



KENTUCKY TRANSPORTATION CENTER

**EVALUATION OF KENTUCKY'S
"BUCKLE UP KENTUCKY: IT'S THE LAW & IT'S ENFORCED"
2007 CAMPAIGN**



UNIVERSITY OF KENTUCKY
College of Engineering



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We provide services to the transportation community
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We create and participate in partnerships
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OUR VALUES

Teamwork

Listening and communicating along with
courtesy and respect for others.

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Delivering the highest quality
products and services.

Continuous Improvement

In all that we do.

**Research Report
KTC-07-23/KSP1-07-11**

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"BUCKLE UP KENTUCKY: IT'S THE LAW & IT'S ENFORCED"
2007 CAMPAIGN**

by

Kenneth R. Agent
Transportation Research Engineer

and

Eric R. Green
Transportation Research Engineer

Kentucky Transportation Center
College of Engineering

and

Ronald E. Langley, Ph.D.
Director, Survey Research Center

University of Kentucky
Lexington, Kentucky

in cooperation with
Kentucky State Police
Commonwealth of Kentucky

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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” 2007 campaign in Kentucky. Data were also taken to document the change in usage after enactment of the primary enforcement law. The campaign involved a combination of earned media, paid media, and enforcement. The earned media started about five weeks prior to Memorial Day 2007 and continued through the enforcement periods. The paid media campaign was for the two weeks prior to Memorial Day while 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 was obtained at a mini-sample set of 21 locations across the state (compared to 200 sites for a full statewide survey). Usage for all vehicles at the 21 sites increased from 67.6 percent for the 2006 statewide survey to 68.7 during the public information period associated with the primary enforcement law (December 2006) to 76.2 percent during the 2007 enforcement campaign (May 2007).

Enforcement was conducted by both state and local police through saturated enforcement and checkpoints. A total of 22,846 safety belt citations and 478 child restraint citations were given during the two-week enforcement period around Memorial Day in 2007. This compares to 4,704 safety belt citations in 2006.

The telephone survey showed that drivers had heard publicity about the campaign (most often on television) with an increase in the perceived likelihood of receiving a ticket for not wearing a seat belt. Almost all drivers understood that there was a new law allowing the police to stop them for just a seat belt violation. The most common slogans drivers had heard were “Buckle up Kentucky. It’s the Law and it’s Enforced” and “Click it or Ticket.” There were several differences in the responses of all drivers and pickup drivers.

The numbers of total, fatal, and injury crashes (as well as the number of fatalities and injuries) in 2007 were lower than the average of the previous three years.

The observational surveys showed that enactment of the primary enforcement law, along with publicity and associated enforcement, did result in a substantial increase in usage. However, the increase occurred only after enforcement was implemented with very little change associated with only education.

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 first enacted statewide legislation requiring the use of safety belts for all vehicle occupants in 1994. The law allowed secondary enforcement which meant that a citation could only be written after an officer stopped a driver for another violation. The law was changed in 2006 to allow primary enforcement where a driver can be stopped for failure to wear a safety belt. The legislation established a period from July through December 2006 for education of drivers concerning the change in the law where a warning was given instead of a fine. Enforcement with a fine was started in January 2007.

The first statewide observational surveys in Kentucky in 1982 showed a driver usage rate of only 4 percent. Usage has increased dramatically over the past years to a level of 67.2 percent for all front seat occupants in 2006. However, this level is only about nine percentage points above the 58 percent rate found in 1994 after enactment of the original statewide legislation. The statewide level is also substantially below the national usage rate in 2006 of 81 percent.

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 first used in Kentucky in 2001 as part of a coordinated effort for states in the southeastern United States (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 usage. 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 through 2007 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 2007 campaign conducted around Memorial Day (with an emphasis on the change in use associated with enactment of the primary safety belt law in 2006). Previous campaigns included an emphasis on pickup truck drivers because of their lower usage but this was not part of the 2007 campaign. The campaign involved a combination of earned media, paid media, and enforcement. The enforcement period for the general campaign 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 campaign, 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 have been 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.

For this report, additional data were taken to document the change in usage during the public information period after the enactment of the primary law and then after start of the enforcement of the primary law. Five sets of the mini-surveys were collected from late 2006 through the enforcement campaign in 2007. The dates were September 2006, December 2006, February 2007, April 2007, and May 2007. The data in September and December 2006 were collected during the public information phase (with warning citations). The February 2007 and April 2007 data were after enforcement of the primary enforcement law started (with citations and fines) with the May 2007 data taken during the enforcement emphasis campaign.

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 and cable television. The type and amount of publicity were documented.

2.3 Enforcement

Enforcement was achieved through the Kentucky State Police (KSP), Kentucky Vehicle Enforcement (KVE) 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 periods were summarized. The enforcement for the “Buckle Up Kentucky: It’s the Law & It’s Enforced” campaign was between May 21 and June 3, 2007.

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 February 5 to March 14, 2007 before the start of the campaign. The second set was from June 4 to July 23, 2007 after completion of the enforcement campaign.

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

The questions on the survey obtained information about drivers’: 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 (May 21 through June 3, 2007). This data were then compared to crashes which occurred during the two-week 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

Five sets of mini-surveys were conducted at the 21 sample locations since the 2006 statewide data were collected from June through August 2006. The data for the individual sites are given in Appendix A.

Data were collected in September and December 2006 to document usage during the public information phase after enactment of the primary enforcement law. Data were collected in February and April 2007 after enforcement of the law began with the May 2007 data collected during the enforcement emphasis campaign. The following usage rates (all front seat occupants) were obtained during the listed dates.

<u>Time Period</u>	<u>Percent Usage</u>
September 2006	68.4
December 2006	68.7
February 2007	72.0
April 2007	73.0
May 2007	76.2

The 2006 statewide survey found a statewide usage rate of 67.2 percent. The mini-survey sites portion of the 2006 statewide survey had a rate of 67.6 percent. These results showed that the sites selected for the mini-surveys were representative of all the statewide sites.

This was the fifth 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 through 2006.

	<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
2006 Baseline	67.3 percent	52.9 percent
2006 Enforcement	67.9 percent	54.8 percent
2007 Baseline	73.0 percent	59.3 percent
2007 Enforcement	76.2 percent	63.6 percent

The increase during the enforcement campaign compared to the baseline had decreased since the 10.6 percent decrease from original 2001 Click It or Ticket campaign prior to the increase in 2007. The overall increase was 10.9 percent in 2003 and then decreased to 6.0 percent in 2004, 2.5 percent in 2005, and 0.6 percent in 2006 before increasing to 3.2 percent in 2007.

The increase in usage related to enactment of the primary enforcement legislation is shown in the 2007 data. Usage during the enforcement period in 2007 was 8.3 percent higher than 2006 and 3.7 percent above the previous high (during enforcement) in 2003. The 2007 statewide survey of 200 locations found a usage of 71.8 percent with a rate of 74.0 percent for the 21 mini-survey sites. The decrease in usage from the May 2007 data show that enforcement and education must be continued or usage will not continue to increase.

3.2 Publicity

The publicity consisted of a combination of earned and paid media. The baseline usage data collection was completed before the earned media started . The earned media continued through the enforcement period which ended on June 3. The paid media for the enforcement campaign started on May 14 and ended on May 27.

New West LLC from Louisville (who is Kentucky's media contractor) produced new 30 second television and radio spots for the 2007 campaign. They also handled all media placement. The cost for the production, placement, and public relation fees for the campaign was about \$60,000. A summary of the number and cost of the cable television and radio spots for the campaigns is given in Table 1. There was no placement on network television. Examples of the cable networks used are FX, Cartoon Network, USA, ESPN, Comedy Central, BTV, and MTV. Advertisements were aired in nine markets with five cities located in adjacent states.

There was no print media or billboards included in the 2007 campaign. There was an event held at the Kentucky Speedway on May 12, 2007 as a method to provide publicity for the start of the campaign. Another event was held on May 21 with law enforcement and first responders from Ohio, West Virginia and Kentucky (with involvement from McDonalds who provided food coupons for customers wearing seat belts). Both events were co-sponsored by the Kentucky State Police and Kentucky Transportation Cabinet.

3.3 Enforcement

The enforcement period for the campaign was May 21 through June 3. There are approximately 352 police agencies in Kentucky that participate in traffic enforcement. Contact was made with each agency with an agreement of participation obtained from 245 of these agencies. The extent of participation varied by local agency with reports of activity obtained from 234 of the agencies. Summaries of the results of the enforcement for the enforcement period are given in Table 2.

The enforcement involved both saturated enforcement and checkpoints and involved KSP, KVE, and local police. The total number of officer hours worked by all the officers was about 120,000 with about 19,600 of overtime hours and 3,200 hours related to checkpoints. There were 770 checkpoints with about two-thirds conducted by KSP.

There were a total of 22,846 safety belt citation given along with 478 child restraint citations. The large increase of citations written in 2007 is shown by comparing the number written in 2006 (4,704 safety belt citations along with 311 child restraint citations). About 43 percent of the seat belt citations and 62 percent of the child restraint citations were issued by the KSP.

There were other citations and arrests which occurred as a result of this enforcement. The largest number of other citations were speeding with 17,575. There were 1,644 DUI arrests and 1,462 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 February 5 through March 14, 2007. Calls for the post-campaign survey were made from June 4 through July 23, 2007. The disposition results of the survey were as follows:

Pre-campaign survey:

Interviews completed	714
Any Vehicle	(355)
Pickup Truck	(359)
Refused	1,456
Not Eligible (Any Vehicle)	348
No Eligible Pickup Driver	2,825
Total	5,343
Response rate (eligible driver)	33.0 percent

Post-campaign survey

Interviews completed	685
Any Vehicle	(360)
Pickup Truck	(325)
Refused	1,591
Not Eligible (Any Vehicle)	368
No Eligible Pickup Driver	2,964
Total	5,608
Response rate (eligible driver)	30.1 percent

The margin of error for samples of these sizes varies from plus or minus 5.2 to 5.4 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.

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

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. The reported usage was higher for all drivers compared to pickup drivers.

Almost all drivers (over 99 percent) were aware that Kentucky has a law requiring seat belt use. The knowledge that the law has been changed to primary enforcement where the police can stop a driver for just a seat belt violation was shown with about 90 percent of drivers aware of the current law. About 70 percent of all drivers and 60 percent of pickup drivers thought police should be able to stop a driver for just a safety belt violation. Only about six percent of all drivers and seven 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.

About 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, about 65 percent 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 shorter time since the last time they did not wear a safety belt for pickup drivers

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 21 through June 3, 2007) were compared to those occurring during the 14-day enforcement period for the previous three years around the Memorial Day holiday. The numbers of fatal and injury crashes as well as the number of fatalities and injuries in 2007 were lower than the average of the previous three years.

There were 27 fatal crashes with 27 fatalities during the two-week enforcement period in 2007. This compares to an average of about 38 fatal crashes with 41 fatalities over the 14 days of enforcement in 2004 through 2006.

There were 1,060 injury crashes with 1,601 injuries in the two-week enforcement period in 2007. This compares to an average of about 1,215 injury crashes and 1,831 injuries in 2004 through 2006.

There were 5,515 total crashes during the 14 days of enforcement in 2007. This compares to an average of about 6,116 in the previous three years.

4.0 CONCLUSIONS

The observational surveys showed that enactment of the primary enforcement law, along with publicity and associated enforcement, can result in a substantial increase in safety belt usage. There was an increase in usage of 8.6 percent during the 2007 enforcement campaign compared with the usage at the mini-survey site portion of the 2006 statewide survey. The surveys also showed a change of only about one percent during the public information period associated with the primary enforcement law which extended through December 2006. The reduction in usage after the enforcement campaign shows that continued publicity and enforcement will be necessary to further increase usage.

The data show that knowledge of 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 first step in obtaining a meaningful increase in safety belt usage was achieved by changing the law from secondary to primary enforcement. The next step is to provide sustained enforcement 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 Costs (Buckle Up Kentucky: It's the Law and It's Enforced)

Type	Market	Paid Spots	Bonus Spots*	Cost
Radio	Bowling Green	292	169	\$10,016
	Lexington	480	417	15,842
	Louisville	554	425	21,825
	Outlying Markets	2,220	1,365	47,070
	Subtotal	3,546	2,376	\$94,753
Cable TV	Cincinnati, Ohio	532	372	10,192
	Charleston, WV	2,684	1,878	27,173
	Evansville, Indiana	1,658	1,160	15,400
	Lexington	3,104	2,173	51,573
	Paducah	1,964	1,375	14,890
	Bowling Green	1,443	1,010	10,608
	Louisville	802	561	25,259
	Knoxville, TN	1,420	994	9,046
	Nashville, TN	2,002	1,401	22,860
	Subtotal	15,609	10,924	\$187,001

* Spots reflected are 70 percent of the spots agreed to by the station (since not all "no charge" spots clear)

**Table 2. SUMMARY OF ENFORCEMENT DATA
(Buckle Up Kentucky: It's the Law and It's Enforced)
(May 21-June 3, 2007)**

	KSP*	KVE**	LOCAL POLICE	TOTAL
Total Officer Hours	38,370	11,893	69,637	119,900
Overtime Hours	10,286	2,094	7,231	19,611
Total Checkpoint Hours	1,421	766	1,021	3,208
Number of Checkpoints	513	11	246	770
Seatbelt Citations	9,914	942	11,990	22,846
Child Restraint Citations	294	15	169	478
Speeding Citations	7,916	3,041	6,618	17,575
Reckless Driving	141	31	349	521
Operating on Suspended License	434	98	1,403	1,935
No Insurance	1,475	427	3,710	5,612
Other Traffic Violations	10,072	1,846	9,398	21,316
DUI Arrests	562	75	1,007	1,644
Drug Arrests	284	51	1,127	1,462
Other Felony Arrests	201	43	858	1,102
Fugitive Apprehensions	234	38	961	1,233
Stolen Vehicles Recovered	16	1	87	104

* Kentucky State Police

** Kentucky Vehicle Enforcement

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

Question	Choices	Percent	
		Before	After
Frequency of driving	Almost everyday	79.2	81.9
Frequency wearing shoulder belt	All of the time	80.2	84.2
Change of seat belt usage in the last 30 days	Increased	9.3	8.2
Likelihood for receiving ticket while not wearing seat belt for six months	Somewhat likely	63.0	63.8
Seat belt offense level*	Police can stop for just for seatbelt violation	95.8	91.9
Should police be able to ticket for not wearing seat belt when no other traffic laws are being broken (primary law)?*	Yes	66.2	73.1
How has Kentucky's seatbelt law changed?	Primary Law	85.7	90.9
Have you received a ticket for not wearing a seat belt? Yes		5.9	6.7
Police generally do not write tickets for seat belt violations	Strongly agree	19.6	18.8
Police enforcement of belt laws are important	Strongly agree	63.0	70.3
Police are ticketing more often than a few months ago	Strongly agree	36.1	40.3
Aware of special efforts regarding seatbelt ticketing in the last 30 days*	Yes	19.8	31.3
If yes, where did you see or hear of this?	TV	43.9	36.5
Have you seen or heard about any activities related to seat belt usage in the last 30 days?*	Yes	75.2	83.3
How has the number of these activities changed in the past 30 days?	More than usual	31.2	34.6
In the past 30 days have you heard messages concerning use in pickup trucks?*	Yes	21.1	27.8
How has the number of these message concerning pickup trucks changed in the past 30 days?	More than usual	31.0	36.2
Have you heard or seen these slogans in the past 30 days?*	Click it or ticket*	65.0	73.0
	Buckle up for Those You Love*	41.0	45.0
	Buckle up in Your Truck	18.2	18.0
	Buckle up Kentucky. It's the Law and it's Enforced*	76.3	78.0

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

Question	Choices	Percent	
		Before	After
Frequency of driving	Almost everyday	88.6	88.6
Frequency wearing shoulder belt	All of the time	72.6	72.1
Change of seat belt usage in the last 30 days	Increased	9.8	11.8
Likelihood for receiving ticket while not wearing seat belt for six months	Somewhat likely	56.2	61.5
Seat belt offense level	Police can stop for just for seatbelt violation	94.2	97.1
Should police be able to ticket for not wearing seat belt when no other traffic laws are being broken (primary law)?	Yes	59.4	62.1
How has Kentucky's seat belt law changed?	Primary law	91.3	91.0
Have you received a ticket for not wearing a seat belt? Yes		7.5	6.8
Police generally do not write tickets for seat belt violations	Strongly agree	20.0	23.5
Police enforcement of belt laws are important	Strongly agree	59.9	61.2
Police are ticketing more often than a few months ago	Strongly agree	35.1	43.2
Aware of special efforts regarding seatbelt ticketing in the last 30 days*	Yes	25.0	39.4
If yes, where did you see or hear of this?	TV	43.5	30.0
Have you seen or heard about any activities related to seat belt usage in the last 30 days?	Yes	80.2	80.6
How has the number of these activities changed in the past 30 days?	More than usual	33.1	36.1
In the past 30 days have you heard messages concerning use in pickup trucks?	Yes	20.6	21.8
How has the number of these message concerning pickup trucks changed in the past 30 days?	More than usual	42.9	39.1
Have you heard or seen these slogans in the past 30 days?**	Click it or ticket*	72.0	76.1
	Buckle up for Those You Love	36.8	39.9
	Buckle up in Your Truck	13.6	20.1
	Buckle up Kentucky. It's the Law and it's Enforced	78.0	78.3

*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.

APPENDIX A. SAFETY BELT OBSERVATIONS

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

LOCATION		PERCENT USAGE (ALL FRONT SEAT)				
COUNTY	INTERSECTION	September 2006*	December 2006*	February 2007**	April 2007**	May 2007***
Barren	I-65 at Exit 53	75	80	84	85	83
Meade	US 31W at KY 1638	75	76	77	79	78
Grayson	KY 259 at US 62	55	55	58	60	65
Logan	US 68 at US 79	59	65	67	70	71
Hopkins	Pennyrile Parkway (Exit 44)	80	73	78	76	83
Henderson	US 41A at 5th St.	70	68	72	71	77
Calloway	KY 1637 at 16th	60	60	68	65	70
Shelby	I-64 at Exit 28	73	72	84	83	85
Woodford	US 60 at US 62	67	71	75	76	77
Oldham	KY 146 at KY 1817	75	72	79	81	80
Franklin	KY 2820 at US 127	60	57	61	61	64
Kenton	I-75 at Exit 186	81	77	82	80	85
Jefferson	US 31W at KY 841	69	65	68	70	72
Boone	US 42 at US 25	68	76	76	76	79
Boyd	I-64 at Exit 185	69	78	82	83	82
Lincoln	US 27 at US 150	59	68	58	64	70
Carter	US 60 at KY 7	54	52	54	61	64
Floyd	KY 680 at KY 122	49	53	58	55	65
Rowan	I-64 at Exit 137	74	75	80	79	77
Laurel	US 25E at US 25	64	63	65	68	70
Pulaski	KY 80 at KY 2296	64	62	64	71	72
		68.4	68.7	72.0	73.0	76.2

* After primary enforcement law effective in July 2006 during information phase (warning citations).

** After start of enforcement (with fines) starting January 2007.

*** During Memorial Day enforcement campaign.

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	41.1	48.1	
	Female	58.9	51.9	
Frequency of driving	Almost everyday	79.2	81.9	
	Few days a week	13.8	12.2	
	Few days a month	2.0	2.5	
	Few days a year	0.6	1.1	
	Never	4.2	2.2	
Type of vehicle driven most often	Car	49.7	49.4	
	Van or minivan	13.2	10.2	
	Motorcycle	0.3	0.0	
	Pickup truck	20.6	20.7	
	Sport Utility Vehicle	15.0	18.5	
	Other non-truck	0.6	0.6	
	Other truck	0.6	0.6	
Seat belt configuration	Across shoulder	10.3	5.7	
	Across both	89.4	93.2	
Frequency wearing shoulder belt	All of the time	80.2	84.2	
	Most of the time	11.2	9.5	
	Some of the time	3.8	2.9	
	Rarely	3.0	2.0	
	Never	1.8	1.4	
Frequency wearing lap belt	All of the time	80.1	84.9	
	Most of the time	10.3	8.5	
	Some of the time	4.3	4.2	
	Rarely	3.6	1.2	
	Never	1.7	1.2	
Frequency wearing shoulder belt - riding in car	All of the time	77.4	81.7	
	Most of the time	8.1	7.5	
	Some of the time	5.4	3.8	
	Rarely	2.7	2.7	
	Never	3.8	1.6	
	Don't drive or ride in car	2.7	2.7	
Frequency wearing shoulder belt - riding in pickup	All of the time	61.8	70.0	
	Most of the time	8.1	5.9	
	Some of the time	4.2	2.1	
	Rarely	2.8	2.8	
	Never	5.3	3.5	
	Don't drive or ride in pickup	17.3	15.0	
Frequency wearing shoulder belt - riding in SUV	All of the time	65.0	69.8	
	Most of the time	6.3	4.1	
	Some of the time	2.6	2.7	
	Rarely	3.6	3.4	
	Never	4.0	1.7	
	Don't drive or ride in SUV	18.5	18.3	

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	65.3	72.2	
	Most of the time	7.8	6.2	
	Some of the time	4.2	3.1	
	Rarely	2.9	1.9	
	Never	3.9	2.5	
	Don't drive or ride in van	15.9	14.2	
Last time not wearing seat belt	Within the past day	14.0	10.2	p < 0.05
	Within the past week	8.7	9.6	
	Within the past month	6.0	2.9	
	Within the past year	10.3	5.2	
	A year or more ago	61.0	72.2	
Change of seat belt usage in the last 30 days	Increased	9.3	8.2	
	Stayed the same	90.1	91.5	
	Decreased	0.3	0.3	
Of those who said "increase", what caused your seat belt usage to increase?*	Increased awareness	32.3	40.7	
	Influence/pressure	3.2	18.5	
	Seatbelt law	41.9	48.2	
	Was in a crash	3.2	3.7	
	Don't want to get a ticket	16.1	18.5	
Does Kentucky have a law requiring seat belt use for adults?	Yes	99.4	99.7	
	No	0.6	0.3	
Likelihood for receiving ticket while not wearing seat belt for six months	Somewhat likely	63.0	63.8	
	Somewhat unlikely	16.8	13.4	
	Very unlikely	20.3	22.8	
Seat belt offense level	Police can stop for just for seatbelt violation	95.8	91.9	p < 0.05
	Police must observe another violation	4.2	8.1	
Has the Kentucky seat belt law changed in the past year?	Yes	85.4	79.4	
	No	14.6	20.6	
When did Kentucky's seat belt law change?	July 2006	13.0	12.4	
	January 2007	39.5	23.0	
	Last Summer	10.7	6.2	
	Recently	16.7	43.0	
How has Kentucky's seat belt law changed?	Primary law	85.7	90.9	
	Only warnings	1.2	0.9	
	Larger fine	3.2	0.4	
Should police be able to ticket for not wearing seat belt when no other traffic laws are being broken (primary law)?	Yes	66.2	73.1	p < 0.05
	No	33.8	26.9	
Have you received a ticket for not wearing a seat belt?	Yes	5.9	6.7	
	No	94.1	93.3	

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

Question	Choices	Percent		t-test Statistic*
		Before	After	
If yes, how many months ago did you get the ticket?	Within last month	4.8	4.2	
	1 to 3 months ago	0.0	8.3	
	6 to 12 months ago	14.3	4.2	
	More than 12 months ago	81.0	83.3	
Have you received a warning ticket for not wearing a seat belt?	Yes	2.3	1.4	
	No	97.7	98.6	
Likelihood for driver who has been drinking to be stopped by police compared to a month ago	More likely	59.3	66.5	
	Less likely	6.3	4.5	
	About the same	34.4	29.1	
Are seat belts just as likely to harm as they are to help?	Strongly agree	15.6	10.1	
	Somewhat agree	17.4	24.9	
	Somewhat disagree	22.4	25.5	
	Strongly disagree	44.7	39.4	
If in a crash, do you want to wear seat belt?	Strongly agree	87.4	84.1	
	Somewhat agree	7.2	12.2	
	Somewhat disagree	3.4	1.7	
	Strongly disagree	2.0	2.0	
Police generally do not write tickets for seat belt	Strongly agree	19.6	18.8	
	Somewhat agree	31.9	27.0	
	Somewhat disagree	24.3	22.7	
	Strongly disagree	24.3	31.6	
Police enforcement of belt laws are important	Strongly agree	63.0	70.3	
	Somewhat agree	20.9	17.3	
	Somewhat disagree	8.6	6.2	
	Strongly disagree	7.4	6.2	
Wearing belt makes me worry about getting into an accident	Strongly agree	10.6	6.7	
	Somewhat agree	8.8	7.6	
	Somewhat disagree	17.9	20.1	
	Strongly disagree	62.6	65.6	
Police are ticketing more often than a few months ago	Strongly agree	36.1	40.3	
	Somewhat agree	39.5	31.8	
	Somewhat disagree	16.4	15.9	
	Strongly disagree	8.0	12.0	
Aware of special efforts regarding seatbelt ticketing in the last 30 days	Yes	19.8	31.3	p < 0.05
	No	80.2	68.7	
If yes, where did you see or hear of this?*	TV	43.9	36.5	
	Radio	24.2	26.9	
	Friend-Relative	16.7	16.3	
	Newspaper	7.6	17.3	
	Witnessed checkpoint	6.1	9.6	
	Road signs	6.1	4.8	
If you said TV or radio, in what form did you see or hear of this?	News story	46.2	50.9	
	Commercial advertisement, PSA	59.0	49.1	

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

Question	Choices	Percent		t-test Statistic*
		Before	After	
Have you seen or heard about any activities related to seat belt usage in the last 30 days?	Yes	75.2	83.3	p < 0.05
	No	24.8	16.7	
How has the number of these activities changed in the past 30 days?	More than usual	31.2	34.6	
	About the same	66.2	63.0	
	Fewer than usual	2.7	2.4	
In the past 30 days have you heard messages concerning use in pickup trucks?	Yes	21.1	27.8	p < 0.05
	No	78.9	72.2	
How has the number of these message concerning pickup trucks changed in the past 30 days?	More than usual	31.0	36.2	p < 0.05
	Fewer than usual	62.0	62.8	
	About the same	7.0	1.1	
What would be best if you were in a crash and your vehicle rolled over?	You are wearing a belt	95.9	97.4	
	You are not wearing a belt	2.9	2.6	
	You are not wearing a belt and are ejected	1.2	0.0	
Importance of seat belt enforcement	Very important	64.0	69.5	
	Fairly important	12.3	12.0	
	Just somewhat important	14.0	12.3	
	Not that important	9.7	6.3	
Have you heard or seen these slogans in the past 30 days?*	Click it or ticket	65.0	73.0	p < 0.05
	Buckle up for Those You Love	41.0	45.1	
	Buckle up in Your Truck	18.2	18.0	
	Buckle up Kentucky. It's the Law and it's Enforced	76.3	78.0	
Age	16-19	1.5	1.8	
	20-29	8.9	5.6	
	30-39	18.9	12.7	
	40-49	19.9	18.6	
	50-59	18.2	24.3	
	60-69	16.2	20.7	
	70-79	9.1	13.5	
80 or older	5.9	3.8		
Number of persons 16 years or older in household?	1	33.7	33.6	
	2	48.7	47.2	
	3	11.8	12.4	
	4 or more	5.8	5.9	
Consider yourself Hispanic Latino	Yes	3.2	2.0	
	No	96.8	98.0	
Racial categories that describe you	American Indian or Alaskan Native	3.2	2.9	
	Asian	1.1	0.9	
	Black or African American	4.0	5.4	
	White	92.8	90.0	
	Native Hawaiian or Pacific Islander	0.3	0.0	

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	3.7	4.8	
	9th grade	0.9	2.0	
	10th grade	4.3	2.8	
	11th grade	2.3	4.3	
	12th grade-GED	36.6	33.2	
	Some college-post secondary education	23.7	28.4	
	College graduate or higher	28.6	24.4	

*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 (ALL PICKUP DRIVERS)

Question	Choices	Percent		t-test Statistic*
		Before	After	
Gender	Male	80.2	84.9	
	Female	19.8	15.1	
Frequency of driving	Almost everyday	88.6	88.7	
	Few days a week	9.7	9.3	
	Few days a month	1.1	2.0	
	Few days a year	0.3	0.0	
Seat belt configuration	Across shoulder	7.6	8.0	
	Across lap	0.6	0.3	
	Across both	91.6	91.7	
	No belts	0.3	0.0	
Frequency wearing shoulder belt	All of the time	72.6	72.1	
	Most of the time	12.7	15.2	
	Some of the time	7.6	8.4	
	Rarely	2.3	1.9	
	Never	4.8	2.5	
Frequency wearing lap belt	All of the time	75.3	74.4	
	Most of the time	11.3	12.5	
	Some of the time	7.6	7.4	
	Rarely	1.8	2.0	
	Never	4.0	3.7	
Frequency wearing shoulder belt - riding in car	All of the time	70.6	71.6	
	Most of the time	12.3	12.6	
	Some of the time	7.0	6.2	
	Rarely	2.5	1.5	
	Never	4.8	2.8	
	Don't drive or ride in car	2.2	5.2	
Frequency wearing shoulder belt - riding in SUV	All of the time	61.0	63.7	
	Most of the time	12.8	11.5	
	Some of the time	4.7	5.9	
	Rarely	1.7	2.2	
	Never	6.4	4.0	
	Don't drive or ride in SUV	13.4	12.7	
Frequency wearing shoulder belt - riding in van	All of the time	59.6	64.0	
	Most of the time	9.2	10.8	
	Some of the time	4.2	5.5	
	Rarely	2.2	1.8	
	Never	7.5	4.3	
	Don't drive or ride in van	17.3	13.5	
Last time not wearing seat belt	Within the past day	24.0	21.1	
	Within the past week	9.7	10.2	
	Within the past month	4.7	5.3	
	Within the past year	5.3	5.6	
	A year or more ago	56.4	57.9	

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

Question	Choices	Percent		t-test Statistic*
		Before	After	
Change of seat belt usage in the last 30 days	Increased	9.8	11.8	
	Decreased	89.9	87.6	
	Stayed the same	0.3	0.6	
Of those who said "increase", what caused your seat belt usage to increase?*	Increased awareness	35.3	31.4	
	Influence/pressure	5.9	5.7	
	Seatbelt law	41.2	42.9	
	Was in a crash	8.8	2.9	
	Don't want to get a ticket	20.6	31.4	
	Got ticket	0.0	11.4	
Does Kentucky have a law requiring seat belt use for adults?	Yes	99.4	99.7	
	No	0.6	0.3	
Likelihood for receiving ticket while not wearing seat belt for six months	Somewhat likely	56.2	61.5	
	Somewhat unlikely	19.1	12.2	
	Very unlikely	24.7	26.3	
Seat belt offense level	Police can stop for just for seatbelt violation	94.2	97.1	
	Police must observe another violation	5.8	2.9	
Has the Kentucky seat belt law changed in the past year?	Yes	85.2	75.3	
	No	14.8	24.7	
When did Kentucky's seat belt law change?	July 2006	9.5	11.7	
	January 2007	42.3	26.0	
	Last summer	10.9	6.5	
	Recently	15.4	40.9	
How has Kentucky's seat belt law changed?	Primary law	91.3	91.0	
	Larger Fine	2.0	2.0	
Should police be able to ticket for not wearing seat belt when no other traffic laws are being broken (primary law)?	Yes	59.4	62.1	
	No	40.6	37.9	
Have you received a ticket for not wearing a seat belt?	Yes	7.5	6.8	
	No	92.5	93.2	
If yes, how many months ago did you get the ticket?	Within last month	0.0	9.5	
	1-3 months ago	0.0	9.5	
	6-12 months ago	11.1	19.1	
	More than 12 months ago	88.9	61.9	
Have you received a warning ticket for not wearing a seat belt?	Yes	4.5	4.6	
	No	95.5	95.4	
Likelihood for driver who has been drinking to be stopped by police compared to a month ago	More likely	57.1	67.5	p < 0.05
	Less likely	3.3	1.3	
	About the same	39.6	31.1	

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

Question	Choices	Percent		t-test Statistic*
		Before	After	
Are seat belts just as likely to harm as they are to help?	Strongly agree	15.9	14.4	
	Somewhat agree	23.7	24.4	
	Somewhat disagree	22.5	21.8	
	Strongly disagree	37.9	39.4	
If in a crash, do you want to wear seat belt?	Strongly agree	79.8	79.5	
	Somewhat agree	13.3	14.8	
	Somewhat disagree	3.8	2.2	
	Strongly disagree	3.2	3.5	
Police generally do not write tickets for seat belt	Strongly agree	20.0	23.5	
	Somewhat agree	34.0	26.9	
	Somewhat disagree	22.5	23.5	
	Strongly disagree	23.5	26.1	
Police enforcement of belt laws are important	Strongly agree	59.9	61.2	
	Somewhat agree	19.5	21.8	
	Somewhat disagree	8.6	5.7	
	Strongly disagree	12.0	11.4	
Wearing belt makes me worry about getting into an accident	Strongly agree	10.9	9.2	
	Somewhat agree	7.7	8.6	
	Somewhat disagree	28.3	24.8	
	Strongly disagree	53.1	57.5	
Police are ticketing more often than a few months ago	Strongly agree	35.1	43.2	
	Somewhat agree	35.1	33.3	
	Somewhat disagree	22.2	12.8	
	Strongly disagree	7.6	10.7	
Aware of special efforts regarding seatbelt ticketing in the last 30 days	Yes	25.0	39.4	p < 0.05
	No	75.0	60.6	
If yes, where did you see or hear of this?*	TV	43.5	30.0	p < 0.05
	Radio	28.2	22.5	
	Friend-Relative	14.1	23.3	
	Newspaper	15.3	16.7	
	Witnessed checkpoint	3.5	2.5	
	Road signs	4.7	5.8	
	Police	5.9	1.7	
If you said TV or radio, in what form did you see or hear of this?	News story	34.0	48.1	
	Commercial advertisement, PSA	68.1	68.5	
Have you seen or heard about any activities related to seat belt usage in the last 30 days?	Yes	80.2	80.6	
	No	19.8	19.4	
How has the number of these activities changed in the past 30 days?	More than usual	33.1	36.1	
	About the same	64.1	62.7	
	Fewer than usual	2.8	1.2	
In the past 30 days have you heard messages concerning use in pickup trucks?	Yes	20.6	21.8	
	No	79.4	78.2	

TABLE B-2. RESULTS OF TELEPHONE SURVEY (ALL PICKUP 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	42.9	39.1	
	Fewer than usual	54.3	56.5	
	About the same	2.9	4.3	
What would be best if you were in a crash and your vehicle rolled over?	You are wearing a belt	92.5	94.3	
	You are not wearing a belt	6.1	5.1	
	You are not wearing a belt and are ejected	1.4	0.6	
Importance of seat belt enforcement	Very important	59.4	63.1	
	Fairly important	13.4	13.8	
	Just somewhat important	13.1	11.2	
	Not that important	14.2	11.9	
Have you heard or seen these slogans in the past 30 days?*	Click it or ticket	72.0	76.1	p < 0.05
	Buckle up for Those You Love	36.8	39.9	
	Buckle up in Your Truck	13.6	20.1	
	Buckle up Kentucky. It's the Law and it's Enforced	78.0	78.3	
	None	9.9	4.5	
Age	16-19	0.6	3.5	
	20-29	8.9	3.5	
	30-39	11.3	11.4	
	40-49	23.4	21.6	
	50-59	26.8	27.6	
	60-69	21.5	21.0	
	70-79	4.5	10.1	
	80 or older	1.5	1.2	
Number of persons 16 years or older in household?	1	23.7	24.1	
	2	53.7	53.3	
	3	13.8	16.2	
	4 or more	8.2	4.1	
Consider yourself Hispanic Latino	Yes	1.2	2.9	
	No	98.8	97.1	
Racial categories that describe you	American Indian or Alaskan Native	2.6	6.2	
	Black or African American	2.1	1.6	
	White	96.0	94.1	
Highest year of school completed	8th grade or lower	5.9	7.1	
	9th grade	2.5	1.0	
	10th grade	3.1	3.5	
	11th grade	3.1	6.1	
	12th grade-GED	40.2	41.8	
	Some college-post secondary education	23.8	22.2	
	College graduate or higher	21.2	18.3	

*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.

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For more information or a complete publication list, contact us at:

KENTUCKY TRANSPORTATION CENTER

176 Raymond Building
University of Kentucky
Lexington, Kentucky 40506-0281

(859) 257-4513
(859) 257-1815 (FAX)
1-800-432-0719
www.ktc.uky.edu
ktc@engr.uky.edu

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