Berkeley SafeTREC
SAFE TRANSPORTATION RESEARCH AND EDUCATION CENTER

OTS CALIFORNIA OFFICE OF TRAFFIC SAFETY

TRAFFIC SAFETY FACTS

Aging Road Users

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

INTRODUCTION

The older adult population in the United States aged 65 and older is expected to almost double between 2012 and 2050, from 43.1 million to 83.7 million. In 2017, there were 6,784 people aged 65 or older killed in a traffic collision in the United States; this accounted for 18.3 percent of all traffic fatalities, while the overall population aged 65 or older accounts for 14.9 percent of people in the United States and 19.4 percent of all licensed drivers in 2017. California has the largest number of licensed drivers aged 65 or older in the nation with 4,251,349, or 15.9 percent of all licensed drivers in the state. As drivers age, physical and mental changes including reduced visual acuity, increased fragility, restricted movement, and cognitive impairment can directly and indirectly result in age-related driving impairments.

CALIFORNIA FACTS

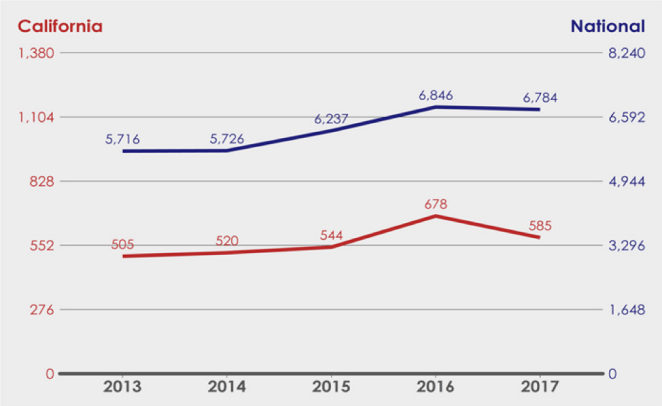
NATIONAL DATA

- Nearly seven thousand 6,784 people age 65 and older were fatally injured in motor vehicle crashes in 2017, a 22 percent increase from 2008. This is much higher than the one percent decrease in total traffic fatalities for all ages from 2008 to 2017.
- In 2017, drivers age 65 and older had a lower involvement rate in fatal collisions (16.6 per 100,000 licensed drivers) than drivers age 16-64 (24.1 per 100,000 licensed drivers).
- In 2017, the rate of pedestrian deaths per 100,000 population was highest for adults aged 80-84.
- Of drivers 65 and older who were involved in fatal crashes in 2017, eight percent were alcohol-impaired, less than the 20 percent of all drivers involved in fatal crashes that were alcohol-impaired. Of alcohol-impaired drivers involved in fatal crashes, 5.6 percent were 65 and older.

CALIFORNIA DATA

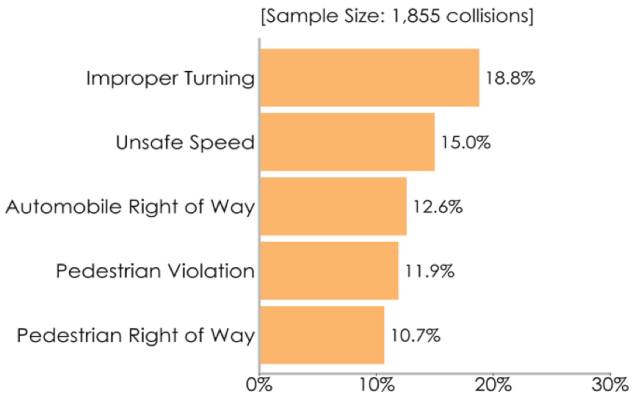
- In 2017, there were 585 people age 65 and older killed in traffic collisions in California, which is a 13.7 percent decrease from 678 in 2016.
- Pedestrian fatalities aged 65 and older decreased by 18.8 percent, from 239 in 2016 to 194 in 2017.

Aging Road User Fatality Trends, Nationwide and California, 2013-2017



Source: FARS 2013-2016, FARS ARF 2017

Top Five Primary Collision Factors for Aging Road User Fatal and Serious Injury Collisions, 2017

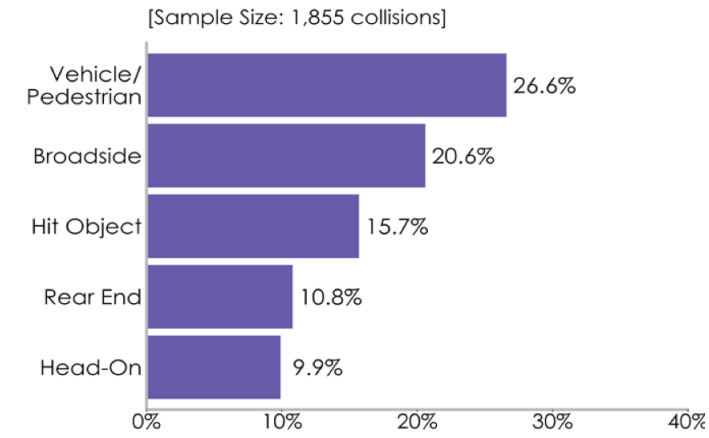


Source: Provisional SWITRS 2017

CALIFORNIA DATA *(continued)*

- In 2017, drivers age 65 and older had a lower involvement rate in fatal collisions (11.9 per 100,000 licensed drivers) than drivers age 16-64 (19.4 per 100,000 licensed drivers).

Time of Day and Day of Week for Aging Road User Fatal and Serious Injury Victims, 2017



Source: FARS ARF 2017; Provisional SWITRS 2017

Top Five Crash Types for Aging Road User Fatal and Serious Injury Collisions, California, 2017

	MON	TUE	WED	THU	FRI	SAT	SUN	TOTAL
dnight-3AM	8	2	2	6	6	3	13	40 [2.1%]
3-6AM	12	8	13	16	15	9	14	87 [4.6%]
6-9AM	25	43	31	42	25	33	21	220 [11.6%]
9AM-Noon	36	37	39	54	49	48	33	296 [15.6%]
Noon-3PM	64	52	68	53	64	55	52	408 [21.5%]
3-6PM	59	60	62	49	53	54	46	383 [20.2%]
6-9PM	41	32	55	41	53	41	37	300 [15.8%]
PM-Midnight	23	17	19	21	23	18	28	149 [7.9%]
Unknown	1	2	2	0	4	1	1	11 [0.6%]
TOTAL	269 [14.2%]	253 [13.4%]	291 [15.4%]	282 [14.9%]	292 [15.4%]	262 [13.8%]	245 [12.9%]	1,894 [100.0%]

FSI Num+% 0 1 - 8 9 - 21 22 - 37 38 - 53 54 - 68

Source: Provisional SWITRS 2017

REFERENCES

- Choi, J., Tay, R., Kim, S., and Jeong, S. Turning movements, vehicle offsets and ageing drivers driving behaviour at channelized and unchannelized intersections. Accident Analysis & Prevention, Volume 108, November 2017, Pages 227-233. https://www.sciencedirect.com/science/article/pii/S0001457517303093
- Lombardi, D.A., Horrey, W.J., and Courtney, T.K. Age-related differences in fatal intersection crashes in the United States. Accident Analysis and Prevention 99 (2017) 20-29. https://ac.els-cdn.com/S0001457516303918/1-s2.0-S0001457516303918-main.pdf?_tid=ac7e3875-ea11-408e-98ed-56fa33cc2263&acdnat=1521570170_d2226d29e3bed327d4094cf1f0d85a6a
- Ortman, J.M., Velkoff, V.A., and Hogan, H. (2014, May). An Aging Nation: The Older Population in the United States. United States Census Bureau, https://www.census.gov/newsroom/press-releases/2014/cb14-84.html. Accessed March 2019.
- U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates. Accessed March 2019. https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_17_5YR_S0101&prodType=table
- Federal Highway Administration. Highway Statistics 2017. Accessed March 2019. https://www.fhwa.dot.gov/policyinformation/statistics/2017
- National Center for Statistics and Analysis. (2018, March-Revised). Pedestrians: 2016 data. (Traffic Safety Facts. Report No. DOT HS 812 493). Washington, DC: National Highway Traffic Safety Administration.
- Insurance Institute for Highway Safety. (2017, December). Older Drivers. Accessed April 2018. http://www.iihs.org/iihs/topics/t/older-drivers/fatalityfacts/older-people/2016

Funding for this program was provided by a grant from the California Office of Traffic Safety, through the National Highway Traffic Safety Administration.