

2019 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 3-15 during which a total of 37,882 vehicle occupants, including 29,091 drivers and 8,791 outboard passengers, were observed. Thirty-three percent (33%) of the observed vehicles were cars, 33% sport utility vehicles (SUV), 26% pickup trucks, and 8% were vans.

The seat belt use rate among motor vehicle occupants was **90.2% in 2019**, which demonstrates an increase of 1.2 percentage points from the 2018 rate of 89%. Since the implementation of the primary seat belt law in May 2015, Utah's seat belt use has increased 7.9%.

Usage rates by type of vehicle were analyzed. Ninety-two (92%) of car occupants were belted, 93% for SUVs, 92% for vans, and 83% of truck occupants were using seat belts. Truck occupants had the

lowest seat belt usage rate at 83%, while SUVs had the highest usage rate at 93%. Data showed that drivers buckle up less often than passengers. Seat belt use for drivers was 89.8% and 92.2% 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 91%, while rural counties rate was 89%. Table 2 shows that use rates were higher in urban counties in all categories except for Vans.

The study found that female occupants buckled up more often (93.7%) than their male counterparts (87.4%) and this is true for both urban and rural areas. In urban counties, the use rate among females was found to be 94.4%, whereas the rate among males was 88%. In rural counties 92% of females were using seat belts but only 85.8% 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 0.46%, well within a standard error of 2.5 percent as required by NHTSA guidelines.

Table 1: Seat Belt Use (%) by Vehicle Type in Utah, 2017-2019

	2019	2018	2017
All Vehicles	90.2	89.0	88.8
SUVs	93	91.6	90.9
Vans	92	93.4	93.4
Cars	92	90.3	90.4
Trucks	83	81.6	76.6

Table 2: Seat Belt Use (%) by Urban/Rural in Utah, 2019

	Urban	Rural
All Occupants	91	89
Male Occupants	88	85.8
Female Occupants	94.4	92
SUVs	93.4	89.6
Vans	91.3	94.2
Cars	92.3	89.6
Trucks	84.2	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 2019 was 90.2%

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 2019. Seat belt use among females exceeded that of males in all counties, except Tooele. The greatest increase for females was in Iron County, while the greatest disparity between genders was also seen in Iron, Uintah, and Washington Counties.

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 7.9% from 2015 to 2019. 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 between 2015—2019.

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. Findings from this observational study are used to effectively implement education and enforcement campaigns and efforts to increase seat belt use. Some of the greatest increases were in Carbon, Iron, Uintah, and Washington Counties. San Juan has been increasing 3% each year, with a 12.6% increase in 2018, but in 2019 held at 81.7%. Uintah still had the lowest rate but it increased 5.1% over the last year. Carbon had the highest rate of all the counties, Davis had the second highest.

Table 3: Seat Belt Use by County and Gender in 2019, Utah
(including 2018 use rate by county and % point change)

County	2019			2018	
	% Female Belted	% Male Belted	% Total Belted	% Total Belted	% Point Change
Box Elder	94.4	87.6	90.6	94.2	-3.6
Cache	94.7	88.1	91.6	92.2	-0.6
Carbon	96.5	93.5	94.8	87.7	+7.1
Davis	97.2	90.8	94.2	93.7	+0.5
Grand	90.4	86.3	88.2	88.2	+0
Iron	91.5	78.0	84.1	79.7	+4.4
Millard	94.8	91.6	93.2	92.2	+1.0
Salt Lake	94.0	88.6	90.9	88.8	+2.1
San Juan	83.6	80.1	81.7	80.2	+1.5
Sanpete	87.6	76.5	81.8	77.3	+4.5
Sevier	87.0	77.6	81.7	79.8	+1.9
Summit	95.3	88.0	91.5	90.5	+1.0
Tooele	90.8	92.1	91.5	90.6	+0.9
Uintah	83.3	74.7	78.2	73.1	+5.1
Utah	93.1	85.4	88.8	88.6	+0.2
Washington	94.8	85.5	89.8	84.9	+4.9
Weber	93.1	89.7	91.2	92.3	-1.1
Total	93.7	87.4	90.2	89.0	+1.2

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 2019. 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.



REPORT PREPARED BY:
 Utah Department of Public Safety—Highway Safety Office
 5500 Amelia Earhart Drive, Suite 155, Salt Lake City, Utah 84116
 (801) 366-6040
www.publicsafety.utah.gov/highwaysafety
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 For a copy of the complete survey design and methodology contact the Highway Safety Office

