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Fact Sheet

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2020 SafeTREC Traffic Safety Facts: Pedestrian Safety

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Authors

Chen, Katherine L.

Tsai, Bor-Wen

Fortin, Garrett

et al.

Publication Date

2020-04-01

TRAFFIC SAFETY FACTS

Pedestrian Safety

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

INTRODUCTION

Everyone is a pedestrian, whether or not walking is one's primary mode of travel. As a commute mode, walking is gaining in numbers. In its 2020 report, "Pedestrian Traffic Fatalities by State, 2019 Preliminary Data" 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 motor vehicle deaths increased from 12 percent in 2009 to 17 percent in 2018. Moreover, pedestrian fatalities increased 53 percent from 2009 to 2018 while other traffic deaths increased by 2 percent. Further, GHSA estimates 6,590 pedestrians were fatally injured in 2019, a 5 percent increase from 2018, continuing an increasing trend and the largest number of pedestrian fatalities nationwide since 1988. This report found that in 2018 the highest proportion of pedestrian fatalities (59 percent) occurred on non-freeway arterials, which often have higher speeds and few safe crossing areas.

CALIFORNIA FACTS

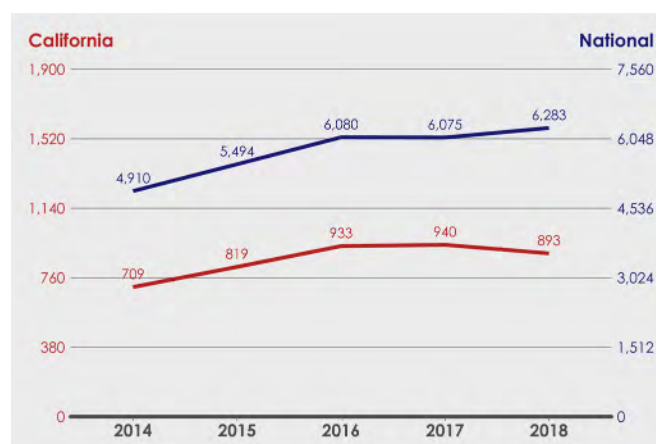
NATIONAL DATA

- Pedestrian fatalities rose between 2014 and 2018, increasing 28.0 percent from 4,910 people in 2014 to 6,283 people in 2018. The one-year increase from 2017 was 3.4 percent from 6,075 pedestrian fatalities.
- NHTSA reports that over 17 pedestrians died every day, averaging a pedestrian fatality every 1.4 hours in traffic crashes in 2018.

CALIFORNIA DATA

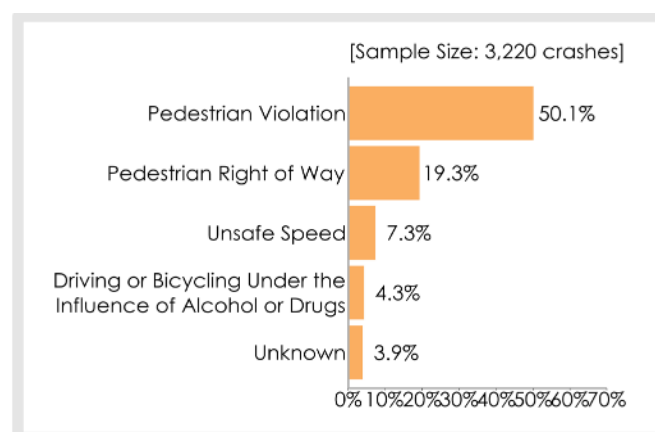
- Pedestrian fatalities rose 26.0 percent from 709 in 2014 to 893 in 2018. The one-year decrease from 2017 was 0.5 percent from 940 pedestrian fatalities.
- In the 2019 Traffic Safety Survey conducted by UC Berkeley SafeTREC, 1,298 Californians were asked to think of the times they had been a pedestrian or bicyclist in the past six months and to identify the safety problems they experienced. "Cars not stopping" was noted by 22.8 percent, and "cars going too fast" was reported by 17.7 percent of respondents. "Distracted Drivers (by cell phones)" was reported by 18.4 percent of respondents.

Pedestrian Fatality Trends, Nationwide and California, 2014-2018



Source: FARS 2014-2017, FARS ARF 2018

Top Five Primary Crash Factors for Pedestrian Fatal and Serious Injury Crashes, California, 2018



Source: Provisional SWITRS 2018

Fatal and Serious Injury Pedestrian Crashes by County

- The highest numbers of pedestrian fatal and serious injuries occurred in densely populated areas in Los Angeles County, followed by San Diego, Orange, Riverside, Sacramento, San Bernardino, Alameda, and San Francisco. Conversely, ten counties reported zero pedestrian fatal and serious injuries in 2017. These ten counties were Alpine, Colusa, Del Norte, Inyo, Lassen, Modoc, Mono, Plumas, and Sierra counties.
- Elevated rates of pedestrian fatal and serious injuries by population occurred in both urban and rural counties. The counties with the highest rates were Yuba, Merced, Humboldt, Santa Cruz, and San Francisco.

Primary Crash Factors (PCF) of Pedestrian Fatal and Serious Injury Crashes

- The most common PCF for pedestrian fatal and serious injuries was pedestrian violations, at 50.1 percent, followed by pedestrian right-of-way violations at 19.3 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 crash.
- 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.

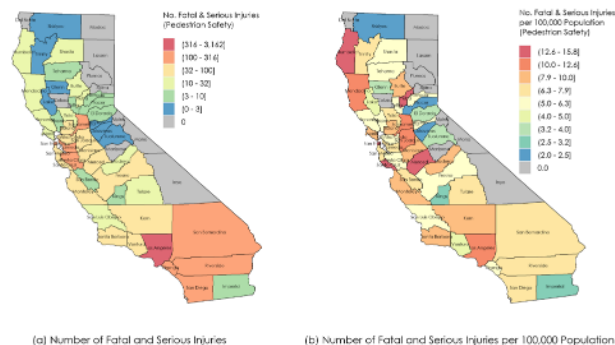
Time and Day of Pedestrian Fatal and Serious Injuries

- About 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.

REFERENCES

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Pedestrian Fatal and Serious Injury Number and Rate per 100K Population by County, California, 2018



Source: FARS ARF 2018; Provisional SWITRS 2018

Time of Day and Day of Week for Pedestrian Fatal and Serious Injury Victims, California, 2018

	MON	TUE	WED	THU	FRI	SAT	SUN	TOTAL
Midnight-3AM	34	21	26	33	37	71	89	311 [9.7%]
3-6AM	22	30	28	27	37	36	31	211 [6.6%]
6-9AM	52	54	52	48	64	34	12	316 [9.8%]
9AM-Noon	38	22	19	36	32	32	16	195 [6.1%]
Noon-3PM	33	31	38	33	34	37	24	230 [7.1%]
3-6PM	81	80	65	71	70	48	57	472 [14.7%]
6-9PM	112	128	118	114	134	129	102	837 [26.0%]
9PM-Midnight	81	74	78	89	103	112	90	627 [19.5%]
Unknown	2	2	6	1	3	2	3	19 [0.6%]
TOTAL	455 [14.1%]	442 [13.7%]	430 [13.4%]	452 [14.0%]	514 [16.0%]	501 [15.6%]	424 [13.2%]	3,218 [100.0%]

FSI Num+% 1 - 23 24 - 34 35 - 52 53 - 81 82 - 134

Source: FARS ARF 2018, Provisional SWITRS 2018

Pedestrian Fatal and Serious Injury Victim Demographics

- More male than female pedestrians in almost every age group sustained fatal and serious injuries in 2017, with the one exception being pedestrians aged 75 to 84. Pedestrian injuries were greatest for the following age groups: 55 to 64 (17.1 percent of all fatally or seriously injured pedestrian victims), 25 to 34 (15.8 percent) and 45 to 54 (14.7 percent).
- Race was unknown in FARS for 68.2 percent, or 609 of the pedestrian fatalities. Of the 284 fatalities with a known race, about 76.7 percent (or 218) were white, followed by black victims (10.7 percent or 31 pedestrians).

Crash Location for Pedestrian Victims

- The vast majority (90.0 percent) of pedestrian fatalities occurred in urban areas compared to 10.0 percent in rural areas.
- Almost two-thirds (65.0 percent) of all pedestrian fatalities occurred on non-interstate principal or minor arterial roadways.