

2018 Utah Seat Belt Use survey

Since 1986, the Utah Department of Public Safety's Highway Safety Office has conducted an annual seat belt 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 seat belts. For over 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, seat belt use has climbed and lives have been saved.

EXECUTIVE SUMMARY & RESULTS

The National Highway Traffic Safety Administration (NHTSA) requires state's to conduct observational surveys annually to determine the level of seat belt use. The 17 counties selected for observation in Utah were: Box Elder, Cache, Carbon, Davis, Grand, Iron, Millard, Salt Lake, San Juan, Sanpete, Sevier, Summit, Tooele, Uintah, Utah, Washington, and Weber.

The study was conducted June 4-16 during which a total of 36,780 vehicle occupants, including 28,594 drivers and 8,186 outboard passengers, were observed. Thirty-five percent (35%) of the observed vehicles were cars, 31% sport utility vehicles (SUV), 26% pickup trucks, and 8% were vans.

The seat belt use rate among motor vehicle occupants was **89% in 2018**, which demonstrates an increase of 0.2 percentage points from the 2017 rate of 88.8%. Since the implementation of the primary seat belt law in May 2015, Utah's seat belt use has increased 6.7%.

Usage rates by type of vehicle were analyzed. Ninety (90%) of car occupants were belted, 92% for SUVs, 93% for vans, and 82% of truck occupants were using seat belts. Truck occupants had the lowest seat

belt usage rate at 82%, while vans had the highest usage rate at 93%. Data showed that drivers buckle up less often than passengers. Seat belt use for drivers was 88.5% and 91.3% for outboard passengers.

Urban counties (Cache, Davis, Salt Lake, Utah, Washington, and Weber) were analyzed separately from rural. The seat belt usage rate for urban areas was 90%, while rural counties rate was 88% (up from 82% last year). Table 2 shows that use rates were higher in urban counties in all categories.

The study found that female occupants buckled up more often (91.8%) than their male counterparts (86.7%) and this is true for both urban and rural areas. In urban counties, the use rate among females was found to be 92.5%, whereas the rate among males was 87.2%. In rural counties 90.2% of females were using seat belts but only 85.4% of males buckled up (Table 2).

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 0.45%, well within a standard error of 2.5 percent as required by NHTSA guidelines.

Table 1: Seat Belt Use (%) by Vehicle Type in Utah, 2016-2018

	2018	2017	2016
All Vehicles	89.0	88.8	87.9
SUVs	91.6	90.9	92.4
Vans	93.4	93.4	90.4
Cars	90.3	90.4	90.2
Trucks	81.6	81.5	76.6

Table 2: Seat Belt Use (%) by Urban/Rural in Utah, 2018

	Urban	Rural
All Occupants	89.6	87.6
Male Occupants	87.2	85.4
Female Occupants	92.5	90.2
SUVs	91.8	91.1
Vans	94.0	91.9
Cars	90.7	89.2
Trucks	82.2	80.6

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 seat belt surveys beginning in 2012. 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 seat belt use surveys and marks a new benchmark for the state.

**Utah's
Seat Belt Use Rate
in 2018 was 89%**

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 seat belt usage rates for occupants are very different from county to county, especially when comparing urban and rural areas of the state.

Table 3 presents the seat belt usage rates by county and gender for 2018. San Juan had a huge increase, while Millard, Sevier, and Tooele had good increases as well. Box Elder and Davis counties had the highest usage rates. San Juan had an “outlier” year in 2018 with a new surveyor. Seat belt use among females exceeded that of males in all counties, except Millard. The greatest increase for males was seen in San Juan County, while the greatest disparity between genders was seen in Sanpete and Uintah counties (10.2 and 8.8% point respectively).

CONCLUSIONS

A significant change took place on May 12, 2015 with the implementation of a primary seat belt law in Utah. The observed usage rates increased 6.7% from 2015 to 2018. With the other variables being equal from year to year, the logical conclusion would be that the implementation of Utah’s primary seat belt law was responsible for the significant increase in seat belt usage in 2015—2018.

It is very cost effective for large companies and government agencies who pay for employee benefits to require seat belt use on the job. Any driver or passenger not wearing their seat belt is in violation of Utah law. Some notable increases in seat belt use were seen in rural counties, which increased 5% overall. Some of the greatest increases were in Box Elder, Millard, Sevier, and Tooele counties. Uintah had the lowest usage rate and Box Elder had the highest.

Table 3: Seat Belt Use by County and Gender in 2018, Utah
(including 2017 use rate by county and % point change)

County	2018			2017	
	% Female Belted	% Male Belted	% Total Belted	% Total Belted	% Point Change
Box Elder	96.3	92.6	94.2	90.6	+3.6
Cache	94.9	88.9	92.2	92.0	+0.2
Carbon	91.0	84.6	87.7	85.0	+2.7
Davis	96.0	91.1	93.7	91.3	+2.4
Grand	91.2	86.1	88.2	83.1	+5.1
Iron	81.2	78.4	79.7	76.0	+3.7
Millard	90.6	93.6	92.2	87.1	+5.1
Salt Lake	92.1	86.0	88.8	92.4	-3.6
San Juan	81.4	79.2	80.2	67.6	+12.6
Sanpete	82.4	72.2	77.3	68.1	+9.2
Sevier	86.4	74.9	79.8	74.0	+5.8
Summit	93.5	88.2	90.5	89.6	+0.9
Tooele	94.4	93.9	90.6	81.2	+9.4
Uintah	78.2	69.4	73.1	71.1	+2.0
Utah	91.5	91.9	88.6	89.9	-1.3
Washington	85.9	87.3	84.9	83.2	+1.7
Weber	95.3	90.0	92.3	92.1	+0.2
Total	91.8	86.7	89.0	88.8	+0.2

SURVEY DESIGN AND METHODOLOGY

According to survey criteria, each state must study seat belt 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 by functional classification (Interstate/Primary, Arterial/Secondary, and Local) 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. 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 2018. 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.



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 This document was prepared on 09/14/2018
 For a copy of the complete survey design and methodology contact the Highway Safety Office

