

# 2013 Utah Seatbelt Use survey

Since 1986, the Utah Department of Public Safety's Highway Safety Office has conducted an annual seatbelt observational study to determine the percentage of motorists who buckle up. This study has been the cornerstone for developing, implementing and evaluating occupant protection programs in the state. The first study revealed that only 18% of Utah motorists use seatbelts. For nearly three decades, safety advocates have worked to increase the use of this life-saving device by implementing a multi-faceted and comprehensive program. As a result, seatbelt use has climbed and lives have been saved.

## Executive Summary & Results

The National Highway Traffic Safety Administration (NHTSA) requires observational surveys to be completed annually in each state to determine the level of seatbelt use. The 17 counties chosen for the Utah observations were: Box Elder, Cache, Carbon, Davis, Grand, Iron, Millard, Salt Lake, San Juan, Sanpete, Sevier, Summit, Tooele, Uintah, Utah, Washington, and Weber.

A total of 26,123 vehicle occupants, including 20,033 drivers and 6,090 outboard passengers, were observed. Forty-three percent (43%) of the observed vehicles were cars, 23% sport utility vehicles (SUV), 26% trucks, and 8% were vans.

The seatbelt use rate among motor vehicle occupants was **82.4% in 2013**, which demonstrates an increase of 0.5% from the 2012 rate of 81.9%. Usage rates by type of vehicle were also analyzed (Table 1). Eighty-five (85.1%) percent of the front seat outboard car occupants were belted, 86.1% of SUVs, 86.7% of vans, and 71.3% of truck occupants were using seatbelts. Table 1

shows that seatbelt use among pickup truck occupants is lowest among all vehicle types.

The study found that female occupants buckled up more often than their male counterparts. The seatbelt usage rate among females was found to be 86.7% and the rate among males was 78.9%. Table 3 provides usage data by gender for each county studied.

The "urban" counties of Cache, Davis, Salt Lake, Utah, Washington, and Weber were analyzed separately from the rural counties. The seatbelt usage rate for urban counties was 85.6% and 70.0% for rural counties. Table 2 shows that usage was higher for urban counties but the difference is most dramatic for urban/rural truck occupants.

According to federal guidelines, the reliability of the survey results should be within the 95 percent confidence interval. The standard error was determined to be 0.0081, well within a standard error of 2.5 percentage points as required by NHTSA guidelines.

**Table 1: Seatbelt Use by Vehicle Type in Utah, 2012-2013**

|                     | 2013         | 2012         |
|---------------------|--------------|--------------|
| <b>All Vehicles</b> | <b>82.4%</b> | <b>81.9%</b> |
| <b>SUVs</b>         | <b>86.1%</b> | <b>87.0%</b> |
| <b>Vans</b>         | <b>86.7%</b> | <b>86.4%</b> |
| <b>Cars</b>         | <b>85.1%</b> | <b>84.6%</b> |
| <b>Trucks</b>       | <b>71.3%</b> | <b>69.3%</b> |

**Table 2: Occupant Restraint Use (%) by Urban/Rural in Utah, 2013**

|                         | Urban        | Rural        |
|-------------------------|--------------|--------------|
| <b>All Occupants</b>    | <b>85.6%</b> | <b>70.0%</b> |
| <b>Male Occupants</b>   | <b>81.9%</b> | <b>66.0%</b> |
| <b>Female Occupants</b> | <b>90.1%</b> | <b>74.6%</b> |
| <b>SUVs</b>             | <b>88.8%</b> | <b>74.8%</b> |
| <b>Vans</b>             | <b>89.8%</b> | <b>73.9%</b> |
| <b>Cars</b>             | <b>87.2%</b> | <b>74.8%</b> |
| <b>Trucks</b>           | <b>75.8%</b> | <b>59.1%</b> |

**Utah's  
Seatbelt Use  
Rate in 2013  
was 82.4%**

## BACKGROUND

In April 2011, NHTSA issued new Uniform Criteria for State Observational Surveys of Seatbelt Use. Utah's new survey design was accepted as fully compliant with the Uniform Criteria and was used for the implementation of the state's 2012 and 2013 seatbelt surveys. The most dramatic change in the survey design was the inclusion of 11 rural counties in the study. Prior to 2012, the study only surveyed the six most urban counties in the state. Due to the changes in methodology, the results should not be compared to previous statewide seatbelt use surveys and marks a new benchmark for the state.

# Regional Differences & Conclusions

Survey results reflect restraint use by the driver and front seat outboard passenger in a probability sample of vehicles drawn from the counties with the greatest motor vehicle fatality rates in Utah. The seatbelt usage rates for occupants are very different from county to county.

Table 3 presents the seatbelt usage rates by county and by gender within each county. The table shows Summit county had the highest usage rate and the rural counties of Millard, San Juan, and Carbon counties had the lowest. In addition, female occupants had a significantly higher usage rate than male occupants in every county surveyed.

## Conclusions:

The survey methodology for observing seatbelt use changed in 2012 for the entire U.S. and territories. The sampling methodology and statistical analyses used in this survey

yielded results well within the parameters required by the Utah Highway Safety Office and the National Highway Traffic Safety Administration. However, due to the substantial changes in survey design, the results should not be compared with statewide survey results from previous years.

Van occupants, females, and Urban residents had the highest seatbelt usage rates in 2013. While truck occupants, males, and rural residents had the lowest usage rates. The theoretical profile for the individual most likely to be wearing a seatbelt in Utah in June 2013, would be a female passenger riding in a van while in Summit County. The lowest seatbelt usage profile would be a male driving a truck in Carbon County.

Enforcement and educational campaigns directed toward rural residents and truck occupants will be included in the state's plan to increase seatbelt use.

**Table 3: Seatbelt Use by County and Gender in Utah, 2013**

| County       | % Belted     | % Male Belted | % Female Belted |
|--------------|--------------|---------------|-----------------|
| Box Elder    | 78.9         | 79.1          | 78.7            |
| Cache        | 71.7         | 66.9          | 76.6            |
| Carbon       | 52.5         | 48.2          | 57.8            |
| Davis        | 86.0         | 84.1          | 87.9            |
| Grand        | 78.1         | 72.7          | 85.5            |
| Iron         | 73.5         | 68.0          | 79.3            |
| Millard      | 61.6         | 59.9          | 63.5            |
| Salt Lake    | 88.7         | 85.0          | 93.2            |
| San Juan     | 55.0         | 51.2          | 59.8            |
| Sanpete      | 69.6         | 59.6          | 80.1            |
| Sevier       | 75.7         | 69.1          | 83.8            |
| Summit       | 94.3         | 94.2          | 94.0            |
| Tooele       | 69.1         | 64.4          | 73.7            |
| Uintah       | 63.0         | 56.5          | 72.3            |
| Utah         | 85.8         | 80.5          | 93.2            |
| Washington   | 75.6         | 72.1          | 80.2            |
| Weber        | 83.0         | 80.9          | 86.1            |
| <b>Total</b> | <b>82.4%</b> | <b>78.9%</b>  | <b>86.7%</b>    |

## SURVEY DESIGN AND METHODOLOGY

According to the survey criteria, each state must study seatbelt use within a geographic area that accounts for at least 85 percent of the passenger vehicle crash-related fatalities according to the Fatality Analysis Reporting System (FARS) data averages for the period of 2008 to 2010. Of Utah's 29 counties, 17 were selected to be included in this study. Road segments were randomly selected using a combination of the Utah Department of Transportation roadway file and the 2010 TIGER data developed by the U.S. Census Bureau. In addition, all passenger vehicles with a gross vehicle weight up to 10,000 pounds were included in the survey. A total of 170 sites were selected for the study, which took place for a two-week period in June 2013. In each of the 17 counties, 10 sites were surveyed by trained observers who documented belt use and gender among the driver and outboard front seat passenger for a period of 45 minutes at each location.



Everyone. Every Time.

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