



CALIFORNIA OFFICE
OF TRAFFIC SAFETY

Spring 2018 Seat Belt Usage Report



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Spring 2018 Executive Summary

2018 is the second year under the revised, resampling guidelines for collecting restraint usage data in California. Under these guidelines, the seat belt survey uses a fatality-based sampling method and includes all roads for sampling. This fatality-based sampling method means that counties with more traffic fatalities have a greater chance of being included in the survey than do counties where fatalities are low. This approach is required by NHTSA.

The data included in this report are for the Spring “pre-test” portion of the survey and a Summer “post-test” will also be collected. The results from these two surveys will be combined to provide an overall 2018 usage rate for the required NHTSA report.



There were no causes for delays in data collection which occurred in April and May (pre-Memorial Day). The Spring data was collected at 94 locations across fourteen California counties providing a representative sampling of the entire state. In all 16,969 occupants were observed, but belt use could not be determined for 86 (0.5%) occupants (normally due to dark windows or car speed). Consequently, the survey results contained in this report are based on 16,883 observations.

In Spring 2018, the combined usage rate was 96.07%. For comparison, the previous five Spring surveys reported usage rates of 96.47%, 96.15%, 97.16%, 97.10%, and 97.67% in 2013.

The accompanying report provides a further detailed breakdown of restraint usage by occupant type, road type and by county in which the survey took place.

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Usage Rates by Road Type

This data shows the restraint usage rates by the three different federal classifications of road types used by the TIGER database. More specifically, roads are classified as being “local”, “secondary”, or “primary” (for a detailed description of each road type, please see the last page of this report).

There were small differences between restraint usages based on the type of road during Spring 2018. Overall, occupants were restrained less frequently on local roads than they were on secondary or primary roads.



Combined Data – All Occupants

	Local	Secondary	Primary	All Roads
Usage Rates	94.86	97.60	98.09	96.07
Standard Error	.019	0.011	.004	.014
Sample Sizes	3,455	8,904	4,524	16,883
95% Confidence Interval	90.64-99.08%	95.19-100.00%	97.12-99.07%	92.94-99.20%

Usage Rates for Drivers

The 2018 usage rates indicate that drivers are a little less likely to wear their belts on local roads than they are on secondary or primary roads. This is the same pattern found in 2016 and 2017.



At an overall level, the 96.03% usage rate was not markedly different than it has been in recent years. For comparison, the rate was 96.88% in 2017, 94.42% in 2016, and 97.27% in 2015.

Driver Only Data

	Local	Secondary	Primary	All Roads
Usage Rates	94.71	97.58	98.39	96.03
Standard Error	.018	.011	.007	.014
Sample Sizes	2,702	7,221	3,478	13,401
95% Confidence Interval	90.83-98.59%	95.16-100.00%	96.87-99.91%	93.02-99.04%

Usage Rates for Passengers

This data shows the restraint usage rates for the front seat passengers of the vehicle. 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 passenger use is similar to the pattern for driver use, but the lower usage on local roads was a slightly smaller gap for passengers than it was for drivers.

The results for 2018 were not markedly different from recent years. In 2017, the passenger usage rate was 94.10%, in 2016 it was 95.21%, and in 2015 it was 96.52%. As a result, while the usage rates show small year-to-year variations, there does not appear to be a significant trend suggesting that passenger restraint data is changing at a meaningful rate.



Passenger Only Data

	Local	Secondary	Primary	All Roads
Usage Rates	95.38	97.69	97.36	96.23
Standard Error	.024	.014	.009	.017
Sample Sizes	753	1,683	1,046	3,482
95% Confidence Interval	90.06-100.00%	94.49-100.00%	95.30-99.42%	92.50-99.96%

Usage Rates by Vehicle Type

This data shows the restraint usage rates across different vehicle types. Traditionally, cars and vans or SUVs have shown virtually the same usage rates, so they have been combined in our analyses. Usage rates for the occupants of pickup trucks, however, have traditionally lagged other vehicle types.



The results for the Spring 2018 survey do show a difference between restraint usage rates for pickup trucks and other vehicles. Occupants of pickup trucks were 3.6% less likely to use a restraint than their counterparts in other vehicles.

Combined Data – All Occupants

	Cars and Vans/SUVs	Pickup Trucks	All Vehicles
Usage Rates	96.75	93.15	96.07
Standard Error	.011	.028	.014
Sample Sizes	13,575	3,308	16,883
95% Confidence Interval	94.26-99.24%	87.06-99.23%	92.94-99.20%

Usage Rates by County

This table shows the combined (drivers and passengers) restraint usage rates in each of the counties included in recent statewide surveys. These specific counties were selected to provide a representative sampling of California, which was consistent with NHTSA guidelines. For the new sampling (begun in 2017), of the seventeen counties, nine were selected from the counties with more miles of roads while the remaining eight were selected from the counties with less miles of paved roads. In addition, a representative balance of northern and southern California was used so that the survey was representative of the entire state and not a particular region.



Overall, all of the counties have continued to have relatively high usage rates. In addition, there do not appear to be differences between rates in Southern versus Northern California. Further, the more populous counties do not appear to differ substantially from the less populated ones.

COMBINED USAGE BY COUNTY - ALL ROAD TYPES

County	Spring 2018 Usage Rate	Spring 2017 Usage Rate	Spring 2016 Usage Rate	Spring 2015 Usage Rate	Spring 2014 Usage Rate	Simple Average
Fresno	-	--	97.32	99.99	99.40	98.90
Santa Barbara	98.10	99.37	--	--	--	98.74
San Luis Obispo	97.81	99.57	--	--	--	98.69
Los Angeles	98.77	99.24	99.95	99.13	95.11	98.44
Ventura	97.32	99.41	--	--	--	98.37
Riverside	92.62	98.48	97.66	99.95	99.93	97.73
Merced	-	--	99.90	99.20	93.60	97.57
Monterey	99.76	99.49	98.78	95.49	93.77	97.46
San Diego	95.22	98.13	96.34	95.43	99.58	96.94
Solano	-	96.92	--	--	--	96.92
Sacramento	93.43	97.56	96.22	99.78	97.15	96.83
San Mateo	96.71	96.65	--	--	--	96.68
Sonoma	94.94	93.93	99.20	98.17	96.36	96.52
El Dorado	-	--	93.44	95.82	99.99	96.42
Orange	-	96.23	--	--	--	96.23
Kern	98.54	--	97.36	92.30	96.68	96.22
Shasta	-	--	96.47	96.87	94.95	96.10
Contra Costa	94.85	97.10	--	--	--	95.98
San Joaquin	-	95.84	--	--	--	95.84
Alameda	-	97.27	92.17	95.14	98.63	95.80
San Bernardino	-	92.16	99.34	97.67	92.27	95.36
Mendocino	-	--	95.76	93.72	94.60	94.69
Statewide	96.07%	96.47%	96.15%	97.16%	97.10%	96.72%

Detailed Description of Road Types

Code	Name	Definition
S1100	Primary Road	Primary roads are generally divided, limited-access highways within the interstate highway system or under state management, and are distinguished by the presence of interchanges. These highways are accessible by ramps and may include some toll highways.
S1200	Secondary Road	Secondary roads are main arteries, usually in the U.S. Highway, State Highway or County Highway system. These roads have one or more lanes of traffic in each direction, may or may not be divided, and usually have at-grade intersections with many other roads and driveways. They often have both a local name and a route number.
S1400	Local Neighborhood Road, Rural Road, City Street	These are generally paved non-arterial streets, roads, or byways that usually have a single lane of traffic in each direction. Roads in this feature class may be privately or publicly maintained. Scenic park roads would be included in this feature class, as would (depending on the region of the country) some unpaved roads.