# STATE OF ALABAMA

# **FISCAL YEAR 2015**

# **HIGHWAY SAFETY PLAN**

Prepared for

# THE US DEPARTMENT OF TRANSPORTATION NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION and FEDERAL HIGHWAY ADMINISTRATION

by the

STATE OF ALABAMA Robert Bentley, Governor

# ALABAMA DEPARTMENT OF ECONOMIC AND COMMUNITY AFFAIRS LAW ENFORCEMENT AND TRAFFIC SAFETY DIVISION Jim Byard, Jr., ADECA – Director William M. Babington, Division Chief

June 30, 2014



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# CERTIFICATION AND ASSURANCES FOR HIGHWAY SAFETY GRANTS (23 U.S.C. CHAPTER 4)

State: Alabama Fiscal Year: 2015

Each fiscal year the State must sign these Certifications and Assurances that it complies with all requirements including applicable Federal statutes and regulations that are in effect during the grant period. (Requirements that also apply to subrecipients are noted under the applicable caption.)

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

### **GENERAL REQUIREMENTS**

To the best of my personal knowledge, the information submitted in the Highway Safety Plan in support of the State's application for Section 402 and Section 405 grants is accurate and complete. (Incomplete or incorrect information may result in the disapproval of the Highway Safety Plan.)

The Governor is the responsible official for the administration of the State highway safety program through a State highway safety agency that has adequate powers and is suitably equipped and organized (as evidenced by appropriate oversight procedures governing such areas as procurement, financial administration, and the use, management, and disposition of equipment) to carry out the program. (23 U.S.C. 402(b)(1)(A))

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

- 23 U.S.C. Chapter 4 Highway Safety Act of 1966, as amended
- 49 CFR Part 18 Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments
- 23 CFR Part 1200 Uniform Procedures for State Highway Safety Grant Programs

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

# FEDERAL FUNDING ACCOUNTABILITY AND TRANSPARENCY ACT (FFATA)

The State will comply with FFATA guidance, <u>OMB Guidance on FFATA Subward and Executive Compensation Reporting</u>, August 27, 2010,

(https://www.fsrs.gov/documents/OMB\_Guidance\_on\_FFATA\_Subaward\_and\_Executive\_C ompensation\_Reporting\_08272010.pdf) by reporting to FSRS.gov for each sub-grant awarded:

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

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

# **NONDISCRIMINATION**

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 (Pub. 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), and the Americans with Disabilities Act of 1990 (Pub. L. 101-336), as amended (42 U.S.C. 12101, et seq.), which prohibits discrimination on the basis of disabilities (and 49 CFR Part 27); (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. 6101-6107), which prohibits discrimination on the basis of age; (e) the Civil Rights Restoration Act of 1987 (Pub. L. 100-259), which requires Federal-aid recipients and all subrecipients to prevent discrimination and ensure nondiscrimination in all of their programs and activities; (f) the Drug Abuse Office and Treatment Act of 1972 (Pub. L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (g) the comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (Pub. L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (h) Sections 523 and 527 of the Public Health Service Act of 1912, as amended (42 U.S.C. 290dd-3 and 290ee-3), relating to confidentiality of alcohol and drug abuse patient records; (i) Title VIII of the Civil Rights Act of 1968, as amended (42 U.S.C. 3601, et seq.), relating to nondiscrimination in the sale, rental or financing of housing; (j) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and (k) the requirements of any other nondiscrimination statute(s) which may apply to the application.

# THE DRUG-FREE WORKPLACE ACT OF 1988(41 USC 8103)

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;
- Establishing a drug-free awareness program to inform employees about:
  - o The dangers of drug abuse in the workplace.
  - o The grantee's policy of maintaining a drug-free workplace.
  - o Any available drug counseling, rehabilitation, and employee assistance programs.
  - o The penalties that may be imposed upon employees for drug violations occurring in the workplace.
  - o Making it a requirement that each employee engaged in the performance of the grant be given a copy of the statement required by paragraph (a).
- Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will
  - o Abide by the terms of the statement.
  - o Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after such conviction.
- Notifying the agency within ten days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction.
- 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
  - o Taking appropriate personnel action against such an employee, up to and including termination.
  - o 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.
- Making a good faith effort to continue to maintain a drug-free workplace through implementation of all of the paragraphs above.

### **BUY AMERICA ACT**

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

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

# **POLITICAL ACTIVITY (HATCH ACT)**

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

# CERTIFICATION REGARDING FEDERAL LOBBYING

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.

# <u>Certification Regarding Debarment, Suspension, and Other Responsibility Matters-Primary Covered Transactions</u>

- (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.

# <u>Instructions for Lower Tier Certification</u>

- 1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
- 2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- 3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 4. The terms covered transaction, 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.
- 5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under 48 CFR Part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- 6. The prospective lower tier 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," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions. (See below)
- 7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR

Part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the List of Parties Excluded from Federal Procurement and Non-procurement Programs.

- 8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR Part 9, subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, 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.

# <u>Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -- Lower Tier Covered Transactions:</u>

- 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.

# **POLICY ON SEAT BELT USE**

In accordance with Executive Order 13043, Increasing Seat Belt Use in the United States, dated April 16, 1997, the Grantee is encouraged to adopt and enforce on-the-job seat belt use policies and programs for its employees when operating company-owned, rented, or personally-owned vehicles. The National Highway Traffic Safety Administration (NHTSA) is responsible for providing leadership and guidance in support of this Presidential initiative. For information on how to implement such a program, or statistics on the potential benefits and cost-savings to your company or organization, please visit the Buckle Up America section on NHTSA's website at www.nhtsa.dot.gov. Additional resources are available from the Network of Employers for Traffic Safety (NETS), a public-private partnership headquartered in the Washington, D.C. metropolitan area, and dedicated to improving the traffic safety practices of employers and employees. NETS is prepared to provide technical assistance, a simple, user-friendly program kit, and an award for achieving the President's goal of 90 percent seat belt use. NETS can be contacted at 1 (888) 221-0045 or visit its website at www.trafficsafety.org.

## POLICY ON BANNING TEXT MESSAGING WHILE DRIVING

In accordance with Executive Order 13513, Federal Leadership On Reducing Text Messaging While Driving, and DOT Order 3902.10, Text Messaging While Driving, States are encouraged to adopt and enforce workplace safety policies to decrease crashed caused by distracted driving, including policies to ban text messaging while driving company-owned or -rented vehicles, Government-owned, leased or rented vehicles, or privately-owned when on official Government business or when performing any work on or behalf of the Government. States are also encouraged to conduct workplace safety initiatives in a manner commensurate with the size of the business, such as establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving, and education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

# **ENVIRONMENTAL IMPACT**

The Governor's Representative for Highway Safety has reviewed the State's Fiscal Year 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 is modified in a manner that could result in a significant environmental impact and trigger the need for an environmental review, this office is prepared to take the action necessary to comply with the National Environmental Policy Act of 1969 (42 U.S.C. 4321, et seq.) and the implementing regulations of the Council on Environmental Quality (40 CFR Parts 1500-1517).

# **SECTION 402 REQUIREMENTS**

The political subdivisions of this State are authorized, as part of the State highway safety program, to carry out within their jurisdictions local highway safety programs which have been approved by the Governor and are in accordance with the uniform guidelines promulgated by the Secretary of Transportation. (23 U.S.C. 402(b)(1)(B))

At least 40 percent (or 95 percent, as applicable) of all Federal funds apportioned to this State under 23 U.S.C. 402 for this fiscal year will be expended by or for the benefit of the political subdivision of the State in carrying out local highway safety programs (23 U.S.C. 402(b)(1)(C), 402(h)(2)), unless this requirement is waived in writing.

The State's highway safety program provides adequate and reasonable access for the safe and convenient movement of physically handicapped persons, including those in wheelchairs, across curbs constructed or replaced on or after July 1, 1976, at all pedestrian crosswalks. (23 U.S.C. 402(b)(1)(D))

The State will provide for an evidenced-based traffic safety enforcement program to prevent traffic violations, crashes, and crash fatalities and injuries in areas most at risk for such incidents. (23 U.S.C. 402(b) (1)(E))10

The State will implement activities in support of national highway safety goals to reduce motor vehicle related fatalities that also reflect the primary data-related crash factors within the State as identified by the State highway safety planning process, including:

- Participation in the National high-visibility law enforcement mobilizations;
- Sustained enforcement of statutes addressing impaired driving, occupant protection, and driving in excess of posted speed limits;
- An annual statewide seat belt use survey in accordance with 23 CFR Part 1340 for the measurement of State seat belt use rates;
- Development of statewide data systems to provide timely and effective data analysis to support allocation of highway safety resources;
- Coordination of Highway Safety Plan, data collection, and information systems with the State strategic highway safety plan, as defined in 23 U.S.C. 148(a).

(23 U.S.C. 402(b)(1)(F))

The State will actively encourage all relevant law enforcement agencies in the State to follow the guidelines established for vehicular pursuits issued by the International Association of Chiefs of Police that are currently in effect. (23 U.S.C. 402(j))

The State will not expend Section 402 funds to carry out a program to purchase, operate, or maintain an automated traffic enforcement system. (23 U.S.C. 402(c)(4))

I understand that failure to comply with applicable Federal statutes and regulations 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.

6/30/14

I sign these Certifications and Assurances based on personal knowledge, after appropriate inquiry, and I understand that the Government will rely on these representations in awarding grant funds.

Signature Governor's Representative for Highway Safety

William M. Babington

Printed name of Governor's Representative for Highway Safety

# **COST SUMMARY**

Page: 1

Report Date: 06/19/2014

# U.S. Department of Transportation National Highway Traffic Safety Administration

# **Highway Safety Plan Cost Summary**

State: Alabama

2015-HSP-1

For Approval

Pro- gram Area	Project	Description	Prior Approved Program Funds	State Funds	Previous Bal.	Incre/(Decre)	Current Bal- ance	Share to Local
NHTSA								
NHTSA 40	02							
Planning	and Administratio	on						
	PA-2015-00-00-00	Planning & Administration	\$.00	\$200,000.00	\$.00	\$200,000.00	\$200,000.00	\$.00
Planning	g and Administra- tion Total		\$.00	\$200,000.00	\$.00	\$200,000.00	\$200,000.00	\$.00
Alcohol								
	AL-2015-SP-AL-01	Alcohol (Dept of Public Safety)	\$.00	\$.00	\$.00	\$33,894.46	\$33,894.46	\$.00
	Alcohol Total		\$.00	\$.00	\$.00	\$33,894.46	\$33,894.46	\$.00
Police Tra	affic Services							
	PT-2015-SP-PT-01	Police Traffic (NW Shoals Com Coll)	\$.00	\$.00	\$.00	\$72,000.00	\$72,000.00	\$72,000.00
	PT-2015-SP-PT-02	Police Traffic (Shelton St Com Coll)	\$.00	\$.00	\$.00	\$56,000.00	\$56,000.00	\$56,000.00
	PT-2015-SP-PT-03	Police Traffic (Etowah Cty Comm)	\$.00	\$.00	\$.00	\$208,000.00	\$208,000.00	\$208,000.00
	PT-2015-SP-PT-04	Police Traffic (Mobile Cty Comm)	\$.00	\$.00	\$.00	\$176,000.00	\$176,000.00	\$176,000.00
	PT-2015-SP-PT-05	Police Traffic (City of Montgomery)	\$.00	\$.00	\$.00	\$104,000.00	\$104,000.00	\$104,000.00
	PT-2015-SP-PT-06	Police Traffic (Gadsden St Com Coll)	\$.00	\$.00	\$.00	\$24,000.00	\$24,000.00	\$24,000.00
	PT-2015-SP-PT-07	Police Traffic (Enterprise St Com Coll)	\$.00	\$.00	\$.00	\$24,000.00	\$24,000.00	\$24,000.00
	PT-2015-SP-PT-08	Police Traffic (Jefferson St Com Coll)	\$.00	\$.00	\$.00	\$128,000.00	\$128,000.00	\$128,000.00
	PT-2015-SP-PT-09	Police Traffic (AL Tombigbee Reg Plan Co	\$.00	\$.00	\$.00	\$8,000.00	\$8,000.00	\$8,000.00
	PT-2015-SP-PT-10	Police Traffic (Dept of Public Safety)	\$.00	\$.00	\$.00	\$800,000.00	\$800,000.00	\$.00
Polic	ce Traffic Services Total		\$.00	\$.00	\$.00	\$1,600,000.00	\$1,600,000.00	\$800,000.00
Communi	ity Traffic Safety P	Project						
	CP-2015-00-00-00	Section 402 Transfer Holding	\$.00	\$953,522.00	\$.00	\$3,814,087.00	\$3,814,087.00	\$762,818.00
	CP-2015-SP-CP-01	Comm Traffic Safety(NW Shoals Com Coll)	\$.00	\$106,666.67	\$.00	\$320,000.00	\$320,000.00	\$320,000.00
	CP-2015-SP-CP-02	Comm Traffic Safety(Shelton State Com Coll)	\$.00	\$60,766.67	\$.00	\$182,300.00	\$182,300.00	\$182,300.00

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Pre-Prior Ap-Program proved vi-Current Bal-Project Description **State Funds** Incre/(Decre) Share to Local Area **Program** ous ance Funds Bal. CP-2015-SP-CP-03 Comm Traffic Safety(Etowah Cty Comm) \$210,786.99 \$.00 \$210,786.99 \$210,786.99 \$210,786.99 \$.00 \$137,549.00 CP-2015-SP-CP-04 Comm Traffic Safety(Mobile Cty Com) \$.00 \$6,000.00 \$.00 \$137,549.00 \$137,549.00 CP-2015-SP-CP-05 Comm Traffic Safety(City of Montgomery) \$.00 \$28,006.13 \$.00 \$84,018.38 \$84,018.38 \$84,018.38 CP-2015-SP-CP-06 Comm Traffic Safety(Gadsden ST Com \$.00 \$126,380.00 \$.00 \$126,380.00 \$126,380.00 \$126,380.00 Coll) CP-2015-SP-CP-07 Comm Traffic Safety(Enterprise St Com Co \$.00 \$49,027.88 \$.00 \$147,083.58 \$147,083.58 \$147,083.58 CP-2015-SP-CP-08 Comm Traffic Safety(Jefferson St Com Col \$.00 \$79,612.14 \$.00 \$165,020.00 \$165,020.00 \$165,020.00 CP-2015-SP-CP-09 Comm Traffic Safety(AL Tombigbee Reg Pl \$.00 \$109,440.00 \$.00 \$109,440.00 \$109,440.00 \$109,440.00 CP-2015-SP-CP-10 ADECA Com Traffic Safety Program \$.00 \$.00 \$.00 \$62,500.00 \$62,500.00 \$.00 Manager **Community Traffic Safety** \$.00 \$1,730,208.48 \$.00 \$5,359,164.95 \$5,359,164.95 \$2,245,395.95 **Project Total** NHTSA 402 Total \$.00 \$1,930,208.48 \$.00 \$7,193,059.41 \$7,193,059.41 \$3,045,395.95 408 Data Program SAFETEA-LU 408 Data Program Incentive K9-2015-HS-K9-01 Data Program(AL Dept of Public Health) \$.00 \$.00 \$.00 \$60,000.00 \$60,000.00 \$.00 408 Data Program Incentive \$.00 \$.00 \$.00 \$60,000.00 \$.00 \$60,000.00 Total 408 Data Program SAFE-\$.00 \$.00 \$.00 \$60,000.00 \$60,000.00 \$.00 **TEA-LU Total** 410 Alcohol SAFETEA-LU 410 Alcohol SAFETEA-LU K8-2015-HS-K8-01 Alcohol Enforcement (NW Shoals Com Coll) \$.00 \$.00 \$.00 \$20,960.00 \$20,960.00 \$.00 K8-2015-HS-K8-02 Alcohol Enforcement (Shelton St Com Coll) \$.00 \$.00 \$.00 \$15,240.00 \$15,240.00 \$.00 K8-2015-HS-K8-03 Alcohol Enforcement (Etowah Cty Com) \$.00 \$.00 \$.00 \$30,480.00 \$30,480.00 \$.00 K8-2015-HS-K8-04 Alcohol Enforcement (City of Montgomery) \$.00 \$.00 \$.00 \$26,660.00 \$26,660.00 \$.00 K8-2015-HS-K8-05 Alcohol Enforcement (City of Montgomery) \$.00 \$.00 \$.00 \$21,900.00 \$21,900.00 \$.00 K8-2015-HS-K8-06 Alcohol Enforcement(Gadsden St Com Coll) \$.00 \$.00 \$.00 \$9,520.00 \$9,520.00 \$.00 K8-2015-HS-K8-07 Alcohol Enforcement (Enterprise St Com Co \$.00 \$.00 \$.00 \$18,100.00 \$18,100.00 \$.00

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Program Area	Project	Description	Prior Approved Program Funds	State Funds	Previous Bal.	Incre/(Decre)	Current Bal- ance	Share to Local
	K8-2015-HS-K8-08	Alcohol Enforcement(Jefferson St Com Col	\$.00	\$.00	\$.00	\$31,420.00	\$31,420.00	\$.00
	K8-2015-HS-K8-09	Alcohol Enforcement(AL Tombigbee Reg Pla	\$.00	\$.00	\$.00	\$25,720.00	\$25,720.00	\$.00
410 Alco	hol SAFETEA-LU Total		\$.00	\$.00	\$.00	\$200,000.00	\$200,000.00	\$.00
410 Alcol	hol SAFETEA-LU Paid N	ledia						
	K8PM-2015-HS-K8-10	Alcohol PM (AL Dept of Commerce)	\$.00	\$.00	\$.00	\$400,000.00	\$400,000.00	\$.00
410 Alc	ohol SAFETEA-LU Paid Media Total		\$.00	\$.00	\$.00	\$400,000.00	\$400,000.00	\$.00
410 Alco	ohol SAFETEA-LU Total		\$.00	\$.00	\$.00	\$600,000.00	\$600,000.00	\$.00
MAP 21 4 405b OP	105b OP High High							
	M1X-2015-00-00-00	MAP 21 405b Transfer Holding	\$.00	\$.00	\$.00	\$1,026,199.00	\$1,026,199.00	\$.00
	405b OP High Total		\$.00	\$.00	\$.00	\$1,026,199.00	\$1,026,199.00	\$.00
MAP 2	21 405b OP High Total		\$.00	\$.00	\$.00	\$1,026,199.0 0	\$1,026,199.00	\$.00
MAP 21 4	105b OP Low							
405b Lov	v HVE							
	M2HVE-2015-HS-M2-01	CIOT (NW Shoals Com Coll)	\$.00	\$.00	\$.00	\$20,500.00	\$20,500.00	\$.00
	M2HVE-2015-HS-M2-02	CIOT (Shelton St Com Coll)	\$.00	\$.00	\$.00	\$19,940.00	\$19,940.00	\$.00
	M2HVE-2015-HS-M2-03	CIOT (Etowah Cty Comm)	\$.00	\$.00	\$.00	\$27,700.00	\$27,700.00	\$.00
	M2HVE-2015-HS-M2-04	CIOT (Mobile Cty Comm)	\$.00	\$.00	\$.00	\$23,260.00	\$23,260.00	\$.00
	M2HVE-2015-HS-M2-05	CIOT (City of Montgomery)	\$.00	\$.00	\$.00	\$27,140.00	\$27,140.00	\$.00
	M2HVE-2015-HS-M2-06	CIOT (Gadsden St Com Coll)	\$.00	\$.00	\$.00	\$24,380.00	\$24,380.00	\$.00
	M2HVE-2015-HS-M2-07	CIOT (Enterprise St Com Coll)	\$.00	\$.00	\$.00	\$11,640.00	\$11,640.00	\$.00
	M2HVE-2015-HS-M2-08	CIOT (Jefferson St Com Coll)	\$.00	\$.00	\$.00	\$31,580.00	\$31,580.00	\$.00
	M2HVE-2015-HS-M2-09	CIOT (AL Tombigbee Reg Plan Co)	\$.00	\$.00	\$.00	\$13,860.00	\$13,860.00	\$.00
	M2HVE-2015-HS-M2-12	2015 CIOT Paid Media (Dept. Of Commerce)	\$.00	\$.00	\$.00	\$400,000.00	\$400,000.00	\$.00

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Program Area	Project	Description	Prior Approved Program Funds	State Funds	Previous Bal.	Incre/(Decre)	Current Bal- ance	Share to Local
	405b Low HVE Total		\$.00	\$.00	\$.00	\$600,000.00	\$600,000.00	\$.00
405b Lov	v Public Education							
	M2PE-2015-HS-M2-11	Public Education(NW Shoals Comm College)	\$.00	\$.00	\$.00	\$70,703.21	\$70,703.21	\$.00
405b	Low Public Education Total		\$.00	\$.00	\$.00	\$70,703.21	\$70,703.21	\$.00
405b Lov	v OP Information Syst	e <b>m</b>						
	M2OP-2015-HS-M2-10	Information System (University of AL)	\$.00	\$.00	\$.00	\$201,008.81	\$201,008.81	\$.00
405b Lov	v OP Information Sys- tem Total		\$.00	\$.00	\$.00	\$201,008.81	\$201,008.81	\$.00
MAP	21 405b OP Low Total		\$.00	\$.00	\$.00	\$871,712.02	\$871,712.02	\$.00
MAP 21 4	105c Data Program							
405c Dat	a Program							
	M3DA-2015-00-00-00	MAP 21 405c Transfer Holding	\$.00	\$.00	\$.00	\$900,558.00	\$900,558.00	\$.00
	M3DA-2015-HS-M3-01	Data Program (University of AL)	\$.00	\$.00	\$.00	\$698,398.75	\$698,398.75	\$.00
	5c Data Program Total		\$.00	\$.00	\$.00	\$1,598,956.75	\$1,598,956.75	\$.00
MAP 2	21 405c Data Program Total		\$.00	\$.00	\$.00	\$1,598,956.7 5	\$1,598,956.7 5	
MAP 21 4	105d Impaired Driving	Mid						
405d Mid	I HVE							
	M5HVE-2015-00-00-00	405d Mid HVE (Transfer Holding)	\$.00	\$.00	\$.00	\$2,418,874.00	\$2,418,874.00	\$.00
	M5HVE-2015-HS-M5-01	Impaired Driving (NW Shoals Comm College	\$.00	\$.00	\$.00	\$101,520.00	\$101,520.00	\$.00
	M5HVE-2015-HS-M5-02	Impaired Driving (Shelton State Comm Coll)	\$.00	\$.00	\$.00	\$60,160.00	\$60,160.00	\$.00
	M5HVE-2015-HS-M5-03	Impaired Driving(Etowah County Commission	\$.00	\$.00	\$.00	\$163,760.00	\$163,760.00	\$.00
	M5HVE-2015-HS-M5-04	Impaired Driving(Mobile County Commission	\$.00	\$.00	\$.00	\$123,200.00	\$123,200.00	\$.00
	M5HVE-2015-HS-M5-05	Impaired Driving(City of Montgomery)	\$.00	\$.00	\$.00	\$107,760.00	\$107,760.00	\$.00
	M5HVE-2015-HS-M5-06	Impaired Driving(Gadsden State Comm Coll)	\$.00	\$.00	\$.00	\$44,800.00	\$44,800.00	\$.00
	M5HVE-2015-HS-M5-07	Impaired Driving(Enterprise State Comm Coll)	\$.00	\$.00	\$.00	\$56,000.00	\$56,000.00	\$.00

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Pro- gram Area	Project	Description	Prior Ap- proved Program Funds	State Funds	Pre- vious Bal.	Incre/(Decre)	Current Balance	Share to Local
	M5HVE-2015-HS-M5-08	Impaired Driving(Jefferson State Comm Co	\$.00	\$.00	\$.00	\$116,880.00	\$116,880.00	\$.00
	M5HVE-2015-HS-M5-09	Impaired Driving(AL-Tombigbee Regional Commission	\$.00	\$.00	\$.00	\$25,920.00	\$25,920.00	\$.00
	M5HVE-2015-HS-M5-10	Impaired Driving(AL Dept of Public Safety	\$.00	\$.00	\$.00	\$300,000.00	\$300,000.00	\$.00
	405d Mid HVE Total		\$.00	\$.00	\$.00	\$3,518,874.00	\$3,518,874.00	\$.00
405d Mid	d Court Support							
	M5CS-2015-HS-M5-12	Impaired Driving (NW Shoals Comm College	\$.00	\$.00	\$.00	\$375,000.00	\$375,000.00	\$.00
405d M	lid Court Support Total		\$.00	\$.00	\$.00	\$375,000.00	\$375,000.00	\$.00
405d Mid	d Paid/Earned Media							
	M5PEM-2015-HS-M5-11	Impaired Driving(AL Dept of Commerce)	\$.00	\$.00	\$.00	\$400,000.00	\$400,000.00	\$.00
405d N	/lid Paid/Earned Media Total		\$.00	\$.00	\$.00	\$400,000.00	\$400,000.00	\$.00
I	MAP 21 405d Impaired Driving Mid Total		\$.00	\$.00	\$.00	\$4,293,874.00	\$4,293,874.00	\$.00
	NHTSA Total		\$.00	\$1,930,208.48	\$.00	\$15,643,801.18	\$15,643,801.18	\$3,045,395.95
	Total		\$.00	\$1,930,208.48	\$.00	\$15,643,801.18	\$15,643,801.18	\$3,045,395.95

- o Section 402, 405b-d: The match source may be a combination of the Department Public Safety (DPS), State Trust Fund and Local Law Enforcement Agencies. DPS will use personnel costs (salaries), vehicle purchases, vehicle operations, and vehicle maintenance cost.
- o The DPS match funds are applicable to each NHTSA grant program. The Alabama Office of Highway Safety (AOHS) will make sure the DPS, State Trust Fund, and Local Law Enforcement Agencies' matching funds will not be used to match another Federal grant program.

# **EXECUTIVE SUMMARY**

The Alabama Highway Safety Plan (HSP) is a planning document that is produced each year to provide continuous guidance and improvement in Alabama's ongoing efforts. The HSP also assures that 402 Program funds are allocated optimally in order to produce the maximum reduction of crash-caused fatalities and severe injuries on Alabama roadways.

According to the MAP-21 guidelines, 402 Program highway safety funds must be used to support programs that (source: GHSA Review of Section 402 State and Community Highway Safety Grant Program http://www.ghsa.org/html/stateinfo/programs/402.html (c) 2013):

- Reduce impaired driving
- Reduce speeding
- Encourage the use of occupant protection
- Improve motorcycle safety
- Improve pedestrian and bicycle safety
- Reduce school bus deaths and injuries
- Reduce crashes from unsafe driving behavior
- Improve enforcement of traffic safety laws
- Improve driver performance
- Improve traffic records
- Enhance emergency services

Alabama has met the requirements for Section 402 funding since the beginning of the program in the late 1960s. The National Highway Traffic Safety Administration (NHTSA) administers the Federal Section 402 Program, which in Alabama is administered by the Governor through the Alabama Office of Highway Safety (AOHS), which is housed within the Law Enforcement and Traffic Safety Division of the Alabama Department of Economic and Community Affairs (ADECA). The AOHS is directed by the Governor's Representative for Highway Safety/State Coordinator (GR/SC), to which all highway traffic safety staff report. The Alabama Highway Safety Plan (HSP) reflects the new Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) reforms.

The various statewide and local traffic safety efforts involve a variety of political subdivisions within the State that implement local highway safety programs consistently with Federal policy. The local agencies that receive funding are authorized to implement their local programs according to the specifications of the HSP. Nine regional Community Traffic Safety Program (CTSP) Coordinators report directly to the GR/SC. Working closely with each other, and the GR/SC, the Coordinators implement all programs that involve local agencies. The AOHS also employs a Traffic Safety Resource Prosecutor who deals with impaired driving cases involving traffic violations, which range from minor misdemeanors to vehicular homicide.

The following present the high level characteristics of Alabama's HSP:

- **Vision:** To create the safest surface transportation system possible, using comparable metrics from other states in the Southeast to assess progress in maintaining continuous recognizable improvement.
- **Primary ideals:** Saving the most lives and reducing the most suffering possible.
- **Countermeasure selection approach:** Detailed problem identification efforts to quantify and compare alternatives, consistently with the NHTSA document *Countermeasures That Work*.

- **Primary focus:** Selective enforcement on speed, impaired driving and failure to use restraints hotspots.
- **Implementation Approach:** Cooperative effort that involves teamwork and diversity, including all organizations and individuals within the state who have traffic safety interests.
- **Participant mission:** Reduce fatalities and severe injuries by focusing on the locations with the highest potential for severe crash frequency and severity reduction, as identified for speed and impaired driving, which were the largest two causes of fatal crashes, and for restraint non-use, which is the greatest factor causing increased severity.

All programs have been subjected to problem identifications efforts over the years, and any change in traffic safety relative statistics is intensely studied to determine the root cause as well as the correlated demographics. The analytical procedures employed in these efforts are presented in the next section of this document. This analytical process is two-fold: (1) to evaluate alternative overall countermeasure strategies, and select the one that will best solve the problem, and (2) once that is resolved, to use further analytical techniques to fine-tune the particular countermeasures that have been selected for implementation. This includes all of the basic countermeasures that are presented in this plan as well as the particular tactics to be applied in their implementations. The highest level of problem identification is exemplified by Table 1 in the body of this report, which contains a comparison of the potential savings that could be obtained by attacking the various major issues that AOHS has been charged to address. An extract from Table 1 is given below.

### **Extract of Top Ten Fatality Causes from Table 1**

Crash Type (Causal Driver)	Fatal Number	Fatal %	Injuries	Injury %	PDO No.	PDO %	Total
1. Restraint Deficient*	365	3.92%	3,607	38.78%	5,328	57.29%	9,300
2. Impaired Driving	184	2.63%	2,292	32.81%	4,509	64.55%	6,985
3. Speeding	160	4.18%	1,494	39.04%	2,173	56.78%	3,827
4. Obstacle Removal	124	2.05%	2,114	34.90%	3,819	63.05%	6,057
6. License Status Deficiency	90	1.42%	1,751	27.65%	4,491	70.93%	6,332
5. Mature – Age > 64	83	0.66%	2,776	22.13%	9,683	77.20%	12,542
7. Youth – Age 16-20	80	0.39%	4,478	21.72%	16,062	77.90%	20,620
8. Motorcycle	71	4.49%	1,092	68.98%	420	26.53%	1,583
9. Ped., Bicycle, School Bus	66	4.39%	895	59.55%	542	36.06%	1,503
10. Pedestrian	57	7.89%	602	83.38%	63	8.73%	722

<sup>\*</sup> All categories list number of crashes except for the "Restraint Deficient" category. The restraint category cannot accurately be measured by number of crashes so it lists the number of unrestrained persons for each severity classification.

This begins to provide insight into the basic prioritization that was performed in resolving the overall state countermeasure strategies. It is important to recognize that the various categories are not mutually exclusive. Detailed explanations for each crash type or problem are given in the body of this document on page 29.

From the summary of the table above, it is clear that to attack the causes of fatalities, restraint deficiencies, impaired driving and speeding are clearly the major problems that need to be attacked, without totally ignoring the other issues further down on the list. Since the body of this HSP document will be

concentrating on the specifics of the top three countermeasure types, the other "top 10" items are in order on page 22:

- Obstacle Removal this is being giving considerable attention by ALDOT within programs sponsored by the Federal Highway Administration (FHWA) and the State of Alabama.
- Mature Drivers Age > 64 while this looks like a high number, recognize that this represents about 20 years of ages (65-84) as opposed to Item 7, which is only five years of ages. Since the number of fatalities attributed to the two groups is the same we can conclude that on a per one-year age basis, the 16-20 year olds cause about four times the fatalities as the older driver group. So once these numbers are normalized on a per year basis, it seems clear that counter-measure resources need to go toward the younger drivers. This age classification is maintained because of the obvious growth in it that is expected over the coming decade. An important factor that drives the number of fatalities up in this category is the lower survivability of older injured persons.
- License Status Deficiency this is highly correlated with DUI, speeding and other violations that would cause the revocation of the drivers' licenses. It is included to indicate that suspending the license is not an effective deterrent with many drivers.
- Youth Age 16-20 there is no doubt that by any metric this age group is the most critical to reducing fatalities and all other crashes, even when normalized by number in the driving population. See the discussion for Mature Drivers above.
- Motorcycle attention is justified for this category because of the recent increased use of motorcycles due to increase gasoline prices and other economic considerations.
- Pedestrian, Bicycle and School Bus this category is consolidated over several areas that involve young people who have not yet reached driving age.
- Pedestrian this covers all pedestrian fatalities.

The maximum improvement in traffic safety can only be attained if the available resources are allocated to those areas where they will have the greatest chances of reducing fatality and injury crashes. Table 1 on page 29 demonstrates the highest potential for countermeasures in the broadest categories, since it is obvious that it is impossible to reduce more crashes than occur. It is true that a category with a lower potential could achieve higher benefits if the countermeasures applied to it were more effective. That is, it is both the potential for reduction and the effectiveness in the countermeasures that together determine the optimal countermeasures to apply.

Being data driven, the Highway Safety Plan for FY 2015 addresses the two largest factors that *cause* injury and fatal crashes, and the single greatest factor influencing severity: seat belt use. Crashes that were in either the Speed or Impaired Driving category were identified and locations with the highest numbers of these crashes (particularly the severe crashes) were included in the prioritized lists that provides the basis for their selective enforcement efforts. Also, those areas in which it was found that seat belt non-use was highest were also isolated for seat belt enforcement. These problem areas, known as *hotspots*, were defined by specific criteria depending on roadway classification. These hotspots are defined, listed and mapped in this plan. Each of the regional coordinators uses these specifications as the basis for their plans for the coming year.

The following presents a summary of each of the major strategies that are detailed in this plan:

- Continue supporting the nine Community Traffic Safety Program (CTSP) projects.
- Continue to support the Center for Advanced Public Safety (CAPS) in exchange for their support of AOHS. CAPS provides AOHS with their crash and traffic safety data and analytical technical assistance throughout the year.

- Conduct nine local Hotspot Special Traffic Enforcement Program (STEP) projects, one within each of the CTSP regions. Additionally, a statewide STEP project will be conducted in conjunction with the Alabama Department of Public Safety (DPS).
- Continue to require the CTSP Coordinators to conduct selective enforcement efforts that focus
  their plans on hotspot locations identified by the data analyses provided for their respective regions.
- Participate in the national "Click It or Ticket" campaign on the statewide level.
- Conduct a statewide "Drive Sober or Get Pulled Over" campaign in conjunction with the national campaign.
- Conduct sustained enforcement for impaired driving, speeding, and seat belts.
- Conduct data driven enforcement programs through law enforcement agencies in Alabama to prevent crashes, fatalities and injuries in the State.

Performance measures were established for assessing each of these strategies. Specific countermeasures within each of these categories were checked for their effectiveness estimates from the NHTSA-recommended document: *Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices, Seventh Edition, 2013*; which can be viewed at: <a href="http://www.safehomealabama.gov/Portals/0/PDF/Countermeaures%20that%20Work%20811727.pdf">http://www.safehomealabama.gov/Portals/0/PDF/Countermeaures%20that%20Work%20811727.pdf</a> [This document will be henceforth referenced as "NHTSA Countermeasures that Work."]

To assure that the operation of the State's traffic safety program is well organized and continues to be implemented on the basis of sound data analyses, provisions have been made to accomplish a number of administrative goals. In summary, the administrative goals include the following:

- Training and internal interaction requirements (e.g., meetings and conferences) to keep the AOHS staff and those with whom they interact familiar with the most recent developments in traffic safety that are relevant to their roles.
- Support and coordination of Section 402 and Section 405 (as given in the new MAP-21 guidelines), in the support and integration of eCite, eCrash, MMUCC, driver license access, EMSmedical data integration, roadway data and vehicle data.
- Legislative support activities to provide information for sound legislation through the efforts of the State Safety Coordinating Committee.
- The compilation, presentation and coordination of all formal governmental and volunteer traffic safety efforts within Alabama by means of the http://www.SafeHomeAlabama.gov/ website.

It will be impossible to accomplish all of the plans set forth in this document without statewide cooperation throughout the traffic safety community. Therefore, the AOHS has forged key partnerships that are briefly described below:

- Community Traffic Safety Program (CTSP) Coordinators employed in the field as an arm of the AOHS who live and have offices within their respective regions, and build ongoing relationships with local and state level law enforcement who serve that region. In addition, they build relationships with all other traffic safety stakeholders in the local communities.
- Alabama Department of Public Safety in being the pilot implementers of systems such as eCrash, eCite and other innovations, providing a much more efficient system of law enforcement as well as a model for local acceptance of technology.
- Alabama Department of Transportation (ALDOT) in participating on their monthly sponsored Safety Outreach Meetings.

- Strategic Highway Safety Plan Steering Committee which also brings involvement and close cooperation with ALDOT and the following Federal agencies:
  - o Federal Highway Administration (FHWA)
  - o Federal Motor Carrier Safety Administration (FMCSA)
  - o National Highway Traffic Safety Administration (NHTSA)
- Alabama Department of Public Health providing data and information technology expertise for EMSIS and trauma data integration and use.
- Local law enforcement including city police and county sheriffs, these partners are essential to all statewide and local enforcement programs.
- Media providing continued support to inform the public of all selective enforcement and other initiatives.
- Traffic Records Coordinating Committee a broad based committee that represents all developers and users of traffic safety information systems.
- State and local District Attorneys involved to increase their level of readiness and proficiency for the effective prosecution of traffic related cases.
- The University of Alabama Center for Advanced Public Safety (CAPS) which provides the information foundation from crash, citation, EMS runs and other databases to enable AOHS and the CTSP Coordinators and LELs to be assured that their traffic safety resources are being allocated most effectively. CAPS also provides liaison with other university traffic safety efforts (see <a href="http://www.safehomealabama.gov/Universities.aspx">http://www.safehomealabama.gov/Universities.aspx</a>).

While fatalities are caused by factors other than speed, impaired driving and lack of proper restraints, the limited funding available is being applied to those measures, since they demonstrate the greatest reduction potential for fatalities and severe injuries. Even if all of these goals for these various programs are met, there will still be an intolerably high death and injury toll, and the State embraces all of the principles of the National effort, Toward Zero Deaths (TZD).

### PLANNING PROCESS

The planning process starts with a very general problem identification, which is initiated as soon as the close out of the previous year's data is completed. This occurs in the April-May time frame. The detailed procedure for the problem identification is given in a separate section below. The most current year of data after the close out is combined with the previous two years of data in order to have three years of crash data to perform the problem identification. Research performed by CAPS has shown that three years is an optimal time span for predicting future hotspots. The increased value of adding a fourth year is offset by the misinformation that comes from the obsolete data.

As shown by the problem identification details, the plan is totally data driven. In order to get the CTSP Coordinators to be totally involved in this process, they are required to submit their tentative plans in the April-May time frame, at about the same time as the statewide problem identification is being performed. While this tentative plan is based on data that is not totally current, it has the advantage of reflecting the experience that the CTSP Coordinators have had in their previous year of implementation. As an extreme example, it may contain information related to the inexperience or failure to cooperate of a local agency and plans to overcome such issues. These are factors that cannot be seen or appreciated by computer outputs at the state level.

The AOHS takes advantage of the expertise built up over many years by the University of Alabama Center for Advanced Public Safety (CAPS) to perform the problem identification, and to work with the AOHS GR/SC and staff in assembling a tentative statewide planning document. Using the Critical Analysis Reporting Environment (CARE) program, a complete listing and illustration of problem crash locations (or hotspots) throughout the state is developed. In addition to a breakdown by CTSP region, the results are also subdivided by crash type and roadway classification. This is because different agencies may deal with different roadway classifications, and different tactics may be applied to different types of crashes. As seen in the current document, the results are subdivided by the nine CTSP regions. These data are distributed then to the CTSP Coordinators so that they can refine their respective plans.

A similar exercise involves the Alabama Department of Public Safety (DPS), which is given information on Interstates and rural state routes that it tends to patrol. Generally, each region and the DPS receive a package of information that is formatted just like the statewide results, but tailored to their particular region or roadway subset. In addition, all agencies also have access to the preliminary statewide plan. By providing both statewide information and information specific to their region, the regional coordinators are able to identify the problem areas in their region but also determine how they relate to the statewide plan.

Once this information is provided to the CTSP Coordinators, they are instructed to focus their plans for the coming year on the hotspot locations given in the reports for their region. At this point it is a minor adjustment for them to revise the hotspot definition part of their plan. Other issues presented in their tentative plans are reviewed by AOHS staff to assure integrity and consistency among the regions.

# PROBLEM IDENTIFICATION

### PROCEDURE FOR THE PROBLEM IDENTIFICATION

The AOHS has worked in partnership with the University of Alabama/CAPS for well over a decade to continually improve and streamline its problem identification process. Among other innovations, this has resulted in the creation of the Critical Analysis Reporting Environment (CARE) system, which is being continuously improved to produce greater information benefits to the state, now in its tenth major upgrade (CARE10).

To avoid ambiguity, the term "Impaired Driving" is used throughout this document to refer to DUI-caused crashes that are the result of either alcohol or any drug involvement according to the reporting officers. We recognize that alcohol is a drug, and as the predominant drug of choice, it is the one that is most abused, and the easiest for reporting officers to detect. While other drugs are reported in relatively small numbers compared to alcohol involvement, it is of growing concern and AOHS agrees with NHTSA that impaired driving is not limited to only alcohol causation. Those statistical tables where information is only available on alcohol will be so noted.

The first step in the problem identification process was to determine those types of crashes that were going to be targeted for countermeasure implementation. The top three items in Table 1 on page 29 were Speed, Impaired Driving and Restraints Not Used. The first two of these are causes of severe crashes; the third is a failure on the part of one or more crash vehicle occupants to protect themselves in the event of a crash; i.e., seat belts prevent more severe injuries, but they very rarely prevent the crash itself. However, individuals who drive impaired and drive above the posted speed limits have been found to be in the risk-taking category, and they are highly correlated with those who typically refuse to use (or insist upon the use of) occupant restraints. The major countermeasures chosen were selective enforcement based on evaluations that have been performed in Alabama that demonstrate the effectiveness of adding enforcement officers. This report is available on: <a href="http://www.safehomealabama.gov/Enforcement/EnforcementStudies.aspx">http://www.safehomealabama.gov/Enforcement/EnforcementStudies.aspx</a>

In addition, specific countermeasures within each of these categories were checked for their effectiveness estimates from the NHTSA-recommended document, *NHTSA Countermeasures that Work*.

The criteria used for defining speed and impaired driving hotspots for the Fiscal Year 2014 HSP was also used in the Fiscal Year 2015 Highway Safety Plan. By using essentially the same search criteria to locate hotspots, comparisons can be made from year to year for the state as a whole, and for each CTSP region within the state. For the FY 2015 HSP, the 2011-2013 calendar years were used. We anticipate that similar criteria for defining hotspots will continue to be used in future years in order to allow for comparison of data and hotspots from one year to the next.

Speeding and Impaired Driving crash location hotspots can be divided into seven groups:

- 1. Speeding Mileposted Locations on Interstate Routes,
- 2. Speeding Mileposted Locations on State/Federal Routes,
- 3. Speeding Non-Mileposted Segment Locations,
- 4. Impaired Driving Mileposted Locations on Interstate Routes,
- 5. Impaired Driving Mileposted Locations on State/Federal Routes,
- 6. Impaired Driving Non-Mileposted Segment Locations, and
- 7. Impaired Driving Non-Mileposted Intersection Locations.

Speeding is not typically listed as a crash cause at intersections, and thus high-crash speed-related intersection crashes was not a useful criterion.

Criteria for finding hotspots were defined for each of these seven categories and the CARE system was used to find the hotspots. The following indicates the criteria that were applied;

- 1. Speeding Mileposted Locations on Interstate Routes with five or more Injury or Fatality crashes within 10 miles. Injuries and fatalities were then summed and hotspots (10 miles in length) with eight or more injury or fatality crashes were used,
- 2. Speeding Mileposted Locations on State/Federal Routes with five or more Injury or Fatality crashes within 10 miles. Injuries and fatalities were then summed and hotspots (10 miles in length) with eight or more injury or fatality crashes were used,
- 3. Speeding Non-Mileposted Segment Locations with three or more crashes resulting in injury or fatality
- 4. Impaired Driving Mileposted Locations on Interstate Routes with two or more crashes within five miles. Injuries and fatalities were then summed and hotspots (5 miles in length) with eight or more injury or fatality crashes were used,
- 5. Impaired Driving Mileposted Locations on State/Federal Routes with two or more crashes within five miles. Injuries and fatalities were then summed and hotspots (5 miles in length) with nine or more injury or fatality crashes were used,
- 6. Impaired Driving Non-Mileposted Segment Locations with three or more crashes, and
- 7. Impaired Driving Non-Mileposted Intersection Locations with three or more crashes.

A more detailed explanation of the criteria for the various hotspot locations, and the process used in their determination is given in the Hotspot Listings section on page 57.

Once the hotspots were defined and the locations were found using CARE, the CTSP Coordinators from across the state were given information on the hotspot locations for the state as a whole. They were also provided detailed hotspot reports specific to their region to assist them in their focused efforts. A copy of the statewide report that was developed using CARE and integrated GIS mapping programs can be found in the Hotspot Listings and Regional Reports section.

Using the reports and maps developed for each region, the CTSP Coordinators will develop a plan, including the time schedule and work assignments, for their region that focuses on the hotspot locations. More detailed information on the goals and strategies for the state are included in the Goals and Strategies section. The goals set on a regional basis will be in line with the goals and strategies laid out in that section.

## GENERAL CONSIDERATIONS OF THE PROBLEM IDENTIFICATION

For FY 2015, AOHS will continue the strategy of identifying and focusing on impaired driving and speed related hotspots in the State of Alabama, with a special emphasis on locations where occupant restraints were also found to be overrepresented. It is clear from a consideration of Table 1 that the two biggest problem areas, in terms of behavior that causes crashes, are speeding and impaired driving. While the failure to use occupant protection devices is infrequently the cause of a crash, it can have a mitigating effect on the severity both per se and in some rare cases by enabling the driver to regain control. Thus, the consideration of hotspots where causal drivers were reported "not properly restrained" has a negative effect on crash severity and the saving of lives (see Appendix A: Section 405b Occupant Protection Plan). Since these trends have been recognized year after year, they cannot be ignored and must be consistently and continually addressed.

Table 1. Summary of Crash Severity by Crash Type -Alabama CY2013 Data

Crash Type (Causal Driver)	Fatal Number	Fatal %	Injury Number	Injury %	PDO No.	PDO %	Total
1. Restraint Deficient*	365	3.92%	3,607	38.78%	5,328	57.29%	9,300
2. Impaired Driving	184	2.63%	2,292	32.81%	4,509	64.55%	6,985
3. Speeding	160	4.18%	1,494	39.04%	2,173	56.78%	3,827
4. Obstacle Removal	124	2.05%	2,114	34.90%	3,819	63.05%	6,057
6. License Status Deficiency	90	1.42%	1,751	27.65%	4,491	70.93%	6,332
5. Mature – Age > 64	83	0.66%	2,776	22.13%	9,683	77.20%	12,542
7. Youth – Age 16-20	80	0.39%	4,478	21.72%	16,062	77.90%	20,620
8. Motorcycle	71	4.49%	1,092	68.98%	420	26.53%	1,583
9. Ped., Bicycle, School Bus	66	4.39%	895	59.55%	542	36.06%	1,503
10. Pedestrian	57	7.89%	602	83.38%	63	8.73%	722
11. Non-pickup Truck Involved	40	0.91%	759	17.32%	3,493	79.69%	4,383
12. Utility Pole	34	1.50%	760	33.52%	1,388	61.23%	2,267
13. Fail to Conform to S/Y Sign	32	0.51%	1,698	27.26%	4,404	70.69%	6,230
14. Construction Zone	21	0.94%	545	24.42%	1,766	79.12%	2,232
15. Vehicle Defects – All	15	0.45%	726	21.74%	2,496	74.75%	3,339
16. Fail to Conform to Signal	15	0.36%	1,299	31.26%	2,770	66.65%	4,156
17. Vision Obscured – Env.	13	0.86%	391	26.01%	1048	69.73%	1,503
18. Child Restraint Deficient*	11	0.50%	566	25.86%	1,877	85.75%	2,189
19. Bicycle	6	2.33%	192	74.42%	46	17.83%	258
20. School Bus	3	0.57%	107	20.27%	410	77.65%	528
21. Railroad Trains	1	14.29%	2	28.57%	4	57.14%	7
22. Roadway Defects – All	0	0.00%	28	20.74%	105	77.78%	135

<sup>\*</sup> All categories list number of crashes except for the "Restraint Deficient" and "Child Restraint Deficient" categories. The restraint categories cannot accurately be measured by number of crashes so they list number of unrestrained persons for each severity classification.

AOHS personnel have served on the steering committee for the development of the Alabama Strategic Highway Safety Plan (SHSP), and they are presently active in its implementation phase. They have worked collectively in goal setting for the common goals in the HSP, SHSP and the Highway Safety Improvement Plan (HSIP). The common goals were mutually agreed upon by the Alabama Office of Highway Safety, the Strategic Highway Safety Plan steering committee and the Highway Safety Improvement Plan committee. The AOHS Highway Safety Plan has been incorporated into the Alabama SHSP as an appendix, reflecting their agreement with the goals and approaches being taken by AOHS. The major goals of both the HSP and the SHSP are to bring about a more effective and coordinated statewide allocation of traffic safety resources, including funding and equipment, but most importantly, personnel.

Table 1 was developed to bring together and initiate a process of prioritization for all of the key traffic safety categories. All SHSP participants were encouraged to add any categories that they felt were appropriate. The data contained in Table 1 are updated and used year after year by those in the traffic

safety profession across the State of Alabama, since this information provides a broad overview of the key categories of concern to those within the traffic safety community. It is recognized that this information obtained by comparing gross fatality and injury counts in overlapping categories is merely a first step in the analytical process to find optimal allocations of resources among programs. However, without such a high level view much time is wasted in analyzing areas that have little hope of addressing the major traffic safety problems within the state.

The highest number of fatal crashes is listed first in Table 1, descending to the crash type category with the lowest number of fatal crashes listed last. Categories were defined by the members of the SHSP steering committee who submitted all significant categories within their respective areas of interest. Each crash type category lists the crashes that happened for that particular category between January 1, 2013 and December 31, 2013, which elsewhere is called the Calendar Year (CY). Within the Performance Goals and Strategies section, all past statistics have been updated to reflect the CY. The categories given in Table 1 are not mutually exclusive (e.g., you could have an impaired driving crash that also involved speeding). However, they still tend to demonstrate the relative criticality of that particular category.

The crash frequency within each severity classification is also given in Table 1 for CY 2012. The percentages given are for the respective severity classification only; thus, these percentages represent the relative severity of the crash category, and this can be used to compare the crash categories by severity. For example, it might be noticed that the severity of pedestrian, motorcycle and railroad crashes are significantly higher than most other categories, as is also true for those crashes in which the driver was not properly restrained.

In July 2009, the State of Alabama made a major change in their crash form and this resulted in changes in the data that was being collected across the state. After a multiyear process of trying to improve the data elements collected, the eCrash system was developed that enables officers to enter data directly into the computer (paperless). This change helped to create data that met the Model Minimum Uniform Crash Criteria (MMUCC) and provided better data for future analysis. With this change, a number of new variables and codes were introduced to the crash report, allowing for more accurate and complete data from the crash data entered by officers in the field. This upgrade has caused some changes to the search criteria used in Table 1 as well as the search criteria for Impaired Driving and Speed Hotspots. Careful work was done to ensure that no variables or codes were missed and that the search criteria captured all of the crashes for that particular category.

For the FY 2015 analysis, data from three prior years (CY 2011-2013) were used. A total of 37 Speeding hotspots and 198 Impaired Driving hotspots were identified. These hotspots are defined, listed and mapped (when possible) in Hotspot Listings below, requiring the CTSP Coordinators and the officers within their jurisdictions to work those areas that are most critical as given by the evidence based analyses. The plans for each of the regional coordinators for the coming year will focus on these hotspot areas, as portions of their funding will be restricted to working the speeding and impaired driving hotspot locations defined for each region.

Alabama's fatality counts and fatality rates (per 100 million vehicle miles traveled) since 1987 are given below.

Rate	<u>Fatalities</u>	Miles Driven (100 MVMT)
2.98	1116	374.37
2.58	1023	396.84
2.52	1028	407.65
2.64	1118	423.47
2.59	1110	429.24
2.26	1033	457.62
2.20	1040	472.03
2.21	1081	489.56
2.20	1113	506.28
2.22	1142	514.33
2.23	1190	534.58
1.94	1071	552.05
2.03	1148	564.13
1.74	986	565.71
1.76	998	567.08
1.80	1038	575.32
1.71	1001	586.33
1.96	1154	588.62
1.92	1148	596.62
2.00	1207	603.94
1.81	1110	613.13
1.63	966	591.48
1.38	849	613.00
1.34	859	641.51
1.38	894	649.14
1.33	865	650.38
	2.98 2.58 2.52 2.64 2.59 2.26 2.20 2.21 2.20 2.22 2.23 1.94 2.03 1.74 1.76 1.80 1.71 1.96 1.92 2.00 1.81 1.63 1.38 1.34 1.38	2.98     1116       2.58     1023       2.52     1028       2.64     1118       2.59     1110       2.26     1033       2.20     1040       2.21     1081       2.20     1113       2.22     1142       2.23     1190       1.94     1071       2.03     1148       1.74     986       1.76     998       1.80     1038       1.71     1001       1.96     1154       1.92     1148       2.00     1207       1.81     1110       1.63     966       1.38     849       1.34     859       1.38     894

The fatality rate has been cut by 50% over the time period represented above. The reduction in rates over the past few years is also extremely promising, reflecting major efforts in publicizing and enforcing the primary seat belt law, and the many other efforts along the broad range of traffic safety activities. Alabama will not be satisfied, however, with even one death on the roadway, and the state will continue to put forth a concerted effort to assure that traffic safety resources are utilized to their maximum capabilities to sustain the trend toward zero deaths.

This document will continue by presenting the Vision, Ideals and Mission in the next section of the plan, which gives an overview of the AOHS strategic planning efforts. The next section after that will present the goals and strategies to address hotspot locations. Finally, there will be a section that gives the statewide analyses of speed and impaired driving hotspot locations. Each CTSP Coordinator and LEL receives a copy of the statewide list as well as information that is specific for their region. These lists allow them to focus on the countermeasures that will have the most impact on their area of the state.

# VISION, IDEALS, MISSION

#### **VISION:**

To create the safest possible surface transportation system by means of a cooperative effort that involves all organizations and individuals within the state who have traffic safety interests.

This vision is measurable in terms of crash, injury and fatality rates (per million vehicle mile). In order to perform an accurate evaluation of the metric, Alabama will be compared to the other states in NHTSA Region 4.

# **IDEALS:**

To move toward this vision and ultimately toward zero deaths (TZD) requires that the following ideals be accepted as guiding principles in this endeavor:

- Saving Lives. Preserve the lives of all users of the Alabama surface transportation system by minimizing the frequency and severity of all potentially fatal crashes, regardless of the countermeasure type or the organization that has primary responsibility for its implementation.
- *Reduction in Suffering*. Reduce suffering and property loss resulting from injury and property damage only crashes.
- Focus on speed, impaired driving and restraint deficient hotspots. When looking at crashes in Alabama and the damage that they cause in terms of suffering and property loss, crashes caused by speeding and impaired driving were determined to be the biggest driver-caused problem, and the lack of proper restraint use was seen to be the largest severity increase problem. In order to help reduce these crashes, all organizations and individuals in the area of traffic safety must be committed to targeting these hotspot locations. Plans developed by the state's safety coordinators reflect this focus, and funding will be concentrated on hotspot crash locations that have been identified. While focusing and addressing the behavioral problems of speeding and impaired driving, law enforcement will continue issuing tickets to unrestrained motorist. Individuals who drive impaired and drive above the posted speed limits are most often not using occupant restraints, nor do they insist that their passengers buckle up.
- *Teamwork and Diversity*. Recognize that these ideas will only be attained through the dedication to cooperative efforts among a wide range of federal, state and local organizations. All highway users and user groups must be adequately represented, and all sub-disciplines will be given the opportunity to provide input and information.

## **MISSION:**

Conduct selective enforcement coupled with PI&E that will reduce fatalities and injuries by focusing on the locations identified for speed and impaired driving hotspots with additional strong consideration on hotspots where deficiencies in occupant protection were found.

Speeding and impaired driving are the biggest causes of traffic crash fatalities and are major problem areas for traffic safety in the State of Alabama. By focusing efforts to reduce the number of speed and impaired driving related crashes, lives have been saved in the past and can be saved in the future. Each of these crashes is caused by the *choice* to speed and drive impaired. By changing driver and occupant behavior, the number of hotspot locations can be reduced and traffic safety will be improved.

# **GOALS AND STRATEGIES**

# **Process for Developing Goals**

Funding to the state CTSPs for FY 2015 will be largely focused on the problem locations discussed and defined in Hotspot Listings section below. In addition, AOHS will continue participation in the "Click It or Ticket" and "Drive Sober Or Get Pulled Over" campaigns. AOHS continues to pledge its support to these programs and will fund the participating regions and agencies accordingly. These programs have received extensive review and recommendations by those who developed the state's Strategic Highway Safety Plan (SHSP). The overall goals set in the Strategic Highway Safety Plan for the State of Alabama are complementary to, and consistent with, those presented below.

Goals will be presented in the following categories: (1) Traffic Safety Performance Measures, (2) Traffic Safety Activity Measures, (3) Overall Program Goal, (4) Performance Goals and Strategies, Administrative Goals, and (5) Legislative Goals. The goals were set jointly by AOHS and CAPS using FARS and CARE crash data to define data driven goals.

The University of Alabama Center for Advanced Public Safety (CAPS) provided data from the CARE system that was used to select the target locations. All SHSO staff and CAPS participated in the selection process for the performance goals and targets. The SHSO and CAPS were involved in the development and selection of evidence-based countermeasures strategies and projects to address problem areas and achieve performance targets. Funding is determined for each region based on the percentage of hotspots in the region. Grant funds are allocated to the regions based on their percentage of alcohol, restraint, and speed crash problem.

The table on the following page presents a multi-year summary and the item numbers within this table are used below in the goal definitions. Unless otherwise noted, these number were provided by FARS.

# **Statewide Statistics 2007-2013**

								2015 **
	2007	2008	2009	2010	2011	2012	2013	Baseline
C-1 Number of Traffic Fatalities (FARS)	1,110	969	848	862	894	865		888
C-2 Number of Serious Injuries in Traffic Crashes (State Crash File)	22,755	20,293	15,131	10,544	9,904	8,974		12,969
C-3 Fatalities/VMT (FARS/FHWA)								
• Total	1.81	1.63	1.38	1.34	1.38	1.33		1.41
• Urban	1.20	1.18	1.08	0.97	1.09	0.99		1.06
• Rural	2.44	2.10	1.69	1.72	1.70	1.68		1.78
C-4 Number of Unrestrained Passenger Vehicle Occupant Fatalities, All Seat Positions (FARS)	538	452	378	394	382	354		392
C-5 Number of Fatalities in crashes involving driver or motorcycle operator with a BAC of .08 and above (FARS)	377	314	267	264	261	257		273
C-6 Number of Speeding-Related Fatalities (FARS)	497	447	327	316	298	272		332
C-7 Number of Motorcyclist Fatalities (FARS)	85	100	76	86	98	97		91
C-8 Number of Unhelmeted Motorcyclist Fatalities (FARS)	8	15	7	5	10	10		9
C-9 Number of Drivers Age 20 or Younger Involved in Fatal Crashes (FARS)	194	163	140	140	136	139		144
C-10 Number of Pedestrian Fatalities (FARS)	69	68	64	61	79	77		70
C-11 Number of Bicycle Fatalities (FARS)	9	4	6	6	5	9		6
B-1 Observed Seat Belt Use for Passenger Vehicles, Front Seat Outboard Occupants (State Survey)	82.3%	86.1%	90.0%	91.4%	88.0%	89.5%	97.3%	89.0%
Speed Hotspots*	142	123	93	63	45	47		74
Speed Fatal Crashes*	359	338	221	212	188	176		227
Speed Injury Crashes*	3,392	2,958	2,299	1,883	1,832	1,779		2,150
Impaired Driving Hotspots*	191	190	194	143	144	179		170
Impaired Driving Fatal Crashes*	257	212	237	210	217	186		212
Impaired Driving Injury Crashes*	2,719	2,450	2,548	2,798	2,647	2,661		2,621

<sup>\*</sup> State Data

<sup>\*\*</sup> Baselines are 5-year averages of the 2008-2012 data.

# **Traffic Safety Performance Measures for FY 2015**

#### **General Considerations**

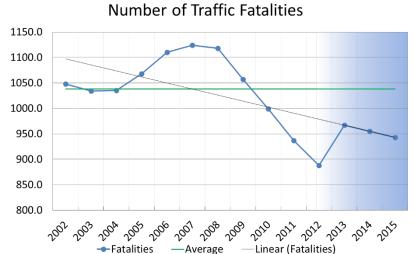
The general rationale for setting the specific goals will be presented under the various charts below that illustrate the baseline and the trends. In order to keep from being repetitious, there are some general consideration that will be presented here, since they generally apply to more than one of the metrics. In some cases these will be referenced back to the following using the corresponding item numbers:

- 1. Generally the baseline for the estimates was based upon the most recent five years of data. This can be seen from the graphs that demonstrate the metrics over the past five available calendar years (2008-2012). Items C1, C2 and C3a used the identical methodology as was approved in the coordination meetings with ALDOT in order to keep these goals consistent with the safety goals required by FHWA. These goals were mutually agreed upon by the Alabama Office of Highway Safety, the Strategic Highway Safety Plan steering committee and the Highway Safety Improvement Plan committee.
- 2. In all of the graphs, the shaded area represents the projected estimated number assuming that the established trend as given by a regression over the previous known values continues. The first year that is projected is not shaded as heavily as the "out" years in order to convey an idea for the reliability of the projection. Clearly the further out that is projected, the less reliable will be the projection.
- 3. Extrapolating from a limited number of past values can lead to extreme errors, especially since the last value that we have in most cases is 2012, requiring (for example) that the estimates of 2013, 2014 and 2015 all be based on an extrapolation of 2008 through 2012. (Unless otherwise noted, all years given are calendar years.) Rarely, if ever, does such a linear trend establish an accurate prediction, especially in crash data where regression to the mean usually follows any dramatic departure from the established trend. Nevertheless, these estimates are presented since they do provide valuable information upon which to make and refine the estimates.
- 4. **All fatality count metrics.** The above (Item 3) is particularly true of any metric that is dependent on fatality counts. Consistent with the national trend, Alabama experienced almost a 24% reduction in fatalities between 2007 and 2009. Because of several economic factors (price of fuel, alcohol, reduction in driving by high-risk groups, reduction in speeds for fuel conservation, and several other well established factors), the typical regression to the mean has not occurred. Any trend line that includes fatality counts prior to 2008 will obviously produce a down trend that is clearly not feasible to maintain by traffic safety countermeasures alone. Thus, the data chosen for the five-year trend and the baseline will go back no further than 2008. Even this generally produces a very optimistic projection, and since the state has been urged to be aggressive (but not unrealistic) in setting goals, they will generally be somewhere between the projected trend line point for 2015 and the baseline. Notable exceptions to these general patterns were observed in motorcycle and pedestrian fatalities; they are discussed in separate items below.

- 5. Severe injury count metrics. The considerations above for fatality counts also apply to severe injuries, and so the rationale for the estimates for severe injury counts follow this same pattern. However, there is another very important factor at work for the state's severe injury counts that is critical to note. In July 2009 the state generally (with the exception of only about 15% of the reports) went to a different definition of severe injury (also called "A" injury). The C-2 graph shows a precipitous drop between 2008 and 2010 caused largely by this reporting anomaly. However, we believe that the five year average has not mitigated this issue.
- 6. **Motorcycle fatalities.** The rationale with regard to fatalities in general (Item 4) given above does not apply to motorcycle fatalities. There are two reasons for this: (1) the same economic forces that reduce fatalities in general work in just the opposite way when it comes to the use of motorcycles, i.e., they become a much more attractive mode of transportation because of the combined economic factors; and (2) because of this and the aging of the motorcycle-driving population in general, more and more motorcyclists are of a higher age and thus less able to survive a severe injury. For this reason it is reasonable to expect that the sustainment of the baseline of 91 would be a reasonable goal.
- 7. **Pedestrian fatalities.** The cause for the increase in pedestrian fatalities in 2011 is under investigation, but it is difficult to find any patterns with only 79 cases. The state decided to set a goal above the baseline since a regression to the mean is clearly expected in 2014 and 2015.
- 8. **Seat belt use.** The projection for 2015 is based upon the five year rolling average that includes the new method for estimating seat belt used as prescribed by NHTSA.
- 9. **Five-year average goals.** Most of the crash related goals are set differently from previous years. Our analysis concluded that since we were basing estimates on five-year averages, it would not be correct to predict a given one-year estimate. Thus, the goals given are generally for the five-year average that is computed at the end of 2015. The graphs shown below display the five-year rolling averages however the numbers listed above the charts are the single year number for each year.

#### **C-1** Number of Traffic Fatalities (FARS)

2008	2009	2010	2011	2012	Goal
969	848	862	895	865	885

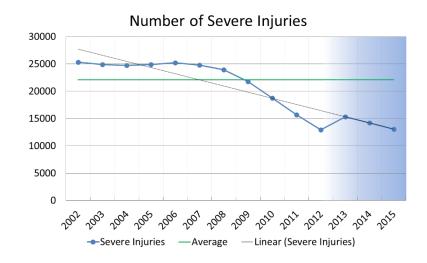


Reduce total traffic fatalities by .34 percent from the five year base line average of 888 (2008-2012) to 885 by 2015\*. This goal was mutually agreed upon by the Alabama Office of Highway Safety, the Strategic Highway Safety Plan steering committee and the Highway Safety Improvement Plan committee.

#### **C-2** Number of Severe Injuries in Traffic Crashes

(State crash data files – most severe category: "A" Injuries.)

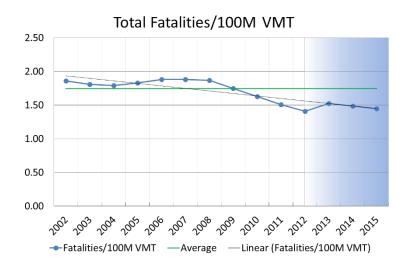
2008	2009	2010	2011	2012	Goal
20,293	15,131	10,544	9,904	8,974	10,600



Reduce serious injuries in traffic crashes by 18.1 percent from the five year base line average of 12,949 (2008-2012) to 10,600 by 2015\*. This goal was mutually agreed upon by the Alabama Office of Highway Safety, the Strategic Highway Safety Plan steering committee and the Highway Safety Improvement Plan committee.

#### C-3a Total Fatality Rate/VMT (FARS/FHWA)

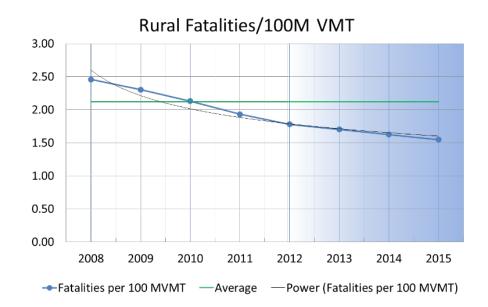
2008	2009	2010	2011	2012	Goal
1.63	1.38	1.34	1.38	1.33	1.40



Reduce the fatality rate per 100M VMT by .7 percent from the five year base line average of 1.41 (2008-2012) to 1.40 by 2015\*. This goal was mutually agreed upon by the Alabama Office of Highway Safety, the Strategic Highway Safety Plan steering committee and the Highway Safety Improvement Plan committee.

#### C-3b Rural Fatality Rate/VMT (FARS)

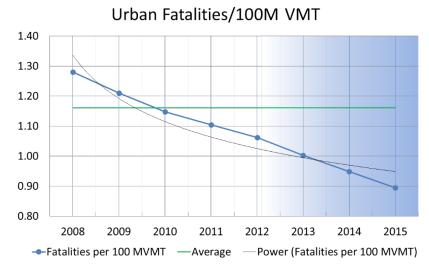
2008	2009	2010	2011	2012	Goal
2.10	1.69	1.72	1.70	1.68	1.76



Reduce the rural fatality rate per 100M VMT by 1.1 percent from the five year base line average of 1.78 (2008-2012) to 1.76 by 2015\*.

#### C-3c Urban Fatality Rate/VMT (FARS)

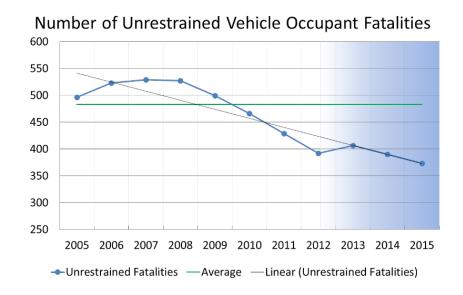
2008	2009	2010	2011	2012	Goal
1.18	1.08	.97	1.09	.99	1.05



Reduce the urban fatality rate per 100M VMT by .9 percent from the five year base line average of 1.06 (2008-2012) to 1.05 by 2015\*.

C-4 Number of Unrestrained Passenger Vehicle Occupant Fatalities, All Seat Positions (FARS)

<u>2008</u>	2009	2010	2011	2012	Goal
452	378	394	382	354	390

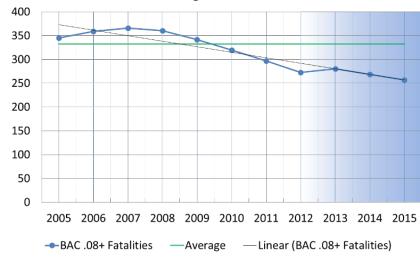


Reduce the unrestrained passenger vehicle occupant fatalities by .5 percent from the five year base line average of 392 (2008-2012) to 390 by 2015\*.

# C-5 Number of Fatalities in crashes involving a driver or motorcycle operator with a BAC of .08 and above (data shown as Alcohol-Impaired Driving Fatalities in STSI-FARS)

2008	2009	2010	2011	2012	Goal
314	267	264	261	257	271

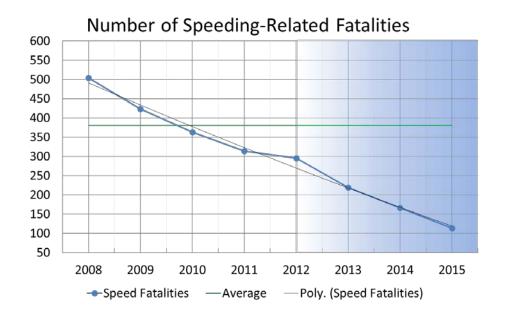
Number of Fatalities involving a Driver with a BAC .08 and Above



Reduce the alcohol- impaired driving fatalities by .7 percent from the five year base line average of 273 (2008-2012) to 271 by 2015\*.

#### **C-6 Number of Speeding-Related Fatalities (FARS)**

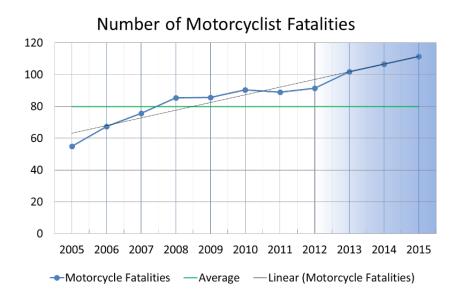
2008	2009	2010	2011	2012	Goal
447	327	316	298	272	331



Reduce the speeding-related fatalities by .3 percent from the five year base line average of 332 (2008-2012) to 331 by 2015\*.

#### **C-7** Number of Motorcyclist Fatalities (FARS)

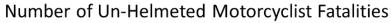
2008	2009	2010	2011	2012	Goal
100	76	86	98	97	90

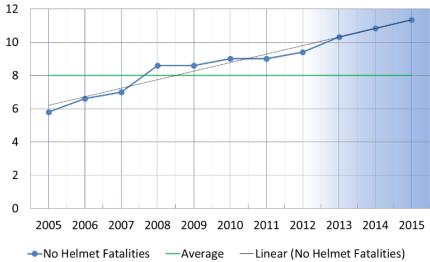


Reduce the motorcyclist fatalities by 1.1 percent from the five year base line average of 91 (2008-2012) to 90 by 2015\*.

#### **C-8 Number of Unhelmeted Motorcyclist Fatalities (FARS)**

2008	2009	2010	2011	2012	Goal
15	7	5	10	10	8



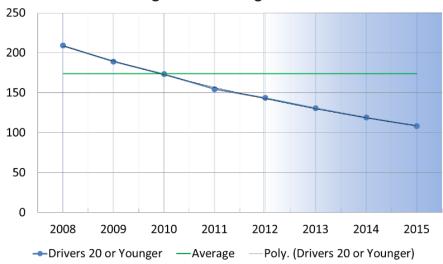


Reduce the un-helmeted motorcyclist fatalities by 11.1 percent from the five year base line average of 9 (2008-2012) to 8 by 2015\*.

C-9 Number of drivers age 20 or younger involved in Fatal Crashes (FARS)

2008	2009	2010	2011	2012	Goal
163	140	140	136	139	143

Number of Drivers Age 20 or Younger involved in a Fatal Crash



Reduce the number of drivers age 20 or younger involved in fatal crashes by .7 percent from the five year base line average of 144 (2008-2012) to 143 by 2015\*.

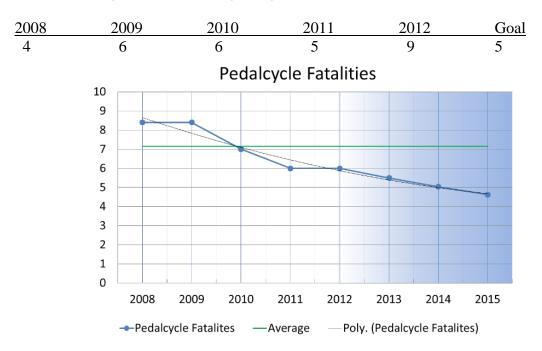
**C-10** Number of Pedestrian Fatalities (FARS)

2008	2009	2010	2011	2012	Goal
68	64	61	79	77	69



Reduce the number of pedestrian fatalities 1.4 percent from the five year base line average of 70 (2008-2012) to 69 by 2015\*.

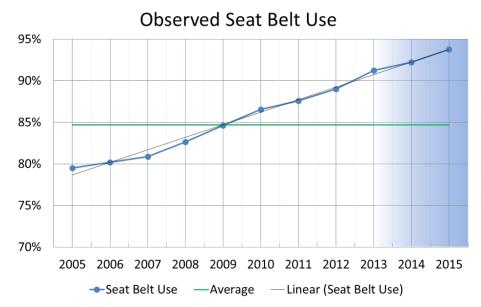
**C-11 Number of Bicyclist Fatalities (FARS)** 



Reduce the number of bicycle fatalities by 16.7 percent from the five year base line average of 6 (2008-2012) to 5 by 2015\*.

B-1 Observed Seat Belt Use for Passenger Vehicles, Front Seat Outboard Occupants (State Survey).

2009	2010	2011	2012	2013	Goal
90.0%	91.4%	88.0%	89.5%	97.3%	92.5%



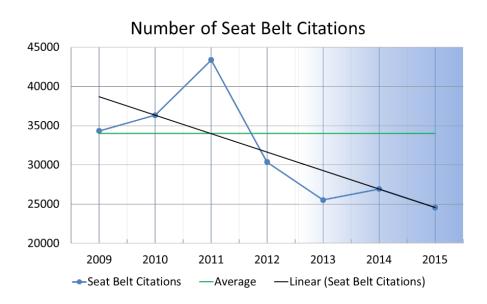
Increase the observed seat belt by 1.3% from the five year baseline average (2009 - 2013) of 91.2% to 92.5% in 2015\*.

<sup>\*</sup>Five Year Average Goal

## **Traffic Safety Activity Measures**

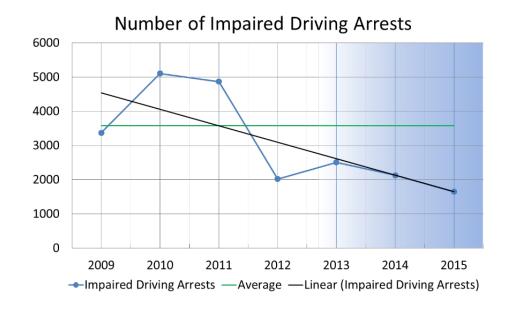
#### A-1 Number of seat belt citations

2009	2010	2011	2012	2013
34,328	36,341	43,384	30,384	25,536



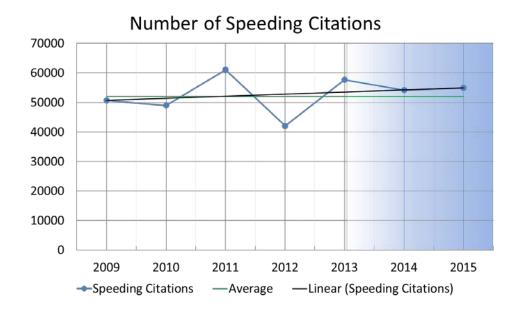
#### A-2 Number of impaired driving arrests

2009	2010	2011	2012	2013
3,374	5,108	4,867	2,021	2,508



#### **A-3 Number of speeding citations**

2009	2010	2011	2012	2013
50,693	49.003	61.054	42,067	57.670



Alabama continues to experience reductions in manpower and budget with the State and local law enforcement agencies. These factors account for the downward trend of all citations issued.

#### **Overall Program Goals**

The overall strategic program goals were developed based on a CY 2011 baseline. A review of this process led to the conclusion that there is no reason to alter this approach based on recent considerations. This lead to the following overall strategic program goal:

To reduce the three-year average annual number of fatalities by 2% per year over the next 25 years (i.e., using 2011 as a base year, through 2035).

Embracing the concept of Toward Zero Deaths (TZD), the Alabama Strategic Highway Safety Plan set a strategic goal of reducing fatalities by 50% over the next 25 years. Based on the 2011 fatality count of 895, this 2% (of the base year) per year reduction would average about 18 fatalities per year. While this might seem a modest number, if maintained as the average over a 25 year period it will save more than 5,600 lives over that time period. This will be a major accomplishment in continuing the downward trend that was established in the 2007-2011 time frame, which reversed the alarming increase in fatalities that preceded 2007. Also, if the 2% of the base year is viewed as a percentage of the years in which reductions have taken place, this percentage grows linearly until in the 25<sup>th</sup> year it amounts to 4% of the previous year.

Calendar year 2006 was the record high in Alabama for traffic fatalities, with a total of 1207. Between 2007 and 2011, there was a reduction of 1353 fatalities over that five-year time period (271 fatalities were saved per year). While no one in the traffic safety community believes that this rate of reduction (6% per year) can be sustained indefinitely, every effort will be made to sustain these new lower fatality counts and reduce them even further. Much of the large reduction was due to a recession in the economy coupled with higher fuel prices. These economic hardships tended to have a much higher impact on unsafe drivers than on the average driving public, for the following reasons:

- They would impact young drivers, economically disadvantaged with older less crashworthy vehicles, and traffic on county roads much more than Commercial Motor Vehicle (CMV) drivers who typically put most of their mileage on safer roadways;
- It would have a much higher impact on those with impaired driving tendencies due to higher costs of alcoholic beverages with less (or perhaps no) discretionary money to purchase it; and
- The economy placed a much higher premium on slower speeds to conserve fuel.

While the goal of sustaining a 5% per year reduction in fatalities is unrealistic, it is not unrealistic to believe that we can sustain the current numbers and rate, and continue to reduce them at the modest rate of 2% per year.

The number of hotspots will continue to be monitored (as seen below in Table 2). By focusing on two of the biggest killers (speed and impaired driving crash hotspots), the goal of reducing the fatality count and rate should be achievable. The criteria used to find the number of hotspots and the calculation of the rate will not change between the years in order to lend consistency in the total number of hotspots found for the State.

**Table 2. Number of Hotspots for Three-Year Periods** 

<b>Fiscal</b>	Calendar Year	<b>Speed</b>	<b>Impaired Driving</b>	<b>Total Number of</b>
Year	<b>Data Used</b>	<b>Hotspots</b>	Hotspots	Hotspots
2009	2005-2007	142	191	333
2010	2006-2008	123	190	313
2011	2007-2009	93	194	287
2012	2008-2010	63	143	206
2013	2009-2011	45	144	189
2014	2010-2012	47	179	226
2015	2011-2013	37	198	235

As the State works to reduce the fatality rate by reducing the number of hotspots meeting the fixed criteria, a statewide effort will continue to focus traffic safety funding on hotspot locations. By doing this, every possible action will be taken to bring these numbers down in the coming years. The change in the number of hotspots found (using identical search criteria) in each year is being monitored. Slight reductions in the total number of hotspots were seen in the three year periods ending 2008 and 2009. A more significant drop in the total number of hotspots was seen between 2009 and 2010. There was an increase in the three year periods ending 2012 to 2013.

**General Strategy:** To require the CTSP Coordinators to focus their plans primarily on the speed, impaired driving and occupant restraint deficiency hotspot locations identified for their respective regions. By doing this they will be focusing on the most critical problem areas and the biggest killers. Tables 3a and 3b present a summary of all crashes for the Calendar Years 2001-2013. These statistics should be referenced as overall goals and strategies are discussed and determined.

Table 3a. Summary of All Crashes - CY 2001-2006 Alabama Data

<b>Performance Measures</b>	2001	2002	2003	2004	2005	2006
Fatal Crashes	902	931	899	1033	1013	1074
Percent Fatal Crash	0.67%	0.66%	0.64%	0.71%	0.70%	0.77%
Injury Crashes	29771	30922	30748	31856	31335	30527
Percent Injury Crashes	22.26%	22.02%	21.80%	21.77%	21.76%	21.84%
PDO Crashes	103066	108583	109420	113469	111645	108179
Percent PDO Crashes	77.07%	77.32%	77.57%	77.53%	77.54%	77.39%
Total	133739	140436	141067	146358	143993	139780

Table 3b. Summary of All Crashes – CY 2007-2013 Alabama Data

<b>Performance Measures</b>	2007	2008	2009	2010	2011	2012	2013
Fatal Crashes	1010	886	775	793	814	815	745
Percent Fatal Crash	0.75%	0.71%	0.63%	0.62%	0.64%	0.63%	0.59%
Injury Crashes	28295	25613	27675	29051	27687	27551	26810
Percent Injury Crashes	20.92%	20.66%	22.37%	22.63%	21.69%	21.45%	21.15%
PDO Crashes	107971	99241	96840	100126	100795	101706	100675
Percent PDO Crashes	79.83%	80.05%	78.26%	77.99%	78.95%	79.18%	79.43%
Total	135256	123968	123740	128384	127668	128442	126740

Tables 4a and 4b summarize all Speed and Impaired Driving hotspots for FY 2008 through FY 2015. Past years data are included here in order to allow for comparison within each region. In future years, data will continue to be added to this table to track the progress made in reducing the number of hotspots across the state and within individual regions.

Table 4a. Speed Hotspot Listing by Region

Region	Speed Hotspots for Fiscal Years											
	2008	2009	2010	2011	2012	2013	2014	2015	% of Total			
									Hotspots (2015)			
Birmingham	25	35	26	21	16	15	14	11	29.73%			
North East	11	17	17	11	13	8	10	7	18.92%			
North	10	18	17	16	9	5	4	2	5.40%			
Mobile	15	15	14	13	9	4	4	5	13.51%			
East	14	16	17	13	8	3	9	6	16.22%			
Central	15	12	15	8	7	3	4	3	8.11%			
South East	11	7	6	5	2	3	1	2	5.41%			
South West	5	10	4	4	2	1	0	0	0.00%			
West	14	16	14	8	1	2	1	1	2.70%			
<b>TOTAL</b>	120	146	130	99	<b>67</b>	44	47	<b>37</b>	100.00%			

Table 4b. Impaired Driving Hotspot Listing by Region

Region		Impaired Driving Hotspots for Fiscal Years											
G	2008	2009	2010	2011	2012	2013	2014	2015	% of Total				
									Hotspots (2015)				
Birmingham	37	32	27	34	41	23	35	27	13.64%				
North East	42	32	27	30	54	36	47	54	27.27%				
North	22	15	17	24	24	15	15	18	9.09%				
Mobile	52	48	47	40	49	25	35	47	23.74%				
East	13	11	14	9	7	3	2	2	1.01%				
Central	23	26	27	25	34	21	26	28	14.14%				
South East	5	2	6	15	17	6	2	4	2.02%				
South West	4	6	5	6	4	2	2	2	1.01%				
West	20	19	21	18	22	13	15	16	8.08%				
<b>TOTAL</b>	218	191	191	201	252	144	179	198	100.00%				

#### **FY 2015 Strategies and Performance Goals**

#### **Strategies**

The following outlines the strategies to be applied during FY 2015:

- AOHS is charged by the Governor with the responsibility for implementing the state's
  highway safety efforts to reduce traffic deaths, injuries and crashes; as such, they will continue to perform the overall administrative functions for the programs and projects implemented.
- The nine Community Traffic Safety Programs (CTSP) projects are seen to be an essential element in maintaining distributed governance over the statewide traffic safety program, and they will be maintained, including the support of the CTSP Coordinators and the administrative support for their offices.
- The Center for Advanced Public Safety (CAPS) is seen to be vital in providing the information required for allocating traffic safety resources in an optimal way, and they will continue to be supported in providing AOHS with Alabama crash and traffic safety data throughout the year.
- Conduct nine local Hotspot Special Traffic Enforcement Program (STEP) projects, one within
  each of the CTSP regions. Additionally, a statewide STEP project will be conducted in conjunction with the Alabama Department of Public Safety (DPS). The efforts of all CTSP selective enforcement projects should be focused on hotspot locations. By focusing on the hotspot
  locations, every effort will be taken to reduce speed and impaired driving crashes, and in so
  doing, reduce the fatality rate for the state.
- Continue the Law Enforcement Liaison (LEL) programs statewide. Beginning in FY 2007, this program was absorbed by the regional CTSP offices and was funded through the Community Traffic Safety Projects. This funding arrangement will continue in FY 2015.
- Participate in national "Click It or Ticket" campaign on the statewide level.
- Conduct statewide "Drive Sober or Get Pulled Over" campaign as a part of the national campaign.
- Conduct sustained enforcement for seat belts, impaired driving, and speeding.

#### **Hotspot Performance Measures and Goals**

*Performance Measure:* Since the criteria for determining the hotspots has not changed over the years, a smaller number of hotspots found would indicate progress in reducing crashes in the selective enforcement areas. These gains would be leveraged over the entire state as the effects of increased enforcement are not limited to the target roadway segments. As the hotspots continue to be tracked in the future, more columns will be added to the table below to track the number of hotspots that were found statewide according to the fixed criteria. The following table indicates how the performance measures for Speed and Impaired Driving hotspots have changed since 2006.

Performance Measure		Three Year Ending Calendar Year										
<b>Hotspot Type</b>	2006	2007	2008	2009	2010	2011	2012	2013	<b>AVERAGE</b>			
Speed	120	142	123	93	63	45	47	37	84			
Impaired Driving	218	191	190	194	143	144	179	198	182			
TOTAL	338	333	313	287	206	189	226	235	266			

*Short Term Hotspot Goals:* The following short term goals have been established based on the historical assessment and future expectations:

- The goal for the number of speed hotspots for 2015 is 36 from the 37 speed hotspots in 2013.
- The goal for the number impaired driving hotspots for 2015 is 194 from the 198 impaired driving hotspots in 2013.

The goals set for this year will be in place for one year as the state efforts have focused on these types of crashes for the past several years. As these programs continue to gain momentum, reductions should be seen each year and monitored on a year to year basis.

#### Impaired Driving Crashes Performance Measures and Goals

*Performance Measures:* The following table indicates how the performance measures for impaired driving crashes have changed since 2001:

Performance Measures	2001	001 2002		3 20	004	2005	2006
Impaired Driving Fatal Crashes	219	214 203		3 2	28	212	237
Impaired Driving Injury Crashes	3,066	3,078 2,878		8 2,876		2,948	3,042
Total	3,285	3,292 3,08		3,104		3,160	3,279
<b>Performance Measures</b>	2007	2008	2009	2010	2011	2012	2013
Impaired Driving Fatal Crashes	257	212	237	210	217	197	184
Impaired Driving Injury Crashes	2,719	2,450	2,548	2,798	2,647	2,661	2,292
Total	2,976	2,662	2,785	3,008	2,864	2,847	2,476

Short Term Impaired Driving Crash Reduction Goals: The following short term goals have been established based on the historical assessment and future expectations:

- The goal for the number of impaired driving fatal crashes for 2015 is 180 from 184 in 2013.
- The goal for the number of impaired driving injury crashes for 2015 is 2,246 from 2,476 in 2013.

Consistently with the way that goals for impaired driving crashes have been set in the past, the goals for the coming year were set based upon five years of data (2008-2012). This will allow for consistent year to year monitoring of the goals.

#### Speed Related Crash Performance Measures and Goals

*Performance Measures:* The following table indicates how the performance measures for speed-related crashes have varied since 2001:

Performance Measures		001	20	02	20	03	200	04	20	05	20	06
Speed Fatal Crashes	2	56	29	298		93 31		17 33		31	37	70
Speed Injury Crashes	3,	119	3,2	53	3,2	808	3,3	25	3,5	02	3,7	'12
Total	3,	375	3,5	51	3,5	501	3,6	42	3,8	33	4,0	)82
<b>Performance Measures</b>	2007	20	08	20	09	20	10	20	11	20	12	2013
Speed Fatal Crashes	359	33	38	22	21	21	2	18	8	17	77	160
Speed Injury Crashes	3,392	2,9	958	2,2	99	1,8	83	1,8	32	1,7	78	1,494
Total	3,751	3,2	296	2,5	20	2,0	95	2,0	20	1,9	55	1,654

Short Term Speed Related Crash Reduction Goals: The following short term goals have been established based on the historical assessment and future expectations:

- The goal for the number of speed fatal crashes for 2015 is 157 from 160 in 2013.
- The goal for the number of speed injury crashes for 2015 is 1,464 from 1,494 in 2013.

Consistently with the way that goals for speed crashes have been set in the past, the goals for the coming year were set based upon the five years of data (2009-2013). This will allow for consistent year to year monitoring of the goals.

#### Occupant Protection Performance Measures and Goals

*Performance Measures:* The performance measures for both child safety seat and overall restraint use are obtained from annual surveys conducted by the CAPS. The Seat Belt Usage Rate is obtained immediately following the "Click It or Ticket" campaign in June and the Child Safety Seat Usage Rate data is collected in August. The latest data for both of these rates was obtained from reports made available by the CAPS. The state will fully support the National Click It or Ticket efforts by running a statewide program that should have a positive impact on restraint use.

Performance Measures Seat Belt Usage Rate Child Safety Seat Usage Rate	<b>2001</b> 79.40% 77.00%	<b>200</b> 2 78.80 89.40	% 77		<b>2004</b> 80.00% 82.90%	<b>2005</b> 81.90% 91.60%	<b>2006</b> 82.90% 88.00%
Performance Measures Seat Belt Usage Rate Child Safety Seat Usage Rate	<b>2007</b> 82.30% 92.30%	<b>2008</b> 86.10% 88.20%	<b>2009</b> 90.00% 94.91%	<b>2010</b> 91.43% 93.12%			<b>2013</b> 97.30% 97.70%

*Short Term Occupant Protection Goals:* The following short term goals have been established based on the historical assessment and future expectations:

- The goal for the statewide seat belt usage rate that will be measured during CY 2015 is from the baseline of 91.2% five year average for CY 2009-2013 to 92.5% in 2015.
- The goal for the statewide child safety seat usage that will be measured during CY 2015 is from the baseline 93.0% five year average for CY 2009-2013 to 94.0% in 2015.

#### **Administrative Goals**

#### Personnel:

- To ensure that the AOHS staff (which includes the Governor's Representative/State Coordinator, Public Safety Unit Chief, Highway Traffic Safety Manager, and Highway Safety Program Manager) has access to information needed to manage a NHTSA compliant Highway Traffic Safety Program, they must attend the appropriate meetings and training sessions. AOHS will be represented at the NHTSA Region 4 Colonel's Conference.
- The AOHS staff, all CTSP Coordinators/LELs, and the Traffic Safety Resource Prosecutor must attend the NHTSA sponsored Annual Regional LEL Conference. The staff will attend this meeting so they are able to effectively discuss regional and state issues and highway safety initiatives for the upcoming year.
- The AOHS staff is encouraged to be represented at the annual Lifesaver's National Conference on Highway Safety Priorities and/or the Governor's Highway Safety Association ings. The representatives attending these conferences will be updated on safety topics such as speed enforcement, impaired driving, child passenger safety and occupant protection, roadway and vehicle safety and technology, traffic records, motorcycle safety, Data-Driven Approaches to Crime and Traffic Safety (DDACTS), nighttime seat belt enforcement, and necessary traffic safety training.

#### **Traffic Records**

#### Goals:

- To ensure that all agencies with responsibility for traffic safety have timely access and complete information needed to identify problems, select optimal countermeasures, and evaluate implemented improvements.
- To assure that effective data are available that pinpoints and targets the exact locations of speed and impaired driving hotspots for each region in the state.
- To administer the Section 405c funded projects so that the comprehensive traffic records plan developed to support those efforts is brought to fruition.
- To provide support to innovations in moving toward better use of available technologies, e.g., data entry at the point of incidents, automated uploading and paperless operations.

#### Strategies:

- Provide at least one statewide training session for CTSP Coordinators and LELs in which the basics of CARE information will be taught in terms of application to local problem identification and evaluation.
- Initiate systems studies to finalize and obtain approval for the recently developed MMUCC-compatible crash report form, and
- To fully deploy, and assure the use of, the developed in-vehicle crash data entry and data uploading system for the electronic crash (eCrash) and the electronic citation system (eCite).

Traffic safety information systems play a major part in identifying optimal countermeasure implementation though problem identification. Once the countermeasure type is identified, further analysis is applied to design optimal tactical approaches to implementing these countermeasures by specifying the locations and other demographic characteristics that are most effective in saving lives and reducing injury.

The Center for Advanced Public Safety (CAPS) at the University of Alabama has provided some of the most advanced traffic safety information systems that exist, and CAPS stands ready to continue to develop and maintain these capabilities with a series of projects during the 2015 fiscal year. The areas in the state's traffic records information system that are most in need of innovation in order to maximize the value of safety information are given below according to their respective components of the traffic safety information system:

- *Citation and Adjudication Component* includes the extension and roll out of the electronic citation, a proposed DUI defendant intake system, a method for moving digital information directly to the field officers using available cell phones, and technological advances to move the traffic citation reporting and processing system toward paperless operations.
- Crash Component includes the complete roll-out of eCrash, further integration of GIS capabilities into eCrash and CARE, the automated generation of information for the Crash Facts Book, and the development of the CARE Safety Portal to produce a more effective interface to deliver CARE-generated information. This will also require an updated version of eCrash to be developed based on the availability of automated location systems and feedback as to improvements needed to make the eCrash data entry system more effective and improve data quality. The completion of the eCrash roll-out will lead to a revamping of the CARE system since it will no longer need to integrate data from paper-based sources.
- Driver Component calls for more effective driver licensing information (including pictures) to be distributed to the field through the extremely successful Law Enforcement Tactical System (LETS). This will require a more effective Driver History database that is updated automatically by eCrash and eCite. The LogBook application plans to completely automate the production of effort logs, and support the electronic transfer of such logs to the appropriate reporting locations. This move toward a paperless environment is leading to greater efficiencies in law enforcement, enabling a greater presence in the field, more time for actual enforcement, and a tremendous boost in morale to the field officers. During FY 2015 these reports will continue to be developed as will the field deployment of the paperless office software.
- *EMS-Medical Component* includes continued support for the implementation of the National Emergency Medical Services Information System (NEMSIS), an ambulance stationing research project, and a pilot project to reduce EMS delay time to the scene of crashes with a moving map display. This will be accomplished by the implementation of the Mobile Officers' Virtual Environment (MOVE) in EMS vehicles and the processing of trauma center and EMS run time data through CARE and ADVANCE. The need to integrate EMS run data with crash data also continues to be an issue; such integration is needed to effectively study crash injury outcomes (e.g., effectiveness of restraints). The development of field EMS reporting software will continue during FY 2015. There are a number of enhancements that will make these data sources far more productive of useful information. The information needs to be made more available, and the user base needs to be expanded. The linkage between the ambulance run data and the trauma data is in its very first stages, which has demonstrated its potential use, but this still needs to be brought to fruition.

- Roadway Component involves a wide diversity of projects in support of the State's Interactive Highway Safety Design Manual (IHSDM)/Highway Safety Manual (HSM)/Safety Analyst (SA) initiatives. This will include the integration of roadway features into CARE and the integration of Crash Modification Factors (CMFs) into the Cost-benefit Optimization for the Reduction of Roadway Caused Tragedies (CORRECT) system using the facilities of the CMF Clearinghouse. To effectively locate crashes on the roadway, it is essential that ALDOT complete their various projects along these lines so that they can be integrated into eCrash and used by CARE to fully utilize its GIS display capabilities. To address the problem of crash and other location specification, CAPS is developing new mapping software to support the more accurate acquisition of precise location information, and deploying this software in conjunction with eCrash to increase the quality of the location information obtained from the field. This project is in progress, and the software will continued to be deployed during FY 2015.
- *Vehicle Component* plans include the detailed design of an electronically readable vehicle registration card and a statewide distribution network that will make vehicle information immediately available to all users of data in the state, including the LETS system.
- Integration and Information Distribution Component, which was added to the other functionally oriented categories above, considers those projects that transcend and have the goal of integrating and/or producing/distributing information from several databases. A major effort is proposed to populate the current Safe Home Alabama web portal so that it will integrate all of the information generated by all agencies and present it in one unified source to the traffic safety community. An example of this is the proposed new Safety Portal that will be a hub for all traffic safety and related data analytics. General Traffic Safety Information Systems (TSIS) management activities are also included in this component. Progress has been made in establishing CARE scripts, i.e., essentially programs for standard report types that essentially "captures" a series of CARE commands and save them into a program for future use. This project needs to be continued into beta testing and further enhancement of these capabilities, since they are currently not available to the CARE user base. A special location type exception report that is similar to those currently being used in the Early Warning programs is also planned to be completed and deployed.

## **Legislative Goals**

AOHS will work with the State Safety Coordinating Committee (SSCC). The Governor has appointed a chairman and the state at large member to the committee. Plans are to have the SSCC active by October 2014. AOHS will participate in establishing legislative goals for FY 2015.

A list of current legislative instruments will be tracked and/or supported by the AOHS is included on the Safe Home Alabama website:

http://www.safehomealabama.gov/GovAgencies/ALLegislature(SSCC).aspx.

# HOTSPOT LISTINGS AND REGIONAL REPORTS

All of the counties in the state were grouped together to form regions for the purpose of identifying problem locations within their region that need attention. The designated regions are as follows:

Region	Counties
Central	Autauga, Bullock, Elmore, Lee, Lowndes, Macon, Montgomery
	and Russell
East	Calhoun, Chambers, Clay, Cleburne, Coosa, Randolph, Talladega, and Tallapoosa
Birmingham	Bibb, Blount, Chilton, Jefferson, Shelby, St. Clair, and Walker
Mobile Area	Baldwin, Escambia and Mobile
North East	Cherokee, DeKalb, Etowah, Jackson, Madison and Marshall
North	Colbert, Cullman, Franklin, Lauderdale, Lawrence, Limestone, Marion, Morgan, and Winston
South East	Barbour, Butler, Coffee, Covington, Crenshaw, Dale, Geneva, Henry, Houston, and Pike
South West	Choctaw, Clarke, Conecuh, Dallas, Marengo, Monroe, Washington, and Wilcox
West	Fayette, Greene, Hale, Lamar, Perry, Pickens, Sumter, and Tuscaloosa

In order to determine the hotspots for each region, several statewide reports were generated. Through the use of the 2011-2013 crash data for the State of Alabama, the CARE program and the ESRI Arc GIS suite of programs, a complete listing and illustration of problem crash locations (or hotspots) throughout the state was developed. While the focus on Speed and Impaired Driving hotspots crashes in this plan has already been discussed, it was important to focus on this type of crash on all types of roadways within the state. With the help of the CARE program, it was possible to identify hotspots in four major categories. These were: (1) hotspots on the Interstate, (2) hotspots on Federal or State Routes, (3) hotspots at non-mileposted intersections (for Impaired Driving Crashes only) and (4) hotspots on non-mileposted segments. By doing this, a total of 37 Speed Hotspots and 198 Impaired Driving Hotspots around the state were identified. The reports generated detailing this information for the entire state included:

- 1. State of Alabama Fatalities Bar Graph (2006-2013)
- 2. 2013 Alabama Fatalities by County and Region Map
- 3. Alabama Fatalities for State and Region (2006-2012)
- 4. 2013 Alabama Fatalities by Region and County
- 5. Top 21 Speeding Related Mileposted Interstate Crashes Map
- 6. Top 19 Speeding Related Mileposted Interstate Crashes Breakdown by Region
- 7. Top 19 Speeding Related Mileposted Interstate Crashes Listing
- 8. Top 24 Impaired Driving Related Mileposted Interstate Crashes Map
- 9. Top 23 Impaired Driving Related Mileposted Interstate Crashes Breakdown by Region
- 10. Top 23 Impaired Driving Related Mileposted Interstate Crashes Listing
- 11. Top 11 Speeding Related Mileposted State/Federal Route Crashes Map
- 12. Top 7 Speeding Related Mileposted State/Federal Route Crashes Breakdown by Region
- 13. Top 7 Speeding Related Mileposted State/Federal Route Crashes Listing
- 14. Top 25 Impaired Driving Related Mileposted State/Federal Route Crashes Map
- 15. Top 32 Impaired Driving Related Mileposted State/Federal Route Crashes breakdown by Region
- 16. Top 32 Impaired Driving Related Mileposted State/Federal Route Crashes Listing
- 17. Top 78 Impaired Driving Related Non-Mileposted Intersection Crashes Breakdown by Region
- 18. Top 78 Impaired Driving Related Non-Mileposted Intersection Crashes Listing
- 19. Top 11 Speeding Related Non-Mileposted Segment Crashes Breakdown by Region
- 20. Top 11 Speeding Related Non-Mileposted Segment Crashes Listing
- 21. Top 65 Impaired Driving Related Non-Mileposted Segment Crashes Breakdown by Region
- 22. Top 65 Impaired Driving Related Non-Mileposted Segment Crashes Listing
- 23. Hotspot Count and Totals by Region and County Map for All Hotspots
- 24. Hotspot Breakdown by Region for All Hotspots
- 25. Hotspot Count and Totals by Region and County Map for Interstate Hotspots Only
- 26. Hotspot Count Breakdown by Region for Interstate Hotspots Only
- 27. Hotspot Count and Totals by Region and County Map for Speeding Related Hotspots Only
- 28. Hotspot Count Breakdown by Region for Speeding Related Hotspots Only
- 29. Hotspot Count and Totals by Region and County Map for Impaired Driving Related Hotspots Only
- 30. Hotspot Count Breakdown by Region for Impaired Driving Related Hotspots Only

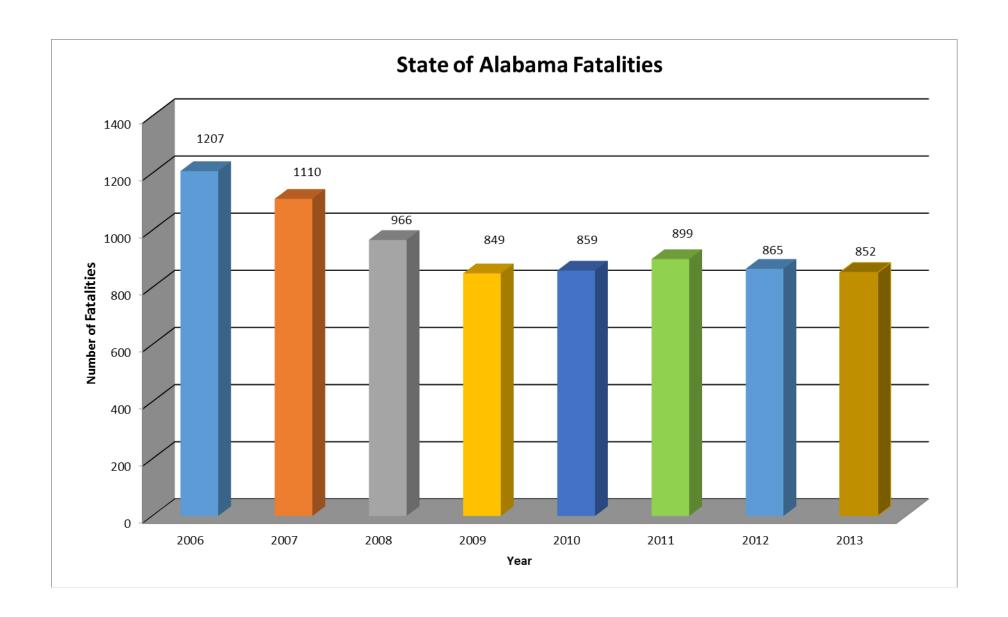
Each of these statewide lists and maps are included in the pages that follow.

In addition to the statewide information, regional information was generated for each of the nine regions across the state. This information was formatted in the same way as the statewide reports but only included information on hotspots specific to their region. Regions were also not given copies of the Interstate Hotspots. The Interstate Hotspots will be covered by the Alabama Department of Public Safety, and they are not under the control of the nine CTSP Coordinators. These hotspot lists that each region received were no different than the statewide list, rather a subset of that list that applied only to the region in question. The reports provided on a regional basis were as follows:

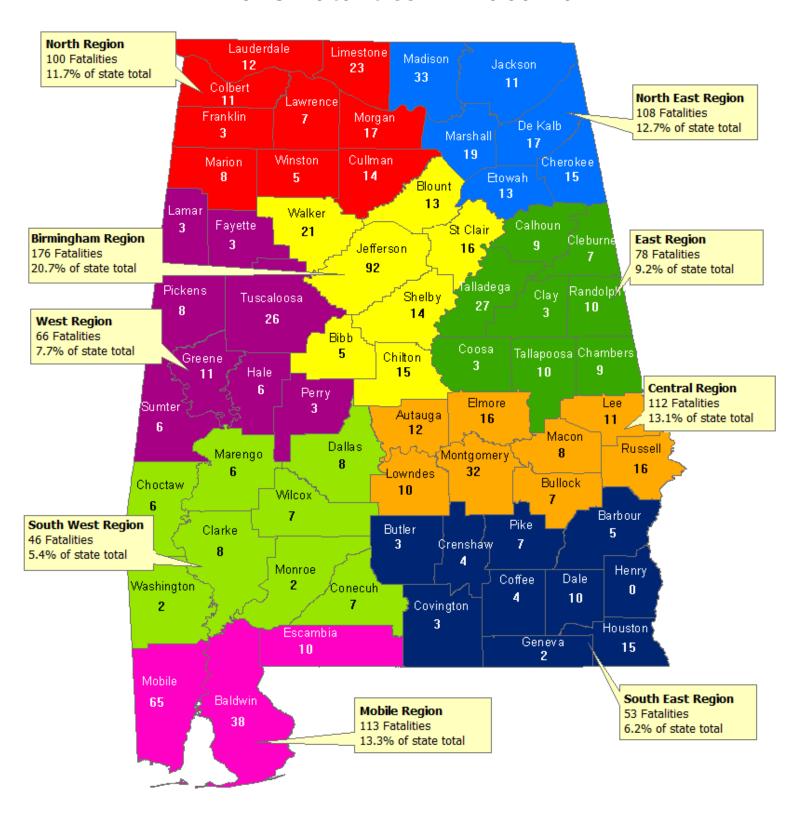
- 1. Regional Fatalities Bar Graph (2006-2013)
- 2. Top Speeding Related Mileposted State/Federal Route Crashes Map for Region
- 3. Top Speeding Related Mileposted State/Federal Route Crashes Listing for Region
- 4. Top Impaired Driving Related Mileposted State/Federal Route Crashes Map for Region
- 5. Top Impaired Driving Related Mileposted State/Federal Route Crashes Listing for Region
- 6. Top Impaired Driving Related Non-Mileposted Intersection Crashes Listing for Region
- 7. Top Speeding Related Non-Mileposted Segment Crashes Listing for Region
- 8. Top Impaired Driving Related Non-Mileposted Segment Crashes Listing for Region

By providing both statewide information and information specific to their region, the regional coordinators were able to identify the problem areas in their region but also look at how they were doing on a statewide level.

Once this information was provided to the CTSP Coordinators, they were instructed to focus their plans for the coming year on the Hotspot locations given in the reports for their region. Money distributed by the AOHS this year will focus completely on these areas within the region. By employing this method of funds distribution, a measurable effect on the two largest factors that cause crashes (speeding and impaired driving) should be seen. The same criteria used to identify the 37 Speeding Related Hotspots and 198 Impaired Driving Related Hotspots locations this year will be used in coming years. If funds are employed effectively and correctly, the number of hotspots should fall within the next few years on both a statewide level and within each individual region.



# 2013 Fatalities in Alabama



Statewide Total Fatalities = 852

# **State of Alabama Fatalities**

<u>Year</u>	<u>Number</u>
2006	1207
2007	1110
2008	966
2009	849
2010	859
2011	899
2012	865
2013	852

# **State of Alabama Fatalities by Region**

<b>Central</b>		<u>Mo</u>	<u>bile</u>	South East			
<u>Year</u>	<u>Number</u>	<u>Year</u>	<u>Number</u>	<u>Year</u>	<u>Number</u>		
2006	170	2006	162	2006	98		
2007	138	2007	148	2007	109		
2008	140	2008	122	2008	68		
2009	103	2009	95	2009	71		
2010	111	2010	108	2010	74		
2011	107	2011	103	2011	70		
2012	87	2012	94	2012	66		
2013	112	2013	113	2013	53		

<u>East</u>		<u>North</u>	<u>ı East</u>	<u>South</u>	<u>West</u>
<u>Year</u>	<u>Number</u>	<u>Year</u>	<u>Number</u>	<u>Year</u>	<u>Number</u>
2006	94	2006	164	2006	71
2007	83	2007	128	2007	53
2008	75	2008	119	2008	65
2009	82	2009	115	2009	46
2010	67	2010	104	2010	54
2011	63	2011	108	2011	55
2012	69	2012	119	2012	56
2013	78	2013	108	2013	46

<b>Birmingham</b>		<u>No</u>	<u>rth</u>	<u>West</u>			
<u>Year</u>	<u>Number</u>	<u>Year</u>	<u>Number</u>	<u>Year</u>	<u>Number</u>		
2006	202	2006	154	2006	92		
2007	221	2007	138	2007	92		
2008	195	2008	117	2008	65		
2009	163	2009	110	2009	64		
2010	182	2010	101	2010	58		
2011	217	2011	118	2011	58		
2012	203	2012	104	2012	67		
2013	176	2013	100	2013	66		

# 2013 Alabama Fatalities

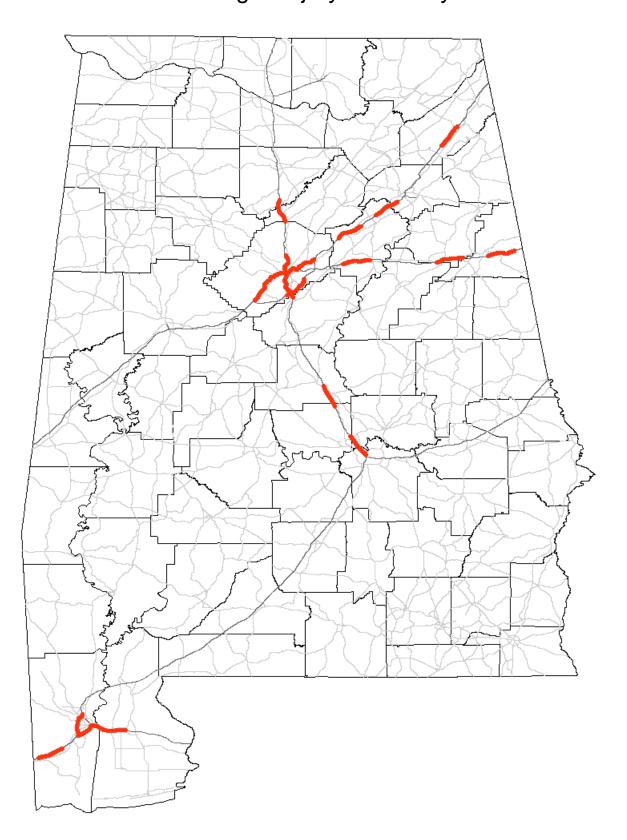
# Fatalities by Region

<u>Region</u>	<b>Number of Fatalities</b>
Birmingham	176
North	100
North East	108
Central	112
Mobile	113
South East	53
East	78
West	66
South West	46
TOTAL	852

# **Fatalities by County**

County	# of Fatalities	<b>County</b>	# of Fatalities	County	# of Fatalities
Jefferson	92	Escambia	10	Covington	3
Mobile	65	Lowndes	10	Fayette	3
Baldwin	38	Randolph	10	Franklin	3
Madison	33	Tallapoosa	10	Lamar	3
Montgomery	32	Chambers	9	Perry	3
Talladega	27	Calhoun	9	Monroe	2
Tuscaloosa	26	Clarke	8	Washington	2
Limestone	23	Dallas	8	Geneva	2
Walker	21	Macon	8	Henry	0
Marshall	19	Marion	8	TOTAL	852
Morgan	17	Pickens	8		
DeKalb	17	Bullock	7		
Russell	16	Cleburne	7		
Elmore	16	Conecuh	7		
Shelby	16	Lawrence	7		
Cherokee	15	Pike	7		
Chilton	15	Wilcox	7		
Houston	15	Choctaw	6		
Saint Clair	14	Hale	6		
Cullman	14	Marengo	6		
Blount	13	Sumter	6		
Etowah	13	Bibb	5		
Autauga	12	Winston	5		
Lauderdale	12	Barbour	5		
Lee	11	Coffee	4		
Colbert	11	Crenshaw	4		
Greene	11	Butler	3		
Jackson	11	Clay	3		
Dale	10	Coosa	3		

Top 19 Mileposted Interstate Locations (10 miles in length) in Alabama with 8 or More Speeding Related Crashes Resulting in Injury or Fatality



# Top 19 Mileposted Interstate Locations (10 miles in length) in Alabama with 8 or More Speeding Related Crashes Resulting in Injury or Fatality

## Regional Breakdown

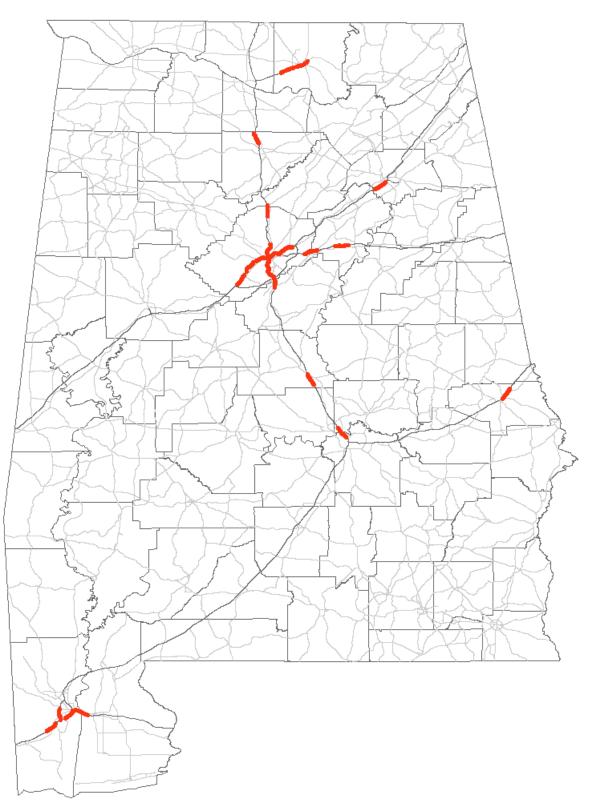
Birmingham Region	10	52.63%
Mobile Region	4	21.05%
East Region	2	10.53%
North East Region	2	10.53%
Central Region	1	5.26%
North Region	0	0.00%
South East Region	0	0.00%
South West Region	0	0.00%
West Region	0	0.00%

# Top 19 Mileposted Interstate Locations (10 Miles in Length) in Alabama with 8 or More Speeding Related Crashes Resulting in Injury or Fatality

The map that corresponds to this data and marks these Hotspots is titled "Top 19 Mileposted Interstate Locations (10 Miles in Length) in Alabama with 8 or More Speeding Related Crashes Resulting in Injury or Fatality"

							Fatal	Injury	Severity	Crashes/			
Rank	County	City	Route	Beg MP	End MP	<b>Total Crashes</b>	Crashes		•	MVM	MVM	ADT	Agency ORI
1	Dekalb	Rural Dekalb	I-59	208.7	218.7	10	2	8	34	0.04	283.95	15559	Alabama DPS - Gadsden Post
2	Calhoun	Rural Calhoun	I-20	182.4	192.4	11	2	9	33.64	0.02	677.93	37147	Alabama DPS - Jacksonville Post
3	Mobile	Mobile	I-65	0.1	10.1	13	5	8	31.54	0.01	1443.16	79077	Mobile Police Department
4	Jefferson	Homewood	I-65	248.3	258.3	9	1	8	28.89	0	2195.8	120318	Homewood Police Department
5	Jefferson	Birmingham	I-59	128	138	8	1	7	28.75	0.01	1277.92	70023	Birmingham Police Department
6	Cleburne	Rural Cleburne	I-20	201.7	211.7	8	1	7	27.5	0.01	621.25	34041	Alabama DPS - Jacksonville Post
7	St Clair	Rural St. Clair	I-59	151.3	161.3	8	2	6	26.25	0.02	422.63	23158	Alabama DPS - Birmingham Post
8	Mobile	Rural Mobile	I-10	2	12	8	1	7	26.25	0.01	900.75	49356	Alabama DPS - Mobile Post
9	Etowah	Rural Etowah	I-59	168.4	178.4	9	0	9	25.56	0.02	380.35	20841	Alabama DPS - Gadsden Post
10	Jefferson	Birmingham	I-59	117.6	127.6	19	1	18	24.74	0.01	2203.92	120763	Birmingham Police Department
11	Jefferson	Rural Jefferson	1-459	13.4	23.4	9	1	8	24.44	0.01	1679.2	92011	Alabama DPS - Birmingham Post
12	Jefferson	Rural Jefferson	I-65	259	269	10	0	10	24	0.01	1471.35	80622	Alabama DPS - Birmingham Post
13	Blount	Rural Blount	I-65	284	294	10	0	10	24	0.01	747.47	40957	Alabama DPS - Birmingham Post
14	Baldwin	Rural Baldwin	I-10	30.4	40.4	10	1	9	24	0.01	947.76	51932	Alabama DPS - Mobile Post
15	Jefferson	Bessemer	I-59	107.3	117.3	8	1	7	23.75	0.01	889.98	48766	Bessemer Police Department
16	Mobile	Mobile	I-10	19.7	29.7	9	1	8	23.33	0.01	1343.07	73593	Mobile Police Department
17	St Clair	Rural St. Clair	I-20	148	158	9	1	8	23.33	0.01	930.35	50978	Alabama DPS - Birmingham Post
18	Chilton	Rural Chilton	I-65	196.5	206.5	9	1	8	22.22	0.01	605.57	33182	Alabama DPS - Montgomery Post
19	Montgomery	Rural Montgomery	I-65	172.3	182.3	13	1	12	21.54	0.01	982.31	53825	Alabama DPS - Montgomery Post

Top 23 Mileposted Interstate Locations (5 miles in length) in Alabama with 8 or More Impaired Driving Related Crashes Resulting in Injury or Fatality



# Top 23 Mileposted Interstate Locations (5 miles in length) in Alabama with 8 or More Impaired Driving Related Crashes Resulting in Injury or Fatality

## **Regional Breakdown**

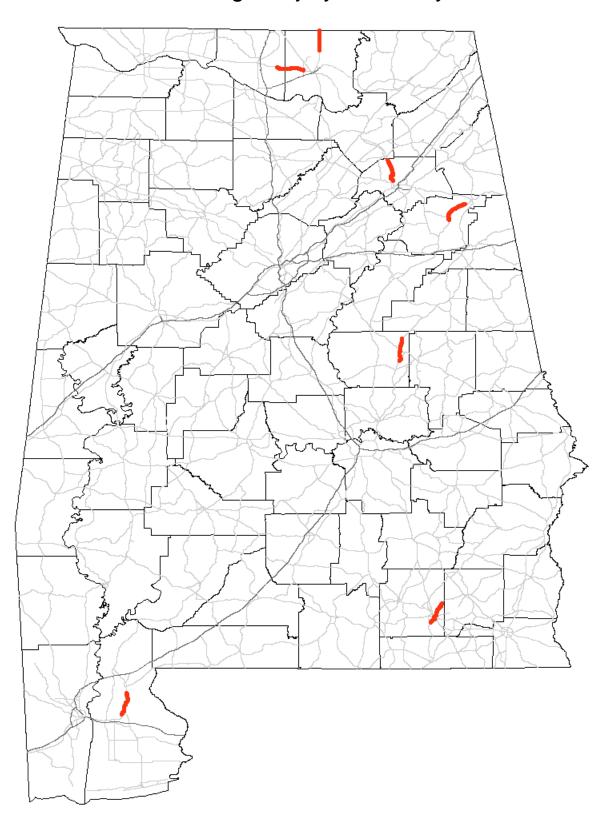
Birmingham Region	13	56.52%
Mobile Region	4	17.39%
North East Region	3	13.04%
Central Region	2	8.70%
North Region	1	4.35%
East Region	0	0.00%
South East Region	0	0.00%
South West Region	0	0.00%
West Region	0	0.00%

# Top 23 Mileposted Interstate Locations (5 Miles in Length) in Alabama with 8 or More Impaired Driving Related Crashes Resulting in Injury or Fatality

The map that corresponds to this data and marks these Hotspots is titled "Top 23 Mileposted Interstate Locations (5 Miles in Length) in Alabama with 8 or More Impaired Driving Related Crashes Resulting in Injury or Fatality"

							Fatal	Injury	Severity				
Rank	County	City	Route	Beg MP	End MP	<b>Total Crashes</b>	Crashes	Crashes	Index	C/MVM	MVM	ADT	Agency ORI
1	Jefferson	Birmingham	I-59	120	125	13	3	10	28.46	0.01	1104.79	121073	Birmingham Police Department
2	Jefferson	Birmingham	I-59	125	130	12	2	10	28.33	0.01	1350.66	148018	Birmingham Police Department
3	Jefferson	Birmingham	I-59	131	136	9	2	7	27.78	0.02	460.37	50452	Birmingham Police Department
4	Jefferson	Rural Jefferson	I-65	262	267	8	1	7	27.5	0.01	647.22	70928	Alabama DPS - Birmingham Post
5	Jefferson	Rural Jefferson	I-20	140	145	8	0	8	27.5	0.01	579.76	63535	Alabama DPS - Birmingham Post
6	Chilton	Rural Chilton	I-65	199.5	204.5	9	1	8	25.56	0.03	299.54	32826	Alabama DPS - Montgomery Post
7	Etowah	Rural Etowah	I-59	176.2	181.2	9	0	9	25.56	0.05	192.64	21111	Alabama DPS - Gadsden Post
8	Jefferson	Rural Jefferson	I-65	279.5	284.5	8	0	8	23.75	0.02	440.08	48228	Alabama DPS - Birmingham Post
9	Mobile	Mobile	I-10	22.1	27.1	8	0	8	23.75	0.01	660.84	72421	Mobile Police Department
10	St Clair	Rural St. Clair	I-20	151.5	156.5	8	1	7	23.75	0.02	465.93	51061	Alabama DPS - Birmingham Post
11	Madison	Huntsville	I-565	16	21	11	0	11	23.64	0.02	618.47	67777	Huntsville Police Department
12	Mobile	Mobile	I-65	0	5	12	1	11	23.33	0.01	801.54	87840	Mobile Police Department
13	Jefferson	Hoover	I-65	251	256	10	1	9	23	0.01	1093.51	119837	Hoover Police Department
14	Jefferson	Birmingham	I-65	256.1	261.1	9	0	9	22.22	0.01	1143.96	125365	Birmingham Police Department
15	Madison	Huntsville	I-565	9.8	14.8	10	0	10	22	0.02	627.86	68807	Huntsville Police Department
16	Cullman	Rural Cullman	I-65	312	317	8	0	8	21.25	0.03	264.81	29020	Alabama DPS - Decatur Post
17	Jefferson	Bessemer	I-59	107	112	12	0	12	20.83	0.03	409.17	44840	Bessemer Police Department
18	Jefferson	Rural Jefferson	I-59	114	119	12	0	12	20.83	0.02	553.52	60660	Alabama DPS - Birmingham Post
19	Mobile	Mobile	I-10	13	18	12	1	11	20.83	0.02	625.86	68587	Mobile Police Department
20	Montgomery	Rural Montgomery	I-65	173.5	178.5	8	1	7	20	0.01	537.45	58899	Alabama DPS - Montgomery Post
21	Jefferson	Hoover	I-65	245.8	250.8	13	0	13	20	0.01	973.77	106715	Hoover Police Department
22	Baldwin	Rural Baldwin	I-10	28	33	8	0	8	20	0.01	555.08	60831	Alabama DPS - Mobile Post
23	Lee	Opelika	I-85	61.7	66.7	9	0	9	16.67	0.03	311.34	34119	Opelika Police Department

Top 7 Mileposted Federal and State Route Locations (10 miles in length) in Alabama with 8 or More Speeding Related Crashes Resulting in Injury or Fatality



# Top 7 Mileposted Federal and State Route Locations (10 miles in length) in Alabama with 8 or More Speeding Related Crashes Resulting in Injury or Fatality

## **Regional Breakdown**

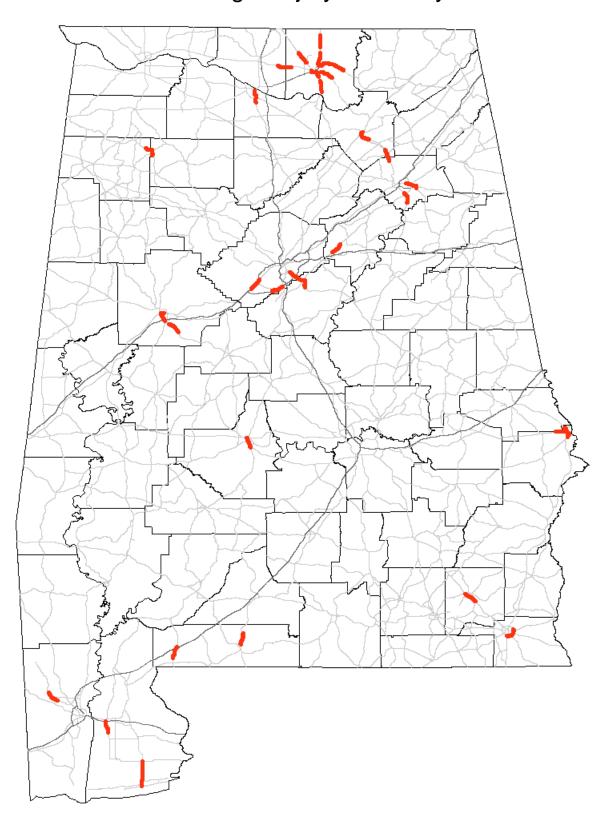
East Region	2	28.57%
North East Region	2	28.57%
Mobile Region	1	14.29%
North Region	1	14.29%
South East Region	1	14.29%
Birmingham Region	0	0.00%
Central Region	0	0.00%
South West Region	0	0.00%
West Region	0	0.00%

# Top 7 Mileposted State and Federal Route Locations (10 Miles in Length) in Alabama with 8 or More Speeding Related Crashes Resulting in Injury or Fatality

The map that corresponds to this data and marks these Hotspots is titled "Top 7 Mileposted State and Federal Route Locations (10 Miles in Length) in Alabama with 8 or More Speeding Related Crashes Resulting in Injury or Fatality"

							Fatal	Injury	Severity	Crashes/			
Rank	County	City	Route	Beg MP	End MP	<b>Total Crashes</b>	Crashes	Crashes	Index	MVM	MVM	ADT	Agency ORI
1	Etowah	Rural Etowah	S-1	269.1	279.1	10	1	9	31	0.03	305.98	16766	Alabama DPS - Gadsden Post
2	Calhoun	Rural Calhoun	S-21	266.2	276.2	8	2	6	30	0.05	147.06	8058	Alabama DPS - Jacksonville Post
3	Limestone	Rural Limestone	S-2	83	93	9	2	7	30	0.02	592.12	32445	Alabama DPS - Decatur Post
4	Coosa	Rural Coosa	S-9	151.8	161.8	8	1	7	28.75	0.16	50.86	2787	Alabama DPS - Alexander City Post
5	Madison	Rural Madison	S-1	344	353	8	1	7	25	0.02	326.87	19901	Alabama DPS - Huntsville Post
6	Coffee	Rural Coffee	S-27	24.9	34.9	9	0	9	24.44	0.1	89.94	4928	Alabama DPS - Dothan Post
7	Baldwin	Rural Baldwin	S-3	8	18	10	1	9	23	0.04	266.01	14576	Alabama DPS - Mobile Post

Top 32 Mileposted Locations on State and Federal Routes (5 miles in length) in Alabama with 9 or More Impaired Driving Related Crashes Resulting in Injury or Fatality



Top 32 Mileposted Locations on State and Federal Routes (5 miles in length) in Alabama with 9 or More Impaired Driving Related Crashes Resulting in Injury or Fatality

North East Region	12	37.50%
Mobile Region	6	18.75%
Birmingham Region	4	12.50%
North Region	3	9.38%
Central Region	2	6.25%
South East Region	2	6.25%
West Region	2	6.25%
South West Region	1	3.13%
East Region	0	0.00%

## Top 32 Mileposted State and Federal Route Locations (5 Miles in Length) in Alabama with 9 or More Impaired Driving Related Crashes Resulting in Injury or Fatality

The map that corresponds to this data and marks these Hotspots is titled "Top 32 Mileposted State and Federal Route Locations (5 Miles in Length) in Alabama with 9 or More Impaired Driving Related Crashes Resulting in Injury or Fatality"

							Fatal	Injury	Severity	Crashes/			
Rank	County	City	Route	Beg MP	End MP	<b>Total Crashes</b>	Crashes	Crashes	Index	MVM	MVM	ADT	Agency ORI
1	Marshall	Guntersville	S-1	290.4	295.4	10	2	8	30	0.04	268.47	29421	Guntersville Police Department
2	Russell	Phenix City	S-8	210.2	215.2	10	1	9	28	0.05	213.23	23368	Phenix City Police Department
3	Escambia	Rural Escambia	S-21	4	9	11	1	10	27.27	0.19	59.02	6468	Alabama DPS - Evergreen Post
4	Madison	Huntsville	S-53	323.4	328.4	9	2	7	26.67	0.06	157.11	17218	Huntsville Police Department
5	St Clair	Moody	S-25	174	179	9	2	7	26.67	0.08	106.04	11621	Moody Police Department
6	Jefferson	Rural Jefferson	S-38	2	7	9	0	9	25.56	0.01	683.14	74865	Mountain Brook Police Department
7	Jefferson	Bessemer	S-5	120	125	11	0	11	25.45	0.06	176.88	19384	Bessemer Police Department
8	Madison	Rural Madison	S-2	104.5	109.5	9	0	9	24.44	0.06	158.78	17401	Alabama DPS - Huntsville Post
9	Morgan	Decatur	S-3	352.8	357.8	9	1	8	24.44	0.04	244.28	26770	Decatur Police Department
10	Russell	Phenix City	S-1	110.6	115.6	11	0	11	23.64	0.04	307.4	33688	Phenix City Police Department
11	Madison	Huntsville	S-2	99.3	104.3	11	2	9	23.64	0.04	290	31781	Huntsville Police Department
12	Mobile	Rural Mobile	S-217	5.7	10.7	11	1	10	23.64	0.11	102.12	11191	Alabama DPS - Mobile Post
13	Dale	Ozark	S-53	39.1	44.1	9	1	8	23.33	0.05	163.92	17964	Ozark Police Department
14	Tuscaloosa	Tuscaloosa	S-215	1.5	6.5	18	1	17	23.33	0.13	137.17	15032	Tuscaloosa Police Department
15	Limestone	Rural Limestone	S-2	83	88	10	0	10	23	0.05	191.12	20945	Alabama DPS - Decatur Post
16	Tuscaloosa	Rural Tuscaloosa	S-6	55.3	60.3	9	0	9	22.22	0.1	89.53	9811	Alabama DPS - Tuscaloosa Post
17	Madison	Huntsville	S-53	308	313	14	0	14	22.14	0.04	399.69	43802	Huntsville Police Department
18	Baldwin	Daphne	S-42	36	41	10	1	9	22	0.03	302.25	33123	Daphne Police Department
19	Winston	Haleyville	S-13	268.4	273.4	10	0	10	22	0.12	86.09	9435	Haleyville Police Department
20	Madison	Huntsville	S-1	327	332	9	0	9	21.11	0.04	232.3	25458	Huntsville Police Department
21	Baldwin	Foley	S-59	6	11	9	1	8	21.11	0.03	305.27	33454	Foley Police Department
22	Escambia	Rural Escambia	S-3	71.7	76.7	9	1	8	21.11	0.17	54.28	5949	Alabama DPS - Evergreen Post
23	Madison	Huntsville	S-53	314.7	319.7	11	0	11	20.91	0.03	400.79	43922	Huntsville Police Department
24	Marshall	Boaz	S-1	278	283	10	0	10	19	0.05	216.47	23723	Boaz Police Department

Top 32 Mileposted State and Federal Route Locations (5 Miles in Length) in Alabama with 9 or More Impaired Driving Related Crashes Resulting in Injury or Fatality

Rank	County	City	Route	Beg MP	End MP	Total Crashes	Fatal Crashes	Injury Crashes	Severity Index	Crashes/ MVM	MVM	ADT	Agency ORI
25	Dallas	Rural Dallas	S-8	82.9	87.9	9	1	8	18.89	0.07	130.28	14277	Alabama DPS - Selma Post
26	Etowah	Southside	S-77	99	104	9	0	9	18.89	0.05	188.35	20641	Southside Police Department
27	Madison	Huntsville	S-1	337.5	342.5	13	0	13	18.46	0.05	257.53	28222	Huntsville Police Department
28	Madison	Rural Madison	S-1	345	350	13	0	13	18.46	0.06	203.99	22355	Alabama DPS - Huntsville Post
29	Houston	Dothan	S-210	9.4	14	11	0	11	18.18	0.06	198.26	23617	Dothan Police Department
30	Baldwin	Gulf Shores	S-59	0.3	5.3	9	0	9	17.78	0.03	324.29	35539	Gulf Shores Police Department
31	Etowah	Gadsden	S-1	258	263	10	0	10	17	0.04	265.79	29128	Gadsden Police Department
32	Shelby	Hoover	S-38	7	12	10	0	10	15	0.02	539.81	59157	Hoover Police Department

## **Top 78 Intersection Locations Statewide with 3 or More Total Impaired Driving Related Crashes**

North East Region	26	33.33%
Mobile Region	20	25.64%
Central Region	12	15.38%
West Region	9	11.54%
North Region	5	6.41%
Birmingham Region	4	5.13%
South East Region	1	1.28%
South West Region	1	1.28%
East Region	0	0.00%

## **Top 78 Intersection Locations Statewide with 3 or More Total Impaired Driving Related Crashes**

These crashes are those that happened off the state systems and are therefore not mappable at this time.

Total	Fatal	Injury	PDO		People	People							
Crashes	Crashes	Crashes	Crashes	Severity	Killed	Injured	County	City	Location	Node 1	Node 2	Route	Agency ORI
3	0	0	0	23.33	0	6	Mobile	Mobile	PLEASANT AVE at ALA 17 & ST STEPHENS RD	9874		8860	Mobile Police Department
3	0	0	0	20	0	6	Mobile	Mobile	NO DESCRIPTION AVAILABLE	12285	N/A	1346	Mobile Police Department
9	1	0	3	16.67	1	7	Lawrence	Rural Lawrence	NO DESCRIPTION AVAILABLE	8840	N/A	1087	Alabama DPS - Decatur Post
3	0	0	1	16.67	0	4	Tuscaloosa	Tuscaloosa	10TH AVE 5704 at 15TH ST	290	N/A	6299	Tuscaloosa Police Department
3	0	0	1	16.67	0	4	Madison	Huntsville	BOB WALLACE AVE at TRIANA BLVD	3105	N/A	7219	Huntsville Police Department
3	0	0	0	16.67	0	3	Lauderdale	Florence	CHISOLM RD at RICKWOOD RD	1282	N/A	5170	Florence Police Department
3	0	0	0	16.67	0	6	Tuscaloosa	Tuscaloosa	NO DESCRIPTION AVAILABLE	5203	N/A	1185	Tuscaloosa Police Department
3	0	0	1	16.67	0	2	Madison	Huntsville	GOVERNORS DR SR-53 at SEMINOLE ST	4089	N/A	5546	Huntsville Police Department
4	0	0	2	15	0	7	Mobile	Mobile	NO DESCRIPTION AVAILABLE	6200	N/A	8803	Mobile Police Department
3	0	0	1	13.33	0	3	Madison	Huntsville	JORDAN LN (PATTON RD at BOB WALLACE AVE	2566	N/A	7228	Huntsville Police Department
3	0	0	1	13.33	0	3	Madison	Huntsville	AIRPORT RD at MEMORIAL PKWYS	3625	N/A	5500	Huntsville Police Department
3	0	0	1	13.33	0	2	Jefferson	Bessemer	NO DESCRIPTION AVAILABLE	1287	N/A	5309	Bessemer Police Department
4	0	0	2	12.5	0	2	Elmore	Millbrook	NO DESCRIPTION AVAILABLE	8199	N/A	1048	Millbrook Police Department
5	0	0	2	10	0	7	Mobile	Mobile	MCGREGOR AVE at OLD SHELL RD	2519	N/A	6200	Mobile Police Department
5	1	0	4	10	1	2	Lee	Auburn	SR 147 COLLEGE ST at SR 267 SHUG JORDAN PKWY	834	N/A	6078	Auburn Police Department
4	0	0	2	10	0	2	Madison	Madison	NO DESCRIPTION AVAILABLE	42	N/A	8076	Madison Police Department
4	0	0	2	10	0	2	Dallas	Selma	NO DESCRIPTION AVAILABLE	164	N/A		Selma Police Department
3	0	0	1	10	0	3	St Clair	Pell City	NO DESCRIPTION AVAILABLE	1234	N/A	1234	Pell City Police Department
3	0	0	1	10	0	2	Lee	Auburn	GAYSTS at SAMFORD AVE E	578	N/A	5045	Auburn Police Department
3	0	0	2	10	0	1	Marshall	Guntersville	NO DESCRIPTION AVAILABLE	159	N/A	1162	Guntersville Police Department
3	0	0	1	10	0	2	Baldwin	Rural Baldwin	NO DESCRIPTION AVAILABLE	14601	N/A	1890	Alabama DPS - Mobile Post
9	0	0	6	8.89	0	5	Madison	Huntsville	DRAKE AVE at PATTON RD	2004	N/A	7228	Huntsville Police Department
4	0	0	2	7.5	0	2	Madison	Huntsville	BIDEFORD DR at LEICESTER DR	958	N/A	1028	Huntsville Police Department
6	0	0	4	6.67	0	3	Madison	Huntsville	BLEVINS GAP RD at SEQUOYAH TRAIL	1363	N/A	5932	Huntsville Police Department
3	0	0	2	6.67	0	1	Autauga	Prattville	MAIN ST E at MCQUEEN SMITH RD	890	N/A	1002	Prattville Police Department
3	0	0	2	6.67	0	2	Madison	Huntsville	CALIFORNIA ST S E at GOVERNORS DR	4228	N/A	5944	Huntsville Police Department
3	0	0	2	6.67	0	2	Madison	Huntsville	LILY FLAGG RD SE at MEMORIAL PKWY S	475	N/A		Huntsville Police Department
3	0	0	2	6.67	0	1	Tuscaloosa	Tuscaloosa	15TH ST E 5168 at 19TH AVE E	261	N/A	5168	Tuscaloosa Police Department
3	0	0	2	6.67	0	1	Madison	Huntsville	NO DESCRIPTION AVAILABLE	62485	N/A	1016	Huntsville Police Department
3	0	0	2	6.67	0	1	Tuscaloosa	Tuscaloosa	15TH ST 5168 at LAKE AVE	277	N/A	6299	Tuscaloosa Police Department
3	0	0	2	6.67	0	3	Baldwin	Rural Baldwin	NO DESCRIPTION AVAILABLE	8009	N/A	1480	Alabama DPS - Mobile Post
3	0	0	2	6.67	0	3	Mobile	Mobile	BERWICK CT at DEAD END	1384	N/A	5031	Mobile Police Department
3	0	0	2	6.67	0	1	Mobile	Rural Mobile	FIRETOWER RD at HOWELLS FERRY RD	7951	N/A	1585	Alabama DPS - Mobile Post
3	0	0	2	6.67	0	1	Madison	Rural Madison	JEFF RD at TONEY RD	7371	N/A	1088	Alabama DPS - Huntsville Post
3	0	0	2	6.67	0	2	Mobile	Mobile	NO DESCRIPTION AVAILABLE	5232	N/A	3287	Mobile Police Department
3	0	0	2	6.67	0	2	Madison	Huntsville	SPARKMAN DR at UNIVERSITY DR	2707	N/A	6298	Huntsville Police Department
3	0	0	2	6.67	0	1	Morgan	Hartselle	NO DESCRIPTION AVAILABLE	260 N/A 1055		1055	Hartselle Police Department
3	0	0	2	6.67	0	2	Morgan	Decatur	AUSTINVILLE RD at CARRIDALE ST	635	N/A	5052	Decatur Police Department

## **Top 78 Intersection Locations Statewide with 3 or More Total Impaired Driving Related Crashes**

These crashes are those that happened off the state systems and are therefore not mappable at this time.

PDO		People	People							
Crashes	Severity	Killed	Injured	County	City	Location	Node 1	Node 2	Route	Agency ORI
3	5	0	1	Madison	Huntsville	MAIN DR N.E at CAMPUS RD	209	N/A	1305	Huntsville Police Department
3	5	0	1	Mobile	Mobile	AIRPORT BLVD at HILLCREST RD AT ARNOLD RD	2217	N/A	1346	Mobile Police Department
3	5	0	1	Montgomery	Rural Montgomery	WARES FERRY RD at PRIVATE RD	8074	N/A	2046	Alabama DPS - Montgomery Post
7	4	0	7	Madison	Huntsville	JORDAN LN SR-53 at UNIVERSITY DR	2356	N/A		Huntsville Police Department
5	3.33	0	1	Lee	Auburn	MAGNOLIA AVE at SR 147 COLLEGE ST	315	N/A	6078	Auburn Police Department
5	3.33	0	3	Madison	Madison	NO DESCRIPTION AVAILABLE	41	N/A	1005	Madison Police Department
2	3.33	0	1	Madison	Madison	NO DESCRIPTION AVAILABLE	200	N/A	1005	Madison Police Department
2	3.33	0	1	Mobile	Mobile	AIRPORT BLVD at MCGREGOR AVE AT AZALEA RD	2005	N/A	1346	Mobile Police Department
2	3.33	0	1	Montgomery	Montgomery	INTERSTATE 65 at SOUTH BLVD INTERCHANGE	4718	N/A	5006	Montgomery Police Department
2	3.33	0	0	Madison	Huntsville	MEMORIAL PKWY N SR-1 at OAKWOOD AVE	5701	N/A	5932	Huntsville Police Department
2	3.33	0	2	Shelby	Hoover	RIVERCHASE PKWY E at VALLEYDALE RD	93	N/A	1250	Hoover Police Department
2	3.33	0	1	Mobile	Rural Mobile	MARCH RD CO 295 at OLD PASCAGOULA RD	7922	N/A	1145	Alabama DPS - Mobile Post
2	3.33	0	4	Mobile	Mobile	MOFFAT RD US HWY 98 at WOLF RIDGE RD E JCT	7593	N/A		Mobile Police Department
2	3.33	0	1	Tuscaloosa	Tuscaloosa	10TH AVE 5704 at 17TH ST	315	N/A	5704	Tuscaloosa Police Department
2	3.33	0	1	Houston	Dothan	HONEYSUCKLE RD at SR 12 US84 ENTERPRISE HWY	1250	N/A	5488	Dothan Police Department
2	3.33	0	1	Madison	Huntsville	DRAKE AVE at IVY AVE	3300	N/A	5626	Huntsville Police Department
3	2.5	0	1	Madison	Rural Madison	OLD MONROVIA RD at CAPSHAW RD	8045	N/A	1088	Alabama DPS - Huntsville Post
3	2.5	0	1	Limestone	Rural Limestone	NO DESCRIPTION AVAILABLE	7756	N/A	1350	Alabama DPS - Decatur Post
3	2.5	0	1	Tuscaloosa	Tuscaloosa	15TH ST 5168 at ALA 6 MCFARLAND & 15 ST E	269	N/A	6299	Tuscaloosa Police Department
3	2.5	0	1	Mobile	Rural Mobile	MOFFAT RD US HWY 98 at SCHILLINGER RD	10129	N/A	8860	Alabama DPS - Mobile Post
4	2	0	1	Madison	Huntsville	AIRPORT RD at WHITESBURG DR	1711	N/A	5420	Huntsville Police Department
6	0	0	1	Madison	Huntsville	DRAKE AVE at TRIANA BLVD	2065	N/A	7219	Huntsville Police Department
5	0	0	0	Tuscaloosa	Tuscaloosa	23RD AVE 5186 at 4TH ST	4135	N/A	5177	Tuscaloosa Police Department
4	0	0	0	Mobile	Mobile	AIRPORT BLVD at UNIVERSITY BLVD	2139	N/A	6051	Mobile Police Department
3	0	0	0	Mobile	Mobile	COTTAGE HILL RD at HILLCREST RD	667	N/A	5903	Mobile Police Department
3	0	0	0	Mobile	Mobile	AZALEA RD at PACE LN	1346	N/A	5732	Mobile Police Department
3	0	0	0	Tuscaloosa	Tuscaloosa	15TH ST 5168 at 18TH AVE	295	N/A	6299	Tuscaloosa Police Department
3	0	0	0	Mobile	Mobile	BROAD ST US-43 at GOVERNMENT ST SR-16 US-90	4196	N/A	6347	Mobile Police Department
3	0	0	0	Montgomery	Montgomery	NO DESCRIPTION AVAILABLE	8058	N/A	5844	Montgomery Police Department
3	0	0	0	Madison	Madison	NO DESCRIPTION AVAILABLE	140	N/A	1016	Madison Police Department
3	0	0	0	Montgomery	Montgomery	DECATUR ST N at GRAVES ST	999	N/A		Montgomery Police Department
3	0	0	0	Lee	Auburn	DONAHUE DR at SR 147 COLLEGE ST	704	N/A	6078	Auburn Police Department
3	0	0	0	Lee	Auburn	SR 147 COLLEGE ST at TICHENOR AVE	314	N/A	6078	Auburn Police Department
3	0	0	0	Mobile	Mobile	COTTAGE HILL RD at DEMETROPOLIS RD	1185	N/A	1359	Mobile Police Department
3	0	0	0	Madison	Madison	NO DESCRIPTION AVAILABLE	48	N/A	8076	Madison Police Department
3	0	0	0	Montgomery	Montgomery	ANN ST at HIGHLAND AVE	1648	N/A	6009	Montgomery Police Department
3	0	0	0	Baldwin	Foley	NO DESCRIPTION AVAILABLE	15112	N/A	3722	Foley Police Department
3	0	0	0	Madison	Huntsville	MONROE ST at WASHINGTON ST	4758	N/A	6027	Huntsville Police Department
3	0	0	0	Jefferson	Rural Jefferson	MT. OLIVE RD-CO 112 at SUTHERLAND RD	9362	N/A	1398	Alabama DPS - Birmingham Post
3	0	0	0	Tuscaloosa	Tuscaloosa	21ST AVE 5188 at 5TH ST E JCT	163	N/A	5187	Tuscaloosa Police Department

## **Top 11 Segment Locations Statewide with 3 or More Speeding Related Crashes Resulting in Injury or Fatality**

North East Region	3	27.27%
Central Region	2	18.18%
East Region	2	18.18%
Birmingham Region	1	9.09%
North Region	1	9.09%
South East Region	1	9.09%
West Region	1	9.09%
Mobile Region	0	0.00%
South West Region	0	0.00%

Top 11 Segment Locations Statewide with 3 or More Speeding Related Crashes Resulting in Injury or Fatality These crashes are those that happened off the state systems and are therefore not mappable at this time.

Total	Fatal	Injury	PDO		People	People						
Crashes	Crashes	Crashes	Crashes	Severity	Killed	Injured	County	City	Node 1	Node 2	Route	Agency ORI
3	2	0	0	40	3	2	Talladega	Rural Talladega	7824	8278	1047	Alabama DPS - Jacksonville Post
3	1	0	0	33.33	1	5	Coffee	Rural Coffee	7288	7315	1066	Alabama DPS - Dothan Post
4	1	0	0	30	1	3	Lauderdale	Rural Lauderdale	9457	7386	1143	Alabama DPS - Quad Cities Post
3	0	0	0	30	0	3	Etowah	Rural Etowah	7821	7824	1269	Alabama DPS - Gadsden Post
3	0	0	0	30	0	3	Etowah	Rural Etowah	8068	8065	1306	Alabama DPS - Gadsden Post
4	1	0	0	27.5	1	3	Autauga	Rural Autauga	7238	7353	1069	Alabama DPS - Montgomery Post
5	0	0	0	26	0	6	Talladega	Rural Talladega	8040	7191	1045	Alabama DPS - Jacksonville Post
3	0	0	0	23.33	0	3	Etowah	Rural Etowah	8212	7669	1391	Alabama DPS - Gadsden Post
3	0	0	0	20	0	4	Tuscaloosa	Rural Tuscaloosa	7980	7979	1405	Alabama DPS - Tuscaloosa Post
3	0	0	0	16.67	0	5	Chilton	Rural Chilton	7819	7564	1115	Alabama DPS - Montgomery Post
3	0	0	0	16.67	0	3	Macon	Rural Macon	7422	7429	1128	Alabama DPS - Opelika Post

## **Top 65 Segment Locations Statewide with 3 or More Total Impaired Driving Related Crashes**

Mobile Region	17	26.15%
North East Region	13	20.00%
Central Region	12	18.46%
North Region	9	13.85%
Birmingham Region	6	9.23%
West Region	5	7.69%
East Region	2	3.08%
South East Region	1	1.54%
South West Region	0	0.00%

## **Top 65 Segment Locations Statewide with 3 or More Total Impaired Driving Related Crashes**

These crashes are those that happened off the state systems and are therefore not mappable at this time.

	People	People							
Severity	Killed	Injured	County	City	Route	Node 1	Node 2	Location	Agency ORI
26.67	1	3	Montgomery	Rural Montgomery	1086	7431	7419	DORAL TRACE at SNOWDOUN CHAMBERS RD and HANCE MILL RD	Alabama DPS - Montgomery Post
26.67	0	3	Escambia	Rural Escambia	1154	8021	7270	No Description Available	Alabama DPS - Evergreen Post
26.67	0	4	Jefferson	Rural Jefferson	1231	17258	21102	N/A at N/A and HAMBY RD at MARSH MTN RD-CO 153	Alabama DPS - Birmingham Post
25	0	6	Madison	Rural Madison	1154	7313	7311	WEST LIMESTONE RD at BOBO RD and LOVELESS RD	Alabama DPS - Huntsville Post
23.33	0	3	Morgan	Rural Morgan	1004	7775	7702	No Description Available	Alabama DPS - Decatur Post
23.33	1	1	Autauga	Rural Autauga	1216	119	7178	No Description Available	Alabama DPS - Montgomery Post
23.33	1	1	Lowndes	Rural Lowndes	1101	8	7578	No Description Available	Alabama DPS - Montgomery Post
22.5	0	7	Walker	Jasper	1409	8248	1699	No Description Available	Jasper Police Department
20	0	4	Tuscaloosa	Tuscaloosa	1185	846	336	24TH AVE 6138 at RIVER ROAD 1185 and 22ND AVE 5187 at RIVER RD	Tuscaloosa Police Department
20	0	2	Etowah	Rural Etowah	1269	7765	7748	No Description Available	Alabama DPS - Gadsden Post
17.5	0	3	Tuscaloosa	Tuscaloosa	1185	5203	5030	No Description Available	Tuscaloosa Police Department
16.67	1	0	Mobile	Rural Mobile	8860	10129	10138	MOFFAT RD US HWY 98 at SCHILLINGER RD and HIGHWOOD CIR S	Alabama DPS - Mobile Post
16.67	0	2	Madison	Madison	1088	366	62545	No Description Available	Madison Police Department
16.67	0	2	Mobile	Rural Mobile	1346	8456	8449	AIRPORT BLVD CO 56 at NEWMAN RD at FERNLAND LN	Alabama DPS - Mobile Post
16.67	0	3	Cleburne	Rural Cleburne	1065	7669	7673	No Description Available	Alabama DPS - Jacksonville Post
16.67	1	0	Lauderdale	Rural Lauderdale	1143	7386	9457	No Description Available	Alabama DPS - Quad Cities Post
16.67	0	2	Madison	Rural Madison	3030	9682	7666	COLBY DR at COUNTESS RD and BALTIMORE HILL RD	Alabama DPS - Huntsville Post
16.67	0	5	Mobile	Rural Mobile	1326	8372	8253	BEN HAMILTON RD CO 354 at MARCH RD and MARCH RD CO 295	Alabama DPS - Mobile Post
16.67	0	2	St Clair	Rural St. Clair	1257	7076	7072	No Description Available	Alabama DPS - Birmingham Post
16.67	0	2	Lauderdale	Rural Lauderdale	1587	8094	8145	No Description Available	Alabama DPS - Quad Cities Post
16.67	0	2	Madison	Madison	1010	520	911	No Description Available	Madison Police Department
16.67	0	5	Lee	Rural Lee	1166	7387	7385	No Description Available	Alabama DPS - Opelika Post
16.67	0	3	Lauderdale	Rural Lauderdale	1211	7385	9426	No Description Available	Alabama DPS - Quad Cities Post
16.67	0	2	Morgan	Rural Morgan	1191	7845	7844	No Description Available	Alabama DPS - Decatur Post
16.67	1	0	Baldwin	Rural Baldwin	1031	13869	7274	No Description Available	Alabama DPS - Mobile Post
16.67	1	0	Mobile	Rural Mobile	1145	10942	10941	OLD CHERRY DR E at OLD PASCAGOULA RD and LIVE OAK CIR	Alabama DPS - Mobile Post
16.67	0	4	Chilton	Rural Chilton	1061	7390	7391	No Description Available	Alabama DPS - Montgomery Post
13.33	0	2	Madison	Rural Madison	2120	7327	7340	HENSHAW RD at DAWN DR and FRANK CHURCH RD at GRIMWOOD RD	Alabama DPS - Huntsville Post
13.33	0	2	Tuscaloosa	Tuscaloosa	5970	34	35	37TH ST 5970 at HIGHLAND OAKS DR and 37TH ST 5970 at 6TH AVE	Tuscaloosa Police Department
13.33	0	2	Lee	Smiths Station	1248	8026	7743	No Description Available	Alabama DPS - Opelika Post
10	0	3	Mobile	Rural Mobile	1215	12024	7758	ARGYLE RD CO 71 at BEVERLY RD and ARGYLE RD CO 71 at HALF MILE RD	Alabama DPS - Mobile Post
10	0	4	Chilton	Rural Chilton	1393	8222	8223	No Description Available	Alabama DPS - Montgomery Post
10	0	3	Mobile	Rural Mobile	8860	9511	9489	LOTT RD at SCHILLINGER AT NEWBURN RD and RENEE RD	Alabama DPS - Mobile Post

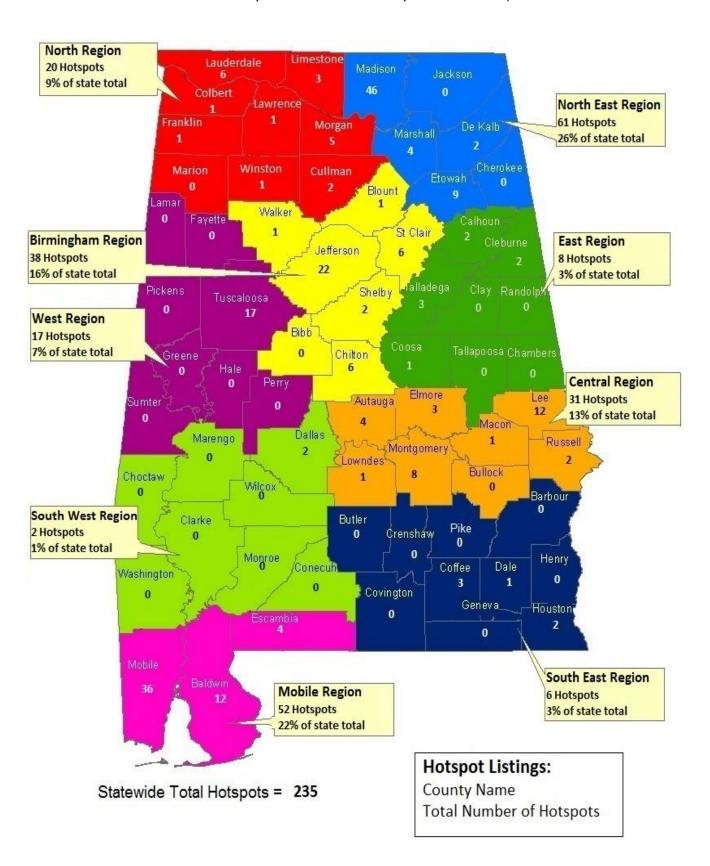
## **Top 65 Segment Locations Statewide with 3 or More Total Impaired Driving Related Crashes**

These crashes are those that happened off the state systems and are therefore not mappable at this time.

	People	People							
Severity	Killed	Injured	County	City	Route	Node 1	Node 2	Location	Agency ORI
10	0	2	Mobile	Rural Mobile	1524	8906	8730	GLENWOOD RD CO 576 at ICG RR and CUSS FORK RD CO 762	Alabama DPS - Mobile Post
10	0	3	Lee	Rural Lee	1318	9543	7623	No Description Available	Alabama DPS - Opelika Post
10	0	1	Mobile	Rural Mobile	1338	8382	8391	GRAND BAY-WILMER RD CO 5 at JEFF HAMILTON RD	Alabama DPS - Mobile Post
10	0	1	Madison	Rural Madison	1305	7205	7162	HILLSBORO CIR at WINCHESTER RD N JCT and OLLIE HOWARD RD	Alabama DPS - Huntsville Post
10	0	1	Coffee	Rural Coffee	1086	7303	7296	No Description Available	Alabama DPS - Dothan Post
10	0	1	Madison	Rural Madison	1324	11000	7667	MOORES MILL RD at STONE HILL DR and BALTIMORE HILL RD	Alabama DPS - Huntsville Post
10	0	1	Madison	Rural Madison	1296	8007	8005	FORD CIR at SHIELDS RD and OCONEE DR at SHIELDS RD	Alabama DPS - Huntsville Post
7.5	0	3	Colbert	Rural Colbert	1149	7139	7119	No Description Available	Alabama DPS - Quad Cities Post
7.5	0	2	Lee	Opelika	5553	1582	1476	No Description Available	Opelika Police Department
6.67	0	2	Mobile	Rural Mobile	2072	8837	8759	FIRETOWER RD at WARDS LN and WARDS LN at WHITESTONE DR	Alabama DPS - Mobile Post
6.67	0	2	Marshall	Rural Marshall	1466	8332	9226	No Description Available	Alabama DPS - Huntsville Post
6.67	0	2	Mobile	Rural Mobile	1552	7930	7931	HOWELLS FERRY RD CO 599 at SNOW RD and ROOT DR CO 596	Alabama DPS - Mobile Post
6.67	0	1	Chilton	Rural Chilton	1506	8100	8093	No Description Available	Alabama DPS - Montgomery Post
6.67	0	1	Lauderdale	Rural Lauderdale	1436	7987	7975	No Description Available	Alabama DPS - Quad Cities Post
6.67	0	1	Elmore	Rural Elmore	2120	9571	7006	No Description Available	Alabama DPS - Montgomery Post
6.67	0	1	Autauga	Rural Autauga	1165	7314	7301	No Description Available	Alabama DPS - Montgomery Post
6.67	0	1	Baldwin	Rural Baldwin	1757	10130	311	No Description Available	Alabama DPS - Mobile Post
3.33	0	1	Tuscaloosa	Rural Tuscaloosa	1224	7197	7196	No Description Available	Alabama DPS - Tuscaloosa Post
3.33	0	2	Cullman	Rural Cullman	1390	9581	8321	No Description Available	Alabama DPS - Decatur Post
2.5	0	1	Tuscaloosa	Tuscaloosa	6125	7150	848	N/A at N/A and 19TH ST 5190 at RIVER RD 1185	Tuscaloosa Police Department
0	0	0	Elmore	Rural Elmore	1269	7977	7976	No Description Available	Alabama DPS - Montgomery Post
0	0	0	Lee	Auburn	5379	934	933	GLENN AVE at WRIGHT ST and MAGNOLIA AVE at WRIGHT ST	Auburn Police Department
0	0	0	Mobile	Rural Mobile	1634	9415	8731	COLEMAN DAIRY RD CO 752 at LEE ROY JORDAN SO	Alabama DPS - Mobile Post
0	0	0	Mobile	Rural Mobile	8860	10129	10133	MOFFAT RD US HWY 98 at SCHILLINGER RD and DOGWOOD DR	Alabama DPS - Mobile Post
0	0	0	Lee	Auburn	6077	92	93	DEAN RD at SR 14 OPELIKA RD and GENTRY DR at SR 14 OPELIKA RD	Auburn Police Department
0	0	0	Baldwin	Foley	3722	15113	15114	No Description Available	Foley Police Department
0	0	0	Madison	Madison	5163	140	1524	No Description Available	Madison Police Department
0	0	0	Franklin	Rural Franklin	1226	7932	7715	No Description Available	Alabama DPS - Quad Cities Post
0	0	0	Escambia	Rural Escambia	1337	7142	7141	No Description Available	Alabama DPS - Evergreen Post
0	0	0	Dekalb	Rural Dekalb	1173	7888	7884	No Description Available	Alabama DPS - Gadsden Post
0	0	0	Talladega	Talladega	1326	7564	8294	No Description Available	Talladega Police Department
0	0	0	Madison	Rural Madison	1239	7098	7084	FLOOD LN at OLD HWY 431 and BOBO SECTION RD at HILLS CHAPEL RD	Alabama DPS - Huntsville Post

## **Hotspot Totals for Alabama**

(Totals include Speeding Related and Impaired Driving Related Hotspots Found on Mileposted and Non-Mileposted Routes)

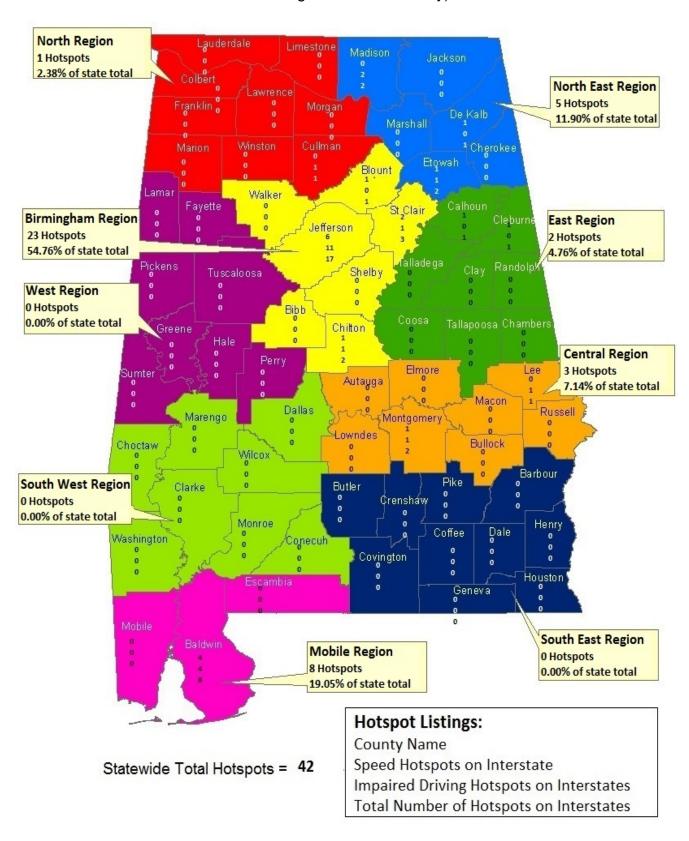


## **Total Hotspots for Alabama (235 Total Hotspots)**

North East Region	61	25.96%
Mobile Region	52	22.13%
Birmingham Region	38	16.17%
Central Region	31	13.19%
North Region	20	8.51%
West Region	17	7.23%
East Region	8	3.40%
South East Region	6	2.55%
South West Region	2	0.85%

## **Interstate Hotspot Totals for Alabama**

(Totals include Speeding Related and Impaired Driving Related Hotspots Occuring on Interstates Only)

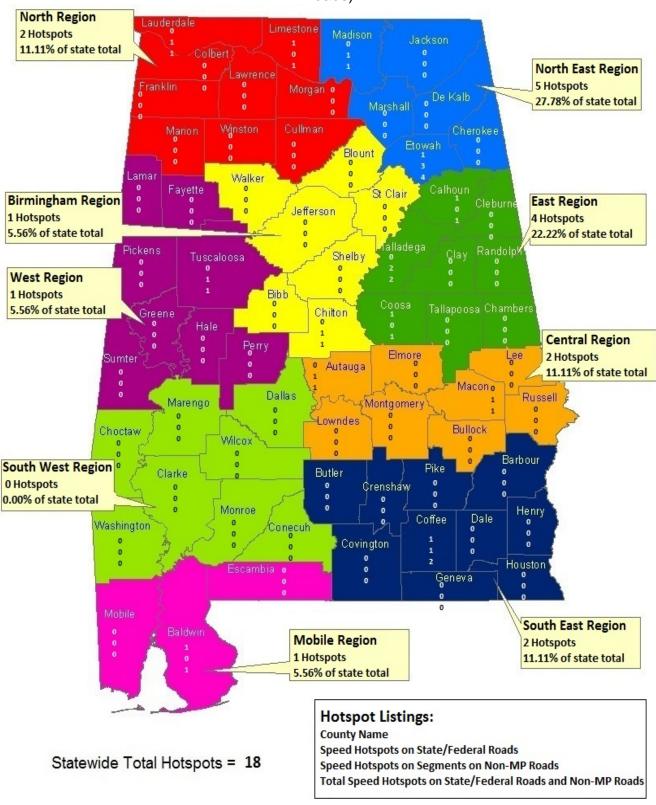


## **Interstate Hotspots for Alabama (42 Total Hotspots)**

Birmingham Region	23	54.76%
Mobile Region	8	19.05%
East Region	2	4.76%
North East Region	5	11.90%
Central Region	3	7.14%
North Region	1	2.38%
South East Region	0	0.00%
South West Region	0	0.00%
West Region	0	0.00%

## Speeding Related Hotspot Totals for State/Federal Roads and Non-Mileposted Roads in Alabama

(Totals include Speeding Related Hotspots Occuring on Federal/State Roads and Non-MP Roads)

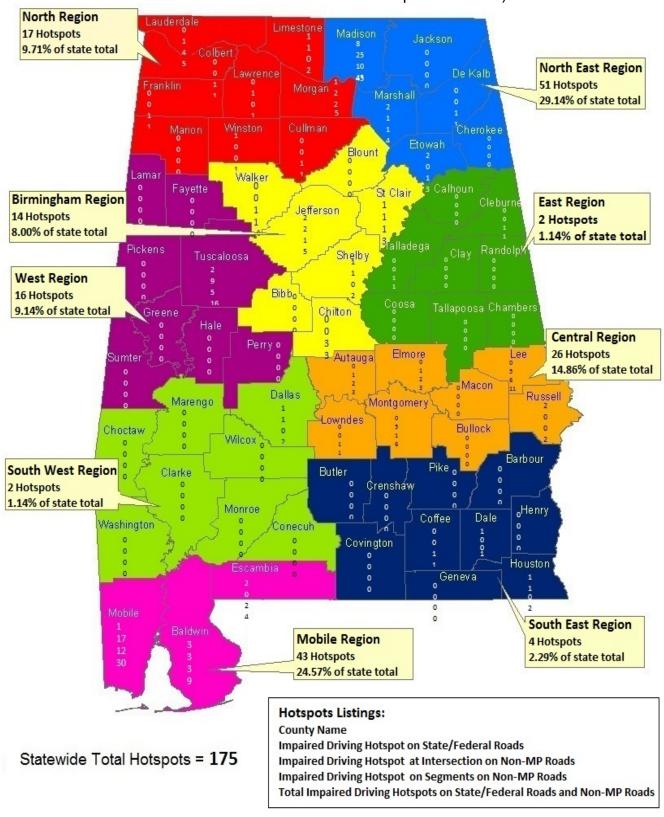


## Speeding Related Hotspots for State/Federal and Non-Mileposted Roads (18 Total Hotspots)

North East Region	5	27.78%
East Region	4	22.22%
Central Region	2	11.11%
North Region	2	11.11%
South East Region	2	11.11%
Birmingham Region	1	5.56%
West Region	1	5.56%
Mobile Region	1	5.56%
South West Region	0	0.00%

## Impaired Driving Related Hotspot Totals for State/Federal Roads and Non-Mileposted Roads in Alabama

(Totals include Impaired Driving Related Hotspots Occurring on Federal/State Roads and Non-Mileposted Roads)



# Impaired Driving Related Hotspots for State/Federal and Non-Mileposted Roads (175 Total Hotspots)

North East Region	51	29.14%
Mobile Region	43	24.57%
Central Region	26	14.86%
North Region	17	9.71%
West Region	16	9.14%
Birmingham Region	14	8.00%
South East Region	4	2.29%
East Region	2	1.14%
South West Region	2	1.14%

#### PLANNED ACTIVITIES

In previous portions of the HSP, several strategies for the coming year were laid out. Each of these strategies dealt with the operation of AOHS and the focus on the hotspot crashes that have been identified in this HSP. In this section of the HSP, these strategies will be grouped according to their funding source. Each strategy will be briefly discussed and the rationale for these projects from *NHTSA Countermeasures that Work* will be noted. The amount of money allotted to each strategy during the coming year will be given.

#### **402 Planned Activities:**

#### **Planning and Administration:**

AOHS is charged with implementing the state's highway safety efforts to reduce traffic deaths, injuries and crashes. In order to properly coordinate the efforts from across the state, a certain amount of money is allotted each year for the state office located in Montgomery, Alabama. P & A will include both direct and indirect costs for personnel with their associated costs. Personnel in the direct cost category include the Public Safety Unit Chief who will spend approximately 50% of his time on highway traffic safety related issues. Personnel in the indirect cost category will use ADECA Indirect Cost Rate, which includes the LETS Division Chief/GR, the LETS Accounting and two (2) Accounting Staff Members devoted to highway traffic ty. All P & A costs will be split 50% Federal and 50% State.

**Indirect Cost:** Per a Negotiated Indirect Cost Rate Agreement dated October 26, 2012 with the U.S. Department of Labor, the ADECA LETS Division has been approved to use a Provisional Indirect Cost Rate of 5.48% for the period of 10/1/2013 through 9/30/2014 on grants and contracts with the Federal Government. In accordance with the agreement, ADECA must submit a proposal to establish a final rate within six months after the end of the fiscal year. Any and all adjustments will be made in accordance with the terms stated in the Negotiated Indirect Cost Rate Agreement. As such, the Provisional Indirect Cost Rate of 5.48% will most likely change for future periods. The ADECA LETS Division will use the Negotiated Indirect Cost Rates determined to be in effect at that time for future periods.

Total FY 2015 Allotment = \$200,000.00 -Funding Source – Section 402 (PA) State Match = \$200,000.00

#### Support Community Traffic Safety Program (CTSP)/Law Enforcement Liaison (LEL) projects:

There are nine CTSP/LEL Regions across the state. For the coming year, each CTSP/LEL is charged with focusing on the hotspot locations outlined for their region. In order to coordinate the efforts within the nine regions, a CTSP/LEL office is located in each region. Each of these regions is responsible for the problem areas within their region and will supply reports and information back to the central office regarding the efforts taking place within their region.

The major focus of the CTSP/LEL efforts is involved with assuring the effective execution of very focused selective enforcement on alcohol and speed hotspots. This covers three of the four basic strategies recommended in the *NHTSA Countermeasures that Work* document (Page 1-4) to reduce alcohol-impaired crashes and drinking and driving: (1) Deterrence: enact, publicize, enforce, and adjudicate laws prohibiting alcohol-impaired driving so that people choose not to drive impaired; (2) Prevention: reduce drinking and keep drinkers from driving; and (3) Communications and outreach: inform the public of the dangers of impaired driving and establish positive social norms that make driving while impaired unacceptable.

For additional support, we have a State Highway Safety Program Manager who works as a centralized point of contact for regional CTSP/LEL offices and acts as liaison to municipal, county, state and federal officials or individuals with regard to the administration so that program goals and objectives of the 402 Highway Safety program are accomplished effectively within ADECA and NHTSA guidelines. This Program Manager reviews, monitors and recommends program expenditures, assists in the development of program plans, budgets; reviews and recommends grants, contracts and related budgets, assists in the development and reporting of program policies and procedures as necessary to ensure compliance with appropriate rules, regulations and procedures.

Subgrant	Applicant Subgrantee	Source Share
15.SP.CP.001	Northwest Shoals Community College	\$320,000.00
15.SP.CP.002	Shelton State Community College	\$182,300.00
15.SP.CP.003	Etowah Co Commission	\$210,786.99
15.SP.CP.004	Mobile Co Commission	\$137,549.00
15.SP.CP.005	City of Montgomery	\$84,018.38
15.SP.CP.006	Gadsden State Community College	\$126,380.00
15.SP.CP.007	Enterprise Sate Community College	\$147,083.58
15.SP.CP.008	Jefferson State Community College	\$165,020.00
15.SP.CP.009	AL Tombigbee Reg. Planning Commission	\$109,440.00
15.SP.CP.010	ADECA Com Traffic Safety Prog Manager	\$62,500.00

**Total FY 2015 Allotment = \$1,545,077.95 - Funding Source - Section 402 (CP)** 

#### **Conduct Hotspot Special Traffic Enforcement Program (STEP) projects:**

There will be nine local STEP projects during the coming year as well as one statewide STEP project. Each of these STEP projects will focus on Hotspot crashes and the problem locations that have been identified across the state. One STEP project will take place in each of the nine CTSP/LEL regions and the statewide STEP project will be conducted in conjunction with the Alabama Department of Public Safety. By conducting these STEP projects, additional efforts can be focused on the reduction of impaired driving related crashes and speed related crashes. The Law Enforcement activity will be sustained for twelve (12) months. The enforcement effort is data driven, with the objective of preventing traffic violations, crashes, and crash fatalities and injuries in locations most at risk. The enforcement program will continuously be evaluated and the necessary adjustment will be made.

The value of such integrated enforcement efforts is demonstrated by studies referenced in Page 1-24 of *NHTSA Countermeasures that Work*. In one study a three-site evaluation of integrated impaired driving, speed, and seat belt use enforcement indicated that "sites that combined high publicity with increased enforcement reduced crashes likely to involve alcohol (such as single-vehicle nighttime crashes) by 10% to 35%. Another study of comprehensive programs in six communities used integrated enforcement methods where it was reported that these programs reduced fatal crashes involving alcohol by 42%. About half the speeding drivers detected through these enforcement activities had been drinking and about half the impaired drivers were speeding. It is well established that the same risk-taking motivations that seem to compel some drivers to be impaired and speed also leads them to avoid using proper restraints.

Subgrant	Applicant Subgrantee	<b>Source Share</b>
15.SP.PT.001	Northwest Shoals Community College	\$72,000.00
15.SP.PT.002	Shelton State Community College	\$56,000.00
15.SP.PT.003	Etowah Co Commission	\$208,000.00
15.SP.PT.004	Mobile Co Commission	\$176,000.00
15.SP.PT.005	City of Montgomery	\$104,000.00
15.SP.PT.006	Gadsden State Community College	\$24,000.00
15.SP.PT.007	Enterprise Sate Community College	\$24,000.00
15.SP.PT.008	Jefferson State Community College	\$128,000.00
15.SP.PT.009	AL Tombigbee Reg. Planning Commission	\$8,000.00
15.SP.PT.010	Alabama Department of Public Safety	\$800,000.00

Total FY 2015 Allotment = \$1,600,000.00 -Funding Source – Section 402 (PT)

#### **Driver's License Suspension Appeals (DLSA) Program:**

Plans are to fund the DLSA program through the Alabama Department of Public Safety. The goal of this program is to assure the impaired driving case load is maintained at a manageable level.

According to *NHTSA Countermeasures that Work* (Page 1-12), many State Administrative License Revocation (ALT) and Administrative License Suspension (ALS) laws have been in place for decades, and much of the research examining the effectiveness of these laws is now quite old. However, there is no reason to conclude that it is not still valid. For example, a summary of 12 evaluations through 1991 found ALR and ALS laws reduced crashes of different types by an average of 13%. A more recent study examining the long-term effects of license suspension policies across the United States concluded that ALR reduces alcohol-related fatal crash involvement by 5%, saving an estimated 800 lives each year nationally.

Subgrant	Applicant Subgrantee	Source Share
15.SP.AL.001	AL Department of Public Safety	\$33,894.46

Total FY 2015 Allotment = \$33,894.46 -Funding Source – Section 402 (AL)

#### **405b Planned Activities:**

#### Statewide "Click It or Ticket" campaign (High Visibility Enforcement):

In addition to the paid media, we will have a High Visibility Enforcement program for a three week period. The enforcement program will consist of members from the Municipal Law Enforcement Agencies, County Sheriffs and State Highway Patrol (Department of Public Safety).

The value of Click it or Ticket (CIOT) projects is well documented (see *NHTSA Countermeasures that Work* Page 2-4). High-visibility, short-duration seat belt law enforcement programs were demonstrated in individual communities in the late 1980s. North Carolina's CIOT program took this model statewide beginning in 1993 and raised the use rate above 80%. The CIOT model expanded nationwide in 2003 and seat belt use increased nationwide in almost all states from 2000-2006, in part due to CIOT seat belt enforcement programs. The national seat belt use rate reached 87% in 2013. Alabama is very enthusiastic about being a part of this national program.

Subgrant	Applicant Subgrantee	<b>Source Share</b>
15.HS.M2.001	Northwest Shoals Community College	\$20,500.00
15.HS.M2.002	Shelton State Community College	\$19,940.00
15.HS.M2.003	Etowah Co Commission	\$27,700.00
15.HS.M2.004	Mobile Co Commission	\$23,260.00
15.HS.M2.005	City of Montgomery	\$27,140.00
15.HS.M2.006	Gadsden State Community College	\$24,380.00
15.HS.M2.007	Enterprise State Community College	\$11,640.00
15.HS.M2.008	Jefferson State Community College	\$31,580.00
15.HS.M2.009	AL Tombigbee Reg. Planning Commission	\$13,860.00

Total FY 2015 Allotment = \$200,000.00 - Funding Source - Section 405b (M2HVE)

#### Statewide "Click It or Ticket" (Surveys, Analysis, Certification and Final Report):

The Center for Advanced Public Safety (CAPS) will conduct pre and post surveys for seat belt programs and evaluate several types of survey information regarding seat belt and child restraint usage rates as part of the "Click It or Ticket" campaign. The program will consist of waves of surveys, enforcement and media blitzes, carefully scheduled to maximize public understanding of restraint use. CAPS' role will be to: (1) contract the conduction of annual pre and post observational survey of vehicle seat belt usage and child restraint usage throughout Alabama according to the NHTSA approved Sampling, Data Collection and Estimation Plan (2) perform an evaluation of the program results using scientific analyses of baseline observations before the STEP and post observations after it is completed and calculate the official seat belt usage rate for the State (3) collect results from all the various involved parties for their activities, (4) perform analysis of data generated through telephone polls, media campaign data and enforcement data and (5) compile the project report for "Click It or Ticket" 2015 (6) contract the conduction of the child restraint observational survey (7) analyze survey data and compute child restraint usage rate for State. (8) produce report on results of child restraint observational surveys. (9) receive and scientifically analyze data obtained (10) collect reports on

the other components of the project (11) obtain signed certification page and (12) produce a comprehensive final report covering all aspects of the campaign.

The *NHTSA Countermeasures that Work* references to Click It or Ticket have been presented above for those projects. This is a mandatory part of that effort.

SubgrantApplicant SubgranteeSource Share15.HS.M2.010Univ of AL/Center for Advanced Public Safety\$201,008.81

Total FY 2015 Allotment = \$201,008.81 - Funding Source – Section 405b (M2OP)

#### "Click It or Ticket" campaign (Paid Media):

As a part of the nationwide initiative to increase seat belt usage, Alabama will participate in the "Click It or Ticket" High Visibility Paid Media campaign. This campaign will be scheduled in May and concluding on the Memorial Day Holiday. This has been a highly successful program in the past several years. Alabama will continue to lend its full support to the program in the coming year.

The value of Click it or Ticket (CIOT) projects is well documented (see *NHTSA Countermeasures that Work* Page 2-4). High-visibility, short-duration belt law enforcement programs were demonstrated in individual communities in the late 1980s. North Carolina's CIOT program took this model statewide beginning in 1993 and raised the seat belt use rate above 80%. The CIOT model expanded nationwide in 2003 and seat belt use increased nationwide in almost all states from 2000-2006, in part due to CIOT seat belt enforcement programs. The national seat belt use rate reached 87% in 2013. Alabama is very enthusiastic about being a part of this national program.

SubgrantApplicant SubgranteeSource Share15.HS.M2.012AL Dept of Commerce\$400,000.00

**Total FY 2015 Allotment = \$400,000.00 - Funding Source - 405b (M2HVE)** 

#### **Child Passenger Safety Training and Coordination**

We will have a state Child Passenger Safety Coordinator. We will provide training for first time technicians, re-certification, and renewals for trained technicians. Fitting stations will be available to the public. The technicians will ensure the child passenger restraints are installed correctly.

According to *NHTSA Countermeasures that Work* (Page 2-1), NHTSA estimates that correctly used child restraints are even more effective than seat belts in reducing fatalities. Child restraints reduce fatalities by 71% for infants younger than 1 year old and by 54% for children 1 to 4 years old in passenger cars. In light trucks, the fatality reductions are 58% for infants and 59% for children 1 to 4 years old. In addition, research conducted by the Partners for Child Passenger Safety Program at the Children's Hospital of Philadelphia found that belt-positioning booster seats reduce the risk of injury to children 4 to 8 in crashes by 45% when compared to the effectiveness of seat belts alone. The proper use of child restraints is not trivial, and most parents are not intuitively aware of all of the complexities involved. Improper application of

even the correct devices can lead to increased injury or even death. It is quite clear that this training project is a key component of the overall child restraint effort.

SubgrantApplicant SubgranteeSource Share15.HS.M2.011NW Shoals Community College\$70,703.21

**Total FY 2015 Allotment = \$70,703.21 - Funding Source – Section 405b (M2PE)** 

#### **405c Planned Activities:**

#### **Traffic Safety Records Improvement Program:**

We have an active Traffic Records Coordinating Committee (TRCC) in Alabama. AOHS will continue funding for the development of several projects such as a data entry system for EMS data for use in the field called RESCUE, continuing work on the EMS analysis portal, the SAFETY portal and other analysis portals, completing and deploying MapClick which is the new mapping tool in MOVE, developing CARE cloud datasets and developing a DUI/citation tracking system. These systems improve data quality, timeliness and completeness.

Traffic Safety Information Systems are not covered by NHTSA Countermeasures that Work

SubgrantApplicant SubgranteeSource Share15.HS.M3.001Univ of AL/Center for Advanced Public Safety\$698,398.75

Total FY 2015 Allotment = \$698,398.75 -Funding Source – Section 405c (M3DA)

#### **405d Planned Activities:**

#### **Impaired Driving Grant Funds:**

There will be nine local Alcohol High Visibility Enforcement projects during the coming year as well as one statewide Alcohol High Visibility Enforcement project. Each of these projects will focus on alcohol related Hotspot crashes and the problem locations that have been identified across the state. One project will take place in each of the nine CTSP/LEL regions and the statewide project will be conducted in conjunction with the Alabama Department of Public Safety. By conducting these HVE projects, additional efforts can be focused on the reduction of impaired driving related crashes. The Law Enforcement activity will be sustained for twelve (12) months. The enforcement effort is data driven, which will prevent traffic violations, crashes, and crash fatalities and injuries in locations most at risk. The enforcement program will continuously be evaluated and the necessary adjustments will be made.

NHTSA Countermeasures that Work (Page 1-21) reviewed intensive alcohol selective enforcement efforts such as publicized saturation patrol programs. These patrols aim to deter driving after drinking by increasing the perceived risk of arrest. They recommend saturation patrols that are publicized extensively and conducted regularly, as well as roving patrols in which individual patrol officers concentrate on detecting and arresting impaired drivers in an area where impaired driving is common or where alcohol-involved crashes have occurred. A demonstra-

tion program in Michigan, where sobriety checkpoints are prohibited by State law, revealed that saturation patrols can be effective in reducing alcohol-related fatal crashes when accompanied by intensive publicity.

Subgrant	Applicant Subgrantee	<b>Source Share</b>
15.HS.M5.001	Northwest Shoals Community College	\$101,520.00
15.HS.M5.002	Shelton State Community College	\$60,160.00
15.HS.M5.003	Etowah Co Commission	\$163,760.00
15.HS.M5.004	Mobile Co Commission	\$123,200.00
15.HS.M5.005	City of Montgomery	\$107,760.00
15.HS.M5.006	Gadsden State Community College	\$44,800.00
15.HS.M5.007	Enterprise State Community College	\$56,000.00
15.HS.M5.008	Jefferson State Community College	\$116,880.00
15.HS.M5.009	AL Tombigbee Reg. Planning Commission	\$25,920.00
15.HS.M5.010	Alabama Department of Public Safety	\$300,000.00

**Total FY 2015 Allotment = \$1,100,000.00 - Funding Source - Section 405d (M5HVE)** 

#### Impaired Driving campaign (Paid Media):

As a part of the nationwide impaired driving campaign to reduce impaired driving-related fatalities, Alabama will participate in the High Visibility Impaired Driving Enforcement Paid Media Campaign. The campaign will take place year round and encompass an array of multimedia messages. Along with traditional print, radio and television advertisements, the Department of Commerce will use additional means of reaching the motoring public. Through professional services contracts, Alabama will be able to place campaign messages in movie theatres, as well as interactive web banners on the concert ticket purchasing page for the popular Verizon Wireless Amphitheatre in Pelham, AL.

The NHTSA Countermeasures that Work review for this effort is discussed immediately above.

Subgrant	Applicant Subgrantee	Source Share		
15.HS.M5.011	AL Dept of Commerce	\$400,000.00		

**Total FY 2015 Allotment = \$400,000.00 - Funding Source - 405d (M5PEM)** 

#### **Traffic Safety Resource Prosecutor Program (TSRP):**

Goals for the TSRP program are to provide training requirements to all District Attorneys, ADA's and their staff in order to increase the level of readiness and proficiency for the effective prosecution of traffic related cases. Additionally the goals of this program will emphasize:

- Practical impaired driving Course: Nuts & Bolts
- Handling the Experts
- Legal Updates
- Search & Seizure

- Jury Selection
- Coordinate Drug Recognition Expert (DRE) Program

According to *NHTSA Countermeasures that Work* (Page 1-26), "DWI cases can be highly complex and difficult to prosecute, yet they are often assigned to the least experienced prosecutors". In one survey, about half of prosecutors and judges said the training and education they received prior to assuming their position was inadequate for preparing them to prosecute and preside over DWI cases (Robertson & Simpson, 2002a). Traffic Safety Resource Prosecutors (TSRPs) are current (or former) prosecutors who specialize in the prosecution of traffic crimes, and DWI cases in particular. They provide training, education, and technical support to other prosecutors and law enforcement agencies within their State. Judicial Outreach Liaisons (JOLs) are current (or former) judges who are experienced in handling DWI cases. Many JOLs have presided over DWI or Drug courts. They share information and provide education to judges and other court personnel about DWI cases. NHTSA has developed a manual to assist new TSRPs (NHTSA, 2007b) and is in the process of developing one for JOLs."

SubgrantApplicant SubgranteeSource Share15.HS.M5.012Auburn University at Montgomery\$395,967.29

Total FY 2015 Allotment = \$395,967.29 -Funding Source – Section 405d (M5CS)

#### **408 Planned Activities:**

#### **Electronic Patient Care Reports (ePCR) Program:**

The Alabama Department of Public Health will utilize grant funds to purchase a maintenance and support contract for software to continue their process of electronic patient care reports in accordance with the National Emergency Medical Services Information System (NEMSIS) standards.

Traffic Safety Information Systems are not covered by NHTSA Countermeasures that Work

SubgrantApplicant SubgranteeSource Share15.HS.K9.001AL Dept of Public Health\$60,000.00

**Total FY 2015 Allotment = \$60,000.00 - Funding Source - Section 408 (K9)** 

#### 410 Planned Activities:

#### Nationwide "Drive Sober or Get Pulled Over" Campaign:

In addition to the paid media, we will have a High Visibility Enforcement program for a two week period. The enforcement program will consist of members from the Municipal Law Enforcement Agencies, County Sheriffs and State Highway Patrol (Department of Public Safety). This campaign will begin in August and conclude on Labor Day.

NHTSA Countermeasures that Work (Page 1-21) reviewed intensive alcohol selective enforcement efforts. The primary purpose of publicized saturation patrol programs is to deter driving

after drinking by increasing the perceived risk of arrest. They recommend saturation patrols that are publicized extensively and conducted regularly, as well as roving patrols in which individual patrol officers concentrate on detecting and arresting impaired drivers in an area where impaired driving is common or where alcohol-involved crashes have occurred. A demonstration program in Michigan, where sobriety checkpoints are prohibited by State law, revealed that saturation patrols can be effective in reducing alcohol-related fatal crashes when accompanied by intensive publicity.

Subgrant	Applicant Subgrantee	Source Share
15.HS.K8.001	Northwest Shoals Community College	\$20,960.00
15.HS.K8.002	Shelton State Community College	\$15,240.00
15.HS.K8.003	Etowah Co Commission	\$30,480.00
15.HS.K8.004	Mobile Co Commission	\$26,660.00
15.HS.K8.005	City of Montgomery	\$21,900.00
15.HS.K8.006	Gadsden State Community College	\$9,520.00
15.HS.K8.007	Enterprise State Community College	\$18,100.00
15.HS.K8.008	Jefferson State Community College	\$31,420.00
15.HS.K8.009	AL Tombigbee Reg. Planning Commission	\$25,720.00

**Total FY 2015 Allotment = \$200,000.00 - Funding Source - Section 410 (K8)** 

#### Statewide High Visibility Impaired Driving Enforcement Campaign (Paid Media):

As a part of the nationwide impaired driving campaign to reduce impaired driving-related fatalities, Alabama will participate in the High Visibility Impaired Driving Enforcement Paid Media Campaign. This "Drive Sober or Get Pulled Over" campaign will begin in August and conclude on Labor Day.

The NHTSA Countermeasures that Work review for this effort is discussed immediately above.

Subgrant	Applicant Subgrantee	Source Share
15.HS.K8.010	AL Dept of Commerce	\$400,000.00

Total FY 2015 Allotment = \$400,000.00 -Funding Source – Section 410 (K8PM)

#### **State Traffic Safety Trust Fund Planned Activities:**

#### **Alabama Yellow Dot Program**

This grant will provide funding for the continued implementation of the Yellow Dot Program for Senior and At Risk Drivers. The Northeast Alabama Highway Safety Office will take the lead role in the implementation of the Yellow Dot Program throughout all regions of the State of Alabama and will coordinate the forming and training of coalitions of Law Enforcement, Fire, EMS and Senior Groups.

The "Yellow Dot" program provides detailed medical information that can be crucial following a crash. Participants of the program receive a "Yellow Dot" decal, a "Yellow Dot" folder and

an information form with the participant's name, an identifying photo, emergency contact information, personal physicians' information, medical conditions, recent surgeries, allergies and medications being used. A "Yellow Dot" decal on the driver's side rear window of a vehicle alerts first responders to check in the glove compartment for the corresponding "Yellow Dot" folder. Having this information following a crash helps first responders positively identify the person, get in touch with family or emergency contacts and ensures that the person's current medications and pre-existing medical conditions are considered when treatment is administered for injuries. Because of the novelty of this program it has not been considered in *NHTSA Countermeasures that Work;* however, we feel that it will be added as soon as its many benefits are established.

SubgrantApplicant SubgranteeSource Share15.TF.ST.001Etowah Co Commission\$30,000.00

Total FY 2015 Allotment = \$30,000.00 -Funding Source – State Traffic Safety Trust Fund (TFST)

#### **Support the Center for Advanced Public Safety (CAPS):**

CAPS at the University of Alabama develops and maintains the CARE program which is the software used for all traffic crash and safety analysis done in Alabama. In exchange for the support that CAPS receives from ADECA LETS, CAPS provides ADECA LETS with crash and traffic safety data throughout the year. This includes preparing reports and grant applications as required and providing answers for data requests from across the state that come up throughout the year. CAPS also provides technical support, training, and maintenance on CAPS software products like eCite, eCrash, eForms, MapClick and others. CAPS has developed basically a grant accounting system for CTSPs and their reporting agencies called CORE to eliminate the paper forms the CTSPs and law enforcement agencies were using to report STEP enforcement grant expenditures. CAPS will work to get this deployed to all CTSPs in FY15 after the pilot program is successful. CAPS will also continue to update and maintain the SafeHomeAlabama.gov web portal. Its goal is to be totally comprehensive in keeping the entire traffic safety community aware of the most recent developments in traffic safety both in Alabama and nationally.

Traffic Safety Information Systems are specifically excluded from *NHTSA Countermeasures* that Work. However, it is well known and commonly accepted that without crash, citation, EMS, drivers' license, registration, and many other types of traffic records data, it would be impossible to operate and manage an effective traffic safety program. This is true down to the project level for all of the countermeasures that will be implemented in FY 2015, and studies have been conducted and will continue to be updated continually and pushed out on the www.safehomealabama.gov web site.

SubgrantApplicant SubgranteeSource Share15.TF.TR.001Univ of AL/Center for Advanced Public Safety\$857,064.20

Total FY 2015 Allotment = \$857,064.20 -Funding Source – State Traffic Safety Trust Fund (TFTR)

#### **Attitude and Awareness Survey**

AOHS will use the NHTSA/GHSA survey questions to track driver attitudes and awareness concerning impaired driving, seat belt use, and speeding issues. This survey will be conducted by phone during the month of July. The attitude and awareness survey will be funded by the State Traffic Safety Trust Fund.

#### **Impaired Driving**

- A-1: In the past 60 days, how many times have you driven a motor vehicle within 2 hours after drinking alcoholic beverages?
- A-2: In the past 30 days, have you read, seen or heard anything about alcohol impaired driving (or drunk driving) enforcement by police?
- A-3: What do you think the chances are of someone getting arrested if they drive after drinking?

#### **Seat Belts**

- B-1: How often do you use seat belts when you drive or ride in a car, van, sport utility vehicle or pick up?
- B-2: In the past 60 days, have you read, seen or heard anything about seat belt law enforcement by police?
- B-3: What do you think the chances are of getting a ticket if you don't wear your seat belt?

#### **Speeding**

- S-1a: On a local road with a speed limit of 30 mph, how often do you drive faster than 35 mph most of the time, half the time, rarely, never?
- S-1b: On a road with a speed limit of 65 mph, how often do you drive faster than 70 mph most of the time, half the time, rarely, never?
- S-2: In the past 30 days, have you read, seen or heard anything about speed enforcement by police?
- S-3: What do you think the chances are of getting a ticket if you drive over the speed limit?

### OCCUPANT PROTECTION PLAN FOR STATE OF ALABAMA FY 2015 – SECTION 405b

### **Executive Summary**

This document presents the strategic plan for all restraint programs conducted in Alabama with special emphasis on those that are proposed to be funded under the MAP-21 405b Occupant Protection Grants section for FY 2015. The Alabama Office of Highway Safety (AOHS) has developed a comprehensive highway safety program on an annualized basis since the early 1970s for the purpose of reduction in traffic crashes, fatalities, and injuries on public roads. As demonstrated by the annually documented Highway Safety Plan (HSP), this program has been evidence driven and reflective of the particular issues within the State. These HSPs were developed to assure that traffic safety resources were used in an optimal manner to bring about the maximum traffic safety benefits to the roadway users of the State, and they have been improved annually to that effect.

The purpose of the 405B program is to "encourage States to adopt and implement occupant protection laws and programs to reduce highway deaths and injuries from individuals riding unrestrained in motor vehicles." Since Alabama's 2013 restraint survey indicated that their usage rate was 97.3% for front seat occupants Alabama now qualifies as a high seat belt use state since our usage rate was above 90%.

MAP-21 provides that a high seat belt use rate State may qualify for funds by submitting an occupant protection plan and meeting three programmatic criteria which are participating in the Click It or Ticket campaign, having child restraint inspection stations and having child passenger safety technicians. Alabama meets all of these requirements.

Problem Identification. The AOHS conducts ongoing problem identifications for all traffic safety issues, including occupant protection. Special problem identification studies are performed when any new issues arise, or for all countermeasures for which discretionary funds are expended. The analytical procedures employed for occupant protection are presented in the Problem Identification section of this document. The basic goal of this evidenced based analytical process is to evaluate the overall countermeasure strategy, and once that is resolved, to use the analyses to fine-tune the particular countermeasures that are implemented. This includes all of the countermeasures that are presented in this plan as well as the particular tactics to be applied in their implementations. From the highest strategic point of view, Table 1 in the Problem Identification Section presents a comparison of the general weighting of each of the major issues that AOHS has been charged to address. The extract from Table 1 on the following page gives insight into the basic prioritization that was performed in resolving the overall state countermeasure strategies. The various categories are not mutually exclusive, and the detailed explanation for each crash type is given in the State's HSP.

Clearly, to bring about the maximum improvement in traffic safety, available resources must be allocated to general areas and to particular countermeasures where they will have the greatest chances of reducing fatalities and severe injuries. Table 1 demonstrates the highest potential for countermeasures is in the crash type where there were restraint deficiencies. Both the potential for reduction and the effectiveness in the countermeasures applied to a given category determine the optimal countermeasures to apply.

#### **Extract from Table 1**

Crash Type (Causal Driver)	Fatal	Fatal	Injury	Injury	PDO		
	Number	%	Number	%	No.	PDO %	Total
1. Restraint Deficient*	365	3.92%	3,607	38.78%	5,328	57.29%	9,300
2. Impaired Driving	184	2.63%	2,292	32.81%	4,509	64.55%	6,985
3. Speeding	160	4.18%	1,494	39.04%	2,173	56.78%	3,827
4. Obstacle Removal	124	2.05%	2,114	34.90%	3,819	63.05%	6,057
5. Mature – Age > 64	83	0.66%	2,776	22.13%	9,683	77.20%	12,542
6. License Status Deficiency	90	1.42%	1,751	27.65%	4,491	70.93%	6,332
7. Youth – Age 16-20	80	0.39%	4,478	21.72%	16,062	77.90%	20,620
8. Motorcycle	71	4.49%	1,092	68.98%	420	26.53%	1,583
9. Ped., Bicycle, School Bus	66	4.39%	895	59.55%	542	36.06%	1,503
10. Pedestrian	57	7.89%	602	83.38%	63	8.73%	722

Table 1, which is further detailed and explained in the Problem Identification Section below, is at the highest level of crash data analysis. Two terms are introduced in this section to facilitate the discussion:

- Restraint-Deficient Crashes (RDC) any crash in which one more of the occupants of any involved vehicle (including the driver(s)) were not properly restrained; and
- Child Restraint-Deficient Crashes (CRDC) any crash in which one or more children who are subject to child restraint laws were not properly restrained, independent of the restraint characteristics of the other occupants.

This section of the plan will illustrate the two types of problem identifications that were performed for restraint deficiencies:

- By locations with the highest RDC and CRDC hotspots (detailed in Attachment A); and
- General information mining of the crash records to determine over-represented characteristics of RDC and CRDC crashes in order to guide the selective enforcement and all other countermeasures applied (detailed in Attachment B).

The Problem Identification Section given in this Appendix is itself a summary of these analyses, which will not be repeated here. The full details and results of the two analyses are given in Attachments A and B, respectively, to this Appendix.

Legislation. The Legislation Section presents a review of Alabama's current restraint laws and those proposed for future enactment as well as the continued efforts to educate law makers as to the need for continued improvement in the current laws. A number of proposed safety legislation bills were endorsed by the State's Strategic Highway Safety Plan Committee (SHSP, Page 41). The SHSP proposes a "primary seat belt law for all passengers" that would address this issue for adult passengers in the back seat. Furthermore, the SHSP goes on to address the issue of passengers in the rear of pickups. This provision would require that passengers would only be allowed to ride in areas equipped with seat belts.

While the State's child restraint law is quite comprehensive, legislation has been proposed to adjust the booster seat requirement for children so as to require each occupant who is eight years of age and under, weighs less than 80 pounds and is less than four feet, nine inches in height to be secured in an age-appropriate child restraint. This measure would address discrepancies concerning the proper age and weight for eliminating the use of a booster seat. Furthermore, the State's SHSP intends to address the Child Restraint Law to ensure that there are no gaps in restraint laws to ensure that all occupants of a motor vehicle under the age of sixteen are covered by specific laws. These suggested provisions do not include a provision regarding an age requirement for riding as passenger in the front seat. Many states include such stipulations that make this a primary offense if a child under the age requirement is sitting in the front seat, with or without safety restraints. A complete list of current traffic safety legislation under consideration is given on:

http://www.safehomealabama.gov/GovAgencies/ALLegislature(SSCC).aspx

Data Driven Enforcement Programs (DDEP). This section demonstrates how the problem identification efforts translate themselves into activities with the goal of being the most effective use of restraint dedicated resources statewide. It details three major enforcement activities:

- General data driven enforcement programs (DDEP) that will take place throughout the year;
- Click It Or Ticket (CIOT), which is part of the highly focused National effort; and
- Child Restraint Data Driven Enforcement Program that will supplement the Occupant Protection of Children Program.

An analysis of the citations given in the CY2010 through CY2012 time frame indicated that well over 96% of the state was covered by the State's restraint enforcement program. There is no reason to believe that there has been any shift since that time, and these estimates are still valid for FY 2015.

Occupant Protection for Children Program. This part of the occupant restraint program will continue to be administered by the State Child Passenger Safety (CPS) Coordinator. This will include training for first time technicians, recertification, and renewals for trained technicians. Inspection stations will be available to the public. The technicians will ensure the child passenger restraints are installed correctly. The plan is to further reach out to underserved communities and technicians and to provide the services of additional trained CPS professionals in all communities. The goal for the CPS program is to develop trained CPS professionals in as many communities over the state as possible. The ultimate goal is to create statewide community inspection stations where parents and other caregivers can obtain proper education about restraining their children for safety, while at the same time providing a supporting public information and education program that informs and motivates the public in proper child restraint use.

Data and Program Evaluation. This section provides a review of the use of data and analysis for overall restraint program improvement. It is subdivided according to the follow categories:

- Observational survey of occupant protection and child restraint use. Pre and post surveys for seat belt programs will be conducted using the 2013 NHTSA-compliant seat belt survey design. A telephone survey will be used to evaluate the effectiveness of the paid media related to the CIOT campaign.
- Occupant protection and child restraint citation analysis. These are performed to assure that the citations issued are consistent with the locations and other demographics are consistent with those found to be most advantageous by the problem identification efforts.
- Continued problem identification and evaluation. The efforts exemplified in the Problem Identification section will be repeated, extended and updated as needed to assure the most effective distribution of resources that can be obtained from evidence-base and data driven decisions. In addition, several evaluation studies are described to determine program success and to improve the program in future years.

It would be impossible to accomplish all of the plans set forth in this document without statewide cooperation throughout the traffic safety community. To accomplish this, AOHS has forged key partnerships with the following entities, which will be described in detail in the context of the various programs:

- Community Traffic Safety Program/Law Enforcement Liaison (CTSP/LEL) Coordinators,
- The University of Alabama Center for Advanced Public Safety (UA-CAPS),
- The Alabama Department of Public Safety,
- Local law enforcement,
- Full range of Media,
- Alabama Department of Public Health,
- Traffic Records Coordinating Committee, and
- State and local District Attorneys.

Specific countermeasures within each of these categories given above were checked for their effectiveness estimates from the NHTSA-recommended document: *Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices, Seventh Edition, 2013*; which can be viewed at:

http://www.safehomealabama.gov/Portals/0/PDF/Countemeaures%20that%20Work%20811727.pdf [This document will be henceforth referenced as "NHTSA Countermeasures that Work."]

#### Introduction

The Alabama Office of Highway Safety (AOHS) has developed a comprehensive highway safety program on an annualized basis since the early 1970s for the purpose of reduction in traffic crashes, fatalities, and injuries on public roads. As demonstrated by the annually documented Highway Safety Plan (HSP), this program has been data driven and reflective of identified issues within the State. These plans were developed to assure that traffic safety resources were used in an optimal manner to bring about the maximum traffic safety benefits to the roadway users of the State. As will be shown in the Problem Identification section below, occupant restraints surfaced as the most effective approach to crash injury severity reduction.

AOHS personnel have served on the steering committee for the development of the Alabama Strategic Highway Safety Plan (SHSP), and they are presently active in its implementation phase. The AOHS Highway Safety Plan has been incorporated into the Alabama SHSP. The major goals of both the HSP and the SHSP are to bring about a more effective statewide allocation of traffic safety resources, including funding and equipment, but most importantly, personnel.

It will be impossible to accomplish all of the plans set forth in this document without statewide cooperation throughout the traffic safety community. To accomplish this, AOHS has forged key partnerships that are briefly described below:

- Community Traffic Safety Program/Law Enforcement Liaison (CTSP/LEL) Coordinators, who
  live and have offices within their respective regions, and who build ongoing relationships with
  local and state level law enforcement who serve that region. In addition, they build relationships with all other traffic safety stakeholders in the local communities assuring coordination
  among the occupant protection efforts.
- The University of Alabama Center for Advanced Public Safety (UA-CAPS) provides the information foundation for data-driven decisions, including the HSP document; data sources include crash, citation, EMS runs and other databases to enable the AOHS and the CTSP/LEL Coordinators and LELs to be assured that their traffic safety resources are being allocated most effectively.
- The Alabama Department of Public Safety officers are the pilot implementers of systems such as eCrash, eCite and other innovations, providing a much more efficient system of law enforcement as well as a model for local acceptance of technology and the enforcement of occupant protection laws.
- Local law enforcement, including city police and county sheriffs; these partners are essential to all statewide and local occupant protection enforcement programs.
- Media provides continued support through their efforts to inform the public of all data driven enforcement and other occupant protection projects.
- Alabama Department of Public Health provides data and subject matter knowledge for EMSIS
  and trauma data integration and use, and they have been instrumental in the past in performing
  restraint-use surveys.
- Traffic Records Coordinating Committee a broad based committee that represents all developers and users of traffic safety information systems, including those involved with occupant protection.
- State and local District Attorneys involved to increase their level of readiness and proficiency for the effective prosecution of traffic related cases.

The HSP has reflected that seat belt and child safety seat usage can only be increased by a combination of legislation and use requirements, enforcement, communication, education, and other incentive strategies. This document will begin by summarizing the results of an intensive problem identification that has been performed and updated on a regular basis to guide the overall occupant protection strategies. It will go on to describe the occupant protection program management, followed by a section on each of the planned programs. A final section is devoted to occupant protection data and program evaluation.

# **Problem Identification**

## Procedure for the Problem Identification

Table 1 provides the context for the problem identification results summarized in this section. It is sorted so that the crash type category with the highest number of fatal crashes (fatalities in the case of occupant restraints) is listed at the top, descending to the crash type category with the lowest number of fatal crashes listed last.

Table 1. Summary of Crash Severity by Crash Type – CY 2013 Alabama Data

Crash Type (Causal Driver)	Fatal Number	Fatal %	Injury Number	Injury %	PDO No.	PDO %	Total
1. Restraint Deficient*	366	3.53%	4,075	39.35%	5,916	57.12%	10,357
2. Impaired Driving	186	2.67%	2,661	38.19%	4,120	59.14%	6,967
3. Speeding	176	4.60%	1,779	46.49%	1,872	48.92%	3,827
4. Obstacle Removal	123	2.03%	2,102	34.75%	3,824	63.22%	6,049
5. Mature $-$ Age $>$ 64	103	0.90%	2,477	21.60%	8,887	77.50%	11,467
6. License Status Deficiency	97	1.53%	2,048	32.36%	4,183	66.10%	6,324
7. Youth – Age 16-20	91	0.43%	4,790	22.51%	16,400	77.06%	21,281
8. Motorcycle	89	4.65%	1,289	67.42%	534	27.93%	1,912
9. Ped., Bicycle, School Bus	88	4.36%	1,004	49.70%	928	45.94%	2,020
10. Pedestrian	78	9.01%	647	74.71%	141	16.28%	866
11. Fail to Conform to S/Y Sign	32	0.52%	1,663	26.80%	4,510	72.68%	6,205
12. Utility Pole	30	1.32%	831	36.53%	1,414	62.15%	2,275
13. Non-pickup Truck Involved	30	0.68%	712	16.20%	3,653	83.12%	4,395
14. Construction Zone	23	1.03%	477	21.37%	1,732	77.60%	2,232
15. Roadway Defects – All	21	0.61%	807	23.56%	2,598	75.83%	3,426
16. Vehicle Defects – All	17	1.14%	350	23.46%	1,125	75.40%	1,492
17. Vision Obscured – Env.	13	1.21%	271	25.28%	788	73.51%	1,072
18. Fail to Conform to Signal	12	0.27%	1,306	29.49%	3,110	70.23%	4,428
19. Bicycle	9	1.46%	270	43.76%	338	54.78%	617
20. Child Restraint Deficient*	4	0.18%	347	15.22%	1,929	84.61%	2,280
21. Railroad Trains	1	0.83%	35	28.93%	85	70.25%	121
22. School Bus	1	0.18%	103	18.39%	456	81.43%	560

<sup>\*</sup> The Fatal, Injury and PDO numbers for the "Restraint Deficient" and "Child Restraint Deficient" are the total number of persons killed, injured and uninjured, respectively. This is different from the other categories in that they list the number of crashes in which such an injury severity was incurred.

The categories given in Table 1 are not mutually exclusive (e.g., you could have unrestrained passengers in an alcohol/drug crash that involved speeding). However, they still tend to demonstrate the relative criticality of each of the particular categories. Clearly the failure to use occupant protective devices is one of the most critical factors in fatality causation. For this reason the State has put considerable

emphasis on occupant protection, and extensive analyses have been performed in an effort to determine the best approach to increasing restraint use.

Given that occupant restraints are so important to fatality and injury reduction, the next step in the problem identification process is to determine the who, what, where, when and why of crashes involving non-restrained occupants, and thus to determine the best approaches for countermeasure implementation (i.e., the how). This starts by determining those types of crashes that were going to be targeted for occupant protection countermeasure implementation.

For the data driven enforcement program, specific locations were identified where there were concentrations of crashes involving unrestrained occupants. Once the hotspots were defined and the locations were found using the Critical Analysis Reporting Environment (CARE) software, the Community Traffic Safety Program/Law Enforcement Liaison (CTSP/LEL) Coordinators across the state were given information on the hotspot locations for the state as a whole. They were also provided detailed hotspot reports specific to their region to assist them in their focused efforts.

Using the reports and maps developed for each region, the CTSP/LEL Coordinators will develop a plan, including the time schedule and work assignments, for their region that focuses on the hotspot locations. The goals set on a regional basis will be in line with the goals and strategies laid out in that section.

#### **Problem Identification Results**

# **Data Driven Enforcement Program (DDEP) Hotspot Analysis**

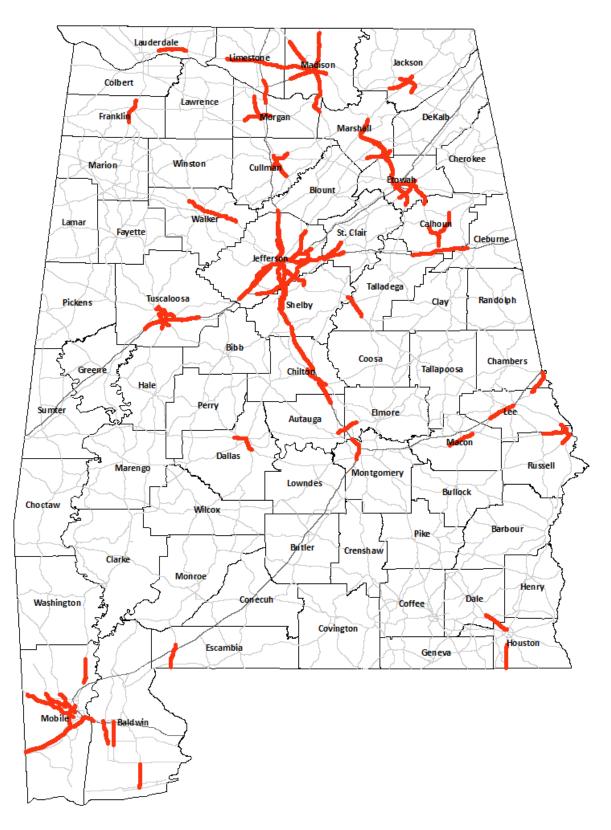
For the FY 2015 analysis, data from three prior years (CY 2011-2013) were used to find what we will call "restraint-deficient hotspots" or RD hotspots. RD includes both adult and child restraint deficiencies. Child Restraint Deficient crashes (i.e., crashes in which one or more children are not restrained independently of whether the adults are restrained) will be indicated by CRD. The CRD hotspots were based on one year of data (CY 2013). The following table gives the numbers of hotspots found according to the various location types and criteria.

<b>Hotspot Target</b>	<b>Location Type</b>	Number of Hotspots	Criteria
General	Mileposted	87	>=20 RD Crashes in 10 Miles
General	Intersection	73	>=4 RD Crashes at Intersection
General	Segment	67	>=4 RD Crashes on Segment
Child Restraint	Mileposted	71	>=4 CRD Crashes in 10 Miles
Child Restraint	Intersection	80	>=2 CRD Crashes at Intersection
Child Restraint	Segment	24	>=2 CRD Crashes on Segment
TOTAL		402	

These restraint-deficient hotspots were defined, listed and mapped for ease of identification by the CTSP/LEL Coordinators and their respective local police agencies. The plans for each of the regional coordinators for the coming year will focus on these hotspot areas, as this part of their funding will be restricted to working restraint-deficient hotspot locations defined for each region. The details for this plan are given in Attachment A.

The general strategy is to require the CTSP/LEL Coordinators to focus their plans primarily on restraint-deficient hotspot locations identified for their respective regions. By doing this they will be focusing on the most critical problem areas and the biggest killers. Display 1 below shows a map of the most critical restraint-deficient segments on the mileposted roadways of the state. There were 87 segments found of 10 miles in length that had 20 or more restraint-deficient crashes.

Table 2 illustrates the organization of these hotspots by county and region for implementation by the CTSP/LELs, with a corresponding column for crashes by severity. Table 3 presents a summary of these locations for each of the regions, with an indication of the number of crashes by severity for each region. It is important to recognize that the hotspot analyses are intended to target those locations that have the highest potential for restraint-deficient crash improvement.



Display 1. Mileposted Unrestrained Hotspot Map

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Table 2. Mileposted Hotspots by County within Region

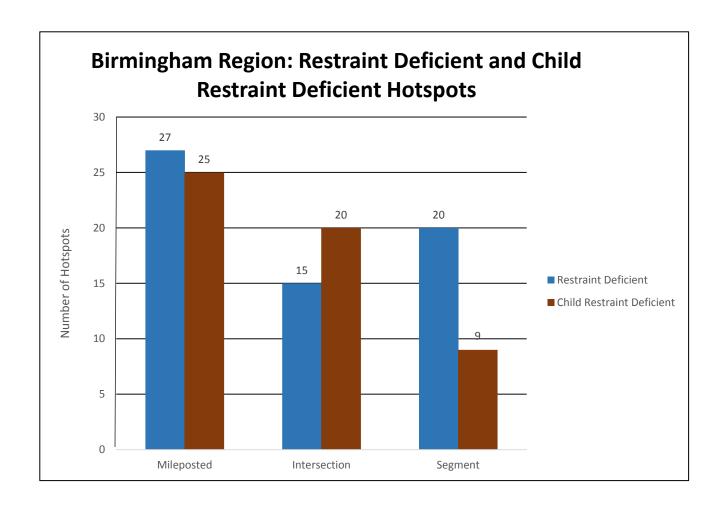
Region	County	Hotspots	Fatal Crashes	Injury Crashes	Total Crashes
	TOTAL	87	1135	10352	20032
Birmingham		27	209	1904	3834
	Bibb	0	11	43	79
	Blount	0	17	158	288
	Chilton	4	24	171	315
	Jefferson	15	74	825	1806
	Saint Clair	2	16	236	462
	Shelby	4	28	167	321
	Walker	2	39	304	563
Central		6	124	1064	2043
	Autauga	0	15	79	164
	Bullock	0	7	29	47
	Elmore	1	15	176	310
	Lee	1	21	261	576
	Lowndes	0	10	35	60
	Macon	1	8	76	123
	Montgomery	1	36	299	580
	Russell	2	12	109	183
East		6	105	951	1818
Last	Calhoun	3	15	351	657
	Chambers	1	19	77	182
	Clay	0	4	29	54
	Cleburne	0	6	49	92
	Coosa	0	5	34	64
	Randolph	0	15	64	128
	Talladega	2	32	234	433
	_	0	9	113	208
	Tallapoosa	U	9	113	208
Mobile		13	143	1299	2605
	Baldwin	3	42	363	720
	Escambia	1	21	136	284
	Mobile	9	80	800	1601
Nouth Foot		17	140	1564	2020
North East	Chanalas	17	146	1564	2939
	Cherokee	0	14	92	156
	DeKalb	0	19	165	282
	Etowah	5	26	303	568
	Jackson	2	15	183	339
	Madison	6	44	558	1070
	Marshall	4	28	263	524

North		10	139	1302	2590
	Colbert	0	13	116	255
	Cullman	2	22	247	529
	Franklin	1	9	76	171
	Lauderdale	1	17	190	379
	Lawrence	0	12	70	131
	Limestone	2	23	179	350
	Marion	0	11	102	159
	Morgan	4	24	250	500
	Winston	0	8	72	116
South East		2	89	954	1760
	Barbour	0	9	49	85
	Butler	0	10	99	182
	Coffee	0	11	121	235
	Covington	0	12	122	248
	Crenshaw	0	6	44	87
	Dale	0	12	81	146
	Geneva	0	2	64	124
	Henry	0	2	33	59
	Houston	2	16	233	402
	Pike	0	9	108	192
South West		1	95	569	1046
	Choctaw	0	7	41	82
	Clarke	0	13	97	178
	Conecuh	0	11	90	162
	Dallas	1	20	107	212
	Marengo	0	11	47	95
	Monroe	0	9	76	133
	Washington	0	11	55	93
	Wilcox	0	13	56	91
West		5	85	745	1397
	Fayette	0	3	40	70
	Greene	0	8	38	63
	Hale	0	8	53	88
	Lamar	0	4	41	66
	Perry	0	9	25	43
	, Pickens	0	12	32	66
	Sumter	0	8	51	85
	Tuscaloosa	5	33	465	916

Table 3. Summary of Hotspots by Crash and Region

			Fatal		Injury		Total	
Region	Hotspots	Regional	Crashes	Regional	Crashes	Regional	Crashes	Regional
Birmingham	27	31.0%	209	18.4%	1904	18.4%	3834	19.1%
North East	17	19.5%	146	12.9%	1564	15.1%	2939	14.7%
North	10	11.5%	139	12.2%	1302	12.6%	2590	12.9%
Mobile	13	14.9%	143	12.6%	1299	12.5%	2605	13.0%
East	6	6.9%	105	9.3%	951	9.2%	1818	9.1%
Central	6	6.9%	124	10.9%	1064	10.3%	2043	10.2%
South East	2	2.3%	89	7.8%	954	9.2%	1760	8.8%
South West	1	1.1%	95	8.4%	569	5.5%	1046	5.2%
West	5	5.7%	85	7.5%	745	7.2%	1397	7.0%
TOTAL	87		1135		10352		20032	

Analyses similar to those above were performed for non-mileposted roadways to obtain the non-mileposted intersections and segments that had the largest number of restraint deficient crashes in the state.



Display 2. Number of Hotspots Found in the Birmingham Region by Type

Display 2 is a graphic representation of the various hotspot types compared by the roadway type and also by the restraint deficiency type for the Birmingham Region (an example of one of nine regions). The entire set of hotspot analyses were repeated for Child Restraint Deficient crashes. Officers will use these hotspot specifications as a guide in targeting the general locations for restraint deficiencies. All of these analyses were subdivided by region so that the local CTSP/LEL Coordinators could effectively administer their respective programs.

Details of the specific locations found during the problem identification analyses are given in Attachment A. The analytical arrangement is as follows:

- Region
  - o All restrain deficiencies
    - Mileposted
    - Intersections
    - Non-mileposted segments
  - o Child restraint deficiencies
    - Mileposted
    - Intersections
    - Non-mileposted segments

## Other Problem Identification Analysis Results

A detailed problem identification to determine the "who, what, when, where and why" of restraint-deficient crashes is given in Attachment B. This information was forwarded to the CTSP/LEL Coordinators so that they could provide guidance in the data driven enforcement and public information aspects of the various projects. The following summarizes these results:

# Geographical Factors

- o Counties with the greatest over-representation factors for unrestrained driver crashes include Walker, Talladega, Escambia and Jackson.
- o The number of crashes involving drivers who use no restraints is greatly overrepresented in rural areas in comparison to the urban areas. The odds ratio for rural areas is well over twice what would be expected if rural and urban restraint use were the same.
- The most over-represented (worse) areas are the rural county areas in Walker, Mobile, Cullman, and Escambia.
- o The most under-represented (best) cities are Montgomery, Birmingham, Mobile, and Tuscaloosa.
- Crash incidents with no driver restraints being used are greatly overrepresented on county highways, with 2.5 times the expected number of crashes. County was the only roadway classification that was over-represented.
- o In the analysis of locale, crashes involving no restraints are most commonly overrepresented in open country areas.

#### Time Factors

- o The weekend days are the most over-represented days of the week for crashes in which drivers did not use restraints. This correlates highly with impaired driving crashes.
- o In the evaluation of time of day, over-representation peaks during the 12 PM to 5 AM period and then tapers off, falling back below crashes involving causal drivers who use restraints in the 7 AM to 7 PM time periods. Additional cross-tabulations were performed for specific target groups (see below).

#### • Crash Causal Factors

- The over-representation factors indicate that certain risk-taking behaviors are often associated with crashes in which restraints are not used, including DUI, over the speed limit, running off the road, aggressive operation, and fatigue/sleep.
- Crashes attributed to drivers who used no restraints are greatly overrepresented in vehicles with model years 1960-1989, which could be attributed to the lack of standard safety restraints in these older model vehicles, or perhaps the removal of these safety devices over time.
- o The speed at impact for crashes for this type of crash is overrepresented in all of the categories above 40 MPH, indicating that these crashes consistently occur at higher speeds than crashes in which restraints were used by the causal driver.

## Severity Factors

 Fatal, incapacitating, and non-incapacitating injuries are all overrepresented in crashes where drivers were not restrained; this analysis quantified the benefits of the restraint use.

- o Fatal injuries in crashes where no restraints are used are over-represented on interstate and state roadways. "Possible Injuries" were over-represented on municipal highways.
- o Analysis of injuries shows that the proportion of injuries (including fatalities) in unrestrained driver crashes is overrepresented from 1 to 6 injuries per crash. Crashes without restraints are clearly causing much more severe injuries.
- The proportion of fatalities in general as well as the proportion of multiple fatality crashes is dramatically overrepresented in crashes where the causal driver is unrestrained.
- o As expected, ejection of the unrestrained driver is overrepresented, indicating one major cause for many fatalities in which safety equipment is not properly utilized.
- All types of injuries, including fatalities, are consistently overrepresented in crashes where no restraints were used.

## • Driver Demographics

- Analysis of individual driver ages indicates that crashes involving no restraints are overrepresented in drivers in and immediately above the teen driver classification (age range 16-35).
- o Male drivers account for a majority of crashes in which restraints are not used, and they are overrepresented by a factor of 1.29.
- Analysis of Time of Day by Day of Week. Crosstab analyses of time of day by day of the week of crashes in which restraints were not used enables officers to determine target times and days to enforce restraint laws so that this severe crashes may be prevented. Three analyses were performed and compared for three target groups: rural crashes, crashes caused by drivers 16-20, and crashes caused by drivers 21-25. While the rural and 21-25 crosstabs were expected to correlate very heavily with impaired driving, it was found that the 16-20 year old causal drivers were not very much different. It seems clear that while they might not be involved with alcohol or drugs, they are out and engaged in risk-taking practices at the same time as the impaired driving by their older counterparts, they further compounding the problem at these times. The 16-20 would also reasonable be expected to be over-represented in the week-day after school hours in the proximity of their schools and after-school activities.

## **Focus Area and Age Groups**

The problem identification clearly identified rural areas and the 16-25 year old age group for more intensive selective enforcement. Some preliminary analyses to identify specific 10-mile locations for these specific targets found one of two things: either the locations found were highly over-lapping the locations specified above in the general restraint deficiency locations, or else the number of crashes that qualified in the focus group was well below that for the locations already established to have the highest potential for improvement. Therefore, the decision was made to train the officers to be particularly sensitive to these focus areas and age groups rather than to direct them specifically to target locations that were not already identified above.

In particular, the following provided guidance to the training of the officers who would be involved in the selective enforcement efforts:

#### Rural Areas

- Within the segments specified, pay special attention to the rural areas; for example, along a 10-mile section there could be both rural and urban areas, in which case the portion of the segment that was in the open country should be worked as opposed to in the urban area.
- O Concentrate especially in the rural areas where there might be a relatively large traffic flow due to the proximity of an urban area.
- o If county roads were not specified as high restraint deficient areas, include some county roads as part of the normal enforcement routing cycle.
- o When county roads are specified, give them a higher priority in enforcement routing.
- o Give special attention to older vehicles.
- o Combine restraint deficiency enforcement with DUI enforcement since the most critical times for both are late Friday night, early Saturday morning (until 6 AM), late Saturday night (after 6 PM), and early Sunday morning (until 4 AM).
- o Morning and afternoon rush hours would also be targeted times in rural areas, although the per-vehicle incidence will only be about half of that which occurs during the night-time hours.

## • Age Group 16-20

- o Give special attention to male drivers.
- o Give special attention to drivers that may be engaged in marginal risk-taking behavior.
- o Concentrate on school-proximal areas in the 7 AM to 8 AM time frame, and in the afternoon from 2 PM to 6 PM.
- o Concentrate on high-school type night spots on Friday-Saturday night and Saturday-Sunday night in the 9 PM until 2 AM time frame.

## • Age Group 21-25

- o Give special attention to male drivers.
- o Concentrate on areas where there is college or university "night-life."
- o Combine restraint deficiency enforcement with DUI enforcement since the most critical times for both are late Friday night, early Saturday morning (until 6 AM), late Saturday night (after 6 PM), and early Sunday morning (until 4 AM).
- o Concentrate on the afternoon protracted rush hour (3 PM to 7 PM) as opposed to the morning rush hours.

# **Program Management**

The Alabama Office of Highway Safety (AOHS), which is the state highway safety office, provides centralized leadership, planning, implementation, and coordination on all State occupant restraint programs. As demonstrated by the problem identification summary above, and by the data and program evaluation efforts in that section below, AOHS monitors existing programs, and modifies them based on their progress and success. New programs are developed as they are shown to have a high potential for success.

AOHS will administer the program with the support of the CTSP/LEL Coordinators and the other partner state agencies that will be involved. As part of this effort, AOHS will do the following:

- Develop a vision and mission statement and monitor the program to assure that it stays consistent with these intended ideals:
- Develop goals consistent with the vision/mission statement from which measurable objectives are established,
- Evaluate the effectiveness of the program against these objectives;
- With guidance from NHTSA, develop strategies that will accomplish the established goals, among them to include:
  - o Training and technical assistance to other State and local agencies as well as any private advocacy groups that are involved with occupant protection;
  - o Establish a broad base of support for the various programs;
  - Establish and convene various committees or other work teams that will reflect the demographic composition of those most in need of training and assistance;
  - Fully involve the CTSP/LEL Coordinators in continuing to integrate occupant protection programs into their ongoing community/corridor traffic safety and other injury prevention programs.

This section will continue by presenting the Vision and Mission Statements along with the overall goals and strategies for implementing improved occupant restraint programs.

#### Vision and Mission Statements

AOHS has established the following overall vision statement for all of its programs:

To create the safest possible surface transportation system by means of a cooperative effort that involves all organizations and individuals within the state who have traffic safety interests.

This vision is measurable in terms of crash, injury and fatality rates (per million vehicle mile). More specifically, the vision statement for the occupant restraint programs is as follows:

To create a culture change in the percentage of the motoring public who are not using occupant restraints that will motivate them to see the lost benefits and take those actions to assure that they and their fellow passengers are properly restrained.

With regard to occupant protection, AOHS has developed the following Mission Statement:

Coordinate and build cooperation among all involved within the traffic safety community to effectively conduct a broad range of the most effective programs possible to significantly and permanently increase restraint use within the State.

This mission statement recognizes that the following ideals that will need to become part of the culture of the general public, starting with all members of the traffic safety community within the State:

- Saving Lives. Preserve the lives of all users of the Alabama surface transportation system by minimizing the frequency and severity of all potentially fatal crashes, regardless of the countermeasure type or the organization that has primary responsibility for its implementation.
- *Reduction in Severity*. Reduce the suffering results from injuries sustained in motor vehicle crashes.
- Focus on occupant restraints. When considering crashes in Alabama and the damage that they cause in terms of human loss and suffering, increased injury severity resulting from a failure to use occupant restraints must be recognized as one of the most critical issues. All organizations and individuals in the area of traffic safety must be committed to improvement in this area. Enforcement plans developed by the state's safety coordinators will reflect this focus, and data driven enforcement funding will be concentrated on hotspot crash locations that have been identified as problems. In addition, all of the strategies discussed below will become part of the overall safety culture.
- *Teamwork and Diversity*. Recognize that these ideals will only be attained through the dedication to cooperative efforts among a wide range of federal, state and local organizations as well as private advocate groups. All highway users and user groups must be adequately represented, and all sub-disciplines will be given the opportunity to provide input and information to improve the overall program.

By focusing efforts on increased restraint use, lives have been saved in the past and will be saved in the future. The severity increase in each crash involving unrestrained passengers is caused by the *choice* not to use restraints. By changing driver and passenger behaviors in this regard, a measurable increase in restraint use should be forthcoming as well as a measurable decrease in crash severity.

# **Goals and Strategies**

Goals have been established for the overall occupant restraint program based measures of improvements that have been obtained in the past as well as the anticipated potential benefits from the more comprehensive proposed programs. Consistent with the State's dedication to the ultimate goal of zero deaths, and the Toward Zero Deaths (TZD) approach, it is our long term goal to have all passengers in the state restrained, and thus to get the maximum benefit in terms of reduced crash severity that occupant restraints offer.

Because it is impossible to identify the cause of fatalities saved, the overall strategic program goal for all programs in the state will be referenced, as follows:

To reduce the three-year average annual number of fatalities by 2% per year over the next 25 years (i.e., using 2010 as a base year, through 2035).

Embracing the concept of Toward Zero Deaths (TZD), the Alabama Strategic Highway Safety Plan set a strategic goal of reducing fatalities by 50% over the next 25 years. Based on the 2011 fatality count of 894, this 2% (of the base year) per year reduction would average about 18 fatalities per year. While this might seem a modest number, if maintained as the average over a 25 year period it will save more than 5,600 lives over that time period. This will be a major accomplishment in continuing the downward trend that was established in the 2007-2011 time frame, which reversed the alarming increase in fatalities that preceded 2007. Also, if the 2% of the base year is viewed as a percentage of the years in which reductions

have taken place, this percentage grows linearly until in the 25<sup>th</sup> year it amounts to 4% of the previous year.

Unlike the long range goal, short range goals are established each year. These goals are along the same line as the long range goals but are adjusted more frequently in order to track progress that the state has made by looking at the coming fiscal year. When looking at these goals, it is important to note that the data being used for these goals is somewhat delayed. Because of the delay in receiving completed crash data for the year, 2012 FARS Data must be used to develop the plan for fiscal year 2015.

## **Occupant Protection Performance Measures and Goals**

The performance measures for both child safety seat and overall restraint use have been obtained from annual surveys that were conducted by the Alabama Department of Public Health and CAPS. The Seat Belt Usage Rate is obtained immediately following the "Click It or Ticket" campaign and the Child Safety Seat Usage Rate data is collected in August. The latest data for both of these rates was obtained from reports made available by the Alabama Department of Public Health and UA-CAPS, as follows:

Performance Measures	2001	2002	2003	2004	2005	2006
Seat Belt Usage Rate	79.40%	78.80%	77.40%	80.00%	81.90%	82.90%
Child Safety Seat Usage Rate	77.00%	89.40%	87.00%	82.90%	91.60%	88.00%

Performance Measures	2007	2008	2009	2010	2011	2012	2013
Seat Belt Usage Rate	82.30%	86.10%	90.00%	91.43%	88.00%	89.50%	97.26%
Child Safety Seat Usage Rate	92.30%	88.20%	94.91%	93.12%	95.83%	93.00%	97.70%

Goals cannot be progressively realized without appropriate performance measures. These will be given with the goals along with a description of the data sources used. Performance measures include one or more of the following:

- 1. Fatal crash frequency (e.g., the number or proportion of fatal crashes in which the fatally injured passenger (including drivers) was properly restrained;
- 2. Crash severity reduction (e.g., the ratio of the proportion of fatalities to severe injuries, and
- 3. Percentages of all crashes that are fatal (to gauge the proportion within the overall population of crashes).

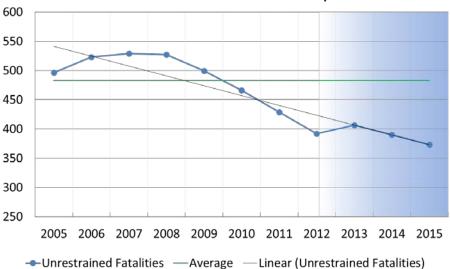
Only injury and fatal collisions will be included in the crash frequency goals. Goals will now be presented in the following categories (reference to the FY 2015 HSP):

- Number of Unrestrained Passengers Killed (C-4)
- Seat belt Usage (B-1)
- Traffic Safety Activity Measures (A-3).

**HSP Metric C-4.** Number of unrestrained passenger vehicle occupant fatalities, all seat positions (FARS)

2008	2009	2010	2011	2012	Goal
452	378	394	382	354	390

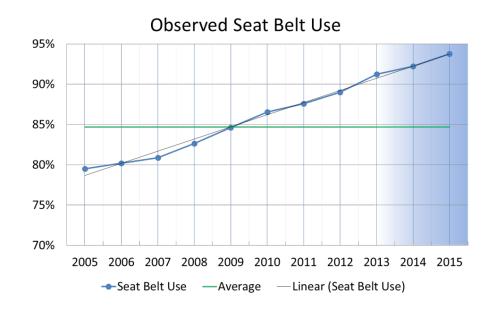




Reduce the unrestrained passenger vehicle occupant fatalities by .5 percent from the five year base line average of 392 (2008-2012) to 390 by 2015\*.

**HSP Metric B-1.** Observed seat belt use for passenger vehicles, front seat outboard occupants (survey).

2008	2009	2010	2011	2012	Goal
86.1%	90.0%	91.4%	88.0%	89.5%	92.0%



Increase the observed seat belt by 3% from the five year baseline average (2008 -2012) of 89.0% to 92.0% in 2015\*.

\*Five Year Average Goal

## Strategies for FY 2015

The following outlines the strategies to be applied during FY 2015:

- Planning and Administration The Alabama Office of Highway Safety (AOHS) is charged by the Governor with the responsibility for implementing the state's highway safety efforts to reduce traffic deaths, injuries and crashes; as such, they will continue to perform the overall administrative functions for the programs and projects implemented.
- The nine Community Traffic Safety Programs/Law Enforcement Liaison (CTSP/LEL) projects are seen to be an essential element in maintaining distributed governance over the statewide traffic safety program, and they will be maintained, including the support of the CTSP/LEL Coordinators and the administrative support for their offices.
- The University of Alabama Center for Advanced Public Safety (UA-CAPS) is seen to be vital in providing the information required for allocating traffic safety resources in an optimal way, and they will continue to be supported in providing AOHS with Alabama crash and traffic safety data throughout the year.
- Conduct nine local Hotspot Data Driven Enforcement Program (DDEP) projects, one within each of the CTSP/LEL regions. Additionally, a statewide DDEP project will be conducted in conjunction with the Alabama Department of Public Safety (DPS). The efforts of all CTSP/LEL data driven enforcement projects will be focused on hotspot locations. By focusing on the hotspot locations, every effort will be taken to reduce restraint-deficient crashes, and in so doing, reduce the fatality rate for the state.
- Continue the (LEL) programs statewide. Beginning in FY 2007, this program was absorbed by the regional CTSP/LEL offices and was funded through the Community Traffic Safety Projects. This funding arrangement will continue in FY 2015.
- Participate in national "Click It or Ticket" campaign on the statewide level.

#### **Child Restraint Laws**

Child safety belt laws were specifically targeted in the 2006 Child Restraint Law, which provided amendments to the section of the Code of Alabama 1975. This legislation is listed below:

# Child Restraint Regulations Set Forth Guidelines for Infant-only, Forward-facing, and Booster Seats

Act 2006-623

Effective July 1, 2006

ENROLLED, An Act,

To amend Section 32-5-222 of the Code of Alabama 1975, relating to child passenger restraints, to further provide for the use of child passenger restraints; to increase the fine; to provide for a point system; to provide for dismissal of charges upon proof of acquisition of an appropriate child passenger restraint; to provide for \$15 to be deposited in the State Treasury to be disbursed by the State Comptroller to the Alabama Head Injury Foundation to administer; to subject the foundation to examination by the Department of Examiners of Public Accounts; and in connection therewith would have as its purpose or effect the requirement of a new or increased expenditure of local funds within the meaning of Amendment 621 of the Constitution of Alabama of 1901. BE IT ENACTED BY THE LEGISLATURE OF ALABAMA:

# Section 1. Section 32-5-222 of the Code of Alabama 1975, is amended to read as follows: §32-5-222.

- (a) Every person transporting a child in a motor vehicle operated on the roadways, streets, or highways of this state, shall provide for the protection of the child by properly using an aftermarket or integrated child passenger restraint system meeting applicable federal motor vehicle safety standards and the requirements of subsection (b). This section shall not be interpreted to release in part or in whole the responsibility of an automobile manufacturer to insure the safety of children to a level at least equivalent to existing federal safety standards for adults. In no event shall failure to wear a child passenger restraint system be considered as contributory negligence. The term "motor vehicle" as used in this section shall include a passenger car, pickup truck, van (seating capacity of 10 or less), minivan, or sports utility vehicle.
- (b) The size appropriate restraint system required for a child in subsection (a) shall include all of the following:
- (1) Infant only seats and convertible seats used in the rear facing position for infants until at least one year of age or 20 pounds.
- (2) Convertible seats in the forward position or forward facing seats until the child is at least five years of age or 40 pounds.
- (3) Booster seats until the child is six years of age.
- (4) Seat belts until 15 years of age.

However this bill must meet the requirements of Code Section 32-5b-4.

# **Proposed Legislation**

There are many opportunities to strengthen the current restraint laws in Alabama. Despite the revisions to the Primary Seat Belt Law in 1999, the law still fails to address the use of restraints for any

adult passengers in the back seat. Alabama law addresses this requirement in child restraint laws, but there is no requirement for adults.

A number of proposed safety legislation bills were endorsed by the State's Strategic Highway Safety Plan Committee (SHSP, Page 41). The SHSP proposes a "primary seat belt law for all passengers" that would address this issue for adult passengers in the back seat. Furthermore, the SHSP goes on to address the issue of passengers in the rear of pickups. This provision would require that passengers would only be allowed to ride in areas equipped with safety belts.

The State's child restraint law is rather comprehensive; however, legislation has been proposed to adjust the booster seat requirement for children so as to require each occupant who is eight years of age and under, weighs less than 80 pounds and is less than four feet, nine inches in height to be secured in an age-appropriate child restraint. This measure would address discrepancies concerning the proper age and weight for eliminating the use of a booster seat. Furthermore, the State's SHSP intends to address the Child Restraint Law to ensure that there are no gaps in restraint laws to ensure that all occupants of a motor vehicle under the age of sixteen are covered by specific laws. These suggested provisions do not include a provision regarding an age requirement for riding as passenger in the front seat. Many states include such stipulations that make this a primary offense if a child under the age requirement is sitting in the front seat, with or without safety restraints. Still to be proposed is the law that all occupants riding in passenger motor vehicles must be secured in a seat belt or appropriate child restraint so that there will be no gaps in coverage in the State occupant protection laws.

In summary, proposed legislation includes the following items:

- People sitting in all seat positions wear seat belts.
- Minimum fine of \$25.00.
- Adjust the booster seat requirement for children so as to require each occupant who is eight years of age and under, weighs less than 80 pounds and is less than four feet, nine inches in height to be secured in an age-appropriate child restraint.
- Provide incentives for motor vehicle insurance companies to offer economic incentives for policy holders who agree to use appropriate restraints; with the stipulation that there will be penalties to them if they are in a crash and injured without being restrained.
- Provide extremely stiff penalties as part of the State GDL (perhaps up to the short suspension of license) for any driver who is caught without everyone in the vehicle being restrained. The only exception might be if there were never restraints installed. While the current law addresses the maximum number of occupants and restricted driving schedule, it does not specify seat belt use for drivers or passengers. For example, the GDL law in Delaware includes a seat belt provision that requires teen drivers and passengers under age 18 to wear a seat belt at all times. If this provision is violated, the teen driver faces suspension of a license or permit for two months.
- Provide some legal basis for making the degree of injury sustained not covered by insurance when there is contributory negligence on the part of passengers who fail to be properly restrained.

The list of bills that is being promoted and supported are given at: http://www.safehomealabama.gov/GovAgencies/ALLegislature(SSCC).aspx

# **Data Driven Enforcement Program (DDEP)**

# **General Program Overview**

The State will engage in an evidence-based data driven enforcement effort to assure that its child restraint and occupant protection laws are vigorously enforced. The AOHS law enforcement liaisons (LEL) are synonymous with the CTSP Coordinators, but to emphasize this they will be referenced as CTSP/LELs in this context. The following provides a summary of the planned enforcement (and enforcement-related) efforts that will be made throughout the 2015 fiscal year:

- Totally involve the CTSP/LEL Regional Coordinators. In addition to the efforts of the state office in Montgomery, there is a Coordinator within each of the nine CTSP/LEL Regions across the state. Each CTSP/LEL Coordinator has been charged with focusing on the occupant restraint hotspot locations outlined for their region. In order to coordinate the efforts within the nine regions, a CTSP/LEL office is located in each region. Each of these regions is responsible for the problem areas within their region and will supply reports and information back to the central office regarding the efforts taking place within their region.
- Obtain analytical support from the University of Alabama Center for Advanced Public Safety (UA-CAPS), which has developed and currently maintains the CARE program, which is the software used for all traffic crash and safety analysis done in Alabama. UA-CAPS will provide continuous updates of crash and other traffic safety (e.g., citation) data throughout the year. This includes updates of the analyses given in the problem identification above, preparing reports and providing answers for information requests related to the occupant safety program.
- Conduct Data Driven Enforcement Program (DDEP) projects. There will be nine local DDEP projects during the coming year as well as one statewide DDEP project focusing specifically on occupant restraint enforcement. Each of these DDEP projects will be located at one of the problem locations that have been identified across the state. One DDEP project will take place in each of the nine CTSP/LEL regions, and the statewide DDEP project will be conducted in conjunction with the Alabama Department of Public Safety. General Law Enforcement activity including restraint enforcement will be sustained for twelve (12) months, and the special restraint-focused DDEP project will not diminish the normal efforts being made in this regard.

# **Data Driven Enforcement Programs (DDEP)**

The State's ongoing Data Driven Enforcement Program (DDEP) plan targets countermeasures that result in lower injury and fatality rates by enabling law enforcement at a local level to enforce non-use of occupant and child restraints laws. Increasing citation rates has shown to have positive effects on lowering the incidence of the offense in the location where the citations are given. In addition to the special Memorial Day and the Labor Day campaigns, Alabama will also conduct sustained enforcement throughout the year.

The Data Driven Enforcement Program (DDEP) is developed using traffic crash data, as illustrated in the Problem Identification Section above. Each potential location for enforcement is selected based upon the determination of restraint-deficient hotspots. Fatalities due to non-use or inappropriate use of occupant and/or child restraints are seen in both adult and child populations and remain overrepresented statistically as compared to the national data. Education efforts will be offered to augment the high visibility enforcement of the primary-enforcement occupant restraint laws.

The project with regional coordinators and the Alabama Department of Public Safety, and local law enforcement involves overtime pay for officers to conduct a statewide data driven enforcement program aimed at identified segments of roadway with restraint-deficient crashes (i.e., crashes where one or more occupants, including the driver, were not properly restrained). The strategy of this effort is to reduce these hotspots in the state, or to reduce the frequency of restraint-deficient crashes within each. Current policy is to fund overtime as it gives the greatest flexibility in manpower deployment, and is thus more effective and efficient, since overtime allows more flexibility in scheduling. Law enforcement agencies will use saturation patrols, line patrols, checkpoints, and regular patrol in order for the DDEP projects to be effective.

#### **Seat Belt Enforcement Plan**

The state is divided into nine Community Traffic Safety Programs/Law Enforcement Liaison (CTSP/LEL) regions across the state. Within these groups, law enforcement agencies at all levels are in partnership to execute the DDEP program throughout the year. The Alabama Department of Public Safety will also be a full partner in all of these efforts.

The specific locations of enforcement activities will be deployed to those specific segments defined by the problem identification above, specifically in Tables 2 and 3 in the "Data Driven Enforcement Program Hotspots Analysis" section.

To the extent that resources will permit, the DDEP program will be supported my media efforts similar to those described below for the Click It or Ticket Program described below.

The total population percentage covered by the DDEP program will be over 96 percent. The Alabama Department of Public Safety (DPS) will participate in the DDEP.

# Click It or Ticket (CIOT)

#### **Overall CIOT Summary**

Since passing the Primary Seat belt Law in 1999, Alabama continues to steadily improve its seat belt and child restraint use rates. As part of this process, a Data Driven Enforcement Program (DDEP) called "Click It or Ticket" (CIOT) is run on an annual basis in April, May and June of each year (see schedule below).

The following summarizes the CIOT effort:

- The State will conduct an aggressive "Click It or Ticket" (CIOT) campaign (generally, paid media) in close concert with NHTSA coordination. As part of the nationwide initiative to increase seat belt usage, there will be a CIOT High Visibility Paid Media campaign. This has been a highly successful program in the past several years. The State will continue to lend its full support to the program in the coming year.
- A statewide CIOT High Visibility Enforcement campaign will be conducted in addition to the paid media, we will have High Visibility Enforcement program for a three week period. The enforcement program will consist of members from the Municipal Law Enforcement Agencies, County Sheriffs and State Highway Patrol (Department of Public Safety).
- An additional effort in conjunction with CIOT will be supported to conduct surveys, perform analyses, and verify certification. UA-CAPS will conduct pre and post surveys for seat belt programs and evaluate several types of survey data regarding seat belt and child restraint usage

rates as part of the CIOT campaign. The program will consist of waves of surveys, enforcement and media blitzes, carefully scheduled to maximize public understanding of restraint use. UA-CAPS' role will be to: (1) receive and scientifically analyze data obtained (2) collect reports on the other components of the project (3) obtain signed certification page and (4) produce a comprehensive final report covering all aspects of the campaign.

- This data driven enforcement program will involve multiple agencies and organizations that will participate in this effort, under the leadership of the Law Enforcement and Traffic Safety (LETS) Division of the Alabama Department of Economic and Community Affairs (ADECA). Waves of public education and enforcement will be conducted, working toward the single goal of increasing proper restraint use for both children and adults to improve highway safety.
- The University of Alabama Center for Advanced Public Safety (UA-CAPS) will support ADECA/LETS in providing the following services:
  - Contracting out the performance of the annual pre and post observational survey of vehicle belt usage and child restraint usage throughout Alabama according to the new NHTSA approved Sampling, Data Collection and Estimation Plan;
  - o Performing an evaluation of the program results using scientific analyses of baseline observations before the STEP and post observations after it is completed and calculate the official seat belt usage rate for the State;
  - o Collecting results from all the various involved parties for their activities;
  - o Performing analyses of data generated through telephone polls, media campaign data and enforcement data;
  - o Compiling the project report for "Click It or Ticket" 2015;
  - o Contracting out the performance of the child restraint observational survey;
  - o Analyzing survey data and computing child seat belt usage rate for State
  - o Producing a report on results of child restraint observational surveys.

The listing of general activities to be conducted during the STEP and the proposed schedule are shown below:

Weeks	Dates	Activities
1-2	April 20-May 3	Statewide Observational Survey (Baseline)*
3-8+	May 4-June 11	Earned Media for CIOT
4-5	May 11-25	Paid media for CIOT
5-6	May 18-31	Enforcement for CIOT
7-8	June 1-11	Statewide Observational and Telephone Surveys*

<sup>\*</sup> Activities that involve data collection and analysis

The problem identification for the CIOT DDEP program is documented above. This section will continue by presenting the media plan, followed by the plan for the CIOT evaluation.

#### Media Plan for CIOT

The "Click it or Ticket" statewide multimedia campaign will be aimed at increasing seat belt usage on Alabama's highways in the most effective ways. The campaign will incorporate advertising, bonus spots, website links, and support of government agencies, local coalitions and school officials in an effort that will impact restraint usage.

The campaign will consist of:

- Development of the "Click It or Ticket" marketing approach based on Nielsen and Arbitron ratings and targeted primarily towards the 18-34 male age group.
- Placement of paid "Click It or Ticket" ads on broadcast television, cable television, and radio in addition to public service spots. Paid advertising will be placed primarily in the five largest media markets.
- Management of public relations efforts including press releases and special media events to stimulate media coverage and alert the public to the "Click It or Ticket" campaign.
- In addition to the paid and free media, the Office of Highway Safety website will have updated information including ads, articles and other information pertaining to the seat belt campaigns.
- Each CTSP/LEL Coordinator will be responsible for generating sustained earned media in their area of the state throughout the year. The CTSP/LEL Coordinators are also responsible for developing press releases and conducting press events that are specifically targeted to their regions.

In addition, other enforcement and education campaigns throughout the year encourage increased seat belt usage. These campaigns have been successful in that survey data after the 2013 campaign revealed that 97 percent of respondents reported that they used their seat belts "all the time" or "most of the time" at the end of the media campaign.

The CIOT Media Campaign will include placement of approved, paid CIOT programming on broadcast and cable TV and radio spots during the appropriate time frame, and negotiations will be conducted to maximize the earned (free) media as well. These media efforts, including commercials, will supplement law enforcement agencies statewide as they conducted a zero-tolerance enforcement of seat belt laws.

Further, electronic billboards, the AL.com website and statewide newspapers will be employed to reach the target audiences aimed at yielding increases in seat belt and child restraint use. Previous efforts resulted in the Alabama Department of Commerce placing 15,512 paid media and 7,144 bonus commercials for the Click It or Ticket campaign.

The following will summarize the anticipated paid media campaign, which will be engaged based on parameters outlined below:

- Broadcast Television. Experience has shown that broadcast television buys provide the greatest reach. The buys will be focused on programming in prime times: morning drive (M-F, 7A-9A) and evenings (M-F, 5P-Midnight). Selected weekend day parts, especially sporting events, will also be employed if the media programming is assessed to appeal to the target group.
- Cable Television. The large number of cable networks in Alabama can be effective in building frequency for the male 16-34 target market. The buys will focus on the following day parts: morning drive (M-F, 7A-9A) and evenings (M-F, 5P-Midnight) with selected weekend day parts, especially sporting events. Paid scheduling will be placed for networks that cater to males in the target areas.
- Radio. The campaign will target that same key at-risk group, 16-34 year olds, particularly males. The buy will focus on the following day parts:

morning drive (M-F, 7A-9A), midday (M-F 11A-1P), afternoon (M-F, 4P-7P), evenings (M-F, 7P-Midnight). Selected weekend day parts will be considered as well.

Commercials will be produced for television and radio to emphasize the Click It or Ticket theme. Advertisements for electronic billboards, newspaper and AL.com will relate back to the video media to the extent possible. Billboards will be used to reinforce the radio and TV commercials. At least three designs will be developed to correspond to and reinforce the video commercials. The AL.com website will be employed in the planned program. This is the state's leading news website, and they provide excellent coverage.

#### **CIOT Evaluation**

This project will be evaluated using methods and procedures approved by NHTSA. FY 2015 is the second year to use the new survey plan that is documented in a report entitled "Alabama Observational Survey Plan for Occupant Restraint Use – 2013," and the details of that plan will not be repeated here. This data collection and estimation plan is based on fatality rates rather than population as was done previously. UA-CAPS will manage the process for the observational surveys, phone survey evaluation of the media campaign, and be involved in evaluation and report generation portions of the project.

UA-CAPS will conduct overall coordination between other agencies and consultants participating in the project. This will keep UA-CAPS in close contact during the design of data collection forms and procedures, will help ensure timely and accurate data collection, and will help ensure that UA-CAPS receives data and preliminary analyses in a timely manner. Data observation, collection and processing will be in accordance with NHTSA-approved techniques.

Basic phone and observational surveys will be used to gather data for the in-depth evaluation. The target will be the measurement of proper restraint use by drivers and front seat outboard passengers in passenger motor vehicles. The phone surveys will be conducted throughout the state. The observation surveys will be conducted at a total of 343 assigned sites in 40 Alabama counties: Jefferson, Mobile, Madison, Tuscaloosa, Baldwin, Montgomery, Marshall, Lee, Walker, Calhoun, Shelby, Elmore, Cullman, Talladega, Limestone, St. Clair, Russell, Etowah, Morgan, Jackson, Houston, Lauderdale, Lawrence, Escambia, Blount, Chilton, Dallas, Pike, Autauga, Dekalb, Dale, Coffee, Monroe, Chambers, Tallapoosa, Franklin, Winston, Colbert, Conecuh and Covington.

In addition to direct field measurement of restraint use, a parallel thrust will measure changes in public awareness and attitude. This will be based upon statewide telephone surveys.

With regard to the observational surveys, UA-CAPS will:

- Contract a highly qualified vendor to recruit and train the Observational Surveyors, and to conduct the three observational surveys described within this document
- Assign observation locations and dates to the Surveyors, and
- Collect and process the raw data produced by the Surveyors.

In conducting the evaluation, UA-CAPS will require the assistance of other agencies and organizations, as follows:

- The Alabama Department of Commerce (ADC) will:
  - o Implement the media portion of the campaign;

- o Contract with another group to produce ads if that is found to be most expedient;
- O Determine where and when the ads are run; this will include the avenues of TV, cable, radio and electronic billboards;
- o Update the web site;
- o Produce promotional brochures for the project;
- o Submit reports to ADECA-LETS; and
- o Submit reports to UA-CAPS for inclusion in the overall final report for the project.

#### • ADECA LETS will:

- o Provide funding for the project;
- Serve as the host agency for the effort, providing ongoing oversight coordination, and guidance as needed;
- o Coordinate the enforcement campaign and provide summary reports to UA-CAPS for inclusion in final report; and
- O Assist UA-CAPS, if needed, in obtaining data from Surveyor observations, consultant phone polls, and consultant questionnaires.
- The abt SRBI group, which performed the phone survey for the 2001 through 2013 "Click It or Ticket" programs, will be engaged to conduct the telephone surveys that will involve:
  - Design and prepare the telephone questionnaire instrument (with guidance from LETS and UA-CAPS);
  - o Conduct a post survey only this year;
  - o Encode and analyze the data, and
  - o Deliver the data and a preliminary analysis of the data to UA-CAPS in a timely manner.

To summarize, restraint use will be evaluated in two primary ways: (1) by direct observation of vehicles, based upon a carefully designed sampling technique, and (2) through a telephone survey. Before and after seat belt usage rates will be evaluated by direct observation, and after rates will be evaluated through the telephone surveys. A final report will be produced by CAPS that will describe the results of the current year evaluation efforts and summarize past year's evaluation efforts to hopefully show continual improvements being made by participating in the campaigns.

# **General Restraint Data Driven Enforcement Program**

The Problem Identification Results section above, along with Attachment A detail the procedures and results obtained from the hotspot analyses. By using actual crash data in which it was found that occupants (including drivers) were not properly restrained, resources can be focused on the best possible place to perform the Data Driven Enforcement Programs.

## **Child Restraint Data Driven Enforcement Efforts**

The very same procedures that were used to find hotspots for all restraint deficient crashes were applied to find those crashes in which child restraints were deficient. The only difference was that the criterion for the subsets used in this case was only those crashes in which there were child restraint deficiencies. Attachment A is organized by region to facilitate its use by the CTSP/LEL coordinators in administering the various programs. Officers will be required to cover the specific locations listed.

# **Communication Program**

In order to keep the components of the various programs together, communication efforts have been described within each program. These will be an integral part of the enforcement effort, recognizing that the effects of the law enforcement efforts can be dramatically increased by effective and relatively inexpensive paid and earned media campaigns. They will also be integrated into the other child protection programs.

The AOHS and their partners, such as UA-CAPS and others, put forth efforts to capitalize on special events, such as nationally recognized safety and injury prevention weeks and local enforcement campaigns, by promoting these events on their social media sites including Facebook and Twitter. Brief, but very focused, messages are frequently pushed out through these means. This is an especially effective avenue of reaching younger audiences. These events are also promoted on agency websites and the <a href="www.SafeHome.Alabama.gov">www.SafeHome.Alabama.gov</a> website that is comprehensive of all of the Alabama's traffic safety endeavors. Not only are the events publicized prior to occurring but the results are published afterwards through these means as another opportunity to get the word out.

A major goal of the CPS program (detailed in the next section) for FY 2015 will be to increase communication and awareness on the issue of CPS in each of the nine CTSP/LEL regions. The statewide CPS website is heavily utilized by parents and technicians alike. The website (<a href="www.cpsalabama.org">www.cpsalabama.org</a>) offers a place to go to get accurate, up-to-date CPS information for parents and technicians. More detail on this website is given in the Occupant Protection for Children Program section, Increased Communication and Awareness subsection.

# **Occupant Protection for Children Program**

The occupant protection for children part of the occupant restraint program will be administered by the State Child Passenger Safety (CPS) coordinator. This will include training for first time technicians, and recertification for trained technicians. Inspection stations will be available to the public. The technicians will ensure that parents learn how to properly install their child passenger restraints. Key components to this education are to educate the parent on proper harnessing of their child and proper installation of the child restraint in the vehicle.

Alabama's CPS program was in its tenth year in FY2014. The single CPS coordinator and instructors are addressing the needs of the nine CTSP/LEL regions. The plan for FY 2015 is to further reach out to underserved communities and technicians and to provide the services of additional trained CPS professionals in all communities. The following sections will detail how the program will accomplish these goals.

The State plans to continue with the Child Passenger Safety (CPS) program that began in FY2006. In that year, a single CPS coordinator was appointed, augmented with three additional instructors from the CTSP/LEL offices and tasked them with addressing CPS from a regional perspective. The CPS program will be continued through FY 2015 with an emphasis on teaching new technicians in communities throughout the 9 CTSP/LEL regions. The overall goal of the CPS program remains to have more child restraint technicians available so that it will lead to an increase in child restraint usage within the State of Alabama, resulting in a reduction of fatalities and serious injuries.

# Alabama Child Passenger Safety (CPS) Program

The Alabama CPS program for FY 2015 will be staffed by the state coordinator. The single CPS coordinator handles all CTSP/LEL regional needs. The plan for FY 2015 is to train new CPS technicians all around the state but place a special emphasis on the small and high risk communities. Additionally, the plan is to maintain existing technicians who live anywhere in Alabama but especially these small/under-served communities. Reaching small/underserved communities remains a major goal for the program. Gaining champions in these communities takes a commitment from Police Chiefs, Fire Chiefs, hospital CEOs and other leaders in the community. These communities have little to no resources for such trainings, and therefore, gaining inroads into these communities has proved difficult. The economic down turn has made this program outreach even more challenging.

The goal for the CPS program is to develop trained CPS professionals in as many communities over the state as possible. The ultimate goal is to create statewide community inspection stations where parents and other caregivers can obtain proper education about safely restraining their children. The following paragraphs will detail how the program will accomplish these goals.

There will be at least 10 Child Passenger Safety standardized certification training opportunities for up to 10 community individuals in each class. These 10 training classes will be conducted by the CPS coordinator and at least two additional instructors. The goal for the CTSP/LEL offices is to make these trainings as accessible to as many dedicated people in these communities as possible. The Alabama CPS program is building a network of trained CPS professionals and inspection stations in as many communities around the state as possible. The CPS state-wide website <a href="https://www.cpsalabama.org">www.cpsalabama.org</a> provides a calendar and registration form for prospective participants, as well as the necessary tools for technicians and inspection stations to keep up with the ever changing field of CPS.

The CPS program has developed an updated curriculum that will be applied in FY 2015 to help technicians maintain their certification. Recertification requires that the technician acquire at least 6 Child Passenger Safety Continuing Education Units (CEUs). The curriculum developed by the Alabama CPS program, provides all 6 CPS CEU's. Alabama has several options for technicians to acquire the 6 CEUs, but the primary one is the CPS update curriculum. The update class has been structured to offer all 6 CEUs in one sitting. Additionally, there are websites that have online offerings for CEUs. All CEU opportunities, either in-person or on-line, will highlight the changes in the CPS field since the technician/instructor originally took the course and make them the local "expert" for the communities they serve. A major change in the role of a Child Passenger Safety technician, implemented in late 2007, is to "educate" parents regarding proper restraint of child passengers. This education process will enable technicians to reach out to more parents since the parent will be able to properly restrain child passengers regardless of the type of restraint used. The technician can then focus on the remainder of the parents and children in the community.

As previously stated, the entire recertification process requires that existing technicians earn 6 CEUs to recertify in addition to the 5 specific car seat installations (witnessed and signed off by an instructor or by an instructor authorized proxy), and they must attend a 2 hour community car seat check event. Once the technician has completed these tasks, they enter the information in their "profile" on the certification website. During FY 2015, events are being planned to assist these technicians to attend a two hour community event and obtain signoff for all required car seat instal-

lations. No currently certified technicians should lose their certifications since there are many opportunities for those technicians to obtain CEUs. If they are unable to attend an Alabama CPS program update class, they may satisfy CEU requirements by reading CPS articles, taking on-line quizzes or participating in teleconferences with links that are all posted on <a href="https://www.cpsalabama.org">www.cpsalabama.org</a>. All CEU opportunities encompass the goals and objective of the NHTSA Standardized Child Passenger Safety Training Program.

In the ever-changing world of Child Passenger Safety, the CPS coordinator plans to train and update child passenger technicians, law enforcement officials, fire, and emergency rescue personnel and provide them with the educational tools necessary to teach parents and caregivers the proper installation of child safety seats.

The statewide website (www.cpsalabama.org) will continue to be upgraded. It has been recently enhanced to include more information for parents looking for help within their community, how to bring a CPS class to their community and how to become a technician if they so desire. The technician section of the website alerts technicians on how to obtain a recall list, how technicians can receive a standardized car seat inspection form and also updated information on the latest child restraints, vehicle to child restraint incompatibilities and other information vital to protecting Alabama's children. Materials from NHTSA and the American Academy of Pediatrics (AAP) have been added to the website along with child growth charts and other resources that parents and technicians alike will find beneficial. The website has a calendar of events with a list of all car seat educational opportunities available around the state. The calendar also gives the dates and locations of car seat inspection events. All on-going child safety seat inspection stations and their hours of operation, location and contact information are listed as well. The website has evolved into a repository/statewide resource for all CPS information, such as printed materials, media, checkup event resources and links to all major websites that can aid parents and technicians. The website provides means for technicians to report upcoming events or to submit a report on a completed event.

The best method to teach parents and caregivers about safely transporting their children is to conduct child safety seat inspections and education clinics in their communities. The Alabama CPS program currently has 18 child safety seat inspection sites, listed on the NHTSA website and distributed around the state. Each CTSP/LEL region has promoted CPS and will continue to promote CPS, which has the goal of increasing the child safety inspection/clinics in their regions. These efforts will hopefully enable all of the parents and caregivers in the state to receive this valuable education. During FY 2015 the NHTSA website will be updated with Alabama inspection station locations (with certified technicians) as they are added. The NHTSA website currently has an accurate record of these inspection stations and each inspection station is maintaining the standards set by the national CPS curriculum.

In FY2012, the CPS public information program reached 62 percent of the State's total population. The goal for FY 2015 will be to increase this level to a larger portion of the population of parents and caregivers. The CTSP/LELs will help increase this rate by increasing child safety seat inspections and education clinics to parents and caregivers in their region. The CTSP/LELs will also use earned media to make parents and caregivers aware of the clinics and inspection stations in their regions.

The agendas for both the certification and update classes taught are available upon request. The statewide website (<u>www.cpsalabama.org</u>) also provides pages containing information about hosting

CPS classes. The website has the American Academy of Pediatrics (AAP) recommendations for car seat use. Each NHTSA-recognized inspection station will receive a copy of the latest Lower Anchors and Tethers for Children (LATCH) manual. This valuable resource provides additional information for each inspection station. All other vital information will also be found on the website, which will be updated on a continuous basis.

More detail on increasing the number of certified child restraint technicians and adding inspection stations is given in the next two sections.

## **Increase Number of Certified Child Passenger Technicians**

During the past year, 13 certification classes were taught and 8 recertification classes were taught. The recertification rate for Alabama for this year was 53%, which was comparable to the national average of 54%. Alabama's high recertification rate can be attributed to the recertification classes and to an increased awareness of Child Passenger Safety across the state. The increased awareness has resulted in better retention of technicians. To aid in the retention of these technicians, the statewide coordinator is sending an email to remind all technicians, within 2 months of their expiration date, to follow through and complete the recertification requirements.

The plan for FY 2015 includes maintaining the number of certification classes, and the number of update classes to 15 or more, while maintaining the high recertification rate. There will be at least 10 three day training opportunities for up to 10 community individuals in each class. These 10 training classes will be taught by the state-wide CPS coordinator and two additional instructors. The goal for the CTSP/LEL offices is to make these trainings as accessible to as many dedicated people in these communities as possible. The Alabama CPS program is building a structure of having a trained CPS professional within 25 miles of every community in the state.

To keep the current CPS professionals "sharp" with their skills and help them maintain their certification, 8 update/recertification classes are scheduled in FY 2015. These classes will highlight the changes in the CPS field since the technician/instructor originally took the course and make them the local "expert" for those communities they serve. Once they complete the class, perform 5 specific car seat installations (witnessed and signed off by a local instructor), and attend a 2 hour community car seat check event they have successfully completed the recertification requirements. For those technicians/instructors who follow these guidelines, the grant funds cover the recertification fee.

A statewide website was formed in 2005 and has been constantly updated so the public and local technicians can easily see who they can contact to get help within their community. The website has a map of Alabama and the CTSP/LEL contacts for each county. If a community has an on-going child safety seat inspection station/clinic, then the hours of operation, location and contact information will be listed as well.

To meet this goal for FY 2015, it is anticipated that three-day classes will be held in:

- Birmingham, Alabama;
- Florence, Alabama;
- Mobile, Alabama;
- Fairhope, Alabama;
- Grove Hill, Alabama;

- Gadsden, Alabama;
- Dothan, Alabama;
- Huntsville, Alabama;
- Eufaula, Alabama;
- Montgomery, Alabama;
- Selma, Alabama;
- Geneva, Alabama; and
- Tuscaloosa, Alabama.

Each CTSP/LEL office will be made aware of all the training opportunities available for the year. Generally these classes are on a first-come, first-served basis. Not only are the classes advertised through the CTSP/LEL offices but each CTSP/LEL office is responsible for making sure all participants sign up using the website, <a href="www.cpsalabama.org">www.cpsalabama.org</a>. Many classes are being projected for all over the state and many of the smaller communities are now willing to participate. The smaller (higher risk, underserved) communities have been a goal of the CPS program since its inception.

A special emphasis will be placed on keeping currently certified technicians. To meet this need, update classes will be offered throughout the state. This update class enables the technicians the opportunity to acquire all six CPS Continuing Education Units (CEUs) required for recertification. The technician is also required to attend a two hour (minimum) checkup event and install five car seat scenarios with an instructor or tech proxy present to complete all the requirements for recertification. The calendar on www.cpsalabama.org is constantly updated and all the classes (both certification & update) are shown. Each CTSP/LEL Coordinator will be encouraged to hold both a CPS certification class and a CPS update class in their region.

In FY 2015, a minimum of 8 update classes will be held to support the inspection stations in the region. The CPS Coordinator will manage the development of the update curriculum for use in Alabama, and it is already approved for CPS CEUs with SAFE Kids worldwide, which makes recertification much easier for technicians. For FY2014, the standardized CPS curriculum was revised and taught over three days instead of the previous four days.

## **Additional Inspection Stations**

In FY 2015 the CTSP/LEL regional offices will increase the number of inspection stations from their current 18. The goal has been to add Inspection Stations to the NHTSA website but due to issues within some organizations this is not possible so these community resources are being offered by word-of-mouth and not advertised on the NHTSA website. Meeting the goal of having an inspection station within 25 miles (previously 50 miles for FY 2014) of parents anywhere in the state is slowly being realized using these unadvertised Inspection Stations. This ambitious goal is a challenge to meet in the rural areas but great in-roads have been made in the past few years. With concentrated assistance from the CTSP/LEL regional offices, this goal can be met.

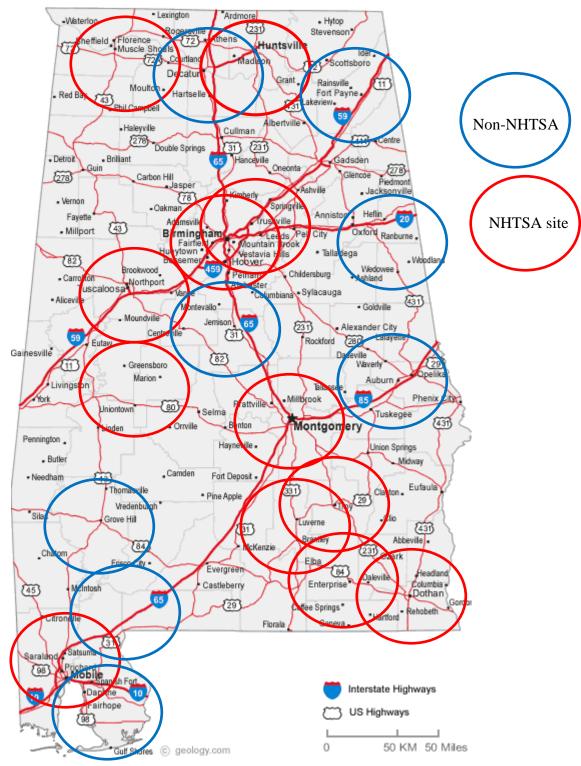
All these inspections stations will be staffed with nationally certified CPS technicians during posted working hours.

Display 3 presents the location of the 18 NHTSA and the 8 non-NHTSA listed inspection stations. The red circles which represent a 25 mile radius around the NHTSA recognized inspection stations. Some of the red circles contain more than one inspection station. The blue circles represent inspection

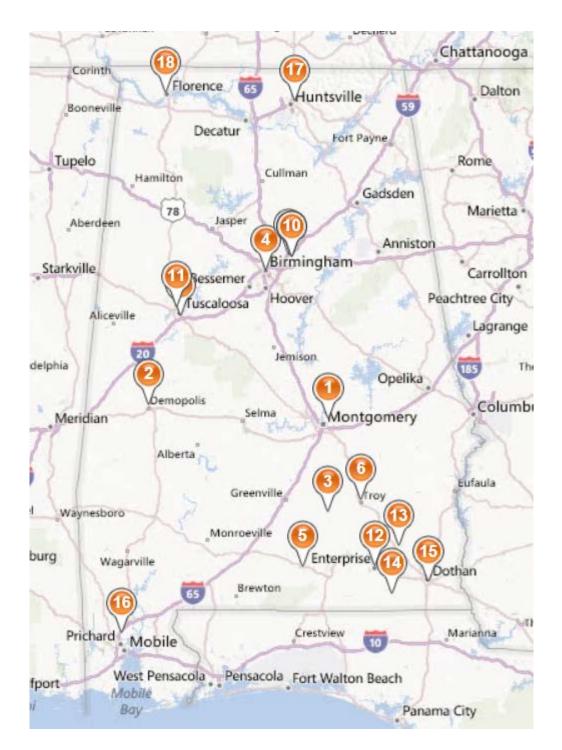
stations that report numbers and assist parents but they do not want to be recognized as locations on the NHTSA website.

Display 4 presents the location of the 18 NHTSA listed inspection stations, with specific responsible agencies given in the key beneath the display.

Table 5 is a summary table indicating the proportion of the state that is covered.



Display 3. Location of Alabama's CPS Inspections Stations



Display 4. Location of NHTSA recognized CPS Inspections Stations

The following is the key to Display 4:

- 1. SAFE Kids Montgomery Area
- 2. Demopolis Police Department
- 3. Crenshaw County Sheriff's Office
- 4. Children's Hospital
- 5. Andalusia Police Department
- 6. Troy Police Department
- 7. Tuscaloosa Police Department

- 8. Trussville Fire and Rescue Station 1
- 9. Trussville Fire and Rescue Station 2
- 10. Trussville Fire and Rescue Station 3
- 11. Child Passenger Inspection Center
- 12. Enterprise Police Department
- 13. Ozark Police Department
- 14. Hartford Police Department
- 15. Southeast Alabama Medical
- 16. Saraland Police Dept.
- 17. Huntsville Hospital
- 18. Eliza Coffee Memorial Hospital

Table 5. Proportion of Alabama's Population Covered by Inspection Stations
Listed on NHTSA website

<b>Station Numbers</b>	<b>Population Served</b>	Percentage of AL Population
1	321,790	7%
2	25,670	0.5%
3	13,845	0.3%
4, 8, 9, 10	936,752	20%
5	20,551	0.4%
6	49,804	1%
7, 11	224,400	5%
12, 13, 14	76,936	1.6%
15	119,207	2.5%
16	596,420	12%
17	432,195	9%
18	146,587	3%
TOTAL	2,990,351	62.3%

Alabama's total population in the 2010 census was 4,779,736.

With the addition of the eight additional sites shown on Display 3, the gain in coverage for Alabama becomes approximately **90.4%**. The sites shown on blue do not wish to be recognized on the NHTSA website due to liability, internal policy or other reasons, but they help cover those previously underserved communities.

#### **Increased Communication and Awareness**

A major goal of the CPS program for FY 2015 will be to increase communication and awareness on the issue of CPS in each of the nine CTSP/LEL regions. The statewide CPS website is heavily utilized by parents and technicians alike. The website offers a place to go to get accurate up-to-date CPS information for parents and technicians. The website (<a href="www.cpsalabama.org">www.cpsalabama.org</a>) is now being utilized all over the country. Since the website offers a single place for all accurate CPS information, both technicians and parents are able to use it. The website has also generated phone calls from all over the country about the law in Alabama, the proper way to travel with children through Alabama and who they can contact for help in their local community.

Additional printable items will be added to the website in FY 2015. For example, the web site now produces a chart of the minimum and maximum weight ranges for all car seats, and this will be updated as necessary to aid technicians when working with parents. A chart on how child restraint manufacturer's view inflatable seat belts has also been added. The website has valuable information for current CPS technicians so that they may retain their certification. The website has a recertification page with links to articles, activities and tests to help technicians stay current. The calendar on the website notes Child Passenger Safety related events such as classes. The website also now offers valuable information on changes in the technology of child restraints. This website will be maintained and upgraded in FY 2015.

# **Data Driven Enforcement Program for Child Restraints**

This is an integral part of the data driven enforcement efforts as indicated in the Enforcement Program described above, and the details of that effort will not be repeated here.

# **Data and Program Evaluation**

This section is subdivided according to the follow categories:

- Observational survey of occupant protection and child restraint use
- Data driven enforcement citation analysis
- Continued problem identification and evaluation efforts

# Observational Survey of Occupant Protection and Child Restraint Use

Pre and post surveys for seat belt programs will be conducted by the University of Alabama Center for Advanced Public Safety (UA-CAPS). The 2013 compliant seat belt survey design will be used for these surveys. The University of Alabama will coordinate the post telephone survey to evaluate the effectiveness of our paid media and compile all data related to the CIOT campaign.

The National Highway Traffic Safety Administration (NHTSA) recently issued new Uniform Criteria for State Observational Surveys of Seat Belt Use (NHTSA, 2011a). The final rule was published in Federal Register Vol. 76 No. 63, April 1, 2011, Rules and Regulations, pp. 18042 – 18059. The approved survey plan is Alabama's response to the requirement to submit to NHTSA a study and data collection protocol for an annual state survey to estimate passenger vehicle occupant restraint and child safety restraint use. This plan is fully compliant with the Uniform Criteria and will be used for the implementation of Alabama's 2015 seat belt survey.

The University of Alabama Center for Advanced Public Safety (UA-CAPS) will conduct the annual survey of vehicle belt usage and child restraint usage throughout Alabama working together with faculty within the Department of Information Systems, Statistics, and Management Science in the Culverhouse College of Commerce and Business Administration at the University of Alabama.

# **Data Driven Enforcement Citation Analysis**

The State has an advanced capability to analyze and evaluate its enforcement efforts by the analysis of data obtained from its recently implemented electronic citation system (eCite). The following subsections will illustrate this capability with the following examples:

- Analysis by target areas: rural/urban within regions;
- Analysis by target groups: 16-25 year old drivers;
- Analysis by citation coverage of the state.

Evaluation efforts such as these will continue in order to assure that the appropriate subgroups of the population and areas of the state are covered, thus assuring that resources are used in the best possible way. The tables in the next section are based on citations in the eCite database for the 2010-2012 time period and the 2010 census data.

#### **Rural-Urban Analysis**

According to the 2011 survey, the usage rate was indicated to be lower in the rural areas than in the urban areas. A comparison of the rural and urban counties surveyed showed the estimate of the rural rate to be 85.9%, while the urban rate was 89.2%. The study given in Attachment B also shows that the number of crashes involving drivers who use no restraints is over-represented in rural areas. So these two facts prove that rural areas needed to be targeted, and this has been done over the past two years.

Based on the 2013 survey, a weighted average of the rural and urban counties similar to that done for the 2011 survey showed that the rural restraint usage rate was 94.1%, and the urban usage rate was 96.8%. This demonstrates a major increase in the overall usage rate, but it also shows that the differential between the urban and the rural rates has been reduced from 3.3% to 2.7%, showing relative improvement in the rural areas.

Table 5 presents a comparison of rural verses urban citations issued over the state by regions in the CY2010-2012 time frame. The total for the region is given in the "All" column, with the regional percentage given in the next column. This is followed by two pairs of comparable columns, the first pair for the citations issued in rural areas and the second for citations issued in urban areas of the region.

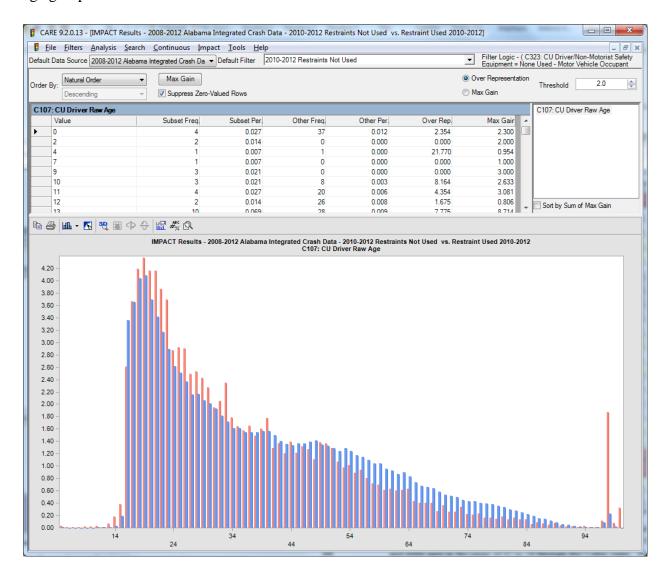
Table 5. Citation Analysis by Urban/Rural

Region	All	Regional	Rural	Regional	Urban	Regional
Birmingham	41481	11.9%	24760	10.3%	16721	15.5%
North East	42008	12.1%	31511	13.1%	10497	9.7%
North	57838	16.6%	46900	19.6%	10938	10.1%
Mobile	48489	13.9%	30720	12.8%	17769	16.5%
East	31594	9.1%	20814	8.7%	10780	10.0%
Central	42298	12.2%	21803	9.1%	20495	19.0%
South East	39545	11.4%	26458	11.0%	13087	12.1%
South West	16693	4.8%	12390	5.2%	4303	4.0%
West	27731	8.0%	24338	10.2%	3393	3.1%
TOTAL	347677		239694		107983	

The proportion of rural tickets issued is 239,694/347,677 = 68.9%. The population of Alabama is 28.5% rural and 71.5% urban, according to the 2010 census data. The statistical significance for the ratio of 68.9% of the seat belt citations to 28.5% rural population is enormous, clearly demonstrating a concentration in the rural areas with a goal of improving seat belt usage among rural drivers in order to decrease fatalities and the overall severity of crashes. This clearly demonstrates that the State's plan for the past two years has focused on rural areas.

#### 16-25 Year Old Driver Analysis

The following chart illustrates the high numbers of crashes involving causal drivers in the 16-25 year age group.



Analysis of individual driver ages indicates that crashes involving no restraints are overrepresented in the years above the teen-drivers (age range 20-35). While it appears that teen-aged drivers are more likely to use safety equipment (perhaps due to the emphasis on it place during training), there is still a very large proportion that are unrestrained, and this problem is multiplied by their over-representation in crashes in general (see how they are at least twice the average of the other ages).

An analysis of fatalities that compare 21-25 year old males against their older counterparts (both male and females) indicated that the average number of fatalities incurred over the 2008-2012 period was **83.2** for males ages 21-25. This was compared to the older ages (in this case 26-70 so as not to bias the results with the drop off in population after age 70). The average fatality per year for the 26-70 year old group was **50.9**. This difference was found to be significant at the highest possible level.

The difference in the number of fatalities within these two groups on a per year basis was **83.2-50.9** = **32.3 fatalities.** If the restraint use by this target group of 21-25 year old males could be increased to that of the general population, the fatality number would be significantly reduced. This was the goal in targeting this age group.

#### **Restraint Citation Coverage Analysis**

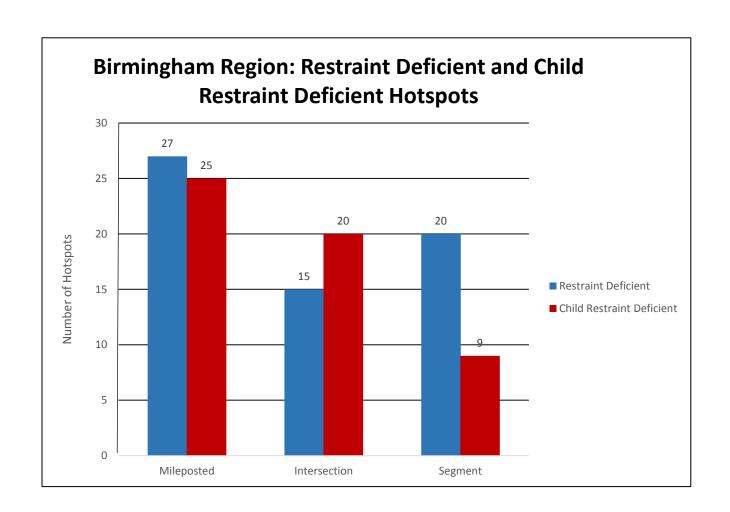
The restraint citation coverage analysis was performed by determining the populations of those cities in which no citations were issued in the 2009-2012 citation data. The populations for these cities were determined in order to obtain the total coverage. There were 61 very small cities that did not have a population listing. Many of these are without police departments, whose enforcement activities would generally be covered by the Alabama Department of Public Safety or the county sheriff's department. To obtain a conservative estimate of coverage, we assumed that none of these had citations issued by DPS or the county sheriff. Further, a liberal estimate of their population was obtained from the average population of those who did not report, since they would generally be of the same or lower population size. The total came out to a population of 185,522 that were not covered out of a total population of 4,779,736 (2010 population), which gives a total coverage of over 96% for the State of Alabama.

#### **Continued Problem Identification and Evaluation Efforts**

The efforts exemplified in the Problem Identification section above will be repeated and updated as needed to assure the most effective distribution of resources that can be obtained from evidence based and data driven decisions. In addition, several evaluation studies will be performed to determine program success and to improve the program in future years. More specifically, the following types of analyses will be performed:

- GIS based locations of restraint-deficient crashes combined with the locations of citations given for these deficiencies; this will be performed for both restraints in general and for child restraints.
- Comparisons of the number and severity of the hotspots found over time.
- Comparisons of the number of citations by citation type issued over time.
- Comparison of the above by rate among the various regions.
- Mapping of best routes for officers to take to cover the maximum number of hotspots in one shift.

#### ATTACHMENT A – LOCATION HOTSPOT RESTRAINT PROBLEM IDENTIFICATION



Top 27 Mileposted Locations (10 Miles in Length) in the Birmingham Region with 20 or More Restraint Deficient Crashes

Rank	County	City	Route	Beg MP	End MP	Total Crashes	Fatal Crashes	Injury Crashes	C/MVM	Severity Index	MVM	ADT	Agency ORI
1	Jefferson	Vestavia Hills	I-65	252	262	51	3	23	0.02	11.96	2203.16	120721	Vestavia Hills Police Department
2	Jefferson	Hoover	S-3	263.7	273.7	38	0	17	0.05	8.68	756.66	41461	Hoover Police Department
3	Jefferson	Rural Jefferson	I-59	112.5	122.5	37	4	18	0.03	16.22	1324.18	72558	Alabama DPS- Birmingham Post
4	Jefferson	Birmingham	I-59	123	133	36	3	20	0.02	15.56	2276.51	124740	Birmingham Police Department
5	Shelby	Hoover	I-65	241.9	251.9	33	1	23	0.02	15.45	1797.22	98478	Hoover Police Department
6	Shelby	Rural Jefferson	S-38	0.7	10.7	33	0	11	0.03	6.67	1253.72	68697	Alabama DPS- Birmingham Post
7	Jefferson	Rural Jefferson	I-65	262	272	31	1	11	0.03	10	1193.62	65404	Alabama DPS- Birmingham Post
8	St Clair	Moody	S-25	170.1	180.1	29	3	12	0.11	13.1	274.72	15053	Moody Police Department
9	Jefferson	Rural Jefferson	S-75	0.4	10.4	27	0	14	0.07	11.48	411.59	22553	Alabama DPS- Birmingham Post
10	Walker	Jasper	S-5	169.6	179.6	27	1	14	0.14	11.11	199.51	10932	Jasper Police Department
11	Jefferson	Bessemer	S-5	121.7	131.7	26	0	11	0.07	8.85	368.07	20168	Bessemer Police Department
12	Jefferson	Rural Jeffer- son	I-459	14	24	26	1	13	0.02	15	1645.84	90183	Alabama DPS- Birmingham Post
13	Jefferson	Rural Jeffer- son	I-65	275	285	23	3	11	0.03	15.65	886.75	48589	Alabama DPS- Birmingham Post

Rank	County	City	Route	Beg MP	End MP	Total Crashes	Fatal Crashes	Injury Crashes	C/MVM	Severity Index	MVM	ADT	Agency ORI
14	Jefferson	Trussville	S-7	139.4	149.4	22	1	8	0.05	10.91	406.59	22279	Trussville Police Department
15	Chilton	Rural Chilton	I-65	220	230	21	4	11	0.03	22.86	726.33	39799	Alabama DPS- Montgomery Post
16	Chilton	Clanton	S-3	213.4	223.4	21	0	14	0.11	11.43	184.91	10132	Clanton Police Department
17	Jefferson	Gardendale	S-3	280.1	290.1	21	2	6	0.08	11.43	251.41	13776	Gardendale Police Department
18	Jefferson	Bessemer	I-59	102.4	112.4	21	0	10	0.02	9.52	931.17	51023	Bessemer Police Department
19	Jefferson	Rural Jefferson	I-459	24.8	34	21	2	12	0.02	18.57	1105.94	65869	Alabama DPS- Birmingham Post
20	Shelby	Pelham	S-3	253.1	263.1	21	0	9	0.03	9.52	604.11	33102	Pelham Police Department
21	St Clair	Rural St. Clair	I-20	140.9	150.9	21	0	8	0.02	9.05	1044.5	57233	Alabama DPS- Birmingham Post
22	Chilton	Rural Chilton	I-65	194	204	20	3	11	0.03	19.5	599.17	32831	Alabama DPS- Montgomery Post
23	Chilton	Rural Chilton	I-65	210	220	20	5	10	0.03	21	682.48	37396	Alabama DPS- Montgomery Post
24	Jefferson	Rural Jefferson	I-20	130.5	140.5	20	3	10	0.02	19.5	1114.78	61084	Alabama DPS- Birmingham Post
25	Jefferson	Hoover	I-459	4	14	20	3	8	0.02	16	1122.08	61484	Hoover Police Department
26	Shelby	Rural Shelby	I-65	231.7	241.7	20	0	7	0.02	10.5	1123.67	61571	Alabama DPS- Birmingham Post
27	Walker	Rural Walker	S-5	159.5	169.5	20	3	13	0.06	22	315.49	17287	Alabama DPS- Birmingham Post

## **Top 15 Intersections in the Birmingham Region with 4 or More Restraint Deficient Crashes**

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Severity Index	People Killed	People Injured	Link	Node 1	Location	Agency ORI
		Vestavia										NO DESCRIPTION	Vestavia Hills
1	Jefferson	Hills	11	0	2	9	2.73	0	3	I-65	91	AVAILABLE	Police Department
												INTERSTATE 459 at	
												SR-3 US-31 INTER-	Hoover Police
2	Jefferson	Hoover	7	0	4	3	12.86	0	6	I-459	292	CHANGE	Department
												NO DESCRIPTION	Alabama DPS –
3	Walker	Rural Walker	7	2	4	1	27.14	2	11	S-5	7794	AVAILABLE	Birmingham Post
												INTERSTATE 459 at	Hoover Police
4	Jefferson	Hoover	6	0	4	2	18.33	0	5	I-65	15192	I-65 INTERCHANGE	Department
												NO DESCRIPTION	Brighton Police
5	Jefferson	Brighton	5	0	0	5	0	0	0		5021	AVAILABLE	Department
												INTERSTATE 65 at	
												SR-3 US-31 INTER-	Hoover Police
6	Jefferson	Hoover	5	0	1	4	6	0	1	I-65	781	CHANGE	Department
		Rural										NO DESCRIPTION	Alabama DPS –
7	Jefferson	Jefferson	5	0	4	1	18	0	10	I-20	15125	AVAILABLE	Birmingham Post
												INTERSTATE 65 at	
												US-31 SR-3 INTER-	Alabaster Police Depart-
8	Shelby	Alabaster	5	0	1	4	2	0	2	S-3	175	CHANGE	ment
												NO DESCRIPTION	Pell City Police Depart-
9	St Clair	Pell City	5	0	2	3	10	0	4	1234	1234	AVAILABLE	ment
_				_				_				NO DESCRIPTION	Jasper Police
10	Walker	Jasper	5	0	1	4	2	0	2	S-5	114	AVAILABLE	Department

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Severity Index	People Killed	People Injured	Link	Node 1	Location	Agency ORI
												NO DESCRIPTION	Fultondale Police Depart-
11	Jefferson	Fultondale	4	0	0	4	0	0	0	5221	630	AVAILABLE	ment
												NO DESCRIPTION	Fultondale Police Depart-
12	Jefferson	Fultondale	4	0	1	3	2.5	0	1	1332	515	AVAILABLE	ment
												NO DESCRIPTION	Pell City Police
13	St Clair	Pell City	4	0	2	2	12.5	0	4	1	1	AVAILABLE	Department
												NO DESCRIPTION	Jasper Police
14	Walker	Jasper	4	0	1	3	2.5	0	1	S-5	119	AVAILABLE	Department
												NO DESCRIPTION	Alabama DPS –
15	Walker	Rural Walker	4	0	2	2	15	0	4	S-69	7846	AVAILABLE	Birmingham Post

**Top 20 Segment in the Birmingham Region with 4 or More Restraint Deficient Crashes** 

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Severity Index	People Killed	People Injured	Link	Node 1	Node 2	Location	Agency ORI
		Rural											NO DESCRIPTION	Alabama DPS –
1	Chilton	Chilton	10	1	5	4	17	1	9	I-65	8123	8067	AVAILABLE	Montgomery Post
		Besse-											NO DESCRIPTION	Bessemer Police
2	Jefferson	mer	8	1	6	1	25	1	11	I-459	13917	680	AVAILABLE	Department
		Rural											NO DESCRIPTION	Alabama DPS –
3	Jefferson	Jefferson	7	0	6	1	20	0	10	I-459	14947	15125	AVAILABLE	Birmingham Post
		Rural											NO DESCRIPTION	Alabama DPS –
4	Jefferson	Jefferson	6	0	0	6	0	0	0	I-65	515	11507	AVAILABLE	Birmingham Post
		Rural											NO DESCRIPTION	Alabama DPS –
5	St Clair	St. Clair	6	0	1	5	3.33	0	1	I-20	7536	7775	AVAILABLE	Birmingham Post
													MONTGOMERY HWY	Hoover Police
6	Jefferson	Hoover	5	0	3	2	12	0	6	S-3	8852	770	and OLD CHAPLE RD	Department
		Rural											NO DESCRIPTION	Alabama DPS –
7	Jefferson	Jefferson	5	0	2	3	10	0	3	I-59	12509	386	AVAILABLE	Birmingham Post
		Rural											NO DESCRIPTION	Alabama DPS –
8	Shelby	Shelby	5	2	3	0	38	3	9	I-65	172	7265	AVAILABLE	Birmingham Post
		Rural											NO DESCRIPTION	Alabama DPS –
9	St Clair	St. Clair	5	0	1	4	4	0	2	I-20	7780	7819	AVAILABLE	Birmingham Post
		Rural											NO DESCRIPTION	Alabama DPS –
10	St Clair	St. Clair	5	1	3	1	20	1	8	I-59	7154	7287	AVAILABLE	Birmingham Post
		Rural											NO DESCRIPTION	Alabama DPS –
11	Chilton	Chilton	4	0	2	2	12.5	0	5	I-65	8146	8067	AVAILABLE	Montgomery Post
		Rural											NO DESCRIPTION	Alabama DPS –
12	Chilton	Chilton	4	1	2	1	27.5	1	8	S-155	8013	8015	AVAILABLE	Montgomery Post
		Rural											NO DESCRIPTION	Alabama DPS –
13	Chilton	Chilton	4	0	3	1	15	0	4	S-22	7666	7583	AVAILABLE	Montgomery Post

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Severity Index	People Killed	People Injured	Link	Node 1	Node 2	Location	Agency ORI
		Rural											NO DESCRIPTION	Alabama DPS –
14	Jefferson	Jefferson	4	0	3	1	20	0	3	I-459	15192	14391	AVAILABLE	Birmingham Post
													Between ACTON RD at	
													I-459 INTERCHANGE	
		Rural											and NO DESCRIPTION	Alabama DPS –
15	Jefferson	Jefferson	4	0	1	3	5	0	1	I-459	14396	15582	AVAILABLE	Birmingham Post
		Rural											NO DESCRIPTION	Alabama DPS –
16	Jefferson	Jefferson	4	1	2	2	20	1	2	I-20	17479	15125	AVAILABLE	Birmingham Post
													INTERSTATE 59 at	
													BRIDGE AVE V ENSLEY	
													and INTERSTATE 59 at	
		Birming-											ARKADELPHIA RD SR4	Birmingham Police
17	Jefferson	ham	4	1	3	0	27.5	1	3	I-59	1512	1771	US78	Department
													NO DESCRIPTION	Pelham Police
18	Shelby	Pelham	4	0	2	2	12.5	0	2	1429	24	462	AVAILABLE	Department
													NO DESCRIPTION	Pelham Police
19	Shelby	Pelham	4	0	2	2	7.5	0	2	I-65	71	366	AVAILABLE	Department
		Rural											NO DESCRIPTION	Alabama DPS –
20	St Clair	St. Clair	4	0	1	3	7.5	0	2	I-20	7780	7775	AVAILABLE	Birmingham Post

Top 25 Mileposted Locations (10 miles in Length) in the Birmingham Region with 4 or More Child Restraint Deficient Crashes

Rank	County	City	Route	Beg MP	End MP	Total Crashes	Fatal Crashes	Injury Crashes	C/MVM	Severity Index	MVM	ADT	Agency ORI
1	lefferes a	Haarran	LCE	247.2	257.2	15	0	1	0.01	4 22	1025.26	447265	Hoover Police
1	Jefferson	Hoover	I-65	247.2	257.2	15	0	1	0.01	1.33	1035.26	117365	Department
2	Shelby	Rural Jefferson	S-38	1.7	11.7	15	0	3	0.03	2.67	589.87	66872	Mountain Brook Police Department
	0.10.07	vee	0 00				-		0.00		303.07	55572	. once paperentent
3	Jefferson	Birmingham	I-59	124	134	14	0	3	0.01	5	1020.48	115690	Birmingham Police Department
		Vestavia											
4	Jefferson	Hills	S-3	265	275	11	0	0	0.03	0	400.12	45361	Vestavia Hills Police Department
5	Jefferson	Birmingham	I-65	259	269	11	0	3	0.02	6.36	702.91	79687	Birmingham Police Department
													Hoover Police
6	Jefferson	Hoover	S-150	7.1	12	9	0	1	0.08	2.22	118.67	27456	Department
_						_	_						Moody Police
7	St Clair	Moody	S-25	169.9	179.9	9	0	2	0.07	2.22	134.85	15288	Department
8	Jefferson	Bessemer	I-59	114	124	7	0	2	0.01	5.71	747.35	84726	Birmingham Police Department
0	Jenerson	besserilei	1-33	114	124	,	U		0.01	5.71	747.33	64720	Trussville Police
9	Jefferson	Trussville	S-7	147.1	157.1	7	0	1	0.05	1.43	129.81	14716	Department
	3011013011	Trussvine	3 /	147.1	137.1	,	0		0.03	1.43	123.01	14710	Oneonta Police
10	Blount	Oneonta	S-75	26.2	36.2	5	0	2	0.06	6	86.87	9848	Department
							-						Trussville Police
11	Jefferson	Trussville	I-59	137.1	147.1	5	0	1	0.01	6	352.39	39950	Department
													Hoover Police
12	Jefferson	Hoover	I-459	13	23	5	0	1	0.01	2	830.41	94142	Department
		Rural Jeffer-							_				Alabama DPS –
13	Jefferson	son	I-459	23.2	33.2	5	0	0	0.01	0	601.37	68176	Birmingham Post

Rank	County	City	Route	Beg MP	End MP	Total Crashes	Fatal Crashes	Injury Crashes	C/MVM	Severity Index	MVM	ADT	Agency ORI
14	Jefferson	Rural Jefferson	S-75	2.9	12.9	5	0	2	0.03	8	147.94	16772	Jefferson County Sheriff's Office
15	Jefferson	Birmingham	S-7	137	147	5	0	0	0.03	0	171.45	19437	Birmingham Police Department
16	Shelby	Calera	S-3	242.7	252.7	5	0	1	0.05	4	107.01	12132	Calera Police Department
17	Shelby	Pelham	S-3	254.8	264.8	5	0	0	0.02	0	317.07	35946	Pelham Police Department
17	Sileiby	remain	3-3	234.8	204.8	<u> </u>	0	0	0.02	0	317.07	33340	r emani r once Department
18	Shelby	Pelham	I-65	237	247	5	0	0	0.01	0	684.3	77578	Pelham Police Department
10	Ch alla.	Chalasa	C 20	12.2	22.2	-	0	2	0.03	0	224.04	26102	Challey Cayoty Chariffle Office
19	Shelby	Chelsea	S-38	12.3	22.3	5	0	2	0.02	8	231.04	26192	Shelby County Sheriff's Office
20	Jefferson	Gardendale	S-3	277.1	287.1	4	0	1	0.03	0	133.9	15180	Gardendale Police Department
21	Jefferson	Disminaham	S-5	122.7	132.7	4	0	1	0.02	7.5	173.07	10621	Dirmingham Police Department
21	Jenerson	Birmingham	3-3	122.7	132.7	4	U	1	0.02	7.5	1/3.0/	19621	Birmingham Police Department
22	Jefferson	Adamsville	S-5	133	143	4	0	2	0.01	10	317.53	35998	Adamsville Police Department
22	. "		6.4.40	0.0					0.00		470.54	24022	
23	Jefferson	Homewood	S-149	0.8	9	4	0	0	0.02	0	179.54	24822	Homewood Police Department
24	Shelby	Rural Shelby	S-119	18.4	28.4	4	0	1	0.03	7.5	148.09	16789	Pelham Police Department
25	St Clair	Rural St. Clair	I-20	145	155	4	0	2	0.01	12.5	472.71	53590	Alabama DPS - Birmingham Post

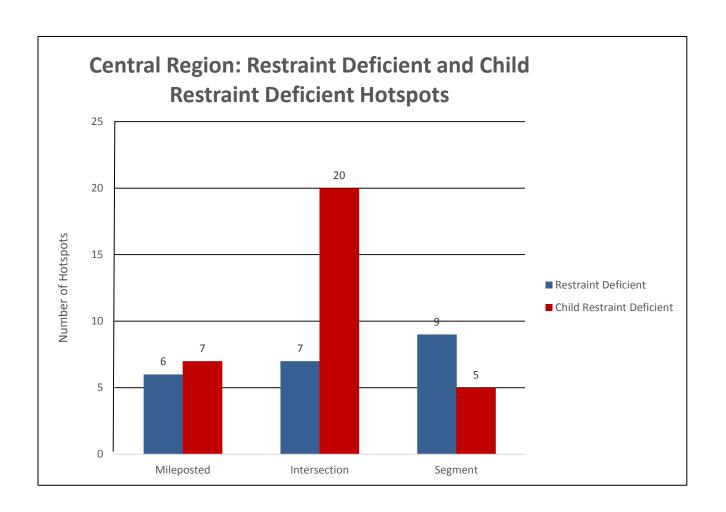
## **Top 20 Intersections in the Birmingham Region with 2 or More Child Restraint Deficient Crashes**

Rank	County	City	Total	Fatal	Injury	PDO	Severity	Node 1	Link	Location	Agency ORI
	-	,	Crashes	Crashes	Crashes	Crashes	•				
1	St Clair	Pell City	6	0	2	4	6.67	1234	1234	NO DESCRIPTION AVAILABLE	Pell City Police Department
										BESSEMER CUT-OFF RD at	
2	Jefferson	Hoover	4	0	1	3	5	11593	S-150	STADIUM TRACE PKWY	Hoover Police Department
											Homewood Police
3	Jefferson	Homewood	4	0	2	2	10	185	I-65	NO DESCRIPTION AVAILABLE	Department
4	Shelby	Hoover	4	0	4	4	0	8057	S-38	US 280 at VALLEYDALE RD	Hoover Police Department
										INTERSTATE 59 at US-280	Birmingham Police De-
5	Jefferson	Birmingham	3	0	2	1	13.33	2653	I-59	SR-38 INTERCHANGE	partment
										MONTGOMERY HWY US-31	
6	Jefferson	Hoover	3	0	0	3	0	155	5067	at RIVERCHASE RD	Hoover Police Department
										13TH ST SW at TUSCA-	Birmingham Police De-
7	Jefferson	Birmingham	2	0	0	2	0	346	3562	LOOSA AVE	partment
											Birmingham Police De-
8	Jefferson	Birmingham	2	0	1	1	10	2512	7316	17TH ST N at 5TH AVE N	partment
											Birmingham Police De-
9	Jefferson	Birmingham	2	0	0	2	0	4625	S-7	1ST AVE N at 55TH ST N	partment
										AVE T ENSLEY at PIKE RD W	Birmingham Police De-
10	Jefferson	Birmingham	2	0	0	2	0	903	3478	JCT	partment
										INTERSTATE 65 at SR-3 US-	
11	Jefferson	Hoover	2	0	0	2	0	781	S-3	31 INTERCHANGE	Hoover Police Department
12	Jefferson	Leeds	2	0	0	2	0	549	5227	NO DESCRIPTION AVAILABLE	Leeds Police Department
											Trussville Police Depart-
13	Jefferson	Trussville	2	0	0	2	0	169	1229	NO DESCRIPTION AVAILABLE	ment

Rank	County	City	Total	Fatal	Injury	PDO	Severity	Node 1	Link	Location	Agency ORI
			Crashes	Crashes	Crashes	Crashes					
											Vestavia Hills Police
14	Jefferson	Vestavia Hills	2	0	0	2	0	97	S-3	NO DESCRIPTION AVAILABLE	Department
										Intersection: RESEARCH	
										PKWY at WEST OXMOOR	Birmingham Police
15	Jefferson	Birmingham	2	0	0	2	0	35566	2714	RD	Department
											Shelby County Sheriff's
16	Shelby	Rural Shelby	2	0	1	1	10	10666	S-38	NO DESCRIPTION AVAILABLE	Office
											Shelby County Sheriff's
17	Shelby	Rural Shelby	2	0	1	1	5	8056	S-38	NO DESCRIPTION AVAILABLE	Office
											Moody Police
18	St Clair	Moody	2	0	0	2	0	7877	S-25	NO DESCRIPTION AVAILABLE	Department
											Jasper Police
19	Walker	Jasper	2	0	1	1	5	1411	5174	NO DESCRIPTION AVAILABLE	Department
											Sumiton Police
20	Walker	Sumiton	2	0	0	2	0	1607	1018	NO DESCRIPTION AVAILABLE	Department

## **Top 9 Segments in the Birmingham Region with 2 or More Child Restraint Deficient Crashes**

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Severity	Node 1	Node 2	Link	Location	Agency ORI
			Crasiles	Crasiles	Crasiles	Crasiles		1	2			
											INTERSTATE 59 at 165 INTER-	
											CHANGE and INTERSTATE 65 at	Birmingham Police Depart-
1	Jefferson	Birmingham	3	0	1	2	10	2136	2374	I-65	3RD AVE N SR4-7 INTERCHNG	ment
											INTERSTATE 65 at BRIDGE-8TH	
											AVE N and INTERSTATE 65 at	Birmingham Police Depart-
2	Jefferson	Birmingham	3	0	1	2	3.33	2107	2374	I-65	3RD AVE N SR4-7 INTERCHNG	ment
											86TH PL NW at DEAD END W	
											OF 10TH AVE N and INTERSTATE	Birmingham Police Depart-
3	Jefferson	Birmingham	2	0	0	2	0	11811	4730	I-59	59 at 77TH ST N INTERCHANGE	ment
											INTERSTATE 59 at 165 INTER-	
											CHANGE and INTERSTATE 59 at	Birmingham Police Depart-
4	Jefferson	Birmingham	2	0	0	2	0	2136	3199	I-59	BRIDGE CENTER ST	ment
											INTERSTATE 59 at	
											TALLAPOOSA ST SR79 INTCHG	
											and INTERSTATE 59 at AIRPORT	Birmingham Police Depart-
5	Jefferson	Birmingham	2	0	0	2	0	2873	4714	I-59	HWY INTERCHANGE	ment
											INTERSTATE 59 at	
											TALLAPOOSA ST SR79 INTCHG	
											and INTERSTATE 59 at BRIDGE	Birmingham Police Depart-
6	Jefferson	Birmingham	2	0	0	2	0	2873	3192	I-59	OVER RR	ment
7	Jefferson	Bessemer	2	0	0	2	0	14380	14378	I-59	NO DESCRIPTION AVAILABLE	Bessemer Police Department
<del>- '</del>	2611612011	Desselliel		U	U		U	14360	14370	1-33	NO DESCRIPTION AVAILABLE	bessemei Folice Departillellt
												Shelby County Sheriff's Of-
8	Shelby	Chelsea	2	0	0	2	0	80	7773	S-38	NO DESCRIPTION AVAILABLE	fice
					_	_				_		
	Ch allan	Daniel Challe					10	7704	10225	6.20	NO DESCRIPTION AVAILABLE	Shelby County Sheriff's Of-
9	Shelby	Rural Shelby	2	0	1	1	10	7784	10225	S-38	NO DESCRIPTION AVAILABLE	fice



Top 6 Mileposted Locations (10 Miles in Length) in the Central Region with 20 or More Restraint Deficient Crashes

Rank	County	City	Route	Beg MP	End MP	Total Crashes	Fatal Crashes	Injury Crashes	C/MVM	Severity Index	MVM	ADT	Agency ORI
1	Russell	Phoenix City	S-1	107.5	117.5	30	3	20	0.06	20	488.99	26794	Phoenix City Police Department
2	Lee	Opelika	I-85	51.5	61.5	21	2	6	0.03	11.9	738.78	40481	Opelika Police Department
	Montgom-	Rural											
3	ery	Montgomery	I-65	166.6	176.6	21	0	12	0.02	12.38	1171.83	64210	Alabama DPS- Montgomery Post
4	Russell	Rural Russell	S-8	205.7	215.7	21	2	13	0.06	19.52	324.08	17758	Phoenix City Police Department
5	Elmore	Millbrook	S-14	152.8	162.8	20	3	11	0.05	20	365.89	20049	Millbrook Police Department
6	Macon	Tuskegee	S-8	169	179	20	1	13	0.17	15	120.96	6628	Tuskegee Police Department

**Top 7 Intersections in the Central Region with 4 or More Restraint Deficient Crashes** 

Rank	County	City	Total	Fatal	Injury	PDO	Severity	People	People	Link	Node	Location	Agency ORI
	,	,	Crashes	Crashes	Crashes	Crashes	Index	Killed	Injured		1		
												SR 147 COLLEGE ST at SR	Auburn Police
1	Lee	Auburn	6	1	1	4	10	1	3	6078	834	267 SHUG JORDAN PKWY	Department
												NO DESCRIPTION	Millbrook Police Depart-
2	Elmore	Millbrook	4	0	3	1	20	0	3	1048	8199	AVAILABLE	ment
		Rural										NO DESCRIPTION	Alabama DPS - Montgom-
3	Elmore	Elmore	4	0	0	4	0	0	0	S-14	8415	AVAILABLE	ery Post
4	Lee	Opelika	4	0	0	4	0	0	0	I-85	58	HAMILTON RD at 1085	Opelika Police Department
												DEAN RD at SR 14 OPELIKA	
5	Lee	Auburn	4	0	2	2	5	0	2	6077	92	RD	Auburn Police Department
												CRAWFORD RD at SR 1901	Phenix City Police
6	Russell	Phenix City	4	0	2	2	10	0	2	S-1	1218	SR 8 US 80	Department
												CITY ST at CRAWFORD RD	Phenix City Police
7	Russell	Phenix City	4	0	1	3	5	0	1	5672	1455	5672	Department

**Top 9 Segments in the Central Region with 4 or More Restraint Deficient Crashes** 

Rank	County	City	Total	Fatal	Injury	PDO	Severity	People	People	Link	Node	Node	Location	Agency ORI
Nalik	County	City	Crashes	Crashes	Crashes	Crashes	Index	Killed	Injured	LIIIK	1	2	LOCATION	Agency Oki
		Rural											NO DESCRIPTION	
1	Macon	Macon	8	0	5	3	15	0	12	I-85	7418	7477	AVAILABLE	Alabama DPS - Opelika Post
		Rural											NO DESCRIPTION	Alabama DPS –
2	Elmore	Elmore	7	1	4	2	21.43	1	9	I-65	8415	8131	AVAILABLE	Montgomery Post
													INTERSTATE 85 at	
													S001 and INTERSTATE	
3	Lee	Opelika	7	1	3	3	18.57	1	5	I-85	1069	339	85 at S051	Opelika Police Department
													NO DESCRIPTION	
4	Lee	Rural Lee	6	0	4	2	16.67	0	5	S-15	7145	7124	AVAILABLE	Alabama DPS - Opelika Post
		Rural											NO DESCRIPTION	Alabama DPS –
5	Autauga	Autauga	4	1	0	3	12.5	1	4	I-65	7438	7430	AVAILABLE	Montgomery Post
													GLENN AVE at 185	
													and I-85 at MOORES	
6	Lee	Auburn	4	0	2	2	7.5	0	8	I-85	434	770	MILL RD	Auburn Police Department
													NO DESCRIPTION	
7	Lee	Rural Lee	4	0	3	1	20	0	4	S-15	9058	7118	AVAILABLE	Alabama DPS - Opelika Post
		Rural											NO DESCRIPTION	
8	Macon	Macon	4	0	2	2	10	0	6	I-85	7477	7510	AVAILABLE	Alabama DPS - Opelika Post
													TROY HWY SR-6 US-82	
		Rural											at TROY HWY SR-53	
	Mont-	Montgom-											US-231 and TROTMAN	Alabama DPS –
9	gomery	ery	4	1	2	1	22.5	1	3	S-6	7222	7491	DR at SR 6 US 82	Montgomery Post

**Top 7 Mileposted Locations (10 miles in Length) in the Central Region with 4 or More Child Restraint Deficient Crashes** 

Rank	County	City	Route	Beg MP	End MP	Total Crashes	Fatal Crashes	Injury Crashes	C/MVM	Severity Index	MVM	ADT	Agency ORI
1	Lee	Opelika	I-85	53.5	63.5	8	0	2	0.02	3.75	363.6	41221	Opelika Police Department
2	Elmore	Millbrook	S-14	153.7	163.7	7	0	1	0.04	4.29	181.28	20551	Millbrook Police Department
3	Montgomery	Montgomery	I-85	3	13	6	0	1	0.01	1.67	626.92	71073	Montgomery Police Department
4	Russell	Phenix City	S-1	110	120	6	0	1	0.02	5	240.07	27216	Phenix City Police Department
5	Russell	Rural Russell	S-8	210.1	218	6	0	3	0.03	15	201.8	28959	Phenix City Police Department
6	Lowndes	Rural Lowndes	I-65	144.5	154.5	5	0	2	0.02	8	246.5	27945	Alabama DPS – Montgomery Post
7	Elmore	Wetumpka	S-9	113.5	123.5	4	0	4	0.02	15	264.36	29970	Wetumpka Police Department

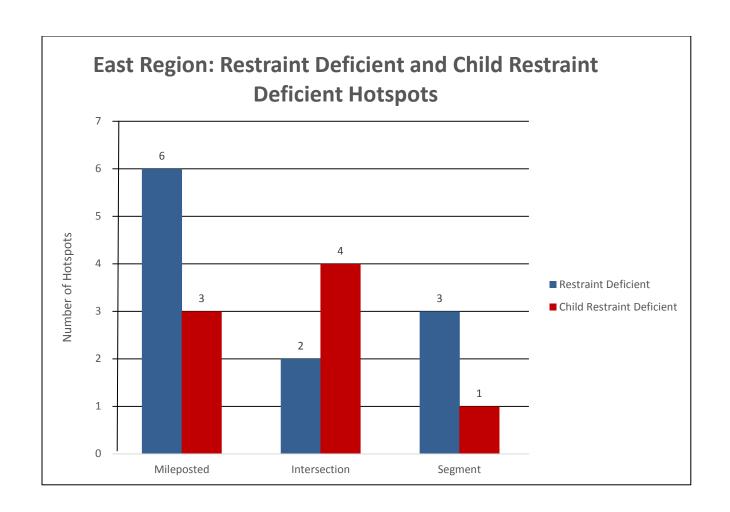
**Top 20 Intersections in the Central Region with 2 or More Child Restraint Deficient Crashes** 

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Severity	Node 1	Link	Location	Agency ORI
1	Montgomery	Montgomery	5	0	2	3	4	7740	I-85	INTERSTATE 85 at CITY LIMIT	Montgomery Police Department
2	Autauga	Prattville	3	0	0	3	0	637	1002	MARTIN BLVD at SR 3 MEMO- RIAL DR	Prattville Police Department
3	Lee	Opelika	3	0	0	3	0	58	I-85	HAMILTON RD at 1085	Opelika Police Department
4	Lee	Opelika	3	0	1	2	3.33	1505	5592	NO DESCRIPTION AVAILABLE	Opelika Police Department
5	Lee	Auburn	3	0	1	2	3.33	834	S-147	SR 147 COLLEGE ST at SR 267 SHUG JORDAN PKWY	Auburn Police Department
6	Montgomery	Montgomery	3	0	1	2	3.33	7727	9220	ATLANTA HWY SR-8 US-80 at RYAN RD	Montgomery Police Department
7	Montgomery	Montgomery	3	0	1	2	3.33	4449	1254	SOUTH BLVD SR-6 US-82 at WOODLEY RD	Montgomery Police Department
8	Elmore	Prattville	2	0	0	2	0	922	1002	MAIN ST E at NO NAME CS 1140	Prattville Police Department
9	Elmore	Millbrook	2	0	0	2	0	8415	S-14	NO DESCRIPTION AVAILABLE	Millbrook Police Department
10	Elmore	Rural Elmore	2	0	0	2	0	8131	1002	NO DESCRIPTION AVAILABLE	Alabama DPS - Montgomery Post
11	Lee	Auburn	2	0	0	2	0	73	6077	RONALD LN at SR 14 OPELIKA RD	Auburn Police Department
12	Lee	Auburn	2	0	0	2	0	588	5046	SAMFORD AVE at SR 147 COL- LEGE ST	Auburn Police Department
13	Montgomery	Montgomery	2	0	0	2	0	1271	8192	ATLANTA HWY at PERRY HILL RD	Montgomery Police Department

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Severity	Node 1	Link	Location	Agency ORI
										EAST BLVD SR-8 US-80 at AT-	
14	Montgomery	Montgomery	2	0	0	2	0	1377	8192	LANTA HWY SR-8 US 80	Montgomery Police Department
										INTERSTATE 65 at SOUTH	
15	Montgomery	Montgomery	2	0	0	2	0	4718	S-6	BLVD INTERCHANGE	Montgomery Police Department
										INTERSTATE 85 at PERRY HILL	
16	Montgomery	Montgomery	2	0	0	2	0	3095	I-85	RD INTERCHANGE	Montgomery Police Department
										MONTICELLO DR S at EAST	
17	Montgomery	Montgomery	2	0	0	2	0	8534	5008	BLVD SR-8 US-80	Montgomery Police Department
										SOUTH BLVD SR-6 US-82 at	
18	Montgomery	Montgomery	2	0	0	2	0	4370		MCGEHEE RD	Montgomery Police Department
19	Montgomery	Montgomery	2	0	1	1	10	2748	5955	UNION ST S at ARBA ST	Montgomery Police Department
20	Russell	Rural Russell	2	0	1	1	15	8993	S-8	NO DESCRIPTION AVAILABLE	Phenix City Police Department

**Top 5 Segments in the Central Region with 2 or More Child Restraint Deficient Crashes** 

Rank	County	City	Total	Fatal	Injury	PDO	Severity	Node	Node	Link	Location	Agency ORI
			Crashes	Crashes	Crashes	Crashes		1	2			
											NO DESCRIPTION	
1	Macon	Rural Macon	3	0	0	3	0	7510	7477	I-85	AVAILABLE	Alabama DPS - Opelika Post
											MAIN ST E at SHEILA BLVD	
											and NO DESCRIPTION	
2	Autauga	Prattville	2	0	1	1	10	867	1050	1002	AVAILABLE	Prattville Police Department
											HAMILTON RD at 1085 and	
3	Lee	Opelika	2	0	0	2	0	58	339	I-85	INTERSTATE 85 at S051	Opelika Police Department
											EDINBURGH DR at VAUGHN	
		Montgom-									RD SR-110 and NO DESCRIP-	Montgomery Police
4	Montgomery	ery	2	0	0	2	0	4305	11750	8058	TION AVAILABLE	Department
		Montgom-									NO DESCRIPTION	Montgomery Police
5	Montgomery	ery	2	0	1	1	5	15366	15368	1187	AVAILABLE	Department



 $Top\ 6\ Mileposted\ Locations\ (10\ Miles\ in\ Length)\ in\ the\ East\ Region\ with\ 20\ or\ More\ Restraint\ Deficient\ Crashes$ 

Rank	County	City	Route	Beg	End	Total	Fatal	Injury	PDO	C/MVM	Severity	MVM	ADT	Agency ORI
				MP	MP	Crashes	Crashes	Crashes	Crashes		Index			
1	Calhoun	Anniston	S-1	229.9	239.9	28	1	14	13	0.06	14.29	500.76	27439	Anniston Police Department
2	Talladega	Rural Talladega	I-20	176	186	22	2	10	10	0.03	17.27	684.69	37517	Alabama DPS- Jacksonville Post
3	Calhoun	Rural Calhoun	I-20	186.5	196.5	21	2	8	11	0.03	16.19	656.51	35973	Alabama DPS- Jacksonville Post
4	Chambers	Valley	S-15	199.3	209.3	21	1	13	7	0.13	15.24	161.29	8838	Valley Police Department
5	Calhoun	Jacksonville	S-21	258.9	268.9	20	0	11	9	0.06	13	358.87	19664	Jacksonville Police Department
6	Talladega	Childersburg	S-38	29.5	39.5	20	1	9	10	0.05	12.5	380.2	20833	Harpersville Police Department

#### **Top 2 Intersections in the East Region with 4 or More Restraint Deficient Crashes**

Rank	County	City	Total	Fatal	Injury	PDO	Severity	People	People	Link	Node	Location	Agency ORI
			Crashes	Crashes	Crashes	Crashes	Index	Killed	Injured		1		
												NO DESCRIP-	
												TION	
1	Calhoun	Jacksonville	5	0	4	1	14	0	5	S-21	9414	AVAILABLE	Jacksonville Police Department
												15TH ST at	
2	Calhoun	Anniston	4	0	2	2	10	0	5	5022	820	NOBLE ST	Anniston Police Department

#### **Top 3 Segments in East Region with 4 or More Restraint Deficient Crashes**

Rank	County	City	Total	Fatal	Injury	PDO	Severity	People	People	Link	Node	Node	Location	Agency ORI
			Crashes	Crashes	Crashes	Crashes	Index	Killed	Injured		1	2		
		Rural											NO DESCRIPTION	Alabama DPS - Jacksonville
1	Cleburne	Cleburne	5	0	3	2	18	0	4	S-1	7665	7833	AVAILABLE	Post
													NO DESCRIPTION	Alabama DPS - Jacksonville
2	Talladega	Lincoln	4	0	2	2	15	0	9	I-20	55	25	AVAILABLE	Post
		Rural											NO DESCRIPTION	Alabama DPS - Jacksonville
3	Talladega	Talladega	4	0	4	0	27.5	0	5	1045	8040	7191	AVAILABLE	Post

## **Top 3 Mileposted Locations (10 miles in Length) in the East Region with 4 or More Child Restraint Deficient Crashes**

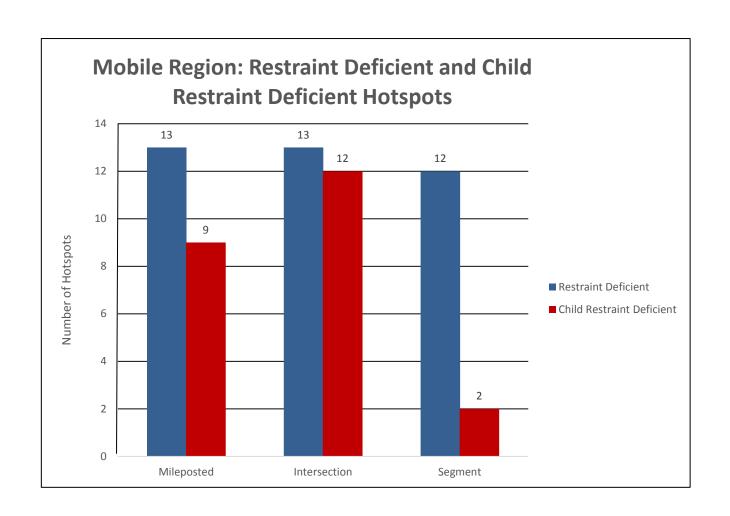
Rank	County	City	Route	Beg	End	Total	Fatal	Injury	C/MVM	Severity	MVM	ADT	Agency ORI
				MP	MP	Crashes	Crashes	Crashes		Index			
		Rural											
1	Calhoun	Calhoun	S-1	232.2	242.2	5	0	1	0.02	6	200.05	22679	Alabama DPS - Jacksonville Post
2	Calhoun	Oxford	I-20	185.6	195.6	4	0	0	0.01	0	325.83	36939	Alabama DPS - Jacksonville Post
3	Randolph	Roanoke	S-1	180.7	190.7	4	0	1	0.09	2.5	45.14	5117	Roanoke Police Department

#### **Top 4 Intersections in East Region with 2 or More Child Restraint Deficient Crashes**

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Severity	Node 1	Link	Location	Agency ORI
			5.00.00	0.00.00	0.0000	5.0000					
1	Calhoun	Anniston	3	0	2	1	13.33	11706	5408	NO DESCRIPTION AVAILABLE	Anniston Police Department
2	Calhoun	Anniston	2	0	2	0	20	1234	5022	ALA 202 at NOBLE ST	Anniston Police Department
3	Calhoun	Oxford	2	0	0	2	0	189	S-21	NO DESCRIPTION AVAILABLE	Oxford Police Department
4	Talladega	Sylacauga	2	0	1	1	5	1183	S-53	NO DESCRIPTION AVAILABLE	Sylacauga Police Department

#### Top 1 Segment in the East Region with 2 or More Child Restraint Deficient Crashes

Ran	County	City	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Severity	Node 1	Node 2	Link	Location	Agency ORI
	Calhoun	Oxford	2	0	0	2	0	449	847	I-20	NO DESCRIPTION AVAILABLE	Alabama DPS - Jacksonville Post



Top 13 Mileposted Locations (10 Miles in Length) in the Mobile Region with 20 or More Restraint Deficient Crashes

Rank	County	City	Route	Beg MP	End MP	Total Crashes	Fatal Crashes	Injury Crashes	C/MVM	Severity Index	MVM	ADT	Agency ORI
1	Mobile	Mobile	I-10	21.1	31.1	48	1	26	0.04	11.46	1271.37	69664	Mobile Police Department
2	Mobile	Rural Mobile	S-42	3	13	36	2	19	0.12	14.17	298.59	16361	Alabama DPS- Mobile Post
3	Mobile	Mobile	I-65	0.5	10.5	35	5	12	0.02	15.14	1426.51	78165	Mobile Police Department
4	Mobile	Prichard	S-17	2.8	12.8	30	1	4	0.14	4.67	210.88	11555	Prichard Police Department
5	Baldwin	Gulf Shores	S-59	0.3	10.3	29	1	11	0.05	8.97	640.61	35102	Gulf Shores Police Department
6	Mobile	Mobile	I-10	10.3	20.3	29	4	17	0.02	19.31	1267.37	69445	Mobile Police Department
7	Baldwin	Daphne	S-42	35	45	27	1	16	0.05	12.96	545.33	29881	Daphne Police Department
8	Mobile	Rural Mobile	S-217	1	11	27	2	13	0.18	15.19	150.71	8258	Alabama DPS- Mobile Post
9	Escambia	Rural Escambia	S-21	0.5	10.5	26	3	7	0.19	12.31	138.75	7603	Alabama DPS- Evergreen Post
10	Mobile	Rural Mobile	I-10	0.1	10.1	22	1	8	0.03	8.64	860.85	47170	Alabama DPS- Mobile Post
11	Mobile	Rural Mobile	S-42	13.5	23.5	22	1	14	0.04	17.73	508.28	27851	Alabama DPS- Mobile Post
12	Mobile	Rural Mobile	S-13	13	23	21	1	12	0.06	14.76	336.07	18415	Alabama DPS- Mobile Post
13	Baldwin	Rural Baldwin	S-181	7.4	17.4	20	0	14	0.09	13.5	224.18	12284	Alabama DPS- Mobile Post

**Top 13 Intersection in the Mobile Region with 4 or More Restraint Deficient Crashes** 

Rank	County	City	Total	Fatal	Injury	PDO	Severity	People	People	Link	Node 1	Location	Agency ORI
			Crashes	Crashes	Crashes	Crashes	Index	Killed	Injured				
							_	_				NO DESCRIPTION	
1	Baldwin	Daphne	5	0	3	2	12	0	5	S-16	458	AVAILABLE	Daphne Police Department
												NO DESCRIPTION	Bayou La Batre Police De-
2	Mobile	Bayou La Batre	5	0	1	4	4	0	1	S-188	209	AVAILABLE	partment
												NOBLE AVE at ST STE-	
3	Mobile	Prichard	5	0	2	3	8	0	2	S-17	915	PHENS RD SR-17	Prichard Police Department
												INTERSTATE 10 at US	
4	Mobile	Mobile	5	0	0	5	0	0	0	I-10	7743	HWY 90 INTERCHANGE	Mobile Police Department
												CONCEPTION ST at	
												GOVERNMENT ST SR-16	
5	Mobile	Mobile	4	0	1	3	5	0	1	S-16	4169	US-90	Mobile Police Department
												ST STEPHENS RD at	
6	Mobile	Prichard	4	0	0	4	0	0	0	S-17	926	HAND AVE	Prichard Police Department
												HICKORY LN CO 754 at	
7	Mobile	Rural Mobile	4	0	3	1	17.5	0	5	S-42	8860	NORTHWOOD DR W	Alabama DPS - Mobile Post
												I-165 at I-65 INTER-	
8	Mobile	Prichard	4	0	0	4	0	0	0	I-65	1650	CHANGE	Prichard Police Department
9	Mobile	Prichard	4	0	0	4	0	0	0	S-17	1145	OPP AVE at SR-17	Prichard Police Department
												INTERSTATE 10 at	
												HIGGINS RD INTER-	
10	Mobile	Mobile	4	0	3	1	12.5	0	3	I-10	10560	CHANGE	Mobile Police Department
												LOTT RD at SPICE	
11	Mobile	Rural Mobile	4	0	4	0	22.5	0	6	S-217	8811	POND RD	Alabama DPS - Mobile Post
												I-165 at SR-17 INTER-	
12	Mobile	Prichard	4	1	0	3	12.5	1	1	I-65	873	CHANGE	Prichard Police Department
												NO DESCRIPTION	
13	Mobile	Saraland	4	0	2	2	12.5	0	2	1665	317	AVAILABLE	Saraland Police Department

**Top 12 Segments in the Mobile Region with 4 or More Restraint Deficient Crashes** 

Rank	County	City	Total	Fatal	Injury	PDO	Severity	People	People	Link	Node	Node	Location	Agency ORI
		Dl	Crashes	Crashes	Crashes	Crashes	Index	Killed	Injured		1	2		Alabarra DDC Malaila
1	Dalakuda	Rural Baldwin	8		2	_				1.10	0702	0726	NO DECEDIDATION AVAILABLE	Alabama DPS - Mobile
1	Baldwin		8	0	2	6	5	0	6	I-10	8703	8726	NO DESCRIPTION AVAILABLE	Post
2	Dalah da	Rural	_			_					0004	0044	NO DECORIDEION AVAILABLE	Alabama DPS - Mobile
2	Baldwin	Baldwin	5	0	0	5	0	0	0	I-10	8901	8841	NO DESCRIPTION AVAILABLE	Post
	5	Gulf	_							6.50	24.6	E 40	NO DESCRIPTION AVAILABLE	Gulf Shores Police De-
3	Baldwin	Shores	5	0	2	3	8	0	2	S-59	316	543	NO DESCRIPTION AVAILABLE	partment
		Dl											BOOTHETOWN RD CO 92 at	Alabama DDC Adabila
	N 4 - I- 11 -	Rural Mobile	_		2	_	4.4		_	1637	0043	0200	MASON FERRY RD and EARL-	Alabama DPS - Mobile
4	Mobile		5	0	3	2	14	0	6	1637	9012	9200	VILLE RD CO 21	Post Cult Change Balliag Ba
_	Dalduin	Gulf	4	1	_	2	12.5	1	4	S-59	7270	305	NO DECEDIDATION AVAILABLE	Gulf Shores Police De-
5	Baldwin	Shores	4	1	0	3	12.5	1	1	5-59	7279	305	NO DESCRIPTION AVAILABLE	partment
	F	Rural												Alabama DDC Francisco
6	Escam- bia	Escam- bia	4	0	1	3	7.5	0	1	I-65	7329	7491	NO DESCRIPTION AVAILABLE	Alabama DPS - Evergreen Post
0	Dia	Dia	4	U	1	3	7.5	U	1	1-05	7329	7491	CANAL ST at I-10 and INTER-	POST
													STATE 10 at TEXAS ST INTER-	
7	Mobile	Mobile	4	0	0	4	0	0	0	I-10	8876	8870	CHANGE	Mobile Police Department
	Mobile	Mobile	4	U	U	4	U	U	U	1-10	00/0	0070	LOTT RD at SCHILLINGER AT	Mobile Police Department
													NEWBURN RD and FRANK	
		Rural										1308	MAPLES RD at LOTT RD SR-	Alabama DPS - Mobile
8	Mobile	Mobile	4	0	1	3	7.5	0	3	S-217	9511	3	217	Post
- 0	WIODIIE	WIODIIE	4	0	1	3	7.5	0	3	3-217	9311	,	GRAND BAY-WILMER RD CO 5	F 031
													at SMITH RD and BALLARD	
		Rural											RD CO 272 at GRAND BAY-	Alabama DPS - Mobile
9	Mobile	Mobile	4	0	1	3	7.5	0	1	1344	8268	8278	WILMER RD	Post
	Modific	17100110	,		-		7.5	-	-	1344	3200	32,0	HALLS MILL RD at 1-65 and	1 030
													GOVERNMENT BLVD US HWY	
10	Mobile	Mobile	4	3	1	0	45	3	4	I-65	1293	1361	90	Mobile Police Department
10		.7100110			_		.5		<u> </u>	. 00	1233	1301	INTERSTATE 10 at MCDON-	
		Rural										1315	ALD RD BRIDGE and FOWL	Alabama DPS - Mobile
11	Mobile	Mobile	4	0	0	0	20	0	9	I-10	8219	6	RIVER BRIDGE	Post
				-	-	-					3223	<u> </u>	GRAND BAY-WILMER RD at I-	
		Rural											10 INTERCHANGE at RAMSEY	Alabama DPS - Mobile
12	Mobile	Mobile	4	0	1	3	2.5	0	3	I-10	8330	7917	RD BRIDGE	Post
	14100110	17100110	<u> </u>		<u> </u>		2.5			, 10	3330	,,,,,	THE DIVIDUE	1 . 030

# Top 9 Mileposted Locations (10 Miles in Length) in the Mobile Region with 4 or More Child Restraint Deficient Crashes

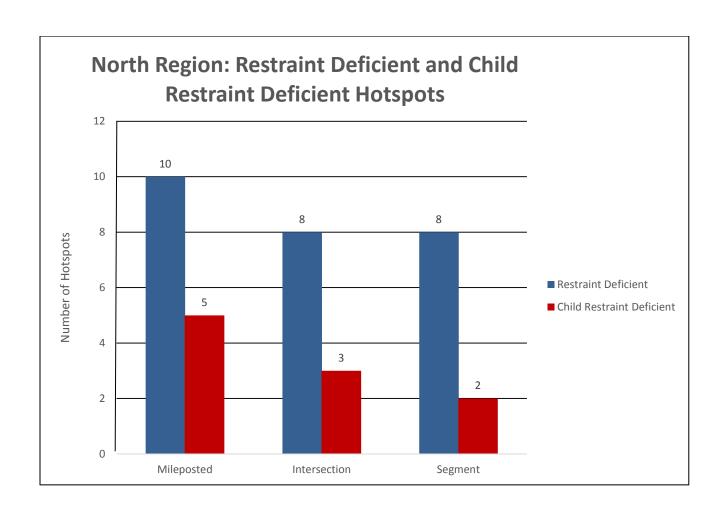
Rank	County	City	Route	Beg MP	End MP	Total	Fatal	Injury	PDO	Severity	C/MVM	MVM	ADT	Agency ORI
						Crashes	Crashes	Crashes	Crashes	Index				
1	Mobile	Mobile	I-10	25.3	35.3	14	0	2	12	2.14	0.03	540.87	61317	Mobile Police Department
2	Baldwin	Orange Beach	S-180	22	32	7	0	2	5	2.86	0.07	105.44	11953	Orange Beach Police Department
3	Mobile	Mobile	I-65	0	10	7	0	0	7	0	0.01	700.21	79381	Mobile Police Department
4	Baldwin	Gulf Shores	S-182	0.2	10.2	7	0	0	7	0	0.09	78.55	8905	Gulf Shores Police Department
5	Baldwin	Foley	S-59	1.4	11.4	7	0	0	7	0	0.02	304.45	34515	Foley Police Department
6	Baldwin	Daphne	S-42	37	47	6	0	2	4	5	0.03	224.59	25461	Daphne Police Department
7	Mobile	Mobile	I-10	13	23	5	0	2	3	4	0.01	681.4	77249	Mobile Police Department
8	Mobile	Rural Mobile	S-217	4	14	4	0	1	3	2.5	0.05	80.17	9089	Alabama DPS - Mobile Post
9	Mobile	Mobile	S-16	1.9	11.9	4	0	1	3	2.5	0.06	62.57	7094	Mobile Police Department
10	Mobile	Mobile	S-16	20	30	4	0	0	4	0	0.02	194.84	22089	Mobile Police Department

**Top 12 Intersections in the Mobile Region with 2 or More Child Restraint Deficient Crashes** 

Rank	County	City	Total	Fatal	Injury	PDO	People	People	Severity	Link	Node	Location	Agency ORI
			Crashes	Crashes	Crashes	Crashes	Killed	Injured			1		
												NO DESCRIPTION AVAIL-	
1	Baldwin	Gulf Shores	3	0	0	3	0	0	0	S-182	68	ABLE	Gulf Shores Police Department
												DAUPHIN ST at	
2	Mobile	Mobile	3	0	0	3	0	0	0	5985	1979	SPRINGDALE BLVD	Mobile Police Department
												INTERSTATE 10 at I-65	
3	Mobile	Mobile	3	0	1	2	0	1	3.33	I-10	1283	INTERCHANGE	Mobile Police Department
												NO DESCRIPTION AVAIL-	
4	Baldwin	Daphne	2	0	0	2	0	0	0	S-42	14	ABLE	Daphne Police Department
												NO DESCRIPTION AVAIL-	
5	Baldwin	Foley	2	0	0	2	0	0	0	S-59	7300	ABLE	Foley Police Department
												NO DESCRIPTION AVAIL-	
6	Baldwin	Rural Baldwin	2	0	0	2	0	0	0	1081	7712	ABLE	Alabama DPS - Mobile Post
												AIRPORT BLVD at GOV-	
												ERNMENT ST SR-16 US-	
7	Mobile	Mobile	2	0	0	2	0	0	0	6827	3831	90	Mobile Police Department
												AIRPORT BLVD at HILL-	
8	Mobile	Mobile	2	0	0	2	0	0	0	1346	2217	CREST RD AT ARNOLD RD	Mobile Police Department
												NO DESCRIPTION AVAIL-	
9	Mobile	Mobile	2	0	0	2	0	0	0	1346	8352	ABLE	Mobile Police Department
												NO DESCRIPTION AVAIL-	
10	Mobile	Saraland	2	0	0	2	0	0	0	I-65	9410	ABLE	
												OLD SHELL RD at UNI-	
11	Mobile	Mobile	2	0	0	2	0	0	0	6200	2340	VERSITY BLVD	Mobile Police Department
												PRICHARD AVE at ST	
12	Mobile	Mobile	2	0	0	2	0	0	0		5457	STEPHENS RD SR-17 US45	Mobile Police Department

## **Top 2 Segments in the Mobile Region with 2 or More Child Restraint Deficient Crashes**

Rank	County	City	Total	Fatal	Injury	PDO	Severity	People	People	Node	Node	Link	Location	Agency ORI
			Crashes	Crashes	Crashes	Crashes		Killed	Injured	1	2			
													NO DESCRIPTION	
1	Baldwin	Rural Baldwin	3	0	1	2	6.67	0	2	8703	8726	I-10	AVAILABLE	Alabama DPS - Mobile Post
													NO DESCRIPTION	
2	Baldwin	Foley	2	0	0	2	0	0	0	678	7300	S-59	AVAILABLE	Foley Police Department



**Top 10 Mileposted Locations (10 Miles in Length) in the North Region with 20 or More Restraint Deficient Crashes** 

Rank	County	City	Route	Beg MP	End MP	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	C/MVM	Severity Index	MVM	ADT	Agency ORI
1	Limestone	Rural Limestone	S-2	75	85	37	3	16	18	0.1	14.32	360.91	19776	Alabama DPS - Decatur Post
2	Morgan	Hartselle	S-3	345.1	355.1	26	1	16	9	0.07	13.46	384.24	21054	Hartselle Police Department
3	Morgan	Hartselle	S-36	15.1	25.1	24	0	15	9	0.16	12.92	148.72	8149	Hartselle Police Department
4	Cullman	Cullman	S-3	318	328	22	0	7	15	0.08	6.82	292.6	16033	Cullman Police Department
5	Cullman	Rural Cullman	S-69	239.5	249.5	22	0	10	12	0.1	9.09	229.66	12584	Alabama DPS - Decatur Post
6	Lauderdale	Killen	S-2	39.7	49.7	22	1	12	9	0.07	15.45	318.88	17473	Killen Police Department
7	Limestone	Rural Limestone	S-2	65	75	21	1	15	5	0.07	19.52	301.36	16513	Alabama Department of Public Safety - Decatur Post
8	Morgan	Rural Morgan	I-65	333	343	21	1	8	12	0.04	12.86	578.63	31706	Alabama Department of Public Safety - Montgomery Post
9	Franklin	Russellville	S-13	287.7	297.7	20	2	10	8	0.09	14	225.52	12357	Russellville Police Department
10	Morgan	Rural Morgan	S-53	298.1	308.1	20	1	14	5	0.06	18	345.45	18929	Alabama Department of Public Safety - Decatur Post

## **Top 8 Intersections in the North Region with 4 or More Restraint Deficient Crashes**

Rank	County	City	Total	Fatal	Injury	PDO	Severity	People	People	Link	Node	Location	Agency ORI
			Crashes	Crashes	Crashes	Crashes	Index	Killed	Injured		1		
		Rural										NO DESCRIPTION	
1	Lawrence	Lawrence	11	1	4	3	19.09	1	12	S-24	8840	AVAILABLE	Alabama DPS - Decatur Post
		Rural										NO DESCRIPTION	
2	Limestone	Limestone	5	0	2	3	8	0	3	S-2	8292	AVAILABLE	Alabama DPS - Decatur Post
		Rural										NO DESCRIPTION	
3	Morgan	Morgan	5	0	4	1	22	0	5	S-24	3012	AVAILABLE	Alabama DPS - Decatur Post
												ALA 13 & WOODWARD	
		Muscle										AVE at BUENA VISTA	Muscle Shoals Police Depart-
4	Colbert	Shoals	4	0	1	3	2.5	0	1	S-2	695	AVE	ment
		Rural										NO DESCRIPTION	
5	Limestone	Limestone	4	0	1	3	7.5	0	1	S-2	7797	AVAILABLE	Alabama DPS - Decatur Post
		Rural										NO DESCRIPTION	
6	Limestone	Limestone	4	1	3	0	32.5	1	6	S-2	7607	AVAILABLE	Alabama DPS - Decatur Post
		Rural										NO DESCRIPTION	
7	Morgan	Morgan	4	1	1	2	17.5	1	3	S-53	8391	AVAILABLE	Alabama DPS - Decatur Post
												SR 3 US 31 at SR 20/NO	
8	Morgan	Decatur	4	0	0	4	0	0	0	S-3	1729	NAME 5428	Decatur Police Department

**Top 8 Segments in the North Region with 4 or More Restraint Deficient Crashes** 

Rank	County	City	Total	Fatal	Injury	PDO	Severity	People	People	Link	Node	Node	Location	Agency ORI
			Crashes	Crashes	Crashes	Crashes	Index	Killed	Injured		1	2		
		Rural											NO DESCRIPTION	Alabama DPS –
1	Cullman	Cullman	7	1	2	4	12.86	1	4	I-65	7541	7281	AVAILABLE	Decatur Post
		Rural											NO DESCRIPTION	Alabama DPS –
2	Limestone	Limestone	5	1	4	0	32	1	6	S-2	7797	7806	AVAILABLE	Decatur Post
		Rural											NO DESCRIPTION	Alabama DPS –
3	Colbert	Colbert	4	1	2	1	25	1	2	1179	7207	8280	AVAILABLE	Quad Cities Post
		Rural											NO DESCRIPTION	Alabama DPS –
4	Cullman	Cullman	4	0	1	3	5	0	1	S-69	8516	8515	AVAILABLE	Decatur Post
		Rural											NO DESCRIPTION	Alabama DPS –
5	Lauderdale	Lauderdale	4	0	2	2	10	0	4	S-17	7378	7379	AVAILABLE	Quad Cities Post
		Rural											NO DESCRIPTION	Alabama DPS –
6	Limestone	Limestone	4	0	3	1	17.5	0	12	I-65	8084	1124	AVAILABLE	Decatur Post
		Rural											NO DESCRIPTION	Alabama DPS –
7	Limestone	Limestone	4	1	2	2	17.5	1	4	I-65	7151	7172	AVAILABLE	Decatur Post
		Rural											NO DESCRIPTION	Alabama DPS –
8	Morgan	Morgan	4	0	1	3	7.5	0	1	I-65	94	19	AVAILABLE	Decatur Post

**Top 5** Mileposted Locations (10 miles in Length) in the North Region with 4 or More Child Restraint Deficient Crashes

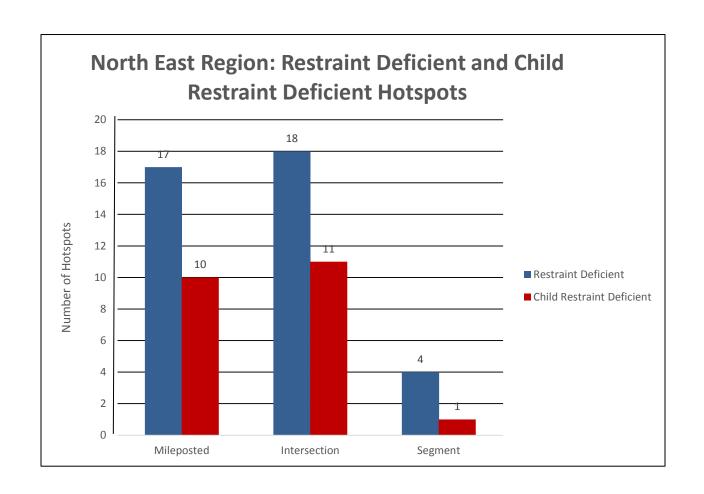
Rank	County	City	Route	Beg MP	End MP	Total	Fatal	Injury	PDO	C/MVM	Severity	MVM	ADT	Agency ORI
						Crashes	Crashes	Crashes	Crashes		Index			
1	Morgan	Decatur	S-3	352.2	362.2	7	0	3	4	0.03	5.71	245.93	27881	Decatur Police Department
2	Cullman	Cullman	S-3	320	330	5	0	1	4	0.04	2	142.24	16126	Cullman Police Department
3	Colbert	Sheffield	S-2	24.6	34.6	4	0	0	4	0.02	0	198.23	22473	Sheffield Police Depart- ment
4	Limestone	Athens	S-2	68.5	78.5	4	0	1	3	0.02	5	179.24	20320	Athens Police Department
5	Morgan	Priceville	S-67	34	44	4	0	1	3	0.02	7.5	254.4	28841	Priceville Police Depart- ment

**Top 3 Intersections in the North Region with 2 or More Child Restraint Deficient Crashes** 

Rank	County	City	Total	Fatal	Injury	PDO	Severity	People	People	Link	Node 1	Location	Agency ORI
			Crashes	Crashes	Crashes	Crashes	Index	Killed	Injured				
												15TH ST at 5020 & JACKSON	Sheffield Police
1	Colbert	Sheffield	2	0	0	2	0	0	0	S-2	770	HWY	Department
													Athens Police
2	Limestone	Athens	2	0	0	2	0	0	0	5373	122	NO DESCRIPTION AVAILABLE	Department
													Decatur Police
3	Morgan	Decatur	2	0	1	1	10	0	2	S-3	300	SR 3 US 31 at SR 67	Department

## **Top 2 Segments in the North Region with 2 or More Child Restrain Deficient Crashes**

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Severity Index	People Killed	People Injured	Link	Node 1	Node 2	Location	Agency ORI
1	Cullman	Cullman	3	0	1	2	3.33	0	1	S-3	180	237	NO DESCRIPTION AVAILABLE	Cullman Police Department
2	Morgan	Decatur	2	0	1	1	10	0	2	S-67	3396	2803	NO DESCRIPTION AVAILABLE	Decatur Police Department



**Top 17 Mileposted Locations (10 Miles in Length) in the North East Region with 20 or More Restraint Deficient Crashes** 

Rank	County	City	Route	Beg MP	End MP	Total Crashes	Fatal Crashes	Injury Crashes	C/MVM	Severity Index	MVM	ADT	Agency ORI
1	Marshall	Albertville	S-1	281.5	291.5	50	2	24	0.09	11	527.02	28878	Albertville Police Department
2	Etowah	Gadsden	S-1	260.1	270.1	39	2	20	0.1	13.59	375.2	20559	Gadsden Police Department
3	Marshall	Guntersville	S-1	291.5	301.5	35	1	15	0.09	9.43	402.34	22046	Guntersville Police Department
4	Madison	Huntsville	S-2	85	95	33	1	10	0.05	7.27	683.96	37477	Huntsville Police Department
5	Madison	Rural Madi- son	S-1	341	351	32	2	16	0.07	13.13	429.26	23521	Alabama DPS- Huntsville Post
6	Madison	Huntsville	S-53	308.2	318.2	28	0	19	0.03	13.21	959	52548	Huntsville Police Department
7	Jackson	Scottsboro	S-35	43	53	27	0	18	0.12	12.96	217.43	11914	Scottsboro Police Department
8	Marshall	Albertville	S-205	0.5	10.5	27	2	14	0.24	14.07	114.08	6251	Albertville Police Department
9	Etowah	Gadsden	S-1	250	260	25	0	13	0.07	11.6	369.76	20261	Gadsden Police Department
10	Etowah	Rural Etowah	S-1	271.3	281.3	25	1	14	0.07	15.2	334.81	18346	Alabama DPS- Gadsden Post
11	Etowah	Rainbow City	S-25	210.5	220.5	24	0	5	0.06	2.92	390.81	21414	Rainbow City Police Department
12	Jackson	Scottsboro	S-2	130.9	140.9	24	1	13	0.08	12.08	316.49	17342	Scottsboro Police Department
13	Madison	Huntsville	S-1	329.5	339.5	24	1	11	0.03	10.42	907.52	49727	Huntsville Police Department
14	Etowah	Southside	S-77	98	108	22	1	14	0.06	14.55	354.29	19413	Southside Police Department
15	Madison	Rural Madi- son	S-53	324	334	21	0	14	0.08	15.71	248.22	13601	Alabama DPS- Huntsville Post
16	Marshall	Boaz	S-168	3.2	13.2	21	0	11	0.2	12.38	103.13	5651	Boaz Police Department
17	Madison	Huntsville	I-565	9.5	19.5	20	2	13	0.01	20	1368.53	74988	Huntsville Police Department

**Top 18 Intersections in the North East Region with 4 or More Restraint Deficient** 

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Severity Index	People Killed	People Injured	Link	Node 1	Location	Agency ORI
			Crusiics	Crusiics	Crusiics	Crusiics	шасх	Killed	injurcu		-	ALA 1 US 431 ALA 74 at	Gadsden Police De-
1	Etowah	Gadsden	5	1	1	3	12	1	3	S-1	2317	3RD ST 6102	partment
	20000	<b>3</b> 4454611		_								NO DESCRIPTION	Scottsboro Police De-
2	Jackson	Scottsboro	5	0	2	3	8	0	2	S-2	1274	AVAILABLE	partment
												DECATUR HWY SR-20 at	Huntsville Police De-
3	Madison	Huntsville	5	0	1	4	4	0	1	I-565	2157	RIDEOUT RD	partment
												OLD MADISON PIKE at	Huntsville Police De-
4	Madison	Huntsville	5	0	2	3	8	0	3	1016	2446	RIDE OUT RD	partment
												BYRD SPRINGS RD at	Huntsville Police De-
5	Madison	Huntsville	5	0	4	1	14	0	7	S-53	1614	MEMORIAL PKWY S	partment
												JORDAN LN SR-53 at	Huntsville Police De-
6	Madison	Huntsville	5	0	2	3	4	0	2	S-53	2356	UNIVERSITY DR	partment
												NO DESCRIPTION	Albertville Police De-
7	Marshall	Albertville	5	0	1	4	4	0	2	S-1	358	AVAILABLE	partment
												NO DESCRIPTION	Alabama DPS - Gads-
8	Etowah	Rural Etowah	4	0	2	2	10	0	4	S-1	8196	AVAILABLE	den Post
												NO DESCRIPTION	Alabama DPS - Gads-
9	Etowah	Rural Etowah	4	0	4	0	27.5	0	14	S-1	7409	AVAILABLE	den Post
												NO DESCRIPTION	Scottsboro Police De-
10	Jackson	Scottsboro	4	0	1	3	2.5	0	3	S-35	642	AVAILABLE	partment
												MEMORIAL PKWY N at	Huntsville Police De-
11	Madison	Huntsville	4	0	2	2	7.5	0	2	S-1	897	SPARKMAN DR AT US 72 E	partment
												GREEN COVE RD S.E at	Huntsville Police De-
12	Madison	Huntsville	4	0	1	3	7.5	0	4	S-53	4462	MEMORIAL PKWY S	partment
												NO DESCRIPTION AVAILA-	Madison Police De-
13	Madison	Madison	4	0	3	1	17.5	0	5	1005	539	BLE	partment
												NO DESCRIPTION AVAILA-	Madison Police De-
14	Madison	Madison	4	0	1	3	5	0	2	1005	200	BLE	partment
									_			MASTIN LAKE RD at	Huntsville Police De-
15	Madison	Huntsville	4	0	2	2	10	0	3	S-1	619	MEMORIAL PKWY N	partment
	l										205=	DRAKE AVE at TRIANA	Huntsville Police De-
16	Madison	Huntsville	4	0	0	4	0	0	2	7219	2065	BLVD	partment
1									_			NO DESCRIPTION AVAILA-	Guntersville Police
17	Marshall	Guntersville	4	0	2	2	12.5	0	5	S-1	9496	BLE	Department
									_			NO DESCRIPTION AVAILA-	Guntersville Police
18	Marshall	Guntersville	4	0	3	1	12.5	0	5	S-1	177	BLE	Department

**Top 4 Segments in the North East Region with 4 or More Restraint Deficient Crashes** 

Rank	County	City	Total	Fatal	Injury	PDO	Severity	People	People	Link	Node	Node	Location	Agency ORI
			Crashes	Crashes	Crashes	Crashes	Index	Killed	Injured		1	2		
		Rural												Alabama DPS –
1	Etowah	Etowah	5	0	5	0	30	0	8	S-74	7206	7393	NO DESCRIPTION AVAILABLE	Gadsden Post
		Rural								S-				Alabama DPS –
2	Etowah	Etowah	4	0	2	2	15	0	3	179	7169	7172	NO DESCRIPTION AVAILABLE	Gadsden Post
		Rural												Scottsboro Police
3	Jackson	Jackson	4	0	3	1	15	0	4	1034	7130	7165	NO DESCRIPTION AVAILABLE	Department
													WEST LIMESTONE RD at	
		Rural											BOBO RD and LOVELESS RD	Alabama DPS –
4	Madison	Madison	4	0	2	2	12.5	0	3	1154	7313	7311	at WEST LIMESTONE RD	Huntsville Post

**Top 10 Mileposted Locations (10 miles in Length) in the North East Region with 4 or More Child Restraint Deficient Crashes** 

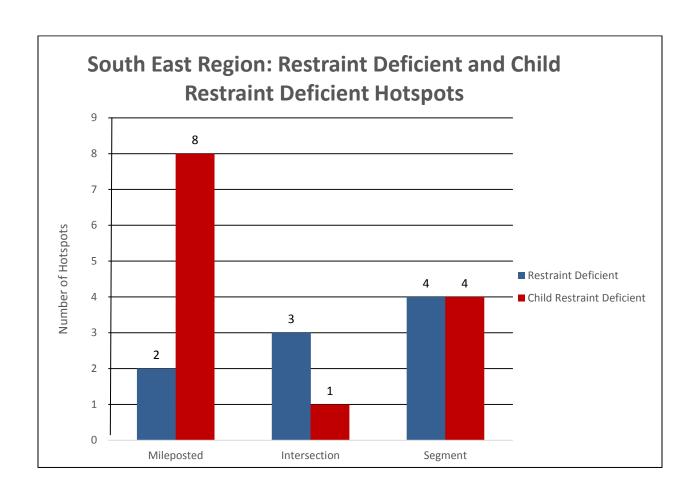
Rank	County	City	Route	Beg MP	End MP	Total Crashes	Fatal Crashes	Injury Crashes	C/MVM	Severity Index	MVM	ADT	Agency ORI
						Crasiles	Crasiles	Crasiles		illuex			
1	Etowah	Gadsden	S-1	258	268	6	0	1	0.03	1.67	214.16	24279	Gadsden Police Department
2	Etowah	Gadsden	S-25	212	222	6	0	0	0.03	0	199.47	22613	Gadsden Police Department
3	Madison	Huntsville	S-1	330.9	340.9	6	0	1	0.01	1.67	445.75	50534	Huntsville Police Department
4	Madison	Huntsville	S-2	82	92	6	0	0	0.02	0	261.78	29677	Huntsville Police Department
5	Madison	Huntsville	I-565	3	13	5	0	1	0.01	2	474.36	53777	Huntsville Police Department
6	Madison	Huntsville	I-565	13	22	5	0	1	0.01	2	606.43	76389	Huntsville Police Department
7	Marshall	Albertville	S-1	286.4	296.4	5	0	1	0.02	2	250.06	28349	Albertville Police Department
8	Etowah	Southside	S-77	101	111	4	0	1	0.03	5	156.02	17688	Southside Police Department
9	Marshall	Boaz	S-1	272	282	4	0	1	0.02	7.5	165.31	18741	Boaz Police Department
10	Marshall	Arab	S-69	266.2	276.2	4	0	2	0.04	10	96.39	10928	Arab Police Department

**Top 11 Intersections in the North East Region with 2 or More Child Restraint Deficient Crashes** 

Rank	County	City	Total	Fatal	Injury	PDO	Severity	People	People	Link	Node	Location	Agency ORI
			Crashes	Crashes	Crashes	Crashes	Index	Killed	Injured		1		
1	Madison	Huntsville	3	0	1	2	3.33	0	2	S-1	209	MAIN DR N.E at CAMPUS RD	Huntsville Police Department
2	Etowah	Gadsden	2	0	0	2	0	0	0	S-1	2317	ALA 1 US 431 ALA 74 at 3RD ST 6102	Gadsden Police Department
3	Etowah	Gadsden	2	0	0	2	0	0	0	S-25	270	ALA 25 US 411 at JCT 1759	Gadsden Police Department
4	Etowah	Gadsden	2	0	1	1	5	0	1	5936	4118	NO DESCRIPTION AVAILABLE	Gadsden Police Department
5	Madison	Huntsville	2	0	2	0	15	0	2	6211	5697	BLUE SPRINGS RD at SPARK- MAN DR	Huntsville Police Department
6	Madison	Huntsville	2	0	0	2	0	0	0	6017	2605	HOLMES AVE at SPARKMAN DR S JCT	Huntsville Police Department
7	Madison	Huntsville	2	0	0	2	0	0	0	S-1	619	MASTIN LAKE RD at MEMO- RIAL PKWY N	Huntsville Police Department
8	Madison	Huntsville	2	0	1	1	5	0	1	7608	41240	NO DESCRIPTION AVAILABLE	Huntsville Police Department
9	Madison	Huntsville	2	0	0	2	0	0	0	1028	2161	PULASKI PIKE at UNIVERSITY DR	Huntsville Police Department
10	Marshall	Albertville	2	0	1	1	5	0	2	S-75	663	NO DESCRIPTION AVAILABLE	Albertville Police Depart- ment
11	Marshall	Rural Marshall	2	0	1	1	15	0	1	S-69	7834	NO DESCRIPTION AVAILABLE	Alabama DPS - Huntsville Post

## Top 1 Segment in the North East Region with 2 or More Child Restraint Deficient

Rank	County	City	Total	Fatal	Injury	PDO	Severity	People	People	Link	Node	Node	Location	Agency ORI
			Crashes	Crashes	Crashes	Crashes	Index	Killed	Injured		1	2		
													GOVERNORS DR SR-53 at ME-	
													MORIAL PKWY and BOB WAL-	Huntsville Police
1	Madison	Huntsville	2	0	1	1	5	0	1	S-53	110	2796	LACE AVE at MEMORIAL PKWY	Department



**Top 2 Mileposted Locations (10 Miles in Length) in the South East Region with 20 or More Restraint Deficient Crashes** 

Rank	County	City	Route	Beg	End	Total	Fatal	Injury	PDO	C/MVM	Severity	MVM	ADT	Agency ORI
				MP	MP	Crashes	Crashes	Crashes	Crashes		Index			
		Rural												
1	Houston	Houston	S-1	0.1	10.1	20	0	16	4	0.07	21	284.06	15565	Alabama DPS- Dothan Post
2	Houston	Dothan	S-53	22.5	32.5	20	2	5	13	0.05	10.5	422.98	23177	Dothan Police Department

## **Top 3 Intersections in the South East Region with 4 or More Restraint Deficient Crashes**

Rank	County	City	Total	Fatal	Injury	PDO	Severity	People	People	Link	Node	Node	Location	Agency ORI
			Crashes	Crashes	Crashes	Crashes	Index	Killed	Injured		1	2		
													MONTGOMERY HWY US	
1	Houston	Dothan	5	0	2	3	8	0	5	S-53	2230	0	231 at WESTGATE PKWY	Dothan Police Department
													NO DESCRIPTION AVAILA-	Enterprise Police Depart-
2	Coffee	Enterprise	4	0	2	2	5	0	2	S-12	384	0	BLE	ment
													ENTERPRISE HWY US 84	
													at SR 210 ROSS CLARK	
3	Houston	Dothan	4	0	2	2	10	0	5	S-210	1256	0	CIRCLE	Dothan Police Department

### **Top 4 Segments in the South East Region with 4 or More Restraint Deficient Crashes**

Rank	County	City	Total	Fatal Crashes	Injury	PDO	Severity	People	People	Link	Node	Node	Location	Agency ORI
			Crashes		Crashes	Crashes	Index	Killed	Injured		1	2		
		Rural											NO DESCRIPTION	Alabama DPS –
1	Butler	Butler	6	0	5	1	20	0	10	I-65	7108	7113	AVAILABLE	Evergreen Post
		Rural											NO DESCRIPTION	Alabama DPS –
2	Butler	Butler	5	0	4	1	18	0	5	I-65	7470	7475	AVAILABLE	Evergreen Post
		Rural											NO DESCRIPTION	Alabama DPS –
3	Butler	Butler	5	0	3	2	14	0	3	I-65	7163	7342	AVAILABLE	Evergreen Post
										S-			ENTERPRISE HWY at ROSS	Dothan Police
4	Houston	Dothan	4	0	1	3	5	0	3	210	1256	1271	CLARK CIRCLE KENT DR	Department

**Top 8 Mileposted Locations (10 miles in Length) in the South East Region with 4 or More Child Restraint Deficient Crashes** 

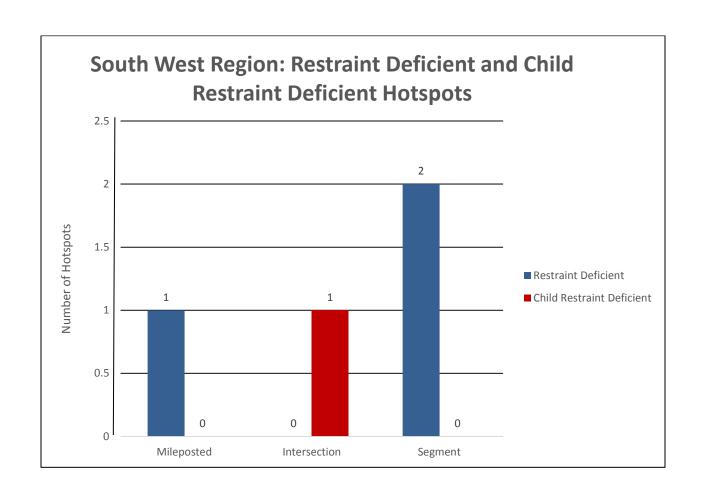
Rank	County	City	Route	Beg MP	End MP	Total	Fatal	Injury	PDO	C/MVM	Severity	MVM	ADT	Agency ORI
						Crashes	Crashes	Crashes	Crashes		Index			
1	Houston	Dothan	S-210	1.8	11.8	8	0	0	8	0.03	0	239.03	27098	Dothan Police Department
2	Coffee	Enterprise	S-248	0.1	7	6	0	0	8	0.08	0	79.82	13115	Enterprise Police Department
3	Houston	Dothan	S-12	207.6	217.6	6	0	1	5	0.04	1.67	159.69	18104	Dothan Police Department
4	Coffee	Enterprise	S-12	179	189	4	0	4	0	0.02	17.5	171.84	19481	Enterprise Police Department
5	Dale	Ozark	S-249	2.7	6	4	0	1	3	0.14	2.5	27.92	9591	Ozark Police Department
6	Houston	Dothan	S-53	15.5	25.5	4	0	1	3	0.03	2.5	127.44	14448	Dothan Police Department
7	Pike	Troy	S-10	170.4	180.4	4	0	0	8	0.03	0	148.92	16883	Troy Police Department
8	Barbour	Eufaula	S-1	64	74	4	0	1	3	0.02	2.5	168.9	19148	Eufaula Police Department

## **Top 1 Intersection in the South East Region with 2 or More Child Restraint Deficient Crashes**

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Severity Index	People Killed	People Injured	Link	Node 1	Location	Agency ORI
1	Dale	Ozark	2	0	1	1	5	0	1	S-249	332	NO DESCRIPTION AVAILABLE	Ozark Police Department

## **Top 4 Segments in the South East Region with 2 or More Child Restraint Deficient Crashes**

Rank	County	City	Total	Fatal	Injury	PDO	Severity	Link	Node	Node	Location	Agency ORI
			Crashes	Crashes	Crashes	Crashes	Index		1	2		
1	Butler	Rural Butler	2	0	0	2	0	I-65	7680	7163	NO DESCRIPTION AVAILABLE	Alabama DPS - Evergreen Post
2	Houston	Dothan	2	0	0	2	0	S-1	75	78	CAMPBELLTON HWY at SOUTHGATE	Dothan Police Department
											RD and INEZ RD	
3	Houston	Dothan	2	0	0	2	0	S-210	1957	1972	CHARLTON DR at ROSS CLARK CIR-	Dothan Police Department
											CLE and CHEROKEE AVE N	
4	Houston	Dothan	2	0	0	2	0	S-210	841	1173	MAIN ST E at ROSS CLARK CIRCLE	Dothan Police Department
											and KELLEY RD	



## Top 1 Mileposted Location (10 Miles in Length) in the South West Region with 20 or More Restraint Deficient Crashes

Rank	County	City	Route	Beg MP	End MP	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	C/MVM	Severity Index	MVM	ADT	Agency ORI
1	Dallas	Rural Dallas	S-8	78.9	88.9	22	4	8	10	0.08	16.36	288.95	15833	Alabama DPS- Selma Post

## **Top 0 Intersection in the South West Region with 4 or More Restraint Deficient Crashes**

**No Reported Locations** 

**Top 2 Segments in the South West Region with 4 or More Restraint Deficient Crashes** 

Rank	County	City	Total	Fatal	Injury	PDO	Severity	People	People	Link	Node	Node	Location	Agency ORI
			Crash-	Crash-	Crash-	Crash-	Index	Killed	Injured		1	2		
			es	es	es	es								
		Rural											NO DESCRIPTION	
1	Conecuh	Conecuh	5	1	3	1	20	1	10	I-65	7606	7620	AVAILABLE	Alabama DPS - Evergreen Post
		Rural											NO DESCRIPTION	
2	Conecuh	Conecuh	4	1	1	2	17.5	1	3	I-65	7295	7329	AVAILABLE	Alabama DPS - Evergreen Post

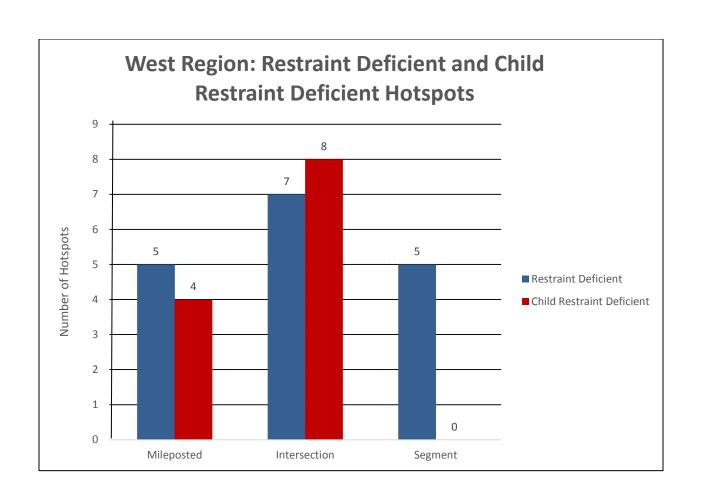
# **Top 0 Mileposted Locations (10 miles in Length) in the South West Region with 4 or More Child Restraint Deficient Crashes**

**No Reported Locations** 

## **Top 1 Intersection in the South West Region with 2 or More Child Restraint Deficient Crashes**

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Severity Index	People Killed	People Injured	Link	Node 1	Link	Location	Agency ORI
1	Dallas	Selma	2	0	1	1	15	0	1	S-14	168	S-14	NO DESCRIPTION AVAILABLE	Selma Police Department

## **Top 0 Segments in the South West Region with 2 or More Child Restraint Deficient Crashes No Reported Locations**



**Top 5 Mileposted Locations (10 Miles in Length) in the West Region with 20 or More Restraint Deficient Crashes** 

Rank	County	City	Route	Beg	End	Total	Fatal	Injury	PDO	C/MVM	Severity	MVM	ADT	Agency ORI
				MP	MP	Crashes	Crashes	Crashes	Crashes		Index			
1	Tuscaloosa	Tuscaloosa	S-215	1	11	44	0	21	23	0.15	8.86	299.5	16411	Tuscaloosa Police Department
		Rural Tus-												
2	Tuscaloosa	caloosa	I-59	75.1	85.1	26	0	9	17	0.03	7.69	877.35	48074	Alabama DPS- Tuscaloosa Post
		Rural Tus-												
3	Tuscaloosa	caloosa	I-59	64.2	74.2	25	4	13	8	0.04	20.4	641.89	35172	Alabama DPS- Tuscaloosa Post
4	Tuscaloosa	Tuscaloosa	S-6	46	56	22	2	9	11	0.04	12.27	618.95	33915	Tuscaloosa Police Department
		Rural Tus-												
5	Tuscaloosa	caloosa	S-69	139.5	149.5	20	0	9	11	0.03	10.5	574.86	31499	Alabama DPS- Tuscaloosa Post

**Top 7 Intersections in the West Region with 4 or More Restraint Deficient Crashes** 

Rank	County	City	Total	Fatal	Injury	PDO	Severity	People	People	Link	Node 1	Location	Agency ORI
			Crashes	Crashes	Crashes	Crashes	Index	Killed	Injured				
												37TH ST 5970 at ALA 6	
1	Tuscaloosa	Tuscaloosa	6	0	2	4	8.33	0	7	S-6	65	& MCFARLAND BLVD	Tuscaloosa Police Department
												NO DESCRIPTION	
2	Sumter	Livingston	5	0	4	1	18	0	16	S-7	5007	AVAILABLE	Livingston Police Department
												AL 13 US 43 at AL 6 /	
3	Tuscaloosa	Northport	5	0	2	3	6	0	4	S-6	391	MCFARLAND BLVD	Northport Police Department
												ALA 215 & UNIVERSITY	
												BLVD at BRIDGE ON	
4	Tuscaloosa	Tuscaloosa	5	0	1	4	6	0	1	S-6	195	ALA 6	Tuscaloosa Police Department
												NO DESCRIPTION	
5	Tuscaloosa	Tuscaloosa	5	0	3	2	10	0	5	S-69	12172	AVAILABLE	Tuscaloosa Police Department
												2ND AVE 5724 at ALA	University of Alabama Police
6	Tuscaloosa	Tuscaloosa	4	0	1	3	5	0	1	S-215	188	215 & UNIVERSITY BLVD	Department
		·										10TH AVE 5704 at	
7	Tuscaloosa	Tuscaloosa	4	0	2	2	7.5	0	4	6299	290	15TH ST	Tuscaloosa Police Department

**Top 5 Segments in the West Region with 4 or More Restraint Deficient Crashes** 

Rank	County	City	Total	Fatal	Injury	PDO	Severity	People	People	Link	Node	Node	Location	Agency ORI
			Crashes	Crashes	Crashes	Crashes	Index	Killed	Injured		1	2		
		Rural Tusca-											NO DESCRIPTION	Alabama DPS –
1	Tuscaloosa	loosa	6	0	1	5	5	0	1	I-59	82	8842	AVAILABLE	Tuscaloosa Post
		Rural Tusca-											NO DESCRIPTION	Alabama DPS –
2	Tuscaloosa	loosa	5	0	1	4	4	0	2	I-59	7646	8845	AVAILABLE	Tuscaloosa Post
													NO DESCRIPTION	Alabama DPS –
3	Hale	Rural Hale	4	0	1	3	5	0	2	S-25	158	7449	AVAILABLE	Selma Post
		Rural Tusca-											NO DESCRIPTION	Alabama DPS –
4	Tuscaloosa	loosa	4	2	1	1	30	3	11	I-59	9525	9140	AVAILABLE	Tuscaloosa Post
		Rural Tusca-											NO DESCRIPTION	Alabama DPS –
5	Tuscaloosa	loosa	4	1	2	1	22.5	1	3	I-59	11935	7712	AVAILABLE	Tuscaloosa Post

**Top 4 Mileposted Locations (10 miles in Length) in the West Region with 4 or More Child Restraint Deficient Crashes** 

Rank	County	City	Route	Beg	End	Total	Fatal	Injury	PDO	C/MVM	Severity	MVM	ADT	Agency ORI
				MP	MP	Crashes	Crashes	Crashes	Crashes		Index			
		Rural												Alabama DPS - Tuscaloosa
1	Tuscaloosa	Tuscaloosa	I-59	72.6	82.6	7	0	1	6	0.02	4.29	427.72	48490	Post
														Tuscaloosa Police
2	Tuscaloosa	Tuscaloosa	S-215	2.4	12.4	7	0	0	7	0.05	0	151.76	17205	Department
														Northport Police
3	Tuscaloosa	Northport	S-13	194.5	204.5	7	0	3	4	0.03	5.71	249.89	28330	Department
														Tuscaloosa Police
4	Tuscaloosa	Tuscaloosa	S-6	43.9	53.9	6	0	0	6	0.02	0	343.71	38966	Department

Top 8 Intersections in the West Region with 2 or More Child Restraint Deficient Crashes

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	PDO Crashes	Severity Index	People Killed	People Injured	Link	Node 1	Location	Agency ORI
1	Tuscaloosa	Tuscaloosa	3	0	0	3	0	0	0	S-69	12172	NO DESCRIPTION AVAILABLE	Tuscaloosa Police Department
2	Tuscaloosa	Tuscaloosa	2	0	0	2	0	0	0	6299	271	15TH ST 5168 at 7TH AVE E	Tuscaloosa Police Department
3	Tuscaloosa	Tuscaloosa	2	0	0	2	0	0	0	S-6	65	37TH ST 5970 at ALA 6 & MCFARLAND BLVD	Tuscaloosa Police Department
4	Tuscaloosa	Tuscaloosa	2	0	0	2	0	0	0	S-6	533	ALA 6 & MCFARLAND BLVD at HARGROVE RD	Tuscaloosa Police Department
5	Tuscaloosa	Tuscaloosa	2	0	1	1	5	0	0	S-6	591	MC FARLAND BLVD at RICE MINE RD 1365	Tuscaloosa Police Department
6	Tuscaloosa	Tuscaloosa	2	0	0	2	0	0	0	S-7	82	ALA 7 SKYLAND BLVD at 120 & 159	Tuscaloosa Police Department
7	Tuscaloosa	Northport	2	0	0	2	0	0	0	7467	12594	NO DESCRIPTION AVAILABLE	Northport Police Department
8	Tuscaloosa	Tuscaloosa	2	0	1	1	10	0	1	S-7	89	NO DESCRIPTION AVAILABLE	Tuscaloosa Police Department

Top 0 Segments in the West Region with 2 or More Child Restraint Deficient Crashes

**No Reported Locations** 

## ATTACHMENT B – RESTRAINT ISSUES DETAILED PROBLEM IDENTIFICATION

#### Introduction

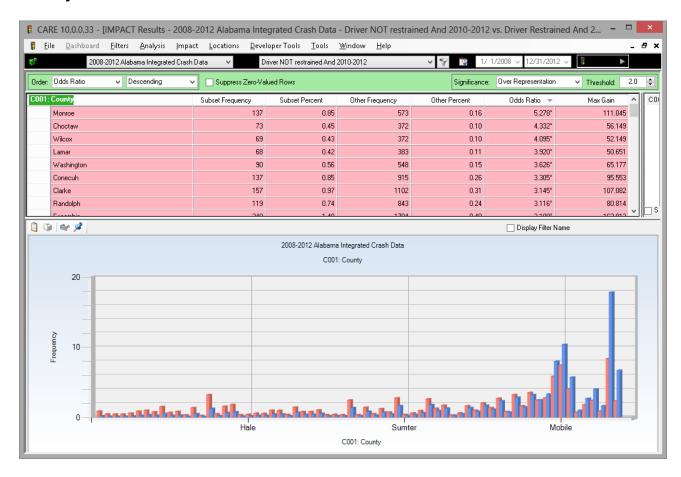
This problem identification study was conducted in order to develop countermeasures for crashes involving causal drivers who do not use restraints. This study contains detailed data analysis performed using data that is consistent with that used in the FY 2014 HSP, calendar years 2010-2012. CARE IMPACT displays are included that were used to generate the information. The comparisons made were between those crashes in which the causal drivers were not restrained (generally represented by the red bars in the charts) and those which were reported to be restrained (generally represented by the blue bars in the charts). The use of proper restraints by causal drivers is seen to be an excellent proxy for their use by all passengers in the vehicle.

The results of the comparisons given in the following sections typically do not change by more than 1% from year to year. Thus, it was concluded that no updates of the following were justified for FY 2015.

#### **Geographical Factors**

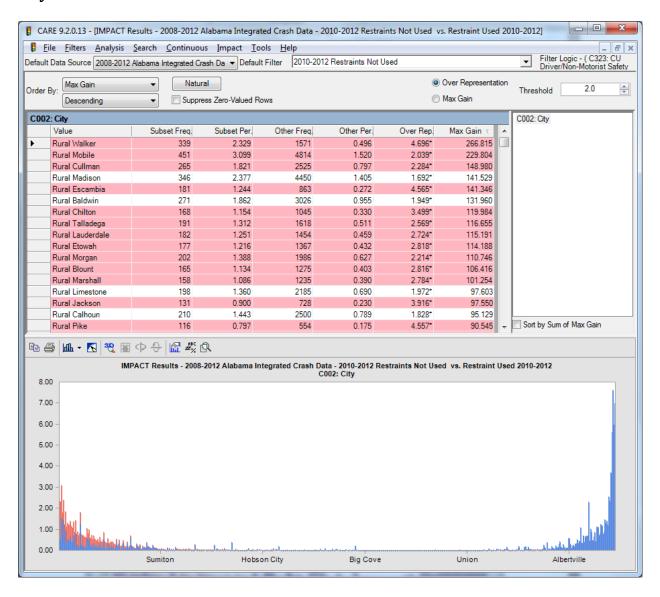
Geographical factors were analyzed in order to determine which areas are over-represented for crashes involving drivers who did not use restraints. In order to determine these problem areas, geographical factors were analyzed in the following categories: county, city, rural versus urban, highway classification, and locale.

#### **County**



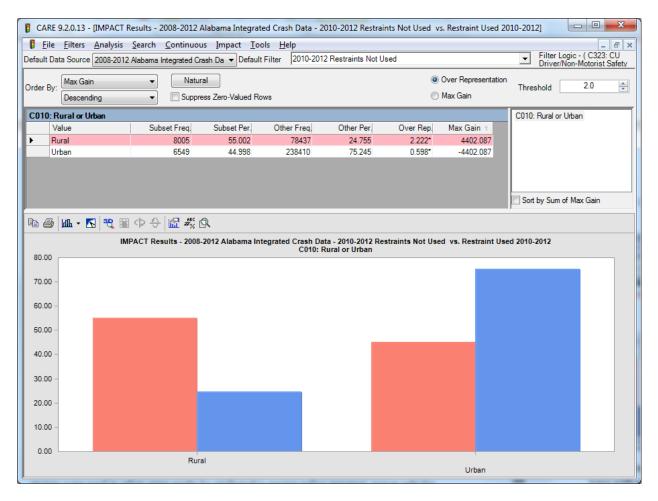
The counties with the greatest overrepresentation factors for crashes in which the driver failed to use restraints include Monroe, Choctaw, Wilcox and Lamar.

#### City



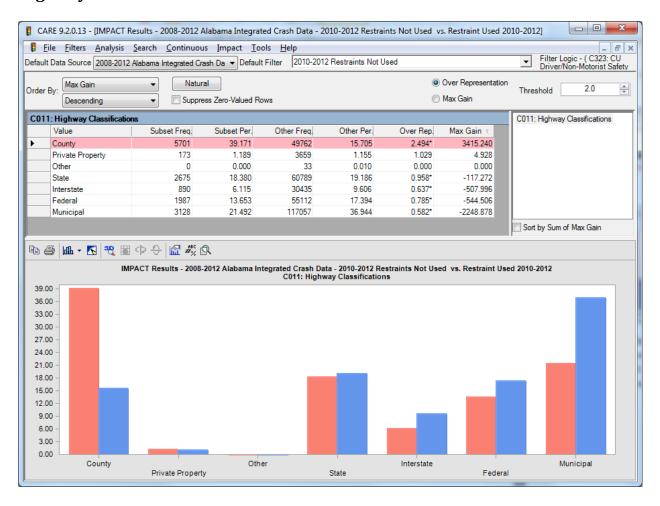
Overrepresented cities and county rural areas listed in the order of maximum gain are: rural Walker, rural Mobile, rural Cullman, and rural Madison. Almost all of the over representation occurs in the rural county areas. The most under represented cities in order of "best" first are as follows: Montgomery, Birmingham, Mobile, and Tuscaloosa.

#### Rural/Urban



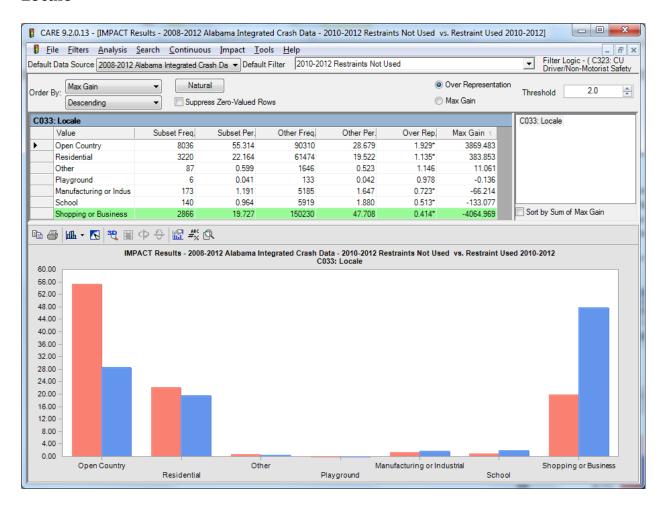
As expected from the city results above, the number of crashes involving drivers who use no restraints is greatly overrepresented in rural areas. The increased number of crashes in which restraints were used in urban areas might be attributed to greater police presence, newer vehicles, public information and educations efforts, and the demographics of urban drivers in general.

#### **Highway Classification**



Crash incidents in which no restraints were used are greatly overrepresented on county highways with nearly 2.5 times the expected number of crashes. These crashes were only slightly overrepresented on private property, where restraints are not mandated. The proportion of crashes in which restraints were used is greater in state, interstate, federal, and municipal highway areas.

#### Locale

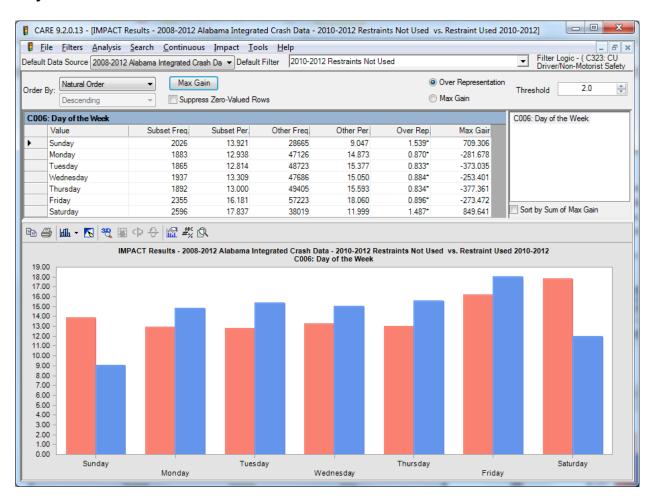


These crash incidents involving no restraints are overrepresented in open country areas. However, school and shopping areas are significantly under-represented, indicating that crashes in these areas generally involve drivers who used restraints.

#### **Time Factors**

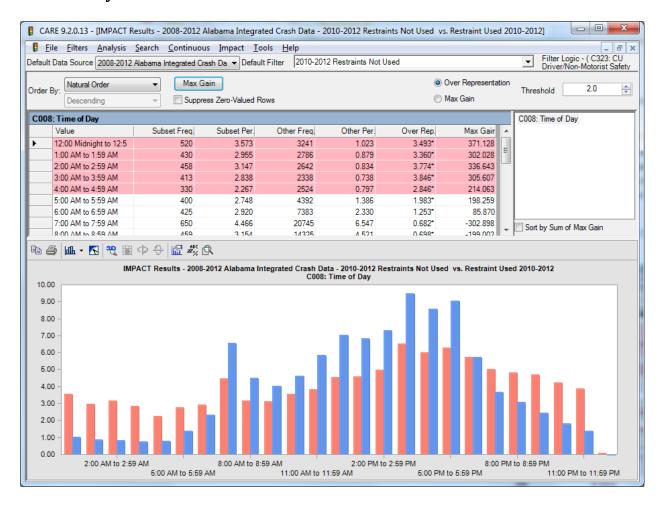
Time factors were also analyzed in several different categories to determine over-representation for day of the week and time of day. Analysis of these time factors allows for the determination of particular days of week or times of day in which more crashes occur with drivers who did not use restraints.

#### Day of the Week



The weekend is overrepresented for crashes involving causal drivers who failed to use restraints, demonstrating a heavy correlation with alcohol involved crashes. Sunday has 1.5 times the expected number of crashes, and Saturday has 1.5 times the expected number of crashes involving causal drivers who failed to use restraints.

#### Time of Day

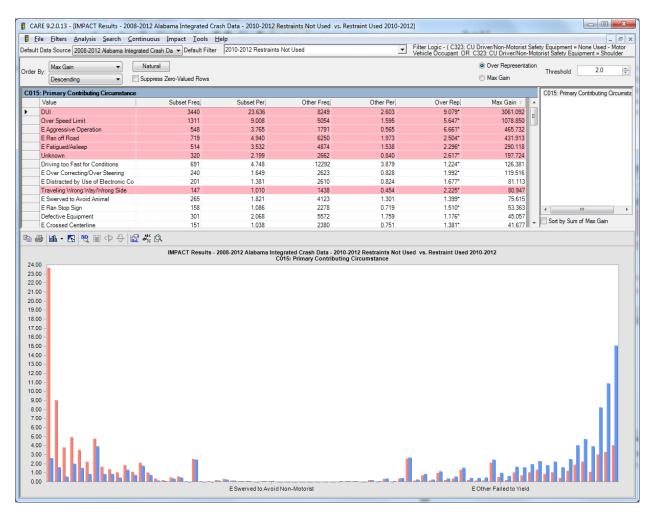


The relative probability of crashes involving no restraints is generally greater before and after standard work and rush hours. Over representation peaks during the 12 PM to 5 AM period and then tapers off, falling back below crashes involving causal drivers who use restraints in the 7 AM to 8 AM time period. This chart has a very strong resemblance to its DUI counterpart.

#### **Crash Causal Factors**

Analysis of crash causal factors determines which factors are the most likely contributors to crashes in which drivers did not use restraints. The primary contributing circumstances of the crashes were analyzed, and over-representation values indicate certain risk-taking behaviors associated with this type of crash. Vehicle model year and speed at impact were also evaluated to characterize factors that are consistently associated with crashes in which drivers do not use restraints.

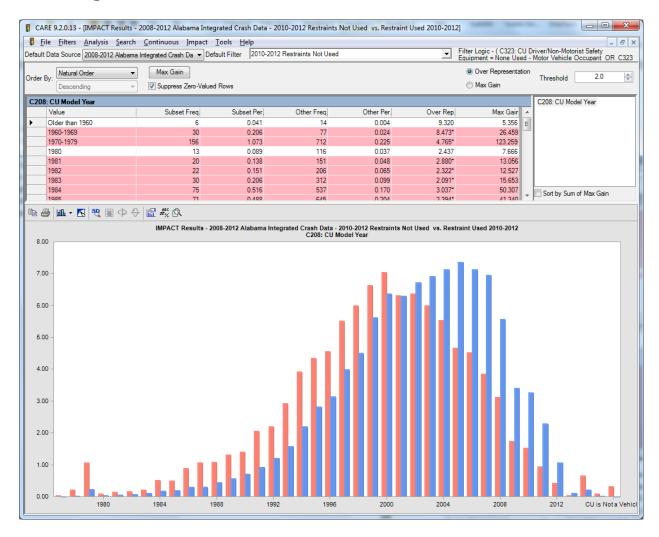
#### **Primary Contributing Circumstance**



Over representation factors indicate that certain risk-taking behaviors are often associated with the crashes in which drivers do not use restraints. In order of maximum potential expected gain (Max Gain), these include: DUI, over the speed limit, running off the road, aggressive operation, and fatigue or sleep. It is obvious that the presence of seat belts will not have a large impact on the causation of these crashes, although the increased ability to maintain control in adverse situations should not be minimized as a benefit of restraints. However, the correlation here would be the result of risk acceptance in general, and the inability of those who are impaired to consider the life-saving benefits of restraint use. Additionally, analysis of other contributing circumstanc-

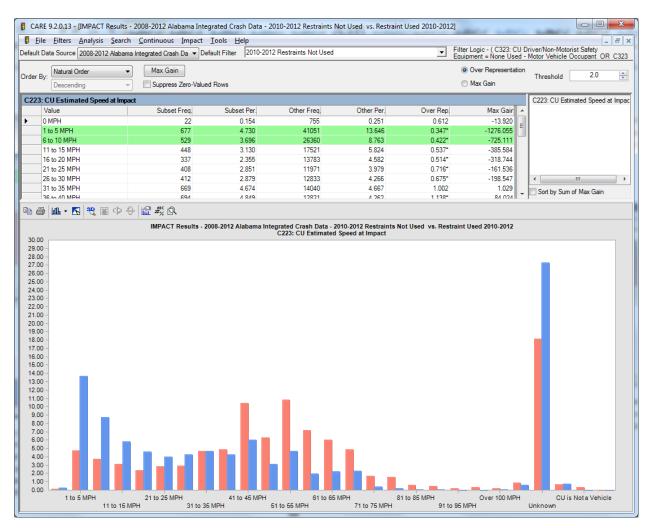
es presented similar risk-taking behaviors associated with crashes in which causal drivers did not use restraints. In order of maximum gain, these include: DUI, over the speed limit, running off the road, aggressive operation, and over correction. Other overrepresented contributing circumstances include traveling the wrong way, vehicle left in road, running stop signs, driver condition, improper parking, and wrong side of the road.

#### Vehicle Age - Model Year



Crashes attributed to drivers who used no restraints are greatly overrepresented in vehicles with model years 1960-1989. This might be attributed to the lack of standard safety restraints in these older model vehicles. Vehicles with model years 2000-2012 indicate that the numbers involving restraints very significantly surpasses those involving drivers who did not use restraints. One factor that would increase the rural problem could well be the economic disadvantages of those in the rural areas, and thus their use of older vehicles.

#### **Speed at Impact**

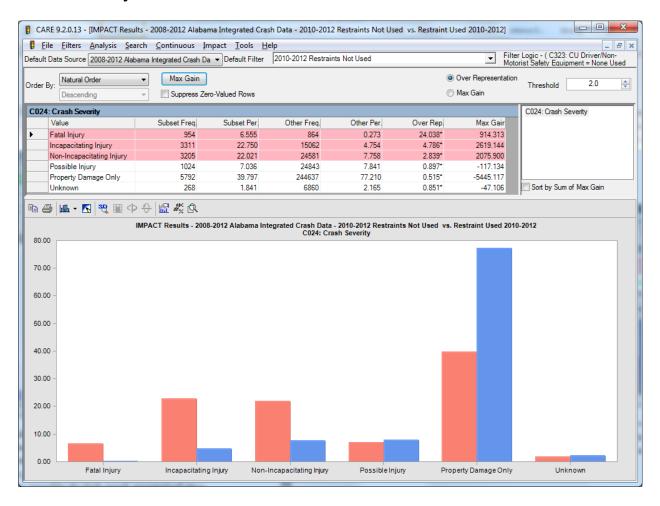


Speed at impact for crashes in which drivers failed to use restraints is overrepresented in the range of 46-100 MPH. This indicates that crashes in which restraints were not used consistently occur at higher speeds than crashes in which restraints were used by the causal driver. This confirms the rural-urban finding, in that speeds are generally higher in the rural areas. It also exacerbates the problem, resulting in greater severity caused by the high-speed, unrestrained situations. Severity factors are considered below.

#### **Severity Factors**

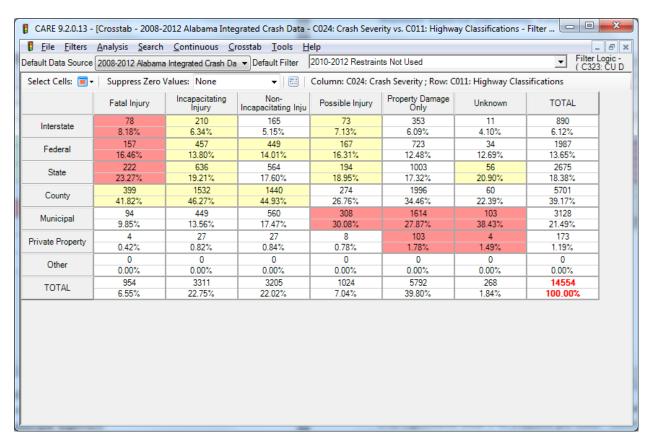
Severity factors were analyzed in several different categories to determine to what extent the use of restraints affects the safety of the drivers. These factors analyzed include crash severity, crash severity in urban versus rural areas, number injured, number killed, driver ejection status, and driver injury type.

#### **Crash Severity**



Fatal, incapacitating, and non-incapacitating injuries are all overrepresented in crashes that occurred without the use of restraints. This expected result quantifies the effects of the benefits of restraint use. Property damage only was far more common in crashes in which drivers did employ the use of restraints.

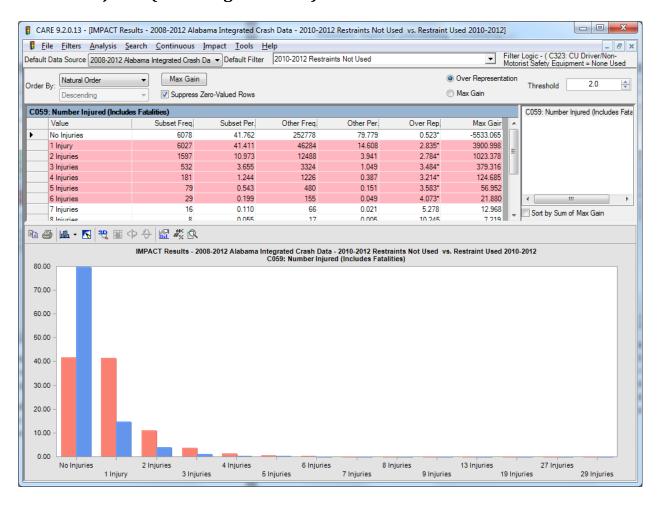
#### Crash Severity Urban vs. Rural



Analysis of crash severity by highway classification for crashes in which the causal driver did not use restraints shows that fatal injuries are over-represented on interstate and state roadways. Possible injuries were over-represented on municipal highways.

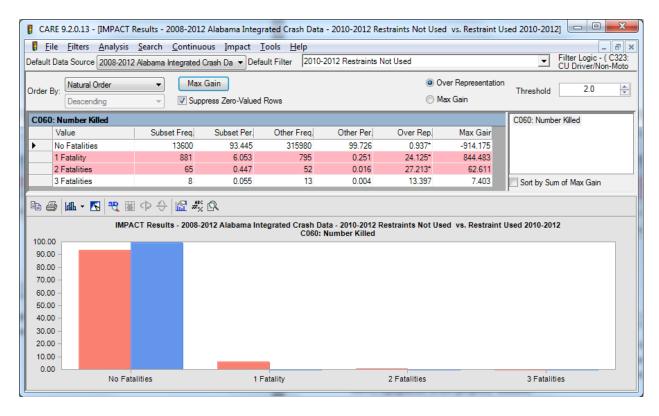
In a comparison of crash severity in rural versus urban areas for causal drivers who did not use restraints, possible injuries were over-represented in urban areas. However, in rural areas, fatal injuries crashes with causal drivers who did not use restraints were significantly over-represented, comprising 70% of fatal injuries.

#### **Number Injured (Including Fatalities)**



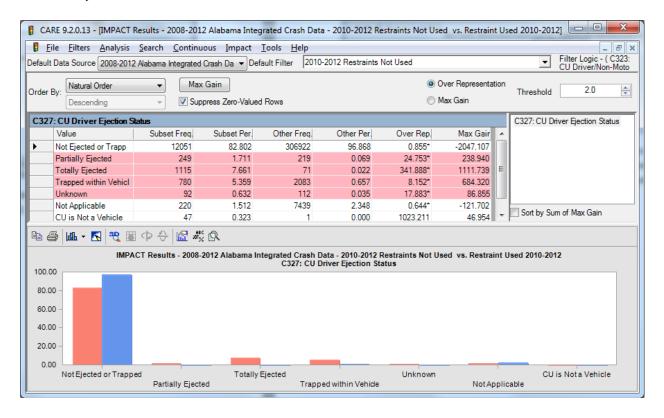
The proportion of injuries (including fatalities) in crashes in which no restraints were used is overrepresented from 1 to 6 injuries per crash. These results show quite plainly that crashes in which the causal driver was not restrained are much more severe in their effects to all passengers than when the causal driver is restrained. The overrepresentation of multiple injuries in the causal vehicle might also indicate a tendency to travel with multiple individuals in the vehicle. This also demonstrates that the use of a seat belt by the driver is an excellent proxy for seat belt use in general in the corresponding vehicle.

#### **Number Killed**



The proportion of fatalities in general as well as the proportion of multiple fatality crashes is dramatically overrepresented when restraints are not used.

#### **Driver Ejection Status**



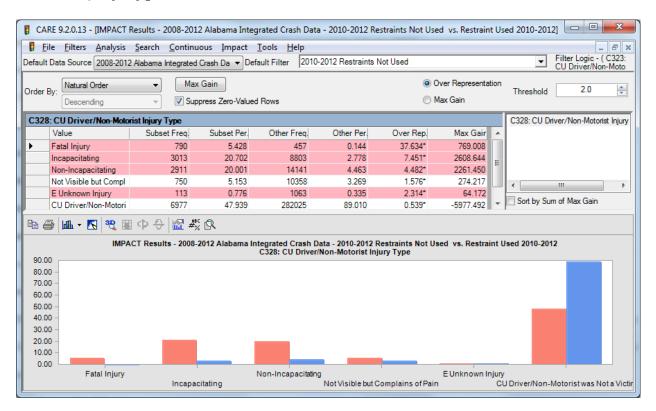
Ejection status of drivers is overrepresented in crashes in which the driver did not use restraints, indicating the cause for many fatalities. Total ejection is overrepresented by a factor of 341.8. Partial ejection, total ejection, or entrapments in the vehicle are expected in crashes in which safety equipment is not properly utilized.

# **Ejection Status by Severity**



In evaluating crash severity by ejection status, data shows that fatal and incapacitating injuries were significantly over-represented in crashes in which the driver was partially ejected, totally ejected, or trapped within the vehicle. Because the ejection status is strongly associated with the use of restraints, this data indicates that failure to use restraints results in greater severity of injuries in crashes. The table given above quantifies this increase in severity.

## **Driver Injury Type**

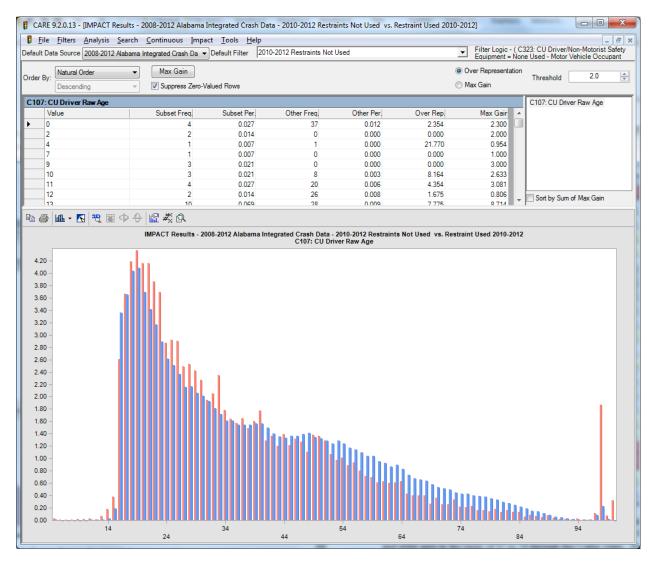


Various types of injuries, including fatalities, are consistently overrepresented in crashes where no restraints were used. Fatalities in these crashes are overrepresented by a factor of 37.63. In crashes in which safety restraints were used, drivers and non-motorists were far less likely to be injured.

# **Driver Demographics**

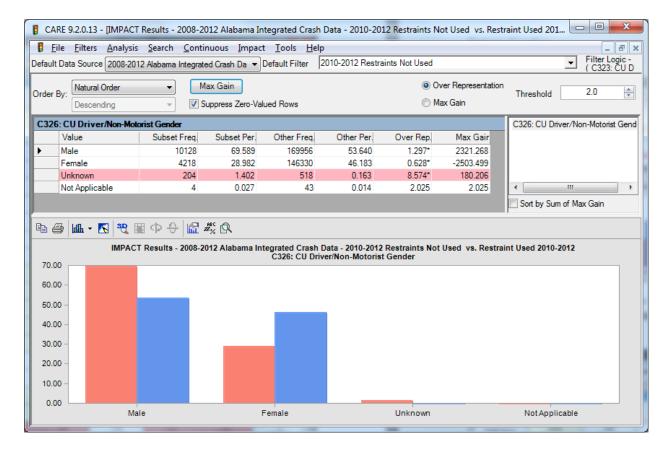
The study of driver demographics provides information about which gender or age groups are more likely to be involved in these crashes in which no restraints are used. Determination of over-representation can help to target the gender or age group that is more likely to be involved in this type of crash.

# **Driver Age**



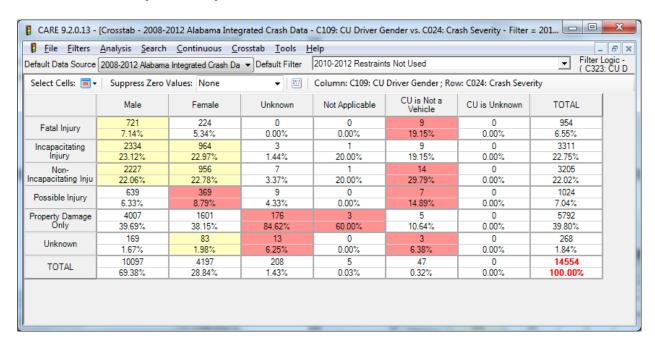
Analysis of individual driver ages indicates that crashes involving no restraints are overrepresented in the years above the teen-drivers (age range 20-35). While it appears that teen-aged drivers are more likely to use safety equipment (perhaps due to the emphasis on it place during training), there is still a very large proportion that are unrestrained, and this problem is multiplied by their over-representation in crashes in general (see how they are at least twice the average of the other ages).

#### **Driver Gender**



Males account for 69.58% of crashes in which restraints are not used, and they are overrepresented by a factor of 1.29. Since they do the majority of the driving, they become a clear target for restraint countermeasures.

# **Driver Gender by Severity**



When driver gender by severity was studied, data indicates that "Possible Injuries" are over-represented for female drivers in this type of crash.

# **Restraints Not Used in Rural Crashes - Times**

		Continuous Cr Integrated Crash Da	_	2010-2012 Restraints	Not Used And Ru	ral	<b>-</b>	Filter Logic - (( C323: CU
				,				Driver/Non-Motorist Safety
elect Cells: 🔳 🕶	Suppress Zero \	/alues: None	▼	Column: C006: Day	of the Week; Row	: C008: Time of Da	у	
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturda	y TOTAL
12:00 Midnight to 12:59 AM	89	30	28	23	31	31	100	332
	7.10% 73	3.02%	2.93%	2.23%	3.18%	2.52%	6.38% 77	4.15% 266
1:00 AM to 1:59 AM	5.83%	1.11%	2.51%	2.52%	2.36%	2.60%	4.91%	3.32%
2:00 AM to 2:59	88	20	21	18	14	34	80	275
AM AM	7.02%	2.02%	2.19%	1.75%	1.43%	2.77%	5.11%	3.44%
3:00 AM to 3:59	71	15	17	14	16	35	85	253
AM	5.67%	1.51%	1.78%	1.36%	1.64%	2.85%	5.42%	3.16%
4:00 AM to 4:59	44	14	14	23	17	30	75	217
AM	3.51%	1.41%	1.46%	2.23%	1.74%	2.44%	4.79%	2.71%
5:00 AM to 5:59	48	23	32	29	31	36	53	252
AM	3.83%	2.32%	3.34%	2.81%	3.18%	2.93%	3.38%	3.15%
6:00 AM to 6:59	53	28	32	38	31	40	51	273
AM	4.23%	2.82%	3.34%	3.69%	3.18%	3.25%	3.25%	3.41%
7:00 AM to 7:59	33	48	61	62	49	48	30	331
AM	2.63%	4.84%	6.37%	6.01%	5.02%	3.91%	1.91%	4.13%
8:00 AM to 8:59	33	29	37	39	30	31	40	239
AM	2.63%	2.92%	3.87%	3.78%	3.07%	2.52%	2.55%	2.99%
9:00 AM to 9:59 AM	23	35	43	42	28	38	37	246
	1.84%	3.53%	4.49%	4.07%	2.87%	3.09%	2.36%	3.07%
10:00 AM to 10:59 AM	22	41 4.13%	33 3.45%	39 3.78%	28	35 2.85%	39 2.49%	237
	1.76% 35	4.13% 55	25	3.78%	30	2.85%	48	2.96%
11:00 AM to 11:59 AM	2.79%	5.54%	2.61%	4.27%	3.07%	2.03%	3.06%	3.27%
12:00 Noon to	39	44	31	43	45	52	43	297
12:59 PM	3.11%	4.44%	3.24%	4.17%	4.61%	4.23%	2.74%	3.71%
1:00 PM to 1:59	50	57	42	40	45	47	61	342
PM	3.99%	5.75%	4.39%	3.88%	4.61%	3.82%	3.89%	4.27%
2:00 PM to 2:59	51	62	42	52	48	48	69	372
PM	4.07%	6.25%	4.39%	5.04%	4.92%	3.91%	4.40%	4.65%
3:00 PM to 3:59	52	57	57	58	68	74	63	429
PM	4.15%	5.75%	5.96%	5.63%	6.97%	6.02%	4.02%	5.36%
4:00 PM to 4:59	69	54	64	67	64	73	58	449
PM	5.51%	5.44%	6.69%	6.50%	6.56%	5.94%	3.70%	5.61%
5:00 PM to 5:59	66	71	65	71	58	74	70	475
PM	5.27%	7.16%	6.79%	6.89%	5.94%	6.02%	4.47%	5.93%
6:00 PM to 6:59	68	62	54	50	53	74	94	455
PM	5.43%	6.25%	5.64%	4.85%	5.43%	6.02%	6.00%	5.68%
7:00 PM to 7:59	57	53	59	65	59	70	77	440
PM	4.55%	5.34%	6.17%	6.30%	6.05%	5.70%	4.91%	5.50%
8:00 PM to 8:59	50	61	47	51	53	60	91	413
PM	3.99%	6.15%	4.91%	4.95%	5.43%	4.88%	5.81%	5.16%
9:00 PM to 9:59 PM	56	46	57 500°/	49	62	82 C 67%	74	426
	4.47%	4.64%	5.96%	4.75%	6.35%	6.67%	4.72%	5.32%
10:00 PM to 10:59	52 4 15%	40	39	48	44 4 51°/	78 c 25%	76 4.95%	377 4.71%
	4.15% 29	4.03%	4.08%	4.66%	4.51%	6.35%	4.85% 75	4.71%
11:00 PM to 11:59   PM	29	33 3.33%	3.34%	40 3.88%	48 4.92%	81 6.59%	4.79%	338 4.22%
	2.31%	3.33%	3.34%	0	4.32%	0.03%	4.73%	9
Unknown	0.16%	0.30%	0.10%	0.00%	0.10%	0.08%	0.06%	0.11%
	1253	992	957	1031	976	1229	1567	8005
TOTAL	15.65%	12.39%	11.96%	12.88%	12.19%	15.35%	19.58%	
	10.0076	12.5576	11.50%	12.00%	12.1370	10.00%	15.5676	100.00%

Crosstab analysis of time of day by day of the week for rural crashes in which restraints were not used helps target specific times in which officers should increase patrols in order to prevent these crashes.

# **Restraints Not Used Causal Driver Age 16-20 - Times**

File Filters	2008-2012 Alabama	Continuous C	_	Help 2010-2012 Restraints	Not Used Causal F	river 16-20	▼ Filter	Logic - (( C323: CU
				,			— Drive	r/Non-Motorist Safety
Select Cells: 🔳 ▾	Suppress Zero \	/alues: None	▼   📟	Column: C006: Day	of the Week; Row	: C008: Time of Da	y	1
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	TOTAL
12:00 Midnight to 12:59 AM	31	7	10	11	15	6	31	111
1:00 AM to 1:59	7.71% 22	2.13%	2.63%	2.91%	3.92% 10	1.41%	6.62%	4.01% 89
AM	5.47%	0.61%	2.11%	2.12%	2.61%	2.35%	6.20%	3.22%
2:00 AM to 2:59	25	9	4	8	9	4	25	84
AM	6.22%	2.74%	1.05%	2.12%	2.35%	0.94%	5.34%	3.04%
3:00 AM to 3:59	20	7	6	10	7	9	27	86
AM	4.98%	2.13%	1.58%	2.65%	1.83%	2.12%	5.77%	3.11%
4:00 AM to 4:59	16	4	2	3	5	12	21	63
AM	3.98%	1.22%	0.53%	0.79%	1.31%	2.82%	4.49%	2.28%
5:00 AM to 5:59	14	8	11	6	8	9	12	68
AM	3.48%	2.43%	2.89%	1.59%	2.09%	2.12%	2.56%	2.46%
6:00 AM to 6:59	13	6	7	6	6	8	21	67
AM	3.23%	1.82%	1.84%	1.59%	1.57%	1.88%	4.49%	2.42%
7:00 AM to 7:59	8	19	29	36	31	29	9	161
AM	1.99%	5.78%	7.63%	9.52%	8.09%	6.82%	1.92%	5.82%
8:00 AM to 8:59	9	7	13	11	14	2	8	64
AM	2.24%	2.13%	3.42%	2.91%	3.66%	0.47%	1.71%	2.31%
9:00 AM to 9:59	8	8	11	8	8	7	10	60
AM	1.99%	2.43%	2.89%	2.12%	2.09%	1.65%	2.14%	2.17%
10:00 AM to 10:59 AM	11	14	10	12	7	10	14	78
	2.74%	4.26%	2.63%	3.17%	1.83%	2.35%	2.99%	2.82%
11:00 AM to 11:59 AM	14 3.48%	7 2.13%	12 3.16%	21 5.56%	11 2.87%	7 1.65%	14 2.99%	86 3.11%
	16	20	20	17	13	22	17	125
12:00 Noon to 12:59 PM	3.98%	6.08%	5.26%	4.50%	3.39%	5.18%	3.63%	4.52%
1:00 PM to 1:59	16	14	16	15	14	12	17	104
PM	3.98%	4.26%	4.21%	3.97%	3.66%	2.82%	3.63%	3.76%
2:00 PM to 2:59	18	18	14	25	22	22	17	136
PM	4.48%	5.47%	3.68%	6.61%	5.74%	5.18%	3.63%	4.92%
3:00 PM to 3:59	21	34	39	31	42	43	16	226
PM	5.22%	10.33%	10.26%	8.20%	10.97%	10.12%	3.42%	8.17%
4:00 PM to 4:59	20	25	28	34	24	32	21	184
PM	4.98%	7.60%	7.37%	8.99%	6.27%	7.53%	4.49%	6.65%
5:00 PM to 5:59	15	23	35	21	32	25	18	169
PM	3.73%	6.99%	9.21%	5.56%	8.36%	5.88%	3.85%	6.11%
6:00 PM to 6:59	25	29	26	16	23	22	29	170
РМ	6.22%	8.81%	6.84%	4.23%	6.01%	5.18%	6.20%	6.15%
7:00 PM to 7:59	21	13	17	24	13	15	20	123
PM	5.22%	3.95%	4.47%	6.35%	3.39%	3.53%	4.27%	4.45%
8:00 PM to 8:59	15	19	21	16	20	18	18	127
PM	3.73%	5.78%	5.53%	4.23%	5.22%	4.24%	3.85%	4.59%
9:00 PM to 9:59	16	12	15	15	21	28	18	125
PM	3.98%	3.65%	3.95%	3.97%	5.48%	6.59%	3.85%	4.52%
10:00 PM to 10:59 PM	15	10	13	10	18	30	25	121
	3.73%	3.04%	3.42%	2.65%	4.70%	7.06%	5.34%	4.38%
11:00 PM to 11:59	13	14	13	13	10	43	31 c c 2°/	137
PM	3.23%	4.26%	3.42%	3.44%	2.61%	10.12%	6.62%	4.95%
Unknown	0 00%	0.00%	0.00%	1 0.26%	0.00%	0.00%	0.00%	0.04%
	0.00%			0.26%				
TOTAL	402 14.54%	329 11.90%	380 13.74%	378 13.67%	383 13.85%	425 15.37%	468 16.93%	2765 100.00%
	14.04%	11.30%	13.74%	13.07 %	13.03%	10.57 %	10.55%	100.00%

Crosstab analysis of specific times of day by day of the week for crashes in which the causal driver was between the ages of 16-20 also help target specifically problematic times in which younger drivers are more likely to get into crashes. The most consistently over-represented times include early morning hours on weekend days.

# **Restraints Not Used Causal Driver Age 21-25 - Times**

12:00 Midnight to 12:59 AM 1:00 AM to 1:59 AM 2:00 AM to 2:59 AM 3:00 AM to 3:59 AM 4:00 AM to 4:59 AM 5:00 AM to 5:59 AM 6:00 AM to 5:59 AM 6:00 AM to 6:59 AM 7:00 AM to 7:59 AM 8:00 AM to 8:59 AM 9:00 AM to 9:59 AM 0:00 AM to 10:59 AM 11:00 AM to 11:59 AM 11:00 Noon to	press Zero Va Sunday 24 5.93% 28 6.91% 48 11.85% 38 9.38% 21 5.19% 21 5.19% 16 3.95% 17 4.20% 7 7 4.20% 7 1.73% 3 0.74% 5		Tuesday  12 3.76% 9 2.82% 9 2.82% 3 0.94% 4 1.25% 8 2.51% 9 2.82% 16 5.02% 14 4.39% 12 3.76%	2010-2012 Restraints Column: C006: Day Wednesday  15 4.67% 6 1.87% 5 1.56% 9 2.80% 10 3.12% 4 1.25% 11 3.43% 15 4.67% 16 4.98% 12		Friday  13 3.15% 18 4.36% 14 3.39% 19 4.60% 21 5.08% 10 2.42% 15 3.63% 12 2.91%		/Non-Motorist Safety  TOTAL  113 4.43% 110 4.31% 127 4.98% 123 4.82% 96 3.76% 82 3.22% 85 3.33% 85
12:00 Midnight to 12:59 AM 1:00 AM to 1:59 AM 2:00 AM to 2:59 AM 3:00 AM to 3:59 AM 4:00 AM to 4:59 AM 5:00 AM to 5:59 AM 6:00 AM to 5:59 AM 6:00 AM to 6:59 AM 7:00 AM to 7:59 AM 8:00 AM to 8:59 AM 9:00 AM to 9:59 AM 10:00 AM to 10:59 AM 11:00 AM to 11:59 AM	Sunday  24  5.93%  28  6.91%  48  11.85%  38  9.38%  21  5.19%  16  3.95%  17  4.20%  7  1.73%  3  0.74%  5  1.23%	Monday  9 3.06% 7 2.38% 9 3.06% 6 2.04% 9 3.06% 8 2.72% 9 3.06% 13 4.42% 10 3.40%	Tuesday  12 3.76% 9 2.82% 9 2.82% 3 0.94% 4 1.25% 8 2.51% 9 2.82% 16 5.02% 14 4.39% 12	Wednesday  15 4.67% 6 1.87% 5 1.56% 9 2.80% 10 3.12% 4 1.25% 11 3.43% 15 4.67% 16 4.98%	Thursday  10 3.26% 11 3.58% 5 1.63% 6 1.95% 4 1.30% 13 4.23% 9 2.93%	Friday  13 3.15% 18 4.36% 14 3.39% 19 4.60% 21 5.08% 10 2.42% 15 3.63% 12 2.91%	Saturday 30 6.11% 31 6.31% 37 7.54% 42 8.55% 27 5.50% 18 3.67% 17 3.46% 7	113 4.43% 110 4.31% 127 4.98% 123 4.82% 96 3.76% 82 3.22% 85 3.33% 85
12:00 Midnight to 12:59 AM 1:00 AM to 1:59 AM 2:00 AM to 2:59 AM 3:00 AM to 3:59 AM 4:00 AM to 4:59 AM 5:00 AM to 5:59 AM 6:00 AM to 6:59 AM 7:00 AM to 7:59 AM 8:00 AM to 8:59 AM 9:00 AM to 9:59 AM 0:00 AM to 10:59 AM 11:00 AM to 11:59 AM	24 5.93% 28 6.91% 48 1.85% 38 9.38% 21 5.19% 21 5.19% 16 3.95% 17 4.20% 7 1.73% 3 0.74% 5	9 3.06% 7 2.38% 9 3.06% 6 2.04% 9 3.06% 8 2.72% 8 2.72% 9 3.06% 13 4.42% 10 3.40%	12 3.76% 9 2.82% 9 2.82% 3 0.94% 4 1.25% 8 2.51% 9 2.82% 16 5.02% 14 4.39%	15 4.67% 6 1.87% 5 1.56% 9 2.80% 10 3.12% 4 1.25% 11 3.43% 15 4.67% 16 4.98%	10 3.26% 11 3.58% 5 1.63% 6 1.95% 4 1.30% 13 4.23% 9 2.93%	13 3.15% 18 4.36% 14 3.39% 19 4.60% 21 5.08% 10 2.42% 15 3.63% 12 2.91%	30 6.11% 31 6.31% 37 7.54% 42 8.55% 27 5.50% 18 3.67% 17 3.46% 7	113 4.43% 110 4.31% 127 4.98% 123 4.82% 96 3.76% 82 3.22% 85 3.33% 85
1:00 AM to 1:59 AM 2:00 AM to 2:59 AM 3:00 AM to 3:59 AM 4:00 AM to 4:59 AM 5:00 AM to 5:59 AM 6:00 AM to 6:59 AM 7:00 AM to 7:59 AM 8:00 AM to 8:59 AM 9:00 AM to 9:59 AM 10:00 AM to 10:59 AM 11:00 AM to 11:59 AM	5.93% 28 6.91% 48 11.85% 38 9.38% 21 5.19% 21 5.19% 16 3.95% 17 4.20% 7 1.73% 3 0.74% 5	3.06% 7 2.38% 9 3.06% 6 2.04% 9 3.06% 8 2.72% 8 2.72% 9 3.06% 13 4.42% 10 3.40%	3.76% 9 2.82% 9 2.82% 3 0.94% 4 1.25% 8 2.51% 9 2.82% 16 5.02% 14 4.39% 12	4.67% 6 1.87% 5 1.56% 9 2.80% 10 3.12% 4 1.25% 11 3.43% 15 4.67% 16 4.98%	3.26% 11 3.58% 5 1.63% 6 1.95% 4 1.30% 13 4.23% 9 2.93% 9 2.93%	3.15% 18 4.36% 14 3.39% 19 4.60% 21 5.08% 10 2.42% 15 3.63% 12 2.91%	6.11% 31 6.31% 37 7.54% 42 8.55% 27 5.50% 18 3.67% 17 3.46% 7	4.43% 110 4.31% 127 4.98% 123 4.82% 96 3.76% 82 3.22% 85 3.33% 85
1:00 AM to 1:59 AM 2:00 AM to 2:59 AM 3:00 AM to 3:59 AM 4:00 AM to 4:59 AM 5:00 AM to 5:59 AM 6:00 AM to 6:59 AM 7:00 AM to 7:59 AM 8:00 AM to 8:59 AM 9:00 AM to 9:59 AM 10:00 AM to 10:59 AM 11:00 AM to 10:59 AM	28 6.91% 48 11.85% 38 9.38% 21 5.19% 21 5.19% 16 3.95% 17 4.20% 7 1.73% 3 0.74% 5 1.23%	7 2.38% 9 3.06% 6 2.04% 9 3.06% 8 2.72% 8 2.72% 9 3.06% 13 4.42% 10 3.40%	9 2.82% 9 2.82% 3 0.94% 4 1.25% 8 2.51% 9 2.82% 16 5.02% 14 4.39% 12	6 1.87% 5 1.56% 9 2.80% 10 3.12% 4 1.25% 11 3.43% 15 4.67% 16 4.98%	11 3.58% 5 1.63% 6 1.95% 4 1.30% 13 4.23% 9 2.93% 9	18 4.36% 14 3.39% 19 4.60% 21 5.08% 10 2.42% 15 3.63% 12 2.91%	31 6.31% 37 7.54% 42 8.55% 27 5.50% 18 3.67% 17 3.46%	110 4.31% 127 4.98% 123 4.82% 96 3.76% 82 3.22% 85 3.33% 85
AM 2:00 AM to 2:59 AM 3:00 AM to 3:59 AM 4:00 AM to 4:59 AM 5:00 AM to 5:59 AM 6:00 AM to 6:59 AM 7:00 AM to 7:59 AM 8:00 AM to 8:59 AM 10:00 AM to 9:59 AM 11:00 AM to 10:59 AM 11:00 AM to 10:59 AM	6.91% 48 11.85% 38 9.38% 21 5.19% 21 5.19% 16 3.95% 17 4.20% 7 1.73% 3 0.74% 5 1.23%	2.38% 9 3.06% 6 2.04% 9 3.06% 8 2.72% 9 3.06% 13 4.42% 10 3.40%	2.82% 9 2.82% 3 0.94% 4 1.25% 8 2.51% 9 2.82% 16 5.02% 14 4.39% 12	1.87% 5 1.56% 9 2.80% 10 3.12% 4 1.25% 11 3.43% 15 4.67% 16 4.98%	3.58% 5 1.63% 6 1.95% 4 1.30% 13 4.23% 9 2.93% 9	4.36% 14 3.39% 19 4.60% 21 5.08% 10 2.42% 15 3.63% 12 2.91%	6.31% 37 7.54% 42 8.55% 27 5.50% 18 3.67% 17 3.46% 7	4.31% 127 4.98% 123 4.82% 96 3.76% 82 3.22% 85 3.33% 85
2:00 AM to 2:59 AM 3:00 AM to 3:59 AM 4:00 AM to 4:59 AM 5:00 AM to 5:59 AM 6:00 AM to 6:59 AM 7:00 AM to 7:59 AM 8:00 AM to 8:59 9:00 AM to 9:59 AM 10:00 AM to 10:59 AM 11:00 AM to 11:59 AM	48 11.85% 38 9.38% 21 5.19% 21 5.19% 16 3.95% 17 4.20% 7 1.73% 3 0.74% 5 1.23%	9 3.06% 6 2.04% 9 3.06% 8 2.72% 8 2.72% 9 3.06% 13 4.42% 10 3.40%	9 2.82% 3 0.94% 4 1.25% 8 2.51% 9 2.82% 16 5.02% 14 4.39% 12	5 1.56% 9 2.80% 10 3.12% 4 1.25% 11 3.43% 15 4.67% 16 4.98%	5 1.63% 6 1.95% 4 1.30% 13 4.23% 9 2.93% 9	14 3.39% 19 4.60% 21 5.08% 10 2.42% 15 3.63% 12 2.91%	37 7.54% 42 8.55% 27 5.50% 18 3.67% 17 3.46% 7	127 4.98% 123 4.82% 96 3.76% 82 3.22% 85 3.33% 85
AM 3:00 AM to 3:59 AM 4:00 AM to 4:59 AM 5:00 AM to 5:59 AM 6:00 AM to 6:59 AM 7:00 AM to 7:59 AM 8:00 AM to 8:59 AM 9:00 AM to 9:59 AM 10:00 AM to 10:59 AM 11:00 AM to 11:59 AM	11.85% 38 93.87 21 5.19% 21 5.19% 16 3.95% 17 4.20% 7 11.73% 3 0.74% 5 11.23%	3.06% 6 2.04% 9 3.06% 8 2.72% 8 2.72% 9 3.06% 13 4.42% 10 3.40%	2.82% 3 0.94% 4 1.25% 8 2.51% 9 2.82% 16 5.02% 14 4.39% 12	1.56% 9 2.80% 10 3.12% 4 1.25% 11 3.43% 15 4.67% 16 4.98%	1.63% 6 1.95% 4 1.30% 13 4.23% 9 2.93% 9	3.39% 19 4.60% 21 5.08% 10 2.42% 15 3.63% 12 2.91%	7.54% 42 8.55% 27 5.50% 18 3.67% 17 3.46% 7	4.98% 123 4.82% 96 3.76% 82 3.22% 85 3.33% 85
3:00 AM to 3:59 AM 4:00 AM to 4:59 AM 5:00 AM to 5:59 AM 6:00 AM to 6:59 AM 7:00 AM to 7:59 AM 8:00 AM to 8:59 AM 9:00 AM to 9:59 AM 10:00 AM to 10:59 AM 11:00 AM to 11:59 AM	38 9.38% 21 5.19% 21 5.19% 16 3.395% 17 4.20% 7 1.73% 3 0.74% 5 1.23%	6 2.04% 9 3.06% 8 2.72% 8 2.72% 9 3.06% 13 4.42% 10 3.40%	3 0.94% 4 1.25% 8 2.51% 9 2.82% 16 5.02% 14 4.39%	9 2.80% 10 3.12% 4 1.25% 11 3.43% 15 4.67% 16 4.98%	6 1.95% 4 1.30% 13 4.23% 9 2.93% 9 2.93%	19 4.60% 21 5.08% 10 2.42% 15 3.63% 12 2.91%	42 8.55% 27 5.50% 18 3.67% 17 3.46%	123 4.82% 96 3.76% 82 3.22% 85 3.33% 85
AM 4:00 AM to 4:59 AM 5:00 AM to 5:59 AM 6:00 AM to 6:59 AM 7:00 AM to 7:59 AM 8:00 AM to 8:59 AM 9:00 AM to 9:59 AM 10:00 AM to 10:59 AM 11:00 AM to 11:59 AM	9.38% 21 5.19% 21 5.19% 16 3.95% 17 173% 3 0.74% 5 1.23%	2.04% 9 3.06% 8 2.72% 8 2.72% 9 3.06% 13 4.42% 10 3.40%	0.94% 4 1.25% 8 2.51% 9 2.82% 16 5.02% 14 4.39% 12	2.80% 10 3.12% 4 1.25% 11 3.43% 15 4.67% 16 4.98%	1.95% 4 1.30% 13 4.23% 9 2.93% 9 2.93%	4.60% 21 5.08% 10 2.42% 15 3.63% 12 2.91%	8.55% 27 5.50% 18 3.67% 17 3.46%	4.82% 96 3.76% 82 3.22% 85 3.33% 85
4:00 AM to 4:59 AM 5:00 AM to 5:59 AM 6:00 AM to 6:59 AM 7:00 AM to 7:59 AM 8:00 AM to 8:59 AM 9:00 AM to 9:59 AM 10:00 AM to 10:59 AM 11:00 AM to 11:59 AM	21 5.19% 21 5.19% 16 3.95% 17 4.20% 7 1.73% 3 0.74% 5 1.23%	9 3.06% 8 2.72% 8 2.72% 9 3.06% 13 4.42% 10 3.40%	4 1.25% 8 2.51% 9 2.82% 16 5.02% 14 4.39% 12	10 3.12% 4 1.25% 11 3.43% 15 4.67% 16 4.98%	4 1.30% 13 4.23% 9 2.93% 9	21 5.08% 10 2.42% 15 3.63% 12 2.91%	27 5.50% 18 3.67% 17 3.46% 7	96 3.76% 82 3.22% 85 3.33% 85
AM 5:00 AM to 5:59 AM 6:00 AM to 6:59 AM 7:00 AM to 7:59 AM 8:00 AM to 8:59 AM 9:00 AM to 9:59 AM 10:00 AM to 10:59 AM 11:00 AM to 11:59 AM 11:00 Noon to	5.19% 21 5.19% 16 3.95% 17 4.20% 7 7 1.73% 3 0.74% 5	3.06% 8 2.72% 8 2.72% 9 3.06% 13 4.42% 10 3.40%	1.25% 8 2.51% 9 2.82% 16 5.02% 14 4.39% 12	3.12% 4 1.25% 11 3.43% 15 4.67% 16 4.98%	1.30% 13 4.23% 9 2.93% 9 2.93%	5.08% 10 2.42% 15 3.63% 12 2.91%	5.50% 18 3.67% 17 3.46% 7	3.76% 82 3.22% 85 3.33% 85
5:00 AM to 5:59 AM 6:00 AM to 6:59 AM 7:00 AM to 7:59 AM 8:00 AM to 8:59 AM 9:00 AM to 9:59 AM 10:00 AM to 10:59 AM 11:00 AM to 11:59 AM	21 5.19% 16 3.95% 17 4.20% 7 1.73% 3 0.074% 5 1.23%	8 2.72% 8 2.72% 9 3.06% 13 4.42% 10 3.40%	8 2.51% 9 2.82% 16 5.02% 14 4.39% 12	4 1.25% 11 3.43% 15 4.67% 16 4.98%	13 4.23% 9 2.93% 9 2.93%	10 2.42% 15 3.63% 12 2.91%	18 3.67% 17 3.46% 7	82 3.22% 85 3.33% 85
AM 6:00 AM to 6:59 AM 7:00 AM to 7:59 AM 8:00 AM to 8:59 AM 9:00 AM to 9:59 AM 10:00 AM to 10:59 AM 11:00 AM to 11:59 AM	5.19% 16 3.95% 17 4.20% 7 1.73% 3 0.74% 5 1.23%	2.72% 8 2.72% 9 3.06% 13 4.42% 10 3.40%	2.51% 9 2.82% 16 5.02% 14 4.39% 12	1.25% 11 3.43% 15 4.67% 16 4.98%	4.23% 9 2.93% 9 2.93%	2.42% 15 3.63% 12 2.91%	3.67% 17 3.46% 7	3.22% 85 3.33% 85
6:00 AM to 6:59 AM 7:00 AM to 7:59 AM 8:00 AM to 8:59 AM 9:00 AM to 9:59 AM 10:00 AM to 10:59 AM 11:00 AM to 11:59 AM	16 3.95% 17 4.20% 7 1.73% 3 0.74% 5	8 2.72% 9 3.06% 13 4.42% 10 3.40%	9 2.82% 16 5.02% 14 4.39%	11 3.43% 15 4.67% 16 4.98%	9 2.93% 9 2.93%	15 3.63% 12 2.91%	17 3.46% 7	85 3.33% 85
AM 7:00 AM to 7:59 AM 8:00 AM to 8:59 AM 9:00 AM to 9:59 AM 10:00 AM to 10:59 AM 11:00 AM to 11:59 AM 12:00 Noon to	3.95% 17 4.20% 7 1.73% 3 0.74% 5 1.23%	2.72% 9 3.06% 13 4.42% 10 3.40%	2.82% 16 5.02% 14 4.39%	3.43% 15 4.67% 16 4.98%	2.93% 9 2.93%	3.63% 12 2.91%	3.46% 7	3.33% 85
7:00 AM to 7:59 AM 8:00 AM to 8:59 9:00 AM to 9:59 AM 10:00 AM to 10:59 AM 11:00 AM to 11:59 AM	17 4.20% 7 1.73% 3 0.74% 5 1.23%	9 3.06% 13 4.42% 10 3.40%	16 5.02% 14 4.39% 12	15 4.67% 16 4.98%	9 2.93%	12 2.91%	7	85
AM  8:00 AM to 8:59  AM  9:00 AM to 9:59  AM  10:00 AM to 10:59  AM  11:00 AM to 11:59  AM  12:00 Noon to	4.20% 7 1.73% 3 0.74% 5 1.23%	3.06% 13 4.42% 10 3.40%	5.02% 14 4.39% 12	4.67% 16 4.98%	2.93%	2.91%		
8:00 AM to 8:59 AM 9:00 AM to 9:59 AM 10:00 AM to 10:59 AM 11:00 AM to 11:59 AM 12:00 Noon to	7 1.73% 3 0.74% 5 1.23%	13 4.42% 10 3.40%	14 4.39% 12	16 4.98%				3.33%
AM 9:00 AM to 9:59 AM 10:00 AM to 10:59 AM 11:00 AM to 11:59 AM 12:00 Noon to	1.73% 3 0.74% 5 1.23%	4.42% 10 3.40%	4.39% 12	4.98%		5	15	81
9:00 AM to 9:59 AM 10:00 AM to 10:59 AM 11:00 AM to 11:59 AM 12:00 Noon to	3 0.74% 5 1.23%	10 3.40%	12		3.58%	1.21%	3.05%	3.18%
AM 10:00 AM to 10:59 AM 11:00 AM to 11:59 AM 12:00 Noon to	0.74% 5 1.23%	3.40%		12	8	11	11	67
AM 11:00 AM to 11:59 AM 12:00 Noon to	1.23%	10		3.74%	2.61%	2.66%	2.24%	2.63%
AM 11:00 AM to 11:59 AM 12:00 Noon to			13	11	10	15	10	74
AM 12:00 Noon to	10	3.40%	4.08%	3.43%	3.26%	3.63%	2.04%	2.90%
AM 12:00 Noon to		12	12	11	11	10	18	84
	2.47%	4.08%	3.76%	3.43%	3.58%	2.42%	3.67%	3.29%
12:59 PM	9	10	13	22	23	19	11	107
	2.22%	3.40%	4.08%	6.85%	7.49%	4.60%	2.24%	4.20%
1:00 PM to 1:59	9	12	12	21	21	18	11	104
PM	2.22%	4.08%	3.76%	6.54%	6.84%	4.36%	2.24%	4.08%
2:00 PM to 2:59	13	18	19	12	15	17	13	107
	3.21%	6.12%	5.96%	3.74%	4.89%	4.12%	2.65%	4.20%
3:00 PM to 3:59	14	19	20	15	20	20	19	127
	3.46%	6.46%	6.27%	4.67%	6.51%	4.84%	3.87%	4.98%
4:00 PM to 4:59	16	20	24	19	26	25	14	144
	3.95%	6.80%	7.52%	5.92%	8.47%	6.05%	2.85%	5.65%
5:00 PM to 5:59 PM	17	22	19	18	24	26	20	146
	4.20%	7.48%	5.96%	5.61%	7.82%	6.30%	4.07%	5.73%
6:00 PM to 6:59 PM	15 3.70%	16 5.44%	23 7.21%	24 7.48%	18 5.86%	15 3.63%	26 5.30%	137 5.37%
	15	9	16		11	25	17	111
7:00 PM to 7:59 PM	3.70%	3.06%	5.02%	18 5.61%	3.58%	6.05%	3.46%	4.35%
8:00 PM to 8:59	16	17	12	6	3.56%	18	27	106
	3.95%	5.78%	3.76%	1.87%	3.26%	4.36%	5.50%	4.16%
9:00 PM to 9:59	15	13	15	17	14	19	21	114
	3.70%	4.42%	4.70%	5.30%	4.56%	4.60%	4.28%	4.47%
10:00 PM to 10:59	15	12	11	12	9	28	30	117
	3.70%	4.08%	3.45%	3.74%	2.93%	6.78%	6.11%	4.59%
11:00 PM to 11:59	12	15	13	12	9	20	19	100
	2.96%	5.10%	4.08%	3.74%	2.93%	4.84%	3.87%	3.92%
Unknown	1	1	1	0	0	0	0	3
Unknown	0.25%	0.34%	0.31%	0.00%	0.00%	0.00%	0.00%	0.12%
TOTAL	405	294	319	321	307	413	491	2550
TOTAL	15.88%	11.53%	12.51%	12.59%	12.04%	16.20%	19.25%	100.00%

Crosstab analysis of specific times of day by day of the week for crashes in which the causal driver was between the ages of 21-25 also help target specifically problematic times in which drivers in a different age range are more likely to get into crashes. The most consistently over-represented times include early morning hours on weekend days and afternoon hours on week-days.

# **Summary and Conclusions**

### Geographical Factors

- o Counties with the greatest over-representation factors for unrestrained driver crashes include Walker, Talladega, Escambia and Jackson.
- The number of crashes involving drivers who use no restraints is greatly overrepresented in rural areas in comparison to the urban areas. The odds ratio for rural areas is well over twice what would be expected if rural and urban restraint use were the same.
- o The most overrepresented (worse) areas are the rural county areas in Walker, Mobile, Cullman, and Escambia.
- o The most under-represented (best) cities are Montgomery, Birmingham, Mobile, and Tuscaloosa.
- O Crash incidents with no driver restraints being used are greatly overrepresented on county highways, with 2.5 times the expected number of crashes. County was the only roadway classification that was overrepresented.
- o In the analysis of locale, crashes involving no restraints are most commonly overrepresented in open country areas.

#### • Time Factors

- The weekend days are the most overrepresented days of the week for crashes in which drivers did not use restraints. This correlates highly with impaired driving crashes.
- o In the evaluation of time of day, overrepresentation peaks during the 12 PM to 5 AM period and then tapers off, falling back below crashes involving causal drivers who use restraints in the 7 AM to 7 PM time periods. Additional crosstabulations were performed for specific target groups (see below).

#### • Crash Causal Factors

- o The overrepresentation factors indicate that certain risk-taking behaviors are often associated with crashes in which restraints are not used, including DUI, over the speed limit, running off the road, aggressive operation, and fatigue/sleep.
- Crashes attributed to drivers who used no restraints are greatly overrepresented in vehicles with model years 1960-1989, which could be attributed to the lack of standard safety restraints in these older model vehicles, or perhaps the removal of these safety devices over time.
- o The speed at impact for crashes for this type of crash is overrepresented in all of the categories above 40 MPH, indicating that these crashes consistently occur at higher speeds than crashes in which restraints were used by the causal driver.

#### • Severity Factors

- Fatal, incapacitating, and non-incapacitating injuries are all overrepresented in crashes where drivers were not restrained; this analysis quantified the benefits of the restraint use.
- Fatal injuries in crashes where no restraints are used are overrepresented on interstate and state roadways. "Possible Injuries" were overrepresented on municipal highways.
- Analysis of injuries shows that the proportion of injuries (including fatalities) in unrestrained driver crashes is overrepresented from 1 to 6 injuries per crash.
   Crashes without restraints are clearly causing much more severe injuries.
- The proportion of fatalities in general as well as the proportion of multiple fatality crashes is dramatically overrepresented in crashes where the causal driver is unrestrained.
- o As expected, ejection of the unrestrained driver is overrepresented, indicating one major cause for many fatalities in which safety equipment is not properly utilized.
- o All types of injuries, including fatalities, are consistently overrepresented in crashes where no restraints were used.

#### Driver Demographics

- Analysis of individual driver ages indicates that crashes involving no restraints are overrepresented in drivers in and immediately above the teen driver classification (age range 16-35).
- o Male drivers account for a majority of crashes in which restraints are not used, and they are overrepresented by a factor of 1.29.
- Analysis of Time of Day by Day of Week. Crosstab analyses of time of day by day of the week of crashes in which restraints were not used enables officers to determine target times and days to enforce restraint laws so that this severe crashes may be prevented. Three analyses were performed and compared for three target groups: rural crashes, crashes caused by drivers 16-20, and crashes caused by drivers 21-25. While the rural and 21-25 crosstabs were expected to correlate very heavily with impaired driving, it was found that the 16-20 year old causal drivers were not very much different. It seems clear that while they might not be involved with alcohol or drugs, they are out and engaged in risk-taking practices at the same time as the impaired driving by their older driver counterparts, further compounding the problem at these times. The drivers 16-20 would also reasonably be expected to be overrepresented in the week-day after school hours in the proximity of their schools and after-school activities.

# **Alabama Performance Report**

#### TRAFFIC SAFETY PERFORMANCE MEASURES

#### C-1) Number of traffic fatalities (FARS)

2008	2009	2010	2011	Goal
969	848	862	894	875

Based on the above analysis of the FARS data from 2008 through 2012, the goal for calendar year 2014 was to reduce the number of fatalities from its four year baseline of 893 to 875 traffic fatalities. The FARS total number of traffic fatalities in 2012 was 865. The goal was achieved.

# C-2) Number of severe injuries in traffic crashes (State crash data files – most severe category: "A" Injuries.)

2009	2010	2011	2012	Goal
15,131	10,544	9,904	8,974	7,750

Based on the above analysis of the Alabama data from 2009 through 2012, the goal for calendar year 2014 was to reduce the number of severe injuries from its four-year (2009-2012) baseline of 11,138 to 7,750. The State total number of severe injuries in 2012 was 8,974. The goal was not achieved. Calendar year 2012 had higher than average multiple injuries for a single crash. There were more recorded crashes for 2012 with 3 or more injuries compared to the 5 year average.

#### C-3) Fatalities/100M VMT (FARS, FHWA)

#### **Rural Fatalities/100M VMT**

2008	2009	2010	Goal
2.10	1 69	1 72	1.70

Based on the above analysis of the FARS crash data from 2008 through 2010, the goal for calendar year 2014 was a reduction from the 1.84 baseline to 1.70 rural fatalities per 100M VMT. The FARS actual total Rural Fatalities per 100M VMT in 2012 was 1.68. The goal was achieved.

#### **Urban Fatalities/100M VMT**

2008	2009	2010	Goal
1.18	1.08	.97	.95

Based on the above analysis of the FARS crash data from 2008 through 2010, the goal for calendar year 2014 was a reduction from the 1.08 baseline to 0.95 urban fatalities per 100M VMT. The FARS actual total Urban Fatalities per 100M VMT in 2012 was .99. The goal was not achieved. Run-off-road crashes were the only primary contributing circumstance that had a substantial increase in fatal crashes compared to previous years.

#### **Total Fatalities/100M VMT**

2008	2009	2010	2011	Goal
1.63	1.38	1.34	1.38	1.35

Based on the above analysis of the FARS crash data from 2008 through 2010, the goal for calendar year 2014 was a reduction from the 1.43 baseline to 1.35 urban fatalities per 100M VMT. The FARS actual Total Fatalities per 100M VMT in 2012 was 1.33. The goal was achieved.

C-4) Number of unrestrained passenger vehicle occupant fatalities, all seat positions (FARS)

2008	2009	2010	2011	Goal
452	378	394	382	375

Based on the above analysis of the FARS crash data from 2008 through 2011, the goal for calendar year 2014 was a reduction from the 402 baseline to 375 unrestrained occupant fatalities. The FARS actual total of unrestrained passenger vehicle fatalities in 2012 was 354. The goal was achieved.

C-5) Number of fatalities in crashes involving a driver (or motorcycle operator) with a BAC of .08 and above (FARS)

2008	2009	2010	2011	Goal
314	267	264	261	250

Based on the above analysis of the FARS crash data from 2008 through 2011, the goal for calendar year 2014 was a reduction from the 277 baseline to 250 fatalities involving a driver with a BAC. 08 and above. The FARS actual total of fatalities in crashes involving a driver (Or motorcycle operator) with a BAC of .08 and above in 2012 was 257. The goal was not achieved. A contributing factor in not achieving the goal was reductions in manpower and budget.

#### C-6) Number of speeding-related fatalities (FARS)

2008	2009	2010	2011	Goal
447	327	316	298	280

Based on the above analysis of the FARS crash data from 2008 through 2011, the goal for calendar year 2014 was a reduction from the 347 baseline to 280 speed-related fatalities. The FARS actual number of speeding- related fatalities in 2012 was 272. The goal was achieved.

#### C-7) Number of motorcyclist fatalities (FARS)

2008	2009	2010	2011	Goal
100	76	86	98	90

Based on the above analysis of the FARS crash data from 2008 through, the goal for calendar year 2014 was 90 motorcycle fatalities. The FARS actual total of motorcyclist fatalities in 2012 was 97. The goal was not achieved. The primary current issue with motorcycle fatalities is a combination of (1) more motorcycle use due to the recession and high fuel prices and (2) the number of older drivers who have taken to motorcycle use.

#### C-8) Number of un-helmeted motorcyclist fatalities (FARS)

2008	2009	2010	2011	Goal
15	7	5	10	8

Based on the above analysis of the FARS crash data from 2008 through 2011, the goal for calendar year 2014 was 8 un-helmeted motorcyclist fatalities. The FARS total number of un-helmeted motorcyclist fatalities in 2012 was 10. The goal was not achieved. The same problem that is causing increased motorcycle fatalities in general would also impact un-helmeted fatalities.

## C-9) Number of drivers age 20 or younger involved in fatal crashes (FARS)

2008	2009	2010	2011	Goal
163	140	140	136	130

Based on the above analysis of the FARS crash data from 2008 through 2011, the goal for calendar year 2014 was 130 fatalities. The FARS actual number of drivers age 20 or younger involved in fatal crashes in 2012 was 139. The goal was not achieved. There was an increase in the incidences of "air bag not deployed", "trapped in vehicle", and pedestrian fatalities.

## C-10) Number of pedestrian fatalities (FARS)

2008	2009	2010	2011	Goal
68	64	61	79	64

Based on the above analysis of the FARS crash data from 2008 through 2011, the goal for calendar year 2014 was 64 pedestrian fatalities. The FARS total number of pedestrian fatalities in 2012 was 77. The goal was not achieved. The primary contributing circumstances related to these fatalities was improper crossing and not wearing reflective apparel, thereby limiting visibility.

B-1) The observed seat belt use for passenger vehicles, front seat outboard occupants (survey).

2009	2010	2011	2012	Goal
90.0%	91.4%	88.0%	89.5%	90.5%

Based on the above analysis of the Alabama seatbelt survey data from 2008 through 2012, the goal for calendar year 2014 was an increase to 90.50 percent seat belt use. The actual NHTSA certified observed seat belt usage rate in 2013 was 97.3 percent. The goal was achieved.

## **Traffic Safety Activity Measures**

## **Number of speeding citations**

2009	2010	2011	2012	Goal
50,693	49,003	61,054	42,067	45,000

Based on the above analysis of the Alabama citation data from 2009 through 2012, the goal for calendar year 2014 was 45,000 speeding citations. The total number of speeding citations in 2013 was 57,670.

## Number of impaired driving arrests

2009	2010	2011	2012	Goal
3,374	5,108	4,867	2,041	3,500

Based on the above analysis of the Alabama citation data from 2009 through 2012, the goal for calendar year 2014 was 3,500 impaired driving arrests. The total number of impaired driving arrests in 2013 was 2,508.

#### **Number of seat belt citations**

2009	2010	2011	2012	Goal
34,328	36,341	43,384	30,425	36,500

Based on the above analysis of the Alabama citation data from 2009 through 2012, the goal for calendar year 2014 was 36,500 speeding citations. The total number of seat belt citations for 2013 was 25,536.

# **Alabama Overtime Grant Review Policy and Procedures**

Beginning in October of 2012, the Alabama Office of Highway Safety conducts on-site reviews of local law enforcement agencies that participate in grant funded overtime projects. The reviews are conducted by AOHS staff and include the review of regular and overtime hour timesheets, activity reports, activities and milestones, examination of the stated goals and objectives versus progress achieved, check for supervisor's signatures, and ensure the program grant funds were used correctly in accordance with the grant program requirements. Results are then documented and discussed with subgrantees. Any additional action, including reimbursement of funds, necessary with regard to program activities or management is noted and followed through by the AOHS staff .This exercise has been recognized as a best practice by NHTSA during the 2014 Management Review.

Included below is the established policy regarding on-site agency reviews.

The purpose of the review is to ensure that the law enforcement agencies who receive overtime funding from ADECA/LETS are in compliance with their requirements for overtime funding. Conducting periodic reviews will identify whether there are deficiencies in the claim submission process which may result in inaccurate claims.

#### 1. Review Plan

- a. The Highway Traffic Safety Manager (HTSM) will make the determination as to which agencies are reviewed.
- b. The HTSM will contact the appropriate CTSP Regional Director to inform him/her that an agency in their region has been selected for a review.
- c. The CTSP Regional Director is responsible to notify the agency of said review and to ensure that all relevant personnel (chief/sheriff or their designated representative, city clerk or other payroll personnel, etc.) can attend or provide the necessary documentation needed to perform the review.
- d. It is the responsibility of the CTSP Regional Director to coordinate a date and time for the audit that accommodates the schedule of all relevant parties.
- e. The CTSP Regional Director will inform the agency of the documents that will need to be made available to facilitate the review. These documents include, but are not limited to, the following:
  - i. Agency's Overtime Policy
  - ii. Agreement for Overtime Funds
  - iii. Reimbursement claims submitted to ADECA/LETS for payment (The grant numbers and exact reimbursement claims may be provided prior to the review or may be determined on the day of the review.) The reimbursement claim should include the following documents:
    - 1. Reimbursement Form
    - 2. Contact Report(s)
    - 3. Operational Plan
    - 4. Roll-Up Form

- iv. Copies of citations and warnings listed on the contact report and roll-up sheet
- v. Time sheets/cards showing overtime worked
- vi. Payroll records showing payment to the officer(s) for overtime claimed

## 2. Conducting the Review

- a. The review will be conducted by the HTSM and review staff.
- b. The HTSM and review staff will determine which grants and reimbursement claims will be audited and will review all supporting documentation for each claim made by the agency.
- c. Depending on what the review reveals, the HTSM and review staff may ask for clarification of certain items or request additional supporting documentation.

#### 3. Review Results

- a. Following the review, a Summary of Review and Findings will be generated.
- b. If the result of the review suggests or demonstrates that the agency received an overpayment, the HTSM will evaluate the amount of the overpayment and circumstances surrounding the overpayment, in accordance with established policies managing state and federal funds management, and make a recommendation as to whether the agency needs to make restitution.
- c. The HTSM will make his recommendations to the Law Enforcement and Traffic Safety Division Chief and the Public Safety Unit Chief. Upon their approval, the HTSM will send the CTSP Regional Director the Summary of Review and Findings and a letter stating the recommendations.
- d. It is the responsibility of the CTSP Regional Director to send a letter to the agency explaining what the findings were and the appropriate action, if any, that needs to be taken.