

2017 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.

**Utah's
Seat Belt Use
Rate in 2017
was 88.8%**

BACKGROUND

The survey methodology for observing seat belt use changed* in 2012 for the entire U.S. and territories. According to the new methodology, the sample sites, days of the week, and times of day could remain the same for five years. This consistent sampling will yield very comparable results from year to year. In 2016, Utah had to re-select sample sites within the same 17 counties. The days of the week and start times stayed the same to reduce the influence of variables.

*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.

Executive Summary & Results

The National Highway Traffic Safety Administration (NHTSA) requires states 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 5-17 during which a total of 31,724 vehicle occupants, including 24,526 drivers and 7,198 outboard passengers, were observed. Thirty-six percent (36%) of the observed vehicles were cars, 31% sport utility vehicles (SUV), 26% trucks, and 7% were vans.

The seat belt use rate among motor vehicle occupants was 88.8% in 2017, which demonstrates an increase of 0.9% from the 2016 rate of 87.9%. Since the implementation of the primary seat belt law in May 2015, Utah's seat belt use has increased 5.6%.

Seat belt usage varied by the type vehicle (Table 1) and type of roadway. More people used seat belts while traveling on highways (91%) when compared to arterial roadways (87.6%) and local roads (84.1%).

**Table 1: Seat Belt Use (%)
by Vehicle Type in Utah, 2013-2017**

	2017	2016	2015	2014	2013
All Vehicles	88.8	87.9	87.2	83.4	82.4
SUVs	90.9	92.4	90.6	87.8	86.1
Vans	93.4	90.4	90.7	88.1	86.7
Cars	90.4	90.2	89.3	85.7	85.1
Trucks	81.5	76.6	78.1	71.9	71.3

The 2017 data showed that 88.8 percent of the drivers and 88.9 percent of the outboard passengers were wearing seat belts.

Urban counties (Cache, Davis, Salt Lake, Utah, Washington, and Weber) were analyzed separately from rural. The seat belt usage rate for urban areas was 91.0% compared to 82.7% for rural counties. Table 2 shows that use rates were higher in urban counties in all categories.

The study found that overall, female occupants buckled up more often (91.6%) than their male counterparts (84.8%) and this is true for both urban and rural* areas. In urban counties, the use rate among females was found to be 93.4%, whereas the rate among males increased to 89.0%. In rural counties 85.5% of females were using seat belts while 80.4% of males buckled up (Table 2).

*See Regional Differences on next page for exceptions to this.

According to federal guidelines, the reliability of the survey results should be within the 95% confidence interval. The standard error was determined to be 0.005 or .5%. The data analyzed were found to be well within a standard error of 2.5% (0.025) as required by NHTSA guidelines.

**Table 2: Seat Belt Use (%)
by Urban/Rural in Utah, 2017**

	Urban	Rural
All Occupants	91.0	82.7
Female Occupants	93.4	85.5
Male Occupants	89.0	80.4
Cars	91.8	85.3
SUVs	92.5	86.9
Trucks	85.8	73.0
Vans	94.5	90.2

REGIONAL DIFFERENCES

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 2017. The table shows Salt Lake, Weber and Cache counties had the highest usage rate and the rural counties of Sanpete and San Juan had the lowest. The largest increases were seen in Millard, Carbon and Uintah Counties. The counties with the largest decrease were Sevier and Sanpete; Sevier had an “outlier” year in 2016 but their trend line is fairly flat.

While historically more female occupants buckled up than males in every county surveyed, Millard and San Juan counties showed more males buckling up than females. The greatest increase was seen for males in Millard County (26 percentage points), while the greatest disparity between genders was seen in Tooele and Iron counties (14.1 and 13.9% points 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% from 2012 to 2013, 1.2% from 2013-2014, 4.6% from 2014-2015, and 1% from 2016-2017. With the other variables being equal from year to year, the logical conclusion would be that the enactment of Utah’s primary seat belt law was responsible for the significant increase in seat belt usage in 2015 - 2017.

Government officials and business leaders are encouraged to require and enforce seat belt use policies in the workplace. All of the Utah Highway Patrol drivers observed during the study were buckled up. However, several drivers of local and state government vehicles were observed not wearing their seat belt. Any driver not wearing a seat belt is in violation of Utah law.

Some notable increases in seat belt use were seen in the Rural counties of Carbon, Millard, and Uintah. Summit County had the lowest usage rate in the last six years, probably due to the new sample sites.

Van occupants had the highest usage, while SUV and car occupants came in a close second place. Females and urban residents were the leaders for seat belt usage again this year. Drivers and passengers had almost identical usage rates at 88.8% and 88.9% respectively. The theoretical profile for the individual most likely to be wearing a seat belt in Utah in June 2017 would be a female passenger in a Van, on a primary road in Davis County. The lowest seat belt usage profile would be a male driving a truck on rural roads in San Juan County.

Table 3: Seat Belt Use by County and Gender in 2017, Utah (including 2016 use rate by county and % change)

County	2017			2016	
	% Female Belted	% Male Belted	% Total Belted	% Total Belted	% Change
Box Elder	94.2	88.1	90.6	89.4	+1.2
Cache	95.3	88.9	92.0	92.2	-0.2
Carbon	87.9	82.8	85.0	70.5	+14.5
Davis	95.6	86.7	91.3	94.1	-2.8
Grand	85.3	81.4	83.1	82.5	+0.6
Iron	83.3	69.4	76.0	73.8	+2.2
Millard	82.5	91.7	87.1	72.4	+14.7
Salt Lake	94.2	91.2	92.4	90.5	+1.9
San Juan	65.7	69.5	67.6	64.0	+3.6
Sanpete	72.3	64.4	68.1	73.2	-5.1
Sevier	76.1	72.3	74.0	82.7	-8.7
Summit	91.2	88.4	89.6	92.7	-3.1
Tooele	93.9	79.8	86.0	87.5	-1.5
Uintah	78.5	65.6	71.1	63.5	+7.6
Utah	91.9	88.1	89.9	89.5	+0.4
Washington	87.3	79.3	83.2	82.3	+0.9
Weber	93.7	90.9	92.1	92.8	-0.7
Total	91.3	86.8	88.8	87.9	+0.9

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 2017. 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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For a copy of the complete survey design and methodology contact the Highway Safety Office

