



2018 High School Restraint Usage



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Spring 2018 Executive Summary

The 2018 High School Survey of Teen Drivers and Front Seat Passengers is designed to evaluate teen restraint usage across the state of California. The 2018 survey was the second year that the current list of schools, from the same counties used in the seat belt survey required by the National Highway Traffic Safety Administration (NHTSA), was used. This new approach allowed for a more efficient collection of teen driver and passenger information, while simultaneously providing representative data for the state of California.

The 2018 High School Survey of Teen Drivers was collected at 102 locations between May and August of 2018. The survey was based upon 28,900 direct, personal observations.

Of the 28,900 observations, 13,068 involved vehicles operated by teen drivers. The other observations came from vehicles operated by older drivers but were still observed to determine whether or not their teen passengers were using restraints, and to determine if there is a differential belt usage rate for passengers in vehicles with a teen driver versus an “adult” driver.



The overall usage rate was 97.78% with a very small standard error (0.3%). These results compare favorably to recent years (94.19% in 2017, 96.37% in 2016, 95.98% in 2015, 95.19% in 2014, and 96.91% in 2013). As a result, we can be 95% confident that the actual seat belt usage rate was between 97.11% and 98.46%.

Further analyses of the results found that restraint usage in pickup trucks increased this year and actually exceed the usage rate in other vehicle types. Usage rates between drivers and passengers did not differ meaningfully. Lastly, usage rates across the state showed little variation with all counties surveyed exceeding 94% and ranging from 94.03% in Contra Costa to 99.90% in Alameda County.

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Usage Rates by Vehicle Type

These results show the restraint usage rates of high school students by the type of vehicle in which they are occupants. From historical data, the teen driver survey has consistently shown that usage rates between autos and SUVs or vans do not differ to a significant degree. As a result, these categories were combined for the 2018 survey. Previous surveys, however, have shown a consistently lower rate of restraint use among the occupants of pickup trucks when compared to other vehicle types.

In 2018, the usage rates in pickup trucks showed a significant increase from the previous year. This resulted in pickup trucks having a slightly higher usage rate than other vehicle types.



The increased restraint usage rates in pickup trucks is a continuation of an ongoing trend. With the increase in 2018, there is not a meaningful difference between trucks and other vehicles.

Combined Data – All Occupants by Vehicle Type

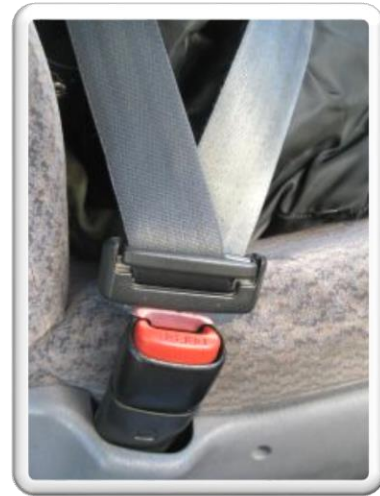
	Auto, SUVs, & Vans	Pickup	All
Usage Rates	97.72	98.51	97.78
Standard Error	.003	0.004	.003
Sample Sizes	18,873	2,111	20,984
95% Confidence Interval	97.03-98.40%	97.62-99.40%	97.11-98.46%

Usage Rates for Drivers

The results presented below represent usage rates for teen drivers only. The 2018 survey found that 97.97% of drivers were restrained.

This is slightly higher than the results from recent years (i.e., 96.57% in 2017, 97.31% in 2016, 96.43% in 2015, and 96.16% from 2014). In addition, this rate is consistent with the usage rate for the general population in the state of California. The 2018 survey represents the sixth survey in a row where the teen usage rates closely mirror the overall usage rates of adults. This reverses a long-standing pattern of teen usage rates significantly lagging the general population.

The 2018 survey found that the usage rate did not differ significantly based upon the type of vehicle being driven.



Driver Only Data – by Vehicle Type

	Auto, SUVs, & Vans	Pickup	All
Usage Rates	97.94	98.39	97.97
Standard Error	.003	0.007	.003
Sample Sizes	8,531	949	9,480
95% Confidence Interval	97.31-98.56%	97.06-99.71%	97.37-98.58%

Usage Rates for Passengers

The results below show the restraint usage rates for the vehicle's front seat passengers. The rates for front seat passengers are estimated in the same way that the combined rates and the driver-only rates are estimated.

The results for passengers are calculated for all teen passengers, but are further analyzed by examining teens with an adult driver versus with a teen driver.

In the two previous years, teen passengers surprisingly showed a lower usage rate when they were with "adult" drivers than with teen drivers. This difference was not found in 2018. Passengers with adult drivers were more likely to be restrained, but this difference was small and would not be considered statistically, or practically meaningful.



Passenger Only Data – by Driver Type

	Adult Driver	Teen Driver	All
Usage Rates	97.75	97.02	97.64
Standard Error	.006	.004	.005
Sample Sizes	7,916	3,588	11,504
95% Confidence Interval	96.78-98.97%	96.31-97.74%	96.69-98.59%

Usage Rates by County

This table shows the combined (drivers and passengers) restraint usage rates in each of the seventeen counties surveyed. These specific counties were selected to provide a representative sampling of California. With the survey resampling in 2017, there are now different counties being sampled than were used in years prior to 2017. This is why some counties in the table below are missing values for specific years.



There does not appear to be a significant geographic pattern for the 2018 results.

Combined Usage Rates - by County

County	2018 Combined Usage Rate	2017 Combined Usage Rate	2016 Combined Usage Rate	2015 Combined Usage Rate
Alameda	99.90%	97.07%	95.35%	97.26%
San Joaquin	99.87%	95.58%	--	--
Santa Barbara	99.80%	99.74%	--	--
Sacramento	99.70%	95.19%	98.10%	100.00%
Los Angeles	99.69%	98.94%	100.00%	97.42%
Ventura	99.31%	99.77%	--	--
Monterey	98.79%	99.66%	99.32%	91.05%
San Luis Obispo	98.58%	99.70%	--	--
Kern	98.25%	100.00%	99.12%	92.92%
Solano	98.14%	95.56%	--	--
Orange	97.61%	91.62%	--	--
Sonoma	97.43%	94.48%	100.00%	98.42%
San Diego	96.62%	99.68%	95.89%	96.06%
Riverside	96.32%	98.81%	92.87%	99.79%
San Bernardino	95.81%	91.37%	98.17%	94.90%
San Mateo	95.52%	98.09%	--	--
Contra Costa	94.03%	96.03%	--	--
Merced	--	--	99.99%	99.28%
Mendocino	--	--	98.76%	96.93%
Shasta	--	--	98.38%	96.52%
Fresno	--	--	95.43%	99.90%
El Dorado	--	--	93.42%	94.26%
Statewide	97.78%	94.19%	96.37%	95.98%