

Research Report
KTC-05-18/KSP1-05-11

KENTUCKY TRANSPORTATION CENTER

College of Engineering

**EVALUATION OF KENTUCKY'S "BUCKLE UP KENTUCKY:
IT'S THE LAW & IT'S ENFORCED" 2005 CAMPAIGN**



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**Research Report
KTC-05-18/KSP1-05-1I**

**EVALUATION OF KENTUCKY'S
"BUCKLE UP KENTUCKY: IT'S THE LAW & IT'S ENFORCED"
2005 CAMPAIGN**

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EXECUTIVE SUMMARY

The objective of this report was to document the results of the “Buckle Up Kentucky: It’s the Law & It’s Enforced” 2005 campaign in Kentucky. The campaign involved a combination of earned media, paid media, and enforcement. The earned media started two weeks prior to Memorial Day 2005 and continued through the enforcement period. Two separate paid media campaigns were conducted. One dealt specifically with pickups while the other was a general campaign for all drivers. The pickup campaign started four weeks prior to Memorial Day and lasted two weeks. The general campaign was for the two weeks prior to Memorial Day. The enforcement period was a two-week period including the week before and the week of Memorial Day.

The evaluation of the campaign included documenting the activities associated with the program (publicity and enforcement) and evaluating the results. The evaluation also involved conducting observations of safety belt usage at a sample of locations across the state, conducting telephone surveys before and after the campaign, and comparing the number of fatal and injury crashes during the enforcement period with previous years.

Safety belt usage at a mini-sample set of 21 locations across the state (compared to 200 sites for a full statewide survey) found that usage increased from a baseline level of 66.1 percent to 68.6 percent during the enforcement phase of the campaign.

Enforcement was conducted by both state and local police through saturated enforcement and checkpoints. A total of 6,089 safety belt citations and 422 child restraint citations were given during the two-week enforcement period.

The telephone survey showed that drivers had heard publicity about the campaign (most often on television). A higher percentage of drivers indicated they had increased their safety belt usage in the last 30 days after the campaign. About two-thirds of all drivers felt Kentucky should have a primary enforcement law allowing police to stop drivers for a safety belt violation. There were several differences in the responses of all drivers and pickup drivers.

The numbers of fatal crashes, injury crashes and total crashes during the two-week enforcement period of the campaign were lower than in any of the previous three years. The number of injuries during this period was 269 less than the average of the previous three years with nine less fatalities.

A review of the data results in the opinion that the current law in Kentucky must be changed from secondary to primary enforcement to obtain a long-term high safety belt use percentage. There must also be an awareness by the public that the law is being enforced.

1.0 BACKGROUND

The use of safety belts has been shown to be an effective method to reduce the severity of injuries to occupants of motor vehicles involved in traffic crashes. Methods used to increase usage rates have included public information campaigns, legislation, and enforcement of the legislation. Kentucky enacted statewide legislation requiring the use of safety belts for all vehicle occupants in 1994. Kentucky's law allows secondary enforcement which means a citation can be written only after an officer stops a driver for another violation.

Statewide observational surveys were first conducted in Kentucky in 1982 with a driver usage rate of only 4 percent. The usage rate has increased dramatically over the past years to a level of 66.0 percent for all front seat occupants in 2004. However, this level is only about eight percentage points above the 58 percent rate found in 1994 immediately after enactment of the statewide legislation. The statewide level is also substantially below the national usage rate of 80 percent in 2004.

Selective traffic enforcement programs (STEPS) have been used to modify motorist behavior (especially related to speeding). The use of STEPs to increase safety belt usage rates was first done in Elmira, NY in 1985. Canada was the first country to use this technique. National efforts in the United States, using STEPs, have included Operation Buckle Down in 1991 and 1992, Safe and Sober in 1996 and 1997, and Operation ABC in 1998 through 2000. The first statewide STEP, named Click It or Ticket, was in North Carolina in 1993.

The Click It or Ticket campaign was used in Kentucky in 2001 as part of an effort for states across the southeastern United States. The coordinated effort was made in response to the high fatality rate in the southeast compared to the remainder of the nation. Increasing safety belt usage was seen as an effective means to decrease this high fatality rate. The use of a STEP enforcement effort (named Click It or Ticket) was selected as a method to increase the usage rate. A coordinated effort was made with the eight states in Region IV of the National Highway Traffic Safety Association (NHTSA) with the enforcement occurring in a two-week period around Memorial Day in 2001. Similar campaigns have been conducted in 2003, 2004, and 2005 with the name changed in Kentucky to "Buckle Up Kentucky: It's the Law & It's Enforced."

The objective of this report was to document the results of the 2005 campaign conducted around Memorial Day. An added feature of the 2005 campaign was an emphasis on pickup truck drivers because of their lower usage. A portion of the media component was directed specifically to pickup truck drivers. The campaign involved a combination of earned media, paid media, and enforcement. The earned media started four weeks prior to Memorial Day and continued through the enforcement period. The paid media for the pickup portion of the campaign started four weeks prior to Memorial Day. The enforcement period was a two-week period including the week before and the week of Memorial Day.

2.0 PROCEDURE

The evaluation of the campaign included documenting the activities associated with the program (publicity and enforcement) and evaluating the results. The evaluation involved conducting observations of safety belt usage at a sample of locations across the state, conducting telephone surveys before and after the campaigns, and comparing the number of fatal and injury crashes during the enforcement period with previous years. Following is a description of the procedures used in the evaluation.

2.1 Observations

Statewide surveys have been conducted in Kentucky since 1982. The last modification in the procedure was made in 1999. The statewide survey involves collecting two hours of data at 200 sites across the state. Seat belt data are collected for the driver and front-seat passenger in the outboard position. Four categories of vehicles are used (passenger car, pickup, van, and sport utility vehicle). The sampling design plan divides the state into three geographical regions and seven roadway functional classification groups resulting in 21 stratum. The statewide rate is determined using the usage rate and total vehicle miles for each stratum.

Data had to be collected to provide a baseline statewide usage rate to compare with data collected during the enforcement portion of the campaign. Two sets of data could not be reasonably collected at all 200 sites during the available time frame. Therefore, a site was selected from each of the 21 stratum to represent the usage rate for the stratum. A list of these sites is given in Appendix A. Using data from these 21 sites has been shown to result in very similar statewide usage rates as obtained from the 200 sites. This shows that the sample of sites can effectively represent the statewide sample sites.

Two sets of the mini-surveys were collected in 2005. One set was collected before the campaign and one set during the enforcement phase of the campaign. The baseline data were collected in April before the start of the earned media. The data during the enforcement period were collected between May 23 and June 5.

2.2 Publicity

The types of media publicity could be classified into two broad categories. One was earned media which was provided at no charge. The second type was the paid media which was purchased. The paid media involved radio, network television, cable television, and outdoor billboards. The type and amount of publicity were summarized.

Two separate campaigns were conducted. One was directed specifically to seat belt usage in pickups. The second campaign was a general campaign directed to the drivers of all vehicle types.

2.3 Enforcement

Enforcement was achieved through both the Kentucky State Police (KSP) and local agencies. Enforcement involved both saturated patrols and checkpoints. In addition to seat belt citations, other citations and arrests were made. The numbers of various types of citations given over the enforcement period were summarized.

2.4 Telephone Survey

Two sets of telephone surveys were conducted by the University of Kentucky Survey Research Center. The first set was conducted from April 12 to May 4 before the start of the campaign. The second set was from June 6 to June 27 after completion of the enforcement.

A minimum of 350 interviews were obtained for the pre- and post-media and enforcement campaign surveys. In addition, an over-sample of a minimum of 350 interviews were obtained in each wave with drivers whose primary vehicle is a pickup truck.

The questions on the survey obtained information about driver's: type and amount of driving, use of safety belts and any change in usage, knowledge about Kentucky's safety belt law and its enforcement, opinion about the effectiveness of safety belts, knowledge of increased enforcement or checkpoints, awareness of any related advertisements or activities, and general characteristics.

Respondents were contacted using a modified, list-assisted Waksberg Random-Digit Dialing method giving every household with a telephone in Kentucky an equal probability of being contacted. Up to 15 attempts were made to each number in the sample. In addition, up to 10 scheduled call-backs were made to those reached at an inconvenient time, and one refusal conversion was attempted. The Survey Research Center also provided a statistical analysis of the results of the telephone surveys.

2.5 Fatal/Injury Crashes

The statewide crash data file was searched to determine the numbers of fatal and injury crashes which occurred during the enforcement dates of the "Buckle Up Kentucky: It's the Law & It's Enforced" campaign. This data were then compared to crashes which occurred during the enforcement dates for previous years. The numbers of fatalities and injuries were also obtained during each of these time periods.

3.0 RESULTS

3.1 Observations

Two sets of mini-surveys were conducted at the 21 sample locations as part of the campaign and compared to data from the 2004 statewide survey. The data for the individual sites are given in Appendix A.

Baseline data were collected before the start of the earned media to compare with data collected during the enforcement phase of the campaign. In previous years, data were also collected during the earned media and paid media phases of the campaign. The data consistently showed there was almost no change in usage, compared with the baseline rate, during these phases. Therefore, the decision was made that it was not necessary to collect data during the media phases. The following usage rates were obtained during the listed dates.

Baseline	April 2005	66.1 percent
Enforcement	May 23 - June 5, 2005	68.6 percent

The baseline data closely agree with the 2004 statewide survey which had found a statewide usage rate of 66.0 percent. The results from the baseline data showed that the sites selected for the mini-surveys were representative of all the statewide sites.

An emphasis of the 2005 campaign was the lower usage rate which has been found for pickup truck drivers. Data are classified into four vehicle categories with pickup trucks one of the categories. The usage rate for pickup trucks increased from 52.2 percent for the baseline to 56.0 during the enforcement phase of the campaign. There was a larger increase for pickup trucks compared to all vehicles.

This was the third year for the “Buckle Up Kentucky: It’s the Law and It’s Enforced” campaign. Following is a summary of the baseline and enforcement phase usage rates for 2003, 2004, and 2005.

	<u>All Vehicles</u>	<u>Pickup Trucks</u>
2003 Baseline	61.6 percent	45.7 percent
2003 Enforcement	72.5 percent	60.4 percent
2004 Baseline	64.5 percent	49.0 percent
2004 Enforcement	70.5 percent	56.0 percent
2005 Baseline	66.1 percent	52.2 percent
2005 Enforcement	68.6 percent	56.0 percent

The increase during enforcement compared to the baseline has decreased over these three years. The overall increase was 10.9 percent in 2003, 6.0 percent in 2004, and 2.5 percent in 2005. This increase during the 2001 Click It or Ticket campaign was 10.6 percent.

3.2 Publicity

The publicity consisted of a combination of earned and paid media. The baseline data collection was completed before the earned media started. The earned media continued through the enforcement period which ended on June 5. The paid media for the pickup truck campaign was from May 2 through May 15, 2005. The paid media for the general campaign directed to all drivers started on May 16 and ended on May 29.

The Tombras Group of Nashville, TN was contracted by NHTSA to produce the “Buckle Up in Your Truck” advertisements for the eight states in the southeast region of the United States. The advertisements consisted of a 30-second television spot, a 30-second radio spot, and a billboard design. New West LLC from Louisville (who is Kentucky’s media contractor) then tagged the spots with Kentucky logos and purchased media time.

For the general “Buckle Up Kentucky: It’s the Law and It’s Enforced” campaign, the same 30-second television spots from 2004 was used. These spots were originally produced by Paul Schultz Advertising of Louisville. New West made minor edits to update the tapes with required tags. New 30-second and 60-second radio spots were recorded by New West for this campaign. New West also handled all media placement.

The cost for the production, placement, and public relation fees for both campaigns was about \$38,000. A summary of the number and cost of the network television, cable television, and radio spots is given in Table 1. Advertisements were aired in nine markets with three in a city in an adjacent state.

The cost of the billboards was \$147,131 for both campaigns. A total of 67 billboards (12 feet by 25 feet) were installed. There were 22 billboards with the “Buckle Up in Your Truck” message and 45 with the “Buckle Up or Pay Up” message. These billboards were placed in 27 counties scattered across the state. The outdoor companies also gave 19 additional boards on a “space available” basis. Nine large format boards (ranging in size from 14 feet by 48 feet to 20 feet by 80 feet) were used with the “Buckle Up or Pay Up” message along interstates and parkways in eight counties.

An audio news release was recorded describing the campaigns for use as earned media and sent to radio stations across the state. It was estimated that it was aired approximately 475 times on 158 radio stations with a spot equivalency valued at \$7,110. Representatives from Kentucky State Police made appearances on three morning news shows to promote the campaign and were involved in

four press conferences to publicize joint enforcement efforts between Kentucky, Tennessee, and West Virginia.

3.3 Enforcement

The enforcement period was the two weeks from May 23 through June 5, 2005. There are approximately 376 police agencies in Kentucky that participate in traffic enforcement. Contact was made with each agency with an agreement of participation obtained from 218 of these agencies. The extent of participation varied by local agency with reports of activity obtained from 188 of the agencies. A summary of the results of the enforcement is given in Table 2.

The enforcement involved both saturated enforcement and checkpoints and involved both KSP and local police. The total number of hours worked by all the officers was about 153,000 with only about 1.8 percent of those hours related to checkpoints. There were 714 checkpoints with 75 percent conducted by KSP.

There were a total of 6,089 seat belt citations given along with 422 child restraint citations during the two-week enforcement period. About 46 percent of the seat belt citations and 55 percent of the child restraint citations were issued by the KSP. The large majority of the seat belt citations from both KSP and local police were the result of saturated enforcement.

There were other citations and arrests which occurred as a result of this enforcement. The largest number of other citations were speeding with 21,645 of those citations. There were 1,422 DUI arrests and 1,289 drug related arrests.

3.4 Telephone Survey

The University of Kentucky Survey Research Center conducted these surveys. Calls for the pre-campaign survey were made from April 12 through May 4, 2005. Calls for the post-campaign survey were made from June 6 through June 27, 2005. The disposition results of the survey were as follows:

Pre-campaign survey:

Interviews completed	738
Any Vehicle	(381)
Pickup Truck	(357)
Refused	1,048
Not Eligible (Any Vehicle)	317
No Eligible Pickup Driver	1,980
Total	4,083
Response rate (eligible driver)	41.3 percent

Post-campaign survey

Interviews completed	731
Any Vehicle	(369)
Pickup Truck	(362)
Refused	964
Not Eligible (Any Vehicle)	357
No Eligible Pickup Driver	2,123
Total	4,175
Response rate (eligible driver)	43.1 percent

The margin of error for samples of this size is approximately plus or minus 4.3 percent at the 95 percent confidence level. The results of the surveys are given in Appendix B. The Survey Research Center provided a detailed summary of the responses to each question. They also provided results of a t-test for Independent Samples analysis which was used to determine if changes in the responses for the pre- and post-surveys were statistically significant. Questions that had a p-value of less than or equal to 0.05 were considered as showing a “statistically significant” change. Comparisons were also made between the responses for all drivers with that for drivers of pickup trucks.

Summaries of some of the results of the telephone surveys are given in Table 3 for all drivers and Table 4 for drivers of pickup trucks. A notation is given if the difference between the before and after data is statistically significant.

The surveys showed that the publicity was effective in informing drivers of the campaign. Specifically, there was a statistically significant increase in both sets of drivers who stated they had seen or heard about activities related to seat belt usage and pickup trucks in the last 30 days with the number of these activities and messages increasing. Other statistically significant changes for both sets of drivers were a knowledge of an increase in special efforts for seatbelt ticketing and a decrease in the opinion that police do not write tickets for seat belt usage.

The slogans for which drivers showed a large increase in knowledge were “Buckle up Kentucky: It’s the Law and It’s Enforced,” “Click it or Ticket,” and “Buckle up in Your Truck.” Drivers indicated that they had seen or heard the publicity most often on television followed by radio and newspapers. For those who saw or heard about the campaign on television or the radio, the most common form was a commercial advertisement.

The percentage of drivers who stated they wore their safety belt either all or most of the time was substantially higher than what has been found in observational surveys. There was an increase in

this percentage after the campaign but the increase was not statistically significant. The percentage of drivers who indicated they had increased safety belt usage increased after the campaign with increased awareness given as the most common reason for this increase.

Almost all drivers (about 99 percent) were aware that Kentucky has a law requiring seat belt use. About one-half of the drivers thought police could stop a driver for just a safety belt violation. The knowledge that police must observe another violation first actually increased slightly after the campaign. About two-thirds of all drivers felt Kentucky should have a primary enforcement law allowing police to stop drivers for a safety belt violation. This percentage was lower for pickup drivers (about 55 percent). Only about five percent of all drivers and nine percent of pickup drivers reported receiving a ticket for not wearing a safety belt. The majority of drivers felt police enforcement of belt laws was important with this percentage lower for pickup drivers.

Over 80 percent of the drivers strongly agreed with the statement that they would want to be wearing a safety belt if they were involved in a crash. Also, almost two-thirds of the drivers disagreed with a statement that safety belts are just as likely to harm as they are to help. About 95 percent of the drivers felt it would be best to be wearing a safety belt if their vehicle rolled during a crash.

There were several differences in the responses of all drivers and pickup drivers. Following is a list of those with statistically significant differences.

- a higher percentage of males drive pickup trucks
- the frequency of driving is higher for pickup drivers
- the frequency of wearing a safety belt was lower for pickup drivers
- a higher increase in safety belt usage during the past 30 days for pickup drivers
- a smaller percentage of pickup drivers felt there should be a primary law
- a higher percentage of pickup drivers had received a ticket for not wearing a safety belt
- a smaller percentage of pickup drivers felt enforcement of belt laws was important

These differences in responses are consistent with the results from observational surveys which have found that drivers of pickup trucks have the lowest usage rate of any vehicle type.

3.5 Fatal/Injury Crashes

The numbers of fatal crashes, fatalities, injury crashes, and injuries occurring in Kentucky during the enforcement period of the “Buckle up Kentucky: It’s the Law & It’s Enforced” campaign (May 23 through June 5, 2005) were compared to those occurring during the 14-day enforcement period for the previous three years around the Memorial Day holiday. The numbers of injuries, injury crashes, fatalities, fatal crashes, and total crashes in 2005 were lower than the average of the previous three years.

There were 28 fatal crashes with 28 fatalities during the two-week enforcement period in 2005. This compares to an average of about 32 fatal crashes with 37 fatalities over the 14 days of enforcement in 2002 through 2004.

There were 1,123 injury crashes resulting in 1,632 injuries in 2005. This compares to an average of about 1,264 injury crashes and 1,901 injuries in 2002 through 2004.

There were 5,690 total crashes during the 14 days of enforcement in 2005. This compares to an average of about 5,744 in the previous three years.

4.0 CONCLUSIONS

The observational surveys showed that safety belt usage can be increased using a combination of publicity and enforcement. However, the extent of any increase, given the current secondary enforcement law, is limited. The increase during enforcement compared to baseline has decreased over the past few years.

The data show that an increased possibility of receiving a ticket for failing to wear a safety belt is required for a certain segment of the driving population to increase their use of safety belts. The only method which can be expected to significantly increase safety belt usage in Kentucky would be changing the current law from secondary to primary enforcement. This must be combined with the necessary publicity to provide an awareness to the public that the law is being enforced. The opinion survey shows that the majority of drivers are in favor of primary enforcement.

Table 1. SUMMARY OF MEDIA DATA

Market	Network TV		Cable TV		Radio	
	Cost (\$)	Spots (No.)	Cost (\$)	Spots (No.)	Cost (\$)	Spots (No.)
Buckle Up in Your Truck (May 2-15, 2005)						
Hazard	9,724	191	3,255	1,159	5,133	2,646
Charleston, WV			16,010	3,264	12,764	
Bowling Green	17,459	180	40,851	882	8,498	313
Lexington	28,828	260	40,851	3,339	12,386	335
Paducah	14,705	87	13,005	2,448	8,228	
Northern Kentucky			8,806	700		
Louisville	40,409	276	11,216	1,350	14,535	689
Evansville, IND	21,195	257	16,243	2,403	9,962	
Nashville, TN			9,690	1,159	1,292	
Total	132,320	1,251	159,927	16,704	72,798	3,983
Buckle Up Kentucky: It's the Law and It's Enforced (May 16-29, 2005)						
Hazard	9,724	191	3,255	999	5,132	2,646
Charleston, WV			16,010	3,264	12,764	
Bowling Green	17,357	178	5,283	882	8,498	337
Lexington	31,526	280	40,851	3,339	12,661	335
Paducah	14,747	87	13,005	2,448	8,228	
Northern Kentucky			8,806	700		
Louisville	43,248	296	11,216	1,350	14,535	610
Evansville, IND	22,147	277	16,243	2,403	9,962	
Nashville, TN			9,690	1,159	1,292	
Total	138,750	1,309	124,359	16,544	73,074	3,928
Combined Total	271,069	2,560	284,287	33,248	145,872	7,911

Table 2. SUMMARY OF ENFORCEMENT DATA

	KSP	LOCAL POLICE	TOTAL
Total Officer Hours	50,586	102,887	153,473
Overtime Hours	4,256	9,064	13,320
Total Checkpoint Hours	1,424	1,399	2,823
Number of Checkpoints	537	177	714
Seatbelt Citations	2,784	3,305	6,089
Child Restraint Citations	231	191	422
Speeding Citations	8,135	13,510	21,645
Reckless Driving	120	374	494
Operating on Suspended License	442	963	1,405
No Insurance	1,602	3,524	5,126
Other Traffic Violations	6,975	9,410	16,385
DUI Arrests	537	885	1,422
Drug Arrests	289	1,000	1,289
Other Felony Arrests	203	607	810
Fugitive Apprehensions	142	893	1,035
Stolen Vehicles Recovered	9	80	89

TABLE 3. SUMMARY OF TELEPHONE SURVEY RESULTS (ALL DRIVERS)

Question	Choices	Percent	
		Before	After
Frequency of driving	Almost everyday	79.8	80.2
Frequency wearing shoulder belt	All of the time	77.3	81.8
Change of seat belt usage in the last 30 days	Increased	5.5	8.0
Likelihood for receiving ticket while not wearing seat belt for six months	Somewhat likely	46.7	52.1
Seat belt offense level	Police can stop for just for seatbelt violation	50.6	47.0
Should police be able to ticket for not wearing seat belt when no other traffic laws are being broken (primary law)?	Yes	64.7	66.4
Have you received a ticket for not wearing a seat belt? Yes		5.0	5.7
Police generally do not write tickets for seat belt violations	Strongly agree	23.8	21.0
Police enforcement of belt laws are important	Strongly agree	63.4	70.0
Police are ticketing more often than a few months ago	Strongly agree	25.6	32.9
Aware of special efforts regarding seatbelt ticketing in the last 30 days	Yes	13.5	42.1
If yes, where did you see or hear of this?	TV	40.7	48.5
Have you seen or heard about any activities related to seat belt usage in the last 30 days?	Yes	75.5	84.9
How has the number of these activities changed in the past 30 days?	More than usual	11.7	43.6
In the past 30 days have you heard messages concerning use in pickup trucks?	Yes	14.2	29.9
How has the number of these message concerning pickup trucks changed in the past 30 days?	More than usual	15.1	63.0
Have you heard or seen these slogans in the past 30 days?*	Friends don't let friends drive drunk	84.0	84.1
	Click it or ticket	52.3	71.5
	Buckle up for Those You Love	51.5	57.5
	Buckle up in Your Truck	8.5	24.1
	You drink, you drive, you lose	71.5	73.2

*Multiple responses were accepted for these questions.

TABLE 4. SUMMARY OF TELEPHONE SURVEY RESULTS (PICKUP TRUCK DRIVERS)

Question	Choices	Percent	
		Before	After
Frequency of driving	Almost everyday	87.1	87.6
Frequency wearing shoulder belt	All of the time	65.7	69.8
Change of seat belt usage in the last 30 days	Increased	9.0	11.4
Likelihood for receiving ticket while not wearing seat belt for six months	Somewhat likely	40.7	48.7
Seat belt offense level	Police can stop for just for seatbelt violation	49.4	43.9
Should police be able to ticket for not wearing seat belt when no other traffic laws are being broken (primary law)?	Yes	55.2	55.1
Have you received a ticket for not wearing a seat belt? Yes		9.3	9.1
Police generally do not write tickets for seat belt violations	Strongly agree	23.8	18.2
Police enforcement of belt laws are important	Strongly agree	57.7	57.0
Police are ticketing more often than a few months ago	Strongly agree	30.7	30.2
Aware of special efforts regarding seatbelt ticketing in the last 30 days	Yes	18.6	44.1
If yes, where did you see or hear of this?	TV	52.3	58.3
Have you seen or heard about any activities related to seat belt usage in the last 30 days?	Yes	71.6	87.5
How has the number of these activities changed in the past 30 days?	More than usual	16.1	70.7
In the past 30 days have you heard messages concerning use in pickup trucks?	Yes	17.5	34.5
How has the number of these message concerning pickup trucks changed in the past 30 days?	More than usual	33.3	70.7
Have you heard or seen these slogans in the past 30 days?*	Friends don't let friends drive drunk	79.3	81.0
	Click it or ticket	65.1	83.2
	Buckle up for Those You Love	55.1	54.3
	Buckle up in Your Truck	15.1	30.5
	You drink, you drive, you lose	75.9	81.0
	Buckle up Kentucky. It's the Law and it's Enforced	58.8	83.2

*Multiple responses were accepted for these questions.

APPENDIX A. SAFETY BELT OBSERVATIONS

Table A-1. SUMMARY OF SEAT BELT OBSERVATIONS AT INDIVIDUAL SITES

LOCATION		PERCENT USAGE (ALL FRONT SEAT)			
COUNTY	INTERSECTION	BASELINE ALL	ENFORCEMENT ALL	BASELINE PICKUPS	ENFORCEMENT PICKUPS
Barren	I-65 at Exit 53	81	80	67	70
Meade	US 31W at KY 1638	71	69	60	59
Grayson	KY 259 at US 62	52	56	42	43
Logan	US 68 at US 79	62	66	46	51
Hopkins	Pennyrile Parkway at Exit 44	71	73	62	63
Henderson	US 41A at 5th St.	63	64	50	51
Calloway	KY 1637 at 16th	59	66	40	48
Shelby	I-64 at Exit 28	71	74	55	55
Woodford	US 60 at US 62	73	75	62	59
Oldham	KY 146 at KY 1817	70	73	53	56
Franklin	KY 2820 at US 127	55	60	33	52
Kenton	I-75 at Exit 186	76	79	62	68
Jefferson	US 31W at KY 841	65	66	52	58
Boone	US 42 at US 25	65	67	46	51
Boyd	I-64 at Exit 185	77	77	64	66
Lincoln	US 27 at US 150	59	60	45	49
Carter	US 60 at KY 7	54	60	46	50
Floyd	KY 680 at KY 122	48	52	36	41
Rowan	I-64 at Exit 137	76	82	62	76
Laurel	US 25E at US 25	59	65	47	49
Pulaski	KY 80 at KY 2296	58	65	48	47
		66.1	68.6	52.2	56.0

APPENDIX B. RESULTS OF TELEPHONE SURVEYS

TABLE B-1. RESULTS OF TELEPHONE SURVEY (ALL DRIVERS)

Question	Choices	Percent		t-test Statistic*
		Before	After	
Gender	Male	48.8	40.4	p < 0.05
	Female	51.2	59.6	
Frequency of driving	Almost everyday	79.8	80.2	
	Few days a week	10.8	11.9	
	Few days a month	2.6	1.6	
	Few days a year	0.5	0.8	
	Never	6.3	5.4	
Type of vehicle driven most often	Car	56.9	51.3	
	Van or minivan	7.6	11.2	
	Motorcycle	0.0	0.6	
	Pickup truck	20.2	21.2	
	Sport Utility Vehicle	13.7	14.6	
	Other non-truck	0.3	0.6	
	Other truck	1.4	0.6	
Seat belt configuration	Across shoulder	8.4	6.6	
	Across lap	0.6	0.3	
	Across both	90.5	93.1	
	No belts	0.6	0.0	
Frequency wearing shoulder belt	All of the time	77.3	81.8	
	Most of the time	12.7	10.1	
	Some of the time	4.8	4.6	
	Rarely	1.4	2.6	
	Never	3.7	0.9	
Frequency wearing lap belt	All of the time	76.9	81.8	
	Most of the time	12.6	9.3	
	Some of the time	5.5	5.2	
	Rarely	1.2	2.8	
	Never	3.7	0.9	
Frequency wearing shoulder belt - riding in car	All of the time	74.3	78.2	
	Most of the time	15.4	9.6	
	Some of the time	4.6	6.9	
	Rarely	1.1	2.7	
	Never	4.6	2.7	
	Don't drive or ride in car	1.7	1.1	
Frequency wearing shoulder belt - riding in pickup	All of the time	76.3	72.4	
	Most of the time	11.0	9.8	
	Some of the time	5.7	7.6	
	Rarely	2.0	5.3	
	Never	4.9	4.9	
	Don't drive or ride in pickup	20.2	23.7	
Frequency wearing shoulder belt - riding in SUV	All of the time	73.7	79.5	
	Most of the time	9.5	9.6	
	Some of the time	7.4	3.9	
	Rarely	3.7	3.9	
	Never	5.8	3.1	
	Don't drive or ride in SUV	26.8	28.0	

TABLE B-1. RESULTS OF TELEPHONE SURVEY (ALL DRIVERS) (continued)

Question	Choices	Percent		t-test Statistic*
		Before	After	
Frequency wearing shoulder belt - riding in van	All of the time	74.5	76.7	
	Most of the time	12.7	10.3	
	Some of the time	5.1	4.7	
	Rarely	1.5	4.7	
	Never	6.2	3.6	
	Don't drive or ride in van	22.1	23.3	
Last time not wearing seat belt	Within the past day	19.5	15.7	
	Within the past week	8.9	8.1	
	Within the past month	3.8	5.6	
	Within the past year	3.5	3.9	
	A year or more ago	64.2	66.7	
Change of seat belt usage in the last 30 days	Increased	5.5	8.0	
	Decreased	1.3	0.8	
	Stayed the same	93.1	91.2	
Of those who said "increase", what caused your seat belt usage to increase?***	Increased awareness	19.0	32.1	
	Influence/pressure	14.3	7.1	
	Seatbelt law	14.3	7.1	
	Was in a crash	0.0	10.7	
	Don't want to get another ticket	9.5	14.3	
	Increased enforcement	14.3	10.7	
	New car requires	9.5	3.6	
	Began driving long distances	4.8	0.0	
	Set good example	0.0	3.6	
Does Kentucky have a law requiring seat belt use for adults?	Yes	98.6	99.7	
	No	1.4	0.3	
Likelihood for receiving ticket while not wearing seat belt for six months	Somewhat likely	46.7	52.1	
	Somewhat unlikely	23.2	18.6	
	Very unlikely	30.1	29.3	
Seat belt offense level	Police can stop for just for seatbelt violation	50.6	47.0	
	Police must observe another violation	49.4	53.0	
Should police be able to ticket for not wearing seat belt when no other traffic laws are being broken (primary law)?	Yes	64.7	66.4	
	No	35.3	33.6	
Have you received a ticket for not wearing a seat belt?	Yes	5.0	5.7	
	No	95.0	94.3	
Likelihood for driver who has been drinking to be stopped by police compared to a month ago	More likely	70.4	62.9	p < 0.05
	Less likely	4.7	3.4	
	About the same	24.9	33.7	
Are seat belts just as likely to harm as they are to help?	Strongly agree	13.0	14.6	
	Somewhat agree	24.2	19.9	
	Somewhat disagree	18.6	20.4	
	Strongly disagree	44.1	45.1	

TABLE B-1. RESULTS OF TELEPHONE SURVEY (ALL DRIVERS) (continued)

Question	Choices	Percent		t-test Statistic*
		Before	After	
If in a crash, do you want to wear seat belt?	Strongly agree	85.0	86.8	
	Somewhat agree	9.2	8.8	
	Somewhat disagree	2.6	2.7	
	Strongly disagree	3.2	1.6	
Police generally do not write tickets for seat belt violations	Strongly agree	23.8	21.0	p < 0.05
	Somewhat agree	30.7	24.9	
	Somewhat disagree	21.8	23.0	
	Strongly disagree	23.8	31.1	
Police enforcement of belt laws are important	Strongly agree	63.4	70.0	
	Somewhat agree	24.9	18.7	
	Somewhat disagree	6.1	5.2	
	Strongly disagree	5.6	6.1	
Wearing belt makes me worry about getting into an accident	Strongly agree	8.8	7.5	
	Somewhat agree	8.0	6.4	
	Somewhat disagree	20.6	22.9	
	Strongly disagree	62.5	63.3	
Police are ticketing more often than a few months ago	Strongly agree	25.6	32.9	p < 0.05
	Somewhat agree	33.3	40.3	
	Somewhat disagree	24.4	15.1	
	Strongly disagree	16.7	11.6	
Aware of special efforts regarding seatbelt ticketing in the last 30 days	Yes	13.5	42.1	p < 0.05
	No	84.3	57.9	
If yes, where did you see or hear of this?*	TV	44.0	48.5	p < 0.05
	Radio	12.0	26.8	
	Friend-Relative	16.0	3.5	
	Newspaper	18.0	12.1	
	Witnessed checkpoint	8.0	5.1	
	Road signs	10.0	4.0	
If you said TV or radio, in what form did you see or hear of this?	News story	41.7	32.5	
	Commercial advertisement	58.3	77.2	
	Something else	8.3	2.6	
Have you seen or heard about any activities related to seat belt usage in the last 30 days?	Yes	75.5	84.9	p < 0.05
	No	24.5	15.1	
How has the number of these activities changed in the past 30 days?	More than usual	11.7	43.6	p < 0.05
	Fewer than usual	3.9	1.3	
	About the same	84.4	55.0	
In the past 30 days have you heard messages concerning use in pickup trucks?	Yes	14.2	29.9	p < 0.05
	No	85.8	70.1	

TABLE B-1. RESULTS OF TELEPHONE SURVEY (ALL DRIVERS) (continued)

Question	Choices	Percent		t-test Statistic*
		Before	After	
How has the number of these message concerning pickup trucks changed in the past 30 days?	More than usual	15.1	63.0	p < 0.05
	Fewer than usual	3.8	2.8	
	About the same	81.1	34.3	
What would be best if you were in a crash and your vehicle rolled over?	You are wearing a belt	96.2	95.7	
	You are not wearing a belt	2.4	3.4	
	You are not wearing a belt and are ejected	1.3	0.9	
Importance of seat belt enforcement	Very important	63.5	69.5	
	Fairly important	18.1	12.6	
	Just somewhat important	10.7	11.0	
	Not that important	7.7	6.9	
Have you heard or seen these slogans in the past 30 days?*	Friends don't let friends drive drunk	84.0	84.1	
	Click it or ticket	52.3	71.5	
	Buckle up for Those You Love	51.5	57.5	
	Buckle up in Your Truck	8.5	24.1	
	You drink, you drive, you lose	71.5	73.2	
	Buckle up Kentucky. It's the Law and it's Enforced	69.6	79.5	
Age	16-19	4.9	2.3	
	20-29	10.2	7.8	
	30-39	13.0	19.5	
	40-49	17.1	21.3	
	50-59	23.2	20.7	
	60-69	18.7	15.2	
	70-79	11.3	8.7	
	80 or older	3.8	4.8	
Number of persons 16 years or older in household	1	29.9	28.9	
	2	51.6	50.1	
	3	13.9	14.6	
	4 or more	4.6	6.4	
Consider yourself Hispanic Latino	Yes	1.4	2.2	
	No	98.6	97.8	
Racial categories that describe you	American Indian or Alaskan Native	4.1	4.0	
	Black or African American	5.4	4.8	
	White	89.2	88.4	
	Some other race	1.3	2.8	

TABLE B-1. RESULTS OF TELEPHONE SURVEY (ALL DRIVERS) (continued)

Question	Choices	Percent		t-test Statistic*
		Before	After	
Highest year of school completed	8th grade or lower	5.9	5.0	
	9th grade	3.5	2.8	
	10th grade	4.8	3.0	
	11th grade	4.0	2.8	
	12th grade-GED	32.9	34.8	
	Some college-post secondary education	25.1	25.7	
	College graduate or higher	23.8	26.0	

*A t-test was conducted comparing the means of the before and after samples. Questions that had a p-value of less than or equal to 0.05 were considered as showing a "statistically significant" change. The test applied to all responses, even those not listed.

**Multiple responses were accepted for these questions.

TABLE B-2. RESULTS OF TELEPHONE SURVEY (PICKUP TRUCK DRIVERS)

Question	Choices	Percent		t-test Statistic*
		Before	After	
Gender	Male	83.5	79.0	
	Female	16.5	21.0	
Frequency of driving	Almost everyday	87.1	87.6	
	Few days a week	12.3	11.3	
	Few days a month	0.6	1.1	
	Few days a year	0.0	0.0	
	Never	0.0	0.0	
Type of vehicle driven most often	Car	0.0	0.0	
	Van or minivan	0.0	0.0	
	Motorcycle	0.0	0.0	
	Pickup truck	100.0	100.0	
	Sport Utility Vehicle	0.0	0.0	
	Other non-truck	0.0	0.0	
	Other truck	0.0	0.0	
Seat belt configuration	Across shoulder	4.8	7.2	
	Across lap	2.8	2.2	
	Across both	92.4	90.6	
	No belts	0.0	0.0	
Frequency wearing shoulder belt	All of the time	65.7	69.8	
	Most of the time	17.3	17.5	
	Some of the time	8.1	5.1	
	Rarely	4.9	3.7	
	Never	4.0	4.0	
Frequency wearing lap belt	All of the time	63.8	71.4	p > 0.05
	Most of the time	17.6	17.3	
	Some of the time	7.1	4.5	
	Rarely	5.9	3.6	
	Never	5.6	3.3	
Frequency wearing shoulder belt - riding in car	All of the time	61.2	72.4	
	Most of the time	20.4	14.9	
	Some of the time	8.3	5.5	
	Rarely	5.2	3.4	
	Never	4.9	3.7	
	Don't drive or ride in car	2.2	3.6	
Frequency wearing shoulder belt - riding in SUV	All of the time	62.8	73.9	
	Most of the time	19.0	13.1	
	Some of the time	6.9	5.2	
	Rarely	4.4	4.5	
	Never	6.9	3.4	
	Don't drive or ride in SUV	23.2	26.0	
Frequency wearing shoulder belt - riding in van	All of the time	67.0	74.0	
	Most of the time	15.7	13.4	
	Some of the time	5.7	3.5	
	Rarely	5.4	5.1	
	Never	6.1	3.9	
	Don't drive or ride in van	26.9	29.6	

TABLE B-2. RESULTS OF TELEPHONE SURVEY (PICKUP TRUCK DRIVERS) (continued)

Question	Choices	Percent		t-test Statistic*
		Before	After	
Last time not wearing seat belt	Within the past day	26.6	21.9	p > 0.05
	Within the past week	14.8	9.6	
	Within the past month	5.7	5.9	
	Within the past year	3.3	3.1	
	A year or more ago	49.5	59.6	
Change of seat belt usage in the last 30 days	Increased	9.0	11.4	
	Decreased	0.3	0.3	
	Stayed the same	90.7	88.4	
Of those who said "increase", what caused your seat belt usage to increase?*	Increased awareness	41.4	42.5	
	Influence/pressure	10.3	22.5	
	Seatbelt law	10.3	27.5	
	Was in a crash	3.4	0.0	
	Don't want to get another ticket	3.4	10.0	
	Increased enforcement	6.9	7.5	
	New car requires	3.4	5.0	
	Required for work	6.9	2.5	
Does Kentucky have a law requiring seat belt use for adults?	Yes	99.2	98.9	
	No	0.8	1.1	
Likelihood for receiving ticket while not wearing seat belt for six months	Somewhat likely	40.7	48.7	p > 0.05
	Somewhat unlikely	20.7	20.9	
	Very unlikely	38.6	30.4	
Seat belt offense level	Police can stop for just for seatbelt violation	49.4	43.9	
	Police must observe another violation	50.6	56.1	
Should police be able to ticket for not wearing seat belt when no other traffic laws are being broken (primary law)?	Yes	55.2	55.1	
	No	44.8	44.9	
Have you received a ticket for not wearing a seat belt?	Yes	9.3	9.1	
	No	90.7	90.9	
Likelihood for driver who has been drinking to be stopped by police compared to a month ago	More likely	64.9	65.9	
	Less likely	4.9	5.2	
	About the same	30.1	28.9	
Are seat belts just as likely to harm as they are to help?	Strongly agree	17.9	15.3	
	Somewhat agree	20.7	23.3	
	Somewhat disagree	21.9	19.0	
	Strongly disagree	39.5	42.4	
If in a crash, do you want to wear seat belt?	Strongly agree	82.9	82.6	
	Somewhat agree	9.7	11.7	
	Somewhat disagree	3.7	2.9	
	Strongly disagree	3.7	2.9	

TABLE B-2. RESULTS OF TELEPHONE SURVEY (PICKUP TRUCK DRIVERS) (continued)

Question	Choices	Percent		t-test Statistic*
		Before	After	
Police generally do not write tickets for seat belt violations	Strongly agree	23.8	18.2	p < 0.05
	Somewhat agree	33.8	27.5	
	Somewhat disagree	15.6	26.8	
	Strongly disagree	26.8	27.5	
Police enforcement of belt laws are important	Strongly agree	57.7	57.0	
	Somewhat agree	25.6	26.8	
	Somewhat disagree	7.6	6.1	
	Strongly disagree	9.0	10.1	
Wearing belt makes me worry about getting into an accident	Strongly agree	9.9	7.9	
	Somewhat agree	8.5	12.5	
	Somewhat disagree	27.4	20.7	
	Strongly disagree	54.2	58.9	
Police are ticketing more often than a few months ago	Strongly agree	30.7	30.2	
	Somewhat agree	33.3	42.4	
	Somewhat disagree	23.4	16.1	
	Strongly disagree	12.6	11.4	
Aware of special efforts regarding seatbelt ticketing in the last 30 days	Yes	18.6	44.1	p < 0.05
	No	81.4	55.9	
If yes, where did you see or hear of this?*	TV	52.3	58.3	
	Radio	29.2	39.1	
	Friend-Relative	7.7	5.1	
	Newspaper	18.5	16.0	
	Witnessed checkpoint	1.5	7.1	
	Road signs	9.2	12.2	
If you said TV or radio, in what form did you see or hear of this?*	News story	56.5	30.0	p < 0.05
	Commercial advertisement	43.5	75.0	
	Something else	6.5	3.3	
Have you seen or heard about any activities related to seat belt usage in the last 30 days?	Yes	71.6	87.5	p < 0.05
	No	28.4	12.5	
How has the number of these activities changed in the past 30 days?	More than usual	16.1	70.7	p < 0.05
	Fewer than usual	2.4	1.6	
	About the same	81.5	27.6	
In the past 30 days have you heard messages concerning use in pickup trucks?	Yes	17.5	34.5	p < 0.05
	No	82.5	65.5	
How has the number of these message concerning pickup trucks changed in the past 30 days?	More than usual	33.3	70.7	p < 0.05
	Fewer than usual	3.3	1.6	
	About the same	63.3	27.6	

TABLE B-2. RESULTS OF TELEPHONE SURVEY (PICKUP TRUCK DRIVERS) (continued)

Question	Choices	Percent		t-test Statistic*
		Before	After	
What would be best if you were in a crash and your vehicle rolled over?	You are wearing a belt	93.9	95.1	
	You are not wearing a belt	4.6	3.4	
	You are not wearing a belt and are ejected	1.4	1.4	
Importance of seat belt enforcement	Very important	57.8	55.2	
	Fairly important	15.9	18.3	
	Just somewhat important	13.6	14.9	
	Not that important	12.7	11.5	
Have you heard or seen these slogans in the past 30 days?***	Friends don't let friends drive drunk	79.3	81.0	
	Click it or ticket	65.1	83.2	
	Buckle up for Those You Love	55.1	54.3	
	Buckle up in Your Truck	15.1	30.5	
	You drink, you drive, you lose	75.9	81.0	
	Buckle up Kentucky. It's the Law and it's Enforced	58.8	83.2	
Age	16-19	6.3	2.9	
	20-29	9.7	9.7	
	30-39	14.5	11.1	
	40-49	22.2	23.1	
	50-59	20.5	28.3	
	60-69	18.5	14.9	
	70-79	8.0	8.3	
	80 or older	0.3	1.7	
Number of persons 16 years or older in household	1	21.3	23.4	
	2	54.0	54.4	
	3	17.9	15.8	
	4 or more	6.8	6.5	
Consider yourself Hispanic Latino	Yes	2.3	2.0	
	No	97.7	98.0	
Racial categories that describe you	American Indian or Alaskan Native	4.9	5.5	
	Black or African American	2.4	1.6	
	White	89.1	91.8	
	Some other race	3.5	1.1	

TABLE B-2. RESULTS OF TELEPHONE SURVEY (PICKUP TRUCK DRIVERS) (continued)

Question	Choices	Percent		t-test Statistic*
		Before	After	
Highest year of school completed	8th grade or lower	4.6	7.9	
	9th grade	2.9	3.7	
	10th grade	7.4	2.3	
	11th grade	4.9	3.7	
	12th grade-GED	44.1	38.8	
	Some college-post secondary education	17.8	26.3	
	College graduate or higher	18.3	17.3	

*A t-test was conducted comparing the means of the before and after samples. Questions that had a p-value of less than or equal to 0.05 were considered as showing a "statistically significant" change. The test applied to all responses, even those not listed.

**Multiple responses were accepted for these questions.