

Strategic Highway Safety Plan

Traffic Safety Facts

April 2022



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.



Statewide



Since 2010, California roadway fatalities and serious injuries increased by

52%

California Fatalities and Serious Injuries by Year



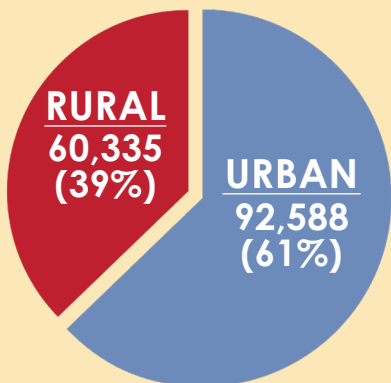
Data Source: Fatality Analysis Reporting System (FARS) 2009-2018 for Fatalities and Statewide Integrated Traffic Records System (SWITRS) 2009-2018 for Serious Injuries

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**

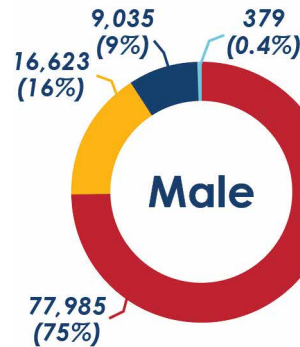


39% of fatalities and serious injuries occur in **rural areas**

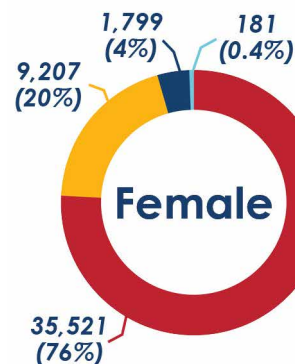
WHEREAS

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



68% of fatal and serious injury victims are **male** **WHEREAS** males make up **51%** of the state's **licensed drivers**



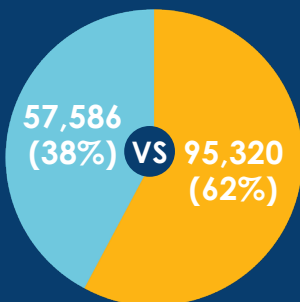
31% of fatal and serious injury victims are **female** **WHEREAS** females make up **49%** of the state's **licensed drivers**

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

Other (light blue), Pedestrian (yellow), Bicyclist (dark blue), Vehicle Occupant (red)

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

38% of fatal and serious injuries are on **state highways**



62% of fatal and serious injuries are on **local roadways**

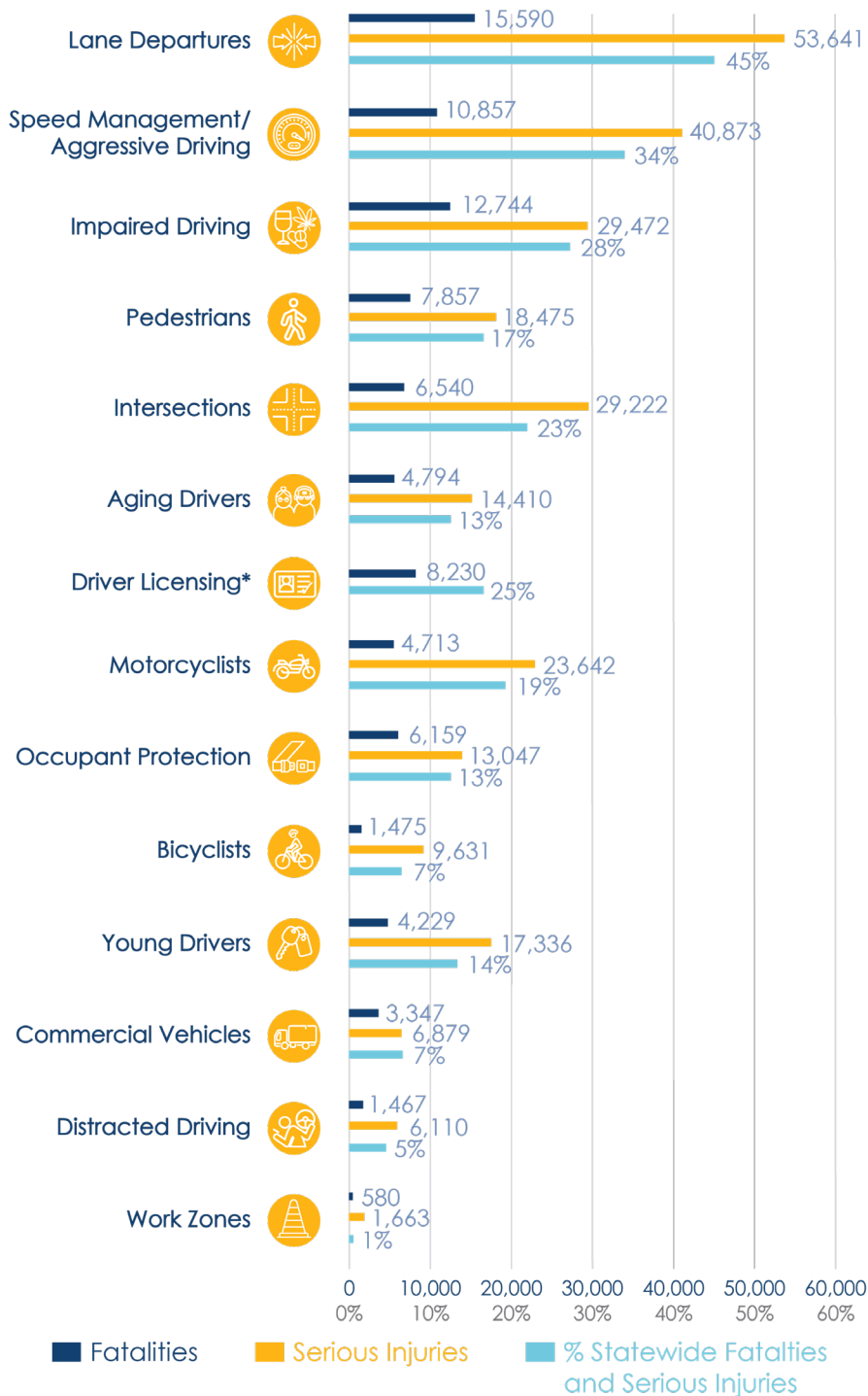
In 2018, **local roadways** account for **45%** of California's annual vehicle miles traveled

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

Statewide

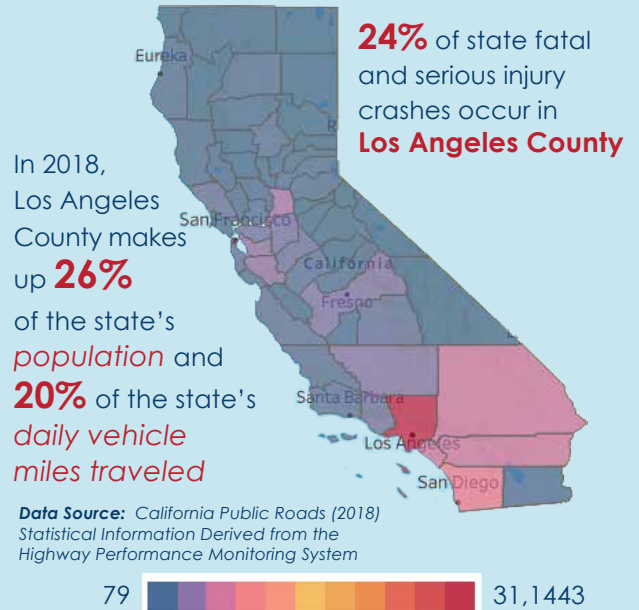


Fatalities and Serious Injuries by Challenge Area

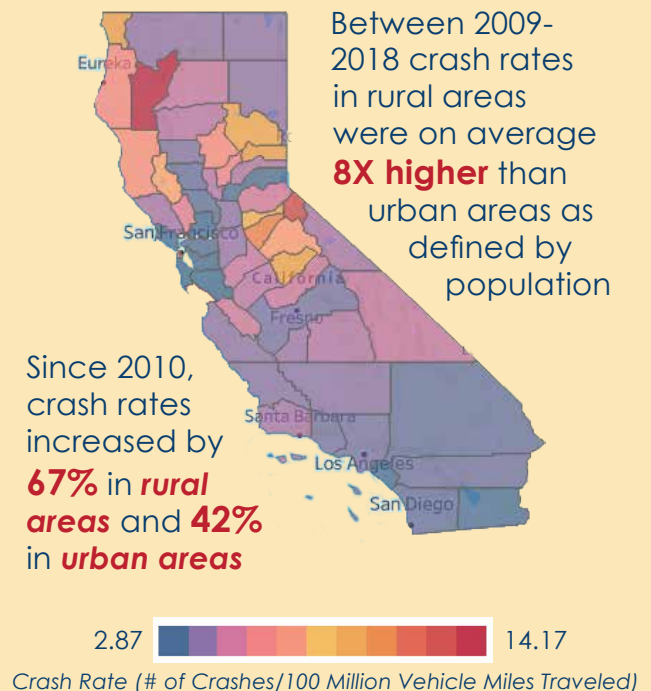


*Driver Licensing information based on FARS, which does not include serious injury data.

Number of Fatal and Serious Injury Crashes by County



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

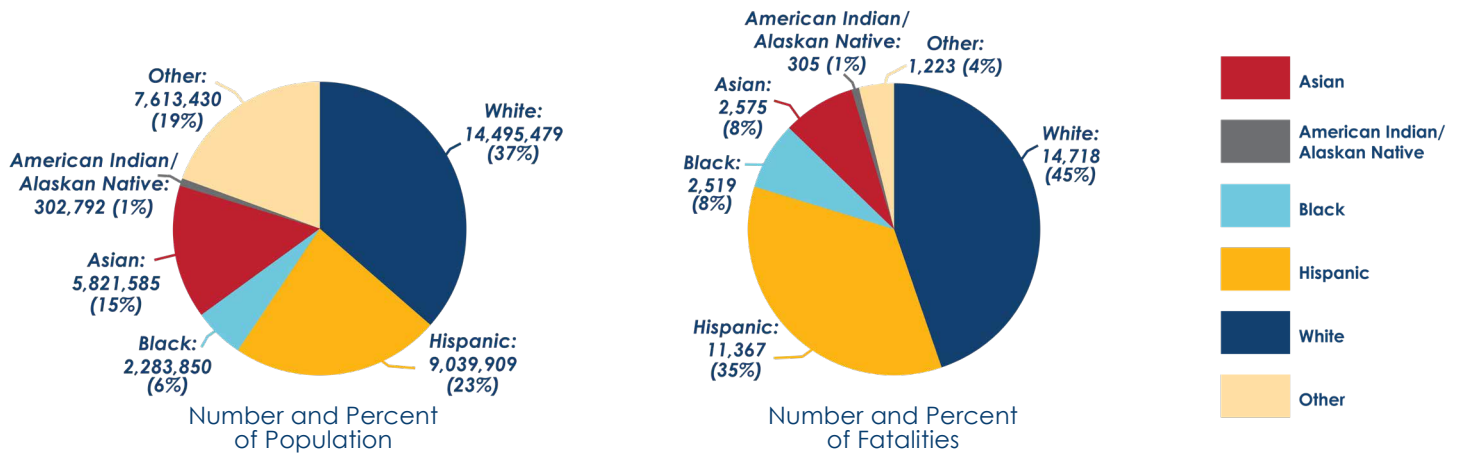


Statewide

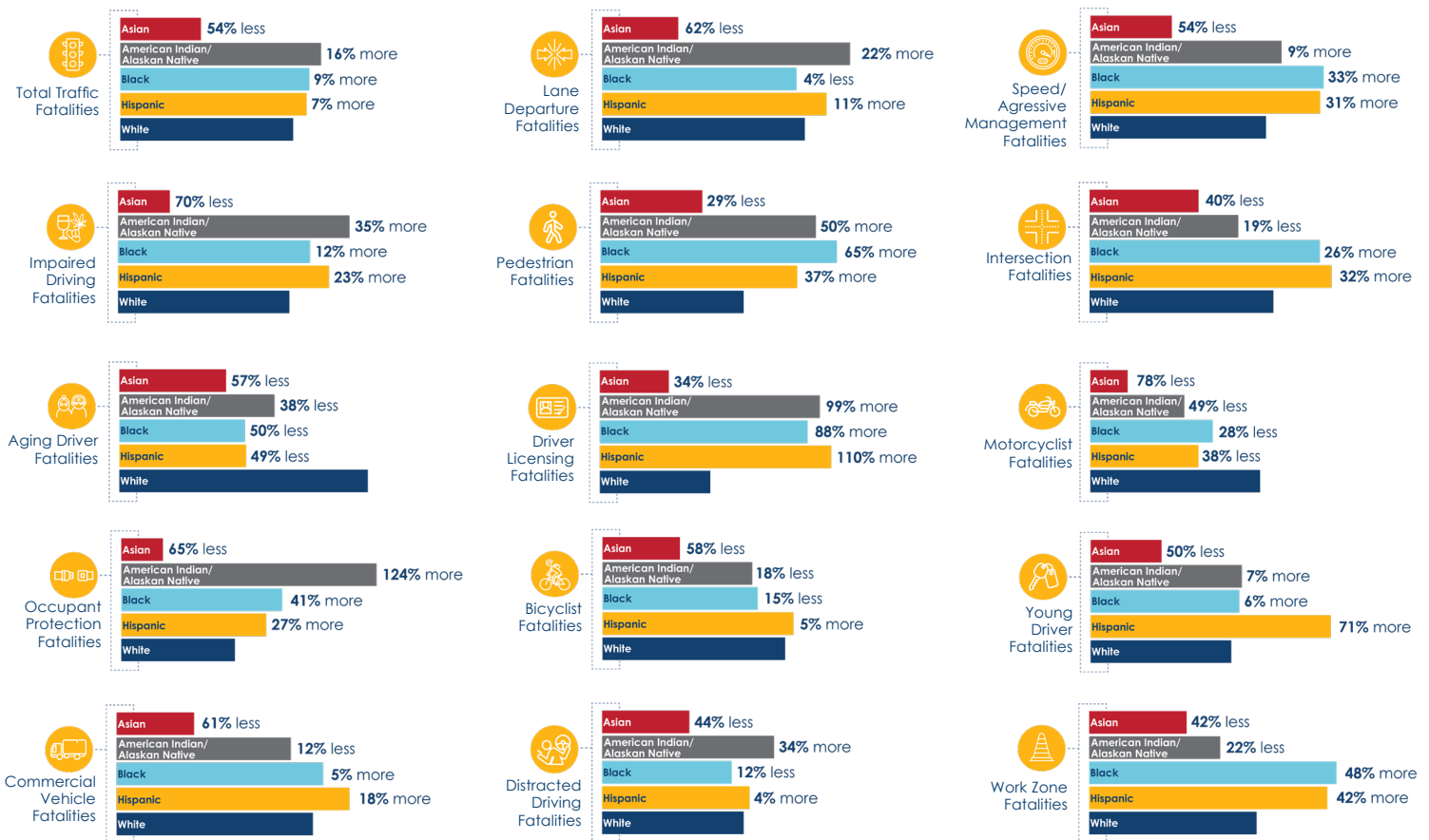
Racial Equity in Traffic Fatalities



Distribution of California Traffic Fatalities by Race/Ethnicity



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



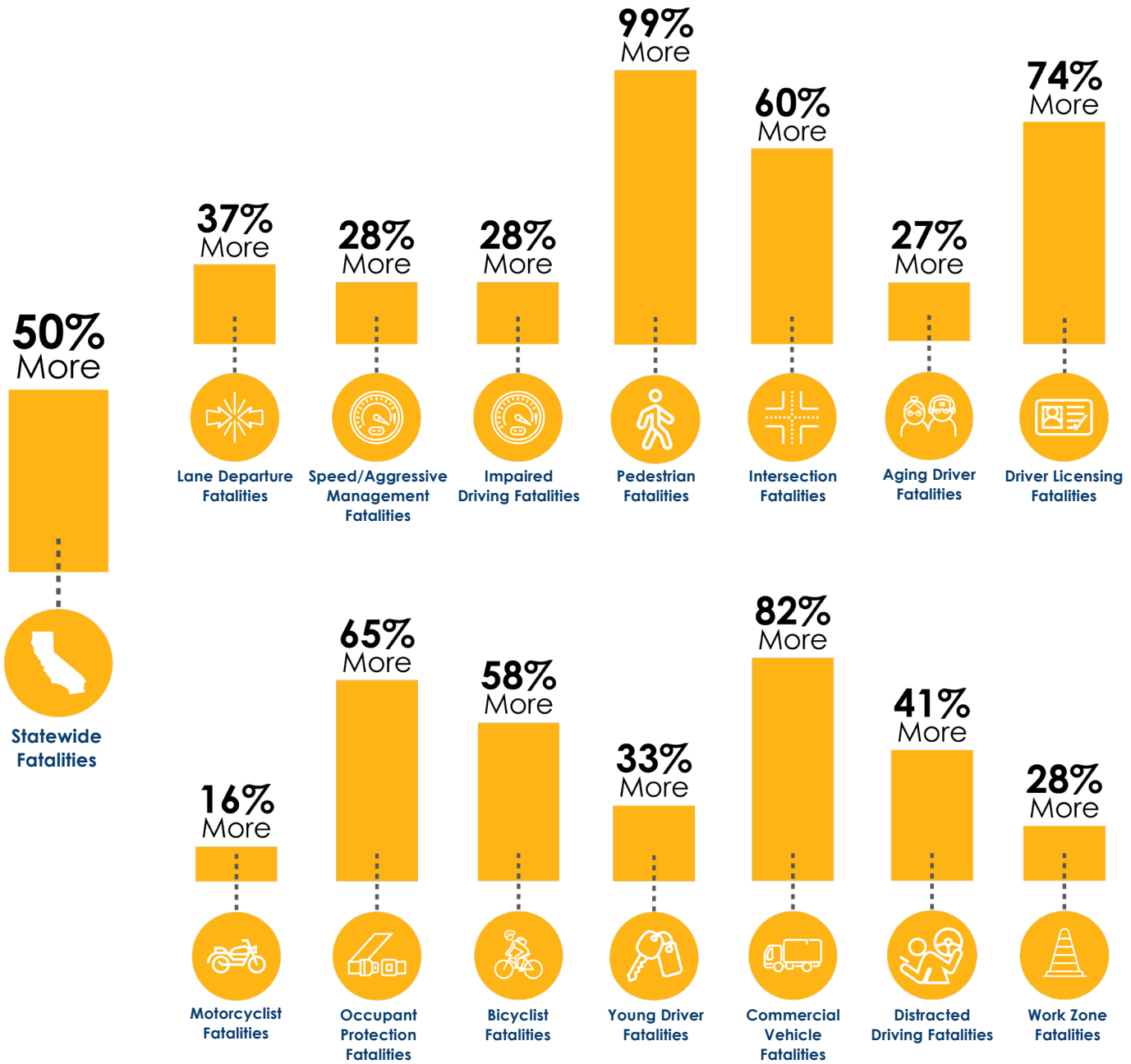
Data Source: US Census Bureau ACS and FARS (2009-2018)

- The race/ethnic groups presented above summarizes groups that could be consistently compared across the different data sets.
- 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).



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



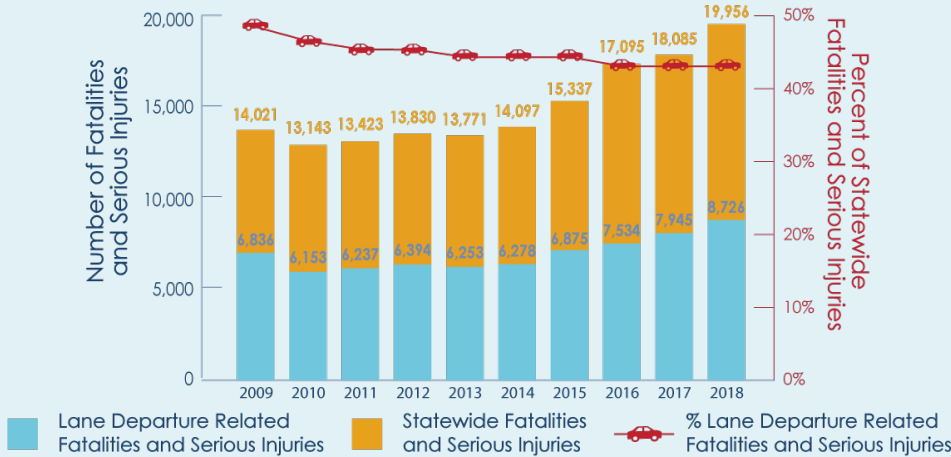
Data Source: American Community Survey (ACS) collected by U.S. Census Bureau, FARS

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.

Lane Departures

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



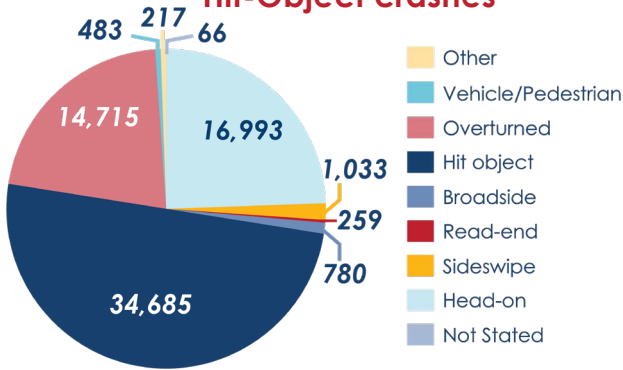
Nearly **45%** of lane departure related fatalities and serious injuries occur on **URBAN ROADWAYS**

VS



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**

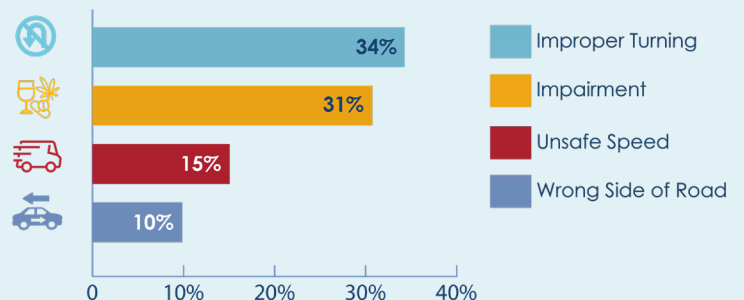


15-24 year olds

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



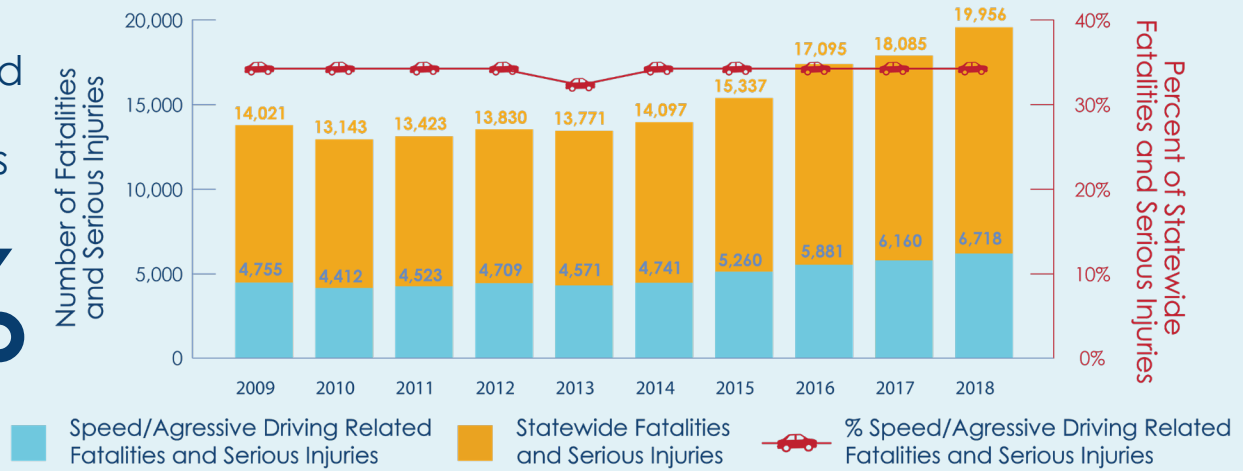
Data Source: SWITRS 2009-2018, unless otherwise stated



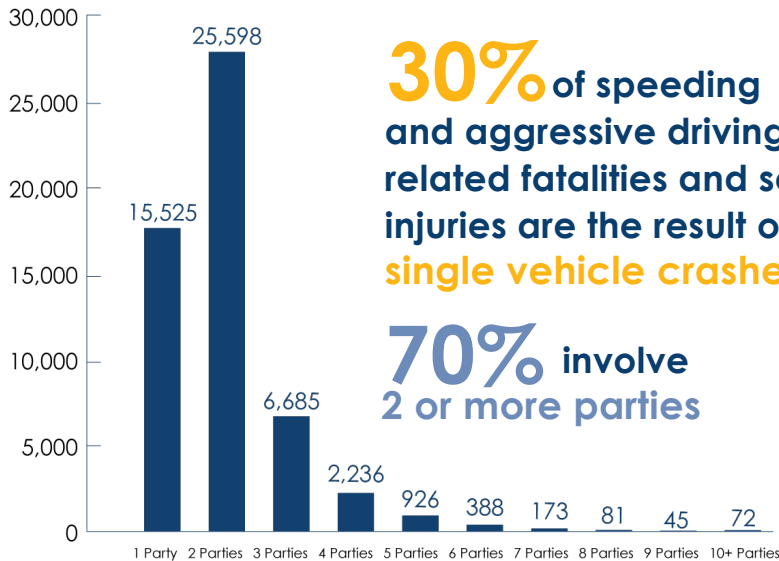
Since 2010, speeding and aggressive driving related fatalities and serious injuries increased by

52%

Speeding and Aggressive Driving Related Fatalities and Serious Injuries and Percent of Statewide Fatalities and Serious Injuries by Year



Number of Speeding and Aggressive Driving Related Fatalities and Serious Injuries by Number of Parties Involved



30% of speeding and aggressive driving related fatalities and serious injuries are the result of **single vehicle crashes**

70% involve **2 or more parties**

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

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

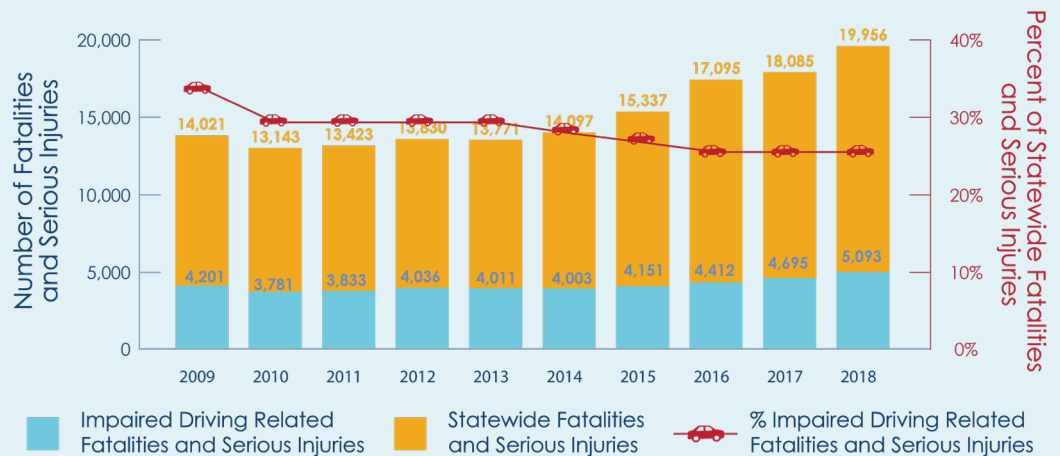
Impaired Driving



Impaired driving represents
28%
of statewide fatalities
and serious injuries

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

Impaired Driving Related Fatalities and Serious Injuries and Percent of Statewide Fatalities and Serious Injuries by Year



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

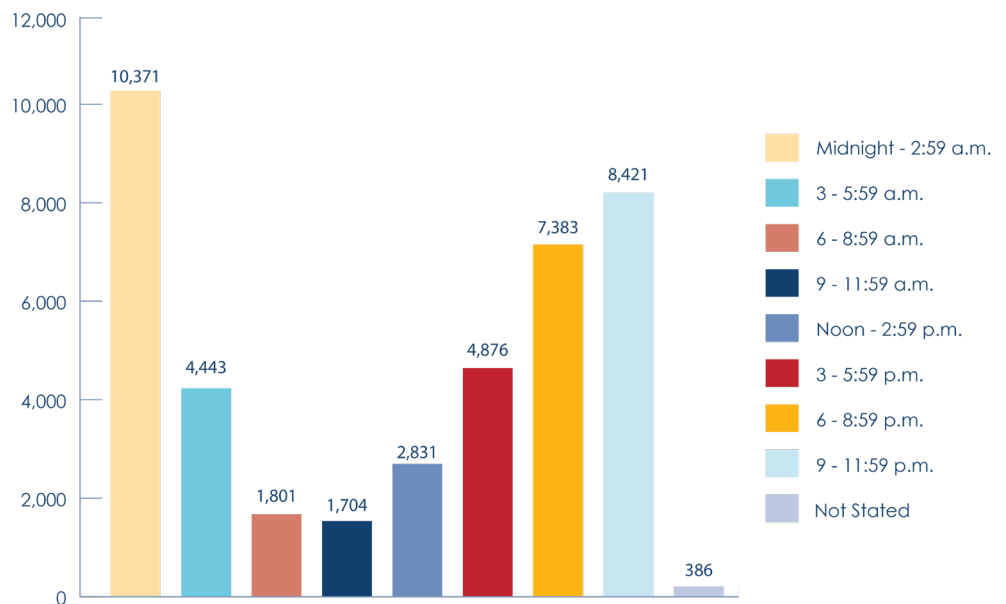
AND



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

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

Impaired Driving Related Fatalities and Serious Injuries by Time of Day



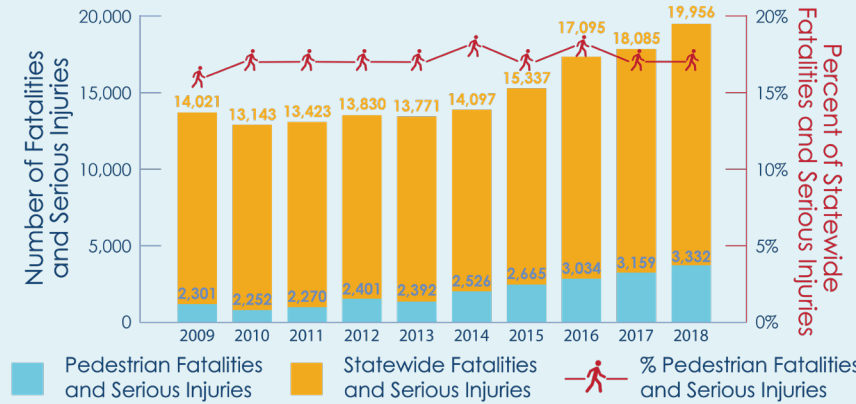
62% of impaired driving related fatalities and serious injuries occur between **6:00PM and 2:59AM**

Pedestrians

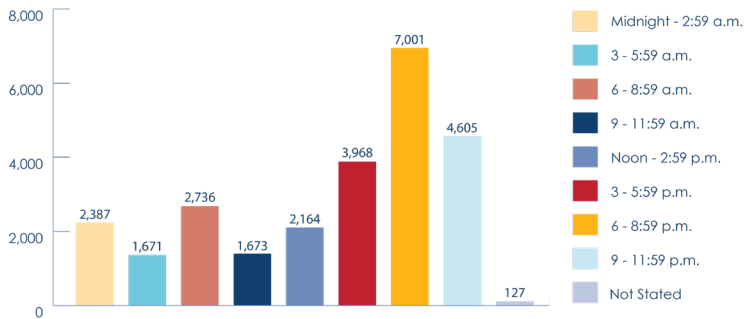


Since 2010, **pedestrian fatalities and serious injuries** have increased by **48%**

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



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

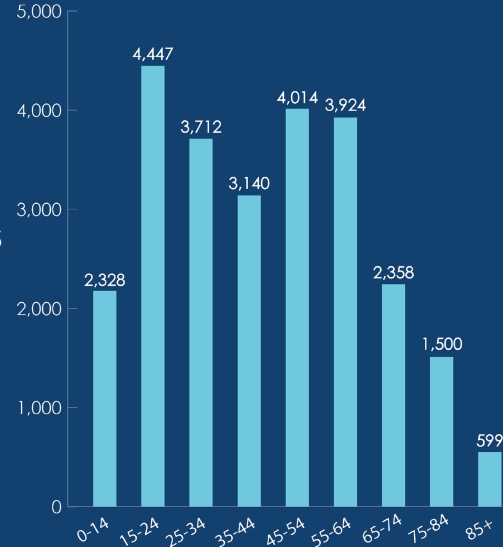
14% of pedestrian fatalities involve **impaired drivers**

WHEREAS



39% of ALL fatalities involve an **impaired driver**

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



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

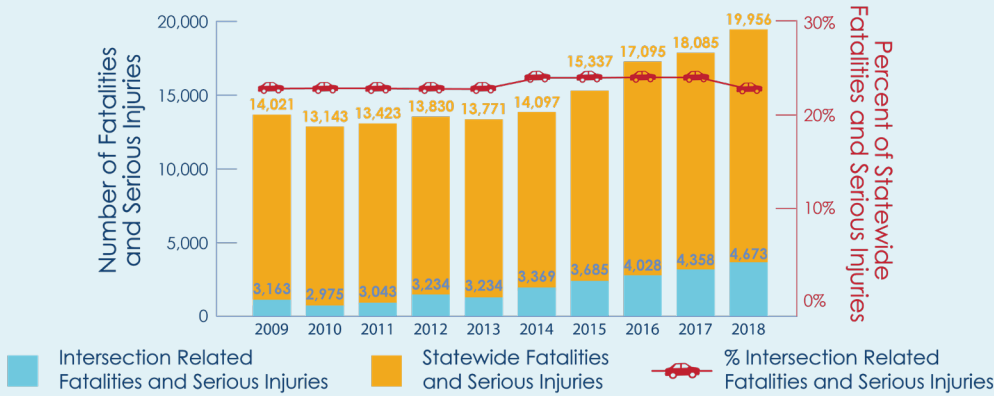


Data Source: SWITRS 2009-2018, unless otherwise stated

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**

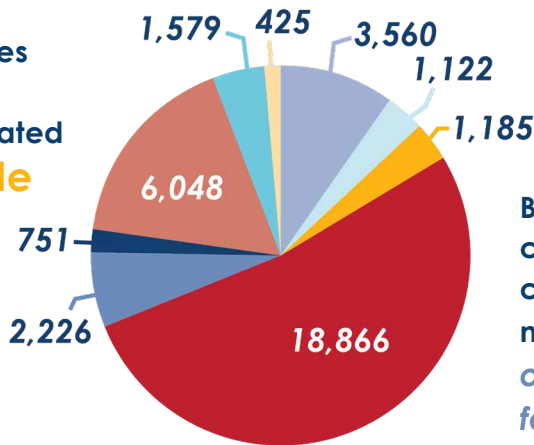
21%

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



Intersection Related Fatalities and Serious Injuries by Crash Type

More than 1/2 of intersection related fatalities and serious injuries are related to **broadside crashes**



Broadside crashes, in comparison, make up **19%** of all statewide fatalities and serious injuries

- Overtaken
- Hit object
- Broadside
- Rear-end
- Sideswipe
- Head-on
- Not Stated
- Other
- Vehicle/Pedestrian

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**



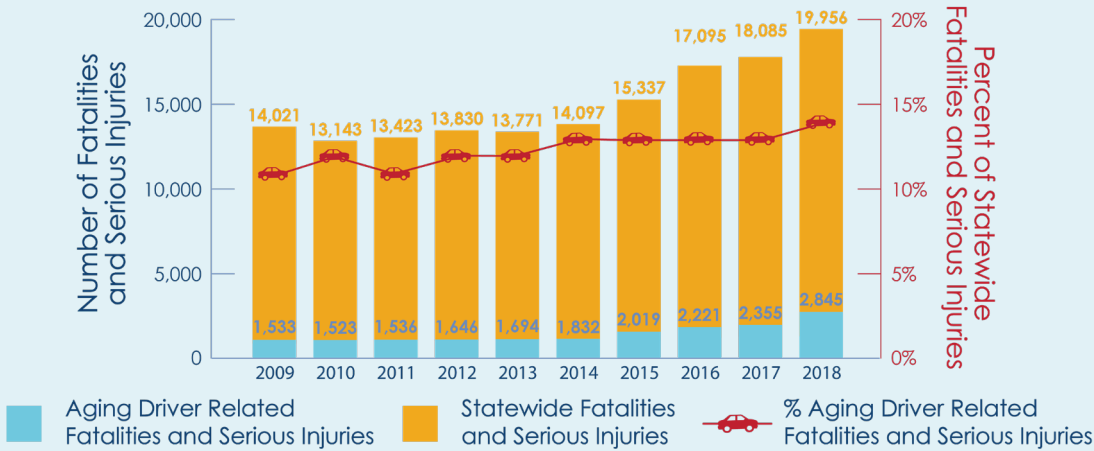
Data Source: SWITRS 2009-2018, unless otherwise stated

Aging Drivers



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

Aging Driver Related Fatalities and Serious Injuries and Percent of Statewide Fatalities and Serious Injuries by Year



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

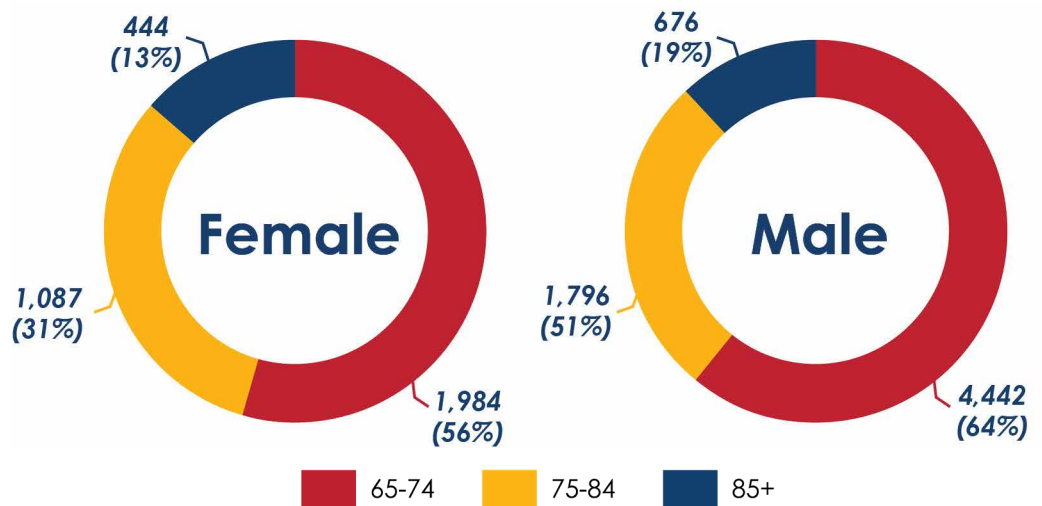


61% of aging driver related fatalities and serious injuries are **male**

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



Aging Drivers Involved in Fatal and Serious Injury Crashes



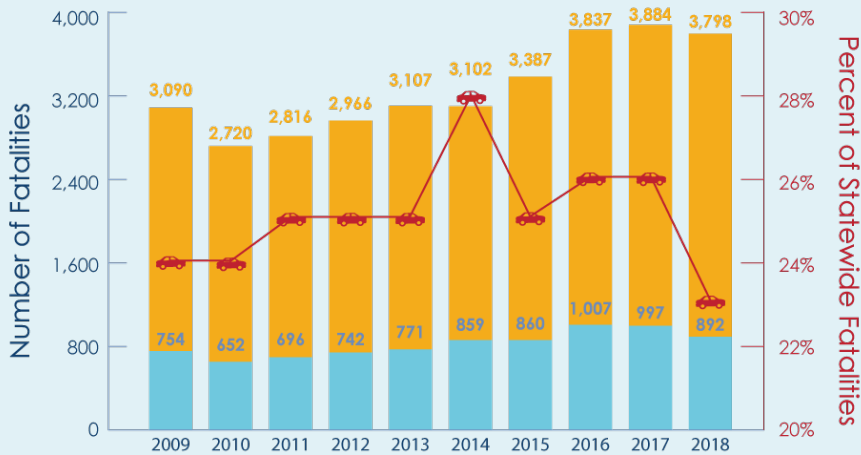
Data Source: SWTRS 2009-2018, unless otherwise stated

Driver Licensing

The Driver Licensing Challenge Area includes instances where an involved driver is unlicensed or does not carry a valid license for the vehicle that they are operating.



Driver Licensing Related Fatalities and Percent of Statewide Fatalities by Year



Since 2010, **driver licensing** related fatalities increased by

37%

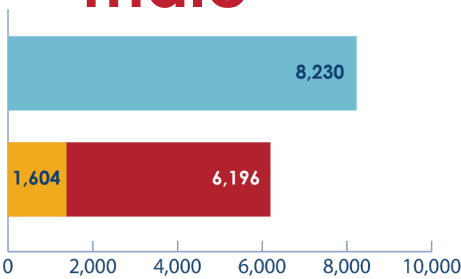


Driver licensing related fatalities make up **23%** of **statewide fatalities** in 2018

The data shows that people *continue to drive* after their privileges have been suspended or revoked, and drivers without valid licenses remains an issue associated with fatalities on California roadways.

75%

of driver licensing related fatalities are **male**



- Total Driver Licensing Related Fatalities
- Total Male Driver Licensing Related Fatalities
- Male Ages 15-24 Driver Licensing Related Fatalities

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

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

VS



44%

of driver licensing related fatalities are **female passenger** victims

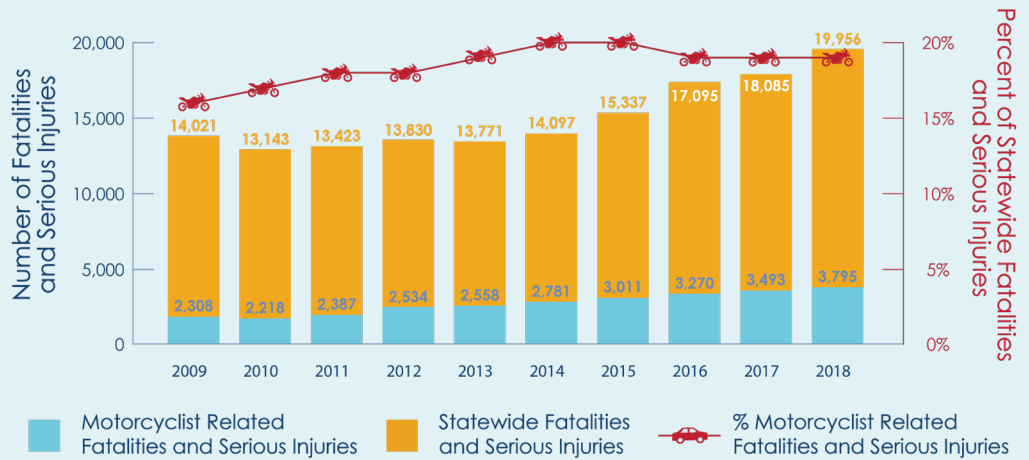
Female victims are more likely to be **passengers** while **males** are more likely to be **drivers**



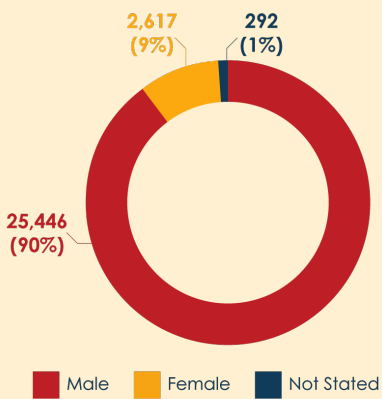
Since 2010, motorcyclist fatalities and serious injuries increased by

71%

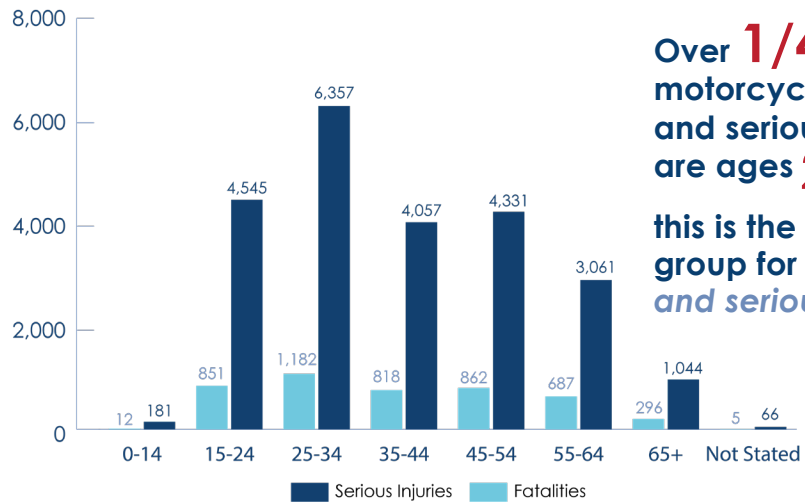
Motorcyclist Fatalities and Serious Injuries and Percent of Statewide Fatalities and Serious Injuries by Year



Motorcyclist Fatalities and Serious Injuries by Gender



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 motorcyclists and motor vehicle drivers



Data Source: SWITRS 2009-2018, unless otherwise stated

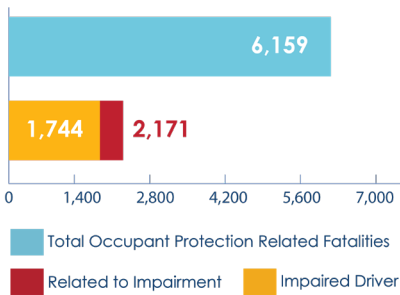
Occupant Protection



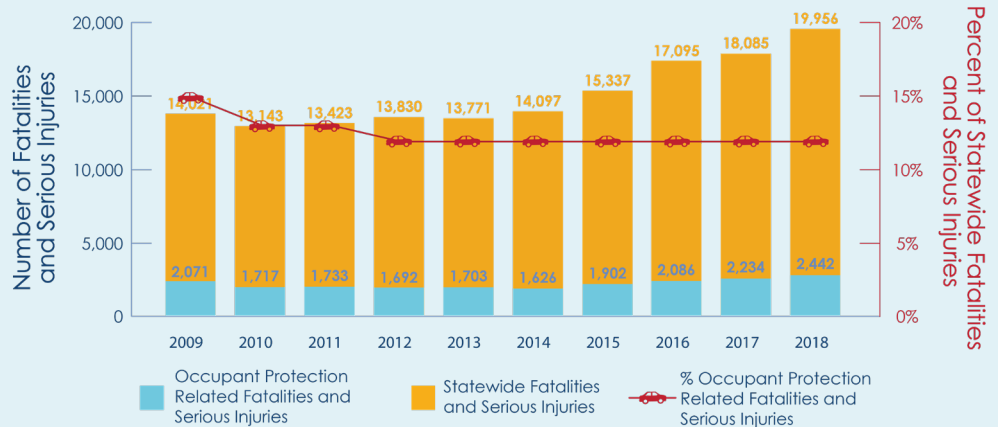
35%
of occupant protection
related fatalities are
related to **impairment**

OF WHICH

80%
are the
**impaired driver
themselves**

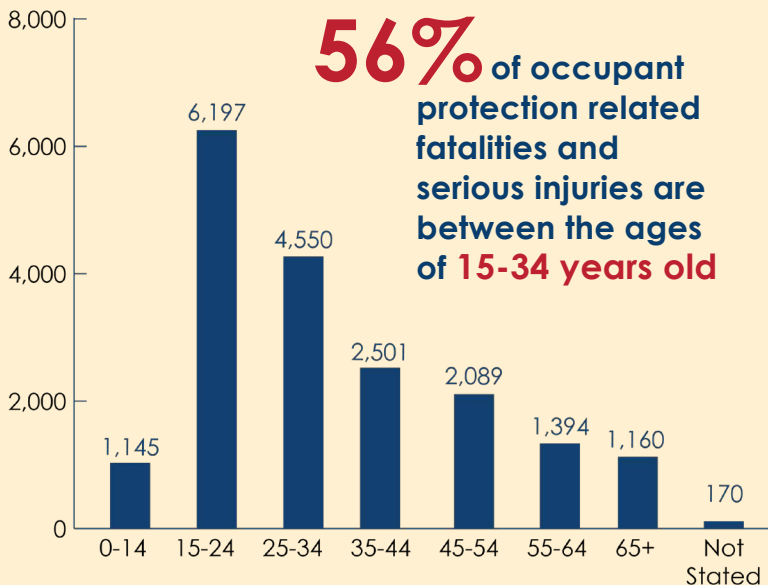


Occupant Protection Related Fatalities and Serious Injuries and Percent of Statewide Fatalities and Serious Injuries by Year

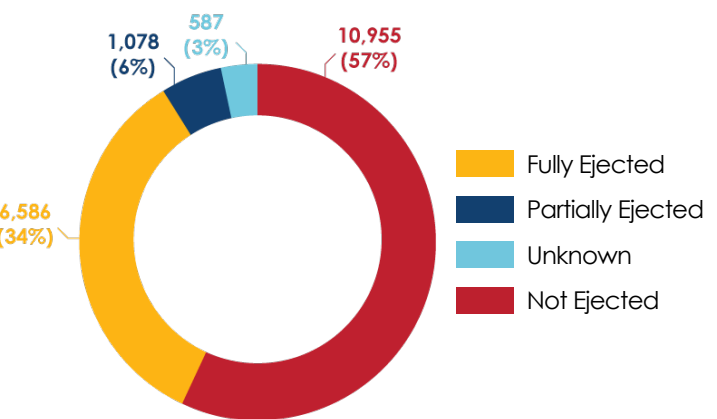


Occupant Protection Related Fatalities and Serious Injuries by Age

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



Occupant Protection Related Fatalities and Serious Injuries by Victim Ejection



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

Data Source: SWITRS 2009-2018, unless otherwise stated

Bicyclists



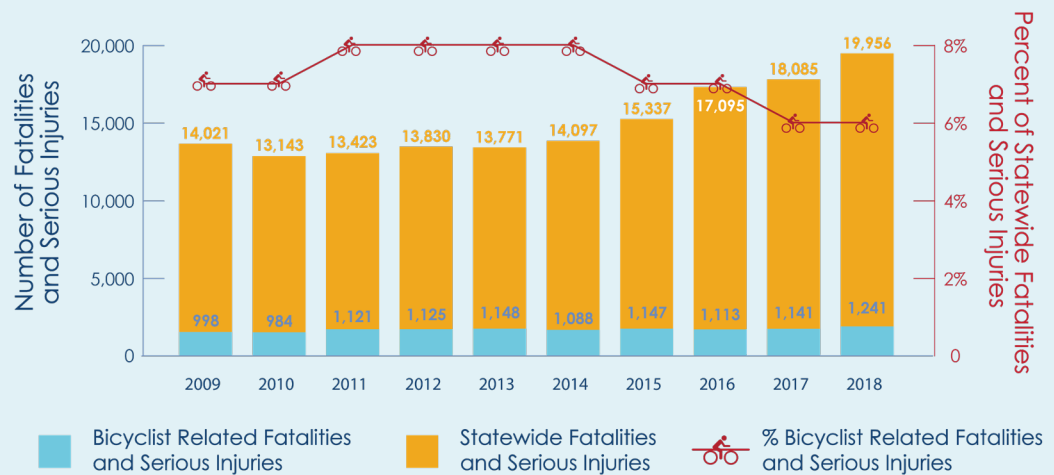
Bicyclist fatalities and serious injuries increased by

26%

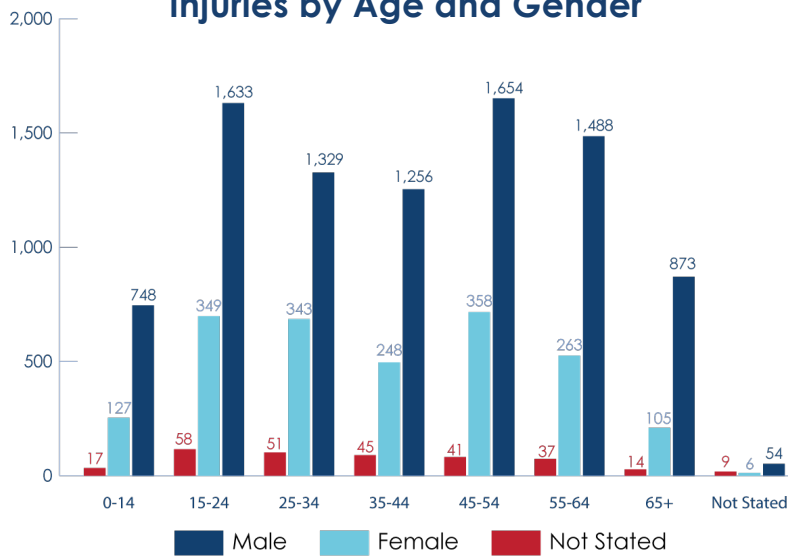
since 2010, with fatalities in particular increasing by

61%

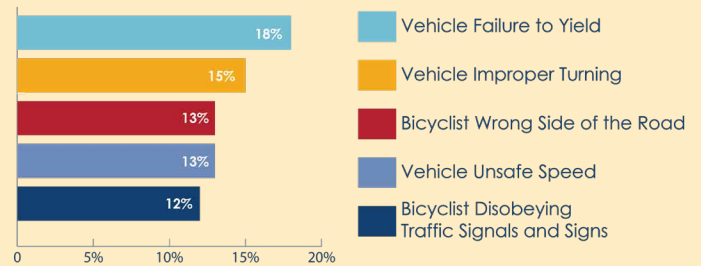
Bicyclist Fatalities and Serious Injuries and Percent of Statewide Fatalities and Serious Injuries by Year



Bicyclist Fatalities and Serious Injuries by Age and Gender



Percent of Bicyclist Fatalities and Serious Injuries by Primary Collision Factor



76%

of bicyclist fatalities and serious injuries occur in urban areas



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



81%

of bicyclist fatalities and serious injuries are male



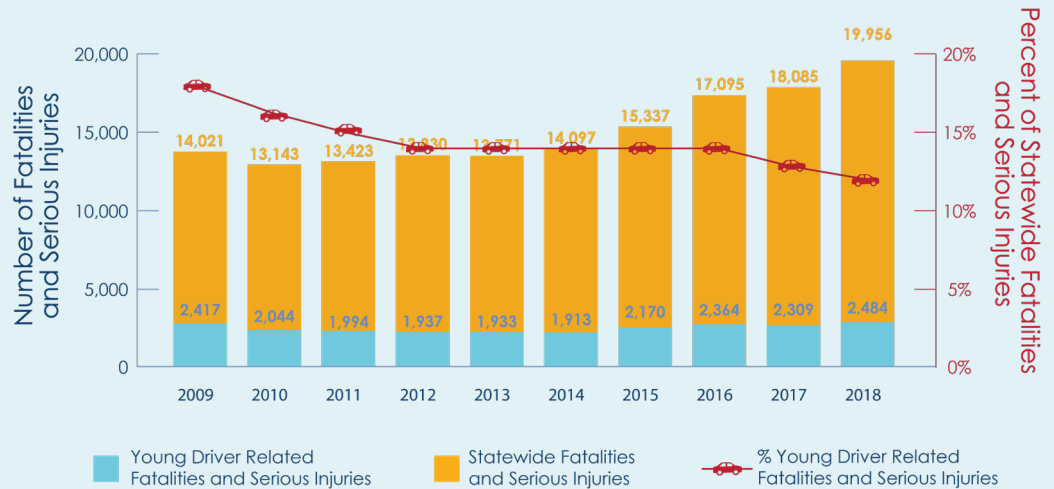
Data Source: SWITRS 2009-2018, unless otherwise stated

Young Drivers



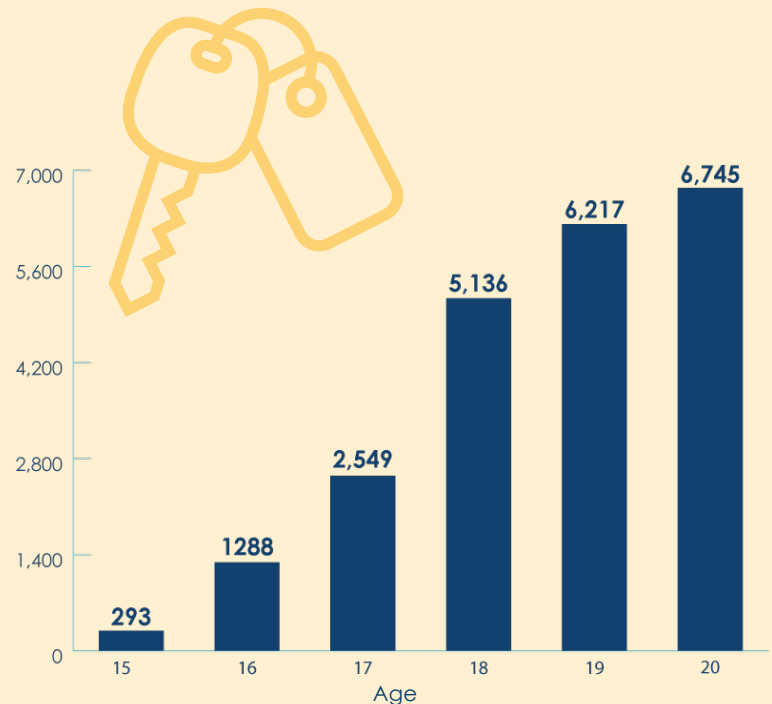
66%
of fatalities and serious injuries related to young driver crashes are male

Young Driver Related Fatalities and Serious Injuries and Percent of Statewide Fatalities and Serious Injuries by Year



67%
of young drivers involved in a fatal or serious injury crash are at-fault
COMPARED TO
53%
of drivers overall

Fatalities and Serious Injuries Based on Driver Age



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

Data Source: SWITRS 2009-2018, unless otherwise stated

Commercial Vehicles

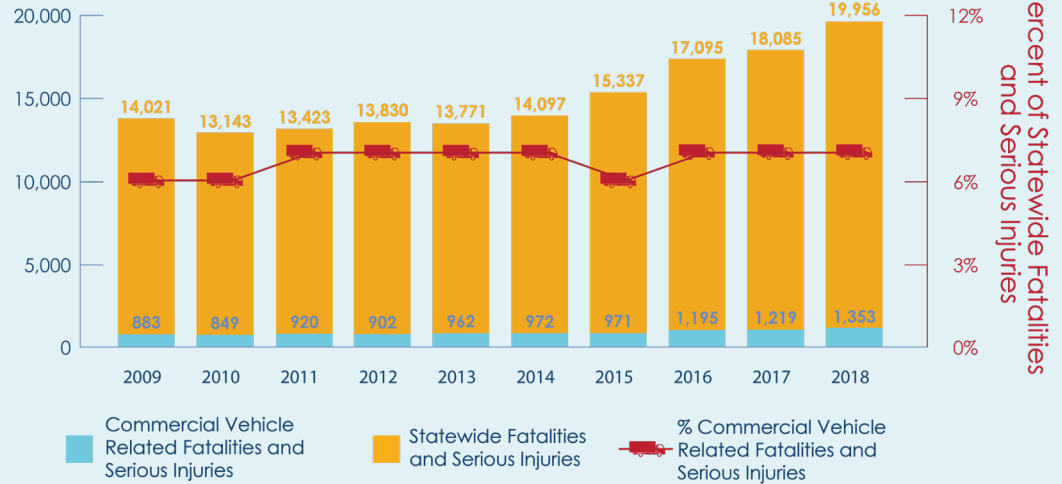


Since 2010, commercial vehicle related fatalities and serious injuries have increased

35%

Number of Fatalities and Serious Injuries

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



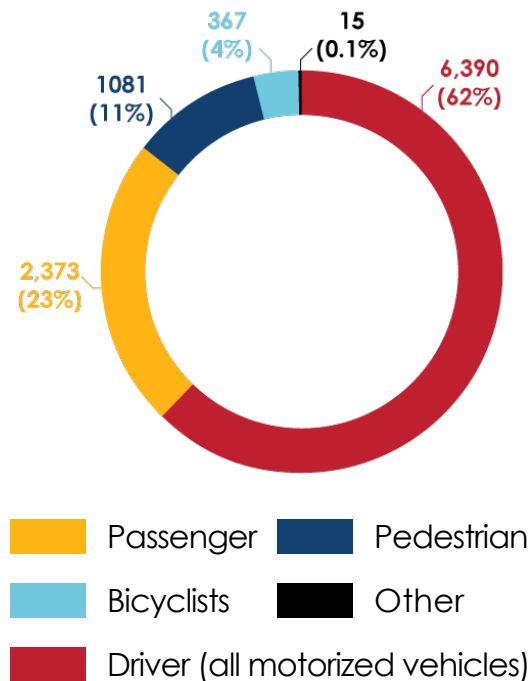
13%

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



Commercial vehicle related fatalities and serious injuries occur in urban and rural areas, as defined by population,

EQUALLY

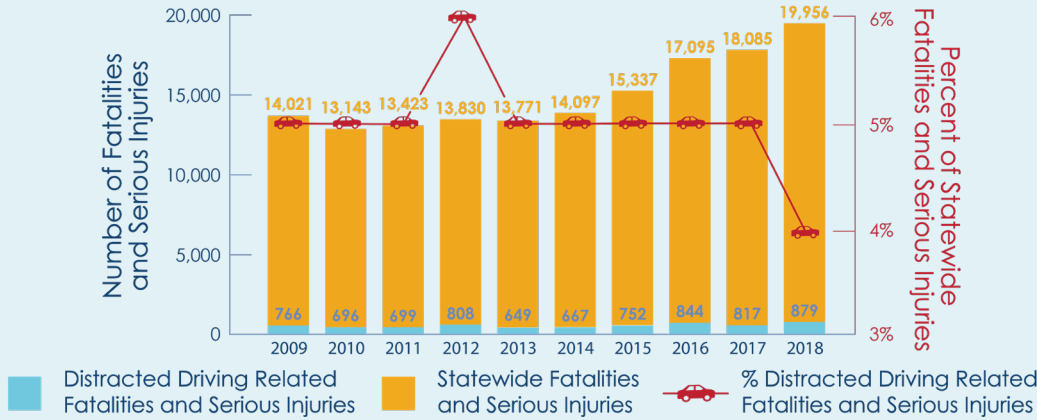


Data Source: SWITRS 2009-2018, unless otherwise stated

Distracted Driving



Distracted Driving Related Fatalities and Serious Injuries and Percent of Statewide Fatalities and Serious Injuries by Year



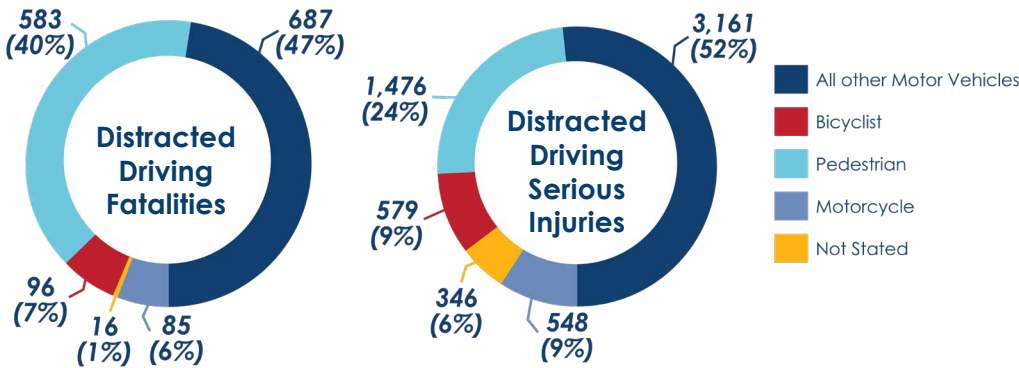
20-24 year olds make up the greatest number of distracted driving related fatalities and serious injuries for *both males and females*

21%

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



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



40% of distracted driving related fatalities involve a **pedestrian**

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

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

WHEREAS

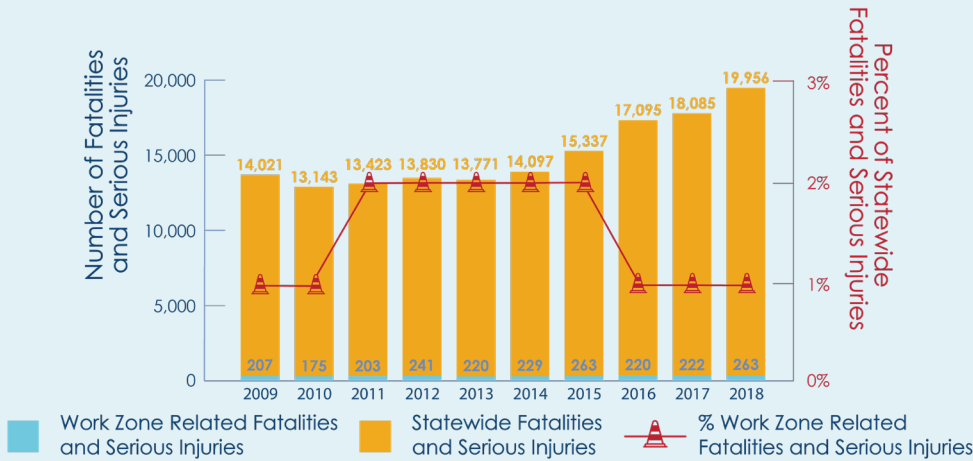
28% of **statewide** fatalities and serious injuries are **female**

Data Source: SWITRS 2009-2018, unless otherwise stated

Work Zones



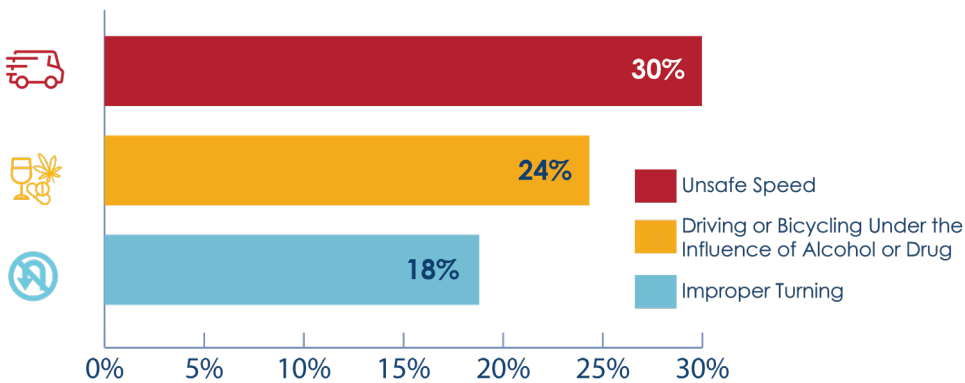
Work Zone Related Fatalities and Percent of Statewide Fatalities and Serious Injuries by Year



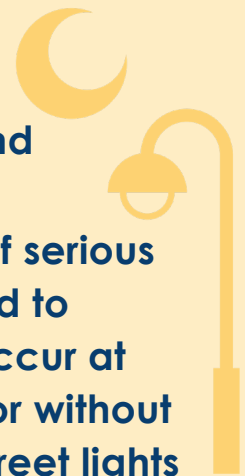
Over 1/2 of work zone related fatalities and serious injuries result from **hit object and rear-end crashes**



Percent of Work Zone Related Fatalities and Serious Injuries by Primary Collision Factor



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