



MISSOURI'S 2019

HIGHWAY SAFETY PLAN
(HSP)

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INTRODUCTION & BACKGROUND

In 2003, Missouri participated with the American Association of State Highway Transportation Officials (AASHTO) in a national effort to reduce the preventable tragedies associated with traffic crashes. Utilizing a partnership approach, the state's Strategic Highway Safety Plan (SHSP), *Missouri's Blueprint for Safer Roadways*, was developed that outlined opportunities to reduce fatal and serious injuries on Missouri's roads. The goal established in the *Blueprint* was set at 1,000 or fewer fatalities by 2008. That goal was reached one year early, with a year-end fatality total for 2007 of 992, as well as in 2008 with 960 fatalities.

The second SHSP, *Missouri's Blueprint to ARRIVE ALIVE*, was unveiled at the semi-annual Blueprint Conference in October 2008. The new goal was set to reduce traffic fatalities to 850 or fewer by 2012. That goal was reached two years early with 821 fatalities in 2010. In 2011, the fatality total was 786. Not only did we achieve the 2012 goal, but we also attained the lowest number of people lost in roadway related fatalities in Missouri since 1947.

Missouri's third Strategic Highway Safety Plan, *Missouri Blueprint to SAVE MORE LIVES*, was rolled out in October of 2012 at the Blueprint Conference. The target for the document was 700 or fewer fatalities by 2016. In, 2015, Missouri as well as the rest of the nation experienced an increase in fatalities. It is believed that an improving economy played a large role in these increasing numbers as the percentage of miles driven also increased. Missouri ended 2016 with 945 fatalities.

During the years of 2017 through 2020, Missouri's Blueprint – A partnership Toward Zero Deaths will be the State's Strategic Highway Safety Plan. Missouri's ultimate Blueprint goal is that NO lives are lost due to a traffic crash. However, the interim goal of 700 or fewer fatalities must be met in order to reach ZERO deaths.

The document challenges all of us to not only focus on this target, but also concentrate on a higher vision and move Toward Zero Roadway Deaths.

Year	Fatalities	Serious Injuries
2012	826	5,506
2013	757	4,938
2014	766	4,657
2015	870	4573
2016	945	4,743
2017	930	4,842
2012-2016 Total	4,164	24,417

Core Outcome Measures

C-1) Traffic Fatalities (FARS)

Decrease traffic fatalities by 9.0 percent annually, resulting in a five-year average fatality target of 872.3 fatalities by December 31, 2019.

C-2) Serious Traffic Injuries (STARS)

Decrease serious traffic injuries by 5.0 percent annually, resulting in a five-year average fatality target of 4,433.8 serious injuries by December 31, 2019.

C-3) Fatalities/VMT (FARS/FHWA)

Decrease traffic fatalities by 9.0 percent annually, resulting in a reduced five-year average fatality rate of 1.160 by December 31, 2019.

C-3a) Fatalities/VMT Rural (FARS/FHWA)

Decrease rural traffic fatalities by 0.17 percent annually, resulting in a reduced five-year average rural fatality rate of 1.536 by December 31, 2019.

C-3b) Fatalities/VMT Urban (FARS/FHWA)

Based on an annual average increase of 6.29 percent in urban traffic fatalities from 2012 to 2017, Missouri is projecting a five-year average urban fatality rate of 1.045 by December 31, 2019.

C-4) Unrestrained Passenger Vehicle Occupant Fatalities (FARS)

Based on an annual average increase of 0.10 percent in unrestrained passenger vehicle occupant fatalities from 2012 to 2017, Missouri is projecting 385.5 five-year average unrestrained passenger vehicle occupant fatalities by December 31, 2019.

C-5) Alcohol-Impaired Driving Fatalities (FARS)

Decrease alcohol-impaired driving involved fatalities by 3.45 percent annually, resulting in a five-year average alcohol-impaired driving involved fatality goal of 230.3 by December 31, 2019.

C-6) Speeding Related Fatalities (FARS)

Based on an annual average increase of 5.75 percent in aggressive driving related fatalities from 2012 to 2017, Missouri is projecting 331.7 five-year average speed related fatalities by December 31, 2019.

C-7) Motorcyclist Fatalities (FARS)

Based on an annual average increase of 2.12 percent in motorcyclist fatalities from 2012 to 2017, Missouri is projecting 115.3 five-year average motorcyclist fatalities by December 31, 2019.

C-8) Unhelmeted Motorcyclist Fatalities (FARS)

Based on an annual average increase of 11.11 percent in unhelmeted motorcyclist fatalities from 2012 to 2017, Missouri is projecting 13.8 five-year average unhelmeted motorcyclist fatalities by December 31, 2019.

C-9) Drivers Age 20 or Younger Involved in Fatal Crashes (FARS)

Decrease drivers age 20 or younger involved in fatal crashes by 0.78 percent annually, resulting in a five-year average goal of 123.8 by December 31, 2019.

C-10) Pedestrian Fatalities (FARS)

Based on an annual average increase of 3.33 percent in pedestrian fatalities from 2012 to 2017, Missouri is projecting 100.8 five-year average pedestrian fatalities by December 31, 2019.

C-11) Bicyclist Fatalities (FARS)

Based on an annual average increase of 10.00 percent in bicyclist fatalities from 2012 to 2017, Missouri is projecting 9.4 five-year average bicyclist fatalities by December 31, 2019.

CORE BEHAVIOR MEASURE

B-1) Observed Belt Usage (Observed Seat Belt Use Survey)

To increase statewide observed seat belt use of front seat outboard occupants in passenger vehicles 1 percentage point annually from the 2017 calendar base year rate of 84% to 86% by December 31, 2019.

Blueprint Strategies

The Focused FIVE

Historically, the Blueprint has identified a few strategies having the greatest potential to save lives and reduce serious injuries. These strategies were called the Essential Eight in 2004, Targeted Ten in 2008 the, Necessary Nine in 2012 and now the Focused Five. Aggressive implementation of the Focused Five represents the greatest opportunity to save lives.

Change the Traffic Safety Culture

- Increase safety belt/safety restraint use - Everyone, Every Trip, Every Time, Day and Night
- Educate roadway users on their roles and responsibilities
- Expand outreach efforts to new traffic safety partners
- Educate on the dangers of aggressive, distracted and substance-impaired driving
- Create safe and efficient clearance of roadway impacts

Highway Safety Legislation

- Pass a primary safety belt law
- Pass a cell phone ban law for all drivers
- Maintain and enhance existing traffic safety laws
- Increase transportation funding

Increase Enforcement Efforts

- Focus on high-crash corridors and work zones
- Expand efforts to stop aggressive driving
- Increase sobriety checkpoints/saturation patrols
- Expand multi-jurisdictional task forces

Implement Engineering Solutions

- Install shoulders with rumble stripes
- Improve curve safety
- Increase use of innovative intersection designs
- Enhance roadway visibility

Enhance Pedestrian Safety

- Install/improve signage, pavement markings and signals
- Educate pedestrians on safe habits (pedestrian to roadway interactions, distractions and substance impairment)

Six Emphasis Areas

This Blueprint is comprised of six emphasis areas and 27 focus areas. Strategies have been identified that provide the opportunity to reduce fatalities and serious injuries resulting from roadway crashes.

Emphasis & focus areas include:

1. Serious Crash Types

- Lane Departure
- Run-Off-Road - Not in a Curve
- Run-Off-Road - In a Curve
- Collision with Trees and/or Utility Poles
- Head-On
- Intersections
- Non-Signalized
- Signalized

2. High-Risk Driving & Unrestrained Aggressive Driving

- Unrestrained Drivers and Occupants
- Substance-Impaired Driving
- Unlicensed/Improperly Licensed Driving
- Young Driver (15 - 20 years of age)
- Distracted/Inattentive Driving
- Drowsy Driving

3. Special Vehicles

- Commercial Motor Vehicles (CMV's)
- All-Terrain Vehicles (ATV's)/Utility Vehicles School Buses

4. Vulnerable Roadway Users

- Older Driver (Age 65 or Older)
- Motorcyclists
- Pedestrians
- Bicyclists

5. Special Roadway Environments

- Nighttime Driving
- Work Zone
- Highway / Rail Crossing
- Traffic Incident Management Area

6. Data & Data System Improvements

- Data Collection
- Data Accessibility
- System Linkage

Targets by Region

The Missouri Coalition for Roadway Safety has seen varied success from each of the seven regions in reducing fatalities on our roadways. While some regions have seen greater success than others in regards to percentage reduction, each has done a tremendous job in making our roads safer for the traveling public.

In order for the Coalition to reach the target of 700 or fewer by the end of 2020, each region will need to continue efforts in all disciplines. If goals are met by the end of 2018, the state will have seen a roadway fatality reduction of 35 percent since 2005. More importantly, each region will have to reduce the roadway fatalities in order for the state to reach the target.

The fatality number established for each region was determined from the previous eight years ending with 2016 (eight-year average). This method was preferred in order to minimize the fluctuations realized by each region.

Fatalities by Region **Reduction per Region (2017-2020 estimated)**

Fatalities

Year	NW	NE	KC	CD	SL	SW	SE	Total
2005	85	93	203	188	238	257	193	1,257
2006	56	63	150	190	205	260	172	1,096
2007	52	71	162	175	206	173	153	992
2008	59	62	171	155	195	179	139	960
2009	57	49	155	133	170	165	149	878
2010	32	66	145	101	175	167	135	821
2011	48	50	122	120	162	154	130	786
2012	46	58	161	123	171	143	124	826
2013	32	51	148	97	157	149	123	757
2014	36	45	128	118	173	144	122	766
2015	45	60	149	109	196	181	130	870
2016	46	70	167	145	225	159	133	945
2017	54	48	198	108	228	159	135	930
2018	49	44	180	98	207	145	123	783
2019	45	40	164	89	189	132	112	712
2020	44	39	161	88	186	129	110	700

Blueprint Implementation

The *Blueprint* is a collective effort of the Missouri Coalition for Roadway Safety (MCRS) and safety professionals throughout the state. The MCRS leads the charge to implement the *Blueprint* and encourage safety partners to focus their activities and programs in support of the “Focused Five” and subsequent emphasis areas, focus areas, and strategies. The state is divided into seven regional coalitions that develop annual safety plans. The coalition’s meet on a regular basis to discuss their concerns, review how their countermeasures are working, and consider ways to improve their efforts. Approximately \$2 million of state road funds is dedicated to this effort.

The *Blueprint* is an overarching strategic highway safety plan for the State of Missouri while the state’s Highway Safety Plan serves as one of the implementation components in support of the *Blueprint* efforts.

- The *Blueprint* serves as a **strategic plan** for the State’s Highway Safety Plan
- The “**Focused Five**”, **6 Emphasis Areas** and **27 Focus Areas** provide **direction** for the HSP
- The *Blueprint* determines our **interim fatality reduction target**

Partnerships

No highway safety office can successfully function without communication, cooperation and coordination with our safety partners. This partnership approach allows us to expand our resources, generate diverse ideas, and incorporate new concepts and projects into our Highway Safety Plan. A sampling of the myriad of our safety partners includes:

American Automobile Association	MO Department of Revenue
American Association of Retired Persons	MO Division of Behavioral Health
Blueprint Regional Coalitions	MO Division of Alcohol and Tobacco
Cape Girardeau Safe Communities Program	MO Head Injury Advisory Council
City/County Engineers	MO Injury and Violence Prevention Advisory Committee
County Health Departments	MO Trucking Association
East-West Gateway Coordinating Council	MO Office of Prosecution Services
Emergency Nurses Association	MO Police Chiefs Association
Federal Highway Administration	MO Safety Center
Federal Motor Carrier Safety Administration	MO Sheriffs Association
Institutions of Higher Education	MO State Highway Patrol
Law Enforcement Traffic Safety Advisory Council	MO Youth/Adult Alliance
Law Enforcement Training Academies	Mothers Against Drunk Driving
Local Technical Assistance Program	Motorcycle Safety Task Force
Manufacturers Alliance Child Passenger Safety	National Highway Traffic Safety - Region 7
Mercy Hospital	Office of State Courts Administrator
Metropolitan Planning Organizations	Operation Impact
Mid-American Regional Council	Operation Lifesaver
MO Association of Insurance Agents	Partners in Prevention
MO Automobile Dealers Association	Regional Planning Commissions
MO Coalition for Roadway Safety	Safe Kids Coalitions
MO Department of Health & Senior Services	State Farm Insurance
MO Department of Labor and Industrial Relations	Think First Missouri
MO Department of Mental Health	Traffic Safety Alliance of the Ozarks
MO Department of Public Safety	Trailnet

In addition to these highway safety partners, each *Blueprint* regional coalition has an extensive base of local partners.

Overall Problem Identification

Problem Identification

Problem identification involves the study of the relationship between collisions and the characteristics of people using the roadways, types and numbers of vehicles on the roads, miles traveled, and roadway engineering.

Most motor vehicle crashes have multiple causes. Experts and studies have identified three categories of factors that contribute to crashes – human, roadway environment, and vehicle factors. Human factors involve the driver's actions (speeding and violating traffic laws, etc.) or condition (effects of alcohol or drugs, inattention, decision errors, age, etc.). Roadway environment factors include the design of the roadway, roadside hazards, and roadway conditions. Vehicle factors include any failures in the vehicle or its design. Human factors are generally seen as contributing most often to crashes at 93 percent, followed by roadway environment at 33 percent, and finally the vehicle at 13 percent (US General Accounting Office, GAO-03-436, *Research Continues on a Variety of Factors that Contribute to Motor Vehicle Crashes*, March 2003).

In March 2016, an attitudinal survey was conducted on 2,502 adult Missouri drivers to capture their current attitudes and awareness of specific items concerning highway safety such as seat belt usage, speeding issues, cell phone use while driving and alcohol impaired driving.

Since this plan is directed toward modifying behavior so that safety will be the accepted norm, it stands to reason that we must identify and categorize those individuals who are making unsafe decisions and/or who are causing traffic crashes. It will be obvious to the reader that this document references *targeted* audiences or populations. The term “target audience” infers a population group that is overrepresented in a particular type of crash (e.g., drinking drivers) or is underrepresented in using safety devices (e.g., un-helmeted motorcyclists or unrestrained occupants). This terminology is in no way meant to profile certain populations by age, gender, race, or nationality. Rather, this is an accepted term to identify specific population groups that must be reached with our messages and our enforcement efforts if we are to reduce traffic crashes, prevent injuries and save lives.

Research has shown that the number of crashes at a particular site can vary widely from year to year, even if there are no changes in traffic or in the layout of the road. Since a single year's data is subject to considerable statistical variation; three years is generally regarded as a practical minimum period for which a fairly reliable annual average rate can be calculated. The FY 2019 Highway Safety Plan references crash statistics for 2012 through 2016.

In the 5-year period 2012-2016, a total of 4,164 people died on Missouri's roadways while another 24,417 suffered serious injuries. A fatality is recorded when a victim dies within 30 days of the crash date from injuries sustained in the crash. A serious injury is recorded when any injury other than a fatality which results in one or more of the following:

- Severe laceration resulting in exposure of underlying tissues/muscle/organs or resulting in significant loss of blood
- Broken or distorted extremity (arm or leg)
- Crush injuries
- Suspected skull, chest or abdominal injury other than bruises or minor lacerations
- Significant burns (second and third degree burns over 10% or more of the body)
- Unconsciousness when taken from the crash scene
- Paralysis

While we recognize that many crashes result simply in property damage, only fatal and serious injury crashes have been targeted because they are more costly in human suffering, social and economic terms.

Although overall fatalities and the death rate reflect a positive reduction since 2005, it should not be a cause for complacency. A substantial number of people continue to be killed and seriously injured on Missouri roadways and most of these traffic crashes are preventable. In 2012-2016, of the 720,913 traffic crashes, 3,819 resulted in fatalities and 19,606 resulted in serious injuries. These fatal and serious injury crashes resulted in 4,164 deaths and 24,417 serious injuries.

A substantial number of persons killed or injured in Missouri's 2012-2016 traffic crashes were drivers and passengers of motorized vehicles. Of the fatalities, 78.2% were drivers and 21.8% were passengers; of those seriously injured, 73% were drivers and 27% were passengers.

Between 2005 and 2014, Missouri's annual traffic fatalities decreased from 1,257 to 766; however, there were increases to 870 in 2015 and 945 in 2016. Preliminary state data shows a slight decrease to 930 fatalities in 2017. In the time period of 2005-2015, serious injuries fell from 8,624 to 4,573, and increased in 2016 to 4,743. Preliminary state data also shows an increase to 4,842 serious injuries in 2017.

Throughout the remainder of the document, the fatality reduction goals/projections are calculated in the following manner. An annual average increase/decrease was calculated using five years of actual crash data (2012-2017) and then applied to the 2018 and 2019 fatality projections. The baseline five-year rolling average was calculated using five years of actual crash data (2012-2017). The 2019 projection was based on the 2015-2019 five-year rolling average.

The 2019 overall fatality goal was calculated on an assumed 9% annual reduction in Missouri's fatalities resulting in a five-year average target of 872.3 fatalities by December 31, 2019. A 9% annual reduction in fatalities would allow Missouri to reach the 2020 Blueprint goal of 700 or fewer fatalities.

The 2019 serious injury goal was calculated on an assumed 5% annual reduction in Missouri's serious injuries resulting in a five-year average target of 4,433.8 serious injuries by December 31, 2019.

A trend line based on the 2012-2016 five-year average was also applied to show the data trends for each category.

Fatality reduction goals were calculated for the following crash types:

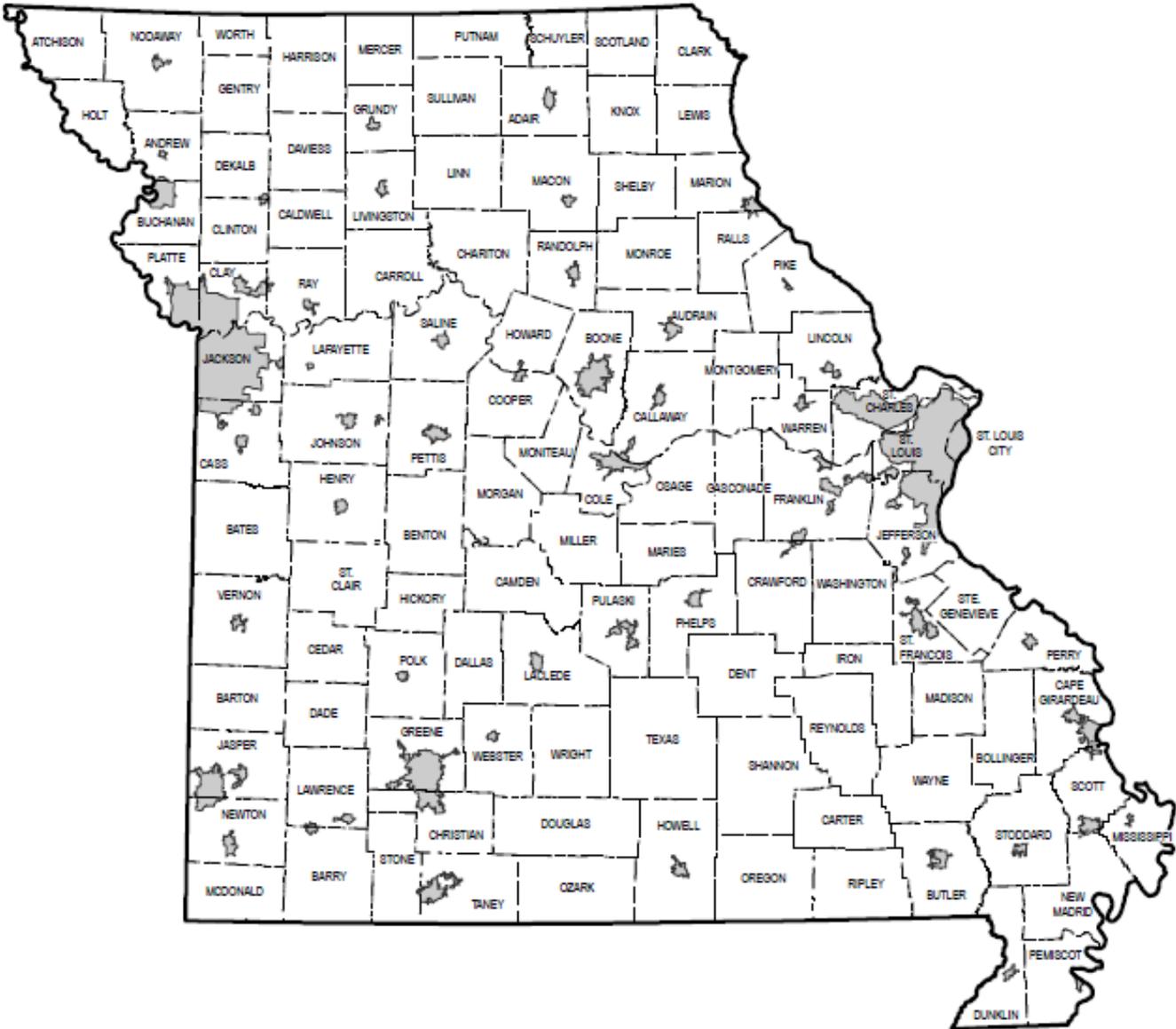
- Aggressive driving-related fatalities
- Speed-related fatalities
- Fatalities involving drivers with a .08 BAC or greater
- Unrestrained passenger vehicle occupant fatalities
- Drivers 15-20 Involved in Fatal Crashes
- Fatalities involving drivers age 65 and older
- Motorcyclist fatalities
- Un-helmeted motorcyclist fatalities
- Fatalities involving motorcycle operators who are not licensed or improperly licensed
- Fatalities resulting from crashes involving school buses or school bus signals
- Pedestrian fatalities
- Bicyclist fatalities

Urban versus Rural Crash Experience

Traffic crashes are not evenly distributed on Missouri roadways. As expected, crashes occur in large numbers in the densely populated urban areas (population of 5,000 or more) of the state. Since such a large portion of Missouri's overall population is in the rural areas (under 5,000 population or unincorporated area), the greater number of crashes occur in those areas. Of the 23,423 fatal and serious injury crashes in 2012-2016, 53% occurred in an urban community while 47% occurred in a rural area. The rural areas of the state take on even greater significance when examining only fatal traffic crashes. In 2012-2016 fatal traffic crashes, 43% occurred in an urban area of the state while 57% occurred in a rural area.

The following two maps depict the high fatality and serious injury locations and the urban (population of 5,000-49,999) and Urbanized (population of 50,000 or greater) for comparison to where crashes are occurring.

Missouri Urban/Urbanized Areas



Shaded areas represent Urban and Urbanized cities in the state.

Urbanized	Population 50,000 or Greater
Urban	Population 5,000 - 49,999

Data Collection and Sources

Data is the cornerstone of this plan, and is essential for diagnosing crash problems and monitoring efforts to solve traffic safety problems. We must identify the demographics of the roadway users involved in crashes, what behaviors or actions led to their crashes, and the conditions under which the crashes occurred. Data collection and analysis is dynamic throughout the year.

When data is effectively used to identify repeating patterns in the dynamic interaction of people, pavement, vehicles, traffic, and other conditions, there is increased potential for successful mitigation. From this comes a reduction in the number and severity of crashes, ultimately resulting in fewer fatalities and serious injuries.

Problem identification, performance goals and strategies are derived by utilization of Fatality Analysis Reporting System (FARS), the Missouri Statewide Traffic Accident Records System (STARS), Vehicle Miles Traveled (VMT) and observational occupant protection surveys, among others listed below.

Fatality Analysis Reporting System (FARS)

The State of Missouri utilizes the core performance measures outlined in ‘Traffic Safety Performance Measures for State and Federal Agencies’ (DOT HS 811 025) as developed by NHTSA and GHSA. The FARS database provides ten of the twelve performance measures. These performance measures are not only used to address problem areas, but to gauge recent success or need for improvement at the statewide level.

Statewide Traffic Accident Records System (STARS)

The source of statewide analytical data is the Missouri Statewide Traffic Accident Records System (STARS) managed by the Missouri State Highway Patrol. All Missouri law enforcement agencies are required by law (RSMO 43.250) to submit a Missouri Uniform Traffic Crash Report (MUCR) to STARS if a traffic crash involves a death, a personal injury, total property damage to an apparent extent of five hundred dollars or more to one person, or other written MUCR's as a result of an investigation. It should be noted that although reports that did not occur on public roadways are maintained in STARS, these crashes are not included in statistical analyses provided. Crashes involving less than five hundred dollars to one person may be included if they were reported to STARS.

Vehicle Miles Traveled (VMT)

MoDOT maintains vehicle miles traveled charts, graphs and counts for all state maintained roadways in the state. This information serves the HSO in developing problem identification, identifying resources and allocating funding.

Engineering Data

MoDOT connects the crash statistics from STARS to their Transportation Management System (TMS). Information relating to roadway features, such as speed limit, lane widths, presence of

guardrail, etc.; are stored in TMS. By joining these two data sources, MoDOT is able to perform a comprehensive safety review of the transportation system and strategically implement safety countermeasures.

Observational Occupant Protection Surveys

The State of Missouri, with the assistance of the Missouri Safety Center, conducts an annual Statewide Seat Belt Observational Survey. The survey sites for the 2018 survey have been re-selected per rule 1340.12(a) Re-selection of observation sites.

The 2019 HSO funding will also include a statewide Teen Observational Survey conducted in areas where teen drivers are present such as school parking lots. The teen survey is conducted at 150 locations throughout Missouri.

Court Data

Court data, gathered from the Office of State Courts Administrator includes DWI filings, diversions, dismissals and convictions. This information is available to the municipal and circuit courts and is used in support of the impaired driving problem identification regarding DWI convictions.

Department of Revenue

Information gathered from the Department of Revenue (DOR) includes data elements important to the HSO Young Driver Program and Older Driver Program such as driver's license by age and gender. This information helps the HSO to identify target age groups when evaluating program objectives.

Biennial Survey of State Automated Traffic Enforcement Systems

Beginning with fiscal year 2018, the HSO is conducting a survey of all automated traffic enforcement systems used on any public road in the State. The survey follows the guidelines set forth in 23 CFR Part 1300.13.

Safety Plan Integration

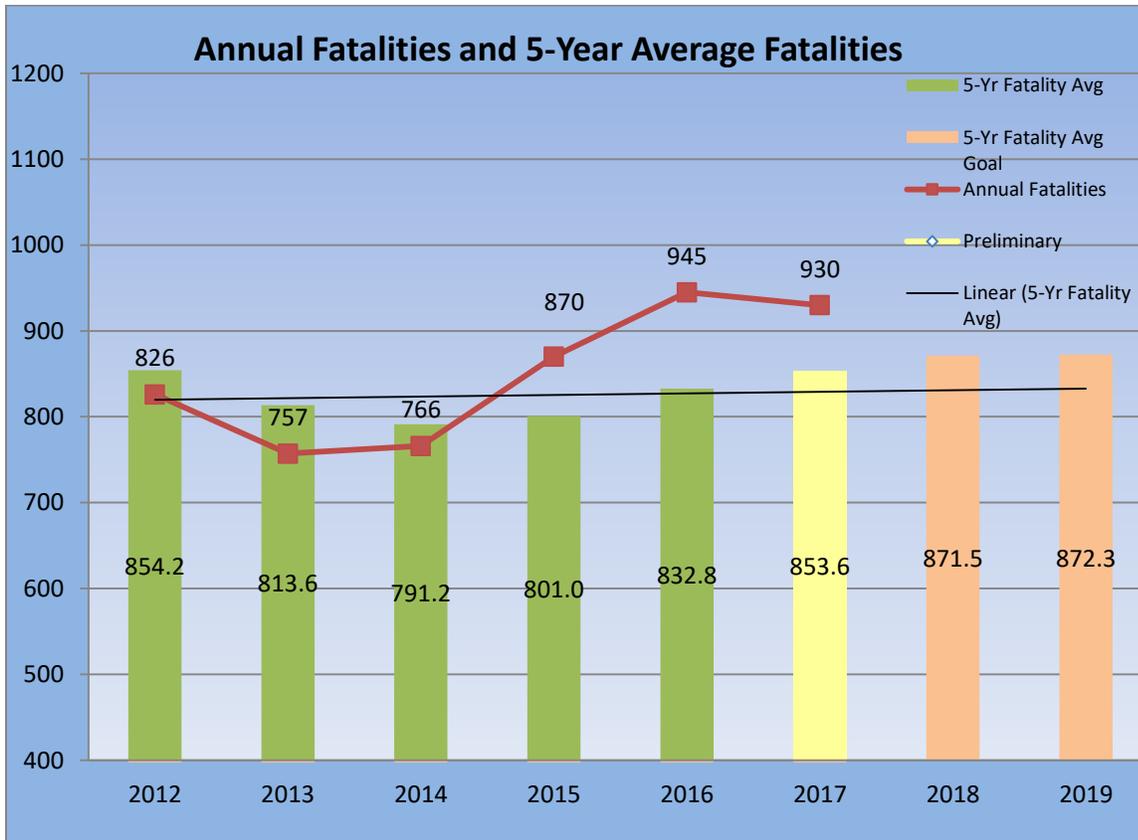
Missouri's target of 700 or fewer fatalities by 2020 has been integrated into all key planning documents that include: State Highway Safety Strategic Plan, *Missouri's Blueprint: Partnership Toward Zero Deaths*; the Commercial Vehicle Safety Plan (CVSP); and the Highway Safety Plan and Performance Plan (HSP). The HSP performance targets are identical to the Missouri's Department of Transportation targets for common performance measures (fatality, fatality rate and serious injuries) reported in the Highway Safety Improvement Plan (HSIP) annual report as coordinated through the state SHSP.

Every effort will be made to establish evidence based strategies that will guide Missouri to meet this target.

Core Outcome Measures

C-1) Traffic Fatalities (FARS)

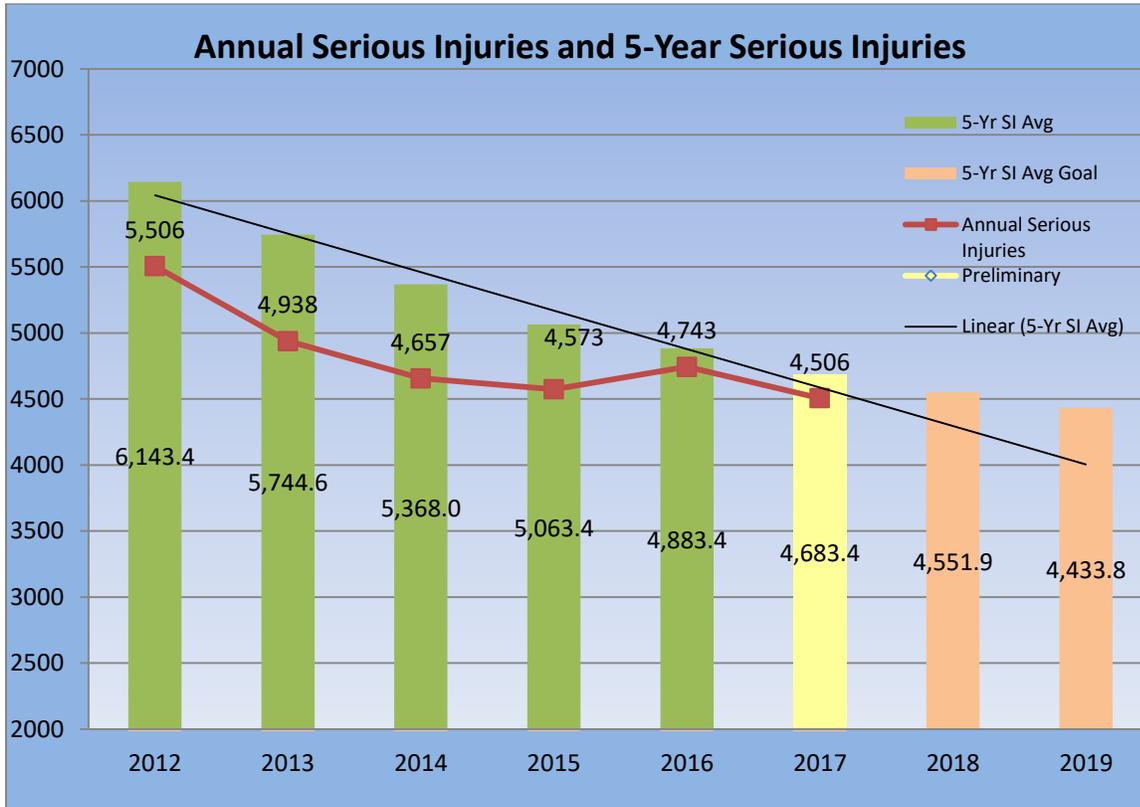
Decrease traffic fatalities by 9.0 percent annually, resulting in a five-year average fatality target of 872.3 fatalities by December 31, 2019.



Based on an assumed 9% annual reduction in fatalities, Missouri anticipates a projected five-year average fatality target of 872.3 fatalities by December 31, 2019. A 9% annual reduction in fatalities would allow Missouri to reach the 2020 Blueprint goal of 700 or fewer fatalities.

C-2) Serious Traffic Injuries (STARS)

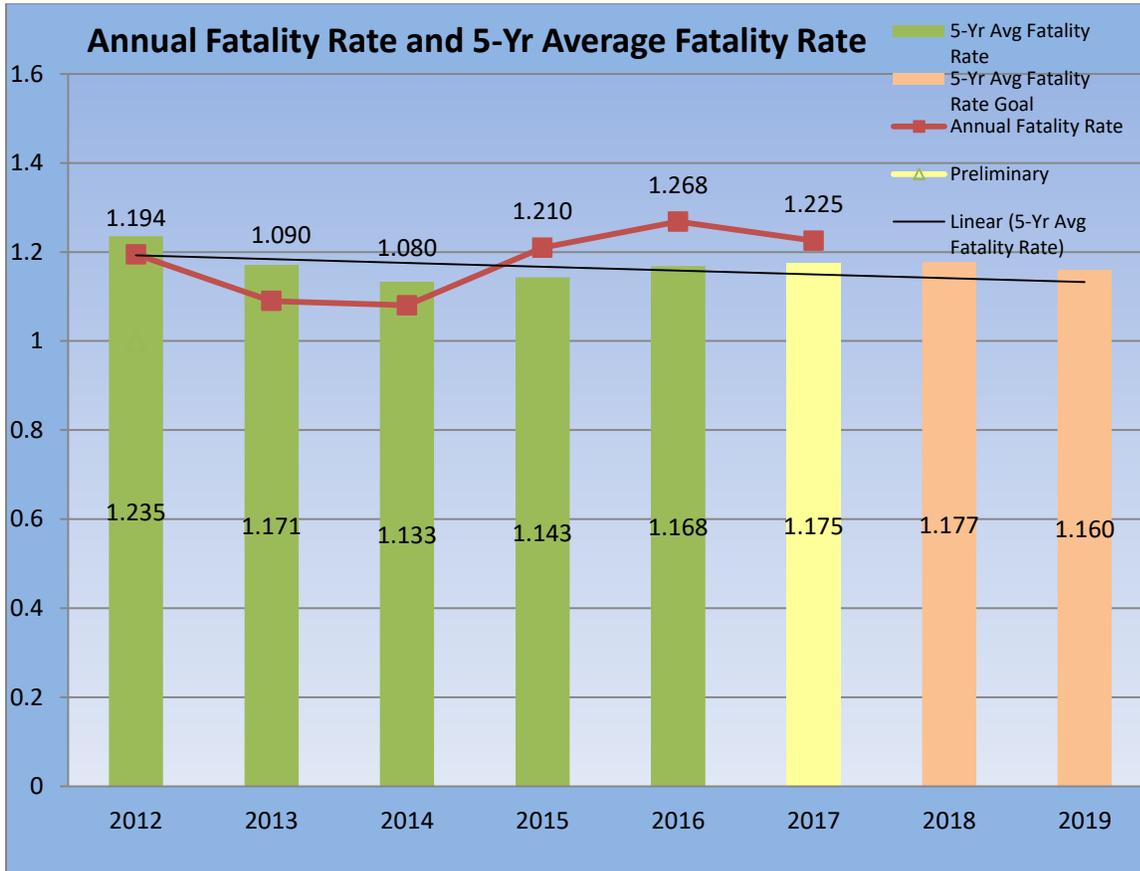
Decrease serious traffic injuries by 5.0 percent annually, resulting in a five-year average fatality target of 4,433.8 serious injuries by December 31, 2019.



Based on an assumed 5% annual reduction in serious injuries, Missouri anticipates a projected five-year average serious injury target of 4,433.8 by December 31, 2019.

C-3) Fatalities / VMT (FARS/FHWA)

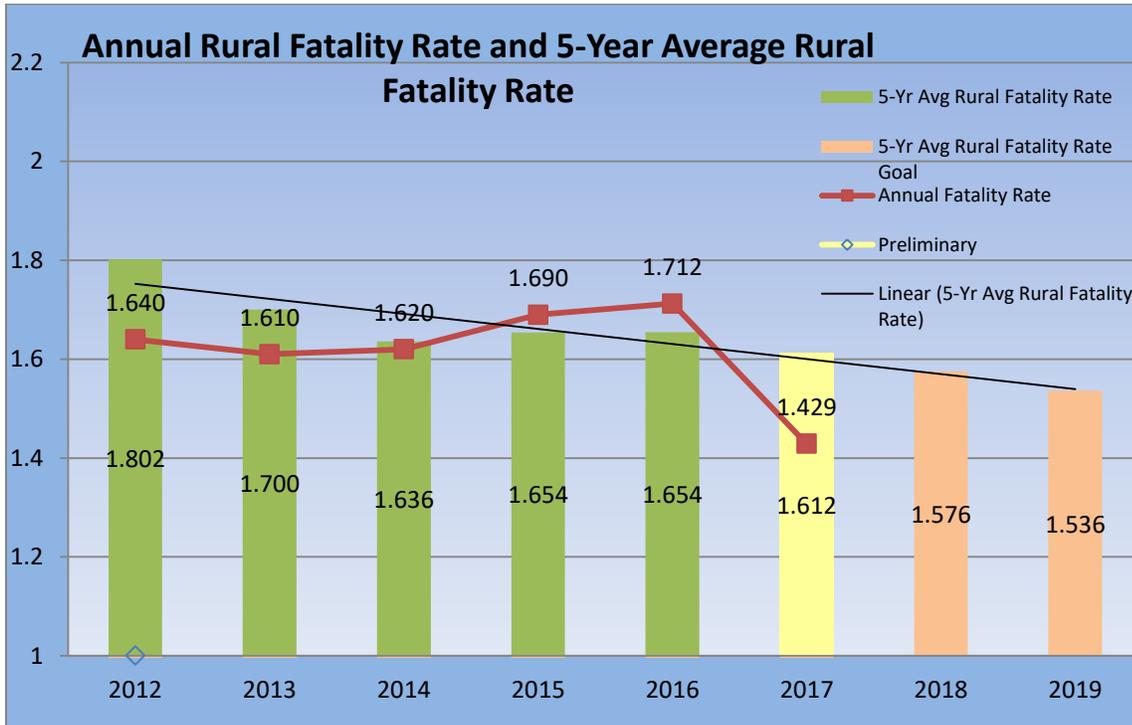
Decrease traffic fatalities by 9.0 percent annually, resulting in a reduced five-year average fatality rate of 1.160 by December 31, 2019.



Based on an assumed 9% annual reduction in fatalities, Missouri anticipates a projected five-year average fatality rate target of 1.160 by December 31, 2019.

C-3a) Fatalities/VMT Rural (FARS/FHWA)

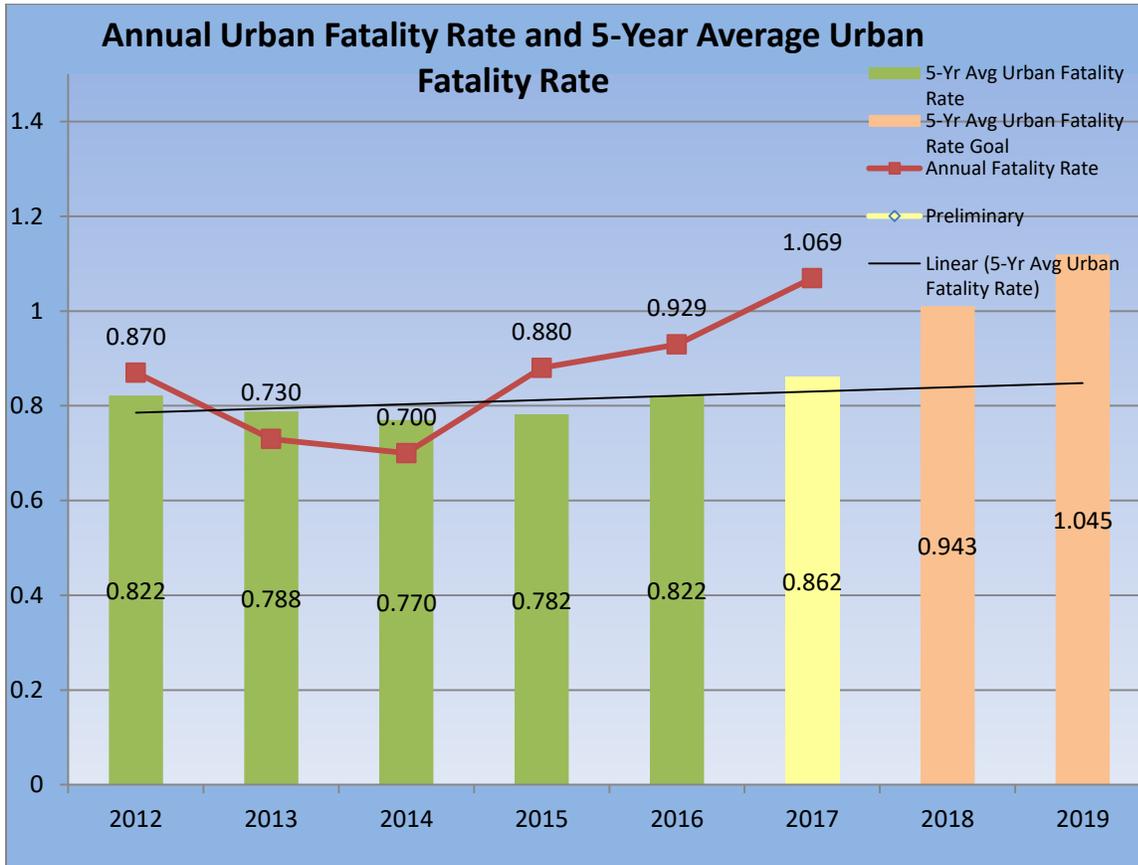
Decrease rural traffic fatalities by 0.17 percent annually, resulting in a reduced five-year average rural fatality rate of 1.536 by December 31, 2019.



Based on an annual average decrease of 0.17 percent in rural traffic fatalities from 2012 to 2017, Missouri is projecting a five-year average rural fatality rate of 1.536 by December 31, 2019.

C-3b) Fatalities/VMT **Urban** (FARS/FHWA)

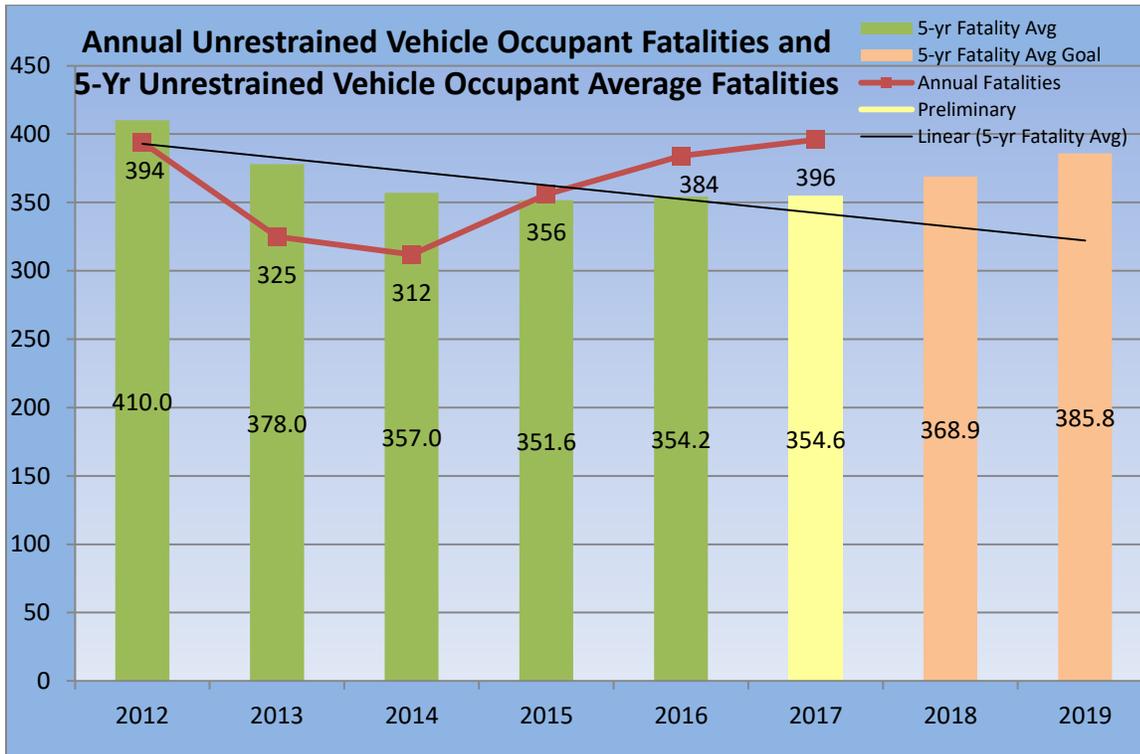
Missouri is projecting an increased five-year average urban fatality rate of 1.045 by December 31, 2019.



Based on an annual average increase of 6.29 percent in urban traffic fatalities from 2012 to 2017, Missouri is projecting a five-year average urban fatality rate of 1.045 by December 31, 2019.

C-4) Unrestrained Passenger Vehicle Occupant Fatalities (FARS)

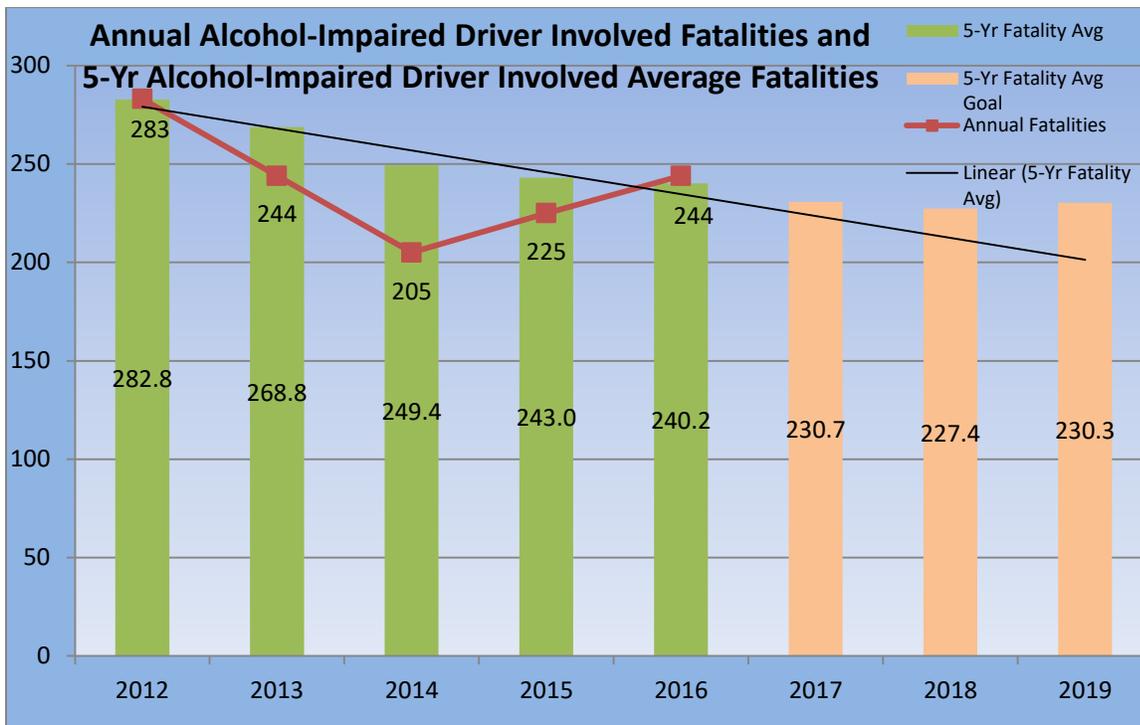
Missouri is projecting an increase to 385.8 five-year average unrestrained passenger vehicle occupant fatalities by December 31, 2019.



Based on an annual average increase of 0.10 percent in unrestrained passenger vehicle occupant fatalities from 2012 to 2017, Missouri is projecting 385.5 five-year average unrestrained passenger vehicle occupant fatalities by December 31, 2019.

C-5) Alcohol-Impaired Driving Fatalities (FARS)

Decrease alcohol-impaired driving involved fatalities by 3.45 percent annually, resulting in a five-year average alcohol-impaired driving involved fatality goal of 230.3 by December 31, 2019.

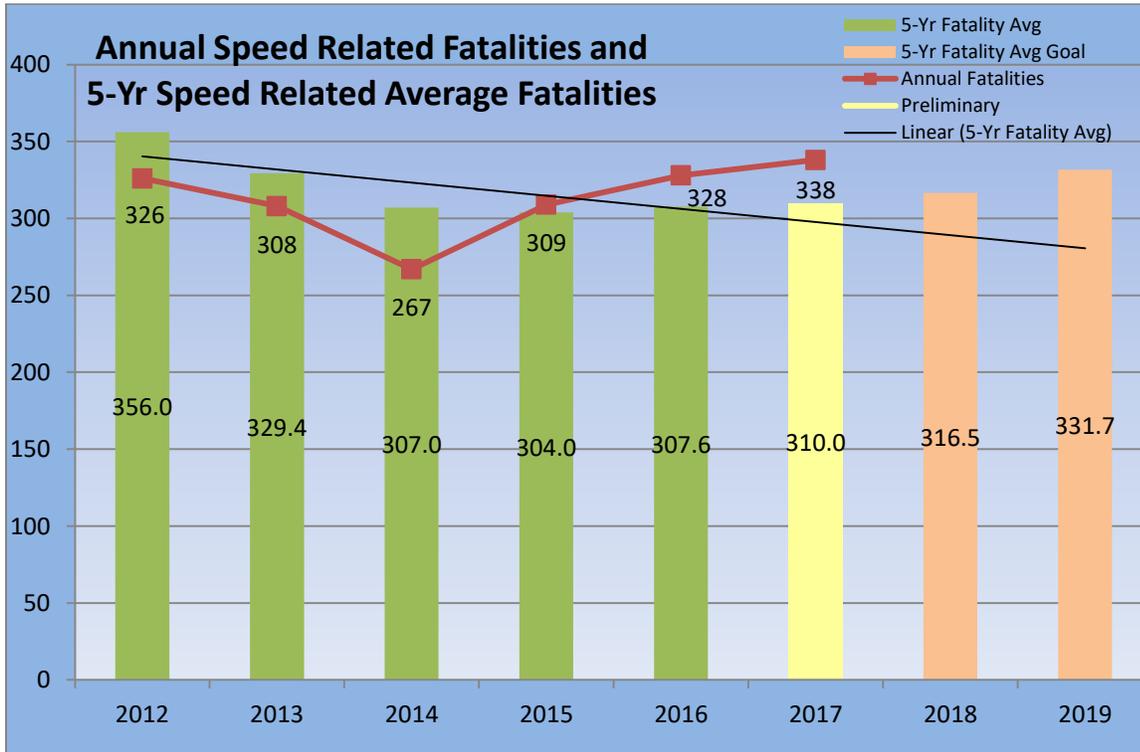


Based on an annual average decrease of 3.45 percent in alcohol-impaired driving involved fatalities from 2012 to 2016, Missouri is projecting a five-year average alcohol-impaired driving involved fatality goal of 230.3 by December 31, 2019.

Note: due to Missouri not collecting BAC on their crash report, preliminary 2017 state data will not be used for alcohol-impaired driver involved fatalities.

C-6) Speeding Related Fatalities (FARS)

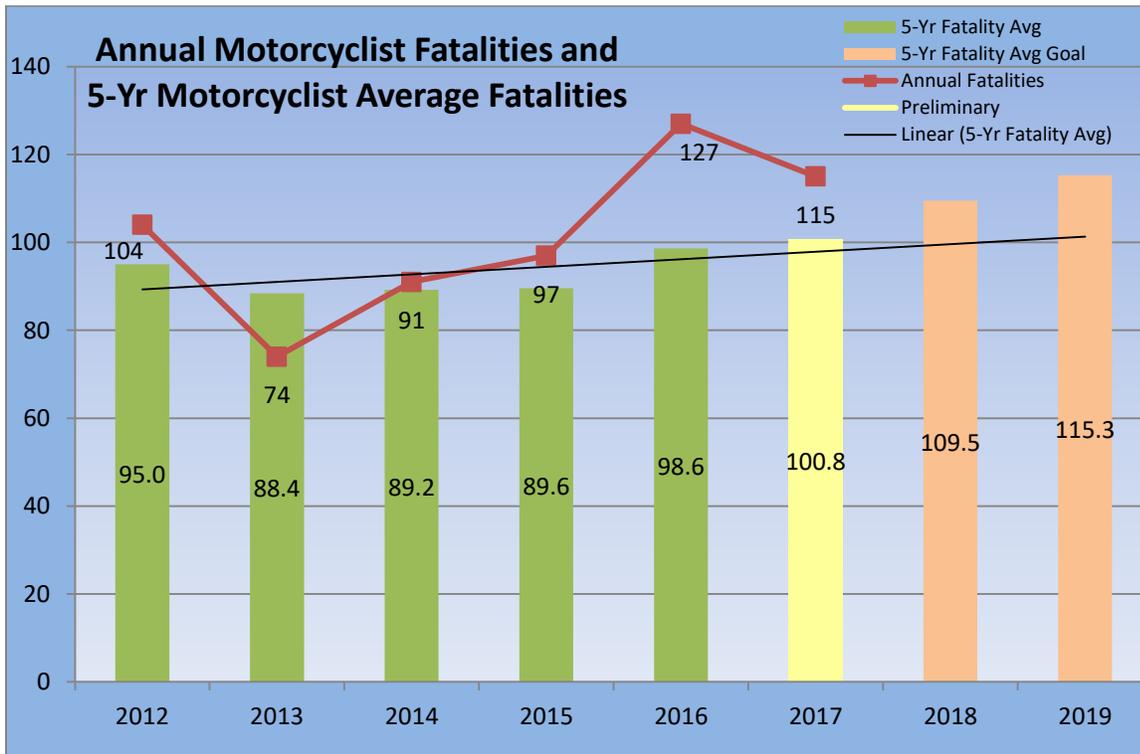
Missouri is projecting an increase to 331.7 five-year average speed related fatalities by December 31, 2019.



Based on an annual average increase of 0.74 percent in speed related fatalities from 2012 to 2017, Missouri is projecting 331.7 five-year average speed related fatalities by December 31, 2019.

C-7) Motorcyclist Fatalities (FARS)

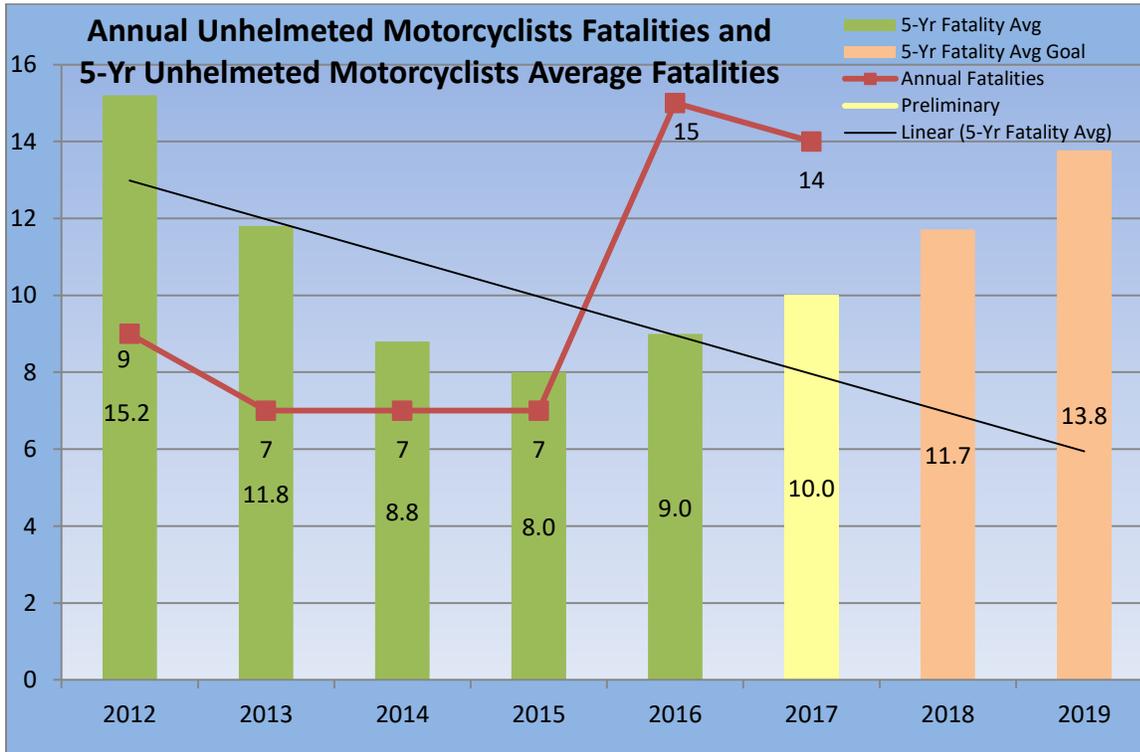
Missouri is projecting an increase to 115.3 five-year average motorcyclist fatalities by December 31, 2019.



Based on an annual average increase of 2.12 percent in motorcyclist fatalities from 2012 to 2017, Missouri is projecting 115.3 five-year average motorcyclist fatalities by December 31, 2019.

C-8) Unhelmeted Motorcyclist Fatalities (FARS)

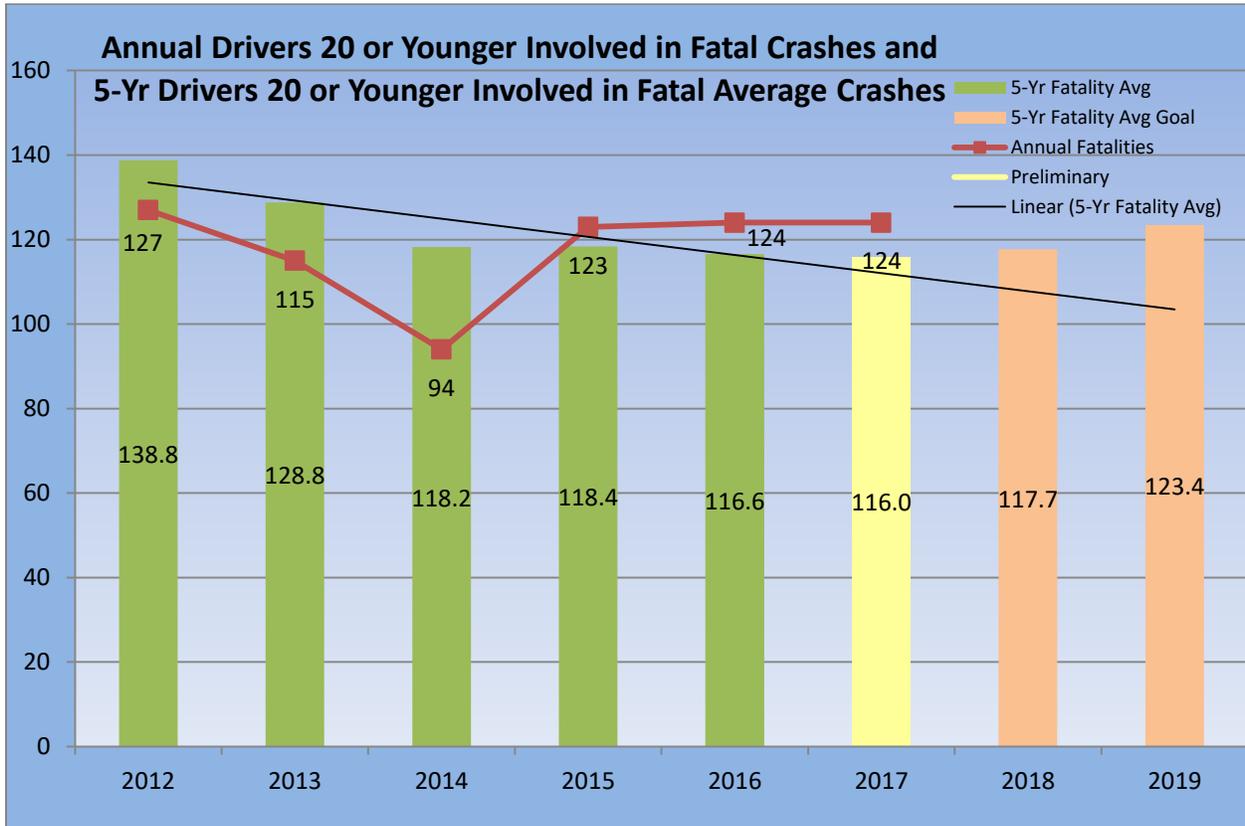
Missouri is projecting an increase to 13.8 five-year average unhelmeted motorcyclist fatalities by December 31, 2019.



Based on an annual average increase of 11.11 percent in unhelmeted motorcyclist fatalities from 2012 to 2017, Missouri is projecting 13.8 five-year average unhelmeted motorcyclist fatalities by December 31, 2019.

C-9) Drivers Aged 20 or Younger Involved in Fatal Crashes (FARS)

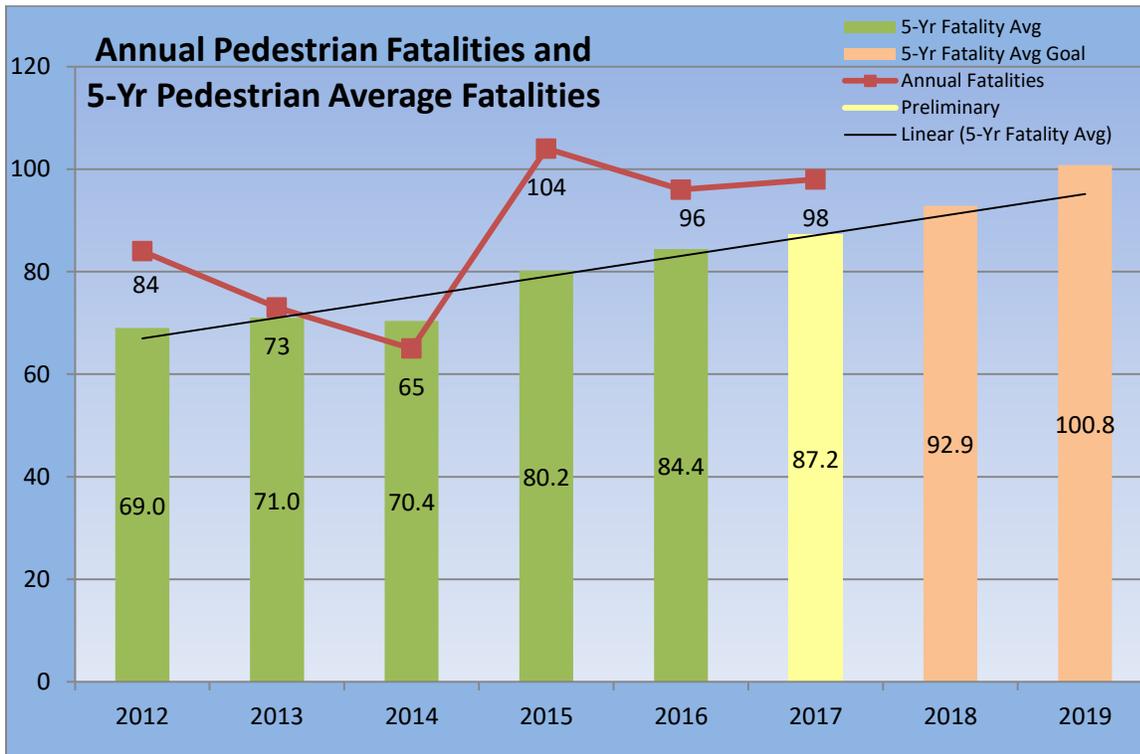
Decrease drivers age 20 or younger involved in fatal crashes by 0.78 percent annually, resulting in a five-year average goal of 123.8 by December 31, 2019.



Based on an annual average decrease of 0.78 percent of drivers 20 or younger involved in fatal crashes from 2012 to 2017, Missouri is projecting a five-year average goal of 123.8 by December 31, 2019.

C-10) Pedestrian Fatalities (FARS)

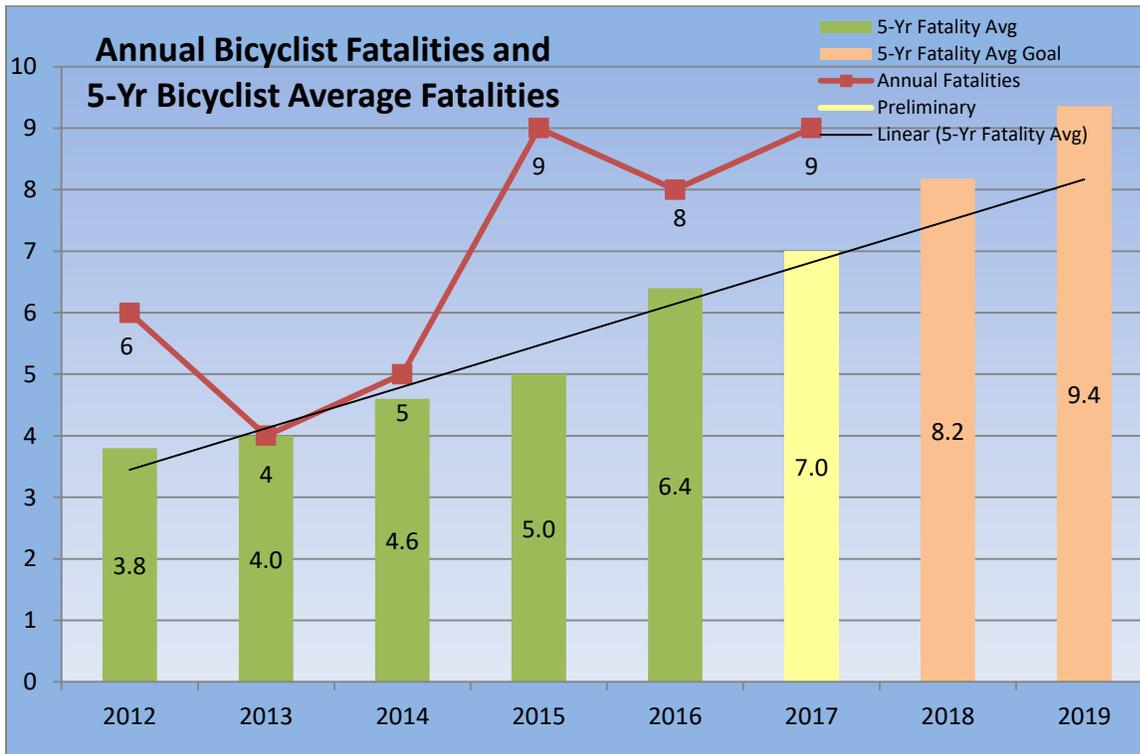
Missouri is projecting an increase to 100.8 five-year average pedestrian fatalities by December 31, 2019.



Based on an annual average increase of 3.33 percent in pedestrian fatalities from 2012 to 2017, Missouri is projecting 100.8 five-year average pedestrian fatalities by December 31, 2019.

C-11) Bicyclist Fatalities (FARS)

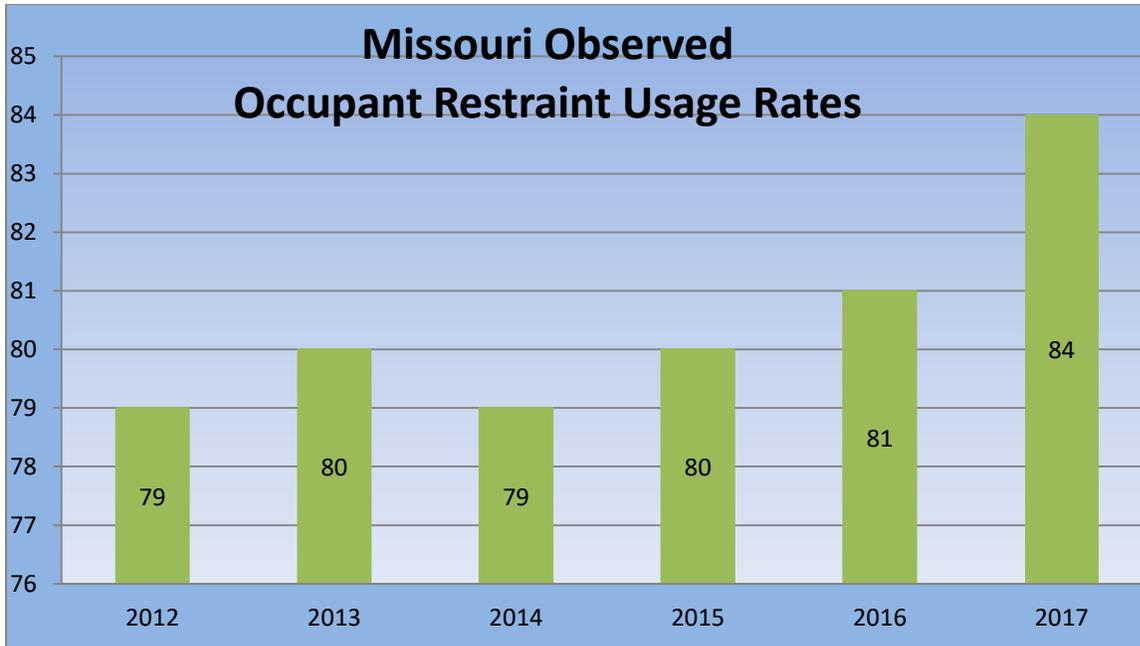
Missouri is projecting an increase to 9.4 five-year average bicyclist fatalities by December 31, 2019.



Based on an annual average increase of 10.00 percent in bicyclist fatalities from 2012 to 2017, Missouri is projecting 9.4 five-year average bicyclist fatalities by December 31, 2019.

B-1) Observed Belt Usage (Observed Seat Belt Use Survey)

To increase statewide observed seat belt use of front seat outboard occupants in passenger vehicles 1 percentage point annually from the 2017 calendar base year rate of 84% to 86% by December 31, 2019.*



*At the time of the HSP submission, the 2018 survey was not complete. The usage rate was 87.1% in 2018.

Project Selection

Best Practices Countermeasures

The highway safety office makes every attempt to ensure that effective countermeasure efforts are incorporated into the strategies of the Plan by employing the following methods:

1. Utilizing proven countermeasures identified within the latest update of *Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices*, US DOT, NHTSA;
2. Utilizing countermeasures identified in NCHRP report 622 publication (Effectiveness of Highway Safety Countermeasures)
3. Evaluating traffic crash data to determine crash types, target populations and geographic locations in order to most effectively implement countermeasure efforts;
4. Participating in national law enforcement mobilizations that combine blanketed enforcement and saturated media during established timeframes and in targeted traffic corridors;
5. Participating in state, regional, and national training opportunities in order to gain insight into proven programs that can be replicated in Missouri; and
6. Reviewing highway safety research studies from Transportation Research Board, NHTSA, FHWA, FMCSA, Insurance Institute for Highway Safety, AAA Foundation, etc. to guide the inclusion of various strategies in the Plan.

Planning, Programming and Implementation

The state's highway safety program, as explained earlier, is a federal grant program. The federal fiscal year runs from October 1 through September 30.

Grant Application Process

The Highway Safety Office hosts grant application workshops each year for potential applicants. These workshops are held in five strategic regional locations (Cape Girardeau, Chesterfield, Jefferson City, Springfield, and Lee's Summit) so it is more convenient for potential applicants to attend. They are usually scheduled during January.

Workshop participants are provided a packet explaining the highway safety grant program, the types of projects eligible for award, and an overview of statewide statistical traffic crash data. Potential applicants are given instruction on how to retrieve traffic crash data for analysis through the Missouri State Highway Patrol's web site.

The purpose of the highway safety program and the statewide goal are discussed to help the potential applicants understand how their efforts are imperative in order to impact the fatality reduction goal. Program areas are identified and the Highway Safety Grant Management System (GMS) and on-line reporting systems are reviewed. These seminars are used as an opportunity to share any new contract conditions, application process changes, or legislative changes that may impact the grant programs. The grant application deadline for the 2019 fiscal year was March 1, 2018.

Internal Grants Management System

In late 2001, the Highway Safety Office began work with the Regional Justice Information Service (REJIS) to develop the first-of-its-kind on-line grants management system. The system allows applicants to electronically submit applications. This information feeds into a system that builds databases for managing the highway safety grants (budgets, grantee lists, inventory, vouchering, reporting data, disbursement reports, etc.). The system went live for the 2003 grant application cycle. Since that time, the Highway Safety Office has continued to work with REJIS to refine the system in order to make it more user friendly for the applicants and subrecipients, in addition to being more functional and robust for the Highway Safety Office. An extensive rewrite took place to coincide with the 2010 grant cycle. The system was refined so that the processes of application submission, contract development, enforcement reporting, and vouchering are now entirely web-based. The areas of Motor Carrier Safety Assistance Program and Regional Blueprint have also been added to the system. Additional reporting components continue to be developed. The Highway Safety Office will continue to maintain and improve the GMS and is currently working toward an entirely paperless grant process.

Grant Selection Process

The Highway Safety program staff reviews the applications relative to their specific areas of expertise. During this preliminary review, they assess the applications to determine their relevancy toward meeting the highway safety goals. Applicants are contacted if clarification is needed. In essence, a case is prepared to present to management and the remaining program staff members to support whether the application should be funded in full, in part, or denied.

Fatal and serious injury crash rankings are performed for all cities, counties, and the unincorporated areas in the state. These rankings are conducted for the problem areas of alcohol, speed, young drinking drivers, distracted, unbelted, under 21 years of age and older drivers. These rankings are also used in determining the overall severity of the problem for each respective location. Fatal and serious injury county, city, and unincorporated county rank orders are located in the *Crashes by City, County & Unincorporated County* section of this report. Ranking by problem area can be found on the Missouri State Highway Patrol's on-line State Traffic Accident Records System located at https://www.mshp.dps.missouri.gov/MSHPWeb/SAC/stars_index.html.

Law enforcement applications are assessed to determine their rankings by the type of project they are choosing to conduct. While the highest-ranking locals are given priority because of the potential impact of their project, other considerations are taken into account. For instance, a lower-ranking city may be given a project because the county in which they reside ranks high or they may fall within a dangerous corridor. Some communities are given a project in order to participate in the national mobilizations while others are given consideration because the Highway Safety Office has determined a need exists to garner traffic safety minded agencies within a particular geographic location. An additional consideration may be their participation in multi-jurisdictional law enforcement task forces.

Risk Assessment

An internal team of highway safety program staff review all grant applications which includes conducting a risk assessment. Several days are set aside to review the applications and hear both supporting arguments and issues of concern. The reviewers take many factors into consideration when assessing these applications:

- Does the project fall within the national priority program areas (alcohol and other drug countermeasures; police traffic services; occupant protection; traffic records; emergency medical services; speed; motorcycle, pedestrian, or bicycle safety)?
- Does the project address the key emphasis areas identified within the *Blueprint* and does it have the ability to impact statewide traffic crash fatalities and serious injuries?
- Does the problem identification sufficiently document problem locations, crash statistics, targeted populations, demonstrated need, and the impact this project would have on traffic safety problems in their community?
- Have “best practices” countermeasures been proposed in order to make a positive impact on the identified problem?
- Will this project provide continuity of effort in a particular geographic region (such as multi-jurisdiction enforcement) or in a particular program area (occupant protection)?
- Will the activity serve as a “foundational project” that satisfies criteria for additional federal funding (e.g., safety belt observational survey)?

- Does the project alleviate, eliminate or correct a problem that was identified in a federally conducted assessment of a highway safety priority program area?
- Will the project satisfy or help satisfy federal goals for regional highway safety issues?
- Are innovative countermeasures proposed and, if so, is there an effective evaluation component included?
- Are any local in-kind resources proposed to match the federal grant efforts?
- Does the applicant propose developing partnerships (e.g., working with service organizations, health agencies, and/or insurance companies; conducting multi-jurisdiction enforcement efforts) in order to expand their resources and enhance their outcomes?
- Is the local government or administration supportive of this proposed activity?
- If equipment is requested, will the equipment support a project or enforcement activity; does the agency have the ability to provide a local match for part of the equipment purchase?
- Is there sufficient funding in the budget to support all or part of this application?
- Has the applicants risk of noncompliance with Federal statutes, regulations, and the terms and conditions of the subaward been considered for such factors as:
 - The applicants prior experience with the same or similar sub awards;
 - The results of previous audits including whether or not the applicant receives a Single Audit in accordance with Subpart F-Audit Requirements of this part, and the extent to which the same or similar subaward has been audited as a major program;
 - Whether the applicant has new personnel or new or substantially changed systems; and
 - The extent and results of federal awarding agency monitoring

Information and Data Sources Consulted

The following information and data sources were consulted during the grant application review process:

- Grants Management System (GMS) - provided financial history and past performance information
- STARS & FARS - Provide the crash history, state ranking, crash time frames and crash locations.
- Transportation Management System (TMS) - connects MoDOT crash statistics to STARS.

The applications are discussed at length using a risk assessment checklist to ensure consistency and to determine whether the agency should be funded, the level of funding, which grant funding source should support the project, and whether the activity is a state or local benefit (40 percent of funds must be expended toward local benefit). Each applicant funding amount is determined by reviewing at least two prior years' awarded funding amounts and spending history; the agencies risk for potential fraud, waste and abuse; and the agencies willingness to comply with the contract conditions regarding timely vouchering. A key reference document is

Countermeasures that Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices to assure we support research-based strategies. Other considerations for research-based strategies are Transportation Research Board research and reports, other DOT funded research and university-based research.

When equipment is required, the applicant is requested to provide a local match. If the local match is unavailable, those applications are reviewed on a case-by-case basis to determine whether this agency can provide full support.

During the meeting, this information is continually updated into the Highway Safety Office's grant management system so that real-time information is immediately available. By the end of the meeting, there is a complete listing of the approved projects that will best support the mission and work toward reaching the Blueprint's target of 700 or fewer fatalities by 2020.

Subrecipient Compliance Requirements

Any agency receiving a Highway Safety grant must comply with the following statutes or rules. The following are included in the contract signed by the subrecipient:

Nondiscrimination — CFR Chapter 50 prohibits discrimination on the basis of race, color, religion, sex or national origin including DBE and Segregated Facilities.

Hatch Act – Pursuant to United States Code Sections 1501-1508, employees who are paid in whole or in part with federal funds are prohibited from participating in certain partisan political activities including, but not limited to, being candidates for elective office.

Federal Funding Accountability and Transparency Act: Subrecipients must disclose detailed information about their operations including the name and location of the entity, amount of award, transaction type, unique identifier, names and the total compensation of the five most highly compensated officers of the entity if certain parameters are met. The state then compiles this information for all grantees and facilitates the disclosure of this information to the federal government and the public.

Buy America Act – The state will comply with the provisions of the Buy America Act (49 U.S.C. 5323 (j)), which contains the following requirements:

Only steel, iron and manufactured products produced in the United States may be purchased with federal funds unless the Secretary of Transportation determines that such domestic purchases would be inconsistent with the public interest, that such materials are not reasonably available and of a satisfactory quality, or that inclusion of domestic materials will increase the cost of the overall project contract by more than 25 percent. Clear justification for

the purchase of non-domestic items must be in the form of a waiver request submitted to and approved by the Secretary of Transportation.

All items purchased must be compliant with the National Highway Traffic Safety Administration (NHTSA) interpretation of the Buy America Act including, but not limited to:

1. Items valued over \$5,000 per unit must be manufactured or assembled in the United States of America , or as allowed by a current Buy America Act waiver issued by the NHTSA;
2. All vehicles must be manufactured or assembled in the United States of America regardless of cost .

www.nhtsa.gov/staticfiles/administration/programs-grants/Buy-America-Act-revised-11202015.pdf

The Drug-Free Workplace Act of 1988 – The state will provide a drug-free workplace according to 41 U.S.C. 8103 by notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee’s workplace. The State will also establish a drug-free awareness program; notify employees of the requirements of the workplace and conviction of such offense and the actions to be taken.

Certification Regarding Federal Lobbying and Restriction on State Lobbying – Certifies no federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any federal contract. None of the funds under the programs will be used for any activity specifically designed to urge or influence a state or local legislator to favor or oppose the adoption of any specific legislative proposal pending before any state or local legislative body.

Certification Regarding Debarment and Suspension and Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions – Certifying that the agency and its principals are presently not debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in the transaction by any federal department or agency.

Any law enforcement agency receiving a Highway Safety grant must also comply with the following statutes or rules. The following are included in the contract signed by the grantee :

Peace Officer Standards and Training Certification (P.O.S.T.) — Pursuant to RSMo 590.100-590.180 all peace officers in the State of Missouri are required to be certified by the Department of Public Safety.

Statewide Traffic Analysis Reporting (STARS) – Pursuant to RSMo 43.250, law enforcement agencies must file accident reports with the Missouri State Highway Patrol.

Uniform Crime Reporting — Pursuant to RSMo 43.505, all law enforcement agencies shall submit crime incident reports to the Department of Public Safety on the forms or in the format prescribed by DPS, as shall any other crime incident information that may be required by DPS.

Racial Profiling — Pursuant to RSMo 590.650, each law enforcement agency shall compile the data described in Subsection 2 of Section 590.650 for the calendar year into a report to the Attorney General and submit the report to the AG no later than March first of the following calendar year.

Prohibition on Using Grant Funds to Check for Helmet Usage - The State and each subrecipient will not use 23 U.S.C. Chapter 4 grant funds for programs to check helmet usage or to create checkpoints that specifically target motorcycles.

Policy on Seat Belt Use – In accordance with Executive Order 13043, Increasing Seat Belt Use in the United States, dated April 16, 1997, the Grantee is encouraged to adopt and enforce on-the-job seat belt use policies and programs for its employees when operating company-owned, rented, or personally-owned vehicles.

Policy on Banning Text Messaging While Driving – In accordance with Executive Order 13513, Federal Leadership On Reducing Text Messaging While Driving, and DOT Order 3902.10, Text Messaging While Driving, States are encouraged to adopt and enforce workplace safety policies to decrease crashes caused by distracted driving, including policies to ban text messaging while driving company-owned or –rented vehicles, Government-owned, leased or rented vehicles, or privately-owned when on official Government business or when performing any work on or behalf of the Government.

Local Ordinances and Policies

Agencies are encouraged to adopt the following local ordinances and policies, if possible:

- **Model Traffic Ordinance**—Chapter 300—Rules governing traffic administration and regulation
- **Child Restraints**—RSMo 307.179—Passenger restraint system required for children birth through age seven years (Primary Offense)
- **Seat Belts**—RSMo 307.178—Seat belts required for passenger cars
- **Open Container**—A model ordinance prohibiting the possession of an open container of alcoholic beverages in a motor vehicle.
- **Law enforcement vehicular pursuit training Title 23, USC, Chapter 4 402a(j)** - A state shall actively encourage all relevant law enforcement agencies in such state to follow the guidelines established for vehicular pursuits issued by the International Association of

Chiefs of Police that are in effect on the date of enactment of this subsection or as revised and in effect after such date as determined by the secretary.

Traffic Safety Enforcement Program

The Highway Safety Office has three law enforcement program managers that cover specific regions of the state and three Law Enforcement Liaisons (LEL) who cover the Kansas City, St. Louis and Springfield areas. Below is a map that outlines the areas of responsibility for each program manager. These managers are responsible for the statewide coordination of state, county, and local law enforcement projects. The evidence-based traffic safety enforcement program is focused on preventing traffic violations, crashes, and crash fatalities and injuries in areas of most risk for such incidents. It involves an array of enforcement activities throughout the fiscal year.

This section includes: Problem Identification, Implementation Plan and Performance Measures pertaining to the Evidence-Based Traffic Safety Enforcement Program.



Regional Coverage Areas:	
Northwest & Kansas City	Scott Wilson
Northeast, Southeast & St. Louis	Mike Stapp
Central & Southwest	Mandy Kliethermes

Problem Identification Process

Fatal and serious injury crash rankings are performed for all cities, counties, and the unincorporated areas in the state. These ranking are conducted for the problem areas of alcohol, speed, young drinking drivers, distracted, unbelted, under 21 years of age and older drivers. These rankings are also used in determining the overall severity of the problem for each respective location. Fatal and serious injury by county, city, and unincorporated county rank orders are located in the Crashes by City, County & Unincorporated County section of this report. Ranking by problem area can be found on the Missouri State Highway Patrol's on-line State Traffic Accident System located at https://www.mshp.dps.missouri.gov/MSHPWeb/SAC/stars_index.html

Implementation Plan

Grant Application Selection

Grant application workshops are held for potential applicants in five locations around the state. The purpose of the highway safety program and statewide goal are discussed at each workshop to help grantees understand how their efforts are imperative in order to impact the fatality and serious injury problem on Missouri highways. Law Enforcement (LE) program management staff participates in each workshop and offer assistance to agencies interested in submitting a grant.

Once applicants submit their applications into the Highway Safety Office Grant Management System, law enforcement program management staff reviews each application for their fatality / serious injury rankings. During this review, LE program managers assess the applications to determine their relevancy toward meeting the highway safety goals.

The LE program management team reviews their respective applications where the LE staff share supporting arguments and issues of concern recommending either to fully fund, partially fund or deny the LE applications. The reviewers take the same factors into consideration as where described in the Project Selection section of this document.

Once LE grant award decisions are made that best support the mission and work toward reaching the Blueprint's target of 700 or fewer fatalities by 2020, grant award meetings are held in the fall at five locations around the State. LE program managers provide a copy of the award, review subrecipient compliance requirements, address any questions and concerns, and network with any new and continuing grantees.

Mobilizations

The Law Enforcement Traffic Safety Advisory Council identifies quarterly impaired driving and occupant protection mobilization dates for each fiscal year. The LE program management staff aggressively seek participation in these mobilizations, as well as, the NHTSA required Drive Sober or Get Pulled Over and the Click It or Ticket mobilizations. Agencies are also encouraged to participate in the Distracted Driving Month enforcement activities.

DWI/Traffic Units are a key enforcement technique used to team with a city or county law enforcement agency to financially support DWI/Traffic Units. The HSO currently funds 10 units (some agencies fund their own units). The mission of these units is to focus on impaired drivers/high risk drivers and to aggressively enforce DWI and hazardous moving violations. Below is a list of the full-time DWI/Traffic Units:

- Joplin Police Department
- Greene County Sheriff's Office
- Boone County Sheriff's Office
- Columbia Police Department
- Jackson County Sheriff's Office
- Jefferson County Sheriff's Office
- Franklin County Sheriff's Office
- St. Louis County Police Department
- Creve Coeur Police Department
- Platte County Sheriff's Office

Law Enforcement Task Forces/Councils have also been formed in many multiple city/county LE agencies and meet on a regular basis to plan and coordinate key enforcement activities. Several agencies have a shortage of personnel to conduct sobriety checkpoints and other enforcement initiatives. The task force concept provides the opportunity to pool resources to conduct more manpower intensive activities such as sobriety checkpoints or corridor projects. It also provides a forum for the LE officers to network and share traffic issues or concerns. Below is a list of the multi-jurisdictional task forces operating in Missouri:

- Southwest DWI Task Force (11 Agencies)
- Northwest DWI Task Force (7 Agencies)
- Jackson County Traffic Safety Task Force (9 Agencies)
- Cass County STEP DWI Task Force (4 Agencies)
- Clay/Platte County DWI Task Force (14 Agencies)
- St. Louis Regional Traffic Safety Council (50 Agencies)
- St. Charles County DWI Task Force (7 Agencies)
- Central Ozarks Regional DWI Task Force (19 Agencies)
- Southeast Missouri DWI Task Force (13 Agencies)
- Law Enforcement Traffic Safety Advisory Council

Sobriety Checkpoints

In 2009 an effort was made to increase the number of sobriety checkpoints held each year. Since that time approximately 500 checkpoints are held each year.

In 2017, the Missouri legislature drafted and approved a bill which only allows the HSO to fund one dollar toward sobriety checkpoints. It is the hope of the HSO that this legislation will be reversed in the 2018 legislative session. However, until that time, law enforcement agencies are encouraged to continue conducting sobriety checkpoints with internal funding.*

*At the time of the HSP submission, legislation was not complete. However, the 2018 legislative session did not restore checkpoints.

Communication Component

There is a communication plan developed with each mobilization. These plans vary depending on the available funding and involve press releases, paid media, social media, and earned media. Sample pre- and post- press releases are sent to LE departments choosing to participate in various law enforcement initiatives/mobilizations. In the case of sobriety checkpoints, these releases are required and help make the general deterrent strategy more effective.

Continuous Follow-Up and Adjustment

Program management staff reviews the results of various law enforcement initiatives/mobilizations. State, local and county LE agencies are encouraged to review their results and area crash data on a regular basis. Based upon these reviews, adjustments are made to operational plans to improve the activity's effectiveness.

Performance Measures

To monitor law enforcement participation in the NHTSA and LETSAC mobilizations, the Traffic and Highway Safety Division has three performance measures in their division tracker. These measures identify the number of participating agencies, number of hours worked, number of sobriety checkpoints, and the type and number of citation and warning tickets.

There are a number of measures listed throughout the HSP designed to track the progress of our law enforcement activities. The most important outcome involves a reduction in the number of fatalities and serious injuries occurring by crash type. The following is a list of other measures.

- Number of speeding citations issued during grant-funded enforcement activities and mobilizations
- Number of impaired driving arrests made during grant-funded enforcement activities and mobilizations.
- Number of safety belt citations issued during grant-funded enforcement activities and mobilizations

Performance Plan Program Areas

In the following section, each program area contains specific counter measure strategies used to complete the program and achieve specific performance targets. Each program area contains a description of the problem identification, prior year performance, allocation of funding, other sources used to achieve the goals, core performance measures, other performance goals and each project selected for the program area showing the proven countermeasure strategies. The information provided is accurate as of June 1, 2018.

Planning and Administration

Problem Identification

Not Applicable

Communications (Media)

Problem Identification

From 2005-2017, due to the combined efforts of highway safety advocates in the MCRS, 4,455 lives have been saved on MO roadways, a decrease of 26 percent.



The coalition credits a combination of law enforcement, educational efforts, emergency medical services, engineering enhancements and public policy as the successful formula for saving lives. However, the historic four “E’s” of safety must be expanded to include Evaluation and Everyone. Measuring success by Evaluation of performance measures holds each of us accountable for its success. In turn, addressing the need to change traffic safety culture challenges each person to make personal responsibility for their behavior as a roadway user and includes *EVERYONE*.

While our roads are safer than they have been in many years, there are still too many crashes and senseless deaths happening every year. We are committed to further reducing the number of traffic crashes in Missouri, so we must work even harder to reach those remaining people who haven’t gotten the message that:

- Seat belts save lives;
- Drinking and driving are a deadly mix;
- Distracted drivers are dangerous drivers; and
- Parents and caregivers must secure children in size-and age-appropriate car seats that are properly installed.

This is accomplished by developing highly visible, catchy campaigns that are coupled with strong enforcement efforts. We rely on our traffic safety partners to be active participants in these campaigns. Some of the most effective campaigns have been the national law enforcement mobilization efforts such as “Click It or Ticket” and “Drive Sober or Get Pulled Over.” People heard about the mobilizations in the media, and drivers were aware that the risk of apprehension was high. These campaigns have proven their ability to not only heighten awareness, but also to ultimately make positive behavioral changes.

In order to continue to raise awareness and change driving attitudes and behaviors, the safe driving messages need to be perpetuated through traditional media vehicles (TV, radio, print, outdoor, digital) as well as through social media throughout the year. Social media has become a key part of the highway safety campaigns, increasing awareness and conversation about safe driving, complementing PSA distributions and helping to spread campaign messages virally. Social media efforts will continue through mainstream platforms such as Facebook and Twitter, Instagram and Vine. Dynamic Message Boards (DMS) statewide help promote campaign awareness by alerting the traveling public to enforcement efforts.

Other Funding Sources, Documents and Data to Achieve Goals

The Public Information Subcommittee of the Missouri Coalition for Roadway Safety (MCRS) has been instrumental in increasing public education and information on traffic safety issues. The subcommittee develops an annual statewide media plan; has identified ARRIVE ALIVE as the overarching message for the coalition's public information activities; and manages the saveMOlives.com website to grab people's attention and convey safety information in the best way possible. The site features eye-catching graphics, intriguing videos, news and information, driving tips and advice on how to Arrive Alive at your destination.

Other Performance Measure Goals

1. Promote Missouri's traffic safety issues to improve understanding and increase compliance with state traffic laws, thereby reducing fatalities and serious injuries.

Speed Management

Problem Identification

Aggressive driving can be any one of us, when we make the choice to drive over the speed limit; change lanes several times in a short distance and/or follow too closely.

Aggressive driving is a costly decision, often made in an instant, but can have lifelong consequences. According to the National Highway Traffic Safety Administration, aggressive driving is when an individual commits a combination of moving traffic offenses so as to endanger other persons or property. During the last five years, the combination of aggressive driving behaviors contributed to 53 percent of fatalities and 46 percent of serious injuries in Missouri. Speed-related conditions, including exceeding the speed limit and too fast for conditions, accounted for the most fatalities of all aggressive driving behaviors. Nearly 37 percent of all Missouri fatalities over the last five years were speed-related.



Other Funding Sources, Documents and Data to Achieve Goals

The Missouri Coalition for Roadway Safety will continue to be instrumental in helping to reduce the number of fatalities and serious injuries by providing funding support for aggressive driving projects.

Other Performance Measure Goals/Projections

1. Based on an annual average increase of 2.53 percent in aggressive driving related fatalities from 2012 to 2017, Missouri is projecting 482.3 five-year average aggressive driving related fatalities by December 31, 2019.

Impaired Driving (Drug and Alcohol)

Problem Identification

Substance-impaired drivers contributed to 25.6 percent of Missouri's traffic crash fatalities during the past five years.

Alcohol remains the primary contributor to substance-impaired driving crashes; however, the number of persons under the influence of prescription medications and/or illicit drugs continues to increase. Male drivers were more likely than females to be involved in substance-impaired driving crashes. During the past five years, males were responsible for 82.4 percent of substance-impaired driving fatalities. Ten percent of the children less than 15 years of age who were killed in motor vehicle crashes over the last five years, were riding with a substance-impaired driver.



Other Funding Sources, Documents and Data to Achieve Goals

The Missouri Coalition for Roadway Safety will continue to be instrumental in helping to reduce the number of fatalities and serious injuries by providing funding support for alcohol-impaired driving projects.

The Statewide Substance Impaired Driving Strategic plan was approved by the Statewide Substance Impaired Driving Subcommittee in June of 2017 and continues to play a vital role in prioritizing the projects of the impaired driving program.

Other Performance Measure Goals/Projections

1. Decrease alcohol-impaired driving involved serious injuries by 7.51 percent annually, resulting in a five-year average alcohol-impaired driving involved fatality goal of 505.1 by December 31, 2019.

Occupant Protection (Adult and Child Passenger)



Problem Identification

During 2012-2016, 64.3 percent of drivers and occupants killed in crashes in Missouri were unrestrained. The number of unrestrained teens killed in Missouri crashes during the last five years is even higher – 74.7 percent. When analyzing only the pickup truck drivers and occupants, 77.8 percent of those killed during the last five years were unrestrained. Missouri’s observed safety belt use rate of 84 percent in 2017 is well below the national average of 90 percent. Missouri conducts a statewide observational safety belt survey annually, a teen safety belt survey biennially, and a child passenger and commercial motor vehicle safety belt use survey alternately when funds are available.

The child safety seat and commercial motor vehicle driver safety belt use surveys are conducted periodically. Teen safety belt use is of particular concern. This group’s safety belt use was 11 percent lower than the 2016 overall use rate.

Properly wearing a safety belt or using a child restraint is the single most effective way to prevent death and reduce injuries in a crash. According to the National Highway Traffic Safety Administration, safety restraint systems, when utilized correctly, reduce the risk of fatal injuries to front-seat passenger vehicle occupants by 45 percent and reduce the risk of moderate-to-critical injuries by 50 percent. For occupants of light trucks, using safety belts lower the risk of fatal injuries by 60 percent and moderate-to-critical injuries by 65 percent.

Other Funding Sources, Documents and Data to Achieve Goals

The Missouri Coalition for Roadway Safety will continue to be instrumental in helping to reduce the number of fatalities and serious injuries by providing funding support for unrestrained occupant projects.

Input from the 2014 assessment was used to develop the Occupant Protection Strategic Plan. Missouri conducted a NHTSA-facilitated Occupant Protection Program Assessment February 13-17, 2017. Input from the 2017 assessment was used to update the Occupant Protection Strategic Plan.

Mike Stapp has been designated as the occupant protection coordinator and plays a vital part on the Occupant Protection Subcommittee which helps guide the program in meeting its yearly goals.

Other Performance Measure Goals/Projections

1. Increase statewide observed seat belt use of front seat outboard occupants in passenger vehicles 1 percentage point annually from the 2017 calendar base year rate of 84% to 86% by December 31, 2019.

Distracted Driving

Problem Identification

Distracted driving is a diversion of the driver's attention from activities critical to safe driving. There is a growing body of evidence which suggests driver distractions, both inside and outside of the vehicle, are becoming increasingly large contributors to traffic crashes. While many drivers drive distracted, it is difficult for law enforcement to determine after a crash. Without specifically checking cell phone records (which requires a warrant), a crash is often attributed to other circumstances.



A 2011 study (Crashes Involving Cell Phones) by the National Safety Council found that cell phone usage may be underreported by as much as 50 percent. It is estimated that drivers engage in a secondary task between one-quarter and one-half of the time they drive. According to a recent Naturalistic Driving study by Virginia Tech Transportation Institute, a risk for being involved in a critical incident is 23 times greater if the driver texts while driving. During the last five years (2012-2016), 10 percent of Missouri fatal crashes involved a distracted driver. Twenty-five percent of the distracted drivers involved in fatal crashes in the last five years were between 15 and 24 years of age.

Prior Year Performance

Distracted driving projects funded by the Highway Safety Office include all behaviors that take a drivers attention away from the driving task, including but not limited to, cell phones, GPS, eating, passengers and driving while drowsy.

There were 97 distracted driving fatalities in 2016, with a 2012-2016 moving average of 83.8; thereby meeting the 2014-2018 moving average goal of 86.8 by 2017. The Highway Safety office will continue to encourage law enforcement to conduct high visibility enforcement looking for distracted drivers through the HMV grants. Teen and adult education will also continue in the area using school presentations and media campaigns.

Other Funding Sources, Documents and Data to Achieve Goals

The Missouri Coalition for Roadway Safety will continue to be instrumental in helping to reduce the number of fatalities and serious injuries by providing funding support for distracted driving projects.

Other Performance Measure Goals/Projections

1. Decrease distracted driving involved fatalities by 1.41 percent annually, resulting in a five-year average distracted driving involved fatality goal of 86.5 by December 31, 2019.
2. Decrease distracted driving involved serious injuries by 4.56 percent annually, resulting in a five-year average distracted driving involved serious injury goal of 605.4 by December 31, 2019.

Young Drivers

Problem Identification

Traffic crashes are the leading cause of death among youth in Missouri, accounting for 11 percent of traffic fatalities during the last five years. Although only comprising approximately 8 percent of Missouri licensed drivers, young drivers were involved in 18.4 percent of fatal and serious injury crashes during the last five years. These early driving years are of particular concern because of driver inexperience and the high frequency of risky behaviors such as speeding, distracted and drowsy driving, alcohol/drug use and failing to use safety belts.



The top 5 contributing circumstances attributable to young drivers of motor vehicles involved in 2011-2015 Missouri fatal and serious injury crashes were:

1. Driving Too Fast for Conditions
2. Failed to Yield
3. Distracted / Inattentive
4. Improper Lane Usage / Change
5. Speed Exceeded Limit

Prior Year Performance

Young driver programs funded by the Highway Safety Office include a wide focus area, including seat belt use, underage drinking and general safe driving habits.

There were 124 young drivers (age 20 or younger) involved in 2016 fatal crashes, with a 2012-2016 moving average of 117.2; thereby not meeting the 2014-2018 moving average goal of 112.7 by 2017. The HSO will continue to focus on this young driving age group with the seat belt and distracted driving messages. Law enforcement will also be reminded that the GDL law creates a primary seat belt law for those under 18 years old.

Other Funding Sources, Documents and Data to Achieve Goals

The Missouri Coalition for Roadway Safety will continue to be instrumental in helping to reduce the number of fatalities and serious injuries by providing funding support for young driver focused projects.

In 2015, a Missouri Teen Driving Review SWOT Analysis was conducted by GHSA Consulting Services. The analysis provided Missouri with helpful insights and recommendations for improving the young driver programs.

Core Performance Measure Goals/Projections

1. Decrease drivers age 20 or younger involved in fatal crashes by 0.78 percent annually, resulting in a five-year average goal of 123.8 by December 31, 2019.

Other Performance Measure Goals/Projections

1. Decrease drivers age 20 or younger involved in serious injury crashes by 3.71 percent annually, resulting in a five-year average goal of 757.8 by December 31, 2019.

OLDER DRIVERS 65 YEARS OF AGE AND OVER

Continuing to drive safely and enjoying alternative transportation means enhanced mobility and independence for older adults in Missouri. These factors heavily influence the quality of life for older adults and their friends and families.



Statewide data reveals that the number of Missourians age 65 or over is projected to grow exponentially during the next 13 years, bringing the total number of older adults to an estimated 1.4 million (source: Missouri Office of Administration). This represents an 87 percent increase in older adults since the year 2000. This is not surprising given that across the nation 10,000 people will turn 65 every day through 2030. Statewide, adults 65 and over will make up more than 21 percent of the population by 2030. Many Missouri counties can expect 1 in 4 of their residents to be 65 or over at that time.

Missourians are living longer and desire to remain active in the community, which means there is a need to maintain independence and mobility; however, medical conditions that may impair driving ability become more likely in older age. Whether older adults have the capacity to meet their transportation needs is often measured by how many hold a valid driver license. In 2018, 882,634 people age 65 or older held a Missouri driver license. They accounted for 19 percent of the 4,480,170 persons licensed in the state (source: Missouri Department of Revenue). During the years of 2012 – 2016, 836 drivers over 65 years old were involved in fatal car crashes.

Additionally, as people age, fitness-to-drive (the ability to drive safely) can be compromised by changes in vision, movement, thinking and memory, or even use of certain medications. These risks increase in advanced older age, as does the risk of injury when a crash does occur. Our society is highly mobile. In some areas of the state, driving may be one of the few means of transportation, and the car remains important to many older Missourians. Although cars today are safer, new technology takes time to be incorporated into the overall vehicle fleet.

Prior Year Performance

The older driver programs conducted through Highway Safety funding have involved training for drivers, caregivers, family members and medical staff; development and research on screening/assessment tools; and public education of resources available. Focus has also been placed on establishing the correlation between performance of the Traffic Sign Naming Test and the on-road driver license testing. These research projects have proven to be beneficial to healthcare providers in assessing and advising neurologically-impaired drivers and their families about the option of returning safely to driving or adjusting to being a non-driver in the short- or long-term.

In 2016, there were 209 fatalities involving an older driver, with a 2012-2016 moving average of 173.2; thereby meeting the 2014-2018 moving average goal of 189.1 by 2017. In 2016, there

were 744 serious injuries involving an older driver, with a 2012-2016 moving average of 741.6; thereby not meeting the 2014-2018 moving average goal of 726 by 2017. Missouri plans to continue to reach the older driver population with outreach from Safe Communities programs conducting Fitness to Drive and the research and training conducted to the older drivers and families to assess driving ability and encourage driving retirement when needed.

Other Funding Sources, Documents and Data to Achieve Goals

The Missouri Coalition for Roadway Safety will continue to be instrumental in helping to reduce the number of fatalities and serious injuries by providing funding support for aggressive driving projects.

Other Performance Measure Goals/Projections

1. Based on an annual average increase of 5.63 percent in older driver involved fatalities from 2012 to 2017, Missouri is projecting 196.9 five-year average older driver involved fatalities by December 31, 2019.
2. Decrease older driver involved serious injuries by 0.94 percent annually, resulting in a five-year average older driver involved serious injury goal of 734.5 by December 31, 2019.

Commercial Motor Vehicles

Problem Identification

Commercial motor vehicles make up approximately 20 percent of all traffic on Missouri interstates. Between 2012 and 2016, CMVs were involved in 8.8 percent of all traffic crashes, 13.6 percent of fatal traffic crashes, and 7.8 percent of serious injury crashes in Missouri. It's a common misconception that the CMV driver is usually responsible for the crash. During the last five years, when analyzing the known CMV drivers involved in fatal and serious injury crashes, 56.7 percent had no contributing circumstance to the crashes.



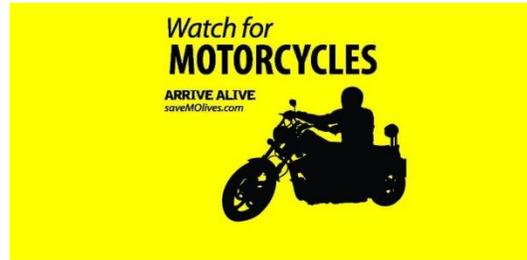
The Motor Carrier Safety Assistance Program (MCSAP) is a federal grant program that provides financial assistance to states to reduce the number and severity of crashes and hazardous materials incidents involving commercial motor vehicles. The goal of the MCSAP is to reduce CMV involved crashes, fatalities, and injuries through consistent, uniform and effective CMV safety programs. Investing grant monies in appropriate safety programs will increase the likelihood that safety defects, driver deficiencies, and unsafe motor carrier practices will be detected and corrected before they become contributing factors to crashes. The Traffic and Highway Safety Division administers MCSAP, but the MCSAP program operates under a separate federal grant. Goals, benchmarks and strategies are outlined within the Commercial Vehicle Safety Plan (CVSP), which is submitted to the Federal Motor Carrier Safety Administration.

Goals, benchmarks and strategies are outlined within the Commercial Vehicle Safety Plan (CVSP), which is submitted to the Federal Motor Carrier Safety Administration.

Motorcycle Safety

Problem Identification

A motorcycle is inherently more difficult to operate than a passenger vehicle, requiring more physical skill and offering riders almost no protection in a crash. Between 2012 and 2016 in Missouri, motorcycle operators were involved in 481 fatalities. Of those 481 fatalities, 448 were the motorcycle drivers and/or riders. Motorcycles currently represent 2 percent of the registered vehicles in Missouri but were involved in 12.1 percent of all fatal traffic crashes during the last five years (2012-2016).



An area of particular concern is the number of unlicensed and improperly licensed motorcycle operators involved in crashes. Between 2012 and 2016, 39.7 percent of the motorcycle involved fatalities involved an unlicensed or improperly licensed motorcycle operator.

Prior Year Performance

Projects funded by the Highway Safety Office in the motorcycle safety program area focus on driver awareness and motorcyclist safety. There were 127 motorcyclist fatalities in 2016, with a 2012-2016 moving average of 98.6; thereby meeting the 2014-2018 moving average goal of 106.4 by 2017. There were 15 unhelmeted fatalities in 2016, with a 2012-2016 moving average of 9.0; thereby not meeting the 2014-2018 moving average goal of 8.9 by 2017. The 2016 goal for unhelmeted fatalities used in the 2016 Annual Report included non-DOT compliant helmeted motorcyclists. The Highway Safety Office will continue its efforts to encourage drivers to always be aware of their surroundings and Watch for Motorcycles. Funding will also be used for media efforts for both motorcyclists and vehicle drivers.

Other Funding Sources, Documents and Data to Achieve Goals

The Missouri Coalition for Roadway Safety will continue to be instrumental in helping to reduce the number of fatalities and serious injuries by providing funding support for motorcycle safety projects.

Core Performance Measure Goals/Projections

1. Based on an annual average increase of 2.12 percent in motorcyclist fatalities from 2012 to 2017, Missouri is projecting 115.3 five-year average motorcyclist fatalities by December 31, 2019.
2. Based on an annual average increase of 11.11 percent in unhelmeted motorcyclist fatalities from 2012 to 2017, Missouri is projecting 13.8 five-year average unhelmeted motorcyclist fatalities by December 31, 2019.

Other Performance Measure Goals/Projections

1. Based on an annual average increase of 6.09 percent in serious injuries involving unlicensed/improperly licensed motorcycle operators from 2012 to 2017, Missouri is projecting 45.5 five-year average serious injuries involving unlicensed/improperly licensed motorcycle operators by December 31, 2019.

School Bus Safety

Problem Identification

According to the U.S. Department of Transportation, school buses are the safest mode of transportation for getting children back and forth to school. They are designed to be safer than passenger vehicles.

However, there are still school bus related fatalities and serious injuries that occur.



From 2012 through 2016, there were 12 fatalities and 87 serious injuries involving school buses. Of those 99 fatalities and serious injuries, 31 were occupants of school buses; four were pedestrians, one was a bicyclist, and 63 were drivers and occupants of other vehicles.

Prior Year Performance

There was 1 fatality involving school buses in 2016, with a 2012-2016 moving average of 0.2; thereby meeting the 2014-2018 moving average goal of 10.6 by 2017.

Other Funding Sources, Documents and Data to Achieve Goals

The Missouri Coalition for Roadway Safety will continue to be instrumental in helping to reduce the number of fatalities and serious injuries by providing funding support for school bus projects.

Other Performance Measure Goals/Projections

1. Based on an annual average increase of 13.33 percent in school bus/school bus signal involved fatalities from 2012 to 2017, Missouri is projecting 2.4 five-year average school bus/school bus signal involved fatalities by December 31, 2019.
2. Decrease school bus/school bus signal involved serious injuries by 4.0 percent annually, resulting in a five-year average school bus/school bus signal involved serious injury goal of 14.7 by December 31, 2019.

Education Countermeasures

The Highway Safety office continues membership of the Statewide School Bus Task Force. The Task Force is responsible for developing strategies for improving school bus safety, analyzing current state and federal laws and programs, reviewing the issue of seat belts in school buses, recommending legislation and recommending best practices or policies to be implemented by state or local governments to enhance school bus safety.

Non-Motorized (Pedestrians and Bicyclists)

Pedestrians

Problem Identification

Walking is an essential transportation mode for many Missourians. For transit or motor vehicle users, every trip begins and ends as a pedestrian. Public health, economic, and environmental factors are elevating the importance of this mode. Many Missourians do not have access to a personal vehicle, are not physically capable of driving, simply decide not to drive, or delay licensure. Across Missouri, communities are responding with changes to land-use development practices and complete streets policies.



Many of the urban areas like St. Louis, Kansas City, Springfield and Columbia have robust pedestrian networks.

Motor vehicle crashes involving pedestrians do not occur in extremely large numbers, but when a pedestrian is involved in a traffic crash, the potential for injury or death is much greater. From 2012 through 2016, pedestrian involved crashes comprised less than 1 percent of all crashes, but accounted for 10.4 percent of all fatalities and 5.2 percent of all serious injuries in Missouri.

Pedestrian age and vehicle speed are the two most significant factors determining the outcome of a crash. This is especially true for children and older pedestrians. Research shows that pedestrians hit by a vehicle traveling 20 mph have a 5 percent chance of death, whereas those struck at 40 mph have an 85 percent chance of death.

Pedestrian trips are a larger percentage of all trips in the urbanized areas of the state. Of the 2012-2016 Missouri pedestrian fatalities, 75.8 percent occurred in urban areas and 24.2 percent occurred in rural areas. The Vision Zero approach to traffic safety, which began in Sweden and has now been adopted in Missouri, views traffic deaths and serious injuries as preventable not inevitable.

When evaluating pedestrian crashes in Missouri, it is important to know how a pedestrian is defined. The general perception of a pedestrian is an individual who has chosen walking as their preferred mode of transportation. For the purposes of traffic safety, the definition is broader and includes anyone on foot or using a wheelchair. For example, a person who intentionally exits a vehicle and then is struck by another vehicle is considered a pedestrian.

Core Performance Measure Goals/Projections

1. Based on an annual average increase of 3.33 percent in pedestrian fatalities from 2012 to 2017, Missouri is projecting 100.8 five-year average pedestrian fatalities by December 31, 2019.

Bicyclists

Problem Identification

Bicycling is an essential transportation mode for many Missourians. Public health, economic, and environmental factors are elevating the importance of this mode. Across Missouri, communities are responding with changes to land-use development practice and complete streets policies. Many of the urban areas like St. Louis, Kansas City, Springfield and Columbia have robust bicycling networks.

While bicycling is a safe and healthy mode of travel, potential crashes with motorized vehicles make these road users vulnerable to serious injury or death if struck. Between 2012 and 2016, cyclists made up .08 percent (32 of 4,164) of the total statewide fatalities.

Between 2012 and 2016, only one of the 25 Missouri bicycle fatalities was female. The Vision Zero movement in some cities has led to grassroots change in how roadway deaths are viewed crashes involving pedestrians and bicyclists are preventable.

Other Funding Sources, Documents and Data to Achieve Goals

The Missouri Coalition for Roadway Safety will continue to be instrumental in helping to reduce the number of fatalities and serious injuries by providing funding support for bicycle safety projects.

Core Performance Measure Goals/Projections

1. Based on an annual average increase of 10.00 percent in bicyclist fatalities from 2012 to 2017, Missouri is projecting 9.4 five-year average bicyclist fatalities by December 31, 2019.

Roadway Safety/Traffic Engineering

Problem Identification

Engineering is a vital component of a comprehensive approach to improve highway safety. The techniques and strategies engineers use to design and improve roads can have a direct impact on the safety of motorists. Engineering countermeasures to improve safety can be implemented during the design of a roadway or in modifications after a road has already been built. During design, engineers strive to create a roadway environment that mitigates traffic crashes from the start. This can be achieved in various aspects of design: lane widths, the use of shoulders, curve design, signing, striping, rumble strips, etc. However, some roads were designed long before today's safety countermeasures were discovered. As a result, many roads will often be retrofitted to include safety enhancements such as rumble strips, brighter signs and pavement marking, and intersection improvements.

One of the most successful examples of this in Missouri is the addition of paved shoulders and rumble stripes on most of Missouri's most heavily traveled roads. Over 10,000 miles of rumble stripes have been installed. This combination of paved shoulders and rumble stripes has proven very beneficial in reducing crashes in which a vehicle leaves its lane or the roadway, one of Missouri's most common severe crash types. Roundabouts and J-Turn intersections are successful examples of how intersections can be improved to eliminate or greatly reduce right angle crashes, another common severe crash type in Missouri.

Other Funding Sources, Documents and Data to Achieve Goals

The Missouri Coalition for Roadway Safety will continue to be instrumental in helping to reduce the number of fatalities and serious injuries by providing funding support, engineering projects and conferences for the engineering community.

Training, Miscellaneous and Multi-Program Projects

Problem Identification

While most of the Highway Safety projects fall under obvious program areas, a select few projects are outside the scope of the typical areas. However, these projects are extremely important in keeping people safe on Missouri roadways. Those projects are described in this section.



The Highway Safety Office sponsors training for law enforcement officers, first responders, and other safety advocates on a wide variety of program areas. One area of funding is the prosecutorial services that are necessary to prosecute impaired drivers. Without these services, many impaired drivers would be free to drive impaired.

Another area is railroad crossings; these are often forgotten when thinking of roadway safety. Missouri houses the second and third largest hubs for rail traffic in the nation. While this is a benefit to the state, many drivers feel railroad crossings are a burden to obey. One HSO project focuses on these crossings by assisting law enforcement agencies in enforcing the crossing guard laws of the state. Too many people ignore the crossing guard signs and lose their lives in the process.

Prior Year Performance

These projects have been funded for multiple years and have shown an increasing benefit to Missouri.

In 2016, fatalities at highway rail crossings remained virtually the same as 2015 and much higher than 2014, while the number of injuries did the same, however both remain too high.

Two fatalities occurred in 2013 and 2014 each, but seven occurred in 2015 and 2016. Injuries went the opposite direction with 31 and 38 occurring in 2013 and 2014 respectively and 19 and 17 in 2015 and 2016 respectively.

Six people were killed and nine were injured while walking on or along the railroad tracks in 2016, which is a significant decrease from the previous two years, and these numbers have remained constant over the past several years.

Other Funding Sources, Documents and Data to Achieve Goals

The Missouri Coalition for Roadway Safety will continue to be instrumental in helping to reduce the number of fatalities and serious injuries by providing funding support for aggressive driving projects.

Missouri Office of Highway Safety FY19 Planned Projects by Program Area

Planning & Administration

Planned Activity Unique Identifier	Planned Activity Name	Planned Activity Description	Subrecipients	Total \$
PA-2019-02-01-00	2019 Planning & Administration	Associated costs for federally funded P&A include staff travel, travel, contract award meetings, office supplies, excluding those that are not allowable under federal rule and administrative payroll. Federal participation does not exceed 50% of the total cost of P&A. Federal P&A does not exceed 13% of the total 402 funds reimbursed.	Highway Safety and Traffic Division	\$115,000.00

Communications (Media)

Planned Activity Unique Identifier	Planned Activity Name	Planned Activity Description	Subrecipients	Total \$
154AL-2019-AL-B4-00	Alliance Sports Marketing	The funding will allow the HSO to contract with Alliance Sports Marketing to coordinate sponsorship elements with 20 sports venues throughout Missouri. This campaign brings the impaired driving message to dirt track venues and minor league sporting events where recreational activity and drinking occur.	Highway Safety and Traffic Division	\$80,000.00
PM-2019-02-05-00	Work Zone Awareness Campaign	Funding will provide paid media to supplement the statewide Work Zone Awareness campaign. Media includes radio, digital, online, print and social media.	Highway Safety and Traffic Division	\$50,000.00
PM-2019-02-07-00	PI Creative Services and Paid Media	This funding will be used for professional marketing services to generate effective and compelling messages to reach Missourians regarding safe driving. Creative work produced could include TV and radio scripts, and/or production, posters, billboards, online banners, etc. It could also include any technical services such as dubbing fees for creative products. We are now also incorporating Spanish and ASL into all of our messages. These versions require additional funding.	Highway Safety and Traffic Division	\$150,000.00
PM-2019-02-06-00	Bike/Pedestrian and Distracted Driving	This funding will be used for professional marketing services to generate effective and compelling messages to reach Missourians regarding safe driving. Creative work produced could include TV and radio scripts, and/or production, posters, billboards, online banners, etc. It could also include any technical services such as dubbing fees for creative products. We are now also incorporating Spanish and ASL into all of our messages. These versions require additional funding.	Highway Safety and Traffic Division	\$150,000.00
PM-2019-02-04-00	Buckle Up Phone Down Paid Media	Media will be purchased during the year to promote MoDOT's "Buckle Up, Phone Down" Campaign. Media will include radio, digital, print, online and social media.	Highway Safety and Traffic Division	\$200,000.00

RH-2019-02-01-00	Missouri Operation Lifesaver	Operation lifesaver will conduct safety presentations, Positive Enforcement Efforts, Officer on the Train programs, and Grade Crossing Collision Investigation courses across Missouri. Funding will provide safety materials and supplies, and expenses to conduct the enforcement.	Missouri Operation Lifesaver	\$15,000.00
PT-2019-02-69-00	Traffic Safety Informational Initiative	The Olivette Police Department will conduct 4-5 traffic safety informational events. The events will be conducted in conjunction with other Olivette community functions to help increase exposure to as many people as possible. The City of Olivette holds many functions throughout the year that are attended by not only Olivette residents but, members of surrounding communities.	Olivette Police Dept.	\$1,630.49

Speed Management

Planned Activity Unique Identifier	Planned Activity Name	Planned Activity Description	Subrecipients	Total \$
PT-2019-02-00-G0	402 HMV Enforcement	This funding will be used to pay for officer overtime, full time officer salary and fringe, and equipment which includes radars/lidars, window tint meters, crash reconstruction total stations, flares and flashlights. Funding will also be utilized to provide training for law enforcement in traffic safety countermeasures and reconstruction.	Arnold Police Dept., Ballwin Police Dept., Belton Police Dept., Blue Springs Police Dept., Bolivar Police Dept., Boone County Sheriff's Dept., Branson Police Dept., Buchanan County Sheriff's Dept., Butler County Sheriff's Office, Callaway County Sheriff's Office, Calverton Park Police Dept., Camden County Sheriff's Office, Camdenton Police Dept., Cameron Police Dept., Cape Girardeau Police Dept., Cass County Sheriff's Office, Chesterfield Police Dept., Chillicothe Police	\$2,589,223.57

PT-2019-02-A1-00	2019 Police Traffic Services	In order to effectively carry out the mission of the state Highway Safety Office, it is necessary to have program coordinators assigned to the various traffic safety program areas. The time these individuals work on traffic safety countermeasures within the program areas must be able to be charged against the federal highway safety funds allocated for this purpose.	Highway Safety and Traffic Division	\$329,000.00
PT-2019-02-00-00	THSD-Statewide PTS	This project is for a statewide effort to improve police traffic services programs. When needed, this account will be reduced to fund specific sub-recipient agreements.	Highway Safety and Traffic Division	\$4,500,000.00

Impaired Driving (Drug and Alcohol)

Planned Activity Unique Identifier	Planned Activity Name	Planned Activity Description	Subrecipients	Total \$
154AL-2019-AL-00-G0	154 Impaired Driving Enforcement	This funding will be used to pay for officer overtime, full time officer salary and fringe, police vehicles, and equipment to include flares, in-car video systems, in-car computers, vehicle lighting, preliminary breath testers/mouthpieces, dry gas simulators, wireless air cards, traffic cones, body cameras and flashlights. Funding will also be utilized to provide training for law enforcement in impaired driving traffic safety countermeasures.	Arnold Police Dept., Ballwin Police Dept., Belton Police Dept., Benton County Sheriff's Office, Billings Police Dept., Blue Springs Police Dept., Bolivar Police Dept., Boone County Sheriff's Dept., Branson Police Dept., Byrnes Mill Police Dept., Calverton Park Police Dept., Camden County Sheriff's Office, Cape Girardeau County Sheriff's Office, Cape Girardeau Police Dept., Cartersville Police Dept., Cass County Sheriff's Office, Chesterfield Police Dept., Christian County Sheriff's Office,	\$3,390,631.34

M5HVE-2019-03-00-G0	405d Impaired Driving Enforcement	This funding will be used to pay for officer overtime, full time officer salary and fringe, police vehicles, and equipment to include flares, in-car video systems, in-car computers, vehicle lighting, preliminary breath testers/mouthpieces, dry gas simulators, wireless air cards, traffic cones, body cameras and flashlights. Funding will also be utilized to provide training for law enforcement in impaired driving traffic safety countermeasures.	Boone County Sheriff's Dept., Columbia Police Dept., Greene County Sheriff's Office, Highway Safety and Traffic Division, Jackson County Sheriff's Office, Johnson County Sheriff's Dept., Joplin Police Dept., Kearney Police Dept., Lamar Police Dept., Lee's Summit Police Dept., MO State Highway Patrol, Pettis County Sheriff's Office, Platte County Sheriff's Office, Smithville Police Dept., Union Police Dept., Waynesville Police Dept., Webb City Police Dept., Wentzville Police Dept.	\$918,127.31
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M5TR-2019-03-05-00	Safe Communities/TRACTION youth impaired	TRACTION - <i>Teens Taking Action to Prevent Traffic Crashes</i> is a peer-to-peer youth traffic safety leadership training program. High school students and advisors are invited to attend one of three training programs as a school team. The training promotes safe driving habits for youth and provides students and their adult advisors with the motivation, information, skills, and support necessary to develop a plan of action that addresses impaired driving driving habits through events and activities to be implemented within their school and communities the following year. The funding will provide staff training, supplies, conference development and travel costs to conduct three conferences and a one-day workshop.	Cape Girardeau Safe Communities	\$97,829.65
M5OT-2019-03-05-00	In-house Impaired Driving Project	This project will cover activities in the impaired driving program area including: development and printing costs; educational programs; travel expenses for speaking engagements or conferences; supplies for training programs or educational activities; assessments; etc.	Highway Safety and Traffic Division	\$20,000.00
154AL-2019-AL-B5-00	Impaired Driving Paid Media 154	The funding will provide paid media campaigns for Drive Sober or Get Pulled Over, Youth Alcohol, Quarterly Impaired Driving Campaigns, and various other impaired driving efforts for, but not limited to Super Bowl Sunday, Cinco De Mayo, statewide festivals, etc. Includes Alcohol Impaired Driving Only.	Highway Safety and Traffic Division	\$650,000.00
M5PEM-2019-03-01-00	Paid Media Impaired Driving 405D	The funding will provide paid media campaigns for Drive Sober or Get Pulled Over, Youth Alcohol, Quarterly Impaired Driving Campaigns, and various other impaired driving efforts for, but not limited to Super Bowl Sunday, Cinco De Mayo, statewide festivals, etc. Includes Drug and Alcohol Impaired Driving messages.	Highway Safety and Traffic Division	\$750,000.00
M5IDC-2019-03-02-00	2019 405d Mid Impaired Driving Coord.	Funding will be allocated for coordination activities. Costs will include salaries, fringe benefits and travel by highway safety program staff.	Highway Safety and Traffic Division	\$96,000.00
M5IDC-2019-03-01-00	2019 405d Youth Alcohol Coordination	Funding will be allocated for coordination activities. Costs will include salaries, fringe benefits and travel by highway safety program staff.	Highway Safety and Traffic Division	\$96,000.00

M5TR-2019-03-07-00	Youth Alcohol Program	The majority of this project supports three, POST Certified, Underage Drinking Law Enforcement Trainings annually. In the 7-hour class, law enforcement officers gain knowledge on how to enforce underage drinking laws as well as how to reduce underage drinking. Topics vary from year to year. The funding will also be used for general program support and to support the National Council for Alcohol and Drug Addiction conference.	Highway Safety and Traffic Division	\$31,500.00
154AL-2019-AL-86-00	BA Instrument & SFST Program	The Highway Safety Office will be developing a program to track breath instrument placement with local law enforcement agencies and depreciation costs of those instruments. In addition, the program will track SFST instructors and practitioners.	Highway Safety and Traffic Division	\$150,000.00
M5X-2019-03-00-00	HSTD Statewide 405d Impaired Driving Mid	This project is for a statewide effort to improve impaired driving programs. When needed, this account will be reduced to fund specific sub-recipient agreements.	Highway Safety and Traffic Division	\$4,300,000.00
154AL-2019-AL-00-00	HSTD Statewide 154AL Program	This project is for a statewide effort to improve impaired driving programs. When needed, this account will be reduced to fund specific sub-recipient agreements.	Highway Safety and Traffic Division	\$6,000,000.00
AI-2019-04-02-00	Advanced Crash Investigation Training	Advanced crash investigation training for KCPD crash reconstructionists to utilize during impaired driving related crashes resulting in fatalities and/or serious injuries. The skills, knowledge and techniques gained through these courses will teach officers how to recognize and detect specific facts to aid in prosecuting impaired drivers when they recklessly cause a crash and death to another.	Kansas City MO Board of Police Commissioners	\$20,000.00

M5OT-2019-03-01-00	DITEP 2019	The Missouri Police Chiefs Association provides Drug Impairment Training for Educational Professionals (DITEP) across the state. This training is intended to provide school administrators, nurses and school resource officers with a systematic approach to recognizing and evaluating individuals in the academic environment who are abusing and are impaired by drugs, both legal and illegal, in order to provide early recognition and intervention. Funding for this project covers instructor fees, training and travel costs, and printing.	Missouri Police Chiefs Association	\$33,000.00
154AL-2019-AL-24-00	Impaired Driving Countermeasures	The Missouri Safety Center provides professional staff for coordination of the breath alcohol, SFST, and ignition interlock programs. The Safety Center provides oversight of breath instrument placement, maintenance and service, inventory, and technical assistance across the State. In addition, MSC provides technical assistance in the area of ignition interlocks by monitoring the ignition interlock service centers and field testing ignition interlock devices to determine compliance with the administrative rules governing the program. The MSC provides a call center for those who have questions about each of the programs and DWI clients who have questions regarding ignition interlocks. The funding covers costs such as salaries and fringe, equipment, operational expenses, training, travel, and indirect costs.	Missouri Safety Center	\$748,982.54
M5OT-2019-03-02-00	Drug Impaired Driving	The Highway Safety Office contracts with the Missouri Safety Center for coordination of the DRE program in the state. The DRE State Coordinator provides oversight of the program and works with members of the DRE/SFST Technical Panel, chaired by a member of the Missouri State Highway Patrol. This project covers salaries, equipment, operational and travel expenses and indirect costs.	Missouri Safety Center	\$157,238.51
154AL-2019-AL-71-00	Alcohol LE Liaison	The Missouri Safety Center will employ up to three law enforcement liaisons (LEL) to meet the goals and objectives of the occupant protection program area in order to move toward meeting the 2019 goal.	Missouri Safety Center	\$174,676.76

154AL-2019-AL-19-00	Enforcement - Drive Sober Campaign	Through the cooperation of the Safety Center, the Highway Safety office promotes law enforcement mobilization efforts, works to increase participation in statewide enforcement efforts and provides funding for saturation enforcement teams. Budget items include officer overtime/fringe, salary and fringe for one office professional (40%), office supplies and indirect rate.	Missouri Safety Center	\$420,000.00
M5TR-2019-03-01-00	Training for Law Enforcement Officers	Missouri Southern State University provides training to law enforcement in the area of impaired driving. The courses offered are DWI Crash Investigation, DWI Enforcement Strategies for Small Departments, SFST Update, ARIDE, and Spanish for law enforcement conducting SFSTs. MSSU charges a flat fee per course which covers all the expenses for conducting the course.	Missouri Southern State University	\$50,400.00
154AL-2019-AL-25-00	Attorney and Legal Assistant	coordinators, state coordinator and the federal database. The system also allows for email notification of DREs, regional coordinators and the state coordinator. DRE Candidates are trained on the new system as part of their DRE training, conducting their field certifications using the system. The program is proving to be a great administrative tool and will add to the state's ability to track drug involvement in traffic stops. This project covers the costs for hosting the database, IT support of the program, and any enhancements.	MO Dept. of Revenue	\$135,720.40
M5OT-2019-03-03-00	DOR and Law Enforcement Training	The Office of Highway Safety provides grant funding to the Missouri Department of Revenue for staff attorney training and regional workshops for law enforcement. It is imperative to keep both law enforcement and the department attorneys updated in current impaired-driving related training and apprised of new case law in the state. The funding covers printing and any travel expenses that are incurred.	MO Dept. of Revenue	\$22,844.00

154AL-2019-AL-F0-00	Alcohol Safety & Awareness Program	This project with the Missouri Division of Alcohol and Tobacco Control (ATC) is part of ATC's two-prong approach to reduce underage drinking. This education project covers expenses (print material, equipment, salary, overtime, mileage) to provide server training. The program teaches responsible retail practices and gives the retailer the knowledge and tools to prevent service of alcohol to minors and intoxicated patrons.	MO Div. of Alcohol and Tobacco Control	\$96,000.00
M5CS-2019-03-02-00	Traffic Safety Resource Prosecutor	This project provides for two traffic safety resource prosecutors (TSRP) that focus on traffic safety issues, particularly impaired driving, and serve as a resource to other prosecutors and law enforcement officers. The Deputy Director of the Missouri Office of Prosecution Services serves half-time as a TSRP and a special prosecutor in the office serves fulltime. The TSRP Program will provide training to law enforcement, prosecutors and other traffic safety advocates in the state. Traffic Safety Newsletters will be sent out as necessary to inform the criminal justice community of any new issues and provide an update on case law. In addition the TSRP program will provide technical assistance and serve as special prosecutor on some cases. The funding for this project covers salaries, coordination costs for training programs, operational & educational expenses and travel expenses.	MO Office of Prosecution Services	\$281,889.78
M5TR-2019-03-02-00	BAC/DRE/ARIDE Training	This project covers impaired driving training for both the Missouri State Highway Patrol and local law enforcement agencies. Some of the training is for continuing education for Highway Patrol staff, while other training is hosted at the Highway Patrol Training Academy. The grant covers expenses associated with attendance at national impaired driving conferences/training and courses offered at the Highway Patrol Training Academy such as Breath Alcohol training, SFST Instructor, ARIDE and DRE training/recertification. Some equipment will also be purchased under this grant for breath instrument calibration and the DREs.	MO State Highway Patrol	\$100,116.40

M5HVE-2019-03-12-00	DWI Tracking System (DWITS)	The DWITS provides a means of tracking driving while intoxicated (DWI) offenses through their full life cycle -- from arrest to final court disposition. The Missouri State Highway Patrol offers regional training seminars on the DWI Tracking System with training curriculum geared toward law enforcement agencies, prosecuting attorney offices and courts. Budget items include postage, supplies for DWITS tutorials and travel expenses.	MO State Highway Patrol	\$4,400.00
154AL-2019-AL-26-00	Court Monitoring Program	Mothers Against Drunk Driving continues to partner with the Office of Highway Safety to track and monitor DWI offenses (misdemeanor and felony) in specific, targeted counties in Missouri. Through data collected, any trends and/or breakdowns that occur throughout the judicial proceedings will be identified, analyzed and offered solutions. Court monitoring in the state is conducted by both paid and volunteer staff with MADD. Funding for this project covers salaries for coordination of the program, travel expenses, office supplies and indirect costs.	Mothers Against Drunk Driving	\$129,500.80
154AL-2019-AL-B2-00	MADD Power of Parents and Power of Youth	MADD Power of Parents and Power of Youth programs are part of a community mobilization to educate entire communities about the dangers and impact of underage alcohol use. Power of Parents seeks to equip parents to have intentional, ongoing and potentially lifesaving conversations about alcohol with their kids. Power of Youth empowers teens to resist peer pressure to make smart, healthy decisions about not drinking alcohol before they turn 21 and to never get in a car with someone who has been drinking. Missouri's hopes for a safer future are riding on tomorrow's drivers and we want to get our youth off to a good start. MADD is focused on tackling underage drinking, a problem that threatens the safety of our kids and endangers entire communities, now and down the road. Funding will be used to support travel, training, educational materials and operational expenses of the program.	Mothers Against Drunk Driving	\$100,000.00

M5CS-2019-03-01-00	DWI Court Project	The Office of State Courts Administrator (OSCA) receives grant funding for DWI court expansion in the State. DWI courts provide a cost-effective alternative to the traditional criminal justice system in addressing the risk to public safety caused by hardcore impaired drivers. The Missouri Supreme Court adopted Court Operating Rule (COR) 26. This rule requires all courts that seek to establish a DWI court or docket to submit a Plan of Operation to the Drug Courts Coordinating Commission for approval before issuing a limited driving privilege. This project covers costs associated with establishing new DWI Courts in the state. Those costs include: lab testing, offender supervision, law enforcement trackers, treatment, educational materials, training, and travel expenses.	Office of State Courts Administrator	\$215,001.00
M5OT-2019-03-04-00	DRE Sustainment and Enhancements	The Highway Safety Office contracts with the REJIS Commission to host an automated system for data collection, data sharing, tracking of certification and overall administration of the DRE program. This system allows for automatic transmission of drug evaluations to the regional	REJIS	\$41,748.00
154AL-2019-AL-F2-00	Missouri Safe and Sober	Missouri Safe and Sober Program is an effective program that educates students for free on the dangers of drugs and alcohol while reinforcing positive decision making and responsibility. The program is designed to give high school and middle school students, along with their parents and teachers, the information they need to prevent underage drinking. By properly educating students and their parents on the criminal, civil, personal and emotional consequences of underage drinking, the hope is to encourage safe choices both now and as the students' transition toward adulthood. The funding will provide program development, travel, educational material and operational expenses of the program.	Safe and Sober, Inc.	\$330,000.00

M5TR-2019-03-06-00	SMART, CHEERS, DRIVE SAFE, DRIVE SMART	SMART, CHEERS and DRIVE SAFE/DRIVE SMART. Programs are college and community based programs to encourage college students to make smart choices when it comes to drinking and driving, and encourage the use of designated drivers. The programs also work with retail and liquor establishments to educate employees on over service of alcohol and selling to minors. The funding will provide training, salary, Meeting of the Minds conference support, educational materials and operational expenses of the program.	University of MO Curators	\$320,000.00
154AL-2019-AL-F3-00	ThinkFirst - Youth Alcohol	ThinkFirst Missouri is an evidence-based trauma prevention program of the University of Missouri, School of Medicine, Department of Physical Medicine & Rehabilitation. The award-winning programs of ThinkFirst educate people, especially high-risk young people about their vulnerability to brain and spinal cord injury, common causes of these injuries (such as driving impaired) and how to prevent them. The mission of ThinkFirst is to prevent traumatic injuries through education, research and policy. The most effective component of the program features the personal testimony of a ThinkFirst Voices for Injury Prevention (VIP) speaker. VIP speakers are people who have sustained a brain or spinal cord injury, usually due to a motor vehicle crash. Funding will be used to support travel, staff salary and program expenses.	University of MO Curators	\$120,000.00
M5TR-2019-03-04-00	Is It Worth It?	The Injury Prevention and Trauma Outreach Program at the University of Missouri, focuses on educating young drivers on all aspects of safe driving and rules of the roadway. Teens will be educated on Missouri's roadway laws, common roadway signs, safety precautions and the importance of accepting full responsibility for their own safety and the safety of others, while driving. Presentations are both informative and interactive and focused heavily on seatbelt use, impaired driving and distracted driving.	University of MO Curators	\$20,000.00
154AL-2019-AL-F5-00	Ignition Interlock Database	Develop and implement a database/tracking system for MoDOT, Missouri Department of Revenue and Missouri Safety Center to track issues with ignition interlock devices.	Highway Safety and Traffic Division	\$175,000.00

Occupant Protection (Adult and Child Passenger Safety)

Planned Activity Unique Identifier	Planned Activity Name	Planned Activity Description	Subrecipients	Total \$
M2HVE-2019-05-00-G0	Occupant Protection Enforcement	This funding will be used to pay for officer overtime for year-round occupant protection enforcement projects and also for special mobilization campaigns including Teen Seat Belt, Click It or Ticket, and Child Passenger Safety week.	Adair County Sheriff's Office, Arnold Police Dept., Ballwin Police Dept., Calverton Park Police Dept., Cape Girardeau County Sheriff's Office, Creve Coeur Police Dept., Dexter Police Dept., Eureka Police Dept., Florissant Police Dept., Grandview Police Dept., Greene County Sheriff's Office, Harrisonville Police Dept., Hazelwood Police Dept., Independence Police Dept., Jackson Police Dept., Jefferson County Sheriff's Office, Kansas City MO Board of Police	\$450,777.20

CR-2019-05-02-00	402 Car Seat Distribution	Child passenger safety programs are conducted statewide focusing on age birth through age 14. Car seats are distributed through Missouri's network of approximately 175 NHTSA registered Inspection Stations and over 1,000 CPS Technicians to low income individuals in need of a seat. This program will help ensure that parents/caregivers properly install safety seats for young children. Funding will be used for the purchase of convertible and high back booster child safety seats.	Highway Safety and Traffic Division	\$50,000.00
M2CSS-2019-05-01-00	405 Car Seat Distribution	Child passenger safety programs are conducted statewide focusing on age birth through age 14. Car seats are distributed through Missouri's network of approximately 175 NHTSA registered Inspection Stations and over 1,000 CPS Technicians to low income individuals in need of a seat. This program will help ensure that parents/caregivers properly install safety seats for young children. Funding will be used for the purchase of convertible and high back booster child safety seats.	Highway Safety and Traffic Division	\$49,850.57
M2CPS-2019-05-01-00	CPS Program Training	The HSO and Department of Health and Senior Services are working together to provide support to individuals who wish to become CPS Technicians. Grant funding will be provided for training costs and travel to attend the 3-day CPS Technician training course. This program will help ensure that parents/caregivers properly install safety seats for young children.	Highway Safety and Traffic Division	\$65,000.00
M2PE-2019-05-02-00	Click it or Ticket Paid Media	In order to continue to raise awareness and change driving attitudes and behaviors, the safe driving messages need to be perpetuated through traditional media vehicles (TV, radio, print, outdoor, digital) as well as through social media throughout the year.	Highway Safety and Traffic Division	\$200,000.00
CR-2019-05-01-00	CPS Program Activities Administration	The funding for this project will support the HSO CPS program, to include training expenses, LATCH Manuals, and other supplies needed for CPS courses.	Highway Safety and Traffic Division	\$10,000.00
M2CPS-2019-05-04-00	Child Passenger Safety Campaign	Paid media will be used to target parents or care givers about the importance of properly restraining children as they travel on Missouri roadways.	Highway Safety and Traffic Division	\$100,000.00

M2CPS-2019-05-03-00	2019 405b Low CPS Coordination	Funding will be allocated for coordination activities in this area. Costs will include salaries, fringe benefits and travel by highway safety program staff.	Highway Safety and Traffic Division	\$30,000.00
M2PE-2019-05-03-00	Youth Seat Belt Campaign	The funding will allow the HSO to work with a media agency to create or revise a media campaign regarding teen seat belt use. The media should include TV, radio, internet, social media and any other media outlets available.	Highway Safety and Traffic Division	\$175,000.00
M2X-2019-05-00-00	THSD-Statewide 405b Low	This project is for a statewide effort to improve occupant protection programs. When needed, this account will be reduced to fund specific sub-recipient agreements.	Highway Safety and Traffic Division	\$1,500,000.00
CP-2019-09-02-00	Occupant Protection - Injury Prevention	The Mercy Injury Prevention Center plans to target children and teen drivers as the key concerns to address. An outreach coordinator will work with low income families to provide CPS support and implement the Alive at 25 program in the communities. Funding will provide staff training and travel; educational materials and fees; salary; and certification fees.	Mercy Hospital	\$60,000.00
PT-2019-02-66-00	Statewide Safety Belt Survey	The Missouri Safety Center will manage the NHTSA-approved Missouri statewide seat belt survey for 2019, This survey will be conducted in 28 counties statewide that are in the top 85% of vehicle occupant fatalities in the state. This project will cover the expense to train and monitor data collectors (surveyors), scheduling, field protocols and reporting requirements, compile and analyze the survey data, furnish a detailed report of the findings, and provide updated maps of safety belt usage by site.	Missouri Safety Center	\$162,925.94
PT-2019-02-68-00	Occupant Protection LE Liaison	The Missouri Safety Center employ up to three law enforcement liaisons (LEL) to meet the goals and objectives of the occupant protection program area in order to move toward meeting the 2019 goal.	Missouri Safety Center	\$84,634.36

PT-2019-02-67-00	Occupant Protection Enforcement Campaign	The Missouri Safety Center (MSC) will manage this program by encouraging targeted law enforcement agencies to participate in the State's national CIOT occupant protection enforcement and special mobilization efforts. This will be accomplished through sub-award grants to law enforcement agencies, making available overtime funds to increase occupant protection enforcement during the May and June national CIOT campaign, the teen seat belt campaign and the CPS campaign. High Visibility Enforcement is a proven effective strategy used to increase seat belt use.	Missouri Safety Center	\$273,409.80
M2CPS-2019-05-02-00	Child Passenger Safety	The DHSS will provide financial support for identified ambulance services to send personnel to the CPS technician training by covering the CPS technician training fee. Each ambulance service will agree to become a fitting station for a period of three years after receiving certification.	MO Dept. of Health and Senior Services	\$23,375.00
SA-2019-09-00-G0	Safe Communities Programs	Two safe communities programs throughout the state focus efforts on seat belt education for all ages. These programs meet the goals set by the HSO and help to reduce unrestrained fatalities by focusing on low belt use areas and groups. Funding for those programs will support travel expenses, educational material, supplies and salary.	St. Joseph Safety & Health Council, Safety Council of Greater St. Louis	\$80,000.00

CP-2019-09-05-00	ThinkFirst Missouri	<p>ThinkFirst Missouri is an evidence-based trauma prevention program of the University of Missouri School of Medicine, Department of Physical Medicine & Rehabilitation. The mission of the program is to prevent traumatic injuries from unbuckled car crashes, especially traffic-related traumatic injuries, through education, research and advocacy. ThinkFirst Missouri, along with its sub-contractor ThinkFirst of Greater Kansas City, provided 209 traffic safety presentations in 143 schools reaching 38,052 Missouri students. In addition, 1,854 Missourians received traffic safety education from the ThinkFirst Corporate/Community Traffic Safety program delivered through 40 presentations at 32 worksites and community organizations. Missouri teens have the lowest safety belt usage rate. This program works to increase safety belt usage among teens. Funding will provide program development fees, educational materials and supplies, salary, speaker fees and travel expenses. This project also funds the First Impact program. First Impact is an evidence-based, traffic safety parent program targeted to parents and/or guardians of teen drivers in the pre-permit, permit or intermediate stage of licensure. The goal of First Impact is to reduce the number of motor vehicle fatalities, injuries and crashes among teen drivers by increasing parental awareness and enforcement of Missouri's graduated driver license law. First Impact will provide the tools parents need to be involved in monitoring, coaching and supporting their new teen driver. Funding will be used to support travel, staff salary and program expenses.</p>	University of MO Curators	\$360,000.00
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Distracted Driving

Planned Activity Unique Identifier	Planned Activity Name	Planned Activity Description	Subrecipients	Total \$
CP-2019-09-01-00	It Only Takes One/TRACTION Awards	The It Only Takes One campaign is a statewide high school competition that provides peer-to-peer education on seat belt use, distracted driving and underage drinking and driving and gives student groups the opportunity to educate teens, parents and their community about the dangers teens face while driving, including distracted driving. The competition includes educational campaigns, surprise safety belt surveys and the creation of a public service announcement. The funding will provide winning schools grant funding to continue to educate the school on distracted driving issues.	Highway Safety and Traffic Division	\$9,500.00

Young Drivers

Planned Activity Unique Identifier	Planned Activity Name	Planned Activity Description	Subrecipients	Total \$
CP-2019-09-03-00	Safe Communities / TRACTION	TRACTION - <i>Teens Taking Action to Prevent Traffic Crashes</i> is a peer-to-peer youth traffic safety leadership training program. High school students and advisors are invited to attend one of three training programs as a school team. The training promotes safe driving habits for youth including seat belt use, distracted driving and underage drinking and driving and provides students and their adult advisors with the motivation, information, skills, and support necessary to develop a plan of action that addresses unsafe driving habits through events and activities to be implemented within their school and communities the following year. The funding will provide staff, supplies, conference development and travel costs to conduct three conferences and one one-day workshop.	Cape Girardeau Safe Communities	\$227,170.35
CP-2019-09-04-00	Teen Driving Programs	The funding from the program will be used to update and reprint the Roadwise Guide and other brochures for distribution and initiate new and support existing young driver safety programs in Missouri as well as support the school resource officers annual conference.	Highway Safety and Traffic Division	\$25,300.00
SA-2019-09-03-00	TYREDD	The TyREDD program (Tyler Raising Education for Drowsy Driving) brings awareness of drowsy driving to teens, a topic that is very prevalent in teen lives, however, not discussed in many educational programs. The TyREDD mission is to raise awareness and provide education for the prevention of drowsy driving and the tragedies that can follow. Funding will be used to support program development and salary of presenters.	TYREDD	\$39,720.00

Older Drivers

Planned Activity Unique Identifier	Planned Activity Name	Planned Activity Description	Subrecipients	Total \$
DE-2019-02-02-00	In-house Project for Mature Driver Prog	The HSO will continue to research, develop and implement driver education seminars for the aging driver, to include how to refresh their driving skills, age-specific traffic safety issues, and effects of medication and physical conditions on driving ability.	Highway Safety and Traffic Division	\$2,500.00
DE-2019-02-01-00	Keep Your Keys	The University of Missouri – Columbia will be providing training to older drivers and family members or caregivers on the issues of aging and driving. The Keep Your Keys Program will provide non-objective information for the older driver to use in making an informative decision about their current driving status. This program will open the discussion to plan for driving retirement. Project costs include printing of educational materials, marketing of training program, operational expenses, part-time staff positions, and indirect costs.	University of MO Curators	\$38,052.00
DL-2019-02-01-00	Rural Driving Study and Traffic Signs	The Highway Safety Office continues to work with Washington University to produce and implement countermeasures that reduce crashes involving older drivers. This project will focus on refining the scoring procedures for the Traffic Sign Naming Test and the correlation with the on-road testing. Under this project, standardized materials will be provided to state driver examiners, license renewal staff, driving rehabilitation specialists and driving researchers. The standardized training materials will be piloted in various groups to determine its ability to produce reliable scores between various testing modes. The funding for this research project will cover salaries, consultant services, lab testing fees, operational and travel expenses, and indirect costs.	Washington University	\$157,078.91

DL-2019-02-02-00	Maximizing Driving Safety After Stroke	Washington University will develop and promote fitness-to-drive screening and assessment tools relevant to stakeholders (professionals, older drivers, families, and community members), as well as resources that promote safe driving, ultimately furthering the field of driver evaluation and rehabilitation as an area of practice. The funding for this research project will cover salaries, equipment, lab fees, travel expenses and indirect costs.	Washington University	\$113,590.26
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Commercial Motor Vehicles

*There are no NHTSA funded projects for Commercial Motor Vehicles in Missouri. Commercial Motor Vehicle programs (also administered by the Office Of Highway Safety) are funded through the Federal Motor Carrier Safety Administration and are documented in Missouri's Commercial Motor Vehicle Safety Plan.

Motorcycle Safety

Planned Activity Unique Identifier	Planned Activity Name	Planned Activity Description	Subrecipients	Total \$
M9MA-2019-12-01-00	Motorcycle Awareness Paid Media	Funding will provide paid media and outreach efforts reminding motorists to Watch for Motorcycles.	Highway Safety and Traffic Division	\$98,346.77
PM-2019-02-08-00	Motorcycle Awareness Incentive Items	The funding will be used to purchase yard signs for distribution statewide. This program has been extremely popular and helpful in getting the message across to drivers on the importance of looking twice for motorcycles.	Highway Safety and Traffic Division	\$100,000.00
M9MA-2019-12-00-00	THSD-Statewide 405f Motorcycle Program	This project is for a statewide effort to improve Motorcycle programs. When needed, this account will be reduced to fund specific sub-recipient agreements.	Highway Safety and Traffic Division	\$150,000.00

School Bus Safety

*There are no FY19 projects specific to school bus safety

Non-Motorized (Pedestrians and Bicyclists)

*There are no FY19 projects specific to pedestrians or bicyclists

Traffic Records

Planned Activity Unique Identifier	Planned Activity Name	Planned Activity Description	Subrecipients	Total \$
M3DA-2019-04-00-G0	E-Citation Projects	This project is a continuation of the software interface designed between the vendor ticketing system and the electronic state prosecutor/court system to allow electronic transmittal of traffic citations. This electronic interface will reduce the time that it takes to route traffic citations to the prosecutor/court and increase the accuracy of the citations.	Cape Girardeau County Sheriff's Office, Greene County Sheriff's Offices, Hayti Police Dept., Jackson Police Dept., Osceola Police Dept., Pleasant Valley Police Dept., Sparta Police Dept., Willow Springs Police Dept.	\$62,962.04
M3DA-2019-04-04-00	Traffic Records Data Improvement	This project was created to support conference registrations, meals, hotels and travel to the National Traffic Records Forum. Funding is also utilized to support e-crash and e-citation integration and equipment	Highway Safety and Traffic Division	\$65,000.00
M3DA-2019-04-00-00	THSD-Statewide 405c Data Program	This project is for a statewide effort to improve Traffic Records Data programs. When needed, this account will be reduced to fund specific sub-recipient agreements.	Highway Safety and Traffic Division	\$2,000,000.00
M3DA-2019-04-06-00	Missouri Ambulance Reporting System	Currently The Missouri Department of Health and Senior Services (DHSS), Bureau of EMS (BEMS) hosts the central data repository for all EMS call data statewide. This system has been funded by the DHSS since 2005 and has remained compliant with the standards set forth by NHTSA's National EMS Information System. As of December 31, 2016 the Federal Government will no longer accept data based on the current NEMSIS 2.0/2.2 data elements, but unfortunately, DHSS has not been able to migrate to NESIS 3.0. With this funding, the migration can occur and EMS data can be captured and reported to NHTSA.	MO Dept. of Health and Senior Services	\$92,205.00

M3DA-2019-04-08-00	Statewide Traffic Accident Records Sys.	The purpose of this grant proposal is to continue the activities of the Statewide Traffic Accident Records System (STARS) Information Maintenance Project. This project will entail personnel from the Highway Patrol, Patrol Records Division, processing and encoding information from approximately 130,000 - 150,000 motor vehicle crash reports into the STARS. The funding will cover personnel, supplies, consultant services and travel to conferences.	MO State Highway Patrol	\$182,975.00
M3DA-2019-04-09-00	STARS and FARS Support	Secure federal funding in order for MSHP to meet our MOU obligation with MoDOT and cover the costs to complete the transition of the STARS from COOL:Gen technology to .NET as well as additional STARS enhancements and knowledge transfer of consultants to MSHP information technology personnel on .NET technology.	MO State Highway Patrol	\$192,500.00
M3DA-2019-04-10-00	Predictive Analytical Crash Project	The Missouri State Highway Patrol Statistical Analysis Center (SAC) is developing a predictive model to provide law enforcement officers with a crash forecast. This forecast will assist officers in making smarter patrol decisions in hopes of deterring bad driver behavior and preventing traffic crashes. The SAC will also provide other agencies with the forecast through the use of a secure online portal, which will create the Missouri Analytical Traffic Reporting Information Exchange (MATRIX). The goal of the MATRIX is to spur collaboration among all law enforcement agencies in Missouri and to encourage them to submit their crash reports electronically. If the SAC is able to receive timely data from other agencies, then they will be able to produce a more accurate crash forecast leading to safer roads across Missouri. The funding will provide consultant services and travel costs.	MO State Highway Patrol	\$26,540.00

M3DA-2019-04-11-00	Show Me Court Implementations	<p>The Office of State Courts Administrator (OSCA) is requesting funding to improve the collection and management of traffic records, as well as increase the accuracy and timeliness of reporting disposition information. This will be accomplished by implementing the new case management system, Show-Me Courts, into municipal divisions that currently have no automation, the Judicial Information System (JIS) or some other court software. Show-Me Courts contains the edit checks built into the application, so users will be prompted to fix or enter the required information at the time the case is initiated. A second part of the Show-Me Court system that should improve the record of conviction reporting is the Prosecutor Portal. This functionality will allow a ticket to be sent electronically from the police department's records management system to the prosecutor portal. The prosecutor will review the tickets and electronically send the information to the court on the cases they wish to file. With this process most of the data will be either entered by a person at the police department or received electronically through an e-ticketing system. Since fewer people will be doing data entry throughout the process it should reduce the potential for data entry errors and improve accuracy. Budget items include salary and fringe for an Education Management Analyst, Court Services Management Analyst and an Accountant for the implementation of Show-Me Courts.</p>	Office of State Courts Administrator	\$194,318.67
M3DA-2019-04-12-00	JIS Monitoring and Reporting	<p>The Office of State Courts Administrator (OSCA) is requesting funding to improve the collection and management of traffic records, as well as increase the accuracy and timeliness of reporting disposition information by monitoring the electronic transmission of traffic-related conviction data from the courts to DOR and MSHP to determine if on-site assistance or training/instruction is required to increase to accuracy and timeliness of reporting.</p>	Office of State Courts Administrator	\$171,531.26

M3DA-2019-04-15-00	LETS Sustainment and Enhancement	REJIS will continue to provide operational support for LETS using their data center, operations and help desk staff. REJIS will continue to support LETS with training and "how to" question resolution as well as support agencies to adopt LETS. Any improvements approved by Highway Safety will be identified before initiated. REJIS will administer the third party integrated diagramming software licensing as funded to assure support and version upgrades. REJIS staff will also work closely with Highway Safety and LETS customers to coordinate, plan and execute service management activities. The funding will cover the operational expenses and supplies of the project.	REJIS	\$162,316.00
M3DA-2019-04-16-00	Electronic Records Adoption Improvement	The long term mission of the Traffic Data Standardization Project is to bring additional agencies of all sizes who work traffic crashes into the LETS system so they can submit crash data directly into the STARS system. This transformation of data from paper copy submission to electronic submission with electronic checks and balances will greatly increase the accuracy of the data going into the STARS system as well as increasing the speed (time) it takes to get into the STARS database. The State has demonstrated a need to have complete and accurate data in the STARS system to allow for corrective enforcement, advanced engineering and accurate reporting to the federal levels. Contact will be made with Missouri Law Enforcement agencies to encourage their participation in LETS to achieve results sought for the objectives identified. Monthly reporting will illustrate these contacts, software distributed, etc. If desired, additional reporting on growth of LETS use and electronic reporting of Crash Reports, via LETS, will be provided. The funding will provide consultant program fees and operational costs.	REJIS	\$11,212.00

Roadway Safety/Traffic Engineering

RS-2019-11-01-00	Traffic Engineering Assistance Program	It is often necessary for cities and counties to obtain the services of private consulting engineering firms in order to aid them in correcting operational problems on their streets and highways. Correction of these problems can require detailed assessment of traffic crash analysis, traffic counts, speed surveys, minor origin and destination studies, non-rapid transit studies, parking supply and demand, capacity analysis, lighting analysis and design, traffic control devices (inventory and layout), or traffic signal progression analysis and design. This is not a complete list of what studies a traffic engineer consultant may be called upon to perform. Most cities and counties do not have personnel with expertise in these areas to perform the necessary analysis. This is a support problem where methods of correcting a particular situation must first be examined and determined before they can be implemented or evaluated for effectiveness.	Highway Safety and Traffic Division	\$60,000.00
RS-2019-11-02-00	2019 Blueprint Conference	To assist the state engineers and all statewide safety advocates, the Highway Safety office provides funding to coordinate a statewide traffic engineering conference. This conference provides continuing education credit and education on keeping Missouri roadways safe.	University of MO Curators	\$25,000.00

Training/Miscellaneous/Multi-Program

Planned Activity Unique Identifier	Planned Activity Name	Planned Activity Description	Subrecipients	Total \$
PT-2019-02-A0-00	402 Training/Survey/Operations	Provide training expenses for Highway Safety Staff, law enforcement and other external partners; fund the public opinion survey; DWI/Full Time Unit workshop; hOUR program lunch and learns, and the TOPS training program.	Highway Safety and Traffic Division	\$115,000.00
PT-2019-02-00-G1	2019 LETSAC Conference	This funding will cover expenses for the LETSAC Conference(hotel rooms, meals & mileage) and provide funds for conference costs (speakers, equipment, awards banquet, & equipment). Conduct one multi-day training conference which will provide up to 22 hours of POST approved training hours and recognitions of officers and agencies for their efforts in the area of traffic enforcement in Missouri. Responsibilities of this conference are shared between the HSTD and the Missouri Police Chiefs Association.	Highway Safety and Traffic Division, Missouri Police Chiefs Assoc.	\$59,500.00
PT-2019-02-28-00	LE Driving 2019	The Missouri Police Chiefs Association will provide law enforcement defensive and tactical response driving training. The funding covers instructor fees, printing costs, monthly notifications, simulator repairs, facility costs, and costs associated with continuing education hours.	Missouri Police Chiefs Association	\$40,000.00
PT-2019-02-01-00	Driver Improvement Program (D.I.P.)	The project will allow the Missouri Safety Center to manage the Driver Improvement Program providers and instructors, compliance audits; and maintain and survey approved providers. Funding will include salary, operational expenses and travel costs.	Missouri Safety Center	\$49,719.67
PT-2019-02-29-00	Law Enforcement Training	Missouri Southern State University will provide comprehensive traffic enforcement related training to law enforcement officers in the state. The training programs will include Vehicle Search and Seizure, High Risk Vehicle Stops, Traffic Stop Safety, and Missouri Motor Vehicle Law. MSSU charges a flat fee per course which covers all the expenses for conducting the course.	Missouri Southern State University	\$24,000.00

AI-2019-04-01-00	Accident Invest/Training/Reconstruction	The Missouri State Highway Patrol Training Academy will offer Basic Crash Investigation and the Crash Investigation series of courses, Advanced Crash Investigation and Crash Reconstruction. MSHP is charging a fee per student for each of the courses with the grant covering 62% of that cost.	MO State Highway Patrol	\$70,205.70
PT-2019-02-32-00	Radar/EVOC/Instructor Dev/Equip Purchase	The Missouri State Highway Patrol Training Academy will offer Radar/Laser Operator and Instructor, Emergency Vehicle Operations Course (EVOC) Basic, Instructor and Refresher, Instructor Development and educational equipment and materials necessary for each of the courses. Additional equipment requirements will be covered under the grant for items such as safety vests, tires for cars used in EVOC, safety cones, etc. MSHP is charging a fee per student for each of the courses with the grant covering 62% of that cost.	MO State Highway Patrol	\$78,256.70
PT-2019-02-33-00	Skill Development	Funds traffic-related training for the MSHP staff for various events such as Lifesavers Conference, LETSAC, DWI/DRE Conference, etc.	MO State Highway Patrol	\$20,000.00
EM-2019-02-01-00	Highway Emergency Response Training	Individuals injured in highway incidents need quick, on-scene access to emergency care by trained fire and emergency service first responders to institute life saving measures. The University of Missouri Fire and Rescue Training Institute will provide training to first responders in an effort to reduce the number of deaths and seriousness of injuries related to traffic crashes by decreasing the transport time to hospitals and reducing the amount of time to open the roadway. Emergency Medical Services is an essential component of a comprehensive traffic safety system. When injuries occur as a result of motor vehicle crashes, EMS provides the best "last chance" to reduce death and disability. The training programs meet standards of the National Fire Protection Association.	University of MO Curators	\$57,050.00
PA-2019-02-02-00	DocuSign Project	To incorporate electronic signature and storage ability in the Office of Highway Safety's Grant Management System.	REJIS	\$35,000.00

FY 2019 CORE OUTCOME MEASURES

In addition to the Focus Areas, the HSP also focuses on 12 Core Outcome Measures. The National Highway Traffic Safety Administration (NHTSA) and the Governors Highway Safety Association (GHSA) have agreed on a minimum set of performance measures to be used by States and federal agencies in the development and implementation of behavioral highway safety plans and programs. An expert panel from NHTSA, State Highway Safety Offices, academic and research organizations, and other key groups assisted in developing the measures.*

The initial minimum set contains 12 measures: 11 core outcome measures and one core behavior measure. The measures cover the major areas common to State highway safety plans and use existing data systems. The following outlines the 12 performance measures which will be identified within their respective program areas.

*Traffic Safety Performance Measures for States and Federal Agencies DOT HS 811 025, August 2008.

Performance Measure Name	Target Period (Performance Target)	Target Start Year (Performance Target)	Target End Year (Performance Target)	Target Value (Performance Target)
C-1) Number of traffic fatalities (FARS)	5 year	2015	2019	872.3
C-2) Number of serious injuries in traffic crashes (State crash data files)	5 year	2015	2019	4,433.80
C-3) Fatalities/VMT (FARS,FHWA)	5 year	2015	2019	1.16
C-4) Number of unrestrained passenger vehicle occupant fatalities, all seat positions (FARS)	5 year	2015	2019	385.5
C-5) Number of fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above (FARS)	5 year	2015	2019	230.3
C-6) Number of speeding-related fatalities (FARS)	5 year	2015	2019	331.7

C-7) Number of motorcyclist fatalities (FARS)	5 year	2015	2019	115.3
C-8) Number of unhelmeted motorcyclist fatalities (FARS)	5 year	2015	2019	13.8
C-9) Number of drivers age 20 or younger involved in fatal crashes (FARS)	5 year	2015	2019	123.8
C-10) Number of pedestrian fatalities (FARS)	5 year	2015	2019	100.8
C-11) Number of bicyclists fatalities (FARS)	5 year	2015	2019	9.4
B-1) Observed seat belt use for passenger vehicles, front seat outboard occupants (survey)	5 year	2015	2019	86

Fiscal Year 2019 Equipment List

Agency	Item Detail	Budget	Source	Project Number	Purpose
Jefferson County Sheriff's Department	2019 Chevy Tahoe SUV Patrol Vehicle, compliant with Buy America Act	\$25,000	154	19-154-AL-117	Vehicle will be utilized by a Full Time DWI Unit Officer
Kirkwood Police Department	2019 Chevy Tahoe SUV Patrol Vehicle, compliant with Buy America Act	\$32,600 (\$16,300 NHTSA cost only)	402	19-PT-02-115	Vehicle will be utilized by a Full Time Unit Officer
St. Clair Police Department	WatchGuard 4RE in car video system	\$5,020 (\$2,510 NHTSA cost only)	154	19-154-AL-137	Equipment will be used to support local DWI Enforcement
Missouri Safety Center, University of Central Missouri	Software Update	\$103,880	154	19-154-AL-024	Required Software Updates for Breath Alcohol Instruments
Jackson County Sheriff's Department	2019 Ford Interceptor SUV Patrol Vehicle, compliant with Buy America Act	\$42,000	154	19-154-AL-031	Vehicle will be utilized by a Full Time DWI Unit Officer
Kansas City MO Board of Police Commissioners	2019 Ford Interceptor SUV Patrol Vehicle, compliant with Buy America Act	\$55,000	154	19-154-AL-015	Vehicle will be utilized by a Full Time DWI Unit Officer
Platte County Sheriff's Department	2019 Ford Interceptor SUV Patrol Vehicle, compliant with Buy America Act	\$45,000	402	19-PT-02-024	Vehicle will be utilized by a Full Time Unit Officer
Columbia Police Department	2019 Chevy Tahoe SUV Patrol Vehicle, compliant with Buy America Act	\$50,000	405d	19-M5HVE-03-015	Vehicle will be utilized by a Full Time DWI Unit Officer
Franklin County Sheriff's Department	2019 Ford Interceptor SUV Patrol Vehicle, compliant with Buy America Act	\$27,000	154	19-154-AL-047	Vehicle will be utilized by a Full Time DWI Unit Officer
Franklin County Sheriff's Department	2019 Ford Interceptor SUV Patrol Vehicle, compliant with Buy America Act	\$27,000	154	19-154-AL-047	Vehicle will be utilized by a Full Time DWI Unit Officer
Greene County Sheriff's Department	2018 Chevy Tahoe SUV Patrol Vehicle, compliant with Buy America Act	\$35,879	402	19-PT-02-047	Vehicle will be utilized by a Full Time Unit Officer

**2012-2016 MISSOURI FATAL TRAFFIC CRASHES
RANK ORDER CITY LIST**

Ranking	City	Count	Percent
1	KANSAS CITY	290	18.7%
2	ST. LOUIS	209	13.5%
3	SPRINGFIELD	85	5.5%
4	INDEPENDENCE	52	3.4%
5	COLUMBIA	35	2.3%
6	JOPLIN	26	1.7%
7	ST. CHARLES	21	1.4%
8	CAPE GIRARDEAU	19	1.2%
9	LEES SUMMIT	19	1.2%
10	ST. JOSEPH	19	1.2%
11	CHESTERFIELD	16	1.0%
12	HAZELWOOD	15	1.0%
13	BRIDGETON	14	0.9%
14	ROLLA	13	0.8%
15	BLUE SPRINGS	12	0.8%
16	O'FALLON	12	0.8%
17	ST. PETERS	12	0.8%
18	WENTZVILLE	12	0.8%
19	BERKELEY	11	0.7%
20	FLORISSANT	11	0.7%
21	MARYLAND HEIGHTS	11	0.7%
22	SUNSET HILLS	11	0.7%
23	BRANSON	10	0.6%
24	JEFFERSON CITY	10	0.6%
25	WILDWOOD	9	0.6%
26	FERGUSON	8	0.5%
27	GRANDVIEW	8	0.5%
28	OZARK	8	0.5%
29	SEDALIA	8	0.5%
30	SIKESTON	8	0.5%
31	SULLIVAN	8	0.5%
32	TOWN AND COUNTRY	8	0.5%
33	UNIVERSITY CITY	8	0.5%
34	ARNOLD	7	0.5%
35	BELTON	7	0.5%
36	FESTUS	7	0.5%
37	RIVERSIDE	7	0.5%
38	ST. CLAIR	7	0.5%
39	WRIGHT CITY	7	0.5%
40	BOLIVAR	6	0.4%
41	FARMINGTON	6	0.4%
42	FENTON	6	0.4%

43	LAKE ST. LOUIS	6	0.4%
44	LIBERTY	6	0.4%
45	NEOSHO	6	0.4%
46	REPUBLIC	6	0.4%
47	WEST PLAINS	6	0.4%
48	BELLEFONTAINE NEIGHBORS	5	0.3%
49	DES PERES	5	0.3%
50	DEXTER	5	0.3%
51	DOOLITTLE	5	0.3%
52	EUREKA	5	0.3%
53	FULTON	5	0.3%
54	JACKSON	5	0.3%
55	KIRKSVILLE	5	0.3%
56	KIRKWOOD	5	0.3%
57	NEVADA	5	0.3%
58	NIXA	5	0.3%
59	OAK GROVE	5	0.3%
60	PACIFIC	5	0.3%
61	PERRYVILLE	5	0.3%
62	PINEVILLE	5	0.3%
63	POPLAR BLUFF	5	0.3%
64	RAYTOWN	5	0.3%
65	SCOTT CITY	5	0.3%
66	ST. JAMES	5	0.3%
67	ST. JOHN	5	0.3%
68	WARRENTON	5	0.3%
69	WELLSTON	5	0.3%
70	CAMDENTON	4	0.3%
71	CREVE COEUR	4	0.3%
72	KEARNEY	4	0.3%
73	LAKE OZARK	4	0.3%
74	MEXICO	4	0.3%
75	OSAGE BEACH	4	0.3%
76	STRAFFORD	4	0.3%
77	WASHINGTON	4	0.3%
78	WINFIELD	4	0.3%
79	ANDERSON	3	0.2%
80	DE SOTO	3	0.2%
81	DESLOGE	3	0.2%
82	DIGGINS	3	0.2%
83	GRAY SUMMIT	3	0.2%
84	HANNIBAL	3	0.2%
85	HARRISONVILLE	3	0.2%
86	HOLLISTER	3	0.2%
87	JANE	3	0.2%
88	LADUE	3	0.2%
89	LEBANON	3	0.2%

90	MANCHESTER	3	0.2%
91	MARIONVILLE	3	0.2%
92	MARSHALL	3	0.2%
93	MARSHFIELD	3	0.2%
94	MONETT	3	0.2%
95	MOSCOW MILLS	3	0.2%
96	NORTH KANSAS CITY	3	0.2%
97	REEDS SPRING	3	0.2%
98	TRENTON	3	0.2%
99	TROY	3	0.2%
100	VALLEY PARK	3	0.2%
101	WARRENSBURG	3	0.2%
102	ASHLAND	2	0.1%
103	BALLWIN	2	0.1%
104	BYRNES MILL	2	0.1%
105	CAMERON	2	0.1%
106	CARTHAGE	2	0.1%
107	CHILLICOTHE	2	0.1%
108	CLARK	2	0.1%
109	CRESTWOOD	2	0.1%
110	CRYSTAL CITY	2	0.1%
111	ELLISVILLE	2	0.1%
112	FAIR GROVE	2	0.1%
113	FORDLAND	2	0.1%
114	FRONTENAC	2	0.1%
115	GLADSTONE	2	0.1%
116	GRAIN VALLEY	2	0.1%
117	GRAVOIS MILLS	2	0.1%
118	HIGHLANDVILLE	2	0.1%
119	HOUSTON	2	0.1%
120	JENNINGS	2	0.1%
121	JONESBURG	2	0.1%
122	KINGDOM CITY	2	0.1%
123	LAKE LOTAWANA	2	0.1%
124	LAKE WINNEBAGO	2	0.1%
125	LINN CREEK	2	0.1%
126	MARYVILLE	2	0.1%
127	MOUNTAIN VIEW	2	0.1%
128	NOEL	2	0.1%
129	OLIVETTE	2	0.1%
130	PARK HILLS	2	0.1%
131	PINE LAWN	2	0.1%
132	PLATTE CITY	2	0.1%
133	PLEASANT HILL	2	0.1%
134	PORTAGEVILLE	2	0.1%
135	QUEEN CITY	2	0.1%
136	ROGERSVILLE	2	0.1%

137	SALEM	2	0.1%
138	SENECA	2	0.1%
139	SMITHVILLE	2	0.1%
140	ST. PAUL	2	0.1%
141	SUGAR CREEK	2	0.1%
142	UNION	2	0.1%
143	VAN BUREN	2	0.1%
144	VERONA	2	0.1%
145	WEBB CITY	2	0.1%
146	WILLARD	2	0.1%
147	AIRPORT DRIVE	1	0.1%
148	ALTON	1	0.1%
149	ARROW POINT	1	0.1%
150	AURORA	1	0.1%
151	AVILLA	1	0.1%
152	BAGNELL	1	0.1%
153	BELLE	1	0.1%
154	BEVERLY HILLS	1	0.1%
155	BLACK JACK	1	0.1%
156	BOONVILLE	1	0.1%
157	BOURBON	1	0.1%
158	BRANSON WEST	1	0.1%
159	BRENTWOOD	1	0.1%
160	BRONAUGH	1	0.1%
161	BUNKER	1	0.1%
162	BUTLER	1	0.1%
163	CABOOL	1	0.1%
164	CALIFORNIA	1	0.1%
165	CANTON	1	0.1%
166	CARL JUNCTION	1	0.1%
167	CARUTHERSVILLE	1	0.1%
168	CASSVILLE	1	0.1%
169	CLARKSVILLE	1	0.1%
170	CLAYCOMO	1	0.1%
171	CLINTON	1	0.1%
172	CONWAY	1	0.1%
173	COTTLEVILLE	1	0.1%
174	COUNTRY CLUB HILLS	1	0.1%
175	COUNTRY CLUB VILLAGE	1	0.1%
176	CRANE	1	0.1%
177	CUBA	1	0.1%
178	DIAMOND	1	0.1%
179	DONIPHAN	1	0.1%
180	EDMUNDSON	1	0.1%
181	ELLSINORE	1	0.1%
182	ELMO	1	0.1%
183	EVERTON	1	0.1%

184	EWING	1	0.1%
185	EXCELSIOR SPRINGS	1	0.1%
186	FOREST CITY	1	0.1%
187	FORISTELL	1	0.1%
188	FORT LEONARD WOOD	1	0.1%
189	FREDERICKTOWN	1	0.1%
190	GAINESVILLE	1	0.1%
191	GLASGOW	1	0.1%
192	GRANBY	1	0.1%
193	HAYTI HEIGHTS	1	0.1%
194	HERCULANEUM	1	0.1%
195	HIGBEE	1	0.1%
196	HIGGINSVILLE	1	0.1%
197	HIGH HILL	1	0.1%
198	HILLSBORO	1	0.1%
199	HOLDEN	1	0.1%
200	INNSBROOK	1	0.1%
201	KAHOKA	1	0.1%
202	KENNETT	1	0.1%
203	KINGSVILLE	1	0.1%
204	KINLOCH	1	0.1%
205	KNOB NOSTER	1	0.1%
206	LA BELLE	1	0.1%
207	LA MONTE	1	0.1%
208	LA PLATA	1	0.1%
209	LADDONIA	1	0.1%
210	LANAGAN	1	0.1%
211	LANCASTER	1	0.1%
212	LAWSON	1	0.1%
213	LEADWOOD	1	0.1%
214	LEXINGTON	1	0.1%
215	LINCOLN	1	0.1%
216	LONE JACK	1	0.1%
217	LOUISIANA	1	0.1%
218	MACON	1	0.1%
219	MALDEN	1	0.1%
220	MANSFIELD	1	0.1%
221	MAPLEWOOD	1	0.1%
222	MCCORD BEND	1	0.1%
223	MERRIAM WOODS	1	0.1%
224	MILAN	1	0.1%
225	MINDENMINES	1	0.1%
226	MONTGOMERY CITY	1	0.1%
227	MOREHOUSE	1	0.1%
228	MOSBY	1	0.1%
229	NEELYVILLE	1	0.1%
230	NEW FLORENCE	1	0.1%

231	NEW HAVEN	1	0.1%
232	NEW MADRID	1	0.1%
233	NEWARK	1	0.1%
234	NORMANDY	1	0.1%
235	NORTHWOODS	1	0.1%
236	OAKLAND	1	0.1%
237	ODESSA	1	0.1%
238	OLD MONROE	1	0.1%
239	OVERLAND	1	0.1%
240	OWENSVILLE	1	0.1%
241	PAGEDALE	1	0.1%
242	PALMYRA	1	0.1%
243	PARKVILLE	1	0.1%
244	PEACH ORCHARD	1	0.1%
245	PECULIAR	1	0.1%
246	PEVELY	1	0.1%
247	PLATTSBURG	1	0.1%
248	PLEASANT HOPE	1	0.1%
249	PLEASANT VALLEY	1	0.1%
250	POTOSI	1	0.1%
251	PRATHERSVILLE	1	0.1%
252	PRESTON	1	0.1%
253	RANDOLPH	1	0.1%
254	RHINELAND	1	0.1%
255	RICHMOND	1	0.1%
256	RICHMOND HEIGHTS	1	0.1%
257	RIVER BEND	1	0.1%
258	RUSSELLVILLE	1	0.1%
259	SAVANNAH	1	0.1%
260	SENATH	1	0.1%
261	SEYMOUR	1	0.1%
262	SHREWSBURY	1	0.1%
263	SIBLEY	1	0.1%
264	SILVER CREEK	1	0.1%
265	SPARTA	1	0.1%
266	ST. ANN	1	0.1%
267	ST. ROBERT	1	0.1%
268	ST. THOMAS	1	0.1%
269	STEELVILLE	1	0.1%
270	STOVER	1	0.1%
271	TAOS	1	0.1%
272	THAYER	1	0.1%
273	UNIONVILLE	1	0.1%
274	UNITY VILLAGE	1	0.1%
275	URBANA	1	0.1%
276	VANDALIA	1	0.1%
277	VINITA PARK	1	0.1%

278	WARSAW	1	0.1%
279	WAYNESVILLE	1	0.1%
280	WEAUBLEAU	1	0.1%
281	WEST ALTON	1	0.1%
282	WHEATLAND	1	0.1%
283	WINONA	1	0.1%
284	WYATT	1	0.1%
TOTAL		1,551	

Note: 2,268 fatal crashes occurred in Non-City or Unincorporated areas.

Appendix D

**2012-2016 MISSOURI FATAL TRAFFIC CRASHES
RANK ORDER COUNTY LIST**

Ranking	County	Count	Percent
1	JACKSON	355	9.3%
2	ST. LOUIS	292	7.6%
3	ST. LOUIS CITY	209	5.5%
4	GREENE	155	4.1%
5	JEFFERSON	146	3.8%
6	ST. CHARLES	104	2.7%
7	FRANKLIN	102	2.7%
8	CLAY	98	2.6%
9	BOONE	81	2.1%
10	JASPER	71	1.9%
11	NEWTON	57	1.5%
12	CASS	55	1.4%
13	PHELPS	52	1.4%
14	ST. FRANCOIS	52	1.4%
15	PLATTE	50	1.3%
16	LINCOLN	47	1.2%
17	CAPE GIRARDEAU	46	1.2%
18	TANEY	46	1.2%
19	CHRISTIAN	45	1.2%
20	JOHNSON	45	1.2%
21	CAMDEN	43	1.1%
22	HOWELL	42	1.1%
23	BARRY	40	1.0%
24	MILLER	39	1.0%
25	WASHINGTON	39	1.0%
26	LAWRENCE	38	1.0%
27	BUCHANAN	37	1.0%
28	BUTLER	36	0.9%
29	STONE	36	0.9%
30	MCDONALD	34	0.9%
31	PETTIS	34	0.9%
32	WARREN	34	0.9%
33	DUNKLIN	33	0.9%
34	LACLEDE	33	0.9%
35	CALLAWAY	32	0.8%
36	TEXAS	32	0.8%
37	COLE	31	0.8%
38	PEMISCOT	31	0.8%
39	PULASKI	31	0.8%
40	WEBSTER	31	0.8%
41	POLK	30	0.8%
42	STODDARD	27	0.7%

43	NEW MADRID	26	0.7%
44	SCOTT	26	0.7%
45	LAFAYETTE	25	0.7%
46	BENTON	23	0.6%
47	GASCONADE	23	0.6%
48	SALINE	23	0.6%
49	STE. GENEVIEVE	23	0.6%
50	MONTGOMERY	22	0.6%
51	PIKE	22	0.6%
52	MORGAN	21	0.5%
53	ANDREW	20	0.5%
54	CRAWFORD	20	0.5%
55	AUDRAIN	19	0.5%
56	DENT	19	0.5%
57	MARIES	19	0.5%
58	RIPLEY	18	0.5%
59	BOLLINGER	17	0.4%
60	MARION	17	0.4%
61	PERRY	17	0.4%
62	WRIGHT	17	0.4%
63	RALLS	16	0.4%
64	RANDOLPH	16	0.4%
65	RAY	16	0.4%
66	VERNON	16	0.4%
67	MISSISSIPPI	15	0.4%
68	MONITEAU	15	0.4%
69	REYNOLDS	15	0.4%
70	ST. CLAIR	15	0.4%
71	WAYNE	15	0.4%
72	HENRY	14	0.4%
73	MADISON	14	0.4%
74	OREGON	14	0.4%
75	SHANNON	14	0.4%
76	CARTER	13	0.3%
77	COOPER	13	0.3%
78	IRON	13	0.3%
79	NODAWAY	13	0.3%
80	DALLAS	12	0.3%
81	HARRISON	12	0.3%
82	HOWARD	12	0.3%
83	OZARK	12	0.3%
84	BATES	11	0.3%
85	CLARK	11	0.3%
86	CLINTON	11	0.3%
87	ADAIR	10	0.3%
88	CEDAR	10	0.3%
89	DEKALB	10	0.3%

90	HOLT	10	0.3%
91	BARTON	9	0.2%
92	LEWIS	9	0.2%
93	OSAGE	9	0.2%
94	CALDWELL	8	0.2%
95	CHARITON	8	0.2%
96	DADE	8	0.2%
97	DOUGLAS	8	0.2%
98	HICKORY	8	0.2%
99	LINN	8	0.2%
100	LIVINGSTON	8	0.2%
101	MACON	8	0.2%
102	SCHUYLER	8	0.2%
103	DAVISS	7	0.2%
104	GRUNDY	7	0.2%
105	KNOX	7	0.2%
106	CARROLL	6	0.2%
107	MONROE	6	0.2%
108	SULLIVAN	6	0.2%
109	PUTNAM	5	0.1%
110	ATCHISON	4	0.1%
111	MERCER	4	0.1%
112	SCOTLAND	4	0.1%
113	WORTH	4	0.1%
114	GENTRY	2	0.1%
115	SHELBY	2	0.1%
TOTAL		3,819	

Appendix E

**2012-2016 MISSOURI FATAL TRAFFIC CRASHES
RANK ORDER UNINCORPORATED COUNTY LIST**

Ranking	County	Count	Percent
1	JEFFERSON	122	5.4%
2	ST. LOUIS	88	3.9%
3	FRANKLIN	77	3.4%
4	GREENE	56	2.5%
5	BOONE	44	1.9%
6	JASPER	44	1.9%
7	CASS	41	1.8%
9	NEWTON	40	1.8%
8	ST. FRANCOIS	40	1.8%
10	JOHNSON	39	1.7%
11	WASHINGTON	38	1.7%
13	BARRY	36	1.6%
12	LINCOLN	36	1.6%
14	ST. CHARLES	36	1.6%
16	HOWELL	34	1.5%
15	MILLER	34	1.5%
18	CAMDEN	33	1.5%
17	CLAY	32	1.4%
19	TANEY	32	1.4%
20	LAWRENCE	31	1.4%
22	BUTLER	30	1.3%
21	DUNKLIN	30	1.3%
23	STONE	30	1.3%
24	CHRISTIAN	29	1.3%
25	LACLEDE	29	1.3%
26	PHELPS	29	1.3%
27	TEXAS	29	1.3%
28	PEMISCOT	28	1.2%
29	PULASKI	28	1.2%
32	CALLAWAY	25	1.1%
30	PETTIS	25	1.1%
34	POLK	23	1.0%
31	STE. GENEVIEVE	23	1.0%
36	CAPE GIRARDEAU	22	1.0%
35	GASCONADE	22	1.0%
38	LAFAYETTE	22	1.0%
33	STODDARD	22	1.0%
37	BENTON	21	0.9%
40	NEW MADRID	21	0.9%
39	WARREN	21	0.9%
41	MCDONALD	20	0.9%
44	PIKE	20	0.9%

43	SALINE	20	0.9%
42	WEBSTER	20	0.9%
45	JACKSON	19	0.8%
49	ANDREW	18	0.8%
47	BUCHANAN	18	0.8%
46	COLE	18	0.8%
50	MARIES	18	0.8%
48	MORGAN	18	0.8%
51	BOLLINGER	17	0.7%
52	RIPLEY	17	0.7%
57	DENT	16	0.7%
56	MONTGOMERY	16	0.7%
53	PLATTE	16	0.7%
55	RALLS	16	0.7%
54	WRIGHT	16	0.7%
58	CRAWFORD	15	0.7%
61	RAY	15	0.7%
59	REYNOLDS	15	0.7%
62	ST. CLAIR	15	0.7%
60	WAYNE	15	0.7%
64	MISSISSIPPI	14	0.6%
66	MONITEAU	14	0.6%
65	SCOTT	14	0.6%
67	AUDRAIN	13	0.6%
70	HENRY	13	0.6%
74	IRON	13	0.6%
63	MADISON	13	0.6%
68	MARION	13	0.6%
69	RANDOLPH	13	0.6%
71	SHANNON	13	0.6%
76	COOPER	12	0.5%
73	HARRISON	12	0.5%
75	OREGON	12	0.5%
72	PERRY	12	0.5%
78	DALLAS	11	0.5%
77	HOWARD	11	0.5%
79	OZARK	11	0.5%
84	BATES	10	0.4%
82	CARTER	10	0.4%
83	CEDAR	10	0.4%
85	CLARK	10	0.4%
81	CLINTON	10	0.4%
80	NODAWAY	10	0.4%
86	VERNON	10	0.4%
87	HOLT	9	0.4%
90	OSAGE	9	0.4%
93	BARTON	8	0.4%

92	CALDWELL	8	0.4%
91	CHARITON	8	0.4%
96	DEKALB	8	0.4%
88	DOUGLAS	8	0.4%
89	LINN	8	0.4%
95	DADE	7	0.3%
98	DAVISS	7	0.3%
100	CARROLL	6	0.3%
99	KNOX	6	0.3%
94	LEWIS	6	0.3%
97	LIVINGSTON	6	0.3%
102	MACON	6	0.3%
101	MONROE	6	0.3%
103	ADAIR	5	0.2%
106	HICKORY	5	0.2%
104	SCHUYLER	5	0.2%
105	SULLIVAN	5	0.2%
113	ATCHISON	4	0.2%
107	GRUNDY	4	0.2%
109	MERCER	4	0.2%
108	PUTNAM	4	0.2%
111	SCOTLAND	4	0.2%
112	WORTH	4	0.2%
110	GENTRY	2	0.1%
115	SHELBY	2	0.1%
TOTAL		2,268	

**2012-2016 MISSOURI SERIOUS INJURY TRAFFIC CRASHES
RANK ORDER CITY LIST**

Ranking	City	Count	Percent
1	KANSAS CITY	1,394	14.2%
2	ST. LOUIS	958	9.7%
3	INDEPENDENCE	732	7.4%
4	ST. JOSEPH	497	5.1%
5	SPRINGFIELD	411	4.2%
6	COLUMBIA	223	2.3%
7	JEFFERSON CITY	185	1.9%
8	BLUE SPRINGS	184	1.9%
9	LEES SUMMIT	170	1.7%
10	ST. CHARLES	144	1.5%
11	LIBERTY	126	1.3%
12	JOPLIN	124	1.3%
13	BRIDGETON	103	1.0%
14	ST. PETERS	103	1.0%
15	OZARK	97	1.0%
16	CHESTERFIELD	94	1.0%
17	MARYLAND HEIGHTS	78	0.8%
18	CAPE GIRARDEAU	75	0.8%
19	KIRKWOOD	65	0.7%
20	TOWN AND COUNTRY	65	0.7%
21	FLORISSANT	62	0.6%
22	O'FALLON	61	0.6%
23	HAZELWOOD	60	0.6%
24	LEBANON	60	0.6%
25	RAYTOWN	59	0.6%
26	FERGUSON	57	0.6%
27	SUNSET HILLS	56	0.6%
28	KIRKSVILLE	52	0.5%
29	GLADSTONE	51	0.5%
30	HANNIBAL	50	0.5%
31	ARNOLD	49	0.5%
32	UNIVERSITY CITY	49	0.5%
33	FENTON	47	0.5%
34	GRANDVIEW	47	0.5%
35	JENNINGS	47	0.5%
36	ROLLA	46	0.5%
37	WENTZVILLE	46	0.5%
38	BRANSON	45	0.5%
39	MOBERLY	45	0.5%
40	BELLEFONTAINE NEIGHBORS	43	0.4%
41	POPLAR BLUFF	43	0.4%
42	BERKELEY	42	0.4%

43	CLAYTON	42	0.4%
44	CREVE COEUR	41	0.4%
45	SIKESTON	41	0.4%
46	OVERLAND	39	0.4%
47	SEDALIA	38	0.4%
48	WEBSTER GROVES	38	0.4%
49	BALLWIN	36	0.4%
50	NIXA	36	0.4%
51	FESTUS	35	0.4%
52	NORTH KANSAS CITY	35	0.4%
53	WILDWOOD	35	0.4%
54	BELTON	34	0.3%
55	RICHMOND HEIGHTS	34	0.3%
56	UNION	34	0.3%
57	NEOSHO	33	0.3%
58	FARMINGTON	32	0.3%
59	JACKSON	31	0.3%
60	ST. CLAIR	30	0.3%
61	EUREKA	29	0.3%
62	LAKE ST. LOUIS	29	0.3%
63	TROY	29	0.3%
64	MANCHESTER	28	0.3%
65	MAPLEWOOD	28	0.3%
66	EXCELSIOR SPRINGS	27	0.3%
67	OSAGE BEACH	27	0.3%
68	FULTON	26	0.3%
69	DES PERES	25	0.3%
70	LADUE	25	0.3%
71	CARTHAGE	24	0.2%
72	SMITHVILLE	23	0.2%
73	BOLIVAR	22	0.2%
74	KENNETT	22	0.2%
75	VALLEY PARK	22	0.2%
76	BRENTWOOD	21	0.2%
77	CLINTON	21	0.2%
78	MONETT	21	0.2%
79	AURORA	20	0.2%
80	GRAIN VALLEY	20	0.2%
81	GRAY SUMMIT	20	0.2%
82	NEVADA	20	0.2%
83	PLEASANT HILL	20	0.2%
84	ST. ANN	20	0.2%
85	MEXICO	19	0.2%
86	SALEM	19	0.2%
87	WARRENSBURG	19	0.2%
88	RAYMORE	18	0.2%
89	ST. JOHN	18	0.2%

90	WRIGHT CITY	18	0.2%
91	ELLISVILLE	17	0.2%
92	LAKE OZARK	17	0.2%
93	WARRENTON	17	0.2%
94	CLAYCOMO	16	0.2%
95	CRYSTAL CITY	16	0.2%
96	HARRISONVILLE	16	0.2%
97	REPUBLIC	16	0.2%
98	ST. ROBERT	16	0.2%
99	WEST ALTON	16	0.2%
100	BEL-RIDGE	15	0.2%
101	LAKE LOTAWANA	15	0.2%
102	PEVELY	15	0.2%
103	DELLWOOD	14	0.1%
104	OLIVETTE	14	0.1%
105	WEBB CITY	14	0.1%
106	RIVERSIDE	13	0.1%
107	ROGERSVILLE	13	0.1%
108	SEYMOUR	13	0.1%
109	SULLIVAN	13	0.1%
110	WEST PLAINS	13	0.1%
111	BRANSON WEST	12	0.1%
112	DONIPHAN	12	0.1%
113	ELDON	12	0.1%
114	CAMERON	11	0.1%
115	CHILLICOTHE	11	0.1%
116	DE SOTO	11	0.1%
117	FORSYTH	11	0.1%
118	HAYTI	11	0.1%
119	HERCULANEUM	11	0.1%
120	MACON	11	0.1%
121	MARSHALL	11	0.1%
122	MOLINE ACRES	11	0.1%
123	OAK GROVE	11	0.1%
124	PLATTE CITY	11	0.1%
125	RICHMOND	11	0.1%
126	WASHINGTON	11	0.1%
127	WELDON SPRING	11	0.1%
128	DESLOGE	10	0.1%
129	KEARNEY	10	0.1%
130	KINGDOM CITY	10	0.1%
131	MOSCOW MILLS	10	0.1%
132	MOUNTAIN VIEW	10	0.1%
133	PARK HILLS	10	0.1%
134	STRAFFORD	10	0.1%
135	DIGGINS	9	0.1%
136	GLENDALE	9	0.1%

Appendix G

137	HIGHLANDVILLE	9	0.1%
138	HILLSBORO	9	0.1%
139	LAMAR	9	0.1%
140	MARYVILLE	9	0.1%
141	NORWOOD COURT	9	0.1%
142	PACIFIC	9	0.1%
143	PERRYVILLE	9	0.1%
144	PINE LAWN	9	0.1%
145	SENECA	9	0.1%
146	SHREWSBURY	9	0.1%
147	WILLARD	9	0.1%
148	AIRPORT DRIVE	8	0.1%
149	ANDERSON	8	0.1%
150	BOONVILLE	8	0.1%
151	CARL JUNCTION	8	0.1%
152	DEXTER	8	0.1%
153	MARSHFIELD	8	0.1%
154	PECULIAR	8	0.1%
155	POTOSI	8	0.1%
156	ROCK HILL	8	0.1%
157	ST. JAMES	8	0.1%
158	WINFIELD	8	0.1%
159	CAMDENTON	7	0.1%
160	COTTLEVILLE	7	0.1%
161	DARDENNE PRAIRIE	7	0.1%
162	LINN CREEK	7	0.1%
163	LONE JACK	7	0.1%
164	MARIONVILLE	7	0.1%
165	MINER	7	0.1%
166	NORMANDY	7	0.1%
167	OAKLAND	7	0.1%
168	OLD MONROE	7	0.1%
169	PAGEDALE	7	0.1%
170	PARKVILLE	7	0.1%
171	RIVER BEND	7	0.1%
172	SUGAR CREEK	7	0.1%
173	WARSAW	7	0.1%
174	ASHLAND	6	0.1%
175	CARUTHERSVILLE	6	0.1%
176	CRESTWOOD	6	0.1%
177	FORISTELL	6	0.1%
178	FRONTENAC	6	0.1%
179	HIGGINSVILLE	6	0.1%
180	KIMBERLING CITY	6	0.1%
181	LAURIE	6	0.1%
182	NEW MADRID	6	0.1%
183	PALMYRA	6	0.1%

184	PLEASANT VALLEY	6	0.1%
185	RIVERVIEW	6	0.1%
186	TRENTON	6	0.1%
187	WELLSTON	6	0.1%
188	WINONA	6	0.1%
189	WOODSON TERRACE	6	0.1%
190	AVA	5	0.1%
191	BATTLEFIELD	5	0.1%
192	BETHANY	5	0.1%
193	BLACK JACK	5	0.1%
194	BOWLING GREEN	5	0.1%
195	BUFFALO	5	0.1%
196	CABOOL	5	0.1%
197	ELSBERRY	5	0.1%
198	FLORDELL HILLS	5	0.1%
199	HOLLISTER	5	0.1%
200	LEADWOOD	5	0.1%
201	LEXINGTON	5	0.1%
202	LOCKWOOD	5	0.1%
203	MONTGOMERY CITY	5	0.1%
204	REEDS SPRING	5	0.1%
205	SAVANNAH	5	0.1%
206	SHELL CITY	5	0.1%
207	WAYNESVILLE	5	0.1%
208	BONNE TERRE	4	0.0%
209	BOURBON	4	0.0%
210	BULL CREEK	4	0.0%
211	CARROLLTON	4	0.0%
212	CENTRALIA	4	0.0%
213	CLARK	4	0.0%
214	CLEVER	4	0.0%
215	COOL VALLEY	4	0.0%
216	COUNTRY CLUB VILLAGE	4	0.0%
217	CUBA	4	0.0%
218	DIAMOND	4	0.0%
219	EDINA	4	0.0%
220	EL DORADO SPRINGS	4	0.0%
221	FORDLAND	4	0.0%
222	GAINESVILLE	4	0.0%
223	JONESBURG	4	0.0%
224	LOWRY CITY	4	0.0%
225	MARLBOROUGH	4	0.0%
226	MERRIAM WOODS	4	0.0%
227	NEW LONDON	4	0.0%
228	NORTHWOODS	4	0.0%
229	OAK GROVE VILLAGE	4	0.0%
230	ODESSA	4	0.0%

231	OWENSVILLE	4	0.0%
232	SCOTT CITY	4	0.0%
233	SPARTA	4	0.0%
234	STEELE	4	0.0%
235	TAOS	4	0.0%
236	WINDSOR PLACE	4	0.0%
237	BEL-NOR	3	0.0%
238	BERNIE	3	0.0%
239	BRECKENRIDGE HILLS	3	0.0%
240	BRUNSWICK	3	0.0%
241	CALIFORNIA	3	0.0%
242	CONWAY	3	0.0%
243	COUNTRY CLUB HILLS	3	0.0%
244	DUQUESNE	3	0.0%
245	ELLSINORE	3	0.0%
246	EMINENCE	3	0.0%
247	FREEMAN	3	0.0%
248	GALENA	3	0.0%
249	GARDEN CITY	3	0.0%
250	GORDONVILLE	3	0.0%
251	HERMANN	3	0.0%
252	HOUSTON	3	0.0%
253	IBERIA	3	0.0%
254	IRONTON	3	0.0%
255	LEADINGTON	3	0.0%
256	LOUISIANA	3	0.0%
257	MARBLE HILL	3	0.0%
258	MOUNT VERNON	3	0.0%
259	MOUNTAIN GROVE	3	0.0%
260	NEW HAVEN	3	0.0%
261	PIERCE CITY	3	0.0%
262	PINEVILLE	3	0.0%
263	PORTAGE DES SIOUX	3	0.0%
264	STE. GENEVIEVE	3	0.0%
265	TWIN OAKS	3	0.0%
266	WESTON	3	0.0%
267	WOOD HEIGHTS	3	0.0%
268	APPLETON CITY	2	0.0%
269	BELLE	2	0.0%
270	BILLINGS	2	0.0%
271	BROOKFIELD	2	0.0%
272	BURLINGTON JUNCTION	2	0.0%
273	BUTLER	2	0.0%
274	BYRNES MILL	2	0.0%
275	CARTERVILLE	2	0.0%
276	CASSVILLE	2	0.0%
277	CENTER	2	0.0%

278	CENTERVILLE	2	0.0%
279	CHAFFEE	2	0.0%
280	CONCORDIA	2	0.0%
281	DOOLITTLE	2	0.0%
282	DUENWEG	2	0.0%
283	EDMUNDSON	2	0.0%
284	ETHEL	2	0.0%
285	EVERTON	2	0.0%
286	FIDELITY	2	0.0%
287	FOLEY	2	0.0%
288	FRANKFORD	2	0.0%
289	FREDERICKTOWN	2	0.0%
290	GOODMAN	2	0.0%
291	GOWER	2	0.0%
292	GRAHAM	2	0.0%
293	GREEN PARK	2	0.0%
294	HAWK POINT	2	0.0%
295	HAYTI HEIGHTS	2	0.0%
296	HOLCOMB	2	0.0%
297	HOLDEN	2	0.0%
298	HOLTS SUMMIT	2	0.0%
299	HOPKINS	2	0.0%
300	JAMESPORT	2	0.0%
301	KIRBYVILLE	2	0.0%
302	KNOB NOSTER	2	0.0%
303	LA MONTE	2	0.0%
304	LAMAR HEIGHTS	2	0.0%
305	LAWSON	2	0.0%
306	LEAWOOD	2	0.0%
307	MALDEN	2	0.0%
308	MARSTON	2	0.0%
309	MEMPHIS	2	0.0%
310	META	2	0.0%
311	MIAMI	2	0.0%
312	MONROE CITY	2	0.0%
313	NEELYVILLE	2	0.0%
314	NEW CAMBRIA	2	0.0%
315	NEW HAMPTON	2	0.0%
316	PARKWAY	2	0.0%
317	PRINCETON	2	0.0%
318	PURDY	2	0.0%
319	RANDOLPH	2	0.0%
320	SAGINAW	2	0.0%
321	SELIGMAN	2	0.0%
322	SHOAL CREEK DRIVE	2	0.0%

323	SOUTHWEST CITY	2	0.0%
324	SPICKARD	2	0.0%
325	ST. MARTINS	2	0.0%
326	ST. THOMAS	2	0.0%
327	STANBERRY	2	0.0%
328	STEELVILLE	2	0.0%
329	STOUTLAND	2	0.0%
330	STOVER	2	0.0%
331	SUNRISE BEACH	2	0.0%
332	THAYER	2	0.0%
333	TIPTON	2	0.0%
334	UNIONVILLE	2	0.0%
335	URBANA	2	0.0%
336	VERONA	2	0.0%
337	VERSAILLES	2	0.0%
338	ADRIAN	1	0.0%
339	ADVANCE	1	0.0%
340	AGENCY	1	0.0%
341	ALBANY	1	0.0%
342	ALTAMONT	1	0.0%
343	ALTENBURG	1	0.0%
344	ANNISTON	1	0.0%
345	ARCHIE	1	0.0%
346	ARROW POINT	1	0.0%
347	ASH GROVE	1	0.0%
348	AUXVASSE	1	0.0%
349	BAGNELL	1	0.0%
350	BAKERSFIELD	1	0.0%
351	BARING	1	0.0%
352	BARNETT	1	0.0%
353	BATES CITY	1	0.0%
354	BELL CITY	1	0.0%
355	BERTRAND	1	0.0%
356	BEVERLY HILLS	1	0.0%
357	BEVIER	1	0.0%
358	BIEHLE	1	0.0%
359	BIG LAKE	1	0.0%
360	BIRCH TREE	1	0.0%
361	BLOOMSDALE	1	0.0%
362	BOSWORTH	1	0.0%
363	BRAGG CITY	1	0.0%
364	BRASHEAR	1	0.0%
365	BRAYMER	1	0.0%
366	BRECKENRIDGE	1	0.0%

367	BRUMLEY	1	0.0%
368	BUNKER	1	0.0%
369	CAINSVILLE	1	0.0%
370	CHILHOWEE	1	0.0%
371	CHULA	1	0.0%
372	CLARENCE	1	0.0%
373	CLARKSVILLE	1	0.0%
374	CLEVELAND	1	0.0%
375	COLLINS	1	0.0%
376	CROSS TIMBERS	1	0.0%
377	CRYSTAL LAKES	1	0.0%
378	CURRYVILLE	1	0.0%
379	DEARBORN	1	0.0%
380	DELTA	1	0.0%
381	DIXON	1	0.0%
382	DOWNING	1	0.0%
383	DREXEL	1	0.0%
384	DUTCHTOWN	1	0.0%
385	EAGLEVILLE	1	0.0%
386	ELLINGTON	1	0.0%
387	EOLIA	1	0.0%
388	ESSEX	1	0.0%
389	EVERGREEN	1	0.0%
390	FARLEY	1	0.0%
391	FAYETTE	1	0.0%
392	FLINT HILL	1	0.0%
393	FREISTATT	1	0.0%
394	GALLATIN	1	0.0%
395	GLASGOW	1	0.0%
396	GRANT CITY	1	0.0%
397	GREENFIELD	1	0.0%
398	GREENWOOD	1	0.0%
399	HALLSVILLE	1	0.0%
400	HAMILTON	1	0.0%
401	HANLEY HILLS	1	0.0%
402	HARRISBURG	1	0.0%
403	HENRIETTA	1	0.0%
404	HERMITAGE	1	0.0%
405	HIGBEE	1	0.0%
406	HIGH HILL	1	0.0%
407	HUMANSVILLE	1	0.0%
408	HUNTSVILLE	1	0.0%
409	HURLEY	1	0.0%
410	INNSBROOK	1	0.0%

411	JANE	1	0.0%
412	JASPER	1	0.0%
413	JERICO SPRINGS	1	0.0%
414	JOSEPHVILLE	1	0.0%
415	KEYTESVILLE	1	0.0%
416	KNOX CITY	1	0.0%
417	KOSHKONONG	1	0.0%
418	LA BELLE	1	0.0%
419	LACLEDE	1	0.0%
420	LADDONIA	1	0.0%
421	LAKE LAFAYETTE	1	0.0%
422	LAKE TAPAWINGO	1	0.0%
423	LANCASTER	1	0.0%
424	LEASBURG	1	0.0%
425	LEVASY	1	0.0%
426	LICKING	1	0.0%
427	LINN	1	0.0%
428	LUDLOW	1	0.0%
429	LURAY	1	0.0%
430	MADISON	1	0.0%
431	MANSFIELD	1	0.0%
432	MARCELINE	1	0.0%
433	MILAN	1	0.0%
434	MOUND CITY	1	0.0%
435	NAPOLEON	1	0.0%
436	NAYLOR	1	0.0%
437	NEW FLORENCE	1	0.0%
438	NEWBURG	1	0.0%
439	NOEL	1	0.0%
440	NORWOOD	1	0.0%
441	OLEAN	1	0.0%
442	ORAN	1	0.0%
443	OREGON	1	0.0%
444	OSCEOLA	1	0.0%
445	PARIS	1	0.0%
446	PASCOLA	1	0.0%
447	PASSAIC	1	0.0%
448	PATTONSBURG	1	0.0%
449	PERRY	1	0.0%
450	PICKERING	1	0.0%
451	PILOT KNOB	1	0.0%
452	PLATO	1	0.0%
453	PLATTE WOODS	1	0.0%
454	POINT LOOKOUT	1	0.0%

455	POLO	1	0.0%
456	PORTAGEVILLE	1	0.0%
457	QULIN	1	0.0%
458	RAYMONDVILLE	1	0.0%
459	REDINGS MILL	1	0.0%
460	RENSELAER	1	0.0%
461	RICHLAND	1	0.0%
462	RIDGELY	1	0.0%
463	RISCO	1	0.0%
464	ROCKAWAY BEACH	1	0.0%
465	ROCKVILLE	1	0.0%
466	ROSCOE	1	0.0%
467	RUSHVILLE	1	0.0%
468	RUSSELLVILLE	1	0.0%
469	SADDLEBROOKE	1	0.0%
470	SALISBURY	1	0.0%
471	SARCOXIE	1	0.0%
472	SHERIDAN	1	0.0%
473	SILVER CREEK	1	0.0%
474	SLATER	1	0.0%
475	SOUTH LINEVILLE	1	0.0%
476	ST. CLOUD	1	0.0%
477	ST. ELIZABETH	1	0.0%
478	ST. PAUL	1	0.0%
479	STOCKTON	1	0.0%
480	STOTTS CITY	1	0.0%
481	SUMMERSVILLE	1	0.0%
482	TARKIO	1	0.0%
483	THEODOSIA	1	0.0%
484	TRACY	1	0.0%
485	TRUESDALE	1	0.0%
486	UNITY VILLAGE	1	0.0%
487	UPLANDS PARK	1	0.0%
488	URICH	1	0.0%
489	UTICA	1	0.0%
490	VAN BUREN	1	0.0%
491	VILLAGE OF FOUR SEASONS	1	0.0%
492	VILLAGE OF LOCH LLOYD	1	0.0%
493	VINITA PARK	1	0.0%
494	VINITA TERRACE	1	0.0%
495	WAYLAND	1	0.0%
496	WEATHERBY LAKE	1	0.0%
497	WELLSVILLE	1	0.0%
498	WHITE OAK	1	0.0%

499	WHITEMAN AFB	1	0.0%
500	WILLOW SPRINGS	1	0.0%
501	WINSTON	1	0.0%
502	WYATT	1	0.0%
503	ZALMA	1	0.0%
TOTAL		9,839	

**2012-2016 MISSOURI SERIOUS INJURY TRAFFIC CRASHES
RANK ORDER COUNTY LIST**

Ranking	County	Count	Percent
1	JACKSON	2,426	12.4%
2	ST. LOUIS	2,277	11.6%
3	ST. LOUIS CITY	958	4.9%
4	GREENE	780	4.0%
5	JEFFERSON	759	3.9%
6	ST. CHARLES	626	3.2%
7	CLAY	563	2.9%
8	BUCHANAN	555	2.8%
9	FRANKLIN	413	2.1%
10	BOONE	383	2.0%
11	CHRISTIAN	335	1.7%
12	JASPER	299	1.5%
13	LACLEDE	287	1.5%
14	COLE	270	1.4%
15	NEWTON	269	1.4%
16	TANEY	257	1.3%
17	LINCOLN	242	1.2%
18	CAPE GIRARDEAU	229	1.2%
19	PLATTE	211	1.1%
20	BARRY	206	1.1%
21	LAWRENCE	202	1.0%
22	CASS	198	1.0%
23	CAMDEN	180	0.9%
24	WEBSTER	179	0.9%
25	HOWELL	170	0.9%
26	CALLAWAY	169	0.9%
27	ST. FRANCOIS	165	0.8%
28	BUTLER	163	0.8%
29	JOHNSON	161	0.8%
30	STONE	160	0.8%
31	TEXAS	160	0.8%
32	PULASKI	156	0.8%
33	PETTIS	149	0.8%
34	PHELPS	144	0.7%
35	MILLER	140	0.7%
36	SCOTT	136	0.7%
37	MARION	133	0.7%
38	LAFAYETTE	130	0.7%
39	MCDONALD	128	0.7%
40	PEMISCOT	121	0.6%
41	RANDOLPH	120	0.6%
42	WASHINGTON	108	0.6%

43	NEW MADRID	106	0.5%
44	BENTON	104	0.5%
45	PIKE	104	0.5%
46	DENT	99	0.5%
47	WARREN	97	0.5%
48	CRAWFORD	96	0.5%
49	RALLS	94	0.5%
50	MORGAN	91	0.5%
51	NODAWAY	90	0.5%
52	ADAIR	82	0.4%
53	WRIGHT	80	0.4%
54	MACON	78	0.4%
55	AUDRAIN	77	0.4%
56	VERNON	77	0.4%
57	BOLLINGER	75	0.4%
58	HENRY	74	0.4%
59	DUNKLIN	72	0.4%
60	ANDREW	71	0.4%
61	SHANNON	71	0.4%
62	BATES	69	0.4%
63	OZARK	67	0.3%
64	COOPER	66	0.3%
65	CLINTON	65	0.3%
66	SALINE	65	0.3%
67	POLK	64	0.3%
68	RAY	64	0.3%
69	DOUGLAS	63	0.3%
70	STE. GENEVIEVE	63	0.3%
71	STODDARD	62	0.3%
72	ST. CLAIR	61	0.3%
73	LEWIS	60	0.3%
74	MONTGOMERY	58	0.3%
75	GASCONADE	56	0.3%
76	PERRY	56	0.3%
77	DADE	54	0.3%
78	MONITEAU	49	0.2%
79	OREGON	49	0.2%
80	CEDAR	48	0.2%
81	REYNOLDS	48	0.2%
82	RIPLEY	47	0.2%
83	WAYNE	47	0.2%
84	LIVINGSTON	46	0.2%
85	HOWARD	43	0.2%
86	MARIES	43	0.2%
87	ATCHISON	41	0.2%
88	BARTON	40	0.2%
89	MISSISSIPPI	40	0.2%

90	HOLT	39	0.2%
91	IRON	39	0.2%
92	MONROE	36	0.2%
93	OSAGE	36	0.2%
94	CLARK	35	0.2%
95	DEKALB	35	0.2%
96	DAVISS	34	0.2%
97	HARRISON	34	0.2%
98	KNOX	33	0.2%
99	CALDWELL	32	0.2%
100	SULLIVAN	32	0.2%
101	CHARITON	31	0.2%
102	LINN	31	0.2%
103	CARTER	29	0.1%
104	GRUNDY	28	0.1%
105	DALLAS	27	0.1%
106	CARROLL	26	0.1%
107	PUTNAM	26	0.1%
108	SHELBY	24	0.1%
109	GENTRY	22	0.1%
110	SCOTLAND	22	0.1%
111	MERCER	21	0.1%
112	MADISON	16	0.1%
113	SCHUYLER	15	0.1%
114	WORTH	8	0.0%
115	HICKORY	6	0.0%
TOTAL		19,606	

**2012-2016 MISSOURI SERIOUS INJURY TRAFFIC CRASHES
RANK ORDER UNINCORPORATED COUNTY LIST**

Ranking	County	Count	Percent
1	ST. LOUIS	718	7.4%
2	JEFFERSON	611	6.3%
3	GREENE	323	3.3%
4	FRANKLIN	291	3.0%
5	LACLEDE	222	2.3%
6	NEWTON	194	2.0%
7	ST. CHARLES	193	2.0%
8	TANEY	184	1.9%
9	CHRISTIAN	182	1.9%
10	LINCOLN	179	1.8%
11	BARRY	178	1.8%
12	LAWRENCE	165	1.7%
13	BOONE	148	1.5%
14	TEXAS	148	1.5%
15	HOWELL	146	1.5%
16	WEBSTER	137	1.4%
17	JOHNSON	136	1.4%
18	PULASKI	133	1.4%
19	STONE	133	1.4%
20	CAMDEN	131	1.3%
21	JASPER	131	1.3%
22	CALLAWAY	123	1.3%
23	CAPE GIRARDEAU	118	1.2%
24	BUTLER	117	1.2%
25	MCDONALD	111	1.1%
26	LAFAYETTE	110	1.1%
27	PETTIS	109	1.1%
28	MILLER	108	1.1%
29	ST. FRANCOIS	101	1.0%
30	WASHINGTON	100	1.0%
31	BENTON	97	1.0%
32	PEMISCOT	96	1.0%
33	PIKE	91	0.9%
34	CASS	90	0.9%
35	SCOTT	90	0.9%
36	NEW MADRID	87	0.9%
37	PHELPS	87	0.9%
38	RALLS	85	0.9%
39	COLE	83	0.8%
40	CRAWFORD	81	0.8%
41	JACKSON	80	0.8%
42	MORGAN	80	0.8%

43	DENT	79	0.8%
44	MARION	77	0.8%
45	WRIGHT	75	0.8%
46	NODAWAY	74	0.8%
47	BOLLINGER	71	0.7%
48	RANDOLPH	69	0.7%
49	PLATTE	66	0.7%
50	BATES	63	0.6%
51	CLAY	63	0.6%
52	ANDREW	62	0.6%
53	MACON	62	0.6%
54	OZARK	61	0.6%
55	SHANNON	61	0.6%
56	CLINTON	59	0.6%
57	LEWIS	59	0.6%
58	STE. GENEVIEVE	59	0.6%
59	DOUGLAS	58	0.6%
60	AUDRAIN	57	0.6%
61	WARREN	57	0.6%
62	BUCHANAN	56	0.6%
63	COOPER	54	0.6%
64	HENRY	52	0.5%
65	ST. CLAIR	52	0.5%
66	VERNON	52	0.5%
67	SALINE	51	0.5%
68	GASCONADE	49	0.5%
69	STODDARD	48	0.5%
70	RAY	47	0.5%
71	WAYNE	47	0.5%
72	DADE	46	0.5%
73	MONTGOMERY	46	0.5%
74	OREGON	46	0.5%
75	DUNKLIN	45	0.5%
76	PERRY	45	0.5%
77	REYNOLDS	45	0.5%
78	MONITEAU	44	0.5%
79	CEDAR	42	0.4%
80	HOWARD	41	0.4%
81	MARIES	41	0.4%
82	POLK	41	0.4%
83	ATCHISON	40	0.4%
84	MISSISSIPPI	37	0.4%
85	HOLT	36	0.4%
86	IRON	35	0.4%
87	RIPLEY	34	0.3%
88	CLARK	33	0.3%
89	MONROE	33	0.3%

90	OSAGE	33	0.3%
91	LIVINGSTON	32	0.3%
92	SULLIVAN	31	0.3%
93	ADAIR	29	0.3%
94	BARTON	29	0.3%
95	CALDWELL	28	0.3%
96	DAVISS	28	0.3%
97	DEKALB	28	0.3%
98	KNOX	27	0.3%
99	LINN	27	0.3%
100	CHARITON	26	0.3%
101	CARTER	25	0.3%
102	HARRISON	25	0.3%
103	PUTNAM	24	0.2%
104	SHELBY	23	0.2%
105	CARROLL	21	0.2%
106	DALLAS	20	0.2%
107	GRUNDY	20	0.2%
108	SCOTLAND	20	0.2%
109	GENTRY	19	0.2%
110	MERCER	18	0.2%
111	MADISON	14	0.1%
112	SCHUYLER	13	0.1%
113	WORTH	6	0.1%
114	HICKORY	4	0.0%
TOTAL		9,767	