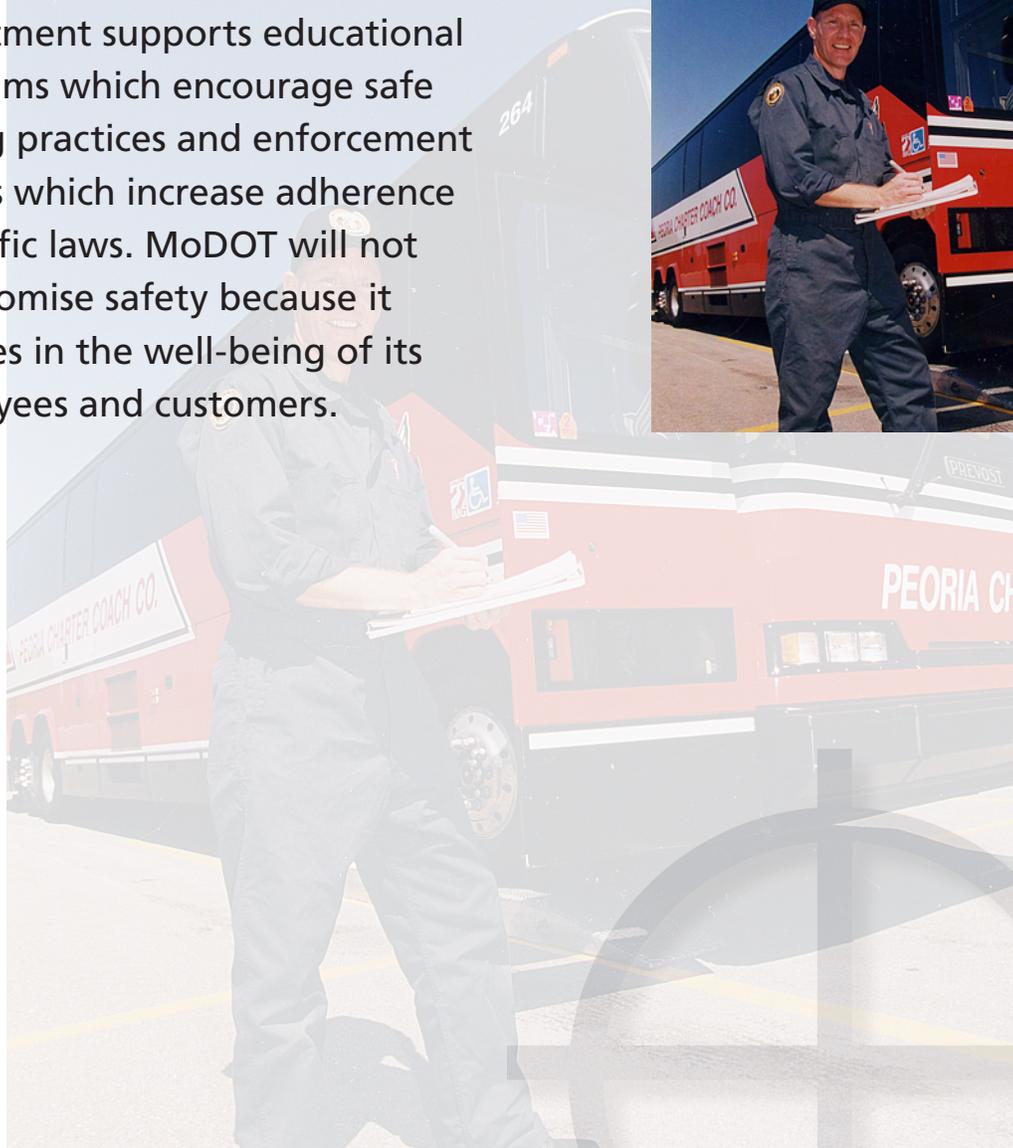

Safe Transportation System

*Tangible Result Driver – Don Hillis,
Director of System Management*

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



Safe Transportation System

Number of fatalities and disabling injuries

Result Driver: Don Hillis, Director of System Management
Measurement Driver: Leanna Depue, Highway Safety Director

Purpose of the Measure:

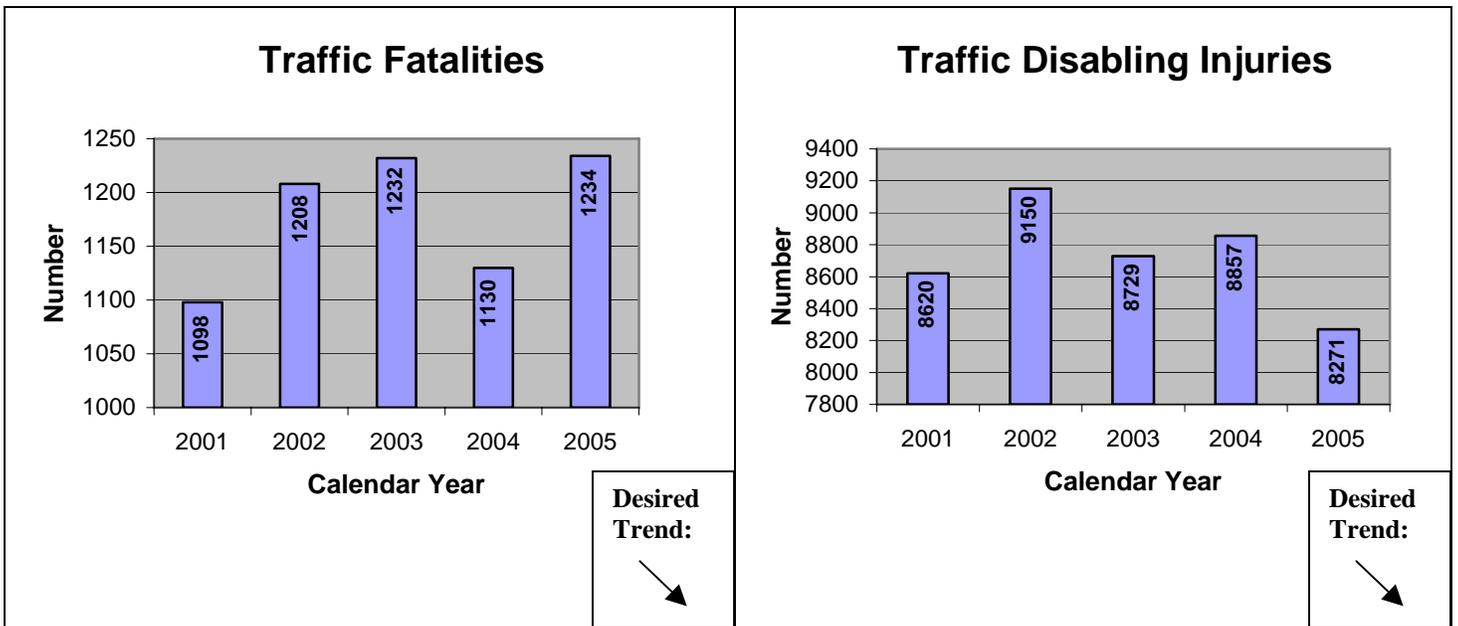
This measure tracks annual trends in fatalities and disabling injuries resulting from Missouri motor vehicle crashes. It will help drive the Missouri Highway Safety Plan, which supports the *Blueprint for Safer Roadways*, toward efforts that reduce fatalities and injuries on all Missouri roads.

Measurement and Data Collection:

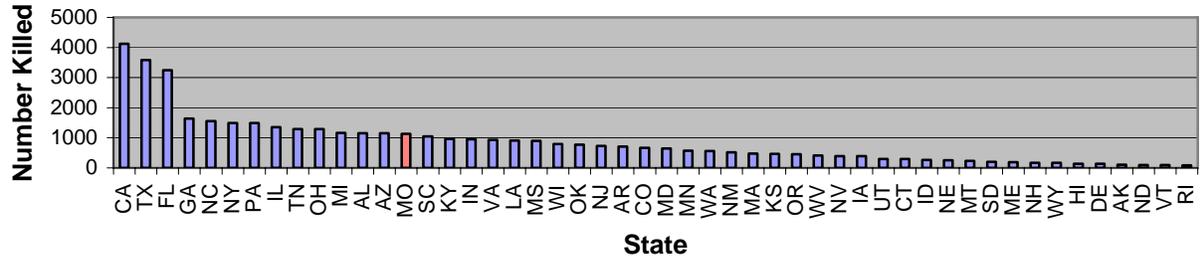
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT's traffic management system. Reports on crash data are available to law enforcement and traffic safety advocates for crash analysis through both databases. Fatality data is not final until each fatal crash has been validated and the investigation is closed. Some crashes occurring in 2005 are under investigation, therefore, final annual data is not available.

Improvement Status:

Fatalities increased by 10 percent in 2005 after experiencing a significant decrease from 2003 to 2004. Disabling injuries continue to show a decreasing trend. In 2005, Missouri ranked 14th in total fatalities as compared to other states. Fatalities and disabling injuries are higher due to non-use of safety belts, speeding, and impaired driving. Exposure rate has increased each year due to the number of registered vehicles and licensed drivers along with the number of miles traveled. Rural crashes on State Numbered Roadways continue to be a concern. Focusing public information, education and sustained enforcement efforts on specific behavior demonstrated by specific age groups is our best practice. Safety advocates, organizations and agencies across Missouri have joined together to implement *Missouri's Blueprint for Safer Roadways*. The Blueprint outlines strategies to reduce fatal and disabling injury crashes on our roadways with a goal of 1,000 or fewer fatalities by 2008.



Total Fatalities 2004



Safe Transportation System

Number of impaired driver-related fatalities and disabling injuries

Result Driver: Don Hillis, Director of System Management

Measurement Driver: Leanna Depue, Highway Safety Director

Purpose of the Measure:

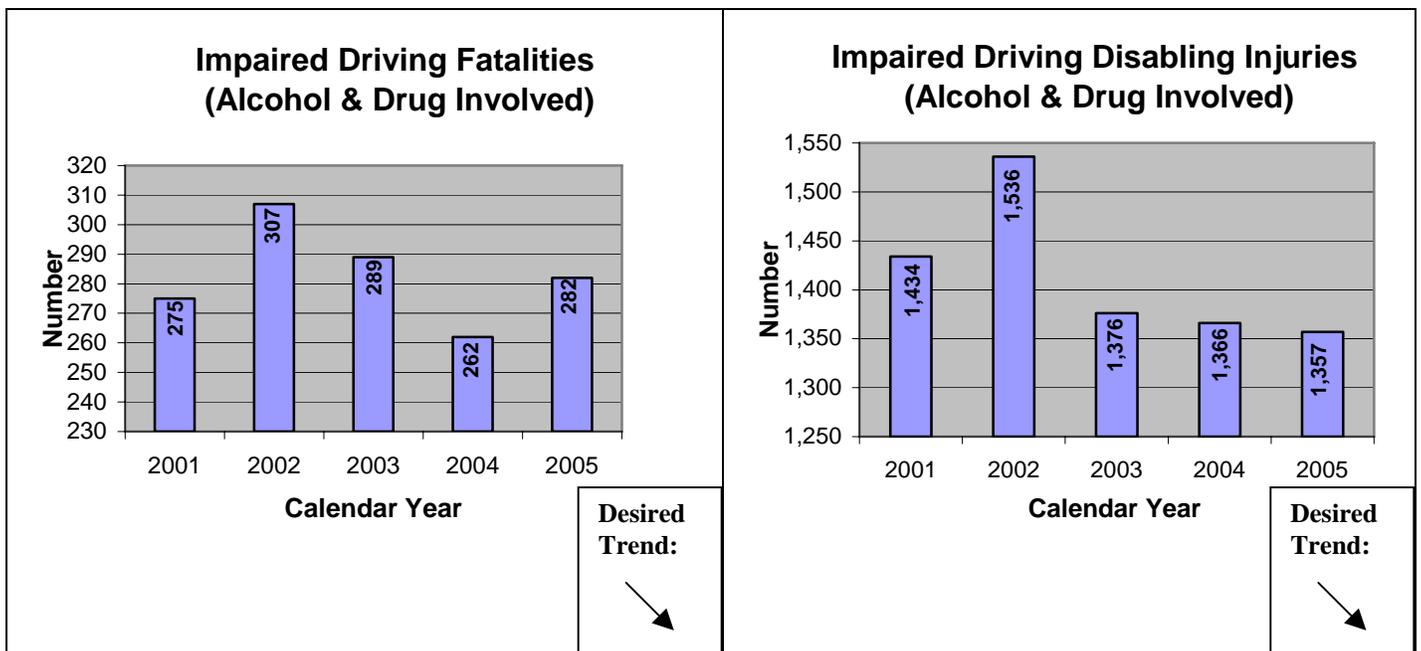
This measure tracks annual trends in fatalities and injuries resulting from motor vehicle crashes involving drivers who are impaired by alcohol and/or drugs. It will help drive the Missouri Highway Safety Plan, which supports the *Blueprint for Safer Roadways*, toward efforts that reduce fatalities and injuries on Missouri’s roadways.

Measurement and Data Collection:

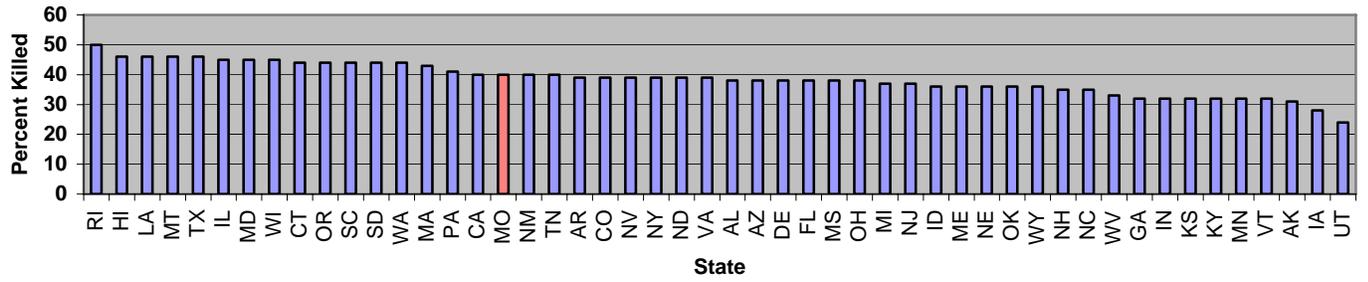
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT’s traffic management system. Reports on crash data are available to law enforcement and traffic safety advocates for crash analysis through both databases. Fatality data is not final until each fatal crash has been validated and the investigation is closed. Some crashes occurring in 2005 are under investigation, therefore, final annual data is not available.

Improvement Status:

Alcohol- and drug-related fatalities and disabling injuries have decreased since 2002. In 2005, Missouri still ranked 17th overall in percent of persons killed in alcohol-related crashes as compared to other states. In addition to Missouri participating in the National “You Drink and Drive, You Lose.” campaign, Missouri joined 14 other states with high alcohol-related crashes as a Strategic Evaluation State. Missouri agreed to increase law enforcement activity through June 2006 in areas that represent 65 percent of the states’ high alcohol-related crashes. Public information and education has been directed at high-risk drivers between the ages of 21 to 35. Law enforcement efforts have been concentrated on high crash corridors. These efforts have assisted in the reduction of impaired driving crashes overall. Although, impaired driving fatalities have increased slightly from 2004 to 2005, Missouri is experiencing a downward trend. Safety advocates, organizations and agencies across Missouri have joined together to implement *Missouri’s Blueprint for Safer Roadways*. The Blueprint outlines strategies to reduce fatal and disabling injury crashes on our roadways with a goal of 1,000 or fewer fatalities by 2008.



**Missouri's National Ranking by Percent Killed in Alcohol-Related Crashes
2004**



Safe Transportation System

Rate of annual fatalities and disabling injuries

Result Driver: Don Hillis, Director of System Management

Measurement Driver: Leanna Depue, Highway Safety Director

Purpose of the Measure:

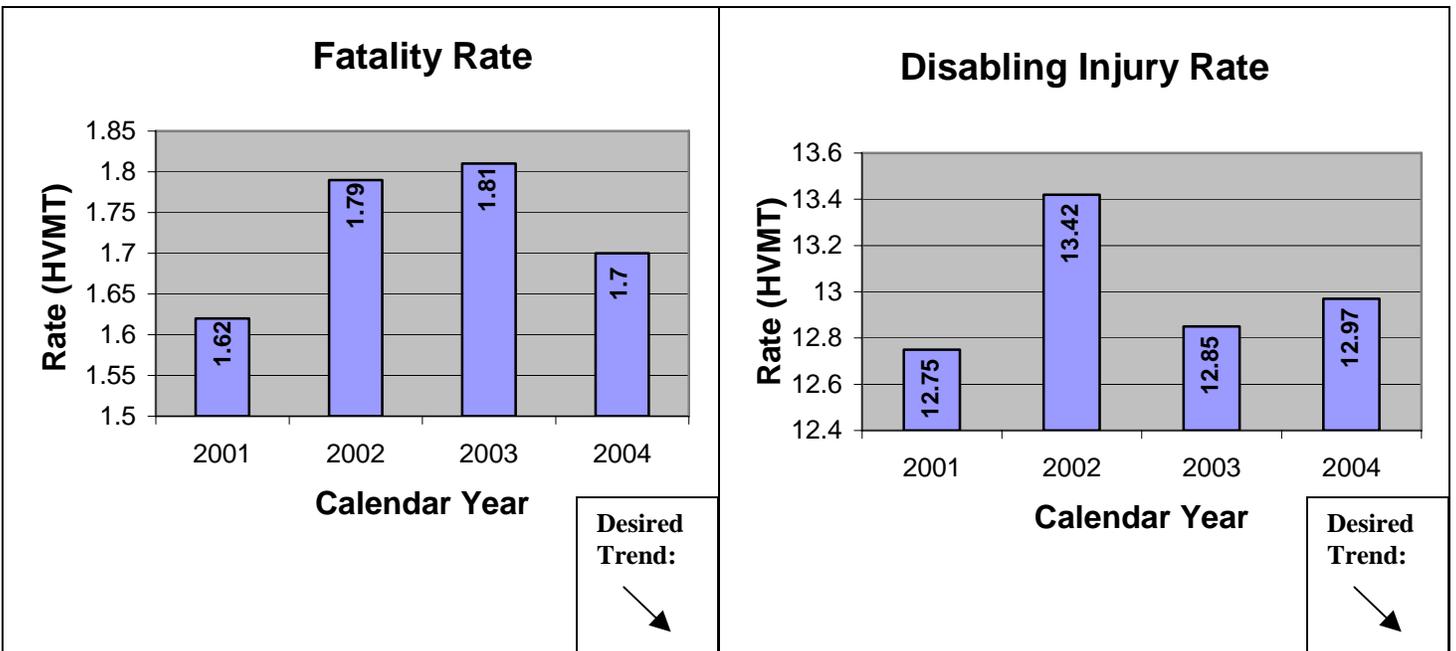
This measure tracks annual trends in fatalities and disabling injury rates per one hundred million vehicle miles traveled (HVMT) in Missouri. It will help drive the Missouri Highway Safety Plan, which supports the *Blueprint for Safer Roadways*, toward efforts that reduce fatalities and injuries on Missouri’s roadways.

Measurement and Data Collection:

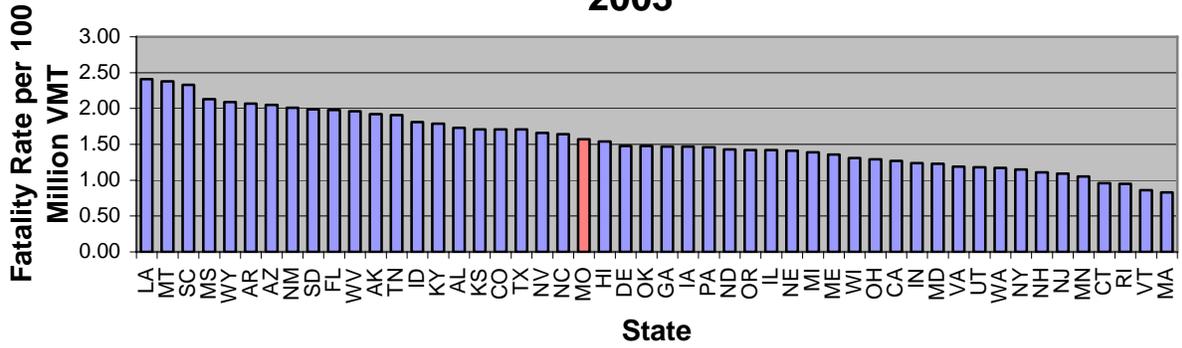
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT’s traffic management system. Reports on crash data is available to law enforcement and traffic safety advocates for crash analysis through both databases. Rates cannot be calculated until the VMT is calculated in July of the following year.

Improvement Status:

The fatality rate decreased to 1.7 in 2004 after reaching 1.81 in 2003. The decrease is significant considering there were more vehicles registered and more miles traveled than in any previous year. Focused law enforcement efforts, engineering safety enhancements and increased public awareness all contribute to the decrease. Safety advocates, organizations and agencies across Missouri have joined together to implement *Missouri’s Blueprint for Safer Roadways*. The Blueprint outlines strategies to reduce fatal and disabling injury crashes on our roadways with a goal of 1,000 or fewer fatalities by 2008.



Missouri's National Ranking in State Fatality Rates 2003



Safe Transportation System

Percent of safety belt/passenger vehicle restraint use

Result Driver: Don Hillis, Director of System Management
Measurement Driver: Leanna Depue, Highway Safety Director

Purpose of the Measure:

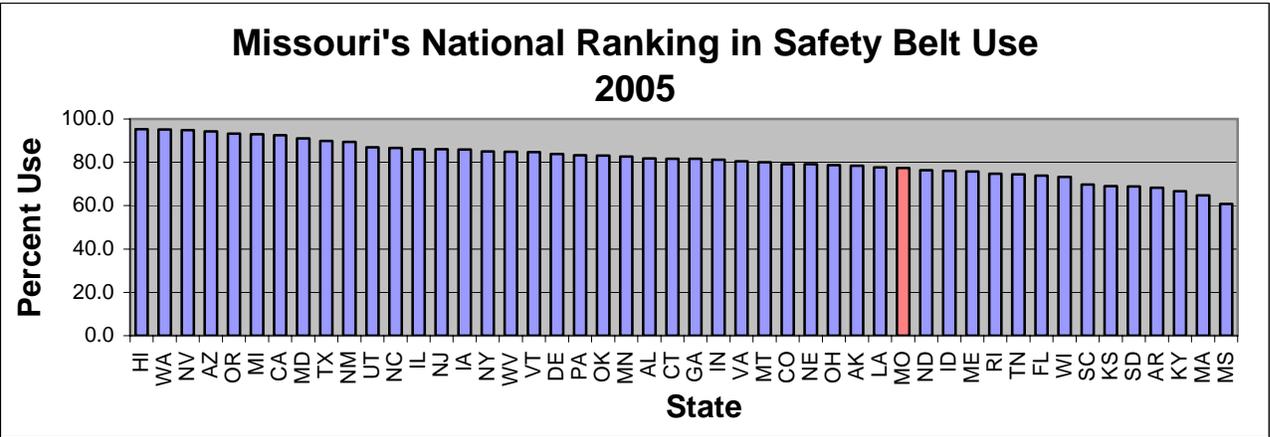
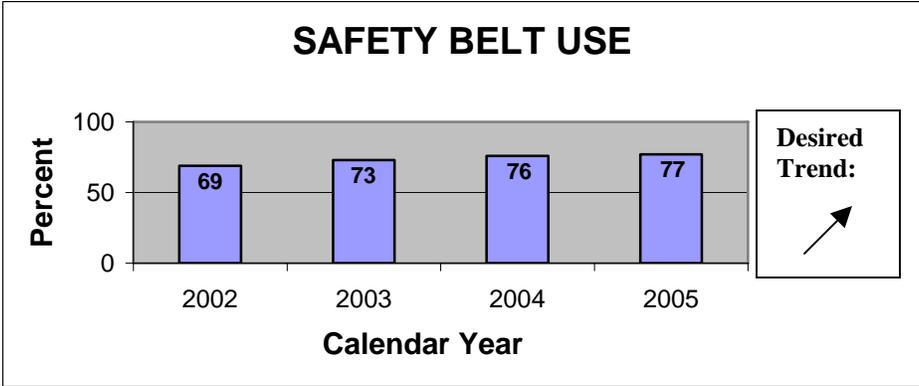
This measure tracks annual trends in safety belt usage by persons in passenger vehicles. This measure will help drive the Missouri Highway Safety Plan, which supports the *Blueprint for Safer Roadways*, toward efforts that reduce the number of fatalities and injuries on all Missouri roads.

Measurement and Data Collection:

An annual statewide survey is conducted each June at 480 pre-selected locations in 20 counties. The data collected at these sites is calculated into a rate by use of 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.

Improvement Status:

Safety belt use has increased eight percent in the past four years. In 2005, Missouri ranked 34th in safety belt use rate as compared to other states. Missouri’s increase is largely due to increased public awareness and law enforcement participation in the National “Click it or Ticket” campaign. A pilot program conducted in 2005 focused on teen safety belt usage also proved to be successful in increasing use among teenagers. MoDOT continues to promote the need for a primary seat belt law in Missouri.



Safe Transportation System

Number of bicycle and pedestrian fatalities and disabling injuries

Result Driver: Don Hillis, Director of System Management

Measurement Driver: Leanna Depue, Highway Safety Director

Purpose of the Measure:

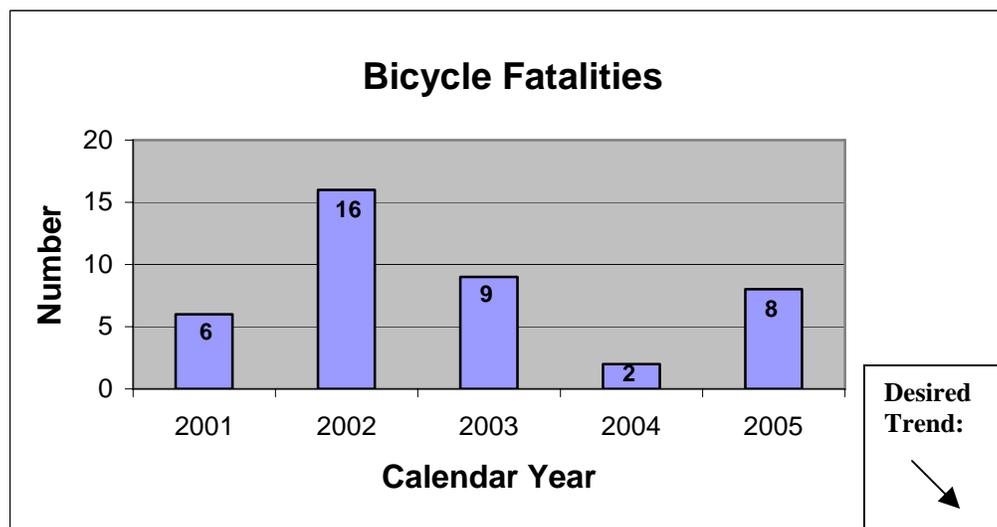
This measure tracks annual trends in fatalities and disabling injuries resulting from motor vehicle crashes with bicycles and pedestrians in Missouri. It will help drive the Missouri Highway Safety Plan, which supports the *Blueprint for Safer Roadways*, toward efforts that reduce fatalities and injuries on all Missouri roads.

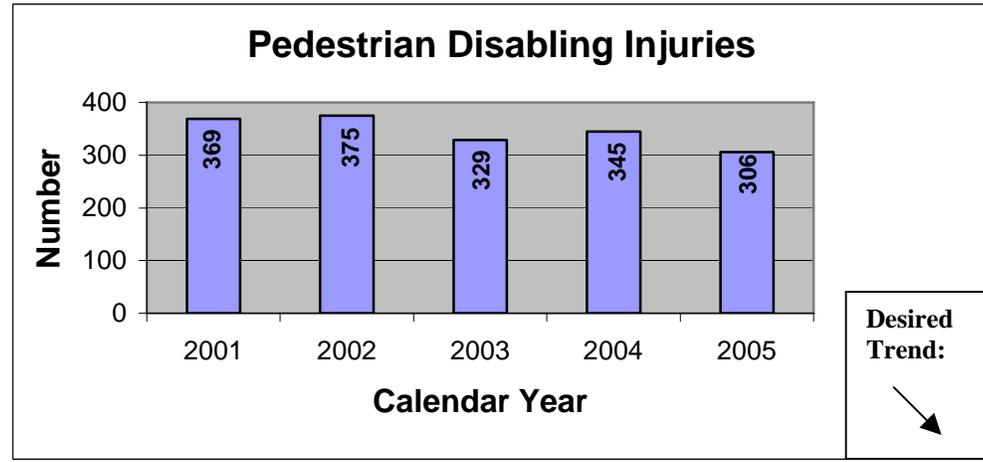
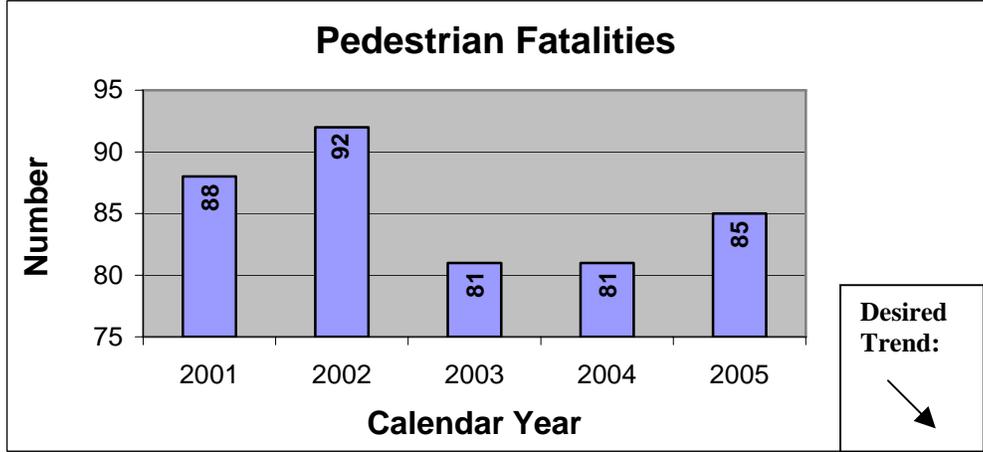
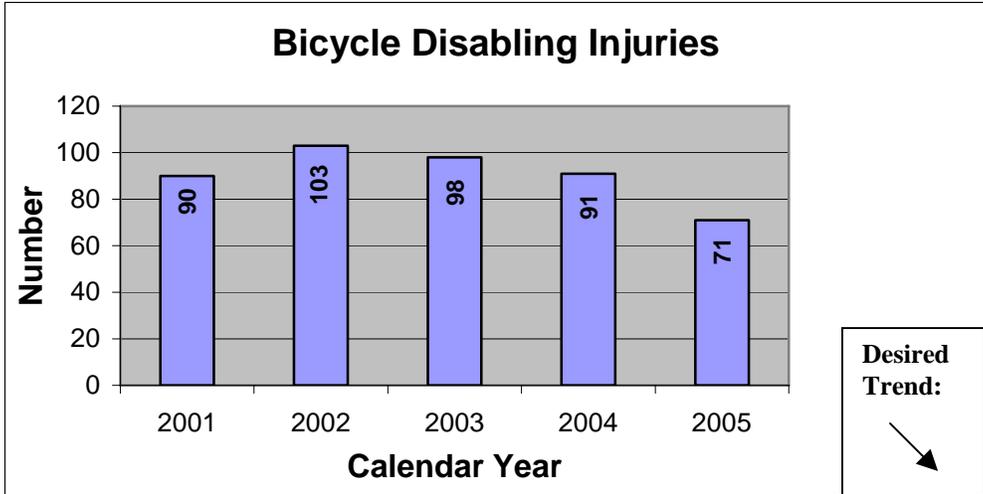
Measurement and Data Collection:

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. Reports on crash data are available to law enforcement and traffic safety advocates for crash analysis through both databases. Fatality data is not final until each fatal crash has been validated and the investigation is closed. Some crashes occurring in 2005 are under investigation, therefore, final annual data is not available.

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. There has been a downward trend in bicycle fatalities and disabling injuries over the past four years, due to more dedicated bicycle lanes and riding areas. Pedestrian fatalities and disabling injuries also are on a downward trend, due to improved cross walks and signaling. Safety advocates, organizations and agencies across Missouri have joined together to implement *Missouri's Blueprint for Safer Roadways*. The Blueprint outlines strategies to reduce fatal and disabling injury crashes on our roadways with a goal of 1,000 or fewer fatalities by 2008. Funds have been dedicated to the St. Louis and Kansas City regions in support of pedestrian safety under the Blueprint.





Safe Transportation System

Number of motorcycle fatalities and disabling injuries

Result Driver: Don Hillis, Director of System Management
Measurement Driver: Leanna Depue, Highway Safety Director

Purpose of the Measure:

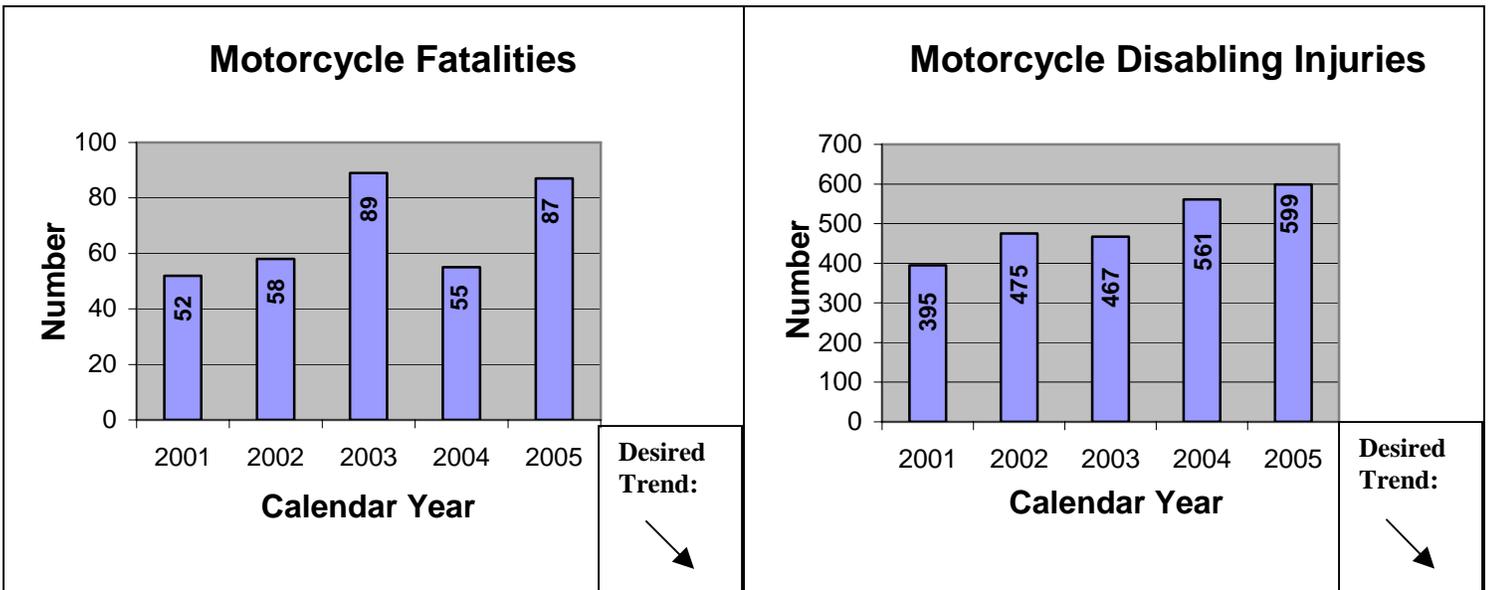
This measure tracks annual trends in fatalities and disabling injuries resulting from motorcycle crashes in Missouri. It will help drive the Missouri Highway Safety Plan, which supports the *Blueprint for Safer Roadways*, toward efforts that reduce fatalities and disabling injuries on Missouri’s roadways.

Measurement and Data Collection:

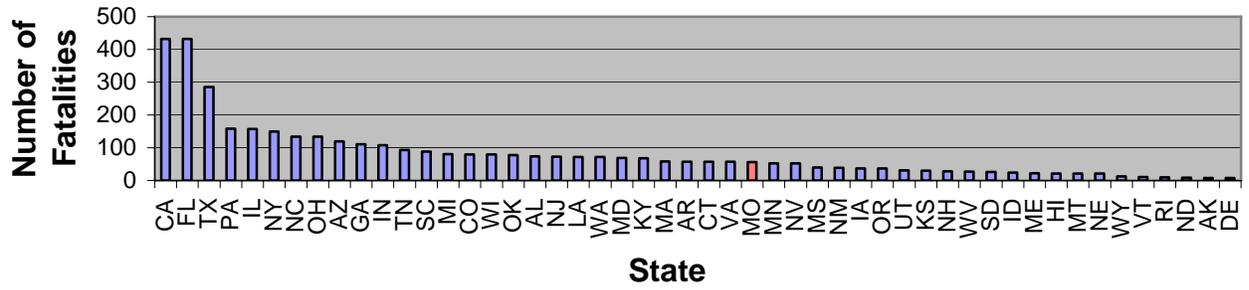
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT’s traffic management system. Reports on crash data are available to law enforcement and traffic safety advocates for crash analysis through both databases. Fatality data is not final until each fatal crash has been validated and the investigation is closed. Some crashes occurring in 2005 are under investigation, therefore, final annual data is not available.

Improvement Status:

Fatalities and disabling injuries have shown an upward trend over the past four years. In 2005, Missouri ranked 28th in total fatalities when compared to other states. Missouri has ranked as high as 12th in 2003. A significant increase in the number of licensed motorcycles and riders has increased the exposure rate. Rider education classes are offered throughout Missouri so that no one must drive more than one hour to a site for training. More than 4,000 riders at 28 sites are trained each year. Twenty-four new instructors are also trained each year. Safety advocates, organizations and agencies across Missouri have joined together to implement *Missouri’s Blueprint for Safer Roadways*. The Blueprint outlines strategies to reduce fatal and disabling injury crashes on our roadways with a goal of 1,000 or fewer fatalities by 2008. A motorcycle sub-committee has been formed and charged with developing a strategic plan further analyzing and addressing the problem in Missouri.



Missouri's National Ranking in Motorcycle Fatalities 2004



Safe Transportation System

Number of commercial motor vehicle crashes resulting in fatalities

Result Driver: Don Hillis, Director of Systems Management

Measurement Driver: Charles Gohring, Motor Carrier Services Program Manager

Purpose of the Measure:

This measure tracks the number of commercial motor vehicles involved in fatality accidents each year. MoDOT uses the information to target educational and enforcement efforts.

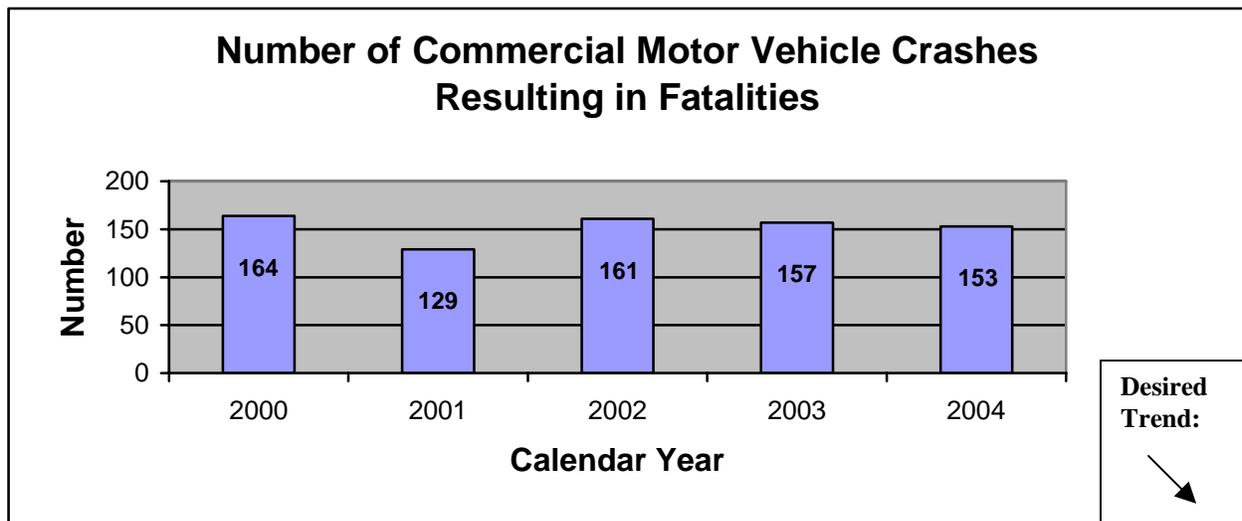
Measurement and Data Collection:

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 as a result of the crash.

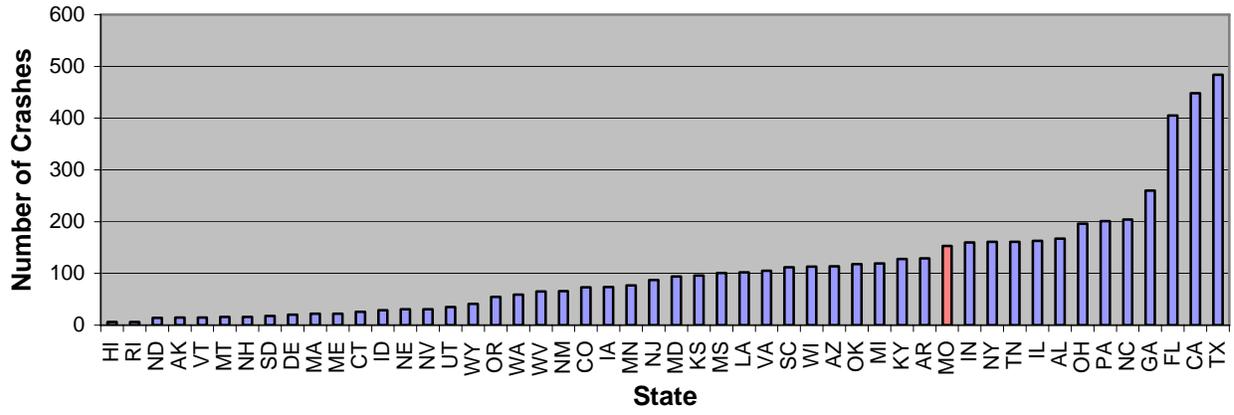
Improvement Status:

Between 2000 and 2004, the number of Missouri commercial motor vehicle fatal crashes have slowly dropped from 164 in 2000 to 153 in 2004, due to the coordinated efforts of MoDOT, the Missouri State Highway Patrol, the Federal Motor Carrier Safety Administration Missouri Division, and the Kansas City and St. Louis Police Departments. 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 also conducts training sessions, 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 to remove unsafe drivers and vehicles from the road.

In 2004, Missouri ranked 40th nationally in the number of fatality crashes.



**Missouri's National Ranking in Number of Fatal Commercial Vehicle Crashes
2004**



Safe Transportation System

Number of commercial motor vehicle crashes resulting in injuries

Result Driver: Don Hillis, Director of Systems Management

Measurement Driver: Charles Gohring, Motor Carrier Services Program Manager

Purpose of the Measure:

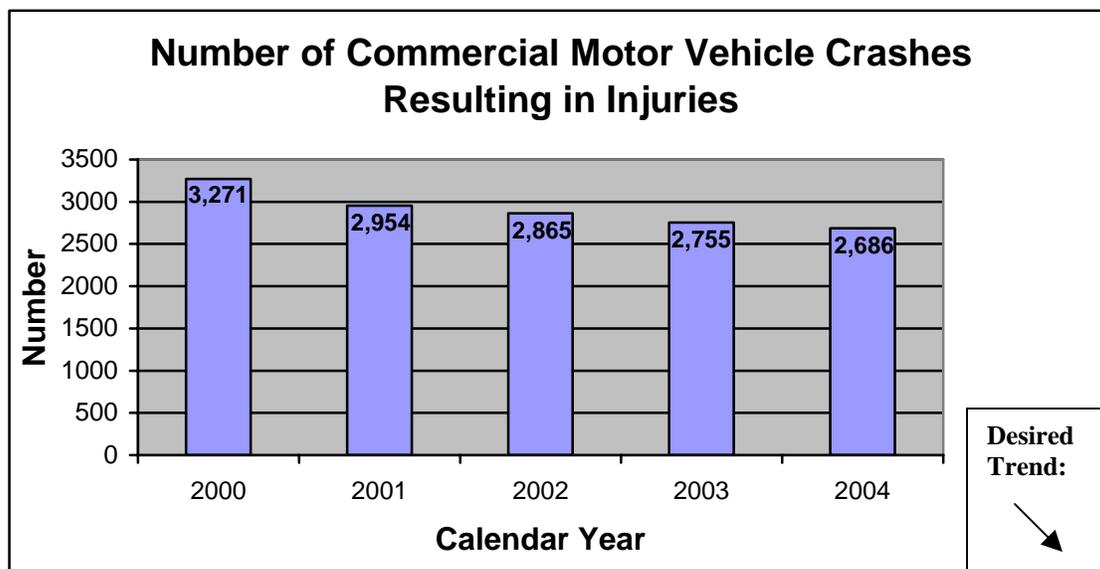
This measure tracks number of commercial motor vehicles involved in injury accidents each year. MoDOT uses the information to target educational and enforcement efforts.

Measurement and Data Collection:

The Missouri State Highway Patrol collects and records crash statistics. The data for this measure reflects the number of commercial motor vehicles involved in crashes where one or more people are injured as a result of the crash.

Improvement Status:

Between 2000 and 2004, the number of commercial motor vehicle crashes resulting in injuries decreased. The improvement is due to the coordinated safety efforts of MoDOT, the Missouri State Highway Patrol, the Federal Motor Carrier Safety Administration Missouri Division, and the Kansas City and St. Louis Police Departments. MoDOT efforts include the installation of larger highway signs, highly reflective pavement markings, cable guardrails, roundabout intersections, incident management alert signs, rumble stripes, and intelligent transportation systems at scales. MoDOT also conducts training sessions, 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 to remove unsafe drivers and vehicles from the road.



Safe Transportation System

Number of fatalities and injuries in work zones

Result Driver: Don Hillis, Director of System Management

Measurement Driver: Scott Stotlemeyer, Technical Support Engineer

Purpose of the Measure:

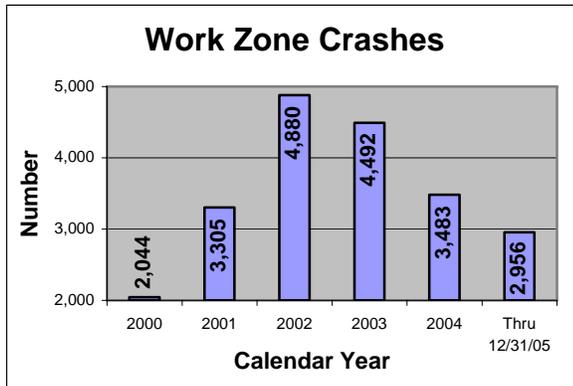
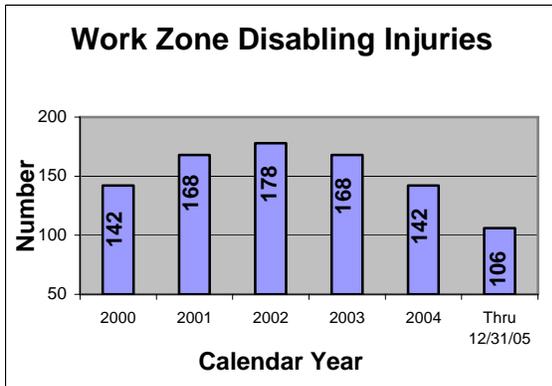
An important factor in evaluating the safety of Missouri’s transportation system is determining the safety of work zones located on the state’s public roads. This measure tracks the number of injuries and fatalities occurring as a result of a traffic crash in a work zone on any of these facilities.

Measurement and Data Collection:

Law enforcement agencies in Missouri are required to report vehicular crashes via submittal of a standardized vehicle accident report form to the Missouri State Highway Patrol. MSHP personnel enter these reports into a statewide crash database. MoDOT staff queries this data to identify injuries and fatalities associated with work zones.

Improvement Status:

Since 2002, the year Missouri traffic safety representatives reformatted the accident report form and MSHP conducted extensive training to emphasize work zones, the number of work zone-related crashes, disabling injuries, injuries, and fatalities on the state’s roadways has generally decreased over consecutive years. This reduction, despite increasing traffic demand on the transportation system and a growing state highway construction program, results from the department’s proactive approach to raising work zone awareness and minimizing impacts on the traveling public over the same timeframe.



Desired Trend:
↓

Safe Transportation System

Number of highway-rail crossing fatalities and collisions

Results Driver: Don Hillis, Director of System Management

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 railroad crossings in Missouri. It supports *Missouri's Blueprint for Safer Roads* in efforts to reduce the number of fatalities, collisions and injuries at Missouri's public highway-rail crossings.

Measurement and Data Collection:

Crash data is collected at the Multimodal Operations Division, Railroad Section and is entered into a railroad safety information system (RSIS). The record system is used to update MoDOT's traffic management system. This figure does not include fatalities from those trespassing on railroad property at areas other than at railroad crossings, which are tabulated separately. Missouri is then ranked in a chart with all other states using data the Federal Railroad Administration (FRA) supplies regarding collisions and fatalities in each state. Missouri ranks ahead for its population in fatalities and somewhat behind in collisions.

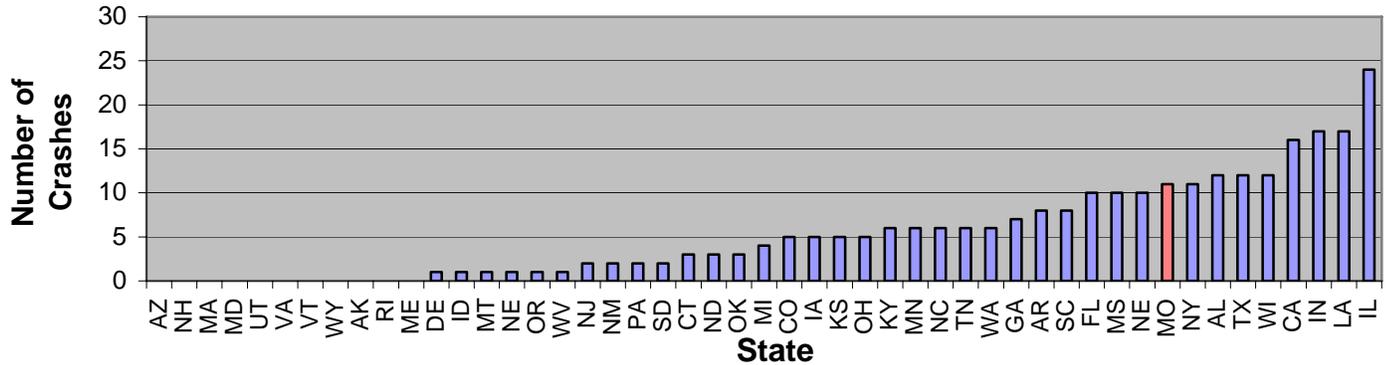
Improvement Status:

The Railroad Section continues to coordinate its railroad crossing projects in the areas of greatest need, using a safety exposure index, in addition to focusing on crossings with a history of accidents or limited sight distance. In addition, the use of railroad corridors allows limited funds to be used over a wider area and allows for financial participation by the railroads, thereby increasing the number of overall projects completed in specific areas of the state.

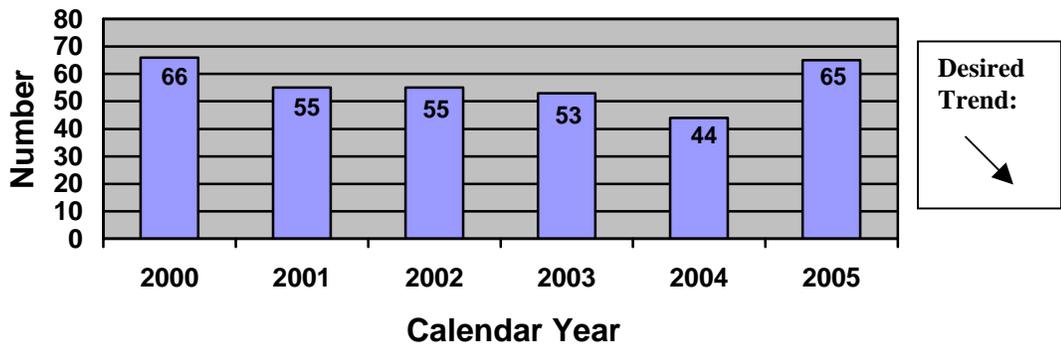
Other improvements include an increased emphasis on and MoDOT employee participation in public outreach presentations on rail safety in conjunction with Operation Lifesaver, Inc., and further exploration of public-private partnerships. For example, through these partnerships, county or city governments could contribute to the costs of installing gates and lights at crossings or installing grade separations at former crossing where state and federal funds would not be sufficient to complete the project. There is also a renewed emphasis on closing unnecessary crossings. The increase in fatalities and collisions in calendar year 2005 resulted in the planning of the first mini-summit (February 2006) on rail safety hosted by MoDOT to identify new strategies and ideas for addressing rail-crossing safety.



Missouri's National Ranking in Highway-Rail Crossing Fatalities (January through October 2005)



Number of Highway-Rail Crossing Collisions in Missouri



Missouri's National Ranking of Highway-Rail Crossing Collisions (January through October 2005)

