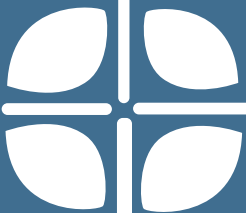




# **DMAMPO**

## Comprehensive Safety Action Plan

- Crash Data Analysis Preliminary Findings
- Transportation Technical Committee
- April 1, 2024



**01.**

# Introduction & Project Overview





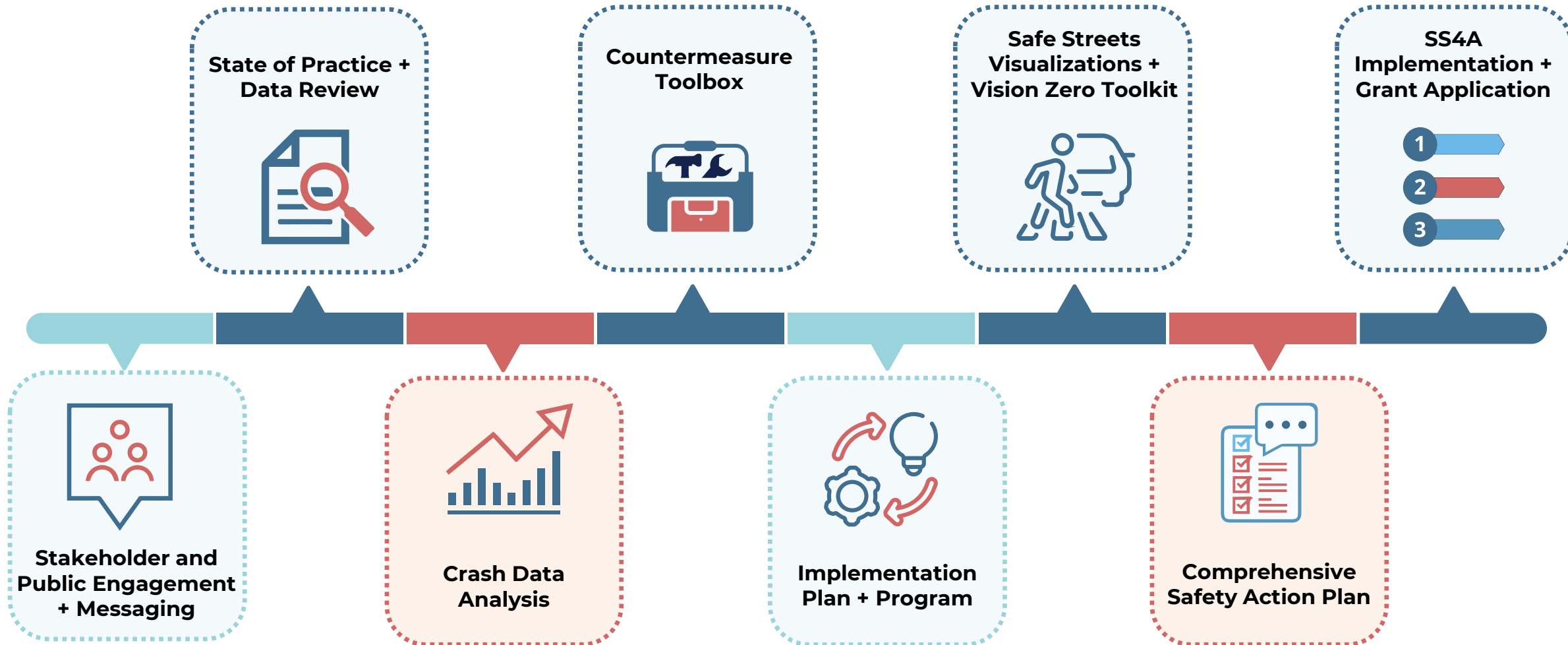
# Comprehensive Safety Action Plan

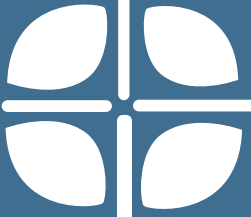
## What is Comprehensive Safety Action Plan (CSAP)?

- Part of the SS4A Infrastructure Program & IIJL Funding
- Focused on eliminating **fatal and serious injury crashes**
- Our team will:
  - ID crash factors and risks.
  - ID high injury network and priority corridors.
  - ID proven safety countermeasures – solutions, tailored to the crash factors!
  - Develop an action focused plan, to guide the regional communities to significantly reduce and eliminate fatal and serious injury crashes.
  - Plan will reflect community-based and data-driven recommendations.
  - **Complete SS4A Implementation Grant Application.**

# Overview of Project

**Project Overview** – 8 major tasks across 14 months





02.

# Crash Trends Overview (Descriptive Analysis)



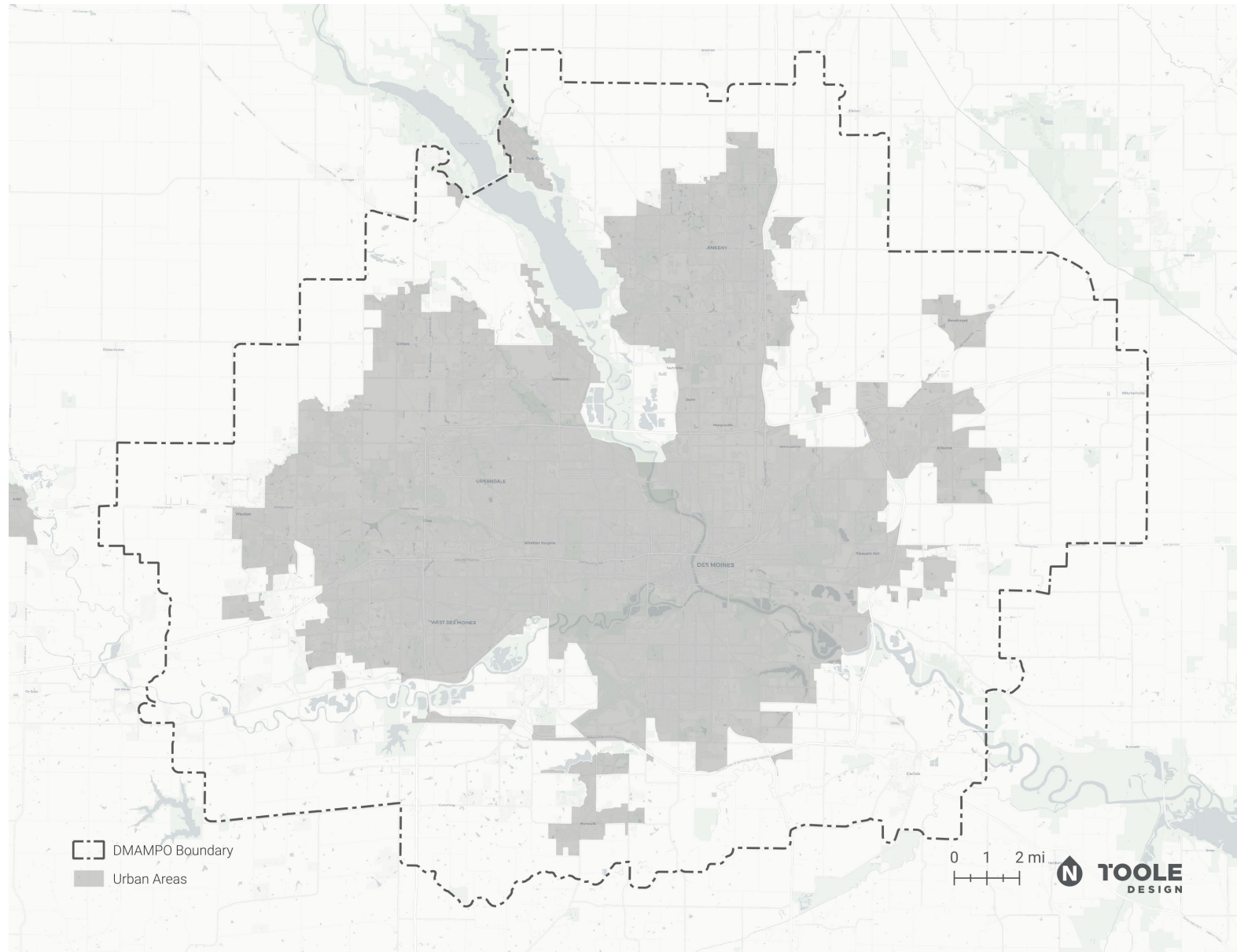
# Goals of this Analysis

1. Create a shared understanding
2. Describe current safety conditions
3. Begin to tell the story of safety in DMAMPO



# Analysis Context

- DMAMPO represents a diverse area
  - How do rural vs. urban contexts differ?
- Safety changes over time
  - Are we on the right track?
- Limitations of data
  - We need the community to help us help you!





# Overview

## From 2018 to 2022

**50,265**

total crashes

**939**

crashes where a person was fatally or seriously injured (FSI)

**771**

crashes led to a serious injury

**168**

crashes were fatal

Crashes where someone was *fatally or seriously injured (FSI)* included

**576**

motorists



**215**

motorcyclists



**119**

pedestrians



**29**

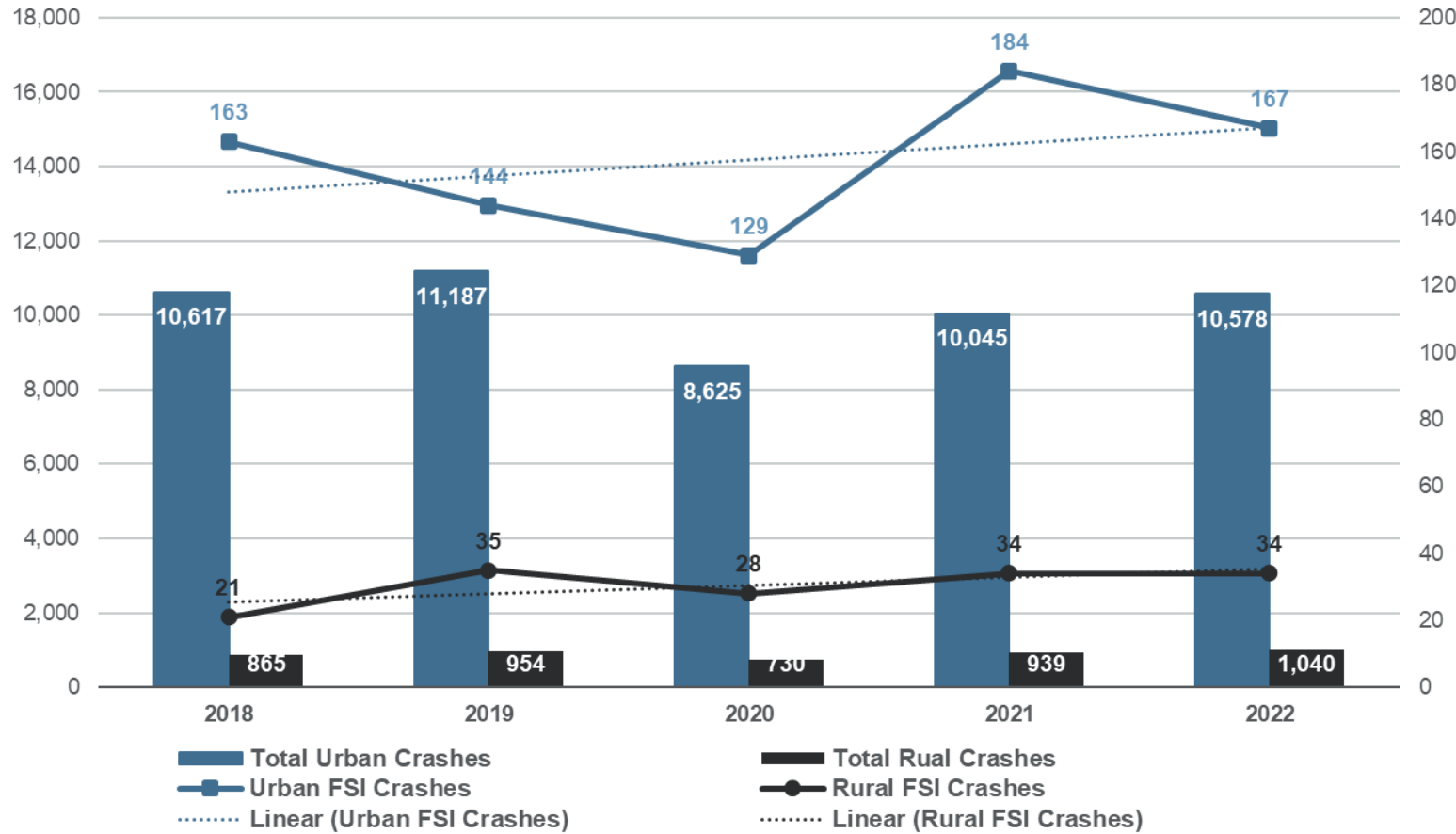
bicyclists



*All stats after this slide are for fatal or serious injury (FSI) crashes, 2018 to 2022*

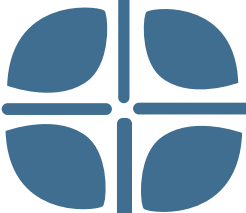


# Urban vs. Rural Areas

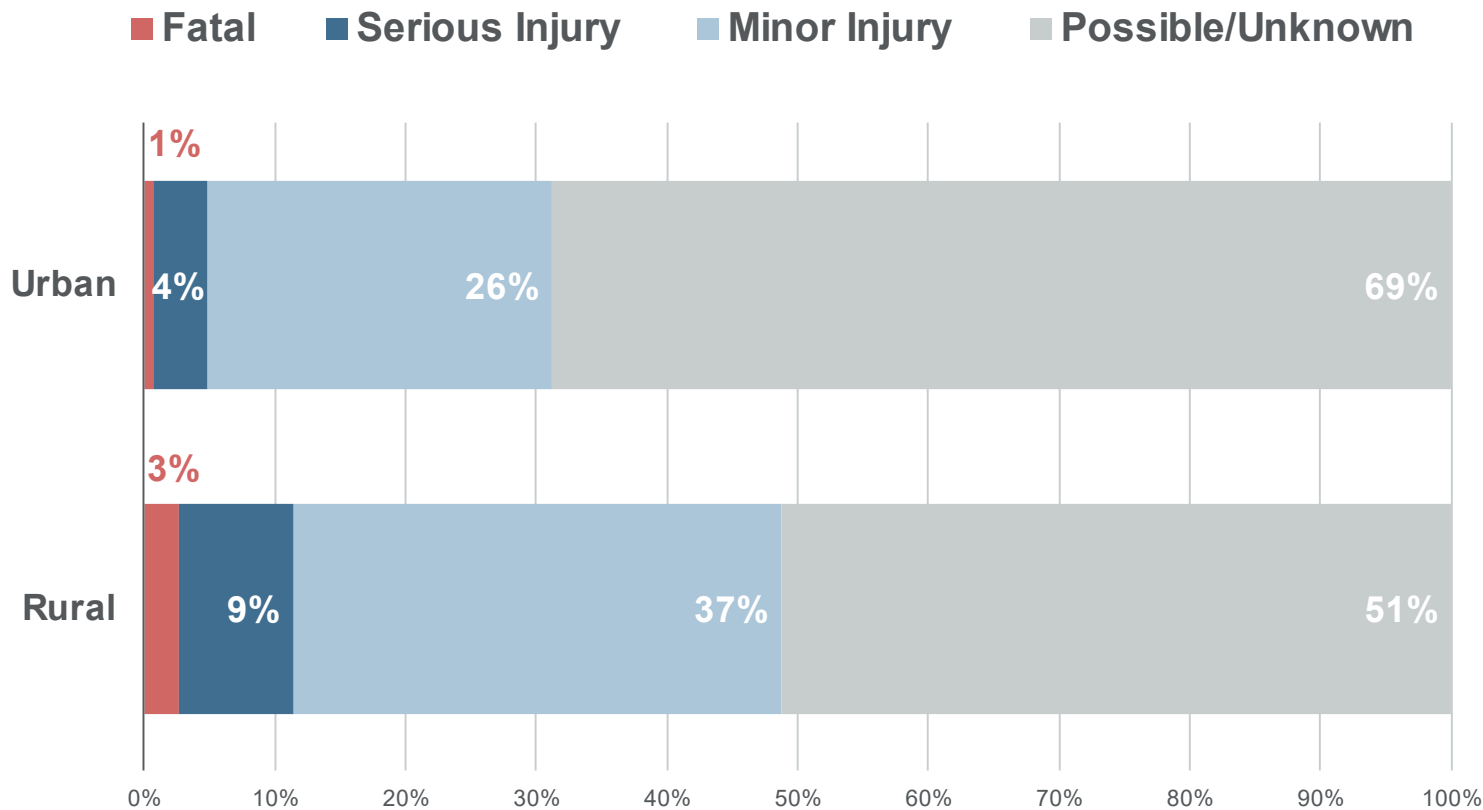


**Fatal and Serious Injury (FSI) crashes are increasing slightly after a drop in 2020**

**How do we understand the impacts of COVID?**

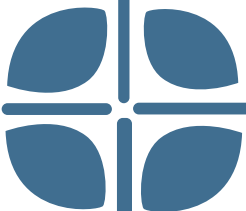


# Urban vs. Rural Areas

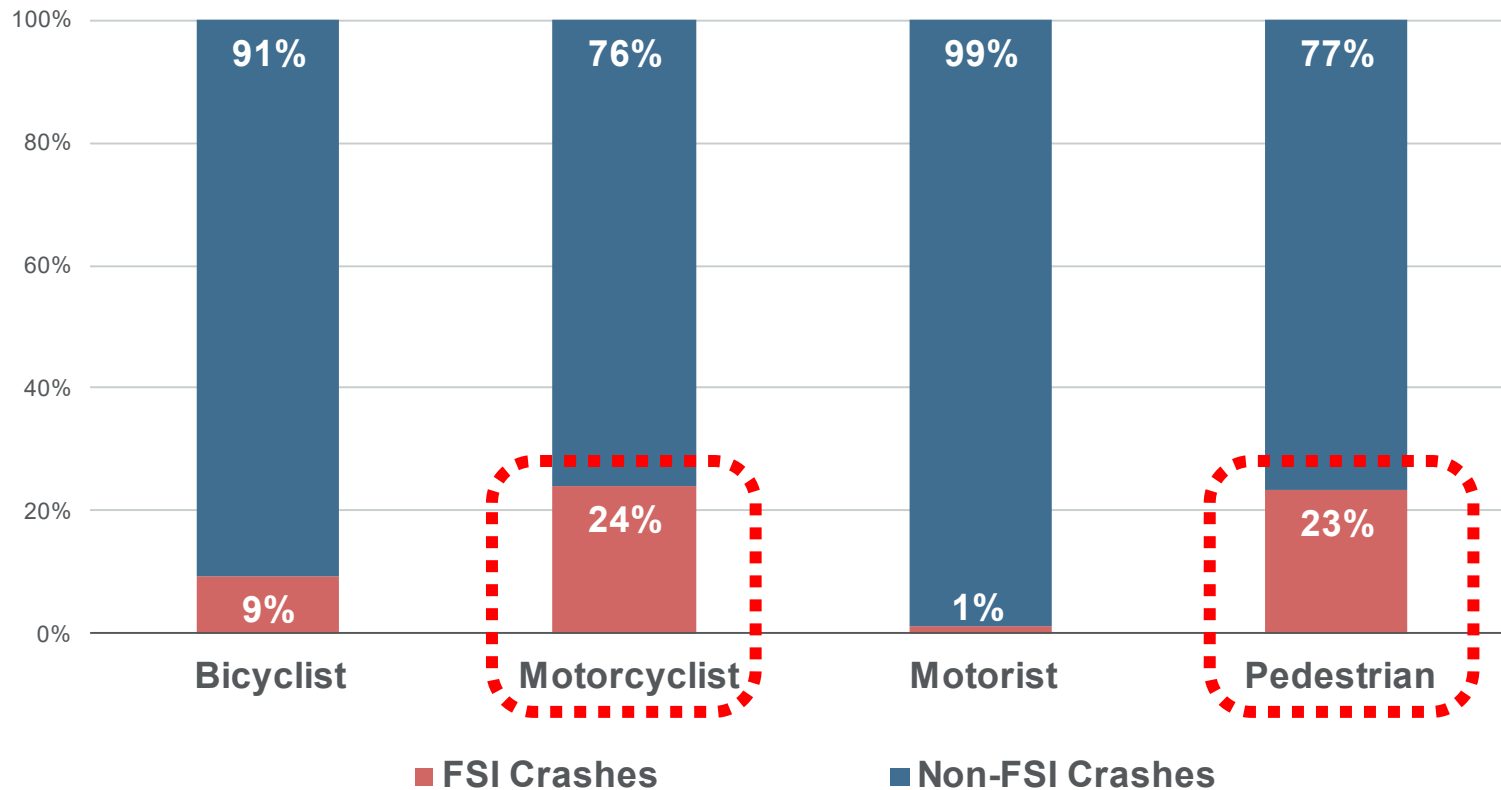


**Rural areas have a higher percent of crashes that led to someone being fatally or seriously injured**





# Road Users



**Vulnerable road users experience higher severity crashes**

# Day of Week / Time of Day

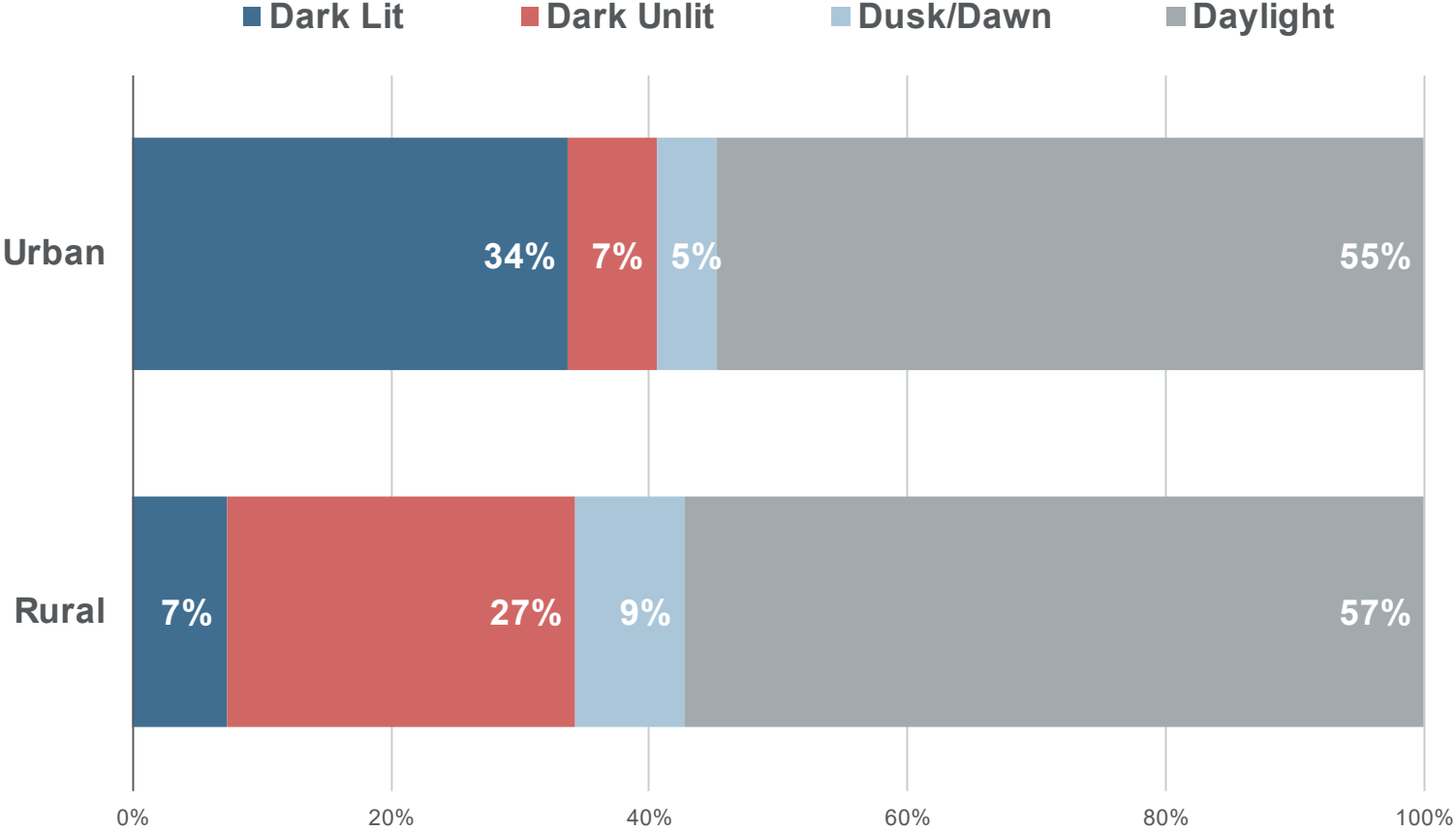
	Time of Day								
	12AM - 3AM	3AM - 6AM	6AM - 9AM	9AM - 12PM	12PM - 3PM	3PM - 6PM	6PM - 9PM	9PM - 12AM	
Monday	10	5	9	20	9	30	18	10	Weekdays
Tuesday	9	2	12	10	16	34	18	9	
Wednesday	3	10	18	14	19	30	13	9	
Thursday	8	5	13	15	20	45	25	15	
Friday	13	6	12	10	18	33	25	28	
Saturday	29	13	6	14	17	22	30	25	Weekdays
Sunday	32	15	8	6	10	33	31	20	
Dark Conditions		AM Peak		Light Conditions		PM Peak	Dark Conditions		

**Crashes where someone is fatally or seriously injured are more frequent on weekends and dark conditions**

*Total crashes where someone was killed or seriously injured by time of day and day of week 2019-2022*

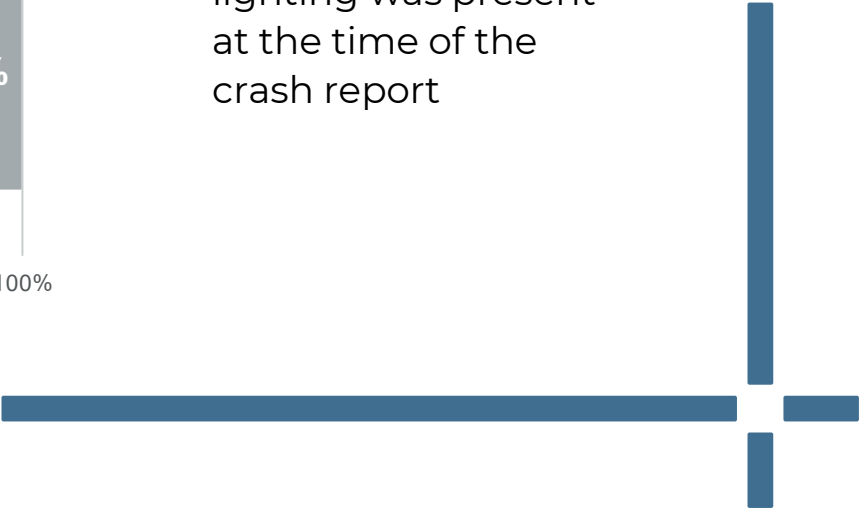


# Lighting Conditions



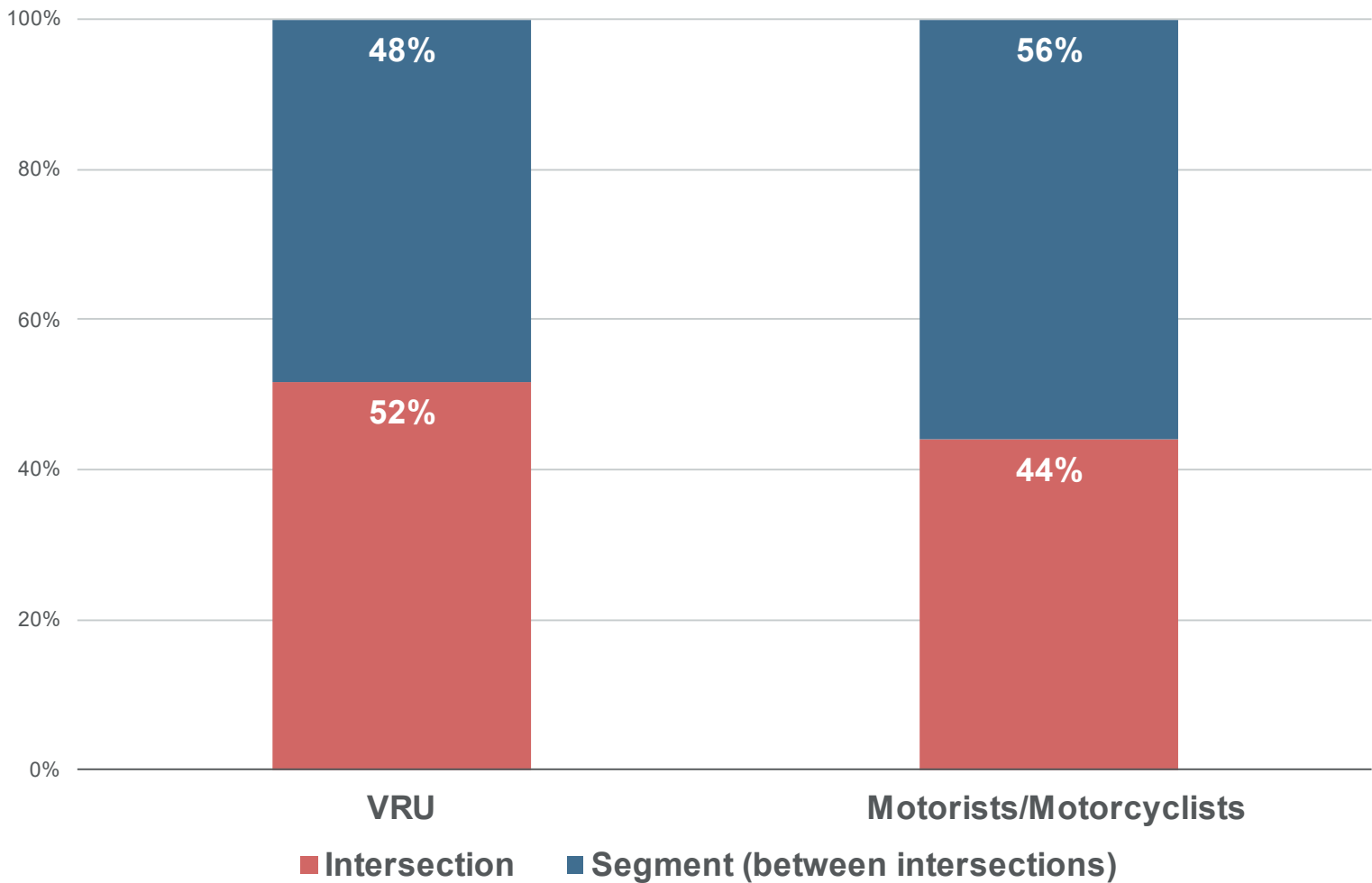
**27% of FSI crashes in rural areas occurred in dark-unlit conditions**

Dark-unlit crashes occurred in dark conditions where no lighting was present at the time of the crash report

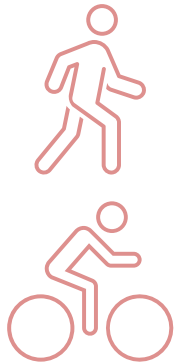




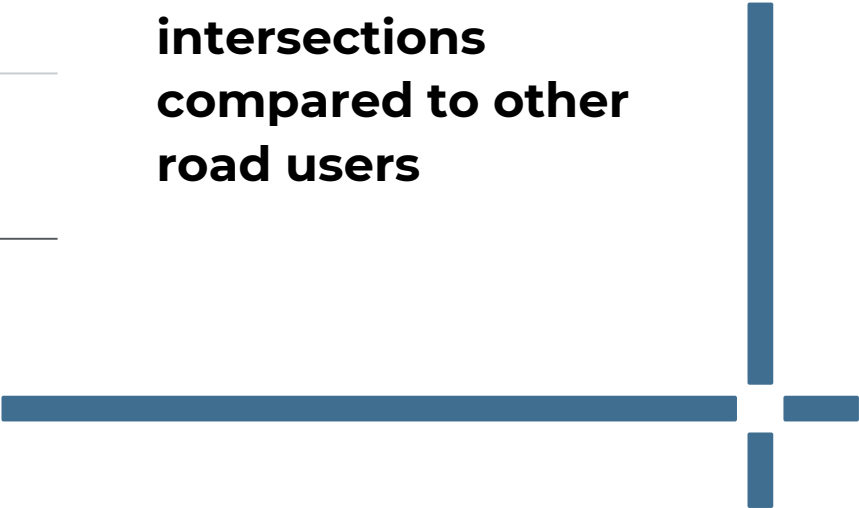
# Intersections



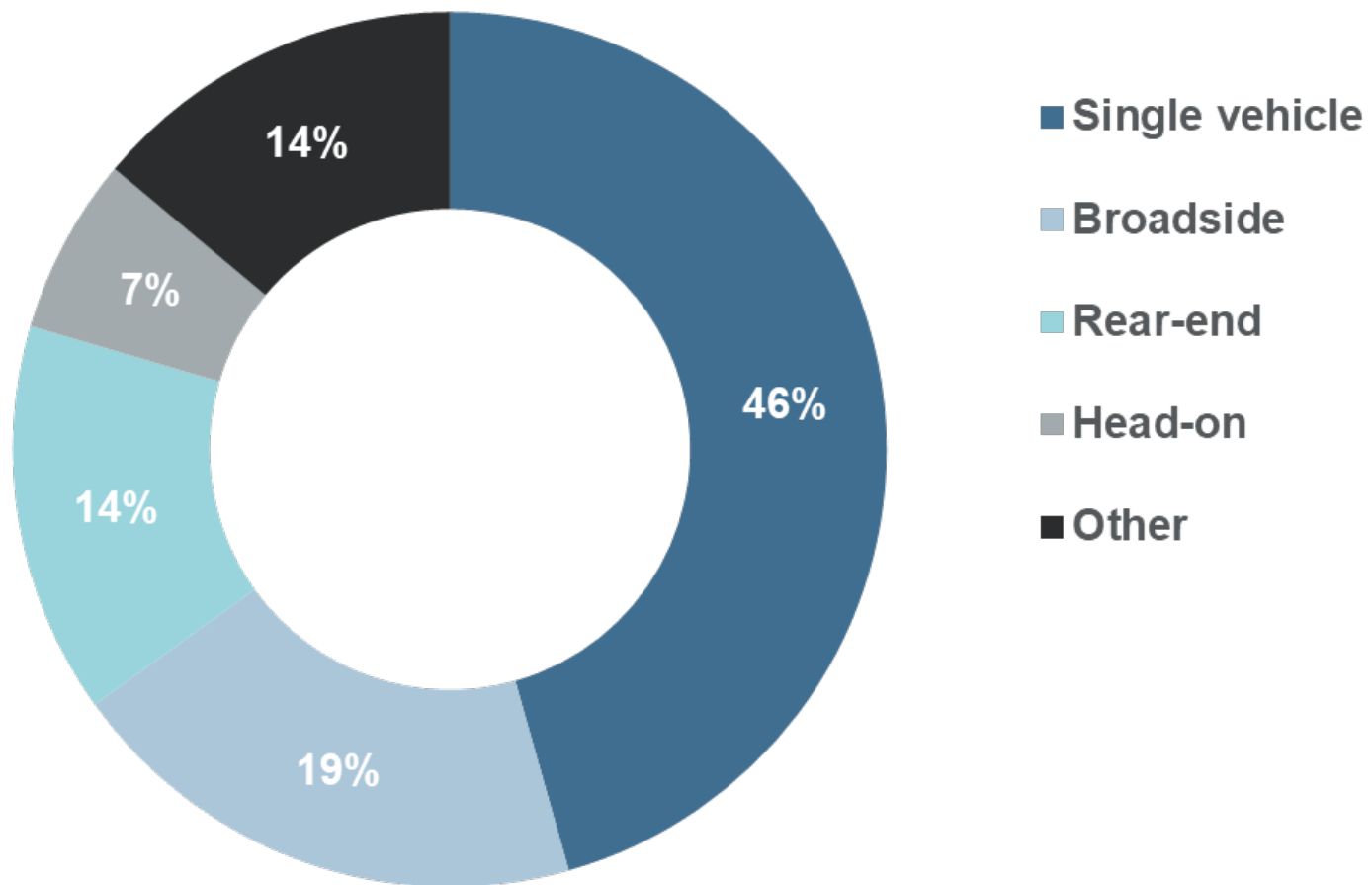
Vulnerable Road Users (VRU) are people who walk, roll, or ride a bicycle



**A higher percent of VRU FSI crashes occur at intersections compared to other road users**



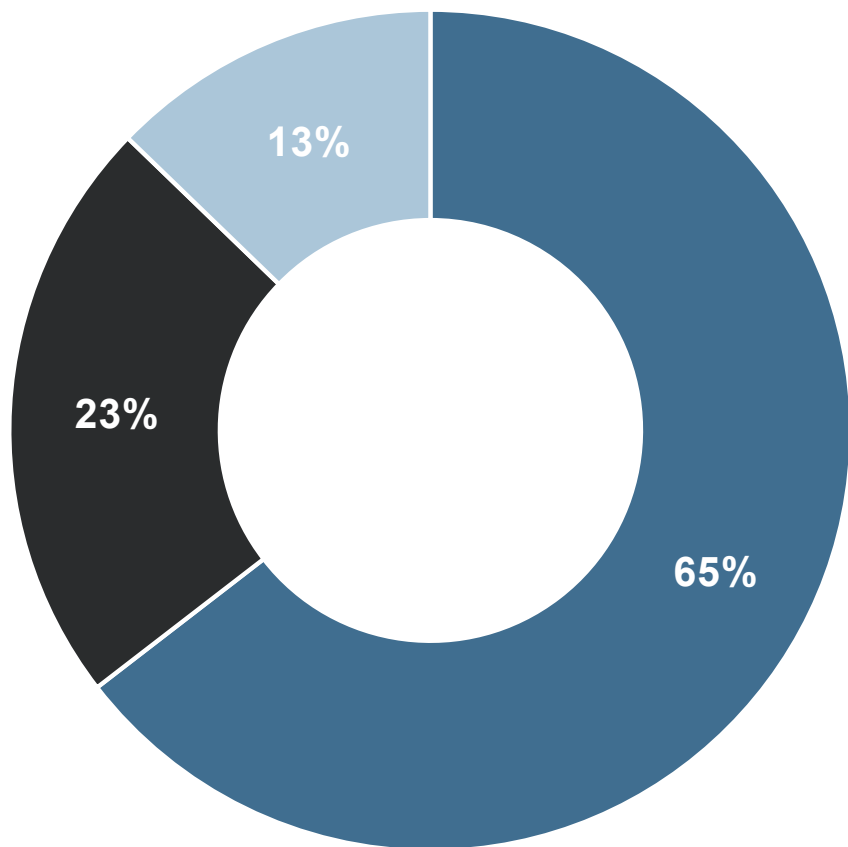
# Collision Manner



**Almost half of FSI crashes was a single vehicle crash**



# VRU Actions



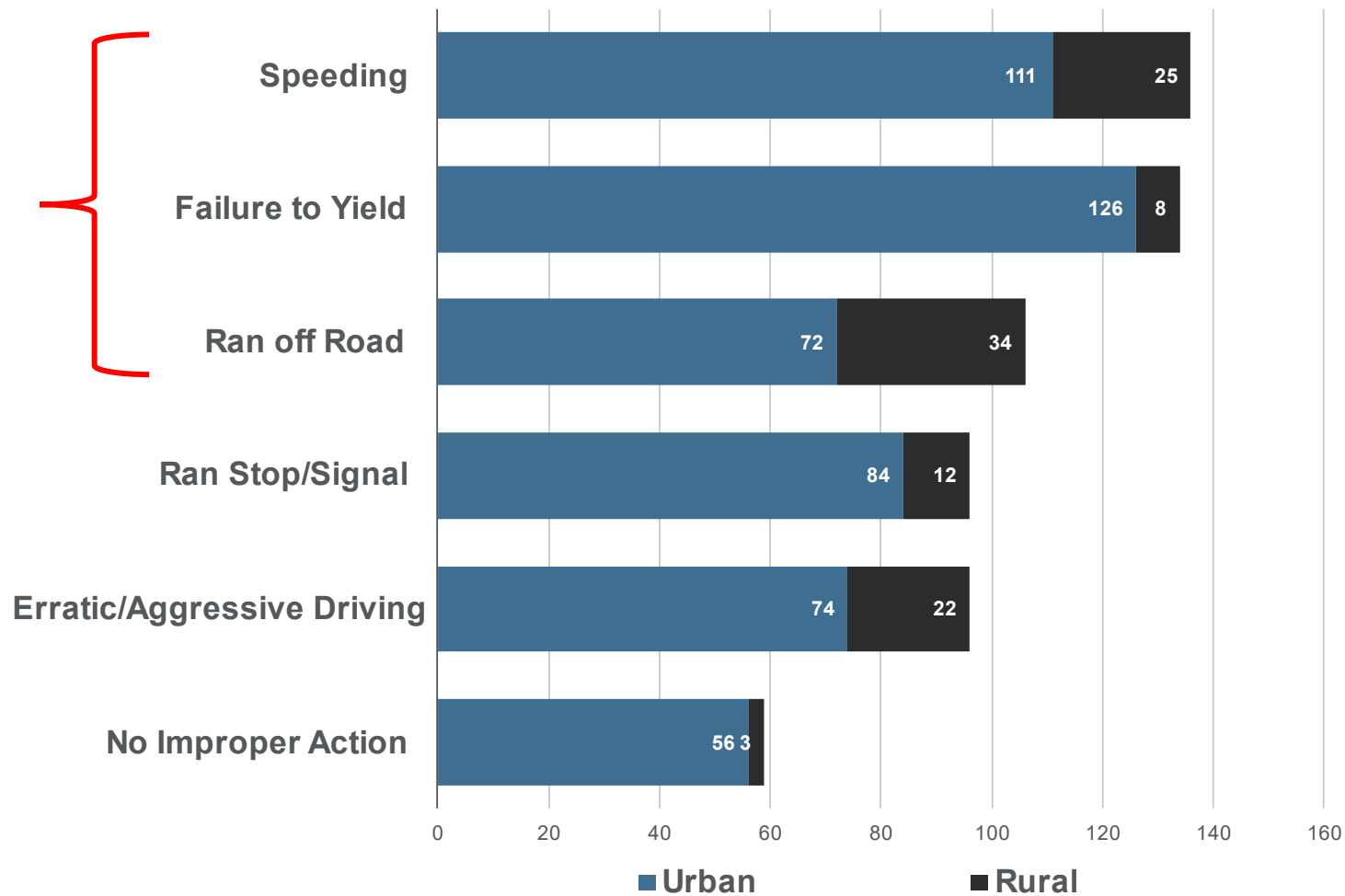
- Entering or Crossing Roadway
- Traveling Along Roadway
- Other

**In 65% of VRU FSI crashes, the VRU action was *entering or crossing roadway***

Vulnerable Road Users (VRU) are people who walk, roll, or ride a bicycle



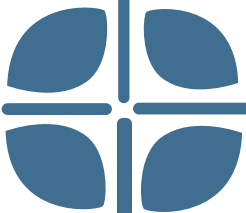
# Unsafe Behaviors



**Speeding** and **failure to yield** were the top behaviors in urban FSI crashes

**Ran off road, speeding, and erratic/aggressive driving** were the top behaviors in rural areas

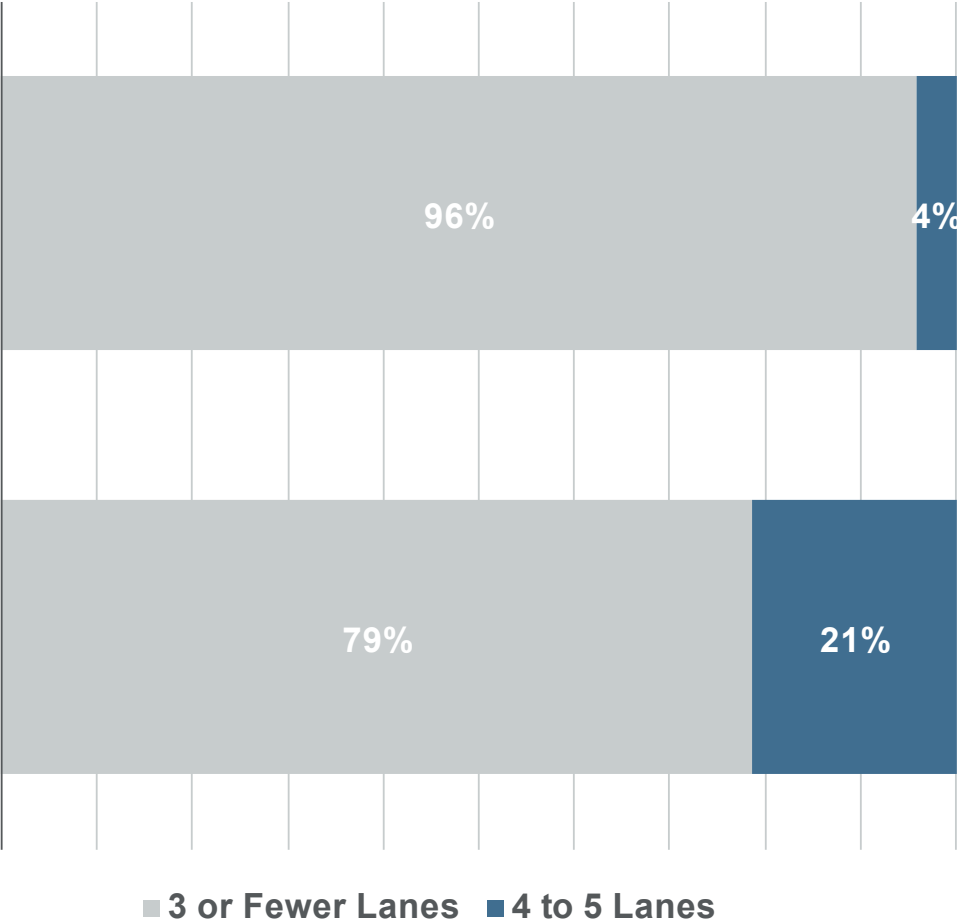
*These six reported major causes represent 72% of all FSI crashes*



# Number of Lanes

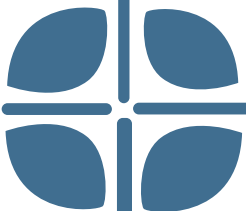
% of Road Network Mileage

% of FSI Crashes

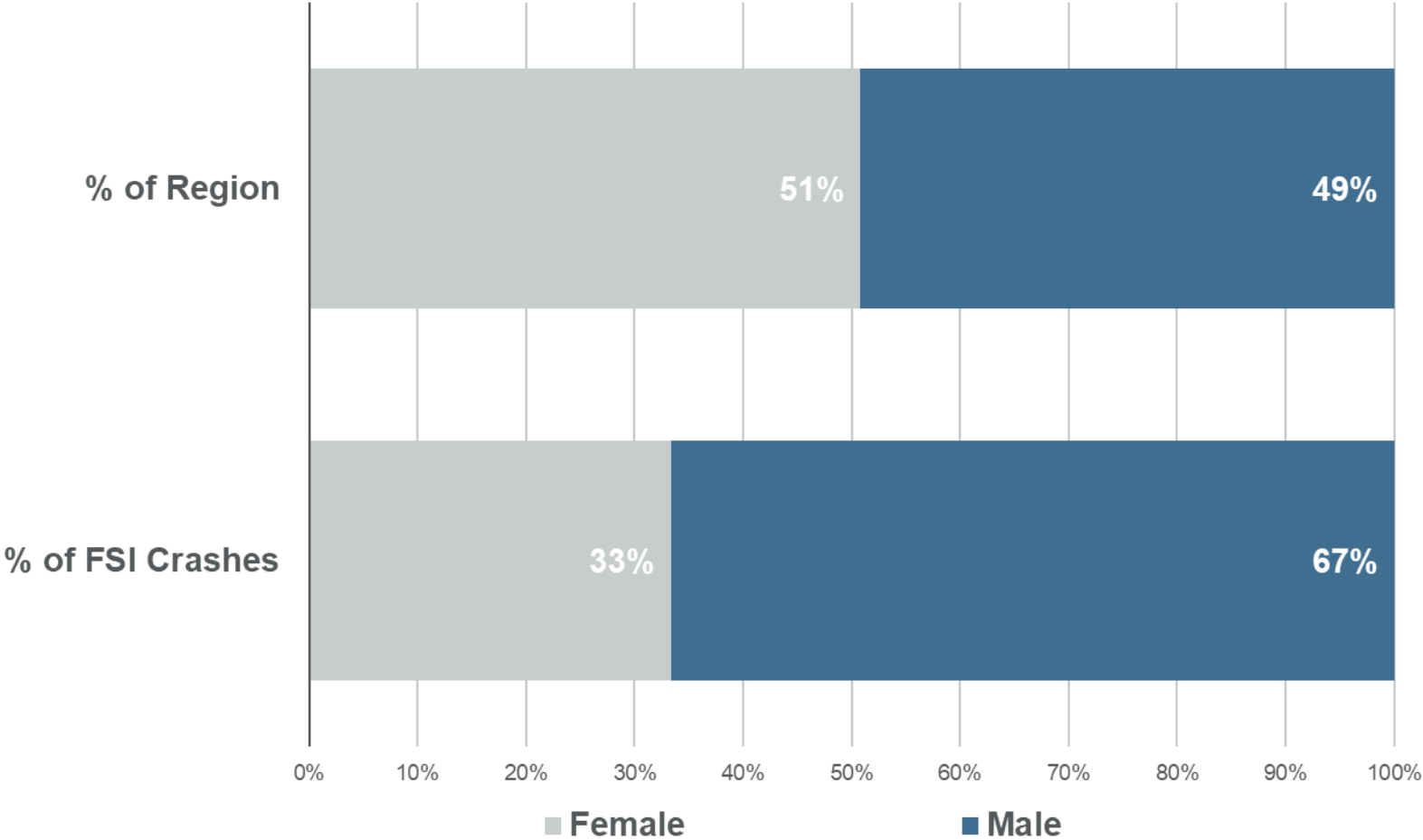


Although 4-5 lane roads make up 4% of the region's road network, 21% of FSI crashes occur on those roads





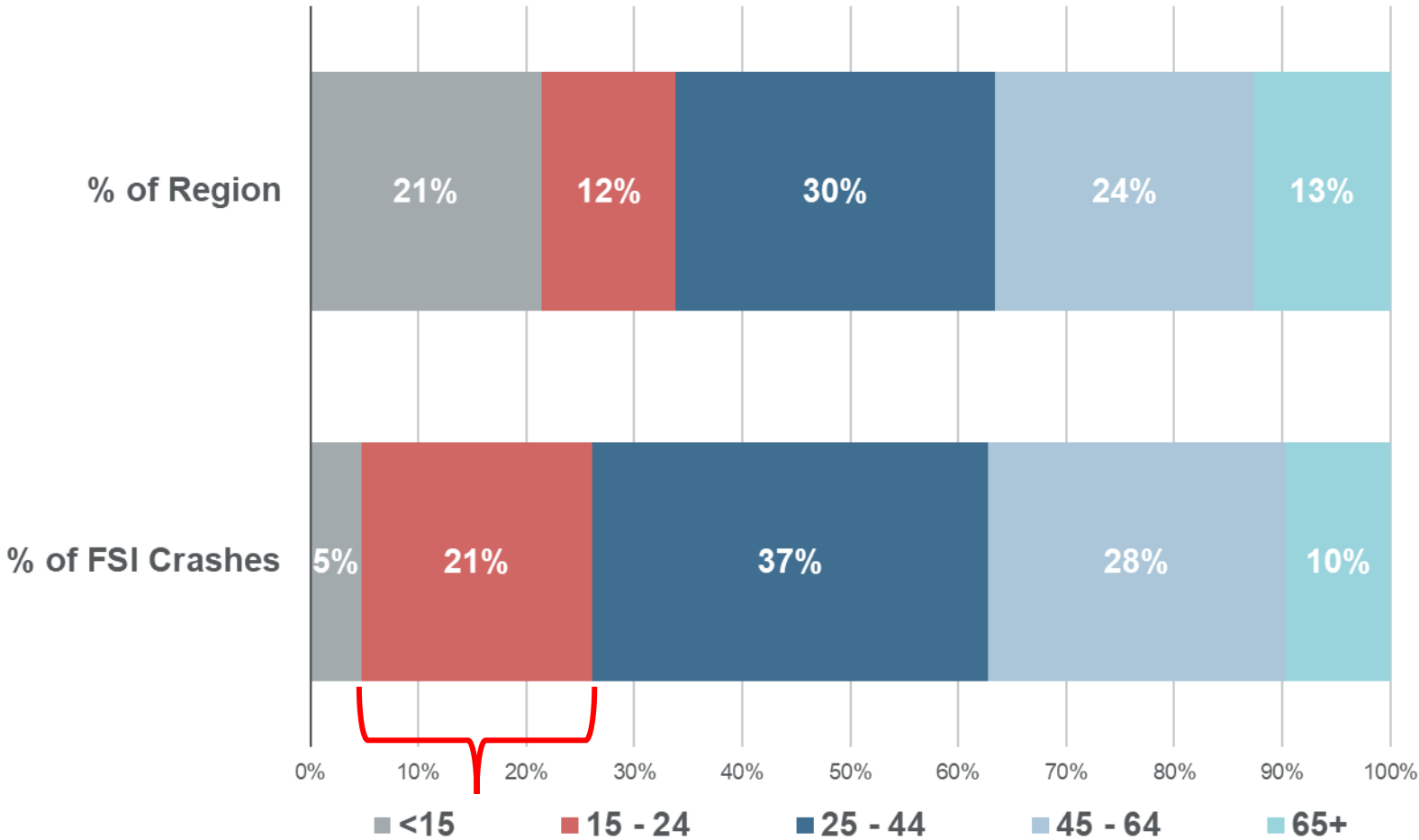
# Gender



**Males were involved in 67% of FSI crashes** but makeup 49% of the region



# Younger Drivers

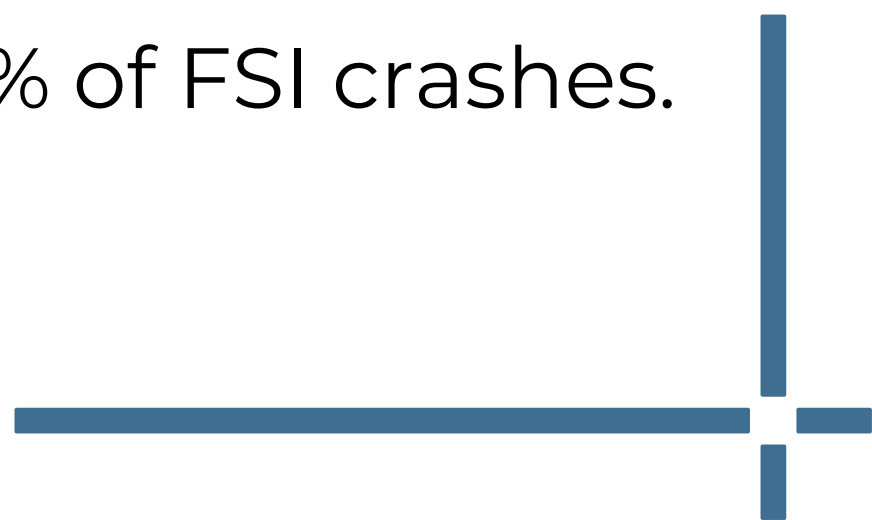


Although people in the 15 – 24 age range make up 12% of the region’s population, 21% of FSI crashes involved someone who is that age



## Key Takeaways (1/3)

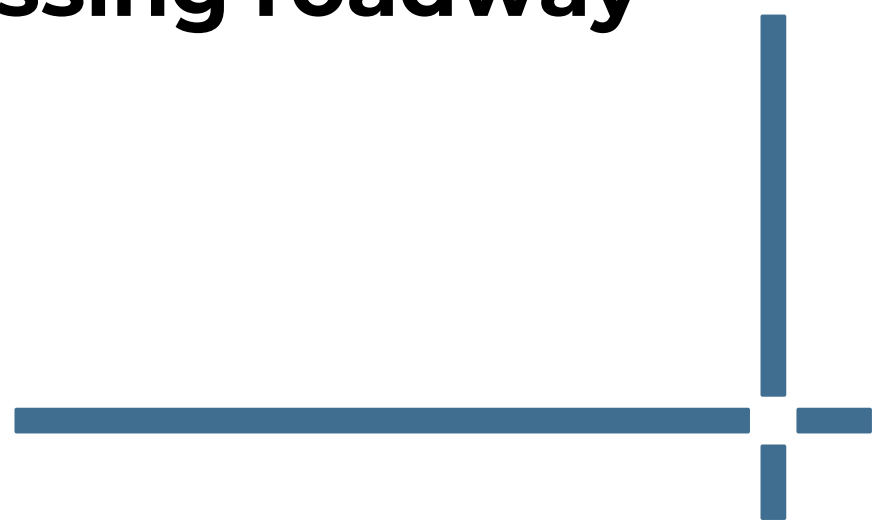
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- **Rural areas** have a higher percent of serious crashes. **Ran off road** was the top cause of rural FSI crashes.
  - FSI crashes are more frequent on **weekends** and **dark** conditions. One-third of **rural** FSI crashes occurred in dark-unlit conditions.
  - **Single-vehicle** crashes were 46% of FSI crashes.
- 



## Key Takeaways (2/3)

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- Crashes involving **motorcyclists** and **pedestrians** had a higher likelihood of leading to an FSI.
  - Half of **VRU** crashes occurred at an **intersection**.
  - VRU action was **entering or crossing roadway** in 65% of VRU FSI crashes.
- 





## Key Takeaways (3/3)

---

- **Speeding** and **failure to yield** were the top major causes in urban FSI crashes.
  - **Males** were involved in 67% of FSI crashes.
  - **Younger drivers** were involved in 21% of FSI crashes.
- 

# Top Five FSI Crash Factors

- 1. Ran off road** (rural)
- 2. Speeding** (urban)
- 3. Failure to yield**
- 4. Dark conditions**
- 5. Younger, male drivers**





# What's Next?

## 1. Equity Analysis

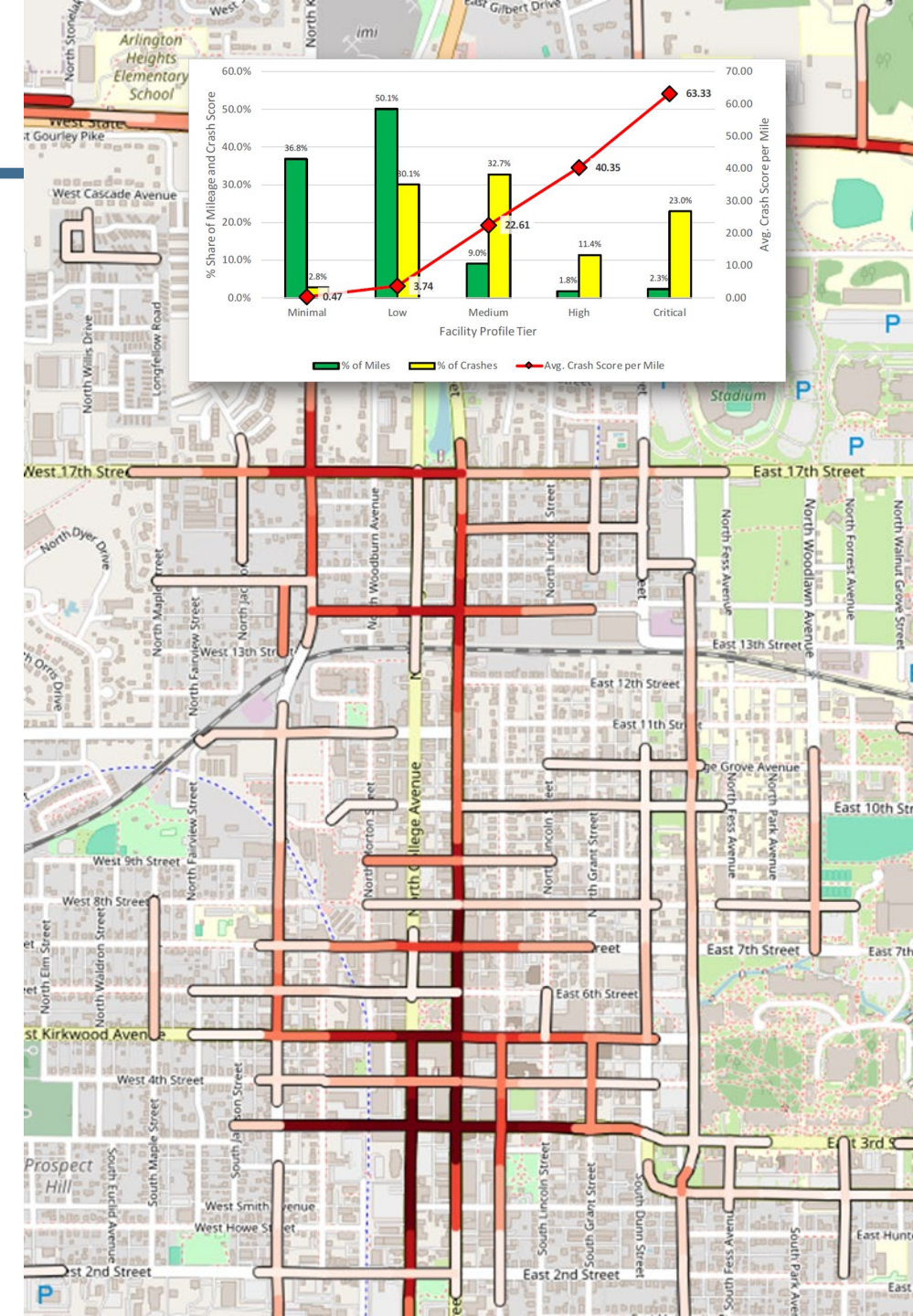
- How do *equity and socioeconomic* impact safety outcomes?

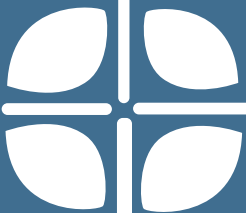
## 2. High-injury Network

- *Where* are these crash patterns occurring?

## 3. High-risk Network

- How can we *proactively* pursue safety?





**03.**

Questions?

