ANALYSIS OF 2001 ALABAMA SEAT BELT USE
Public Awareness Safety Campaign - Phase 3

for

The Alabama Department of Transportation

By

Mr. Tony Alex, Dr. Jay K Lindly, and Dr. Daniel S. Turner
Department of Civil and Environmental Engineering
and
Dr. David B. Brown
Engineering Research Lab
University of Alabama
Tuscaloosa, Alabama

Prepared by

UTCA
University Transportation Center for Alabama
The University of Alabama, The University of Alabama at Birmingham, and
The University of Alabama in Huntsville

UTCA Report Number 00473
May 24, 2002
This report describes the findings of two telephone surveys aimed at discovering the seatbelt habits of a representative cross-section of Alabama residents. The surveys were performed in 2001 shortly before and after the “Click It or Ticket” seatbelt enforcement campaign, so they reveal something of the effects of the campaign as well as provide insights into the self-reported seatbelt habits of Alabamians. A study performed by Schulman, Ronca & Bucuvalas involved sets of 500 telephone interviews before and after the “Click It or Ticket” campaign. A second survey by the University of Alabama involved 4,631 telephone interviews shortly after the end of the “Click It or Ticket” campaign.

The Schulman, Ronca & Bucuvalas survey found 86% of respondents reported using lap or shoulder belts before the “Click It or Ticket” campaign, and 90% of respondents reported using them after it, though the difference was not statistically significant. The University of Alabama survey found self-reported seat belt use “all the time” to be approximately 94%, with an additional 2.5% wearing belts half the time. One portion of the UA study compared belt use in cities over-represented in minority population with belt use in under-represented cities, but found no statistically significant differences.

The self-reported results from both of the surveys showed a higher rate of seatbelt use than did field counts of belt use performed by law enforcement personnel.
## Contents

Contents ........................................................................................................ iii
Lists of Tables .............................................................................................. iv
List of Figures .............................................................................................. iv
Executive Summary .................................................................................. v

1.0 Introduction ......................................................................................... 1
  “Click it or Ticket” Program ..................................................................... 1
  Project Description ................................................................................ 2
  Earlier Studies ....................................................................................... 3
  Methodology of Study .......................................................................... 3
  Example of Impact Analysis .................................................................. 5

2.0 Literature Review .............................................................................. 6
  Use of Seat Belts .................................................................................... 6
  Seat Belt Usage in the United States .................................................... 6
  Alabama’s Primary Safety Enforcement Law ......................................... 8
  Seat Belt Usage in Alabama ................................................................. 8
  Effect of Primary Enforcement of Seat Belt on Drivers Behavior and Traffic Fatalities .... 9
  Reasons Frequently Given for Non-Use of Seat Belt ......................... 10

3.0 Analysis of University of Alabama Telephone Survey ....................... 11
  Background ......................................................................................... 11
  Minority Comparison .......................................................................... 13
  Detailed Analysis .............................................................................. 14

4.0 External Survey Data Analysis ........................................................... 20
  Introduction ......................................................................................... 20
  Frequency Analysis ........................................................................... 20
  Detailed Analysis .............................................................................. 23

5.0 Making Sense of Statistical Data .......................................................... 36
  Analysis of University of Alabama Telephone Survey ....................... 36
  Schulman, Ronca & Bucuvalas Survey Data Analysis ........................... 38
  Selection of Groups for Seat Belt Countermeasure Development .......... 40

6.0 Summary and Conclusions ................................................................. 41
  Schulman, Ronca & Bucuvalas Surveys ............................................... 41
  University of Alabama Telephone Survey ......................................... 42
  Conclusions ....................................................................................... 44

7.0 References ......................................................................................... 45

8.0 Appendix A ....................................................................................... 47
  University Of Alabama Telephone Survey Script ................................ 47
  Telephone Survey Script For External Survey ................................... 53
### List Of Tables

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1</td>
<td>IMPACT Analysis of Year 2000 Alabama Crash Data</td>
<td>5</td>
</tr>
<tr>
<td>3-1</td>
<td>Cities Selected And Percentage Of Calls</td>
<td>11</td>
</tr>
<tr>
<td>3-2</td>
<td>Cross Tabulation of Different Parameters With Month Of Call</td>
<td>13</td>
</tr>
<tr>
<td>3-3</td>
<td>Comparison of Cities Overrepresented and Underrepresented In Minority Population</td>
<td>14</td>
</tr>
<tr>
<td>4-1</td>
<td>Seat Belt Usage In Alabama</td>
<td>20</td>
</tr>
<tr>
<td>5-1</td>
<td>Estimation of Target Population of Seat Belt Countermeasures – Alabama Survey</td>
<td>37</td>
</tr>
<tr>
<td>5-2</td>
<td>Estimation of Number of Lives Saved Annually by applying Seat Belt Countermeasures</td>
<td>37</td>
</tr>
<tr>
<td>5-3</td>
<td>Estimation of Target Population of Seat Belt Countermeasures – External Survey</td>
<td>38</td>
</tr>
<tr>
<td>5-4</td>
<td>Estimation of Number of Lives Saved Annually by applying Seat Belt Countermeasures</td>
<td>39</td>
</tr>
</tbody>
</table>

### List Of Figures

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-1</td>
<td>US Seat belt usage rates</td>
<td>7</td>
</tr>
<tr>
<td>2-2</td>
<td>Seat Belt Usages in Alabama</td>
<td>9</td>
</tr>
<tr>
<td>3-1</td>
<td>Map of Alabama showing cities selected for the study</td>
<td>12</td>
</tr>
<tr>
<td>3-2</td>
<td>The Frequency of Seat Belt Usage After the ‘Click it or Ticket’ Program</td>
<td>13</td>
</tr>
<tr>
<td>4-1</td>
<td>Cross Tabulation, Shoulder Belt Users with Age Category</td>
<td>21</td>
</tr>
<tr>
<td>4-2</td>
<td>Cross Tabulation, Lap Belt Users with Age Category</td>
<td>22</td>
</tr>
<tr>
<td>4-3</td>
<td>Cross Tabulation, Shoulder Belt Users with Ethnicity</td>
<td>22</td>
</tr>
<tr>
<td>4-4</td>
<td>Cross Tabulation, Lap Belt Users with Ethnicity</td>
<td>23</td>
</tr>
</tbody>
</table>
Executive Summary

This report describes the finding of two sets of telephone surveys aimed at discovering the seatbelt habits of a representative cross-section of Alabama residents. The surveys were performed in 2001 shortly before and after the “Click It or Ticket” seatbelt enforcement campaign, so they reveal something of the effects of the campaign as well as provide insights into the self-reported seatbelt habits of Alabamians. A study performed by Schulman, Ronca & Bucuvalas involved sets of 500 telephone interviews before and after the “Click It or Ticket” campaign. A second survey was conducted by the University of Alabama (UA) and involved 4,631 telephone interviews conducted shortly after the end of the “Click It or Ticket” campaign.

The Schulman, Ronca & Bucuvalas survey showed that 86% of respondents reported using lap or shoulder belts before the “Click It or Ticket” campaign, and 90% of respondents reported using lap or shoulder belts after it, though the difference was not found to be statistically significant. The UA survey revealed a self-reported “all the time” seatbelt use of approximately 94%, with an additional 2.5% wearing belts half the time. The self-reported results from both of these surveys showed a higher rate of seatbelt use than did field counts performed by law enforcement personnel.

Based on the analysis of data from the Schulman, Ronca & Bucuvalas phone survey, the following groups were identified for seat belt countermeasure development, in order of their potential for reducing accidents (highest potential is first on the list).

- Persons who believe a seat belt law should not be made primary
- Persons who believe that it is not important for the police to enforce the seat belt law
- Males
- Pickup truck drivers
- Persons who believe seat belts are “as likely to harm you as to help you”
- Persons who some what agree that they want to be wearing a seat belt when they have an accident
- Persons who believe putting on a seat belt makes them worry about being in an accident

The UA study compared belt use in cities over-represented in minority population with belt use in under-represented cities, but found no statistically significant differences. However, the overall analysis of UA data was useful because it identified the following groups for seat belt countermeasure development, listed in order of their potential for reducing accidents.

- Persons who are willing to change their seat belt wearing habits
- Males
- Persons who wear seat belts more on long trips than on short trips
• Persons who are not willing to change their seat belt wearing habits
• Persons who were not inclined to wear seat belts after hearing "Click it or Ticket”
• Age group 16-18

Seat belt public relations efforts like the “Click It or Ticket” enforcement campaign have proven successful in raising seat belt usage, and it appears that the campaign should be continued. However, the results of this research indicate that complementary campaign strategies would also lead to increased usage:

• Encourage part-time seat belt wearers to increase usage (80% of traffic fatalities occur within 25 miles of home and under 40 miles per hour).
• Convince non-users who believe seat belts are “as likely to harm as help” to start wearing seatbelts (Seat belts are comfortable; seatbelts almost never trap a person in a burning or submerged vehicle; most people who are ejected from a car die; and injury severity is reduced by seat belts.).
• Inform the public that the chances of becoming a fatality in a crash are five times higher for persons not wearing seat belts.
Section 1.0
Introduction

The magnitude of loss attributable to traffic crashes is enormous. In 2000, 986 people were killed in traffic crashes in Alabama, according to the statistics released by the Alabama Department of Public Safety (DPS) (Crash facts, 2000). Of that number, 417 people were not wearing seat belts (Crash facts, 2000). Fatalities in traffic crashes can be minimized by safe driving habits. According to the National Highway Traffic Safety Administration (NHTSA), properly used lap/shoulder belts reduce the risk of fatal injury to front seat passenger car occupants by 45 percent and the risk of moderate to critical injury by 50 percent (Buckle up America, 1997).

According to a research note published by NHTSA in 2000, 70.6% (State shoulder belt rates, 2001) of Alabamians wear their seat belts. The “Click it or Ticket” seat belt enforcement program announced by the Governor of Alabama on May 11, 2001 was intended to increase the seat belt usage in the state. The “Click it or Ticket” campaign was an educational program followed by a massive 11-day long enforcement of seatbelt laws by state, county and municipal law enforcement agencies.

This report will describe the findings of two sets of telephone surveys aimed at discovering the seatbelt habits of a cross-section of Alabama residents. The surveys were performed shortly before and after the “Click It or Ticket” campaign, so they reveal something of the effects of the campaign as well as provide insights into the self-reported seat belt habits of Alabamians. The report is presented in six sections. Section One presents background information about the project, a project description, and the methodology of the study. Section Two is a brief literature review. Section Three presents the analysis of a telephone survey performed by the University of Alabama. Section Four presents the analysis of a telephone survey performed by Schulman, Ronca & Bucuvalas of Atlanta, Georgia. Section Five presents analysis of the statistical data, and Section Six presents the summary and conclusions of the project.

“Click It Or Ticket” Program

Forty-nine U.S. states (all except New Hampshire) and the District of Columbia have seat belt use laws in effect, but only eighteen states have laws that allow primary enforcement of seat belt laws. Primary enforcement allows law-enforcing officials to stop and ticket a driver or front seat passenger for not wearing a seat belt even if there is no other traffic violation. Alabama is one of the states with primary enforcement for seat belt usage (Insurance Institute of Highway Safety, Child Restraint and Belt Laws as of October 2001).

“Click It or Ticket” was developed in co-operation with the Alabama Department Of Economic and Community Affairs (ADECA), the DPS, and NHTSA (Office of the Governor, Press Release, 2001). The overall “Click It or Ticket” advertisement campaign included Alabama,
Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina and Tennessee. This report analyses the effectiveness of the “Click It Or Ticket” campaign in Alabama only.

The advertisement campaign for the “Click it or Ticket” enforcement program started May 14, 2001 and extended through June 26, 2001. The enforcement program was started May 24, 2001 and extended through June 3, 2001. For the campaign, 1,071 seat belt checkpoints were established across the state. The checkpoints were placed at heavy traffic and heavy crash areas. Law enforcement officers wrote 12,257 tickets at these check points to people who disregarded seat belt laws.

**Project Description**

This study evaluated seat belt use through telephonic surveys conducted by Schulman, Ronca & Bucuvalas of Atlanta and the University of Alabama. The data collected through the surveys were computerized for analysis.

The Schulman, Ronca & Bucuvalas survey interviewed sets of 500 persons before and after the “Click it or Ticket” seat belt enforcement program. The survey was conducted from 24 April 2001 to 6 May 2001 (just before advertisement for the program began) and from 5 June 2001 to 19 June 2001 (just after the enforcement portion of the program ended). The sample was designed as a statewide cross section of telephone households in Alabama. The telephone numbers were randomly generated through computer, to avoid any stratification. The surveyors asked fifty questions to bring out respondents’ attitudes to seat belt laws, seat belt wearing habits, and respondent personality traits. The telephone script used by the callers is shown in Appendix A.

The University of Alabama telephonic survey was performed in July, August, September, and October 2001 (just after the enforcement program ended). Four thousand six hundred thirty one people were interviewed throughout the state. Nine cities in Alabama were sampled based on their historical over- and under-representation of minority populations. The four cities selected as over-represented in minority populations were Tuskegee, Hayneville, Brighton and Orrville, while the five cities selected as under-represented in their minority populations were Arab, Cullman, Robertsdale, Haleyville, and Gardendale. Telephone numbers were selected randomly from the phone books of the cities. The telephone script used by callers is shown in Appendix A.

The Critical Analysis Reporting Environment (CARE) system was used for analyzing the results of the survey. CARE is a sophisticated statistical analytical tool developed by Dr. David Brown of the University of Alabama, Department of Computer Science. CARE is designed for traffic crash problem identification and countermeasure development (Brown D.).

The crash analysis is performed using three methods available in the CARE software.

1. Frequency analysis: This analysis classifies telephone survey data based on questions such as “What is your frequency of seat belt usage?” and “What type of vehicle do you drive?”
2. Cross Tabulation: This analysis provides a matrix representation of two variables of telephone survey data. For example, frequency of seat belt usage is plotted versus the month of the telephone interview.

3. Information Mining (IMPACT) analysis: IMPACT is an analysis mode available in CARE that facilitates statistical comparison of two data sets. The results are presented in terms of the major issues studied in the telephone survey. For example, the first issue considered is frequency of seatbelt usage. Persons who wear their seat belts “all the time” versus “all other users” may be considered a particularly interesting contrast, as “all other users” is the group at whom future seat belt initiatives should be aimed.

IMPACT analysis is used to determine the characteristics of the persons who make up the “all the time” and “all other users” groups (the “test” group and the “control” group). The characteristics are then evaluated to determine if they can be supported by statistical analysis. The statistical test used is the normal approximation to the binomial. For this report, an alpha value of 0.99 is required for the characteristic to be considered “statistically significant”. Some small data sets cannot be tested for significance because the test requires a sample size of at least 20.

Earlier Studies

This research project used the conclusions derived from earlier seatbelt safety campaigns. With the passage of the primary seat belt law in Alabama in the summer of 1999, the Alabama Department of Transportation (ALDOT) started a variety of restraint promotion efforts. As a part of the campaign in May 1999, billboards were placed in key cities throughout the state encouraging the use of seatbelts. The success or failure of this effort was evaluated by a telephonic survey conducted in Mobile and Houston counties in March through October 2000. A total of 2,536 persons were interviewed in this period (Brown D., 2001).

In September 1999, a series of seat belt enforcement radio announcements were made during the Auburn/Alabama football game broadcast and also were placed on the Auburn University website. The success or failure of this effort to increase the percentage of seatbelt users in Alabama was evaluated by telephonic surveys of over 2,760 people in Jefferson and Houston counties in March through October 2000 (Brown D., 2001).

The two earlier studies identified younger individuals and males as the groups least likely to wear seatbelts. The study revealed that these groups prefer radio stations of classic rock, alternative/metal, and rap/hip-hop, and they are highly influenced by peer groups. This type of information is helpful in planning future seat belt campaigns.

Methodology Of This Study

The data collected through the “Click It or Ticket” telephonic surveys was analyzed through the IMPACT capability of CARE. For example, in the case of frequency of seat belt usage, “all the time seat belt users” was compared against “all the other seatbelt results”. The comparisons were performed to bring out the personality traits of Alabama residents who were unwilling to wear
their seat belts. The following list shows similar IMPACT comparisons that were performed on the University of Alabama telephonic data sets. The comparisons were chosen to elicit the maximum amount of information concerning groups that do not use their seat belts.

1. Have you heard the slogan “Click it or Ticket”: “No” with “Yes”.
2. Are you willing to change seat belt habits: “No” with “Yes”.
3. Do you realize the chances of getting killed in a car accident are at least 5 times greater if you don’t wear your seat belts: “No” with “Yes”.
4. What is your frequency of seat belt usage: “Half the time or less” with all other results.
5. Do you wear seat belt because it is law or because of safety: “Safety” with “It’s the law”.
6. Do you wear seat belts on longer trips: “No” with “Yes”.
7. Are you more inclined to wear seat belt after seeing or hearing the “Click it or Ticket” campaign: “No” with “Yes”.
8. What was your source of first information about the “Click It or Ticket” campaign: “Radio” with “Television”.
9. Do most of your friends use seat belts: “No” with “Yes”.
10. Age group: “16 or less” with all others.
11. Age group: “16 – 21” with all others.
12. Age group: “22-49” with all other results.
13. Age group: “50 or older” with all others.

Different questions were asked during the Schulman, Ronca & Bucuvalas telephonic surveys. Thus, different IMPACT studies were performed for that survey:

1. Type of motor vehicle driven: “Car” with “Pick up truck”.
2. Why has your seat belt use increased: “Seatbelt law” with all other results.
3. How has your use of seatbelts changed during the past 30 days: “Increased” with all other results.
4. Are you aware of state seatbelt laws: “No” with “Yes”.
5. Do you believe you are likely to be ticketed for not wearing a seat belt: “ Very likely” with all other results.
6. Seatbelts are as likely to harm as help you: “ Strongly agree” with all other results.
7. Do you want a seat belt on in an accident: “ Strongly agree” with all other results.
8. Enforcement of seat belt laws is important: “Strongly disagree” with all other results.
9. Putting seat belts on makes me worry: “ Strongly agree” with all other results.
10. Where did you hear about the special enforcement program: “ TV” with “Radio”.
11. Where did you hear about the enforcement program: “Commercial” with “News program”.
12. Have you personally seen seat belt checkpoints: “Yes” with “No”.
13. Have you seen or heard special enforcement efforts for children in past 30 days: “No” with “Yes”.
14. Have you seen or heard messages encouraging seat belt use in past 30 days: “No” with “Yes”.
15. How has the number of messages encouraging seat belt use in the past 30 days changed: “Fewer” with “More”.
16. Have you seen or heard other activities encouraging seat belt in past 30 days “ No” with “Yes”.
17. Have you seen advertisements or activities to encourage Child Car Seats or Seatbelts: “No” with “Yes”.
18. How important is stricter enforcement of adult seatbelt laws: “ Not that important” with all other results.
19. Respondent education: “High school graduate or less” with all other results.
20. Respondent education: “8th Grade” with all other results.
22. Respondent gender: “Male” with “Female”.

The analysis using CARE will show the degree to which one group’s response to a question exceeds another group’s response. With the help of these comparisons, the persons who are unwilling to wear seatbelts will be separated out of the data set, and further drilldown (information gathering) will be carried out to understand their driving habits and specific personality traits so that future safety efforts can be tailored to reach and influence these individuals.

Example Of Impact Analysis

To obtain background information and to understand how the IMPACT analysis works, the authors performed an IMPACT analysis on year 2000 Alabama crash data. The results are shown in Table 1-1, which presents a summary of proportions and frequencies of persons who were wearing and not wearing seat belts in crashes. Table 1-1 shows the chance of being killed in an accident in Alabama in 2000 is highly overrepresented (by a factor of 4.96/0.312=15.9) for persons who do not use restraints compared to those who use restraints. It also shows that the probability of being injured is overrepresented by 2.3 times for non-restraint users compared to the restraint users. The last column in Table 1-1 (Maximum gain) indicates that if Alabama achieves 100 percent seat belt use, 419 fatalities and 2511 injuries per year can be avoided. The asterisks in the table indicate that the overrepresentations are statistically significant.

Table 1-1. IMPACT Analysis of Year 2000 Alabama Crash Data

<table>
<thead>
<tr>
<th>No.</th>
<th>Accident Severity</th>
<th>Restraints Not Used</th>
<th>Restraints Used</th>
<th>Overrepresentation</th>
<th>Max Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency (%)</td>
<td>Frequency (%)</td>
<td>Frequency (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Injury</td>
<td>4384 48.58</td>
<td>22324 20.75</td>
<td>2.34*</td>
<td>2511</td>
</tr>
<tr>
<td>2</td>
<td>Fatalities</td>
<td>448 4.96</td>
<td>336 0.312</td>
<td>15.893*</td>
<td>419</td>
</tr>
<tr>
<td>3</td>
<td>Property Damage</td>
<td>4192 46.54</td>
<td>84905 78.93</td>
<td>0.589*</td>
<td>-2930</td>
</tr>
</tbody>
</table>
Introduction

Traffic crashes are a major source of fatalities and injuries in America. Every 12 minutes, someone is killed in a traffic crash, and every 14 seconds someone is injured (Buckle up America, 1997). The most effective method of reducing traffic fatalities is the use of seat belts. Seat belts are designed to reduce potential injuries in crashes by restraining vehicle occupants.

Use Of Seat Belts

In any crash, there are two types of collisions. The first collision occurs when the car strikes an object. The second collision occurs when the people sitting inside the car strike the interior of the vehicle or are ejected from the vehicle. Death or injury occurs mainly from the second collision (Sudden impact, 1992). When a car moving at a rate of 15 miles per hour strikes an object, the car stops in the first tenth of a second. The passengers inside the car continue to move at the same rate until an object such as the steering wheel, the dashboard, or the windshield stops them. An injury can also happen because unbelted occupants inside the car collide with each other. A properly worn seat belt can keep that second collision -- the human collision -- from happening. The seat belt stretches slightly, which increases the person’s stopping distance. This slower stop reduces injuries.

Ejection is one of the most important causes of death in automobile accidents and occurs 10 times more often to unrestrained occupants compared to occupants wearing seatbelts. In the case of frontal impact collisions, seatbelts offer protection for the passengers, reducing the chance of injury to the head or face by 60% (Virtual Hospital, Iowa).

Seat Belt Usage Rates In The United States

Even though the first seat belts in the United States were installed by automobile manufacturers in the 1950’s, use was only 10 to 15 percent nation-wide (NHTSA, Presidential Initiative). This usage rate remained stable until the 1980’s.

Figure 2-1 shows the seat belt usage rate in the U.S. by year. In 1971, the Insurance Institute of Highway Safety developed television commercials to promote belt use (Automotive Coalition, 2001). The commercials were developed from interviews that identified differences between observed belt users and non-users. Those commercials were shown on cable television during a nine-month period from July 1971 until March 1972. The seat belt usage was observed in communities that received the commercials and in communities that did not receive the
commercials. The results revealed that the media effort did not increase seat belt usage (Automotive Coalition, 2001).

Seat belt laws were passed from 1984 to 1987 in 31 states in the United States. As a result, seat belt usage rose from 14 percent to 42 percent. Due to public education and highly visible enforcement programs, seat belt usage rose from 42% in 1987 to 62% in 1992 (NHTSA, Presidential Initiative).

On December 28, 1996, President Clinton asked all Americans to wear their seat belt and to use child restraints to reduce traffic fatalities in his “Buckle Up America” campaign. The goals of the Presidential initiative follow: (NHTSA, Presidential Initiative)

- Increase national seat belt use to 85 percent by 2000 and 90 percent by 2005.
- Decrease child occupant fatalities (0-4 years) by 15 percent in 2000 and by 25 percent in 2005.

Due to such initiatives as the nation-wide “Buckle up America” seat belt enforcement program, seat belt usage in the U.S rose from 68% in 1996 to 71% in 1999.

![Figure 2-1: U.S. Seat Belt Usage Rates](Haseltine, 2001)
Alabama’s Primary Safety Belt Enforcement Law

Alabama’s safety belt enforcement law is given in Alabama Code, Chapter 5 B, Sections 32-5B-1 through 32-5B-7 (Legislature, Code of Alabama, 1975). A provision to add primary enforcement capabilities to the Alabama Safety Belt Use Act of 1991 passed the Legislature and was signed into law on June 9, 1999. Primary enforcement means a police officer can stop a driver to issue a citation for failure to wear a seat belt based solely on probable cause of such violation. In contrast, under secondary enforcement, an officer is authorized to issue a citation only if the officer has first stopped the person for some other violation of law.

The Alabama Safety Belt Use Act of 1991 calls for front seat occupants in vehicles designed for carrying 10 or fewer passengers to wear seat belts at all times when the vehicle is in motion. Exceptions to this law are made for child passengers who use a child passenger restraint system according to Alabama Code Section 32–5-222, people who have a written doctor’s excuse, rural letter carriers, drivers/passengers delivering newspapers, passengers in cars of a model year prior to 1965, and passengers in motor vehicles which normally operate in reverse.

The fine for those who violate the seat belt law is up to $25.00, with no court costs attached. No citation or warrant for arrest can be issued for the violation of the seat belt law. Failure to wear a safety belt is not considered as evidence of contributory negligence and will not limit the liability of an insurer, nor will the conviction be entered on the driving record of any individual charged under the provisions of the law (Brown, 2001).

Seat Belt Usage In Alabama

The seat belt usage rate in Alabama is shown in Figure 2-2. The “Healthy Alabama 2010” report set an objective in Alabama to increase the seat belt usage to 90 percent or more (ADPS, Healthy Alabama 2010). The objective was set by the Healthy Alabama 2010 Steering Committee, comprised of staff members from the Alabama Department of Public Health and the University of Alabama at Birmingham School of Public Health.
Effect Of Primary Enforcement Of Seat Belt Laws
On Drivers Behavior And Traffic Fatalities

Alma Cohen and Liran Einav from the Department of Economics of Harvard University reported on the effects of mandatory seat belt laws on driver behavior and traffic fatalities in October 2001 (Cohen, 2001). They found that seat belt legislation unambiguously reduces traffic fatalities. They estimated that a 10 percent increase in usage rate reduced occupant fatalities by about 1.35 percent. They also found that the most important factor for obtaining a substantial increase in usage rate was having primary enforcement rather than secondary enforcement. They found that a mandatory seat belt law backed by primary enforcement increased the usage rate by 22 percentage points, whereas a mandatory seat belt law with secondary enforcement increased usage rate by 11 percentage points (Cohen, 2001).
Reasons Frequently Given For Non-Use Of Seat Belt

Some persons apparently still don’t believe that seat belt use is an effective safety measure. The following are some common excuses and rebuttal facts for the non-use of seat belts (Iowa Health Book)

1. Seat belts are only needed for long trips and on high-speed highways. Rebuttal: 80% of the traffic fatalities occur within 25 miles of home and under 40 miles an hour.
2. The belt might trap the passenger inside. Rebuttal: Deaths by incineration or drowning account for less than 1/10th of 1% of motor vehicle crashes.
3. The passenger would be safe if he is ejected from the car. Rebuttal: Most passengers ejected from the car die, and most of them are ejected through the windshield.
4. Seat belts are uncomfortable. Rebuttal: Modern seat belts give when the passenger moves and will lock only when the car is stopped suddenly. Some belts come with comfort clips, which hold the belt in a slightly slackened position.
6. Seat belts are not required when air bags are deployed. Rebuttal: An airbag increases the effectiveness of a safety belt by 40 percent. Air bags are not a replacement for the safety belts, as they won’t protect against side impacts. (A relatively low percentage of vehicles have side crash cushions).
7. Seat belts may cause injuries. Rebuttal: In any crash, the severity of the injury is reduced by seat belts.
Section 3

Analysis The University Of Alabama Telephone Survey

Background

This section of the report presents the analysis performed on the 2001 University of Alabama telephone survey of seat belt usage in Alabama. 4,631 persons were interviewed after the “Click it or Ticket” program. The telephone calls were made to nine cities based on the city’s minority population rate to yield a response representative of Alabama’s population. The nine cities selected are shown in Figure 3-1. The telephonic survey was performed in July, August, September, and October 2001. The following section presents the analysis performed on the data. Table 3-1 shows the cities selected for the telephone survey and the percentage of the total calls made to each city. It can be seen that 95.5% of the calls were made to cities overrepresented or underrepresented in minority population. Error caused an additional 4.5% of the calls to be made outside those cities.

Table 3-1. Cities Selected and Percentage of Calls

<table>
<thead>
<tr>
<th>CITY SELECTED</th>
<th>Percentage of Calls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hayneville</td>
<td>4.91</td>
</tr>
<tr>
<td>Brighton</td>
<td>4.97</td>
</tr>
<tr>
<td>Orrville</td>
<td>3.64</td>
</tr>
<tr>
<td>Tuskegee</td>
<td>14.29</td>
</tr>
<tr>
<td>Cullman</td>
<td>12.5</td>
</tr>
<tr>
<td>Haleyville</td>
<td>15.88</td>
</tr>
<tr>
<td>Gardendale</td>
<td>12.37</td>
</tr>
<tr>
<td>Arab</td>
<td>14.48</td>
</tr>
<tr>
<td>Robertsdale</td>
<td>12.46</td>
</tr>
</tbody>
</table>

It is important to note that the resulting data is self-reported. The frequency analysis of the data set shows 93.93% of the respondents wear seatbelts all the time, and 2.5% of the respondents wear them more than half the time. Additionally, 1.58% of the respondents wear their seat belts about half the time, 0.91% wear them less than half the time, and 1.08% of the respondents never wear their seat belts.

In a separate question, the study found that of the 6% of the driver who do not buckle up “All the time”, more than half (3.8%) tend to wear seat belts more on long trips. Figure 3-2 shows the frequency of seat belt usage for the months July, August, September and October. It can be seen from the figure that the “all the time” seat belt usage remained over 93% for all four months. October shows the maximum seat belt usage rate of 94.35%. This shows that for four months
following the end of the “Click it or Ticket” enforcement program, the self reported seat belt usage remained constant.

Figure 3-1. Map of Alabama showing cities selected for the study.
Table 3-2 presents a cross tabulation of respondent’s opinions on different parameters versus month of call. It shows roughly 75% of the respondents were aware of the slogan “Click it or Ticket”, with a maximum of 80.59% in October. There was a sharp increase in percentage of persons who wear seat belts because “it is the law”. Eighteen to 20% of the respondents were not aware that chances of being killed are 5 times greater when not wearing the seat belt.

<table>
<thead>
<tr>
<th>Description</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Size</td>
<td>2992</td>
<td>972</td>
<td>275</td>
<td>408</td>
</tr>
<tr>
<td>Heard Slogan “Click it or Ticket”: “Yes”</td>
<td>75.61%</td>
<td>75.21%</td>
<td>72%</td>
<td>80.59%</td>
</tr>
<tr>
<td>Reason for wearing seat belt: “It’s the law”</td>
<td>17.93%</td>
<td>18.25%</td>
<td>17.82%</td>
<td>27.03%</td>
</tr>
<tr>
<td>Realize chances of death are 5 times greater for not wearing seat belt: “No”</td>
<td>18.72%</td>
<td>17.36%</td>
<td>15.64%</td>
<td>20.83%</td>
</tr>
<tr>
<td>More inclined to wear seat belt after Hearing “Click it or Ticket” slogan: “No”</td>
<td>2.28%</td>
<td>2.89%</td>
<td>4.73%</td>
<td>2.46%</td>
</tr>
</tbody>
</table>

Minority Comparison

Table 3-3 shows comparisons between respondents from cities overrepresented in minority population and cities underrepresented in minority population. 3,135 persons were interviewed from cities underrepresented in minority population, and 1,290 persons were interviewed from cities overrepresented in minority population. It can be observed from the table that there was
little difference in respondents’ seat belt wearing habits for the two test groups. Statistical evaluation did not reveal any statistically significant difference between those proportions.

Table 3-3. Comparison of Cities Overrepresented and Underrepresented in Minority Population

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>Cities overrepresented in minority population (%)</th>
<th>Cities underrepresented in minority population (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How frequently do you wear your seat belt?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All the time</td>
<td>93.41</td>
<td>94.35</td>
</tr>
<tr>
<td>Do you wear your seatbelt because of safety or because you know it’s the law. [If they respond both, ask them which one is the most motivating.]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety</td>
<td>75.85</td>
<td>75.51</td>
</tr>
<tr>
<td>Its the law</td>
<td>18.94</td>
<td>18.72</td>
</tr>
<tr>
<td>How many of your friends “buckle up?”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than half</td>
<td>86.42</td>
<td>89</td>
</tr>
<tr>
<td>Have you heard the slogan ‘Click it or Ticket?’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>74.69</td>
<td>76.49</td>
</tr>
<tr>
<td>Were you more inclined to wear your seat belt after seeing or hearing the ‘Click it or Ticket’ slogan?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>2.17</td>
<td>2.71</td>
</tr>
<tr>
<td>No</td>
<td>2.48</td>
<td>2.55</td>
</tr>
<tr>
<td>Where did you first notice/hear about “Click it or Ticket?”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio</td>
<td>8.39</td>
<td>8.38</td>
</tr>
<tr>
<td>Television</td>
<td>49.77</td>
<td>48.87</td>
</tr>
<tr>
<td>Do you realize that your chances of getting killed in a car accident are at least 5 times greater if you don’t wear your seat belt?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>18.25</td>
<td>18.3</td>
</tr>
</tbody>
</table>

Detailed Analysis

The following section presents detailed analyses performed on the Alabama telephone survey data. The information was generated through the Impact analysis of the CARE system.

What is your frequency of seat belt usage? “All the time” vs. “all other results”

4,631 people answered this question. Frequency analysis of the sample shows an “all the time” seat belt usage of 93.61%. The test group for the analysis was the respondents who reported “all
the time” seat belt usage, and the control group was “all other results”. The following list presents the statistically significant findings.

1. Females (71.08% of the test group and 58.71% of the control group) were statistically overrepresented in their reported “all the time” use by a 21.1% compared to the control group. (71.08/58.71 = 1.211.) This result means that women comprised 21.1% more of the “all the time” group than the “all other results” group.
2. Persons aged 16-18 comprised 4.41% of the test group and 7.82% of the control group. They were underrepresented in the reported “all the time” seat belt usage by 77% over the control group.
3. Persons who reported that safety is their motivating factor for wearing seat belts comprised 76.05% of the test group and 67.26% of the control group. They were overrepresented by 13.1% over the control group.

Further analysis on the data set did not show any statistically significant comparisons.

Frequency of seat belt usage: “All other results” vs. “All the time”

This analysis compared those persons who reported that they wear the seat belt “more than half the time”, “about half the time”, “less than half the time” and “never” against those reported “all the time”. This analysis is significant because “all other results” is a target group for whom seat belt initiatives can be designed. The test group for the analysis was the respondents who reported “All other results” seat belt usage, and the control group was “All the time”. The following section presents statistically significant comparisons.

1. Males (40.93% of the test group and 28.82% of the control group) were statistically overrepresented by 42% in less than “all the time” seat belt usage compared to the control group. (40.93%/28.82% = 1.42.)
2. Persons aged 16-18 comprised 7.82% of the test group and 4.41% of the control group. They were overrepresented in the reported less than “all the time” seat belt usage by 77% over the control group.
3. Persons who reported using seat belts during long trips (18.50% of the test group and 2.82% of the control group) were statistically overrepresented by 6.54 times compared to the control group. This findings means that less than “all the time” seat belt users often wear their seat belts for long trips but not for short trips.
4. Persons who are unwilling to change their seatbelt wearing habits comprised 14.23% of the test group and 1.37% of the control group. They were statistically overrepresented by 10.32 times the control group.
5. Persons who are willing to change their seatbelt wearing habits comprised 25.97% of the test group and 2.34% of the control group. They were statistically overrepresented by 11.09 times the control group.
6. Persons who report that they were not more inclined to wear their seat belts after seeing the “Click it or Ticket” slogan comprised 8.18% of the test group and 2.207% of the control group. They were statistically overrepresented by 3.70 times the control group.
Further analysis of the above conditions did not reveal any statistically significant comparisons.

**Frequency of seat belt usage: “Half the time or less” vs. “All other results”**

This analysis compared those persons who reported that they wear the seat belt “about half the time”, “less than half the time” and “never” against those reported “more than half the time” and “all the time”. This analysis is significant because “half the time or less” is a target group for whom seat belt initiatives can be designed. The test group for the analysis was the respondents who reported “half the time or less” seat belt usage, and the control group was “all other results”. The following section presents statistically significant comparisons. Only 165 respondents reported wearing their seat belts half the time or less, which is approximately 3.5% of the sample population.

7. Males (44.53% of the test group and 29.01% of the control group) were statistically overrepresented by 52.5% in “half the time or less” seat belt usage compared to the control group. (44.53%/29.01% = 1.525.)

8. Persons who drive mostly on city streets (14.54% of the test group and 22.48% of the control group) were underrepresented by 54% in “half the time or less” usage compared to the control group.

9. Persons who reported using seat belts during long trips (18.18% of the test group and 3.247% of the control group) were statistically overrepresented by 5.6 times compared to the control group. This findings means that “half the time or less” seat belt users often wear their seat belts for long trips but not for short trips.

10. Persons who are unwilling to change their seatbelt wearing habits comprised 20.60% of the test group and 1.47% of the control group. They were statistically overrepresented by 13.94 times the control group.

11. Persons who are willing to change their seatbelt wearing habits comprise 22.42% of the test group and 3.09% of the control group. They were statistically overrepresented by 7.25 times the control group.

12. Persons who had reported a lack of awareness that the “chances of being killed in a car accident were at least 5 times greater if one does not wear his seat belt” comprised of 25.45% the test group and 18.18% of the control group. They were statistically overrepresented by 40.00% over the control group.

Further analysis of the above conditions did not reveal any statistically significant comparisons.

**Males vs. Females:**

This analysis compared Male respondents with Female respondents. The gender breakdown for the survey is Male: 1369 and Female: 3262. While designing and selecting countermeasures, the gender of the group that least uses seat belts (sometimes called the target group) should be taken into consideration. The following presents statistically
significant comparisons that are gender specific. The test group was the male respondents, and the control group was the female respondents.

1. Persons who reported “about half the time” seat belt usage comprised of 2.41% of the test group and 1.23% of the control group. They were statistically overrepresented by 96.6% over the control group (2.41/1.23 = 1.96).

2. Persons who reported that the primary motivating factor for wearing seat belts was the seat belt law comprised of 20.8% of the test group and 17.87% of the control group. They were statistically overrepresented by 16.5% over the control group.

3. Persons who reported that the primary motivating factor for wearing seat belts was safety comprised of 72.38% of the test group and 76.85% of the control group. The test group was statistically underrepresented by 6% over the control group.

4. Radio was the main source of information about the “Click it or Ticket” program for 10.66% of the test group and 7.41% of the control group. The test group was statistically overrepresented by 43.8% over the control group.

5. Persons who were willing to change their seatbelt wearing habits comprised 4.82% of the test group and 3.34% of the control group. The test group was statistically overrepresented by 44.3% over the control group.

Further analysis of the data set did not show any statistically significant comparisons.

*Do you realize the chances of getting killed in a car accident are at least 5 times greater if you don’t wear your seat belts: “No” vs. “Yes”*

This analysis compared those persons who stated that they were not aware of the increased chances of being killed by driving without a seat belt (test group) against those who responded that they were aware of it (control group). The frequency analysis of the data showed 81.23% of the respondents were aware of the increased danger, whereas 18.38% of the respondents were not aware of it.

The only statistically significant comparison found between the two subsets was that the test group was not willing to change their seat belt habits. They comprised 3.5% of the test group and 1.85% of the control group. They were overrepresented by 89.5% over the control group (3.5/1.85=1.89).

*Do you wear seat belts because: “It is law” vs “Safety”.*

This analysis compared those persons who wear seat belts because it is law against those who wear seat belts realizing that it is a safety measure. 18.72% of the respondents said that they wear seat belts because it is law, whereas 75.43% of the respondents said that they wear them because of safety. The test group was those persons who wore their belts because of law, and the control group was those who persons who wore seat belts as a safety measure. The following are the statistically significant comparisons:
1. Males (32.75% of the test group and 28.79% of the control group) were overrepresented in their reported habit of wearing seat belts because “it is the law” and were statistically overrepresented by 15.9% over the control group (32.75/28.79 = 1.159).

2. Persons who reported that they wore seat belts more than half the time comprised 3.67% of the test group and 2.16% of the control group. They were overrepresented by 69.6% over the control group.

3. Persons who reported that they wore their seatbelts more on long trips comprised 5.47% of the test group and 3.25% of the control group. They were statistically overrepresented by 76.7% over the control group.

4. Persons who were willing to change their seatbelt wearing habits comprised 5.17% of the test group and 3.39% of the control group. They were statistically overrepresented by 52.3% over the control group.

5. Persons who were unwilling to change their seatbelt wearing habits comprised 3.103% of the test group and 1.74% of the control group. They were statistically overrepresented by 78.3% over the control group.

Further analysis of the data set did not show any statistically significant comparisons.

Are you more inclined to wear a seat belt after seeing or hearing the “Click it or Ticket” campaign: “Yes” vs. “No”

This section presents data for those who stated that they were more inclined to wear seat belts after seeing the “Click it or Ticket” program with those who are not. The frequency analysis showed 2.47% of the sample population were more inclined to wear seat belts after seeing the “Click it or Ticket” program. The analysis also shows 2.56% of the sample population were not more inclined to wear their seat belts even after seeing the “Click it or Ticket” program. Further analysis on the data set did not show any statistically significant comparisons.

What was your source of first information about the “Click it or Ticket” campaign: “Radio” vs. “Television”

This analysis presents data for the respondents who stated that their source of information about the “Click it or Ticket” was “Radio” (the test group) with those who stated that their source of information was “Television” (the control group). The frequency analysis showed 8.39% of the respondents came to know about “Click it or Ticket” through “Radio”, whereas 48.96% came to know about it through “Television”. The other sources of information about the “Click it or Ticket” program for the respondents were School (0.65%), Family or Friends (3.94%), Newspaper (2.71%), Billboards (3.68%) and Others (7.19%). 24.14% of the respondents were unaware of the “Click it or Ticket” program. The following presented statistically overrepresented comparisons.
1. Males (37.43% of the test group and 28.61% of the control group) were statistically overrepresented by 30.8% in “Radio” as the main source of information about “Click it or Ticket” (37.43/28.61=1.308).

Further analysis of the data set did not show any statistically significant comparisons.

*Do most of your friends use seat belts: “About half or less” vs. “More than half”*

Frequency analysis showed 8.91% of the respondents indicated that “About half” of their friends wear seat belts and 2.95% of the respondents indicated that “Less than half” of their friends wear their seat belts. 87.8% of the respondents said that “More than half” of their friends wear their seat belts. The test group were those persons who reported “About half or less” of the friends used seat belts, and the control group is “more than half”. The following presents the statistically significant comparisons.

1. Age groups 16-18 (7.62% of the test group and 4.21% of the control group) were statistically overrepresented in their reported “about half or less” of their friends used seat belts by 80.8% over the control group (7.62/4.21=1.808).
2. Age group 19-21 (6.53% of the test group and 3.309% of the control group) were statistically overrepresented in their reported “about half or less” of their friends used seat belts by 97.5% over the control group.
3. Persons who report that they were not more inclined to wear their seat belts after seeing the “Click it or Ticket” slogan comprise 4.17% of the test group and 2.35% of the control group. They were statistically overrepresented by 77.4% over the control group.
4. Persons who were unwilling to change their seatbelt wearing habits comprised 3.81% of the test group and 1.88% of the control group. They were statistically overrepresented by 2.01 times the control group.

Further analysis of the data set did not show any statistically significant comparisons.

*Other Investigations:*

The researchers made many other statistical comparisons, including the following:

1. Age group “18 or less” vs. all other results.
2. Age group “19-21” vs. all other results.
3. Age group “22-49” vs. all other results.
4. Age group “50 or older” vs. all other results.
5. Cities selected as “Under represented” in minority population vs. “Overrepresented” in minority population.

No statistically valid differences were found in any of those comparisons.
Section 4
Analysis Of External Telephone Survey Data

Introduction

This section of the report describes the telephonic survey conducted by Schulman, Ronca & Bucuvalas of Atlanta. The data collected through the survey was put into the CARE software for analysis. IMPACT, cross tabulation, and frequency analyses were conducted on the data, and the statistically significant results are presented in the following sections.

Schulman, Ronca & Bucuvalas conducted 500 random interviews with Alabama residents both before and after Alabama’s “Click it or Ticket” seat belt enforcement program. The samples were designed as a statewide cross section of households. The telephone numbers were randomly generated by a computer, to avoid any stratification.

Frequency Analysis

Table 4-1 presents the frequency analysis of seat belt usage for the full 1,000 calls (comparing data from “before” and “after” the enforcement program). The results reveal an increase in “All the time” seat belt usage, climbing to 87-88% in the “After” case. 2-3% of respondents indicated they wore seat belts “Rarely” or “Never”. It is important to note that this is self-reported data.

<table>
<thead>
<tr>
<th>Frequency of Shoulder Belt Use</th>
<th>Before Frequency (%)</th>
<th>After Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All the time</td>
<td>84</td>
<td>87</td>
</tr>
<tr>
<td>Most of the time</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Some of the time</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Rarely</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Never</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Frequency of Lap Belt Use</th>
<th>Before Frequency (%)</th>
<th>After Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All the time</td>
<td>84</td>
<td>88</td>
</tr>
<tr>
<td>Most of the time</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Some of the time</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Rarely</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Never</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
Figures 4-1 through 4-4 present cross tabulations of the combined “before” and “after” telephone survey data with different parameters. Figure 4-1 shows variation of shoulder belt usage across different age groups. It can be seen that there was not a wide variation in shoulder belt usage for different age groups, except that the 65+ age group reported wearing shoulder belts at the highest rate.

Figure 4-1. Cross tabulation, shoulder belt users with age category.

Figure 4-2 shows the variation of lap belt usage across different age groups. All age groups reported lap belt usage rate in the 80% - 90% range, with the oldest group (65+) and youngest group (16-24) reporting highest use.

Figures 4-3 and 4-4 show the cross tabulation of shoulder and lap belt usage with respondent’s race and ethnicity. Only six Asian and four Hispanic respondents are represented in the figures, which does not constitute a sufficient number for statistical verification. The remaining groups showed reasonably similar seat belt use rates, with black Alabamians slightly below white Alabamians.
Figure 4-2. Cross tabulation, lap belt users with age category.

Figure 4-3. Cross tabulation, shoulder belt users with ethnicity.
Detailed Analysis

Comparisons of the 500 “before” and 500 “after” calls provided only a few statistically significant findings. (They are presented under the “month of call” heading below.) Thus, the authors performed an IMPACT analysis on the full (1,000 calls) data set using CARE. All of the findings presented below are statistically significant.

What is your frequency of seat belt use (both lap and shoulder belt): “All the time” with “All other results”

This analysis compared the frequency of both lap and shoulder belt “All the time” users with its complement “All other results”. The “All other results” included “Most of the time”, “Some of the time”, “Rarely”, and “Never”. The following results were statistically significant for the comparison. The “All the time” seat belt users were the test group, and “All other results” were the control group.

1. Pickup trucks (22.56% of the test group and 32.86% of the control group) were statistically underrepresented as “Vehicle most often driven” for “All the time” seat belt users by 45.6% over the control group (32.86/22.56=1.456).
2. Persons who responded that police should be allowed to stop a vehicle if they observed a seat belt violation when no other traffic laws were being broken
comprised 71.58% of the test group and 41.95% of the control group. They were statistically overrepresented by 70.6% over the control group.

3. Persons who “strongly disagreed” with the question “seatbelts were just as likely to harm you as help you” comprised 37.88% of the test group and 23.07% of the control group. They were statistically overrepresented by 64.2% over the control group.

4. Persons who “strongly disagreed” that “putting on a seatbelt makes me worry about being in an accident” comprised 64.76% of the test group and 49.65% of the control group. They were statistically overrepresented by 30.4% over the control group.

5. Persons who “Strongly agreed” that “it is important for the state to enforce the seatbelt laws for adults” comprised 63.51% of the test group and 32.16% of the control group. They were overrepresented by 97.4% over the control group.

6. Females (54.45% of the test group and 37.06% of the control group) were overrepresented by 46.9% in “all the time” seat belt usage over the control group.

Further analysis did not reveal any other statistically significant comparisons.

What is your frequency of seat belt use (either lap or shoulder belt): "Most of the time", “Some of the time”, “Rarely”, “Never” with “All the time”

This analysis compared the frequency of persons wearing either lap or shoulder seatbelt “Most of the time”, “Some of the time”, “Rarely”, “Never” with “All the time”. The test group was composed of persons who wore the seat belt less than “all the time”. The control group was composed of those who reported “all the time” seat belt usage. The following results were statistically significant for the comparison.

1. Pickup trucks (32.86% of the test group and 22.87% of the control group) were most overrepresented as “Vehicle most often driven” for the test group by 43.7% over the control group (32.86/22.87=1.43). Further investigation of the group who drove pick up trucks showed that males were overrepresented in that group by 38.6% compared to the control group. When pick up drivers were asked “when was the last time you drove an automobile without wearing a seat belt”, “within the past day” was overrepresented by 41.1% compared to the control group. Further analysis did not reveal any significant comparisons.

2. Persons who felt that the seat belt laws should not be made primary comprised 51.74% of the test group and 25% of the control group. They were statistically overrepresented by 2.0 times the control group. Further analysis on this parameter did not reveal any significant comparisons.

3. Persons who “Somewhat agreed” that it is important to have a seat belt on in an accident comprised 18.18% of the test group and 9.62% of the control group. They were overrepresented by 88.9% over the control group.

4. Persons who felt that police should not be allowed to stop a vehicle if they observe a seat belt violation when no other traffic laws were being broken comprised 17.48% of the test group and 5.12% of the control group. They were overrepresented by 3.41 times the control group.
5. Persons who “Some what agreed” with the argument that “putting on a seat belt makes me worry about being in an accident” comprised 13.98% of the test group and 6.12% of the control group. They were statistically overrepresented by 2.28 times the control group.

6. Persons who felt that “it is not that important for the state to enforce the seat belt law” comprised 27.97% of the test group and 7.12% of the control group. They were overrepresented by 3.9 times the control group.

7. Males (62.93% of the test group and 46.62% of the control group) were overrepresented by 35% over the control group.

Further analysis did not reveal any other statistically significant comparisons.

What is your frequency of seat belt use (either lap or shoulder belt): “All other results ” with “Never”

This analysis compared the frequency of either lap or shoulder belts “All other results” users with “Never”. The test group is the persons who responded that their frequency of either lap or shoulder belt usage is “All the time”, “Most of the time”, “Some of the time”, “Rarely”, and the control group is the persons who responded “Never” to seat belt usage. The following results were statistically significant for the comparison.

1. Cars (59% of the test group and 48.63% of the control group) were statistically overrepresented for the test group as “Vehicle most often driven” by 21.3% over the control group (59/48.63=1.213).

2. Persons who reported Pickup trucks as “Vehicle most often driven” comprised 22.87% of the test group and 32.87% of the control group. They were underrepresented by 43.7% over the control group.

3. Persons who reported that they were very likely expecting to get a ticket during the next six months for not wearing a seat belt comprised 44.25% of the test group and 33.56% of the control group. They were overrepresented by 31.8 % over the control group.

4. Persons who “Strongly disagreed” with the statement “seatbelts are just as likely to harm you as help you” comprised 36% of the test group and 22.60% of the control group. They were overrepresented by 59% over the control group.

5. Persons who “strongly agreed” that having a seatbelt on in an accident is important comprised 85% of the test group and 58.21% of the control group. They were overrepresented by 46% over the control group.

6. Persons who “Strongly agreed” that it is important for the police to enforce the seat belt laws comprised 63.25% of the test group and 34.93% of the control group. They were overrepresented by 81% over the control group.

7. Persons who strongly disagreed with the argument that putting on a seat belt makes one worry about accidents comprised 63% of the test group and 48.63% of the control group. They were overrepresented by 29.5% over the control group.
8. Persons who had heard messages encouraging seat belt use in past 30 days comprised 85.25% of the test group and 77.39% of the control group. They were overrepresented by 10% over the control group.

9. Persons who believed that it is important to have stricter enforcement of seat belt laws comprised 63.62% of the test group and 32.19% of the control group. They were overrepresented by 98% over the control group.

10. Females (53.37% of the test group and 37.67% of the control group) were statistically overrepresented by 42% over the control group.

“Males” vs. “Females”.

This analysis compared male respondents with female respondents in their seat belt usage. The gender breakdown was 480 males (the test group) and 520 females (the control group). The following presents statistically significant comparisons that were gender specific.

1. Persons who said that they drove an automobile almost everyday comprised of 85.62% of the test group (males) and 75.96% of the control group (females). They were overrepresented by 12% over the control group (85.62/75.96=1.12).

2. Pickup truck (39.79% of the test group and 6.34% of the control group) was most overrepresented as the type of motor vehicle driven by the test group by 6.2 times the control group.

3. Persons who reported “most of the time” shoulder belt usage comprised of 11.66% of the test group and 5.38% of the control group. They were overrepresented by 2.16 times the control group.

4. Persons who reported “most of the time” lap belt usage comprised of 10% of the test group and 3.84% of the control group. They were overrepresented by 2.6 times the control group.

5. Persons who reported “All the time” shoulder belt usage comprised 73.95% of the test group and 80.96% of the control group. They were underrepresented by 9% over the control group.

6. Persons who reported that their use of seatbelts had increased in the past 30 days comprised 13.75% of the test group and 7.11% of the control group. They were overrepresented by 93% over the control group. Further analysis showed that the most prominent reason for the increase in seatbelt usage in males was the seat belt law, but it was not statistically significant.

7. Persons who reported that it is very unlikely that they would receive a ticket for not wearing seat belts for the next six months comprised 16.45% of the test group and 9.80% of the control group. They were overrepresented by 67.8% over the control group.

8. Persons who said “police can stop a vehicle when they observe a seat belt violation” comprised 78.54% of the test group and 69.80% of the control group. They were overrepresented by 12% over the control group. This showed the awareness of primary enforcement of seat belt law among males compared to females.

9. Persons who reported that police should not be allowed to stop a vehicle if they observe a seat belt violation when no other traffic laws are being broken comprised
34.37% of the test group and 23.84% of the control group. They were overrepresented by 44% over the control group.

10. Persons who reported that it was not important for the police to enforce the seat belt laws comprised 10.83% of the test group and 4.03% of the control group. They were overrepresented by 2.6 times over the control group.

11. Persons who reported that they had seen or heard messages encouraging seat belt use in past 30 days comprised 33.12% of the test group and 23.46% of the control group. They were overrepresented by 41% over the control group.

12. Persons who reported that even after hearing the importance of seat belt enforcement, it was not important to enforce strictly the seat belt laws for adults comprised 14.37% of the test group and 6.26% of the control group. They were overrepresented by 2.25 times the control group.

*Have you heard the slogan “Click it or Ticket” with “All other slogans”.*

This analysis compared those who stated that they heard the slogan “Click it or Ticket” with those who heard all other slogans. 159 (15.90%) of the 1,000 respondents agreed that they heard the “Click it or Ticket” slogan. The other slogans included in the questionnaire were “Friends don’t let friends drive drunk”, “Buckle up America”, “Children in back”, “You drink, you drive, you lose”. The following presents the statistically significant overrepresented findings for those persons who said that they heard “Click it or ticket” (the test group).

1. Persons who reported TV (23.8% of the test group and 11.29% of the control group) as the main source of information about slogans were overrepresented by 2.12 times the control group (23.8/11.29=2.116).

2. Persons who reported newspaper (13.83% of the test group and 5.23% of the control group) as the main source of information about slogans, were overrepresented by 2.64 times the control group.

3. Persons who reported commercial/advertisement programs (22.64% of the test group and 8.44% of the control group) as the main source for messages on enforcement programs were overrepresented by 2.68 times the control group.

4. Persons who reported news story/news program (16.35% of the test group and 9.15% of the control group) as the main source for messages on enforcement programs were overrepresented by 78% over the control group.

5. Persons who reported TV (20.12% of the test group and 8.08% of the control group) as the main source of information about seat belt checkpoints were overrepresented by 2.5 times the control group.

6. Persons who reported that in the past 30 days they had seen personally the checkpoints where the police stopped automobiles to personally check whether the passengers were wearing seat belts comprised 66.03% of the test group and 36.14% of the control group. They were overrepresented by 82.70% over the control group.

7. Persons who reported that they had seen or heard of special efforts by police to ticket drivers if the children in their vehicles were not wearing seatbelts or were not in car
seats comprised 41.50% of the test group and 25.56% of the control group. They were overrepresented by 63% over the control group.

8. Persons who reported that the number of messages encouraging the use of seatbelts were more than usual comprise 59.74% of the test group and 28.89% of the control group. They were overrepresented by 2 times the control group.

Month of Call: June Vs. May

This analysis compared the respondents’ opinions on seatbelt enforcement for persons called during the month June (test group) with persons called during May (control group). This analysis was important to evaluate the effectiveness of the “Click it or Ticket” seat belt enforcement program because the public had not heard of the campaign in May, but it was heavily advertised in June. 500 persons were interviewed in both May and June. The number who had heard about the “Click it or Ticket” slogan was 145 in June, which indicates that 29% of the test group were aware of the “Click it or Ticket” slogan. The following items present the statistically significant results from a comparison of these two subsets.

1. Persons who reported they would “very likely” be ticketed for not wearing seat belt comprised 48.2% of the test group and 32.2% of the control group. They were overrepresented by 49.7% over the control group (48.2/32.2=1.497).

2. Persons who “strongly agreed” that Police in their community are writing more tickets for seat belt violations comprised 55.8% of the test group and 26.4% of the control group. They were overrepresented by over 2.1 times the control group.

3. A positive response to “have you seen or heard special enforcement efforts in the past 30 days” (for 64.6% of the test group and 15.6% of the control group) was overrepresented by over 4 times the control group.

4. Persons who reported personally seeing the seat belt check points in the past 30 days comprised 23.4% of the test group and 11.4% of the control group. They were overrepresented by over 2.05 times the control group.

5. A positive response to “have you been personally stopped at seat belt check points” was overrepresented (13.4% of the test group and 5.4% of the control group) by 2.4 times the control group.

6. Persons who reported that they had seen or heard of special enforcement efforts by police to ticket drivers if children in their vehicles were not wearing their seat belts or were not in their car seats comprised 37.2% of the test group and 19% of the control group. They were overrepresented by 95.8% over the control group.

7. Persons who reported that they had seen or heard messages encouraging people to wear their seat belts in the past 30 days comprised 90.2% of the test group and 76.2% of the control group. They were overrepresented by 18.4% over the control group.

8. Persons who reported that they had seen “More than usual” messages encouraging seatbelt use in the past 30 days comprised 56% of the test group and 11.6% of the control group. They were overrepresented by over 4.8 times the control group.

9. A “No” response (75.8% of the test group and 67.4% of the control group) was overrepresented for the question “would information about protecting a child in motor vehicle be helpful” by 12.5% over the control group.
Type of motor vehicle driven: “Pick up truck” with “Car”.

This analysis compared those who stated that they more often drove a pick up truck with those who drove a car. The following presents the statistically significant results that were found in comparing these two subsets. Frequency analysis showed 24.19% of the respondents drove a pickup truck and 56.91% drove a car.

1. Persons who reported “almost every day” as the frequency of driving an automobile comprised 91.52% of the test group and 83.68% of the control group. They were overrepresented by 9.4% over the control group.

2. Persons who reported “within the past day” as the last time drove when not wearing seat belt comprised 16.07% of the test group and 7.97% of the control group. They were overrepresented by 2.01 times the control group.

3. Persons who reported that they were aware of the primary seat belt law comprised 81.69% of the test group and 72.86% of the control group. They were overrepresented by 12% over the control group.

4. Persons who reported that the seat belt laws should not be primary comprised 33.92% of the test group and 23.90% of the control group. They were overrepresented by 41.9% over the control group.

5. Persons who “strongly disagreed” that, it is important for police to enforce seat belt law comprised 12.5% of the test group and 5.123% of the control group. They were overrepresented by 2.4 times the control group.

6. Persons who “Somewhat disagreed” with the opinion that “putting on a seat belt makes me worry about being in an accident” comprised 26.33% of the test group and 17.64% of the control group. They were overrepresented by 49.3% over the control group.

7. Persons who felt that it was not important for the state to enforce the seat belt laws for adults more strictly comprised 15.62% of the test group and 7.97% of the control group. They were overrepresented by 96% over the control group.

8. A “No” (80.35% of the test group and 68.69% of the control group) response on “would find information on how to protect a child in a motor vehicle helpful” was overrepresented by 17% over the control group.

9. Males (85.26% of the test group and 33.01% of the control group) were overrepresented by 2.58 times the control group in their reported driving of pickup truck.

Why has your seat belt use increased: “Seat belt law” with “All other results”

Certain drivers (10.3% of the total) indicated that their seat belt use had recently increased. Persons who said their use had increased due to the “Seat belt law” (35.92%) were chosen as the test group, and “all other results” was the control group. The test group’s responses to a series of questions was compared to the responses of the control group. The following presents the statistically significant comparisons.
1. Persons who responded in the month of June comprised 78.37% of the test group and 50% of the control group. They were overrepresented in the month of June by 56.8% over May. This result clearly seems to demonstrate the impact of “Click it or Ticket” campaign.

2. Persons who reported that they were aware of the primary enforcement of the seat belt law comprised 94.59% of the test group and 71.66% of the control group. They were overrepresented by 32% over the control group.

3. Persons who reported that they had seen special enforcement efforts during the past 30 days comprised 62.16% of the test group and 35% of the control group. They were overrepresented by 77.6% over the control group.

Are you aware of the seat belt law: “No” with “Yes”

The frequency analysis showed 95.6% of the respondents were aware of the primary enforcement of seat belt law, and 0.70% of the respondents were not aware of the primary enforcement of the seat belt law. (3.50% of the respondents were not sure of the primary enforcement of the seat belt law). Impact analysis did not reveal any statistically significant comparisons.

What is the likelihood of you being ticketed for not wearing a seat belt: “Very Unlikely” and “Somewhat Unlikely” with “Very Likely” and “Somewhat Likely”

This analysis compared those who responded that it is “very unlikely” and “somewhat unlikely” to be ticketed for a seat belt violation during the next six months (the test group) with those who responded “very likely” and “somewhat likely” (the control group). The following were the statistically significant comparisons.

1. Males (58.73% of the test group and 45.28% of the control group) were overrepresented in their opinion that they are “very unlikely” or “somewhat unlikely” to be ticketed for not wearing a seat belt by 29.7% over the control group.

2. Persons who “strongly disagreed” with the statement that seat belts are as likely to harm as help you comprised 42.71% of the test group and 32.51% of the control group. They were overrepresented by 31.4% over the control group.

3. Persons who “somewhat agreed” that police generally won’t bother to write tickets for seat belt violations comprised 31.55% of the test group and 20.18% of the control group. They were overrepresented by 56.3% over the control group.

4. Persons who “strongly disagreed” that police are writing more tickets for seat belt violations comprised 13.10% of the test group and 3.69% of the control group. They were overrepresented by 3.5 times the control group.

5. A “no” response to “have you heard or seen seat belt check points” (for 68.44% of the test group and 49.61% of the control group) was overrepresented by 46% over the control group.
6. A “no” response to “have you personally seen seat belt check points in the past 30 days” (for 89.32% of the test group and 76.42% of the control group) was overrepresented by 16.9% over the control group.

7. A “no” response to “have you seen or heard about special enforcement efforts for children in the past 30 days” (for 76.69% of the test group and 65.79% of the control group) was overrepresented by 16.6% over the control group.

8. A “no” response to “have you seen or heard messages encouraging seatbelt use in the past 30 days” (for 18.93% of the test group and 11.71% of the control group) was overrepresented by 61.7% over the control group.

9. Persons who reported that the “number of messages encouraging seat belt use in the past 30 days remained the same” comprised 53.88% of the test group and 43.91% of the control group. They were overrepresented by 22.7% over the control group.

10. Persons who reported that they had not seen slogans encouraging seat belt use comprised 12.62% of the test group and 6.62% of the control group. They were overrepresented by 90.5% over the control group.

Do you believe seat belts are as likely to harm as help you: “Strongly Agree”, “Somewhat Agree” with “All other results”.

This analysis compared the 38% of Alabamians who responded “Strongly agree” or “Somewhat agree” (the test group) that seat belts are as likely to harm as help you with all other results (the control group). The “all other results” include “Strongly disagree” and “Somewhat disagree” and “Don’t know”. The following were the statistically significant comparisons.

1. Persons who reported that the type of seat belt in the car they most often drove are shoulder belts only comprised 8% of the test group and 3.89% of the control group. They were overrepresented by 2 times over the control group (8/3.89=2).

2. Persons who reported “most of the time” as the frequency of shoulder belt usage comprised 11.46% of the test group and 6.48% of the control group. They were overrepresented by 76.9% over the control group.

3. Persons who reported driving an automobile without wearing a seat belt “within the past day” comprised 13.86% of the test group and 7.45% of the control group. They were overrepresented by 86% over the control group.

4. Persons who reported that the seat belt laws should not be primary comprised 37.06% of the test group and 24.14% of the control group. They were overrepresented by 53.5% over the control group.

5. Persons who “Some what agreed” that it is safer to have seatbelt on in an accident comprised 18.93% of the test group and 5.99% of the control group. They were overrepresented by 3.15 times the control group.

6. Persons who reported that it is not important for the state to enforce the seat belt law comprised 14.66% of the test group and 7.45% of the control group. They were overrepresented by 96.7% over the control group.
7. Persons who reported that the slogan “Buckle up America” was heard during the past 30 days comprised 22.4% of the test group and 15.55% of the control group. They were overrepresented by 44% over the control group.

**Putting on seatbelts makes me worry: “Strongly Agree”, “Somewhat Agree” Vs. “All other results”**.

This analysis compared a test group that responded, “strongly agree (9.4% of the respondents)” and “somewhat agree (7% of the respondents)” that “putting on seat belts makes me worry” (the test group) with “all other results” (the control group). The “all other results” include “strongly disagree” and “somewhat disagree”. The following were the statistically significant comparisons.

1. “Never drive” (14.02% of the test group and 4.81% of the control group) was overrepresented for “How often do you drive a motor vehicle” by 2.9 times the control group (14.02/4.81=2.9).
2. Persons who reported that the seat belt laws should not be primary comprised 43.90% test group and 26.61% of the control group. They were overrepresented by 64.9% over the control group.
3. Persons who “strongly agreed” that “the seat belt is as likely to harm as to help you” comprised 39.64% of the test group and 11.53% of the control group. They were overrepresented by 3.4 times the control group.
4. Persons who “somewhat agreed” that it is safer to have seatbelt on in an accident comprised 23.17% of the test group and 7.98% of the control group. They were overrepresented by 2.9 times the control group.
5. Persons who “strongly disagreed” with “it is important for police to enforce seat belt law” comprised 15.24% of the test group and 5.83% of the control group. They were overrepresented by 2.6 times the control group.
6. Persons who “strongly agreed” with “police in the community are writing more tickets for seatbelt violations” comprised 54.87% of the test group and 38.53% of the control group. They were overrepresented by 42.4% over the control group.
7. Persons who reported that “it was not that important” for state to enforce the seatbelt law comprised 20.73% of the test group and 8.11% of the control group. They were overrepresented by 2.5 times the control group.

**Respondent education: “12th grade or less” with “More than 12th grade”**

This analysis compared the respondents with educational qualification as “12th grade or less (49.7% of the respondents)” (the test group) with “more than 12th grade” (the control group). The following presents statistically significant comparisons.

1. “Sport Utility Vehicle” (6.23% of the test group and 12.19% of the control group) and “Car” (48.08% of the test group and 57.02% of the control group) were
underrepresented as the vehicle most often driven for the test group by 95% and 18% respectively.

2. “All the time” (73.04% of the test group and 82.43% of the control group) was underrepresented for the question how often “shoulder belt is used for the vehicle most often driven” by 12.8% over the control group.

3. “All the time” (68.81% of the test group and 80.16% of the control group) was underrepresented for the question how often lap belt is used for the vehicle most often driven by 16.5% over the control group (80.16/68.81=16.5).

4. “Very likely” (45.67% of the test group and 34.09% of the control group) was overrepresented for the question “likelihood of being ticketed for not wearing seat belt” by 34% over the control group.

5. Persons who “Strongly agreed” in their opinion that “seat belts are as likely to harm you as help you” comprised 24.34% of the test group and 8.26% of the control group. They were overrepresented by 2.9 times the control group.

6. “Strongly agree” (13.68% of the test group and 4.95% of the control group), “Somewhat agree” (22.53% of the test group and 16.11% of the control group) and “Somewhat Disagree” (8.85% of the test group and 4.95% of the control group) were overrepresented for the test group in their opinion “putting on a seat belt makes me worry about being in an accident” by 2.759, 1.39, 1.758 respectively times the control group.

7. Persons who “Strongly agreed” in their opinion that “Police in the community are writing more seat belt tickets than a few months ago” comprised 48.08% of the test group and 34.71% of the control group. They were overrepresented by 38.5% over the control group.

8. “No” (61.16% of the test group and 52.89% of the control group) was overrepresented for the question “have you seen or heard special enforcement efforts in the past 30 days” by 38.5% over the control group.

9. The older age groups, i.e., “65+” (23.74% of the test group and 12.60% of the control group), “55 to 64” (16.09% of the test group and 8.47% of the control group), and the youngest age group “16 to 24” (13.88% of the test group and 1.49% of the control group), were overrepresented in the test group by 88%, 63%, 49% respectively over the control group.

10. “White” (67% of the test group and 77.27% of the control group) was underrepresented as respondents Ethnicity for the test group by 15.3% over the control group.

**Age group: “16 to 24” with all other results**

An impact analysis was performed on the telephone survey data comparing the “16 to 24” age group (the test group) with all other age groups (the control group). The other age groups included “25 to 34”, “35 to 44” 45 to 54”, “55 to 64” and age above 65. The analysis did not show statistically significant results.
Age group “16-34” with all other groups:

This analysis compared the respondents whose age was between “16 to 34” (27.4% of the respondents, the test group) with all other age groups (the control group). The following presents statistically significant results.

1. Sport Utility vehicle (12.77% of the test group and 7.55% of the control group) was overrepresented as the most often driven vehicle by 69% over the control group (12.77/7.55=1.69).
2. Persons who reported that seat belt laws should not be primary comprised 34.67% of the test group and 26.49% of the control group. They were overrepresented by 30.9% over the control group.
3. Persons who “somewhat agreed” with the opinion that “police in community generally won’t bother to write more ticket for seat belt violations” comprised 27.73% of test group and 19.08% of the control group. They were overrepresented by 45.3% over the control group.
4. Persons who “some what agreed” in their opinion that “it is important for the police to enforce seat belt laws” comprised 32.48% of test group and 20.65% of the control group. They were overrepresented by 57.3% over the control group.
5. Persons who “strongly disagreed” in their opinion that “putting on a seat belt makes me worry about being in an accident” comprised 67.51% of test group and 56.98% of the control group. They were overrepresented by 18.5% over the control group.
6. A higher proportion of test group “strongly disagreed” (8.75% of the test group and 4.55% of the control group) and “somewhat disagreed” (10.58% of the test group and 5.55% of the control group) in their opinion that police in their community are writing more seat belt tickets than they were a few months ago and were overrepresented by 90% and 92% respectively.
7. “More than usual” (39.78% of the test group and 31.90% of the control group) was overrepresented for the question “have you heard more or fewer messages encouraging seatbelt use in past 30 days” by 24.7% over the control group.
8. “Fairly important” (21.53% of the test group and 14.67% of the control group) was overrepresented for the question “what is the importance of the state enforcing seat belt laws for adults more strictly” by 46.8% over the control group.
9. “You Drink, You Drive, You Lose” (21.53% of the test group and 14.24% of the control group) was overrepresented as the slogan most heard in the past 30 days by 51.2% over the control group.
10. Persons who report “Direct mail/In the mail” as the preferred source of information about protecting children comprised 12.77% of the test group and 4.98% of the control group. They were overrepresented by over 2.5 times the control group.
11. “11th Grade” (for 8.02% of the test group and 4.27% of the control group) was overrepresented as the respondent’s education by 87.9% over the control group.
Respondents Race and Ethnicity “White” with “All other results”.

This analysis compared a test group who described themselves as “White” with “All other results”

1. “Almost every day” (84.55% of the test group and 72.45% of the control group) was overrepresented for the question “how often you drive a motor vehicle” by 16.7% over the control group.
2. “Pickup truck” (25.56% of the test group and 14.34% of the control group) was overrepresented as the vehicle most often driven by 78.3% over the control group.
3. “All of the time” (80.05% of the test group and 72.07% of the control group) was overrepresented for shoulder belt usage by 11.1% over the control group.
4. Persons who reported that the seat belt usage for the test group stayed the same over the last 30 days comprised 84.55% of the test group and 70.18% of the control group. They were overrepresented by 20.5% over the control group.
5. “Somewhat likely” (27.52% of the test group and 16.60% of the control group) was overrepresented for the question “Likelihood of being ticketed for not wearing seat belt” by 65.8% over the control group.
6. “Somewhat disagree” (24.71% of the test group and 14.34% of the control group) and “Strongly disagree” (38.06% of the test group and 24.15% of the control group) were overrepresented for the question “Seat belts are as likely to harm you as to help you” for the test group by 72% and 57% respectively over the control group.
7. Persons who “Strongly disagreed” with the opinion “putting on a seat belts makes me worry about being in an accident” comprised 64.6% of the test group and 49.05% of the control group. They were overrepresented by 31.7% over the control group.
8. A “No” (74.57% of the test group and 64.52% of the control group) response was overrepresented for the question “would information on protecting a child in a motor vehicle be helpful” by 15.6% over the control group.
9. “College graduate or higher” (29.63% of the test group and 19.62% of the control group) was overrepresented as test group’s education by 51% over the control group.
Section: 5
Making Sense of the Statistical Data

The Schulman, Ronca & Bucuvalas survey and the University of Alabama survey interviewed a combined total of 5,631 persons in Alabama to understand their seat belt usage habits. These persons represent 0.13% of the total Alabama population. Sections three and four of this report presented the statistically significant findings for the small sample population. It is important to know how the statistically significant findings represent and affect the overall Alabama population, so that the most effective techniques can be selected to influence more Alabamians to wear seat belts during future seat belt campaigns. This section of the report will present that analysis and rank target populations for seat belt countermeasure development.

Analysis of Alabama Survey Data

The University of Alabama interviewed 4,631 persons after the “Click it or Ticket” seat belt enforcement program. 94% of the sample population self-reported that they wore their seat belts “all the time” in Alabama. Applying this result to the 2000 census data lead to the conclusion that 266,826 persons in Alabama buckle up less than “all the time”. The authors used the IMPACT module of CARE module to identify and analyze different sets of target populations who wear seat belt less than “all the time”.

Table 5-1 displays some of the attributes of the persons who reported “less than all the time” seat belt usage, when compare to those who reported “all the time”. This IMPACT analysis was performed to identify statistically significant personality traits of the sample population who reported “less than all the time.” The Max Gain column shows the maximum number of persons in the sample population who would change their seat belt habits if they could be influenced by an effective seatbelt information or enforcement campaign. For example, out of 1,369 males surveyed, 115 wore seat belts “less than all the time”. Of that 115, 34 (the number in the ‘Max Gain’ column) might be persuaded to begin wearing seat belts “all the time”. Thus, the percentage of Alabama males who might be convinced to wear seat belts is $\frac{34}{1,369} = 2.48\%$. The 2000 Census identified 2,103,478 males in Alabama. Multiplying 2,103,478 by 2.48% yielded a target number of 53,241 Alabama males who might be persuaded to wear seat belts. The numbers in the rightmost column of Table 5-1 are very important, because future seat belt campaigns may select target groups with the highest values in that column. Similar analyses were performed for all other statistically significant parameters, and the results are summarized in Table 5-1.

Research performed by Dr. David Brown of University of Alabama identified that for every 1% increase in seat belt usage rate, seven lives can be saved annually. Applying his findings to the target population for seat belt countermeasures, the authors estimated the number of lives that can be saved annually by applying suitable countermeasures. For example, by selecting suitable techniques, 52,241 males in Alabama might be convinced to wear their seat belts “all the time”,

36
which is 1.17% of the total population. Thus eight lives (1.17% of population x 7 lives saved per one percent seatbelt increase) might be saved annually in Alabama if this target group could be persuaded to wear seatbelts. Table 5-2 presents the number of lives that can be saved annually by applying the same procedure to different parameters.

Table 5-1. Estimation of Target Population of Seat Belt Countermeasures

<table>
<thead>
<tr>
<th>Parameters</th>
<th>All other results</th>
<th>All the time</th>
<th>Max Gain</th>
<th>Target Population for Seat Belt Countermeasures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Test Group (%)</td>
<td>Frequency</td>
<td>Control Group (%)</td>
</tr>
<tr>
<td>Are you willing to change seat belt habits: Yes</td>
<td>73</td>
<td>25.97</td>
<td>102</td>
<td>2.34</td>
</tr>
<tr>
<td>Gender: Males</td>
<td>115</td>
<td>40.92</td>
<td>1254</td>
<td>28.82</td>
</tr>
<tr>
<td>Do you wear seat belt on long trips: Yes</td>
<td>52</td>
<td>18.50</td>
<td>123</td>
<td>2.82</td>
</tr>
<tr>
<td>Are you willing to change seat belt habits: No</td>
<td>40</td>
<td>14.23</td>
<td>60</td>
<td>1.37</td>
</tr>
<tr>
<td>Were you more inclined to wear seat belt after hearing &quot;Click it or Ticket&quot;: No</td>
<td>23</td>
<td>8.18</td>
<td>96</td>
<td>2.20</td>
</tr>
<tr>
<td>Age group: 16-18</td>
<td>22</td>
<td>7.89</td>
<td>192</td>
<td>4.41</td>
</tr>
<tr>
<td>Were you more inclined to wear seat belt after hearing &quot;Click it or Ticket&quot;: Yes</td>
<td>18</td>
<td>6.4</td>
<td>96</td>
<td>2.20</td>
</tr>
</tbody>
</table>

Table 5-2. Estimation of Number of Lives Saved Annually by applying Seat Belt Countermeasures

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Target population for seat belt countermeasures</th>
<th>% Increase in belt usage</th>
<th>Estimated lives saved annually</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you willing to change seat belt habits: Yes</td>
<td>63,379</td>
<td>1.43</td>
<td>10</td>
</tr>
<tr>
<td>Gender: Males</td>
<td>52,241</td>
<td>1.17</td>
<td>8</td>
</tr>
<tr>
<td>Do you wear seat belt on long trips: Yes</td>
<td>42,253</td>
<td>0.95</td>
<td>7</td>
</tr>
<tr>
<td>Are you willing to change seat belt habits: No</td>
<td>34,570</td>
<td>0.78</td>
<td>5</td>
</tr>
<tr>
<td>Were you more inclined to wear seat belt after hearing &quot;Click it or Ticket&quot;: No</td>
<td>15,365</td>
<td>0.35</td>
<td>2</td>
</tr>
<tr>
<td>Age group: 16-18</td>
<td>9,092</td>
<td>0.21</td>
<td>1</td>
</tr>
<tr>
<td>Were you more inclined to wear seat belt after hearing &quot;Click it or Ticket&quot;: Yes</td>
<td>not statistically significant</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Analysis of Schulman, Ronca & Bucuvalas Survey Data

The Schulman, Ronca & Bucuvalas survey interviewed random sets of 500 persons before and after the “Click it or Ticket” seat belt enforcement program. The self-reported data for the combined 1000 sample population showed 88% wore their seat belts “all the time”. The authors performed IMPACT analyses to identify personality traits of the 12% of the sample population who wore their seat belts “less than all the time”. The results of the analysis are presented in Table 5-3. The calculations leading to the values in Table 5-3 are similar to the calculations performed for Table 5-1.

Table 5-3. Estimation of Target Population of Seat Belt Countermeasures

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Frequency</th>
<th>Test Group (%)</th>
<th>Control Group (%)</th>
<th>Max Gain (No of persons)</th>
<th>Target Population for Seat Belt Countermeasures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should seat belt law be primary: Should not</td>
<td>74</td>
<td>51.74</td>
<td>200</td>
<td>25</td>
<td>38</td>
</tr>
<tr>
<td>Is it important for state to enforce seat belt law: Not that important</td>
<td>40</td>
<td>27.97</td>
<td>57</td>
<td>7.12</td>
<td>29</td>
</tr>
<tr>
<td>Gender: Male</td>
<td>90</td>
<td>62.93</td>
<td>373</td>
<td>46.62</td>
<td>23</td>
</tr>
<tr>
<td>Vehicle most often driven: Pickup truck</td>
<td>47</td>
<td>32.86</td>
<td>183</td>
<td>22.87</td>
<td>14</td>
</tr>
<tr>
<td>Seat belts are as likely to harm you as to help you: Strongly agree</td>
<td>35</td>
<td>24.47</td>
<td>114</td>
<td>14.25</td>
<td>14</td>
</tr>
<tr>
<td>Do you want seat belt on in an accident: &quot;Some what agree&quot;</td>
<td>26</td>
<td>18.18</td>
<td>77</td>
<td>9.62</td>
<td>12</td>
</tr>
<tr>
<td>Putting on seat belt makes one worry about being in an accident: Somewhat agree</td>
<td>20</td>
<td>13.98</td>
<td>49</td>
<td>6.12</td>
<td>11</td>
</tr>
<tr>
<td>Minority population</td>
<td>26</td>
<td>20.15</td>
<td>147</td>
<td>18.37</td>
<td>Not statistically significant</td>
</tr>
</tbody>
</table>

The authors estimated the number of lives that might be saved by applying suitable countermeasures to the target population. (The estimates follow the procedures used to arrive at the values in Table 5-2). The results are presented in Table 5-4.
Table 5-4. Estimation of Number of Lives Saved Annually by applying Seat Belt Countermeasures

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Target population for seat belt countermeasures</th>
<th>% Increase in seat belt usage</th>
<th>Estimated lives saved annually</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should seat belt law be primary:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Should not</td>
<td>168,990</td>
<td>3.8</td>
<td>27</td>
</tr>
<tr>
<td>Is it important for state to enforce seat belt law:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not that important</td>
<td>128,966</td>
<td>2.9</td>
<td>20</td>
</tr>
<tr>
<td>Gender: Males</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicle most often driven:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pickup truck</td>
<td>100,792</td>
<td>2.3</td>
<td>16</td>
</tr>
<tr>
<td>Seat belts are as likely to harm you as to help you:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>62,259</td>
<td>1.4</td>
<td>10</td>
</tr>
<tr>
<td>Do you want seat belt on in an accident:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somewhat agree</td>
<td>53,365</td>
<td>1.2</td>
<td>8</td>
</tr>
<tr>
<td>Putting on seat belt makes one worry about being in</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>an accident:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somewhat agree</td>
<td>48,918</td>
<td>1.1</td>
<td>8</td>
</tr>
<tr>
<td>Minority population</td>
<td></td>
<td></td>
<td>not statistically significant</td>
</tr>
</tbody>
</table>

Comparison of UA and Schulman, Ronca & Bucuvalas Survey Analyses

Comparing Tables 5-1 Table 5-3 reveals that the results of the two surveys vary considerably. Both results list males as an important group, but the other entries in the tables are largely different. The reasons for the variation can be attributed to the following factors.

- The two surveys asked different questions or asked the same questions differently. So, there could have been subtle differences in the groupings of respondents based upon their responses. In other words, even though a question had the same intent on the two surveys, it might have been worded differently and a particular respondent might answer “yes” to one survey and “no” to the other, just because of that person’s interpretation of the different wordings of the question.

- The external survey interviewed 500 persons before and 500 persons after the “Click it or Ticket” enforcement program. The analysis showed 88% of the total sample population buckled up “all the time”. The Alabama survey was performed after the “Click it or Ticket” enforcement program and showed 94% of the sample population buckled up “all the time”. This indicates there was a significant increase in the awareness of the seat belt enforcement program across the state, which is reflected in the results presented here.
Selection of Groups for Seat Belt Countermeasure Development

Based on the analysis of Schulman, Ronca & Bucuvalas telephone survey, several groups were identified for seat belt countermeasure development, and they are listed below according to their potential for reducing accidents.

- Persons who believe the seat belt law should not be made primary
- Persons who believe that it is not important for the police to enforce the seat belt law
- Males
- Pickup truck drivers
- Persons who believe seat belts are “as likely to harm you as to help you”
- Persons who somewhat agree that they want to have their seat belt during an accident
- Persons who believe putting on a seat belt makes them worry about being in an accident

Based on the analysis of the University of Alabama telephone survey, several groups were identified for seat belt countermeasure development. They are listed below in order of their potential for reducing accidents.

- Persons who are willing to change their seat belt wearing habits
- Males
- Persons who wear seat belts more on long trips than short trips
- Persons who are not willing to change their seat belt wearing habits
- Persons who were not inclined to wear seat belts after hearing "Click it or Ticket”
- Age group 16-18

This report does not specify how each of these groups can best be influenced to wear seat belts. But an example can illustrate how this might be done. For persons who are inclined to wear seat belts more on long trips than short trips, they could be informed of the statistics in Section 2 of this report that show 80% of traffic fatalities occur within 25 miles of home.
This report describes the findings of two sets of telephone surveys aimed at discovering the seatbelt habits of a representative cross-section of Alabama residents. The surveys were performed in 2001 shortly before and after the “Click It or Ticket” seatbelt enforcement campaign, so they provide insight into the effects of the campaign as well as into the self-reported seatbelt habits of Alabamians. A study performed by Schulman, Ronca & Bucuvalas involved sets pf 500 telephone interviews before and after the “Click It or Ticket” campaign. A University of Alabama survey involved 4,631 telephone interviews conducted shortly after the end of the “Click It or Ticket” campaign.

Schulman, Ronca & Bucuvalas Survey

The Schulman, Ronca & Bucuvalas survey found that 86% of respondents reported using lap or shoulder belts before the “Click It or Ticket” campaign, while 90% of respondents reported using lap or shoulder belts after it, though the difference was not statistically significant. To gain a general understanding of Alabama residents’ seatbelt habits, the 1,000 responses were grouped together for analysis, and yielded the following results.

“All the time” seatbelt users exhibit the following characteristics compared to drivers who use seatbelts less frequently or not at all:

- They are more likely to be female
- They are less likely to drive pickup trucks
- They are more likely to believe that police should be allowed to stop a vehicle if the police observe a seatbelt violation when no other traffic laws are being broken.
- They are more likely to believe that seatbelts save lives.
- They are more likely to believe that enforcement of seatbelt laws for adults is important.
- They are less likely to report “putting on a seat belt makes me worry about being in an accident”.

Persons who report increased seatbelt use after the campaign (12% of the 500 “after” calls) were more likely to attribute the change to the seatbelt law. The majority of those individuals had personally seen seatbelt enforcement checkpoints. These results indicate the effectiveness of the “Click It” campaign.

Pickup drivers constituted 24.2% of the respondents; car drivers were 56.9%; and others (such as drivers of SUVs) constituted the remainder. Pickup drivers were least likely to wear their seatbelts and exhibited the following characteristics compared to car drivers:
• Pickup drivers were twice as likely to have driven an automobile but not worn a seatbelt within the last day.
• Pickup drivers were 42% more likely to believe the state should not have primary seatbelt enforcement laws.
• Pickup drivers were 2.6 times more likely to be males.

38% of drivers “strongly agree” or “somewhat agree” that seatbelts were “as likely to harm as help you” in an automobile crash. They exhibited the following characteristics when compared to other drivers:

• They were almost twice as likely to have driven without a seatbelt in the last 24 hours.
• They were almost twice as likely to believe that the state should not enforce the seatbelt law.

Education played a part in persons’ opinions concerning seatbelts and seatbelt laws. Persons with a 12th grade education or less (49.7% of the total) were almost three times more likely to say that seatbelts were “as likely to harm as help you” in an automobile crash.

Black Alabamians appeared to wear seatbelts at lower rates than other races/ethnicities. Their reported “all the time” lap belt usage rate was slightly less than 83.6%, while the rate for white Alabamians was 86.5%. However, the difference in usage rate was not statistically significant. White Alabamians were 78% more likely to drive pickup trucks than their counterparts.

Based on the analysis of the telephone survey by Schulman, Ronca & Bucuvalas, several groups were identified for seat belt countermeasure development. They are listed below in order of their potential for reducing accidents (highest potential is first on the list).

• Persons who believe the seat belt law should not be made primary
• Persons who believe that it is not important for the police to enforce the seat belt law
• Males
• Pickup truck drivers
• Persons who believe seat belts are “as likely to harm you as to help you”
• Persons who some what agree that they want to be wearing their seat belt in an accident
• Persons who believe putting on a seat belt makes them worry about being in an accident

University Of Alabama Survey

The University of Alabama survey was the larger of the two surveys, but it took place only after the “Click It” enforcement program. Self-reported “all the time” seat belt use was roughly 94%, with an additional 2.5% of respondents wearing them half the time. Of the group that did not buckle up “all the time” more than half (62%) tended to wear seat belts more for longer trips than shorter trips. UA survey findings reinforced the findings of the Schulman, Ronca, & Bucuvalas survey, and added additional data to the study:
• Males were over 50% more likely to use their seatbelts “half the time or less” compared to females.
• Persons who wore seatbelts “half the time or less” tended to wear them for long trips but not for short trips.
• The 16-18 age group was least likely to use seatbelts. That group and the 19-21 age group were also most likely to report that “half or less” of their friends used seatbelts.
• 75 percent of the respondents said they used seatbelts for safety; 19% said they wore them because “it’s the law”. (The remainder did not wear seatbelts or did not respond.)
• 18% of the population was unaware that the chances of a crash fatality were five times higher for persons not wearing seat belts.

One aspect of the UA study was an attempt to identify minority seatbelt use rates. This was investigated by comparing belt use in cities over-represented in minority population with belt use in under-represented cities. This comparison found no statistically significant differences of belt use in the sampled cities.

Based on the analysis of the University of Alabama telephone survey, the groups identified for seat belt countermeasure development are listed below in order of their potential for reducing accidents (highest potential is first on the list).

• Persons who are willing to change their seat belt wearing habits
• Males
• Persons who wear seat belts more on long trips than shorter trips
• Persons who were not willing to change their seat belt wearing habits
• Persons who were not inclined to wear seat belt after hearing "Click it or Ticket"
• Age group 16-18
Conclusions

Seat belt usage in Alabama is on the rise. However, field observations by law enforcement personnel indicate that approximately 21% of Alabamians still do not buckle up. The results of the two seat belt surveys reported here identified groups that do not wear seat belts, and the authors have suggested strategies that might be used to increase seat belt usage in the state.

All groups should be encouraged to increase seat belt usage; none should be left out. However, results indicate that several groups wear seat belts less frequently than their counterparts, and future safety campaigns might benefit by emphasizing them.

Groups identified based by the Schulman, Ronca & Bucuvalas survey:

- Persons who believe seat belt laws should not be made primary
- Persons who believe that it is not important for the police to enforce seat belt laws
- Males
- Pickup truck drivers
- Persons who believe seat belts are “as likely to harm you as to help you”
- Persons who somewhat agree that they want to have seat belt on in an accident
- Persons who believe putting on a seat belt makes them worry about being in an accident

Groups identified based on the University of Alabama survey:

- Persons who are willing to change their seat belt wearing habits
- Males
- Persons who wear seat belt more on long trips
- Persons who are not willing to change their seat belt wearing habits
- Persons who are not inclined to wear seat belt after hearing “Click it or Ticket”
- Age group 16-18

Campaign Strategies

The recent “Click It or Ticket” enforcement campaign in Alabama successfully raised seat belt usage. It appears that the campaign should be continued. However, the results of this research indicate that other campaign strategies would also lead to increased usage. Three examples are included below:

- Encourage part-time seat belt wearers to increase their usage. (80% of traffic fatalities occur within 25 miles of home and under 40 miles per hour.)
- Convince non-users who believe seat belts are “as likely to harm as help” to begin wearing seatbelts. (Seat belts are comfortable; almost never trap a person in a burning or submerged vehicle—most who are ejected from a car die; and reduce injury severity.)
- Inform the public that the chances of becoming a crash fatality are five times higher for persons not wearing seat belts.
Section 7.0

References


National Highway Traffic Safety Administration. “Click it or Ticket in North Carolina: A Case Study of a Successful Campaign to Raise the Seat Belt Use Rate.”.


Appendix A
University Of Alabama Telephone Survey Script

Introduction To Callers

The primary purpose of this survey is to determine the effectiveness of several selective enforcement (SE) and public information and education (PI&E) programs that will soon be conducted in Alabama to promote the implementation of the recently-passed primary restraint law. These programs will be run throughout the year and targeted at those areas that have the highest potential for increased restraint usage. This survey also has two secondary purposes: (1) countermeasure focus and improvement, and (2) education. However, this last objective is strictly a by-product of the survey itself.

Reminder To The Callers

You are representing The University of Alabama, the Alabama Department of Transportation, and the Federal Highway Administration in this research project. It is very important that you do not offend anyone, since they will complain to our sponsors. Do not be preachy, intimidate or demean the persons called (the subjects) in any way. This will not only cause antagonism, but it will decrease the chances of your getting accurate information from them. The overall strategy is to start by getting the subject’s cooperation (or early termination of the call). It is OK to have fun and try to get the subjects to enjoy the calls, but be sure not to do anything to insult or intimidate them. Please avoid any humor that people could take in a negative way – some people just do not have a sense of humor. Also, if you are in a bad mood or things have gone wrong for you and you do not feel like being positive, let the supervisor know and get another assignment for the day.

Once a rapport with the subject is attained, a number of easy, non-controversial questions of a demographic nature will be asked. The last few questions are somewhat more difficult, and they are put last to keep from biasing the other answers.

It is important that the subject does not feel that you are reading the questions. Use a conversational tone, as you talk to the subject, and rephrase the questions in your own words. Try to build confidence in the subjects so that their responses will be as accurate as possible. Do not do anything to bias the answers. Analyses will be done to compare your responses with those of the other callers. There should be no significant differences between these responses within a given area.

Any age that will give reasonable responses are acceptable. The subjects do not have to be drivers.
No Call List

This is very important. Under the Federal telecommunications acts, if a subject should state at any time that they do not ever wish to be called again, you must take their number down so that we are sure that we never call them again. These numbers will go into a database and before we call a number it will be checked to assure that we are compliant with the no call rulings.

Information To Be Gathered Before The Call

1. Phone number ____________________________________________
   ( ) check here if this number needs to be placed on the no-call list.

2. County Name ____________________________ County Code _________

3. City Name ____________________________     City Code _________

4. Caller Name __________________________ Caller Code _________

5. Date of Call (mm/dd/yy): / /

6. Time of Call: _______ AM/PM

Script: Information Gathered During The Call

Suggested caller words in **bold**; instructions are in brackets [ ]. Use a conversational tone.

Q1. **Hello. My name is _____________. I am a student at The University of Alabama, and I'm participating in a research project sponsored by the Alabama Department of Transportation to obtain information to help save lives in Alabama. We are not selling anything or asking for contributions; we just would like your opinion on some things.**

   Do you have a few minutes now to answer a few questions or would it be more convenient to call back later? The survey will only take about five minutes.

   A1. 7.1 _______ Yes  
       7.2 _______ No, Call Back Later  
       7.3 _______ No, Do Not Want to Participate  
       7.4 _______ No and Do Not Call Back

   [If “CALL BACK LATER,” use your judgment as to whether it is worth calling back or not. If so, put form in “pending” stack; if not, check No above.]
If ANSWERING MACHINE/VOICE MAIL: do not leave message, recycle the number by placing form in “pending” stack.

If “DO NOT CALL BACK” (at any time during the call):” “Thank you. Goodbye.” [note by checking under 1 above, check 5.4 and put form in “no call” stack.]

If REFUSE TO RESPOND: “Thank you for your time.” Check 5.3 and submit form.

[If subject should terminate call before normal completion for any reason, check 5.3.]

Q2. Your number was picked from a random selection of numbers from the phone book. We do not know your name, and we are prohibited by policy from identifying you, so please don’t give me your name.

We just need a general age category. It does not have to be exact. [Caller: to speed things up, don’t just enumerate the ranges. Start by asking: are you under 30? and then zero in on it.]

A2. 8.1 ___ 15 or under
     8.2 ___ 16-18
     8.3 ___ 19-21
     8.4 ___ 22-24
     8.5 ___ 25-29
     8.6 ___ 30-39
     8.7 ___ 40-49
     8.8 ___ 50-59
     8.9 ___ 60-69
     8.10 ___ 70 or over
     8.11 ___ Refused to give age but still wanted to participate.

[Note: any age group that gives intelligent responses are acceptable. This will generally be down to ages as low as 8 or 9. However, callers should use their judgment and ask for parents in cases where reasonable responses are not being obtained or expected due to age.]

Q3. [No question. Caller: enter gender.]

A3. 9.1 ___ Male
     9.2 ___ Female

Q4 Do you do most of your driving/riding on …

A4 10.1 ___ City Streets
     10.2 ___ About half and half
     10.3 ___ Country/Rural Roads
Q5  How frequently do you wear your seat belt?

A5  11.1 ___  All the time
   11.2 ___  More than half the time
   11.3 ___  About half the time
   11.4 ___  Less than half the time
   11.5 ___  Never

[If A5 is “Never,” mark last entry in A6 and A7 and go on to Q8.

Q6  Do you wear your seatbelt because of safety or because you know it’s the law?
[If they respond both, ask them which one is the most motivating.]

A6  12.1 ___  Safety
    12.2 ___  It’s the law
    12.3 ___  Any other reason
    12.4 ___  Answer to A5 was “Never”

[If A5 is “All the time” mark A7 appropriately and go to Q8.

Q7  Do you tend to wear seat belts more on longer trips?

A7.  13.1 ___  Yes
     13.2 ___  No
     13.3 ___  No, because wears them all the time (A5 = “All the time”)
     13.4 ___  Answer to A5 was “Never”

Q8.  Do most of your friends “buckle up?”

A8.  14.1 ___  Less than half
     14.2 ___  About half
     14.2 ___  More than half

Q9.  Have you heard the slogan “Click it or Ticket”

[If they ask what it is, mark “no” and tell them: “It is a combination of enforcement and public information and education to get people to buckle up.”]

A9.  15.1 ___  Yes
     15.2 ___  No

[If A9 = No, mark the last entry of Q10 and Q11 and go to Q12.]
Q10. Were you more inclined to wear your seat belt after seeing or hearing the “Click it or Ticket” slogan?

A10. 16.1 ___ Yes
     16.2 ___ No
     16.3 ___ Was not aware of it (A9 = No)
     16.4 ___ Already buckled up all the time

Q11. Where did you first notice/hear about “Click it or Ticket?”

A11. 17.1 ___ Radio
     17.2 ___ Television
     17.3 ___ School
     17.4 ___ Family or Friends
     17.5 ___ Newspaper
     17.6 ___ Billboards
     17.7 ___ Other
     17.8 ___ Was not aware of it (A9 = No)

We are just about finished; just a couple more quick questions …

[If A5 = “All the time” then mark the last entry of A12 and go to Q13.]

Q12. Do you think you would be willing to change your seat belt wearing habits?

A12. 18.1 ___ Yes
     18.2 ___ No
     18.3 ___ No – already buckled up all the time (A6 = “All the time”)

Q13. Do you realize that your chances of getting killed in a car accident are at least 5 times greater if you don’t wear your seat belt?

A13. 19.1 ___ Yes
     19.2 ___ No

Q14. Open Ended: enter any unsolicited comments on a separate sheet.

Closure. I want to thank you so much for being willing to help me with this research project. Would you like the number to call to get free copies of our Accident Facts book? That number is 205-348-6999.

[If they trust you to give you their address for that now, OK. However, do not solicit or suggest this, since we are supposed to keep the responses anonymous. If they do give you the address be sure you place it on a separate list – DO NOT enter it on the form.]
Frequently Asked Questions (FAQS)

Do not discourage questions – this is part of your building a rapport with the subject.

The following are some questions that we anticipate you might be asked:

1. **Who is your supervisor?** Carol Whatley; her number is 205-348-6999.

2. **Where can I get more information?** Call Carol at 205-348-6999 or check if they have e-mail, and if so, cwhatley@cs.ua.edu -- ask for the Accident Facts Book.

3. **If I call, won’t that identify me for this poll?** No. We get lots of calls for the Accident Facts Book that are unrelated to the poll, and we are polling hundreds and hundreds of people, so there is no way that your answers can be tied to you.

4. **Which campus are you with?** Tuscaloosa campus.

5. **What department of the University are you with?** It is in the College of Engineering, and the department is the University Transportation Center for Alabama.

6. **Who is the Director of the University Transportation Center?** Dr. Dan Turner.

7. **Questions that you cannot handle:** I’m sorry, I do not know the answer to that. Let me give you Carol Whatley’s number and she can help you. It is 205-348-6999.
Telephone Survey Script For External Survey

SCHULMAN, RONCA & BUCUALAS, INC
2001 SEAT BELT TRACKING STUDY: NR/JUNE (ALABAMA)

PAGE(S)   TITLES
1-2  BANNER 4 (ALABAMA)
3  VERSION
4-7  STATE
8  DOT REGION
9  Q.1 HOW OFTEN DO YOU DRIVE A MOTOR VEHICLE...?
10  Q.2 IS THE VEHICLE YOU DRIVE MOST OFTEN A CAR, VAN, MOTORCYCLE, SPORT UTILITY VEHICLE, PICKUP TRUCK, OR OTHER TYPE OF TRUCK?
** DRIVERS **
** MOTORCYCLE IS NOT VEHICLE DRIVEN MOST OFTEN **
12  Q.4 WHEN DRIVING THIS [TYPE OF VEHICLE], HOW OFTEN DO YOU WEAR YOUR SHOULDER BELT...?
** SEAT BELT GOES ACROSS SHOULDER OR BOTH SHOULDER AND LAP **
13  Q.5 WHEN DRIVING THIS [TYPE OF VEHICLE], HOW OFTEN DO YOU WEAR YOUR LAP BELT...?
** SEAT BELT GOES ACROSS LAP OR BOTH SHOULDER AND LAP **
14  Q.4/5 NET SEATBELT USAGE
** MOTORCYCLE IS NOT VEHICLE DRIVEN MOST OFTEN **
15  Q.6 WHEN WAS THE LAST TIME YOU DID NOT WEAR YOUR SEAT BELT WHEN DRIVING...?
** MOTORCYCLE IS NOT VEHICLE DRIVEN MOST OFTEN **
16  Q.7 IN THE PAST 30 DAYS, HAS YOUR USE OF SEAT BELTS WHEN DRIVING (VEHICLE DRIVEN MOST OFTEN) INCREASED, DECREASED, OR STAYED THE SAME?
** MOTORCYCLE IS NOT VEHICLE DRIVEN MOST OFTEN **
17-18  Q.8 WHAT CAUSED YOUR USE OF SEAT BELTS TO INCREASE?
** SEAT BELT USE INCREASED IN PAST 30 DAYS **
19  Q.9 DOES [STATE] HAVE A LAW REQUIRING SEAT BELT USE BY ADULTS?
20  Q.10 ASSUME THAT YOU DO NOT USE YOUR SEAT BELT AT ALL WHILE DRIVING OVER THE NEXT SIX MONTHS. HOW LIKELY DO YOU THINK YOU WILL BE TO RECEIVE A TICKET FOR NOT WEARING A SEAT BELT...?
** DRIVE VEHICLE OTHER THAN MOTORCYCLE **
21  Q.10A ACCORDING TO YOUR STATE LAW, CAN POLICE STOP A VEHICLE IF THEY OBSERVE A SEAT BELT VIOLATION OR DO THEY HAVE TO OBSERVE SOME OTHER OFFENSE FIRST IN ORDER TO STOP THE VEHICLE?
** STATE REQUIRES SEAT BELT USE **
Q10B. In your opinion, should police be allowed to stop a vehicle if they observe a seat belt violation when no other traffic laws are being broken?

Q11. Have you ever received a ticket for not wearing seat belts?

Q12. How long ago did you receive a ticket for not wearing seat belts?

Q12A. Enter number of weeks (range 0-52; less than 1 week ago = 0)

Q12B. Enter number of months (range 1-12)

Q12C. Enter number of years

Q13. Please tell me whether you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following statements:

(A) Seat belts are just as likely to harm you as help you

(B) If I was in an accident, I would want to have my seat belt on

(C) Police in my community generally will not bother to write tickets for seat belt violations

(D) It is important for police to enforce the seat belt laws

(E) Putting on a seat belt makes me worry more about being in an accident

(F) Police in my community are writing more seat belt tickets now than they were a few months ago

Q14. Yes or no—In the past 30 days, have you seen or heard of any special effort by police to ticket drivers in your community for seat belt violations?

Q14A. Where did you see or hear that message?

Q14B. Have you ever heard of special effort by police to ticket drivers for seat belt violations?
38  Q.14A1 WAS THE MESSAGE A COMMERCIAL (OR ADVERTISEMENT), WAS IT PART OF A NEWS PROGRAM, OR WAS IT SOMETHING ELSE?
** HEARD OF SPECIAL EFFORT BY POLICE TO TICKET DRIVERS FOR SEAT BELT VIOLATIONS ON TV/RADIO **

39  Q.14B YES OR NO, IN THE PAST 30 DAYS, HAVE YOU SEEN OR HEARD ANYTHING ABOUT THE POLICE SETTING UP SEAT BELT CHECKPOINT NTS WHERE THEY WILL STOP MOTOR VEHICLES TO CHECK WHETHER DRIVERS AND PASSENGERS ARE WEARING SEAT BELTS?
** ALABAMA/GEORGIA/KENTUCKY/MISSISSIPPI/NORTH CAROLINA/SOUTH CAROLINA/TENNESSEE **

40  Q.14B1 BY CHECKPO NT, WE MEAN A SYSTEMATIC EFFORT BY POLICE TO STOP VEHICLES FOR THE PURPOSE OF CHECKING FOR COMPLIANCE WITH EXISTING SEAT BELT LAWS. LET ME JUST CONFIRM, IS THIS THE TYPE OF CHECKPO NT THAT YOU HAVE SEEN OR HEARD ABOUT IN THE PAST 30 DAYS?
** ALABAMA/GEORGIA/KENTUCKY/MISSISSIPPI/NORTH CAROLINA/SOUTH CAROLINA/TENNESSEE **

41-42  Q.14C WHERE DID YOU SEE OR HEAR ABOUT THE POLICE CHECKPOINT NTS FOR SEAT BELTS?
** CONFIRMATION ABOUT CHECKPO TS IN PAST 30 DAYS **

43  Q.14C1 WAS THE MESSAGE A COMMERCIAL (OR ADVERTISEMENT), WAS IT PART OF A NEWS PROGRAM, OR WAS IT SOMETHING ELSE?
** ALABAMA/GEORGIA/KENTUCKY/MISSISSIPPI/NORTH CAROLINA/SOUTH CAROLINA/TENNESSEE **

44  Q.14D IN THE PAST 30 DAYS, DID YOU PERSONALLY SEE ANY CHECKPOINT NTS WHERE POLICE WERE STOPPING MOTOR VEHICLES TO SEE IF DRIVERS AND PASSENGERS WERE WEARING SEAT BELTS?
** ALABAMA/GEORGIA/KENTUCKY/MISSISSIPPI/NORTH CAROLINA/SOUTH CAROLINA/TENNESSEE **

45  Q.14D1 [AGAIN,] BY CHECKPO NT, WE MEAN A SYSTEMATIC EFFORT BY POLICE TO STOP VEHICLES FOR THE PURPOSE OF CHECKING FOR COMPLIANCE WITH EXISTING SEAT BELT LAWS. LET ME JUST CONFIRM, IS THIS THE TYPE OF CHECKPO NT THAT YOU PERSONALLY SAW IN THE PAST 30 DAYS?
** ALABAMA/GEORGIA/KENTUCKY/MISSISSIPPI/NORTH CAROLINA/SOUTH CAROLINA/TENNESSEE **

46  Q.14E WERE YOU PERSONALLY STOPPED BY POLICE AT A SEAT BELT CHECKPOINT IN THE PAST 30 DAYS?
** ALABAMA/GEORGIA/KENTUCKY/MISSISSIPPI/NORTH CAROLINA/SOUTH CAROLINA/TENNESSEE **

47  Q.15 IN THE PAST 30 DAYS, HAVE YOU SEEN OR HEARD OF ANY SPECIAL EFFORT BY POLICE TO TICKET DRIVERS IN YOUR COMMUNITY IF CHILDREN IN THEIR VEHICLES ARE NOT WEARING SEAT BELTS OR ARE NOT IN CAR SEATS?

48  Q.16 NOW I WOULD LIKE TO ASK YOU A FEW QUESTIONS ABOUT EDUCATIONAL OR OTHER TYPES OF ACTIVITIES? IN THE PAST 30 DAYS, HAVE YOU SEEN OR HEARD ANY MESSAGES THAT ENCOURAGE PEOPLE TO WEAR THEIR SEAT BELTS. THIS COULD BE PUBLIC SERVICE ANNOUNCEMENTS ON TV, MESSAGES ON THE ROAD SIGNS ON THE ROAD, NEWS STORIES, OR SOMETHING ELSE.
49. Q17 Would you say that the number of messages you have seen or heard in the past 30 days is more than usual, fewer than usual, or about the same as usual? 
** Saw/heard messages in past 30 days encouraging seat belt use **

50. Q18 Are there any other types of activities that you have seen or heard in the past 30 days that encouraged people to wear seat belts?

51-59. Q19 What other types of activities have you seen or heard in the past 30 days? 
** Saw/heard other types of activities in past 30 days encouraging seat belt use **

60. Q19A Thinking about everything you have heard, how important do you think it is for [STATE] to enforce seat belt laws for adults more strictly...?

61. Q20 Do you have any children age 12 or younger living in your household?

62-63. Q20A What are their ages? 
** Children 12 or younger in household **

64. Q21 Are there any advertisements or activities that you have seen or heard in the past 30 days that encouraged adults to make sure that children use car seats or seat belts?

65-73. Q22 What did you see or hear? 
** Saw/heard ads/activities in past 30 days encouraging seat belt use for children **

74. Q22A Do you recall hearing or seeing the following slogans in the past 30 days...?

75. Q22C Is there any particular type of information you would find helpful on how to protect a child in a motor vehicle? 
** Would find some type of information helpful on how to protect a child in a motor vehicle **

76-80. Q22C1 What information would you find helpful? 

81-83. Q22D If you wanted to receive information on how to protect children in a motor vehicle, where would you like to be able to get that information?

84. Q23 Please tell me whether you would like the following activities to be conducted in your community on a regular basis: Would you like your community to have (A) public education programs to increase seat belt use

85. Q23 Please tell me whether you would like the following activities to be conducted in your community on a regular basis: Would you like your community to have (B) public education programs to increase child safety seat use

86. Q23 Please tell me whether you would like the following activities to be conducted in your community on a regular basis: Would you like your community to have (C) incentive programs that give people money, coupons, or other items to encourage them to buckle up
87 Q.23 PLEASE TELL ME WHETHER YOU WOULD LIKE THE FOLLOWING ACTIVITIES TO BE CONDUCTED IN YOUR COMMUNITY ON A REGULAR BASIS: WOULD YOU LIKE YOUR COMMUNITY TO HAVE (D) SCHOOL ACTIVITIES THAT ENCOURAGE CHILDREN TO USE SEAT BELTS?

88 Q.23 PLEASE TELL ME WHETHER YOU WOULD LIKE THE FOLLOWING ACTIVITIES TO BE CONDUCTED IN YOUR COMMUNITY ON A REGULAR BASIS: WOULD YOU LIKE YOUR COMMUNITY TO HAVE (E) PLACES WHERE PARENTS CAN GO TO SEE WHETHER OR NOT THEY ARE USING CHILD SAFETY SEATS CORRECTLY?

89 Q.24 WHAT IS YOUR AGE?

90 Q.25 I MOLLING YOURSELF, HOW MANY PERSONS, AGE 16 OR OLDER, ARE LIVING IN YOUR HOUSEHOLD AT LEAST HALF OF THE TIME OR CONSIDER IT THEIR PRIMARY RESIDENCE?

91 Q.26 HOW MANY CHILDREN AGE 15 OR YOUNGER ARE LIVING IN YOUR HOUSEHOLD AT LEAST HALF OF THE TIME OR CONSIDER IT THEIR PRIMARY RESIDENCE?

92 Q.27 DO YOU CONSIDER YOURSELF TO BE HISPANIC OR LATINO?

93 Q.28 WHICH OF THE FOLLOWING RACIAL CATEGORIES DESCRIBES YOU? YOU MAY SELECT MORE THAN ONE:

94 Q.29 WHAT IS THE HIGHEST GRADE OR YEAR OF SCHOOL YOU COMPLETED?

95 Q.30 DO YOU HAVE MORE THAN ONE TELEPHONE NUMBER IN YOUR HOUSEHOLD?

96 Q.31 HOW MANY DIFFERENT TELEPHONE NUMBERS DO YOU HAVE? (RANGE 2-10: 10 OR MORE = 10; DON'T KNOW = 11; REFUSED = ** MORE THAN ONE TELEPHONE LINE **)

97 Q.32 SEX OF RESPONDENT