The 2020-2024 California Strategic Highway Safety Plan (SHSP) is a data-driven traffic safety plan that provides a framework for reducing traffic fatalities and serious injuries on all public roads. In summer 2020, state transportation leaders recognized a bolder and more focused approach was necessary to strengthen California’s traffic safety efforts. This change, referred to as The Pivot, established a broader, more transparent, and collaborative approach to improving traffic safety by establishing four Guiding Principles and emphasizing improvements for the High Priority Areas.

Another component of The Pivot was to increase access to crash data for traffic safety professionals and partners. The fact sheets in this document highlight influential data findings related to each of the SHSP Challenge Areas and can be used to guide safety improvements. While these fact sheets provide a snapshot of unique statistical findings, access to more California crash data is available by visiting the SHSP Crash Data Dashboard (https://shsp.dot.ca.gov/). Utilizing this data can guide the targeted implementation of safety strategies with the greatest potential to save lives and prevent serious injuries.
Since 2010, California roadway fatalities and serious injuries increased by 52%.

**Data Source:** Fatality Analysis Reporting System (FARS) 2009-2018 for Fatalities and Statewide Integrated Traffic Records System (SWITRS) 2009-2018 for Serious Injuries

39% of fatalities and serious injuries occur in rural areas.

WHEREAS

17% of the state is considered rural as defined by population size. In 2018, rural areas contribute 14% of daily vehicle miles traveled.

**Data Source:** California Public Roads (2018) statistical information derived from the highway performance monitoring system

In 2018, local roadways account for 45% of California’s annual vehicle miles traveled.

**Data Source:** California Public Roads (2018) statistical information derived from the highway performance monitoring system

In the 2017 National Household Travel Survey, 12.6% of California’s mode share per trip are pedestrians.

WHEREAS

25% of statewide fatalities are pedestrians.

**Data Source:** Fatality Analysis Reporting System (FARS) 2009-2018 for Fatalities and Statewide Integrated Traffic Records System (SWITRS) 2009-2018 for Serious Injuries

WHEREAS

68% of fatal and serious injury victims are male. Males make up 51% of the state’s licensed drivers.

WHEREAS

31% of fatal and serious injury victims are female. Females make up 49% of the state’s licensed drivers.

*1% of fatal and serious injury victims do not have a gender identified.

WHEREAS

12.6% of California’s mode share per trip are pedestrians.

WHEREAS

25% of statewide fatalities are pedestrians.

**Data Source:** Statewide Integrated Traffic Records System (SWITRS) 2009-2018

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Statewide

Fatalities and Serious Injuries by Challenge Area

- Lane Departures: 53,641 (45% serious injuries)
- Speed Management/Aggressive Driving: 40,873 (34% serious injuries)
- Impaired Driving: 29,472 (28% serious injuries)
- Pedestrians: 18,475 (17% serious injuries)
- Intersections: 29,222 (23% serious injuries)
- Aging Drivers: 14,410 (13% serious injuries)
- Driver Licensing*: 8,230 (25% serious injuries)
- Motorcyclists: 23,642 (19% serious injuries)
- Occupant Protection: 13,047 (13% serious injuries)
- Bicyclists: 9,631 (7% serious injuries)
- Young Drivers: 17,336 (14% serious injuries)
- Commercial Vehicles: 6,879 (7% serious injuries)
- Distracted Driving: 6,110 (5% serious injuries)
- Work Zones: 1,663 (1% serious injuries)

*Driver Licensing information based on FARS, which does not include serious injury data.

Number of Fatal and Serious Injury Crashes by County

- 24% of state fatal and serious injury crashes occur in Los Angeles County.

In 2018, Los Angeles County makes up 26% of the state’s population and 20% of the state’s daily vehicle miles traveled.


Fatal and Serious Injury Crash Rate (Crashes per 100M Vehicle Miles Traveled)

- Between 2009-2018 crash rates in rural areas were on average 8X higher than urban areas as defined by population.
- Since 2010, crash rates increased by 67% in rural areas and 42% in urban areas.

Data Source: SWITRS 2009-2018, unless otherwise stated

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Racial Equity in Traffic Fatalities

Distribution of California Traffic Fatalities by Race/Ethnicity

- **White:** 14,495,479 (37%)
- **American Indian/Alaskan Native:** 305 (1%)
- **Asian:** 5,821,585 (15%)
- **Black:** 2,283,850 (6%)
- **Hispanic:** 9,039,909 (23%)
- **Other:** 7,613,430 (19%)

Number and Percent of Population

Fatality Rate by Race/Ethnicity Compared to White
(Comparison of Fatality Rate by Population)

1. **Impaired Driving Fatalities**
   - **Asian:** 54% less, 14% more
   - **American Indian/Alaskan Native:** 30% less, 35% more
   - **Black:** 9% more
   - **Hispanic:** 7% more
   - **White:**

2. **Aging Driver Fatalities**
   - **Asian:** 57% less
   - **American Indian/Alaskan Native:** 36% less
   - **Black:** 50% less
   - **Hispanic:** 47% less
   - **White:** 124% more

3. **Occupant Protection Fatalities**
   - **Asian:** 65% less
   - **American Indian/Alaskan Native:** 41% more
   - **Black:** 27% more
   - **Hispanic:**
   - **White:**

4. **Commercial Vehicle Fatalities**
   - **Asian:** 61% less
   - **American Indian/Alaskan Native:**
   - **Black:** 12% less
   - **Hispanic:** 5% more
   - **White:** 18% more

5. **Lane Departure Fatalities**
   - **Asian:** 62% less
   - **American Indian/Alaskan Native:** 4% less
   - **Black:** 11% more
   - **Hispanic:**
   - **White:**

6. **Motorcycle Fatalities**
   - **Asian:** 40% less
   - **American Indian/Alaskan Native:** 19% less
   - **Black:** 28% less
   - **Hispanic:** 38% less
   - **White:**

7. **Work Zone Fatalities**
   - **Asian:** 42% less
   - **American Indian/Alaskan Native:** 22% less
   - **Black:** 46% more
   - **Hispanic:**
   - **White:**

8. **Distracted Driving Fatalities**
   - **Asian:** 44% more
   - **American Indian/Alaskan Native:** 34% more
   - **Black:** 12% less
   - **Hispanic:**
   - **White:**

9. **Speed/Agressive Management Fatalities**
   - **Asian:** 54% less
   - **American Indian/Alaskan Native:**
   - **Black:** 9% more
   - **Hispanic:** 33% more
   - **White:** 31% more

10. **Intersection Fatalities**
    - **Asian:** 29% less
    - **American Indian/Alaskan Native:** 50% more
    - **Black:** 65% more
    - **Hispanic:** 37% more
    - **White:**

11. **Pedestrian Fatalities**
    - **Asian:**
    - **American Indian/Alaskan Native:**
    - **Black:**
    - **Hispanic:**
    - **White:**

12. **Young Driver Fatalities**
    - **Asian:** 78% less
    - **American Indian/Alaskan Native:**
    - **Black:**
    - **Hispanic:**
    - **White:**

13. **Driver Licensing Fatalities**
    - **Asian:** 34% less
    - **American Indian/Alaskan Native:**
    - **Black:**
    - **Hispanic:**
    - **White:**

14. **Total Traffic Fatalities**
    - **Asian:**
    - **American Indian/Alaskan Native:**
    - **Black:**
    - **Hispanic:**
    - **White:**

Data Source: US Census Bureau ACS and FARS (2009-2018)
1. The race/ethnicity groups presented above summarizes groups that could be consistently compared across the different data sets.
2. Fatality data from FARS is used on this sheet because racial data in FARS is victim specificity (rather than SWITRS, which is at the party level).

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Statewide

Income Equity in Traffic Fatalities
Increased Rate of Fatalities for Census Block Groups Locations with Household Income Less than $50,000 Compared to Income Greater than $50,000

Data Source: American Community Survey (ACS) collected by U.S. Census Bureau, FARS
1. Income data is available for the Census Block Groups where a traffic fatality occurs and not the individual (i.e. this data represents the income information of the Census Block Groups where the crash occurs and not the income of the crash victim.)
2. The ACS 1-Year Estimates for 2018 were used to determine per-capita fatality rates.
3. FARS data was used because it has a greater percentage of located crashes than SWITRS.
Since 2010, lane departure related fatalities and serious injuries have increased by **42%**

**Lane Departure Related Fatalities and Serious Injuries and Percent of Statewide Fatalities and Serious Injuries by Year**

- **Nearly 45%** of lane departure related fatalities and serious injuries occur on URBAN ROADWAYS
- **Over 55%** of lane departure related fatalities and serious injuries occur on RURAL ROADWAYS

**Approximately 1/2** of lane departure fatalities and serious injuries are related to Hit-Object crashes

- **15-24 year olds** make up the greatest number of lane departure fatalities and serious injuries for both males and females

Lane departure related fatalities and serious injuries peak between **3:00PM and 5:59PM**, making up **16%** of total lane departure related fatalities and serious injuries

**Percent of Lane Departure Related Fatalities and Serious Injuries by Primary Collision Factor**

- **Improper Turning**: 34%
- **Impairment**: 31%
- **Unsafe Speed**: 15%
- **Wrong Side of Road**: 10%

Data Source: SWITRS 2009-2018, unless otherwise stated

Website: https://dot.ca.gov/programs/safety-programs/shsp
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Since 2010, speeding and aggressive driving related fatalities and serious injuries increased by 52%.

Almost 1/5 of speeding and aggressive driving related fatalities and serious injuries involve impaired drivers. This is the second highest primary collision factor behind unsafe speed.

30% of speeding and aggressive driving related fatalities and serious injuries are the result of single vehicle crashes. 70% involve 2 or more parties.

34% of statewide fatalities and serious injuries are related to speeding and aggressive driving.

2X as many males are killed or seriously injured in a speeding and aggressive driving-related crash than females.

Data Source: SWITRS 2009-2018, unless otherwise stated

Website: https://dot.ca.gov/programs/safety-programs/shsp
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Impaired Driving

Impaired driving represents **28%** of statewide fatalities and serious injuries.

Since 2010, impaired driving related fatalities and serious injuries increased by **35%**.

*1% of impaired driving related fatalities and serious injuries did not have a gender identified.*

**69% of impaired driving related fatalities and serious injuries are male.**

**30% of impaired driving related fatalities and serious injuries are female.**

**62% of impaired driving related fatalities and serious injuries occur between 6:00PM and 2:59AM.**

**Data Source:** SWITRS 2009-2018, unless otherwise stated

**Website:** https://dot.ca.gov/programs/safety-programs/shsp

**Email:** SHSP@dot.ca.gov
Pedestrians

Since 2010, pedestrian fatalities and serious injuries have increased by 48%.

Pedestrian Fatalities and Serious Injuries and Percent of Statewide Fatalities and Serious Injuries by Year

59% of pedestrian fatalities and serious injuries occur when it is dark, with or without street lights present or functioning.

48% of pedestrian fatalities and serious injuries since 2010 have increased by 9%.

44% of pedestrian fatalities and serious injuries occur between 6PM and Midnight.

17% of pedestrian fatalities and serious injuries are between 15-24 years old.

14% of pedestrian fatalities involve impaired drivers.

WHEREAS

39% of ALL fatalities involve an impaired driver.

9% of pedestrian fatalities and serious injuries are under the age of 15.

Data Source: SWITRS 2009-2018, unless otherwise stated

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Intersections

Intersection Related Fatalities and Serious Injuries and Percent of Statewide Fatalities and Serious Injuries by Year

27% of intersection related fatalities and serious injuries are related to vehicle failure to yield

21% of intersection related fatalities and serious injuries are related to disobeying traffic signals and signs

18% of intersection related fatalities and serious injuries are motorcyclist victims

32% of intersection related fatalities and serious injuries are victims ages 65+

AND

27% of victims are between the age of 0-14

19% of intersection related fatalities and serious injuries are pedestrian crashes

32% of intersection related fatalities and serious injuries occur between 6:00PM and midnight

Data Source: SWITRS 2009-2018, unless otherwise stated

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Aging Drivers

Since 2010, aging driver related fatalities and serious injuries increased by **87%**

**65%** of aging drivers involved in a fatal or serious injury crash are at fault

**41%** of fatalities and serious injuries related to aging driver crashes are the **aging driver themselves**

**61%** of aging driver related fatalities and serious injuries are **male**

Data Source: SWITRS 2009-2018, unless otherwise stated

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Driver Licensing

Driver Licensing Related Fatalities and Percent of Statewide Fatalities by Year

Since 2010, driver licensing related fatalities increased by 37%.

Driver licensing related fatalities make up 23% of statewide fatalities in 2018.

75% of driver licensing related fatalities are male.

20% of male drivers in California do not have a valid license compared to 12% of females.

71% of driver licensing related fatalities are male driver victims.

44% of driver licensing related fatalities are female passenger victims.

Female victims are more likely to be passengers while males are more likely to be drivers.

26% of male fatalities are between the ages 15-24.

Data Source: SWITRS 2009-2018, unless otherwise stated

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Motorcyclist Fatalities and Serious Injuries and Percent of Statewide Fatalities and Serious Injuries by Year

Motorcyclist Fatalities and Serious Injuries by Age

Over 1/4 of motorcyclist fatalities and serious injuries are ages 25-34; this is the largest age group for these fatal and serious injuries.

90% of motorcyclist fatalities and serious injuries are male.

75% of motorcyclist fatalities and serious injuries are non-intersection crashes.

63% of motorcyclist crashes are multi-vehicle.

About 1/2 are the fault of each motorcyclist and motor vehicle drivers.

Since 2010, motorcyclist fatalities and serious injuries increased by 71%.

Data Source: SWITRS 2009-2018, unless otherwise stated.

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35% of occupant protection related fatalities are related to impairment

80% are the impaired driver themselves

35% of occupant protection related fatalities are impaired driver themselves

80% are the impaired driver themselves

56% of occupant protection related fatalities and serious injuries are between the ages of 15-34 years old

34% of occupant protection related fatalities and serious injuries are fully ejected from the vehicle

Data Source: SWITRS 2009-2018, unless otherwise stated

Website: https://dot.ca.gov/programs/safety-programs/shsp
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Bicyclist fatalities and serious injuries increased by **26%** since 2010, with fatalities in particular increasing by **61%**.

### Bicyclist Fatalities and Serious Injuries by Age and Gender

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Male</th>
<th>Female</th>
<th>Not Stated</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14</td>
<td>72</td>
<td>748</td>
<td>633</td>
</tr>
<tr>
<td>15-24</td>
<td>59</td>
<td>349</td>
<td>1,329</td>
</tr>
<tr>
<td>25-34</td>
<td>51</td>
<td>343</td>
<td>1,256</td>
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<tr>
<td>35-44</td>
<td>45</td>
<td>246</td>
<td>1,256</td>
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<tr>
<td>45-54</td>
<td>41</td>
<td>358</td>
<td>1,454</td>
</tr>
<tr>
<td>55-64</td>
<td>27</td>
<td>258</td>
<td>1,488</td>
</tr>
<tr>
<td>65+</td>
<td>14</td>
<td>103</td>
<td>873</td>
</tr>
</tbody>
</table>

### Bicyclist Fatalities and Serious Injuries by Primary Collision Factor

- **Vehicle Failure to Yield**: 18%
- **Vehicle Improper Turning**: 15%
- **Bicyclist Wrong Side of the Road**: 13%
- **Vehicle Unsafe Speed**: 13%
- **Vehicle Disobeying Traffic Signals and Signs**: 12%

### Percent of Bicyclist Fatalities and Serious Injuries by Primary Collision Factor

<table>
<thead>
<tr>
<th>Primary Collision Factor</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Vehicle Failure to Yield</td>
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<tr>
<td>Vehicle Disobeying Traffic Signals and Signs</td>
<td>12%</td>
</tr>
</tbody>
</table>

### More than 1/4 of male bicyclist fatalities and serious injuries are 55+ years old

### 76% of bicyclist fatalities and serious injuries occur in urban areas

### 81% of bicyclist fatalities and serious injuries are male

**Data Source:** SWITRS 2009-2018, unless otherwise stated

**Website:** https://dot.ca.gov/programs/safety-programs/shsp

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Young Drivers

66% of fatalities and serious injuries related to young driver crashes are male.

67% of young drivers involved in a fatal or serious injury crash are at-fault compared to 53% of drivers overall.

36% of fatalities related to young driver crashes are the young drivers themselves.

Data Source: SWITRS 2009-2018, unless otherwise stated

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Since 2010, commercial vehicle related fatalities and serious injuries have increased 35%.

13% of driver fatalities and serious injuries related to commercial vehicle crashes are motorcyclists.

14% of driver fatalities and serious injuries related to commercial vehicle crashes are commercial vehicle drivers.

Commercial Vehicle Related Fatalities and Serious Injuries by Victim Role

- Passenger: 2,373 (23%)
- Pedestrian: 1,081 (11%)
- Bicyclists: 367 (4%)
- Driver (all motorized vehicles): 15,890 (62%)
- Other: 6,390 (62%)

Commercial Vehicle Related Fatalities and Serious Injuries and Percent of Statewide Fatalities and Serious Injuries by Year

Data Source: SWITRS 2009-2018, unless otherwise stated

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Female drivers ages 15-24 are more than 2X as likely as all drivers to be involved in distracted driving related fatal crashes.

WHEREAS

20-24 year olds make up the greatest number of distracted driving related fatalities and serious injuries for both males and females.

21% of distracted driving related fatalities and serious injuries also had unsafe speed reported — the most common primary collision factor.

39% of distracted driving related fatalities and serious injuries are female

40% of distracted driving related fatalities involve a pedestrian

9% of fatalities and serious injuries related to distracted driving are bicyclists

28% of statewide fatalities and serious injuries are female

Data Source: SWITRS 2009-2018, unless otherwise stated

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Work Zones

Work Zone Related Fatalities and Percent of Statewide Fatalities and Serious Injuries by Year

Over 1/2 of work zone related fatalities and serious injuries result from hit object and rear-end crashes.

56% of fatalities and 46% of serious injuries related to work zones occur at dark — with/or without functioning street lights.

71% of work zone related fatalities and serious injuries are male and 25% of these male victims are between the ages of 15-24.

75% of work zone related fatalities and serious injuries occur on the state highway system.

Data Source: SWITRS 2009-2018, unless otherwise stated.

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