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2021 SafeTREC Traffic Safety Fact Sheet: Speeding-Related Crashes

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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 2019, over one in four (26.3 percent) fatalities involved speeding, a proportion that has remained steady since 2017 following a decline in the prior decade. 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.

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 speeding-related 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 police traffic services program area refer to speeding-related fatal and serious injuries.

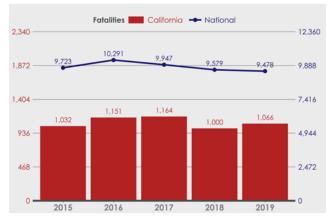
While the effects of the COVID-19 pandemic on transportation injuries in 2020 are not yet fully known, early work in California has found that while the number of injury crashes dropped, especially in the early lockdown period, the severity of crashes increased. This may be due to an increased prevalence of risky behaviors, including speeding, by these drivers, though it may also be partially caused by a reduction in congestion-related minor crashes.

KEY FINDINGS

NATIONAL DATA

- In the United States, there were 9,478 people killed in a speeding-related traffic crash in 2019, a 1.1 percent decrease from 9,579 in 2018, and a 2.5 percent decrease from 9,723 in 2015 (see Figure 1).
- In 2019, 26.3 percent of the nation's 36,096 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, 36.7 percent had a BAC of .08 or higher compared to only 16.0 percent of non-speeding drivers involved in fatal crashes in 2018.
- In 2018, only 46.2 percent of speeding passenger vehicle drivers involved in fatal crashes were known to be restrained, compared to 72.7 percent of nonspeeding drivers.
- In 2018, 31.7 percent of motorcyclists involved in fatal crashes were speeding, more than any other vehicle type.

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



Source: FARS 2015-2018, FARS ARF 2019

According to AAA's 2019 Traffic Safety Culture Index report, about half (48.3 percent) of drivers reported driving 15 mph over the speed limit on freeways and slightly fewer (41.5 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: 19.3 percent of drivers at least somewhat approve of speeding by 15 mph or more on a freeway, while 12.5 percent approve of speeding by 10 mph on a residential street.

CALIFORNIA DATA

State-level Analysis

The figures in this section refer to drivers, passengers, bicyclists, and pedestrians fatally or seriously injured in a speeding-related crash in California in 2019. These numbers are the products of UCB SafeTREC analysis.

KEY FINDINGS

- In California, there were 1,066 people killed in speeding-related traffic crashes in 2019, a 6.6 percent increase from 1,000 in 2018, and a 3.3 percent increase from 1,032 in 2015.
- In 2019, 29.6 percent of California's 3,606 motor vehicle fatalities were speeding-related.
- The 2020 OTS Traffic Safety Survey reported that 35.9 percent of drivers surveyed perceive that it is safe to drive 10 mph over the speed limit on freeways. When asked about the safety of driving 5 mph over the speed limit in a residential area, 25.6 percent of drivers surveyed believe it is safe; both are significant decreases from 59.5 percent and 39.5 percent, respectively, of drivers in 2019 (p<0.01). The survey also found "speeding and aggressive driving" was the second-most commonly mentioned safety problem on California roadways, comprising 19.1 percent of responses. Speeding and aggressive driving has been a top three concern consistently since 2010.

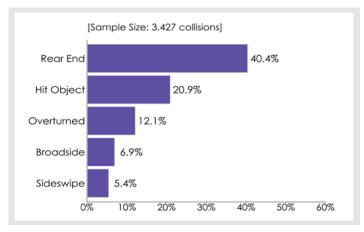
Speeding-Related Fatal and Serious Injury Crashes by County

- The highest number of speeding-related fatal and serious injuries were in Los Angeles, San Bernardino, San Diego, Riverside, Orange, Alameda, Sacramento, and Santa Clara counties (see Figure 4).
- The highest rate of speeding-related fatal and serious injury per population were concentrated in more rural parts of California in Alpine, Sierra, Mono, Del Norte, Trinity, Plumas, Amador, and Siskiyou 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.

Figure 2: Top Five Crash Types for Speed-Related Fatal and Serious Injury Crashes, California, 2019



Source: Provisional SWITRS 2019

Crash Types for Speeding-Related Fatal and Serious Injury Crashes

Over one-third (40.4 percent) of speeding-related crashes were rear end crashes. Other common crash types for speeding-related crashes were hitting an object at 20.9 percent and overturned vehicle at 12.1 percent (see Figure 2).

Speeding-Related Fatal and Serious Injury Crash Victim Demographics

- About three-quarters (72.3 percent) of fatal and seriously injured speeding-related crash victims were males. Just under half (46.5 percent) of all fatal and seriously injured speeding-related crash victims were aged 15 to 34.
- Race was not reported for 27.0 percent of the speeding-related fatalities. Of the 778 fatalities with a known race, 80.4 percent (or 626) were white.

CALIFORNIA DATA

(continued)

Figure 3: Time of Day and Day of Week for Speeding-Related Fatal and Serious Injury Victims, California, 2019

	MON	TUE	WED	THU	FRI	SAT	SUN	TOTAL
Midnight-3AM	53	44	41	46	47	114	127	472 [10.7%]
3-6AM	44	39	42	46	35	38	70	314 [7.1%]
6-9AM	73	83	66	89	71	56	42	480 [10.9%]
9AM-Noon	56	52	71	47	68	78	107	479 [10.9%]
Noon-3PM	77	65	79	87	90	129	118	645 [14.6%]
3-6PM	89	107	121	101	130	115	105	768 [17.4%]
6-9PM	99	90	88	72	124	90	82	645 [14.6%]
9PM-Midnight	70	60	80	71	97	129	80	587 [13.3%]
Unknown	2	2	5	2	1	3	3	18 [0.4%]
TOTAL	563 [12.8%]	542 [12.3%]	593 [13.5%]	561 [12.7%]	663 [15.0%]	752 [17.1%]	734 [16.7%]	4,408 [100.0%]

FSI Num+% 1 - 43 44 - 66 67 - 80 81 - 100 101 - 130

Source: FARS ARF 2019; Provisional SWITRS 2019

Time and Day of Speeding-Related Fatal and Serious Injuries

Nearly one-quarter (23.2 percent) of fatal and serious injuries from speeding occurred on weekdays between 3pm and 9pm. About one-third (33.7 percent) of fatal and serious injuries occurred on weekends (see Figure 3).

Crash Location of Speeding-Related Fatal Injury Crash Victims

- About three-quarters (73.6 percent) of speeding-related fatalities occurred in urban areas compared to 26.4 percent on rural roads. However only about 17.1 percent of travel took place on rural roads in 2019.
- Over one-third (40.3 percent) of all speeding-related fatalities occurred on non-interstate principal arterials. The next most common locations for speeding-related fatalities were non-interstate minor arterials at 20.2 percent, interstates at 16.3 percent, and non-interstate collectors at 16.0 percent.

REFERENCES

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- National Center for Statistics and Analysis. (2020, April) Speeding: 2018 data (Traffic Safety Facts. DOT HS 812 932). Washington, DC: National Highway Traffic Safety Administration.

COUNTY TABLE: SPEED-RELATED CRASHES

Figure 4: Speed-Related Fatalities and Serious Injuries, by Number and Rate, 2019

Alloned			-	Socional division	Fatal & Serious	FSI per 100K
Alpine	County	Population	Fatalities	Serious Injuries	Injuries (FSI)	Population
Amador 37,724 6 9 15 39,76 Butte 214,532 9 24 33 15,38 Colusa 22,045 0 4 4 18,14 Cohusa 22,045 0 4 4 18,14 Cohusa 22,205 0 4 4 18,14 Cohusa 22,207 4 114 118 66.16 El Dorado 188,818 17 23 40 21,18 Fresna 1,018,437 36 51 87 8.54 Glenn 29,072 2 0 2 6.88 14 Humboldt 113,820 6 21 27 20,18 19 Impedial 188,962 6 7 13 6.88 1ryo 18,46 18 19,62 6 7 13 6.88 1ryo 18,43 0 3 3 16,25 20,18 18 18 18 </td <td>Alameda</td> <td>1,668,965</td> <td>40</td> <td>155</td> <td>195</td> <td>11.68</td>	Alameda	1,668,965	40	155	195	11.68
Buttle	Alpine	1,123	0	5	5	445.24
Colaveras 44,403 2 9 11 24,77 Colusa 22,045 0 4 4 18,14 Colusa 1,147,269 21 92 113 9,85 Del Norte 227,007 4 114 18 66,16 El Dorado 188,818 17 23 40 21,18 Fresno 1,018,437 36 51 87 8,54 Glenn 29,072 2 0 2 6,88 Humbold1 133,320 6 21 27 20.18 Imperial 188,962 6 7 13 6,88 Inyo 18,463 0 3 3 16,25 Kem 909,697 37 84 121 133,30 Kings 153,522 1 6 7 133 6,88 Inyo 18,66 4,080 3 7 10 15,61 Lossen 29,772	Amador	37,724	6	9	15	39.76
Colusa 22,045 0 4 4 18,14 Contro Costa 1,147,269 21 92 113 9,85 Del Norte 27,207 4 14 18 66,16 66,16 El Dorado 188,818 17 23 40 21,18 Fresno 1,018,437 36 51 87 8,54 Glenn 29,072 2 0 2 6,88 Humboldt 133,820 6 21 27 20.18 Imperial 188,962 6 7 13 6,88 Inyo 18,463 0 3 3 16,25 Kerm 909,697 37 84 121 13,30 Kerm 909,697 37 84 121 13,30 Kings 155,522 1 5 6 7 4,56 Loke 64,080 3 7 10 15,61 10 Los Angeles </td <td>Butte</td> <td>214,532</td> <td>9</td> <td>24</td> <td>33</td> <td>15.38</td>	Butte	214,532	9	24	33	15.38
Contra Costa	Calaveras	44,403	2	9	11	24.77
Del Norte	Colusa	22,045	0	4	4	18.14
El Dorado	Contra Costa	1,147,269	21	92	113	9.85
Fresno 1.018.437 36 51 87 8.54 Glenn 229.072 2 0 2 6.88 Humboldt 133.820 6 21 27 20.18 Imperial 188.962 6 7 13 6.88 Inyo 18.463 0 3 3 3 16.25 Kern 909,697 37 84 121 13.30 Kings 153.522 1 6 7 4.55 Lake 64.080 3 7 10 15.61 Lassen 28,972 1 5 6 20.71 Los Angeles 10,210,966 235 779 1.014 9.93 Madera 157.686 9 21 30 19.02 Marinosa 17.842 0 2 2 11.21 Mendocino 88,125 7 19 26 29.50 Merced 281.592 13 37 42 11.21 Modoc 9,458 0 1 1 10.057 Modoc 9,458 0 1 1 10.057 Monterey 443.397 7 39 46 10.37 Napa 139,874 4 14 18 12.87 Napa 139,874 4 14 18 12.87 Naya 14,845 0 2 6 8 8 154 Orange 3,195,197 58 154 212 6.64 Plucer 3,46,60 43 146 189 12.20 Saramento 1,548,760 43 146 189 12.20 Sara Benito 6,2051 3 6 9 13.57 San Benito 6,2051 3 6 9 14.50 San Benito 6,2051 3 6 9 13.57 San Lis Obligo 277,275 San Mateo 776,002 11 57 68 8.76 San San Benito 6,2051 3 6 9 14.50 San Benito 6,2051 3 6 9 9 14.50 San Benito 6,2051 3 6 9 14.50 San Benito 6,2051 3 6 9 14.50 San Benito 6,205	Del Norte	27,207	4	14	18	66.16
Glenn 29,072 2 0 2 6.88 Humbolott 133,820 6 21 27 20.18 Imperial 188,962 6 7 13 6.88 Inyo 18,463 0 3 3 16.25 Kern 909,697 37 84 121 13.30 Kings 153,522 1 6 7 4.56 Lake 64,080 3 7 10 15.61 Lossen 28,972 1 5 6 20.71 Loss Angeles 10210,966 235 779 1,014 9.93 Madra 260,869 5 37 42 16.09 Marinosa 17,842 0 2 2 2 11.21 Merced 281,592 13 37 50 17.76 Mondoc 94,458 0 1 1 1 10.57 Mondere 443,397	El Dorado	188,818	17	23	40	21.18
Humboldt	Fresno	1,018,437	36	51	87	8.54
Imperial 188,962 6 7 13 6.88 Inyo 18.463 0 3 3 16.25 Kern 199,697 37 84 121 13.30 Kings 153.522 1 6 7 4.56 Lake 64.080 3 7 10 15.61 Lassen 28,972 1 5 6 20.71 Los Angeles 10.210,966 235 779 1.014 9.93 Madera 157.686 9 21 30 19.02 Marinosa 17.842 0 2 2 11.21 Merdocino 88.125 7 19 26 29.50 Merced 281.592 13 37 50 17.76 Modoc 91.458 0 1 1 10.57 Mono 13.9874 4 14 18 12.87 Nopa 139.4626 7 34	Glenn	29,072	2	0	2	6.88
Inyo	Humboldt	133,820	6		27	20.18
Kern 909,697 37 84 121 13.30 Kings 153,522 1 6 7 4.56 Lose 64,080 3 7 10 15.61 Losen 28,972 1 5 6 20.71 Los Angeles 10,210,766 235 779 1,014 9,93 Modera 157,686 9 21 30 19.02 Morin 260,969 5 37 42 16.09 Mariposa 17,842 0 2 2 2 11.21 Mendocino 88,125 7 19 26 29.50 Modec 9,458 0 1 1 10.57 Modoc 9,458 0 1 1 10.57 Modoc 9,458 0 1 1 10.57 Monterey 443,397 7 39 46 10.37 Napa 139,874 4 14 18 12.27 </td <td>Imperial</td> <td>188,962</td> <td>6</td> <td>7</td> <td>13</td> <td>6.88</td>	Imperial	188,962	6	7	13	6.88
Kings 153,522 1 6 7 4.56 Lake 64,080 3 7 10 15,61 Lassen 28,972 1 5 6 20,71 Los Angeles 10,210,966 235 779 1,014 9,93 Moder 157,686 9 21 30 19,02 Marin 260,969 5 37 42 16,09 Marin 30 1 1 <th< td=""><td>Inyo</td><td>18,463</td><td>0</td><td>3</td><td>3</td><td>16.25</td></th<>	Inyo	18,463	0	3	3	16.25
Lake 64,080 3 7 10 15.61 Lassen 28,972 1 5 6 20.71 Los Angeles 10,210,966 235 779 1,014 9,93 Madera 157,686 9 21 30 19,02 Marin 260,969 5 37 42 16.09 Mariposa 17,842 0 2 2 2 11.21 Mendocino 88,125 7 19 26 29,50 Merced 281,592 13 37 50 17,76 Modoc 9,458 0 1 1 1 1 10.57 Modoc 9,458 0 1 1 1 1 10.57 Mono 13,585 2 7 9 66.25 Monterey 443,397 7 39 46 10.37 Napa 139,874 4 14 18 12.87 Nevada 97,808 1 23 24 24.54 Orange 3,195,197 58 154 212 6.64 Plumas 18,450 2 6 8 43.36 Sacramento 1,548,760 43 146 189 12.20 San Benita 62,051 3 6 9 14.50 San Benita 62,051 3 6 9 14.50 San Benita 62,051 3 6 9 14.50 San Benita 76,795 34 98 132 17.19 San Joaquín 767,935 34 98 132 17.19 San Joaquín 767,935 34 98 132 17.19 San Joaquín 767,935 34 98 132 17.19 San Mateo 776,002 11 57 68 8.76 San Mateo 776,002 11 57 68 8.76 Santa Cluz 272,185 5 27 32 11.76 Santa Cluz 272,185 5 27 32 11.76 Santa Cluz 272,185 5 27 32 11.76 Sichia 4,208 8 13 21 20,43 Fibria 31,27 2 3 5 5 15.90 Sichia 4,208 8 13 21 20,43 Fibria 4,209 90 11 16 36.36 Solano 439,990 11 16 36.36 Solano 439,990 11 16 36.36 Solano 477,731 16 34 50 10.77 Tuolumne 52,557 3 7 10 19.03 Ventura 844,213 22 65 87 10.30 Ventura 844,213 22 65 87 10.30 Ventura 78,061 4 13 17 21.78	Kern	909,697	37	84	121	13.30
Lossen 28,972 1 5 6 20,71 Los Angeles 10,210,966 235 779 1,014 9,93 Madera 157,686 9 21 30 19,02 Marinosa 17,842 0 2 2 11,21 Mendocino 88,125 7 19 26 29,50 Merced 281,592 13 37 50 17,76 Modoc 9,458 0 1 1 10,57 Mono 13,585 2 7 9 66,25 Monterey 443,397 7 39 46 10,37 Nevada 97,808 1 23 24 24,54 Orange 3198,197 58 154 212 6,64 Plumas 18,450 2 6 8 43,36 Riverside 2,428,464 78 228 306 12,60 San Benito 62,051 3	Kings	153,522	1	6	7	4.56
Los Angeles 10,210,966 235 779 1,014 9,93 Madra 157,886 9 21 30 19,02 Marin 260,969 5 37 42 16.09 Marin 260,969 5 37 42 16.09 Moriposa 17,842 0 2 2 11.21 Mendocino 88,125 7 19 26 29,50 Merced 281,572 13 37 50 17.76 Mono 13,585 2 7 9 66.25 Monterey 443,397 7 39 46 10.37 Napa 139,874 4 14 18 12.87 Nevada 97,808 1 23 24 24,54 Orange 3,195,197 58 154 212 6.64 Placer 394,626 7 34 41 10.39 Plumas 18,450 2	Lake	64,080	3	7	10	15.61
Modera 157.686 9 21 30 19.02 Marin 260,969 5 37 42 16.09 Mariposa 17.842 0 2 2 2 11.21 Mendocino 88,125 7 19 26 29.50 Merced 281,592 13 37 50 17.76 Modoc 9,458 0 1 1 10.57 Mono 13,585 2 7 9 66.25 Monterey 443,397 7 39 46 10.37 Napa 139,874 4 14 18 12.87 Nevada 97,808 1 23 24 24.54 Orange 3,195,197 58 154 212 6.64 Placer 394,626 7 34 41 10.39 Plumas 18,450 2 6 8 43.36 Riverside 2,428,464 78	Lassen	28,972	1	5	6	20.71
Marin 260,969 5 37 42 16.09 Mariposa 17,842 0 2 2 11,21 Mendocino 88,125 7 19 26 29,50 Merced 281,592 13 37 50 17,76 Modoc 9,458 0 1 1 10,57 Mono 13,885 2 7 9 66,25 Monterey 443,397 7 39 46 10,37 Napa 139,874 4 14 18 12,87 Nevada 97,808 1 23 24 24,54 Orange 3,195,197 58 154 212 6,44 Placer 394,626 7 34 41 10,39 Plumas 18,450 2 6 8 43,35 Riverside 2,428,464 78 228 306 12,20 San Benito 62,051 3 6 </td <td>Los Angeles</td> <td>10,210,966</td> <td>235</td> <td>779</td> <td>1,014</td> <td>9.93</td>	Los Angeles	10,210,966	235	779	1,014	9.93
Mariposa 17.842 0 2 2 11.21 Menced 88.125 7 19 26 29.50 Merced 281.592 13 37 50 17.76 Modoc 9.458 0 1 1 10.57 Mono 13,585 2 7 9 66.25 Monterey 443,397 7 39 46 10.37 Napa 139.874 4 14 18 12.87 Nevada 97,808 1 23 24 24.54 Orange 3,195,197 58 154 212 6.64 Placer 394,626 7 34 41 10.39 Plumas 18,450 2 6 8 43.36 Riverside 2,428,464 78 228 306 12.60 San Benito 62,051 3 6 9 14.50 San Bernardino 5,248,693 73	Madera	157,686	9	21	30	19.02
Mendocino 88,125 7 19 26 29,50 Merced 281,592 13 37 50 17,76 Modoc 9,458 0 1 1 10,57 Mono 13,585 2 7 9 66,25 Monterey 443,397 7 39 46 10,37 Napa 139,874 4 14 18 12,87 Nevada 97,808 1 23 24 24,54 Orange 3,195,197 58 154 212 6,64 Placer 394,626 7 34 41 10,39 Plumas 18,450 2 6 8 43,36 Riverside 2,428,464 78 228 306 12,60 Sacramento 1,548,760 43 146 189 12,20 San Bernardino 2,176,150 91 252 343 15,76 San Prancisco 87,114	Marin	260,969	5	37	42	16.09
Merced 281,592 13 37 50 17.76 Modoc 9,458 0 1 1 10.57 Mono 13,585 2 7 9 66,25 Monterey 443,397 7 39 46 10.37 Nopa 139,874 4 14 18 12.87 Nevada 97,808 1 23 24 24,54 Orange 3,195,197 58 154 212 6,64 Placer 394,626 7 34 41 10.39 Plumas 18,450 2 6 8 43.34 Riverside 2,428,464 78 228 306 12.60 Sacramento 1,548,760 43 146 189 12.20 San Bernardino 2,176,150 91 252 343 15.76 San Bernardino 2,176,150 91 252 343 15.76 San Francisco 897,114<	Mariposa	17,842	0	2	2	11.21
Modoc 9,458 0 1 1 10,57 Mono 13,585 2 7 9 66,25 Monterey 443,397 7 39 46 10,37 Napa 139,874 4 14 18 11,287 Nevada 97,808 1 23 24 24,54 Crange 3,195,197 58 154 212 6,64 Plucar 394,626 7 34 41 10,39 Plumas 18,450 2 6 8 43,36 Riverside 24,28,464 78 228 306 12,60 Sacramento 1,548,760 43 146 189 12,20 San Benito 62,051 3 6 9 14,50 San Bernardino 2,176,150 91 252 343 15,76 San Diego 3,346,937 73 244 317 79 8,81 San Loiego	Mendocino	88,125	7	19	26	29.50
Mono 13,585 2 7 9 66.25 Monterey 443,397 7 39 46 10,37 Nopa 139,874 4 14 18 12,87 Nevada 97,808 1 23 24 24,54 Orange 3,195,197 58 154 212 6.64 Placer 394,626 7 34 41 10,39 Plumas 18,450 2 6 8 43,36 Riverside 2,428,464 78 228 306 12,60 Sacramento 1,548,760 43 146 189 12,20 San Benito 62,051 3 6 9 14,50 San Bernardino 2,176,150 91 252 343 15,76 San Diego 3,346,937 73 244 317 9,47 San Luis Obispo 377,276 7 36 43 15,51 San Luis Obispo <t< td=""><td>Merced</td><td>281,592</td><td>13</td><td>37</td><td>50</td><td>17.76</td></t<>	Merced	281,592	13	37	50	17.76
Monterey 443,397 7 39 46 10,37 Napa 139,874 4 14 18 12,87 Nevada 97,808 1 23 24 24,54 Orange 3,195,197 58 154 212 6.64 Placer 394,626 7 34 41 10,39 Plumas 18,450 2 6 8 43,36 Riverside 2,428,464 78 228 306 12,60 Sacramento 1,548,760 43 146 189 12,20 San Benito 62,051 3 6 9 14,50 San Berardino 2,176,150 91 252 343 15,76 San Diego 3,346,937 73 244 317 9,47 San Francisco 897,114 8 71 79 8,81 San Luís Obispo 277,276 7 36 43 15,51 San Mateo	Modoc	9,458	0	1	1	10.57
Napa	Mono	13,585	2	7	9	66.25
Nevada 97,808 1 23 24 24.54 Orange 3,195,197 58 154 212 6.64 Placer 394,626 7 34 41 10.39 Plumas 18,450 2 6 8 43.36 Riverside 2,428,464 78 228 306 12.60 Sacramento 1,548,760 43 146 189 12.20 San Benito 62,051 3 6 9 14.50 San Bernardino 2,176,150 91 252 343 15.76 San Diego 3,346,937 73 244 317 9.47 San Joaquin 767,935 34 98 132 17.19 San Luis Obispo 277,276 7 36 43 15.51 Santa Barbara 452,066 10 41 51 11.28 Santa Clara 1,960,932 40 122 162 8.26 Sa	Monterey	443,397	7	39	46	10.37
Orange 3,195,197 58 154 212 6.64 Placer 394,626 7 34 41 10,39 Plumas 18,450 2 6 8 43,36 Riverside 2,428,464 78 228 306 12,60 Sacramento 1,548,760 43 146 189 12,20 San Benito 62,051 3 6 9 14,50 San Diego 3,346,937 73 244 317 9,47 San Francisco 897,114 <td>Napa</td> <td>139,874</td> <td>4</td> <td>14</td> <td>18</td> <td>12.87</td>	Napa	139,874	4	14	18	12.87
Placer 394,626 7 34 41 10.39 Plumas 18,450 2 6 8 43.36 Riverside 2,428,464 78 228 306 12.60 Sacramento 1,548,760 43 146 189 12.20 San Benito 62,051 3 6 9 14.50 San Bernardino 2,176,150 91 252 343 15.76 San Diego 3,346,937 73 244 317 9.47 San Francisco 897,114 8 71 79 8.81 San Joaquin 767,935 34 98 132 17.19 San Luis Obispo 277,276 7 36 43 15.51 San Mateo 776,002 11 57 68 8.76 Santa Clara 1,960,932 40 122 162 8.26 Santa Clara 1,960,932 40 122 162 8.26	Nevada	97,808	1	23	24	24.54
Plumas 18,450 2 6 8 43.36 Riverside 2,428,464 78 228 306 12.60 Sacramento 1,548,760 43 146 189 12.20 San Benito 62,051 3 6 9 14,50 San Bernardino 2,176,150 91 252 343 15,76 San Diego 3,346,937 73 244 317 9.47 San Francisco 897,114 8 71 79 8.81 San Joaquin 767,935 34 98 132 17,19 San Luis Obispo 277,276 7 36 43 15,51 San Mateo 776,002 11 57 68 8.76 Santa Barbara 452,066 10 41 51 11,28 Santa Clara 1,960,932 40 122 162 8.26 Santa Cruz 272,185 5 27 32 11,76	Orange	3,195,197	58	154	212	6.64
Riverside 2,428,464 78 228 306 12.60 Sacramento 1,548,760 43 146 189 12.20 San Benito 62,051 3 6 9 14.50 San Bernardino 2,176,150 91 252 343 15.76 San Diego 3,346,937 73 244 317 9.47 San Diego 3,346,937 73 244 317 9.47 San Tuesco 897,114 8 71 79 8.81 San Joaquin 767,935 34 98 132 17.19 San Luis Obispo 277,276 7 36 43 15.51 San Mateo 776,002 11 57 68 8.76 Santa Barbara 452,066 10 41 51 11.28 Santa Clara 1,960,932 40 122 162 8.26 Santa Cruz 272,185 5 27 32 11.76 <t< td=""><td>Placer</td><td>394,626</td><td>7</td><td>34</td><td>41</td><td>10.39</td></t<>	Placer	394,626	7	34	41	10.39
Sacramento 1,548,760 43 146 189 12,20 San Benito 62,051 3 6 9 14,50 San Bernardino 2,176,150 91 252 343 15,76 San Diego 3,346,937 73 244 317 9,47 San Diego 3,346,937 73 244 317 9,47 San Tancisco 897,114 8 71 79 8,81 San Joaquín 767,935 34 98 132 17,19 San Luis Obispo 277,276 7 36 43 15,51 San Mateo 776,002 11 57 68 8,76 Santa Barbara 452,066 10 41 51 11,28 Santa Clara 1,960,932 40 122 162 8,26 Santa Cruz 272,185 5 27 32 11,76 Shasta 177,620 10 25 35 19,70	Plumas	18,450	2	6	8	43.36
San Benito 62,051 3 6 9 14.50 San Bernardino 2,176,150 91 252 343 15.76 San Diego 3,346,937 73 244 317 9.47 San Francisco 897,114 8 71 79 8.81 San Joaquin 767,935 34 98 132 17.19 San Luis Obispo 277,276 7 36 43 15.51 San Mateo 776,002 11 57 68 8.76 Santa Barbara 452,066 10 41 51 11.28 Santa Clara 1,960,932 40 122 162 8.26 Santa Cruz 272,185 5 27 32 11.76 Shasta 177,620 10 25 35 19.70 Sierra 3,127 2 3 5 159.90 Siskiyou 44,000 5 11 16 36.36 Solano<	Riverside	2,428,464	78	228	306	12.60
San Bernardino 2,176,150 91 252 343 15.76 San Diego 3,346,937 73 244 317 9,47 San Francisco 897,114 8 71 79 8.81 San Joaquin 767,935 34 98 132 17.19 San Luis Obispo 277,276 7 36 43 15.51 San Mateo 776,002 11 57 68 8.76 Santa Barbara 452,066 10 41 51 11.28 Santa Clara 1,960,932 40 122 162 8.26 Santa Cruz 272,185 5 27 32 11.76 Shasta 177,620 10 25 35 19.70 Sierra 3,127 2 3 5 159.90 Siskiyou 44,000 5 11 16 36.36 Solano 439,990 11 40 51 11.59 Sonoma<	Sacramento	1,548,760	43	146	189	12.20
San Diego 3,346,937 73 244 317 9,47 San Francisco 897,114 8 71 79 8.81 San Joaquin 767,935 34 98 132 17.19 San Luis Obispo 277,276 7 36 43 15.51 San Mateo 776,002 11 57 68 8.76 Santa Barbara 452,066 10 41 51 11.28 Santa Clara 1,960,932 40 122 162 8.26 Santa Cruz 272,185 5 27 32 11.76 Shasta 177,620 10 25 35 19.70 Sierra 3,127 2 3 5 159.90 Siskiyou 44,000 5 11 16 36.36 Solano 439,990 11 40 51 11.59 Sonoma 495,058 9 30 39 7.88 Stanislaus	San Benito	62,051	3	6	9	14.50
San Francisco 897,114 8 71 79 8.81 San Joaquin 767,935 34 98 132 17.19 San Luis Obispo 277,276 7 36 43 15.51 San Mateo 776,002 11 57 68 8.76 Santa Barbara 452,066 10 41 51 11.28 Santa Clara 1,960,932 40 122 162 8.26 Santa Cruz 272,185 5 27 32 11.76 Shasta 177,620 10 25 35 19.70 Sierra 3,127 2 3 5 159.90 Siskiyou 44,000 5 11 16 36.36 Solano 439,990 11 40 51 11.59 Sonoma 495,058 9 30 39 7.88 Stanislaus 554,212 22 49 71 12.81 Sutter <td< td=""><td>San Bernardino</td><td>2,176,150</td><td>91</td><td>252</td><td>343</td><td>15.76</td></td<>	San Bernardino	2,176,150	91	252	343	15.76
San Joaquin 767,935 34 98 132 17.19 San Luis Obispo 277,276 7 36 43 15.51 San Mateo 776,002 11 57 68 8.76 Santa Barbara 452,066 10 41 51 11.28 Santa Clara 1,960,932 40 122 162 8.26 Santa Cruz 272,185 5 27 32 11.76 Shasta 177,620 10 25 35 19.70 Sierra 3,127 2 3 5 159.90 Siskiyou 44,000 5 11 16 36.36 Solano 439,990 11 40 51 11.59 Sonoma 495,058 9 30 39 7.88 Stanislaus 554,212 22 49 71 12.81 Sutter 102,808 8 13 21 20.43 Tehama 65,16	San Diego	3,346,937	73	244	317	9.47
San Luis Obispo 277,276 7 36 43 15.51 San Mateo 776,002 11 57 68 8.76 Santa Barbara 452,066 10 41 51 11.28 Santa Clara 1,960,932 40 122 162 8.26 Santa Cruz 272,185 5 27 32 11.76 Shasta 177,620 10 25 35 19.70 Sierra 3,127 2 3 5 159.90 Siskiyou 44,000 5 11 16 36.36 Solano 439,990 11 40 51 11.59 Sonoma 495,058 9 30 39 7.88 Stanislaus 554,212 22 49 71 12.81 Sutter 102,808 8 13 21 20.43 Tehama 65,163 4 6 10 15.35 Trinity 13,374	San Francisco	897,114	8	71	79	8.81
San Mateo 776,002 11 57 68 8.76 Santa Barbara 452,066 10 41 51 11.28 Santa Clara 1,960,932 40 122 162 8.26 Santa Cruz 272,185 5 27 32 11.76 Shasta 177,620 10 25 35 19.70 Sierra 3,127 2 3 5 159.90 Siskiyou 44,000 5 11 16 36.36 Solano 439,990 11 40 51 11.59 Sonoma 495,058 9 30 39 7.88 Stanislaus 554,212 22 49 71 12.81 Sutter 102,808 8 13 21 20.43 Tehama 65,163 4 6 10 15.35 Trinity 13,374 2 4 6 44.86 Tuolumne 52,557 <td< td=""><td>San Joaquin</td><td>767,935</td><td>34</td><td>98</td><td>132</td><td>17.19</td></td<>	San Joaquin	767,935	34	98	132	17.19
Santa Barbara 452,066 10 41 51 11.28 Santa Clara 1,960,932 40 122 162 8.26 Santa Cruz 272,185 5 27 32 11.76 Shasta 177,620 10 25 35 19,70 Sierra 3,127 2 3 5 159,90 Siskiyou 44,000 5 11 16 36,36 Solano 439,990 11 40 51 11.59 Sonoma 495,058 9 30 39 7.88 Stanislaus 554,212 22 49 71 12.81 Sutter 102,808 8 13 21 20.43 Tehama 65,163 4 6 10 15.35 Trinity 13,374 2 4 6 44.86 Tuolume 52,557 3 7 10 19.03 Ventura 844,213 22<	San Luis Obispo	277,276	7	36	43	15.51
Santa Clara 1,960,932 40 122 162 8.26 Santa Cruz 272,185 5 27 32 11.76 Shasta 177,620 10 25 35 19.70 Sierra 3,127 2 3 5 159.90 Siskiyou 44,000 5 11 16 36.36 Solano 439,990 11 40 51 11.59 Sonoma 495,058 9 30 39 7.88 Stanislaus 554,212 22 49 71 12.81 Sutter 102,808 8 13 21 20.43 Tehama 65,163 4 6 10 15.35 Trinity 13,374 2 4 6 44.86 Tuolare 477,731 16 34 50 10.47 Tuolumne 52,557 3 7 10 19.03 Ventura 844,213 22	San Mateo	776,002	11	57	68	8.76
Santa Cruz 272,185 5 27 32 11.76 Shasta 177,620 10 25 35 19.70 Sierra 3,127 2 3 5 159.90 Siskiyou 44,000 5 11 16 36.36 Solano 439,990 11 40 51 11.59 Sonoma 495,058 9 30 39 7.88 Stanislaus 554,212 22 49 71 12.81 Sutter 102,808 8 13 21 20.43 Tehama 65,163 4 6 10 15.35 Trinity 13,374 2 4 6 44.86 Tulare 477,731 16 34 50 10.47 Tuolumne 52,557 3 7 10 19.03 Ventura 844,213 22 65 87 10.30 Yolo 220,723 4	Santa Barbara	452,066	10	41	51	11.28
Shasta 177,620 10 25 35 19.70 Sierra 3,127 2 3 5 159.90 Siskiyou 44,000 5 11 16 36.36 Solano 439,990 11 40 51 11.59 Sonoma 495,058 9 30 39 7.88 Stanislaus 554,212 22 49 71 12.81 Sutter 102,808 8 13 21 20.43 Tehama 65,163 4 6 10 15.35 Trinity 13,374 2 4 6 44.86 Tulare 477,731 16 34 50 10.47 Tuolumne 52,557 3 7 10 19.03 Ventura 844,213 22 65 87 10.30 Yolo 220,723 4 22 26 11.78 Yuba 78,061 4 13	Santa Clara	1,960,932	40	122	162	8.26
Sierra 3,127 2 3 5 159,90 Siskiyou 44,000 5 11 16 36,36 Solano 439,990 11 40 51 11,59 Sonoma 495,058 9 30 39 7,88 Stanislaus 554,212 22 49 71 12,81 Sutter 102,808 8 13 21 20,43 Tehama 65,163 4 6 10 15,35 Trinity 13,374 2 4 6 44,86 Tulare 477,731 16 34 50 10,47 Tuolumne 52,557 3 7 10 19,03 Ventura 844,213 22 65 87 10,30 Yolo 220,723 4 22 26 11,78 Yuba 78,061 4 13 17 21,78	Santa Cruz	272,185	5	27	32	11.76
Siskiyou 44,000 5 11 16 36.36 Solano 439,990 11 40 51 11.59 Sonoma 495,058 9 30 39 7.88 Stanislaus 554,212 22 49 71 12.81 Sutter 102,808 8 13 21 20.43 Tehama 65,163 4 6 10 15.35 Trinity 13,374 2 4 6 44.86 Tulare 477,731 16 34 50 10.47 Tuolumne 52,557 3 7 10 19.03 Ventura 844,213 22 65 87 10.30 Yolo 220,723 4 22 26 11.78 Yuba 78,061 4 13 17 21.78	Shasta	177,620	10	25	35	19.70
Solano 439,990 11 40 51 11.59 Sonoma 495,058 9 30 39 7.88 Stanislaus 554,212 22 49 71 12.81 Sutter 102,808 8 13 21 20.43 Tehama 65,163 4 6 10 15.35 Trinity 13,374 2 4 6 44.86 Tulare 477,731 16 34 50 10.47 Tuolumne 52,557 3 7 10 19.03 Ventura 844,213 22 65 87 10.30 Yolo 220,723 4 22 26 11.78 Yuba 78,061 4 13 17 21.78	Sierra	3,127	2	3	5	159.90
Sonoma 495,058 9 30 39 7.88 Stanislaus 554,212 22 49 71 12.81 Sutter 102,808 8 13 21 20.43 Tehama 65,163 4 6 10 15.35 Trinity 13,374 2 4 6 44.86 Tulare 477,731 16 34 50 10.47 Tuolumne 52,557 3 7 10 19.03 Ventura 844,213 22 65 87 10.30 Yolo 220,723 4 22 26 11.78 Yuba 78,061 4 13 17 21.78	Siskiyou	44,000	5	11	16	36.36
Stanislaus 554,212 22 49 71 12.81 Sutter 102,808 8 13 21 20.43 Tehama 65,163 4 6 10 15.35 Trinity 13,374 2 4 6 44.86 Tulare 477,731 16 34 50 10.47 Tuolumne 52,557 3 7 10 19.03 Ventura 844,213 22 65 87 10.30 Yolo 220,723 4 22 26 11.78 Yuba 78,061 4 13 17 21.78	Solano	439,990	11	40	51	11.59
Sutter 102,808 8 13 21 20,43 Tehama 65,163 4 6 10 15,35 Trinity 13,374 2 4 6 44.86 Tulare 477,731 16 34 50 10,47 Tuolumne 52,557 3 7 10 19,03 Ventura 844,213 22 65 87 10,30 Yolo 220,723 4 22 26 11,78 Yuba 78,061 4 13 17 21,78	Sonoma	495,058	9	30	39	7.88
Tehama 65,163 4 6 10 15.35 Trinity 13,374 2 4 6 44.86 Tulare 477,731 16 34 50 10.47 Tuolumne 52,557 3 7 10 19.03 Ventura 844,213 22 65 87 10.30 Yolo 220,723 4 22 26 11.78 Yuba 78,061 4 13 17 21.78	Stanislaus	554,212	22	49	71	12.81
Trinity 13,374 2 4 6 44.86 Tulare 477,731 16 34 50 10.47 Tuolumne 52,557 3 7 10 19.03 Ventura 844,213 22 65 87 10.30 Yolo 220,723 4 22 26 11.78 Yuba 78,061 4 13 17 21.78	Sutter	102,808	8	13	21	20.43
Tulare 477,731 16 34 50 10.47 Tuolumne 52,557 3 7 10 19.03 Ventura 844,213 22 65 87 10.30 Yolo 220,723 4 22 26 11.78 Yuba 78,061 4 13 17 21.78	Tehama	65,163	4	6	10	15.35
Tuolumne 52,557 3 7 10 19.03 Ventura 844,213 22 65 87 10.30 Yolo 220,723 4 22 26 11.78 Yuba 78,061 4 13 17 21.78	Trinity	13,374	2	4	6	44.86
Ventura 844,213 22 65 87 10.30 Yolo 220,723 4 22 26 11.78 Yuba 78,061 4 13 17 21.78	Tulare	477,731	16	34	50	10.47
Yolo 220,723 4 22 26 11.78 Yuba 78,061 4 13 17 21.78	Tuolumne	52,557	3	7	10	19.03
Yuba 78,061 4 13 17 21.78	Ventura	844,213	22	65	87	10.30
	Yolo	220,723	4	22	26	11.78
Total 39,761,195 1,066 3,342 4,408 11.09	Yuba	78,061	4	13	17	21.78
	Total	39,761,195	1,066	3,342	4,408	11.09

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