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2020 SafeTREC Traffic Safety Facts: Speeding-Related Crashes

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CALIFORNIA OFFICE TRAFFIC SAFET

TRAFFIC SAFETY FACTS Speeding-Related Crashes

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

INTRODUCTION

A speeding-related crash is defined as one where a driver is speeding, racing, driving too fast for the conditions, or driving in excess of the posted speed limit. In the United States, in 2018, over one in four (25.7 percent) fatalities involved speeding, a steady decline from a decade ago. Speeding reduces a driver's ability to steer safely around curves or objects, reduces the amount of time a driver has to react to a dangerous situation, and extends safe stopping distances. Analyses presented in the police traffic services program area refer to speeding-related fatal and serious injuries.

CALIFORNIA FACTS

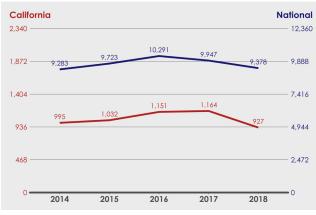
NATIONAL DATA

- In the United States, there were 9,378 people killed in a speeding-related traffic crash in 2018, a 5.7 percent decrease from 9,947 in 2017, and a 1.0 percent increase from 9,283 in 2014.
- In 2018, 25.7 percent of the nation's 36,560 motor vehicle fatalities were speeding-related. Drivers involved in a fatal speeding-related crash were also more likely to engage in other risky behaviors compared to non-speeding drivers.
- Of all speeding drivers in fatal crashes, 37.3 percent had a BAC of .08 or higher compared to only 16.2 percent of non-speeding drivers involved in fatal crashes in 2017.
- In 2017, only 51.5 percent of speeding passenger vehicle drivers involved in fatal crashes were known to be restrained, compared to 78.8 percent of non-speeding drivers.
- In 2017, 31.9 percent of motorcycle riders involved in fatal crashes were speeding.
- According to AAA's 2018 Traffic Safety Culture Index report, about half (49.0 percent) of drivers reported driving 15 mph over the speed limit on freeways. Slightly fewer (40.1 percent) reported driving 10 mph over the speed limit on residential streets in the past 30 days. This self-reported behavior differed from their beliefs about speeding: 23.0 percent of drivers personally at least somewhat approve of speeding by 15 mph or more on a freeway, while only 10.9 percent approved of speeding by 10 mph on a residential street.

CALIFORNIA DATA

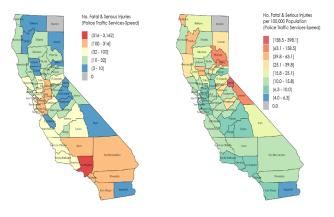
- In California, there were 927 people killed in speedingrelated traffic crashes in 2018, a 20.4 percent decrease from 1,164 in 2017, and a 6.8 percent decrease from 995 in 2014.
- In 2018, 26.0 percent of California's 3,563 motor vehicle fatalities were speeding related.

Speeding-Related Fatality Trends, Nationwide and California, 2014-2018



Source: FARS 2014-2017, FARS ARF 2018

Speeding-Related Crash Factors for Aging Road User Fatal and Serious Injury Crashes per 100K Population by County, California, 2018



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

(a) Number of Fatal and Serious Injuries

Source: Provisional SWITRS 2018

TRAFFIC SAFETY FACTS

CALIFORNIA DATA

(continued)

The 2019 OTS Traffic Safety Survey reported that 59.5 percent of drivers surveyed perceive that it is safe to drive 10 miles over the speed limit on freeways. When asked about the safety of driving 5 miles over the speed limit in a residential area, 39.5 percent of drivers surveyed believe it is safe; this is a significant increase from 33.2 percent of drivers in 2018 (p=0.00). The survey also found "speeding and aggressive driving" was the most commonly mentioned safety problem on California roadways, comprising 20.3 percent of responses. Speeding and aggressive driving has been a top three concern consistently since 2010.

State-level Analysis

The figures in this section refer to drivers, passengers, bicyclists, and pedestrians fatally injured in or seriously injured in a speeding-related crash in California in 2018. These numbers are the products of UCB SafeTREC analysis.

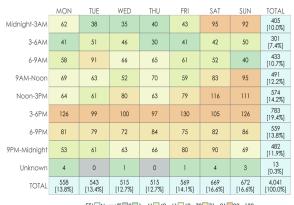
Speeding-Related Fatal and Serious Injury Crashes by County

- The highest number of speeding-related fatal and serious injuries were in Los Angeles County, followed by San Diego, San Bernardino, Riverside, Orange, Santa Clara, Sacramento, Alameda, San Joaquin, and Kern counties.
- The highest rate of speeding-related fatal and serious injury per population were concentrated in more rural parts of California in Alpine county, followed by Sierra, Mono, and Plumas counties.

Primary Crash Factors for Speeding-Related Fatal and Serious Injury Crashes

This program area is defined by crashes in which drivers are speeding; therefore, 100 percent of the crashes in this program area had a primary crash factor of unsafe speed.

Time of Day and Day of Week for Speeding-Related Fatal and Serious Injury Victims, California, 2018



FSI Num+% 0 1 - 41 42 - 61 62 - 70 71 - 91 92 - 130

Source: FARS ARF 2018; Provisional SWITRS 2018

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- California Department of Transportation. (2019, November). California Public Road Data 2018.
- Ewald & Wasserman Research Consultants, LLC. (2019, September). California Traffic Safety Survey 2019. Elk Grove, CA: California Office of Traffic Safety.
- National Center for Statistics and Analysis. (2019, May) Speeding: 2017 data (Traffic Safety Facts. DOT HS 812 687). Washington, DC: National Highway Traffic Safety Administration.

Crash Types for Speeding-Related Fatal and Serious Injury Crashes

Over one-third (39.5 percent) of speeding-related crashes were rear end crashes. Other common crash types for speeding-related crashes were hitting an object at 20.8 percent and overturned vehicle at 13.3 percent.

Time and Day of Speeding-Related Fatal and Serious Injuries

Nearly one-quarter (23.3 percent) of fatal and serious injuries from speeding occurred on weekdays between 3pm and 9pm. Another one-fifth (19.9 percent) of fatal and serious injuries occurred on weekends from 9am to 9pm.

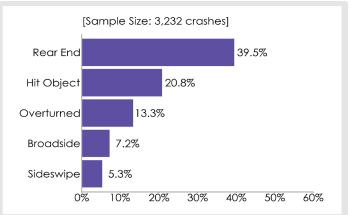
Speeding-Related Fatal and Serious Injury Crash Victim Demographics

- About three-quarters (73.2 percent) of fatal and seriously injured speed-related crash victims were males. Almost half (48.2 percent) of all fatal and seriously injured speedrelated crash victims were aged 15 to 34.
- Race was not reported for 64.2 percent of the speedrelated fatalities. Of the 332 fatalities with a known race, 77.1 percent (or 256) were white.

Crash Location of Speeding-Related Fatal Injury Crash Victims

- Over three-quarters (76.1 percent) of speed-related fatalities occurred in urban areas compared to 23.9 percent on rural roads. However only about 16.3 percent of travel took place on rural roads in 2018.
- Over one-third (40.6 percent) of all speed-related fatalities occurred on non-interstate principal arterials. The next most common locations for speed-related fatalities were interstates at 18.6 percent and non-interstate minor arterials at 16.5 percent.

Top Five Crash Types for Speed-Related Fatal and Serious Injury Crashes, California, 2018



Source: Provisional SWITRS 2018

- National Center for Statistics and Analysis. (2019, October) 2018 Fatal Motor Vehicle Crashes: Overview (Traffic Safety Facts. DOT HS 812 826). Washington, DC: National Highway Traffic Safety Administration. State Traffic Safety Information (STSI). Traffic Safety Performance (Core Outcome) Measures for California. Washington, DC: National Highway
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