

# 2009 Highway Safety Plan & Performance Plan



Missouri Department of Transportation Highway Safety Division 2211 St. Mary's Boulevard P.O. Box 270 Jefferson City, MO 65102 800.800.2358 or 573.751.4161

### **Table of Contents**

1)	OVERVIEW	
	PROCESS DESCRIPTION	1
	STATE CERTIFICATIONS AND ASSURANCES	2
2)	MISSOURI'S HIGHWAY SAFETY PLAN and	
	PERFORMANCE PLAN	
	Supporting Background—Missouri's Blueprint to ARRIVE ALIVE	9
	Blueprint Strategies	10
	Blueprint Implementation	10
	HSP and Performance Plan Overview	11
	Benchmarks	11
	Best Practices Countermeasures	11
	Partnerships	12
	Planning, Programming & Implementation Timeframes	13
	- HSP and Annual Report	14
	- SAFETEA-LU Incentive Grant Programs (other than 402)	15
	Grant Applications	16
	Grant Selection Process	16
	Grantee Compliance Requirements	18
3)	STATEWIDE TRAFFIC CRASH ANALYSIS	
	Problem Identification	19
	20-Year Death & Disabling Injury Rates	20
	3-Year (2005-2007) Death & Disabling Injury Rates	21
	Current Traffic Crash Data	22
	Data Collection	23
	Contributing Factors	23
	Total Fatalities and Disabling Injuries by Target Area	24
	Urban versus Rural Crash Experience	25

Fatal Traffic Crashes Rank Order by City	26
Personal Injury Traffic Crashes Rank Order by City	31
Fatal Traffic Crashes Rank Order by County	39
Personal Injury Traffic Crashes Rank Order by County	43

### 4) PUBLIC INFORMATION AND EDUCATION

	Background	47
	Benchmarks	48
	Performance Measures	48
	Strategies	48
5)	AGGRESSIVE DRIVERS	
	Background	50
	Benchmarks	51
	Performance Measures	51
	Strategies	51
6)	ALCOHOL AND OTHER DRUGS	
	Background	52
	Young Impaired Drivers (under age 21)	53
	Benchmarks	54
	Performance Measures	54
	Strategies (Public Information & Education)	54
	Strategies (Enforcement)	55
	Strategies (Prosecution/Adjudication)	55
	Strategies (Technology)	56
	Strategies (Hazard Elimination – Sect 154 Open Container Transfer)	56
7)	OCCUPANT RESTRAINTS	
	Restraint Use	57
	Seat Belt Usage Among High School Students	58
	Ejections	59

	Very Young Passengers	60
	Benchmarks	61
	Performance Measures	61
	Strategies	62
8)	YOUNG DRIVERS	
	Background	63
	Young Drinking Drivers	63
	Benchmarks	65
	Performance Measures	65
	Strategies	65
9)	OLDER DRIVERS—65 YEARS OF AGE AND OVER	
	Background	66
	Benchmarks	68
	Performance Measures	68
	Strategies	68
10)	COMMERCIAL MOTOR VEHICLES	
	Background	69
11)	MOTORCYCLE CRASHES	
	Background	70
	Benchmarks	72
	Performance Measures	72
	Strategies	72
12)	<b>CRASHES INVOLVING SCHOOL BUSES</b>	
	Background	73
	Benchmarks	74
	Performance Measures	74
	Strategies	74

### 13) VULNERABLE ROADWAY USERS

	Pedestrians	75
	Bicyclists	76
	Benchmarks	76
	Performance Measures	76
	Strategies	76
14)	ENGINEERING SERVICES AND DATA COLLECTION	
	Engineering Services	77
	Local Community Traffic Assistance (TEAP)	77
	Local Community Bridge Assistance (BEAP)	77
	Internal Grants Management System	78
	Training	78
	Data Collection:	
	STARS Maintenance & Traffic Safety Compendium	78
	Law Enforcement Traffic Software (LETS)	78
	Benchmarks	79
	Performance Measures	79
	Strategies	79
15)	FY 2009 BUDGET & PROJECT LISTING	80-91

### **PROCESS DESCRIPTION**

#### **Missouri Department of Transportation Mission**

To provide a world-class transportation experience that delights our customers and promotes a prosperous Missouri.

#### **Missouri's Highway Safety Goal**

Overall Goal – to reduce number and severity of traffic crashes occurring in Missouri Specific Goal – to reduce traffic fatalities to 1,000 or fewer by the year 2008 as identified in the state's strategic highway safety plan, *Missouri's Blueprint for Safer Roadways*.

#### Highway Safety Plan and Performance Plan

The Governor's Highway Safety Program is outlined in an annual Highway Safety Plan (HSP) and Performance Plan. This document describes how Missouri's Section 402 State and Community Highway Safety Program grant (plus additional incentive grant funds and Section 154 transfer funds) will be used to promote highway safety within our state. The 2009 HSP encompasses the federal fiscal year October 1, 2008 through September 30, 2009.

The HSP will be a data driven, performance based, dynamic plan, allowing for continual review and modification in order to enhance the outcome of our efforts.

#### Submission

The Missouri Department of Transportation submits herewith the 2009 Highway Safety Plan and Performance Plan to:

The Honorable Matt Blunt, Governor of Missouri Romell Cooks, NHTSA Central Region Administrator Allen Masuda, FHWA Region VII Administrator

Pete K. Rahn Governor's Representative for Highway Safety

Copies of this document are available for purchase by writing to: Missouri Department of Transportation Highway Safety Division 2211 St. Mary's Boulevard Jefferson City, MO 65102

Or to download free at: www.nhtsa.dot.gov/nhtsa/whatsup/SAFETEAweb/

### STATE CERTIFICATIONS AND ASSURANCES

(revised 8/25/05)

Failure to comply with applicable Federal statutes, regulations and directives may subject State officials to civil or criminal penalties and/or place the State in a high risk grantee status in accordance with 49 CFR §18.12.

Each fiscal year the State will sign these Certifications and Assurances that the State complies with all applicable Federal statutes, regulations, and directives in effect with respect to the periods for which it receives grant funding. Applicable provisions include, but not limited to, the following:

- 23 U.S.C. Chapter 4 Highway Safety Act of 1966, as amended;
- 49 CFR Part 18 Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments
- 49 CFR Part 19 Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals and Other Nonprofit Organizations
- 23 CFR Chapter II (§§1200, 1205, 1206, 1250, 1251, & 1252) Regulations governing highway safety programs
- NHTSA Order 462-6C Matching Rates for State and Community Highway Safety Programs
- Highway Safety Grant Funding Policy for Field-Administered Grants

### **Certifications and Assurances**

The Governor is responsible for the administration of the State highway safety program through a State highway safety agency which 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 USC 402(b) (1) (A));

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 USC 402(b) (1) (B));

At least 40 per cent of all Federal funds apportioned to this State under 23 USC 402 for this fiscal year will be expended by or for the benefit of the political subdivision of the State in carrying out local highway safety programs (23 USC 402(b) (1) (C)), unless this requirement is waived in writing;

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:

- National law enforcement mobilizations;
- Sustained enforcement of statutes addressing impaired driving, occupant protection, and driving in excess of posted speed limits;
- An annual statewide safety belt use survey in accordance with criteria established by the Secretary for the measurement of State safety belt use rates to ensure that the measurements are accurate and representative; and
- Development of statewide data systems to provide timely and effective data analysis to support allocation of highway safety resources.

The State shall 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.

This 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 USC 402(b) (1) (D));

Cash drawdowns will be initiated only when actually needed for disbursement, cash disbursements and balances will be reported in a timely manner as required by NHTSA, and the same standards of timing and amount, including the reporting of cash disbursement and balances, will be imposed upon any secondary recipient organizations (49 CFR 18.20, 18.21, and 18.41). Failure to adhere to these provisions may result in the termination of drawdown privileges);

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);

Equipment acquired under this agreement for use in highway safety program areas shall be used and kept in operation for highway safety purposes by the State; or the State, by formal agreement with appropriate officials of a political subdivision or State agency, shall cause such equipment to be used and kept in operation for highway safety purposes (23 CFR 1200.21);

The State will comply with all applicable State procurement procedures and will maintain a financial management system that complies with the minimum requirements of 49 CFR 18.20;

The State highway safety agency will comply with all Federal statutes and implementing regulations relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin (and 49 CFR Part 21); (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§ 1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps (and 49 CFR Part 27); (d) the Age Discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970(P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse of

alcoholism; (g) §§ 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§ 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§ 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

### The Drug-free Workplace Act of 1988(49 CFR Part 29 Sub-part F):

The State will provide a drug-free workplace by:

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;

- a. Establishing a drug-free awareness program to inform employees about:
  - 1. The dangers of drug abuse in the workplace.
  - 2. The grantee's policy of maintaining a drug-free workplace.
  - 3. Any available drug counseling, rehabilitation, and employee assistance programs.
  - 4. The penalties that may be imposed upon employees for drug violations occurring in the workplace.
- b. 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 --
  - 1. Abide by the terms of the statement.
  - 2. 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 (d) (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 (d) (2), with respect to any employee who is so convicted -
  - 1. Taking appropriate personnel action against such an employee, up to and including termination.
  - 2. 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 paragraphs (a), (b), (c), (d), (e), and (f) above.

### **BUY AMERICA ACT**

The State will comply with the provisions of the Buy America Act (23 USC 101 Note), 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.

### POLITICAL ACTIVITY (HATCH ACT).

The State will comply with the provisions of 5 U.S.C. §§ 1501-1508 and implementing regulations of 5 CFR Part 151, concerning "Political Activity of State or Local Offices, or Employees".

### **CERTIFICATION REGARDING FEDERAL LOBBYING**

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**

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**

### **Instructions for Primary Certification**

- 1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
- 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.
- 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, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded*, as used in this clause, have the meaning set out in the Definitions and coverage sections of 49 CFR Part 29. 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 the department or agency entering into this transaction.
- 7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "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.
- 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, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

# 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**

By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below. 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.

- 1. 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.
- 2. The terms *covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded*, as used in this clause, have the meanings set out in the Definition and Coverage sections of 49 CFR Part 29. You may contact the person to whom this proposal is submitted for assistance in obtaining a copy of those regulations.
- 3. 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 the department or agency with which this transaction originated.
- 4. The prospective lower tier participant further agrees by submitting this proposal that is it will include the clause titled "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 (see below).

- 5. 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.
- 6. 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.
- 7. 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, 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.

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.

### **ENVIRONMENTAL IMPACT**

The Governor's Representative for Highway Safety has reviewed the State's fiscal year 2009 highway safety planning document and hereby declares that no significant environmental impact will result from implementing this Highway Safety Plan. If, under a future revision, this Plan will be modified in such a manner that a project would be instituted that could affect environmental quality to the extent that a review and statement would be necessary, this office is prepared to take the action necessary to comply with the National Environmental Policy Act of 1969 (42 USC 4321 et seq.) and the implementing regulations of the Council on Environmental Quality (40 CFR Parts 1500-1517).

Governor's Representative for Highway Safety

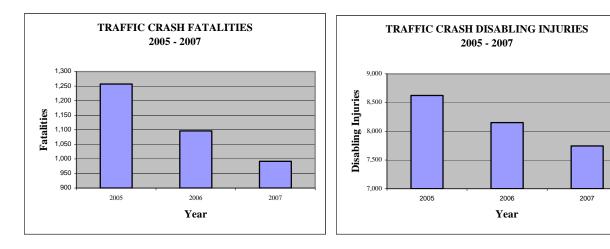
August 26, 2008 Date

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

### Supporting Background – Missouri's Blueprint for Safer Roadways

In 2003, Missouri decided to participate with the American Association of State Highway Transportation Officials (AASHTO) in a national effort to reduce the preventable tragedies associated with traffic crashes. Utilizing a partnership approach, the state's Strategic Highway Safety Plan (SHSP) *Missouri's Blueprint for Safer Roadways* was developed that outlined opportunities to reduce fatal and serious injuries on Missouri's roads. The goal established in the *Blueprint* was set at **1,000 or fewer fatalities by 2008.** This was an 11.5% reduction from 2004, a 20.4% reduction from 2005, and an 8.8% reduction from 2006. We are excited to announce that Missouri did, in fact, reach the goal one year early. The year-end fatality total for 2007 was 992! In light of that fact, a core team has begun work on development of the next SHSP, *Missouri's Blueprint to ARRIVE ALIVE*. Although currently in draft format, plans are underway to unveil this document at the Blueprint Conference scheduled for October 2008.

Year	Fatalities	Disabling Injuries
2003	1,232	8,730
2004	1,130	8,857
2005	1,257	8,624
2006	1,096	8,151
2007	992	7,744
2003-2005 Total	3,619	26,211
2004-2006 Total	3,483	25,632
2005-2007 Total	3,345	24,519



### **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. The strategies for the *Blueprint to ARRIVE ALIVE* have been identified as our "Targeted Ten":

- 1. Pass a primary safety belt law, and maintain and enhance existing traffic safety laws;
- 2. Increase enforcement on targeted crash corridors;
- 3. Increase public education and information traffic safety issues;
- 4. Expand the installation of shoulder and centerline rumble strips/stripes;
- 5. Expand, improve and maintain roadways visibility features (pavement markings, signs, lighting, etc);
- 6. Effectively deter, identify, arrest & adjudicate alcohol/other drug impaired drivers & pedestrians;
- 7. Expand installation and maintenance of roadways shoulder and clear zones;
- 8. Remove and/or shield fixed objects along roadside right-of-way;
- 9. Improve and expand intersection safety with the use of innovative engineering designs (e.g., J-turns, roundabouts), technology and enforcement; and
- 10. Improve curve recognition through the use of signs, markings, and pavement treatments.

Five key Emphasis Areas were identified within the *Blueprint* and 17 Targets within them:

#### I - Serious Crash Types

- 1. Run-off-road
- 2. Crashes involving horizontal curves
- 3. Head-on crashes
- 4. Crashes w/trees or poles
- 5. Intersection crashes (signalized/unsignalized)

#### III – Special Vehicles

- 1. Commercial motor vehicles
- 2. Motorcycles
- 3. School buses/school bus signals
- IV Vulnerable Roadway Users
- 1. Pedestrians
- 2. Bicyclists

#### II - High-Risk Drivers

- 1. Unrestrained occupants
- 2. Crashes involving inattentive drivers
- 3. Crashes involving aggressive drivers
- 4. Crashes involving drivers impaired by alcohol or other drugs
- 5. Crashes involving young drivers (15-20 years of age)
- 6. Crashes involving unlicensed, revoked or suspended drivers
- 7. Crashes involving older drivers (65 years of age or older)
- V Special Roadway Environments
- 1. Work zones
- 2. Highway/rail crossings

For each of these emphasis areas and targets, strategies are being employed that incorporate the 4 E's – education, emergency medical services, enforcement, and engineering.

### **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 "Targeted Ten" and subsequent emphasis areas, targets, and strategies. The state has been divided into ten (10) regional coalitions that have each developed a safety plan. The

coalitions meet on a regular basis to discuss their concerns, review how their countermeasures are working, and consider ways to improve their efforts.

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.

- → The *Blueprint* serves as a **roadmap** for the State's Highway Safety Plan
  - → The "Targeted Ten" provide direction for the HSP
    - → The goal determines our final destination

### Highway Safety Plan (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 are to be used to support the State's Performance Plan, which contains performance goals, based on the problems identified by the state, and Highway Safety Plan 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 contribute to the reduction of crashes and resulting deaths and injuries.

### Benchmarks

Highway safety countermeasures are designed to enhance existing law enforcement and community/state efforts and to modify unsafe driving behaviors by promoting safe, responsible driving. Countermeasure development must also fulfill state statute requirements and federal guidelines.

Benchmarks are the "ideals" toward which we will strive. We believe that our countermeasure efforts may have an impact on the following problem areas: motor vehicle deaths and disabling injuries; death and disabling injury rates; numbers and frequency of traffic crashes; hazardous moving violations; crashes involving special vehicles; use of safety devices; and deaths/disabling injuries involving high-risk drivers and involving vulnerable roadway users.

While these benchmarks are quantifiable for evaluation and accountability purposes, it should be noted that they are not totally reliant upon the programs implemented by the highway safety division. They are often highly dependent upon existing legislation and the motoring public's adherence to traffic laws and safe driving habits.

### **Best Practices Countermeasures**

The highway safety division 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 document *Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices*, US DOT, NHTSA, Third Edition, 2008;
- 2. Evaluating traffic data to determine target populations and geographic locations in order to most effectively implement countermeasure efforts;
- 3. Participating in national law enforcement mobilizations that combine blanketed enforcement and saturated media during established timeframes and in targeted traffic corridors; and
- 4. Participating in state and national training opportunities in order gain insight into proven programs that can be replicated in Missouri.

### **Partnerships**

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 our safety partners includes:

- American Automobile Association
- American Association of Retired Persons
- Blueprint Regional Coalitions (10 Northwest, North Central, Northeast, Kansas City, Central, St. Louis, Southwest, Springfield, South Central, Southeast)
- Cape Girardeau Safe Communities Program
- County Health Departments
- East-West Gateway Coordinating Council
- Emergency Nurses Association
- Federal Highway Administration
- Federal Motor Carrier Administration
- Institutions of Higher Education
- Law Enforcement Traffic Safety Advisory Council
- Law Enforcement Training Academies
- 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 Department of Transportation
- MO Division of Alcohol and Drug Abuse
- MO Division of Alcohol and Tobacco Control
- MO Head Injury Advisory Council
- MO Motor Carriers Association
- MO Office of Prosecution Services
- MO Police Chiefs Association
- MO Safety Center
- MO Safety Council
- MO Sheriffs Association
- MO State Highway Patrol
- MO Youth/Adult Alliance
- Mothers Against Drunk Driving
- Motorcycle Safety Committee
- National Highway Traffic Safety Administration Central Region
- Office of State Courts Administrator
- Operation Impact
- Partners in Environmental Change
- Partners in Prevention
- Safe Kids Coalitions
- Safety Council of the Ozarks
- State Farm Insurance
- Think First Missouri
- Traffic Safety Alliance of the Ozarks

In addition to our Highway Safety partners, each *Blueprint* regional coalition has an extensive base of local partners. During the 2007 legislative session, the MCRS established a widespread grassroots network of safety advocates statewide. These partners numbered well over 600. The highway safety office is able to collaborate with those partners at a lower tier level by working through our regional coalition contacts.

### **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 the period October 1 through September 30.

The tables on the following pages represent 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 Division are more fluid; they may be revised in order to allow the agency to function more efficiently.

The first table sets the timeframes for the basic Section 402 State and Community Program Grant and the Annual Report for that grant. The second table establishes the timeframes for supplemental grants the agency may receive under the additional provisions of SAFETEA-LU.

### **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 and analysis		ONGOING										
Contract monitoring (HS staff)		ONGOING										
Grantee monthly reimbursement vouchers due		vou	U C H E R	SARE	PROCES	SSED TV	WICE M	ONTH	LYAS	RECEI	V E D	
Solicitation letters sent to prospective grantees					1							
Regional grant application training sessions						1-15						
Grant applications due to HS								1				
Grant applications review & budget meetings									15-30			
HSP & Performance Plan due to NHTSA											31	
Mail grantee award and denial letters											1	
Contracts written and reviewed internally											15	
Regional contract award workshops w/grantees											25	
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	15											
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									

### **Planning, Programming and Implementation Timeframes**

### **SAFETEA-LU Incentive Grant Programs (other than 402)**

ACTIVITY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	NUL	JUL	AUG	SEP
Data collection and analysis			0	Ν	G	0	I	N	G			
Contract monitoring by HS staff			0	Ν	G	0	Ι	Ν	G			
Grantee monthly reimbursement vouchers due monthly				DUE	BY	THE	10 <sup>TH</sup>	EACH	MONTH			
Safety Belt Use Survey Results from previous calendar year						1						
Section 154 Open Container Certification (eligible as soon as the law is passed and is being enforced)												30
Section 405 Occupant Protection Incentive Grant application due					15							
Section 406 Safety Belt Incentive Grant application due (eligible as soon as the law is passed and is being enforced)									30			
Section 408 Data Improvement Incentive Grant application due									15			
Section 410 Alcohol Impaired Driving Incentive Grant application due											1	
Section 1906 Racial Profiling Incentive Grant application due										1		
Section 2010 Motorcycle Safety Incentive Grant application due											1	
Section 2011 Child Safety & Booster Seat Incentive Grant application due										1		

### **Grant Application Process**

The Highway Safety Division hosts grant application workshops to which all potential grantees are invited. These workshops are held in five strategic regional locations (Farmington, Creve Coeur, Jefferson City, Springfield, and Lee's Summit) so that no participant has to travel terribly far in order to attend. They are usually scheduled between March 1 and 15.

Workshop participants are provided a packet explaining the mission of the program, the types of projects eligible for award, and (for local law enforcement agencies) statistical reports of their fatal and serious injury rankings for total crashes and crashes attributed to alcohol use, speeding, and young drivers. The rankings are by city, county and unincorporated portions of each county.

Highway Safety program coordinators state the purpose of the highway safety program and the statewide goal, and help the potential grantees understand how their efforts are required in order to positively affect the goal. Program areas are identified and the Highway Safety Division's web-based grant management system and on-line reporting system is detailed for them. These seminars are used as an opportunity to share any new contract conditions, application process changes, or legislative changes that may impact our grant program. They are told that the deadline date for submission of applications is May 1.

### **Grant Selection Process**

The highway safety program staff members each review the applications relative to their specific areas of expertise. During this preliminary review, they assess the applications to **determine their relevancy toward meeting our highway safety goals**. Applicants are contacted if clarification is needed. In essence, they prepare a case, based on their knowledge and experience, to support or deny the application to the rest of the staff.

Fatal and disabling injury crash rankings are performed for all cities, all counties, and the unincorporated areas in the state. These rankings are conducted for the problem areas of alcohol, speed, young drinking drivers, and older drivers. In addition, the cities and unincorporated areas in each county are given a cumulative ranking, e.g. combining the fatal, serious injuries, alcohol, speed and young drinking driver crash rankings into a single rating for each.

Law enforcement applications are assessed to determine where they fit within the rankings by the type of project they are choosing to conduct. While the highest-ranking cities/counties are most often 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 may be given a project in order that they can become an active participant in the national mobilizations; while others are given consideration because we have determined a need exists to garner traffic safety minded agencies within a particular geographic location.

An internal team comprised of Highway Safety program staff review all grant applications. Several days are set aside to review all applications and hear both supporting arguments and issues of concern. The reviewers assess the applications taking many factors into consideration:

- 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 disabling injuries?
- Does the problem identification sufficiently document problem locations, crash statistics, targeted population, 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 multijurisdiction enforcement) or in a particular program area (occupant protection surveys)?
- Will the activity serve as a "foundational project" that satisfies criteria for additional federal funding (e.g., sobriety checkpoints, server training, underage drinking prevention)?
- 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 regional goals for highway safety?
- 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?
- Has past experience working with this grantee been positive (have they performed according to expectations)?
- Is the local government or administration supportive of this proposed activity?
- If equipment is requested, is the equipment supporting 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?

The applications are discussed at length to determine whether they 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).

Equipment requests are most often required to include a 50% match. When a 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 Division's grant management system so that real-time information is immediately available. By the end of the meeting, there is a complete listing of the approved projects that will best support the mission and work toward reaching the *Blueprint* goal.

### **Grantee Compliance Requirements**

### COMPLIANCE

# Any agency receiving a Highway Safety grant must comply with the following Statutes or Rules:

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

<u>Hatch Act</u> – 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 partian political activities including, but not limited to, being candidates for elective office.

## Any law enforcement agency receiving a Highway Safety grant must comply with the following Statutes or Rules:

<u>Peace Officer Standards and Training Certification (P.O.S.T.)</u> — 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

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

<u>Uniform Crime Reporting</u> — 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.

<u>Racial Profiling</u> — 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.

### 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
- *Open Container*—A model ordinance prohibiting the possession of an open container of alcoholic beverages in a motor vehicle.
- Law Enforcement Vehicular Pursuit Training—Section 402 subsection (1) pursuant to SAFETEA-LU, requires **states** to actively encourage all relevant law enforcement agencies in the state to follow guidelines set for vehicular pursuits issued by the International Association of Chiefs of Police. The Highway Safety division, by way of letter and inclusion in the Highway Safety Contract Conditions, encourages all Missouri law enforcement agencies to follow the IACP Vehicular Pursuit Guidelines.

### STATEWIDE TRAFFIC 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**

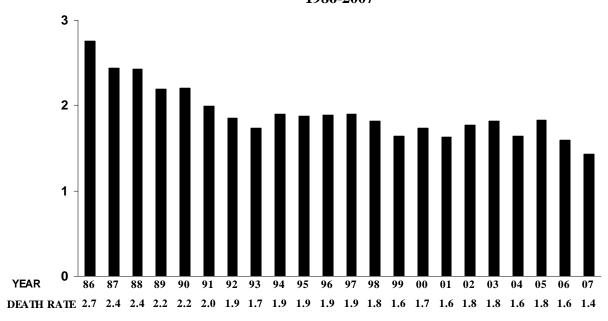
Problem identification involves the study of the relationship between collisions and the characteristics of people using the roadways, types and numbers of vehicles on the roads, miles traveled, and roadway engineering.

There are three factors that contribute to traffic crashes: the roadway and environment; the vehicle itself; and the driver (human behavior). According to studies, statistics and the experts, the human factor is the most prevalent contributing factor to traffic crashes at 93%, followed by roadway environment at 33%, and finally the vehicles at 13% (US General Accounting Office, Highlight of GAO-03-436, *A Report to Congressional Requesters*, March 2003).

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 currently causing traffic crashes. It will be obvious to the reader that this document references *targeted* audiences or populations. A target, of course, is the object toward which you direct your aim. 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., unhelmeted motorcyclists or unbuckled occupants). This terminology is in no way meant to profile certain populations by age, gender, race, or nationality. Rather, this is an accepted term in all National Highway Traffic Safety Administration publications 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.

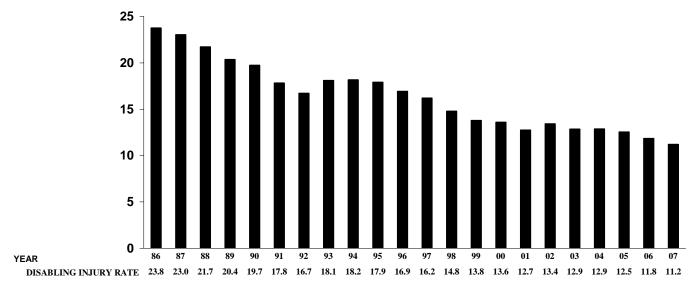
Research has shown that the number of crashes at a particular site can vary widely from year to year, even if there are no changes in traffic or in the layout of the road. A single year's data is subject to considerable statistical variation. Three years is generally regarded as a practical minimum period for which a fairly reliable annual average rate can be calculated. Statistical data from the most current three years are analyzed to support the annual Highway Safety Plan.

In the 3-year period **2005-2007**, a total of 3,345 **people died** on Missouri's roadways while another 24,519 **suffered disabling injuries**. A fatality is recorded when a victim dies within 30 days of the crash date from injuries sustained in the crash. A disabling 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 Disabling Injury crashes have been targeted because they are more costly in human suffering, social and economic terms. The graphs on this page present a long-term depiction of deaths and disabling injuries covering the 21-year period 1986 through 2007. While the graphs on the following page address only the 3-year period 2005-2007 assessed within this Plan.



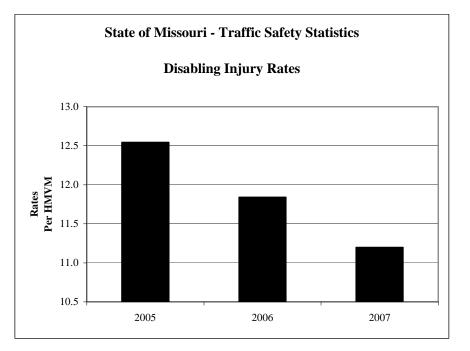
MISSOURI DEATH RATE 1986-2007

### MISSOURI DISABLING INJURY RATE 1986-2007



20





					Disabling
		Disabling		Fatality <sup>2</sup>	Injury
Year	Fatalities	Injuries	Miles Traveled <sup>1</sup>	Rate	Rate <sup>3</sup>
2005	1,257	8,624	68,754,000,000	1.8	12.5
2006	1,096	8,151	68,834,000,000	1.6	11.8
2007	992	7,744	69,150,000,000	1.4	11.2

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

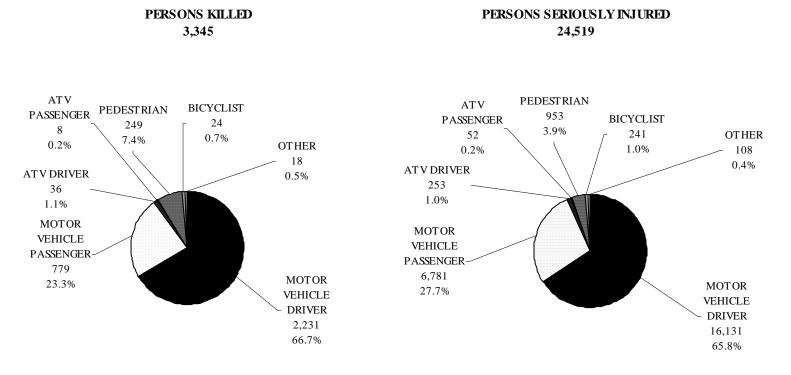
<sup>2</sup>Number of fatalities per 100 million miles of vehicle travel.

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

### Current Traffic Crash Data: 2005-2007

Even though statistics like the death rate indicate a positive impact is being made on Missouri's traffic safety problem, 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 2005-2007, of the 508,470 traffic crashes, 2,988 were fatal and 18,586 resulted in serious injuries. These fatal and serious injury crashes resulted in the death of 3,345 people and 24,519 serious injuries.

A substantial number of persons killed and injured in Missouri's 2005-2007 traffic crashes were drivers and passengers of motorized vehicles. Of the fatalities, 66.7% were drivers and 23.3% were passengers; of those seriously injured, 65.8% were drivers and 27.7% were passengers.

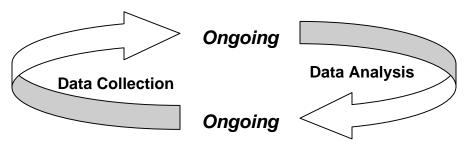


#### 2005-2007 MISSOURI FATALITIES AND DISABLING INJURIES

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

### **Data Collection**

Data is the cornerstone of this study, 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 disabling 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 Division analyzes that data to compile statistics on fatalities and disabling injuries for the calendar years 2005-2007. Three years' worth of crash statistics provide a more representative sampling, thereby more effectively normalizing the data.

Collisions were 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 accident corridors
- → *Roadway users* age, gender, vehicle users versus pedestrians
- → *Safety devices* used/not used (safety belts, child safety seats, 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

### **Contributing Factors**

Analysis of our statewide traffic crash data was based on the five Emphasis Areas and their targets as defined in the *Blueprint for Safer Roadways*:

Emphasis Area I – Serious Crash Types Emphasis Area II – High-Risk Drivers and Occupant Emphasis Area III – Special Vehicles Emphasis Area IV – Vulnerable Roadway Users Emphasis Area V – Special Roadway Environments

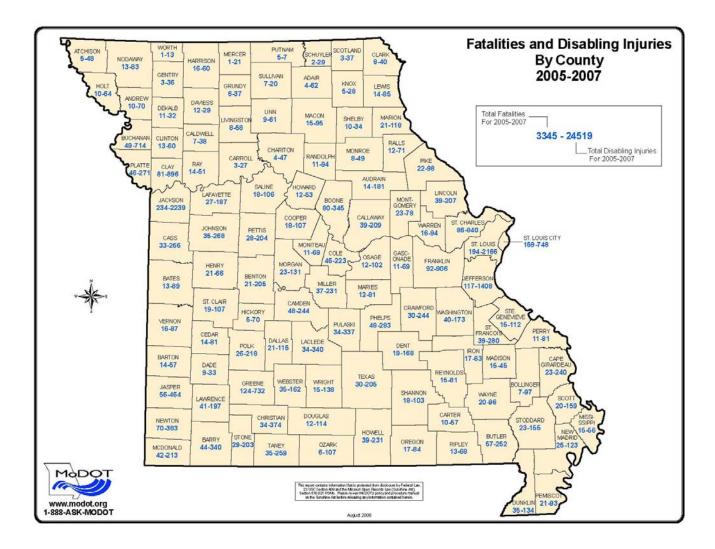
# Total Fatalities and Disabling Injuries by Target Area 2005-2007

Fatalities					
Description	2005	2006	2007	Total	
Unrestrained Occupants	621	576	478	1,675	
Killed in Run-Off-Road Crashes	594	494	447	1,535	
Aggressive Driving Involved					
Following too close	23	23	18	64	
Too fast for conditions	316	290	254	860	
Speed exceeded limit	226	195	174	595	
TOTAL for 3 conditions	565	708	446	1,519	
Horizontal Curves Involved	427	375	350	1,152	
Alcohol and/or Other Drugs Involved	289	288	257	834	
Inattentive Drivers Involved	313	262	247	822	
Young Drivers—15-20 Involved	262	245	180	687	
Killed in Head-On Crashes					
Head-On - Non-Interstate	219	141	158	518	
Head-On - Interstates	34	13	6	53	
TOTAL for Non-Interstate and Interstate	253	154	164	571	
Killed Involving Commercial Motor					
Vehicles	205	181	168	554	
Unlicensed Drivers Involved	185	166	138	489	
Killed in Intersection Crashes					
Unsignalized	100	115	98	313	
Signalized	47	55	60	162	
TOTAL for Intersection Fatalities	147	170	158	475	
Killed in Collision with Tree	161	139	141	441	
Older Drivers—65-75 Involved	119	107	84	310	
Motorcyclists Killed	88	93	91	272	
Pedestrians Killed	92	78	79	249	
Older Drivers – 76 or Older Involved	85	72	90	247	
Killed in Collision with Utility Pole	46	38	27	111	
Killed in Work Zones	15	19	5	39	
Bicyclists Killed	8	7	9	24	
School Buses / Bus Signal Involved	4	3	5	12	
Sensor Bases, Bus signar myorved		5	5	12	

Disabling Injuries						
Description	2005	2006	2007	Total		
Seriously Injured in Run-Off-Road Crashes	3,557	3,349	3,338	10,244		
Aggressive Driving Involved						
Following too close	493	509	481	1,483		
Too fast for conditions	2,259	2,176	2,177	6,612		
Speed exceeded limit	614	608	552	1,774		
TOTAL for 3 conditions	3,366	3,293	3,210	9,869		
Unrestrained Occupants	2,533	2,400	2,116	7,049		
Horizontal Curves Involved	2,465	2,282	2,198	6,945		
Young Drivers—15-20 Involved	2,435	2,251	1,945	6,631		
Inattentive Drivers Involved	2,281	2,187	2,123	6,591		
Seriously Injured in Intersection Crashes						
Unsignalized	1,237	1,221	1,140	3,598		
Signalized	882	762	784	2,428		
Total for Intersection Serious Injuries	2,119	1,983	1,924	6,026		
Alcohol and/or Other Drugs Involved	1,406	1,360	1,324	4,090		
Unlicensed Drivers Involved	935	917	900	2,752		
Seriously Injured in Collision with Tree	897	865	802	2,564		
Seriously Injured in Head-On Crashes						
Head-On - Non-Interstates	912	749	761	2,422		
Head-On - Interstates	52	29	13	94		
TOTAL for Non-Interstate and Interstate	964	778	774	2,516		
Seriously Injured Involving Commercial Motor Vehicles	740	673	682	2,095		
Older Drivers—65-75 Involved	740	662	641	2,075		
Motorcyclists Seriously Injured	588	686	715	1,989		
Older Drivers – 76 or Older Involved	492	384	389	1,265		
Pedestrians Seriously Injured	328	319	306	953		
Seriously Injured in Collision with Utility	520	517	500	,,,,		
Pole	267	242	236	745		
Seriously Injured in Work Zones	108	104	94	306		
Bicyclists Seriously Injured	83	88	71	242		
School Buses / Bus Signal Involved	82	29	31	142		
Sensor Buses / Bus signar involved	01		51	112		

### **Urban versus Rural Crash Experience**

As expected, traffic crashes are not evenly distributed on Missouri roadways. They occur in larger numbers in more densely populated regions of the State compared to the rural areas. Of the 21,574 fatal and disabling injury crashes in 2005-2007, 9.7% occurred in an urban community having a population of 5,000 or more and 90.3% occurred in a rural area (under 5,000 population or unincorporated area). Rural areas of the State, however, take on even greater significance when examining traffic crashes resulting only in fatalities. In 2005-2007 fatal traffic crashes, 6.4% occurred in an urban area of the State and 93.6% in a rural area.



# 2005-2007

# **FATAL TRAFFIC CRASHES**

# **RANK ORDER BY CITY**

CITYRANK	CITY	COUNT	PCT
1.0	KANSAS CITY	178	18.3
	ST. LOUIS	144	
		49	
		38	
		31	
	ST. JOSEPH	21	
7.0		18	1.9
	JOPLIN	17	1.8
9.0		13	1.3
	ST. CHARLES	12	1.2
	BRIDGETON	10	1.0
	JEFFERSON CITY	10	1.0
12.0	MARYLAND HEIGHTS	10	1.0
15.0	ARNOLD	9	0.9
15.0	0'FALLON	9	0.9
15.0	WEST PLAINS	9	0.9
19.0	BERKELEY	8	0.8
19.0	CAPE GIRARDEAU	8	0.8
19.0	FLORISSANT	8	0.8
19.0	ST. ROBERT	8	0.8
19.0	SUNSET HILLS	8	0.8
23.5	BLUE SPRINGS	7	0.7
	GRANDVIEW	7	0.7
	JENNINGS	7	0.7
23.5	LIBERTY	7	0.7
29.0		6	0.6
29.0		6	0.6
29.0	FENTON	6	0.6
29.0	HAZELWOOD	6	0.6
29.0	LAKE OZARK	6	0.6
29.0	NORTH KANSAS CITY	6	0.6
29.0	SEDALIA	6	0.6
37.0	ELDON	5	0.5
37.0	LAKE LOTAWANA	5	0.5
37.0	NEOSHO	5	0.5
37.0	NIXA	5	0.5
37.0	OZARK	5	0.5
37.0	PEVELY	5	0.5
37.0	POPLAR BLUFF	5	0.5
37.0	RAYTOWN	5	0.5
37.0	ROGERSVILLE	5	0.5
49.0	BELTON	4	0.4
49.0	BRANSON	4	0.4
49.0	CARL JUNCTION	4	0.4
49.0	CREVE COEUR	4	0.4
49.0	DES PERES	4	0.4
49.0	FULTON	4	0.4
49.0	KENNETT	4	0.4
49.0	LADUE	4	0.4
49.0	MOBERLY	4	0.4
49.0	MOSCOW MILLS	4	0.4
49.0	OSAGE BEACH	4	0.4
49.0	RIVERSIDE	4	0.4
49.0	ROLLA	4	0.4
49.0	UNION	4	0.4
47.0	0112011	-7	

CITYRANK	CITY	COUNT	PCT
49.0	WASHINGTON	4	0.4
	CARTHAGE	3	0.3
62.5	CHARLESTON	3	0.3
62.5	CHESTERFIELD	3	0.3
	CLINTON	3	0.3
62.5		3	0.3
62.5		3	0.3
	HANNIBAL	3	0.3
	KIRKWOOD	3	0.3
	PACIFIC	3	
	REPUBLIC	3	0.3
	ST. JAMES		0.3
62.5		3	0.3
	TOWN AND COUNTRY	3	0.3
86.0		2	0.2
		2	0.2
	BOONVILLE		0.2
		2	0.2
86.0		2	0.2
86.0	BRECKENRIDGE HILLS	2	0.2
86.0	BRENTWOOD	2	0.2
86.0	CARUTHERSVILLE	2	0.2
86.0	CASSVILLE	2	0.2
86.0	CLAYCOMO	2	0.2
86.0	COTTLEVILLE	2	0.2
	CUBA	2	0.2
86.0		2	0.2
86.0		2	0.2
		2	0.2
	EXCELSIOR SPRINGS		0.2
	FERGUSON	2	0.2
	FREDERICKTOWN	2	0.2
	FRONTENAC	2	0.2
	HARRISONVILLE	2	0.2
86.0		2	0.2
86.0	MINER	2	0.2
86.0	OLIVETTE	2	0.2
86.0	OVERLAND	2	0.2
86.0	PALMYRA	2	0.2
86.0	RAYMORE	2	0.2
86.0	SIKESTON	2	0.2
86.0	STRAFFORD	2	0.2
86.0	SUGAR CREEK	2	0.2
86.0	WARRENSBURG	2	0.2
86.0	WARRENTON	2	0.2
86.0	WELLSVILLE	2	0.2
86.0	WENTZVILLE	2	0.2
86.0	WILLARD	2	0.2
	WRIGHT CITY	2	0.2
86.0		1	0.1
139.5	ANDERSON	1	0.1
139.5	ASHLAND	1	0.1
139.5	AVA	1	0.1
139.5	BELLE	1	0.1
139.5	BEL-NOR	1	0.1
139.5	BETHANY	1	0.1
139.5	BILLINGS	T.	0.1

CITYRANK	CITY	COUNT	PCT
139.5	BOLIVAR	1	0.1
139.5	BONNE TERRE	1	0.1
139.5	BROOKFIELD	1	0.1
139.5	BYRNE'S MILL	1	0.1
139.5	CAMDENTON	1	0.1
139.5	CENTRALIA	1	0.1
139.5	CHILLICOTHE	1	0.1
139.5	CRYSTAL CITY	1	0.1
139.5	DELLWOOD	1	0.1
139.5	DESLOGE	1	0.1
139.5	EDINA	1	0.1
139.5	FORSYTH	1	0.1
	GIDEON	1	0.1
	GLADSTONE	1	0.1
	GRAIN VALLEY	1	0.1
	GREENFIELD	ĩ	0.1
139.5	HILLSBORD	1	0.1
139.5	HOUSTON	1	0.1
139.5	LAKE ST. LOUIS	1	0.1
139.5	LAMAR	1	0.1
139.5	LAWSON	1	0.1
	LILBOURN	1	0.1
139.5		1	0.1
139.5	LOUISIANA	1	0.1
139.5	MACON	1	0.1
139.5	MALDEN	1	
139.5	MANCHESTER	1	0.1
139.5	MAPLEWOOD		0.1
139.5	MARIONVILLE	1	
139.5	MARLBOROUGH	1	0.1
139.5	MARSHFIELD	1	0.1
139.5	MARYVILLE	1	0.1
139.5	MEXICO	1	0.1
139.5	MONETT	1	0.1
139.5	MONROE CITY	1	0.1
139.5	MOUNTAIN GROVE	1	0.1
139.5	NEW MADRID	1	0.1
139.5	NOEL	1	0.1
139.5	NORMANDY	1	0.1
139.5	OAK GROVE	1	0.1
139.5	OAKLAND	1	0.1
139.5	PARKVILLE	1	0.1
139.5	PECULIAR	1	0.1
139.5	PERRYVILLE	1	0.1
139.5	PLATTE CITY	1	0.1
139.5	PLATTSBURG	1	0.1
139.5	PLEASANT HILL	1	0.1
139.5	PLEASANT VALLEY	1	0.1
139.5	POTOSI	1	0.1
139.5	RICHLAND	1	0.1
139.5	RICHMOND	1	0.1
139.5	RICHMOND HEIGHTS	1	0.1
139.5	ST. ANN	1	0.1
139.5	ST. CLAIR	1	0.1
139.5	SCOTT CITY	1	0.1
139.5	SHREWSBURY	1	0.1

CITYRANK	CITY	COUNT	PCT
139.5	STANBERRY	1	0.1
139.5	SULLIVAN	1	0.1
139.5	TIPTON	1	0.1
139.5	UNIONVILLE	1	0.1
139.5	UNIVERSITY CITY	1	0.1
139.5	WAYNESVILLE	1	0.1
139.5	WEBB CITY	1	0.1
139.5	WEBSTER GROVES	1	0.1
139.5	WILDWOOD	1	0.1
139.5	WINONA	1	0.1

# 2005-2007 PERSONAL INJURY TRAFFIC CRASHES RANK ORDER BY CITY

CITY	RANK	CITY	COUNT	PCT
1	. 0	KANSAS CITY	13113	15.5
		ST. LOUIS	11439	13.5
3	. 0	SPRINGFIELD	6499	7.7
	. 0	INDEPENDENCE	3006	3.6
		ST. JOSEPH	2079	2.5
	.0	COLUMBIA	1938	2.3
	.0		1836	
	.0	LEE'S SUMMIT	1264	
	.0		1214	
		JEFFERSON CITY	1268	1.6
10	.0	JEFFERSON CITS	1207	1.4
11	.0	O'FALLON	1197	1.4
12	.0	FLORISSANI	1177	
13	.0		1089	1.3
14	.0	CHESTERFIELD	1070	1.3
	.0			1.1
16	.0	BRIDGETON CREVE COEUR	852	1.0
17	.0	CREVE COEUR	833	1.0
18	.0	CAPE GIRARDEAU	803	0.9
		SUNSET HILLS	766	0.9
	.0		730	0.9
21	.0	HAZELWOOD	710	0.8
		RICHMOND HEIGHTS	700	0.8
		KIRKWOOD	677	0.8
	. 0		675	8.0
	.0		657	0.8
	.0	SEDALIA	629	0.7
27	.0		605	
			602	
			550	
			524	
	.0	DANTOUN	505	
	.0	GLADSTONE	484	
	.0	BELTON	481	
	.0	LEBANON	478	
	.0	BERKELEY	467	0.6
	.0	UNIVERSITY CITY	457	0.5
	.0	MOBERLY	373	0.4
38		FERGUSON	363	0.4
	.5	GRANDVIEW	363	0.4
40		NORTH KANSAS CITY	362	0.4
41		CLAYTON	358	0.4
42	.0	SIKESTON	345	0.4
43	.0	WEBSTER GROVES	341	0.4
44	.5	FENTON	336	0.4
44	.5	HANNIBAL	336	0.4
46	.0	OVERLAND	323	0.4
47	.0	WENTZVILLE	313	0.4
48	.5	BALLWIN	302	0.4
48		WILDWOOD	302	0.4
50		OZARK	301	0.4
51		OSAGE BEACH	298	0.4
52		FARMINGTON	289	0.3
53		FESTUS	288	0.3
	.0	WASHINGTON	287	0.3
55		DES PERES	286	0.3

CITYRANK	CITY	COUNT	PCT
56.0	LADUE	280	0.3
	MANCHESTER	275	0.3
58.0		272	0.3
59.5	EUREKA	264	0.3
59.5	KIRKSVILLE	264	
61.5	UNION	260	
	WEST PLAINS	240	0.3
63.0	ELLISVILLE	254	0.3
64.0	KENNETT	249	
65.0	JENNINGS	244	
	JACKSON	245	0.3
67.0	ST. ROBERT	235	0.3
68.0	NEOSHO	230	0.5
69.0	HARRISONVILLE	201	
	EXCELSION SPRINGS	199	0.2
71.0	CARTHAGE	197	0.2
72.0	TROY	196	0.2
	FULTON	194	
74.0	BRENTWOOD	191	0.2
75.0	BELLEFONTAINE NB	1.87	0.2
76.0	LAKE ST. LOUIS	1.84	0.2
	PERRYVILLE	183	
	WEBB CITY	182	0.2
79.0	ST. ANN	179	0.2
80.0	REPUBLIC	176	0.2
\$1.0	MEXICO	175	0.2
32.0	PEVELY	171	0.2
83.0	OLIVETTE	1.69	0.2
84.0	NIXA	165	0.2
85.0	NEVADA	165	0.2
86.0	BOLIVAR	157	
	MARSHALL	155	0.2
88.0	ST. CLAIR	150	0.2
89.0	CLINTON	144	0.2
90.0	MONETT	142	0.2
91.0	MAPLEWOOD	137	0.2
92.0	PARK HILL	134	0.2
93.5	AURORA	133	0.2
93.5	PARKVILLE	133	0.2
	CHILLICOTHE	126	0.1
96.0	FRONTENAC	120	0.1
97.0	CAMERON	119	0.1
98.5	SHREWSBURY	118	0.1
98.5	WARRENTON	115	0.1
100.0	HOLLISTER	117	0.1
101.5	COTTLEVILLE	116	0.1
101.5	PACIFIC	116	0.1
103.0	BOONVILLE	110	0.1
104.0	ST. JOHN	108	0.1
104.0	LAKE OZARK	106	0.1
106.0	MARYVILLE	106	0.1
106.0	SMITHVILLE	106	0.1
108.0	ST. JAMES	105	0.1
109.0	MAYNESVILLE	103	0.1
110.5	CANDENTON	102	0.1
10.00 M + 104		and the line	

CITYRANK	CITY	COUNT	PCT
110.5	DEXTER	102	0.1
	CRESTWOOD	100	0.1
	DE SOTO	99	0.1
114.0	RAYMORE	98	0.1
115.0	GRAIN VALLEY	97	0.1
116.5		96	
	DAK GROVE	96	0.1
118.0	KEARNEY	95	0.1
119.0	CARUTHERSVILLE	92	0.1
120.0	CRYSTAL CITY	88	
121.5	DELLWOOD	86	0.1
121.5	SULLIVAN	86	0.1
123.5	BRECKENRIDGE HILLS	83	0.1
123.5	RIVERSIDE	83	
	BUFFALO	81	0.1
	ROGERSVILLE	80	0.1
127.0	CUBA	79	0.1
128.0	HERCULANEUM	78	0.1
	HILLSBORD	75	
	POTOSI	75	0.1
	MACON	73	0.1
133.0	CLAYCOMO	72	0.1
133.0	LAKE LOTAWANA	72	0.1
	SALEM	72	0.1
135.0	PINE LAWN	71	0.1
137.5	NORMANDY	69	0.1
	PLATTE CITY	69	0.1
	PLEASANT HILL	69	0.1
137.5	VALLEV PARK	69	0.1
140.0	FREDERICKTOWN	67	0.1
141.0	PLEASANT VALLEY	66	0.1
142.0	MOSCOW MILLS	65	0.1
143.0	COOL VALLEY	63	0.1
145.0	BOURBON	61	0.1
145.0	CASSVILLE	61	0.1
145.0	RICHMOND	61	0.1
147.0	BEL-RIDGE	60	0.1
148.5	PAGEDALE	59	0.1
148.5	SUGAR CREEK	59	0.1
150.0	MINER	58	0.1
151.5	BONNE TERRE	56	0.1
151.5	SCOTT CITY	56	0.1
153.0	ODESSA	55	0.1
154.0	HAYTI	53	0.1
155.0	ROCK HILL	51	0.1
156.0	MOLINE ACRES	50	0.1
158.5	BYRNE'S MILL	49	0.1
158.5	MOUNT VERNON	49	0.1
158.5	TRENTON	49	0.1
158.5	WILLARD	49	0.1
161.0	WRIGHT CITY	47	0.1
163.0	BETHANY	46	0.1
163.0	DESLOGE	46	0.1
163.0	WOODSON TERRACE	46	0.1
165.5	ELDON	45	0.1

CITYRANK	CITY	COUNT	PCT
165.5	LAMAR HIGGINSVILLE WELLSTON	45	0.1
167.5	HIGGINSVILLE WELLSTON BROOKFIELD LEXINGTON MALDEN STEL GENEVIEVE	66	0.L
167.5	WELLSTON	66	Q.L
169.0	BRDDKFIELD	43	0.1
171.5	LEXINGTON	61	0.0
171.5	MALDEN	41	0.0
171.5	OIL: OUNDERSEE		
	STRAFFORD	61	0.0
175.0	CALIFORNIA	40	0.0
175 0	DARDENNE PRAIRIE	60	0.0
175.0	HOUSTON	40	0.0
177.5	FORSYTH	39	0.0
177.6	ONENSVILLE	39	0.0
179.5	BUTLER	38	0.0
179 5	HOUSTON FORSYTH ONENSVILLE BUTLER DAKLAND CARL JUNCTION	3.8	0.0
182.0	CARL JUNCTION	37	0.0
182 6	LOUISTANA	37	0.0
102.0	LOUISIANA Northwoods	37	0.0
106.0	NORTHWOODS		
105.0	BLACK JACK COUNTRY CLUB HILLS	3.6	0.0
185.0	COURTES CLOS ALECS	36	
185.0	DONIPHAN CABOOL		0.0
107.0	CABODE	39	0.0
188.5	SLENDALE COURT	34	0.0
188.5	CABODE GLENDALE NORMOOD COURT PALMYRA	34	3.0
190.5	PALMYRA SAVANNAH	3.3	0.0
190.5	SAVANNAH PECULIAR	33	0.0
	PECULIAR	32	0.0
		31	
		31	8.0
195.0	MOUNTAIN GROVE	31	0.0
	WILLOW SPRINGS EL DORADO SPRINGS		0.0
198.0	EL DORADO SPRINGS PIEDMONT VINITA PARX MILAN CENTRALIA	30	
100.0	VINITA DADY	3.0	
170.0	WILLIN FROM	29	
200.0	DILLAR DENTRA: EA	28	0.0
202.0	CENTRALIA MONGOE CITY	28	0.0
202.0	MONRDE CITY Versailles		
		27	0.0
206.0	ANDERSON	27	0.0
206.0	CLARKSON VALLEY	27	0.0
206.0	DUQUESNE	27	0.0
206.0	HOLTS SUMMIT	27	0.0
206.0	NEW MADRID	26	0.0
209.5	CARROLLTON		0.0
209.5	WESTON	26	0.0
212.5	BILLINGS	25 25	0.0
212.5	EAST PRAIRIE		
212.5	MARSAW	25	0.0
212.5	MINCHESTER	25	0.0
215.5	MONTGOMERY CITY	23	0.0
215.5	MOUNTAIN VIEW	23	0.0
217.0	AVA	22	0.0
219.5	BOWLING GREEN	21	0.0
	CAMPBELL	21	0.0
219.5	MARLBOROUGH	21	0.0

CITYRANK	CITY	COUNT	PCT
219.5	THAYER	21	0
		20	
662-2	KIMBERLING CITY MARBLE HILL MARIONVILLE MEMPHIS KNOB NOSTER LANSON LINCOLN HERMANN	20	0
225.5	MARBLE HILL	-2.0	ő
559.2	MARIONVILLE		0
223.5	MEMPHIS	20	
227.0	KNOB NOSTER	19	
227.0	LANSON	19	0
227.0	LINCOLN	19	0
229.0	HERMANN Albany Green Park Weidon Spring	15	0
231.0	ALBANY	17	
231.0	GREEN PARK	17	
231.0	WELDON SPRING	17	0
Z34.5	ASHLAND	16	0
259.5	BULKNEK	16	0
234.5	NEW HAVEN	1.6	σ
234.5	STEELVILLE	1.6	0
230.5	CDUNTRY CLUB VILLAGE		a
228.5	LTNN	15	C
230.5	PLATTSBURG	15	0
220.2		1.5	
200.0	VIENNE MANOCICID	16	0
292.0	NEWSPIELD	14	ő
292.0	SETHOUR .	14	ŏ
292.0	HDLDEN		
$\leq c_0 \gg 1$ , (9)	H D L L L N	13	
	MARCELINE	13	
	RIVERVIEW	1.5	0
245.5		1.5	0
		12	0
251.5	BLDOMFIELD	12	0
251.5	CALVERTON PARK	12	0
251.5	BLDOMFIELD CALVERTON PARK CARTERVILLE CHAFFEE CROCKER HILLSDALE WINDSOR DIXON NOEL SARCOXIE VELDA VILLAGE		0
251.5	CHAFFEE	12	
251.5	CROCKER	12	0
251.5	HILLSDALE	12	0
251.5	HENDSOR	1.5	0
257.5	DIXON	11	0
257.5	NOEL	11	0
257.5	SARCOXIE	11	0
257.5	VELDA VILLAGE	11	0
	CANTON	1.0	0
262.5	FDUR SEASONS	10	0
262.5	LICKING	10	0
262.5	RICHLAND	10	0
262.5	SHELBINA	10	0
262.5	UNIONVILLE	10	0
271.0	CHARLACK	9	ŏ
	DUENWEG	9	Ű.
271.0		9	Ő
271.0	EDINA	9	0
271.0	ELSBERRY		
271.0	PAYETTE	7	D
271.0	GREENWOOD	9	0
271.0	КАНОКА	9	0
271.0	PARIS	9	0
271.0	SALISBURY	9	0
271.0	SENATH	9	0

CETYRANK	CITY	COUNT	PCT
271.0	WINONA	9	0
278.0	GARDEN CITY	8	0
	TRONTON	B	ġ.
278.0	I RONTON VANDALIA	0	ŏ
	ASH GROVE	-	ă
		8 7 7	ě
	BEL-NOR	4	ő
283.5	BERNIE	1	
	CLEVER	7 7 7 7	0
	FAIR GROVE	6	0
283.5	GRANBY		0
	GREENFIELD	7	0
283.5	LATHROP	7	0
292.5	ADRIAN ADVANCE CONCORDIA	6	0
292.5	ADVANCE	6	0
292.5	CONCORDIA	6	0
292.5	GODDMAN	6	0
292.5	HANLEY HILLS	6	0
292.5	LA PLATA	6	0
292.5	PURDY	6	0
292.5	PUXICO	6	0
	ROCKPORT	6	0
	SPARTA	-6	0
	DREXEL	5	0
299.5	GOWER	5	0
	HAMILTON	5	0
299.5	PRINCETON	5	0
299.9	CRANE	4	0
304.0	GERALD	4	0
	MAYSVILLE	4	0
	MERRIAN WOODS	4	0
304.0	ST. PAUL		0
314.0	APPLETON CITY	61 CH	0
	CLARKTON		0
	GALLATIN	3	0
	HUNTSVILLE	3	0
	JASPER	3	0
314.0	KING CITY	3	0
314.0	LA HONTE	3	0
314.0	LEADWOOD	5	0
314.0	NEW FRANKLIN	3	0
314.0	NEW LONDON	-3	0
314.0	PIERCE CITY	5	0
314.0	RICH HILL	5	0
314.0	SLATER	3	0
314.0	STANBERRY	3	0
314.0	WELLSVILLE	3	0
325.0	BISMARK	2	0
325.0	COLE CAMP	2	0
325.0	LA GRANGE	2	0
	MOUND CITY	2	0
325.0	ST. MARTINS	2	0
	SWEET SPRINGS	2	0
325.0		2	0
325.0	TARKID	2	0
331.5	GIDEON		
331.5	BLASBOW	1	a

CITYRANK	CITY	COUNT	PCT
331.5	LAKESHIRE	1	D
331.5	LILBOURN	1	0
331.5	ST. GEORGE	1	0
331.5	WEATHERBY LAKE	1	0

# 2005-2007

# FATAL TRAFFIC CRASHES

# **RANK ORDER BY COUNTY**

#### 2005 - 2007 MISSOURI FATAL TRAFFIC CRASHES RANK-ORDER COUNTY LISTING

CNTYRANK	COUNTY	COUNT	PCT
1.0	JACKSON	227	7.6
2.0	ST LOUIS	178	6.0
3.0	ST LOUIS CITY	144	4.8
4.5	GREENE	111	3.7
4.5		111	3.7
6.0	FRANKLIN	81	2.7
7.0	ST CHARLES	79	2.6
8.0	BOONE	71	2.4
9.0	CLAY	69	2.3
10.0		59	2.0
11.0	JASPER	51	1.7
12.0	BUTLER	46	1.5
13.0	PHELPS	45	1.5
14.5	BUCHANAN	43	1.4
14.5	COLE	43	1.4
16.5	CAMDEN	42	1.4
16.5	PLATTE	42	1.4
18.0	BARRY	39	1.3
	ST FRANCOIS	37	1.2
21.0	HOWELL	36	1.2
21.0	LAWRENCE	36	1.2
21.0	WASHINGTON	36	1.2
23.5	MC DONALD	34	1.1
23.5	TANEY	34	1.1
25.5	CALLAWAY	33	1.1
25.5	LACLEDE	33	1.1
28.0	CHRISTIAN	32	1.1
28.0	MILLER	32	1.1
28.0	PULASKI	32	1.1
30.0	CASS	31	1.0
31.5	JOHNSON	29	1.0
31.5	WEBSTER	29	1.0
33.5	DUNKLIN	28	0.9
33.5	LINCOLN	28	0.9
36.0	CRAWFORD	26	0.9
36.0	PETTIS	26	0.9
36.0	STONE	26	0.9
38.0	TEXAS	25	0.8
40.0	LAFAYETTE	23	0.8
40.0	NEW MADRID	23	0.8
40.0	POLK	23	0.8
42.0	CAPE GIRARDEAU	21	0.7
43.5	MARION	20	0.7
43.5	STODDARD	20	0.7
46.5	BENTON	19	0.6
46.5	MORGAN	19	0.6
46.5	ST CLAIR	19	0.6
46.5	SCOTT	19 ,	0.6
49.0	MONTGOMERY	18	0.6
51.5	COOPER	17	0.6
51.5	DALLAS	17	0.6
51.5	PEMISCOT	17	0.6
51.5	WAYNE	17	0.6
55.5	DENT	16	0.5
55.5	HENRY	16	0.5

#### 2005 - 2007 MISSOURI FATAL TRAFFIC CRASHES RANK-ORDER COUNTY LISTING

CNTYRANK	COUNTY	COUNT	PCT
55.5	PIKE	16	0.5
55.5	SALINE	16	0.5
59.5	IRON	15	0.5
59.5	OREGON	15	0.5
59.5	REYNOLDS	15	0.5
59.5	WARREN	15	0.5
63.5	CEDAR	14	0.5
63.5	HARRISON	14	0.5
63.5	STE GENEVIEVE	14	0.5
63.5	VERNON	14	0.5
68.5	BATES	13	0.4
68.5	MACON	13	0.4
68.5	MADISON	13	0.4
68.5	RAY	13	0.4
68.5	SHANNON	13	0.4
68.5	WRIGHT	13	0.4
73.5	MISSISSIPPI	12	0.4
73.5	NODAWAY	12	0.4
73.5	OSAGE	12	0.4
73.5	RIPLEY	12	0.4
79.5	AUDRAIN	11	0.4
79.5	CLINTON	11	0.4
79.5	DAVIESS	11	0.4
79.5	DOUGLAS	11	0.4
79.5	GASCONADE	11	0.4
79.5	MARIES	11	0.4
79.5	MONITEAU	11	0.4
79.5	RALLS	11	0.4
86.5	CARTER	10	0.3
86.5	DE KALB	10	0.3
86.5	HOWARD	10	0.3
86.5	LEWIS	10	0.3
86.5	PERRY	10	0.3
86.5	RANDOLPH	10	0.3
90.5	BARTON	9	0.3
90.5	LINN	9	0.3
93.5	ANDREW	8	0.3
93.5	CLARK	8	0.3
93.5	HOLT	8	0.3
93.5	MONROE	8	0.3
98.0	BOLLINGER	7	0.2
98.0	CALDWELL	7	0.2
98.0	DADE	7	0.2
98.0	LIVINGSTON	7	0.2
98.0	SULLIVAN	7	0.2
101.0	OZARK	6	0.2
102.5	ATCHISON	5	0.2
102.5	SHELBY	5	0.2
106.0	ADAIR	4	0.1
106.0	CHARITON	4	0.1
106.0	HICKORY	4	0.1
106.0	KNOX	4	0.1
106.0	PUTNAM	4	0.1
110.5	CARROLL	3	0.1
110.5	GENTRY	3	0.1

#### 2005 - 2007 MISSOURI FATAL TRAFFIC CRASHES RANK-ORDER COUNTY LISTING

CNTYRANK	COUNTY	COUNT	PCT
110.5	GRUNDY	3	0.1
110.5	SCOTLAND	3	0.1
113.0	SCHUYLER	2	0.1
114.5	MERCER	1	0.0
114.5	WORTH	1	0.0

# 2005-2007

# **PERSONAL INJURY**

# **TRAFFIC CRASHES**

# **RANK ORDER BY COUNTY**

CNTYRANK	COUNTY	COUNT	PCT
1.0	ST LOUIS	20530	16.1
	JACKSON	17217	
	ST LOUIS CITY		8.9
	GREENE	8021	6.3
	GREENE ST CHARLES JEFFERSON	5583	6.5
5.0	ST CHARLES	2262	3.4
<b>5</b> .0			
7.0	CLAY	4170	3.3
8.D		2836	
9.0	BOONE	2684	
		2352	
		2290	
		1615	
13.0	PLATTE	1583	1,2
14.0	TANEY	1557	1.2
15.0	CAPE GIRARDEAU	1478	1.2
16.0	CASS	1410	1.1
17.0	NEWTON	1296	1.0
18.0	PHELPS	1269	1.0
19.0	ST FRANCOIS	1237	1.0
20.0	BUTLER	1149	0.9
21.0	PETTIS	1036	0.8
22.0	CHRISTIAN	1005	0,8
	CANDEN	983	
	LACLEDE	943	
	JOHNSON	927	
	CALLAWAY	820	
27.0			0.6
	LINCOLN	794	0.6
29.0	PULASKI	738	0.6
30.0	SCOTT	735	0.6
31.0	STONE	733	0.6
32.0	LAWRENCE	719	0.6
33.0	HOWELL	710	0.6
34.0	DUNKLIN	684	0.5
34.0	RANDOLPH	586	0.5
35.0	STODDARD		0.4
37.0	LAFAYETTE	558	0,4
38.0	HC DONALD	556	0.4
39.0	HILLER	552	0.4
40.0	POLK	549	0.4
61.5	CRAWFORD	548	0.4
61.5	MARION	548	0.4
43.0	WASHINGTON	539	0.4
44.0	WARREN	512	0.4
45.0	WEBSTER	497	0.4
46.0	SALINE	491	0.4
47.0	PEMISCOT	469	0.4
48.0	BENTON	458	0.4
49.0	NEW MADRID	447	0.3
50.0	HENRY	639	0.3
51.0	AUDRAIN	425	0.3
52.0	ADAIR	418	0.3
53.0	TEXAS	411	0.3
54.0	COOPER	396	0.3
55.0	PERRY	389	0.3

CNTYRANK	COUNTY	COUNT	PCT
56.0	MORGAN VERNON PAY	379	0.3
57.0	VERNON	367	0.3
58.0	RAY	351	0.3
59.0	DALLAS	319	0.2
60.0	CLINTON	316	5.0
61.0	ANDREW	314	0.2
62.0	STE GENEVIEVE	310	0.2
63.0	MONTGONERY	305	0.2
64.0	HODAWAY	303	
65.0	WAYNE	295	0.2
66.0	WRIGHT	294	0.2
67.0	NATNE WRIGHT PIKE	277	0.2
68.0	DENT	276	0.2
69.0	GASCONADE	269	0.2
70.0	MACON	268	0.2
	RIPLEY	263	0.2
	LIVINGSTON	249	0.2
73.5	BATES	247	
73.5		247	
75.0	LEDN	233	2.0
76.0	DOUGLAS	227	0.2
77.0	DE KALB	225	0.2
	BOLLINGER		
79.0		218	
	MISSISSIPPI	211	0.2
	MARIES	210	0.2
		209	0.2
	BARTON	206	0.2
	HARRISON OREGON	200	0.2
	RALLS	196	0.2
87.0	ST CLAIR	194	0.2
88.0	OZARK	185	0.1
89.0	SHANNON	175	0.1
90.0	LINN	166	0.1
		163	
92.0	CALDWELL	155	0.1
93.0	REYNOLDS	154	0.1
94.0	DAVIESS	151	0.1
95.0	HICKORY	145	0.1
96.0	MONRDE	142	0.1
27.0	LEWIS	360	0.1
98.5	CARTER	139	0.1
98.5	GRUNDY	139	0.1
100.0	SULLIVAN	138	0.2
101.0	HOWARD	135	0.1
102.0	CARROLL	125	0.1
103.0	HOLT	113	0.1
104.0	ATCHISON	102	0.1
105.0	CHARITON	99	0.1
106.0	CLARK	98	0.1
107.0	DADE	94	0.1
108.0	GENTRY	93	0.1
109.0	SHELBY	82	0.1
110.0	PUTNAM	\$0	0.1

CNTYRANK	COUNTY	COUNT	PCT
111	SCOTLAND	75	0.1
112	SCHUYLER	69	0.1
113	MERCER	64	0.1
114	KNOX	58	0.0
115	WORTH	29	0.0



# PUBLIC INFORMATION AND EDUCATION



# Background

Traffic crashes, unfortunately, appear to be an accepted part of our mobile society. Drivers become complacent. They don't think about crashing until they witness a wreck, then they slow down and are cautious for a short while. After that, it's back to driving just like they were before they witnessed the scene.

Most people tend to think they are good drivers. One of the Highway Safety Division's former campaigns posed the question "*What if everybody drove like you*?" The typical response was, "*There would be fewer crashes,*" or "*We'd be better off.*" A similar response is noted when drivers are asked to assess their driving skills -3 of 4 drivers say their own skills are above average. Is it possible for virtually every driver on the road to be above average? Our challenge is to make the general public aware of their poor driving habits, responsive to changing these habits, and to voluntarily comply with Missouri's traffic laws.

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 *You Drink & Drive. YOU LOSE*. People heard about the mobilizations in the media, there were well-recognized logos to support the effort, 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.

The Public Information Subcommittee of the Missouri Coalition for Roadway Safety (MCRS) is comprised of partners throughout the state who have expertise in traffic safety programming.

The subcommittee developed a central theme for use on all traffic safety materials and campaigns. The theme, *Arrive Alive*, conveys a consistent unified message regardless of whether the campaign pertains to occupant protection, drinking drivers, or any other traffic safety concern. The HSD works closely with the committee to coordinate all of our public awareness efforts. A website (<u>www.saveMOlives.com</u>) was developed to promote our public awareness programs such as *Saved by the Belt*. In an attempt to reach more youth, it was agreed that a separate website be designed which would prove more attractive to younger audiences. The *Never Made It* youth campaign, among others, can be viewed at www.saveMOyouth.com.







# Benchmarks

- A. Increase awareness and positively impact traffic safety behaviors of the general public concerning impaired driving, aggressive driving, speeding, fatigued or distracted driving, sharing the road with other vehicles, and obeying traffic laws
- B. Increase awareness regarding the importance of correctly using safety devices including safety belts, child safety seats, booster seats, motorcycle helmets and additional protective gear, and bicycle helmets
- C. Increase awareness regarding driving safely and obeying the laws in construction work zones and at highway/rail crossings

# **Performance Measures**

- 1. Monitor campaigns by following exposure of our messages and size of the audience reached
- 2. Track crash statistics relevant to target audiences
- 3. Monitor statewide safety belt use rate, teen safety belt use rate, commercial vehicle safety belt use rate, and child safety seat and/or booster seat use rate
- 4. Track: number of presentations given; number of exhibits and audiences reached; number of public service announcements aired or posted; acceptance of, and participation in, campaigns by partners and sponsors; and the amount of traffic safety materials distributed annually

# Strategies

- 1. Serve as the point of contact for the media and the general public to field questions, conduct interviews, and provide information
- 2. Develop and disseminate promotional/educational materials
- 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 Division to the general public through websites (MoDOT; saveMOlives; saveMOyouth), in workshops, at conferences and exhibits, and through our materials
- 6. Update public information materials and websites to keep information current, easily accessible, and appealing
- 7. Develop and promote materials/campaigns to reach specific audiences (e.g., high risk drivers, vulnerable roadway users, impaired drivers, mature drivers)
- 8. Maintain the youth-specific website, saveMOyouth, in a format that is fresh and appealing to teens/young adults
- 9. 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
- 10. Promote the ARRIVE ALIVE theme developed by the MCRS and incorporate the logo in all materials
- 11. Work with the MCRS regional coalitions to appropriately target their messages and develop programs to meet their needs
- 12. Develop strategies to work with partners—both traditional and nontraditional—in order to reach wider audiences and maximize resources
- 13. Solicit public information activity reports from law enforcement partners and district coalitions
- 14. Work with the Motor Carrier Safety Assistance Program, Safe Routes to School Program, Missouri Motorcycle Safety Education Program, and others to promote joint traffic safety awareness campaigns when possible

- 15. Give presentations and provide training to community groups, schools, etc. as available
- 16. Serve on federal, state, and regional committees/boards in order to broaden opportunities to promote traffic safety issues
- 17. Promote law enforcement mobilization efforts: *Click It or Ticket* safety belt campaign; *You Drink & Drive. YOU LOSE* alcohol campaign; quarterly occupant protection and impaired driving mobilizations; *Operation Safe Teen* youth campaign (the enforcement portion of the *Never Made It* teen campaign)
- 18. Purchase paid advertising to support traffic safety campaigns (e.g., occupant protection and impaired driving)
- 19. Support and promote MoDOT's *The Difference is You. DRIVE SMART* construction work zone public awareness campaign
- 20. Promote Saved by the Belt and Battle of the Belt programs
- 21. Promote the *Seat Belt Convincer, Rollover Simulator, and SIDNE* educational programs to assure the units are used to reach as many people as possible
- 22. Participate in the Missouri State Fair to educate the public on traffic safety issues and provide detailed information about occupant protection, child safety seats, older driver issues, motorcycles and scooters, and any modifications to traffic safety laws
- 23. 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



# **AGGRESSIVE DRIVERS**



# Background

"The causes of aggressive driving are complex—no one has all of the answers. Some psychiatrists point to deep-rooted personal causes such as stress disorders that lead to impaired judgment. Social scientists have tended to see a connection between societal problems and uncivil or violent forms of driving behavior. What we do know is that 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." (Ricardo Martinez, M.D., Administrator, NHTSA, July 17, 1997).

Aggressive driving is serious problem on Missouri's roadways and has contributed substantially to traffic crashes, especially crashes resulting in death. Aggressive drivers are defined in *Missouri's Blueprint for Safer Roadways* 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."

CIRCUMSTANCE	FATALITIES - 1,519	DISABLING INJURIES - 9,869
Exceeding Speed Limit	39.2%	18.0%
Too Fast For Conditions	56.6%	67.0%
Following Too Close	4.2%	15.0%

#### 2005-2007 MISSOURI AGGRESSIVE DRIVER INVOLVED FATALITIES AND DISABLING INJURIES TYPE OF CIRCUMSTANCE (by Crash Severity<sup>1</sup>)

<sup>1</sup> Percentage of 2005-2007 aggressive driving related fatalities and disabling injuries by type of aggressive driving behavior involved. For instance, in aggressive driving related fatalities and disabling injuries, 39.2% involved a motorized vehicle-driver exceeding the speed limit. NOTE: Multiple aggressive driving factors can be related to a single fatality or disabling injury.

Aggressive drivers not only put their own lives at risk, but the lives of others as well. Of the 1,419 people killed, 61.9% were the aggressive driver and the other 38.1% were some other party in the incident. Of the 9,209 seriously injured, slightly more than one-half (55.0%) were the aggressive drivers and nearly one-half (45.0%) 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. In 2005-2007, there were 508,470 crashes in Missouri; 17.1% involved speeding. The problem is more significant when examining fatal crashes—of the **2,988 fatal crashes**, **40.8% involved drivers who were speeding**.

### Benchmarks

A. 2% reduction in fatalities and disabling injuries attributable to aggressive driving crashes in comparison to the previous 3-year total (2005-2007 = 10,628).

Note: Statistics from 2005-2007 show a slight increase in the number of aggressive driving fatalities and disabling injuries as a percentage of total fatalities and disabling injuries (37.4% in 2005, up to 38.1% in 2006, slightly up again to 39.0% in 2007). When reviewing fatalities only, there has also been a slight fluctuation in the number of aggressive driving fatalities as a percentage of total fatalities (41.8% in 2005, up to 42.9% in 2006, and slightly down to 42.7% in 2007).

# **Performance Measures**

- 1. Monitor the effects of road conditions, traffic congestion, and time constraints on aggressive driving crashes. Areas that warrant special attention are roadways with considerable construction work (locations will be defined by crash data indicating that a majority of fatal and serious injury crashes are occurring on these roads).
- 2. Continue to track and evaluate all crashes involving hazardous moving violations with special attention given to Speeding (exceeding posted limit and too fast for conditions) and Following Too Closely as identified in *Missouri's Blueprint to ARRIVE ALIVE*.

With further study of these control factors, we hope to be able to continually develop more effective countermeasures.

# **Strategies**

- 1. Expand targeted corridor projects and Selective Traffic Enforcement Programs (STEPs) conducted by the Highway Patrol and local law enforcement agencies
- 2. Continue to strategize with law enforcement and training academy partners to develop enforcement/awareness countermeasures and share their concepts and programs
- 3. Fund saturation enforcement efforts in construction/work zones in the MoDOT districts and enhance the enforcement with public awareness campaigns
- 4. Expand use of speed monitoring and changeable message signs
- 5. Expand efforts to educate roadways users on the dangers of aggressive driving and the rules of the road
- 6. Expand the use of red light running cameras throughout the state



# ALCOHOL AND OTHER DRUGS

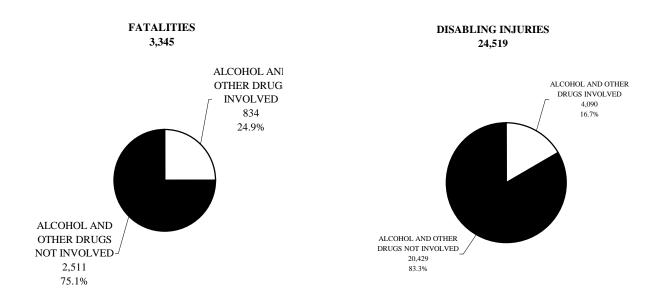


# Background

It is impossible for anyone to predict how alcohol will affect him or her on any given occasion. Every drink, especially the first, takes influence over the body and mind having a profound impact over divided attention skills like driving a motor vehicle. Only one drink could have dire consequences.

Alcohol and other drugs contribute substantially to traffic crashes on Missouri's roads, especially those resulting in death or disabling injury. In the 2005-2007 period, 508,470 traffic crashes occurred in the State. Of those, 0.6% resulted in a fatality and 3.7% involved someone being seriously injured. During the same time period, there were 25,451 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, 834 people were killed and another 4,090 were seriously injured.

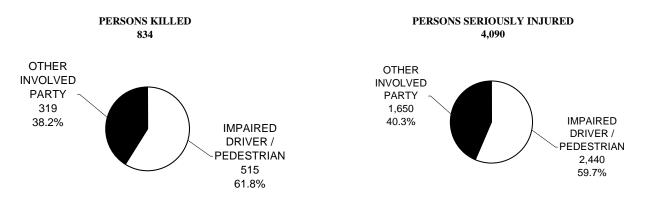
It also is important to note that impaired driving is under-reported as a contributing factor in traffic crashes. As a result, it is an even greater problem than these statistics would indicate.



#### 2005-2007 MISSOURI ALCOHOL AND OTHER DRUG RELATED FATALITIES AND DISABLING INJURIES

A common misconception is that impaired drivers are mostly hurting and killing themselves. While that is often true, a substantial number of people killed and seriously injured in these crashes were not intoxicated. Their actions in these incidents probably did not contribute to the cause of the collision. Of the 834 people killed in alcohol and other drug-related traffic crashes, 61.8% were the impaired driver/pedestrian and 38.2% were some other involved party. Of the 4,090 seriously injured, 59.7% were the impaired drivers/pedestrians while 40.3% were other persons in the incidents.

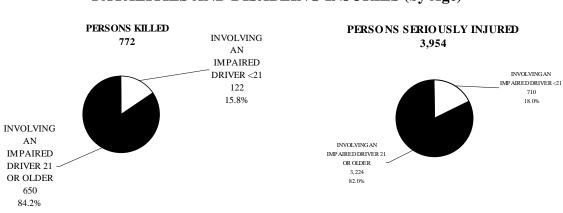
#### 2005-2007 MISSOURI ALCOHOL AND OTHER DRUG RELATED FATALITIES AND DISABLING INJURIES (Person Involvement)



# Young Impaired Drivers (Under Age 21)

Youth make up a significant proportion of impaired drivers of motorized vehicles causing traffic crashes on Missouri roadways. Of the 25,262 impaired drivers who caused traffic crashes during 2005-2007, 14.8% 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 2005-2007, a total of 709 impaired drivers were involved in crashes where one or more persons were killed. In known cases, 16.3% of these drivers were under the age of 21. A total of 122 persons were killed in traffic crashes involving these young drivers. Of those persons killed, 41.0% were the underage impaired driver and 59.0% were some other party in the crash.



#### 2005-2007 MISSOURI ALCOHOL AND OTHER DRUG RELATED FATALITIES AND DISABLING INJURIES (by Age)

**NOTE:** The data for persons killed and seriously injured involving an impaired driver by age does not include data for those crashes where the driver's age was unknown or where the pedestrian was the impaired party. Also, one alcohol and other drug related crash has the potential of consisting of an 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.

# Benchmarks

- A. 2% decrease in alcohol and other drug related fatalities and disabling injuries in comparison to the previous 3-year total (2005-2007 = 4,924).
- B. 2% decrease in alcohol and other drug related fatalities and disabling injuries involving drivers under age 21 in comparison to the previous 3-year total (2005-2007 = 832).

# **Performance Measures**

- 1. Ongoing analysis of the traffic crash data in Missouri will serve as the means to measure progress toward the benchmarks. In impaired driving crashes, specific criteria are considered: age and sex of drivers; time of day, day of week, month of year, and location of occurrences; drivers of passenger vehicles or motorcycles versus pedestrians; vehicle type (motorcycle, auto, CMV).
- 2. Where available, arrest and conviction data will be used to evaluate existing statutes and regulations, and to determine training and equipment needs for effective enforcement, prosecution, adjudication and treatment of offenders.

# 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 *You Drink & Drive. YOU LOSE*, through quarterly impaired driving mobilizations, and through the distribution of educational materials at traffic safety workshops, health and safety fairs, displays, on the web site, and through public service announcements
- 2. Incorporate impaired driving educational programs into school systems and businesses
- 3. Develop 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
- 6. Implement, if possible, recommendations identified in the 2008 Statewide Impaired Driving Assessment
- 7. Working through the MCRS Impaired Driving Subcommittee, implement, as possible, strategies identified in the 2008 Impaired Driving Strategic Advance
- 8. 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 and Partners in Environmental Change; local community educational programs
- 9. Revise and reprint impaired driving educational materials as needed; expand partnerships to encourage use of these materials in their publications
- 10. Develop campaigns/materials to reach targeted high-risk groups
- 11. Develop materials to educate legislators about alcohol and other drug-related driving issues
- 12. 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, Partners In Environmental Change)

13. 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

### **Enforcement**

- 1. Provide funding for alcohol saturation enforcement teams, 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, sobriety checkpoint supervisor training, courtroom testimony, Drug Recognition Experts, and DWI crash investigation techniques)
- 4. Provide motivational speakers for law enforcement personnel during training events such as the annual Law Enforcement Traffic Safety Advisory Council (LETSAC) conference
- 5. Provide supplies, support, and training for Drug Recognition Experts and the DRE Recertification Training to ensure continuity of the program
- 6. Support a State SFST Coordinator who will work in cooperation with the Impaired Driving Subcommittee of the MCRS in order to maintain standardization of the program
- 7. Support projects designed to prevent underage alcohol purchase, apprehend minors attempting to purchase alcohol, and provide a physical enforcement/intervention presence (e.g., Badges in Business, Server Training, Party Patrol, 1-866-MUSTB21 tipline, PIRE law enforcement training, selective enforcement, compliance checks, and special events)
- 8. Incorporate, if possible, recommendations identified in the 2008 Impaired Driving Assessment
- 9. Increase participation in statewide multijurisdiction mobilization enforcement efforts
- 10. Support selective enforcement efforts to address young drinking drivers by funding underage drinking enforcement projects statewide
- 11. Support one additional DWI traffic unit with a local law enforcement agency

# Prosecution/Adjudication

- 1. Train 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, 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. Provide equipment and training to enhance the DWI Tracking System (DWITS)
- 6. Provide motivational speakers for judicial personnel during training events such as their annual municipal judges and court clerks conference
- 7. 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

8. Continue expansion of DWI Courts throughout the state beyond the current five locations in St. Charles, Lincoln, Jefferson, Buchanan and Greene Counties

#### **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 Instrument Training Laboratory to calibrate and repair breath test instruments in order to improve their reliability, and reassign instruments as needed
- 3. Seek ways to expedite processing of DWI offenders
- 4. Improve the process of tracking DWI offenders who have been sanctioned to install ignition interlock devices

#### Hazard Elimination (Section 154 Open Container Transfer Funds)

Within the provisions of SAFETEA-LU, states were required to pass and enforce a qualifying Open Container law or be subject to a 3% transfer of their federal aid highway funds. These funds were required to be diverted to either alcohol countermeasure safety programs (within the Highway Safety Division) or be utilized for qualifying Hazard Elimination projects. Some of the alcohol countermeasures identified within this Plan are supported by Section 154 transfer funds. A portion of the funding has been retained for Hazard Elimination efforts consisting of installation of 3-strand guard cable on major roadways to prevent crossover crashes – one of the most serious types of crashes occurring in Missouri.



# **OCCUPANT RESTRAINTS**



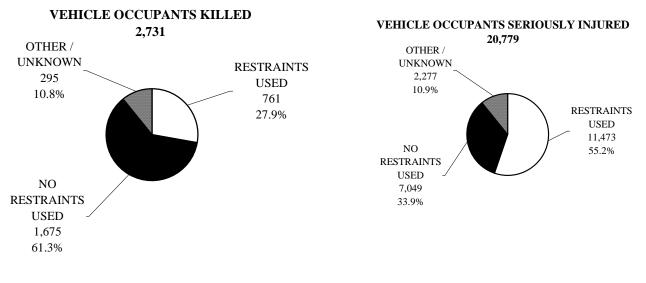
# **RESTRAINT USE**

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 seat belt or a child safety seat. Increasing safety belt 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 seat 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 or seriously injured in 2005-2007, in all probability, had a seat belt available for use:

- 3,345 killed -81.6% had a seat belt available;
- 24,519 seriously injured 84.8% had a seat belt available.

A substantial number of occupants killed in 2005-2007 Missouri traffic crashes were not wearing seat belts compared to those injured and not injured. In fatal crashes, **68.8% of the people who died were not buckled up** (crashes where usage was known). Of those seriously injured, 38.1% were not belted. Conversely, of those not injured, 643,100 were wearing a seat belt.

Note: The following charts include the percent of fatalities with unknown seat belt usage.



#### 2005-2007 MISSOURI TRAFFIC FATALITIES AND DISABLING INJURIES SEAT BELT USAGE

Data includes Child Safety Seats

Data includes Child Safety Seats

Seat belt use dramatically reduces a person's chance of being killed or seriously injured in a traffic crash. Of the drivers involved in 2005-2007 crashes, 1 in 2 was injured when they failed to wear their seat belt. But when they were wearing a seat belt, their chances of being injured in the crash were 1 in 7. When examining driver deaths, the differences are much more significant. Drivers had a **1 in 32** chance of being **killed** if they were **not wearing a seat belt**; but that chance dropped dramatically to only **1 in 1,220** if the driver was **wearing a seat belt**.



# Seat Belt Usage Among High School Students

While 68.8% of the dead occupants were not buckled up, lack of seat belt use becomes even more significant when we segregate young people. When just looking at young people between the **ages of 15 through 20, 80.4% of those who died were not buckled up**.

The Highway Safety Division had long been concerned with the lack of seat belt usage among young drivers and passengers. Unfortunately, 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 usage survey for these 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 seat belt usage observations would be made.
- 2. The safety belt usage rates of high school students would be computed for each of the ten MoDOT districts in the state.
- 3. The number of schools selected from each MoDOT district would be proportionate to the number of schools in that district in comparison to the state total of 496 public high schools
- 4. The high schools within each district would be selected in their descending order of student enrollment to maximize the number of high school students from each MoDOT district.

One hundred-fifty high schools were selected for the survey in 92 counties (80% of the 115 counties in Missouri). Data were collected in April and/or May. Observations were conducted 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 seat outboard passenger and other occupants in the vehicle. A detailed report of all findings is kept on file at the Highway Safety office.

Results of the high school surveys have shown small but steady increases:

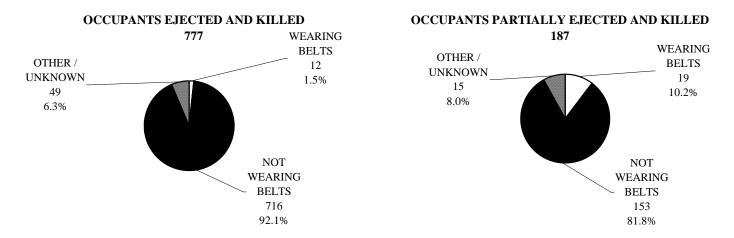
- 2004 53.5 percent;
- 2005 56.4 percent;
- 2006 57.9 percent; and
- 2007 61.3 percent.

# **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 belted 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, 92.1% were not wearing seat belts and of those partially ejected, 81.8% were not belted. Of the occupants not ejected from their vehicles, 45.7% failed to wear their seat belts.

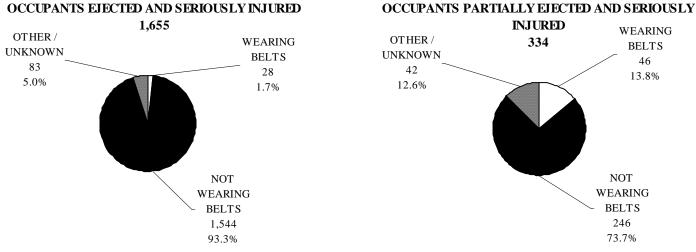
Note: The following charts include the percent of fatalities with unknown seat belt usage.

#### 2005-2007 MISSOURI TRAFFIC FATALITIES AND DISABLING INJURIES SEAT BELT USAGE



In known cases of those occupants seriously injured who were totally ejected from the vehicle, 93.3% were not wearing seat belts and of those partially ejected, 73.7% were not belted. Of the occupants not ejected from their vehicles, only 28.4% failed to wear their seat belts.

Note: The following charts include the percent of seriously injured with unknown seat belt usage.



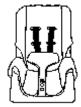
#### OCCUPANTS EJECTED AND SERIOUSLY INJURED

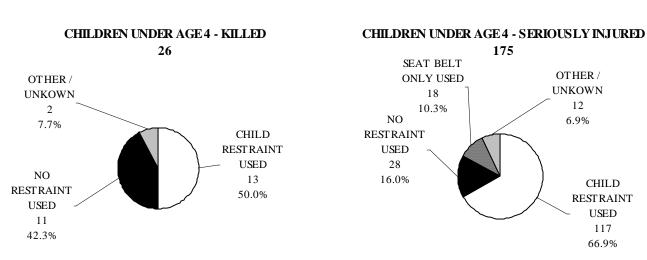
# **Very Young Passengers**

While Missouri must continue to promote the use of seat belts, particular attention must be paid to increasing the use of specialized restraint devices when 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 use or non-use of child safety seats and booster seats.

# **Children Birth through Age Three – Child Safety Seats**

In 2005-2007, 26 children under the age of 4 were killed in a motor vehicle; 42.3% were not using any type of restraint device (in known cases). There were 175 children under 4 seriously injured. In known cases, 16.0% were not using any type of restraint device and 10.3% were in an adult seat belt.





#### 2005-2007 MISSOURI TRAFFIC FATALITIES AND DISABLING INJURIES RESTRAINT DEVICE USAGE – CHILDREN UNDER AGE 4

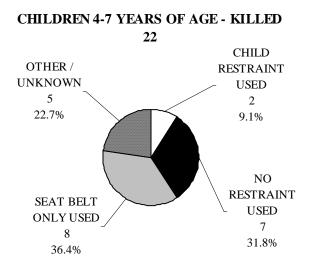
# Children Age 4 through 7 – Booster Seats

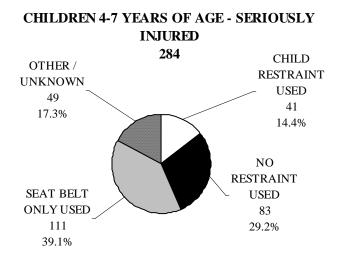
Research indicates that when children are graduated to a safety belt too soon, they are much more likely to suffer serious, disabling injuries due to "seat belt syndrome" if they are in a crash. Therefore, during the 2006 legislative session, Missouri's child passenger restraint law was strengthened 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). The law became effective August 28, leaving only four months in 2006 to capture data on booster seat usage. Given that it can take up to six months before the general public is aware of a new law and has put it into practice, we will not evaluate booster seat usage for 2006. We will begin analyzing crash data on this age group beginning in 2007 to determine whether we observe a trend that is indicative of a reduction in deaths and serious injuries. We also plan to train a base of individuals on proper techniques for conducting a booster seat observational survey; the actual survey is planned for several pilot sites in the Spring of 2009.



In 2005-2007, 22 children 4 through 7 years of age were killed in a motor vehicle; in known cases, 31.8% were not using any type of restraint device. Another 284 children within this age group were seriously injured – 29.2% were not secured in any type of restraint device, 14.4% were in a child restraint, and 39.1% were in a seat belt.

#### 2005-2007 MISSOURI TRAFFIC FATALITIES AND DISABLING INJURIES RESTRAINT DEVICE USAGE – CHILDREN 4-7 YEARS OF AGE





# Benchmarks

- A. Establish a baseline usage rate for children in booster seats
- B. 2% increase in the statewide safety belt usage rate (2007 usage was 77.2%)
- C. 2% increase in the teen young driver safety belt usage rate (2007 usage was 61.3%)
- D. 2% increase in the child occupant restraint usage rate (2007 usage was 88%)
- E. 2% increase in the CMV operator safety belt usage rate (2007 usage was 67.5%)
- F. 100% correct use of child safety seats by parents/caregivers upon exiting checkup events or fitting stations
- G. Assure there is an adequate base of certified Child Passenger Safety Technicians and Instructors within the state 944 certified Technicians; 35 certified Instructors

# **Performance Measures**

- 1. Ongoing analysis of the traffic crash data in Missouri will serve as the means to measure progress toward the benchmarks.
- 2. Properly administered and consistent occupant restraint usage surveys will be conducted statewide through grants with the Missouri Safety Center. Usage rates will be monitored to analyze the effectiveness of our enforcement and awareness mobilizations and our educational campaigns.
- 3. Track the number of CPS technicians and instructors entered into the database maintained by the highway safety division.

# Strategies

- 1. Conduct NHTSA-approved statewide observational safety belt survey in May/June (pre, peak, and post surveys in conjunction with enforcement mobilizations and public awareness campaigns)
- 2. Conduct annual teen statewide safety belt enforcement and public awareness campaign in February/March followed by the teen observational safety belt survey in March/April
- 3. Conduct observational booster seat survey at identified pilot sites in Spring 2009
- 4. Produce, promote and distribute educational materials addressing: occupant protection laws; importance of wearing safety belts all the time; properly installing child safety seats; booster seat use; air bag safety
- 5. Maintain a state CPS Advisory Committee and implement their recommendations where appropriate
- 6. Conduct 8 certified Child Passenger Safety Technician classes statewide
- 7. Certify an additional 2 CPS Instructors
- 8. Maintain a statewide computer list-serve of CPS technicians and instructors
- 9. 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 Highway Safety Division
- 10. Work with partners and with the media to garner support for annual CPS Week in September
- 11. Provide child safety seats/booster seats and supplies to fitting stations for distribution to low income families (note: fitting 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 )
- 12. 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
- 13. Conduct Selective Traffic Enforcement Program (STEP Waves) with State Patrol and local law enforcement agencies which will be 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
- 14. Conduct paid media efforts and work toward continual increases in earned media efforts
- 15. Develop educational pieces to heighten awareness concerning the life-saving and economic benefits derived from primary safety belt laws and enhanced child safety seat laws
- 16. Conduct youth safety belt selective traffic enforcement efforts statewide (*Operation Safe Teen*) coupled with press releases, radio spots, and materials targeting young drivers
- 17. Promote the *Never Made It* and *Battle of the Belt* youth campaigns; modify or enhance campaigns as needed to keep a fresh approach for the teen audience
- 18. Develop youth safety belt public awareness materials with input from young drivers
- 19. Educate youth on the importance of safety belts through programs such as Team Spirit Leadership Training & Reunion, Think First, and the Young Traffic Offenders Program
- 20. Coordinate the production of paid media messages and public services announcements



# **YOUNG DRIVERS**

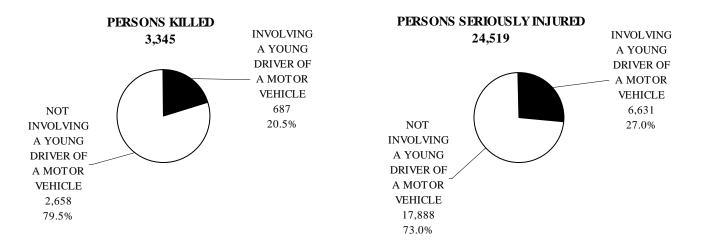


### Background

Young drivers are categorized as those ages 15 through 20 years. These young drivers are substantially over-involved in Missouri's traffic crash experience. In 2007, 18.9% of all fatal crashes involved a young driver of a motor vehicle; this is particularly significant since young drivers comprised of only 8.8% of the licensed driver population in Missouri.

Of all 2005-2007 fatal and disabling injury crashes in Missouri, 25.6% involved a young driver of a motor vehicle. In 2005-2007, 687 persons were killed and 6,631 were seriously injured in traffic crashes involving a young driver of a motor vehicle.

# 2005-2007 MISSOURI YOUTH INVOLVED TRAFFIC FATALITIES AND DISABLING INJURIES



NOTE: data for persons killed and seriously injured involving a young driver does not include young drivers of ATV's, bicycles, farm implements, construction equipment, other transport devices, and unknown vehicle body types.

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

• <u>Inexperience</u>: 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.

- <u>Risk-taking behavior and immaturity</u>: Adolescent impulsiveness is a natural behavior, but it results in poor driving judgment and participation in high-risk behaviors such as speeding, inattention, drinking, 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 2006 was 57.9% compared to the overall usage rate of 75.1%).
- <u>Greater risk exposure</u>: 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. Both of these factors increase crash risk.

The top 5 contributing circumstances attributable to young drivers were:

- 1. Inattention
- 2. Driving Too Fast for Conditions

- 3. Failed to Yield
- 4. Following too Close
- 5. Improper lane usage/change



# **Young Drinking Drivers**

When analyzing statistics involving young drinking drivers, it is all the more important for us to keep in mind that drinking is an illegal behavior for those under 21 years of age. In Missouri, we have 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 2005-2007, there were 3,465 drivers whose consumption of alcohol contributed to the cause of a fatal or disabling injury crash. In known case, 550 (16.0%) of the drinking drivers were under the legal drinking age of 21.

In 2005-2007, a total of 672 drinking drivers were involved in crashes where one or more people were **killed**. In known cases, 105 (15.7%) of those drinking drivers were under the legal drinking age of 21.

In 2005-2007, 790 (23.6%) of the fatalities and 3,841 (15.7%) of the disabling injuries involved a drinking driver. Of these, 112 (14.2%) of the fatalities and 654 (17.0%) of the disabling injuries involved an underage drinking driver.

In 2005-2007, 620 **young drivers** of motor vehicles were involved in 595 fatal traffic crashes where 687 people died. In those crashes, 103 or 16.6% of the young drivers were drinking and driving. **In other words, one of every 6 young drivers of a motor vehicle involved in fatal crashes was drinking alcohol and his / her intoxicated condition contributed to the cause of the crash.** 

# Benchmarks

- A. 2% decrease in fatalities and disabling injuries resulting from crashes involving young drivers compared to the previous 3-year period (2005-2007 =7,318).
- B. 2% decrease in fatalities and disabling injuries resulting from crashes involving young drinking drivers compared to the previous 3-year period (2005-2007 =766).

### **Performance Measures**

- 1. Ongoing analysis of the traffic crash data in Missouri will serve as the means to measure progress toward the benchmarks. We will monitor crashes involving drivers within the age group affected by Missouri's graduated drivers' licensing law, which became effective January 1, 2001. Increases and/or decreases in the percentage of licensed young drivers will also be monitored. Effective August 28, 2006, changes to Missouri's GDL law were implemented. The number of supervised driving hours was increased from twenty to forty (ten of which must take place at night), and passengers (outside of the immediate family) under age 19 were limited to one for the first six months and limited to three during the following six months.
- 2. Analyze results of GDL study that is under contract between MoDOT Organizational Results and University of Missouri-Kansas City (due for completion Fall of 2008).
- 3. Monitor legislative changes that impact young drivers to determine whether they have had any significant bearing on crashes involving intermediate licensees.

# **Strategies**

 Continue support for youth prevention and education programs to include Team Spirit Leadership Conferences; Team Spirit Reunion; Think First Programs (school assemblies, Traffic Offenders Program, and the corporate program); *Every15 Minutes*; DWI docudramas; CHEERS university-based designated driver program



- 2. Continue statewide distribution of *Safe Driving for Life, A Parent's Guide to Teaching Your Teen to Drive* through DOR offices and Highway Patrol driver examination stations
- 3. Seek out and continually assess young driver educational programs to determine the best and most cost-effective way to reach the largest number parents who are teaching teens to drive and teens who are learning to drive
- 4. Continue to update, as needed, materials and web site information on young, high-risk drivers; develop materials that are especially appealing to young drivers
- 5. Include information on the GDL law in highway safety materials, on the web site, and within presentations
- 6. Support projects designed to prevent underage alcohol purchase, apprehend minors attempting to purchase alcohol, and provide a physical enforcement/intervention presence (e.g., Badges in Business, Server Training, SMART web-based server training, Party Patrol, selective enforcement, PIRE law enforcement training, compliance checks, and multi-jurisdiction enforcement teams)
- 7. Conduct an annual safety belt survey of young drivers and their passengers
- 8. Provide funding to support college/university prevention programs (Partners In Prevention, Partners In Environmental Change, CHEERS Designated Driver program) that focus on the development and implementation of UMC's *Drive Safe*. *Drive Smart* campaign
- 9. Encourage strict enforcement of Missouri laws targeting young drivers (e.g., Graduated Drivers License, Zero Tolerance, Abuse and Lose)
- 10. Promote saveMOyouth web site
- 11. Initiate 1-866-MustB21 a statewide underage drinking tipline to report parties involving underage drinking, plans to purchase alcohol for underage persons, and sales to minors







### Background

Our population is aging and older adult drivers are increasing their exposure (miles driven/year) on the highways. Fatality rates per vehicle miles traveled have been falling for society as a whole, but older drivers' rates are increasing (NHTSA, 2005). According to the 2000 Census, Missouri ranked 14<sup>th</sup> nationally with 13.5% of the population age 65 or older. A 62% increase is expected in this age group between 2005 and 2025, from 774,000 to 1,258,000.

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 but teenage drivers. Furthermore, as drivers age past 65, fatality rates multiply as indicated by reports that fatal crash rates for drivers 85 years and older are nearly three times that of drivers aged 55 through 74.

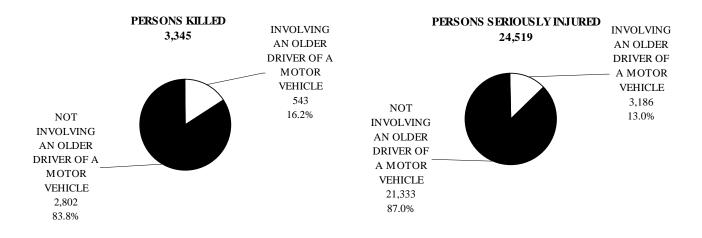
Older drivers are a major concern because they are more at risk of dying in a traffic crash than younger drivers. This is due, in large part, to the fragility of older individuals. Fragility and inflexibility – natural occurrences of aging – cause older drivers to be more easily injured. These conditions cause them to be less likely to survive their injuries. Certain progressive illnesses, such as osteoporosis, atherosclerosis, Alzheimer's disease and macular degeneration, eventually cause physical weakness and/or require driving retirement due to the progressive nature of these diseases. For this reason, NHTSA lists older driver safety as a priority area for research, education, and rulemaking in the upcoming decade.

The good news is that older drivers who keep track of changes in their eyesight, physical fitness and reflexes may be able to adjust their driving habits so they stay safer on the road. The Missouri Department of Transportation has also begun implementing numerous countermeasures to address visibility issues with older drivers. Roadway markings and highway signs have been modified to utilize material and paint with higher retro-reflectivity. Advance street name signs and wrong-way arrows on ramps have been installed on the highways. Center and edgeline rumble strips and rumble stripes have been installed with this highly reflective material and the width of the stripes have been increased. Interstate mile markers have been redesigned for higher visibility. Signs have been revamped to incorporate a type font that is more clearly seen. In relation to all other licensed drivers in the State, drivers 65 and over are almost equally involved in Missouri's traffic crash experience; however, older drivers do not travel as many miles or as frequently as other drivers. This may be due, in part, to the fact that older drivers tend to self-regulate. As their nighttime vision begins to deteriorate, they begin to restrict their driving to daylight hours. If they are uncomfortable or frightened driving in unfamiliar surroundings, they limit their driving to locations that are well known to them.

In 2006, there were 638,057 people licensed in Missouri who were age 65 or over. They accounted for 14.9% percent of the 4,281,710 persons licensed in Missouri. By 2008, 671,634 of the 4,296,576 licensed drivers in the state were 65 and older—representing an increase to 15.6% of the total licensed driver population.

Of all 2005-2007 fatal and disabling injury crashes in Missouri, 13.4% involved an older driver of a motor vehicle. In 2005-2007, 543 persons were killed and 3,186 were seriously injured in traffic crashes involving an older driver of a motor vehicle.

#### OLDER DRIVER INVOLVEMENT IN 2005-2007 MISSOURI TRAFFIC CRASHES



### Benchmarks

A. 2% decrease in number of fatalities and disabling injuries resulting from crashes involving older drivers of a motor vehicle in comparison to the previous 3-year total (2005-2007 = 3,729).

## **Performance Measures**

1. Track crashes involving older drivers and assess specific contributing factors that occur with more frequency in these crashes.

- 1. Work with safety advocates and partners to assess and implement countermeasures to reduce crashes involving older drivers
- 2. Maintain a database of partners that have an interest in older driver issues; keep these partners apprised of new developments and materials in this field
- 3. Develop and distribute public informational materials to assist older drivers and their families
- 4. Conduct Drive Well and Car Fit NHTSA training sessions in selected regions of the state
- 5. Implement strategies outlined in *Missouri's Blueprint for Safer Roadways*
- 6. Train law enforcement personnel to identify signs of impairment specific to older drivers
- 7. Identify and promote self-assessment tools to enable older drivers to check their own driving abilities
- 8. Improve the process for reporting unsafe or medically unfit drivers (revisions of forms, internal processes, and needed training)

## **COMMERCIAL MOTOR VEHICLES**

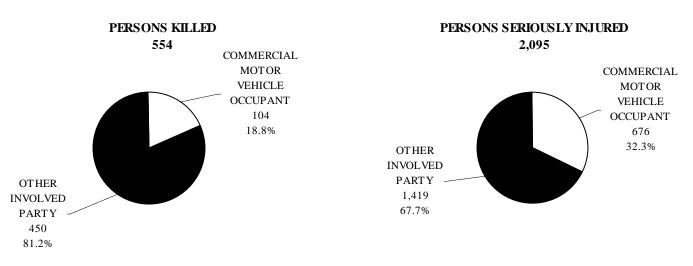


#### Background

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 commercial motor vehicles crashes, the great majority were not the commercial motor vehicle drivers or passengers.

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 2005-2007, there were 508,470 traffic crashes in the State. In these crashes, 40,794 or 8.0% involved at least one commercial motor vehicle. Of the 2,988 fatal crashes, however, 461 or 15.4% involved at least one commercial motor vehicle.

Of those killed in 2005–2007 CMV crashes, 104 (18.8%) were CMV occupants but 450 (81.2%) were other parties in the incident. When examining disabling injuries, 676 (32.3%) were CMV occupants while 1,419 (67.7%) were some other party.



#### 2005-2007 MISSOURI COMMERCIAL MOTOR VEHICLE INVOLVED TRAFFIC CRASHES

The Motor Carrier Safety Assistance Program (MCSAP) is a federal grant program that provides financial assistance to states to reduce the number and severity of 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 Highway Safety Division administers MCSAP, but the MCSAP program operates under a separate federal grant. Benchmarks and strategies are outlined within the MCSAP Plan, which is submitted to the Federal Highway Administration.



## **MOTORCYCLE CRASHES**

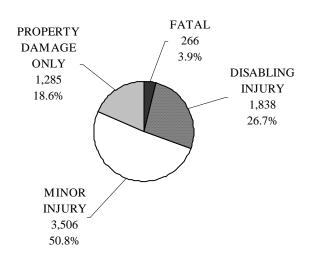


#### Background

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.

Although motorcycle traffic crashes do not occur with great frequency in Missouri, they usually result in deaths or disabling injuries at a considerably greater rate than other traffic crashes. In the 2006 national rankings of the 50 States, DC and Puerto Rico, Missouri ranked 8<sup>th</sup> of the ten best in the nation – Missouri's motorcycle helmet law has undoubtedly had an impact on the relatively low motorcycle fatality rate per 100,000 population.

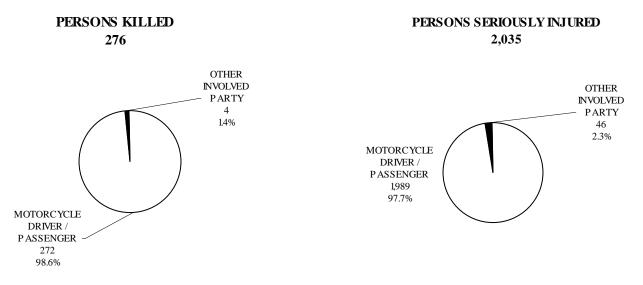
Of the 508,470 traffic crashes in 2005-2007, 0.6% resulted in a fatality and 3.7% involved someone being seriously injured in the incident. During the same period, there were 6,895 traffic crashes involving motorcycles. In these incidents, 3.9% (266) resulted in a fatality and 26.7% (1,838) resulted in someone being seriously injured in the crash. These figures demonstrate the overrepresentation of motorcycles in fatal and serious injury crashes.



#### 2005 – 2007 MISSOURI MOTORCYCLE INVOLVED CRASHES 6,895

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 276 people killed in motorcycle-involved crashes, 98.6% (272) were motorcycle riders and 1.4% (4) were some other person in the incident. Of the 2,035 seriously injured, 97.7% (1,989) were the motorcycle riders while only 2.3% (46) were some other person in the incident.

#### 2005 – 2007 MISSOURI MOTORCYCLE INVOLVED TRAFFIC CRASHES (Person Involvement)



A significant number of motorcyclists and their passengers killed and seriously injured in Missouri traffic crashes are young. Of those killed, 7.7% were under the age of 21 and 8.4% of those seriously injured were in this age group.

#### 2005-2007 MISSOURI MOTORCYCLE DRIVERS AND PASSENGERS KILLED AND SERIOUSLY INJURED IN MISSOURI TRAFFIC CRASHES (Age by Personal Injury Severity)

		KILLED	)	SERIO	USLY IN.	JURED	TO	ΓAL
Age	Number	%	Without Helmets	Number	%	Without Helmets	Number	%
00 - 20	21	7.7%	5	167	8.4%	28	188	8.3%
21 - 40	112	41.2%	20	787	39.6%	75	899	39.9%
41 - 60	122	44.9%	15	898	45.1%	42	1020	45.3%
61 and Over	17	6.3%	0	130	6.5%	3	147	6.5%
Unknown age	0	0.0%	0	7	0.4%	0	7	0.3%
Total	272	100.0%	40	1989	100.0%	148	2254	100.0%

#### Benchmarks

A. 2% reduction in fatalities and disabling injuries resulting from crashes involving motorcycles in comparison to the previous 3-year period (2005-2007 = 2,311)

### **Performance Measures**

- 1. Analyze feedback from the Missouri Motorcycle Safety Program (MMSP)
- 2. Evaluate crash data relating to motorcyclists as compared to number of registered/licensed motorcyclists

- 1. Continue support for the MMSP administered by the Missouri Safety Center at UCM
- 2. Continue to provide motorcycle rider education statewide in order to train 4500 riders annually
- 3. Conduct a minimum of two RiderCoaches (Instructor) Preparation courses per year over the next five years in order to train and expand base of certified motorcycle RiderCoaches
- 4. Actively participate in Missouri's Motorcycle Safety Committee
- 5. Implement, as feasible, strategies identified in the "Strategic Planning Final Report," August 30, 2006, developed by the Missouri Motorcycle Safety Committee which includes:
  - Distribute NHTSA's *Fake Helmets, Unsafe on Any Head* to law enforcement agencies, conduct training through LETSAC on detecting the use of non-compliant helmets, and encourage aggressive enforcement of Missouri's helmet law (DVDs are now available and are being distributed)
  - Distribute NHTSA's *Detecting DWI Motorcyclists* to law enforcement agencies, conduct training through LETSAC on detecting DWI motorcyclists, and encourage aggressive enforcement of while riding while impaired
  - Continue to work with eligible entities that are seeking approval to become training providers in order to expand motorcycle training capacity (in identified areas of need)
  - Continue to search for suitable locations for permanent training sites to expand motorcycle training capacity in order to accommodate training within 50 miles of any Missouri resident
  - Continue to encourage motorcycle groups and motorcycle dealerships to promote formal motorcycle rider education
  - Expand upon the motorcycle public information and education campaigns including motorists' awareness of motorcyclists (promote *Share the Road* paid media campaign utilizing Section 2010 funds); proper protective gear – to include billboards, print materials (pamphlets and posters), radio spots, and television spots; distribute print materials statewide through the DOR field offices, MSHP examination stations, dealerships, etc.
  - Work toward assuring that EMS personnel receive accident scene management training specific to motorcycle crashes
  - Work with MoDOT to evaluate signage that may be of safety benefit to motorcyclists entering work zones and where conditions are particularly hazardous to motorcycles
  - Conduct a statewide motorcycle assessment



## CRASHES INVOLVING SCHOOL BUSES



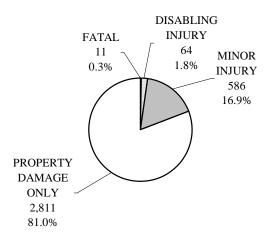
### Background

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.

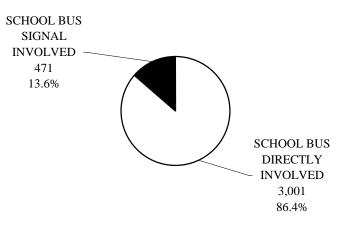
A vehicle must meet safety standards that are appropriate for its size and type because different types of vehicles perform differently in a crash. For example, because a large school bus is heavier than most other vehicles, its weight can protect its occupants from crash forces better than a light vehicle 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.

School buses are not involved in a large number of traffic crashes in Missouri, but they are significant due to their potential for causing harm to young children. Of all 2005-2007 Missouri traffic crashes, 0.7% involved a school bus or school bus signal. In 86.4% of the school bus crashes, a school bus was directly involved in the crash and in 13.6% of the crashes, no school bus was directly involved but a school bus signal was involved.

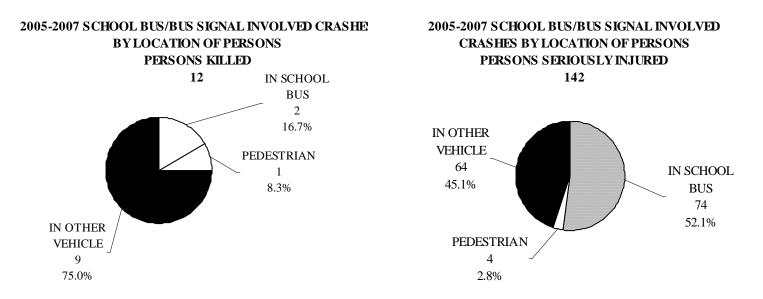
#### 2005-2007 MISSOURI SCHOOL BUS/SCHOOL BUS SIGNAL INVOLVED TRAFFIC CRASHES



#### SCHOOL BUS INVOLVEMENT TYPE 2005-2007 MISSOURI SCHOOL BUS INVOLVED TRAFFIC CRASHES



Of the 12 persons killed during 2005-2007 in crashes involving school buses, two were actual occupants of the school bus, one was a pedestrian, and the remaining nine were some other person in the incident. Of the 142 persons seriously injured, 74 were occupants of the school bus, four were pedestrians and 64 were some other person in the incident.



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

#### PERSONS KILLED AND SERIOUSLY INJURED IN 2005-2007 SCHOOL BUS/BUS SIGNAL INVOLVED TRAFFIC CRASHES (Age by Personal Injury Severity by Involvement)

	IN	BUS	PEDE	STRIAN	IN OTHE	R VEHICLE
Age	Killed	Disabling Injuries	Killed	Disabling Injuries	Killed	Disabling Injuries
0-4	0	0	0	0	0	1
5-8	0	27	1	0	0	1
9-20	0	34	0	1	2	20
21+	2	13	0	2	7	42
Unknown	0	0	0	1	0	1
Total	2	74	1	4	9	64

#### **Benchmarks**

A. 2% reduction in the number of fatalities and disabling injuries resulting from crashes involving school buses in comparison to the previous 3-year period (2005-2007 = 154).

#### **Performance Measures**

Assess crashes involving school buses to determine the number of crashes, whether injuries involve passengers inside the bus or individuals outside the bus, and determine whether injuries occurring inside the bus are minor, moderate, or serious.

- 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 compartmentalization of school buses, general safety issues regarding riding a school bus, safety around the loading zones, and sharing the road with school buses



## VULNERABLE ROADWAY USERS



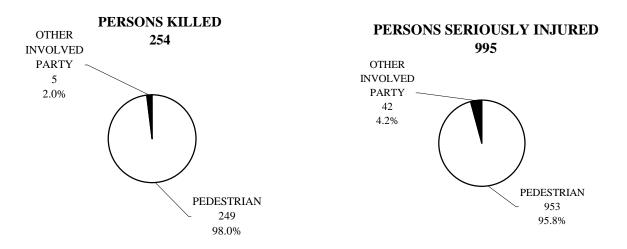
Many Missourians rely on non-motorized means of transportation such as walking and bicycling. Both of these modes have the ability to provide physical and health benefits, but they also have the potential for serious or fatal injuries in the event of a crash. Crashes involving pedestrians and bicyclists do not occur in extremely large numbers (0.9% 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 2005-2007, there were 249 fatal pedestrian-involved crashes and 917 disabling injury pedestrian-involved crashes. During that 3-year period, of the 254 persons killed in pedestrian involved crashes, 249 (98.0%) were the pedestrians. Of the 995 seriously injured in pedestrian involved crashes, 953 (95.8%) were the pedestrians.

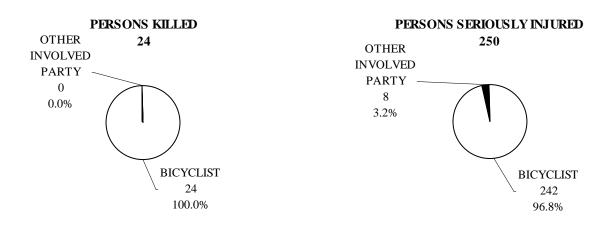
### 2005 – 2007 MISSOURI PEDESTRIAN INVOLVED TRAFFIC CRASHES (Person Involvement)



## **Bicyclists**

For the period 2005-2007, there were 23 fatal bicycle-involved crashes and 237 disabling injury bicycle-involved crashes. For that same 3-year period, of the 24 persons killed in bicycle-involved crashes, all were the bicyclists. Of the 250 persons seriously injured in bicycle-involved crashes, 242 (96.8%) were the bicyclists.

#### 2005-2007 MISSOURI BICYCLE INVOLVED TRAFFIC CRASHES (Person Involvement)



## Benchmarks

- A. 2% reduction in number of people killed in crashes involving pedestrians in comparison to the previous 3-year period (2005-2007 = 254)
- B. 2% reduction in the number of people seriously injured in pedestrian involved crashed compared to the previous 3-year period (2005-2007 = 995)
- C. 2% reduction in number of people killed in crashes involving bicycles in comparison to the previous 3-year period (2005-2007 = 24)
- D. 2% reduction in number of people seriously injured in bicycle involved crashed compared to the previous 3-year period (2005-2007 = 250)

#### **Performance Measures**

Continue to track fatal and disabling injury crashes involving pedestrians and bicyclists

- 1. Serve on the MoDOT Bicycle and Pedestrian Advisory Committee (BPAC)
- 2. Administer Safe Routes to Schools grants through the highway safety division to improve walking, biking and wheeling conditions for children getting to and from school 29 non-infrastructure projects have been awarded which will impact over 60 schools; infrastructure projects are scheduled to be awarded in late Fall 2008
- 3. Educate the motoring public on sharing the road safely with pedestrians and bicyclists
- 4. Educate pedestrians and bicyclists on safely interacting with motor vehicles
- 5. Purchase helmets for distribution at exhibits and for school/local safety awareness programs
- 6. Utilize Safe Communities to conduct bicycle rodeos (or similar programs) and other bicycle safety events and awareness programs



## **ENGINEERING SERVICES AND DATA COLLECTION**



### **Engineering Services**

Traffic engineering is a vital component of the traffic safety countermeasure picture. The techniques engineers use to design roads certainly affect the safety of motorists. Engineering approaches offer two basic types of countermeasures against drivers committing hazardous moving violations: highway design and traffic operations. With highway design, the roads can be redesigned to add capacity or accommodate increased traffic. Highway design can also mitigate the injury consequences for motorists who come into contact with aggressive, impaired, or distracted drivers. Effective traffic engineering offers a way to accommodate increased traffic flow, or at least get it under control, without building new roads.

One of the most successful examples of an engineering solution to mitigate cross-median crashes (one of our most deadly crashes on the interstates), has been the installation of the median guard cable. Since the statewide installation effort began in 2003, over 500 miles of guard cable have been installed across the state. As a result, only two crossover fatalities occurred at cable locations in 2007 compared to 55 the year before cable was installed – a 96% reduction.

### **Traffic Engineering Assistance Program (TEAP)**

It is often necessary for cities and counties to obtain the services of private consulting engineering firms in order to aid them in correcting operational problems on their streets and highways. Correction of these problems can require detailed assessment of traffic crash analysis, traffic courts, 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 Division allocates funding for consultants to perform this service for the local jurisdictions.

## Bridge Engineering Assistance Program (BEAP)

It is often necessary for cities and counties to obtain the services of private consulting engineering firms in order to aid them in correcting operational problems on their bridges. Correction of these problems can require evaluation of bridge structures for load-carrying capacity. Technical expertise is provided to cities/counties to conduct bridge analysis including bridge inspections. In order to provide assistance in this area, the Highway Safety Division allocates funding for consultants to perform this service for the local jurisdictions.

#### **Internal Grants Management System**

In late 2001, the highway safety division began work with the Regional Justice Information Service (REJIS) to develop the first-of-its-kind online 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 division has continued to work with REJIS to refine the system and make it more user friendly for the grantees and more functional and extensive for the highway safety office.

### Training

Support is also provided for traffic engineering forums and technology transfer to enhance the abilities for local communities to develop accident countermeasures. This is accomplished through training workshops and conferences funded through MoDOT.

An instructional program on traffic practices and crash countermeasure development will be offered to local law enforcement and traffic engineers. This program provides them fifteen hours of professional development. Participants receive training on pinpointing typical traffic problems, recognizing roadway and signing defects, and identifying solutions for high-crash locations.

### **Data Collection**

Each state has developed, to varying degrees, systems for the collection, maintenance and analysis of traffic safety data. Motor vehicle crash data tell 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 person 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 Traffic Safety Compendium is compiled from statistics collected in STARS. 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 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 accident countermeasure programs, and develop customized reports. The LETS software will be able to electronically transfer crash data to the STARS database when that system is capable of receiving the data.

#### Benchmarks

- A. Produce the annual Traffic Safety Compendium in a timely fashion for easy use by traffic safety advocates, law enforcement agencies, media, and the general public
- B. Provide consultant assistance to local communities for traffic engineering assessments
- C. Provide consultant assistance to local communities for bridge engineering assessments
- D. 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)
- E. Provide an effective, efficient software system for capturing local law enforcement crash data
- F. Provide an effective, efficient web-based highway safety grants management system

### **Performance Measures**

Continue tracking and analyzing crash statistics to determine which problem areas have demonstrated an increase or decrease in crash activity. Crash statistics will be evaluated by geographic location, driver subgroups, and causation factors to determine positive or negative trends.

- 1. Encode all accident reports into the STARS system, ensuring accuracy and efficiency, and provide equipment to support STARS maintenance
- 2. Utilize statistics to produce the annual Traffic Safety Compendium to assist MoDOT's 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. Implement, where possible, recommendations of the Traffic Records Assessment team which will include establishing linkage capability with the Statewide Traffic Accident Reporting System in order to generate merged records for analytic purposes
- 7. Continue to serve on the Traffic Records committee and assist in the update of the Missouri Traffic Records Strategic Plan
- 8. Implement recommendations of the 2006 Traffic Records Assessment into the statewide strategic plan (as required in Section 408 implementing guidelines); review and update the strategic plan as needed
- 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 revamp the annual Traffic Safety Compendium in order to make it more comprehensible to the general public, and to assure that the statistics being captured answer the state's problem identification questions in order to properly allocate limited resources in the most efficient manner
- 12. Develop and implement a totally web-based Highway Safety grants management system working in conjunction with the Highway Safety division, REJIS, and MoDOT's Information Technology division

# FY 2009 BUDGET

# and

# **PROJECT LISTING**





Project #	Grantee	Problem Area and Project Countermeasure	Total Allocation	402	410	154 AL	2011	154 HE	408	2010	1906
		PLANNING AND ADMINISTRATION									
09-PA-02-01	MO. Division of Highway Safety	P & A Coordination		100,000.00							
		TOTAL PA	100,000.00	100,000.00							
		POLICE TRAFFIC SERVICES									
09-PT-02-01	MO. Division of Highway Safety	PTS Program Coordination		200,000.00							
09-PT-02-02	MO. Division of Highway Safety	LETSAC		35,000.00							ļ
09-PT-02-03	MO. Division of Highway Safety	REJIS		5,000.00							ļ
09-PT-02-04	MO. Division of Highway Safety	STATEWIDE HMV		30,000.00							ļ
09-PT-02-05	MO. Division of Highway Safety	LAW ENFORCEMENT INCENTIVE ITEMS		50,000.00			-				
09-PT-02-06	MO. Division of Highway Safety	WORKSHOPS/TRAINING SUPPORT		50,000.00							ļ
09-PT-02-07	MO. Division of Highway Safety	PI&E GENERAL		25,000.00							ļ
09-PT-02-08	MO. Division of Highway Safety	PI CREATIVE SERVICES		30,000.00							
09-PT-02-09	MO. Division of Highway Safety	MATURE DRIVER PROGRAM		10,000.00			-				ļ
09-PT-02-10	MO. Division of Highway Safety	YOUNG DRIVE PROGRAM		27,500.00							
09-PT-02-11	MO. Division of Highway Safety	TWEEN SAFETY PROGRAM		20,000.00							
09-PT-02-12	MO. Division of Highway Safety	MODOT 2009 TRAFFIC & SAFETY CONFERENCE		30,000.00			-				
09-PT-02-13	MO. Division of Highway Safety	MOTORCYCLE ASSESSMENT		15,000.00			-				
09-PT-02-14	ARNOLD POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		6,435.00							
09-PT-02-15	BALLWIN POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		4,152.96			-				ļ
09-PT-02-16	BARTON COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		4,000.00			-				
09-PT-02-17	BELLEFONTAINE NEIGHBORS PD	HAZARDOUS MOVING VIOLATION		8,160.00			-				ļ
09-PT-02-19	BELTON POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		12,324.00			-				
09-PT-02-20	BLUE SPRINGS POLICE DEPT	HAZARDOUS MOVING VIOLATION		6,000.00			-				ļ
09-PT-02-21	BOLIVAR POLICE DEPARTMENT	SPEED ENFORCEMENT		4,000.00			-				ļ
09-PT-02-22	BOONE COUNTY SHERIFF	HMV-OPERATION SLOW DOWN		13,330.56							
09-PT-02-23	BOWLING GREEN POLICE DEPT	HAZARDOUS MOVING VIOLATION		3,390.00							
09-PT-02-24	BRANSON POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		4,320.00			-				
09-PT-02-25	BRIDGETON POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		9,864.00							
09-PT-02-26	BUTLER COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		8,337.60							
09-PT-02-27	CAMDEN COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		25,000.00							
09-PT-02-28	CAMDENTON POLICE DEPT	HAZARDOUS MOVING VIOLATION		3,000.00							
09-PT-02-29	CAPE GIRARDEAU POLICE DEPT	HAZARDOUS MOVING VIOLATION		9,856.00							
09-PT-02-30	CARTHAGE POLICE DEPARTMENT	SPEED ENFORCEMENT		4,688.44							
09-PT-02-31	CARUTHERSVILLE POLICE DEPT	SPEED ENFORCEMENT		3,000.00							<b></b>
09-PT-02-32	CASS COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		10,997.50							<b></b>
09-PT-02-33	CHESTERFIELD POLICE DEPT	EDUCATIONAL GRANT		32,100.00							

Project #	Grantee	Problem Area and Project Countermeasure	Total Allocation	402	410	154 AL	2011	154 HE	408	2010	1906
09-PT-02-34	CHRISTIAN COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		14,976.00							
09-PT-02-35	CLAY COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		21,000.00							
09-PT-02-36	CLEVELAND POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		2,000.00							
09-PT-02-37	CLINTON POLICE DEPARTMENT	AGGRESSIVE DRIVING		12,475.00							
09-PT-02-38	COLE COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		17,250.00							
09-PT-02-39	CREVE COEUR POLICE DEPT	WORK ZONE OFFICER		39,500.00							
09-PT-02-40	CREVE COEUR POLICE DEPT	SPEED ENFORCEMENT		5,000.00							
09-PT-02-41	CRYSTAL CITY POLICE DEPT	SPEED ENFORCEMENT		4,509.00							
09-PT-02-42	CRYSTAL CITY POLICE DEPT	HAZARDOUS MOVING VIOLATION		4,509.00							
09-PT-02-43	DALLAS COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		8,444.80							
09-PT-02-44	DESOTO POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		2,240.00							
09-PT-02-45	DUNKLIN COUNTY SHERIFF	SPEED ENFORCEMENT		5,790.40							
09-PT-02-46	EUREKA POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		30,009.96							
09-PT-02-47	FARMINGTON POLICE DEPT	HAZARDOUS MOVING VIOLATION		8,466.00							
09-PT-02-48	FERGUSON POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		7,178.00							
09-PT-02-49	FESTUS POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		10,020.00							
09-PT-02-50	FLORISSANT POLICE DEPT	HAZARDOUS MOVING VIOLATION		8,832.00							
09-PT-02-51	FRANKLIN COUNTY SHERIFF	SPEED ENFORCEMENT		10,000.00							
09-PT-02-52	GLADSTONE DPS	HAZARDOUS MOVING VIOLATION		12,500.00							
09-PT-02-53	GLENDALE POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		4,560.00							
09-PT-02-54	GRAIN VALLEY POLICE DEPT	HAZARDOUS MOVING VIOLATION		5,376.00							
09-PT-02-55	GRANDVIEW POLICE DEPT	HAZARDOUS MOVING VIOLATION		10,000.00							
09-PT-02-56	GREENE COUNTY SHERIFF	SPEED ENFORCEMENT		50,000.00							
09-PT-02-57	HARRISONVILLE POLICE DEPT	HAZARDOUS MOVING VIOLATION		3,000.00							
09-PT-02-58	HAZELWOOD POLICE DEPT	HAZARDOUS MOVING VIOLATION		9,422.40							
09-PT-02-59	HENRY COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		11,850.00							
09-PT-02-60	HERCULANEUM POLICE DEPT	HAZARDOUS MOVING VIOLATION		7,502.00							
09-PT-02-61	HOWELL COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		9,600.00							
09-PT-02-62	INDEPENCE POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		132,000.00							
09-PT-02-64	INDEPENCE POLICE DEPARTMENT	I-70 AGGRESSIVE DRIVING		35,000.00							
09-PT-02-65	JACKSON POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		4,740.00							
09-PT-02-66	JACKSON COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		25,000.00							
09-PT-02-67	JASCO-METROPOLITAN POLICE	HAZARDOUS MOVING VIOLATION		3,000.00							
09-PT-02-68	JASPER COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		12,500.00							
09-PT-02-69	JASPER COUNTY SHERIFF	SPEED ENFORCEMENT		12,500.00							
09-PT-02-70	JEFFERSON CITY POLICE DEPT	HAZARDOUS MOVING VIOLATION		25,020.00							

Project #	Grantee	Problem Area and Project Countermeasure	Total Allocation	402	410	154 AL	2011	154 HE	408	2010	1906
09-PT-02-71	JEFFERSON COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		110,003.80							ļ
09-PT-02-72	JEFFERSON COUNTY SHERIFF	SPEED ENFORCEMENT		38,004.72							<b> </b>
09-PT-02-73	JENNINGS POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		6,016.00							
09-PT-02-74	JOHNSON COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		11,930.00							
09-PT-02-75	JOPLIN POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		10,005.78							
09-PT-02-76	KANSAS CITY POLICE DEPT	HAZARDOUS MOVING VIOLATION		80,000.00							
09-PT-02-77	KANSAS CITY POLICE DEPT	SPEED ENFORCEMENT I-435		50,000.00							
09-PT-02-78	KANSAS CITY POLICE DEPT	SPEED ENFORCEMENT I-70		75,000.00							
09-PT-02-79	KANSAS CITY POLICE DEPT	OCCUPANT PROTECTION		56,880.00							
09-PT-02-80	KENNETT POLICE DEPARTMENT	SPEED ENFORCEMENT		14,800.00							ļ
09-PT-02-81	KENNETT POLICE DEPARTMENT	OCCUPANT PROTECTION		3,700.00							
09-PT-02-82	KIRKWOOD POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		12,521.76							ļ
09-PT-02-83	LAWRENCE COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		9,000.00							
09-PT-02-84	LEE'S SUMMIT POLICE DEPT	HAZARDOUS MOVING VIOLATION		30,600.00							
09-PT-02-85	LIBERTY POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		9,408.96							ļ
09-PT-02-86	LONE JACK POLICE DEPT	HAZARDOUS MOVING VIOLATION		8,000.00							
09-PT-02-87	MARYLAND HEIGHTS POLICE DEPT	HAZARDOUS MOVING VIOLATION		4,907.76							
09-PT-02-88	MARYLAND HEIGHTS POLICE DEPT	SPEED ENFORCEMENT		14,028.48							ļ
09-PT-02-89	MILLER COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		8,800.00							
09-PT-02-90	MISSOURI POLICE CHIEFS	LAW ENFORCEMENT TRAINING		48,900.00							
09-PT-02-91	MISSOURI SHERIFF'S ASSOC	LAW ENF VEHICLE DRIVER TRAINING		41,992.50							ļ
09-PT-02-92	NEOSHO POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		7,010.00							ļ
09-PT-02-93	NEWTON COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		26,050.00							
09-PT-02-94	NIXA POLICE DEPARTMENT	SPEED ENFORCEMENT		5,760.00							ļ
09-PT-02-95	NORTH KANSAS CITY POLICE DEPT	HAZARDOUS MOVING VIOLATION		8,000.00							
09-PT-02-96	O'FALLON POLICE DEPARTMENT	SPEED ENFORCEMENT		18,184.56							ļ
09-PT-02-97	OLIVETTE POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		2,520.00							ļ
09-PT-02-98	OLIVETTE POLICE DEPARTMENT	SPEED ENFORCEMENT		3,390.00							ļ
09-PT-02-99	OSAGE BEACH DPS	HAZARDOUS MOVING VIOLATION		6,336.00							ļ
09-PT-02-100	OVERLAND POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		12,250.00							ļ
09-PT-02-101	OVERLAND POLICE DEPARTMENT	SPEED ENFORCEMENT		12,250.00							<u> </u>
09-PT-02-102	OZARK POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		8,805.00							
09-PT-02-103	PALMYRA POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		3,360.00							
09-PT-02-104	PECULIAR POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		4,008.00							
09-PT-02-105	PEMISCOT COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		11,990.00							
09-PT-02-106	PETTIS COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		14,390.00							

Project #	Grantee	Problem Area and Project Countermeasure	Total Allocation	402	410	154 AL	2011	154 HE	408	2010	1906
09-PT-02-107	PEVELY POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		14,007.00							
09-PT-02-108	PEVELY POLICE DEPARTMENT	SPEED ENFORCEMENT		16,008.00							
09-PT-02-109	PHELPS COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		8,559.00							
09-PT-02-110	PLATTE COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		19,200.00							
09-PT-02-111	PLATTE COUNTY SHERIFF	TRAFFIC SAFETY OFFICER		21,268.65							
09-PT-02-112	PLEASANT HILL POLICE DEPT	HAZARDOUS MOVING VIOLATION		5,000.00							
09-PT-02-113	PULASKI COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		12,985.65							
09-PT-02-114	RAYMORE POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		10,000.00							
09-PT-02-115	RAYTOWN POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		16,220.00							
09-PT-02-116	RICHMOND HEIGHTS PD	HAZARDOUS MOVING VIOLATION		7,560.00							
09-PT-02-117	RIVERSIDE DPS	HAZARDOUS MOVING VIOLATION		6,000.00							
09-PT-02-118	ROLLA POLICE DEPARTMENT	SPEED ENFORCEMENT		14,150.00							
09-PT-02-119	SCOTT COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		10,987.50							
09-PT-02-120	SEDALIA POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		10,780.00							
09-PT-02-121	SMITHVILLE POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		7,200.00							
09-PT-02-122	SPRINGFIELD POLICE DEPT	HAZARDOUS MOVING VIOLATION		39,000.00							
09-PT-02-123	SPRINGFIELD POLICE DEPT	RED LIGHT RUNNING		30,000.00							
09-PT-02-124	SPRINGFIELD POLICE DEPT	PART-TIME DATA ENTRY PERSONNEL		9,100.00							
09-PT-02-125	ST ANN POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		7,569.92							
09-PT-02-126	ST CHARLES CITY POLICE DEPT	HAZARDOUS MOVING VIOLATION		11,340.00							
09-PT-02-127	ST CHARLES CITY POLICE DEPT	SPEED ENFORCEMENT		12,960.00							
09-PT-02-128	ST JOHN POLICE DEPARTEMNT	HAZARDOUS MOVING VIOLATION		9,000.00							
09-PT-02-129	ST JOSEPH POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		9,000.00							
09-PT-02-130	ST JOSEPH POLICE DEPARTMENT	OCCUPANT PROTECTION		5,937.00							
09-PT-02-131	ST LOUIS METRO POLICE DEPT	HAZARDOUS MOVING VIOLATION		109,998.00							
09-PT-02-132	ST LOUIS METRO POLICE DEPT	SPEED ENFORCEMENT		109,998.00							
09-PT-02-133	ST LOUIS COUNTY POLICE DEPT	ENFORCEMENT UNIT		250,689.00							
09-PT-02-134	ST PETERS POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		10,011.30							
09-PT-02-135	ST ROBERT POLICE DEPARTMENT	AGGRESSIVE DRIVERS		3,200.00							
09-PT-02-136	STE. GENEVIEVE CO SHERIFF	HAZARDOUS MOVING VIOLATION		20,811.00							
09-PT-02-137	STONE COUNTY SHERIFF	SPEED ENFORCEMENT		4,521.30							
09-PT-02-138	STRAFFORD COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		3,002.45							
09-PT-02-139	SUGAR CREEK POLICE DEPT	HAZARDOUS MOVING VIOLATION		11,020.00							
09-PT-02-140	TANEY COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		19,700.00							
09-PT-02-141	TOWN & COUNTRY POLICE DEPT	SPEED & AGGRESSIVE DRIVERS		22,560.00							
09-PT-02-142	TROY POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		6,720.00							

Project #	Grantee	Problem Area and Project Countermeasure	Total Allocation	402	410	154 AL	2011	154 HE	408	2010	1906
09-PT-02-143	TROY POLICE DEPARTMENT	SPEED ENFORCEMENT		6,720.00							
09-PT-02-144	UNION POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		14,980.00							
09-PT-02-145	UNION POLICE DEPARTMENT	OCCUPANT PROTECTION		6,135.00							
09-PT-02-146	WASHINGTON POLICE DEPT	HAZARDOUS MOVING VIOLATION		8,700.00							
09-PT-02-147	WASHINGTON COUNTY SHERIFF	HAZARDOUS MOVING VIOLATION		2,439.36							
09-PT-02-148	WEBB CITY POLICE DEPARTMENT	HAZARDOUS MOVING VIOLATION		10,745.00							
09-PT-02-149	WEST PLAINS POLICE DEPT	HAZARDOUS MOVING VIOLATION		10,273.50							
09-PT-02-150	WILLOW SPRINGS POLICE DEPT	HAZARDOUS MOVING VIOLATION		4,000.00							
09-PT-02-151	MODOT	OPERATION LIFESAVER		50,000.00							
09-PT-02-152	MISSOURI SAFETY CENTER	STATEWIDE SEATBELT SURVEY		100,008.00							
09-PT-02-153	MISSOURI SAFETY CENTER	TEEN SEATBELT SURVEY		64,800.00							
09-PT-02-154	MISSOURI SAFETY CENTER	DRIVER IMPROVEMENT PROGRAM		47,196.00							
09-PT-02-155	MISSOURI SAFETY CENTER	CHILD SAFETY SEAT SURVEY		21,600.00							
09-PT-02-156	MISSOURI SAFETY CENTER	CLICK IT OR TICKET ENFORCEMENT		274,860.00							
09-PT-02-157	MISSOURI SAFETY CENTER	OCCUPANT PROT-YOUTH ENFORCEMENT		55,200.00							
09-PT-02-158	MISSOURI SAFETY CENTER	LAW ENF CRASH INVESTIGATION TRAINING		87,615.00							
09-PT-02-159	MO SOUTHERN STATE UNIVERSITY	LAW ENFORCEMENT TRAINING		45,000.00							
09-PT-02-160	UNIVERSITY OF MISSOURI	REVISION/EVALUATION OF FORMS/TRAINING		54,480.00							
09-PT-02-161	UNIV OF MISSOURI KANSAS CITY	HAZARDOUS MOVING VIOLATION		8,000.00							
09-PT-02-162	WASHINGTON UNIVERSITY	OLDER DRIVERS WITH DEMENTIA		88,415.00							
09-PT-02-163	MO DIVISION OF FIRE SAFETY	EDUCATIONAL PROJECTS		26,475.00							
09-PT-02-164	MSHP	LAW ENFORCEMENT GENERAL TRAINING		141,557.50			-				
09-PT-02-165	MSHP	OCCUPANT PROTECTION		160,010.40			-				
09-PT-02-166	MSHP	HAZARDOUS MOVING VIOLATION		160,010.40			-				
09-PT-02-167	MSHP	STATISTICAL ANALYSIS CENTER/SUPPORT		10,000.00							
09-PT-02-168	MSHP	STARS INFORMATION MAINTENANCE		73,108.25							
09-PT-02-169	MSHP	SKILL DEVELOPMENT		33,500.00							
09-PT-02-170	MSHP	SPEED ENFORCEMENT FOR AIRCRAFT		95,058.92							
		TOTAL PTS PROJECTS		4,621,981.04							
		TOTAL 402 FUNDED PROJECTS	6,107,281.21								
		ALCOHOL ENFORCEMENT PROJECTS									
09-AL-03-01	MO. Division of Highway Safety	YOUTH ALCOHOL Coordination		74,000.00							
09-AL-03-02	MO. Division of Highway Safety	PARENT GUIDE		58,000.00							
09-K8-03-01	MO. Division of Highway Safety	ALCOHOL PROGRAM Coordination			70,000.00	)					
09-K8-03-02	MO. Division of Highway Safety	STATEWIDE DWI			30,000.00						
09-K8-03-03	MO. Division of Highway Safety	SOBRIETY CHECKPOINT EQUIPMENT			65,000.00	)					

Project #	Grantee	Problem Area and Project Countermeasure	Total Allocation	402	410	154 AL	2011	154 HE	408	2010	1906
09-K8-03-04	MO. Division of Highway Safety	IMPAIRED DRIVING PROGRAM			50,000.00						
09-K8-03-05	MO. Division of Highway Safety	DRE			40,000.00						
09-K8-03-06	MO. Division of Highway Safety	IMPAIRED DRIVING KIOSK			20,000.00						
09-K8-03-07	MO. Division of Highway Safety	SOUTHWEST MO DWI TASK FORCE			20,000.00						
09-K8-03-08	ARNOLD POLICE DEPARTMENT	DWI ENFORCEMENT (WOLFPACK)			4,125.00						
09-K8-03-09	ARNOLD POLICE DEPARTMENT	SOBRIETY CHECKPOINT			4,950.00						
09-K8-03-10	BALLWIN POLICE DEPARTMENT	DWI ENFORCEMENT (WOLFPACK)			8,305.92						
09-K8-03-11	BARTON COUNTY SHERIFF	DWI ENFORCEMENT (WOLFPACK)			7,259.97						
09-K8-03-12	BELTON POLICE DEPARTMENT	DWI ENFORCEMENT (WOLFPACK)			3,040.00						
09-K8-03-13	BELTON POLICE DEPARTMENT	SOBRIETY CHECKPOINT			7,700.00						
09-K8-03-14	BLUE SPRINGS POLICE DEPT	SOBRIETY CHECKPOINT			4,560.00						
09-K8-03-15	BOLIVAR POLICE DEPARTMENT	DWI ENFORCEMENT			6,000.00						
09-K8-03-16	BRANSON POLICE DEPARTMENT	DWI ENFORCEMENT			10,350.00						
09-K8-03-17	CAMDEN COUNTY SHERIFF	DWI ENFORCEMENT			15,000.00						
09-K8-03-18	CAPE GIRARDEAU POLICE DEPT	DWI ENFORCEMENT			16,780.00						
09-K8-03-19	CAPE GIRARDEAU POLICE DEPT	SOBRIETY CHECKPOINT			3,150.00						
09-K8-03-20	CAPE GIRARDEAU CO SHERIFF	DWI ENFORCEMENT			8,390.76						
09-K8-03-21	CARTERVILLE POLICE DEPT	SOBRIETY CHECKPOINT			4,560.00						
09-K8-03-22	CARTHAGE POLICE DEPARTMENT	DWI ENFORCEMENT SATURATION			1,128.96						
09-K8-03-23	CARUTHERSVILLE POLICE DEPT	DWI ENFORCEMENT			5,000.00						
09-K8-03-24	CASS COUNTY SHERIFF	DWI ENFORCEMENT			5,000.00						
09-K8-03-25	CASS COUNTY SHERIFF	SOBRIETY CHECKPOINT			4,650.00						
09-K8-03-26	CHRISTIAN COUNTY SHERIFF	DWI ENFORCEMENT (WOLFPACK)			14,976.00						
09-K8-03-27	CLARK COUNTY SHERIFF	DWI/DRUG IMPAIRED DRIVER ENFORCEMENT			5,000.00						
09-K8-03-28	CLAY COUNTY SHERIFF	DWI ENFORCEMENT (WOLFPACK)			9,000.00						
09-K8-03-29	CLAY COUNTY SHERIFF	YOUTH ALCOHOL ENFORCEMENT			4,980.00						
09-K8-03-30	CLEVELAND POLICE DEPARTMENT	SOBRIETY CHECKPOINT			1,080.00						
09-K8-03-31	COLE COUNTY SHERIFF	SOBRIETY CHECKPOINT			11,500.00						
09-K8-03-32	COLUMBIA POLICE DEPARTMENT	DWI ENFORCEMENT (WOLFPACK)			8,400.00						
09-K8-03-33	CREVE COEUR POLICE DEPT	SOBRIETY CHECKPOINT			13,050.00						
09-K8-03-34	CREVE COEUR POLICE DEPT	BAT VAN			7,000.00						
09-K8-03-35	EUREKA POLICE DEPARTMENT	SOBRIETY CHECKPOINT			10,578.64						
09-K8-03-36	FARMINGTON POLICE DEPT	SOBRIETY CHECKPOINT			3,912.50						
09-K8-03-37	FESTUS POLICE DEPARTMENT	DWI ENFORCEMENT (WOLFPACK)			10,020.00						
09-K8-03-38	FLORISSANT POLICE DEPT	DWI ENFORCEMENT (WOLFPACK)			11,040.00						
09-K8-03-39	FRANKLIN COUNTY SHERIFF	DWI ENFORCEMENT (WOLFPACK)			15,000.00						

Project #	Grantee	Problem Area and Project Countermeasure	Total Allocation	402	410	154 AL	2011	154 HE	408	2010	1906
09-K8-03-40	FRANKLIN COUNTY SHERIFF	SOBRIETY CHECKPOINT			10,000.00						
09-K8-03-41	FRANKLIN COUNTY SHERIFF	YOUTH ALCOHOL			10,000.00						
09-K8-03-42	GLADSTONE DPS	DWI ENFORCEMENT			7,000.00						
09-K8-03-43	GRAIN VALLEY POLICE DEPT	DWI ENFORCEMENT	_		2,800.00				-		
09-K8-03-44	GRANDVIEW POLICE DEPT	DWI ENFORCEMENT			12,880.00						
09-K8-03-45	GREENE COUNTY SHERIFF	DWI ENFORCEMENT	_		75,000.00				-		
09-K8-03-46	GREENE COUNTY SHERIFF	YOUTH ALCOHOL ENFORCEMENT	_		35,000.00				-		
09-K8-03-48	HARRISONVILLE POLICE DEPT	SOBRIETY CHECKPOINT	_		7,424.00				-		
09-K8-03-49	HERCULANEUM POLICE DEPT	DWI ENFORCEMENT			3,100.00						
09-K8-03-50	HOWELL COUNTY SHERIFF	DWI ENFORCEMENT			5,000.00						
09-K8-03-51	INDEPENDENCE POLICE DEPT	DWI ENFORCEMENT (WOLFPACK)			125,000.00						
09-K8-03-52	INDEPENDENCE POLICE DEPT	SOBRIETY CHECKPOINT			45,000.00						
09-K8-03-54	JACKSON COUNTY SHERIFF	DWI ENFORCEMENT			13,425.00						
09-K8-03-55	JACKSON COUNTY SHERIFF	SOBRIETY CHECKPOINT			16,662.00						
09-K8-03-57	JACKSON COUNTY SHERIFF	TRAFFIC UNIT HARDWARE			2,500.00						
09-K8-03-58	JACKSON COUNTY SHERIFF	JCSO TRAFFIC UNIT			280,470.56						
09-K8-03-59	JASCO-METRO POLICE DEPT	DWI ENFORCEMENT			3,000.00						
09-K8-03-60	JASCO-METRO POLICE DEPT	SOBRIETY CHECKPOINT			3,000.00						
09-K8-03-61	JASPER COUNTY SHERIFF	DWI ENFORCEMENT			15,000.00						
09-K8-03-62	JEFFERSON CITY POLICE DEPT	DWI ENFORCEMENT			13,320.00						
09-K8-03-63	JEFFERSON COUNTY SHERIFF	DWI ENFORCEMENT (WOLFPACK)			110,003.80						
09-K8-03-64	JEFFERSON COUNTY SHERIFF	SOBRIETY CHECKPOINT			50,035.80						
09-K8-03-65	JEFFERSON COUNTY SHERIFF	YOUTH ALCOHOL			115,026.12						
09-K8-03-66	JENNINGS POLICE DEPARTMENT	DWI ENFORCEMENT			9,021.00						
09-K8-03-67	JENNINGS POLICE DEPARTMENT	SOBRIETY CHECKPOINT			5,010.00						
09-K8-03-68	JOPLIN POLICE DEPARTMENT	DWI ENFORCEMENT (WOLFPACK)			11,200.50						
09-K8-03-69	JOPLIN POLICE DEPARTMENT	YOUTH ALCOHOL			7,467.00						
09-K8-03-70	JOPLIN POLICE DEPARTMENT	DWI OFFICER			190,206.63						
09-K8-03-71	SCOTT COUNTY SHERIFF	DWI ENFORCEMENT			12,985.00						
09-K8-03-72	STRAFFORD POLICE DEPT				3,962.45		1				
09-K8-03-73	TROY POLICE DEPARTMENT	DWI ENFORCEMENT (WOLFPACK)			7,560.00		1				
09-K8-03-74	MSHP	DWI TRACKING SYSTEM	1		70,735.00						
09-K8-03-75	MSHP	SOBRIETY CHECKPOINT	1		240,590.00		1				
09-K8-03-76	MSHP	DWI SATURATION ENFORCEMENT			225,067.26				1		
09-K8-03-70	MSHP	DWI ENFORCEMENT (WOLFPACK)			45,007.20						
09-K8-03-77 09-K8PM-03-01		IMPAIRED DRIVING PAID MEDIA			350,000.00						

Project #	Grantee	Problem Area and Project Countermeasure	Total Allocation	402	410	154 AL	2011	154 HE	408	2010	1906
09-154-AL-01	MO. Division of Highway Safety	YOUTH ALCOHOL				16,000.00					
09-154-AL-02	MO. Division of Highway Safety	PIRE PROGRAM				10,000.00					
09-154-AL-03	BOONE COUNTY SHERIFF	FULL TIME TRAFFIC UNIT WITH TRAINING				54,500.00					
09-154-AL-04	BOONE COUNTY SHERIFF	CHECKPOINT-SATURATON COMBINATION				11,695.95					
09-154-AL-05	KANSAS CITY POLICE DEPT.	DWI ENFORCEMENT				55,450.00					
09-154-AL-06	KANSAS CITY POLICE DEPT.	SOBRIETY CHECKPOINT				106,210.00					
09-154-AL-07	KANSAS CITY POLICE DEPT.	YOUTH ALCOHOL				18,000.00					
09-154-AL-08	KENNETT POLICE DEPT.	DWI ENFORCEMENT (WOLFPACK)				18,500.00					
09-154-AL-09	LADUE POLICE DEPARTMENT	DWI ENFORCEMENT (WOLFPACK)				6,031.00					
09-154-AL-10	LEE'S SUMMIT POLICE DEPT.	DWI ENFORCEMENT				25,900.00					
09-154-AL-11	MARYLAND HEIGHTS PD	DWI ENFORCEMENT (WOLFPACK)				11,925.60					
09-154-AL-12	MILLER COUNTY SHERIFF	DWI ENFORCEMENT (WOLFPACK)				5,200.00					
09-154-AL-13	MOBERLY POLICE DEPT.	SOBRIETY CHECKPOINT/DWI (WOLFPACK)				4,525.50					
09-154-AL-14	NEOSHO POLICE DEPARTMENT	DWI ENFORCEMENT (WOLFPACK)				2,555.91					
09-154-AL-15	NEWTON COUNTY SHERIFF	DWI ENFORCEMENT				36,510.00					
09-154-AL-16	NIXA POLICE DEPARTMENT	DWI ENFORCEMENT				6,195.00					
09-154-AL-17	NIXA POLICE DEPARTMENT	SOBRIETY CHECKPOINT				8,182.50					
09-154-AL-18	O'FALLON POLICE DEPARTMENT	DWI ENFORCEMENT (WOLFPACK)				10,696.80					
09-154-AL-19	O'FALLON POLICE DEPARTMENT	SOBRIETY CHECKPOINT				9,627.12					
09-154-AL-20	OLIVETTE POLICE DEPARTMENT	SOBRIETY CHECKPOINT				4,200.00					
09-154-AL-21	OSAGE BEACH DPS	SOBRIETY CHECKPOINT				9,900.00					
09-154-AL-22	OVERLAND POLICE DEPARTMENT	DWI ENFORCEMENT (WOLFPACK)				11,025.00					
09-154-AL-23	OVERLAND POLICE DEPARTMENT	SOBRIETY CHECKPOINT				6,061.00					
09-154-AL-24	OZARK POLICE DEPARTMENT	DWI ENFORCEMENT (WOLFPACK)				7,055.00					
09-154-AL-25	OZARK POLICE DEPARTMENT	SOBRIETY CHECKPOINT				11,190.00					
09-154-AL-27	PECULIAR POLICE DEPARTMENT	SOBRIETY CHECKPOINT (CASS CO. S.T.E.P.)				2,088.00					
09-154-AL-28	PERRYVILLE POLICE DEPT.	DWI ENFORCEMENT (WOLFPACK)				9,008.00					
09-154-AL-29	PEVELY POLICE DEPARTMENT	DWI ENFORCEMENT				6,960.00					
09-154-AL-30	PHELPS COUNTY SHERIFF	DWI ENFORCEMENT (WOLFPACK)				10,955.52					
09-154-AL-31	PLATTE COUNTY SHERIFF	DWI ENFORCEMENT (WOLFPACK)			1	4,480.00					
09-154-AL-33	PLEASANT HILL POLICE DEPT.	SOBRIETY CHECKPOINT			1	7,626.00					
09-154-AL-34	POPLAR BLUFF POLICE DEPT.	DWI ENFORCEMENT				15,961.17					
09-154-AL-36	RAYMORE POLICE DEPARTMENT	SOBRIETY CHECKPOINT				10,488.00					
09-154-AL-37	RIVERSIDE DPS	DWI ENFORCEMENT				5,000.00				T	
09-154-AL-39	SMITHVILLE POLICE DEPARTMENT	SOBRIETY CHECKPOINT				7,500.00					

Project #	Grantee	Problem Area and Project Countermeasure	Total Allocation	402	410	154 AL	2011	154 HE	408	2010	1906
09-154-AL-40	SPRINGFIELD POLICE DEPT	DWI ENFORCEMENT (WOLFPACK)				55,000.00					
09-154-AL-41	SPRINGFIELD POLICE DEPT	YOUTH ALCOHOL				30,000.00					
09-154-AL-42	ST CHARLES CITY POLICE DEPT	DWI ENFORCEMENT				12,960.00					
09-154-AL-43	ST CHARLES CITY POLICE DEPT	SOBRIETY CHECKPOINT				7,200.00					
09-154-AL-44	ST CHARLES COUNTY SHERIFF	DWI ENFORCEMENT (WOLFPACK)				15,190.00					
09-154-AL-45	ST JOHN POLICE DEPARTMENT	DWI ENFORCEMENT (WOLFPACK)				9,000.00					
09-154-AL-46	ST JOHN POLICE DEPARTMENT	SOBRIETY CHECKPOINT				8,225.00					
09-154-AL-48	ST JOSEPH POLICE DEPARTMENT	SOBRIETY CHECKPOINT				12,600.00					
09-154-AL-49	ST JOSEPH POLICE DEPARTMENT	YOUTH ALCOHOL				13,130.00					
09-154-AL-50	ST LOUIS METRO POLICE DEPT	DWI ENFORCEMENT (WOLFPACK)				229,976.00					
09-154-AL-51	ST LOUIS METRO POLICE DEPT	SOBRIETY CHECKPOINT				24,192.00					
09-154-AL-52	ST LOUIS COUNTY POLICE DEPT	DWI ENFORCMEMENT/SOBRIETY CHECKPOINT				35,000.85					
09-154-AL-53	ST ROBERT POLICE DEPARTMENT	SOBRIETY CHECKPOINT				6,000.00					
09-154-AL-54	STONE COUNTY SHERIFF	DWI SATURATION				5,382.60					
09-154-AL-55	STONE COUNTY SHERIFF	SOBRIETY CHECKPOINT				6,781.95					
09-154-AL-56	TROY POLICE DEPARTMENT	DWI ENFORCEMENT/SOBRIETY CHECKPOINT				6,300.00					
09-154-AL-57	UNION POLICE DEPARTMENT	DWI ENFORCEMENT (WOLFPACK)				55,535.00					
09-154-AL-58	WASHINGTON POLICE DEPT	SOBRIETY CHECKPOINT				4,350.00					
09-154-AL-59	WASHINGTON POLICE DEPT	YOUTH ALCOHOL				5,800.00					
09-154-AL-60	WEBB CITY POLICE DEPARTMENT	DWI ENFORCEMENT (WOLFPACK)				8,750.00					
09-154-AL-61	WEST PLAINS POLICE DEPT	SOBRIETY CHECKPOINT				3,287.52					
09-154-AL-62	WILLOW SPRINGS POLICE DEPT	SOBRIETY CHECKPOINT				4,010.20					
09-154-AL-63	MADD	COURT MONITORING PROJECT				113,740.00					
09-154-AL-64	MISSOURI SAFETY CENTER	STATEWIDE DWI ENFORCEMENT				270,000.00					
09-154-AL-65	MISSOURI SAFETY CENTER	SFST COORDINATION				166,251.96					
09-154-AL-66	MISSOURI SAFETY CENTER	L.E. TRAINING - DRUGS THAT IMPAIR				4,536.00					
09-154-AL-67	MISSOURI SAFETY CENTER	SOBRIETY CHECKPOINT SUPERVISOR TRNG				35,640.00					
09-154-AL-68	MISSOURI SAFETY CENTER	BREATH ALCOHOL LAB OPS				261,945.36					
09-154-AL-69	MISSOURI SAFETY CENTER	BA SIMULATOR REPLACEMENT				28,642.00					
09-154-AL-70	MO SOUTHERN STATE UNIVERSITY	ALCOHOL PROJECTS				81,000.00					
09-154-AL-71	UNIVERSITY OF MISSOURI	THINK FIRST				276,746.00					
09-154-AL-72	UNIVERSITY OF MISSOURI	SMART/CHEERS				251,601.12					
09-154-AL-73	UNIV OF MISSOURI KANSAS CITY	DWI ENFORCEMENT				7,500.00					
09-154-AL-74	MO DIV OF ALCOHOL & TOBACCO	YOUTH ALCOHOL - ASAP				404,750.00					
09-154-AL-75	MSHP	LAW ENFORCEMENT TRAINING-ALCOHOL				51,940.00					

Project #	Grantee	Problem Area and Project Countermeasure	Total Allocation	402	410	154 AL	2011	154 HE	408	2010	1906
09-154-AL-76	MO OFF OF PROSECUTION SVCS	TRAFFIC SAFETY RESOURCE PROSECUTOR				174,124.94					
09-154-AL-77	MO DEPARTMENT OF REVENUE	LAW ENF TRNG - ALCOHOL/DRUG IMPAIRED				11,966.25					
09-154-AL-78	MO DEPARTMENT OF REVENUE	ALCOHOL TRNG FOR OFFICER & ATTORNEYS				11,640.00					
		TOTAL ALCOHOL PROJECTS	6,069,843.45	132,000.00	2,679,945.63	3,257,897.82					
		OCCUPANT PROTECTION									
09-OP-05-01	MO. Division of Highway Safety	CPS Program Coordination		51,000.00							
09-OP-05-02	MO. Division of Highway Safety	CPS PROGRAM ACTIVITY		20,000.00							
09-OP-05-03	MO. Division of Highway Safety	BICYCLE/PEDESTRIAN SAFETY		5,000.00							
		TOTAL OCCUPANT PROTECTION (402)	76,000.00	76,000.00							
		SAFE COMMUNITIES									
09-SA-09-01	CAPE GIRARDEAU SAFE COMM	SAFE COMMUNITIES PROGRAM		91,173.10							
09-SA-09-02	CAPE GIRARDEAU SAFE COMM	TEAM SPIRIT		158,291.47							
09-SA-09-03	TRAFFIC SAFETY ALLIANCE	SAFE COMMUNITIES PROGRAM		52,335.60							
		TOTAL SAFE COMMUNITIES	301,800.17	301,800.17							
		ENGINEERING SERVICES									
09-RS-11-01	MO. Division of Highway Safety	ENGINEERING SERVICES Coordination		500.00							
09-RS-11-02	MO. Division of Highway Safety	BEAP/TEAP ENGINEERING ASSISTANCE		100,000.00							
		TOTAL ENGINEERING SERVICES	100,500.00	100,500.00							
		402 PAID MEDIA									
09-PM 02-01	MO. Division of Highway Safety	CHILD PASSENGER SAFETY PAID MEDIA		100,000.00							
09-PM-02-02	MO. Division of Highway Safety	WORK ZONE PAID MEDIA		100,000.00							
09-PM-02-03	MO. Division of Highway Safety	YOUNG DRIVER PAID MEDIA		250,000.00							
09-PM-02-04	MO. Division of Highway Safety	OCCUPANT PROTECTION CIOT PAID MEDIA		325,000.00							
		TOTAL PAID MEDIA	775,000.00	775,000.00							
		PROHIBIT RACIAL PROFILING									
09-K10-07-01	MSHP	PROHIBIT RACIAL PROFILING									240,000.00
		TOTAL PROHIBIT RACIAL PROFILING	240,000.00								240,000.00
		DATA PROGRAM INCENTIVE									
09-K9-04-01	MO. Division of Highway Safety	TRAFFIC RECORDS Coordination							5,000.00		
09-K9-04-02	MO. Division of Highway Safety	LETS SOFTWARE							20,000.00		
09-K9-04-03	MISSOURI SAFETY CENTER	LETS SOFTWARE TRAINING							5,346.00		
09-K9-04-05	REJIS	TECHNOLOGY							28,593.00		

Project #	Grantee	Problem Area and Project Countermeasure	Total Allocation	402	410	154 AL	2011	154 HE	408	2010	1906
		TOTAL DATA PROGRAM INCENTIVE	58,939.00						58,939.00		
		154 HE TRANSFER FUNDS									
09-154-HE-01	MO. Division of Highway Safety	HAZARD ELIMINATION PROJECTS						12,000,000.00			
		TOTAL 154 HE TRANSFER FUNDS	12,000,000.00					12,000,000.00			
		2010 MOTORCYCLE SAFETY									
09-K6-12-01	MO. Division of Highway Safety	SHARE THE ROAD CAMPAIGN								120,000.00	
		TOTAL 2010 MOTORCYCLE SAFETY	120,000.00							120,000.00	
		2011 CHILD SEATS									
09-K3-05-01	MO. Division of Highway Safety	CPS FOR LOW INCOME FAMILIES					1,000,000.00				
		TOTAL 2011 CHILD SEATS	1,000,000.00				1,000,000.00				
				6,107,281.21	2,679,945.63	3,257,897.82	1,000,000.00	12,000,000.00	58,939.00	120,000.00	240,000.0

TOTAL HSP

25,464,063.66