The Effects of Paid Media and Enforcement on Safety Belt Use in Michigan

David W. Eby, Lidia P. Kostyniuk, Krishnan Sudharsan, Jonathon M. Vivoda, and Helen K. Spradlin

October 2002

Technical Report Documentation Page

| 1. Report No. <br> UMTRI-2002-27 | 2. Govermment Accession No. | 3. Recipient's Catalog No. |
| :--- | :--- | :--- |
| 4. Title and Subtitle <br> The Effects of Paid Media and Enforcement on Safety Belt Use in <br> Michigan | 5. Report Date <br> October 2002 |  |
|  | 6. Perrorming Organization Code |  |
| 7. Author(s) David W. Eby, Lidia P. Kostyniuk, Krishnan Sudharsan, <br> Jonathon M. Vivoda, and Helen Spradlin | 8. Performing Organization Report No. <br> UMTRI-2002-27 |  |
| 9. Perrorming Organization Name and Address <br> The University of Michigan <br> Transportation Research Institute <br> 2901 Baxter Road <br> Ann Arbor, MI 48109 | 10. Work Unit No. (TRAIS) |  |
| 12. Sponsoring Agency Name and Address <br> Michigan Office of Highway Safety Planning <br> 400 Collins Road, PO Box 30633 <br> Lansing, MI 48909-8133 |  |  |

15. Supplementary Notes

## 16. Abstract

The purpose of this study was to evaluate the effectiveness of a media/enforcement program designed to increase safety belt use. The program included a paid media campaign using advertisements on broadcast television, cable television, radio, and outdoor bulletins and posters. Concurrent with the media campaign, Michigan also implemented increased police enforcement of the safety belt use law. The study utilized an experimental region, where all media and enforcement activities took place, and a control region, in which no media or enforcement were implemented specifically as part of the program. Study measures were acquired from three waves of a direct observation survey of safety belt use, with each wave conducted concurrently in each region. The direct observation study was supplemented by a telephone-survey conducted by a NHTSA-sponsored research firm during each of the waves in each region. The direct observation survey results showed that safety belt use did not significantly increase in either region immediately after the program. The media/enforcement program did not seem to have a differential effect on safety belt use in the experimental region. One reason for this lack of effect may have been that the media/enforcement campaign had far-reaching effects in Michigan. Even though no specific program activities were scheduled to appear in the counties comprising the control region, the telephone survey revealed that people in the control region were exposed to an increase in messages and enforcement during the program period. Because of this exposure in the control region, the experimental/control study-design we utilized was compromised. Without the ability to compare safety belt use in the experimental region to use in a region without any program activities, we have no way of determining the differential effects of the program on the background of other statewide factors that influence safety belt use.

| 17. Key Words <br> Safety Belt, Media, Enforcement, Survey | (18. Distribution |  |  |
| :---: | :---: | :---: | :---: |
|  |  | Unlimited |  |
| 19. Security Classii. (of this report) | 20. Security Classii. (of this page) | 21. No. of Pages | 22. Price |
| Unclassified | Unclassified | 60 |  |

Reproduction of completed page authorized

## CONTENTS

INTRODUCTION ..... 1
METHODS ..... 5
Selection of Experimental and Control Regions ..... 5
Direct Observation Survey ..... 6
Sample Design ..... 6
Data Collection ..... 9
Observer Training ..... 11
Observer Supervision and Monitoring ..... 11
Data Processing and Estimation Procedures ..... 12
Telephone Survey ..... 13
Methods ..... 13
Sample and Interviews ..... 14
Sample Weighting ..... 14
Respondents ..... 14
RESULTS ..... 16
Direct Observation Survey ..... 16
Telephone Survey ..... 18
Driving/Vehicle/Safety Belt Use ..... 19
Knowledge and opinions about Michigan's mandatory safety belt use law21
Attitudes Toward Safety Belts ..... 22
Awareness of the Media/Enforcement Campaign ..... 24
DISCUSSION ..... 31
REFERENCES ..... 33
APPENDIX A
Data Collection Forms ..... 34
APPENDIX B
Site Listing ..... 37
APPENDIX C ..... 41
Telephone Survey ..... 41

## ACKNOWLEDGMENTS

This work was sponsored by the Michigan Office of Highway Safety Planning (OHSP) through Highway Safety Funds from the National Highway Traffic Safety Administration (NHTSA). We express our thanks to several individuals who were essential to the completion of this project. Steven Guerriero and Brenda Farnam conducted field observations. Judy Settles and Mary Chico coordinated administrative procedures for the field observers. Betty Mercer and Pat Eliason of OHSP provided valuable feedback on the project. We also thank Fredrick Streff and Jean Shope for their contributions to the project. We thank SRBI for providing us with telephone survey data. The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the OHSP or NHTSA.

## INTRODUCTION

Motor vehicle crashes are a leading cause of injury and death to individuals of all ages. The use of safety belts has been identified as an effective means of reducing trauma incurred by vehicle occupants involved in crashes. Although the advantages of using a safety belt are obvious, the nationwide belt use rate observed in June 2002, was only 75 percent (US Department of Transportation, 2002). While this level of belt use is the highest ever reported since nationwide surveys began in 1994, there is still obvious progress to be made. The National Highway Traffic Safety Administration (NHTSA, 2000) suggests that nationwide, more than 5,000 fewer people would have died in motor vehicle crashes in 2000 if the level of belt use in the US had been the same as in other countries (85 percent use). NHTSA (2000) also reports that if every passenger vehicle occupant over age 4 used safety belts, an additional 9,238 lives would have been saved in 2000. While the reduction of loss of life and injury that would result from increasing use of safety belts is striking, there is also an economic aspect to consider. The average in-patient hospital charges of an unbelted driver involved in a crash exceed those of a belted driver by $\$ 5,000$ (NHTSA, 2002). Increasing the belt use rate from 68 percent to 85 percent would save Medicare and Medicaid alone $\$ 275$ million each year (NHTSA, 2002).

Based on these economic and societal savings, the advantages of using safety belts are obvious and generally accepted. The challenge to traffic-safety professionals is to find ways to ensure that these beliefs are translated into actual behaviors; that is, the use of safety belts. To increase the overall safety belt use rate in any given area, it is necessary to convince each individual in that population that it is important to use his ir her safety belt. When each individual begins to accept this idea and to make behavioral changes, these changes will start to be reflected in the population as a whole.

There are several potential ways to change the behavior of the motoring public. One proven method is to change the expectation that individuals have about the consequences of their behavior. For example, traffic safety programs have attempted to educate people about the dangers of not using safety belts in the event of an automobile crash. One problem with this approach is that many people have the "optimism bias"; the
generally mistaken belief that you are less likely to be involved in a traffic crash than everyone else because of your superior driving skills or luck. It may be difficult to get motorists to use safety belts by explaining the possible dangers of lack of belt use in a crash, because of the strong optimism bias exhibited by drivers, particularly young drivers. People often understand the message and are educated about the importance of using safety belts, but since they do not believe they will get into a crash, they weigh the risk of injury in a crash as low, and assign little benefit to personal safety belt use.

Traffic safety professionals have also dealt with this problem by focusing on another possible consequence of safety belt nonuse-the possibility of receiving a safety belt citation for violating the mandatory safety belt use law. A study conducted by Campbell (1987) suggests that the perception of police enforcement might be more important than the actual enforcement level. An individual's perception of enforcement, and thus the likelihood of receiving a citation, is something that can be targeted and affected by various programs designed to increase belt use.

Perhaps the most effective means by which to change the perception of the likelihood of receiving a safety belt citation is by changing the enforcement provision of the safety belt law. In Michigan, and many other states, the original mandatory safety belt use law was implemented with a secondary enforcement provision. This type of enforcement provision allows police officers to issue a safety belt citation only if the vehicle is stopped for some other violation, and the motorist is also not using a safety belt. Michigan has recently changed this provision to standard (primary) enforcement. Officers can now stop and cite motorists solely for a lack of safety belt use. Changing the enforcement provision in this way most likely affected the perception of the likelihood of receiving a citation because of an increase in both actual enforcement, and perception of enforcement. This legislative change resulted in one of the largest increases in safety belt use that has ever been observed in Michigan (Eby, Vivoda, \& Fordyce, 2002).

Another effective way to change the perception of the likelihood of receiving a safety belt citation is by active and visible police enforcement coupled with media campaigns that inform the public of the enforcement programs. When people see media that warn of receiving a citation for lack of belt use, it is important that they see police officers backing
up these messages. The campaign known as Click It or Ticket is an example of a successful program that has utilized this idea. The program educates the public about the importance of using a safety belt and also informs people that there will be police enforcement and consequences for failure to buckle up. Finally, these warnings are supported by active and visible police enforcement of the safety belt law.

Whenever there is a new program designed to increase belt use, it is important that the program be properly evaluated. This evaluation is important for a variety of reasons. To begin with, the organization that has provided the funding for the program often wants to make sure that it has spent its money wisely. Additionally, a program may affect different groups in a given population in different ways. It is critical to understand how each of these groups respond to the program overall. Finally, an evaluation can provide information regarding different aspects of the program to assess which parts of the program have been effective, and which parts might need to be changed in future campaigns.

The purpose of the current study was to evaluate the effectiveness of a media/enforcement program designed to increase safety belt use. Incentive funding for states to implement innovative projects designed to increase safety belt use, including media campaigns and enforcement programs, is available under Section 157 of the Highway Safety Act of 1966 through the Transportation Equity Act for the $21^{\text {st }}$ Century (TEA-21). Under this section, Michigan was one of several states to receive funding to implement a paid media campaign using advertisements on broadcast television, cable television, radio, and outdoor bulletins and posters. Concurrent with the media campaign, Michigan also implemented increased police enforcement of the safety belt law.

The study utilized an experimental region where all media and enforcement activities took place and a control region in which no media or enforcement were to be implemented specifically as part of the program. Study measures were acquired from three waves of a direct observation survey of safety belt use, with each wave conducted concurrently in each region. The direct observation study was supplemented by a telephone-survey study conducted by a NHTSA-sponsored research firm during each of
the waves in each region. Results from both the direct observation study and the telephone survey were used in assessing the effects of the media and enforcement mobilization campaign.

## METHODS

## Selection of Experimental and Control Regions

The study design started with the selection of an experimental region and a control region. The best experimental region is one in which the full impact of the paid media campaign is realized; that is, an area in which broadcast television, cable television, radio, and outdoor media are present. The best control region is one in which no paid media coverage or safety belt enforcement is present. In order to assess differences in belt use resulting from only the media campaign, it is imperative to match the two regions as closely as possible. Because the dependent variable is safety belt use, the regions should match as closely as possible on this variable prior to the media campaign. In addition, the populations of the regions should also be as similar as possible in their ability to process the information in the campaign. The best surrogate for this ability is level of education. Because of the uniqueness of Southeastern Michigan, this area was not a candidate for the experimental region, as no control region in Michigan would match. Based upon these criteria, the experimental region consisted of three counties: Kent, Ottawa, and Muskegon. The control region that matched most closely with the experimental region consisted of three counties: Grand Traverse, Emmett, and Wexford. Table 1 shows the safety belt use and education level ${ }^{1}$ of each study region. Kent county matched most closely with Grand Traverse County, Ottawa County with Emmett County, and Muskegon County with Wexford County. Overall, the average safety belt use and education levels between the experimental and control regions matched closely.

[^0]| Table 1. Safety Belt Use and Education Level for the <br> Experimental and Control Groups by County and Overall. |  |  |
| :--- | :---: | :---: |
| Experimental | Belt Use, \% | Education, \% |
| Kent | 74.2 | 12.6 |
| Ottawa | 69.0 | 11.0 |
| Muskegon | 61.6 | 7.0 |
| Overall | 68.3 | 10.2 |
| Control |  |  |
| Grand Traverse | 76.3 | 14.1 |
| Emmett | 70.3 | 12.6 |
| Wexford | 63.8 | 8.0 |
| Overall | 70.1 | 11.6 |

The study consisted of three waves of both direct observation and telephone surveys. The first wave of data collection was conducted from May 1, 2002 to May 15, 2002; the second wave from June 19, 2002 to July 3, 2002; and the third wave from July 31,2002 to August 14, 2002. The first wave of data collection served as the baseline (called "Pre") and was conducted prior to the media/enforcement campaign which was held in the last 2 weeks of May, 2002 and the first 2 weeks of June, 2002. The purpose of the second wave of the data collection effort (called "Post 1") was to evaluate the immediate impact of the campaign. The third wave (called "Post 2") was conducted to evaluate the longer-term impact of the campaign. The three waves of data collection together represented a complete picture for evaluating the effectiveness of the media/enforcement campaign in increasing safety belt use.

## Direct Observation Survey

## Sample Design

For each wave, a total of 100 intersections were observed, 50 in the experimental region, and 50 in the control region. The sites were chosen using a method that ensured that each intersection within a region had an equal probability of selection. Detailed, equalscale road maps for each county were obtained. The maps of each county within the experimental region were then joined together to form a contiguous region map. The same procedure was carried out for the control region. The region maps were then divided into
a grid by breaking down the horizontal and vertical axes into 1 -mile square blocks. The grid dimensions were 59 lines horizontally by 48 lines vertically for the experimental region, and 43 lines horizontally and 57 lines vertically for the control region. Each grid square was uniquely identified by two numbers, a horizontal $(x)$ coordinate and a vertical ( $y$ ) coordinate.

The 50 intersection sites within each region were selected sequentially. The sites were chosen by randomly selecting a grid square. Thus, each grid square within a region had an equal probability of selection. If a single intersection was contained within the grid square, that intersection was chosen as an observation site. If there was no intersection within the square, or there was an intersection but it was located one road link from an already selected intersection, then a new grid square was selected randomly. If more than one intersection was present within the grid square, all intersections within the square were assigned a number, and one of these numbers was picked randomly. The corresponding intersection was then chosen as the site.

Once a site was chosen, the following procedure was used to determine the particular street and direction of traffic flow that would be observed. For each intersection, all possible combinations of street and traffic flow were determined. From this set of observer locations, one location was randomly selected with a probability equal to $1 /$ number of locations. For example, if the intersection, was a "+" intersection, as shown in Figure 1, then there would be four possible combinations of street and direction of traffic flow to be observed (observers watched traffic only on the side of the street on which they were standing). In Figure 1, observer location number one indicates that the observer would watch southbound traffic and stand next to Main Street. For observer location number two, the observer would watch eastbound traffic and stand next to Second Street, and so on. In this example, a random number between 1 and 4 would be selected to determine the observer location for this specific site. The probability of selecting an intersection approach is dependent upon the type of intersection. Four-legged intersections like that shown in Figure 1 have four possible observer locations, while threelegged intersections like "T" and "Y" intersections have only three possible observer locations. The effect of this slight difference in probability accounts for .01 percent or less of the standard error in the belt use estimate.


Figure 1. An Example " + " Intersection Showing Four Possible Observer Locations.

For each primary intersection site, an alternate site was also selected. The alternate sites were chosen within a 2-mile square unit area around the grid square containing the original intersection. All possible alternate sites within the 2-mile square area were given a number and one of these numbers was picked randomly. The observer location at the alternate intersection was determined in the same way as at the primary site.

The day of week and time of day for site observation were pseudo-randomly assigned to sites in such a way that all days of the week and all daylight hours (7:00 a.m. - 7:00 p.m.) had essentially equal probability of selection. The sites were observed using a clustering procedure. That is, sites that were located spatially adjacent to each other were considered to be a cluster. Within each cluster, a shortest route between all of the sites was decided (essentially a loop) and each site was numbered. A random number between 1 and the number of sites in the cluster was selected. This number determined the site within the cluster where the first observation would take place. The observer then visited sites following the loop in either a clockwise or counterclockwise direction (whichever direction left them closest to home at the end of the day). This
direction was determined by the project manager prior to sending the observer into the field. An observer watched traffic at all sites in the cluster during a single day. The day in which the cluster was to be observed was randomly determined. After taking into consideration the time required to finish all sites before dark, a random starting time for the day was selected. Because of various scheduling limitations (e.g., observer availability, number of hours worked per week) certain days and/or times were selected that could not be observed. When this occurred, a new day and/or time was randomly selected until a usable one was found. The important issue about the randomization is that the day and time assignments to the sites were not correlated with belt use at a site. This pseudorandom method is random with respect to this issue.

## Data Collection

Data collection for the study involved direct observation of shoulder belt use, estimated age, sex, and race. There were two observers for each wave and the same observers participated in all three waves. Each observer collected data at 50 sites. Both observers collected data in both regions during the same period of data collection. The observers noted shoulder belt use of drivers and front-right passengers traveling in passenger cars, sport-utility vehicles, vans/minivans, and pickup trucks during daylight hours for the three waves. Safety belt use, age, sex, and race observations were conducted when a vehicle came to a stop at a traffic light or a stop sign.

Two forms were used for data collection: a site description form and an observation form. The site description form (see Appendix A) provided descriptive information about the site including the site number, location, observer number, date, day of week, time of day, weather, and a count of eligible vehicles traveling on the proper traffic leg. A place on the form was also furnished for observers to sketch the intersection and to identify observation locations and traffic flow patterns. Finally, a comments section was available for observers to identify landmarks that might be helpful in characterizing the site (e.g., school, shopping mall) and to discuss problems or issues relevant to the site or study.

The second form, the observation form, was used to record safety belt use, passenger information, and vehicle information (see Appendix A). Each observation form
was divided into four boxes with each box having room for the survey of a single vehicle. For each vehicle surveyed, shoulder belt use, sex, race, and estimated age for the driver as well as vehicle type were recorded on the upper half of the box, while the same information for the front-outboard passenger could be recorded in the lower half of the box if there was a front-outboard passenger present. Children riding in child safety seats were recorded but not included in any part of the analysis. Occupants observed with their shoulder belt worn under the arm or behind the back were noted but considered as belted in the analysis. Based upon NHTSA (1998) guidelines, the observer also recorded whether the vehicle was commercial or noncommercial. At each site, the observer carried several data collection forms and completed as many as were necessary during the observation period.

All sites in the sample were visited by one observer for a period of 1 hour. Upon arrival at a site, observers determined whether observations were possible at that site. If observations were not possible (e.g., due to construction), observers proceeded to the alternate site. Otherwise, observers completed the site description form and then moved to their observation position near the traffic control device. Observers were instructed to observe only the lane immediately adjacent to the curb for safety belt use regardless of the number of lanes present.

At each site, observers conducted a 5-minute count of all eligible vehicles on the designated traffic leg before beginning safety belt observations. Observations began immediately after completion of the count and continued for 50 minutes. During the observation period, observers recorded data for as many eligible vehicles as they could. If traffic flow was heavy, observers were instructed to record data for the first eligible vehicle they saw and then look up and record data for the next eligible vehicle they saw, continuing this process for the remainder of the observation period. At the end of the observation period, a second 5-minute vehicle count was conducted.

## Observer Training

Prior to data collection, field observers participated in 2 days of intensive training, including both classroom review of data collection procedures and practice field observations. Each observer received a training manual containing detailed information on field procedures for observations, data collection forms, and administrative policies and procedures. Included in the manual was a listing of the sites for the study that identified the location of each site and the traffic leg to be observed (see Appendix B for a listing of the sites), as well as a site schedule identifying the date and time each site was to be observed.

After intensive review of the manual, observers conducted practice observations at several sites chosen to represent the types of sites and situations that would actually be encountered in the field. None of these practice sites were the same as sites observed during the study. Training at each practice site focused on completing the site description form, determining where to stand and which lanes to observe, conducting the vehicle count, recording safety belt use, and estimating age and sex. Observers worked in pairs, observing the same vehicles, but recording data independently on separate data collection forms. Each observer pair practiced recording safety belt use, sex, race, and age until there was an inter-observer reliability of at least 85 percent for all measures on drivers and front-right passengers.

Each observer was provided with an atlas of Michigan county-maps and all necessary field supplies. Observers were given time to mark their assigned sites on the appropriate maps and plan travel routes to the sites. After marking the sites on their maps, the marked locations were compared to a master map of locations to ensure that the correct sites had been pinpointed. Field procedures were reviewed for the final time and observers were informed that unannounced site visits would be made by the field supervisor during data collection to ensure adherence to study protocols.

## Observer Supervision and Monitoring

During data collection, each observer was spot checked in the field on at least two occasions by the field supervisor for each wave. Contact between the field supervisor and
field staff was also maintained on a regular basis through staff visits to the UMTRI office to drop off completed forms and through telephone calls from staff to report progress and discuss problems encountered in the field. Field staff were instructed to call the field supervisor at home if problems arose during evening hours or on weekends.

Incoming data forms were examined by the field supervisor and problems (e.g., missing data, discrepancies between the site description form and site listing or schedule) were noted and discussed with field staff. Attention was also given to comments on the site description form about site-specific characteristics that might affect future surveys (e.g., traffic flow patterns, traffic control devices, site access).

## Data Processing and Estimation Procedures

The site and data collection forms were entered into an electronic format. The accuracy of the data entry was verified in two ways. First, all data were entered twice and the data sets were compared for consistency. Second, the data from randomly selected sites were reviewed for accuracy by a second party and all site data were checked for inconsistent codes (e.g., the observation end time occurring before the start time). Errors were corrected after consultation with the original data forms.

For each site, the number of observed vehicles, belted and unbelted drivers, and belted and unbelted passengers was determined. Separate counts were made for each independent variable in the survey (i.e., site type, time of day, day of week, weather, sex, race, age, seating position, and vehicle type). This information was combined with the site information to create a file used for generating study results. Vehicle count information was used to weight the observed traffic volumes so they would more accurately reflect traffic volumes in the study areas.

This weighting was done by first adding each of the two 5 -minute counts and then multiplying this number by 5 so that it would represent a 50 -minute duration. The resulting number was the estimated number of vehicles passing the site if all eligible vehicles had been included in the survey during the observation period. The estimated count then was divided by the actual vehicle count to obtain a traffic-volume weighting-factor for that site.

Unless otherwise indicated, all analyses reported here are based upon the weighted values.

## Telephone Survey

The objective of the telephone survey was to measure the effects of paid media activities and police-enforcement programs on public attitudes and perceptions about safety belt use and the program itself.

## Methods

NHTSA selected Schulman, Ronca and Bucuvalas, Inc. (SRBI), a professional survey research organization to conduct the telephone surveys for all of the participating states. This included sampling, conducting the telephone interviews, developing the data files, including data weighting, preliminary data analysis, and documentation. The telephone survey instrument was specified by NHTSA for consistency across participating states. The version used in Michigan included items on media slogans and types of enforcement used in Michigan. A copy of the telephone survey instrument used in Michigan can be found in Appendix C.

The telephone interviews were conducted in three waves in the same experimental and control regions of Michigan used in the direct observation portion of the study. The same instrument was used throughout the study. Baseline information on the public's knowledge, attitudes, and reported behavior related to safety belt use was collected between April 18 and May 3, 2002, prior to any paid media and enforcement efforts in the Pre wave of the survey. The Post 1 wave of the telephone survey was conducted between June 3 and June 24, 2002, immediately after the media and enforcement mobilization. The Post 2 wave of the survey was conducted between July 9 and July 22, 2002. The intent of the third wave was to determine if the attitudes and perceptions of respondents changed with time. Further details on the survey design and data collection can be found elsewhere (Schulman, Ronca and Bucuvalas, Inc., 2002).

## Sample and Interviews

The survey samples were selected using random-digit-dialing procedures and systematic selection of respondents from among the adults in the sampled households. Separate samples were drawn for each wave in both the experimental and control regions. A minimum of five calls were attempted to each telephone number. Target numbers of respondents by age and gender, proportional to age and gender distributions in the study areas were used. See Schulman, Ronca and Bucuvalas, Inc. (2002) for details of the sample dispositions.

## Sample Weighting

In the series of surveys, the chances of a person being selected for the survey were affected by the number of telephone lines in the household as well as the number of adults in the household. Furthermore, as in most surveys in which participation is voluntary, there was the chance of a self-selection bias related to age and gender; that is, people from some age and gender groups may have been more likely to volunteer for participation in the survey than people from other age and gender groups. Accordingly, SRBI developed weights to correct for unequal probabilities of selection and to adjust the sample to the age and gender distributions in the experimental and control areas (Schulman, Ronca and Bucuvalas, Inc., 2002). All analyses were conducted on the weighted data.

## Respondents

The number of respondents for each wave and area was approximately 500 . Table 2 shows the number of actual respondents for each survey wave and region.
Table 3 shows the demographic distribution of survey respondents by wave and region.

| Table 2: Number of Respondents by Survey Wave and Region |  |  |
| :--- | :---: | :---: |
| Survey Wave | Experimental | Control |
| Pre | 505 | 502 |
| Post 1 | 502 | 500 |
| Post 2 | 506 | 495 |


| Table 2: Demographics of Respondents by Survey Wave and Region |  |  |  |
| :--- | :--- | :---: | :---: |
| Demographic | Survey Wave | Experimental | Control |
| \% Male | Pre | $52 \%$ | $48 \%$ |
|  | Post 1 | $50 \%$ | $48 \%$ |
|  | Post 2 | $50 \%$ | $48 \%$ |
|  | Pre | 40.6 | 45.6 |
|  | Post 1 | 42.6 | 45.3 |
|  | Post 2 | 42.9 | 45.6 |
| \% College graduates | Pre | $81 \%$ | $95 \%$ |
|  | Post 1 | $85 \%$ | $94 \%$ |
|  | Post 2 | $86 \%$ | $94 \%$ |
|  | Pre | $29 \%$ | $34 \%$ |
|  | Post 1 | $33 \%$ | $36 \%$ |
|  | Post 2 | $34 \%$ | $38 \%$ |
| Mean N children in household | Pre | 2.4 | 2.2 |
|  | Post 1 | 2.5 | 2.3 |
|  | Post 2 | 2.2 | 2.4 |
|  | Pre | 0.8 | 0.6 |
|  | Post 1 | 0.8 | 0.7 |
|  | Post 2 | 0.7 | 0.7 |

## RESULTS

## Direct Observation Survey

Table 3 shows the overall safety belt use rates, 95 percent confidence bands, and unweighted Ns for each region and survey wave. Confidence bands that do not overlap can be considered significantly different. Note again that the Pre survey was conducted prior to the media/education program, the Post 1 survey was conducted immediately after the program, and the Post 2 survey wave was conducted 6 weeks after program completion. Comparing across survey waves showed that safety belt use in the experimental region, where the media/enforcement program was conducted, did not change except for a significant increase between Post 1 and Post 2. In the control region, where no specific media/enforcement program activities occurred, the estimated rate increased between the Pre and Post 1 survey waves but not significantly. Thus, the program does not appear to have increased belt use in the experimental region. Unexpectedly, safety belt use was significantly higher in the control than in the experimental region for Post 1.

| Table 3: Overall Safety Belt Use by Survey Wave and Study Region |  |  |  |
| :--- | :---: | :---: | :---: |
| Region | Pre | Post 1 | Post 2 |
| Experimental | $74.7 \pm 5.1(2,242)$ | $72.2 \pm 1.8(2,786)$ | $77.9 \pm 2.79(2,913)$ |
| Control | $77.5 \pm 3.4(2,321)$ | $81.4 \pm 3.8 \dagger(3,140)$ | $82.3 \pm 4.7(3,095)$ |

$\dagger$ Significant with Experimental group.
II Significant with Post 1.
Table 4 shows estimated safety belt use rates, 95 percent confidence bands, and unweighted $N$ s for each region and survey wave by vehicle type. As is typically found, safety belt use for pickup truck occupants was significantly lower than for occupants of other vehicle types, while little difference was found in safety belt use for occupants of passenger cars, vans/minivans, or sport-utility vehicles (SUVs). Analysis across survey waves for the experimental region showed no differences in safety belt use for pickup trucks, SUVs, or vans/minivans. Passenger car occupant belt use increased significantly between the Post 1 and Post 2 surveys.

| Region | Pre | Post 1 | Post 2 |
| :---: | :---: | :---: | :---: |
| Experimental |  |  |  |
| Passenger |  |  |  |
| Van/minivan | $\begin{aligned} & 78.2 \pm 4.0 \quad(478) \\ & 79.2 \pm 10.4(376) \end{aligned}$ | $72.6 \pm 5.1 \quad \text { (457) }$ $74.7 \pm 8.8$ | $\begin{array}{ll} 79.8 \pm 8.8 & (510) \\ 812+47 & (436) \end{array}$ |
| SUV Pickup truck | $\begin{aligned} & 79.2 \pm 10.4(376) \\ & 58.5+13 \end{aligned}$ | $\begin{array}{ll} 74.7 \pm 8.8 & (385) \\ 56.0 \pm 5.8 & (561) \end{array}$ | $\begin{array}{\|ll} 81.2 \pm 4.7 & (436) \\ 60.3 \pm 5.9 & (607) \end{array}$ |
| Control |  |  |  |
| Passenger | $82.5 \pm 2.8$ (946) | $86.2 \pm 4.4 \dagger$ (1,311) | $86.8 \pm 4.5(1,248)$ |
| Van/minivan | $80.4 \pm 4.2$ (376) | $87.5 \pm 4.0 \dagger$ (533) | $86.1 \pm 6.9$ (535) |
| SUV | $79.5 \pm 5.9$ (403) | $84.2 \pm 6.1$ (659) | $82.6 \pm 4.7$ (629) |
| Pickup truck | $66.0 \pm 5.8$ (596) | $61.3 \pm 10.3$ (631) | $68.8 \pm 5.7$ (682) |

$\dagger$ Significant with Experimental group.
II Significant with Post 1.
Table 5 shows estimated safety belt use rates, 95 percent confidence bands, and unweighted Ns for each region and survey wave by age. Comparing across surveys waves showed no difference in estimated safety belt use for the 4-15, 30-59, or 60 and over age groups. Safety belt use increased significantly for the 16-29 year old age group between the Post 1 and Post 2 surveys in the experimental region. There were no significant differences for the control region for any group between any waves. Safety belt use was significantly higher in the control region for the two middle age groups during the Post 1 wave.

| Region | Pre | Post 1 | Post 2 |
| :---: | :---: | :---: | :---: |
| Experimental |  |  |  |
| 4-15 | $87.5 \pm 4.4$ (137) | $82.9 \pm 6.5$ (154) | $87.2 \pm 7.3$ (167) |
| 16-29 | $75.4 \pm 4.5$ (788) | $67.4 \pm 3.9$ (785) | $78.3 \pm 3.59$ (872) |
| 30-59 | $72.0 \pm 8.7(1,653)$ | $71.5 \pm 2.4(1,547)$ | $74.9 \pm 4.7(1,523)$ |
| 60+ | $82.0 \pm 6.6$ (305) | $81.2 \pm 4.4$ (296) | $85.4 \pm 4.1$ (347) |
| Control |  |  |  |
| 4-15 | $87.0 \pm 10.6$ (97) | $86.2 \pm 5.7$ (158) | $80.3 \pm 14.7$ (147) |
| 16-29 | $73.6 \pm 6.5$ (428) | $80.9 \pm 5.4 \dagger$ (728) | $80.1 \pm 6.7$ (734) |
| 30-59 | $75.1 \pm 2.9(1,445)$ | $79.9 \pm 3.9 \dagger$ (1,834) | $81.5 \pm 5.2(1,749)$ |
| 60+ | $88.9 \pm 7.0 \quad$ (345) | $87.6 \pm 3.9 \quad$ (415) | $89.3 \pm 4.7$ (460) |

$\dagger$ Significant with Experimental group.
ๆ Significant with Post 1.
Table 6 shows estimated safety belt use rates, 95 percent confidence bands, and unweighted Ns for each region and survey wave by sex. Comparing across surveys waves showed that estimated safety belt use increased significantly for males between the Post

1 and Post 2 surveys for the experimental region. There were no significant differences for the control region for males or females between any waves. Safety belt use was significantly higher in the control region for males in Post 1.

| Table 6: Overall Safety Belt Use by Survey Wave, Study Region, and Sex |  |  |  |
| :--- | :---: | :---: | :---: |
| Region | Pre | Post 1 | Post 2 |
| Experimental |  |  |  |
| Male | $66.9 \pm 5.5(1,517)$ | $64.7 \pm 2.6(1,548)$ | $71.7 \pm 3.89(1,577)$ |
| Female | $83.6 \pm 5.0(1,372)$ | $81.9 \pm 2.0(1,238)$ | $85.3 \pm 4.6 \quad(1,336)$ |
| Control |  |  |  |
| Male | $72.0 \pm 3.8(1,238)$ | $76.7 \pm 4.7 \dagger(1,687)$ | $75.7 \pm 4.9(1,609)$ |
| Female | $83.5 \pm 3.5(1,083)$ | $87.0 \pm 3.1 \quad(1,452)$ | $89.1 \pm 4.2(1,486)$ |

$\dagger$ Significant with Experimental group.
IT Significant with Post 1.
Table 7 shows estimated safety belt use rates, 95 percent confidence bands, and unweighted Ns for each region and survey wave by seating position. Analysis across survey waves showed that estimated safety belt use increased significantly for drivers between the Post 1 and Post 2 surveys, while no differences for passengers were found in the experimental region. There were no significant differences for the control region for drivers or passengers between any waves. In the Post 1, safety belt for both drivers and passengers was higher for the control region than the experimental region.

| Region | Pre | Post 1 | Post 2 |
| :---: | :---: | :---: | :---: |
| Experimental Driver Passenger | $\begin{array}{lr} 76.1 \pm 3.9 & (2,271) \\ 69.8 \pm 9.2 \quad(620) \end{array}$ | $\begin{array}{lr} 71.8 \pm 1.8 & (2,051) \\ 73.2 \pm 3.1 & (735) \end{array}$ | $\begin{array}{ll} 77.6 \pm 3.2 才 & (2,268) \\ 79.1 \pm 4.8 & (645) \end{array}$ |
| Control Driver Passenger | $\begin{aligned} & 76.9 \pm 3.0(1,642) \\ & 78.9 \pm 5.9 \quad(679) \end{aligned}$ | $\begin{aligned} & 80.6 \pm 4.4 \dagger(2,080) \\ & 83.2 \pm 3.4 \dagger(1,060) \end{aligned}$ | $\begin{aligned} & 81.5 \pm 4.3(2,083) \\ & 83.8 \pm 6.1(1,012) \\ & \hline \end{aligned}$ |

$\dagger$ Significant with Experimental group.
II Significant with Post 1.

## Telephone Survey

The telephone survey was divided into four sections: Driving/vehicle/safety belt use; Knowledge and opinions about Michigan's mandatory safety belt use law; Attitudes toward
safety belts; and Awareness of the media/enforcement campaign. We present the telephone survey results organized by these categories.

## Driving/Vehicle/Safety Belt Use

Table 8 shows the percentage of respondents in each region and survey wave that reported driving a motor vehicle almost every day. More than 80 percent of respondents in each region and wave drove almost daily. Significant differences in responses to this question were found for the experimental region between the Pre and Post 2 survey waves. There was also a significant difference between respondents in the two regions for Post 2.

| Table 8: Drive a Motor Vehicle Almost Every Day. |  |  |
| :--- | :---: | :---: |
| Survey Wave | Experimental | Control |
| Pre | $84 \%$ (505) | $83 \%(502)$ |
| Post 1 | $87 \%(502)$ | $85 \%(500)$ |
| Post 2 | $89 \%^{*}(506)$ | $81 \% \dagger(495)$ |

* Significant with Pre at $p<.05$.
$\dagger$ Significant with Experimental group at $p<05$.
Table 9 shows the percentage of respondents in each region and survey wave that reported most often driving a passenger car. In all survey waves, significant differences between regions were found, with respondents in the experimental region significantly more likely to drive passenger cars. Respondents in the control group were more likely to drive vans, pickup trucks, and SUVs.

| Table 9: Percent of Respondents Whose Primary Vehicle is a |  |  |
| :--- | :---: | :---: |
| Passenger Car. |  |  |$|$| Survey Wave | Experimental |
| :--- | :---: |
| Pre | $67 \%(466)$ |
| Post 1 | $63 \%(475)$ |
| Post 2 | $60 \%$ (475) |

$\dagger$ Significant with Experimental group at $p<05$.

Table 10 shows the percentage of respondents in each region and survey wave that reported having a primary vehicle with both a shoulder and lap belt. In both regions the
presence of lap and shoulder belts was extremely high, with no differences between survey waves or regions.

| Table 10: Percent of Respondents with Both a Shoulder and Lap Belt in Primary Vehicle. |  |  |
| :---: | :---: | :---: |
| Survey Wave | Experimental | Control |
| Pre | 95\% (465) | 96\% (464) |
| Post 1 | 94\% (475) | 93\% (478) |
| Post 2 | 94\% (471) | 93\% (459) |

Tables 11 and 12 show the percentage of respondents in each region and survey wave that reported using a shoulder belt and a lap belt all of the time. For the experimental region, both Post survey waves had a significantly greater number of respondents report using shoulder belts "all of the time" than in the Pre survey wave, while no differences between waves were found for the control region. In addition, self-reported all-of-the-time use was significantly greater in the control region than in the experimental region for the Pre survey wave. Similar results were found when respondents were asked about lap belt use (Table 12).

| Table 11: Percent of Respondents Reporting Using Shoulder Belt All of the Time. |  |  |
| :--- | :---: | :---: |
| Survey Wave | Experimental | Control |
| Pre | $87 \%$ (462) | $92 \% \dagger$ (461) |
| Post 1 | $89 \%^{*}(471)$ | $89 \%(470)$ |
| Post 2 | $91 \%^{*}(468)$ | $90 \%$ (454) |

* Significant with Pre at $p<05$.
$\dagger$ Significant with Experimental group at $p<.05$.

| Table 12: Percent of Respondents Reporting Using Lap Belt All of the Time. |  |  |
| :--- | :---: | :---: |
| Survey Wave | Experimental | Control |
| Pre | $86 \%(434)$ | $91 \% \dagger(441)$ |
| Post 1 | $89 \%(446)$ | $88 \%(446)$ |
| Post 2 | $91 \%^{*}(447)$ | $88 \%(433)$ |

* Significant with Pre at $p<05$.
$\dagger$ Significant with Experimental group at $p<.05$.

Knowledge and opinions about Michigan's mandatory safety belt use law
Table 13 shows the percentage of respondents in each region and survey wave that reported knowing that Michigan had a mandatory safety belt use law for adults. In all survey waves and both regions, awareness of the law was extremely high. No significant differences were found by region or survey wave.

| Table 13: Percent of Respondents Who Know that Michigan Has a Safety Belt |  |  |
| :--- | :---: | :---: |
| Use Law for Adults. |  |  |
| Survey Wave | Experimental | Control |
| Pre | $96 \%(505)$ | $98 \%(502)$ |
| Post 1 | $97 \%(502)$ | $97 \%(500)$ |
| Post 2 | $97 \%(506)$ | $96 \%(495)$ |

Table 14 shows the percentage of respondents in each region and survey wave that believed that they were very likely to receive a ticket for a lack of safety belt use. Overall, about 30 percent of people thought a ticket for violating the safety belt law was very likely. There were no significant differences for this question between regions. In addition, there were no significant differences between waves within regions except for a significant increase in the percentage of respondents in te experimental region reporting this belief in the Post 2 survey when compared to the Pre survey.

| Table 14: Percent of Respondents Who Believe That They are Very Likely to <br> Receive a Ticket if not Using a Safety Belt While Driving. |  |  |
| :--- | :---: | :---: |
| Survey Wave | Experimental | Control |
| Pre | $29 \%(453)$ | $35 \%(458)$ |
| Post 1 | $30 \%(464)$ | $33 \%(468)$ |
| Post 2 | $36 \%{ }^{*}(462)$ | $31 \%(442)$ |

* Significant with Pre at $p<.05$.

Table 15 shows the percentage of respondents in each region and survey wave who knew about the standard enforcement provision of Michigan's law. In general, knowledge of standard enforcement was high in both regions and all survey waves. This knowledge was reported significantly more frequently by respondents in the control group for Post 1 .

There was also a significant decrease in the knowledge in the control group between Post 1 and Post 2 surveys.

| Table 15: Percent of Respondents Who Know that According to State Law, Police Can Stop a Vehicle if they Observe a Seat Belt Violation Without Observing Some Other Offense. |  |  |
| :---: | :---: | :---: |
| Survey Wave | Experimental | Control |
| Pre | 85\% (488) | 89\% (490) |
| Post 1 | 87\% (490) | 91\% $\dagger$ (488) |
| Post 2 | 87\% (492) | 85\% 1 ( 473 ) |

$\dagger$ Significant with Experimental group at $p<.05$.
I Significant with Post 1 at $p<.05$.
Table 16 shows the percentage of respondents in each region and survey wave who support standard enforcement. Overall, support for standard enforcement was found in about two-thirds of respondents. There were no significant differences between waves or regions.

| Table 16: Percent of Respondents Who Believe that Police Should be <br> Allowed to Stop a Vehicle if they Observe a Seat Belt Violation When no <br> Other Traffic Laws are Being Broken. |  |  |
| :--- | :---: | :---: |
| Survey Wave | Experimental | Control |
| Pre | $68 \%(505)$ | $66 \%(502)$ |
| Post 1 | $70 \%(502)$ | $68 \%(500)$ |
| Post 2 | $69 \%(506)$ | $67 \%(495)$ |

## Attitudes Toward Safety Belts

Table 17 shows the percentage of respondents in each region and survey wave who strongly disagreed that safety belts are just as likely to cause harm as to help. Overall, about one-half of respondents held this belief. There were no significant differences between regions. Within the control region, however, significantly more respondents in Post 1 held this belief than in the Pre survey wave.

| Table 17: Percent of Respondents Who Strongly Disagree with the <br> Statement "Seat Belts are Just as Likely to Harm You as Help You." |  |  |
| :--- | :---: | :---: |
| Survey Wave | Experimental | Control |
| Pre | $45 \%(505)$ | $45 \%(502)$ |
| Post 1 | $46 \%(502)$ | $51 \%{ }^{*}(500)$ |
| Post 2 | $47 \%(506)$ | $47 \%(495)$ |

* Significant with Pre at $p<05$.

Table 18 shows the percentage of respondents in each region and survey wave who reported that they would want to be using a safety belt if they were in a crash. In all cases, nearly 90 percent of respondents held this belief with no differences between regions. In the experimental region, significantly fewer respondents held this belief in the Post 1 survey than in the Pre survey.

| Table 18: Percent of Respondents Who Strongly Agree with Statement, "If I <br> Was in an Accident, I Would Want to Have my Seat Belt On." |  |  |
| :--- | :---: | :---: |
| Survey Wave | Experimental | Control |
| Pre | $89 \%(505)$ | $87 \%(502)$ |
| Post 1 | $87 \%{ }^{*}(502)$ | $85 \%(500)$ |
| Post 2 | $89 \%(506)$ | $86 \%(495)$ |

* Significant with Pre at $p<.05$.

Table 19 shows the percentage of respondents in each region and survey wave who either somewhat or strongly agreed that police in their community do not generally enforce the safety belt law. In general, slightly less than 30 percent of respondents at least agreed somewhat with this statement. There were no differences between regions. The study found a significant decrease in the percentage of respondents in the experimental region who at least agreed somewhat with this statement between the Pre and Post 1 surveys.

| Table 19: Percent of Respondents who Agree with the Statement, "Police in <br> My Community Generally will not Bother to Write Tickets for Seat Belt <br> Violations." |  |  |
| :--- | :---: | :---: |
| Survey Wave | Experimental | Control |
| Pre | $33 \%(505)$ | $28 \%(502)$ |
| Post 1 | $27 \%{ }^{*}(502)$ | $27 \%(500)$ |
| Post 2 | $28 \%(506)$ | $29 \%(495)$ |

* Significant with Pre at p<. 05 .

Table 20 shows the percentage of respondents in each region and survey wave who strongly agreed that it is important for police to enforce safety belt laws. In all survey waves and regions, about 60 percent of respondents agreed with this statement, with no significant differences by region or survey wave.

| Table 20: Percent of Respondents who Strongly Agreed it was Important <br> For Police to Enforce Safety Belt Laws. |  |  |
| :--- | :---: | :---: |
| Survey Wave | Experimental | Control |
| Pre | $61 \%(505)$ | $61 \%(502)$ |
| Post 1 | $64 \%(502)$ | $60 \%(500)$ |
| Post 2 | $62 \%(506)$ | $59 \%(495)$ |

## Awareness of the Media/Enforcement Campaign

Table 21 shows the percentage of respondents in each region and survey wave who somewhat or strongly agreed that police safety belt citation activity has increased in the past few months. In general, slightly more than 40 percent of respondents held this belief with no differences between the regions. The study also found a significant increase in the percentage of respondents holding this belief in the experimental region between the Pre and Post 1 survey waves. Thus, it appears that the enforcement component of the campaign in the experimental region was visible to respondents in that region.

| Table 21: Percent of Respondents Who Agreed with Statement, "Police in My <br> Community are Writing More Safety Belt Tickets Now Than They Were a Few <br> Months Ago." |  |  |
| :--- | :---: | :---: |
| Survey Wave | Experimental | Control |
| Pre | $38 \%(505)$ | $41 \%(502)$ |
| Post 1 | $45 \%{ }^{*}(502)$ | $44 \%(500)$ |
| Post 2 | $41 \%(506)$ | $45 \%(495)$ |

* Significant with Pre at $p<05$.

Table 22 shows the percentage of respondents in each region and survey wave who reported seeing or hearing about special safety belt enforcement efforts in their community. In both the experimental and control regions, there was a significant increase in the percentage of respondents who were exposed to media about the campaign between the Pre and Post 1 surveys. In addition, the experimental and control regions differed for the Pre and Post 1 survey waves, with more people in the experimental region exposed to the campaign for the Post 1 survey wave. In both regions, exposure to the campaign decreased significantly between the Post 1 and Post 2 survey waves. Thus, it appears that the control region, where no paid media was scheduled to appear, did get covered by the media campaign but to a lesser extent than the experimental region.

| Table 22: Percent of Respondents Reporting Having Seen or Heard Information About Special Efforts by Police to Ticket Drivers in their Community for Seat Belt Violations in Past 30 Days. |  |  |
| :---: | :---: | :---: |
| Survey Wave | Experimental | Control |
| Pre | 11\% (505) | 18\%† (502) |
| Post 1 | 38\%* (502) | $32 \% *$ ( 500 ) |
| Post 2 | 26\%*ๆ (506) | 25\%*ๆ (495) |

* Significant with Pre at $p<05$.
$\dagger$ Significant with Experimental group at $p<.05$.
II Significant with Post 1 at $p<05$.

For those people who reported exposure to the campaign, a follow up question was asked about the type of medium they saw or heard. Table 23 shows the percentage of respondents in each region and survey wave reporting the various types of media. Comparing across the Pre and Post 1 surveys in the experimental region, we found that television and radio exposure both increased significantly in the experimental region; both
media were important components of the campaign. In the control region, we found a significant increase in exposure through television, suggesting that the campaign's television coverage unexpectedly reached this area. It is also interesting to note that newspaper media exposure was significantly higher in the control region than the experimental region for all three waves. Billboards, another important component of the media campaign, were seen significantly more often in the experimental region than the control region for the Post 1 and Post 2 surveys.

| Table 23: Percent of Respondents Reporting Having Seen or Heard About Special Efforts by Police to Ticket Drivers by Medium. |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Survey Wave | Experimental |  |  |  |  | Control |  |  |  |  |
|  | TV | Radio | News paper | Bill board | Road Obs. | TV | Radio | News paper | Bill board | Road Obs. |
| Pre | $\begin{aligned} & 30 \% \\ & (44) \end{aligned}$ | $\begin{aligned} & 14 \% \\ & (44) \end{aligned}$ | $\begin{aligned} & 10 \% \\ & (44) \end{aligned}$ | $\begin{aligned} & 13 \% \\ & (44) \end{aligned}$ | $\begin{aligned} & 12 \% \\ & (44) \end{aligned}$ | $\begin{aligned} & 27 \% \\ & \text { (87) } \\ & \hline \end{aligned}$ | $\begin{aligned} & 21 \% \\ & \text { (87) } \\ & \hline \end{aligned}$ | $27 \% \dagger$ (87) | $\begin{gathered} 8 \% \\ (87) \end{gathered}$ | $\begin{aligned} & 20 \% \\ & (87) \end{aligned}$ |
| Post 1 | $\begin{aligned} & 56 \%{ }^{*} \\ & (180) \end{aligned}$ | $\begin{aligned} & 29 \%{ }^{*} \\ & (180) \\ & \hline \end{aligned}$ | $\begin{array}{r} 20 \% \\ (180) \\ \hline \end{array}$ | $\begin{aligned} & 21 \% \\ & (180) \end{aligned}$ | $\begin{gathered} 8 \% \\ (180) \\ \hline \end{gathered}$ | $\begin{aligned} & 41 \% * t \\ & (154) \end{aligned}$ | $\begin{array}{r} 28 \% \\ (154) \\ \hline \end{array}$ | $\begin{aligned} & 31 \% \dagger \\ & (154) \end{aligned}$ | $\begin{aligned} & 10 \% \dagger \\ & (154) \end{aligned}$ | $\begin{aligned} & 11 \% \\ & (154) \\ & \hline \end{aligned}$ |
| Post 2 | $\begin{aligned} & 43 \% \text { 丹 } \\ & (125) \\ & \hline \end{aligned}$ | $\begin{array}{r} 24 \% \\ (125) \\ \hline \end{array}$ | $\begin{array}{r} 19 \% \\ (125) \\ \hline \end{array}$ | $\begin{array}{r} 22 \% \\ (125) \\ \hline \end{array}$ | $\begin{array}{r} 10 \% \\ (125) \\ \hline \end{array}$ | $\begin{aligned} & 40 \%{ }^{*} \\ & (119) \end{aligned}$ | $\begin{gathered} 28 \% \\ \text { (119) } \end{gathered}$ | $\begin{aligned} & 39 \% \dagger \\ & (119) \end{aligned}$ | $\begin{aligned} & 7 \% \dagger \\ & (119) \end{aligned}$ | $\begin{array}{r} 13 \% \\ (119) \\ \hline \end{array}$ |

*Significant with Pre at $p<.05$.
$\dagger$ Significant with Experimental group at $p<.05$.
ๆ Significant with Post 1 at $p<.05$.

Table 24 shows the percentage of respondents in each region and survey wave who reported seeing or hearing about police saturation patrols for enforcing the safety belt law. Overall, only a small percentage of people reported seeing or hearing about these patrols. In both the experimental and control regions, however, there was a significant increase in the percentage of people having seen or heard about the patrols between the Pre and Post 1 survey waves.

| Table 24: Percent of Respondents Reporting Having Seen or Heard About the |  |  |
| :--- | :---: | :---: |
| Police Saturation Patrols for Safety Belt Law Enforcement in the Past 30 Days. |  |  |
| Survey Wave | Experimental | Control |
| Pre | $5 \%(505)$ | $12 \% \dagger(502)$ |
| Post 1 | $16 \%^{*}(502)$ | $20 \%^{*}(500)$ |
| Post 2 | $13 \%^{*}(506)$ | $13 \% \\|(495)$ |

* Significant with Pre at $p<05$.
$\dagger$ Significant with Experimental group at $p<.05$.
ๆ Significant with Post 1 at $p<05$.
Table 25 shows the percentage of respondents in each region and survey wave who reported having seen or heard about special efforts by police to enforce child occupant protection laws. In general, slightly less than one-quarter of respondents reported seeing or hearing about these special efforts. In the experimental region, however, the percentages significantly increased after the Pre survey wave, while no differences were found for the control region.

| Table 25: Percent of Respondents Who in the Past 30 Days, Have Seen or <br> Heard of Any Special Effort by Police to Ticket Drivers in My Community if <br> Children in their Vehicles are Not Wearing Seat Belts or Not in Car Seats. |  |  |
| :--- | :---: | :---: |
| Survey Wave | Experimental | Control |
| Pre | $15 \%(505)$ | $19 \%(502)$ |
| Post 1 | $25 \%^{*}(502)$ | $23 \%(500)$ |
| Post 2 | $24 \%^{*}(506)$ | $20 \%(495)$ |

* Significant with Pre at $p<.05$.

Table 26 shows the percentage of respondents in each region and survey wave who reported exposure to messages in the last month that encourage safety belt use. About 80 percent of all respondents reported having been exposed to this message within the past month. There was a significant increase in people reporting exposure to the safety belt message in both regions between the Pre and Post 1 survey waves.

| Table 26: Percent of Respondents Who in the Past 30 Days, Have Seen or <br> Heard Any Messages that Encourage People to Wear Their Seat Belts. |  |  |
| :--- | :---: | :---: |
| Survey Wave | Experimental | Control |
| Pre | $76 \%(505)$ | $79 \%(502)$ |
| Post 1 | $85 \%^{*}(502)$ | $84 \%^{*}(500)$ |
| Post 2 | $83 \%^{*}(506)$ | $79 \%$ ๆ (495) |

* Significant with Pre at $p<.05$.

II Significant with Post 1 at $p<.05$.

Those people who reported having heard or seen messages promoting safety belt use were asked a follow up question about which type of medium carried the message. Table 27, shows the percentage of respondents by region and survey waves reporting exposure by type of media. For the experimental region, significant increases in percentage were found between the Pre and Post 1 survey waves for television, radio, newspapers, and billboards. For the control region, significant increases were found for radio, newspapers, and on-the-road observation. Again, it appears as if the media campaign unexpectedly reached the control region, or another campaign was in effect at the same time.

| Table 27: Percent of Respondents Reporting Having Seen or Heard Messages About Special Efforts by Police to Ticket Drivers by Medium. |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Survey Wave | Experimental |  |  |  |  | Control |  |  |  |  |
|  | TV | Radio | News paper | Bill board | Road Obs. | TV | Radio | News paper | Bill board | Road Obs. |
| Pre | $\begin{aligned} & 50 \% \\ & (377) \end{aligned}$ | $\begin{aligned} & 22 \% \\ & (377) \end{aligned}$ | $\begin{gathered} 4 \% \\ (377) \end{gathered}$ | $\begin{aligned} & 54 \% \\ & (377) \end{aligned}$ | $\begin{gathered} 9 \% \\ (377) \end{gathered}$ | $\begin{aligned} & 58 \% \dagger \\ & (381) \end{aligned}$ | $\begin{aligned} & 25 \% \\ & (381) \end{aligned}$ | $\begin{gathered} 5 \% \\ (381) \end{gathered}$ | $\begin{aligned} & 43 \% \dagger \\ & (381) \end{aligned}$ | $\begin{gathered} 9 \% \\ (381) \end{gathered}$ |
| Post 1 | $\begin{aligned} & 63 \%{ }^{*} \\ & (429) \end{aligned}$ | $\begin{aligned} & 29 \%{ }^{*} \\ & (429) \end{aligned}$ | $\begin{gathered} 9 \%^{*} \\ (429) \\ \hline \end{gathered}$ | $\begin{aligned} & 44 \%^{*} \\ & (429) \\ & \hline \end{aligned}$ | $\begin{aligned} & 10 \% \\ & (429) \end{aligned}$ | $\begin{aligned} & 63 \% \\ & (419) \\ & \hline \end{aligned}$ | $\begin{aligned} & 35 \%{ }^{*} \\ & (419) \end{aligned}$ | $\begin{gathered} 9 \%^{*} \\ (419) \end{gathered}$ | $\begin{aligned} & 40 \% \\ & (419) \end{aligned}$ | $\begin{aligned} & 13 \%{ }^{*} \\ & (419) \end{aligned}$ |
| Post 2 | $\begin{aligned} & 60 \%^{*} \\ & (413) \end{aligned}$ | $\begin{array}{r} 25 \% \\ (413) \\ \hline \end{array}$ | $\begin{gathered} 7 \% \\ (413) \\ \hline \end{gathered}$ | $\begin{aligned} & 56 \% \text { ๆl } \\ & (413) \end{aligned}$ | $\begin{aligned} & 10 \% \\ & (413) \\ & \hline \end{aligned}$ | $\begin{aligned} & 60 \% \\ & (383) \\ & \hline \end{aligned}$ | $\begin{gathered} 32 \%{ }^{3} \dagger \\ (383) \end{gathered}$ | $\begin{aligned} & 10 \% \text { * } \\ & (383) \end{aligned}$ | $\begin{aligned} & 39 \% \dagger \\ & (383) \end{aligned}$ | $\begin{aligned} & 15 \%{ }^{*} \dagger \\ & (383) \end{aligned}$ |

* Significant with Pre at $p<05$.
$\dagger$ Significant with Experimental group at p<. 05 .
II Significant with Post 1 at $p<.05$.

Table 28 shows the percentage of respondents in each region and survey wave who reported having seen advertisements or activities in the past month encouraging child
occupant protection device use. Again, for both regions, significant increases in reported exposure were found between the Pre and Post 1 survey waves.

| Table 28: Percent of Respondents Reporting Seeing Advertisements or <br> Activities in the Past 30 Days that Encouraged Adults to Make Sure Their <br> Children Use Car Seats or Seat Belts. |  |  |
| :--- | :---: | :---: |
| Survey Wave | Experimental | Control |
| Pre | $38 \%(505)$ | $38 \%(502)$ |
| Post 1 | $46 \%{ }^{*}(502)$ | $46 \%^{*}(500)$ |
| Post 2 | $42 \%(506)$ | $44 \%^{*}(495)$ |

* Significant with Pre at $p<.05$.

Table 29 shows the percentage of respondents in each region and survey wave who think it is important for Michigan to enforce the adult safety belt law more strictly. Overall, about one-half of respondents held this belief with no significant differences between regions or survey waves.

| Table 29: Percent of Respondents Who Think That it is Very Important for <br> Michigan to Enforce Seat Belt Laws for Adults More Strictly. |  |  |
| :--- | :---: | :---: |
| Survey Wave | Experimental | Control |
| Pre | $52 \%(505)$ | $51 \%(502)$ |
| Post 1 | $56 \%(502)$ | $51 \%(500)$ |
| Post 2 | $56 \%(506)$ | $51 \%(495)$ |

Table 30 shows the percentage of respondents in each region and survey wave who reported having seen or heard any of the following messages in the past month: Buckle Up Always; Buckle up Michigan; Click It or Ticket Michigan; Get the Keys; Didn't see it coming? No one ever does; You Drink, You Drive, You Lose; Children in Back; Buckle up America; Click It or Ticket; or Friends Don't Let Friends Drive Drunk. Nearly 100 percent of respondents had heard of at least one of these messages, with no difference between regions or survey waves. Table 31 shows the percentages of people reporting exposure to the various safety-belt-related messages by region and survey wave. The study found increases in the percentages of people reporting exposure to both Click it or Ticket messages between the Pre and Post 1 survey waves for both regions. Significantly more
people in the control than in the experimental region reported exposure to the Buckle Up Michigan message for the Pre and Post 1 surveys waves.

Table 30: Percent of Respondents Who Recall Hearing or Seeing Any Safety Belt Messages in the Past 30 Days.

| Survey Wave | Experimental | Control |
| :--- | :---: | :---: |
| Pre | $96 \%(505)$ | $97 \%(502)$ |
| Post 1 | $97 \%(502)$ | $98 \%(500)$ |
| Post 2 | $98 \%(506)$ | $97 \%(495)$ |

Table 31: Percent of Respondents Who Recall Hearing or Seeing the Following Slogans in the Past 30 Days.

| Survey Wave | Experimental |  |  |  | Control |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Buckle Up MI | Click it or Ticket MI | Buckle up America | Click it or Ticket | Buckle Up M | Click it or Ticket MI | Buckle up America | Click it or Ticket |
| Pre | $\begin{aligned} & 45 \% \\ & (505) \end{aligned}$ | $\begin{gathered} 51 \% \\ (505) \end{gathered}$ | $\begin{gathered} 37 \% \\ (505) \end{gathered}$ | $\begin{aligned} & 64 \% \\ & (505) \end{aligned}$ | $60 \% \dagger$ <br> (502) | $\begin{gathered} 50 \% \\ (502) \end{gathered}$ | $\begin{gathered} 35 \% \\ (502) \end{gathered}$ | $\begin{aligned} & 61 \% \\ & (502) \end{aligned}$ |
| Post 1 | $\begin{gathered} 46 \% \\ (502) \end{gathered}$ | $\begin{aligned} & 58 \% * \\ & (502) \end{aligned}$ | $\begin{gathered} 33 \% \\ (502) \end{gathered}$ | $\begin{aligned} & 77 \% * \\ & (502) \end{aligned}$ | 54\% $\dagger$ <br> (500) | $\begin{aligned} & 58 \% * \\ & (500) \end{aligned}$ | $39 \% \dagger$ <br> (500) | $\begin{aligned} & 73 \% * \\ & (500) \end{aligned}$ |
| Post 2 | $\begin{array}{r} 51 \% \\ (506) \\ \hline \end{array}$ | $\begin{aligned} & 60 \% * \\ & (506) \\ & \hline \end{aligned}$ | $\begin{gathered} 34 \% \\ (506) \\ \hline \end{gathered}$ | $\begin{aligned} & 76 \% * \\ & (506) \\ & \hline \end{aligned}$ | $\begin{gathered} 54 \% \\ (495) \\ \hline \end{gathered}$ | 52\% $\dagger$ <br> (495) | $\begin{array}{r} 35 \% \\ (495) \\ \hline \end{array}$ | $69 \%{ }^{*} \dagger$ (495) |

[^1]
## DISCUSSION

This study was designed to assess the effects of a paid media and safety belt enforcement campaign in selected regions of Michigan. The study utilized an experimental region, where the full impact of the campaign was scheduled, and a matched control region, where no specific campaign impact was intended. Three waves of a direct observation survey of safety belt use were conducted in each of the regions concurrently. The first wave (Pre) occurred prior to any campaign activities, the second (Post 1) occurred immediately following the campaign activities, and the third (Post 2) occurred about 6 weeks after completion of program activities. In addition, a telephone survey regarding awareness of various program activities and other safety-belt-related issues, was conducted in each region during each of the three direct observation survey wave periods.

The direct observation survey results showed that safety belt use did not significantly increase in either region between the Pre and Post 1 survey waves. Thus there was no immediate effect of the media/enforcement campaign on safety belt use. For the experimental region, however, safety belt use during the Post 2 survey wave increased significantly from the Post 1 survey, indicating possible long-term effects of the program. In the control region, safety belt use increased between the Pre and Post 1 survey waves, but not significantly. When the two regions were compared by survey wave, we found the control region had significantly higher safety belt use than the experimental region immediately after the program (Post 1), while no significant differences were found for the other waves. Based upon these results, it appears that the media/enforcement program did not have a differential effect in the experimental region.

One reason for this lack of effect may have been that the media/enforcement campaign had more far-reaching effects than intended in the control region of Michigan. Even though no specific program activities were scheduled to appear in the counties comprising the control region, the telephone survey revealed that people in the control region were exposed to an increase in messages after the Pre survey wave. Respondents in this region also reported a greater perceived threat of safety belt enforcement, similar to people in the experimental region. Very likely, people in the control region read or watched news stories from the Detroit or Southeastern Michigan areas that discussed the
campaign or increased safety belt enforcement in general. In this respect, we conclude that the program had unexpected effects in that local media and enforcement efforts trickled out to areas far removed from the areas for which media was purchased.

Because the control region was exposed to increased safety belt media and enforcement at the same time as the experimental region, the experimental/control studydesign we utilized for comparing changes in observed safety belt use was compromised. Without the ability to compare safety belt use in the experimental region to safety belt use in a region without any program activities, we have no way of determining the differential effects of the program on the background of other statewide factors that influence safety belt use.

## REFERENCES

Campbell, B.J. (1987). The Relationship of Seat Belt Law Enforcement to Level of Belt Use. Chapel Hill, NC: University of North Carolina Highway Safety Research Center.

National Highway Traffic Safety Administration (1998). Uniform Criteria for State Observational Surveys of Seat Belt Use. (Docket No. NHTSA-98-4280). Washington, DC: US Department of Transportation.

National Highway Traffic Safety Administration. (2000). Traffic Safety Facts 2000: Occupant Protection. [Electronic Version]. (Report No. DOT HS 809 327). Washington, DC: US Department of Transportation.

National Highway Traffic Safety Administration. (2002). Occupant Protection: Region 5. Retrieved October 11, 2002 from http://www.nhtsa.dot.gov/nhtsa/whatis/regions/ Region05/05op.html.

Schulman, Ronca and Bucuvalas, Inc. (2002). 2002 NHTSA Seat Belt Tracking Telephone Surveys: Methodology.

US Department of Transportation. (2002). Seat Belt Use by Drivers, Passengers Reaches 75 percent, NHTSA Reports. Retrieved October 11, 2002 from http://www.dot.gov/ affairs/nhtsa5802.htm.

## APPENDIX A <br> Data Collection Forms

$\qquad$

## ATTENTION CODING: DUPLICATE COL 1 - 3 FOR ALL VEHICLES: Section 157 Evaluation

| DRIVER | $1 \square$ Not belted $2 \square$ Belted $3 \square$ B Back $4 \square$ U Arm | $\begin{aligned} & 1 \square \text { Male } \\ & 2 \square \text { Female } \end{aligned}$ | $\begin{aligned} & 1 \square \text { White } \\ & 2 \square \text { Black } \\ & 3 \square \text { Other } \end{aligned}$ | $\begin{aligned} & 2 \square 4-15 \\ & 3 \square 16-29 \\ & 4 \square 30-59 \\ & 5 \square 60+ \end{aligned}$ | VEHICLE TYPE Passenger car <br> $2 \square$ Van $\square$ Utility <br> $4 \square$ $\square$ Pick-up |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { FRONT- } \\ & \text { RIGHT- } \\ & \text { PASSENGER } \end{aligned}$ | $1 \square$ Not belted $2 \square$ Belted $3 \square$ B Back $4 \square$ U Arm $5 \square$ 9 | $\begin{aligned} & 1 \square \text { Male } \\ & 2 \square \text { Female } \end{aligned}$ | $\begin{aligned} & 1 \square \text { White } \\ & 2 \square \text { Black } \\ & 3 \square \text { Other } \end{aligned}$ | $1 \square 0-3$ $2 \square 4-15$ $3 \square 16-29$ $4 \square 30-59$ $5 \square 60+$ | Office Use Only: $\frac{13}{14} \frac{15}{15}$ | $\begin{aligned} & \text { COMM } \\ & \text { VEHCLE } \\ & 1 \square \mathrm{No} \\ & 2 \square \mathrm{Yes} \end{aligned}$ |


| DRIVER | $1 \square$ Not belted $2 \square$ Belted $3 \square$ B Back $4 \square$ U Arm | $\begin{aligned} & 1 \square \text { Male } \\ & 2 \square \text { Female } \end{aligned}$ | $\begin{aligned} & 1 \square \text { White } \\ & 2 \square \text { Black } \\ & 3 \square \text { Other } \end{aligned}$ | $\begin{aligned} & 2 \square 4-15 \\ & 3 \square 16-29 \\ & 4 \square 30-59 \\ & 5 \square 60+ \end{aligned}$ | VEHICLE TYPE Passenger car Van <br> $3 \square$ <br> Utility <br> 4 <br> Pick-up |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { FRONT- } \\ & \text { RIGHT- } \\ & \text { PASSENGER } \end{aligned}$ | $1 \square$ Not belted $2 \square$ Belted $3 \square$ B Back $4 \square$ U Arm $5 \square$ CRD | $\begin{aligned} & 1 \square \text { Male } \\ & 2 \square \text { Female } \end{aligned}$ | $\begin{aligned} & 1 \square \text { White } \\ & 2 \square \text { Black } \\ & 3 \square \text { Other } \end{aligned}$ | $\begin{aligned} & 1 \square 0-3 \\ & 2 \square 4-15 \\ & 3 \square 16 \cdot 29 \\ & 4 \square 30-59 \\ & 5 \square 60+ \end{aligned}$ | Office Use Only: $13 \times 14, \frac{15}{}$ | COMM. <br> VEHICLE <br> $1 \square$ No <br> $2 \square \mathrm{Y} \mathrm{Yes}$ |


| DRIVER | $1 \square$ Not belted $2 \square$ Belted $3 \square$ B Back $4 \square$ U Arm | $\begin{aligned} & 1 \square \text { Male } \\ & 2 \square \text { Female } \end{aligned}$ | $\begin{aligned} & 1 \square \text { White } \\ & 2 \square \text { Black } \\ & 3 \square \text { Other } \end{aligned}$ | $\begin{aligned} & 2 \square 4-15 \\ & 3 \square 16 \cdot 29 \\ & 4 \square 30-59 \\ & 5 \square 60+ \end{aligned}$ | $\quad$ VEHICLE TYPE1 $\square$ Passenger car$2 \square$ Van$3 \square$ Utility$4 \square$ Pick-up |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FRONTRIGHT PASSENGER | $1 \square$ Not belted $2 \square$ Belted $3 \square$ B Back $4 \square$ U Arm $5 \square$ CRD | $\begin{aligned} & 1 \square \text { Male } \\ & 2 \square \text { Female } \end{aligned}$ | $\begin{aligned} & 1 \square \text { White } \\ & 2 \square \text { Black } \\ & 3 \square \text { Other } \end{aligned}$ | $1 \square 0-3$ $2 \square 4-15$ $3 \square 16-29$ $4 \square 30-59$ $5 \square 60+$ | Office Use Only: $13 \cdot 14 \cdot 15$ | COMM. <br> VEHICLE $\begin{aligned} & 1 \square \mathrm{No} \\ & 2 \square \mathrm{Yes} \end{aligned}$ |

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline DRIVER \& $1 \square$ Not belted
$2 \square$ Belted
$3 \square$ B Back
$4 \square{ }_{4}$ U Arm \& $$
\begin{aligned}
& 1 \square \text { Male } \\
& 2 \square \text { Female }
\end{aligned}
$$ \& $$
\begin{aligned}
& 1 \square \text { White } \\
& 2 \square \text { Black } \\
& 3 \square \text { Other }
\end{aligned}
$$ \& \[
$$
\begin{aligned}
& 2 \square 4-15 \\
& 3 \square 16-29 \\
& 4 \square 30-59 \\
& 5 \square 60+
\end{aligned}
$$

\] \& \multicolumn{2}{|l|}{\begin{tabular}{l}
VEHICLE TYPE
Passenger car

Van <br>
$3 \square$ Utility <br>
4
$\square$ Pick-up
\end{tabular}} <br>

\hline $$
\begin{aligned}
& \text { FRONT- } \\
& \text { RIGHT- } \\
& \text { PASSENGER }
\end{aligned}
$$ \& $1 \square$ Not belted

$2 \square$ Belted
$3 \square$ B Back
$4 \square$ U Arm

$5 \square$ CRD \& \[
$$
\begin{aligned}
& 1 \square \text { Male } \\
& 2 \square \text { Female }
\end{aligned}
$$

\] \& \[

$$
\begin{aligned}
& 1 \square \text { White } \\
& 2 \square \text { Black } \\
& 3 \square \text { Other }
\end{aligned}
$$
\] \& $1 \square 0-3$

$2 \square 4-15$
$3 \square 16-29$
$4 \square 30-59$
$5 \square 60+$ \& Office Use Only: \& COMM
VEHCLE

$$
\begin{aligned}
& 1 \square \mathrm{No} \\
& 2 \square{ }_{16} \mathrm{Yes}
\end{aligned}
$$ <br>

\hline
\end{tabular}

## SECTION 157 EVALUATION <br> SITE DESCRIPTION 2002

SITE \# $-\frac{1}{3}$ SITE LOCATION $\qquad$

SITE TYPEIntersectionFreeway

4
Exit No. $\qquad$

TRAFFIC CONTROLTraffic LightStop sign
$3 \square$ None
4 $\square$ Other $\qquad$
5

DATE (month/day): $\frac{-1}{6} \frac{1}{7} \frac{1}{9}^{2002}$
OBSERVER

DAY OF WEEKMonday
$2 \square$ Tuesday
3 $\square$ Wednesday
$4 \square$ Thursday
5 Friday
$6 \square$ Saturday
$7{ }_{11}$ Sunday

START TIME:
 END TIME: $-\frac{17}{18181920}(24 \mathrm{hr}$ clock)
$\qquad$

INTERRUPTION (total number of minutes during observation period): $\overline{21} \overline{22}$

MEDIAN:
$1 \square$ Yes
$2 \square \mathrm{No}$
23

TRAFFIC COUNT 1: $\overline{24} \overline{25} \overline{26}$
TRAFFIC COUNT 2: $\overline{27} \overline{28} \overline{29}$ comments:


APPENDIX B
Site Listing

## EXPERIMENTAL REGION

## Site Number

001
002
003
004
005
006
007
008 009 010
011
012
013
014
015
016
017
018
019
020
021
022
023
024
025
026
027
028
029
030
031
032
033
034
035
036
037
038
039
040
041
042
043
044

## Site Location

EB 15 Mile Road/Truman and Fruit Ridge Ave.
SEB Butternut and Quincy St.
WB Ellis Rd. and Ravenna Rd.
NB Carr Rd. and Sternberg Rd.
WB Hackley Ave. and Getty St.
NB Tisdel Ave. and Dickerson Lake/22 Mile Rd.
SB $48^{\text {th }}$ Ave. and M-21/Chicago Rd.
WB New Holland St. and US-31
SB Weber Rd. and River Rd.
EB Wilkes/Old Channel and Lamos
SB Murray Lake and 2 Mile Rd.
EB Main St./Byron Rd. and Fairview Ave.
NB Sikkenga Rd. and Fruitvale Rd.
SB $88^{\text {th }}$ Ave. and Taft St.
SB Blue Lake Rd. and Holton-Whitehall Rd.
WB Bauer Rd. and $20^{\text {th }}$ Ave.
WB Warner St. and $60^{\text {th }}$ Ave.
NB Division Ave. and 10 Mile Rd.
SB Wabasis Ave. and Belding Rd./M-44
SWB W.River Dr. and Pine Island Dr.
SB Maynard Ave. and O'Brien/Wealthy St.
NB Harvard Ave. and 18 Mile Rd.
WB White Rd. and Canada Rd.
WB Crocker Rd./96 ${ }^{\text {th }}$ St. and Holton-Duck Lake Rd.
EB Vergennes St. and Flat River Dr./Sayles Rd.
EB Wilson Rd. and $112^{\text {th }}$ Ave.
WB State Rd. and Fruitport Rd.
SB $128^{\text {th }}$ Ave. and M-45/Lake Michigan Dr.
WB Riley St. and Lake Shore Ave.
EB Bailey Rd. and Newago Rd.
NB Paine Rd. and 17 Mile Rd./M-46
EB 5 Mile Rd. and Lincoln Lake Ave.
EB Lincoln Ave. and US-31
EB Johnson St. and $24^{\text {th }}$ Ave.
SB Keller and 18 Mile Rd.
SWB M-120 and Getty St.
WB 20 Mile/White Rd. and Kenowa Rd.
SB $112^{\text {th }}$ Ave./Main St. and Leonard St.
WB Johnson and $144^{\text {th }}$ Ave.
NB Blakely Dr. and Kies St.
EB Hancock Rd. and Cook St.
NB $48^{\text {th }}$ Ave. and Fillmore St.
EB Becker St. and Pine Lake Ave.
WB Lake Michigan Dr./M-45 and US-31

NB Keller and 21 Mile Rd.
EB Fruitvale Rd. and Nichols Rd.
SB Crahen and M-21/Fulton St.
NB Eastern Ave. and Fulton St.
SB Division Ave. and $76^{\text {th }}$ St.
SB Henry St. and Laketon Ave.

## CONTROL REGION

Site Number
051
052
053
054
055
056
057
058
059
060
061
062
063
064
065
066
067
068
069
070
071
072
073
074
075
076
077
078
079
080
081
082
083
084
085
086

## Site Location

WB M-72 and M-31
SB C.R. \#27 and C.R. \#34
SB \#611/Garfield and M-113/Main St.
EB Quick Rd. and Pleasantview Rd.
SB Mission Rd. and Smokey Hollow Rd.
NB C.R. \#29 and C.R. \#46
NB 77/State/Chippewa and Lake Shore Dr./M-119
WB E.Van Rd. and C.R. \#81/Pleasantview Rd.
SB C.R. \#21 $1 / 2$ and C.R. \#30
SB Bennett and Brackett-Hawley Rd.
WB $13^{\text {th }}$ St./C.R. \#36 and N.Mitchell/US-131
EB Townline Rd. and Elk Lake Rd.
SB C.R. \#37 and C.R. \#34
EB C.R. \#34/Boon Rd. and US-131/N.Mitchell
SB Lautner Rd. and M-72
WB Airport and \#611/Garfield
NB C.R. \#15 and C.R.\#48
NB Larks Lake Rd./St. Nicholas Rd. and Zulski Rd.
SB M-119/State St. and Main St./M-119
SB US-31 and M-68/Chicago St.
EB C.R. \#14 and C.R. \#31
WB C.R. \#34 and C.R. \#23/Hoskin Rd.
WB M-72/M-31 and M-37/Garfield
WB Hilltop Rd. and C.R. \#633
WB Valley Rd. and Sunny Ridge Rd.
EB M-186 and US-131
WB C.R. \#34 and US-115
WB M-42 and US-131
NB C.R. \#41/39 and US-115
SB Knight Rd. and M-113
NB C.R. \#19 and C.R. \#4
SWB Bluff Rd. and M-37
EB Mitchell Rd. and Division Rd.
NB Schichtel Rd. and M-113
WB Swaney Rd. and M-37
SB M-37 and M-55

087
088
089
090
091
092
093
094
095
096
097
098
099
100

NB Valley Rd. and Levering Rd./C.R. \#66
SB Munro Rd. and Angell Rd.
NB Lightfoot Rd. and Middle Rd.
WB Voice Rd. and Clark Rd.
SB Mackinaw Hwy. and US-31
SB Orchard Rd. and E.Van Rd.
NB 5 Mile Rd. and Holiday Rd.
WB Cassidy Rd. and Pleasantview Rd.
SB Eppler Rd. and Intertown Rd.
EB C.R. \#46 and C.R. \#25
SB C.R. \#13 and M-55
WB C.R. \#14 and M-37
NB Resort Pike Rd. and US-31
SB C.R. \#27 and M-55

## APPENDIX C

Telephone Survey

Study \#9421A
OMB Number:2127-0615
Expiration Date: 12/31/04
Final Approved: 4/04/2002

## BUCKLE UP AMERICA SURVEYS (State Version Apri/June 2002)



DUMMY QUESTION FOR BIRTHDAY QUESTIONS
Has had the most recent .. 1
Will have the next .. 2
A. In order to select just one person to interview, could I speak to the person in your household, 16 or older, who (has had the most recent/will have the next) birthday?
Respondent is the person................ 1
Other respondent comes to phone............ 2
Respondent is not available.......... 3

Refused. ... 4
B. Hello, I'm $\qquad$ calling for the U.S. Department of Transportation. We are conducting a study of Americans' driving habits and attitudes. The interview is voluntary and completely confidential. It only takes about 10 minutes to complete. [Please note that an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control number for this information collection is 2127-0615.] Could we begin now?

## CONTINUE INTERVIEW. 1

Arrange Callback.................................
Refused. 3

Note: Text in brackets is not read, but available if asked.

Respondent's State
$1>$ *Alabama
$2>$ *Alaska
$4>$ *Arizona
$5>$ *Arkansas
$6>*$ California
$8>$ *Colorado
$9>*$ Connecticut
$10>$ *Delaware
$11>*$ District of Columbia
$12>$ *Florida
$13>*$ Georgia
$15>$ *Hawaii
$16>$ *Idaho
$17>$ *Illinois
$18>$ *Indiana
$19>$ *Iowa
$20>*$ Kansas
$21>*$ Kentucky
$22>$ *Louisiana
$23>$ *Maine
$24>$ *Maryland
$25>$ *Massachusetts
$26>$ *Michigan
$27>$ *Minnesota
$28>*$ Mississippi
$29>$ *Missourí
$30>$ *Montana
$31>$ *Nebraska
$32>*$ Nevada
33 > *New Hampshire
$34>$ *New Jersey
$35>$ *New Mexico
$36>$ *New York
$37>*$ North Carolina
$38>$ *North Dakota
$39>$ *Ohio
$40>$ *Oklahoma
$41>$ *Oregon
$42>$ *Pennsylvania
$44>$ *Rhode Island
$45>$ *South Carolina
$46>$ *South Dakota
47 > *Tennessee
$48>$ *Texas
$49>$ *Utah
$50>$ *Vermont
$51>$ *Virginia
$53>*$ Washington
$54>$ *West Virginia
$55>$ *Wisconsin
$56>*$ Wyoming
Q. 1 How often do you drive a motor vehicle? Almost every day, a few days a week, a few days a month, a few days a year, or do you never drive?

Almost every day................. 1
Few days a week................................ 2
Few days a month .. 3
Few days a year. .
......................... 4
Never.............................................. 6
(VOL) Don't know.................................. 8
(VOL) Refused............. 8
Q. 2 Is the vehicle you drive most often a car, van, motorcycle, sport utility vehicle, pickup truck, or other type of truck? (NOTE: IF RESPONDENT DRIVES MORE THÂN ONE VEHICLE OFTEN, ASK:) "What kind of vehicle did you LAST drive?"
Car. ..... 1
Van or minivan .....  2
Motorcycle .....  3
Pickup truck. ..... 4
Sport Utility Vehicle .....  5
Other. ..... 10Other truck (SPECIFY)...............
(VOL) Don't know. .....  ..... 12
(VOL) Refused. ..... 13
Q. 3 For the next series of questions, please answer only for the(car/truck/van) you said you usually drive. Do the seat belts in thefront seat of the (car/truck/van) go across your shoulder only, acrossyour lap only, or across both your shoulder and lap?
INTERVIEWER INSTRUCTION: SEATBELT QUESTIONS REFER TO DRIVER SIDE BELTS.

| Across shoulder....................... 1 |  |
| :--- | :--- |
| Across lap................................... 2 | SKIP TO Q5 |
| Across both........................ 4 | SKIP TO Q9 |
| Vehicle has no belts................ 5 | SKIP TO Q9 |
| (VOL) Don't know................ 6 | SKIP TO Q9 |

## 2002 NHTSA Seat Belt Tracking Telephone Surveys

Q. 4 When driving this (car/truck/van), how often do you wear your shoulder belt... (READ LIST)
ALL OF THE TIME .. 1
MOST OF THE TIME .2
SOME OF THE TIME................ 3
RARELY OR. . .4
NEVER .5
(VOL) Don't know .6
(VOL) Refused. 7

## IF Q3=1 SKIP TO Q6

Q. 5 When driving this (car/truck/van), how often do you wear your lap belt...(READ LIST)

ALL OF THE TIME................. 1
MOST OF THE TIME.................... 2
SOME OF THE TIME.............. 3
RARELY OR...................................... 4
NEVER....................................... 5
(VOL) Don't know....................... 6
(VOL) Refused.................................. 7
Q. 6 When was the last time you did NOT wear your seat belt when driving?
Within the past day................................ 1
Within the past week. . 2
Within the past month . 3
Within the past year.................................... 4
A year or more ago/I always wear it...... 5
(VOL) Don't know.................................... 6
(VOL) Refused.................................. 7
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?

Increased.
.1
Decreased.....................................
2 SKIP TO Q9
Stayed the same............. 3
New driver........................... 4
(VOL) Don't know...... 5
(VOL) Refused.
.. 6

## 2002 NHTSA Seat Belt Tracking Telephone Surveys

## Q. 8 What caused your use of seat belts to increase?

(DO NOT READ LIST - MULTIPLE RECORD)
Increased awareness of safety ..... 1
Seat belt law ..... 2
Don't want to get a ticket ..... 3
Was in a crash ..... 4
New car with automatic belt ..... 5
Influence/pressure from others ..... 6
More long distance driving ..... 7
Remember more/more in the habit ..... 8
The weather .....  9
The holidays ..... 10
Driving faster ..... 11
Other (SPECIFY ..... 27
(VOL) Don't know. ..... 28
(VOL) Refused ..... 29
Q. 9 Does (RESP'S STATE) have a law requiring seat belt use by adults?
Yes ..... 1
No. .....  3 (VOL) Refused ..... 4 SKIP TO Q12
IF Q1 $=5$ AND Q9 $=1$, SKIP TO ..... Q11
If $Q^{2}=3$ AND $\mathbf{Q}^{9}=1$, SKIP TO Q11
Q. 10 Assume that you do not use your seat belt AT ALL while driving over the next sixmonths. How likely do you think you will be to receive a ticket for not wearing a seatbelt? READ
Very likely ..... 1
Somewhat likely ..... 2
Somewhat unlikely ..... 3
Very unlikely ..... 4
(VOL) Don't know ..... 5
(VOL) Refused .....  6
Q. 11 According to your state law, can police stop a vehicle if they observe a seat belt violationor do they have to observe some other offense first in order to stop the vehicle?
Can stop just for seat belt violation ..... 1
Must observe another offense first ..... 2
(VOL) Don't know .....  3
(VOL) Refused .....  4
Q. 12 In your opinion, SHOULD police be allowed to stop a vehicle if they observe a seat beltviolation when no other traffic laws are being broken?
Should be allowed to stop .....  1
Should not ..... 2
(VOL) Don't know ..... 3
(VOL) Refused ..... 4

## 2002 NHTSA Seat Belt Tracking Telephone Surveys

## Ohio Only, all else skip to q13

Q.12b Have you ever received a ticket for not wearing seat belts?

Q.12c How long ago did you receive a ticket for not wearing seat belts? (IF MORE THAN ONCE, ASK FOR LAST TIME]
$\qquad$ WEEKS AGO
MONTHS AGO, OR
YEARS AGO
Q. 13 Please tell me whether you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following statements?

## ROTATE

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.
Q. 14 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?

Yes. .1
No . 2

SKIP TO CONDITIONAL BEFORE Q17
(Vol) Don't know... 3 (Vol) Refused3 4

SKIP TO CONDITIONAL BEFORE Q17 SKIP TO CONDITIONAL BEFORE Q17
Q. 15 Where did you see or hear about that special effort?
[DO NOT READ--MULTIPLE RESPONSE]
TV.
.1
Radio .2
Friend/Relative.................. 3
Newspaper................. 4
4
SKIP TO CONDITIONAL BEFORE Q17 SKIP TO CONDITIONAL BEFORE Q17
Personal observation/on the road.... 5 SKIP TO CONDITIONAL BEFOREQ17
Billboard/signs.................. 7
I'm a police officer/judge........ 9 SKIP TO CONDITIONAL BEFORE Q17
SKIP TO CONDITIONAL BEFORE Q17
Other (specify____)......... 17 SKIP TO CONDITIONAL BEFORE Q17
Don't know....................... 18
Refused.
Q. 16 Was the (TV/radio) message a commercial (or advertisement), was it part of a news program, or was it something else? MULTIPLE RECORD
Commercial/Advertisement/
Public Service Announcement. ..... 1
News story/news program ..... 2
Something else (specify): ..... 3
Don't know .....  4
Refused. ..... 5
IF STATE EQ MICHIGAN SKIP TO ALTERNATIVE M. 17
IF STATE EQ INDIANA SKIP TO ALTERNATIVE I. 17 IF STATE EQ OHIO ASK Q17
ALL OTHER STATES SKIP TO Q24Q. 17 Yes or no- in the past 30 days, have you seen or heard anything about the police settingup seat belt checkpoints where they will stop motor vehicles to check whether drivers andpassengers are wearing seat belts?
Yes. ..... 1
No. ..... 2
SKIP TO Q24
(Vol.) Don't know...... 3
(Vol.) Refused. .....  .4
SKIP TO Q24 SKIP TO Q24
By checkpoint, we mean a systematic effort by police to stop vehiclesfor the purpose of checking for compliance with existing seat belt laws.
Q. 18 Let me just confirm, is this the type of checkpoint that you have seen orheard about in the past 30 days?
Yes ..... 1
(Vol.)............................ 3 2 SKIP TO Q24
(Vol.) Refused. ..... 4
SKIP TO Q24
Q. 19 Where did you see or hear about the police checkpoints for seat belts?
[DO NOT READ--MULTIPLE RESPONSE]
TV. ..... 1
Radio ..... 2
Friend/Relative. ..... 3
SKIP TO Q21Newspaper............................. 4Personal observation/on the road............. 55
Billboard/signs. .....  7
I'm a police officer/judge .....  9
Other (specify ..... 17
Don't know ..... 18Refused.19
Q. 20 Was the (radio/radio) message a commercial (or advertisement), was it part of a news program, or was it something else? MULTIPLE RECORD
Commercial/Advertisement/ Public Service Announcement .....  .1
News story/news program ..... 2
Don't know. ..... 4
Refused ..... 5
Q. 21 In the past 30 days, did you personally see any checkpoints where police were stopping motor vehicles to see if drivers and passengers were wearing seat belts?

Yes............................ 1
No.................................. 2
(Vol.) Don't know.... 3 SKIP TO Q24
(Vol.) Refused................. 4 SKIP TO Q24
Again, by checkpoint, we mean a systematic effort by police to stop vehicles for the purpose of checking for compliance with existing seat belt laws.
Q. 22 Let me just confirm, is this the type of checkpoint that you personally saw in the past 30 days?

| Yes......................... 1 |  |
| :---: | :---: |
| No.............................................. 2 | SKIP TO Q24 |
| (Vol.) Don't know...... 3 | SKIP TO Q24 |
| (Vol.) Refused.................. 4 | SKIP TO Q24 |

Q. 23 Were you personally stopped by police at a seat belt checkpoint in the past 30 days?
$\qquad$
Yes .1
No................................................ 2
(Vol.) Don't know...... 3
(Vol.) Refused
.4
ALTERNATIVE M.17-M. 21 FOR MICHIGAN
M. 17 Yes or no- in the past 30 days, have you seen, read or heard anything about the police conducting SATURATION PATROLS to observe whether drivers and passengers are wearing seat belts?

| Yes.......................... 1 |  |
| :---: | :---: |
| No..................................... 2 | SKIP TO Q24 |
| (Vol.) Don't know...... 3 | SKIP TO Q24 |
| (Vol.) Refused.................. 4 | SKIP TO Q24 |

M. 19 Where did you see, read or hear about these saturation patrols?
[DO NOT READ--MULTIPLE RESPONSE]
TV. . 1
Radio............................................. 2
Friend/Relative.................... 3
Newspaper..................... 4
Personal observation/on the road.... 5
Billboard/signs.................. 7
... 9
I'm a police officer/judge......... 9
Other (specify___)......... 17
Don't know.
18
Refused

SKIP TO M. 21
SKIP TO M. 21
SKIP TO M. 21
SKIP TO M. 21
SKIP TO M. 21
SKIP TO M. 21
SKIP TO M. 21
SKIP TO M. 21
M. 20 Was the (radio/radio) message a commercial (or advertisement), was it part of a news program, or was it something else? MULTIPLE
RECORD
Commercial/Advertisement/
Public Service Announcement............ 1
News story/news program
Something else (specify): -........................ 3
Don't know................................................... 4
Refused............................................... 5
M. 21 In the past 30 days, did you personally see any saturation patrols?

| Yes. | SKIP TO Q24 |
| :---: | :---: |
| No.............................. 2 | SKIP TO Q24 |
| (Vol.) Don't know..... 3 | SKIP TO Q24 |
| (Vol.) Refused............... 4 | SKIP TO Q24 |

## ALTERNATIVE I.17-I.21FOR INDIANA

I. 17 Yes or no- in the past 30 days, have you seen, read or heard anything about the police setting up seat belt ENFORCEMENT ZONES in your community? By seat belt enforcement zones, we mean a special area where police officers observe whether drivers or passengers are wearing seat belt.

I. 19 Where did you see, read or hear about the seat belt enforcement zones? [DO NOT READ--MULTIPLE RESPONSE]

| TV................................ 1 |  |
| :---: | :---: |
| Radio.................................... 2 |  |
| Friend/Relative.................. 3 | SKIP TO I. 21 |
| Newspaper.................. 4 | SKIP TO I. 21 |
| Personal observation/on the road.... 5 | SKIP TO I. 21 |
| Billboard/signs................ 7 | SKIP TO 1.21 |
| I'm a police officer/judge........ 9 | SKIP TO I. 21 |
| Other (specify___)........ 17 | SKIP TO 1.21 |
| Don't know.................... 18 | SKIP TO 1.21 |
| Refused............................... 19 | SKIP TO 1.21 |

I. 20 Was the (radio/radio) message a commercial (or advertisement), was it part of a news program, or was it something else? MULTIPLE RECORD
Commercial/Advertisement/ Public Service Announcement............ 1
News story/news program
Something else (specify): .. 2
Don't know. 3

$$
\text { Refused................................................................ } 5
$$

I. 21 In the past 30 days, did you personally see any enforcement zones where police Were observing whether drivers and passengers were wearing seat belts?

| Yes................................................................................ 4 | SKIP TO Q24 |
| :---: | :--- |
| SKIP TO Q24 |  |
| No.......... DO TO Q24 |  |

## ASK EVERYONE

Q. 24 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?
Yes..............................................................................
Q. 25 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 radio, signs on the road, news stories, or something else.
Yes.......................... 1 .. 2 SKIP TO Q29
Don't know............ 3
SKIP TO Q29
Refused. .. 4
Q. 26 Where did you see or hear these messages? [DO NOT READ--MULTIPLE RESPONSE]
$\qquad$
Radio .2

Friend/Relative........... 3
Newspaper................. 4
Personal observation/on the road.... 5
Billboard/signs. .. 7
I'm a police officer/judge......... 9 Other (specify $\qquad$ )......17

Don't know .18
Refused. $\qquad$
Q. $27 \begin{aligned} & \text { Was the (radio/radio) message a comme } \\ & \text { news program, or was it something else } \\ & \text { Commercial/Advertisement/ } \\ & \text { Public Service Announcement }\end{aligned}$ News story/news program SKIP TO Q28 SKIP TO Q28 SKIP TO Q28 SKIP TO Q28 SKIP TO Q28 SKIP TO Q28 SKIP TO Q28 SKIP TO Q28
$\qquad$ Something else (specify): Don't know. ..... 3 Don't know. ......... 4 Refused. .5
Q. 28 Would you say that the number of these messages you have seen or heard in the past 30 days is more than usual, fewer than usual, or about the same as usual?

More than usual. .. 1
Fewer than usual . 2
About the same. . 3
Don't know. . 4
Refused .5

## 2002 NHTSA Seat Belt Tracking Telephone Surveys

Q. 29 Are there any advertisements or activities that you have seen or heard in the past 30 daysthat encouraged adults to make sure that children use car seats or seat belts?
Yes .....  1
No. . 2 SKIP TO Q31
Don't know ..... 3Refused.4 SKIP TO Q31
Q. 30 What did you see or hear?
Q. 31 Thinking about everything you have heard, how important do you think it is for [respondent's STATE] to enforce seat belt laws for ADULTS more strictly ..... very important, fairly important, just somewhat important, or not that important?
Very important. ..... 1
Fairly important ..... 2
Just somewhat important ..... 3
Not that important .....  4
Don't know. ..... 5
Refused. .....  6

## Q. 32 Do you recall hearing or seeing the following slogans in the past 30 days? READ LIST

 AND MULTIPLE RECORD
## ROTATE PUNCHES 1-9

Friends don't let friends drive drunk.............. 1
Click it or ticket 2
Buckle Up America. .....  3
Children In Back
You drink, you drive, you lose ..... 5 4
Didn't see it coming? No one ever does. ..... 6
Get the keys ..... 7Please Buckle Up (Ohio)8
What's Holding You Back (Ohio). .....  9
Operation Pullover (Indiana)Buckle Up AlwaysWhy Risk It (Nevada)No, Exceptions, No Excuses, Buckle Up Now (Nevada)Click It Or Ticket: (State Name)Buckle Up (State Name)Buckling Up Makes Good Sense for Kids (Colorado)
Buckle Up It's the Law and It's Enforced (Connecticut)
Show a Little Restraint (Iowa)
Kansas Clicks (Kansas)
Buckle Up or Pay the Price (Minnesota)
Click It don't Risk It (Missouri)
Click It don't Risk It (Nebraska)
Life Is Good. The Way to Go (Oregon).
Fasten for Life (South Carolina)
Buckle Up or Busted (Utah)
Click It Why Risk It (Wisconsin)
No Excuses, Buckle Up (Wyoming)
None of these
Don't know ..... 88
Refused ..... 99

## FOR OHIO ONLY, ALL ELSE SKIP TO Q33.

Q.32b Is there any particular type of information you would find helpful on how to protect a child in a motor vehicle?
Yes. .1
No.
.. 2 SKIP TO Q32d
Don't know 3 SKIP TO Q32d
Refused.
.4 SKIP TO Q32d
Q.32c What information would you find helpful?
Q.32d 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?
[DO NOT READ, MULTIPLE RESPONSE]
WEB site ..... 1
Pediatrician .....  2
Doctor (Unspecified) .....  .3
Nurse. ..... 4
Clinic. .....  5
TV. .....  6
Radio ..... 7
Magazines ..... 8
Grocery Store. ..... 9
Other (specify): .....  10
Don't know ..... 98
Refused ..... 99
Q. 33 Now, I need to ask you some basic information about you and your household. What is your age?
$\qquad$ AGE REFUSED=99
Q. 34 Including 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?
$\qquad$ REFUSED=99
Q. 35 How many children age 15 or younger are living in your household at least half of the time or consider it their primary residence?
$\qquad$ NONE:=0 REFUSED=99
Q. 36 Do you consider yourself to be Hispanic or Latino?

Yes. .1
No. .2
(VOL) Not sure........... 3 (VOL) Refused. .4

## 2002 NHTSA Seat Belt Tracking Telephone Surveys

Q. 37 Which of the following racial categories describes you? You may select more than one. [READ LIST--MULTIPLE RECORD]

> American Indian or Alaskan Native............ 1
> Asian .2
> Black or African American 3
> Native Hawaiian or other Pacific Islander
> White...................................................... 5
> Other(SPECIFY)
> .6
(VOL) Refused....................................... 9
Q. 38 What is the highest grade or year of school you completed?
8th grade or less .9
9 th grade.10
10 th grade ..... 11
11th grade. ..... 12
12th grade/GED ..... 13
Some college. ..... 14
College graduate or higher ..... 15(VOL) Refused16
Q. 39 Do you have more than one telephone number in your household?

| Yes....................... 1 |  |
| :---: | :---: |
| No...................................... 2 | SKIP TO Q41 |
| Don't know............. 3 | SKIP TO Q41 |
| (VOL) Refused................ 4 | SKIP TO Q41 |

Q. 40 Not including cells phones, and numbers used primarily for fax or computer lines, How many different telephone numbers do you have in your household-?
_ 10 OR MORE $=10$ DON'T KNOW=11 REFUSED=12

## Q. 41 FROM OBSERVATION, ENTER SEX OF RESPONDENT

Male .. 1
Female. 2

That completes the survey.
Thank you very much for your time and cooperation.


[^0]:    ${ }^{1}$ Education was defined as the proportion of population in the county over 25 years of age with a professional or graduate degree based on 1990 estimates.

[^1]:    * Significant with Pre at $p<05$.
    $\dagger$ Significant with Experimental group at $p<.05$.
    I Significant with Post 1 at $p<05$.

