



# 2017

State of Missouri  
Highway Safety & Performance Plan  
&  
Section 405 Grant Program

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**APPENDIX A TO PART 1300 –  
CERTIFICATIONS AND ASSURANCES  
FOR HIGHWAY SAFETY GRANTS  
(23 U.S.C. CHAPTER 4; SEC. 1906, PUB. L. 109-59,  
AS AMENDED BY SEC. 4011, PUB. L. 114-94)**

*[Each fiscal year, the Governor's Representative for Highway Safety must sign these Certifications and Assurances affirming that the State complies with all requirements, including applicable Federal statutes and regulations, that are in effect during the grant period. Requirements that also apply to subrecipients are noted under the applicable caption.]*

State: Missouri

Fiscal Year: 2017

By submitting an application for Federal grant funds under 23 U.S.C. Chapter 4 or Section 1906, the State Highway Safety Office acknowledges and agrees to the following conditions and requirements. In my capacity as the Governor's Representative for Highway Safety, I hereby provide the following Certifications and Assurances:

**GENERAL REQUIREMENTS**

The State will comply with applicable statutes and regulations, including but not limited to:

- 23 U.S.C. Chapter 4 – Highway Safety Act of 1966, as amended
- Sec. 1906, Pub. L. 109-59, as amended by Sec. 4011, Pub. L. 114-94
- 23 CFR part 1300 – Uniform Procedures for State Highway Safety Grant Programs
- 2 CFR part 200 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards
- 2 CFR part 1201 – Department of Transportation, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards

**INTERGOVERNMENTAL REVIEW OF FEDERAL PROGRAMS**

The State has submitted appropriate documentation for review to the single point of contact designated by the Governor to review Federal programs, as required by Executive Order 12372 (Intergovernmental Review of Federal Programs).

**FEDERAL FUNDING ACCOUNTABILITY AND TRANSPARENCY ACT (FFATA)**

The State will comply with FFATA guidance, OMB Guidance on FFATA Subaward and Executive Compensation Reporting, August 27, 2010, ([https://www.fsr.gov/documents/OMB\\_Guidance\\_on\\_FFATA\\_Subaward\\_and\\_Executive\\_Compensation\\_Reporting\\_08272010.pdf](https://www.fsr.gov/documents/OMB_Guidance_on_FFATA_Subaward_and_Executive_Compensation_Reporting_08272010.pdf)) by reporting to FSR.gov for each sub-grant awarded:

- Name of the entity receiving the award;
- Amount of the award;

- Information on the award including transaction type, funding agency, the North American Industry Classification System code or Catalog of Federal Domestic Assistance number (where applicable), program source;
- Location of the entity receiving the award and the primary location of performance under the award, including the city, State, congressional district, and country; and an award title descriptive of the purpose of each funding action;
- A unique identifier (DUNS);
- The names and total compensation of the five most highly compensated officers of the entity if:
  - (i) the entity in the preceding fiscal year received—
    - (I) 80 percent or more of its annual gross revenues in Federal awards;
    - (II) \$25,000,000 or more in annual gross revenues from Federal awards; and
  - (ii) the public does not have access to information about the compensation of the senior executives of the entity through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986;
- Other relevant information specified by OMB guidance.

#### **NONDISCRIMINATION**

**(applies to subrecipients as well as States)**

The State highway safety agency will comply with all Federal statutes and implementing regulations relating to nondiscrimination ("Federal Nondiscrimination Authorities"). These include but are not limited to:

- **Title VI of the Civil Rights Act of 1964** (42 U.S.C. 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin) and 49 CFR part 21;
- **The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970**, (42 U.S.C. 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- **Federal-Aid Highway Act of 1973**, (23 U.S.C. 324 *et seq.*), and **Title IX of the Education Amendments of 1972**, as amended (20 U.S.C. 1681-1683 and 1685-1686) (prohibit discrimination on the basis of sex);
- **Section 504 of the Rehabilitation Act of 1973**, (29 U.S.C. 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability) and 49 CFR part 27;
- **The Age Discrimination Act of 1975**, as amended, (42 U.S.C. 6101 *et seq.*), (prohibits discrimination on the basis of age);
- **The Civil Rights Restoration Act of 1987**, (Pub. L. 100-209), (broadens scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal aid recipients, sub-recipients and contractors, whether such programs or activities are Federally-funded or not);
- **Titles II and III of the Americans with Disabilities Act** (42 U.S.C. 12131-12189) (prohibits discrimination on the basis of disability in the operation of public entities,

public and private transportation systems, places of public accommodation, and certain testing) and 49 CFR parts 37 and 38;

- **Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations** (prevents discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations); and
- **Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency** (guards against Title VI national origin discrimination/discrimination because of limited English proficiency (LEP) by ensuring that funding recipients take reasonable steps to ensure that LEP persons have meaningful access to programs (70 FR at 74087 to 74100)).

The State highway safety agency—

- Will take all measures necessary to ensure that no person in the United States shall, on the grounds of race, color, national origin, disability, sex, age, limited English proficiency, or membership in any other class protected by Federal Nondiscrimination Authorities, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any of its programs or activities, so long as any portion of the program is Federally-assisted.
- Will administer the program in a manner that reasonably ensures that any of its subrecipients, contractors, subcontractors, and consultants receiving Federal financial assistance under this program will comply with all requirements of the Non-Discrimination Authorities identified in this Assurance;
- Agrees to comply (and require any of its subrecipients, contractors, subcontractors, and consultants to comply) with all applicable provisions of law or regulation governing US DOT's or NHTSA's access to records, accounts, documents, information, facilities, and staff, and to cooperate and comply with any program or compliance reviews, and/or complaint investigations conducted by US DOT or NHTSA under any Federal Nondiscrimination Authority;
- Acknowledges that the United States has a right to seek judicial enforcement with regard to any matter arising under these Non-Discrimination Authorities and this Assurance;
- Insert in all contracts and funding agreements with other State or private entities the following clause:

“During the performance of this contract/funding agreement, the contractor/funding recipient agrees—

- a. To comply with all Federal nondiscrimination laws and regulations, as may be amended from time to time;

- b. Not to participate directly or indirectly in the discrimination prohibited by any Federal non-discrimination law or regulation, as set forth in Appendix B of 49 CFR part 21 and herein;
- c. To permit access to its books, records, accounts, other sources of information, and its facilities as required by the State highway safety office, US DOT or NHTSA;
- d. That, in event a contractor/funding recipient fails to comply with any nondiscrimination provisions in this contract/funding agreement, the State highway safety agency will have the right to impose such contract/agreement sanctions as it or NHTSA determine are appropriate, including but not limited to withholding payments to the contractor/funding recipient under the contract/agreement until the contractor/funding recipient complies; and/or cancelling, terminating, or suspending a contract or funding agreement, in whole or in part; and
- e. To insert this clause, including paragraphs a through e, in every subcontract and subagreement and in every solicitation for a subcontract or sub-agreement, that receives Federal funds under this program.

**THE DRUG-FREE WORKPLACE ACT OF 1988 (41 U.S.C. 8103)**

The State will provide a drug-free workplace by:

- a. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- b. Establishing a drug-free awareness program to inform employees about:
  - o The dangers of drug abuse in the workplace.
  - o The grantee's policy of maintaining a drug-free workplace.
  - o Any available drug counseling, rehabilitation, and employee assistance programs.
  - o The penalties that may be imposed upon employees for drug violations occurring in the workplace.
  - o Making it a requirement that each employee engaged in the performance of the grant be given a copy of the statement required by paragraph (a).
- c. Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will –
  - o Abide by the terms of the statement.
  - o Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after such conviction.
- d. Notifying the agency within ten days after receiving notice under subparagraph (c)(2) from an employee or otherwise receiving actual notice of such conviction.
- e. Taking one of the following actions, within 30 days of receiving notice under subparagraph (c)(2), with respect to any employee who is so convicted –

- Taking appropriate personnel action against such an employee, up to and including termination.
  - Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency.
- f. Making a good faith effort to continue to maintain a drug-free workplace through implementation of all of the paragraphs above.

**POLITICAL ACTIVITY (HATCH ACT)**  
**(applies to subrecipients as well as States)**

The State will comply with provisions of the Hatch Act (5 U.S.C. 1501-1508), which limits the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

**CERTIFICATION REGARDING FEDERAL LOBBYING**  
**(applies to subrecipients as well as States)**

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, 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, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than 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 this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all sub-award at all tiers (including subcontracts, subgrants, and contracts under grant, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who

fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

**RESTRICTION ON STATE LOBBYING**  
**(applies to subrecipients as well as States)**

None of the funds under this program 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. Such activities include both direct and indirect (e.g., "grassroots") lobbying activities, with one exception. This does not preclude a State official whose salary is supported with NHTSA funds from engaging in direct communications with State or local legislative officials, in accordance with customary State practice, even if such communications urge legislative officials to favor or oppose the adoption of a specific pending legislative proposal.

**CERTIFICATION REGARDING DEBARMENT AND SUSPENSION**  
**(applies to subrecipients as well as States)**

Instructions for Primary Certification (States)

1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below and agrees to comply with the requirements of 2 CFR Parts 180 and 1300.
2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default or may pursue suspension or debarment.
4. The prospective primary participant shall provide immediate written notice to the department or agency to which this proposal is submitted if at any time the prospective primary participant learns its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The terms *covered transaction*, *debarment*, *suspension*, *ineligible*, *lower tier*, *participant*, *person*, *primary tier*, *principal*, and *voluntarily excluded*, as used in this clause, have the



meaning set out in the Definitions and coverage sections of 2 CFR Part 180. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.

6. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by NHTSA.

7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Instructions for Lower Tier Certification" including the "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion—Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions and will require lower tier participants to comply with 2 CFR Parts 180 and 1300.

8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the list of Parties Excluded from Federal Procurement and Non-procurement Programs.

9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

10. Except for transactions authorized under paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR part 9, subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, the department or agency may disallow costs, annul or terminate the transaction, issue a stop work order, debar or suspend you, or take other remedies as appropriate.

*Certification Regarding Debarment, Suspension, and Other Responsibility Matters-Primary Covered Transactions*

(1) The prospective primary participant certifies to the best of its knowledge and belief, that its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency;

- (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of record, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or Local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
- (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

(2) Where the prospective primary participant is unable to certify to any of the Statements in this certification, such prospective participant shall attach an explanation to this proposal.

#### Instructions for Lower Tier Certification

1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below and agrees to comply with the requirements of 2 CFR Parts 180 and 1300.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms *covered transaction*, *debarment*, *suspension*, *ineligible*, *lower tier*, *participant*, *person*, *primary tier*, *principal*, and *voluntarily excluded*, as used in this clause, have the meanings set out in the Definition and Coverage sections of 2 CFR Part 180. You may contact the person to whom this proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by NHTSA.
6. The prospective lower tier participant further agrees by submitting this proposal that it will include the clause titled "Instructions for Lower Tier Certification" including the "Certification

Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions and will require lower tier participants to comply with 2 CFR Parts 180 and 1300.

7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the List of Parties Excluded from Federal Procurement and Non-procurement Programs.

8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR part 9, subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, the department or agency with which this transaction originated may disallow costs, annul or terminate the transaction, issue a stop work order, debar or suspend you, or take other remedies as appropriate.

*Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -- Lower Tier Covered Transactions:*

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

**BUY AMERICA ACT**

**(applies to subrecipients as well as States)**

The State and each subrecipient will comply with the Buy America requirement (23 U.S.C. 313) when purchasing items using Federal funds. Buy America requires a State, or subrecipient, to purchase only steel, iron and manufactured products produced in the United States with Federal funds, unless the Secretary of Transportation determines that such domestically produced items 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. In order to use Federal funds to purchase

foreign produced items, the State must submit a waiver request that provides an adequate basis and justification to and approved by the Secretary of Transportation.

**PROHIBITION ON USING GRANT FUNDS TO CHECK FOR HELMET USAGE**  
**(applies to subrecipients as well as States)**

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 motorcyclists.

**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. The National Highway Traffic Safety Administration (NHTSA) is responsible for providing leadership and guidance in support of this Presidential initiative. For information on how to implement such a program, or statistics on the potential benefits and cost-savings to your company or organization, please visit the Buckle Up America section on NHTSA's website at [www.nhtsa.dot.gov](http://www.nhtsa.dot.gov). Additional resources are available from the Network of Employers for Traffic Safety (NETS), a public-private partnership headquartered in the Washington, D.C. metropolitan area, and dedicated to improving the traffic safety practices of employers and employees. NETS is prepared to provide technical assistance, a simple, user-friendly program kit, and an award for achieving the President's goal of 90 percent seat belt use. NETS can be contacted at 1 (888) 221-0045 or visit its website at [www.trafficsafety.org](http://www.trafficsafety.org).

**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. States are also encouraged to conduct workplace safety initiatives in a manner commensurate with the size of the business, such as establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving, and education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

**SECTION 402 REQUIREMENTS**

1. To the best of my personal knowledge, the information submitted in the Highway Safety Plan in support of the State's application for a grant under 23 U.S.C. 402 is accurate and complete.
2. The Governor is the responsible official for the administration of the State highway safety program, by appointing a Governor's Representative for Highway Safety who shall be responsible for a State highway safety agency that has adequate powers and is suitably

equipped and organized (as evidenced by appropriate oversight procedures governing such areas as procurement, financial administration, and the use, management, and disposition of equipment) to carry out the program. (23 U.S.C. 402(b)(1)(A))

3. The political subdivisions of this State are authorized, as part of the State highway safety program, to carry out within their jurisdictions local highway safety programs which have been approved by the Governor and are in accordance with the uniform guidelines promulgated by the Secretary of Transportation. (23 U.S.C. 402(b)(1)(B))
4. At least 40 percent of all Federal funds apportioned to this State under 23 U.S.C. 402 for this fiscal year will be expended by or for the benefit of political subdivisions of the State in carrying out local highway safety programs (23 U.S.C. 402(b)(1)(C)) or 95 percent by and for the benefit of Indian tribes (23 U.S.C. 402(h)(2)), unless this requirement is waived in writing. (This provision is not applicable to the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.)
5. The State's highway safety program provides adequate and reasonable access for the safe and convenient movement of physically handicapped persons, including those in wheelchairs, across curbs constructed or replaced on or after July 1, 1976, at all pedestrian crosswalks. (23 U.S.C. 402(b)(1)(D))
6. The State will provide for an evidenced-based traffic safety enforcement program to prevent traffic violations, crashes, and crash fatalities and injuries in areas most at risk for such incidents. (23 U.S.C. 402(b)(1)(E))
7. The State will implement activities in support of national highway safety goals to reduce motor vehicle related fatalities that also reflect the primary data-related crash factors within the State, as identified by the State highway safety planning process, including:
  - Participation in the National high-visibility law enforcement mobilizations as identified annually in the NHTSA Communications Calendar, including not less than 3 mobilization campaigns in each fiscal year to –
    - Reduce alcohol-impaired or drug-impaired operation of motor vehicles; and
    - Increase use of seatbelts by occupants of motor vehicles;
  - Submission of information regarding mobilization participation into the HVE Database;
  - Sustained enforcement of statutes addressing impaired driving, occupant protection, and driving in excess of posted speed limits;
  - An annual Statewide seat belt use survey in accordance with 23 CFR part 1340 for the measurement of State seat belt use rates, except for the Secretary of Interior on behalf of Indian tribes;
  - Development of Statewide data systems to provide timely and effective data analysis to support allocation of highway safety resources;
  - Coordination of Highway Safety Plan, data collection, and information systems with the State strategic highway safety plan, as defined in 23 U.S.C. 148(a).  
(23 U.S.C. 402(b)(1)(F))

- 8. The State will actively encourage all relevant law enforcement agencies in the State to follow the guidelines established for vehicular pursuits issued by the International Association of Chiefs of Police that are currently in effect. (23 U.S.C. 402(j))
- 9. The State will not expend Section 402 funds to carry out a program to purchase, operate, or maintain an automated traffic enforcement system. (23 U.S.C. 402(c)(4))

The State: [**CHECK ONLY ONE**]

Certifies that automated traffic enforcement systems are not used on any public road in the State;

OR

Is unable to certify that automated traffic enforcement systems are not used on any public road in the State, and therefore will conduct a survey meeting the requirements of 23 CFR 1300.13(d)(3) AND will submit the survey results to the NHTSA Regional office no later than March 1 of the fiscal year of the grant.

**I understand that my statements in support of the State's application for Federal grant funds are statements upon which the Federal Government will rely in determining qualification for grant funds, and that knowing misstatements may be subject to civil or criminal penalties under 18 U.S.C. 1001. I sign these Certifications and Assurances based on personal knowledge, and after appropriate inquiry.**

Patrick K. McKenna  
Signature Governor's Representative for Highway Safety

6.2.2016  
Date

**Patrick K. McKenna, Director**

Printed name of Governor's Representative for Highway Safety

**APPENDIX B TO PART 1300 –  
APPLICATION REQUIREMENTS  
FOR SECTION 405 AND SECTION 1906 GRANTS**

*[Each fiscal year, to apply for a grant under 23 U.S.C. 405 or Section 1906, Pub. L. 109-59, as amended by Section 4011, Pub. L. 114-94, the State must complete and submit all required information in this appendix, and the Governor's Representative for Highway Safety must sign the Certifications and Assurances.]*

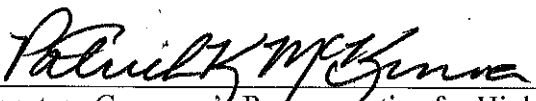
State: Missouri

Fiscal Year: 2017

**In my capacity as the Governor's Representative for Highway Safety, I hereby provide the following certifications and assurances –**

- I have reviewed the above information in support of the State's application for 23 U.S.C. 405 and Section 1906 grants, and based on my review, the information is accurate and complete to the best of my personal knowledge.
- As condition of each grant awarded, the State will use these grant funds in accordance with the specific statutory and regulatory requirements of that grant, and will comply with all applicable laws, regulations, and financial and programmatic requirements for Federal grants.
- I understand and accept that incorrect, incomplete, or untimely information submitted in support of the State's application may result in the denial of a grant award.

**I understand that my statements in support of the State's application for Federal grant funds are statements upon which the Federal Government will rely in determining qualification for grant funds, and that knowing misstatements may be subject to civil or criminal penalties under 18 U.S.C. 1001. I sign these Certifications and Assurances based on personal knowledge, and after appropriate inquiry.**

  
Signature Governor's Representative for Highway Safety

6.2.2016  
Date

**Patrick K. McKenna, Director**

Printed name of Governor's Representative for Highway Safety

# MISSOURI'S HIGHWAY SAFETY PLAN (HSP) AND PERFORMANCE PLAN

## Supporting Background – Missouri's Blueprint to SAVE MORE LIVES

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 fatalities 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 Confer-

ence 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 2008 goal but 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 new target for this document is 700 or fewer fatalities by 2016. 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
2007	992	7,744
2008	960	6,932
2009	878	6,540
2010	821	6,096
2011	786	5,643
2012	826	5,506
2013	757	4,938
2014	766	4,657
2007-2009 Total	2,830	21,216
2008-2010 Total	2,659	19,568
2009-2011 Total	2,485	18,278
2010-2012 Total	2,433	17,244
2011-2013 Total	2,369	16,087
2012-2014 Total	2,349	15,101





**Missouri Annual Comparative Data Chart**

CORE OUTCOME MEASURES:	2010	2011	2012	2013	2014	2016 Target
<b>Traffic Fatalities &amp; Serious Injuries</b>						
Number of Fatalities	821	786	826	757	766	700
3-Year Rolling Average/5-Year Rolling Average	886 949	828 887	811 854	790 814	783 791	
Total Rural Fatalities	492	495	474	459	471	
Total Urban Fatalities	329	291	350	298	295	
<b>Serious Injuries</b>						
Number of Serious Injuries	6,096	5,643	5,506	5,643	4,658	4,534
3-Year Rolling Average/5-Year Rolling Average	6,523 7,093	6,093 6,591	5,748 6,143	5,363 5,745	5,034 5,368	
Serious Injury Rate	10.15	9.48	8.60	8.20	7.11	
Fatalities and Serious Injuries Combined	6917	6429	6332	6152	5817	

<b>Fatalities per 100 Million Vehicle Miles Driven</b>						
Vehicle Miles (Billions)	70,864	68,789	69,153	69,458	70,909	
Total Fatalities Per 100 Million VMT	1.16	1.14	1.19	1.09	1.08	1.0
3-Year Rolling Average/5-Year Rolling Average	1.28 1.37	1.19 1.28	1.16 1.23	1.14 1.17	1.12 1.13	
Total Rural Fatalities per 100 million VMT	1.60	1.71	1.64	1.61	1.62	
Total Urban Fatalities per 100 million VMT	0.82	0.73	0.87	0.73	0.7	

<b>Serious Injuries per 100 Million Vehicle Miles Driven</b>						
Vehicle Miles (Billions)	70,864	68,789	69,153	69,458	70,909	
Total Serious Injuries Per 100 Million VMT	8.60	8.20	7.96	8.12	6.71	

<b>Passenger Vehicle Occupant Fatalities (all seat positions)</b>						
Total	620	597	600	559	556	
Restrained	195	177	155	192	198	
Unrestrained Passenger Vehicle Fatalities	383	371	394	325	312	326
3-Year Rolling Average/5-Year Rolling Average	431 464	396 427	389 414	370 384	352 366	
Unknown	42	49	51	42	46	

<b>Alcohol-Impaired Driving Fatalities (BAC= .08+)</b>						
Fatalities	257	257	280	248	204	230
3-Year Rolling Average/5-Year Rolling Average	291 318	272 293	265 282	262 269	244 249	

<b>Speed Related Fatalities</b>						
Fatalities	324	310	326	308	267	258
3-Year Rolling Average/5-Year Rolling Average	381 410	338 378	320 356	315 329	300 307	

<b>Motorcyclist Fatalities</b>						
Total	93	81	102	72	87	84
3-Year Rolling Average/5-Year Rolling Average	96 94	87 92	92 94	85 87	87 87	
Helmeted	83	71	90	66	79	
Unhelmeted	11	10	9	7	7	
3-Year Rolling Average/5-Year Rolling Average	19 19	14 18	10 15	9 12	8 9	
Unknown	1	1	5	1	5	

<b>Drivers age 20 or younger involved in fatal crashes</b>						
Aged Under 15	4	2	2	4	3	
3-Year Rolling Average/5-Year Rolling Average	4 3	3 3	3 3	3 3	3 3	
Aged 15-20	118	131	127	111	94	
3-Year Rolling Average/5-Year Rolling Average	141 164	131 145	125 136	123 126	111 116	

<b>Pedestrians Fatalities</b>						
Fatalities	55	75	84	73	65	71
3-Year Rolling Average/5-Year Rolling Average	62 68	66 68	71 69	77 71	74 70	

<b>Bicyclist Fatalities</b>						
Fatalities	7	1	6	4	5	4
3-Year Rolling Average/5-Year Rolling Average	4 6	3 4	5 4	4 4	5 5	

<b>Distraction Driving Involved Fatalities</b>						
Fatalities	182	161	85	74	61	70
3-Year Rolling Average/5-Year Rolling Average	181 201	166 186	143 158	107 131	73 113	

<b>CORE BEHAVIOR MEASURE</b>						
Observed seat belt use for passenger vehicles, front seat outboard occupants	76%	79%	79%	80%	79%	83%
3-Year Rolling Average/5-Year Rolling Average	76% 76%	77% 77%	78% 77%	79% 78%	79% 79%	

<b>Warnings and Citations:</b>						
Safety Belt Citations Grant Funded *	2010	2011	2012	2013	2014	2015
	36,773	38,111	30,687	36,969	33,620	39,237
Impaired Driving Arrests Grant Funded	8,844	8,831	8,072	7,021	6,069	5,458
Speeding Citations Grant Funded	128,529	124,668	116,625	120,470	119,625	129,112

\*Does not include CPS      Key:      3-Year Rolling Average      5-Year Rolling Average

## CORE OUTCOME MEASURES

### C-1) Traffic Fatalities

To decrease traffic fatalities from the expected 2012 calendar base year of 850 to 700 by December 31, 2016.

### C-2) Serious Traffic Injuries

To decrease serious traffic injuries from the 2012 calendar base year of 5,506 to 4,534 by December 31, 2016.

### C-3) Fatalities/VMT

To decrease fatalities/VMT from the expected 2012 calendar base year of 1.2 to 1.0 by December 31, 2016.

### C-4) Unrestrained Passenger Vehicle Occupant Fatalities

To decrease unrestrained passenger vehicle occupant fatalities in all seating positions from the 2012 calendar base year of 396 to 326 by December 31, 2016.

### C-5) Alcohol-Impaired Driving Fatalities

To decrease alcohol impaired driving fatalities from the 2012 calendar base year of 280 to 230 by December 31, 2016.

### C-6) Speeding Related Fatalities

To decrease speeding-related fatalities from the 2012 calendar base year of 313 to 258 by December 31, 2016.

### C-7) Motorcyclist Fatalities

To decrease motorcyclist fatalities from the 2012 calendar base year of 102 to 84 by December 31, 2016.

### C-8) Unhelmeted Motorcyclist Fatalities

To decrease unhelmeted motorcyclist fatalities from the 2012 calendar base year of 26 to 21 by December 31, 2016.

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

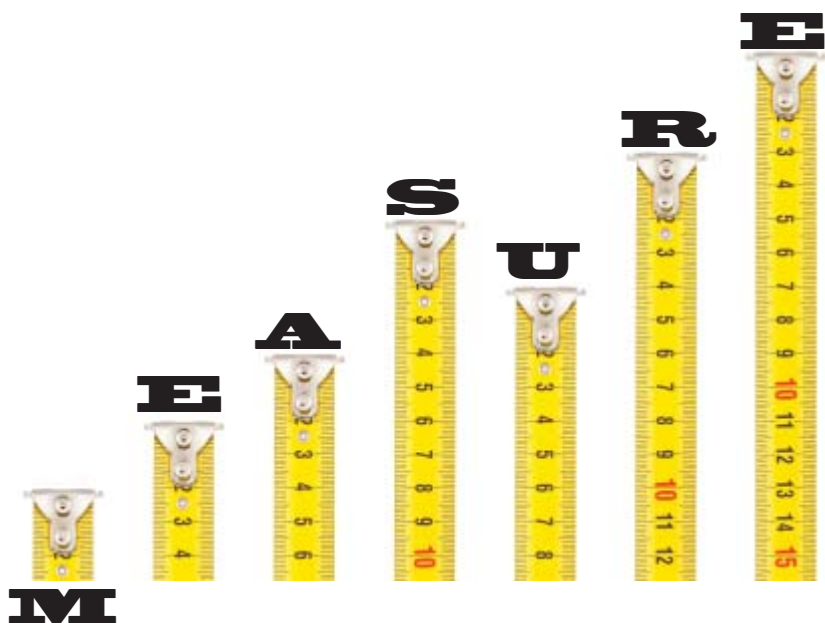
To decrease drivers age 20 or younger involved fatalities from the 2012 calendar base year of 135 to 111 by December 31, 2016.

### C-10) Pedestrian Fatalities

To decrease pedestrian fatalities from the 2012 calendar base year of 86 to 71 by December 31, 2016.

### C-11) Bicyclist Fatalities

To decrease bicyclist fatalities from the 2012 calendar base year of 6 to 4 by December 31, 2016.



## CORE BEHAVIOR MEASURE

### B-1) Observed Belt Usage

To increase statewide observed seat belt use of front seat outboard occupants in passenger vehicles 1% annually from the 2013 calendar base year average usage rate of 80% to 83% by December 31, 2016.

## ACTIVITY MEASURES

### A-1) Number of Seat Belt Citations Issued

To increase the number of seat belt citations and warnings issued during grant funded enforcement activities by .25 percent annually from the 2011-2103 calendar base year average of 35,256 to 35,520 by December 31, 2016.

### A-2) Number of Impaired Driving Arrests

To increase the number of substance-impaired driving arrests made during grant funded enforcement activities by .25 percent annually from the 2011-2103 calendar base year average of 7,975 to 8,035 by December 31, 2016.

### A-3) Number of Speeding Citations Issued

To increase the number of speeding citations and warnings issued during grant funded enforcement activities by .25 percent annually from the 2011-2103 calendar base year average of 120,588 to 121,907 by December 31, 2016.



## Blueprint Strategies

Through extensive data analysis, current research findings, and best practices, strategies were identified that must be implemented in order to make significant progress toward reaching the projected goal of 700 or fewer fatalities by 2016. Key strategies in the Blueprint to SAVE MORE LIVES were identified and called the “Necessary Nine”:

### 1. Increase Safety Belt Use

- Pass a primary safety belt law
- Increase the number of local communities with primary safety belt ordinances
- Increase the fine for non-use of a safety belt under the current law

### 2. Expand the Installation of Rumble Strips/Stripes

- Increase the number of miles of edgeline and centerline rumble strips/stripes

### 3. Increase Efforts to Reduce the Number of Substance-Impaired Vehicle Drivers and Motorcycle Operators

- Increase the number of sobriety checkpoints
- Expand the use of ignition interlocks
- Increase the number of DWI courts

### 4. Improve Intersection Safety

- Increase the use of Innovative Intersection Solutions (J-turns, Roundabouts)
- Expand the use of technology
- Increase targeted enforcement
- Increase pedestrian safety features

### 5. Improve Curve Safety

- Increase the use of curve alignment signs
- Increase curve recognition with pavement marking
- Increase pavement friction

### 6. Change Traffic Safety Culture

- Develop focused public education
- Expand outreach efforts

### 7. Improve Roadway Shoulders

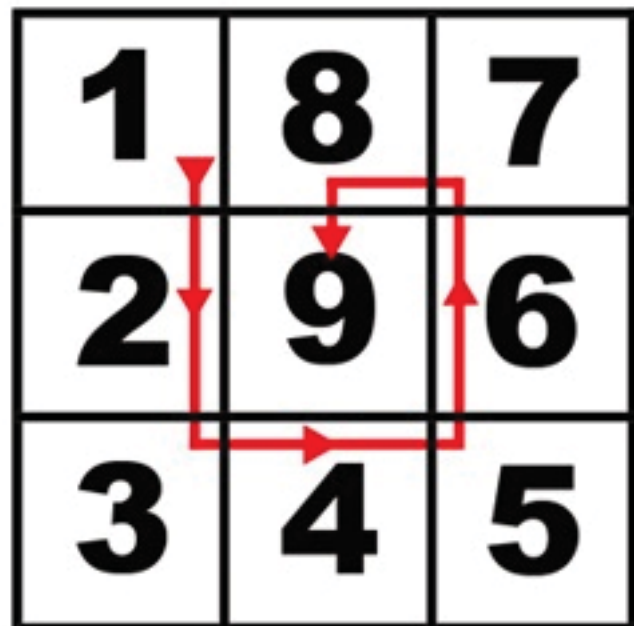
- Increase the miles of shoulders
- Reduce pavement edge drop-offs through maintenance

### 8. Increase Enforcement Efforts

- Focus on high crash corridors
- Target high impact work zones

### 9. Expand and Improve Roadway Visibility

- Ensure all roadway signs meet acceptable retro reflectivity
- Expand the use of delineation
- Expand the use of centerlines and edgelines and ensure the markings meet acceptable retroreflectivity



## **Emphasis/Focus Areas**

**Six key Emphasis Areas and 25 Focus Areas were identified within the Blueprint**

### *Emphasis Area I / Serious Crash Types*

#### **Focus Areas**

- o Run-Off-Road Crashes
- o Horizontal Curve Crashes
- o Intersection Crashes
- o Collisions with Trees and Utility Poles
- o Head-On Crashes

### *Emphasis Area II / High-Risk Drivers and Unrestrained Occupants*

#### **Focus Areas**

- o Aggressive Drivers
- o Unrestrained Drivers and Occupants
- o Distracted and Drowsy Drivers
- o Young Drivers (15 through 20 years of age)
- o Substance-Impaired Drivers
- o Unlicensed, Revoked or Suspended Drivers

### *Emphasis Area III / Special Vehicles*

#### **Focus Areas**

- o Commercial Motor Vehicles (CMVs)
- o All-Terrain Vehicles (ATVs)
- o School Buses/School Bus Signals

### *Emphasis Area IV / Vulnerable Roadway Users*

#### **Focus Areas**

- o Older Drivers (65 years of age or older)
- o Motorcyclists
- o Pedestrians
- o Bicyclists

### *Emphasis Area V / Special Roadway Environments*

#### **Focus Areas**

- o Nighttime Driving
- o Work Zones
- o Highway / Rail Crossings
- o Traffic Incident Management Areas

### *Emphasis Areas VI / Data and Data System Improvements*

#### **Focus Areas**

- o Data Collection
- o Data Accessibility
- o System Linkage



Strategies were developed for each of these focus areas that incorporated the 4 E's – education, enforcement, engineering, and emergency response as well as technology and public policy. Many of these are also included in the Highway Safety Plan (HSP).

## Statewide Targets, Performance Measures & Benchmarks

### Justification and Explanation for Setting Performance Measures and Benchmark for the Fatality Reduction Goal

Historically, Missouri's Strategic Highway Safety Plans have set fatality reduction goals. In the 2012 plan, an interim fatality reduction goal of 700 or fewer fatalities was established for 2016. The 2012 fatality reduction goal of 850 was used as the baseline number. The interim years (2013, 2014, 2015 and 2016) were calculated using a trend line starting from the 850 baseline. The yearly goals are listed below.

Target #1: To reduce fatalities to:

- 850 by 2012
- 813 by 2013
- 775 by 2014
- 738 by 2015
- 700 by 2016

Performance Measures:

- Number of statewide fatalities
- Fatality rate per 100M VMT

Benchmarks:

- Expected 2012 fatalities = 850 (766 in 2014)
- Expected 2012 fatality rate per 100M VMT = 1.2 (1.1 in 2014)

Throughout the remainder of the document, the fatality reduction goals were calculated in the following manner. The percent of contribution of the various crash types was applied to the 2012 baseline of 850 fatalities. From that point, the interim years' fatality goals (2013, 2014, 2015, and 2016) were calculated using a trend line aimed at reaching the 700 or fewer fatalities by 2016. 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
- Fatalities involving alcohol-impaired drivers under the age of 21 years old
- Unrestrained passenger vehicle occupant fatalities
- Fatalities involving drivers age 15 through 20
- Fatalities involving older drivers
- Motorcyclist fatalities
- Un-helmeted or non-DOT compliant 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

### Justification and Explanation for Setting Performance Measures and Benchmark for the Serious Injury Reduction Goal

A serious Injury reduction goal was not established in Missouri's 2012 Strategic Highway Safety Plan. As a result, the 2012 actual serious injury number was established as the benchmark. From the 2012 number, the same fatality reduction trend line was used to calculate interim yearly serious injury reduction goals from 2013 through 2016.

Target #2: To reduce serious injuries to:

- 5,266 by 2013
- 5,020 by 2014
- 4,781 by 2015
- 4,534 by 2016

Performance Measure:

- Number of serious injuries

Benchmark:

- 2012 serious injuries = 5,506 (4,657 in 2014)

Throughout the remainder of the document, the following serious injury reduction goals were calculated in the following manner. The percent of contribution of the various crash types was applied to the 2012 baseline of 5,506 serious injuries. From that point, the interim years' serious injury goals (2013, 2014, 2015 and 2016) were calculated using a trend line aimed at reaching the 4,534 or fewer serious injuries by 2016. Serious injury goals were set for the following areas:

- Serious injuries involving drivers age 15 through 20
- Serious injuries involving older drivers
- Serious injuries resulting from crashes involving school buses or school bus signals

( ) Information in parenthesis is actual data for the respective year listed.

## 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 2016, each region will need to continue efforts in all disciplines. By the end of 2016, the state will have seen a roadway fatality reduction of 44 percent since 2005. More importantly, each region will have to reduce the roadway fatalities by over 40 percent in order for the state to reach the target.

The fatality number established for each region was determined from the previous eight years starting with 2005 (eight-year average). This method was preferred in order to minimize the fluctuations realized by each region.

### Fatalities by Region

Reduction per Region (2013-2016 estimated)

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	46	55	135	126	162	160	128	813
2014	44	52	129	121	155	152	122	775
2015	42	50	123	115	147	145	116	738
2016	40	47	117	109	140	138	110	700

## Safety Plan Integration

Missouri's target of 700 or fewer fatalities has been integrated into all key planning documents that include: State Highway Safety Strategic Plan, Missouri's Blueprint to Save More Lives; the Commercial Vehicle Safety Plan (CVSP); and the Highway Safety Plan and Performance Plan (HSP). The fatality reduction goal is also included in the Highway Safety Improvement Program (HSIP) Annual Report along with fatalities, fatality rates and serious injuries. Every effort will be made to establish evidence based strategies that will guide Missouri to meet this target.

## 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 "Necessary Nine" and subsequent emphasis areas, focus areas, and strategies. The state is divided into seven regional coalitions that develop annual safety plans. These coalitions 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 are dedicated to this effort.

The Blueprint is an overarching strategic highway safety plan for the State of Missouri while the state's Section 402 Highway Safety Plan serves as one of the implementation components in support of the Blueprint efforts.

## HSP and Performance Plan Overview

Under the Highway Safety Act of 1966, the National Highway Traffic Safety Administration (NHTSA) provides grants and technical assistance to states and communities. Section 402 of the Act requires each state to have a highway safety program to reduce traffic crashes and deaths, injuries and property damage. Section 402 grant funds are apportioned to the states based on the ratio of state population to the national population (75%) and state public road mileage to the total national public road mileage (25%).



Section 402 funds must be used to support the state's performance plan (which contains performance goals based on the traffic safety problems identified by the state) and the HSP. These plans provide for the implementation of a program that addresses a wide range of highway safety problems related to human factors and the roadway environment and that contributes to the reduction of crashes and resulting deaths and injuries.




The strategies outlined within the HSP and Performance Plan will be implemented in an attempt to reach the overarching statewide Blueprint target of 700 or fewer fatalities by 2016.

## Performance Measures

Performance measures enable the state to track progress, from a specific baseline, toward meeting an interim target. In August 2008, the US Department of Transportation released a document, DOT HS 811 025, that outlines 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 the National Highway Traffic Safety Administration, State Highway Safety Offices, academic and research organizations, and other key groups developed these performance measures, which were agreed upon by NHTSA and the Governors Highway Safety Association.

The initial minimum set contains 15 measures: 11 core outcome measures, 1 core behavior measure; and 3 activity measures.

These 15 measures cover the major areas common to state highway safety plans and use existing data systems. Beginning with the 2010 Highway Safety Plans and Annual Reports, states set goals for and report progress on each of the 11 core outcome and behavior measures annually. In 2014, an additional outcome measure, bicycle fatalities, was added. The following page outlines the 15 performance measures which will be identified within their respective program areas:

-  The Blueprint serves as a roadmap for the State's Highway Safety Plan
-  The "Necessary Nine" provides direction for the HSP
-  The goal determines our interim fatality reduction target

1. Fatalities (actual)
2. Fatality rate per 100M VMT (statewide; urban; rural)
3. Number of serious (disabling) injuries
4. Number of fatalities involving drivers or motorcycle operators with .08 BAC or above
5. Number of unrestrained passenger vehicle occupant fatalities
6. Number of speeding-related fatalities
7. Number of motorcyclist fatalities
8. Number of un-helmeted motorcyclist fatalities
9. Number of drivers age 20 or younger involved in fatal crashes
10. Number of pedestrian fatalities
11. Number of bicycle fatalities
12. Percent observed belt use for passenger vehicles – front seat outboard occupants
13. Number of seat belt citations issued during grant-funded enforcement activities
14. Number of impaired driving arrests made during grant-funded enforcement activities
15. Number of speeding citations issued during grant-funded enforcement activities

## **Benchmarks**

Our benchmarks will serve as points of reference by which we are able to measure our progress. These benchmarks are not totally reliant upon the programs implemented by the highway safety office. They are often highly dependent upon existing public policy and the motoring public's adherence to traffic laws and safe driving habits.

The Statewide Goals, Performance Measures, and Benchmarks are "expectations" based upon the targets established in Missouri's Blueprint to ARRIVE ALIVE (850 or fewer fatalities by 2012) and Missouri's Blueprint to SAVE MORE LIVES (700 or fewer fatalities by 2016).

## **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 blanket 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.





No highway safety office can work in a vacuum 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 safety partners include:

American Automobile Association  
 American Association of Retired Persons  
 Blueprint Regional Coalitions (7 – Northwest, Northeast, Kansas City, Central, St. Louis, Southwest, Southeast)  
 Cape Girardeau Safe Communities Program  
 City/County Engineers  
 County Health Departments  
 East-West Gateway Coordinating Council  
 Emergency Nurses Association  
 Federal Highway Administration  
 Federal Motor Carrier Safety Administration  
 Institutions of Higher Education  
 Law Enforcement Traffic Safety Advisory Council  
 Law Enforcement Training Academies  
 Local Technical Assistance Program  
 Mercy Hospital  
 Metropolitan Planning Organizations  
 Mid-American Regional Council  
 MO Association of Insurance Agents  
 MO Automobile Dealers Association  
 MO Coalition for Roadway Safety  
 MO Department of Health & Senior Services  
 MO Department of Labor and Industrial Relations

MO Department of Mental Health  
 MO Department of Public Safety  
 MO Department of Revenue  
 MO Division of Alcohol and Drug Abuse  
 MO Division of Alcohol and Tobacco Control  
 MO Head Injury Advisory Council  
 MO Injury and Violence Prevention Advisory Committee  
 MO Trucking Association  
 MO Office of Prosecution Services  
 MO Police Chiefs Association  
 MO Safety Center  
 MO Sheriffs Association  
 MO State Highway Patrol  
 MO Youth/Adult Alliance  
 Mothers Against Drunk Driving  
 Motorcycle Safety Task Force  
 National Highway Traffic Safety Admin. Region 7  
 Office of State Courts Administrator  
 Operation Impact  
 Operation Lifesaver  
 Partners in Prevention  
 Regional Planning Commissions  
 Safe Kids Coalitions  
 State Farm Insurance  
 Think First Missouri  
 Traffic Safety Alliance of the Ozarks  
 Trailnet

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

## Planning, Programming and Implementation Timeframes

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.

The table on the following page represents the timeframes within which the agency must operate in order to meet our federal requirements. The timeframes also provide a quick overview of when grant applications, program reports, and annual reports are due. This information provides our grantees and the general public a clearer picture of our internal process.

Some dates are firm—those established by the federal government for submitting our HSP, annual report, and supplemental grant applications. Some of the dates established by the Highway Safety Office are more fluid; they may be revised in order to allow the agency to function more efficiently.

The following table sets the timeframes for the basic Section 402/405 Highway Safety Program and the annual report.



# Planning, Programming and Implementation Timeframes

## Highway Safety Plan and Annual Report

ACTIVITY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Data collection & analysis, problem identification, internal planning and input solicitation for new fiscal year				1								
Mail out requests for project proposals for new fiscal year			1									
Contract and equipment monitoring by HS staff												
Grantee reimbursement vouchers												
O N G O I N G												
Conduct regional grant application training sessions				2-13								
Grant applications due to HS						1						
Grant applications review & budget meetings							3-14					
Contracts written and reviewed internally									10			
HSP & Performance Plan/405 grants due to NHTSA										30		
Mail grantee award and denial letters										15-31		
Regional contract award workshops w/grantees											21-25	
Verify that soft match letters are on file												1
Program income submissions from grantees	31						30					
Federal fiscal year ends (contract ending date)												30
All funds must be obligated for new fiscal year												30
Federal fiscal year begins (contract start date)	1											
Mail letters requesting year-end reports												30
Year end reports due from grantees		15										
Compile & print annual report			15									
Annual report & final cost summary due			31									
Audit closeout (within 90 days of fiscal year end)			31									
Require submission of program income documentation	31						30					

## Grant Application Process

The Highway Safety Office hosts grant application workshops each spring for potential grantees. These workshops are held in five strategic regional locations (Cape Girardeau, Chesterfield, Jefferson City, Springfield, and Lee's Summit) so that no participant has to travel terribly far in order 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 grantees

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 grantees

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 2017 fiscal year was March 1, 2016.

## Internal Grants Management System

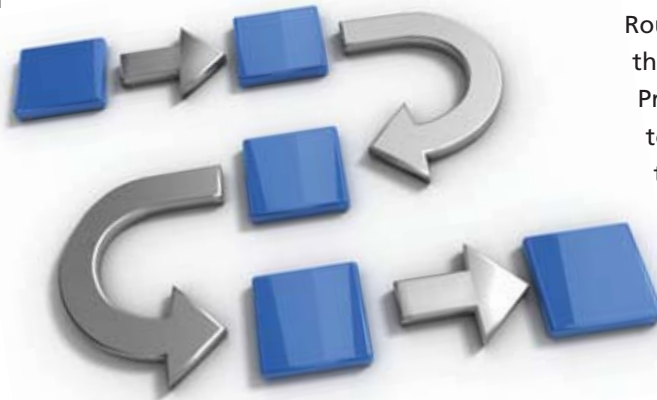
In late 2001, the Highway Safety Office began work with the Regional Justice Information Service (REJIS) to develop the first-of-its-kind on-line grants management system. The system allows grantees to electronically submit applications. This information feeds into a system that builds databases for 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 grantees, 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. Three additional programs were also added to the system: Safe Routes to School; Work Zones; and the Motor Carrier Safety Assistance Program. In 2010 the Safe Routes to School program was transferred to another division of MoDOT, therefore, this section of the GMS was not further developed. Additional reporting components have been developed including a training section. 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 (STARS) located at [https://www.mshp.dps.missouri.gov/MSHPWeb/SAC/stars\\_index.html](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.

An internal team of highway safety program staff review all grant applications. 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 sub recipients risk of noncompliance with federal statutes, regulations, and the terms and conditions of

the sub award been considered for such factors as:

- \*The sub recipient's prior experience with the same or similar sub awards;

- \*The results of previous audits including whether or not the sub recipient receives a Single Audit in accordance with Subpart F-Audit Requirements of this part, and the extent to which the same or similar sub-award has been audited as a major program;

- \*Whether the sub recipient has new personnel or new or substantially changed systems; and

- \*The extent and results of federal awarding agency monitoring

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 grantee agency 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 Grants 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 2016.

## Grantee Compliance Requirements

### COMPLIANCE

Any agency receiving a Highway Safety grant must comply with the following statutes or rules:

**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 & Transparency Act** - Grantees 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.

**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

**Restriction of 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:*

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, if possible:

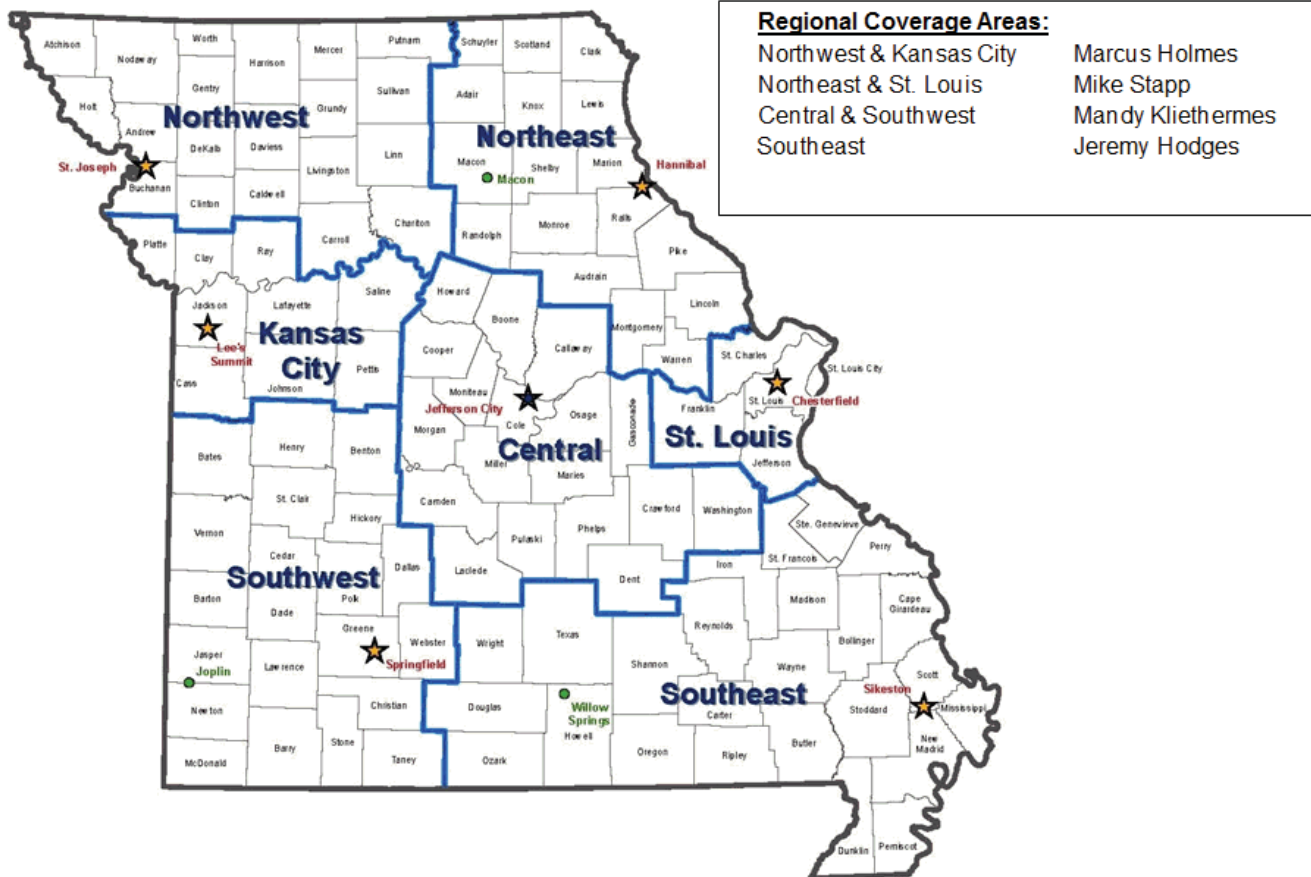
- Model Traffic Ordinance—RSMo 300.00—Rules governing traffic administration and regulation
- Child Restraints—RSMo 307.179—Passenger restraint system required for children birth through age seven years (Primary Offense)
- Seat Belts—RSMo 307.178—Seat belts required for passenger cars
- Primary Seat Belt – A model ordinance allowing primary enforcement of a seat belt violation.
- 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.

# EVIDENCE-BASED TRAFFIC SAFETY ENFORCEMENT (E-Be) PROGRAM

The Highway Safety Office has four law enforcement program managers that cover specific regions of the state and two Law Enforcement Liaisons. (LEL) 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.





## Problem Identification Process

- 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 System located at [https://www.mshp.dps.missouri.gov/MSHPWeb/SAC/stars\\_index.html](https://www.mshp.dps.missouri.gov/MSHPWeb/SAC/stars_index.html)

## Implementation Plan

- **Grant Application Selection**
  - o Grant application workshops are held for potential grantees 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.
    - o Law Enforcement (LE) program management staff participate in each workshop and offer assistance to agencies interested in submitting a grant.
    - o Once grantees 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.
    - o The LE program management team reviews their respective applications and, in spring, a grant application review meeting is held for all grant applications. 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 many factors into consideration when assessing these applications. A list of considerations are located in the *Missouri's HSP & Performance Plan*

section of the HSP.

- o 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 2016, grant award meetings are held in the fall at five locations around the state. LE program managers provide a copy of the award, review grantee compliance requirements, address any questions and concerns, and network with any new and continuing grantees.

- **Mobilizations**

- o The Law Enforcement Traffic Safety Advisory Council identifies quarterly substance-impaired driving and occupant protection mobilization dates for each fiscal year. The LE program management staff aggressively seeks participation in these mobilizations as well as the NHTSA required Drive Sober or Get Pulled Over and the Click It or Ticket mobilizations. Efforts are also made to encourage participation in the distracted driving month emphasis area enforcement activities and techniques.

- **DWI/Traffic Unit**

- o A key enforcement technique used is to team with a city or county law enforcement agency to financially support DWI/Traffic Units. We have a total of 10 units. The mission of these units is to focus on substance-impaired drivers/high risk drivers and to aggressively enforce DWI and hazardous moving violations. Below is a list of the full-time DWI 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**
  - Multiple city/county LE agencies 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 (12 Agencies)*

*Northwest DWI Task Force (2 Agencies)*

*Jackson County Traffic Safety Task Force (11 Agencies)*

*Cass County STEP DWI Task Force (7 Agencies)*

*Clay/Platte County DWI Task Force (13 Agencies)*

*St. Louis Regional Traffic Safety Council (50 Agencies)*

*St. Charles County DWI Task Force (7 Agencies)*

*Central Ozarks Regional DWI Task Force (14 Agencies)*

*Southeast Missouri DWI Task Force (12 Agencies)*

*Law Enforcement Traffic Safety Advisory Council  
(20 Agencies)*

*West Central Traffic Task Force (7 Agencies)*

- **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.

- **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. The 2014-2015 annual results are located at the end of the section.

- 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/warnings 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



## Keep Customers and Ourselves Safe

### ***Number of Law Enforcement Agencies Participating and their Citation Results for the National “Click It or Ticket” and “Drive Sober or Get Pulled Over” Campaigns***

**Result Driver:** Bill Whitfield, Highway Safety Director

**Measurement Driver:** Mike Stapp, Senior System Management Specialist

**Purpose of the Measure:**

This measure tracks both the participation and enforcement results of law enforcement activity in the national “Click It or Ticket” safety belt campaign and the “Drive Sober or Get Pulled Over” impaired driving campaign. The National Highway Traffic Safety Administration strongly encourages Missouri’s law enforcement participation in these campaigns. Public information and education coupled with strong law enforcement support has proven to be effective in modifying driver behavior.

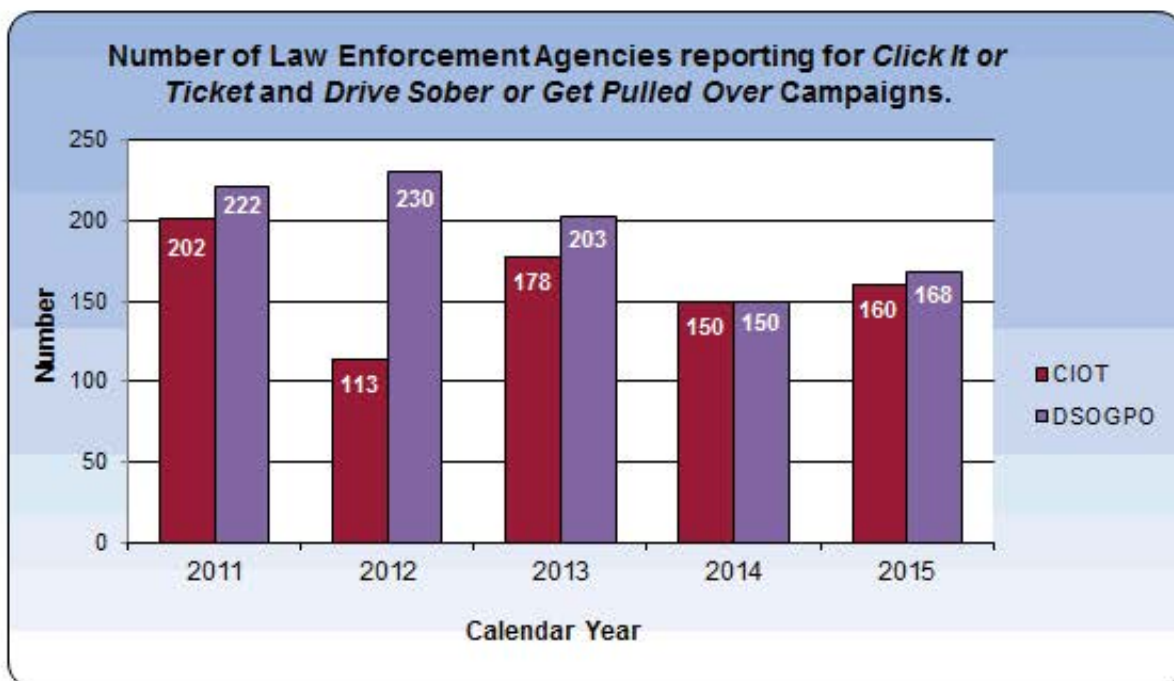
**Measurement and Data Collection:**

The Highway Safety Office subcontracts with the Missouri Safety Center to provide mini-grants to law enforcement agencies in the form of overtime. The enforcement overtime is used to target impaired drivers and unbuckled vehicle occupants. The law enforcement agencies report their enforcement statistics to the Highway Safety Office via an online reporting system.

**Improvement Status:**

Beginning in 2009 all agencies that worked the Drive Sober or Get Pulled Over campaign and four other statewide DWI campaigns were included in a drawing for a fully equipped DWI enforcement vehicle. This and other avenues of promotion by the Highway Safety Office have helped increase participation in all statewide campaigns.

After dropping in participation during 2014, participation in both Click It or Ticket and the Drive Sober Campaign picked back up in 2015.



### Citations/Warnings Issued During the Click It or Ticket Safety Belt Campaign

Year	2011	2012	2013	2014	2015
Participating Agencies	202	113	178	150	160
Hours Worked	15,722	6,079	9,011	7,365	7,334
Traffic Stops	28,905	18,523	17,195	17,131	14,332
Sobriety Checkpoints	21	5	6	3	2
DWI Arrests	386	147	193	167	239
Safety Restraint	7,283	5,201	9,074	9,050	7,785
Child Passenger	330	164	369	377	132
Felonies	97	74	85	109	115
Stolen Vehicles Recovered	4	4	4	9	3
Fugitives Apprehended	471	217	242	503	316
Suspended Licenses	1,377	850	1336	1576	1,271
Uninsured Motorists	3,311	2,303	3,149	3,284	2,792
Speeding	10,046	6,571	8,754	8,682	8,069
Reckless Driver	307	119	191	213	181
Drugs	176	84	194	170	211
Other	11,964	8,199	9,086	9,491	9,355

### Citations/Warning Issued During the Drive Sober or Get Pulled Over DWI Campaign

Year	2011	2012	2013	2014	2015
Participating Agencies	222	230	203	150	168
Hours Worked	11,485	11,104	9,458	5,208	6,500
Traffic Stops	25,594	24,559	24,217	9,405	14,419
Sobriety Checkpoints	66	32	34	13	21
DWI Arrests	852	714	587	288	415
Safety Restraint	1,774	1,609	2,398	935	1,981
Child Passenger	130	101	152	53	88
Felonies	193	152	151	81	145
Stolen Vehicles Recovered	8	14	9	5	5
Fugitives Apprehended	377	344	485	331	297
Suspended Licenses	1,394	1,433	1,992	817	1,265
Uninsured Motorists	3,482	3,560	4,371	1,899	2,581
Speeding	8,906	9,087	9,991	6,119	7,265
Reckless Driver	377	386	382	205	232
Drugs	289	267	308	191	232
Other	14,012	12,970	22,947	11,322	8,514

## Keep Customers and Ourselves Safe

### ***Number of Citations and Warnings Issued by Law Enforcement Officers Working Highway Safety Overtime Projects***

**Result Driver:** Bill Whitfield, Highway Safety Director

**Measurement Driver:** Mike Stapp, Senior System Management Specialist

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

This measure tracks annual trends in law enforcement activity conducted during contracted overtime enforcement projects each federal fiscal year. Law enforcement agencies are awarded overtime enforcement grants to conduct high visibility enforcement of traffic laws. Focused law enforcement efforts attempt to modify driver behavior and ultimately reduce traffic crashes in their jurisdiction.

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

Law enforcement agencies receiving grant funds are required to submit monthly or quarterly reports showing their enforcement efforts. These activity reports are used to demonstrate the amount of effort being conducted in a particular focus area. The enforcement and crash data can help us determine if the project is having an impact. The number of citations issued can vary depending on the time of the year, ongoing campaigns, calls for service, and department strengths.

#### **Improvement Status:**

The Traffic and Highway Safety Division continues to encourage all law enforcement to participate and report activity for all enforcement efforts. The graphs below show the citations and warnings written each federal fiscal year by law enforcement agencies working in an overtime basis with grants funded by the Traffic and Highway Safety Division.

### **Number of Citations and Warnings Issued by Law Enforcement - Overtime Projects**

Year	2011	2012	2013	2014	2015
Total Number of Stops	301,027	264,639	263,741	270,538	255,920
Total Hours Worked	159,170	139,389	137,226	134,810	158,235
Total Violations	216,883	198,401	211,958	213,732	194,170
Total HMV	127,261	122,430	131,052	134,946	138,325
DWI	5,761	5,370	4,581	4,178	3,871
Following to Close	1,633	2,821	1,739	2,674	1,741
Stop Sign	7,044	5,729	6,572	9,034	7,238
Signal Violation	3,580	2,670	2,583	3,169	2,923
Fail to Yield	1,071	818	743	925	845
C&I	1,335	1,409	1,296	976	1,252
Speeding	81,055	71,688	77,153	79,366	84,897
Other HMV	25,761	31,682	36,155	34,380	35,558
Seat Belt	20,401	15,716	18,138	17,273	20,590
Child Restraint	933	547	693	610	586
Other Non-HMV Violations	43,867	36,969	36,312	34,434	36,190
Felony Arrests	1,287	980	1,047	850	1,064
Drug Arrests	1,758	1,636	1,654	1,577	1,944
Vehicles Recovered	36	102	46	153	82
Fugitives Apprehended	2,868	2,456	3,427	2,745	3,600
Suspended Revoked License	6,416	5,154	5,989	6,060	6,594
Uninsured	18,027	15,220	19,841	17,557	16,169
Number of Sobriety Checkpoints	503	504	475	446	389

## Keep Customers and Ourselves Safe

### ***Number of Citations Issued by Law Enforcement Officers Working Highway Safety Mobilizations***

**Result Driver:** Bill Whitfield, Highway Safety Director

**Measurement Driver:** Marcus Holmes, Intermediate System Management Specialist

**Purpose of the Measure:**

This measure tracks annual trends in law enforcement activity conducted during mobilization efforts throughout the year. Eleven mobilization campaigns are conducted throughout the year targeting occupant restraint and impaired driving violations. Public information and education coupled with strong law enforcement support has proven to be effective in modifying driver behavior and ultimately reduces traffic crashes.

**Measurement and Data Collection:**

Law enforcement agencies utilize funding provided by the University of Central Missouri - Missouri Safety Center or provide manpower at their own expense. Enforcement data from the participating agencies is collected through a web-based reporting site. These activity reports are used to demonstrate the amount of effort being conducted in a particular focus area.

**Improvement Status:**

Citations increase during National and State recognized campaigns. These include "Youth Seat Belt Enforcement" in March, "Click It or Ticket" in May/June, and "Drive Sober or Get Pulled Over" in August/September. The Traffic and Highway Safety Division continues to encourage all law enforcement to participate and report activity for these campaigns whether funded or not. The graph below shows the citations written each year by participating law enforcement agencies.

#### **Number of Citations Issued by Law Enforcement During Mobilizations**

<b>Year</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Total Number of Stops	143,262	121,483	104,765	88,126	66,172
Total Hours Worked	70,307	51,865	45,288	36,446	43,093
Total Violations	147,213	153,639	117,559	96,409	97,163
Total HMV	75,542	85,689	27,766	67,365	73,515
DWI	2,923	2,814	2,440	1,871	1,544
Following to Close	1,217	1,355	1,282	1,160	1,173
Stop Sign	6,012	5,407	6,564	5,195	5,242
Signal Violation	2,404	2,378	3,138	2,379	2,619
Fail to Yield	1,298	1,218	1,341	1,226	1,247
C&I	1,515	1,532	1,588	1,214	1,333
Speeding	42,792	44,804	44,317	39,955	43,326
Other HMV	17,319	24,139	11,110	14,209	16,769
Seat Belt	20,347	15,029	18,831	16,312	18,642
Child Restraint	1,183	769	1,055	916	707
Other Violations	28,924	31,141	66,862	72,154	71,090
Felony Arrests	735	670	546	595	689
Drug Arrests	1,217	1,301	1,368	1,270	1,444
Vehicles Recovered	97	45	30	41	34
Fugitives Apprehended	1,966	1,769	2,064	2,369	1,655
Suspended Revoked License	5,959	6,275	8,353	6,526	6,946
Uninsured	14,666	15,693	18,919	14,954	15,270
Number of Sobriety Checkpoints	167	145	139	90	61

# STATEWIDE CRASH ANALYSIS

Making the roadway traffic system less hazardous requires understanding the system as a whole – understanding the interaction between its elements (vehicles, roads, road users and their physical, social and economic environments) and identifying where there is potential for intervention. This integrated approach more effectively addresses our traffic safety problems.

## Problem Identification

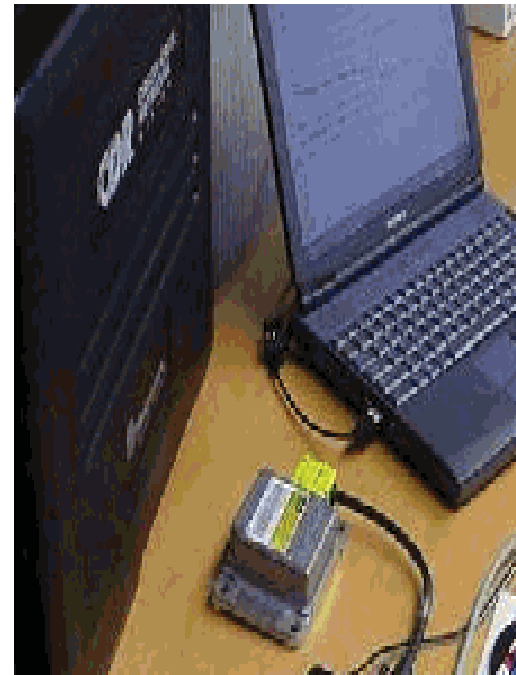
Problem identification involves the study of the relationship between collisions and the characteristics of people using the roadways, types and numbers of vehicles on the roads, miles traveled, and roadway engineering.

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 2015, 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. (2016 survey results not available until July, 2016)

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 2017 Highway Safety Plan references crash statistics for 2012 through 2014.

In the 3-year period 2012-2014, a total of 2,349 people died on Missouri's roadways while another 15,101 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 a victim observed at the scene has sustained injuries that prevent them from walking, driving, or continuing activities the person was capable of performing before the crash. 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.

The first series of graphs on the following pages present a long-term depiction of death and serious injury rates covering the 20-year period 1995 through 2014. The second series of graphs address only the three-year period, 2012-2014. The final graphs show the three-year moving average for fatalities and serious injuries starting with 2006-2008.

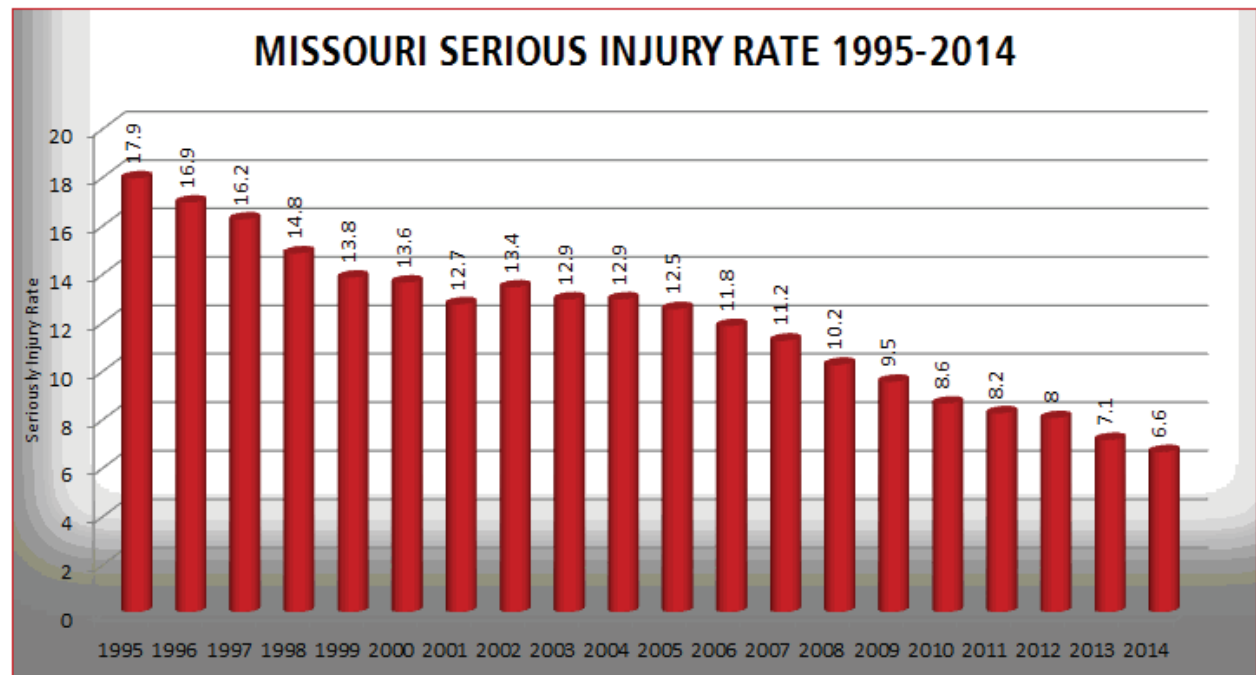
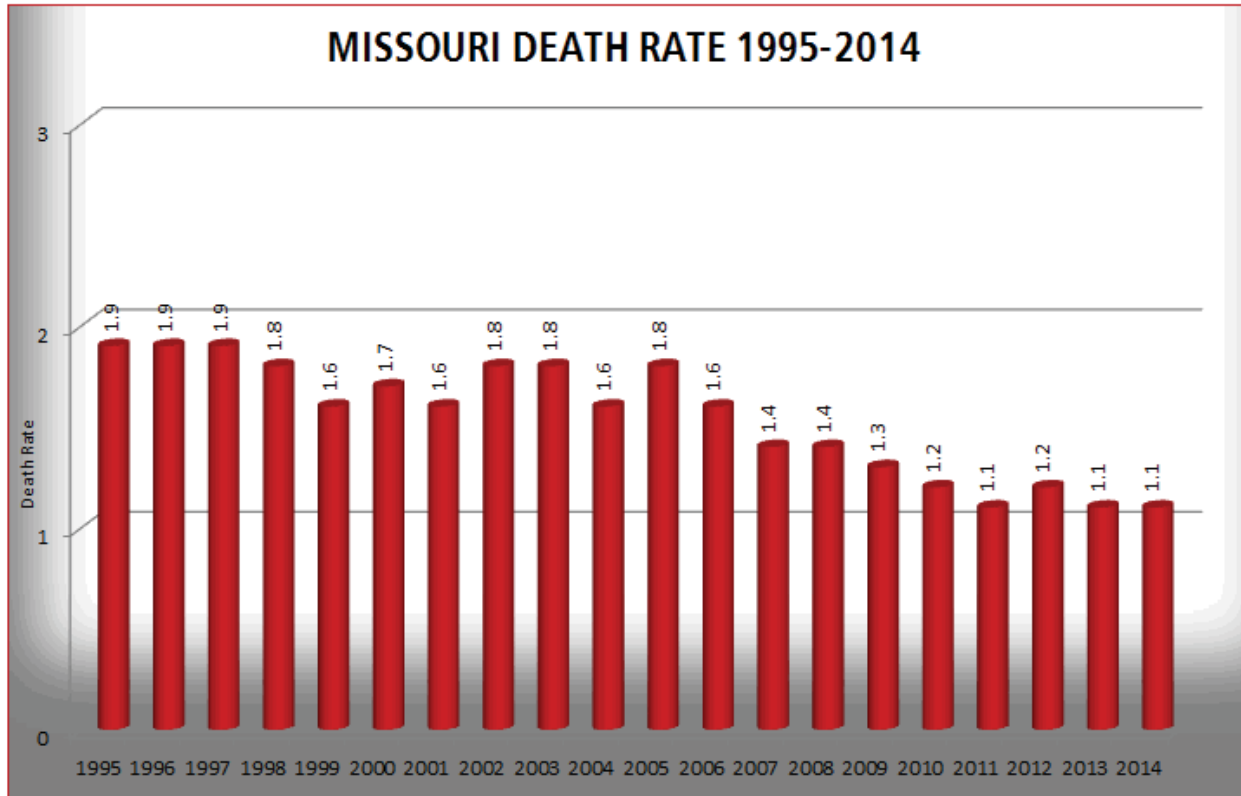
Year	Fatalities	Serious Injuries	Miles Traveled <sup>1</sup>	Fatality <sup>2</sup> Rate	Serious Injury Rate <sup>3</sup>
2012	826	5,506	68,403,000,000	1.2	8
2013	757	4,939	69,328,000,000	1.1	7.1
2014	766	4,657	70,937,000,000	1.1	6.6

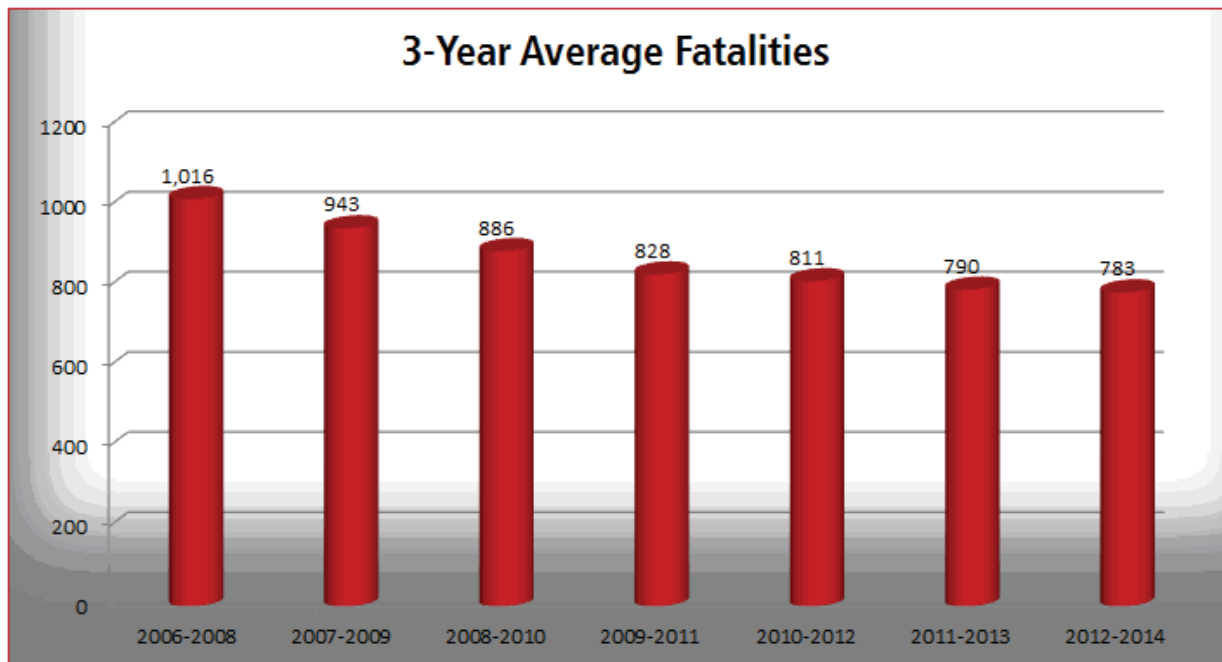
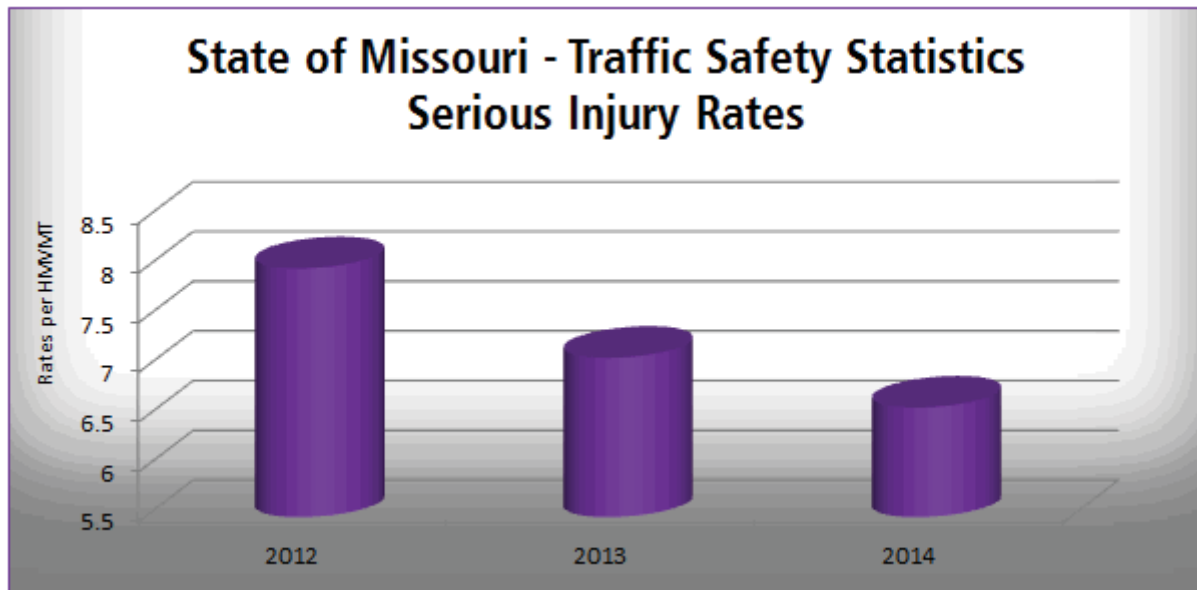
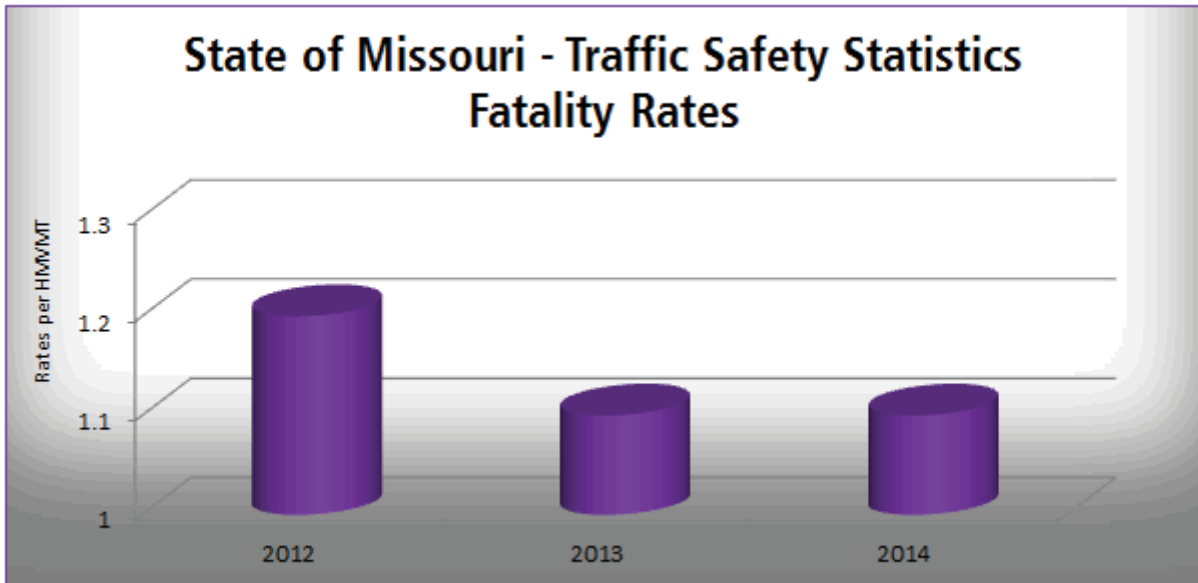
<sup>1</sup> Miles traveled were obtained from the Missouri Department of Transportation - Planning (not an official number)

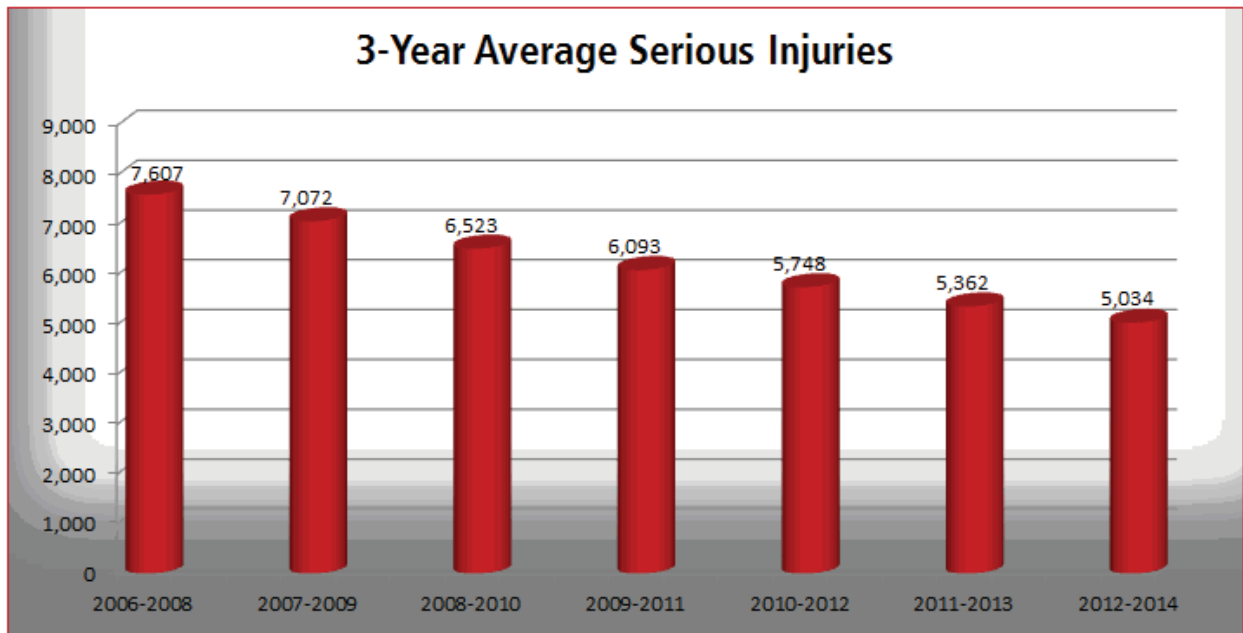
<sup>2</sup> Number of fatalities per 100 million miles of vehicle travel

<sup>3</sup> Number of serious injuries per 100 million miles of vehicle travel









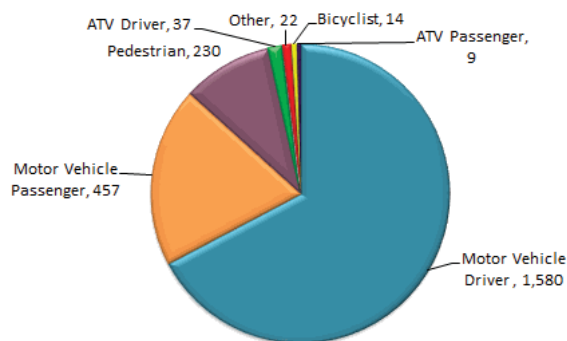
### Current Traffic Crash Data: 2012-2014

Although overall fatalities and the death rate reflect a positive reduction, 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 2012-2014, there were 414,173 traffic crashes, 2,143 resulted in fatalities and 12,000 resulted in serious injuries. These fatal and serious injury crashes resulted in 2,349 deaths and 15,101 serious injuries.

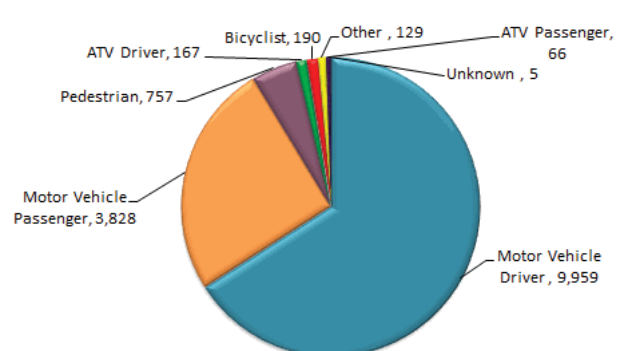
A substantial number of persons killed or injured in Missouri's 2012-2014 traffic crashes were drivers and passengers of motorized vehicles. Of the fatalities, 67.3% were drivers and 19.5% were passengers; of those seriously injured, 65.9% were drivers and 25.3% were passengers.

### 2012-2014 Missouri Fatalities & Serious Injuries

**Persons Killed = 2,349**



**Persons Seriously Injured = 15,101**



Note: OTHER = drivers/passengers on farm implements, motorized bicycles, other transport devices, construction equipment and unknown vehicle body types

## Data Collection

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.

The Missouri State Highway Patrol serves as the central repository for all traffic crash data in the state. The Safety Section of MoDOT's Traffic and Highway Safety Division analyzes that data to compile statistics on fatalities and serious injuries. Three years' worth of crash statistics are compiled to provide a more representative sampling, thereby more effectively normalizing the data. Missouri uses comprehensive data sources which include: STARS and Traffic Management System (TMS).

Collisions are analyzed to identify:

- Occurrence – time of day, day of week, month of year, holidays and/or special events
- Roadways – urban versus rural, design, signage,

traffic volume, work zones, visibility factors, location within high crash corridors

Roadway users – age, gender, vehicle users versus pedestrians

Safety devices – used/not used (safety belts, child safety seats, DOT compliant motorcycle helmets)

Causation factors –

Primary: aggressive driving, impaired by alcohol and/or other drugs, distracted or fatigued, speeding or driving too fast for conditions, red light running

Secondary: run off the road, head-on, horizontal curves, collisions with trees or utility poles, unsignalized intersections

Vehicles – type (e.g., passenger vehicles, motorcycles, pickup trucks)

## Contributing Factors

Analysis of our statewide traffic crash data was based on the six emphasis areas and their focus areas as defined in the *Missouri's Blueprint to SAVE MORE LIVES*:

**Emphasis Area I – Serious Crash Types**

**Emphasis Area II – High-Risk Drivers and Unrestrained Occupants**

**Emphasis Area III – Special Vehicles**

**Emphasis Area IV – Vulnerable Roadway Users**

**Emphasis Area V – Special Roadway Environments**

**Emphasis Area VI – Data and Data System Improvements**

MEASURES  
ASSESSMENT  
OBSERVATION  
NOTES  
DATA  
COLLECTION  
GATHERING  
SURVEY

## 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 14,143 fatal and serious injury crashes in 2012-2014, 52% occurred in an urban community while 48% occurred in a rural area. The rural areas of the state take on even greater significance when examining only fatal traffic crashes. In 2012-2014 fatal traffic crashes, 41.9% occurred in an urban area of the state while 58.1% occurred in a rural area.

### FATALITIES AND SERIOUS INJURIES BY COUNTY 2012-2014

**KEY:**  
County name  
XX-XX  
(Fatality #-Serious Injury #)

**2012-2014**  
**Total Fatalities: 2,349**  
**Total Serious Injuries: 15,101**



**APPENDIX A****STATEWIDE****Total Fatalities and Serious Injuries by Target Area****2012 - 2014****Fatalities Involving**

Description	2012	2013	2014	Total
Run-off-Road Crashes	401	365	352	1,118
Unrestrained Occupants Killed	396	334	327	1,057
Horizontal Curves	279	263	256	798
Alcohol and - or Other Drugs	244	239	205	688
Aggressive Driving-Too Fast for Conditions	200	195	164	559
Unlicensed / Improperly Licensed Drivers	153	135	159	447
Collision with Tree	131	141	143	415
Aggressive Driving-Speed Exceeded Limit	143	121	131	395
Young Drivers - 15-20	135	120	114	369
Commercial Motor Vehicle	113	99	111	323
Head-On Crashes (Non-Interstates)	86	97	109	292
Older Drivers - 65-75	86	92	102	280
Unsignalized Intersection Crashes	104	76	83	263
Motorcyclists Killed	102	72	87	261
Distraction / Inattention	92	85	68	245
Pedestrians Killed	86	75	69	230
Distracted / Inattentive Drivers	85	74	61	220
Older Drivers - 76 or Older	60	67	69	196
Collision with Utility Pole	25	37	24	86
Signalized Intersection Crashes	31	24	28	83
Aggressive Driving-Following Too Close	16	9	17	42
Head-On Crashes (Interstates)	10	9	10	29
Work Zones	9	9	8	26
Bicyclists Killed	6	4	4	14
School Buses/Bus Signal	3	3	4	10

**Serious Injuries Involving**

Description	2012	2013	2014	Total
Run-off-Road Crashes	2,281	1,982	1,936	6,199
Horizontal Curves	1,484	1,245	1,264	3,993
Unrestrained Occupants Seriously Injured	1,449	1,240	1,175	3,864
Aggressive Driving-Too Fast for Conditions	1,280	1,086	1,102	3,468
Young Drivers - 15-20	1,261	1,050	932	3,243
Unsignalized Intersection Crashes	935	828	811	2,574
Alcohol and - or Other Drugs	912	787	749	2,448
Unlicensed / Improperly Licensed Drivers	879	743	772	2,394
Distraction / Inattention	860	767	748	2,375
Distracted / Inattentive Drivers	825	722	711	2,258
Motorcyclists Seriously Injured	688	555	545	1,788
Collision with Tree	634	560	543	1,737
Older Drivers - 65-75	512	484	511	1,507
Head-On Crashes (Non-Interstates)	479	427	450	1,356
Signalized Intersection Crashes	405	454	368	1,227
Aggressive Driving-Speed Exceeded Limit	430	410	359	1,199
Commercial Motor Vehicle	389	402	371	1,162
Aggressive Driving-Following Too Close	345	378	302	1,025
Older Drivers - 76 or Older	284	249	241	774
Pedestrians Seriously Injured	229	276	252	757
Collision with Utility Pole	178	159	161	498
Bicyclists Seriously Injured	73	66	51	190
Work Zones	73	34	55	162
Head-On Crashes (Interstates)	27	16	17	60
School Buses/Bus Signal	15	19	14	48

Note: This summary of traffic crashes represents only those crashes that occurred on Missouri's highway system, including all public roadways. The information is a summary of the crash reports submitted to the Missouri State Highway Patrol.

This publication is possible only through the conscientious reporting efforts of Missouri law-enforcement agencies. These statistics are compiled pursuant to federal law, 23 USC Section 152.



**County Rank Order**  
**2012-2014**  
**FATAL CRASHES**

**2012-2014 MISSOURI FATAL TRAFFIC CRASHES  
RANK ORDER COUNTY LIST**

<b>Ranking</b>	<b>County</b>	<b>Count</b>	<b>Percent</b>
1	JACKSON	194	9.1%
2	ST LOUIS	156	7.3%
3	ST LOUIS CITY	105	4.9%
4	GREENE	85	4.0%
5	JEFFERSON	82	3.8%
6	FRANKLIN	64	3.0%
7	CLAY	60	2.8%
8	ST CHARLES	57	2.7%
9	BOONE	43	2.0%
10	NEWTON	38	1.8%
11	JASPER	35	1.6%
12	ST FRANCOIS	32	1.5%
13	JOHNSON	31	1.4%
14	CASS	30	1.4%
15	PHELPS	30	1.4%
16	PLATTE	30	1.4%
17	BARRY	28	1.3%
18	LINCOLN	28	1.3%
19	BUCHANAN	27	1.3%
20	WASHINGTON	27	1.3%
21	CAMDEN	25	1.2%
22	MILLER	25	1.2%
23	HOWELL	24	1.1%
24	CHRISTIAN	23	1.1%
25	CAPE GIRARDEAU	22	1.0%
26	DUNKLIN	21	1.0%
27	PETTIS	21	1.0%
28	PULASKI	21	1.0%
29	TANEY	21	1.0%
30	LAWRENCE	20	0.9%
31	MCDONALD	20	0.9%
32	STONE	20	0.9%
33	LACLEDE	19	0.9%
34	BUTLER	18	0.8%
35	COLE	18	0.8%
36	WARREN	17	0.8%
37	POLK	16	0.7%
38	SCOTT	16	0.7%
39	BENTON	15	0.7%
40	CALLAWAY	15	0.7%
41	CRAWFORD	15	0.7%
42	STE GENEVIEVE	15	0.7%



43	NEW MADRID	14	0.7%
44	PEMISCOT	14	0.7%
45	TEXAS	14	0.7%
46	RANDOLPH	13	0.6%
47	SALINE	13	0.6%
48	STODDARD	13	0.6%
49	VERNON	13	0.6%
50	WEBSTER	13	0.6%
51	WRIGHT	13	0.6%
52	BOLLINGER	12	0.6%
53	LAFAYETTE	12	0.6%
54	PERRY	12	0.6%
55	WAYNE	12	0.6%
56	ANDREW	11	0.5%
57	AUDRAIN	11	0.5%
58	MARION	11	0.5%
59	COOPER	10	0.5%
60	DENT	10	0.5%
61	MONTGOMERY	10	0.5%
62	OREGON	10	0.5%
63	PIKE	10	0.5%
64	RIPLEY	10	0.5%
65	GASCONADE	9	0.4%
66	MARIES	9	0.4%
67	MISSISSIPPI	9	0.4%
68	MONITEAU	9	0.4%
69	MORGAN	9	0.4%
70	OZARK	9	0.4%
71	RALLS	9	0.4%
72	RAY	9	0.4%
73	SHANNON	9	0.4%
74	HENRY	8	0.4%
75	IRON	8	0.4%
76	REYNOLDS	8	0.4%
77	BARTON	7	0.3%
78	CEDAR	7	0.3%
79	DOUGLAS	7	0.3%
80	HARRISON	7	0.3%
81	MADISON	7	0.3%
82	NODAWAY	7	0.3%
83	OSAGE	7	0.3%
84	ST CLAIR	7	0.3%
85	ADAIR	6	0.3%
86	CLARK	6	0.3%
87	DADE	6	0.3%
88	CARTER	5	0.2%
89	CHARITON	5	0.2%

90	CLINTON	5	0.2%
91	DAVISS	5	0.2%
92	DEKALB	5	0.2%
93	HOLT	5	0.2%
94	HOWARD	5	0.2%
95	LEWIS	5	0.2%
96	MACON	5	0.2%
97	SCHUYLER	5	0.2%
98	CALDWELL	4	0.2%
99	DALLAS	4	0.2%
100	KNOX	4	0.2%
101	LIVINGSTON	4	0.2%
102	PUTNAM	4	0.2%
103	SULLIVAN	4	0.2%
104	BATES	3	0.1%
105	CARROLL	3	0.1%
106	MONROE	3	0.1%
107	GRUNDY	2	0.1%
108	HICKORY	2	0.1%
109	LINN	2	0.1%
110	WORTH	2	0.1%
111	GENTRY	1	0.0%
112	MERCER	1	0.0%
113	SCOTLAND	1	0.0%
114	ATCHISON	0	0.0%
115	SHELBY	0	0.0%
Total		2,143	



**County Rank Order**

**2012-2014**

**SERIOUS INJURY CRASHES**

**2012-2014 MISSOURI SERIOUS INJURY TRAFFIC CRASHES  
RANK ORDER COUNTY LIST**

<b>Ranking</b>	<b>County</b>	<b>Count</b>	<b>Percent</b>
1	JACKSON	1,486	12.4%
2	ST LOUIS	1,343	11.2%
3	ST LOUIS CITY	579	4.8%
4	JEFFERSON	450	3.8%
5	GREENE	436	3.6%
6	ST CHARLES	394	3.3%
7	CLAY	355	3.0%
8	BUCHANAN	354	3.0%
9	FRANKLIN	259	2.2%
10	CHRISTIAN	239	2.0%
11	BOONE	218	1.8%
12	LACLEDE	200	1.7%
13	COLE	185	1.5%
14	JASPER	178	1.5%
15	NEWTON	162	1.4%
16	LINCOLN	157	1.3%
17	TANEY	154	1.3%
18	CAPE GIRARDEAU	131	1.1%
19	PLATTE	126	1.1%
20	PULASKI	121	1.0%
21	BARRY	116	1.0%
22	LAWRENCE	109	0.9%
23	WEBSTER	108	0.9%
24	TEXAS	107	0.9%
25	BUTLER	105	0.9%
26	CASS	104	0.9%
27	CAMDEN	102	0.9%
28	HOWELL	102	0.9%
29	CALLAWAY	100	0.8%
30	STONE	100	0.8%
31	ST FRANCOIS	99	0.8%
32	LAFAYETTE	89	0.7%
33	SCOTT	89	0.7%
34	MCDONALD	86	0.7%
35	PETTIS	86	0.7%
36	MILLER	85	0.7%
37	MARION	83	0.7%

38	PHELPS	83	0.7%
39	JOHNSON	80	0.7%
40	BENTON	72	0.6%
41	DENT	69	0.6%
42	RANDOLPH	69	0.6%
43	MORGAN	66	0.6%
44	WASHINGTON	65	0.5%
45	CRAWFORD	64	0.5%
46	PEMISCOT	64	0.5%
47	PIKE	61	0.5%
48	BOLLINGER	59	0.5%
49	NEW MADRID	56	0.5%
50	ADAIR	54	0.5%
51	AUDRAIN	54	0.5%
52	WARREN	54	0.5%
53	NODAWAY	52	0.4%
54	COOPER	50	0.4%
55	HENRY	48	0.4%
56	OZARK	48	0.4%
57	RALLS	47	0.4%
58	BATES	46	0.4%
59	SALINE	45	0.4%
60	ST CLAIR	45	0.4%
61	VERNON	45	0.4%
62	DUNKLIN	44	0.4%
63	WRIGHT	43	0.4%
64	CLINTON	42	0.4%
65	MACON	42	0.4%
66	STE GENEVIEVE	42	0.4%
67	DOUGLAS	40	0.3%
68	GASCONADE	40	0.3%
69	PERRY	40	0.3%
70	STODDARD	40	0.3%
71	POLK	39	0.3%
72	ANDREW	38	0.3%
73	LEWIS	36	0.3%
74	SHANNON	36	0.3%
75	DADE	35	0.3%
76	CEDAR	34	0.3%
77	HOWARD	34	0.3%
78	MARIES	34	0.3%

79	MONITEAU	32	0.3%
80	MONTGOMERY	32	0.3%
81	RAY	30	0.3%
82	RIPLEY	30	0.3%
83	WAYNE	30	0.3%
84	LIVINGSTON	28	0.2%
85	OSAGE	27	0.2%
86	DEKALB	26	0.2%
87	REYNOLDS	26	0.2%
88	OREGON	25	0.2%
89	ATCHISON	24	0.2%
90	DAVISS	24	0.2%
91	HOLT	24	0.2%
92	KNOX	24	0.2%
93	SULLIVAN	24	0.2%
94	CLARK	23	0.2%
95	HARRISON	20	0.2%
96	MISSISSIPPI	20	0.2%
97	MONROE	20	0.2%
98	CALDWELL	19	0.2%
99	GRUNDY	19	0.2%
100	IRON	19	0.2%
101	PUTNAM	19	0.2%
102	CARTER	18	0.2%
103	DALLAS	18	0.2%
104	BARTON	17	0.1%
105	CARROLL	16	0.1%
106	CHARITON	16	0.1%
107	GENTRY	15	0.1%
108	LINN	15	0.1%
109	MERCER	14	0.1%
110	SCHUYLER	12	0.1%
111	MADISON	11	0.1%
112	SHELBY	11	0.1%
113	SCOTLAND	10	0.1%
114	WORTH	7	0.1%
115	HICKORY	3	0.0%
Total		12,000	



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**City Rank Order**  
**2012-2014**  
**FATAL CRASHES**

**2012-2014 MISSOURI FATAL TRAFFIC CRASHES  
RANK ORDER CITY LIST**

<b>Ranking</b>	<b>City</b>	<b>Count</b>	<b>Percent</b>
1	KANSAS CITY	164	19%
2	ST. LOUIS	106	12%
3	SPRINGFIELD	46	5%
4	INDEPENDENCE	29	3%
5	JOPLIN	18	2%
6	COLUMBIA	17	2%
7	ST. JOSEPH	14	2%
8	CHESTERFIELD	12	1%
9	CAPE GIRARDEAU	11	1%
10	LEES SUMMIT	11	1%
11	ST. CHARLES	11	1%
12	OZARK	8	1%
13	MARYLAND HEIGHTS	7	1%
14	ROLLA	7	1%
15	SIKESTON	7	1%
16	SUNSET HILLS	7	1%
17	FERGUSON	6	1%
18	JEFFERSON CITY	6	1%
19	ST. PETERS	6	1%
20	ARNOLD	5	1%
21	BERKELEY	5	1%
22	BLUE SPRINGS	5	1%
23	BRANSON	5	1%
24	BRIDGETON	5	1%
25	EUREKA	5	1%
26	FENTON	5	1%
27	FLORISSANT	5	1%
28	HAZELWOOD	5	1%
29	NEVADA	5	1%
30	O'FALLON	5	1%
31	RIVERSIDE	5	1%
32	ST. CLAIR	5	1%
33	SULLIVAN	5	1%
34	TOWN AND COUNTRY	5	1%
35	WEST PLAINS	5	1%
36	WRIGHT CITY	5	1%
37	BELTON	4	0%



38	FARMINGTON	4	0%
39	KEARNEY	4	0%
40	LIBERTY	4	0%
41	NEOSHO	4	0%
42	ST. JOHN	4	0%
43	WARRENTON	4	0%
44	WENTZVILLE	4	0%
45	CAMDENTON	3	0%
46	DEXTER	3	0%
47	FESTUS	3	0%
48	GRANDVIEW	3	0%
49	HANNIBAL	3	0%
50	JACKSON	3	0%
51	KIRKSVILLE	3	0%
52	KIRKWOOD	3	0%
53	LAKE ST. LOUIS	3	0%
54	MURPHY	3	0%
55	PERRYVILLE	3	0%
56	PINEVILLE	3	0%
57	POPLAR BLUFF	3	0%
58	REPUBLIC	3	0%
59	SCOTT CITY	3	0%
60	UNIVERSITY CITY	3	0%
61	WARRENSBURG	3	0%
62	WILDWOOD	3	0%
63	ANDERSON	2	0%
64	ASHLAND	2	0%
65	BELLEFONTAINE NEIGHBORS	2	0%
66	BOLIVAR	2	0%
67	BYRNES MILL	2	0%
68	CLARK	2	0%
69	CLINTON	2	0%
70	CREVE COEUR	2	0%
71	DES PERES	2	0%
72	DESLOGE	2	0%
73	ELLISVILLE	2	0%
74	FAIR GROVE	2	0%
75	GRAY SUMMIT	2	0%
76	HOUSTON	2	0%
77	IMPERIAL	2	0%
78	LADUE	2	0%
79	LEBANON	2	0%

80	MARIONVILLE	2	0%
81	MARYVILLE	2	0%
82	MEXICO	2	0%
83	MONETT	2	0%
84	NORTH KANSAS CITY	2	0%
85	OSAGE BEACH	2	0%
86	PACIFIC	2	0%
87	PLEASANT HILL	2	0%
88	PORTAGEVILLE	2	0%
89	RAYTOWN	2	0%
90	REEDS SPRING	2	0%
91	SEDALIA	2	0%
92	SUGAR CREEK	2	0%
93	TROY	2	0%
94	VALLEY PARK	2	0%
95	WASHINGTON	2	0%
96	ARROW POINT	1	0%
97	AVILLA	1	0%
98	ALTON	1	0%
99	BALLWIN	1	0%
100	BEVERLY HILLS	1	0%
101	BLACK JACK	1	0%
102	BOONVILLE	1	0%
103	BRENTWOOD	1	0%
104	BRONAUGH	1	0%
105	BUNKER	1	0%
106	CABOOL	1	0%
107	CALIFORNIA	1	0%
108	CAMERON	1	0%
109	CANTON	1	0%
110	CARTHAGE	1	0%
111	CARUTHERSVILLE	1	0%
112	CASSVILLE	1	0%
113	CEDAR HILL	1	0%
114	CHILLICOTHE	1	0%
115	COTTLEVILLE	1	0%
116	COUNTRY CLUB HILLS	1	0%
117	COUNTRY CLUB VILLAGE	1	0%
118	CRESTWOOD	1	0%
119	CRYSTAL CITY	1	0%
120	CUBA	1	0%
121	DE SOTO	1	0%

122	DIAMOND	1	0%
123	EVERTON	1	0%
124	EWING	1	0%
125	EXCELSIOR SPRINGS	1	0%
126	FORT LEONARD WOOD	1	0%
127	FREDERICKTOWN	1	0%
128	FULTON	1	0%
129	GAINESVILLE	1	0%
130	GLADSTONE	1	0%
131	GLASGOW	1	0%
132	GRAIN VALLEY	1	0%
133	GRANBY	1	0%
134	GRAVOIS MILLS	1	0%
135	HARRISONVILLE	1	0%
136	HIGBEE	1	0%
137	HIGH RIDGE	1	0%
138	HILLSBORO	1	0%
139	JANE	1	0%
140	JENNINGS	1	0%
141	JONESBURG	1	0%
142	KAHOKA	1	0%
143	KENNETT	1	0%
144	KINGDOM CITY	1	0%
145	KINGSVILLE	1	0%
146	KNOB NOSTER	1	0%
147	LA MONTE	1	0%
148	LADDONIA	1	0%
149	LAKE LOTAWANA	1	0%
150	LAKE OZARK	1	0%
151	LAKE WINNEBAGO	1	0%
152	LANCASTER	1	0%
153	LAWSON	1	0%
154	LEADWOOD	1	0%
155	LEXINGTON	1	0%
156	LINCOLN	1	0%
157	LINN CREEK	1	0%
158	MACON	1	0%
159	MALDEN	1	0%
160	MANCHESTER	1	0%
161	MAPLEWOOD	1	0%
162	MARSHFIELD	1	0%
163	MILAN	1	0%

164	MINDENMINES	1	0%
165	MONTGOMERY CITY	1	0%
166	MOUNTAIN VIEW	1	0%
167	NEELYVILLE	1	0%
168	NEW FLORENCE	1	0%
169	NEW HAVEN	1	0%
170	NIXA	1	0%
171	NOEL	1	0%
172	OAK GROVE	1	0%
173	OAKLAND	1	0%
174	OLIVETTE	1	0%
175	OVERLAND	1	0%
176	OWENSVILLE	1	0%
177	PAGEDALE	1	0%
178	PALMYRA	1	0%
179	PARKVILLE	1	0%
180	PEACH ORCHARD	1	0%
181	PHILLIPSBURG	1	0%
182	PINE LAWN	1	0%
183	PLATTSBURG	1	0%
184	QUEEN CITY	1	0%
185	RANDOLPH	1	0%
186	ROGERSVILLE	1	0%
187	RUSSELLVILLE	1	0%
188	SALEM	1	0%
189	SENATH	1	0%
190	SENECA	1	0%
191	SEYMOUR	1	0%
192	SILVER CREEK	1	0%
193	SMITHVILLE	1	0%
194	ST. ROBERT	1	0%
195	ST. THOMAS	1	0%
196	STEELVILLE	1	0%
197	STRAFFORD	1	0%
198	THAYER	1	0%
199	TRENTON	1	0%
200	UNION	1	0%
201	UNIONVILLE	1	0%
202	UNITY VILLAGE	1	0%
203	URBANA	1	0%
204	VAN BUREN	1	0%
205	VERONA	1	0%

206	VILLA RIDGE	1	0%
207	VINITA PARK	1	0%
208	WARSAW	1	0%
209	WAYNESVILLE	1	0%
210	WEAUBLEAU	1	0%
211	WEBB CITY	1	0%
212	WELLSTON	1	0%
213	WINFIELD	1	0%
214	WINONA	1	0%
215	WYATT	1	0%
Total		850	

*Note: 1,293 fatal crashes occurred in Non-City or Unincorporated areas.*



**City Rank Order**

**2012-2014**

**SERIOUS INJURY CRASHES**

**2012-2014 MISSOURI SERIOUS INJURY TRAFFIC CRASHES  
RANK ORDER CITY LIST**

<b>Ranking</b>	<b>City</b>	<b>Count</b>	<b>Percent</b>
1	KANSAS CITY	839	14.2%
2	ST. LOUIS	580	9.8%
3	INDEPENDENCE	448	7.6%
4	ST. JOSEPH	325	5.5%
5	SPRINGFIELD	207	3.5%
6	JEFFERSON CITY	137	2.3%
7	LEES SUMMIT	133	2.3%
8	COLUMBIA	117	2.0%
9	BLUE SPRINGS	104	1.8%
10	ST. CHARLES	87	1.5%
11	LIBERTY	84	1.4%
12	JOPLIN	75	1.3%
13	BRIDGETON	73	1.2%
14	OZARK	57	1.0%
15	ST. PETERS	55	0.9%
16	TOWN AND COUNTRY	51	0.9%
17	CHESTERFIELD	43	0.7%
18	FLORISSANT	40	0.7%
19	MARYLAND HEIGHTS	40	0.7%
20	KIRKWOOD	38	0.6%
21	HANNIBAL	37	0.6%
22	HAZELWOOD	37	0.6%
23	LEBANON	37	0.6%
24	RAYTOWN	36	0.6%
25	ARNOLD	35	0.6%
26	CAPE GIRARDEAU	35	0.6%
27	SUNSET HILLS	35	0.6%
28	FERGUSON	34	0.6%
29	GLADSTONE	34	0.6%
30	FENTON	33	0.6%
31	BRANSON	31	0.5%
32	KIRKSVILLE	31	0.5%
33	SIKESTON	30	0.5%
34	POPLAR BLUFF	29	0.5%
35	WENTZVILLE	29	0.5%

36	MURPHY	27	0.5%
37	WEBSTER GROVES	27	0.5%
38	JACKSON	26	0.4%
39	OVERLAND	26	0.4%
40	BALLWIN	25	0.4%
41	BELLEFONTAINE NEIGHBORS	25	0.4%
42	GRANDVIEW	25	0.4%
43	WILDWOOD	25	0.4%
44	JENNINGS	24	0.4%
45	RICHMOND HEIGHTS	24	0.4%
46	ROLLA	24	0.4%
47	UNIVERSITY CITY	24	0.4%
48	CREVE COEUR	23	0.4%
49	SEDALIA	23	0.4%
50	BERKELEY	22	0.4%
51	O'FALLON	22	0.4%
52	UNION	21	0.4%
53	MOBERLY	20	0.3%
54	EUREKA	19	0.3%
55	CARTHAGE	18	0.3%
56	LADUE	18	0.3%
57	ST. CLAIR	18	0.3%
58	TROY	18	0.3%
59	WELDON SPRING	18	0.3%
60	BELTON	17	0.3%
61	CLAYTON	17	0.3%
62	CLINTON	17	0.3%
63	FESTUS	17	0.3%
64	MANCHESTER	17	0.3%
65	KENNETT	15	0.3%
66	MONETT	15	0.3%
67	ST. ROBERT	15	0.3%
68	DES PERES	14	0.2%
69	EXCELSIOR SPRINGS	14	0.2%
70	FARMINGTON	14	0.2%
71	LAKE ST. LOUIS	14	0.2%
72	MEXICO	14	0.2%
73	OSAGE BEACH	14	0.2%
74	PLEASANT HILL	14	0.2%
75	SALEM	14	0.2%



76	BOLIVAR	13	0.2%
77	NEOSHO	13	0.2%
78	NIXA	13	0.2%
79	NORTH KANSAS CITY	13	0.2%
80	ST. ANN	13	0.2%
81	AURORA	12	0.2%
82	CLAYCOMO	12	0.2%
83	MAPLEWOOD	12	0.2%
84	WRIGHT CITY	12	0.2%
85	GRAIN VALLEY	11	0.2%
86	NEVADA	11	0.2%
87	VALLEY PARK	11	0.2%
88	WARRENTON	11	0.2%
89	BRENTWOOD	10	0.2%
90	DONIPHAN	10	0.2%
91	SMITHVILLE	10	0.2%
92	ELDON	9	0.2%
93	ELLISVILLE	9	0.2%
94	FULTON	9	0.2%
95	HIGH RIDGE	9	0.2%
96	HIGHLANDVILLE	9	0.2%
97	KEARNEY	9	0.2%
98	KINGDOM CITY	9	0.2%
99	OAK GROVE	9	0.2%
100	OLIVETTE	9	0.2%
101	SULLIVAN	9	0.2%
102	WARRENSBURG	9	0.2%
103	WEBB CITY	9	0.2%
104	AIRPORT DRIVE	8	0.1%
105	BARNHART	8	0.1%
106	BEL-RIDGE	8	0.1%
107	CAMERON	8	0.1%
108	CEDAR HILL	8	0.1%
109	CRYSTAL CITY	8	0.1%
110	GRAY SUMMIT	8	0.1%
111	HARRISONVILLE	8	0.1%
112	PERRYVILLE	8	0.1%
113	RIVERSIDE	8	0.1%
114	BRANSON WEST	7	0.1%
115	DESLOGE	7	0.1%

116	GLENDALE	7	0.1%
117	IMPERIAL	7	0.1%
118	LAKE LOTAWANA	7	0.1%
119	LONE JACK	7	0.1%
120	MARSHALL	7	0.1%
121	MARYVILLE	7	0.1%
122	PACIFIC	7	0.1%
123	PARK HILLS	7	0.1%
124	PARKVILLE	7	0.1%
125	PEVELY	7	0.1%
126	PLATTE CITY	7	0.1%
127	REPUBLIC	7	0.1%
128	SHREWSBURY	7	0.1%
129	ST. JOHN	7	0.1%
130	WAYNESVILLE	7	0.1%
131	BOONVILLE	6	0.1%
132	DELLWOOD	6	0.1%
133	HERCULANEUM	6	0.1%
134	LAKE OZARK	6	0.1%
135	MOUNTAIN VIEW	6	0.1%
136	OAKLAND	6	0.1%
137	POTOSI	6	0.1%
138	ROCK HILL	6	0.1%
139	SUGAR CREEK	6	0.1%
140	WARSAW	6	0.1%
141	WEST PLAINS	6	0.1%
142	AVA	5	0.1%
143	CAMDENTON	5	0.1%
144	CARUTHERSVILLE	5	0.1%
145	HAYTI	5	0.1%
146	HIGGINSVILLE	5	0.1%
147	LAMAR	5	0.1%
148	LEADWOOD	5	0.1%
149	NORWOOD COURT	5	0.1%
150	ROGERSVILLE	5	0.1%
151	SAVANNAH	5	0.1%
152	SENECA	5	0.1%
153	WASHINGTON	5	0.1%
154	ASHLAND	4	0.1%
155	CARL JUNCTION	4	0.1%

156	FRONTENAC	4	0.1%
157	HILLSBORO	4	0.1%
158	LAURIE	4	0.1%
159	LOWRY CITY	4	0.1%
160	MINER	4	0.1%
161	NEW MADRID	4	0.1%
162	NORMANDY	4	0.1%
163	PALMYRA	4	0.1%
164	PECULIAR	4	0.1%
165	PINE LAWN	4	0.1%
166	RAYMORE	4	0.1%
167	REEDS SPRING	4	0.1%
168	SEYMOUR	4	0.1%
169	WELLSTON	4	0.1%
170	BETHANY	3	0.1%
171	BLACK JACK	3	0.1%
172	BULL CREEK	3	0.1%
173	CABOOL	3	0.1%
174	CHILLICOTHE	3	0.1%
175	CLARK	3	0.1%
176	CONWAY	3	0.1%
177	COOL VALLEY	3	0.1%
178	COTTLEVILLE	3	0.1%
179	DEXTER	3	0.1%
180	DIAMOND	3	0.1%
181	EDINA	3	0.1%
182	ELLSINORE	3	0.1%
183	ELSBERRY	3	0.1%
184	EMINENCE	3	0.1%
185	FORISTELL	3	0.1%
186	FREEMAN	3	0.1%
187	IRONTON	3	0.1%
188	KIMBERLING CITY	3	0.1%
189	LEXINGTON	3	0.1%
190	LOCKWOOD	3	0.1%
191	LOUISIANA	3	0.1%
192	MARSHFIELD	3	0.1%
193	MOLINE ACRES	3	0.1%
194	MOSCOW MILLS	3	0.1%
195	MOUNTAIN GROVE	3	0.1%

196	NEW HAVEN	3	0.1%
197	NEW LONDON	3	0.1%
198	NORTHWOODS	3	0.1%
199	PAGEDALE	3	0.1%
200	PLEASANT VALLEY	3	0.1%
201	RICHMOND	3	0.1%
202	RIVER BEND	3	0.1%
203	SPARTA	3	0.1%
204	ST. JAMES	3	0.1%
205	STE. GENEVIEVE	3	0.1%
206	STRAFFORD	3	0.1%
207	TAOS	3	0.1%
208	TRENTON	3	0.1%
209	TWIN OAKS	3	0.1%
210	VILLA RIDGE	3	0.1%
211	WESTON	3	0.1%
212	WILLARD	3	0.1%
213	WOODSON TERRACE	3	0.1%
214	ANDERSON	2	0.0%
215	APPLETON CITY	2	0.0%
216	BATTLEFIELD	2	0.0%
217	BEL-NOR	2	0.0%
218	BONNE TERRE	2	0.0%
219	BOWLING GREEN	2	0.0%
220	BRECKENRIDGE HILLS	2	0.0%
221	BROOKFIELD	2	0.0%
222	BRUNSWICK	2	0.0%
223	CALIFORNIA	2	0.0%
224	CARROLLTON	2	0.0%
225	CENTRALIA	2	0.0%
226	CHAFFEE	2	0.0%
227	COUNTRY CLUB VILLAGE	2	0.0%
228	DE SOTO	2	0.0%
229	DIGGINS	2	0.0%
230	DUQUESNE	2	0.0%
231	EDMUNDSON	2	0.0%
232	EL DORADO SPRINGS	2	0.0%
233	FLORDELL HILLS	2	0.0%
234	FORSYTH	2	0.0%
235	GALENA	2	0.0%

236	HERMANN	2	0.0%
237	HOLCOMB	2	0.0%
238	HOLLISTER	2	0.0%
239	HOPKINS	2	0.0%
240	HOUSTON	2	0.0%
241	IBERIA	2	0.0%
242	JAMESPORT	2	0.0%
243	JONESBURG	2	0.0%
244	LEADINGTON	2	0.0%
245	LINN CREEK	2	0.0%
246	MACKS CREEK	2	0.0%
247	MACON	2	0.0%
248	MARBLE HILL	2	0.0%
249	MARIONVILLE	2	0.0%
250	MERRIAM WOODS	2	0.0%
251	MONROE CITY	2	0.0%
252	NEW CAMBRIA	2	0.0%
253	OAK GROVE VILLAGE	2	0.0%
254	ODESSA	2	0.0%
255	PINEVILLE	2	0.0%
256	RIVERVIEW	2	0.0%
257	SOUTHWEST CITY	2	0.0%
258	SPICKARD	2	0.0%
259	STEELE	2	0.0%
260	UNIONVILLE	2	0.0%
261	UNITY VILLAGE	2	0.0%
262	VERSAILLES	2	0.0%
263	WINONA	2	0.0%
264	ALTENBURG	1	0.0%
265	ANNISTON	1	0.0%
266	ASH GROVE	1	0.0%
267	AUXVASSE	1	0.0%
268	BAGNELL	1	0.0%
269	BARING	1	0.0%
270	BARNETT	1	0.0%
271	BATES CITY	1	0.0%
272	BELL CITY	1	0.0%
273	BELLE	1	0.0%
274	BERNIE	1	0.0%
275	BEVIER	1	0.0%

276	BIG LAKE	1	0.0%
277	BILLINGS	1	0.0%
278	BIRCH TREE	1	0.0%
279	BOURBON	1	0.0%
280	BRAGG CITY	1	0.0%
281	BRAYMER	1	0.0%
282	BRECKENRIDGE	1	0.0%
283	BUFFALO	1	0.0%
284	BURLINGTON JUNCTION	1	0.0%
285	BYRNES MILL	1	0.0%
286	CAINSVILLE	1	0.0%
287	CARTERVILLE	1	0.0%
288	CASSVILLE	1	0.0%
289	CENTER	1	0.0%
290	CENTERVILLE	1	0.0%
291	CHULA	1	0.0%
292	CLARENCE	1	0.0%
293	CLARKSVILLE	1	0.0%
294	CLEVER	1	0.0%
295	COLE CAMP	1	0.0%
296	COLLINS	1	0.0%
297	COUNTRY CLUB HILLS	1	0.0%
298	CRESTWOOD	1	0.0%
299	CROCKER	1	0.0%
300	CROSS TIMBERS	1	0.0%
301	CUBA	1	0.0%
302	DIXON	1	0.0%
303	DOWNING	1	0.0%
304	ESSEX	1	0.0%
305	ETHEL	1	0.0%
306	EVERTON	1	0.0%
307	FAYETTE	1	0.0%
308	FIDELITY	1	0.0%
309	FOLEY	1	0.0%
310	FORDLAND	1	0.0%
311	FRANKFORD	1	0.0%
312	FREDERICKTOWN	1	0.0%
313	FREMONT HILLS	1	0.0%
314	GAINESVILLE	1	0.0%
315	GARDEN CITY	1	0.0%

316	GOODMAN	1	0.0%
317	GORDONVILLE	1	0.0%
318	GOWER	1	0.0%
319	GRANT CITY	1	0.0%
320	GREEN PARK	1	0.0%
321	GREENFIELD	1	0.0%
322	HALLSVILLE	1	0.0%
323	HAMILTON	1	0.0%
324	HANLEY HILLS	1	0.0%
325	HARRISBURG	1	0.0%
326	HAYTI HEIGHTS	1	0.0%
327	HENRIETTA	1	0.0%
328	HERMITAGE	1	0.0%
329	HIGBEE	1	0.0%
330	HOLTS SUMMIT	1	0.0%
331	HORINE	1	0.0%
332	HUMANSVILLE	1	0.0%
333	HUNTSVILLE	1	0.0%
334	JASPER	1	0.0%
335	JERICO SPRINGS	1	0.0%
336	JOSEPHVILLE	1	0.0%
337	KNOB NOSTER	1	0.0%
338	KOSHKONONG	1	0.0%
339	LA BELLE	1	0.0%
340	LACLEDE	1	0.0%
341	LAKE TAPAWINGO	1	0.0%
342	LAKELAND	1	0.0%
343	LAMAR HEIGHTS	1	0.0%
344	LAWSON	1	0.0%
345	LEASBURG	1	0.0%
346	LEAWOOD	1	0.0%
347	LEVASY	1	0.0%
348	LINN	1	0.0%
349	LURAY	1	0.0%
350	MALDEN	1	0.0%
351	MARCELINE	1	0.0%
352	MARLBOROUGH	1	0.0%
353	MARSTON	1	0.0%
354	MEMPHIS	1	0.0%
355	META	1	0.0%

356	MIAMI	1	0.0%
357	MILAN	1	0.0%
358	MONTGOMERY CITY	1	0.0%
359	MOUND CITY	1	0.0%
360	NAPOLEON	1	0.0%
361	NEELYVILLE	1	0.0%
362	NEW FLORENCE	1	0.0%
363	NEW HAMPTON	1	0.0%
364	NEW MELLE	1	0.0%
365	NOEL	1	0.0%
366	NOVINGER	1	0.0%
367	ORAN	1	0.0%
368	OREGON	1	0.0%
369	OSCEOLA	1	0.0%
370	PARKWAY	1	0.0%
371	PASCOLA	1	0.0%
372	PASSAIC	1	0.0%
373	PHILLIPSBURG	1	0.0%
374	PICKERING	1	0.0%
375	PIERCE CITY	1	0.0%
376	PILOT KNOB	1	0.0%
377	PLATTE WOODS	1	0.0%
378	POLO	1	0.0%
379	PORTAGE DES SIOUX	1	0.0%
380	PORTAGEVILLE	1	0.0%
381	PRINCETON	1	0.0%
382	PURDY	1	0.0%
383	QULIN	1	0.0%
384	RANDOLPH	1	0.0%
385	REDINGS MILL	1	0.0%
386	RICHLAND	1	0.0%
387	ROCKAWAY BEACH	1	0.0%
388	ROCKVILLE	1	0.0%
389	ROSCOE	1	0.0%
390	SAGINAW	1	0.0%
391	SARCOXIE	1	0.0%
392	SCHELL CITY	1	0.0%
393	SCOTT CITY	1	0.0%
394	SELIGMAN	1	0.0%
395	SHERIDAN	1	0.0%



396	SHOAL CREEK DRIVE	1	0.0%
397	ST. CLOUD	1	0.0%
398	ST. ELIZABETH	1	0.0%
399	ST. PAUL	1	0.0%
400	STANBERRY	1	0.0%
401	STOTTS CITY	1	0.0%
402	STOUTLAND	1	0.0%
403	SUMMERSVILLE	1	0.0%
404	SUNRISE BEACH	1	0.0%
405	TARKIO	1	0.0%
406	THEODOSIA	1	0.0%
407	TIPTON	1	0.0%
408	TRACY	1	0.0%
409	TRUESDALE	1	0.0%
410	UTICA	1	0.0%
411	VERONA	1	0.0%
412	VILLAGE OF FOUR SEASONS	1	0.0%
413	WAYLAND	1	0.0%
414	WHITE OAK	1	0.0%
415	WHITEMAN AFB	1	0.0%
416	WILLOW SPRINGS	1	0.0%
417	WINSTON	1	0.0%
418	WOOD HEIGHTS	1	0.0%
Total		5,891	

*Note: 6,109 serious injury crashes occurred in Non-City or Unincorporated areas.*



# **Unincorporated County Rank Order**

**2012-2014**

# **FATAL CRASHES**

**2012-2014 MISSOURI FATAL TRAFFIC CRASHES  
RANK ORDER UNINCORPORATED COUNTY LIST**

<b>Ranking</b>	<b>County</b>	<b>Count</b>	<b>Percent</b>
1	JEFFERSON	68	5.3%
2	FRANKLIN	54	4.2%
3	ST. LOUIS	44	3.4%
4	GREENE	33	2.6%
5	JOHNSON	26	2.0%
6	WASHINGTON	26	2.0%
7	CASS	25	1.9%
8	NEWTON	25	1.9%
9	ST. CHARLES	25	1.9%
10	LINCOLN	24	1.9%
11	MILLER	24	1.9%
12	ST. FRANCOIS	24	1.9%
13	BARRY	23	1.8%
14	BOONE	23	1.8%
15	PHELPS	21	1.6%
16	CAMDEN	19	1.5%
17	JASPER	19	1.5%
18	CLAY	18	1.4%
19	DUNKLIN	18	1.4%
20	HOWELL	18	1.4%
21	LAWRENCE	18	1.4%
22	PETTIS	18	1.4%
23	STONE	18	1.4%
24	LACLEDE	16	1.2%
25	TANEY	16	1.2%
26	PULASKI	15	1.2%
27	BUTLER	14	1.1%
28	MCDONALD	14	1.1%
29	BENTON	13	1.0%
30	CALLAWAY	13	1.0%
31	CRAWFORD	13	1.0%
32	PEMISCOT	13	1.0%
33	SALINE	13	1.0%
34	STE. GENEVIEVE	13	1.0%
35	BOLLINGER	12	0.9%
36	CHRISTIAN	12	0.9%
37	NEW MADRID	12	0.9%
38	POLK	12	0.9%
39	RANDOLPH	12	0.9%
40	WRIGHT	12	0.9%

41	ANDREW	11	0.9%
42	LAFAYETTE	11	0.9%
43	PLATTE	11	0.9%
44	TEXAS	11	0.9%
45	WAYNE	11	0.9%
46	BUCHANAN	10	0.8%
47	CAPE GIRARDEAU	10	0.8%
48	COLE	10	0.8%
49	COOPER	10	0.8%
50	JACKSON	10	0.8%
51	RIPLEY	10	0.8%
52	STODDARD	10	0.8%
53	MARIES	9	0.7%
54	MISSISSIPPI	9	0.7%
55	MORGAN	9	0.7%
56	OREGON	9	0.7%
57	PERRY	9	0.7%
58	PIKE	9	0.7%
59	RALLS	9	0.7%
60	RAY	9	0.7%
61	WEBSTER	9	0.7%
62	DENT	8	0.6%
63	GASCONADE	8	0.6%
64	IRON	8	0.6%
65	MONITEAU	8	0.6%
66	OZARK	8	0.6%
67	REYNOLDS	8	0.6%
68	SHANNON	8	0.6%
69	VERNON	8	0.6%
70	WARREN	8	0.6%
71	CEDAR	7	0.5%
72	DOUGLAS	7	0.5%
73	HARRISON	7	0.5%
74	HENRY	7	0.5%
75	MARION	7	0.5%
76	MONTGOMERY	7	0.5%
77	OSAGE	7	0.5%
78	ST. CLAIR	7	0.5%
79	AUDRAIN	6	0.5%
80	BARTON	6	0.5%
81	DADE	6	0.5%
82	SCOTT	6	0.5%
83	CARTER	5	0.4%
84	CHARITON	5	0.4%

85	CLARK	5	0.4%
86	DAVISS	5	0.4%
87	HOLT	5	0.4%
88	MADISON	5	0.4%
89	NODAWAY	5	0.4%
90	CALDWELL	4	0.3%
91	CLINTON	4	0.3%
92	DEKALB	4	0.3%
93	HOWARD	4	0.3%
94	KNOX	4	0.3%
95	MACON	4	0.3%
96	SCHUYLER	4	0.3%
97	ADAIR	3	0.2%
98	BATES	3	0.2%
99	CARROLL	3	0.2%
100	DALLAS	3	0.2%
101	LEWIS	3	0.2%
102	LIVINGSTON	3	0.2%
103	MONROE	3	0.2%
104	PUTNAM	3	0.2%
105	SULLIVAN	3	0.2%
106	HICKORY	2	0.2%
107	LINN	2	0.2%
108	WORTH	2	0.2%
109	GENTRY	1	0.1%
110	GRUNDY	1	0.1%
111	MERCER	1	0.1%
112	SCOTLAND	1	0.1%
Total		1,294	



**Unincorporated County Rank Order**  
**2012-2014**  
**SERIOUS INJURY CRASHES**

**2012-2014 MISSOURI SERIOUS INJURY TRAFFIC CRASHES  
RANK ORDER UNINCORPORATED COUNTY LIST**

<b>Ranking</b>	<b>County</b>	<b>Count</b>	<b>Percent</b>
1	ST. LOUIS	438	7.1%
2	JEFFERSON	354	5.8%
3	GREENE	217	3.5%
4	FRANKLIN	197	3.2%
5	LACLEDE	159	2.6%
6	ST. CHARLES	142	2.3%
7	CHRISTIAN	138	2.3%
8	NEWTON	126	2.1%
9	LINCOLN	122	2.0%
10	TANEY	111	1.8%
11	TEXAS	102	1.7%
12	BARRY	100	1.6%
13	WEBSTER	95	1.6%
14	LAWRENCE	94	1.5%
15	BOONE	93	1.5%
16	PULASKI	93	1.5%
17	HOWELL	90	1.5%
18	STONE	85	1.4%
19	CALLAWAY	79	1.3%
20	LAFAYETTE	77	1.3%
21	BUTLER	75	1.2%
22	CAMDEN	73	1.2%
23	MCDONALD	73	1.2%
24	CAPE GIRARDEAU	72	1.2%
25	JOHNSON	68	1.1%
26	MILLER	68	1.1%
27	BENTON	66	1.1%
28	JASPER	65	1.1%
29	PETTIS	63	1.0%
30	PHELPS	60	1.0%
31	MORGAN	58	0.9%
32	ST. FRANCOIS	58	0.9%
33	WASHINGTON	58	0.9%
34	BOLLINGER	57	0.9%
35	CRAWFORD	57	0.9%
36	DENT	57	0.9%
37	SCOTT	56	0.9%
38	COLE	52	0.8%
39	PIKE	51	0.8%
40	JACKSON	49	0.8%

41	COOPER	47	0.8%
42	OZARK	47	0.8%
43	PEMISCOT	47	0.8%
44	CASS	45	0.7%
45	RANDOLPH	45	0.7%
46	BATES	44	0.7%
47	MARION	44	0.7%
48	NEW MADRID	44	0.7%
49	RALLS	43	0.7%
50	NODAWAY	42	0.7%
51	WRIGHT	40	0.7%
52	AUDRAIN	39	0.6%
53	GASCONADE	38	0.6%
54	DOUGLAS	36	0.6%
55	MACON	36	0.6%
56	PLATTE	36	0.6%
57	SALINE	36	0.6%
58	STE. GENEVIEVE	36	0.6%
59	STODDARD	36	0.6%
60	LEWIS	35	0.6%
61	CLAY	34	0.6%
62	CLINTON	34	0.6%
63	HOWARD	34	0.6%
64	VERNON	34	0.6%
65	ST. CLAIR	33	0.5%
66	WARREN	33	0.5%
67	MARIES	32	0.5%
68	PERRY	32	0.5%
69	SHANNON	32	0.5%
70	ANDREW	31	0.5%
71	CEDAR	31	0.5%
72	HENRY	31	0.5%
73	DADE	30	0.5%
74	WAYNE	30	0.5%
75	MONITEAU	29	0.5%
76	DUNKLIN	26	0.4%
77	REYNOLDS	26	0.4%
78	MONTGOMERY	25	0.4%
79	OREGON	25	0.4%
80	OSAGE	25	0.4%
81	BUCHANAN	24	0.4%
82	LIVINGSTON	24	0.4%
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84	ATCHISON	23	0.4%



85	POLK	23	0.4%
86	ADAIR	22	0.4%
87	HOLT	22	0.4%
88	SULLIVAN	22	0.4%
89	DAVISS	21	0.3%
90	DEKALB	21	0.3%
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92	CLARK	20	0.3%
93	RIPLEY	20	0.3%
94	MONROE	19	0.3%
95	MISSISSIPPI	18	0.3%
96	HARRISON	17	0.3%
97	PUTNAM	17	0.3%
98	CALDWELL	15	0.2%
99	CARTER	15	0.2%
100	CHARITON	15	0.2%
101	DALLAS	15	0.2%
102	IRON	15	0.2%
103	CARROLL	14	0.2%
104	GRUNDY	14	0.2%
105	GENTRY	13	0.2%
106	BARTON	12	0.2%
107	MERCER	12	0.2%
108	LINN	11	0.2%
109	SCHUYLER	11	0.2%
110	SHELBY	11	0.2%
111	MADISON	9	0.1%
112	SCOTLAND	8	0.1%
113	WORTH	5	0.1%
114	ST. LOUIS CITY	2	0.0%
115	HICKORY	1	0.0%
Total		6,127	

## PUBLIC INFORMATION AND EDUCATION

### Background

From 2005-2014, due to the combined efforts of highway safety advocates in the Missouri Coalition for Roadway Safety, 3,270 lives have been saved on Missouri roadways, a decrease of 39.1 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.

The Missouri Coalition for Roadway Safety set a new fatality reduction goal of 700 or fewer by 2016 at its Blueprint to SAVE MORE LIVES 2012 fall conference. This goal reflects the overall vision to continuously move Missouri toward zero deaths.

While our roads are safer than they have been in many years, there are still too many senseless crashes and 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) state-wide help promote campaign awareness by alerting the traveling public to enforcement efforts.

The Public Information Subcom-



mittee 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.

The Traffic and Highway Safety Division has added a tool to combat fatalities and serious injuries on our roadways. This tool is a driver survey that reflects drivers' views on a variety of highway safety issues including seat belt usage, speeding, cell phone use, and impaired driving. Heartland Market Research conducted this research project that reached 2,514 adult Missouri drivers in April of 2014. People were surveyed from all of the 114 counties as well as the independent city of St. Louis. Residents from 671 different zip codes are represented. The standard phone survey practice of alternatively asking for either the oldest or youngest adult was not employed. Instead, the calling center was given specific goals for each age group and gender within various geographic areas to ensure the most representative sample possible.

The purpose of this survey was to capture current attitudes and awareness of highway safety issues. These findings will be used to design and implement public information and law enforcement campaigns that effectively deter drivers from engaging in unsafe driving behaviors. In addition, better understanding driver attitudes on highway safety issues will aide in public policy and legislative decisions. The research was designed so that in addition to providing a statewide result, statistically useful information was also available at the district level. Special emphasis was placed on ensuring that the sample reflected Missouri's geographic, age, and gender diversity.

The 2014 results of this driver survey showed that drivers perceive their driving abilities and habits to be better than citation numbers and what accident rates reflect. For example, 84.6 percent of the sample in the driver survey claim to always use their seat belt but the most recent safety belt survey (2014) showed that only 79 percent of drivers observed were actually

belted. In 2014 those least likely to wear seat belts were males, 50 years of age and older, whose primary vehicle was a pickup truck. In 2013 those least likely to wear seat belts were males, between the ages of 18 and 29, whose primary vehicle was a pickup truck or other type of truck. Also, drivers' perception of law enforcement efforts was revealed. Those who were the least likely to wear seat belts were the most likely to be aware of seat belt enforcement publicity, but were the least likely to receive a ticket if they did not wear their seat belt. Those who lived in very rural areas were also less likely to always buckle up than those living in other communities. Fifty-seven percent of the drivers surveyed prefer to keep Missouri's seat belt law a secondary law, slightly higher, but similar to the findings from recent years. Fifty-one percent preferred to leave the penalty for violating the law unchanged (\$10). Out of the minority who favored increasing the fine, 35 percent thought the fine should range from \$25 to \$49, and 23 percent thought the fine should range from \$50 to \$74. Thirty-six percent thought people who did not wear their seat belt would only rarely get a ticket, while 47 percent thought people would be caught at least half of the time. The vast majority of the respondents, 81 percent, were not aware of any publicity concerning seat belt enforcement.

Over 87 percent of Missouri drivers stated they rarely or never talk on a cell phone while driving, and over 98 percent stated they rarely or never text on a cell phone while driving. Ninety-three percent of Missouri drivers favored some type of restriction on how people could use cell phones while driving, 32 percent favored banning all cellphone use by drivers and 61 percent wanted to ensure drivers could still use cell phones for talking while seeing the need for some restrictions. In 2014 men age 65 and older were the least likely to talk on a cell phone while driving, and females between age 30-39 were the most likely group to talk on a cell phone while driving, with 22 percent of this segment stating they do so 50 percent of the time or more. In 2013 women 65 and older were the least likely to talk on a cell phone while driving.

The largest perceived risk of being ticketed or arrested was associated with driving while impaired; 70 percent of those surveys expected people who drove after drinking would be arrested at least half of the time. Ninety percent of Missouri drivers stated that they had not driven a vehicle within two hours of consuming an alcoholic beverage any time in the last 60 days. In 2014 those most likely to drive under the influence of alcohol were males 65 years of age and older. Men were much more likely to drive after drinking than women. Drivers of motorcycles were more likely to drive under the influence than drivers of vehicles, followed by drivers of pickup trucks. In 2013 those most likely to drive under the influence of alcohol were males 50 to 64 years of age and older. Approximately half of Missouri drivers were aware of recent publicity regarding enforcement.

The full executive summary of this report is attached in Appendix A of the Highway Safety Plan.

**GOAL:**

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

**Performance Measure:**

- Traffic crash statistics relevant to target audiences
- Campaign messages:

- \* Target audiences reached
- \* News clippings
- \* Venues utilized
- \* Total spots aired
- \* Total impressions/reach
- Increase in safety devices used:
  - \* Statewide safety belt use rate
  - \* Teen safety belt use rate
  - \* Commercial vehicle safety belt use rate \*\*
  - \* Child safety seat and/or booster seat use rate \*\*
  - \* Motorcycle helmet usage rate \*\*
- Pieces of traffic safety materials distributed

**Benchmarks:**

- 2012 fatalities - 826 (757 in 2013) (869 in 2014)
- Increase in safety devices used:
  - \* Statewide safety belt use rate  
80% in 2013 (79% in 2014) (80% in 2015)
  - \* Teen safety belt use rate  
67% in 2013 (67% in 2014) (69% in 2015)
  - \* Commercial vehicle safety belt use rate\*\*  
80.6% in 2010 (81% in 2014)
  - \* Child safety seat and/or booster seat use rate\*\*  
91% in 2009 (91% in 2014)
  - \* Motorcycle helmet usage rate\*\*  
99.2% in 2005
- Pieces of traffic safety materials distributed through on-line ordering system  
209,000 in 2013 (239,860 in 2014) (207,714 in 2015)

\*\* Surveys not conducted annually.

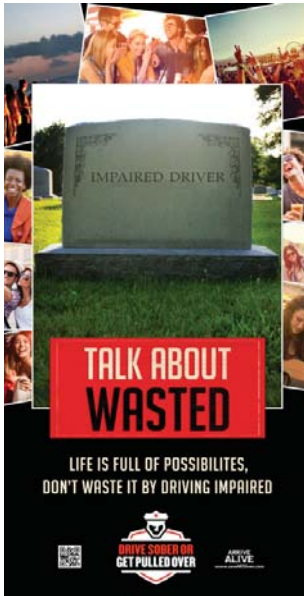
( ) Information in parenthesis is actual data for the respective year listed.

Campaign Media Source and Impressions (2013-2015)



## STRATEGIES

1. Serve as the point of contact for the media and the general public to field questions, conduct interviews, and provide information
2. Conduct an attitude and awareness survey. The survey will contain questions on occupant protection, substance-impaired driving, speeding, and distracted driving (cell phone/texting)
3. Organize and/or participate in press events and work with media outlets across the state to promote highway safety initiatives
4. Encourage the media to participate in campaigns by publicizing our messages
5. Publicize the services and resources of the Highway Safety Office to the general public through our web sites at [www.saveMOLives.com](http://www.saveMOLives.com), in workshops, at conferences/exhibits, and through social media channels.
6. Develop, update and disseminate public information/educational materials and websites
7. Develop and promote materials/campaigns to reach specific audiences (e.g., high risk drivers, vulnerable roadway users, substance-impaired drivers, mature drivers)
8. Actively participate in the Missouri Coalition for Roadway Safety (MCRS) Public Information Subcommittee in order to increase coordination, communication and cooperation among safety advocates statewide
9. Promote and incorporate the ARRIVE ALIVE theme and logo developed by the MCRS
10. Work with the MCRS regional coalitions to appropriately target their messages and develop programs to meet their needs
11. Develop strategies to work with partners—both traditional and nontraditional—in order to reach wider audiences and maximize resources
12. Solicit public information activity reports from law enforcement partners and district coalitions
13. Work with the Motor Carrier Safety Assistance Program, Missouri Motorcycle Safety Education Program, and others to promote joint traffic safety awareness campaigns when possible
14. Give presentations and provide training to community groups, schools, etc. as available
15. Serve on federal, state, and regional com-



mittees/boards in order to broaden opportunities to promote traffic safety issues

16. Promote law enforcement mobilization efforts: Click It or Ticket safety belt campaign; Drive Sober or Get Pulled Over alcohol campaign; quarterly occupant protection and substance-impaired driving mobilizations; youth seat belt enforcement campaign
17. Purchase paid advertising to support traffic safety campaigns (e.g., occupant protection and substance-impaired driving)
18. Support and promote MoDOT's construction work zone public awareness campaign
19. Promote Saved by the Belt and It Only Takes One programs
20. Promote the Seat Belt Convincer, Rollover Simulator, and driving simulator programs to reach as many people as possible.

sible.

21. Participate in the Missouri State Fair to educate the public on traffic safety issues and any modifications to traffic safety laws
22. Promote the cellular phone ICE program (In Case of Emergency) which is designed to assist first responders in rapidly identifying a crash victim's emergency contacts
23. Promote Commercial Motor Vehicle Awareness through public awareness campaigns geared primarily toward passenger vehicle drivers, then CMV drivers.
24. Develop and promote materials and media to reach the limited English speaking and deaf/hard of hearing communities.



# AGGRESSIVE DRIVERS

## Background

The causes of aggressive driving are complex. However, three factors in particular are linked to aggressive driving: 1) lack of responsible driving behavior; 2) reduced levels of traffic enforcement; and 3) increased congestion and travel in our urban areas. One researcher has suggested that, "A driving behavior is aggressive if it is deliberate, likely to increase the risk of collision and is motivated by impatience, annoyance, hostility and/or an attempt to save time."

Aggressive driving is a serious problem on Missouri's roadways and has contributed substantially to traffic crashes, especially crashes resulting in death. Aggressive drivers are defined within Missouri's Blueprint to SAVE MORE LIVES as, "drivers of motorized vehicles who committed one or more of the following violations which contributed to the cause of a traffic crash: speeding; driving too fast for conditions; and/or following too close."

Aggressive drivers not only put their own lives at risk, but the lives of others as well. Of the 930 people killed, 67.4% were the aggressive driver and the other 32.6% were some other party in the incident. Of the 5,266 seriously injured, slightly more than one-half (53.9%) were the aggressive drivers and nearly one-half (46.1%) being some other person involved.

Speeding (too fast for conditions or exceeding the posted limit) is a large part of the aggressive driving problem. In 2002, NHTSA conducted a national telephone survey of over 4,000 drivers which verified that speeding is a pervasive behavior with most drivers—51% indicated they drive 10 mph over the posted speed on the interstates and 34% responded that they drive 10 mph faster than most other vehicles. According to an April 2009 report by the AAA Foundation for Traffic Safety, aggressive driving actions "were reported in 56 percent of fatal crashes from 2003 through 2007, with excessive speed being the number one factor."

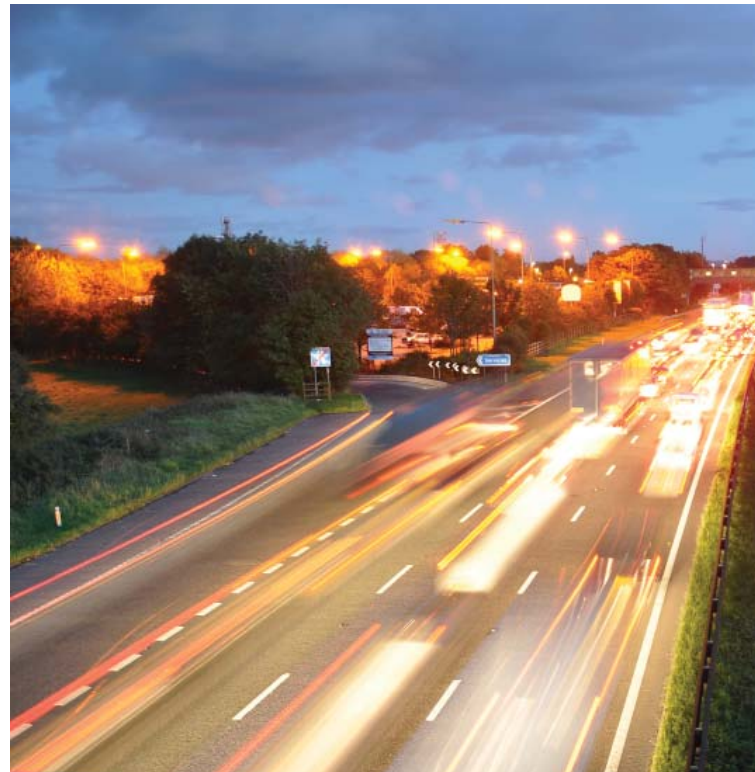
### 2012-2014 Missouri Aggressive Driver Involved Fatalities & Serious Injuries

Type Of Circumstance (by Crash Severity<sup>1</sup>)

Circumstance	Fatalities - 996	Serious Injuries - 5,692
Too fast for conditions	56.1%	60.9%
Exceeding speed limit	39.7%	21.1%
Following too close	4.2%	18.0%

<sup>1</sup> Percentage of 2012-2014 aggressive driving related fatalities and serious injuries by type of aggressive driving behavior involved. For instance, in aggressive driving related fatalities, 39.1% involved a motorized vehicle-driver exceeding the speed limit. NOTE: Multiple aggressive driving factors can be related to a single fatality or serious injury.

In 2012-2014, there were 414,173 traffic crashes in Missouri – 15.1% involved speeding. Correlating with the national data, Missouri's problem is also more significant when examining fatal crashes—of the 2,143 fatal crashes, 37.5% involved drivers who were speeding.



**GOAL #1:**

To decrease aggressive driving-related fatalities to 270 by 2016:

2013	2014	2015
314	299	288

**Performance Measure:**

- Number of aggressive driving-related fatalities

**Benchmark:**

- 2012 aggressive driving-related fatalities - 328 (308 in 2013) (287 in 2014)

**GOAL #2:**

To decrease speed-related fatalities to 258 by 2016:

2013	2014	2015
299	285	272

**Performance Measure:**

- Number of speed-related fatalities

**Benchmark:**

- 2012 speed-related fatalities - 313 (302 in 2013) (276 in 2014)

**GOAL #3:**

To increase speed-related citations and warnings made during grant-funded enforcement activities and mobilizations by .25 percent annually based on a three-year rolling average of grant years 2011, 2012, 2013 - 120,588

2012-2014	2013-2015	2014-2016
121,300	121,603	121,907

**Performance Measure:**

- Number of speeding citations and warnings issued during grant-funded enforcement activities and mobilizations

**Benchmark:**

- 2011-2013 speeding citations and warnings issued during grant-funded enforcement activities and mobilizations - 120,588 (118,907 - 2012-2014 three-year rolling average) (123,069 - 2013-2015 three-year rolling average)

( ) Information in parenthesis is actual data for the respective year listed.

**STRATEGIES**

1. Continue funding speed/hazardous moving violation enforcement overtime grants with local law enforcement and the Highway Patrol
2. Encourage law enforcement agencies to target aggressive drivers when working statewide DWI and occupant protection mobilization campaigns
3. Continue implementing targeted corridor projects (Travel Safe Zones) and Selective Traffic Enforcement Programs (STEPS) and High Enforcement Action Teams (HEAT) conducted by law enforcement agencies
4. Continue to strategize with law enforcement and training academy partners to develop enforcement/awareness countermeasures and share their concepts and programs
5. Fund enforcement efforts in construction/work zones in the MoDOT districts and enhance the enforcement with public awareness campaigns
6. Continue the use of speed monitoring devices (radars) and changeable message signs
7. Expand efforts to educate roadway users on the dangers of aggressive driving and the rules of the road
8. Encourage the local regional coalitions of the Missouri Coalition for Roadway Safety to fund and promote enforcement.
9. Educate roadway users on the dangers of aggressive driving and rules of the road.
10. Use pre- and post- enforcement operation news releases to educate the public about enforcement efforts.







# ALCOHOL AND OTHER DRUGS

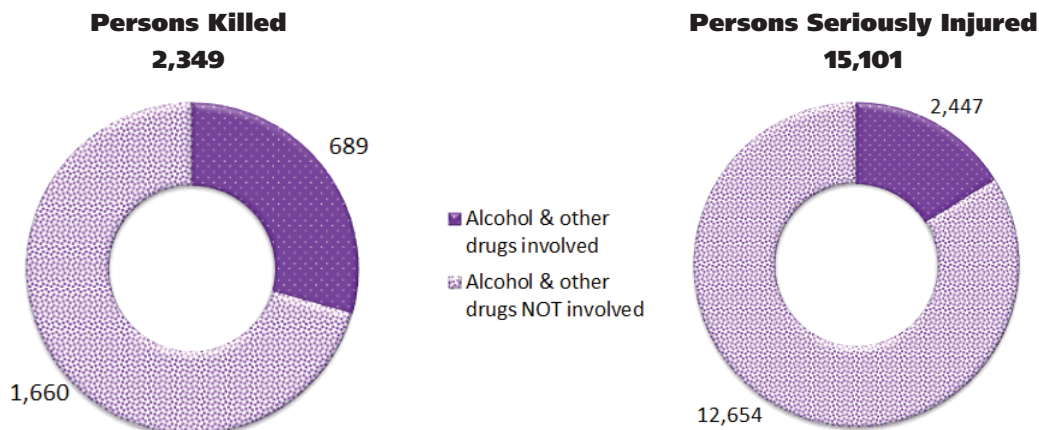
## Background

It is impossible to predict how alcohol will affect a person on any given occasion. Every drink influences both the body and mind and has a profound impact on the physical and mental skills needed to drive a motor vehicle. One drink could have serious consequences.

Alcohol and other drugs contribute substantially to traffic crashes on Missouri's roads, particularly those resulting in death or serious injury. In the 2012-2014 period, 414,173 traffic crashes occurred in the state. Of those, 0.5% resulted in a fatality and 2.9% involved someone being seriously injured. During the same time period, there were 19,161 traffic crashes where one or more drivers and/or pedestrians were under the influence of intoxicants

and in the opinion of the investigating officer their intoxicated condition was a contributing factor to the crash. In these crashes where drivers or pedestrians were impaired by alcohol or other drugs, 689 people were killed and another 2,447 were seriously injured. It also is important to note that substance-impaired driving is under-reported as a contributing factor in traffic crashes. This under-reporting is due to drivers experiencing injuries sustained from crashes without being tested for blood alcohol content. Also, some forms of drug impairment may not be apparent to officers on the scene. As a result, it is an even greater problem than these statistics would indicate. In addition, 86.1% of substance-impaired drivers killed also failed to wear a safety belt further compounding the problem of substance-impaired driving.

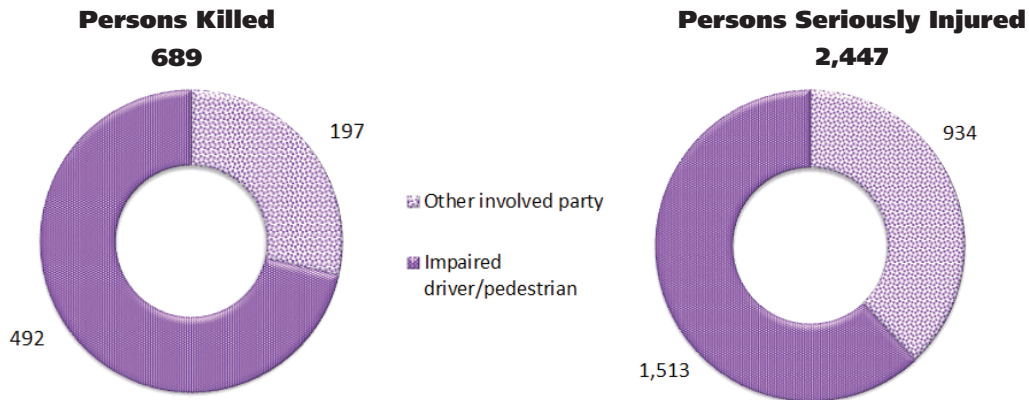
### 2012-2014 Missouri Alcohol and Other Drug Related Fatalities & Serious Injuries



A common misconception is that substance-impaired drivers are primarily injuring and killing themselves. While that is often true, a substantial number of people killed and seriously injured in these crashes were not intoxicated by alcohol or other drugs. Their actions in these incidents probably did not contribute

to the cause of the collision. Of the 689 people killed in alcohol and other drug-related traffic crashes, 71.4% were the substance-impaired driver/pedestrian and 28.6% were some other involved party. Of the 2,447 seriously injured, 61.8% were the substance-impaired drivers/pedestrians while 38.2% were other persons in the incidents.

## 2012-2014 Missouri Alcohol and Other Drug Related Fatalities & Serious Injuries (Person Involvement)

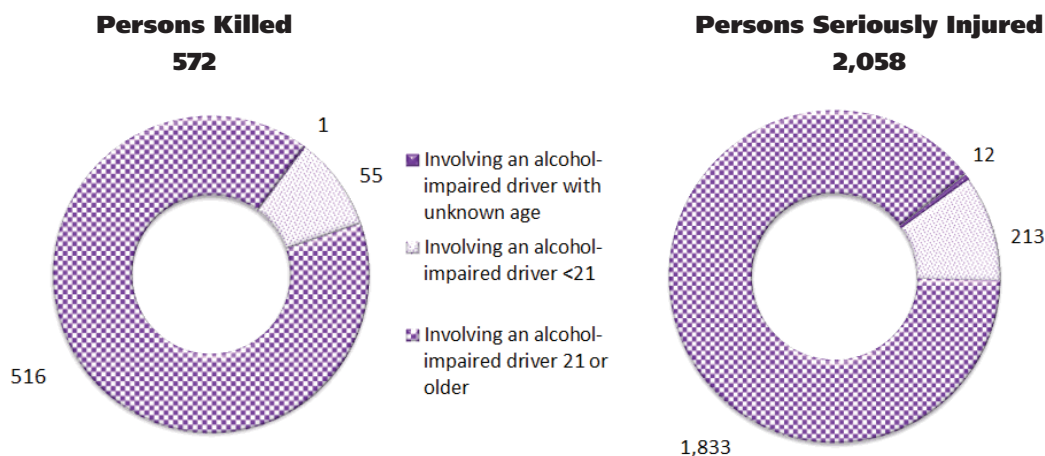


### Young Alcohol Impaired Drivers (Under Age 21)

Youth make up a significant proportion of alcohol-impaired drivers causing traffic crashes on Missouri roadways. Of the 16,440 alcohol-impaired drivers involved in traffic crashes during 2012-2014, 10.1% were under the age of 21 (in known cases). This is especially significant when you consider it is illegal for someone under 21 to possess or consume alcohol in Missouri.

In 2012-2014, a total of 531 alcohol-impaired drivers were involved in crashes where one or more persons were killed. In known cases, 8.9% of these drivers were under the age of 21. A total of 55 persons were killed in traffic crashes involving these young alcohol-impaired drivers. Of those persons killed, 56.4% were the underage alcohol-impaired driver and 43.6% were some other party in the crash.

## 2012-2014 Missouri Alcohol-Impaired Driver Involved Fatalities & Serious Injuries (By Age of Impaired Driver)



*NOTE: The data for persons killed and seriously injured involving an substance-impaired driver by age does not include data for those crashes where the pedestrian was the impaired party. Also, one substance-impaired related crash has the potential of consisting of substance-impaired driver younger than 21 and one 21 or older. In these cases, the persons killed and seriously injured will be counted in each chart shown above.*

**GOAL #1:**

To decrease fatalities involving drivers with .08 BAC or greater to 230 by 2016:

2013	2014	2015
267	255	243

**Performance Measure:**

- Number of fatalities involving drivers with .08 BAC or greater

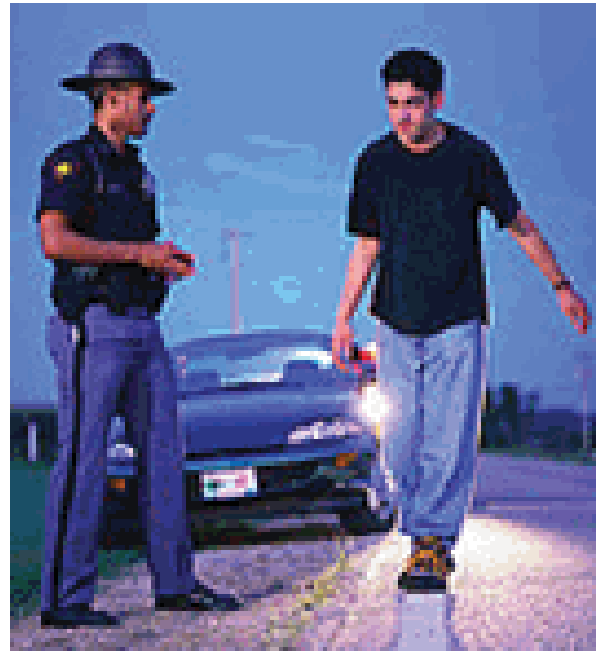
**Benchmark:**

- 2012 fatalities involving drivers with .08 BAC or greater - 280 (248 in 2013) (204 for 2014)

**GOAL #2:**

To increase substance-impaired driving arrests made during grant funded enforcement activities and mobilizations by .25 percent annually based on a three-year rolling average of grant years 2011, 2012, 2013 = 7,975

2014	2015	2016
7,995	8,015	8,035

**Performance Measure:**

- Number of substance-impaired driving arrests made during grant-funded enforcement activities and mobilizations

**Benchmark:**

- 2011-2013 substance-impaired driving arrests made during grant-funded enforcement activities and mobilizations - 7,975 (DWI)  
(7,054 - 2012-2014 three-year rolling average)  
(6,183 - 2013-2015 three-year rolling average)

**GOAL #3:**

To decrease fatalities involving alcohol-impaired drivers under the age of 21 years to 14 by 2016:

2013	2014	2015
16	15	15

**Performance Measure:**

- Number of fatalities involving alcohol-impaired drivers under the age of 21 years

**Benchmark:**

- 2012 fatalities involving alcohol-impaired drivers under the age of 21 years - 17  
(28 for 2013) (10 for 2014)

( ) Information in parenthesis is actual data for the respective year listed.



## STRATEGIES

### *Public Information and Education*

1. Educate the public on the dangers of driving after drinking or using other drugs through public awareness campaigns such as Drive Sober or Get Pulled Over, through quarterly impaired driving mobilizations, and through the distribution of educational materials at traffic safety workshops, health and safety fairs, displays, on the website, and through public service announcements
2. Incorporate impaired driving educational programs into school systems and businesses
3. Continue statewide designated driver programs which stress alternatives to drinking and driving (CHEERS designated driver program)
4. Educate large numbers of alcohol servers in intervention techniques utilizing the Server Training program conducted by the Division of Alcohol and Tobacco Control and through the SMART Web-based server training program; continue to expand and promote the programs
5. Provide support for the MCRS Impaired Driving Subcommittee to address impaired driving crashes and underage impaired driving
6. Incorporate toxicology into Impaired Driving Subcommittee efforts
7. Checkpoint news releases mention that specially trained drug detection officers will be working the overtime enforcement effort and/or sobriety checkpoint
8. Encourage law enforcement and prosecutors to report the type(s) of drug involvement suspected in crashes to the media
9. Include drug arrest details in after-action enforcement reports to the media
10. Implement, as appropriate, recommendations identified in the 2008 Statewide Impaired Driving Assessment
11. Work with the MCRS Impaired Driving Subcommittee to implement strategies outlined in the Impaired Driving Strategic Plan
12. Continue support for youth and young adult prevention and education programs including Team Spirit Leadership Conference; Team Spirit Reunion; Think First Programs (School Assembly Programs, Elementary School Curriculum, Young Traffic Offenders Program); university level Partners in Prevention; local community educational programs; and Missouri Safe and Sober

13. Revise and reprint impaired driving educational materials as needed; expand partnerships to encourage use of these materials in their publications

14. Develop campaigns/materials to reach targeted high-risk groups

15. Participate in interagency committees to share ideas, avoid duplication of efforts, and maximize resources (MCRS and the MCRS Impaired Driving Subcommittee, Missouri Youth/Adult Alliance, Partners in Prevention)

16. Support local efforts to reduce drinking and driving – especially underage drinking – by providing technical assistance to develop programs such as DWI docudramas or Every 15 Minutes, loaning them collateral materials to enhance their efforts (fatal vision goggles, videos, community program guides), and providing speakers

17. Provide Drug Impairment Training for Educational Professionals across the state

18. Organize and/or participate in press events and work with media outlets across the state to promote highway safety initiatives

### *Enforcement*

1. Provide funding for alcohol saturation enforcement teams, DWI Task Forces, sobriety checkpoints, quarterly impaired driving mobilizations, overtime salaries for Breath Alcohol Testing (BAT) van operations, and maintenance for BAT vans

2. Provide equipment to enhance enforcement efforts and appropriate training to ensure effective use of this equipment (e.g., breath alcohol testing instruments; enforcement vehicles; digital in-car video cameras; and sobriety checkpoint supplies)

3. Provide training on detection and apprehension of impaired drivers (e.g., standardized field sobriety testing (SFST), sobriety checkpoint supervisor training, courtroom testimony, drug recognition experts (DRE), ARIDE, and DWI crash investigation techniques)

4. Ensure access to DRE and/or ARIDE trained officers at sobriety checkpoints

5. Provide motivational and educational speakers for law enforcement personnel during training events such as the annual Law Enforcement Traffic Safety Advisory Council (LETSAC) conference

6. Provide supplies, support, and training for DREs and the DRE recertification training to ensure continuity of the program

7. Support a state SFST/DRE coordinator who will work in cooperation with the Impaired Driving Sub-

committee of the MCRC and the DRE/SFST Advisory Committee in order to maintain standardization of the program

8. Support projects designed to prevent underage alcohol purchase, apprehend minors attempting to purchase alcohol, and provide a physical enforcement/intervention presence (e.g., Server Training, Party Patrol, Underage Drinking LE Training, selective enforcement, compliance checks, and special events)
9. Incorporate, as appropriate, recommendations identified in the 2008 Impaired Driving Assessment
10. Increase participation in statewide multi-jurisdiction mobilization enforcement efforts
11. Support selective enforcement efforts to address young drinking drivers by funding statewide underage drinking enforcement projects and training
12. Support DWI traffic units with local law enforcement agencies
13. Update administrative rules for the ignition interlock program as needed to insure that DWI offenders cannot operate a vehicle while intoxicated

#### *Prosecution/Adjudication*

1. Provide training for judges, prosecutors and law enforcement personnel on local/national DWI issues utilizing the expertise of the Missouri Office of Prosecution Services, Department of Revenue, Office of State Courts Administrator, the National Traffic Law Center and the National Drug Court Institute
2. Provide continued funding for the statewide Traffic Safety Resource Prosecutor whose job it is to provide training and technical support for prosecutors in Missouri
3. Continue to provide funding for the MADD Court Monitoring project in selected counties and municipalities in order to increase conviction rates
4. Provide National Drug Court Institute training to DWI court teams from across the state
5. Incorporate topics on toxicology in law enforcement and prosecutor trainings

6. Provide equipment and training to enhance the DWI Tracking System (DWITS)
7. Provide motivational speakers for judicial personnel during training events such as their annual municipal judges and court clerks conference
8. Provide an integrated system, a web link and/or specifications to local law enforcement agencies that will allow them to access the DWITS and enter DWI arrest information that can be tracked through prosecution and sentencing
9. Continue expansion of DWI courts throughout the state
10. Provide funding for an additional transportation attorney at the Missouri Department of Revenue to provide legal representation for alcohol-related license appeals to Missouri appellate courts
11. Provide funding for a paralegal position in the legal counsel's office at the Missouri Department of Revenue whose dedicated function will be to serve as the ignition interlock coordinator
12. Work with local jurisdictions across the State to implement no-refusal policies for BAC testing
13. Work with local jurisdictions across the State to implement electronic warrant systems in order to reduce the amount of time it takes for law enforcement officers to obtain a warrant in DWI cases
14. Provide specimen kits to coroners and medical examiners in order to obtain BAC test results in fatal crashes

#### *Technology*

1. Continue to provide DWITS enhancements: design specifications for program linkages; develop reports as needed by the users; conduct training for users of the system



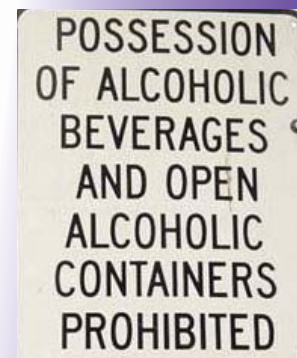
2. Support the efforts of the Missouri Safety Center Breath Alcohol Instrument Training and Repair Laboratory to calibrate and repair breath test instruments in order to improve their reliability, and reassign instruments as needed
3. Work with the Missouri Safety Center and the Missouri State Highway Patrol to purchase and place new breath testing technology around the state
4. Seek ways to expedite processing of DWI offenders
5. Improve the process of tracking DWI offenders who have been sanctioned to install ignition interlock devices
6. Monitor ignition interlock manufacturers/installers for adherence to the Breath Alcohol Ignition Interlock Device Program guidelines and administrative rules

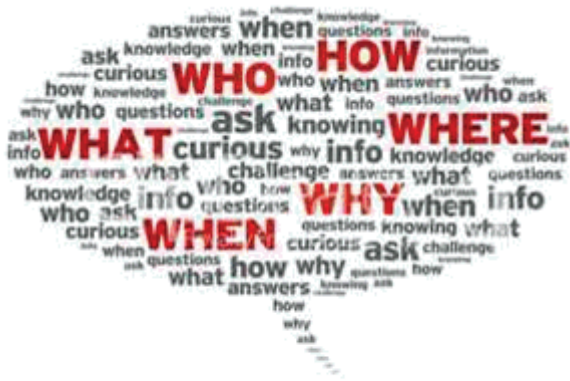
#### ***Open Container (Section 154 Open Container Transfer Funds)***

The open container transfer provision was initially authorized under TEA-21 and reauthorized under SAFETEA-LU and MAP-21. The provision requires states to pass and enforce a qualifying open container law or be subject to a 3% transfer of their federal aid highway funds until FY 2012 when it decreased to 2.5%. These funds were required to be diverted to either alcohol countermeasure safety programs (within the Highway

Safety Office) or be utilized for qualifying hazard elimination projects. Some of the alcohol countermeasures identified within this plan are supported by Section 154 transfer funds. The remainder of the funding has been retained for hazard elimination efforts.

Historically Missouri has focused on the prevention of crossover fatalities through the installation of 3-strand median guard cable on major roadways – one of the most serious types of crashes occurring in Missouri. Because of our efforts using the Open Container Transfer funds to install the median guard cable, we have almost eliminated crossover fatalities on our divided roadways. Currently safety engineering efforts using this funding source involve the installation of rumble stripes focused on keeping vehicles on the roadway, systematically addressing horizontal curve crash locations, and the systematic improvement to numerous intersections with both low-cost and higher-cost initiatives.





## ALCOHOL AND OTHER DRUGS

### Who

2012-2014 Fatalities by Age:

Age	Fatalities	Percent of Total Fatalities
0-9	10	1.53%
10-19	55	8.44%
20-29	216	33.13%
30-39	129	19.79%
40-49	103	15.80%
50-59	88	13.50%
60-69	37	5.67%
>=70	14	2.15%
Total	652	100.00%

Includes everyone killed involving at least one substance-impaired (alcohol and/or drugs) driver

### What

2012-2014 Substance-Impaired Driver Vehicle Types in Fatal Crashes:

Vehicle Type	Substance-Impaired Drivers in Fatal Crashes	Percent of Total Fatalities
Passenger Car	248	41.47%
SUV	99	16.56%
Van	18	3.01%
Motorcycle	62	10.37%
ATV	26	4.35%
Farm Imp	1	0.17%
Other/Unknown	1	0.17%
Pick Up	138	23.08%
Large Trucks	4	0.67%
Cargo Van	1	0.17%
Total	598	100.00%

### Where

2012-2014 Fatalities by Roadway Designation

Roadway Desg.	Fatalities	Percent of Total Fatalities
Interstates	55	8.44%
US Numbered Routes	69	10.58%
MO Lettered Routes	155	23.77%
MO Numbered Routes	156	23.93%
Business	3	0.46%
City Street	85	13.04%
Ramp	5	0.77%
County Road	115	17.64%
Outer Road	7	1.07%
Loop	0	0.00%
PVT	2	0.31%
Other	0	0.00%
Total	652	100.00%

### When

2012-2014 Fatalities by Time of Day:

Time	Fatalities	Percent of Total Fatalities
Midnight - 5:59 am	212	32.52%
6:00 am - 11:59 am	63	9.66%
Noon - 5:59 pm	118	18.10%
6:00 pm - 11:59 pm	259	39.72%
Total	652	100.00%

**Why** - See Statewide Total Fatalities and Serious Injuries by Target Area

# OCCUPANT RESTRAINTS

## Background

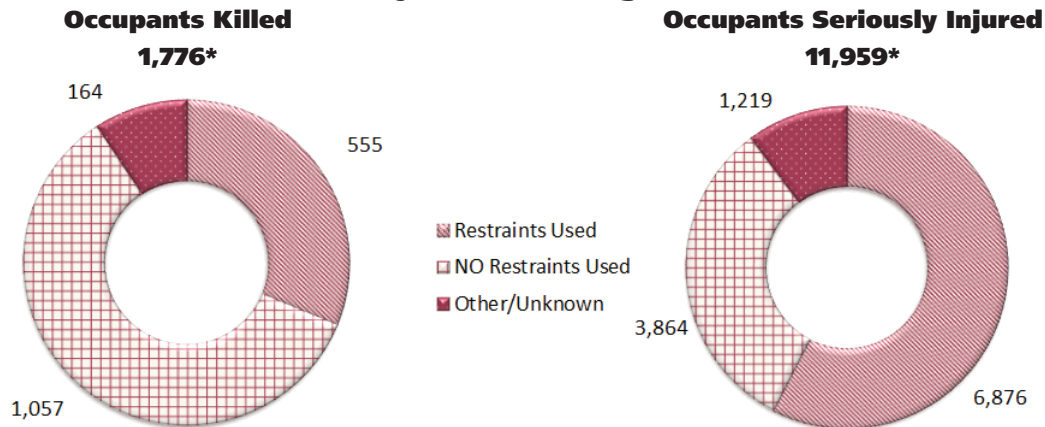
Traffic crashes are the leading cause of death in the United States. It is well recognized that one of the best means of defense in a crash is to be protected by a safety belt or a child safety seat. Increasing safety belt and child safety seat use has tremendous potential for saving lives, preventing injuries, and reducing the economic costs associated with traffic crashes. For many years, motor vehicle manufacturers have been required to install safety belts in their vehicles, so the vast majority of vehicles on the roads today have these types of safety devices installed. The overwhelming percentage of people killed on Missouri roads or seriously injured in 2012-2014, in all probability, had a safety belt available for use (except for pedestrians, bicyclists, and motorcyclists):

- 2,349 killed – 75.6% had a safety belt available;
- 15,101 seriously injured – 79.2% had a safety belt available.

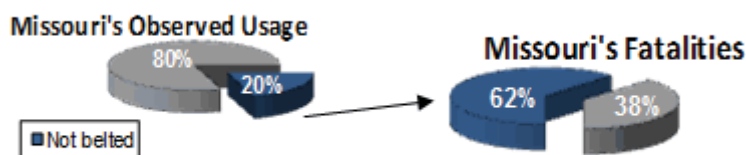
A substantial number of occupants killed in 2012-2014 Missouri traffic crashes were not wearing safety belts or in a child safety seat compared to those injured and not injured. In fatal crashes where safety belt usage was known, 65.6% of the people who died were not restrained. Of those seriously injured, 36.0% were not restrained. Conversely, of those not injured, 685,537 were wearing a safety belt or in a child safety seat.

Safety belt use dramatically reduces a person's chance of being killed or seriously injured in a traffic crash. Of the drivers involved in 2012-2014 crashes, 1 in 2 was injured when they failed to wear their safety belt, however, when they were wearing a safety belt, their chances of being injured in the crash were 1 in 8. When examining driver deaths, the differences are much more significant. Drivers had a 1 in 29.8 chance of being killed if they were not wearing a safety belt; but that chance dropped dramatically to only 1 in 1,343 if the driver was wearing a safety belt.

### 2012-2014 Vehicle Occupant Traffic Fatalities and Serious Injuries By Restraint Usage



\*Data includes Child Safety Seats



**62% of 2014 vehicle occupants killed were unrestrained!**

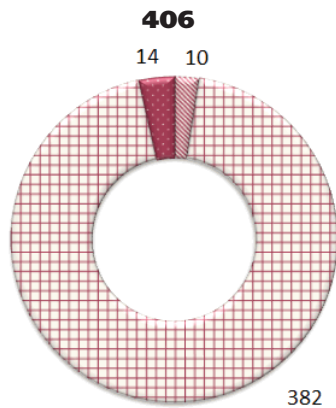


## Ejections

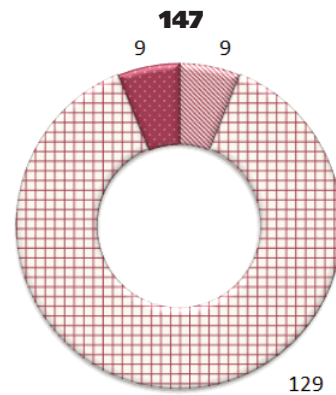
The possibility of death and serious injury dramatically increases in cases where the person is ejected from the vehicle at the time of the crash. One of the benefits of being restrained is it increases the probability of the person staying in the vehicle and being protected by the vehicle passenger compartment. In known cases of those occupants killed who were totally ejected from the vehicle, 97.4% were not restrained and of those partially ejected, 93.5% were not restrained. Of the occupants killed who were not ejected from their vehicles, 50.4% were not restrained.

### 2012-2014 Vehicle Occupant Traffic Fatalities and Serious Injuries By Restraint Usage

#### Ejected Occupants Killed



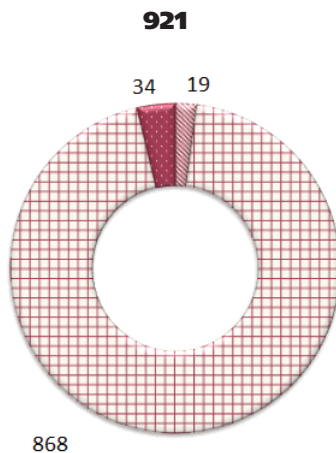
#### Partially Ejected Occupants Killed



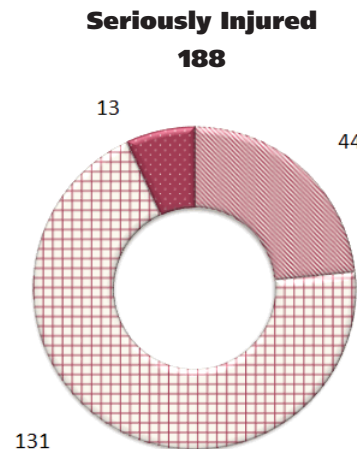
Restraints Used  
NO Restraints Used  
Other/Unknown

In known cases of those occupants seriously injured who were totally ejected from the vehicle, 97.9% were not restrained and of those partially ejected, 74.9% were not restrained. Of the occupants seriously injured who were not ejected from their vehicles, 29.5% were not restrained.

#### Ejected Occupants Seriously Injured



#### Partially Ejected Occupants Seriously Injured



Restraints Used  
NO Restraints Used  
Other/Unknown

## Safety Belt Usage Among High School Students

While 65.6% of the occupants who died were not restrained, lack of safety belt use becomes even more significant when we segregate young people. When just looking at young people between the ages of 15 through 20, 73.4% of those who died were not buckled up.

The Office of Highway Safety had long been concerned with the lack of safety belt usage among young drivers and passengers. Unfortunately, in the past, there was no survey data to provide an established use rate for this age group. In 2003, parameters were developed to conduct an observational safety belt use survey for teens. It was determined that the most effective way to reach this very targeted age group was to survey specific high schools throughout the state.

Several guiding principles served as the underlying basis for the sampling plan:

1. The individual public high school would be the basic sample unit at which safety belt usage observations would be made.
2. The safety belt usage rates of high school students would be computed for each of the seven MoDOT regions in the state.
3. The number of schools selected from each Mo-

DOT region would be proportionate to the number of schools in that region in comparison to the state total of 496 public high schools.

4. The high schools within each region would be selected in their descending order of student enrollment to maximize the number of high school students from each MoDOT region.

One hundred-fifty high schools were selected for the survey in 92 counties (80 percent of the 115 counties in Missouri). Observational data were collected in April, Monday through Friday. Two instruments were used to collect the data. One instrument focused on the vehicle and the driver, while the other targeted the front safety outboard passenger and other occupants in the vehicle. A detailed report of all findings is available on file at the Office of Highway Safety.

Results of the high school surveys reflected mostly modest increases until a 5 percent jump in usage in 2010. The usage rate has been very stagnant since 2010, fluctuating between 66 and 67 percent.

- 2006 – 58 percent
- 2007 – 61 percent
- 2008 – 62 percent
- 2009 – 61 percent
- 2010 – 66 percent
- 2011 – 67 percent
- 2012 – 66 percent
- 2013 – 67 percent
- 2014 – 67 percent
- 2015 - 68 percent





### Very Young Passengers

While Missouri must continue to promote the use of safety belts, particular attention must be paid to increasing the use of restraint devices for transporting young children. According to the National Highway Traffic Safety Administration (NHTSA), approximately 7,500 lives have been saved by the proper use of child restraints during the past 20 years. Yet, motor vehicle crashes still remain the number one killer of children ages 4 to 14 in America. The reason? Too often it is the improper or non-use of child safety seats and booster seats.

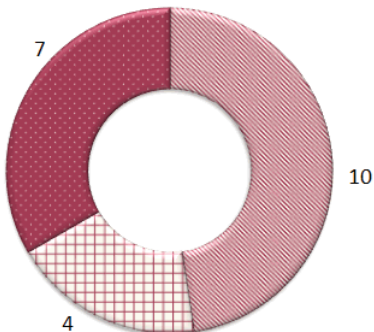
### Children Birth through Age Three - Child Safety Seats

In 2012-2014, 21 children under the age of 4 were killed in a motor vehicle; 19.0% were not using any type of restraint device (in known cases). Another 106 were seriously injured. In known cases, 27.4% were not in any restraint device and 2.8% were in an adult safety belt.

## 2012-2014 Vehicle Occupant Traffic Fatalities and Serious Injuries By Restraint Device - Children Under Age 4

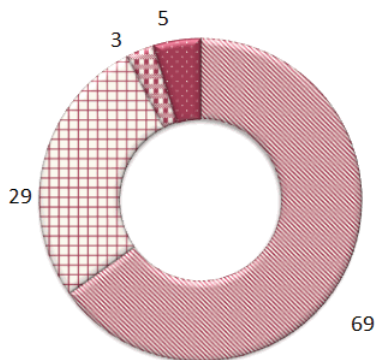
**Children Under Age 4 Killed**

21



**Children Under Age 4 Seriously Injured**

106



- Child Restraint Used
- NO Restraints Used
- Seat Belt Only
- Other/Unknown

## Children Age 4 through 7 – Booster Seats

Research indicates that when children are graduated to a safety belt too soon, they are much more likely to suffer serious injuries in a crash due to “safety belt syndrome.” Therefore, during the 2006 legislative session, Missouri’s child passenger restraint law was strengthened to require children ages 4 through 7 (unless they are 4’9” tall or weigh more than 80 pounds) to be secured in a booster seat (or child safety seat if appropriate for their height and weight). Many children in the upper end of this age group are also allowed to ride in the front passenger seat of vehicles, when it is not

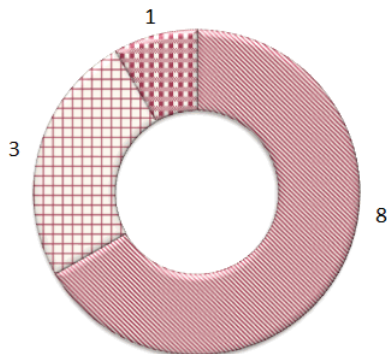
recommended they do so until age 13. This is a dangerous position for young children and parents should be educated on the importance of children remaining in the back seats.

In 2012-2014, 12 children, 4 through 7 years of age, were killed in a motor vehicle; in known cases, 25.0% were not using any type of restraint device and 8.3% were in an adult safety belt. Another 137 children within this age group were seriously injured – 24.1% were not secured in any type of restraint device, 35.0% were in a child restraint, and 24.1% were in an adult safety belt.

### 2012-2014 Vehicle Occupant Traffic Fatalities and Serious Injuries By Restraint Device - Children Age 4-7

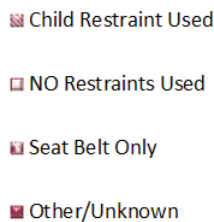
**Children Age 4-7 Killed**

12



**Children Age 4-7 Seriously Injured**

137



### GOAL #1:

To increase statewide safety belt usage by 1% annually to:

2014	2015	2016
81%	82%	83%

#### Performance Measure:

- Statewide percent observed belt use for passenger vehicles (front seat outboard occupants)

#### Benchmark:

- 2013 statewide safety belt usage - 80% (79% in 2014) (80% in 2015)

### GOAL #2:

To reduce unrestrained passenger vehicle occupant fatalities to 326 by 2016:

2013	2014	2015
379	361	344

#### Performance Measure:

- Number of unrestrained passenger vehicle occupant fatalities

#### Benchmark:

- 2012 unrestrained passenger vehicle occupant fatalities - 396 (334 in 2013) (327 in 2014)

### GOAL #3:

To increase safety belt related citations and warnings made during grant funded enforcement activities and mobilizations by .25 percent annually based on a three-year rolling average of grant years 2011, 2012, 2013 = 35,256

2012-2014	2013-2015	2014-2016
35,344	35,432	35,520

**Performance Measure:**

- Number of safety belt citations and warnings issued during grant funded enforcement activities and mobilizations

**Benchmark:**

- 2011-2013 safety belt citations and warnings issued during grant funded enforcement and mobilizations - 35,256 (33,759 - 2012-2014 three -year rolling average) (36,609 - 2013-2015 three-year rolling average)

**GOAL #4:**

To increase teen safety belt usage by 1% annually to:

2014	2015	2016
68%	69%	70%

**Performance Measure:**

- Percent observed belt use for teen front seat outboard occupants

**Benchmark:**

- 2013 statewide safety belt usage - 67% (67% in 2014) (68% in 2015)

**GOAL #5:**

To increase safety belt usage of commercial motor vehicle (CMV) drivers by 1% during surveys conducted biennially to:

2014	2016
82%	83%

**Performance Measure:**

- Percent observed safety belt use for CMV drivers

**Benchmark:**

- 2012 CMV driver safety belt usage - 81% (81% in 2014)

**GOAL #6:**

To increase child safety seat usage by 1% annually to:

2014	2015	2016
92%	93%	94%

**Performance Measure:**

- Percent observed child safety seat use

**Benchmark:**

- 2013 child safety seat usage rate - 91% (91% in 2014)

**GOAL #7:**

To maintain an adequate base of certified Child Passenger Safety Technicians throughout the state to fall within the following range:

- 800-1,000 with representation in each of the seven blueprint regional coalitions

**Performance Measure:**

- Number of certified Child Passenger Safety Technicians in the statewide database maintained by the Highway Safety Office

**Benchmark:**

- Certified Technicians as of February 2014 - 989 (1,053 in December 2014) (1,039 in December 2015)

**GOAL #8:**

To maintain an adequate base of certified Child Passenger Safety Instructors throughout the state to fall within the following range:

- 30-40 with representation in each of the seven blueprint regional coalitions

**Performance Measure:**

- Number of certified Child Passenger Safety Instructors in the statewide database maintained by the Highway Safety Office

**Benchmark:**

- Certified instructors as of February 2014 - 38 (38 in December 2014)

**GOAL #9:**

To maintain an adequate base of Missouri inspection stations (that are listed on the NHTSA website) throughout the state to fall within the following range:

- 125 – 200 with representation in each of the seven blueprint regional coalitions

**Performance Measure:**

- Number of Missouri inspection stations in a statewide database maintained by the Highway Safety Office

**Benchmark:**

- Inspection stations in Missouri as of February 2014 - 198 (198 in December 2014) (207 in December 2015)

( ) Information in parenthesis is actual data for the respective year(s) listed.

## **STRATEGIES**

### ***Child Passengers***

1. Produce, promote and distribute educational materials addressing: the proper installation of child safety seats and booster seat use
2. Maintain a state CPS Advisory Committee and implement their recommendations where appropriate
3. Conduct six Certified Child Passenger Safety Technician classes statewide
4. Certify an additional CPS Instructor each year
5. Maintain a statewide computer list-serve of CPS technicians and instructors
6. Support child safety seat checkup events and educational programs through local law enforcement agencies, fire departments, Safe Communities, hospitals and health care agencies, safety organizations such as Safe Kids, and the Traffic and Highway Safety Division
7. Work with partners and with the media to garner support for annual CPS Week in September
8. When funding is available, provide child safety seats/booster seats and supplies to inspection stations for distribution to low income families (note: inspection stations must meet guidelines established by Missouri's CPS Advisory Committee and must be listed on the NHTSA Web site <http://www.nhtsa.dot.gov/people/injury/childps/CPSFittingStations/CPSinspection.htm> )
9. Develop educational pieces to heighten awareness concerning the life-saving and economic benefits derived from enhanced child safety seat laws
10. Conduct Child Restraint Observational Survey every other year
11. Conduct annual CPS enforcement and public awareness campaign during National CPS Week
12. Focus educational materials toward booster seats and children remaining in the back seat of a vehicle until age 13
13. Create educational materials to accommodate the non-english speaking and deaf/hard of hearing communities

### ***Teen Passengers/Drivers***

1. Conduct a safety belt survey of young drivers and their passengers every two years and conduct annual law enforcement mobilizations and public awareness campaigns targeting lack of safety belt use at high schools
2. Conduct youth safety belt selective traffic enforcement efforts statewide coupled with press releases, radio spots, and materials targeting young drivers
3. Promote the youth campaigns; modify or en-

hance campaigns as needed to keep a fresh approach for the teen audience

4. Develop youth safety belt public awareness materials with input from young drivers
5. Educate youth on the importance of safety belts through programs such as Team Spirit Youth Traffic Safety Leadership Training Program & Reunion, Think First, It Only Takes One, and the Young Traffic Offenders Program
6. Support the First Impact parent program geared toward educating the parents of teen drivers on the important role they play in the early driving years

### ***General Occupant Protection***

1. Conduct NHTSA-approved statewide observational safety belt survey every year, in May/June (pre, peak, and post surveys in conjunction with enforcement mobilizations and public awareness campaigns)
2. Produce, promote and distribute educational materials addressing: occupant protection laws; importance of wearing safety belts all the time and air bag safety
3. Promote the Saved by the Belt survivor program; maintain a database of survivors to contact those who are willing to speak publicly about their life-saving experience
4. Conduct annual Click It or Ticket selective traffic enforcement wave during May/June, augmented with collateral public information and awareness efforts such as press releases, observational surveys, and educational programs utilizing the Click It or Ticket safety belt campaign message
5. Compliment annual Click It or Ticket campaign with quarterly occupant protection enforcement days, augmented with collateral public information and awareness efforts, namely through press releases.
6. Conduct paid media efforts and work toward continual increases in earned media efforts
7. Develop educational pieces to heighten awareness concerning the life-saving and economic benefits derived from primary safety belt laws
8. Continue funding traffic occupant protection strategies training to law enforcement agencies throughout the state.
9. Provide motivational and educational speakers for law enforcement personnel during training events such as the annual Law Enforcement Traffic Safety Advisory Council (LETSAC) conference
9. Provide motivational and educational speakers for law enforcement personnel during training events such as the annual Law Enforcement Traffic Safety Advisory Council (LETSAC) conference







# DISTRACTED DRIVERS

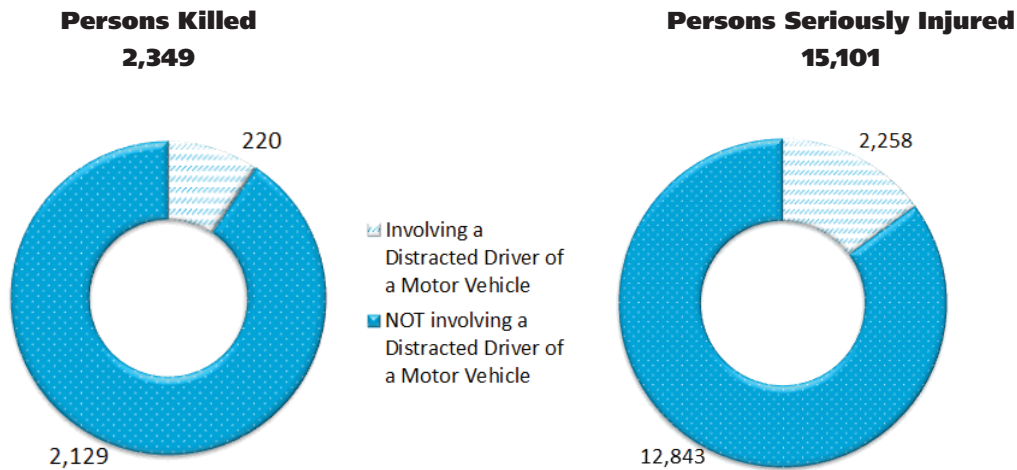
## Background

Distracted driving is a voluntary diversion of the driver's attention from activities critical to safe driving. There are four types of driver distraction; visual, auditory, manual, and cognitive. There is a growing body of evidence which suggests driver distractions, both inside the vehicle and the road environment, are becoming increasingly large contributors to road trauma.

It is estimated that drivers engage in a secondary task between one-quarter and one-half of the time they drive. In recent surveys, about two-thirds of all drivers reported using a cell phone while driving. In daytime observational studies, 7 to 10 percent of all drivers were using a cell phone. Based on a 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.

On January 1, 2012, Missouri's law enforcement officers began using a revised crash report which includes additional data elements that address distracted driving. This more detailed report will provide data that can be used to more accurately assess the magnitude of this high-risk behavior. From 2012-2014, 9.7% of Missouri fatal traffic crashes involved at least one distracted driver. About 35 percent of the distracted drivers involved in fatal crashes in the last three years were between 15 and 30 years of age.

## 2012-2014 Statewide Fatalities & Serious Injuries Vs. Number of Distracted Driver Involved



**GOAL #1:**

To decrease fatalities involving distracted drivers to 70 by 2016:

2013	2014	2015
81	78	74

**Performance Measure:**

- Number of distracted driving-related fatalities

**Benchmark:**

- 2012 distracted driving-related fatalities - 85 (74 in 2013) (61 for 2014)

**STRATEGIES**

1. Continue to expand public information campaigns to educate the roadway user on the dangers of distracted driving
2. Encourage companies to strengthen distracted driving policies and consequences for those who text and drive, use cell phones and other electronic devices while driving
3. Seek opportunities to give distracted driving

**GOAL #2:**

To decrease serious injuries involving distracted drivers to 674 by 2016:

2013	2014	2015
783	747	711

**Performance Measure:**

- Number of distracted driving-related serious injuries

**Benchmark:**

- 2012 distracted driving-related serious injuries - 819 (722 in 2013) (771 in 2014)

( ) Information in parenthesis is actual data for the respective year listed.

presentations at businesses, schools, and community organizations

4. Enact legislation to restrict texting for all drivers
5. Expand GDL law to ban cell phone use by beginner drivers
6. Work with safety advocates and partners to implement countermeasures to reduce crashes involving distracted drivers





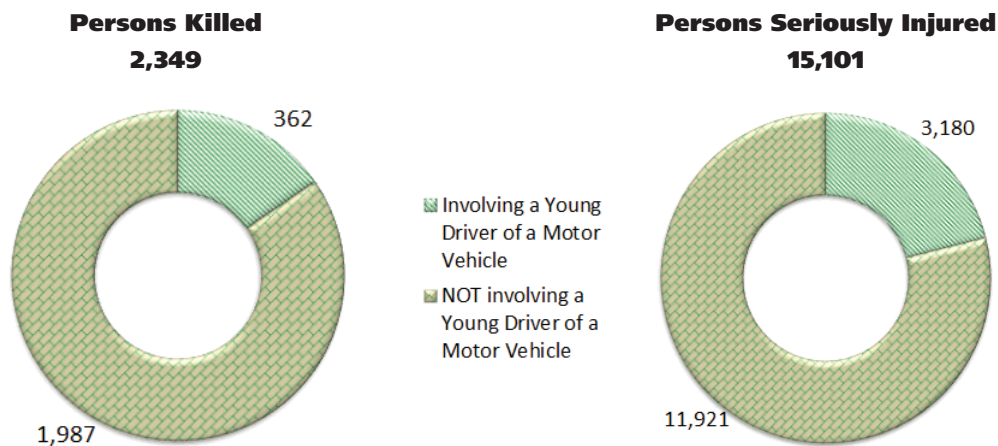
# YOUNG DRIVERS

## Background

Young drivers are categorized as those ages 15 through 20 years. These young drivers are substantially over-involved in Missouri traffic crashes. In 2014, 13.9% of all fatal crashes involved a young driver of a motor vehicle; this is particularly significant since young drivers comprised only 7.9% of the licensed driver population in Missouri.

Of all 2012-2014 fatal and serious injury crashes in Missouri, 19.7% involved a young driver of a motor vehicle. In 2012-2014, 362 persons were killed and 3,180 were seriously injured in traffic crashes involving a young driver of a motor vehicle.

### 2012-2014 Statewide Fatalities & Serious Injuries Vs. Number of Young Drivers Involved



*NOTE: data for persons killed and seriously injured involving a young driver does not include young drivers of ATVs, bicycles, farm implements, construction equipment, other vehicles and unknown vehicle body types.*

Several factors work together to make this age group so susceptible to crashes:

- Inexperience:** All young drivers start out with very little knowledge or understanding of the complexities of driving a motor vehicle. Like any other skill, learning to drive well takes a lot of time. Technical ability, good judgment and experience are all needed to properly make the many continuous decisions—small and large—that add up to safe driving. This is confirmed by the larger percentage of single-vehicle fatal crashes involving young drivers where the vehicle frequently leaves the road and overturns or hits a stationary object like a tree or pole.
- Risk-taking behavior and immaturity:** Adolescent impulsiveness is a natural behavior, but it results in poor driving judgment and participation in high-risk behaviors such as speeding, inattention, impairment and failing to wear a safety belt. Peer pressure also often encourages risk taking. In general a smaller percentage of young drivers in Missouri wear their safety belts compared to other drivers (teen safety belt usage rate for 2015 was 68 percent compared to the overall usage rate of 80 percent).
- Greater risk exposure:** Young drivers often drive at night with other friends in the vehicle. During night driving, reaction time is slower since the driver can only see as far as the headlights allow. More teen fatal crashes occur when passengers—usually other teenagers—are in the car than do crashes involving

other drivers. Driving with young, exuberant passengers usually poses a situation of distraction from the driving task. There are many other distractions in vehicles including the loud music and cell phones; all of which are factors that increase crash risk.

The top 5 contributing circumstances attributable to young drivers of motor vehicles involved in 2012-2014 fatal and serious injury crashes were:

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



## Young Drinking Drivers

When analyzing statistics involving young drinking drivers, it is all the more important for us to keep in mind that drinking alcohol is an illegal behavior for those under 21 years of age. Missouri has a “zero tolerance” law for people under 21 that sets their illegal blood alcohol content level at .02 percent (considerably lower than the .08 BAC level for adults).

In 2012-2014, there were 2,082 drivers whose consumption of alcohol contributed to the cause of a fatal or serious injury crash. In known cases, 193 (9.3%) of the drinking drivers were under the legal drinking age of 21.

In 2012-2014, a total of 529 drinking drivers were involved in crashes where one or more people were killed. In known cases, 47 (8.9%) of those drinking drivers were under the legal drinking age of 21.

In 2012-2014, 569 (24.2%) of the fatalities and 2,057 (13.6%) of the serious injuries involved a drinking driver. Of these, 55 (9.7%) of the fatalities and 213 (10.4%) of the serious injuries involved an underage drinking driver.

In 2012-2014, 333 young drivers were involved in 325 fatal traffic crashes where 362 people died. In those crashes, 47 or 14.1% of the young drivers were drinking and driving. In other words, one of every 7 young drivers involved in fatal crashes was drinking alcohol and their intoxicated condition contributed to the cause of the crash.



**GOAL #1:**

To decrease fatalities involving drivers age 15 through 20 to 111 by 2016:

2013	2014	2015
129	123	117

**Performance Measure:**

- Number of fatalities involving drivers age 15 through 20

**Benchmark:**

- 2012 fatalities involving drivers age 15 through 20 - 135 (120 in 2013) (114 in 2014)

**GOAL #2:**

To decrease serious injuries involving drivers age 15 through 20 to 1,038 by 2016:

2013	2014	2015
1,206	1,150	1,095

**Performance Measure:**

- Number of people seriously injured involving drivers age 15 through 20

**Benchmark:**

- 2012 serious injuries involving drivers age 15 through 20 - 1,261 (1,050 in 2013) (932 in 2014)

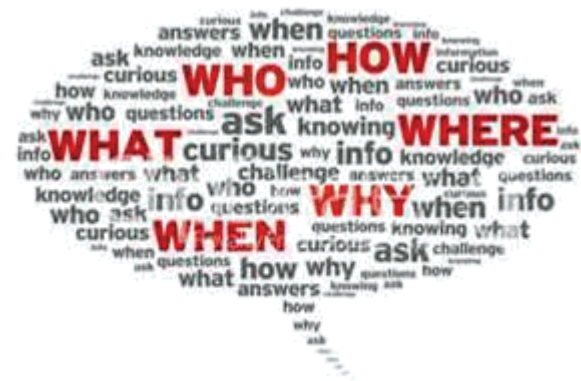
( ) Information in parenthesis is actual data for the respective year listed.

**STRATEGIES**

1. Continue support for youth prevention and education programs to include Team Spirit Youth Traffic Safety Leadership Training Program and Reunion; It Only Takes One, ThinkFirst Programs (school assemblies, Traffic Offenders Program and the corporate program); Every15 Minutes; DWI docu dramas; CHEERS university-based designated driver program, Safe Communities programs throughout the state and statewide It Only Takes One campaign
2. Continue statewide distribution of Road Wise: Parent/Teen Safe Driving Guide through Department of Revenue licensing offices, Highway Patrol driver examination stations, First Impact parent program and upon request
3. Seek out and continually assess young driver educational programs to determine the best and most cost-effective way to reach the largest number of parents and teens
4. Continue to update, as needed, materials and

web/social media information on young, high-risk drivers; develop materials that are especially appealing to young drivers

5. Include information on the graduated driver license (GDL) law in materials, on the web/social media sites and within presentations
6. Continue to support the First Impact parent program to educate parents of young, high-risk drivers on all highway safety measures, especially the GDL law
7. Support projects designed to prevent underage alcohol purchase, educate law enforcement and the public about underage drinking, apprehend minors attempting to purchase alcohol and adults purchasing alcohol for minors, and provide a physical enforcement/intervention presence (e.g., Server Training, SMART on-line server training, underage drinking law enforcement training, compliance checks and multi-jurisdiction enforcement teams)
8. Conduct a safety belt survey of young drivers and their passengers every two years and conduct annual law enforcement mobilizations and public awareness campaigns targeting lack of safety belt use at high schools
9. Conduct an annual law enforcement campaign focused on underage drinking and driving
10. Provide funding to support college/university prevention programs (Partners in Prevention, CHEERS Designated Driver program, SMART online server training and START online student alcohol awareness training) that focus on the development and implementation of UMC's Drive Safe. Drive Smart campaign
11. Encourage strict enforcement of Missouri laws targeting young drivers (e.g., Graduated Driver License, Zero Tolerance, Abuse and Lose)
12. Promote the saveMOlives website and social marketing sites that appeal to youth (Facebook, Twitter, Instagram, etc.)
13. Provide support for the Missouri Coalition for Roadway Safety Substance-Impaired Driving Subcommittee to address underage substance-impaired driving
14. Develop campaigns/materials to reach targeted high-risk groups
15. Promote the seat belt and youth alcohol campaigns; modify or enhance campaigns as needed to keep a fresh approach for the teen audience



## YOUNG DRIVERS

### Who

2012-2014 Fatalities by Age:

Age	Fatalities	Percent of Total Fatalities
0-9	4	1.08%
10-19	176	47.70%
20-29	75	20.33%
30-39	16	4.34%
40-49	25	6.78%
50-59	22	5.96%
60-69	18	4.88%
>=70	33	8.94%
Total	369	100.00%

*Includes everyone killed in crashes involving at least one young driver.*

### What

2012-2014 Young Driver Vehicles Involved in Fatal Crashes

Vehicle Type	Young Driver Vehicle Body Type	Percent of Total Fatalities
Passenger Car	189	56.76%
SUV	45	13.51%
Van	6	1.80%
Motorcycle	10	3.00%
ATV	5	1.50%
Farm Imp.	2	0.60%
Pick Up	74	22.22%
Large Trucks	2	0.60%
Total	333	100.00%

### Where

2012-2014 Fatalities by Roadway Designation

Roadway Desg.	Fatalities	Percent of Total Fatalities
Interstates	26	7.05%
US Numbered Routes	57	15.45%
MO Lettered Routes	65	17.62%
MO Numbered Routes	93	25.20%
Loop (Interstates only)	2	0.54%
Business	2	0.54%
City Street	51	13.82%
Ramp	6	1.63%
County Road	65	17.62%
Outer Road	2	0.54%
Total	369	100.00%

### When

2012-2014 Fatalities by Time of Day:

Time	Fatalities	Percent of Total Fatalities
Midnight - 5:59 am	68	18.43%
6:00 am - 11:59 am	57	15.45%
Noon - 5:59 pm	129	34.96%
6:00 pm - 11:59 pm	115	31.17%
Total	369	100.00%

### Why

- See Statewide Total Fatalities and Serious Injuries by Target Area





## OLDER DRIVERS 65 YEARS OF AGE AND OVER

### Background

Our population is aging and older adult drivers are increasing their exposure (miles driven/year) on the highways. According to the U.S. Census Bureau, Missouri ranked 16th nationally in 2010 with 15% of the population age 65 or older. By the year 2030 it is estimated that over 20% of the population in Missouri will be age 65 or older. That means approximately one in five people will be 65 or older.

Being able to go where we want and when we want is important to our quality of life. Personal mobility is often inextricably linked to the ability to drive a car. However, as we age our ability to drive a motor vehicle may be compromised by changes in vision, attention, perception, memory, decision-making, reaction time and aspects of physical fitness and performance.

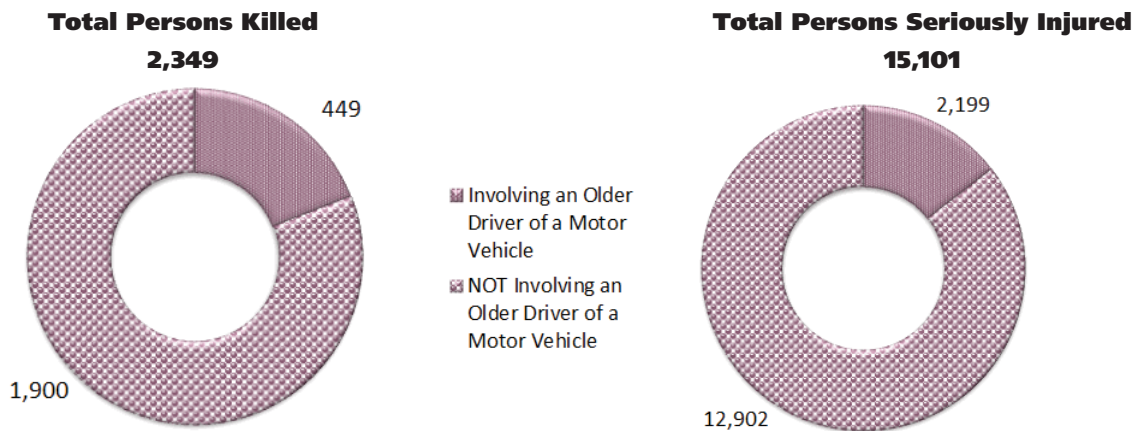
A wide variety of age-related decreases in physical and mental abilities can contribute to decreased driving ability, as implied by reports that elderly drivers drive less as

they age, while collisions per mile driven increase. Drivers 65 and older who are injured in automobile crashes are more likely than younger drivers to die from their injuries. Accordingly, several reports have noted that per mile driven, older drivers experience higher crash fatality rates than all other drivers except teen-age drivers. Studies have shown that a driver 70 or over is about three times as likely as someone 35-54 years old to sustain a fatal injury in a crash.

In May of 2016, there were 830,670 people licensed in Missouri who were age 65 or over. They accounted for 18.8% of the 4,426,742 persons licensed in Missouri.

Of all 2012-2014 fatal and serious injury crashes in Missouri, 15.5% involved an older driver of a motor vehicle. In 2012-2014, 449 persons were killed and 2,199 were seriously injured in Missouri traffic crashes involving an older driver of a motor vehicle.

## 2012-2014 Statewide Fatalities & Serious Injuries Vs. Number of Older Drivers Involved



### GOAL #1:

To decrease fatalities involving older drivers to 117 by 2016:

2013	2014	2015
136	129	123

#### Performance Measure:

- Number of fatalities occurring in crashes involving older drivers

#### Benchmark:

- 2012 fatalities involving older drivers - 142 (151 in 2013) (166 in 2014)

### GOAL #2:

To decrease serious injuries involving older drivers to 632 by 2016:

2013	2014	2015
732	698	665

#### Performance Measure:

- Number of serious injuries occurring in crashes involving older drivers

#### Benchmark:

- 2012 serious injuries involving older drivers - 768 (707 in 2013) (736 in 2014)

( ) Information in parenthesis is actual data for the respective year listed.

### STRATEGIES

- Work with safety advocates and partners to assess and implement countermeasures to reduce crashes involving older drivers identified in the SHSP Missouri's Blueprint to Save More Lives
- Develop and distribute public informational materials to assist older drivers and their families
- Provide educational programs to community groups and the public
- Train law enforcement personnel to identify signs of impairment specific to older drivers
- Identify and promote self-assessment tools to enable older drivers to check their own driving abilities
- Improve the process for reporting unsafe or medically unfit drivers (revisions of forms, internal processes, and needed training)
- Work with the Subcommittee on Elder Mobility and Safety under the Missouri Coalition for Roadway Safety to address older driver safety
- Develop a package of office-based screening tools that can be used by healthcare providers and agencies involved in licensing decisions



## COMMERCIAL MOTOR VEHICLES

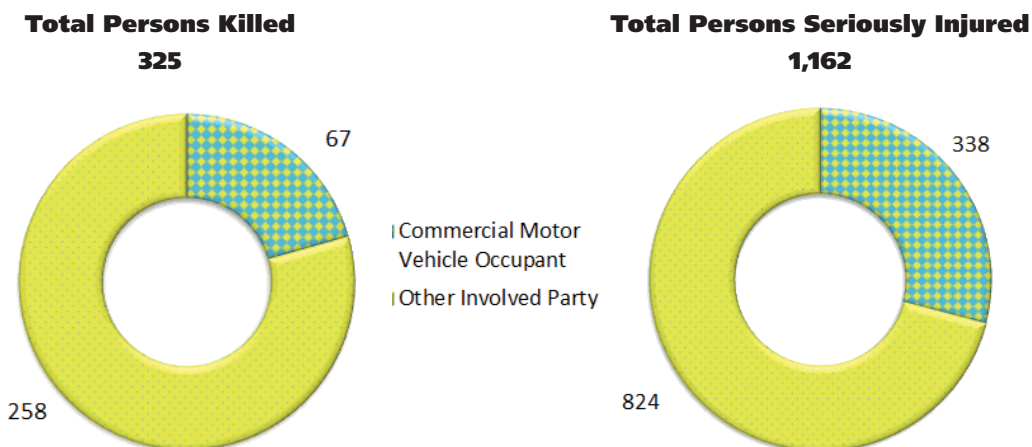
### Background

Large trucks have blind spots – identified as No Zones – around the front, back and sides of the truck, which make it difficult for the driver to see. It is critically important that other drivers stay out of the No Zone of a commercial vehicle. Because most commercial motor vehicles (CMVs) are large transport devices that are much heavier than the normal vehicle population, they cause greater amounts of personal injury and severity to the occupants of vehicles with which they collide. When analyzing the types of persons killed or injured in CMV crashes, the great majority were not the occupants of the commercial motor vehicle.

Commercial motor vehicles are involved in a substantial number of traffic crashes in Missouri, especially those resulting in the death of one or more persons. In 2012-2014, there were 414,173 traffic crashes in the state. In these crashes, 35,624 (8.6%) involved at least one commercial motor vehicle. Of the 2,143 fatal crashes, however, 289 (13.5%) involved at least one commercial motor vehicle.

Of those killed in 2012–2014 CMV crashes, 67 (20.6%) were CMV occupants and 258 (79.4%) were other parties in the incident. When examining serious injuries, 338 (29.1%) were CMV occupants while 824 (70.9%) were some other party.

### 2012-2014 Statewide Fatalities & Serious Injuries Commercial Motor Vehicle Involved



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 accidents 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 CRASHES

## Background

A responsible motorcyclist must think about the consequences of their riding behavior in traffic and accept personal responsibility for the results of their decisions and actions, as well as develop good skills and judgment. The motorcyclist must consider their personal margin of safety or margin for error – how much extra time and space they need given their skill level.

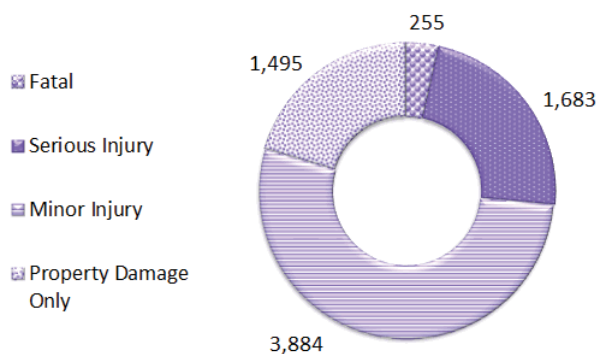
Likewise, the general motoring public must be aware of their surroundings while driving and share the road with motorcyclists. A significant number of motorcycle crashes involve another vehicle.

Although motorcycle traffic crashes do not occur with great frequency in Missouri, they usually result in deaths or serious injuries at a considerably greater rate than other traffic crashes. This reality makes helmet use imperative.

Of the 414,173 traffic crashes in 2012-2014, 0.5% resulted in a fatality and 2.9% involved someone being seriously injured in the incident. During the same period, there were 7,317 traffic crashes involving motorcycles. In these incidents, 255 (3.5%) resulted in a fatality and 1,683 (23.0%) resulted in someone being seriously injured in the crash. These figures demonstrate the overrepresentation of motorcycles in fatal and serious injury crashes.

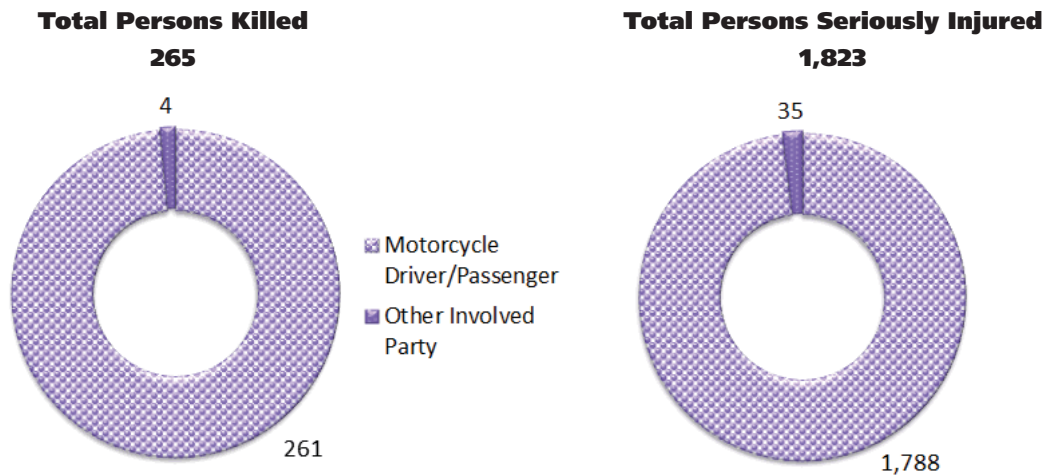
An area of particular concern is the number of unlicensed and improperly licensed motorcyclists involved in crashes. Between 2012-2014, 22.8% of the 7,317 motorcycle involved traffic crashes involved an unlicensed or improperly licensed motorcycle driver. In fatal crashes, 40.0% involved an unlicensed or improperly licensed motorcycle driver, while 28.2% of the serious injury crashes involved an unlicensed or improperly licensed motorcycle driver.

## 2012-2014 Statewide Motorcycle Involved Crashes 7,317



In most instances, motorcycle drivers and/or their passengers are the ones killed and seriously injured when they are involved in a traffic crash. Of the 265 persons killed in motorcycle-involved crashes (2012-2014), 261 (98.5%) were motorcycle riders and 4 (1.5%) were some other person in the incident. Of the 1,823 seriously injured (2012-2014), 1,788 (98.1%) were the motorcycle riders while only 35 (1.9%) were some other person in the incident.

### 2012-2014 Statewide Fatalities & Serious Injuries Motorcycle Involved



A significant number of motorcyclists and their passengers killed and seriously injured in Missouri traffic crashes are middle age. Of those killed, 41.8% were between the ages of 41-60 and 44.9% of those seriously injured were in this age group.

### 2012-2014 Statewide Motorcycle Drivers and Passengers Killed and Seriously Injured in Missouri Traffic Crashes

(Age by Personal Injury Severity)

Age	KILLED			SERIOUSLY INJURED			TOTAL	
	Number	%	Unhelmeted/Non-Compliant Helmet	Number	%	Unhelmeted/Non-Compliant Helmet	Number	%
00 - 20	9	3.4%	1	129	7.2%	42	138	6.7%
21 - 40	112	42.9%	26	668	37.4%	140	780	37.7%
41 - 60	109	41.8%	39	802	44.9%	161	911	44.5%
61 and Over	31	11.9%	3	185	10.3%	26	216	10.5%
Unknown age	0	0.0%	0	4	0.2%	1	4	0.2%
<b>Total</b>	<b>261</b>	<b>100.0%</b>	<b>69</b>	<b>1,788</b>	<b>100.0%</b>	<b>370</b>	<b>2,049</b>	<b>99.6%</b>

8 motorcyclists who were killed had an unknown helmet usage.

111 motorcyclists who were seriously injured had an unknown helmet usage.

#### GOAL #1:

To decrease motorcyclist fatalities to 84 by 2016:

2013	2014	2015
98	93	89

#### Performance Measure:

- Number of motorcyclist fatalities

#### Benchmark:

- Number of 2012 motorcyclist fatalities = 102 (72 in 2013) (87 in 2014)

#### GOAL #2:

To decrease un-helmeted or non-DOT-compliant helmeted motorcyclist fatalities to 21 by 2016 (does not include fatalities where helmet use was "unknown"):

2013	2014	2015
25	24	22

#### Performance Measure:

- Number of un-helmeted or non-DOT compliant helmeted motorcyclist fatalities (only those fatalities where helmet use was known)

#### Benchmark:

- Number of 2012 un-helmeted or non-DOT-



**STRATEGIES**

compliant helmeted motorcyclist fatalities = 26  
(21 in 2013) (22 in 2014)

**GOAL #3:**

To decrease fatalities involving motorcycle operators who are not licensed or improperly licensed to 40 by 2016:

2013	2014	2015
46	43	41

**Performance Measure:**

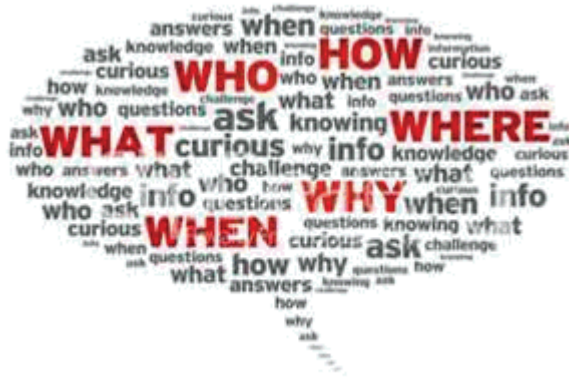
- Number of fatalities involving motorcycle operators with no license or improperly licensed

**Benchmark:**

- 2012 fatalities involving a motorcycle operator with no license or improperly licensed = 48  
(24 in 2013) (33 in 2014)

1. Continue support for the Missouri Motorcycle Safety Program administered by the Missouri Safety Center at University of Central Missouri
2. Continue to provide motorcycle rider education statewide in order to train 4500+ riders annually
3. Conduct RiderCoach (Instructor) Preparation courses as needed in order to train and expand the base of certified motorcycle RiderCoaches to meet demand
4. Actively participate in the Motorcycle Safety Subcommittee of the Missouri Coalition for Roadway Safety
5. Implement, where possible, strategies in the Missouri Motorcycle Strategic Safety Plan 2012-2016
6. Create and distribute Missouri helmet law cards to law enforcement statewide on detecting non-compliant helmets
7. Continue working with numerous grass-roots motorcycle safety groups in promoting the "Watch for Motorcycles" message throughout the state





# MOTORCYCLE CRASHES

## Who

2012-2014 Fatalities by Age:

Age	Fatalities	Percent of Total Fatalities
0-9	0	0.00%
10-19	5	1.92%
20-29	61	23.37%
30-39	50	19.16%
40-49	54	20.69%
50-59	58	22.22%
60-69	27	10.34%
>=70	6	2.30%
Total	261	100.00%

*Includes drivers/passengers of motorcycles.*

## What

2012-2014 Vehicle Body Types Involved in Fatal Motorcycle Crashes

Vehicle Type	Vehicle Body Type Involved	Percent of Total Fatalities
Passenger Car	62	14.55%
SUV	37	8.69%
Van	5	1.17%
Other Bus	1	0.23%
School Bus	3	0.70%
Const. Equip.	1	0.23%
Pick Up	38	8.92%
Motorcycle	264	61.97%
Large Trucks	15	3.52%
Total	426	100.00%

## Where

2012-2014 Fatalities by Roadway Designation

Roadway Desg.	Fatalities	Percent of Total Fatalities
Interstates	19	7.28%
US Numbered Routes	28	10.73%
MO Lettered Routes	55	21.07%
MO Numbered Routes	68	26.05%
Loop (Interstates only)	3	1.15%
Business	2	0.77%
City Street	52	19.92%
Ramp	3	1.15%
County Road	25	9.58%
Outer Road	4	1.53%
Private	2	0.77%
Total	261	100.00%

## When

2012-2014 Fatalities by Time of Day:

Time	Fatalities	Percent of Total Fatalities
Midnight - 5:59 am	28	10.73%
6:00 am - 11:59 am	45	17.24%
Noon - 5:59 pm	95	36.40%
6:00 pm - 11:59 pm	93	35.63%
Total	261	100.00%

## Why

**= See Statewide Total Fatalities and Serious Injuries by Target Area**



## CRASHES INVOLVING SCHOOL BUSES

### Background

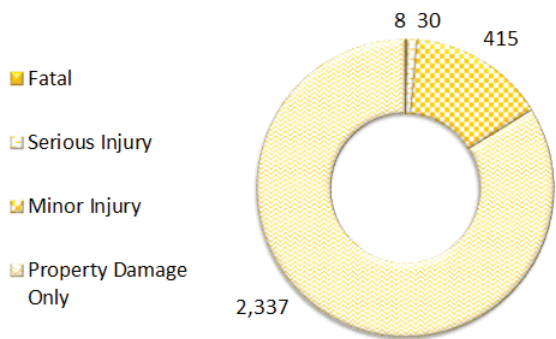
Although school buses provide one of the safest modes of transportation, there are still school bus related injuries and, unfortunately, some fatalities every year. Some of these are due to crashes with other vehicles while others are due to the school bus striking a pedestrian or bicyclist. The responsibility borne by school bus drivers is considerable.

A vehicle must meet safety standards that are appropriate for its size and type because different types of vehicles perform differently in a crash. For example, because a large school bus is heavier than most other vehicles, its weight can protect its occupants from crash forces better than a light vehicle such as a passenger car. The passive protection engineered into large school buses, combined with other factors such

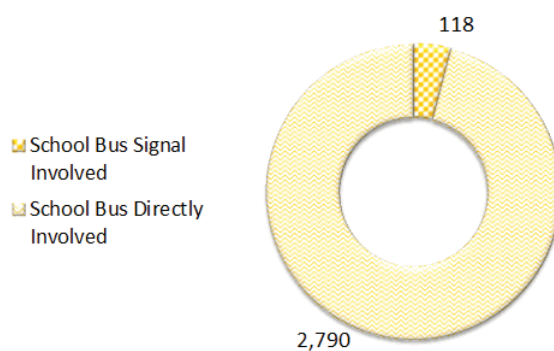
as weight, provides passenger protection similar to that provided by safety devices in passenger cars. Both types of vehicles protect children from harm but in different ways. Many school buses throughout Missouri are now equipped with 3-point safety belts. This safety enhancement, when properly used, provides additional protection in the event of a crash.

School buses are not involved in a large number of traffic crashes in Missouri. Of all 2012-2014 Missouri traffic crashes, 0.7% involved a school bus or school bus signal. In 95.9% of the school bus crashes, a school bus was directly involved in the crash and in 4.1% of the crashes, no school bus was directly involved but a school bus signal was involved.

**2012-2014 Statewide School Bus/School Bus Signal Crashes**  
(By Severity)

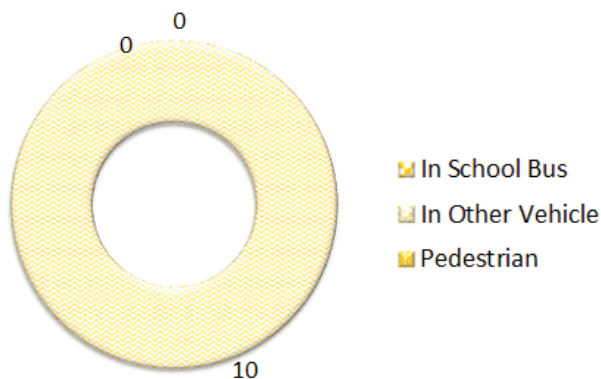


**2012-2014 Statewide School Bus/School Bus Signal Crashes**  
(Involvement Type)

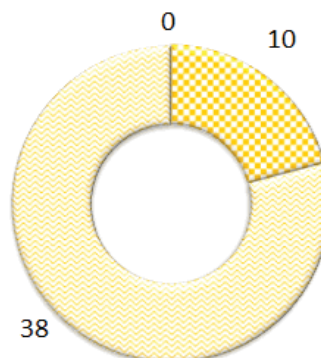


Of the 10 persons killed during 2012-2014 in crashes involving school buses, no bus occupants or pedestrians were killed. All 10 of the fatalities were some other person in the incident. Of the 48 persons seriously injured, 10 were occupants of the school bus, no pedestrians were seriously injured, and 38 were some other person in the incident.

**2012-2014 Statewide School Bus/School Bus Signal Involved Fatalities by Location of Persons Killed**



**2012-2014 Statewide School Bus/School Bus Signal Involved Serious Injuries by Location of Persons Seriously Injured**



A significant number of persons killed or seriously injured in crashes involving school buses are young.

Age	IN BUS		PEDESTRIAN		IN OTHER VEHICLE	
	Killed	Serious Injuries	Killed	Serious Injuries	Killed	Serious Injuries
0-4	0	1	0	0	0	0
5-8	0	1	0	0	0	2
9-20	0	5	0	0	1	10
21+	0	3	0	0	9	26
Unknown	0	0	0	0	0	0
<b>Total</b>	0	10	0	0	10	38

**GOAL #1:**

To decrease or maintain fatalities involving school buses or school bus signals to 2 by 2016:

2013	2014	2015
3	3	2

**Performance Measure:**

- Number of fatalities occurring in crashes involving school buses or school bus signals

**Benchmark:**

- 2012 fatalities occurring in crashes involving school buses or school bus signals = 3  
(3 in 2013) (4 in 2014)

**GOAL #2:**

To decrease serious injuries involving school buses or school bus signals to 12 by 2016:

2013	2014	2015
14	14	13

**Performance Measure:**

- Number of serious injuries occurring in crashes involving school buses or school bus signals

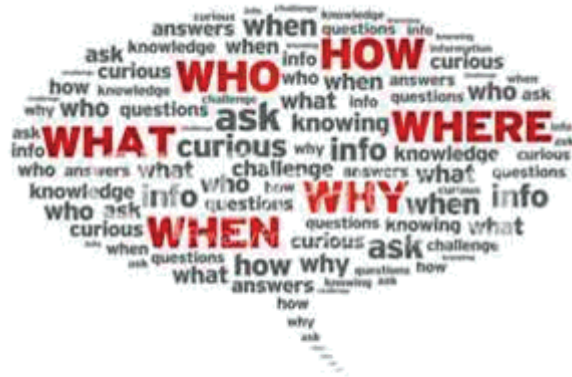
**Benchmark:**

- 2012 serious injuries occurring in crashes involving school buses or school bus signals = 15  
(19 in 2013) (14 in 2014)

**STRATEGIES**

1. Support and implement, if feasible, recommendations made by the 2005 Governor's School Bus Task Force
2. Continue to serve on any state school bus safety committees
3. Expand current public awareness materials to address seat belts on school buses, compartmentalization of school buses, general safety issues regarding riding a school bus, safety around the loading zones and sharing the road with school buses





# CRASHES INVOLVING SCHOOL BUSES

## Who

2012-2014 Fatalities by Age:

Age	Fatalities	Percent of Total Fatalities
0-9	0	0.00%
10-19	0	0.00%
20-29	2	20.00%
30-39	2	20.00%
40-49	2	20.00%
50-59	2	20.00%
60-69	1	10.00%
>=70	1	10.00%
Total	10	100.00%

*Includes everyone killed in crashes involving a school bus or school bus signal.*

## What

2012-2014 Vehicle Body Types Involved in Fatal School Bus/Bus Signal Crashes

Vehicle Type	Vehicle Body Type Involved	Percent of Total Fatalities
SUV	1	5.56%
Van	1	5.56%
School Bus	8	44.44%
Motorcycle	5	27.78%
Pick Up	3	16.67%
Total	18	100.00%

## Where

2012-2014 Fatalities by Roadway Designation

Roadway Desg.	Fatalities	Percent of Total Fatalities
Interstates	0	0.00%
US Numbered Routes	2	20.00%
MO Lettered Routes	5	50.00%
MO Numbered Routes	1	10.00%
Loop (Interstates only)	0	0.00%
Business	0	0.00%
City Street	1	10.00%
Ramp	0	0.00%
County Road	0	0.00%
Outer Road	1	10.00%
Other	0	0.00%
Total	10	100.00%

## When

2012-2014 Fatalities by Time of Day:

Time	Fatalities	Percent of Total Fatalities
Midnight - 5:59 am	0	0.00%
6:00 am - 11:59 am	5	50.00%
Noon - 5:59 pm	5	50.00%
6:00 pm - 11:59 pm	0	0.00%
Total	10	100.00%

## Why

- See Statewide Total Fatalities and Serious Injuries by Target Area

# VULNERABLE ROADWAY USERS

## Background

Many Missourians rely on non-motorized means of transportation such as walking and bicycling. Both of these modes have the ability to provide physical and health benefits, but they also have the potential for serious or fatal injuries in the event of a crash. Crashes involving pedestrians and bicyclists do not occur in extremely large numbers (1.0% and 0.4% of all crashes, respectively) but when a pedestrian or bicyclist is involved in a traffic crash, the potential for harm is much greater.

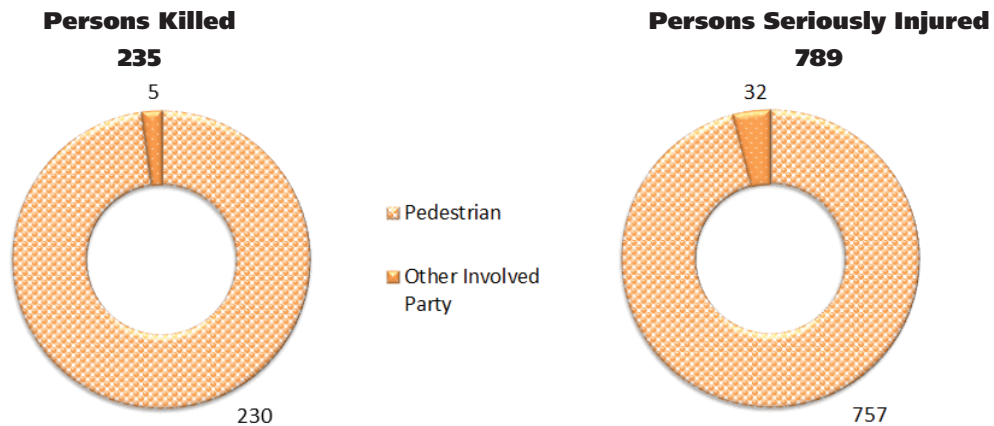
Pedestrians and bicyclists alike need to understand that they have primary responsibility for their own safety; however, the motoring public also has a responsibility to share the road in a safe manner with these vulnerable road users. This is especially true since many pedestrians and bicyclists are children who often lack the knowledge or skills to interact safely in traffic.



## PEDESTRIANS

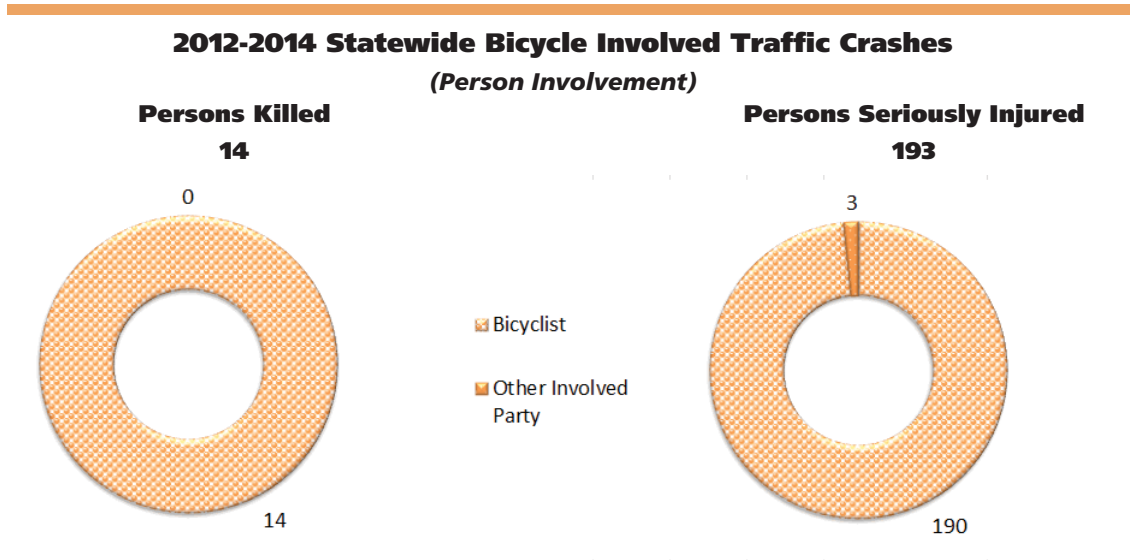
For the period 2012-2014, there were 232 fatal pedestrian-involved crashes and 744 serious injury pedestrian-involved crashes. During that three-year period, of the 235 persons killed in pedestrian involved crashes, 230 (97.9%) were the pedestrians. Of the 789 seriously injured in pedestrian involved crashes, 757 (95.9%) were the pedestrians.

**2012-2014 Statewide Pedestrian Involved Traffic Crashes**  
(Person Involvement)



## BICYCLISTS

For the period 2012-2014, there were 14 fatal bicycle-involved crashes and 191 serious injury bicycle-involved crashes. For that same three-year period, of the 14 persons killed in bicycle-involved crashes, all were the bicyclists. Of the 193 persons seriously injured in bicycle-involved crashes, 190 (98.4%) were the bicyclists.



### GOAL #1:

To decrease pedestrian fatalities to 71 by 2016:

2013	2014	2015
82	78	75

**Performance Measure:**

- Number of pedestrian fatalities

**Benchmark:**

- 2012 pedestrian fatalities = 86 (75 in 2013) (69 for 2014)

### GOAL #2:

To decrease or maintain bicyclist fatalities to 4 by 2016:

2013	2014	2015
6	5	5

**Performance Measure:**

- Number of bicyclist fatalities

**Benchmark:**

- 2012 bicyclist fatalities = 6 (4 in 2013) (4 in 2014)

### STRATEGIES

1. Educate the motoring public on sharing the road safely with pedestrians and bicyclists
2. Educate pedestrians and bicyclists on safely interacting with motor vehicles
3. Purchase helmets for distribution at exhibits and for school/local safety awareness programs
4. Promote bicycle safety events/awareness programs at the local level utilizing the Safe Communities programs and the Missouri Coalition for Roadway Safety regional coalitions
5. Partner with law enforcement agencies to focus on pedestrian/bicycle safety education
6. Partner with law enforcement agencies to focus on driver safety around pedestrians and bicyclists







## ENGINEERING SERVICES & DATA COLLECTION

### ENGINEERING SERVICES

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 mitigate 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 statewide application of paved shoulders and rumble strips on Missouri's most heavily traveled roads. Over 10,000 miles of rumble strips have been installed. Rumble strips have 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.

### TRAFFIC ENGINEERING ASSISTANCE PROGRAM (TEAP)

It is often necessary for cities and counties to obtain the services of private consulting engineering firms to aid them in correcting safety and operational concerns on local 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 studies, capacity analysis, lighting analysis and design, traffic control devices (inventory and layout), or traffic signal progression analysis and design. Most cities and counties do not have the personnel with expertise in these areas to perform the necessary analysis. (This is not a complete list of the studies a traffic engineering consultant may be called upon to perform.) 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. In order to provide assistance in this area, the Highway Safety Office allocates funding for consultants to perform this service for the local jurisdictions.

## **TRAINING**

Support is also provided for traffic engineering forums and technology transfer to enhance the ability of the local communities to develop crash countermeasures. This is accomplished through training workshops and conferences funded through the Missouri Department of Transportation.

## **DATA COLLECTION**

Each state has developed, to varying degrees, systems for the collection, maintenance and analysis of traffic safety data. Motor vehicle crash data tells us about the characteristics of the crash and the vehicles and persons involved. Crash data elements describe the date, time, location, harmful events, type of crash, weather, and contributing circumstances. Vehicle data elements describe the vehicle in terms of the make, year, type, role, actions, direction, impact, sequence of events, and damaged areas. Person data elements describe all persons involved by age, sex, injury status, and type. Additional information describing the vehicle number, seating position, use of safety equipment, driver status information, non-motorist status, alcohol/drug involvement, and EMS transport status is collected when relevant to the occupants involved.

### ***STARS MAINTENANCE AND TRAFFIC SAFETY COMPENDIUM***

The traffic safety program supports maintenance of the Statewide Traffic Accident Reporting System (STARS), which is the repository for all crash statistics. The Missouri State Highway Patrol started electronically filing crash reports in 2007. Approximately 45% of crash reports are now entered electronically into the STARS system. Revision of the crash report form has been completed with training provided annually. The form became effective on January 1, 2012. The Traffic Safety Compendium is compiled from statistics collected in STARS and is available in .pdf format. Without this vital

component, it would be difficult to develop a comprehensive plan based on consistently reported crash data especially as it relates to contributing circumstances that caused the crash. This crash information is shared with MoDOT's Traffic and Highway Safety Division.

### ***LAW ENFORCEMENT TRAFFIC SOFTWARE (LETS)***

This web-based computerized system for collection and comprehensive management of traffic data provides on-line information concerning traffic activities and needs for local law enforcement agencies. LETS allows agencies to track crash occurrences, deploy enforcement efforts, design crash countermeasure programs, and develop customized reports. The LETS software also allows agencies to electronically transfer crash data to the STARS database.

### ***SELECTION OF TRAFFIC RECORDS COORDINATING COMMITTEE (TRCC) PROJECTS***

The TRCC plays a role in the creation, approval and evaluation of the data improvement projects. The TRCC consists in developing initial project proposals as well as discusses the proposals openly in the TRCC monthly meetings. The TRCC through the discussion of proposed projects, prioritize the projects and determine the funding sources. Once the project begins, the TRCC provides additional guidance on the projects activities.

Projects are selected based on recommendations from the most current assessments and their ability to meet six characteristics: timeliness, accuracy, integration, uniformity, accessibility and completeness.

These projects are evaluated on an annual basis to ensure they are in compliance with project milestones and their ability to improve the states traffic records data systems.

**GOAL #1:**

To assure there is a robust traffic data system available to assist all data users in development of appropriate traffic safety countermeasures

**Performance Measure:**

- Percent of all crash reports filed electronically through LETS into the STARS system.
- Ability to track positive or negative trends in traffic crashes by target populations, geographic location, driver subgroups, and causation factors

**Benchmark:**

- In 2009, local law enforcement agencies began electronically submitting crash reports through LETS.

**GOAL #2:**

To provide adequate training on an annual basis that will support and enhance the ability of state and local agencies in developing accident countermeasures

**Performance Measure:**

- Continue partnership with Mid America Regional Council to conduct road safety audits with law enforcement

**Benchmark:**

- Conduct one road safety audit with law enforcement

**BENCHMARKS:**

- Provide consultant assistance to local communities for traffic engineering assessments
- Provide consultant assistance to local communities for bridge engineering assessments
- Provide training for engineering professionals at workshops and the Annual Traffic Conference (number of attendees depends upon conference costs which is based on location and travel constraints)
- Provide an effective, efficient software system for capturing local law enforcement crash data
- Provide an effective, efficient web-based highway safety grants management system

**STRATEGIES**

1. Encode all crash reports into the STARS system, ensuring accuracy and efficiency, and provide equipment to support STARS maintenance
2. Utilize statistics gathered from STARS to assist MoDOT's Traffic and Highway Safety Division and local communities in developing problem identification
3. Provide expertise and funding to assure communities are in compliance with uniform traffic codes and that the bridges within their jurisdictions are upgraded in terms of their safety
4. Provide training to assure state and local engineers are kept abreast of current technology
5. Continue LETS software improvement and training – train users on accessing and utilizing LETS system, log users into the system, and provide help desk through REJIS
6. Continue to serve on the Traffic Records Coordinating Committee and assist in the redevelopment of the Missouri Traffic Records Strategic Plan
7. Continue to emphasize linkage capability within the traffic records data systems to generate merged records for analytic purposes.
8. Implement recommendations of the 2015 Traffic Records Assessment into the statewide strategic plan (as required in Section 405C implementing guidelines)
9. Continually refine and enhance Missouri's data collection and analysis systems in order to produce tables and reports that provide standardized exposure data for use in developing traffic safety countermeasure programs
10. Promote use of the online law enforcement mobilization reporting system
11. Collaborate with the Missouri State Highway Patrol to assure that Missouri's traffic crash report form complies with MMUCC standards.
12. Maintain and improve, as needed, a totally web-based Highway Safety grants management system working in conjunction with the Highway Safety Office, REJIS, and MoDOT's Information Technology Division



**Final Report**

6-150205LK

**Highway Safety Drivers Survey**

Prepared for  
Missouri Department of Transportation  
Organizational Results

By

Lance Gentry



**HEARTLAND**  
MARKET RESEARCH LLC

**May 5, 2015**

The opinions, findings, and conclusions expressed in this publication are those of the principal investigators and the Missouri Department of Transportation. They are not necessarily those of the U.S. Department of Transportation, Federal Highway Administration. This report does not constitute a standard or regulation.

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## **Executive Summary**

### **Highway Safety Findings**

This research project surveyed 2,502 adult Missouri drivers in March 2015 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. The research was designed so that in addition to providing a statewide result, statistically useful information was also available at the district level.

Special emphasis was placed on ensuring that the sample reflected Missouri's geographic, age, and gender diversity. People were surveyed from 113 counties as well as the independent city of St. Louis. Residents from 620 different zip codes are represented. The typical market research survey practice of alternatively asking for either the oldest or youngest adult was not employed. Instead, the calling center was given specific goals for each age group and gender within various geographic areas to ensure the most representative sample possible.

### **Seat Belt Findings**

83.1% of Missouri drivers claimed to always use their seat belts, statistically identical to the results from the previous four years. In 2015 those least likely to wear seat belts when driving or riding in a car, van, sport utility vehicle, or pick up were males of at least 50 years of age who primarily drove either a motorcycle or a pick up. Those who lived in areas classified as relatively urbanized were most likely to wear their seat belts whereas those who lived in either very rural location or in very urban areas such as St. Louis were less likely to wear seat belts.

A majority (54.6%) of the respondents prefer to keep Missouri's seat belt law a secondary law, similar to the findings from recent years. Likewise, a slight majority (51.6%) preferred to leave the penalty for violating the law unchanged. All responses were statistically identical to those from the previous year. Out of the minority who favored increasing the fine, a plurality (44.0%) thought the fine should range from \$25 to \$49. The second largest group (20.0%) thought the fine should range from \$50 to \$74. These were also the two largest groups the last five years out of the minority who wished to increase the fine.

The vast majority of the respondents (82.4%) were not aware of any publicity concerning seat belt law enforcement. While statistically similar to the previous year, this continued a downward trend in awareness since 2010. There may be several reasons for this trend. First of all, people have many more options for their free time, making it much more difficult to reach them. People have access to more video and audio options than ever before, many of which are now available directly over the internet making local advertising very challenging. Secondly, this research measures the statewide perception on the issues being discussed. However, MoDOT may spend its marketing efforts targeting citizens at special risk. If so, any report of the statewide results will underestimate the effectiveness of publicity efforts as the responses from the citizens not being targeted make up a significant portion of the overall measure captured by this research. Finally, the timing of this research makes the current survey methodology a poor instrument for measuring the effectiveness of MoDOT's seat belt safety awareness campaign which last took place in May 2014, approximately 10 months before respondents were surveyed.

### **Speeding Findings**

72.4% of Missouri drivers stated they never or rarely drive more than 35 mph when the speed limit is 30 mph less than the 86.8% of Missouri drivers who stated they never or rarely drive more than 75 mph when the speed limit is 70 mph on local roads. Both findings were similar to those found in 2014.

In 2015, females between 18 to 29 were more likely to speed on roads with speed limits of 30 mph compared to other groups. Women between 30 and 49 and men between 30 and 64 were more likely to speed on roads with speed limits of 70 mph. All age and gender segments were more likely to speed on roads with a 30 mph speed limit than roads with a 70 mph speed limit. In a change from last year, this was not true of motorcyclists. While they remain the group most likely to speed on roads with a speed limit of 70 mph, this year motorcyclists stated they were less likely to speed on roads with speed limits of 30 mph than drivers of other vehicles. It is important to understand that the sample size of motorcyclists is very small, thus there is likely to be greater variation from year to year in this group. In keeping with the findings since 2010, there was no correlation between speeding and any publicity about relevant law enforcement activities; nor was there any correlation between speeding and the respondent's perception of the chance of being caught.

The majority (73.3%) of Missouri drivers were unaware of any recent publicity regarding speed enforcement. This was virtually identical to the findings from the previous two years. Two-thirds (66.6%) of Missouri drivers thought their chances of receiving a ticket if they speed were at least fifty percent. This was also similar to the findings since 2011.

### **Cell Phone Findings**

88.4% of Missouri drivers stated they rarely or never talk on a cell phone while driving. 11.2% of Missourians talk at least half of the time they drive. 99.1% of Missouri drivers stated they rarely or never text on a cell phone while driving. These numbers are statistically identical to the findings from last year.

92.5% of Missouri drivers favored some type of restriction on how people could use cell phones while driving. 29.9% favored banning all cell phone use by drivers, while a majority (62.6%) wanted to ensure drivers could still use cell phones for talking while seeing the need for some restrictions. These results were similar to previous findings and continue a downward trend in the number of people who support a complete ban on cell phone use while driving.

In 2015 women 65 and older were the least likely to drive while talking on a cell phone whereas females from 30 to 49 were the most likely group to talk on a cellular phone while driving. However, at just under 18% (17.9% for women 30 to 39 and 17.8% for women 40 to 49), this is significantly lower than the measures recorded in previous years. Self-reported texting while driving also continued to decline. In 2015, males 40 to 49 were the most likely age/gender segment to text while driving and only 2% of this group said they did so at least 50% of their driving time.

## **DUI Findings**

89.4% of Missouri drivers stated that they had not driven a vehicle within two hours of consuming an alcoholic beverage anytime in the last sixty days. This is similar to last year's findings. 8.1% of Missouri drivers admitted to having done so at least once in the last sixty days. Another 2.5% refused to answer the question.

Heartland Market Research concluded that approximately 10.6% of Missouri drivers have driven under the influence of alcohol in the last sixty days. Considering the margin of error, this is similar to the findings that have been measured most years of this study (11.5% in 2010, 18.7% in 2011, 8.3% in 2012, 12.7% in 2013, and 9.3% in 2014). Out of those who admitted to drinking before driving, the average driver did so about three times in the last sixty days (average of 3.1 times). This is the lowest amount recorded since Heartland became involved with this research in 2010. It compares to an average of 3.6 times in 2014 and 2013, 5.5 times in 2012, 6.2 times in 2011, and an average of 5.2 times in 2010.

Similar to last year, in 2015 males 65 years of age and older were most likely to drive under the influence of alcohol, closely followed by males 40 to 49 years of age. For every age category, women were less likely to drive under the influence of alcohol than males. Motorcyclists and pickup truck drivers were more likely to drive under the influence than drivers of other vehicles. Drivers of other types of trucks, closely followed by van/minivan drivers, were least likely to drive under the influence. Drivers residing in highly urbanized areas were more likely to drive after consuming alcohol than residents of less populated areas. While awareness of DUI enforcement was not correlated with stated behavior, the expectation of being ticketed reduced the likelihood of DUI behavior similar to the results in 2014, 2013, and 2011.

Approximately half (47.2%) of Missouri drivers were aware of recent publicity regarding DUI enforcement. This was similar to the findings of the previous years. The timing of this survey made these results intriguing. Before 2013, this survey has been conducted in the summer (typically in June). In 2013 the survey was conducted in March, in 2014 the survey was conducted in April, and in 2015 the survey was conducted in March. Results were quite consistent despite the variation in timing.

## **Recommended Improvements for This Research Program**

This survey instrument used in this study is remarkably accurate. As detailed within, the self-reported behavior for seat belt usage from this research was compared to an observational study. The difference between the two studies was approximately the combined margin of error of the two efforts. However, while this comparison supports the accuracy of the research methodology, current practice is not well suited for determining the effectiveness of MoDOT's various public safety campaigns. For example, MoDOT conducts most of its "Click It or Ticket" outreach in May compared to offering multiple campaigns about DUI throughout the year. Since the current survey asks about consumer awareness for the last 30 to 60 days, it is not surprising that awareness of DUI enforcement (47.2%) is much higher than awareness of seat belt enforcement (17.5%). Thus in the case of the seat belt enforcement awareness question, the better a person recalls when a campaign was conducted, the more likely the person is to answer no and give the impression that the campaign was ineffective.

**Recommendation 1:** The three enforcement awareness questions should be reworded to be internally consistent and cover a longer period of time. Specifically, these questions should ask about the last six months instead of the current 60 days for one question and 30 days for two questions. In addition, they questions should be more specific where feasible (e.g., instead of simply asking about seat belt law enforcement, include “Click It or Ticket” in the question).

The three awareness questions cover seat belt enforcement, speeding enforcement, and DUI enforcement. Chronologically, MoDOT uses two different tactics to publicize seat belt enforcement and DUI enforcement. MoDOT currently makes an annual effort to publicize “Click It or Ticket” in May for seat belt enforcement compared with several campaigns throughout the year for DUI enforcement (“Drive Sober or Get Pulled Over” in March and August/September along with the “Choose Your Ride” in November/December).

**Recommendation 2:** Ideally, MoDOT split the current sample size into thirds and conduct the survey three times throughout the year (e.g., February, June, and October). The cost of conducting three smaller surveys would be similar to one larger survey and this would also allow MoDOT to track awareness of the three enforcement efforts throughout the year. Alternatively, MoDOT could keep the survey as an annual survey, but move it to June.

### **Other Recommendations for MoDOT**

**Recommendation 3:** MoDOT spends a large portion of their seat belt enforcement money on campaigns aimed at teenagers under 18. While this survey does an excellent job of measuring current attitudes and behaviors of adult drivers, it is not designed for – and specifically excludes – teenagers under 18. MoDOT may wish to commission a survey to measure the effectiveness of seat belt enforcement efforts aimed at this age group.

**Recommendation 4:** In the six years Heartland has been conducting this survey, public awareness of DUI enforcement campaigns has been much higher – often more than double – than public awareness of seat belt enforcement. Even when the survey was being asked in June, there was a very large difference. While other factors probably also influence this difference, it suggests that the tactic of publicizing enforcement activities multiple times a year is more effective than an annual effort. MoDOT should evaluate the feasibility of publicizing seat belt enforcement campaigns three times a year similar to the DUI enforcement campaigns.

## **Introduction**

The Missouri Department of Transportation (MoDOT) desired to know more regarding attitudes and awareness concerning impaired driving, seat belt use, and speeding from Missouri adults. Following standard practice, MoDOT requested bids from qualified research organizations by posting a request for proposals on their public website. Heartland Market Research LLC was selected from this competitive process as having the best research proposal and was awarded the research contract. The research was conducted during March 2015 using a phone survey instrument.

## **Objective**

The primary objective of this research project was to survey adult Missouri drivers to capture their current attitudes and awareness of specific items concerning highway safety such as seat belt usage, speeding, cell phone use while driving, and alcohol impaired driving while minimizing the margin of error. The research was designed so that in addition to providing a statewide result, statistically useful information was also available at the district level. Special emphasis was placed on ensuring that the sample reflected Missouri's geographic, age, and gender diversity.

## **Technical Approach**

The survey questions were provided by MoDOT and were similar to the questions used in the 2010 and 2011 Highway Safety studies and identical to the questions asked in 2012, 2013, and 2014. In 2012 additional questions were added pertaining to cell phone and texting usage while driving and these were also employed in 2013, 2014, and 2015.

Starting on March 9 and ending on March 29, 2015, Quancor Virtual Sales and Marketing (QVSM) placed 139,473 calls in the State of Missouri. During this process, they reached 5,369 persons, of whom 2,502 completed the survey. The operators were instructed to mention MoDOT only if the respondent asked who had commissioned the survey. A copy of the operator script appears in Appendix B.

Special efforts were made to make the phone survey as representative as possible, especially in terms of the research objectives (geographic, gender, and age). People were surveyed from 113 counties as well as the independent city of St. Louis. Residents from 620 different zip codes are represented. The typical phone survey practice of alternatively asking for either the oldest or youngest adult was not employed. Instead, the calling center was given specific goals for each age group and gender within various geographic areas to ensure the most representative sample possible within the constraints of the project.

The survey results were weighted proportionally to the actual population in terms of geographic, gender, and age distributions. Information from 2010 Census was used for this purpose as this was the most recent complete information available. The weighted results from the three previous phone surveys are also shown for comparative purposes and this information was taken from the 2012 Highway Safety Driver Survey report. All years compared utilized the exact same weights from the 2010 Census.

## Results and Discussion (Evaluation)

In surveying, it is usually not reasonable to survey everyone in the population of interest. Therefore, a portion of the population is surveyed and this portion is called the sample. Since the sample is usually much smaller than the population of interest, the mean of the population may vary from the mean of the sample. The expected error depends upon the size of the sample and the desired level of confidence. As the sample size increases, the margin of error decreases. The general formula for computing the margin of error at the 95% level of confidence is .98 divided by the square root of the sample size. The following table shows the margin of error for the most recent Highway Safety surveys.

**Table 1: Survey Margin of Error**

	2010 Phone Survey	2011 Phone Survey	2012 Phone Survey	2013 Phone Survey	2014 Phone Survey	2015 Phone Survey
Responses	3,010	1,207	2,616	2,510	2,513	2,502
Margin of Error	1.79%	2.82%	1.92%	1.96%	1.95%	1.96%

Thus with an overall sample size of 2,502 we can be 95% certain that the sample mean is within 1.96% of the population mean. Thus if 17.48% of our sample is aware of any recent publicity concerning seat belt law enforcement, we can be 95% certain that between 15.5% and 19.4% of the adult driving population in Missouri would actually be aware of any recent publicity. These statistics assume honest answers by the respondents. Research has shown that people tend to answer surveys honestly unless the answer is perceived to have an appropriate answer. For example, most people believe that wearing seatbelts is the socially correct thing to do, so the answer to the seat belt question may be slightly inflated. Likewise, most people believe that driving under the influence of alcohol is socially incorrect, so the answers to these questions may be slightly deflated. In these cases, the most important factor is to look for statistically significant changes from year to year.

The results from the previous four surveys are provided along with this year's survey so that changes over time may also be reviewed. When comparing surveys, the margins of error are cumulative. Therefore, we can be 95% confident there has been a significant change in the attitudes of Missourian from 2014 to 2015 if the survey results differ by more than 3.91%.

The statewide results have been weighted proportionally to the actual population in terms of geographic, gender, and age distributions.

Readers should not use this research to draw conclusions about the behavior of those who primarily drove motorcycles. While the sample size is quite adequate for drivers of other vehicles, only eight respondents stated that their primary vehicle was a motorcycle. This is to be expected in a survey that represents the general public given that only a small percentage of the US population rides motorcycles. Further, out of the entire population of motorcycle riders, many of them may have another vehicle they drive more often than their bike.



## Seat Belt Usage

Depending upon their opinions, respondents answered five to six questions pertaining to their behavior and thoughts concerning seat belts.

**Question 1:** *How often do you use seat belts when you drive or ride in a car, van, sport utility vehicle or pick up?*

In 2015, 83.1% of Missouri drivers claimed to always use their seat belts, statistically identical to the results from the previous four years. This is slightly higher than the 75% average observed seat belt use Pickrell and Ye (2008) documented for states with secondary enforcement laws. It is also remarkably close to the 78.8% observed rate for Missouri in an extensive study commissioned by MoDOT for the period from June 2 to June 15 2014. The 2014 study was based on total of 90,015 vehicles and 117,297 vehicle occupants observed across twenty roadway segments in each of 28 survey counties for a total of 560 observed sites. The margin of error for the observed studies was 2.5% so the combined margin of error of the two studies was about 4.5%. In other words, the difference between the two studies is about the expected margin of error. The fact that the 2014 observed seatbelt rate and the self-reported rates from 2010 to 2015 are so close shows the reliability of the self-report method – at least when it comes to reporting seat-belt usage.

**Table 2: Statewide Seatbelt Usage**

		2010 Phone Survey	2011 Phone Survey	2012 Phone Survey	2013 Phone Survey	2014 Phone Survey	2015 Phone Survey
How often do you use seat belts when you drive or ride in a car, van, sport utility vehicle, or pick up?	Always	82.0%	84.1%	84.2%	82.7%	84.6%	83.1%
	Most of the time	9.2%	7.7%	8.6%	9.6%	9.7%	9.6%
	Half of the time	3.2%	3.4%	3.0%	2.9%	1.8%	2.7%
	Rarely	2.4%	2.6%	1.9%	2.5%	1.7%	2.1%
	Never	3.1%	2.1%	2.1%	2.1%	2.2%	2.4%
	Refused	0.1%	0.1%	0.2%	0.2%	0.1%	0.2%

Similar to other years, males were less likely to wear seat belts than females in 2015. Those least likely to wear seat belts when driving or riding in a car, van, sport utility vehicle, or pick up were males of at least 50 years of age who primarily drove either a motorcycle or a pick up. Those who lived in areas classified as relatively urbanized were most likely to wear their seat belts whereas those who lived in either very rural location or in very urban areas such as St. Louis were less likely to wear seat belts.

In 2014 those least likely to wear seat belts were males, 50 years of age and older, whose primary vehicle was a pickup truck. Similar to previous findings, those who were the least likely to wear seat belts were also the least likely to believe that people would receive a ticket if they did not wear their seat belt. Also similar to previous years, those who lived in very rural areas were also less likely to always buckle up than those living in other communities.

In 2013 those least likely to wear seat belts were males, between the ages of 18 and 29, whose primary vehicle was a pickup truck or other type of truck. As was also the case last year, those who were the least likely to wear seat belts were the most likely to be aware of seat belt enforcement publicity, but were the least likely to believe that people would receive a ticket if they did not wear their seat belt. Also similar to last year, those who lived in very rural areas were also less likely to always buckle up than those living in other communities.

In 2012 those least likely to wear seat belts were males, between the ages of 50 and 64, whose primary vehicle was a pickup truck or a motorcycle. In 2012 those who were the least likely to wear seat belts were the most likely to be aware of seat belt enforcement publicity, but were also the least likely to believe that people would receive a ticket if they did not wear their seat belt. This was a change from the findings from the previous two years. Those who lived in very rural areas were also less likely to buckle up than those living in other communities.

In 2011 the results were similar with one major difference. While those least likely to wear seat belts were still males between the ages of 30 and 64 who drive a pickup truck, those who drove some other type of truck wear their seat belts “always” or “most of the time”. In 2011, there was no correlation between seat belt usage and any publicity about law enforcement activities. While smaller than the 2010 impact, those with a higher expectation of receiving a ticket if they did not wear their seat belt were more likely to wear one.

In 2010 those least likely to wear seat belts were males, between the ages of 30 and 64, who drove some type of truck (e.g, either a pickup truck or “other type of truck”). There was no correlation between seat belt usage and any publicity about law enforcement activities; however, those more likely to think they would receive a ticket for not wearing a seat belt were more likely to comply with the law.

**Question 2:** *Do you favor keeping Missouri's seat belt law as a "secondary law"—where you can only be pulled over or ticketed if you are observed committing another violation; or do you favor changing Missouri's seat belt law to a "primary law"—where you can be pulled over or ticketed if the officer clearly observes you are not wearing your seat belt?*

A majority (54.6%) of the respondents prefer to keep Missouri's seat belt law a secondary law, similar to the findings from recent years.

**Table 3: Secondary vs. Primary Law**

		2010 Phone Survey	2011 Phone Survey	2012 Phone Survey	2013 Phone Survey	2014 Phone Survey	2015 Phone Survey
Do you favor keeping Missouri's seat belt law as a "secondary law" - where you can only be pulled over or ticketed if you are observed committing another violation; or do you favor changing Missouri's seat belt law to a "primary law" - where you can be pulled over or ticketed if the officer clearly observes you are not wearing your seat belt?	Keep "secondary law"	54.7%	51.4%	51.0%	52.5%	57.0%	54.6%
	Change to "primary law"	41.1%	38.5%	41.2%	36.7%	36.1%	39.0%
	No Opinion/ Refused	4.2%	10.0%	7.8%	10.8%	6.8%	6.5%

**Question 3:** *Currently, the fine for violating Missouri's seat belt law is \$10. Would you support an increase in the fine associated with this violation?*

A slight majority (51.6%) preferred to leave the penalty for violating the law unchanged. All responses were statistically identical to those from the previous year.

**Table 4: Statewide Support for Increasing Fine for Violating Seat Belt Law**

		2010 Phone Survey	2011 Phone Survey	2012 Phone Survey	2013 Phone Survey	2014 Phone Survey	2015 Phone Survey
Currently, the fine for violating Missouri's seat belt law is \$10. Would you support an increase in the fine associated with this violation?	Yes	46.6%	45.8%	43.7%	44.3%	45.3%	45.9%
	No	51.7%	50.1%	52.9%	51.9%	51.2%	51.6%
	No Opinion / Refused	1.8%	4.1%	3.4%	3.8%	3.5%	2.5%

**Question 3b:** *In your opinion, what should the fine associated with violating Missouri's seat belt law be?*

Question 3b was only asked of 1,079 respondents who supported an increase in the fine associated with not wearing a seatbelt (Question 3). Since the number of respondents for this question is smaller than for the other questions, the margin of error is slightly larger (3.0%).

Out of the minority who favored increasing the fine, a plurality (44.0%) thought the fine should range from \$25 to \$49. The second largest group (20.0%) thought the fine should range from \$50 to \$74. These were also the two largest groups the last five years out of the minority who wished to increase the fine.

**Table 5: Respondent Input on Increasing Fine**

		2010 Phone Survey	2011 Phone Survey	2012 Phone Survey	2013 Phone Survey	2014 Phone Survey	2015 Phone Survey
In your opinion, what should the fine associated with violating Missouri's seat belt law be?	Under \$25	14.1%	17.0%	14.5%	17.3%	15.7%	17.3%
	\$25 to \$49	38.8%	31.0%	35.6%	36.5%	35.6%	44.0%
	\$50 to \$74	25.9%	21.6%	24.5%	22.9%	23.4%	20.0%
	\$75 to \$100	12.9%	16.1%	13.6%	12.2%	14.0%	10.9%
	Over \$100	6.7%	11.8%	8.9%	8.7%	9.3%	6.2%
	No Opinion/Refused	1.6%	2.5%	2.9%	2.4%	2.0%	1.6%
	Margin of Error	2.7%	4.5%	3.0%	3.0%	3.0%	3.0%

**Question 4:** *In the past 60 days, have you read, seen or heard anything about seat belt law enforcement by police?*

The vast majority of the respondents (82.4%) were not aware of any publicity concerning seat belt law enforcement. While statistically similar to the previous year, this continued a downward trend in awareness since 2010. There may be several reasons for this trend. First of all, people have many more options for their free time, making it much more difficult to reach them. People have access to more video and audio options than ever before, many of which are now available directly over the internet making local advertising very challenging. Secondly, this research measures the statewide perception on the issues being discussed. However, MoDOT may spend its marketing efforts targeting citizens at special risk. If so, any report of the statewide results will underestimate the effectiveness of publicity efforts as the responses from the citizens not being targeted make up a significant portion of the overall measure for this research.

**Table 6: Seat Belt Law Enforcement Publicity Awareness**

		2010 Phone Survey	2011 Phone Survey	2012 Phone Survey	2013 Phone Survey	2014 Phone Survey	2015 Phone Survey
In the past 60 days, have you read, seen, or heard anything about seat belt law enforcement by police?	Yes	31.7%	29.0%	26.5%	20.9%	17.7%	17.5%
	No	68.1%	70.3%	73.2%	78.7%	81.5%	82.4%
	No Opinion / Refused	0.2%	0.7%	0.2%	0.4%	0.8%	0.1%

**Question 5:** *What do you think the chances are of getting a ticket if you don't wear your safety belt?*

Opinions varied greatly on this issue, but a plurality (35.1%) thought people who did not wear their seat belt would only rarely get a ticket. 47.6% of the respondents thought people would be caught at least half of the time.

The number of people who thought someone would always get a ticket for not wearing a seatbelt was similar to the findings since 2012.

**Table 7: Perceived Chance of Obtaining Ticket for Violating Seat Belt Laws**

		2010 Phone Survey	2011 Phone Survey	2012 Phone Survey	2013 Phone Survey	2014 Phone Survey	2015 Phone Survey
What do you think the chances are of getting a ticket if you don't wear your seat belt?	Always	12.4%	7.6%	12.9%	12.4%	10.6%	13.6%
	Most of the time	16.2%	15.0%	15.1%	15.9%	15.9%	15.3%
	Half of the time	21.4%	20.5%	19.7%	16.5%	20.5%	18.7%
	Rarely	37.4%	40.8%	36.4%	35.2%	36.3%	35.1%
	Never	10.0%	7.1%	8.5%	10.5%	10.0%	9.9%
	No Opinion/Refused	2.6%	9.0%	7.4%	9.6%	6.7%	7.4%

## Speeding Issues

Missouri drivers answered four questions concerning speeding.

**Question 6:** *On a local road with a speed limit of 30 mph, how often do you drive faster than 35 mph?*

72.4% of Missouri drivers stated they never or rarely drive more than 35 mph when the speed limit is 30 mph, similar to the findings from recent years.

**Table 8: Speeding in 30 MPH Zones**

		2010 Phone Survey	2011 Phone Survey	2012 Phone Survey	2013 Phone Survey	2014 Phone Survey	2015 Phone Survey
On a local road with a speed limit of 30 mph, how often do you travel faster than 35 mph?	Always	4.3%	4.2%	4.2%	3.9%	3.3%	2.5%
	Most of the time	9.8%	8.0%	9.5%	10.5%	10.8%	10.4%
	Half of the time	13.0%	15.1%	14.9%	12.4%	12.7%	13.3%
	Rarely	44.7%	43.8%	39.0%	39.5%	48.3%	44.7%
	Never	27.7%	28.2%	31.2%	32.3%	24.4%	27.6%
	Refused	0.5%	0.7%	1.3%	1.4%	0.5%	1.4%

**Question 7:** *On a local road with a speed limit of 70 mph, how often do you drive faster than 75 mph?*

86.8% of Missouri drivers stated they never or rarely drive more than 75 mph when the speed limit is 70 mph on local roads.

**Table 9: Speeding in 70 MPH Zones**

		2010 Phone Survey	2011 Phone Survey	2012 Phone Survey	2013 Phone Survey	2014 Phone Survey	2015 Phone Survey
On a local road with a speed limit of 70 mph, how often do you driver faster than 75 mph?	Always	2.6%	1.8%	2.2%	1.9%	1.3%	1.6%
	Most of the time	3.5%	3.4%	4.0%	4.0%	3.7%	4.4%
	Half of the time	7.2%	9.6%	8.5%	5.9%	6.5%	6.9%
	Rarely	32.3%	38.0%	32.7%	31.2%	39.2%	37.6%
	Never	54.2%	46.2%	51.7%	56.4%	48.9%	49.1%
	Refused	0.2%	1.0%	0.9%	0.6%	0.3%	0.3%

In 2015, females between 18 to 29 were more likely to speed on roads with speed limits of 30 mph compared to other groups. Women between 30 and 49 and men between 30 and 64 were more likely to speed on roads with speed limits of 70 mph. All age and gender segments were more likely to speed on roads with a 30 mph speed limit than roads with a 70 mph speed limit. In a change from last year, this was not true of motorcyclists. While they remain the group most likely to speed on roads with a speed limit of 70 mph, this year motorcyclists stated they were less likely to speed on roads with speed limits of 30 mph than drivers of other vehicles. It is important to understand that the sample size of motorcyclists is very small, thus there is likely to be greater variation from year to year in this group. In keeping with the findings since 2010, there was no correlation between speeding and any publicity about relevant law enforcement activities; nor was there any correlation between speeding and the respondent's perception of the chance of being caught.

In 2014, men between 40 to 49 years of age were more likely to speed than other groups on local roads with speed limits of 30 mph while men 30 to 39 were more likely to speed on faster roads with speed limits of 70 mph. Similar to last year, women 65 and older were the least likely to speed under both 30 and 70 mph limits. Also similar to last year, all segments were more likely to speed on local roads with a speed limit of 30 mph than on local roads with speed limits of 70 mph. Motorcyclists continue to be the most prevalent speeders on roads with speed limits of 30 mph and this year reported being the most likely to speed on roads with speed limits of 70 miles per hour. In keeping with the findings since 2010, there was no correlation between speeding and any publicity about relevant law enforcement activities; nor was there any correlation between speeding and the respondent's perception of the chance of being caught.

In 2013, women between 30 to 39 years of age were more likely to speed than other groups on both local roads with speed limits of 30 mph and faster roads with speed limits of 70 mph. Similar to last year, women 65 and older were the least likely to speed under both 30 and 70 mph limits. Motorcyclists continue to be the most prevalent speeders on roads with speed limits of 30 mph. As has been the case in the past, truck (non-pickup) drivers were the least likely to speed on roads with speed limits of 30 mph, but the most likely to speed on local roads with speed limits of 70 mph. There was no correlation between speeding and any publicity about relevant law enforcement activities; nor was there any correlation between speeding and the respondent's perception of the chance of being caught.

In 2012, people between 18 to 29 years of age and males 40 to 49 years of age were most likely to speed on local roads with a speed limit of 30 mph. On roads with speed limits of 70 mph, males between 18 to 49 and females between 30 to 39 were more likely to speed than other groups. Women 65 and older were the least likely to speed under both 30 and 70 mph limits. All segments were more likely to speed on local roads with a speed limit of 30 mph than on local roads with speed limits of 70 mph. Motorcyclists and drivers of other types of trucks (not pickups) were the outlying cases for speeding, but their behavior was the inverse of each other. Motorcyclists said they were the most likely to speed on local roads with speed limits of 30 mph, but the least like to speed on roads where the speed limit was 70 mph. Truck (non-pickup) drivers were the least likely to speed on roads with speed limits of 30 mph, but the most likely to speed on local roads with speed limits of 70 mph. As was the case in the last two years, there was no correlation between awareness of speed enforcement by police and speeding behavior nor between speeding and the respondent's perception of the chance of being caught.

In 2011 the results were similar but varied slightly. Those most likely to speed were anyone between 18 to 29, males 40 to 49, and females 65 and older. Those who stated they drove an “other type of truck” were more likely to speed than drivers of other vehicles followed by motorcyclists. Just like 2010, there was no correlation between speeding and any publicity about relevant law enforcement activities; nor was there any correlation between speeding and the respondent’s perception of the chance of being caught.

In 2010 those most likely to speed were either males between 18 to 29 years of age or females between 40 to 49 years of age. Motorcycle drivers were much more likely to speed than other drivers, followed by those who stated they drove an “other type of truck” (i.e., a truck that was neither a pickup truck, a SUV, nor a crossover). There was no correlation between speeding and any publicity about relevant law enforcement activities; nor was there any correlation between speeding and the respondent’s perception of the chance of being caught.



**Question 8:** *In the past 30 days, have you read, seen or heard anything about speed enforcement by police?*

The majority (73.3%) of Missouri drivers were unaware of any recent publicity regarding speed enforcement. This was virtually identical to the findings from last year.

**Table 10: Speeding Enforcement Publicity Awareness**

		2010 Phone Survey	2011 Phone Survey	2012 Phone Survey	2013 Phone Survey	2014 Phone Survey	2015 Phone Survey
In the past 30 days, have you read, seen or heard anything about speed enforcement by police?	Yes	37.4%	31.4%	34.6%	28.0%	28.1%	26.2%
	No	62.4%	67.9%	65.0%	71.6%	71.5%	73.3%
	No Opinion / Refused	0.2%	0.7%	0.4%	0.4%	0.5%	0.4%

**Question 9:** *What do you think the chances are of getting a ticket if you drive over the speed limit?*

Two-thirds (66.6%) of Missouri drivers thought their chances of receiving a ticket if they speed were at least fifty percent. This was also similar to the findings since 2011.

**Table 11: Perceived Chance of Obtaining Ticket for Speeding**

		2010 Phone Survey	2011 Phone Survey	2012 Phone Survey	2013 Phone Survey	2014 Phone Survey	2015 Phone Survey
What do you think the chances are of getting a ticket if you drive over the speed limit?	Always	11.3%	8.5%	10.2%	9.9%	7.3%	8.1%
	Most of the time	27.4%	26.4%	26.3%	27.3%	27.5%	22.9%
	Half of the time	35.3%	32.8%	30.9%	31.4%	35.6%	35.6%
	Rarely	21.4%	24.2%	26.3%	23.0%	25.1%	27.1%
	Never	3.4%	4.5%	3.6%	4.3%	2.8%	3.6%
	No Opinion/Refused	1.3%	3.5%	2.7%	4.1%	1.6%	2.7%

### Cell Phone Use While Driving

Respondents were asked three questions about cell phone use while driving. The first two questions were added in 2012.

**Question 10:** *How often do you talk on a hand-held cellular phone while driving a car, van, sport utility vehicle, or pick-up?*

88.4% of Missouri drivers stated they rarely or never talk on a cell phone while driving. 11.2% of Missourians talk at least half of the time they drive.

**Table 12: Frequency of Talking while Driving**

		2012 Phone Survey	2013 Phone Survey	2014 Phone Survey	2015 Phone Survey
How often do you talk on a hand-held cellular phone while driving a car, van, sport utility vehicle, or pick-up?	Always	1.0%	1.0%	0.7%	0.7%
	Most of the Time	2.6%	3.5%	1.8%	2.2%
	Half of the Time	9.8%	8.1%	9.7%	8.4%
	Rarely	44.4%	39.0%	44.0%	43.4%
	Never	41.8%	47.9%	43.5%	45.0%
	No Opinion/Refused	0.3%	0.5%	0.5%	0.4%

**Question 11:** *How often do you use a hand-held cellular phone for texting while driving a car, van, sport utility vehicle, or pick-up?*

99.1% of Missouri drivers stated they rarely or never text on a cell phone while driving.

**Table 13: Frequency of Texting while Driving**

		2012 Phone Survey	2013 Phone Survey	2014 Phone Survey	2015 Phone Survey
How often do you use a hand-held cellular phone for texting while driving a car, van, sport utility vehicle, or pick-up?	Always	0.4%	0.0%	0.1%	0.1%
	Most of the Time	0.4%	0.2%	0.1%	0.1%
	Half of the Time	1.5%	0.8%	0.5%	0.5%
	Rarely	11.0%	7.6%	9.6%	8.9%
	Never	86.3%	91.2%	89.1%	90.3%
	No Opinion/Refused	0.4%	0.3%	0.6%	0.2%

**Question 12:** *Many states have passed laws which restrict or ban cellular phone use, including texting, while driving. What level of restrictions would you support regarding cellular phone usage while driving?*

92.5% of Missouri drivers favored some type of restriction on how people could use cell phones while driving. 29.9% favored banning all cell phone use by drivers, while a majority (62.6%) wanted to ensure drivers could still use cell phones for talking while seeing the need for some restrictions. These results were similar to previous findings.

**Table 14: Statewide Opinions Regarding Cell Phone Restrictions**

	2010 Phone Survey	2011 Phone Survey	2012 Phone Survey	2013 Phone Survey	2014 Phone Survey	2015 Phone Survey	
Many states have passed laws which restrict or ban cellular phone use, including texting, while driving. What level of restrictions would you support regarding cellular phone usage while driving?	Full Restrictions - No Cellular Phone Use Allowed	39.3%	34.2%	34.0%	28.9%	32.5%	29.9%
	Ban on Texting While Driving, Phone Use Allowed	24.7%	30.8%	22.8%	21.2%	18.8%	17.9%
	Ban on Texting While Driving, Hands-Free Phone Device Allowed	20.1%	16.4%	16.8%	14.2%	19.1%	17.0%
	Hands-Free Phone Device Use Only	12.8%	14.0%	19.7%	26.8%	23.2%	27.7%
	No Restrictions	2.4%	3.6%	4.4%	5.6%	3.8%	4.4%
	No Opinion / Refused	0.7%	1.0%	2.4%	3.1%	2.5%	3.1%

In 2015 women 65 and older were the least likely to drive while talking on a cell phone whereas females from 30 to 49 were the most likely group to talk on a cellular phone while driving. However, at just under 18% (17.9% for women 30 to 39 and 17.8% for women 40 to 49), this is significantly lower than the measures recorded in previous years. Self-reported texting while driving also continued to decline. In 2015, males 40 to 49 were the most likely age/gender segment to text while driving and only 2% of this group said they did so at least 50% of their driving time.

In 2014 men 65 and older were the least likely to talk on a cell phone while driving. As has been the case since this question was first asked, females between 30 to 39 were the most likely group to talk on a cell phone while driving with 22.3% of this segment stating they do so fifty percent of the time or more.

In 2013 women 65 and older were the least likely to talk on a cell phone while driving. Females between 30 to 39 continue to be the most likely group to talk on a cell phone while driving with 24.3% of this segment stating they do so fifty percent of the time or more. This segment was also most likely to text while driving, but only 3.4% texted at least half the time they were driving.

In 2012 females between 30 to 39 years of age were much more likely to talk on a cell phone while driving than other groups with 27.8% of this segment stating that they do so at least half of the time they are driving. People between 18 to 29 were more likely to text while driving than other segments, but only about 4% of this segment texted at least half the time they were driving.

### **Alcohol Impaired Driving**

Missouri drivers were asked three questions regarding alcohol impaired driving. When these questions were first asked in 2010, the researchers were concerned that people might not answer these questions honestly considering the legal and ethical implications of driving under the influence. However, the survey operators had the consistent impression that people were either answering these questions honestly or simply refusing to answer the question. The same calling center has been used since the 2010 survey and the call center operators have had similar impressions every year they have conducted the surveys.

**Question 13:** *In the past 60 days, how many times have you driven a motor vehicle within two (2) hours after drinking alcoholic beverages?*

89.4% of Missouri drivers stated that they had not driven a vehicle within two hours of consuming an alcoholic beverage anytime in the last sixty days. This is similar to last year's findings. 8.1% of Missouri drivers admitted to having done so at least once in the last sixty days. Another 2.5% refused to answer the question.

Researchers usually hesitate to draw conclusions from refusals, but after considering the implications for self-incrimination and the impressions of the survey operators, Heartland Market Research concluded that approximately 10.6% of Missouri drivers have driven under the influence of alcohol in the last sixty days. Considering the margin of error, this is similar to the findings that have been measured most years of this study (11.5% in 2010, 18.7% in 2011, 8.3% in 2012, 12.7% in 2013, and 9.3% in 2014).

Out of those who admitted to drinking before driving, the average driver did so about three times in the last sixty days (average of 3.1 times). This is the lowest amount recorded since Heartland became involved with this research in 2010. It compares to an average of 3.6 times in 2014 and 2013, 5.5 times in 2012, 6.2 times in 2011, and an average of 5.2 times in 2010.

**Table 15: Statewide Drinking Behavior before Driving**

		2010 Phone Survey	2011 Phone Survey	2012 Phone Survey	2013 Phone Survey	2014 Phone Survey	2015 Phone Survey
In the past 60 days, how many times have you driven a vehicle within two (2) hours after drinking alcoholic beverages?	0	88.20%	81.30%	91.70%	87.30%	90.71%	89.41%
	1	3.20%	4.60%	2.50%	2.20%	2.57%	2.68%
	2	3.00%	1.80%	2.10%	2.60%	2.18%	2.49%
	3	0.80%	1.10%	0.40%	0.70%	0.62%	0.89%
	4	0.60%	2.20%	0.30%	0.60%	0.36%	0.75%
	5	0.30%	0.40%	0.60%	0.40%	0.45%	0.25%
	6	0.40%	0.00%	0.30%	0.10%	0.16%	0.29%
	7	0.00%	0.00%	0.00%	0.10%	0.03%	0.09%
	8	0.00%	0.10%	0.10%	0.20%	0.00%	0.12%
	10	0.50%	0.40%	0.10%	0.20%	0.21%	0.11%
	12	0.10%	0.00%	0.00%	0.10%	0.02%	0.15%
	14	0.00%	0.00%	0.10%	0.00%	0.00%	0.00%
	15	0.00%	0.30%	0.00%	0.00%	0.00%	0.00%
	16	0.00%	0.00%	0.00%	0.00%	0.00%	0.10%
	20	0.10%	0.00%	0.00%	0.00%	0.03%	0.14%
	24	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%
	25	0.00%	0.00%	0.00%	0.10%	0.01%	0.00%
	30	0.10%	0.40%	0.00%	0.00%	0.00%	0.02%
	60	0.20%	0.10%	0.30%	0.10%	0.09%	0.00%
Refused		2.20%	7.30%	1.50%	5.50%	2.58%	2.52%

Similar to last year, in 2015 males 65 years of age and older were most likely to drive under the influence of alcohol, closely followed by males 40 to 49 years of age. For every age category, women were less likely to drive under the influence of alcohol than males. Motorcyclists and pickup truck drivers were more likely to drive under the influence than drivers of other vehicles. Drivers of other types of trucks, closely followed by van/minivan drivers, were least likely to drive under the influence. Drivers residing in highly urbanized areas were more likely to drive after consuming alcohol than residents of less populated areas. While awareness of DUI enforcement was not correlated with stated behavior, the expectation of being ticketed reduced the likelihood of DUI behavior similar to the results in 2014, 2013, and 2011.

In 2014 those most likely to drive under the influence of alcohol were males of 65 years of age and older. Men were much more likely to drive after drinking than women. As was the case for the two previous years, men 18 to 29 stated they drove after drinking less than the other male segments, but this group was still more likely to drive under the influence than women 18 to 29 (the female age range most likely to drink and drive). Drivers of motorcycles were more likely to drive under the influence than drivers of other vehicles followed by drivers of pickup trucks. Drivers of vans or minivans were the least likely to drive after drinking. Those who lived in highly urbanized areas were most likely to drive under the influence of alcohol compared to residents of other areas. While awareness of DUI enforcement was not correlated with stated behavior, the expectation of being ticketed reduced the likelihood of DUI behavior similar to the results in 2013 and 2011.

In 2013 those most likely to drive under the influence of alcohol were males 50 to 64 years of age and older. Men were much more likely to drive after drinking than women. As was the case in 2012, men 18 to 29 stated they drove after drinking less than the other male segments, but this group was still more likely to drive under the influence than women 30 to 39 (the female age range most likely to drive and drive). Drivers of pickup trucks were more likely to drive under the influence than drivers of other vehicles followed by drivers of SUVs/crossovers. In a change from the previous year, drivers of other types of truck were the least likely to drive after drinking. While awareness of DUI enforcement was not correlated with stated behavior, the expectation of being ticketed reduced the likelihood of driving under the influence.

In 2012 those most likely to drive under the influence of alcohol were males 40 years of age and older. Men were much more likely to drive after drinking than women. Men 18 to 29 stated they drove after drinking less than the other male segments, but this group was still more likely to drive under the influence than women 30 to 39 (the female age range most likely to drive and drive). Drivers of motorcycles, SUVs, and all types of trucks were more likely to drive under the influence than drivers of other vehicles. Neither awareness of DUI enforcement nor expectations of being ticketed was correlated with drinking and driving behavior.

In 2011 those most likely to drive under the influence of alcohol were again males between 50 to 64 years of age. Males 18 to 29 and females 30 to 39 were also more likely to drive under the influence than other segments. Similar to 2010, neither motorcyclists nor drivers of “other type of truck” stated they had consumed alcohol within two hours of driving, but this year some of the motorcyclists refused to answer the question. While awareness of DUI enforcement was not correlated with stated behavior, in 2011 the expectation of being ticketed reduced the likelihood of driving under the influence.

In 2010 those most likely to drive under the influence of alcohol were males between 50 to 64 years of age. Unlike other risky behavior measured in this survey, drivers of motorcycles and those who stated they drove an “other type of truck” were the least likely to drink before driving. According to the research, not a single motorcycle driver or “other” truck driver stated they had consumed alcohol within two hours of driving.

**Question 14:** *In the past 30 days, have you read, seen or heard anything about alcohol impaired driving (or drunk driving) enforcement by police?*

Approximately half (47.2%) of Missouri drivers were aware of recent publicity regarding DUI enforcement. This was similar to the findings of the previous years. The timing of this survey made these results intriguing. Before 2013, this survey has been conducted in the summer (typically in June). In 2013 the survey was conducted in March, in 2014 the survey was conducted in April, and in 2015 the survey was conducted in March. Results were quite consistent despite the variation in timing.

**Table 16: DUI Enforcement Publicity Awareness**

		2010 Phone Survey	2011 Phone Survey	2012 Phone Survey	2013 Phone Survey	2014 Phone Survey	2015 Phone Survey
In the past 30 days, have you read, seen or heard anything about alcohol impaired driving (or drunk driving) enforcement by police?	Yes	54.9%	48.4%	49.9%	52.0%	50.6%	47.2%
	No	44.8%	50.6%	49.3%	47.1%	48.8%	52.1%
	No Opinion / Refused	0.3%	1.0%	0.8%	0.9%	0.5%	0.7%

**Question 15:** *What do you think the chances are of someone getting arrested if they drive after drinking?*

69.0% of the respondents expected people who drove after drinking would be arrested at least half of the time, statistically identical to that of the previous measurements.

**Table 17: Perceived Chance of Arrest after DUI**

		2010 Phone Survey	2011 Phone Survey	2012 Phone Survey	2013 Phone Survey	2014 Phone Survey	2015 Phone Survey
What do you think the chances are of someone getting arrested if they drive after drinking?	Always	16.6%	14.1%	16.9%	17.4%	13.0%	13.4%
	Most of the time	21.5%	22.9%	21.9%	24.3%	23.4%	21.3%
	Half of the time	34.2%	32.1%	32.5%	30.5%	34.4%	34.3%
	Rarely	24.6%	27.4%	24.4%	23.0%	25.8%	26.6%
	Never	1.2%	0.7%	1.7%	0.7%	0.8%	1.1%
	No Opinion/Refused	2.0%	2.8%	2.7%	4.1%	2.6%	3.4%

## Principal Investigator and Project Members

### Heartland Market Research LLC

- Gentry, Lance      Principal Investigator: The Principal Investigator (PI) had the primary responsibility for achieving the objectives of the project, while also ensuring the project complied with the financial, administrative, and legal constraints associated with the project contract. General responsibilities of the PI included the following:
- Complete the project as documented in the contract (e.g., weight and analyze results, write reports, manage subcontractor, etc.) or make changes to the plan as needed to ensure all work is completed in accordance with the research goals and objectives within the original proposal
  - Fulfill the project's financial plan as presented in the funded proposal or make changes to the plan as needed to ensure all work is completed within the original budget
  - Report project progress to MoDOT to ensure sponsor is kept aware of key activities and benchmarks
  - Keep records of all project related expenses

### Quancor Virtual Sales and Marketing

- Korn, Marie      President and CEO: Responsible for overall operations of the company. On this project she helped program caller scripts and ensured that QVSM's Operations staff had all the tools they need to complete all jobs and exceed the project goals.
- Korn, Steve      Vice-President of Sales: Responsible for ensuring how QVSM's telemarketing merges in with the rest of QVSM's clients' marketing efforts to achieve their sales and marketing goals. Duties also included contacting Heartland Market Research about any issues regarding this project and was day-to-day contact regarding the progress of survey.
- Bitter, Tammy      Operations Manager: Responsible for the day-to-day operations for QVSM.
- Doddy, Terry      Traffic Manager: Ensured survey calls were run at the best times to maximize their results. This included watching what days agents called, what times of day they run and which agents made the calls.
- Ying, Darral      Quality Manager: Responsible for QVSM's Quality Assurance staff.



**Works Cited**

Nielsen Media Research, *Glossary of Media Terms*, accessed from <http://www.nielsenmedia.com/glossary/> on June 19, 2011

Pickrell, Timothy M and Tony J. Ye (2008), *Seat Belt Use in 2008 – Overall Results*, Traffic Safety Facts Research Note, NHTSA's National Center for Statistics and Analysis, <http://www-nrd.nhtsa.dot.gov/pubs/811036.pdf>

2014 Statewide Safety Belt Survey conducted June 2 – June 15, 2014 for MoDOT

## Appendix A: Work Plan

Given the objectives of this project, Heartland proposed a phone survey of Missouri drivers. MoDOT notified Heartland that their proposal was the best of those submitted on February 25 and provided a contract to Heartland on February 27. Heartland immediately notified Quancor Virtual Sales and Marketing (QVSM) that the project was underway.

After Heartland received the contract from MoDOT, Quancor Virtual Sales and Marketing immediately started programming the final version of the survey into their call center system. Next their callers and their management team were trained on the new scripts. Each caller was thoroughly tested on the scripts before they were permitted to make any live calls.

Quancor Virtual Sales and Marketing started surveying people on March 9, 2015. All survey answers were recorded and stored for 30 days in case MoDOT wanted to review any of the phone interviews. Quancor Virtual Sales and Marketing delivered 2,502 completed surveys to Heartland on March 31, 2015. Heartland organized the data and provided top line (unweighted) results to MoDOT on April 1, 2015. Heartland analyzed the data and wrote a draft report for MoDOT. In accordance with MoDOT guidelines, the report was written using their Research Report Template to ensure a consistent format with other technical reports.

Heartland provided MoDOT with an initial report on April 24, 2015. MoDOT reviewed the document and provide feedback on the report to Heartland on May 5. Heartland then delivered the final report to MoDOT on May 5.

**Table 18: Timeline for 2015 Surveys**

Schedule of Events	Completion
MoDOT awarded the contract to Heartland	February 27
QVSM programs survey into call center system and tests program	March 6
QVSM conducts regional stratified survey starting March 9	March 31
QVSM provides all data to Heartland	March 31
Heartland provides top line results to MoDOT	April 1
Heartland analyzes data and provides draft report to MoDOT	April 24
MoDOT provides Heartland with feedback on draft report	May 5
Heartland completes final report and provides to MoDOT	May 5

## Appendix B: Survey Script

### Phone Survey Script

Hello, this is (RepName) calling on behalf of Heartland Market Research. We are conducting a brief survey about transportation issues facing people in Missouri. We are not selling anything, this number was selected at random, and no personal information will be gathered. This means your answers will be completely anonymous – we are just interested in the overall opinion of Missouri drivers.

- a. Are you a licensed Missouri driver?
  - a. Yes
  - b. No [end interview]
- b. What is your age?
  - a. 18-29 years old
  - b. 30-39 years old
  - c. 40-49 years old
  - d. 50-64 years old
  - e. 65+ years old

[If the respondent is under 18 years old, ask respondent if anyone over the age of 18 is available, if not, end interview]
- c. Are you male or female?
  - a. Male
  - b. Female
- d. What is your ethnicity?
  - a. American Indian or Alaska Native
  - b. Asian
  - c. Black or African American
  - d. Hispanic or Latino
  - e. Native Hawaiian or Other Pacific Islander
  - f. White

[Respondent may select multiple categories]
- e. Is the vehicle you drive most often a:
  - a. Car
  - b. Van or Minivan
  - c. Motorcycle
  - d. Sport Utility Vehicle or Crossover
  - e. Pickup Truck
  - f. Other type of truck
- f. In what county do you currently live?
  - a. \_\_\_\_\_ county name
- g. What is your home zip code:
  - a. \_\_\_\_\_ zip code

- h. What is your household income?
  - a. Under \$30,000
  - b. \$30,000 – \$49,999
  - c. \$50,000 – \$69,999
  - d. \$70,000 or greater
  - e. I prefer not to answer [do not ask, only use if respondent volunteers this answer]
  
- 1. How often do you use seat belts when you drive or ride in a car, van, sport utility vehicle or pick up?
  - a. Always
  - b. Most of the Time
  - c. Half of the Time
  - d. Rarely
  - e. Never
  
- 2. Do you favor keeping Missouri's seat belt law as a "secondary law"—where you can only be pulled over or ticketed if you are observed committing another violation; or do you favor changing Missouri's seat belt law to a "primary law"—where you can be pulled over or ticketed if the officer clearly observes you are not wearing your seat belt?
  - a. Keep “secondary law”
  - b. Change to “primary law”
  
- 3. Currently, the fine for violating Missouri's seat belt law is \$10. Would you support an increase in the fine associated with this violation?
  - a. Yes [Skip to Question 3b]
  - b. No [Skip to Question 4]
  
- 3b. In your opinion, what should the fine associated with violating Missouri's seat belt law be?
  - a. Under \$25
  - b. \$25 - \$49
  - c. \$50 - \$74
  - d. \$75 - \$100
  - e. Over \$100
  
- 4. In the past 60 days, have you read, seen or heard anything about seat belt law enforcement by police?
  - a. Yes
  - b. No

5. What do you think the chances are of getting a ticket if you don't wear your safety belt?
  - a. Always
  - b. Most of the Time
  - c. Half of the Time
  - d. Rarely
  - e. Never
  
6. On a local road with a speed limit of 30 mph, how often do you drive faster than 35 mph?
  - a. Always
  - b. Most of the Time
  - c. Half of the Time
  - d. Rarely
  - e. Never
  
7. On a local road with a speed limit of 70 mph, how often do you drive faster than 75 mph?
  - a. Always
  - b. Most of the Time
  - c. Half of the Time
  - d. Rarely
  - e. Never
  
8. In the past 30 days, have you read, seen or heard anything about speed enforcement by police?
  - a. Yes
  - b. No
  
9. What do you think the chances are of getting a ticket if you drive over the speed limit?
  - a. Always
  - b. Most of the Time
  - c. Half of the Time
  - d. Rarely
  - e. Never
  
10. How often do you talk on a hand-held cellular phone while driving a car, van, sport utility vehicle, or pick-up?
  - a. Always
  - b. Most of the Time
  - c. Half of the Time
  - d. Rarely
  - e. Never

11. How often do you use a hand-held cellular phone for texting while driving a car, van, sport utility vehicle, or pick-up?
  - a. Always
  - b. Most of the Time
  - c. Half of the Time
  - d. Rarely
  - e. Never
  
12. Many states have passed laws which restrict or ban cellular phone use, including texting, while driving. What level of restrictions would you support regarding cellular phone usage while driving?
  - a. Full Restrictions – No Cellular Phone Use Allowed
  - b. Ban on Texting While Driving, Phone Use Allowed
  - c. Ban on Texting While Driving, Hands-Free Phone Device Allowed
  - d. Hands-Free Phone Device Use Only
  - e. No Restrictions
  
13. In the past 60 days, how many times have you driven a motor vehicle within two (2) hours after drinking alcoholic beverages?
  - a. \_\_\_\_\_ (number) times
  
14. In the past 30 days, have you read, seen or heard anything about alcohol impaired driving (or drunk driving) enforcement by police?
  - a. Yes
  - b. No
  
15. What do you think the chances are of someone getting arrested if they drive after drinking?
  - a. Always
  - b. Most of the Time
  - c. Half of the Time
  - d. Rarely
  - e. Never

Thank you very much. Have a great day/night.

## Appendix C: Additional Findings: Crosstabs of Interest

The survey results in the main report were weighted proportionally to the actual population in terms of geographic, gender, and age distributions. In this appendix, the results are presented by various variables of interest, such as by district and are unweighted.

The crosstabs that the researchers thought would be of most interest to MoDOT are presented in this appendix (all research questions by district and all research questions by category of residence). Heartland Market Research will gladly provide additional crosstabs upon request.

### Research Questions by District

Since the sample size for each district is smaller than the overall survey, the respective margin of error is greater. Margins of error are cumulative, so in order for a change from 2014 to 2015 to be statistically significant, it must be greater than the sum of the district's margin of error for these years. For example, for the St. Louis District, any change from 2014 to 2015 must be greater than 10.4% (5.2% + 5.2%) in order to be 95% certain it is truly a change in opinion or behavior.

**Table 19: Margin of Error by District**

Location	2010	2011	2012	2013	2014	2015
NW	4.5%	7.0%	5.2%	5.2%	5.2%	5.2%
NE	5.0%	7.9%	5.2%	5.2%	5.2%	5.1%
KC	5.4%	9.1%	5.1%	5.2%	5.2%	5.2%
CD	4.9%	7.5%	5.1%	5.2%	5.2%	5.2%
SL	5.7%	9.1%	5.0%	5.2%	5.2%	5.2%
SW	4.2%	6.7%	5.0%	5.1%	5.2%	5.2%
SE	4.1%	6.4%	5.0%	5.2%	5.1%	5.2%
State	1.8%	2.8%	1.9%	2.0%	2.0%	2.0%

**Table 20: District by Question 1**

		How often do you use seat belts when you drive or ride in a car, van, sport utility vehicle, or pick up?							Total
		Always	Most of the time	Half of the time	Rarely	Never	Opinion/Refused	No	
Districts	NW	Count 262 72.4%	63 17.4%	12 3.3%	15 4.1%	10 2.8%	0 0.0%	362 100.0%	
	% within Districts								
	NE	Count 263 72.5%	62 17.1%	15 4.1%	14 3.9%	9 2.5%	0 0.0%	363 100.0%	
	% within Districts								
	KC	Count 304 85.9%	35 9.9%	7 2.0%	2 0.6%	6 1.7%	0 0.0%	354 100.0%	
	% within Districts								
	CD	Count 289 81.0%	37 10.4%	13 3.6%	8 2.2%	8 2.2%	2 0.6%	357 100.0%	
	% within Districts								
	SL	Count 307 86.2%	20 5.6%	7 2.0%	8 2.2%	13 3.7%	1 0.3%	356 100.0%	
	% within Districts								
	SW	Count 278 78.8%	46 13.0%	13 3.7%	7 2.0%	9 2.5%	0 0.0%	353 100.0%	
	% within Districts								
	SE	Count 297 83.2%	33 9.2%	9 2.5%	11 3.1%	6 1.7%	1 0.3%	357 100.0%	
	% within Districts								
Total	Count	2000 79.9%	296 11.8%	76 3.0%	65 2.6%	61 2.4%	4 0.2%	2502 100.0%	
	% within Districts								



**Table 21: District by Question 2**

**Districts \* Do you favor keeping Missouri's seat belt law as a "secondary law"—where you can only be pulled over or ticketed if you are observed committing another violation; or do you favor changing Missouri's seat belt law to a "primary law"—where you can be pulled**

			Do you favor keeping Missouri's seat belt law as a "secondary law"—where you can only be pulled over or ticketed if you are observed committing another violation; or do you favor changing Missouri's seat belt law to a "primary law"—where you can be pulled			Total
			Keep "secondary law"	Change to "primary law"	No Opinion/Refused	
Districts	NW	Count	220	120	22	362
		% within Districts	60.8%	33.1%	6.1%	100.0%
	NE	Count	236	98	29	363
		% within Districts	65.0%	27.0%	8.0%	100.0%
	KC	Count	178	153	23	354
		% within Districts	50.3%	43.2%	6.5%	100.0%
	CD	Count	215	122	20	357
		% within Districts	60.2%	34.2%	5.6%	100.0%
	SL	Count	180	157	19	356
		% within Districts	50.6%	44.1%	5.3%	100.0%
	SW	Count	191	128	34	353
		% within Districts	54.1%	36.3%	9.6%	100.0%
	SE	Count	214	121	22	357
		% within Districts	59.9%	33.9%	6.2%	100.0%
Total		Count	1434	899	169	2502
		% within Districts	57.3%	35.9%	6.8%	100.0%

**Table 22: District by Question 3**

**Districts \* Currently, the fine for violating Missouri's seat belt law is \$10. Would you support an increase in the fine associated with this violation? Crosstabulation**

			Currently, the fine for violating Missouri's seat belt law is \$10. Would you support an increase in the fine associated with this violation?			Total
			Yes	No	No Opinion/Refused	
Districts	NW	Count	140	215	7	362
		% within Districts	38.7%	59.4%	1.9%	100.0%
	NE	Count	140	213	10	363
		% within Districts	38.6%	58.7%	2.8%	100.0%
	KC	Count	180	169	5	354
		% within Districts	50.8%	47.7%	1.4%	100.0%
	CD	Count	155	192	10	357
		% within Districts	43.4%	53.8%	2.8%	100.0%
	SL	Count	186	161	9	356
		% within Districts	52.2%	45.2%	2.5%	100.0%
	SW	Count	125	213	15	353
		% within Districts	35.4%	60.3%	4.2%	100.0%
	SE	Count	153	197	7	357
		% within Districts	42.9%	55.2%	2.0%	100.0%
Total		Count	1079	1360	63	2502
		% within Districts	43.1%	54.4%	2.5%	100.0%

**Table 23: District by Question 3b**

		In your opinion, what should the fine associated with violating Missouri's seat belt law be?							Total
		Under \$25	\$25 - \$49	\$50 - \$74	\$75 - \$100	Over \$100	No Opinion/Refused		
Districts	NW	Count % within Districts	22 15.7%	66 47.1%	28 20.0%	17 12.1%	6 4.3%	1 0.7%	140 100.0%
	NE	Count % within Districts	29 20.7%	60 42.9%	33 23.6%	7 5.0%	8 5.7%	3 2.1%	140 100.0%
	KC	Count % within Districts	32 17.7%	81 44.8%	38 21.0%	19 10.5%	10 5.5%	1 0.6%	181 100.0%
	CD	Count % within Districts	25 16.1%	63 40.6%	40 25.8%	17 11.0%	8 5.2%	2 1.3%	155 100.0%
	SL	Count % within Districts	27 14.5%	91 48.9%	35 18.8%	18 9.7%	11 5.9%	4 2.2%	186 100.0%
	SW	Count % within Districts	24 19.2%	50 40.0%	23 18.4%	16 12.8%	9 7.2%	3 2.4%	125 100.0%
	SE	Count % within Districts	33 21.6%	59 38.6%	31 20.3%	16 10.5%	12 7.8%	2 1.3%	153 100.0%
Total		Count % within Districts	192 17.8%	470 43.5%	228 21.1%	110 10.2%	64 5.9%	16 1.5%	1080 100.0%

**Table 24: District by Question 4**

**Districts \* In the past 60 days, have you read, seen or heard anything about seat belt law enforcement by police? Crosstabulation**

			In the past 60 days, have you read, seen or heard anything about seat belt law enforcement by police?			Total
			Yes	No	No Opinion/Refused	
Districts	NW	Count	74	287	1	362
		% within Districts	20.4%	79.3%	0.3%	100.0%
	NE	Count	78	284	1	363
		% within Districts	21.5%	78.2%	0.3%	100.0%
	KC	Count	71	282	1	354
		% within Districts	20.1%	79.7%	0.3%	100.0%
	CD	Count	51	304	2	357
		% within Districts	14.3%	85.2%	0.6%	100.0%
	SL	Count	63	293	0	356
		% within Districts	17.7%	82.3%	0.0%	100.0%
	SW	Count	56	297	0	353
		% within Districts	15.9%	84.1%	0.0%	100.0%
	SE	Count	57	299	1	357
		% within Districts	16.0%	83.8%	0.3%	100.0%
Total		Count	450	2046	6	2502
		% within Districts	18.0%	81.8%	0.2%	100.0%

**Table 25: District by Question 5**

**Districts \* What do you think the chances are of getting a ticket if you don't wear your safety belt? Crosstabulation**

Districts	What do you think the chances are of getting a ticket if you don't wear your safety belt?						Total
	Always	Most of the time	Half of the time	Rarely	Never	No Opinion/Refused	
NW	58	68	81	98	27	30	362
% within Districts	16.0%	18.8%	22.4%	27.1%	7.5%	8.3%	100.0%
NE	52	55	81	123	22	30	363
% within Districts	14.3%	15.2%	22.3%	33.9%	6.1%	8.3%	100.0%
KC	46	46	61	125	47	29	354
% within Districts	13.0%	13.0%	17.2%	35.3%	13.3%	8.2%	100.0%
CD	51	75	61	112	28	30	357
% within Districts	14.3%	21.0%	17.1%	31.4%	7.8%	8.4%	100.0%
SL	37	46	61	153	34	25	356
% within Districts	10.4%	12.9%	17.1%	43.0%	9.6%	7.0%	100.0%
SW	56	48	72	109	37	31	353
% within Districts	15.9%	13.6%	20.4%	30.9%	10.5%	8.8%	100.0%
SE	56	78	74	100	27	22	357
% within Districts	15.7%	21.8%	20.7%	28.0%	7.6%	6.2%	100.0%
Total	356	416	491	820	222	197	2502
% within Districts	14.2%	16.6%	19.6%	32.8%	8.9%	7.9%	100.0%

**Table 26: District by Question 6**

Districts	On a local road with a speed limit of 30 mph, how often do you drive faster than 35 mph? Crosstabulation								Total
	Always	Most of the time	Half of the time	Rarely	Never	No Opinion/Refused			
NW Count % within Districts	12 3.3%	33 9.1%	42 11.6%	162 44.8%	110 30.4%	3 0.8%			362 100.0%
NE Count % within Districts	8 2.2%	36 9.9%	49 13.5%	161 44.4%	102 28.1%	7 1.9%			363 100.0%
KC Count % within Districts	10 2.8%	28 7.9%	50 14.1%	157 44.4%	101 28.5%	8 2.3%			354 100.0%
CD Count % within Districts	9 2.5%	36 10.1%	43 12.0%	165 46.2%	97 27.2%	7 2.0%			357 100.0%
SL Count % within Districts	7 2.0%	47 13.2%	49 13.8%	161 45.2%	87 24.4%	5 1.4%			356 100.0%
SW Count % within Districts	16 4.5%	32 9.1%	40 11.3%	149 42.2%	112 31.7%	4 1.1%			353 100.0%
SE Count % within Districts	9 2.5%	41 11.5%	55 15.4%	150 42.0%	98 27.5%	4 1.1%			357 100.0%
Total Count % within Districts	71 2.8%	253 10.1%	328 13.1%	1105 44.2%	707 28.3%	38 1.5%			2502 100.0%

**Table 27: District by Question 7**

		On a local road with a speed limit of 70 mph, how often do you drive faster than 75 mph? Crosstabulation							Total
		Always	Most of the time	Half of the time	Rarely	Never	Opinion/Refused		
Districts	NW	Count	19	26	122	188	1	362	
		% within Districts	5.2%	7.2%	33.7%	51.9%	0.3%	100.0%	
	NE	Count	15	20	125	193	3	363	
		% within Districts	4.1%	5.5%	34.4%	53.2%	0.8%	100.0%	
	KC	Count	14	17	140	177	1	354	
		% within Districts	4.0%	4.8%	39.5%	50.0%	0.3%	100.0%	
	CD	Count	19	20	129	180	0	357	
		% within Districts	5.3%	5.6%	36.1%	50.4%	0.0%	100.0%	
	SL	Count	17	31	139	162	1	356	
		% within Districts	4.8%	8.7%	39.0%	45.5%	0.3%	100.0%	
	SW	Count	12	22	119	192	3	353	
		% within Districts	3.4%	6.2%	33.7%	54.4%	0.8%	100.0%	
	SE	Count	21	23	125	183	0	357	
		% within Districts	5.9%	6.4%	35.0%	51.3%	0.0%	100.0%	
Total		Count	117	159	899	1275	9	2502	
		% within Districts	4.7%	6.4%	35.9%	51.0%	0.4%	100.0%	

**Table 28: District by Question 8**

**Districts \* In the past 30 days, have you read, seen or heard anything about speed enforcement by police? Crosstabulation**

			In the past 30 days, have you read, seen or heard anything about speed enforcement by police?			
			Yes	No	No Opinion/Refused	Total
Districts	NW	Count	101	258	3	362
		% within Districts	27.9%	71.3%	0.8%	100.0%
	NE	Count	110	250	3	363
		% within Districts	30.3%	68.9%	0.8%	100.0%
	KC	Count	100	254	0	354
		% within Districts	28.2%	71.8%	0.0%	100.0%
	CD	Count	92	260	5	357
		% within Districts	25.8%	72.8%	1.4%	100.0%
	SL	Count	102	252	2	356
		% within Districts	28.7%	70.8%	0.6%	100.0%
	SW	Count	71	282	0	353
		% within Districts	20.1%	79.9%	0.0%	100.0%
	SE	Count	77	279	1	357
		% within Districts	21.6%	78.2%	0.3%	100.0%
Total		Count	653	1835	14	2502
		% within Districts	26.1%	73.3%	0.6%	100.0%



**Table 29: District by Question 9**

Districts * What do you think the chances are of getting a ticket if you drive over the speed limit? Crosstabulation	What do you think the chances are of getting a ticket if you drive over the speed limit?							Total
	Always	Most of the time	Half of the time	Rarely	Never	Opinion/Refused	No	
Districts NW Count % within Districts	31 8.6%	84 23.2%	136 37.6%	85 23.5%	11 3.0%	15 4.1%	362 100.0%	
NE Count % within Districts	27 7.4%	100 27.5%	129 35.5%	79 21.8%	10 2.8%	18 5.0%	363 100.0%	
KC Count % within Districts	32 9.0%	80 22.6%	137 38.7%	84 23.7%	13 3.7%	8 2.3%	354 100.0%	
CD Count % within Districts	30 8.4%	84 23.5%	125 35.0%	97 27.2%	10 2.8%	11 3.1%	357 100.0%	
SL Count % within Districts	20 5.6%	68 19.1%	127 35.7%	123 34.6%	11 3.1%	7 2.0%	356 100.0%	
SW Count % within Districts	30 8.5%	92 26.1%	108 30.6%	92 26.1%	20 5.7%	11 3.1%	353 100.0%	
SE Count % within Districts	36 10.1%	95 26.6%	122 34.2%	82 23.0%	11 3.1%	11 3.1%	357 100.0%	
Total Count % within Districts	206 8.2%	603 24.1%	884 35.3%	642 25.7%	86 3.4%	81 3.2%	2502 100.0%	

**Table 30: District by Question 10**

		Districts * How often do you talk on a hand-held cellular phone while driving a car, van, sport utility vehicle, or pick-up? Crosstabulation									
		How often do you talk on a hand-held cellular phone while driving a car, van, sport utility vehicle, or pick-up?									
		Always	Most of the time	Half of the time	Rarely	Never	No Opinion/Refused	Total			
Districts	NW	Count	1	8	26	159	167	1	362		
		% within Districts	0.3%	2.2%	7.2%	43.9%	46.1%	0.3%	100.0%		
NE	Count	3	4	36	166	151	3	363			
		% within Districts	0.8%	1.1%	9.9%	45.7%	41.6%	0.8%	100.0%		
KC	Count	4	6	29	156	159	0	354			
		% within Districts	1.1%	1.7%	8.2%	44.1%	44.9%	0.0%	100.0%		
CD	Count	4	8	23	165	157	0	357			
		% within Districts	1.1%	2.2%	6.4%	46.2%	44.0%	0.0%	100.0%		
SL	Count	1	8	26	143	175	3	356			
		% within Districts	0.3%	2.2%	7.3%	40.2%	49.2%	0.8%	100.0%		
SW	Count	4	8	36	147	157	1	353			
		% within Districts	1.1%	2.3%	10.2%	41.6%	44.5%	0.3%	100.0%		
SE	Count	1	8	29	149	167	3	357			
		% within Districts	0.3%	2.2%	8.1%	41.7%	46.8%	0.8%	100.0%		
Total	Count	18	50	205	1085	1133	11	2502			
		% within Districts	0.7%	2.0%	8.2%	43.4%	45.3%	0.4%	100.0%		

**Table 31: District by Question 11**

Districts * How often do you use a hand-held cellular phone for texting while driving a car, van, sport utility vehicle, or pick-up? Crosstabulation	How often do you use a hand-held cellular phone for texting while driving a car, van, sport utility vehicle, or pick-up?							Total
	Always	Most of the time	Half of the time	Rarely	Never	No Opinion/Refused		
Districts NW Count % within Districts	0 0.0%	1 0.3%	3 0.8%	35 9.7%	321 88.7%	2 0.6%	362 100.0%	
NE Count % within Districts	0 0.0%	0 0.0%	1 0.3%	34 9.4%	325 89.5%	3 0.8%	363 100.0%	
KC Count % within Districts	0 0.0%	0 0.0%	0 0.0%	38 10.7%	316 89.3%	0 0.0%	354 100.0%	
CD Count % within Districts	0 0.0%	0 0.0%	1 0.3%	34 9.5%	322 90.2%	0 0.0%	357 100.0%	
SL Count % within Districts	0 0.0%	0 0.0%	2 0.6%	23 6.5%	330 92.7%	1 0.3%	356 100.0%	
SW Count % within Districts	1 0.3%	1 0.3%	4 1.1%	24 6.8%	321 90.9%	2 0.6%	353 100.0%	
SE Count % within Districts	0 0.0%	1 0.3%	2 0.6%	28 7.8%	326 91.3%	0 0.0%	357 100.0%	
Total Count % within Districts	1 0.0%	3 0.1%	13 0.5%	216 8.6%	2261 90.4%	8 0.3%	2502 100.0%	

**Table 32: District by Question 12**

**Districts \* Many states have passed laws which restrict or ban cellular phone use, including texting, while driving. What level of restrictions would you support regarding cellular phone usage while driving? Crosstabulation**

		Many states have passed laws which restrict or ban cellular phone use, including texting, while driving. What level of restrictions would you support regarding cellular phone usage while driving?					Total	
		Full Restrictions - No Cellular Phone Use Allowed	Ban on Texting While Driving, Phone Use Allowed	Ban on Texting While Driving, Hands-Free Phone Device Allowed	Hands-Free Phone Device Use Only	No Restrictions	Opinion/Refused	Total
Districts	NW	Count 115 31.8%	75 20.7%	66 18.2%	75 20.7%	15 4.1%	16 4.4%	362 100.0%
	% within Districts							
	NE	Count 106 29.2%	75 20.7%	49 13.5%	104 28.7%	17 4.7%	12 3.3%	363 100.0%
	% within Districts							
	KC	Count 110 31.1%	61 17.2%	53 15.0%	101 28.5%	16 4.5%	13 3.7%	354 100.0%
	% within Districts							
	CD	Count 106 29.7%	68 19.0%	61 17.1%	105 29.4%	12 3.4%	5 1.4%	357 100.0%
	% within Districts							
	SL	Count 110 30.9%	49 13.8%	69 19.4%	99 27.8%	18 5.1%	11 3.1%	356 100.0%
	% within Districts							
	SW	Count 114 32.3%	71 20.1%	50 14.2%	94 26.6%	12 3.4%	12 3.4%	353 100.0%
	% within Districts							
	SE	Count 111 31.1%	70 19.6%	53 14.8%	99 27.7%	10 2.8%	14 3.9%	357 100.0%
	% within Districts							
Total	Count	772 30.9%	469 18.7%	401 16.0%	677 27.1%	100 4.0%	83 3.3%	2502 100.0%
	% within Districts							

**Table 33: District by Question 13**

**In the past 60 days, how many times have you driven a motor vehicle within two (2) hours after drinking alcoholic beverages? \* Districts Crosstabulation**

		Districts							Total	
		NW	NE	KC	CD	SL	SW	SE		
In the past 60 days, how many times have you driven a motor vehicle within two (2) hours after drinking alcoholic beverages?	0	Count	327	327	323	321	299	326	334	2257
		%	90.3%	90.1%	91.2%	89.9%	84.0%	92.4%	93.6%	90.2%
	1	Count	10	9	9	5	14	6	4	57
		%	2.8%	2.5%	2.5%	1.4%	3.9%	1.7%	1.1%	2.3%
	2	Count	11	8	4	9	14	5	6	57
		%	3.0%	2.2%	1.1%	2.5%	3.9%	1.4%	1.7%	2.3%
	3	Count	2	0	2	0	7	1	0	12
		%	.6%	0.0%	.6%	0.0%	2.0%	.3%	0.0%	.5%
	4	Count	1	3	2	1	5	1	1	14
		%	.3%	.8%	.6%	.3%	1.4%	.3%	.3%	.6%
	5	Count	1	2	0	1	3	0	0	7
		%	.3%	.6%	0.0%	.3%	.8%	0.0%	0.0%	.3%
	6	Count	0	0	1	1	3	0	0	5
		%	0.0%	0.0%	.3%	.3%	.8%	0.0%	0.0%	.2%
	7	Count	0	0	0	0	1	0	0	1
		%	0.0%	0.0%	0.0%	0.0%	.3%	0.0%	0.0%	.0%
	8	Count	0	1	1	0	0	1	0	3
		%	0.0%	.3%	.3%	0.0%	0.0%	.3%	0.0%	.1%
	10	Count	0	0	0	0	1	0	1	2
		%	0.0%	0.0%	0.0%	0.0%	.3%	0.0%	.3%	.1%
12	Count	0	0	1	1	1	0	0	3	
	%	0.0%	0.0%	.3%	.3%	.3%	0.0%	0.0%	.1%	
16	Count	0	0	0	0	1	0	0	1	
	%	0.0%	0.0%	0.0%	0.0%	.3%	0.0%	0.0%	.0%	
20	Count	0	0	0	2	1	0	0	3	
	%	0.0%	0.0%	0.0%	.6%	.3%	0.0%	0.0%	.1%	
30	Count	0	0	0	1	0	0	0	1	
	%	0.0%	0.0%	0.0%	.3%	0.0%	0.0%	0.0%	.0%	
Refused	Count	10	13	11	15	6	13	11	79	
	%	2.8%	3.6%	3.1%	4.2%	1.7%	3.7%	3.1%	3.2%	
Total	Count	362	363	354	357	356	353	357	2502	
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

**Table 34: District by Question 14**

**Districts \* In the past 30 days, have you read, seen or heard anything about alcohol impaired driving (or drunk driving) enforcement by police? Crosstabulation**

			In the past 30 days, have you read, seen or heard anything about alcohol impaired driving (or drunk driving) enforcement by police?			Total
			Yes	No	No Opinion/Refused	
Districts	NW	Count	190	171	1	362
		% within Districts	52.5%	47.2%	0.3%	100.0%
	NE	Count	182	177	4	363
		% within Districts	50.1%	48.8%	1.1%	100.0%
	KC	Count	174	178	2	354
		% within Districts	49.2%	50.3%	0.6%	100.0%
	CD	Count	173	182	2	357
		% within Districts	48.5%	51.0%	0.6%	100.0%
	SL	Count	165	187	4	356
		% within Districts	46.3%	52.5%	1.1%	100.0%
	SW	Count	158	194	1	353
		% within Districts	44.8%	55.0%	0.3%	100.0%
	SE	Count	178	177	2	357
		% within Districts	49.9%	49.6%	0.6%	100.0%
Total		Count	1220	1266	16	2502
		% within Districts	48.8%	50.6%	0.6%	100.0%

**Table 35: District by Question 15**

**Districts \* What do you think the chances are of someone getting arrested if they drive after drinking? Crosstabulation**

	What do you think the chances are of someone getting arrested if they drive after drinking?							Total
	Always	Most of the time	Half of the time	Rarely	Never	No Opinion/Refused		
Districts								
NW	Count	47	78	131	98	4	4	362
	% within Districts	13.0%	21.5%	36.2%	27.1%	1.1%	1.1%	100.0%
NE	Count	53	89	134	74	1	12	363
	% within Districts	14.6%	24.5%	36.9%	20.4%	0.3%	3.3%	100.0%
KC	Count	40	68	130	97	5	14	354
	% within Districts	11.3%	19.2%	36.7%	27.4%	1.4%	4.0%	100.0%
CD	Count	57	78	109	89	4	20	357
	% within Districts	16.0%	21.8%	30.5%	24.9%	1.1%	5.6%	100.0%
SL	Count	29	70	126	117	4	10	356
	% within Districts	8.1%	19.7%	35.4%	32.9%	1.1%	2.8%	100.0%
SW	Count	68	77	114	79	3	12	353
	% within Districts	19.3%	21.8%	32.3%	22.4%	0.8%	3.4%	100.0%
SE	Count	64	90	106	80	5	12	357
	% within Districts	17.9%	25.2%	29.7%	22.4%	1.4%	3.4%	100.0%
Total	Count	358	550	850	634	26	84	2502
	% within Districts	14.3%	22.0%	34.0%	25.3%	1.0%	3.4%	100.0%

## Research Questions by Rural/Urban

Differences between rural and urban communities often show themselves in various research projects. These differences in community are so common that the Nielsen Company has used the US Census data to develop four distinct categories of residence: Highly Urbanized, Relatively Urbanized, Relatively Rural, and Very Rural.

The highly urbanized responses come from the St. Louis area and a few counties adjacent to it. The relatively urbanized responses come from the Kansas City area and a few counties adjacent to it. The rest of the state falls in the categories of relatively rural or very rural. The following table may make this more apparent.

**Table 36: District by Nielson Community Type**

			Districts * Nielsen Crosstabulation				Total
			Highly Urbanized	Relatively Urbanized	Relatively Rural	Very Rural	
Districts	NW	Count	0	18	38	306	362
		% within Districts	0.0%	5.0%	10.5%	84.5%	100.0%
	NE	Count	43	0	0	320	363
		% within Districts	11.8%	0.0%	0.0%	88.2%	100.0%
	KC	Count	0	236	0	118	354
		% within Districts	0.0%	66.7%	0.0%	33.3%	100.0%
	CD	Count	0	0	43	314	357
		% within Districts	0.0%	0.0%	12.0%	88.0%	100.0%
	SL	Count	356	0	0	0	356
		% within Districts	100.0%	0.0%	0.0%	0.0%	100.0%
	SW	Count	0	0	84	269	353
		% within Districts	0.0%	0.0%	23.8%	76.2%	100.0%
	SE	Count	0	0	14	343	357
		% within Districts	0.0%	0.0%	3.9%	96.1%	100.0%
Total		Count	399	254	179	1670	2502
		% within Districts	15.9%	10.2%	7.2%	66.7%	100.0%

**It is important to note that some of Nielsen's classifications may not be intuitive for Missourians.** For example, most people in Missouri would probably consider Springfield and Jefferson City to be relatively urbanized, but these areas are classified as relatively rural by Nielsen.



The percentages in these tables are by column (not by row as has been the case for most of the tables in this document). This allows readers to quickly see how people in each Nielson Community answered the research questions.

**Table 37: Nielson Community Type by Question 1**

		Nielson				Total
		Highly Urbanized	Relatively Urbanized	Relatively Rural	Very Rural	
How often do you use seat belts when you drive or ride in a car, van, sport utility vehicle, or pick up? * Nielson Crosstabulation	Always	Count 347	Count 217	Count 136	Count 1300	Count 2000
		87.0%	85.4%	76.0%	77.8%	79.9%
	Most of the time	Count 23	Count 27	Count 26	Count 220	Count 296
		5.8%	10.6%	14.5%	13.2%	11.8%
	Half of the time	Count 7	Count 5	Count 7	Count 57	Count 76
		1.8%	2.0%	3.9%	3.4%	3.0%
	Rarely	Count 8	Count 1	Count 6	Count 50	Count 65
	2.0%	0.4%	3.4%	3.0%	2.6%	
Never	Count 13	Count 4	Count 4	Count 40	Count 61	
	3.3%	1.6%	2.2%	2.4%	2.4%	
No Opinion/Refused	Count 1	Count 0	Count 0	Count 3	Count 4	
	0.3%	0.0%	0.0%	0.2%	0.2%	
<b>Total</b>	Count 399	Count 254	Count 179	Count 1670	Count 2502	
	100.0%	100.0%	100.0%	100.0%	100.0%	

**Table 38: Nielson Community Type by Question 2**

**Do you favor keeping Missouri's seat belt law as a "secondary law"—where you can only be pulled over or ticketed if you are observed committing another violation; or do you favor changing Missouri's seat belt law to a "primary law"—where you can be pulled \* Nielson Crosstabulation**

		Nielson				Total
		Highly Urbanized	Relatively Urbanized	Relatively Rural	Very Rural	
Do you favor keeping Missouri's seat belt law as a "secondary law"—where you can only be pulled over or ticketed if you are observed committing another violation; or do you favor changing Missouri's seat belt law to a "primary law"—where you can be pulled	Count	207	137	102	988	1434
	% within Nielson	51.9%	53.9%	57.0%	59.2%	57.3%
Keep "secondary law"	Count	172	101	64	562	899
	% within Nielson	43.1%	39.8%	35.8%	33.7%	35.9%
Change to "primary law"	Count	20	16	13	120	169
	% within Nielson	5.0%	6.3%	7.3%	7.2%	6.8%
No Opinion/Refused	Count	399	254	179	1670	2502
	% within Nielson	100.0%	100.0%	100.0%	100.0%	100.0%

**Table 39: Nielson Community Type by Question 3**

**Currently, the fine for violating Missouri's seat belt law is \$10. Would you support an increase in the fine associated with this violation? \* Nielsen**

		Crosstabulation				Total
		Nielsen				
		Highly Urbanized	Relatively Urbanized	Relatively Rural	Very Rural	
Currently, the fine for violating Missouri's seat belt law is \$10.	Yes	Count 208 52.1%	Count 130 51.2%	Count 80 44.7%	Count 661 39.6%	Count 1079 43.1%
Would you support an increase in the fine associated with this violation?	No	Count 182 45.6%	Count 122 48.0%	Count 92 51.4%	Count 964 57.7%	Count 1360 54.4%
	No Opinion/Refused	Count 9 2.3%	Count 2 0.8%	Count 7 3.9%	Count 45 2.7%	Count 63 2.5%
<b>Total</b>		Count 399 100.0%	Count 254 100.0%	Count 179 100.0%	Count 1670 100.0%	Count 2502 100.0%

**Table 40: Nielson Community Type by Question 3b**

In your opinion, what should the fine associated with violating Missouri's seat belt law be? * Nielson Crosstabulation	Nielson				Total
	Highly Urbanized		Relatively Rural		
	Count	% within Nielsen	Count	% within Nielsen	
Under \$25	33	15.9%	14	17.5%	192
					17.8%
\$25 - \$49	97	46.6%	39	48.8%	470
					43.5%
\$50 - \$74	41	19.7%	14	17.5%	228
					21.1%
\$75 - \$100	18	8.7%	7	8.8%	110
					10.2%
Over \$100	15	7.2%	5	6.3%	64
					5.9%
No Opinion/Refused	4	1.9%	1	1.3%	16
					1.5%
<b>Total</b>	<b>208</b>	<b>100.0%</b>	<b>80</b>	<b>100.0%</b>	<b>1080</b>
					<b>100.0%</b>

**Table 41: Nielson Community Type by Question 4**

		Nielson				Total
		Highly Urbanized	Relatively Urbanized	Relatively Rural	Very Rural	
In the past 60 days, have you read, seen or heard anything about seat belt law enforcement by police?	Yes	Count 75 18.8%	Count 53 20.9%	Count 26 14.5%	Count 296 17.7%	Count 450 18.0%
	No	Count 324 81.2%	Count 200 78.7%	Count 153 85.5%	Count 1369 82.0%	Count 2046 81.8%
	No Opinion/Refused	Count 0 0.0%	Count 1 0.4%	Count 0 0.0%	Count 5 0.3%	Count 6 0.2%
Total		Count 399 100.0%	Count 254 100.0%	Count 179 100.0%	Count 1670 100.0%	Count 2502 100.0%

**Table 42: Nielson Community Type by Question 5**

		Nielson				Total
		What do you think the chances are of getting a ticket if you don't wear your safety belt? * Nielson Crosstabulation				
		Highly Urbanized	Relatively Urbanized	Relatively Rural	Very Rural	
What do you think the chances are of getting a ticket if you don't wear your safety belt?	Always	41 10.3%	34 13.4%	23 12.8%	258 15.4%	356 14.2%
	Most of the time	53 13.3%	32 12.6%	30 16.8%	301 18.0%	416 16.6%
Half of the time	Count	70	46	29	346	491
	% within Nielson	17.5%	18.1%	16.2%	20.7%	19.6%
Rarely	Count	171	88	71	490	820
	% within Nielson	42.9%	34.6%	39.7%	29.3%	32.8%
Never	Count	35	35	14	138	222
	% within Nielson	8.8%	13.8%	7.8%	8.3%	8.9%
No Opinion/Refused	Count	29	19	12	137	197
	% within Nielson	7.3%	7.5%	6.7%	8.2%	7.9%
Total	Count	399	254	179	1670	2502
	% within Nielson	100.0%	100.0%	100.0%	100.0%	100.0%

**Table 43: Nielson Community Type by Question 6**

		Nielson				Total
		Highly Urbanized	Relatively Urbanized	Relatively Rural	Very Rural	
On a local road with a speed limit of 30 mph, how often do you drive faster than 35 mph?	Always	Count 8 2.0%	6 2.4%	3 1.7%	54 3.2%	71 2.8%
	Most of the time	Count 52 13.0%	19 7.5%	14 7.8%	168 10.1%	253 10.1%
Half of the time	Count	55 13.8%	37 14.6%	22 12.3%	214 12.8%	328 13.1%
	Rarely	Count 182 45.6%	115 45.3%	92 51.4%	716 42.9%	1105 44.2%
Never	Count	97 24.3%	72 28.3%	47 26.3%	491 29.4%	707 28.3%
	No Opinion/Refused	Count 5 1.3%	5 2.0%	1 0.6%	27 1.6%	38 1.5%
Total	Count	399 100.0%	254 100.0%	179 100.0%	1670 100.0%	2502 100.0%
	% within Nielson					

**Table 44: Nielson Community Type by Question 7**

**On a local road with a speed limit of 70 mph, how often do you drive faster than 75 mph? \* Nielson Crosstabulation**

		Nielson				Total
		Highly Urbanized	Relatively Urbanized	Relatively Rural	Very Rural	
On a local road with a speed limit of 70 mph, how often do you drive faster than 75 mph?	Always	Count 6 1.5%	Count 3 1.2%	Count 3 1.7%	Count 31 1.9%	Count 43 1.7%
	Most of the time	Count 18 4.5%	Count 10 3.9%	Count 9 5.0%	Count 80 4.8%	Count 117 4.7%
Half of the time	Count	Count 32 8.0%	Count 16 6.3%	Count 14 7.8%	Count 97 5.8%	Count 159 6.4%
	% within Nielson	Count 154 38.6%	Count 102 40.2%	Count 55 30.7%	Count 588 35.2%	Count 899 35.9%
Rarely	Count	Count 188 47.1%	Count 122 48.0%	Count 97 54.2%	Count 868 52.0%	Count 1275 51.0%
	% within Nielson	Count 1 0.3%	Count 1 0.4%	Count 1 0.6%	Count 6 0.4%	Count 9 0.4%
Never	Count	Count 399 100.0%	Count 254 100.0%	Count 179 100.0%	Count 1670 100.0%	Count 2502 100.0%
	% within Nielson					



**Table 45: Nielson Community Type by Question 8**

**In the past 30 days, have you read, seen or heard anything about speed enforcement by police? \* Nielson Crosstabulation**

		Nielson				Total
		Highly Urbanized	Relatively Urbanized	Relatively Rural	Very Rural	
In the past 30 days, have you read, seen or heard anything about speed enforcement by police?	Yes	Count 121 30.3%	Count 75 29.5%	Count 42 23.5%	Count 415 24.9%	Count 653 26.1%
	No	Count 276 69.2%	Count 179 70.5%	Count 137 76.5%	Count 1243 74.4%	Count 1835 73.3%
	No Opinion/Refused	Count 2 0.5%	Count 0 0.0%	Count 0 0.0%	Count 12 0.7%	Count 14 0.6%
Total		Count 399 100.0%	Count 254 100.0%	Count 179 100.0%	Count 1670 100.0%	Count 2502 100.0%

**Table 46: Nielson Community Type by Question 9**

	What do you think the chances are of getting a ticket if you drive over the speed limit? * Nielson Crosstabulation	Nielson				Total
		Highly Urbanized	Relatively Urbanized	Relatively Rural	Very Rural	
What do you think the chances are of getting a ticket if you drive over the speed limit?	Always	Count 21 5.3%	Count 22 8.7%	Count 14 7.8%	Count 149 8.9%	Count 206 8.2%
	Most of the time	Count 77 19.3%	Count 53 20.9%	Count 35 19.6%	Count 438 26.2%	Count 603 24.1%
	Half of the time	Count 144 36.1%	Count 100 39.4%	Count 58 32.4%	Count 582 34.9%	Count 884 35.3%
	Rarely	Count 133 33.3%	Count 65 25.6%	Count 59 33.0%	Count 385 23.1%	Count 642 25.7%
	Never	Count 13 3.3%	Count 8 3.1%	Count 9 5.0%	Count 56 3.4%	Count 86 3.4%
	No Opinion/Refused	Count 11 2.8%	Count 6 2.4%	Count 4 2.2%	Count 60 3.6%	Count 81 3.2%
Total	Count 399 100.0%	Count 254 100.0%	Count 179 100.0%	Count 1670 100.0%	Count 2502 100.0%	

**Table 47: Nielson Community Type by Question 10**

	Nielson				Total
	Highly Urbanized	Relatively Urbanized	Relatively Rural	Very Rural	
How often do you talk on a hand-held cellular phone while driving a car, van, sport utility vehicle, or pick-up?					
Always	Count 2 0.5%	Count 3 1.2%	Count 2 1.1%	Count 11 0.7%	Count 18 0.7%
Most of the time	Count 8 2.0%	Count 5 2.0%	Count 3 1.7%	Count 34 2.0%	Count 50 2.0%
Half of the time	Count 34 8.5%	Count 20 7.9%	Count 15 8.4%	Count 136 8.1%	Count 205 8.2%
Rarely	Count 163 40.9%	Count 118 46.5%	Count 93 52.0%	Count 711 42.6%	Count 1085 43.4%
Never	Count 189 47.4%	Count 108 42.5%	Count 66 36.9%	Count 770 46.1%	Count 1133 45.3%
No Opinion/Refused	Count 3 0.8%	Count 0 0.0%	Count 0 0.0%	Count 8 0.5%	Count 11 0.4%
Total	Count 399 100.0%	Count 254 100.0%	Count 179 100.0%	Count 1670 100.0%	Count 2502 100.0%

**Table 48: Nielson Community Type by Question 11**

		Nielson				Total
		How often do you use a hand-held cellular phone for texting while driving a car, van, sport utility vehicle, or pick-up? * Nielson Crosstabulation				
		Highly Urbanized	Relatively Urbanized	Relatively Rural	Very Rural	
How often do you use a hand-held cellular phone for texting	Always	Count 0	Count 0	Count 0	Count 1	
	% within Nielson	0.0%	0.0%	0.0%	0.1%	
while driving a car, van, sport utility vehicle, or pick-up?	Most of the time	Count 0	Count 0	Count 1	Count 2	
	% within Nielson	0.0%	0.0%	0.6%	0.1%	
Half of the time	Count	2	0	1	10	
	% within Nielson	0.5%	0.0%	0.6%	0.6%	
Rarely	Count	27	29	18	142	
	% within Nielson	6.8%	11.4%	10.1%	8.5%	
Never	Count	369	225	159	1508	
	% within Nielson	92.5%	88.6%	88.8%	90.3%	
No Opinion/Refused	Count	1	0	0	7	
	% within Nielson	0.3%	0.0%	0.0%	0.4%	
Total	Count	399	254	179	1670	
	% within Nielson	100.0%	100.0%	100.0%	100.0%	

**Table 49: Nielson Community Type by Question 12**

**Many states have passed laws which restrict or ban cellular phone use, including texting, while driving. What level of restrictions would you support regarding cellular phone usage while driving? \* Nielson Crosstabulation**

	Nielson				Total
	Highly Urbanized	Relatively Urbanized	Relatively Rural	Very Rural	
Many states have passed laws which restrict or ban cellular phone use, including texting, while driving. What level of restrictions would you support regarding cellular phone usage while driving?	Count	Count	Count	Count	Count
Full Restrictions - No Cellular Phone Use Allowed	120 30.1%	73 28.7%	51 28.5%	528 31.6%	772 30.9%
Ban on Texting While Driving, Phone Use Allowed	63 15.8%	50 19.7%	30 16.8%	326 19.5%	469 18.7%
Ban on Texting While Driving, Hands-Free Phone Device Allowed	73 18.3%	40 15.7%	35 19.6%	253 15.1%	401 16.0%
Hands-Free Phone Device Use Only	111 27.8%	69 27.2%	51 28.5%	446 26.7%	677 27.1%
No Restrictions	20 5.0%	13 5.1%	4 2.2%	63 3.8%	100 4.0%
No Opinion/Refused	12 3.0%	9 3.5%	8 4.5%	54 3.2%	83 3.3%
<b>Total</b>	399 100.0%	254 100.0%	179 100.0%	1670 100.0%	2502 100.0%

**Table 50: Nielson Community Type by Question 13**

**In the past 60 days, how many times have you driven a motor vehicle within two (2) hours after drinking alcoholic beverages? \* Nielsen Crosstabulation**

			Nielsen				Total
			Highly Urbanized	Relatively Urbanized	Relatively Rural	Very Rural	
In the past 60 days, how many times have you driven a motor vehicle within two (2) hours after drinking alcoholic beverages?	0	Count	336	235	162	1524	2257
		%	84.2%	92.5%	90.5%	91.3%	90.2%
	1	Count	15	7	4	31	57
		%	3.8%	2.8%	2.2%	1.9%	2.3%
	2	Count	15	3	6	33	57
		%	3.8%	1.2%	3.4%	2.0%	2.3%
	3	Count	7	1	1	3	12
		%	1.8%	.4%	.6%	.2%	.5%
	4	Count	6	0	2	6	14
		%	1.5%	0.0%	1.1%	.4%	.6%
	5	Count	4	0	0	3	7
		%	1.0%	0.0%	0.0%	.2%	.3%
	6	Count	3	0	1	1	5
		%	.8%	0.0%	.6%	.1%	.2%
	7	Count	1	0	0	0	1
		%	.3%	0.0%	0.0%	0.0%	.0%
	8	Count	0	1	0	2	3
		%	0.0%	.4%	0.0%	.1%	.1%
	10	Count	1	0	0	1	2
		%	.3%	0.0%	0.0%	.1%	.1%
	12	Count	1	0	0	2	3
		%	.3%	0.0%	0.0%	.1%	.1%
	16	Count	1	0	0	0	1
		%	.3%	0.0%	0.0%	0.0%	.0%
	20	Count	1	0	1	1	3
		%	.3%	0.0%	.6%	.1%	.1%
	30	Count	0	0	0	1	1
		%	0.0%	0.0%	0.0%	.1%	.0%
	Refused	Count	8	7	2	62	79
		%	2.0%	2.8%	1.1%	3.7%	3.2%
Total		Count	399	254	179	1670	2502
		%	100.0%	100.0%	100.0%	100.0%	100.0%

**Table 51: Nielson Community Type by Question 14**

		Nielson				Total
		Highly Urbanized	Relatively Urbanized	Relatively Rural	Very Rural	
In the past 30 days, have you read, seen or heard anything about alcohol impaired driving (or drunk driving) enforcement by police? * Nielson Crosstabulation	Yes	Count 186 46.6%	Count 127 50.0%	Count 94 52.5%	Count 813 48.7%	Count 1220 48.8%
	No	Count 209 52.4%	Count 126 49.6%	Count 84 46.9%	Count 847 50.7%	Count 1266 50.6%
	No Opinion/Refused	Count 4 1.0%	Count 1 0.4%	Count 1 0.6%	Count 10 0.6%	Count 16 0.6%
Total		Count 399 100.0%	Count 254 100.0%	Count 179 100.0%	Count 1670 100.0%	Count 2502 100.0%

**Table 52: Nielson Community Type by Question 15**

		What do you think the chances are of someone getting arrested if they drive after drinking? * Nielson Crosstabulation				Total
		Nielson				
		Highly Urbanized	Relatively Urbanized	Relatively Rural	Very Rural	
What do you think the chances are of someone getting arrested if they drive after drinking?	Always	Count 35 8.8%	Count 24 9.4%	Count 23 12.8%	Count 276 16.5%	Count 358 14.3%
	Most of the time	Count 74 18.5%	Count 50 19.7%	Count 33 18.4%	Count 393 23.5%	Count 550 22.0%
	Half of the time	Count 147 36.8%	Count 87 34.3%	Count 51 28.5%	Count 565 33.8%	Count 850 34.0%
	Rarely	Count 128 32.1%	Count 78 30.7%	Count 66 36.9%	Count 362 21.7%	Count 634 25.3%
	Never	Count 4 1.0%	Count 3 1.2%	Count 1 0.6%	Count 18 1.1%	Count 26 1.0%
	No Opinion/Refused	Count 11 2.8%	Count 12 4.7%	Count 5 2.8%	Count 56 3.4%	Count 84 3.4%
Total	Count	399 100.0%	254 100.0%	179 100.0%	1670 100.0%	2502 100.0%
	% within Nielson					



## Appendix D: Demographics

**Table 53: Question a**

**Are you a licensed Missouri driver?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	2502	100.0	100.0	100.0

**Table 54: Question b**

**What is your age?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 18 to 29	354	14.1	14.1	14.1
30 to 39	355	14.2	14.2	28.3
40 to 49	515	20.6	20.6	48.9
50 to 64	610	24.4	24.4	73.3
65 and up	668	26.7	26.7	100.0
Total	2502	100.0	100.0	

**Table 55: Question c**

**Gender**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Female	1283	51.3	51.3	51.3
Male	1219	48.7	48.7	100.0
Total	2502	100.0	100.0	

**Table 56: Question d**

		What is your ethnicity?			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	American Indian or Alaska Native	44	1.8	1.8	1.8
	American Indian or Alaska Native, and Asian	1	.0	.0	1.8
	American Indian or Alaska Native, and Black or African American	1	.0	.0	1.8
	American Indian or Alaska Native, and Native Hawaiian or Other Pacific Islander	1	.0	.0	1.9
	American Indian or Alaska Native, and White	17	.7	.7	2.6
	Asian	7	.3	.3	2.8
	Asian, and White	4	.2	.2	3.0
	Black or African American	52	2.1	2.1	5.1
	Black or African American, and Hispanic or Latino, and Native Hawaiian or Other Pacific Islander	1	.0	.0	5.1
	Black or African American, and White	8	.3	.3	5.4
	Hispanic or Latino	31	1.2	1.2	6.7
	Hispanic or Latino, and White	2	.1	.1	6.8
	Native Hawaiian or Other Pacific Islander	6	.2	.2	7.0
	Native Hawaiian or Other Pacific Islander, and White	2	.1	.1	7.1
	Refused	66	2.6	2.6	9.7
	White	2259	90.3	90.3	100.0
	Total	2502	100.0	100.0	

**Table 57: Question e****Is the car you drive most often a:**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Car	1002	40.0	40.0	40.0
	Van or Minivan	330	13.2	13.2	53.2
	Motorcycle	8	.3	.3	53.6
	Sport Utility Vehicle or Crossover	535	21.4	21.4	74.9
	Pickup Truck	570	22.8	22.8	97.7
	Other type of truck	50	2.0	2.0	99.7
	No Opinion/Refused	7	.3	.3	100.0
	Total	2502	100.0	100.0	

**Table 58: Question f****In what county do you currently live?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	ADAIR	22	.9	.9	.9
	ANDREW	18	.7	.7	1.6
	ATCHISON	17	.7	.7	2.3
	AUDRAIN	21	.8	.8	3.1
	BARRY	17	.7	.7	3.8
	BARTON	18	.7	.7	4.5
	BATES	18	.7	.7	5.2
	BENTON	16	.6	.6	5.9
	BOLLINGER	15	.6	.6	6.5
	BOONE	20	.8	.8	7.3
	BUCHANAN	20	.8	.8	8.1
	BUTLER	14	.6	.6	8.6
	CALDWELL	18	.7	.7	9.4
	CALLAWAY	20	.8	.8	10.2
	CAMDEN	20	.8	.8	11.0
	CAPE GIRARDEAU	14	.6	.6	11.5

CARROLL	18	.7	.7	12.2
CARTER	14	.6	.6	12.8
CASS	39	1.6	1.6	14.3
CEDAR	16	.6	.6	15.0
CHARITON	17	.7	.7	15.7
CHRISTIAN	17	.7	.7	16.3
CLARK	21	.8	.8	17.2
CLAY	42	1.7	1.7	18.9
CLINTON	18	.7	.7	19.6
COLE	21	.8	.8	20.4
COOPER	20	.8	.8	21.2
CRAWFORD	19	.8	.8	22.0
DADE	16	.6	.6	22.6
DALLAS	16	.6	.6	23.3
DAVISS	18	.7	.7	24.0
DEKALB	20	.8	.8	24.8
DENT	19	.8	.8	25.5
DOUGLAS	14	.6	.6	26.1
DUNKLIN	15	.6	.6	26.7
FRANKLIN	73	2.9	2.9	29.6
GASCONADE	20	.8	.8	30.4
GENTRY	18	.7	.7	31.1
GREENE	17	.7	.7	31.8
GRUNDY	17	.7	.7	32.5
HARRISON	12	.5	.5	33.0
HENRY	17	.7	.7	33.7
HICKORY	16	.6	.6	34.3
HOLT	18	.7	.7	35.0
HOWARD	19	.8	.8	35.8
HOWELL	14	.6	.6	36.3
IRON	14	.6	.6	36.9
JACKSON	39	1.6	1.6	38.4
JASPER	17	.7	.7	39.1
JEFFERSON	70	2.8	2.8	41.9
JOHNSON	40	1.6	1.6	43.5

KNOX	24	1.0	1.0	44.5
LACLEDE	18	.7	.7	45.2
LAFAYETTE	38	1.5	1.5	46.7
LAWRENCE	17	.7	.7	47.4
LEWIS	21	.8	.8	48.2
LINCOLN	21	.8	.8	49.1
LINN	19	.8	.8	49.8
LIVINGSTON	19	.8	.8	50.6
MACON	20	.8	.8	51.4
MADISON	14	.6	.6	52.0
MARIES	20	.8	.8	52.8
MARION	21	.8	.8	53.6
MCDONALD	16	.6	.6	54.2
MILLER	19	.8	.8	55.0
MISSISSIPPI	15	.6	.6	55.6
MONITEAU	23	.9	.9	56.5
MONROE	20	.8	.8	57.3
MONTGOMERY	21	.8	.8	58.2
MORGAN	19	.8	.8	58.9
NEW MADRID	14	.6	.6	59.5
NEWTON	18	.7	.7	60.2
NODAWAY	51	2.0	2.0	62.2
OREGON	14	.6	.6	62.8
OSAGE	19	.8	.8	63.5
OZARK	15	.6	.6	64.1
PEMISCOT	16	.6	.6	64.8
PERRY	15	.6	.6	65.4
PETTIS	39	1.6	1.6	66.9
PHELPS	20	.8	.8	67.7
PIKE	21	.8	.8	68.6
PLATTE	39	1.6	1.6	70.1
POLK	17	.7	.7	70.8
PULASKI	19	.8	.8	71.6
PUTNAM	9	.4	.4	71.9
RALLS	20	.8	.8	72.7

RANDOLPH	36	1.4	1.4	74.2
RAY	39	1.6	1.6	75.7
REYNOLDS	14	.6	.6	76.3
RIPLEY	14	.6	.6	76.9
SAINT CHARLES	71	2.8	2.8	79.7
SAINT CLAIR	16	.6	.6	80.3
SAINT FRANCOIS	14	.6	.6	80.9
SAINT LOUIS	70	2.8	2.8	83.7
SAINT LOUIS CITY	72	2.9	2.9	86.6
SAINTE GENEVIEVE	14	.6	.6	87.1
SALINE	39	1.6	1.6	88.7
SCHUYLER	21	.8	.8	89.5
SCOTLAND	11	.4	.4	90.0
SCOTT	14	.6	.6	90.5
SHANNON	13	.5	.5	91.0
SHELBY	20	.8	.8	91.8
STODDARD	14	.6	.6	92.4
STONE	17	.7	.7	93.1
SULLIVAN	18	.7	.7	93.8
TANEY	17	.7	.7	94.5
TEXAS	14	.6	.6	95.0
VERNON	17	.7	.7	95.7
WARREN	22	.9	.9	96.6
WASHINGTON	22	.9	.9	97.5
WAYNE	14	.6	.6	98.0
WEBSTER	17	.7	.7	98.7
WORTH	17	.7	.7	99.4
WRIGHT	15	.6	.6	100.0
Total	2502	100.0	100.0	

**Table 59: Question g**

		What is your home zip code?			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	63005	1	.0	.0	.0
	63010	13	.5	.5	.6
	63011	4	.2	.2	.7
	63012	3	.1	.1	.8
	63013	4	.2	.2	1.0
	63015	1	.0	.0	1.0
	63016	1	.0	.0	1.1
	63017	3	.1	.1	1.2
	63020	6	.2	.2	1.4
	63021	4	.2	.2	1.6
	63023	2	.1	.1	1.7
	63025	4	.2	.2	1.8
	63026	4	.2	.2	2.0
	63028	7	.3	.3	2.3
	63031	3	.1	.1	2.4
	63033	8	.3	.3	2.7
	63034	1	.0	.0	2.8
	63038	1	.0	.0	2.8
	63039	3	.1	.1	2.9
	63041	1	.0	.0	3.0
	63042	1	.0	.0	3.0
	63043	1	.0	.0	3.0
	63044	1	.0	.0	3.1
	63048	3	.1	.1	3.2
	63049	5	.2	.2	3.4
	63050	4	.2	.2	3.6
	63051	7	.3	.3	3.8
	63052	9	.4	.4	4.2
	63055	3	.1	.1	4.3
	63056	2	.1	.1	4.4
	63060	1	.0	.0	4.4

63061	1	.0	.0	4.5
63069	8	.3	.3	4.8
63070	2	.1	.1	4.9
63071	1	.0	.0	4.9
63072	2	.1	.1	5.0
63074	1	.0	.0	5.0
63077	9	.4	.4	5.4
63080	1	.0	.0	5.4
63084	3	.1	.1	5.6
63089	7	.3	.3	5.8
63090	28	1.1	1.1	7.0
63104	7	.3	.3	7.2
63107	3	.1	.1	7.4
63108	6	.2	.2	7.6
63109	14	.6	.6	8.2
63110	6	.2	.2	8.4
63111	4	.2	.2	8.6
63112	3	.1	.1	8.7
63114	3	.1	.1	8.8
63115	3	.1	.1	8.9
63116	13	.5	.5	9.4
63118	1	.0	.0	9.5
63119	4	.2	.2	9.6
63120	1	.0	.0	9.7
63121	1	.0	.0	9.7
63122	2	.1	.1	9.8
63123	7	.3	.3	10.1
63125	1	.0	.0	10.1
63126	3	.1	.1	10.2
63127	1	.0	.0	10.3
63128	3	.1	.1	10.4
63129	5	.2	.2	10.6
63130	2	.1	.1	10.7
63131	2	.1	.1	10.8
63132	1	.0	.0	10.8



63135	1	.0	.0	10.8
63136	2	.1	.1	10.9
63137	1	.0	.0	11.0
63139	4	.2	.2	11.1
63141	2	.1	.1	11.2
63146	3	.1	.1	11.3
63147	3	.1	.1	11.4
63301	10	.4	.4	11.8
63303	9	.4	.4	12.2
63304	9	.4	.4	12.5
63334	7	.3	.3	12.8
63336	3	.1	.1	12.9
63339	2	.1	.1	13.0
63341	1	.0	.0	13.1
63344	2	.1	.1	13.1
63348	2	.1	.1	13.2
63349	2	.1	.1	13.3
63350	3	.1	.1	13.4
63351	3	.1	.1	13.5
63353	5	.2	.2	13.7
63357	4	.2	.2	13.9
63361	13	.5	.5	14.4
63362	4	.2	.2	14.6
63366	9	.4	.4	14.9
63367	5	.2	.2	15.1
63368	6	.2	.2	15.4
63376	11	.4	.4	15.8
63377	2	.1	.1	15.9
63379	8	.3	.3	16.2
63382	6	.2	.2	16.5
63383	7	.3	.3	16.7
63384	3	.1	.1	16.9
63385	10	.4	.4	17.3
63386	1	.0	.0	17.3
63389	4	.2	.2	17.5

63390	8	.3	.3	17.8
63401	20	.8	.8	18.6
63430	1	.0	.0	18.6
63432	1	.0	.0	18.7
63435	8	.3	.3	19.0
63436	1	.0	.0	19.0
63437	3	.1	.1	19.1
63440	5	.2	.2	19.3
63441	2	.1	.1	19.4
63443	1	.0	.0	19.5
63445	17	.7	.7	20.1
63446	1	.0	.0	20.2
63447	1	.0	.0	20.2
63448	3	.1	.1	20.3
63450	1	.0	.0	20.4
63452	4	.2	.2	20.5
63454	1	.0	.0	20.6
63456	4	.2	.2	20.7
63457	1	.0	.0	20.8
63459	9	.4	.4	21.1
63460	3	.1	.1	21.3
63461	4	.2	.2	21.4
63462	1	.0	.0	21.5
63465	1	.0	.0	21.5
63468	10	.4	.4	21.9
63469	9	.4	.4	22.3
63501	21	.8	.8	23.1
63531	1	.0	.0	23.1
63532	2	.1	.1	23.2
63534	1	.0	.0	23.3
63536	10	.4	.4	23.7
63537	15	.6	.6	24.3
63543	2	.1	.1	24.3
63546	2	.1	.1	24.4
63547	2	.1	.1	24.5

63548	11	.4	.4	24.9
63549	7	.3	.3	25.2
63551	2	.1	.1	25.3
63552	6	.2	.2	25.5
63555	5	.2	.2	25.7
63556	15	.6	.6	26.3
63557	1	.0	.0	26.4
63558	1	.0	.0	26.4
63563	4	.2	.2	26.6
63565	6	.2	.2	26.8
63601	2	.1	.1	26.9
63620	3	.1	.1	27.0
63621	2	.1	.1	27.1
63622	2	.1	.1	27.2
63623	4	.2	.2	27.3
63624	1	.0	.0	27.4
63625	1	.0	.0	27.4
63626	1	.0	.0	27.5
63627	2	.1	.1	27.5
63628	3	.1	.1	27.7
63629	4	.2	.2	27.8
63630	3	.1	.1	27.9
63631	1	.0	.0	28.0
63633	2	.1	.1	28.1
63638	1	.0	.0	28.1
63640	7	.3	.3	28.4
63645	13	.5	.5	28.9
63648	1	.0	.0	28.9
63650	4	.2	.2	29.1
63653	1	.0	.0	29.1
63654	3	.1	.1	29.3
63655	1	.0	.0	29.3
63656	1	.0	.0	29.3
63660	2	.1	.1	29.4
63662	2	.1	.1	29.5

63664	11	.4	.4	29.9
63670	12	.5	.5	30.4
63701	10	.4	.4	30.8
63703	1	.0	.0	30.9
63730	3	.1	.1	31.0
63736	2	.1	.1	31.1
63748	1	.0	.0	31.1
63751	3	.1	.1	31.2
63755	3	.1	.1	31.3
63764	6	.2	.2	31.6
63771	2	.1	.1	31.7
63775	14	.6	.6	32.2
63780	2	.1	.1	32.3
63781	4	.2	.2	32.5
63801	9	.4	.4	32.8
63823	2	.1	.1	32.9
63824	1	.0	.0	32.9
63825	1	.0	.0	33.0
63826	1	.0	.0	33.0
63827	3	.1	.1	33.1
63829	2	.1	.1	33.2
63830	7	.3	.3	33.5
63834	6	.2	.2	33.7
63841	6	.2	.2	34.0
63845	7	.3	.3	34.3
63846	2	.1	.1	34.3
63848	1	.0	.0	34.4
63851	2	.1	.1	34.5
63852	1	.0	.0	34.5
63857	6	.2	.2	34.7
63863	3	.1	.1	34.9
63866	1	.0	.0	34.9
63867	2	.1	.1	35.0
63869	3	.1	.1	35.1
63873	5	.2	.2	35.3

63876	1	.0	.0	35.3
63877	1	.0	.0	35.4
63878	1	.0	.0	35.4
63879	1	.0	.0	35.5
63901	10	.4	.4	35.9
63933	2	.1	.1	35.9
63935	8	.3	.3	36.3
63936	2	.1	.1	36.3
63937	3	.1	.1	36.5
63939	2	.1	.1	36.5
63940	2	.1	.1	36.6
63942	1	.0	.0	36.7
63943	4	.2	.2	36.8
63944	1	.0	.0	36.9
63952	1	.0	.0	36.9
63953	3	.1	.1	37.0
63954	1	.0	.0	37.1
63956	4	.2	.2	37.2
63957	9	.4	.4	37.6
63965	7	.3	.3	37.8
63967	3	.1	.1	38.0
64011	4	.2	.2	38.1
64012	16	.6	.6	38.8
64014	2	.1	.1	38.8
64015	5	.2	.2	39.0
64017	2	.1	.1	39.1
64018	2	.1	.1	39.2
64019	3	.1	.1	39.3
64020	7	.3	.3	39.6
64024	12	.5	.5	40.1
64029	1	.0	.0	40.1
64030	2	.1	.1	40.2
64034	3	.1	.1	40.3
64035	1	.0	.0	40.4
64040	9	.4	.4	40.7

64050	1	.0	.0	40.8
64052	1	.0	.0	40.8
64055	2	.1	.1	40.9
64057	1	.0	.0	40.9
64060	2	.1	.1	41.0
64061	6	.2	.2	41.2
64062	10	.4	.4	41.6
64067	7	.3	.3	41.9
64068	7	.3	.3	42.2
64071	2	.1	.1	42.3
64076	15	.6	.6	42.9
64077	2	.1	.1	43.0
64079	4	.2	.2	43.1
64080	3	.1	.1	43.2
64081	2	.1	.1	43.3
64083	10	.4	.4	43.7
64084	1	.0	.0	43.8
64085	13	.5	.5	44.3
64086	3	.1	.1	44.4
64089	3	.1	.1	44.5
64093	16	.6	.6	45.2
64096	2	.1	.1	45.2
64108	1	.0	.0	45.3
64109	1	.0	.0	45.3
64110	1	.0	.0	45.4
64113	1	.0	.0	45.4
64116	1	.0	.0	45.4
64117	2	.1	.1	45.5
64118	11	.4	.4	46.0
64119	5	.2	.2	46.2
64124	1	.0	.0	46.2
64125	1	.0	.0	46.2
64128	1	.0	.0	46.3
64130	1	.0	.0	46.3
64131	2	.1	.1	46.4

64133	2	.1	.1	46.5
64134	1	.0	.0	46.5
64137	2	.1	.1	46.6
64138	1	.0	.0	46.6
64145	1	.0	.0	46.7
64151	10	.4	.4	47.1
64152	15	.6	.6	47.7
64153	2	.1	.1	47.8
64154	2	.1	.1	47.8
64155	5	.2	.2	48.0
64156	1	.0	.0	48.1
64157	2	.1	.1	48.2
64158	1	.0	.0	48.2
64163	1	.0	.0	48.2
64402	9	.4	.4	48.6
64422	3	.1	.1	48.7
64423	1	.0	.0	48.8
64424	7	.3	.3	49.0
64427	1	.0	.0	49.1
64429	16	.6	.6	49.7
64430	1	.0	.0	49.8
64434	2	.1	.1	49.8
64437	2	.1	.1	49.9
64439	2	.1	.1	50.0
64441	1	.0	.0	50.0
64442	3	.1	.1	50.2
64444	2	.1	.1	50.2
64446	3	.1	.1	50.4
64448	1	.0	.0	50.4
64451	1	.0	.0	50.4
64454	5	.2	.2	50.6
64456	14	.6	.6	51.2
64457	1	.0	.0	51.2
64458	1	.0	.0	51.3
64461	1	.0	.0	51.3

64463	3	.1	.1	51.4
64465	3	.1	.1	51.6
64468	42	1.7	1.7	53.2
64469	4	.2	.2	53.4
64470	15	.6	.6	54.0
64474	2	.1	.1	54.1
64476	1	.0	.0	54.1
64477	2	.1	.1	54.2
64479	1	.0	.0	54.2
64482	2	.1	.1	54.3
64484	1	.0	.0	54.4
64485	13	.5	.5	54.9
64486	2	.1	.1	55.0
64487	2	.1	.1	55.0
64489	4	.2	.2	55.2
64490	6	.2	.2	55.4
64491	10	.4	.4	55.8
64492	2	.1	.1	55.9
64493	1	.0	.0	56.0
64494	2	.1	.1	56.0
64497	2	.1	.1	56.1
64498	2	.1	.1	56.2
64501	1	.0	.0	56.2
64503	1	.0	.0	56.3
64504	4	.2	.2	56.4
64505	8	.3	.3	56.8
64506	4	.2	.2	56.9
64601	19	.8	.8	57.7
64620	3	.1	.1	57.8
64624	2	.1	.1	57.9
64628	14	.6	.6	58.4
64633	16	.6	.6	59.1
64639	1	.0	.0	59.1
64640	7	.3	.3	59.4
64644	6	.2	.2	59.6



64645	3	.1	.1	59.8
64648	2	.1	.1	59.8
64649	1	.0	.0	59.9
64650	1	.0	.0	59.9
64655	1	.0	.0	60.0
64657	1	.0	.0	60.0
64658	6	.2	.2	60.2
64660	2	.1	.1	60.3
64668	1	.0	.0	60.4
64670	5	.2	.2	60.6
64671	1	.0	.0	60.6
64676	1	.0	.0	60.6
64681	2	.1	.1	60.7
64683	17	.7	.7	61.4
64689	2	.1	.1	61.5
64701	8	.3	.3	61.8
64720	4	.2	.2	62.0
64723	1	.0	.0	62.0
64724	4	.2	.2	62.2
64725	1	.0	.0	62.2
64730	8	.3	.3	62.5
64733	2	.1	.1	62.6
64735	12	.5	.5	63.1
64738	3	.1	.1	63.2
64740	2	.1	.1	63.3
64742	1	.0	.0	63.3
64744	8	.3	.3	63.6
64748	1	.0	.0	63.7
64755	2	.1	.1	63.7
64756	2	.1	.1	63.8
64759	12	.5	.5	64.3
64761	2	.1	.1	64.4
64762	3	.1	.1	64.5
64763	2	.1	.1	64.6
64770	2	.1	.1	64.7

64772	17	.7	.7	65.3
64776	4	.2	.2	65.5
64780	1	.0	.0	65.5
64783	2	.1	.1	65.6
64788	2	.1	.1	65.7
64801	5	.2	.2	65.9
64804	7	.3	.3	66.2
64831	6	.2	.2	66.4
64834	3	.1	.1	66.5
64835	1	.0	.0	66.6
64836	4	.2	.2	66.7
64840	1	.0	.0	66.8
64843	3	.1	.1	66.9
64850	7	.3	.3	67.2
64854	3	.1	.1	67.3
64856	2	.1	.1	67.4
64861	1	.0	.0	67.4
64862	2	.1	.1	67.5
64865	4	.2	.2	67.7
64870	2	.1	.1	67.7
64873	1	.0	.0	67.8
64874	1	.0	.0	67.8
65001	2	.1	.1	67.9
65010	2	.1	.1	68.0
65011	1	.0	.0	68.0
65013	7	.3	.3	68.3
65014	4	.2	.2	68.5
65016	2	.1	.1	68.5
65017	1	.0	.0	68.6
65018	11	.4	.4	69.0
65020	5	.2	.2	69.2
65024	3	.1	.1	69.3
65025	1	.0	.0	69.4
65026	5	.2	.2	69.6
65032	1	.0	.0	69.6

65037	3	.1	.1	69.7
65039	1	.0	.0	69.8
65040	3	.1	.1	69.9
65041	13	.5	.5	70.4
65043	8	.3	.3	70.7
65046	3	.1	.1	70.9
65047	1	.0	.0	70.9
65049	4	.2	.2	71.1
65051	8	.3	.3	71.4
65052	1	.0	.0	71.4
65054	2	.1	.1	71.5
65055	1	.0	.0	71.5
65058	3	.1	.1	71.7
65061	1	.0	.0	71.7
65063	1	.0	.0	71.7
65066	3	.1	.1	71.9
65068	4	.2	.2	72.0
65072	1	.0	.0	72.1
65074	5	.2	.2	72.3
65078	4	.2	.2	72.4
65079	4	.2	.2	72.6
65080	1	.0	.0	72.6
65081	5	.2	.2	72.8
65082	3	.1	.1	72.9
65083	1	.0	.0	73.0
65084	6	.2	.2	73.2
65085	2	.1	.1	73.3
65101	8	.3	.3	73.6
65109	8	.3	.3	73.9
65201	2	.1	.1	74.0
65202	6	.2	.2	74.3
65203	4	.2	.2	74.4
65230	2	.1	.1	74.5
65232	1	.0	.0	74.5
65233	14	.6	.6	75.1

65236	5	.2	.2	75.3
65237	2	.1	.1	75.4
65239	5	.2	.2	75.6
65240	4	.2	.2	75.7
65243	2	.1	.1	75.8
65247	1	.0	.0	75.9
65248	6	.2	.2	76.1
65250	1	.0	.0	76.1
65251	10	.4	.4	76.5
65254	5	.2	.2	76.7
65255	1	.0	.0	76.8
65256	3	.1	.1	76.9
65257	4	.2	.2	77.1
65258	2	.1	.1	77.1
65260	1	.0	.0	77.2
65261	4	.2	.2	77.3
65263	5	.2	.2	77.5
65264	2	.1	.1	77.6
65265	14	.6	.6	78.2
65270	26	1.0	1.0	79.2
65274	2	.1	.1	79.3
65275	6	.2	.2	79.5
65279	2	.1	.1	79.6
65280	1	.0	.0	79.7
65281	1	.0	.0	79.7
65283	1	.0	.0	79.7
65301	30	1.2	1.2	80.9
65321	2	.1	.1	81.0
65323	1	.0	.0	81.1
65324	1	.0	.0	81.1
65325	6	.2	.2	81.3
65326	2	.1	.1	81.4
65327	1	.0	.0	81.5
65329	1	.0	.0	81.5
65332	2	.1	.1	81.6

65334	1	.0	.0	81.6
65336	3	.1	.1	81.7
65337	4	.2	.2	81.9
65338	1	.0	.0	81.9
65340	26	1.0	1.0	83.0
65345	2	.1	.1	83.1
65347	1	.0	.0	83.1
65348	1	.0	.0	83.1
65349	6	.2	.2	83.4
65350	1	.0	.0	83.4
65351	4	.2	.2	83.6
65355	7	.3	.3	83.9
65360	1	.0	.0	83.9
65401	12	.5	.5	84.4
65436	1	.0	.0	84.4
65438	3	.1	.1	84.5
65440	1	.0	.0	84.6
65441	7	.3	.3	84.9
65443	1	.0	.0	84.9
65449	1	.0	.0	84.9
65452	3	.1	.1	85.1
65453	4	.2	.2	85.2
65459	6	.2	.2	85.5
65463	3	.1	.1	85.6
65466	3	.1	.1	85.7
65470	1	.0	.0	85.7
65483	1	.0	.0	85.8
65486	2	.1	.1	85.9
65534	2	.1	.1	85.9
65535	3	.1	.1	86.1
65536	12	.5	.5	86.5
65542	4	.2	.2	86.7
65550	1	.0	.0	86.7
65552	2	.1	.1	86.8
65555	1	.0	.0	86.9

65556	6	.2	.2	87.1
65557	1	.0	.0	87.1
65559	9	.4	.4	87.5
65560	18	.7	.7	88.2
65565	4	.2	.2	88.4
65567	1	.0	.0	88.4
65571	3	.1	.1	88.5
65582	6	.2	.2	88.8
65583	6	.2	.2	89.0
65588	6	.2	.2	89.2
65590	5	.2	.2	89.4
65591	2	.1	.1	89.5
65601	1	.0	.0	89.6
65603	3	.1	.1	89.7
65604	2	.1	.1	89.8
65605	3	.1	.1	89.9
65606	7	.3	.3	90.2
65608	6	.2	.2	90.4
65609	1	.0	.0	90.4
65610	1	.0	.0	90.5
65611	1	.0	.0	90.5
65613	12	.5	.5	91.0
65615	1	.0	.0	91.0
65616	11	.4	.4	91.5
65622	3	.1	.1	91.6
65625	3	.1	.1	91.7
65626	1	.0	.0	91.8
65632	1	.0	.0	91.8
65633	2	.1	.1	91.9
65635	3	.1	.1	92.0
65637	1	.0	.0	92.0
65640	2	.1	.1	92.1
65644	2	.1	.1	92.2
65646	4	.2	.2	92.4
65647	2	.1	.1	92.4

65650	2	.1	.1	92.5
65652	1	.0	.0	92.6
65653	1	.0	.0	92.6
65655	3	.1	.1	92.7
65656	1	.0	.0	92.8
65661	3	.1	.1	92.9
65662	1	.0	.0	92.9
65668	3	.1	.1	93.0
65672	1	.0	.0	93.1
65679	2	.1	.1	93.2
65681	3	.1	.1	93.3
65682	1	.0	.0	93.3
65685	3	.1	.1	93.4
65686	2	.1	.1	93.5
65689	4	.2	.2	93.7
65692	1	.0	.0	93.7
65704	4	.2	.2	93.9
65705	1	.0	.0	93.9
65706	5	.2	.2	94.1
65708	7	.3	.3	94.4
65711	7	.3	.3	94.7
65712	2	.1	.1	94.8
65713	1	.0	.0	94.8
65714	4	.2	.2	95.0
65717	5	.2	.2	95.2
65721	6	.2	.2	95.4
65722	2	.1	.1	95.5
65723	7	.3	.3	95.8
65724	2	.1	.1	95.8
65729	2	.1	.1	95.9
65732	2	.1	.1	96.0
65737	4	.2	.2	96.2
65742	3	.1	.1	96.3
65746	6	.2	.2	96.5
65747	5	.2	.2	96.7

65753	5	.2	.2	96.9
65754	1	.0	.0	97.0
65755	1	.0	.0	97.0
65757	2	.1	.1	97.1
65759	2	.1	.1	97.2
65760	1	.0	.0	97.2
65761	3	.1	.1	97.3
65764	2	.1	.1	97.4
65766	1	.0	.0	97.4
65767	3	.1	.1	97.6
65768	2	.1	.1	97.6
65769	1	.0	.0	97.7
65772	4	.2	.2	97.8
65773	2	.1	.1	97.9
65774	3	.1	.1	98.0
65775	11	.4	.4	98.5
65779	4	.2	.2	98.6
65785	6	.2	.2	98.9
65786	1	.0	.0	98.9
65787	2	.1	.1	99.0
65789	1	.0	.0	99.0
65791	6	.2	.2	99.3
65793	2	.1	.1	99.4
65802	3	.1	.1	99.5
65803	3	.1	.1	99.6
65804	4	.2	.2	99.8
65807	4	.2	.2	99.9
65809	1	.0	.0	100.0
65810	1	.0	.0	100.0
Total	2502	100.0	100.0	



**Table 60: Question h****What is your household income?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under \$30,000	501	20.0	20.0	20.0
	\$30,000 - \$49,999	398	15.9	15.9	35.9
	\$50,000 - \$69,999	307	12.3	12.3	48.2
	\$70,000 or greater	554	22.1	22.1	70.3
	Refused	742	29.7	29.7	100.0
	Total	2502	100.0	100.0	

O.M.B. No. 2127-0003

### HIGHWAY SAFETY PROGRAM COST SUMMARY

U.S. Department of Transportation  
 National Highway Traffic Safety  
 Administration  
 Federal Highway Administration

State Missouri Number 17-1 Date June 23, 2016

Program Area	Approved Program Costs	State/Local Funds	Federally Funded Programs		Federal Share to Local
			Previous Balance	Increase/(Decrease) Current Balance	
PA	100,000.00	100,000.00			0.00
EM	45,000.00	0.00			0.00
MC	13,800.00	0.00			13,800.00
OP	742,699.20	0.00			535,344.00
PS	8,200.00	0.00			8,200.00
PT	4,496,092.03	1,947,102.87			3,624,858.70
AI	146,278.44	0.00			15,000.00
CP	954,198.80	0.00			333,177.00
DE	103,190.00	0.00			50,900.00
DL	305,676.80	0.00			0.00
RH	17,000.00	0.00			17,000.00
RS	90,000.00	0.00			0.00
SA	141,456.87	0.00			141,456.87
SE	110,000.00	0.00			0.00
CR	209,817.35	0.00			66,967.00
PM	705,000.00	0.00			0.00
<b>402 Total</b>	<b>8,188,411.49</b>	<b>2,047,102.87</b>	<b>0.00</b>	<b>0.00</b>	<b>4,806,703.57</b>
154AL	8,656,568.45	0.00			6,498,834.45
<b>154 Total</b>	<b>8,656,568.45</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>6,498,834.45</b>
M2HVE	267,177.00	0.00			147,177.00
M2PE	500,000.00	0.00			0.00
M2CPS	45,000.00	0.00			0.00
M2CSS	42,700.00	0.00			0.00
M2X	900,000.00	438,719.25			900,000.00
<b>405b Total</b>	<b>1,754,877.00</b>	<b>438,719.25</b>	<b>0.00</b>	<b>0.00</b>	<b>1,047,177.00</b>

Program Area	Approved Program Costs	State/Local Funds	Federally Funded Programs		Federal Share to Local
			Previous Balance	Increase/(Decrease) Current Balance	
M3DA	2,202,017.09	550,504.27			176,551.45
405c Total	2,202,017.09	550,504.27	0.00	0.00	176,551.45
M5HVE	1,699,521.48	0.00			1,584,082.36
M5IDC	160,000.00	0.00			0.00
M5CS	419,220.30	0.00			0.00
M5TR	232,122.26	0.00			44,580.50
M5OT	1,031,406.42	0.00			0.00
M5X	3,000,000.00	1,635,567.62			3,000,000.00
405d Total	6,542,270.46	1,635,567.62	0.00	0.00	4,628,662.86
M9MA	200,000.00	0.00			0.00
M9X	90,000.00	72,500.00			0.00
405f Total	290,000.00	72,500.00	0.00	0.00	0.00
Total NHTSA	27,634,144.49	4,744,394.01	0.00	0.00	17,157,929.33
Total FHWA					
Total NHTSA & FHWA	27,634,144.49	4,744,394.01	0.00	0.00	17,157,929.33

State Official Authorized Signature: \_\_\_\_\_

Federal Official Authorized Signature: \_\_\_\_\_

NAME: Patrick K. McKenna

TITLE: Director, Department of

Transportation and Governor's

Representative for Highway Safety

DATE: 6-23-16

NHTSA - NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_

Effective Date: \_\_\_\_\_

## Highway Safety Plan Cost Summary - Missouri 2017 HSP 1

Program Area	Project	Description	Prior Approved Program Funds	State Funds	Previous Bal.	Incre/(Decre)	Current Balance	Share to Local
NHTSA								
NHTSA 402								
Planning and Administration	PA-2017-02-01-00	THSD-Planning & Administration	\$0.00	\$100,000.00	\$0.00	\$100,000.00	\$100,000.00	\$0.00
		Planning and Administration Total	\$0.00	\$100,000.00	\$0.00	\$100,000.00	\$100,000.00	\$0.00
Emergency Medical Services	EM-2017-02-01-00	UofMO Curators-Safety Training for Em Re	\$0.00	\$0.00	\$0.00	\$45,000.00	\$45,000.00	\$0.00
		Emergency Medical Services Total	\$0.00	\$0.00	\$0.00	\$45,000.00	\$45,000.00	\$0.00
Motorcycle Safety	MC-2017-12-01-00	KC Bd of Pol Comm-Police Motorcycle Inst	\$0.00	\$0.00	\$0.00	\$13,800.00	\$13,800.00	\$13,800.00
		Motorcycle Safety Total	\$0.00	\$0.00	\$0.00	\$13,800.00	\$13,800.00	\$13,800.00
Occupant Protection	OP-2017-05-01-00	MO Safety Center-Statewide Seat Belt Sur	\$0.00	\$0.00	\$0.00	\$157,752.76	\$157,752.76	\$0.00
	OP-2017-05-02-00	MO Safety Center-Enforcement CIOT	\$0.00	\$0.00	\$0.00	\$232,103.72	\$232,103.72	\$200,000.00
	OP-2017-05-03-00	Jeferson Co Sheriff-Occupant Protection	\$0.00	\$0.00	\$0.00	\$45,000.00	\$45,000.00	\$45,000.00
	OP-2017-05-04-00	Kirkwood Police-Buckle Up,Save A Life,Yc	\$0.00	\$0.00	\$0.00	\$13,438.08	\$13,438.08	\$13,438.08
	OP-2017-05-05-00	Lake St Louis Police-Occupant Protection	\$0.00	\$0.00	\$0.00	\$4,500.00	\$4,500.00	\$4,500.00
	OP-2017-05-06-00	Maryland Heights Pol-Safety&Drivers Lice	\$0.00	\$0.00	\$0.00	\$2,207.36	\$2,207.36	\$2,207.36
	OP-2017-05-07-00	Moline Acres Police-Safety Enforcement	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
	OP-2017-05-08-00	Olivette Police-Occupant Protection Inil	\$0.00	\$0.00	\$0.00	\$2,450.00	\$2,450.00	\$2,450.00
	OP-2017-05-09-00	Pevly Police-Occupant Protection Enforc	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
	OP-2017-05-10-00	St Charles City Police-Occupant Protecti	\$0.00	\$0.00	\$0.00	\$5,750.00	\$5,750.00	\$5,750.00
	OP-2017-05-11-00	St Louis Co Police-Occupant Protection E	\$0.00	\$0.00	\$0.00	\$30,000.00	\$30,000.00	\$30,000.00
	OP-2017-05-12-00	MO Safety Center-Enforcement-Youth Seat	\$0.00	\$0.00	\$0.00	\$77,498.72	\$77,498.72	\$60,000.00
	OP-2017-05-13-00	Webster Groves Police-Occupant Protectio	\$0.00	\$0.00	\$0.00	\$6,000.00	\$6,000.00	\$6,000.00
	OP-2017-05-14-00	Wentzville Police-Click It or Ticket	\$0.00	\$0.00	\$0.00	\$8,000.00	\$8,000.00	\$8,000.00
	OP-2017-05-15-00	Independence Police-Occupant Protection	\$0.00	\$0.00	\$0.00	\$52,000.00	\$52,000.00	\$52,000.00
	OP-2017-05-16-00	KC Bd of Police Comm-Occupant Protection	\$0.00	\$0.00	\$0.00	\$71,000.00	\$71,000.00	\$71,000.00
	OP-2017-05-17-00	Eureka Police-Occupant Protection	\$0.00	\$0.00	\$0.00	\$6,000.00	\$6,000.00	\$6,000.00
	OP-2017-05-18-00	Florissant Police-Occupant Protection	\$0.00	\$0.00	\$0.00	\$7,000.00	\$7,000.00	\$7,000.00
	OP-2017-05-19-00	Adair Co Sheriff-CIOT: Zero Deaths	\$0.00	\$0.00	\$0.00	\$11,998.56	\$11,998.56	\$11,998.56
		Occupant Protection Total	\$0.00	\$0.00	\$0.00	\$742,699.20	\$742,699.20	\$535,344.00
Pedestrian/Bicycle Safety	PS-2017-02-01-00	Trailnet-Share Our Streets Safely	\$0.00	\$0.00	\$0.00	\$8,200.00	\$8,200.00	\$8,200.00
		Pedestrian/Bicycle Safety Total	\$0.00	\$0.00	\$0.00	\$8,200.00	\$8,200.00	\$8,200.00
Police Traffic Services	PT-2017-02-00-00	THSD-Statewide PTS	\$0.00	\$1,947,102.87	\$0.00	\$1,300,000.00	\$1,300,000.00	\$1,300,000.00
	PT-2017-02-01-00	THSD-PTS Program Coordination	\$0.00	\$0.00	\$0.00	\$260,000.00	\$260,000.00	\$0.00

## Highway Safety Plan Cost Summary - Missouri

### 2017 HSP 1

Program Area	Project	Description	Prior Approved Program Funds	State Funds	Previous Bal.	Incre/(Decre)	Current Balance	Share to Local
	PT-2017-02-02-00	THSD-402 Training Survey Assessments	\$0.00	\$0.00	\$0.00	\$125,000.00	\$125,000.00	\$0.00
	PT-2017-02-04-00	Arnold Police-Aggressive Drivers	\$0.00	\$0.00	\$0.00	\$13,700.00	\$13,700.00	\$13,700.00
	PT-2017-02-05-00	THSD-2017 LETSAC	\$0.00	\$0.00	\$0.00	\$24,500.00	\$24,500.00	\$0.00
	PT-2017-02-06-00	MO Sheriffs Assoc-Law Enforcement Liaiso	\$0.00	\$0.00	\$0.00	\$68,400.00	\$68,400.00	\$68,400.00
	PT-2017-02-07-00	MO Police Chiefs Assoc-LETSAC Conf 2017	\$0.00	\$0.00	\$0.00	\$25,500.00	\$25,500.00	\$25,500.00
	PT-2017-02-08-00	Ballwin Police-Hazardous Moving	\$0.00	\$0.00	\$0.00	\$7,000.00	\$7,000.00	\$7,000.00
	PT-2017-02-09-00	Byrnes Mill Police-Move Over & Slow Down	\$0.00	\$0.00	\$0.00	\$7,000.00	\$7,000.00	\$7,000.00
	PT-2017-02-10-00	Calverton Park Police-HMV Enf, 2 School	\$0.00	\$0.00	\$0.00	\$2,000.00	\$2,000.00	\$2,000.00
	PT-2017-02-12-00	THSD-Older Driver Program	\$0.00	\$0.00	\$0.00	\$2,500.00	\$2,500.00	\$0.00
	PT-2017-02-13-00	Chesterfield Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$9,000.00	\$9,000.00	\$9,000.00
	PT-2017-02-14-00	Clayton Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$5,989.20	\$5,989.20	\$5,989.20
	PT-2017-02-15-00	Creve Coeur Police-Speed HMV	\$0.00	\$0.00	\$0.00	\$10,000.00	\$10,000.00	\$10,000.00
	PT-2017-02-16-00	Crystal City Police-HMV	\$0.00	\$0.00	\$0.00	\$15,000.00	\$15,000.00	\$15,000.00
	PT-2017-02-17-00	DeSoto Pub Safety-HMV	\$0.00	\$0.00	\$0.00	\$2,000.00	\$2,000.00	\$2,000.00
	PT-2017-02-18-00	Eureka Police-HMV	\$0.00	\$0.00	\$0.00	\$13,000.00	\$13,000.00	\$13,000.00
	PT-2017-02-20-00	Festus Police-Hazardous Moving Overtime	\$0.00	\$0.00	\$0.00	\$18,250.00	\$18,250.00	\$18,250.00
	PT-2017-02-22-00	Florissant Police-HMV	\$0.00	\$0.00	\$0.00	\$18,000.00	\$18,000.00	\$18,000.00
	PT-2017-02-23-00	Glendale Police-HMV	\$0.00	\$0.00	\$0.00	\$4,750.00	\$4,750.00	\$4,750.00
	PT-2017-02-24-00	Hazelwood Police-Hazardous Moving Enforc	\$0.00	\$0.00	\$0.00	\$19,250.00	\$19,250.00	\$19,250.00
	PT-2017-02-25-00	Herculaneum Police-HMV	\$0.00	\$0.00	\$0.00	\$4,409.00	\$4,409.00	\$4,409.00
	PT-2017-02-26-00	Jefferson Co Sheriff-HMV	\$0.00	\$0.00	\$0.00	\$216,500.00	\$216,500.00	\$216,500.00
	PT-2017-02-27-00	Kirkwood Police-HMV, Distracted Driving	\$0.00	\$0.00	\$0.00	\$11,198.00	\$11,198.00	\$11,198.00
	PT-2017-02-28-00	Lake St Louis Police-HMV	\$0.00	\$0.00	\$0.00	\$6,000.00	\$6,000.00	\$6,000.00
	PT-2017-02-29-00	Lincoln Co Sheriff-HMV	\$0.00	\$0.00	\$0.00	\$10,500.00	\$10,500.00	\$10,500.00
	PT-2017-02-30-00	Macon Co Sheriff-Operation Drive Safe	\$0.00	\$0.00	\$0.00	\$4,000.00	\$4,000.00	\$4,000.00
	PT-2017-02-31-00	Macon Police-Macon Our Roads Safe-HMV 1c	\$0.00	\$0.00	\$0.00	\$2,500.00	\$2,500.00	\$2,500.00
	PT-2017-02-32-00	Manchester Police-Haz Moving /Occupant P	\$0.00	\$0.00	\$0.00	\$5,005.00	\$5,005.00	\$5,005.00
	PT-2017-02-33-00	Maryland Heights Police-Interstate Speed	\$0.00	\$0.00	\$0.00	\$13,025.00	\$13,025.00	\$13,025.00
	PT-2017-02-34-00	Monroe Co Sheriff-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$2,000.00	\$2,000.00	\$2,000.00
	PT-2017-02-35-00	O'Fallon Police-Speeding /Red Light Enf,	\$0.00	\$0.00	\$0.00	\$21,000.00	\$21,000.00	\$21,000.00
	PT-2017-02-36-00	Olivette Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$4,900.00	\$4,900.00	\$4,900.00
	PT-2017-02-37-00	Overland Police-Hazardous & Speeding	\$0.00	\$0.00	\$0.00	\$8,175.00	\$8,175.00	\$8,175.00
	PT-2017-02-38-00	Pevely Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$8,750.00	\$8,750.00	\$8,750.00
	PT-2017-02-39-00	Richmond Heights Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$8,500.00	\$8,500.00	\$8,500.00
	PT-2017-02-40-00	Shrewsbury Police-HMV & Speeders	\$0.00	\$0.00	\$0.00	\$7,500.00	\$7,500.00	\$7,500.00
	PT-2017-02-41-00	St Ann Police-Speed Enforcement	\$0.00	\$0.00	\$0.00	\$8,000.00	\$8,000.00	\$8,000.00
	PT-2017-02-42-00	St Charles City Police-HMV	\$0.00	\$0.00	\$0.00	\$16,000.00	\$16,000.00	\$16,000.00
	PT-2017-02-43-00	St Charles Co Police-HMV	\$0.00	\$0.00	\$0.00	\$17,000.00	\$17,000.00	\$17,000.00

## Highway Safety Plan Cost Summary - Missouri

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Program Area	Project	Description	Prior Approved Program Funds	State Funds	Previous Bal.	Incre/(Decre)	Current Balance	Share to Local
	PT-2017-02-44-00	St Clair Police-Speed Enforcement	\$0.00	\$0.00	\$0.00	\$5,500.00	\$5,500.00	\$5,500.00
	PT-2017-02-45-00	St John Police-HMV	\$0.00	\$0.00	\$0.00	\$9,000.00	\$9,000.00	\$9,000.00
	PT-2017-02-46-00	St Louis Co Police-Highway Safety Unit	\$0.00	\$0.00	\$0.00	\$299,873.50	\$299,873.50	\$299,873.50
	PT-2017-02-47-00	St Louis Metro Police-Haz Violations/Spe	\$0.00	\$0.00	\$0.00	\$144,500.00	\$144,500.00	\$144,500.00
	PT-2017-02-48-00	St Peter Police-Hazardous Moving	\$0.00	\$0.00	\$0.00	\$27,073.44	\$27,073.44	\$27,073.44
	PT-2017-02-49-00	Town & Country Police-HMV Initiative	\$0.00	\$0.00	\$0.00	\$9,000.00	\$9,000.00	\$9,000.00
	PT-2017-02-50-00	Troy Police-HMV	\$0.00	\$0.00	\$0.00	\$7,000.00	\$7,000.00	\$7,000.00
	PT-2017-02-51-00	Union Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$11,525.00	\$11,525.00	\$11,525.00
	PT-2017-02-52-00	Webster Groves Police-HMV 2017	\$0.00	\$0.00	\$0.00	\$5,750.00	\$5,750.00	\$5,750.00
	PT-2017-02-53-00	Wentzville Police-HMV	\$0.00	\$0.00	\$0.00	\$9,086.00	\$9,086.00	\$9,086.00
	PT-2017-02-54-00	Belton Police-Hazardous Moving	\$0.00	\$0.00	\$0.00	\$8,864.00	\$8,864.00	\$8,864.00
	PT-2017-02-55-00	Blue Springs Police-Hazardous Moving	\$0.00	\$0.00	\$0.00	\$12,585.00	\$12,585.00	\$12,585.00
	PT-2017-02-56-00	Buchanan Co Sheriff-HMV	\$0.00	\$0.00	\$0.00	\$15,100.00	\$15,100.00	\$15,100.00
	PT-2017-02-57-00	Cameron Police-Operation Safe Travels	\$0.00	\$0.00	\$0.00	\$8,500.00	\$8,500.00	\$8,500.00
	PT-2017-02-58-00	Cass Co Sheriff-HMV	\$0.00	\$0.00	\$0.00	\$4,600.00	\$4,600.00	\$4,600.00
	PT-2017-02-59-00	Chillicothe Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$7,030.00	\$7,030.00	\$7,030.00
	PT-2017-02-60-00	Clay Co Sheriff-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$11,080.00	\$11,080.00	\$11,080.00
	PT-2017-02-61-00	Excelsior Springs Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$5,400.00	\$5,400.00	\$5,400.00
	PT-2017-02-62-00	Gladstone Pub Safety-HMV	\$0.00	\$0.00	\$0.00	\$7,500.00	\$7,500.00	\$7,500.00
	PT-2017-02-63-00	Grain Valley Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$1,680.00	\$1,680.00	\$1,680.00
	PT-2017-02-64-00	Grandview Police-HMV	\$0.00	\$0.00	\$0.00	\$15,000.00	\$15,000.00	\$15,000.00
	PT-2017-02-65-00	Harrisonville Police-Speeding	\$0.00	\$0.00	\$0.00	\$2,800.00	\$2,800.00	\$2,800.00
	PT-2017-02-66-00	Henry Co Sheriff-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$9,135.00	\$9,135.00	\$9,135.00
	PT-2017-02-67-00	Independence Police-HMV	\$0.00	\$0.00	\$0.00	\$181,800.00	\$181,800.00	\$181,800.00
	PT-2017-02-68-00	Jackson Co Sheriff-HMV & LETSAC Training	\$0.00	\$0.00	\$0.00	\$14,000.00	\$14,000.00	\$14,000.00
	PT-2017-02-69-00	KC Bd of Police Comm-HMV	\$0.00	\$0.00	\$0.00	\$240,000.00	\$240,000.00	\$240,000.00
	PT-2017-02-70-00	Kearney Police-Remove Aggressive Drivers	\$0.00	\$0.00	\$0.00	\$3,000.00	\$3,000.00	\$3,000.00
	PT-2017-02-71-00	Lee's Summit Police-HMV	\$0.00	\$0.00	\$0.00	\$30,000.00	\$30,000.00	\$30,000.00
	PT-2017-02-72-00	Liberty Police-HMV	\$0.00	\$0.00	\$0.00	\$10,500.00	\$10,500.00	\$10,500.00
	PT-2017-02-73-00	Marshall Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$3,250.00	\$3,250.00	\$3,250.00
	PT-2017-02-74-00	Pettis Co Sheriff-Aggressive Driving	\$0.00	\$0.00	\$0.00	\$4,823.80	\$4,823.80	\$4,823.80
	PT-2017-02-75-00	Platte Co Sheriff-Traffic Safety Officer	\$0.00	\$0.00	\$0.00	\$28,500.00	\$28,500.00	\$28,500.00
	PT-2017-02-76-00	Platte Co Sheriff-HMV	\$0.00	\$0.00	\$0.00	\$20,750.00	\$20,750.00	\$20,750.00
	PT-2017-02-77-00	Pleasant Hill Police-HMV	\$0.00	\$0.00	\$0.00	\$3,500.00	\$3,500.00	\$3,500.00
	PT-2017-02-78-00	Raymore Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$5,500.00	\$5,500.00	\$5,500.00
	PT-2017-02-79-00	Raytown Police-Hazardous Moving 2017	\$0.00	\$0.00	\$0.00	\$4,000.00	\$4,000.00	\$4,000.00
	PT-2017-02-80-00	Richmond Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$3,120.00	\$3,120.00	\$3,120.00
	PT-2017-02-81-00	Riverside Pub Safety- HMV Enforcement	\$0.00	\$0.00	\$0.00	\$3,000.00	\$3,000.00	\$3,000.00

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Program Area	Project	Description	Prior Approved Program Funds	State Funds	Previous Bal.	Incre/(Decre)	Current Balance	Share to Local
	PT-2017-02-82-00	Sedalia Police-Hazardous Moving 2017	\$0.00	\$0.00	\$0.00	\$3,250.00	\$3,250.00	\$3,250.00
	PT-2017-02-83-00	Smithville Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$4,492.00	\$4,492.00	\$4,492.00
	PT-2017-02-84-00	St Joseph Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$6,480.00	\$6,480.00	\$6,480.00
	PT-2017-02-85-00	MO Southern St Univ-Law Enf Training	\$0.00	\$0.00	\$0.00	\$30,000.00	\$30,000.00	\$0.00
	PT-2017-02-86-00	MSHP-Skill Development	\$0.00	\$0.00	\$0.00	\$20,000.00	\$20,000.00	\$0.00
	PT-2017-02-87-00	MSHP-Radar/EVOC/Instr Dev/Equip Material	\$0.00	\$0.00	\$0.00	\$96,560.00	\$96,560.00	\$0.00
	PT-2017-02-88-00	Scott City Police-HMV Enforcement 2017	\$0.00	\$0.00	\$0.00	\$3,200.00	\$3,200.00	\$3,200.00
	PT-2017-02-89-00	Scott Co Sheriff-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$3,718.00	\$3,718.00	\$3,718.00
	PT-2017-02-90-00	Wayne Co Sheriff-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$10,185.00	\$10,185.00	\$10,185.00
	PT-2017-02-91-00	West Plains Police-HMV 2017	\$0.00	\$0.00	\$0.00	\$3,500.00	\$3,500.00	\$3,500.00
	PT-2017-02-92-00	Willow Springs Police-HMV	\$0.00	\$0.00	\$0.00	\$1,500.00	\$1,500.00	\$1,500.00
	PT-2017-02-93-00	Howell Co Sheriff-HMV	\$0.00	\$0.00	\$0.00	\$6,000.00	\$6,000.00	\$6,000.00
	PT-2017-02-94-00	Jackson Police-HMV Project	\$0.00	\$0.00	\$0.00	\$3,750.00	\$3,750.00	\$3,750.00
	PT-2017-02-95-00	Kennett Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$3,500.00	\$3,500.00	\$3,500.00
	PT-2017-02-96-00	Butler Co Sheriff-HMV 2016-17	\$0.00	\$0.00	\$0.00	\$7,192.73	\$7,192.73	\$7,192.73
	PT-2017-02-97-00	Cape Girardeau Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$6,500.00	\$6,500.00	\$6,500.00
	PT-2017-02-98-00	Essex Police-Safer Roads for Essex	\$0.00	\$0.00	\$0.00	\$3,675.04	\$3,675.04	\$3,675.04
	PT-2017-02-99-00	Farmington Police-HMV	\$0.00	\$0.00	\$0.00	\$4,500.00	\$4,500.00	\$4,500.00
	PT-2017-02-A0-00	Madison Co Sheriff-Operation Safe Travel	\$0.00	\$0.00	\$0.00	\$3,750.00	\$3,750.00	\$3,750.00
	PT-2017-02-A2-00	Mountain View Police-HMV Violations	\$0.00	\$0.00	\$0.00	\$2,250.00	\$2,250.00	\$2,250.00
	PT-2017-02-A3-00	MSHP-Hazardous Moving Operations	\$0.00	\$0.00	\$0.00	\$250,000.00	\$250,000.00	\$0.00
	PT-2017-02-A5-00	MO Safety Center-Driver Improvement Prog	\$0.00	\$0.00	\$0.00	\$47,673.33	\$47,673.33	\$0.00
	PT-2017-02-A6-00	Livingston Co Sheriff-HMV Project	\$0.00	\$0.00	\$0.00	\$2,500.00	\$2,500.00	\$2,500.00
	PT-2017-02-A9-00	Hollister Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$2,750.00	\$2,750.00	\$2,750.00
	PT-2017-02-B0-00	Greene Co Sheriff-HMV	\$0.00	\$0.00	\$0.00	\$65,000.00	\$65,000.00	\$65,000.00
	PT-2017-02-B1-00	Potosi Police-HMV	\$0.00	\$0.00	\$0.00	\$7,142.21	\$7,142.21	\$7,142.21
	PT-2017-02-B2-00	Osage Beach Police-Hazardous Moving Enfo	\$0.00	\$0.00	\$0.00	\$4,500.00	\$4,500.00	\$4,500.00
	PT-2017-02-B3-00	Republic Police-Safety Is Our 1st Priori	\$0.00	\$0.00	\$0.00	\$3,500.00	\$3,500.00	\$3,500.00
	PT-2017-02-B4-00	Phelps Co Sheriff-Hazardous Moving Enf 2	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
	PT-2017-02-B5-00	Rolla Police-HMV & Occupant Protection	\$0.00	\$0.00	\$0.00	\$6,000.00	\$6,000.00	\$6,000.00
	PT-2017-02-B6-00	Rogersville Police-HMV 2016-17	\$0.00	\$0.00	\$0.00	\$2,000.00	\$2,000.00	\$2,000.00
	PT-2017-02-B7-00	St Clair Co Sheriff-Traffic Enforcement	\$0.00	\$0.00	\$0.00	\$3,000.00	\$3,000.00	\$3,000.00
	PT-2017-02-B8-00	Springfield Police-HMV	\$0.00	\$0.00	\$0.00	\$76,404.20	\$76,404.20	\$76,404.20
	PT-2017-02-B9-00	THSD-Statewide HMV	\$0.00	\$0.00	\$0.00	\$30,000.00	\$30,000.00	\$15,000.00
	PT-2017-02-C0-00	Stone Co Sheriff-HMV	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
	PT-2017-02-C1-00	Jasper Co Sheriff-HMV	\$0.00	\$0.00	\$0.00	\$10,000.00	\$10,000.00	\$10,000.00
	PT-2017-02-C2-00	Jefferson City Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$20,750.00	\$20,750.00	\$20,750.00
	PT-2017-02-C3-00	Joplin Police-HMV Overtime	\$0.00	\$0.00	\$0.00	\$10,000.00	\$10,000.00	\$10,000.00

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	PT-2017-02-C4-00	Christian Co Sheriff-Enforcing HMV	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
	PT-2017-02-C5-00	Branson Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$3,000.00	\$3,000.00	\$3,000.00
	PT-2017-02-C6-00	Boone Co Sheriff-HMV Slowdown	\$0.00	\$0.00	\$0.00	\$20,528.00	\$20,528.00	\$20,528.00
	PT-2017-02-C7-00	Bolivar Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$6,050.00	\$6,050.00	\$6,050.00
	PT-2017-02-C8-00	Franklin Co Sheriff-HMV	\$0.00	\$0.00	\$0.00	\$30,000.00	\$30,000.00	\$30,000.00
	PT-2017-02-C9-00	Cole Co Sheriff-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$7,425.00	\$7,425.00	\$7,425.00
	PT-2017-02-D0-00	Brentwood Police-Citizen Traffic Safety	\$0.00	\$0.00	\$0.00	\$4,500.00	\$4,500.00	\$4,500.00
	PT-2017-02-D1-00	Greene Co Sheriff-HMV Unit	\$0.00	\$0.00	\$0.00	\$25,376.58	\$25,376.58	\$25,376.58
	PT-2017-02-D2-00	Newton Co Sheriff-Hazardous Moving	\$0.00	\$0.00	\$0.00	\$8,300.00	\$8,300.00	\$8,300.00
	PT-2017-02-D3-00	Washington Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$15,617.00	\$15,617.00	\$15,617.00
	PT-2017-02-D4-00	Waynesville Police-Slow the Roll	\$0.00	\$0.00	\$0.00	\$2,000.00	\$2,000.00	\$2,000.00
	PT-2017-02-D5-00	Neosho Police-HMV	\$0.00	\$0.00	\$0.00	\$6,700.00	\$6,700.00	\$6,700.00
	PT-2017-02-D6-00	Camden Co Sheriff-HMV	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
	PT-2017-02-D7-00	Seneca Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$1,500.00	\$1,500.00	\$1,500.00
	PT-2017-02-D8-00	Camdenton Police-Overtime Enforcement	\$0.00	\$0.00	\$0.00	\$1,250.00	\$1,250.00	\$1,250.00
	PT-2017-02-D9-00	Callaway Co Sheriff-Callaway Co Sheriffs	\$0.00	\$0.00	\$0.00	\$8,208.00	\$8,208.00	\$8,208.00
	PT-2017-02-E0-00	Webb City Police-HMV Patrols	\$0.00	\$0.00	\$0.00	\$10,000.00	\$10,000.00	\$10,000.00
	PT-2017-02-E1-00	Washington Co Sheriff-HMV	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
	PT-2017-02-E2-00	Nevada Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$6,000.00	\$6,000.00	\$6,000.00
	PT-2017-02-E3-00	St Robert Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$4,000.00	\$4,000.00	\$4,000.00
	PT-2017-02-E4-00	Nixa Police-HMV	\$0.00	\$0.00	\$0.00	\$6,000.00	\$6,000.00	\$6,000.00
	PT-2017-02-E5-00	Ozark Police-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$3,990.00	\$3,990.00	\$3,990.00
	PT-2017-02-E6-00	Lawrence Co Sheriff-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$5,500.00	\$5,500.00	\$5,500.00
	PT-2017-02-E7-00	Webster Co Sheriff-HMV Enforcement	\$0.00	\$0.00	\$0.00	\$8,798.00	\$8,798.00	\$8,798.00
	PT-2017-02-E8-00	Lake Winnebago Police-HMV	\$0.00	\$0.00	\$0.00	\$2,000.00	\$2,000.00	\$2,000.00
		Police Traffic Services Total	\$0.00	\$1,947,102.87	\$0.00	\$4,496,092.03	\$4,496,092.03	\$3,624,858.70
		Accident Investigation						
	AI-2017-04-01-00	MO Safety Center-Crash Investigation Tra	\$0.00	\$0.00	\$0.00	\$61,097.54	\$61,097.54	\$0.00
	AI-2017-04-02-00	KC Bd of Pol Comm-Adv Crash Investigatio	\$0.00	\$0.00	\$0.00	\$15,000.00	\$15,000.00	\$15,000.00
	AI-2017-04-03-00	MSHP-Accident Investigation	\$0.00	\$0.00	\$0.00	\$70,180.90	\$70,180.90	\$0.00
		Accident Investigation Total	\$0.00	\$0.00	\$0.00	\$146,278.44	\$146,278.44	\$15,000.00



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Community Traffic Safety Project								
	CP-2017-09-01-00	THSD-Teen Safety	\$0.00	\$0.00	\$0.00	\$30,000.00	\$30,000.00	\$0.00
	CP-2017-09-02-00	THSD-Teen Driving Programs	\$0.00	\$0.00	\$0.00	\$33,590.00	\$33,590.00	\$0.00
	CP-2017-09-03-00	Cape Girardeau Safe Comm-Team Spirit You	\$0.00	\$0.00	\$0.00	\$183,177.00	\$183,177.00	\$183,177.00
	CP-2017-09-04-00	Mercy Hospital-Occupant Protection-Injur	\$0.00	\$0.00	\$0.00	\$60,000.80	\$60,000.80	\$0.00
	CP-2017-09-05-00	Univ of MO Curators-ThinkFirst MO	\$0.00	\$0.00	\$0.00	\$497,431.00	\$497,431.00	\$0.00
	CP-2017-09-06-00	THSD-Youth & CPS Training	\$0.00	\$0.00	\$0.00	\$150,000.00	\$150,000.00	\$150,000.00
		Community Traffic Safety Project Total	\$0.00	\$0.00	\$0.00	\$954,198.80	\$954,198.80	\$333,177.00
Driver Education								
	DE-2017-02-01-00	MO Police Chiefs Assoc-Law Enf Driving T	\$0.00	\$0.00	\$0.00	\$41,300.00	\$41,300.00	\$41,300.00
	DE-2017-02-02-00	MO Sheriffs Assoc-Law Enf Driver Trainin	\$0.00	\$0.00	\$0.00	\$9,600.00	\$9,600.00	\$9,600.00
	DE-2017-02-03-00	Univ of MO Curators-MobileAge Comp Educa	\$0.00	\$0.00	\$0.00	\$52,290.00	\$52,290.00	\$0.00
		Driver Education Total	\$0.00	\$0.00	\$0.00	\$103,190.00	\$103,190.00	\$50,900.00
Driver Licensing								
	DL-2017-02-01-00	Wash Univ STL-R&D Standard Tr Sign Namin	\$0.00	\$0.00	\$0.00	\$126,047.40	\$126,047.40	\$0.00
	DL-2017-02-02-00	Wash Univ STL-R&D ID & Ed of Older Drive	\$0.00	\$0.00	\$0.00	\$134,293.40	\$134,293.40	\$0.00
	DL-2017-02-03-00	Wash Univ STL-R&D Older Dvr Fitness Ass	\$0.00	\$0.00	\$0.00	\$45,338.00	\$45,338.00	\$0.00
		Driver Licensing Total	\$0.00	\$0.00	\$0.00	\$305,678.80	\$305,678.80	\$0.00
Railroad/Highway Crossings								
	RH-2017-02-01-00	MO Operation Livesaver-MO Operation Life	\$0.00	\$0.00	\$0.00	\$17,000.00	\$17,000.00	\$17,000.00
		Railroad/Highway Crossings Total	\$0.00	\$0.00	\$0.00	\$17,000.00	\$17,000.00	\$17,000.00
Roadway Safety								
	RS-2017-11-01-00	THSD-TEAP	\$0.00	\$0.00	\$0.00	\$60,000.00	\$60,000.00	\$0.00
	RS-2017-11-02-00	U of MO Curators-Traffic Safety & Bluepr	\$0.00	\$0.00	\$0.00	\$30,000.00	\$30,000.00	\$0.00
		Roadway Safety Total	\$0.00	\$0.00	\$0.00	\$90,000.00	\$90,000.00	\$0.00
Safe Communities								
	SA-2017-09-01-00	Cape Girardeau Safe Comm-Safe Communitie	\$0.00	\$0.00	\$0.00	\$76,053.87	\$76,053.87	\$76,053.87
	SA-2017-09-02-00	St Joseph Safety&Health-Traffic Safety T	\$0.00	\$0.00	\$0.00	\$65,403.00	\$65,403.00	\$65,403.00
		Safe Communities Total	\$0.00	\$0.00	\$0.00	\$141,456.87	\$141,456.87	\$141,456.87
Speed Enforcement								
	SE-2017-02-01-00	MSHP-Speed Enforcement	\$0.00	\$0.00	\$0.00	\$110,000.00	\$110,000.00	\$0.00
		Speed Enforcement Total	\$0.00	\$0.00	\$0.00	\$110,000.00	\$110,000.00	\$0.00

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Program Area	Project	Description	Prior Approved Program Funds	State Funds	Previous Bal.	Incre/(Decre)	Current Balance	Share to Local
Child Restraint								
	CR-2017-05-01-00	THSD-CPS Program Activities	\$0.00	\$0.00	\$0.00	\$28,000.00	\$28,000.00	\$0.00
	CR-2017-05-02-00	CMO Foster Care&Adopt-Car Seat & Safety	\$0.00	\$0.00	\$0.00	\$10,967.00	\$10,967.00	\$10,967.00
	CR-2017-05-03-00	MO Safety Center-Enforcement CPS Week	\$0.00	\$0.00	\$0.00	\$73,043.72	\$73,043.72	\$56,000.00
	CR-2017-05-04-00	MO Safety Center-Survey CPS	\$0.00	\$0.00	\$0.00	\$47,806.63	\$47,806.63	\$0.00
	CR-2017-05-05-00	THSD-Car Seat Distribution Program	\$0.00	\$0.00	\$0.00	\$50,000.00	\$50,000.00	\$0.00
		Child Restraint Total	\$0.00	\$0.00	\$0.00	\$209,817.35	\$209,817.35	\$66,967.00
Paid Advertising								
	PM-2017-02-01-00	THSD-Youth Seat Belt Enforcement Campaign	\$0.00	\$0.00	\$0.00	\$300,000.00	\$300,000.00	\$0.00
	PM-2017-02-02-00	THSD-Work Zone Awareness	\$0.00	\$0.00	\$0.00	\$50,000.00	\$50,000.00	\$0.00
	PM-2017-02-03-00	THSD-PI Creative Services	\$0.00	\$0.00	\$0.00	\$50,000.00	\$50,000.00	\$0.00
	PM-2017-02-04-00	THSD-Bike, Ped & Distracted Drv PI&E	\$0.00	\$0.00	\$0.00	\$270,000.00	\$270,000.00	\$0.00
	PM-2017-02-05-00	THSD-Motorcycle Safety Initiatives	\$0.00	\$0.00	\$0.00	\$35,000.00	\$35,000.00	\$0.00
		Paid Advertising Total	\$0.00	\$0.00	\$0.00	\$705,000.00	\$705,000.00	\$0.00
		NHTSA 402 Total	\$0.00	\$2,047,102.87	\$0.00	\$8,188,411.49	\$8,188,411.49	\$4,806,703.57
154 Transfer Funds								
	154AL-2017-AL-00-00	THSD-Statewide 154AL Program	\$0.00	\$0.00	\$0.00	\$3,500,000.00	\$3,500,000.00	\$3,500,000.00
	154AL-2017-AL-01-00	Barry Co Sheriff-DWI Check Pt	\$0.00	\$0.00	\$0.00	\$2,310.00	\$2,310.00	\$2,310.00
	154AL-2017-AL-02-00	Billings Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$1,500.00	\$1,500.00	\$1,500.00
	154AL-2017-AL-03-00	Bolivar Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$9,385.00	\$9,385.00	\$9,385.00
	154AL-2017-AL-04-00	Boone Co Sheriff-Youth Alcohol Enf	\$0.00	\$0.00	\$0.00	\$2,750.00	\$2,750.00	\$2,750.00
	154AL-2017-AL-05-00	Boone Co Sheriff-FullTime DWI /Traffic U	\$0.00	\$0.00	\$0.00	\$68,575.00	\$68,575.00	\$68,575.00
	154AL-2017-AL-06-00	Branson Police-DWI Saturation Enf	\$0.00	\$0.00	\$0.00	\$3,500.00	\$3,500.00	\$3,500.00
	154AL-2017-AL-07-00	Branson Police-Youth Alcohol Enf	\$0.00	\$0.00	\$0.00	\$3,500.00	\$3,500.00	\$3,500.00
	154AL-2017-AL-08-00	THSD-Impaired Driving Paid Media Campaign	\$0.00	\$0.00	\$0.00	\$850,000.00	\$850,000.00	\$0.00
	154AL-2017-AL-09-00	THSD-Alliance Sports Marketing	\$0.00	\$0.00	\$0.00	\$80,000.00	\$80,000.00	\$0.00
	154AL-2017-AL-10-00	Camden Co Sheriff-DWI Enf	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
	154AL-2017-AL-11-00	MSPH-Wolfpack DWI Effort	\$0.00	\$0.00	\$0.00	\$64,600.00	\$64,600.00	\$0.00
	154AL-2017-AL-12-00	Cartersville Police-SW MO DWI Task Force	\$0.00	\$0.00	\$0.00	\$5,500.00	\$5,500.00	\$5,500.00
	154AL-2017-AL-13-00	Carthage Police-DWI Sobriety Checkpoint	\$0.00	\$0.00	\$0.00	\$3,125.00	\$3,125.00	\$3,125.00
	154AL-2017-AL-14-00	Christian Co Sheriff-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
	154AL-2017-AL-16-00	Arnold Police-Sobriety Checkpoint	\$0.00	\$0.00	\$0.00	\$8,400.00	\$8,400.00	\$8,400.00
	154AL-2017-AL-17-00	Arnold Police-Youth Alcohol Enforcement	\$0.00	\$0.00	\$0.00	\$6,200.00	\$6,200.00	\$6,200.00
	154AL-2017-AL-18-00	Arnold Police-DWI Saturation Patrol	\$0.00	\$0.00	\$0.00	\$13,000.00	\$13,000.00	\$13,000.00
	154AL-2017-AL-19-00	Ballwin Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$10,750.00	\$10,750.00	\$10,750.00
	154AL-2017-AL-20-00	Christian Co Sheriff-Youth Alcohol Enf	\$0.00	\$0.00	\$0.00	\$3,000.00	\$3,000.00	\$3,000.00
	154AL-2017-AL-21-00	Cole Co Sheriff-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$11,000.00	\$11,000.00	\$11,000.00
	154AL-2017-AL-22-00	Columbia Police-DWI Enforcement Activiti	\$0.00	\$0.00	\$0.00	\$25,000.00	\$25,000.00	\$25,000.00

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154AL-2017-AL-23-00		Crocker Police-Sobriety Ckpt & DWI Satur	\$0.00	\$0.00	\$0.00	\$5,520.00	\$5,520.00	\$5,520.00
154AL-2017-AL-24-00		Franklin Co Sheriff-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$15,000.00	\$15,000.00	\$15,000.00
154AL-2017-AL-25-00		Franklin Co Sheriff-Youth Alcohol	\$0.00	\$0.00	\$0.00	\$10,000.00	\$10,000.00	\$10,000.00
154AL-2017-AL-26-00		Greene Co Sheriff-DWI	\$0.00	\$0.00	\$0.00	\$90,000.00	\$90,000.00	\$90,000.00
154AL-2017-AL-27-00		Greene Co Sheriff-Youth Alcohol Enf	\$0.00	\$0.00	\$0.00	\$38,000.00	\$38,000.00	\$38,000.00
154AL-2017-AL-28-00		MO Sheriffs Assoc-LE Liaison (Alcohol) 2	\$0.00	\$0.00	\$0.00	\$159,000.00	\$159,000.00	\$159,000.00
154AL-2017-AL-29-00		Hollister Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$1,500.00	\$1,500.00	\$1,500.00
154AL-2017-AL-30-00		Hollister Police-Youth Alcohol Enforceme	\$0.00	\$0.00	\$0.00	\$2,000.00	\$2,000.00	\$2,000.00
154AL-2017-AL-31-00		THSD-Youth Alcohol Program	\$0.00	\$0.00	\$0.00	\$18,000.00	\$18,000.00	\$0.00
154AL-2017-AL-32-00		Jasper Co Sheriff-DWI Enf & Checkpoint	\$0.00	\$0.00	\$0.00	\$20,000.00	\$20,000.00	\$20,000.00
154AL-2017-AL-33-00		Jefferson City Police-DWI Enf / Saturati	\$0.00	\$0.00	\$0.00	\$24,000.00	\$24,000.00	\$24,000.00
154AL-2017-AL-34-00		Joplin Police-DWI Enf & Youth Alcohol	\$0.00	\$0.00	\$0.00	\$10,000.00	\$10,000.00	\$10,000.00
154AL-2017-AL-35-00		Joplin Police-Full Time DWI Unit	\$0.00	\$0.00	\$0.00	\$61,700.00	\$61,700.00	\$61,700.00
154AL-2017-AL-36-00		Lake Winnebago Pol-DWI Enf / Youth Alcoho	\$0.00	\$0.00	\$0.00	\$2,500.00	\$2,500.00	\$2,500.00
154AL-2017-AL-37-00		Lamar Police-You Booze You Loose	\$0.00	\$0.00	\$0.00	\$2,500.00	\$2,500.00	\$2,500.00
154AL-2017-AL-38-00		Lawrence Co Sheriff-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$12,000.00	\$12,000.00	\$12,000.00
154AL-2017-AL-39-00		Monett Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$1,234.80	\$1,234.80	\$1,234.80
154AL-2017-AL-40-00		Neosho Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$3,780.00	\$3,780.00	\$3,780.00
154AL-2017-AL-41-00		Ballwin Police-Youth Alcohol	\$0.00	\$0.00	\$0.00	\$2,750.00	\$2,750.00	\$2,750.00
154AL-2017-AL-43-00		Byrnes Mill Police-Arrive Safe & Sober	\$0.00	\$0.00	\$0.00	\$4,000.00	\$4,000.00	\$4,000.00
154AL-2017-AL-44-00		Chesterfield Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$6,500.00	\$6,500.00	\$6,500.00
154AL-2017-AL-45-00		Chesterfield Police-Sobriety Checkpoint	\$0.00	\$0.00	\$0.00	\$10,000.00	\$10,000.00	\$10,000.00
154AL-2017-AL-46-00		Clark Co Sheriff-DWI	\$0.00	\$0.00	\$0.00	\$8,995.35	\$8,995.35	\$8,995.35
154AL-2017-AL-47-00		Clayton Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$2,994.60	\$2,994.60	\$2,994.60
154AL-2017-AL-48-00		Cottleville Pol-Cottleville/StCharles DW	\$0.00	\$0.00	\$0.00	\$6,400.00	\$6,400.00	\$6,400.00
154AL-2017-AL-49-00		Creve Coeur Police-You Drink, Drive, Los	\$0.00	\$0.00	\$0.00	\$6,500.00	\$6,500.00	\$6,500.00
154AL-2017-AL-50-00		Creve Coeur Police-Sobriety Ckpoint /BAT	\$0.00	\$0.00	\$0.00	\$13,000.00	\$13,000.00	\$13,000.00
154AL-2017-AL-51-00		Creve Coeur Police-DWI Officer	\$0.00	\$0.00	\$0.00	\$56,000.00	\$56,000.00	\$56,000.00
154AL-2017-AL-52-00		Des Peres Pub Safety-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$2,000.00	\$2,000.00	\$2,000.00
154AL-2017-AL-53-00		Ellisville Police-DWI Enforcement FY16-1	\$0.00	\$0.00	\$0.00	\$3,000.00	\$3,000.00	\$3,000.00
154AL-2017-AL-54-00		Eureka Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$2,500.00	\$2,500.00	\$2,500.00
154AL-2017-AL-55-00		Eureka Police-Sobriety Checkpoint	\$0.00	\$0.00	\$0.00	\$7,500.00	\$7,500.00	\$7,500.00
154AL-2017-AL-56-00		Eureka Police-Youth Alcohol	\$0.00	\$0.00	\$0.00	\$2,000.00	\$2,000.00	\$2,000.00
154AL-2017-AL-57-00		Festus Police-DWI Overtime Enforcement	\$0.00	\$0.00	\$0.00	\$12,000.00	\$12,000.00	\$12,000.00
154AL-2017-AL-58-00		Festus Police-Youth Alcohol Overtime Enf	\$0.00	\$0.00	\$0.00	\$8,000.00	\$8,000.00	\$8,000.00
154AL-2017-AL-59-00		Florissant Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$9,000.00	\$9,000.00	\$9,000.00
154AL-2017-AL-60-00		Hazelwood Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$32,310.48	\$32,310.48	\$32,310.48
154AL-2017-AL-61-00		Hazelwood Police-Youth Alcohol Enforceme	\$0.00	\$0.00	\$0.00	\$10,000.00	\$10,000.00	\$10,000.00

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154AL-2017-AL-62-00		Hazelwood Police-BAT Van Operations	\$0.00	\$0.00	\$0.00	\$5,750.00	\$5,750.00	\$5,750.00
154AL-2017-AL-63-00		Nevada Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$4,000.00	\$4,000.00	\$4,000.00
154AL-2017-AL-64-00		Newton Co Sheriff-Impaired Driver	\$0.00	\$0.00	\$0.00	\$7,500.00	\$7,500.00	\$7,500.00
154AL-2017-AL-65-00		Nixa Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$9,500.00	\$9,500.00	\$9,500.00
154AL-2017-AL-66-00		Jefferson Co Sheriff-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$215,000.00	\$215,000.00	\$215,000.00
154AL-2017-AL-67-00		Jefferson Co Sheriff-DWI Enf Unit	\$0.00	\$0.00	\$0.00	\$129,905.27	\$129,905.27	\$129,905.27
154AL-2017-AL-68-00		Jefferson Co Sheriff-Sobriety Checkpoint	\$0.00	\$0.00	\$0.00	\$80,000.00	\$80,000.00	\$80,000.00
154AL-2017-AL-69-00		Jefferson Co Sheriff-Youth Alcohol	\$0.00	\$0.00	\$0.00	\$180,000.00	\$180,000.00	\$180,000.00
154AL-2017-AL-70-00		Lake St Louis Police-DWI Saturation Patr	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
154AL-2017-AL-71-00		Lake St Louis Police-DWI Checkpoint	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
154AL-2017-AL-72-00		Macon Police-Macon Our Roads Safe-DWI Pr	\$0.00	\$0.00	\$0.00	\$2,500.00	\$2,500.00	\$2,500.00
154AL-2017-AL-73-00		Manchester Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$5,005.00	\$5,005.00	\$5,005.00
154AL-2017-AL-74-00		Maryland Heights Police-DWI Saturation P	\$0.00	\$0.00	\$0.00	\$6,230.00	\$6,230.00	\$6,230.00
154AL-2017-AL-75-00		Maryland Heights Pol-Hollywd Amph Youth	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
154AL-2017-AL-76-00		Moberly Police-DWI Enf /Checkpoint	\$0.00	\$0.00	\$0.00	\$3,750.00	\$3,750.00	\$3,750.00
154AL-2017-AL-77-00		Osage Beach Police-Stop Drinking & Drivi	\$0.00	\$0.00	\$0.00	\$3,500.00	\$3,500.00	\$3,500.00
154AL-2017-AL-78-00		Monroe Co Sheriff-DWI Saturation Enf	\$0.00	\$0.00	\$0.00	\$2,000.00	\$2,000.00	\$2,000.00
154AL-2017-AL-79-00		O'Fallon Police-DWI Saturation Patrols	\$0.00	\$0.00	\$0.00	\$23,040.00	\$23,040.00	\$23,040.00
154AL-2017-AL-80-00		O'Fallon Police-Sobriety Checkpoint	\$0.00	\$0.00	\$0.00	\$10,000.00	\$10,000.00	\$10,000.00
154AL-2017-AL-81-00		O'Fallon Police-Youth Alcohol, Before Th	\$0.00	\$0.00	\$0.00	\$6,500.00	\$6,500.00	\$6,500.00
154AL-2017-AL-82-00		Olivette Police-DWI Enforcement Initiati	\$0.00	\$0.00	\$0.00	\$10,575.00	\$10,575.00	\$10,575.00
154AL-2017-AL-83-00		Overland Police-Youth Alcohol	\$0.00	\$0.00	\$0.00	\$1,680.00	\$1,680.00	\$1,680.00
154AL-2017-AL-84-00		Overland Police- DWI Saturation Patrols	\$0.00	\$0.00	\$0.00	\$7,500.00	\$7,500.00	\$7,500.00
154AL-2017-AL-85-00		Overland Police-DWI Sobriety Checkpoints	\$0.00	\$0.00	\$0.00	\$13,600.00	\$13,600.00	\$13,600.00
154AL-2017-AL-86-00		Pevely Police-DWI Wolf Pack	\$0.00	\$0.00	\$0.00	\$5,500.00	\$5,500.00	\$5,500.00
154AL-2017-AL-87-00		Pevely Police-Youth Alcohol Enforcement	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
154AL-2017-AL-88-00		St Ann Police-Sobriety Checkpoint	\$0.00	\$0.00	\$0.00	\$14,000.00	\$14,000.00	\$14,000.00
154AL-2017-AL-89-00		St Charles City Police-DWI Saturation/Wo	\$0.00	\$0.00	\$0.00	\$15,500.00	\$15,500.00	\$15,500.00
154AL-2017-AL-90-00		St Charles City Police-DWI Checkpoint	\$0.00	\$0.00	\$0.00	\$15,125.00	\$15,125.00	\$15,125.00
154AL-2017-AL-91-00		St Charles City Police-Youth Alcohol Enf	\$0.00	\$0.00	\$0.00	\$6,000.00	\$6,000.00	\$6,000.00
154AL-2017-AL-92-00		St Charles Co Police-DWI Checkpoint	\$0.00	\$0.00	\$0.00	\$10,000.00	\$10,000.00	\$10,000.00
154AL-2017-AL-93-00		Ozark Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$6,000.00	\$6,000.00	\$6,000.00
154AL-2017-AL-95-00		St Charles Co Police-Youth Alcohol	\$0.00	\$0.00	\$0.00	\$10,000.00	\$10,000.00	\$10,000.00
154AL-2017-AL-96-00		St Charles Co Police-DWI Wolfpack/Satura	\$0.00	\$0.00	\$0.00	\$15,500.00	\$15,500.00	\$15,500.00
154AL-2017-AL-97-00		Potosi Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$8,000.00	\$8,000.00	\$8,000.00
154AL-2017-AL-98-00		Republic Police-DWI Enf & Education	\$0.00	\$0.00	\$0.00	\$9,000.00	\$9,000.00	\$9,000.00
154AL-2017-AL-99-00		Rogersville Police-DWI Enforcement 2016-	\$0.00	\$0.00	\$0.00	\$3,000.00	\$3,000.00	\$3,000.00
154AL-2017-AL-A0-00		Rolla Police-DWI Enf /Checkpoint	\$0.00	\$0.00	\$0.00	\$14,000.00	\$14,000.00	\$14,000.00

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154AL-2017-AL-A1-00		Seneca Police-Zero Tolerance	\$0.00	\$0.00	\$0.00	\$1,500.00	\$1,500.00	\$1,500.00
154AL-2017-AL-A2-00		MADD-Power of Parents & Power of Youth	\$0.00	\$0.00	\$0.00	\$53,500.00	\$53,500.00	\$53,500.00
154AL-2017-AL-A3-00		Safe & Sober Inc-MO Safe & Sober	\$0.00	\$0.00	\$0.00	\$310,000.00	\$310,000.00	\$310,000.00
154AL-2017-AL-A4-00		St Clair Police-R.I.D.	\$0.00	\$0.00	\$0.00	\$5,500.00	\$5,500.00	\$5,500.00
154AL-2017-AL-A5-00		St John Police-Sobriety Checkpoints	\$0.00	\$0.00	\$0.00	\$13,000.00	\$13,000.00	\$13,000.00
154AL-2017-AL-A6-00		St John Police-DWI Saturation	\$0.00	\$0.00	\$0.00	\$8,000.00	\$8,000.00	\$8,000.00
154AL-2017-AL-A7-00		St Louis Co Police-Sobriety Ckpt/Saturat	\$0.00	\$0.00	\$0.00	\$31,500.00	\$31,500.00	\$31,500.00
154AL-2017-AL-A8-00		St Louis Metro Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$115,000.00	\$115,000.00	\$115,000.00
154AL-2017-AL-A9-00		St Louis Metro Police-Sobriety Ckpoint	\$0.00	\$0.00	\$0.00	\$20,000.00	\$20,000.00	\$20,000.00
154AL-2017-AL-B0-00		St Peters Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$28,000.00	\$28,000.00	\$28,000.00
154AL-2017-AL-B1-00		Sullivan Police-DWI Enf Overtime	\$0.00	\$0.00	\$0.00	\$5,500.00	\$5,500.00	\$5,500.00
154AL-2017-AL-B2-00		Sullivan Police-Franklin Co DWI Task For	\$0.00	\$0.00	\$0.00	\$3,000.00	\$3,000.00	\$3,000.00
154AL-2017-AL-B3-00		Troy Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
154AL-2017-AL-B4-00		U of MO Curators-Partners In Prevention	\$0.00	\$0.00	\$0.00	\$320,000.00	\$320,000.00	\$0.00
154AL-2017-AL-B5-00		Union Police-Franklin Co Impaired Drivin	\$0.00	\$0.00	\$0.00	\$3,000.00	\$3,000.00	\$3,000.00
154AL-2017-AL-B6-00		Velda City Police-Safer Roads	\$0.00	\$0.00	\$0.00	\$3,000.00	\$3,000.00	\$3,000.00
154AL-2017-AL-B7-00		Vinita Park Police-DWI Ckpoint & Saturat	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
154AL-2017-AL-B8-00		Wentzville Police-Sobriety Checkpoint	\$0.00	\$0.00	\$0.00	\$8,000.00	\$8,000.00	\$8,000.00
154AL-2017-AL-B9-00		Wentzville Police-Underage Drinking	\$0.00	\$0.00	\$0.00	\$5,500.00	\$5,500.00	\$5,500.00
154AL-2017-AL-C0-00		Wentzville Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$10,000.00	\$10,000.00	\$10,000.00
154AL-2017-AL-C1-00		Woodson Terrace Police-DWI Wolfpack Enf	\$0.00	\$0.00	\$0.00	\$2,500.00	\$2,500.00	\$2,500.00
154AL-2017-AL-C2-00		DeSoto Public Safety-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$2,000.00	\$2,000.00	\$2,000.00
154AL-2017-AL-C3-00		Belton Police-DWI Wolfpack	\$0.00	\$0.00	\$0.00	\$3,048.00	\$3,048.00	\$3,048.00
154AL-2017-AL-C4-00		Belton Police-Sobriety Checkpoint	\$0.00	\$0.00	\$0.00	\$10,080.00	\$10,080.00	\$10,080.00
154AL-2017-AL-C5-00		Benton Co Sheriff-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$8,000.00	\$8,000.00	\$8,000.00
154AL-2017-AL-C6-00		Blue Springs Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$2,500.00	\$2,500.00	\$2,500.00
154AL-2017-AL-C7-00		Blue Springs Police-Sobriety Checkpoints	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
154AL-2017-AL-C8-00		Cass Co Sheriff-Alcohol Enforcement	\$0.00	\$0.00	\$0.00	\$9,300.00	\$9,300.00	\$9,300.00
154AL-2017-AL-C9-00		Clay Co Sheriff-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$12,995.00	\$12,995.00	\$12,995.00
154AL-2017-AL-D0-00		Clay Co Sheriff-Youth Alcohol Enforcemen	\$0.00	\$0.00	\$0.00	\$2,000.00	\$2,000.00	\$2,000.00
154AL-2017-AL-D1-00		Clay Co Sheriff-Sobriety Ckpt / Task For	\$0.00	\$0.00	\$0.00	\$4,000.00	\$4,000.00	\$4,000.00
154AL-2017-AL-D2-00		Excelsior Springs Police-Clay/Platte DWI	\$0.00	\$0.00	\$0.00	\$7,300.00	\$7,300.00	\$7,300.00
154AL-2017-AL-D3-00		Gladstone Pub Safety-DWI & Ckpoint	\$0.00	\$0.00	\$0.00	\$8,000.00	\$8,000.00	\$8,000.00
154AL-2017-AL-D4-00		Grain Valley Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$3,500.00	\$3,500.00	\$3,500.00
154AL-2017-AL-D5-00		GrandView Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$19,000.00	\$19,000.00	\$19,000.00
154AL-2017-AL-D6-00		Harrisonville Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$1,750.00	\$1,750.00	\$1,750.00
154AL-2017-AL-D7-00		Springfield Police-Youth Alcohol Enforce	\$0.00	\$0.00	\$0.00	\$29,879.00	\$29,879.00	\$29,879.00
154AL-2017-AL-D8-00		St Clair Co Sheriff-DWI Enf & Checkpoint	\$0.00	\$0.00	\$0.00	\$1,548.00	\$1,548.00	\$1,548.00

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	154AL-2017-AL-D9-00	St Robert Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$7,924.00	\$7,924.00	\$7,924.00
	154AL-2017-AL-E0-00	Stone Co Sheriff-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$9,000.00	\$9,000.00	\$9,000.00
	154AL-2017-AL-E1-00	Washington Co Sheriff-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$5,800.00	\$5,800.00	\$5,800.00
	154AL-2017-AL-E2-00	Jackson Co Sheriff-DWI Unit Salary	\$0.00	\$0.00	\$0.00	\$159,485.08	\$159,485.08	\$159,485.08
	154AL-2017-AL-E3-00	KC Bd of Pol Comm-Youth Alcohol	\$0.00	\$0.00	\$0.00	\$22,500.00	\$22,500.00	\$22,500.00
	154AL-2017-AL-E4-00	Kearney Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$3,000.00	\$3,000.00	\$3,000.00
	154AL-2017-AL-E5-00	Webster Co Sheriff-Youth DWI 16-17	\$0.00	\$0.00	\$0.00	\$2,700.00	\$2,700.00	\$2,700.00
	154AL-2017-AL-E6-00	Liberty Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$2,500.00	\$2,500.00	\$2,500.00
	154AL-2017-AL-E7-00	Livingston Co Sheriff-DWI Project	\$0.00	\$0.00	\$0.00	\$3,510.00	\$3,510.00	\$3,510.00
	154AL-2017-AL-E8-00	Marshall Police-Sobriety Checkpoint	\$0.00	\$0.00	\$0.00	\$7,749.87	\$7,749.87	\$7,749.87
	154AL-2017-AL-E9-00	Oak Grove Police-DWI Enforcement 2017	\$0.00	\$0.00	\$0.00	\$3,348.00	\$3,348.00	\$3,348.00
	154AL-2017-AL-F0-00	Platte City Police-Platt & Clay Co Ckpt	\$0.00	\$0.00	\$0.00	\$1,500.00	\$1,500.00	\$1,500.00
	154AL-2017-AL-F1-00	Platte Co Sheriff-Sobriety Checkpoint	\$0.00	\$0.00	\$0.00	\$27,401.00	\$27,401.00	\$27,401.00
	154AL-2017-AL-F2-00	Raymore Police-Sobriety Ckpt /DWI Enforc	\$0.00	\$0.00	\$0.00	\$7,500.00	\$7,500.00	\$7,500.00
	154AL-2017-AL-F3-00	Riverside Pub Safety-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$5,040.00	\$5,040.00	\$5,040.00
	154AL-2017-AL-F4-00	Sedalia Police-DWI Enforcement 2017	\$0.00	\$0.00	\$0.00	\$4,220.00	\$4,220.00	\$4,220.00
	154AL-2017-AL-F5-00	Smithville Police-Youth Alcohol Enforcem	\$0.00	\$0.00	\$0.00	\$3,432.00	\$3,432.00	\$3,432.00
	154AL-2017-AL-F6-00	St Joseph Police-Midland Empire Alcohol	\$0.00	\$0.00	\$0.00	\$33,984.00	\$33,984.00	\$33,984.00
	154AL-2017-AL-F7-00	St Joseph Police-NW MO DWI Task Force	\$0.00	\$0.00	\$0.00	\$31,500.00	\$31,500.00	\$31,500.00
	154AL-2017-AL-F8-00	THSD-DWI Enforcement Equipment	\$0.00	\$0.00	\$0.00	\$80,000.00	\$80,000.00	\$0.00
	154AL-2017-AL-F9-00	MADD-Court Monitoring Program	\$0.00	\$0.00	\$0.00	\$123,000.00	\$123,000.00	\$123,000.00
	154AL-2017-AL-G0-00	OSCA-DWI Court Project	\$0.00	\$0.00	\$0.00	\$258,284.00	\$258,284.00	\$0.00
	154AL-2017-AL-G1-00	MSPH-Sobriety Checkpoint Operations	\$0.00	\$0.00	\$0.00	\$240,000.00	\$240,000.00	\$0.00
	154AL-2017-AL-G2-00	MSPH-DWI Saturations	\$0.00	\$0.00	\$0.00	\$246,850.00	\$246,850.00	\$0.00
	154AL-2017-AL-G3-00	Franklin Co Sheriff-Sobriety Checkpoint	\$0.00	\$0.00	\$0.00	\$19,000.00	\$19,000.00	\$19,000.00
	154AL-2017-AL-G4-00	Christian Co Sheriff-Sobriety Checkpoint	\$0.00	\$0.00	\$0.00	\$6,500.00	\$6,500.00	\$6,500.00
	154AL-2017-AL-G5-00	Phelps Co Sheriff-DWI Enforcement 2017	\$0.00	\$0.00	\$0.00	\$6,000.00	\$6,000.00	\$6,000.00
	154AL-2017-AL-G6-00	Gladstone Pub Safety-Not 21, Do Not Sell	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
	154 Alcohol Total		\$0.00	\$0.00	\$0.00	\$8,656,568.45	\$8,656,568.45	\$6,498,834.45
	154 Transfer Funds Total		\$0.00	\$0.00	\$0.00	\$8,656,568.45	\$8,656,568.45	\$6,498,834.45
MAP 21 405b OP Low								
	M2HVE-2017-05-01-00	Arnold Police-Unrestrained Drivers & Pas	\$0.00	\$0.00	\$0.00	\$14,700.00	\$14,700.00	\$14,700.00
	M2HVE-2017-05-02-00	Greene Co Sheriff-Occupant Protection	\$0.00	\$0.00	\$0.00	\$22,000.00	\$22,000.00	\$22,000.00
	M2HVE-2017-05-03-00	Ballwin Police-Occupant Protection	\$0.00	\$0.00	\$0.00	\$3,977.00	\$3,977.00	\$3,977.00
	M2HVE-2017-05-04-00	Brentwood Police-Max Prim Seat Belt Ordi	\$0.00	\$0.00	\$0.00	\$2,500.00	\$2,500.00	\$2,500.00
	M2HVE-2017-05-05-00	Byrnes Mill Police-Safety First	\$0.00	\$0.00	\$0.00	\$3,500.00	\$3,500.00	\$3,500.00
	M2HVE-2017-05-06-00	Calverton Park Police-Click It Or Ticket	\$0.00	\$0.00	\$0.00	\$4,500.00	\$4,500.00	\$4,500.00
	M2HVE-2017-05-07-00	Creve Coeur Police-Click It Or Ticket	\$0.00	\$0.00	\$0.00	\$8,000.00	\$8,000.00	\$8,000.00

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	M2HVE-2017-05-08-00	Hazelwood Police-Seat Belt Enforcement	\$0.00	\$0.00	\$0.00	\$15,000.00	\$15,000.00	\$15,000.00
	M2HVE-2017-05-09-00	Maryland Heights Police-Seat Belt Enforc	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
	M2HVE-2017-05-10-00	Winfield Police- Winfield Cares Buckle Up	\$0.00	\$0.00	\$0.00	\$3,000.00	\$3,000.00	\$3,000.00
	M2HVE-2017-05-11-00	Jackson Police-Occupant Protection	\$0.00	\$0.00	\$0.00	\$6,000.00	\$6,000.00	\$6,000.00
	M2HVE-2017-05-12-00	Cape Girardeau Co Sheriff-Occup Protecti	\$0.00	\$0.00	\$0.00	\$3,500.00	\$3,500.00	\$3,500.00
	M2HVE-2017-05-13-00	Dexter Police-Occupant Protection Enforc	\$0.00	\$0.00	\$0.00	\$10,000.00	\$10,000.00	\$10,000.00
	M2HVE-2017-05-14-00	Fredericktown Police-Keep Our Citizens S	\$0.00	\$0.00	\$0.00	\$10,000.00	\$10,000.00	\$10,000.00
	M2HVE-2017-05-15-00	Madison Co Sheriff-Safety First	\$0.00	\$0.00	\$0.00	\$3,000.00	\$3,000.00	\$3,000.00
	M2HVE-2017-05-16-00	MSHP-Occupant Protection Project	\$0.00	\$0.00	\$0.00	\$120,000.00	\$120,000.00	\$0.00
	M2HVE-2017-05-17-00	Jackson Co Sheriff-Seat Belt Enf/Educati	\$0.00	\$0.00	\$0.00	\$7,000.00	\$7,000.00	\$7,000.00
	M2HVE-2017-05-18-00	Grandview Police-Occupant Protection	\$0.00	\$0.00	\$0.00	\$20,000.00	\$20,000.00	\$20,000.00
	M2HVE-2017-05-19-00	Harrisonville Police-Safety Belt Enforce	\$0.00	\$0.00	\$0.00	\$3,000.00	\$3,000.00	\$3,000.00
	M2HVE-2017-05-20-00	Clay Co Sheriff-Occupant Protection	\$0.00	\$0.00	\$0.00	\$2,500.00	\$2,500.00	\$2,500.00
	405b Low HVE Total		\$0.00	\$0.00	\$0.00	\$267,177.00	\$267,177.00	\$147,177.00
405b Low Public Education								
	M2PE-2017-05-02-00	THSD-Click It Or Ticket Enf Campaign	\$0.00	\$0.00	\$0.00	\$350,000.00	\$350,000.00	\$0.00
	M2PE-2017-05-03-00	THSD-Child Passenger Safety	\$0.00	\$0.00	\$0.00	\$150,000.00	\$150,000.00	\$0.00
	405b Low Public Education Total		\$0.00	\$0.00	\$0.00	\$500,000.00	\$500,000.00	\$0.00
405b Low Community CPS Services								
	M2CPS-2017-05-01-00	THSD-Child Passenger Safety Coordination	\$0.00	\$0.00	\$0.00	\$45,000.00	\$45,000.00	\$0.00
405b Low Community CPS Services Total			\$0.00	\$0.00	\$0.00	\$45,000.00	\$45,000.00	\$0.00
405b Low CSS Purchase/Distribution								
	M2CSS-2017-05-01-00	THSD-MAP 21 Child Safety Seat Distributi	\$0.00	\$0.00	\$0.00	\$42,700.00	\$42,700.00	\$0.00
405b Low CSS Purchase/Distribution Total			\$0.00	\$0.00	\$0.00	\$42,700.00	\$42,700.00	\$0.00
405b OP Low								
	M2X-2017-05-00-00	THSD-Statewide 405b OP Low	\$0.00	\$438,719.25	\$0.00	\$900,000.00	\$900,000.00	\$900,000.00
	405b OP Low Total		\$0.00	\$438,719.25	\$0.00	\$900,000.00	\$900,000.00	\$900,000.00
MAP 21 405b OP Low Total			\$0.00	\$438,719.25	\$0.00	\$1,754,877.00	\$1,754,877.00	\$1,047,177.00
MAP 21 405c Data Program								
	M3DA-2017-04-00-00	THSD-Statewide 405c Data Program	\$0.00	\$550,504.27	\$0.00	\$1,300,000.00	\$1,300,000.00	\$0.00
	M3DA-2017-04-01-00	Blue Springs Police-E Citation	\$0.00	\$0.00	\$0.00	\$52,000.00	\$52,000.00	\$52,000.00
	M3DA-2017-04-02-00	OSCA-JIS Monitoring & Reporting	\$0.00	\$0.00	\$0.00	\$169,325.64	\$169,325.64	\$0.00
	M3DA-2017-04-03-00	MSHP-STARS and FARS Support	\$0.00	\$0.00	\$0.00	\$224,052.00	\$224,052.00	\$0.00
	M3DA-2017-04-04-00	Ballwin Police-E Citations	\$0.00	\$0.00	\$0.00	\$14,300.00	\$14,300.00	\$14,300.00
	M3DA-2017-04-05-00	Christian Co Sheriff-E Citation	\$0.00	\$0.00	\$0.00	\$40,912.04	\$40,912.04	\$40,912.04
	M3DA-2017-04-06-00	Dexter Police- Ticket Printers For Patrol	\$0.00	\$0.00	\$0.00	\$4,365.00	\$4,365.00	\$4,365.00
	M3DA-2017-04-07-00	Jackson Police-E Ticketing Project	\$0.00	\$0.00	\$0.00	\$44,815.33	\$44,815.33	\$44,815.33

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M3DA-2017-04-08-00		MSP-Statewide Traffic Accident Records	\$0.00	\$0.00	\$0.00	\$139,300.00	\$139,300.00	\$0.00
M3DA-2017-04-09-00		REJIS-LETS Sustainment & Enhancements	\$0.00	\$0.00	\$0.00	\$84,976.00	\$84,976.00	\$0.00
M3DA-2017-04-10-00		REJIS-Electronic Records Adoption Improv	\$0.00	\$0.00	\$0.00	\$17,812.00	\$17,812.00	\$0.00
M3DA-2017-04-11-00		Rogersville Police-E Ticketing	\$0.00	\$0.00	\$0.00	\$3,604.00	\$3,604.00	\$3,604.00
M3DA-2017-04-12-00		THSD-Traffic Records Data Improvement	\$0.00	\$0.00	\$0.00	\$90,000.00	\$90,000.00	\$0.00
M3DA-2017-04-13-00		Washington Police-Mobile Ticketing Print	\$0.00	\$0.00	\$0.00	\$5,118.00	\$5,118.00	\$5,118.00
M3DA-2017-04-14-00		Webb City Police-Digital Ticket Process	\$0.00	\$0.00	\$0.00	\$4,297.08	\$4,297.08	\$4,297.08
M3DA-2017-04-15-00		Willow Springs Police-E Ticket Printers	\$0.00	\$0.00	\$0.00	\$7,140.00	\$7,140.00	\$7,140.00
	405c Data Program Total		\$0.00	\$550,504.27	\$0.00	\$2,202,017.09	\$2,202,017.09	\$176,551.45
	MAP 21 405c Data Program Total		\$0.00	\$550,504.27	\$0.00	\$2,202,017.09	\$2,202,017.09	\$176,551.45
	MAP 21 405d Impaired Driving Mid							
M5HVE-2017-03-01-00		Boone Co Sheriff-Sobriety Ckpt /Saturat	\$0.00	\$0.00	\$0.00	\$13,500.00	\$13,500.00	\$13,500.00
M5HVE-2017-03-02-00		Columbia Police-DWI Full Time Unit	\$0.00	\$0.00	\$0.00	\$74,302.40	\$74,302.40	\$74,302.40
M5HVE-2017-03-03-00		Franklin Co Sheriff-Traffic Safety /DWI	\$0.00	\$0.00	\$0.00	\$112,472.11	\$112,472.11	\$112,472.11
M5HVE-2017-03-04-00		Greene Co Sheriff-DWI Unit	\$0.00	\$0.00	\$0.00	\$50,753.15	\$50,753.15	\$50,753.15
M5HVE-2017-03-05-00		Lebanon Police-Sobriety Ckpt /DWI Enforc	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
M5HVE-2017-03-06-00		Union Police-Impaired Driving Saturation	\$0.00	\$0.00	\$0.00	\$13,750.00	\$13,750.00	\$13,750.00
M5HVE-2017-03-07-00		Springfield Police-DWI Enf /Sobriety Ckp	\$0.00	\$0.00	\$0.00	\$108,629.00	\$108,629.00	\$108,629.00
M5HVE-2017-03-08-00		Independence Police-Sob Ckpt Youth Al Wo	\$0.00	\$0.00	\$0.00	\$260,000.00	\$260,000.00	\$260,000.00
M5HVE-2017-03-09-00		Washington Police-Youth Alcohol Enforcem	\$0.00	\$0.00	\$0.00	\$4,500.00	\$4,500.00	\$4,500.00
M5HVE-2017-03-10-00		Jackson Co Sheriff-Sobriety Checkpoint	\$0.00	\$0.00	\$0.00	\$25,000.00	\$25,000.00	\$25,000.00
M5HVE-2017-03-11-00		Jackson Co Sheriff-Wolf Pack Saturation	\$0.00	\$0.00	\$0.00	\$20,000.00	\$20,000.00	\$20,000.00
M5HVE-2017-03-12-00		Jackson Co Sheriff-No Refusal DWI Unit	\$0.00	\$0.00	\$0.00	\$10,000.00	\$10,000.00	\$10,000.00
M5HVE-2017-03-13-00		KC Bd of Police Comm-Sobriety Checkpoint	\$0.00	\$0.00	\$0.00	\$150,000.00	\$150,000.00	\$150,000.00
M5HVE-2017-03-14-00		KC Bd of Police Comm-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$110,000.00	\$110,000.00	\$110,000.00
M5HVE-2017-03-15-00		Washington Police-Sobriety Checkpoint	\$0.00	\$0.00	\$0.00	\$9,750.00	\$9,750.00	\$9,750.00
M5HVE-2017-03-16-00		Waynesville Police-It Don't Jive To Drin	\$0.00	\$0.00	\$0.00	\$3,750.00	\$3,750.00	\$3,750.00
M5HVE-2017-03-17-00		Lee's Summit Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$33,500.00	\$33,500.00	\$33,500.00
M5HVE-2017-03-18-00		Webb City Police-DWI Saturation Patrols	\$0.00	\$0.00	\$0.00	\$11,500.00	\$11,500.00	\$11,500.00
M5HVE-2017-03-19-00		Webster Co Sheriff-DWI Enforcement 2016-	\$0.00	\$0.00	\$0.00	\$12,000.00	\$12,000.00	\$12,000.00
M5HVE-2017-03-20-00		Platte Co Sheriff-DWI Enf Officer	\$0.00	\$0.00	\$0.00	\$43,562.50	\$43,562.50	\$43,562.50
M5HVE-2017-03-21-00		Pleasant Hill Police-DWI Wolf Packs /Ckp	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
M5HVE-2017-03-22-00		MO Safety Center-Enforcement Drive Sober	\$0.00	\$0.00	\$0.00	\$419,239.12	\$419,239.12	\$360,000.00
M5HVE-2017-03-23-00		Smithville Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$3,541.96	\$3,541.96	\$3,541.96
M5HVE-2017-03-24-00		Smithville Police-Joint Clay/Platte DWI	\$0.00	\$0.00	\$0.00	\$4,976.64	\$4,976.64	\$4,976.64
M5HVE-2017-03-25-00		THSD-Statewide DWI 405d	\$0.00	\$0.00	\$0.00	\$50,000.00	\$50,000.00	\$0.00
M5HVE-2017-03-26-00		Scott City Police-SEMO DWI Task Force	\$0.00	\$0.00	\$0.00	\$4,000.00	\$4,000.00	\$4,000.00
M5HVE-2017-03-27-00		Scott Co Sheriff-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$4,320.00	\$4,320.00	\$4,320.00



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	M5HVE-2017-03-28-00	Scott Co Sheriff-DWI Task Force	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
	M5HVE-2017-03-29-00	St Genevieve Co Sheriff-Impaired Driving	\$0.00	\$0.00	\$0.00	\$11,500.00	\$11,500.00	\$11,500.00
	M5HVE-2017-03-30-00	Thayer Police-DWI Saturation Patrol	\$0.00	\$0.00	\$0.00	\$2,556.80	\$2,556.80	\$2,556.80
	M5HVE-2017-03-31-00	West Plains Police-Sobriety Checkpoints	\$0.00	\$0.00	\$0.00	\$3,000.00	\$3,000.00	\$3,000.00
	M5HVE-2017-03-32-00	Willow Springs Police-Sobriety Checkpoint	\$0.00	\$0.00	\$0.00	\$2,500.00	\$2,500.00	\$2,500.00
	M5HVE-2017-03-33-00	Howell Co Sheriff-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
	M5HVE-2017-03-34-00	Jackson Police-DWI Enf /DWI Task Force	\$0.00	\$0.00	\$0.00	\$10,600.00	\$10,600.00	\$10,600.00
	M5HVE-2017-03-35-00	Kennett Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$11,000.00	\$11,000.00	\$11,000.00
	M5HVE-2017-03-36-00	Kennett Police-Kennet PD /Task Force Ckp	\$0.00	\$0.00	\$0.00	\$9,030.00	\$9,030.00	\$9,030.00
	M5HVE-2017-03-37-00	Cape Girardeau Co Shrf-DWI Enf/SEMO DWI	\$0.00	\$0.00	\$0.00	\$15,400.00	\$15,400.00	\$15,400.00
	M5HVE-2017-03-38-00	Cape Girardeau Police-DWI Enforcement	\$0.00	\$0.00	\$0.00	\$7,700.00	\$7,700.00	\$7,700.00
	M5HVE-2017-03-39-00	Cape Girardeau Police-Sobriety Ckpoint	\$0.00	\$0.00	\$0.00	\$9,100.00	\$9,100.00	\$9,100.00
	M5HVE-2017-03-40-00	Charleston Pub Safety-SEMO DWI Task Forc	\$0.00	\$0.00	\$0.00	\$1,100.00	\$1,100.00	\$1,100.00
	M5HVE-2017-03-41-00	Dexter Police-Sobriety Ckpoint Operation	\$0.00	\$0.00	\$0.00	\$10,087.80	\$10,087.80	\$10,087.80
	M5HVE-2017-03-42-00	Dexter Police-Roving Patrol DWI Enforcem	\$0.00	\$0.00	\$0.00	\$6,000.00	\$6,000.00	\$6,000.00
	M5HVE-2017-03-43-00	Doniphan Police-In Car & Officer-Worn Ca	\$0.00	\$0.00	\$0.00	\$2,500.00	\$2,500.00	\$2,500.00
	M5HVE-2017-03-44-00	Hayti Police-DWI Enforcement 2016-17	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	\$5,000.00
	M5HVE-2017-03-45-00	Madison Co Sheriff-Sobriety Checkpoint	\$0.00	\$0.00	\$0.00	\$5,330.00	\$5,330.00	\$5,330.00
	M5HVE-2017-03-46-00	Madison Co Sheriff-DWI Saturation Projec	\$0.00	\$0.00	\$0.00	\$5,770.00	\$5,770.00	\$5,770.00
	M5HVE-2017-03-47-00	M5HP-DWI Tracking System (DWITS)	\$0.00	\$0.00	\$0.00	\$6,200.00	\$6,200.00	\$0.00
	M5HVE-2017-03-48-00	Mtn View Police-DWI Checkpoints	\$0.00	\$0.00	\$0.00	\$2,100.00	\$2,100.00	\$2,100.00
	405d Mid HVE Total		\$0.00	\$0.00	\$0.00	\$1,699,521.48	\$1,699,521.48	\$1,584,082.36
405d Mid ID Coordinator								
	M5IDC-2017-03-01-00	THSD-Alcohol Coordination	\$0.00	\$0.00	\$0.00	\$80,000.00	\$80,000.00	\$0.00
	M5IDC-2017-03-02-00	THSD-Youth Alcohol Program Coordination	\$0.00	\$0.00	\$0.00	\$80,000.00	\$80,000.00	\$0.00
	405d Mid ID Coordinator Total		\$0.00	\$0.00	\$0.00	\$160,000.00	\$160,000.00	\$0.00
405d Mid Court Support								
	M5CS-2017-03-01-00	DOR-Attorney & Legal Assistant	\$0.00	\$0.00	\$0.00	\$124,536.21	\$124,536.21	\$0.00
	M5CS-2017-03-02-00	MOPS-Traffic Safety Resource Prosecutor	\$0.00	\$0.00	\$0.00	\$294,684.09	\$294,684.09	\$0.00
	405d Mid Court Support Total		\$0.00	\$0.00	\$0.00	\$419,220.30	\$419,220.30	\$0.00
405d Mid Training								
	M5TR-2017-03-01-00	MO Police Chiefs Assoc-DITEP 2017	\$0.00	\$0.00	\$0.00	\$44,580.50	\$44,580.50	\$44,580.50
	M5TR-2017-03-02-00	MO South St U-Alcohol Training for LE Of	\$0.00	\$0.00	\$0.00	\$54,600.00	\$54,600.00	\$0.00
	M5TR-2017-03-03-00	M5HP-BAC/DRE/ARIDE/SFST	\$0.00	\$0.00	\$0.00	\$132,941.76	\$132,941.76	\$0.00
	405d Mid Training Total		\$0.00	\$0.00	\$0.00	\$232,122.26	\$232,122.26	\$44,580.50

## Highway Safety Plan Cost Summary - Missouri 2017 HSP 1

Program Area	Project	Description	Prior Approved Program Funds	State Funds	Previous Bal.	Incre/(Decre)	Current Balance	Share to Local
405d Mid Other Based on Problem ID								
	M5OT-2017-03-01-00	THSD-Impaired Driving Program Activities	\$0.00	\$0.00	\$0.00	\$30,000.00	\$30,000.00	\$0.00
	M5OT-2017-03-02-00	DOR-DOR & Law Enforcement Training	\$0.00	\$0.00	\$0.00	\$23,594.00	\$23,594.00	\$0.00
	M5OT-2017-03-03-00	REJIS-Drug Recognition Expert System	\$0.00	\$0.00	\$0.00	\$52,208.00	\$52,208.00	\$0.00
	M5OT-2017-03-04-00	MO Safety Center-Impaired Driving Counte	\$0.00	\$0.00	\$0.00	\$875,604.42	\$875,604.42	\$0.00
	M5OT-2017-03-05-00	THSD-Drug Testing in Fatal Crashes	\$0.00	\$0.00	\$0.00	\$50,000.00	\$50,000.00	\$0.00
405d Mid Other Based on Problem ID Total								
405d Impaired Driving Mid			\$0.00	\$0.00	\$0.00	\$1,031,406.42	\$1,031,406.42	\$0.00
405f Motorcyclist Awareness Total								
	M5X-2017-03-00-00	THSD-Statewide 450d Impaired Driving Mid	\$0.00	\$1,635,567.62	\$0.00	\$3,000,000.00	\$3,000,000.00	\$3,000,000.00
405d Impaired Driving Mid Total			\$0.00	\$1,635,567.62	\$0.00	\$3,000,000.00	\$3,000,000.00	\$3,000,000.00
MAP 21 405d Impaired Driving Mid Total			\$0.00	\$1,635,567.62	\$0.00	\$6,542,270.46	\$6,542,270.46	\$4,628,662.86
MAP 21 405f Motorcycle Programs								
	M9MA-2017-12-01-00	THSD-Motorcycle Safety Initiatives	\$0.00	\$0.00	\$0.00	\$200,000.00	\$200,000.00	\$0.00
405f Motorcyclist Awareness Total			\$0.00	\$0.00	\$0.00	\$200,000.00	\$200,000.00	\$0.00
405f Motorcycle Programs								
	M9X-2017-12-00-00	THSD-Statewide 405f Motorcycle Program	\$0.00	\$72,500.00	\$0.00	\$90,000.00	\$90,000.00	\$0.00
405f Motorcycle Programs Total			\$0.00	\$72,500.00	\$0.00	\$90,000.00	\$90,000.00	\$0.00
MAP 21 405f Motorcycle Programs Total								
	NHTSA Total		\$0.00	\$4,744,394.01	\$0.00	\$27,634,144.49	\$27,634,144.49	\$17,157,929.33
Total			\$0.00	\$4,744,394.01	\$0.00	\$27,634,144.49	\$27,634,144.49	\$17,157,929.33

# **Fiscal Year 2017**

# **Equipment List**

## Fiscal Year 2017 Equipment List

Agency	Item Description	Amount	Contract
Boone County DWI Unit	SUV w/ equipment	\$55,000.00	17-M5HVE-03-002
Greene County DWI Unit	2016 Ford Explorer	\$30,993.00	17-M5HVE-03-004
Joplin PD DWI Unit	Police Vehicle	\$40,000.00	17-154-AL-035
Platte County HVM Unit	Police Vehicle	\$45,000.00	17-PT-02-075
Jefferson County	Chevy Tahoes	\$176,988.00	17-154-AL-067
St. Louis County	Ford Interceptor	\$32,000.00	17-PT-02-046
Jackson County DWI Unit	BAT van	\$94,275.00	no contract
	Total	\$474,256.00	

# NHTSA

## Program Assessments

NHTSA Program Assessments completed in the last fiscal year are included in this section. Assessments included in previous HSP's are referenced below with the date of competition. Please contact our office for a full copy of an assessment.

Included in this section:

- Traffic Records Program Assessment - January 19, 2016

Submitted in a previous HSP:

- Occupant Protection Program Assessment - March 31 – April 4, 2014
- Standardized Field Sobriety Testing Program Assessment – May 16-18, 2006  
(Scheduled for fall, 2016)
- Impaired Driving Program Assessment – April 19-23, 1999
- Impaired Driving Special Management Review – May 7-10, 2007

# State of Missouri

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Traffic Records Assessment

**January 19, 2016**

National Highway Traffic Safety Administration

Technical Assessment Team

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## Executive Summary

Out of 391 assessment questions, Missouri met the Advisory ideal for 163 questions (41.7%), partially met the Advisory ideal for 58 questions (14.8%), and did not meet the Advisory ideal for 170 questions (43.5%).

As Figure 1 illustrates, within each assessment module, Missouri met the criteria outlined in the *Traffic Records Program Assessment Advisory* 63.2% of the time for Traffic Records Coordinating Committee Management, 75% of the time for Strategic Planning, 47.7% of the time for Crash, 41% of the time for Vehicle, 64.4% of the time for Driver, 57.9% of the time for Roadway, 14.8% of the time for Citation / Adjudication, 34.1% of the time for EMS / Injury Surveillance, and 7.7% of the time for Data Use and Integration.

**Figure 1: Rating Distribution by Module**

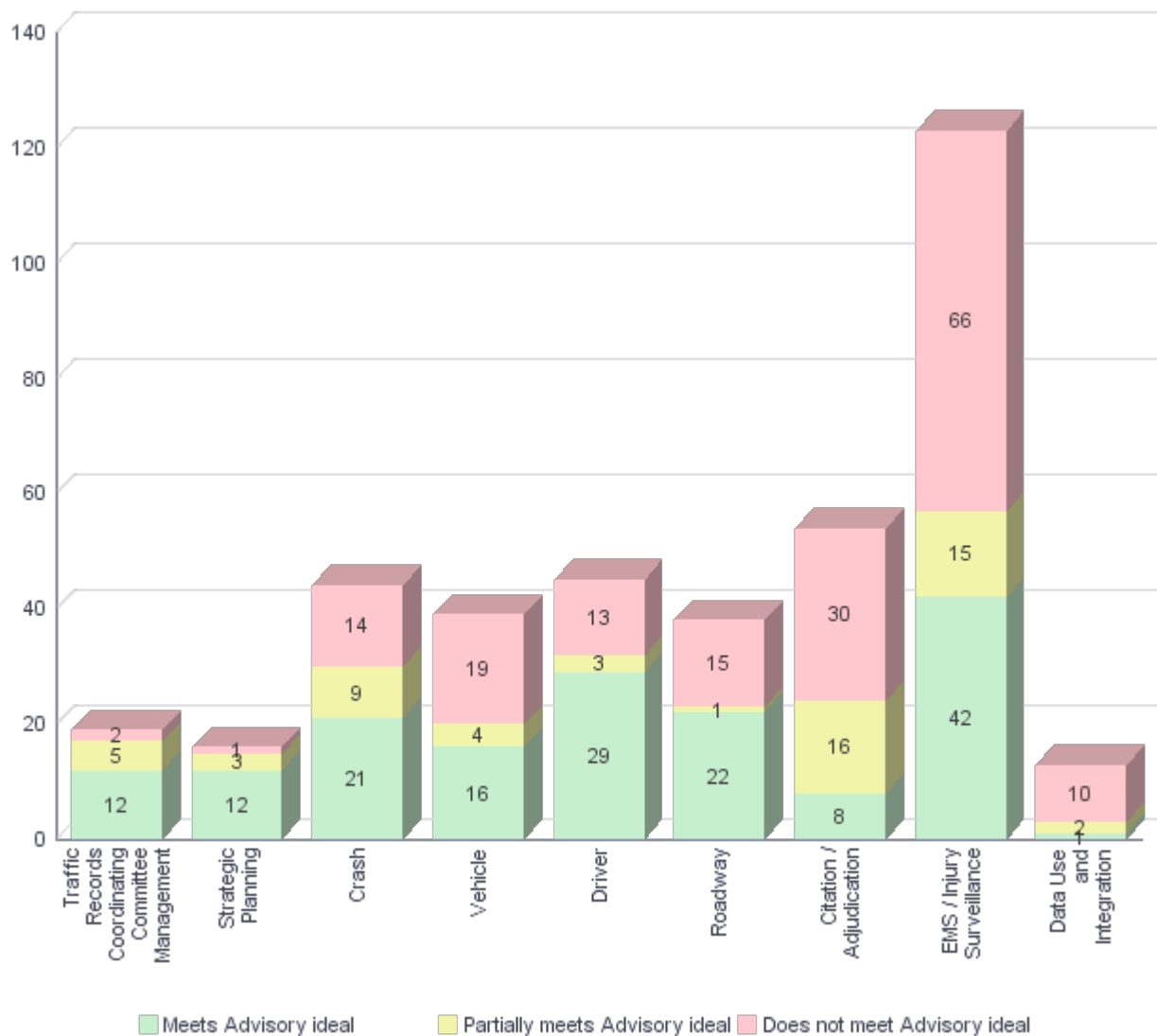










Figure 2: Assessment Section Ratings

	 Crash	 Vehicle	 Driver	 Roadway	 Citation / Adjudication	 EMS / Injury Surveillance
Description and Contents	97.6%	66.7%	90.0%	100.0%	66.7%	52.9%
Applicable Guidelines	86.7%	81.8%	100.0%	83.3%	64.9%	87.7%
Data Dictionaries	86.7%	81.0%	100.0%	80.0%	36.5%	63.3%
Procedures / Process Flow	77.1%	68.2%	98.0%	87.5%	66.7%	83.6%
Interfaces	53.3%	57.6%	76.2%	88.9%	40.5%	81.0%
Data Quality Control Programs	56.5%	52.0%	53.8%	51.9%	41.0%	48.4%
<b>Overall</b>	<b>73.0%</b>	<b>62.6%</b>	<b>79.3%</b>	<b>73.3%</b>	<b>53.2%</b>	<b>59.8%</b>

	Overall
Traffic Records Coordinating Committee Management	84.0%
Strategic Planning for the Traffic Records System	90.5%
Data Use and Integration	44.4%

## Recommendations

Figure 2 shows the aggregate ratings by data system and assessment module. Each question's score is derived by multiplying its rank and rating (very important = 3, somewhat important = 2, and less important = 1; meets = 3, partially meets = 2, and does not meet = 1). The sum total for each module section is calculated based upon the individual question scores. Then, the percentage is calculated for each module section as follows:

$$\text{Section average (\%)} = \frac{\text{Section sum total}}{\text{Section total possible}}$$

The cells highlighted in red indicate the module sub-sections that scored below that data system's weighted average. The following priority recommendations are based on improving those module subsections with scores below the overall system score.

According to 23 CFR Part 1200, §1200.22, applicants for State traffic safety information system improvements grants are required to maintain a State traffic records strategic plan that—

*“(3) Includes a list of all recommendations from its most recent highway safety data and traffic records system assessment; (4) Identifies which such recommendations the State intends to implement and the performance measures to be used to demonstrate quantifiable and measurable progress; and (5) For recommendations that the State does not intend to implement, provides an explanation.”*

Missouri can address the recommendations below by implementing changes to improve the ratings for the questions in those section modules with lower than average scores. Missouri can also apply for a NHTSA Traffic Records GO Team, for targeted technical assistance.

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### **Crash Recommendations**

Improve the interfaces with the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Improve the data quality control program for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

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### **Vehicle Recommendations**

Improve the interfaces with the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Improve the data quality control program for the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

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### **Driver Recommendations**

Improve the interfaces with the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Improve the data quality control program for the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

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### **Roadway Recommendations**

Improve the data quality control program for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

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### **Citation / Adjudication Recommendations**

Improve the data dictionary for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Improve the interfaces with the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Improve the data quality control program for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.

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### **EMS / Injury Surveillance Recommendations**

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Improve the description and contents of the Injury Surveillance systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Improve the data quality control program for the Injury Surveillance systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.

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### **Data Use and Integration Recommendations**

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Improve the traffic records systems capacity to integrate data to reflect best practices identified in the Traffic Records Program Assessment Advisory.

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## Introduction

A traffic records system consists of data about a State's roadway transportation network and the people and vehicles that use it. The six primary components of a State traffic records system are: Crash, Driver, Vehicle, Roadway, Citation/Adjudication, and Injury Surveillance. These components address driver demographics, licensure, behavior and sanctions; vehicle types, configurations, and usage; engineering, education, enforcement measures; crash-related medical issues and actions; and how they affect highway traffic safety.

Quality traffic records data exhibiting the six primary data quality attributes—timeliness, accuracy, completeness, uniformity, integration, and accessibility—is necessary to improve traffic safety and effectively manage the motor vehicle transportation network, at the Federal, State, and local levels. Such data enables problem identification, countermeasure development and application, and outcome evaluation. Continued application of data-driven, science-based management practices can decrease the frequency of traffic crashes and mitigate their substantial negative effects on individuals and society.

State traffic records systems are the culmination of the combined efforts of collectors, managers, and users of data. Collaboration and cooperation between these groups can improve data and ensure that the data is used in ways that provide the greatest benefit to traffic safety efforts. Thoughtful, comprehensive, and uniform data use and governance policies can improve service delivery, link business processes, maximize return on investments, and improve risk management.

Congress has recognized the benefit of independent peer reviews for State traffic records data systems. These assessments help States identify areas of high performance and areas in need of improvement in addition to fostering greater collaboration among data systems. In order to encourage States to undertake such reviews regularly, Congress' Moving Ahead for Progress in the 21st Century (MAP-21) legislation requires States to conduct or update an assessment of its highway safety data and traffic records system every 5 years in order to qualify for §405(c) grant funding. The State's Governor's Representative must certify that an appropriate assessment has been completed within five years of the application deadline.

## Background

In 2012, the National Highway Traffic Safety Administration published an updated *Traffic Records Program Assessment Advisory* (Report No. DOT HS 811 644). This *Advisory* was drafted by a group of traffic safety experts from a variety of backgrounds and affiliations, including: State highway safety offices, the Governors Highway Safety Association (GHSA) and the Association of Transportation Safety Information Professionals (ATSIP), as well as staff from NHTSA, FMCSA, and FHWA. The *Advisory* provides information on the contents, capabilities, and data quality of effective traffic records systems by describing an ideal that supports quality data driven decisions and improves highway safety. In addition, the *Advisory* describes in detail the importance of quality data in the identification of crash causes and outcomes, the development of effective interventions, implementation of countermeasures that prevent crashes and improve crash outcomes, updating traffic safety programs, systems, and policies, and evaluating progress in

reducing crash frequency and severity.

The *Advisory* is based upon a uniform set of questions derived from the ideal model traffic records data system. This model and suite of questions is designed to be used by independent subject matter experts in their assessment of the systems and processes that govern the collection, management, and analysis of traffic records data in a given State.

## **Methodology**

A State initiates the assessment process by submitting a formal request to its NHTSA Regional Administrator. Once that request is passed onto the NHTSA National Center for Statistics and Analysis Traffic Records Team, it appoints an assessment facilitator to work with the State Governor's Representative to identify a State assessment coordinator and appropriate State respondents for each assessment question. Respondents enter the data into NHTSA's State Traffic Records Assessment Program (STRAP), the Web-based application for the assessment. The assessment facilitator works with the State assessment coordinator to prepare for the assessment and establish a schedule consistent with the example outlined in Figure 3. Actual schedules can vary as dates may be altered to accommodate State-specific needs.

**Figure 3: Traffic Records Assessment Time Table**

Upon NHTSA TR Team receipt of request		Initial pre-assessment conference call
1 month prior to kickoff meeting		Facilitator introduction pre-assessment conference call
Between facilitator conference call and kickoff		State Coordinator assigns questions, enters contact information into STRAP, and builds initial document library
<b>Assessment</b>	Monday, Week 1	On-site kickoff meeting
	Tuesday, Week 1 – 12pm EST, Friday, Week 3	<b>Round 1 Data Collection:</b> State answers standardized assessment questions
	Friday, Week 3 – Wednesday, Week 5	<b>Round 1 Analysis:</b> Assessors review State answers and rate the responses and, if needed, request necessary clarifications
	Thursday, Week 5 – 12pm EST, Friday, Week 7	<b>Round 2 Data Collection:</b> State responds to the assessors' initial ratings and requests for more information and clarification
	Friday, Week 7 – Wednesday, Week 9	<b>Round 2 Analysis:</b> Assessors review additional information from the State and, if needed, adjust initial ratings
	Thursday, Week 9 – 12pm EST, Friday, Week 11	<b>Round 3 Data Collection:</b> State provides final response to the assessors' ratings
	Friday, Week 11 – Monday, Week 13	<b>Round 3 Analysis:</b> make final ratings
	Tuesday, Week 13 – Monday, Week 14	Facilitator prepares final report
Week 15		NHTSA delivers final report to State and Region
(After completion of assessment, date set by State)		NHTSA hosts webinar to debrief State participants
(After completion of assessment)		(OPTIONAL) State may request GO Team targeted technical assistance or training

Following a kickoff meeting that explains the assessment process, schedule, and confirms question assignments, each respondent is sent an email with a token enabling them to log onto STRAP and answer assessment questions that had been assigned to them. The respondents may (a) answer a question, (b) answer the question and refer that question to another person to answer it as well, (c) refer the question—decline the question and send the question to someone else to answer—or (d) decline the question.

The traffic records assessment is an iterative process that includes three question-answer cycles. In each, State respondents have the opportunity to answer each question assigned to them before the assessors examine their answers and supporting evidence, at which point the

assessors rate each response. The second and third question and answer cycles are used to clarify responses and provide the most accurate rating for each question. In an attempt to prioritize the capabilities of each system being assessed, each question is ranked as “very important,” “somewhat important” or “less important.” To assist the State in responding to each question, the *Advisory* also provides State respondents with standards of evidence that identify the specific information necessary to answer each assessment question.

A group of qualified independent assessors rates the responses and determines how closely a State’s capabilities match those of the ideal system outlined in the *Advisory*. Each system component is evaluated independently by two or more assessors, who reach a consensus on the ratings. Specifically, the assessors rate each response and determine if a State (a) meets the description of the ideal traffic records system, (b) partially meets the ideal description, or (c) does not meet the ideal description. The assessors write a brief narrative to explain their rating for each question.

In order for NHTSA to accept and approve an assessment each question must have an answer. When appropriate, however, a State may answer questions with “no, we do not have this capability/use this practice” etc. These responses constitute an acceptable answer and will receive a “does not meet” rating. An assessment with unanswered or blank questions will not be acceptable and cannot be used to qualify for §405 grant funds.

The complete traffic records assessment process is outlined in Figure 5 below.

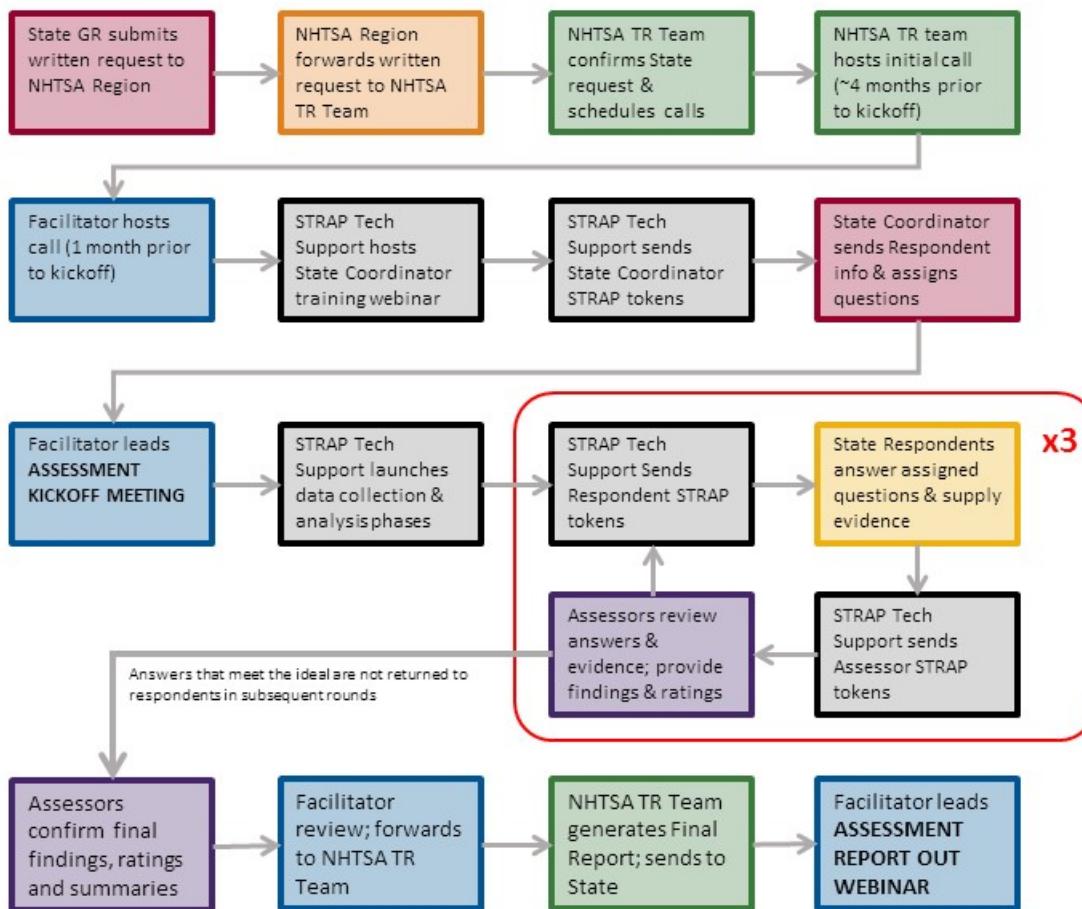
States are encouraged to use the conclusions of this report as a basis for the State data improvement program strategic planning process, and are encouraged to review the conclusions at least annually to gauge how the State is addressing the items in this report. NHTSA can provide support in addressing these conclusions by means of GO Teams. NHTSA's Traffic Records GO Team program helps States improve their traffic records systems by deploying teams of subject matter experts to deliver tailored technical assistance and training based on States' actual needs.

**Figure 4: State Schedule for the Traffic Records Assessment**

Kickoff	October 14, 2015
Begin first Q&A Cycle	October 14, 2015
End first Q&A Cycle	October 30, 2015
Begin second Q&A Cycle	November 12, 2015
End second Q&A Cycle	November 27, 2015
Begin third Q&A Cycle	December 10, 2015
End third Q&A Cycle	December 25, 2015
Assessors' Final Results Complete	January 06, 2016
Final Report Due	January 19, 2016
Debrief	January 25, 2016



### Figure 5: State Traffic Records Assessment Process



## Results

For each question, a rating was assigned based on the answers and supporting documentation provided by the State. The ratings are shown as three icons, depicting 'meets', 'partially meets', or 'does not meet'.

Legend:



Meets



Partially meets



Does not meet

## Traffic Records Coordinating Committee Management

The State has a two tiered TRCC structure with a technical level committee that meets monthly and an executive level that meets as part of a larger coalition on a semi-annual basis. The TRCC has a designated chair and coordinator to facilitate the work of the committee. The members included in the technical TRCC roster are at a level to represent and influence the system in which they work. The State uses an overarching executive committee that meets on a wide variety of transportation issues as the executive TRCC. TRCC issues are a part of this semi-annual meeting. The State may wish to consider if this meets their needs as an executive committee and can provide the needed oversight.

The TRCC works in a collaborative effort to positively impact traffic records systems and processes. The committee is actively involved in the project selection process and employs costs benefit analysis in the decision-making process. The TRCC does a good job monitoring projects funded with federal traffic records improvement dollars.

State TRCCs are charged with developing, implementing, and monitoring the traffic records strategic plan over time. Projects are monitored, but no information was available related to monitoring the overall multi-year strategic plan. The TRCC should continue to work to establish performance measures for all core systems using NHTSA's 'Traffic Safety Performance Measures for States and Federal Agencies' document for guidance.

### Question 1:

Does the State have both an executive and a technical TRCC?



### Standard of Evidence:

Provide a charter and/or MOU. Also provide a roster with all members' names, affiliations, and titles for both the executive and technical TRCC.

**Question Rank:**  
Very Important

### Assessor conclusions:

The executive level TRCC functions under a broader coalition, which has other responsibilities beyond the functions of a TRCC. The documentation for the State TRCC is very clear, with MOUs for participating agencies. The documentation concerning the broader coalition is not as clearly defined concerning the authority that establishes the group as the executive level TRCC.

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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**Question 2:**

Do the executive TRCC members have the power to direct the agencies' resources for their respective areas of responsibility?

**Standard of Evidence:**

Provide a charter and/or memorandum of understanding (MOU). Also provide a roster with all members' names, affiliations, and titles for the executive TRCC.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The members included in the technical TRCC roster work at a level to represent and influence the system in which they work. The State asserts that the executive TRCC membership is made up of members who supervise the technical level members.

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
-----------------------------	----------	---------------------------	----------	----------------------	-------------

**Question 3:**

Does the executive TRCC review and approve actions proposed by the technical TRCC?

**Standard of Evidence:**

Provide a narrative example of recent actions or programs approved by the executive TRCC (e.g., an approved project or funding proposal).

**Question Rank:**  
Very Important

**Assessor conclusions:**

The executive level TRCC members have some say with proposed projects but do not appear to officially approve the planned actions and projects. The TRCC would benefit from a formal approval process from the executive level of Strategic Plan updates and applications for funding.

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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**Question 4:**

Does the TRCC include representation from the core data systems at both the executive and technical levels?

**Standard of Evidence:**

Identify the executive and technical TRCC members that represent the core data systems: crash, driver, vehicle, roadway, citation and adjudication, and injury surveillance.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Rosters for both the technical and executive level TRCCs are available. It may be helpful for the State to provide titles for the TRCC members to further emphasize the decision-making ability of the members.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
-----------------------------	---	---------------------------	---	----------------------	------

**Question 5:**

Does the TRCC consult with the appropriate State IT agency or offices when planning and implementing technology projects?

**Standard of Evidence:**

Provide a narrative example of the TRCC's process of consulting the appropriate IT agency or offices. Identify the appropriate agency or offices and their responsibilities.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The TRCC proposes projects and then vets them through the appropriate agencies' IT staff before proceeding. Projects are well coordinated with IT staff at the project level and State level.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 6:**

Is there a formal document authorizing the TRCC?

**Standard of Evidence:**

Provide the authorizing document (e.g. MOU, charter).

**Question Rank:**  
Very Important

**Assessor conclusions:**

The FY16 405c Strategic Plan provides the MOUs for the TRCC going forward under the MAP-21 provisions.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 7:**

Does the TRCC provide the leadership and coordination necessary to develop, implement, and monitor the TRCC strategic plan?

**Standard of Evidence:**

Provide a narrative describing the TRCC's role in developing the TRCC strategic plan as well as implementation of a project detailed in the plan.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The TRCC is charged with developing, implementing, and monitoring the Strategic Plan over time. Although it appears the leadership is there and projects are monitored, no evidence of ongoing monitoring of the multi-year plan was provided.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 8:**

Does the TRCC influence policy decisions that impact the State's traffic records system?

**Standard of Evidence:**

Provide a narrative describing a specific example of how the TRCC is engaged by component agencies in the course of their decision-making processes.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The TRCC works in a collaborative effort to positively impact traffic records systems and processes. The State provided an excellent example of agencies working together to improve data quality and completeness with EMS data.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 9:**

Does the TRCC allocate federal traffic records improvement grant funds?

**Standard of Evidence:**

Specify what funds the TRCC is responsible for allocating (e.g., §405(c)) and provide a narrative describing how the TRCC allocated the most recent program year's funding.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The TRCC is actively involved in the project selection process and employs costs benefit analysis in the decision-making process. The committee allocates Section 405c funds based on the needs and benefits to the State. Thorough discussion and analysis is conducted prior to the award of Section 405c funding.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 10:**

Does the TRCC identify core system performance measures and monitor progress?

**Standard of Evidence:**

Provide at least one performance measure for each of the six core systems and describe how the TRCC identified it and has tracked its progress over time.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The TRCC has tracked crash data and commercial motor vehicle (CMV) citation timeliness but does not consistently track measures for all of the core systems. Other measures of timeliness and accuracy are done at the project (not system) level.

While it is understood that there are some legislative hurdles that currently cause issues for setting clear performance measures for some of the core systems, the TRCC should continue to work to establish performance measures for all core systems.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 11:**

Does the TRCC enable meaningful coordination among stakeholders and serve as a forum for the discussion of the State's traffic records programs, challenges, and investments?

**Standard of Evidence:**

Provide the charter or MOU and minutes from the two most recent technical TRCC meetings.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

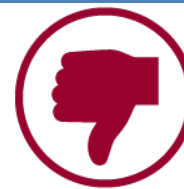
The TRCC has representation from the core systems and serves as the forum for improvements on a Statewide level. The minutes provided were largely based on federal funding applications and projects and did not reflect a broader coordination of efforts.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 12:**

Does the TRCC have a traffic records inventory?

**Standard of Evidence:**

Provide the traffic records inventory.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

The TRCC does not have a traffic records inventory. A complete traffic records inventory is extremely helpful to data users and can help with data linkage opportunities and avoiding duplication of efforts among agencies.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 13:**

Does the technical TRCC have a designated chair?

**Standard of Evidence:**

Provide a position description, identify the individual, and describe the chair's responsibilities.

**Question Rank:**

Very Important

**Assessor conclusions:**

The TRCC has a designated chair who is responsible for facilitating discussion among members in regards to traffic data systems, reviewing projects, and presenting semiannually to the Executive committee the projects, proposed projects, and results.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 14:**

Does the TRCC have a designated coordinator?

**Standard of Evidence:**

Provide a position description, identify the individual, and describe the coordinator's responsibilities.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The TRCC has a designated coordinator. The coordinator schedules the TRCC meetings, takes the meeting minutes, creates the meeting agendas, provides guidance on contracting procedure, creates and manages the 405c contracts, and works with partners to improve the traffic data system.

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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**Question 15:**

Does the executive TRCC meet at least once annually?

**Standard of Evidence:**

Provide a schedule of executive meeting dates from the past two program years.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The State uses an overarching executive committee that meets on a wide variety of transportation issues as the executive TRCC. TRCC issues are a part of this semi-annual meeting. The State may wish to consider if this meets their needs as an executive committee.

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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**Question 16:**

Does the technical TRCC meet at least quarterly?

**Standard of Evidence:**

Provide a schedule of technical TRCC meeting dates for the past program year. If the TRCC has topical sub-committees, identify these groups, their purposes, and meeting dates as well.

**Question Rank:**  
Somewhat Important

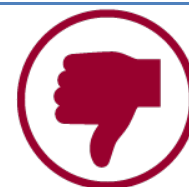
**Assessor conclusions:**

The TRCC technical level committee is scheduled to meet on a monthly basis.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 17:**

Does the TRCC oversee quality control and quality improvement programs impacting the core data systems?

**Standard of Evidence:**

Provide meeting minutes or reports that document the quality control activities that the TRCC undertakes regularly.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Although the TRCC monitors projects, the TRCC does not conduct regular quality control programs for the core systems at a Statewide system level. These may occur at the system owner level.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 18:**

Does the TRCC address technical assistance and training needs?

**Standard of Evidence:**

Document TRCC discussion of technical assistance and training needs with meeting agendas or minutes.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

Training is a standing agenda item for the TRCC. Each of the core agencies discuss training needs at numerous meetings around the State in regards to their programs. These events include local engineer conferences, safety conferences, law enforcement training events, and ambulance services training events. Grants have training as a specific line item in the contract.

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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**Question 19:**

Does the TRCC use a variety of federal funds to strategically allocate resources for traffic records improvement projects?

**Standard of Evidence:**

Provide an inventory of federal funds used to support traffic records improvement projects in the last program year.

**Question Rank:**  
Very Important

**Assessor conclusions:**

A wide variety of federal funds are being utilized for data improvement projects. The State seeks funding opportunities beyond data improvement specific funding (408, 405c) where appropriate. Some State funds are also used.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>100%</b>
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## Strategic Planning

Missouri's Traffic Records Coordinating Committee (TRCC) has a process for development and review of its strategic plan for traffic records improvement. The Plan uses the latest traffic records assessment to determine deficiencies, as well as comments from data users and TRCC members. In determining what projects to select for funding, the State considers major systems first, then other interfacing and local data improvement projects. Missouri updates its strategic plan annually and the system seems to work well enough for the State and its data systems.

While this process is relatively successful, as data management improves it is more important to perfect the process to insure that funding is used most effectively to upgrade data systems, which are the foundation of actions to improve traffic safety for the State's citizens and road users. Some areas which have room for improvement are:

Prioritization of grant-funded projects should be based on a standard procedure that is transparent, agreed upon, and used by the TRCC. There are a number of processes which can be used for prioritization--one is the 4-box system. One aspect of determining the most effective selection process involves having the applications include not just timelines and milestones, but also performance measures which will show how the project will improve data quality in one or more of the six areas of timeliness, accuracy, completeness, uniformity, accessibility, or integration. This will require that a baseline measurement has been determined and the expected improvement outlined as a goal.

The plan should include not just those projects which have been selected and funded, but projects which are deemed important to data improvement that cannot be funded with current resources. This is the basis for strategic thinking and planning. The State's vision for traffic records should be the foundation upon which the planning is built. Once the TRCC determines what direction it will take, the projects should align with and improve the aspects of records upon which the Plan is focusing for the future. With prioritized projects in the plan, it improves the likelihood that funding or resources that become available unexpectedly are used to maximum effectiveness. It can also lead to combination of similar projects which seek to meet a Statewide need. It is particularly true if the State makes an effort to locate various additional sources of grant money and when State agencies are aware of pending needs when State funds become available.

Strategic planning should not be an annual or semi-annual process for data users, managers, and collectors. To be most effective, it must be a consistent way of thinking. If the State limits its strategic planning to a once-a-year exercise, it is less likely to change the status of data and data collection than will a consistent application of strategic thinking about data, data improvement, data use, and traffic safety improvement. Once the TRCC and the State make a concerted effort to think of data improvement holistically, it will be more likely that substantial improvement in data use and usefulness result. The ability to demonstrate how the funding is improving the data will also help advocates for funding show that data improvement is a wise use of resources and will help to justify the expense.

**Question 20:**

Does the TRCC develop the TRCC strategic plan?

**Standard of Evidence:**

Document the process undertaken by the TRCC in developing the strategic plan.

**Question Rank:**  
Very Important

**Assessor conclusions:**

It appears that the TRCC is active in putting together the Strategic Plan for Traffic Records for the State, but the process seems dependent upon the 405 grant funding. Effective strategic planning should initially ignore funding availability. Strategic planning should begin with determination of the State's mission and vision, which has been accomplished including a plan for the near future. The vision should map out where the State hopes to be in the next 5-10 years. Once the vision is developed, the determined deficiencies in records and record systems will be the basis for the types of projects and programs which need to be accomplished or implemented. A list of projects should be developed and priorities set. At that point, the State can request grant proposals in order to fulfill the State's needs in its vision for the future. Projects for which funding is not currently available should remain in the plan, so that they can be considered when appropriate funding become available. Funding should be considered from State and federal sources as well as any and all grant opportunities that may apply. Once the projects are planned, it is much easier to take action on available funding or to seek grant funding that may exceed the traffic records funds that are supplied by NHTSA or available State funding.

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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**Question 21:**

Does the TRCC strategic plan address existing data and data systems deficiencies and document how these deficiencies are identified?

**Standard of Evidence:**

Identify, with appropriate citations, how the strategic plan addresses existing data and data systems deficiencies and documents how they were identified.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State describes how they identify and address existing data and data systems deficiencies presented by the data users and TRCC members each year to create the TRCC Strategic Plan. The deficiencies presented by the most recent traffic records assessment are also included in the plan noting which recommendations have been addressed by the State. Projects that address those deficiencies or which promise to substantially improve an aspect of data quality should be considered and solicited from State and local agencies who collect, manage, or use the data. The current status of each project addressing all of the noted deficiencies is also included in the Strategic Plan.

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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**Question 22:**

Does the TRCC strategic plan identify strategies that address the timeliness, accuracy, completeness, uniformity, integration, and accessibility of the six core data systems?

**Standard of Evidence:**

Identify, with appropriate citations, how the strategic plan identifies strategies that address the timeliness, accuracy, completeness, uniformity, integration, and accessibility of the six core data systems.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Any grant application which seeks 405c funding should outline the improvements to be made in the data by virtue of the project and should set forth performance measures that will ensure that the project is successful. While each project should have a plan and milestones for its completion, these performance measures should be separate and should address the results of the completion and implementation of the program or project that is proposed. For example, a grant request for electronic citation software should be able to: improve timeliness of citation arrival at courts; reduce officer time at the roadside; increase accuracy due to drop-down menus or GPS determination of the location of the stop; improve completeness or ability to determine system completeness due to centralized citation numbering; improve integration from ability to link from the citation system to the court case management system; or improve accessibility due to the direct input of the citation data into the case management systems, to name a few. These are the types of performance measures that should accompany each grant proposal as it outlines how the proposed project will improve the data upon which the State relies for its data-driven traffic safety initiatives.

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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**Question 23:**

Does the TRCC strategic plan indicate what funds are used to undertake efforts detailed in the plan and describe how these allocations contribute to the plan's stated goals?

**Standard of Evidence:**

Identify, with appropriate citations, how efforts detailed in the plan are funded and explain how these allocations address the plan's stated goals as specified in the strategic plan.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State details what funds are budgeted for each project and how the funds are used to complete the project. If local or other funds are used within the same project, this is noted in the progress reports. It is important to outline all funding used for traffic records projects, including funding other than 405c grant funds. It provides a record of the cost of traffic records improvements in the State and allows for an evaluation of return on investment if the improved records allow for improved engineering or education or more effective enforcement, based on data-driven countermeasure development.

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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**Question 24:**

Does the TRCC have a process for prioritizing traffic records improvement projects in the TRCC strategic plan?

**Standard of Evidence:**

Identify, with appropriate citations, how the TRCC prioritizes traffic records improvement projects as specified in the strategic plan.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The TRCC prioritizes the State's data projects by major systems first, then other interfacing and local data improvement requests. Developing a standardized method of reviewing and selecting projects helps to insure that funding is used most effectively. A standardized method of prioritization involving risk-assessment, cost/benefit, multi-attribute ranking, or something similar would ensure a transparent and uniform methodology.

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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**Question 25:**

Does the TRCC have a process for identifying performance measures and corresponding metrics for the six core data systems in the TRCC strategic plan?

**Standard of Evidence:**

Identify, with appropriate citations, how the TRCC identifies performance measures and any corresponding metrics for each of the six core data systems as specified in the strategic plan.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Performance measures are selected for each grant-funded project depending on which aspect of data the grant activity is deemed to be impacting. However, the State has not provided information on how the metrics are developed and how goals are set as systems improve.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 26:**

Does the TRCC have a process for identifying and addressing technical assistance and training needs in the TRCC strategic plan?

**Standard of Evidence:**

Identify, with appropriate citations, how the TRCC identifies and addresses technical assistance and training needs as specified in the strategic plan.

**Question Rank:**  
Somewhat Important

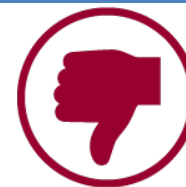
**Assessor conclusions:**

The TRCC provides training when necessary; an example being that training is being provided by the municipal courts from in-house technical trainers. There is also training provided to law enforcement officers for the proper entry of traffic reports..

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 27:**

Does the TRCC have a process for leveraging federal funds and assistance programs in the TRCC strategic plan?

**Standard of Evidence:**

Identify, with appropriate citations, how the TRCC leverages federal funds and assistance programs as specified in the strategic plan.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

While the State does not have a specific strategy for leveraging federal funds, it does require some grant recipients to find partial funding from other federal or State sources as they are able. Having a subcommittee of the TRCC which reviews and reports on available federal funding opportunities might be an effective first step in ensuring that funding opportunities are maximally utilized.

The State might also include data improvement programs such as the Crash Data Improvement Program or the Roadway Data Improvement Program in the Strategic Plan if the State feels they would be beneficial.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 28:**

Does the TRCC have a process for establishing timelines and responsibilities for projects in the TRCC strategic plan?

**Standard of Evidence:**

Identify, with appropriate citations, how the TRCC establishes timelines and responsibilities for projects in the plan.

**Question Rank:**

Very Important

**Assessor conclusions:**

Project progress is reviewed by the TRCC at least annually and the projects adopted include timelines and milestones.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 29:**

Does the TRCC have a process for integrating State and local data needs and goals into the TRCC strategic plan?

**Standard of Evidence:**

Identify, with appropriate citations, how the TRCC integrates State and local data needs and goals into the TRCC strategic plan.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State specifically reviews requests for funding from local agencies. However, it is not clear how local data users are heard from. The TRCC should make every effort to ensure users from whatever level of government agency are heard in terms of their data needs. The cost of data collection and analysis is too high unless the data is used to its maximum potential for purposes of improving highway safety.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 30:**

Does the TRCC consider the use of new technology when developing and managing traffic records projects in the strategic plan?

**Standard of Evidence:**

Identify, with appropriate citations, a project or projects in the strategic plan whose development included the application or consideration of new technology.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The State has included projects using new technology in the Strategic Plan. One such project was to provide tablet computers for all local agencies allowing them to submit electronic EMS data more accurately and timely is an excellent use of technology in traffic records.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 31:**

Does the TRCC consider lifecycle costs in implementing improvement projects?

**Standard of Evidence:**

Identify, with appropriate citations, a project or projects in the strategic plan whose development included consideration of lifecycle costs.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

While lifecycle costs were not fully considered in the initial field data collection software, experience has changed the State's perspective to a more forward-thinking approach. It is difficult to turn down much needed technological advancements when funding is immediately available. However, maintenance and hardware replacement, as well as software updates are expensive aspects of any such project. After experiencing difficulties with updating software in individual units, the State worked to provide a new approach that did not require the individual service that the original program required. The Strategic Plan does not address the need to consider on-going costs for all projects to prevent having to abandon a project or procedure due to lack of on-going funding.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 32:**

Is the strategic plan responsive to the needs of all stakeholders, including local users?

**Standard of Evidence:**

Identify, with appropriate citations, specific instances demonstrating that local stakeholder needs are incorporated into the TRCC's strategic plan.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

Local users are able to request funds to add or upgrade systems to allow them to better supply the traffic records data needed by an effective TRCC.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 33:**

Does the strategic plan make provisions for coordination with key federal traffic records data systems?

**Standard of Evidence:**

Provide a narrative demonstrating how the strategic plan coordinates with key federal traffic records data systems. Provide citations from the strategic plan if appropriate.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

Coordination with federal data systems is considered by the State and such coordination has been the source of several projects over the last few years. State data systems transfer data to the federal systems, such as FARS. This data is monitored for timeliness and accuracy through reports submitted to the TRCC on a regular basis and updated in the Strategic Plan.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 34:**

Does the TRCC have a process for identifying and addressing impediments to coordination with key Federal traffic records data systems?

**Standard of Evidence:**

Provide a narrative detailing the processes used by the TRCC to identify and address impediments to coordination with key Federal traffic records data systems. Provide citations from the strategic plan if appropriate.

**Question Rank:**  
Very Important

**Assessor conclusions:**

It appears that the State's process is reactive in terms of reporting by TRCC members and discussion during TRCC meetings. Perhaps additional focus/measures regarding federal system reporting would help to prevent issues/problems that now seem to be the means by which these systems are addressed.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 35:**

Is the TRCC's strategic plan reviewed and updated annually?



**Standard of Evidence:**

Provide a narrative detailing the frequency and depth of strategic plan reviews and updates. Identify the stakeholder agencies represented in the review process. Provide a schedule or cite the plan itself if appropriate.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The Traffic Records Strategic Plan is reviewed and updated annually by the entire technical and executive TRCC and is signed by the department administrators. The current Strategic Plan is up to date.

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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## Crash

The Missouri State Highway Patrol (MSHP) is the primary custodian of the State's crash data system called the Statewide Traffic Accident Records System (STARS), which is a component of the Missouri Department of Transportation's Transportation Management System (TMS). The State's Revised Statute 43.250 specifies the requirements for law enforcement officers who investigate a crash resulting in a fatal, injury, or PDO (damages to property in excess of \$500) to submit the crash information to the State. While the State does not require crash reports for crashes occurring in non-trafficways, Missouri does collect limited crash, driver, and person information for non-trafficway crashes.

Missouri does a great job of utilizing the crash data to identify crash risk factors, guide engineering projects, prioritize law enforcement activities, and evaluate safety countermeasure programs. The crash data is used extensively to help identify roadway segments in need of improvements. This can be seen in the "high severity" crash lists, "top horizontal curves" list, top intersections list, and top pedestrian corridors list. The data is also used to guide engineering and construction projects. By identifying roadway sections which are over-represented with serious crashes, the State has successfully installed such countermeasures as rumble strips, median guard cable, chevrons, painted edge-lines, and j-turns to help decrease the number of crash-related serious injuries and fatalities. Lastly, the Missouri State Highway Patrol Troops routinely utilize the crash data to allocate manpower and develop enforcement activities.

In 2010/2011, the STARS team considered both MMUCC and ANSI standards when evaluating their crash data report and crash system data dictionary. While ANSI D-16 was used, ANSI D-20 was not considered at that time. The State should consider reviewing their crash report and data dictionary again using the new ANSI D-20 standards. The 2012 Missouri Uniform Crash Report (MUCR) Preparation Manual and the 2012 MUCR Field Specification document together do a good job of defining each data element, field edits, valid codes, and validation rules. However, these documents do not address elements populated through data linkages with other systems. Adding this information to the current documents would be beneficial. Identifying and documenting elements populated through linkages would help stakeholders' understanding of each data element and how the values are being derived. The State is commended for creating these documents and for developing processes used to keep these documents up-to-date.

As of December 2015, the State does not know which agencies were collecting crash data electronically and does not have a desire to achieve 100% electronic crash data collection. However, the Missouri State Highway Patrol does maintain a list of law enforcement agencies reporting electronically and how many reports are reported electronically or via paper. It is strongly recommended that the State strive to increase the number of crash reports collected and submitted electronically. To help accomplish this, a survey could be conducted through the Traffic Records Coordinating Committee (TRCC) to determine if agencies are currently collecting and submitting crash data electronically and if not, why. The results of this survey can aid in identifying roadblocks for agencies and the State. Identifying these issues and assisting agencies in overcoming identified roadblocks will pave the way for improved crash data collection within the areas of timeliness, completeness, accuracy, and uniformity.



At the present time, the State's crash system has an interface with the driver and vehicle data systems. Local law enforcement agencies and the Missouri State Highway Patrol have the ability to access driver and vehicle information via the Department of Revenue. Given a driver license number and/or a vehicle license plate number, an officer can populate the driver and/or vehicle information on the crash report. These processes help verify and validate information, as well as assist in identifying any inconsistencies in the data. The State is commended for their work in this area. However, there was no discussion of accessing the driver and/or vehicle record itself. This is something that should be considered, if not already in place. Having the ability to access a driver's record to determine the driver's previous crash involvements can assist an officer in their investigation. Likewise, accessing a vehicle's record can assist identifying if a car is stolen.

While the crash data may not directly interface with the roadway system, it does link with the roadway system. The State is doing excellent work in this area and can link crash data with the roadway inventory, sign inventory, rumble strip inventory, and traffic volumes data. This linkage was instrumental in the creation of the Transportation Management System (TMS) and allows the State to perform robust analyses of the data. The State should continue to strive to develop linkages with the citation & adjudication and injury surveillance systems. Having these systems integrated with the crash data will allow for more accurate data, enhanced data analysis, and benefit all stakeholders. The TRCC can be an effective resource in pushing data linkage forward by identifying the appropriate personnel, assisting with resources, and explaining the importance/benefits of data integration.

Currently, Missouri does not have any crash data performance measures. It is highly recommended that the State review the NHTSA proposed performance measures and consider the creation of multiple crash system performance measures. Without system wide measurements of performance, there is no goal for data custodians to strive for and no means of measuring success/failure of projects. Since the Missouri State Highway Patrol houses the crash data, they should consider the creation of timeliness performance measures such as overall reporting days or percentage of reports received within 30 days of the crash. This should be performed at the State level for all reports. As the State increases electronic reporting, these performance measures will help document and demonstrate the State's success. Completeness and uniformity performance measures should also be created. Since the State has crash interfaces with the driver and vehicle systems, examples of a possible completeness measures could be percentage of reports with no missing driver or vehicle information.

Data quality is a very important aspect of crash data collection, evaluation, and reporting. Paper reports are manually entered into STARS and the Records Division has the authority to correct obvious errors, except for crash reports created by the Missouri State Highway Patrol (MSHP). These reports are returned to MSHP via an inter-agency electronic workflow process for correction. The State is doing a great job of capturing and documenting common errors in need of correction. They are also using this information to update training content and data collection manuals. The State should use the information collected within these processes to create an accuracy performance measure.

While Missouri seems to have a good foundation for the development of robust crash data quality processes, they should strive to capitalize more in this area. For example, a data quality project to be considered is performing independent random quality review audits on an agency basis. Random quality review audits could be implemented by randomly selecting X% of fatal reports, Y% of injury reports, and Z% of PDO reports at an agency level and reviewing the selected

reports for data quality issues. This process will help the State increase the data accuracy and assist with improving training content. It will also assist Missouri in distributing error reports and developing tailored data quality training at an agency level. All of which will help increase data accuracy over time.

Lastly, data quality information should be shared and discussed more with key stakeholders and the TRCC. While the State is communicating data quality feedback to data collectors on occasion, they should strive to provide this communication on a regular basis. They are also strongly encouraged to consider getting the TRCC involved in data quality management. Having data quality topics discussions at TRCC meetings opens the opportunity for the TRCC to fulfill its roles in overseeing and advising on data quality improvement projects and fulfilling their role in Strategic Planning.

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**Question 36:**

Is statewide crash data consolidated into one database?



**Standard of Evidence:**

Provide a description of the statewide database and specify how the data is consolidated.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

Within Missouri, the crash data is consolidated into the Statewide Traffic Accident Records System (STARS) database.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 37:**

Is the statewide crash system's organizational custodian clearly defined?



**Standard of Evidence:**

Identify what agency has the custodial responsibility for the statewide crash system, detail the extent of the agency's role, and provide all relevant statutes.

**Question Rank:**  
Very Important

**Assessor conclusions:**

A Memorandum of Understanding between the Missouri Highways and Transportation Commission and the Missouri State Highway Patrol (MSHP) clearly identifies the MSHP as the custodian of the State's crash database.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 38:**

Does the State have criteria requiring the submission of fatal crashes to the statewide crash system?

**Standard of Evidence:**

Provide the fatal crash inclusion criteria for the statewide crash system.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Section 43.250 of the Revised Statutes of Missouri requires submission of fatal crashes to the Statewide crash system.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 39:**

Does the State have criteria requiring the submission of injury crashes to the statewide crash system?

**Standard of Evidence:**

Provide the injury crash inclusion criteria for the statewide crash system.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Section 43.250 of the Revised Statutes of Missouri requires submission of injury crashes to the Statewide crash system.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 40:**

Does the State have criteria requiring the submission of PDO crashes to the statewide crash system?

**Standard of Evidence:**

Provide the PDO crash submission criteria for the statewide crash system.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Section 43.250 of the Revised Statutes of Missouri requires submission of PDO crashes to the Statewide crash system. PDO crashes within Missouri are defined as total property damage to an apparent extent of five hundred dollars or more to one person.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 41:**

Does the statewide crash system record crashes occurring in non-trafficway areas (e.g., parking lots, driveways)?

**Standard of Evidence:**

Provide the non-trafficway reporting criteria for the statewide crash system.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

While there are no documented criteria for non-trafficway areas, the State does collect limited crash, driver, and person information which is entered into their crash database for non-traffic crashes.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 42:**

Is data from the crash system used to identify crash risk factors?

**Standard of Evidence:**

Provide example reports and/or analyses that examine locations, roadway features, behaviors, driver characteristics, or vehicle characteristics as they relate to crash risk. If referencing large documents like the SHSP, please cite relevant page numbers.

**Question Rank:**

Very Important

**Assessor conclusions:**

The State does utilize their crash data to identify crash risk factors. This can be seen by the identification of "high severity" crash lists, "top horizontal curves" list, roadways that are over-represented by most severe crash types, top intersections, and top pedestrian corridors as identified within the State's SHSP.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 43:**

Is data from the crash system used to guide engineering and construction projects?

**Standard of Evidence:**

Describe the State's network screening and countermeasure selection processes. Describe how construction projects are funded based on the analysis of crash data. If referencing large documents like the SHSP, please cite relevant page numbers.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State provided ample examples of how the crash system is used to guide engineering and construction projects. Those examples included rumble strips, guard cable, and j-turns.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 44:**

Is data from the crash system regularly used to prioritize law enforcement activity?

**Standard of Evidence:**

Provide a sample location-based analysis and any associated law enforcement activities. If a State DDACTS program exists, provide details.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The reports created from Statewide Traffic Enforcement Program (STEP manual) are used by MHSP troops and zones to determine areas where there is an increased incidence of crashes. These reports can also be used by the State to show numbers of crashes involving fatalities, personal injury, involvement of alcohol/speed/following too closely, breakdown by type of highway/time of day/day of week/CMV involvement/etc.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 45:**

Is data from the crash system used to evaluate safety countermeasure programs?

**Standard of Evidence:**

Describe how crash data is used to evaluate safety countermeasure programs. If referencing large documents like the SHSP, HSP, or Crash Facts, please cite relevant page numbers.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State has multiple strategies in place to reduce injury and fatality rates. Examples of such strategies include reducing alcohol/drug impairment, aggressive/hazardous driving, and increasing seat belt usage as identified within the Missouri State Highway Patrol's Strategic Plan.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 46:**

Is MMUCC a primary source for identifying what crash data elements and attributes the State collects?

**Standard of Evidence:**

Provide a narrative description of the process by which MMUCC was used to identify what crash data elements and attributes are included in the crash database and on the Police Accident Report (PAR).

**Question Rank:**  
Very Important

**Assessor conclusions:**

During their last revision of the crash report, in 2010/2011, the State used the Third Edition of MMUCC to discuss and vote on various MMUCC data elements and attributes which were not previously identified within their crash report and STARS database.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 47:**

Are the ANSI D-16 and ANSI D-20 used as sources for the definitions in the crash system data dictionary?

**Standard of Evidence:**

Provide a narrative description of the process by which ANSI D-16 and ANSI D-20 were used to define data elements in the crash system's data dictionary and user manual.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

State identifies extensive use of ANSI D-16 for definitions and classifications which are incorporated within the crash manual and the State's annual training sessions on this manual for patrol records personnel. State claims non-use of ANSI D-20.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 48:**

Does the data dictionary provide a definition for each data element and define that data element's allowable values?

**Standard of Evidence:**

Provide a copy of the crash system data dictionary.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The Missouri Uniform Crash Report (MUCR) Preparation Manual provides a definition of data elements used on the crash report and in STARS. Also, the 2012 MUCR Field Specification document lists all valid codes in STARS.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 49:**

Does the data dictionary document the system edit checks and validation rules?

**Standard of Evidence:**

Provide a copy of the crash system data dictionary. If the crash system edit checks and validation rules are documented elsewhere, provide the appropriate document.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The State has documentation outlining the crash database system, crash form, allowable values, and functional edits.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 50:**

Is the data dictionary up to date and consistent with the field data collection manual, coding manual, crash report, and any training materials?

**Standard of Evidence:**

Describe the processes to update the crash system's data dictionary, field data collection manual, coding manual, crash report, and training manuals. Specify which of the documents exist and describe processes to keep them consistent with each other.

**Question Rank:**  
Very Important

**Assessor conclusions:**

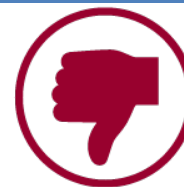
The State routinely updates their data dictionary and ensures it is consistent with the field data collection manual, coding manual, crash report, and any training materials.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 51:**

Does the crash system data dictionary indicate the data elements populated through links to other traffic records system components?

**Standard of Evidence:**

Provide a list of data elements that are populated in the crash system through linkages to other traffic records system components (e.g., the driver file, the vehicle file, the roadway inventory, or statewide mapping system).

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The State's crash system data dictionary does not indicate data elements populated through linkages with other traffic records system components.

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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**Question 52:**

Do all law enforcement agencies collect crash data electronically?

**Standard of Evidence:**

Provide a list of all reporting agencies and specify their data collection methods. Specify any State plans for achieving 100% electronic in-field data collection.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

Less than 100% of police agencies use electronic data collection. No formal plan exists for achieving 100% electronic crash data collection though the "State is striving for 100%".

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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**Question 53:**

Do all law enforcement agencies submit their data to the statewide crash system electronically?

**Standard of Evidence:**

Describe—using a narrative or flow diagram—all data submission processes used to transmit data from collecting agencies to the statewide crash data system. Include the percentage of total data submitted for each specified method.

**Question Rank:**  
Very Important

**Assessor conclusions:**

While not all law enforcement agencies submit their data to the Statewide crash system electronically, some do utilize electronic submission.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 54:**

Do all law enforcement agencies collecting crash data electronically apply validation rules that are consistent with those in the statewide crash system prior to submission?

**Standard of Evidence:**

Describe the validation processes used by the collecting agencies. Specify if the validation rules are applied to the data prior to submission to the statewide crash system. Include, in the description, how the validation rules are distributed to the collecting agencies and how the State checks the submitted data for consistency to rules in the statewide crash system.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State is uncertain of validation rules relating to crash data collection in the field.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 55:**

Does the State maintain accurate and up to date documentation detailing the policies and procedures for key processes governing the collection, reporting, and posting of crash data—including the submission of fatal crash data to the State FARS unit and commercial vehicle crash data to SafetyNet?

**Standard of Evidence:**

Provide a process flow diagram (preferred) or narrative description documenting key processes governing the collection, reporting, and posting of crash data—including the submission of fatal crashes to the State FARS unit and commercial vehicle crashes to SafetyNet.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State maintains data flows of the different crash report types, including the FARS and SafetyNet processes.

Respondents assigned	1	Responses received	1	Response rate	100%
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**Question 56:**

Are the processes for managing errors and incomplete data documented?

**Standard of Evidence:**

Provide a process flow diagram (preferred) or narrative description documenting the processes for managing errors and incomplete data.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State has a detailed process of managing errors and incomplete data and maintains data flow diagrams outlining the processes.

Respondents assigned	1	Responses received	1	Response rate	100%
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**Question 57:**

Do the document retention and archival storage policies meet the needs of safety engineers and other users with a legitimate need for long-term access to the crash data reports?

**Standard of Evidence:**

Provide a copy of the retention policy.

**Question Rank:**

Somewhat  
Important

**Assessor conclusions:**

Crash records are not removed from the database and date back to 1987. Crash report images exist from 1997 to present, and prior to 1997 they exist on microfilm.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 58:**

Does the crash system interface with the driver system?

**Standard of Evidence:**

Provide narrative description of the crash-to-driver system interfaces that enable: verification and validation of the driver's personal information, access to driver records, identification of inconsistencies between the crash and driver records, and/or identification of the driver's prior crash involvement?

**Question Rank:**

Somewhat  
Important

**Assessor conclusions:**

Local law enforcement agencies and the Missouri State Highway Patrol have the ability to input a driver's license number and populate the driver information on the crash report via an interface with DOR. This interface allows for verification and validation of the driver's personal information as well as identification of inconsistencies between the crash and driver records. However, there is no mention of the information helping with access to driver records, identification of inconsistencies between the crash and driver records, and/or identification of the driver's prior crash involvement.

<b>Respondents assigned</b>	2	<b>Responses received</b>	2	<b>Response rate</b>	100%
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**Question 59:**

Does the crash system interface with the vehicle system?

**Standard of Evidence:**

Provide narrative descriptions of the crash-to-vehicle system interfaces that enable: verification and validation of the vehicle information, access to vehicle records, and/or identification of inconsistencies between the crash and vehicle records.

**Assessor conclusions:**

Local law enforcement agencies and the Missouri State Highway Patrol have the ability to input a vehicle's license number and populate the vehicle information on the crash report via an interface with DOR. This interface allows for verification and validation of the vehicle information. However, there is no mention of the information helping with access to the vehicle's records.



**Question Rank:**  
Somewhat Important

<b>Respondents assigned</b>	2	<b>Responses received</b>	2	<b>Response rate</b>	100%
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**Question 60:**

Does the crash system interface with the roadway system?

**Standard of Evidence:**

Provide narrative descriptions of the crash-to-roadway interfaces that enable: verification and validation of the roadway information, and/or identification of inconsistencies between the crash and roadway records.

**Assessor conclusions:**

Crash and roadway records are linkable via a robust linear referencing system. The linked data are routinely utilized to produce useful analytical outputs. However, no discussion of verification and validation of the roadway information and/or identification of inconsistencies between the crash and roadway records were provided, though this might be considered an obvious conclusion.



**Question Rank:**  
Somewhat Important

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 61:**

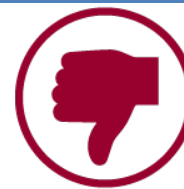
Does the crash system interface with the citation and adjudication systems?

**Standard of Evidence:**

Provide narrative descriptions of the crash-to-citation and -adjudication interfaces that enable: verification and validation of citations and/or alcohol or drug test information in the crash record; identification of any inconsistencies between crash and citation records; and access to criminal history, contact history, and location history.

**Assessor conclusions:**

Within the State, the crash system does not interface with the citation and adjudication system.



**Question Rank:**  
Somewhat  
Important

Respondents assigned	1	Responses received	1	Response rate	100%
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**Question 62:**

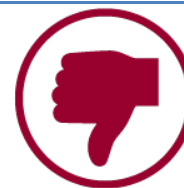
Does the crash system interface with the injury surveillance system?

**Standard of Evidence:**

Provide narrative descriptions of the crash-to-injury surveillance interfaces that enable: verification and validation of EMS information, and identification of inconsistencies between crash and EMS records.

**Assessor conclusions:**

Within the State, the crash system does not interface with the injury surveillance system. However, Missouri's Fatality Analysis Reporting System (FARS) Analyst does have access to the Missouri Department of Health and Senior Services EMS System and Missouri Patient Registry System.



**Question Rank:**  
Somewhat  
Important

Respondents assigned	1	Responses received	1	Response rate	100%
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**Question 63:**

Are there automated edit checks and validation rules to ensure that entered data falls within a range of acceptable values and is logically consistent among data elements?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which automated edit checks or validation rules ensure entered data falls within the range of acceptable values and is logically consistent between fields.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State has automated edit checks and validation rules to ensure that entered data falls within a range of acceptable values and is logically consistent among data elements.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 64:**

Is limited state-level correction authority granted to quality control staff working with the statewide crash database to amend obvious errors and omissions without returning the report to the originating officer?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which limited state-level correction authority is granted to quality control staff working with the statewide crash database.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

Quality control staff is granted access to amend obvious errors and omissions for local law enforcement agencies. However, they do not have access to do so for crash reports submitted from Missouri State Highway Patrol.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 65:**

Are there formally documented processes for returning rejected crash reports to the originating officer and tracking resubmission of the report in place?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which rejected crash reports are returned to the originating officer and then resubmitted to the statewide crash database.

**Question Rank:**  
Very Important

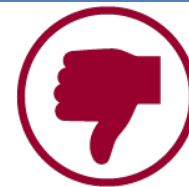
**Assessor conclusions:**

They State does have in place a process for returning rejected crash reports to the originating officer and tracking resubmission of the reports.

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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**Question 66:**

Are there timeliness performance measures tailored to the needs of data managers and data users?

**Standard of Evidence:**

Provide a complete list of crash system timeliness measures the State uses, including the most current baseline and actual values for each.

**Question Rank:**  
Very Important

**Assessor conclusions:**

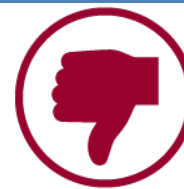
There are no timeliness performance measures tailored to the needs of data managers and data users within the State.

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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**Question 67:**

Are there accuracy performance measures tailored to the needs of data managers and data users?

**Standard of Evidence:**

Provide a complete list of crash system accuracy measures the State uses, including the most current baseline and actual values for each.

**Question Rank:**  
Very Important

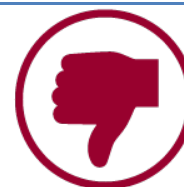
**Assessor conclusions:**

There are no accuracy performance measures tailored to the needs of data managers and data users within the State.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 68:**

Are there completeness performance measures tailored to the needs of data managers and data users?

**Standard of Evidence:**

Provide a complete list of crash system completeness measures the State uses, including the most current baseline and actual values for each.

**Question Rank:**  
Very Important

**Assessor conclusions:**

There are no completeness performance measures tailored to the needs of data managers and data users within the State.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 69:**

Are there uniformity performance measures tailored to the needs of data managers and data users?

**Standard of Evidence:**

Provide a complete list of crash system uniformity measures the State uses, including the most current baseline and actual values for each.

**Question Rank:**  
Very Important

**Assessor conclusions:**

There are no uniformity performance measures tailored to the needs of data managers and data users within the State. However, all crash reports submitted to the State must match the format of the Missouri Uniform Crash Report form.

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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**Question 70:**

Are there integration performance measures tailored to the needs of data managers and data users?

**Standard of Evidence:**

Provide a complete list of crash system integration measures the State uses, including the most current baseline and actual values for each.

**Question Rank:**  
Very Important

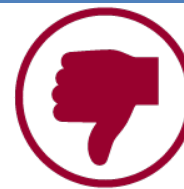
**Assessor conclusions:**

There are no integration performance measures tailored to the needs of data managers and data users within the State.

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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**Question 71:**

Are there accessibility performance measures tailored to the needs of data managers and data users?

**Standard of Evidence:**

Provide a complete list of crash system accessibility measures the State uses, including the most current baseline and actual values for each.

**Question Rank:**

Somewhat Important

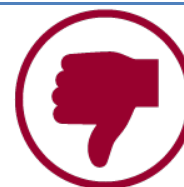
**Assessor conclusions:**

There are no accessibility performance measures tailored to the needs of data managers and data users within the State.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 72:**

Has the state established numeric goals—performance metrics—for each performance measure?

**Standard of Evidence:**

Provide the specific, State-determined numeric goals associated with each performance measure in use.

**Question Rank:**

Very Important

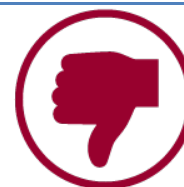
**Assessor conclusions:**

Established numeric goals—performance metrics—have not been created since the State does not have any defined performance measures at this time.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 73:**

Is there performance reporting that provides specific timeliness, accuracy, and completeness feedback to each law enforcement agency?

**Standard of Evidence:**

Provide a sample report, list of receiving law enforcement agencies, and specify the frequency of issuance.

**Question Rank:**

Very Important

**Assessor conclusions:**

There are no performance reports that provide informative feedback generated or distributed to each law enforcement agency within the State.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 74:**

Is the detection of high frequency errors used to generate updates to training content and data collection manuals, update the validation rules, and prompt form revisions?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which high frequency errors are used to generate new training content and data collection manuals, update the validation rules, and prompt form revisions.

**Question Rank:**  
Very Important

**Assessor conclusions:**

In Missouri, high frequency crash reporting errors are monitored by the Missouri State Highway Patrol Information and Communication Technology Division to assess, in conjunction with the Patrol Records Division, various validation rules/edits. Also, the Patrol Records Division assesses reports being returned to officers for correction and makes modifications to annual training of Missouri law enforcement personnel.

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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**Question 75:**

Are quality control reviews comparing the narrative, diagram, and coded contents of the report considered part of the statewide crash database's data acceptance process?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which quality control reviews comparing the narrative, diagram, and coded contents of the report are considered part of the statewide crash database's data acceptance process.

**Question Rank:**  
Somewhat Important

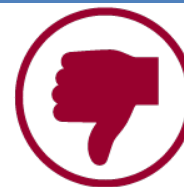
**Assessor conclusions:**

Within Missouri, a review of each crash report narrative, diagram, and coded contents is completed during the quality control phase. Some of the things Q/C analysts are checking include: crash classifications such as crash type and on/off roadway, sequence of events, crash location, number of lanes, directional analysis, roadway characteristics, trafficway type, intersection type if applicable, traffic control, fixed object codes, etc.

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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**Question 76:**

Are independent sample-based audits periodically conducted for crash reports and related database contents?

**Standard of Evidence:**

Describe the formal audit methodology, provide a sample report or other output, and specify the audits' frequency.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

There are no independent sample-based audits periodically conducted for crash reports and related database content.

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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**Question 77:**

Are periodic comparative and trend analyses used to identify unexplained differences in the data across years and jurisdictions?

**Standard of Evidence:**

Describe the analyses, provide a sample report or other output, and specify the analyses' frequency.

**Question Rank:**

Very Important

**Assessor conclusions:**

The State does perform periodic comparative and trend analyses in order to identify unexplained differences in the data across years and jurisdictions.

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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**Question 78:**

Is data quality feedback from key users regularly communicated to data collectors and data managers?

**Standard of Evidence:**

Describe the process for transmitting and utilizing key users' data quality feedback to inform changes.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

The Missouri Department of Transportation (MoDOT) on occasion will question crash data that they are analyzing. However, this process does not seem to occur on a regular basis and does not seem to be a formal process.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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**Question 79:**

Are data quality management reports provided to the TRCC for regular review?

**Standard of Evidence:**

Provide a sample quality management report and specify how frequently they are issued to the TRCC.

**Question Rank:**

Very Important

**Assessor conclusions:**

Data quality management reports are not provided to the TRCC for regular review.

<b>Respondents assigned</b>	1	<b>Responses received</b>	1	<b>Response rate</b>	100%
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## Vehicle

As the centralized custodial agency, the Motor Vehicle Bureau in the Motor Vehicle and Driver Licensing Division within the Missouri Department of Revenue is responsible for the contents of the vehicle data system and for the identification and ownership of vehicles registered in the State. While the agency does use a barcode on the vehicle registration receipt, it is only a 128 barcode and only used to retrieve the registration sub-transaction number on a transactional system. An opportunity exists to consider adopting the use of, at least, a minimum 2D standard barcode that could be used internally and would also allow the rapid and accurate collection of vehicle information by law enforcement officers in the field using barcode readers or scanners.

When it comes to guidelines for the vehicle data system, Missouri generally meets the Advisory ideals with one major exception. Using AAMVA recommended title brands or those received through the National Motor Vehicle Title Information System (NMVTIS) is critical to ensure that a vehicle's history is accurately documented between States for consumer information and safety. Consideration should be given to change the practice of converting those brands to anything other than the AAMVA or NMVTIS title brands in the vehicle data system.

Within the vehicle legacy mainframe-based system, a data dictionary is in place that contains documented definitions for each data field. However, in the documentation entitled 'TRIPS Title Validation/Edits,' no registration-specific edit checks were included. This does provide an opportunity to include references to tag, plate, license, or other registration-specific information.

Missouri procedures and process flows for the vehicle data system are generally in line with Advisory; however, stolen vehicle information is not retained or flagged in the title or registration system. While all stolen vehicle data is retained by the Missouri State Highway Patrol (MSHP) and reportedly all title applications are run through the MSHP prior to issuance, it would appear that it may still be possible for the issuance of a title without checking with the MSHP. As the title and registration systems are updated, consideration should be given to including stolen vehicle flags in the title and/or registration system with the assistance of MSHP, including a possible data linkage.

Being able to interface the vehicle data system with other components only enhances data quality and supports the vehicle system's critical business processes. Currently, the driver and vehicle systems are not unified and do not use the same personal information which prevents the ability to match driver and vehicle information with confidence. Consideration of a unified system utilizing the same personal information conventions would provide better analytic capabilities to increase data accuracy and improve data linkage possibilities.

The data quality control programs for the vehicle data system represent a management program's review protocols covering the entire process. Opportunities exist to improve the use of vehicle system quality control measurements. Implementing timeliness, accuracy, completeness, uniformity, integration, and accessibility measures would significantly enhance in identifying the needs of data managers and addressing the concerns of data users. Consideration should be discussed to establish numeric goals for performance measures for each these quality control measurements. Also, regular and periodic comparative and trend analyses should be considered

to identify unexplained differences in data. Another opportunity exists through the use of regular vehicle system data quality management reports that could be presented at TRCC meetings to improve relationships with other agencies and to gain support for new programs and data linkages

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**Question 80:**

Does custodial responsibility of the identification and ownership of vehicles registered in the State—including vehicle make, model, year of manufacture, body type, and adverse vehicle history (title brands)—reside in a single location?


**Standard of Evidence:**

Provide the custodial agency's name.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

The centralized custodial responsibility resides with the Motor Vehicle Bureau in the Motor Vehicle and Driver Licensing Division within the Missouri Department of Revenue.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 81:**

Does the State or its agents validate every VIN with a verification software application?


**Standard of Evidence:**

Describe the circumstances in which the VIN is validated and used.

**Question Rank:**

Less Important

**Assessor conclusions:**

The State uses VIN validation software to appropriately identify motor vehicle information. Prior to issuance, all motor vehicle titles are processed through the VIN edit software.

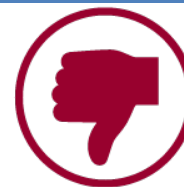
<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 82:**

Are vehicle registration documents barcoded—using at a minimum the 2D standard—to allow for rapid, accurate collection of vehicle information by law enforcement officers in the field using barcode readers or scanners?

**Standard of Evidence:**

Provide a sample document, and identify the information encoded.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The uses a 128 barcode on the registration receipt and scanners can be used to retrieve the registration sub-transaction registration number data on the transactional system. Code 128 barcodes only hold a maximum of 44 characters. The Advisory ideal requires a 2D barcode, such as PDF417, that can transmit a larger volume of data. Law enforcement in the field do not have access to the transactional system.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 83:**

Does the vehicle system provide title information data to the National Motor Vehicle Title Information System (NMVTIS) at least daily?

**Standard of Evidence:**

Explain how and how often the State uploads data to NMVTIS, specifying the manner of transmittal and its frequency (e.g., real-time, nightly, weekly).

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The vehicle title data is uploaded to NMVTIS through a secure FTP on a nightly basis.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 84:**

Does the vehicle system query the National Motor Vehicle Title Information System (NMVTIS) before issuing new titles?

**Standard of Evidence:**

Provide the NMVTIS query processing instructions or provide a screen print of the query tool.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State's Title and Registration Intranet Processing System (TRIPS) initiates a NMVTIS inquiry real-time when the owner submits an application for title.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 85:**

Does the State incorporate brand information on the vehicle record that are recommended by AAMVA and/or received through NMVTIS, whether or not the brand description matches the State's brand descriptions?

**Standard of Evidence:**

Provide the list of the State's title brands and their definitions.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The NMVTIS recommended brands are converted to Missouri equivalent brands, when applicable, and applied to and stored in Missouri's brand file. However, title branding code consistency is key to ensuring a vehicle's history is appropriately carried between States and converting those brands to other than the recommended AAMVA or NMVTIS prohibits that from occurring.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 86:**

Does the State participate in the Performance and Registration Information Systems Management (PRISM) program?

**Standard of Evidence:**

Provide the PRISM processing instructions or a screen print.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Missouri is a PRISM participating State.

<b>Respondents assigned</b>	4	<b>Responses received</b>	1	<b>Response rate</b>	25%
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**Question 87:**

Does the vehicle system have a documented definition for each data field?

**Standard of Evidence:**

Provide a narrative description of the data dictionary and provide an extract.

**Question Rank:**

Somewhat Important

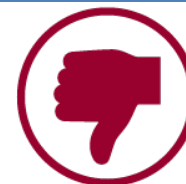
**Assessor conclusions:**

The State vehicle data is stored in both the title and registration systems. The State's Office of Administration, Information Technology Services Division, maintains system and data documentation. Although Missouri's vehicle system is a legacy mainframe based system, they do have a data dictionary in place that contains a documented definition for each data field.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 88:**

Does the vehicle system include edit check and data collection guidelines that correspond to the data definitions?

**Standard of Evidence:**

Provide a narrative description of the data dictionary's edit check and data collection guidelines and provide an extract.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

The State has an internally developed system (Title and Registration Intranet Processing System) that facilitates, edits, and validates data at the time of capture. The supplied documentation, titled 'TRIPS Title Validation/Edits' did not have any registration specific edit checks. Nowhere in the documentation were there any references to tag, plate, license, or anything registration specific that would be expected for an ideal system.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 89:**

Are the collection, reporting, and posting procedures for registration, title, and title brand information formally documented?

**Standard of Evidence:**

Provide a narrative description of the data dictionary's procedure for applying title brands and provide a copy of the brands applied.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The collection, reporting, and posting procedures for registration, title, and title brand information are formally documented.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 90:**

Is there a process flow diagram describing the vehicle data system?

**Standard of Evidence:**

Provide the process flow diagram.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The State maintains a flow diagram that describes the vehicle data system.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 91:**

Does the vehicle system flag or identify vehicles reported as stolen to law enforcement authorities?

**Standard of Evidence:**

Provide a narrative description of the procedures for flagging and identifying vehicles reported as stolen. Provide the appropriate excerpt from the instruction manual.

**Question Rank:**  
Very Important

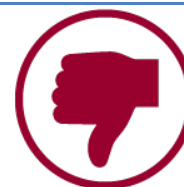
**Assessor conclusions:**

Stolen vehicle information is not retained or 'flagged' in the title and registration system. The stolen vehicle data is retained by the Missouri State Highway Patrol (MSHP) and, while all titles are run through the MSHP prior to issuance, the information is not contained in the title and registration system.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 92:**

If the vehicle system does flag or identify vehicles reported as stolen to law enforcement authorities, are these flags removed when a stolen vehicle has been recovered or junked?

**Standard of Evidence:**

Provide a narrative description of how the flags are removed. Provide the appropriate excerpt from the instruction or procedures manual.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State's title and registration system does not contain any stolen vehicle information. All information is currently retained by the Missouri State Highway Patrol.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 93:**

Does the State record and maintain the title brand history (previously applied to vehicles by other States)?

**Standard of Evidence:**

Provide a narrative description of how title brand information is applied.

**Question Rank:**  
Very Important

**Assessor conclusions:**

NMVTIS brands from other States are converted to Missouri equivalent brands, when applicable, and applied to and stored in Missouri's brand file.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 94:**

Are the steps from initial event (titling, registration) to final entry into the statewide vehicle system documented in a process flow diagram?

**Standard of Evidence:**

Provide the process flow diagram. If diagram does not exist, provide a narrative describing the process in detail.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State maintains a process flow diagram for the vehicle system.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 95:**

Is the process flow diagram or narrative annotated to show the time required to complete each step?

**Standard of Evidence:**

Provide the process flow diagram. If diagram does not exist, provide a narrative describing the process in detail.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The process flow diagram provided by the State contained no information for the time required to complete each step.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 96:**

Does the process flow diagram or narrative show alternative data flows and timelines?

**Standard of Evidence:**

Provide the process flow diagram that specifies alternative data flows and timelines. If diagram does not exist, provide a narrative describing the process in detail.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The process flow diagram provided by the State does contain alternate process flows but does not include timelines for those processes.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 97:**

Does the process flow diagram or narrative include processes for error correction and error handling?

**Standard of Evidence:**

Provide the process flow diagram that specified the processes for error correction and error handling. If diagram does not exist, provide a narrative describing the process in detail.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The State's diagram does include 'system edits' and paths for errors and failures of those edits.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 98:**

Does the process flow diagram or narrative explain the timing, conditions, and procedures for purging records from the vehicle system?

**Standard of Evidence:**

Provide the process flow diagram that specifies the schedule and process for purging records. If diagram does not exist, provide a narrative describing the process in detail.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

Missouri has an appropriate process in place for determining the timing, conditions, and procedures for purging records from the vehicle system.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 99:**

Are the driver and vehicle files unified in one system?

**Standard of Evidence:**

Provide a narrative description of the unified system's main components and identify the variables that link the vehicle and driver files.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The State driver and vehicle files are not unified in one system.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 100:**

If the driver and vehicle files are separate, is personal information entered into the vehicle system using the same conventions used in the driver system?

**Standard of Evidence:**

When the driver and vehicle systems are separate, provide extracts from the driver and vehicle system manuals detailing the data entry conventions for each.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State driver and vehicle files do not use the same personal information conventions.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 101:**

Can vehicle system data be used to verify and validate the vehicle information during initial creation of a citation or crash report?

**Standard of Evidence:**

Provide a narrative description of the procedures governing the use of vehicle system data to verify and validate vehicle information during initial creation of a citation or crash report. **ALTERNATIVE EVIDENCE:** Describe how the vehicle system is accessed, if it is, to validate and verify vehicle information during crash report creation.

**Question Rank:**  
Somewhat Important

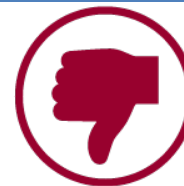
**Assessor conclusions:**

While not yet having a Statewide citation system, the Missouri Law Enforcement Traffic System (LETS) does have a program currently being used through the Regional Justice Information System (REJIS) that allows officers to scan and search vehicle records to auto-populate crash report fields in order to verify and reduce issues with accuracy. In the State's Strategic Traffic Records Plan ongoing project activity with some of the local jurisdictions indicates that a similar effort is underway for citations.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 102:**

When discrepancies are identified during data entry in the crash data system, are vehicle records flagged for possible updating?

**Standard of Evidence:**

Provide an appropriate extract from the vehicle system manual that details the process for addressing a record flagged by the crash system.

**Question Rank:**  
Less Important

**Assessor conclusions:**

No records are flagged for possible updating of the vehicle records system when discrepancies are identified during data entry to the crash data system.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 103:**

Are VIN, title number, and license plate number the key variables used to retrieve vehicle records?

**Standard of Evidence:**

Identify the key variables used to retrieve vehicle records.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The VIN, year, make, title number, and registration can all be used to retrieve vehicle records.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 104:**

Is the vehicle system data processed in real-time?

**Standard of Evidence:**

Provide a narrative statement explaining the answer.

**Question Rank:**  
Very Important

**Assessor conclusions:**

It was indicated that vehicle data is stored in both title and registration systems and may be processed through a transactional system (TRIPS). TRIPS, as well as the public facing on-line systems (on-line registration renewal), are processed in real-time. Data from these systems is extracted nightly and updated in the title and registration systems within two days. Clerk processed registration transactions processed in TRIPS are done in real-time and data is available for inquiry. Updates to other centralized repositories are done through the extract process.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 105:**

Are there automated edit checks and validation rules to ensure that entered data falls within a range of acceptable values and is logically consistent among data elements?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which automated edit checks or validation rules ensure entered data falls within the range of acceptable values and is logically consistent between fields.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The Title and Registration Intranet Processing System (TRIPS) facilitates edits and validations on data at the time of capture. This occurs when data that is keyed by a processing clerk fails to meet system edits. An error message is displayed preventing the processing of the data until the clerk corrects it or it will terminate the transaction.

Respondents assigned	2	Responses received	1	Response rate	50%
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**Question 106:**

Is limited state-level correction authority granted to quality control staff working with the statewide vehicle system to amend obvious errors and omissions?

**Standard of Evidence:**

Name the authority that allows quality control staff to correct the statewide vehicle database.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The Missouri Department of Revenue, Motor Vehicle and Driver Licensing Division, Motor Vehicle Bureau has limited State-level authority related to quality control.

Respondents assigned	2	Responses received	1	Response rate	50%
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**Question 107:**

Are there timeliness performance measures tailored to the needs of data managers and data users?

**Standard of Evidence:**

Provide a complete list of vehicle system timeliness measures the State uses, including the most current baseline and actual values for each.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The Motor Vehicle Bureau does not have standard measures. Any analysis and measures are completed on an as needed basis and supported by ad-hoc queries to multiple motor vehicle related systems.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 108:**

Are there accuracy performance measures tailored to the needs of data managers and data users?

**Standard of Evidence:**

Provide a complete list of vehicle system accuracy measures the State uses, including the most current baseline and actual values for each.

**Question Rank:**  
Very Important

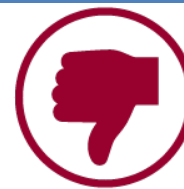
**Assessor conclusions:**

The Motor Vehicle Bureau does not have accuracy performance measures. Any analysis and measures are completed on an as needed basis and supported by ad-hoc queries to multiple motor vehicle related systems.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 109:**

Are there completeness performance measures tailored to the needs of data managers and data users?

**Standard of Evidence:**

Provide a complete list of vehicle system completeness measures the State uses, including the most current baseline and actual values for each.

**Question Rank:**  
Very Important

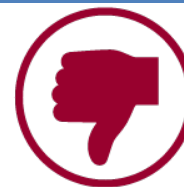
**Assessor conclusions:**

The Motor Vehicle Bureau does not have completeness performance measures. Any analysis and measures are completed on an as needed basis and supported by ad-hoc queries to multiple motor vehicle related systems.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 110:**

Are there uniformity performance measures tailored to the needs of data managers and data users?

**Standard of Evidence:**

Provide a complete list of vehicle system uniformity measures the State uses, including the most current baseline and actual values for each.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The Motor Vehicle Bureau does not have uniformity performance measures. Any analysis and measures are completed on an as needed basis and supported by ad-hoc queries to multiple motor vehicle related systems.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 111:**

Are there integration performance measures tailored to the needs of data managers and data users?

**Standard of Evidence:**

Provide a complete list of vehicle system integration measures the State uses, including the most current baseline and actual values for each.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The Motor Vehicle Bureau does not have integration performance measures. Any analysis and measures are completed on an as needed basis and supported by ad-hoc queries to multiple motor vehicle related systems.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 112:**

Are there accessibility performance measures tailored to the needs of data managers and data users?

**Standard of Evidence:**

Provide a complete list of vehicle system accessibility measures the State uses, including the most current baseline and actual values for each.

**Question Rank:**  
Somewhat Important

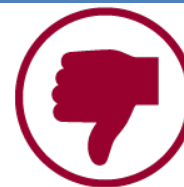
**Assessor conclusions:**

The Motor Vehicle Bureau does not have accessibility performance measures. Any analysis and measures are completed on an as needed basis and supported by ad-hoc queries to multiple motor vehicle related systems.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 113:**

Has the State established numeric goals—performance metrics—for each performance measure?

**Standard of Evidence:**

Provide the specific, State-determined numeric goals associated with each performance measure in use.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The Motor Vehicle Bureau does not have any established numeric goals-performance metrics-for each performance measure.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 114:**

Is the detection of high frequency errors used to generate updates to training content and data collection manuals, update the validation rules, and prompt form revisions?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which high frequency errors are used to generate new training content and data collection manuals, update the validation rules, and prompt form revisions.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The Motor Vehicle Bureau has a process improvement group consisting of front line subject matter experts, management, and analysts. This group meets regularly and discusses identified frequent errors and makes recommendations for correction to management. The process improvement group updates manuals, rules, and forms as errors or issues are identified, analyzed, and recommended solutions are approved by management.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 115:**

Are independent sample-based audits conducted periodically for vehicle reports and related database contents for that record?

**Standard of Evidence:**

Describe the formal audit methodology, provide a sample report or other output, and specify the audits' frequency.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

The vehicle reports are vetted at time of creation for accuracy. No independent sample-based audits are conducted.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 116:**

Are periodic comparative and trend analyses used to identify unexplained differences in the data across years and jurisdictions?

**Standard of Evidence:**

Describe the analyses, provide a sample report or other output, and specify the analyses' frequency.

**Question Rank:**

Very Important

**Assessor conclusions:**

Any analysis and measures are completed only on an as needed basis and supported by ad-hoc queries to multiple motor vehicle related systems. Not enough information was provided to determine if this includes periodic comparative and trend analyses.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 117:**

Is data quality feedback from key users regularly communicated to data collectors and data managers?

**Standard of Evidence:**

Describe the process for transmitting and utilizing key users' data quality feedback to inform changes.

**Question Rank:**

Somewhat Important

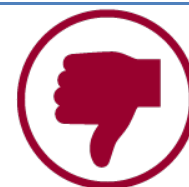
**Assessor conclusions:**

The Motor Vehicle Bureau meets regularly with various data users where opportunities for feedback, concerns, and communication are made.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 118:**

Are data quality management reports provided to the TRCC for regular review?

**Standard of Evidence:**

Provide a sample quality management report and specify how frequently they are issued to the TRCC.

**Question Rank:**

Very Important

**Assessor conclusions:**

It was indicated only that vehicle-related data is available upon request. Not enough information was provided to determine if this includes data quality management reports.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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## Driver

The Driver License Bureau maintains the responsibility of all driver data, including commercial license information. The licensing system maintains and stores original issuance of all license permits, identification cards, and licenses. The system interfaces with the National Driver Registry, the Problem Driver Pointer System, and CDLIS. While the DUI system is separate, the driver and DUI systems are linked via common data elements. Edit checks, data collection guidelines for each data element, data dictionary, and appropriate affiliated procedures all appear to be within the recommended parameters for the Missouri Driver License (MODL) system. During the issuance process photos are verified and all license transactions are verified through CDLIS, PDPS, SSOLV, and VLS/SAVE prior to issuance. In addition, the TSA portal is used to verify the assessment results prior to issuing a hazmat endorsement. These measures appear to be a solid foundation for a driver data system.

Missouri has up to date documentation and flowcharts detailing the licensing, permitting, and endorsement issuance procedures. The Driver License Bureau also maintains accurate and timely documentation detailing the reporting and recording of convictions and any changes in license status. Established turnaround-times for each processing area exist and all work is processed within statutory requirements or, if not statutorily mandated, then within one to five business days. The State reports driver data can be purged through an automated program that is run quarterly or manually with a customer request. Both the automated and manual purges use specific criteria to determine if the record is eligible for purging.

There are established processes to detect internal fraud by individual users or examiners. System logging, supervisor oversight, and annual security audits help enforce these processes. Missouri also has a policy on appropriate system access which employees must acknowledge and sign annually. Access authority is reviewed annually to ensure that the employees have access only to the functions they require to perform their duties. Missouri has strict guidelines, policies and procedures for accessing and releasing driver information.

The State custodial agency does have the capability to grant authorized law enforcement personnel access to information in the driver system. Law enforcement agencies within the State have access to the MODL system in real-time. The custodial agency does have the capability to grant authorized court personnel access to information in the driver system. Once the appropriate MOU is signed, participating courts and authorized staff are assigned a User ID and are granted Resource Access Control Facility (RACF) access to the MODL system. The Missouri Approved Instructions (MAI) system allows personnel from other States to conduct inquiries and submit certain information electronically, such as conviction and withdrawal information, using the AAMVA message exchange, provided Missouri is the current State of record.

The MODL System has field definition validations, online entry edits, and a nightly batch update program that also edits records to ensure data accuracy. These automated edit checks and validation rules ensure entered data falls within a range of acceptable values and is logically consistent among data elements.

The State Weekly Production Report shows the timeliness performance measures in use. The

State also has overarching system performance metrics. The MODL System utilizes system-generated reports, error files, and employee monitoring to determine errors. High frequency errors may result in additional end-user training or enhancements to the system edits and validations.

The overall Missouri Driver License (MODL) system appears to meet many of the Advisory ideals and is well documented. The system could benefit from data integration with other affiliated systems and biometric validations appear to be lacking, but overall the system is quite functional. Many quality control metrics are listed in the opportunities section below and the processes in Missouri could benefit from those targeted metrics.

Opportunities:

Interfaces/General

- Storing historical novice driver training information
- Linking crash & driver systems
- Linking citation and driver systems

Quality Control

Of all of the areas within the driver system for Missouri, the greatest volume of opportunities exist within the quality control metrics. The establishment of metrics for timeliness, completeness, uniformity, accessibility and other associated focus areas is highly recommended. In addition, regular feedback of data quality reports to the TRCC is also recommended to establish a good interactive multi-agency consortium.

#### Question 119:

Does custodial responsibility for the driver system—including commercially-licensed drivers—reside in a single location?



#### Standard of Evidence:

Provide a narrative identifying the custodial agency.

**Question Rank:**  
Very Important

#### Assessor conclusions:

The maintenance of all driver license information, including commercial, is the responsibility of the Driver License Bureau.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 120:**

Can the State's DUI s data system be linked electronically to the driver system?

**Standard of Evidence:**

Provide a narrative explanation of a State's linking protocols that demonstrated how a citation on the DUI data system is linked to a record on the driver system. Include identification of the linkage portal and organizations responsible for maintaining the link and the linking fields used.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The Missouri DUI data system can be electronically linked to the driver system but at this time they are two separate systems.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 121:**

Does the driver system capture novice drivers' training histories, including provider names and types of education (classroom or behind-the-wheel)?

**Standard of Evidence:**

Provide a narrative documenting the availability of novice driver training history (including motorcycle and commercial license training), and specify the pertinent data fields and audit checks in the data dictionary or provide a sample system report.

**Question Rank:**  
Less Important

**Assessor conclusions:**

Novice driver training history information is not currently captured and stored in the MODL driver system.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 122:**

Does the driver system capture drivers' traffic violation and/or driver improvement training histories, including provider names and types of education (classroom or behind-the-wheel)?

**Standard of Evidence:**

Provide a narrative documenting the availability of traffic violation and/or driver improvement training history, including motorcycle and commercial license training, by specifying the pertinent data fields and audit checks in the data dictionary or provide a sample report.

**Question Rank:**  
Less Important

**Assessor conclusions:**

The following data fields are maintained on the MODL system: DIP Ticket (Y/N); Court ORI Number; Court Case Number; Results of Program (Completed/Failed); Date Program (Completed/Failed); and Signature Present (Y/N). Also, the record images contain the provider's name.

Respondents assigned	2	Responses received	1	Response rate	50%
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**Question 123:**

Does the driver system capture and retain the dates of original issuance for all permits, licensing, and endorsements (e.g., learner's permit, provisional license, commercial driver's license, motorcycle license)?

**Standard of Evidence:**

Provide a narrative documenting the availability of original issuance dates for all permits, licensing, and endorsements by specifying the pertinent data fields and audit checks in the data dictionary or provide a sample report.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The Missouri Driver License Bureau's license system maintains and stores original issuance of all license permits, identification cards, and licenses.

Respondents assigned	2	Responses received	1	Response rate	50%
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**Question 124:**

Is driver information maintained in a manner that accommodates interaction with the National Driver Register's Problem Driver Pointer System (PDPS) and the Commercial Driver's License Information System (CDLIS)?

**Standard of Evidence:**

Demonstrate functional integration with the PDPS and CDLIS. AAMVA audit reports can be provided as supporting documentation.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The driver information is maintained in a manner that allows for interactions with the National Driver Registry, the Problem Driver Pointer System, and CDLIS.

Respondents assigned	2	Responses received	1	Response rate	50%
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**Question 125:**

Are the contents of the driver system documented with data definitions for each field?

**Standard of Evidence:**

Provide, at a minimum, a table of contents and sample elements from the data dictionary or a sample data dictionary report.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The field identification and definitions for the Electronic Conviction layout and the Ignition Interlock Electronic Files are maintained in State files.

Respondents assigned	2	Responses received	1	Response rate	50%
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**Question 126:**

Are all valid field values—including null codes—documented in the data dictionary?

**Standard of Evidence:**

Provide sample valid data field values from the data dictionary.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State maintains documentation with data dictionary field names for the driver license fields. The actual definitions cannot be provided, but it would stand to reason the definitions exist if the programs refer to them.

Respondents assigned	2	Responses received	1	Response rate	50%
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**Question 127:**

Are there edit checks and data collection guidelines for each data element?

**Standard of Evidence:**

Provide an example edit check and data collection guideline.

**Question Rank:**  
Very Important

**Assessor conclusions:**

There are edit checks and data collection guidelines for each data element. Record layouts with the corresponding edit rules are available.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 128:**

Is there guidance on how and when to update the data dictionary?

**Standard of Evidence:**

Provide a narrative explanation of the controls and procedures that ensure the data dictionary is kept up to date.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Data Dictionary/Record Layouts are updated anytime data fields, data definitions, and edits change based on system enhancements or legislative requirements that mandate a change. Programming and database staff updates the documentation accordingly when these changes occur.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 129:**

Does the custodial agency maintain accurate and up to date documentation detailing the licensing, permitting, and endorsement issuance procedures (manual and electronic, where applicable)?

**Standard of Evidence:**

Provide a process flow document for this specific process area, or provide a narrative explaining how these processes are documented and how that documentation is maintained. Include the percentage of reporting that is accomplished manually and electronically.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

Missouri has up to date documentation detailing the licensing, permitting, and endorsement issuance procedures. The Uniform License Issuance Manual (ULIM) and process flow documents have been developed.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 130:**

Does the custodial agency maintain accurate and up to date documentation detailing the reporting and recording of relevant citations and convictions (manual and electronic, where applicable)?

**Standard of Evidence:**

Provide a process flow document for this specific process area, or provide a narrative explaining how these processes are documented and how that documentation is maintained. Include the percentage of reporting that is accomplished manually and electronically.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The Driver License Bureau maintains accurate and timely documentation detailing the reporting and recording of convictions.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 131:**

Does the custodial agency maintain accurate and up to date documentation detailing the reporting and recording of driver education and improvement course (manual and electronic, where applicable)?

**Standard of Evidence:**

Provide a process flow document for this specific process area, or provide a narrative explaining how these processes are documented and how that documentation is maintained. Include the percentage of reporting that is accomplished manually and electronically.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

All driver improvement program (DIP) key entry processes are documented in the Points Conviction Detail Entry procedure manual and are updated anytime a procedure changes. In addition, the conviction entry is approximately 75% electronic and 25% manual and the entry of the DIP completion is 100% manual.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 132:**

Does the custodial agency maintain accurate and up to date documentation detailing the reporting and recording of other information that may result in a change of license status (manual and electronic, where applicable)?

**Standard of Evidence:**

Provide a process flow document for this specific process area, or provide a narrative explaining how these processes are documented and how that documentation is maintained. Include the percentage of reporting that is accomplished manually and electronically.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

All withdrawal entry processes are documented in various Action Entry procedure manuals and are updated anytime a procedure changes. That action entry onto the driver record is nearly 100% manual and there are established turn-around-times for each processing area.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 133:**

Does the custodial agency maintain accurate and up to date documentation detailing any change in license status (e.g., sanctions, withdrawals, reinstatement, revocations, and restrictions)?

**Standard of Evidence:**

Provide a narrative or flow diagram describing the processes and procedures governing the actual change to the license status, including timelines for each type of change.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

Missouri maintains accurate and up to date documentation detailing any change in license status. There are established turn-around-times for each processing area and all work is processed within statutory requirements or if not statutorily mandated, then within one to five business days.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 134:**

Is there a process flow diagram that outlines the driver data system's key data process flows, including inputs from other data systems?

**Standard of Evidence:**

Provide the process flow diagram.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State has appropriate process flow charts for the driver data system.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 135:**

Are the processes for error correction and error handling documented for: license, permit, and endorsement issuance; reporting and recording of relevant citations and convictions; reporting and recording of driver education and improvement courses; and reporting and recording of other information that may result in a change of license status?

**Standard of Evidence:**

Provide the documentation or flow diagram that describes the processes and procedures for error correction and error handling in each of the listed process areas.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

Only some error correction and error handling processes are documented. Missouri maintains flow charts on conviction corrections and Ignition Interlock Electronic files, as well as a process for the on-line edits that are built into the license system.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 136:**

Are there processes and procedures for purging data from the driver system documented?

**Standard of Evidence:**

Provide the documentation or flow diagram that describes the processes and procedures for purging data and the timelines for these actions.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The State driver data can be purged through an automated program that is run quarterly or manually with a customer request. Both the automated and manual processes use documented criteria to determine if the record is eligible for purging.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 137:**

In States that have the administrative authority to suspend licenses based on a DUI arrest independent of adjudication, are these processes documented?

**Standard of Evidence:**

Provide the documentation or flow diagram that describes the processes and procedures for administrative license suspension.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The State has flow charts and procedure manuals for the administrative license suspensions, including one titled 'Administrative Alcohol Hearing Process' that appropriately describes the affiliated processes.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 138:**

Are there established processes to detect false identity licensure fraud?

**Standard of Evidence:**

Provide a narrative describing the systems or processes used to detect individuals attempting licensure under a new identity.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State verifies photos and checks all license transactions through CDLIS, PDPS, SSOLV, and VLS/SAVE prior to issuance. These efforts are good, but ideally a biometric component to the system would exist to help mitigate fraud.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 139:**

Are there established processes to detect internal fraud by individual users or examiners?

**Standard of Evidence:**

Provide a narrative describing the systems or processes used to detect internal fraud by individual users or examiners.

**Question Rank:**  
Very Important

**Assessor conclusions:**

There are established processes to detect internal fraud by individual users or examiners. These include system logging, supervisor oversight, and annual security audits to help enforce these processes.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 140:**

Are the established processes to detect CDL fraud (including hazmat endorsements)?

**Standard of Evidence:**

Provide a narrative describing the systems or processes used to detect commercial driver's license fraud, including for hazmat endorsements.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State has established processes to detect CDL fraud. They noted checking a driver's image in addition to running all license transactions through CDLIS, PDPS, SSOLV, and VLS/SAVE prior to issuance. The TSA portal is also used to verify the assessment results prior to issuing a hazmat endorsement. While these manual steps are helpful, it would be ideal if a biometric component existed as well as an automated fraud detection engine.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 141:**

Are there policies and procedures for maintaining appropriate system and information security?

**Standard of Evidence:**

Provide copies of the relevant policies and procedure manuals.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State has a policy on appropriate system access which employees must acknowledge and sign annually. Also, access authority is reviewed annually to ensure that the employees have access only to the functions they require to perform their duties.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 142:**

Are there procedures in place to ensure that driver system custodians track access and release of driver information adequately?

**Standard of Evidence:**

Provide copies of the relevant procedures or manuals.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Missouri has strict guidelines, policies, and procedures for accessing and releasing driver information.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 143:**

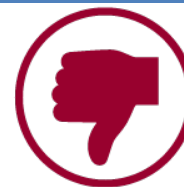
Can the State's crash system be linked to the driver system electronically?

**Standard of Evidence:**

Provide a narrative explanation of a State's linkage protocols that demonstrates how records in the crash system are linked to the driver record. Include identification of the linkage portal and the organization responsible for maintaining the link and the linking fields used.

**Assessor conclusions:**

The Missouri crash and driver systems are not currently electronically linked but the State indicated that they could be linked in the future.



**Question Rank:**  
Very Important

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 144:**

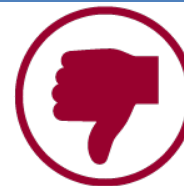
Can the State's citation system be linked to the driver system electronically?

**Standard of Evidence:**

Provide a narrative explanation of a State's linkage protocols that demonstrates how records in the citation system are linked to the driver record. Include identification of the linkage portal and the organization responsible for maintaining the link and the linking fields used.

**Assessor conclusions:**

The Missouri citation and driver systems are not currently linked but the State indicated that they could be linked in the future.



**Question Rank:**  
Very Important

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 145:**

Can the State's adjudication system be linked to the driver system electronically?

**Standard of Evidence:**

Provide a narrative explanation of a State's linkage protocols that demonstrates how records in the adjudication system are linked to the driver record. Include identification of the linkage portal and the organization responsible for maintaining the link and the linking fields used.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The communication between the State's adjudication system and driver system appears to be only one direction (coming from the adjudication system to the driver system).

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 146:**

Is there an interface link between the driver system and: the Problem Driver Pointer System, the Commercial Driver Licensing System, the Social Security Online Verification system, and the Systematic Alien Verification for Entitlement system?

**Standard of Evidence:**

Provide a narrative description of the policy for checking the PDPS, CDLIS, SSOLV, and SAVE for licensing commercial and non-commercial drivers (both original issuances and renewals).

**Question Rank:**  
Very Important

**Assessor conclusions:**

All new and renewal non-commercial and commercial driver license are checked through PDPS, CDLIS, SSOLV, and VLS/SAVE prior to completing the issuance transaction. SSOLV is only checked if not previously verified.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 147:**

Does the custodial agency have the capability to grant authorized law enforcement personnel access to information in the driver system?

**Standard of Evidence:**

Provide a narrative description of the protocols granting authorized law enforcement personnel access to information in the driver system.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The custodial agency does have the capability to grant authorized law enforcement personnel access to information in the driver system. Law enforcement agencies within Missouri have access to the MODL system in real-time.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 148:**

Does the custodial agency have the capability to grant authorized court personnel access to information in the driver system?

**Standard of Evidence:**

Provide a narrative description of the protocols granting authorized law enforcement personnel access to information in the driver system.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The custodial agency does have the capability to grant authorized court personnel access to information in the driver system. Once the appropriate MOU is signed, participating courts and authorized staff are assigned a User ID and are granted RACF access to the MODL (Driver) system.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 149:**

Does the custodial agency have the capability to grant authorized personnel from other States access to information in the driver system?

**Standard of Evidence:**

Provide a narrative description of the protocols granting authorized law enforcement personnel access to information in the driver system.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The MAI system allows personnel from other States to conduct inquiries and submit certain information electronically, such as conviction and withdrawal information, using the AAMVA message exchange, provided Missouri is the current State of record.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 150:**

Is there a formal, comprehensive data quality management program for the driver system?

**Standard of Evidence:**

Provide a narrative description of the driver system's data quality management programs and the most recent data quality reports issued.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The data quality management system relies on the MODL System which has field definition validations, online entry edits, and a nightly batch update program that also runs edits to ensure data accuracy.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 151:**

Are there automated edit checks and validation rules to ensure entered data falls within a range of acceptable values and is logically consistent among data elements?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which automated edit checks or validation rules ensure entered data falls within the range of acceptable values and is logically consistent between fields.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The MODL System has field definition validations, online entry edits, and a nightly batch update program that also runs edits to ensure data accuracy.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 152:**

Are there timeliness performance measures tailored to the needs of data managers and data users?

**Standard of Evidence:**

Provide a complete list of driver system timeliness measures the State uses, including the most current baseline and actual values for each.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State produces Weekly Production Reports that show the timeliness performance measures.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 153:**

Are there accuracy performance measures tailored to the needs of data managers and data users?

**Standard of Evidence:**

Provide a complete list of driver system accuracy measures the State uses, including the most current baseline and actual values for each.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The online and batch system edits require accuracy, completeness, and uniformity in excess of 99% of the data stored in the MODL system. However, the State should maintain supporting documentation detailing the list of driver system accuracy measures, including the most current baseline and actual values for each.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 154:**

Are there completeness performance measures tailored to the needs of data managers and data users?

**Standard of Evidence:**

Provide a complete list of driver system completeness measures the State uses, including the most current baseline and actual values for each.

**Question Rank:**  
Very Important

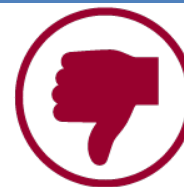
**Assessor conclusions:**

The online and batch system edits require accuracy, completeness, and uniformity in excess of 99% of the data stored in the MODL system. However, the State should maintain supporting documentation detailing the list of driver system accuracy measures, including the most current baseline and actual values for each.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 155:**

Are there uniformity performance measures tailored to the needs of data managers and data users?

**Standard of Evidence:**

Provide a complete list of driver system uniformity measures the State uses, including the most current baseline and actual values for each.

**Question Rank:**  
Very Important

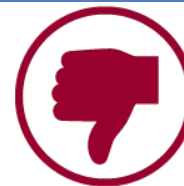
**Assessor conclusions:**

The online and batch system edits require accuracy, completeness, and uniformity in excess of 99% of the data stored in the MODL system. However, the State should maintain supporting documentation detailing the list of driver system accuracy measures, including the most current baseline and actual values for each.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 156:**

Are there integration performance measures tailored to the needs of data managers and data users?

**Standard of Evidence:**

Provide a complete list of driver system integration measures the State uses, including the most current baseline and actual values for each.

**Question Rank:**  
Very Important

**Assessor conclusions:**

There is very limited driver system integration at this time; therefore, there are no performance measures.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 157:**

Are there accessibility performance measures tailored to the needs of data managers and data users?

**Standard of Evidence:**

Provide a complete list of driver system accessibility measures the State uses, including the most current baseline and actual values for each.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

There are no accessibility performance measures that are provided to data managers and data users.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 158:**

Has the state established numeric goals—performance metrics—for each performance measure?

**Standard of Evidence:**

Provide the specific, State-determined numeric goals associated with each performance measure in use.

**Question Rank:**

Very Important

**Assessor conclusions:**

Missouri has not established numeric goals—performance metrics—for each performance measure.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 159:**

Is the detection of high frequency errors used to generate updates to training content and data collection manuals, update the validation rules, and prompt form revisions?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which high frequency errors are used to generate new training content and data collection manuals, update the validation rules, and prompt revisions.

**Question Rank:**  
Very Important

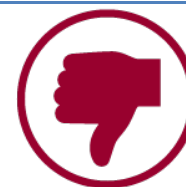
**Assessor conclusions:**

The MODL System utilizes system-generated reports, error files, and employee monitoring to determine errors. High frequency errors may result in additional end-user training or enhancements to the system edits and validations.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 160:**

Are independent sample-based audits conducted periodically for the driver reports and related database contents for that record?

**Standard of Evidence:**

Describe the formal audit methodology, provide a sample report or other output, and specify the audits' frequency.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

Independent sample-based audits are not conducted periodically for the driver reports and related database contents for that record.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 161:**

Are periodic comparative and trend analyses used to identify unexplained differences in the data across years and jurisdictions?

**Standard of Evidence:**

Describe the analyses, provide a sample report or other output, and specify the analyses' frequency.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Periodic comparative and trend analyses are not used to identify unexplained differences in the data across years and jurisdictions.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 162:**

Is data quality feedback from key users regularly communicated to data collectors and data managers?

**Standard of Evidence:**

Describe the process for transmitting and utilizing key users' data quality feedback to inform changes.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

Data quality feedback from key users is not regularly communicated to data collectors and data managers.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 163:**

Are data quality management reports provided to the TRCC for regular review?

**Standard of Evidence:**

Provide a sample quality management report and specify how frequently they are issued to the TRCC.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Missouri does not have data quality management reports that are provided to the TRCC for regular review. A strong TRCC can be of great value to a State and this is highly recommended.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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## Roadway

Safety data is the key to making sound decisions on the design and operations of roadways. Critical safety data includes not only crash information but also traffic data, speed data, roadway data, and other files. The backbone of all data is dependent on an accurate and up-to-date roadway information system to which all other data events can be associated within an enterprise system. This then becomes the integrated system which allows for housing improved and more robust safety data. Producing quality, timely, and shareable data is important to improving traffic safety. In the Moving Ahead for Progress in the 21st Century Act (MAP 21), the importance of using these multiple data sources to understand and remediate highway safety issues was recognized. With limited resource allocation for safety, projects and improvements should be based on effective decision-making.

With MAP 21, it was also anticipated that States would move forward in capturing and inventorying data for all public roadways, not just State-maintained roadways. This is an enormous task, but for a State to fully realize and understand any safety problems they may experience, a need exists for a complete and accurate inventory of all roadway attributes. With usually limited resources available, smart decisions are required to move forward.

Missouri has a base-map with the ability to show all public roadways which are located using MoDOT's location referencing system. This map has the capability of displaying roadway and traffic volumes on State-maintained roadways. All inventoried assets use the same referencing system. Though not all public roadways are populated, the structure is available to handle it. The enterprise system can also locate elements from other data systems, such as bridge and pavement. Crashes are shown on both State and non-State-maintained roadways. These are used for safety analysis and to produce the Highway Safety Plan.

The State collects a majority of the MIRE FDEs, with many collected on all public roadways and others only on State-maintained roadways. Additional elements are also collected and do conform to the MIRE definitions.

All data collected is shown in the State's data dictionary, whether State or non-State-maintained. Updates to the tables and applications are performed on a monthly basis and tracked through the Transportation Planning Staff ensuring all changes occur. Other processes are documented with steps necessary to add new elements and roadway changes.

The State's TMS incorporates all of the data inventories such as crash, bridge, functional class, traffic, surface type, and right of way. Every data element requiring a location uses the same linear referencing tables and methodology to be stored and conversely retrieved.

Roadway Data Managers have reports produced on a quarterly basis to review and analyze data for corrections. Error/edit checks occur at two different times to provide quality control. Training and documentation explaining how to provide fixes to inventories are on the TMS SharePoint page. Any errors found are expected to be edited at once.

Overall Missouri has a roadway system with capabilities to locate all data elements. These can

then be used for any type of studies necessary to provide remedial safety programs and planning for the future.

After this review a couple of areas were noticed that should be looked at for future enhancements of the State's capabilities. First, and probably most important, would be to engage the TRCC along with the counties and local municipalities, to work toward integrating data in the enterprise system. This would not be a short term project but one which will take an enormous amount of planning and collaboration. However, once this system is in place, all roadway attribute data, crashes, speed, traffic , and geometrics will be together as one source for Statewide planning. Additionally this should become an open portal for all users to retrieve and analyze safety data.

Secondly, of extreme importance is the development of performance measures that are monitored on an on-going basis. Performance measures should cover all aspects of the systems. These should cover the performance attributes of timeliness, accuracy, completeness, uniformity, integration, and accessibility. Once local data is being integrated into the enterprise system, a set of performance measures will need to be written to cover those processes and data quality also. The State is encouraged to review NHTSA's February 2011 document "Model Performance Measures for State Traffic Records Systems". This will assist in creating these necessary measures and metrics.

Lastly, a consideration for beginning to improve the roadway data system in the State of Missouri would be to review the "Data Capabilities Assessment" conducted by the Federal Highway Administration. Each State was comprehensively assessed in terms of the collection, management, and use of roadway safety data. That document, in conjunction with this assessment, may assist in identifying further strengths and opportunities presently available.

A comprehensive road map is necessary to move forward and needs to engage the TRCC and other users Statewide. Any programs or data improvements should then become a part of the State's Traffic Records Strategic Plan.

**Question 164:**

Are all public roadways within the State located using a compatible location referencing system?

**Standard of Evidence:**

Provide a map displaying all public roads that represents the system's statewide capabilities. Identify what percentage of the public road system is State owned or maintained. Explain whether the State uses a single compatible location referencing system for all public roads or if it has a set of compatible location referencing systems. Prior reports are acceptable.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State uses a compatible referencing system for all roads, of which 26% are State-maintained. All public roadways in Missouri are located using MoDOT's location referencing system.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 165:**

Are the roadway and traffic data elements located using a compatible location referencing system (e.g., LRS, GIS)?

**Standard of Evidence:**

Provide a map displaying roadway features and traffic volume (FDEs) for all public roads (State and non-State routes) that is representative of the system's statewide capabilities. Explain whether the State uses a single compatible location referencing system for all public roads or if it has a set of compatible location referencing systems. Prior reports are acceptable.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State has the capability of displaying roadway and traffic volumes on State-maintained roadways. The roadway and traffic data use the same location referencing system. As time goes on the State should be looking to populate all public roadways.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 166:**

Is there an enterprise roadway information system containing roadway and traffic data elements for all public roads?

**Standard of Evidence:**

Describe the enterprise roadway information system, which should enable linking between the various roadway information systems including: roadway, traffic, location reference, bridge, and pavement data.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State does have an enterprise information system that can locate all roadway elements from the various databases they use, such as bridge and pavement. Though all data elements are not collected, the system is in place to do so in the future.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 167:**

Does the State have the ability to identify crash locations using a referencing system compatible with the one(s) used for roadways?

**Standard of Evidence:**

Provide a map displaying crash locations on all public roads that is representative of the system's statewide capabilities. Explain whether the State uses a single compatible location referencing system for crash, roadway features, and traffic volume on all public roads or if it has a set of compatible location referencing systems. Prior reports are acceptable.

**Question Rank:**  
Very Important

**Assessor conclusions:**

All crashes use the same location referencing system as roadway. The State also shows crashes on their non-maintained roadways.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 168:**

Is crash data incorporated into the enterprise roadway information system for safety analysis and management use?

**Standard of Evidence:**

Describe how the crash data is incorporated into the enterprise roadway information system and provide an example of how it is used for safety analysis.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State's crash data housed in the enterprise system is used for both safety analysis and management use. The attributes of crash are used to produce the Highway Safety Plan and to focus on safety strategies.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 169:**

Are all the MIRE Fundamental Data Elements collected for all public roads?

**Standard of Evidence:**

Provide a list of FDEs collected and their definitions. Specify if the data collected is for all public roads or State roads only. If the State wishes to cite the data dictionary directly, please identify the FDEs.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The State collects a majority of the FDE elements. Many are collected on all public roadways, where others are only on State-maintained roads.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 170:**

Do all additional collected data elements for any public roads conform to the data elements included in MIRE?

**Standard of Evidence:**

Provide a list of additional MIRE data elements collected beyond the FDEs. Specify if the data elements are collected for all public roads or State roads only.

**Question Rank:**  
Somewhat  
Important

**Assessor conclusions:**

There are elements collected outside of the fundamental data elements. The elements collected outside of the FDEs conform to MIRE definitions.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 171:**

Are all the MIRE Fundamental Data Elements for all public roads documented in the enterprise system's data dictionary?

**Standard of Evidence:**

Identify, with appropriate citations, the MIRE FDE-related contents of the enterprise system's data dictionary. Specify if the data dictionary applies to all public roads or to State roads only.

**Question Rank:**  
Somewhat  
Important

**Assessor conclusions:**

From previous references to FDE elements, the data elements are collected and included in the enterprise database. The data dictionary is a description of all of these elements whether State or non-State-maintained.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 172:**

Are all additional (non-Fundamental Data Element) MIRE data elements for all public roads documented in the data dictionary?

**Standard of Evidence:**

Identify, with appropriate citations, the additional (non-FDE) MIRE data elements included in the data dictionary. Specify if the data dictionary applies to all public roads or to State roads only.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

All data collected is shown in the State's data dictionary whether State or non-State-maintained, including non-Fundamental Data Elements.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 173:**

Does roadway data imported from local or municipal sources comply with the data dictionary?

**Standard of Evidence:**

Provide a narrative statement explaining, how and if any roadway data are accepted and included in the statewide roadway database from local or municipal sources. Describe if the data from local or municipal sources meet the data dictionary standards.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State does not currently import local or municipal roadway inventory into the State's systems.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>100%</b>
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**Question 174:**

Is there guidance on how and when to update the data dictionary?

**Standard of Evidence:**

Provide a narrative explanation of the controls and procedures that ensure the data dictionary is kept up to date.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Updates to tables and applications are performed on a monthly basis. All change requests are tracked through the Transportation Planning staff to ensure all changes occur.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>100%</b>
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**Question 175:**

Are the steps for incorporating new elements into the roadway information system (e.g., a new MIRE element) documented to show the flow of information?

**Standard of Evidence:**

Provide documentation or a narrative explaining the process for adding new data elements (e.g., a new MIRE element) to the roadway system. Identify who is responsible for each step in the process.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State has developed and documented a process necessary to add a new data element to the roadway system.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 176:**

Are the steps for updating roadway information documented to show the flow of information?

**Standard of Evidence:**

Provide documentation or a narrative explaining the process for updating data elements in the roadway system. Identify who is responsible for each step in the process.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State maintains a flow chart to show steps taken to update the Statewide route inventory. These are performed by the GIS staff in the Transportation Planning division.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 177:**

Are the steps for archiving and accessing historical roadway inventory documented?

**Standard of Evidence:**

Provide documentation or a narrative explaining the process of archiving and accessing historical roadway data. Identify who is responsible for each step in the process.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

Archival of data is performed every year by the Information Systems developers using a series of ORACLE scripts. The steps for archiving and accessing historical roadway inventory are documented and handled by the Information Systems developers.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 178:**

Are the procedures that local agencies (e.g., county, MPO, municipality) use to collect, manage, and submit roadway data to the statewide inventory documented?

**Standard of Evidence:**

Provide documentation or a narrative explaining the local agency procedures for collecting, managing, and submitting data to the State roadway inventory. Identify who is responsible for each step in the process.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The State works with localities to capture information which is then updated to the State's systems.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 179:**

Are local agency procedures for collecting and managing the roadway data compatible with the State's enterprise roadway inventory?

**Standard of Evidence:**

Provide official documentation or a narrative explanation of how compatibility between local data systems and the State roadway inventory is achieved. Identify who is responsible for each step in the process.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State does not import local agency data. A pilot project is in the works to develop a tool that would allow an interface between the State and localities.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 180:**

Are there guidelines for collection of data elements as they are described in the State roadway inventory data dictionary?

**Standard of Evidence:**

Provide the guidelines and cite an example of data collection pursuant to the data dictionary.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State has a process for collection of short-term traffic counts as described in the Traffic Monitoring Guide. There are also guidelines for covering the collection of HPMS data elements and guidelines regarding the collection of crash data.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 181:**

Are the location coding methodologies for all State roadway information systems compatible?

**Standard of Evidence:**

Describe the location referencing system and the information systems that use it. If there is more than one location referencing system in use, list each and the associated systems.

**Question Rank:**  
Very Important

**Assessor conclusions:**

TMS incorporates all of the data inventories such as crash, bridge, functional class, traffic, surface type, right of way, etc. Every data element for which a location could apply uses the same LRS tables and methodology to store and retrieve location information, thus integrating all data in the system.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>100%</b>
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**Question 182:**

Are there interface linkages connecting the State's discrete roadway information systems?

**Standard of Evidence:**

Provide a narrative that describes the interface links connecting the State's roadway information systems. Provide the result of a single query (e.g., table, view) that includes both roadway features and traffic data for a segment of road.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State has documentation showing a distinct query that is possible. Since all data resides in the enterprise database, the State is able to link various tables for the purpose necessary.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>100%</b>
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**Question 183:**

Are the location coding methodologies for all regional and local roadway systems compatible?

**Standard of Evidence:**

Provide a narrative describing the location referencing system and the associated regional and local roadway systems. If there is more than one location referencing system in use, list each and the associated regional and local systems.

**Question Rank:**  
Somewhat Important

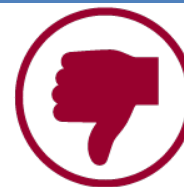
**Assessor conclusions:**

There is only one location referencing system for the State and it is used for both State and non-State-maintained roadways.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 184:**

Do roadway data systems maintained by regional and local custodians (e.g., MPOs, municipalities) interface with the State enterprise roadway information system?

**Standard of Evidence:**

Provide a narrative that describes the interface links connecting the regional or local roadway information systems to the State's enterprise roadway information system. Provide the result of a single query (e.g., table, view) that includes both roadway features and traffic data for a local road segment.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The State roadway data systems at the regional and local levels do not interface with the Statewide roadway system. There is a pilot project with St. Louis County and the city of Springfield, the objective of which is to develop a tool that would interface local data into the Statewide database.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>100%</b>
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**Question 185:**

Does the State enterprise roadway information system allow MPOs and local transportation agencies on-demand access to data?

**Standard of Evidence:**

Provide a narrative that describes the system or process that enables localities to query the data system.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The MPOs and RPCs, by request, are being set up to have access to virtual machines in order to access data in the Statewide database. They can access applications that display data. The State can also provide the data upon request.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 186:**

Do Roadway system data managers regularly produce and analyze data quality reports?

**Standard of Evidence:**

Provide a sample report and specify the release schedule for the reports.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Roadway Data Managers have reports usually created on a quarterly basis to review and analyze data. These are cross-check validations that are printed out so that employees may research the data and then make corrections as necessary in the database.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>100%</b>
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**Question 187:**

Is the overall quality of information in the Roadway system dependent on a formal program of error/edit checking as data is entered into the statewide system?

**Standard of Evidence:**

Describe the formal program of error/edit checking, to include specific procedures for both automated and manual processes.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State has error/edit checks at two different times: at time of entry when data is validated and verified visually on a map, and as nightly reports are run indicating if there are items to investigate. Further checking is also accomplished through quarterly check reviews.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>100%</b>
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**Question 188:**

Are there procedures for prioritizing and addressing detected errors?

**Standard of Evidence:**

Describe the procedures for prioritizing and addressing detected errors in both automated and manual processes. Please specify where these procedures are formally documented.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State process is on the TMS SharePoint page. The TMS Training Materials document how to change or maintain system data. Errors are corrected as found and those resulting from GIS system updates are expected to be cleaned up on a quarterly basis. There is no documentation on prioritization of fixing errors, however all detected errors are expected to be corrected as they are found. Some errors, such as vertical clearance changes on bridges, or official ownership changes, would receive priority over others.

Respondents assigned	2	Responses received	2	Response rate	100%
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**Question 189:**

Are there procedures for sharing quality control information with data collectors through individual and agency-level feedback and training?

**Standard of Evidence:**

Describe all the procedures used for sharing quality control information with data collectors.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State has processes by which inventory data is shared and corrected through relationships with law enforcement. A batch job is run nightly that validates data types in the database and errors are displayed. Staff in Transportation Planning is responsible for correcting most errors with districts making additional corrections.

Respondents assigned	2	Responses received	2	Response rate	100%
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**Question 190:**

Is there a set of established performance measures for the timeliness of the State enterprise roadway information system?

**Standard of Evidence:**

Provide the metrics used.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State did not provide established performance measures or metrics for the timeliness of the State roadway system.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>100%</b>
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**Question 191:**

Is there a set of established performance measures for the timeliness of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.)?

**Standard of Evidence:**

Provide the metrics used.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

No performance measures or metrics were provided for the timeliness of roadway data maintained by regional and local custodians.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>100%</b>
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**Question 192:**

Is there a set of established performance measures for the accuracy of the State enterprise roadway information system?

**Standard of Evidence:**

Provide the metrics used.

**Question Rank:**  
Very Important

**Assessor conclusions:**

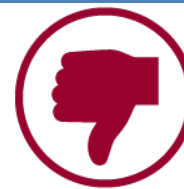
The State has not established performance measures or metrics for the accuracy of the State enterprise roadway information system.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>100%</b>
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**Question 193:**

Is there a set of established performance measures for the accuracy of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.)?

**Standard of Evidence:**

Provide the metrics used.

**Question Rank:**

Somewhat Important

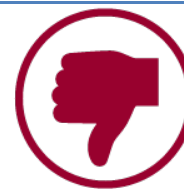
**Assessor conclusions:**

There were no established performance measures or metrics provided for the accuracy of roadway data maintained by regional and local custodians.

Respondents assigned	2	Responses received	2	Response rate	100%
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**Question 194:**

Is there a set of established performance measures for the completeness of the State enterprise roadway information system?

**Standard of Evidence:**

Provide the metrics used.

**Question Rank:**

Very Important

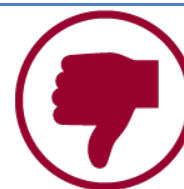
**Assessor conclusions:**

The State has not established performance measures or metrics for the completeness of the State enterprise roadway information system.

Respondents assigned	2	Responses received	2	Response rate	100%
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**Question 195:**

Is there a set of established performance measures for the completeness of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.)?

**Standard of Evidence:**

Provide the metrics used.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

The State has not established performance measures or metrics for the completeness of the roadway data maintained by regional and local custodians.

Respondents assigned	2	Responses received	1	Response rate	50%
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**Question 196:**

Is there a set of established performance measures for the uniformity of the State enterprise roadway information system?

**Standard of Evidence:**

Provide the metrics used.

**Question Rank:**  
Very Important

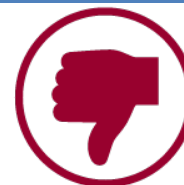
**Assessor conclusions:**

The State has not established performance measures or metrics for the uniformity of the State enterprise roadway information system. Business rules are not the same as a set of performance measures.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 197:**

Is there a set of established performance measures for the uniformity of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.)?

**Standard of Evidence:**

Provide the metrics used.

**Question Rank:**  
Somewhat Important

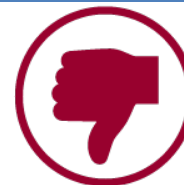
**Assessor conclusions:**

The State has not established performance measures or metrics for the uniformity of roadway data maintained by regional and local custodians.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 198:**

Is there a set of established performance systems for the accessibility of State enterprise roadway information systems?

**Standard of Evidence:**

Provide the metrics used.

**Question Rank:**  
Very Important

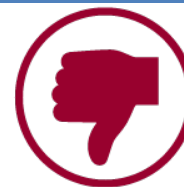
**Assessor conclusions:**

The State has not established performance measures or metrics for the accessibility of State enterprise roadway information systems.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 199:**

Is there a set of established performance measures for the accessibility of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.)?

**Standard of Evidence:**

Provide the metrics used.

**Question Rank:**

Somewhat Important

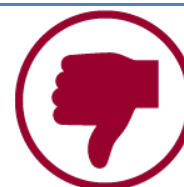
**Assessor conclusions:**

The State has not established performance measures or metrics for the accessibility of roadway data maintained by regional and local custodians.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 200:**

Is there a set of established performance measures for the integration of State enterprise roadway information systems and other critical data systems?

**Standard of Evidence:**

Provide the metrics used.

**Question Rank:**

Very Important

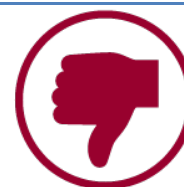
**Assessor conclusions:**

The State has not established performance measures or metrics for the integration of State enterprise roadway information systems and other critical data systems.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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**Question 201:**

Is there a set of established performance measures for the integration of the roadway data maintained by regional and local custodians (municipalities, MPOs, etc.) and other critical data systems?

**Standard of Evidence:**

Provide the metrics used.

**Question Rank:**

Very Important

**Assessor conclusions:**

There are no established performance measures or metrics for the integration of roadway data maintained by regional and local custodians with other critical data systems.

<b>Respondents assigned</b>	2	<b>Responses received</b>	1	<b>Response rate</b>	50%
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## Citation / Adjudication

The Missouri court system has only a small percentage of local courts using the same system as other courts throughout the State. It is unknown whether all of the systems used throughout the different local courts adhere to the same standards. Without the use of standards, it makes it more difficult to integrate multiple court systems. There is a need to standardize the court systems throughout the State in order to use the data for various performance measures and analyses at a Statewide level. The ability to look at multiple jurisdictions and the way cases are handled should be something the State is interested in. The State's ability to ensure that similar violations and cases across the State are being handled in similar ways may lead to a better overall traffic safety program. Using standards within the State would make this integration easier if the idea of using one system for all of the court systems would not be feasible.

Missouri has a baseline and potential to have a great citation tracking system. The State has a central authority to issue citation numbers. A tracking system will provide valuable insight into the scope of traffic enforcement within the State as well as the disposition of cases by the courts. The system will also indicate whether there is different treatment of like offenses across geographic areas or the various courts throughout the State. Not only will a tracking system assist in the enforcement and monitoring of the enforcement efforts, but it will also allow the State to identify missing citations throughout the process. With a paper process still in use, there is potential for citations to not make it to the Court in an expeditious manner. Performance measures can use certain metrics from a tracking system to improve the overall citation and adjudication systems.

With a data dictionary not available for the court system, it is difficult for individuals who want to use the data to know what is available. Even though the system may be proprietary, the data dictionary should still be made available for key stakeholders within the State to promote the integration and linking of citation and adjudication data to other traffic safety systems.

Missouri's DUI tracking system does not meet the standard of MIDRIS. The MIDRIS model is more of an interactive system that provides for tracking of everything from fines and costs to treatment, education, and sanctions. This model system is meant to be accessible by all those who interact with DUI offenders from the alcohol assessors, the probation department, to those who develop curricula for DUI education to licensed treatment providers and the DMV. The system would provide insight and statistics on which types of services and interventions are most effective in preventing recidivism, ensuring court-ordered sanctions are completed or complied with, and to prevent any effort to reinstate driving privileges until all necessary requirements have been met by the offender. When a DUI tracking system is in place across the State, metrics and measures can be monitored more efficiently.

There are no interfaces between the citation/adjudication systems and other traffic records systems within the State. A paper process and manual intervention is required to post disposition data to the driver record. Eliminating a paper process will reduce errors and assist with ensuring information is posted to the driver and vehicle records in a timely manner. Leveraging standards in place for the majority of the systems and coordinating the accessibility of the data throughout the various systems will allow the State to gain a better perspective of what is available. Using the adjudication data in conjunction with other traffic records systems also allows for analyses to

better respond to trends and identify problem areas throughout the State.

Unless data from every court that adjudicates traffic violations were to be submitted to a Statewide system, it is difficult to ascertain information and metrics on the handling of traffic cases Statewide. Metrics such as the number of citations that are submitted by law enforcement, but not filed by prosecutors; the amount of plea bargaining that takes place; and whether there are regional variations in conviction rates of serious cases cannot be established. These are all important aspects of traffic safety data that are not readily accessible from the driver file since it is a repository of convictions, rather than citations. Having a citation tracking system that incorporates the entire lifecycle of a citation will allow the State to evaluate the metrics mentioned.

Performance measures are not present. With performance measures in place, the State will be able to identify degradation of system processes. Performance measures also help identify areas of improvement across multiple system interfaces. These measures are meant to assist in decision-making, resource allocation, and system performance. They are not meant to determine how fast data is received from other sources or evaluate outside agency performance, but to evaluate the internal processes of the specific system and how it may relate to other traffic records systems. Performance measures should not be mistaken for processes and workflow of the data within the system. Performance measures should be quantifiable with the ability to set a baseline and monitor changes within. This will not only assist with determining the system components that may need improvement, but also the improvements a system has made within the process. This will then assist in maintaining the highest standard possible for the systems which meet or exceed the performance measures that are monitored.

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**Question 202:**

Is there a statewide system that provides real-time information on individuals' driving and criminal histories?



**Standard of Evidence:**

Provide a narrative description of the statewide system that provides realtime information on individuals' driving and criminal histories.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Approximately 40 percent of the courts use the system in which information is widely available in real-time.

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<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 203:**

Do all law enforcement agencies, parole agencies, probation agencies, and courts within the State participate in and have access to a system providing real-time information on individuals driving and criminal histories?

**Standard of Evidence:**

Name the groups that have real time access and describe the system that these agencies use to access driver or criminal histories, i.e., police dispatch, direct system access, telephone help desk.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Appropriate personnel have access to court information. Driver history information may include administrative sanctions and other information that would not be available through the court system, i.e., administrative withdrawal of licenses, license denial, etc. and no information is available about access to the driver history record.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 204:**

Is there a statewide authority that assigns unique citation numbers?

**Standard of Evidence:**

Identify the agency responsible and describe the protocols used to generate and assign unique citation numbers. Provide a copy of the relevant statute or gubernatorial order.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The Missouri Highway Patrol is the responsible agency by statute to assign unique citation numbers to local law enforcement agencies to ensure numbers do not duplicate.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>100%</b>
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**Question 205:**

Are all citation dispositions—both within and outside the judicial branch—tracked by the statewide data system?

**Standard of Evidence:**

If a statewide data tracking system exists, describe the means by which citation dispositions are transmitted and posted. If the system is the driver history file, note if deferrals or dismissals are posted. If the statewide system is managed through the courts, indicate whether all courts that handle traffic violations report to the same tracking system.

**Question Rank:**  
Somewhat  
Important

**Assessor conclusions:**

Citations with dispositions through the court are tracked. There is no indication that citations that prosecutors choose not to file, or those with deferred adjudications are also tracked, since they are not disposed until the period of deferral is complete. Also, those courts which are not part of the Judicial Information System do not appear to be centrally tracked anywhere. Citation tracking would require a centralized file of all citations written, including original charges, pleas, plea-bargains, deferrals, and determinations not to file. This type of tracking allows the State to determine if charges are not filed, whether a problem exists with officer training, or if some geographic areas of the State or some courts consistently treat some violations differently.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>100%</b>
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**Question 206:**

Are final dispositions (up to and including the resolution of any appeals) posted to the driver data system?

**Standard of Evidence:**

Provide a flow chart or audit report documenting how all types of dispositions are posted to the driver file.

**Question Rank:**  
Somewhat  
Important

**Assessor conclusions:**

The State flowchart includes processes but does not cover all types of dispositions and how they would flow into the court system and be sent to the driver record. The appeal process was also described, but not each type of disposition.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 207:**

Are the courts' case management systems interoperable among all jurisdictions within the State (including local, municipal and State)?

**Standard of Evidence:**

Provide the number of case management systems in use in the State and detail which are interoperable. Indicate if the State has a unified judicial system and if municipal or other local level courts share the same case management system.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Circuit and many municipal courts' case management systems are interoperable. Of the 610 municipal courts, only 245 of those courts' cases appear within the Judicial Information System.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 208:**

Is citation and adjudication data used for traffic safety analysis to identify problem locations, areas, problem drivers, and issues related to the issuance of citations, prosecution of offenders, and adjudication of cases by courts?

**Standard of Evidence:**

Provide an example analysis and describe the policy or enforcement actions taken as a result.

**Question Rank:**  
Very Important

**Assessor conclusions:**

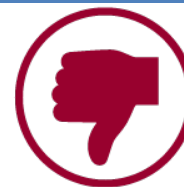
There is no indication that citation and adjudication data is used in analysis. Analysis of the data would include identifying problem locations or identifying issues with citation issuance or court adjudication. The only review done is of the individual driver's record to ascertain the appropriate sanction by the court. This is not the type of holistic traffic safety review that is intended by this question.

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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**Question 209:**

Do the appropriate components of the citation and adjudication systems adhere to the National Crime Information Center (NCIC) data guidelines?

**Standard of Evidence:**

Provide a narrative statement detailing the systems and their adherence to the NCIC guidelines. If not, specify if a comparable guideline is being used.

**Question Rank:**  
Less Important

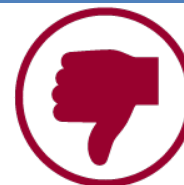
**Assessor conclusions:**

The court system does not directly relate to NCIC and does not internally conform to NCIC guidelines. While courts send the disposition data to the State Highway Patrol, it is not clear if the data meets NCIC guidelines.

<b>Respondents assigned</b>	<b>4</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>50%</b>
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**Question 210:**

Do the appropriate portions of the citation and adjudication systems adhere to the Uniform Crime Reporting (UCR) Program guidelines?

**Standard of Evidence:**

Provide a narrative statement detailing the systems and their adherence to the UCR program guidelines. If not, specify if a comparable guideline is being used.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The adjudication system does not follow UCR guidelines, but it is possible the data elements reported to the State Criminal Justice authority may adhere to the UCR guidelines.

<b>Respondents assigned</b>	<b>4</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>50%</b>
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**Question 211:**

Do the appropriate portions of the citation and adjudication systems adhere to the National Incident-Based Reporting System (NIBRS) guidelines?

**Standard of Evidence:**

Provide a narrative statement detailing the systems and their adherence to the NIBRS guidelines. If not, specify if a comparable guideline is being used.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

The court system does not adhere to NIBRS guidelines.

<b>Respondents assigned</b>	<b>4</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>50%</b>
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**Question 212:**

Do the appropriate portions of the citation and adjudication systems adhere to the National Law Enforcement Telecommunications System (NLETS) guidelines?

**Standard of Evidence:**

Provide a narrative statement detailing the systems and their adherence to the NLETS guidelines. If not, specify if a comparable guideline is being used.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

There are no NLETS guidelines used by the citation and adjudication system. However, NLETS requires compliance prior to use of its system, so it is likely that the law enforcement reporting that is done through NLETS is compliant. It is important to understand whether the convictions/warrants reported through NLETS undergoes some type of interpretive transaction at the State level before being input into the criminal history database.

<b>Respondents assigned</b>	<b>4</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>50%</b>
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**Question 213:**

Do the appropriate portions of the citation and adjudication systems adhere to the National Law Enforcement Information Network (LEIN) guidelines?

**Standard of Evidence:**

Provide a narrative statement detailing the systems and their adherence to the LEIN guidelines. If not, specify if a comparable guideline is being used.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

The system used does not adhere to LEIN guidelines. LEIN guidelines apply only to the State of Michigan.

<b>Respondents assigned</b>	<b>4</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>50%</b>
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**Question 214:**

Do the appropriate portions of the citation and adjudication systems adhere to the Functional Requirement Standards for Traffic Court Case Management?

**Standard of Evidence:**

Provide a narrative statement detailing the systems and their adherence to the Functional Requirement Standards for Traffic Court Case Management. If not, specify if a comparable guideline is being used.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

Missouri utilizes the standards set forth by the Functional Requirement Standards for Traffic Court Case Management. All aspects are not automatic but the functionality is present.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 215:**

Do the appropriate portions of the citation and adjudication systems adhere to the NIEM Justice domain guidelines?

**Standard of Evidence:**

Provide a narrative statement detailing the systems and their adherence to the NIEM Justice domain guidelines. If not, specify if a comparable guideline is being used.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The State adheres to the NIEM guidelines within the JIS system.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 216:**

Does the State use the National Center for State Courts guidelines for court records?

**Standard of Evidence:**

Provide a narrative statement detailing the systems and their adherence to NCSC guidelines for court records. If not, specify if a comparable guideline is being used.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The State adheres to guidelines set forth by the National Center for State Courts. This includes the Functional Requirement Standards for Traffic Court Case Management.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 217:**

Does the State use the Global Justice Reference Architecture (GRA)?

**Standard of Evidence:**

Provide a narrative statement detailing the systems and their adherence to GRA guidelines. If not, specify if a comparable guideline is being used.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The State uses Global Justice Reference Architecture for the court system.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>100%</b>
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**Question 218:**

Does the State have an impaired driving data tracking system that meets the specifications of NHTSA's Model Impaired Driving Records Information System (MIDRIS)?

**Standard of Evidence:**

Provide a narrative statement detailing the systems and their adherence to MIDRIS guidelines. If not, specify if a comparable guideline is being used.

**Question Rank:**  
Somewhat  
Important

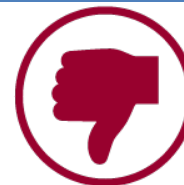
**Assessor conclusions:**

While the State has a system to track DUI offenders, the MIDRIS model is more of an interactive system that provides for tracking of everything from fines and costs to treatment, education, and sanctions. This model system is meant to be accessible by all those who interact with DUI offenders from the alcohol assessors, the probation department, to those who develop curricula for DUI education to licensed treatment providers and the DMV, to ensure that it is possible to determine which types of services and interventions are most effective in preventing recidivism. MIDRIS is more holistic in addressing the core problems that lead to impaired driving, by ensuring all those involved in DUI treatment and adjudication have a means by which to interact and track the violator through both the adjudication as well as the treatment processes.

Respondents assigned	5	Responses received	3	Response rate	60%
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**Question 219:**

Does the citation system have a data dictionary?

**Standard of Evidence:**

Provide the data dictionary for the Statewide citation tracking system if one exists. If not, provide the data dictionary for the most widely used court case management system.

**Question Rank:**  
Very Important

**Assessor conclusions:**

There is no data dictionary available for a citation system.

Respondents assigned	2	Responses received	1	Response rate	50%
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**Question 220:**

Do the citation data dictionaries clearly define all data fields?

**Standard of Evidence:**

If a statewide citation tracking system exists, does its data dictionary clearly define all data fields. If there are two or more repositories of citation data, provide data dictionaries for the two largest. NOTE: This response does not require data dictionaries from individual law enforcement agencies that track their own citations—it refers to a statewide system or one used by multiple agencies.

**Assessor conclusions:**

There is no data dictionary maintained in the State.



**Question Rank:**  
Very Important

**Respondents  
assigned**

2

**Responses  
received**

1

**Response  
rate**

50%

**Question 221:**

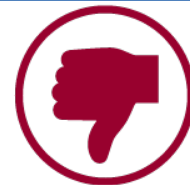
Are the citation system data dictionaries up to date and consistent with the field data collection manual, training materials, coding manuals, and corresponding reports?

**Standard of Evidence:**

Provide a narrative describing the process—including timelines and the summary of changes—used to ensure uniformity in the field data collection manuals, training materials, coding manuals, and corresponding reports.

**Assessor conclusions:**

No information was available related to the citation systems used throughout the State. Although there is no statewide citation tracking system, the information would be related to the systems in which the issuance of a citation occurs.



**Question Rank:**  
Very Important

**Respondents  
assigned**

2

**Responses  
received**

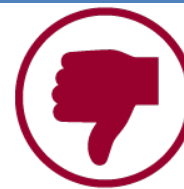
1

**Response  
rate**

50%

**Question 222:**

Do the citation data dictionaries indicate the data fields that are populated through interface linkages with other traffic records system components?

**Standard of Evidence:**

Provide a list of data fields populated through interface linkages with other traffic records system components.

**Question Rank:**  
Very Important

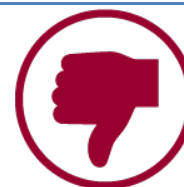
**Assessor conclusions:**

The State does not have a data dictionary or documentation showing interfaces to a citation or court system.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 223:**

Do the courts' case management system data dictionaries provide a definition for each data field?

**Standard of Evidence:**

Provide a list of Case Management Systems used by both State and local level courts and note if a data dictionary is available for each one. Provide a data dictionary for one State, one county/district, and one local (municipal) court if they do not use the same case management systems.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Even proprietary systems should provide full documentation to the user community, to ensure that data entered into the system meets the form and format intended. It is also important that users and collectors of data have access to the data dictionary and to any edits and validation rules within the system to determine edits are working properly or to determine whether additional edits are necessary.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 224:**

Do the courts' case management system data dictionaries clearly define all data fields?

**Standard of Evidence:**

Use the data dictionaries provided in response to Question 223.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

A data dictionary should address the needs of the system administrator, the data collector, and the data user. Each field should have a definition of the data element and describe the exact information to be included and the format in which it is to be entered into the system. The functional specification document does not meet this definition of a data dictionary.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 225:**

Do the courts' case management system data dictionaries indicate the data fields populated through interface linkages with other traffic records system components?

**Standard of Evidence:**

Provide a list of data fields populated through interface linkages with other traffic records system components.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

There is potential to have an interface into the court system, but the available information does not show any other system populating the court data through an interface.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 226:**

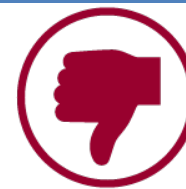
Do the prosecutors' information systems have data dictionaries?

**Standard of Evidence:**

Provide a data dictionary for the State prosecutors' office (State level courts that handle the most traffic violations). Indicate whether local prosecutors (cities, counties) have one or numerous types of data systems.

**Assessor conclusions:**

A data dictionary for a system for the prosecutor's office was not available. Such systems are similar to court Case Management Systems, but are more specific to the prosecutorial duties, including restitution accounting, child support accounting, civil case management, and templates for subpoenas and for letters to victims, witnesses, etc.



**Question Rank:**  
Somewhat Important

<b>Respondents assigned</b>	<b>1</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>100%</b>
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**Question 227:**

Can the State track citations from point of issuance to posting on the driver file?

**Standard of Evidence:**

Provide a flow diagram documenting citation lifecycle process that identifies key stakeholders. Ensure that alternative flows are included (e.g., manual and electronic submission).

**Assessor conclusions:**

The citation can only be tracked beginning at the court. Receiving the citation is the first step in the process, but there is no ability to track a citation prior to the court receiving it. Tracking from issuance to the violator through to the court is important as well. Such tracking ensures that citations are not voided by officers without approval and gives a picture of how the prosecutors treat various charges or traffic charges overall. Prosecutors have discretion as to their decision to charge, defer, or dismiss and it is important to know the extent of each of those decisions that occurs.



**Question Rank:**  
Very Important

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 228:**

Does the State measure compliance with the process outlined in the citation lifecycle flow chart?

**Standard of Evidence:**

Provide a narrative describing how the State measures compliance with the citation lifecycle process specified in the flow chart. If there are official guidance documents, provide them.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

Compliance is measured at the end of the lifecycle. Not all steps in the lifecycle are covered. The compliance on timeliness is measured from the court to the entry on the driver record. Additional tracking of compliance would be helpful to the State to ensure that every ticket issued finds its way through the system or is, at the very least, accounted for in some manner, such as "not filed by prosecutor" or "not received by the court", "voided by the officer", or necessary reporting for those charges that are deferred.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 229:**

Is the State able to track DUI citations?

**Standard of Evidence:**

Provide a flow chart that documents the criminal and administrative DUI processes, identifies all key stakeholders, and includes disposition per the criminal and administrative charges.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Missouri has a well-documented DUI tracking system where they can track DUI citations through the process.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 230:**

Does the DUI tracking system include BAC and any drug testing results?

**Standard of Evidence:**

If no statewide DUI tracking system is in place, indicate whether the driver history record contains the BAC test results.

**Assessor conclusions:**

The DUI tracking system contains BAC, however the system is not able to handle drug test results.



**Question Rank:**  
Very Important

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 231:**

Does the State have a system for tracking administrative driver penalties and sanctions?

**Standard of Evidence:**

Provide a narrative describing the protocol for reporting (posting) the penalty and/or sanction to the driver and/or vehicle file.

**Assessor conclusions:**

The State has a documented process for DUI per se and implied consent charges being entered onto the driver records. It does not appear that there is a connection to DUI arrest tracking to ensure that administrative sanctions match arrests. For this reason, it is very possible that some cases may not make it to the driver licensing authority for sanctions. There is also no information available on other driver-related penalties and sanctions that are posted to the driver record.



**Question Rank:**  
Very Important

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 232:**

Does the State have a system for tracking traffic citations for juvenile offenders?

**Standard of Evidence:**

Provide a flow chart that documents the processing of juvenile offenders' traffic citations, specifying any charges or circumstances that cause juveniles to be processed as adult offenders.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Juvenile citations are tracked, but not separately and not flagged as a juvenile offender.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 233:**

Does the State distinguish between the administrative handling of court payments in lieu of court appearances (mail-ins) and court appearances?

**Standard of Evidence:**

Provide a flow chart documenting the processing of administrative handling of court payments (mail-ins).

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

There is no difference in the handling of payments instead of court appearances, but the fine is higher if there is a court case. There is no indicator or way of understanding if the defendant paid the fine or requested a court date.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 234:**

Does the State track deferral and dismissal of citations?

**Standard of Evidence:**

Provide a flow chart documenting the deferral and the dismissal of citations.

**Question Rank:**

Somewhat Important

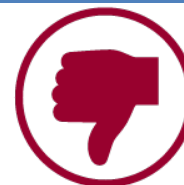
**Assessor conclusions:**

The Highway Patrol tracks dismissals and deferrals for DUIs. There is no formal Statewide system that captures deferrals. This is a prosecutor function, but nothing is available to identify the process.

<b>Respondents assigned</b>	<b>4</b>	<b>Responses received</b>	<b>4</b>	<b>Response rate</b>	<b>100%</b>
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**Question 235:**

Are there State and/or local criteria for deferring or dismissing traffic citations and charges?

**Standard of Evidence:**

Provide the criteria for deferring or dismissing traffic citations and charges.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

Discretion is allowed in Missouri without specific criteria upon which to base the decision to defer or dismiss a charge. This could result in different handling in each county.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>100%</b>
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**Question 236:**

If the State purges its records, are the timing conditions and procedures documented?

**Standard of Evidence:**

Provide a narrative documenting whether or not the State purges records. If so, list the types of records the State purges and provide the criteria for doing so.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

Purging of records is documented by statute.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 237:**

Are the security protocols governing data access, modification, and release officially documented?

**Standard of Evidence:**

Provide the official security protocols governing data access, modification, and release.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

Security controls are well documented through the Office of State Courts.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 238:**

Is citation data linked with the driver system to collect driver information, to carry out administrative actions (e.g., suspension, revocation, cancellation, interlock) and determine the applicable charges?

**Standard of Evidence:**

Describe how citation, adjudication and driver data are linked and by what means administrative actions are carried out or posted using these linkages.

**Question Rank:**  
Very Important

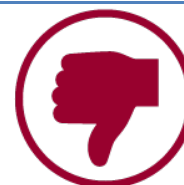
**Assessor conclusions:**

Most administrative actions are performed manually by the Department of Revenue. There is little information, other than the Highway Patrol process, describing the process to link citation and adjudication data to the driver record. There is no linkage or integration with the paper process.

Respondents assigned	2	Responses received	1	Response rate	50%
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**Question 239:**

Is adjudication data linked with the driver system to collect certified driver records and administrative actions (e.g., suspension, revocation, cancellation, interlock) to determine the applicable charges and to post the dispositions to the driver file?

**Standard of Evidence:**

Provide the results of a sample query and describe how the linked information is used to collect certified driver records and administrative charges and to post dispositions to the driver file.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Some courts submit dispositions electronically to the Department of Revenue, but those are then entered manually onto the driver record. Other courts submit paper.

Respondents assigned	4	Responses received	3	Response rate	75%
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**Question 240:**

Is citation data linked with the vehicle file to collect vehicle information and carry out administrative actions (e.g., vehicle seizure, forfeiture, interlock)?

**Standard of Evidence:**

Provide the results of a sample query and describe how the linked information is used to collect vehicle information and carry out administrative actions.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

Citation data is not linked to the vehicle file in order to initiate administrative vehicle sanctions.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 241:**

Is adjudication data linked with the vehicle file to collect vehicle information and carry out administrative actions (e.g., vehicle seizure, forfeiture, interlock mandates and supervision)?

**Standard of Evidence:**

Provide the results of a sample query and describe how the linked information is used to collect vehicle information and carry out administrative actions.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

There is no evidence that the data submitted to DOR is linked to the vehicle file. No information is available to indicate DOR is able to electronically update driver records.

<b>Respondents assigned</b>	<b>4</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>75%</b>
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**Question 242:**

Is citation data linked with the crash file to document violations and charges related to the crash?

**Standard of Evidence:**

Provide the results of a sample query and describe how the linked information is used to document violations and charges related to the crash.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

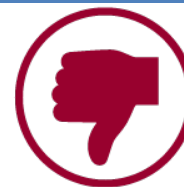
Citation data is not linked to the crash data file.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 243:**

Is adjudication data linked with the crash file to document violations and charges related to the crash?

**Standard of Evidence:**

Provide the results of a sample query and describe how the linked information is used to document violations and charges related to the crash.

**Question Rank:**

Somewhat Important

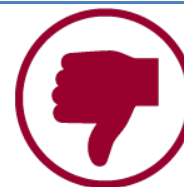
**Assessor conclusions:**

No linkage exists between the crash and adjudication files to document charges within a crash.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 244:**

Is there a set of established performance measures for the timeliness of the citation systems?

**Standard of Evidence:**

If there is a statewide citation tracking system in the State, provide timeliness measures used. If there are two or more centralized citation tracking systems, provide timeliness measures for one of them.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

No performance measures for timeliness of the citation system are given. There is no Statewide citation system.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 245:**

Is there a set of established performance measures for the accuracy of the citation systems?

**Standard of Evidence:**

Provide accuracy measures for the statewide citation tracking system. If there are several citation tracking systems, provide accuracy measures for one of them.

**Question Rank:**  
Very Important

**Assessor conclusions:**

No performance measures for accuracy of the citation system are given. There is no Statewide citation system.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 246:**

Is there a set of established performance measures for the completeness of the citation systems?

**Standard of Evidence:**

Provide completeness measures for the statewide citation tracking system. If there are several citation tracking systems, provide completeness measures for one of them.

**Question Rank:**  
Somewhat Important

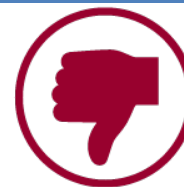
**Assessor conclusions:**

No performance measures for the completeness of the citation system are given. There is no Statewide citation system.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 247:**

Is there a set of established performance measures for the uniformity of the citation systems?

**Standard of Evidence:**

Provide uniformity measures for the statewide citation tracking system. If there are several citation tracking systems, provide uniformity measures for one of them.

**Question Rank:**  
Somewhat Important

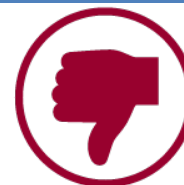
**Assessor conclusions:**

No performance measures for the uniformity of the citation system are given. There is no Statewide citation system.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 248:**

Is there a set of established performance measures for the integration of the citation systems?

**Standard of Evidence:**

Provide integration measures for the statewide citation tracking system. If there are several citation tracking systems, provide integration measures for one of them.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

No performance measures for the integration of the citation system are given. There is no Statewide citation system.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 249:**

Is there a set of established performance measures for the accessibility of the citation systems?

**Standard of Evidence:**

Provide accessibility measures for the statewide citation tracking system. If there are several citation tracking systems, provide accessibility measures for one of them.

**Question Rank:**  
Less Important

**Assessor conclusions:**

No performance measures for accessibility of the citation system are given. There is no Statewide citation system.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 250:**

Is there a set of established performance measures for the timeliness of the adjudication systems?

**Standard of Evidence:**

Provide timeliness measures for the statewide adjudication tracking system. If there are several adjudication tracking systems, provide timeliness measures for one of them.

**Question Rank:**  
Somewhat Important

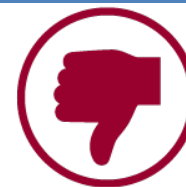
**Assessor conclusions:**

There is a statutory mandate in place requiring reporting of disposition data within 7 days. This is not a performance measure. A true performance measure would indicate the average number of days to report. The State tracks the amount of time taken court by court to transmit dispositions and reports the information back to the court administration. A more formal Statewide measure would help the Department of Revenue stay aware of the "overall" timeliness of disposition reporting.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 251:**

Is there a set of established performance measures for the accuracy of the adjudication systems?

**Standard of Evidence:**

Provide accuracy measures for the statewide adjudication tracking system. If there are several adjudication tracking systems, provide accuracy measures for one of them.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Having edit checks in the system helps to improve, but is no guarantee of accuracy, nor does it replace performance measures. Some data elements will allow free-text answers, for which edits are less effective. It is possible to mistype a date of birth, an address, or a driver license number. Measurement and review of accuracy in the system allows the State to improve the embedded edits and to locate and train those who input data into the system about repeated errors.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 252:**

Is there a set of established performance measures for the completeness of the adjudication systems?

**Standard of Evidence:**

Provide completeness measures for the statewide adjudication tracking system. If there are several adjudication tracking systems, provide completeness measures for one of them.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

There is no indication that there is a performance measure for the completeness of the adjudication system within the courts, although there is a way to put a measurement on the log which is reviewed daily. The idea of a performance measure would be a quantitative way to determine where data is missing within the judicial system.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 253:**

Is there a set of established performance measures for the integration of the adjudication systems?

**Standard of Evidence:**

Provide integration measures for the statewide adjudication tracking system. If there are several adjudication tracking systems, provide integration measures for one of them.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

There are standards but no measures of integration performance. Performance measures would be a quantitative measure to ensure the integration is correct.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 254:**

In States that have an agency responsible for issuing unique citation numbers, is information on intermediate dispositions (e.g., deferrals, dismissals) captured?

**Standard of Evidence:**

Provide documentation detailing the numbers of citations issued from the 10 largest law enforcement agencies and the number of dispositions for those citations that are in the driver file over a three month period.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Intermediate dispositions are not captured within the adjudication of the citations.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>50%</b>
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**Question 255:**

Do the State's DUI tracking systems have additional quality control procedures to ensure the accuracy and timeliness of the data?

**Standard of Evidence:**

Provide a narrative description of the additional quality control measures for the DUI tracking systems and specify which systems use which measures.

**Question Rank:**

Somewhat  
Important

**Assessor conclusions:**

There are controls in place to review information entered into the DUI tracking system. The controls to ensure timeliness of data are missing. Accuracy is reliant on previously entered information compared to newly entered data. Accuracy could also be improved and controlled by automating the transfer of data from other systems into the tracking system.

**Respondents  
assigned**

2

**Responses  
received**

1

**Response  
rate**

50%

## EMS / Injury Surveillance

Missouri does not have an injury surveillance system; there is limited use of the disparate systems for injury reporting in the State. Each of the core components (data systems) resides within the Missouri Department of Health and Senior Services: EMS, trauma, emergency department and hospital discharge, and vital records.

### Missouri EMS Information System

Missouri Revised Statutes, Chapter 190, identifies the Bureau of EMS as the agency responsible for the Missouri Ambulance Reporting System (MARS) and the Statewide repository for all patient care data. MARS, developed by ImageTrend, is NEMSIS 2.2.1 compliant; all patient care records are submitted electronically to the State. The majority of user documentation resides online but the agency does maintain a data dictionary. Though not included in a comprehensive injury surveillance system, the EMS data is a rich source for information on the severity of injuries sustained in motor vehicle crashes.

Each ePCR (patient care report) entered into MARS is given a validation score that reflects its compliance with the requirements set forth in Missouri regulations; an ePCR with a validation score below 90% is rejected. Services that submit third party data that does not meet the minimum requirements receive a rejection notice and a report regarding missing data elements. State EMS inspectors conduct periodic audits of the patient care data.

EMS data is used by the State's Department of Transportation and the Department of Public Safety as well as several other agencies. The "Missouri Blueprint for Highway Safety" is a collaborative effort of several State agencies that includes an ongoing plan to reduce EMS response times to motor vehicle crashes by identifying problem areas and promoting 911 access across the State. External entities interested in EMS data may request it from the Bureau under Missouri's Sunshine Law; the request must be in writing and the Bureau will respond in accordance with internal policies and procedures. The Bureau of EMS is represented on the State TRCC.

### Emergency Department and Hospital Discharge Data

Emergency department and hospital discharge data, collectively known as PAS data – Patient Abstract System, are collected by and available through the Department of Health and Senior Services (DHSS) under State regulations (19 CSR 10-33.010). The data conforms to the UB-04 standard but is tailored to meet the needs of the State; notations within the PAS data dictionary indicate the UB-04 data elements.

State regulations for the submission of PAS data require that each data element shall have an acceptable code in at least 99% of the records and each data element shall be missing or unknown in less than 1% of the records. The regulations also require that a provider submit to DHSS a written notification and plan of correction for identified deficiencies. There is no formal data quality reporting or performance measures in place for the PAS data nor is feedback on data quality provided to the submitting hospitals. The PAS data is reviewed on a quarterly basis and



compared to the previous year's data to identify obvious errors and missing data.

The PAS data has been used for injury surveillance activities and publications such as "Health in Rural Missouri" as well as linked to the State's crash database for the Crash Outcome Data Evaluation System (CODES).

#### Trauma Registry Data

Missouri Revised Statutes requires that all designated trauma centers in the State maintain a trauma registry and submit their trauma data to the Department of Health and Senior Services. The trauma data conforms to the NTDB standard and upon entry into the Time Critical Diagnosis (TCD) System, the trauma record is subject to validation rules to ensure compliance with the standards. The TCD System includes validation rules for State-specific data elements required under State regulations. Records that do not meet a 94% minimum validation score are rejected.

Quality control at the State level is an informal process. Data is reviewed daily as well as quarterly. Data quality issues are relayed back to the data collectors and managers through telephone calls, emails, and in-person visits to ensure regulatory compliance. Data collection problems are remedied by customizing the TCD System. In an effort to ensure a complete trauma registry, the State employs a data team that is available to assist users with data collection and submission.

Though a robust system, it does not appear that the trauma registry data is used for injury surveillance activities or to support highway safety programs.

#### Vital Records

The Missouri Electronic Vital Records system supports the registration of vital events for the Missouri Department of Health and Senior Services and other users. The number of deaths due to motor vehicle crashes was included in the "Health in Rural Missouri" publication and vital records data is available in aggregate form by request or via an online query tool. The vital records data is not used to support an injury surveillance system. Information provided about the vital records system was insufficient to allow an adequate review of its processes and capabilities.

#### Strengths

Missouri maintains the core components of an injury surveillance system and has, in the past, conducted comprehensive analyses on injuries caused by motor vehicle crashes in the State. Through a cooperative agreement and funding from NHTSA, Missouri was a CODES (Crash Outcome Data Evaluation System) State. The integrated database included crash data linked to emergency department and hospital discharge data, the outcome of which provides a better understanding of the medical and financial outcomes of motor vehicle crashes.

The Missouri Ambulance Reporting System is linked to trauma registry system through the State's Time Critical Diagnosis System. This interface enables receiving healthcare facilities to access patient care reports that have been uploaded into their system providing a complete record of pre-hospital care through discharge.

## Opportunities

The State may consider for each data system:

- 1) Formal documentation that describes how the data is collected, managed, and maintained and describes the data in a more comprehensive fashion than a data dictionary. The summary of the data should describe the characteristics of the data, values, limitations and exceptions, if the element is a required data element or a State- or user-created data element;
- 2) Documentation for each system detailing how rejected records are tracked from rejection through correction and resubmission to ensure a complete data system;
- 3) Performance reporting back to submitting agencies, hospitals, trauma centers, etc. on a routine basis to help both the submitting entity in recognizing routine errors and the State receiving improved quality data.

Each of the State's injury surveillance data systems is subject to regulation(s) that require timely reporting, a certain level of accuracy, completeness, and/or validation – depending on the system. A common issue among the State's data systems is the lack of performance measures and reporting on data quality. Reporting requirements found in State regulations are not the same as performance measures. Performance measures enable an agency to monitor and improve the quality of the data in their traffic record systems. The State has an opportunity to use the data quality requirements as goals and create a baseline by which to measure the health and progress of the data going forward. The State should consider developing and instituting formal performance measures – for each data system - that can be used to improve data quality, inform validation rules, training content, and other data system documentation. Data quality management reports should be shared with the TRCC on a routine basis.

NHTSA has available several publications that address performance measures for traffic records systems; including “Model Performance Measures for State Traffic Records Systems,” (DOT HS 811 441) published February 2011. This publication offers several examples of performance measures not only for the injury surveillance data systems, but all six components that make up a traffic records system.

As representatives from each of the injury surveillance data systems regularly attend the TRCC meetings, it would be of value to the TRCC and highway safety stakeholders if those representatives submitted a brief description of their system, a data dictionary (including a list of identifiers that would facilitate the integration of the disparate traffic records systems), access instructions, and any limitations to the use and/or release of the data – an injury surveillance data inventory of sorts.

The CODES data is an immensely valuable resource for the injury surveillance community, traffic safety stakeholders, and researchers. The State may want to determine the feasibility of resuming the linkage of the traffic records systems (crash, EMS, PAS data, trauma, etc.) to conduct comprehensive analyses on the outcomes of motor vehicle crash injuries in an effort to identify problems, allocate resources, and evaluate programs.

**Question 256:**

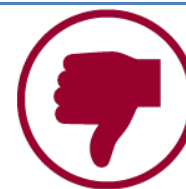
Does the injury surveillance system include EMS data?

**Standard of Evidence:**

Provide an injury surveillance report that illustrates the use of EMS data and data from other injury surveillance systems.

**Assessor conclusions:**

EMS data is collected in the State but it does not appear to be included in the overall State injury surveillance reports.



**Question Rank:**  
Very Important

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 257:**

Does the injury surveillance system include emergency department (ED) data?

**Standard of Evidence:**

Provide an injury surveillance report that illustrates the use of emergency department (ED) data and data from other injury surveillance systems.

**Assessor conclusions:**

Emergency department data is available to support injury prevention activities, including county profiles for each of Missouri's 115 counties. The 'Health in Rural Missouri' report demonstrates the use of Missouri's injury data.



**Question Rank:**  
Very Important

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 258:**

Does the injury surveillance system include hospital discharge data?

**Standard of Evidence:**

Provide an injury surveillance report that illustrates the use of hospital discharge data and data from other injury surveillance systems.

**Assessor conclusions:**

Inpatient hospitalization data is available to support the State's injury prevention activities through two separate websites, including one in which the user can query the inpatient data.



**Question Rank:**  
Very Important

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 259:**

Does the injury surveillance system include trauma registry data?

**Standard of Evidence:**

Provide an injury surveillance report that illustrates the use of trauma registry data and data from other injury surveillance systems.

**Assessor conclusions:**

Section 190.241.1 of the Missouri Revised Statutes requires that all designated trauma centers in the State maintain a trauma registry. No information was available to indicate that any data submitted by trauma centers to the Missouri Department of Health and Senior Services is used as part of an injury surveillance system.



**Question Rank:**  
Very Important

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 260:**

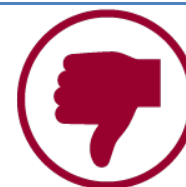
Does the injury surveillance system include rehabilitation data?

**Standard of Evidence:**

Provide an injury surveillance report that illustrates the use of rehabilitation data and data from other injury surveillance systems.

**Assessor conclusions:**

The State does not collect rehabilitation data.



**Question Rank:**  
Very Important

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 261:**

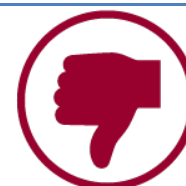
Does the injury surveillance system include vital records data?

**Standard of Evidence:**

Provide an injury surveillance report that illustrates the use of vital data and data from other injury surveillance systems.

**Assessor conclusions:**

Vital statistics data is available through the Department of Health and Senior Services and may be used for special projects. However, the data is not used to support a comprehensive injury surveillance system.



**Question Rank:**  
Very Important

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 262:**

Does the injury surveillance system include other data?

**Standard of Evidence:**

List any other databases or sources included in the injury surveillance system and provide a sample report using data from each of these sources. Additional data resources may include medical examiner reports, payer-related databases, traumatic brain injury registry, and spinal cord injury registry.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State would appear to maintain a registry for all head and spinal cord injured persons in the State. However, no documentation of this system was available. The ability to describe the incidence of head and spinal cord injuries in motor vehicle crashes should be explored by the TRCC or its partners.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 263:**

Does the EMS system track the frequency, severity, and nature of injuries sustained in motor vehicle crashes in the State?

**Standard of Evidence:**

Provide the most recent motor vehicle-related incident counts for the EMS system, any injury severity categorizations applied, and the provider's primary impression (if applicable).

**Question Rank:**  
Very Important

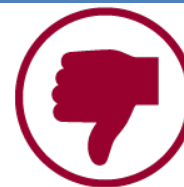
**Assessor conclusions:**

Sample reports showing the frequency of EMS responses related to a motor vehicle crash are available. The frequencies were subset by severity (possible injury) and indication of injury (i.e. vehicle damage/deformation).

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 264:**

Does the emergency department data track the frequency, severity, and nature of injuries sustained in motor vehicle crashes in the State?

**Standard of Evidence:**

Provide the most recent motor vehicle-related incident counts for the emergency department data, any injury severity categorizations applied (e.g., Abbreviated Injury Score, Injury Severity Scale), and principal diagnosis.

**Question Rank:**  
Very Important

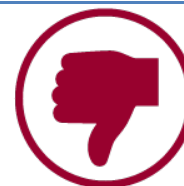
**Assessor conclusions:**

While the State does collect emergency department data, it is unclear if it is used for highway safety activities.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>100%</b>
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**Question 265:**

Does the hospital discharge data track the frequency, severity, and nature of injuries sustained in motor vehicle crashes in the State?

**Standard of Evidence:**

Provide the most recent motor vehicle-related incident counts for the hospital discharge data, any injury severity categorizations applied (e.g., Abbreviated Injury Score, Injury Severity Scale), and principal diagnosis.

**Question Rank:**  
Very Important

**Assessor conclusions:**

While the State does collect hospital discharge data it is unclear if it is used for highway safety activities.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>100%</b>
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**Question 266:**

Does the trauma registry data track the frequency, severity, and nature of injuries sustained in motor vehicle crashes in the State?

**Standard of Evidence:**

Provide the most recent motor vehicle-related incident counts for the trauma registry data, any injury severity categorizations applied (e.g., Abbreviated Injury Score, Injury Severity Scale), and principal diagnosis.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Missouri trauma centers are required by State statute to submit trauma data to the State's trauma registry. While the State collects the data elements necessary to track the frequency, severity, and nature of injuries sustained in motor vehicle crashes, documentation was not available.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 267:**

Does the vital records data track the frequency, severity, and nature of injuries sustained in motor vehicle crashes in the State?

**Standard of Evidence:**

Provide the most recent motor vehicle-related incident counts from the vital records data and the cause of death.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Vital records data has been used to report on the number of deaths due to motor vehicle crashes though no information on the types of injuries sustained in fatal crashes has been reported.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 268:**

Is the EMS data available for analysis and used to identify problems, evaluate programs, and allocate resources?

**Standard of Evidence:**

Provide a sample report or narrative description of a highway safety project that utilized EMS data to identify a problem, evaluate a program, or allocate resources.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The Bureau of EMS identified several external users of the State's EMS data which includes, but is not limited to, the Missouri Department of Transportation and Missouri Department of Public Safety. The Missouri Blueprint for Highway Safety is a collaborative effort that includes a plan to reduce EMS response times to motor vehicle crashes by identifying problem areas and promoting 911 access across the State.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 269:**

Is the emergency department data available for analysis and used to identify problems, evaluate programs, and allocate resources?

**Standard of Evidence:**

Provide a sample report or narrative description of a highway safety project that utilized emergency department data to identify a problem, evaluate a program, or allocate resources.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Emergency department data is available through the Department of Health and Senior Services. Limited information was available that describes how the data is used for problem identification or program evaluation activities in highway safety. A CODES (Crash Outcome Data Evaluation System) report was provided that demonstrates the availability of Missouri's linked crash and hospital data for use in a multi-State analysis though the data is several years old. The use of integrated data is a valuable resource in highway safety applications; it gives the State the ability to more accurately define the nature and severity of injuries sustained in motor vehicle crashes.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>100%</b>
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**Question 270:**

Is the hospital discharge data available for analysis and used to identify problems, evaluate programs, and allocate resources?

**Standard of Evidence:**

Provide a sample report or narrative description of a highway safety project that utilized hospital discharge data to identify a problem, evaluate a program, or allocate resources.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Hospital discharge data is available through the Department of Health and Senior Services. Limited information was provided to describe how the data is used for problem identification or program evaluation activities in highway safety. A CODES (Crash Outcome Data Evaluation System) report was provided that demonstrates the availability of Missouri's linked crash and hospital data for use in a multi-state analysis though the data is several years old.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>100%</b>
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**Question 271:**

Is the trauma registry data available for analysis and used to identify problems, evaluate programs, and allocate resources?

**Standard of Evidence:**

Provide a sample report or narrative description of a highway safety project that utilized trauma registry data to identify a problem, evaluate a program, or allocate resources.

**Question Rank:**  
Very Important

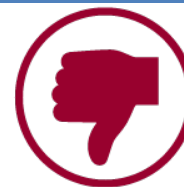
**Assessor conclusions:**

Trauma registry data is available through the Department of Health and Senior Services. While the DHSS is to be commended for their participation on the State's TRCC, little information was available related to how the trauma registry data is used to support highway safety programs.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 272:**

Is the vital records data available for analysis and used to identify problems, evaluate programs, and allocate resources?

**Standard of Evidence:**

Provide a sample report or narrative description of a highway safety project that utilized vital records data to identify a problem, evaluate a program, or allocate resources (e.g., research in support of helmet or GDL legislation).

**Question Rank:**  
Very Important

**Assessor conclusions:**

Vital records data was included in the health report available for review, but not in a way that demonstrated its use in highway safety applications.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 273:**

Does the State have a NEMSIS-compliant statewide database?

**Standard of Evidence:**

Demonstrate submission to the nationwide NEMSIS database and provide any relevant State statutes or regulations. If not compliant, provide narrative detailing the State's efforts to achieve NEMSIS compliance.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Missouri's EMS data collection tool, MARS, is compliant with NEMSIS version 2.2.1.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 274:**

Does the State's emergency department and hospital discharge data conform to the most recent uniform billing standard?

**Standard of Evidence:**

Provide the data dictionaries for both the emergency department and hospital discharge data as appropriate as well as any relevant State statutes or regulations.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State's emergency department and hospital discharge data conform to the UB-04 format as of October 1, 2015 though the data standard has been tailored to fit the needs of the State. The data dictionary includes a column that identifies the UB-04 data elements.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>100%</b>
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**Question 275:**

Does the State's trauma registry database adhere to the National Trauma Data Standards?

**Standard of Evidence:**

Provide the trauma registry data dictionary and any relevant State statutes or regulations.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Missouri uses an ImageTrend product to collect data for their trauma registry. The data dictionary is available through the State and the NTDB lists Missouri as a contributing State.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 276:**

Are Abbreviated Injury Scale (AIS) and Injury Severity Scores (ISS) derived from the State emergency department and hospital discharge data for motor vehicle crash patients?

**Standard of Evidence:**

Provide a distribution of AIS and ISS scores for the most recent year available.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The emergency department and hospital discharge data includes ICD codes which are the basis for the AIS and ISS calculations. However, documentation related to the emergency department and hospital discharge data systems was not available and it is unclear if ISS and/or AIS are calculated from the ICD codes within those systems.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>100%</b>
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**Question 277:**

Are Abbreviated Injury Scale (AIS) and Injury Severity Scores (ISS) derived from the State trauma registry for motor vehicle crash patients?

**Standard of Evidence:**

Provide a distribution of AIS and ISS scores for the most recent year available.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The trauma registry collects ICD codes which are the basis for the AIS and ISS calculations. A list of ISS scores for patients treated in 2014 is available, but the source AIS scores were not available for review.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>100%</b>
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**Question 278:**

Does the State EMS database collect the Glasgow Coma Scale (GCS) data for motor vehicle crash patients?

**Standard of Evidence:**

Provide a distribution of GCS scores for motor vehicle crash patients for the most recent year available.

**Question Rank:**  
Less Important

**Assessor conclusions:**

The Glasgow Coma Scale is collected on a voluntary basis and submitted to MARS.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 279:**

Does the State trauma registry collect the Glasgow Coma Scale (GCS) data for motor vehicle crash patients?

**Standard of Evidence:**

Provide a distribution of GCS scores for motor vehicle crash patients for the most recent year available.

**Question Rank:**  
Less Important

**Assessor conclusions:**

The Total Glasgow Coma Scale (GCS) score is recorded for patients transported by EMS providers as well as for all trauma patients submitted to the registry. It is unclear if this process is exclusive to motor vehicle crash patients or all trauma patients.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 280:**

Are there State privacy and confidentiality laws that supersede HIPAA?

**Standard of Evidence:**

Provide the applicable State laws and describe how they are interpreted—including the identification of situations that may impede data sharing within the State and among public health authorities.

**Assessor conclusions:**

Confidentiality of health data is addressed in the State's Code of Regulations (19c10-33). The regulations do not specifically refer to HIPAA but they do allow the Department of Health and Senior Services to establish regulations regarding the release of health care data.



**Question Rank:**  
Very Important

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>100%</b>
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**Question 281:**

Does the EMS system have a formal data dictionary?

**Standard of Evidence:**

Provide the data dictionary including, at a minimum, the variable names and definitions.

**Assessor conclusions:**

Missouri uses the standard NEMSIS 2.2.1 schema and relies upon the vendor's XSD as reference documentation. The data dictionary for the Missouri Ambulance Reporting System (MARS) is maintained by the State.

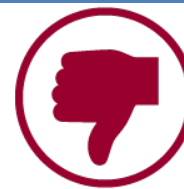


**Question Rank:**  
Very Important

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 282:**

Does the EMS system have formal documentation that provides a summary dataset—characteristics, values, limitations and exceptions, whether submitted or user created—and how it is collected, managed, and maintained?

**Standard of Evidence:**

Provide a user's manual or other form of documentation of the EMS data collection system. Such documentation should include a list of the dataset's variables and a description of how the data is collected, managed and maintained.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The Missouri EMS data collection system was developed by ImageTrend which provides online documentation. The MARS User Guide addresses user set-up and does not address the data elements or attributes nor does it include a description of how the data is collected, managed, and maintained.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 283:**

Does the emergency department dataset have a formal data dictionary?

**Standard of Evidence:**

Provide the data dictionary including, at a minimum, the variable names and definitions.

**Question Rank:**  
Very Important

**Assessor conclusions:**

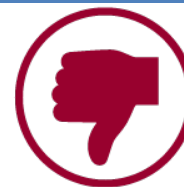
A data dictionary for the Patient Abstract System (PAS) containing information for both emergency department visits and hospital discharges is available.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>100%</b>
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**Question 284:**

Does the emergency department dataset have formal documentation that provides a summary dataset—characteristics, values, limitations and exceptions, whether submitted or user created—and how it is collected, managed, and maintained?

**Standard of Evidence:**

Provide the documentation.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The availability of a user's manual for the emergency department data system that includes a more complete description of the data elements and attributes and how they are collected in the system is valuable for both data collection and analysis purposes - a more comprehensive document than the simple data dictionary.

Respondents assigned	3	Responses received	3	Response rate	100%
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**Question 285:**

Does the hospital discharge dataset have a formal data dictionary?

**Standard of Evidence:**

Provide the data dictionary including, at a minimum, the variable names and definitions.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The Patient Abstract System has a data dictionary that includes information for both the Emergency Department and Hospital Discharge databases.

Respondents assigned	3	Responses received	3	Response rate	100%
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**Question 286:**

Does the hospital discharge dataset have formal documentation that provides a summary dataset—characteristics, values, limitations and exceptions, whether submitted or user created—and how it is collected, managed, and maintained?

**Standard of Evidence:**

Provide the documentation.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The availability of a user's manual for the hospital discharge data system that includes a more complete description of the data elements and attributes and how they are collected in the system is valuable for both data collection and analysis purposes - a more comprehensive document than the simple data dictionary.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>100%</b>
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**Question 287:**

Does the trauma registry have a formal data dictionary?

**Standard of Evidence:**

Provide the data dictionary including, at a minimum, the variable names and definitions.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State uses the National Trauma Data Standard for the trauma registry data collection system. The data dictionary used by the ImageTrend data collection software is available.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 288:**

Does the trauma registry dataset have formal documentation that provides a summary dataset—characteristics, values, limitations and exceptions, whether submitted or user created—and how it is collected, managed, and maintained?

**Standard of Evidence:**

Provide the documentation.

**Question Rank:**  
Very Important

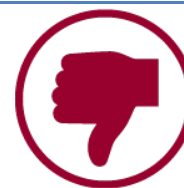
**Assessor conclusions:**

The State uses an ImageTrend software package for the collection of the trauma registry data; much of the documentation provided by ImageTrend is accessible online. The Time Critical Diagnosis (TCD) User Guide gives direction to data entry personnel for standardized data entry and report writing. The documentation does not address limitations and exceptions, or specifics of how this registry is managed and maintained.

Respondents assigned	3	Responses received	2	Response rate	66.7%
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**Question 289:**

Does the vital records system have a formal data dictionary?

**Standard of Evidence:**

Provide the data dictionary including, at a minimum, the variable names and definitions.

**Question Rank:**  
Very Important

**Assessor conclusions:**

A data dictionary was not available for the vital records system. It would benefit the TRCC to obtain this document as part of a complete traffic records system inventory.

Respondents assigned	3	Responses received	1	Response rate	33.3%
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**Question 290:**

Does the vital records system have formal documentation that provides a summary dataset—characteristics, values, limitations and exceptions, whether submitted or user created—and how it is collected, managed, and maintained?

**Standard of Evidence:**

Provide the documentation.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Formal documentation for the vital records system was not available for review.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 291:**

Is there a single entity that collects and compiles data from the local EMS agencies?

**Standard of Evidence:**

Identify the State agency or third party to which the EMS data is initially submitted.

**Question Rank:**  
Very Important

**Assessor conclusions:**

State Statute 190 identifies the Bureau of EMS as the agency responsible for the Missouri Ambulance Reporting System (MARS).

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 292:**

Is there a single entity that collects and compiles data on emergency department visits from individual hospitals?

**Standard of Evidence:**

Identify the State agency or third party to which the data on emergency department visits is initially submitted.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The Missouri Hospital Association collects data from most hospitals in the State. The emergency department and hospital discharge data are passed along to the Missouri Department of Health on a quarterly basis.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>100%</b>
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**Question 293:**

Is there a single entity that collects and compiles data on hospital discharges from individual hospitals?

**Standard of Evidence:**

Identify the State agency or third party to which the data on hospital discharges is initially submitted.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The Missouri Hospital Association collects data from most hospitals in the State. The emergency department and hospital discharge data are passed along to the Missouri Department of Health on a quarterly basis.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>100%</b>
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**Question 294:**

Is there a process flow diagram that outlines the EMS system's key data process flows, including inputs from other systems?

**Standard of Evidence:**

Provide the flow diagram. Alternatively, provide a narrative description of the EMS data process flows from dispatch to submission of the report to the State EMS repository.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The Bureau of EMS maintains a flow chart that shows how data is entered into the MARS.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 295:**

Is there a process flow diagram that outlines the emergency department data's key data process flows, including inputs from other systems?

**Standard of Evidence:**

Provide the flow diagram. Alternatively, provide a narrative description of the emergency department data process flows from patient arrival to submission of the uniform billing data to the State repository.

**Question Rank:**  
Very Important

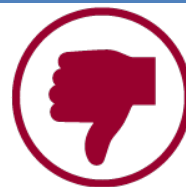
**Assessor conclusions:**

No description or process flow diagram detailing the data collection process for the State's emergency department data was available.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 296:**

Is there a process flow diagram that outlines the hospital discharge data's key data process flows, including inputs from other systems?

**Standard of Evidence:**

Provide the flow diagram. Alternatively, provide a narrative description of the hospital discharge data process flows from patient arrival to submission of the uniform billing data to the State repository.

**Question Rank:**  
Very Important

**Assessor conclusions:**

No description or process flow diagram detailing the data collection process for the State's hospital discharge data was available.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 297:**

Is there a process flow diagram that outlines the trauma registry's key data process flows, including inputs from other systems?

**Standard of Evidence:**

Provide the flow diagram. Alternatively, provide a narrative description of the hospital discharge data process flows, from trauma activation to submission of the trauma data to the State registry.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Patient care providers chart all relevant trauma data which is then provided to the designated trauma registrar at each trauma facility. The relevant data points are entered into the trauma registry via a web based system. It would benefit the State to formalize the process flow to include the trauma activation component.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 298:**

Are there separate procedures for paper and electronic filing of EMS patient care reports?

**Standard of Evidence:**

Provide a copy of the procedures for paper and electronic filing or a narrative describing the procedures.

**Question Rank:**  
Less Important

**Assessor conclusions:**

All patient care records in Missouri are submitted electronically.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 299:**

Are there procedures for collecting, editing, error-checking, and submitting emergency department and hospital discharge data to the statewide repository?

**Standard of Evidence:**

Provide a copy of the procedures or a narrative describing the process of collecting, editing and submitting emergency department and hospital discharge data to the statewide repository.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Limited quality control is done by the State. Once the emergency department and hospital discharge data is submitted to the State, SAS software is used to check for outliers in the hospital charges. It is unclear if the hospitals use a uniform system for quality control before the data is submitted to the hospital association or if the hospital association employs a uniform system for quality control.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 300:**

Does the trauma registry have documented procedures for collecting, editing, error checking, and submitting data?

**Standard of Evidence:**

Provide a copy of the procedures or a narrative describing the process for collecting, error-checking and submitting trauma registry data.

**Question Rank:**  
Very Important

**Assessor conclusions:**

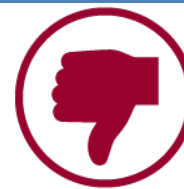
The trauma registry software provides end users with an immediate validation score as the data is submitted. Records not meeting the 94% minimum validation score are rejected. The State also has a data team who is available to assist users with data collection and submission.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 301:**

Are there procedures for collecting, editing, error-checking, and submitting data to the statewide vital records repository?

**Standard of Evidence:**

Provide a copy of the procedures or a narrative describing the process for collecting, error-checking and submitting data to the vital records repository.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Quality control procedures for submitting data to the Statewide vital records repository were not available.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 302:**

Are there documented procedures for returning data to the reporting EMS agencies for quality assurance and improvement (e.g., correction and resubmission)?

**Standard of Evidence:**

Provide a copy of the procedures or a narrative describing the process for returning data to the reporting EMS agencies for correction and resubmission.

**Question Rank:**  
Very Important

**Assessor conclusions:**

State EMS inspectors conduct periodic audits of the ePCR data. Reports entered directly into MARS receive a validation score for QA/QC purposes. Agencies using third party vendors also receive feedback on data deficiencies. System validation rules prevent the end user from saving the record until the errors are addressed.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 303:**

Are there documented procedures for returning data to the reporting emergency departments for quality assurance and improvement (e.g., correction and resubmission)?

**Standard of Evidence:**

Provide a copy of the procedures or a narrative that describes the process for returning data to the reporting emergency departments for correction and resubmission.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The Missouri Hospital Association contacts the facilities when data quality errors have been identified. State regulations require that each data element shall have an acceptable code in at least 99% of the records and each data element shall be missing or unknown in less than 1% of the records. While the procedures for the correction and resubmission of rejected data were not available for review, the regulations require that a provider submit to the Missouri Department of Health and Senior Services a written notification and plan of correction for the identified deficiencies.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 304:**

Are there documented procedures for returning hospital discharge data to the reporting hospitals for quality assurance and improvement (e.g., correction and resubmission)?

**Standard of Evidence:**

Provide a copy of the procedures or a narrative describing the process for returning data to the reporting hospitals for correction and resubmission.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The Missouri Hospital Association contacts the facilities when data quality errors have been identified. State regulations require that each data element shall have an acceptable code in at least ninety-nine percent (99%) of the records and each data element shall be missing or unknown in less than 1% of the records. The regulations require that a provider submit to the Missouri Department of Health and Senior Services a written notification and plan of correction for the identified deficiencies.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 305:**

Are there documented procedures for returning trauma data to the reporting trauma center for quality assurance and improvement (e.g., correction and resubmission)?

**Standard of Evidence:**

Provide a copy of the procedures or a narrative describing the process for returning data to the reporting trauma center for correction and resubmission.

**Question Rank:**  
Very Important

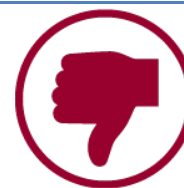
**Assessor conclusions:**

The data collection system, TCD, has validation rules inherent to the system that address both national standard data elements and State-specific data elements. Only those records meeting or exceeding the validation score are accepted into the system. There is no tracking of records that did not meet the validation score, were corrected, and resubmitted.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 306:**

Are there documented procedures for returning data to the reporting vital records agency for quality assurance and improvement (e.g., correction and resubmission)?

**Standard of Evidence:**

Provide a copy of the procedures or a narrative describing the process for returning data to the reporting vital records agency for correction and resubmission.

**Question Rank:**  
Very Important

**Assessor conclusions:**

No information was available on the quality assurance process that may be used within the State for the correction and resubmission of vital records data that may contain errors.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 307:**

Is aggregate EMS data available to outside parties (e.g., universities, traffic safety professionals) for analytical purposes?

**Standard of Evidence:**

Provide a copy of the data access policy, data use agreement, or link to appropriate data access website. Alternatively, provide a description of how outside parties may obtain access to the EMS data for analytical purposes.

**Question Rank:**  
Very Important

**Assessor conclusions:**

MARS data is available from the Bureau of EMS through Missouri's Sunshine Law (State Statute 610). Interested parties may make a specific request in writing to the Bureau of EMS, which will respond in accordance with their internal policies and procedures.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 308:**

Is aggregate emergency department data available to outside parties (e.g., universities, traffic safety professionals) for analytical purposes?

**Standard of Evidence:**

Provide a copy of the data access policy, data use agreement, or link to appropriate data access website. Alternatively, provide a description of how outside parties may obtain access to the emergency department data for analytical purposes.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Emergency department data is available via an online querying tool. Aggregate data can also be requested through Missouri's Sunshine Law. Requests are subject to review by the General Counsel and may incur a time and materials cost depending on the nature of the request.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>100%</b>
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**Question 309:**

Is aggregate hospital discharge data available to outside parties (e.g., universities, traffic safety professionals) for analytical purposes?

**Standard of Evidence:**

Provide a copy of the data access policy, data use agreement, or link to appropriate data access website. Alternatively, provide a description of how outside parties may obtain access to the hospital discharge data for analytical purposes.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Hospital data is available through an online query system. Aggregate data is available under the Missouri Sunshine Law through a request process. The request is reviewed by the General Counsel to ensure HIPAA compliance and may incur a time and materials charge based on the extent of work required to provide the data.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>100%</b>
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**Question 310:**

Is aggregate trauma registry data available to outside parties (e.g., universities, traffic safety professionals) for analytical purposes?

**Standard of Evidence:**

Provide a copy of the data access policy, data use agreement, or link to appropriate data access website. Alternatively, provide a description of how outside parties may obtain access to the trauma registry data for analytical purposes.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Aggregate trauma registry data is available by request under the Missouri Sunshine Law.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 311:**

Is aggregate vital records data available to outside parties (e.g., universities, traffic safety professionals) for analytical purposes?

**Standard of Evidence:**

Provide a copy of the data access policy, data use agreement, or link to appropriate data access website. Alternatively, provide a description of how outside parties may obtain access to the vital records data for analytical purposes.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Vital records data is available through an online query tool and aggregate data can be requested under the State's Sunshine Law.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>100%</b>
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**Question 312:**

Is there an interface among the EMS data and emergency department and hospital discharge data?

**Standard of Evidence:**

Provide a narrative description of the interface link between the EMS data and the emergency department and hospital discharge data. If available provide the applicable data exchange agreement.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

MARS allows hospital access to patient care reports through the Missouri Time Critical Diagnosis (TCD) system.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 313:**

Is there an interface between the EMS data and the trauma registry data?

**Standard of Evidence:**

Provide a narrative description of the interface link between the EMS data and the trauma registry data. If available provide the applicable data exchange agreement.

**Assessor conclusions:**

MARS is linked to the Trauma Registry through the Missouri Time Critical Diagnosis (TCD) application. This process allows receiving facilities to access EMS reports that have been uploaded into their system. A formal agreement is not required as both systems (TCD and MARS) are managed by the same Section for Health Standards and Licensure within the Division of Regulations of the Department of Health and Senior Services.



**Question Rank:**  
Very Important

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 314:**

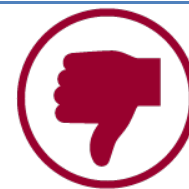
Is there an interface between the vital statistics and hospital discharge data?

**Standard of Evidence:**

Provide a narrative description of the interface link between the vital statistics and hospital discharge data. If available provide the applicable data exchange agreement.

**Assessor conclusions:**

Vital statistics can be linked to inpatient hospital data but there is not a real-time interface between the two data systems.



**Question Rank:**  
Somewhat Important

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 315:**

Are there automated edit checks and validation rules to ensure that entered data falls within a range of acceptable values and is logically consistent among data elements?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which automated edit checks and validation rules ensure entered data falls within the range of acceptable values and is logically consistent among fields.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Each ePCR entered into MARS receives a validation score that reflects the data's compliance with Missouri's required data elements. Services that submit third party data not meeting Missouri's data minimums receive a rejection notice along with a report regarding missing data elements.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 316:**

Is limited state-level correction authority granted to quality control staff working with the statewide EMS database in order to amend obvious errors and omissions without returning the report to the originating entity?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which limited state-level correction authority is granted to quality control staff working with the statewide EMS database.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

The Bureau of EMS has administrative rights to MARS and does have the ability to make minor corrections. However, it is policy of the State that the local services should conduct their own quality reviews and make any necessary corrections at that level.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 317:**

Are there formally documented processes for returning rejected EMS patient care reports to the collecting entity and tracking resubmission to the statewide EMS database?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which rejected EMS patient care reports are returned to the collecting agency and tracked through resubmission to the statewide EMS database.

**Question Rank:**  
Very Important

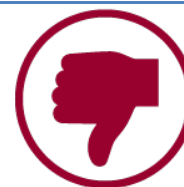
**Assessor conclusions:**

MARS does not allow submission of PCR data with a validation score below a total 90% validation. Validation requires that the reports meet the Missouri State Minimums for EMS reporting. It is unclear if rejected records are tracked as well as any resubmission attempts.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 318:**

Are there timeliness performance measures tailored to the needs of EMS system managers and data users?

**Standard of Evidence:**

Provide a complete list of timeliness performance measures for the EMS system and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Reporting requirements are not the same as performance measures. A performance measure allows an agency to monitor the health and progress of a data system. For example, achieving 90% of all life threatening reports submitted to the Bureau of EMS within 30 days of incident is an example of a timeliness performance measure. The regulation change requiring 100% of incident data to be imported into the State system with 100% validation is a goal and offers an opportunity to develop performance measure to measure progress to these goals.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 319:**

Are there accuracy performance measures tailored to the needs of EMS system managers and data users?

**Standard of Evidence:**

Provide a complete list of accuracy performance measures for the EMS system and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Regulations are not performance measures. For example achieving 100% of patient care reports with a validation score of 95 or better is an example of a performance measure for accuracy. The regulatory change will provide an opportunity to develop performance measures to measure progress toward that goal.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 320:**

Are there completeness performance measures tailored to the needs of EMS system managers and data users?

**Standard of Evidence:**

Provide a complete list of completeness performance measures for the EMS system and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

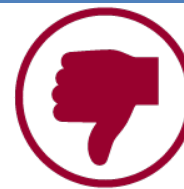
**Assessor conclusions:**

The State has established minimal time parameters for the transportation of Trauma, Stroke, and STEMI patients; these are goals only for timeliness and not completeness. No completeness performance measures related to the MARS system have been developed.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 321:**

Are there uniformity performance measures tailored to the needs of EMS system managers and data users?

**Standard of Evidence:**

Provide a complete list of uniformity performance measures for the EMS system and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

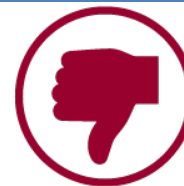
**Assessor conclusions:**

The State has established minimal time parameters for the transportation of Trauma, Stroke, and STEMI patients; these goals are for timeliness and not performance measures of uniformity. No uniformity performance measures have been developed for MARS.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 322:**

Are there integration performance measures tailored to the needs of EMS system managers and data users?

**Standard of Evidence:**

Provide a complete list of integration performance measures for the EMS system and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

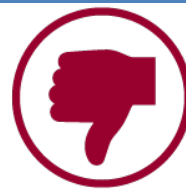
**Assessor conclusions:**

The State has established minimal time parameters for the transportation of Trauma, Stroke, and STEMI patients. However, these are only goals for timeliness and not performance measures of integration. No integration performance measures have been developed for MARS.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 323:**

Are there accessibility performance measures tailored to the needs of EMS system managers and data users?

**Standard of Evidence:**

Provide a complete list of accessibility performance measures for the EMS system and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State has established minimal time parameters for the transportation of Trauma, Stroke, and STEMI patients; these are goals for timeliness and not measures for accessibility. No accessibility performance measures have been developed for MARS.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 324:**

Has the State established numeric goals—performance metrics—for each EMS system performance measure?

**Standard of Evidence:**

Provide specific numeric goals and related performance measures for each attribute as determined by the State.

**Question Rank:**  
Somewhat Important

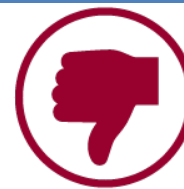
**Assessor conclusions:**

The Time Critical Diagnosis System, implemented through State statute, requires that patients are transported to an appropriate medical facility in a timely manner based on certain medical criteria. The regulatory change will require 100% submission of patient care reports with 100% validation. The requirement of 100% submission with 100% validation can be used as numeric goals to measure improvements in the EMS data system. The committee, expected to be formed after the regulatory change, may consider additional performance metrics for the other performance measures.

<b>Respondents assigned</b>	<b>4</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>50%</b>
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**Question 325:**

Is there performance reporting for the EMS system that provides specific timeliness, accuracy, and completeness feedback to each submitting entity?

**Standard of Evidence:**

Provide a sample report, list of receiving agencies, and specify frequency of issuance.

**Question Rank:**  
Very Important

**Assessor conclusions:**

There are regulations in place that relate to timeliness, accuracy, and completeness of the State's EMS data. Routine onsite inspections are conducted for regulatory compliance, the results of which are addressed at State Advisory Committee meetings and regional meetings. The State does not provide performance reporting feedback to the reporting agencies in any formal manner such as quarterly reports.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 326:**

Are high frequency errors used to update EMS system training content, data collection manuals, and validation rules?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which high frequency errors are used to update EMS system training content, data collection manuals, and validation rules.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State provides local agencies with periodic analytical reports. When an anomaly is identified, the State's Data Management team works directly with the agency to resolve any technical issues. The State also conducts side-by-side comparison of data from the records stored at the local level to the data that is submitted electronically into MARS. Onsite training for data managers is provided upon request and as necessary during the State inspection process.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 327:**

Are quality control reviews conducted to ensure the completeness, accuracy, and uniformity of injury data in the EMS system?

**Standard of Evidence:**

Provide a sample quality control review of injury records that details the system's data completeness.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

The Bureau of EMS conducts audits of the State's data by analyzing specific key elements. One example is the review of the Glasgow Coma Scale. This particular data element is used in conjunction with a validation rule that requires the end users to submit this data for all trauma patients.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 328:**

Are periodic comparative and trend analyses used to identify unexplained differences in the EMS data across years and agencies?

**Standard of Evidence:**

Describe the analyses, provide a sample record or output, and specify their frequency.

**Question Rank:**

Less Important

**Assessor conclusions:**

The State conducts bi-annual comparisons of the data collected in MARS. Recently, the State saw an increase in the number of records submitted which increased the need to monitor the quality of the data and the ability of the State's system to handle the extra records. At the present time, reviews are conducted only to evaluate the accuracy of the data and the stability of the system.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 329:**

Is data quality feedback from key users regularly communicated to EMS data collectors and data managers?

**Standard of Evidence:**

Describe the process for transmitting and utilizing key users' data quality feedback to inform program changes.

**Question Rank:**

Somewhat Important

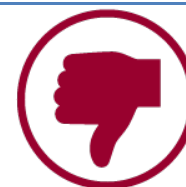
**Assessor conclusions:**

The State Advisory Committee meets monthly in Jefferson City along with staff from the Bureau of EMS. Bureau staff will also provide assistance to the local data managers during normal State inspections being conducted.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 330:**

Are EMS data quality management reports produced regularly and made available to the State TRCC?

**Standard of Evidence:**

Provide a sample quality management report and specify frequency of transmission to the State TRCC.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

A representative from the Bureau of EMS attends each TRCC meeting, providing data and information as needed or requested for review by the committee. The Bureau of EMS presents to State and Federal officials on the State of Missouri EMS System and its data. A sample quality management report was not available for review.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 331:**

Are there automated edit checks and validation rules to ensure that entered data falls within a range of acceptable values and is logically consistent among data elements?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which automated edit checks and validation rules ensure entered data falls within the range of acceptable values and is logically consistent among fields.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The MARS data collection system includes a series of automated edit checks and validation rules.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 332:**

Is limited state-level correction authority granted to quality control staff working with the statewide emergency department and hospital discharge databases in order to amend obvious errors and omissions without returning the report to the originating entity?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which limited state-level correction authority is granted to quality control staff working with the statewide emergency department and hospital discharge databases.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

No information was available to describe how hospital and emergency department records may be corrected at the State level.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 333:**

Are there formally documented processes for returning rejected emergency department and hospital discharge records to the collecting entity and tracking resubmission to the statewide emergency department and hospital discharge databases?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which rejected emergency department and hospital discharge records are returned to the collecting agency and tracked through resubmission to the statewide emergency department and hospital discharge databases.

**Question Rank:**  
Very Important

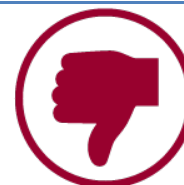
**Assessor conclusions:**

The Missouri Hospital Association contacts the individual facilities when data quality errors are identified. The record is resubmitted to the hospital association after correction. Formally documenting the process used or time frame in which this occurs could lead to future performance measures that may help monitor improvements in the data system.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 334:**

Are there timeliness performance measures tailored to the needs of emergency department and hospital discharge database managers and data users?

**Standard of Evidence:**

Provide a complete list of timeliness performance measures for the emergency department and hospital discharge databases and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Regulations are not a substitute for performance measures but they can be used to develop useful measures to track improvements in the data collection system. For example, achieving 95% hospitals submitting data to the Missouri Hospital Association within 30 days of the end of the quarter.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 335:**

Are there accuracy performance measures tailored to the needs of emergency department and hospital discharge database managers and data users?

**Standard of Evidence:**

Provide a complete list of accuracy performance measures for the emergency department and hospital discharge databases and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

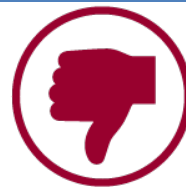
**Assessor conclusions:**

Regulations are not a substitute for performance measures but they can be used to develop useful metrics to measure the improvements in a data system.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 336:**

Are there completeness performance measures tailored to the needs of emergency department and hospital discharge database managers and data users?

**Standard of Evidence:**

Provide a complete list of completeness performance measures for the emergency department and hospital discharge databases and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

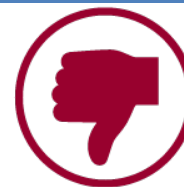
**Assessor conclusions:**

Regulations can be used to develop performance measures that would help the State measure improvements in their data system. NHTSA has published several documents that provide samples of performance measures that could be used as a model to develop metrics for the State.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 337:**

Are there uniformity performance measures tailored to the needs of emergency department and hospital discharge database managers and data users?

**Standard of Evidence:**

Provide a complete list of uniformity performance measures for the emergency department and hospital discharge databases and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

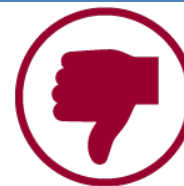
**Assessor conclusions:**

Regulations can be used to develop performance measures that would help the State measure improvements in their data system. NHTSA has published several documents that provide samples of performance measures that could be used as a model to develop metrics for the State.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 338:**

Are there integration performance measures tailored to the needs of emergency department and hospital discharge database managers and data users?

**Standard of Evidence:**

Provide a complete list of integration performance measures for the emergency department and hospital discharge databases and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

**Assessor conclusions:**

No integration performance measures are in place for the hospital data systems.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 339:**

Are there accessibility performance measures tailored to the needs of emergency department and hospital discharge database managers and data users?

**Standard of Evidence:**

Provide a complete list of accessibility performance measures for the emergency department and hospital discharge database and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

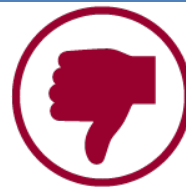
**Assessor conclusions:**

The State does not have accessibility performance measures in place for the hospital data systems.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 340:**

Has the State established numeric goals—performance metrics—for each emergency department and hospital discharge database performance measure?

**Standard of Evidence:**

Provide specific numeric goals and related performance measures for each attribute as determined by the State.

**Question Rank:**  
Somewhat Important

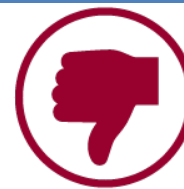
**Assessor conclusions:**

Numeric goals have not been established for either the emergency department data system or the hospital discharge data system.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 341:**

Is there performance reporting for the emergency department and hospital discharge databases that provides specific timeliness, accuracy, and completeness feedback to each submitting entity?

**Standard of Evidence:**

Provide a sample report, list of receiving agencies, and specify frequency of issuance.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The Missouri Department of Health and Senior Services works collaboratively with the Missouri Hospital Association to make sure the hospital data is timely and complete but there is no formal method for performance reporting back to the submitting hospitals.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 342:**

Are high frequency errors used to update emergency department and hospital discharge database training content, data collection manuals, and validation rules?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which high frequency errors are used to update emergency department and hospital discharge database training content, data collection manuals, and validation rules.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Observed errors have been used to modify the analysis of the hospital data sets but this appears to be on an ad-hoc basis. There does not appear to be a formal process in place to routinely use high frequency data errors as a method to revise training and data collection manuals.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 343:**

Are quality control reviews conducted to ensure the completeness, accuracy, and uniformity of injury data in the emergency department and hospital discharge databases?

**Standard of Evidence:**

Provide a sample quality control review of injury records that details the system's data completeness.

**Question Rank:**  
Somewhat  
Important

**Assessor conclusions:**

Each quarter of the Patient Abstract System data is reviewed for obvious errors and missing data. The sample provided is limited to the number of records submitted by a hospital and does not demonstrate quality control review to ensure accuracy or uniformity.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 344:**

Are periodic comparative and trend analyses used to identify unexplained differences in the emergency department and hospital discharge data across years and agencies?

**Standard of Evidence:**

Describe the analyses, provide a sample record or output, and specify their frequency.

**Question Rank:**  
Less Important

**Assessor conclusions:**

Current year data is compared with previous year data to identify obvious errors and missing data in the emergency department and hospital discharge datasets.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 345:**

Is data quality feedback from key users regularly communicated to emergency department and hospital discharge data collectors and data managers?

**Standard of Evidence:**

Describe the process for transmitting and utilizing key users' data quality feedback to inform program changes.

**Question Rank:**  
Somewhat  
Important

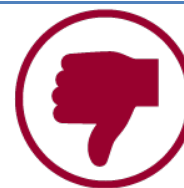
**Assessor conclusions:**

Feedback from analysts is given to the data managers on a case-by-case basis. For example, errors in the census tract information were reported to the Missouri Hospital Association, which corrected the problem by revising their SAS programming code. It is unclear if information that could be used to improve data quality is passed back to the data collectors at the individual facilities.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 346:**

Are emergency department and hospital discharge data quality management reports produced regularly and made available to the State TRCC?

**Standard of Evidence:**

Provide a sample quality management report and specify frequency of transmission to the State TRCC.

**Question Rank:**  
Somewhat  
Important

**Assessor conclusions:**

Quality management reports related to hospital and emergency department data are not routinely made available to the TRCC.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 347:**

Are there automated edit checks and validation rules to ensure that entered data falls within a range of acceptable values and is logically consistent among data elements?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which automated edit checks and validation rules ensure entered data falls within the range of acceptable values and is logically consistent among fields.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Both the EMS and Trauma Registry datasets conform to respective national data parameters through a set of validation rules inherent to the data collection system. Also included in the data collection system are validation rules for data elements specific to the State and based on State regulations.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 348:**

Is limited state-level correction authority granted to quality control staff working with the statewide trauma registry in order to amend obvious errors and omissions without returning the report to the originating entity?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which limited state-level correction authority is granted to quality control staff working with the statewide trauma registry.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

There is limited State-level correction authority to correct errors, but the policy is to have each facility make their own corrections. Corrections are made to ensure the validation minimum score is met for each record.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 349:**

Are there formally documented processes for returning rejected data to the collecting entity and tracking resubmission to the statewide trauma registry?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which rejected data is returned to the collecting agency and tracked through resubmission to the statewide trauma registry.

**Question Rank:**  
Very Important

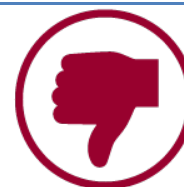
**Assessor conclusions:**

Records that do not meet a minimum validation score are automatically rejected from the TCD system. It is unclear if any other quality control reviews are in place to ensure complete and accurate patient records. No additional information was available to address the eventual inclusion of previously rejected records which pass validations.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 350:**

Are there timeliness performance measures tailored to the needs of trauma registry managers and data users?

**Standard of Evidence:**

Provide a complete list of timeliness performance measures for the trauma registry and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Missouri regulations require that facilities submit trauma registry data within 30 days after the end of each quarter. Regulations themselves are not a substitute for performance measures. Rather, they can be used to establish a goal that can be measured against. In this case, tracking the number of trauma centers that submit data within 30 days of the end of the quarter can be monitored.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 351:**

Are there accuracy performance measures tailored to the needs of trauma registry managers and data users?

**Standard of Evidence:**

Provide a complete list of accuracy performance measures for the trauma registry and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

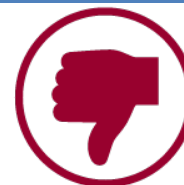
**Assessor conclusions:**

TCD policy dictates that trauma facilities must meet a validity score of 94% - 100% for each trauma patient record entered into the registry. This is a goal and not a performance measure. Tracking the average validity scores for each trauma center would be one metric that could be used to monitor a center's performance.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 352:**

Are there completeness performance measures tailored to the needs of trauma registry managers and data users?

**Standard of Evidence:**

Provide a complete list of completeness performance measures for the trauma registry and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

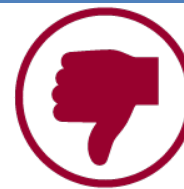
**Assessor conclusions:**

TCD policy dictates that all trauma facilities must meet a validity score of 94% - 100% for each trauma patient entered into the registry. This is a goal not an indicator and the validity score by itself is not a substitute for a performance measure.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 353:**

Are there uniformity performance measures tailored to the needs of trauma registry managers and data users?

**Standard of Evidence:**

Provide a complete list of uniformity performance measures for the trauma registry and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

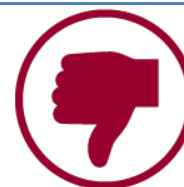
**Assessor conclusions:**

No uniformity performance measures are in place for the trauma registry system.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 354:**

Are there integration performance measures tailored to the needs of trauma registry managers and data users?

**Standard of Evidence:**

Provide a complete list of integration performance measures for the trauma registry and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Integration refers to the linkage of trauma registry records with records from other components of the traffic records system (i.e. crash, EMS). One performance measure could be to link trauma registry and crash records for calendar year 2014. The flow of data to and from the TCD or the NTDB registries for comparisons locally and at the national level would be more fitting for a uniformity measurement, not integration.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 355:**

Are there accessibility performance measures tailored to the needs of trauma registry managers and data users?

**Standard of Evidence:**

Provide a complete list of accessibility performance measures for the trauma registry and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Though all facilities in the State can access the online web portal known as the TCD (Time Critical Diagnosis System), this does not measure widespread accessibility. Performance measures are used to monitor changes in the 'health' of a data system. Goals should be established using metrics that can be measured on a periodic basis to allow the State to track improvements or to identify deficiencies. Accessibility is measured through customer satisfaction surveys, web portal metrics (down time-both scheduled and unscheduled), or data request metrics (number requests, completed, time to completion).

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 356:**

Has the State established numeric goals—performance metrics—for each trauma registry performance measure?

**Standard of Evidence:**

Provide specific numeric goals and related performance measures for each attribute as determined by the State.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

There are a few goals that have been established by State regulation such as the 94% validation rule. These should be used as the basis for the development of performance measures.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 357:**

Is there performance reporting for the trauma registry that provides specific timeliness, accuracy, and completeness feedback to each submitting entity?

**Standard of Evidence:**

Provide a sample report, list of receiving agencies, and specify frequency of issuance.

**Question Rank:**  
Very Important

**Assessor conclusions:**

TCD staff generates quality reports each quarter. If issues are identified, the responsible facilities are contacted. A more formal process of performance reporting back to the submitting facilities may benefit both the trauma facilities in recognizing routine data errors and the registry with better quality data.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 358:**

Are high frequency errors used to update trauma registry training content, data collection manuals, and validation rules?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which high frequency errors are used to update trauma registry training content, data collection manuals, and validation rules.

**Question Rank:**  
Very Important

**Assessor conclusions:**

TCD staff works to correct identified data collection problems by customizing the TCD system. They also provide onsite review and education, as needed, during their inspection process.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 359:**

Are quality control reviews conducted to ensure the completeness, accuracy, and uniformity of injury data in the trauma registry?

**Standard of Evidence:**

Provide a sample quality control review of injury records that details the system's data completeness.

**Question Rank:**

Somewhat Important

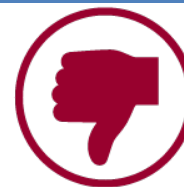
**Assessor conclusions:**

It is unclear if the 'Total Incident Count Per Trauma Form' report is providing a count of data quality incidents or trauma incidents. While it was stated that the TCD staff conduct quarterly reviews of the data, that information is insufficient to determine if the quality control reviews conducted specifically ensure the completeness, accuracy, and uniformity of the trauma registry data.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 360:**

Are periodic comparative and trend analyses used to identify unexplained differences in the trauma registry data across years and agencies?

**Standard of Evidence:**

Describe the analyses, provide a sample record or output, and specify their frequency.

**Question Rank:**

Less Important

**Assessor conclusions:**

Generated reports are reviewed on a regular basis. It is unclear what information is provided in those reports or how they are used to identify changes in frequency or quality of trauma registry records over time.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 361:**

Is data quality feedback from key users regularly communicated to trauma registry data collectors and data managers?

**Standard of Evidence:**

Describe the process for transmitting and utilizing key users' data quality feedback to inform program changes.

**Question Rank:**

Somewhat Important

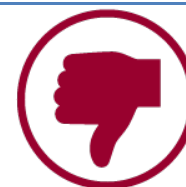
**Assessor conclusions:**

TCD staff review data on a daily basis. Data quality is relayed back to data collectors and managers on a regular basis through phone calls, emails, and in-person visits to ensure regulatory compliance.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 362:**

Are trauma registry data quality management reports produced regularly and made available to the State TRCC?

**Standard of Evidence:**

Provide a sample quality management report and specify frequency of transmission to the State TRCC.

**Question Rank:**

Somewhat Important

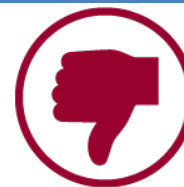
**Assessor conclusions:**

The Department of Health is represented on the TRCC and reports are provided as requested. It would benefit the TRCC to include the Department reports as a standing agenda item, allowing the TRCC to stay abreast of changes and improvements in the health-related data systems and help facilitate integration and analysis of all traffic records data.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 363:**

Are there automated edit checks and validation rules to ensure that entered data falls within a range of acceptable values and is logically consistent among data elements?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which automated edit checks and validation rules ensure entered data falls within the range of acceptable values and is logically consistent among fields.

**Question Rank:**  
Very Important

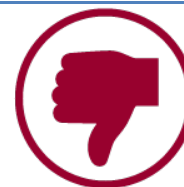
**Assessor conclusions:**

Information on edit checks and validation rules specific to the vital records system was not available.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 364:**

Is limited state-level correction authority granted to quality control staff working with vital records in order to amend obvious errors and omissions without returning the report to the originating entity?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which limited state-level correction authority is granted to quality control staff working with vital records.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

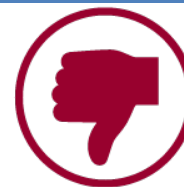
Information regarding State-level correction authority to amend obvious errors was not available.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 365:**

Are there formally documented processes for returning rejected data to the collecting entity and tracking resubmission to vital records?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which rejected data is returned to the collecting agency and tracked through resubmission to vital records.

**Question Rank:**  
Very Important

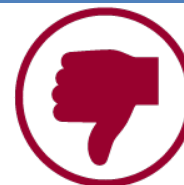
**Assessor conclusions:**

Information about formally documented processes for tracking rejected data between the originating entity and the State was not available.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 366:**

Are there timeliness performance measures tailored to the needs of vital records managers and data users?

**Standard of Evidence:**

Provide a complete list of timeliness performance measures for vital records and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Limited information was available about the vital records system to allow an adequate review of its processes and capabilities.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 367:**

Are there accuracy performance measures tailored to the needs of vital records managers and data users?

**Standard of Evidence:**

Provide a complete list of accuracy performance measures for vital records and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

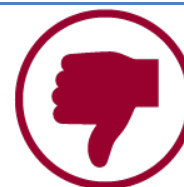
**Assessor conclusions:**

Limited information was available about the vital records system to allow an adequate review of its processes and capabilities.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 368:**

Are there completeness performance measures tailored to the needs of vital records managers and data users?

**Standard of Evidence:**

Provide a complete list of completeness performance measures for vital records and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

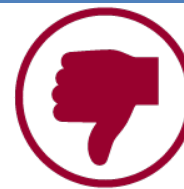
**Assessor conclusions:**

Limited information was available about the vital records system to allow an adequate review of its processes and capabilities.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 369:**

Are there uniformity performance measures tailored to the needs of vital records managers and data users?

**Standard of Evidence:**

Provide a complete list of uniformity performance measures for vital records and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

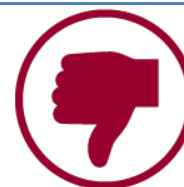
**Assessor conclusions:**

Limited information was available about the vital records system to allow an adequate review of its processes and capabilities.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 370:**

Are there integration performance measures tailored to the needs of vital records managers and data users?

**Standard of Evidence:**

Provide a complete list of integration performance measures for vital records and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Limited information was available about the vital records system to allow an adequate review of its processes and capabilities.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 371:**

Are there accessibility performance measures tailored to the needs of vital records managers and data users?

**Standard of Evidence:**

Provide a complete list of accessibility performance measures for vital records and explain how these measures are used to inform decision-making.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Limited information was available about the vital records system to allow an adequate review of its processes and capabilities.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 372:**

Has the State established numeric goals—performance metrics—for each vital records performance measure?

**Standard of Evidence:**

Provide specific numeric goals and related performance measures for each attribute as determined by the State.

**Question Rank:**  
Somewhat Important

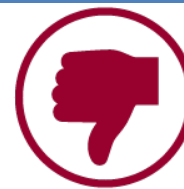
**Assessor conclusions:**

Limited information was available about the vital records system to allow an adequate review of its processes and capabilities.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 373:**

Is there performance reporting for vital records that provides specific timeliness, accuracy, and completeness feedback to each submitting entity?

**Standard of Evidence:**

Provide a sample report, list of receiving agencies, and specify frequency of issuance.

**Question Rank:**  
Very Important

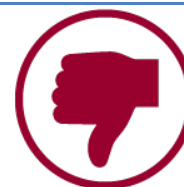
**Assessor conclusions:**

Limited information was available about the vital records system to allow an adequate review of its processes and capabilities.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 374:**

Are high frequency errors used to update vital records training content, data collection manuals, and validation rules?

**Standard of Evidence:**

Provide the formal methodology or describe the process by which high frequency errors are used to update vital records training content, data collection manuals, and validation rules.

**Question Rank:**  
Very Important

**Assessor conclusions:**

Limited information was available about the vital records system to allow an adequate review of its processes and capabilities.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 375:**

Are quality control reviews conducted to ensure the completeness, accuracy, and uniformity of injury data in the vital records?

**Standard of Evidence:**

Provide a sample quality control review of injury records that details the system's data completeness.

**Question Rank:**  
Somewhat Important

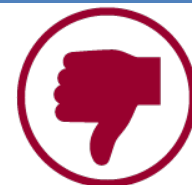
**Assessor conclusions:**

Limited information was available about the vital records system to allow an adequate review of its processes and capabilities.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 376:**

Are periodic comparative and trend analyses used to identify unexplained differences in the vital records data across years and agencies?

**Standard of Evidence:**

Describe the analyses, provide a sample record or output, and specify their frequency.

**Question Rank:**  
Less Important

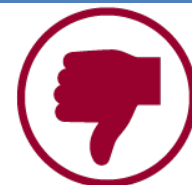
**Assessor conclusions:**

Limited information was available about the vital records system to allow an adequate review of its processes and capabilities.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 377:**

Is data quality feedback from key users regularly communicated to vital records data collectors and data managers?

**Standard of Evidence:**

Describe the process for transmitting and utilizing key users' data quality feedback to inform program changes.

**Question Rank:**  
Somewhat Important

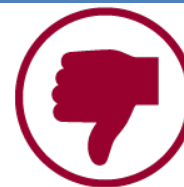
**Assessor conclusions:**

Limited information was available about the vital records system to allow an adequate review of its processes and capabilities.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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**Question 378:**

Are vital records data quality management reports produced regularly and made available to the State TRCC?

**Standard of Evidence:**

Provide a sample quality management report and specify frequency of transmission to the State TRCC.

**Question Rank:**

Somewhat  
Important

**Assessor conclusions:**

Limited information was available about the vital records system to allow an adequate review of its processes and capabilities.

<b>Respondents assigned</b>	<b>3</b>	<b>Responses received</b>	<b>1</b>	<b>Response rate</b>	<b>33.3%</b>
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## Data Use and Integration

Integration combines data from multiple systems to form a new, more robust dataset that is capable of answering a wider variety of safety-related questions. These integrations occur both within the core systems and between them. Data integration does not appear to be a high priority for the State.

The State's roadway system consists of many individually-maintained datasets in one. The addition of crash data gives decision-makers a more complete picture. This was the only documented integration provided.

State decision-makers and the public have access to data and personnel to help them, but with the exception of the linked crash and roadway data, this access is limited to the individual data systems. Creation of, and access to, integrated databases would help planners to better understand the overall traffic safety picture.

### Question 379:

Do behavioral program managers have access to traffic records data and analytic resources for problem identification, priority setting, and program evaluation?



### Standard of Evidence:

Identify the data source(s), (crash, roadway, driver, vehicle, citation adjudication, injury surveillance), discuss and provide examples of program specific analysis (e.g., reports, fact sheets, web pages, ad hoc analyses).

**Question Rank:**  
Very Important

### Assessor conclusions:

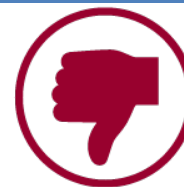
Program managers have access to some reports but it is not evident that they have broad access to resources to make informed decisions. There is data available to specific departments; however, there is no real identification of the data being used for analysis.

<b>Respondents assigned</b>	<b>9</b>	<b>Responses received</b>	<b>6</b>	<b>Response rate</b>	<b>66.7%</b>
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**Question 380:**

Does the State have a data governance process?

**Standard of Evidence:**

Provide a narrative detailing the State's data governance process, identifying the personnel involved and describing how it supports traffic safety data integration and formal data quality management.

**Question Rank:**  
Somewhat Important

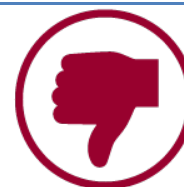
**Assessor conclusions:**

Data owners are responsible for the data systems they oversee, but no formal overall governance process that supports the integration and quality management of systems is in place. Each agency may have governance in place for their own data, but there is no Statewide governance dealing with traffic records systems as a whole.

<b>Respondents assigned</b>	<b>9</b>	<b>Responses received</b>	<b>5</b>	<b>Response rate</b>	<b>55.6%</b>
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**Question 381:**

Does the State have a formal traffic records system inventory that identifies linkages useful to the State and data access policies?

**Standard of Evidence:**

Provide a copy of the system inventory specifying all traffic records data sources, system custodians, data elements and attributes, linkage variables, linkages useful to the State, and data access policies.

**Question Rank:**  
Very Important

**Assessor conclusions:**

The State does not have a comprehensive traffic records system inventory.

<b>Respondents assigned</b>	<b>8</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>37.5%</b>
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**Question 382:**

Does the TRCC promote data integration by aiding in the development of data governance, access, and security policies for integrated data?

**Standard of Evidence:**

Identify, with appropriate citations, the TRCC strategic plan sections that demonstrate the promotion of data integration.

**Question Rank:**

Somewhat Important

**Assessor conclusions:**

The TRCC does not actively promote data integration.

<b>Respondents assigned</b>	<b>8</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>37.5%</b>
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**Question 383:**

Is driver data integrated with crash data for specific analytical purposes?

**Standard of Evidence:**

Document an integrative crash-driver link, the linkage variables, and example analysis, and the frequency of linkage. Example analyses could include an assessment of graduated drivers' license (GDL) law effectiveness or of crash risk associated with motorcycle rider training, licensing, and behavior.

**Question Rank:**

Very Important

**Assessor conclusions:**

The State does not conduct any analysis with driver data linked to crash data.

<b>Respondents assigned</b>	<b>9</b>	<b>Responses received</b>	<b>5</b>	<b>Response rate</b>	<b>55.6%</b>
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**Question 384:**

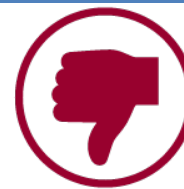
Is vehicle data integrated with crash data for specific analytical purposes?

**Standard of Evidence:**

Document an integrative crash-vehicle link, the linkage variables, and example analysis, and the frequency of linkage. Example analyses could include crash trends among vehicle types or vehicle weight restriction by road classification.

**Assessor conclusions:**

The State does not conduct any analysis with vehicle data linked to crash data.



**Question Rank:**  
Very Important

<b>Respondents assigned</b>	<b>9</b>	<b>Responses received</b>	<b>5</b>	<b>Response rate</b>	<b>55.6%</b>
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**Question 385:**

Is roadway data integrated with crash data for specific analytical purposes?

**Standard of Evidence:**

Document an integrative crash-roadway link, the linkage variables, and example analysis, and the frequency of linkage. Example analyses could include the identification of high crash locations and locations with similar roadway attributes or an assessment of engineering countermeasures' effectiveness.

**Assessor conclusions:**

State crash data and roadway data can be linked by using a common linear reference system. Examples include: J turn safety analysis, safety treatments for rural two lane roads, and edgeline striping.

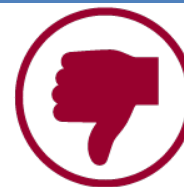


**Question Rank:**  
Very Important

<b>Respondents assigned</b>	<b>9</b>	<b>Responses received</b>	<b>4</b>	<b>Response rate</b>	<b>44.4%</b>
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**Question 386:**

Is citation and adjudication data integrated with crash data for specific analytical purposes?

**Standard of Evidence:**

Document an integrative crash-citation or adjudication link, the linkage variables, and example analysis, and the frequency of linkage. Example analyses could include an assessment of the relationship between illegal actions and crashes for specific driver subpopulations (e.g., older drivers) or of crash-involved DUI offenders' adjudications.

**Question Rank:**  
Very Important

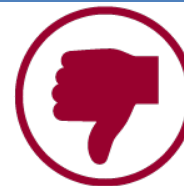
**Assessor conclusions:**

There has been no linking of citation and adjudication data with crash data for analysis.

<b>Respondents assigned</b>	<b>2</b>	<b>Responses received</b>	<b>2</b>	<b>Response rate</b>	<b>100%</b>
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**Question 387:**

Is injury surveillance data integrated with crash data for specific analytical purposes?

**Standard of Evidence:**

Document an integrative crash-injury surveillance link, the linkage variables, and example analysis, and the frequency of linkage. Example analyses could include injury outcomes by specific crash type or injuries associated with occupant protection.

**Question Rank:**  
Very Important

**Assessor conclusions:**

There is no integration of the injury surveillance data with crash data. The FARS analyst has access to health data for the coding of fatal crashes but no integration or linkage exists.

<b>Respondents assigned</b>	<b>9</b>	<b>Responses received</b>	<b>5</b>	<b>Response rate</b>	<b>55.6%</b>
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**Question 388:**

Are there examples of data integration among crash and two or more of the other component systems?

**Standard of Evidence:**

Document an integrative link among crash and multiple data systems, the linkage variables, and example analysis, and the frequency of linkage. Example analyses could include an assessment of the safety impact of differential speed limits for different vehicle types.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

Although crash data is linked with several components of roadway system data, there does not appear to be linkage with a third dataset that is used for analysis. Data linkage among the core traffic records data systems other than crash and roadway does not appear to be in place in the State.

<b>Respondents assigned</b>	<b>9</b>	<b>Responses received</b>	<b>4</b>	<b>Response rate</b>	<b>44.4%</b>
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**Question 389:**

Is data from traffic records component systems—excluding crash—integrated for specific analytical purposes?

**Standard of Evidence:**

Document an integrative link using at least two traffic record component systems excluding the crash system. Include the systems, their linkage variables, example analysis, and the frequency of linkage. Example analyses could include an assessment of recidivism among specific driver populations.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

There appear to be no data linkages between the core traffic records data systems outside of crash, such as driver, vehicle, injury, or citation/adjudication, used for analysis. Data integration between any two systems (excluding crash) is not being used for analysis.

<b>Respondents assigned</b>	<b>9</b>	<b>Responses received</b>	<b>5</b>	<b>Response rate</b>	<b>55.6%</b>
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**Question 390:**

Do decision-makers have access to resources—skilled personnel and user-friendly access tools—for the use and analysis of integrated datasets?

**Standard of Evidence:**

Identify the analytical resources available: personnel, software, or online resources. Specify the decision-makers who have access to these resources.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

Decision-makers have access to several types of data, but the State's lack of integrated datasets does not allow for the analysis of integrated datasets.

<b>Respondents assigned</b>	<b>8</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>37.5%</b>
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**Question 391:**

Does the public have access to resources—skilled personnel and user-friendly access tools—for the use and analysis of integrated datasets?

**Standard of Evidence:**

Identify the analytical resources available to the public: personnel, software, or online resources. Specify how the public has access to these resources.

**Question Rank:**  
Somewhat Important

**Assessor conclusions:**

There is a public tool for crash data, but it is not integrated with any other data.

<b>Respondents assigned</b>	<b>8</b>	<b>Responses received</b>	<b>3</b>	<b>Response rate</b>	<b>37.5%</b>
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## **Appendix A**

### **Assessment Participants**

#### **State Highway Safety Office Representative(s)**

Patrick McKenna  
Missouri Department of Transportation  
Director

Bill Whitfield  
MoDOT  
Highway Safety Director

#### **State Assessment Coordinator(s)**

Mr. Jeremy Hodges  
Missouri Department of Transportation  
Commercial Motor Vehicle Program Manager

Mr. Andrew Williford  
MoDOT  
Traffic Studies Specialist

#### **NHTSA Regional Office Coordinator(s)**

Mr. Jeff Halloran  
NHTSA  
Highway Safety Specialist

#### **NHTSA Headquarters Coordinator**

Mr. John N Siegler Ph.D.  
National Highway Traffic Safety Administration  
Team Lead, Traffic Records Team

### State and Local Respondents

The following State and Local staff assisted in the Assessment by providing responses to the Advisory criteria and questions.

<b>Name</b>	<b>Agency</b>	<b>Title</b>
Mr. Doug Buschjost	OSCA	Project Manager
Megan Denkler	MoDOT	TMS Admin.
Mr. Russ Dunwiddie	Missouri State Highway Patrol	Assistant Director
Mr. Terry Ellsworth	DHSS	Supervisor
Mr. Jeremy Hodges	Missouri Department of Transportation	Commercial Motor Vehicle Program Manager
Andrew Hunter	DHSS	Supervisor
Ms. Tina Jones	OSCA	Support Services Manager
Pamela Lueckenotto	MoDOT	MCS Specialist
Benjamin J Miller	Missouri Office of Prosecution Services	Technology/Automation Resource Prosecutor
Chris Phelps	DHSS	EMS Inspector
Ms. Christina Predmore	Department of Revenue	Manager
Ms. Tracy Robertson	Department of Revenue	Manager
Ms. Myrna R Tucker	Missouri Dept. of Transportation	Planning Data Systems Coordinator



## **Assessment Facilitator**

Ms. Cindy Burch

## **Assessment Team Members**

Sgt. Christopher Corea

Ms. Kathleen Haney

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Mr. Fred E Zwonechek

## Appendix B

### National Acronyms and Abbreviations

AADT	Average Annual Daily Traffic
AAMVA	American Association of Motor Vehicle Administrators
AASHTO	American Association of State Highway and Transportation Officials
ACS	American College of Surgeons
AIS	Abbreviated Injury Score
ANSI	American National Standards Institute
ATSIP	Association of Transportation Safety Information Professionals
BAC	Blood Alcohol Concentration
CDC	Center for Disease Control
CDIP	NHTSA's Crash Data Improvement Program
CDLIS	Commercial Driver License Information System
CODES	Crash Outcome Data Evaluation System
DDACTS	Data Driven Approaches to Crime and Traffic Safety
DHS	Department of Homeland Security
DMV	Department of Motor Vehicles
DPPA	Drivers Privacy Protection Act
DOH	Department of Health
DOJ	Department of Justice
DOT	Department of Transportation
DOT-TRCC	The US DOT Traffic Records Coordinating Committee
DRA	Deputy Regional Administrator (NHTSA)
DUI	Driving Under the Influence
DUID	Driving Under the Influence of Drugs
DWI	Driving While Intoxicated
ED	Emergency Department
EMS	Emergency Medical Service
FARS	Fatality Analysis Reporting System
FDEs	Fundamental Data Elements
FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
GCS	Glasgow Coma Scale
GDL	Graduated Driver Licensing
GES	General Estimates System
GHSA	Governors Highway Safety Association
GIS	Geographic Information System
GJXDM	Global Justice XML Data Model
GPS	Global Positioning System
GRA	Government Reference Architecture
HIPAA	Health Information Privacy and Accountability Act
HPMS	Highway Performance Monitoring System
HSIP	Highway Safety Improvement Plan
HSP	Highway Safety Plan

ICD-10	International Classification of Diseases and Related Health Problems
IRB	Institutional Review Board
ISS	Injury Severity Score
IT	Information Technology
JIEM	Justice Information Exchange Model
LEIN	Law Enforcement Information Network
MADD	Mothers Against Drunk Driving
MCMIS	Motor Carrier Management Information System
MIDRIS	Model Impaired Driving Records Information System
MIRE	Model Inventory of Roadway Elements
MMUCC	Model Minimum Uniform Crash Criteria
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
NAPHSIS	National Association for Public Health Statistics and Information Systems
NCHIP	National Criminal History Improvement Program
NCHS	National Center for Health Statistics
NCIC	National Crime Information Center
NCSC	National Center for State Courts
NDR	National Driver Register
NEMSIS	National Emergency Medical Service Information System
NGA	National Governor's Association
NHTSA	National Highway Traffic Safety Administration
NIBRS	National Incident-Based Reporting System
NIEM	National Information Exchange Model
NLETS	National Law Enforcement Telecommunication System
NMVTIS	National Motor Vehicle Title Information System
NTDS	National Trauma Data Standard
PAR	Police Accident Report
PDPS	Problem Driver Pointer System
PDO	Property Damage Only
PII	Personally Identifiable Information
RA	Regional Administrator (NHTSA)
RDIP	FHWA's Roadway Data Improvement Program
RPM	Regional Program Manager (NHTSA)
RTS	Revised Trauma Score
RMS	Records Management System
RPC	Regional Planning Commission
SaDIP	FMCSA's Safety Data Improvement Program
SAVE	Systematic Alien Verification for Entitlements
SHSP	Strategic Highway Safety Plan
SME	Subject Matter Expert
SSOLV	Social Security Online Verification
STRAP	State Traffic Records Assessment Program
SWISS	Statewide Injury Surveillance System
TCD	Traffic Control Devices
TRA	Traffic Records Assessment
TRIPRS	Traffic Records Improvement Program Reporting System
TRCC	Traffic Records Coordinating Committee
TRS	Traffic Records System

UCR	Uniform Crime Reports
VIN	Vehicle Identification Number
VMT	Vehicle Miles Traveled
XML	Extensible Markup Language

## State-Specific Acronyms and Abbreviations

DHHS	Department of Health and Senior Services
DOR	Department of Revenue
MAI	Missouri Approved Instructions
MARS	Missouri Ambulance Reporting System
MODL	Missouri Driver License system
MSHP	Missouri State Highway Patrol
MUCR	Missouri Uniform Crash Report
MoDOT	Missouri Department of Transportation
PAS	Patient Abstract System
RACF	Resource Access Control Facility
STARS	Statewide Traffic Accident Records System
TCD	Time Critical Diagnosis system
TMS	Transportation Management System
TRIPS	Title and Registration Intranet Process System