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OTS CALIFORNIA OFFICE OF TRAFFIC SAFETY

TRAFFIC SAFETY FACTS

Aging Road Users

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PROBLEM IDENTIFICATION AND DATA ANALYSIS

The older adult population in the United States aged 65 and older is expected to almost double between 2016 and 2060, from 49 million to 95 million. In 2020, there were 6,549 people aged 65 and older killed in traffic crashes in the United States; this accounted for 16.9 percent of all traffic fatalities. Older drivers 65 and older involved in fatal crashes decreased by 9.8 percent between 2019 and 2020.

As drivers age, physical and mental changes including reduced visual acuity, increased fragility, restricted movement, and cognitive impairment may directly and indirectly result in driving impairments.

The United States Department of Transportation uses the Safe System Approach to work towards zero roadway fatalities and serious injuries. The Safe System Approach recognizes human mistakes and vulnerabilities, and designs a system with many redundancies in place to protect everyone. Designing streets to limit the impact of kinetic energy transfer in crashes may provide special benefit to older adults, as increased fragility exacerbates the severity of traffic injuries and the likelihood of death.

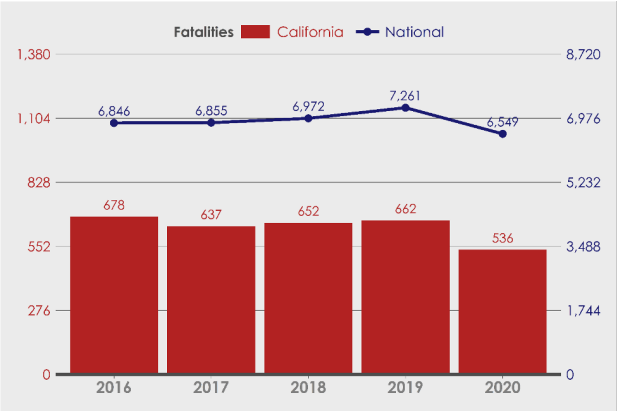
Analyses presented in this section include fatal and serious injuries to drivers, passengers, bicyclists, pedestrians, and other non-motor vehicle occupants aged 65 and older.

KEY FINDINGS

NATIONAL DATA

- In 2020, 6,549 adults aged 65 and older were killed in motor vehicle crashes, a decrease of 9.8 percent from 7,261 fatalities in 2019.
- Adults 65 and older were the only age group to see a decline in fatalities between 2019 and 2020.

Figure 1: Aging Road User Fatality Trends, Nationwide and California, 2016-2020

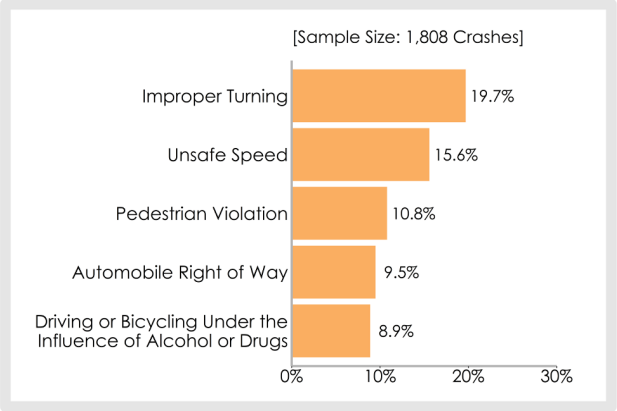


Source: FARS 2016-2019, FARS ARF 2020

CALIFORNIA DATA

- In 2020, there were 536 people age 65 and older killed in traffic crashes in California, which is a 19.0 percent decrease from 662 in 2019.
- In 2020, 19.0 percent (or 187) pedestrians killed in traffic crashes were older adults. Older adults accounted for 14.2 percent of pedestrians seriously injured in a traffic crash.
- In 2020, 17.2 percent of all licensed drivers in California were 65 and older.
- Improper turning at 19.7 percent was the most frequent Primary Crash Factor resulting in fatal and serious injury to those 65 and older in 2020, followed by unsafe speed (15.6 percent). Driving or bicycling under the influence of alcohol or drugs was a factor in 8.9 percent of crashes. (See Figure 2.)

Figure 2: Top Five Primary Crash Factors for Aging Road User Fatal and Serious Injury Crashes, California, 2020



Source: Provisional SWITRS 2020

REFERENCES

- Vespa, J., Medina, L., and Armstrong, D. (2020, Feb - Revised). Demographic Turning Points for the United States: Population Projections for 2020 to 2060. United States Census Bureau. https://www.census.gov/content/dam/Census/library/publications/2020/demo/p25-1144.pdf Accessed April 2022.
- Federal Highway Administration. Highway Statistics 2020. https://www.fhwa.dot.gov/policyinformation/statistics/2020/dl22.cfm Accessed April 2022.
- Stewart, T. (2022, March). Overview of motor vehicle crashes in 2020 (Report No. DOT HS 813 266). National Highway Traffic Safety Administration.

COUNTY TABLE: AGING ROAD USERS

Figure 3: Aging Road User Fatalities and Serious Injuries, by Number and Rate, 2020

County	Population	Fatalities	Serious Injuries	Fatal & Serious Injuries (FSI)	FSI per 100K Population
Alameda	1,681,700	15	37	52	3.09
Alpine	1,199	1	4	5	417.01
Amador	40,506	3	5	8	19.75
Butte	211,216	8	9	17	8.05
Calaveras	45,277	1	9	10	22.09
Colusa	21,826	1	3	4	18.33
Contra Costa	1,166,669	7	32	39	3.34
Del Norte	27,745	1	5	6	21.63
El Dorado	191,282	8	17	25	13.07
Fresno	1,008,860	33	34	67	6.64
Glenn	28,822	1	4	5	17.35
Humboldt	136,514	7	20	27	19.78
Imperial	178,537	5	7	12	6.72
Inyo	18,977	5	9	14	73.77
Kern	907,021	19	36	55	6.06
Kings	153,085	6	2	8	5.23
Lake	68,099	5	11	16	23.50
Lassen	32,025	1	3	4	12.49
Los Angeles	10,012,474	102	253	355	3.55
Madera	156,519	4	4	8	5.11
Marin	262,410	1	19	20	7.62
Mariposa	17,123	0	4	4	23.36
Mendocino	91,602	4	10	14	15.28
Merced	280,873	6	15	21	7.48
Modoc	8,703	0	1	1	11.49
Mono	13,185	1	6	7	53.09
Monterey	439,008	5	16	21	4.78
Napa	138,433	4	9	13	9.39
Nevada	102,392	2	8	10	9.77
Orange	3,184,513	40	71	111	3.49
Placer	405,308	5	14	19	4.69
Plumas	19,666	0	5	5	25.43
Riverside	2,421,480	32	81	113	4.67
Sacramento	1,585,666	20	51	71	4.48
San Benito	64,110	2	2	4	6.24
San Bernardino	2,181,983	29	70	99	4.54
San Diego	3,303,736	40	103	143	4.33
San Francisco	870,985	5	24	29	3.33
San Joaquin	780,676	13	31	44	5.64
San Luis Obispo	282,996	7	16	23	8.13
San Mateo	763,497	4	25	29	3.80
Santa Barbara	448,659	1	26	27	6.02
Santa Clara	1,933,516	18	45	63	3.26
Santa Cruz	272,360	4	16	20	7.34
Shasta	181,881	5	13	18	9.90
Sierra	3,233	0	2	2	61.86
Siskiyou	44,091	0	7	7	15.88
Solano	453,405	8	14	22	4.85
Sonoma	489,880	5	31	36	7.35
Stanislaus	553,995	12	25	37	6.68
Sutter	100,751	3	1	4	3.97
Tehama	65,643	1	6	7	10.66
Trinity	16,135	0	2	2	12.40
Tulare	473,482	11	22	33	6.97
Tuolumne	55,500	2	8	10	18.02
Ventura	844,545	7	39	46	5.45
Yolo	216,544	5	8	13	6.00
Yuba	81,468	1	3	4	4.91
Total	**39,541,786**	**536**	**1,353**	**1,889**	**4.78**

Source: FARS ARF 2020; Provisional SWITRS 2020; California Department of Finance 2021.

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