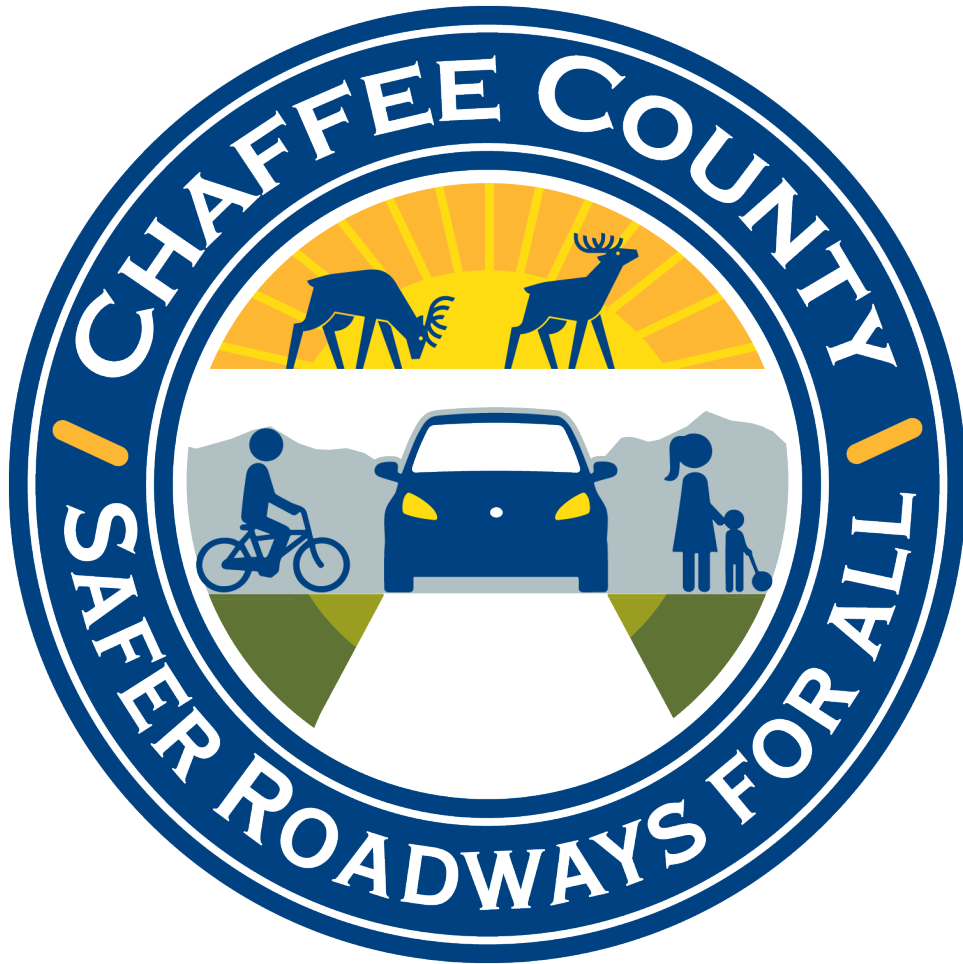




Chaffee County

2017-2024 Crash Analysis

What was analyzed?

An analysis was performed of historic crash data in Chaffee County, Colorado to reveal trends and other factors contributing to crashes. The analysis will inform safety recommendations and solutions as part of the Chaffee County Safer Roadways for All Action Plan. The analysis particularly focuses on **Killed and Seriously Injured (KSI) crash** trends as the primary goal of the Action Plan is to develop strategies to prevent these crashes.

The most recent eight years of crash data were analyzed, from January 1, 2017 to December 31, 2024. This time frame was intended to capture enough data to reveal trends, while being recent enough to be relevant. Only crashes that occurred on the state highways and county roads in Chaffee County were included. Crashes on city and town streets were excluded.

Crash data was sourced from DiExSys Vision Zero Suite, originally provided by the Colorado Department of Revenue (DOR) and managed by the Colorado Department of Transportation (CDOT). DiExSys geocoded all crashes prior to performing the crash analysis.

This slide deck includes a series of charts, tables, and maps summarizing findings of the analysis.



2017-2024 Crash Summary

	ALL Crashes	Injury Crashes (Injury Level A, B, C)	KSI Crashes (Injury Level A, Fatal)
Number of Crashes	2,683	550	128 102 Level A + 26 Fatal
Number of People Involved	5,527	788	161 131 Seriously Injured + 30 Killed
Average per year	335 crashes 691 people	69 crashes 99 people	16 crashes 20 people
Average per month	28 crashes 58 people	6 crashes 8 people	1 KS crash 2 people
Average per week	6 crashes 13 people	1 crash 2 people	
Average per day	1 crash 2 people		

Crashes by Severity

Crash Severity

- Fatal Injury
- Serious Injury
- Minor Injury
- Possible Injury
- Property Damage Only
- Parkland
- Municipalities

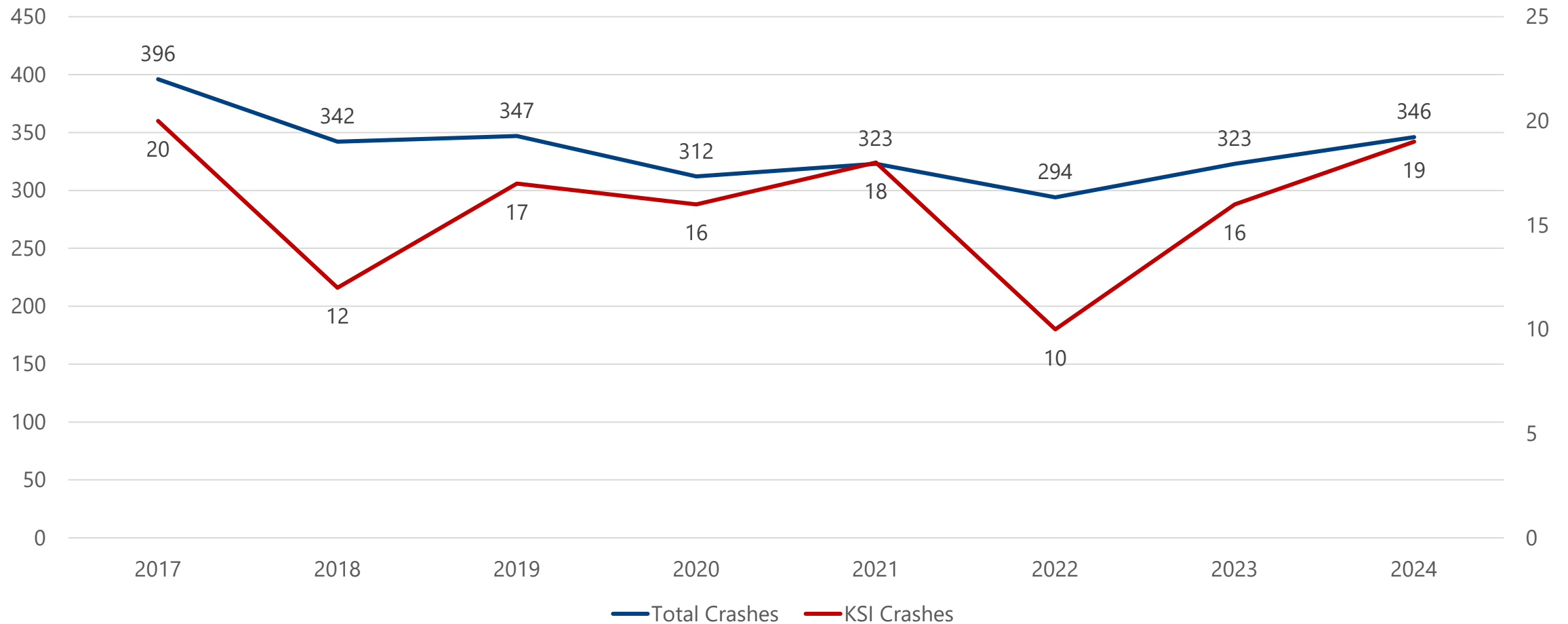


0 1 2 4 6 8 Miles

On average in Chaffee County . . .

- . . . there is one crash every day
- . . . someone is injured in a crash every 3-4 days
- . . . someone is seriously injured in a crash every 3 weeks
- . . . about 4 people per year die in from crashes

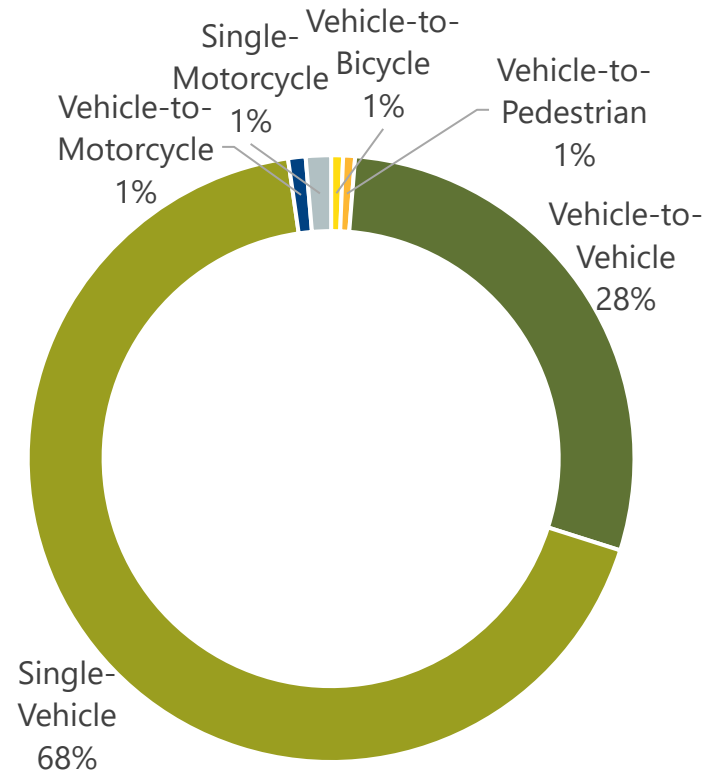
Total Crashes vs. KSI Crashes by Year



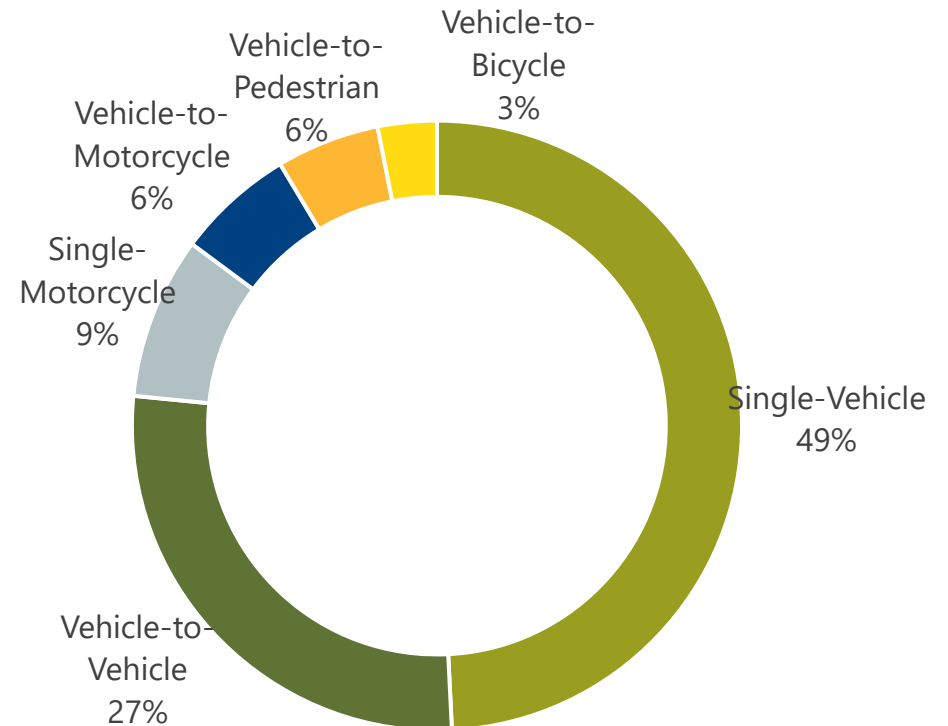
Mode of Transportation

- ***1 out of 12 KSI crashes involved a pedestrian or a bicycle***
- ***1 out of 7 involved a motorcycle***
- ***58% were single vehicle crashes***

ALL Crashes



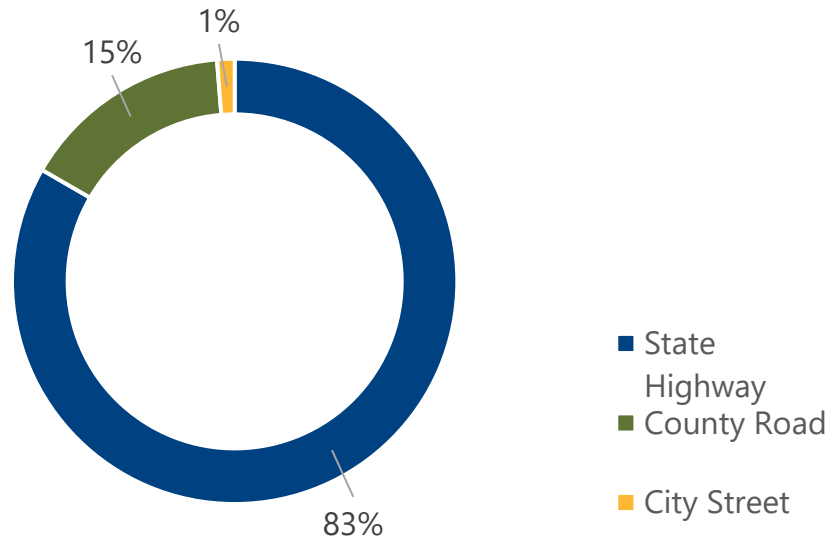
KSI Crashes



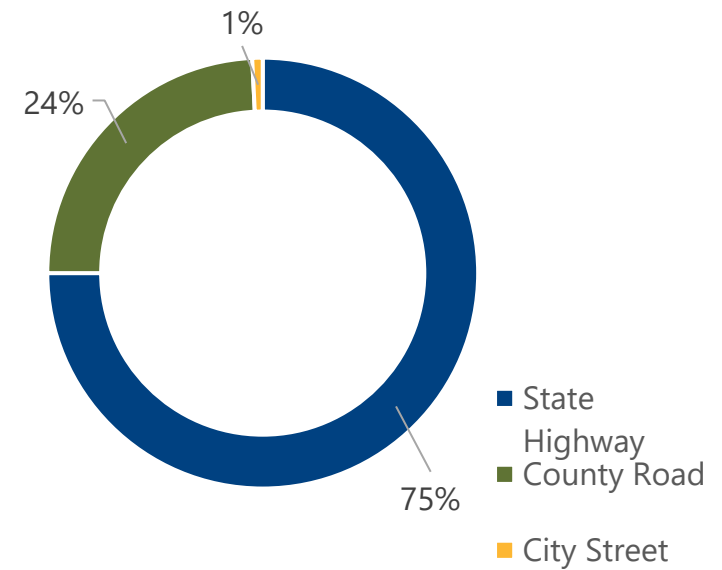
Road System

Most KSI crashes are on the state highways.

ALL Crashes



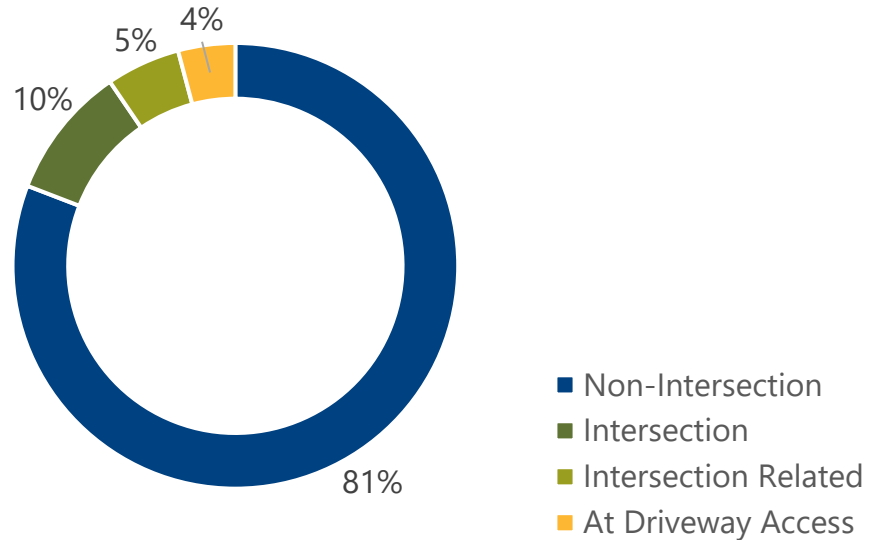
KSI Crashes



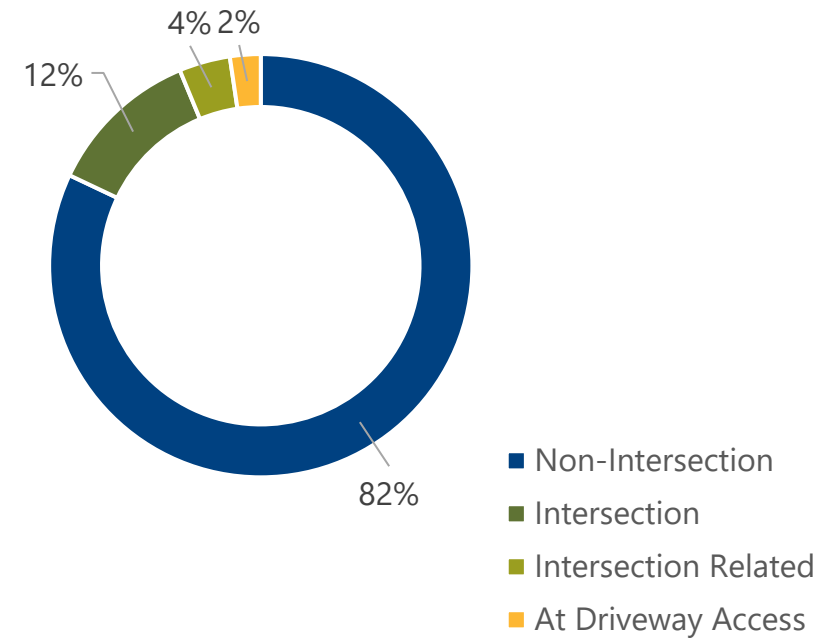
Road Description

8 of 10 KSI crashes were not related to an intersection.

ALL Crashes



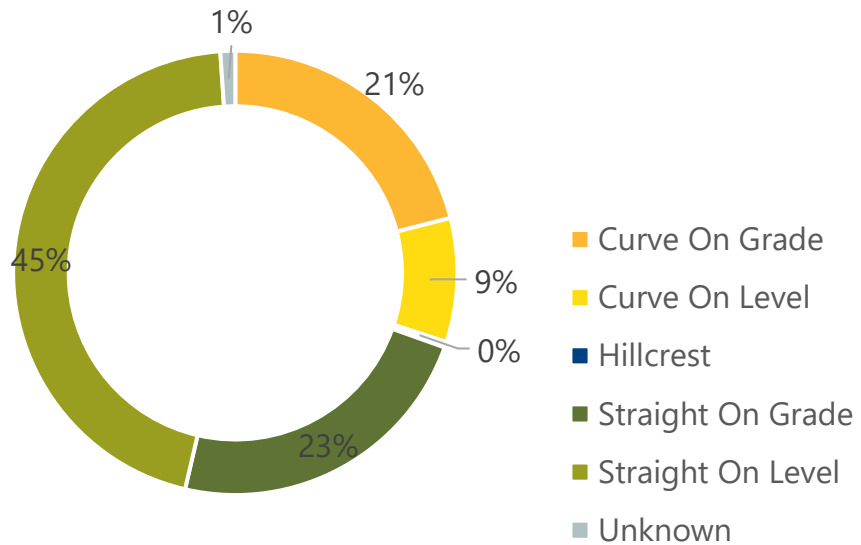
KSI Crashes



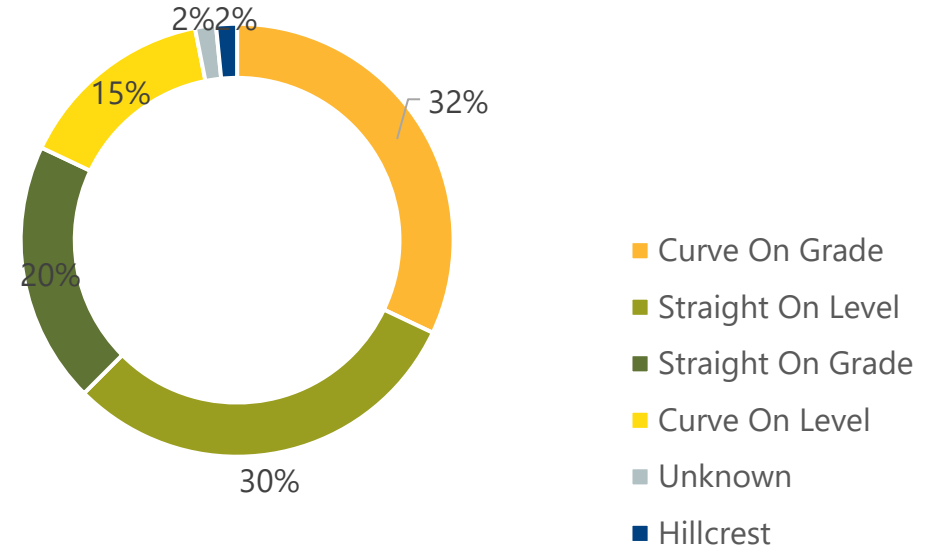
Road Contour

Over half of KSI crashes occurred on a grade.

ALL Crashes

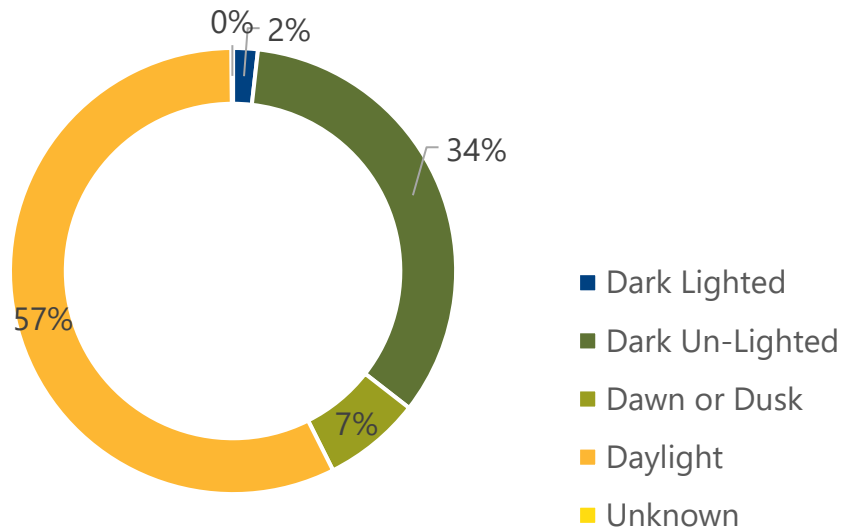


KSI Crashes

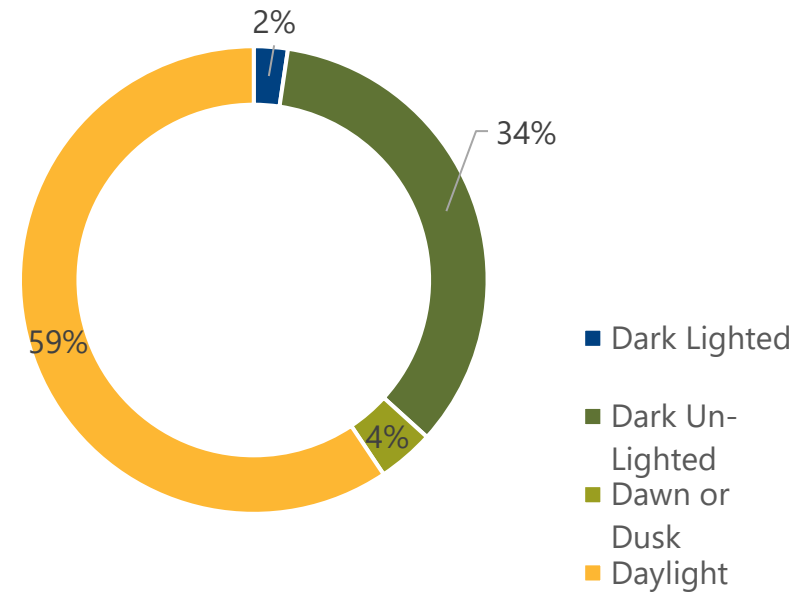


Lighting Condition

ALL Crashes

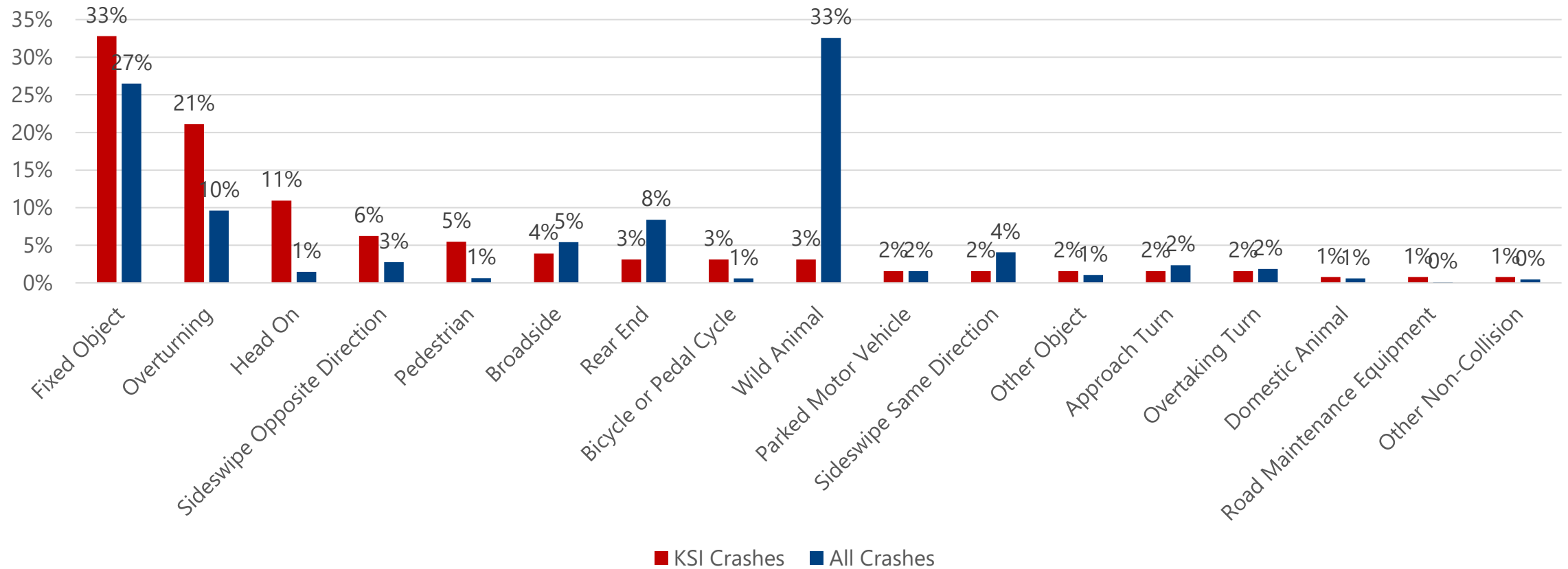


KSI Crashes



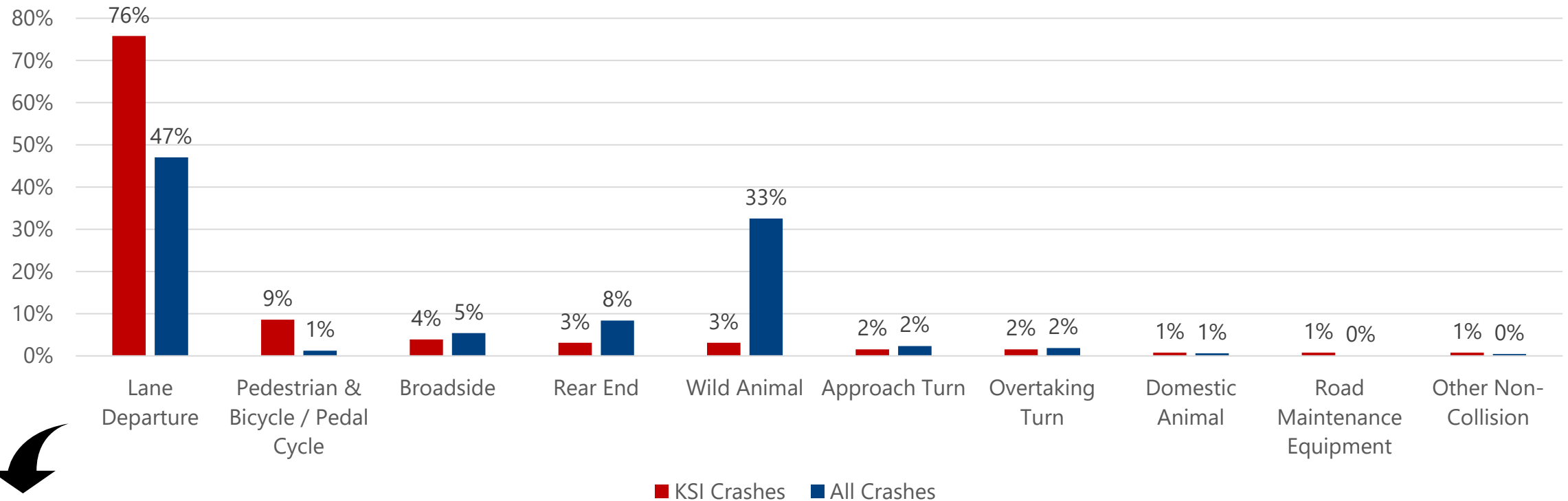
3 out of 4 KSI crashes were lane departure.

Crash Types



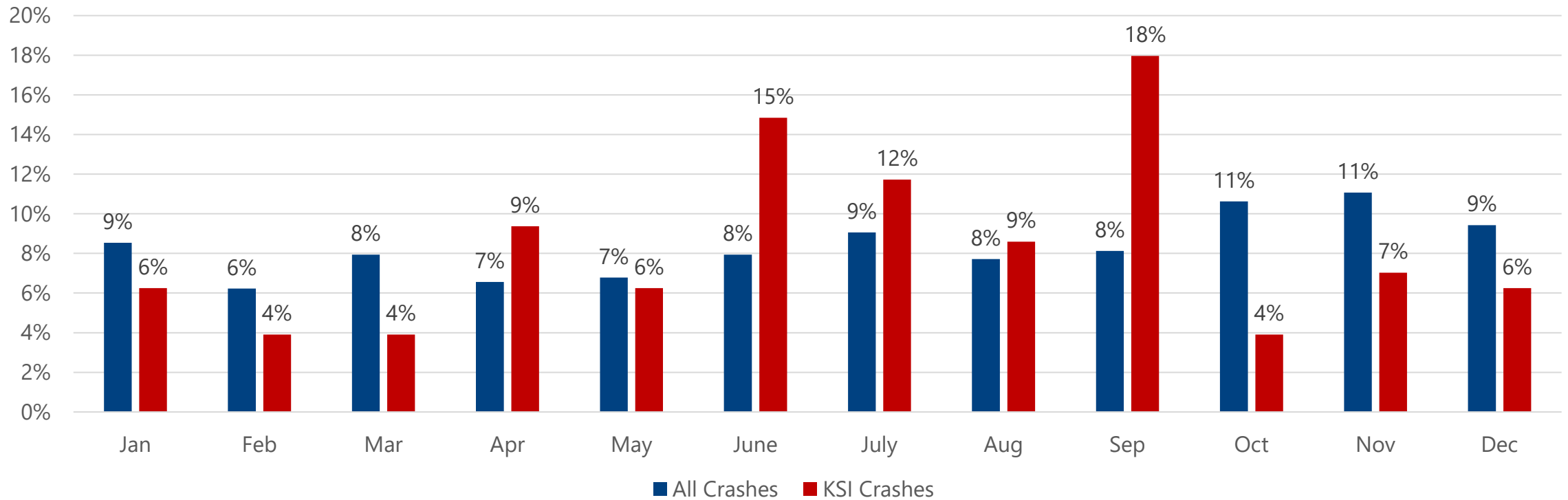
Crash Types

3 out of 4 KSI crashes were lane departure – meaning the driver departed the travel lane to the right or left resulting in a crash.



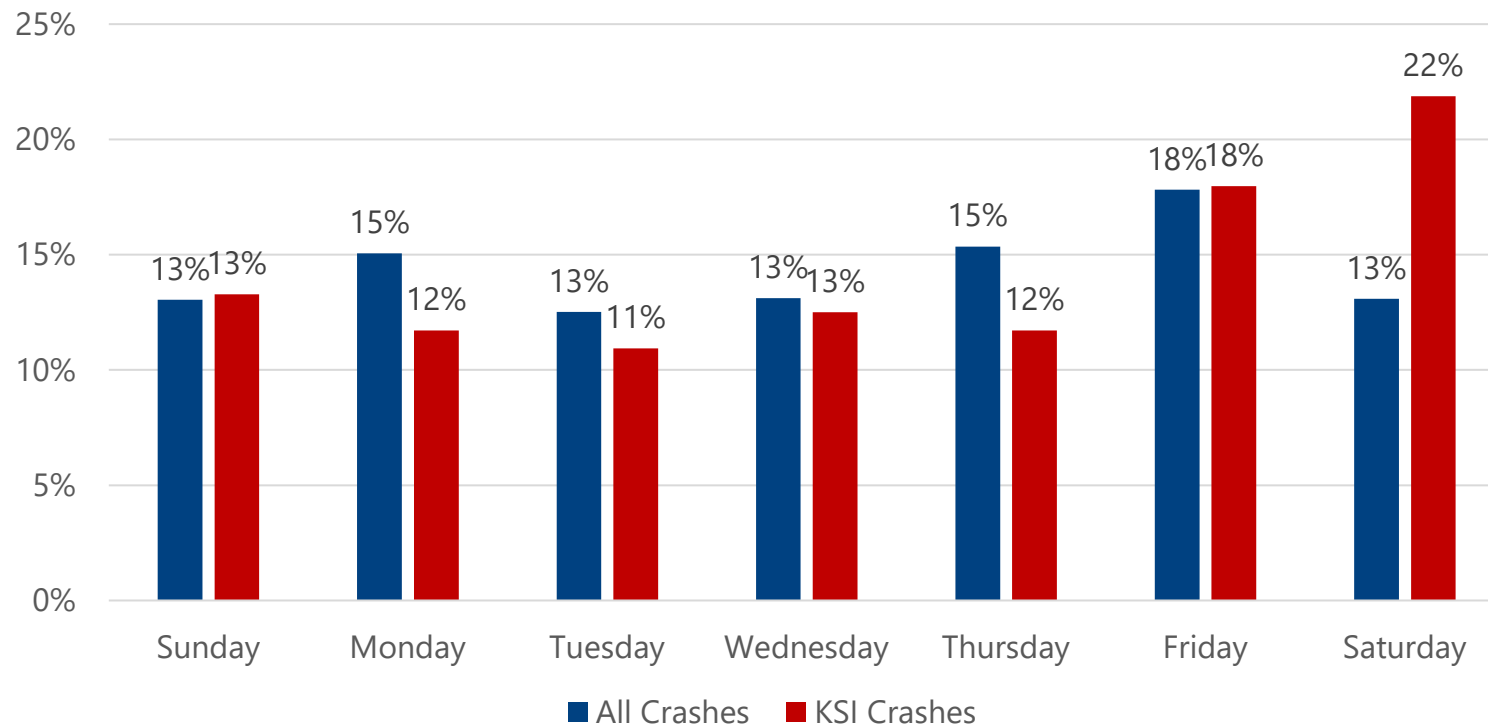
Over half of KSI crashes occurred June - Sept.

Crash by Month

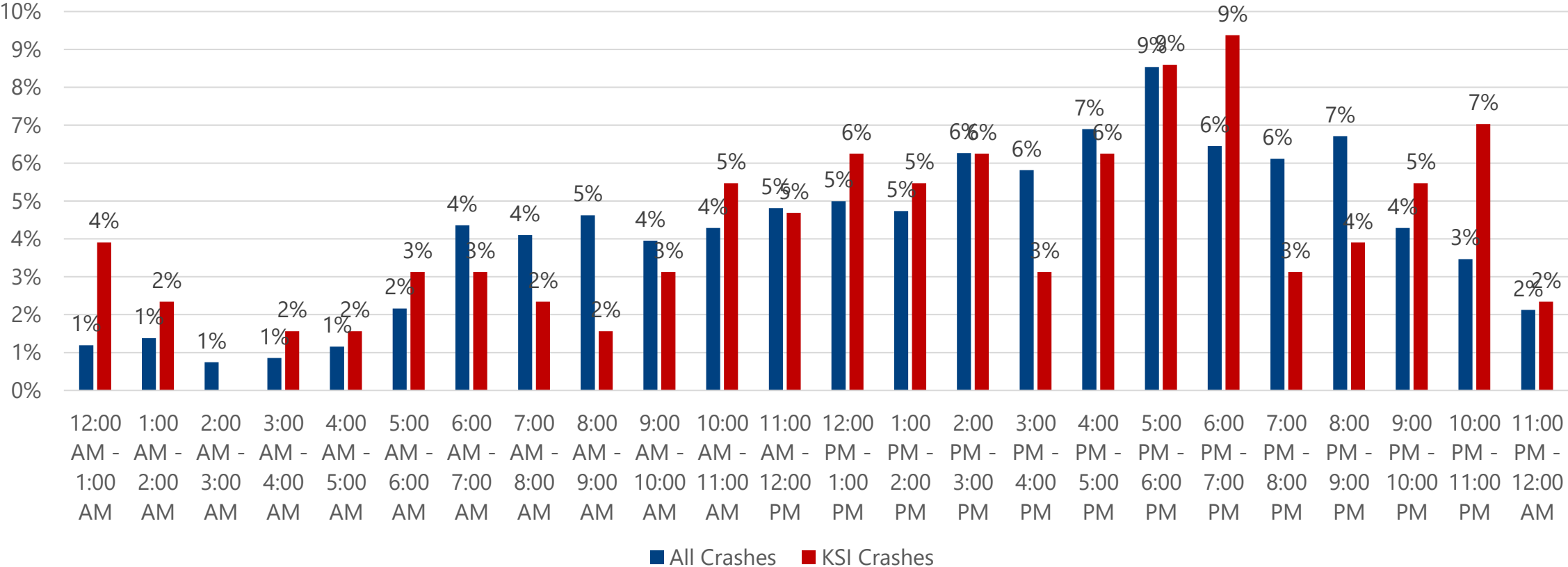


Crash by Day

4 of 10 KSI crashes occurred on Friday or Saturday.

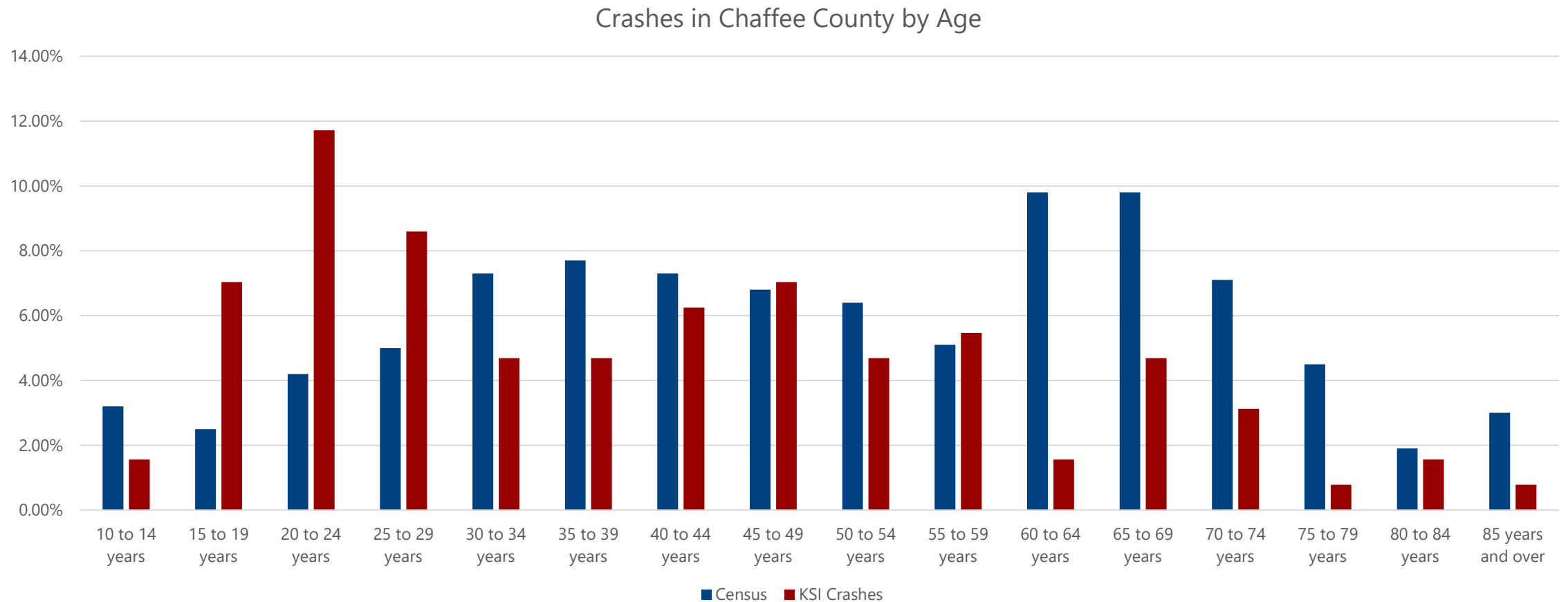


Crash by Hour

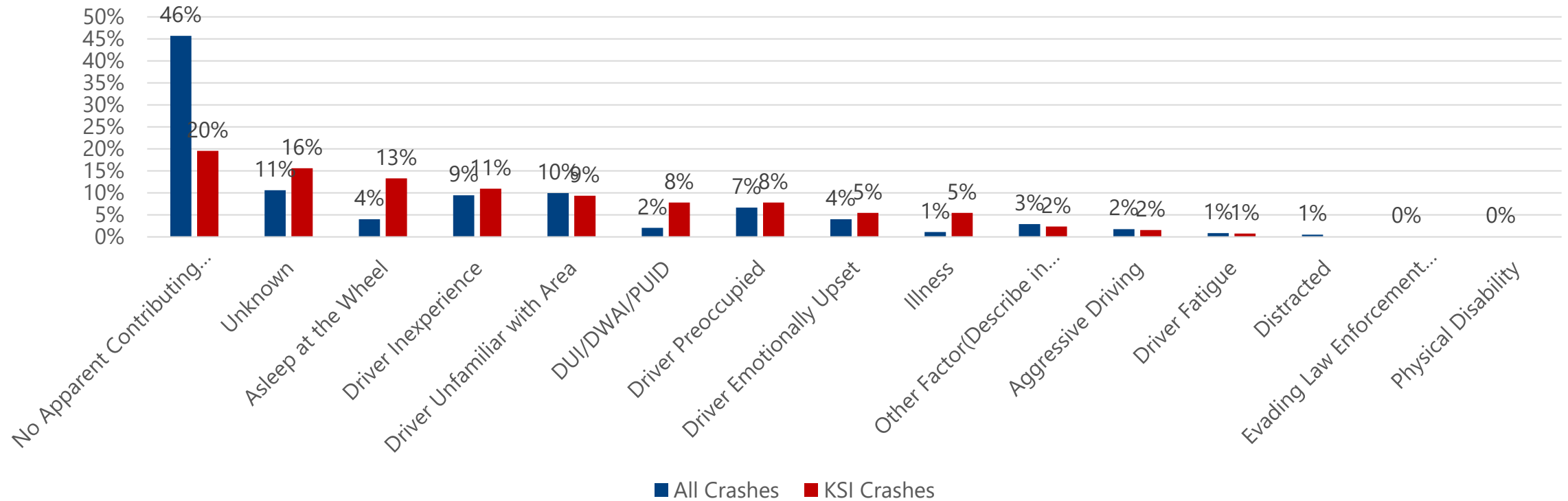


Crash by Age

In 27% of KSI crashes the driver at fault was between the age of 15 and 29, while this age group represents only 12% of the population of Chaffee County.



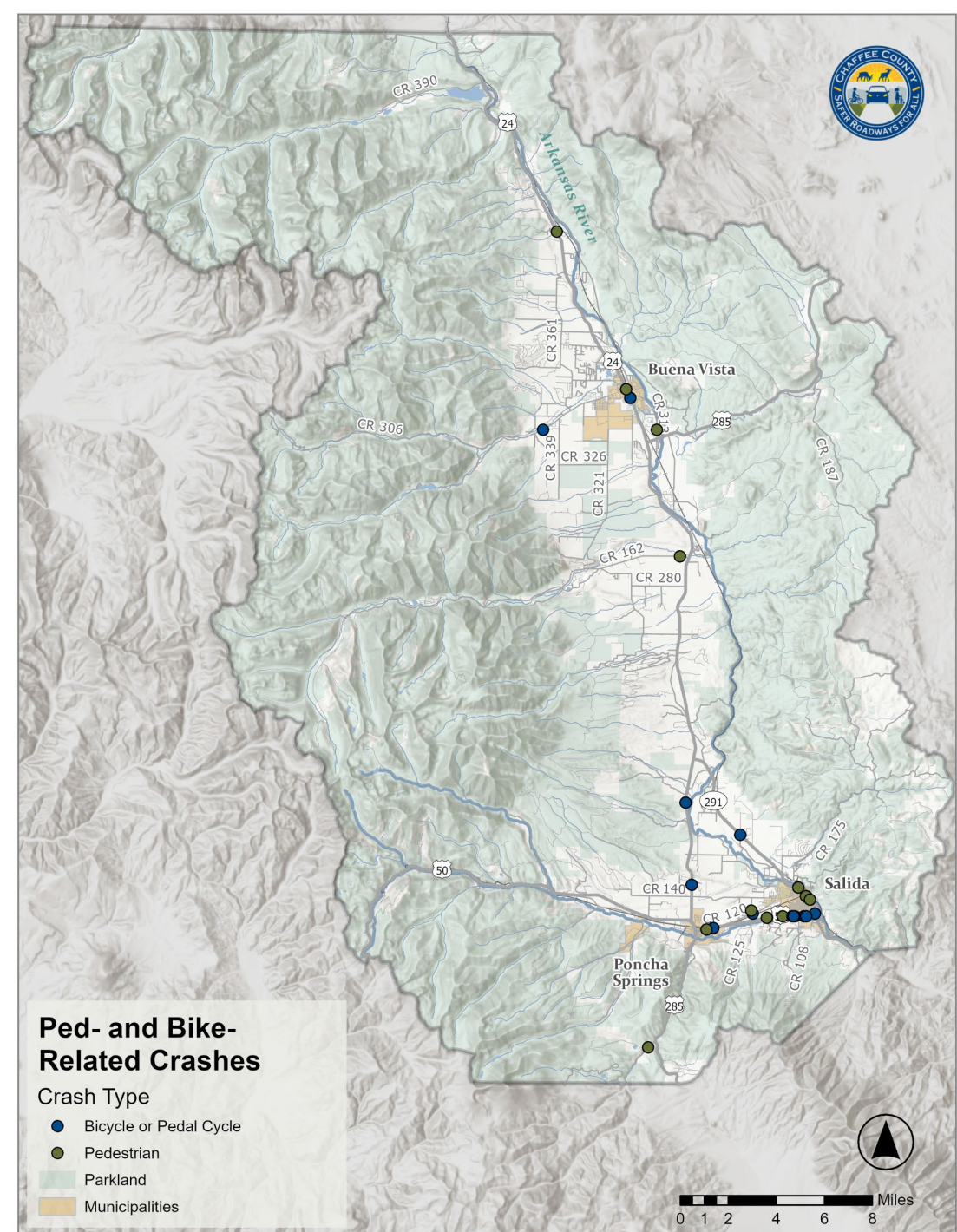
Driver 1: Human Contributing Factor



Most pedestrian and bicycle crashes are occurring within the towns.

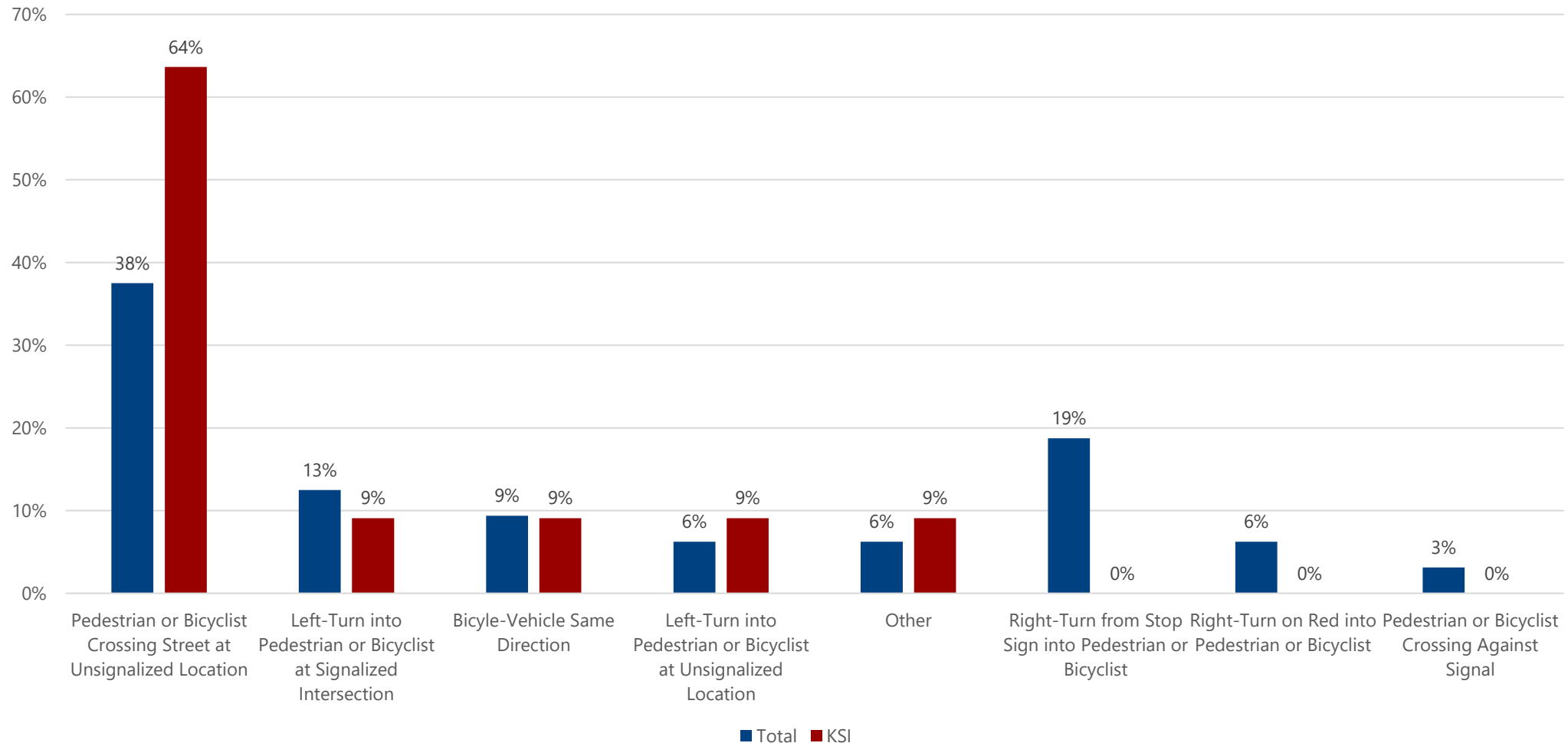
Between 2017 and 2024...

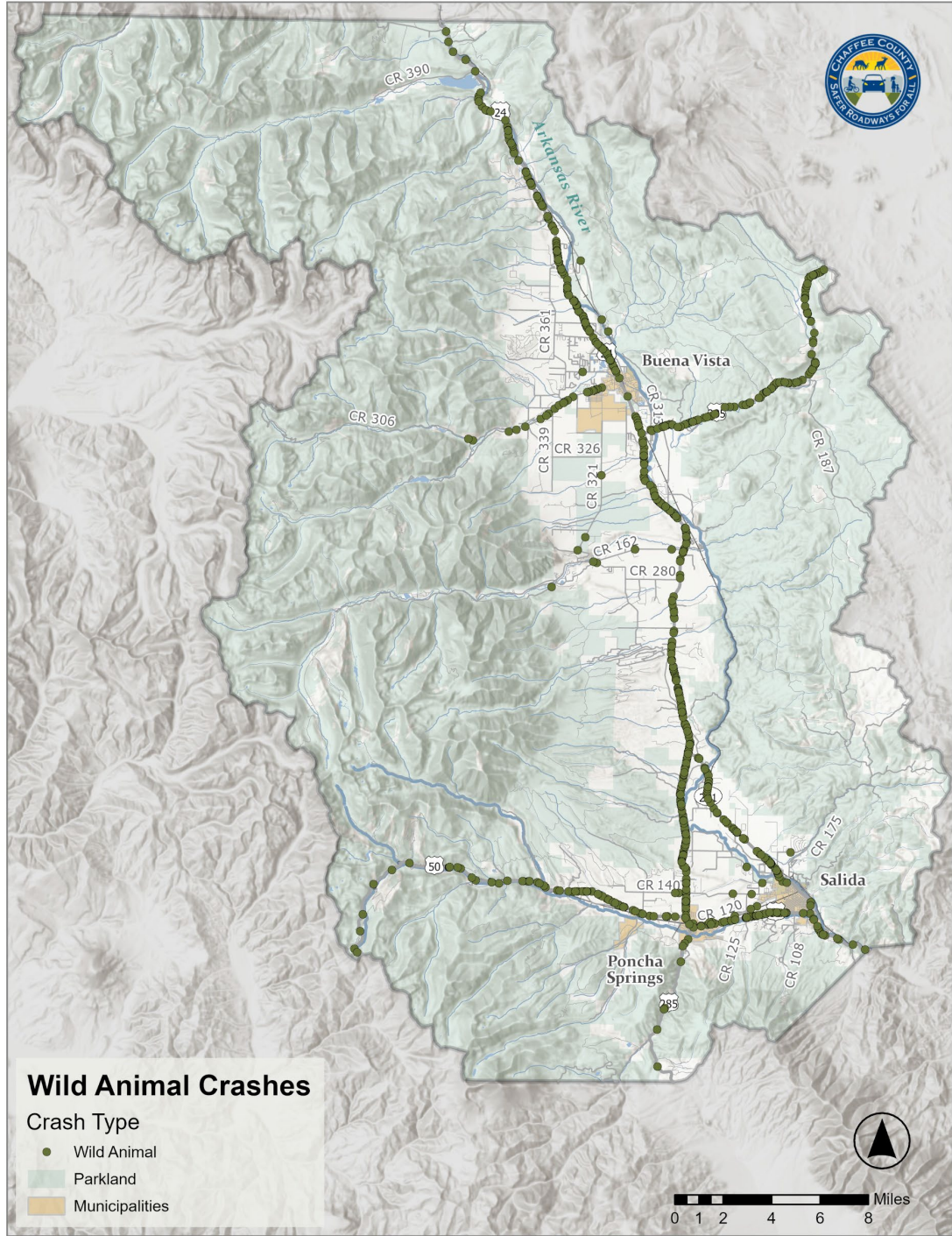
***1 out of 12 KSI
crashes
involved a
pedestrian or a
bicycle.***



Ped/Bike Crash Type

64% of KSI crashes involving a pedestrian or bicyclist involved crossing a road at an unsignalized location.





Top Crash

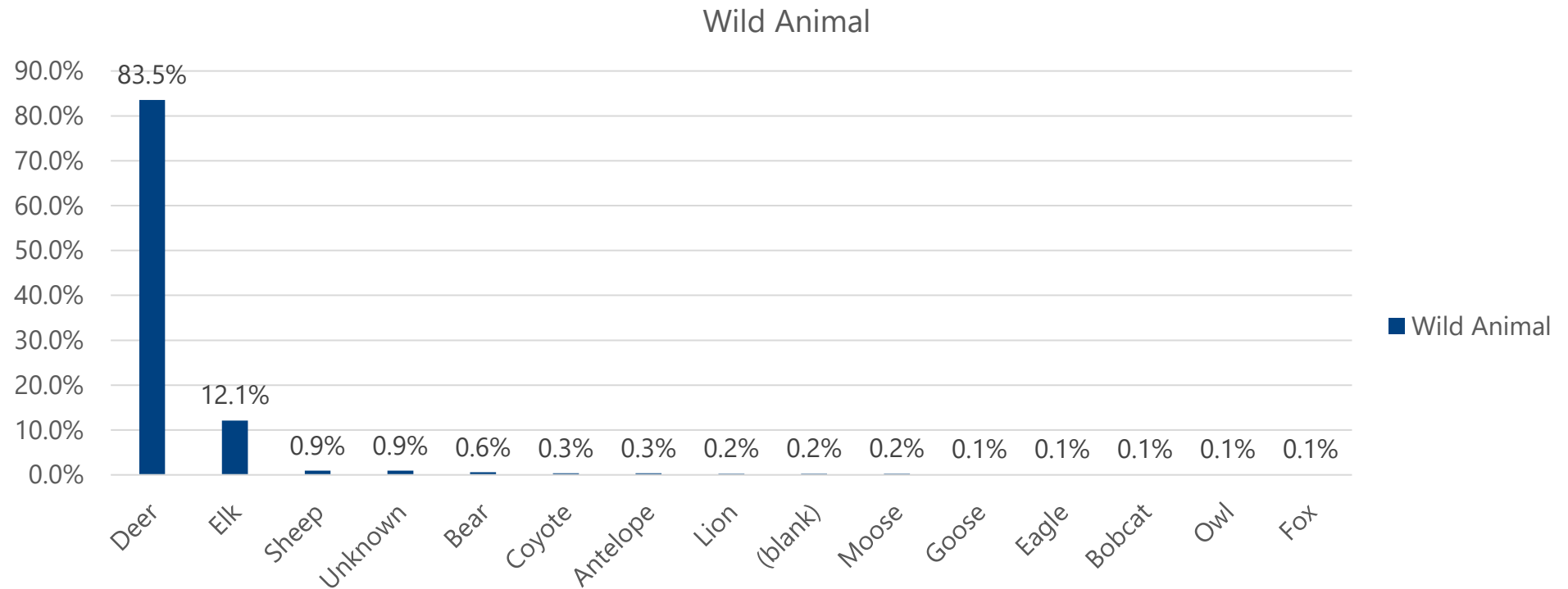


Wildlife Crashes

Between 2017 and 2024...

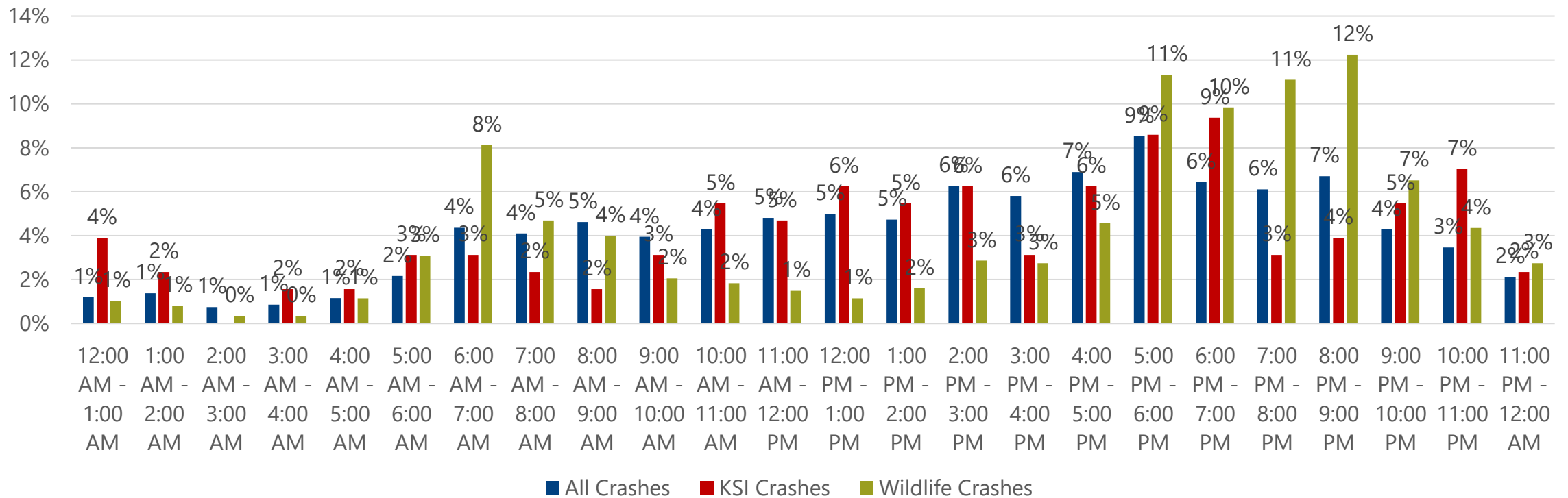
***1 out of 3 crashes
involved a wild animal.***

Wildlife Crash Types

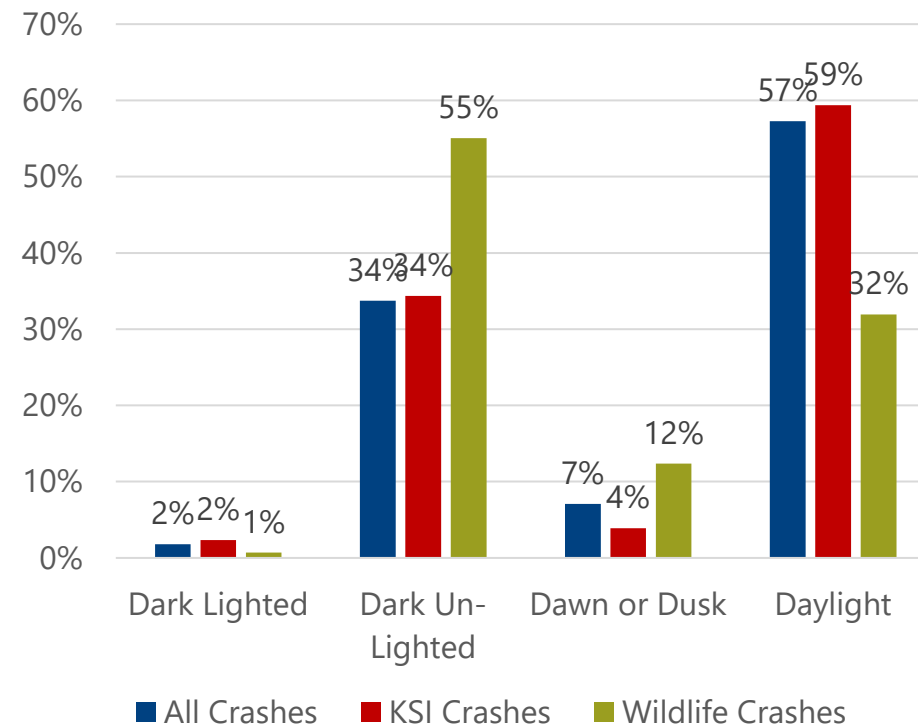


Wildlife crashes disproportionately occur at dawn/dusk and early evening.

Wildlife Crashes by Hour



Wildlife Crashes' Lighting Conditions

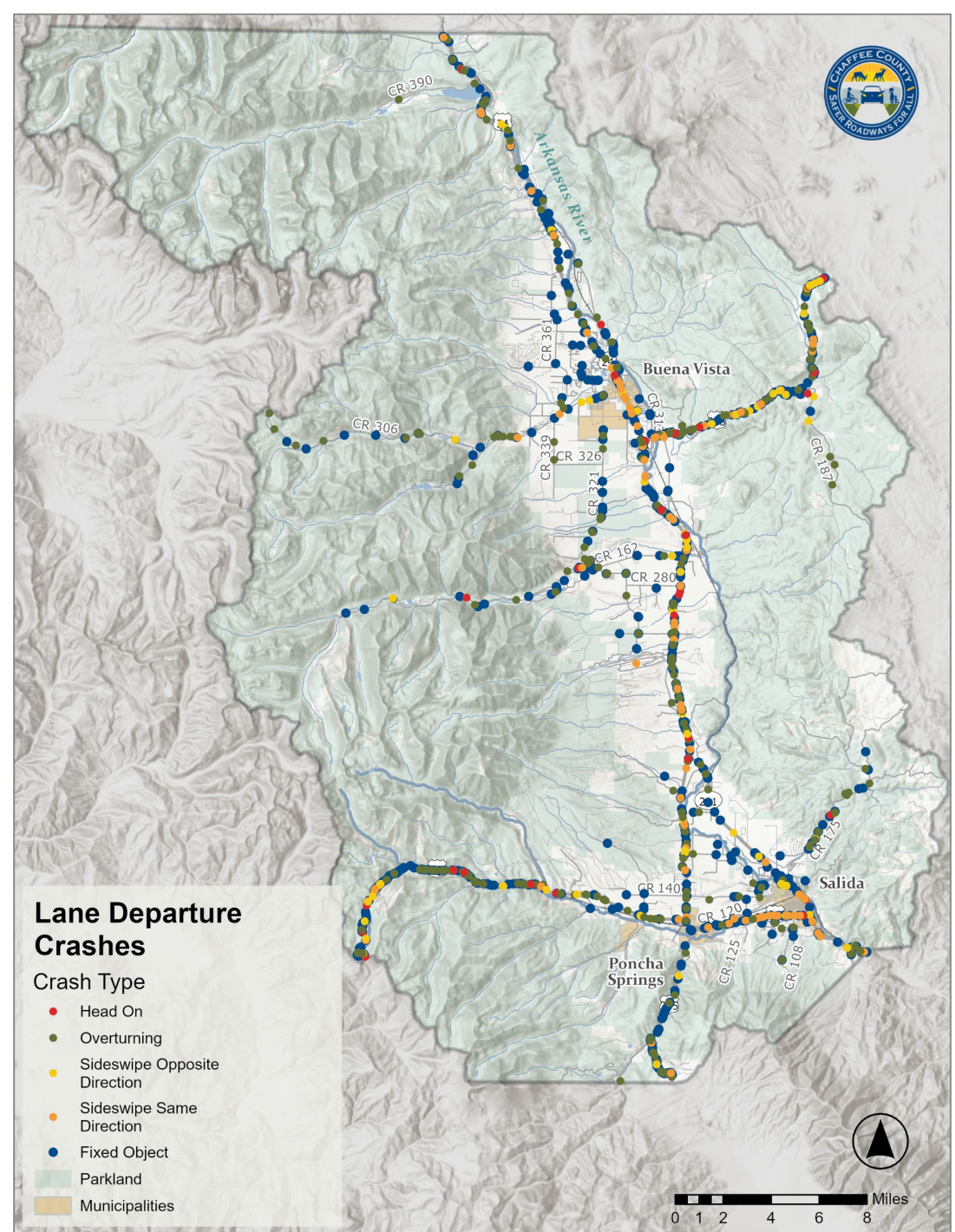


Between 2017 and 2024...

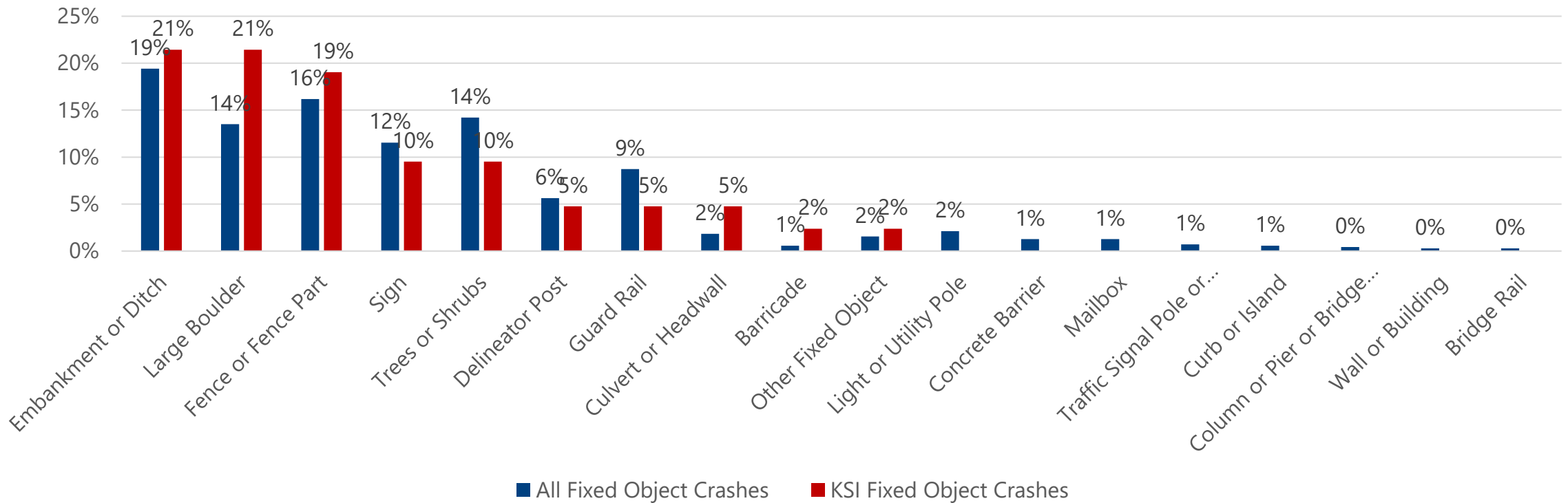
***Lane departure
crashes contribute
to more than 70% of
KSI crashes in
Chaffee County.***

Top 3 lane departure crashes:

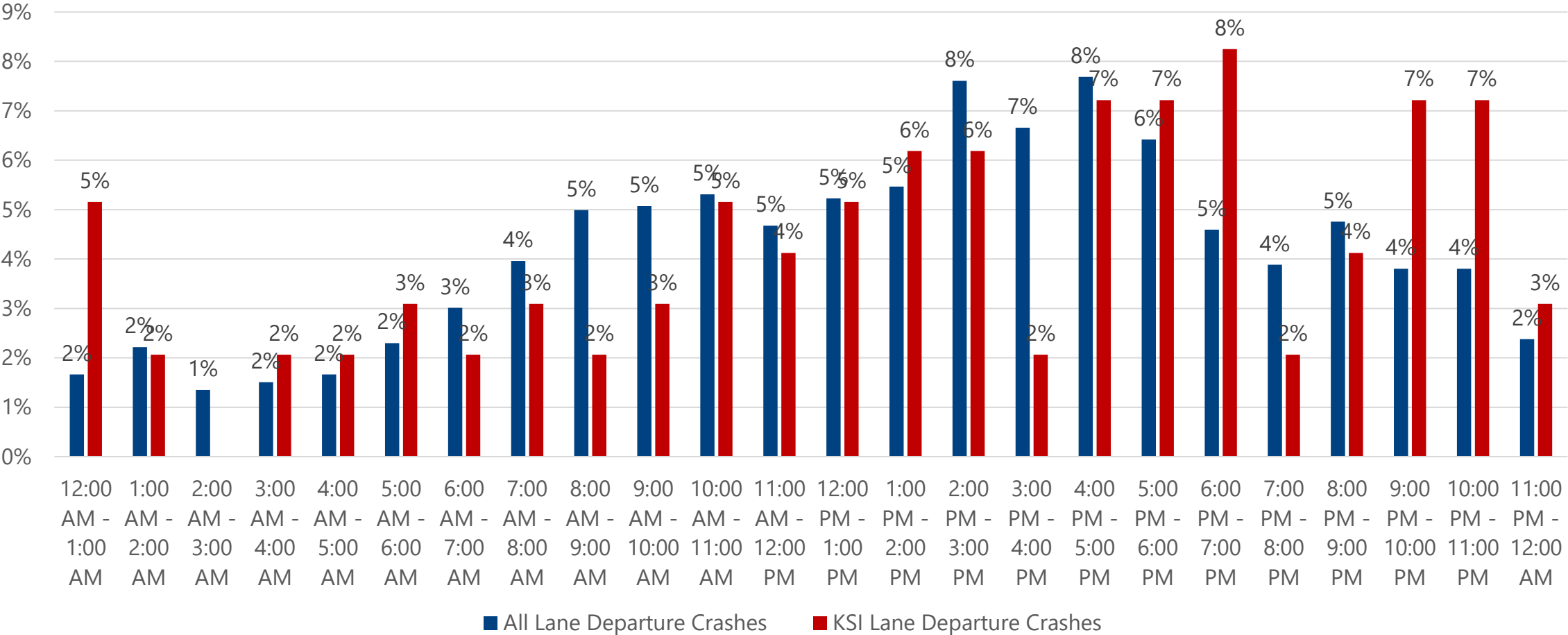
- **Fixed Objects (33% of KSI Crashes)**
- **Overtaking (21% of KSI crashes)**
- **Head On (11% of KSI crashes)**



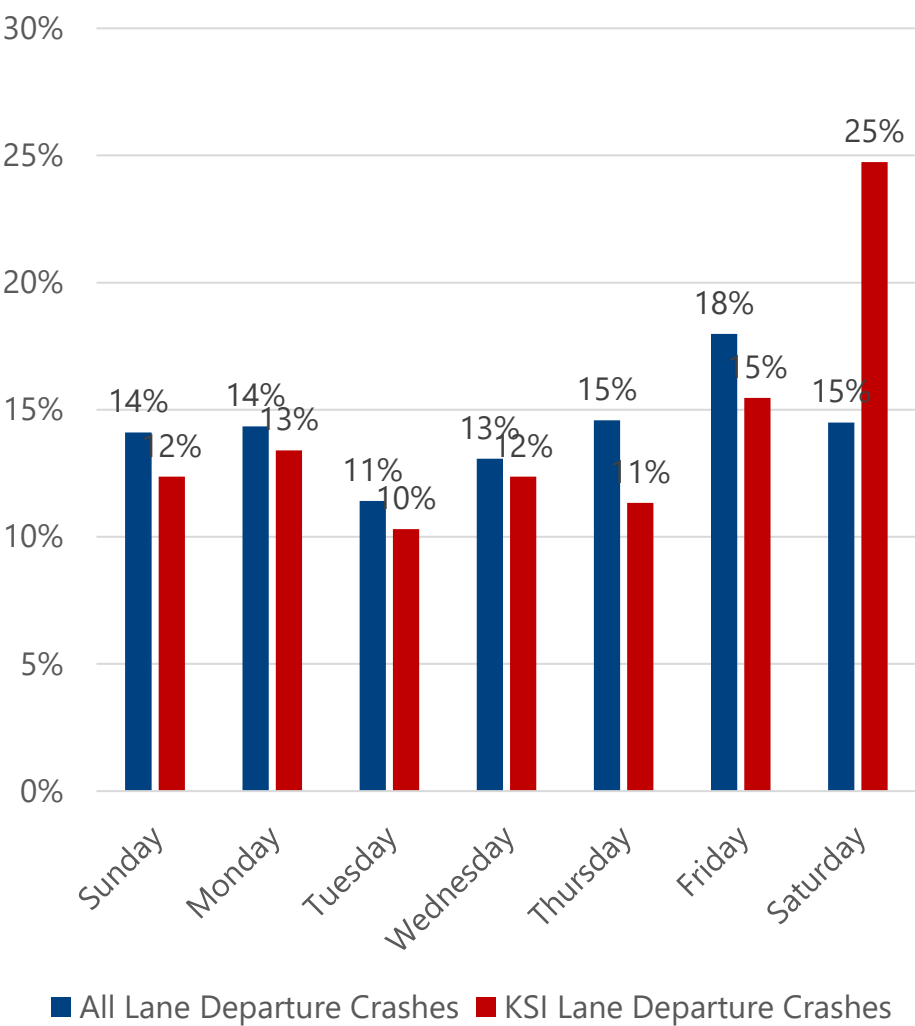
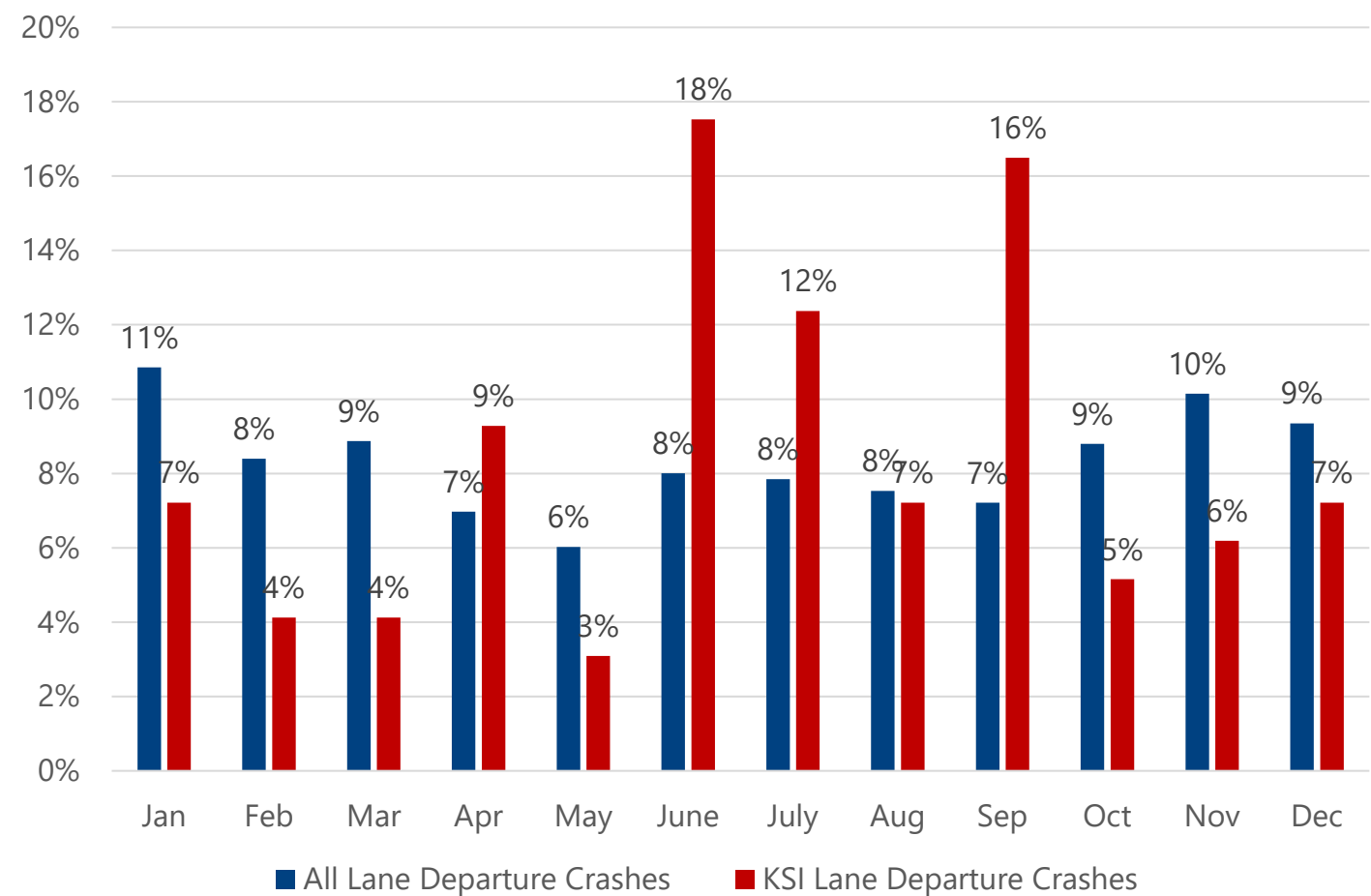
Fixed Object Crash Types



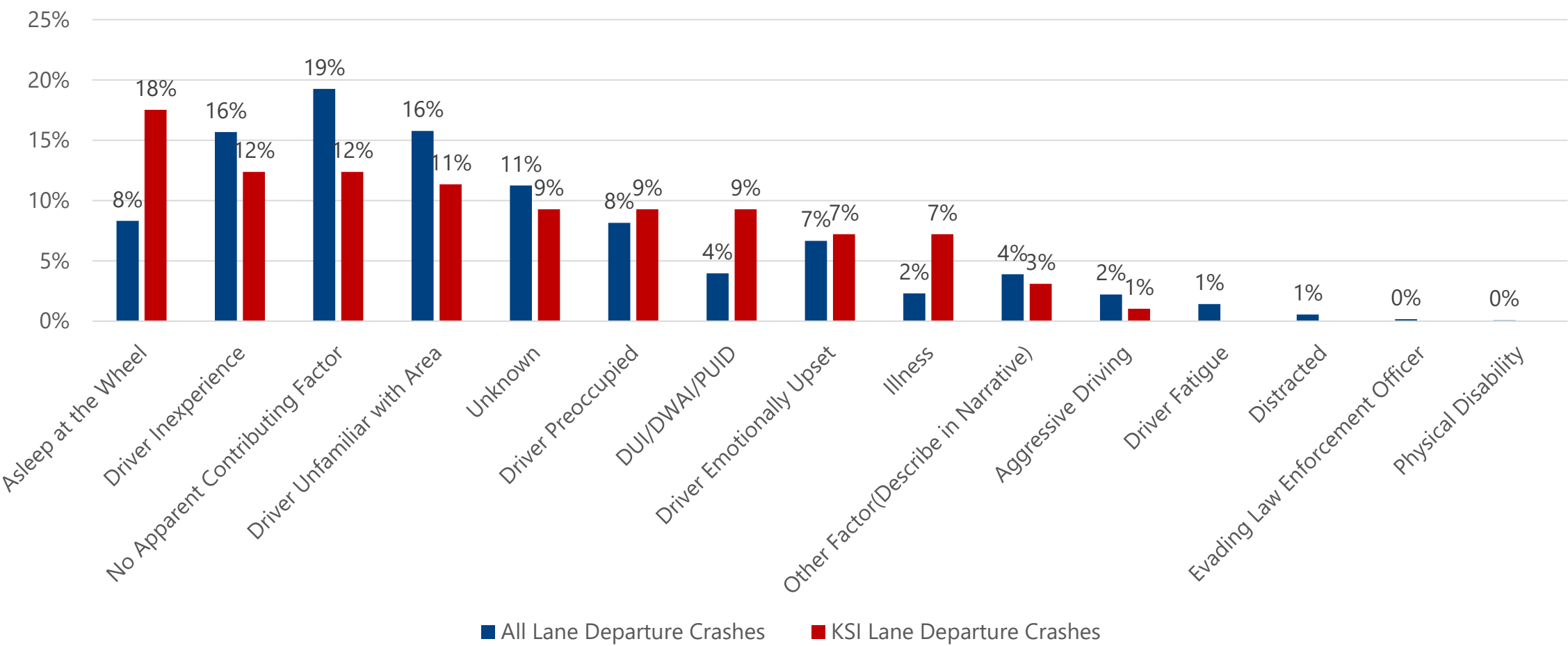
Lane Departure Crashes by Hour



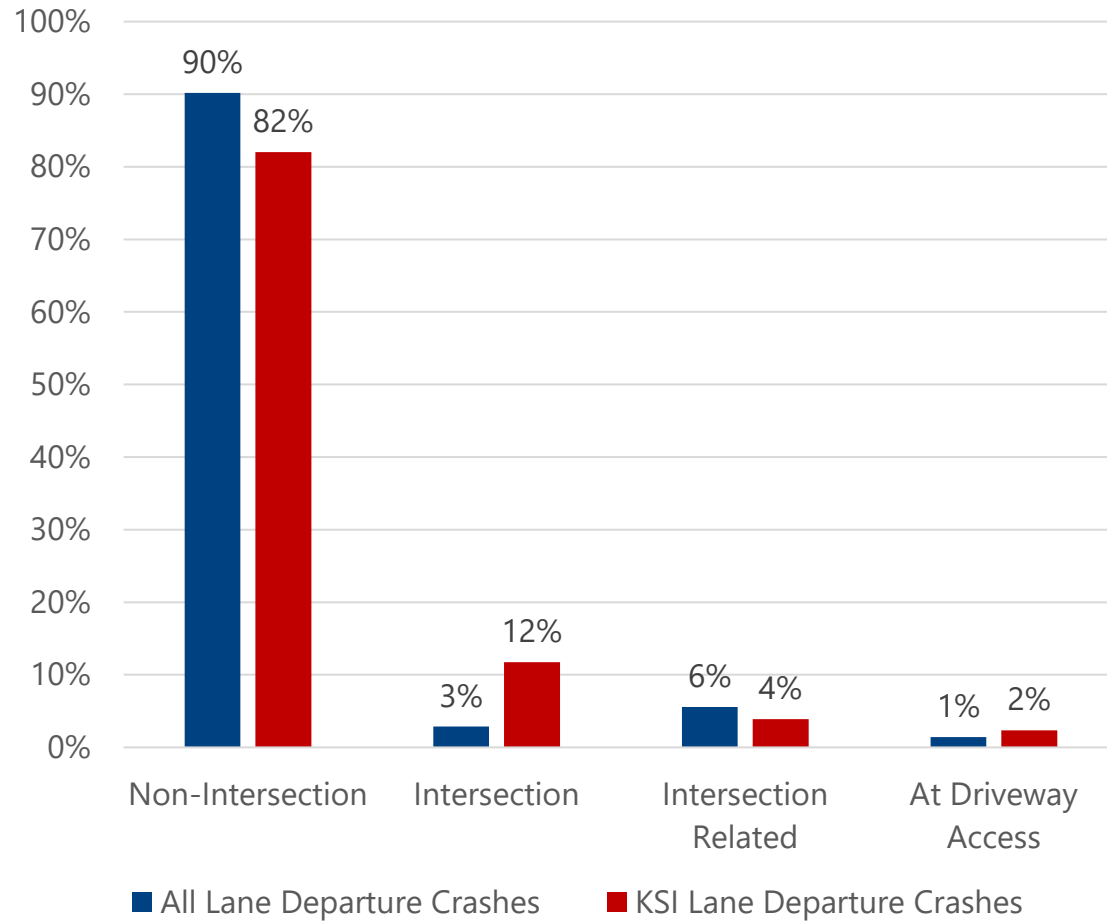
Lane Departure Crashes by Month & Day



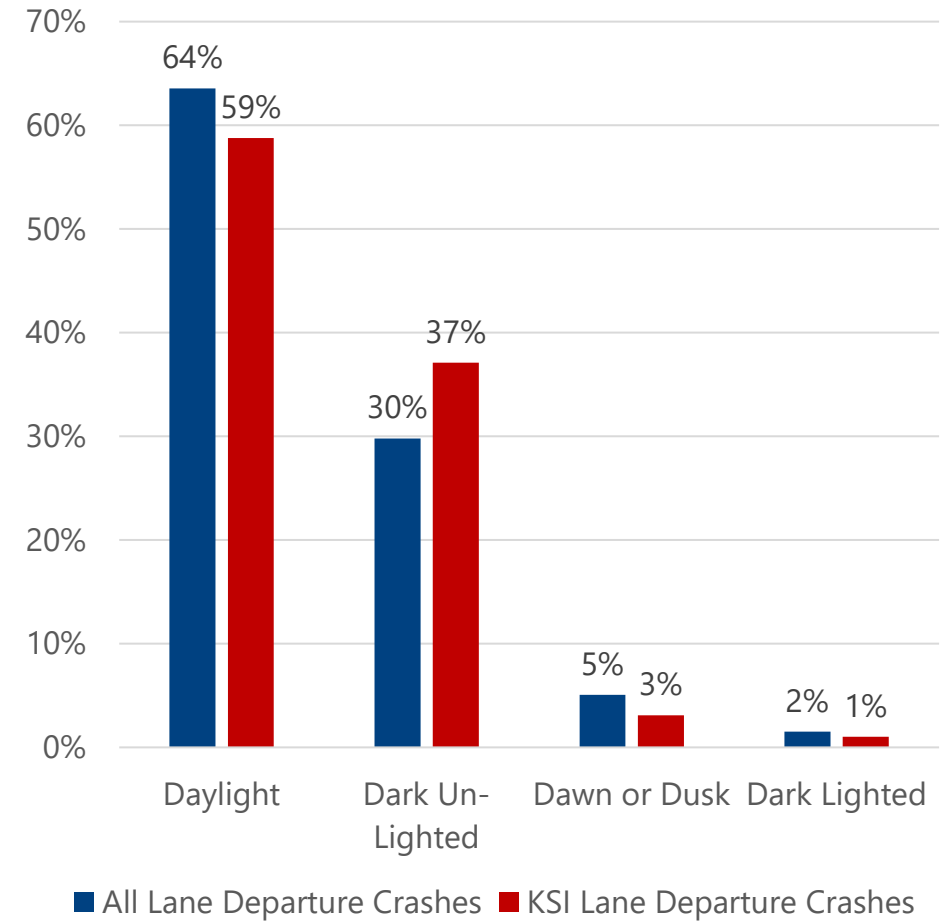
Driver 1 Human Contributing Factors



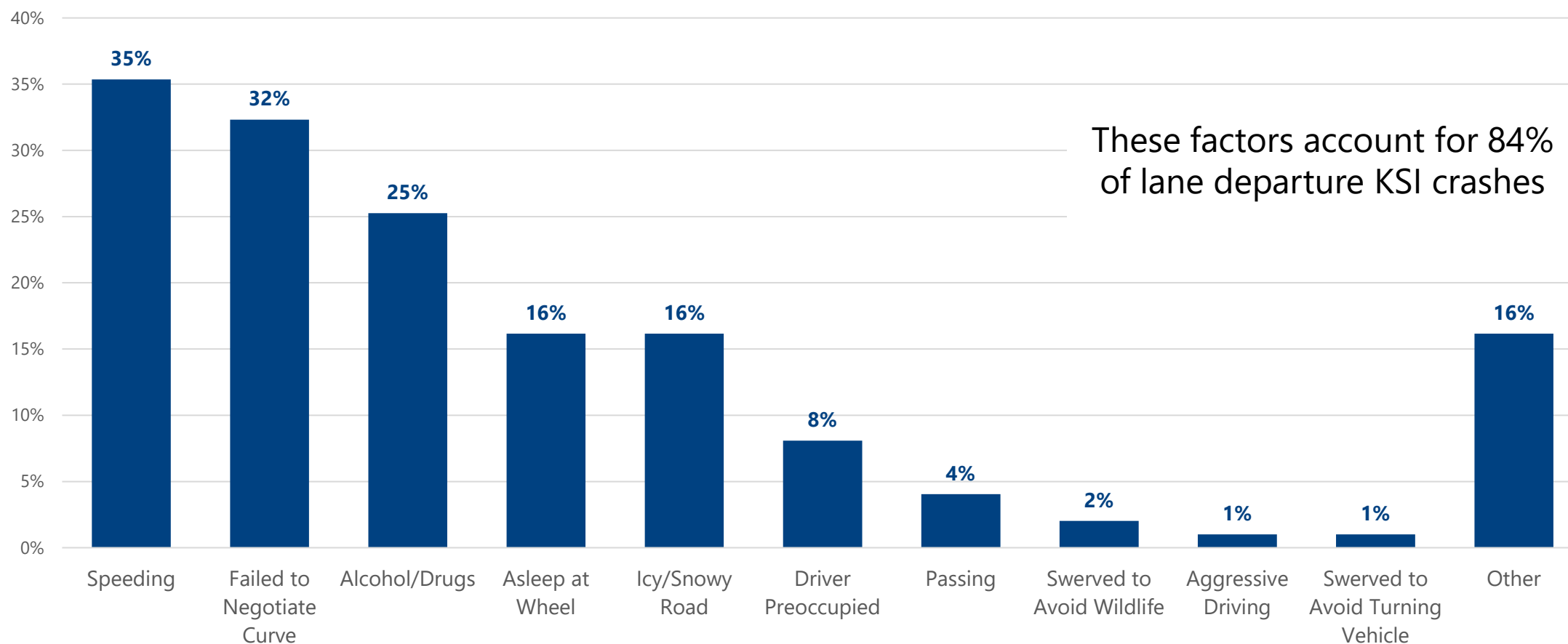
Road Description



Lighting Condition

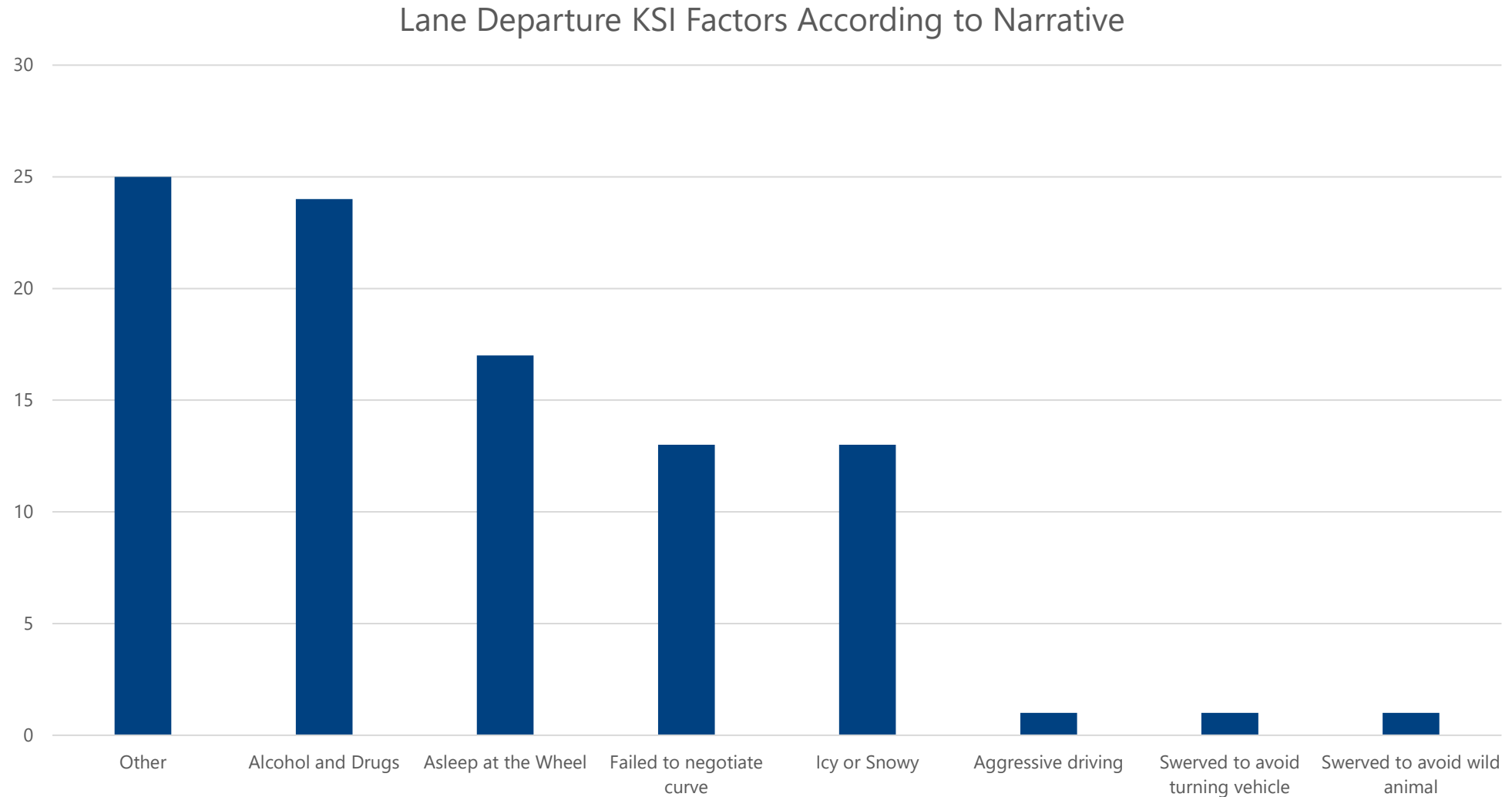


Factors in Lane Departure Crashes



Note: categories are not mutually exclusive

Primary Cause of Lane Departure KSIs



Level of Service of Safety (LOSS) Analysis

What is Level of Service of Safety?

Level of Service of Safety (LOSS) is a metric that indicates the crash rate (crashes per year) compared to other similar locations in Colorado (e.g., with similar daily vehicle volumes, number of lanes, and traffic control). LOSS is measured on a scale of 1-4 based on the number of crashes compared to the expected crash rate at that location:

- LOSS I: <20th percentile
- LOSS II: 20th-50th percentile
- LOSS III: 50th-80th percentile
- LOSS IV: >80th percentile

LOSS III or IV typically means there is a higher potential for crash reduction with implementation of safety countermeasures. LOSS is shown in two ways:

- LOSS Total: Includes all crashes
- LOSS Severity: Includes just fatal and injury crashes

LOSS can indicate where safety countermeasure interventions would be most effective.

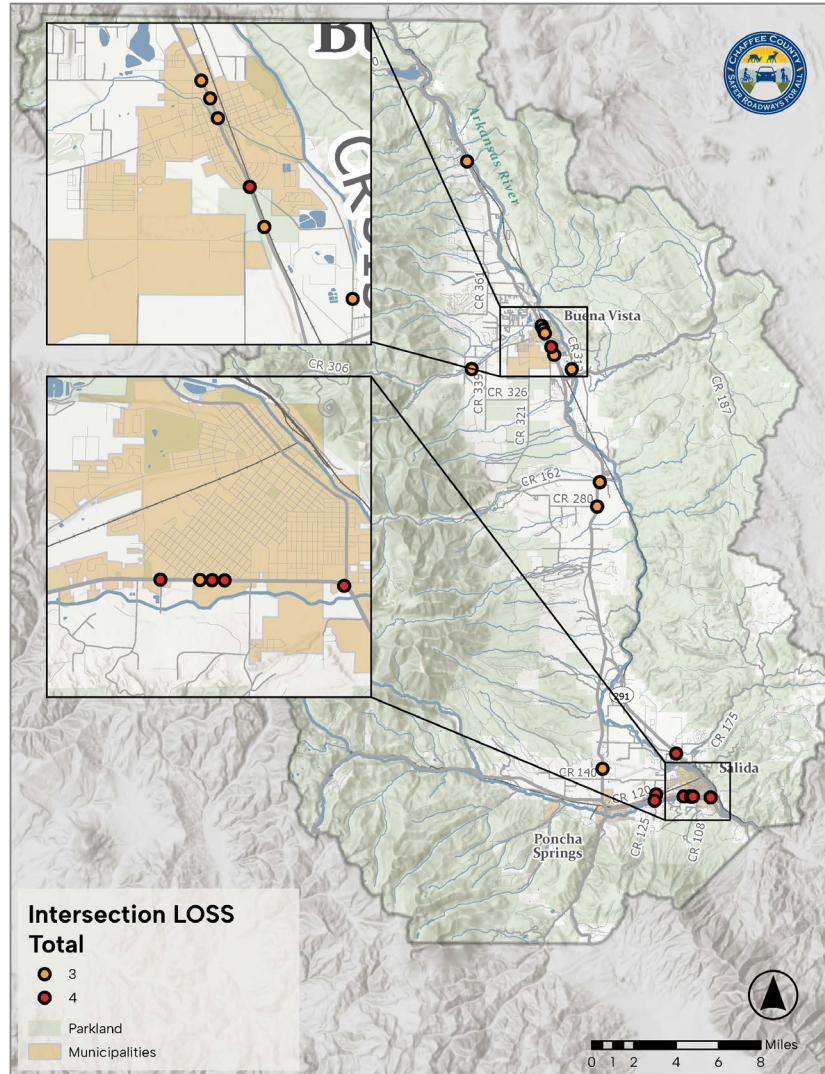
What was Analyzed for LOSS?

The following maps show all the intersections and roadway segments in the Chaffee County study area with LOSS scores of III or IV based on crashes that occurred during the eight-year study period (2017-2024).

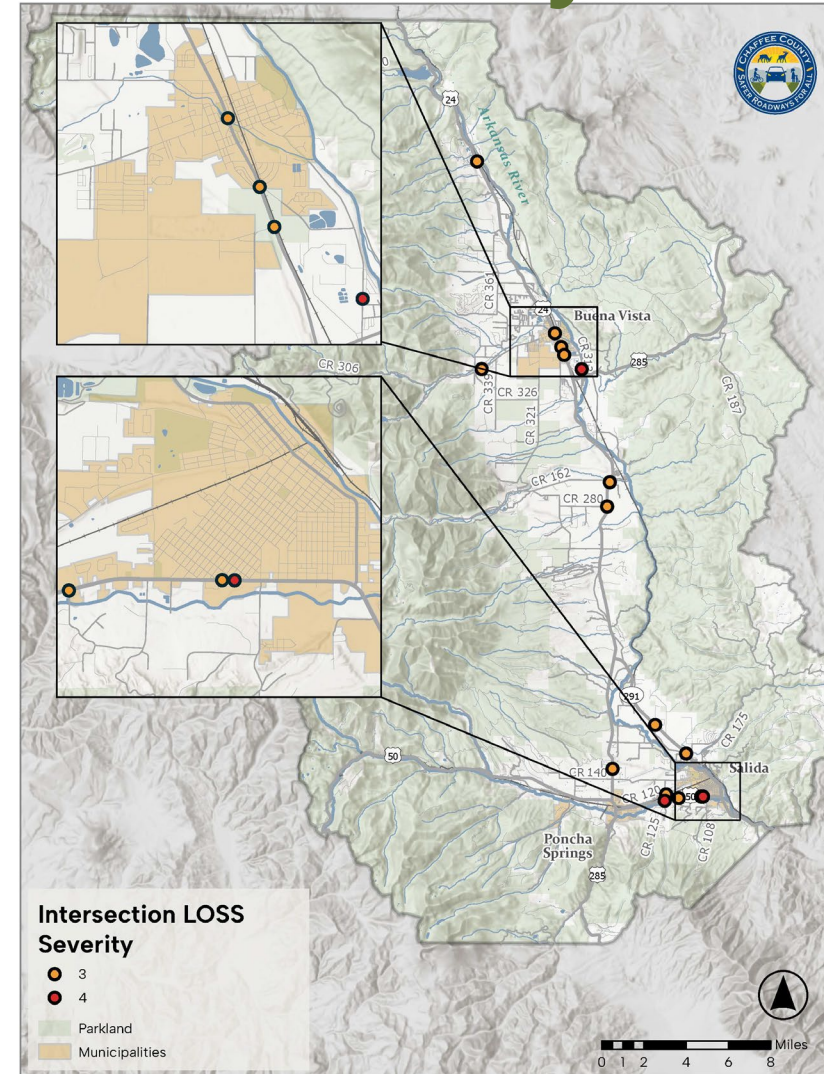
These locations may have a higher potential for crash reduction with implementation of safety countermeasures.

Intersection LOSS (3 & 4)

Total



Severity



Segment LOSS 4: Total and Severity

