

# UC Berkeley

## Fact Sheet

### Title

2019 SafeTREC Traffic Safety Facts: Pedestrian Safety Facts

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## TRAFFIC SAFETY FACTS

# Pedestrian Safety

—Katherine L. Chen, Bor-Wen Tsai, Garrett Fortin, and Jill F. Cooper—

### INTRODUCTION

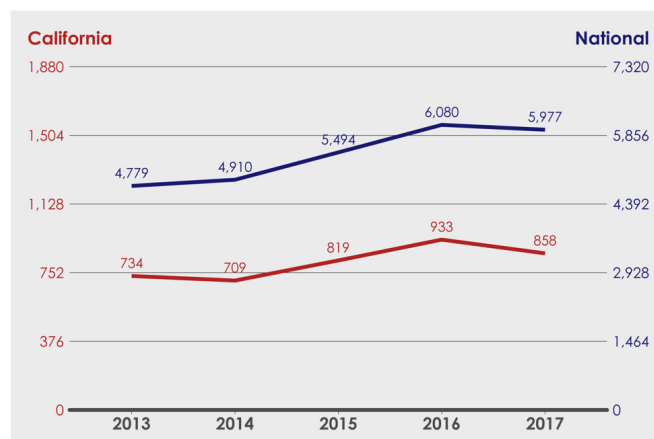
As a commute mode, walking is gaining in numbers. The Governors Highway Safety Association (GHSA) reports that pedestrian fatalities in the nation have increased disproportionately to other traffic deaths. Pedestrian fatalities as a proportion of total traffic deaths increased from 12 percent in 2008 to 16 percent in 2017. Pedestrian fatalities increased by 35 percent from 2008 to 2017 while other traffic deaths decreased by 6 percent. The GSHA also reported the largest proportion of pedestrian deaths around divided highways, which generally have speed limits of 45 or more and lack controlled intersections and safe crossing areas.

### CALIFORNIA FACTS

#### CALIFORNIA DATA

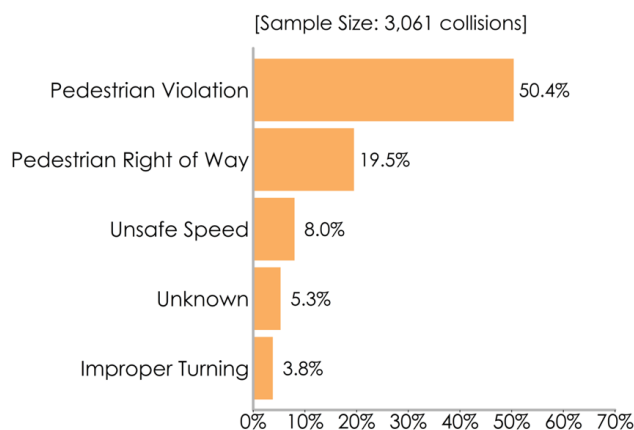
- Pedestrian fatalities continued to increase in California; the number of fatalities rose 16.9 percent from 734 in 2013 to 858 in 2017.
- In a 2018 survey conducted by UC Berkeley SafeTREC, Californians were asked to identify the safety problems they experienced as a pedestrian or bicyclist in the past six months. "Distracted Drivers (by cell phones)" was reported by 31.1 percent of respondents. "Cars not stopping" was noted by 24.5 percent, and "cars going too fast" was reported by 17.5 percent of respondents.
- The highest numbers of pedestrian fatal and serious injuries occurred in densely populated areas in Los Angeles, Orange, San Diego, Riverside, San Bernardino, San Francisco, Alameda, and Sacramento counties.
- Four counties, Modoc, Sierra, Alpine, and Mono, reported zero pedestrian fatal and serious injuries in 2017.
- Elevated rates of pedestrian fatal and serious injuries by population occurred in both urban and rural counties. The county with the highest rate was Humboldt, followed by Siskiyou, Lake, Yuba, Sutter, San Francisco, Tuolumne, and Los Angeles.
- Over three-quarters (83.7 percent) of pedestrian fatalities occurred in urban areas compared to 16.3 percent in rural areas.

Pedestrian Fatality Trends, Nationwide and California, 2013-2017



Source: FARS 2013-2016, FARS ARF 2017

Top Five Primary Collision Factors for Pedestrian Fatal and Serious Injury Collisions



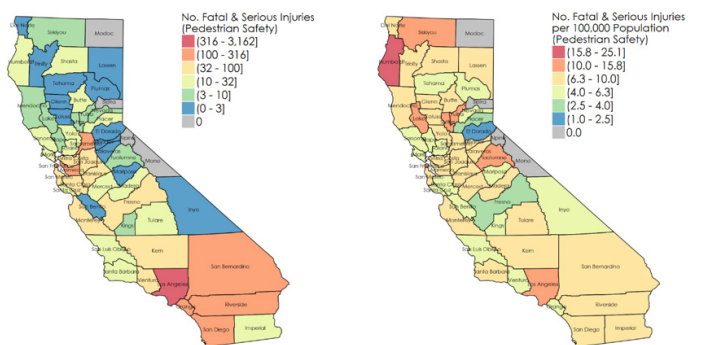
Source: Provisional SWITRS 2017

**CALIFORNIA DATA**

(continued)

- Forty-five percent of pedestrian fatal and serious injuries occur between 6pm and midnight when dusk and darkness are factors. These injuries were most concentrated between 6pm and 9pm on weekdays, with a peak on Friday evenings.
- The most common Primary Collision Factor for pedestrian fatal and serious injuries was pedestrian violations, at 50.4 percent, followed by pedestrian right-of-way violations at 19.5 percent. Pedestrian violations occur when a pedestrian commits a violation, whereas pedestrian right-of-way is defined as when a pedestrian's right-of-way is violated. However, neither indicates which party is most at fault for the collision.
- More males than females in every age group sustained fatal and serious injuries as pedestrians in 2017. Pedestrian injuries were greatest for the following age groups: 55 to 64 (17.8 percent), 25 to 34 (16.5 percent); 45-54 (15.0 percent).
- Race was unknown in FARS for 26.6 percent, or 228 of the pedestrian fatalities. Of the 630 fatalities with a known race, about 77.5 percent (or 488) were white, followed by black victims (11.3 percent).
- Speed affects mortality. On the average, a pedestrian has a 10 percent chance of being killed by a vehicle traveling at 24.1 miles per hour (mph). This risk increases to 50 percent when a vehicle is traveling at 40.6 mph, 75 percent at 48.0 mph, and 90 percent at 54.6 mph. Risk increases with age, with pedestrians over 70 facing higher risk at lower speeds than younger pedestrians.

**Pedestrian Fatal and Serious Injury  
Number and Rate per 100K Population by County, 2017**



(a) Number of Fatal and Serious Injuries (b) Number of Fatal and Serious Injuries per 100,000 Population

Source: FARS ARF 2017; Provisional SWITRS 2017; California Department of Finance 2018

**Time of Day and Day of Week for Pedestrian Fatal and Serious Injury Victims, California, 2017**

	MON	TUE	WED	THU	FRI	SAT	SUN	TOTAL
Midnight-3AM	36	25	19	40	36	60	68	284 [9.3%]
3-6AM	31	29	38	32	46	41	39	256 [8.4%]
6-9AM	45	72	45	62	50	25	19	318 [10.4%]
9AM-Noon	19	23	22	35	35	17	11	162 [5.3%]
Noon-3PM	23	37	42	37	40	41	24	244 [8.0%]
3-6PM	64	56	54	59	65	52	50	400 [13.1%]
6-9PM	113	114	111	121	131	104	109	803 [26.3%]
9PM-Midnight	73	73	76	90	115	83	61	571 [18.7%]
Unknown	5	3	1	0	1	3	3	16 [0.5%]
<b>TOTAL</b>	<b>409</b>	<b>432</b>	<b>408</b>	<b>476</b>	<b>519</b>	<b>426</b>	<b>384</b>	<b>3,054</b>
	[13.4%]	[14.1%]	[13.4%]	[15.6%]	[17.0%]	[13.9%]	[12.6%]	[100.0%]

FSI Num+% 0 1 - 22 23 - 37 38 - 50 51 - 73 74 - 131

Source: FARS ARF 2017, Provisional SWITRS 2017

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