State of Alabama Fiscal Year 2017

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

Jim Byard, Jr., Director
Alabama Department of Economic and Community Affairs
William M. Babington, Governor's Highway Safety Representative
Law Enforcement and Traffic Safety Division Chief

June 22, 2016

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APPENDIX A TO PART 1300 —

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

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

State: Alabama Fiscal Year: 2017

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

GENERAL REQUIREMENTS

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

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

INTERGOVERNMENTAL REVIEW OF FEDERAL PROGRAMS

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

FEDERAL FUNDING ACCOUNTABILITY AND TRANSPARENCY ACT (FFATA)

The State will comply with FFATA guidance, OMB Guidance on FFATA Subaward and Executive Compensation Reporting, August 27, 2010, (https://www.fsrs.gov/documents/OMB_Guidance_on_FFATA_Subaward_and_Executive_Compensation_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
(applies to subrecipients as well as States)

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

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

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

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

The State highway safety agency-

- Will take all measures necessary to ensure that no person in the United States shall, on the grounds of race, color, national origin, disability, sex, age, limited English proficiency, or membership in any other class protected by Federal Nondiscrimination Authorities, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any of its programs or activities, so long as any portion of the program is Federally-assisted.

- Will administer the program in a manner that reasonably ensures that any of its subrecipients, contractors, subcontractors, and consultants receiving Federal financial assistance under this program will comply with all requirements of the Non-Discrimination Authorities identified in this Assurance;

- Agrees to comply (and require any of its subrecipients, contractors, subcontractors, and consultants to comply) with all applicable provisions of law or regulation governing US DOT's or NHTSA's access to records, accounts, documents, information, facilities, and staff, and to cooperate and comply with any program or compliance reviews, and/or complaint investigations conducted by US DOT or NHTSA under any Federal Nondiscrimination Authority;

- Acknowledges that the United States has a right to seek judicial enforcement with regard to any matter arising under these Non-Discrimination Authorities and this Assurance;

- Insert in all contracts and funding agreements with other State or private entities the following clause:

"During the performance of this contract/funding agreement, the contractor/funding recipient agrees-

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

b. Not to participate directly or indirectly in the discrimination prohibited by any Federal non-discrimination law or regulation, as set forth in Appendix B of 49 CFR part 21 and herein;

c. To permit access to its books, records, accounts, other sources of information, and its facilities as required by the State highway safety office, US DOT or NHTSA;

d. That, in event a contractor/funding recipient fails to comply with any nondiscrimination provisions in this contract/funding agreement, the State highway safety agency will have the right to impose such contract/agreement sanctions as it or NHTSA determine are appropriate, including but not limited to withholding payments to the contractor/funding recipient under the contract/agreement until the contractor/funding recipient complies; and/or cancelling, terminating, or suspending a contract or funding agreement, in whole or in part; and

e. To insert this clause, including paragraphs a through e, in every subcontract and subagreement and in every solicitation for a subcontract or sub-agreement, that receives Federal funds under this program.

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

The State will provide a drug-free workplace by:

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

- Taking appropriate personnel action against such an employee, up to and including termination.
- Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency.

f. Making a good faith effort to continue to maintain a drug-free workplace through implementation of all of the paragraphs above.

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

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

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

Certification for Contracts, Grants, Loans, and Cooperative Agreements

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

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all sub-award at all tiers (including subcontracts, subgrants, and contracts under grant, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

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

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

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

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

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

Instructions for Primary Certification (States)

1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below and agrees to comply with the requirements of 2 CFR Parts 180 and 1300.

2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.

3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default or may pursue suspension or debarment.

4. The prospective primary participant shall provide immediate written notice to the department or agency to which this proposal is submitted if at any time the prospective primary participant learns its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

5. The terms *covered transaction, debarment, suspension, ineligible, lower tier, participant, person, primary tier, principal, and voluntarily excluded,* as used in this clause, have the

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

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

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

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

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

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

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

(I) 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 anti-trust 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 (l)(b) of this certification; and
(d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

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

Instructions for Lower Tier Certification

1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below and agrees to comply with the requirements of 2 CFR Parts 180 and 1300.

2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

4. The terms *covered transaction, debarment, suspension, ineligible, lower tier, participant, person, primary tier, principal, and voluntarily excluded,* as used in this clause, have the meanings set out in the Definition and Coverage sections of 2 CFR Part 180. You may contact the person to whom this proposal is submitted for assistance in obtaining a copy of those regulations.

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

6. The prospective lower tier participant further agrees by submitting this proposal that it will include the clause titled "Instructions for Lower Tier Certification" including the "Certification

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

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

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

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

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

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

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

BUY AMERICA ACT

(applies to subrecipients as well as States)

The State and each subrecipient will comply with the Buy America requirement (23 U.S.C. 313) when purchasing items using Federal funds. Buy America requires a State, or subrecipient, to purchase only steel, iron and manufactured products produced in the United States with Federal funds, unless the Secretary of Transportation determines that such domestically produced items would be inconsistent with the public interest, that such materials are not reasonably available and of a satisfactory quality, or that inclusion of domestic materials will increase the cost of the overall project contract by more than 25 percent. In order to use Federal funds to purchase

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

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

The State and each subrecipient will not use 23 U.S.C. Chapter 4 grant funds for programs to check helmet usage or to create checkpoints that specifically target motorcyclists.

POLICY ON SEAT BELT USE

In accordance with Executive Order 13043, Increasing Seat Belt Use in the United States, dated April 16, 1997, the Grantee is encouraged to adopt and enforce on-the-job seat belt use policies and programs for its employees when operating company-owned, rented, or personally-owned vehicles. The National Highway Traffic Safety Administration (NHTSA) is responsible for providing leadership and guidance in support of this Presidential initiative. For information on how to implement such a program, or statistics on the potential benefits and cost-savings to your company or organization, please visit the Buckle Up America section on NHTSA's web-site 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.

SECTION 402 REQUIREMENTS

1. To the best of my personal knowledge, the information submitted in the Highway Safety Plan in support of the State's application for a grant under 23 U.S.C. 402 is accurate and complete.

2. The Governor is the responsible official for the administration of the State highway safety program, by appointing a Governor's Representative for Highway Safety who shall be responsible for a State highway safety agency that has adequate powers and is suitably

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

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

4. At least 40 percent of all Federal funds apportioned to this State under 23 U.S.C. 402 for this fiscal year will be expended by or for the benefit of political subdivisions of the State in carrying out local highway safety programs (23 U.S.C. 402(b)(l)(C)) or 95 percent by and for the benefit of Indian tribes (23 U.S.C. 402(h)(2)), unless this requirement is waived in writing. (This provision is not applicable to the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.)

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

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

7. The State will implement activities in support of national highway safety goals to reduce motor vehicle related fatalities that also reflect the primary data-related crash factors within the State, as identified by the State highway safety planning process, including:
    - Participation in the National high-visibility law enforcement mobilizations as identified annually in the NHTSA Communications Calendar, including not less than 3 mobilization campaigns in each fiscal year to –
        - o Reduce alcohol-impaired or drug-impaired operation of motor vehicles; and
        - o Increase use of seatbelts by occupants of motor vehicles;
    - Submission of information regarding mobilization participation into the HVE Database;
    - Sustained enforcement of statutes addressing impaired driving, occupant protection, and driving in excess of posted speed limits;
    - An annual Statewide seat belt use survey in accordance with 23 CFR part 1340 for the measurement of State seat belt use rates, except for the Secretary of Interior on behalf of Indian tribes;
    - Development of Statewide data systems to provide timely and effective data analysis to support allocation of highway safety resources;
    - Coordination of Highway Safety Plan, data collection, and information systems with the State strategic highway safety plan, as defined in 23 U.S.C. 148(a).
      (23 U.S.C. 402(b)(l)(F))

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

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

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

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

OR

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

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

Signature Governor's Representative for Highway Safety

Date

William M. Babington

Printed name of Governor's Representative for Highway Safety

COST SUMMARY

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

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For Approval | ***2017-HSP-1*** | Report Date: 06/09/2016

Program Area	Project	Description	Prior Approved Program Funds	State Funds	Previous Bal.	Incre/(Decre)	Current Balance	Share to Local
NHTSA								
NHTSA 402								
Planning and Administration								
PA-2017-00-00-00		Planning & Administration	$.00	$300,000.00	$.00	$300,000.00	$300,000.00	$.00
Planning and Administration Total			**$.00**	**$300,000.00**	**$.00**	**$300,000.00**	**$300,000.00**	**$.00**
Alcohol								
AL-2017-SP-AL-01		Alcohol (Alabama Law Enforcement Agency)	$.00	$.00	$.00	$35,000.00	$35,000.00	$.00
Alcohol Total			**$.00**	**$.00**	**$.00**	**$35,000.00**	**$35,000.00**	**$.00**
Police Traffic Services								
PT-2017-SP-PT-01		Police Traffic (Enterprise St Com Coll)	$.00	$.00	$.00	$163,280.00	$163,280.00	$163,280.00
PT-2017-SP-PT-02		Police Traffic (Mobile Cty Comm)	$.00	$.00	$.00	$155,120.00	$155,120.00	$155,120.00
PT-2017-SP-PT-03		Police Traffic (Franklin Cty Comm)	$.00	$.00	$.00	$240,800.00	$240,800.00	$240,800.00
PT-2017-SP-PT-04		Police Traffic (City of Opelika)	$.00	$.00	$.00	$240,800.00	$240,800.00	$240,800.00
PT-2017-SP-PT-05		PT-Drive Sober (Enterprise St Com Coll)	$.00	$.00	$.00	$61,960.00	$61,960.00	$61,960.00
PT-2017-SP-PT-06		PT-Drive Sober (Mobile Cty Comm)	$.00	$.00	$.00	$43,480.00	$43,480.00	$43,480.00
PT-2017-SP-PT-07		PT-Drive Sober (Franklin Cty Comm)	$.00	$.00	$.00	$43,480.00	$43,480.00	$43,480.00
PT-2017-SP-PT-08		PT-Drive Sober (City of Opelika)	$.00	$.00	$.00	$51,080.00	$51,080.00	$51,080.00
PT-2017-SP-PT-09		Police Traffic (AL Law Enforcement Agenc	$.00	$.00	$.00	$800,000.00	$800,000.00	$.00
Police Traffic Services Total			**$.00**	**$.00**	**$.00**	**$1,800,000.00**	**$1,800,000.00**	**$1,000,000.00**
Community Traffic Safety Project								
CP-2017-00-00-00		Section 402 Transfer Holding	$.00	$1,250,000.00	$.00	$5,000,000.00	$5,000,000.00	$2,000,000.00
CP-2017-SP-CP-01		Comm Traffic Safety(Enterprise St Com Co	$.00	$54,932.43	$.00	$164,797.31	$164,797.31	$164,797.31
CP-2017-SP-CP-02		Comm Traffic Safety(Mobile Cty Com)	$.00	$58,603.66	$.00	$175,811.00	$175,811.00	$175,811.00
CP-2017-SP-CP-03		Comm Traffic Safety(Franklin Cty Com)	$.00	$60,945.90	$.00	$182,837.72	$182,837.72	$182,737.72
CP-2017-SP-CP-04		Comm Traffic Safety(City of Opelika)	$.00	$60,030.49	$.00	$180,091.49	$180,091.49	$180,091.49
CP-2017-SP-CP-05		ADECA Com Traffic Safety Program Manager	$.00	$.00	$.00	$75,000.00	$75,000.00	$.00
CP-2017-SP-CP-06		ADECA Com Traffic Safety Program Manager	$.00	$.00	$.00	$60,000.00	$60,000.00	$.00
Community Traffic Safety Project Total			**$.00**	**$1,484,512.48**	**$.00**	**$5,838,537.52**	**$5,838,537.52**	**$2,703,437.52**
NHTSA 402 Total			***$.00***	***$1,784,512.48***	***$.00***	***$7,973,537.52***	***$7,973,537.52***	***$3,703,437.52***

Program Area	Project	Description	Prior Approved Program Funds	State Funds	Previous Bal.	Incre/(Decre)	Current Balance	Share to Local
MAP 21 405b OP High								
405b High HVE								
	M1HVE-2017-HB-M1-01	CIOT (Enterprise St Com Coll)		$.00	$12,105.00	$.00	$48,420.00	$48,420.00	$.00
	M1HVE-2017-HB-M1-02	CIOT (Mobile Cty Comm)		$.00	$11,095.00	$.00	$44,380.00	$44,380.00	$.00
	M1HVE-2017-HB-M1-03	CIOT (Franklin Cty Comm)		$.00	$12,680.00	$.00	$50,720.00	$50,720.00	$.00
	M1HVE-2017-HB-M1-04	CIOT (City of Opelika)		$.00	$14,120.00	$.00	$56,480.00	$56,480.00	$.00
	M1HVE-2017-HB-M1-06	2017 CIOT Paid Media (Auburn University)		$.00	$81,250.00	$.00	$325,000.00	$325,000.00	$.00
405b High HVE Total				**$.00**	**$131,250.00**	**$.00**	**$525,000.00**	**$525,000.00**	**$.00**
405b High Public Education								
	M1PE-2017-HB-M1-05	Public Education(Franklin Cty Commission		$.00	$13,750.00	$.00	$55,000.00	$55,000.00	$.00
405b High Public Education Total				**$.00**	**$13,750.00**	**$.00**	**$55,000.00**	**$55,000.00**	**$.00**
405b High OP Information System								
	M1OP-2017-HB-M1-07	Information System (University of AL)		$.00	$22,461.00	$.00	$89,844.01	$89,844.01	$.00
405b High OP Information System Total				**$.00**	**$22,461.00**	**$.00**	**$89,844.01**	**$89,844.01**	**$.00**
405b OP High								
	M1X-2017-00-00-00	MAP 21 405b Transfer Holding		$.00	$262,500.00	$.00	$1,050,000.00	$1,050,000.00	$.00
405b OP High Total				**$.00**	**$262,500.00**	**$.00**	**$1,050,000.00**	**$1,050,000.00**	**$.00**
MAP 21 405b OP High Total				***$.00***	***$429,961.00***	***$.00***	***$1,719,844.01***	***$1,719,844.01***	***$.00***
MAP 21 405b OP Low								
405b Low HVE								
	M2HVE-2017-00-00-00	MAP 21 405b Transfer Holding		$.00	$17,500.00	$.00	$70,000.00	$70,000.00	$.00

Program Area	Pro-ject	Description	Prior Approved Program Funds	State Funds	Previous Bal.	In-cre/(Decre)	Current Balance		Share to Local	
405b Low HVE Total					**$.00**	**$17,500.00**	**$.00**	**$70,000.00**	**$70,000.00**	**$.00**
405b Low Public Education										
	M2PE-2017-H7-M2-01	Public Education(Franklin Cty Commission			$.00	$25,000.00	$.00	$100,000.00	$100,000.00	$.00
405b Low Public Education Total					**$.00**	**$25,000.00**	**$.00**	**$100,000.00**	**$100,000.00**	**$.00**
405b Low OP Information System										
	M2OP-2017-H7-M2-02	Information System (University of AL)			$.00	$26,184.72	$.00	$104,738.89	$104,738.89	$.00
405b Low OP Information System Total					**$.00**	**$26,184.72**	**$.00**	**$104,738.89**	**$104,738.89**	**$.00**
MAP 21 405b OP Low Total					***$.00***	***$68,684.72***	***$.00***	***$274,738.89***	***$274,738.89***	***$.00***
MAP 21 405c Data Program										
405c Data Program										
	M3DA-2017-00-00-00	MAP 21 405c Transfer Holding			$.00	$200,000.00	$.00	$800,000.00	$800,000.00	$.00
	M3DA-2017-HC-M3-01	Data Program(AL Dept of Public Health)			$.00	$15,000.00	$.00	$60,000.00	$60,000.00	$.00
	M3DA-2017-HC-M3-02	Data Program (University of AL)			$.00	$175,155.27	$.00	$700,621.08	$700,621.08	$.00
405c Data Program Total					**$.00**	**$390,155.27**	**$.00**	**$1,560,621.08**	**$1,560,621.08**	**$.00**
MAP 21 405c Data Program Total					***$.00***	***$390,155.27***	***$.00***	***$1,560,621.08***	***$1,560,621.08***	***$.00***
MAP 21 405d Impaired Driving Mid										
405d Mid HVE										
	M5HVE-2017-00-00-00	405d Mid HVE (Transfer Holding)			$.00	$525,000.00	$.00	$2,100,000.00	$2,100,000.00	$.00
	M5HVE-2017-HD-M5-01	Impaired Driving(Enterprise State Comm C			$.00	$36,522.50	$.00	$146,090.00	$146,090.00	$.00
	M5HVE-2017-HD-M5-02	Impaired Driving(Mobile County Commissio			$.00	$34,212.50	$.00	$136,850.00	$136,850.00	$.00
	M5HVE-2017-HD-M5-03	Impaired Driving(Franklin County Commiss			$.00	$54,862.50	$.00	$219,450.00	$219,450.00	$.00
	M5HVE-2017-HD-M5-04	Impaired Driving(City of Opelika)			$.00	$49,402.50	$.00	$197,610.00	$197,610.00	$.00
	M5HVE-2017-HD-M5-05	Impaired Driving(AL Law Enforcement Agen			$.00	$100,000.00	$.00	$400,000.00	$400,000.00	$.00
405d Mid HVE Total					**$.00**	**$800,000.00**	**$.00**	**$3,200,000.00**	**$3,200,000.00**	**$.00**

Program Area	Project	Description	Prior Approved Program Funds	State Funds	Previous Bal.	Incre/(Decre)	Current Balance	Share to Local
405d Mid Court Support								
	M5CS-2017-HD-M5-06	DRE-(AL Law Enforcement Agency)	$.00	$779,801.92	$.00	$311,923.70	$311,923.70	$.00
	M5CS-2017-HD-M5-08	TSRP (Office of Prosecution Svs)	$.00	$36,863.86	$.00	$147,455.44	$147,455.44	$.00
405d Mid Court Support Total			**$.00**	**$816,665.78**	**$.00**	**$459,379.14**	**$459,379.14**	**$.00**
405d Mid BAC Testing/Reporting								
	M5BAC-2017-HD-M5-07	Impaired Driving BAC(AL Dept of Forensic	$.00	$81,250.00	$.00	$325,000.00	$325,000.00	$.00
405d Mid BAC Testing/Reporting Total			**$.00**	**$81,250.00**	**$.00**	**$325,000.00**	**$325,000.00**	**$.00**
405d Mid Paid/Earned Media								
	M5PEM-2017-HD-M5-09	Impaired Driving(Auburn University) Paid	$.00	$81,250.00	$.00	$325,000.00	$325,000.00	$.00
	M5PEM-2017-HD-M5-10	Drive Sober-Paid Media (Auburn University	$.00	$81,250.00	$.00	$325,000.00	$325,000.00	$.00
405d Mid Paid/Earned Media Total			**$.00**	**$162,500.00**	**$.00**	**$650,000.00**	**$650,000.00**	**$.00**
MAP 21 405d Impaired Driving Mid Total			***$.00***	***$1,860,415.78***	***$.00***	***$4,634,379.14***	***$4,634,379.14***	***$.00***
NHTSA Total			***$.00***	***$4,533,729.25***	***$.00***	***$16,163,120.64***	***$16,163,120.64***	***$3,703,437.52***
Total			***$.00***					

- Section 402, 405b-d: The match source may be a combination of the Alabama Law Enforcement Agency (ALEA), State Trust Fund and Local Law Enforcement Agencies. ALEA will use personnel costs (salaries), vehicle purchases, vehicle operations, and vehicle maintenance cost.

- The ALEA match funds are applicable to each NHTSA grant program. The Alabama Office of Highway Safety (AOHS) will make sure the ALEA, State Trust Fund, and Local Law Enforcement Agencies' matching funds will not be used to match another Federal grant program.

EXECUTIVE SUMMARY

The Alabama Office of Highway Safety (AOHS), which is housed within the Law Enforcement and Traffic Safety Division (LETS) of the Alabama Department of Economic and Community Affairs (ADECA) has been assigned the responsibility of administering traffic safety funds provided by the National Highway Traffic Safety Administration (NHTSA). AOHS is directed by the Governor's Representative for Highway Safety and State Coordinator (GR&SC), to which all highway traffic safety staff report.

A major requirement for the administration of these funds is an annual Highway Safety Plan (HSP), which is developed by AOHS. This plan is highly evidence-based in that it is based upon ongoing analytics performed on crash, citation and other data in order to assure the best possible use of both federal and state funds that are dedicated to traffic safety. The HSP provides continuous guidance and improvement in Alabama's ongoing traffic safety efforts to assure that Section 402 Program funds as well as other traffic safety investments are allocated optimally in order to produce the maximum reduction of traffic fatalities and severe injuries on Alabama roadways.

In FY 2017, the state 402 program will begin operating under the Fixing America's Surface Transportation (FAST) Act that was signed into law on December 4, 2015. According to FAST Act, 402 Program highway safety funds must be used to support programs with one or more of the following categories: (1) recognition awards, (2) safety supplies and equipment, (3) educational materials, and (4) advertising. Funds may be used for equipment, travel, training, program administration and/or public communications. The FAST Act National Priority Safety Programs are as follows:

- Occupant Protection
- Traffic Safety Information Systems Improvements
- Impaired Driving Countermeasures
- Distracted Driving
- Graduated Driver Licensing Laws
- Non-motorized Safety (NEW)

Alabama has made concerted efforts to support these National Priority Safety Program efforts.

Alabama has met the requirements for Section 402 funding since the beginning of the program in the late 1960s, which has been administered by NHTSA. Four regional Community Traffic Safety Program (CTSP) Coordinators report directly to the GR and 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. These various statewide and local traffic safety efforts involve a variety of political subdivisions within the State in their efforts to implement local highway safety programs consistently with State and Federal policy. The local agencies that receive funding are authorized to implement their local programs according to the specifications of the HSP.

The following present the high level overview of the purpose for the 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:** The evidence-based approach draws upon detailed problem identification efforts to quantify and compare alternatives that are given within the NHTSA document *Countermeasures That Work*.
- **Primary focus:** Evidence-Based Enforcement (E-BE) concentrating on enforcement with special emphasis on speed reduction, impaired driving elimination and increasing the use of restraints that are centered around the hotspot analyses performed for each of these countermeasure subjects.
- **Implementation Approach:** AOHS recognizes that if these programs are to be successful, they must entail a cooperative effort that involves teamwork and diversity, including all organizations and individuals within the state who have traffic safety interests.
- **Participant mission:** Focus crash reduction countermeasures 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 crash severity.

A major objective accomplished by the evidence-based approach is to compare similar results from year to year from the data that is used to drive the countermeasure selections. For example, similar hot-spot analyses are performed from year to year to determine the changes in the crash statistics as well as the correlated demographics. This quantifies both improvements and setbacks. If the indications are that a program implemented in the previous fiscal year fell short of its intended target, analyses are performed to determine the various causes in terms of continual improvement in the future. Conversely, if it is determined that a specific program was particularly successful, then its characteristics are studied to determine if they can be applied or even reinforced in future efforts.

The next section of this document, entitled *HSP Planning Process*, gives an overview of the two-fold analytical process: (1) at the highest level, to evaluate alternative overall countermeasure strategies and select the ones 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. For example, the highest level might resolve that selective enforcement and PI&E are the superior countermeasure types to employ, while the second level would establish the specific locations and media markets to implement these countermeasures.

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 at the top of the next page.

Table 1 Extract: Top Ten Crash Types
Crash Data Organized by Top Fatality Causes – CY 2015

Crash Type (Causal Driver)	Fatal	Fatal %	Injuries	Injury %	PDO	PDO %	Total
1. Restraint Deficient*	367	3.42%	4,271	39.82%	6,088	56.76%	10,726
2. Impaired Driving	202	3.23%	2,405	38.49%	3,641	58.27%	6,248
3. Speeding	138	3.97%	1,634	46.95%	1,708	49.08%	3,480
4. Ped., Bicycle, School Bus	107	6.91%	913	58.94%	529	34.15%	1,549
5. License Status Deficiency	104	1.58%	2,091	31.87%	4,367	66.55%	6,562
6. Obstacle Removal	95	1.49%	2,173	34.05%	4,113	64.46%	6,381
7. Pedestrian	95	12.94%	616	83.92%	23	3.13%	734
8. Mature – Age > 64	92	0.66%	3,109	22.36%	10,704	76.98%	13,905
9. Youth – Age 16-20	90	0.39%	5,303	22.90%	17,768	76.72%	23,161
10. Motorcycle	69	4.60%	1,032	68.75%	400	26.65%	1,501

* All categories list number of crashes except for the "Restraint Deficient" and "Child 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.

It is clear from the Table 1 extract above that the major problems that need to be addressed, are restraint deficiencies, impaired driving and speeding. This does not mean that all traffic safety resources must go to countermeasures in these three areas. It is important to maintain a balanced approach that addresses other issues further down on the list, since a relatively low funding allocation to one or more of these areas might be able to produce significant safety benefits. It is very important to notice in interpreting and applying Table 1 that the crash categories given are not mutually exclusive. For example, a crash could involve a 19 year old, impaired, speeding, unrestrained driver whose license status is deficient who runs off the road and hits a tree (obstacle).

While the top three items in Table 1 will be given major consideration, the following outlines efforts that apply to the remaining seven items:

- Pedestrian, Bicycle and School Bus – this category is consolidated over several areas that involve young people who have not yet reached driving age, and especially those in the K-9 grade levels. Our society rightfully gives far greater weight to young people, and the motivational programs for young people should include all aspects of traffic safety that impacts their activities.
- 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 to all drivers, especially those who have little regard for the law.
- Obstacle Removal – an evidence-based hotspot approach, quite similar to those given in this HSP, is being applied by the Alabama Department of Transportation (ALDOT) to assure that obstacle removal programs sponsored by the Federal Highway Administration (FHWA) and the State of Alabama are successful.
- Pedestrian – this covers all pedestrian fatalities for all ages. Pedestrian incidents tend to occur in those places where there are both many vehicles and many pedestrians – i.e., in the large

metropolitan areas. Recent increases in pedestrian incidents can be attributed to the combination of distracted driving and distracted walking, usually involving electronic devices. This has also been impacted by the significant migration to urban areas in the past few years.

- Mature Drivers – Age > 64 – this covers over 20 years (65-84) as opposed to Item 9, which is only five age years (16-20). On a normalized per year basis, it seems clear that countermeasure resources need to go to the younger drivers. However, the senior driver age classification is maintained because of the obvious growth in this group of drivers that is expected over the coming decade.
- Youth – Age 16-20 – by any metric this age group is the most critical in reducing fatalities and all other crashes, even when normalized by number in the driving population. Generally this is attributable to the risk-taking inclination of younger drivers. Because of the increase in this age group in CY 2015, a special problem identification study was performed that is given in Attachment B.
- Motorcycle – these crashes are particularly severe, and this became more of an issue with the surge in motorcycle use with the high fuel prices and decline in the economy that occurred three to five years in the past. Since these economic factors are now mitigated it is expected that improvements will be seen in a reduction of the previous levels.

In order to have the maximum impact on saving lives and reducing suffering, the Highway Safety Plan for FY 2017 addresses the two largest factors that *cause* injury and fatal crashes (speed and impaired driving), and the single greatest factor influencing severity (lack of proper restraint use). Crashes that were in either the Speed or Impaired Driving category were identified, and locations with the highest numbers of severe injury crashes were included in a prioritized listing that provides the basis for their evidence-based selective enforcement efforts by state and local law enforcement agencies. At the same time an analysis was performed to find areas in which seat belt non-use was highest, and these were isolated for seat belt enforcement concentration. These problem areas, known as *hotspots,* were defined by specific criteria depending on their roadway classifications. 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 provides examples of the countermeasures that are detailed in this plan:

- Continue supporting the four Community Traffic Safety Program (CTSP) projects.
- Continue to support the University of Alabama Center for Advanced Public Safety (UA-CAPS) in exchange for their support of AOHS. UA-CAPS provides AOHS with their crash and traffic safety data and analytical technical assistance throughout the year.
- Conduct four local Evidenced-Based Traffic Safety Enforcement Programs, one within each of the Community Traffic Safety Program/Law Enforcement Liaison (CTSP/LEL) regions. Additionally, a statewide Evidenced-Based Traffic Safety Enforcement Program will be conducted in conjunction with the Alabama Law Enforcement Agency (ALEA). See page 95 for more details.
- Continue to require the CTSP/LEL 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 evidence-based enforcement (E-BE) for impaired driving, speeding and seat belts.

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, Eighth Edition, 2015*; which can be viewed at:

http://www.safehomealabama.gov/SafetyTopics/GeneralTrafficSafety.aspx

In addition, the following administrative goals have been established by AOHS to assure that the operation of the State's traffic safety program is well organized and continues to be implemented on the basis of firm evidence derived from data analyses:

- 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 FAST Act guidelines), in the support and integration of eCite, eCrash, MMUCC, driver license access, EMS-medical data integration, roadway data and vehicle data.
- 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.

AOHS has maintained key partnerships over several decades to deal with the many multifaceted aspects of traffic safety. This includes the following partners and their general responsibilities:

- Community Traffic Safety Program/Law Enforcement Liaison (CTSP/LEL) Coordinators – employed in the field as an arm of the AOHS, these individuals live and have offices within their respective regions, and build ongoing relationships with local and state level law enforcement as well as all other traffic safety stakeholders in the local communities who serve that region.
- Alabama Law Enforcement Agency (ALEA) – this agency is now responsible for all state-level law enforcement activities. This includes most enforcement on the state and county route system as well as the support for the many computer systems that they have sponsored in the past, such as eCrash and eCite, the state's electronic crash and citation systems.
- Alabama Department of Transportation (ALDOT) – strong coordination among the traffic safety efforts between ADECA and ALDOT is stimulated by the monthly sponsored Safety Outreach Meetings hosted by ALDOT. ADECA works quite closely with ALDOT in the development of common traffic safety performance measures and goals, which is a requirement of the Strategic Highway Safety Plan (SHSP).
- Strategic Highway Safety Plan (SHSP) Steering Committee – which also brings involvement and close concurrence with ALDOT and the following Federal agencies:
    - Federal Highway Administration (FHWA)
    - Federal Motor Carrier Safety Administration (FMCSA)
    - 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 (UA-CAPS) – a sister state quasi-research agency that provides the information foundation from crash, citation, EMS runs and other databases. See: http://www.caps.ua.edu/

HSP Planning Process

This section gives the steps of the planning process applied by AOHS in creating the HSP. AOHS recognizes there are a large number of excellent countermeasure programs that are in need of funding. For example, it is recognized that fatalities are caused by many factors other than speed, impaired driving and lack of proper restraints. However, optimality demands that the limited resources available be applied to those areas that have the maximum fatality-reduction potential. According to Table 1, these "top three" demonstrate the greatest fatality-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).

As discussed above, the State of Alabama has a comprehensive, evidence-based enforcement plan that encompasses all traffic safety program areas. The following outlines the procedures that are followed in developing the countermeasure programs that are included in the HSP:

- A very general problem identification is initiated as soon as the close out of the previous year's data is completed, usually in the April-May time frame. The detailed procedure for the problem identification is given in Section 1.2.
- 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 has shown that three years is an optimal time span for predicting future hotspots.
- The CARE hotspot analysis is run on these data for the subjects of interest, in this case speed, impaired driving and lack of seatbelt use.
- From these analyses, it becomes quite clear as to where the critical locations are as well as the answer to the more general who, what, where, how old and why questions as to how they can best be addressed.
- To assure that the CTSP/LEL Coordinators are thoroughly involved in this process, they are required to submit their plans in the April-May time frame, at about the same time as the statewide problem identification is being performed.
- These plans are then combined to produce the specific action items that are implemented.

As demonstrated by the results of these problem identification steps that are documented in detail in the plan, the HSP is completely evidence-based.

AOHS also takes advantage of the expertise built up over many years by the University of Alabama Center for Advanced Public Safety (UA-CAPS) to assist with 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/LEL 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.

A similar exercise involves the ALEA/State Troopers Division, which is given information on Interstates and rural state routes that it is responsible to patrol. Generally, each ALEA region receives 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 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 these locations relate to the statewide plan.

Once this information is provided to the CTSP/LEL 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. The enforcement program will continuously be evaluated and any necessary adjustments will be made.

The implementation of the Evidence-Based Enforcement Plan is demonstrated in the following sections of the Highway Safety Plan. Different enforcement campaigns are conducted on one or more of the determined emphasis areas supported by the appropriate funding source. These sections provide more details about specific focused high visibility enforcement efforts:

Section 5.1.3 – Impaired driving and speed related crash hotspots – 402 funds
Section 5.4.1 – Alcohol related crashes hotspots – 405d funds
Section 6.5.2 – Restraint-deficient hotspots – 405b funds

These enforcement efforts are supported by media campaigns to the extent possible. The value of such integrated enforcement efforts is demonstrated by studies referenced in Page 1-24 of *NHTSA Countermeasures that Work,* the URL reference for which is given on page 15.

1.0 EVIDENCE-BASED ENFORCEMENT ACTION PLAN

1.1 Evidence-Based Traffic Safety Enforcement (E-BE) Program

This section will present the State's Evidence-Based Enforcement (E-BE) plan that is used to determine enforcement activity locations based on high-risk hotspots that are derived using criteria based on injury severity and the particular type of crash for which enforcement is being directed. Hotspots are determined and specified based on the appropriate criteria, followed by communication of these hotspots to the Community Traffic Safety Program/Law Enforcement Liaison (CTSP/LEL) coordinators for the state's traffic safety regions, who are responsible for facilitating both regular and special enforcement programs within their respective regions.

1.1.1 An Analysis of Crashes, Crash Fatalities & Areas of Highest Risk

The highest level of problem identification analysis is given by Table 1, which is explained in detail in Section 1.3. At this point our attention will focus on the following three items: (1) Restraint Deficient; (2) Impaired Driving and (3) Speeding. The first of these is the primary cause of increased injury severity in crashes. The second and third are crash causes, although speed both causes and increases the severity of crashes.

In order to implement an effective data driven approach, 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 list 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 Section 4. Each of the regional coordinators will use these specifications as the basis for their plans for the upcoming year.

By the use 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.

Regional information was generated for each of the four regions across the state. It was formatted in the same way as the statewide reports but only included information on hotspots specific to the given region. While Interstate hotspots are covered by ALEA, the CTSP Coordinators were provided copies of the Interstate hotspots for their information. The reports provided on a regional basis are as follows:

1. Regional Fatalities Bar Graph
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

From these reports, containing information that is both statewide and specific to their region, the regional coordinators were able to identify the problem areas in their region and compare their result to those at the statewide level. Generally, each ALEA region receives a package of information that is formatted just like the statewide results, but tailored to their particular region or roadway subset. All agencies also have access to the statewide plan and they are instructed to focus their details for the upcoming year on the hotspot locations. If any issues are raised at this point in the planning process, they are resolved by AOHS staff to assure integrity and consistency among the regions.

1.1.2 Deployment of Resources Based on that Analysis

Funding is determined for each region based on the percentage of hotspots in that region. Grant funds are allocated to the regions based on their percentage of alcohol, restraint, and speed crash problem. 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. Federal funds distributed by the AOHS will be used to focus completely on the high crash areas within each region. If funds are employed effectively and correctly, there should be a reduction in the number of hotspots within the next year on both a statewide level and within each individual region.

While there will be special details at the appointed times correlated with NHTSA emphasis times, the general law enforcement activity will be sustained for twelve months. The enforcement efforts will be data driven, which will prevent traffic violations, crashes, and crash fatalities and injuries in locations most at risk. Law enforcement agencies will use saturation patrols, line patrols, checkpoints, and regular patrol in order for the data-driven enforcement projects to be effective. The enforcement activities and techniques that will be used are:

- Conduct four local hotspot Evidence-Based Enforcement (E-BE) projects, one within each of the CTSP regions. Additionally, a statewide E-BE project will be conducted in conjunction with the Alabama Law Enforcement Agency (ALEA).
- 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 evidence-based traffic safety enforcement programs through law enforcement agencies in Alabama to prevent crashes, fatalities and injuries in the State.

The enforcement effort will be accompanied by a PI&E campaign that 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. This part of the campaign will consist of:

- Development of marketing approach based on Nielsen and Arbitron ratings and targeted primarily towards the 18-34 male age group.
- Placement of paid 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 campaign.
- In addition to the paid and free media, the AOHS 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.

1.1.3 Process of Continuous Follow-up and Adjustment of Plan

The E-BE enforcement program will be continuously evaluated and the necessary adjustments will be made. This will be done by AOHS as they monitor law enforcement agencies activity reports monthly to determine if adjustments are needed for their plans. When activity reports are received, they will be assessed against the latest crash data to identify successful crash reductions in targeted locations, as well as new areas of risk that may be developing. There will be monthly follow-up with agencies to address any lack of performance issues or activities. Adjustments are made to the HSP annually based on the problem identification that include the enforcement plans.

1.2 Table 1. Summary of Crash Severity by Crash Type –Alabama CY 2015 Data

Table 1: Top Fatality Causes

Crash Type (Causal Driver)	Fatal	Fatal %	Injuries	Injury %	PDO	PDO %	Total
1. Restraint Deficient*	367	3.42%	4,271	39.82%	6,088	56.76%	10,726
2. Impaired Driving	202	3.23%	2,405	38.49%	3,641	58.27%	6,248
3. Speeding	138	3.97%	1,634	46.95%	1,708	49.08%	3,480
4. Ped., Bicycle, School Bus	107	6.91%	913	58.94%	529	34.15%	1,549
5. License Status Deficiency	104	1.58%	2,091	31.87%	4,367	66.55%	6,562
6. Obstacle Removal	95	1.49%	2,173	34.05%	4,113	64.46%	6,381
7. Pedestrian	95	12.94%	616	83.92%	23	3.13%	734
8. Mature – Age > 64	92	0.66%	3,109	22.36%	10,704	76.98%	13,905
9. Youth – Age 16-20	90	0.39%	5,303	22.90%	17,768	76.72%	23,161
10. Motorcycle	69	4.60%	1,032	68.75%	400	26.65%	1,501
11. Non-pickup Truck Involved	37	0.76%	890	18.23%	3,955	81.01%	4,882
12. Fail to Conform to S/Y Sign	33	0.48%	1,922	27.74%	4,974	71.79%	6,929
13. Construction Zone	31	1.28%	493	20.42%	1,890	78.29%	2,414
14. Vehicle Defects – All	24	0.63%	850	22.40%	2,921	76.97%	3,795
15. Utility Pole	18	0.73%	914	36.96%	1,541	62.31%	2,473
16. Vision Obscured – Env.	15	0.97%	426	27.63%	1101	71.40%	1,542
17. Fail to Conform to Signal	12	0.28%	1,322	31.32%	2,887	68.40%	4,221
18. Bicycle	9	3.80%	178	75.11%	50	21.10%	237
19. School Bus	5	0.86%	119	20.52%	456	78.62%	580
20. Child Restraint Deficient*	4	0.18%	269	12.07%	1,956	87.75%	2,229
21. Railroad Trains	4	6.45%	13	20.97%	45	72.58%	62
22. Roadway Defects – All	0	0.00%	24	14.37%	143	85.63%	167

* 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.

Table 1 updates have been used since 2010 at the highest levels for a first cut at traffic safety resource allocation for the State of Alabama. The AOHS Highway Safety Plan (HSP) has been incorporated into the Alabama SHSP as an appendix, reflecting their agreement with the goals and approaches being taken by AOHS. 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 accepted by the Alabama Office of Highway Safety, the Strategic Highway Safety Plan steering committee and the Highway Safety Improvement Plan committee. The major goals of both the HSP and the SHSP are to bring about the most effective and coordinated statewide allocation of traffic safety resources possible,

including funding and equipment, but most importantly, personnel. There are no limitations on the various subjects that are isolated for consideration, and all SHSP participants are encouraged to add any categories that they feel are appropriate.

The category with the highest number of fatal crashes is listed at the top of Table 1, descending to the crash type category with the lowest number of fatal crashes listed last. Each crash type category lists the crashes that occurred for that particular category for calendar year (CY) 2015 (between January 1, 2015 and December 31, 2015). It is important to realize that the categories of Table 1 are not mutually exclusive. However, since this is true of all of the categories, these numbers serve to give the relative criticality of the particular categories that most often are the targets for funding or other resource allocations. The comparison of gross fatality and injury counts is merely a first step in the analytical process to find optimal allocations of resources among programs. Obtaining this first-cut perspective is essential to intelligent decision-making.

The severity classification in Table 1 enables a comparison of crash categories by severity. For example, it might be noticed that the relative severity of pedestrian, bicycle, motorcycle and railroad crashes are significantly higher than for most of the other categories, as is also true for the top three categories as well. This is an important aspect to be considered when the ultimate goal is reducing deaths.

The eCrash system, which went into effect July 1, 2009, creates data that meets the Model Minimum Uniform Crash Criteria (MMUCC), and it provides data that is much timelier, in many cases available the same day as the crash. Careful work was done to ensure that no variables or codes that could indicate a particular category were missed, and that the search criteria captured all of the crashes for each of the particular categories for this evidence-based analysis.

The Vision, Ideals and Mission are given in the next section of the plan, which gives the basis for the goals and strategies presented in Section 3. Section 4 contains the statewide results of the evidence-based speed and impaired hotspot location analysis, which is made available to each CTSP/LEL Coordinator along with information specific for their regions. Section 5 contains the planned activities for all activities to be conducted by AOHS during FY 2017. Section 6 contains the Occupant Protection Plan, which satisfies NHTSA requirements in that regard and shows how evidence-based enforcement has been integrated into the planning process and also demonstrates analytics applied to program evaluation. Attachment A gives the location hotspots for the evidence-based restraint deficiency hotspots, and Attachment B presents non-location restraint related problem identification. Attachment C contains the Alabama Performance Report.

2.0 VISION, IDEALS, AND MISSION

2.1 Vision

AOHS has worked with the Traffic Safety community in the State to establish the following Vision Statement:

> **To eliminate all traffic related fatalities by creating 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.**

The relative accomplishment in reaching this vision is measurable in terms of crash, injury and fatality rates (per million vehicle mile). The fairest comparative assessment in evaluating these metrics is to compare Alabama with the other states in NHTSA Region 4, or with other states of comparable rural-urban distributions.

2.2 Ideals

The following ideals provide the guiding principles in moving toward the vision given above:

- *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. Alabama's commitment to this ideal can be seen in the table in Section 2.3, which shows the steady decline in the state's fatality rate since 1987.
- *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.* Crashes caused by excessive speed and impaired driving were determined to be the largest driver-caused problems, and the lack of proper restraint use was seen to be the largest severity increase problem. Plans developed by the state's safety coordinators reflect this focus, and funding is concentrated on the corresponding hotspot crash locations that have been identified.
- *Teamwork and Diversity.* All highway users and user groups are encouraged to provide input to the decision-making process, and all sub-disciplines are given the opportunity to provide input and information.

2.3 Table 1. Fatality Number and Rate by Year

Alabama's traffic fatality counts and fatality rates (per 100 million vehicle miles traveled) since 1987 show a dramatic decrease since that time. The fatality rate has decreased by 58% over this time period.

Year	Rate	Fatalities	Miles Driven (100 MVMT)
1987	2.98	1116	374.37
1988	2.58	1023	396.84
1989	2.52	1028	407.65
1990	2.64	1118	423.47
1991	2.59	1110	429.24
1992	2.26	1033	457.62
1993	2.20	1040	472.03
1994	2.21	1081	489.56
1995	2.20	1113	506.28
1996	2.22	1142	514.33
1997	2.23	1190	534.58
1998	1.94	1071	552.05
1999	2.03	1148	564.13
2000	1.74	986	565.71
2001	1.76	998	567.08
2002	1.80	1038	575.32
2003	1.71	1001	586.33
2004	1.96	1154	588.62
2005	1.92	1148	596.62
2006	2.00	1207	603.94
2007	1.81	1110	613.13
2008	1.63	969	591.48
2009	1.38	848	613.00
2010	1.34	862	641.51
2011	1.38	894	649.14
2012	1.33	865	650.38
2013	1.31	852	650.38
2014	1.25	820	656.11
2015		849*	

*State Data

The reduction in the state's fatality rate since its recent high in 2006 is particularly 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. We expect this trend will continue as vehicles are made more crashworthy and resistant to driver errors through advances in technology. The recent counter-trend has been in the increased cell phone use and texting, which has been a recent downside of the overall advances in technology. 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 and accelerate the trend toward zero deaths.

2.4 Mission

To promote movement toward its vision while maintaining the ideals given on page 23 the following mission statement was developed:

> **Conduct Evidence-Based Enforcement coupled with PI&E and other supportive countermeasures that will reduce fatalities and injuries by focusing on the locations identified for speed and impaired driving hotspots with additional strong consideration to hotspots where deficiencies in occupant protection are found.**

Reducing the number of speed and impaired-driving related crashes while increasing the use of appropriate restraints has been shown in the past to produce the maximum benefit for the resources that are dedicated to traffic safety. These lessons from the past need to be extended in the future because there are still considerable benefits that can be attained by these programs. It is important to recognize that the majority of fatalities are caused by the *choice* to speed, drive impaired or not buckle up (quite often combinations of the three). By changing driver and occupant behavior, the number of hotspot locations will be reduced and overall traffic safety will be improved.

3.0 GOALS AND STRATEGIES

3.1 Process for Developing Goals

The goal development process started with UA-CAPS provided data from the CARE system that was used to evaluate the past ten years of crash history. All Alabama Office of Highway Safety (AOHS) staff and UA-CAPS participated in the process of developing the performance goals and targets, and they were also directly involved in the development and selection of evidence-based countermeasure strategies and specific 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 an assessment of their needs in terms of reducing the problems identified in their respective regions. Projects involving the state CTSPs for FY 2017 will be largely focused on the problem locations discussed and defined in Hotspot Listings in Section 4 and Attachment A. 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 SHSP. The overall goals set in the SHSP for the State of Alabama are complementary to, and consistent with, those presented in Section 3.3. 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 UA-CAPS using FARS and CARE crash data. In those cases where the goals had to be consistent with the SHSP and the HSIP, the appropriate ALDOT officials were involved in assuring that they participated in assuring concurrence among the three documents.

The tables on the following pages, Section 3.2.1 and 3.2.2, present a multi-year summary and the item numbers within the tables are used for the goal definitions. Unless otherwise noted, the number of fatalities for these tables and the goals analyses were provided by FARS.

3.2.1 Statewide Statistics Table for 2009-2015

	2009	2010	2011	2012	2013	2014	2015	2017 ** Baseline
C-1 Number of Traffic Fatalities (FARS)	848	862	895	865	853	820		859
C-2 Number of Serious Injuries in Traffic Crashes (State Crash File) *	15,131	10,544	9,904	8,974	8,558	7,960		9,188
C-3 Fatalities/VMT (FARS/FHWA) • Total_____ • Urban_____ • Rural_____	 1.38 1.08 1.69	 1.34 0.97 1.72	 1.38 1.09 1.70	 1.33 1.01 1.69	 1.31 .82 1.85	 1.25 .72 1.97		 1.32 .92 1.78
C-4 Number of Unrestrained Passenger Vehicle Occupant Fatalities, All Seat Positions (FARS)	378	394	382	354	369	351		370
C-5 Number of Fatalities in crashes involving driver or motorcycle operator with a BAC of .08 and above (FARS)	267	264	261	240	261	264		261
C-6 Number of Speeding-Related Fatalities (FARS)	327	316	298	273	253	237		275
C-7 Number of Motorcyclist Fatalities (FARS)	76	86	98	97	80	65		85
C-8 Number of Unhelmeted Motorcyclist Fatalities (FARS)	7	5	10	10	1	10		7
C-9 Number of Drivers Age 20 or Younger Involved in Fatal Crashes (FARS)	140	140	136	139	102	91		122
C-10 Number of Pedestrian Fatalities (FARS)	64	61	79	77	59	96		74
C-11 Number of Bicycle Fatalities (FARS)	6	6	5	9	6	9		7
B-1 Observed Seat Belt Use for Passenger Vehicles, Front Seat Outboard Occupants (State Survey)	90.0%	91.4%	88.0%	89.5%	97.3%	95.7%	93.3%	92.4%
Speed Hotspots*	93	63	45	47	37	33		45
Speed Fatal Crashes*	221	212	188	179	165	141		177
Speed Injury Crashes*	2,299	1,883	1,832	1,779	1,663	1,529		1,737
Impaired Driving Hotspots*	194	143	144	179	198	176		168
Impaired Driving Fatal Crashes*	237	210	217	186	191	187		198
Impaired Driving Injury Crashes*	2,548	2,798	2,647	2,661	2,490	2,191		2,557

* State Data

** Baselines are 5-year averages of the 2010-2014 data.

3.2.2 Statewide Statistics Table for 5-Year Moving Averages 2009-2014

	2009	2010	2011	2012	2013	2014
C-1 Number of Traffic Fatalities (FARS)	1057	999	937	888	864	859
C-2 Number of Serious Injuries in Traffic Crashes (State Crash File) *	21,761	18,757	15,705	12,949	10,622	9,188
C-3 Fatalities/VMT (FARS/FHWA)						
• Total_____	1.75	1.63	1.51	1.41	1.35	1.32
• Urban_____	1.21	1.15	1.1	1.06	0.99	0.92
• Rural_____	2.3	2.13	1.93	1.78	1.73	1.78
C-4 Number of Unrestrained Passenger Vehicle Occupant Fatalities, All Seat Positions (FARS)	499	466	429	392	373	370
C-5 Number of Fatalities in crashes involving driver or motorcycle operator with a BAC of .08 and above (FARS)	342	320	297	273	258	261
C-6 Number of Speeding-Related Fatalities (FARS)	468	431	377	332	293	275
C-7 Number of Motorcyclist Fatalities (FARS)	86	90	89	91	87	85
C-8 Number of Unhelmeted Motorcyclist Fatalities (FARS)	9	9	9	9	7	7
C-9 Number of Drivers Age 20 or Younger Involved in Fatal Crashes (FARS)	189	173	155	144	136	122
C-10 Number of Pedestrian Fatalities (FARS)	73	68	68	70	68	74
C-11 Number of Bicycle Fatalities (FARS)	8	7	6	6	6	7
B-1 Observed Seat Belt Use for Passenger Vehicles, Front Seat Outboard Occupants (State Survey)	84.60%	86.50%	87.60%	89.00%	91.20%	92.40%

* State Data

3.3 Traffic Safety Performance Measures for FY 2017

3.3.1 General Considerations

This section provides some general considerations that will explain many of the performance measure sections that follow. To reduce the redundancy, many of the items below impact several of the performance measures. In those cases where a given item applies, it will be referenced by its item number in the following list:

1. **Basis for Analysis and Agreement.** Generally the baseline for the estimates was based upon the most recent five years of data. This can be seen from the tables that demonstrate the metrics over the past five available calendar years (2010-2014). 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. **Goals for C1, C2, and C3a 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. **Distinction between Data and Estimates.** The shaded areas in all graphs represent the projected estimated number *assuming that the established trend as given by a linear regression line over the previous known values continues.* The first projected year 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 an estimate is projected, the less reliable will be the projection.

3. **Accounting for Extrapolation Errors.** 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 2014, requiring (for example) that the estimates of 2015, 2016 and 2017 all be based on an extrapolation of 2010 through 2014. (Unless otherwise noted, all references to years are calendar years.) Rarely, if ever, does such a linear trend establish an accurate prediction, especially in crash data where it is commonly accepted that *regression to the mean* follows most dramatic departures from the established trend. Nevertheless, these estimates are presented since they provide the best information upon which to make and refine the estimates.

4. **All fatality count metrics.** The consideration above for Item 3 is particularly applicable for any metric that is dependent on fatality counts. Consistent with the national trend, Alabama experienced almost a 23% reduction in fatalities between 2007 and 2010 compared to the average of the previous four years. 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 did not occur in the 2011-2013 time frame. However it was experienced in 2014 and 2015 as the economy rebounded. 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 2010. 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 2017 and the baseline. Notable exceptions to these general patterns were observed in motorcycle and pedestrian fatalities; motorcycle fatalities are discussed in as a separate item 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 a goal slightly below the 85 baseline would be a reasonable goal.

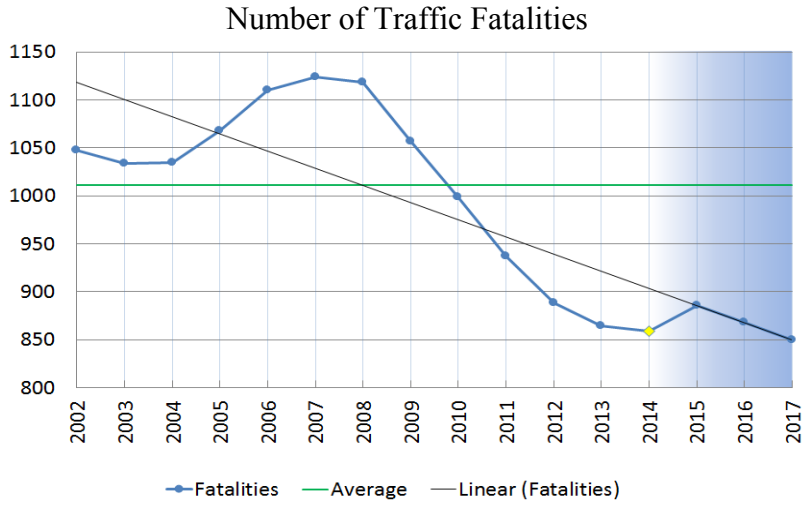
7. **Seat belt use.** The projection for 2017 is based upon the five year rolling average that includes the new method for estimating seat belt used as prescribed by NHTSA.

8. **Five-year average goals.** Most of the crash related goals are set differently from years prior to 2014. 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 2017. The graphs on the following pages display the five-year rolling averages: however, the numbers listed above the charts are the single year number for each year.[1]

[1] All charts shown on the following pages were developed using annual FARS data, with the exception of the serious injuries numbers, which were taken from state crash data files.

3.3.2 C-1: Number of Traffic Fatalities (FARS)

2010	2011	2012	2013	2014	Baseline	Goal
862	895	865	852	820	858.8	857

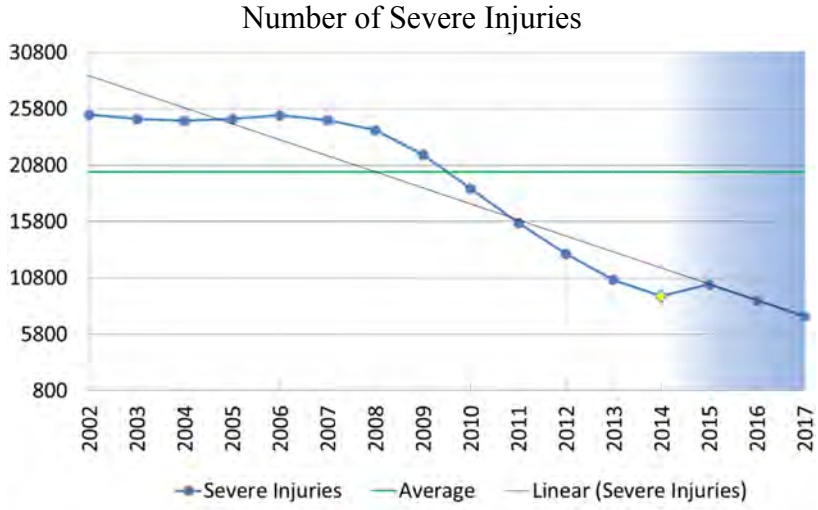


Reduce total traffic fatalities by .24 percent from the five year baseline average of 859 (2010-2014) to 857 by 2017*. **This goal was mutually agreed upon by the Alabama Office of Highway Safety, the Strategic Highway Safety Plan steering committee and the Highway Safety Improvement Plan committee.**

3.3.3 C-2: Number of Severe Injuries in Traffic Crashes

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

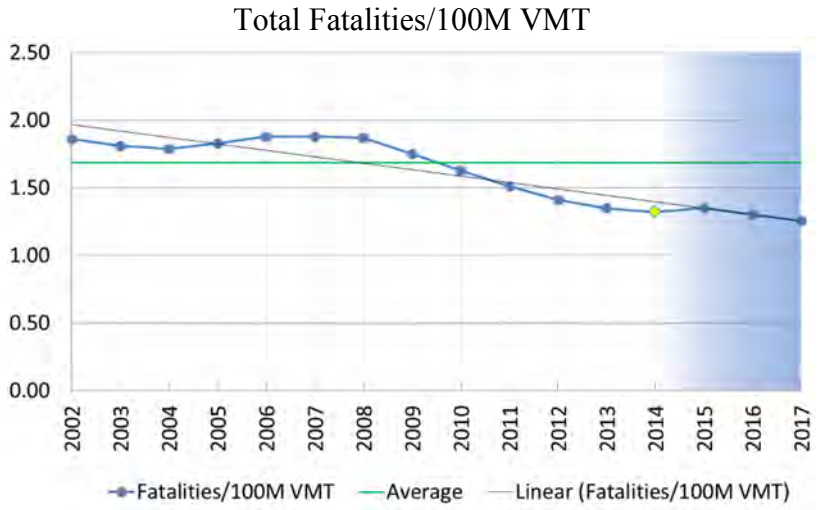
2010	2011	2012	2013	2014	Baseline	Goal
10,544	9,904	8,974	8,558	7,960	9,188	8,900



Reduce serious injuries in traffic crashes by 3.13 percent from the five year baseline average of 9,188 (2010-2014) to 8,900 by 2017*. **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**.

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

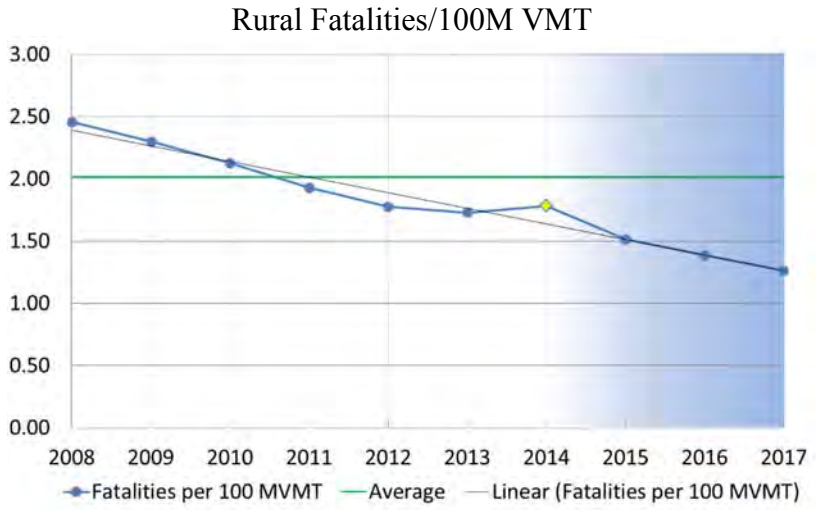
2010	2011	2012	2013	2014	Baseline	Goal
1.34	1.38	1.33	1.31	1.25	1.32	1.31



Reduce the fatality rate per 100M VMT by .75 percent from the five year baseline average of 1.32 (2010-2014) to 1.31 by 2017*. **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.**

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

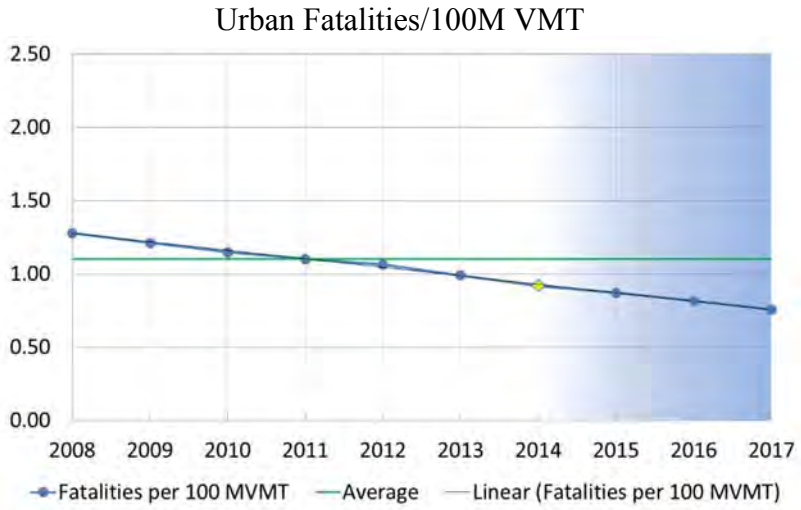
2010	2011	2012	2013	2014	Baseline	Goal
1.72	1.70	1.68	1.85	1.97	1.78	1.77



Reduce the rural fatality rate per 100M VMT by .56 percent from the five year baseline average of 1.78 (2010-2014) to 1.77 by 2017*.

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

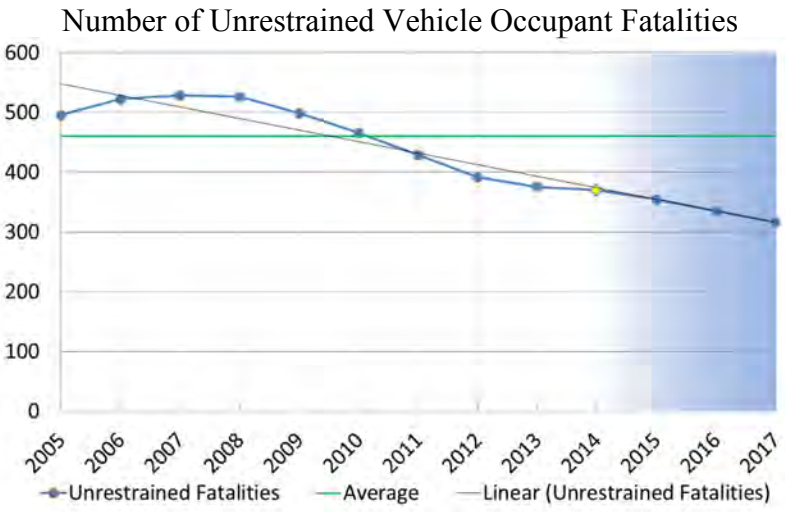
2010	2011	2012	2013	2014	Baseline	Goal
0.97	1.09	0.99	0.82	0.72	0.92	.90



Reduce the urban fatality rate per 100M VMT by 2.17 percent from the five year baseline average of .92 (2010-2014) to .90 by 2017*.

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

2010	2011	2012	2013	2014	Baseline	Goal
394	382	354	369	351	370	368

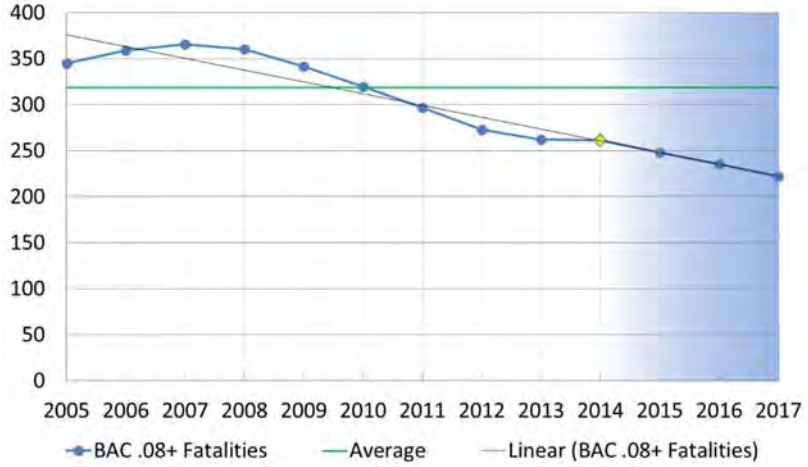


Reduce the unrestrained passenger vehicle occupant fatalities by .54 percent from the five year baseline average of 370 (2010-2014) to 368 by 2017*.

3.3.8 C-5: Number of Fatalities with a BAC of .08 and Above Crashes Involving Driver or Motorcycle Operator (data shown as Alcohol-Impaired Driving Fatalities in STSI-FARS)

2010	2011	2012	2013	2014	Baseline	Goal
264	261	257	260	264	261	259

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

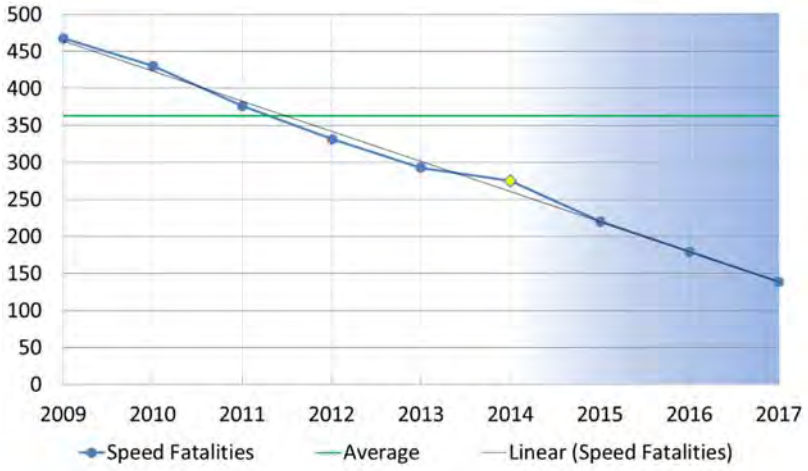


Reduce the alcohol-impaired driving fatalities by .77 percent from the five year baseline average of 261 (2010-2014) to 259 by 2017*.

3.3.9 C-6: Number of Speeding-Related Fatalities (FARS)

2010	2011	2012	2013	2014	Baseline	Goal
316	298	273	253	237	275	270

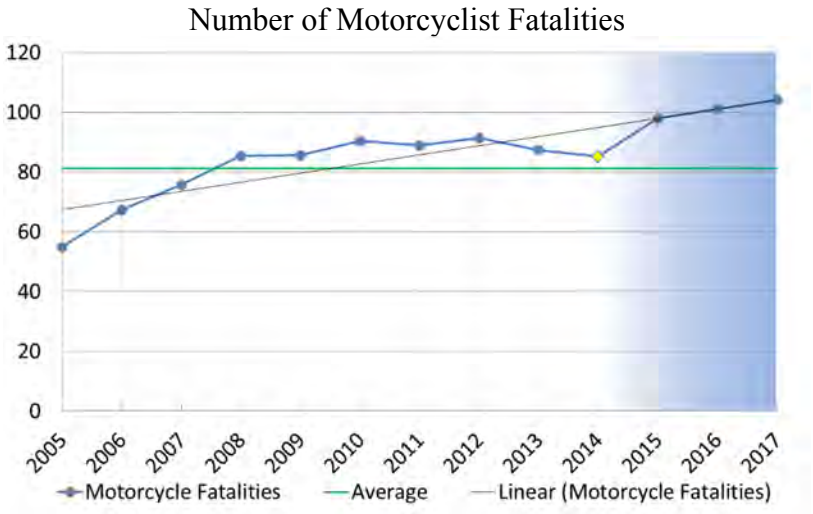
Number of Speeding-Related Fatalities



Reduce the speeding-related fatalities by 1.8 percent from the five year baseline average of 275 (2010-2014) to 270 by 2017*.

3.3.10 C-7: Number of Motorcyclist Fatalities (FARS)

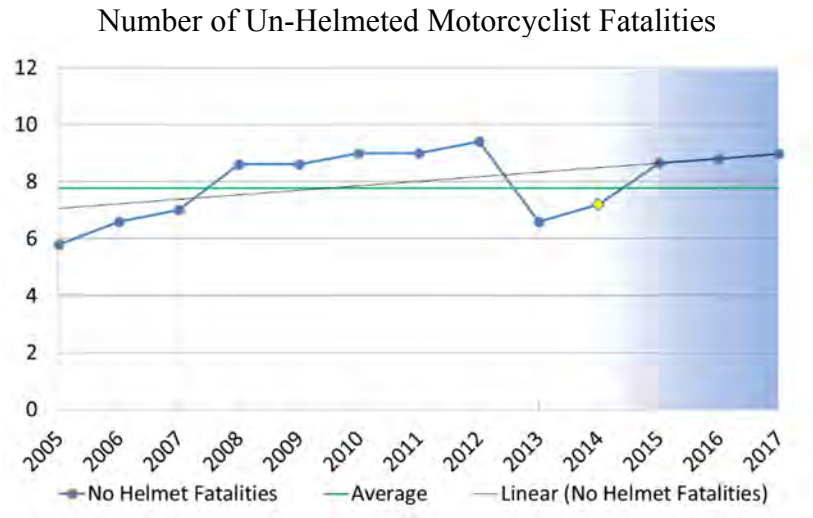
2010	2011	2012	2013	2014	Baseline	Goal
86	98	97	80	65	85	83



Reduce the motorcyclist fatalities by 2.3 percent from the five year baseline average of 85 (2010-2014) to 83 by 2017*.

3.3.11: C-8: Number of Un-helmeted Motorcyclist Fatalities (FARS)

2010	2011	2012	2013	2014	Baseline	Goal
5	10	10	1	10	7.2	6

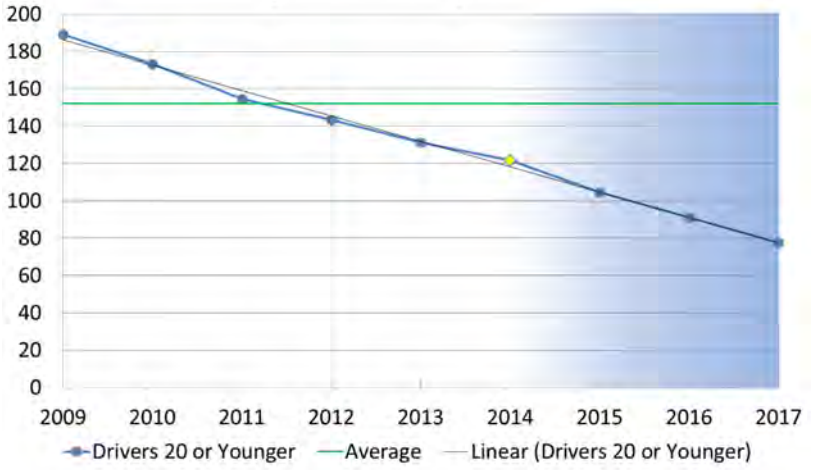


Reduce the un-helmeted motorcyclist fatalities by 14.3 percent from the five year baseline average of 7 (2010-2014) to 6 by 2017*.

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

2010	2011	2012	2013	2014	Baseline	Goal
140	136	139	102	91	122	118

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

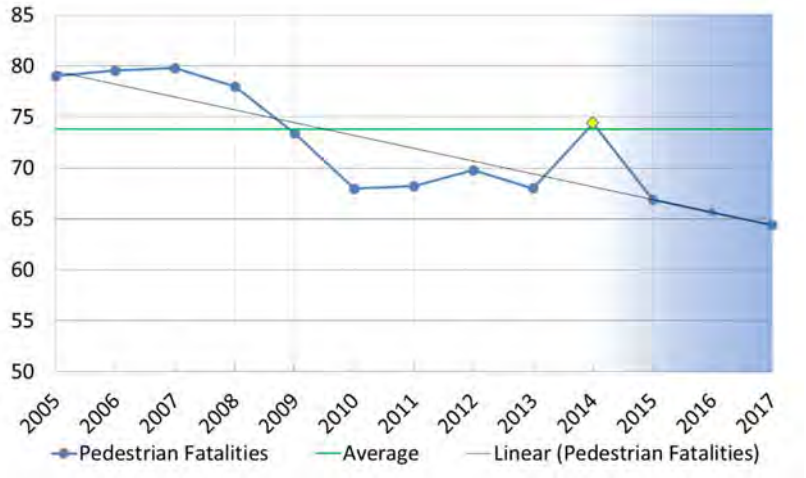


Reduce the number of drivers age 20 or younger involved in fatal crashes by 3.3 percent from the five year baseline average of 122 (2010-2014) to 118 by 2017*.

3.3.13 C-10: Number of Pedestrian Fatalities (FARS)

2010	2011	2012	2013	2014	Baseline	Goal
61	79	77	59	96	69	68

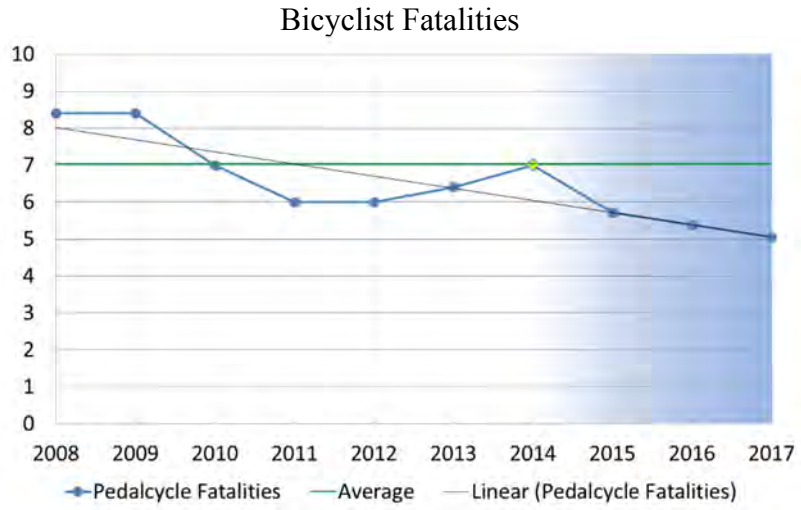
Number of Pedestrian Fatalities



Reduce the number of pedestrian fatalities 1.4 percent from the five year baseline average of 69 (2010-2014) to 68 by 2017*.

3.3.14 C-11: Number of Bicyclist Fatalities (FARS)

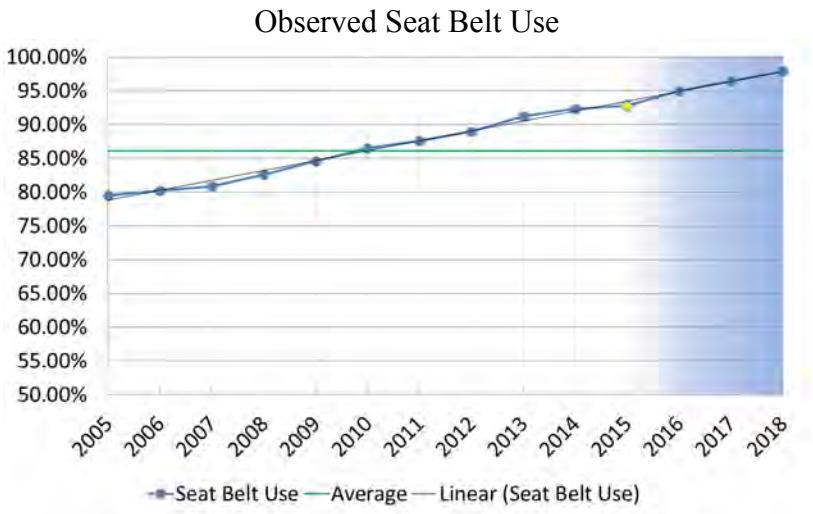
2010	2011	2012	2013	2014	Baseline	Goal
6	5	9	6	9	7	6



Reduce the number of bicycle fatalities by 14.3 percent from the five year baseline average of 7 (2010-2014) to 6 by 2017*.

3.3.15 B-1: Observed Seat Belt Usage for Passenger Vehicles Front Seat Outboard Occupants (State Survey)

2011	2012	2013	2014	2015	Baseline	Goal
88.0	89.5	97.3	95.7	93.3	92.8	93.0



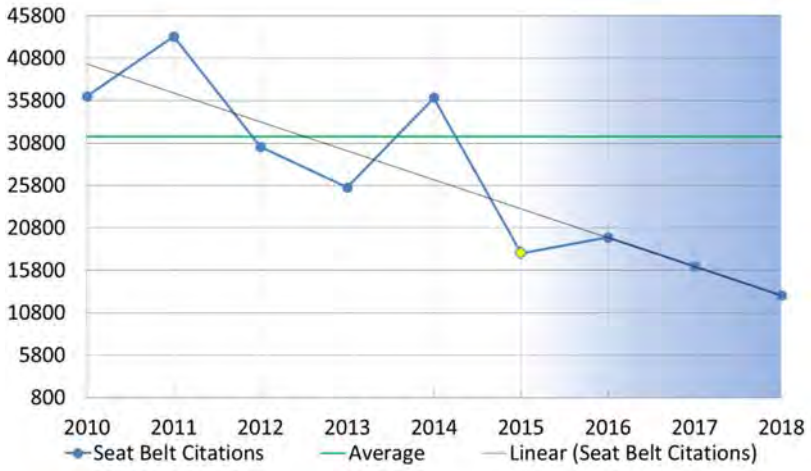
Increase the observed seat belt usage by .22 from the five year baseline average (2011 -2015) of 92.8% to 93.0 % in 2017*.

*Five Year Average Goal

3.4 Traffic Safety Activity Measures

3.4.1 A-1: Number of seat belt citations

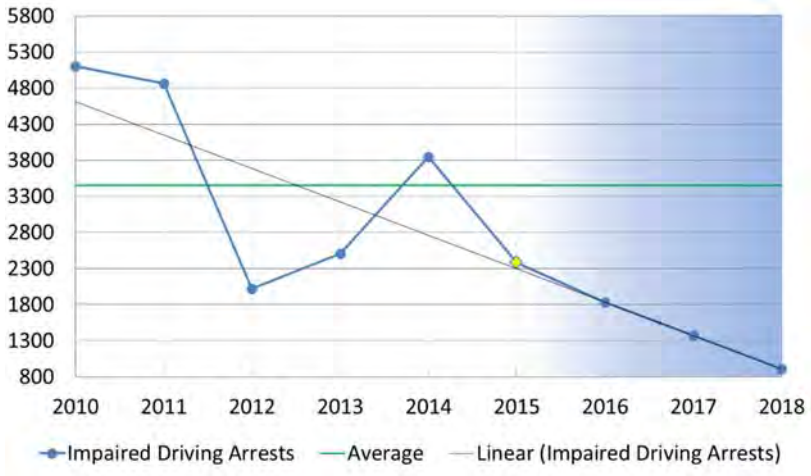
2011	2012	2013	2014	2015	Baseline
43,384	30,384	25,536	36,120	17,801	30,645



The total number of seat belt citations for 2015 was 17,801

3.4.2 A-2: Number of impaired driving arrests

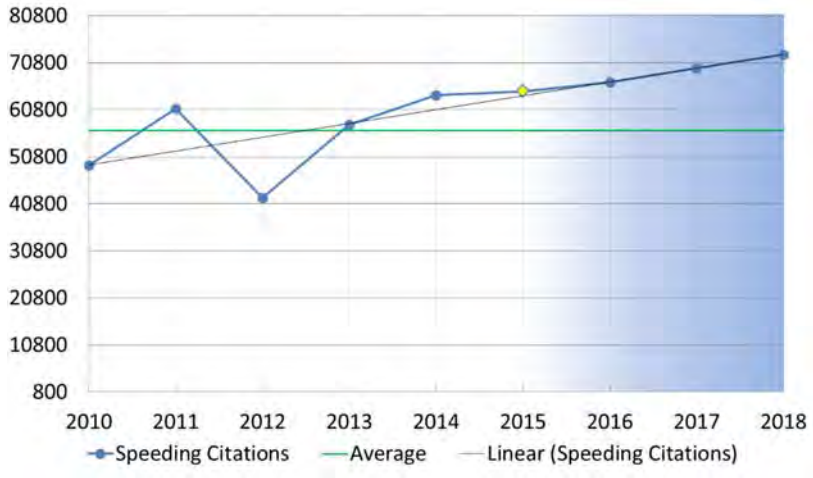
2011	2012	2013	2014	2015	Baseline
4,867	2,021	2,508	3,848	2,381	3,125



The total number of impaired driving arrests in 2015 was 2,381.

3.4.3 A-3: Number of speeding citations

2011	2012	2013	2014	2015	Baseline
61,054	42,067	57,670	63,890	64,719	57,880



The total number of speeding citations in 2015 was 64,719.

3.5 High Level Strategic 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).

Consistent with 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 25th year it amounts to 4% of the previous year.

The record high number of traffic fatalities in Alabama occurred in calendar year 2006 with a total of 1207. Between 2007 and 2011, there was a reduction of 271 lives per year (a total of 1353 fatalities over that five-year time period). This rate of reduction was 6% per year, and 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 that are generally closer to emergency medical services;
- 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.

With the large reduction in fuel prices the last couple of years, sustaining the modest rate of 2% per year is going to be a major challenge. As can be seen from the following table, Alabama was not able to achieve the 2% goal in fatality reduction for the three year average for 2013-2015. However, it is notable that the fatality rate for the State of Alabama has been declining since 2011 even though the vehicle miles traveled have been increasing as shown in Table 1 in Section 2.3.

The following table tracks the 2% per year for the three year running average.

Time Frame	Three Year Average	Differential	Percent	Goal Achieved?
2011-2013	870.3	---	---	
2012-2014	846.0	24.3	2.8%	Yes
2013-2015	840.7	5.3	0.6%	No

Table 2 shows how the number of hotspots is being monitored. The criteria used to find the number of hotspots and the calculation of the rate has not changed over the years in order to make the total number of hotspots comparable from year to year.

Table 2. Number of Hotspots for Three-Year Periods

Fiscal Year	Calendar Year Data Used	Speed Hotspots	Impaired Driving Hotspots	Total Number of 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
2016	2012-2014	33	176	209
2017	2011-2015	30	166	196

The statewide effort will continue to focus traffic safety funding on these hotspot locations, taking every possible action 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 and between 2010 and 2011. There was an increase in the three year periods that ended on 2012 and 2013. This was generally reversed in the three year periods that ended in years 2014 and 2015.

General Strategy: To require the CTSP/LEL Coordinators to focus their plans primarily on the evidence-based analysis of 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 2001-2015. These statistics should be referenced as overall goals and strategies are discussed and determined.

Table 3a. Summary of All Crashes – CY 2001-2008 Alabama Data

Performance Measures	2001	2002	2003	2004	2005	2006	2007	2008
Fatal Crashes	902	931	899	1033	1013	1074	1010	886
Percent Fatal Crash	0.67%	0.66%	0.64%	0.71%	0.70%	0.77%	0.75%	0.71%
Injury Crashes	29771	30922	30748	31856	31335	30527	28295	25613
Percent Injury Crashes	22.26%	22.02%	21.80%	21.77%	21.76%	21.84%	20.92%	20.66%
PDO Crashes	103066	108583	109420	113469	111645	108179	107971	99241
Percent PDO Crashes	77.07%	77.32%	77.57%	77.53%	77.54%	77.39%	79.83%	80.05%
Total	133739	140436	141067	146358	143993	139780	135256	123968

Table 3b. Summary of All Crashes – CY 2009-2015 Alabama Data

Performance Measures	2009	2010	2011	2012	2013	2014	2015
Fatal Crashes	775	793	814	815	745	737	739
Percent Fatal Crash	0.63%	0.62%	0.64%	0.63%	0.59%	0.55%	0.50%
Injury Crashes	27675	29051	27687	27551	26810	28019	30858
Percent Injury Crashes	22.37%	22.63%	21.69%	21.45%	21.15%	21.04%	20.93%
PDO Crashes	96840	100126	100795	101706	100675	100319	111674
Percent PDO Crashes	78.26%	77.99%	78.95%	79.18%	79.43%	75.33%	75.74%
Total	123740	128384	127668	128442	126740	133175	147452

3.6 FY 2017 Strategies and Performance Goals

3.6.1 Strategies

Alabama Office of Highway Safety (AOHS) has been charged by the Governor with the responsibility for implementing the state's highway safety efforts, and as such, it will continue to perform the overall administrative functions for the programs and projects implemented. This includes the development of the following strategies that will be applied during FY 2017:

- Develop optimal approaches and conduct Evidence-Based Enforcement (E-BE) concentrating on those locations (hotspots) where it has been found that significantly higher than expected numbers of speed-related, impaired driving and occupant protection deficiencies have been found. This will be a sustained statewide effort that will include law enforcement officers from both Alabama law Enforcement Agency (ALEA) and local law enforcement agencies. These efforts will be administered by Community Traffic Safety Program/Law Enforcement Liaison (CTSP/LEL) coordinators to focus on hotspot locations in order to increase restraint usage and to reduce speeding and impaired driving crashes, and in so doing to reduce traffic fatalities within the state.
- Participate in national "Click It or Ticket" campaign on the statewide level.
- Conduct a statewide "Drive Sober or Get Pulled Over" campaign as a part of the national campaign.
- Provide funding and technical support for the four Community Traffic Safety Programs (CTSP) Coordinators, including the support for the CTSP/LEL Coordinators and the administrative support for their offices.
- Conduct two local E-BE programs year-round within each of the CTSP/LEL regions.
- Conduct two statewide E-BE programs in conjunction with the Alabama Law Enforcement Agency (ALEA).
- Continue the Law Enforcement Liaison (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 2017.
- Continue the partnership with the University of Alabama Center for Advanced Public Safety (UA-CAPS), which is seen to be vital in providing the information required for allocating traffic safety resources in an optimal way and effective administration of all traffic safety programs, and they will continue to be supported in providing crash analytics and traffic safety information throughout the year.

3.6.2 Hotspot Performance Measures and Goals

Performance Measure: The metric being applied is the number of hotspots found. A smaller number of hotspots found would indicate progress in reducing crashes in the selective enforcement areas to the point of eliminating some of the areas identified last year. These gains would be leveraged over the entire state since the effects of increased enforcement are not limited to the hotspot segments. As the hotspots continue to be tracked in the future, the table below will be updated to track the number of hotspots that were found statewide according to the fixed criteria. This table indicates how the performance measures for Speed and Impaired Driving hotspots have changed since 2006.

Performance Measure	**Three Year Ending Calendar Year**										
Hotspot Type	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**AVERAGE**
Speed	120	142	123	93	63	45	47	37	33	30	73
Impaired Driving	218	191	190	194	143	144	179	198	176	166	180
TOTAL	338	333	313	287	206	189	226	235	209	196	253

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 2017 is 29 from the 30 speed hotspots in 2015.
- The goal for the number of impaired driving hotspots for 2017 is to maintain 166 from the level of 166 impaired driving hotspots in 2015.

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.

3.6.3 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 (note that this is a count of crashes, not fatalities or injuries):

Performance Measures	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**
Impaired Driving Fatal Crashes	219	214	203	228	212	237	257	212
Impaired Driving Injury Crashes	3,066	3,078	2,878	2,876	2,948	3,042	2,719	2,450
Total	3,285	3,292	3,081	3,104	3,160	3,279	2,976	2,662

Performance Measures	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Impaired Driving Fatal Crashes	237	210	217	197	184	187	203
Impaired Driving Injury Crashes	2,548	2,798	2,647	2,661	2,292	2,191	2,405
Total	2,785	3,008	2,864	2,847	2,476	2,378	2,608

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 2017 is to maintain 203 from the level of 203 in 2015.

- The goal for the number of impaired driving injury crashes for 2017 is to maintain 2,405 from the level of 2,405 in 2015.

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 (2011-2015). This allows for consistent year-to-year monitoring of the goals.

3.6.4 Speed Related Crash Performance Measures and Goals

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

Performance Measures	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**
Speed Fatal Crashes	256	298	293	317	331	370	359	338
Speed Injury Crashes	3,119	3,253	3,208	3,325	3,502	3,712	3,392	2,958
Total	3,375	3,551	3,501	3,642	3,833	4,082	3,751	3,296

Performance Measures	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Speed Fatal Crashes	221	212	188	177	160	141	138
Speed Injury Crashes	2,299	1,883	1,832	1,778	1,494	1,529	1,634
Total	2,520	2,095	2,020	1,955	1,654	1,670	1,772

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 2017 is to maintain 138 from the level of 138 in 2015.
- The goal for the number of speed injury crashes for 2017 is to maintain 1,634 from the level of 1,634 in 2015

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 (2011-2015). This will allow for consistent year to year monitoring of the goals.

3.6.5 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 UA-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 UA-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	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**
Seat Belt Usage Rate	79.40%	78.80%	77.40%	80.00%	81.90%	82.90%	82.30%	86.10%
Child Safety Seat Usage Rate	77.00%	89.40%	87.00%	82.90%	91.60%	88.00%	92.30%	88.20%

Performance Measures	2009	2010	2011	2012	2013	2014	2015
Seat Belt Usage Rate	90.00%	91.43%	88.00%	89.50%	97.30%	95.70%	93.29%
Child Safety Seat Usage Rate	94.91%	93.12%	95.83%	93.00%	97.70%	97.90%	96.40%

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 2017 is from the baseline of 92.8% five year average for CY 2011-2015 to 93.0% in 2017.
- The goal for the statewide child safety seat usage that will be measured during CY 2017 is from the baseline 96.17% five year average for CY 2011-2015 to 96.25% in 2017.

3.7 Administrative Goals

Personnel:

- To ensure that the AOHS staff (which includes the Governor's Representative, State Coordinator/Public Safety Unit Chief, Highway Traffic Safety Program Supervisor, 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.
- The AOHS staff, and all CTSP/LEL Coordinators 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 the Governor's Highway Safety Association meetings. 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 and necessary traffic safety training.

3.8 Traffic Records Goals and Strategies

The following are the goals for the Traffic Records functions that support all aspects of the AOHS efforts:

- 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 pinpoint and target the exact locations of speed, impaired driving and restraint deficient 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 according to the strategies given on pages 46-48.
- 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.
- To support all efforts to move Toward Zero Deaths (TZD), including all roadway and vehicle technologies that will eventually lead to autonomous vehicle operations.

The role that Traffic Safety Information Systems (TSIS) plays in identifying optimal countermeasure implementation has been recognized by AOHS for decades. Problem identification efforts are ongoing to first identify the subset of countermeasures that have the highest potential for crash reduction out of all countermeasures that are proposed. Once the most promising countermeasure types are 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 injuries.

The University of Alabama Center for Advanced Public Safety (UA-CAPS) has provided some of the most advanced traffic safety information systems that exist, and UA-CAPS stands ready to continue in partnership with AOHS to develop and maintain these capabilities with a series of projects during the 2017 fiscal year. The areas in the state's traffic records information system that are most in need of innovation in order to satisfy all TSIS goals are chosen for implementation. The following is the *five-year* vision that was adopted by the TRCC that provides the high level guidance to the planning process; this presents the strategies for what is expected at the end of the five year planning horizon:

- All police and Emergency Medical Services (EMS) vehicles (both state and local) will be equipped with laptops or other equipment that will enable the direct entry and retrieval of all relevant records (e.g., including crashes, citation, criminal and medical records). A common virtual environment within all of these vehicles will facilitate not only data entry and use, but also communications of imagery, GIS coordinates and other information to provide complete coordination and interoperability among first responders and subsequent rescue units for such events as traffic, weather and terrorist emergencies.
- Global Positioning System (GPS) and Geographical Information Systems (GIS) technologies will enable officers and EMS personnel to automatically enter accurate locations directly into their respective crash, citation, EMS run and all other records that require location specification. By clicking the location on automated maps all of the necessary data will be accurately added to the records making unnecessary any further map or table lookup or other data entry (e.g., the route number or road name). This capability will be available to all law enforcement statewide to be used in any of their systems requiring location specification.
- Systems will be available in each unit to optimally map out quickest routes and alternative routes to emergencies around congestion. The system will contain artificial intelligence capabilities that will modify alternative routes based on past approved experiences.
- Digital data and imagery will be pushed to both the central dispatch and local command cells where they are most needed to deal with emergencies such as weather events or hazardous materials catastrophes. Field inputs will be designed to enable officers to provide these data elements with minimal time and effort on their part. Data will be piped back to them from all involved officers so that both the central and distributed commands can have not only situational awareness, but there will be full perception of resource availability so that resources can respond to emergency situations in the most effective way possible.
- Bar coding and electronic encryption on drivers' licenses, vehicle registrations and other identification cards will enable accurate and complete driver and registration data to be entered automatically and directly into all the records that consume these data elements.
- All citizens above the age of 15 will have STAR ID with a capability of adding data to their identification cards to meet a variety of traffic safety and other social and economic needs, including identification, authentication, and system/facility access.
- All citation, crash, EMS and other records will be submitted electronically on consistent and integrated data entry systems, and the data will be automatically uploaded to the central databases, saving considerable data entry costs and resulting in totally complete and consistent records that are readily available for analysis and case management.

- Data generated will be immediately available at the local levels to planners and countermeasure developers. Analytics software will be provided to enable them to obtain any information contained in these data to define problem locations, perform problem identifications, and formulate improved countermeasures on a continuous basis. The ultimate goal will be to provide an analytics capability in the field in real time and to train field officers in some of the basics of its use.
- Data generated will also be piped to virtual real-time dashboards that will enable administrators to monitor and control their projects, and to view information generated from their respective systems in a wide variety of ways that respond to their operational needs. These dashboards will be fully customizable so that, by default, they will see a common view of the performance metrics for their systems in real time for any time frame.
- Dashboards will be developed for mobile systems such that they can be set to default to the most useful information that is needed by the field officer on a daily/hourly basis. In addition, they will provide the interface to more detailed alternative information that is currently not available on web-based dashboard systems.
- A centralized index of all available databases will exist that will enable users of these data to understand the availability and content of these databases and to access the data needed for both planning and operational purposes.
- A system will exist to integrate the various disparate databases. For example, GIS will enable the roadway characteristics data to be merged with crash data to provide the basis for surfacing those roadway characteristics that have the maximum potential for crash frequency and severity reduction. Databases will have the ability to be integrated by any common key.
- Case number cross references will enable the merging of crash and medical/EMS data to enable optimal deployment of EMS resources and the development of new countermeasures. In the interim, key data elements in the EMSIS and Trauma data systems will be used to merge these data. Crash, EMS (ambulance run), and trauma data will have an integration capability that is both deterministic and probabilistic, depending on the data availability.
- The FHWA Highway Safety Manual (HSM) and Interactive Highway Safety Design Manual (IHSDM), along with the AASHTO Safety Analyst systems, will be implemented to the extent that they are seen to improve both (1) the safety of overall roadway designs, and (2) the ability of the current Cost-benefit Optimization for the Reduction of Roadway Caused Tragedies (CORRECT) to produce roadway improvements that produce the maximum safety benefits. This will necessitate that roadway characteristics are made available to roadway designers and high crash location investigation teams as required by the systems and manuals listed above.
- A system will be developed and deployed by ALDOT that will totally integrate the maintenance and safety roadway improvement project so that when assets are deployed for roadway maintenance they can be leveraged to produce roadway improvements over the entire segment being maintained; this has been found to reduce the cost of otherwise pure safety project to the extent that the benefit-cost ratios for such roadway improvements are at least doubled.
- Internet portals that include both analytical and GIS capabilities will enable any and all of this information to be viewed on virtually any computer in use. This increased visualization in the form of maps will enable decision-makers to visualize and better understand the true nature of problems, especially those which go beyond solutions at point locations and involve comparative analysis over relatively long segments.
- A more intuitive user interface, including wizards, will be developed for CARE and the CARE Dashboard systems that will enable anyone who is computer literate to immediately obtain information directly from this system without prior training.
- A unified approach to court records will exist such that the violation, court referral, alternative sentencing and criminal histories will be available to all courts and other authorized officials throughout the state in real time.

- All traffic safety efforts within the state will be recorded for and published in a common website that will provide a reference back to the various websites of the agencies and service organizations that are performing these activities. Called SafeHomeAlabama.gov, this website will be kept current by efforts of members of all of the participating organizations.
- An improvement in demographics data will be made available to all users of technology in the State via SafeHomeAlabama.gov to enable them to formulate countermeasure approaches using crash rates by severity in addition to raw frequencies.
- There will be a major effort throughout the traffic safety community led by the Traffic Records Coordinating Committee and other Information Technology specialists to recognize the feasibility of ultimately removing the driver from the critical role of vehicle control. The shift of emphasis toward recognizing that the Toward Zero Deaths (TZD) goal can only be achieved by these developing technologies is itself a major challenge that must be faced by technology specialists.

3.9 Legislative Goals

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/GovernmentAgencies/StateAgencies/ALLegislature.aspx

4.0 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**
East Central	Blount, Calhoun, Chambers, Cherokee, Chilton, Clay, Cleburne, Coosa, Elmore, Etowah, Jefferson, Lee, Macon, Randolph, St. Clair, Shelby, Tallapoosa, and Talladega
North Central	Colbert, Cullman, DeKalb, Fayette, Franklin, Jackson, Lamar, Lauderdale, Lawrence, Limestone, Madison, Marion, Marshall, Morgan, Pickens, Walker, and Winston
South	Baldwin, Choctaw, Clarke, Conecuh, Dallas, Escambia, Green Hale, Marengo, Mobile, Monroe, Perry, Sumter, Washington, and Wilcox
South East	Autauga, Barbour, Bibb, Bullock, Butler, Coffee, Covington, Crenshaw, Dale, Geneva, Henry, Houston, Lowndes, Montgomery, Pike, Russell, and Tuscaloosa

In order to determine the hotspots for each region, several statewide reports were generated. Through the use of the 2013-2015 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 analysis of 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 15 Speed Hotspots and 164 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 (2006-2015)
2. 2015 Alabama Fatalities by County and Region Map
3. Alabama Fatalities for State and Region (2006-2015)
4. Top 15 Speeding Related Mileposted Interstate Crashes Breakdown by Region
5. Top 15 Speeding Related Mileposted Interstate Crashes Listing
6. Top 14 Impaired Driving Related Mileposted Interstate Crashes Breakdown by Region
7. Top 14 Impaired Driving Related Mileposted Interstate Crashes Listing
8. Top 9 Speeding Related Mileposted State/Federal Route Crashes Breakdown by Region
9. Top 9 Speeding Related Mileposted State/Federal Route Crashes Listing
10. Top 37 Impaired Driving Related Mileposted State/Federal Route Crashes breakdown by Region
11. Top 37 Impaired Driving Related Mileposted State/Federal Route Crashes Listing
12. Top 81 Impaired Driving Related Non-Mileposted Intersection Crashes Breakdown by Region
13. Top 81 Impaired Driving Related Non-Mileposted Intersection Crashes Listing
14. Top 6 Speeding Related Non-Mileposted Segment Crashes Breakdown by Region
15. Top 6 Speeding Related Non-Mileposted Segment Crashes Listing
16. Top 34 Impaired Driving Related Non-Mileposted Segment Crashes Breakdown by Region
17. Top 34 Impaired Driving Related Non-Mileposted Segment Crashes Listing
18. Hotspot Count and Totals by Region and County Map for All Hotspots
19. Hotspot Breakdown by Region for All Hotspots
20. Hotspot Count and Totals by Region and County Map for Interstate Hotspots Only
21. Hotspot Count Breakdown by Region for Interstate Hotspots Only
22. Hotspot Count and Totals by Region and County Map for Speeding Related Hotspots Only
23. Hotspot Count Breakdown by Region for Speeding Related Hotspots Only
24. Hotspot Count and Totals by Region and County Map for Impaired Driving Related Hotspots Only
25. 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.

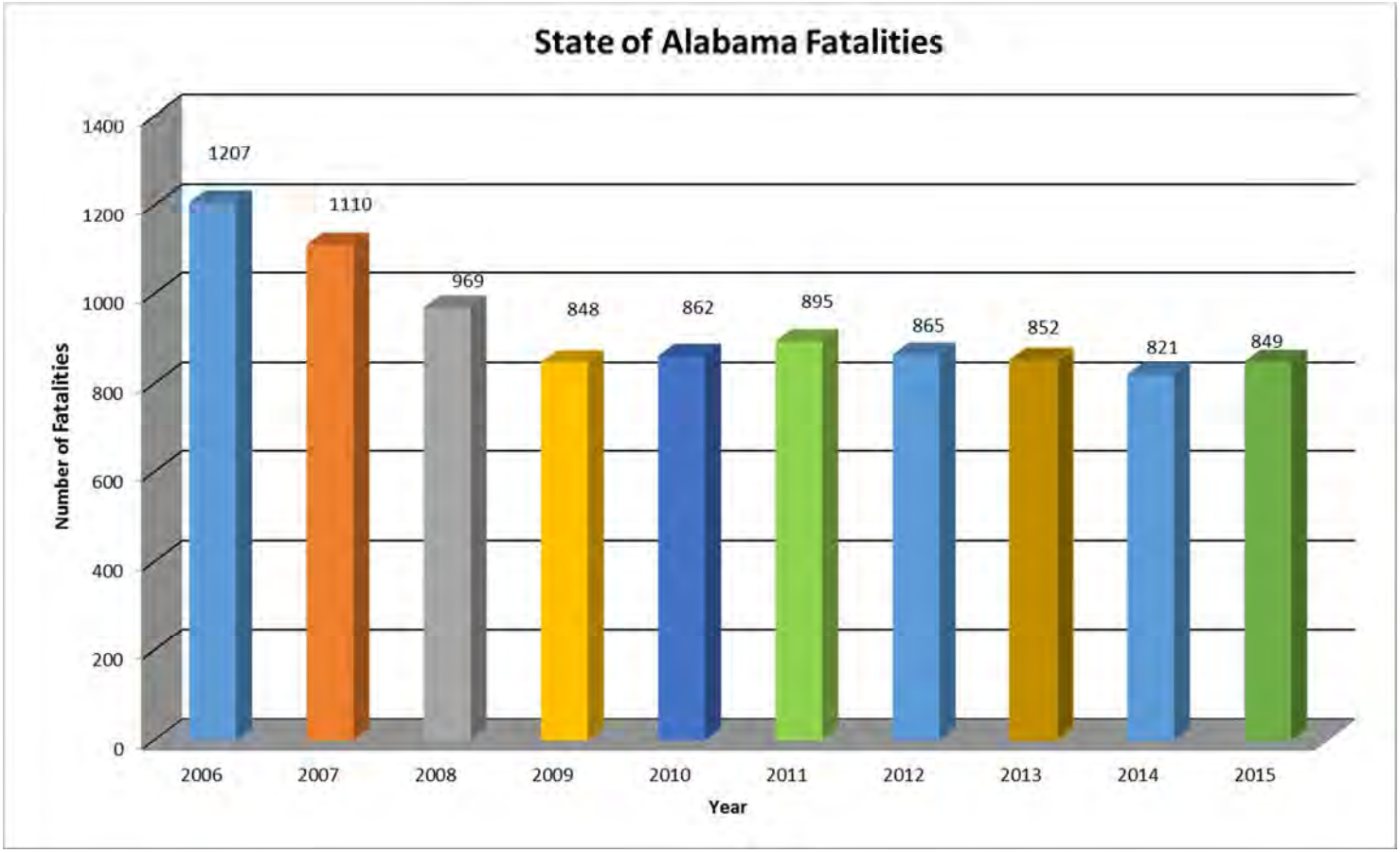
In addition to the statewide information, regional information was generated for each of the four regions across the state. This information was formatted in the same way as the statewide reports but only included information on hotspots specific to their region. Regions were also not given copies of the Interstate Hotspots. The Interstate Hotspots will be covered by the Alabama Law Enforcement Agency (ALEA), and they are not under the control of the four CTSP/LEL 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:

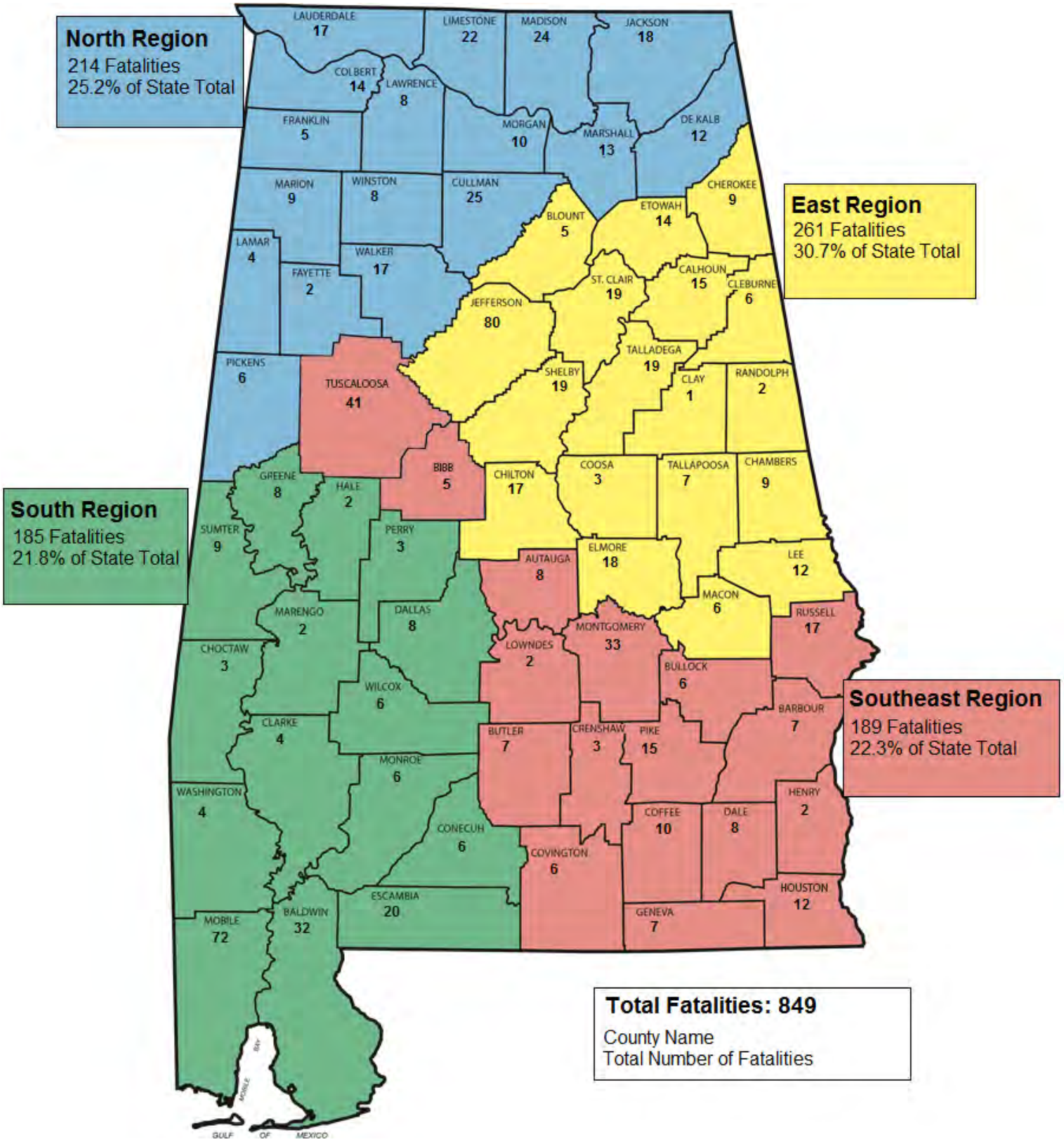
1. Regional Fatalities Bar Graph (2006-2015)
2. Top Speeding Related Mileposted State/Federal Route Crashes Listing for Region
3. Top Impaired Driving Related Mileposted State/Federal Route Crashes Listing for Region
4. Top Impaired Driving Related Non-Mileposted Intersection Crashes Listing for Region
5. Top Speeding Related Non-Mileposted Segment Crashes Listing for Region
6. 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/LEL 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 data-driven 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 Speeding Related Hotspots and 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.


State of Alabama Fatalities
Number of Fatalities
1400
1200
1000
800
600
400
200
0
1207
1110
969
848
862
895
865
852
821
849
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
Year

2015 Fatalities in Alabama



State of Alabama Fatalities

Year	Number
2006	1207
2007	1110
2008	966
2009	849
2010	859
2011	899
2012	865
2013	852
2014	821
2015	849

State of Alabama Fatalities by Region

East Central

Year	Number
2006	352
2007	356
2008	315
2009	291
2010	295
2011	305
2012	297
2013	292
2014	265
2015	261

North Central

Year	Number
2006	381
2007	323
2008	281
2009	271
2010	257
2011	279
2012	276
2013	246
2014	224
2015	214

South

Year	Number
2006	263
2007	235
2008	210
2009	159
2010	178
2011	178
2012	166
2013	184
2014	193
2015	185

Southeast

Year	Number
2006	211
2007	196
2008	154
2009	128
2010	129
2011	137
2012	126
2013	130
2014	139
2015	189

State of Alabama Interstate Locations with 8 or More Speeding Related Crashes Resulting in Injury or Fatality

Region Breakdown

East Region	10	66.7%	North Region	2	13.3%
South Region	2	13.3%	Southeast Region	1	6.7%

East Region	10
Blount	0
Calhoun	1
Chambers	0
Cherokee	0
Chilton	0
Clay	0
Cleburne	0
Coosa	0
Elmore	1
Etowah	1
Jefferson	4
Lee	1
Macon	0
Randolph	0
St Clair	1
Shelby	1
Tallapoosa	0
Talladega	0

South Region	2
Baldwin	0
Choctaw	0
Clarke	0
Conecuh	0
Dallas	0
Escambia	0
Greene	0
Hale	0
Marengo	0
Mobile	2
Monroe	0
Perry	0
Sumter	0
Washington	0
Wilcox	0

North Region	2
Colbert	0
Cullman	1
Dekalb	1
Fayette	0
Franklin	0
Jackson	0
Lamar	0
Lauderdale	0
Lawrence	0
Limestone	0
Madison	0
Marion	0
Marshall	0
Morgan	0
Pickens	0
Walker	0
Winston	0

Southeast Region	1
Autauga	1
Barbour	0
Bibb	0
Bullock	0
Butler	0
Coffee	0
Covington	0
Crenshaw	0
Dale	0
Geneva	0
Henry	0
Houston	0
Lowndes	0
Montgomery	0
Pike	0
Russell	0
Tuscaloosa	0

Top 15 Mileposted Interstate Locations (10 Miles in Length) in Alabama with 8 or More Speeding Related Crashes Resulting in Injury or Fatality

Rank	County	City	Route	Beg MP	End MP	Total Crashes	Fatal Crashes	Injury Crashes	Severity Index	C/MVM	MVM	ADT	Agency ORI
1	Mobile	Mobile	I-10	11.4	21.4	8	3	5	33.75	0.01	1259.45	69011	Mobile Police Department
2	Dekalb	Rural Dekalb	I-59	202.8	212.8	8	1	7	31.25	0.03	267.84	14676	ALEA - Gadsden Post
3	Etowah	Rural Etowah	I-59	167.7	177.7	8	0	8	26.25	0.02	381.15	20885	ALEA - Gadsden Post
4	Cullman	Rural Cullman	I-65	290.8	300.8	10	2	8	26	0.01	716.13	39240	ALEA - Decatur Post
5	Calhoun	Rural Calhoun	I-20	182.5	192.5	9	0	9	25.56	0.01	653.28	35796	ALEA - Jacksonville Post
6	Lee	Opelika	I-85	55.4	65.4	8	1	7	23.75	0.01	703.28	38536	Opelika Police Department
7	Shelby	Rural Shelby	I-65	232.2	242.2	8	0	8	23.75	0.01	1123.6	61567	ALEA - Birmingham Post
8	Jefferson	Bessemer	I-59	111	121	9	0	9	22.22	0.01	1130.33	61936	Bessemer Police Department
9	Jefferson	Birmingham	I-59	123.3	133.3	11	0	11	21.82	0	2257.98	123725	Birmingham Police Department
10	Autauga	Rural Autauga	I-65	184	194	9	0	9	20	0.01	622	34082	ALEA - Montgomery Post
11	Jefferson	Birmingham	I-65	255	265	8	0	8	20	0	2037.25	111630	Birmingham Police Department
12	Jefferson	Rural Jefferson	I-65	266	276	9	0	9	20	0.01	1054.67	57790	ALEA - Birmingham Post
13	Mobile	Mobile	I-10	22.2	32.2	9	0	9	18.89	0.01	1240.29	67961	Mobile Police Department
14	Elmore	Rural Elmore	I-65	173	183	8	0	8	18.75	0.01	991.1	54307	ALEA - Montgomery Post
15	St Clair	Rural St. Clair	I-20	140.9	150.9	8	0	8	18.75	0.01	1041.6	57074	ALEA - Birmingham Post

Top 14 Mileposted Interstate Locations (5 miles in length) in Alabama with 8 or More Impaired Driving Related Crashes Resulting in Injury or Fatality

Region Breakdown

East Region	9	64.3%	North Region	1	7.1%
South Region	3	21.4%	Southeast Region	1	7.1%

East Region	9
Blount	0
Calhoun	0
Chambers	0
Cherokee	0
Chilton	0
Clay	0
Cleburne	0
Coosa	0
Elmore	0
Etowah	0
Jefferson	6
Lee	0
Macon	0
Randolph	0
St Clair	1
Shelby	1
Tallapoosa	0
Talladega	1

South Region	3
Baldwin	1
Choctaw	0
Clarke	0
Conecuh	0
Dallas	0
Escambia	0
Greene	0
Hale	0
Marengo	0
Mobile	2
Monroe	0
Perry	0
Sumter	0
Washington	0
Wilcox	0

North Region	1
Colbert	0
Cullman	0
Dekalb	0
Fayette	0
Franklin	0
Jackson	0
Lamar	0
Lauderdale	0
Lawrence	0
Limestone	0
Madison	1
Marion	0
Marshall	0
Morgan	0
Pickens	0
Walker	0
Winston	0

Southeast Region	1
Autauga	0
Barbour	0
Bibb	0
Bullock	0
Butler	0
Coffee	0
Covington	0
Crenshaw	0
Dale	0
Geneva	0
Henry	0
Houston	0
Lowndes	0
Montgomery	1
Pike	0
Russell	0
Tuscaloosa	0

Top 14 Mileposted Interstate Locations (5 Miles in Length) in Alabama with 8 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	C/MVM	MVM	ADT	Agency ORI
1	Montgomery	Montgomery	I-85	0.5	5.5	8	3	5	31.25	0.01	909.85	99710	Montgomery Police Department
2	St Clair	Rural St. Clair	I-20	151.2	156.2	8	0	8	28.75	0.02	460.65	50482	ALEA - Birmingham Post
3	Jefferson	Hoover	I-65	248.2	253.2	15	4	11	28.67	0.01	1035.56	113486	Hoover Police Department
4	Mobile	Mobile	I-10	15	20	10	2	8	26	0.01	688.19	75418	Mobile Police Department
5	Talladega	Rural Talladega	I-20	164	169	9	0	9	25.56	0.02	369.33	40474	ALEA - Jacksonville Post
6	Jefferson	Rural Jefferson	I-65	266	271	8	0	8	25	0.01	554.52	60769	ALEA - Birmingham Post
7	Jefferson	Hoover	I-459	10.9	15.9	8	1	7	25	0.01	783.92	85909	Hoover Police Department
8	Jefferson	Fairfield	I-59	115	120	16	0	16	23.75	0.03	613.3	67211	Fairfield Police Department
9	Jefferson	Birmingham	I-59	129	134	17	1	16	21.76	0.02	803.13	88014	Birmingham Police Department
10	Madison	Huntsville	I-565	9.8	14.8	9	0	9	21.11	0.01	607.24	66547	Huntsville Police Department
11	Mobile	Mobile	I-65	1	6	9	1	8	21.11	0.01	789.02	86468	Mobile Police Department
12	Baldwin	Rural Baldwin	I-10	30	35	12	0	12	20	0.02	576.88	63220	ALEA - Mobile Post
13	Jefferson	Birmingham	I-59	123	128	12	1	11	20	0.01	1331.02	145865	Birmingham Police Department
14	Shelby	Pelham	I-65	242	247	8	0	8	13.75	0.01	767.52	84112	Pelham Police Department

Top 9 Mileposted Federal and State Route Locations (10 miles in length) in Alabama with 8 or More Speeding Related Crashes Resulting in Injury or Fatality

Region Breakdown

East Region	5	55.6%	North Region	1	11.1%
South Region	1	11.1%	Southeast Region	2	22.2%

East Region	5
Blount	0
Calhoun	1
Chambers	0
Cherokee	0
Chilton	0
Clay	0
Cleburne	0
Coosa	2
Elmore	0
Etowah	0
Jefferson	0
Lee	1
Macon	1
Randolph	0
St Clair	0
Shelby	0
Tallapoosa	0
Talladega	0

South Region	1
Baldwin	1
Choctaw	0
Clarke	0
Conecuh	0
Dallas	0
Escambia	0
Greene	0
Hale	0
Marengo	0
Mobile	0
Monroe	0
Perry	0
Sumter	0
Washington	0
Wilcox	0

North Region	1
Colbert	0
Cullman	0
Dekalb	0
Fayette	0
Franklin	0
Jackson	0
Lamar	0
Lauderdale	0
Lawrence	0
Limestone	1
Madison	0
Marion	0
Marshall	0
Morgan	0
Pickens	0
Walker	0
Winston	0

Southeast Region	2
Autauga	0
Barbour	0
Bibb	0
Bullock	0
Butler	0
Coffee	1
Covington	0
Crenshaw	0
Dale	0
Geneva	0
Henry	0
Houston	0
Lowndes	0
Montgomery	0
Pike	0
Russell	0
Tuscaloosa	1

Top 9 Mileposted State and Federal Route Locations (10 Miles in Length) in Alabama with 8 or More Speeding Related Crashes Resulting in Injury or Fatality

Rank	County	City	Route	Beg MP	End MP	Total Crashes	Fatal Crashes	Injury Crashes	Severity Index	C/MVM	MVM	ADT	Agency ORI
1	Coffee	Rural Coffee	S-27	32.9	42.9	10	1	9	30	0.21	48.76	2672	ALEA - Dothan Post
2	Coosa	Rural Coosa	S-259	2.4	12.4	10	0	10	28	0.41	24.13	1322	ALEA - Alexander City Post
3	Coosa	Rural Coosa	S-22	101	111	8	0	8	27.5	0.17	46.52	2549	ALEA - Alexander City Post
4	Baldwin	Rural Baldwin	S-3	3.6	13.6	12	3	9	25.83	0.07	181.5	9945	ALEA - Mobile Post
5	Macon	Tuskegee	S-8	166.8	176.8	8	2	6	25	0.07	113.04	6194	Tuskegee Police Department
6	Tuscaloosa	Rural Tuscaloosa	S-216	17.7	27	8	0	8	25	0.08	105.26	6202	ALEA - Tuscaloosa Post
7	Calhoun	Jacksonville	S-21	259	269	8	0	8	21.25	0.02	376.39	20624	Jacksonville Police Department
8	Limestone	Rural Limestone	S-2	80	90	8	0	8	21.25	0.02	441.56	24195	ALEA - Decatur Post
9	Lee	Rural Lee	S-1	115	125	10	0	10	21	0.03	391.39	21446	ALEA - Opelika Post

Top 37 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

Region Breakdown

East Region	5	13.5%	North Region	12	32.4%
South Region	4	10.8%	Southeast Region	16	43.2%

East Region	**5**
Blount	1
Calhoun	0
Chambers	0
Cherokee	0
Chilton	0
Clay	0
Cleburne	0
Coosa	0
Elmore	0
Etowah	1
Jefferson	1
Lee	0
Macon	1
Randolph	0
St Clair	0
Shelby	1
Tallapoosa	0
Talladega	0

South Region	**4**
Baldwin	1
Choctaw	0
Clarke	0
Conecuh	0
Dallas	1
Escambia	0
Greene	0
Hale	0
Marengo	0
Mobile	2
Monroe	0
Perry	0
Sumter	0
Washington	0
Wilcox	0

North Region	**12**
Colbert	0
Cullman	0
Dekalb	0
Fayette	0
Franklin	0
Jackson	0
Lamar	0
Lauderdale	0
Lawrence	0
Limestone	0
Madison	9
Marion	0
Marshall	2
Morgan	1
Pickens	0
Walker	0
Winston	0

Southeast Region	**16**
Autauga	1
Barbour	0
Bibb	0
Bullock	0
Butler	0
Coffee	0
Covington	0
Crenshaw	0
Dale	1
Geneva	0
Henry	0
Houston	4
Lowndes	0
Montgomery	1
Pike	0
Russell	3
Tuscaloosa	6

Top 37 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	C/MVM	MVM	ADT	Agency ORI
1	Blount	Rural Blount	S-79	20.1	25.1	11	4	7	31.82	0.16	67.92	7443	ALEA - Decatur Post
2	Madison	Huntsville	S-2	99	104	8	2	6	30	0.03	278.46	30516	Huntsville Police Department
3	Dale	Daleville	S-12	187	192	8	1	7	25	0.06	142.08	15570	Daleville Police Department
4	Madison	Rural Madison	S-1	344.3	349.3	8	1	7	25	0.04	221.28	24250	ALEA - Huntsville Post
5	Madison	Rural Madison	S-2	104.5	109.5	8	0	8	25	0.05	163.21	17886	ALEA - Huntsville Post
6	Madison	Huntsville	S-53	307.4	312.4	11	0	11	24.55	0.03	354.74	38876	Huntsville Police Department
7	Houston	Rural Houston	S-12	192	197	8	0	8	23.75	0.06	128.64	14097	ALEA - Dothan Post
8	Marshall	Boaz	S-205	3.7	8.7	8	1	7	23.75	0.11	75.83	8310	Boaz Police Department
9	Mobile	Rural Mobile	S-42	9.1	14.1	8	0	8	23.75	0.04	197.62	21657	ALEA - Mobile Post
10	Montgomery	Rural Montgomery	S-9	109.4	114.4	8	1	7	23.75	0.03	309.98	33970	ALEA - Montgomery Post
11	Russell	Rural Russell	S-8	207.5	212.5	8	0	8	23.75	0.06	137.84	15106	Phenix City Police Department
12	Russell	Phenix City	S-8	213.8	218	12	0	12	23.33	0.04	294.9	38473	Phenix City Police Department
13	Mobile	Rural Mobile	S-193	11.8	16.8	10	1	9	23	0.21	46.89	5139	ALEA - Mobile Post
14	Marshall	Boaz	S-1	278	283	9	0	9	22.22	0.04	209.05	22910	Boaz Police Department
15	Tuscaloosa	Rural Tuscaloosa	S-69	137.1	142.1	10	1	9	22	0.04	241.47	26462	ALEA - Tuscaloosa Post
16	Houston	Dothan	S-12	201.8	206.8	9	0	9	21.11	0.04	227.25	24904	Dothan Police Department
17	Russell	Phenix City	S-1	110.6	115.6	9	0	9	21.11	0.03	311.63	34151	Phenix City Police Department
18	Tuscaloosa	Tuscaloosa	S-6	47.8	52.8	9	0	9	21.11	0.02	390.44	42788	Tuscaloosa Police Department
19	Tuscaloosa	Tuscaloosa	S-6	52.9	57.9	10	1	9	21	0.06	157.04	17210	Tuscaloosa Police Department
20	Baldwin	Gulf Shores	S-59	1.1	6.1	9	0	9	20	0.03	331.28	36305	Gulf Shores Police Department
21	Dallas	Rural Dallas	S-8	84.2	89.2	8	0	8	20	0.07	110.12	12068	ALEA - Selma Post
22	Jefferson	Mountain Brook	S-38	0.7	5.7	14	0	14	20	0.02	644.92	70676	Mountain Brook Police Department
23	Macon	Tuskegee	S-8	170.9	175.9	8	1	7	20	0.1	79.89	8755	Tuskegee Police Department
24	Madison	Huntsville	S-53	318.8	323.8	9	0	9	20	0.04	221.06	24226	Huntsville Police Department
25	Morgan	Decatur	S-3	354	359	13	0	13	19.23	0.05	256.64	28125	Decatur Police Department
26	Houston	Dothan	S-1	12.6	17.6	9	0	9	18.89	0.06	147.83	16200	Dothan Police Department
27	Tuscaloosa	Tuscaloosa	S-7	80.1	85.1	8	0	8	18.75	0.04	190.92	20923	Tuscaloosa Police Department

Top 37 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	C/MVM	MVM	ADT	Agency ORI
28	Shelby	Rural Shelby	S-38	6.3	11.3	13	0	13	18.46	0.02	525.36	57574	Hoover Police Department
29	Etowah	Gadsden	S-1	257.6	262.6	10	1	9	18	0.04	270.72	29668	Gadsden Police Department
30	Houston	Dothan	S-210	0.2	5.2	8	0	8	17.5	0.03	303.94	33308	Dothan Police Department
31	Madison	Huntsville	S-1	328	333	8	0	8	17.5	0.03	239	26192	Huntsville Police Department
32	Tuscaloosa	Tuscaloosa	S-215	2.2	7.2	20	0	20	17	0.18	112.34	12311	Tuscaloosa Police Department
33	Autauga	Prattville	S-14	155.9	160.9	9	0	9	16.67	0.04	213.37	23383	Prattville Police Department
34	Madison	Huntsville	S-1	338	343	9	0	9	16.67	0.03	258.71	28352	Huntsville Police Department
35	Tuscaloosa	Northport	S-6	42.7	47.7	10	0	10	16	0.03	302.26	33124	Northport Police Department
36	Madison	Madison	S-2	88.2	93.2	8	0	8	15	0.02	418.18	45828	Madison Police Department
37	Madison	Huntsville	S-1	333	338	10	0	10	13	0.02	585.68	64184	Huntsville Police Department

Top 81 Intersection Locations Statewide with 3 or More Total Impaired Driving Related Crashes

Region Breakdown

East Region	21	25.9%	North Region	28	34.6%
South Region	19	23.5%	Southeast Region	13	16.0%

East Region	**21**
Blount	0
Calhoun	0
Chambers	0
Cherokee	0
Chilton	0
Clay	0
Cleburne	0
Coosa	0
Elmore	0
Etowah	0
Jefferson	8
Lee	10
Macon	0
Randolph	0
St Clair	0
Shelby	2
Tallapoosa	0
Talladega	1

South Region	**19**
Baldwin	2
Choctaw	0
Clarke	0
Conecuh	0
Dallas	2
Escambia	1
Greene	0
Hale	0
Marengo	0
Mobile	14
Monroe	0
Perry	0
Sumter	0
Washington	0
Wilcox	0

North Region	**28**
Colbert	2
Cullman	0
Dekalb	0
Fayette	0
Franklin	0
Jackson	0
Lamar	0
Lauderdale	2
Lawrence	0
Limestone	0
Madison	24
Marion	0
Marshall	0
Morgan	0
Pickens	0
Walker	0
Winston	0

Southeast Region	**13**
Autauga	1
Barbour	0
Bibb	0
Bullock	0
Butler	0
Coffee	0
Covington	1
Crenshaw	0
Dale	0
Geneva	0
Henry	0
Houston	0
Lowndes	0
Montgomery	6
Pike	0
Russell	0
Tuscaloosa	5

Top 81 Intersection Locations Statewide with 3 or More Total Impaired Driving Related Crashes

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity	Node 1	Node 2	Route	Location	Agency ORI
1	Jefferson	Birmingham	3	0	3	23.33	4660	N/A	S-7	AL-7 at 1ST AVE N	Birmingham Police Department
2	Tuscaloosa	Tuscaloosa	4	0	4	22.5	542	N/A	5558	CR-37 at HARGROVE RD E	Tuscaloosa Police Department
3	Dallas	Selma	3	0	3	20	1292	N/A	5195	HAMILTON ST at JEFF DAVIS AVE	Selma Police Department
4	Madison	Huntsville	3	0	3	20	3625	N/A	S-53	AIRPORT RD SW at S MEMORIAL PKY	Huntsville Police Department
5	Montgomery	Montgomery	3	1	1	20	5096	N/A	S-6	AL-53 at AL-6	Montgomery Police Department
6	Tuscaloosa	Tuscaloosa	4	0	4	17.5	290	N/A	6299	10TH AVE at 15TH ST	Tuscaloosa Police Department
7	Covington	Rural Covington	3	0	2	16.67	7678	N/A	1295	AL-12 at CR-21	ALEA - Dothan Post
8	Madison	Huntsville	3	0	2	16.67	2067	N/A	1155	LINDEN AVE at PRIVATE RD	Huntsville Police Department
9	Madison	Huntsville	3	0	2	16.67	5576	N/A	6211	BLUE SPRING RD NW at MEDARIS RD NW	Huntsville Police Department
10	Mobile	Prichard	9	0	5	14.44	2222	N/A	1111	NO DESCRIPTION AVAILABLE	Prichard Police Department
11	Dallas	Selma	3	0	2	13.33	164	N/A	S-8	AL-14 at AL-22	Selma Police Department
12	Escambia	Rural Escambia	3	0	2	13.33	7360	N/A	1234	CR-14 at ALPINE RD	ALEA - Evergreen Post
13	Madison	Huntsville	3	0	2	13.33	4047	N/A	S-2	RIDEOUT RD SR-255 at BRIDGE UNI-VERSITY DR	Huntsville Police Department
14	Jefferson	Bessemer	4	0	2	12.5	913	N/A	S-5	AL-5 at AL-7	Bessemer Police Department
15	Madison	Huntsville	5	0	3	12	2004	N/A	7228	DRAKE AVE at PATTON RD	Huntsville Police Department
16	Lauderdale	Florence	6	0	4	11.67	1453	N/A	S-133	AL-133 at AL-157	Florence Police Department
17	Jefferson	Bessemer	4	0	2	10	1287	N/A	5309	AL-150 at CR-18	Bessemer Police Department
18	Lee	Auburn	4	0	2	10	384	N/A	5093	N DEAN RD at E GLENN AVE	Auburn Police Department
19	Madison	Huntsville	3	0	2	10	958	N/A	1028	PULASKI PIKE NW at SPARKMAN DR NW	Huntsville Police Department
20	Mobile	Mobile	3	0	3	10	9071	N/A	7101	AL-42 at N BROAD ST	Mobile Police Department
21	Mobile	Prichard	3	0	1	10	223	N/A	9461	E ELM ST at W ELM ST	Prichard Police Department
22	Mobile	Prichard	3	0	1	10	1234	N/A	1234	AMBER ST at BEAR FORK RD	Prichard Police Department
23	Montgomery	Montgomery	5	0	3	10	4481	N/A	S-6	AL-21 at AL-6	Montgomery Police Department
24	Madison	Madison	5	0	2	8	539	N/A	1005	NO DESCRIPTION AVAILABLE	Madison Police Department
25	Montgomery	Rural Montgomery	5	0	2	8	8074	N/A	2046	CR-64 at CR-74	ALEA - Montgomery Post
26	Mobile	Mobile	4	0	2	7.5	9796	N/A	1346	SHORT at EDITH	Mobile Police Department

Top 81 Intersection Locations Statewide with 3 or More Total Impaired Driving Related Crashes

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity	Node 1	Node 2	Route	Location	Agency ORI
27	Mobile	Mobile	4	0	1	7.5	2340	N/A	5884	CR-70 at OLD SHELL RD	Mobile Police Department
28	Autauga	Prattville	3	0	1	6.67	637	N/A	1002	AL-14 at AL-14-TRUCK	Prattville Police Department
29	Lee	Auburn	6	0	2	6.67	75	N/A	6077	AL-14 at OPELIKA RD	Auburn Police Department
30	Lee	Auburn	3	0	1	6.67	1208	N/A	5263	DEKALB ST at JOHNSTON ST	Auburn Police Department
31	Madison	Rural Madison	3	0	1	6.67	7371	N/A	1280	JEFF RD at TONEY RD	ALEA - Huntsville Post
32	Madison	Huntsville	3	0	1	6.67	2512	N/A	S-2	AL-2 at OLD MONROVIA RD NW	Huntsville Police Department
33	Madison	Huntsville	3	0	1	6.67	41240	N/A	7608	NO DESCRIPTION AVAILABLE	Huntsville Police Department
34	Madison	Huntsville	3	0	1	6.67	5573	N/A	6178	BLUE SPRING RD NW at SHAWMONT DR NW	Huntsville Police Department
35	Madison	Huntsville	3	0	1	6.67	10162	N/A	S-2	CROMWELL CIR at DEAD END	Huntsville Police Department
36	Madison	Huntsville	3	0	2	6.67	1231	N/A	5932	AL-53 at JORDAN LN NW	Huntsville Police Department
37	Mobile	Mobile	3	0	1	6.67	1989	N/A	5985	DAUPHIN ST at I-65	Mobile Police Department
38	Montgomery	Montgomery	3	0	1	6.67	3095	N/A	5862	INTERSTATE 85 at PERRY HILL RD INTER-CHANGE	Montgomery Police Department
39	Talladega	Rural Talladega	3	0	1	6.67	8063	N/A	5026	CR-25 at ALABAMA AVE	ALEA - Jacksonville Post
40	Baldwin	Fairhope	4	0	1	5	773	N/A	S-42	AL-42 at PARKER RD	Fairhope Police Department
41	Colbert	Sheffield	4	0	1	5	386	N/A	5333	AL-184 at 11TH AVE	Sheffield Police Department
42	Madison	Huntsville	4	0	1	5	209	N/A	1305	AL-1 at AL-2	Huntsville Police Department
43	Mobile	Mobile	6	0	2	5	2217	N/A	1346	CR-56 at AIRPORT BLVD	Mobile Police Department
44	Mobile	Mobile	4	0	1	5	4446	N/A	5985	S CATHERINE ST at N CATHERINE ST	Mobile Police Department
45	Tuscaloosa	Tuscaloosa	4	0	1	5	261	N/A	5168	15TH ST E at KICKER RD	Tuscaloosa Police Department
46	Lee	Auburn	5	0	1	4	92	N/A	6077	AL-14 at N DEAN RD	Auburn Police Department
47	Madison	Huntsville	10	0	3	4	2356	N/A	S-53	AL-2 at AL-53	Huntsville Police Department
48	Jefferson	Birmingham	3	0	1	3.33	4841	N/A	8386	6TH ST NW at KILLOUGH SPRINGS RD	Birmingham Police Department
49	Jefferson	Birmingham	3	0	1	3.33	4685	N/A	S-7	AL-7 at AL-75	Birmingham Police Department
50	Lauderdale	Florence	3	0	1	3.33	126	N/A	5074	N PINE ST at W TUSCALOOSA ST	Florence Police Department
51	Lee	Auburn	3	0	1	3.33	375	N/A	6077	AL-14 at DEKALB ST	Auburn Police Department
52	Madison	Huntsville	6	0	1	3.33	8087	N/A	S-2	AL-2 at SLAUGHTER RD	Huntsville Police Department
53	Madison	Madison	3	0	1	3.33	181	N/A	5163	EASTVIEW DR at HUGHES RD	Madison Police Department

Top 81 Intersection Locations Statewide with 3 or More Total Impaired Driving Related Crashes

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity	Node 1	Node 2	Route	Location	Agency ORI
54	Madison	Madison	3	0	1	3.33	42	N/A	8076	AL-20 at MADISON BLVD	Madison Police Department
55	Madison	Huntsville	3	0	1	3.33	1711	N/A	5420	AIRPORT DR SE at AIRPORT RD SW	Huntsville Police Department
56	Mobile	Prichard	3	0	1	3.33	6796	N/A	907	NO DESCRIPTION AVAILABLE	Prichard Police Department
57	Mobile	Mobile	3	0	1	3.33	679	N/A	1359	COTTAGE HILL RD at LLOYDS LN	Mobile Police Department
58	Montgomery	Montgomery	3	0	1	3.33	4718	N/A	S-6	INTERSTATE 65 at SOUTH BLVD INTER-CHANGE	Montgomery Police Department
59	Jefferson	Homewood	4	0	1	2.5	9926	N/A	2714	NO DESCRIPTION AVAILABLE	Homewood Police Department
60	Lee	Auburn	4	0	1	2.5	834	N/A	6078	AL-147 at AL-267	Auburn Police Department
61	Baldwin	Daphne	3	0	0	0	13447	N/A	1408	NO DESCRIPTION AVAILABLE	Daphne Police Department
62	Colbert	Muscle Shoals	3	0	0	0	298	N/A	5448	AL-13 at AL-157	Muscle Shoals Police Department
63	Jefferson	Birmingham	3	0	0	0	44813	N/A	S-38	NO DESCRIPTION AVAILABLE	Birmingham Police Department
64	Jefferson	Trussville	3	0	0	0	996	N/A	1229	NO DESCRIPTION AVAILABLE	Trussville Police Department
65	Lee	Auburn	5	0	0	0	315	N/A	5047	MAGNOLIA AVE at SR 147 COLLEGE ST	Auburn Police Department
66	Lee	Auburn	4	0	0	0	934	N/A	5379	AL-14 at W GLENN AVE	Auburn Police Department
67	Lee	Auburn	3	0	0	0	933	N/A	5047	W MAGNOLIA AVE at WRIGHT ST	Auburn Police Department
68	Lee	Rural Lee	3	0	0	0	7685	N/A	1212	NO DESCRIPTION AVAILABLE	ALEA - Opelika Post
69	Madison	Huntsville	5	0	0	0	2065	N/A	7219	DRAKE AVE SW at TRIANA BLVD SW	Huntsville Police Department
70	Madison	Madison	4	0	0	0	41	N/A	1005	AL-20 at MADISON BLVD	Madison Police Department
71	Madison	Madison	3	0	0	0	1376	N/A	8076	AL-20 at INTERCOM DR	Madison Police Department
72	Madison	Huntsville	3	0	0	0	2681	N/A	S-2	AL-2 at N LOOP RD NW	Huntsville Police Department
73	Madison	Huntsville	3	0	0	0	8017	N/A	1305	MOORES MILL RD at WINCHESTER RD NE	Huntsville Police Department
74	Mobile	Mobile	3	0	0	0	2139	N/A	6051	CR-56 at AIRPORT BLVD	Mobile Police Department
75	Mobile	Mobile	3	0	0	0	2005	N/A	1346	CR-56 at AIRPORT BLVD	Mobile Police Department
76	Mobile	Mobile	3	0	0	0	1595	N/A	1842	GRELOT RD at HILLCREST RD	Mobile Police Department
77	Montgomery	Montgomery	3	0	0	0	1648	N/A	6009	ANN ST at HIGHLAND AVE	Montgomery Police Department
78	Shelby	Hoover	4	0	0	0	93	N/A	1250	RIVERCHASE PKWY E at VALLEYDALE RD	Hoover Police Department
79	Shelby	Hoover	3	0	0	0	8057	N/A	1354	US 280 at VALLEYDALE RD	Hoover Police Department
80	Tuscaloosa	Tuscaloosa	4	0	0	0	4135	N/A	5177	23RD AVE at 4TH ST	Tuscaloosa Police Department
81	Tuscaloosa	Tuscaloosa	3	0	0	0	1105	N/A	5698	AL-215 at 12TH AVE	Tuscaloosa Police Department

Top 6 Segment Locations Statewide with 3 or More Speeding Related Crashes Resulting in Injury or Fatality

Region Breakdown

East Region	2	33.3%	North Region	2	33.3%
South Region	2	33.3%	Southeast Region	0	0.0%

East Region	2
Blount	0
Calhoun	2
Chambers	0
Cherokee	0
Chilton	0
Clay	0
Cleburne	0
Coosa	0
Elmore	0
Etowah	0
Jefferson	0
Lee	0
Macon	0
Randolph	0
St Clair	0
Shelby	0
Tallapoosa	0
Talladega	0

South Region	2
Baldwin	0
Choctaw	0
Clarke	0
Conecuh	0
Dallas	0
Escambia	0
Greene	0
Hale	0
Marengo	0
Mobile	1
Monroe	1
Perry	0
Sumter	0
Washington	0
Wilcox	0

North Region	2
Colbert	0
Cullman	0
Dekalb	0
Fayette	0
Franklin	0
Jackson	0
Lamar	0
Lauderdale	1
Lawrence	0
Limestone	0
Madison	0
Marion	0
Marshall	0
Morgan	0
Pickens	0
Walker	1
Winston	0

Southeast Region	0
Autauga	0
Barbour	0
Bibb	0
Bullock	0
Butler	0
Coffee	0
Covington	0
Crenshaw	0
Dale	0
Geneva	0
Henry	0
Houston	0
Lowndes	0
Montgomery	0
Pike	0
Russell	0
Tuscaloosa	0

Top 6 Segment Locations Statewide with 3 or More Speeding Related Crashes Resulting in Injury or Fatality

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity	Node 1	Node 2	Route	Location	Agency ORI
1	Lauderdale	Rural Lauderdale	3	1	2	33.33	7386	9457	1143	CR-270 at CR-7 and CR-124 at CR-7	ALEA - Quad Cities Post
2	Calhoun	Anniston	3	0	3	23.33	1957	1724	5176	COLEMAN RD at CITY LIMITS and CHERRY CR at COLEMAN RD	Anniston Police Department
3	Mobile	Rural Mobile	3	0	3	23.33	44898	8985	1679	CR-63 at CHUNCHULA GEORGETOWN RD and CR-63	ALEA - Mobile Post
4	Walker	Rural Walker	3	0	3	23.33	7917	7918	1018	CR-22 at CR-543 and CR-543 at EMPIRE RD	ALEA - Birmingham Post
5	Monroe	Rural Monroe	3	0	3	20	7449	7454	1319	ISSAC CREEK RD at LOCK & DAM RD and LOCK & DAM RD at MABIEN LAKE RD	ALEA - Evergreen Post
6	Calhoun	Rural Calhoun	3	0	3	16.67	7242	7243	1292	MILLBRANCH RD at ROCKY HOLLOW RD and CR-23 at MT GILEAD RD	ALEA - Jacksonville Post

Top 34 Segment Locations Statewide with 3 or More Total Impaired Driving Related Crashes

Region Breakdown

East Region	7	20.6%	North Region	12	35.3%
South Region	7	20.6%	Southeast Region	8	23.5%

East Region	7
Blount	0
Calhoun	0
Chambers	0
Cherokee	0
Chilton	0
Clay	0
Cleburne	0
Coosa	0
Elmore	0
Etowah	0
Jefferson	1
Lee	3
Macon	0
Randolph	0
St Clair	2
Shelby	1
Tallapoosa	0
Talladega	0

South Region	7
Baldwin	1
Choctaw	0
Clarke	0
Conecuh	0
Dallas	0
Escambia	0
Greene	0
Hale	0
Marengo	0
Mobile	6
Monroe	0
Perry	0
Sumter	0
Washington	0
Wilcox	0

North Region	12
Colbert	1
Cullman	2
Dekalb	0
Fayette	0
Franklin	0
Jackson	0
Lamar	0
Lauderdale	0
Lawrence	0
Limestone	0
Madison	7
Marion	0
Marshall	1
Morgan	0
Pickens	0
Walker	1
Winston	0

Southeast Region	8
Autauga	0
Barbour	0
Bibb	0
Bullock	0
Butler	0
Coffee	1
Covington	0
Crenshaw	0
Dale	1
Geneva	0
Henry	0
Houston	1
Lowndes	0
Montgomery	1
Pike	1
Russell	0
Tuscaloosa	3

Top 34 Segment Locations Statewide with 3 or More Total Impaired Driving Related Crashes

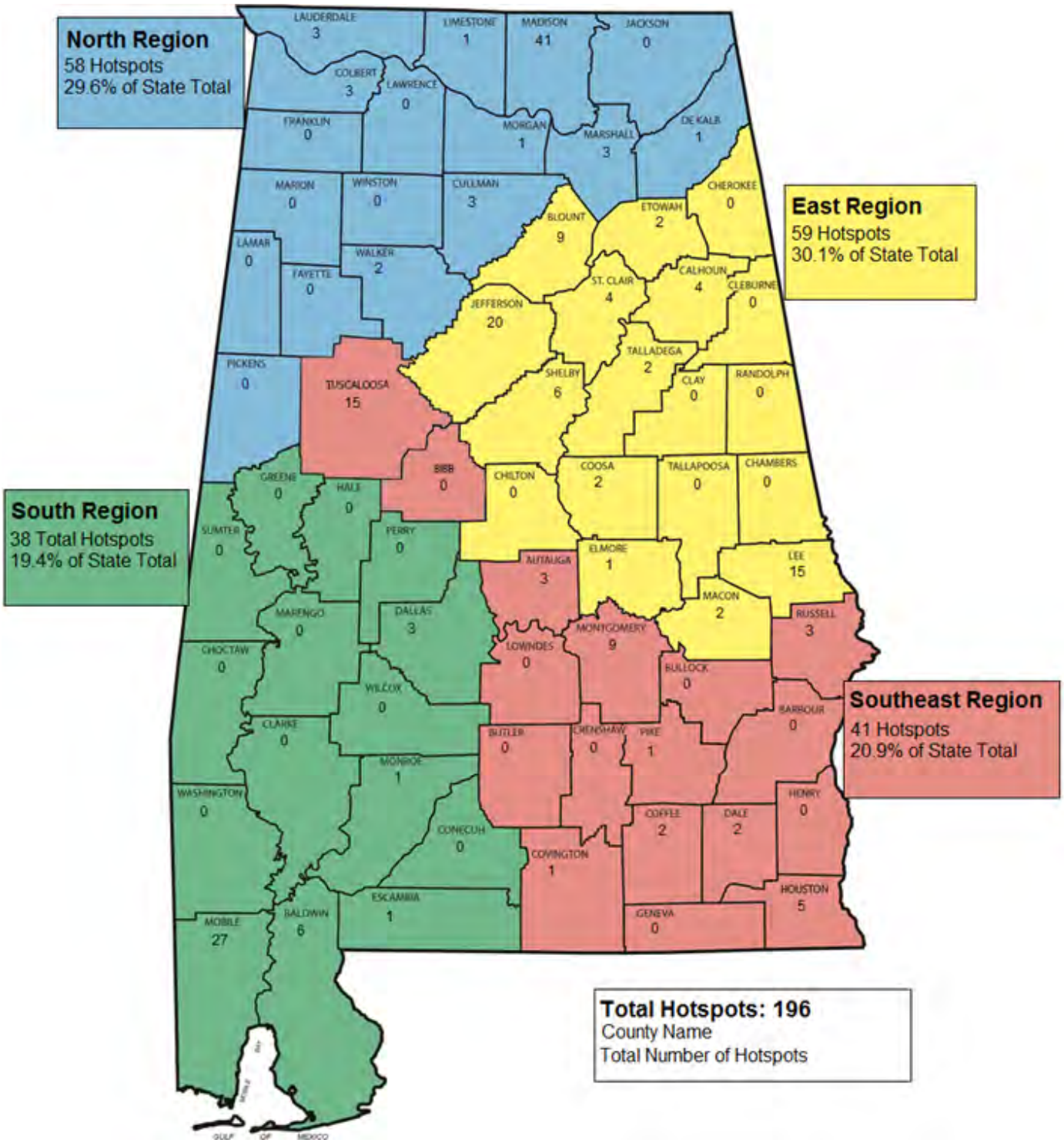
Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity	Node 1	Node 2	Route	Location	Agency ORI
1	Montgomery	Montgomery	3	2	1	43.33	2283	2343	8123	WEST BLVD SR-3 US-31 at B'HAM HWY and TRINITY RD	Montgomery Police Department
2	Pike	Rural Pike	3	2	0	33.33	7232	7254	1139	CR-11 at CR-59 and CR-59 at CR-63	ALEA - Dothan Post
3	Madison	Huntsville	4	1	2	27.5	5835	61	1042	BOB WADE LN NW at NORTHGATE DR NW and SALLY HAMNER RD	Huntsville Police Department
4	Walker	Jasper	4	0	4	27.5	1699	8248	1409	NO DESCRIPTION AVAILABLE and AIRPORT RD at N AIRPORT RD	Jasper Police Department
5	Dale	Rural Dale	3	1	1	26.67	7054	7055	1008	CR-24 at DALE CO 102 and NO DESCRIPTION AVAILABLE	ALEA - Dothan Post
6	St Clair	Rural St. Clair	3	1	1	23.33	7703	7706	1003	CR-37 at CR-54 and CR-37 at KELLY CREEK RD	ALEA - Birmingham Post
7	St Clair	Rural St. Clair	3	0	3	23.33	7118	7119	1209	NO DESCRIPTION AVAILABLE and NO DESCRIPTION AVAILABLE	ALEA - Birmingham Post
8	Madison	Rural Madison	3	0	2	16.67	7495	7568	1497	FORD CHAPEL DR at FORD CHAPEL RD and JEFF RD	ALEA - Huntsville Post
9	Marshall	Albertville	3	0	2	13.33	796	785	1409	BISHOP RD at MARTLING RD and AL-75 at AL-75 N	Albertville Police Department
10	Shelby	Hoover	3	0	2	13.33	8230	8815	1250	INTERSTATE 65 at VALLEYDALE RD and SOUTHLAKE PARKWAY	Hoover Police Department
11	Tuscaloosa	Tuscaloosa	3	0	2	13.33	34	35	5970	37TH ST at HIGHLAND OAKS DR and 37TH ST at 6TH AVE	Tuscaloosa Police Department
12	Tuscaloosa	Tuscaloosa	3	0	2	13.33	5030	5203	1185	25TH AVE NE at JACK WARNER PKY NE and HELEN KELLER BLVD	Tuscaloosa Police Department
13	Jefferson	Hoover	3	0	1	10	10660	15247	1127	NO DESCRIPTION AVAILABLE and VERDURE LN at CHAPEL RD S JCT	Hoover Police Department
14	Madison	Rural Madison	4	0	2	10	8007	8005	1296	FORD CIR at SHIELDS RD and OCONEE DR at SHIELDS RD	ALEA - Huntsville Post
15	Madison	Madison	3	0	2	10	202	2158	S-2	AL-2 at HUGHES RD and NO DESCRIPTION AVAILABLE	Madison Police Department
16	Mobile	Rural Mobile	3	0	1	10	8382	8391	1338	CR-11 at CR-36 and CR-36 at JACK HAMILTON RD	ALEA - Mobile Post
17	Mobile	Rural Mobile	3	0	1	10	8268	8278	1344	CR-11 at GRAND BAY WILMER RD S and BALLARD RD CO 272	ALEA - Mobile Post
18	Madison	Huntsville	3	0	1	6.67	4867	4926	5838	BANKHEAD PKY NE at MAYSVILLE RD NE at DOUGLAS LN NE	Huntsville Police Department
19	Madison	Rural Madison	3	0	1	6.67	7262	7284	1184	MCCOLLUM RD at STEGER RD and MEMORIAL PKWY SR-1 US-231	ALEA - Huntsville Post
20	Mobile	Rural Mobile	3	0	1	6.67	10129	10138	8860	AL-42 at CR-31 and CR-31 at HI WOOD CIR S	ALEA - Mobile Post
21	Mobile	Rural Mobile	3	0	1	6.67	8759	8837	2072	WARDS LN at WHITESTONE DR and FIRETOWER RD at WARDS LN	ALEA - Mobile Post
22	Coffee	Rural Coffee	4	0	1	5	7519	7439	1190	CR-157 at CR-259 and AL-27 at CR-259	ALEA - Dothan Post

Top 34 Segment Locations Statewide with 3 or More Total Impaired Driving Related Crashes

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity	Node 1	Node 2	Route	Location	Agency ORI
23	Cullman	Rural Cullman	3	0	1	3.33	7231	7229	1085	CR-108 at CR-222 and CR-109 at CR-222	ALEA - Decatur Post
24	Houston	Rural Houston	3	0	1	3.33	7480	7483	1028	S CR-55 at BUSTER RD and CR-24 at S CR-55	ALEA - Dothan Post
25	Mobile	Rural Mobile	3	0	1	3.33	7802	7803	1324	CR-28 at CR-39 and CR-39 at LAKE TAHOE DR	ALEA - Mobile Post
26	Tusca-loosa	Tuscaloosa	3	0	1	3.33	7150	848	6125	NO DESCRIPTION AVAILABLE and JACK WARNER PKY at QUEEN CITY AVE	Tuscaloosa Police Department
27	Lee	Auburn	4	0	1	2.5	92	93	6077	AL-14 at N DEAN RD and AL-14 at GENTRY DR	Auburn Police Department
28	Baldwin	Foley	3	0	0	0	15114	15113	3722	NO DESCRIPTION AVAILABLE and DOC MCDUFFIE RD at FOLEY BEACH EXP	Foley Police Department
29	Colbert	Rural Colbert	3	0	0	0	7383	7099	1066	HAWK PRIDE RD at HAWK PRIDE MOUNTAIN RD and CR-41	ALEA - Quad Cities Post
30	Cullman	Rural Cullman	3	0	0	0	8321	9581	1390	CR-1043 at CR-1046 and CR-1043 at CR-1045	ALEA - Decatur Post
31	Lee	Auburn	6	0	0	0	933	934	5379	W MAGNOLIA AVE at WRIGHT ST and AL-14 at W GLENN AVE	Auburn Police Department
32	Lee	Auburn	3	0	0	0	267	235	5093	AL-14 at N DONAHUE DR and FOSTER ST at W GLENN AVE	Auburn Police Department
33	Madison	Rural Madison	3	0	0	0	7480	41111	1652	ALT HARVEST RD at OLD RAILROAD BED RD and PHILLIPS RD	ALEA - Huntsville Post
34	Mobile	Rural Mobile	3	0	0	0	10129	10133	8860	AL-42 at CR-31 and CR-31 at DOGWOOD DR	ALEA - Mobile 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 (196 Total Hotspots)

Region Breakdown

East Region	59	30.1%	North Region	58	29.6%
South Region	38	19.4%	Southeast Region	41	20.9%

East Region	**59**
Blount	1
Calhoun	4
Chambers	0
Cherokee	0
Chilton	0
Clay	0
Cleburne	0
Coosa	2
Elmore	1
Etowah	2
Jefferson	20
Lee	15
Macon	2
Randolph	0
St Clair	4
Shelby	6
Tallapoosa	0
Talladega	2

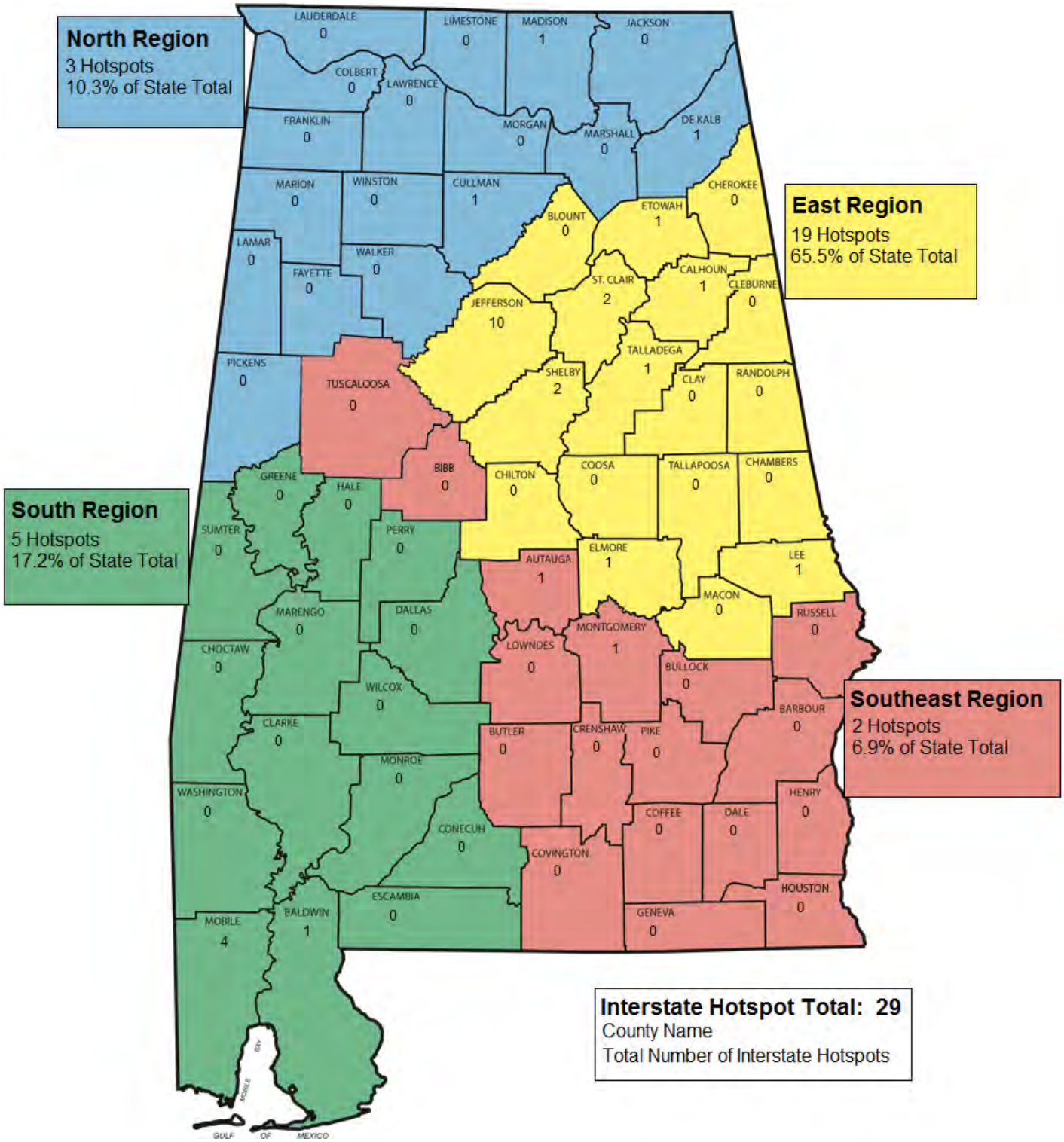
South Region	**38**
Baldwin	6
Choctaw	0
Clarke	0
Conecuh	0
Dallas	3
Escambia	1
Greene	0
Hale	0
Marengo	0
Mobile	27
Monroe	1
Perry	0
Sumter	0
Washington	0
Wilcox	0

North Region	**58**
Colbert	3
Cullman	3
Dekalb	1
Fayette	0
Franklin	0
Jackson	0
Lamar	0
Lauderdale	3
Lawrence	0
Limestone	1
Madison	41
Marion	0
Marshall	3
Morgan	1
Pickens	0
Walker	2
Winston	0

Southeast Region	**41**
Autauga	3
Barbour	0
Bibb	0
Bullock	0
Butler	0
Coffee	2
Covington	1
Crenshaw	0
Dale	2
Geneva	0
Henry	0
Houston	5
Lowndes	0
Montgomery	9
Pike	1
Russell	3
Tuscaloosa	15

Interstate Hotspot Totals for Alabama

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



Interstate Hotspots for Alabama (29 Total Hotspots)

Region Breakdown

East Region	19	65.5%	North Region	3	10.3%
South Region	5	17.2%	Southeast Region	2	6.9%

	Speed	Impaired	Total
East Region	**10**	**9**	**19**
Blount	0	0	0
Calhoun	1	0	1
Chambers	0	0	0
Cherokee	0	0	0
Chilton	0	0	0
Clay	0	0	0
Cleburne	0	0	0
Coosa	0	0	0
Elmore	1	0	1
Etowah	1	0	1
Jefferson	4	6	10
Lee	1	0	1
Macon	0	0	0
Randolph	0	0	0
St Clair	1	1	2
Shelby	1	1	2
Tallapoosa	0	0	0
Talladega	0	1	1

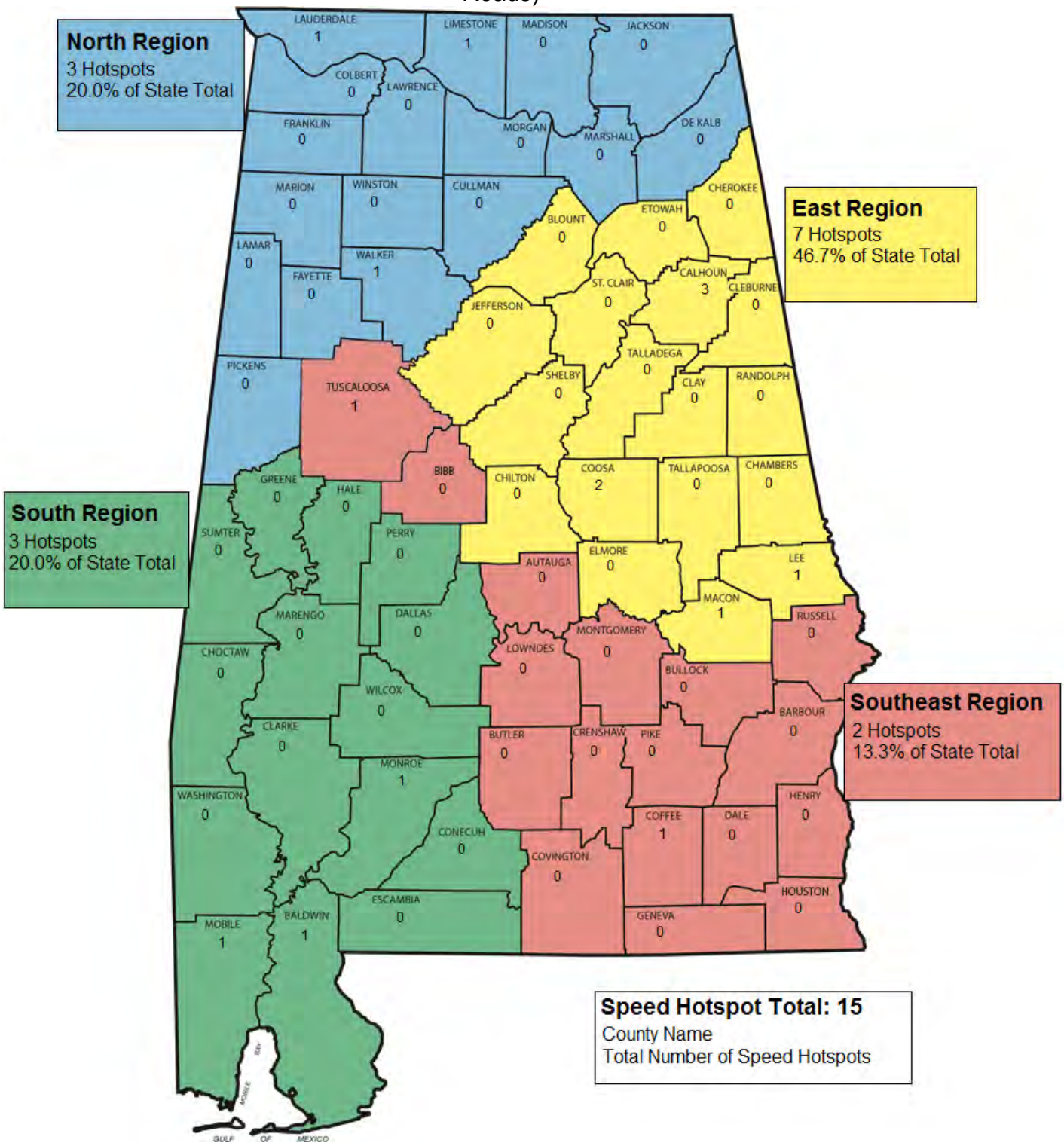
	Speed	Impaired	Total
North Region	**2**	**1**	**3**
Colbert	0	0	0
Cullman	1	0	1
Dekalb	1	0	1
Fayette	0	0	0
Franklin	0	0	0
Jackson	0	0	0
Lamar	0	0	0
Lauderdale	0	0	0
Lawrence	0	0	0
Limestone	0	0	0
Madison	0	1	1
Marion	0	0	0
Marshall	0	0	0
Morgan	0	0	0
Pickens	0	0	0
Walker	0	0	0
Winston	0	0	0

	Speed	Impaired	Total
South Region	**2**	**3**	**5**
Baldwin	0	1	1
Choctaw	0	0	0
Clarke	0	0	0
Conecuh	0	0	0
Dallas	0	0	0
Escambia	0	0	0
Greene	0	0	0
Hale	0	0	0
Marengo	0	0	0
Mobile	2	2	4
Monroe	0	0	0
Perry	0	0	0
Sumter	0	0	0
Washington	0	0	0
Wilcox	0	0	0

	Speed	Impaired	Total
Southeast Region	**1**	**1**	**2**
Autauga	1	0	1
Barbour	0	0	0
Bibb	0	0	0
Bullock	0	0	0
Butler	0	0	0
Coffee	0	0	0
Covington	0	0	0
Crenshaw	0	0	0
Dale	0	0	0
Geneva	0	0	0
Henry	0	0	0
Houston	0	0	0
Lowndes	0	0	0
Montgomery	0	1	1
Pike	0	0	0
Russell	0	0	0
Tuscaloosa	0	0	0

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

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



Speeding Related Hotspots for State/Federal and Non-Mileposted Roads (15 Total Hotspots)

Region Breakdown

East Region	19	65.5%	North Region	3	10.3%
South Region	5	17.2%	Southeast Region	2	6.9%

	State/Fed	Non-MP	Total
East Region	**5**	**2**	**7**
Blount	0	0	0
Calhoun	1	2	3
Chambers	0	0	0
Cherokee	0	0	0
Chilton	0	0	0
Clay	0	0	0
Cleburne	0	0	0
Coosa	2	0	2
Elmore	0	0	0
Etowah	0	0	0
Jefferson	0	0	0
Lee	1	0	1
Macon	1	0	1
Randolph	0	0	0
St Clair	0	0	0
Shelby	0	0	0
Tallapoosa	0	0	0
Talladega	0	0	0

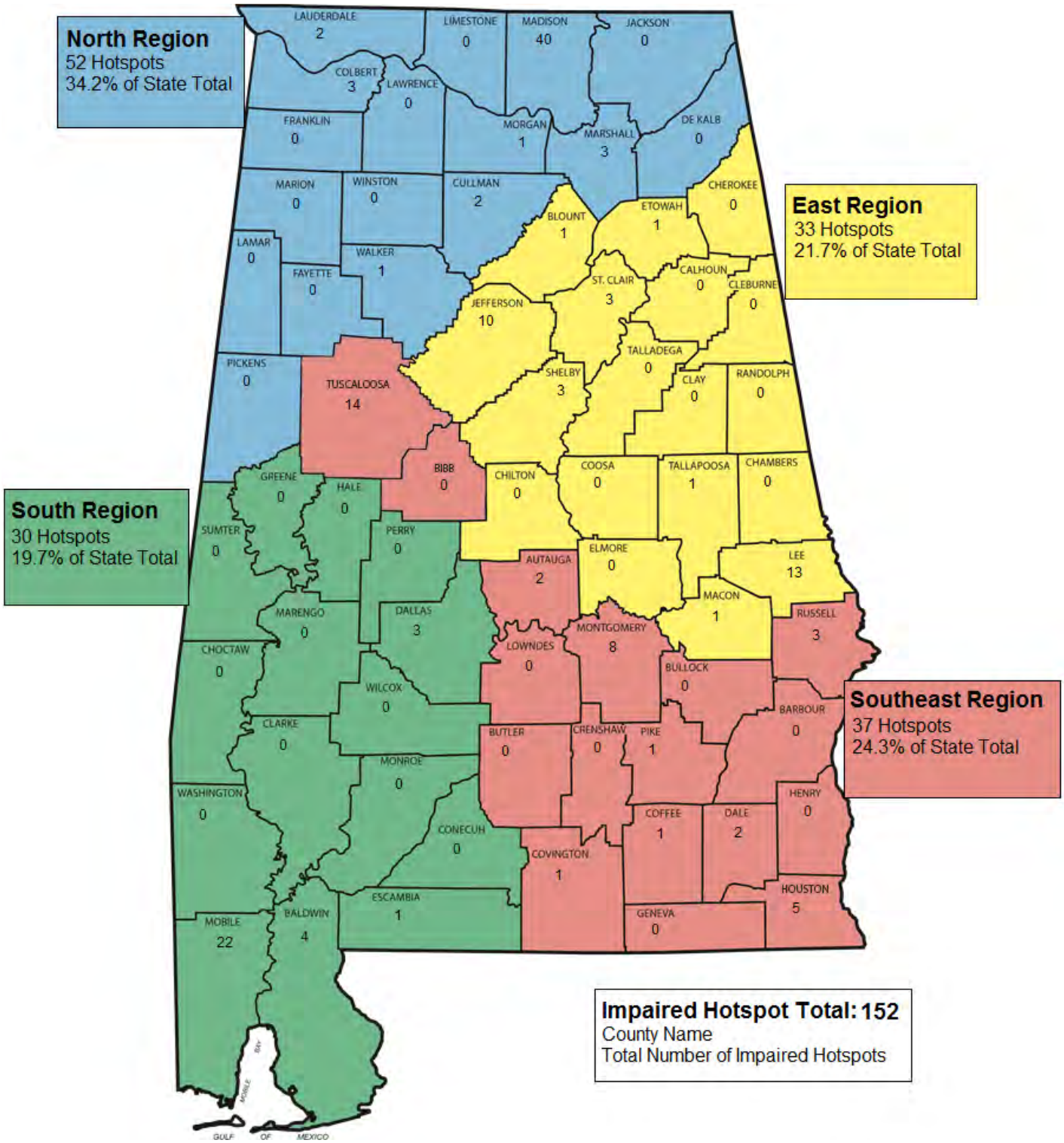
	State/Fed	Non-MP	Total
North Region	**1**	**2**	**3**
Colbert	0	0	0
Cullman	0	0	0
Dekalb	0	0	0
Fayette	0	0	0
Franklin	0	0	0
Jackson	0	0	0
Lamar	0	0	0
Lauderdale	0	1	1
Lawrence	0	0	0
Limestone	1	0	1
Madison	0	0	0
Marion	0	0	0
Marshall	0	0	0
Morgan	0	0	0
Pickens	0	0	0
Walker	0	1	1
Winston	0	0	0

	State/Fed	Non-MP	Total
South Region	**1**	**2**	**3**
Baldwin	1	0	1
Choctaw	0	0	0
Clarke	0	0	0
Conecuh	0	0	0
Dallas	0	0	0
Escambia	0	0	0
Greene	0	0	0
Hale	0	0	0
Marengo	0	0	0
Mobile	0	1	1
Monroe	0	1	1
Perry	0	0	0
Sumter	0	0	0
Washington	0	0	0
Wilcox	0	0	0

	State/Fed	Non-MP	Total
Southeast Region	**2**	**0**	**2**
Autauga	0	0	0
Barbour	0	0	0
Bibb	0	0	0
Bullock	0	0	0
Butler	0	0	0
Coffee	1	0	1
Covington	0	0	0
Crenshaw	0	0	0
Dale	0	0	0
Geneva	0	0	0
Henry	0	0	0
Houston	0	0	0
Lowndes	0	0	0
Montgomery	0	0	0
Pike	0	0	0
Russell	0	0	0
Tuscaloosa	1	0	1

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 (152 Total Hotspots)

Region Breakdown

East Region	33	21.7%		North Region	52	34.2%	
South Region	30	19.7%		Southeast Region	37	24.3%	

	State/ Fed	Non-MP	Inter-section	Total
East Region	**5**	**7**	**21**	**33**
Blount	1	0	0	1
Calhoun	0	0	0	0
Chambers	0	0	0	0
Cherokee	0	0	0	0
Chilton	0	0	0	0
Clay	0	0	0	0
Cleburne	0	0	0	0
Coosa	0	0	0	0
Elmore	0	0	0	0
Etowah	1	0	0	1
Jefferson	1	1	8	10
Lee	0	3	10	13
Macon	1	0	0	1
Randolph	0	0	0	0
St Clair	1	2	0	3
Shelby	0	1	2	3
Tallapoosa	0	0	1	1
Talladega	0	0	0	0

	State/ Fed	Non-MP	Inter-section	Total
South Region	**4**	**7**	**19**	**30**
Baldwin	1	1	2	4
Choctaw	0	0	0	0
Clarke	0	0	0	0
Conecuh	0	0	0	0
Dallas	1	0	2	3
Escambia	0	0	1	1
Greene	0	0	0	0
Hale	0	0	0	0
Marengo	0	0	0	0
Mobile	2	6	14	22
Monroe	0	0	0	0
Perry	0	0	0	0
Sumter	0	0	0	0
Washington	0	0	0	0
Wilcox	0	0	0	0

	State/ Fed	Non-MP	Inter-section	Total
North Region	**12**	**12**	**28**	**52**
Colbert	0	1	2	3
Cullman	0	2	0	2
Dekalb	0	0	0	0
Fayette	0	0	0	0
Franklin	0	0	0	0
Jackson	0	0	0	0
Lamar	0	0	0	0
Lauderdale	0	0	2	2
Lawrence	0	0	0	0
Limestone	0	0	0	0
Madison	9	7	24	40
Marion	0	0	0	0
Marshall	2	1	0	3
Morgan	1	0	0	1
Pickens	0	0	0	0
Walker	0	1	0	1
Winston	0	0	0	0

	State/ Fed	Non-MP	Inter-section	Total
Southeast Region	**16**	**8**	**13**	**37**
Autauga	1	0	1	2
Barbour	0	0	0	0
Bibb	0	0	0	0
Bullock	0	0	0	0
Butler	0	0	0	0
Coffee	0	1	0	1
Covington	0	0	1	1
Crenshaw	0	0	0	0
Dale	1	1	0	2
Geneva	0	0	0	0
Henry	0	0	0	0
Houston	4	1	0	5
Lowndes	0	0	0	0
Montgomery	1	1	6	8
Pike	0	1	0	1
Russell	3	0	0	3
Tuscaloosa	6	3	5	14

Impaired Driving Related Hotspots for State/Federal and Non-Mileposted Roads (164 Total Hotspots)

Region Breakdown

East Region	45	27.4%	North Region	52	31.7%
South Region	30	18.3%	Southeast Region	37	22.6%

	State/ Fed	Non-MP	Inter-section	Total
East Region	**5**	**12**	**28**	**45**
Blount	1	1	2	4
Calhoun	0	2	0	2
Chambers	0	0	0	0
Cherokee	0	0	0	0
Chilton	0	0	0	0
Clay	0	0	0	0
Cleburne	0	0	0	0
Coosa	0	0	2	2
Elmore	0	0	0	0
Etowah	1	0	0	1
Jefferson	1	7	24	32
Lee	0	0	0	0
Macon	1	1	0	2
Randolph	0	0	0	0
St Clair	1	0	0	1
Shelby	0	1	0	1
Tallapoosa	0	0	0	0
Talladega	0	0	0	0

	State/ Fed	Non-MP	Inter-section	Total
South Region	**4**	**7**	**19**	**30**
Baldwin	1	1	2	4
Choctaw	0	0	0	0
Clarke	0	0	0	0
Conecuh	0	0	0	0
Dallas	1	0	2	3
Escambia	0	0	1	1
Greene	0	0	0	0
Hale	0	0	0	0
Marengo	0	0	0	0
Mobile	2	6	14	22
Monroe	0	0	0	0
Perry	0	0	0	0
Sumter	0	0	0	0
Washington	0	0	0	0
Wilcox	0	0	0	0

	State/ Fed	Non-MP	Inter-section	Total
North Region	**12**	**12**	**28**	**52**
Colbert	0	1	2	3
Cullman	0	2	0	2
Dekalb	0	0	0	0
Fayette	0	0	0	0
Franklin	0	0	0	0
Jackson	0	0	0	0
Lamar	0	0	0	0
Lauderdale	0	0	2	2
Lawrence	0	0	0	0
Limestone	0	0	0	0
Madison	9	7	24	40
Marion	0	0	0	0
Marshall	2	1	0	3
Morgan	1	0	0	1
Pickens	0	0	0	0
Walker	0	1	0	1
Winston	0	0	0	0

	State/ Fed	Non-MP	Inter-section	Total
Southeast Region	**16**	**8**	**13**	**37**
Autauga	1	0	1	2
Barbour	0	0	0	0
Bibb	0	0	0	0
Bullock	0	0	0	0
Butler	0	0	0	0
Coffee	0	1	0	1
Covington	0	0	1	1
Crenshaw	0	0	0	0
Dale	1	1	0	2
Geneva	0	0	0	0
Henry	0	0	0	0
Houston	4	1	0	5
Lowndes	0	0	0	0
Montgomery	1	1	6	8
Pike	0	1	0	1
Russell	3	0	0	3
Tuscaloosa	6	3	5	14

5.0 PLANNED ACTIVITIES

Several strategies for the coming year were laid out in Sections 3.7, 3.8 and 3.9, each of which dealt with the operation of Alabama Office of Highway Safety (AOHS) and the focus on the hotspot crashes that were identified by the problem identification and Evidence-Based Enforcement approaches. In this section these strategies will be grouped according to their funding sources. Each strategy will be briefly discussed and the rationale for these projects from *NHTSA Countermeasures that Work* will be noted. The amount of funding allotted to each strategy during the coming year will also be given.

5.1 402 Planned Activities:

5.1.1 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, an Administrative Assistant, the LETS Accounting Unit Manager and one Accounting Staff Member devoted to highway traffic safety. All P & A costs will be split 50% Federal and 50% State.

Indirect Cost: Per a Negotiated Indirect Cost Rate Agreement with the U.S. Department of Labor, the ADECA/LETS Division has been approved to use a Provisional Indirect Cost Rate of 6.95% for the period of 10/1/2016 through 9/30/2017 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 6.95% will 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 2017 Allotment = $300,000.00 -Funding Source – Section 402 (PA)
State Match = $300,000.00

5.1.2 Support Community Traffic Safety Program/Law Enforcement Liaison (CTSP/LEL) Projects:

There are four 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 four regions, a CTSP/LEL office is located in each region. Each of these regions is responsible for the problem areas within their counties and will supply reports and information back to the central office regarding the efforts taking place within their geographic area.

The major focus of the CTSP/LEL efforts is involved with assuring the effective execution of focused evidence-based 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 Supervisor as well as an additional Program Manager who work 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. The Program Supervisor or Manager review, monitor and recommend program expenditures, assist in the development of program plans, budgets: review and recommend grants, contracts and related budgets, assist 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
17.SP.CP.001	Enterprise Community College	$164,797.31
17.SP.CP.002	Mobile County Commission	$175,811.00
17.SP.CP.003	Franklin County Commission	$182,837.72
17.SP.CP.004	City of Opelika	$180,091.49
17.SP.CP.005	Set Aside - Lynne	$75,000.00
17.SP.CP.006	Set Aside -Sam	$60,000.00

Total FY 2017 Allotment = $ 838,571.52 - Funding Source – Section 402 (CP)

5.1.3 Evidence-Based Traffic Safety Enforcement Program projects:

To implement the State's Evidence-Based Enforcement Plan, there will be four local Special Traffic Enforcement Program (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 four CTSP/LEL regions and the statewide STEP project will be conducted in conjunction with the Alabama Law Enforcement Agency (ALEA). 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 evidence-based, 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	Source Share
17.SP.PT.001	Enterprise State Community College	$163,280.00
17.SP.PT.002	Mobile County Commission	$155,120.00
17.SP.PT.003	Franklin County Commission	$240,800.00
17.SP.PT.004	City of Opelika	$240,800.00
17.SP.PT.009	Alabama Law Enforcement Agency	$800,000.00

Total FY 2017 Allotment = $1,600,000.00 -Funding Source – Section 402 (PT)

5.1.4 Driver's License Suspension Appeals (DLSA) Program:

Plans are to fund the DLSA program through the Alabama Law Enforcement Agency (ALEA). 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 (ALR) 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
17.SP.AL.001	Alabama Law Enforcement Agency	$35,000.00

Total FY 2017 Allotment = $35,000.00 -Funding Source – Section 402 (AL)

5.1.5 Nationwide "Drive Sober or Get Pulled Over" Campaign (High Visibility Enforcement):

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 Alabama Law Enforcement Agency. This campaign will begin in August and conclude on Labor Day.

NHTSA Countermeasures that Work (Page 1-24) 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 evidence-based 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
17.SP.PT.005	Enterprise State Community College	$61,960.00
17.SP.PT.006	Mobile County Commission	$43,480.00
17.SP.PT.007	Franklin County Commission	$43,480.00
17.SP.PT.008	City of Opelika	$51,080.00

Total FY 2017 Allotment = $200,000.00 - Funding Source – Section 402 (PT)

5.2 405b Planned Activities:

5.2.1 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 Alabama Law Enforcement Agency

The value of Click it or Ticket (CIOT) projects is well documented (see *NHTSA Countermeasures that Work* Page 2-13) 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 88.5% in 2015.

Subgrant	Applicant Subgrantee	Source Share
17.HB.M1.001	Enterprise State Community College	$48,420.00
17.HB.M1.002	Mobile County Commission	$44,380.00
17.HB.M1.003	Franklin County Commission	$50,720.00
17.HB.M1.004	City of Opelika	$56,480.00

Total FY 2017 Allotment = $200,000.00 - Funding Source – Section 405b (M1HVE)

5.2.2 Statewide "Click It or Ticket" Surveys, Analysis, Certification and Reports

Pre- and post- program surveys will be conducted by the University of Alabama Center for Advanced Public Safety (UA-CAPS) as part of the "Click It or Ticket" campaign and extending to all of the various restraint projects, including the determination of child restraint usage rates. The total restraint-use program will consist of waves of surveys, enforcement and media blitzes, carefully scheduled to maximize public understanding of restraint use. UA-CAPS' role will include the following:

- Contract the conduction of annual pre and post observational surveys of vehicle seat belt usage and child restraint usage throughout Alabama according to the NHTSA-approved Sampling, Data Collection and Estimation Plan;
- Perform an evaluation of the program results using statistical comparative analyses of baseline observations before the STEP and post observations at a fixed time it is completed;

- Calculate the official seat belt usage rate for the State;
- Collect narrative report results from all the various involved parties for their activities that contributed to the projects;
- Perform analysis of data generated through telephone polls, media campaign data and enforcement data;
- Compile the project report for "Click It or Ticket" 2017;
- Contract for a child restraint observational survey;
- Analyze survey data and compute the child restraint usage rate for the State;
- Produce report on results of child restraint observational surveys;
- Receive and statistically analyze data obtained;
- Collect reports on the other components of the project;
- Obtain the signed certification page and;
- 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, and their specification are generally a mandatory part of the restraint-use effort.

Subgrant	Applicant Subgrantee	Source Share
17.H7.M2.002	Univ of AL/Center for Advanced Public Safety	$104,738.89
17.Hb.M1.007	Univ of AL/Center for Advanced Public Safety	$89,844.01

Total FY 2017 Allotment = $194,582.90
FY 2017 Allotment = $104,738.89 - Funding Source – Section 405b (M2OP)
FY 2017 Allotment = $89,844.01 - Funding Source – Section 405 (M1OP)

5.2.3 "Click It or Ticket" Campaign (Paid Media - High Visibility Enforcement)

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 conclude 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.

Subgrant	Applicant Subgrantee	Source Share
17.HB.M1.006	Auburn University	$325,000.00

Total FY 2017 Allotment = $325,000.00 - Funding Source – 405b (M1HVE)

5.2.4 Child Passenger Safety Training and Coordination

Alabama will have a state Child Passenger Safety Coordinator. We will provide training for first time technicians and re-certification for trained technicians. Fitting stations will be available to the public. Technicians will ensure the child passenger restraints are installed correctly and teach the caregivers how to do the installation themselves.

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.

Subgrant	Applicant Subgrantee	Source Share
17.H7.M2.001	Franklin County Commission	$100,000.00
17.HB.M1.005	Franklin County Commission	$55,000.00

Total FY 2017Allotment = $155,000.00
FY 2017 Allotment = $100,000.00 - Funding Source – Section 405b (M2PE)
FY 2017 Allotment = $55,000.00 - Funding Source – Section 405b (M1PE)

5.3 <u>405c</u> Planned Activities:

5.3.1 Traffic Safety Records Improvement Program:

Projects in the Traffic Safety Information Systems (TSIS) areas are conducted with the concurrences of the Traffic Records Coordinating Committee (TRCC). AOHS will continue funding for the development of several projects including but not limited to:

- Ambulance run and EMS records data entry system for EMS called RESCUE,
- Continuing work on the EMS analysis portal that turns RESCUE data into information for decision-making,
- The public-facing SAFETY portal for crash data;
- Several other analysis portals;
- An update to MapClick to respond to eGPS developments within ALDOT;
- Upgrades to MOVE to respond to technology advances;
- Organizing and developing CARE cloud datasets; and,
- Developing a DUI/citation tracking system.

These systems improve data quality, timeliness, uniformity and completeness.

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

Subgrant	Applicant Subgrantee	Source Share
17.HC.M3.002	Univ of AL/Center for Advanced Public Safety	$700,621.08

Total FY 2017 Allotment = $700,621.08 -Funding Source – Section 405c (M3DA)

5.3.2 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*

Subgrant	Applicant Subgrantee	Source Share
17.HC.M3.001	AL Dept of Public Health	$60,000.00

Total FY 2017 Allotment = $60,000.00 -Funding Source – Section 405c (M3DA)

5.4 405d Planned Activities:

5.4.1 Impaired Driving Grant Funds (High Visibility Enforcement):

There will be four 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 four CTSP/LEL regions and the statewide project will be conducted in conjunction with the Alabama Law Enforcement Agency (ALEA). By conducting these HVE projects, additional evidence-based efforts can be focused on the reduction of impaired driving related crashes. The law enforcement activity will be sustained for twelve (12) months. However, increased enforcement efforts will take place during holiday periods known for increased travel and a higher potential for impaired motorists to be on the roadways and in conjunction with a paid media campaign. These periods include Christmas and New Year's, St. Patrick's Day, Cinco de Mayo and the Fourth of July. For the third year since 2015, this HVE campaign will be accompanied by a comprehensive, multiplatform media campaign throughout the state. The enforcement effort is evidence-based, 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 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
17.HD.M5.001	Enterprise State Community College	$146,090.00
17.HD.M5.002	Mobile County Commission	$136,850.00
17.HD.M5.003	Franklin County Commission	$219,450.00

17.HD.M5.004	City of Opelika	$197,610.00
17.HD.M5.005	Alabama Law Enforcement Agency	$400,000.00

Total FY 2017 Allotment = $1,100,000.00 -Funding Source- Section 405d (M5HVE)

5.4.2 Impaired Driving campaign (Paid Media - High Visibility Enforcement):

As a part of the nationwide impaired driving campaign to reduce impaired driving-related fatalities, Alabama will participate in High Visibility Impaired Driving Enforcement Paid Media Campaigns for the third year since 2015. The campaign messages will be placed and aired during holiday periods known for increased travel and a higher potential for impaired motorists to be on the roadways. These periods include Christmas and New Year's, St. Patrick's Day, Cinco de Mayo and the Fourth of July. Along with traditional print, radio and television advertisements, Auburn University will use additional means of reaching the motoring public. Through professional services contracts, Alabama will be also able to place campaign messages in movie theatres, as well as participate in an increased online presence via web ads and newer mediums such as iHeart Radio, Spotify and Pandora.

The *NHTSA Countermeasures that Work* review for this effort is discussed immediately above on page 89.

Subgrant	Applicant Subgrantee	Source Share
17.HD.M5.009	Auburn University	$325,000.00

Total FY 2017 Allotment = $325,000.00 - Funding Source – 405d (M5PEM)

5.4.3 Drug Recognition Expert Program (DRE):

The goal of the Drug Recognition Expert Program (DRE) is to train and certify law enforcement officers from various agencies around Alabama as Drug Recognition Experts. Each certified DRE will be able to diagnose an individual arrested for DUI to be either under the influence of some drug other than alcohol or suffering from a medical issue. If the DRE determines the defendant is under the influence of a drug, then the DRE will identify the category or categories of impairing drugs.

Additionally, continuing education is vital for certified DREs. This program is still being established in Alabama and those being certified are new to DRE, so staying on top of the core issues is imperative. It is necessary to send qualifying DREs to a DRE instructor's school in order to be certified as a DRE instructor to effectively train and educate law enforcement officers, prosecutors, and other traffic safety stakeholders on drug impaired driving issues.

The training staff of certified DRE instructors will evaluate the achievement and field certifications. The state's DRE Coordinator will conduct continuous evaluations of certified DREs based on their level of activity, number of evaluations and toxicological confirmation rates. The DRE Coordinator will also assure the DREs fulfill their two-year recertification requirement.

Subgrant	Applicant Subgrantee	Source Share
17.HD.M5.006	Alabama Law Enforcement Agency	$311,923.70

Total FY 2017 Allotment = $311,923.70 -Funding Source – Section 405d (M5CS)

5.4.4 Replacement of Evidential Breath Tests:

The AOHS will purchase replacement Evidential Breath Testers (EBTs) for testing sites throughout the state. Alabama's current Implied Consent program has been recognized as one of the top in the country. In order to continue this program, new instruments need to be purchased to replace what is currently in the field.

While EBTs are not specifically referenced in *Countermeasures that Work,* their efficiency and use in Alabama has been proven with the success of ADFS's Implied Consent Program. One of the benefits of the instruments is that they are admissible in court, which strengthens the prosecution of DWI cases

Subgrant	Applicant Subgrantee	Source Share
17.HD.M5.007	Alabama Department of Forensic Science	$325,000.00

Total FY 2017 Allotment = $325,000.00 -Funding Source – Section 405d (M5BAC)

5.4.5 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 impaired driving cases. Additionally the goals of this program will emphasize:

- Practical Impaired Driving Course: Nuts & Bolts
- Handling the DUI Experts
- Impaired Driving Legal Updates
- Search & Seizure
- Jury Selection

According to *NHTSA Countermeasures that Work* (Page 1-30), "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 guidelines for developing JOLs (NHTSA, 2013a)."

Subgrant	Applicant Subgrantee	Source Share
17.HD.M5.008	Office of Prosecution Services	$147,455.44

Total FY 2017 Allotment = $147,455.44 -Funding Source – Section 405d (M5CS)

5.4.6 Statewide High Visibility ID Enforcement Campaign (Paid Media - High Visibility Enforcement):

As a part of the nationwide impaired driving campaign to reduce impaired driving-related fatalities, Alabama will participate in "Drive Sober or Get Pulled Over" campaign starting in August and conclude on Labor Day. Along with traditional print, radio and television advertisements, Auburn University will use additional means of reaching the motoring public. Through professional services contracts, Alabama will be also able to place campaign messages in movie theaters, as well as participate in an increased online presence via web ads and newer mediums such as iHeart Radio, Spotify and Pandora.

The *NHTSA Countermeasures that Work* review for this effort is discussed on page 89.

Subgrant	Applicant Subgrantee	Source Share
17.HD.M5.010	Auburn University	$325,000.00

Total FY 2017 Allotment = $325,000.00 -Funding Source – Section 405d (M5PEM)

5.5 State Traffic Safety Trust Fund Planned Activities

5.5.1 Support the University of Alabama-Center for Advanced Public Safety (UA-CAPS)

Supported by ADECA/LETS, UA-CAPS provides crash and traffic safety data throughout the year to a wide range of traffic safety stakeholders throughout the state, and in some cases satisfying requests from federal agencies. Nearly three decades ago UA-CAPS personnel developed the CARE system that has been used to process crash, citation and several other databases of interest in Alabama since that time. The following provides more specific examples of UA-CAPS activities in the traffic safety area:

- Preparing reports and grant applications as required;
- Providing answers for data requests from across the state and from Federal agencies that arise throughout the year;
- Providing technical support, training, and maintenance on CARE and other UA-CAPS software products, such as:
    - eCite;
    - eCrash;
    - eForms;
    - MapClick;
    - MOVE and many others.
- Maintaining a grant accounting system for the CTSPs and their reporting agencies (called CORE), which has eliminated the paper forms that the CTSPs and law enforcement agencies were using to report STEP enforcement grant expenditures;
- Continuing to update and maintain the SafeHomeAlabama.gov web portal so that it can continue 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;
- Contract to conduct the Drive Sober public information and education (PI&E) sports event media campaign, including signage and public address announcements throughout the entirety of their season at applicable games or races;
- Assisting other PI&E efforts through CAPS and SafeHomeAlabama websites;
- Operating Facebook and Twitter accounts to promote AOHS and NHTSA campaigns and causes; and

- Supporting AOHS with respect to the Traffic Records Coordinating Committee, and other committees and reports as needed, which includes the updating of the TSIS Five Year Strategic Plan to take into account the results of the recent Traffic Records Assessment.

Traffic Safety Information Systems (TSIS) are specifically excluded from *NHTSA Countermeasures that Work.* However, TSIS is a priority area in the recently-signed FAST Act, since it is well known and commonly accepted that without crash, citation, EMS, drivers' license, registration, and many other types of traffic records data, it is 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 2017, and studies have been conducted and will continue to be updated continually and published on the http://www.safehomealabama.gov/SHAHome.aspx web site.

Subgrant	Applicant Subgrantee	Source Share
17.TF.TR.001	Univ of AL/Center for Advanced Public Safety	$860,024.19

Total FY 2017 Allotment = $860,024.19 -Funding Source – State Traffic Safety Trust Fund (TFTR)

5.5.2 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. It has the following sections:

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?

6.0 OCCUPANT PROTECTION PLAN FOR STATE OF ALABAMA
FY 2017 – SECTION 405b

6.1 Executive Summary

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-based 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. As part of this planning effort, a strategic Occupant Protection Plan has been developed for the state that considers all restraint programs to be conducted in Alabama over a five year planning horizon with special emphasis on those that are proposed to be funded under the 405b Occupant Protection Grants section for FY 2017. 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 2015 restraint survey indicated that their usage rate was 93.3% for front seat occupants, which is over the 90% required threshold, Alabama qualifies as a high seat belt use state. The State of Alabama 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 plan, Section 6.3. 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 traffic safety strategic point of view, Table 1 in Section 6.3 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 Number	Fatal %	Injuries	Injury %	PDO No.	PDO %	Total
1. Restraint Deficient*	367	3.42%	4,271	39.82%	6,088	56.76%	10,726
2. Impaired Driving	202	3.23%	2,405	38.49%	3,641	58.27%	6,248
3. Speeding	138	3.97%	1,634	46.95%	1,708	49.08%	3,480
4. Ped., Bicycle, School Bus	107	6.91%	913	58.94%	529	34.15%	1,549
5. License Status Deficiency	104	1.58%	2,091	31.87%	4,367	66.55%	6,562
6. Obstacle Removal	95	1.49%	2,173	34.05%	4,113	64.46%	6,381
7. Pedestrian	95	12.94%	616	83.92%	23	3.13%	734
8. Mature – Age > 64	92	0.66%	3,109	22.36%	10,704	76.98%	13,905
9. Youth – Age 16-20	90	0.39%	5,303	22.90%	17,768	76.72%	23,161
10. Motorcycle	69	4.60%	1,032	68.75%	400	26.65%	1,501

* 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.

Table 1, which is further detailed and explained in Section 6.2, is at the highest level of crash data analysis. Two terms are introduced in this section to facilitate the discussion:

- Restraint-Deficient* Crashes (RD) – any crash in which one or more of the occupants of any involved vehicle (including the driver(s)) were not properly restrained; and
- Child Restraint-Deficient Crashes (CRD) – 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 RD and CRD hotspots (detailed in Attachment A); and
- General information mining of the crash records to determine overrepresented characteristics of RD and CRD crashes in order to guide the selective enforcement and all other countermeasures applied (detailed in Attachment B).

The problem identification in Section 6.3 is itself a summary of these analyses. The full details and results of the two analyses are given in Attachments A and B, respectively.

Program Management and Legislation

Given in Section 6.4, the overall vision, mission, goals and strategies of the Occupant Protection Plan are given. This includes the occupant protection performance metrics containing charts that demonstrate the degree which the goals set in terms of these metrics have been met. This is followed by a section (6.4.6) that contains the strategies for FY 2017.

The legislation sections (6.4.7 and 6.4.8) 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 a 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/GovernmentAgencies/State-Agencies/ALLegislature.aspx

Evidence-Based Enforcement Programs (E-BEP)

Section 6.5 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 Evidence-Based Enforcement Programs (E-BEP) that will take place throughout the year;
- Click It Or Ticket (CIOT), which is part of the highly focused National effort; and
- Child Restraint Evidence-Based Enforcement Program that will supplement the Occupant Protection of Children Program.

Occupant Protection for Children Program

This part of the occupant restraint program, given in Section 6.6, will continue to 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 the child passenger restraints are installed correctly and that caregivers know how to install 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

A review of the use of data and analysis for overall restraint program improvement is given in Section 6.7. Data used for problem identification and evaluation can be classified into the following categories:

- Observational survey of occupant protection and child restraint use. Pre and post surveys for seat belt programs will be conducted using the 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 data driven and evidence-based decisions. In addition, several evaluation studies are described to determine program success and to improve the program in future years.

Specific countermeasures within each of these data 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, Eighth Edition, 2015*; 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."]

Cooperative Efforts

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 Alabama Law Enforcement Agency (ALEA),
- Local law enforcement,
- Full range of media,
- Alabama Department of Public Health (ADPH),
- Traffic Records Coordinating Committee (TRCC),
- State and local District Attorneys, and
- The University of Alabama Center for Advanced Public Safety (UA-CAPS).

All involved in occupant protection recognize the need for a totally cooperative effort if these various programs are to succeed. There is great mutual appreciation for all of the individuals and agencies that participate.

6.2 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 reducing traffic crashes, fatalities, and injuries on public roads. As demonstrated by the annually documented Highway Safety Plan (HSP), this program has been evidence-based 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 (6.3) below, occupant restraints surfaced as the most effective approach to crash injury severity reduction, and thus one of the most effective fatality reduction countermeasures.

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 (HSP) has been incorporated into the Alabama SHSP. The major goals of both the HSP and the SHSP are to bring about the most effective statewide allocation of traffic safety resources, including funding, equipment and 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 Alabama Law Enforcement Agency (ALEA) officers were 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 evidence-based enforcement and other occupant protection projects.
- Alabama Department of Public Health provides data and subject matter knowledge for Emergency Medical Services Information Systems (EMSIS) and trauma data integration and use, and they have been instrumental in the past in performing restraint-use surveys.
- Traffic Records Coordinating Committee (TRCC), which is 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, who are 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 (UA-CAPS), which provides the information foundation for evidence-based decisions, including the HSP document; data sources include crash, citation, EMS runs and other databases to enable the AOHS and the CTSP/LEL Coordinators to be assured that their traffic safety resources are being allocated most effectively.

The HSP reflects that seat belt and child safety seat usage can only be increased by a combination of legislation, usage 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 is 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 major planned programs. A final section is devoted to occupant protection data and program evaluation.

6.3 Problem Identification

6.3.1 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 2015 Alabama Data

Crash Type (Causal Driver)	Fatal Number	Fatal %	Injuries	Injury %	PDO No.	PDO %	Total
1. Restraint Deficient*	367	3.42%	4,271	39.82%	6,088	56.76%	10,726
2. Impaired Driving	202	3.23%	2,405	38.49%	3,641	58.27%	6,248
3. Speeding	138	3.97%	1,634	46.95%	1,708	49.08%	3,480
4. Ped., Bicycle, School Bus	107	6.91%	913	58.94%	529	34.15%	1,549
5. License Status Deficiency	104	1.58%	2,091	31.87%	4,367	66.55%	6,562
6. Obstacle Removal	95	1.49%	2,173	34.05%	4,113	64.46%	6,381
7. Pedestrian	95	12.94%	616	83.92%	23	3.13%	734
8. Mature – Age > 64	92	0.66%	3,109	22.36%	10,704	76.98%	13,905
9. Youth – Age 16-20	90	0.39%	5,303	22.90%	17,768	76.72%	23,161
10. Motorcycle	69	4.60%	1,032	68.75%	400	26.65%	1,501
11. Non-pickup Truck Involved	37	0.76%	890	18.23%	3,955	81.01%	4,882
12. Fail to Conform to S/Y Sign	33	0.48%	1,922	27.74%	4,974	71.79%	6,929
13. Construction Zone	31	1.28%	493	20.42%	1,890	78.29%	2,414
14. Vehicle Defects – All	24	0.63%	850	22.40%	2,921	76.97%	3,795
15. Utility Pole	18	0.73%	914	36.96%	1,541	62.31%	2,473
16. Vision Obscured – Env.	15	0.97%	426	27.63%	1101	71.40%	1,542
17. Fail to Conform to Signal	12	0.28%	1,322	31.32%	2,887	68.40%	4,221
18. Bicycle	9	3.80%	178	75.11%	50	21.10%	237
19. School Bus	5	0.86%	119	20.52%	456	78.62%	580
20. Child Restraint Deficient*	4	0.18%	269	12.07%	1,956	87.75%	2,229
21. Railroad Trains	4	6.45%	13	20.97%	45	72.58%	62
22. Roadway Defects – All	0	0.00%	24	14.37%	143	85.63%	167

* 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, 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 evidence-based 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 develop plans, including the time schedule and work assignments, for their respective regions that focuses on the hotspot locations. The goals set on a regional basis are in line with the goals and strategies laid out in this plan (see Section 6.4.2).

6.3.2 Problem Identification Results

6.3.2.1 Evidence-Based Enforcement Program (E-BEP) Hotspot Analysis

For the FY 2017 analysis, data from three prior years (CY 2013-2015) 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 2015). The following table gives the numbers of hotspots found according to the various location types and criteria.

Hotspot Target	Location Type	Number of Hotspots	Criteria
General	Mileposted	97	>=20 RD Crashes in 10 Miles
General	Intersection	86	>=4 RD Crashes at Intersection
General	Segment	66	>=4 RD Crashes on Segment
Child Restraint	Mileposted	83	>=4 CRD Crashes in 10 Miles
Child Restraint	Intersection	93	>=2 CRD Crashes at Intersection
Child Restraint	Segment	30	>=2 CRD Crashes on Segment
TOTAL		**455**	

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.

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.

Table 2. Mileposted Hotspots by County within Region

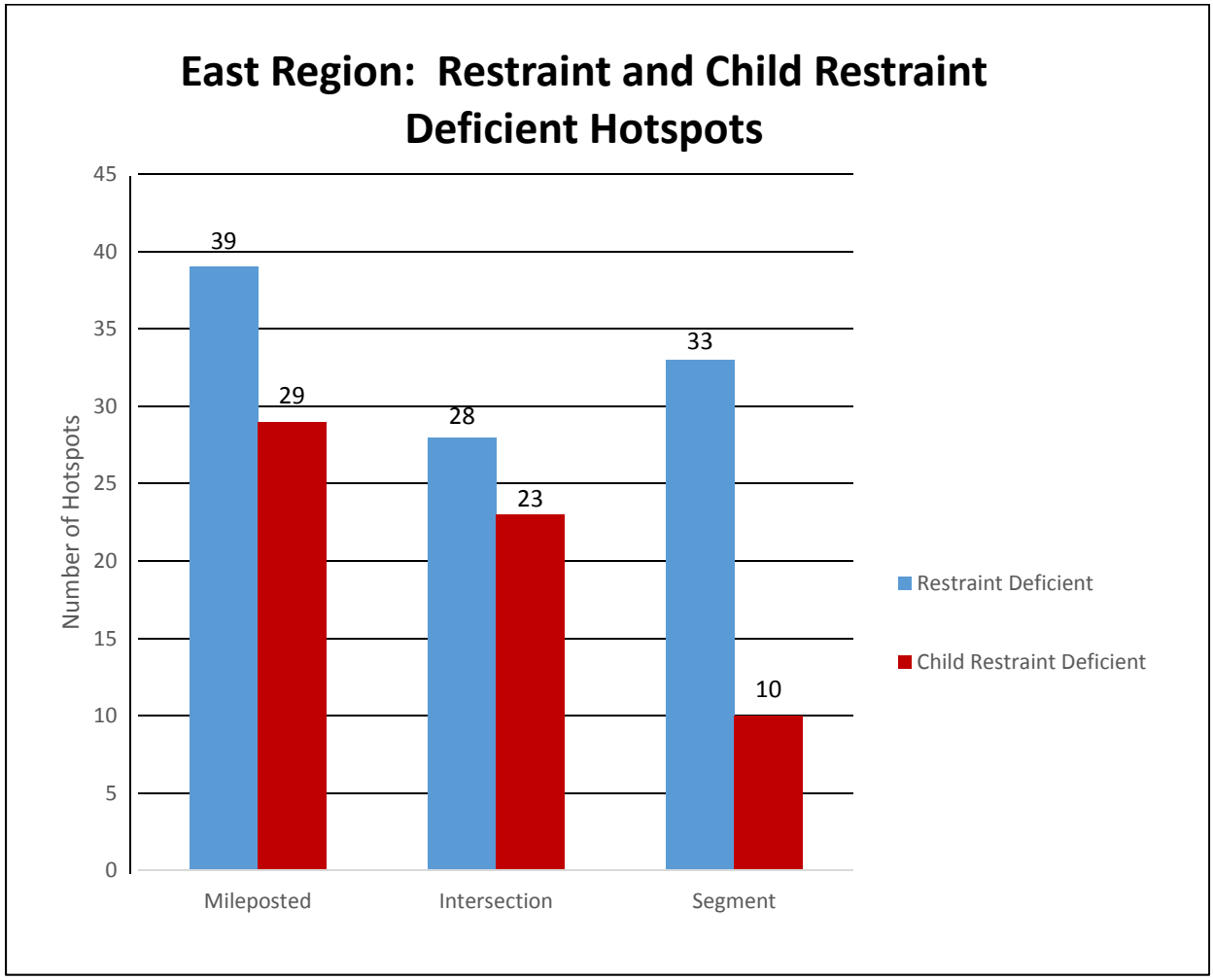
Region	County	Hotspots	Fatal Crashes	Injury Crashes	Total Crashes
	TOTAL	*455*	*1,028*	*10,234*	*19,672*
East		**162**	**296**	**3347**	**6571**
	Blount	1	9	162	288
	Calhoun	10	14	352	605
	Chambers	3	15	86	161
	Cherokee	0	16	71	134
	Chilton	8	20	143	269
	Clay	0	2	34	55
	Cleburne	1	7	50	89
	Coosa	0	5	34	77
	Elmore	4	20	157	291
	Etowah	10	21	283	518
	Jefferson	71	63	846	1947
	Lee	17	13	237	480
	Macon	3	13	75	143
	Randolph	0	13	68	116
	Shelby	18	16	232	461
	St Clair	10	14	202	329
	Talladega	5	26	222	434
	Tallapoosa	1	9	93	174
North		**92**	**246**	**2856**	**5376**
	Colbert	5	5	128	255
	Cullman	4	24	238	500
	Dekalb	2	19	183	324
	Fayette	0	4	41	81
	Franklin	1	10	93	175
	Jackson	7	16	188	344
	Lamar	0	5	44	70
	Lauderdale	6	15	195	371
	Lawrence	0	10	71	125

	Limestone	8	16	193	347
	Madison	36	25	538	1019
	Marion	0	12	97	159
	Marshall	13	21	241	494
	Morgan	8	20	233	465
	Pickens	0	10	40	77
	Walker	2	29	275	472
	Winston	0	5	58	98
South		**92**	**258**	**1963**	**3864**
	Baldwin	25	35	337	646
	Choctaw	0	7	45	92
	Clarke	0	12	104	162
	Conecuh	0	10	73	157
	Dallas	3	16	99	198
	Escambia	2	19	138	263
	Greene	0	9	37	70
	Hale	0	8	68	110
	Marengo	0	11	59	108
	Mobile	61	90	761	1640
	Monroe	0	7	72	130
	Perry	0	3	21	36
	Sumter	1	10	41	75
	Washington	0	7	55	89
	Wilcox	0	14	53	88
Southeast		**109**	**228**	**2068**	**3861**
	Autauga	5	14	102	190
	Barbour	1	8	74	122
	Bibb	0	10	36	85
	Bullock	0	12	26	49
	Butler	3	9	67	138
	Coffee	2	10	102	215
	Covington	0	10	122	236
	Crenshaw	0	4	54	94
	Dale	1	11	83	149
	Geneva	0	3	83	138
	Henry	0	1	36	52
	Houston	15	17	228	387
	Lowndes	0	8	43	75
	Montgomery	26	41	360	642
	Pike	6	14	91	179
	Russell	8	14	92	181
	Tuscaloosa	42	42	469	929

Table 3. Summary of Hotspots by Crash and Region

	Hotspots	Regional	Fatal Crashes	Regional	Injury Crashes	Regional	Total Crashes	Regional
East	162	35.60%	296	28.79%	3347	32.70%	6571	33.40%
North	92	20.22%	246	23.93%	2856	27.91%	5376	27.33%
South	92	20.22%	258	25.10%	1963	19.18%	3864	19.64%
Southeast	109	23.96%	228	22.18%	2068	20.21%	3861	19.63%
TOTAL	455		1,028		10,234		19,672	

Analyses similar to mileposted routes 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 East 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 East Region (an example of one of four 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
  - All restraint deficiencies
    - Mileposted
    - Intersections
    - Non-mileposted segments
  - Child restraint deficiencies
    - Mileposted
    - Intersections
    - Non-mileposted segments

6.3.2.2 Other Problem Identification Analysis Results

A detailed problem identification to determine the "who, what, 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 evidence-based enforcement and public information aspects of the various projects. The following summarizes these results:

- Geographical Factors
  - Counties with the greatest overrepresentation 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.
  - The most overrepresented (worse) areas are the rural county areas in Walker, Mobile, Cullman, and Escambia.
  - The most underrepresented (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 overrepresented.
  - 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.
  - 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 cross-tabulations were performed for specific target groups (see Attachment B).

- Crash Causal Factors
    - 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.
    - 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.
    - 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).
    - 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 severe crashes may be prevented. Three analyses were performed and compared for three target groups: rural crashes, crashes caused by drivers 16-20 years old, and crashes caused by drivers 21-25 years old. 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, thus further compounding the problem at these times. The 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.

- Ejection and Back Seat Analysis
  - The non-restrained person is over 30 times more likely to be ejected than those who are properly restrained.
  - If all back-seat occupants were properly restrained it would result in a saving of 77 lives per year.

6.3.2.4 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.
  - Concentrate especially in the rural areas where there might be a relatively large traffic flow due to the proximity of an urban area.
  - If county roads were not specified as high restraint deficient areas, include some county roads as part of the normal enforcement routing cycle.
  - When county roads are specified, give them a higher priority in enforcement routing.
  - Give special attention to older vehicles.
  - Restraint deficiency enforcement for the most critical times are late Friday night, early Saturday morning (until 6 AM), late Saturday night (after 6 PM), and early Sunday morning (until 4 AM).
  - 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 nighttime hours.

- Age Group 16-20
  - Give special attention to male drivers.
  - Give special attention to drivers that may be engaged in marginal risk-taking behavior.
  - Concentrate on school-proximal areas in the 7 AM to 8 AM time frame, and in the afternoon from 2 PM to 6 PM.
  - 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
    - Give special attention to male drivers.
    - Concentrate on areas where there is college or university "night-life."
    - Restraint deficiency enforcement for the most critical times are late Friday night, early Saturday morning (until 6 AM), late Saturday night (after 6 PM), and early Sunday morning (until 4 AM).
    - Concentrate on the afternoon protracted rush hour (3 PM to 7 PM) as opposed to the morning rush hours.

6.4 Program Management

The Alabama Office of Highway Safety (AOHS), 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, 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:
    - Training and technical assistance to other State and local agencies as well as any private advocacy groups that are involved with occupant protection;
    - 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.

6.4.1 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 the following ideals 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 evidence-based 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 have been 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.

6.4.2 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 in most cases if the cause of fatalities is restraint deficiency, the overall strategic program goal for all programs in the state will be the stated goal, 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 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 25th year it amounts to 4% of the previous year.

Unlike the long range goal, short range goals are established each year. These goals, presented in Sections 6.4.3-6.4.5 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 considering 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, 2014 FARS Data must be used to develop the plan for fiscal year 2017.

6.4.3 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 UA-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 UA-CAPS, as follows:

Performance Measures	2001	2002	2003	2004	2005	2006	2007
Seat Belt Usage Rate	79.40%	78.80%	77.40%	80.00%	81.90%	82.90%	82.30%
Child Safety Seat Usage Rate	77.00%	89.40%	87.00%	82.90%	91.60%	88.00%	92.30%

Performance Measures	2008	2009	2010	2011	2012	2013	2014	2015
Seat Belt Usage Rate	86.10%	90.00%	91.43%	88.00%	89.50%	97.26%	95.70%	93.29%
Child Safety Seat Usage Rate	88.20%	94.91%	93.12%	95.83%	93.00%	97.70%	97.90%	96.40%

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).

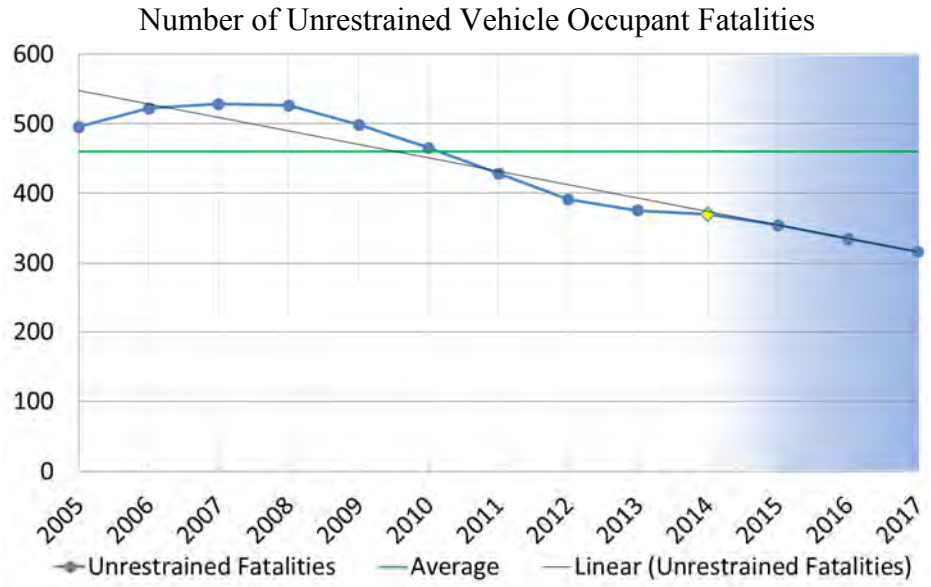
Only injury and fatal collisions will be included in the crash frequency goals. Goals will be presented in the following categories (reference to the FY 2017 HSP):

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

These are given in the following sections.

6.4.4 HSP Metric C-4: Number Unrestrained Passenger Vehicle Occupant Fatalities All Seat Positions (FARS)

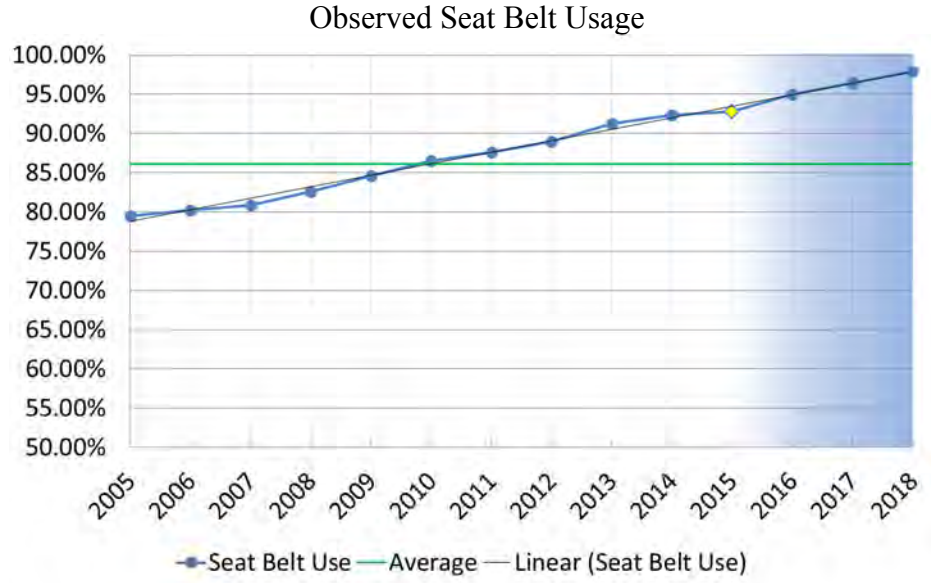
2010	2011	2012	2013	2014	Baseline	Goal
394	382	354	369	351	370	368



Reduce the unrestrained passenger vehicle occupant fatalities by .54 percent from the five year baseline average of 370 (2010-2014) to 368 by 2017*.

6.4.5 HSP Metric B-1: Observed Seat Belt Usage for Passenger Vehicles Front Seat Outboard Occupants (Survey)

2011	2012	2013	2014	2015	Baseline	Goal
88.0	89.5	97.3	95.7	93.3	92.8	93.0



Increase the observed seat belt usage by .22 from the five year baseline average (2010 -2014) of 92.8% to 93.0 % in 2017*.

*Five Year Average Goal

6.4.6 Strategies for FY 2017

The following outlines the strategies to be applied during FY 2017:

- 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 four 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 four local Hotspot Evidence-Based Enforcement Program (E-BEP) projects, one within each of the CTSP/LEL regions. Additionally, a statewide E-BEP project will be conducted in conjunction with the Alabama Law Enforcement Agency (ALEA). The efforts of all CTSP/LEL evidence-based 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 2017.
- Participate in national "Click It or Ticket" campaign on the statewide level.

6.4.7 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.

6.4.8 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 a 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 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/GovernmentAgencies/StateAgencies/ALLegislature.aspx

6.5 Evidence-Based Enforcement Program (E-BEP) for Restraints

6.5.1 General Program Overview

The State will engage in an evidence-based 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/LEL 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 2017 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 four 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 four regions, a CTSP/LEL office is located in each region. Each of these offices 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 procedure, preparing reports and providing answers for information requests related to the occupant safety program.
- Conduct Evidence-Based Enforcement Program (E-BEP) projects. There will be four local E-BEP projects during the coming year as well as one statewide E-BEP project focusing specifically on occupant restraint enforcement. Each of these E-BEP projects will be located at one of the problem locations that have been identified across the state. One E-BEP project will take place in each of the four CTSP/LEL regions, and the statewide E-BEP project will be conducted in conjunction with the Alabama Law Enforcement Agency (ALEA). General Law Enforcement activity including restraint enforcement will be sustained for twelve (12) months, and the special restraint-focused E-BEP project will not diminish the normal efforts being made in this regard.

6.5.2 Data-Driven Enforcement Programs (DDEP) Location Specifications

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 protection 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 Programs (DDEP) is developed using traffic crash data, as illustrated in the Problem Identification Section on page 28. 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, the Alabama Law Enforcement Agency (ALEA), and local law enforcement involves overtime pay for officers to conduct a statewide evidence-based 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.

The state is divided into four 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 Law Enforcement Agency (ALEA) 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 the tables in Attachment A. To the extent that resources will permit, the E-BEP program will be supported by media efforts similar to those described below for the Click It or Ticket Program.

6.5.3 Click It or Ticket (CIOT)

6.5.3.1 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, an Evidence-Based Enforcement Program (E-BEP) 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 for a three week period in addition to paid media, The enforcement program will consist of members from the Municipal Law Enforcement Agencies, County Sheriffs and State Highway Patrol (Alabama Law Enforcement Agency).
- An additional effort in conjunction with CIOT will be supported to conduct surveys, perform analyses, and verify certification. The University of Alabama Center for Advanced Public Safety (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 evidence-based 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.
- 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;
    - Performing an evaluation of the program results using scientific analyses of baseline observations before the Special Traffic Enforcement Program (STEP) and post observations after it is completed and calculate the official seat belt usage rate for the State;
    - Collecting results from all the various involved parties for their activities;
    - Performing analyses of data generated through telephone based polls, media campaign data and enforcement data;
    - Compiling the project report for "Click It or Ticket" 2017;
    - Contracting out the performance of the child restraint observational survey;
    - Analyzing survey data and computing child seat belt usage rate for State;
    - 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 24-May 7	Statewide Observational Survey (Baseline)*
3-8+	May 8-June 15	Earned Media for CIOT
4-5	May 15-29	Paid media for CIOT
5-6	May 22-June 4	Enforcement for CIOT
7-8	June 5-15	Statewide Observational and Telephone Surveys*

* Activities that involve data collection and analysis

The problem identification for the CIOT E-BEP program is documented in Section 6.3.2. This section will continue by presenting the media plan, followed by the plan for the CIOT evaluation.

6.5.3.2 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 2015 campaign revealed that 95% 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 conduct a zero tolerance enforcement of seat belt laws.

Further, electronic billboards, digital music streaming websites and other platforms 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 16,694 paid media and 4,151 bonus commercials for the Click It or Ticket campaign in 2015.

The following summarizes the anticipated paid media campaign that will be performed:

- 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). This media component will target the key at-risk group, 16-34 year olds, particularly males. 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. Radio and digital advertisements 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.

6.5.3.3 CIOT Evaluation

This project will be evaluated using methods and procedures approved by NHTSA. FY 2017 is the fourth 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 Auburn University Media Group will:
    - Implement the media portion of the campaign;
    - Contract with another group to produce ads if that is found to be most expedient;
    - Determine where and when the ads are run; this will include the avenues of TV, cable, radio and electronic billboards;
    - Produce educational brochures for the project;
    - Submit reports to ADECA-LETS; and
    - Submit reports to UA-CAPS for inclusion in the overall final report for the project.
- ADECA/LETS will:
    - Provide funding for the project;
    - Serve as the host agency for the effort, providing ongoing oversight coordination, and guidance as needed;
    - Update the web site;

    - Coordinate the enforcement campaign and provide summary reports to UA-CAPS for inclusion in final report; and
    - Assist UA-CAPS, if needed, in obtaining data from Surveyor observations, consultant phone polls, and consultant questionnaires.
- A highly qualified company will be contracted by UA-CAPS to perform the phone survey to evaluate the media effectiveness of the "Click It or Ticket" program. This part of the project will involve:
    - Design and prepare the telephone questionnaire instrument (with guidance from LETS and UA-CAPS);
    - Conduct a post survey only this year;
    - Encode and analyze the data, and
    - 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 UA-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.

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 Evidence-Based Enforcement Programs.

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.

6.5.4 Complementary Communication Program

In order to keep the components of the various programs together, communication efforts have been described within each program. PI&E 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 www.SafeHome.Alabama.gov website that is comprehensive of all of 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 2017 will be to increase communication and awareness on the issue of CPS in each of the four CTSP/LEL regions. The statewide

CPS website is heavily utilized by parents and technicians alike. The website (www.cpsalabama.org) 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.

6.6 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. These new technicians and seasoned technicians alike will man inspection stations which will be available to the public. Each inspection station will be staffed with at least one current nationally Certified Child Passenger Safety Technician during official posted hours. 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 12th year in FY 2016. The CPS coordinator and instructors are addressing the needs of the four CTSP/LEL regions. The plan for FY 2017 is to further reach out to underserved communities, create 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 FY 2006. In that year, a CPS coordinator was appointed, augmented with three additional instructors from the CTSP/LEL offices, and they were tasked with addressing CPS from a regional perspective. The CPS program will be continued through FY 2017 with an emphasis on teaching new technicians in communities throughout the 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.

6.6.1 Alabama Child Passenger Safety (CPS) Program

The Alabama CPS program for FY 2017 will be staffed by the state coordinator. The CPS coordinator handles all CTSP/LEL regional needs. The plan for FY 2017 is to train new and maintain current CPS technicians all around the state and place a special emphasis on small and high risk communities. Additionally, the plan is to maintain existing technicians no matter where they live in Alabama but especially technicians in these small/under-served communities. Gaining champions in these areas 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 access 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.

The statewide Child Passenger Safety (CPS) Program will conduct at least 15 Child Passenger Safety standardized certification training opportunities for up to 10 community individuals in each class.

These 15 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 CPS state-wide website www.cpsalabama.org 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 which was approved by the Safe Kids Worldwide Certification Director. The updated curriculum course ID is 6013 and the expiration date is April 1, 2017 and will be applied in FY 2017. Recertification requires that the technician acquire at least six Child Passenger Safety Continuing Education Units (CEUs). The curriculum developed by the Alabama CPS program provides all six CPS CEUs. Alabama has several options for technicians to acquire the six CEUs, but the primary one is the CPS update curriculum. The update curriculum class has been structured to offer all six 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 CPS 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 six CEUs to recertify and additionally the five specific car seat installations (witnessed and signed off by an instructor or by an instructor authorized proxy), and they must attend a two 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 2017, events are being planned to assist these technicians and enable them to attend a two hour community event and obtain signoff for all required car seat installations. 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 www.cpsalabama.org. All CEU opportunities encompass the goals and objective of the NHTSA Standardized Child Passenger Safety Training Program.

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 website (www.cpsalabama.org) will continue to be upgraded. It has been 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 techni-

cians 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 a means for technicians to report upcoming events or to submit a report on a completed event. Additionally, the website provides a way for technicians to report on car seat events and submit stats to the statewide coordinator.

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 46 child safety seat inspection sites. Some the child safety seat inspection sites that do not want to be listed on the NHTSA website but serve the parents and children of Alabama as well. 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 2017, 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 FY 2012, the CPS public information program reached 62% of the State's total population. The goal for FY 2017 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 (www.cpsalabama.org) 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.

6.6.2 Increase Number of Certified Child Passenger Technicians

Alabama has approximately 485 technicians. During the past year, 12 certification classes were taught and 7 recertification classes were taught. The recertification rate for Alabama for this year was 48%, which was comparable to the national average of 52%. Alabama's re-certification rate can be attributed to the re-certification classes, an additional reminder email from the CPS coordinator and to an increased awareness of Child Passenger Safety across the state. The increased awareness has resulted in better retention of technicians. Of those technicians who did not re-certify, job change has been the biggest factor.

The plan for FY 2017 includes maintaining the number of certification classes, and increasing the number of update classes to 15 or more, while maintaining the high recertification rate. These training classes will be taught by the statewide CPS coordinator and two additional instructors. The goal for the CTSP/LEL offices is to make these trainings as accessible to as many 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. There is also outreach to new-born assistance programs through local hospitals and other originations.

To keep the current CPS professionals up to date with their skills and help them maintain their certification, the program will schedule at least eight recertification classes in FY 2017, with the goal of increasing to 15 or more. These classes will highlight the changes in the CPS field since the technician/instructor originally took the course. 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. Once they complete the class, perform five specific car seat installations (witnessed and signed off by a local instructor or instructor assigned proxy), and attend a two 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.

To meet the CPS program's goal for FY 2017, it is anticipated that three-day classes will be held in:

- Birmingham, Alabama area;
- Florence, Alabama area;
- Mobile, Alabama area;
- the gulf coast area of Alabama;
- Grove Hill, Alabama;
- Gadsden, Alabama area;
- Dothan, Alabama area;
- Huntsville, Alabama area;
- Auburn, Alabama area;
- Montgomery, Alabama area;
- Selma, Alabama area;
- Geneva, Alabama area; and
- Tuscaloosa, Alabama area.

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-serve 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, www.cpsalabama.org. Many classes are being projected for all over the state and many of the smaller communities are now willing to participate. CPS is a community service driven by a great level of interest and commitment from the individual technicians at each fitting station. The recruitment of individuals at checkup events usually takes place as a grassroots, word-of-mouth recruitment by parents and individuals who go in for fittings and see the benefit and use in becoming certified themselves or encouraging community members to attend trainings.

Each CTSP/LEL Coordinator will be encouraged to hold both a CPS certification class and a CPS update class in their region.

6.6.3 Additional Inspection Stations

In FY 2017, the CTSP/LEL regional offices will increase the number of inspection stations from their current 46. 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 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.

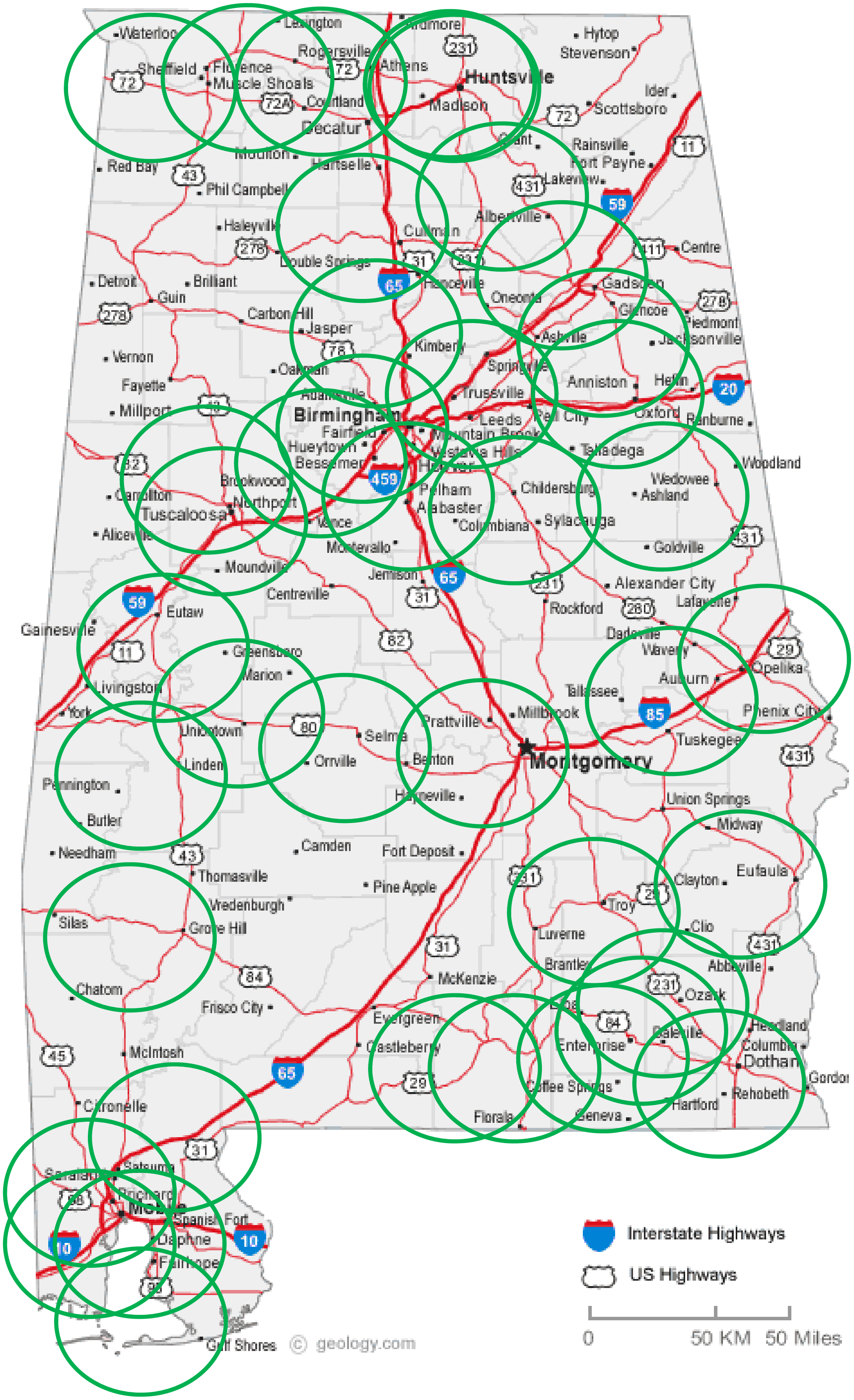
Display 3 presents the location of Alabama's CPS inspection stations. The green circles represent a 25 mile radius around the each inspection site. Some of the circles contain more than one inspection station.

Display 3 and Table 5 shows 35 areas covered by fitting stations and the list of fitting stations shows 46. The multiple fitting stations in one area are as follows:

- Ft. Rucker – Ft Rucker FD/PD & Ozark PD
- Huntsville – Huntsville Hospital, Huntsville Pediatrics, Huntsville PD and Madison County SO
- Birmingham – Children's Hospital and Hueytown PD
- Trussville – 3 Trussville fire fitting stations
- Gadsden – Gadsden FD, Ashland PD and Gadsden Regional Medical Center
- Geneva – Geneva PD & Hartford PD
- Valley – Valley EMS & Valley FD

Table 5 illustrates the proportion of Alabama's population that is covered by inspection stations. The table demonstrates that 83.87% of the population of Alabama is covered.

Display 3 Location of Alabama's CPS inspection stations



The following is the location list for Display 3:

Alabaster Fire Department
AmStar EMS Linden Alabama
Ashland Police Department
Athens Police Department
Auburn Police Department
Bessemer Police Department
Children's Hospital Birmingham
Clarke County Health Department
Daleville Police Department
Demopolis Police Department
Dothan Police Department
Enterprise Police Department
Eufaula Police Department
Foley Police Department
Ft. Rucker Fire Department or Police Department
Gadsden Fire Department
Gadsden Regional Medical Center
Gardendale Fire Department
Geneva Police Department
Hartford Police Department
Hueytown Police Department
Huntsville Hospital
Huntsville Pediatrics
Huntsville Police Department
Jacksonville Fire Department
Lineville Police Department
Madison County Sheriff's Office
Marshall Medical Center
Montgomery SAFE Kids
Northport Fire or Police
Orange Beach Fire Department
Oxford Police Department
Ozark Police Department
Poarch Creek Indians
Saraland Police Department
Selma Police & Fire Departments
South Alabama Medical Center
Sumter County Sheriff's office
Sylacauga Fire Department
Troy Fire Department and Police Department
Trussville Fire Department
Tuscaloosa Police Department
University of North Alabama Police Department
USA Women's and Children's Hospital Mobile
Valley EMS
Valley Fire Department

Table 5. Proportion of Alabama's Population Covered by Inspection Stations

Location	Population served	% of total population
Fort Rucker	26,489	0.55%
Alabaster	43,943	0.92%
Gardendale	57,673	1.21%
Birmingham	660,367	13.82%
Mobile	415,395	8.69%
Northport	65,294	1.37%
Enterprise	51,211	1.07%
Montgomery	236,977	4.96%
Dothan	121,394	2.54%
Valley	34,123	0.71%
Trussville	87,074	1.82%
Troy	33,046	0.69%
Orange Beach	203,709	4.26%
Jacksonville	130,638	2.73%
Huntsville	424,219	8.88%
Athens	91,663	1.92%
Saraland	24,675	0.52%
Selma	41,131	0.86%
Eufaula	59,660	1.25%
Bessemer	22,583	0.47%
Daleville	49,565	1.04%
Lineville	24,675	0.52%
Demopolis	9,652	0.20%
Oxford	128,916	2.70%
Auburn	176,098	3.68%
Gadsden	94,725	1.98%
Grove Hill	33,198	0.69%
Atmore	37,789	0.79%
Linden	23,547	0.49%
Tuscaloosa	40,844	0.85%
Albertville	201,570	4.22%
Sylacauga	132,430	2.77%
Florence	146,950	3.07%
Livingston	13,103	0.27%
Geneva	64,612	1.35%
All the sites	**4,008,938**	**83.87%**

*2010 Census Data, Alabama's total population in the 2010 Federal Census was 4,779,736.

6.6.4 Increased Communication and Awareness

A major goal of the CPS program for FY 2017 will be to increase communication and awareness on the issue of CPS in each of the four 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 (www.cpsalabama.org) 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 2017. For example, the website 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 manufacturers 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 2017.

6.6.5 Evidence-Based Enforcement Program for Child Restraints

This is an integral part of the evidence-based enforcement efforts as indicated in the Enforcement Program described in Section 6.3.2 and Attachment A, and the details of that effort will not be repeated here.

6.7 Data and Program Evaluation

This section is subdivided according to the follow categories:

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

6.7.1 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) 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 2017 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.

6.7.2 Evidence-Based Enforcement Citation Analysis

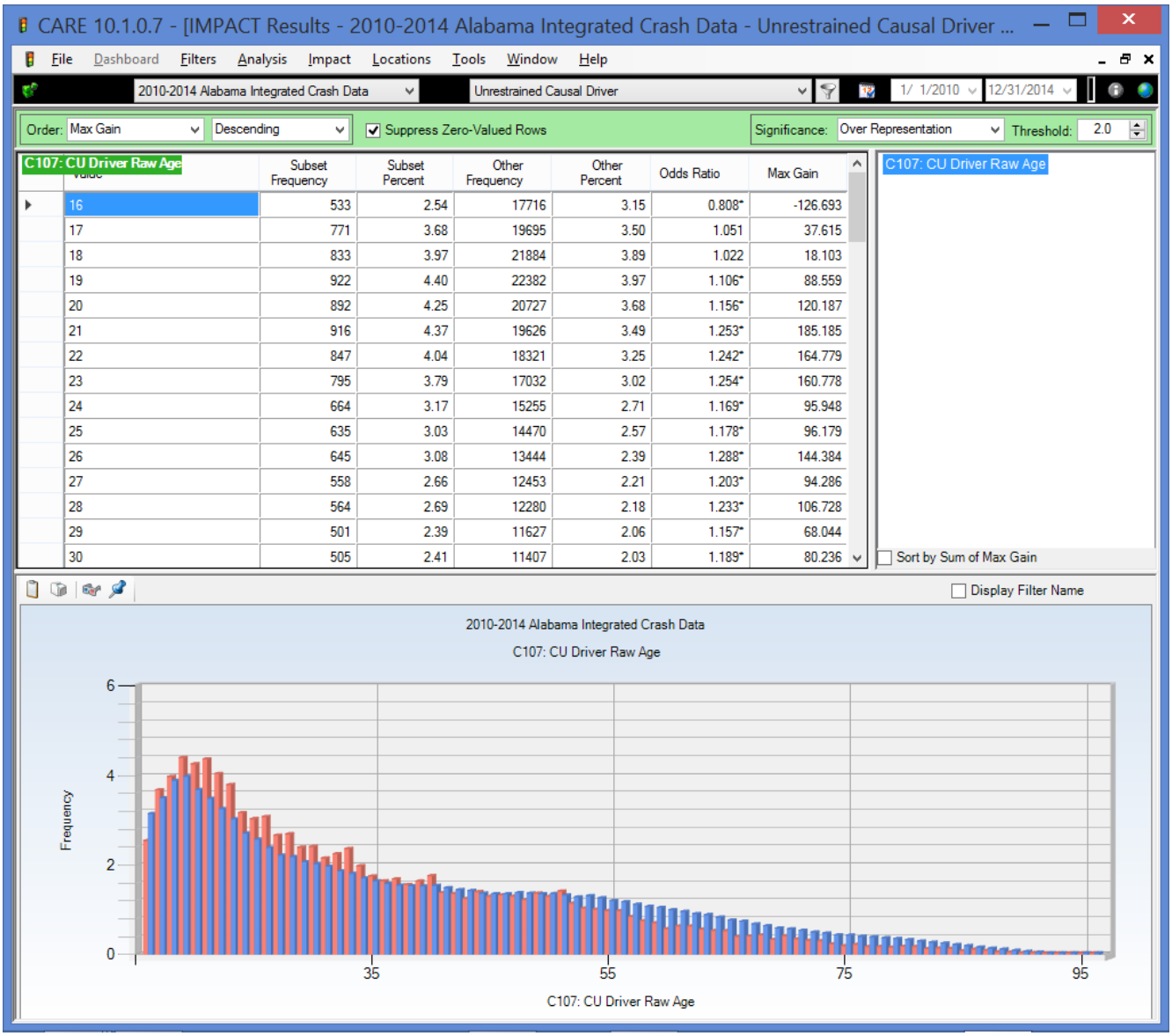
The State has an advanced capability to analyze and evaluate its enforcement efforts by the analysis of data obtained from its electronic citation system (eCite). The following subsection will illustrate this capability with the following example:

- Analysis by target groups: 16-25 year old drivers;

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.

6.7.2.1 Age 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 teen and young adult ages (age range 16-35). While it appears that teen-aged drivers are more likely to use safety equipment (perhaps due to the emphasis placed on it during training), there is still a very large proportion that are unrestrained, and this problem is multiplied by their overrepresentation in crashes in general (see how they are at least twice the average of the other ages).

An analysis of fatalities that compares 21-25 year old males against their older counterparts (both male and females) indicated that the average number of fatalities 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.

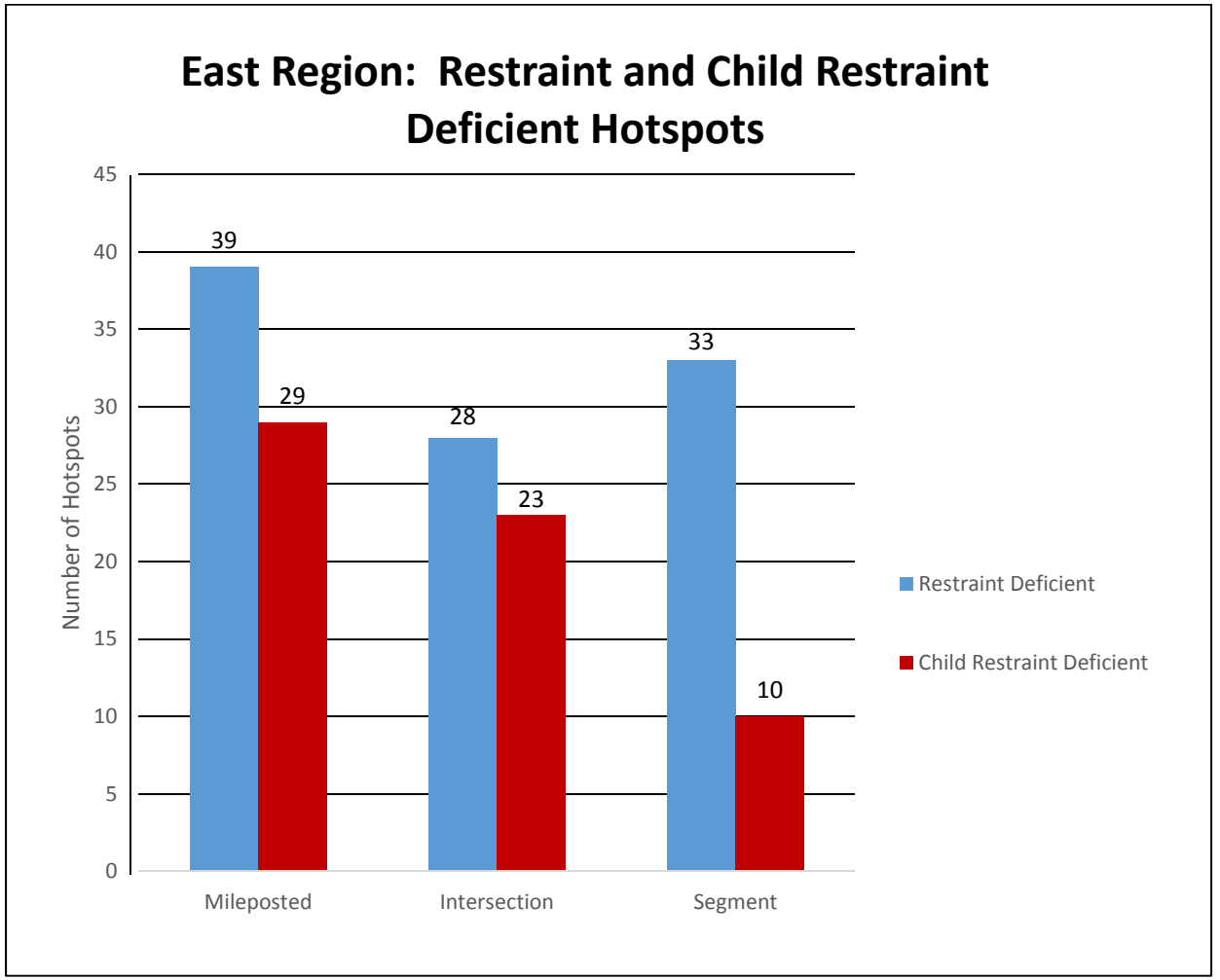
The difference in the number of fatalities within these two groups on a per year basis was **83.2-50.9 = 32.3 fatalities.** If the restraint use by this target group of 21-25 year old males could be increased to that of the general population, the fatality number would be significantly reduced. This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

6.7.3 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 evidence-based 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


East Region: Restraint and Child Restraint Deficient Hotspots
Number of Hotspots
45
40
35
30
25
20
15
10
5
0
39
29
28
23
33
10
Mileposted
Intersection
Segment
Restraint Deficient
Child Restraint Deficient

Top 39 Mileposted Locations (10 Miles in Length) in the 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	Jefferson	Birmingham	I-59	120	130	62	3	35	0.03	14.84	2393.6	131156	Birmingham Police Department
2	Jefferson	Rural Jefferson	I-59	110	120	47	3	24	0.05	14.26	1039.12	56938	ALEA - Birmingham Post
3	Jefferson	Hoover	I-65	243	253	43	1	25	0.02	13.49	1843.27	101001	Hoover Police Department
4	Jefferson	Hoover	I-459	10.5	20.5	38	5	13	0.02	15.26	1630.62	89349	ALEA - Birmingham Post
5	Etowah	Gadsden	S-1	257.6	267.6	32	3	20	0.07	16.56	452.24	24780	Gadsden Police Department
6	Shelby	Birmingham	S-38	0.7	10.7	32	0	15	0.03	8.44	1198.79	65687	Mountain Brook Police Department
7	Jefferson	Bessemer	S-5	120	130	31	1	13	0.09	9.35	337.66	18502	Bessemer Police Department
8	Jefferson	Rural Jefferson	I-65	253	263	29	3	13	0.01	13.45	2176.17	119242	ALEA - Birmingham Post
9	Jefferson	Rural Jefferson	I-459	22	32	29	1	17	0.02	16.55	1312.38	71911	ALEA - Birmingham Post
10	Jefferson	Rural Jefferson	I-65	263.5	273.5	27	1	8	0.02	8.15	1138.22	62368	ALEA - Birmingham Post
11	Shelby	Rural Shelby	S-38	10.8	20.8	27	0	16	0.05	11.48	566.28	31029	ALEA - Birmingham Post
12	Jefferson	Bessemer	I-459	0.1	10.1	26	3	15	0.03	18.08	937.1	51348	Bessemer Police Department
13	St. Clair	Rural St. Clair	I-20	150.9	160.9	26	0	15	0.03	13.85	877.41	48077	ALEA - Birmingham Post
14	Calhoun	Rural Calhoun	S-21	257.5	267.5	25	0	17	0.06	16	432.42	23694	ALEA - Jacksonville Post
15	Etowah	Rural Etowah	S-1	268.1	278.1	25	0	16	0.09	18.4	276.98	15177	ALEA - Gadsden Post
16	Jefferson	Bessemer	I-59	99.7	109.7	25	1	16	0.02	14.4	1001.82	54894	Bessemer Police Department
17	St. Clair	Rural St. Clair	I-20	140.1	150.1	25	1	17	0.02	18.4	1062.15	58200	ALEA - Birmingham Post
18	Elmore	Millbrook	S-14	154.3	164.3	24	1	14	0.07	14.17	362.19	19846	Millbrook Police Department
19	Calhoun	Oxford	S-21	241.8	251.8	24	1	16	0.13	17.08	181.77	9960	Oxford Police Department
20	Jefferson	Hoover	S-3	256	266	24	0	10	0.04	10	653.5	35808	Hoover Police Department
21	Jefferson	Rural Jefferson	I-20	130	140	24	1	10	0.02	11.67	1092.04	59838	ALEA - Birmingham Post
22	Chilton	Rural Chilton	I-65	221.2	231.2	23	1	13	0.03	16.96	715.51	39206	ALEA - Montgomery Post
23	Jefferson	Birmingham	S-5	130.3	140.3	23	0	9	0.04	5.22	576.19	31572	Birmingham Police Department

Top 39 Mileposted Locations in the East Region - Continued

Rank	County	City	Route	Beg MP	End MP	Total Crashes	Fatal Crashes	Injury Crashes	C/MVM	Severity Index	MVM	ADT	Agency ORI
24	Chilton	Rural Chilton	I-65	210	220	22	3	10	0.03	14.55	697.3	38208	ALEA - Montgomery Post
25	Etowah	Rural Etowah	I-59	171.5	181.5	22	1	15	0.06	20.91	379.58	20799	ALEA - Gadsden Post
26	Etowah	Southside	S-77	96	106	22	2	10	0.08	12.73	289.92	15886	Southside Police Department
27	Jefferson	Birmingham	S-7	139.1	149.1	22	1	8	0.06	10	392.81	21524	Birmingham Police Department
28	Jefferson	Bessemer	S-150	0.2	10.2	22	2	10	0.08	13.18	292.2	16011	Bessemer Police Department
29	Shelby	Rural Shelby	I-65	232.2	242.2	22	1	12	0.02	14.09	1123.6	61567	ALEA - Birmingham Post
30	Talladega	Lincoln	I-20	162.5	172.5	22	0	14	0.03	15.45	721.84	39553	ALEA - Jacksonville Post
31	Elmore	Rural Elmore	S-9	112.9	122.9	21	3	13	0.04	18.57	578.32	31689	ALEA - Montgomery Post
32	Etowah	Glencoe	S-1	247	257	21	0	11	0.07	12.86	291.43	15969	Glencoe Police Department
33	Talladega	Rural Talladega	S-38	30.5	40.5	21	1	10	0.05	15.24	386.95	21203	ALEA - Jacksonville Post
34	Blount	Rural Blount	I-65	279	289	20	3	9	0.02	18	813.13	44555	ALEA - Decatur Post
35	Chilton	Rural Chilton	I-65	199.2	209.2	20	1	14	0.03	17	620.01	33973	ALEA - Montgomery Post
36	Jefferson	Birmingham	I-59	130.5	140.5	20	1	12	0.02	15.5	1005.58	55100	Birmingham Police Department
37	Jefferson	Vestavia Hills	S-3	266	276	20	0	13	0.02	13	804.61	44088	Vestavia Hills Police Department
38	Jefferson	Fultondale	S-3	276.4	286.4	20	1	11	0.07	13.5	291.71	15984	Fultondale Police Department
39	Lee	Auburn	I-85	49.4	59.4	20	0	12	0.03	12	668.55	36633	Auburn Police Department

Top 28 Intersections in the East Region with 4 or More Restraint Deficient Crashes

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity Index	Node 1	Route	Location	Agency ORI
1	St. Clair	Pell City	8	0	2	5	1234	S-53	NO DESCRIPTION AVAILABLE	Pell City Police Department
2	Calhoun	Oxford	6	0	4	16.67	445	S-21	AL-21 at AL-21 S	Oxford Police Department
3	Lee	Opelika	6	0	3	11.67	1505	S-38	AL-38 at GATEWAY DR	Opelika Police Department
4	Shelby	Alabaster	6	0	0	0	278	S-3	INDUSTRIAL RD CO RD 66 at 1ST ST N SR-3 US-31	Alabaster Police Department
5	Shelby	Pelham	6	0	2	5	71	I-65	NO DESCRIPTION AVAILABLE	Pelham Police Department
6	Calhoun	Anniston	5	0	3	16	857	S-1	AL-1 at AL-21	Anniston Police Department
7	Jefferson	Bessemer	5	0	0	0	674	1247	CR-52 at CR-6	Bessemer Police Department
8	Jefferson	Birmingham	5	0	1	2	3210	I-59	INTERSTATE 59 at 21ST ST INTERCHANGE	Birmingham Police Department
9	Jefferson	Birmingham	5	0	3	12	2136	I-65	261A at I-65	Birmingham Police Department
10	Jefferson	Birmingham	5	0	3	14	2873	I-59	INTERSTATE 59 at Tallapoosa ST SR79 INTCHG	Birmingham Police Department
11	Shelby	Alabaster	5	0	2	10	7501	S-119	COUNTY ROAD 26 at MONTEVALLO RD SR119 N JCT	Alabaster Police Department
12	Calhoun	Anniston	4	0	1	7.5	297	S-1	AL-1 at AL-21	Anniston Police Department
13	Calhoun	Piedmont	4	0	2	12.5	72	S-74	AL-74 at AL-9	Piedmont Police Department
14	Calhoun	Rural Calhoun	4	0	3	22.5	189	S-21	W 33RD ST at NOBLE ST	ALEA - Jacksonville Post
15	Calhoun	Oxford	4	0	4	12.5	189	S-21	AL-1 at AL-21	Oxford Police Department
16	Jefferson	Birmingham	4	0	0	0	1875	6849	21ST ST N at 8TH AVE N	Birmingham Police Department
17	Jefferson	Bessemer	4	0	1	5	878	S-5	AL-5 at AL-7	Bessemer Police Department
18	Jefferson	Bessemer	4	0	2	10	913	S-5	AL-5 at AL-7	Bessemer Police Department
19	Jefferson	Bessemer	4	0	0	0	13917	I-459	NO DESCRIPTION AVAILABLE	Bessemer Police Department
20	Jefferson	Hoover	4	0	2	10	292	S-3	INTERSTATE 459 at SR-3 US-31 INTER-CHANGE	Hoover Police Department
21	Jefferson	Hoover	4	0	1	2.5	155	S-150	AL-150 at AL-3	Hoover Police Department
22	Jefferson	Hoover	4	0	3	17.5	15192	I-65	INTERSTATE 459 at I-65 INTERCHANGE	Hoover Police Department
23	Jefferson	Rural Jefferson	4	0	4	20	15125	I-20	NO DESCRIPTION AVAILABLE	ALEA - Birmingham Post

Top 28 Intersections in the East Region - Continued

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity Index	Node 1	Route	Location	Agency ORI
24	Lee	Auburn	4	0	4	15	1277	S-147	AL-267 at NORTHPOINTE DR	Auburn Police Department
25	Shelby	Alabaster	4	0	4	12.5	175	S-3	INTERSTATE 65 at US-31 SR-3 INTER-CHANGE	Alabaster Police Department
26	St. Clair	Pell City	4	0	2	5	123	1234	NO DESCRIPTION AVAILABLE	Pell City Police Department
27	Tallapoosa	Alexander City	4	0	4	20	930	S-38	AL-38 at FLINT HILL PL	Alexander City Police Department
28	Talladega	Talladega	4	0	3	17.5	1197	S-275	AL-275 at AL-77	Talladega Police Department

Top 33 Segment in the East Region with 4 or More Restraint Deficient Crashes

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity Index	Node 1	Node 2	Route	Location	Agency ORI
1	Jefferson	Bessemer	12	3	7	26.67	680	13917	I-459	6 at I-459 and NO DESCRIPTION AVAILABLE	Bessemer Police Department
2	St. Clair	Rural St. Clair	9	0	4	12.22	7780	7775	I-20	NO DESCRIPTION AVAILABLE	ALEA - Birmingham Post
3	St. Clair	Rural St. Clair	9	1	5	17.78	7819	7780	I-20	NO DESCRIPTION AVAILABLE	ALEA - Birmingham Post
4	Chilton	Rural Chilton	8	1	3	16.25	8123	8067	I-65	NO DESCRIPTION AVAILABLE	ALEA - Montgomery Post
5	Jefferson	Rural Jefferson	8	0	0	0	515	11507	I-65	LINTHICUM ST at LINTHICUM LN and 266 at I-65	ALEA - Birmingham Post
6	Macon	Rural Macon	7	0	3	12.86	7477	7418	I-85	NO DESCRIPTION AVAILABLE and 38 at I-85	ALEA - Opelika Post
7	Chambers	Lanett	6	0	3	11.67	7089	7146	I-85	NO DESCRIPTION AVAILABLE	Lanett Police Department
8	Cleburne	Rural Cleburne	6	0	4	20	7833	7665	S-1	NO DESCRIPTION AVAILABLE and AL-1 at CHEAHA STATE PARK DR	ALEA - Jacksonville Post
9	Lee	Auburn	6	0	5	13.33	7327	792	I-85	I-85 at SR 147 COLLEGE ST and I-85 at NEW WRIGHTS MILL RD	Auburn Police Department
10	St. Clair	Rural St. Clair	6	0	5	16.67	7154	7287	I-59	NO DESCRIPTION AVAILABLE	ALEA - Birmingham Post
11	St. Clair	Rural St. Clair	6	0	5	20	7536	7775	I-20	NO DESCRIPTION AVAILABLE	ALEA - Birmingham Post
12	Chilton	Rural Chilton	5	0	3	12	8146	8048	I-65	NO DESCRIPTION AVAILABLE	ALEA - Montgomery Post
13	Chilton	Rural Chilton	5	0	4	14	7393	7373	I-65	NO DESCRIPTION AVAILABLE	ALEA - Montgomery Post
14	Jefferson	Bessemer	5	0	3	14	13917	13801	I-459	NO DESCRIPTION AVAILABLE	Bessemer Police Department
15	Jefferson	Birmingham	5	1	2	14	1771	1512	I-59	123 at I-20 and 19TH ST ENSLEY at BUSH BLVD	Birmingham Police Department
16	Lee	Auburn	5	0	3	10	434	770	I-85	AL-15 at 57 and I-85 at MOORES MILL RD	Auburn Police Department
17	Lee	Opelika	5	0	2	8	1069	339	I-85	INTERSTATE 85 at S001 and INTERSTATE 85 at S051	Opelika Police Department
18	Etowah	Rural Etowah	4	1	2	27.5	7364	7365	S-77	AL-77 at 9TH ST SW and AL-77 at MILLER HOLLOW RD	ALEA - Gadsden Post
19	Jefferson	Bessemer	4	1	3	27.5	13802	17712	I-59	NO DESCRIPTION AVAILABLE	Bessemer Police Department
20	Jefferson	Hoover	4	1	3	32.5	15180	15197	I-65	NO DESCRIPTION AVAILABLE	Hoover Police Department
21	Jefferson	Rural Jefferson	4	0	2	10	14396	15192	I-459	17 at I-459 and 15 at I-459	ALEA - Birmingham Post
22	Jefferson	Bessemer	4	0	2	7.5	14380	14378	I-59	NO DESCRIPTION AVAILABLE	Bessemer Police Department
23	Jefferson	Rural Jefferson	4	0	0	0	14396	15582	I-459	17 at I-459 and NO DESCRIPTION AVAILA-BLE	ALEA - Birmingham Post

Top 33 Segments in the East Region - Continued

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity Index	Node 1	Node 2	Route	Location	Agency ORI
24	Jefferson	Hoover	4	0	1	2.5	15152	292	I-459	INTERSTATE 459 at SULPHER SPRINGS and SR-3 US-31 INTERCHANGE	Hoover Police Department
25	Lee	Rural Lee	4	0	4	25	7124	7145	S-15	AL-15 at CR-390 and AL-15 at CR-177	ALEA - Opelika Post
26	Lee	Rural Lee	4	1	2	25	7759	8840	1207	NO DESCRIPTION AVAILABLE	ALEA - Opelika Post
27	Lee	Opelika	4	0	2	12.5	1123	7142	I-85	INTERSTATE 85 at S015 and CO RD 48 at DEAD END	Opelika Police Department
28	Macon	Rural Macon	4	1	2	27.5	7457	7450	S-8	AL-15 at AL-8 and AL-15 at AL-8	ALEA - Opelika Post
29	Macon	Rural Macon	4	0	2	10	7205	7180	I-85	NO DESCRIPTION AVAILABLE	ALEA - Opelika Post
30	Shelby	Pelham	4	0	2	10	24	462	1429	NO DESCRIPTION AVAILABLE	Pelham Police Department
31	St. Clair	Rural St. Clair	4	0	4	22.5	7819	7877	I-20	NO DESCRIPTION AVAILABLE and AL-25 at 144B	ALEA - Birmingham Post
32	Talladega	Rural Talladega	4	0	2	10	7151	7148	S-38	AL-38 at AL-53 and AL-38 at AL-53	ALEA - Jacksonville Post
33	Talladega	Lincoln	4	0	3	15	32	25	I-20	NO DESCRIPTION AVAILABLE	ALEA - Jacksonville Post

Top 29 Mileposted Locations (10 miles in Length) in the 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
1	Jefferson	Birmingham	I-59	121.5	131.5	27	0	8	0.01	4.81	2375.55	130167	Birmingham Police Department
2	Jefferson	Birmingham	I-65	252	262	10	0	1	0	1	2209.87	121089	Birmingham Police Department
3	Jefferson	Hoover	S-3	264	274	10	0	0	0.01	0	763.11	41814	Hoover Police Department
4	Shelby	Rural Shelby	S-38	5.3	15.3	10	0	3	0.01	3	948.96	51998	Hoover Police Department
5	Shelby	Pelham	I-65	241	251	9	0	3	0.01	7.78	1707.98	93588	Pelham Police Department
6	Etowah	Gadsden	S-1	257.6	267.6	8	0	1	0.02	1.25	452.24	24780	Gadsden Police Department
7	Jefferson	Birmingham	S-7	141.1	151.1	8	0	1	0.02	3.75	404.66	22173	Birmingham Police Department
8	Jefferson	Bessemer	I-59	110	120	6	1	2	0.01	16.67	1039.12	56938	Bessemer Police Department
9	Shelby	Rural Shelby	I-65	230.5	240.5	6	0	1	0.01	1.67	1029.96	56436	ALEA - Birmingham Post
10	Calhoun	Oxford	S-21	249.9	259.9	5	0	1	0.01	2	465.69	25517	Oxford Police Department
11	Etowah	Southside	S-77	101	111	5	0	1	0.02	2	323.28	17714	Southside Police Department
12	Etowah	Gadsden	S-25	213	223	5	0	0	0.01	0	393.45	21559	Gadsden Police Department
13	Jefferson	Birmingham	I-65	262	272	5	1	0	0	10	1249.16	68447	Birmingham Police Department
14	Jefferson	Fultondale	S-3	280	290	5	0	3	0.02	8	277.71	15217	Fultondale Police Department
15	Jefferson	Bessemer	S-5	120	130	5	0	1	0.01	4	337.66	18502	Bessemer Police Department
16	Jefferson	Birmingham	S-5	130.7	140.7	5	0	1	0.01	2	588.33	32237	Birmingham Police Department
17	Jefferson	Birmingham	S-79	0.4	10.4	5	0	3	0.01	10	487.71	26724	Birmingham Police Department
18	Elmore	Millbrook	S-14	157.5	167.5	4	0	2	0.01	5	330.14	18090	Millbrook Police Department
19	Chilton	Clanton	I-65	211.6	221.6	4	0	2	0.01	7.5	700.45	38381	Clanton Police Department
20	Chilton	Clanton	S-3	217.1	227.1	4	0	1	0.02	2.5	177.54	9728	Clanton Police Department
21	Jefferson	Birmingham	I-59	132.5	142.5	4	0	1	0	5	883.77	48426	Birmingham Police Department
22	Jefferson	Birmingham	I-20	130.3	140.3	4	0	1	0	5	1095.35	60019	Birmingham Police Department
23	Jefferson	Bessemer	S-150	0.3	10.3	4	0	2	0.01	12.5	294.7	16148	Bessemer Police Department

Top 29 Mileposted Locations in the East Region - Continued

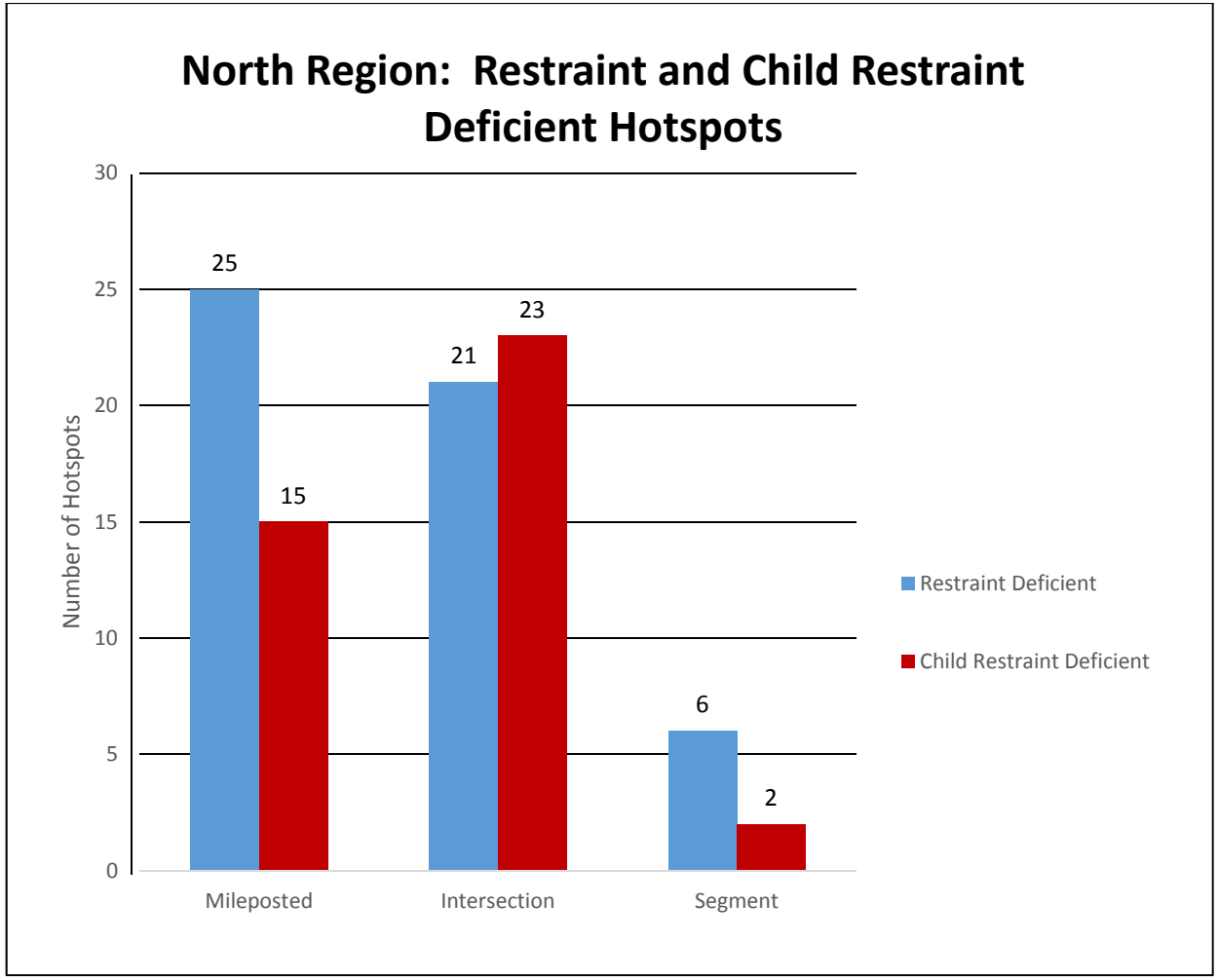
Rank	County	City	Route	Beg MP	End MP	Total Crashes	Fatal Crashes	Injury Crashes	C/MVM	Severity Index	MVM	ADT	Agency ORI
24	Jefferson	Bessemer	I-459	0.5	10.5	4	0	0	0	0	942.7	51655	Bessemer Police Department
25	Lee	Auburn	I-85	51.1	61.1	4	0	1	0.01	7.5	706.57	38716	Auburn Police Department
26	Lee	Opelika	I-85	64.3	74.3	4	0	2	0.01	7.5	579.13	31733	Opelika Police Department
27	Lee	Opelika	S-38	107.1	117.1	4	0	0	0.01	0	539.29	29550	Opelika Police Department
28	Shelby	Rural Shelby	S-119	20	30	4	0	0	0.01	0	297.49	16301	ALEA - Birmingham Post
29	St. Clair	Rural St. Clair	I-20	147.5	157.5	4	0	1	0	5	920.2	50422	ALEA - Birmingham Post

Top 23 Intersections in the East Region with 2 or More Child Restraint Deficient Crashes

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity Index	Node 1	Route	Location	Agency ORI
1	Jefferson	Birmingham	5	0	2	4	3186	I-59	126B at I-20	Birmingham Police Department
2	Etowah	Rainbow City	3	0	1	3.33	141	1050	AL-77 at GILBERT FERRY RD SE	Rainbow City Police Department
3	Jefferson	Birmingham	3	0	0	0	44813	S-38	NO DESCRIPTION AVAILABLE	Birmingham Police Department
4	Elmore	Prattville	2	0	1	10	1177	S-14	AL-14 at BUSINESS PARK DR	Prattville Police Department
5	Calhoun	Anniston	2	0	0	0	335	5022	W 22ND ST at E 22ND ST	Anniston Police Department
6	Chambers	Valley	2	0	0	0	511	S-15	NO DESCRIPTION AVAILABLE	Valley Police Department
7	Jefferson	Birmingham	2	0	1	5	1875	6849	21ST ST N at 8TH AVE N	Birmingham Police Department
8	Jefferson	Gardendale	2	0	1	5	600	S-3	AL-3 at CR-112	Gardendale Police Department
9	Jefferson	Birmingham	2	0	0	0	367	3664	CR-18 at 17TH WAY SW	Birmingham Police Department
10	Jefferson	Birmingham	2	0	1	5	2304	4245	20TH ST S at 3RD AVE S	Birmingham Police Department
11	Jefferson	Birmingham	2	0	0	0	395	I-65	258 at I-65	Birmingham Police Department
12	Jefferson	Bessemer	2	0	0	0	13917	I-459	NO DESCRIPTION AVAILABLE	Bessemer Police Department
13	Jefferson	Birmingham	2	0	0	0	975	4331	AL-149 at 19TH ST S	Birmingham Police Department
14	Jefferson	Birmingham	2	0	0	0	3084	3084	NO DESCRIPTION AVAILABLE	Birmingham Police Department
15	Jefferson	Fultondale	2	0	1	5	540	S-3	AL-3 at CR-121	Fultondale Police Department
16	Jefferson	Birmingham	2	0	0	0	2163	I-65	264 at I-65	Birmingham Police Department
17	Lee	Opelika	2	0	0	0	1293	S-38	AL-38 at CORPORATE DR	Opelika Police Department
18	Lee	Opelika	2	0	0	0	1505	5529	AL-38 at GATEWAY DR	Opelika Police Department
19	Lee	Auburn	2	0	1	5	92	6077	AL-14 at N DEAN RD	Auburn Police Department
20	Shelby	Alabaster	2	0	1	5	252	S-3	7TH AVE NE at 1ST ST N SR-3 US-31	Alabaster Police Department
21	Shelby	Alabaster	2	0	0	0	140	5047	1ST ST SW at SR-119 MONTEVALLO RD	Alabaster Police Department
22	Shelby	Alabaster	2	0	0	0	1721	6068	NO DESCRIPTION AVAILABLE	Alabaster Police Department
23	Shelby	Rural Shelby	2	0	0	0	9868	S-38	NO DESCRIPTION AVAILABLE	ALEA - Birmingham Post

Top 10 Segments in the East Region with 2 or More Child Restraint Deficient Crashes

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity Index	Node 1	Node 2	Route	Location	Agency ORI
1	Jefferson	Birmingham	3	0	2	10	3186	2653	I-59	126B at I-20 and 125 at 25TH ST N	Birmingham Police Department
2	Lee	Auburn	3	0	1	10	792	7327	I-85	I-85 at NEW WRIGHTS MILL RD and I-85 at SR 147 COLLEGE ST	Auburn Police Department
3	Cham-bers	Lanett	2	0	0	0	7146	7089	I-85	NO DESCRIPTION AVAILABLE	Lanett Police Department
4	Jefferson	Birmingham	2	0	0	0	35549	37802	S-38	AL-38 at COLONNADE DR and US HIGHWAY 280 at I459 N ON RAMP SE JCT	Birmingham Police Department
5	Jefferson	Hoover	2	0	0	0	770	8852	S-3	AL-3 at Montgomery HWY and AL-3 at Montgomery HWY	Hoover Police Department
6	Jefferson	Birmingham	2	0	0	0	3186	3190	I-59	126B at I-20 and INTERSTATE 59 at VANDERBILT RD BRIDGE	Birmingham Police Department
7	Jefferson	Bessemer	2	0	0	0	14378	14380	I-59	NO DESCRIPTION AVAILABLE	Bessemer Police Department
8	Lee	Auburn	2	0	0	0	834	1464	S-147	AL-147 at AL-267 and NO DE-SCRIPTION AVAILABLE	Auburn Police Department
9	Shelby	Pelham	2	0	2	10	79	519	S-3	NO DESCRIPTION AVAILABLE	Pelham Police Department
10	Shelby	Pelham	2	0	1	15	260	71	I-65	NO DESCRIPTION AVAILABLE	Pelham Police Department


North Region: Restraint and Child Restraint Deficient Hotspots
Number of Hotspots
30
25
20
15
10
5
0
25
15
21
23
6
2
Mileposted
Intersection
Segment
Restraint Deficient
Child Restraint Deficient

Top 25 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	C/MVM	Severity Index	MVM	ADT	Agency ORI
1	Marshall	Albertville	S-1	279	289	58	1	24	0.12	8.45	503.43	27585	Albertville Police Department
2	Marshall	Guntersville	S-1	290.2	300.2	47	1	19	0.12	9.79	397.54	21783	Guntersville Police Department
3	Madison	Huntsville	S-2	83.5	93.5	42	1	12	0.07	7.38	626.32	34319	Huntsville Police Department
4	Madison	Huntsville	S-53	313	323	39	0	24	0.04	12.56	890.07	48771	Huntsville Police Department
5	Madison	Rural Madison	S-1	338.5	348.5	35	2	23	0.07	16	488.41	26762	ALEA - Huntsville Post
6	Cullman	Cullman	S-3	317.3	327.3	29	4	9	0.1	13.1	284.79	15605	Cullman Police Department
7	Jackson	Scottsboro	S-35	42	52	29	1	11	0.13	9.31	215.13	11788	Scottsboro Police Department
8	Madison	Huntsville	S-2	94	104	29	0	17	0.05	11.03	631.05	34578	Huntsville Police Department
9	Morgan	Decatur	S-3	355	365	28	0	16	0.06	12.14	471.07	25812	Decatur Police Department
10	Morgan	Hartselle	S-3	344.5	354.5	26	0	16	0.08	14.62	311.73	17081	Hartselle Police Department
11	Limestone	Rural Limestone	S-2	63.2	73.2	25	2	18	0.12	20.4	216.59	11868	ALEA - Decatur Post
12	Marshall	Albertville	S-205	0.5	10.5	25	2	14	0.21	14.8	121.73	6670	Albertville Police Department
13	Franklin	Russellville	S-13	289.1	299.1	23	1	10	0.1	9.13	240.79	13194	Russellville Police Department
14	Madison	Huntsville	S-1	328	338	23	0	11	0.03	10	824.83	45196	Huntsville Police Department
15	Madison	Huntsville	I-565	6.4	16.4	23	1	15	0.02	16.09	1172.8	64263	Huntsville Police Department
16	Morgan	Decatur	S-67	33	43	23	2	9	0.05	12.61	493.9	27063	Decatur Police Department
17	Walker	Jasper	S-5	162.9	172.9	23	0	16	0.06	14.78	366.84	20101	ALEA - Hamilton Post
18	Madison	Rural Madison	S-53	323	333	22	2	11	0.08	15	278.79	15276	ALEA - Huntsville Post
19	Colbert	Tuscumbia	S-2	23.5	33.5	21	1	8	0.05	10.95	418.86	22951	Tuscumbia Police Department
20	Cullman	Rural Cullman	I-65	289.3	299.3	21	3	10	0.03	16.19	708.14	38802	ALEA - Decatur Post
21	Cullman	Rural Cullman	I-65	300	310	21	1	7	0.03	9.05	730.64	40035	ALEA - Decatur Post
22	Jackson	Scottsboro	S-2	131.6	141.6	21	0	15	0.07	15.24	310.52	17015	Scottsboro Police Department
23	Marshall	Boaz	S-168	7.4	17.4	21	2	11	0.18	18.57	117.27	6426	Boaz Police Department

Top 25 Mileposted Locations in the North Region - Continued

Rank	County	City	Route	Beg MP	End MP	Total Crashes	Fatal Crashes	Injury Crashes	C/MVM	Severity Index	MVM	ADT	Agency ORI
24	Limestone	Athens	S-2	73.5	83.5	20	1	10	0.05	13	394.53	21618	ALEA - Decatur Post
25	Madison	Huntsville	S-53	303	313	20	2	8	0.03	15	582.96	31943	Huntsville Police Department

Top 21 Intersections in the North Region with 4 or More Restraint Deficient Crashes

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity Index	Node 1	Route	Location	Agency ORI
1	Jackson	Scottsboro	8	0	4	12.5	642	S-35	NO DESCRIPTION AVAILABLE	Scottsboro Police Department
2	Jackson	Scottsboro	7	0	6	18.57	697	S-2	CR-33 at JOHN T REID PKY	Scottsboro Police Department
3	Lauderdale	Florence	6	0	3	8.33	1671	S-133	AL-13 at AL-133	Florence Police Department
4	Limestone	Rural Limestone	5	1	0	10	8292	S-2	AL-2 at BURGREEN RD	ALEA - Decatur Post
5	Madison	Madison	5	0	2	6	954	5163	HUGHES RD at MILL RD	Madison Police Department
6	Marshall	Guntersville	5	0	2	10	407	S-1	AL-1 at AL-69	Guntersville Police Department
7	Marshall	Albertville	5	0	1	2	358	S-1	AL-1 at E MAIN ST	Albertville Police Department
8	Morgan	Rural Morgan	5	1	3	26	8391	S-53	AL-36 at AL-36 E	ALEA - Decatur Post
9	Colbert	Tuscumbia	4	0	1	7.5	7515	S-13	AL-13 at AL-157	Tuscumbia Police Department
10	Lauderdale	Florence	4	0	2	7.5	9998	S-157	NO DESCRIPTION AVAILABLE	Florence Police Department
11	Limestone	Rural Limestone	4	0	4	25	7546	S-2	AL-2 at JOE WHEELER STATE PKY	ALEA - Decatur Post
12	Limestone	Rural Limestone	4	0	1	5	7838	S-2	AL-2 at CR-99	ALEA - Decatur Post
13	Madison	Rural Madison	4	0	2	10	7570	S-53	AL-53 at JEFF RD	ALEA - Huntsville Post
14	Madison	Madison	4	0	3	7.5	200	1005	AL-2 at WALL TRIANA HWY	Madison Police Department
15	Madison	Huntsville	4	0	1	2.5	2356	S-53	AL-2 at AL-53	Huntsville Police Department
16	Madison	Huntsville	4	0	2	7.5	2157	S-53	DECATUR HWY SR-20 at RIDEOUT RD	Huntsville Police Department
17	Madison	Huntsville	4	0	4	17.5	2065	5626	DRAKE AVE SW at TRIANA BLVD SW	Huntsville Police Department
18	Madison	Huntsville	4	0	1	7.5	3625	S-53	AIRPORT RD SW at S MEMORIAL PKY	Huntsville Police Department
19	Morgan	Decatur	4	1	1	20	2790	S-67	NO DESCRIPTION AVAILABLE	Decatur Police Department
20	Morgan	Decatur	4	0	1	2.5	325	S-67	AL-67 at BELTLINE RD SW	Decatur Police Department
21	Walker	Rural Walker	4	1	2	25	7794	S-5	AL-4 at AL-5	ALEA - Hamilton Post

Top 6 Segments in the North Region with 4 or More Restraint Deficient Crashes

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity Index	Node 1	Node 2	Route	Location
1	Cullman	Rural Cullman	5	1	4	26	7281	7541	I-65	NO DESCRIPTION AVAILABLE
2	DeKalb	Rural DeKalb	5	0	3	14	8816	34	I-59	NO DESCRIPTION AVAILABLE and CR-280 at GANN RD SW
3	Jackson	Rural Jackson	5	1	4	30	69	8210	1041	NO DESCRIPTION AVAILABLE and AL-35 at CR-67
4	DeKalb	Rural DeKalb	4	1	2	25	7230	177	I-59	CR-29 at CR-457 and NO DESCRIPTION AVAILABLE
5	Limestone	Rural Limestone	4	0	4	27.5	7797	7806	S-2	AL-2 at CR-109 and AL-2 at BRIAN HILL RD
6	Madison	Madison	4	0	3	20	448	8264	I-565	NO DESCRIPTION AVAILABLE

Top 15 Mileposted Locations (10 miles in Length) in the North Region with 4 or More Child Restraint Deficient Crashes

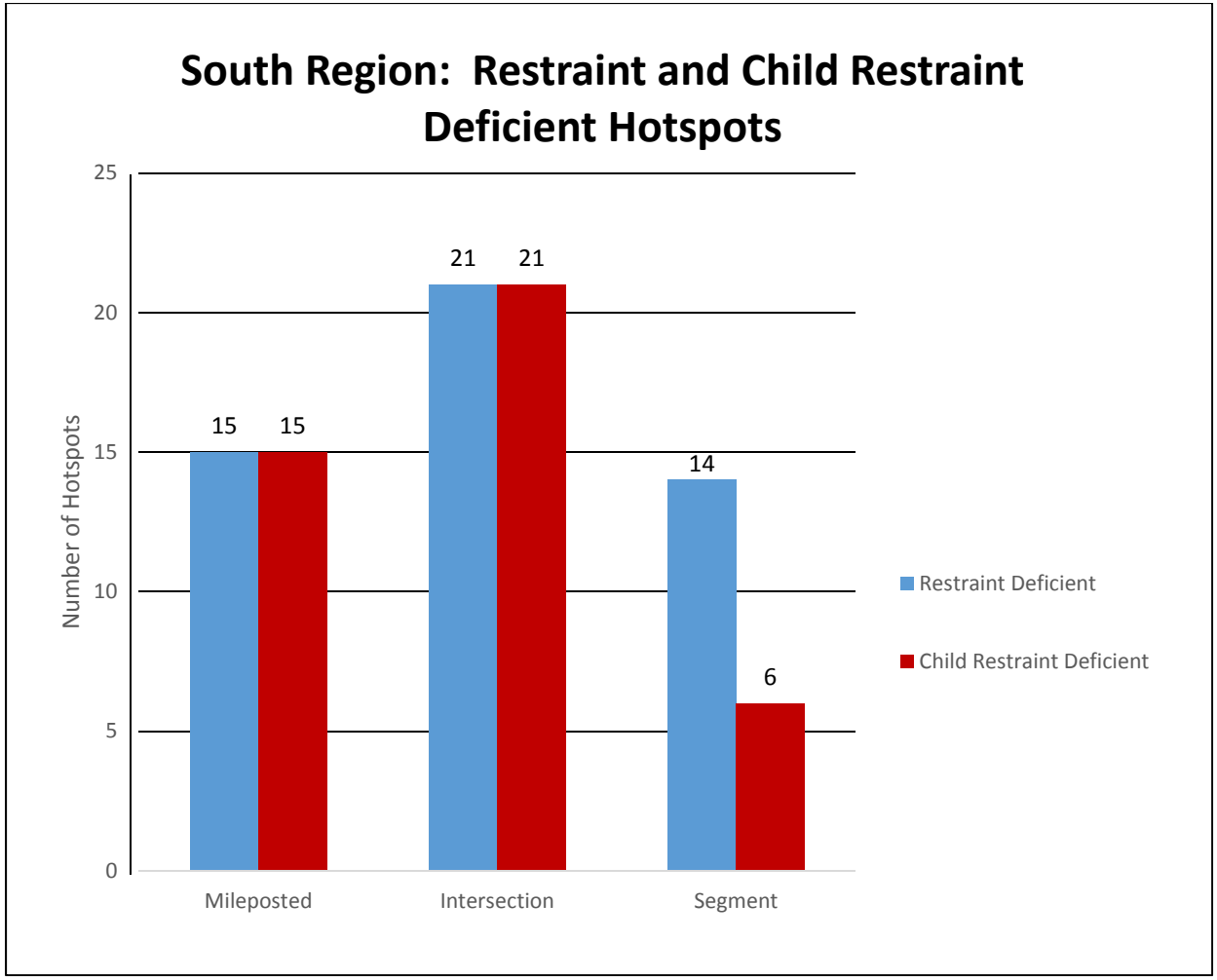
Rank	County	City	Route	Beg MP	End MP	Total Crashes	Fatal Crashes	Injury Crashes	C/MVM	Severity Index	MVM	ADT	Agency ORI
1	Madison	Huntsville	S-1	333	343	13	0	2	0.02	1.54	844.65	46282	Huntsville Police Department
2	Madison	Huntsville	S-53	310	320	12	0	2	0.01	3.33	1038.35	56896	Huntsville Police Department
3	Marshall	Albertville	S-1	278	288	12	0	5	0.02	5.83	487.02	26686	Albertville Police Department
4	Lauderdale	Florence	S-133	4.2	14.2	7	0	1	0.02	1.43	336.53	18440	Florence Police Department
5	Madison	Huntsville	S-2	87	97	7	0	1	0.01	2.86	775.42	42489	Huntsville Police Department
6	Colbert	Muscle Shoals	S-2	18.7	28.7	6	0	1	0.02	1.67	369.31	20236	Muscle Shoals Police Department
7	Limestone	Athens	S-2	74	84	6	0	0	0.02	0	389.4	21337	Athens Police Department
8	Madison	Huntsville	S-53	320	330	5	0	2	0.01	4	351.93	19284	Huntsville Police Department
9	Marshall	Albertville	S-205	3.1	13.1	5	0	1	0.04	2	114.83	6292	Albertville Police Department
10	Morgan	Decatur	S-67	38.9	48	5	0	0	0.01	0	374.47	22548	Decatur Police Department
11	Colbert	Florence	S-2	28.7	38.7	4	0	1	0.01	2.5	448.33	24566	Florence Police Department
12	Jackson	Scottsboro	S-2	137	147	4	0	0	0.01	0	342.28	18755	Scottsboro Police Department
13	Madison	Huntsville	S-1	316.5	326.5	4	0	1	0.01	5	295.91	16214	Huntsville Police Department
14	Marshall	Guntersville	S-1	292.4	302.4	4	0	1	0.01	7.5	350.36	19198	Guntersville Police Department
15	Morgan	Decatur	S-3	356	366	4	0	1	0.01	7.5	445.37	24404	Decatur Police Department

Top 23 Intersections in the North Region with 2 or More Child Restraint Deficient Crashes

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity Index	Node 1	Route	Location	Agency ORI
1	Colbert	Muscle Shoals	2	0	0	0	298	S-2	AL-13 at AL-157	Muscle Shoals Police Department
2	Jackson	Scottsboro	2	0	0	0	1153	S-35	AL-279 at CR-21	Scottsboro Police Department
3	Lauderdale	Florence	2	0	2	20	296	S-20	AL-13 at AL-157	Florence Police Department
4	Lauderdale	Florence	2	0	0	0	1793	S-133	AL-133 at CR-47	Florence Police Department
5	Limestone	Athens	2	0	0	0	466	S-2	AL-2 at S Jefferson ST	Athens Police Department
6	Madison	Huntsville	4	0	2	10	3858	6178	MASTIN LAKE RD NW at PULASKI Pike NW	Huntsville Police Department
7	Madison	Huntsville	3	0	0	0	1399	S-1	MEMORIAL PKY NW at N MEMORIAL PKY	Huntsville Police Department
8	Madison	Huntsville	3	0	0	0	64620	S-2	NO DESCRIPTION AVAILABLE	Huntsville Police Department
9	Madison	Huntsville	3	0	2	10	619	6178	AL-1 at AL-2	Huntsville Police Department
10	Madison	Huntsville	3	0	1	3.33	2356	S-53	AL-2 at AL-53	Huntsville Police Department
11	Madison	Huntsville	2	0	1	5	2770	6648	AL-53 at JORDAN LN NW	Huntsville Police Department
12	Madison	Huntsville	2	0	1	10	8164	1088	HENDERSON RD SW at ROCKHOUSE RD SW	Huntsville Police Department
13	Madison	Madison	2	0	0	0	8118	1048	NO DESCRIPTION AVAILABLE	Madison Police Department
14	Madison	Huntsville	2	0	1	10	8094	1023	NO DESCRIPTION AVAILABLE	Huntsville Police Department
15	Madison	Huntsville	2	0	0	0	8161	S-20	HENDERSON RD at HENDERSON RD 1395	Huntsville Police Department
16	Madison	Huntsville	2	0	1	5	5700	S-1	AL-1 at AL-2	Huntsville Police Department
17	Madison	Huntsville	2	0	1	10	3277	S-53	DRAKE AVE at MEMORIAL PKWY S	Huntsville Police Department
18	Madison	Huntsville	2	0	1	5	41757	7608	GOVERNORS DR NW at OLD Madison Pike NW	Huntsville Police Department
19	Madison	Huntsville	2	0	1	5	958	1028	PULASKI Pike NW at SPARKMAN DR NW	Huntsville Police Department
20	Marshall	Albertville	3	0	0	0	663	S-1	AL-1 at AL-75	Albertville Police Department
21	Marshall	Boaz	2	0	2	10	45	S-1	AL-1 at US HIGHWAY 431	Boaz Police Department
22	Marshall	Albertville	2	0	1	5	331	S-205	COLLEGE ST at MCDONALD AVE	Albertville Police Department
23	Marshall	Albertville	2	0	0	0	358	1378	AL-1 at E MAIN ST	Albertville Police Department

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

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity Index	Node 1	Node 2	Route	Location	Agency ORI
1	Lauderdale	Florence	2	0	0	0	1506	1523	S-133	AL-133 at AL-157 and AL-133 at COX CREEK PKY	Florence Police Department
2	Madison	Rural Madison	2	0	2	30	8597	8576	1176	NEBO RD at NEW HOPE CEDAR POINT RD and CAMBRON RD at NEW HOPE CEDAR POINT RD	ALEA - Huntsville Post


South Region: Restraint and Child Restraint Deficient Hotspots
Number of Hotspots
25
20
15
10
5
0
15
15
21
21
14
6
Mileposted
Intersection
Segment
Restraint Deficient
Child Restraint Deficient

Top 15 Mileposted Locations (10 Miles in Length) in the South 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	Prichard	S-17	0.4	10.4	57	1	14	0.28	5.61	201.17	11023	Prichard Police Department
2	Mobile	Mobile	I-10	20.9	30.9	52	4	21	0.04	11.15	1284.8	70400	Mobile Police Department
3	Mobile	Mobile	I-65	0.5	10.5	48	5	22	0.03	13.96	1446.18	79243	Mobile Police Department
4	Mobile	Rural Mobile	S-42	11	21	33	3	16	0.07	15.45	478.31	26209	ALEA - Mobile Post
5	Baldwin	Gulf Shores	S-59	0.1	10.1	27	0	16	0.04	10.74	643.46	35258	Gulf Shores Police Department
6	Mobile	Rural Mobile	S-42	0.3	10.3	27	3	16	0.13	18.89	215.81	11825	ALEA - Mobile Post
7	Escambia	Rural Escambia	S-21	0.5	10.5	24	2	11	0.17	15	139.23	7629	ALEA - Evergreen Post
8	Mobile	Mobile	I-10	10.3	20.3	24	2	14	0.02	16.67	1194.74	65465	Mobile Police Department
9	Mobile	Rural Mobile	S-217	0.2	10.2	24	2	13	0.17	16.25	142.68	7818	ALEA - Mobile Post
10	Mobile	Saraland	I-65	10.6	20.6	23	2	16	0.03	17.83	807.67	44256	Saraland Police Department
11	Mobile	Rural Mobile	I-10	0.1	10.1	21	3	7	0.03	13.33	829.19	45435	ALEA - Mobile Post
12	Mobile	Rural Mobile	S-188	0	10	21	0	13	0.34	11.9	61.28	3358	Bayou La Batre Police Department
13	Mobile	Mobile	S-16	16	26	21	1	11	0.04	11.9	476.62	26116	Mobile Police Department
14	Baldwin	Rural Baldwin	S-3	4.7	14.7	20	5	11	0.1	23	193.67	10612	ALEA - Mobile Post
15	Dallas	Rural Dallas	S-8	78	88	20	2	10	0.08	14.5	256.32	14045	ALEA - Selma Post

Top 21 Intersections in the South Region with 4 or More Restraint Deficient Crashes

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity Index	Node 1	Route	Location	Agency ORI
1	Jackson	Scottsboro	8	0	4	12.5	642	S-35	NO DESCRIPTION AVAILABLE	Scottsboro Police Department
2	Jackson	Scottsboro	7	0	6	18.57	697	S-2	CR-33 at JOHN T REID PKY	Scottsboro Police Department
3	Lauderdale	Florence	6	0	3	8.33	1671	S-133	AL-13 at AL-133	Florence Police Department
4	Limestone	Rural Limestone	5	1	0	10	8292	S-2	AL-2 at BURGREEN RD	ALEA - Decatur Post
5	Madison	Madison	5	0	2	6	954	5163	HUGHES RD at MILL RD	Madison Police Department
6	Marshall	Guntersville	5	0	2	10	407	S-1	AL-1 at AL-69	Guntersville Police Department
7	Marshall	Albertville	5	0	1	2	358	S-1	AL-1 at E MAIN ST	Albertville Police Department
8	Morgan	Rural Morgan	5	1	3	26	8391	S-53	AL-36 at AL-36 E	ALEA - Decatur Post
9	Colbert	Tuscumbia	4	0	1	7.5	7515	S-13	AL-13 at AL-157	Tuscumbia Police Department
10	Lauderdale	Florence	4	0	2	7.5	9998	S-157	NO DESCRIPTION AVAILABLE	Florence Police Department
11	Limestone	Rural Limestone	4	0	4	25	7546	S-2	AL-2 at JOE WHEELER STATE PKY	ALEA - Decatur Post
12	Limestone	Rural Limestone	4	0	1	5	7838	S-2	AL-2 at CR-99	ALEA - Decatur Post
13	Madison	Rural Madison	4	0	2	10	7570	S-53	AL-53 at JEFF RD	ALEA - Huntsville Post
14	Madison	Madison	4	0	3	7.5	200	1005	AL-2 at WALL TRIANA HWY	Madison Police Department
15	Madison	Huntsville	4	0	1	2.5	2356	S-53	AL-2 at AL-53	Huntsville Police Department
16	Madison	Huntsville	4	0	2	7.5	2157	S-53	DECATUR HWY SR-20 at RIDEOUT RD	Huntsville Police Department
17	Madison	Huntsville	4	0	4	17.5	2065	5626	DRAKE AVE SW at TRIANA BLVD SW	Huntsville Police Department
18	Madison	Huntsville	4	0	1	7.5	3625	S-53	AIRPORT RD SW at S MEMORIAL PKY	Huntsville Police Department
19	Morgan	Decatur	4	1	1	20	2790	S-67	NO DESCRIPTION AVAILABLE	Decatur Police Department
20	Morgan	Decatur	4	0	1	2.5	325	S-67	AL-67 at BELTLINE RD SW	Decatur Police Department
21	Walker	Rural Walker	4	1	2	25	7794	S-5	AL-4 at AL-5	ALEA - Hamilton Post

Top 14 Segments in South Region with 4 or More Restraint Deficient Crashes

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity Index	Node 1	Node 2	Route	Location
1	Baldwin	Gulf Shores	7	0	3	7.14	316	543	S-59	AL-59 at CR-4 and NO DESCRIPTION AVAILABLE
2	Baldwin	Rural Baldwin	7	0	1	2.86	8703	8726	I-10	NO DESCRIPTION AVAILABLE
3	Baldwin	Daphne	6	0	4	15	8703	8841	I-10	NO DESCRIPTION AVAILABLE
4	Baldwin	Rural Baldwin	5	1	4	30	9549	9747	I-65	NO DESCRIPTION AVAILABLE and 45 at I-65
5	Baldwin	Rural Baldwin	5	1	3	20	9210	9107	S-3	AL-3 at AL-59 and AL-3 at AL-59
6	Baldwin	Rural Baldwin	5	1	3	20	8956	8166	I-10	NO DESCRIPTION AVAILABLE
7	Mobile	Rural Mobile	5	2	2	28	11460	9256	1762	CR-96 at W COY SMITH HWY and CR-96 at W COY SMITH HWY
8	Mobile	Rural Mobile	5	2	1	24	8150	8314	I-10	INTERSTATE 10 at Franklin CREEK BRIDGE and MCDONALD LN at OLD PASCAGOULA RD
9	Mobile	Rural Mobile	5	0	2	8	8219	8230	I-10	INTERSTATE 10 at MCDONALD RD BRIDGE and CR-17 at I-10 SERVICE RD
10	Baldwin	Rural Baldwin	4	0	1	2.5	8901	8841	I-10	NO DESCRIPTION AVAILABLE
11	Escambia	Rural Escambia	4	1	2	27.5	7264	7141	S-3	AL-3 at CR-7 and AL-3 at CR-57
12	Mobile	Rural Mobile	4	0	1	7.5	8268	8278	1344	CR-11 at GRAND BAY WILMER RD S and BALLARD RD CO 272 at GRAND BAY-WILMER RD
13	Mobile	Mobile	4	1	1	17.5	127	10560	I-10	I-10 at RIVIERE DU CHIEN RD and INTERSTATE 10 at HIGGINS RD INTERCHANGE
14	Mobile	Saraland	4	0	3	15	317	9410	I-65	NO DESCRIPTION AVAILABLE

Top 15 Mileposted Locations (10 miles in Length) in the South Region with 4 or More Child Restraint Deficient Crashes

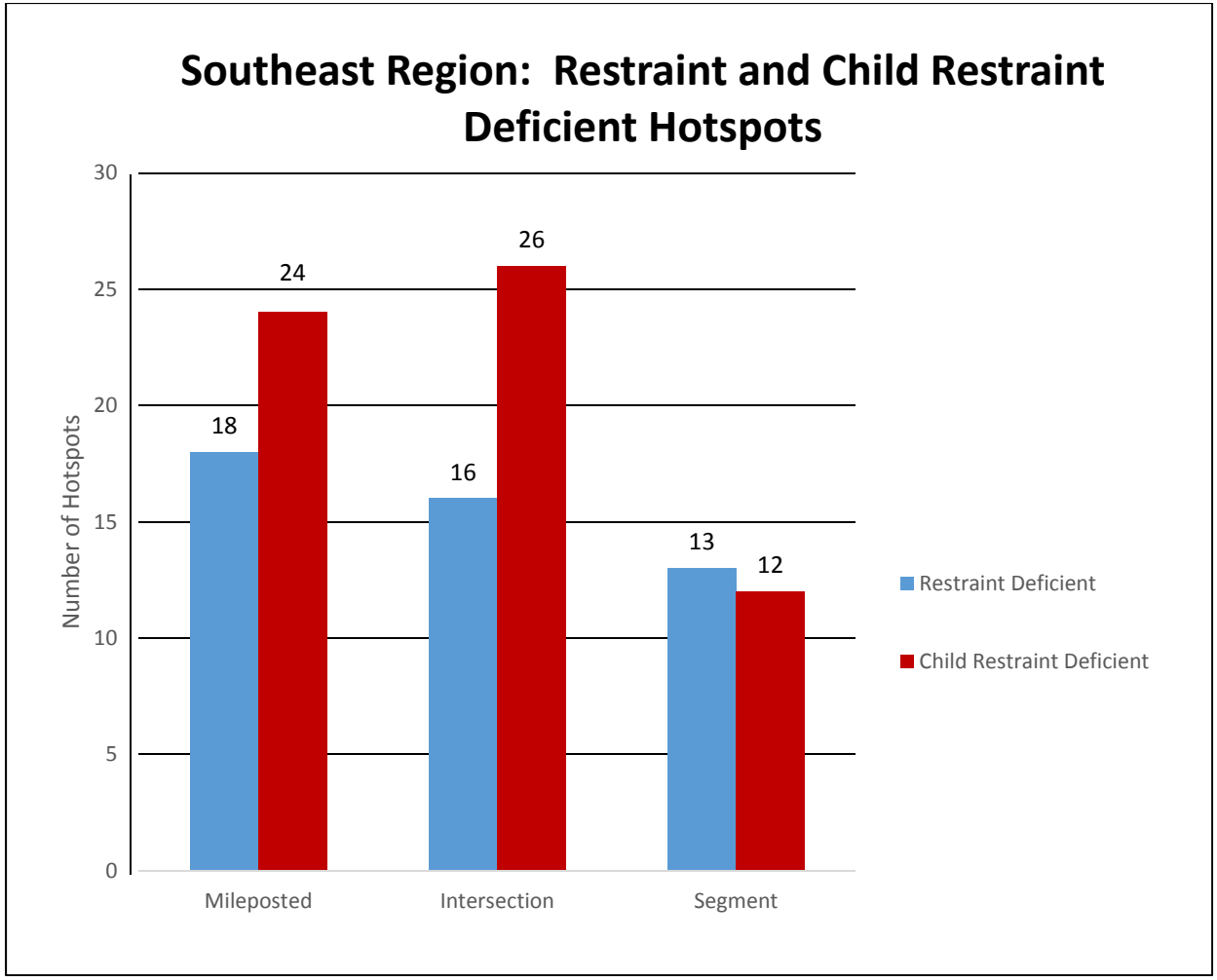
Rank	County	City	Route	Beg MP	End MP	Total Crashes	Fatal Crashes	Injury Crashes	C/MVM	Severity Index	MVM	ADT	Agency ORI
1	Baldwin	Foley	S-59	1	11	19	0	2	0.03	1.05	649.59	35594	Foley Police Department
2	Mobile	Rural Mobile	S-42	5.9	15.9	11	0	2	0.03	3.64	367.04	20112	ALEA - Mobile Post
3	Mobile	Mobile	I-65	1	11	10	0	5	0.01	8	1424.08	78032	Mobile Police Department
4	Baldwin	Gulf Shores	S-182	6.4	16.4	9	0	1	0.03	2.22	262.4	14378	Gulf Shores Police Department
5	Baldwin	Rural Baldwin	I-10	29	39	8	0	3	0.01	8.75	1075.03	58906	ALEA - Mobile Post
6	Mobile	Rural Mobile	S-16	2	12	8	0	1	0.06	2.5	130.32	7141	ALEA - Mobile Post
7	Baldwin	Foley	S-42	61.8	71.8	7	0	1	0.04	2.86	171.19	9380	Foley Police Department
8	Baldwin	Foley	S-59	11.9	21.9	6	0	2	0.01	5	461.09	25265	Foley Police Department
9	Baldwin	Orange Beach	S-180	20.7	30.7	5	0	2	0.03	4	199.75	10945	Orange Beach Police Department
10	Mobile	Mobile	S-163	1	11	5	0	1	0.02	4	281.2	15408	Mobile Police Department
11	Baldwin	Daphne	S-42	37.5	47.5	4	0	0	0.01	0	454.95	24929	Daphne Police Department
12	Dallas	Selma	S-8	82.9	92.9	4	0	1	0.02	7.5	223.31	12236	Selma Police Department
13	Mobile	Mobile	S-42	17.3	27.3	4	0	3	0.01	10	489.01	26795	Mobile Police Department
14	Mobile	Rural Mobile	I-10	4.4	14.4	4	0	0	0	0	900.8	49359	ALEA - Mobile Post
15	Mobile	Mobile	I-10	17.9	27.9	4	1	0	0	12.5	1395.58	76470	Mobile Police Department

Top 21 Intersections in the South Region with 2 or More Child Restraint Deficient Crashes

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity Index	Node 1	Route	Location
1	Baldwin	Foley	3	0	0	0	389	S-59	AL-59 at E FERN AVE
2	Baldwin	Gulf Shores	3	0	0	0	68	S-182	AL-182 at AL-59
3	Dallas	Selma	3	0	2	13.33	336	1233	1ST AVE at LAPSLEY ST
4	Mobile	Mobile	3	0	0	0	1196	6051	COTTAGE HILL RD at UNIVERSITY BLVD S
5	Mobile	Prichard	3	0	2	6.67	2222	1111	NO DESCRIPTION AVAILABLE
6	Baldwin	Gulf Shores	2	0	0	0	86	S-182	AL-182 at E 2ND ST
7	Baldwin	Foley	2	0	1	10	8082	S-42	NO DESCRIPTION AVAILABLE
8	Baldwin	Daphne	2	0	1	5	458	S-16	AL-16 at AL-42
9	Baldwin	Gulf Shores	2	0	0	0	154	S-59	AL-180 at AL-59
10	Mobile	Mobile	2	0	0	0	7118	7101	W I-65 SERVICE RD N at SPRING HILL AVE
11	Mobile	Mobile	2	0	0	0	4669	1346	CR-56 at AIRPORT BLVD
12	Mobile	Mobile	2	0	2	10	4446	5985	S CATHERINE ST at N CATHERINE ST
13	Mobile	Saraland	2	0	1	5	9405	S-158	AL-158 at I-65 SERVICE RD
14	Mobile	Rural Mobile	2	0	0	0	9336	S-16	AL-16 at AL-188
15	Mobile	Mobile	2	0	0	0	7114	S-42	I-65 SERVICE RD E SIDE at MOFFAT RD & INTERCHANGE
16	Mobile	Mobile	2	0	1	5	8525	I-65	AIRPORT BLVD at I-65 SER RD WEST SIDE
17	Mobile	Mobile	2	0	0	0	2139	1346	CR-56 at AIRPORT BLVD
18	Mobile	Saraland	2	0	1	5	9410	I-65	NO DESCRIPTION AVAILABLE
19	Mobile	Mobile	2	0	0	0	635	5253	CODY RD at COTTAGE HILL RD
20	Mobile	Mobile	2	0	1	10	17101	1346	NO DESCRIPTION AVAILABLE
21	Mobile	Mobile	2	0	0	0	3387	S-16	AL-16 at GOVERNMENT BLVD

Top 6 Segment in the South Region with 2 or More Child Restraint Deficient Crashes

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity Index	Node 1	Node 2	Route	Location	Agency ORI
1	Baldwin	Rural Baldwin	3	0	1	6.67	8726	8703	I-10	NO DESCRIPTION AVAILABLE	ALEA - Mobile Post
2	Mobile	Rural Mobile	3	0	0	0	8706	8708	S-42	AL-42 at CR-25 and CR-25 at BLACKWELL NURSERY RD S	ALEA - Mobile Post
3	Baldwin	Foley	2	0	1	5	7300	10173	1124	AL-59 at CR-20 and CR-20 at S JUNIPER ST	Foley Police Department
4	Baldwin	Rural Baldwin	2	1	0	25	9747	9549	I-65	45 at I-65 and NO DESCRIPTION AVAILABLE	ALEA - Mobile Post
5	Mobile	Mobile	2	0	0	0	1999	40130	1346	CR-56 at AIRPORT BLVD and CR-56 at AIRPORT BLVD	Mobile Police Department
6	Mobile	Mobile	2	0	0	0	7991	1990	I-65	BROADWAY DR at W I-65 SERVICE RD N and COLLEGE LN S	Mobile Police Department


Southeast Region: Restraint and Child Restraint Deficient Hotspots
Number of Hotspots
30
25
20
15
10
5
0
18
24
16
26
13
12
Mileposted
Intersection
Segment
Restraint Deficient
Child Restraint Deficient

Top 18 Mileposted Locations (10 Miles in Length) in the Southeast 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	Tuscaloosa	Tuscaloosa	S-6	46.3	56.3	49	3	31	0.08	16.33	618.64	33898	Tuscaloosa Police Department
2	Tuscaloosa	Rural Tuscaloosa	I-59	68.9	78.9	43	5	20	0.05	16.74	820.68	44969	ALEA - Tuscaloosa Post
3	Tuscaloosa	Tuscaloosa	S-215	1.2	11.2	35	0	20	0.13	12	264.84	14512	Tuscaloosa Police Department
4	Tuscaloosa	Rural Tuscaloosa	S-69	135	145	31	0	15	0.07	10	471.49	25835	ALEA - Tuscaloosa Post
5	Montgomery	Montgomery	S-6	153.1	163.1	28	5	15	0.05	20.71	600.44	32901	Montgomery Police Department
6	Houston	Dothan	S-210	0	10	26	1	14	0.05	13.08	536.06	29373	Dothan Police Department
7	Tuscaloosa	Rural Tuscaloosa	I-59	78.9	88.9	26	2	6	0.03	8.08	878.79	48153	ALEA - Tuscaloosa Post
8	Pike	Troy	S-10	164.1	174.1	23	1	12	0.08	13.04	305.85	16759	Troy Police Department
9	Tuscaloosa	Rural Tuscaloosa	I-59	58.7	68.7	23	3	9	0.05	15.22	474.24	25986	ALEA - Tuscaloosa Post
10	Tuscaloosa	Rural Tuscaloosa	I-59	89.2	99.2	23	1	12	0.03	16.09	872.46	47806	ALEA - Tuscaloosa Post
11	Tuscaloosa	Tuscaloosa	S-7	80.1	90.1	22	0	11	0.08	9.55	278.93	15284	Tuscaloosa Police Department
12	Autauga	Rural Autauga	S-3	187.7	197.7	21	1	9	0.1	11.43	214.46	11751	ALEA - Montgomery Post
13	Houston	Dothan	S-12	201.8	211.8	21	0	14	0.05	13.81	457.55	25071	Dothan Police Department
14	Montgomery	Montgomery	I-85	1	11	21	4	12	0.01	20	1546.18	84722	Montgomery Police Department
15	Russell	Phenix City	S-1	104.4	114.4	21	0	13	0.05	16.19	395.51	21672	Phenix City Police Department
16	Tuscaloosa	Northport	S-6	36.1	46.1	21	1	10	0.05	12.86	411.48	22547	Northport Police Department
17	Houston	Dothan	S-1	12.6	22.6	20	0	12	0.06	12	309.43	16955	Dothan Police Department
18	Montgomery	Montgomery	I-65	165.1	175.1	20	4	9	0.02	18.5	1144.8	62729	Montgomery Police Department

Top 16 Intersection in the Southeast Region with 4 or More Restraint Deficient Crashes

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity Index	Node 1	Route	Location	Agency ORI
1	Coffee	Enterprise	6	0	2	3.33	384	S-248	AL-12 at AL-167	Enterprise Police Department
2	Tuscaloosa	Tuscaloosa	6	0	1	3.33	188	S-215	AL-215 at 2ND AVE	University of Alabama Police Department
3	Tuscaloosa	Tuscaloosa	6	0	6	26.67	9140	I-359	71A at I-20	Tuscaloosa Police Department
4	Tuscaloosa	Tuscaloosa	6	0	1	5	65	S-6	AL-6 at 37TH ST E	Tuscaloosa Police Department
5	Montgomery	Montgomery	5	0	4	12	3124	S-8	AL-21 at AL-53	Montgomery Police Department
6	Montgomery	Montgomery	5	0	3	14	4370	S-6	AL-21 at AL-53	Montgomery Police Department
7	Houston	Dothan	4	0	1	5	841	S-12	AL-12 at AL-210	Dothan Police Department
8	Houston	Dothan	4	0	3	15	156	S-210	AL-210 at HODGESVILLE RD	Dothan Police Department
9	Montgomery	Montgomery	4	0	3	7.5	4286	S-8	AL-21 at AL-53	Montgomery Police Department
10	Montgomery	Montgomery	4	0	3	10	3122	S-8	AL-21 at AL-53	Montgomery Police Department
11	Russell	Phenix City	4	0	3	20	1218	S-1	AL-1 at AL-8	Phenix City Police Department
12	Tuscaloosa	Northport	4	0	3	15	386	S-13	AL-13 at AL-69	Northport Police Department
13	Tuscaloosa	Tuscaloosa	4	0	2	15	195	S-6	AL-215 at AL-6	Tuscaloosa Police Department
14	Tuscaloosa	Tuscaloosa	4	0	2	7.5	9844	S-69	AL-69 S at AL-69	Tuscaloosa Police Department
15	Tuscaloosa	Tuscaloosa	4	0	1	2.5	16	S-6	AL-6 at AL-7	Tuscaloosa Police Department
16	Tuscaloosa	Tuscaloosa	4	0	3	10	290	6299	10TH AVE at 15TH ST	Tuscaloosa Police Department

Top 13 Segments in the Southeast Region with 4 or More Restraint Deficient Crashes

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity Index	Node 1	Node 2	Route	Location	Agency ORI
1	Tuscaloosa	Rural Tuscaloosa	10	1	3	11	82	8842	I-59	NO DESCRIPTION AVAILABLE	ALEA - Tuscaloosa Post
2	Tuscaloosa	Rural Tuscaloosa	9	0	5	12.22	7057	9525	I-59	NO DESCRIPTION AVAILABLE and GOLDEN ACRES CIR	ALEA - Tuscaloosa Post
3	Butler	Rural Butler	6	1	3	20	7591	7640	I-65	NO DESCRIPTION AVAILABLE	ALEA - Dothan Post
4	Tuscaloosa	Rural Tuscaloosa	6	1	4	23.33	7712	8268	I-59	NO DESCRIPTION AVAILABLE	ALEA - Tuscaloosa Post
5	Butler	Rural Butler	5	1	1	14	7475	7342	I-65	NO DESCRIPTION AVAILABLE	ALEA - Dothan Post
6	Montgomery	Rural Montgomery	5	1	3	20	7491	7222	S-6	AL-53 at AL-6 and AL-53 at AL-6	ALEA - Montgomery Post
7	Tuscaloosa	Rural Tuscaloosa	5	0	2	8	10502	7433	I-59	NO DESCRIPTION AVAILABLE	ALEA - Tuscaloosa Post
8	Tuscaloosa	Rural Tuscaloosa	5	1	3	26	9140	9525	I-59	NO DESCRIPTION AVAILABLE and GOLDEN ACRES CIR	ALEA - Tuscaloosa Post
9	Tuscaloosa	Rural Tuscaloosa	5	0	1	4	7433	10225	I-59	NO DESCRIPTION AVAILABLE	ALEA - Tuscaloosa Post
10	Montgomery	Montgomery	4	1	1	15	7740	3143	I-85	INTERSTATE 85 at CITY LIMIT and BELL RD at I-85	Montgomery Police Department
11	Tuscaloosa	Rural Tuscaloosa	4	0	3	20	8807	8802	S-69	AL-69 N at CR-46 and AL-69 N at CRABBE RD	ALEA - Tuscaloosa Post
12	Tuscaloosa	Rural Tuscaloosa	4	1	0	12.5	8845	7646	I-59	NO DESCRIPTION AVAILABLE	ALEA - Tuscaloosa Post
13	Tuscaloosa	Rural Tuscaloosa	4	0	2	12.5	82	74	I-59	BRANCH LN at VANCE HIGHLAND DR	ALEA - Tuscaloosa Post

Top 24 Mileposted Locations (10 Miles in Length) in the Southeast 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	Montgomery	Montgomery	S-6	153.7	163.7	14	0	9	0.02	10	593.56	32524	Montgomery Police Department
2	Russell	Phenix City	S-1	112	122	14	0	5	0.03	10	484.19	26531	Phenix City Police Department
3	Tuscaloosa	Tuscaloosa	S-7	76.8	86.8	12	0	4	0.04	3.33	341.93	18736	Tuscaloosa Police Department
4	Tuscaloosa	Northport	S-6	39.5	49.5	11	0	3	0.02	5.45	548.47	30053	Northport Police Department
5	Tuscaloosa	Tuscaloosa	S-6	49.6	59.6	10	0	2	0.02	3	470.01	25754	Tuscaloosa Police Department
6	Houston	Dothan	S-210	0.3	10.3	9	0	2	0.02	3.33	532.63	29185	Dothan Police Department
7	Montgomery	Montgomery	I-85	0.6	10.6	9	0	3	0.01	4.44	1573.48	86218	Montgomery Police Department
8	Russell	Phenix City	S-8	210	218	9	0	4	0.02	7.78	419.15	28709	Phenix City Police Department
9	Autauga	Prattville	S-14	147.5	157.5	8	0	2	0.04	5	218.16	11954	Prattville Police Department
10	Barbour	Eufaula	S-1	63	73	7	0	3	0.02	5.71	361.7	19819	Eufaula Police Department
11	Houston	Dothan	S-1	13.2	23.2	7	0	2	0.02	4.29	289.48	15862	Dothan Police Department
12	Houston	Dothan	S-12	199.2	209.2	7	0	4	0.02	10	457.38	25062	Dothan Police Department
13	Autauga	Prattville	S-3	189.9	199.9	6	1	2	0.03	16.67	184.09	10087	Prattville Police Department
14	Pike	Troy	S-10	160	170	6	1	1	0.04	10	160.11	8773	Troy Police Department
15	Pike	Troy	S-10	170.1	180.1	6	0	2	0.02	5	331.89	18186	Troy Police Department
16	Tuscaloosa	Northport	S-13	194.4	204.4	6	0	1	0.01	3.33	524.63	28747	Northport Police Department
17	Houston	Dothan	S-53	16.9	26.9	5	0	0	0.01	0	344.91	18899	Dothan Police Department
18	Houston	Dothan	S-210	11.9	14	5	0	2	0.05	4	100.94	26338	Dothan Police Department
19	Montgomery	Montgomery	I-65	161.9	171.9	5	0	1	0.01	2	948.12	51952	Montgomery Police Department
20	Montgomery	Montgomery	S-8	137.8	147.8	5	0	4	0.01	10	827.69	45353	Montgomery Police Department
21	Tuscaloosa	Rural Tuscaloosa	S-69	134	144	5	0	3	0.01	12	423.11	23184	ALEA - Tuscaloosa Post
22	Coffee	Enterprise	S-88	0.9	4	4	0	0	0.09	0	43.66	7718	Enterprise Police Department
23	Pike	Troy	S-87	54	64	4	0	1	0.02	2.5	210.55	11537	Troy Police Department
24	Tuscaloosa	Rural Tuscaloosa	I-59	62.8	72.8	4	0	0	0.01	0	567.32	31086	ALEA - Tuscaloosa Post

Top 26 Intersections in the Southeast Region with 2 or More Child Restraint Deficient Crashes

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity Index	Node 1	Route	Location	Agency ORI
1	Montgomery	Montgomery	3	0	1	3.33	4286	8058	AL-21 at AL-53	Montgomery Police Department
2	Montgomery	Montgomery	3	0	2	6.67	3124	I-85	AL-21 at AL-53	Montgomery Police Department
3	Russell	Phenix City	3	0	2	16.67	1511	S-1	SR 8/US 80 at SR 1/US 431	Phenix City Police Department
4	Tuscaloosa	Tuscaloosa	3	0	1	6.67	588	1185	ALA 6 MC FARLAND BLVD at RIVER RD 1185	Tuscaloosa Police Department
5	Tuscaloosa	Tuscaloosa	3	0	1	3.33	16	S-6	AL-6 at AL-7	Tuscaloosa Police Department
6	Butler	Greenville	2	0	1	10	478	S-185	NO DESCRIPTION AVAILABLE	Greenville Police Department
7	Dale	Ozark	2	0	1	10	243	S-53	AL-53 at CLAYBANK AVE	Ozark Police Department
8	Houston	Dothan	2	0	1	5	159	S-210	AL-210 at MAULDIN DR	Dothan Police Department
9	Houston	Dothan	2	0	2	20	1247	S-12	AL-12 at ENTERPRISE HWY	Dothan Police Department
10	Houston	Dothan	2	0	0	0	841	S-12	AL-12 at AL-210	Dothan Police Department
11	Montgomery	Montgomery	2	0	0	0	4402	S-6	NO DESCRIPTION AVAILABLE	Montgomery Police Department
12	Montgomery	Montgomery	2	0	1	5	4661	S-6	AL-21 at AL-6	Montgomery Police Department
13	Montgomery	Montgomery	2	0	0	0	4447	S-6	AL-21 at AL-6	Montgomery Police Department
14	Montgomery	Montgomery	2	0	1	10	4449	S-6	AL-21 at AL-6	Montgomery Police Department
15	Montgomery	Montgomery	2	0	1	5	4718	I-65	INTERSTATE 65 at SOUTH BLVD INTER-CHANGE	Montgomery Police Department
16	Montgomery	Montgomery	2	0	1	5	8054	8126	ATLANTA HWY SR-8 US-80 at I-85 IN-TERCHANGE	Montgomery Police Department
17	Montgomery	Montgomery	2	0	1	5	10785	S-8	AL-21 at AL-53	Montgomery Police Department
18	Russell	Phenix City	2	0	0	0	642	S-1	AL-1 at AL-8	Phenix City Police Department
19	Russell	Phenix City	2	0	1	15	884	S-1	AL-1 at AL-8	Phenix City Police Department
20	Russell	Phenix City	2	0	0	0	1054	5397	AIRPORT RD at STADIUM DR	Phenix City Police Department
21	Tuscaloosa	Tuscaloosa	2	0	0	0	456	6299	AL-13 at AL-7	Tuscaloosa Police Department
22	Tuscaloosa	Northport	2	0	2	15	921	1365	CR-47 at MARTIN LUTHER KING JR BLVD	Northport Police Department
23	Tuscaloosa	Northport	2	0	0	0	1251	S-6	AL-6 at CR-47	Northport Police Department

Top 26 Intersections in the Southeast Region – Continued

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity Index	Node 1	Route	Location	Agency ORI
24	Tuscaloosa	Tuscaloosa	2	0	1	10	12172	S-7	AL-69 at NO DESCRIPTION AVAILABLE	Tuscaloosa Police Department
25	Tuscaloosa	Tuscaloosa	2	0	1	10	593	S-6	3RD AVE N at MCFARLAND BLVD N	Tuscaloosa Police Department
26	Tuscaloosa	Tuscaloosa	2	0	2	15	265	5168	13TH AVE E at 15TH ST E	Tuscaloosa Police Department

Top 12 Segments in the Southeast Region with 2 or More Child Restraint Deficient Crashes

Rank	County	City	Total Crashes	Fatal Crashes	Injury Crashes	Severity Index	Node 1	Node 2	Route	Location	Agency ORI
1	Montgomery	Montgomery	3	0	1	6.67	7740	3143	I-85	INTERSTATE 85 at CITY LIMIT and BELL RD at I-85	Montgomery Police Department
2	Autauga	Prattville	2	0	0	0	691	692	S-14	AL-14 at BROOKHAVEN DR and AL-14 at FAIRVIEW AVE	Prattville Police Department
3	Autauga	Rural Autauga	2	0	0	0	7541	8175	I-65	NO DESCRIPTION AVAILABLE	ALEA - Montgomery Post
4	Houston	Dothan	2	0	1	5	1271	1256	S-210	KENT DR at ROSS CLARK CIR and AL-12 at ENTERPRISE HWY	Dothan Police Department
5	Houston	Dothan	2	0	0	0	1949	1928	S-210	AL-53 at Montgomery HWY and MEADOWBROOK DR at ROSS CLARK CIR	Dothan Police Department
6	Montgomery	Montgomery	2	0	1	5	3014	3095	I-85	ANN ST at I-85 INTERCHANGE at Perry HILL RD INTERCHANGE	Montgomery Police Department
7	Montgomery	Montgomery	2	0	0	0	4402	4405	S-6	NO DESCRIPTION AVAILABLE and AL-21 at AL-6	Montgomery Police Department
8	Montgomery	Montgomery	2	0	1	5	4370	4405	S-6	AL-21 at AL-53 and AL-21 at AL-6	Montgomery Police Department
9	Pike	Troy	2	0	0	0	675	110	S-10	NO DESCRIPTION AVAILABLE and AL-10 at AL-53	Troy Police Department
10	Pike	Troy	2	0	1	5	47	48	S-87	AL-10 at AL-53 and AL-87 at ELBA HWY	Troy Police Department
11	Tuscaloosa	Tuscaloosa	2	0	1	5	91	89	S-7	AL-7 at CYPRESS CREEK AVE E and AL-7 at 18TH AVE	Tuscaloosa Police Department
12	Tuscaloosa	Tuscaloosa	2	0	0	0	9275	9269	S-215	AL-7 at 66TH AVE E and AL-7 at CHURCH ST	Tuscaloosa Police Department

Attachment B – Restraint Issues Problem ID

B1. Introduction

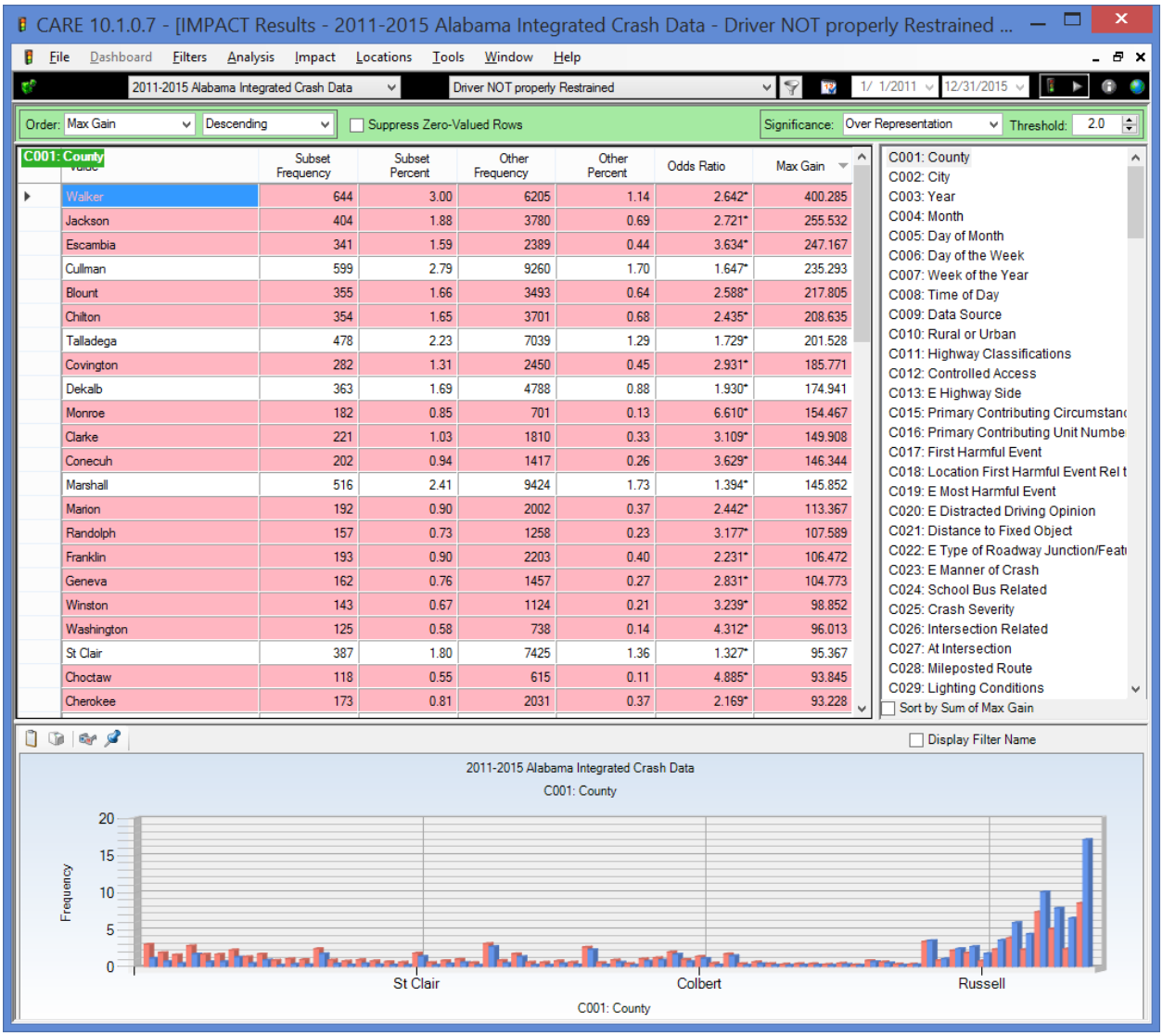
The goal of this problem identification is to assure that the restraint enforcement program considered by the state throughout FY 2017 is completely evidence-based, the evidence being derived from past data obtained from crash records.

A problem identification study was conducted based on data that were consistent with that used in the FY 2016 HSP, calendar years 2011-2015. This study was updated using five years of data (CY 2011 through 2015). CARE is used to display 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 proper restraint use by all passengers in the vehicle.

B2. Geographical Factors

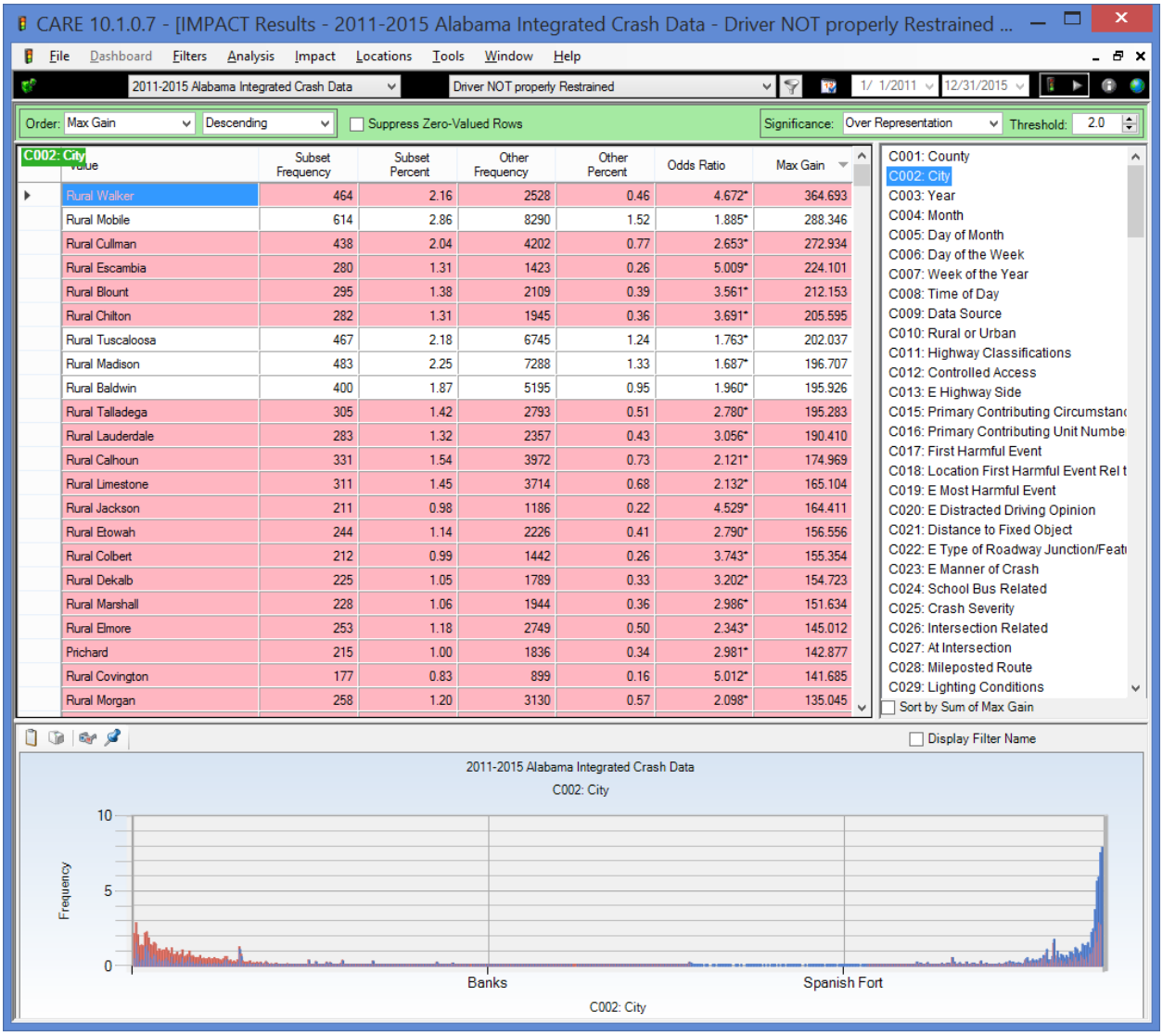
Geographical factors were analyzed in order to determine which areas are overrepresented for crashes involving drivers who did not use restraints. In order to determine these problem areas, geographical factors were analyzed in the following categories: county, city, rural versus urban, highway classification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

B2.1 County



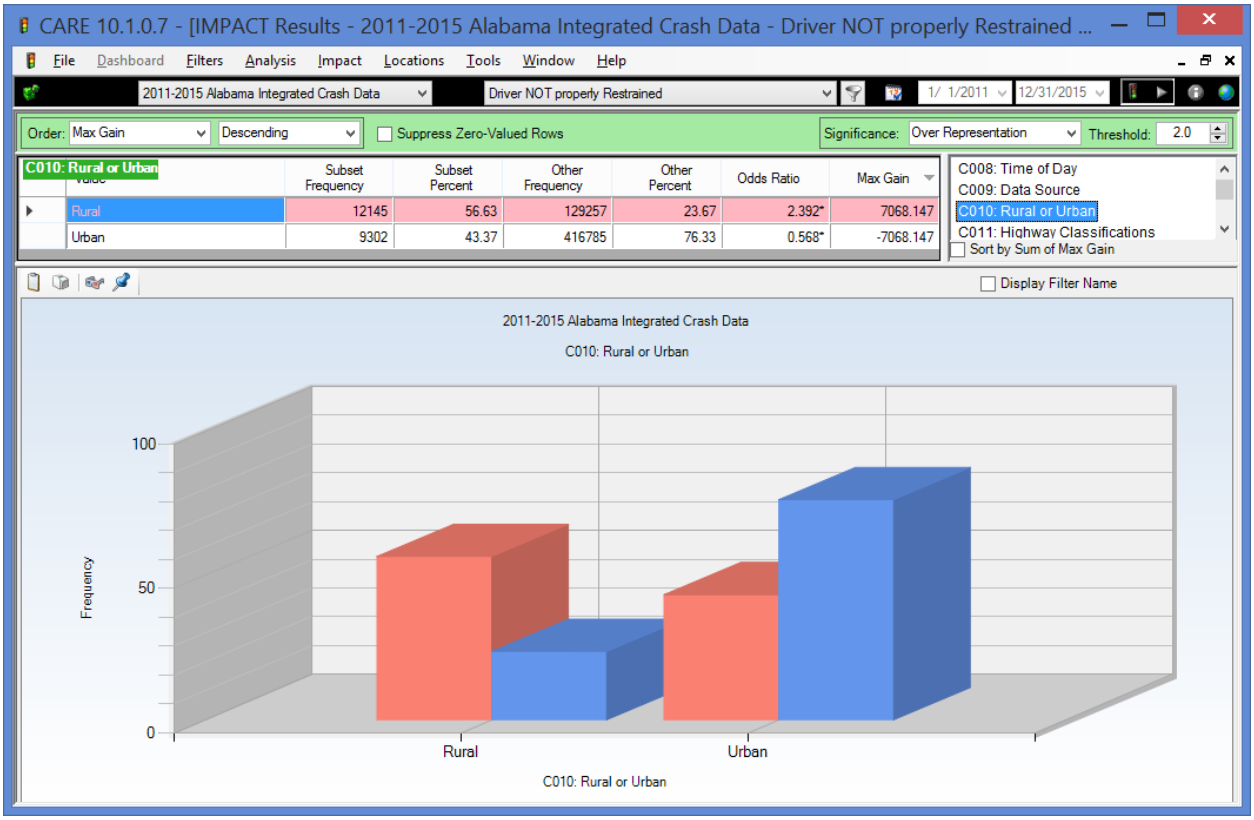
The counties with the greatest overrepresentation factors for crashes in which the driver failed to use restraints include Walker, Jackson, Escambia, Cullman and Blount. The more populated urbanized counties generally showed the highest restraint use.

B2.2 City



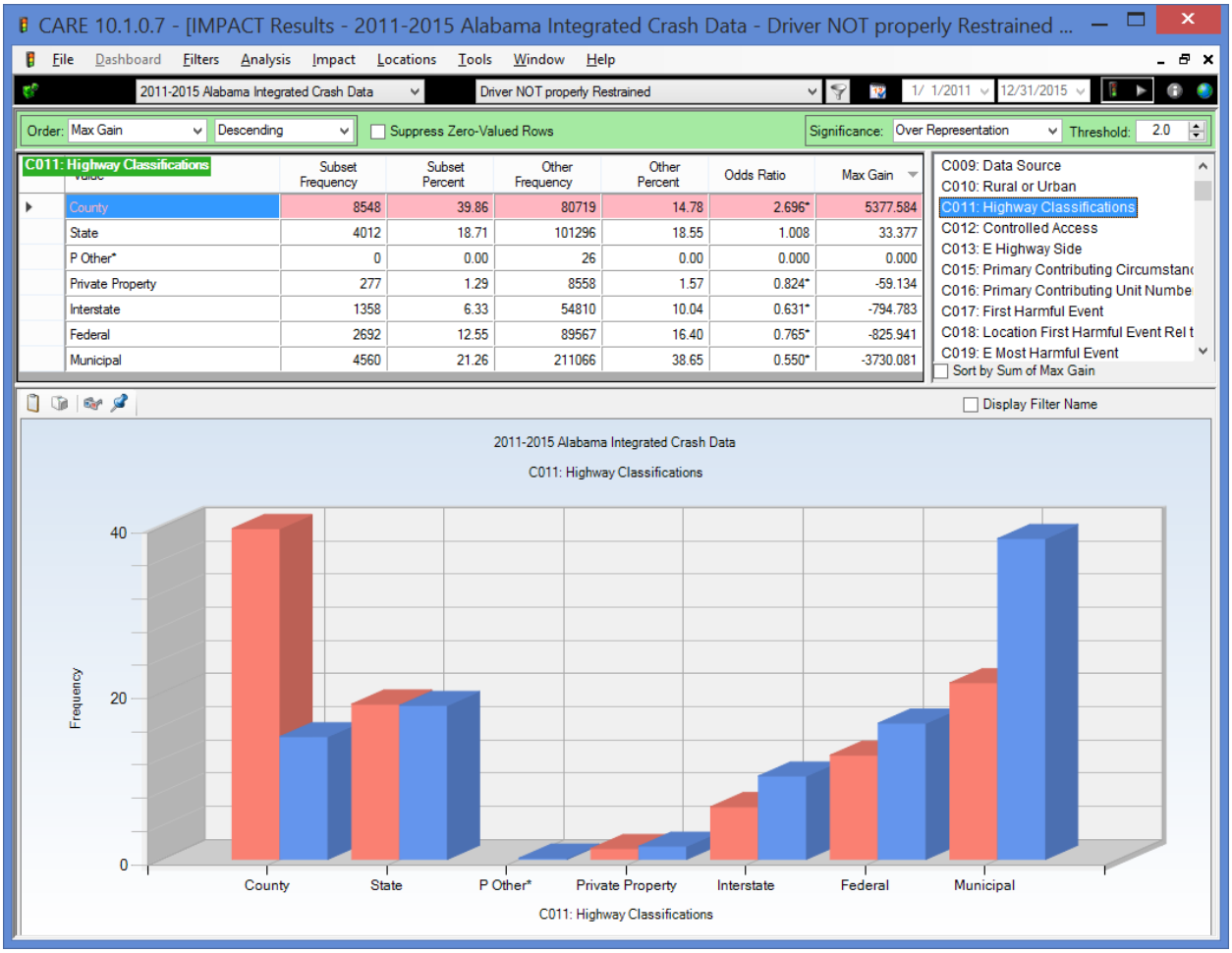
Overrepresented cities and county rural areas listed in the order of maximum gain are: rural Walker, rural Mobile, rural Cullman, and rural Escambia. Almost all of the overrepresentation occurs in the rural county areas. The most under represented cities in order of "best" first are as follows: Birmingham,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

B2.3 Rural/Urban



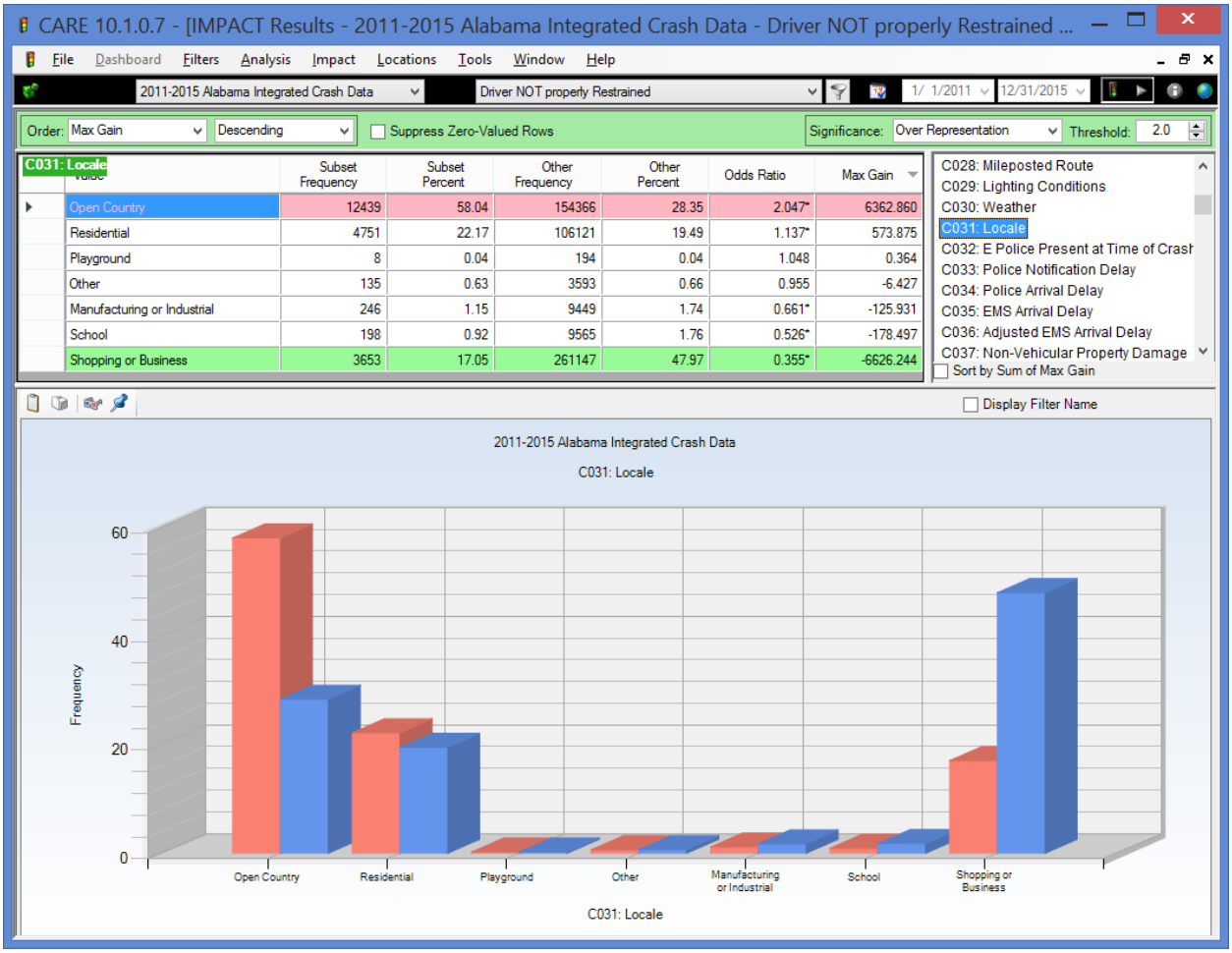
As expected from the city results above, the number of crashes involving drivers who use no restraints is greatly overrepresented in rural areas. The increased number of crashes in which restraints were used in urban areas might be attributed to greater police presence, newer vehicles, public information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

B2.4 Highway Classification



Crash incidents in which no restraints were used are greatly overrepresented on county highways with nearly 2.7 times the expected number of crashes. The proportion of crashes in which restraints were used is greater in state, interstate, federal, and municipal highway areas.

B2.5 Locale

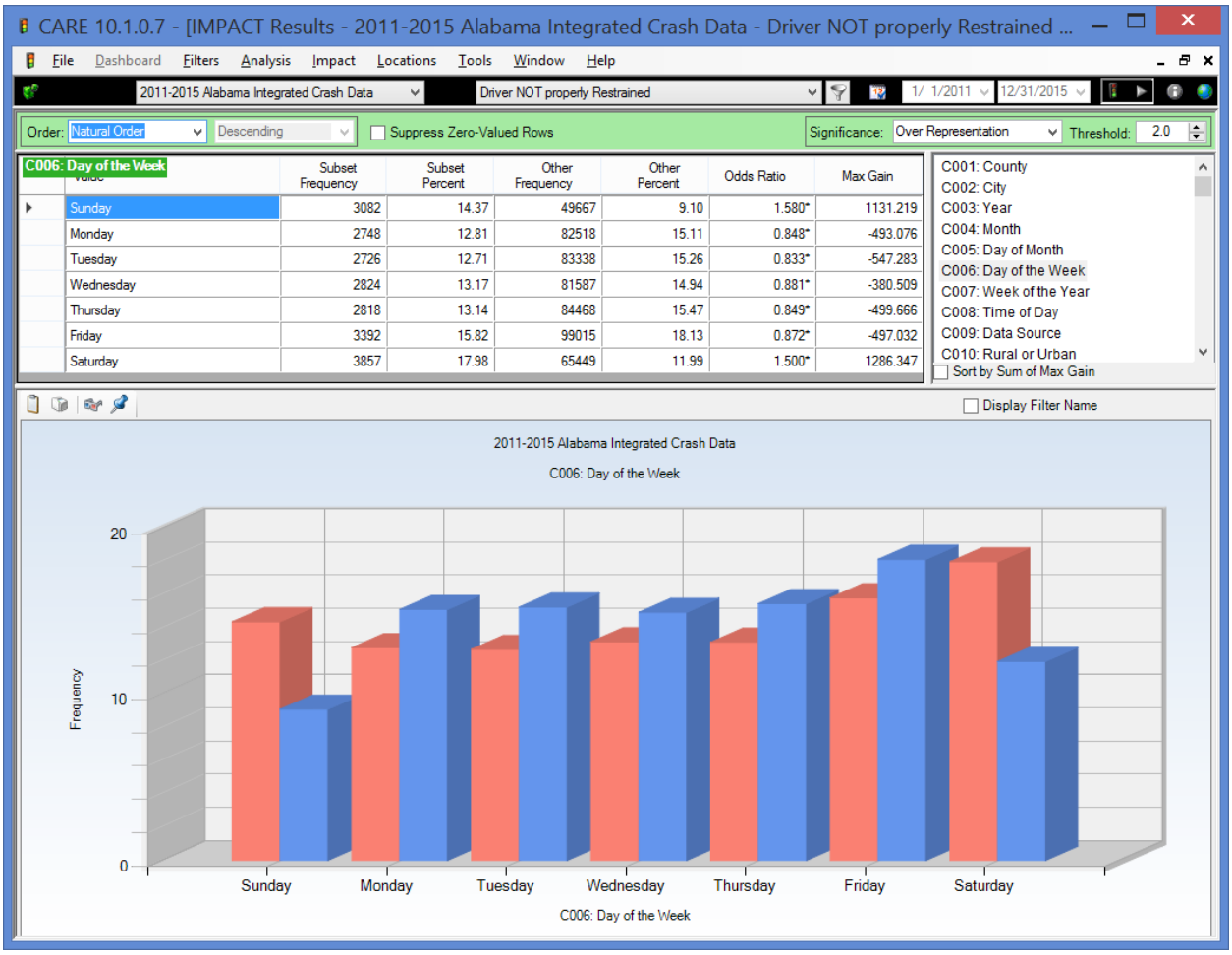


The crash incidents involving no restraints are overrepresented in open country areas. However, school and shopping areas are significantly underrepresented, indicating that crashes in these areas generally involve drivers who were much more apt to use their restraints.

B3. Time Factors

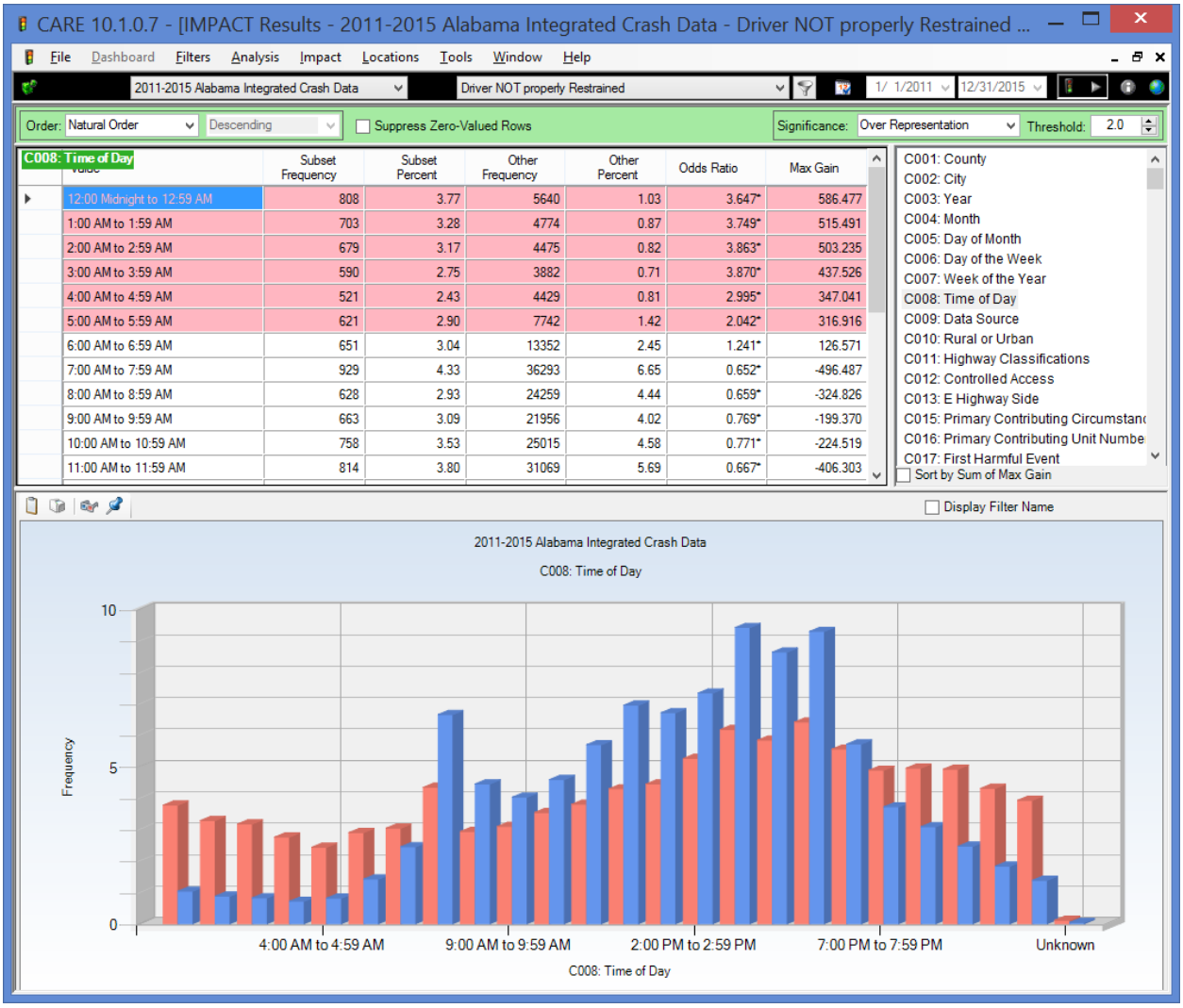
Time factors were also analyzed in several different categories to determine overrepresentation for day of the week and time of day. Analysis of these time factors allows for the determination of particular days of week or times of day in which more crashes occur with drivers who did not use restraints, and thus, those times in which enforcement would be more impactful.

B3.1 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. Both Saturday and Sunday had about 1.5 times the expected number of crashes involving causal drivers who failed to use restraints.

B3.2 Time of Day

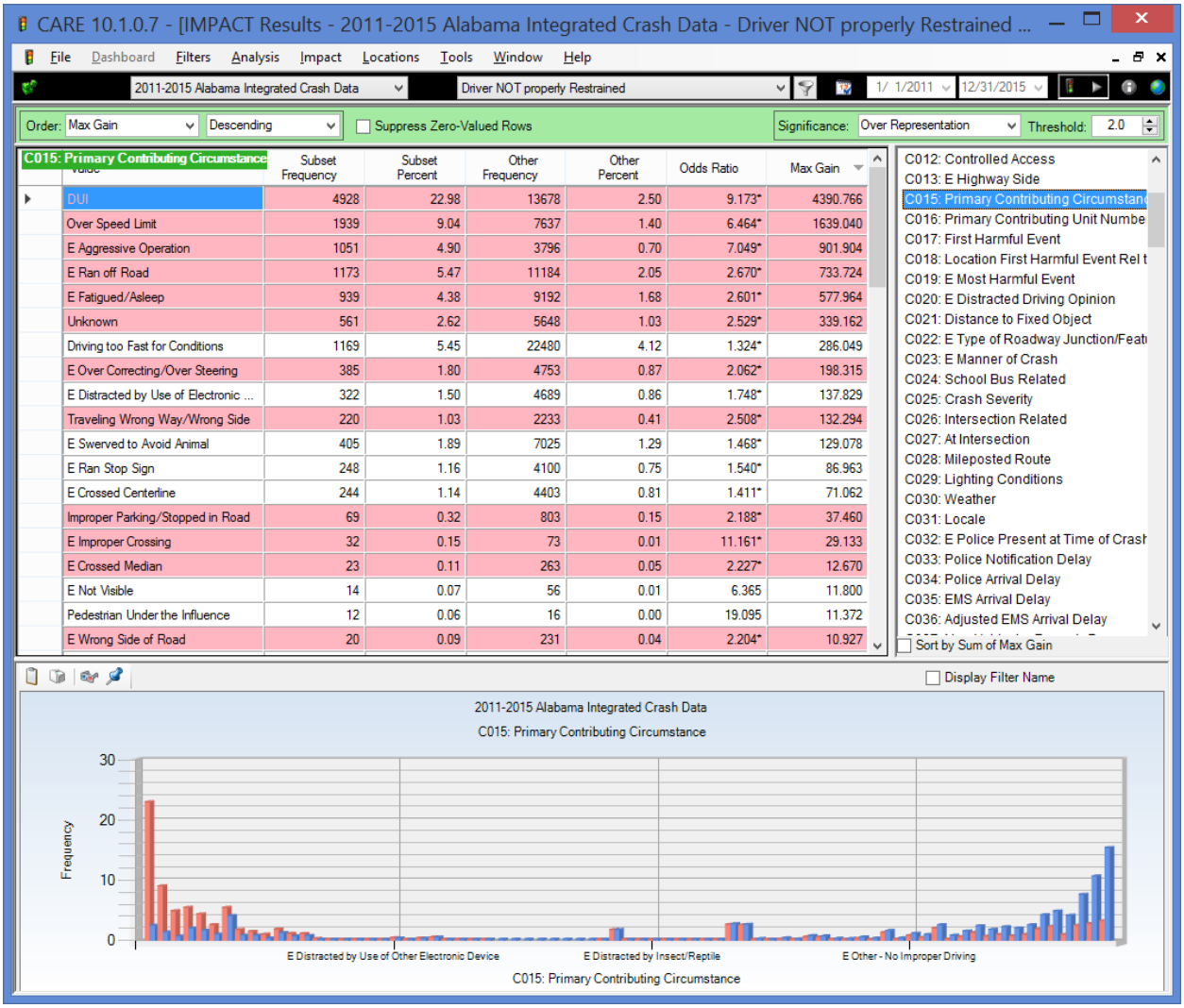


The relative probability of crashes involving no restraints is generally greater before and after standard work and rush hours. Overrepresentation peaks during the 12 PM to 5 AM period and then tapers off, falling back below crashes involving causal drivers who use restraints in the 7 AM to 8 AM time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

B4 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 overrepresentation 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.

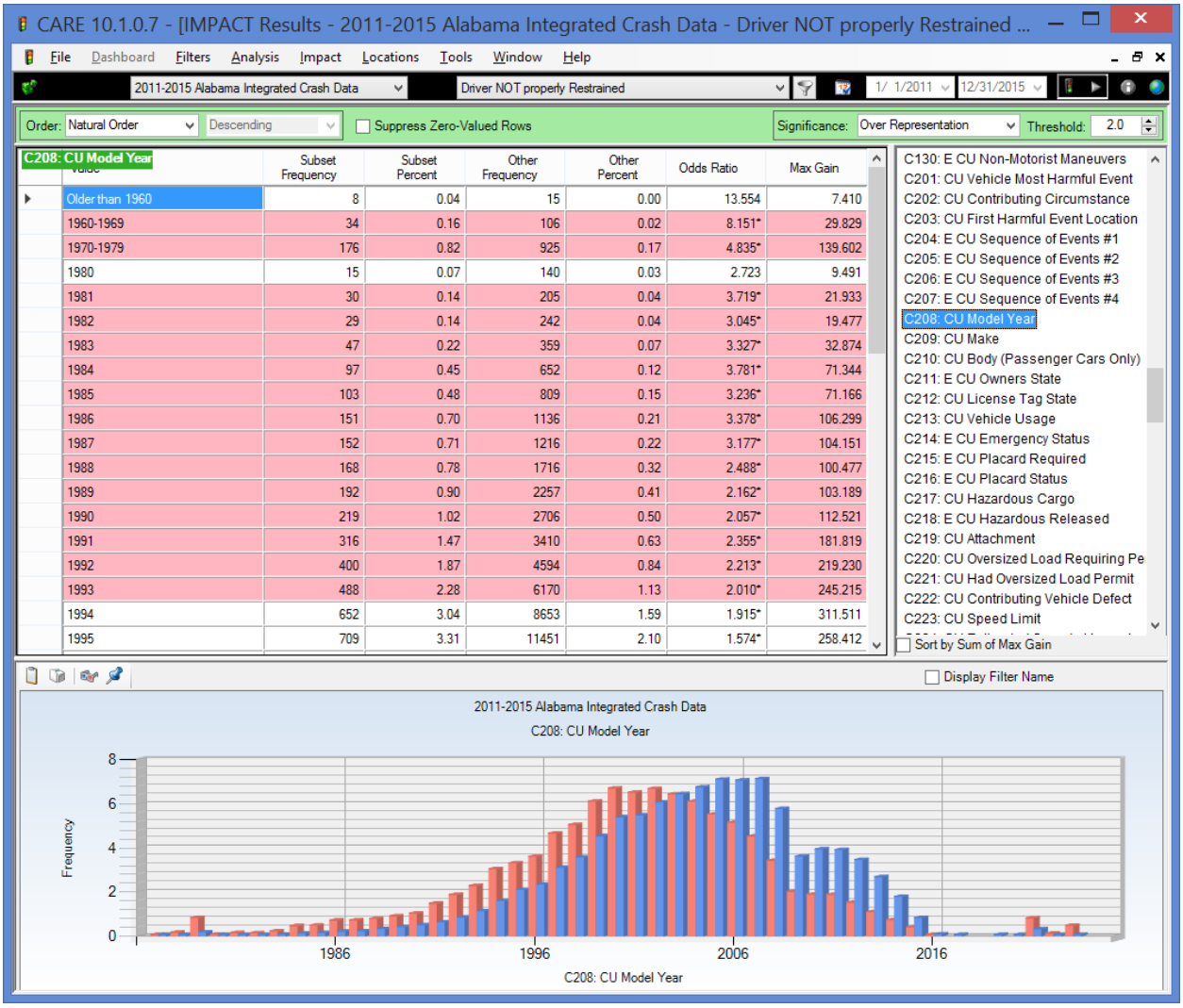
B4.1 Primary Contributing Circumstance



Overrepresentation 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, aggressive operation, running off the road and fatigued/asleep. 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

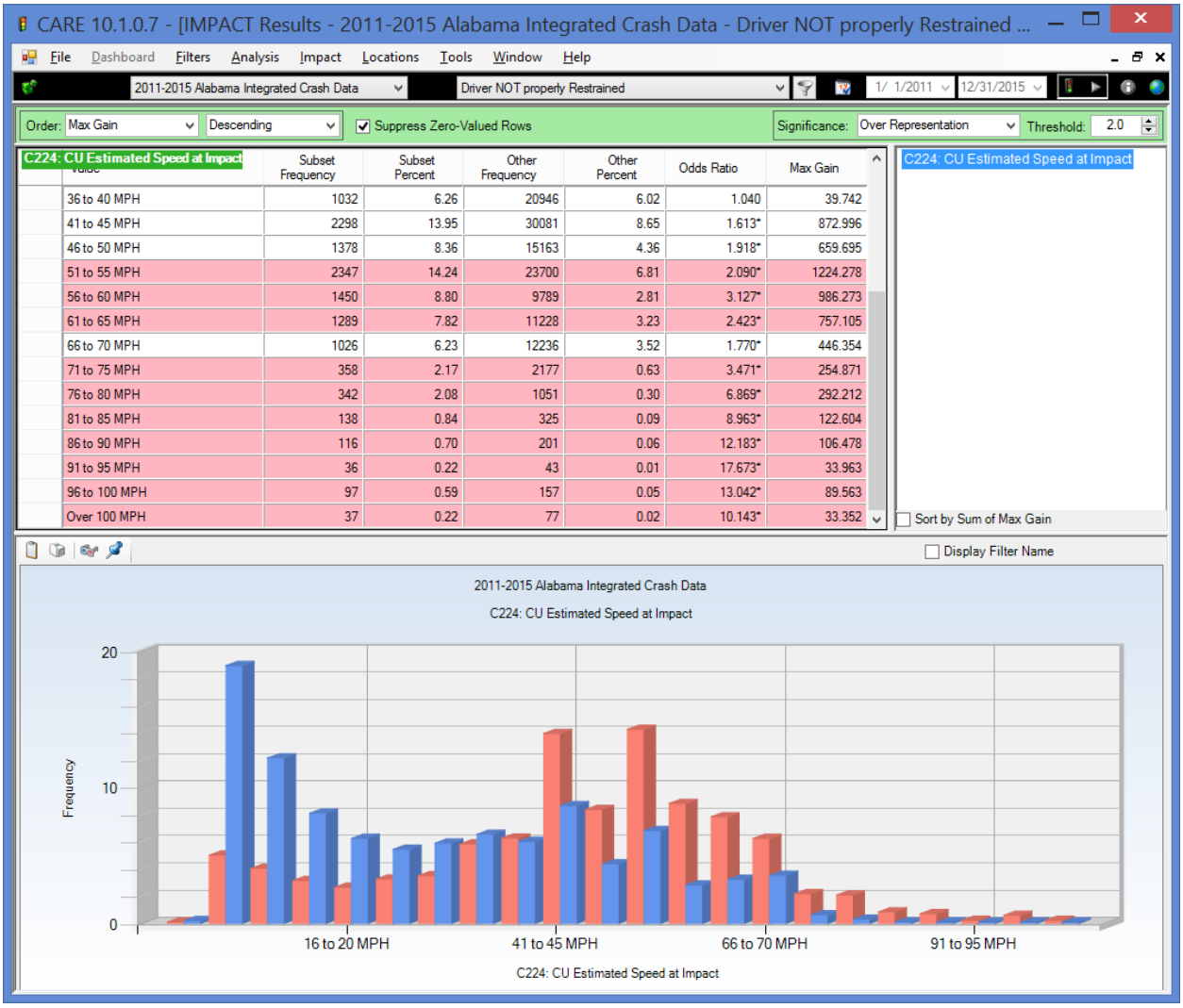
the result of risk acceptance in general, and the inability or unwillingness of those who are impaired to consider the life-saving benefits of restraint use. Additionally, analysis of other contributing circumstances presented similar risk-taking behaviors associated with crashes in which causal drivers did not use restraints. In the 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.

B4.2 Vehicle Age – Model Year



Crashes attributed to drivers who used no restraints are greatly overrepresented in vehicles with model years 1960-2002. This might be attributed to the lack of standard safety restraints in the older model vehicles. Vehicles with model years 2003 and later 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.

B4.3 Speed at Impact

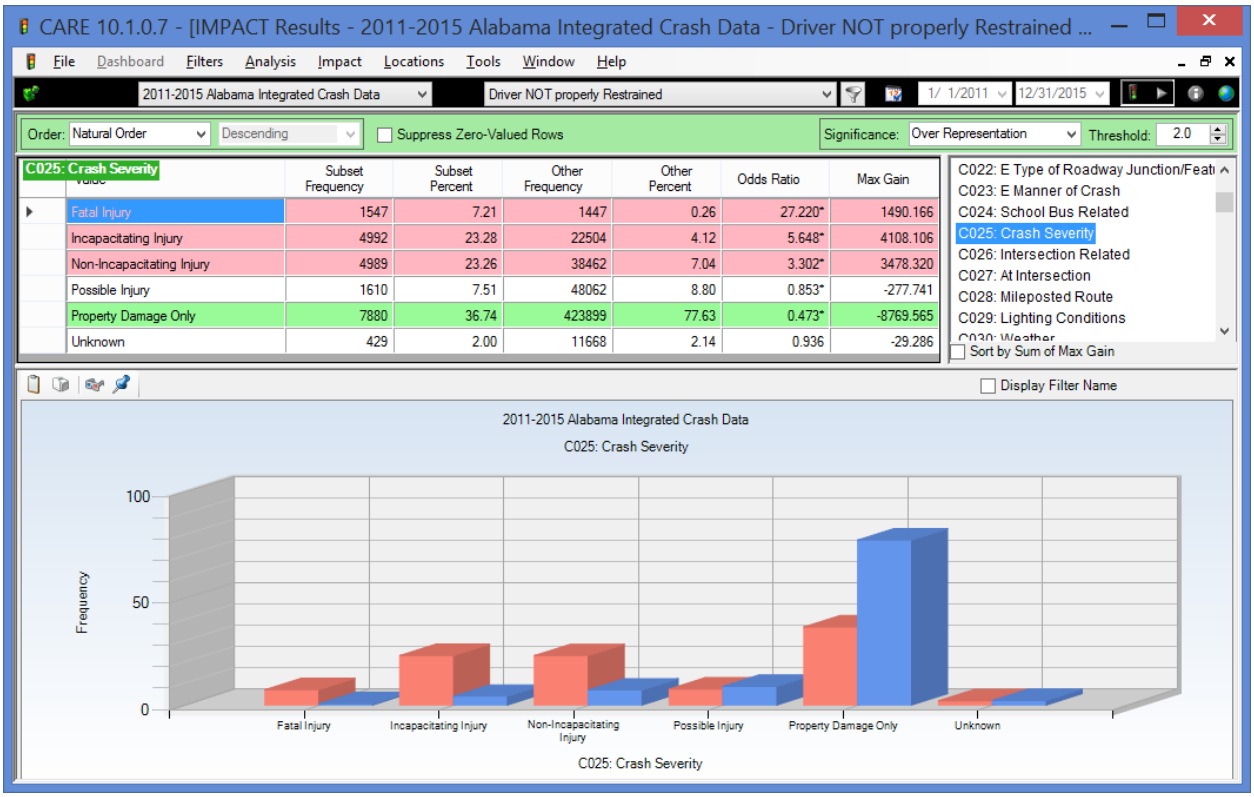


Speed at impact for crashes in which drivers failed to use restraints is overrepresented in the range of 45-100 MPH. This indicates that crashes in which restraints were not used consistently occur at higher speeds than crashes in which restraints were used by the causal driver. This confirms the rural-urban 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 on page 181.

B5 Severity Factors

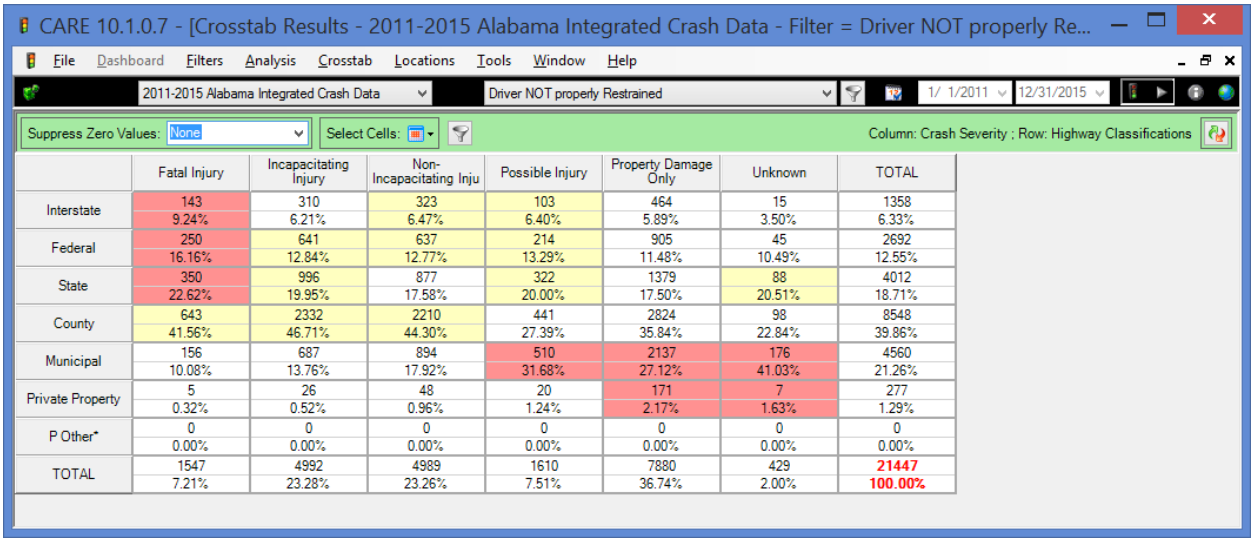
Severity factors were analyzed in several different categories to determine to what extent the use of restraints affects the safety of the drivers. These factors analyzed include crash severity, crash severity in urban versus rural areas, number injured, number killed, driver ejection status, and driver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

B5.1 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 employed the use of restraints.

B5.2 Crash Severity by Highway Classification for Driver Not Restrained

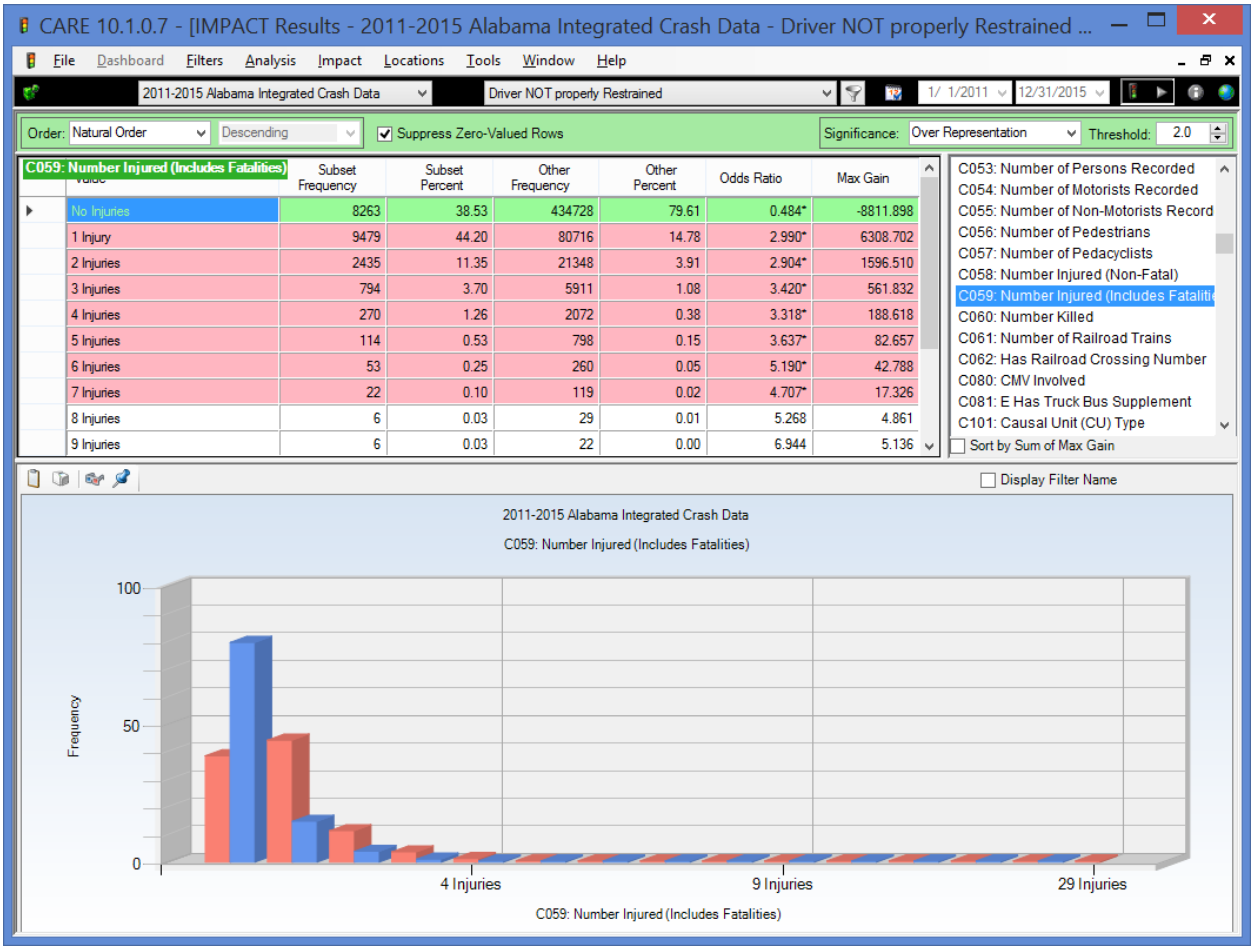


	Fatal Injury	Incapacitating Injury	Non-Incapacitating Inju	Possible Injury	Property Damage Only	Unknown	TOTAL
Interstate	143 9.24%	310 6.21%	323 6.47%	103 6.40%	464 5.89%	15 3.50%	1358 6.33%
Federal	250 16.16%	641 12.84%	637 12.77%	214 13.29%	905 11.48%	45 10.49%	2692 12.55%
State	350 22.62%	996 19.95%	877 17.58%	322 20.00%	1379 17.50%	88 20.51%	4012 18.71%
County	643 41.56%	2332 46.71%	2210 44.30%	441 27.39%	2824 35.84%	98 22.84%	8548 39.86%
Municipal	156 10.08%	687 13.76%	894 17.92%	510 31.68%	2137 27.12%	176 41.03%	4560 21.26%
Private Property	5 0.32%	26 0.52%	48 0.96%	20 1.24%	171 2.17%	7 1.63%	277 1.29%
P Other*	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
TOTAL	1547 7.21%	4992 23.28%	4989 23.26%	1610 7.51%	7880 36.74%	429 2.00%	21447 100.00%

Analysis of crash severity by highway classification for crashes in which the causal driver did not use restraints shows that fatal injuries are overrepresented on Interstate, Federal and State roadways. Possible injuries and Property Damage Only were overrepresented on municipal highways.

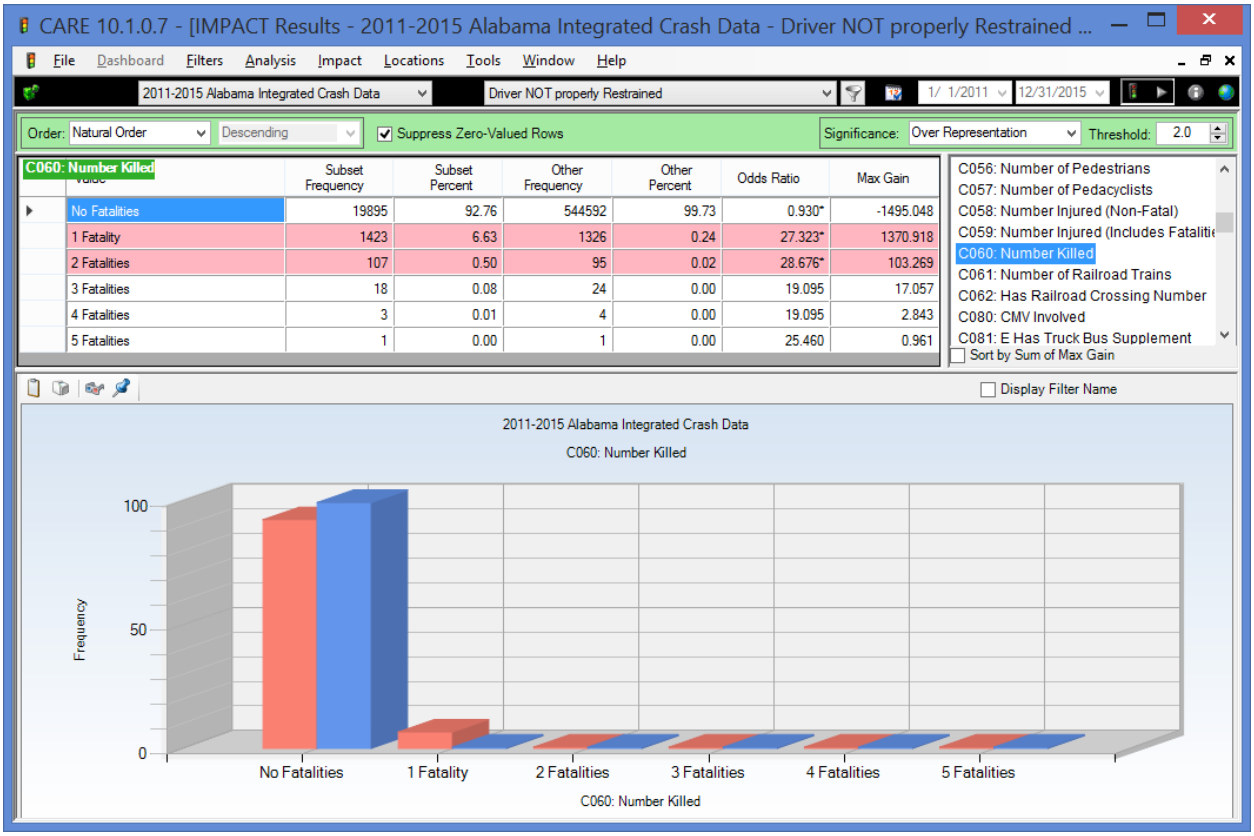
In a comparison of crash severity in rural versus urban areas for causal drivers who did not use restraints, possible injuries were overrepresented in urban areas. However, in rural areas, fatal injuries crashes with causal drivers who did not use restraints were significantly overrepresented, comprising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

B5.3 Number Injured



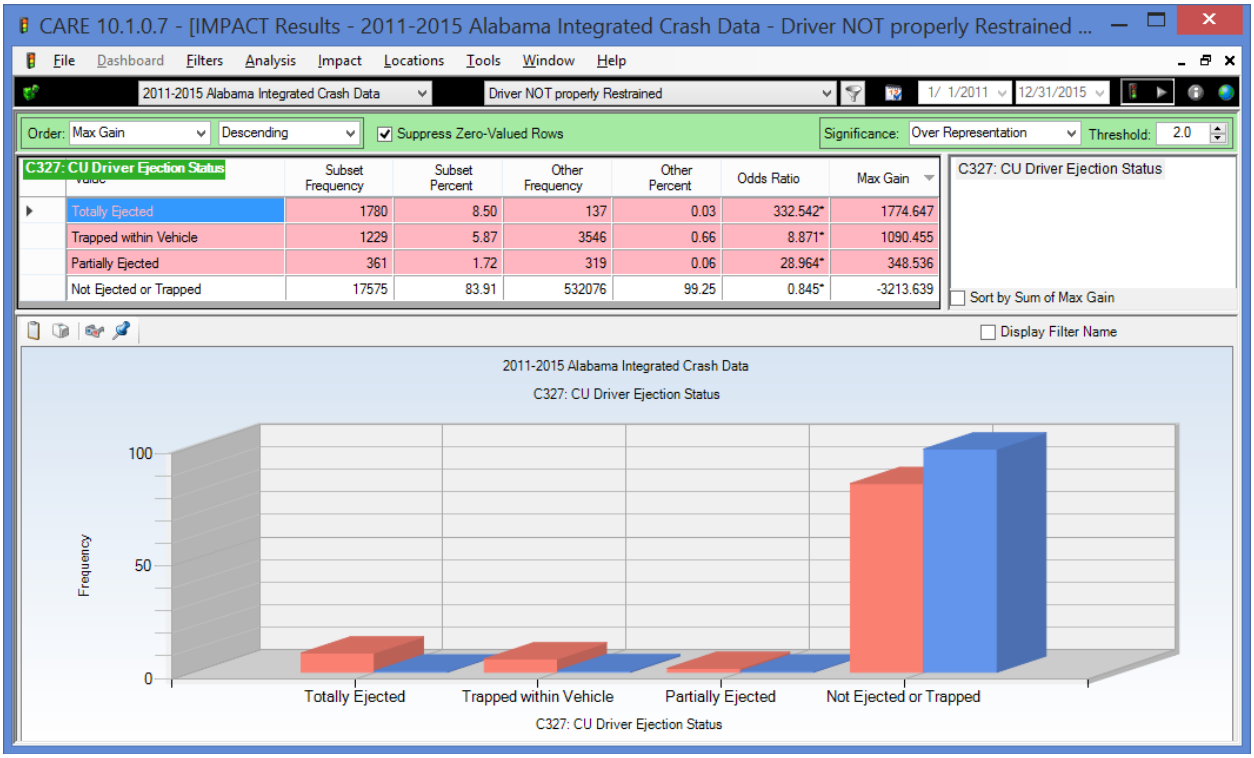
The proportion of injuries (including fatalities) in crashes in which no restraints were used is overrepresented by more than a factor of two when there were 1 to 7 injuries per crash. These results show quite plainly that crashes in which the causal driver was not restrained are much more severe in 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.

B5.4 Number Killed



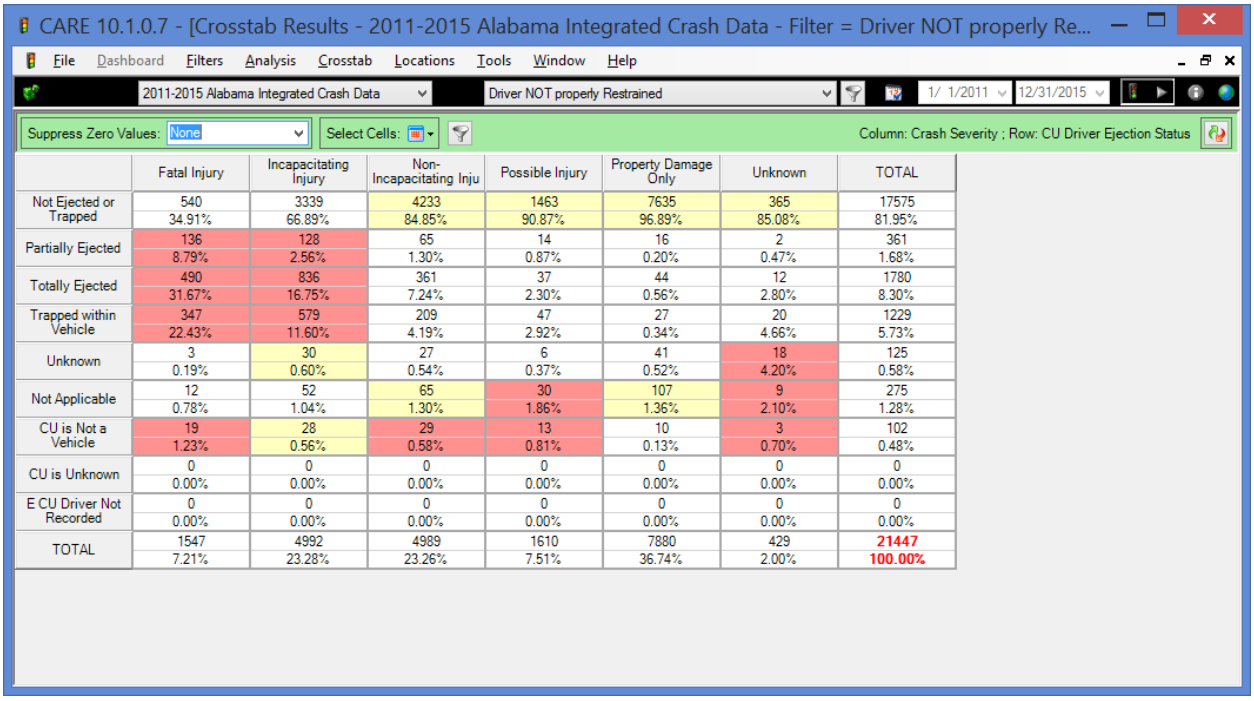
The proportion of fatalities in general as well as the proportion of multiple fatality crashes is dramatically overrepresented when restraints are not used.

B5.5 Driver Ejection Status



Totally Ejected is overrepresented by a factor of over 300 in crashes in which the driver did not use restraints, indicating the cause for many fatalities. Partial ejection, total ejection, or entrapments in the vehicle are expected in crashes in which safety equipment is not properly utilized.

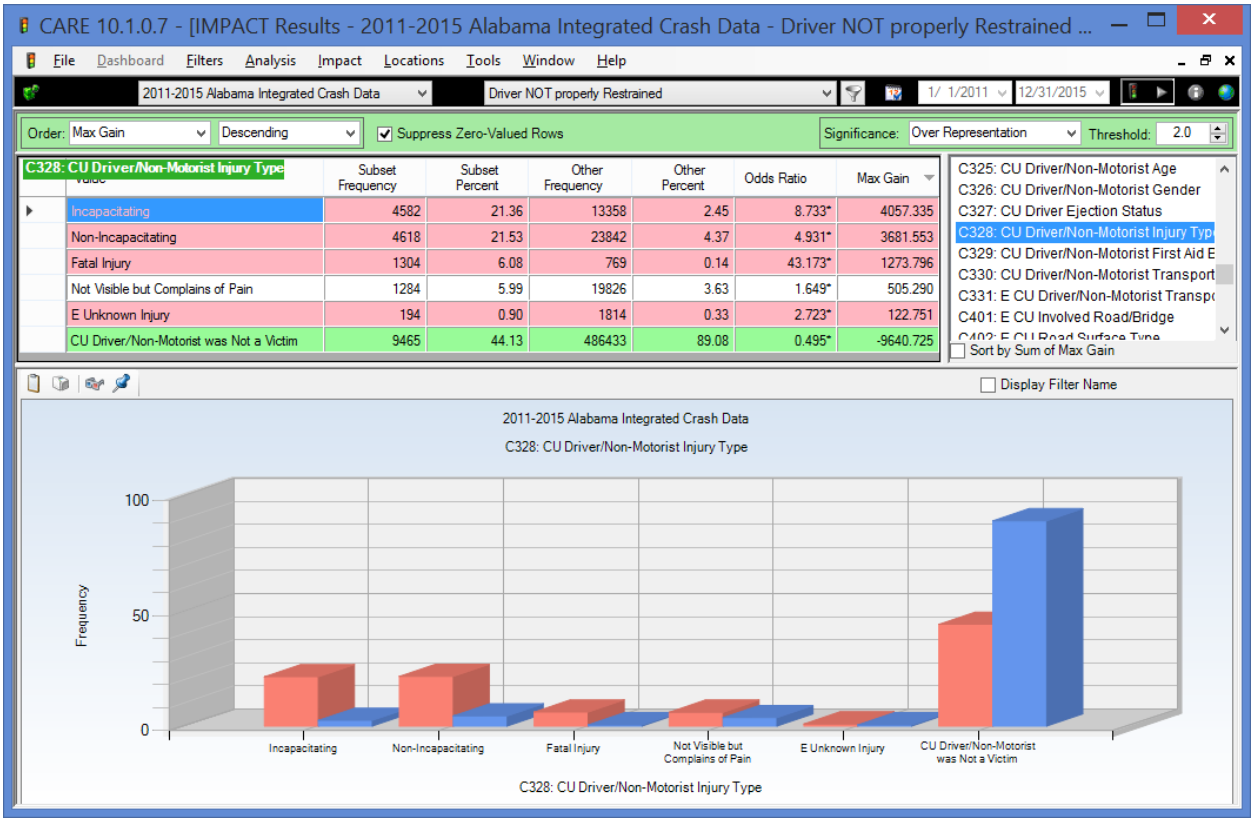
B5.6 Ejection Status by Severity



	Fatal Injury	Incapacitating Injury	Non-Incapacitating Inju	Possible Injury	Property Damage Only	Unknown	TOTAL
Not Ejected or Trapped	540 34.91%	3339 66.89%	4233 84.85%	1463 90.87%	7635 96.89%	365 85.08%	17575 81.95%
Partially Ejected	136 8.79%	128 2.56%	65 1.30%	14 0.87%	16 0.20%	2 0.47%	361 1.68%
Totally Ejected	490 31.67%	836 16.75%	361 7.24%	37 2.30%	44 0.56%	12 2.80%	1780 8.30%
Trapped within Vehicle	347 22.43%	579 11.60%	209 4.19%	47 2.92%	27 0.34%	20 4.66%	1229 5.73%
Unknown	3 0.19%	30 0.60%	27 0.54%	6 0.37%	41 0.52%	18 4.20%	125 0.58%
Not Applicable	12 0.78%	52 1.04%	65 1.30%	30 1.86%	107 1.36%	9 2.10%	275 1.28%
CU is Not a Vehicle	19 1.23%	28 0.56%	29 0.58%	13 0.81%	10 0.13%	3 0.70%	102 0.48%
CU is Unknown	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
E CU Driver Not Recorded	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
TOTAL	1547 7.21%	4992 23.28%	4989 23.26%	1610 7.51%	7880 36.74%	429 2.00%	21447 100.00%

All crashes in the above cross-tabulation involved drivers who were not properly restrained. In evaluating crash severity by ejection status, data show that fatal and incapacitating injuries were significantly overrepresented 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.

B5.7 Driver Injury Type

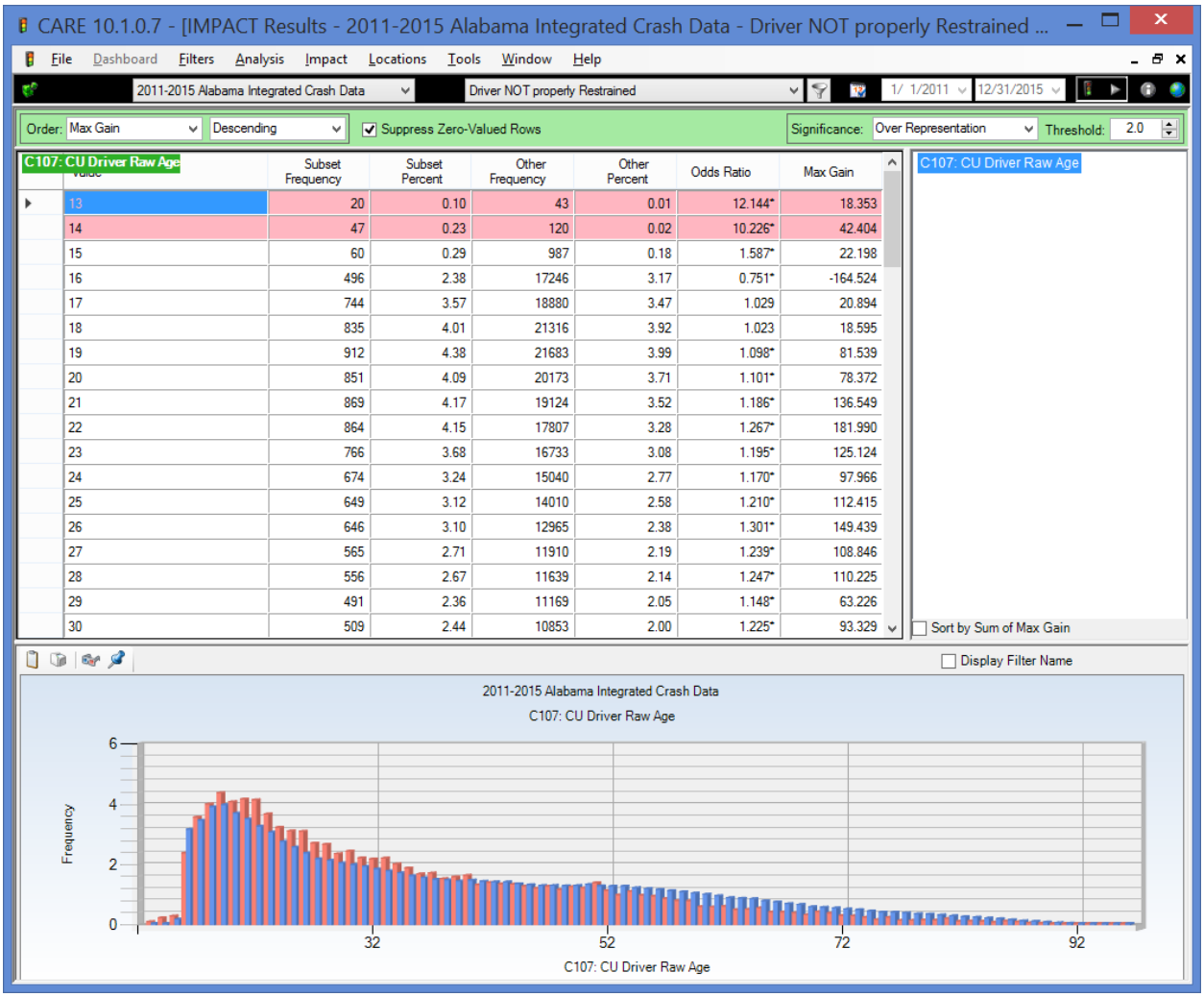


Various types of driver injuries, including fatalities, are consistently overrepresented in crashes where no restraints were used by the driver. Fatalities in these crashes are overrepresented by a factor of over 43. In crashes in which safety restraints were used, drivers and non-motorists were far less likely to be injured.

B6 Driver Demographics

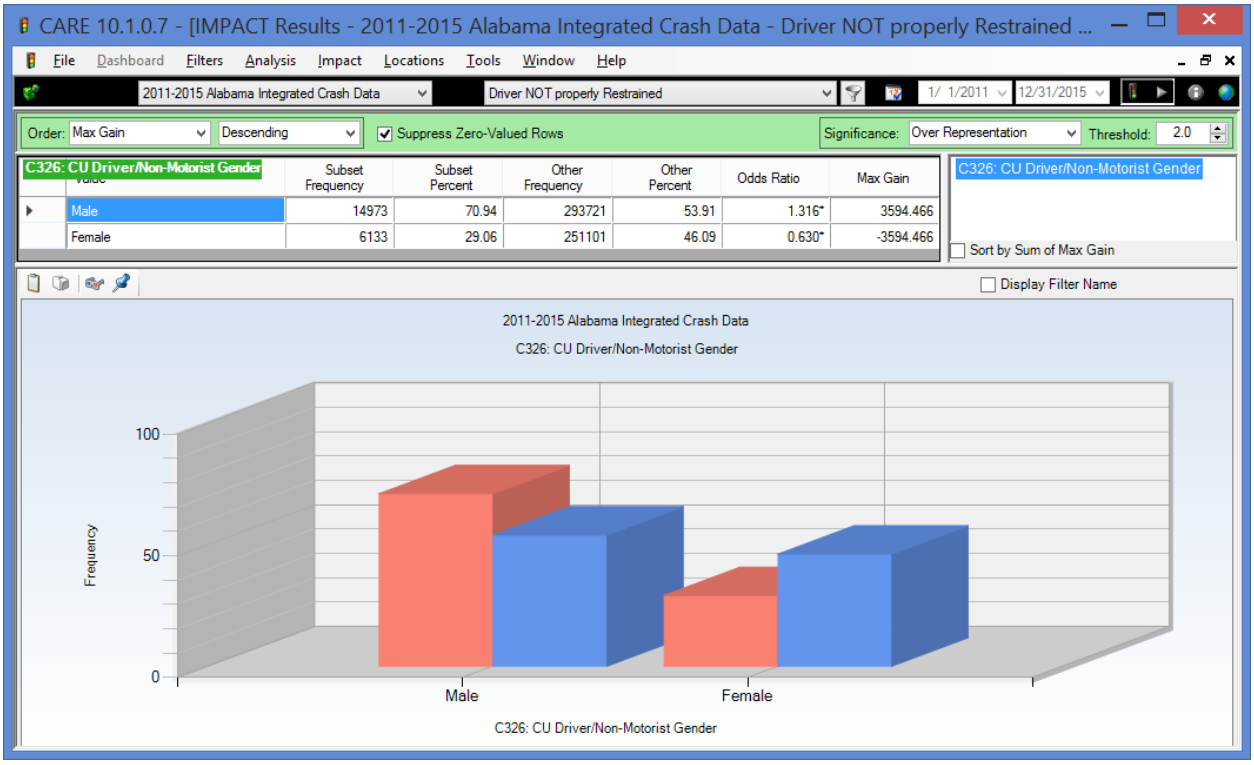
The study of driver demographics provides information about which gender or age groups are more likely to be involved in these crashes in which no restraints are used. Determination of overrepresentation can help to target the gender or age group that is more likely to be involved in this type of crash.

B6.1 Driver Age



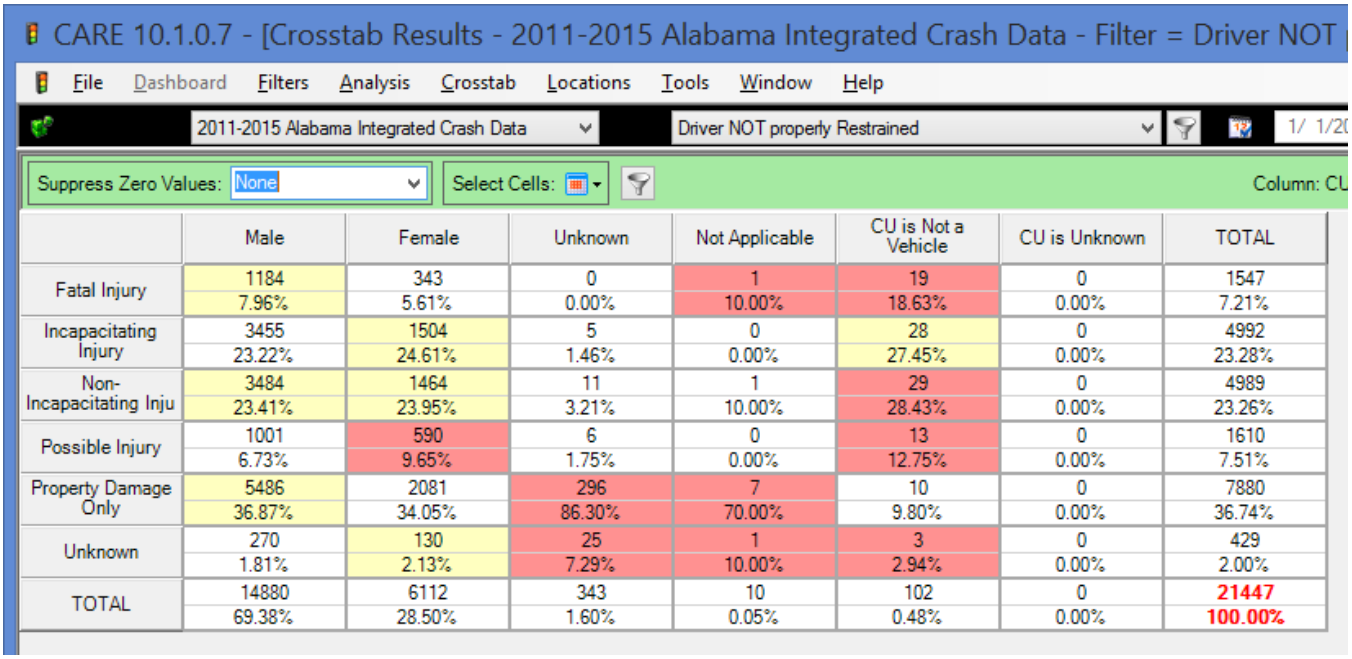
Analysis of individual driver ages indicates that crashes involving no restraints are overrepresented in the years above the teen-drivers (age range 19-35). While it appears that 16-18 teen-aged drivers are more likely to use safety equipment (perhaps due to the emphasis on it placed during training), there is still a very large proportion that are unrestrained, and this problem is multiplied by their overrepresentation in crashes in general (note that, in general, they are at least twice the average of the other ages).

B6.2 Driver Gender



Males account for about 55% of crashes in which restraints are not used, and they are overrepresented by a factor of 1.292. Since males also do the majority of the driving, they become a clear target for restraint countermeasures.

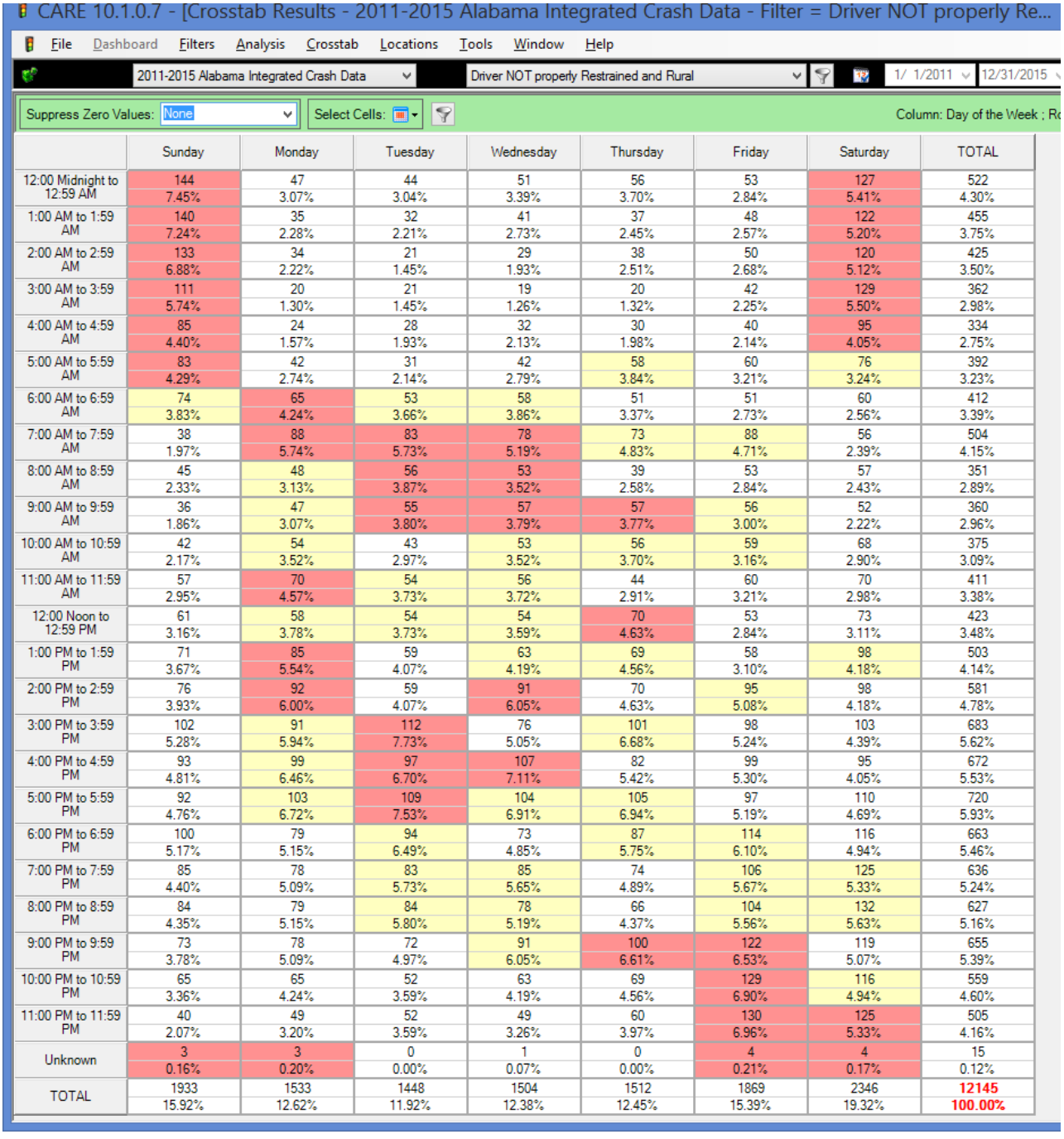
B6.3 Driver Gender by Severity



	Male	Female	Unknown	Not Applicable	CU is Not a Vehicle	CU is Unknown	TOTAL
Fatal Injury	1184	343	0	1	19	0	1547
	7.96%	5.61%	0.00%	10.00%	18.63%	0.00%	7.21%
Incapacitating Injury	3455	1504	5	0	28	0	4992
	23.22%	24.61%	1.46%	0.00%	27.45%	0.00%	23.28%
Non-Incapacitating Inju	3484	1464	11	1	29	0	4989
	23.41%	23.95%	3.21%	10.00%	28.43%	0.00%	23.26%
Possible Injury	1001	590	6	0	13	0	1610
	6.73%	9.65%	1.75%	0.00%	12.75%	0.00%	7.51%
Property Damage Only	5486	2081	296	7	10	0	7880
	36.87%	34.05%	86.30%	70.00%	9.80%	0.00%	36.74%
Unknown	270	130	25	1	3	0	429
	1.81%	2.13%	7.29%	10.00%	2.94%	0.00%	2.00%
TOTAL	14880	6112	343	10	102	0	21447
	69.38%	28.50%	1.60%	0.05%	0.48%	0.00%	100.00%

When driver gender by severity was studied, data indicate that “Possible Injuries” are overrepresented for female drivers in this type of crash. Generally, the distribution of severity is skewed toward more severe injuries for unrestrained male drivers.

B6.4 Restraints Not Used in Rural Crashes – Times



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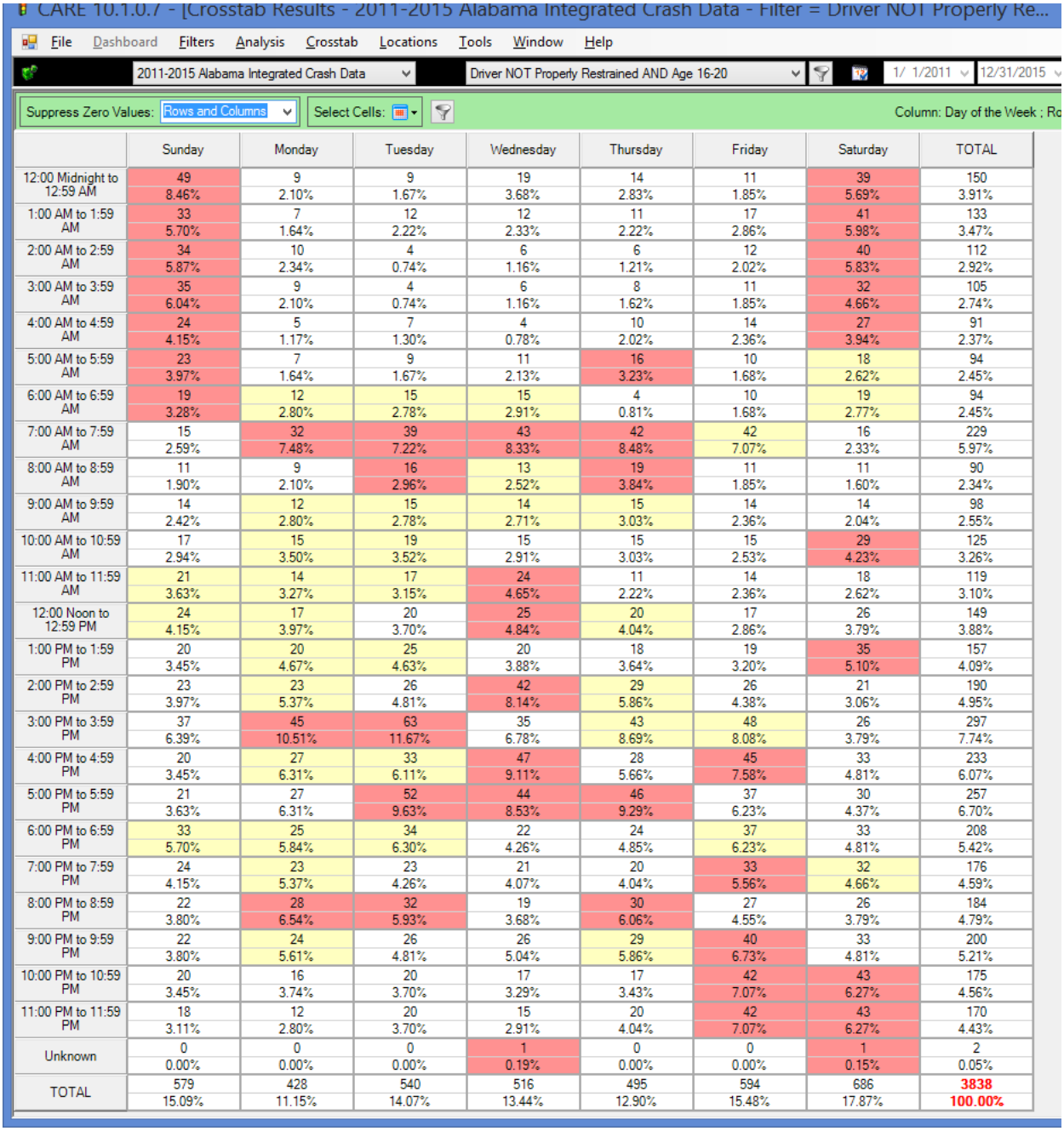
2011-2015 Alabama Integrated Crash Data | Driver NOT properly Restrained and Rural | 1/ 1/2011 | 12/31/2015

Suppress Zero Values: None | Select Cells: | Column: Day of the Week ; Ro

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	TOTAL
12:00 Midnight to 12:59 AM	144 7.45%	47 3.07%	44 3.04%	51 3.39%	56 3.70%	53 2.84%	127 5.41%	522 4.30%
1:00 AM to 1:59 AM	140 7.24%	35 2.28%	32 2.21%	41 2.73%	37 2.45%	48 2.57%	122 5.20%	455 3.75%
2:00 AM to 2:59 AM	133 6.88%	34 2.22%	21 1.45%	29 1.93%	38 2.51%	50 2.68%	120 5.12%	425 3.50%
3:00 AM to 3:59 AM	111 5.74%	20 1.30%	21 1.45%	19 1.26%	20 1.32%	42 2.25%	129 5.50%	362 2.98%
4:00 AM to 4:59 AM	85 4.40%	24 1.57%	28 1.93%	32 2.13%	30 1.98%	40 2.14%	95 4.05%	334 2.75%
5:00 AM to 5:59 AM	83 4.29%	42 2.74%	31 2.14%	42 2.79%	58 3.84%	60 3.21%	76 3.24%	392 3.23%
6:00 AM to 6:59 AM	74 3.83%	65 4.24%	53 3.66%	58 3.86%	51 3.37%	51 2.73%	60 2.56%	412 3.39%
7:00 AM to 7:59 AM	38 1.97%	88 5.74%	83 5.73%	78 5.19%	73 4.83%	88 4.71%	56 2.39%	504 4.15%
8:00 AM to 8:59 AM	45 2.33%	48 3.13%	56 3.87%	53 3.52%	39 2.58%	53 2.84%	57 2.43%	351 2.89%
9:00 AM to 9:59 AM	36 1.86%	47 3.07%	55 3.80%	57 3.79%	57 3.77%	56 3.00%	52 2.22%	360 2.96%
10:00 AM to 10:59 AM	42 2.17%	54 3.52%	43 2.97%	53 3.52%	56 3.70%	59 3.16%	68 2.90%	375 3.09%
11:00 AM to 11:59 AM	57 2.95%	70 4.57%	54 3.73%	56 3.72%	44 2.91%	60 3.21%	70 2.98%	411 3.38%
12:00 Noon to 12:59 PM	61 3.16%	58 3.78%	54 3.73%	54 3.59%	70 4.63%	53 2.84%	73 3.11%	423 3.48%
1:00 PM to 1:59 PM	71 3.67%	85 5.54%	59 4.07%	63 4.19%	69 4.56%	58 3.10%	98 4.18%	503 4.14%
2:00 PM to 2:59 PM	76 3.93%	92 6.00%	59 4.07%	91 6.05%	70 4.63%	95 5.08%	98 4.18%	581 4.78%
3:00 PM to 3:59 PM	102 5.28%	91 5.94%	112 7.73%	76 5.05%	101 6.68%	98 5.24%	103 4.39%	683 5.62%
4:00 PM to 4:59 PM	93 4.81%	99 6.46%	97 6.70%	107 7.11%	82 5.42%	99 5.30%	95 4.05%	672 5.53%
5:00 PM to 5:59 PM	92 4.76%	103 6.72%	109 7.53%	104 6.91%	105 6.94%	97 5.19%	110 4.69%	720 5.93%
6:00 PM to 6:59 PM	100 5.17%	79 5.15%	94 6.49%	73 4.85%	87 5.75%	114 6.10%	116 4.94%	663 5.46%
7:00 PM to 7:59 PM	85 4.40%	78 5.09%	83 5.73%	85 5.65%	74 4.89%	106 5.67%	125 5.33%	636 5.24%
8:00 PM to 8:59 PM	84 4.35%	79 5.15%	84 5.80%	78 5.19%	66 4.37%	104 5.56%	132 5.63%	627 5.16%
9:00 PM to 9:59 PM	73 3.78%	78 5.09%	72 4.97%	91 6.05%	100 6.61%	122 6.53%	119 5.07%	655 5.39%
10:00 PM to 10:59 PM	65 3.36%	65 4.24%	52 3.59%	63 4.19%	69 4.56%	129 6.90%	116 4.94%	559 4.60%
11:00 PM to 11:59 PM	40 2.07%	49 3.20%	52 3.59%	49 3.26%	60 3.97%	130 6.96%	125 5.33%	505 4.16%
Unknown	3 0.16%	3 0.20%	0 0.00%	1 0.07%	0 0.00%	4 0.21%	4 0.17%	15 0.12%
TOTAL	1933 15.92%	1533 12.62%	1448 11.92%	1504 12.38%	1512 12.45%	1869 15.39%	2346 19.32%	12145 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. The above applies to all rural areas, pulled out since the severity in rural areas is generally higher.

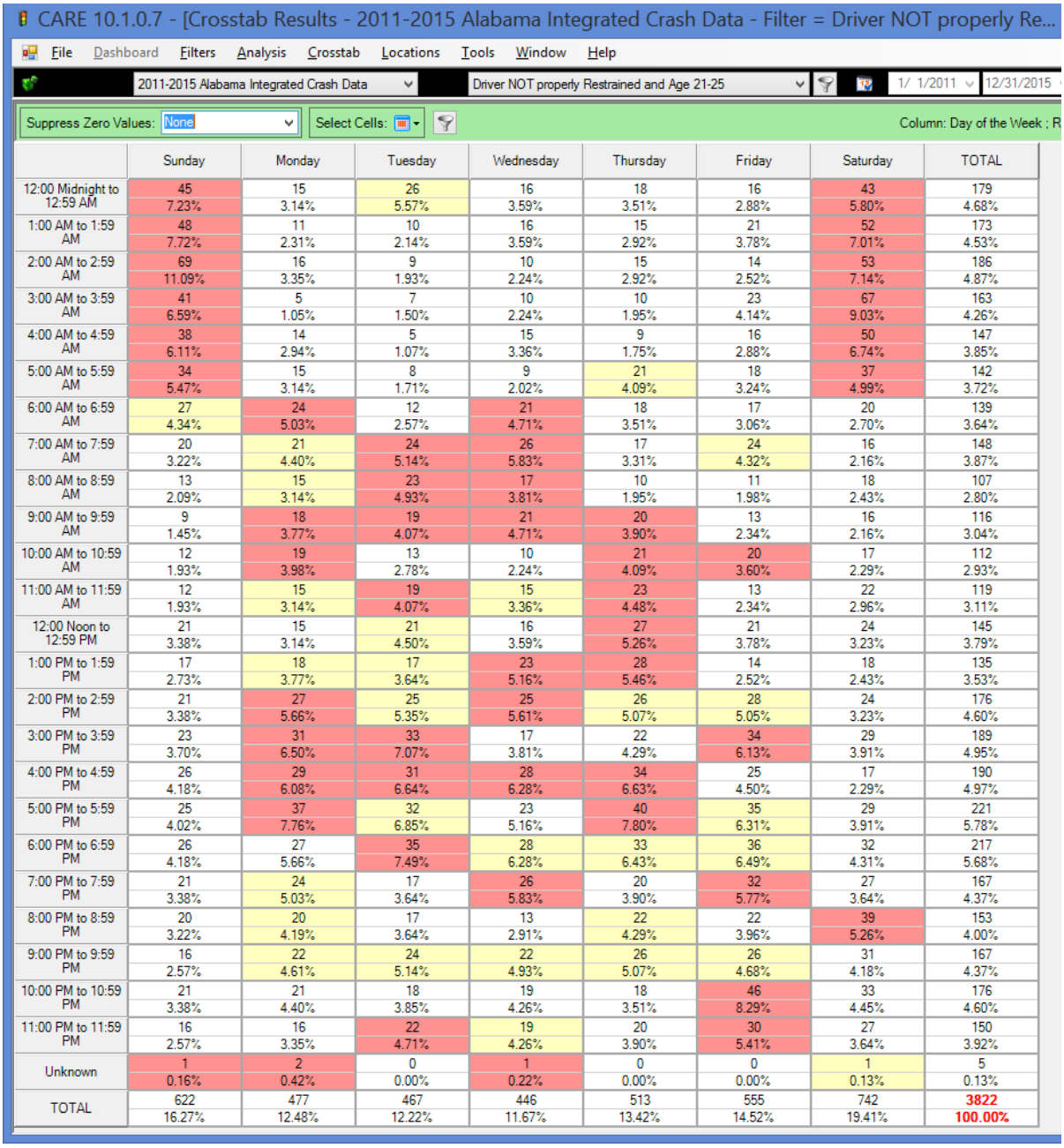
B6.5 Restraints Not Used Causal Driver Age 16-20 – Times



	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	TOTAL
12:00 Midnight to 12:59 AM	49 8.46%	9 2.10%	9 1.67%	19 3.68%	14 2.83%	11 1.85%	39 5.69%	150 3.91%
1:00 AM to 1:59 AM	33 5.70%	7 1.64%	12 2.22%	12 2.33%	11 2.22%	17 2.86%	41 5.98%	133 3.47%
2:00 AM to 2:59 AM	34 5.87%	10 2.34%	4 0.74%	6 1.16%	6 1.21%	12 2.02%	40 5.83%	112 2.92%
3:00 AM to 3:59 AM	35 6.04%	9 2.10%	4 0.74%	6 1.16%	8 1.62%	11 1.85%	32 4.66%	105 2.74%
4:00 AM to 4:59 AM	24 4.15%	5 1.17%	7 1.30%	4 0.78%	10 2.02%	14 2.36%	27 3.94%	91 2.37%
5:00 AM to 5:59 AM	23 3.97%	7 1.64%	9 1.67%	11 2.13%	16 3.23%	10 1.68%	18 2.62%	94 2.45%
6:00 AM to 6:59 AM	19 3.28%	12 2.80%	15 2.78%	15 2.91%	4 0.81%	10 1.68%	19 2.77%	94 2.45%
7:00 AM to 7:59 AM	15 2.59%	32 7.48%	39 7.22%	43 8.33%	42 8.48%	42 7.07%	16 2.33%	229 5.97%
8:00 AM to 8:59 AM	11 1.90%	9 2.10%	16 2.96%	13 2.52%	19 3.84%	11 1.85%	11 1.60%	90 2.34%
9:00 AM to 9:59 AM	14 2.42%	12 2.80%	15 2.78%	14 2.71%	15 3.03%	14 2.36%	14 2.04%	98 2.55%
10:00 AM to 10:59 AM	17 2.94%	15 3.50%	19 3.52%	15 2.91%	15 3.03%	15 2.53%	29 4.23%	125 3.26%
11:00 AM to 11:59 AM	21 3.63%	14 3.27%	17 3.15%	24 4.65%	11 2.22%	14 2.36%	18 2.62%	119 3.10%
12:00 Noon to 12:59 PM	24 4.15%	17 3.97%	20 3.70%	25 4.84%	20 4.04%	17 2.86%	26 3.79%	149 3.88%
1:00 PM to 1:59 PM	20 3.45%	20 4.67%	25 4.63%	20 3.88%	18 3.64%	19 3.20%	35 5.10%	157 4.09%
2:00 PM to 2:59 PM	23 3.97%	23 5.37%	26 4.81%	42 8.14%	29 5.86%	26 4.38%	21 3.06%	190 4.95%
3:00 PM to 3:59 PM	37 6.39%	45 10.51%	63 11.67%	35 6.78%	43 8.69%	48 8.08%	26 3.79%	297 7.74%
4:00 PM to 4:59 PM	20 3.45%	27 6.31%	33 6.11%	47 9.11%	28 5.66%	45 7.58%	33 4.81%	233 6.07%
5:00 PM to 5:59 PM	21 3.63%	27 6.31%	52 9.63%	44 8.53%	46 9.29%	37 6.23%	30 4.37%	257 6.70%
6:00 PM to 6:59 PM	33 5.70%	25 5.84%	34 6.30%	22 4.26%	24 4.85%	37 6.23%	33 4.81%	208 5.42%
7:00 PM to 7:59 PM	24 4.15%	23 5.37%	23 4.26%	21 4.07%	20 4.04%	33 5.56%	32 4.66%	176 4.59%
8:00 PM to 8:59 PM	22 3.80%	28 6.54%	32 5.93%	19 3.68%	30 6.06%	27 4.55%	26 3.79%	184 4.79%
9:00 PM to 9:59 PM	22 3.80%	24 5.61%	26 4.81%	26 5.04%	29 5.86%	40 6.73%	33 4.81%	200 5.21%
10:00 PM to 10:59 PM	20 3.45%	16 3.74%	20 3.70%	17 3.29%	17 3.43%	42 7.07%	43 6.27%	175 4.56%
11:00 PM to 11:59 PM	18 3.11%	12 2.80%	20 3.70%	15 2.91%	20 4.04%	42 7.07%	43 6.27%	170 4.43%
Unknown	0 0.00%	0 0.00%	0 0.00%	1 0.19%	0 0.00%	0 0.00%	1 0.15%	2 0.05%
TOTAL	579 15.09%	428 11.15%	540 14.07%	516 13.44%	495 12.90%	594 15.48%	686 17.87%	3838 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 overrepresented times include early morning hours on weekend days.

B6.6 Restraints Not Used Causal Driver Age 21-25 – Times



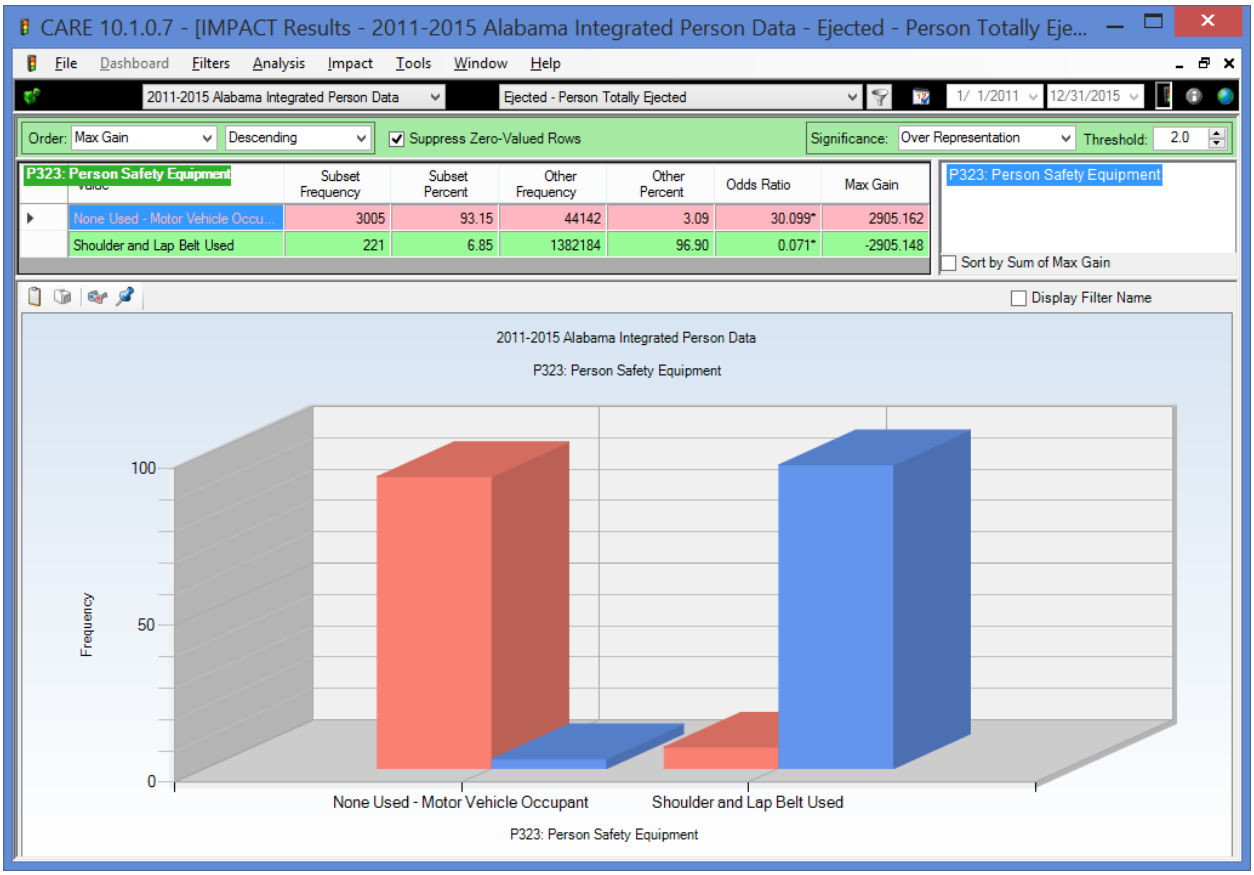
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	TOTAL
12:00 Midnight to 12:59 AM	45 7.23%	15 3.14%	26 5.57%	16 3.59%	18 3.51%	16 2.88%	43 5.80%	179 4.68%
1:00 AM to 1:59 AM	48 7.72%	11 2.31%	10 2.14%	16 3.59%	15 2.92%	21 3.78%	52 7.01%	173 4.53%
2:00 AM to 2:59 AM	69 11.09%	16 3.35%	9 1.93%	10 2.24%	15 2.92%	14 2.52%	53 7.14%	186 4.87%
3:00 AM to 3:59 AM	41 6.59%	5 1.05%	7 1.50%	10 2.24%	10 1.95%	23 4.14%	67 9.03%	163 4.26%
4:00 AM to 4:59 AM	38 6.11%	14 2.94%	5 1.07%	15 3.36%	9 1.75%	16 2.88%	50 6.74%	147 3.85%
5:00 AM to 5:59 AM	34 5.47%	15 3.14%	8 1.71%	9 2.02%	21 4.09%	18 3.24%	37 4.99%	142 3.72%
6:00 AM to 6:59 AM	27 4.34%	24 5.03%	12 2.57%	21 4.71%	18 3.51%	17 3.06%	20 2.70%	139 3.64%
7:00 AM to 7:59 AM	20 3.22%	21 4.40%	24 5.14%	26 5.83%	17 3.31%	24 4.32%	16 2.16%	148 3.87%
8:00 AM to 8:59 AM	13 2.09%	15 3.14%	23 4.93%	17 3.81%	10 1.95%	11 1.98%	18 2.43%	107 2.80%
9:00 AM to 9:59 AM	9 1.45%	18 3.77%	19 4.07%	21 4.71%	20 3.90%	13 2.34%	16 2.16%	116 3.04%
10:00 AM to 10:59 AM	12 1.93%	19 3.98%	13 2.78%	10 2.24%	21 4.09%	20 3.60%	17 2.29%	112 2.93%
11:00 AM to 11:59 AM	12 1.93%	15 3.14%	19 4.07%	15 3.36%	23 4.48%	13 2.34%	22 2.96%	119 3.11%
12:00 Noon to 12:59 PM	21 3.38%	15 3.14%	21 4.50%	16 3.59%	27 5.26%	21 3.78%	24 3.23%	145 3.79%
1:00 PM to 1:59 PM	17 2.73%	18 3.77%	17 3.64%	23 5.16%	28 5.46%	14 2.52%	18 2.43%	135 3.53%
2:00 PM to 2:59 PM	21 3.38%	27 5.66%	25 5.35%	25 5.61%	26 5.07%	28 5.05%	24 3.23%	176 4.60%
3:00 PM to 3:59 PM	23 3.70%	31 6.50%	33 7.07%	17 3.81%	22 4.29%	34 6.13%	29 3.91%	189 4.95%
4:00 PM to 4:59 PM	26 4.18%	29 6.08%	31 6.64%	28 6.28%	34 6.63%	25 4.50%	17 2.29%	190 4.97%
5:00 PM to 5:59 PM	25 4.02%	37 7.76%	32 6.85%	23 5.16%	40 7.80%	35 6.31%	29 3.91%	221 5.78%
6:00 PM to 6:59 PM	26 4.18%	27 5.66%	35 7.49%	28 6.28%	33 6.43%	36 6.49%	32 4.31%	217 5.68%
7:00 PM to 7:59 PM	21 3.38%	24 5.03%	17 3.64%	26 5.83%	20 3.90%	32 5.77%	27 3.64%	167 4.37%
8:00 PM to 8:59 PM	20 3.22%	20 4.19%	17 3.64%	13 2.91%	22 4.29%	22 3.96%	39 5.26%	153 4.00%
9:00 PM to 9:59 PM	16 2.57%	22 4.61%	24 5.14%	22 4.93%	26 5.07%	26 4.68%	31 4.18%	167 4.37%
10:00 PM to 10:59 PM	21 3.38%	21 4.40%	18 3.85%	19 4.26%	18 3.51%	46 8.29%	33 4.45%	176 4.60%
11:00 PM to 11:59 PM	16 2.57%	16 3.35%	22 4.71%	19 4.26%	20 3.90%	30 5.41%	27 3.64%	150 3.92%
Unknown	1 0.16%	2 0.42%	0 0.00%	1 0.22%	0 0.00%	0 0.00%	1 0.13%	5 0.13%
TOTAL	622 16.27%	477 12.48%	467 12.22%	446 11.67%	513 13.42%	555 14.52%	742 19.41%	3822 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 overrepresented times include early morning hours on weekend days and afternoon hours on weekdays.

B7 Analysis of Ejection

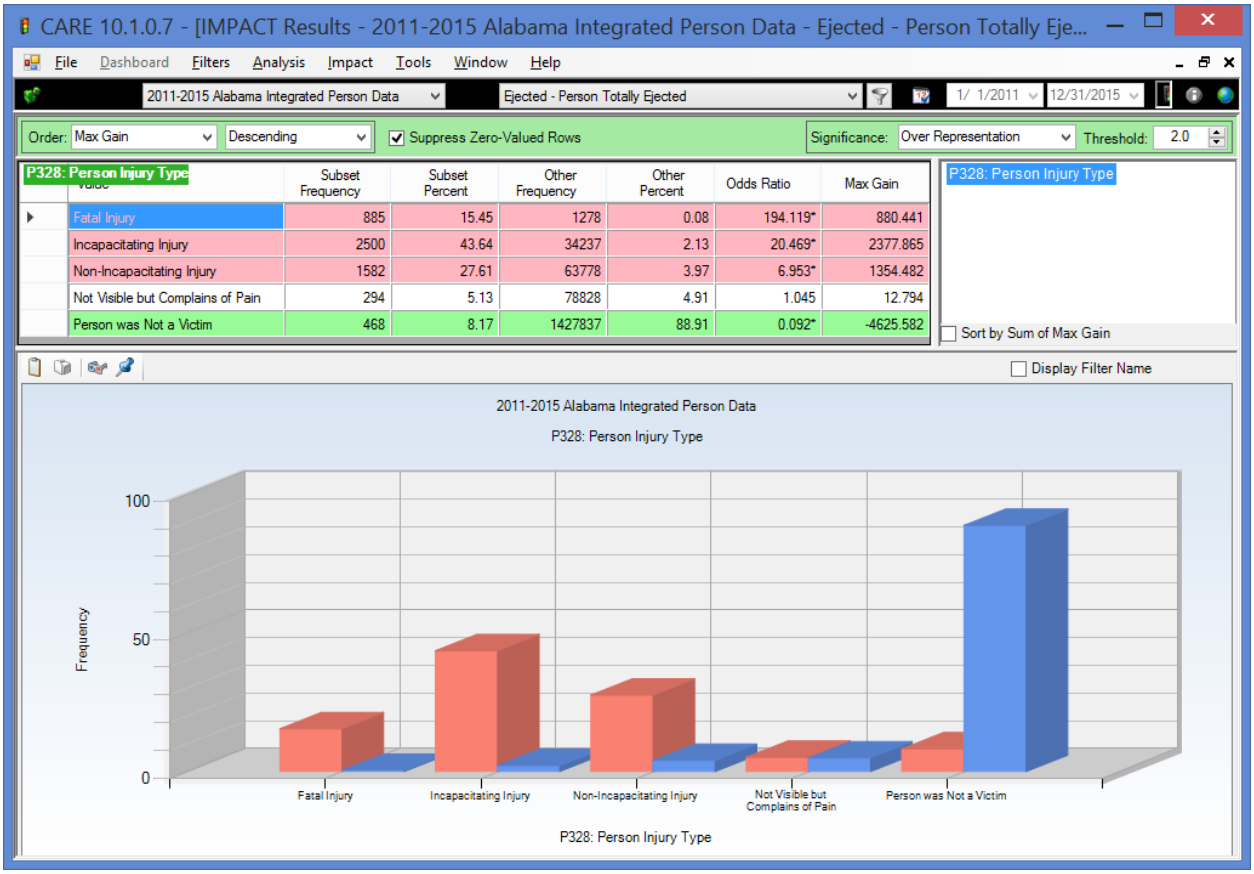
In the Information Mining Prioritization, Analysis, Control Technique (IMPACT) outputs that follow, the red bars represent those who were ejected; the blue bars, those not ejected. This analysis is not by crash and driver as was true of those above; rather, it is counting all occupants of the vehicles who were either ejected or not ejected.

B7.1 Probability of Ejection if Properly Restrained



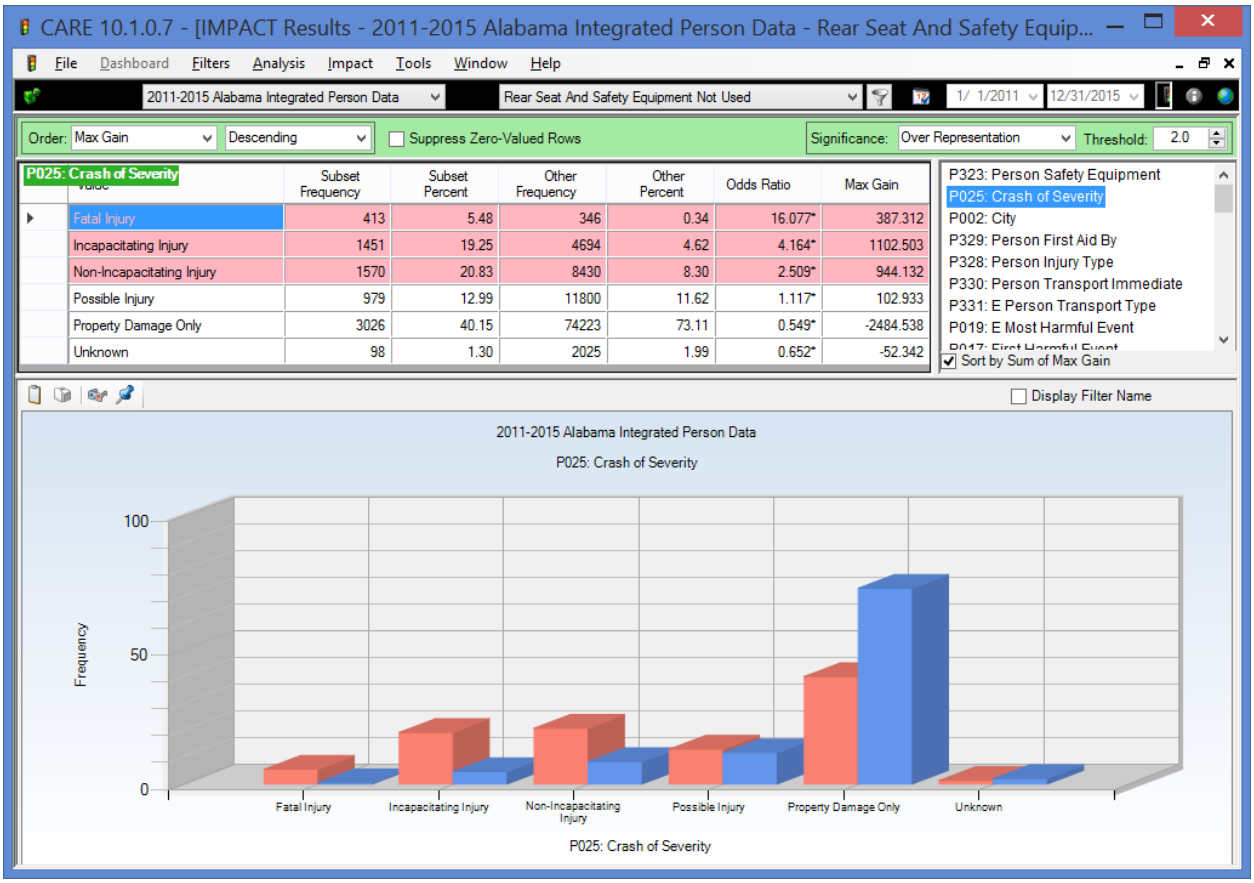
The analysis above shows how much the probability of ejection increases when not properly restrained. The probability of an occupant of a vehicle being ejected when properly restrained is 6.85%, which is about one in 15. The odds ratio for no restraint used is over 30, indicating that the non-restrained person is over 30 times more likely to be ejected than those who are properly restrained.

B7.2 Severity Increase with Ejection



The probability that an ejected occupant is killed is close to 200 times that of an occupant that is not ejected. While not nearly as high a multiple, the two higher injury classifications are also much higher. The Incapacitating Injury classification is increased over 20 times, and the Non-Incapacitating Injury classification increases by a factor of about 7.

B8 Analysis of Back Seat Occupants



Back seat occupants who are not properly restrained have over 16 times the probability of being killed as do those who are properly restrained. The other highest two severity classifications are also greatly increased, although not by as great of multipliers: 4.164 for Incapacitating Injury and 2.509 for Non-Incapacitating Injury.

Looking at the numbers, over the five year period there were 413 back seat occupants killed, which is about 82 per year. Question: how many of these would have been saved had they been properly restrained? Applying the 0.34% to the total unrestrained as opposed to the actual 5.48% yields 25.63 total fatalities, which would mean that the total fatality savings over the five years would have been 387 fatalities, the saving of 77 lives per year.

B9 Summary and Conclusions

The following summarizes the findings of the analysis:

- Geographical Factors
    - Counties with the greatest overrepresentation factors for unrestrained driver crashes include Walker, Jackson, Escambia, Cullman and Blount.
    - 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 overrepresented (worst) areas are the rural county areas in Walker, Mobile, Cullman, and Escambia Counties.
    - The most underrepresented (best) cities are Birmingham, Mobile, Montgomery, Huntsville and Tuscaloosa.
    - Crash incidents with no driver restraints being used are greatly overrepresented on county highways, with 2.7 times the expected number of crashes. County was the only roadway classification that was overrepresented.
    - 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.
    - In the evaluation of time of day, overrepresentation peaks during the 12 Midnight 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 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, aggressive operation, running off the road, and fatigue/sleep.
    - Crashes attributed to drivers who used no restraints are greatly overrepresented in vehicles with model years 1960-2002, which could be attributed to the lack of standard safety restraints in some of these older model vehicles, or perhaps the removal of these safety devices over time.
    - 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 and a greater number of injuries and fatalities per crash.
    - 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.
    - 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).
    - Male drivers account for a majority of crashes in which restraints are not used, and they are overrepresented by a factor of 1.32.

- 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 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.

- Ejection and Back Seat Analysis
    - The non-restrained person is over 30 times more likely to be ejected than those who are properly restrained.
    - If all back-seat occupants were properly restrained it would result in a saving of 77 lives per year.

Attachment C – Alabama Performance Report

Traffic Safety Performance Measures

C-1) Number of traffic fatalities (Fatality Analysis Reporting System (FARS))

2009	2010	2011	2012	2013	Baseline	Goal
848	862	895	865	852	864.4	859

Reduce total traffic fatalities by .57 percent from the five year baseline average of 864 (2009-2013) to 859 by 2016*. **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.** The five year average (2010 to 2014) number of traffic fatalities for is 859. The goal was achieved.

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

2009	2010	2011	2012	2013	Baseline	Goal
15131	10544	9904	8974	8558	10622.2	9900

Reduce serious injuries in traffic crashes by 6.8 percent from the five year baseline average of 10,622 (2009-2013) to 9,900 by 2016*. **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**. The five year average (2010 to 2014) number of series injuries in traffic crashes is 9,188. The goal was achieved.

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

2009	2010	2011	2012	2013	Baseline	Goal
1.38	1.34	1.38	1.33	1.31	1.348	1.34

Reduce the fatality rate per 100M VMT by .74 percent from the five year baseline average of 1.35 (2009-2013) to 1.34 by 2016*. **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.** The five year average (2010-2014) fatality rate 1.32. The goal was achieved.

Rural Fatalities/100M VMT

2009	2010	2011	2012	2013	Baseline	Goal
1.69	1.72	1.70	1.69	1.85	1.73	1.72

Reduce the rural fatality rate per 100M VMT by .58 percent from the five year baseline average of 1.73 (2009-2013) to 1.72 by 2016*. The five year average (2010-2014) rural fatality rate is 1.78. The goal was not achieved. A detailed analysis of rural fatalities in 2014 comparing them to their counterparts in 2009-2013 found that two crash types were responsible for Alabama not meeting their goal. In 2014, the Senior Driver Caused fatality count was up 33.8%, and the Pedestrian Involved fatality count was up 54.5% when compared with the previous five years (2009-2013).The pedestrian fatality count increase was clearly evident in the rural area of Mobile County, which had twice its expected number.

Urban Fatalities/100M VMT

2009	2010	2011	2012	2013	Baseline	Goal
1.08	0.97	1.09	.99	0.82	0.990	.98

Reduce the urban fatality rate per 100M VMT by 1 percent from the five year baseline average of .99 (2009-2013) to .98 by 2016*. The five year average (2010-2014) urban fatality rate is .92. The goal was achieved.

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

2009	2010	2011	2012	2013	Baseline	Goal
378	394	382	354	359	373	361

Reduce the unrestrained passenger vehicle occupant fatalities by 3.2 percent from the five year baseline average of 373 (2009-2013) to 361 by 2016*. The five year average (2010 to 2014) number of unrestrained passenger vehicle occupant fatalities is 370. The goal was achieved.

C-5) Number of fatalities in crashes involving driver or motorcycle operator with a BAC of .08 and above (FARS)

2009	2010	2011	2012	2013	Baseline	Goal
267	264	261	240	260	258.4	251

Reduce the alcohol-impaired driving fatalities by 2.7 percent from the five year baseline average of 258 (2009-2013) to 251 by 2016*. The five year average (2010 to 2014) number of driver or motorcycle operator with a BAC of .08 and above (FARS) for 2015 is 258. The goal was achieved.

C-6) Number of speeding-related fatalities (FARS)

2009	2010	2011	2012	2013	Baseline	Goal
327	316	298	273	253	293.4	287

Reduce the speeding-related fatalities by 2 percent from the five year baseline average of 293 (2009-2013) to 287 by 2016*. The five year average (2010 to 2014) number of speeding-related fatalities (FARS) is 275. The goal was achieved.

C-7) Number of motorcyclist fatalities (FARS)

2009	2010	2011	2012	2013	Baseline	Goal
76	86	98	97	80	87.4	85

Reduce the motorcyclist fatalities by 2.3 percent from the five year baseline average of 87 (2009-2013) to 85 by 2016*. The five year average (2010 to 2014) number of motorcyclist fatalities (FARS) is 85. The goal was achieved.

C-8) Number of un-helmeted motorcyclist fatalities (FARS)

2009	2010	2011	2012	2013	Baseline	Goal
7	5	10	10	1	6.6	6

Reduce the un-helmeted motorcyclist fatalities by 14.3 percent from the five year baseline average of 9 (2008-2012) to 8 by 2015*. The five year average (2010 to 2014) number of un-helmeted motorcyclist fatalities (FARS) is 7. The goal was achieved.

C-9) Number of drivers age 20 or younger involved in fatal crashes (FARS)

2009	2010	2011	2012	2013	Baseline	Goal
140	140	136	139	124	136	125

Reduce the number of drivers age 20 or younger involved in fatal crashes by 8.1 percent from the five year baseline average of 136 (2009-2013) to 125 by 2015*. The five year average (2010 to 2014) number of drivers age 20 or younger involved in fatal crashes (FARS) is 122. The goal was achieved.

C-10) Number of pedestrian fatalities (FARS)

2009	2010	2011	2012	2013	Baseline	Goal
64	61	79	77	59	68	67

Reduce the number of pedestrian fatalities 1.5 percent from the five year baseline average of 68 (2009-2013) to 67 by 2016*. The five year average (2010 to 2014) number of pedestrian fatalities (FARS) is 74. The goal was not achieved. A detailed analysis of the pedestrian fatalities was performed. In the majority of cases, the pedestrian was at fault, not the driver. The fatalities were scattered throughout the state and not concentrated in one particular area. However, the highest increase occurred in the municipal highway classification. This correlates with the significant increase in overall crashes for 2014 indicating more traffic in general in the urban classification.

C-11 Number of Bicyclist Fatalities (FARS)

2009	2010	2011	2012	2013	Baseline	Goal
6	6	5	9	6	6.4	5

Reduce the number of bicycle fatalities by 16.7 percent from the five year baseline average of 6 (2009-2013) to 5 by 2016*. The five year average (2010 to 2014) number of bicyclist fatalities (FARS) is 7. The goal was not achieved. A detailed analysis of the bicyclist fatalities was performed. In the majority of cases, the bicyclist was at fault, not the driver. There were 12 bicyclist caused fatality crashes from 2010 through 2013 (an average of 3 per year) and there were 6 bicyclist caused fatality crashes in 2014. Other trends cannot be determined with such a small number. The main fact noticed is that three of the bicyclist fatalities occurred in August, 2014 and there were no previous bicyclist fatalities in August throughout all of 2010-2013. Supposition is that this could be due to the trend to start the school year progressively earlier in August. Subsequent studies might consider all bicycle crashes or all bicycle crashes with injuries to obtain more information on the changing patterns involved in these types of crashes. These studies will be performed in the coming year.

B-1) The observed seat belt use for passenger vehicles, front seat outboard occupants (survey).

2010	2011	2012	2013	2014	Baseline	Goal
91	88	90	97	96	92.386	93.5

Increase the observed seat belt usage by 1.7% from the five year baseline average (2010 - 2014) of 92.4% to 93.5 % in 2016*. The five year average (2011 to 2015) observed seat belt use for passenger vehicles, front seat outboard occupants (survey) is 92.8. The goal was achieved.

*Five Year Average Goal

Traffic Safety Activity Measures

Number of speeding citations

2011	2012	2013	2014	2015
61,054	42,067	57,670	63,890	64,719

The total number of speeding citations in 2015 was 64,719.

Number of impaired driving arrests

2011	2012	2013	2014	2015
4,867	2,021	2,508	3,848	2,381

The total number of impaired driving arrests in 2015 was 2,381.

Number of seat belt citations

2011	2012	2013	2014	2015
43,384	30,384	25,536	36,120	17,801

The total number of seat belt citations for 2015 was 17,801.