System data on projects awarded from 2000 to 2004. The rural two- to four-lane corridors that were used for the baseline consisted of

Livingston County Route 36, Lewis County Route 61, Pemiscot County Route 412, Carter County Route 60 and Miller County Route 54 at Eldon. As rural corridors are completed, they will be added to this measure. The rest of this Tracker metric will be measured annually and updated in July of each year. The baselines also have a 3 percent inflation factor applied to them to assure that this metric remains a current and relevant measure of MoDOT's cost containment efforts.

### Improvement Status:

The cumulative costs savings since the inception of practical design in 2005 is \$1.2 billion. The bulk of these savings are from major route resurfacing projects. It is important to point out that this savings is mostly due to the substantial reduction in the design life-cycle of the resurfacing solutions. Another area of substantial savings has been minor route bridge replacements. This is a direct result of a practical approach on bridge widths, especially on minor routes with minimal pavement widths on the approaching roadways. In addition, rural corridors have contributed a large amount of savings as a result of practical approaches such as reducing median widths and minimizing the amount of interchanges.





*Concrete or  
Asphalt?  
Let the market-  
place decide.*



Giving Missourians the Best Value for their transportation investment.



### Percent of completed project costs compared to the project estimate in the environmental document-9j

**Result Driver:** Dave Nichols, Chief Engineer

**Measurement Driver:** Joe Jones, Engineering Policy Administrator

#### Purpose of the Measure:

This measure provides information regarding the comparison between the estimates for projects developed in the environmental document and the actual completed project costs.

#### Measurement and Data Collection:

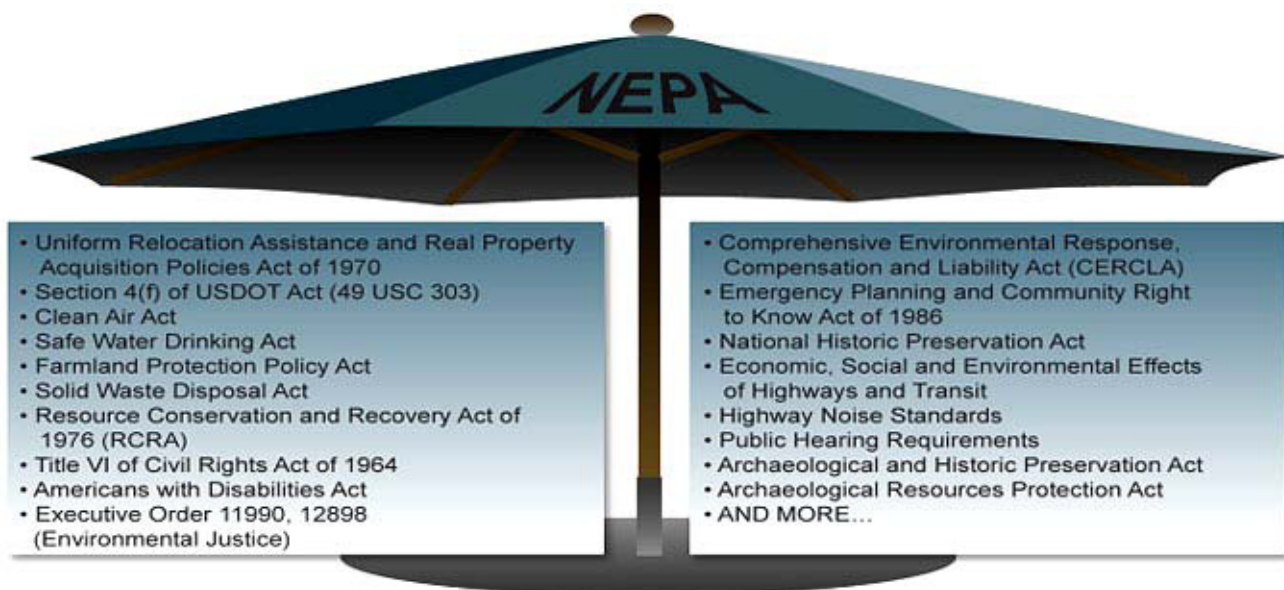
Data for this measure is collected by reviewing the cost estimates required by the National Environmental Policy Act (NEPA) and contained within environmental documents. Some of these documents have a single component, such as a major bridge, and others are comprised of several smaller projects that make up a larger corridor.

If all the projects within the environmental document have been awarded, their total award amounts are compared to the NEPA estimate within the document. If some, but not all of the projects have been awarded, the NEPA estimate is prorated for purposes of comparison. The environmental documents analyzed include environmental assessments (EA) or environmental impact statements (EIS). This is an annual measure updated in July.

#### Improvement Status:

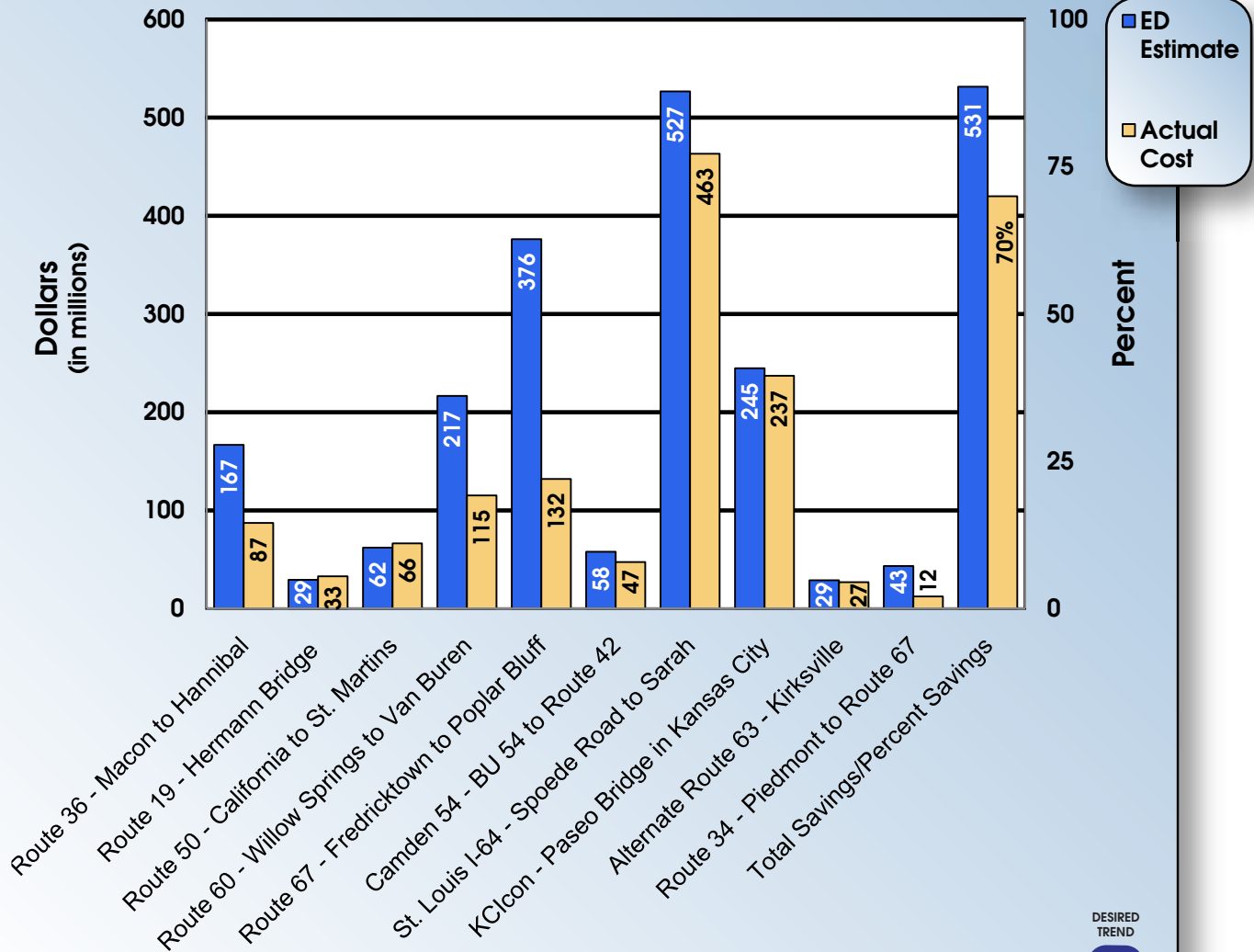
Developing a trend for this measure is a somewhat dynamic process. Environmental documents written in the pre-practical design era display a significant savings when compared to their post-practical design awards. This savings is indicative of MoDOT's efforts in the areas of value and practicality. However, NEPA estimates prepared post-practical design would be more closely aligned with actual awards and show little or no savings. This condition is misleading since MoDOT continues to save money by employing a host of cost-control measures. Since the vast majority of projects currently analyzed were products of pre-practical design NEPA documents, a savings trend will be used initially. Moving forward, this trend will be phased out in favor of one showing how closely NEPA estimates match actual awards.

Currently, \$531 million has been saved in completed project costs relative to the estimated costs in the environmental documents. Much of these costs are associated with the reduction of grade-separated interchanges identified in the environmental documents. These projects have been delivered at 70 percent of the estimates developed in the environmental documents.



FAST PROJECTS THAT ARE OF GREAT VALUE

Percent of Completed Project Costs Compared to the Project Estimate in the Environmental Document



Calendar Year 2009



### Percent of customers who believe completed projects are the right transportation solutions-9k

**Result Driver:** Dave Nichols, Chief Engineer

**Measurement Driver:** Jay Bestgen, 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 that is sent to users of projects that were completed and opened to traffic within the previous year. The goal is for the MoDOT districts to identify 30 projects – three per district – in three different categories (large – major route listed as or funded through major project dollars; medium – district-wide importance; and small – only local significance).

A sample of residents is drawn from zip code areas adjoining the roadway where the project was recently completed. The samples have included 400 addresses per project areas for a total of 12,000 surveys (11,600 in 2007 when there were 29 projects included). Nearly 2,900 surveys were returned in the initial survey, followed by 2,300 (2007), 2,697 (2008), 2,461 (2009), and 2,234 in the most recent survey.

This measure is reported annually in January. Districts will continue to identify one project in each of the three categories to be surveyed, although it is recognized that it might not be possible for every district to have three projects that meet the criteria each year.

#### Improvement Status:

Project-specific questions were asked of MoDOT customers and each showed a high level of satisfaction with important goals such as safety, convenience, less congestion, handles traffic efficiently, easy to navigate, easy to understand and well-marked.

All of the key measures were statistically similar to last year's high ratings, however all of the measures went down slightly this year. The overall results show that most Missourians are very satisfied with their local project and generally believe that MoDOT provides the right transportation solution. 89.2 percent of the respondents were either "very" or "fairly" familiar with the project roadway, and 73.8 percent of the respondents were regular users of the affected roadway.

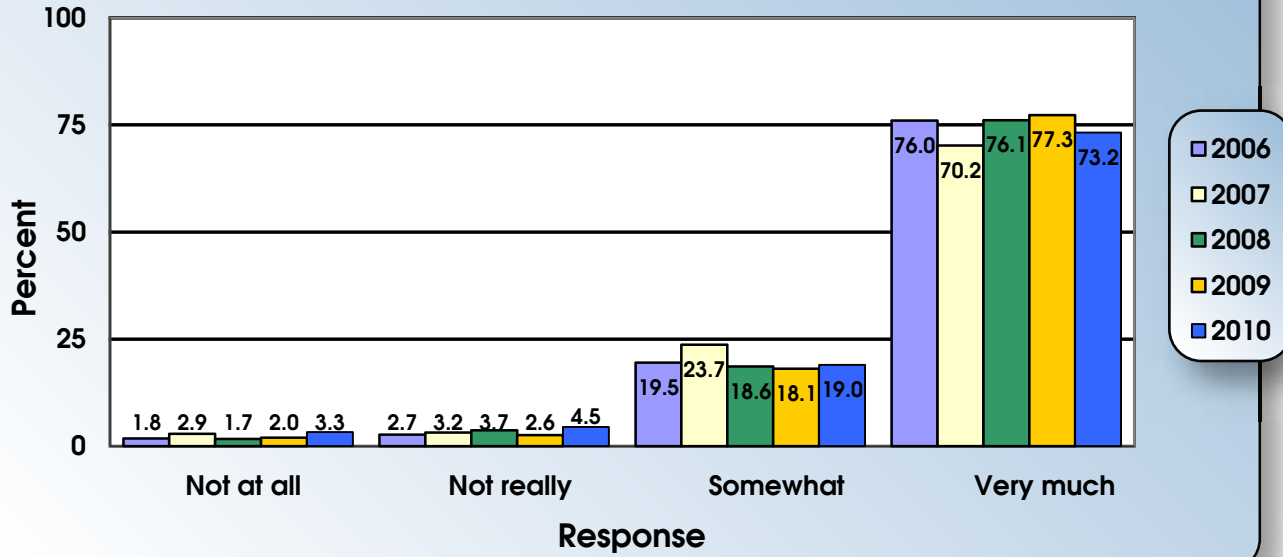
The majority of respondents thought that the project made the roadway:

- safer (92.6 percent),
- more convenient (90.5 percent),
- less congested (81.8 percent),
- easier to drive (91.5 percent),
- better marked (88.8 percent), and
- was the right transportation solution (92.2 percent).

As part of the questionnaire, each respondent had the opportunity to provide comments about why their local project was – or was not – the right transportation solution. Each comment that was provided has been shared with the districts for their evaluation and guidance for future projects.



**Percent of Customers Who Believe Completed Projects Are The Right Transportation Solutions**





A close-up photograph of several hands of different skin tones gently holding and sifting dark brown soil. Some green grass blades are visible in the soil. The image is partially obscured by a semi-transparent white box containing text.

# ENVIRONMENTALLY AND SOCIALLY RESPONSIBLE

*Tangible Result Driver – Kathy Harvey, State Design Engineer*

MoDOT takes great pride in being a good steward of the environment, both in the construction and operation of Missouri's transportation system and in the manner in which its employees complete their daily work. The department strives to protect, conserve, restore and enhance the environment while it plans, designs, builds, maintains and operates a complex transportation infrastructure.

Just as MoDOT is dedicated to environmental responsibility, we are also dedicated to employing a workforce and providing opportunities to contractors and vendors that reflect the customers, communities and cultures we serve. We value diversity and inclusiveness because we believe in the power of our differences.

### Percent of projects completed without environmental violation-10a

**Result Driver:** Kathy Harvey, State Design Engineer

**Measurement Driver:** Gayle Unruh, Environmental and Historic Preservation Manager

#### Purpose of the Measure:

This measure tracks environmental violations. MoDOT projects must comply with several environmental laws and regulations. To be in compliance, MoDOT makes commitments throughout the project development process that must be carried forward during construction and maintenance. In addition, the various permits obtained for projects also contain specific requirements for compliance. MoDOT must also comply with the environmental laws and regulations as it conducts its daily work in all areas of the organization.

If a violation is noted, it can result in either a Letter of Warning (LOW) or a Notice of Violation (NOV) to MoDOT. Letters of Warning can also be received as simply that, a warning to MoDOT of a special circumstance to be aware of, or for a situation that needs to be monitored so that a violation does not occur. For that reason, LOWs never will be eliminated but should be kept to a minimum. However, it is unacceptable to the department to have an NOV.

#### Measurement and Data Collection:

Both LOWs and NOVs are written correspondence to MoDOT or MoDOT's contractors from regulatory

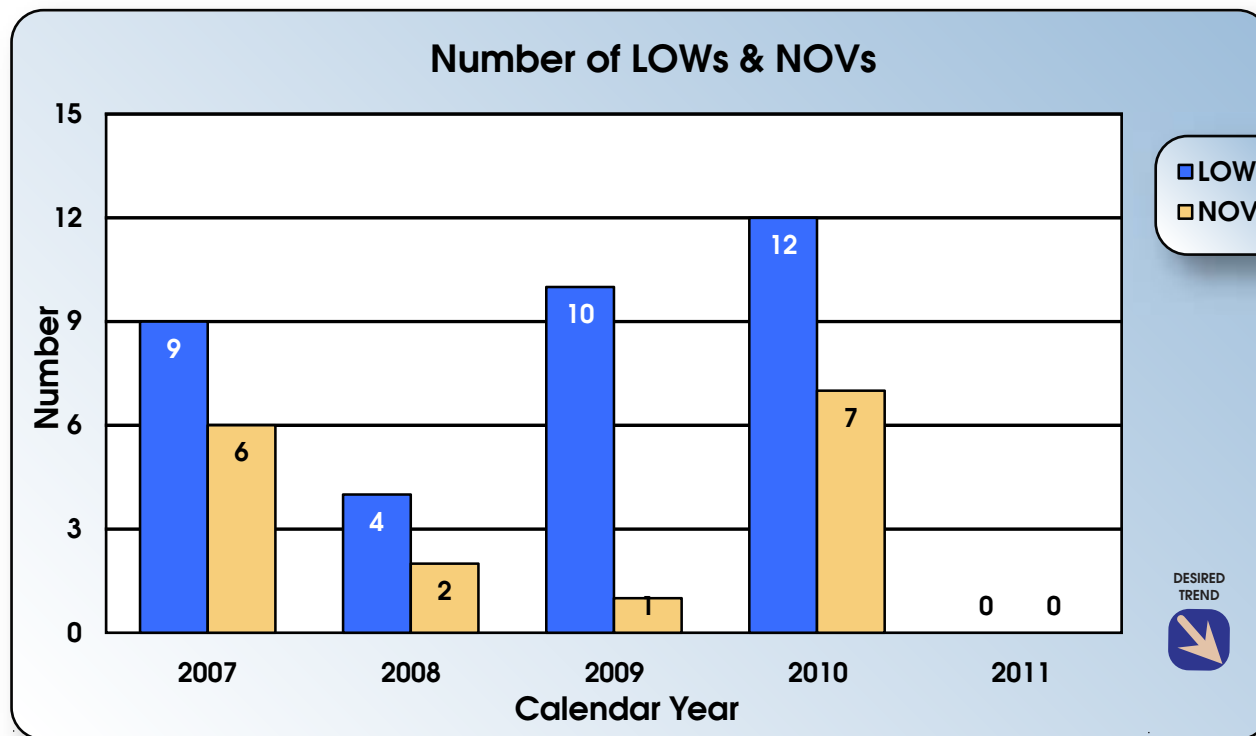
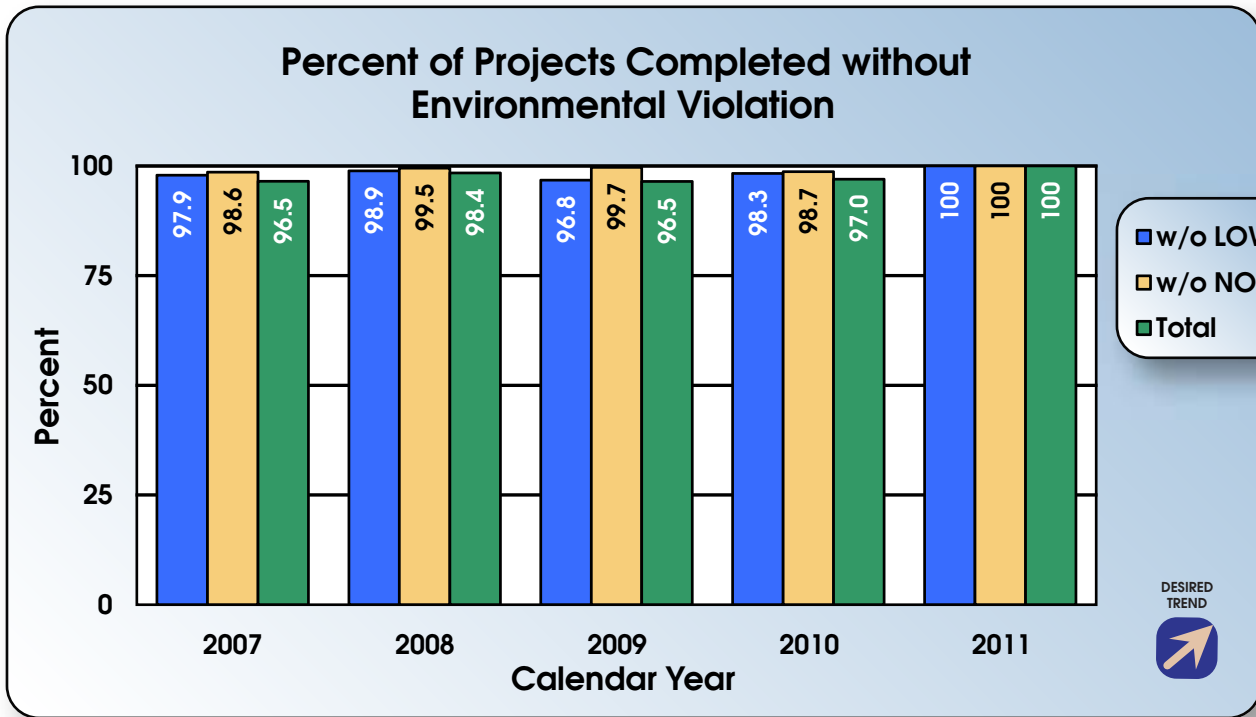
agencies, which are tracked in a MoDOT database by location or project number, as appropriate. Where tracked by project, the project with violations received may span several years. The first chart is based on a calendar year of construction projects reported to be completed during that year and the number of violations received on those projects over the life of the project. The second chart is a report by calendar year of the LOWs and NOVs received by the department for any activity and the data is updated quarterly.

#### Improvement Status:

The percentage of projects completed without environmental violations is relatively level over the past five years with only 0.5 to 3 percent differences from year to year. For 2010, 97 percent of projects were completed without environmental violations. For the first quarter of calendar year 2011, 100 percent of the projects were completed without environmental violation.

- First Quarter 2011 – MoDOT received no LOWs or NOVs.





Note: There is no benchmark data presented with this measure. MoDOT has a zero-tolerance policy toward NOVs, but recognizes LOWs will never be eliminated due to their nature. Therefore, regardless of what other states are doing, MoDOT's desired results are zero NOVs, because NOVs are usually violations of law and state statute.



## Tons of carbon emissions from drivers on Missouri roads-10b

**Results Driver:** Kathy Harvey, State Design Engineer

**Measurement Driver:** Gayle Unruh, Environmental and Historic Preservation Manager

### Purpose of the Measure:

This measure tracks the total tons of carbon emissions resulting from fuel used while driving in Missouri, the total gallons of fuel purchased in the state and the vehicle miles traveled (VMT) by various categories of vehicles on the entire Missouri system including state, county and local roadways.

various vehicles. Prior to 2008 there was a process that adjusted the statewide VMT based on an average growth factor. To split the VMT into categories, known percentages of vehicle types using only the state highway system were applied to the VMT for the entire statewide roadway system. This is an annual measure updated each January.

### Measurement and Data Collection:

Information is prepared from fuel tax information provided by the Missouri Department of Revenue and converted by the Missouri Department of Transportation to tons of carbon emissions and vehicle miles traveled. Tons of carbon emissions are calculated with the following formulas:

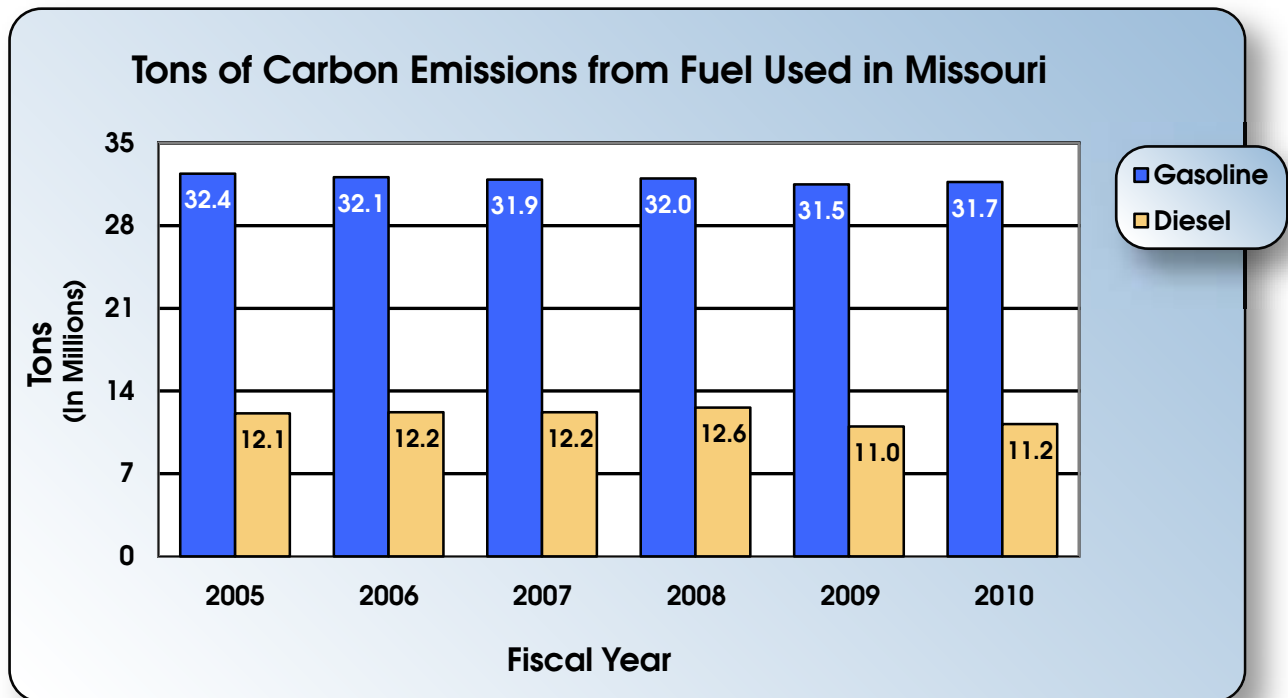
Gasoline: number of gallons consumed x 19.42 (to get to pounds of CO<sub>2</sub>) x 1.057 (remaining emissions factor) / 2000 (to convert to tons).

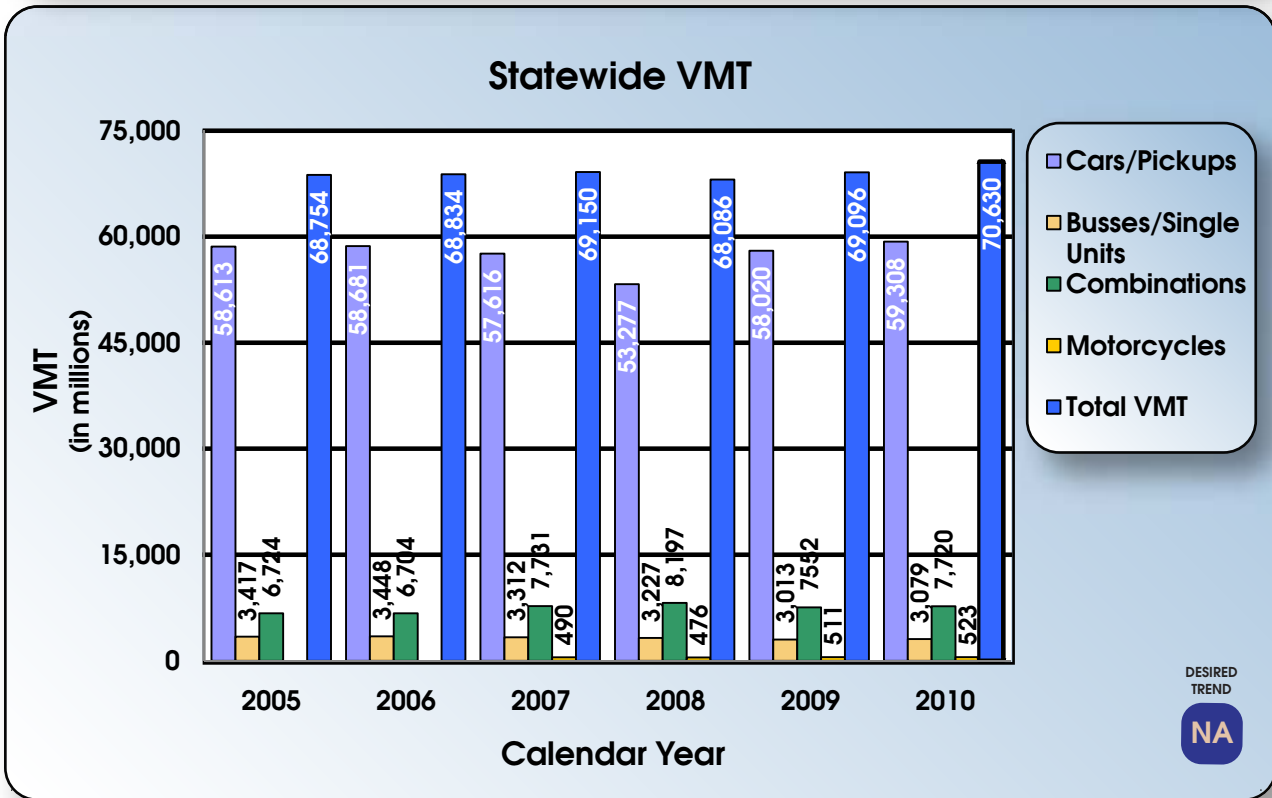
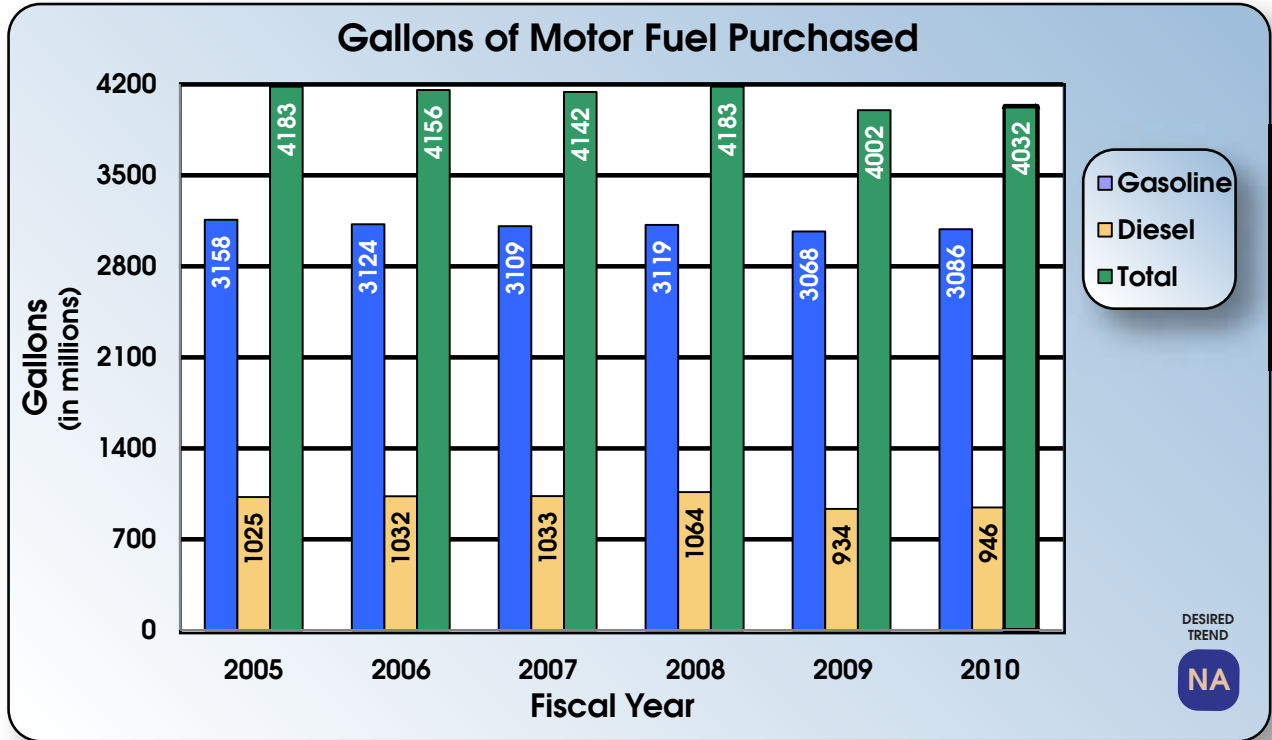
Diesel: number of gallons consumed x 22.38 (to get to pounds of CO<sub>2</sub>) x 1.057 (remaining emissions factor) / 2000 (to convert to tons).

Starting in 2008, total VMT is estimated from the fuel sales using published average mileage for

### Improvement Status:

Overall, there has been a relatively level trend between 2005 and 2010 in tons of carbon emissions and an overall downward trend in gallons of fuel purchased, although 2010 is slightly higher (0.75 percent) than 2009. Statewide VMT in 2010 was up 2.2 percent from 2009. Improved fuel efficiency in the statewide fleet allows for VMT to grow while the fuel purchased remains steady. This information is being used to develop a Missouri baseline for the data.





## Metric tons of CO<sub>2</sub> generated from MoDOT activities – 10c

**Result Driver:** Kathy Harvey, State Design Engineer

**Measurement Driver:** Dave Ahlvers, State Construction and Materials Engineer

**Purpose of the Measure:**

This measure tracks MoDOT’s effort to reduce its CO<sub>2</sub> emissions through the use of environmentally responsible practices.

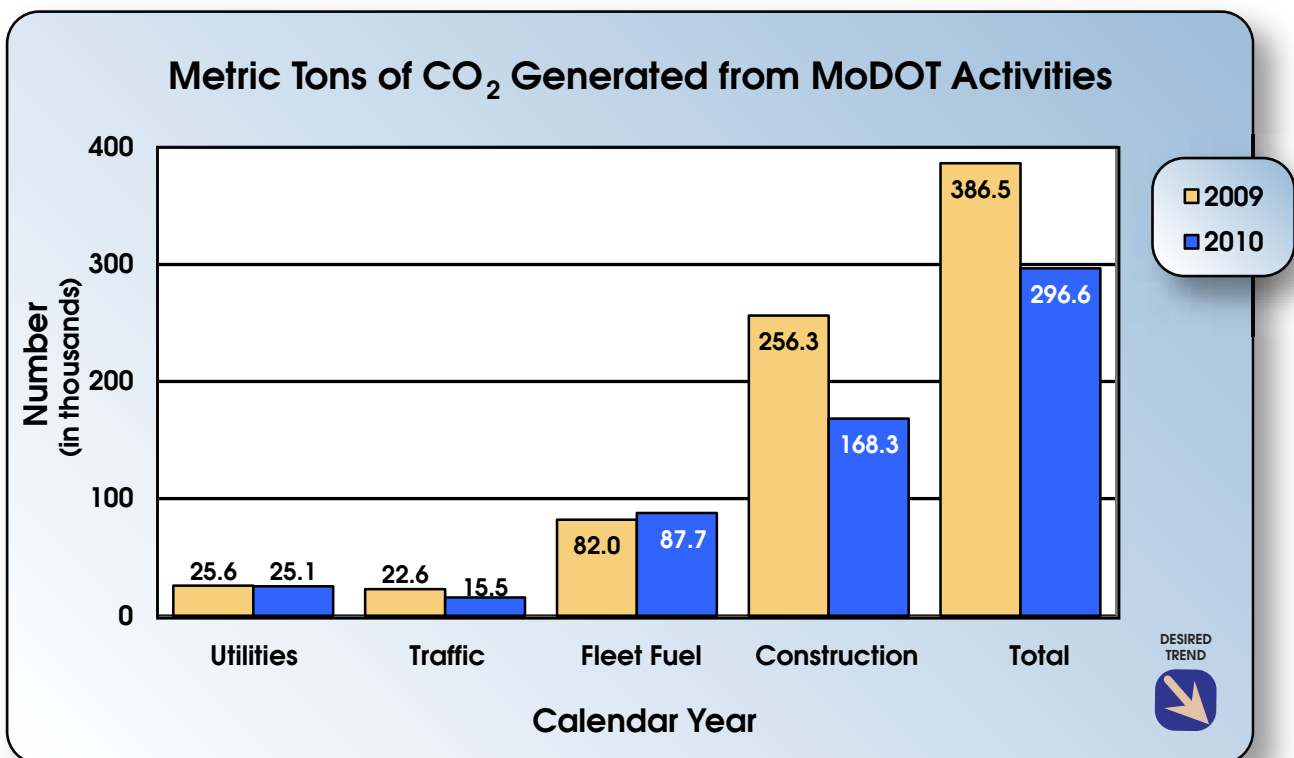
**Measurement and Data Collection:**

The number of metric tons of CO<sub>2</sub> emissions produced through MoDOT activities will be calculated and reported on an annual basis. The amount of fuel and power consumed through utilities and traffic, fleet and construction are converted into metric tons of CO<sub>2</sub>. The annual total will be reported in each April edition.

**Improvement Status:**

In 2010 MoDOT emitted 296,600 tons of CO<sub>2</sub>. The 2010 numbers indicate a reduced amount of emissions primarily due to the reduced amount of asphalt construction work completed.

The strategies currently in place to reduce emissions in utilities and traffic include the use of LED bulbs for traffic signals and highway lighting, solar panels for flashers, more efficient bulbs, insulation, window replacement and occupancy sensors for maintenance and office facilities. Strategies in place for reducing emissions in fleet and fuel include idle reduction, reduced mowing and use of more efficient equipment. The construction operation is utilizing idling technologies and engines which reduce emissions. Warm mix asphalt and the increased use of recycled material reduce fuel consumption in the asphalt industry. Recycling of concrete pavement results in less hauling and quarry operations. Several MoDOT contracts contain green credits which incentivize the use of environmentally friendly practices.



## Number of tons of recycled material-10d

**Result Driver:** Kathy Harvey, State Design Engineer

**Measurement Driver:** Dave Ahlvers, State Construction and Materials Engineer

**Purpose of the Measure:**

This measure tracks MoDOT’s efforts to be environmentally conscious through the use of recycled/waste material.

**Measurement and Data Collection:**

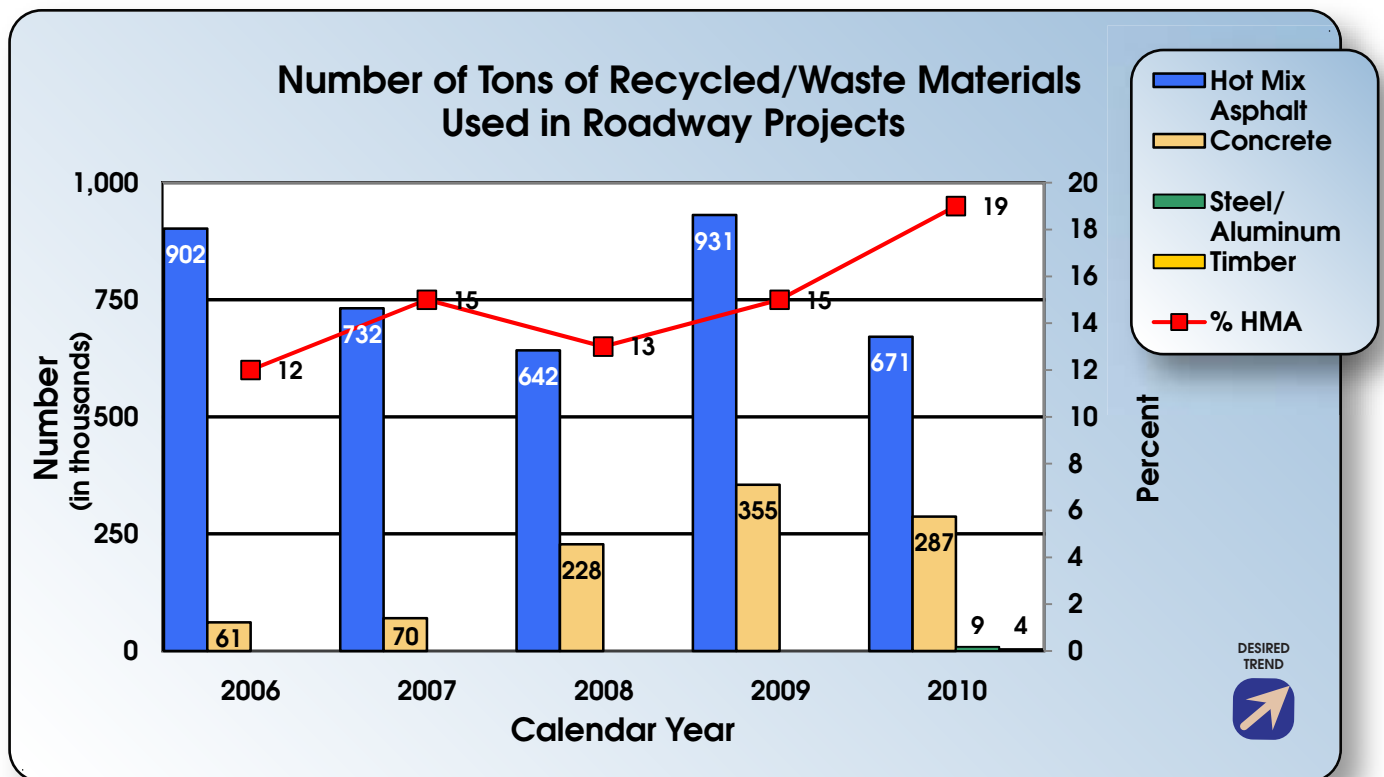
The number of tons of recycled/waste material used in projects is measured through MoDOT’s construction management database, which tracks material incorporated into projects. Data is collected on an annual basis due to the seasonal nature of the construction. The annual total is finalized in each April edition.

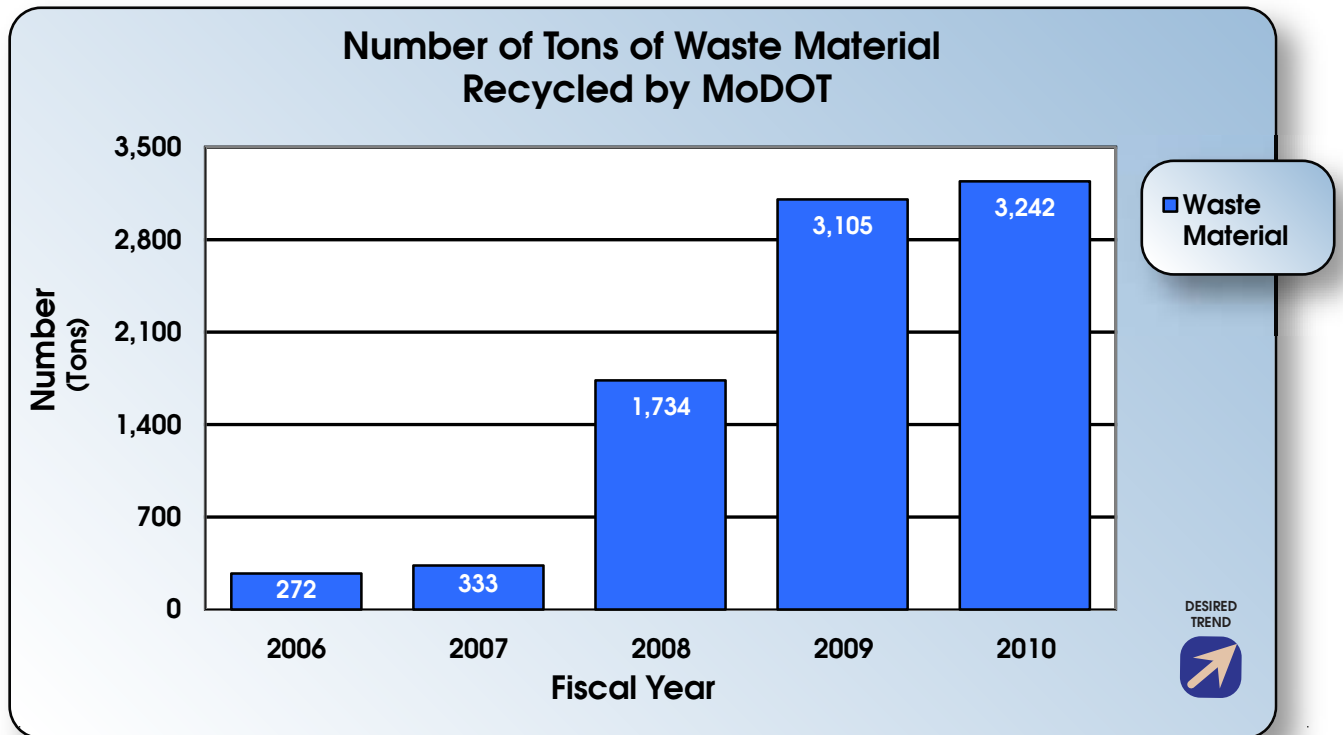
The number of tons of waste material recycled by MoDOT is captured from the annual Missouri State Recycling Program report and from the Maintenance Division. This will be reported in the October edition.

**Improvement Status:**

Recycled hot mix asphalt (HMA) quantities represent 19 percent of the total HMA placed to date; well above the last four years when this percentage ranged from 12 to 15 percent. Reclaimed concrete stayed at an elevated level with the inclusion of material removed from Safe & Sound bridges and kcICON.

This is the first reporting of steel and aluminum material removed from bridges. The largest portion of this is from reinforcing steel salvaged from the demolition of concrete bridges. Also, this is the first time to report product from clearing operations. This basically represents mulch and timber removed from the Rte. 141, Chesterfield project. As can be seen in the graph, it is a small portion of the total of all materials.





## Being Green at MoDOT

### Roofs to Roads

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



Shingles are ground up and processed

## Environmental improvement plan on maintenance facilities-10e

**Results Driver:** Kathy Harvey, State Design Engineer

**Measurement Driver:** Kirk Juranas, District Engineer, District 8

**Purpose of the Measure:**

This measure tracks MoDOT’s efforts toward environmental improvement in the operations of its maintenance facilities across Missouri. The improvement plan will be completed by the end of fiscal year 2012.

This is a quarterly measure.

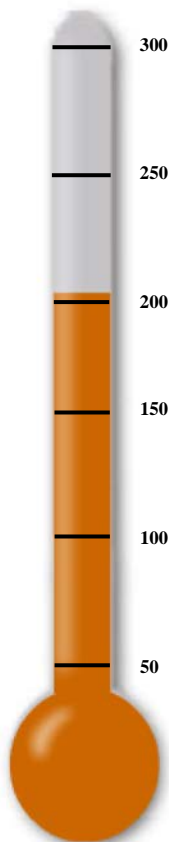
**Improvement Status:**

At the beginning of fiscal year 2010, MoDOT’s Environmental Steering Committee directed MoDOT facilities to demonstrate environmentally and socially responsible operations. Following that meeting, a three-year plan was developed to monitor installation of fence, containment for liquids, storm water and wash water. Improvements such as updated spill protection plans for each facility having petroleum products of 1320 gallons or more have been put in place.

**Measurement and Data Collection:**

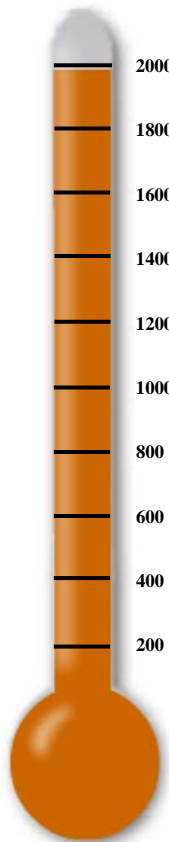
The data is developed from the number of facilities that meet requirements for security, have spill prevention measures in place and properly dispose of waste. Also reflected are the number of maintenance facilities that have completed their environmental improvement plans, budget and projects completed.

**Number of Facilities**  
333



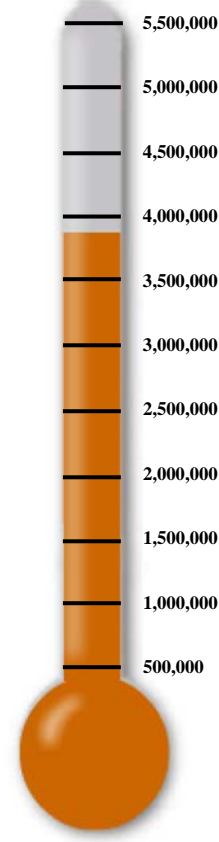
(218 Facilities as of Mar. 31, 2011)  
Facilities With All  
Planned Improvements  
Complete

**Planned Projects**  
2,134



(1,998 Projects as of Mar. 31, 2011)  
Projects  
Completed

**Budget**  
\$5.592 Million



(\$3.785 Million as of Mar. 31, 2011)  
Dollars Spent  
Against Total  
Budget



### Gallons of fuel consumed and miles per gallon- 10f

**Result Driver:** Kathy Harvey, State Design Engineer

**Measurement Driver:** Jeannie Wilson, Central Office General Services Manager

#### Purpose of the Measure:

This measure tracks the use of fuel and fuel efficiency within MoDOT. It shows MoDOT's contribution toward environmental responsibility and conservation of resources. The first chart shows the total number of gallons of fuel consumed. Miles per gallon data is shown for the five vehicle classes that accumulate the majority of miles driven. The five classes are separated into light duty and heavy duty equipment. The other charts indicate the average miles per gallon for cars, pickups, and light duty, heavy duty and extra heavy duty trucks .

#### Measurement and Data Collection:

This measure is intended to focus on the total fuel consumed and how wise choices can impact fuel economy. Fuel data is collected based on the number of gallons of fuel consumed by unit recorded in the statewide financial system. Mileage data is gathered through the FASTER fleet management system.

#### Improvement Status:

In comparing the third quarter of fiscal year 2011 to the third quarter of fiscal year 2010, the total fuel consumed decreased by 331,000 gallons, or 4.8 percent.

Diesel and biodiesel combined decreased approximately 268,000 gallons (5.4 percent); and unleaded and E85 gasoline combined decreased approximately 63,000 gallons (3.3 percent).

The majority of the reduction in the use of diesel fuel took place in the northwestern third of the state. Even though the state experienced a blizzard this past winter, this part of the state had a slightly better winter in fiscal year 2011 than in fiscal year 2010. This reduced the amount of diesel fuel used in the dump truck fleet. For the rest of the state that experienced a more severe winter, strategies from the Five-Year Direction supported fuel savings for winter operations.

Other activities that impacted the use of diesel fuel also demonstrated a decline in miles/hours reported. Signing and striping decreased 560,000 miles which can be attributed to paint supply issues. Mowing activities decreased by 58,000 hours and pavement maintenance activities decreased by 1.3 million miles.

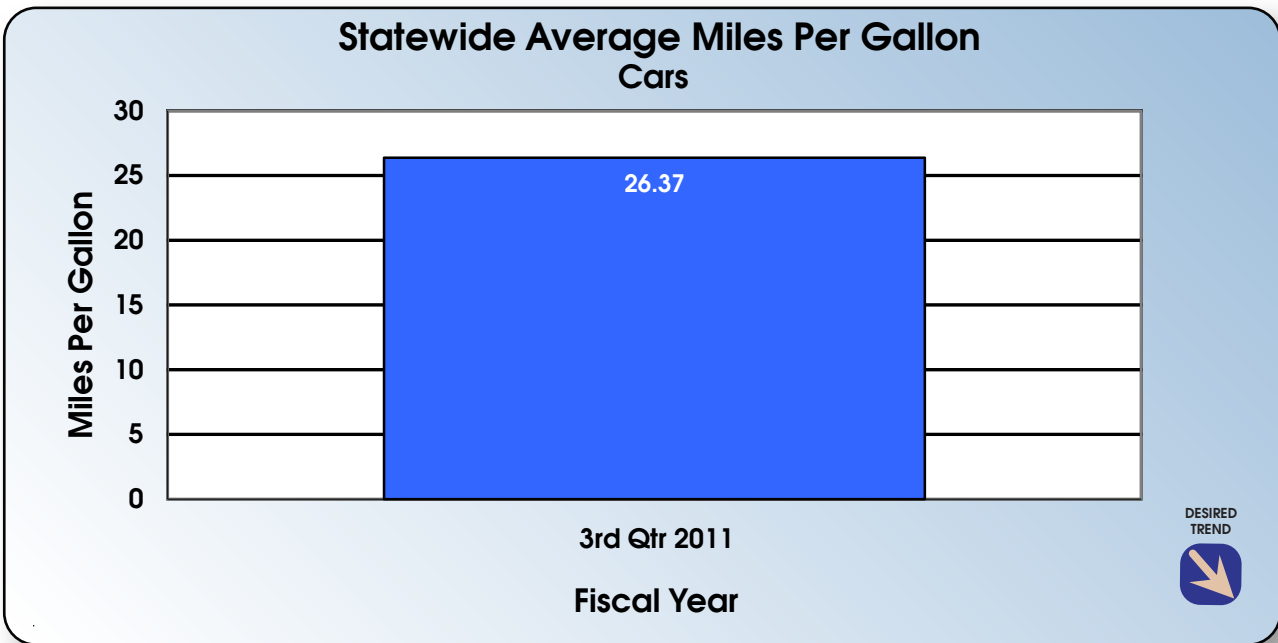
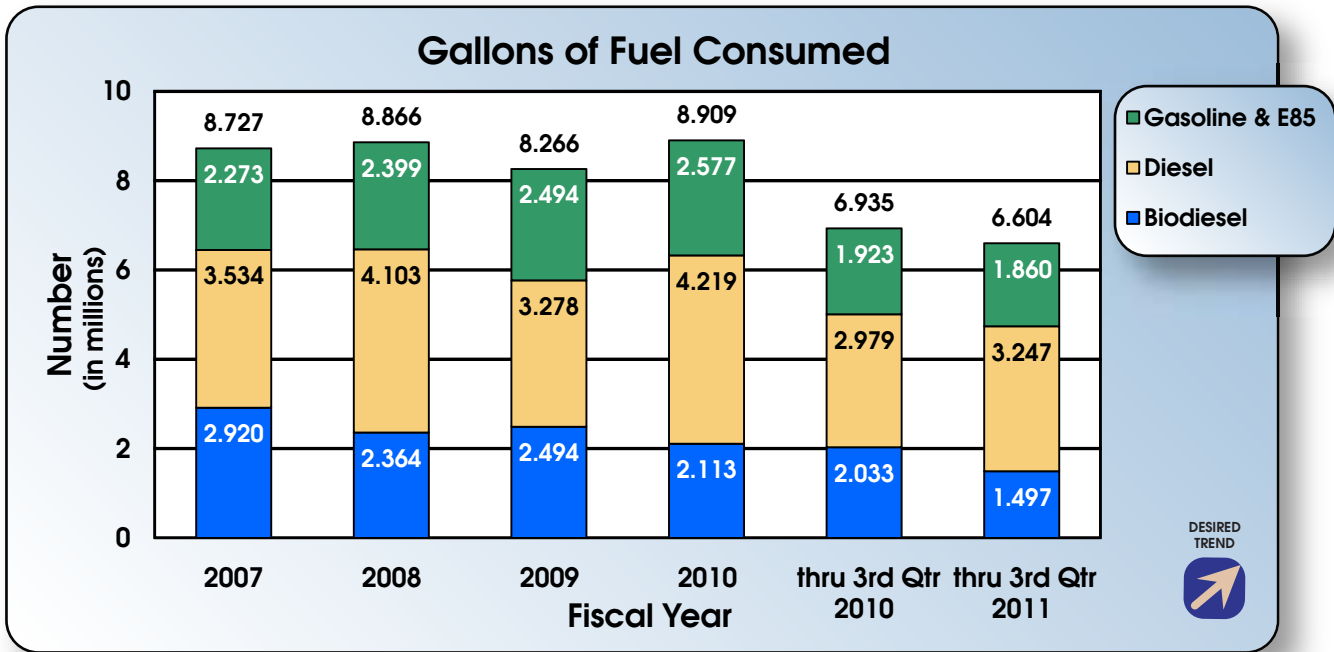
The reduction in construction activities resulted in over 600,000 fewer miles traveled causing a decline in the amount of unleaded fuel consumed.

The statewide miles per gallon portion of this measure has changed to report miles from the automated fuel management system. Due to this change, there is no historical reporting of miles per gallon. The charts were also regrouped by class to report on similar types of equipment. The classes are: passenger cars, pickups and light duty trucks, heavy and extra heavy duty trucks.

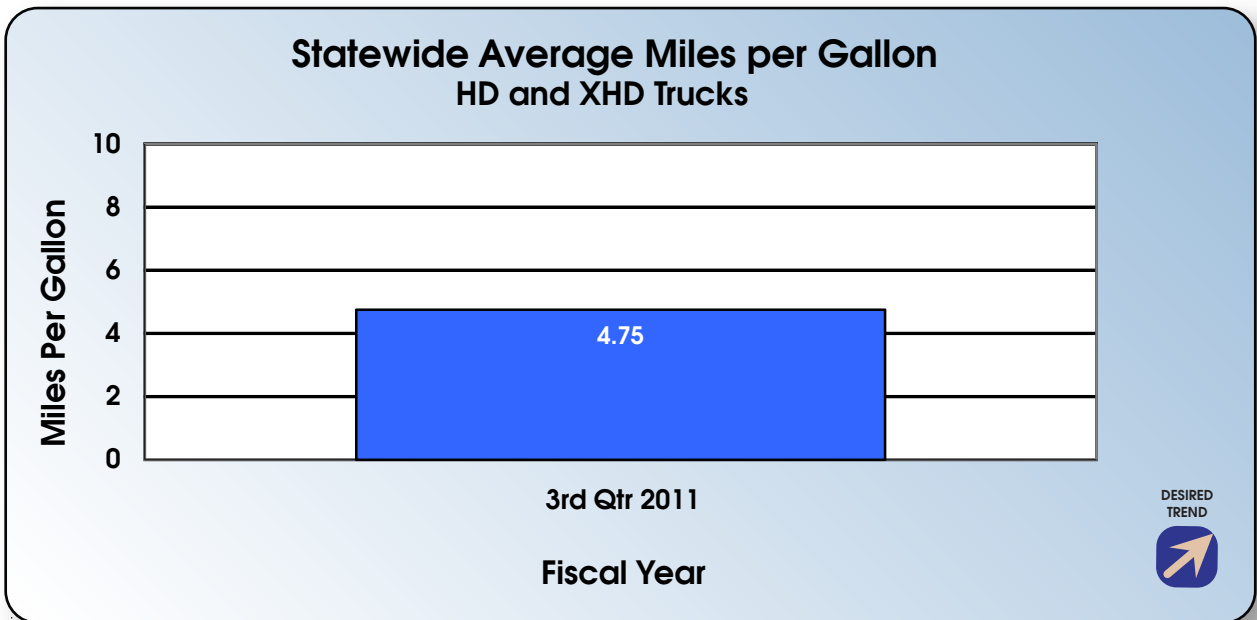
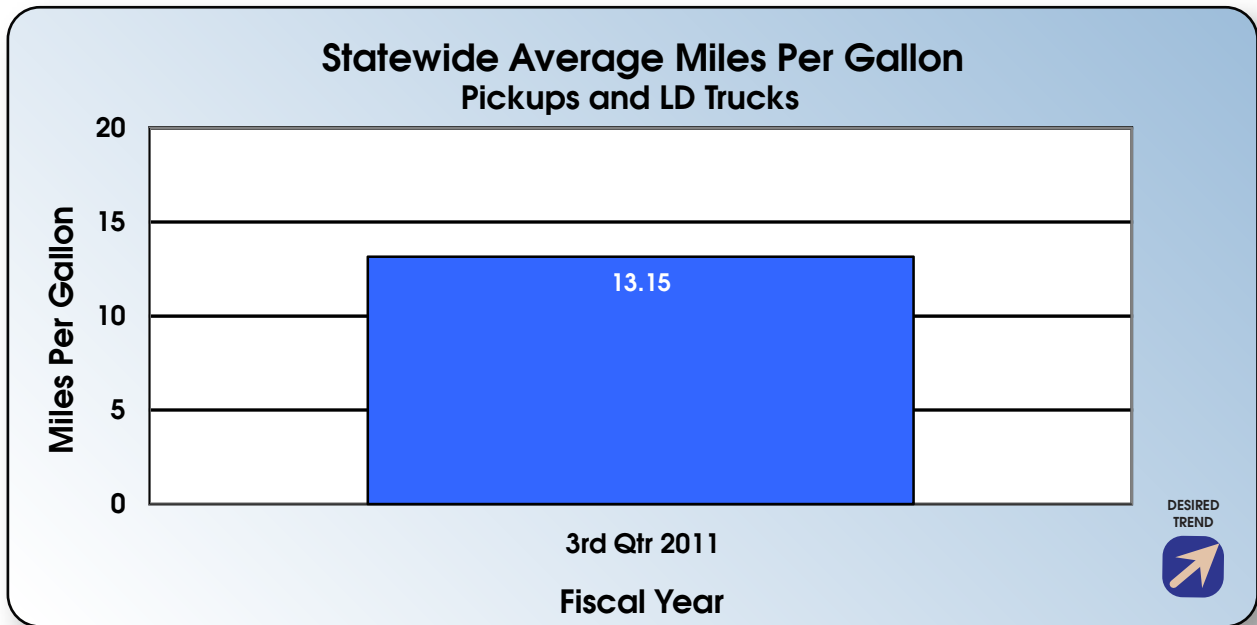


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MoDOT's new statewide automated fuel management system will help the department gain efficiencies and account for petroleum products by providing the ability to track fuel deliveries, fuel dispensed per transaction and site inventory levels.







## Cost and usage of utilities for facilities-10g

**Result Driver:** Kathy Harvey, State Design Engineer

**Measurement Driver:** Doug Record, General Services Manager

### Purpose of the Measure:

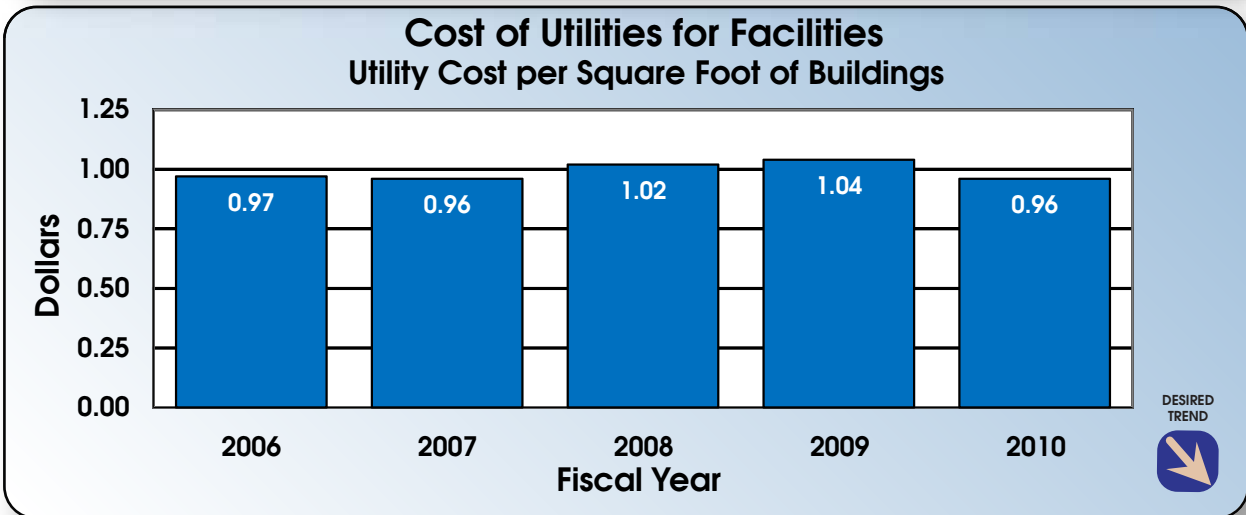
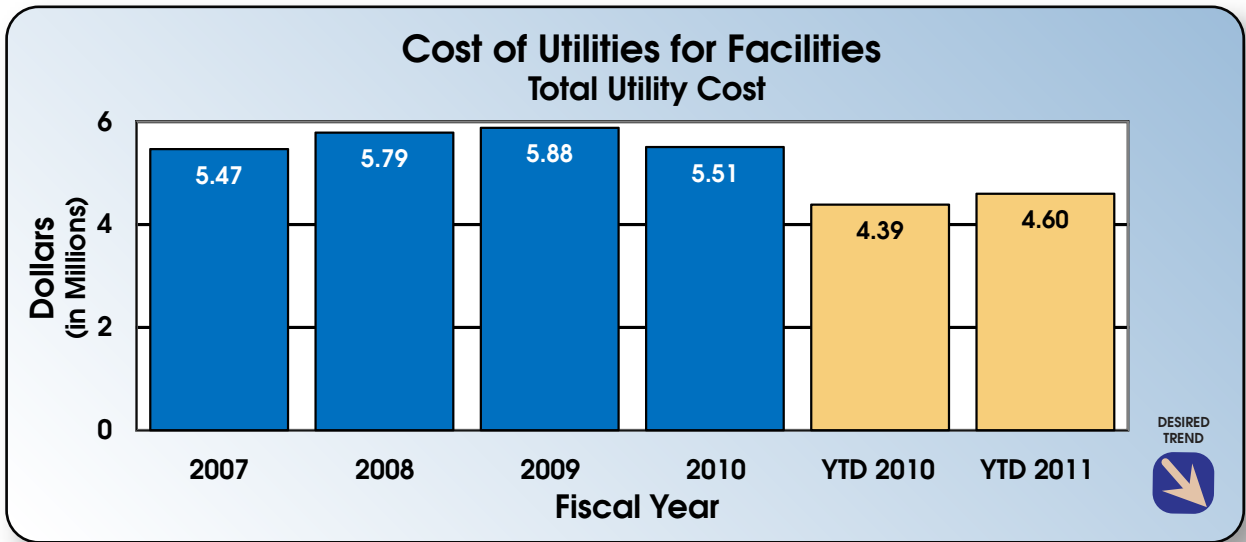
This measure tracks the cost and usage of utilities for department facilities, excluding roadways. It attempts to capture the impact of energy efficient improvements in buildings and operations.

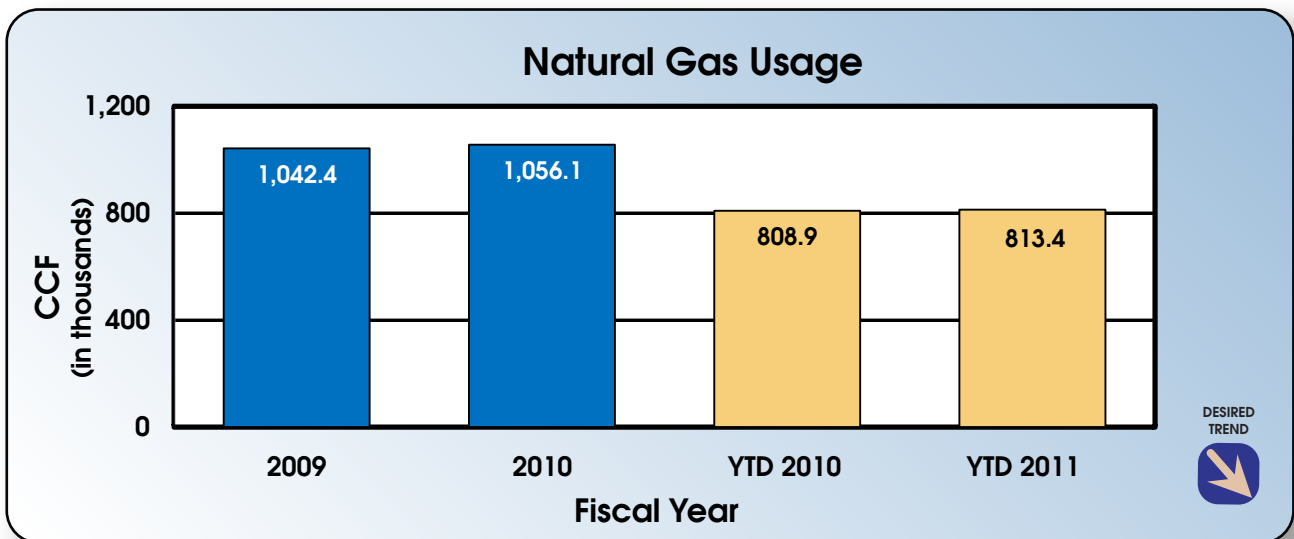
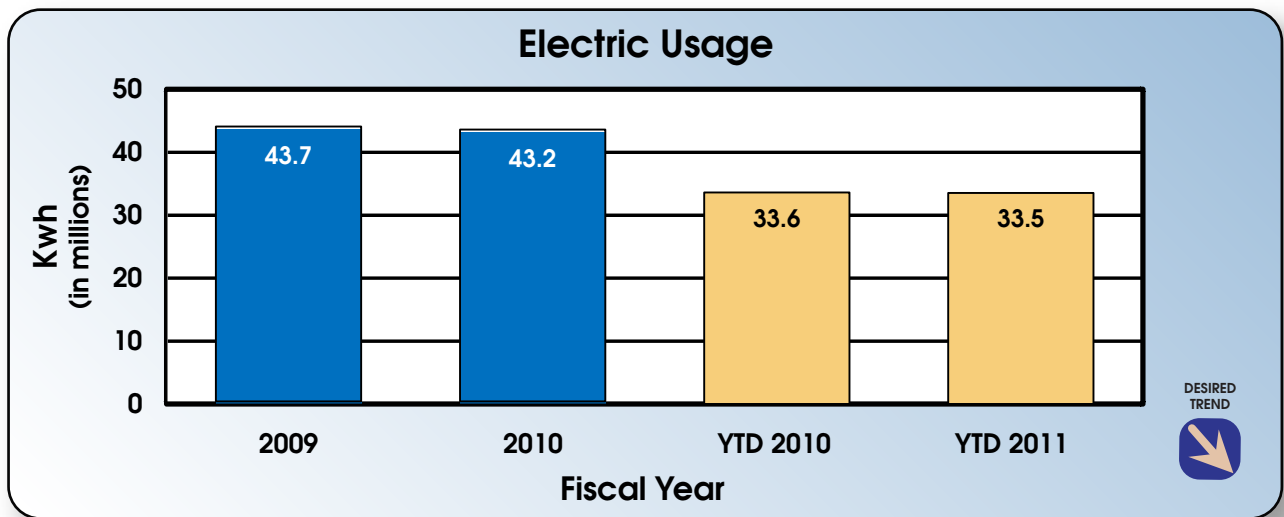
### Measurement and Data Collection:

The data is collected based on utility expenditures and usage recorded in the statewide financial accounting system. The following utilities are included in the analysis: electricity (excluding roadways, lighting and signals), steam, water, sewer, natural gas, propane, fuel oil, other fuel and utilities. This is a quarterly measure with the per square foot chart being updated annually.

### Improvement Status:

The total cost reported for utilities for year to date fiscal year 2011 is \$4,499,040, an increase of 4.7 percent over fiscal year 2010. This change is attributed to an electric rate increase. The cost per square foot chart graph is an annual measure, therefore no updates. The usage graphs show that electric decreased 0.2 percent and there was a 0.6 percent increase in natural gas. Data shows we have maintained the electric usage despite adding buildings such as the Dual Data Center and 830 MoDOT Drive.





## Customer satisfaction with non-motorized facilities- 10h

**Result Driver:** Kathy Harvey, State Design Engineer

**Measurement Driver:** Melissa Anderson, Non-motorized Transportation Engineer

### **Purpose of the Measure:**

This measure tracks customer satisfaction with transportation facilities for biking and walking, such as sidewalks, traffic signals and crosswalks, bike lanes and bikeable shoulders. It is MoDOT's desire to provide accessible and connected networks that allow customers to have options for meeting their transportation, recreation and active living needs.

### **Measurement and Data Collection:**

Data is collected in the annual customer survey titled the "Report Card from Missourians." Customers are asked if they have biked or walked for transportation in the past week. If the answer is yes they are asked additional questions about their experience. This is an annual measure updated each July.

### **Improvement Status:**

MoDOT has made a commitment to make progress in upgrading pedestrian facilities to meet the Americans with Disabilities Act access requirements. In addition, bicycle and pedestrian needs are to be considered on all projects and included where it is the right thing to do. As MoDOT makes system improvements in accessibility and network connectivity, satisfaction levels are expected to increase.

**UNDER DEVELOPMENT**

### Pedestrian and ADA Transition Plan improvements-10i

**Result Driver:** Kathy Harvey, State Design Engineer

**Measurement Driver:** Melissa Anderson, Non-motorized Transportation Engineer

#### **Purpose of the Measure:**

This measure tracks MoDOT's investment in pedestrian facilities as well as its progress toward removing the barriers that prevent accessibility for all users. Completion of the needed improvements will bring the department into compliance with the Americans with Disabilities Act (ADA) as required in MoDOT's 2010 Transition Plan Update. Accessibility applies both to rights of way, such as sidewalks and traffic signals, and to facilities such as parking lots and restrooms.

#### ■ **Investment in Pedestrian Facilities based on Contract Awards**

This measure demonstrates MoDOT's continuing commitment to the pedestrian mode of transportation by tracking the amount of money awarded to contractors for the 20 most common construction elements of a pedestrian project.

#### ■ **Progress toward Completion of Transition Plan – Right of Way**

This measure demonstrates progress toward accomplishing the estimated \$154.8 million of work needed to achieve accessibility for rights of way.

#### ■ **Progress toward Completion of Transition Plan – Building Facilities**

This measure demonstrates progress toward accomplishing the estimated \$1.9 million of work needed to achieve accessibility for building facilities.

#### **Measurement and Data Collection:**

Data for MoDOT's investment in pedestrian facilities (shown in the first chart) is gathered by querying total award amounts for the 20 most common construction elements of a pedestrian project. The number of projects is estimated based upon the number of projects that include pay items for sidewalks.

The dollar amounts tracked for the latter two charts are based on unadjusted estimates made in 2008 and may not reflect the actual expenditures in the field. Rather, as each deficient segment is upgraded or reviewed and removed from the Transition Plan, its 2008 estimated total is accounted

for and shown here as progress. In this manner, inflation and changing field conditions have no impact on the representation of true progress toward completion.

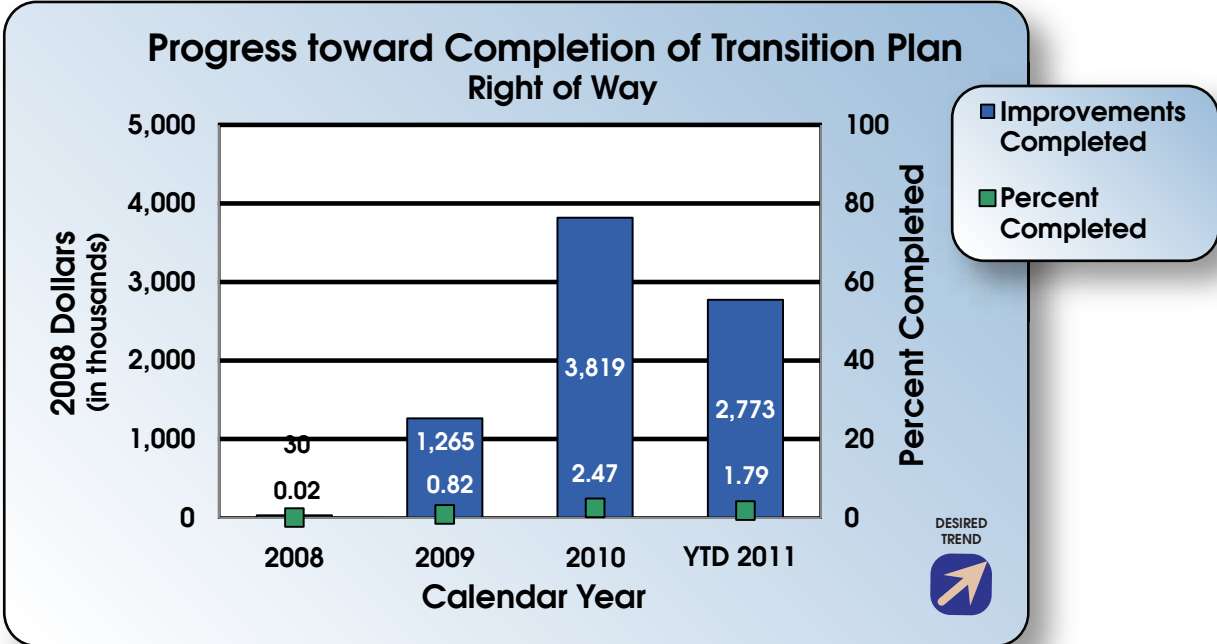
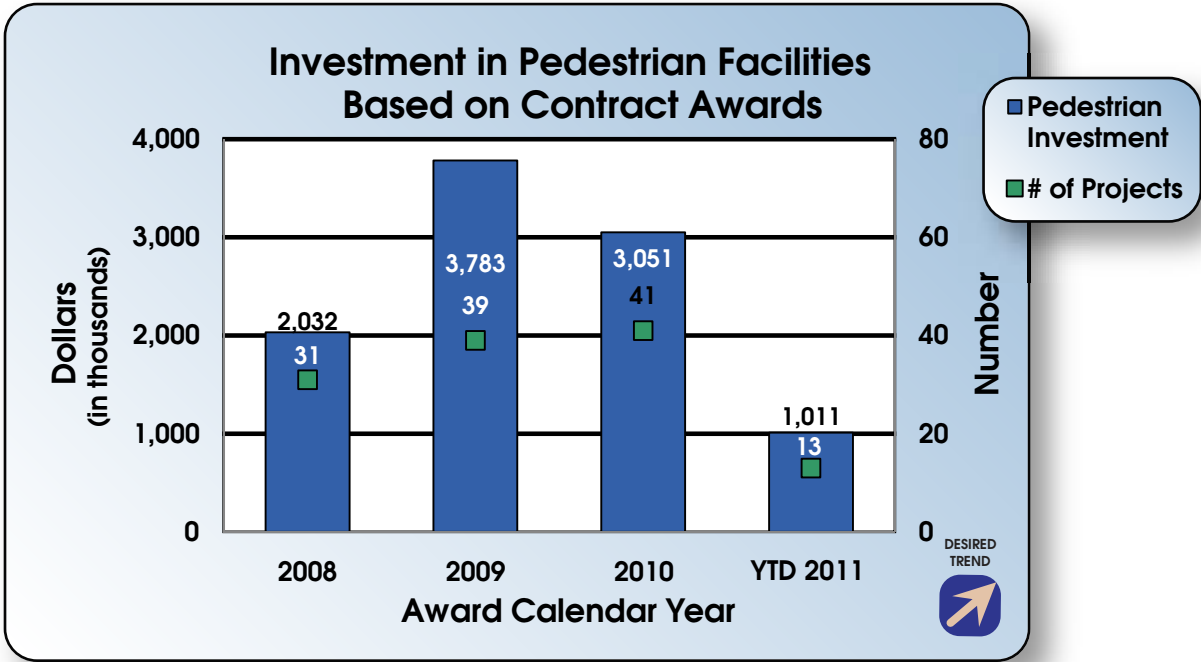
#### **Improvement Status:**

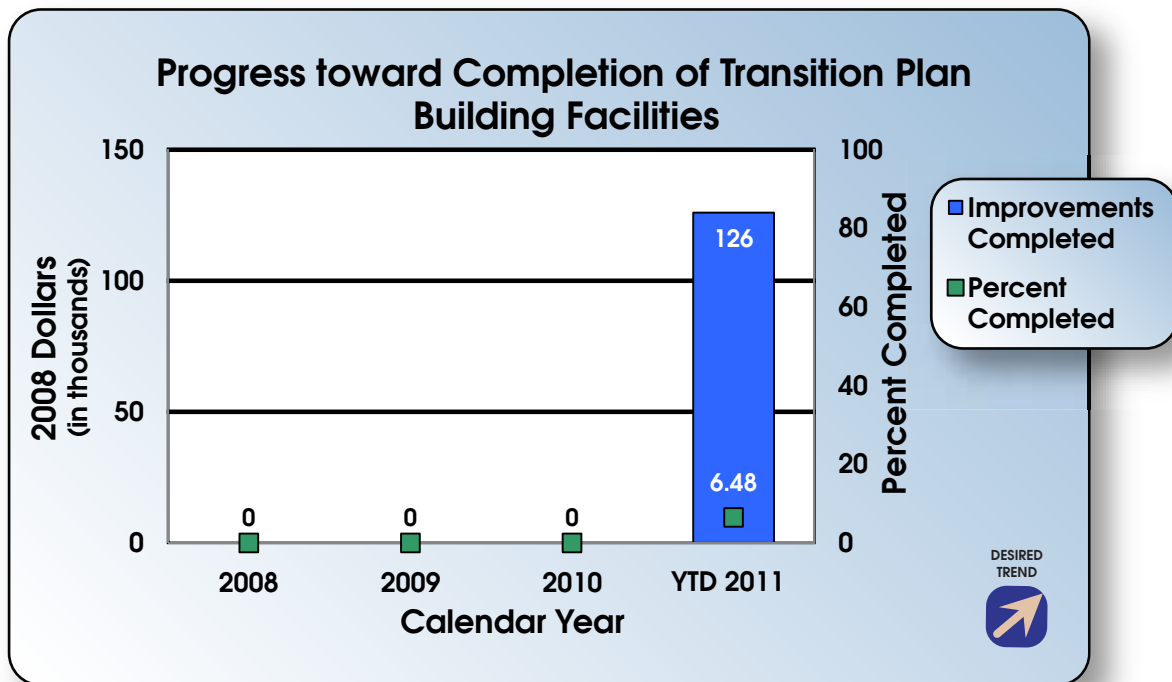
MoDOT's investment in pedestrian facilities reflects its commitment to providing a comprehensive transportation system to meet the needs of all users. Sidewalks are being improved to meet accessibility requirements and network gaps are being filled in. Customers' needs are being met by adding sidewalks, traffic signals and crosswalks where needed to provide safe transportation options.

The peak in 2009 reflects an influx of funding from the American Recovery and Reinvestment Act for pedestrian projects including many ADA improvements. Since then, the opportunity to improve pedestrian travel is considered in all projects. The desired trend is a continued increase in these investments, where needed.

MoDOT's Transition Plan Update was published in 2010. The needs were identified in 2008 and the department has been working to upgrade pedestrian and building facilities with projects since the development of the inventory. The department has been responsive to public requests and has been proactive in many areas to make simple, low-cost improvements when opportunities arise. The peak in 2010 includes corrections to the pedestrian facility inventory.

To date, a cumulative total progress of 5.1 percent of the \$154.8 million pedestrian needs and 6.5 percent of the \$1.9 million building facilities needs have been met.





### Percent of minorities and females employed-10j

**Result Driver:** Kathy Harvey, State Design Engineer

**Measurement Driver:** Rudolph Nickens, Director of Equal Opportunity and Diversity

#### **Purpose of the Measure:**

This measure tracks minority and female employment in MoDOT's workforce and compares it with availability data from the Missouri 2000 Census report. Efficient use of people resources provides opportunities for the department to leverage transportation resources with available human capital. By placing the right people in the right place, the department can better serve its customers and help fulfill its responsibilities to taxpayers.

#### **Measurement and Data Collection:**

MoDOT's Affirmative Action software database is used to collect data. The Missouri 2000 Census Data is used as the benchmark for this measurement. This measure is updated quarterly.

#### **Improvement Status:**

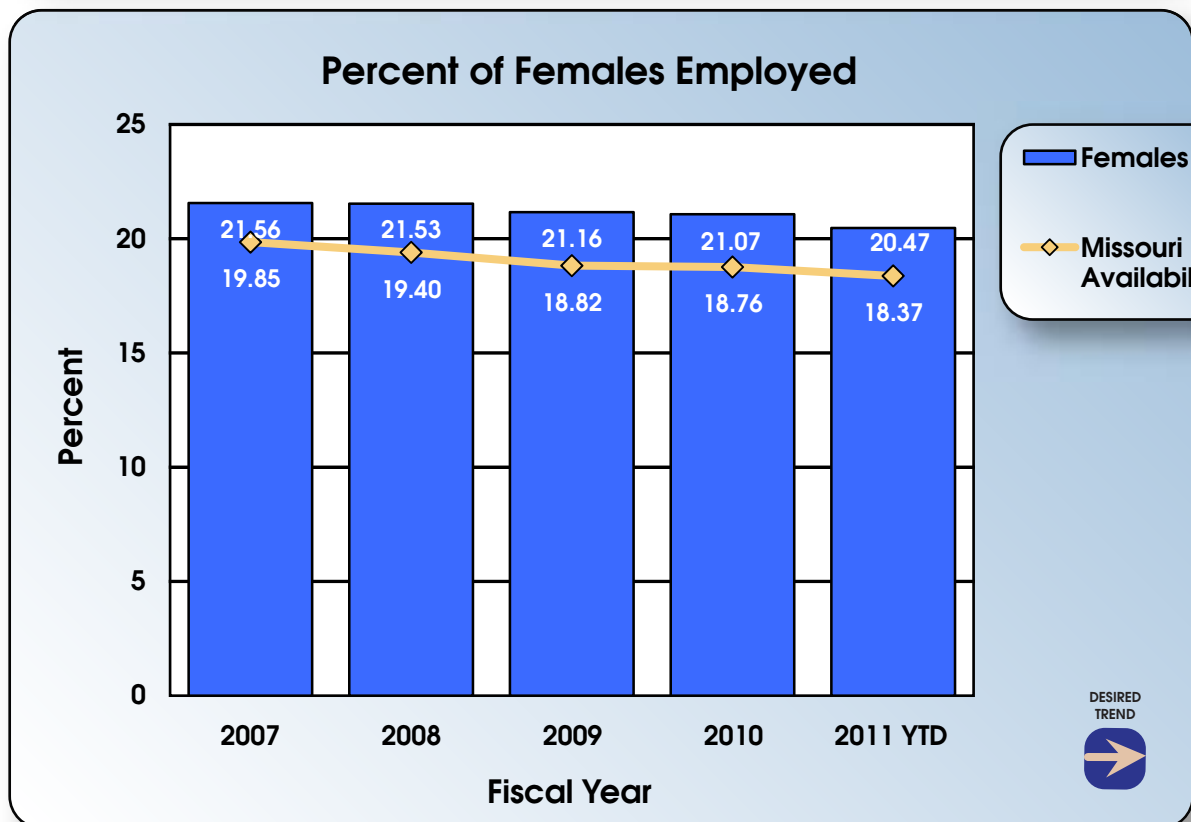
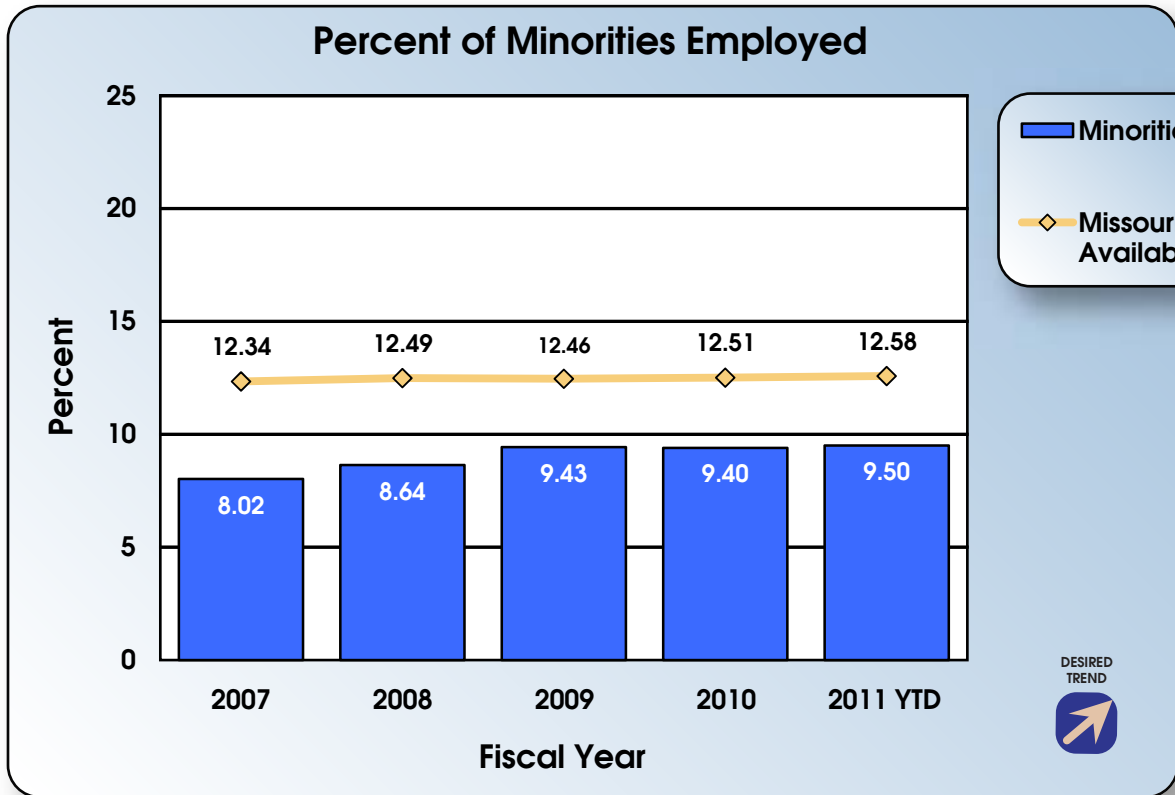
The total number of minority employees decreased by 1.01 percent (573 to 566) from the second to the third quarters of FY 2011, though the percent of minority employment when compared to overall employment increased from 9.46 to 9.50 percent. The total number of female employees also decreased by 1.01 percent from second to third quarters of FY 2011 (1,238 to 1,220), while the percent of females employed saw a slight increase (20.44 to 20.47). Total employment during this time decreased from 6,056 to 5,961.

During this quarter the department made efforts to increase their visibility in the surrounding communities by placing affirmative action ads with Full Employment Council, Guadalupe Center, Job Corp, Missouri Career Center, A Call to Oneness, etc. Also, in some locations, instead of hiring seasonal employees (which requires a CDL license), general laborers were hired, which increased the pool of qualified applicants. Some district personnel meet with organizations such as Community Partnership Reconciliation and the NAACP to discuss topics such as diversity, inclusion, and racism. In addition, many districts have participated in career fairs and informational meetings at their local high schools in an effort to make students aware of the career opportunities available at MoDOT.





ENVIRONMENTALLY AND SOCIALLY RESPONSIBLE



## Separation rates for minorities and females-10k

**Result Driver:** Kathy Harvey, State Design Engineer

**Measurement Driver:** Rudolph Nickens, Director of Equal Opportunity and Diversity

### Purpose of the Measure:

The purpose of this measure is to track female and minority separation rates compared to the overall MoDOT separation rate.

### Measurement and Data Collection:

Data is collected through SAM II Advantage HR, ReportNet and Peopleclick AAPanner reports. Separations include both voluntary and involuntary separations from the department. This measure is updated quarterly.

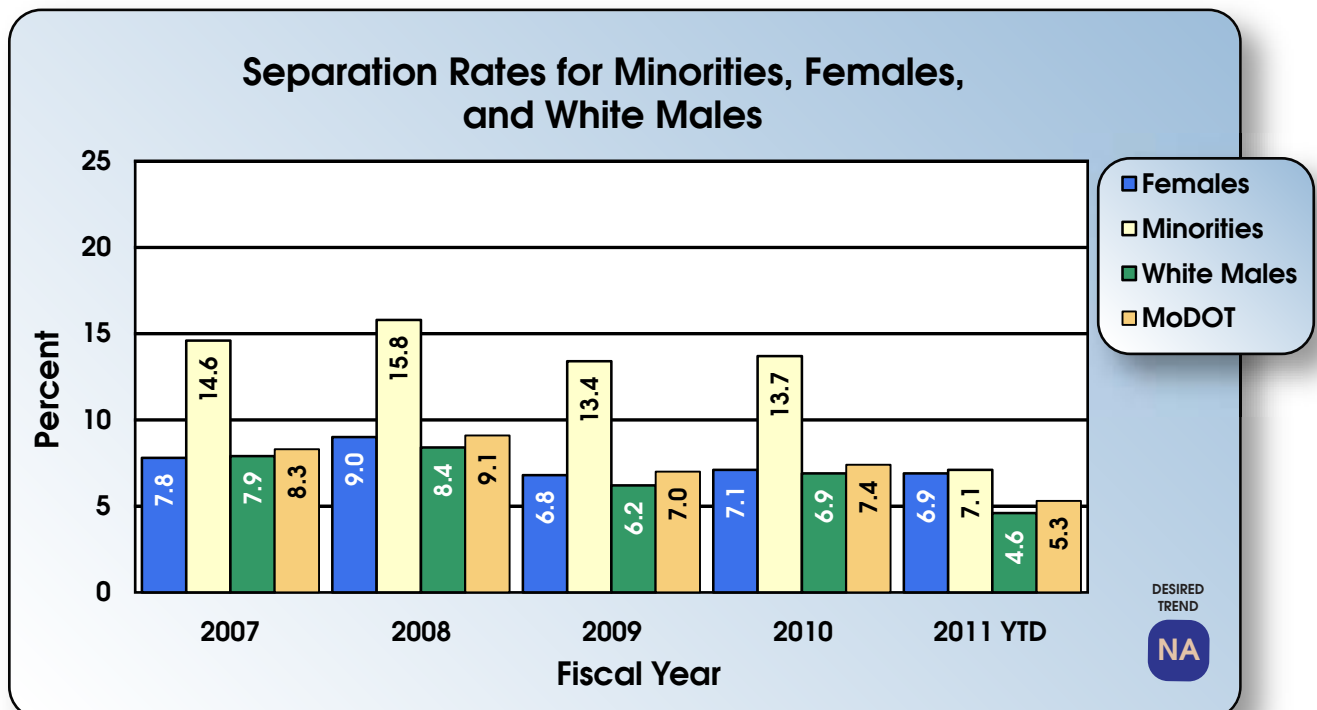
### Improvement Status:

The overall number of separations for the third quarter of FY11 decreased by 9.2 percent (110 to 101) compared to the second quarter of FY11. Of this number, minority separations decreased by 58.8 percent (17 to 10); female separations decreased by 52.5 percent (40 to 19); and white male separations increased by 33 percent (57 to 76).

Overall, the MoDOT separation rate decreased by 0.1 percent, the minority separation rate decreased by 1.2 percent, the female separation rate decreased by 1.6

percent, and the white male separation rate increased by 0.5 percent.

MoDOT uses a number of tools to assist in retaining minority and female employees. Beginning with new employee orientation, Human Resources focuses on continually providing resources to new employees to ensure their long term success, including EEO training and discussion of retention issues. Also, several districts continue to host regional diversity conferences; participate in career fairs; place affirmative action ads in various newspapers, with local career centers, and send them to minority churches; and attend meetings of Minorities in Business, Chamber of Commerce, and the NAACP. In addition, MoDOT continues to work with external partners to communicate our commitment to diversity. An increase in discussion regarding diversity has occurred through Regional Diversity Conferences, workshops, and district EAEC meetings.



## Promotions of minorities and females-10I

**Result Driver:** Kathy Harvey, State Design Engineer

**Measurement Driver:** Rudolph Nickens, Director of Equal Opportunity and Diversity

### Purpose of the Measure:

This measure tracks minority and female promotions in comparison to all promotions throughout MoDOT. A diverse workforce indicates efficient use of our employees. Just as recruitment and retention are important measures of workforce diversity, promotion is a good indicator of the progress the department makes towards a diverse workforce. By placing the right people in the right place, the department can better serve its customers and help fulfill its responsibilities to taxpayers.

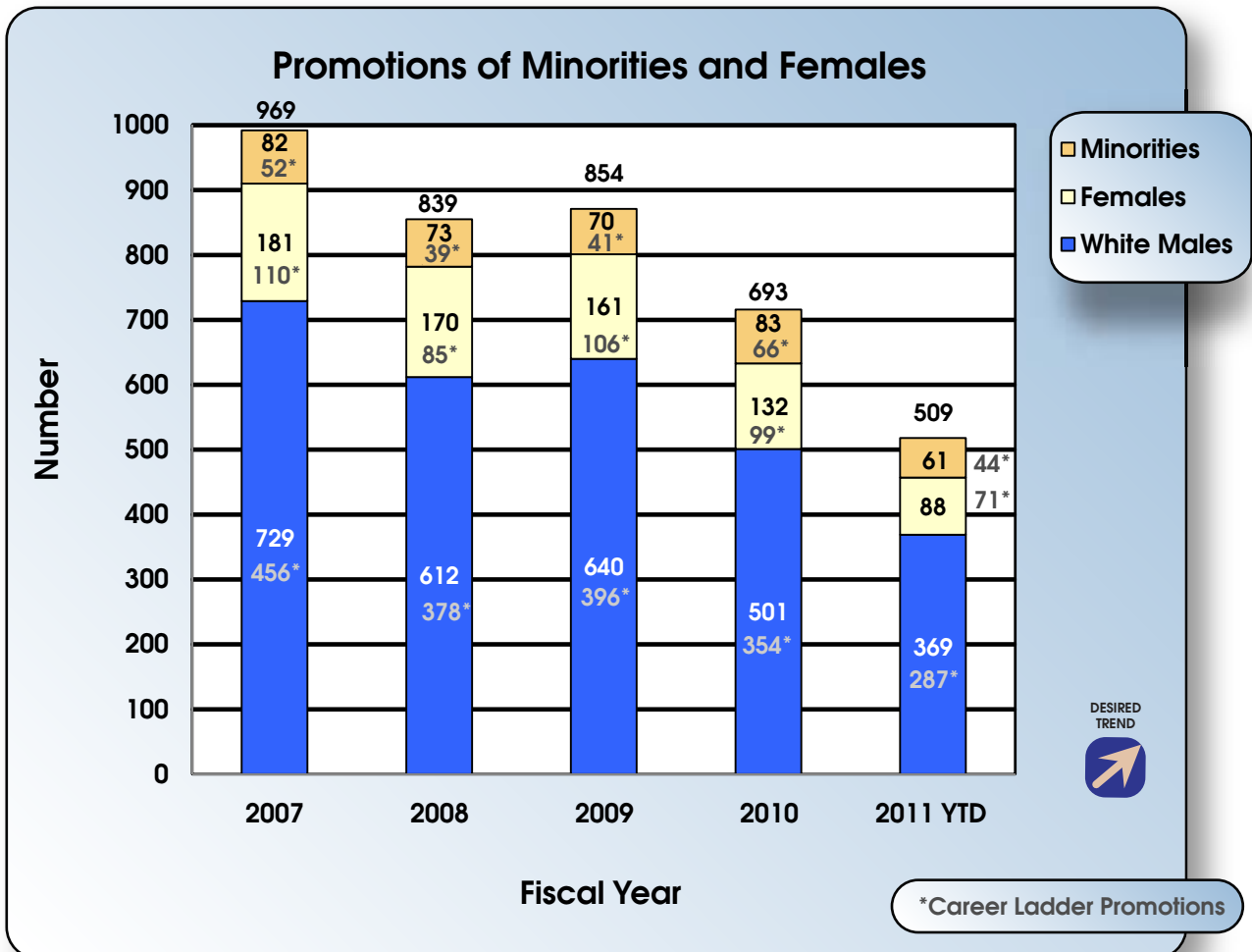
### Measurement and Data Collection:

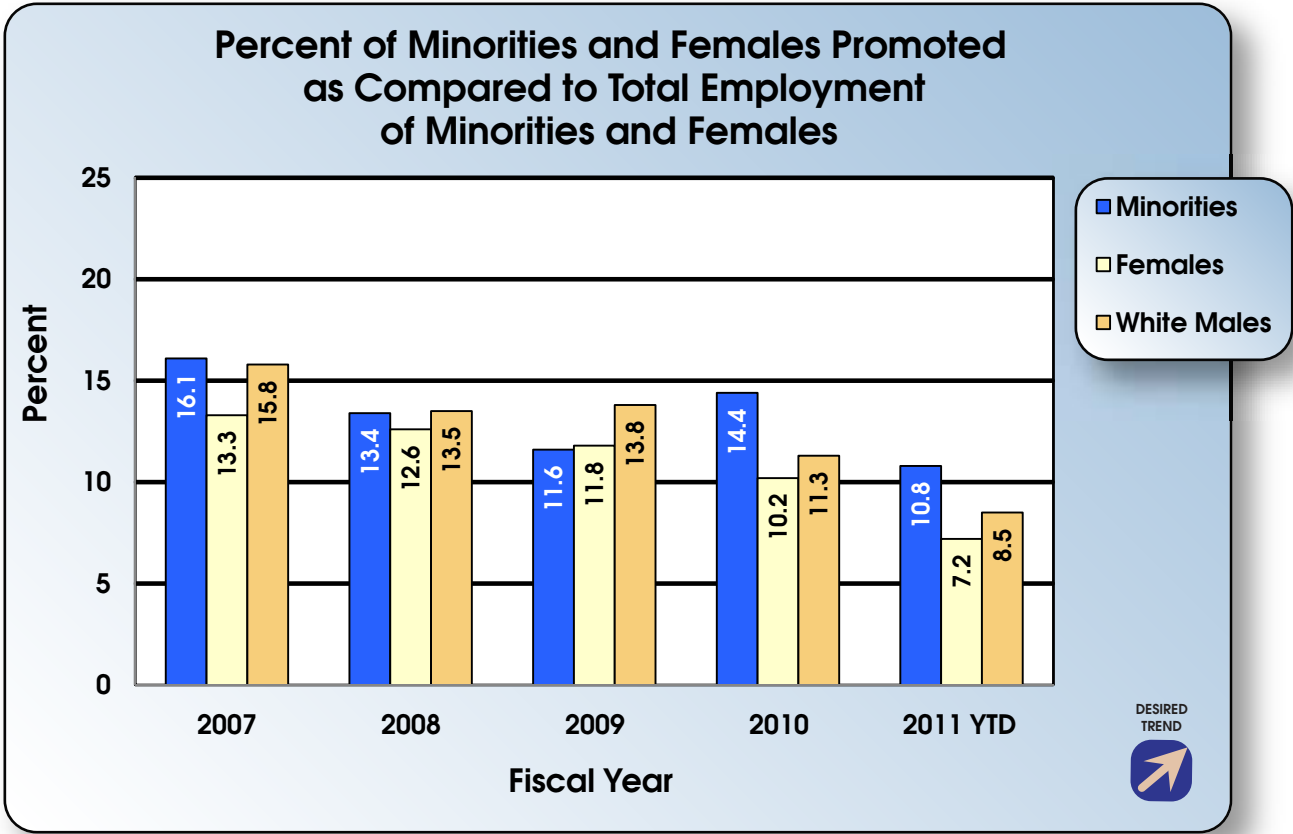
Data is collected using SAM II Advantage HR and Report Net reports. Promotions include all promotions throughout job groups within the department. In the

graph the numbers add up to more than the total at the top of each column because minority women are accounted for in two categories. This is a quarterly measure.

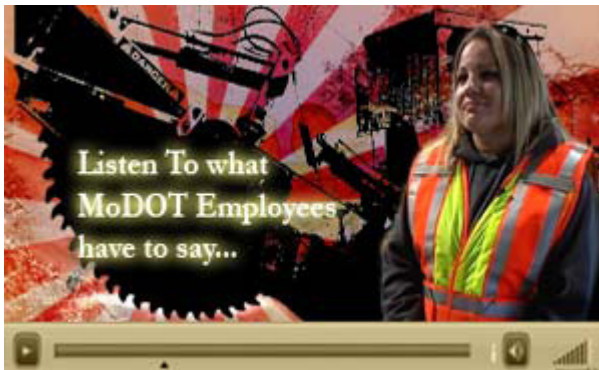
### Improvement Status:

During the first through third quarters of fiscal year 2011 there were 509 promotions. Of these, 396 (77.8 percent) were career ladder promotions, 61 (12 percent) were minorities, and 88 (17.3 percent) were females. White males received 369 (72.5 percent) of the promotions. When compared to the total employment of females and white males, females are only slightly behind with 7.2 percent promoted, while 8.5 percent of white males and 10.8 percent of minorities were promoted.





## The Inside Scoop



What is it like to be a member of the MoDOT Team?

The best way to learn about working at MoDOT is to let our people tell you.

<http://www.modot.mo.gov/jobs/Testimonials.htm>

## Number of active, enrolled and graduated trainees participating in the on-the-job training program-10m

**Result Driver:** Kathy Harvey, State Design Engineer

**Measurement Driver:** Lester Woods, Jr., External Civil Rights Director

### Purpose of the Measure:

This measure tracks the number of active, enrolled and graduated trainees participating in the on-the-job training (OJT) program. FHWA requires the training of minorities, females and disadvantaged persons on highway projects.

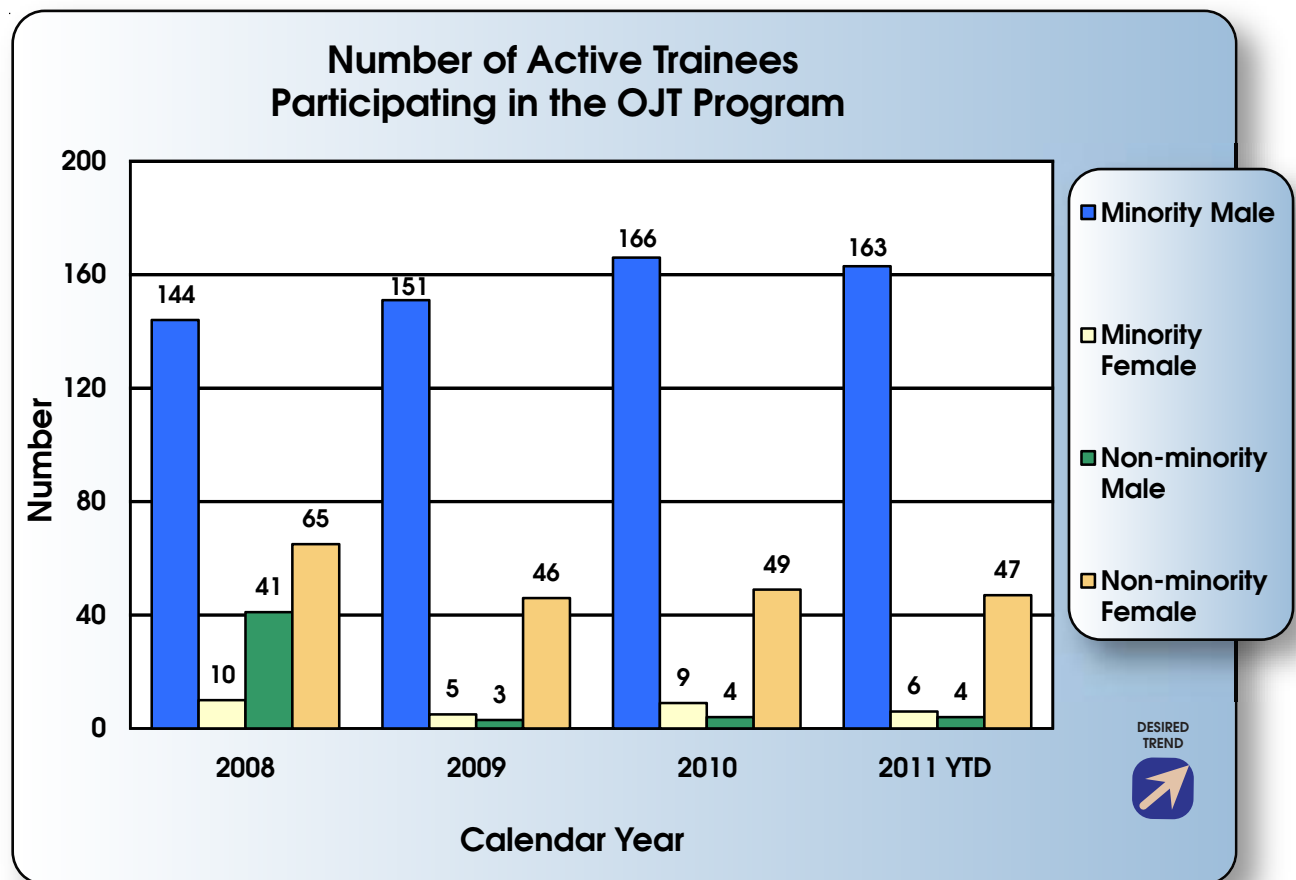
minorities, females and disadvantaged persons are being trained and utilized on highway projects that receive federal funds. Data has a three month lag period. This measure is updated quarterly.

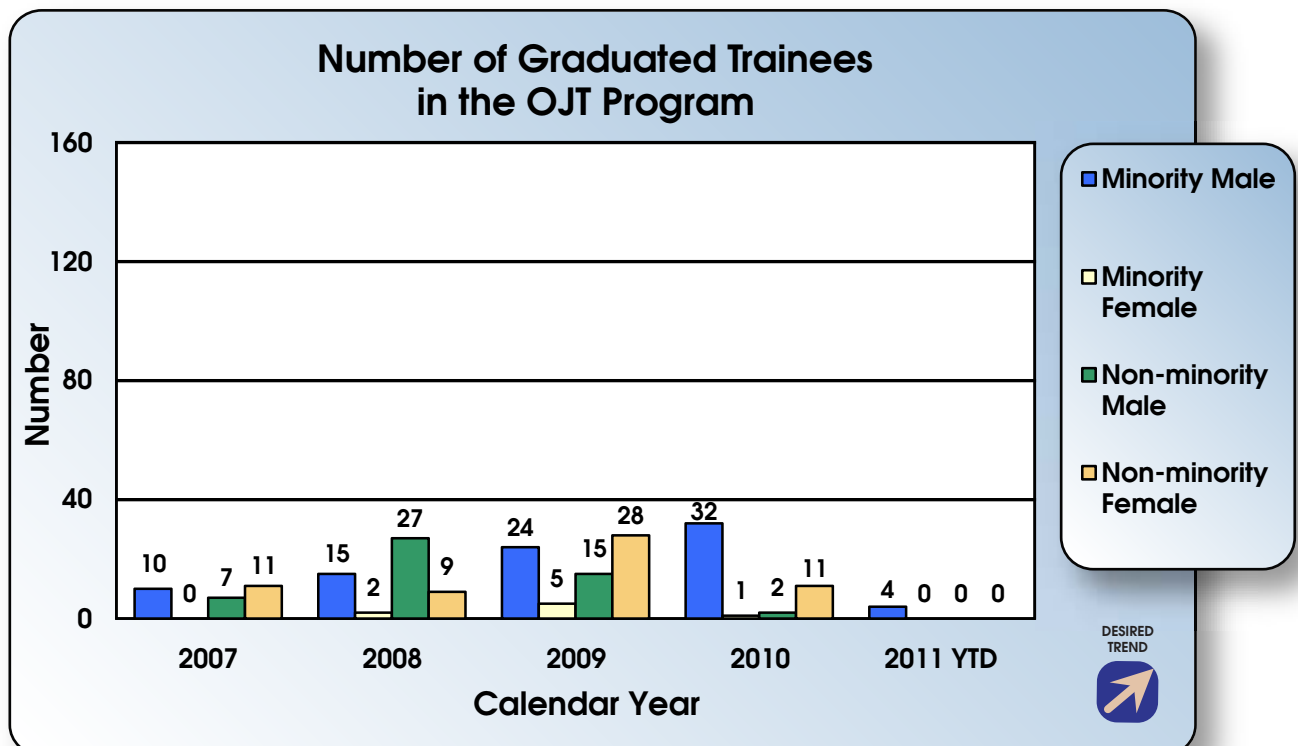
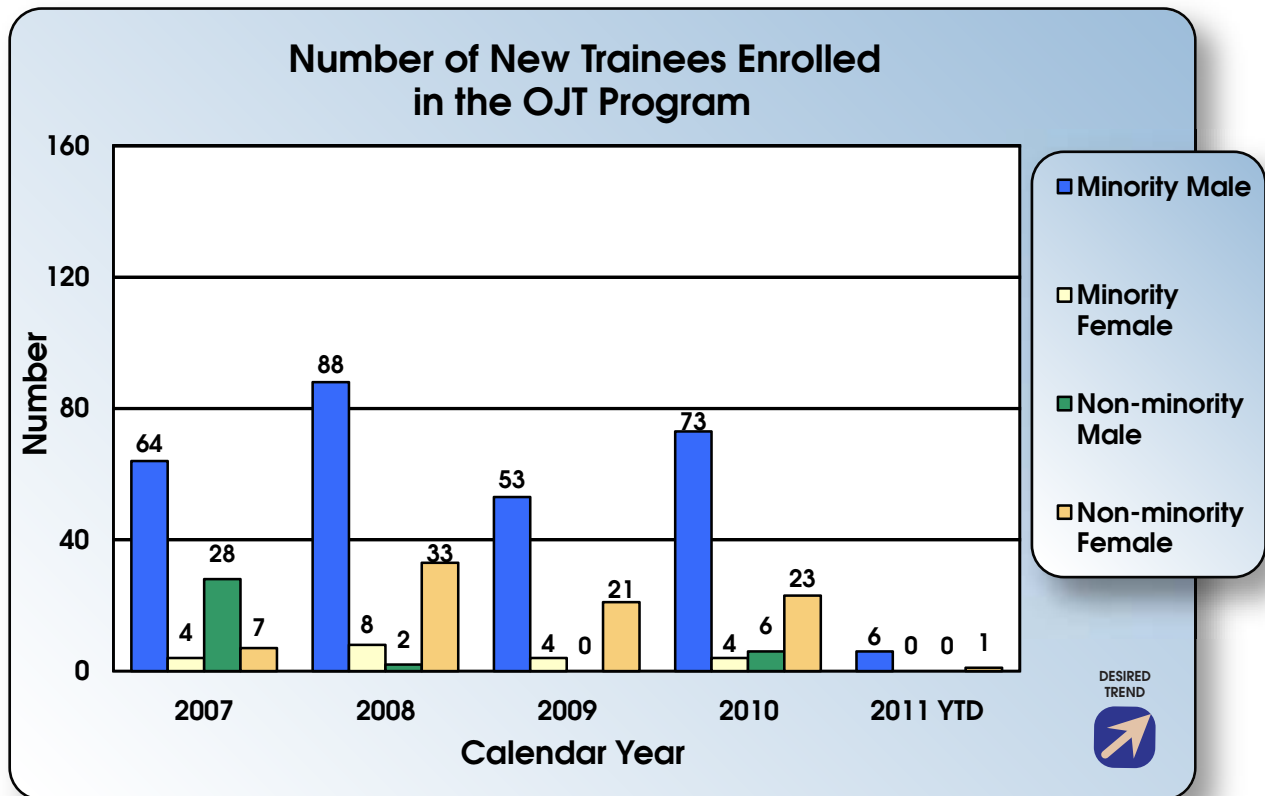
### Measurement and Data Collection:

Trainees are tracked to ensure contractors are utilizing minorities, females and disadvantaged individuals on projects where goals are assigned. The data is reported annually to FHWA to demonstrate MoDOT's achievement in ensuring

### Improvement Status:

Seven trainees enrolled in the program during the reporting quarter which included six minority males, and one non-minority female. A total of four trainees graduated during the reporting quarter.





## Percent of Disadvantaged Business Enterprise participation-10n

**Result Driver:** Kathy Harvey, State Design Engineer

**Measurement Driver:** Lester Woods, Jr., External Civil Rights Director

### Purpose of the Measure:

This measure tracks the percent of Disadvantaged Business Enterprise (DBE) participation on construction projects. 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 the performance on project contracts and subcontracts.

### Measurement and Data Collection:

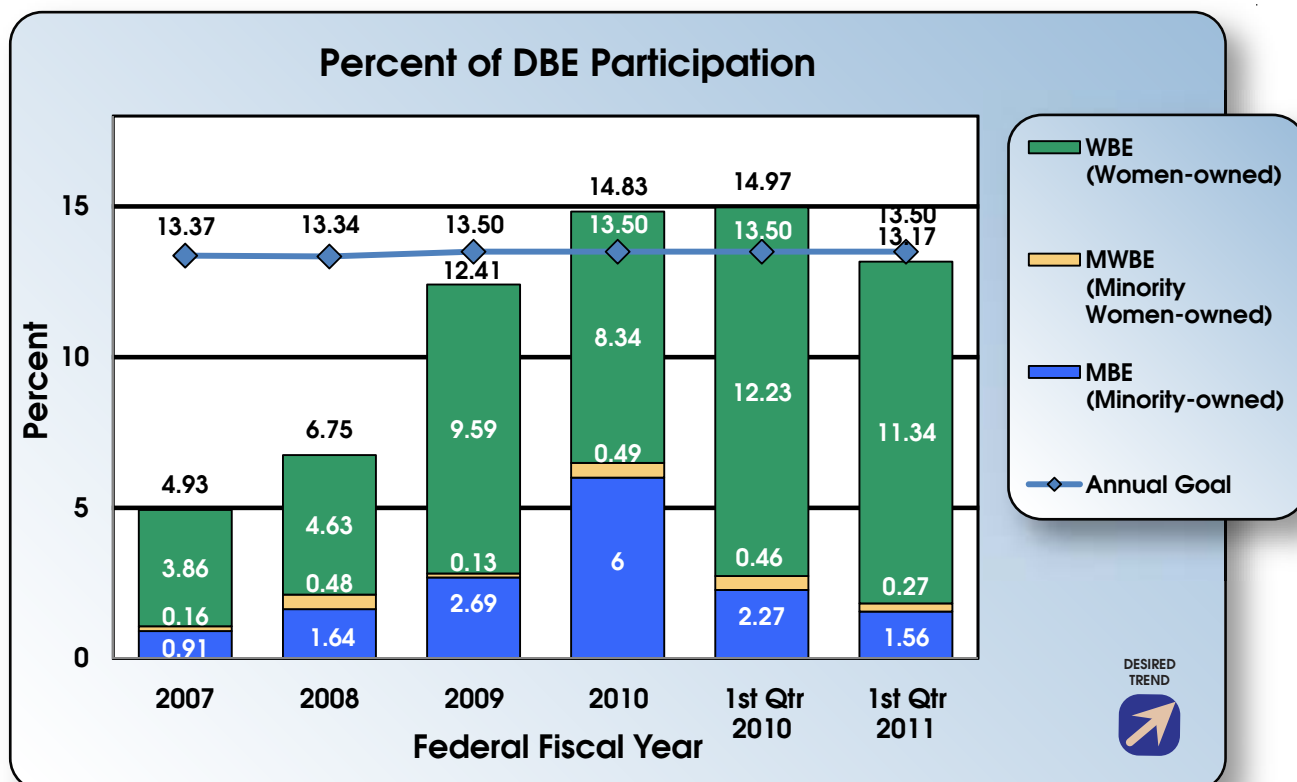
Data is collected through Site Manager for each construction project. The overall DBE goal is a yearly target established by MoDOT and FHWA regarding the expected total DBE participation on all federally funded construction projects. Individual DBE project goals are determined by subcontract opportunity, project location and available DBE firms that can perform the scope of work. DBE participation is tracked for each construction project

identifying the prime contractor, contract amount, the established goal and how the prime contractor fulfilled the goal.

Semi-annual reports are submitted to FHWA in June and December of each year demonstrating our progress in obtaining the overall DBE goal. Data is not always available at the end of each reporting quarter. This measure is based on the federal fiscal year, which is October 1 through September 30. This is a quarterly measure.

### Improvement Status:

The overall DBE goal for FFY 2011 is 13.5%. The total DBE participation for the 1<sup>st</sup> quarter is 13.17%. Participation by DBE firms that are minority-owned decreased .91 percent and women-owned firms decreased .89 percent from the 1<sup>st</sup> quarter 2010 to the 1<sup>st</sup> quarter 2011.



## Minority/women business enterprises bidding and contracting activities for non-construction contracts-10o

**Result Driver:** Kathy Harvey, State Design Engineer

**Measurement Driver:** Rebecca Jackson, Central Office General Services Manager

### Purpose of the Measure:

This measure tracks Minority/Women Business Enterprises (M/WBE) bidding and contracting activities for non-construction contracts. It shows MoDOT's contribution toward social responsibility. The first chart indicates the number of solicitations sent and received from M/WBEs. The second chart indicates the number of contracts awarded to M/WBE vendors. The third chart shows the total M/WBE expenditures compared to the MoDOT's total expenditures and the fourth chart provides the M/WBE percentage of total expenditures. Disadvantage Business Enterprises (DBE) participation on construction projects is tracked through the DBE program therefore this measure only includes non-construction contracts.

### Measurement and Data Collection:

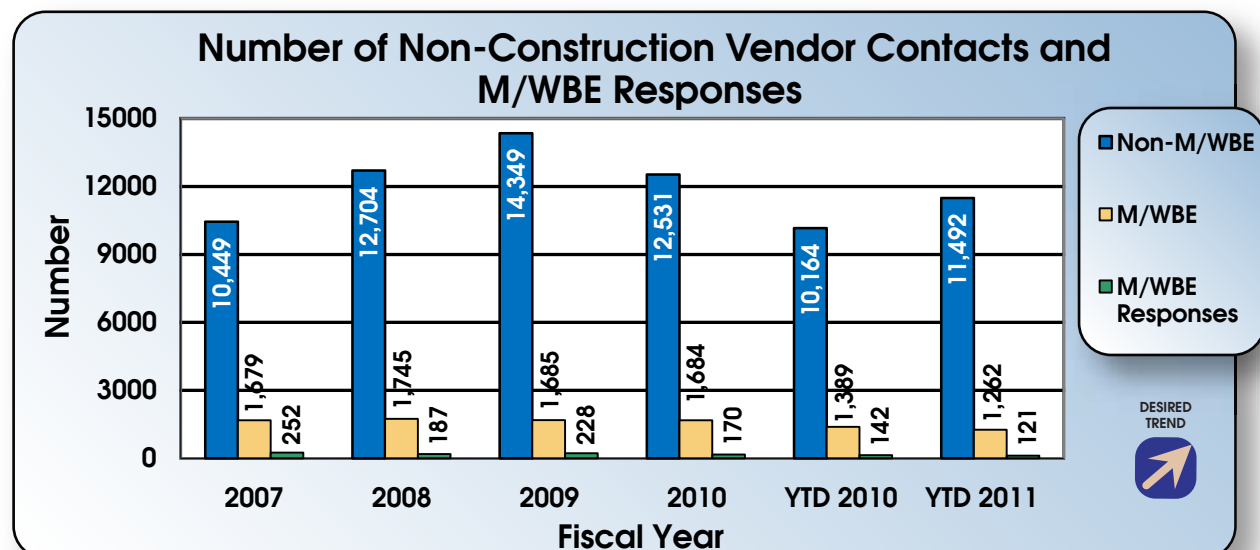
This measure is intended to focus on providing a fair and open procurement process that includes a diverse vendor community. The data for the non-construction solicitations sent to M/WBE is collected by using the information entered into the Procurement Database by the buyer of record. The data for the M/WBE Expenditures is collected from the Office of Administration's M/WBE accounting system (MOBIUS).

### Improvement Status:

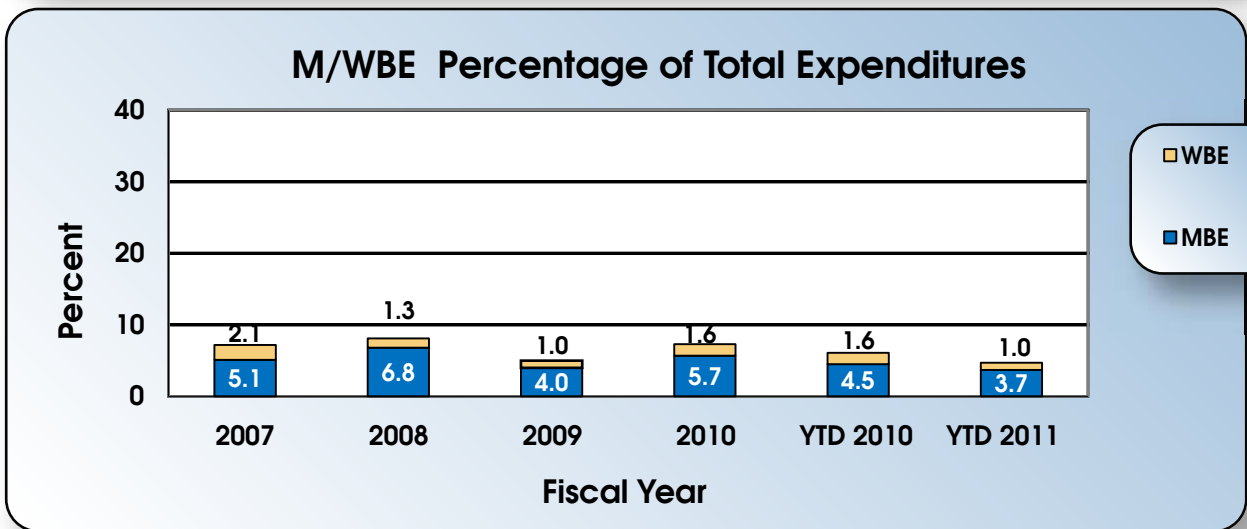
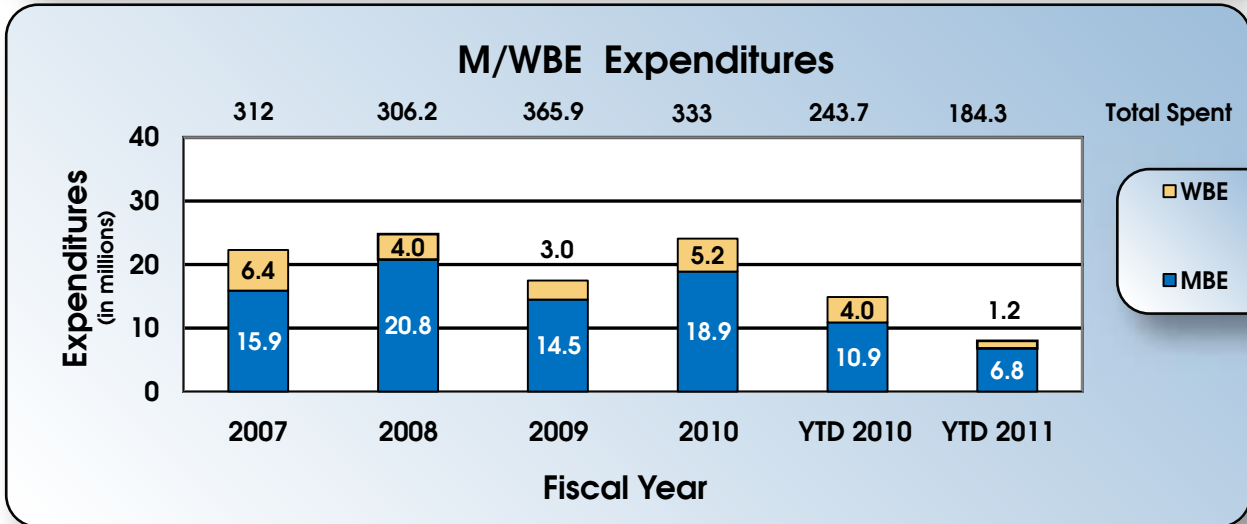
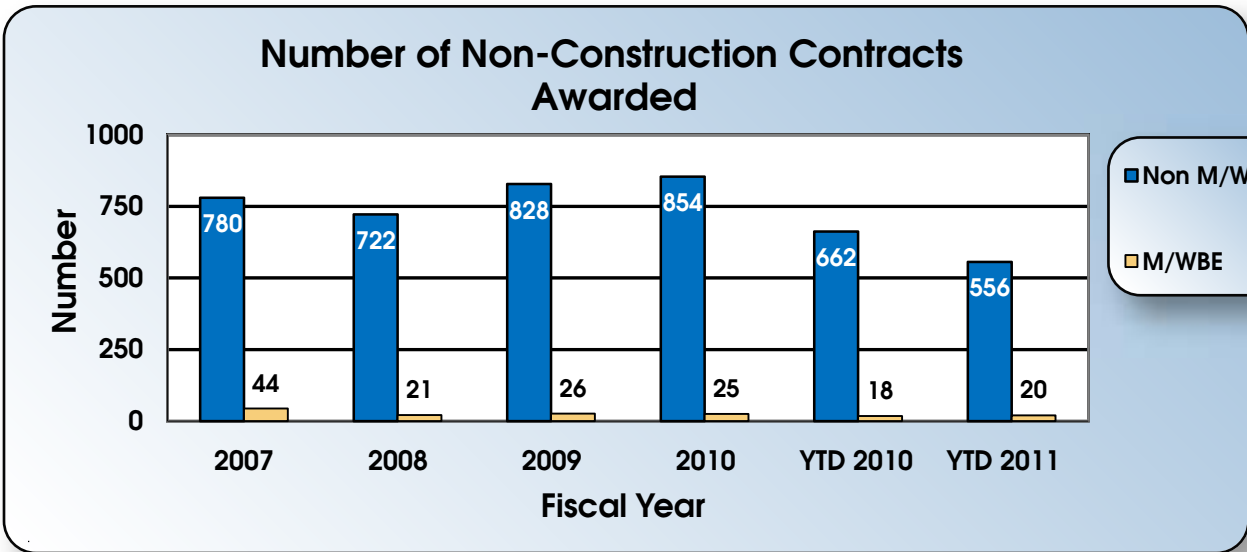
As shown in the first chart, the number of solicitations sent to M/WBE vendors for year-to-date FY2011 decreased by 127 over the same reporting period in FY2010. The variation between FY2010

and FY2011 is directly related to M/WBE representation for specific commodity and services bidding opportunities (i.e., concrete, aggregate, radio towers, investment banking services, snow and ice materials). The second chart indicates, for year-to-date FY2011, a decrease of 106 total contracts awarded and an increase of two contracts awarded to M/WBE vendors for the same reporting period in FY2010. The third chart shows the M/WBE expenditures of \$8 million for year-to-date FY2011, which is a decrease of \$6.9 million from the same reporting period in FY2010. A reduction of \$5.4 million can be attributed to a decrease in expenditures with three major IT M/WBE vendors (World Wide Technology, Rose International and Huber and Associates). It also shows total expenditures of \$184.3 million for year-to-date FY2011, which is a decrease of \$59.4 million from the same reporting period in FY2010. Currently, there is no M/WBE representation for high volume commodities such as traffic marking paint and sodium chloride; however, the expenditures for these items are included in the total expenditure amount. The fourth chart indicates the percent of M/WBE expenditures, which decreased by 1.6 percent for year-to-date FY2011 compared to the same reporting period in FY2010.

In an effort to improve M/WBE participation, the Central Office Procurement unit continued with vendor outreach by conducting four training sessions during the reporting period.







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## EFFICIENT MOVEMENT OF GOODS

*Tangible Result Driver – Jan Skouby, Motor Carrier Services Director*

Missouri's location in the nation's center makes it a major crossroads in the movement of goods. Transportation infrastructure must be up to the task so that as the flow of freight becomes more efficient, businesses and communities share the economic benefits.



## Freight tonnage by mode-11a

**Result Driver:** Jan Skouby, Motor Carrier Services Director

**Measurement Driver:** Ernie Perry, Administrator of Freight Development

### Purpose of the Measure:

This measure tracks trends and indicates diversification of freight movement on Missouri's transportation system.

### Measurement and Data Collection:

Efforts for this measure are currently focused on developing a twice a year reporting scheme that provides accurate and timely freight tonnage information by mode. Current data sources for this measure include 2007 commodity flow data, as well as other modal data that can be as much as two years old. The twice a year freight tonnage updates will begin with the July 2011 Tracker.

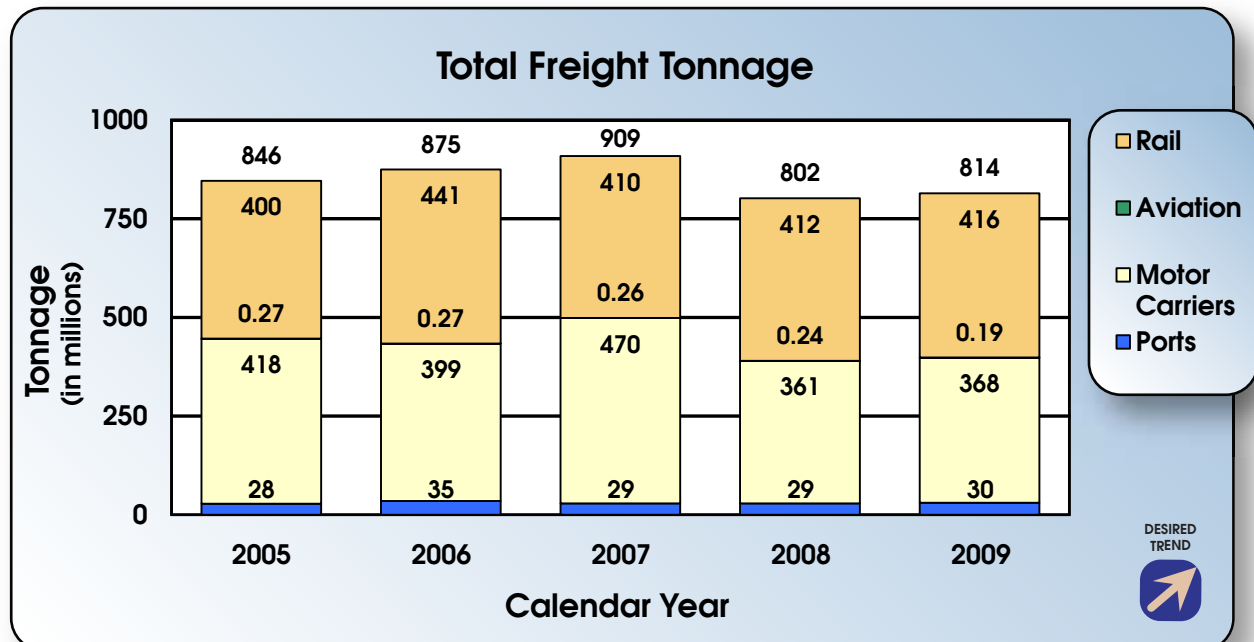
Due to data reporting variability between the various modes and the private and public sectors, this measure represents generalized trends in freight development and movement, and should not be construed as absolute tons moved per year for each of the modes. This measure is updated in July.

### Improvement Status:

Total freight tonnage for all modes increased slightly in 2009 to more than 814 million tons. While the data is beginning to reflect the economic recovery, all freight modes remain near historical lows due to the

economic decline beginning in 2007. Nationally reported freight transport trends demonstrate sporadic ups and downs; however, there have been demonstrated gains in some sectors of the manufacturing and logistics areas. Total port tonnage has remained relatively steady since 2005 with slight gains this year to more than 30 million tons moved. Efforts to reverse the decreased freight movements on the Missouri River are underway with the Missouri River Freight Corridor Development Plan. On the Mississippi River, long-term growth of river transportation is hampered by an inadequate lock and dam system.

Motor carrier freight movement trended upward in 2009 as did the rail freight movements. In 2009, motor carrier tonnage increased 2 percent to 368 million tons while railroad tonnage increased slightly by 1 percent to more than 416 million tons. Aviation tonnage continues to be impacted by a downturn in the aviation industry and the resulting financial impacts to airlines, which carry a significant portion of high-value air cargo. MoDOT's Aviation Advisory Committee helps identify ways to better support the commercial aviation industry.



## Interstate motor carrier mileage-11b

**Result Driver:** Jan Skouby, Motor Carrier Services Director

**Measurement Driver:** Michelle Teel, Assistant Motor Carrier Services Director

### Purpose of the Measure:

This measure reports the fluctuations of motor carrier freight movement in Missouri. MoDOT uses the information to monitor freight movement trends.

### Measurement and Data Collection:

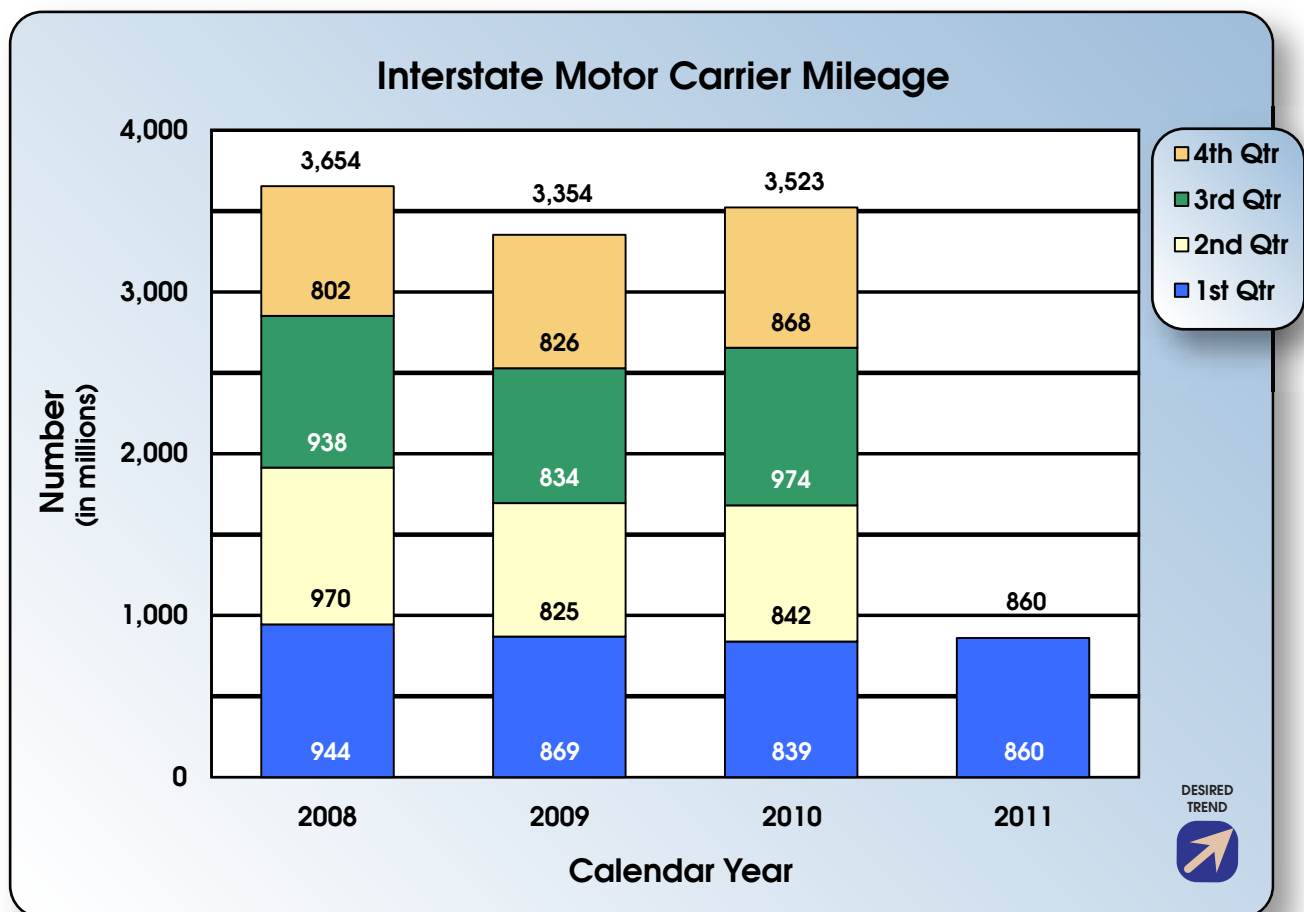
Data is reported quarterly. Quarterly International Fuel Tax Agreement tax returns filed by member states and provinces and monthly reports of mileage data by the members are used to monitor the number of taxable miles traveled in Missouri by all motor carriers.

### Improvement Status:

Total miles traveled by interstate carriers in Missouri decreased less than 1 percent from last quarter. During the first quarter of 2011, interstate carriers traveled 2.5 percent more miles here than during the first quarter of 2010.

Compared to the same time last year, carriers based outside of Missouri traveled 2.1 percent more miles in Missouri. Missouri-based companies traveled 3.6 percent more miles in their home state.

Industry reports indicate the freight index fell 1.5 percent in February.



### Percent of satisfied motor carriers- 11c

**Results Driver:** Jan Skouby, Motor Carrier Services Director

**Measurement Driver:** DeAnne Rickabaugh, Outreach Coordinator

#### **Purpose of the Measure:**

This measure tracks MoDOT's progress toward the goal of expeditiously meeting the needs of the motor carrier industry and facilitating freight movement. MoDOT's Motor Carrier Services team uses the data to identify opportunities to improve customer satisfaction.

#### **Measurement and Data Collection:**

MCS personnel, working with Heartland Market Research, LLC, revised a survey to collect customer satisfaction data. The survey, sent to 800 MCS clients each month, addresses all five MCS program divisions, International Registration Plan, International Fuel Tax Agreement, Oversize Overweight Permitting, Safety and Compliance and Operating Authority. Survey respondents identified the services they use when doing business with MCS, then indicated their level of satisfaction with four customer service factors: "timely response," "returned my call/e-mail," "friendly service," and "service issue resolved". They also gave an "overall satisfaction" score. Customers used a four-point scale: 4 = Very Satisfied, 3 = Satisfied, 2 = Dissatisfied and 1 = Very Dissatisfied. Survey results are reported quarterly.

The Oregon Motor Carrier Transportation Division is the benchmark for this measure. Like MoDOT MCS, Oregon MCTD houses most functions required of motor carriers in the state. Unlike MoDOT's quarterly survey, Oregon's survey is conducted in one week, biennially.

#### **Improvement Status:**

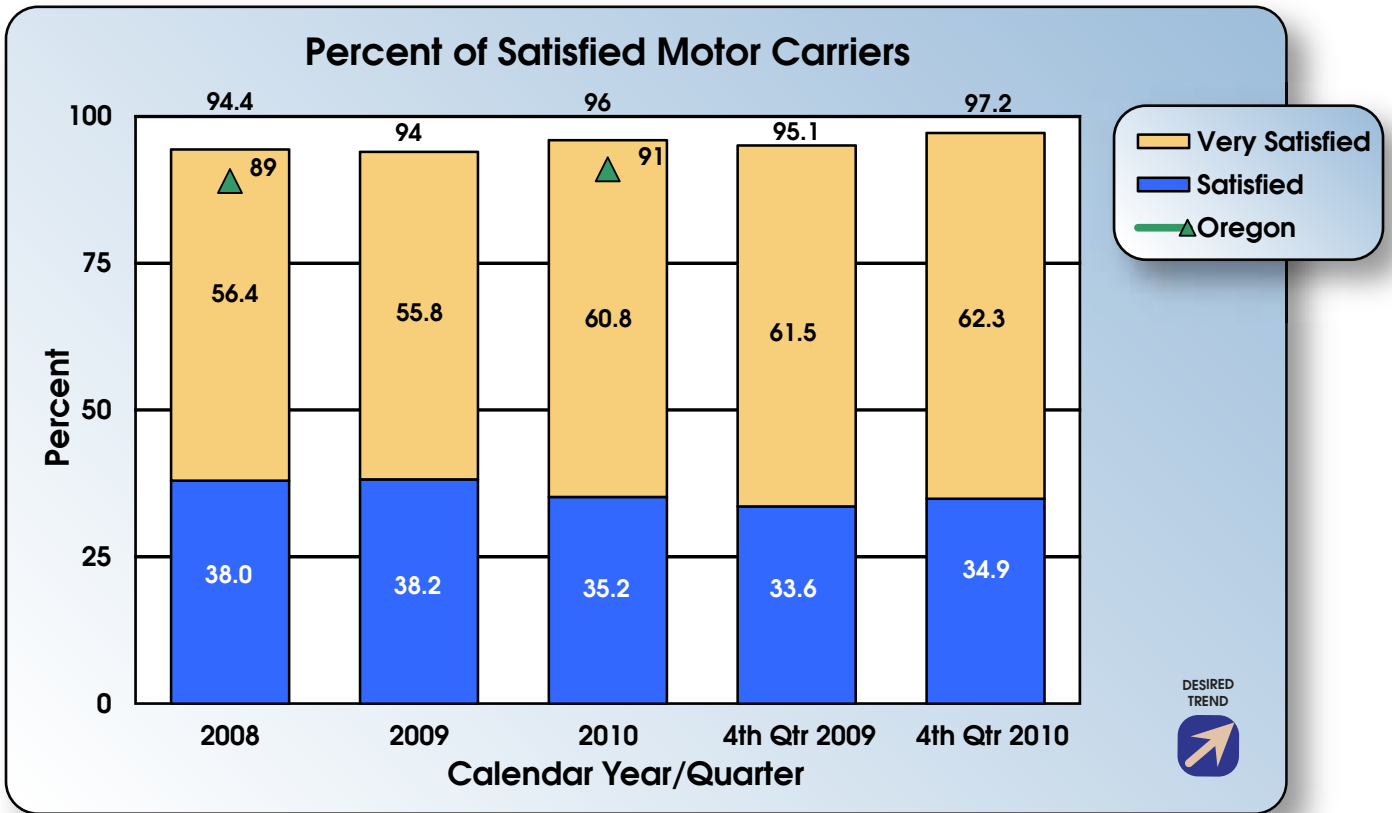
This data stems from customers' opinions of service received in October, November and December 2010.

Motor Carrier Services earned a customer satisfaction rating of 97.2, up 2.3 versus last quarter. The score is 2.1 points higher than the same time last year. The ratio of people who said they were "very satisfied" with the service they received from MCS in the fourth quarter 2010 is 62.3 percent, 4.2 points higher than last quarter and up 0.8 percent from the same time last year.

MCS takes risks in an effort to balance resources, optimize employee time and increase customer usage of Motor Carrier Express while maintaining a high level of customer service. In recent years, MCS decreased resources while increasing output, expectations and customer satisfaction.



**MoDOT Motor Carrier Services  
Earns 2010 Governor's Award for Quality  
and Productivity in Customer Service.**





## Missouri and Mississippi River waterborne freight tonnage-11d

**Result Driver:** Jan Skouby, Motor Carrier Services Director

**Measurement Driver:** Sherrie Turley, Waterways Program Manager

### Purpose of the Measure:

This measure tracks the amount of waterborne freight tonnage moving annually on the Missouri and Mississippi rivers. The measure also provides performance data to track the effectiveness of the industry, the interagency efforts to return freight traffic to the Missouri River and the re-establishment of the Missouri River corridor as a freight corridor following more than eight years of declining shipments.

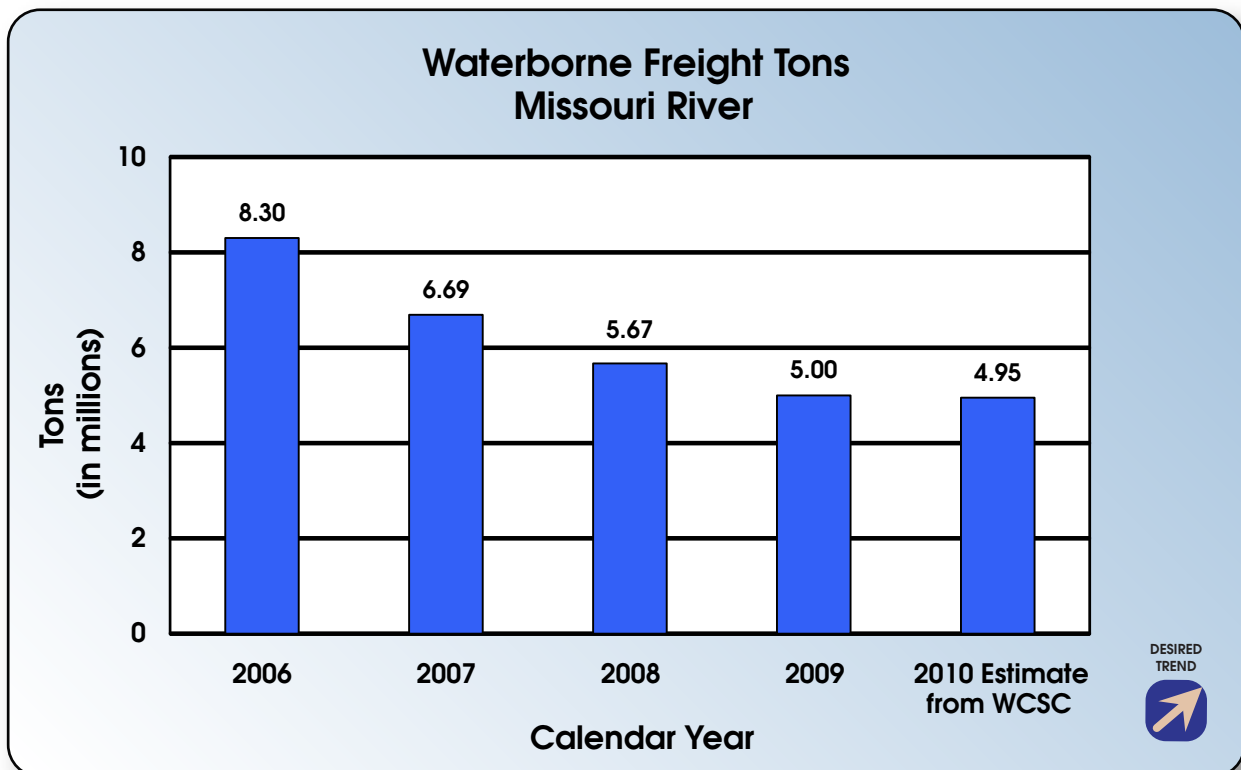
### Measurement and Data Collection:

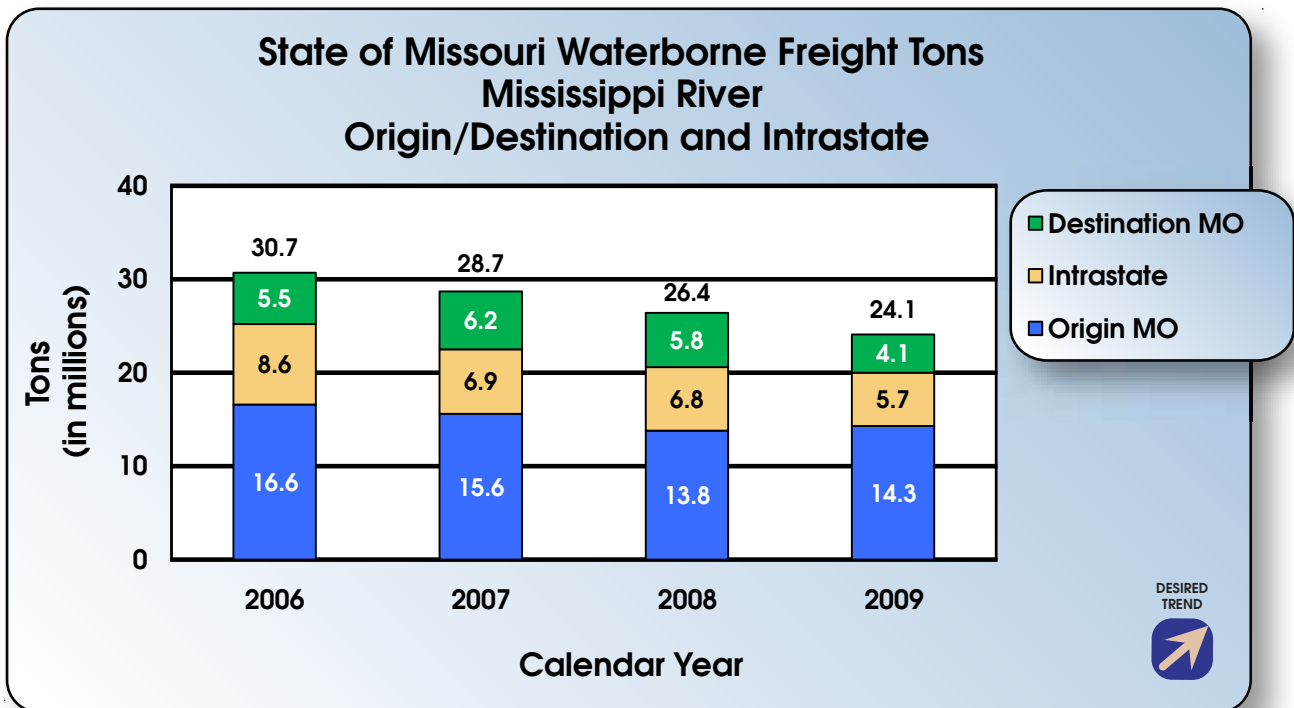
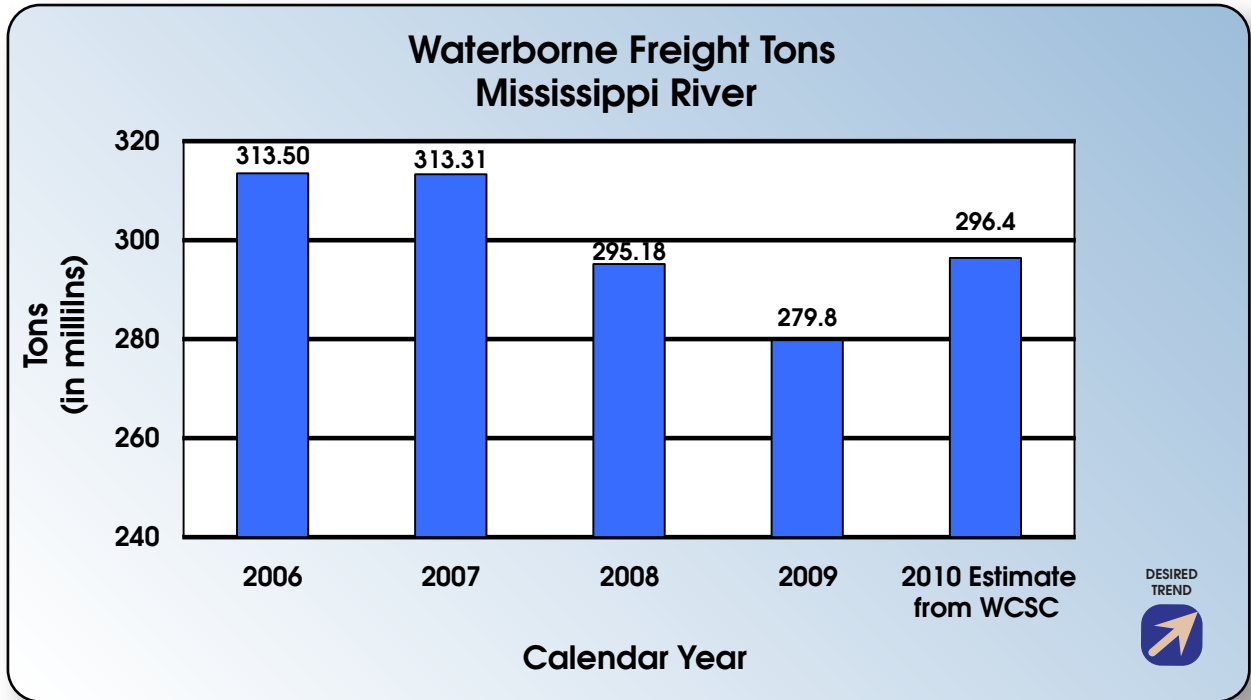
Data for this measure is collected from the U.S. Army Corps of Engineers, Waterborne Commerce Statistics Center (WCSC). This data includes all shipments on the Missouri and Mississippi rivers including sand and gravel. The Missouri River channel is maintained at 300 feet wide and nine feet deep to facilitate commerce; however, drought conditions and unstable water policy have driven much of the river's freight to other modes and rivers. This is an annual measure updated in April.

### Improvement Status:

Total commodities moved on the Missouri River continue a downward trend since a peak of more than nine million tons in 2001. Estimated tonnage for 2010 continues this trend at 4.95 million tons moved on the river. It is important to note that on average, sand and gravel comprise nearly 95 percent of the tons moved in recent years. Sand and gravel moved/mined from the river have gradually increased while freight movements have decreased. However, while sand and gravel tonnage decreased in 2010, freight tonnage increased by 24 percent and the industry expects it to increase by another 15 percent in 2011.

Efforts to move more freight on the river, through a multi-agency and private sector partnership, began in December 2009 with the Missouri River Assessment and Development Plan that is designed to increase the traditional movement of commodities, identify new markets and cargos, and evaluate the infrastructure and management strategies that would enhance the river as a freight corridor. Follow-up meetings are scheduled in April 2011.







# EASILY ACCESSIBLE MODAL CHOICES

*Tangible Result Driver – Brian Weiler, Multimodal Operations Director*

MoDOT has an active role in all modes of transportation, including rail, air, water, and transit. Transportation is more than highways and bridges. Every day millions of tons of goods move through the state by rail. Thousands of passengers use Missouri's airport facilities. And hundreds of barges navigate state waterways. All of these modes combine to keep Missouri's economy robust and vital.

## Number of airline passengers-12a

**Result Driver:** Brian Weiler, Multimodal Operations Director  
**Measurement Driver:** Joe Pestka, Administrator of Aviation

### Purpose of the Measure:

This measure tracks the number of passengers boarding airplanes at Missouri’s commercial airports. It helps determine the viability of Missouri’s commercial airline industry. This number is also used by the Federal Aviation Administration (FAA) to help determine airports’ capital improvement funding levels.

### Measurement and Data Collection:

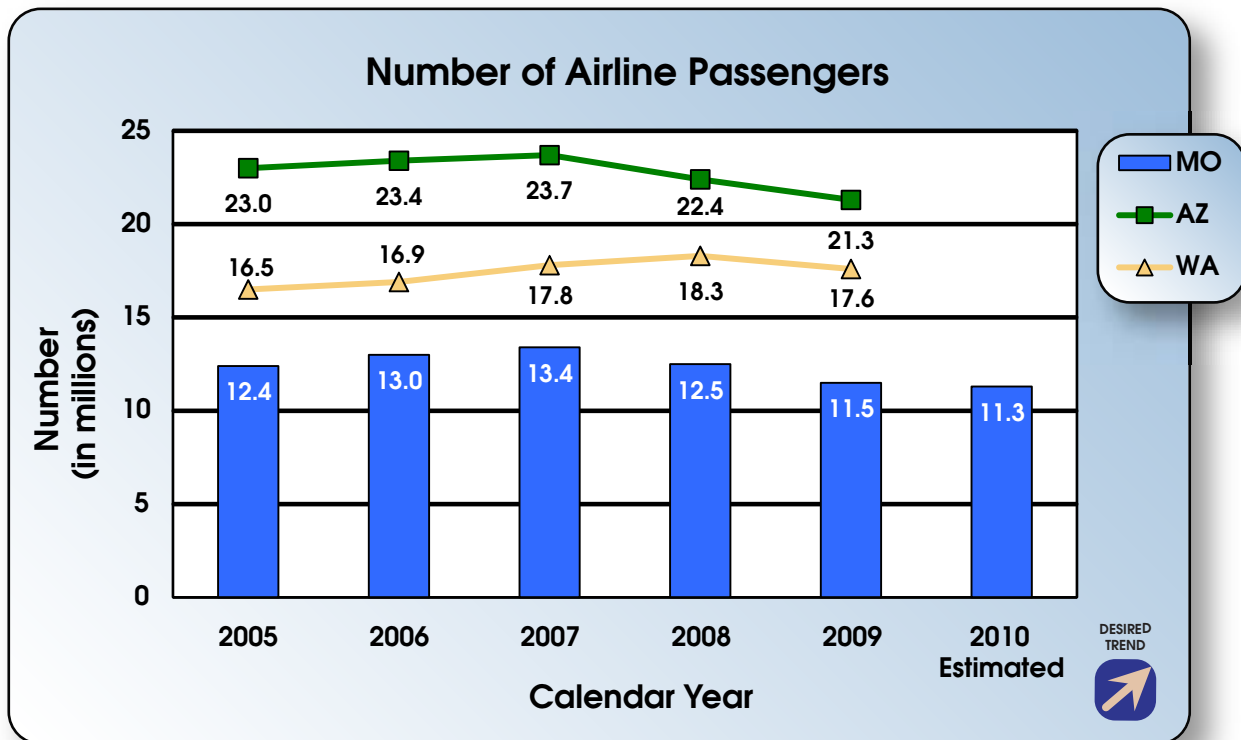
The data is collected annually from FAA. Comparison data has been collected from the same source for the states of Arizona and Washington. These two states were selected based on similar populations in 2004. The annual passenger boardings’ data provided by the FAA is normally published in October for the preceding year. Airline passengers are defined as passengers boarding airplanes. This information is also separated in two graphs showing the number of passengers at St. Louis International and Kansas City International airports, and a graph showing passenger boardings for the other airports in the state. Other airports include:

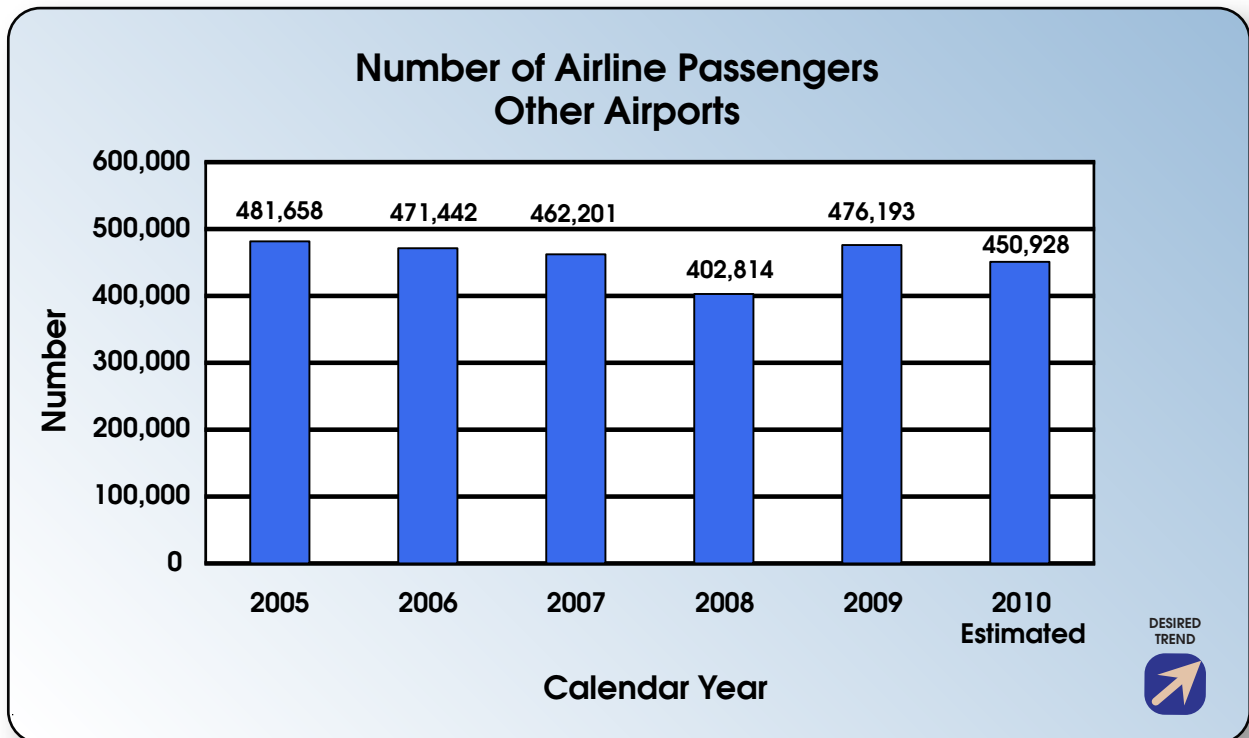
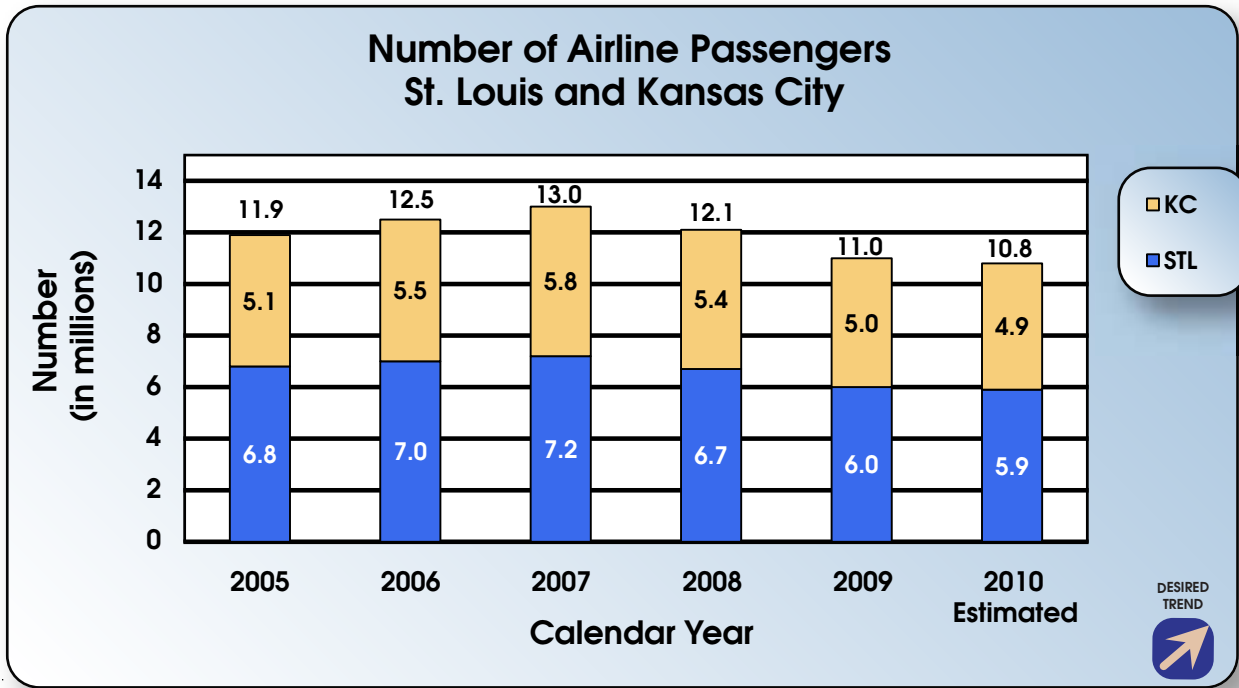
Springfield, Joplin, Columbia, Cape Girardeau, Branson and Waynesville. This measure is updated annually.

### Improvement Status:

Airline passengers have decreased by approximately 200,000 in Missouri from 2009 to 2010. This is a preliminary estimate and will be updated when FAA statistics are published. This decrease has occurred mainly at St. Louis.

State legislation passed in 2008 includes up to \$2 million annually for the study and promotion of expanded domestic or international scheduled commercial service, and for the study and promotion of intrastate scheduled commercial service. Since 2008, \$4 million from the State Aviation Trust Fund have been allocated to air service development at the states’ commercial service airports. In December, MoDOT received a USDOT grant for \$210,000 to assist with air service marketing at airports in Joplin, Columbia and Waynesville.





## Number of business-capable airports-12b

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Joe Pestka, Administrator of Aviation

### Purpose of the Measure:

This measure tracks the number of airports capable of handling business aircraft. Local communities and economic development agencies can use airports to assist in increasing a community’s economic viability for business retention and development.

### Measurement and Data Collection:

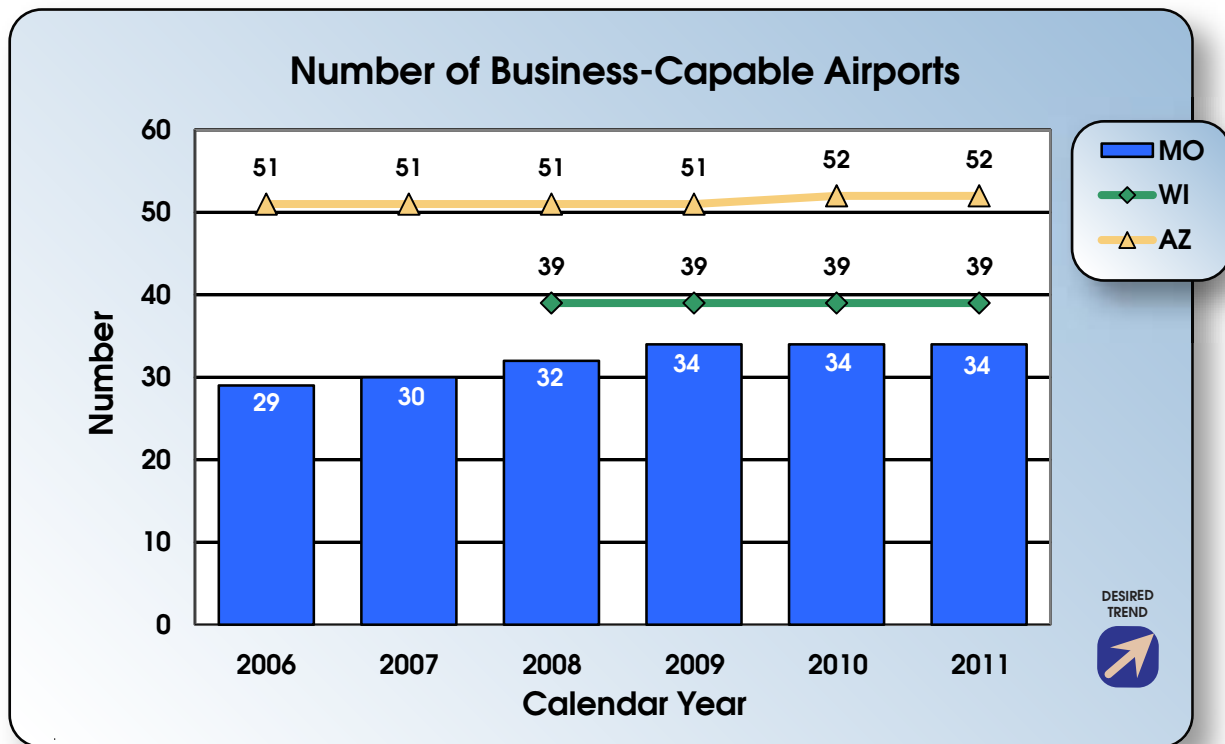
The graph shows the number of business-capable airports. A business-capable airport is defined as accommodating business- or corporate-type aircraft with a runway length of 5,000 feet or more. Comparison data starting in 2005 has been collected from Arizona and from Wisconsin starting in 2008. These states have a population similar to Missouri. Geographically, Wisconsin is similar to Missouri while Arizona is approximately 65 percent larger than Missouri. Data is collected annually by monitoring airport developments and Federal Aviation Administration (FAA) records. Updates to this measure include recording the percent of

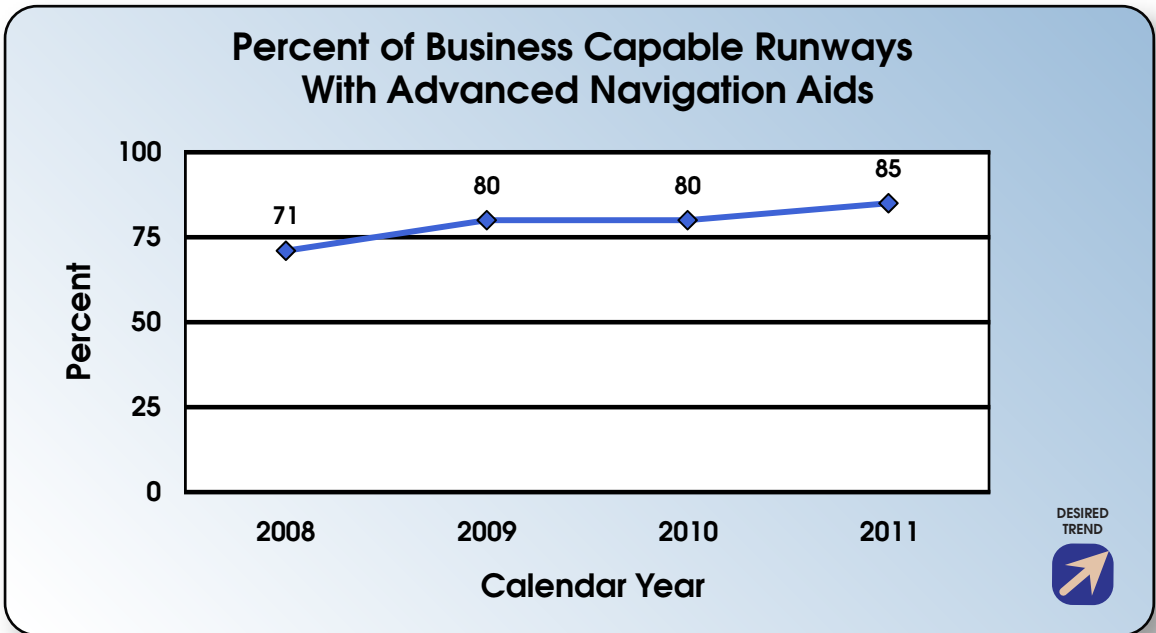
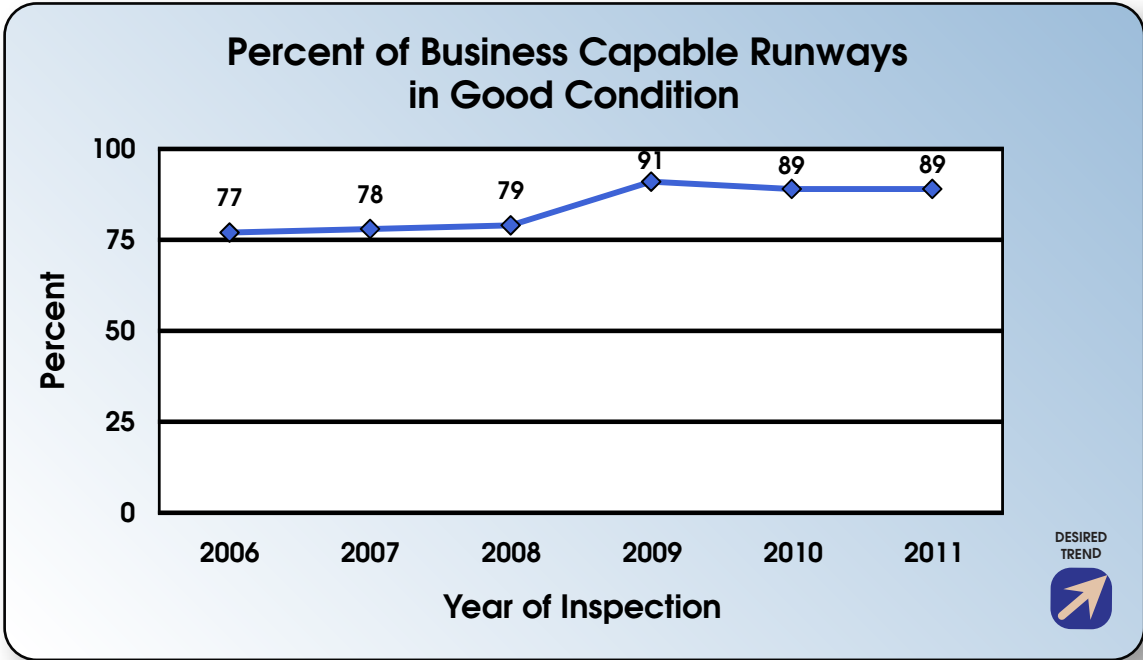
business-capable runways in Missouri that are in good condition. The pavement condition is determined per FAA guidelines and performed by visual inspection. A pavement inspection is completed at each airport either one time yearly or one time every three years.

Also this measure tracks these airports and how accessible they are during inclement weather conditions. The last graph identifies the percentage of runways that maintain advanced navigational capabilities. This measure is updated annually.

### Improvement Status:

MoDOT’s Statewide Transportation Improvement Plan identifies airports that meet the demand criteria and would support the development of a 5,000-foot runway. The MoDOT Aviation Section maintains a development plan for the installation of navigational aids at airports.







## Bicycle and pedestrian activity-12c

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Melissa Anderson, Non-Motorized Transportation Engineer

### Purpose of the Measure:

This measure tracks the activity of bicyclists and pedestrians, and the number of miles of bikeable roads on the MoDOT system. Bikeable roads include those bicyclists tend to favor because of sufficient paved shoulders, low volumes of cars and trucks or other accommodations such as specified bike lanes or share-the-road signs. Local residents and visitors to the state can use the facilities to assist in increasing transportation options, recreation and overall health.

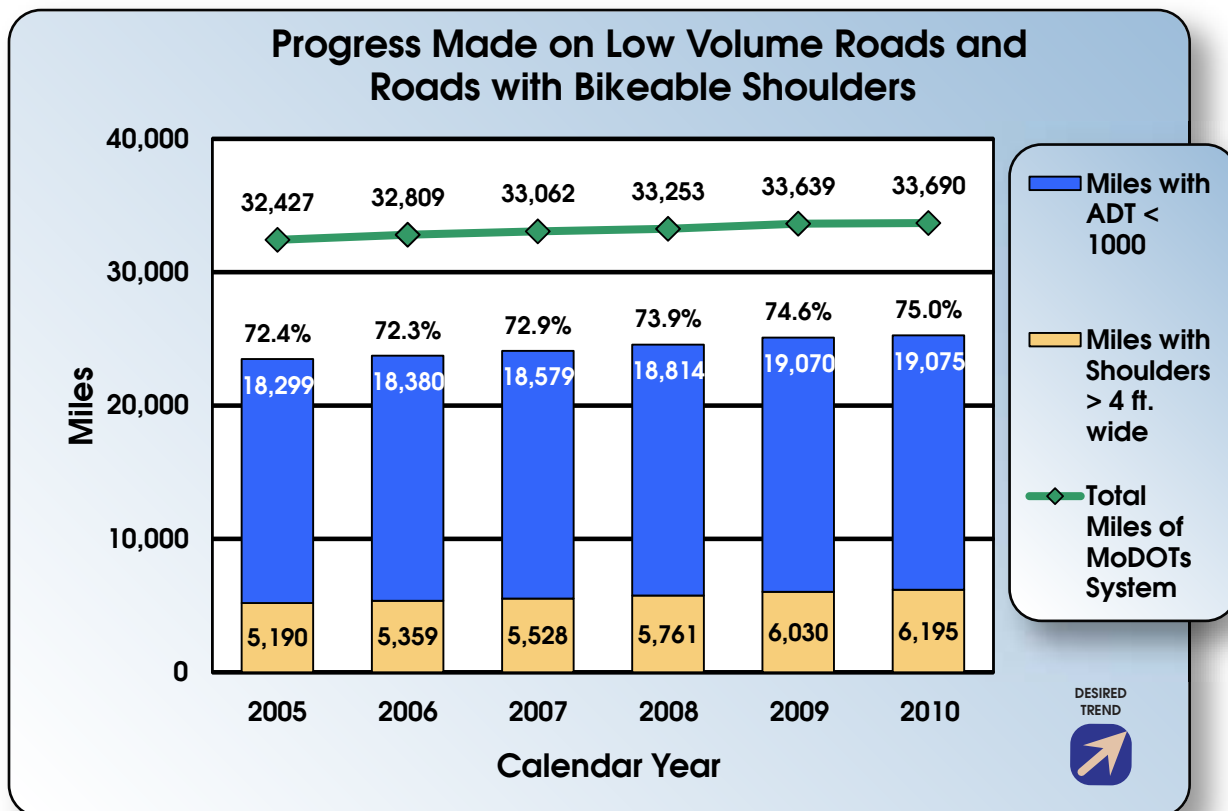
### Measurement and Data Collection:

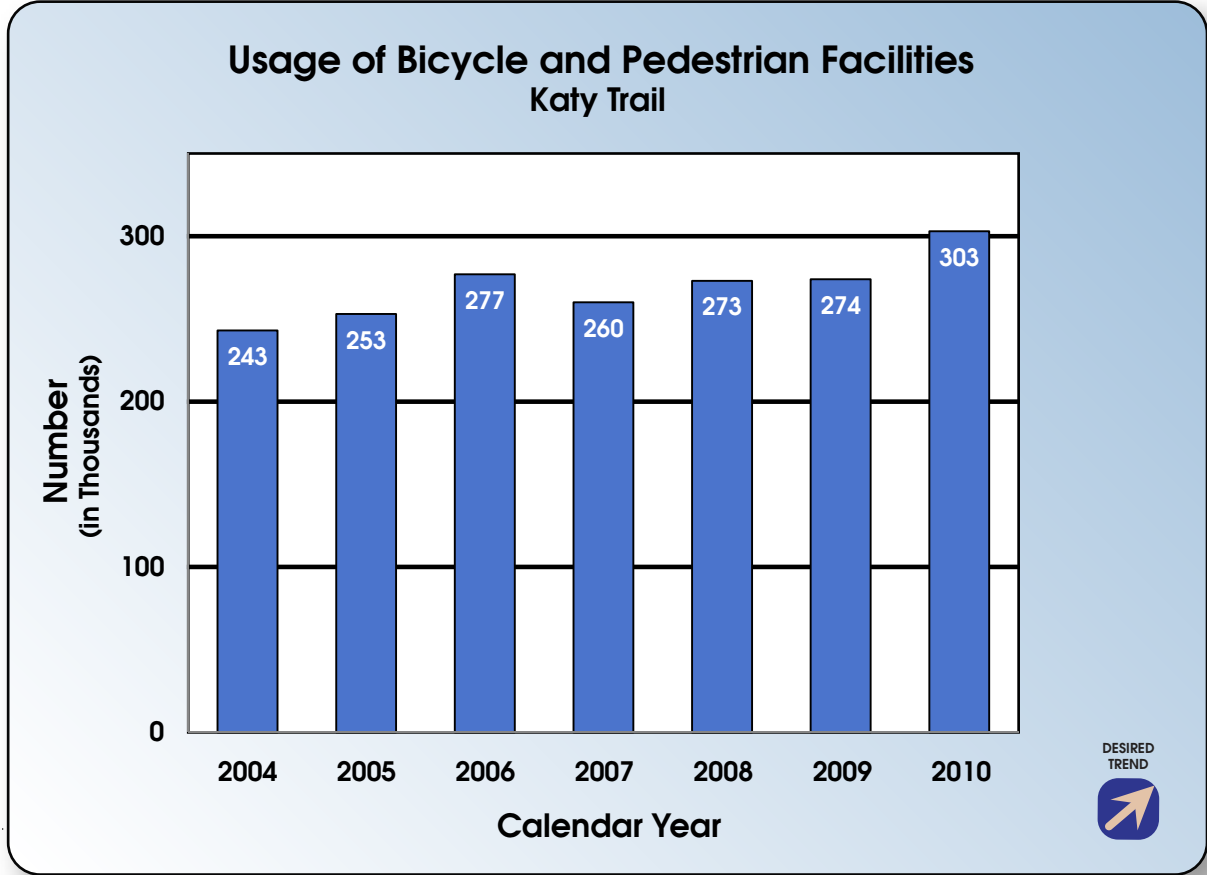
The first graph shows the miles and percent of MoDOT roads that are low volume and those that have shoulders at least 4-feet wide. Roads with these characteristics are frequently sought out by cyclists who may be commuting, traveling across the state or enjoying an energetic recreational activity. This is an annual measure updated each January.

The Katy Trail is being used as a measure of the number of people interested in biking and walking in Missouri. The second graph shows the number of users on the Katy Trail over a seven-year time frame. Use of the Katy Trail is collected annually by the Missouri Department of Natural Resources.

### Improvement Status:

As MoDOT continues to increase biking and walking opportunities, it is expected that the use of the Katy Trail will reflect the increased interest of Missourians in active transportation. An increase in the miles of roads considered bike friendly is the desired trend. Data on miles of bike lanes and shared-use paths will be added when it becomes available.





### Number of transit passengers-12d

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Steve Billings, Administrator of Transit

#### **Purpose of the Measure:**

This measure gauges the use of public transit mobility services in Missouri. It also provides a historical perspective and trend of public transit service use in Missouri.

#### **Measurement and Data Collection:**

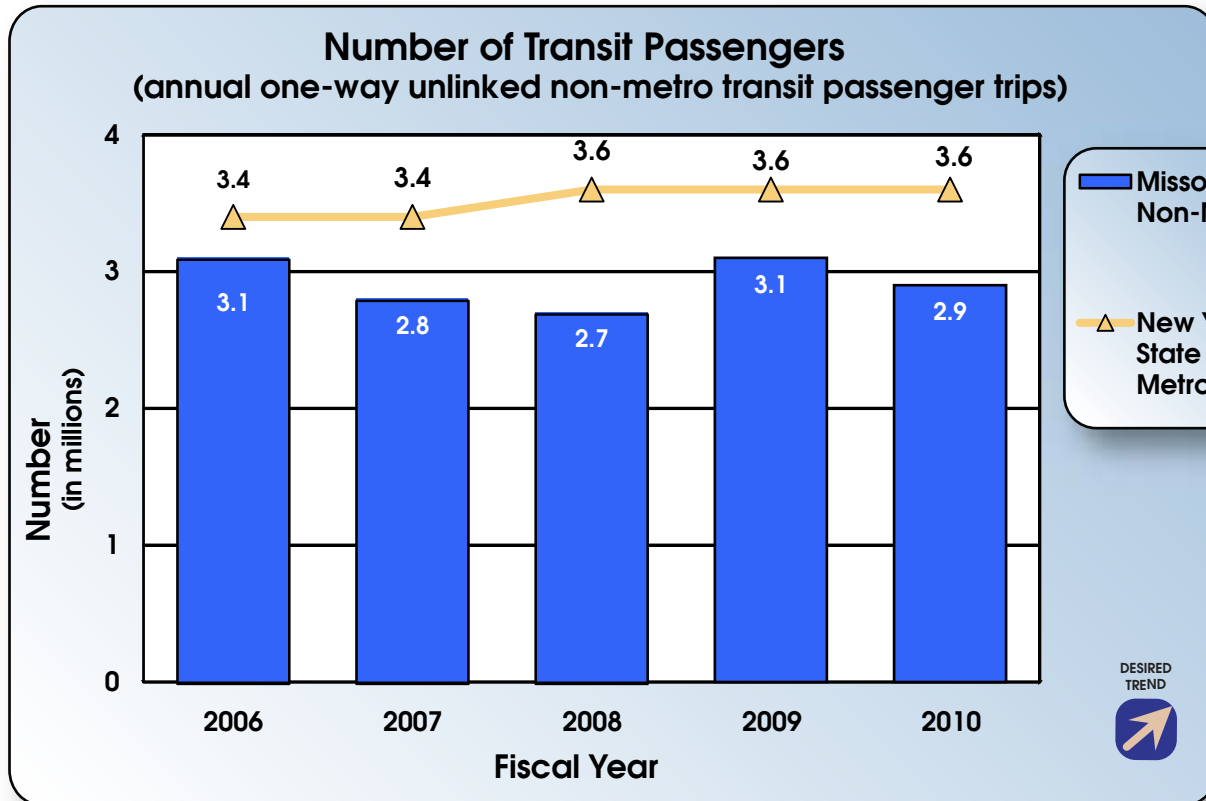
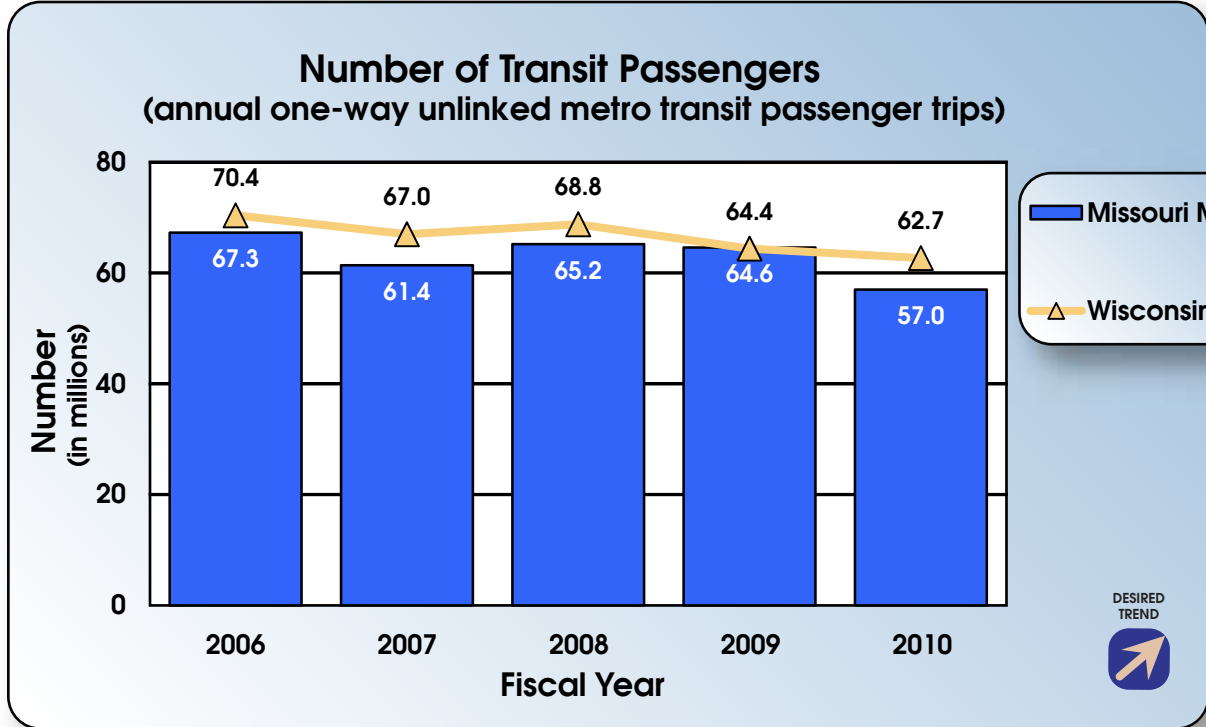
The total number of transit passengers is measured by the annual total of one-way unlinked transit trips taken by passengers on public transit vehicles. Data is obtained from urban and rural providers of general public transit services. Missouri Metro ridership data has been recalibrated for Missouri trips only, rather than “system trips”, that included Illinois trips in the St. Louis area and Kansas trips in the Kansas City area. The non-metro measure is benchmarked to the state of New York, which has a historically high usage of public transit services. The metro measure is benchmarked to Wisconsin, a state with a comparable population. This is an annual fiscal year measure with Missouri data updated in October.

#### **Improvement Status:**

In 2010, statewide metropolitan transit ridership decreased by 7.6 million one-way unlinked Missouri passenger trips compared to the previous year. Most of that ridership reduction occurred in St. Louis, but ridership losses were also experienced in Kansas City and Springfield. Non-metro (rural) ridership decreased by 0.2 million one-way unlinked trips.

Missouri compared 19 percent below New York State’s non-metro transit ridership in 2010. New York’s rural population in the 2000 Census was 3.4 million or twice as large as Missouri’s rural population of 1.7 million. Missouri’s metro transit ridership in 2006 – 2010 generally tracked that of Wisconsin. The New York and Wisconsin benchmark data is for the calendar year and is currently available through 2010.





## Average number of days per week rural transit service is available-12e

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Steve Billings, Administrator of Transit

### Purpose of the Measure:

This measure identifies the average existing public transit service in rural Missouri by indicating the availability of rural mobility services for employment, medical appointments and necessary shopping.

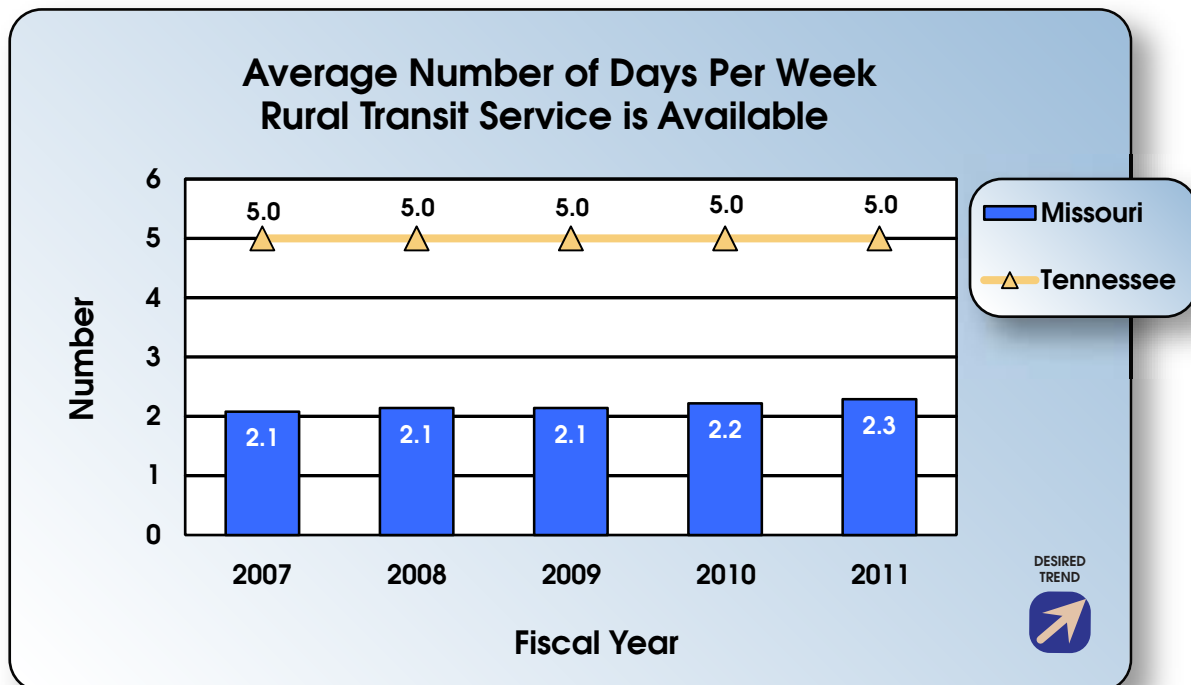
### Measurement and Data Collection:

To calculate the statewide average number of days per week rural transit service is available, MoDOT reviews published transit service schedules for each rural Missouri county. MoDOT then averages these daily frequencies within a week's schedule for available county-wide transit service. Rural transit agencies operate on an annual budget and customarily make transit service changes with the start of a new budget year. The measure is benchmarked to Tennessee, which has a comparable statewide population and some amount of transit service in every rural county as does Missouri. This is an annual measure with updates occurring in April.

### Improvement Status:

Rural transit service at a statewide average of two days per week is not sufficient to support full-time employment for its riders. For 2011, Tennessee deployed more days of rural transit service with five-day-a-week service, subject to available seating. Tennessee in 2008 directed more state funding annually to public transportation (\$17.7 million vs. \$4.1 million in Missouri). Tennessee's transit providers also use pure demand-response dispatching compared to designated daily routes used by OATS and other Missouri providers. However, Missouri's rural transit providers together delivered 2.7 million trips compared to 1.3 million rural transit trips provided in Tennessee based on their most recent 2008 data.

MoDOT also procured rural transit intelligent transportation system (ITS) design services to begin projects to increase transit service through scheduling efficiencies. The initial phase of OATS ITS implementation was completed in March 2011.



## Number of intercity bus stops-12f

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Steve Billings, Administrator of Transit

### Purpose of the Measure:

This measure tracks the number of intercity bus stops. Intercity bus stops represent access points to intercity bus services provided in Missouri by Greyhound, Jefferson Lines, Burlington Trailways and Megabus. More stops among Missouri's 114 counties mean greater access. Fewer stops create a barrier to access by requiring greater traveling distances in order to board an intercity bus.

### Measurement and Data Collection:

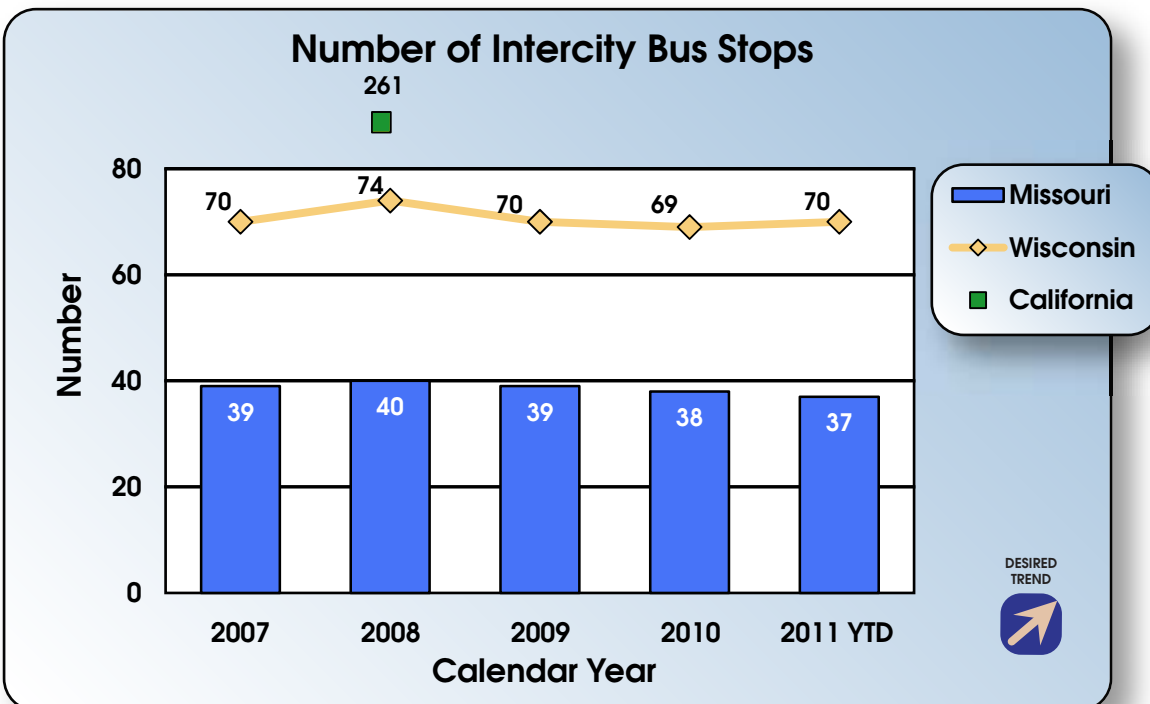
Data on the number and location of intercity bus stops is obtained annually from the national and regional intercity bus carriers. The measure is benchmarked to Wisconsin, which has a comparable total statewide population. An additional benchmark to California was added for 2008. This is a quarterly measure.

### Improvement Status:

The number of Missouri's intercity bus stops has slowly decreased since 2008. Most of the recent incremental growth in Missouri's intercity bus service has increased the schedule frequency for

cities already receiving service rather than creating new bus stops in un-served areas. The stop at Rock Port in northwest Missouri was discontinued in late 2010. The stop at Clinton in west-central Missouri ended service in early 2011. Wisconsin experienced a net gain of one bus stop since the last report. The California bus stop data of 261 intercity bus stops is derived from a 2008 rural intercity bus study concluded that year.

A MoDOT two-year statewide intercity bus study concluded in April 2010. That study's final report recommended improvements for intercity bus stop locations, increased marketing of available services and creation of bus service on the U.S. 36 corridor across northern Missouri, the U.S. 60 corridor across southern Missouri and the U.S. 63 corridor through central Missouri. In February, Greyhound submitted to MoDOT a draft proposal to add service between Springfield and Ottumwa, IA using the US 60 & 63 corridors with eight (8) new stops. Annualized Missouri intercity bus passenger ridership was estimated at 200,000 trips per year.



### Number of rail passengers- 12g

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Rod Massman, Administrator of Railroads

#### Purpose of the Measure:

This measure tracks the number of people using the Amtrak train service in Missouri, including those riding on the state-supported passenger rail trains between Kansas City and St. Louis, the national trains that run through the state and the St. Louis-to-Chicago trains.

#### Measurement and Data Collection:

Data is received monthly from Amtrak providing the number of passengers per train in Missouri. For comparison purposes, the state of Washington's train data is shown due to the state's similar size, population and the fact that Washington has both national and state supported trains. Washington's "Cascades" train service is a national model because the state has for many years invested millions of dollars in both infrastructure and operations. This is a quarterly measure.

#### Improvement Status:

There was a 10 percent increase for passenger rail services on this route between January and March of 2011 when comparing the same months in 2010. For fiscal year 2010, ending June 30, 2010, the total performance was 7 percent more than in fiscal year 2009.

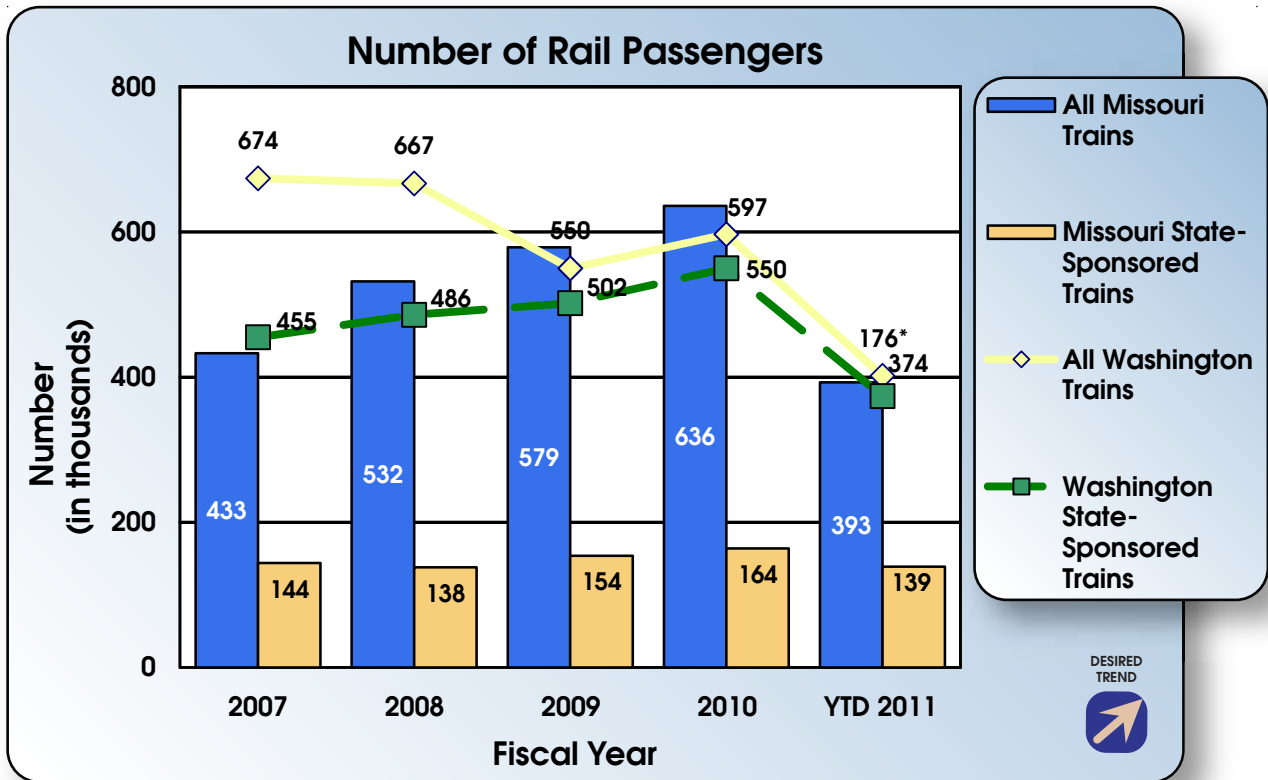
MoDOT continued its publicity efforts through roadside signs, news releases, (including a radio-

station broadcast in which the anchors took the train) a wide-ranging distribution of train schedules, and use of the department's dynamic message signs along the interstate system. These efforts, along with an increase in on-time performance (90 percent in January, 80 percent in February and 91 percent in March) helped increase passenger numbers.

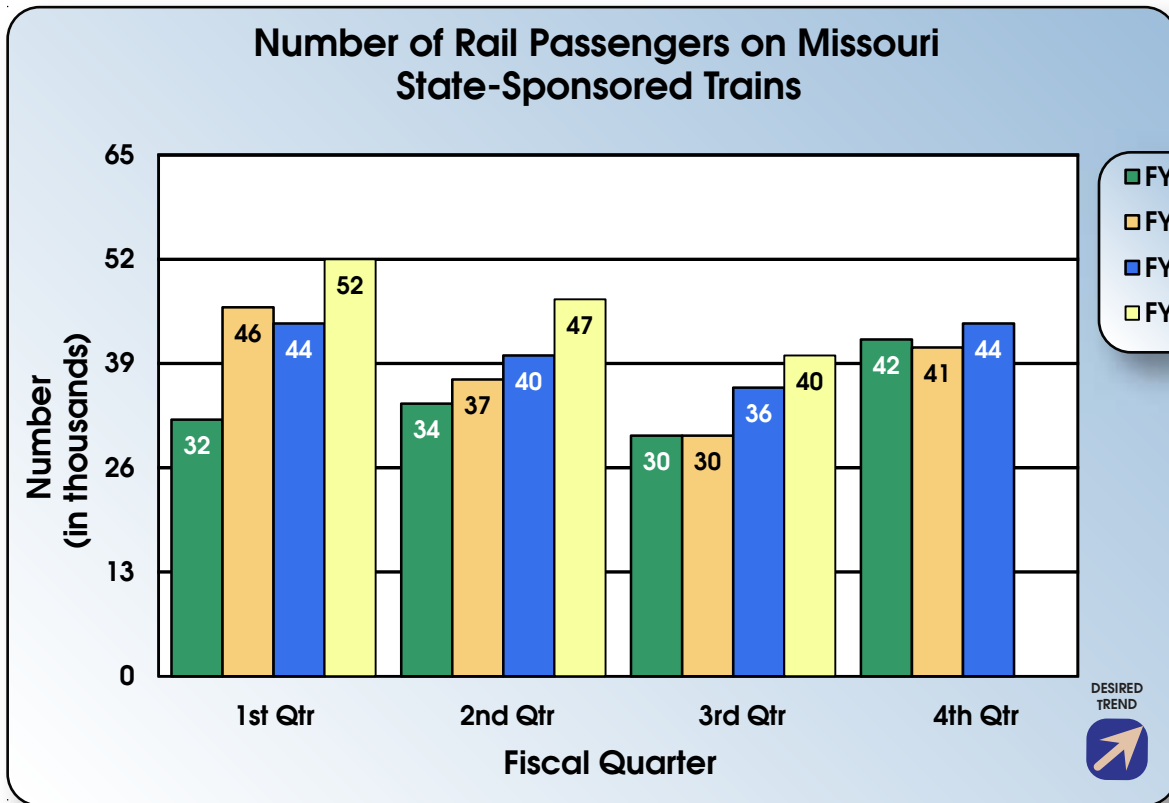
The MoDOT Rail section continues to apply for and receive federal HSIPR grants to improve service. The first group of HSIPR grants for construction was awarded in early 2010. A second group of planning applications was also granted to plan six more miscellaneous projects along the route. All of these projects are currently in various stages of obligation, grant agreement/design, or finalization/review. Some of them are in preparation for construction and some are for preparation to resubmit projects in future application opportunities.

Another project for construction was let this quarter for design on the Terminal Railroad in St. Louis. Each of the previously mentioned project applications follows the general aim of a 2007 University of Missouri study, which is to remove bottlenecks and to increase on-time performance that makes rail passenger service better and more easily accessible.





\*The figure for "All Washington Trains" is for July 2010 through February 2011 because YTD data is unavailable.





### State funding for multimodal programs-12h

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Lisa Hueste, Resource Management Specialist

#### Purpose of the Measure:

This measure provides the history of state funding appropriated by the Missouri state legislature for multimodal programs that include transit, rail, air and waterways.

#### Measurement and Data Collection:

This is an annual measure updated each July. State funding for multimodal programs is determined by the amount of revenue the state collects each year. MoDOT has several funds dedicated to multimodal programs for assisting Missouri citizens.

In addition, multimodal programs also receive state general revenue funding. The governor may withhold funds during the fiscal year to ensure a balanced budget. The spending of funds throughout the fiscal year must be requested and authorized by MoDOT and the state legislature. The legislature may also deal with funding issues for spending through bills filed by the state legislature.

#### Improvement Status:

State funding for multimodal programs increased as a result of action taken during the 2010 legislative session. After the governor withheld \$6 million, the programs received \$17.1 million for fiscal year 2011 compared to a total appropriated amount of \$23.2 million.

The percent of difference between state funding for multimodal programs less withholdings compared to appropriated amounts in fiscal year 2011 was 26 percent. The same funding differential in fiscal year 2010 was 12 percent. The transit program has seen the largest withholdings of \$6.9 million over the past two years.

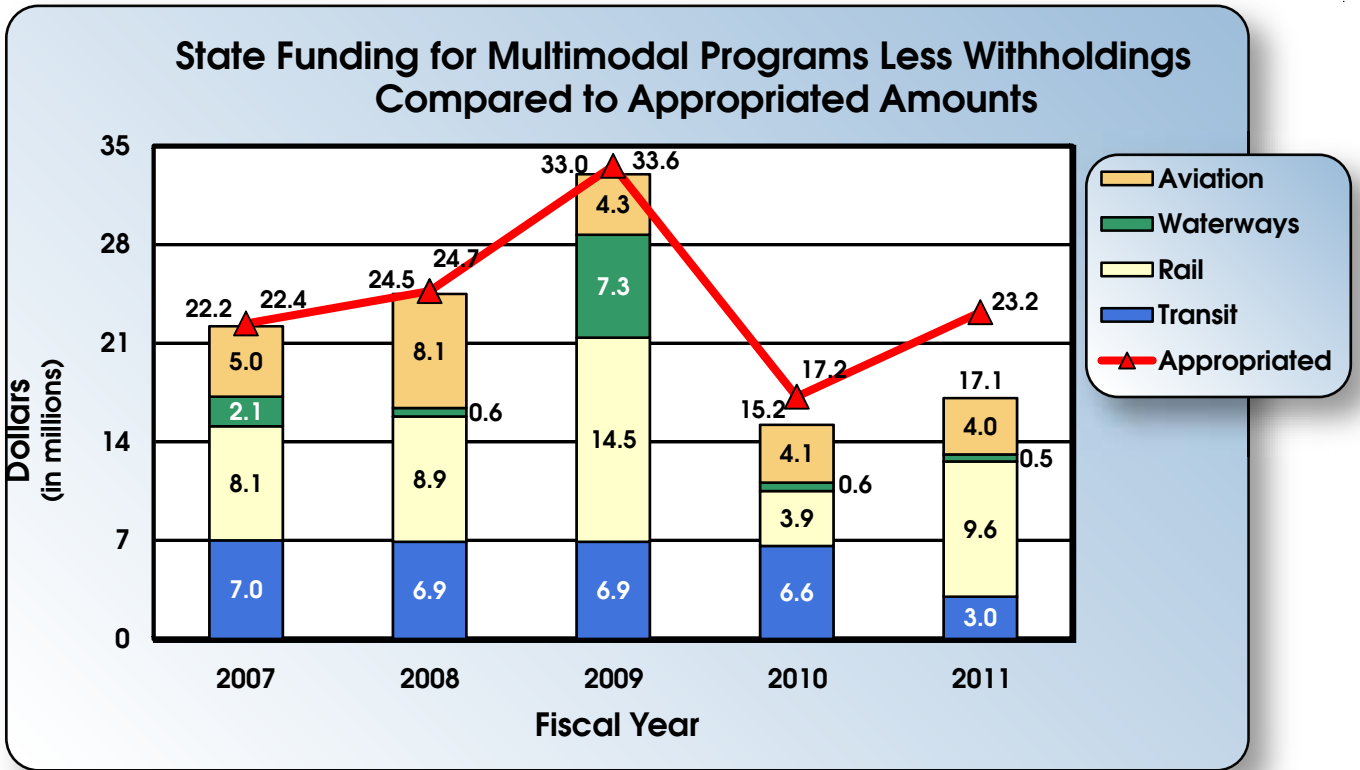
State funding for transit decreased \$3.6 million, from fiscal year 2010, because of withholdings. Declining revenues in general revenue and the State Transportation Fund decreased the Transit and Missouri Elderly and Handicapped Transportation Assistance programs \$.6 million for fiscal year 2011. The Kansas City Area Transportation Authority received \$3 million in one-time funds. However, this amount has been withheld for fiscal year 2011. In addition, \$3 million from the transit program was also withheld from the appropriated amount because revenues have declined further since the legislative session ended.

State funding for rail increased \$5.7 million more than fiscal year 2010. Funding for Amtrak's daily rail service in 2011 was switched by legislators from \$5.5 million of federal funding to state funding. At the same time, legislators decreased this amount 10 percent, or \$900,000, from fiscal year 2010. Total funding increased from \$7.9 million (\$1.1 million withheld in 2010) to \$8.1 million in 2011.

Waterways funding was decreased \$100,000 due to declining revenues.

The aviation program decreased \$100,000 due to declining revenues. Revenue for aviation jet fuel tax has declined 49 percent, or 4.1 million, since 2008.

MoDOT and its external multimodal program partners informed legislators of the importance of how multimodal programs can effectively use state funds. The programs improve economic development and provide needed services for Missouri's citizens.



## Percent of customers satisfied with transportation options-12i

**Result Driver:** Brian Weiler, Multimodal Operations Director

**Measurement Driver:** Eric Curtit, Long-Range Transportation Planning Coordinator

### Purpose of the Measure:

This measure provides information about the public's perception of MoDOT's performance in providing transportation options other than Missouri's personal vehicle.

### Measurement and Data Collection:

Data is collected through a telephone survey each May from interviews of approximately 3,500 randomly selected adult Missourians with an overall margin of error of plus or minus 2 percent. This is an annual measure updated in July.

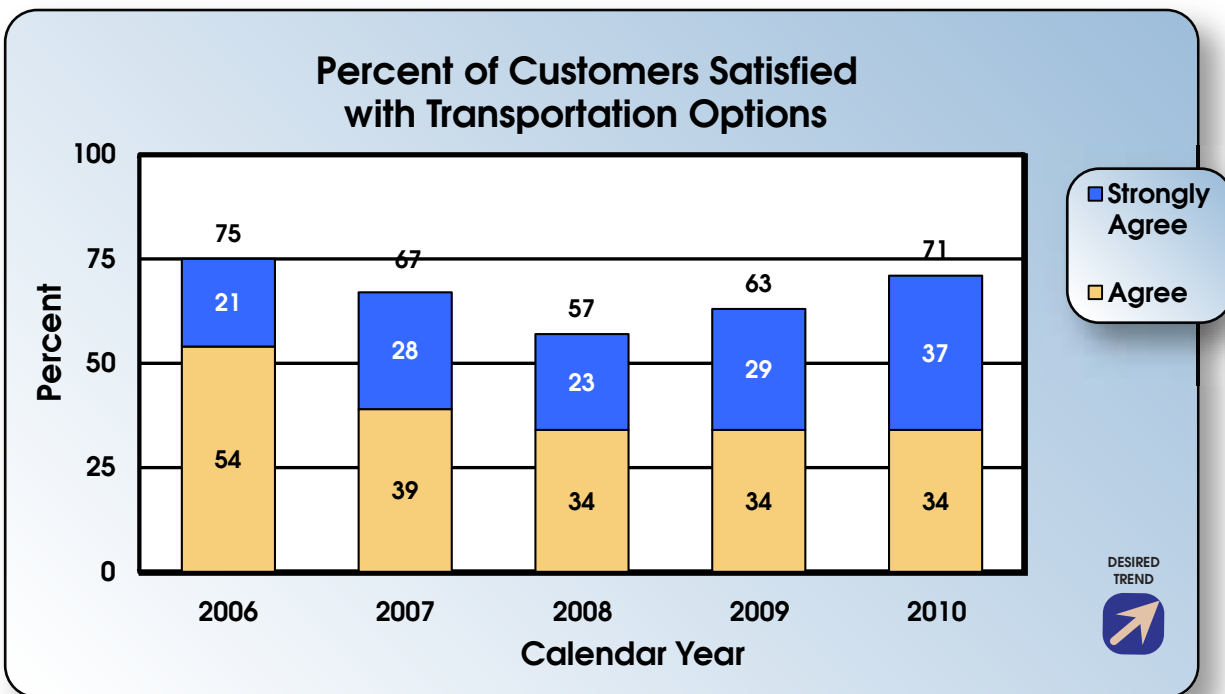
### Improvement Status:

Seventy-one percent of MoDOT's customers are satisfied with transportation options in Missouri. This measure increased by 8 percent from last year's results. There was a 7 percent increase in customers who strongly agree they are satisfied with transportation options. This marks the first time in

more than five years that more Missourians strongly agree with transportation options than agree.

The increase in satisfied customers from 2008- 2010 can be attributed to several factors. During the last year, the residents of the St. Louis region passed a ballot initiative to increase transit service and MoDOT received American Reinvestment and Recovery Act funds to improve passenger rail service between St. Louis and Kansas City.

MoDOT continues to emphasize transportation improvements in all modes including increased services to public transportation, more reliable passenger rail service and port enhancements. Gas prices remain below peak levels experienced in 2008, and this appears to correlate with Missourians satisfaction regarding transportation options.



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# High Impact Low Cost

Use high-quality materials or maintenance applications (e.g. top coat)

GET CONTRACTOR PLANS EARLIER

CONTRACTOR ENTITIES

Identify EXPECTATIONS FOR ATC

HIGH IMPACT  
LOW COST

Use high-quality materials or maintenance applications (e.g. top coat)

Use high-quality materials or maintenance applications (e.g. top coat)

Use high-quality materials or maintenance applications (e.g. top coat)

Use compost for erosion control

Use high-quality materials or maintenance applications (e.g. top coat)

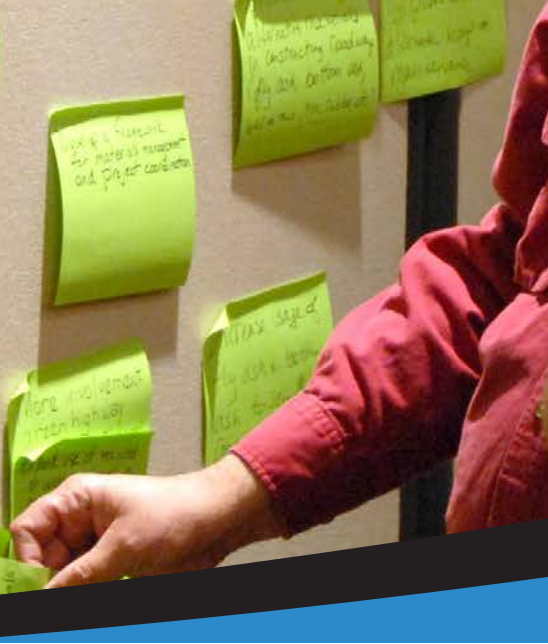
Use high-quality materials or maintenance applications (e.g. top coat)

Flexibility Schedule

Use high-quality materials or maintenance applications (e.g. top coat)

Use high-quality materials or maintenance applications (e.g. top coat)

GET CONTRACTOR PLANS EARLIER



# CUSTOMER INVOLVEMENT IN TRANSPORTATION DECISION- MAKING

*Tangible Result Driver – Paula Gough, District Engineer*

MoDOT seeks out and welcomes any idea that increases its options, because the department doesn't have all the answers. The department creates and preserves a transportation decision-making process that is collaborative and transparent, involving its customers in the determination of needs right through to the development, design and delivery of projects.



## Number of customers who participate in transportation-related meetings- 13a

**Result Driver:** Paula Gough, District Engineer

**Measurement Driver:** Bob Brendel, Outreach Coordinator

### Purpose of the Measure:

This measure gauges MoDOT’s public involvement success – both in terms of public meetings and hearings that are held to make collaborative decisions with the general public, communities, elected officials, stakeholders, and in terms of public informational events scheduled by MoDOT to keep its customers advised of project status and potential impacts that could be experienced.

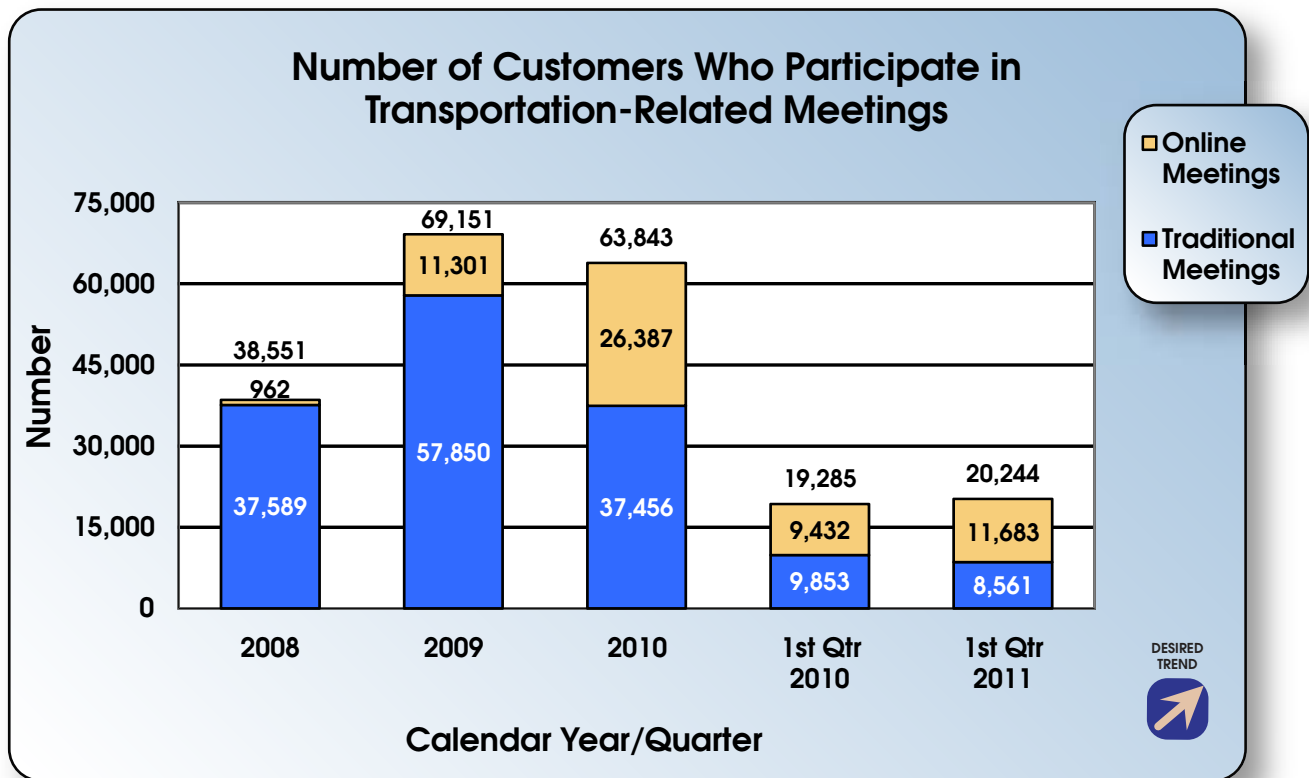
### Measurement and Data Collection:

Participation is determined by analyzing sign-in sheets used at public meetings or by head counts conducted by MoDOT staff. Participation in online

meetings is gauged by using Google Analytics. This measure is updated quarterly.

### Improvement Status:

Participation in transportation-related meetings rebounded in the first quarter of 2011, as districts prepared the public for upcoming improvement projects. The total of 20,244 participants was buoyed by the strongest quarter MoDOT has ever had with online meetings – 11,683. That included two projects with high online interest – District 5’s Hurricane Deck bridge replacement (2,981) and District 4’s Front Street Diverging Diamond Interchange (1,646).



## Percent of customers who are satisfied with feedback they receive from MoDOT after offering comments- 13b

**Result Driver:** Paula Gough, District Engineer

**Measurement Driver:** Bob Brendel, Outreach Coordinator

### Purpose of the Measure:

This measure tracks MoDOT’s responses to its customers. MoDOT routinely asks people who attend public meetings/hearings to submit comments that will be examined by the project team and will become part of the project’s official record. It is important that people who avail themselves of this opportunity know that their comments are taken seriously.

### Measurement and Data Collection:

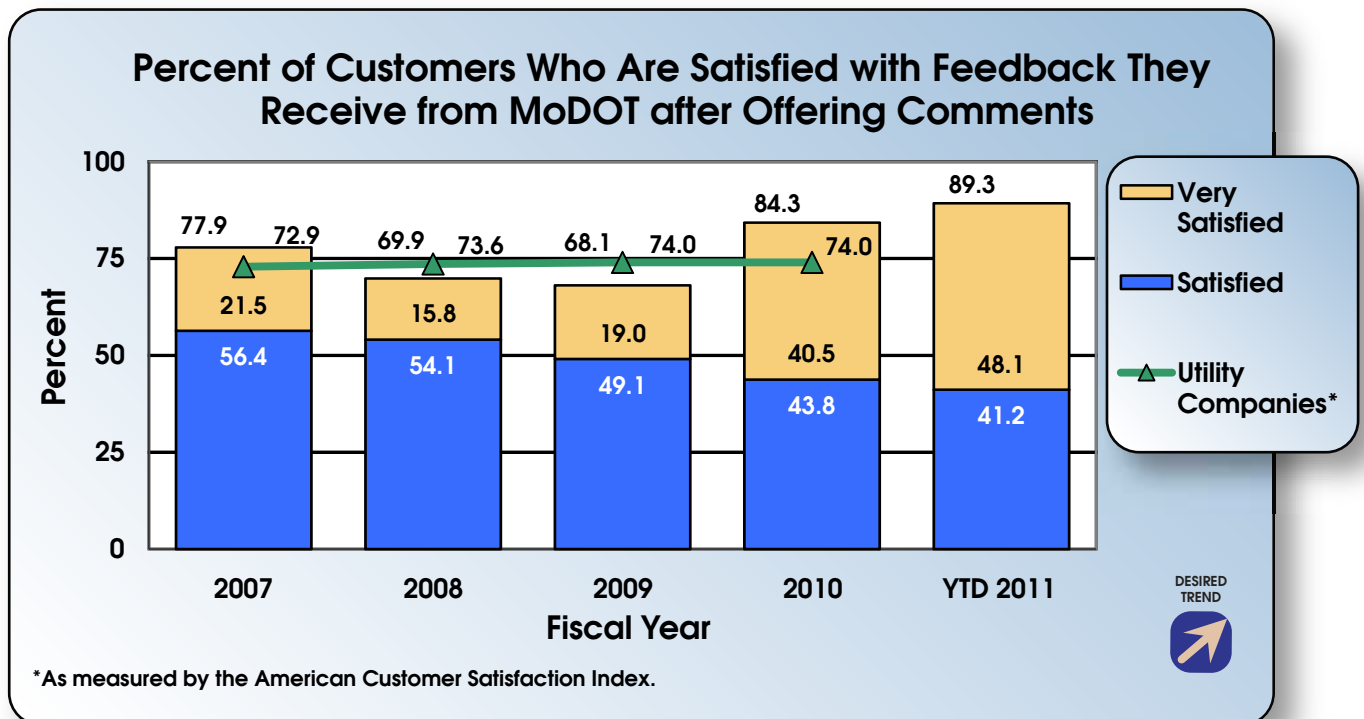
MoDOT routinely coordinates a survey for persons who attend project-specific meetings and hearings. The initial survey was sent to more than 4,500 persons who attended meetings in a five-year period. A survey process continues, with contacts made each time a project reaches the official public hearing milestone. This is an annual measure based upon a fiscal year, and data is analyzed twice each year.

### Improvement Status:

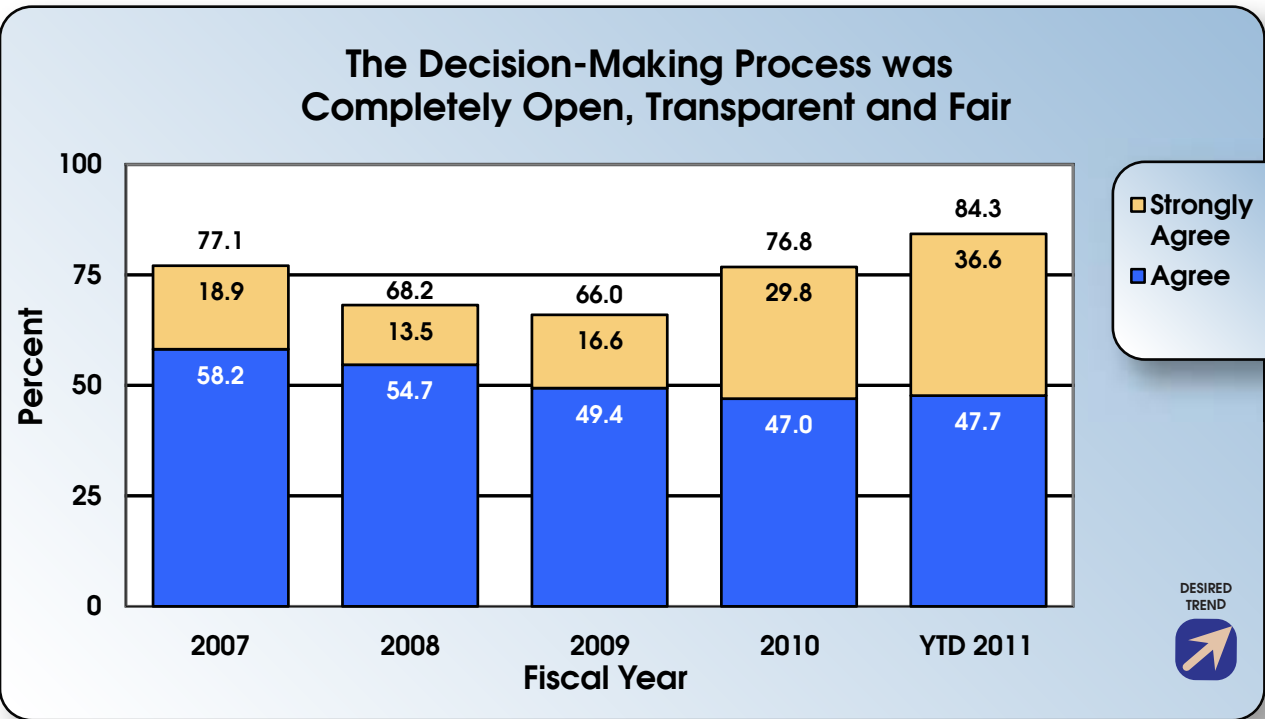
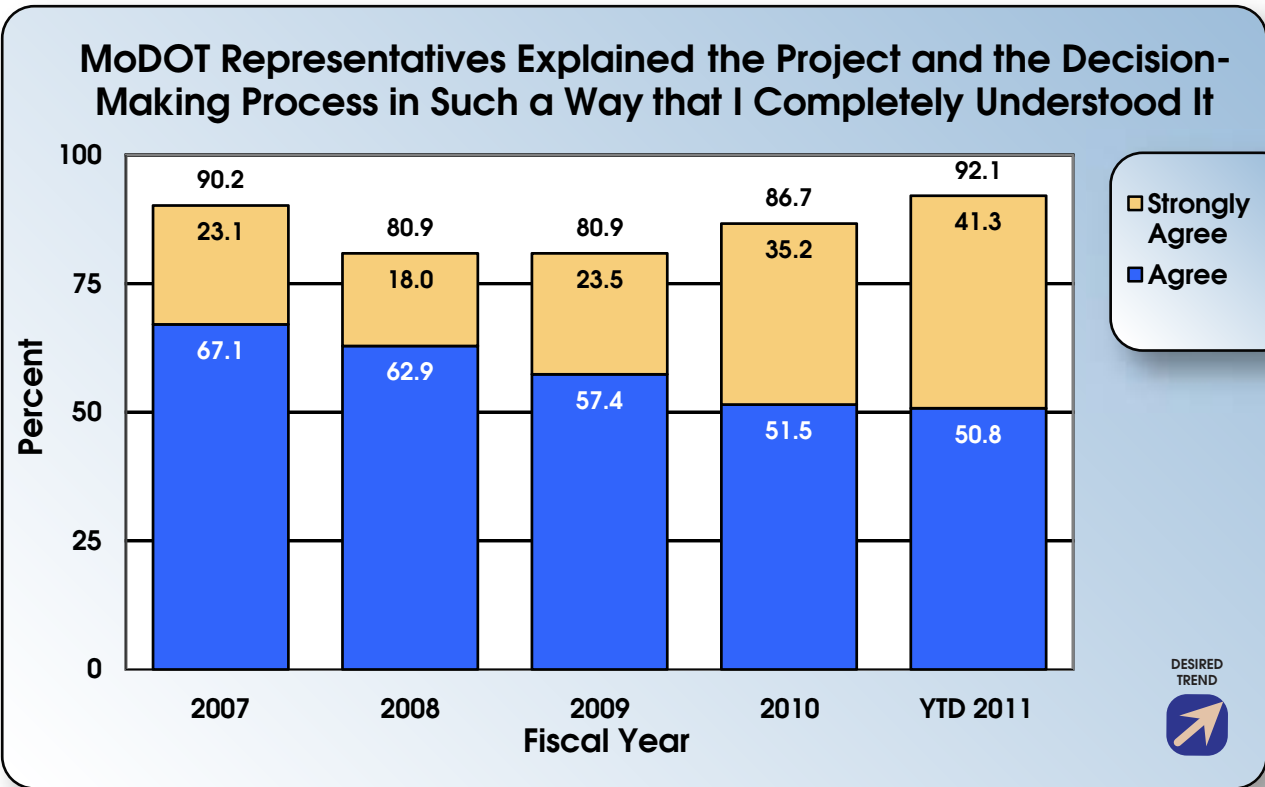
This is a mid-year snapshot of an annual measure, and reflects 29 projects that were surveyed across eight MoDOT districts (1-2-3-5-6-7-9-10).

The overall satisfaction with how MoDOT handled questions and comments was 89.3 percent – the highest since the five-year baseline score of 66.7 percent was established in 2005. Included were 48.1 percent of respondents who said they were “very satisfied.” Eighteen projects had 100 percent satisfaction ratings.

The other two key indicators also improved compared to the previous year: 92.1 percent of the participants credited MoDOT with providing clear explanations and 84.3 percent thought the decision-making process was open, transparent and fair.







## MoDOT takes into consideration customers' needs and views in transportation decision-making-13c

**Result Driver:** Paula Gough, District Engineer

**Measurement Driver:** Sue Cox, Transportation Planning Special Projects Coordinator

**Purpose of the Measure:**

This data helps determine the effectiveness of MoDOT's project planning outreach efforts.

**Measurement and Data Collection:**

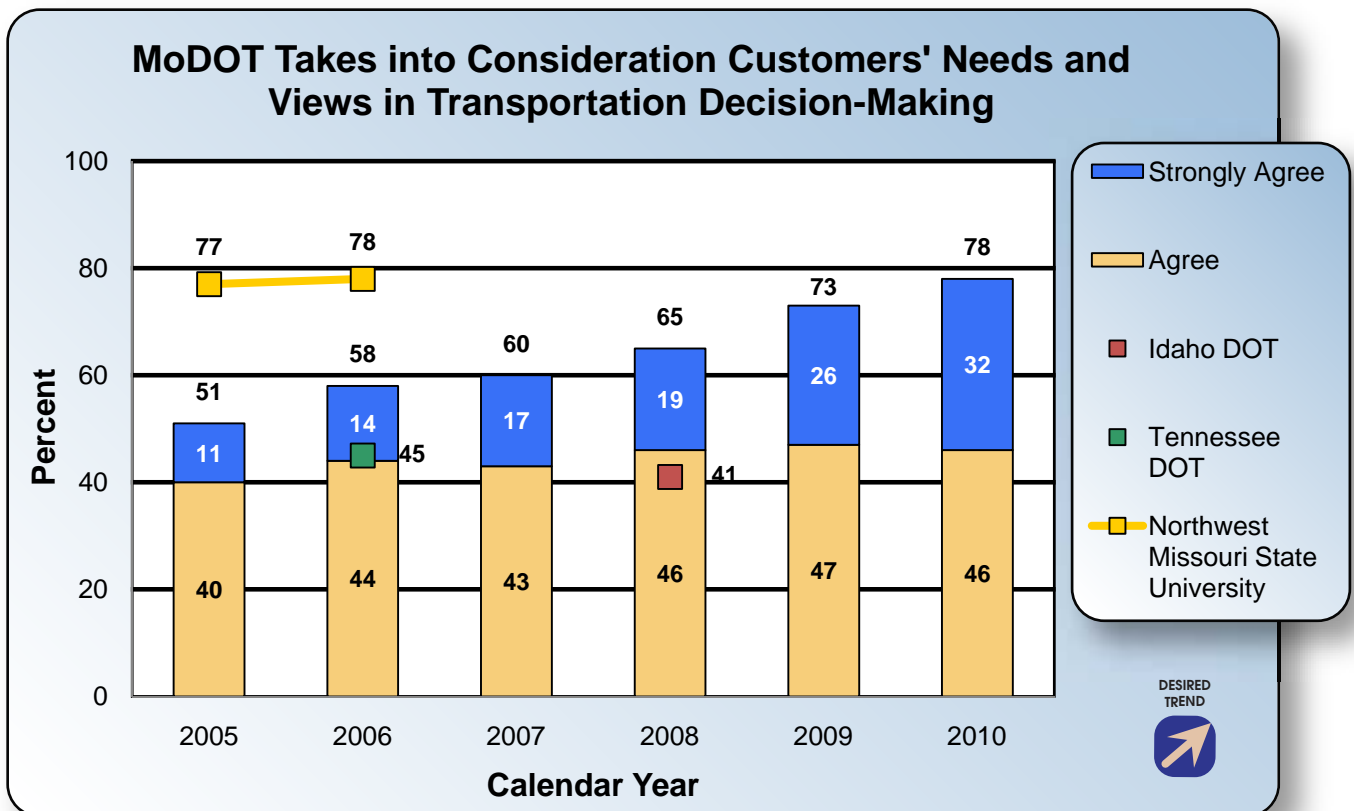
This year's data was collected in May 2010 and gathered from a statewide random telephone survey of approximately 3,500 Missourians. Two comparisons are made to the Tennessee and Idaho departments of transportation, which also measure customers' perceptions regarding involvement in transportation decision-making. This measure is updated in July.

**Improvement Status:**

MoDOT learned in the 2010 customer survey that 78 percent of the survey sample feels MoDOT considers customer concerns and needs when developing transportation decisions. This is an increase of 5 percent, moving up from 73 percent in 2009.

Northwest Missouri State University's 2006 measurement continues to be the most current information available. NMSU data involves surveying its freshmen and juniors' satisfaction concerning student opportunities to provide input regarding student affairs.

To continuously improve in this area, MoDOT identifies additional opportunities to use techniques as outlined in the planning framework decision-making and public involvement process. These efforts are targeted to local officials, planning partners, community leaders, elected officials and the general public. Media interviews, social media, website publicity, news releases, newsletters, specific project surveys, public involvement surveys and community meetings continually provide new opportunities to interact with the public, share MoDOT's direction and discuss transportation priorities.



**Percent of positive feedback responses received from planning partners regarding involvement in transportation decision-making-13d**

**Result Driver:** Paula Gough, District Engineer

**Measurement Driver:** Sue Cox, Transportation Planning, Special Projects Coordinator

**Purpose of the Measure:**

This measure tracks MoDOT’s efforts to include statewide planning partners (members of metropolitan planning organizations and regional planning commissions) in transportation-related decision-making.

MoDOT’s planning framework is a process used to ensure planning partners are able to influence transportation decisions regarding how transportation funds are spent in their areas. It is based on achieving informed consent rather than consensus. To continuously improve in this area, MoDOT focuses primarily on effective communication, and public involvement tools and techniques.

**Measurement and Data Collection:**

Transportation Planning works with Organizational Results and Heartland Market Research LLC to administer an annual survey each January that evaluates planning partners’ involvement in the transportation decision-making process for the previous year. The survey scale measures those who agree, strongly agree, disagree and strongly disagree. This is an annual measure updated in April.

**Improvement Status:**

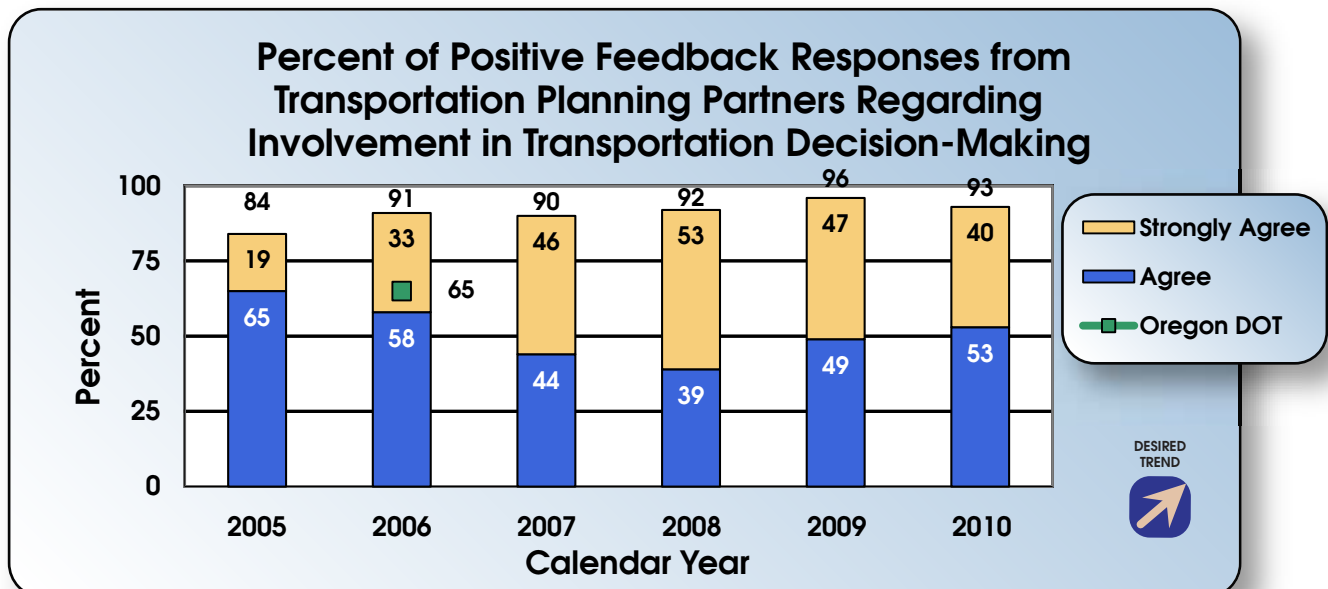
The 2010 survey received 85 responses out of 438 invitations to planning partners resulting in a 19.4

percent response rate. The percent of strongly agree and agree answers decreased from 96 percent in 2009 to 93 percent in 2010. A change in the method of delivery may have impacted the response rate. For example, planning partners had choices to provide survey feedback to other MoDOT partners and may not have chosen to respond to the survey as a planning partner.

Feedback helps MoDOT learn new ways to achieve better involvement, fine-tune communication and try out ideas. Survey results were shared with planning partners and co-efforts were initiated to act on concerns, solve problems and provide clarifying information.

Transportation Planning continues working with each district to assess how the planning framework process works in the field, to identify strengths and weaknesses of the planning outreach process and to share best practices.

For comparison purposes, the Oregon Department of Transportation measured a similar involvement in 2006 – indicating 65 percent of all respondents involved in transportation planning felt their involvement in decision-making was effective. Oregon reports it will update this data about every five years.



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## ACCOMMODATING ROADSIDES

*Tangible Result Driver – Jim Carney, State Maintenance Engineer*

Many Missouri motorists depend on roadside parks, rest areas and commuter parking lots during their travels for the opportunity to rest and refresh themselves in a safe environment. Providing safe, clean and convenient roadside accommodations allows motorists to travel more safely and comfortably.



## Percent of customers satisfied with rest areas' convenience, cleanliness and safety-14a

**Result Driver:** Jim Carney, State Maintenance Engineer

**Measurement Driver:** Kim Tipton, Senior General Services Specialist

### Purpose of the Measure:

This measure helps MoDOT understand and meet customer expectations concerning the convenience, cleanliness and safety of its rest areas. This information provides insight to customer expectations related to rest area location, lighting and security as well as the overall cleanliness.

### Measurement and Data Collection:

The data is collected from both internal and external sources. MoDOT receives external feedback from survey cards offered at all rest areas. The survey card has a variety of questions with three of the questions specifically targeting the convenience, cleanliness and safety of the rest areas. This provides direct input from our customers. All comments from the cards are sent to the districts and sheltered workshop contractor to ensure concerns are addressed.

To ensure customer satisfaction, all rest areas are inspected using an attribute list developed and based on an industry-wide literature review. The attribute list includes characteristics rest-area users identified as what they consider convenient, clean and safe. MoDOT maintenance employees inspect all rest areas and the work of the sheltered workshop contractor at least two times per month using this list and are considered the internal source.

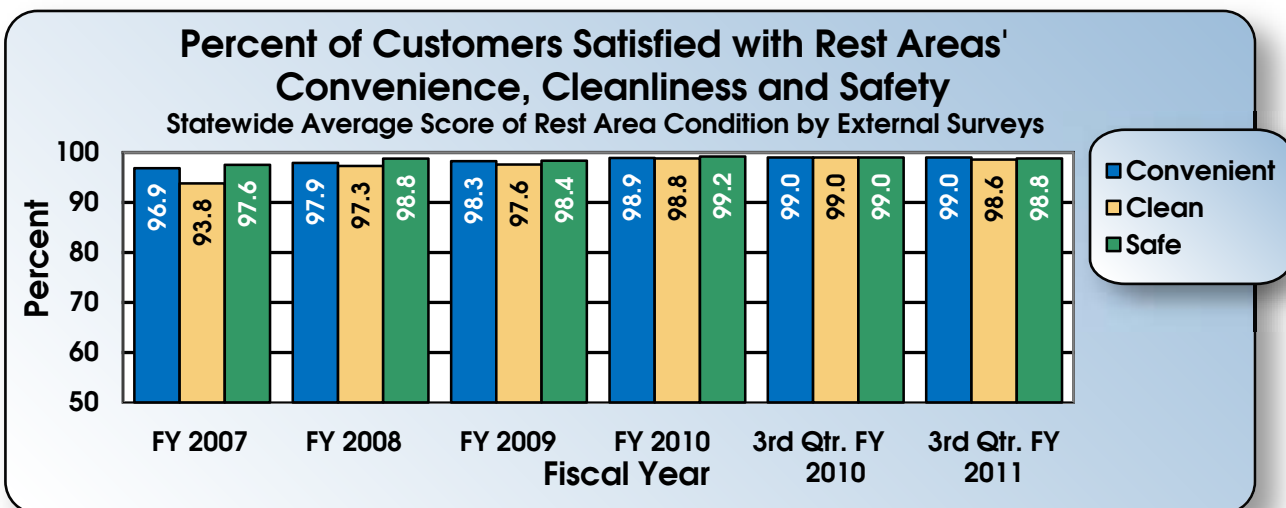
MoDOT works with Extended Employment Sheltered Workshops to provide the cleaning at all 17 rest areas in the system. The sheltered workshop employees provide this service 365 days a year, many from early morning (6 a.m.) to late in the evening (10 p.m.). This measure is updated quarterly.

### Improvement Status:

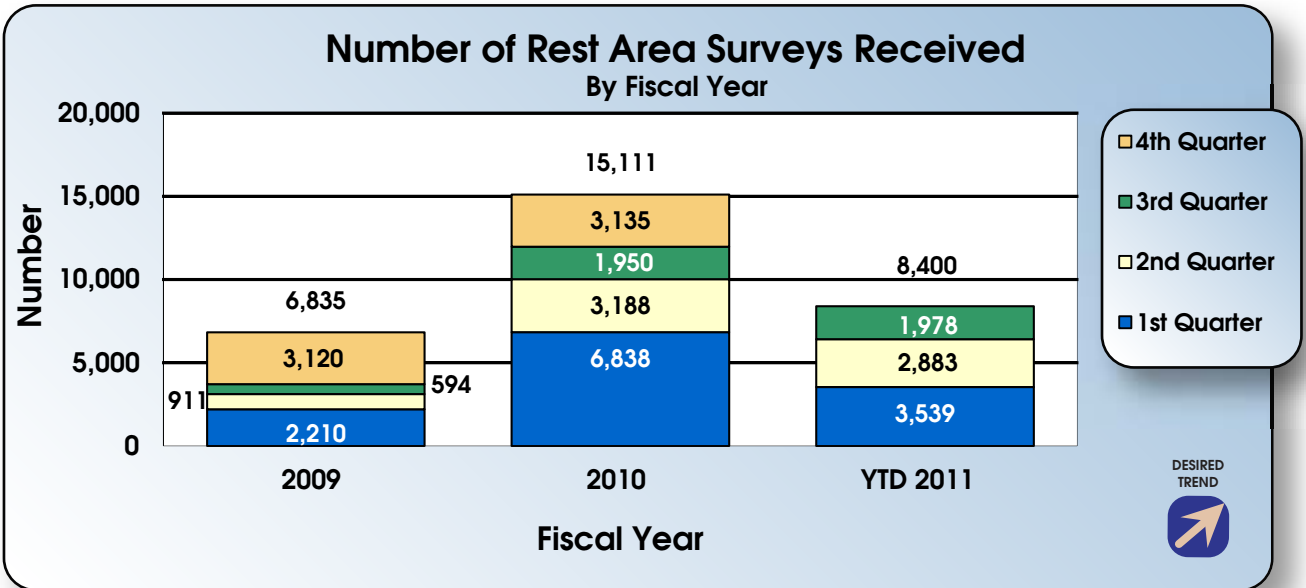
The department received 1,978 surveys this quarter with Joplin, Eagleville and Conway providing the majority of the feedback.

Customer satisfaction for the three attributes is nearly the same in all of the factors when compared to the same quarter one year earlier. All three attributes are at or near the 99 percent level. Several complaints were received during the February blizzard. MoDOT implements actions to improve the cleanliness at rest areas with lower satisfaction ratings through direct contact with the contractor and district personnel.

The internal inspection scores increased slightly from 97.0 percent to 97.3 percent for the third quarter of fiscal year 2011. MoDOT takes care of maintenance concerns in a timely manner to keep the rest areas open for use.



Note: Rest area customer satisfaction benchmarks are limited. Florida's 2007 rest area customer survey results found: 80 percent said the rest areas were clean, 72 percent said there were enough rest areas and 84 percent said the rest areas were safe. New Mexico has a benchmark of 95 percent in their efforts to monitor rest area satisfaction and reached a level of 96 percent for FY08.





## Number of users of rest areas-14b

**Result Driver:** Jim Carney, State Maintenance Engineer

**Measurement Driver:** Kim Tipton, Senior General Services Specialist

### Purpose of the Measure:

This measure tracks the number of vehicles visiting rest areas which is used to estimate the number of visitors. This information helps MoDOT better understand the visitor use patterns at the rest areas impacting staffing decisions. MoDOT estimates the rest areas have more than 20 million visitors each year when all sites are operational.

### Measurement and Data Collection:

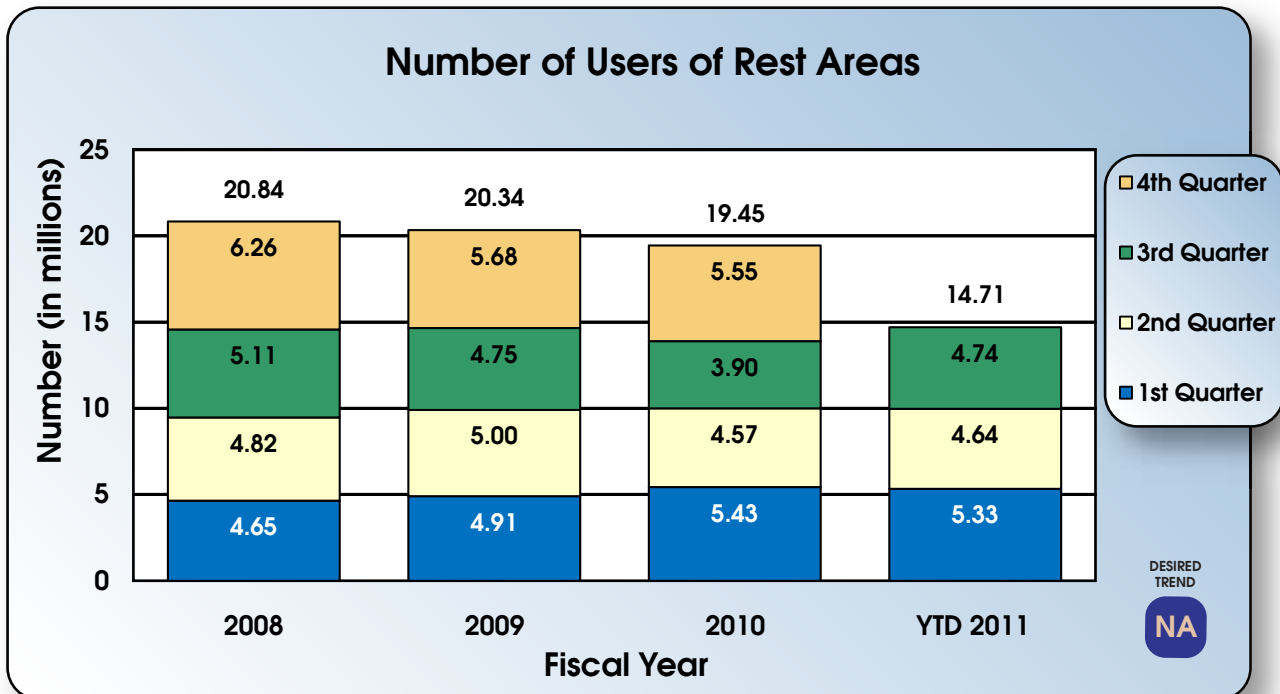
Permanent counters transfer data from five different rest areas located throughout the state. Pavement sensors send data from a solar-powered wireless transfer station to a central database. These counters track the number of vehicles that enter the rest areas. This data is updated quarterly.

There are 17 rest area sites operational this quarter. Some of the sites have only one building servicing one direction while others have two, serving both directions. The 17 sites offer 28 rest room buildings or stopping opportunities. The number of users in the

graph is the quarterly estimation for all 17 rest areas based on the data from the five sites with operational counters. The quarterly estimation is determined by adding the grand totals for each of the five rest area sites, dividing by the 10 stopping opportunities at the five rest areas and multiplying by the total number of stopping opportunities (28) in the entire system. This gives the estimated number of vehicles entering the rest areas for the quarter.

### Improvement Status:

A total of 677,820 vehicles were counted at those rest area sites with the five operational pavement sensors. It is estimated that 1,897,896 vehicles used Missouri rest areas this quarter. Using a conservative estimate of 2.5 passengers per vehicle, the rest areas had approximately 4,744,740 visitors for the quarter. Based on averages the last four quarters (April 1, 2010 – March 31, 2011), Missouri rest areas provided service to 19.4 million visitors.



## Number of truck customers that utilize rest areas-14c

**Result Driver:** Jim Carney, State Maintenance Engineer

**Measurement Driver:** Tim Jackson, Maintenance Liaison Engineer

### Purpose of the Measure:

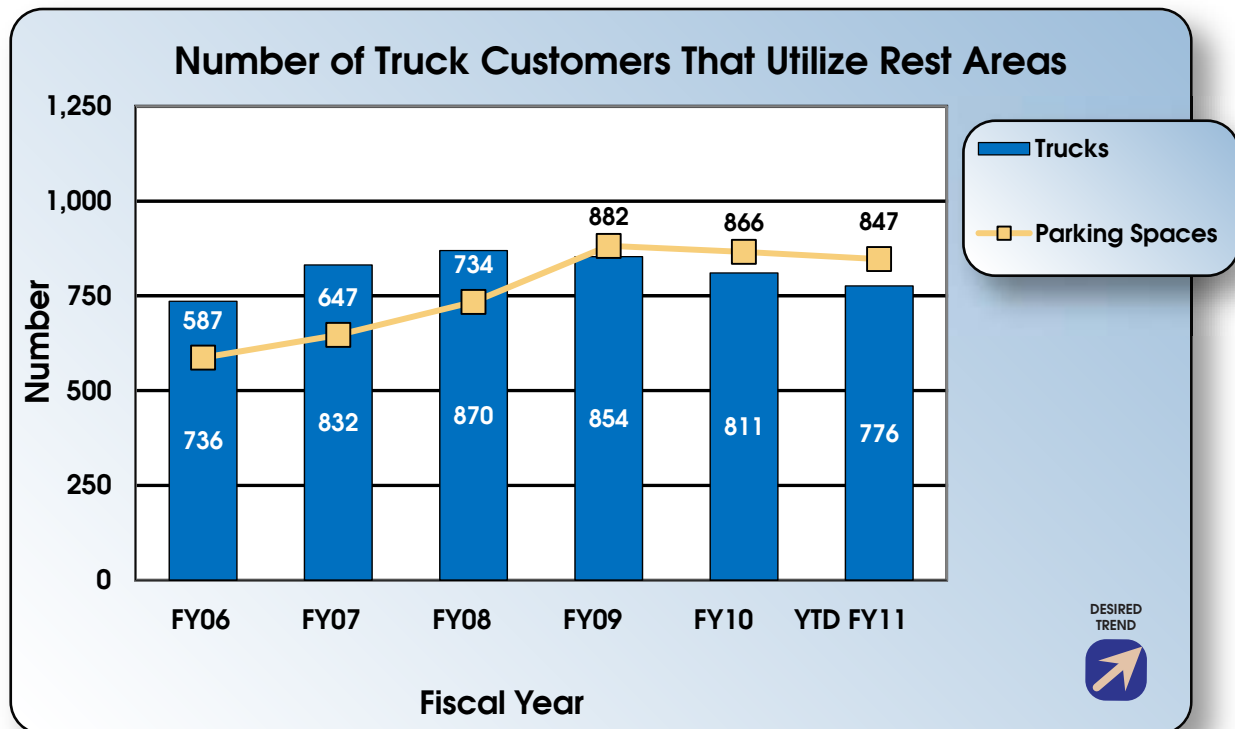
This measure tracks the number of trucks at rest areas, welcome centers and truck parking facilities. The number of trucks using the rest areas could be used to help determine how many spaces are needed to provide convenient parking facilities at each rest area.

### Measurement and Data Collection:

On a monthly basis, district maintenance personnel count the number of trucks parked at welcome centers, rest areas and at designated truck parking facilities. The count is done between 4 and 6 a.m., which is typically the busiest time. Data is collected from every rest area and truck parking facility to create a statewide report which is updated quarterly.

**Improvement Status:** Fiscal year 2011, through March 31, showed a 4 percent decrease in the average number of trucks using the rest areas and

truck parking facilities compared to the previous year's average. There was also a 2 percent decrease in the number of available truck parking spaces. The Marston southbound I-55 rest area remains closed for construction of a new welcome center. The Bloomsdale southbound I-55 facility reopened as a combined weigh station/truck parking facility. The closures of several rest areas in District 10 over the last two years have resulted in a temporary decrease of truck parking spaces and consequently, the number of trucks counted has gone down. If the average number of trucks parked in those closed rest areas were added back in, the yearly decreases would have been less than 2 percent from fiscal year 2009. Constructing welcome centers with additional truck parking spaces and converting abandoned weigh stations into truck parking facilities continues to be a way to accommodate the truck parking needs.



## Number of miles in Adopt-A-Highway program-14d

**Result Driver:** Jim Carney, State Maintenance Engineer

**Measurement Driver:** Stacy Armstrong, Roadside Management Supervisor

### Purpose of the Measure:

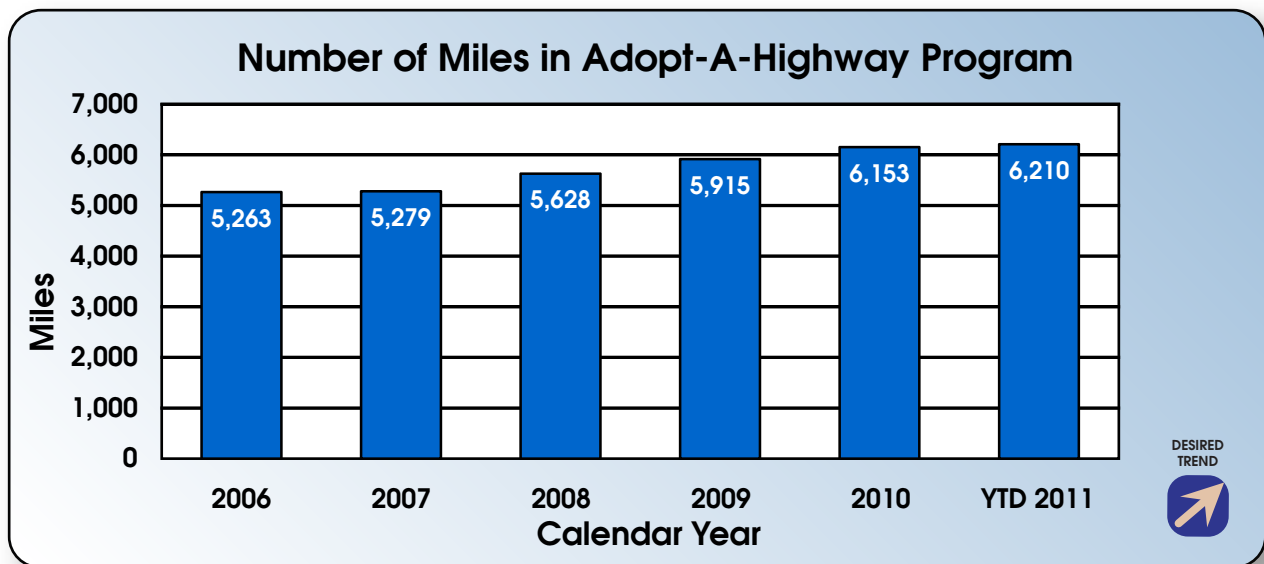
This measure tracks public involvement in taking care of Missouri’s roadsides through the Adopt-A-Highway program. Missouri has one of the largest and oldest Adopt-A-Highway programs in the nation. The volunteers learn about litter awareness and some of the challenges MoDOT faces, while allowing maintenance crews to do more critical activities.

### Measurement and Data Collection:

Adopters agree to pick up litter on a designated roadway section for a minimum of four times a year and report their results. Adopters commit to a three-year agreement when they join the program. Urban adoptions are for a minimum of one-half mile and rural adoptions are for at least two miles. Miles are measured by the centerline, however, volunteers are responsible for both sides of the roadway. Adopter-related information is maintained in an Adopt-A-Highway database using the Transportation

Management System. This is an annual measure updated quarterly.

**Improvement Status:** The number of miles adopted has increased in recent years. This may be due to increased public awareness through No MORE Trash!, a litter-prevention campaign coordinated by MoDOT and the Department of Conservation. Adopt-A-Highway will continue to be promoted at Earth Day, state and county fairs, and other events. There are 100 new adoptions in 2011. Sponsor-A-Highway, a complementary program to Adopt-A-Highway, was launched on September 17, 2008. Currently 40 miles are sponsored for litter cleanup in the Kansas City and St. Louis areas. New Adopt-A-Highway safety vests were introduced in January 2009. A web-based Adopt-A-Highway database was implemented in April 2009.



## Number of users of commuter parking lots-14e

**Result Driver:** Jim Carney, State Maintenance Engineer

**Measurement Driver:** Tim Chojnacki, Maintenance Liaison Engineer

### Purpose of the Measure:

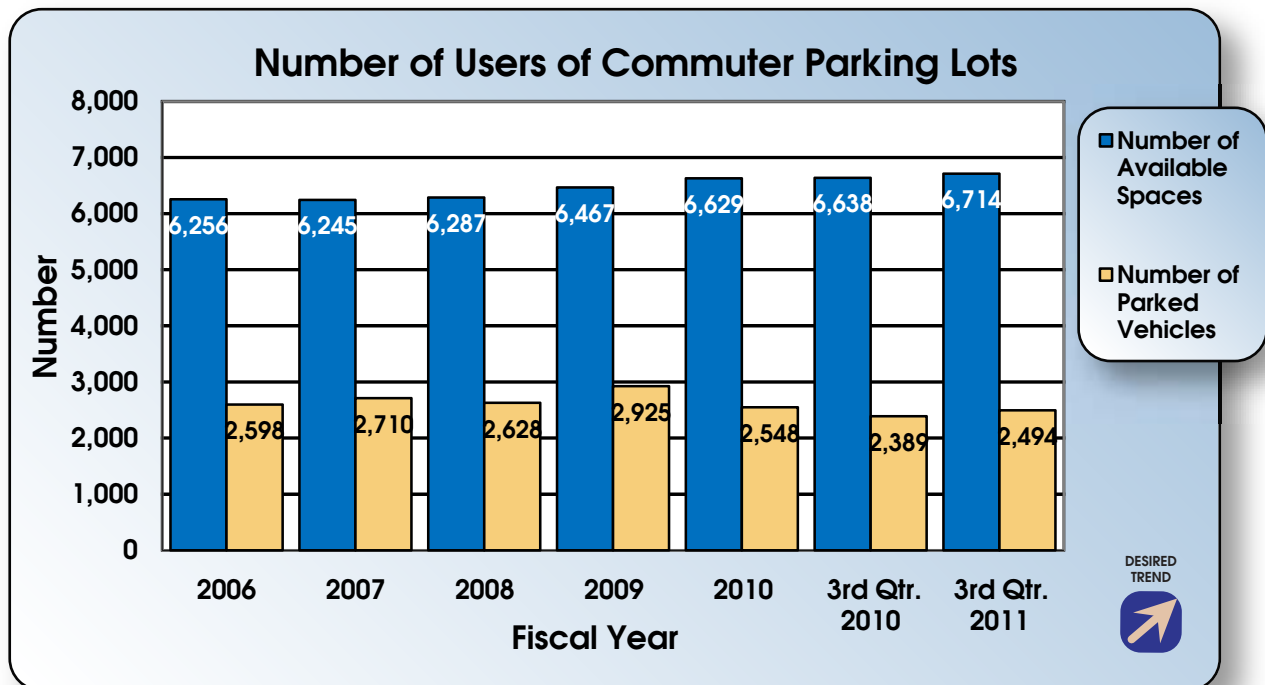
This measure tracks the number of commuter parking lot users. It will help the department determine whether its commuter parking lots are adequate at current locations and whether lots are fulfilling the needs of the traveling public.

### Measurement and Data Collection:

District maintenance personnel count the number of vehicles parked in each commuter lot in conjunction with quarterly condition inspections. Data is collected from every district to create a statewide report. This measure is updated quarterly.

### Improvement Status:

There was an increase in the number of available spaces and the number of parked vehicles this quarter. The number of available spaces statewide is 6,714 at 115 lots. The number of available spaces increased due to the opening of three new lots in District 3 and one new lot in District 4. The number of parked vehicles is 2,494, up from 2,293 last quarter. Data from the recent customer survey indicates that 93 percent of those surveyed think our lots are clean, up from 89 percent last year. Ninety-two percent of respondents believe our lots are safe, which is the same as last year. Missouri DNR has recently agreed to share the cost of the iCarpool service and direct their commuters to MoDOT's website.



A photograph of construction workers on a bridge deck. They are wearing hard hats and safety gear, working with green rebar. The scene is outdoors, with a body of water and a wooden structure in the background. The image is framed by a blue and black curved border at the top and bottom.

## BEST VALUE FOR EVERY DOLLAR SPENT

*Tangible Result Driver – Roberta Broeker, Chief Financial Officer*

Providing the best value for every dollar spent means MoDOT is running its business as efficiently and effectively as possible. A tightly managed budget means more roads and bridges can be fixed. That keeps Missouri moving. This is one of MoDOT's values because every employee is a taxpayer too!



**TRACKER**  
MEASURES OF DEPARTMENTAL PERFORMANCE

## Number of full-time equivalencies-15a

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Steve Meystrik, Special Projects Coordinator

### Purpose of the Measure:

This measure tracks the change in the number of full-time equivalencies (FTEs) within the department and compares it to the number of FTEs in the legislative budget. The data provides a high-level view of overall staffing at MoDOT in relation to budgeted FTEs.

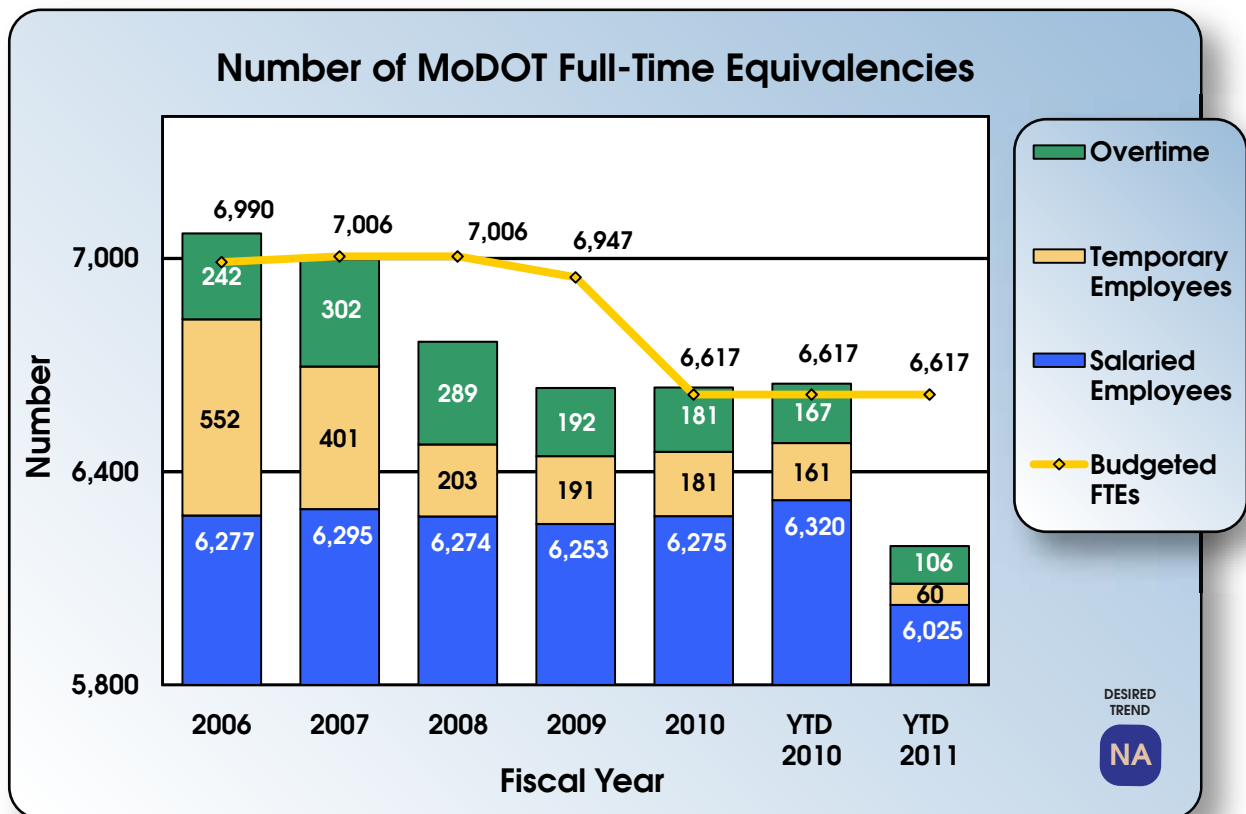
### Measurement and Data Collection:

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 convert these numbers to FTEs, the total number of hours worked or on paid leave is divided by 2,080. Salaried employee data is converted to an annual number for ease in comparison to previous years, whereas temporary employee and overtime data

represent actual year-to-date calculations. This measure is updated quarterly.

### Improvement Status:

Through the third quarter of FY11, compared to the same period in previous years, there have been significant decreases in all three FTE categories: salaried employment, temporary employment, and overtime worked. These reductions are the result of department cost saving strategies implemented in FY10. Through the third quarter of FY11, the department has expended 457 fewer FTEs across all categories compared to the same period in FY10. Of the 106 FTEs expended as a result of overtime hours worked through the third quarter, 82 percent of these hours resulted from the department's snow and ice removal efforts during this winter.



## Rate of employee turnover-15b

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Kim Hickey, Employment Manager

### Purpose of the Measure:

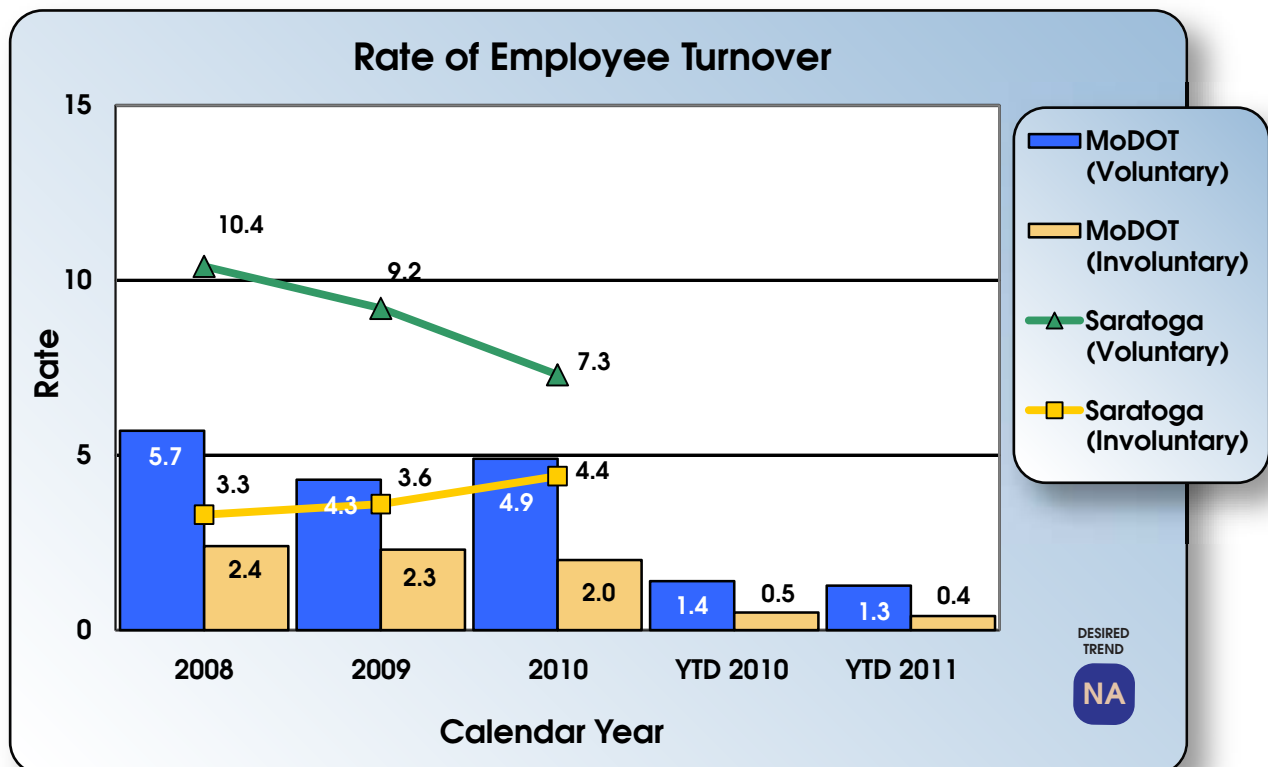
This measure tracks the percentage of employees who leave MoDOT annually and compares the department's turnover rate to benchmarked data. Voluntary turnover includes most resignations and retirements. Involuntary turnover reflects dismissals and also includes retirements and voluntary resignations of employees who had a disciplinary history and/or a final performance management rating of "Needs Improvement" or below. Turnover rates as shown in this measure include voluntary and involuntary separations.

### Measurement and Data Collection:

The data is collected statewide to assess overall employee turnover. Comparison data is collected from various sources annually. For benchmarked data, Saratoga Institute surveyed more than 300 organizations representing a wide variety of industries.

### Improvement Status:

The department's voluntary separation rate decreased slightly from 1.4 percent in the first quarter of calendar year 2010 to 1.3 percent in the first quarter of calendar year 2011. The department's involuntary separation rate decreased from 0.5 percent in the first quarter of calendar year 2010 to 0.4 percent in the first quarter of calendar year 2011. There were 15 releases in the first quarter of 2011, and an additional 9 resignations and retirements designated as involuntary separations. Of the remaining 76 voluntary separations that occurred in the first quarter of 2011, 64 were retirements and 12 were resignations. This compares to 89 voluntary separations in the first quarter of calendar year 2010 (66 retirements and 23 resignations).





### Level of job satisfaction-15c

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Paul Imhoff, Employee Development Manager

#### Purpose of the Measure:

This measure tracks the level of employee satisfaction throughout the department at specific points in time. The first chart indicates the level of department employees' job satisfaction and changes in their satisfaction over time. The second chart shows the percentage of MoDOT employees who are satisfied compared to the organizations that scored the best in employee satisfaction using the same survey instrument, and to top-level organizations using a similar survey questionnaire.

#### Measurement and Data Collection:

Employee satisfaction is measured using 18 items from an annual employee survey. The vendor contracted to conduct the employee satisfaction survey in 2003 and 2005 provided "Vendor Best Practice" data collected from an anonymous company. Society for Human Resources Management (SHRM) best practice data was gathered from an SHRM report of an annual job satisfaction survey of 55 Fortune 500 companies. This is an annual measure updated in July, with the final survey report completed in October.

#### Improvement Status:

The 2010 Employee Satisfaction Survey was distributed on May 12, 2010, with a completion deadline of June 25, 2010. The final report for the survey will be distributed by October 29, 2010.

The results from the 2010 survey indicate that 4,246 employees responded to the survey for a 67.4 percent return rate. This is an increase from 60 percent in 2009 (454 more surveys returned). The percentage of employees that are "very satisfied" decreased from 13 percent in 2009 to 7 percent in 2010. The percentage of employees that indicated they are "somewhat satisfied" remained constant at 58 percent from 2009 to 2010. Overall, the percentage of satisfied employees decreased from 71 percent in 2009 to 65 percent in 2010.

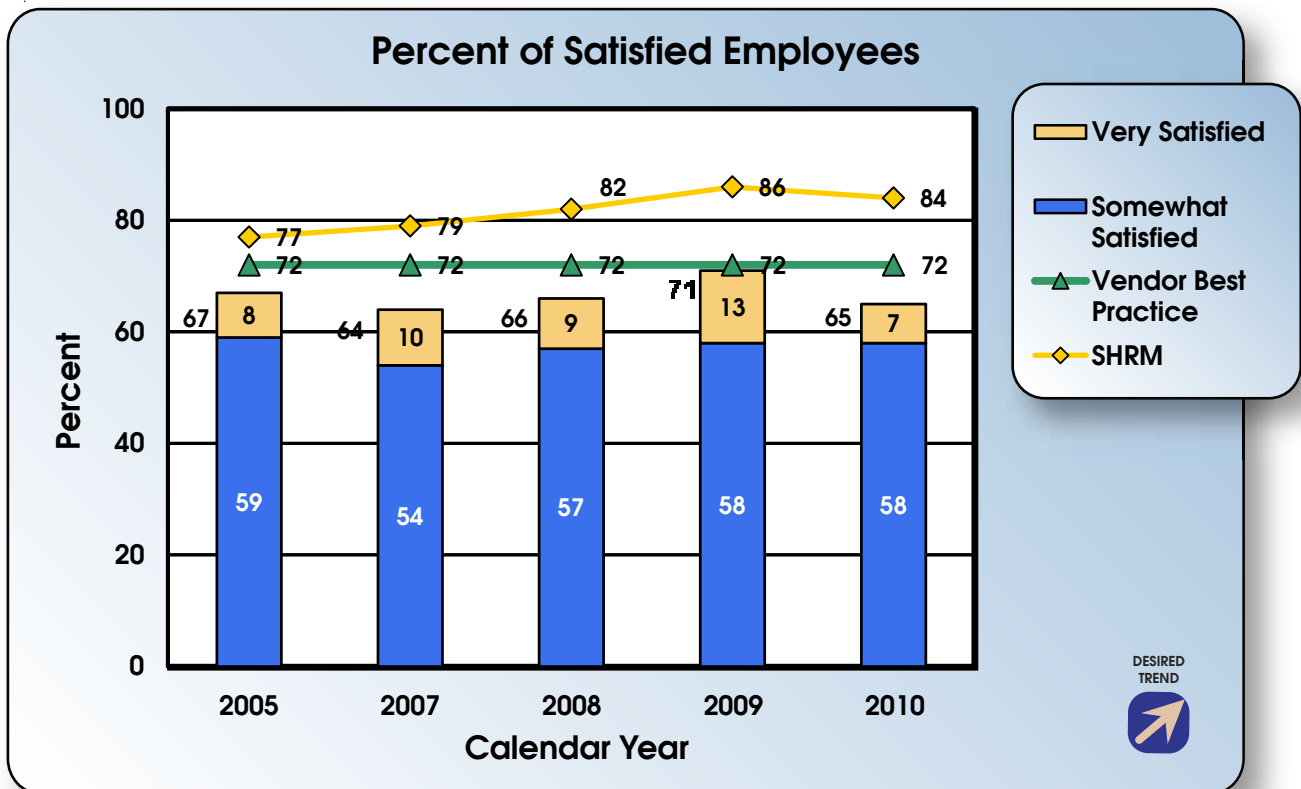
The statewide average rating on all four dimensions of the Employee Satisfaction Survey decreased from 2009 to 2010. Job Satisfaction decreased from 3.58

to 3.5 on a 5-point scale. Employee Engagement decreased from 3.7 to 3.63. Organizational Justice and Fairness decreased from 3.28 to 3.19. Living MoDOT Values decreased from 3.6 to 3.54. Similarly, in most districts and in Central Office, the average rating on each of the four scales decreased. Conversely, District 3 increased on all scales from 2009, while District 9 stayed level on Job Satisfaction and increased on the other three scales.

Areas of low satisfaction center on decision making that leads to wasted dollars, and having little input into decision making. The fairness of disciplinary actions is another area of low ratings. The competitiveness of salaries, lack of promotional opportunities, and the lack of rewards for good performance are also major areas of dissatisfaction. These issues seem to be the leading factors in ratings of low morale and high stress.

Areas of high satisfaction revolve around having plenty of work to do, and doing more than just the minimum. Other satisfiers include having a feeling of safety from sexual harassment, and learning a lot from the work at MoDOT. These issues appear to be major factors in high ratings of commitment to MoDOT and taking pride in the work.





## Number of lost workdays-15d

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Jeff Padgett, Risk and Benefits Management Director

### Purpose of the Measure:

This measure tracks the actual number of days that employees cannot work due to work-related injuries sustained during the reporting period. Note that the results do not include lost workdays for injuries that occurred during previous reporting periods.

(Example: an employee that is injured on Dec. 31, 2010, and is off during January of 2011 will not show up as lost time in 2011 because the incident occurred during the previous reporting period.)

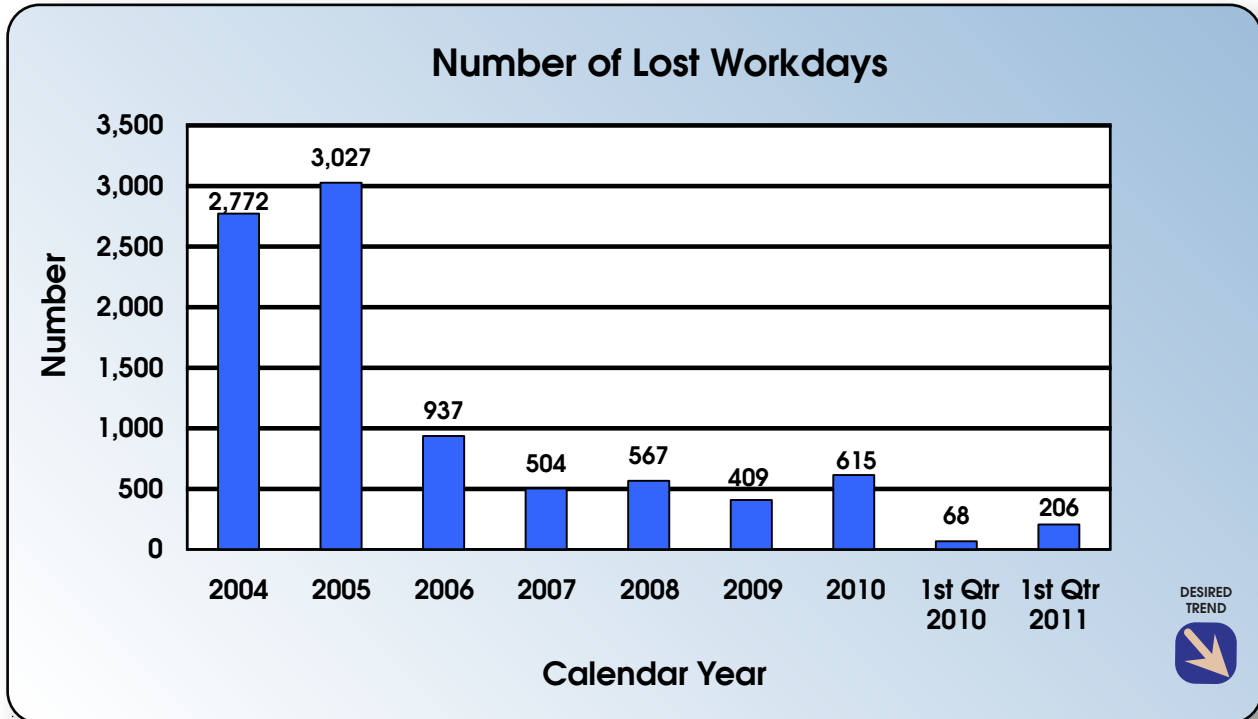
### Measurement and Data Collection:

The data is collected from Riskmaster, a claims administration software. This measure is updated quarterly.

### Improvement Status:

The number of lost workdays for the first quarter of 2011 is 203 percent greater than 2010, increasing

from 68 to 206 lost workdays. Though not illustrated in the chart, the number of lost-time incidents also reflected a sizable increase from 2010 to 2011. Three weather-related incidents account for 46 percent of the lost workdays. These occurred in the Northwest, Northeast and St. Louis Area Districts. Kansas City Area District and the Southwest District both suffered injuries in which the employee struck or was struck by MoDOT equipment. These account for another 47 percent of the lost workdays. MoDOT continues to develop and implement new safety-related initiatives to further reduce lost workdays, including Safety Pays, a work simulation physical exam and the Fit for Duty program. Risk Management personnel now direct all medical care for work-related injuries. MoDOT continues to identify and provide light-duty assignments for injured workers with restrictions in an effort to get employees back to work quickly.



## Rate and total of MoDOT recordable incidents-15e

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Jeff Padgett, Risk and Benefits Management Director

### Purpose of the Measure:

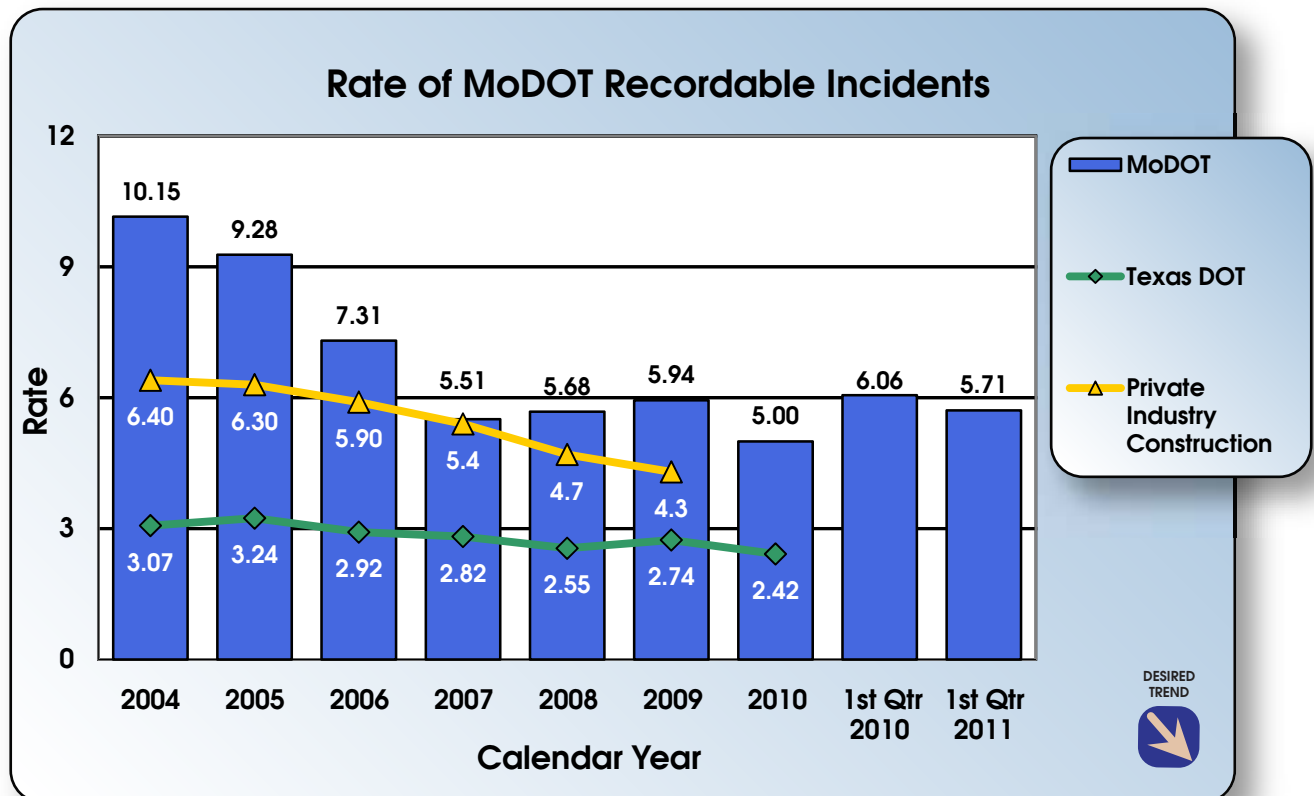
This measure tracks the number of recordable injuries, in total and as a rate of injuries per 100 workers. The calculation for incidence rate is the number of recordables times 200,000 divided by the number of hours worked. The 200,000 used in the calculation is the base for 100 full-time workers (working 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.

### Measurement and Data Collection:

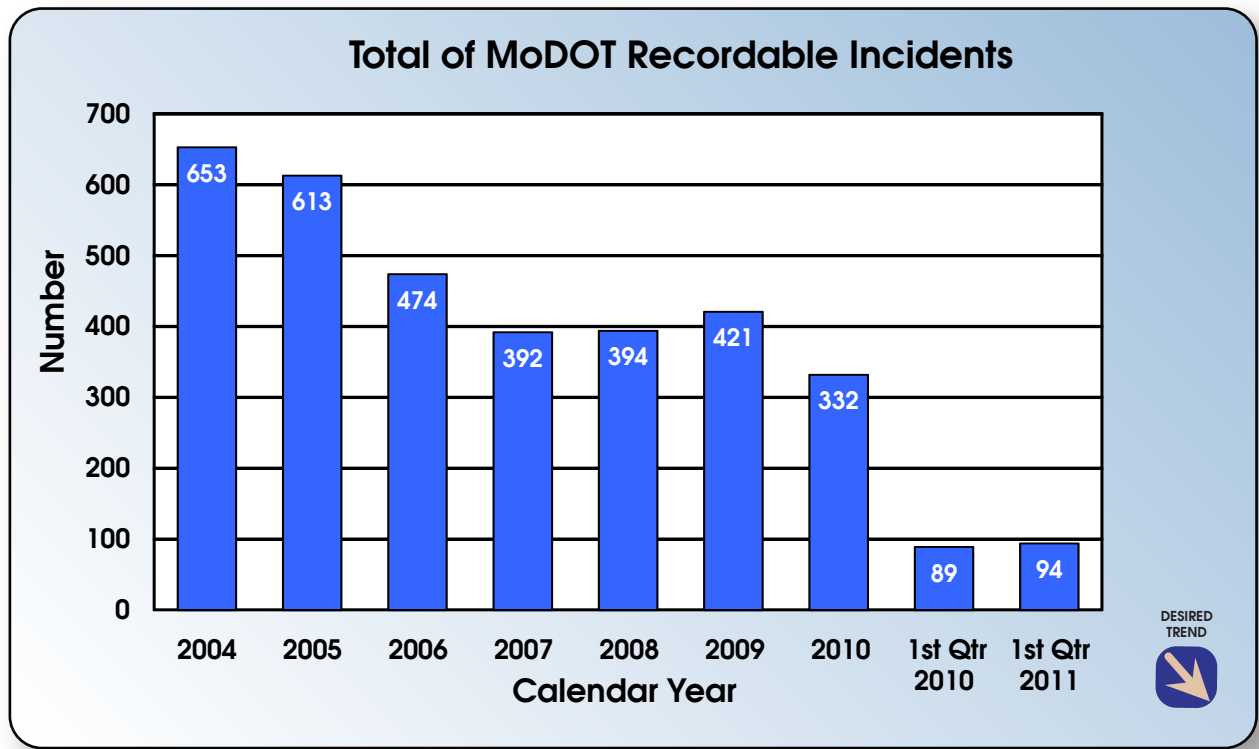
The injury data is collected from Riskmaster, a claims administration software. The number of hours worked is taken from MoDOT's payroll data. This measure is updated quarterly.

### Improvement Status:

The number of MoDOT recordables has increased over the reporting period noted. While the incident rate has decreased, the number of MoDOT recordables increased by 6 percent over the same period, with an increase from 89 to 94. The incident rate decreased by 6 percent over the reporting period, dropping from 6.06 to 5.71.



(Information from Private Industry Construction was not yet available for 2010.)



## Number of claims and amount paid for general liability-15f

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Jeff Padgett, Risk and Benefits Management Director

### Purpose of the Measure:

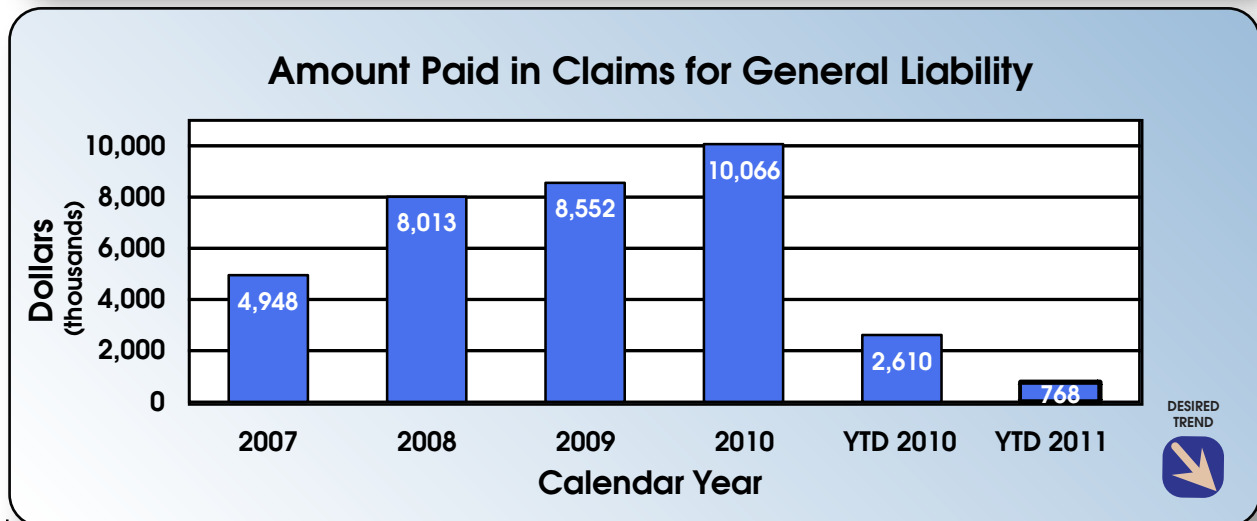
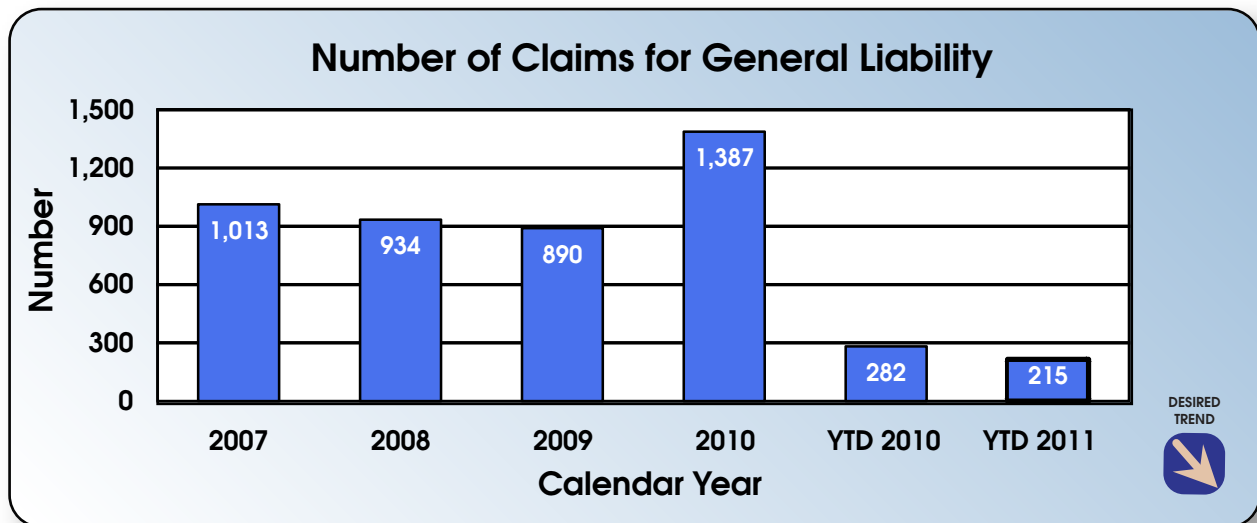
General liability claims arise from allegations of injuries/damages caused by the dangerous condition of MoDOT property and the injury/damage directly resulted from the dangerous condition. In addition, an employee must be negligent and create the dangerous condition or MoDOT must have actual or constructive 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. This measure tracks the number of general liability claims filed and amount paid.

### Measurement and Data Collection:

Risk and Benefits Management reports on the measure quarterly and collects the claims data from Riskmaster, a claims administration software program.

### Improvement Status:

The desired result is a reduction in claims and payments. So far this year the number of claims is down as well as payments.



# BEST VALUE FOR EVERY DOLLAR SPENT

## Fleet status-15g

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Jeannie Wilson, Central Office General Services Manager

### Purpose of the Measure:

This measure tracks the number of units in the MoDOT fleet as well as their condition. The chart provides an overall fleet condition status based on actual fleet age and meter compared to maximum life-cycle thresholds.

### Measurement and Data Collection:

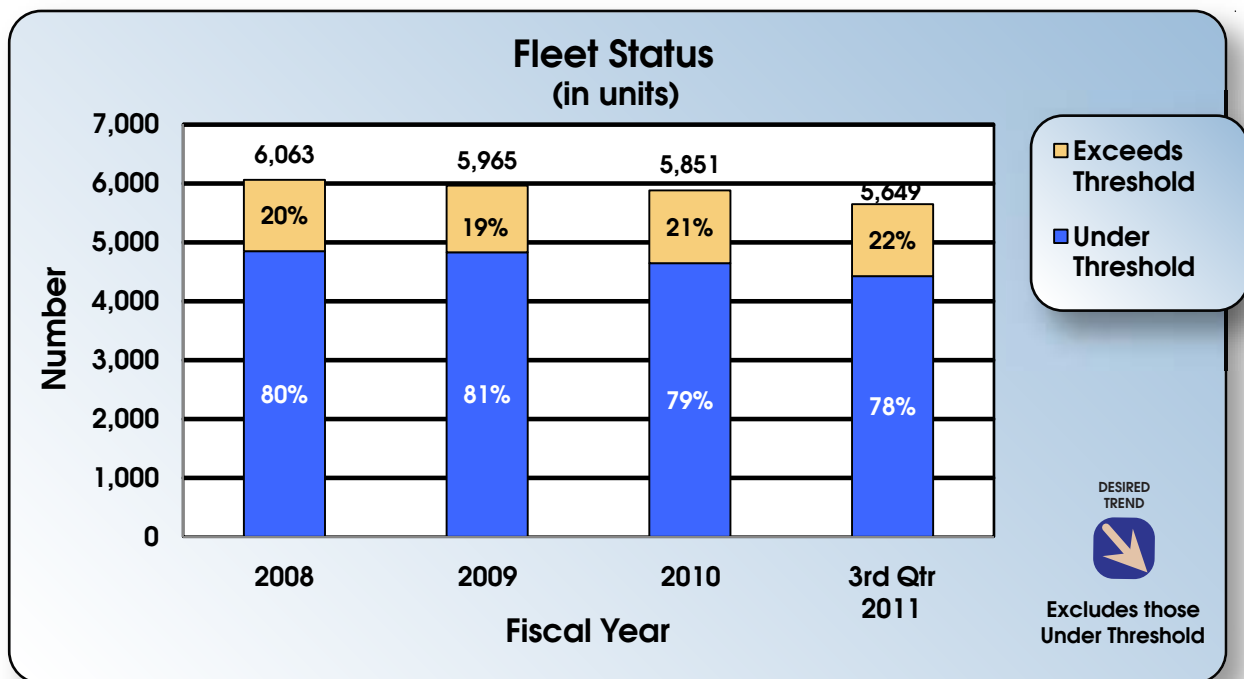
Age and meter thresholds were established based on maximum useful life. Units are identified as either exceeding or not exceeding their primary life cycle for either age or meter.

Reports are generated from the FASTER fleet management system to obtain information regarding equipment age and usage.

### Improvement Status:

Over the last four years, the fleet inventory has been reduced by 414 units or 7 percent. MoDOT's goal is to increase the percentage of fleet under the replacement threshold.

The exceeds threshold category has increased by 1 percent when compared to fiscal year 2010. This increase is attributed to the department's direction focusing on the mission critical fleet and extending the length of use on the non-critical fleet.



## Percent of vendor invoices paid on time-15h

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Debbie Rickard, Controller

### Purpose of the Measure:

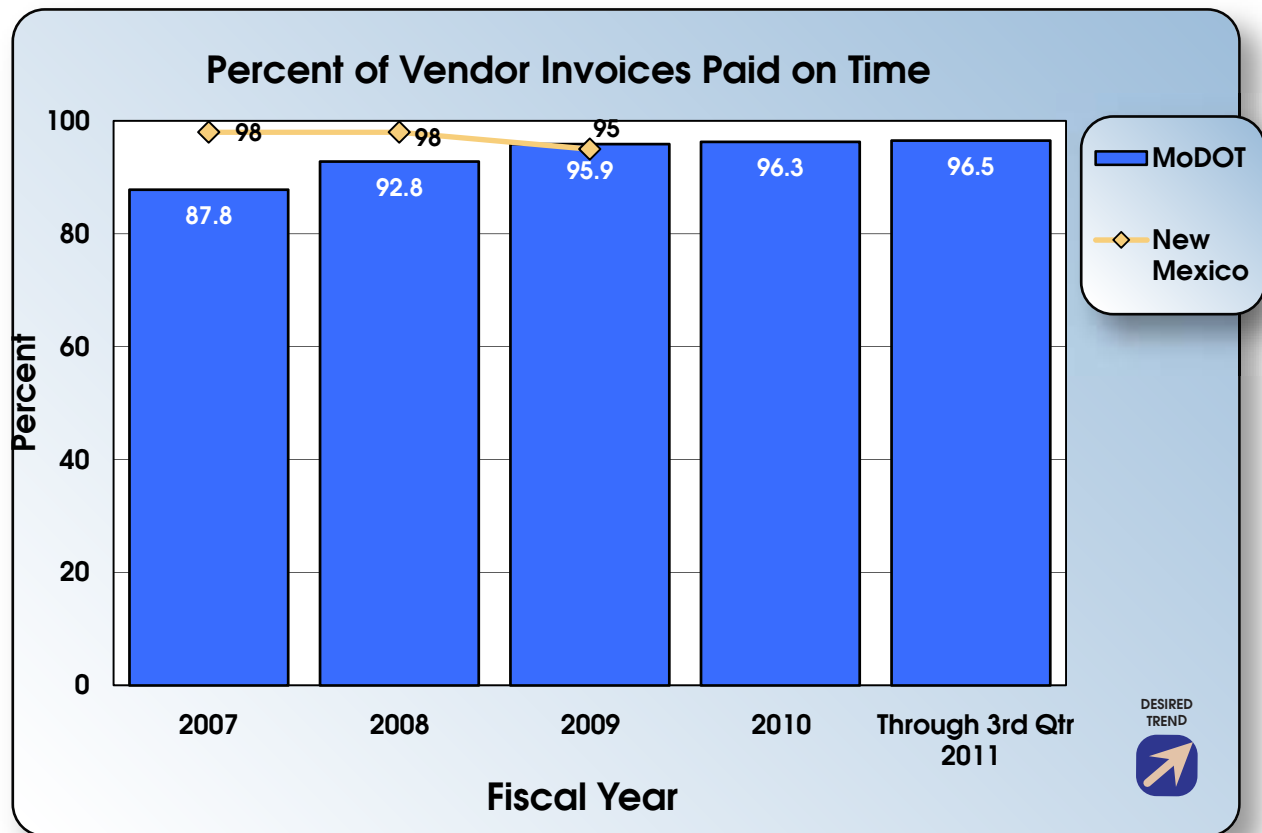
This measure tracks the department's timeliness in processing vendor payments.

### Measurement and Data Collection:

The check date determines if the invoice payment is timely. Timely is defined as a check issued less than 31 days from the date of the invoice. The department's measure is benchmarked to the New Mexico DOT through fiscal year 2009. MoDOT uses the vendor invoice date for determining promptness of payment; New Mexico utilizes a combination of vendor invoice date and the date received by the approving division when the invoice has not been promptly delivered. New Mexico no longer publishes this information. This measure is updated quarterly.

### Improvement Status:

Vendors age their receivables based on the date of invoice. This measure indicates there has been consistent improvement. The steps to further improve are: (1) identify specific vendors experiencing delayed payment and work with those vendors to obtain timely, accurate invoices, (2) determine if delayed payments are common to a particular division within the Central Office or a district, (3) identify processes contributing to the delayed payment, and (4) identify innovative solutions to receive invoices from the customer. Analysis tools have been developed to assist in identifying areas where improvements can be made.





## Distribution of expenditures-15i

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Debbie Rickard, Controller

### Purpose of the Measure:

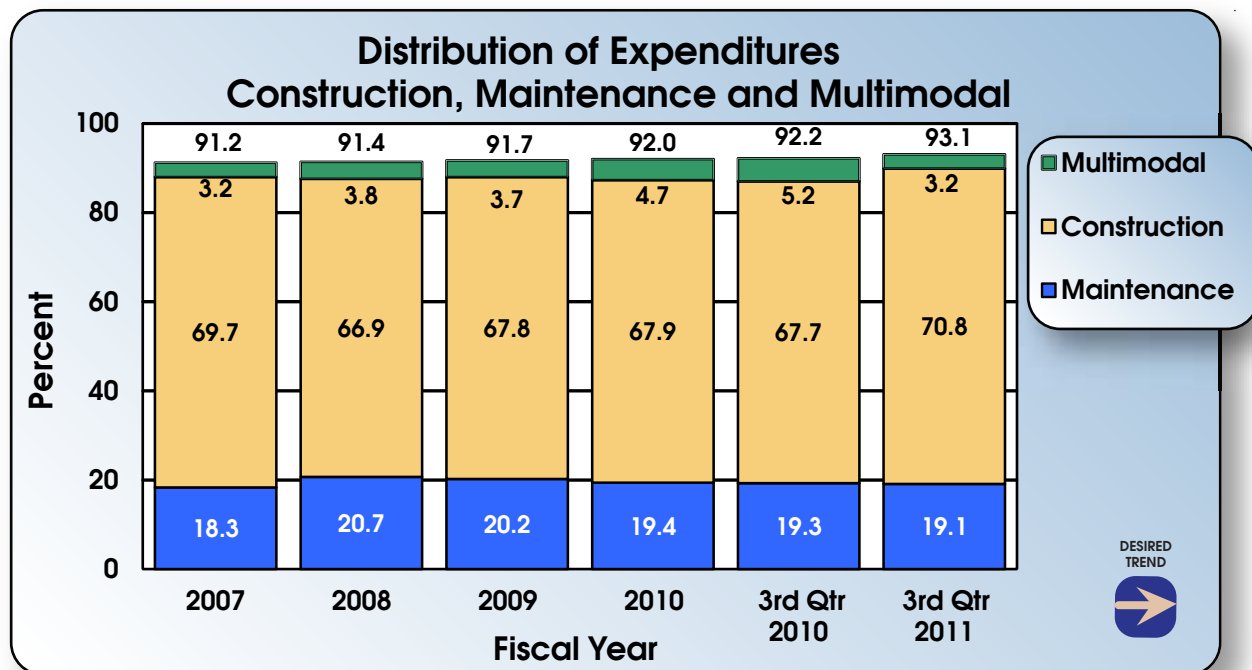
The purpose of the measure is to demonstrate a responsible use of taxpayers' money, with the emphasis of spending on our transportation system.

### Measurement and Data Collection:

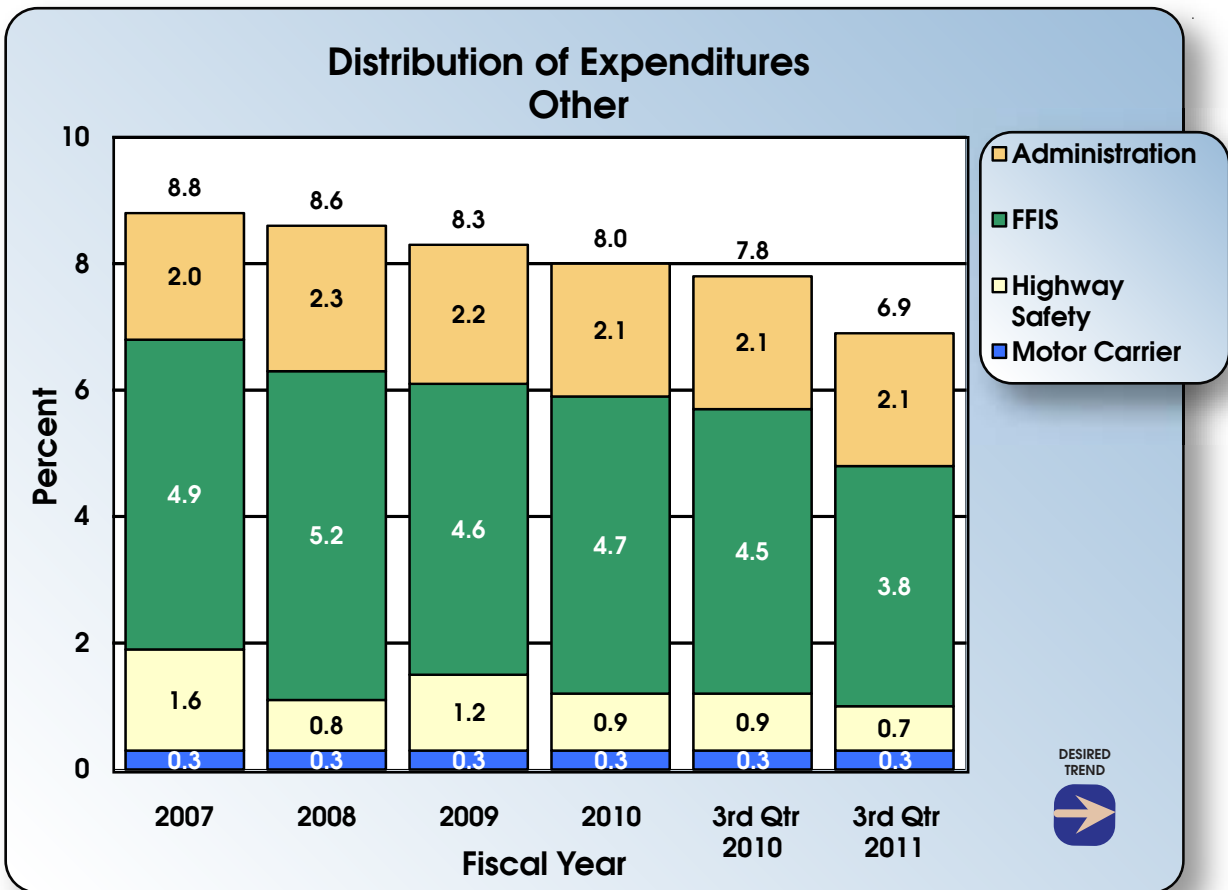
The data collection is based on cash expenditures by appropriation on a quarterly basis. Construction, maintenance and multimodal expenditures are defined as expenditures from the construction, maintenance and multimodal appropriations. Other expenditures include: administration, fleet, facilities, and information systems (FFIS), Motor Carrier and Highway Safety appropriations. Debt service appropriations are not included. This measure is updated quarterly.

### Improvement Status:

MoDOT's emphasis is on expenditures for routine maintenance of the system (maintenance appropriation), rehabilitation and construction of the system (construction appropriation), and other modes of transportation (multimodal appropriations). Construction program dollars have increased due to Federal monies received for federal pass through for ARRA projects and repayments for accelerated programs. The percentage of total dollars increased in the construction program, while other areas have decreased. FFIS decreased consistent with budget reductions due to available funding. Highway Safety decreased due to grant reimbursement requests. Administration and Motor Carrier have remained constant as a percent of total expenditures.



Thousands of Dollars						
	2007	2008	2009	2010	YTD 2010	YTD 2011
Construction	1,542,674	1,377,328	1,533,866	1,617,246	1,191,464	1,214,426
Maintenance	405,447	424,815	457,020	462,490	340,237	326,627
Multimodal	71,839	77,265	83,007	112,298	91,619	54,177
<b>Total Const. &amp; Maint.</b>	<b>2,019,960</b>	<b>1,879,408</b>	<b>2,073,893</b>	<b>2,192,034</b>	<b>1,623,320</b>	<b>1,595,230</b>



Thousands of Dollars						
	2007	2008	2009	2010	YTD 2010	YTD 2011
Administration	45,086	46,808	49,214	49,451	37,414	36,711
FFIS	108,023	106,343	104,635	111,564	78,986	65,856
Motor Carrier	6,899	6,930	7,095	6,963	5,255	4,902
Highway Safety	35,730	17,064	26,531	21,543	15,537	11,286
Total Other	195,738	177,145	187,475	189,521	137,192	118,755

<b>Total Expenditures</b>	<b>2,215,698</b>	<b>2,056,553</b>	<b>2,261,368</b>	<b>2,381,555</b>	<b>1,760,512</b>	<b>1,713,985</b>
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## Accuracy of state and federal revenue projections-15j

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Ben Reeser, Financial Resource Administrator

### Purpose of the Measure:

This measure shows the precision of state and federal revenue projections. Projections are used to prepare the budget that funds MoDOT's operations and capital program.

### Measurement and Data Collection:

State revenue includes three major components of taxes and fees paid by highway users: motor fuel taxes, motor vehicle and driver licensing fees, and motor vehicle sales and use taxes. This measure does not include interest earnings and miscellaneous revenue, which are also considered state revenues. The measure provides the cumulative, year-to-date percent variance of actual state revenue versus projected state revenue by state fiscal year.

Federal revenue is the amount available to obligate in a federal fiscal year for formula apportionments. Formula apportionments are distributed to states via federal law. The measure provides the variance of actual federal revenue versus projected federal revenue by federal fiscal year.

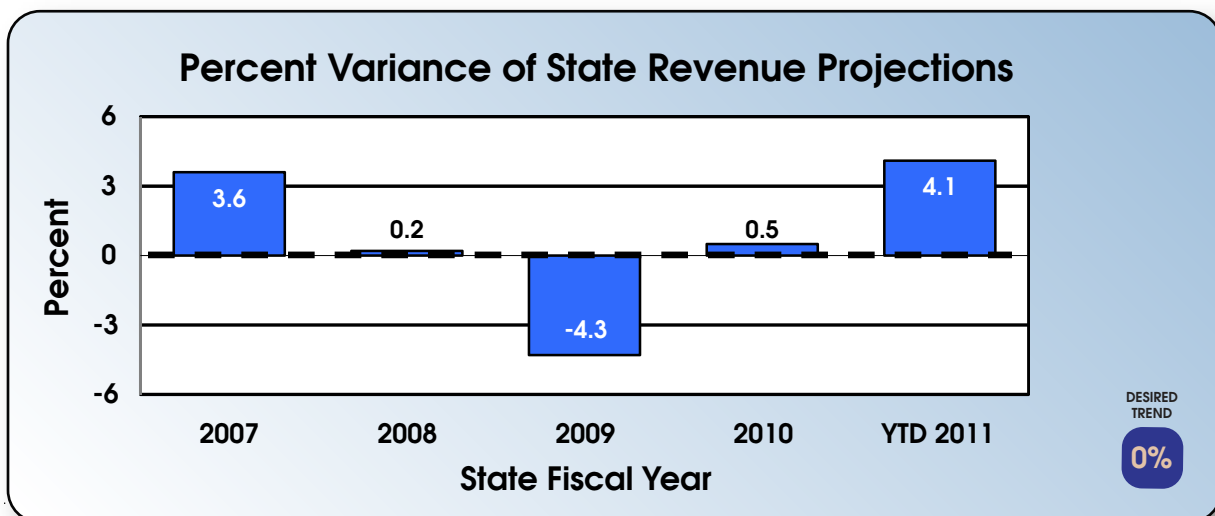
State and federal revenue projections are based on the department's current financial forecast. State revenue data is updated quarterly. Federal revenue data is updated annually in October.

### Improvement Status:

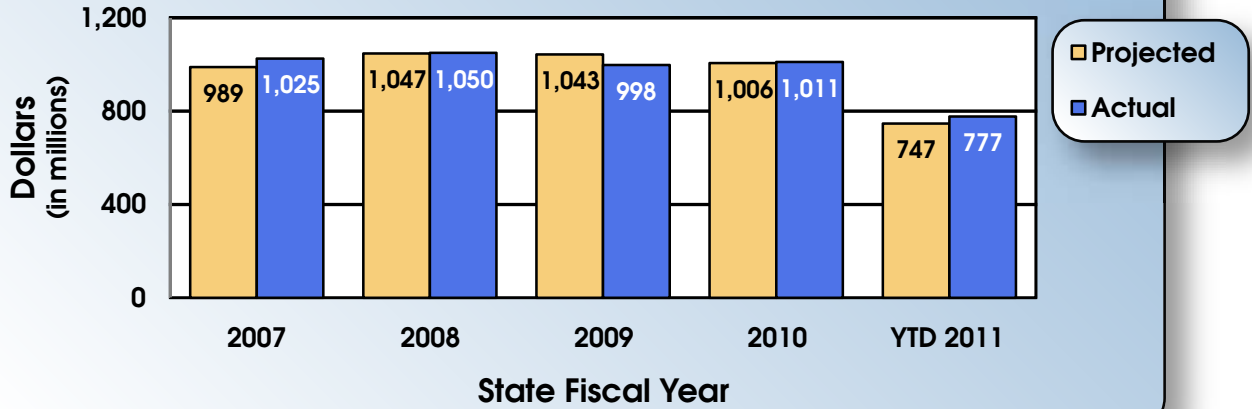
Actual state revenue was more than projected through the third quarter of fiscal year 2011. Projected revenue was \$746.5 million. However, actual receipts were \$776.9 million, a difference of \$30.4 million and a positive variance of 4.1 percent. The majority of the variance was from motor vehicle sales and uses taxes, primarily because the forecast was more conservative than usual due to the uncertain economy.

The actual federal revenue was more than projected for fiscal year 2010. The projected revenue was \$878.9 million. However, the actual revenue was \$910.4 million, a difference of \$31.5 million and a positive variance of 3.6 percent. MoDOT received additional revenue because: 1) funding that previously was classified as discretionary was categorized as formula funds in federal fiscal year 2010 under the SAFETEA-LU extension; and 2) \$14 million of additional funding became available from the annual August redistribution process.

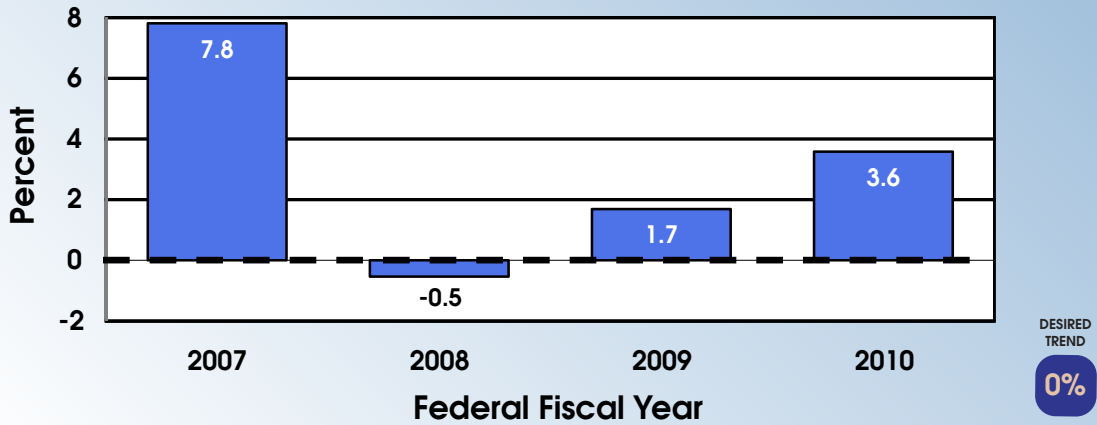
The desired trend is for actual revenue to match projections with no variance. MoDOT staff adjusts future operating and capital budgets to account for these variances, if needed.



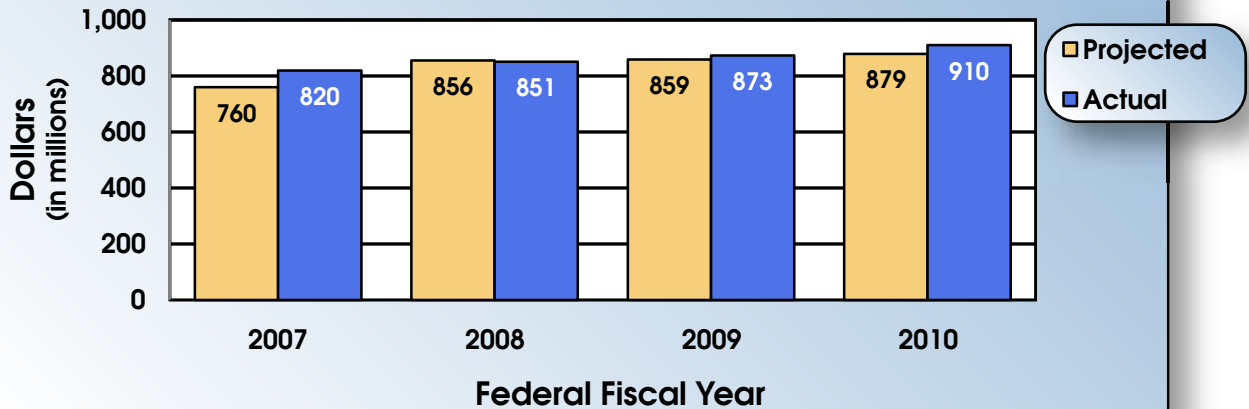
Projected vs. Actual State Revenue Comparison



Percent Variance of Federal Revenue Projections



Projected vs. Actual Federal Revenue Comparison



### Number of excess properties conveyed and gross revenue generated from excess properties conveyed - 15k

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Kelly Lucas, Right of Way Director

#### **Purpose of the Measure:**

The purpose of this measure is to track the number of excess parcels conveyed from MHTC ownership and to track the amount of revenue generated from the conveyance of excess property. In order to fulfill its stewardship role of asset management while observing practical business decisions, the department is proactively identifying and disposing of property that is no longer needed for the maintenance of the transportation system, will not be used for future expansion projects and is no longer needed for its operations. Funds received from the conveyance of excess properties are used to improve the condition of the state highway system. The districts use these funds to apply toward the costs associated with various maintenance activities and construction projects.

#### **Measurement and Data Collection:**

Data collection for this measure is reported on a quarterly basis from the Realty Asset Inventory system.

#### **Improvement Status:**

MoDOT conveyed 226 parcels in the first three quarters of fiscal year 2011, which is slightly less than the 243 parcels conveyed in the first, second and third quarters of fiscal year 2010 combined. Revenue from excess sales through the end of the third quarter of fiscal year 2011 totals \$2,459,504, resulting in an increase of \$363,324 from the previous quarter. Revenue came from 53 percent of the conveyances.

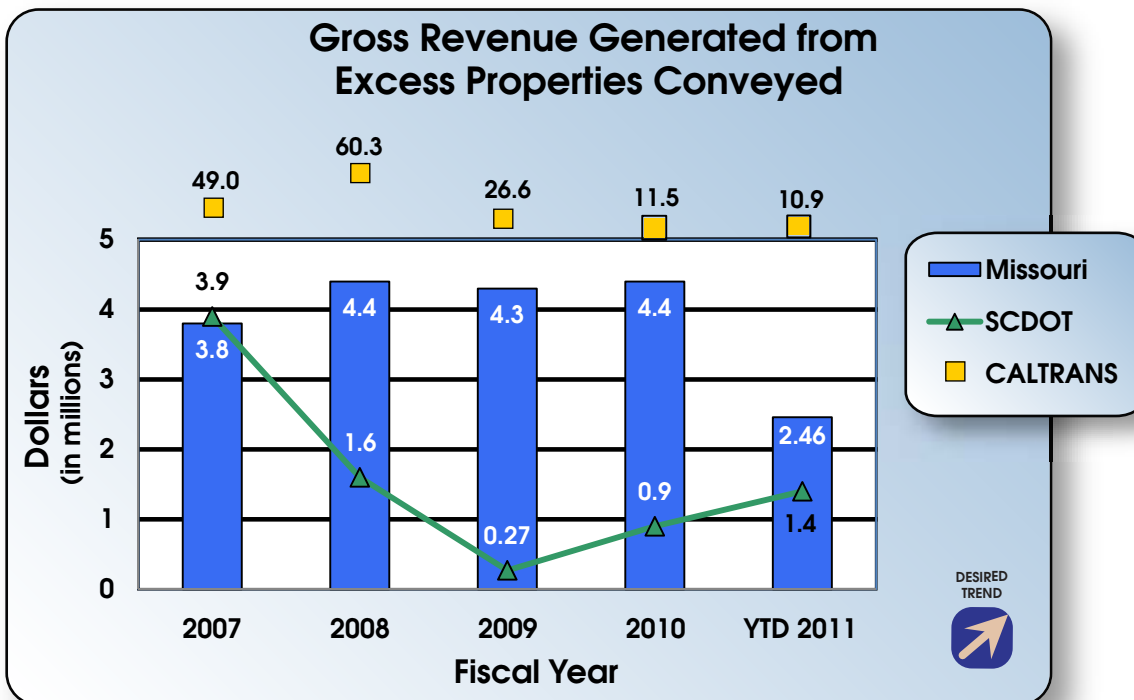
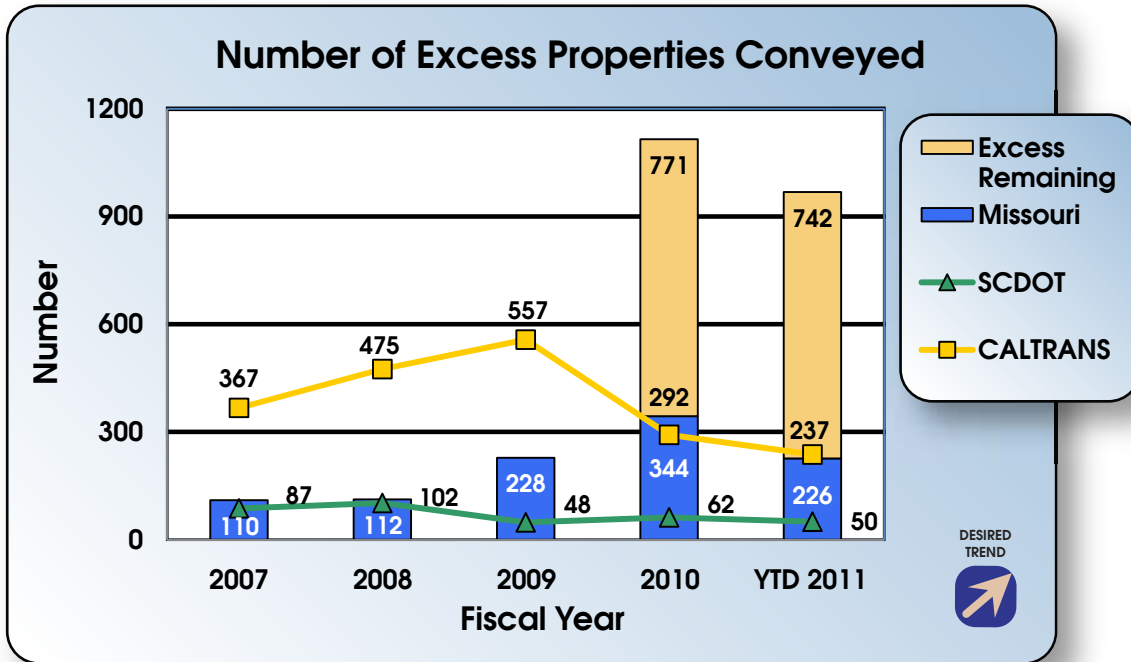
In January, the Commission revised its policy to eliminate the restriction of outdoor advertising on excess property conveyances. This change expands the potential use of the property being marketed by the Commission.

MoDOT and the Office of Administration (OA) have joined forces to sell excess property. MoDOT's website offers a link to other state-owned property being marketed for sale by OA. The OA website, in turn, links to MoDOT's Realty to Roads program page. The web page received 40,640 page views in the third quarter.

In late March, 39 parcels ranging in size from one-tenth of an acre to 199 acres were made available for purchase by either auction or sealed bid. The Realty to Roads Spring Event was well publicized with statewide and local media attention. Each district marketed property for sale with the exception of District 3 and District 5.

Each district completed an excess property inventory review exercise. The exercise reinforced the program objective of reducing the number of excess properties in the Realty Asset Inventory, while also ensuring an accurate and complete inventory. As part of this review, multiple sites were evaluated to determine if the properties should be classified as excess.





## Average cost per acre mowed and treated-15I

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Tom Stehn, District Engineer

### Purpose of the Measure:

This measure tracks the average annual cost per acre of roadside vegetation managed by mowing and/or herbicide treatments. MoDOT has made improvements to the overall quality and efficiency of managing roadside vegetation through the development of mowing best practices and herbicide research.

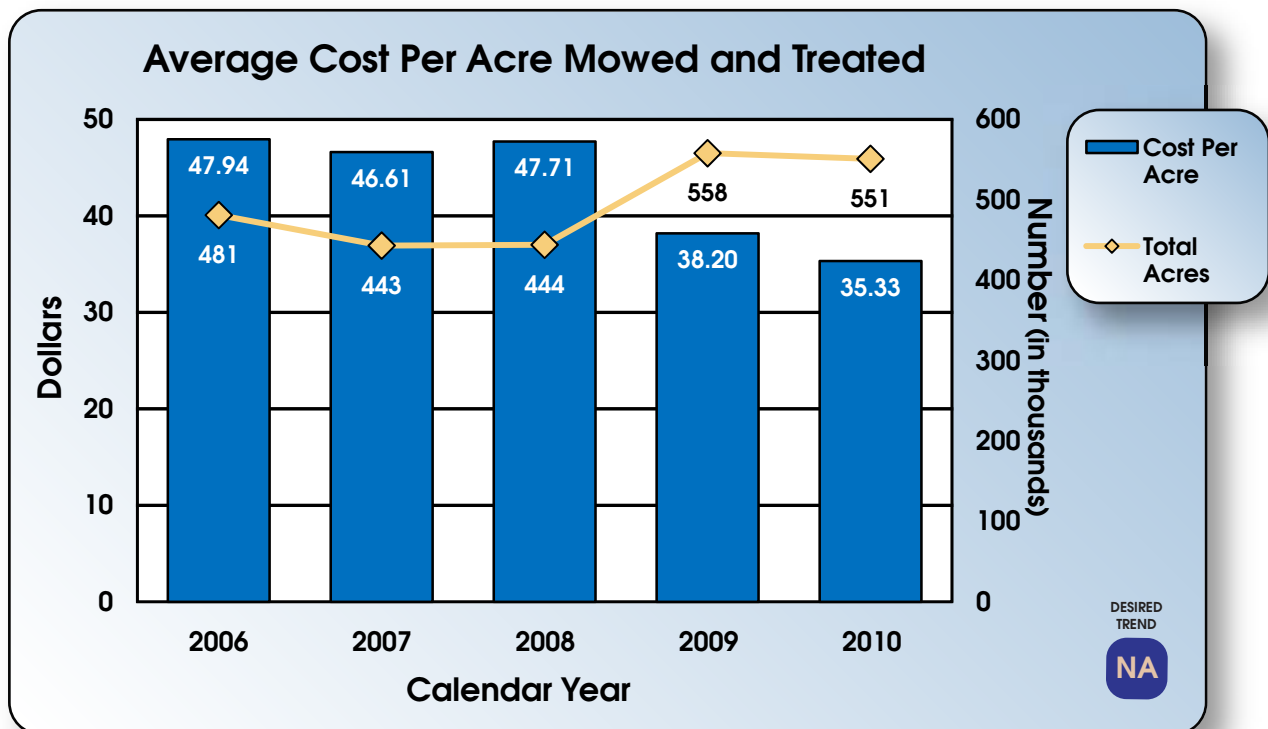
### Measurement and Data Collection:

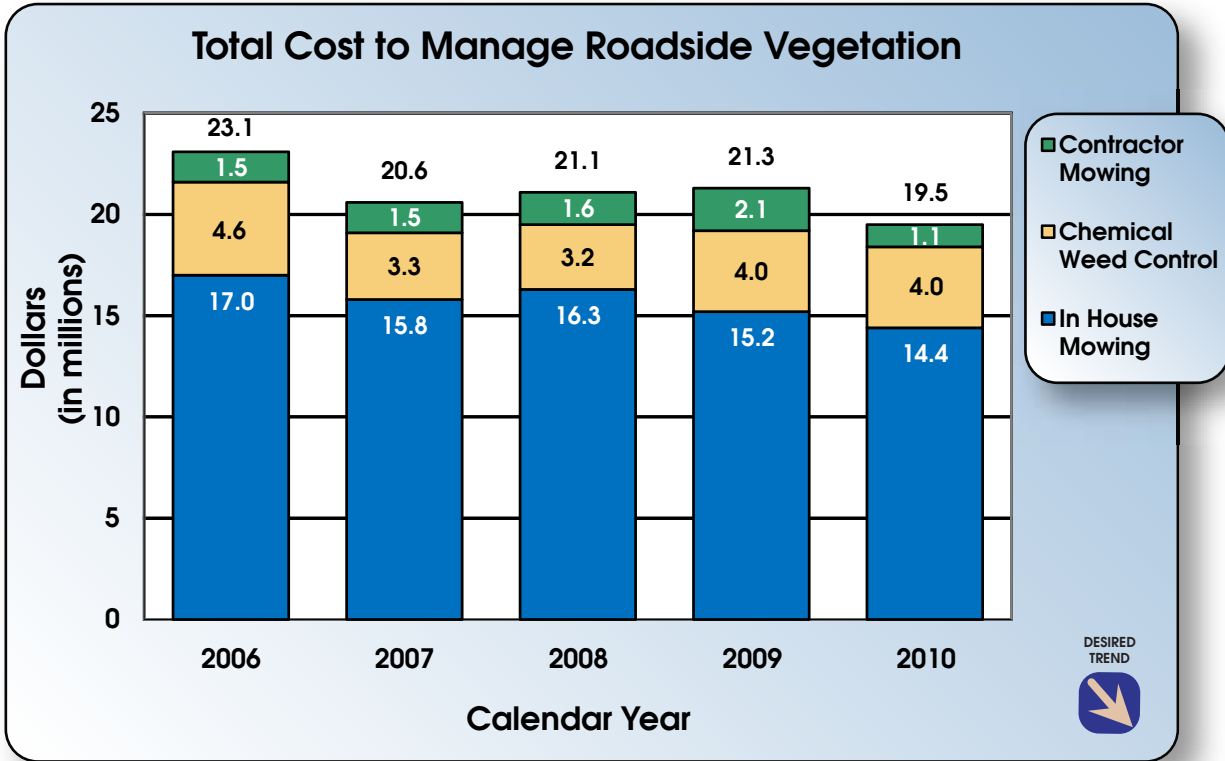
Data is collected by input from each district into the Financial Management System and the Herbicide Database. This measure evaluates the cost of managing roadside vegetation in accordance with the Roadside Vegetation Management Policy and the Herbicide Handbook. The costs are a total of in-house mowing, contractor and farmer mowing and herbicide treatments for chemical mowing and the control of noxious weeds, brush and other

undesirable vegetation. This is an annual measure updated each January.

### Improvement Status:

According to A Report Card from Missourians – 2009, 70 percent of the respondents are satisfied or very satisfied with how the roadside vegetation is managed. During the spring and summer of 2009, mowing best practices were implemented statewide. There is a slight decrease in the reported number of acres mowed and/or treated and \$1.8 million decrease in the cost to manage roadside vegetation. MoDOT increased efficiency in managing roadside vegetation while at the same time maintaining attractive roadsides that deliver an enjoyable transportation experience.







## Average cost per square yard of chip seal – 15m

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Mark Shelton, District Engineer

### Purpose of the Measure:

This measure tracks the unit cost per square yard to chip seal Missouri roadways and the number of lane miles chip sealed statewide. Tracking the cost per square yard of chip seal is part of an overall best practice process that seeks to accurately monitor costs, improve quality and reduce costs.

### Measurement and Data Collection:

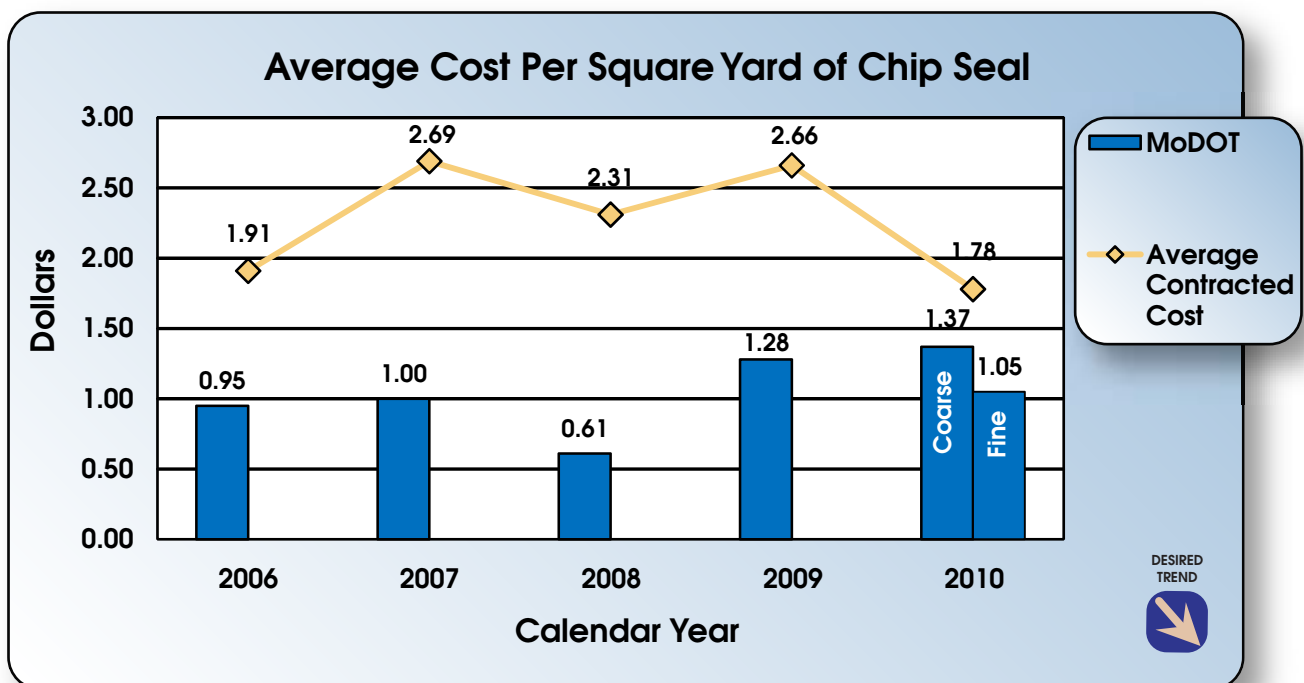
This measure includes costs associated with the equipment, labor and fringe benefits and materials used while performing chip seal operations. The desired trend is to reduce unit costs without impacting the quality of the seal. Field staff enters costs and job data into the Financial Management System (FMS). The data is used to calculate a cost per square yard to complete the chip seals. All projects were completed using “in house” forces. MoDOT, in general, owns the equipment used in completing the chip seals, however some districts rent specialty pieces of equipment rather than purchasing them. The cost is based on a roadway width of 22 feet. The most inconsistent variable between the districts is the cost of the aggregate that

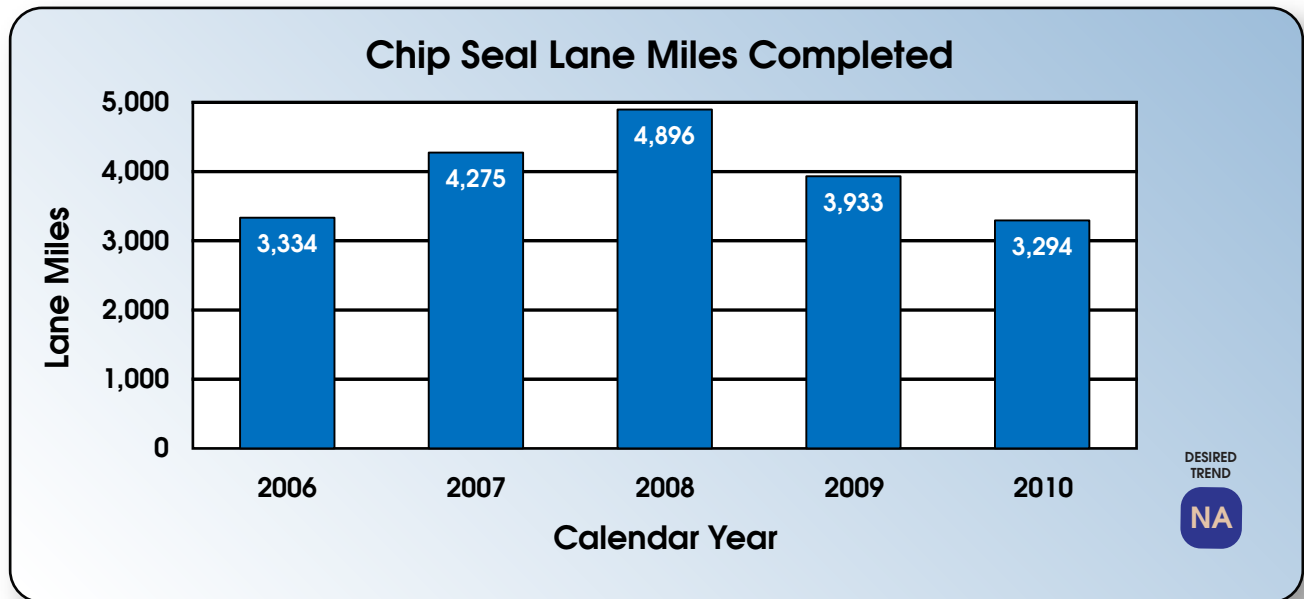
is used in the chip seal. The cost of the aggregate can vary greatly not only by the type of product selected, but can also vary significantly between districts due to the availability of the product, as well as, the transportation costs. This is an annual measure updated each January.

### Improvement Status:

In order to present the cost more accurately, the 2010 calendar year data was separated into fine aggregate seals and coarse aggregate seals. In 2010, MoDOT spent twice as much money on fine aggregate seals as on coarse aggregate seals. This splitting out of aggregate types more accurately conveys the unit costs.

The cost per square yard for chip seal decreased from 2009 to a composite average of \$1.14 per square yard. While the average cost to MoDOT to contract chip seal dipped to \$1.78 per square yard. MoDOT forces placed fewer lane miles of chip seal in 2010 than in 2009.





## Dollars invested in information technology resources-15n

**Result Driver:** Roberta Broeker, Chief Financial Officer

**Measurement Driver:** Mike Miller, Information Systems Director

### Purpose of the Measure:

This measure tracks the dollars invested in information technology that makes MoDOT faster, better and cheaper. This measure also compares the percentage of dollars invested in information technology to total MoDOT operating expenses.

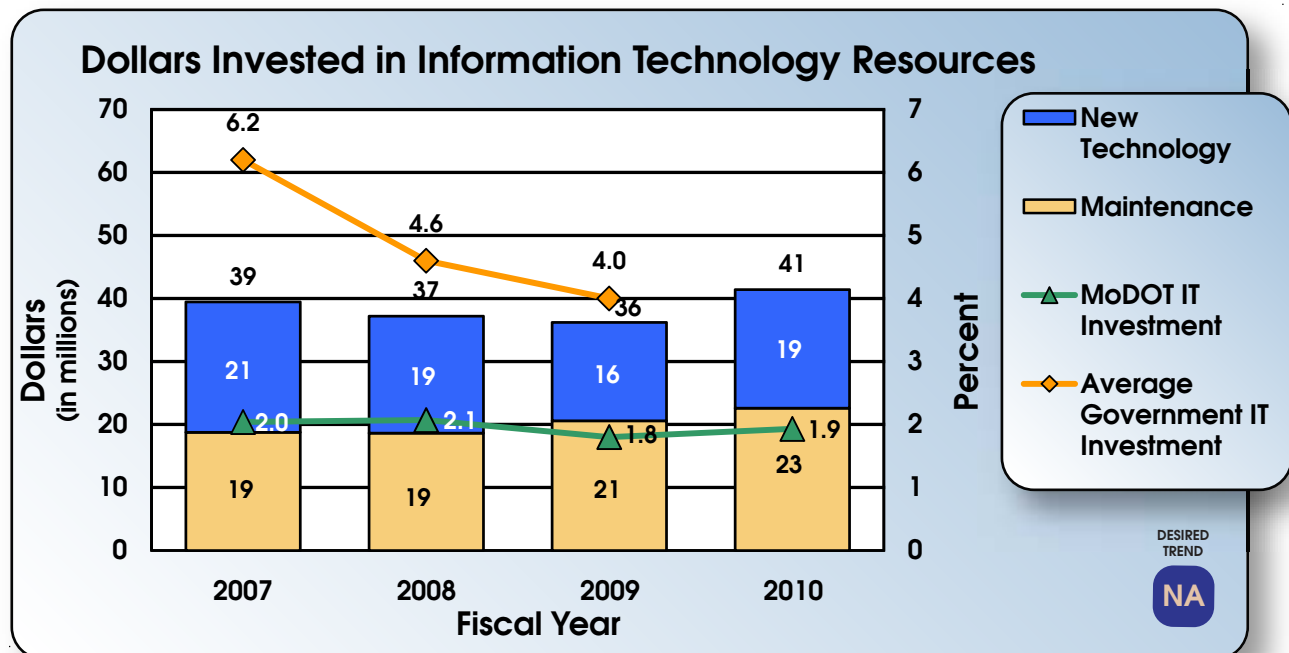
### Measurement and Data Collection:

Data for this measure is collected from the SAM II financial and human resource system. The Information System's resource and planning system also aids in grouping the data into the categories of New Technology or Maintenance expenditures. New Technology is new to the department or expanded beyond its previous use or extent. Maintenance keeps current systems running or upgraded to current vendor level. Investment dollars include Information Systems Division expense and equipment, personal service and fringe benefits only. It does not include division or district dollars. The operating expenses are on a cash basis. The average government IT investment benchmark is obtained from Gartner and indicates the percentage of dollars devoted to information technology within an agency compared to its operating expenses. Gartner is an information technology research and advisory firm that performs

annual surveys across multiple industries, including state government. The Gartner benchmarks are by fiscal year and are published in December. This is an annual measure updated each July for the previous fiscal year.

### Improvement Status:

MoDOT's ITIP Committee works to manage information technology investments while balancing investment in new technologies and maintaining existing systems. Over the last several years maintenance costs have increased due to the need to support information technology systems and applications that were previously purchased. Also, the benchmark of average government IT investment has been on the decline. Similarly, MoDOT's information technology investment was also declining until 2010. The 2010 increase was due to \$3 million dollars in carryover of funds from FY09 for several large projects such as the Dual Data Center, HR Integrated Data system, Fiber to Message Boards and Re-platform Motor Carrier Services servers. We continue to review software and hardware maintenance to determine if the service is needed and of value.



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Lindsey Stapp

Steve Heintjes

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# ADVOCATE FOR TRANSPORTATION ISSUES

*Tangible Result Driver – Jay Wunderlich, Governmental Relations Director*

Transportation issues can be extremely diverse and complex. An efficient transportation system requires leadership and, most importantly, a champion to ensure the resources support projects that will help the department fulfill its responsibilities to the taxpayers. MoDOT will be an advocate for transportation.



## Percent of customers who view MoDOT as Missouri's transportation expert-16a

**Result Driver:** Jay Wunderlich, Governmental Relations Director

**Measurement Driver:** Amy Niederhelm, Intermediate Governmental Relations Specialist

### Purpose of the Measure:

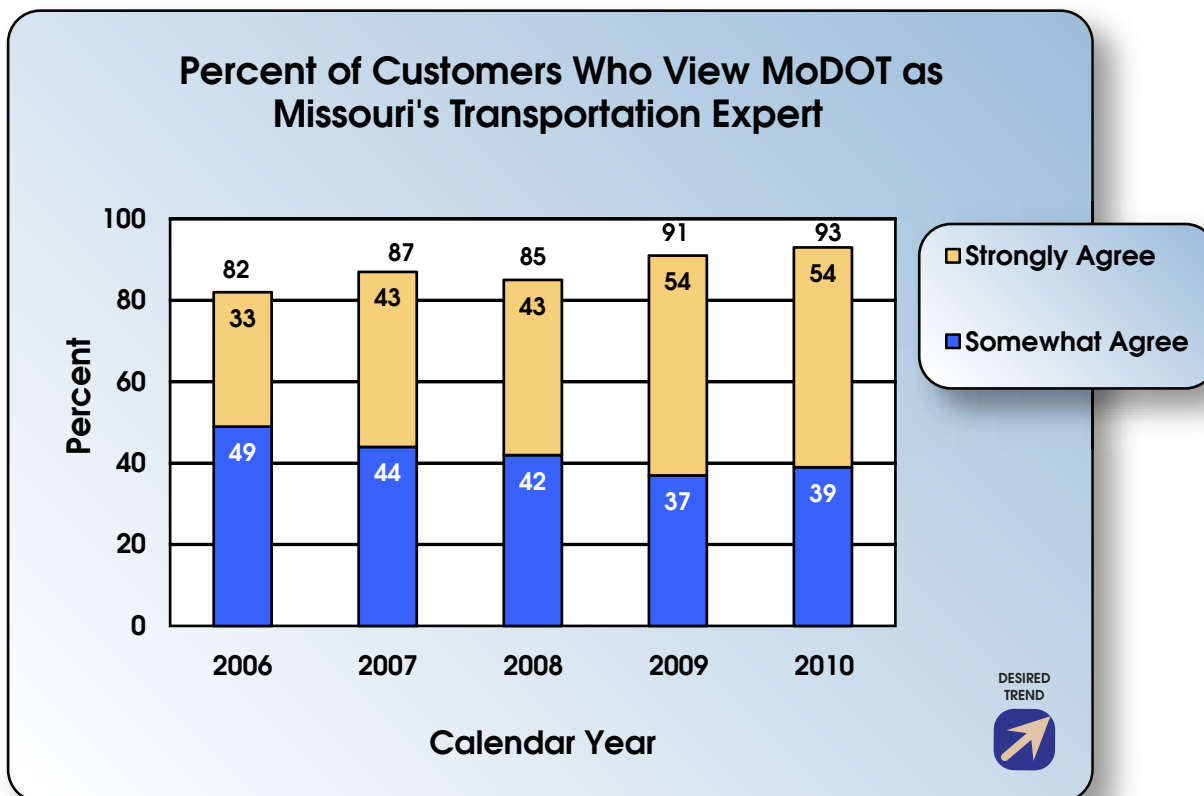
This measure tracks the percent of customers who view MoDOT as a leader and expert in transportation issues. The measure shows the department how effectively MoDOT conveys its expertise to the traveling public.

### Measurement and Data Collection:

Data is collected each May when more than 3,500 randomly selected Missourians are interviewed. MoDOT surveys public opinion on a yearly basis to determine whether or not the public views MoDOT as the primary transportation expert in Missouri. This is an annual measure updated in July.

### Improvement Status:

The current information shows that 93 percent of respondents indicate MoDOT is the transportation expert they rely upon. This represents an increase of 2 percent since last surveyed in 2009. Through a questioning approach identical to the 2009 survey, the 2010 numbers increased in the 'somewhat agree' responses, thus reflecting a lesser percent of individuals that disagreed with this statement than previously (7 percent in 2010 vs. 9 percent in the last year). MoDOT must continue to work on improving partnerships with citizens, legislators and special interest groups promoting MoDOT as a transportation expert. Ways to accomplish this include increasing awareness of MoDOT's responsibilities and services for the traveling public.



## Number of engagements between Missouri's congressional members, statewide elected officials and legislators-16b

**Result Driver:** Jay Wunderlich, Governmental Relations Director

**Measurement Driver:** Lisa LeMaster, Senior Governmental Relations Specialist

### Purpose of the Measure:

This measure tracks the number of legislative contacts between MoDOT and Missouri's congressional members, statewide elected officials and Missouri's legislators for the purpose of either responding to inquiries or to inform the elected officials of important transportation-related issues.

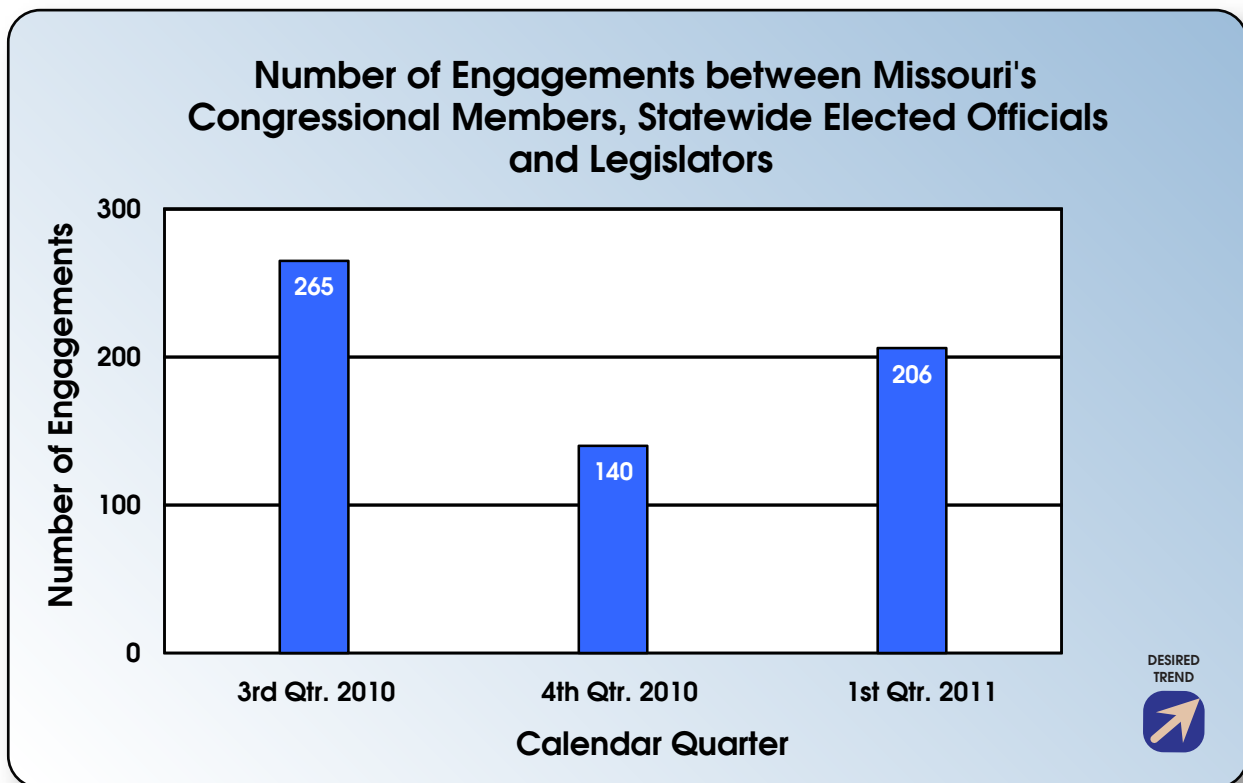
the information to the Governmental Relations Unit where the data is compiled to create a statewide report. This measure is updated quarterly.

### Improvement Status:

During the first quarter of 2011 there were a total of 206 engagements between Missouri's congressional members, statewide elected officials and legislators. This number was an increase from the fourth quarter numbers.

### Measurement and Data Collection:

District community relations managers and central office divisions collect contact information and report





## Number of transportation-related legislative issues-16c

**Result Driver:** Jay Wunderlich, Governmental Relations Director

**Measurement Driver:** Lisa LeMaster, Senior Governmental Relations Specialist

### Purpose of the Measure:

This measure tracks significant transportation-related legislative issues filed by the General Assembly. Significant transportation-related legislative issues are either favorable or unfavorable relating to transportation resources, supporting transportation projects, creating efficiency within the department, or promoting roadway safety. This measure reflects the need for continuous and effective communication between the department and Missouri legislators.

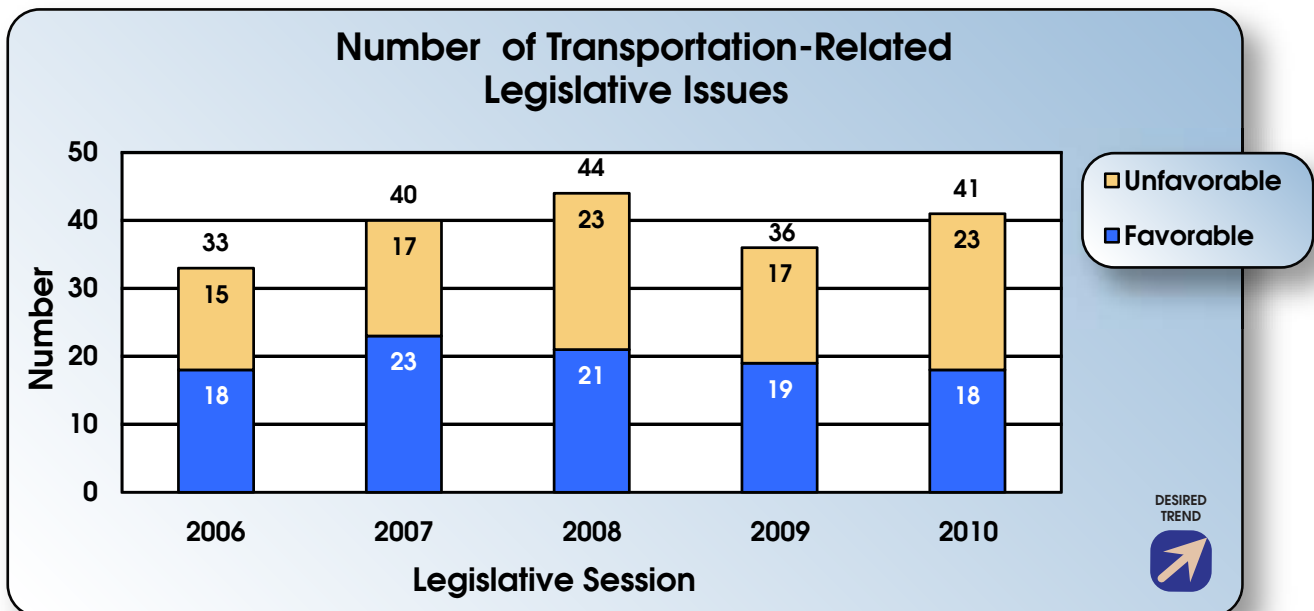
### Measurement and Data Collection:

Data is obtained by reviewing both the Senate and House websites for legislation in the transportation subject categories. Each bill is then reviewed to determine whether it contains an issue(s) that is favorable or unfavorable to transportation. The graph illustrates the total favorable transportation-related issues filed compared to the total unfavorable

transportation-related issues filed. This measure is updated in July.

### Improvement Status:

MoDOT's desired trend as an advocate for transportation is to see a larger number of favorable transportation-related issues filed when compared to unfavorable transportation-related issues filed. Over the past five years, the percentage of transportation-related bills filed has remained fairly steady. During the 2010 session, of the total 1,979 bills filed, 11 percent were transportation-related which equates to 222 transportation bills. Of the 222 transportation bills, there were 41 significant transportation-related issues contained in those bills. This is a slight increase from the 2009 session and a slight decrease from the 2008 session. Of the 41 significant issues, 18 were favorable and 23 were unfavorable.



## Number of proactive communication efforts initiated specifically to advocate for key transportation issues-16d

**Result Driver:** Jay Wunderlich, Governmental Relations Director

**Measurement Driver:** Jorma Duran, Community Relations Coordinator

### Purpose of the Measure:

This measure tracks the number of proactive communication efforts initiated specifically to advocate for key transportation issues.

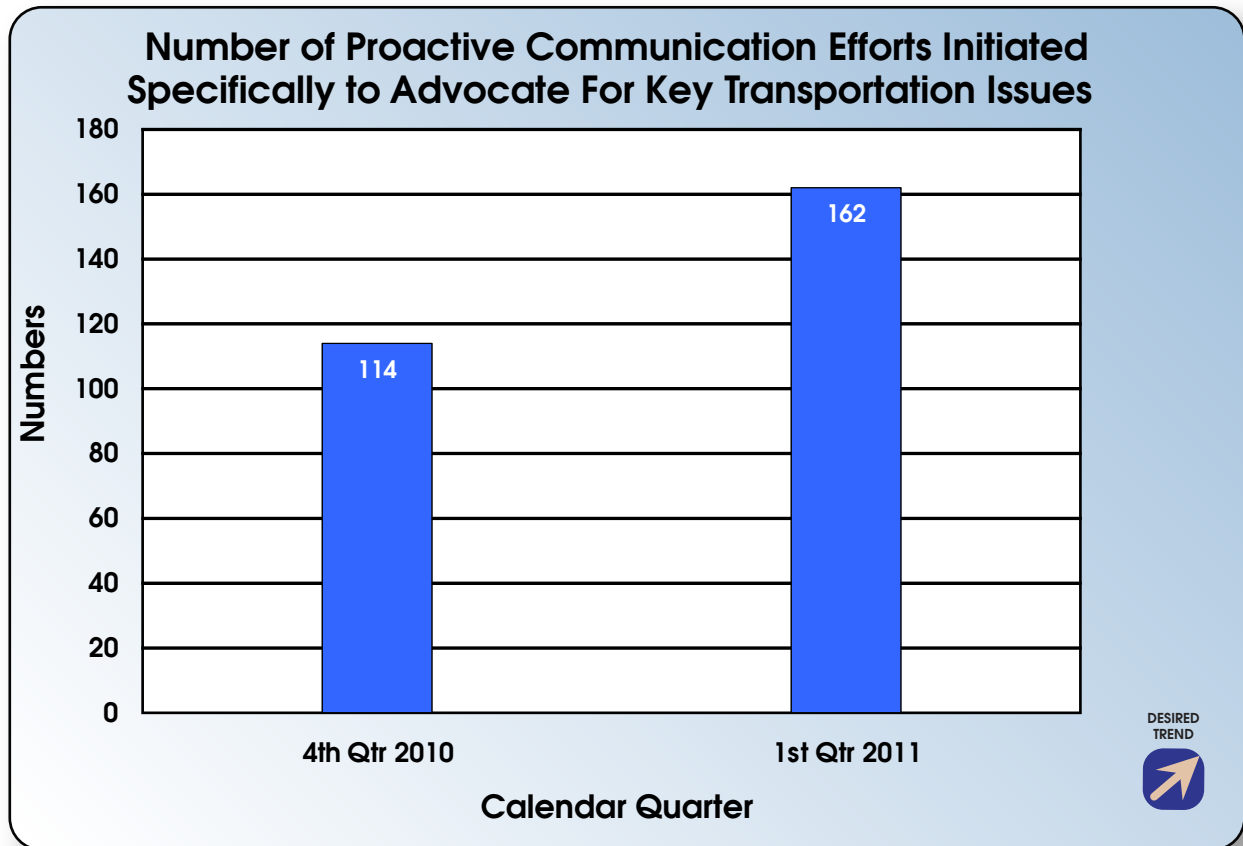
Direction and/or to discuss challenges related to transportation funding.

### Measurement and Data Collection:

District community relations managers will track any external communication efforts (news releases, public appearances, events, ETC.) that are initiated specifically to communicate MoDOT's Five-Year

### Improvement Status:

There were 162 instances in the first quarter of 2011 when external communication regarding MoDOT's Five-Year Direction and/or our "It's Personal" theme was specifically discussed.





Metro Edition

WE GIVE YOU  
OUR FORECAST  
SPORTS | DI

# IT'S THE DODGER

YOU CAN POST  
YOURS ONLINE  
STLtoday.com/cards

## ST. LOUIS POST-DISPATCH

THURSDAY, FEBRUARY 13, 2007 | FOUNDED BY JOSEPH PULITZER IN 1878 | STLtoday.com

### Buckling down On buckling up

**BILL GAINS MOMENTUM** • Police could stop motorists solely for not wearing a seat belt. A hearing is scheduled for today.

**SAVING LIVES** • Supporters say it could prevent 90 traffic deaths a year, save money spent on law suits and bring in extra federal money.

#### TOP NEWS

##### NORTH KOREAN ARMS DEAL?

U.S. diplomat says the North and five other nations have reached a tentative agreement under which Pyongyang would end its nuclear program.

WORKS | A1

#### LOCAL NEWS

##### CONGO CRIME?

Grateful residents of the Congo Mayor's inauguration want to give their association president a gift for all his work. They say he stole more than \$100 million from the state.

##### TO EXPAND

Center St. ...

### A grim anniversary in Iraq Blasts resound during



# PROACTIVE TRANSPORTATION INFORMATION

*Tangible Result Driver – Shane Peck, Community Relations Director*

Accurate, consistent and timely information is critical to accomplishing MoDOT's mission. By providing this information to its customers, MoDOT becomes the first and best source for transportation information in Missouri. Openness and honesty build trust with our customers.

## Number of public appearances-17a

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Sally Oxenhandler, Community Relations Manager

### Purpose of the Measure:

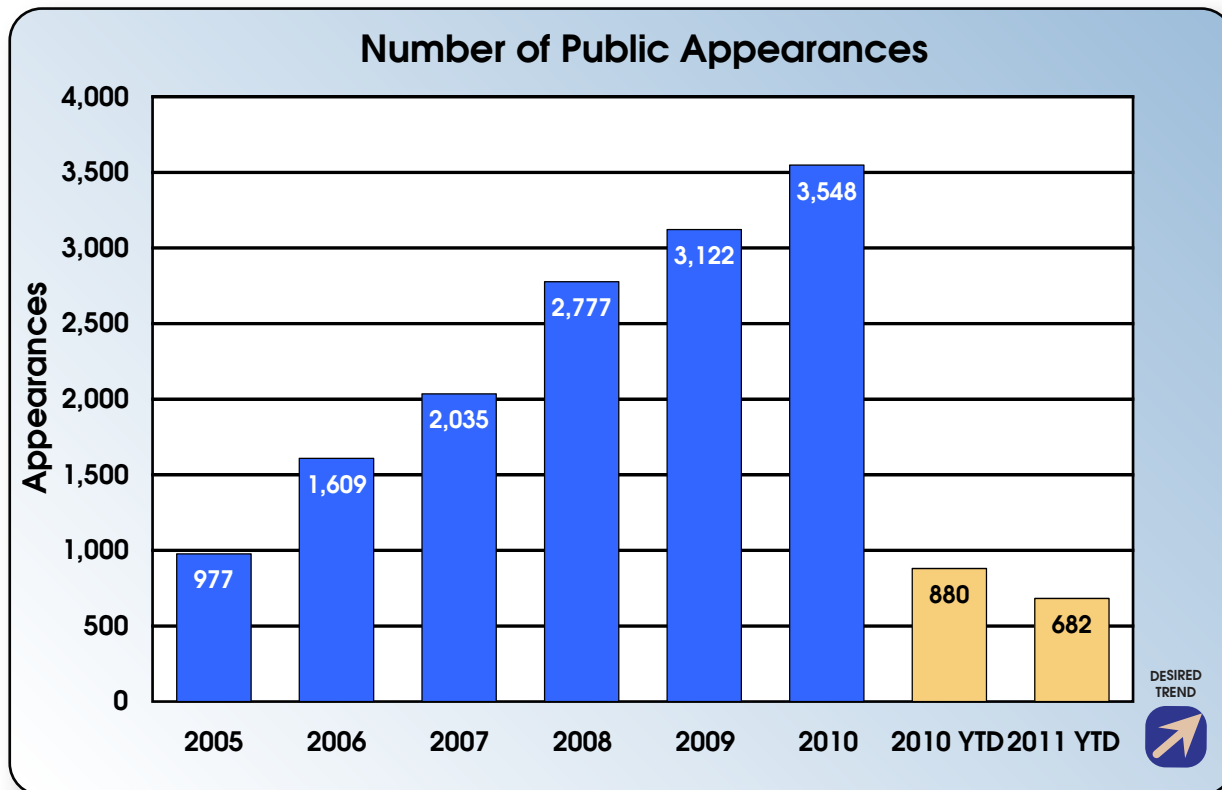
This measure tracks and encourages regular, personal contact with MoDOT customers. A public appearance is defined as any single, public event attended by one or more MoDOT representatives to provide transportation related information. Examples include speeches, presentations, conferences, exhibits, fairs and ribbon cuttings.

### Measurement and Data Collection:

This is an annual measure with quarterly updates. District Community Relations managers collect appearance information from their administrators on a quarterly basis and send it to Central Office Community Relations, where it is combined with data from divisions and business offices to create a statewide report.

### Improvement Status:

MoDOT staff reported 682 public appearances for the 2011 year to date. That number is down from the 880 public appearances reported for the same time period in 2010. The decrease is likely attributed to the decline in the construction program. However, the It's Personal communications effort provides an opportunity for outreach. In addition to district activities, a letter was sent to about 2,000 stakeholders statewide in March encouraging them to contact us for speakers regarding the It's Personal campaign.



## Percent of customers who feel MoDOT provides timely, accurate and understandable information-17b

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Sally Oxenhandler, Community Relations Manager

### Purpose of the Measure:

This measure tracks whether customers feel MoDOT provides timely, accurate and understandable information they need and use.

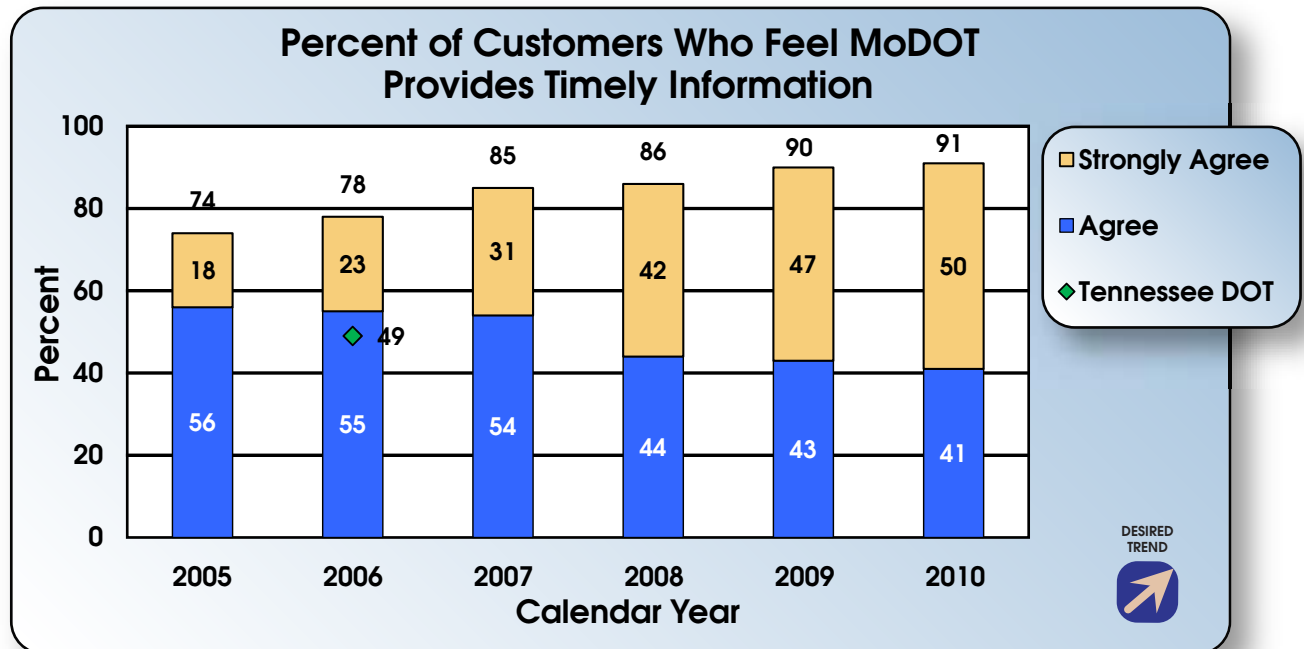
### Measurement and Data Collection:

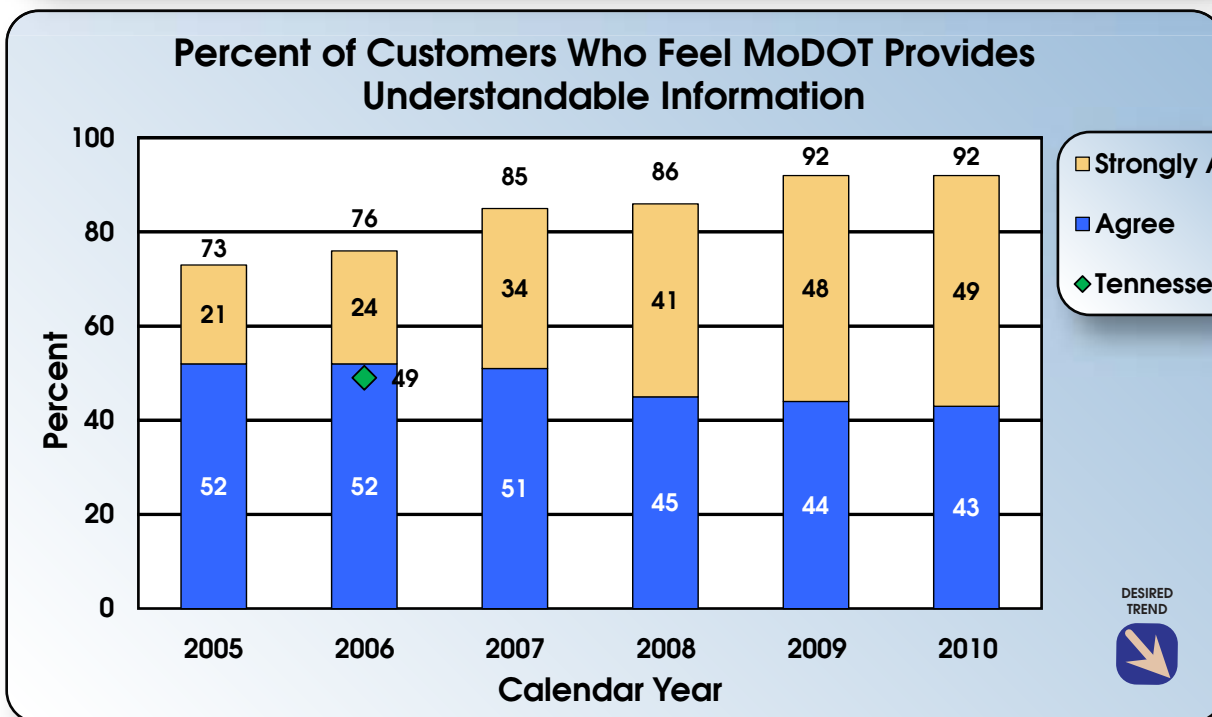
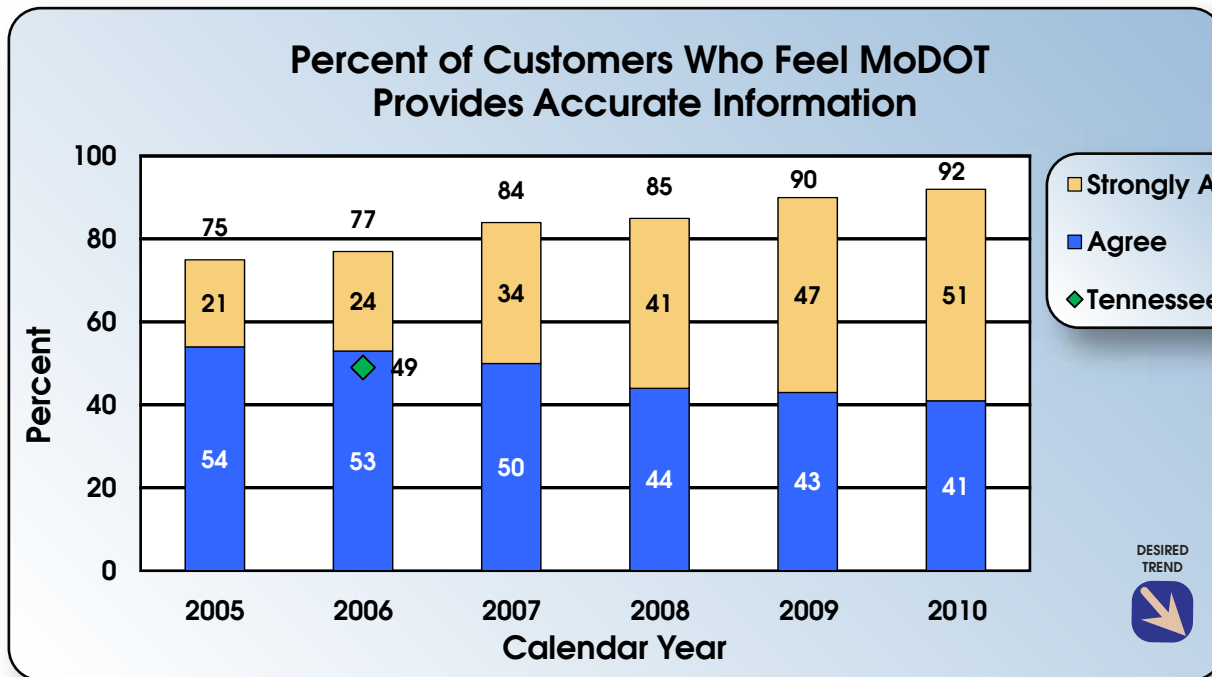
This is an annual measure. Data is collected from telephone interviews with more than 3,500 randomly selected adult Missourians each May. As a comparison, the Tennessee Department of Transportation reported in September 2006 (the latest data available) that 49 percent of residents surveyed said they were satisfied or very satisfied with the agency's efforts to keep them informed about transportation-related issues.

### Improvement Status:

The percentage of Missourians who agree MoDOT provides timely, accurate and understandable

information remains extremely high. Ninety-one percent of Missourians agree MoDOT provides timely information, while 92 percent feel the department provides accurate and understandable information. The number of people who strongly agree that MoDOT does a good job of conveying timely, accurate and understandable information rose in all three areas. MoDOT's efforts to be open and transparent are reflected in these results, as are a variety of outreach activities ranging from the Traveler Information Map and social media communications to a record number of media contacts and virtual public meetings. Efforts to communicate local project information and major initiatives likely contributed to the positive responses as well.





## Number of contacts initiated by MoDOT to media-17c

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Jorma Duran, Community Relations Coordinator

**Purpose of the Measure:**

This measure tracks how well MoDOT staff is “reaching out” to reporters to tell them about the good work MoDOT does.

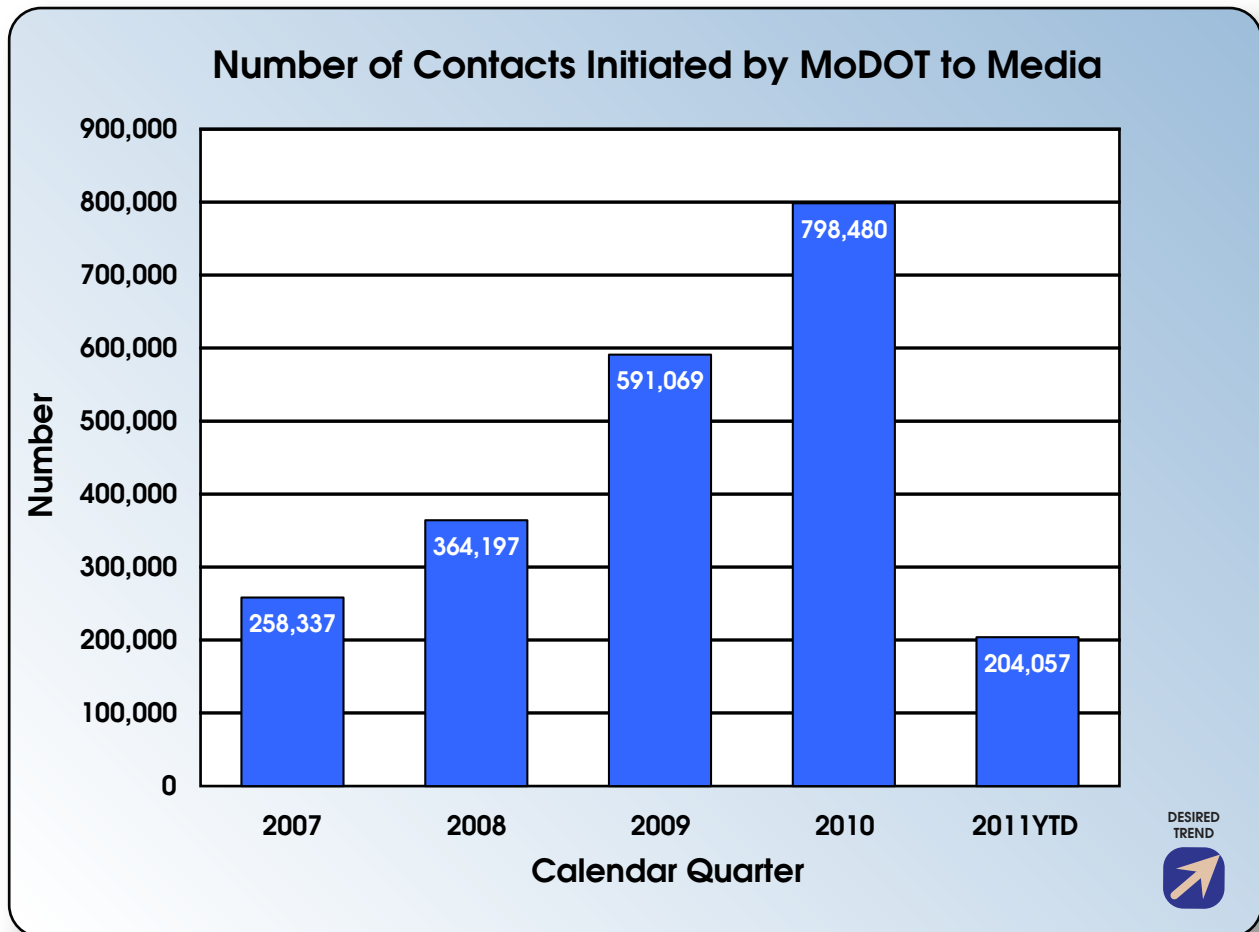
**Improvement Status:**

There were 204,057 media contacts made in the first quarter of 2011. This represents an increase of 46,101 when compared to the fourth quarter of 2010.

**Measurement and Data Collection:**

All contacts (news releases, e-mail, phone, correspondence and Twitter) initiated by MoDOT staff are included. Central Office Community Relations collects quarterly results, including submissions from districts.

Social media, especially Twitter, has continued to grow and keep our connection to the media healthy and strong, allowing the public to be aware of MoDOT news and announcements instantly.





## Percent of MoDOT information that meets the media's expectations-17d

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Jorma Duran, Community Relations Coordinator

**Purpose of the Measure:**

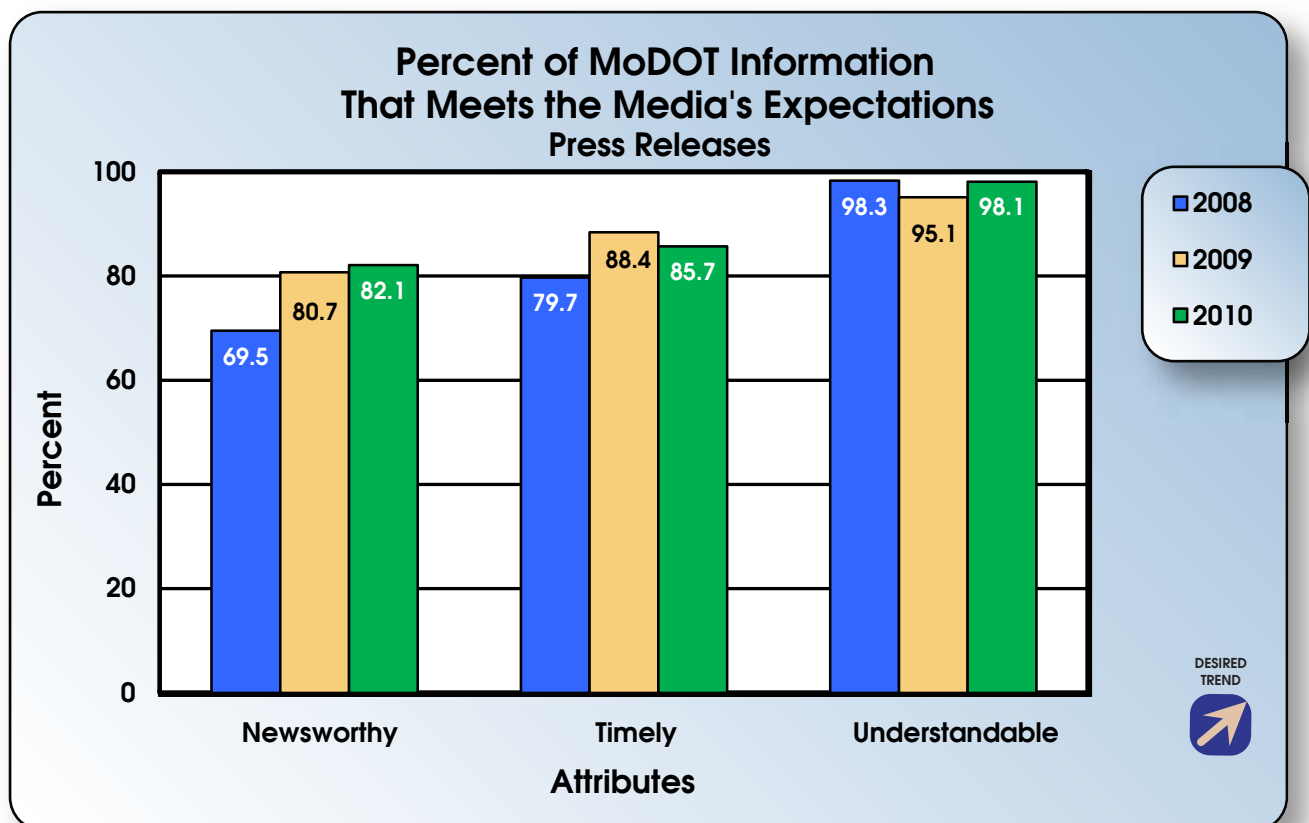
This measure tracks how MoDOT is meeting the media's needs by providing appropriate information.

**Measurement and Data Collection:**

MoDOT sends out an annual survey asking statewide media if MoDOT's outreach efforts meet their expectations. Each media outlet rates their level of satisfaction on how newsworthy, timely, and understandable news generated from MoDOT is.

**Improvement Status:**

The annual statewide media survey is conducted each June. There were 106 media outlets that participated in the 2010 survey. Media satisfaction increased with MoDOT's newsworthiness and understandability, with a slight decrease in timeliness when compared to 2009. Overall, results show MoDOT is providing appropriate information and meeting media expectations.



## Percent of positive newspaper editorials-17e

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Jorma Duran, Community Relations Coordinator

### Purpose of the Measure:

This measure tracks how MoDOT is perceived by the media, and by extension the public.

### Measurement and Data Collection:

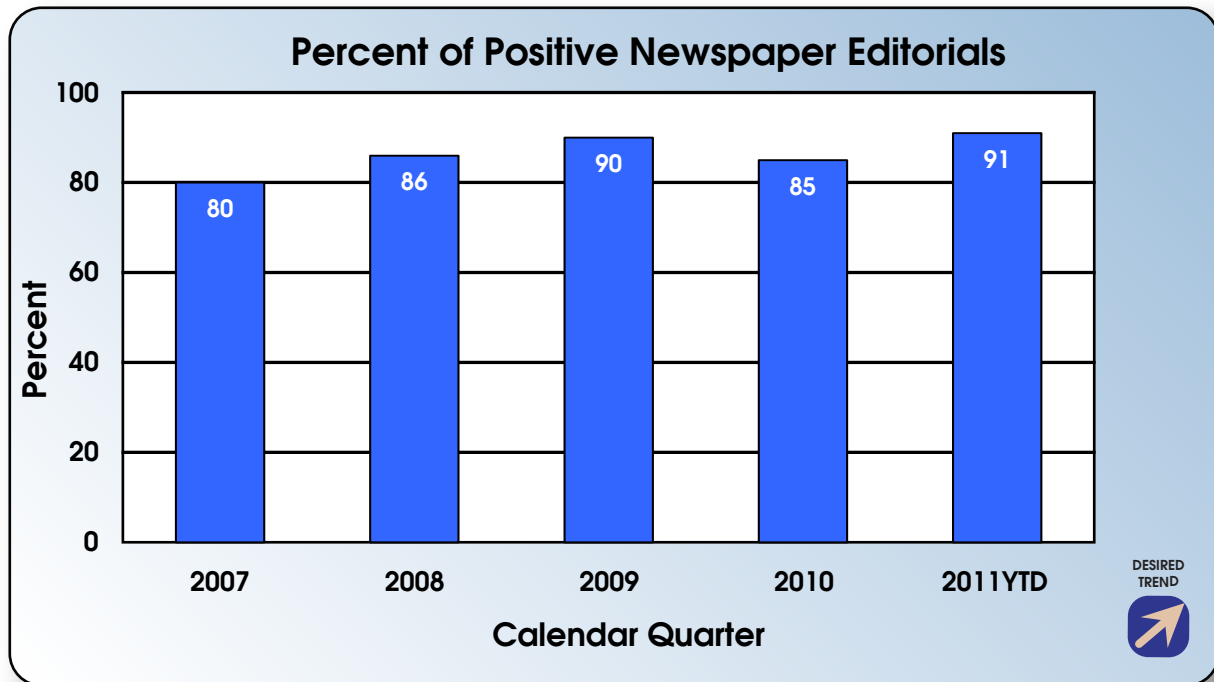
Using a newspaper clips database, MoDOT staff reviews statewide newspaper editorials and determines whether they're positive or negative toward MoDOT and/or the issues it advocates. Only editorials written by newspaper staff are included; guest editorials and letters to the editor are not. Results are charted quarterly.

### Improvement Status:

There were 23 editorials regarding MoDOT or state transportation issues in the first quarter of 2011. Of those editorials, 91 percent (21) were positive.

Positive editorials included aggressive action to stop texting and driving, how red-light cameras should be used across Missouri, and praise for how MoDOT handled the blizzard in early February.

There were two negative editorials that included MoDOT. Lake News Online feels MoDOT has fallen behind in maintenance and improvements in their area and believe the Soap Creek bridge project is just another patchwork fix. The Hannibal Courier Post questioned another delay for the upgrade where U.S. 61 meets up with West Ely Road and Pleasant Street.



## Percent of positive news reports-17f

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Jorma Duran, Community Relations Coordinator

### Purpose of the Measure:

This measure tracks media coverage MoDOT is receiving from local, state, regional and national outlets.

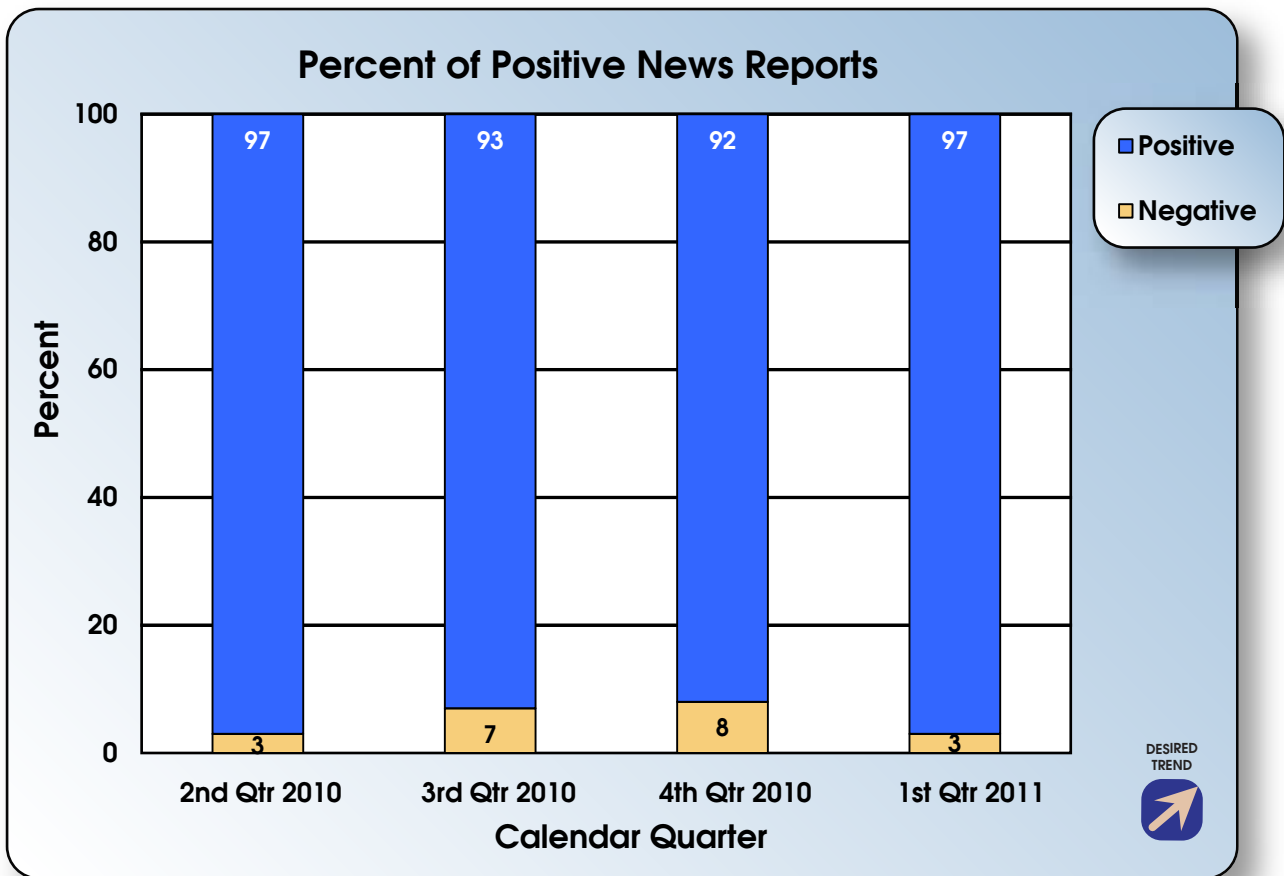
### Measurement and Data Collection:

News articles about MoDOT projects, innovations or leadership are gathered, organized and reported on a quarterly basis. Media coverage includes stories generated directly and indirectly from our communications efforts. Community Relations maintains clipping files resulting from those articles and stories. Every article or story that includes MoDOT is then given a positive or negative classification.

### Improvement Status:

In the first quarter of 2011, there were a total of 3,049 news reports involving MoDOT captured through our clips database. 2,964 of the news reports were positive and 85 were negative. 97.2 percent of media coverage during the first quarter of 2011 was positive.

The stories that contributed to the majority of the negative press included: The Soap Creek bridge project in the Lake of the Ozarks area, emergency repairs to highway 109 in Wildwood, and lack of rural area snow plowing.



## Number of visits to MoDOT's website-17g

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Matt Hiebert, Community Relations Coordinator

### Purpose of the Measure:

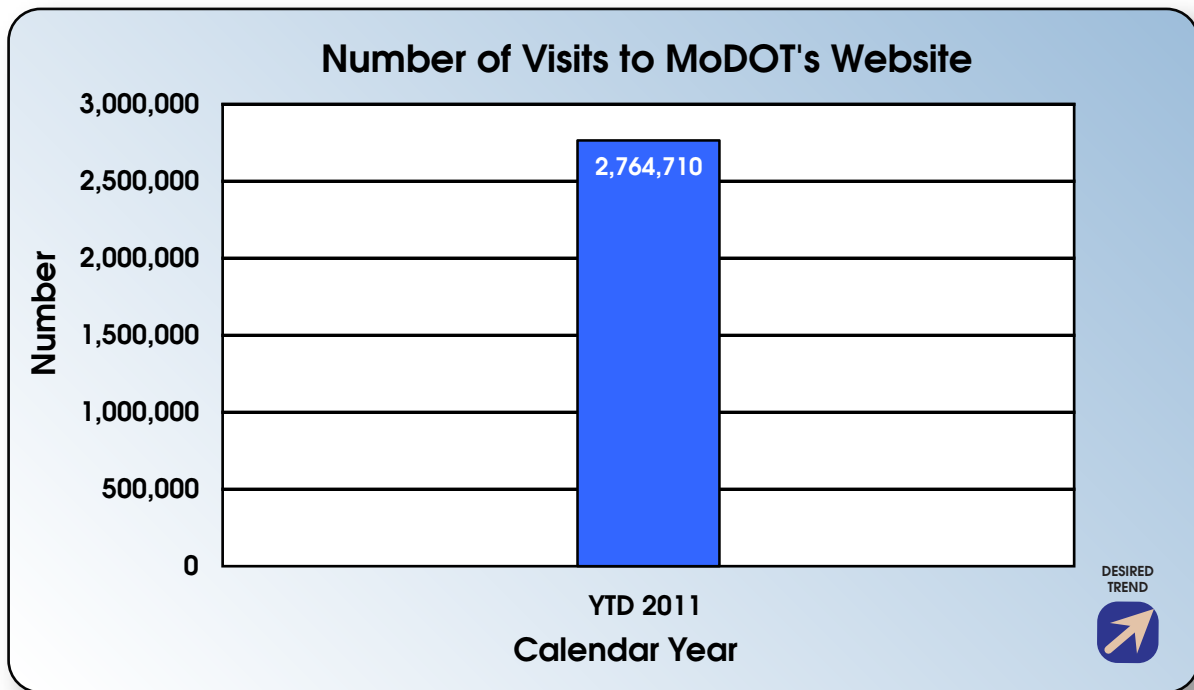
This measure tracks the number of customers who have used MoDOT's website. Monitoring overall visitors aligns with national trends for Web analytics and measures both content value and public awareness of MoDOT's website.

### Improvement Status:

Google Analytics has replaced WebTrends for tracking MoDOT's Web site, and we have started tracking "visits" rather than "visitors" in an effort to reflect best practices found among other government agencies and private industry.

### Measurement and Data Collection:

Data is gathered using Google Analytic which measures site activity and produces reports in graphic and tabular formats.



## Number of customers engaged through social media-17h

**Result Driver:** Shane Peck, Community Relations Director

**Measurement Driver:** Laura Holloway, Community Relations Coordinator

### Purpose of the Measure:

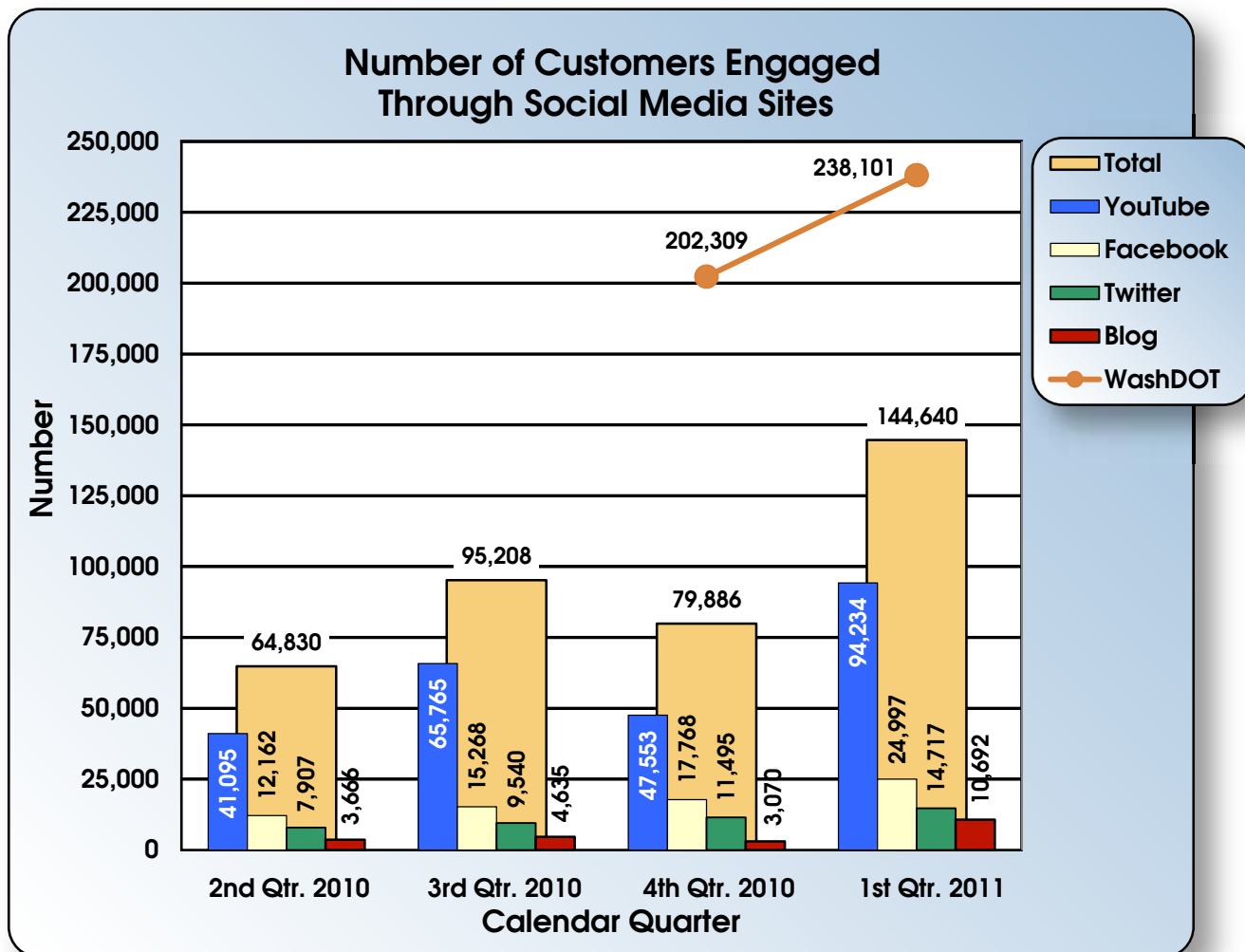
This measure tracks the number of customers MoDOT has engaged through social media sites. It includes customers who choose to receive MoDOT information via Facebook, Twitter, blogs, or have viewed a MoDOT video on YouTube.

### Improvement Status:

There were 144,640 customers engaged during the first quarter of 2011 through MoDOT's social media sites across the state. During the fourth quarter, a new Facebook page was added for Barrel Bob.

### Measurement and Data Collection:

All followers, visits and views from each site are combined for the quarterly measure. It includes customers that follow the statewide sites as well as all district accounts.



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# MoDOT's FIVE-YEAR DIRECTION

*Tangible Result Driver – Don Hillis, Director of System Management*

Transportation is more than roads and bridges and projects. It's personal! It is your connection to safety, work, business, family and better government. Your connections have been improving, but now they are in jeopardy and could get worse.

Funding for transportation in Missouri has been cut in half from a construction program that averaged \$1.2 billion to about \$600 million a year. Now we will only be able to take care of the roads and bridges we have. There won't be enough money for the major transportation projects we need to do to keep motorists safe, support jobs, provide additional transportation options and compete economically.

MoDOT is doing what we can. We are tightening our belt. We are getting smaller, cutting costs, reducing services and squeezing every penny out of every dollar we have to maintain your connections.





## Cumulative dollars saved for five-year direction priorities – 18a

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Ben Reeser, Financial Resource Administrator

### Purpose of the Measure:

In March 2010, the Missouri Highways and Transportation Commission (MHTC) approved a five-year direction to make the best use of available resources that would enable MoDOT to:

- Honor our commitments
- Keep major roads in good condition
- Improve minor roads
- Hold our own on bridges, and
- Provide outstanding customer service

The five-year direction identifies savings from the following areas: employee salaries and fringe benefits, fleet investments, capital improvements, information technology, administrative expenditures, materials inventories, contingency funds, mowing, litter pickup, signing and striping.

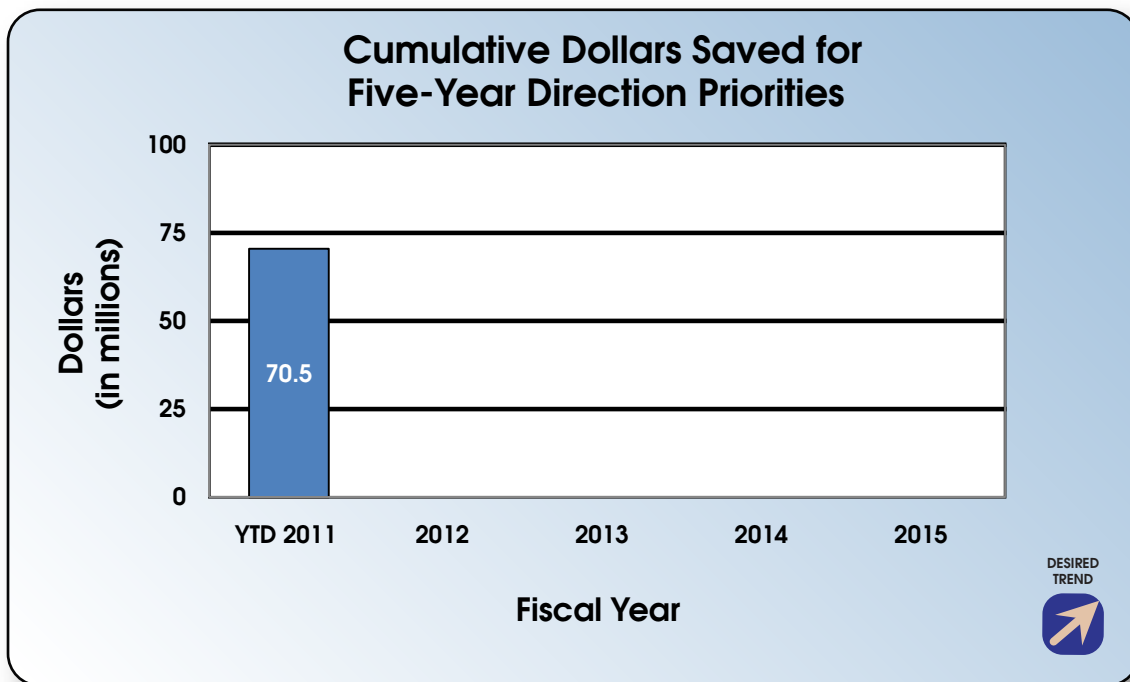
This measure tracks the department's progress in identifying cost savings to be redirected to critical roadway improvements while maximizing MoDOT's ability to provide state match for available federal funds.

### Measurement and Data Collection:

The data collection is performed by Resource Management staff based on analysis of division and district budgets and expenditures. This measure will be updated quarterly.

### Improvement Status:

Through March 31, 2011, \$70.5 million has been saved for five-year direction priorities. The savings have been committed to roadway improvements throughout the state.



## Salaried employment levels-18b

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Becky Baltz, District Engineer

### Purpose of the Measure:

This measure tracks the change in the number of salaried employees compared to current and targeted salaried headcount levels necessary to achieve the cost savings identified as part of MoDOT's workforce reduction plan announced on March 10, 2010. MoDOT plans to continue reducing its salaried staffing level through attrition, with dedicated efforts towards workforce planning and performance management.

### Measurement and Data Collection:

Salaried employees include full-time (including those on leave without pay or not working due to workers' compensation injury), permanent part-time, and Co-op employees. Targeted headcount levels are set by the department. The data related to this measure is collected and reported each quarter of the fiscal year.

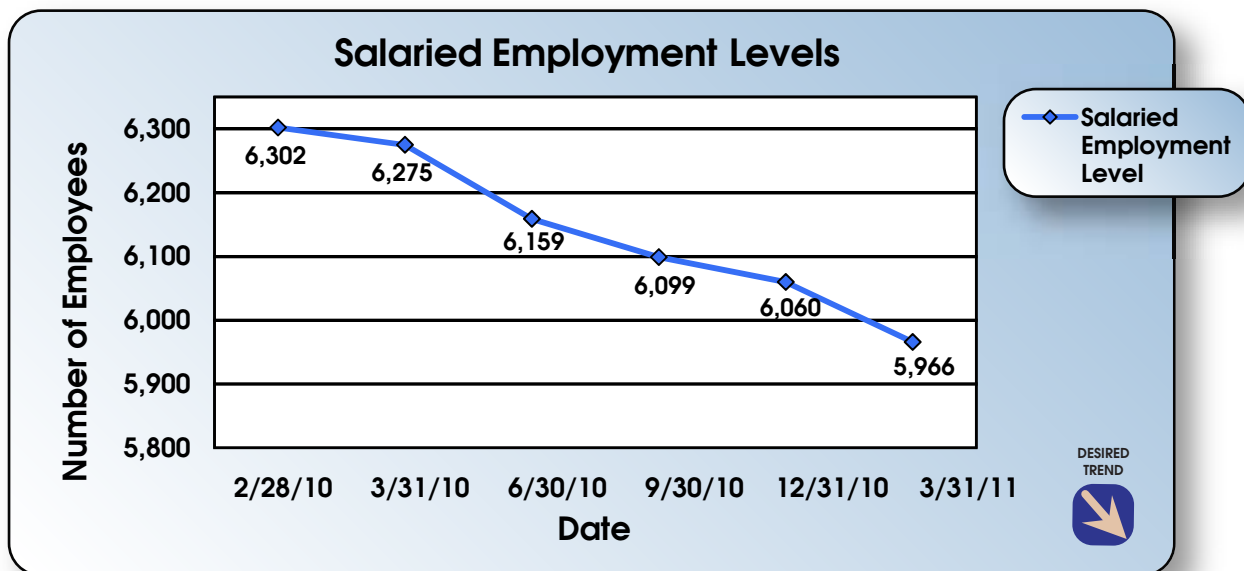
### Improvement Status:

Since February 28, 2010, there have been 451 total salaried separations (excluding 23 separating credit union employees whose positions were funded independently by credit unions) and 138 salaried new

hires, yielding a total reduction of 313 salaried employees at a backfill rate of 30.6 percent.

Of the 138 salaried new hires since February 28, 2010, 128 (92.8 percent) were individuals hired into field maintenance and traffic positions. In addition, 97.8 percent of all new hires since February 28, 2010, have occurred in the districts. All three salaried new hires at the Central Office since February 28, 2010 (2.2 percent of total new hires during this period), were the result of the department honoring employment offers made prior to the five-year direction announcement.

In the last quarter, the department hired a total of eight new employees, resulting in a reduction of the department's overall salaried backfill rate from 37.2 to 30.6 percent since February 28, 2010 (138 new hires to 451 separations).



## Specific targeted expenditures-18c

**Result Driver:** Don Hillis, Director of System Management  
**Measurement Driver:** Debbie Rickard, Controller

**Purpose of the Measure:**

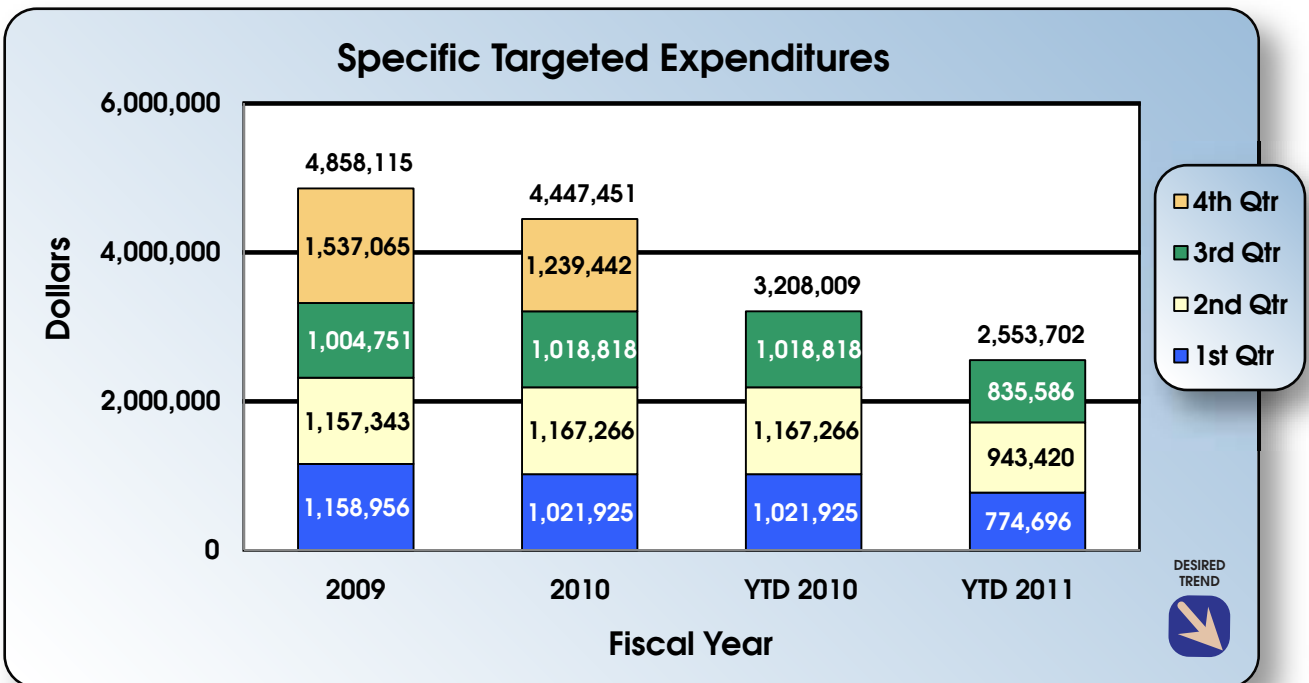
The purpose of the measure is to demonstrate a responsible use of taxpayers' money, with a reduction in specific expenditures. Included in the specific expenditures are: cell phones & pager costs; department provided food; employee recognition; promotional costs; relation costs; and travel – both in-state and out-state.

**Improvement Status:**

MoDOT's focus on reducing these expenditures shows a favorable trend. A team was formed including a district engineer representative and director representatives from the Project Delivery, System Management, and Facilitation teams, to identify best practices and provide guidance to the Senior Management Team.

**Measurement and Data Collection:**

The data collection is based on cash expenditures coded to object codes categorized in the specific targeted expenditures.



## Fleet inventory reduction: Heavy Duty Trucks, Tractors and Stripers- 18d

**Result Driver:** Don Hillis, Director of Systems Management

**Measurement Driver:** Don Wichern, District Engineer

### Purpose of the Measure:

This measure tracks the progress toward the reduction of heavy duty trucks, tractors, and stripers. More than half of the total fleet asset value is within these categories. In order to achieve the goals of the 5-Year Direction, funds must be redirected and applied to the department's established priorities.

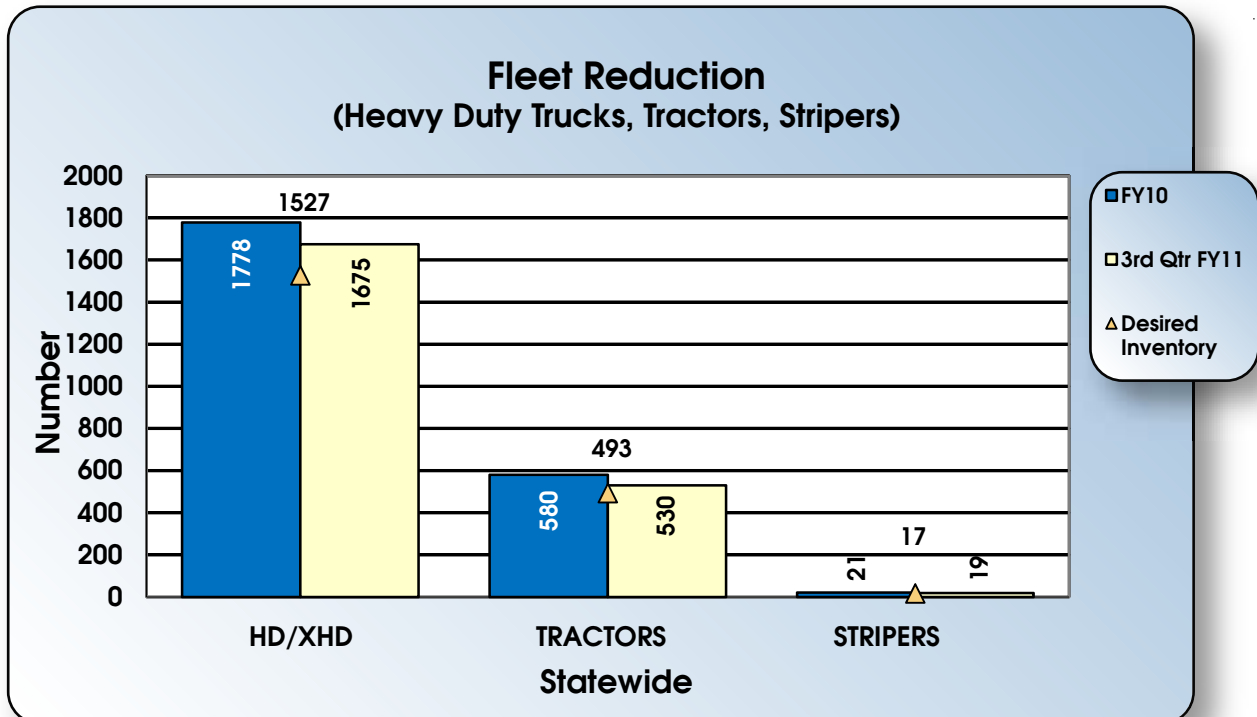
### Measurement and Data Collection:

All active fleet units in the single and tandem truck, tractor (owned and leased) and stripier classifications are included in this report.

Reports are generated from the FASTER fleet management system. This measure is updated quarterly.

### Improvement Status:

Each area is showing a reduction. Districts are working with each other to identify equipment that can be shared regionally. A meeting was held in February 2011 to review the heavy duty trucks and tractor inventories to ensure existing statewide resources are fully utilized before additional assets are acquired.



## More than 365 days of consumable inventory on hand-18e

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Dan Niec, District Engineer

**Purpose of the Measure:**

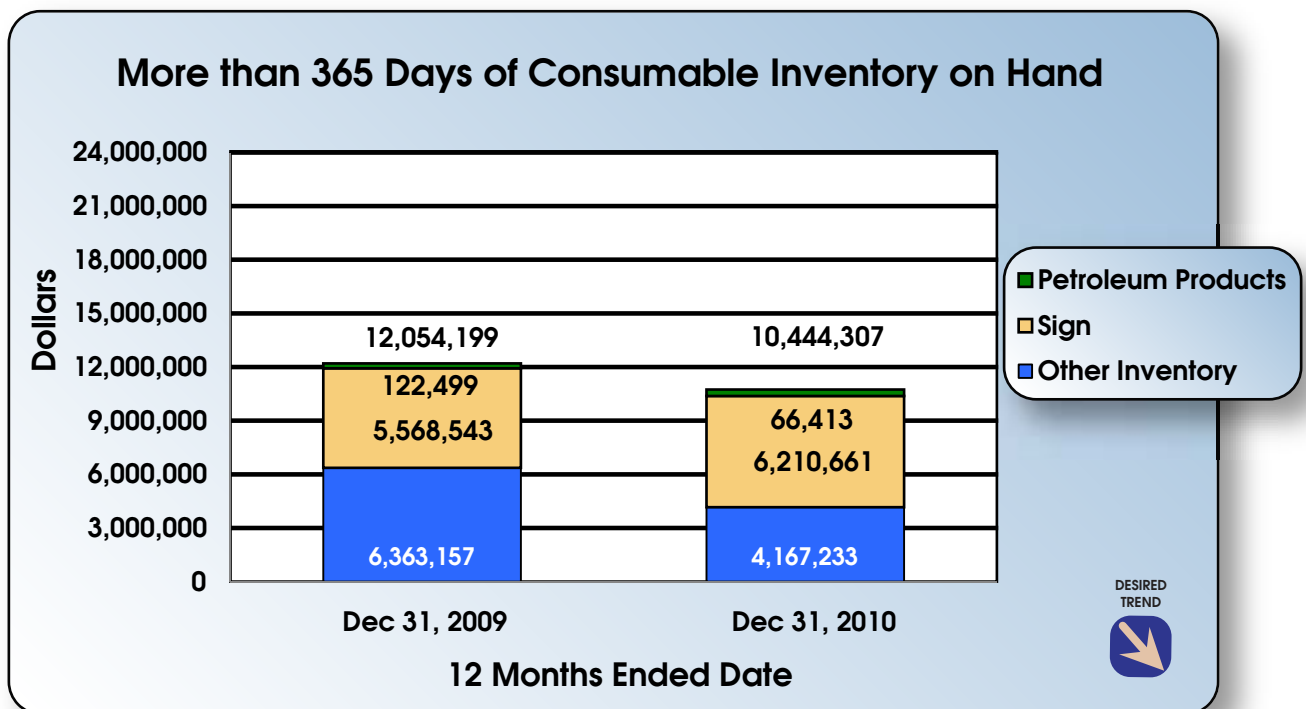
The purpose of the measure is to demonstrate a responsible use of taxpayers' money by effectively managing consumable inventory.

**Measurement and Data Collection:**

The data collection is based on consumable inventory recorded in the SAM II financial system, grouped by similar items.

**Improvement Status:**

The Department is showing a favorable trend in managing consumable inventory. District expense and equipment (e&e) budgets were reduced in fiscal year 2010 providing fewer dollars for excess inventory purchases. Effective management of inventory ensures dollars are available for the Department to carry-out its plans.



## Days of consumable inventory on hand-18f

**Result Driver:** Don Hillis, Director of System Management

**Measurement Driver:** Dan Niec, District Engineer

**Purpose of the Measure:**

The purpose of the measure is to demonstrate a responsible use of taxpayers' money by effectively managing consumable inventory.

**Measurement and Data Collection:**

The data collection is based on consumable inventory recorded in the SAM II financial system, grouped by similar items.

**Improvement Status:**

District expense and equipment (e&e) budgets were reduced in fiscal year 2010 providing fewer dollars for excess inventory purchases. Effective management of inventories ensures dollars are available for the Department to carry-out its plans.

