CALIFORNIA SAFE ROADS

2020 - 2024 Strategic Highway Safety Plan

Strategic Highway Safety Plan (SHSP) Development Outreach Meeting

Sacramento

April 10, 2019

© 2019 California Department of Transportation

AGENDA

CALIFORNIA SAFE ROADS
2020 - 2024 Strategic Highway Safety Plan

8:30 – 9:15 AM: Welcome / Introductions / Overview

9:15 – 9:45 AM: Statewide Summary

9:45 – 10:15 AM: Regional Summary

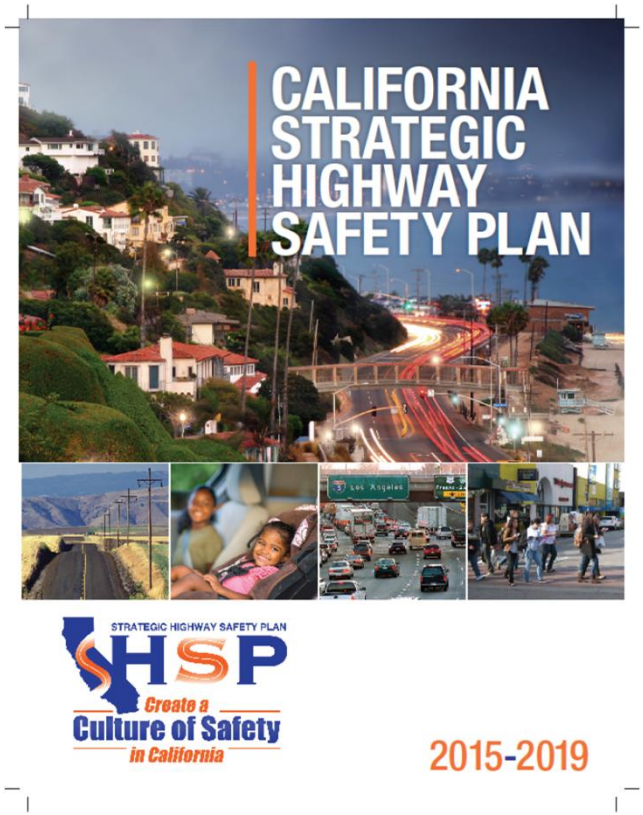
10:15 – 11:30 AM: Safety Strategy Session

11:30 – 12:00 PM: Report Out and Closing

SHSP OVERVIEW

CALIFORNIA SAFE ROADS
2020 - 2024 Strategic Highway Safety Plan

- Guides safety activities for all roadway users
- Addresses safety on all public roads
- All agency coordinated approach
- Strategic, data-driven process
- Federal requirement
- Current SHSP covers 2015 to 2019



SHSP OVERVIEW

CALIFORNIA SAFE ROADS
2020 - 2024 Strategic Highway Safety Plan

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SHSP LOCAL AND REGIONAL BENEFITS

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Improve safety
- Save lives
- Reduce preventable injuries

Improve livability
- Support active transportation goals
- Improve public health
- Coordinate with congestion management efforts

Share local knowledge
- Exchange best practices
- Access information and data
- Funding and partnering opportunities

SHSP

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Vision Statement

Safe Public Roads Across California.

Mission Statement

Ensure safety for all modes of travel on California's public Roads

Objective

Zero Fatalities and Serious Injuries.

MULTIPLE SAFETY APPROACHES

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TZD Toward Zero Deaths™
National Strategy on Highway Safety

VISION ZERO

ROAD TO ZERO

STATEWIDE COLLABORATION

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Working together to reduce fatalities and serious injuries on all public roadways.

DEVELOPMENT PROCESS

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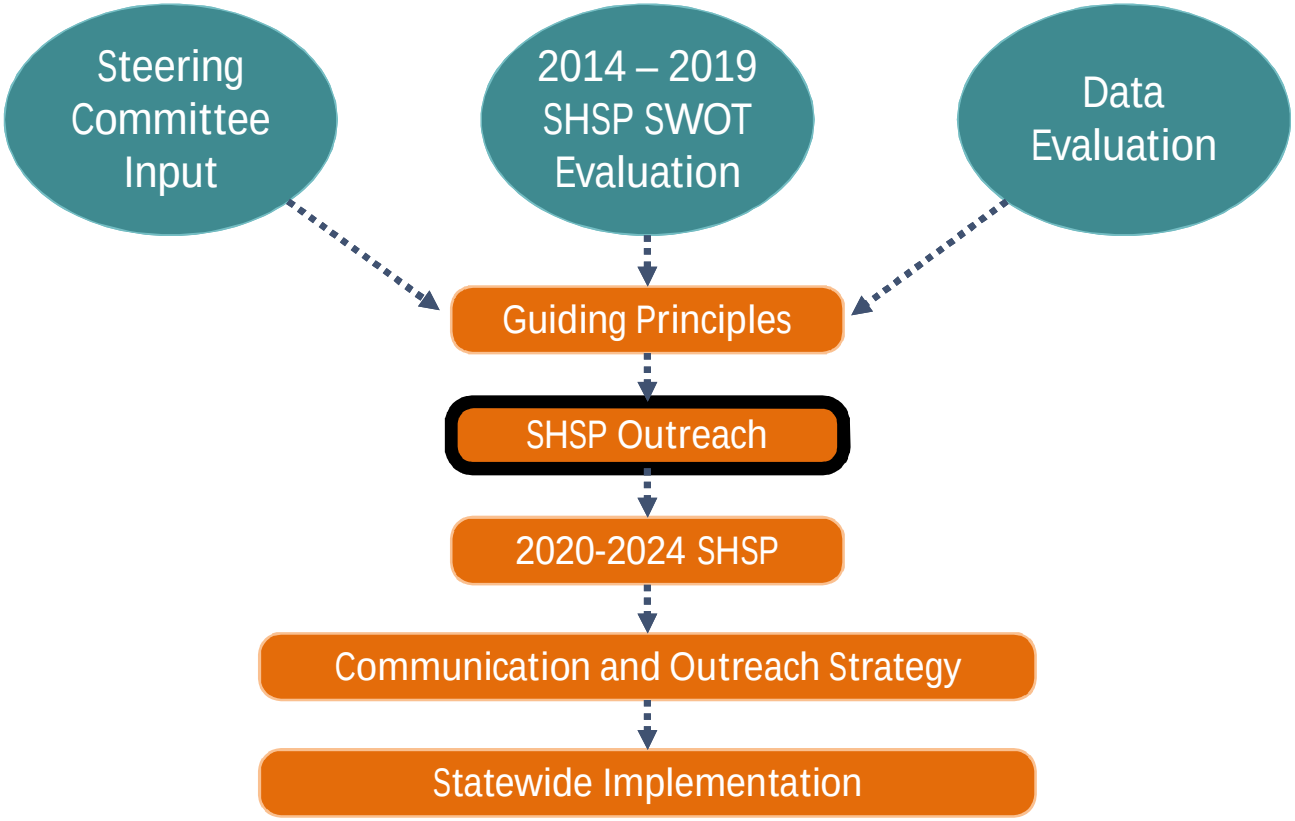
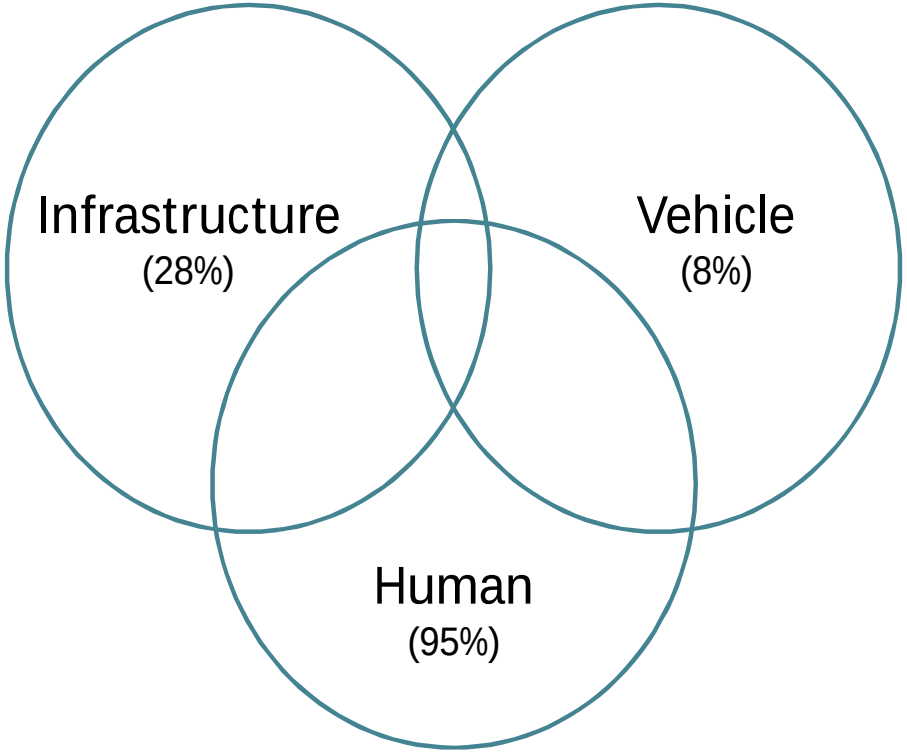


COLLISION FACTORS



4 Es now 5 Es OF TRAFFIC SAFETY

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SHSP CONNECTIONS

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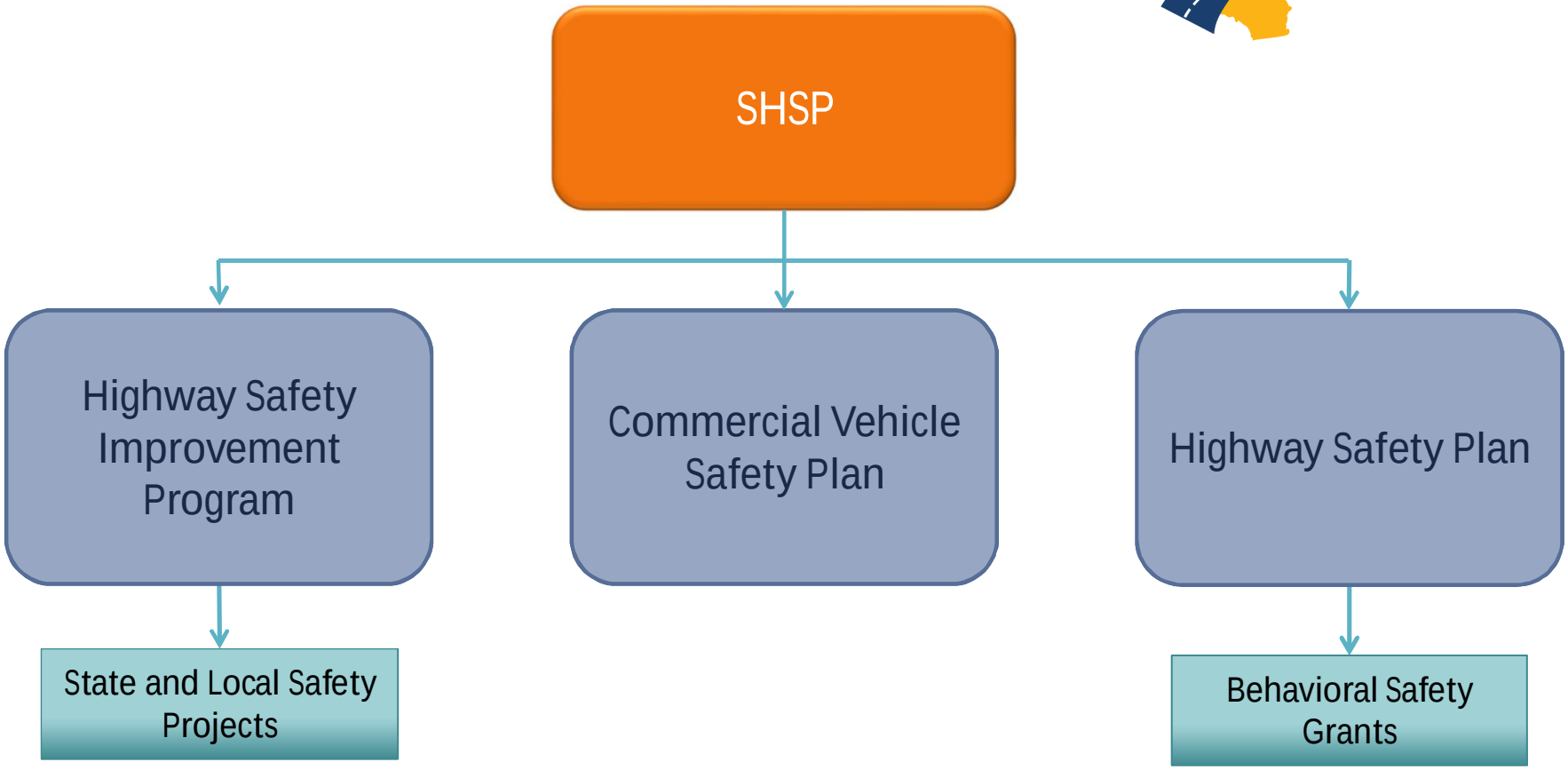

CALTRANS HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)

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- FAST Act
  - Continues the Highway Safety Improvement Program as a core Federal Aid program to significantly reduce fatalities and serious injuries on all public roads.
  - Local HSIP Program
    - Safety Improvement Projects (Benefit/Cost selected safety projects)
    - (New) Systemic Safety Analysis Report Program (SSARP)

Caltrans

OFFICE OF TRAFFIC SAFETY

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- Liaison with the National Highway Traffic Safety Administration (NHTSA)
- California Highway Safety Plan
- Annual Performance Report
- Grant Programs

CALIFORNIA OFFICE OF TRAFFIC SAFETY

CALIFORNIA HIGHWAY PATROL

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- Mission - Provide the highest level of Safety, Service, and Security
- CHP involvement in the SHSP
  - Executive Committee - Commissioner Warren Stanley
  - Steering Committee - Assistant Chief
  - Lead or Co-lead on 10 of the 15 Challenge Areas
  - Active involvement on 13 of the 15 Challenge Areas
  - Lead or Co-lead on 25 of the Actions
  - Mileage Death Rate on the increase (2013: .94 to 2016: 1.08)
  - Work with the Office of Traffic Safety to incorporate SHSP initiatives into the CHP Grants

CALIFORNIA HIGHWAY PATROL

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- Current SHSP Actions the CHP is working on
  - Action 5.1 – Update CHP DUI Checkpoint Educational Pamphlet with an emphasis on drugs
  - Action 6.1 – Develop an issue paper establishing benefits of Standardized Field Sobriety Tests (SFSTs) training for law enforcement agencies
  - Action 6.2 – Increase the number of Advanced Roadside Impaired Driving Enforcement (ARIDE) personnel trained by 8 percent
  - Action 4.1 – Develop a media campaign….to raise awareness about speeding and aggressive driving
  - Action 2.2 - Identify locations with reported pedestrian safety issues and conduct high visibility pedestrian safety enforcement operations

CALIFORNIA HIGHWAY PATROL

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- Commercial Vehicle Safety Plan
  - Funded by the Motor Carrier Safety Assistance Program (MCSAP) Grant 2018-20
  - Reduce commercial motor vehicle (CMV) involved collisions within CHP jurisdiction, including the Mileage Death Rate for CMVs
  - 53 Commercial Vehicle Enforcement Facilities (38 locations)
  - 144 Mobile Road Enforcement Officers
  - CMV Fatal Crashes – 302.6 per year (5 year average)
  - MCSAP Activities: Driver and Vehicle Inspections, Enforcement, Compliance Reviews and Audits, Public Education, and Data Collection

FHWA

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- SHSP is a requirement under SAFETEA-LU
- Statewide-coordinated safety plan led by State DOT that provides comprehensive framework for reducing fatalities and serious injuries on all public roads
- Identifies a State's key safety needs and guides investment decisions towards strategies and countermeasure with the most potential to save lives and prevent injuries
- SHSP shall be data driven, evaluate performance and updated
- SHSP Challenge Areas, Revisions and Stakeholders

U.S. Department of Transportation
Federal Highway Administration

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Statewide Summary

DATA-DRIVEN IMPLEMENTATION

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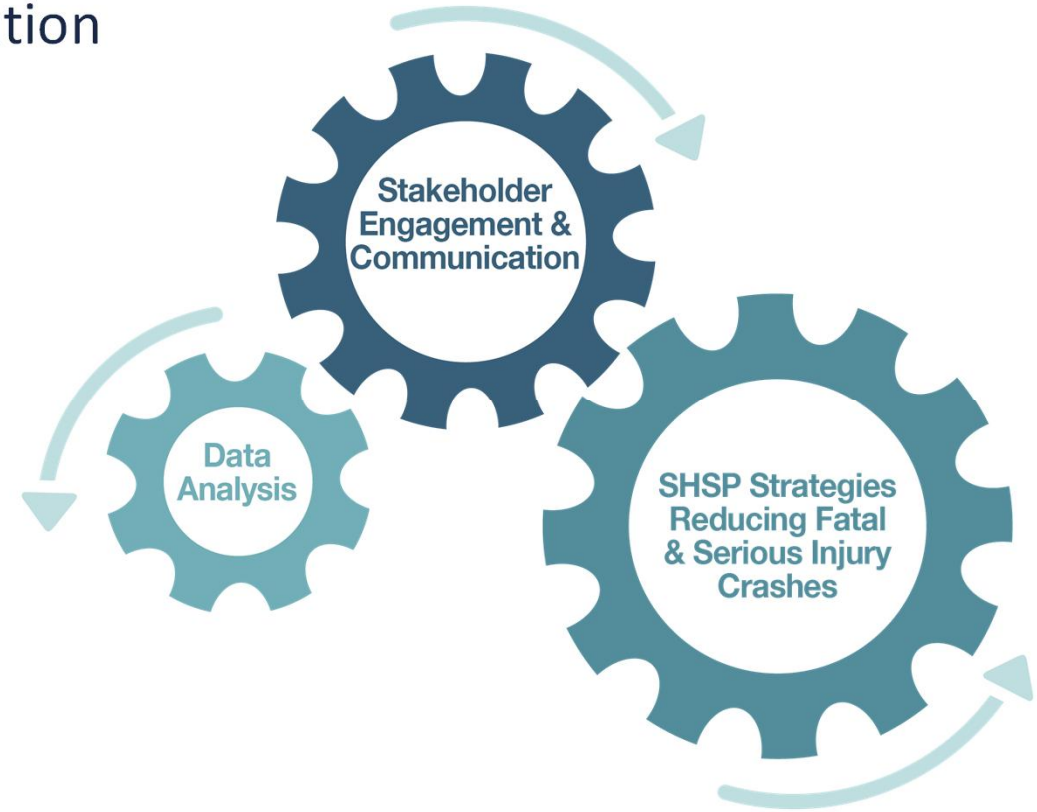
- Data analysis drives implementation
- 2020 to 2024 Data
  - 10 years (2008 to 2017)
  - 128,974 fatal and serious injury collisions
  - 147,458 fatal and serious injuries
  - 1.14 fatal and serious injuries / collision



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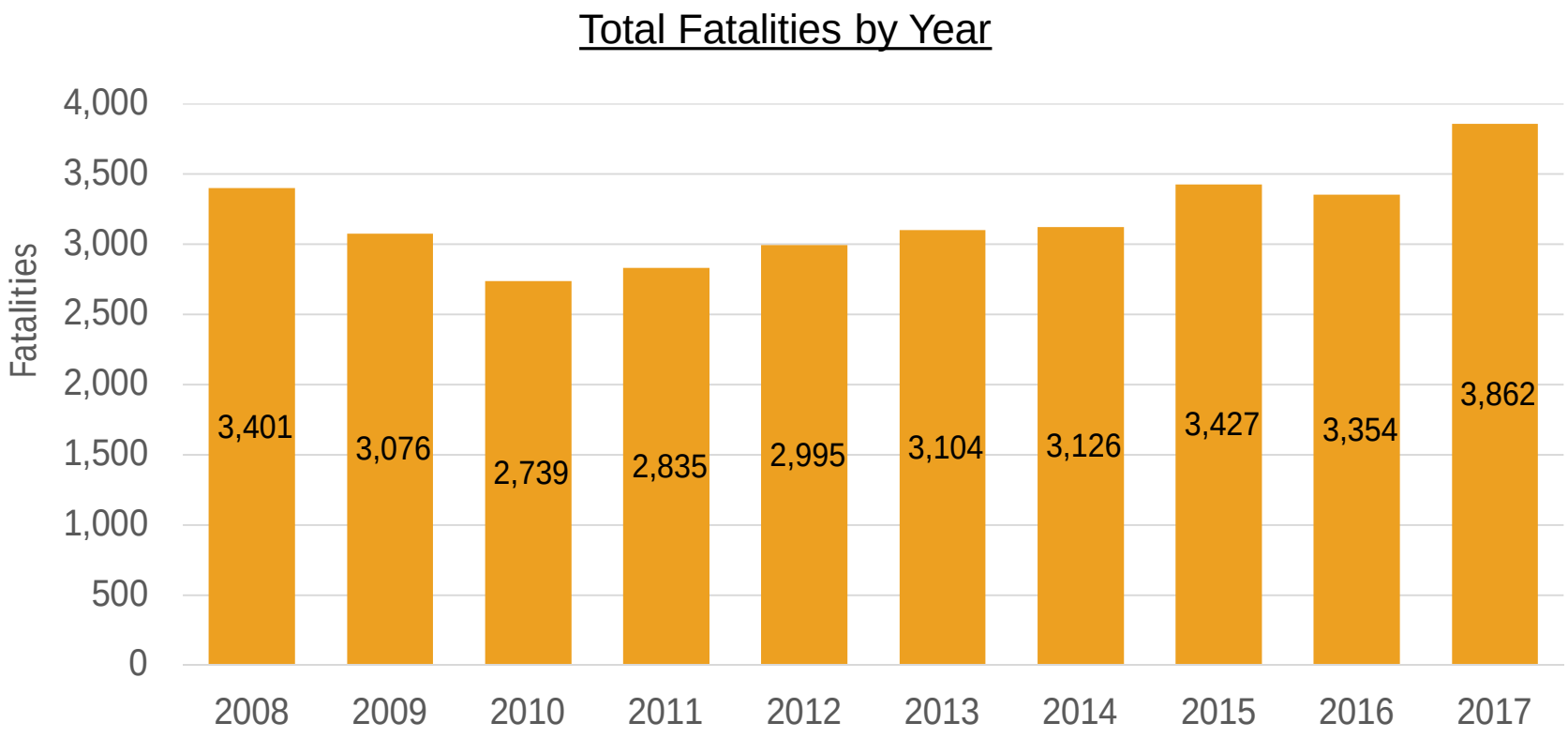

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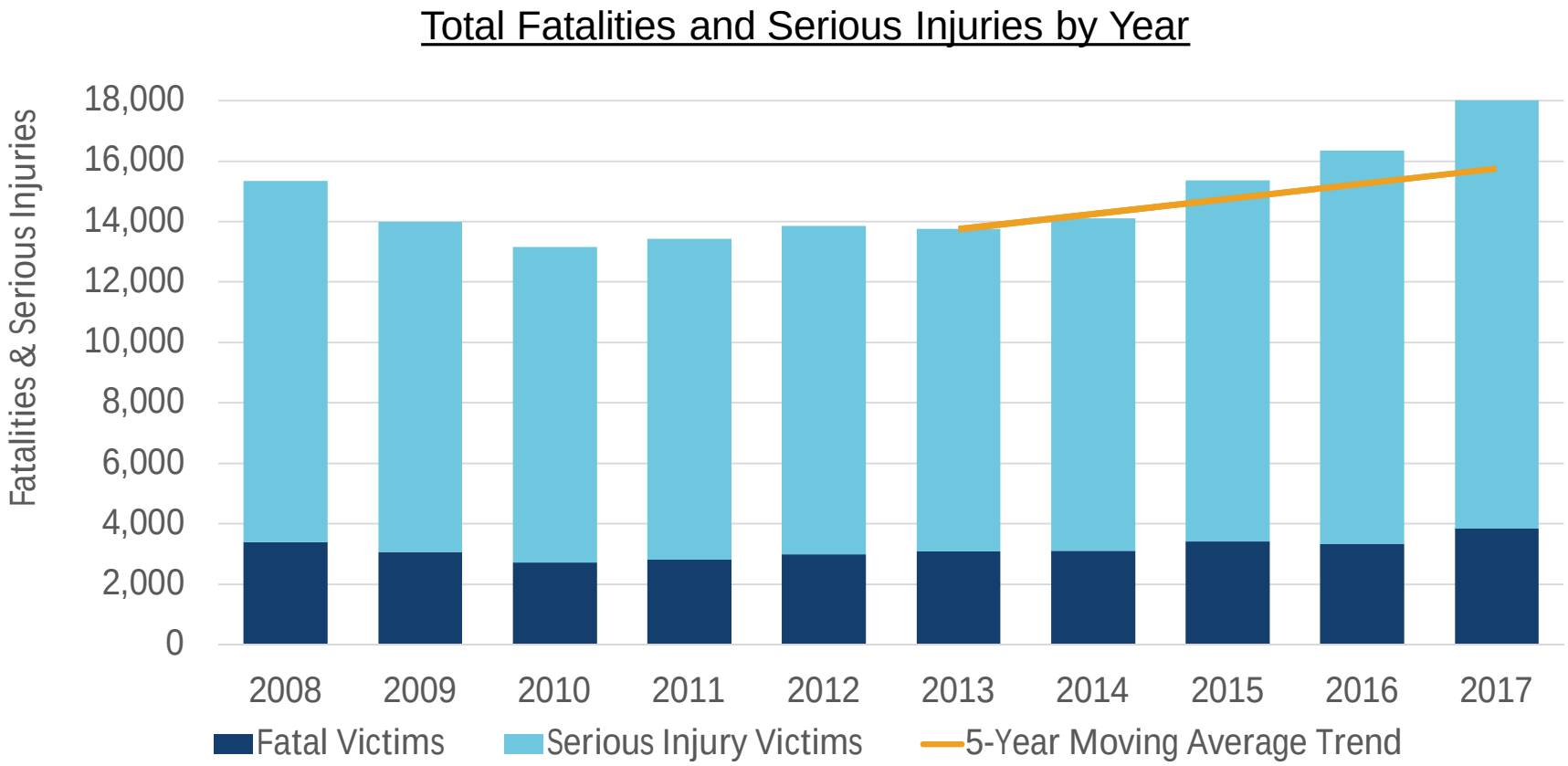

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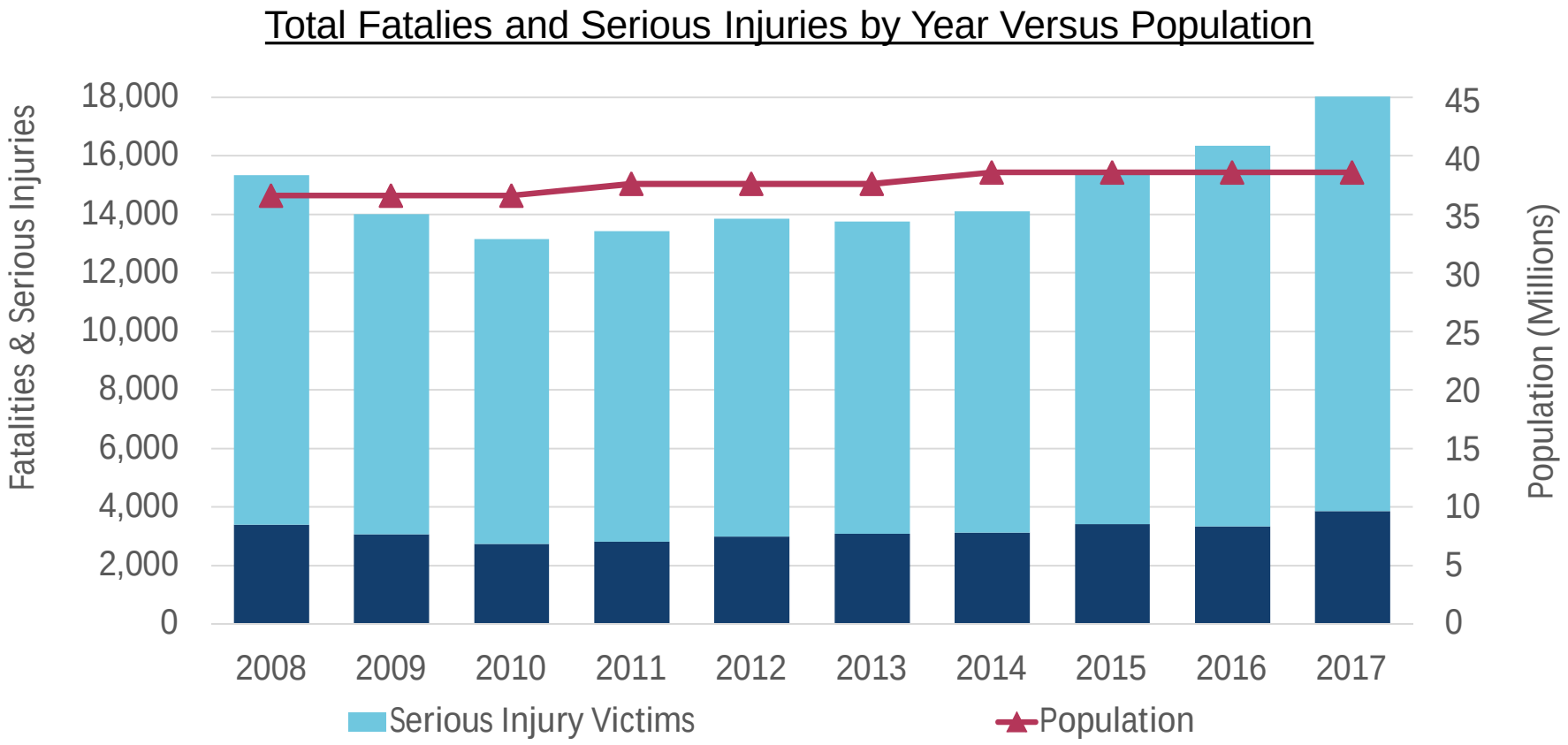

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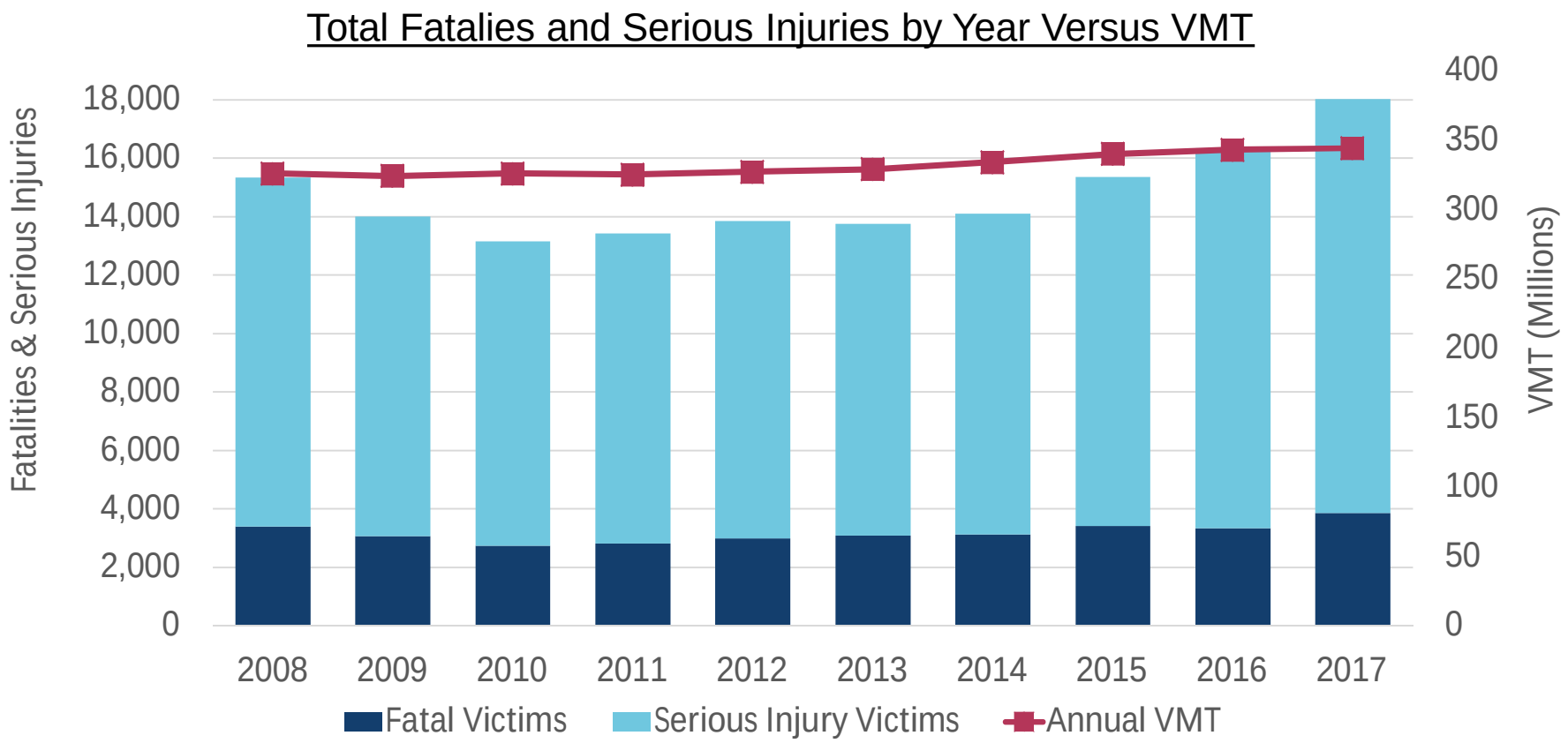

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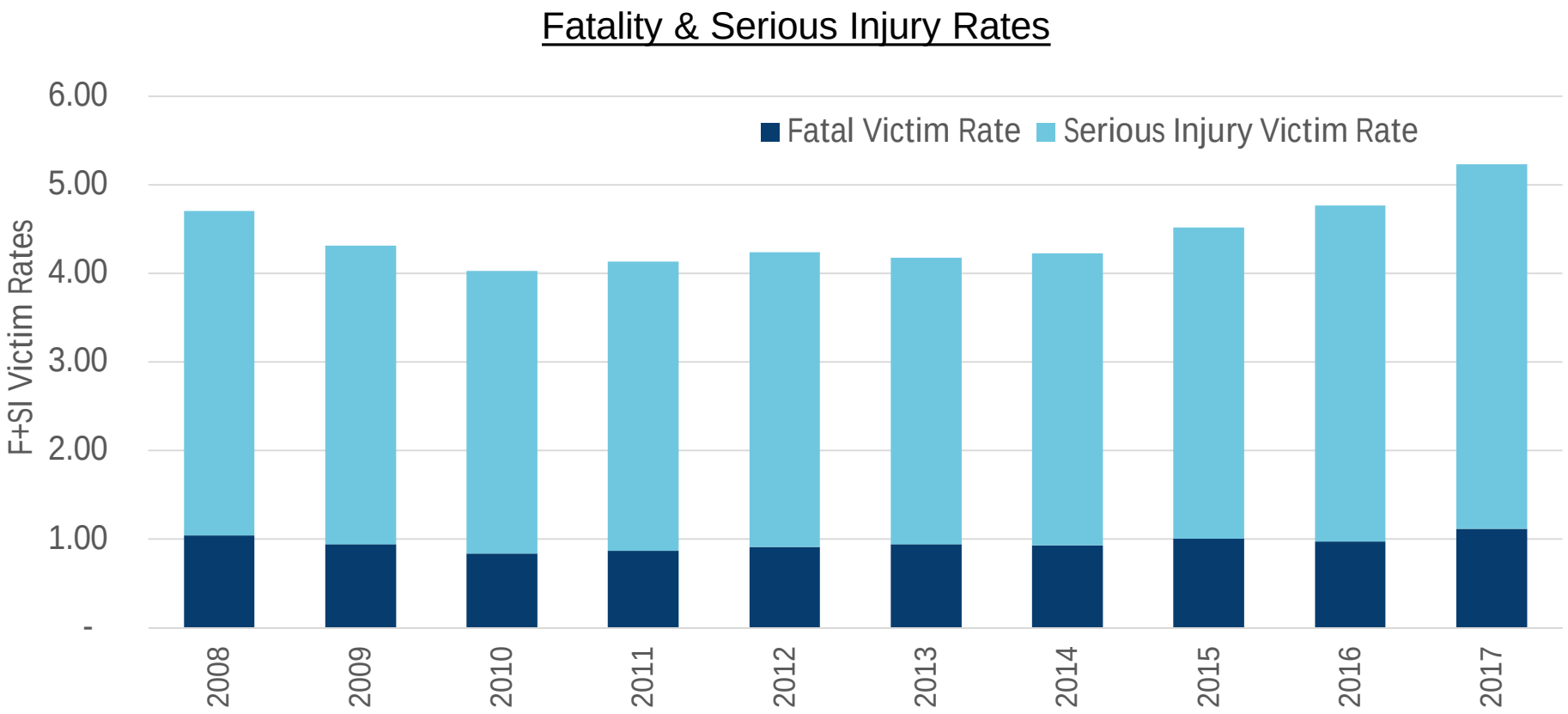

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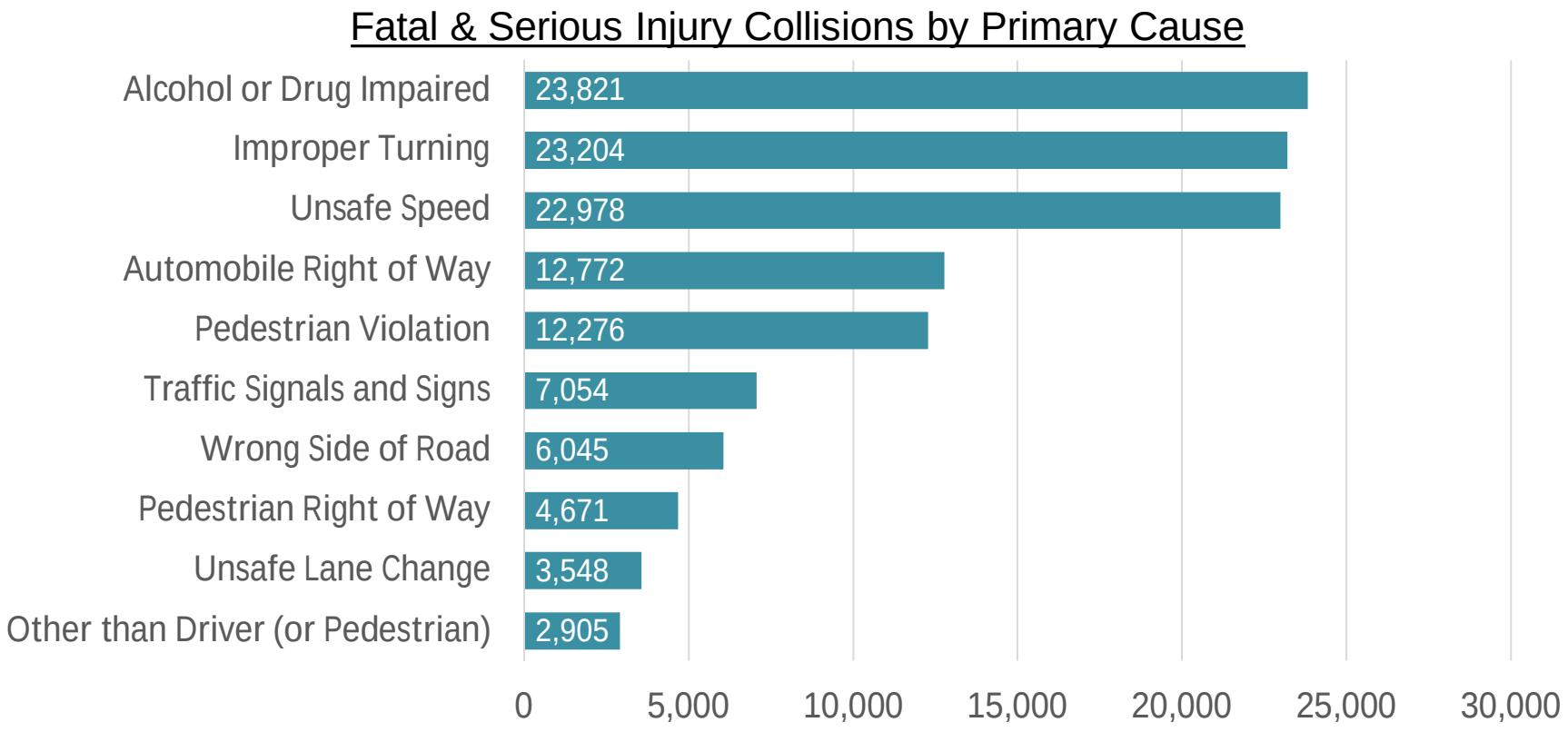

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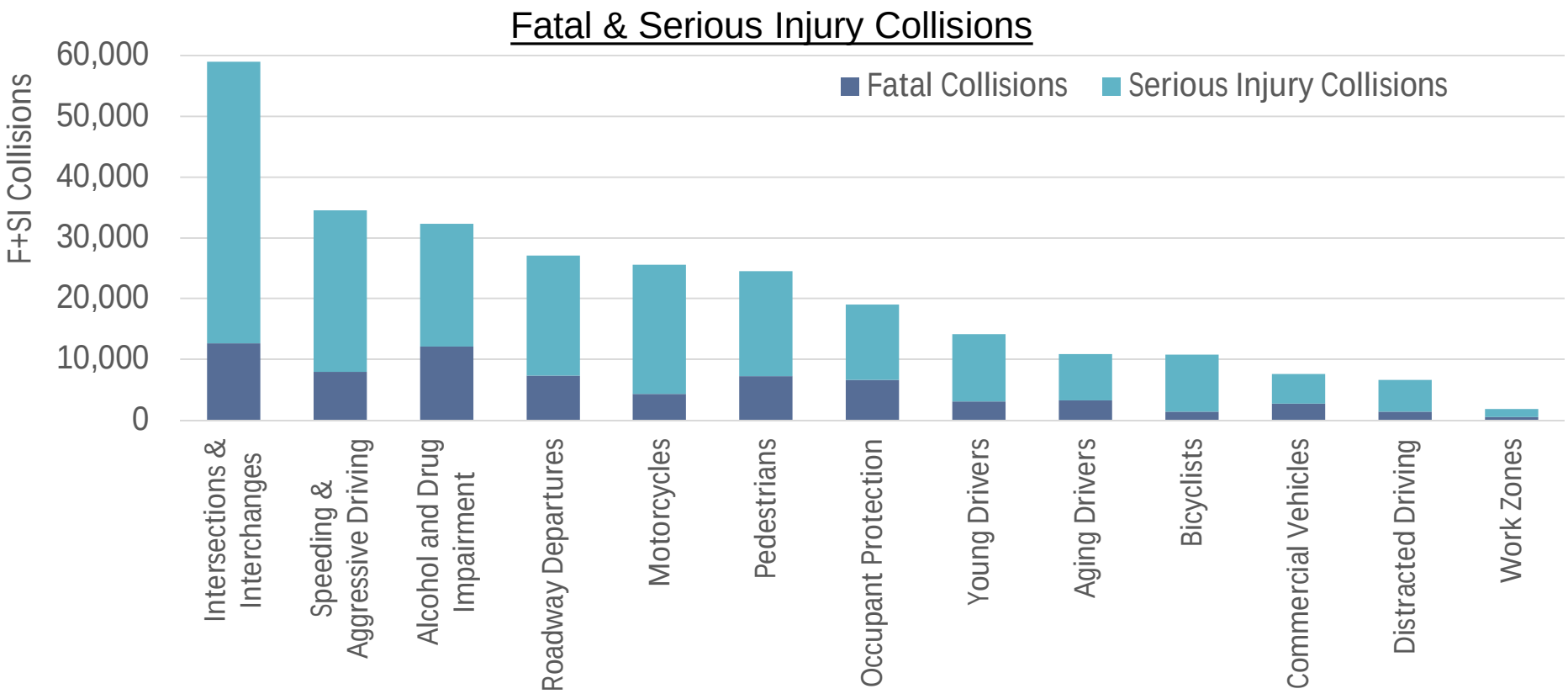

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Fatal and Serious Injury Collision Rankings

Category	Fatal and Serious Injury			Fatal Only		Serious Injury Only	
	Rank	%	% Change	Rank	%	Rank	%
Intersections, Interchanges, and Other Roadway Access	1	45.7 %	0.14%	1	43.2 %	1	46.5 %
Speeding and Aggressive Driving	2	26.8 %	2.24%	3	27.4 %	2	26.7 %
Alcohol and Drug Impairment	3	25.1 %	-4.91%	2	41.4 %	4	20.3 %
Driver Licensing and Competency (Fatal only)	4*	24.5 %*	2.04%	6	24.5 %*	*	*
Roadway Departures and Head-On Collisions	5	21.0 %	-1.52%	4	25.0 %	5	19.9 %
Motorcycles	6	19.9 %	2.04%	8	14.8 %	3	21.4 %
Pedestrians	7	19.0 %	0.85%	5	24.9 %	6	17.3 %
Occupant Protection	8	14.8 %	-2.18%	7	22.6 %	7	12.5 %
Young Drivers	9	11.0 %	-1.20%	10	10.6 %	8	11.2 %
Aging Drivers	10	8.5 %	1.65%	9	11.3 %	10	7.6 %
Bicycling	11	8.4 %	-0.40%	12	4.8 %	9	9.4 %
Commercial Vehicles	12	5.9 %	-2.65%	11	9.5 %	12	4.9 %
Distracted Driving	13	5.2 %	-0.20%	13	4.8 %	11	5.3 %
Work Zones	14	1.5 %	0.08%	14	1.8 %	13	1.4 %

STATEWIDE

Intersections, Interchanges, and Other Roadway Access
43%

Alcohol and Drug Impairment
42%

Speeding and Aggressive Driving
28%

Roadway Departure & Head-on Collisions
26%

Driver Licensing and Competency
25%

Pedestrians
23%

Occupant Protection
19%

Aging Drivers
14%

Motorcycles
14%

Young Drivers
13%

Commercial Vehicles
10%

Distracted Driving
5%

Bicycling
4%

Work Zone
2%

Percent of total fatalities

STATEWIDE

Fatal & Serious Injury Collisions

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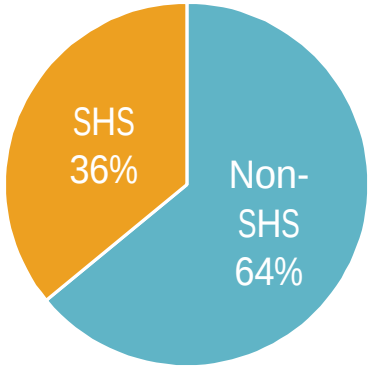
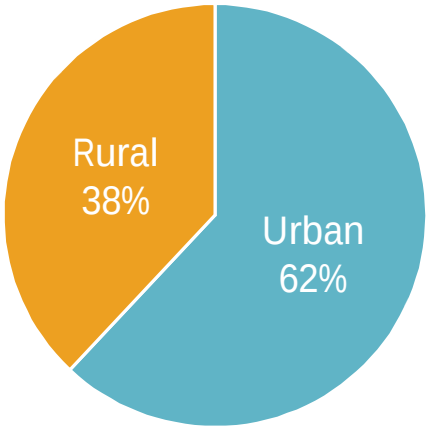
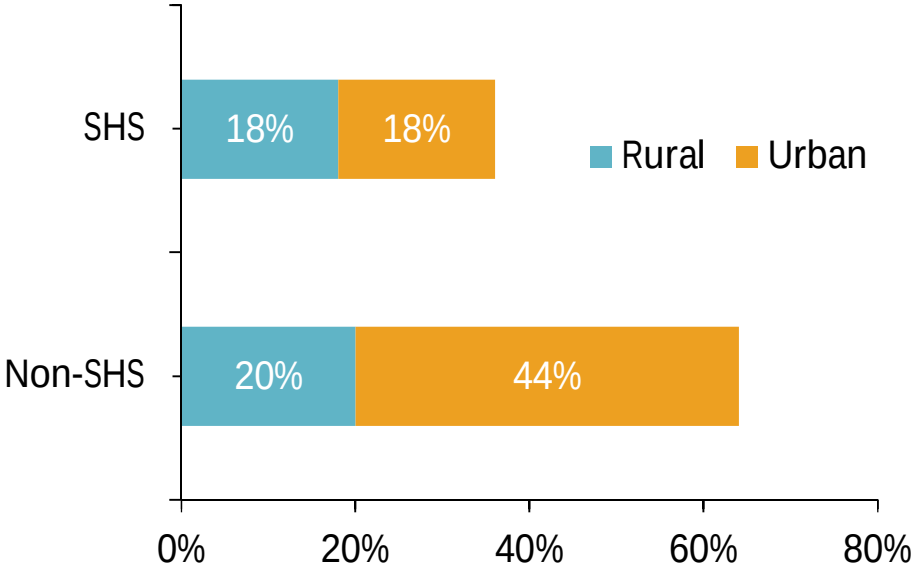
State Highway System (SHS) vs. Non-SHS



Rural vs. Urban



Percent of Victims by Location



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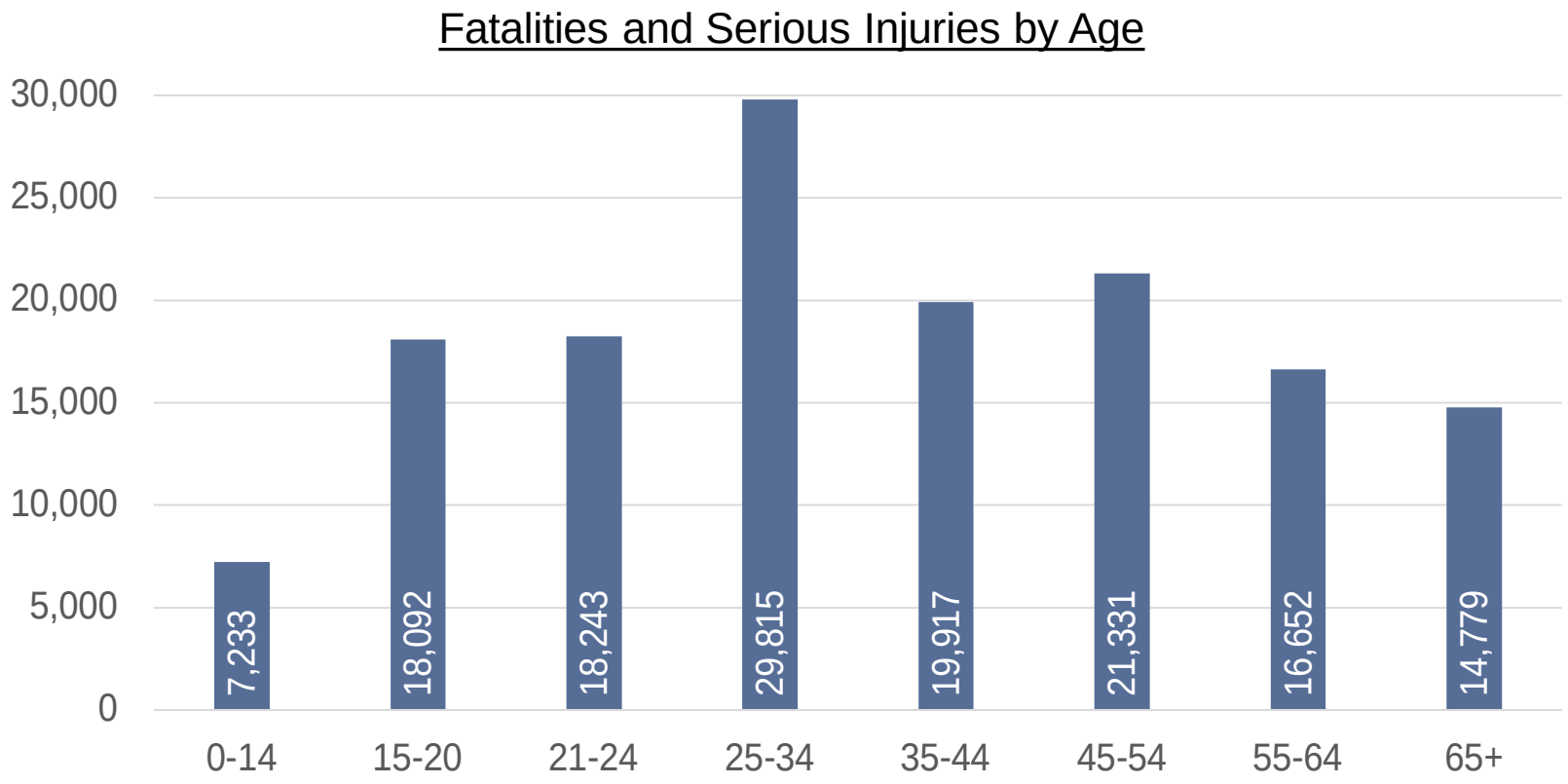

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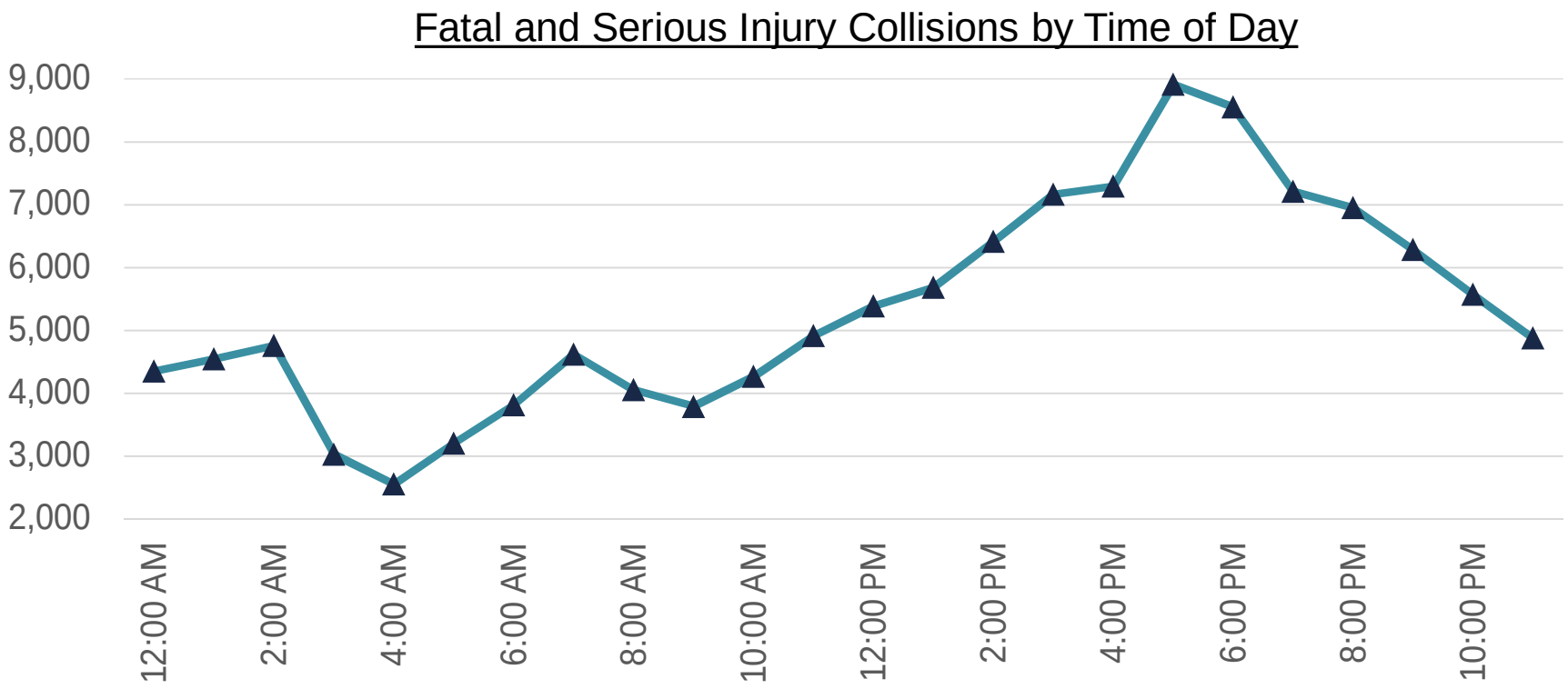

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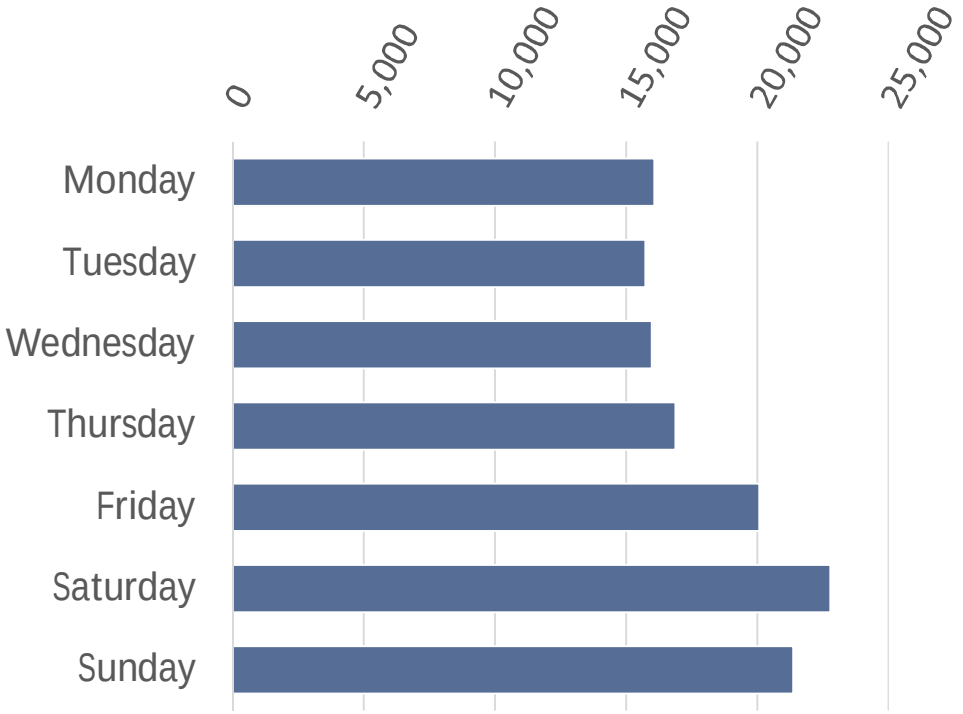
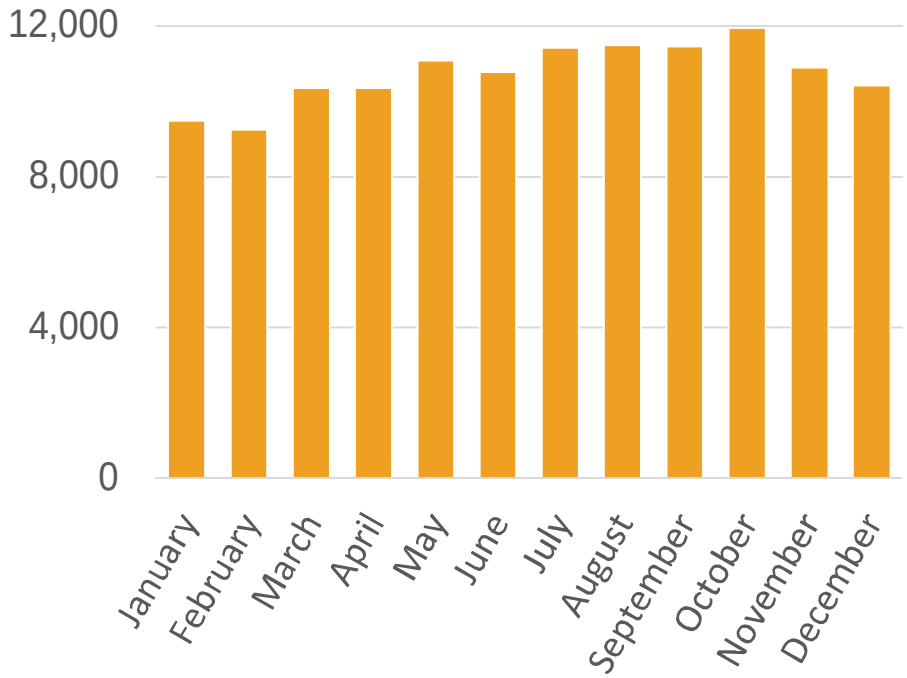
Fatal and Serious Injury Collisions by Day and Month





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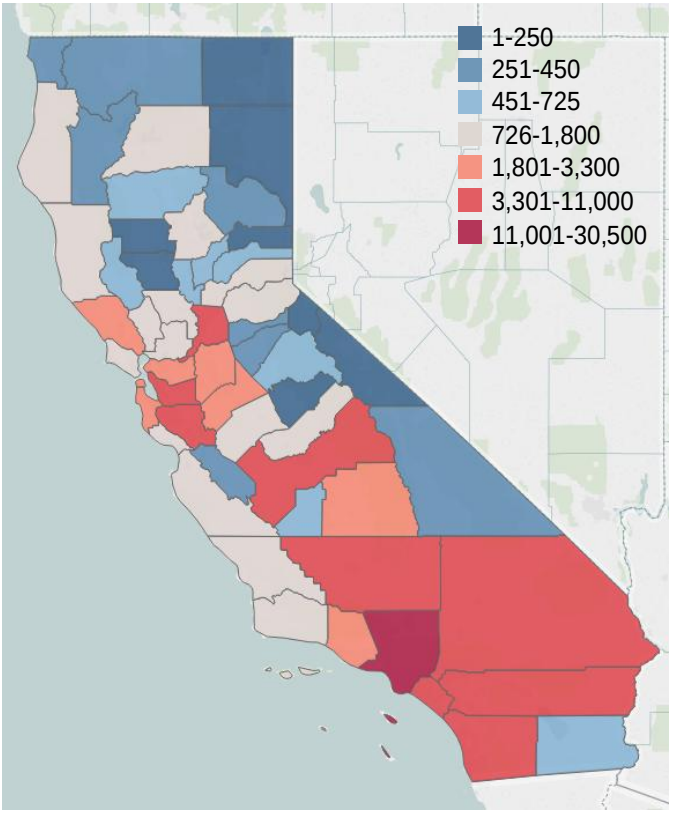
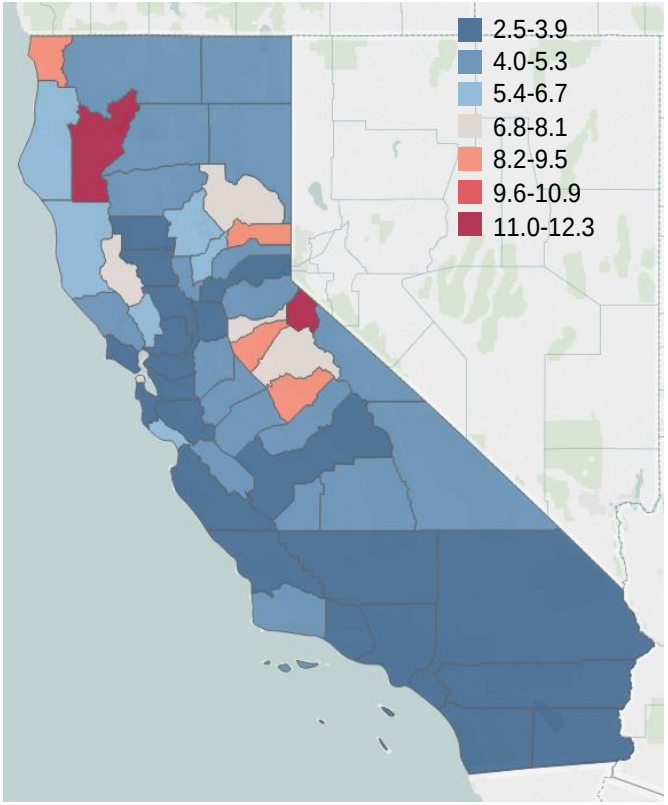
F+SI Collisions



F+SI Collision Rate per 100M VMT



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Sacramento Region Summary

OUTREACH EVENTS

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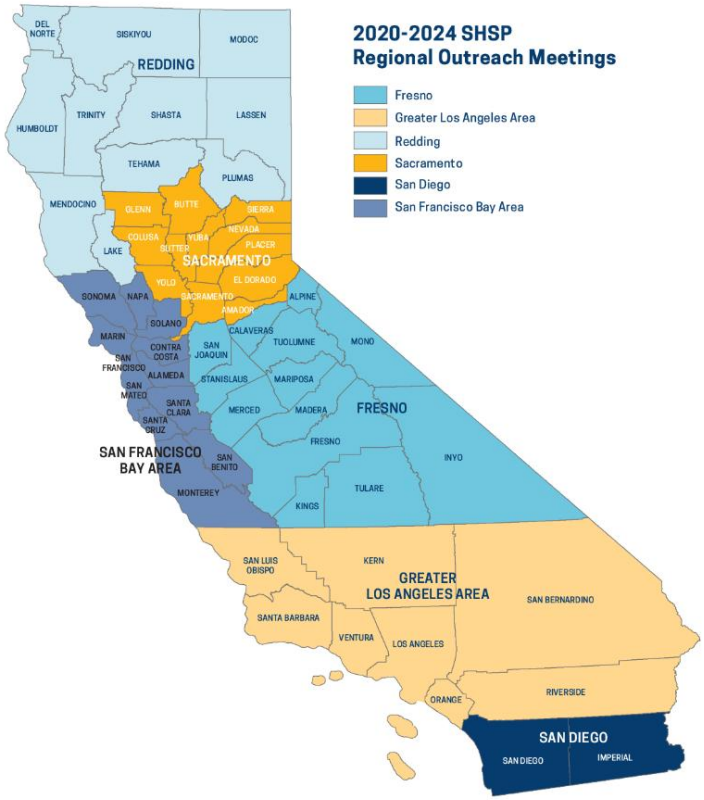

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Join us at one of the following locations to collaborate on eliminating fatalities and serious injuries on all roadways in California.

April 10 // Sacramento
April 11 // San Francisco Bay Area
April 12 // Redding
April 23 // San Diego
April 24 // Greater Los Angeles Area
April 25 // Fresno

Email Ca-SHSP@Kimley-Horn.com for more information.

REGIONAL

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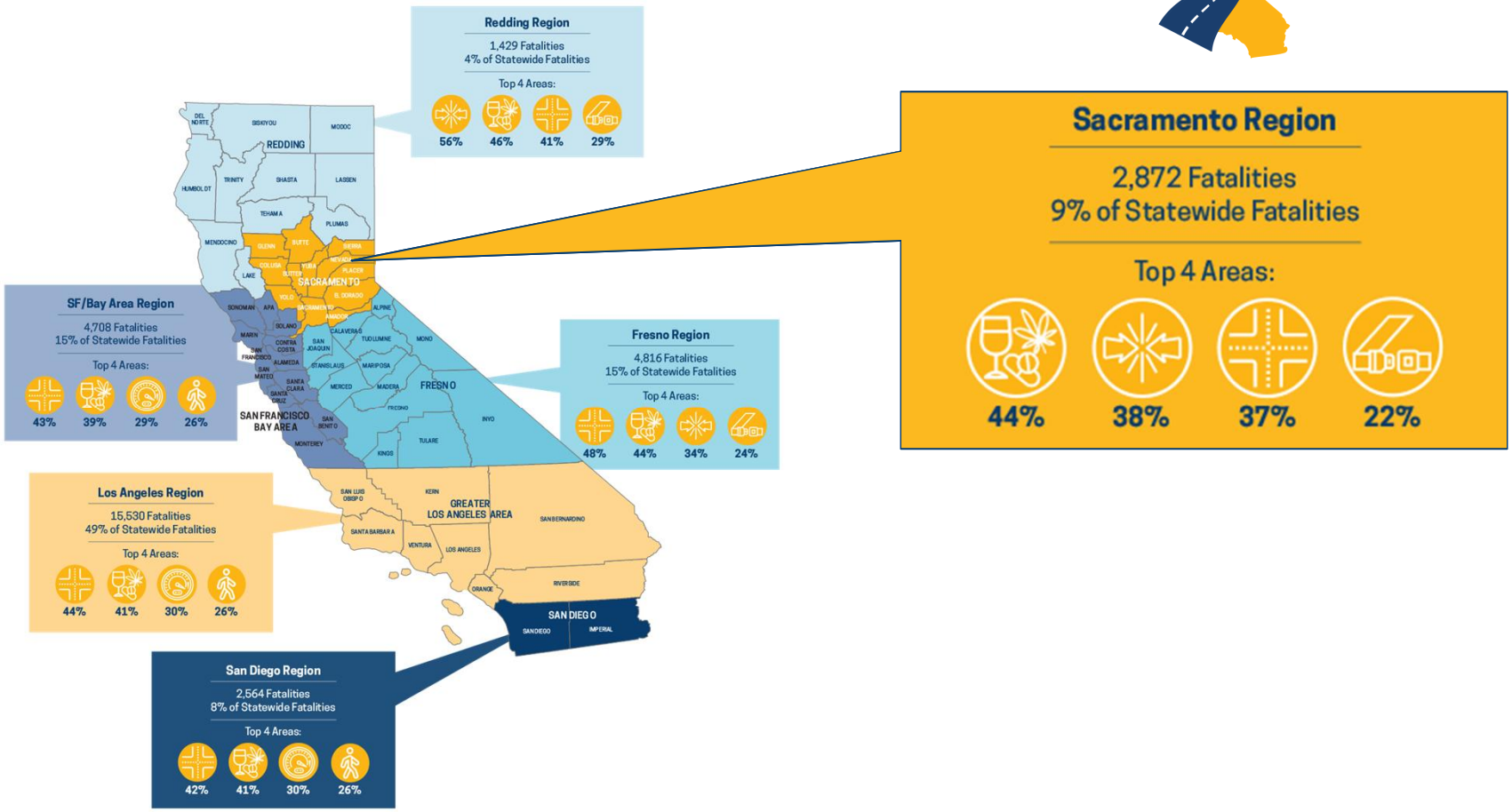

SACRAMENTO REGION

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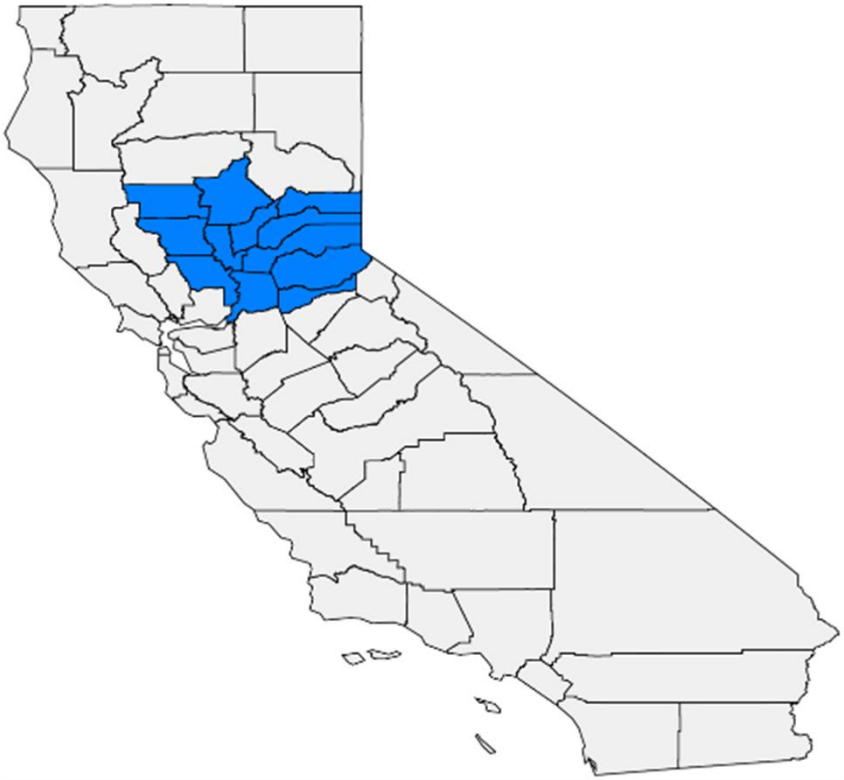

12 Counties

- Amador
- Butte
- Colusa
- El Dorado
- Glenn
- Nevada
- Placer
- Sacramento
- Sierra
- Sutter
- Yolo
- Yuba

REGIONAL

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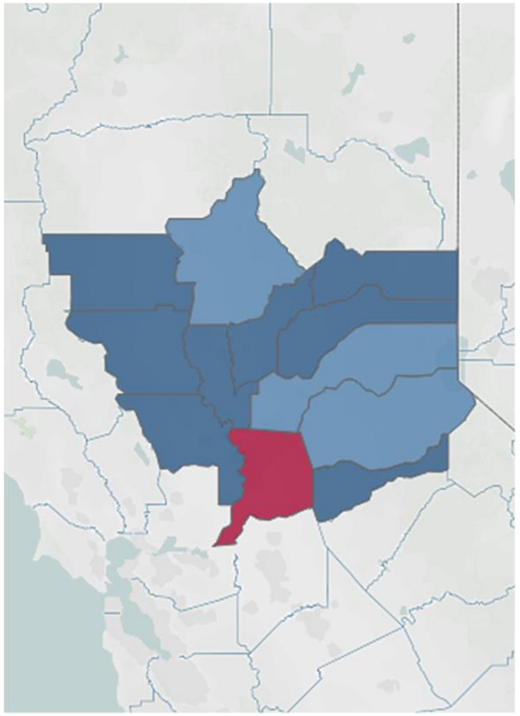
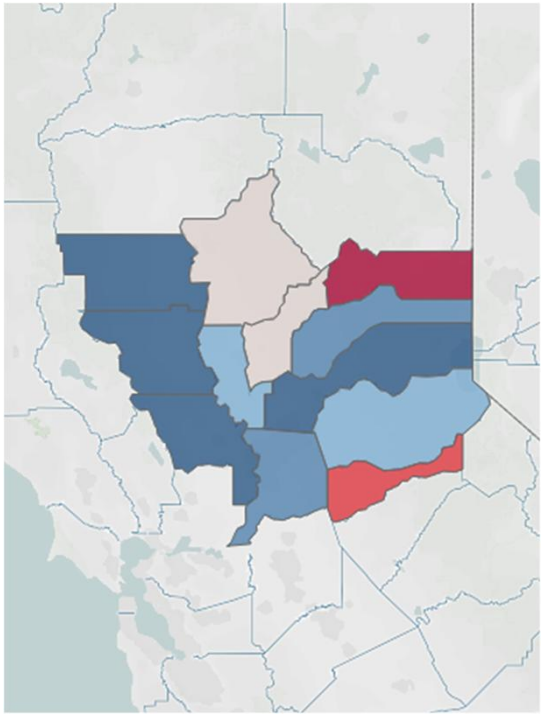
F+SI by County



County	F+SI
Sierra	34
Colusa	62
Glenn	73
Amador	90
Yuba	135
Sutter	140
Nevada	164
Yolo	228
El Dorado	325
Placer	326
Butte	396
Sacramento	1,708

F+SI per 100M VMT



County	F+SI per 100M VMT
Placer	3.1
Colusa	3.5
Yolo	3.6
Sacramento	4.7
Nevada	4.9
Glenn	5.1
Sutter	5.5
El Dorado	6.7
Yuba	7.0
Butte	7.9
Amador	7.9
Sierra	10.8

REGIONAL

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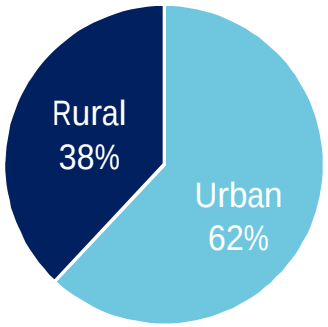
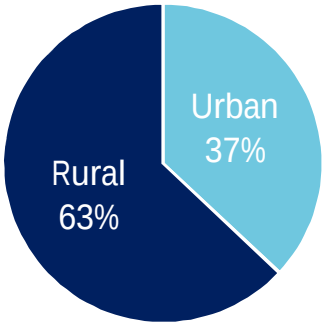
Rural/Urban

Statewide:



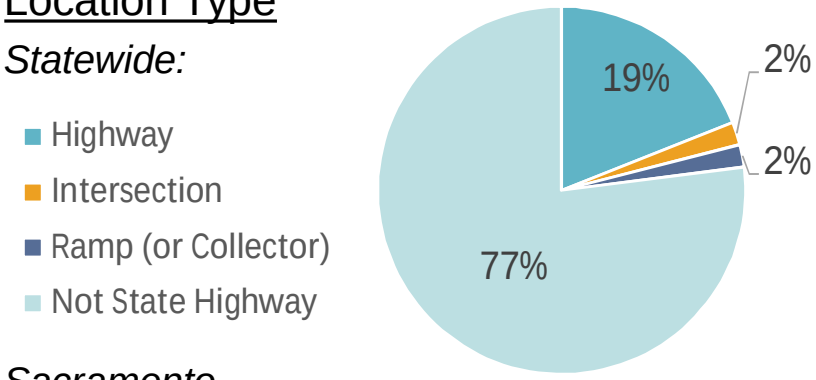
Sacramento Region:



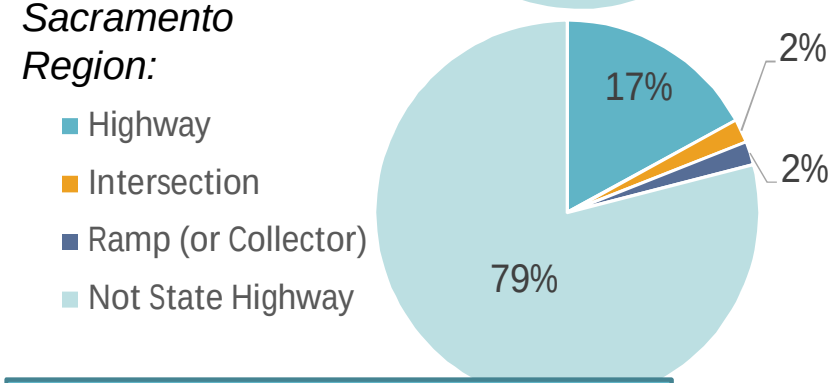
F+SI collisions occurred more in rural areas in this region than California overall.

Location Type

Statewide:



Sacramento Region:



F+SI collisions occurred on similar roadway types in this region as California overall.

REGIONAL

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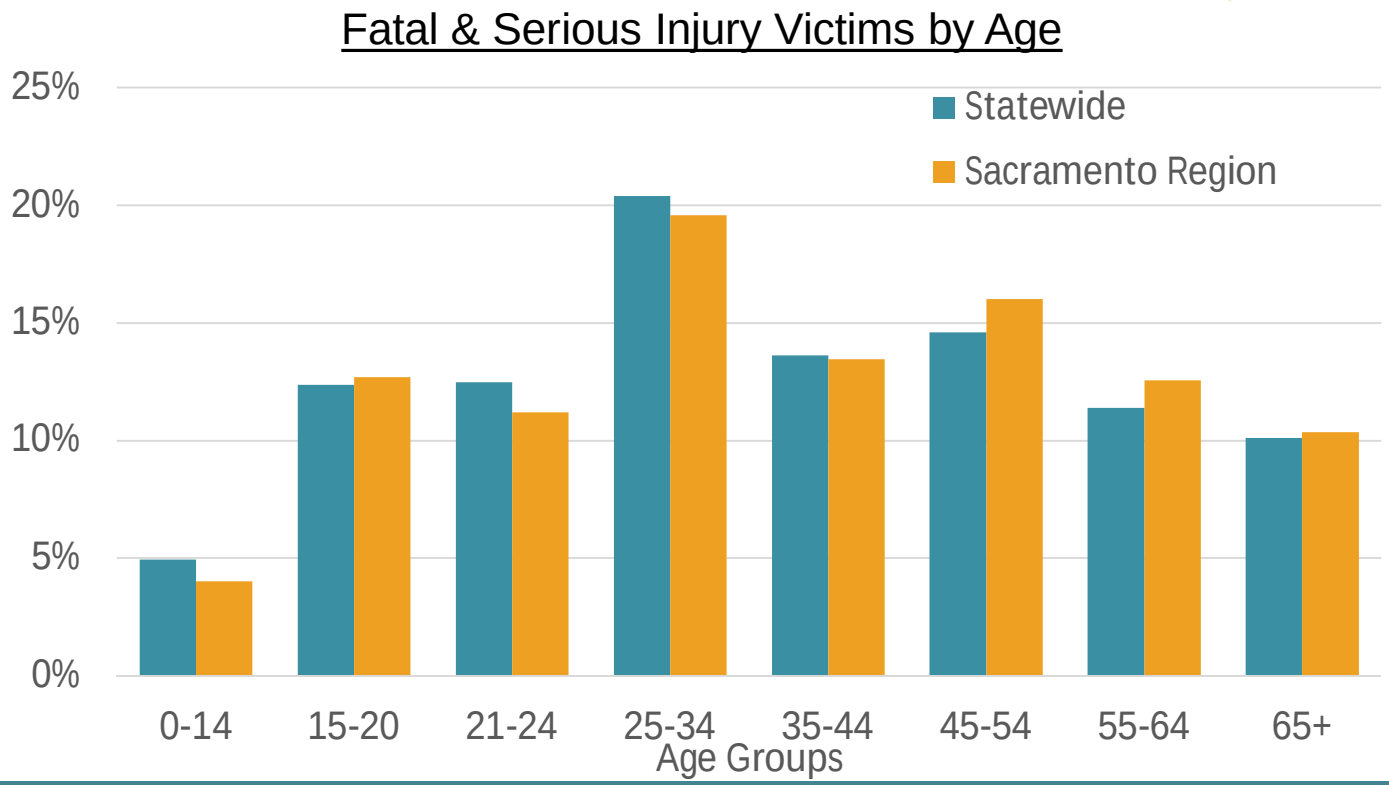

F+SI collisions involved more people aged 45+ in this region than California overall.

REGIONAL

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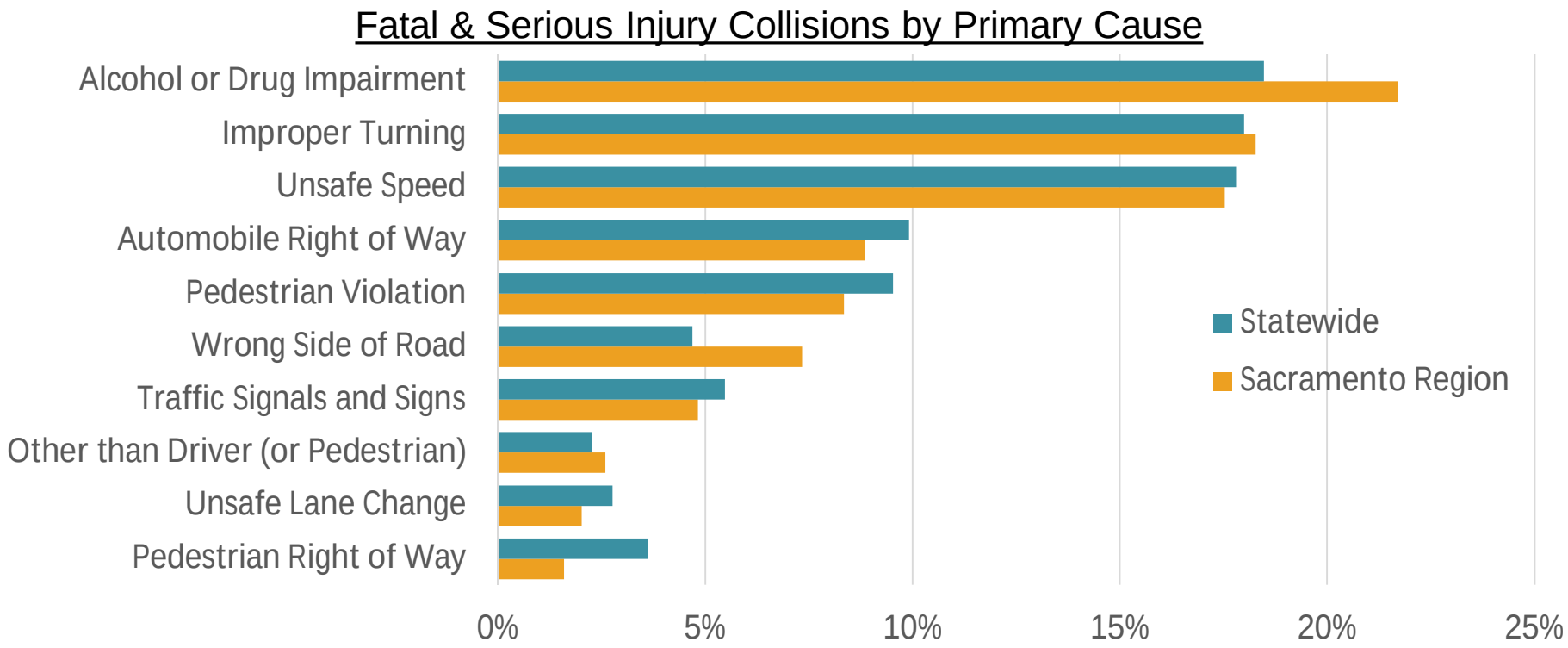

The top 5 primary collision factors were the same in this region and California overall.

REGIONAL

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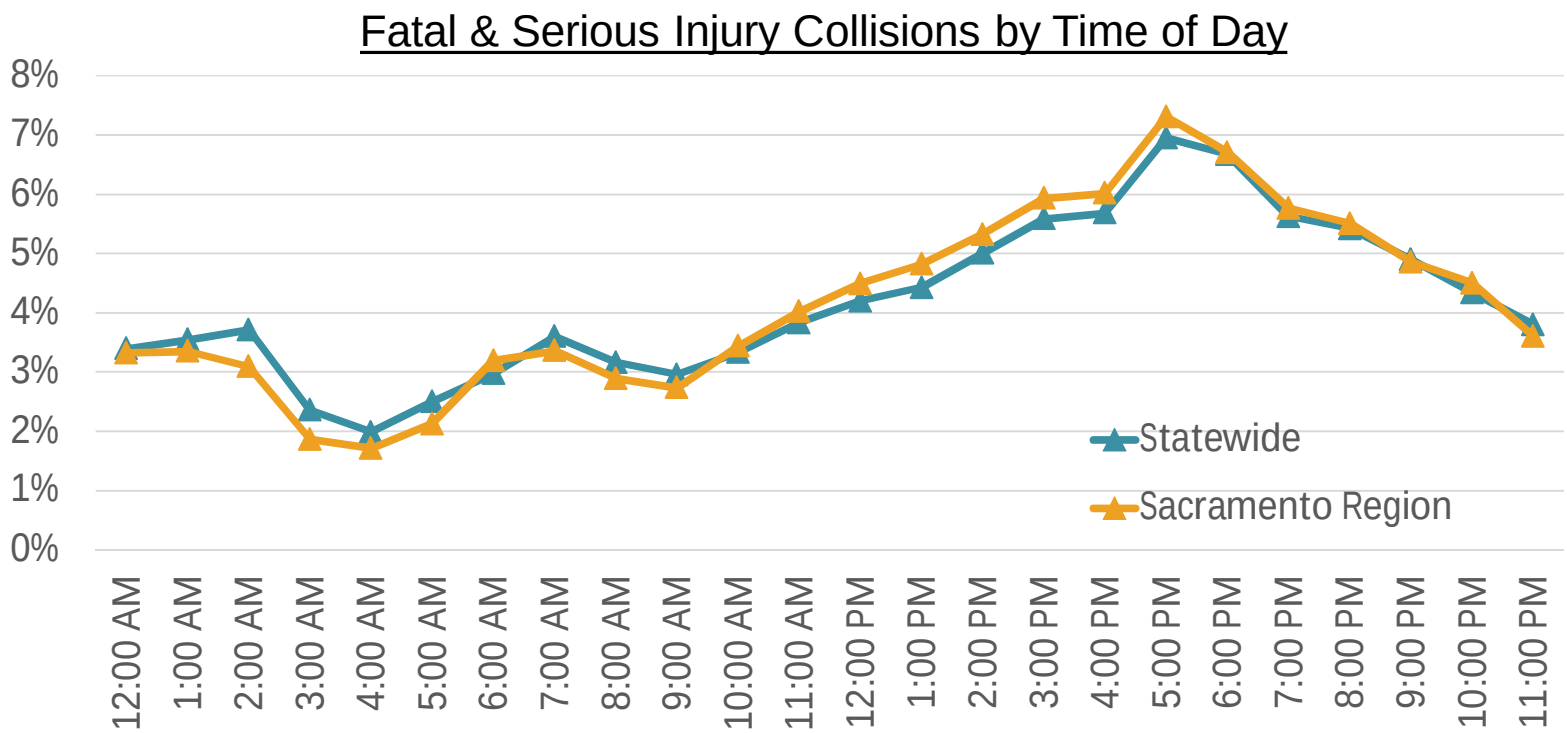

Trends were similar in this region to California overall.

REGIONAL

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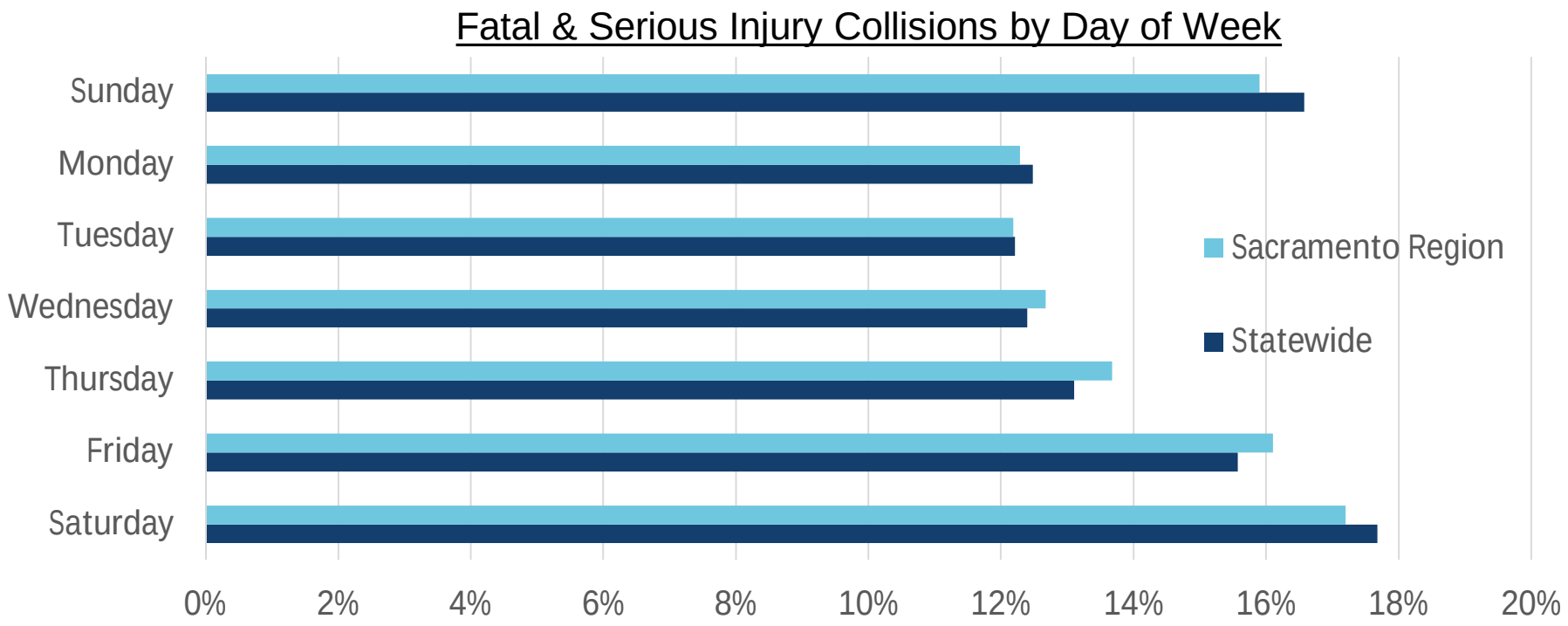

Trends were similar in this region to California overall.

REGIONAL

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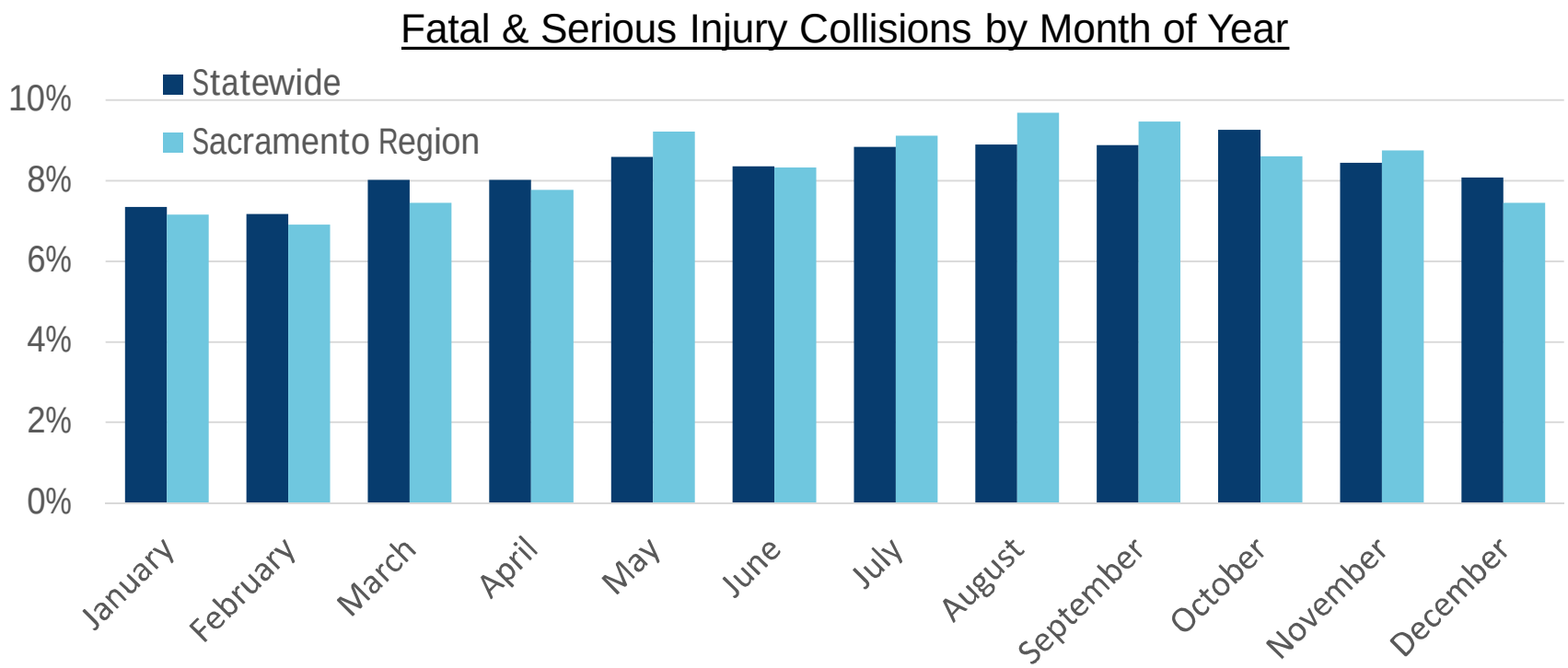

Trends were similar in this region to California overall.

REGIONAL

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Alcohol and Drug Impairment
Statewide: 42%
Sacramento Region: 44%

Roadway Departure
Statewide: 26%
Sacramento Region : 38%
Higher

Intersections & Interchanges
Statewide: 43%
Sacramento Region: 37%
Lower

Speeding and Aggressive Driving
Statewide: 28%
Sacramento Region: 26%

Driver Licensing and Competency
Statewide: 25%
Sacramento Region: 24%

Occupant Protection
Statewide: 19%
Sacramento Region 22%

Pedestrians
Statewide: 23%
Sacramento Region : 19%
Lower

Aging Drivers
Statewide: 14%
Sacramento Region: 16%

Young Drivers
Statewide: 13%
Sacramento Region: 14%

Motorcycles
Statewide: 14%
Sacramento Region: 13%

Commercial Vehicles
Statewide: 10%
Sacramento Region: 9%

Bicycling
Statewide: 4%
Sacramento Region: 5%

Distracted Driving
Statewide: 5%
Sacramento Region: 4%

Work Zone
Statewide: 2%
Sacramento Region: 2%

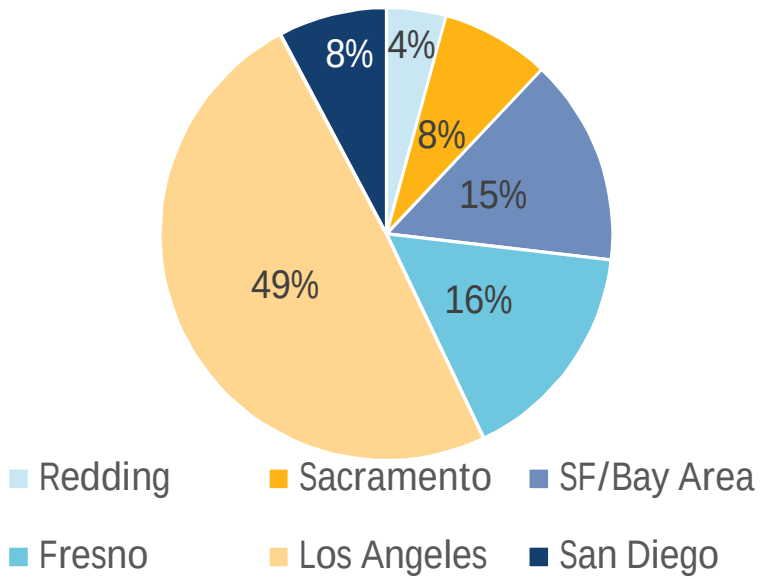
Percent of total fatalities

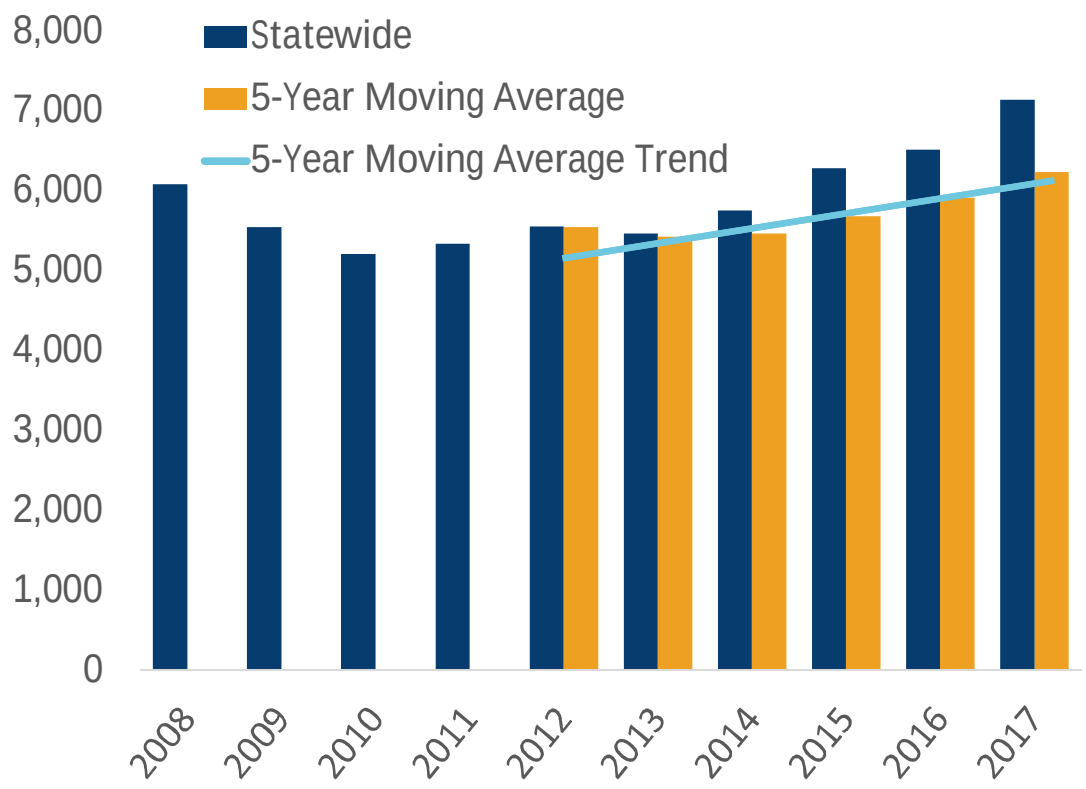
INTERSECTIONS & INTERCHANGES

CALIFORNIA SAFE ROADS
2020 - 2024 Strategic Highway Safety Plan

Statewide: 43%

Fresno: 48%	Sacramento: 37%
Los Angeles: 44%	San Diego: 42%
Redding: 41%	SF/Bay Area 43%



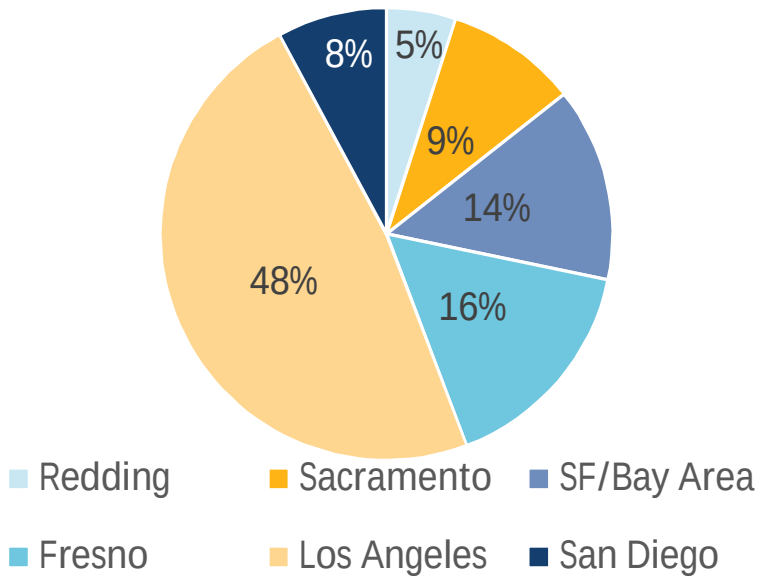


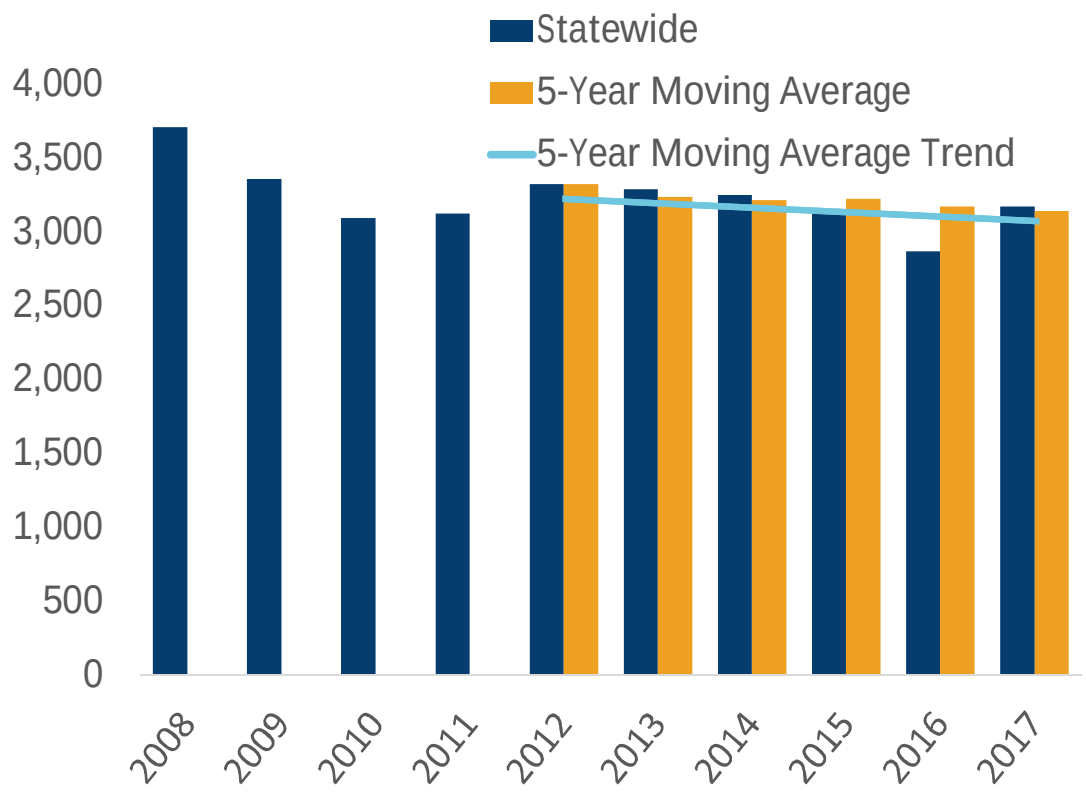
ALCOHOL & DRUG IMPAIRMENT

CALIFORNIA SAFE ROADS
2020 - 2024 Strategic Highway Safety Plan

Statewide: 42%

Fresno: 44%	Sacramento: 44%
Los Angeles: 41%	San Diego: 41%
Redding: 46%	SF/Bay Area 39%



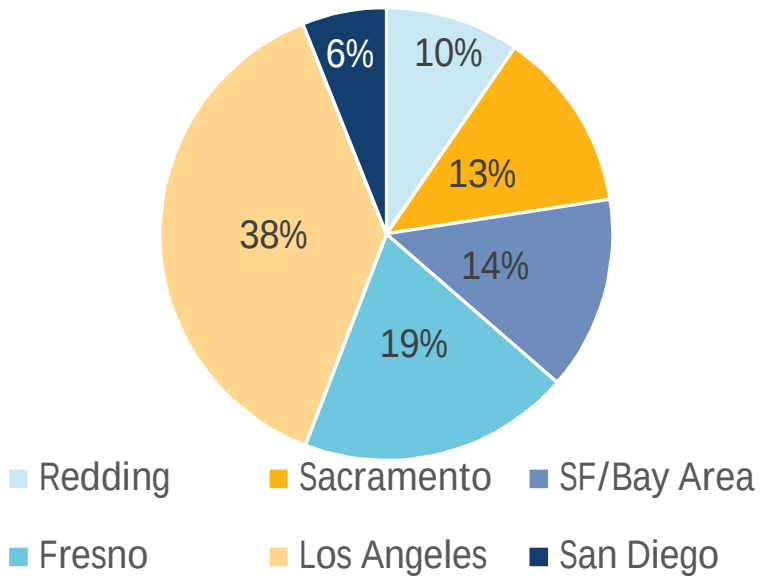


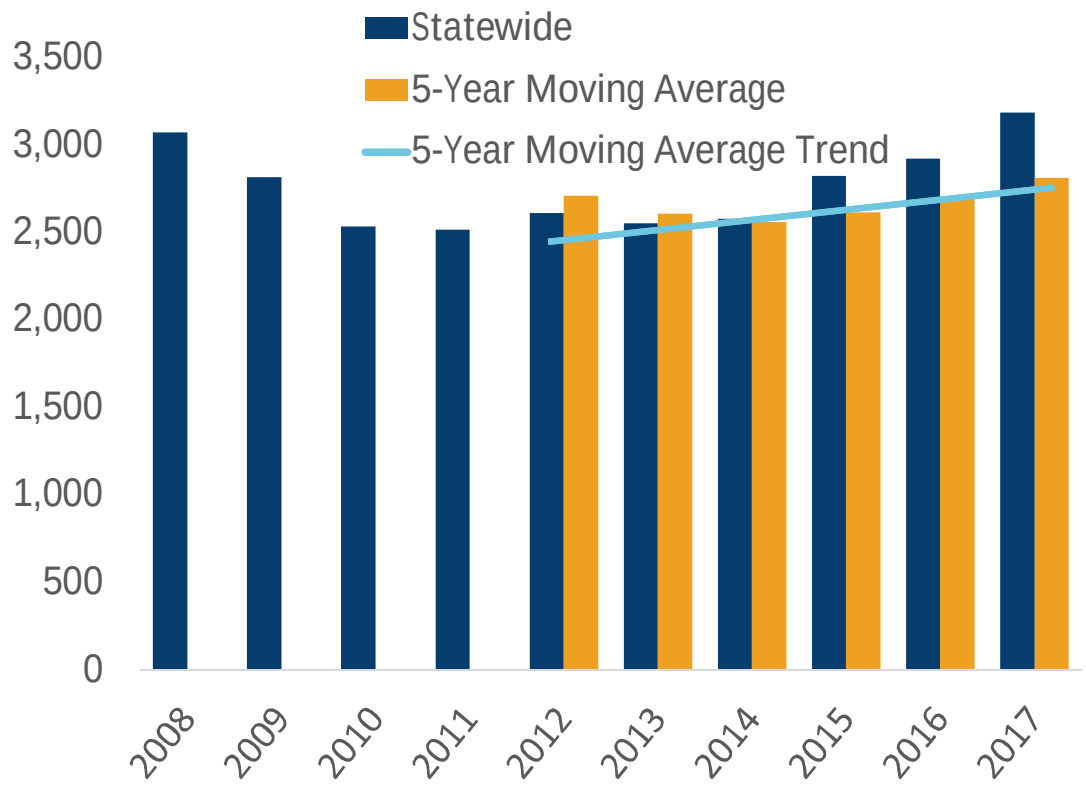
ROADWAY DEPARTURES

CALIFORNIA SAFE ROADS
2020 - 2024 Strategic Highway Safety Plan

Statewide: 26%

Fresno: 34%	Sacramento: 38%
Los Angeles: 20%	San Diego: 21%
Redding: 56%	SF/Bay Area 25%



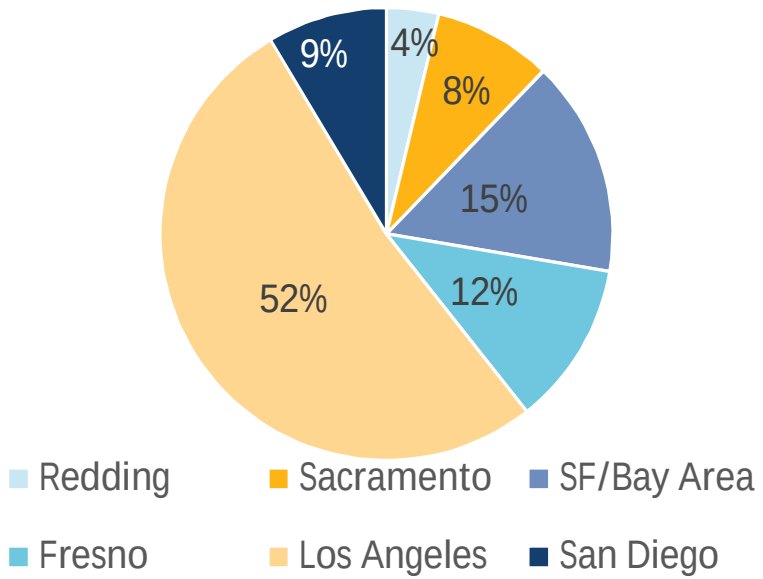


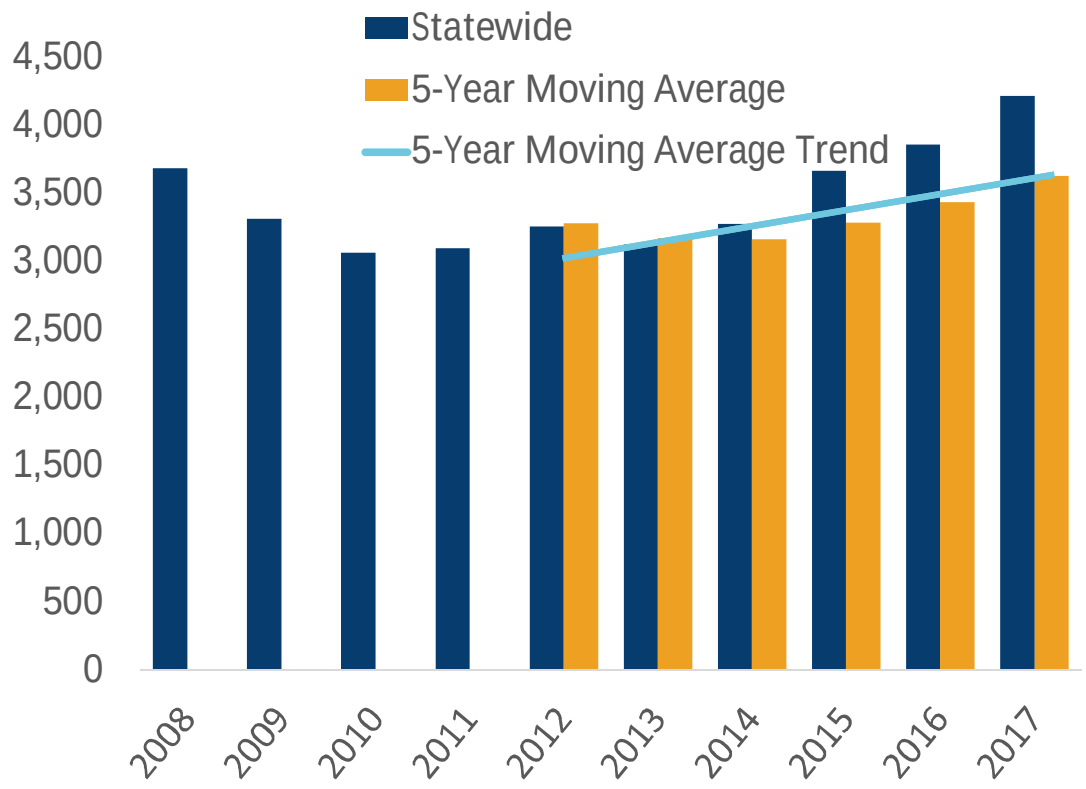
SPEEDING & AGGRESSIVE DRIVING

CALIFORNIA SAFE ROADS
2020 - 2024 Strategic Highway Safety Plan

Statewide: 28%

Fresno: 22%	Sacramento: 26%
Los Angeles: 30%	San Diego: 30%
Redding: 23%	SF/Bay Area 29%



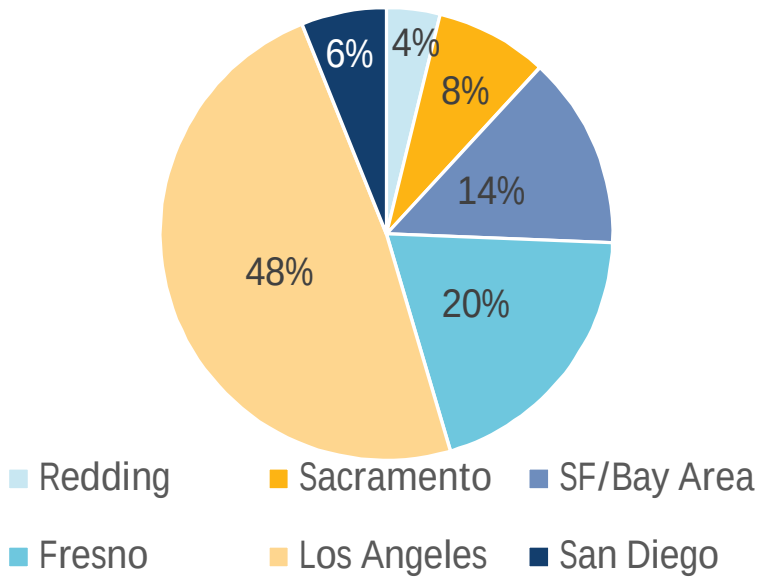


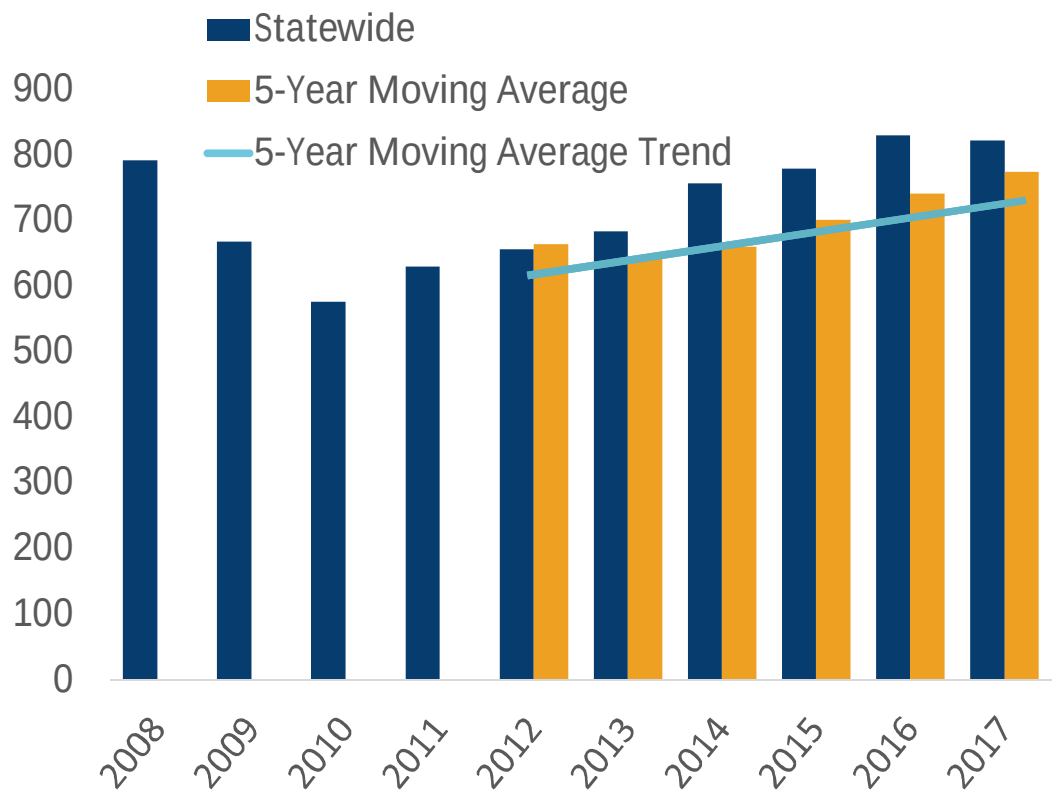
DRIVER LICENSING & COMPETENCY

CALIFORNIA SAFE ROADS
2020 - 2024 Strategic Highway Safety Plan

Statewide: 25%

Fresno: 33%	Sacramento: 24%
Los Angeles: 25%	San Diego: 19%
Redding: 21%	SF/Bay Area 24%



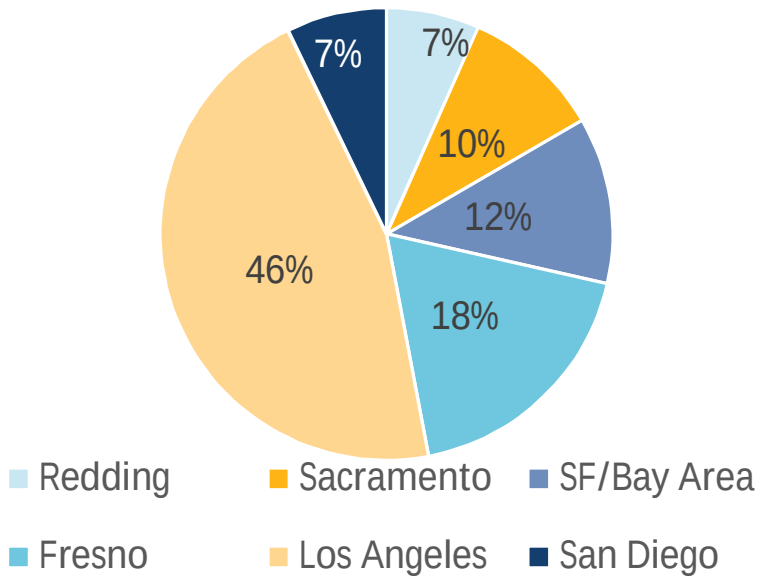


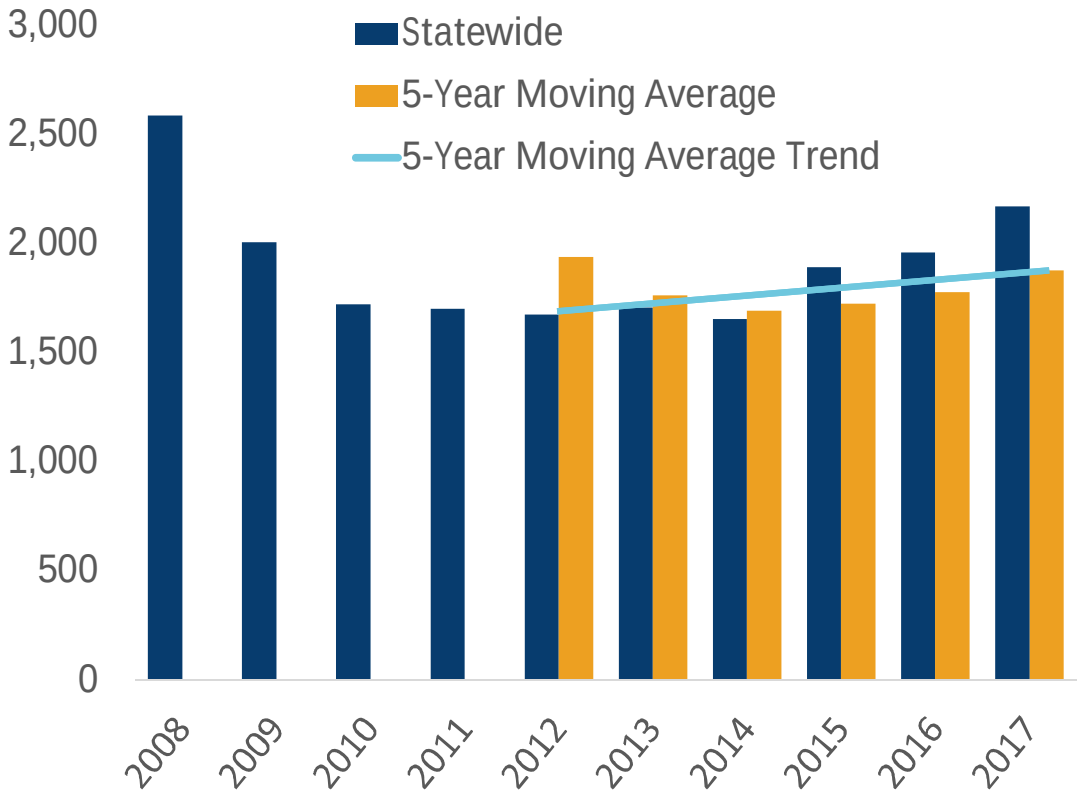
OCCUPANT PROTECTION

CALIFORNIA SAFE ROADS
2020 - 2024 Strategic Highway Safety Plan

Statewide: 19%

Fresno: 24%	Sacramento: 22%
Los Angeles: 18%	San Diego: 17%
Redding: 29%	SF/Bay Area 16%



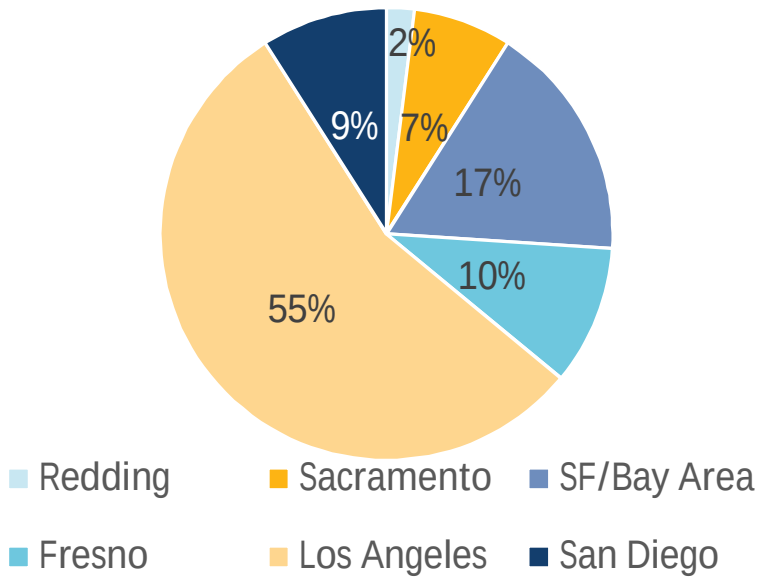


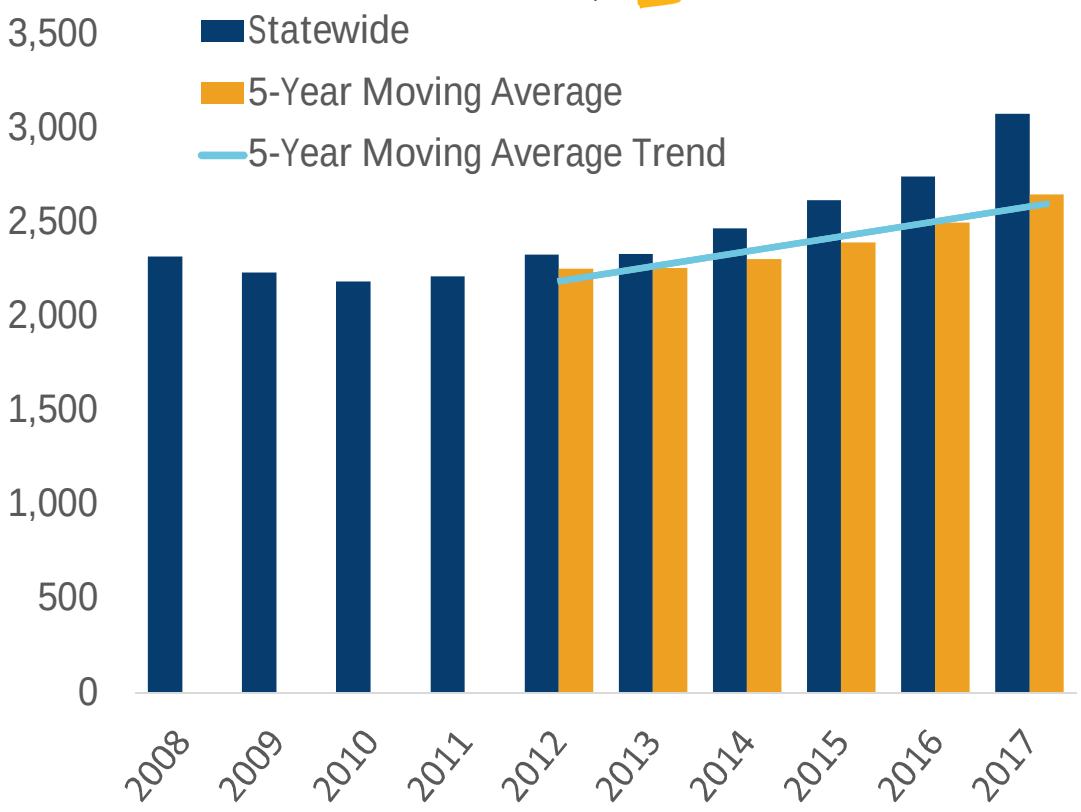
PEDESTRIANS

CALIFORNIA SAFE ROADS
2020 - 2024 Strategic Highway Safety Plan

Statewide: 23%

Fresno: 15%	Sacramento: 19%
Los Angeles: 26%	San Diego: 26%
Redding: 12%	SF/Bay Area 26%

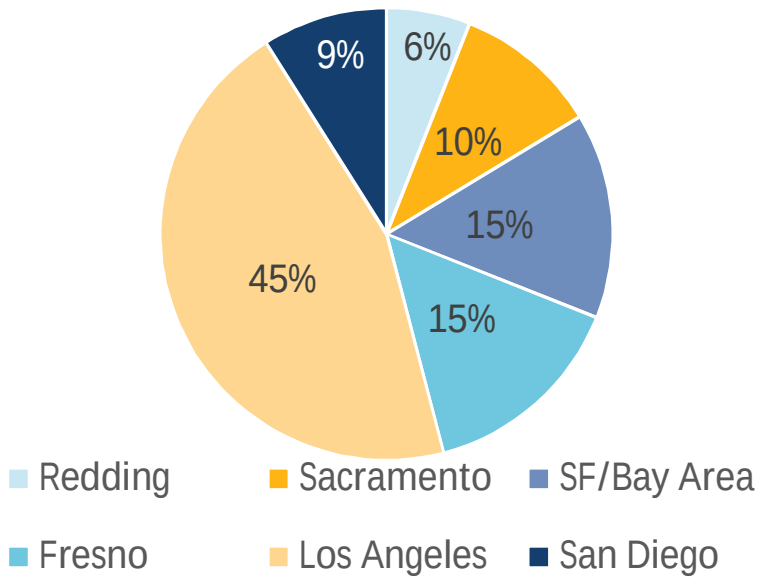


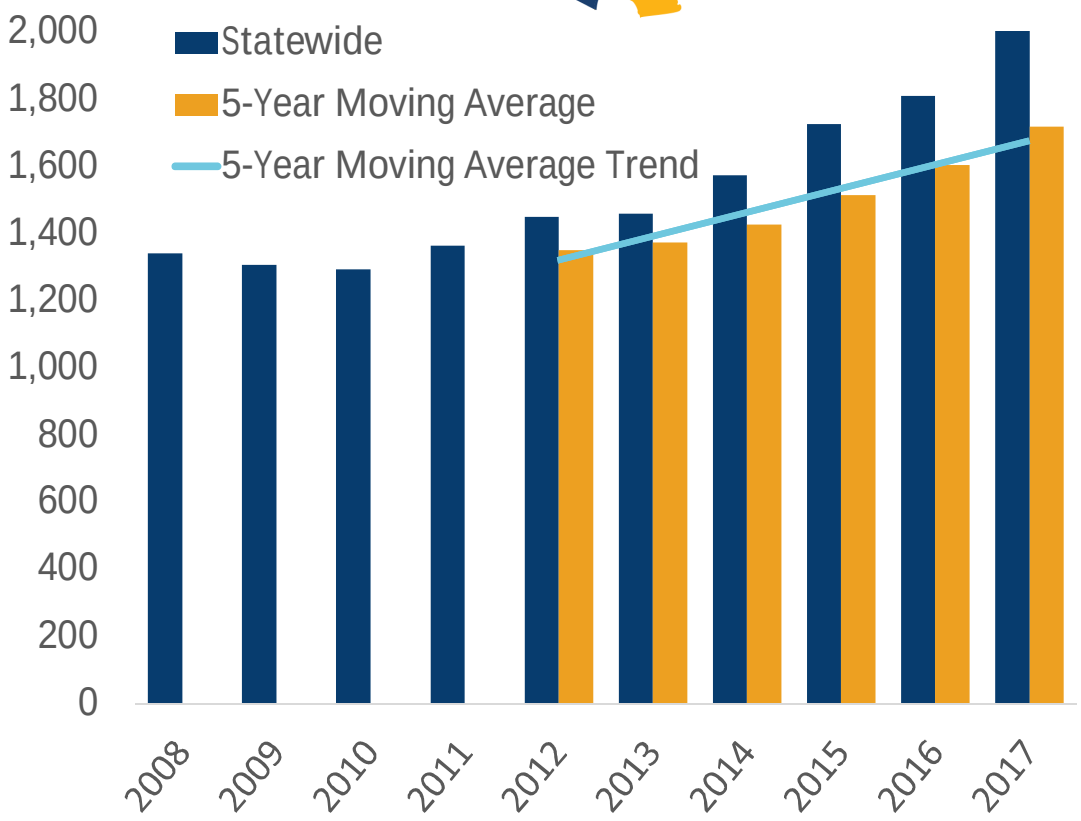


AGING DRIVERS

Statewide: 14%

Fresno: 14%	Sacramento: 16%
Los Angeles: 13%	San Diego: 15%
Redding: 19%	SF/Bay Area 14%

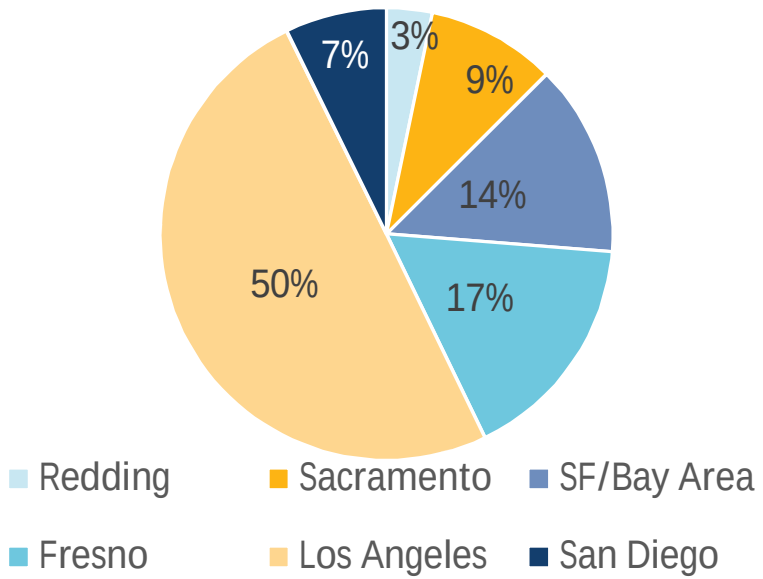


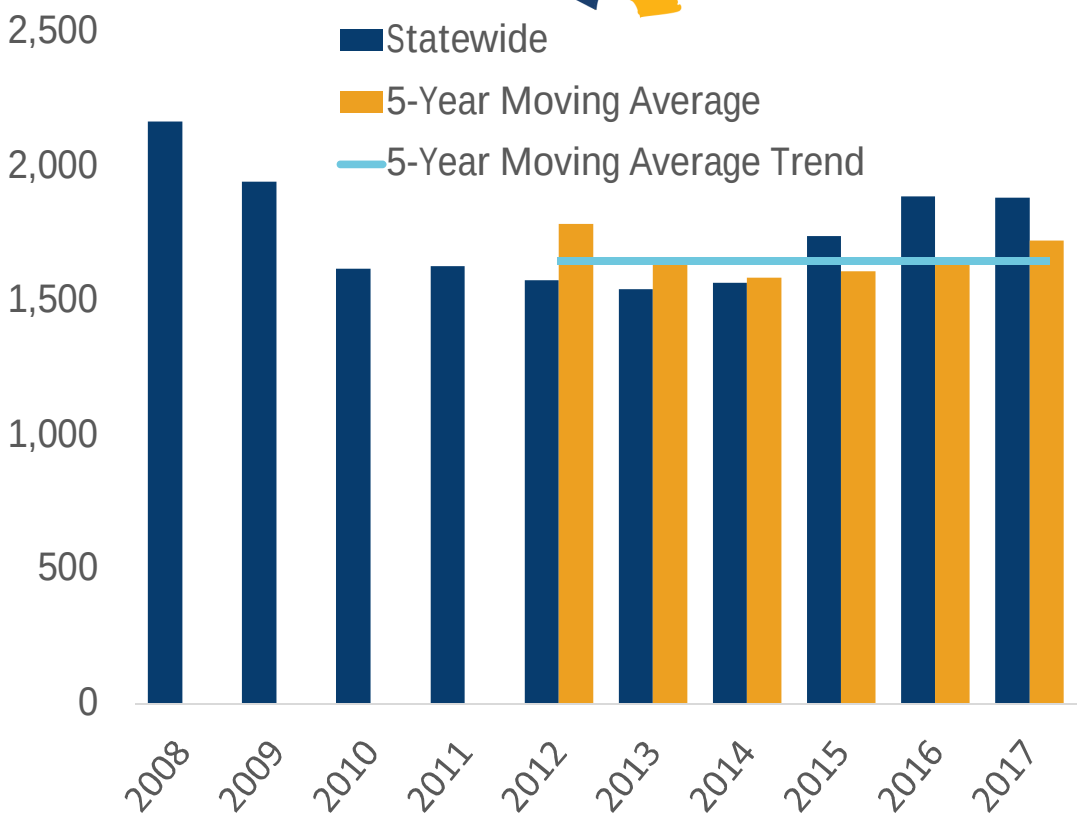


YOUNG DRIVERS

Statewide: 13%

Fresno: 15%	Sacramento: 14%
Los Angeles: 14%	San Diego: 12%
Redding: 10%	SF/Bay Area 13%

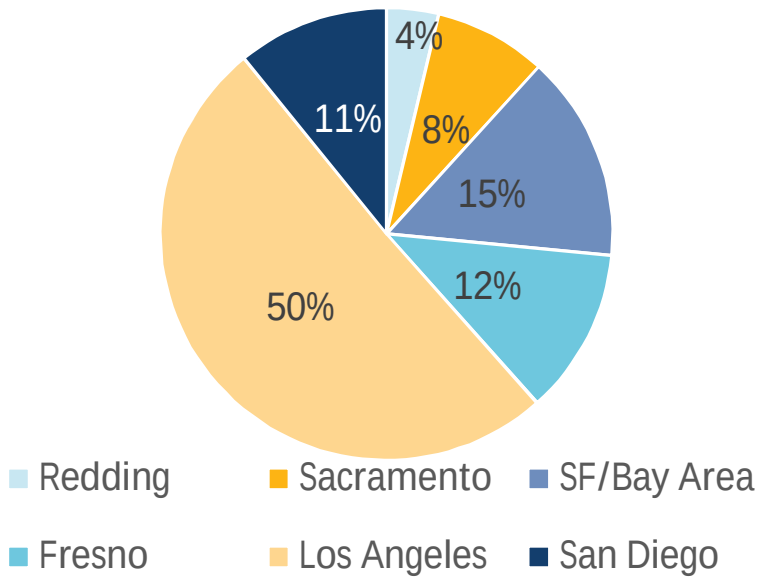


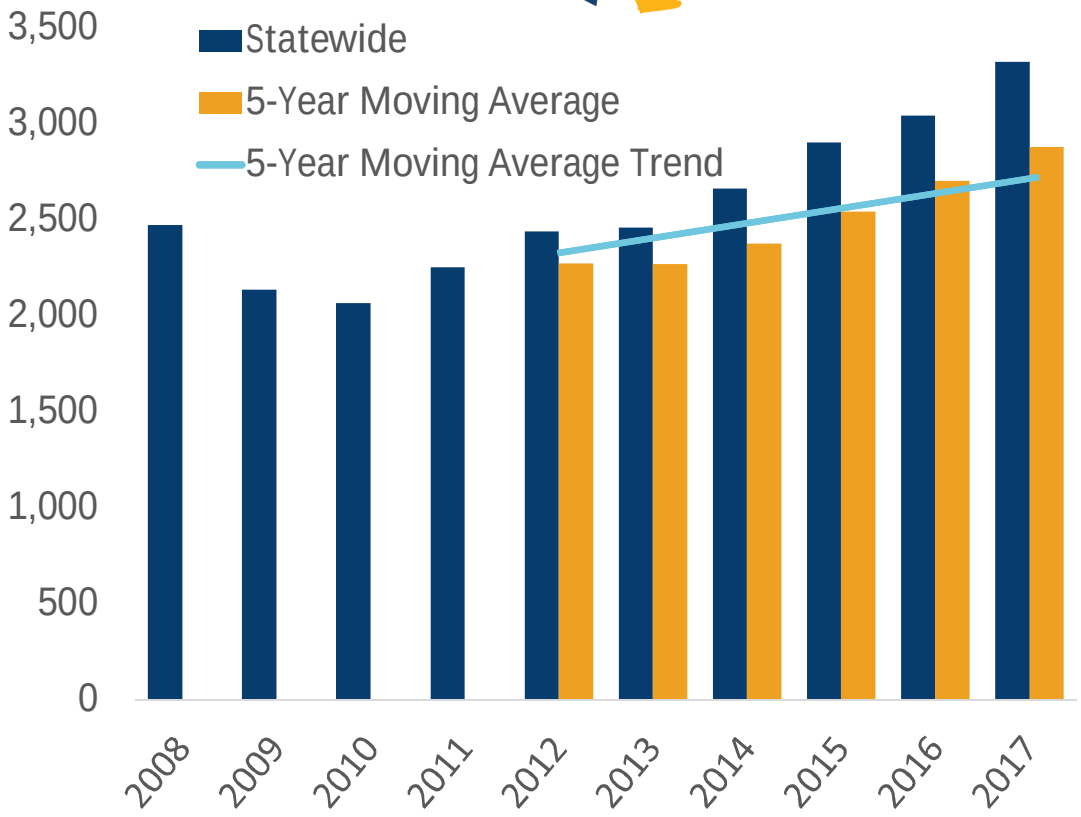


MOTORCYCLES

Statewide: 14%

Fresno: 11%	Sacramento: 13%
Los Angeles: 15%	San Diego: 19%
Redding: 12%	SF/Bay Area 14%

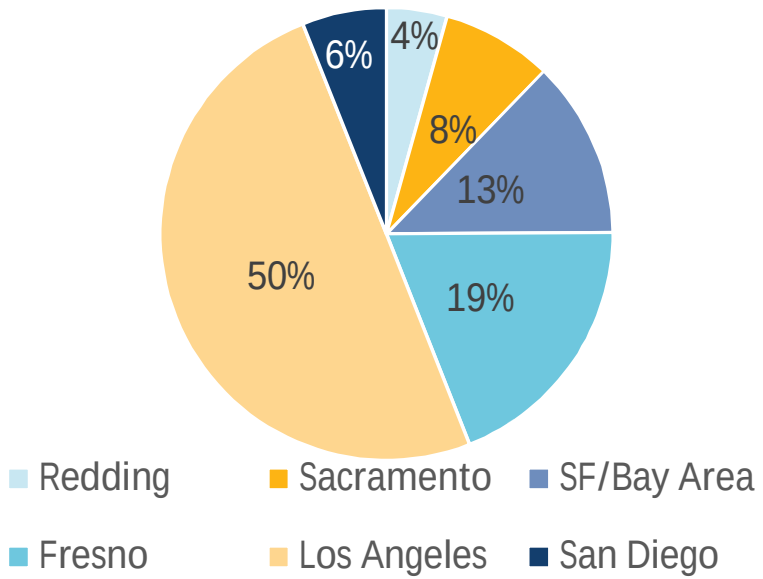


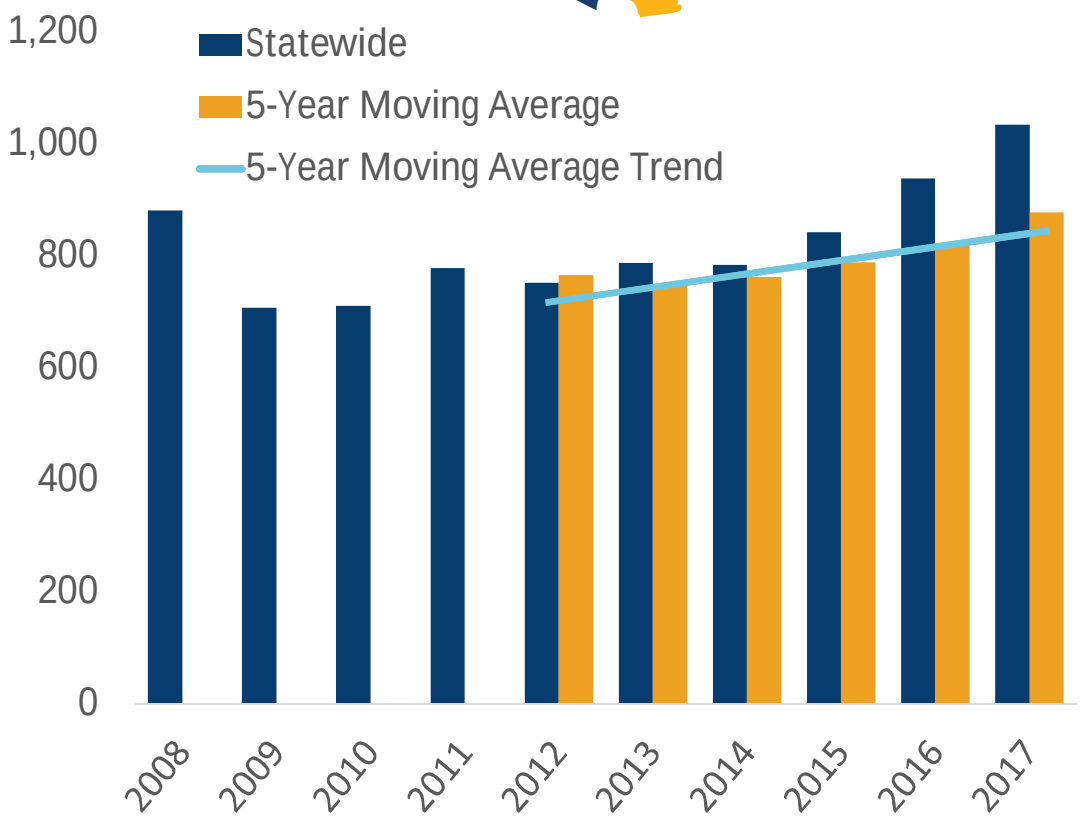


COMMERCIAL VEHICLES

Statewide: 10%

Fresno: 13%	Sacramento: 9%
Los Angeles: 10%	San Diego: 8%
Redding: 10%	SF/Bay Area 8%



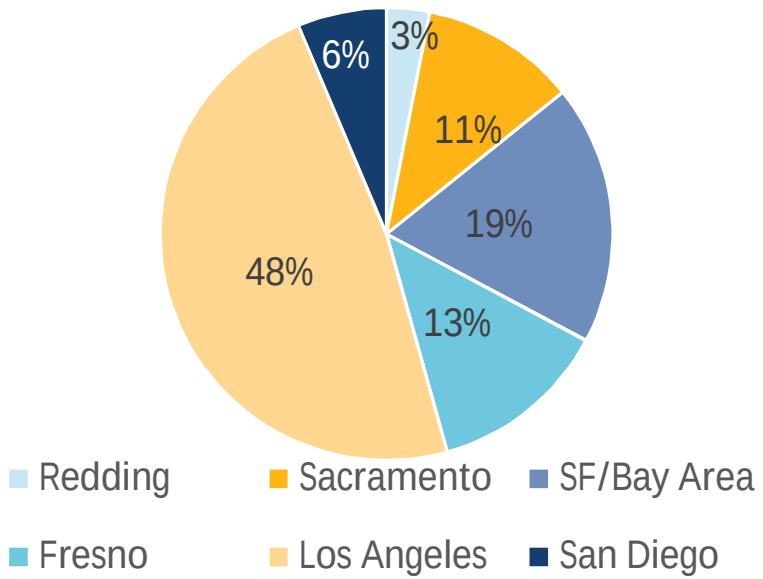


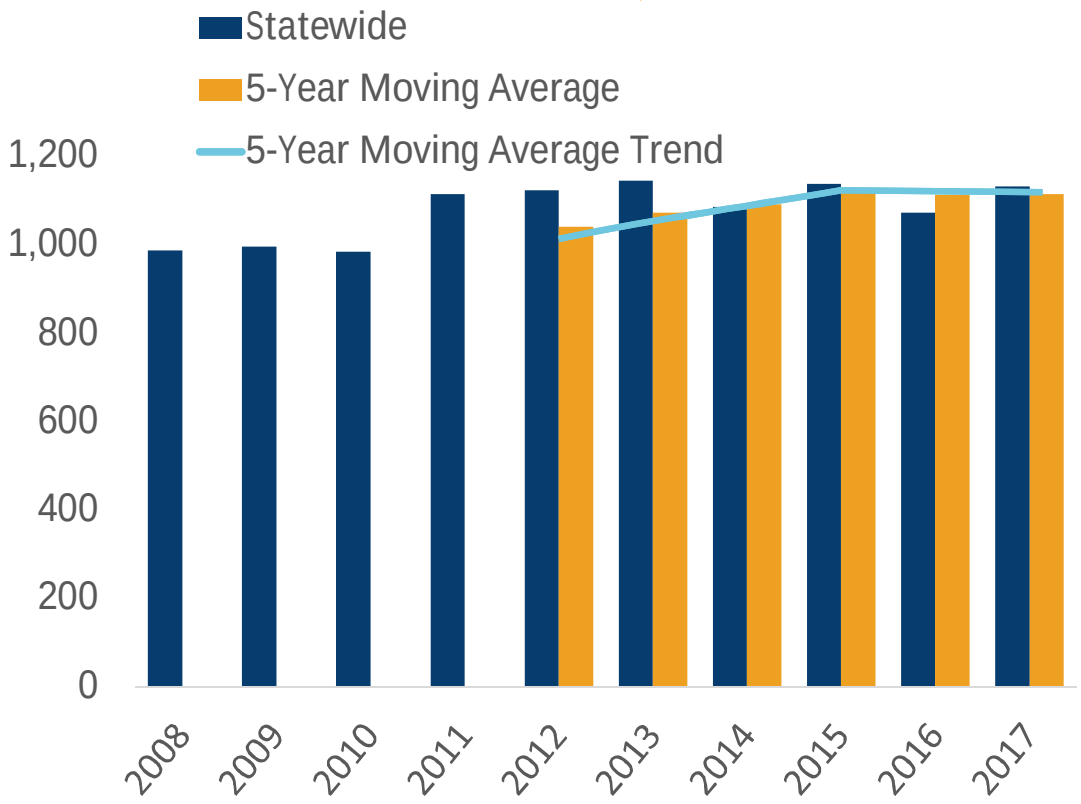
BICYCLING

CALIFORNIA SAFE ROADS
2020 - 2024 Strategic Highway Safety Plan

Statewide: 4%

Fresno: 4%	Sacramento: 5%
Los Angeles: 4%	San Diego: 3%
Redding: 3%	SF/Bay Area 6%



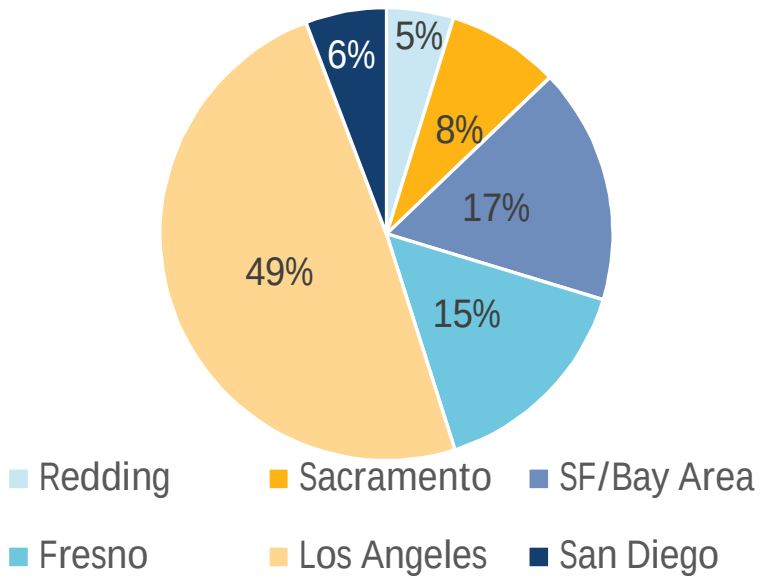


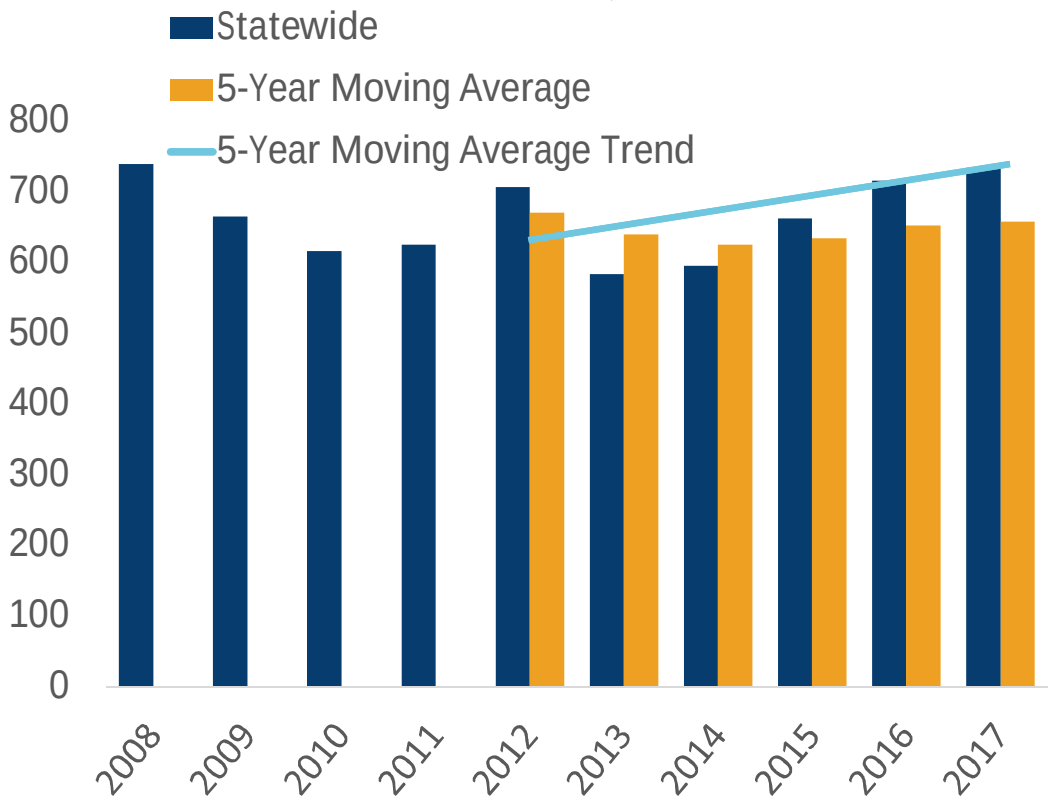
DISTRACTED DRIVING

CALIFORNIA SAFE ROADS
2020 - 2024 Strategic Highway Safety Plan

Statewide: 5%

Fresno: 5%	Sacramento: 4%
Los Angeles: 5%	San Diego: 3%
Redding: 5%	SF/Bay Area 5%

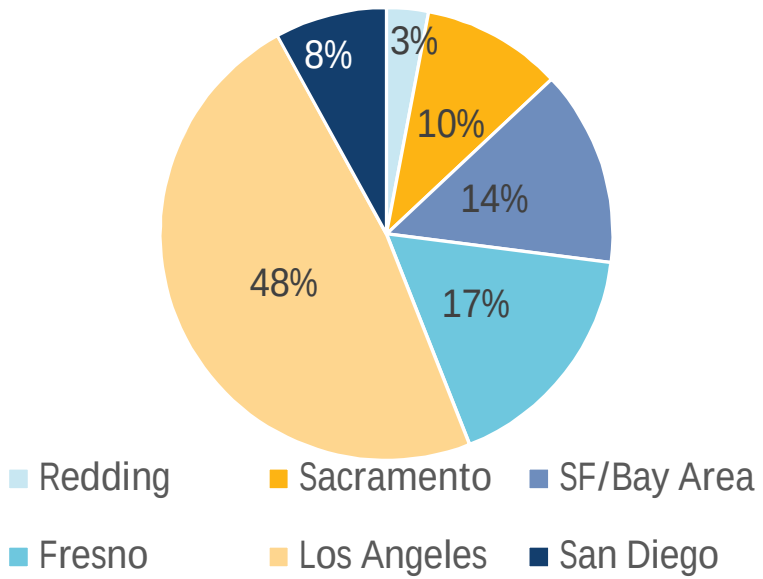


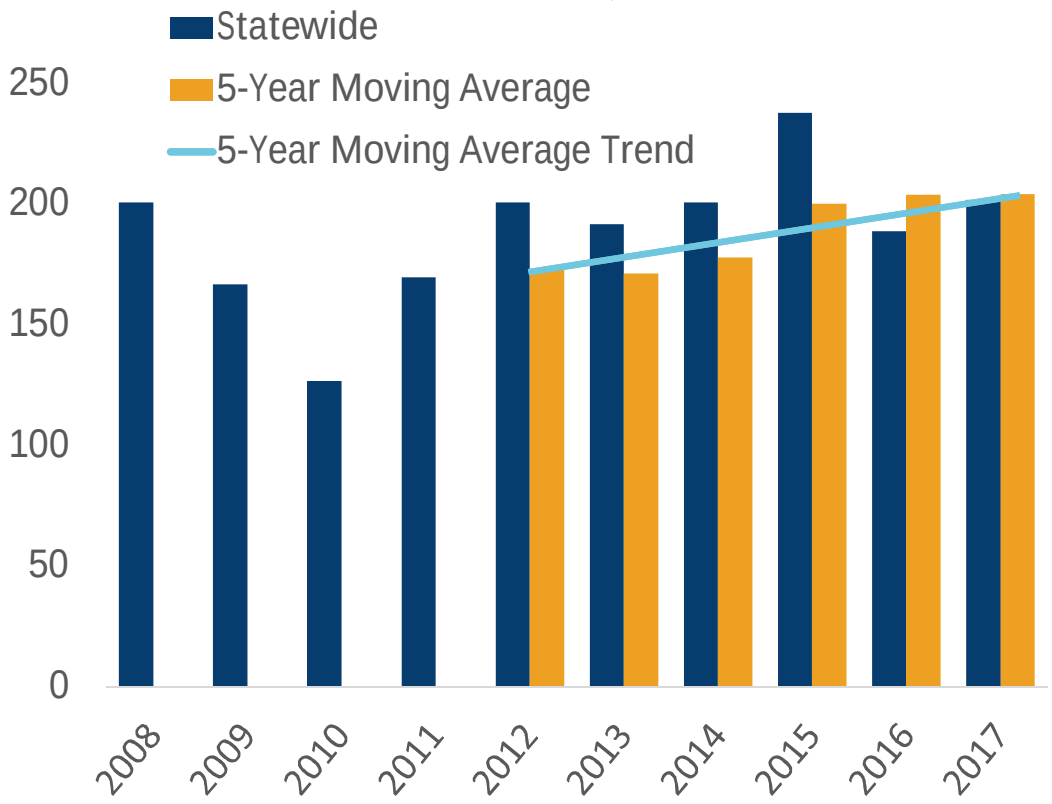


WORK ZONE

Statewide: 2%

Fresno: 2%	Sacramento: 2%
Los Angeles: 2%	San Diego: 2%
Redding: 1%	SF/Bay Area 2%





CALIFORNIA SAFE ROADS

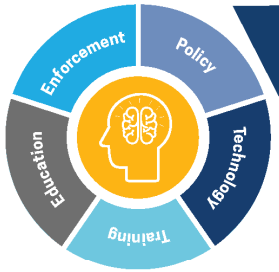
2020 - 2024 Strategic Highway Safety Plan

Safety Strategy Session

EXAMPLE STRATEGIES

Infrastructure-Related Collisions are inclusive of a variety of collision types, including pedestrians, bicyclists, motorcycles, roadway, and intersection collisions.

- Median and Pedestrian Crossing Islands
- Pedestrian Hybrid Beacon
- Leading Pedestrian Intervals
- Walkways
- Road Diet
- Crosswalk Enhancements
- Corridor Access Management
- Roadside Design Improvement at Curves
- Enhanced Delineation and Friction for Horizontal Curves
- Longitudinal Rumbe Stripes
- Median Barriers
- Tapered Edge
- Reduce Left-Turn Conflict Intersections
- Multiple Low-Cost Measures at Stop-Controlled Intersections
- Backplates with Retroreflective Borders
- Dedicated Left-turn and Right-turn lanes
- Roundabouts
- Yellow Change Intervals



Behavior-Related Collisions are inclusive of a variety of collision types, including aggressive driving, alcohol-involved, drug-involved, distracted, young driver, and aging driver collisions.

Policy

- All offender alcohol ignition interlock law
- DWI courts
- Stronger graduated driver licensing laws
- Screening of older drivers

Training

- Employer-based programs targeting workers that are at higher risk of drowsy-driving
- Drug recognition expert training for law enforcement
- Responsible beverage service training
- Motorcycle rider training

Technology

- Automated enforcement for speed and red light running.

Education

- Education campaigns about increased enforcement
- Alternative transportation programs
- Increased parental involvement programs
- Mandatory driver education for novice drivers
- Education campaigns for physicians and law enforcement about older driver screening
- Education campaigns targeted to low seat-belt users
- School programs

Enforcement

- High visibility enforcement
- Publicized sobriety check-points
- Saturation patrols
- Enforcement of graduated driver licensing and zero tolerance laws
- Integrated enforcement

EXAMPLE STRATEGIES

CALIFORNIA SAFE ROADS
2020 - 2024 Strategic Highway Safety Plan

- Median and Pedestrian Crossing Islands
- Pedestrian Hybrid Beacon
- Leading Pedestrian Intervals
- Walkways
- Road Diet
- Crosswalk Enhancements
- Corridor Access Management
- Roadside Design Improvement at Curves
- Enhanced Delineation and Friction for Horizontal Curves

EXAMPLE STRATEGIES

CALIFORNIA SAFE ROADS
2020 - 2024 Strategic Highway Safety Plan

- Longitudinal Rumbe Stripes
- Median Barriers
- Tapered Edge
- Reduce Left-Turn Conflict Intersections
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- Backplates with Retroreflective Borders
- Dedicated Left-turn and Right-turn lanes
- Roundabouts
- Yellow Change Intervals

EXAMPLE STRATEGIES

CALIFORNIA SAFE ROADS
2020 - 2024 Strategic Highway Safety Plan

Policy

- All offender alcohol ignition interlock law
- DWI courts
- Stronger graduated driver licensing laws
- Screening of older drivers

Training

- Employer-based programs targeting workers that are at higher risk of drowsy-driving
- Drug recognition expert training for law enforcement
- Responsible beverage service training
- Motorcycle rider training

Technology

- Automated enforcement for speed and red light running.

EXAMPLE STRATEGIES

Education

- Education campaigns about increased enforcement
- Alternative transportation programs
- Increased parental involvement programs
- Mandatory driver education for novice drivers
- Education campaigns for physicians and law enforcement about older driver screening
- Education campaigns targeted to low seat-belt users
- School programs

Enforcement

- High visibility enforcement
- Publicized sobriety check-points
- Saturation patrols
- Enforcement of graduated driver licensing and zero tolerance laws
- Integrated enforcement

SAFETY STRATEGY SESSION

CALIFORNIA SAFE ROADS
2020 - 2024 Strategic Highway Safety Plan

- Open House Format
- Discuss data and strategies with facilitators and attendees at 5 stations
- Fill out comment forms
  - What is the biggest safety issue in your community?
  - What specific data should drive the strategies?
  - What strategies/programs are most effective in your region?
  - What can be done to improve implementation?
  - What other ideas do you have?

SAFETY STRATEGY SESSION

CALIFORNIA SAFE ROADS
2020 - 2024 Strategic Highway Safety Plan

- Handouts
  - Statewide Overview
  - Data specific to each sub category
  - Example strategies

Safety Strategy Session

CALIFORNIA SAFE ROADS
2020 - 2024 Strategic Highway Safety Plan

- Stations

Overview
- Collision Overview
- Vision / Mission / Objective

Drivers & Passengers
1. Driver licensing
2. Aggressive driving
3. Driving under influence
4. Distracted driving
5. Occupant protection
6. Young drivers (<21)
7. Aging drivers (>65)
8. Commercial vehicle operations

Infrastructure
9. Intersections
10. Lane/Roadway departures
11. Work zones

Vulnerable Users
12. Pedestrians
13. Bicyclists
14. Motorcyclists

Vehicles
15. Equipment

Emergency Response
16. Emergency Response

CALIFORNIA SAFE ROADS

2020 - 2024 Strategic Highway Safety Plan

Report Out / Closing