

TRAFFIC SAFETY FACTS

Pedestrian Safety

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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. Based on the first six months of 2020, the GHSA projects that pedestrian fatalities in the nation will be on pace with 2019 despite large reductions in motor vehicle travel associated with COVID-19. Pedestrian fatalities as a proportion of total motor vehicle deaths increased from 13.0 percent in 2010 to 17.3 percent in 2019. Moreover, pedestrian fatalities increased 46.5 percent from 2010 to 2019 while other traffic deaths increased by 4.9 percent. Increases in pedestrian fatalities are largely occurring at night - from 2010 to 2019, the number of pedestrian fatalities that occurred in the dark increased 53.8 percent compared to a 16.2 percent increase in daytime pedestrian fatalities. Yet, GHSA estimates a pedestrian fatality rate of 1.9 per 100,000 population in 2020, a slight reduction from the 2019 rate of 2.0 per 100,000 population.

Historically, road safety efforts focused on changing human behaviors to prevent crashes. The Safe System approach reframes efforts to save lives by expecting crashes to happen and focusing attention on reducing the severity of injuries when a crash occurs. By understanding the nuances of pedestrian crashes, transportation professionals can better address every aspect of crash risks and implement multiple layers of protection to ensure that everyone traveling on California roadways will go safely. Analyses presented in the pedestrian program area include fatal and serious injuries to pedestrians. FARS only includes pedestrians on foot, whereas SWITRS fatal and serious injury analysis include both pedestrians and persons on personal conveyances, e.g., skateboards, wheelchairs, etc. Pedestrian crashes are defined as crashes where one or more victims is a pedestrian.

KEY FINDINGS

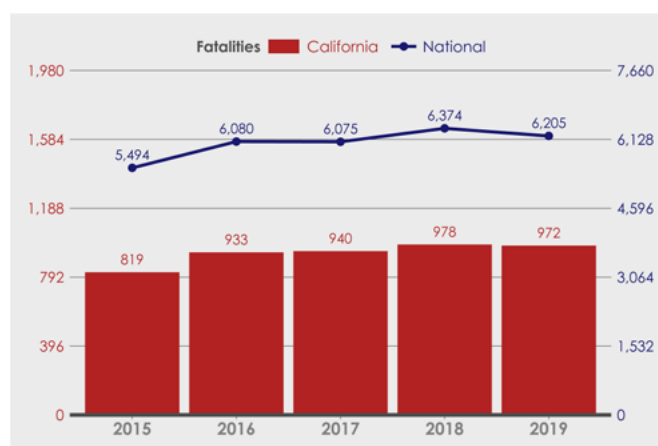
NATIONAL DATA

- Pedestrian fatalities rose between 2015 and 2019, increasing 12.9 percent from 5,494 people in 2015 to 6,205 people in 2019. The one-year decrease from 2018 was 2.7 percent from 6,374 pedestrian fatalities (see Figure 1).
- NHTSA reports that 17 pedestrians died every day, averaging a pedestrian fatality every 1.4 hours in traffic crashes in 2019.

CALIFORNIA DATA

- Pedestrian fatalities rose 18.7 percent from 819 in 2015 to 972 in 2019. The one-year decrease from 2018 was 0.6 percent from 978 pedestrian fatalities.
- In the 2020 Traffic Safety Survey conducted by UC Berkeley SafeTREC, 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 going too fast" was noted by 56.4 percent and "cars not stopping" was reported by 49.5 percent of respondents. "Distracted Drivers (by cell phones)" was reported by 44.0 percent of respondents.

Figure 1: Pedestrian Fatality Trends, Nationwide and California, 2015-2019



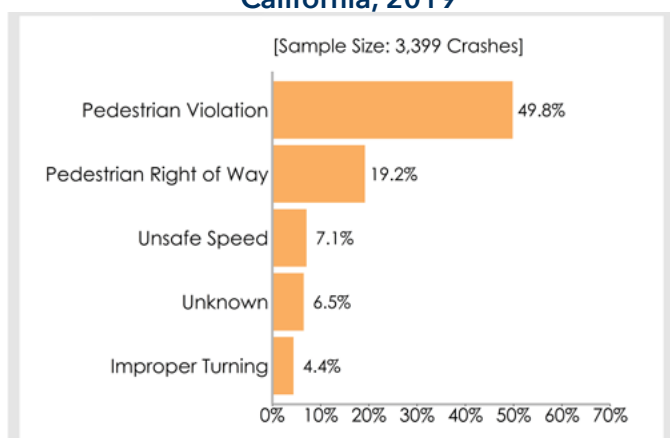
Source: FARS 2015-2018, FARS ARF 2019

CALIFORNIA DATA

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, San Bernardino, Sacramento, Orange, Riverside, Alameda, and San Francisco. Conversely, three counties - Alpine, Modoc, and Sierra - reported zero pedestrian fatal and serious injuries in 2019 (see Figure 4).
- Elevated rates of pedestrian fatal and serious injuries by population occurred in both urban and rural counties. The counties with the highest rates were Mono, Humboldt, San Francisco, Butte, Merced, Sacramento, Los Angeles, and Mendocino.
- Los Angeles, Sacramento, and San Francisco had both high numbers and rates per capita of pedestrian fatal and serious injuries.

Figure 2: Top Five Primary Crash Factors for Pedestrian Fatal and Serious Injury Crashes, California, 2019



Source: Provisional SWITRS 2019

Primary Crash Factors of Pedestrian Fatal and Serious Injury Crashes

- The most common primary crash factor for pedestrian fatal and serious injuries was pedestrian violations, at 49.8 percent, followed by pedestrian right-of-way violations at 19.2 percent (see Figure 2). 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.

REFERENCES

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- Governors Highway Safety Association (GHSA). (2020, February). Spotlight on Safety: Pedestrian Traffic Fatalities by State, 2019 Preliminary Data. <https://www.ghsa.org/sites/default/files/2020-02/GHSA-Pedestrian-Spotlight-FINAL-rev2.pdf>
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Figure 3: Time of Day and Day of Week for Pedestrian Fatal and Serious Injury Victims, California, 2019

	MON	TUE	WED	THU	FRI	SAT	SUN	TOTAL
Midnight-3AM	49	29	25	34	32	69	89	327 [9.5%]
3-6AM	31	36	31	44	43	38	37	260 [7.6%]
6-9AM	60	54	54	49	51	28	26	322 [9.4%]
9AM-Noon	33	31	29	31	34	33	27	218 [6.3%]
Noon-3PM	33	36	49	32	41	20	31	242 [7.0%]
3-6PM	61	72	53	81	75	58	57	457 [13.3%]
6-9PM	114	121	116	127	166	123	104	871 [25.3%]
9PM-Midnight	81	90	89	105	116	156	84	721 [21.0%]
Unknown	2	0	3	2	5	3	3	18 [0.5%]
TOTAL	464 [13.5%]	469 [13.6%]	449 [13.1%]	505 [14.7%]	563 [16.4%]	528 [15.4%]	458 [13.3%]	3,436 [100.0%]

FSI Num+% 0 1-29 30-34 35-53 54-87 88-166

Source: FARS ARF 2018, Provisional SWITRS 2019

Time and Day of Pedestrian Fatal and Serious Injuries

- Nearly half (46.3 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 of 166 on Friday (see Figure 3).

Pedestrian Fatal and Serious Injury Victim Demographics

- More male than female pedestrians in almost every age group sustained fatal and serious injuries in 2019. Pedestrian injuries were greatest for the following age groups: 25 to 34 (18.5 percent of all fatally or seriously injured pedestrian victims), 55 to 64 (15.9 percent), and 45 to 54 (14.4 percent).
- Race was unknown in FARS for 31.0 percent, or 301 of the pedestrian fatalities. Of the 671 fatalities with a known race, about 73.9 percent (or 496) were white.

Crash Location for Pedestrian Victims

- The vast majority (90.1 percent) of pedestrian fatalities occurred in urban areas compared to 9.8 percent in rural areas.
- Almost three-quarters (70.9 percent) of all pedestrian fatalities occurred on non-interstate principal or minor arterial roadways.

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COUNTY TABLE: PEDESTRIAN SAFETY**Figure 4: Pedestrian Fatalities and Serious Injuries, by Number and Rate, 2019**

County	Population	Fatalities	Serious Injuries	Fatal & Serious Injuries (FSI)	FSI per 100K Population
Alameda	1,668,965	33	103	136	8.15
Alpine	1,123	0	0	0	0.00
Amador	37,724	1	0	1	2.65
Butte	214,532	8	22	30	13.98
Calaveras	44,403	1	0	1	2.25
Colusa	22,045	0	2	2	9.07
Contra Costa	1,147,269	20	56	76	6.62
Del Norte	27,207	1	2	3	11.03
El Dorado	188,818	3	3	6	3.18
Fresno	1,018,437	29	18	47	4.62
Glenn	29,072	1	1	2	6.88
Humboldt	133,820	4	22	26	19.43
Imperial	188,962	3	3	6	3.17
Inyo	18,463	0	1	1	5.42
Kern	909,697	29	64	93	10.22
Kings	153,522	5	9	14	9.12
Lake	64,080	3	2	5	7.80
Lassen	28,972	0	1	1	3.45
Los Angeles	10,210,966	265	897	1,162	11.38
Madera	157,686	2	4	6	3.81
Marin	260,969	5	16	21	8.05
Mariposa	17,842	0	2	2	11.21
Mendocino	88,125	2	8	10	11.35
Merced	281,592	9	28	37	13.14
Modoc	9,458	0	0	0	0.00
Mono	13,585	1	4	5	36.80
Monterey	443,397	9	21	30	6.77
Napa	139,874	4	7	11	7.86
Nevada	97,808	1	4	5	5.11
Orange	3,195,197	47	121	168	5.26
Placer	394,626	2	11	13	3.29
Plumas	18,450	0	1	1	5.42
Riverside	2,428,464	63	92	155	6.38
Sacramento	1,548,760	56	123	179	11.56
San Benito	62,051	0	1	1	1.61
San Bernardino	2,176,150	79	126	205	9.42
San Diego	3,346,937	83	167	250	7.47
San Francisco	897,114	18	115	133	14.82
San Joaquin	767,935	29	38	67	8.72
San Luis Obispo	277,276	7	16	23	8.30
San Mateo	776,002	9	39	48	6.19
Santa Barbara	452,066	5	24	29	6.42
Santa Clara	1,960,932	42	86	128	6.53
Santa Cruz	272,185	5	18	23	8.45
Shasta	177,620	2	7	9	5.07
Sierra	3,127	0	0	0	0.00
Siskiyou	44,000	1	1	2	4.54
Solano	439,990	11	24	35	7.96
Sonoma	495,058	11	29	40	8.08
Stanislaus	554,212	19	40	59	10.65
Sutter	102,808	5	6	11	10.70
Tehama	65,163	2	1	3	4.60
Trinity	13,374	0	1	1	7.48
Tulare	477,731	14	23	37	7.74
Tuolumne	52,557	1	1	2	3.81
Ventura	844,213	12	34	46	5.45
Yolo	220,723	9	13	22	9.97
Yuba	78,061	1	6	7	8.97
Total	39,761,195	972	2,464	3,436	8.64

Source: FARS ARF 2019, Provisional SWITRS 2019, California Department of Finance 2020

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