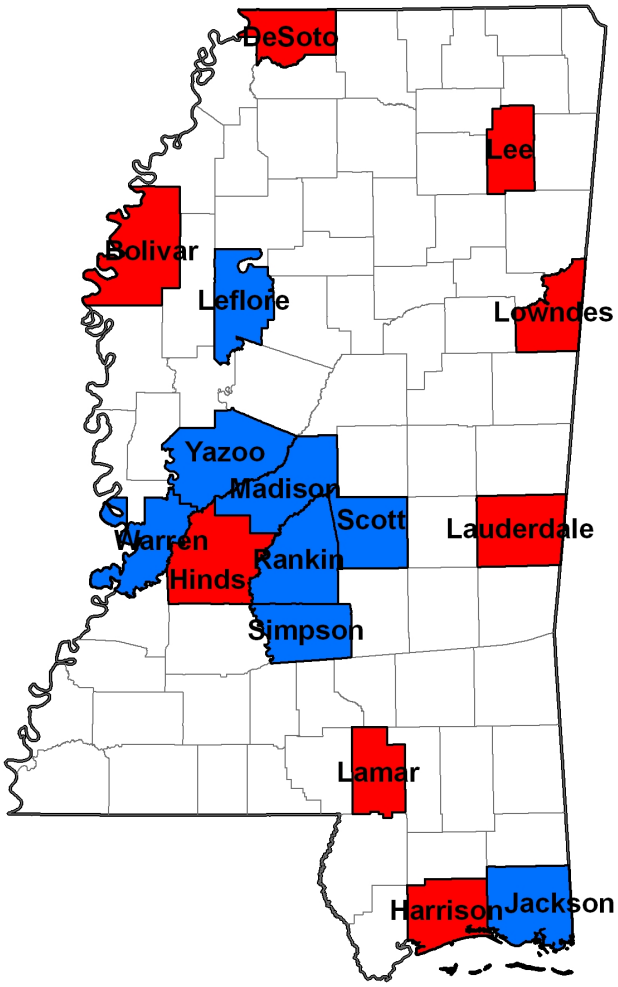
2007 Mississippi Safety Belt / Motorcycle Helmet Survey

Prepared for:

The Office of Highway Safety

Division of Public Safety Planning,
Mississippi Department of Public Safety

November 2007



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INTRODUCTION

Mississippi has benefited from a primary seat belt law for about a year and a half. In May of 2006 Mississippi passed a primary seat belt law making it lawful for an officer to stop and ticket a vehicle driver for no other reason than not using a seatbelt. The officer may also ticket the driver for unbelted passengers in the front seat of a vehicle. This small victory in public safety has resulted in increased seat belt usage rates for the state and thereby theoretically saved the lives of a number of Mississippians.

Vehicle crashes, the leading killer of persons 3 to 33 years of age in this country, has claimed many lives over the years and continues to claim on average about 119 lives each and every day. On the American road network in 2005, there were 6,159,000 police-reported traffic crashes, of which 43,443 people lost their lives. In terms of a rate in 2005, the nation experienced 1.47 fatalities per 100 million vehicle miles of travel. Compare this figure with a rate of 1.73 per 100 million vehicle miles traveled in 1995. A great number of these fatalities may have been avoided if proper vehicle restraints had been used at the time of the crashes. The National Highway Traffic Safety Administration (NHTSA) estimated, from 1975 to 2005, safety belts saved 211,128 lives on American roads.[1]

In 2005, Mississippi's traffic fatality rate of 31.3 fatalities per 100,000 Mississippians was 120 percent higher than the national average of 14.2. This rate continues to be reflected by the 911 lives lost in Mississippi in 2006.[2] Despite a significant increase in observed seat belt usage, from 60.8% in 2005 to 73.6% in 2006, the loss of life in automobile crashes is staggering, due mainly to Mississippi continuing to lag behind most of the nation in belt use. Eight states had a lower belt use rate than Mississippi in 2006, but only two of these states (South Carolina and Kentucky) have primary seat belt laws. Others states ousted by Mississippi included Kansas, South Dakota, Arkansas, Massachusetts, New Hampshire, and Wyoming. New Hampshire remains as the last state in the nation to not have any form of seat belt law.[3]

For the past seven years, Mississippi, along with other southeastern states and other states around the country, participated in a major effort conducted under the term "Click It or Ticket" during Memorial Day mobilizations. These efforts were an attempt to increase seat belt awareness and use by implementing a number of phases. The first of these phases was an earned media phase including public service announcements, brochures, and newspaper articles that were introduced to the Mississippi public. After two weeks of earned media, an extensive paid media campaign began (second phase). Lastly a statewide law enforcement blitz (third phase) increased the intensity of seatbelt law enforcement throughout the state. All law enforcement agencies participated in this increased level of enforcement by using road blocks as well as saturated patrolling efforts.

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[1] *NHTSA Traffic Safety Facts 2005 – Overview* (DOT HS 810 623)
[2] *NHTSA State Traffic Information* – Mississippi – 2006
[3] *NHTSA Traffic Safety Facts – Crash/Stats – April 2007* (DOT HS 810 690)

In 2007, two observational surveys were conducted by the Social Science Research Center at Mississippi State University. One was conducted prior to media and law enforcement intervention on a sub-sample of 64 sites in 8 Mississippi counties (henceforth referred to as "mini survey"). The official follow-up survey, using all 409 survey sites in 16 counties, was completed following all law enforcement and media interventions.

SEATBELT SURVEY METHODOLOGY

The seat belt and motorcycle survey for Mississippi uses a multistage area probability approach. In the first stage, an appropriate number of sampling units are randomly selected. The primary sampling unit for the Mississippi survey is the county. The least populated counties, approximately 15% of the State's population, are excluded from the sampling process. The survey was conducted in 16 Mississippi Counties containing approximately 46% of the State's population.

Summary of Sampling Methodology

I. Three counties were selected as certainty counties because of having populations much larger than other Mississippi Counties. The certainty counties were Harrison, Hinds, and Jackson.

II. Thirty-two of the least populated counties, whose combined population accounted for only 15% of the state's population, were eliminated from sampling.

III. Sampling was done with replacement. In addition to the three certainty counties, 13 other counties were chosen, thus the sample consists of 16 counties.

IV. The sample includes 409 forty-minute observation periods. The three certainty counties were allotted 28 observation periods, while the remaining 13 counties were allotted 25 observation periods each.

V. The Mississippi Department of Transportation (MDOT) provided information for all road segments which Average Daily Travel (ADT) was equal to or exceeded 500 miles. Through a random variable generated by the computer program Statistical Program for the Social Sciences (SPSS), all road segments in each of the counties were randomly selected.

VI. The roads were then sorted by county and functional road classification. The functional road classifications of the road were re-coded into six functional classes.

VII. Total Vehicle Miles Traveled (VMT) per year for each county was calculated by multiplying ADT by road segment length. A similar statistic was calculated for each of the functional road classes. This figure was divided by the total county VMT and then multiplied by the number of observation time periods. For example, there are 3,860 road segments in Hinds County with a VMT of 5,905,627.26. Functional road Class 1 had a VMT of 640,676. The 640,676 was then divided by 5,905,627.26 equaling .1084857 which was in turn multiplied by 28, or the number of observation periods allotted to Hinds County. Thus 3.0375991, or three observation periods were allotted to Class 1 roads in Hinds County, etc. The first three segments chosen for sample were from road Class 1 in Hinds County. Similarly roads for each road class for the remaining five road classes were chosen.

VIII. All road segments were randomly selected and sorted by functional class. The number of roads to be sampled in each class was selected in the order that they were chosen in the random sampling process. For example, if Hinds County needed to sample three Class 1 roads, the first three Class 1 roads plus several back up selections were chosen. The TP number or location designation was then sent to MDOT to be placed on maps and sent back to Mississippi State.

IX. Sites for each county were then clustered according to geographical proximity.
X. For each cluster and each site a day of the week was randomly chosen. All days of the week were eligible for selection.
XI. Once a site was assigned a day of the week, observation times between 8:00 a.m. and 6:00 p.m. were randomly chosen in hourly increments. One hour for lunch was randomly chosen from the hours from 11:00 a.m. to 2:00 p.m.
XII. Direction of observation was randomly assigned for all 409 sites using random assignment procedure generated by SPSS.
XIII. Observers were instructed to observe from a site using the assigned direction for a period of 40 minutes. Interstate sites were surveyed on off ramps.
XIV. The sampling frame includes counting all passenger vehicles, sports utility vehicles, vans and pickup trucks not exempted by state law. Two observers are used at each observation site. One observer counts the driver and outside passengers on the front seat of passenger cars, sport utility vehicles and vans. The other observer counts the driver and outside passenger in pickup trucks.

Further details on the sampling methodology of the survey **"DOCUMENTATION OF MISSISSIPPI OBSERVATIONAL SURVEYS OF SEAT BELT AND MOTORCYCLE HELMET USE"** prepared by Dr. Stephen H. Richards Director, Transportation Center of the University of Tennessee and Dr. Tommy Wright Adjunct professor of Statistics of the University of Tennessee, and can be obtained from the Social Science Research Center at Mississippi State University, Box 5287 Mississippi State, MS 39762, or by calling Mr. David Parrish a 662-325-8116.

DESCRIPTION OF 2007 SURVEYS

This report will be divided into four sections.

Section I will compare seat belt use prior to project intervention and seat belt use following intervention. Only the mini survey (64 location sub-sample) sites in eight counties are compared. This sample consists of the same sites used for the mini surveys conducted in each of the years 2001 – 2006.

Section II will compare seat belt use prior to project intervention and seat belt use following intervention ***for pickup trucks only***. Again, only the mini survey (64 location sub-sample) sites in eight counties are compared.

Section III will include the analysis of the complete 2007 Mississippi observational seat belt survey of 409 sites in 16 Mississippi counties. This survey was conducted after project implementation between the dates of Tuesday June 5, 2007 and Thursday July 5, 2007.

Section IV will include a summary of Motorcycle Helmet Use in Mississippi.

SECTION I:
MINI SEAT BELT SURVEY COMPARISONS

Prior to any media or law enforcement efforts encouraging seat belt usage, a mini survey of 64 observation locations in 8 Mississippi counties was conducted as baseline information. These data – observations from eight sites in each of the eight counties – were collected around mid-to-late April, 2007. These counties, located in *Figure 1*, include a mixture of different geographical regions where both rural and urban counties are represented. The counties are **Bolivar County** in the Mississippi Delta; **Desoto County,** located in the Northwest corner of the State near Memphis; **Lee County,** in Northeast Mississippi; **Lowndes County,** in the Northeast; **Lauderdale County,** in East Central Mississippi; **Lamar County**, in Southeast Mississippi; **Harrison County,** on the Mississippi Gulf Coast; and **Hinds County,** in West Central Mississippi, where the Capital of Mississippi is located. Desoto, Harrison, Hinds, and Lamar are located in standard metropolitan areas. The observation sites within each of these counties are identical to the collection in years 2001 – 2006.

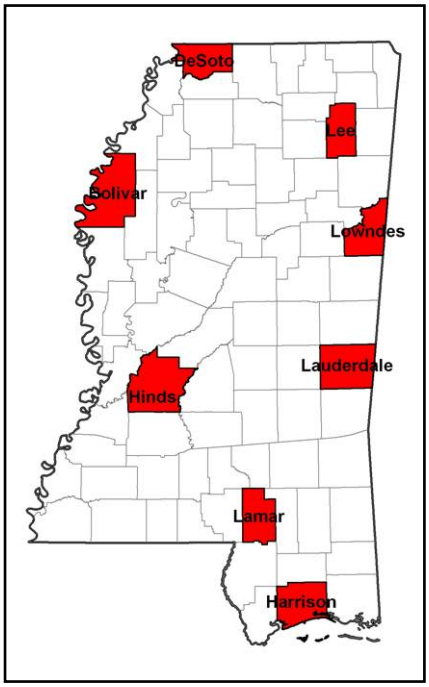


Figure 1: Mini Survey Counties

The percentage of sites drawn from each of the road types is roughly the same as the overall sample of 409 sites. It may be observed that the mini sample is slightly under-represented in rural interstate sites and slightly over-represented in urban interstate sites. See *Table 1* for a comparison of type of roads for mini survey sites versus overall survey sites.

Table 1: Counts and Percentage Breakdown of Type of Roads for Mini Survey and Overall Survey

Type of Road	Mini Survey Frequency	Mini Survey Percent	Overall Survey Frequency	Overall Survey Percent
Rural Interstates	7	10.9 %	58	14.2 %
Rural Major and Collector Roads	17	26.6 %	113	27.6 %
Rural Local Roads	9	14.1 %	61	14.9 %
Urban Interstates and Expressways	9	14.1 %	38	9.3 %
Urban Major Roads and Collector Roads	14	21.9 %	87	21.3 %
Urban Local Roads	8	12.5 %	52	12.7 %

Again, using the sub sample of 64 site locations, a comparison of 2007 seat belt usage rates before and after intervention shows relatively no increase in belt usage. *Table 2* illustrates the 70.6% post-intervention usage rate compared to the 68.9% pre-intervention usage rate. The difference in usage rates (+ 1.7%) is of no significance. The confidence interval bounds and actual number of observations are also included in the same table below.

Table 2: Pre- and Post-Intervention Seat Belt Usage Rate for Mini Surveys in 2007 (includes confidence intervals and actual number of observations)

Counted:	Weighted Percent Seat Belt Use (%)	95% Confidence Bound (%)	Actual Number of Observations
Survey Prior to Intervention	68.9 %	± 2.3 %	22,540
Survey After Intervention	70.6 %	± 1.5 %	21,464

By separating the data by type of vehicle, *Table 3* shows that both car and pickup truck belt usage increased very slightly after the intervention phase of the campaigns. In fact, there is virtually no change in the passenger car belt usage from pre- to post-campaign. Pick-up truck usage rates did show a higher percentage increase of almost 5%, but truck belt usage rates continue to lag far behind those of passenger cars.

Table 3: Pre- and Post-Intervention Seat Belt Usage by Type of Vehicle

Type of Vehicle	Belt Use: Before Intervention (%)	Belt Use: After Intervention (%)	Percent Change (%)	Percent Increase or Decrease (%)
Car	74.5%	75.1%	+ 0.6%	+ 0.8%
Pickup Truck	61.8%	64.7%	+ 2.9%	+ 4.7%
Total	**68.9%**	**70.6%**	**+ 1.7%**	**+ 2.5%**

In *Table 4* a comparison of belt use rates by county is shown. There are basically three groups that can be defined from analyzing this table. Group one can be defined as the counties with slightly positive or negative changes. These would be Desoto (+ 4.4%), Hinds (- 3.0%), Lauderdale (- 0.07%) and Lowndes (+ 1.7%) counties. The counties that showed a moderate increase in belt use could be placed in a second group. These counties are Bolivar (+ 9.4%), Harrison (+ 9.8%), and Lee (+ 8.0%). The third and last group is represented by only one county. Lamar County demonstrated a substantial increase in belt use of + 15.5%.

There is no explicit explanation to why the first group (Desoto, Hinds, Lauderdale and Lowndes) experienced only slight changes in belt usage rates. Perhaps media efforts or belt use enforcement did not create the intended awareness to vehicle occupants in these areas.

Table 4: Pre- and Post-Intervention Seat Belt Usage by County Surveyed

County	Belt Use: Before Intervention (%)	Belt Use: After Intervention (%)	Percent Change (%)	Percent Increase or Decrease (%)
Bolivar	57.8%	63.2%	+ 5.4%	+ 9.4%
Desoto	65.6%	68.5%	+ 2.9%	+ 4.4%
Harrison	66.2%	72.7%	+ 6.5%	+ 9.8%
Hinds	74.3%	72.1%	- 2.3%	- 3.0%
Lamar	66.3%	76.6%	+ 10.3%	+ 15.5%
Lauderdale	60.8%	60.7%	- 0.1%	- 0.07%
Lee	60.0%	64.8%	+ 4.8%	+ 8.0%
Lowndes	63.6%	64.7%	+ 1.1%	+ 1.7%
Total	**68.9%**	**70.6%**	**+ 1.7%**	**+ 2.5%**

Note:
RED cells indicate a negative change in belt use
GREEN cells indicate a positive change in belt use

The seat belt use increased for all road class types in all of the counties in the sub sample. In *Table 5* comparisons of baseline and follow-up seatbelt use by road category are presented. Notice the largest percentage increase occurred on Rural Local Roads (+17.7%). This usage increase is especially substantial in that a large number of fatalities occur on rural local roads. The other five types of roads did experience positive changes in seat belt usage. However none of the five increased as much as Rural Local Roads and none had over a 10% increase.

Table 5: Pre- and Post-Intervention Seat Belt Usage by Type of Road

Type of Road	Belt Use Before Intervention (%)	Belt Use After Intervention (%)	Percent Change (%)	Percent Increase or Decrease (%)
Rural Interstates	73.5%	79.0%	+ 5.4%	+ 7.4%
Rural Major and Collector Roads	63.4%	67.4%	+ 4.0%	+ 6.3%
Rural Local Roads	52.4%	61.7%	+ 9.3%	+ 17.7%
Urban Interstates and Expressways	74.1%	75.6%	+ 1.4%	+ 1.9%
Urban Major Roads and Collector Roads	63.1%	67.3%	+ 4.2%	+ 6.7%
Urban Local Roads	60.5%	61.1%	+ 0.6%	+ 0.9%
Total	**68.9%**	**70.6%**	**+ 1.7%**	**+ 2.5%**

For an additional accuracy check of the survey results, un-weighted belt usage rates were analyzed. The last three columns in *Table 6* demonstrate the precision that can be attained using mini survey results. The follow-up mini survey locations, follow-up non-mini locations and the overall sample had 71.0%, 73.2%, and 72.8% un-weighted belt usage rates, respectively. The closeness of these values seems to indicate the use of mini surveys is a very good approximation to the overall sample.

Table 6: Un-weighted Seat Belt Usage Counts and Rates for Mini and Non-Mini Observations in the Baseline and Follow-up Surveys

	Baseline Mini Sites N = 64	**Follow-up Mini Sites N = 64**	**Follow-up Non-Mini Sites N = 345**	**Combined Mini and Non-Mini Sites N = 409**
Using Seat Belts	15,253	15,234	70,367	85,601
Percent Using Seat Belts	67.7%	71.0%	73.2%	72.8%
Not Using Seat Belts	7,287	6,230	25,708	31,938
Percent Not Using Seat Belts	32.3%	29.0%	26.8%	27.2%
Total	**22,540**	**21,464**	**96,075**	**117,539**

SECTION II:
MINI SEAT BELT SURVEY COMPARISONS – PICKUP TRUCKS

In 2007, the State of Mississippi did not continue the "Buckle Up in Your Truck" media campaign that has accompanied the "Click It or Ticket" effort for the past couple of years. However, as implied by the title, this seat belt encouragement thrust focused on drivers and passengers in pickup trucks in Mississippi. Given the campaign's emphasis on trucks in previous years and to be annually consistent in reporting statistics, this section of the report analyzes some before and after intervention statistics pertaining only to pickup trucks. The sample population for this analysis remains the 64 site locations in the 8 Mississippi counties identical to those described in Section I.

Table 7 illustrates pickup truck belt use by county. All of the eight counties except Hinds County increased their belt usage rate after the intervention phase of the campaign. Two of the counties were above the 10% positive change mark; the other six were not. Harrison and Lamar counties show an impressive 19.3% and 24.7% increase in belt use respectively. On the other hand, Hinds County showed a disappointing decrease in belt use among pick-up truck occupants. Hinds had a decrease of 12.5% from baseline to follow-up but was still had a larger usage rate than Lauderdale and Bolivar counties. Lauderdale was the lowest usage rate county after intervention at 54.1%.

Table 7: Pre- and Post-Intervention Seat Belt Usage for Pickup Trucks by County

County	Pickup Truck Belt Use: Before Intervention (%)	Pickup Truck Belt Use: After Intervention (%)	Percent Change (%)	Percent Increase or Decrease (%)
Bolivar	55.9%	56.9%	+ 1.0%	+ 1.8%
Desoto	66.5%	69.7%	+ 3.2%	+ 4.7%
Harrison	56.9%	67.9%	+ 11.0%	+ 19.3%
Hinds	68.2%	59.7%	- 8.5%	- 12.5 %
Lamar	63.4%	79.1%	+ 15.7%	+ 24.7%
Lauderdale	52.1%	54.1%	+ 2.1%	+ 4.0%
Lee	57.1%	60.7%	+ 3.6%	+ 6.4%
Lowndes	60.3%	61.9%	+ 1.5%	+ 2.6%
Total	**61.7%**	**64.4%**	**+ 2.8%**	**+ 4.5%**

Note:
RED cells indicate a negative change in belt use
GREEN cells indicate a positive change in belt use

Analysis of pickup truck belt use by type of road is shown in *Table 8*. With the exception of Rural and Urban Interstates, all road segment types show positive change in pickup truck belt usage. However, as expected, Rural and Urban Interstates have the highest post-campaign usage rates at 75.9% and 71.6% respectively. The story that seems to dominate this table is the hefty jump in belt use on Rural Local Roads. This statistic leaped from an awful 49.8% usage rate before intervention to a more respectable 60.2% after media and enforcement. These low rates on the local roads have consistently been a frustration from a highway safety perspective, and it seems more attention should be focused on trucks on these types of roads.

Table 8: Pre and Post Intervention Seat Belt Usage for Pickup Trucks by Type of Road

Type of Road	Pickup Truck Belt Use Before Intervention (%)	Pickup Truck Belt Use After Intervention (%)	Percent Change (%)	Percent Increase or Decrease (%)
Rural Interstates	76.0%	75.9%	- 0.1 %	- 0.1 %
Rural Major and Collector Roads	60.2%	62.2%	+ 2.0%	+ 3.3%
Rural Local Roads	49.8%	60.2%	+ 10.4%	+ 20.9%
Urban Interstates and Expressways	71.6%	71.6%	0.0%	0.0 %
Urban Major Roads and Collector Roads	58.4%	64.1%	+ 5.7%	+ 9.7%
Urban Local Roads	53.3%	58.7%	+ 5.3%	+ 10.0%
Total	**61.7%**	**64.4%**	**+ 2.8%**	**+ 4.5%**

SECTION III:
COMPLETE OBSERVATIONAL SEAT BELT SURVEY RESULTS

This Section provides a results summary of the complete 2007 Mississippi Seat Belt / Motorcycle Helmet Survey of 409 sites in 16 Mississippi counties. This survey was conducted after project implementation between the dates of Tuesday June 5, 2007 and Thursday July 5, 2007.

The methodology used for the survey was previously described in this report (pages 2 and 3). A more robust survey than the mini-surveys, there were 409 sites observed rather than 64 with the sites being located in 16 Mississippi Counties rather than 8. In addition to sites used in the sub sample (Bolivar, Desoto, Harrison, Hinds, Lamar, Lauderdale, Lee and Lowndes - Red Counties), the full survey includes sites in eight other counties (Leflore, Jackson, Madison, Rankin, Scott, Simpson, Warren and Yazoo - Blue Counties). See *Figure 2*.

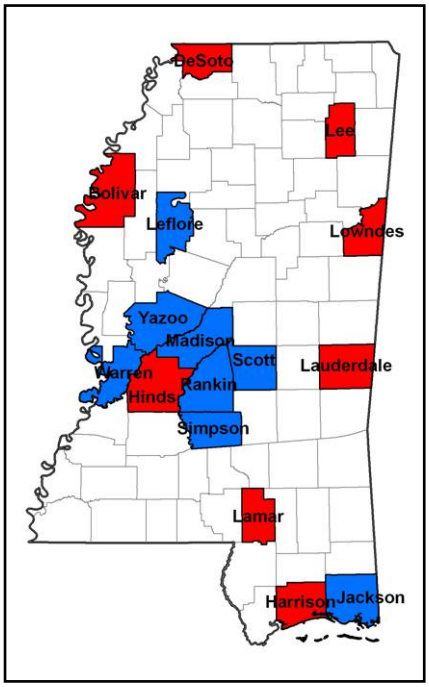


Figure 2: All Surveyed Counties

The percentage of road classes counted was very similar to those counted in the sub sample with two exceptions. There was a lower percentage of rural interstates in the sub sample than in the complete survey and a higher percentage of urban interstate sites in the sub sample. If rural and urban interstate sites are combined the percentage of sites counted in the sub sample with the overall sample are almost identical. Refer back to Table 1.

It appears the primary seat belt law has had a significantly positive impact in Mississippi since May of 2006. Mississippi experienced a significant positive jump in overall seat belt usage rate from the previous year (2005). However, in 2007 the survey results showed little change in seat belt usage from 2006. The 2006 seat belt usage rate for Mississippi was **73.6% ± 2.4%**. This figure was up **12.8%** from the 2005 usage rate of **60.80% ± 3.43%**. In contrast, the 2007 seat belt usage rate was **71.8% ± 2.9%**. This represents an apparent decrease in belt use among Mississippians from 2006, but statistically that is not the case. To better illustrate this point, observe the overlap in confidence intervals for years 2006 and 2007 below in *Figure 3*.

This graph also illustrates a gradual increase in belt usage rates from 1994 to 1998 and a slight dip the next two years (1999 and 2000). However, since the *Click It or Ticket* campaigns began in 2001, we have witnessed usage rates in the low 60 percentile range with very minimal change in belt usage from 2001 to 2005. Beginning with 2006 the usage rate breaks the 70% usage rate line with confidence and continues on to the year 2007. The upper and lower bounds of the 95% confidence intervals are shown to better represent the usage rate for each year.

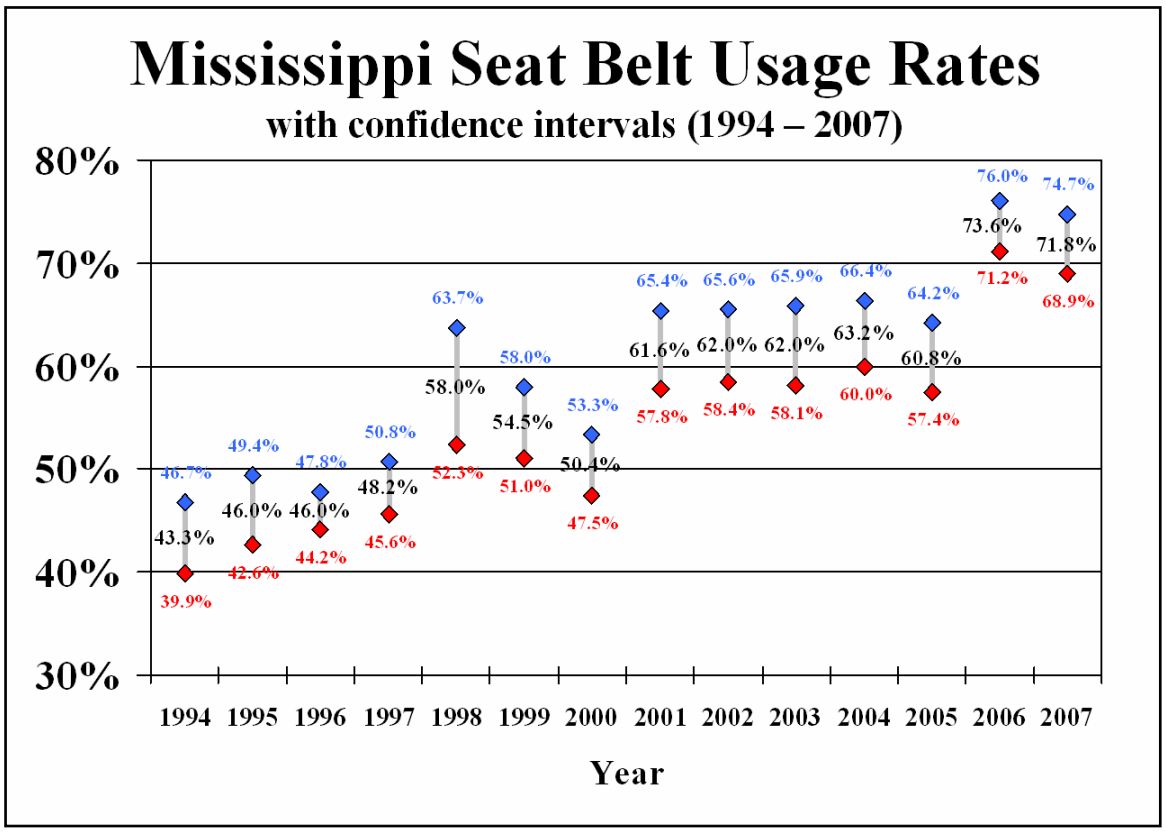


Figure 3: Fourteen years of seat belt survey results including 95% confidence intervals

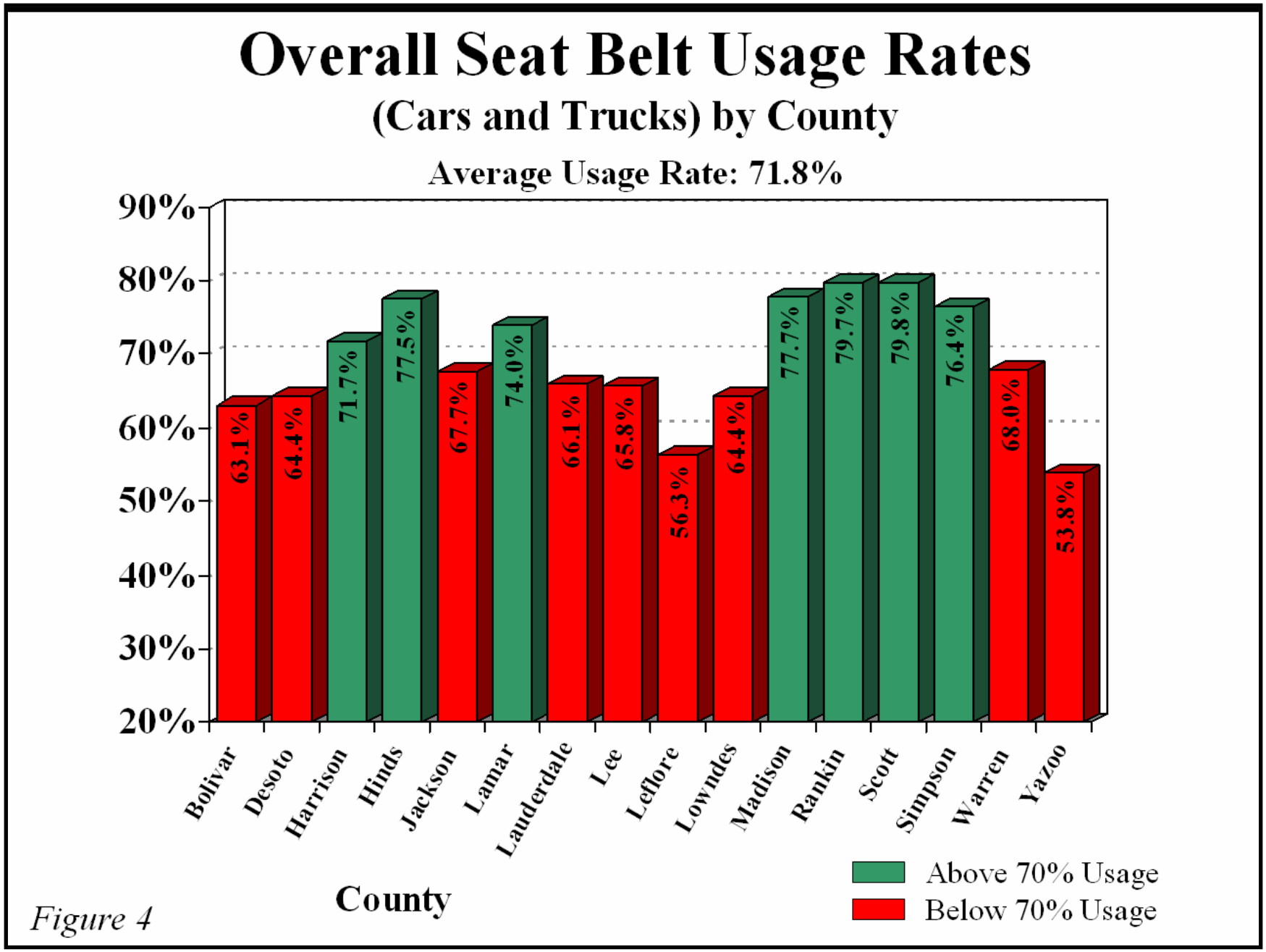
As can be observed in *Table 9*, there is considerable disparity of seatbelt use in the surveyed counties. Column 1 shows usage rates range from 79.7% in Rankin County to only 53.8% in Yazoo County. Also presented in column 2 of *Table 9* is a comparison of seatbelt usage in the 8 sub sample counties compared to seatbelt use in the same counties gathered in the complete survey. In most cases the sub sample rates are very representative of the overall counts for each respective county.

Table 9: Seat Belt Usage by County

County	Belt Use – All Sites (%) N = 409	Belt Use – Mini Sites (%) N = 64
Bolivar	63.1%	63.2%
Desoto	64.4%	68.5%
Harrison	71.7%	72.7%
Hinds	77.5%	72.1%
Jackson	67.7%	n/a
Lamar	74.0%	76.6%
Lauderdale	66.1%	60.7%
Lee	65.8%	64.8%
Leflore	56.3%	n/a
Lowndes	64.4%	64.7%
Madison	77.7%	n/a
Rankin	79.7%	n/a
Scott	79.8%	n/a
Simpson	76.4%	n/a
Warren	68.0%	n/a
Yazoo	53.8%	n/a
Total	**71.8** %	**70.6** %

Note:
RED cells indicate below average belt use
GREEN cells indicate above average belt use

The following three pages presents information by county on overall seat belt use, passenger car belt use, and pickup truck belt use. *Figure 4* graphically represents the information in column 1 above. *Figures 5* and *Figure 6* illustrate belt usage rates by county for passenger cars and pickup trucks separately. Note the counties highlighted in red are counties which have a count below a 70% usage rate.


Overall Seat Belt Usage Rates
(Cars and Trucks) by County
Average Usage Rate: 71.8%
90%
80%
70%
60%
50%
40%
30%
20%
63.1%
64.4%
71.7%
77.5%
67.7%
74.0%
66.1%
65.8%
56.3%
64.4%
77.7%
79.7%
79.8%
76.4%
68.0%
53.8%
Bolivar
Desoto
Harrison
Hinds
Jackson
Lamar
Lauderdale
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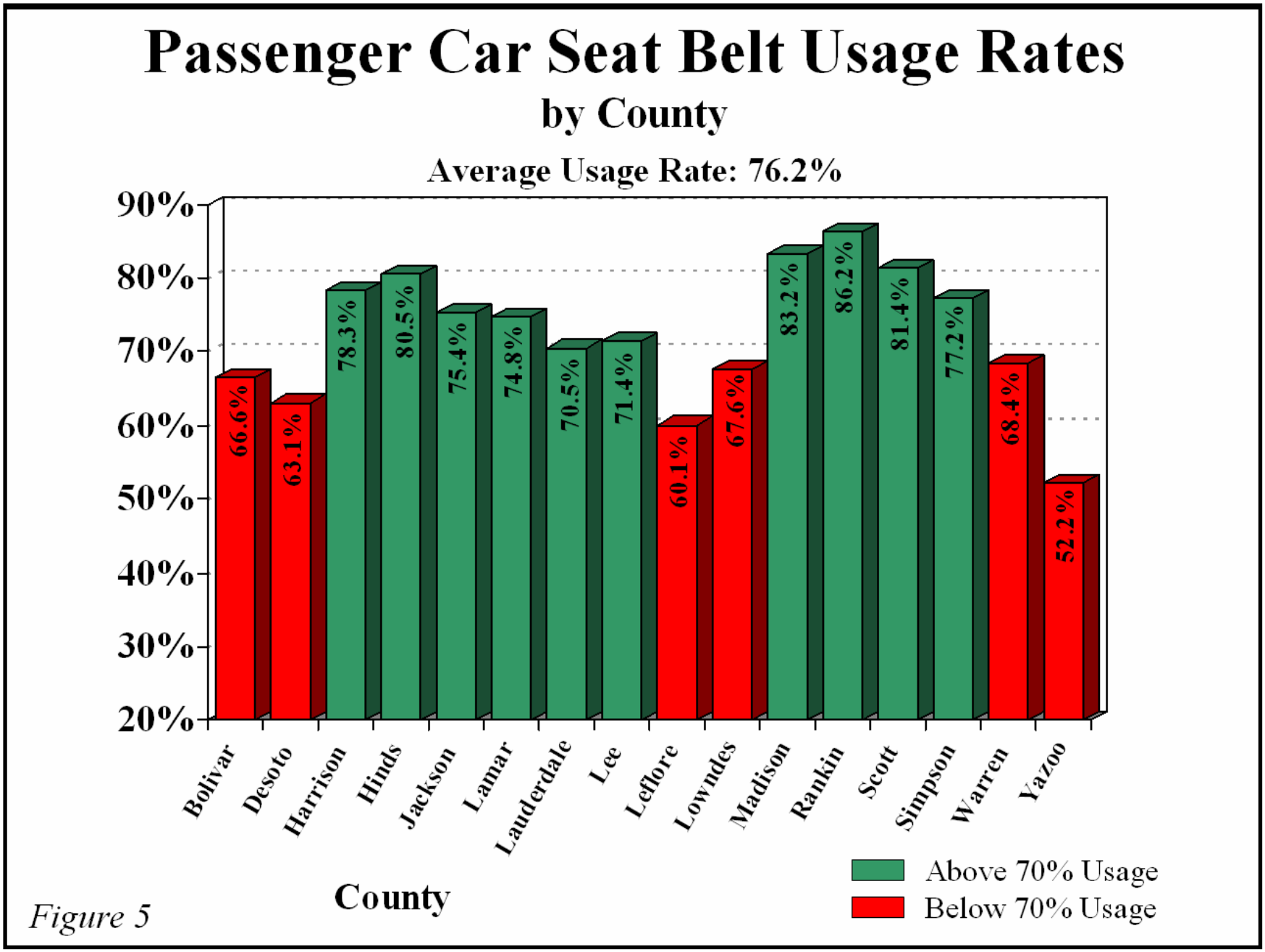
Simpson
Warren
Yazoo
County
Above 70% Usage
Below 70% Usage

Figure 4


Passenger Car Seat Belt Usage Rates
by County
Average Usage Rate: 76.2%
90%
80%
70%
60%
50%
40%
30%
20%
66.6%
63.1%
78.3%
80.5%
75.4%
74.8%
70.5%
71.4%
60.1%
67.6%
83.2%
86.2%
81.4%
77.2%
68.4%
52.2%
Bolivar
Desoto
Harrison
Hinds
Jackson
Lamar
Lauderdale
Lee
Leflore
Lowndes
Madison
Rankin
Scott
Simpson
Warren
Yazoo
County
Above 70% Usage
Below 70% Usage
Figure 5

Truck Seat Belt Usage Rates

by County

Average Usage Rate: 65.9%

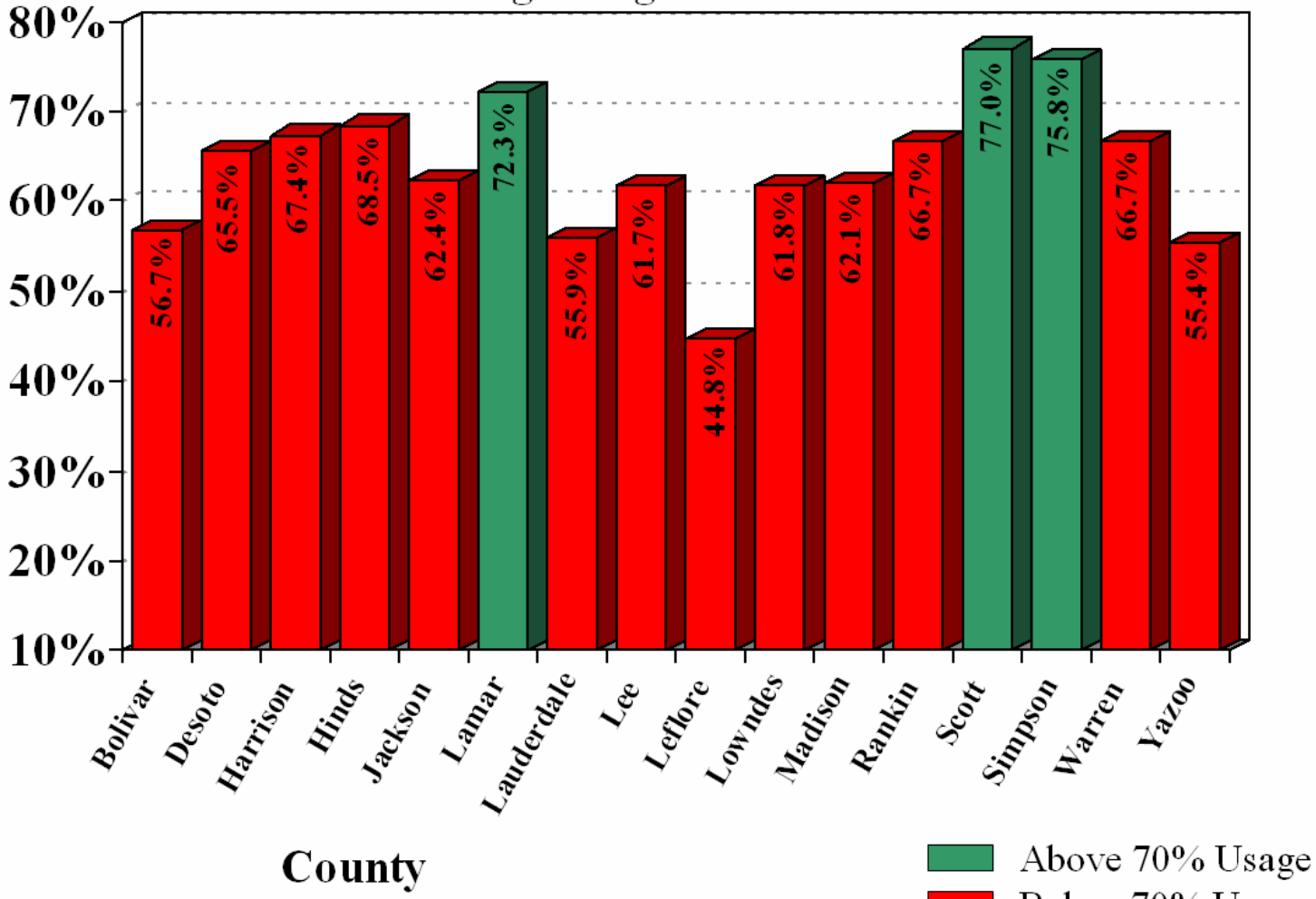


Figure 6

Presented in *Table 10* is a breakdown of seat belt usage rates by type of road. It can clearly be seen that drivers and passengers in motor vehicles are more likely to utilize their restraints on rural interstates (80.6%) than any other type of road. Urban interstate traffic also shows strong use of belt use (78.5%). Rural and urban local roads continue to lag behind in usage rate; however, the rates on these local roads in 2007 are almost equivalent to the overall seatbelt use for the state in 2005. Therefore, it is another indication of Mississippi's move in the right direction concerning seat belt use.

Table 10: Seat Belt Usage by Type of Road

Type of Road	Seat Belt Use (%)
Rural Interstates	80.6%
Rural Major and Collector Roads	68.2%
Rural Local Roads	60.6%
Urban Interstates and Expressways	78.5%
Urban Major Roads and Collector Roads	67.7%
Urban Local Roads	62.5%
Total	**71.8 %**

A summary of ***total seat belt use for 2007 in Mississippi*** is presented in *Table 11* below. Seat belt usage rates among occupants in pickup trucks (65.9%) continue to lag behind the use of seat belts in passenger cars (76.2%). Overall, 2007 was a second consecutive year of victory for seat belt use in Mississippi. The state's official result was a usage rate of 71.8% ± 2.9%.

Table 11: Seat Belt Usage by Type of Vehicle

Type of Vehicle	Weighted Belt Use (%)	Bound (%)
Car	76.2%	3.6%
Pickup Truck	65.9 %	2.0%
Total	**71.8 %**	**2.9 %**

SECTION IV:
MOTORCYCLE HELMET USE

The final segment to be discussed concerns the motorcycle helmet use in Mississippi. As a part of the Seat Belt Survey, motorcycle helmets are also counted. Mississippi is fortunate to have an excellent Motorcycle Helmet law. Mississippi has a primary law in regards to motorcycle helmet use. All motorcycle riders must wear helmets or receive a ticket.

Whereas motorcycle helmet use has shown a sharp decline in use in the U.S., Mississippi has maintained a consistently high percentage of use. A number of studies (Arkansas, Texas to name two) have consistently and very strongly, shown that helmet use is directly correlated with having a primary law. It is hoped that the legislature will continue to resist efforts to roll back the primary law.

Motorcycle helmet use in 2007 in Mississippi was is 99.1% ± 1.9%

Table 12 provides a summary on the 2007 Motorcycle Helmet Survey in Mississippi. There was no attempt in the survey to judge whether the helmet was legal or illegal.

Table 12: Mississippi 2007 Un-weighted Motorcycle Helmet Usage

	Counts	**Percentage (%)**
Using Helmet	567	99.1 %
Not Using Helmet	7	0.9 %
Total	**574**	**100 %**

SUMMARY

For the past seven years, intense media and enforcement campaigns have been directed towards Mississippians with the intent of increasing seat belt use. The newest of these, "Buckle Up in Your Truck," has accompanied "Click It or Ticket" and other seatbelt awareness campaigns for the past few years. The effectiveness of these efforts was evaluated by several types of surveys managed by the Social Science Research Center at Mississippi State University.

The 2007 mini survey of 64 observation locations in 8 Mississippi counties was conducted as baseline information. These data – observations from eight sites in each of the eight counties – were collected from mid to late April, 2007. The complete 2007 Mississippi observational seat belt survey of 409 sites in 16 Mississippi counties was conducted after project implementation during the month of June.

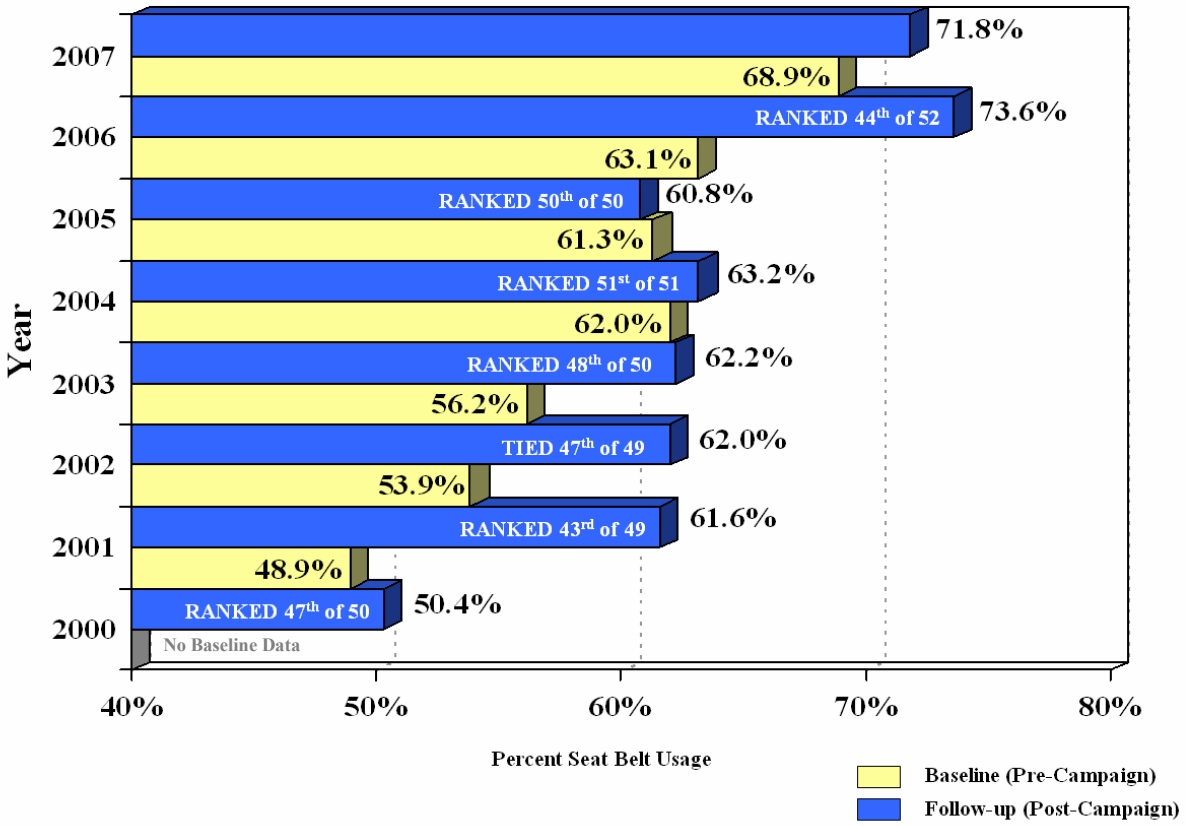
There was no media efforts concentrated on pickup trucks this year, and perhaps as a result there was only a 4.1% increase in belt use among pickup truck occupants. The baseline figure for trucks was 61.8% and the follow-up was 65.9%. Belt use rates for pickup trucks increased for seven of eight surveyed counties and for four of six road classes surveyed before and after intervention.

Overall, the baseline information indicated a 68.9% belt use rate, and when compared to the 71.8% count in the post campaign survey, Mississippi showed a percent change in belt usage of only 2.9%. Perhaps this indicates the seat belt media and enforcement campaign did seem to have a positive, but minimal, impact on the increase of belt usage among vehicle occupants. However, this small increase is overshadowed by the retention of belt use from 2006 to 2007. The primary seat belt law has seemed to engrave itself into the behaviors and attitudes of a greater percentage of Mississippians. This retention of belt use has undoubtedly saved lives. Nevertheless, the state must continue to strive forward in the challenge to raise seat belt usage rates up to the national average of 81%.

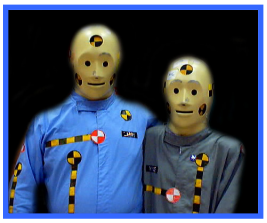
Finally, as is evident by the survey numbers, Mississippi has an excellent usage rate for motorcycle helmets. For a number of years, the helmet use rate has been over 99%.

Mississippi Seat Belt Usage Rates (2000 – 2007)

and Rankings Among Reporting States (includes DC and Puerto Rico)



Source:2007 NHTSA Traffic Safety Facts: Crash/Stats DOT HS 810 690



Please Buckle Up

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