

BEND TRANSPORTATION SAFETY ACTION PLAN UPDATE

Existing Conditions (TM #3) Brief



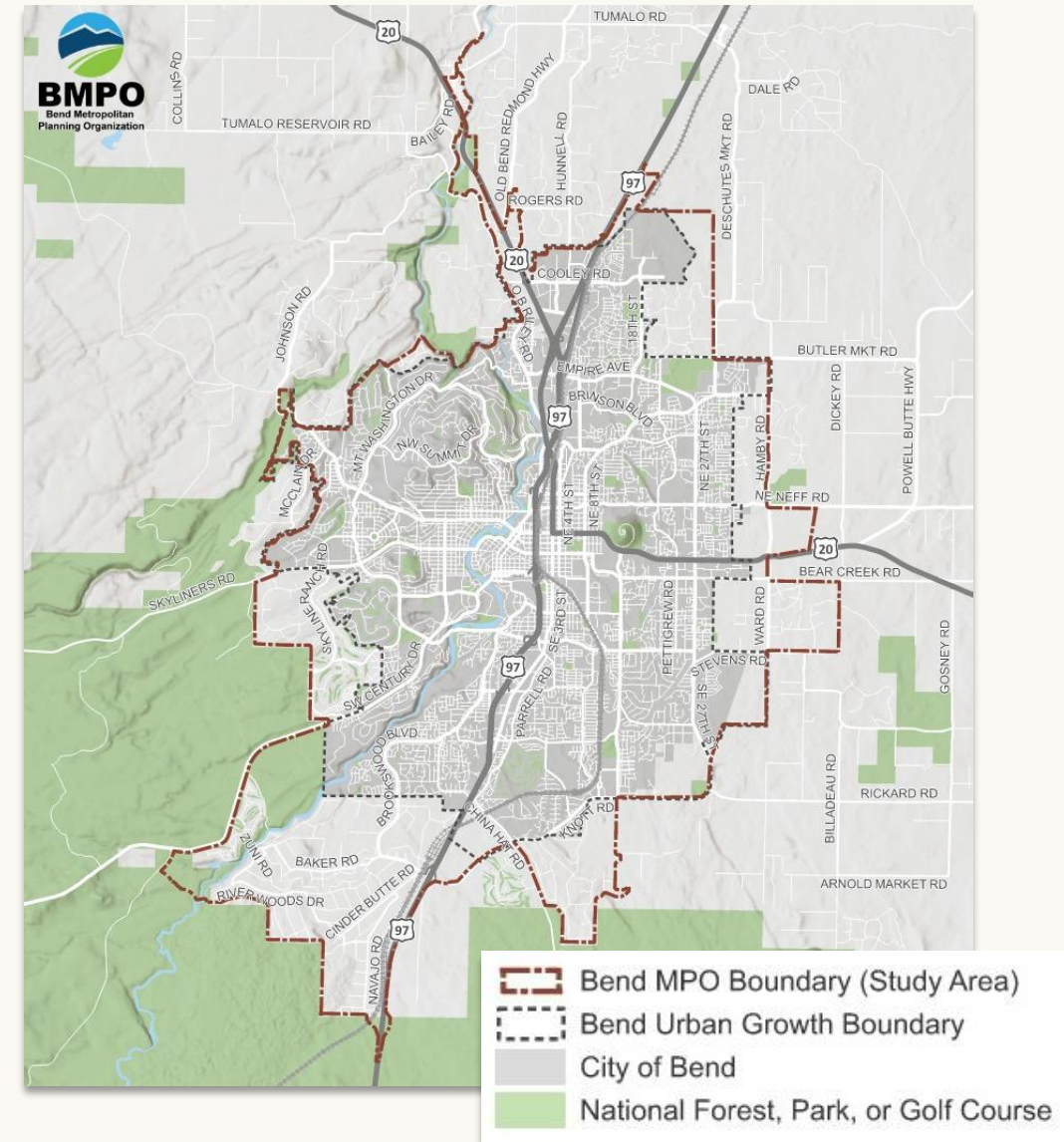
SAFE SYSTEM APPROACH

- UDOT's comprehensive approach to safety
- **Principles:**
 - Death and serious injuries are unacceptable
 - Humans make mistakes
 - Humans are vulnerable
 - Responsibility is shared
 - Safety is proactive
 - Redundancy is crucial
- **Objectives:**
 - Safer People
 - Safer Roads
 - Safer Vehicles
 - Safer Speeds
 - Post-Crash Care



EXISTING CONDITIONS (Tech Memo #3)

- Summarizes crash history within MPO boundary (study area)
- Creates foundation for identifying systemwide strategies and priority locations for individual safety projects



TWO PRIMARY ANALYSIS METHODS



Crash Pattern Assessment

- Identifies historic crash patterns on all public/private roads
- Helps inform MPO's crash **Emphasis Areas** (most common crash patterns)



Network Screening Evaluation

- Screens system for higher concentrations of crashes (particularly serious crashes)
- Helps identify MPO's **High Injury Network** (most serious locations)

CRASH PATTERN ASSESSMENT

Types of Crash Characteristics

- Severities and locations
- Years, months, times of day
- Types, causes, and driving conditions
- Roadway characteristics
- Behavioral characteristics
- Vulnerable road users (pedestrians, bicyclists, motorcyclists, drivers of a certain age)

2019 to 2023 (5 Years)

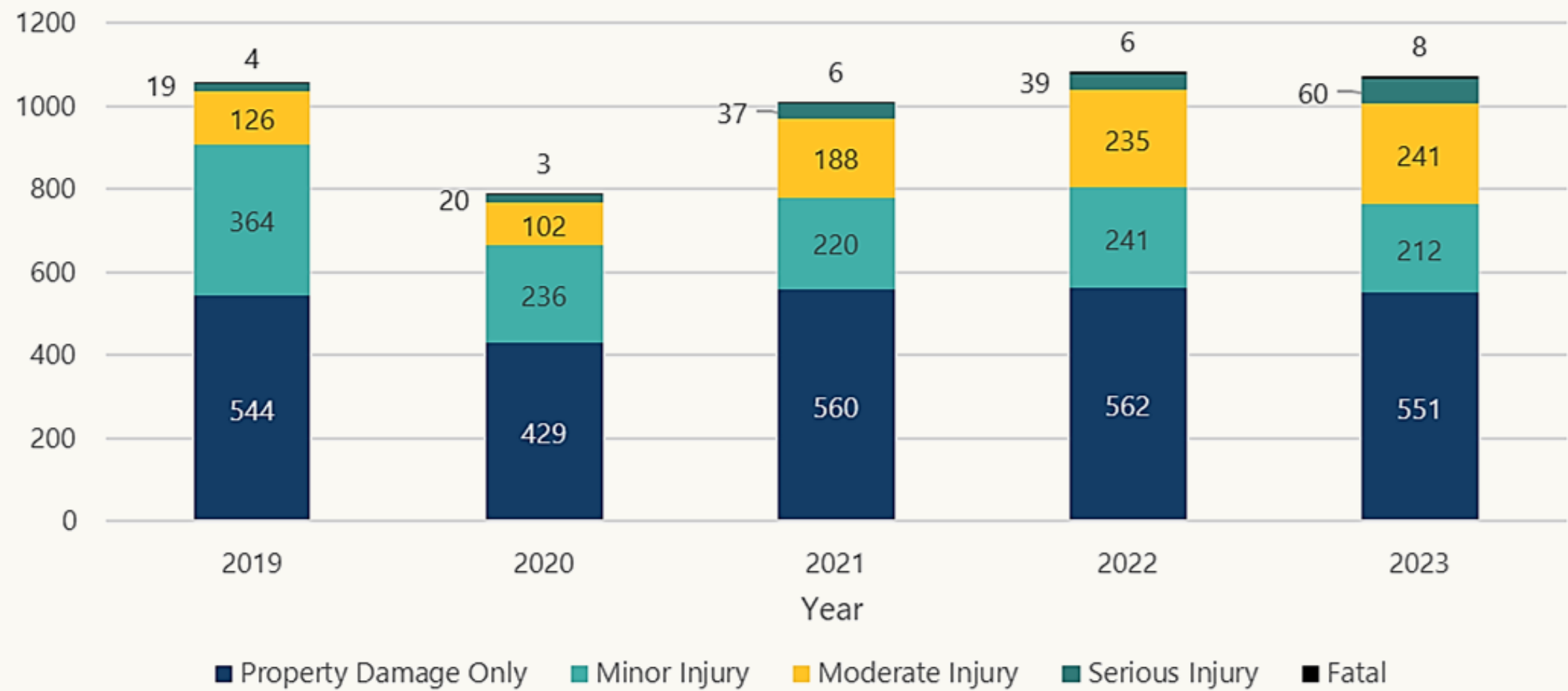
5,013 Reported Crashes

27 – Fatal

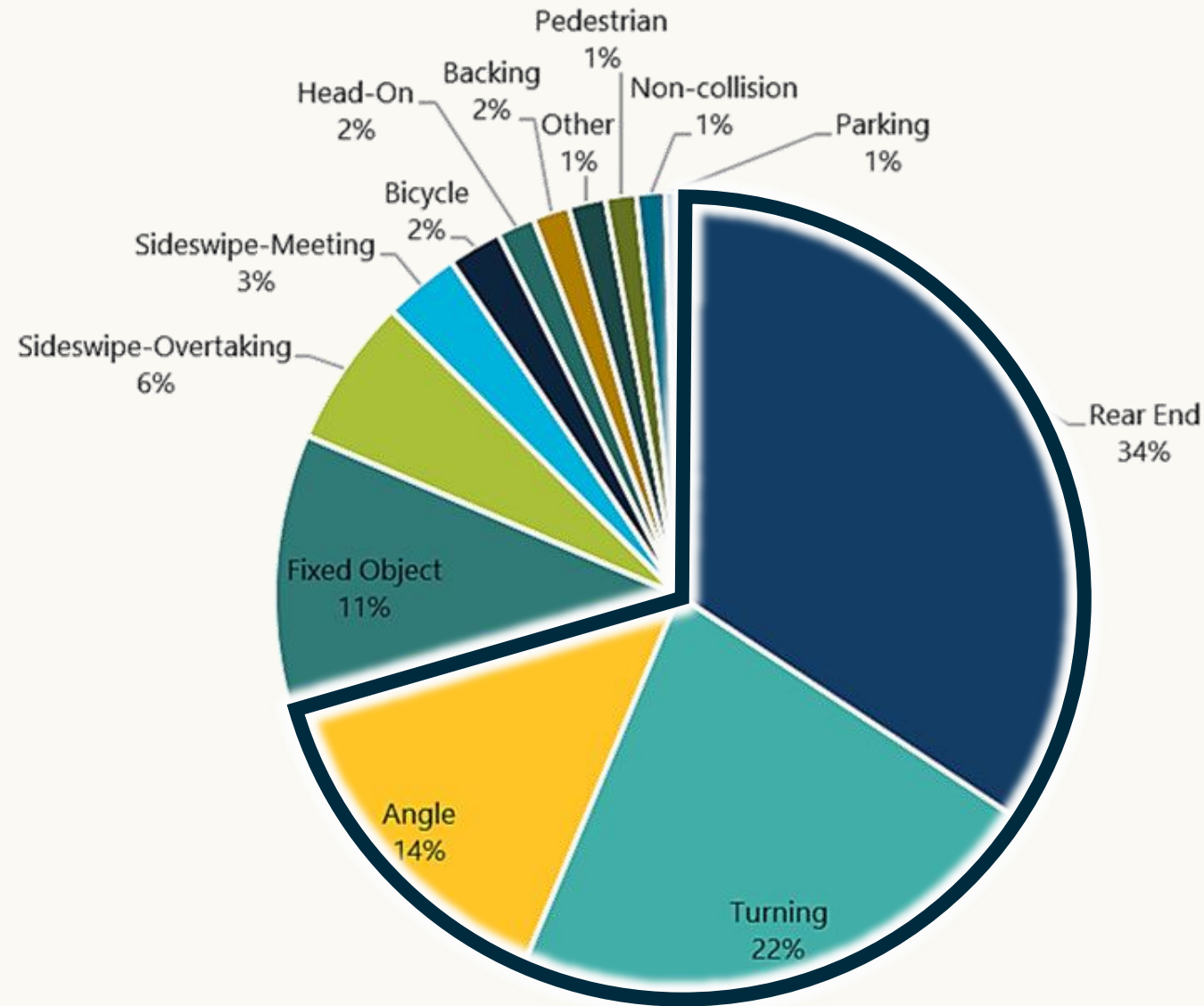
175 – Serious Injury

202 (4% of all Reported Crashes)

CRASHES BY YEAR

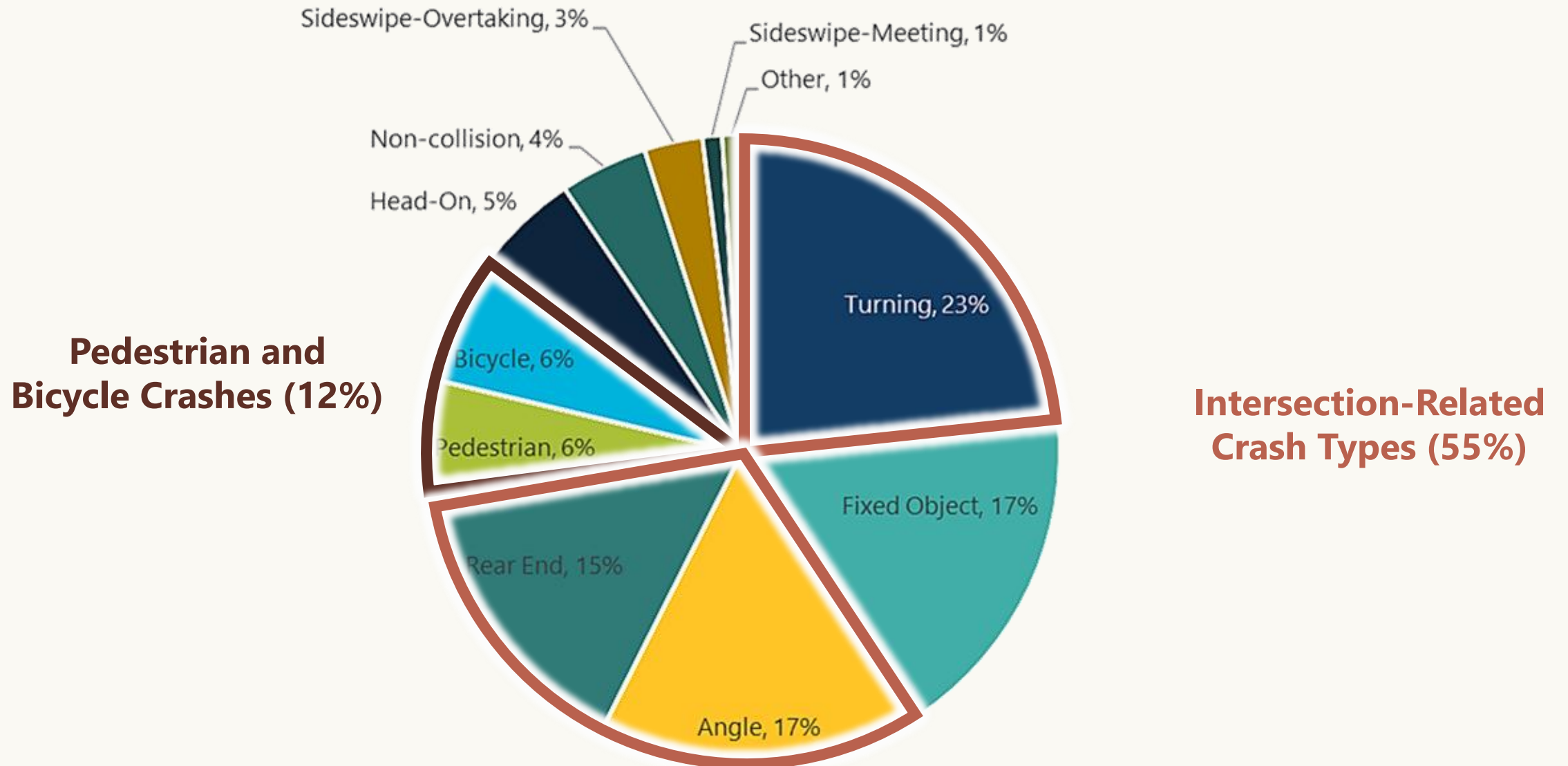


CRASH TYPES (All Crashes)

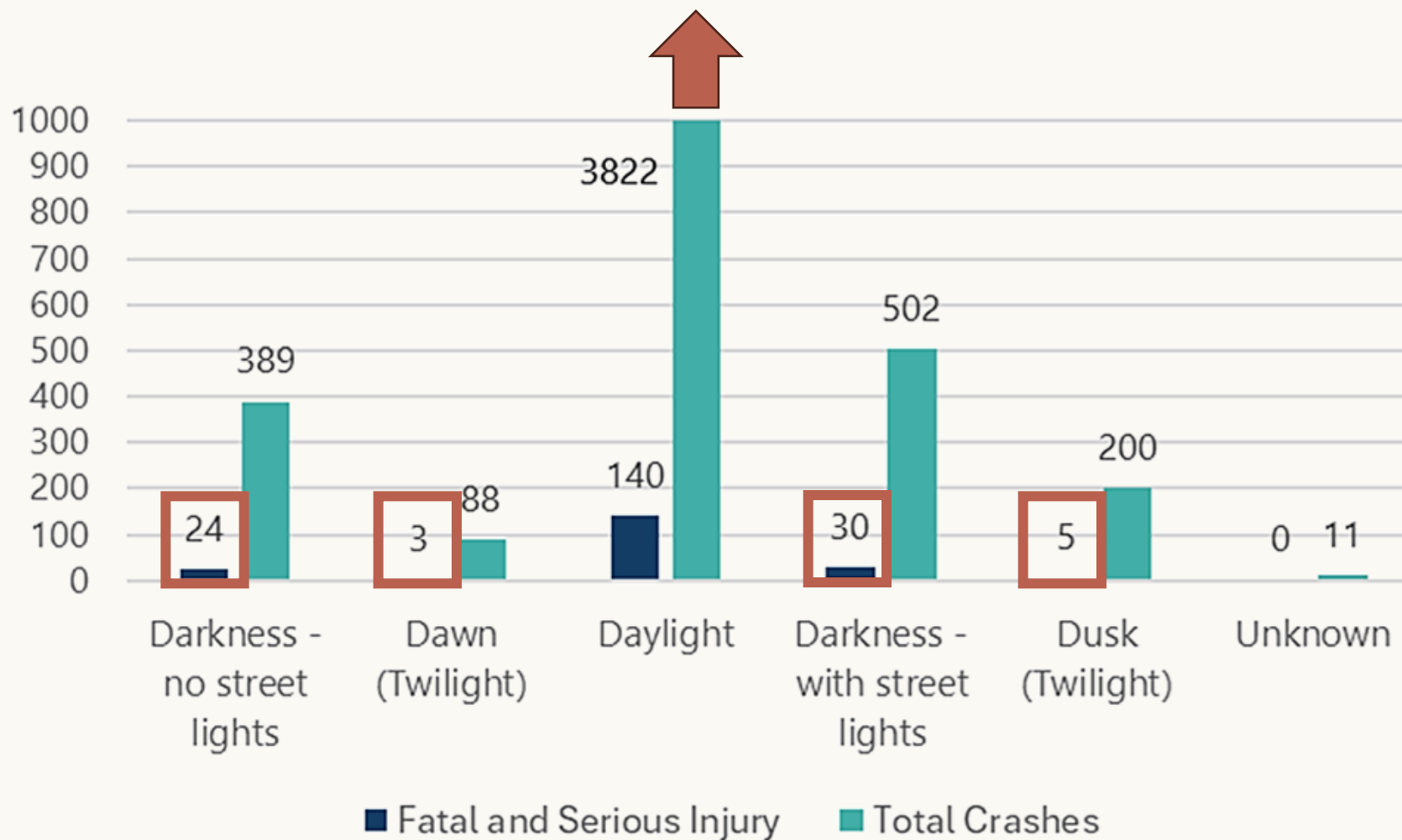


**Intersection-Related
Crash Types (70%)**

CRASH TYPES (Fatal/Serious Inj. Crashes)



LIGHTING CONDITIONS

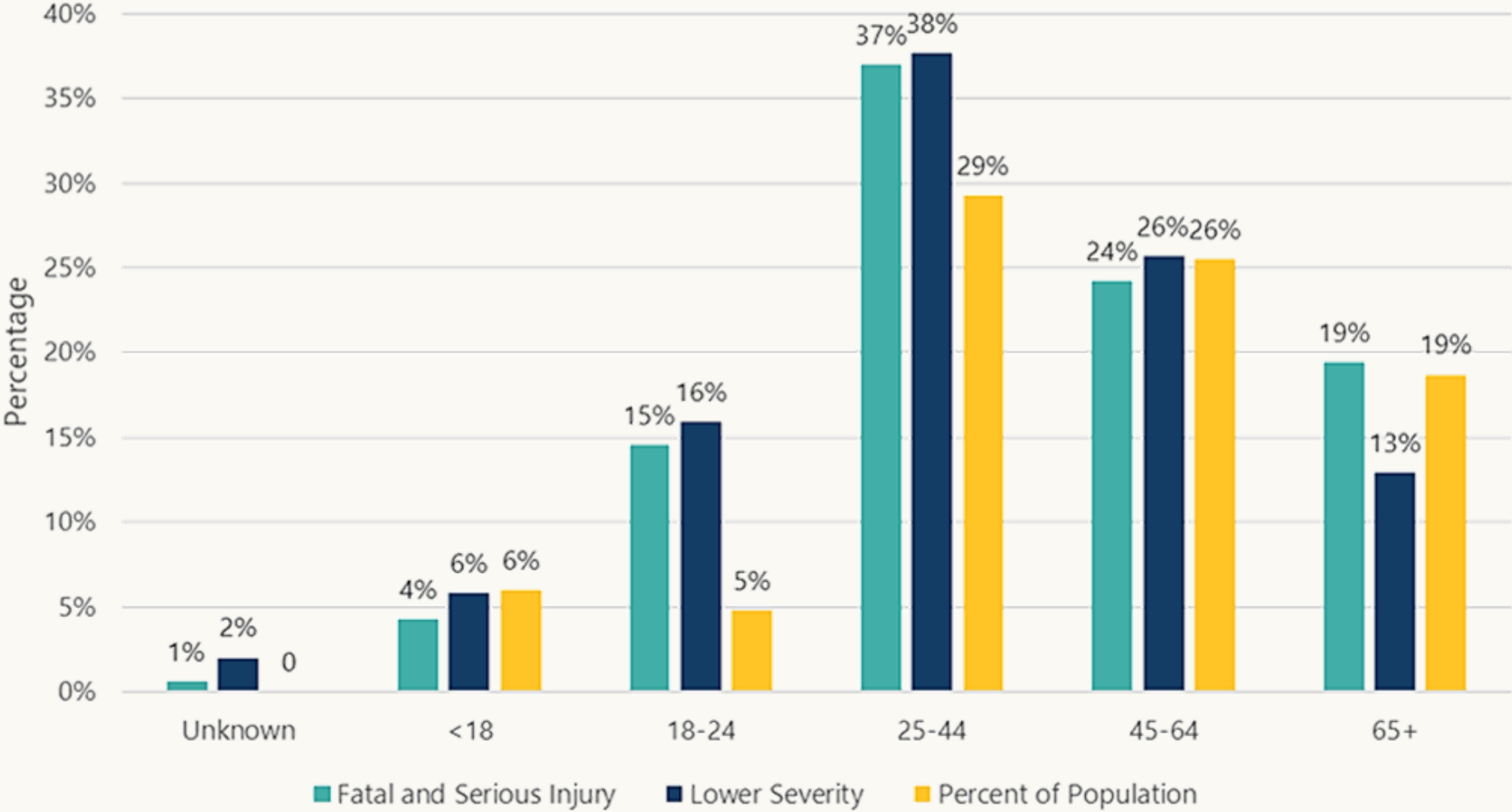


Non-Daylight Crashes

24% of Total Crashes

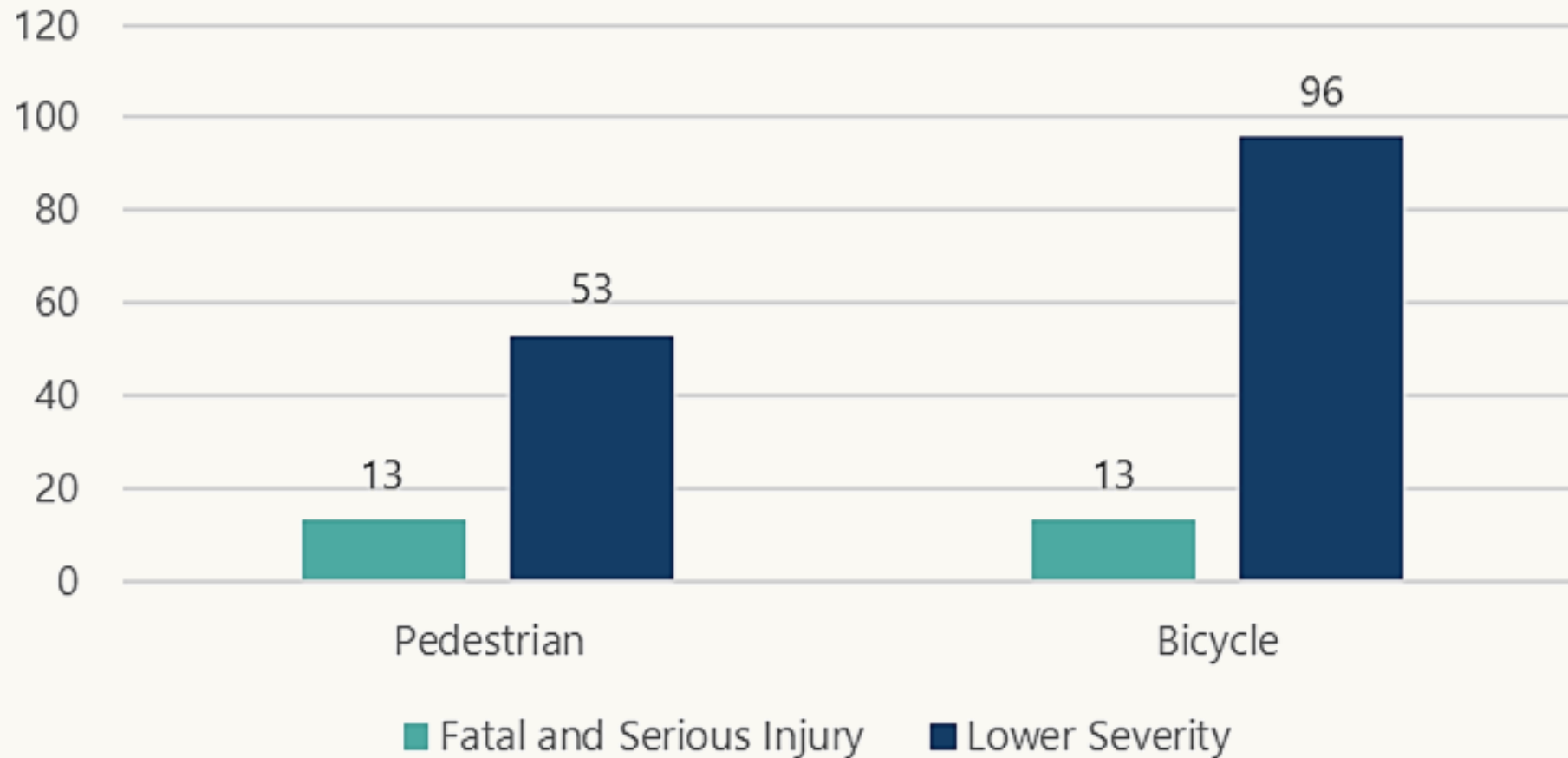
31% of Fatal/Serious Injury Crashes

DRIVER AGE

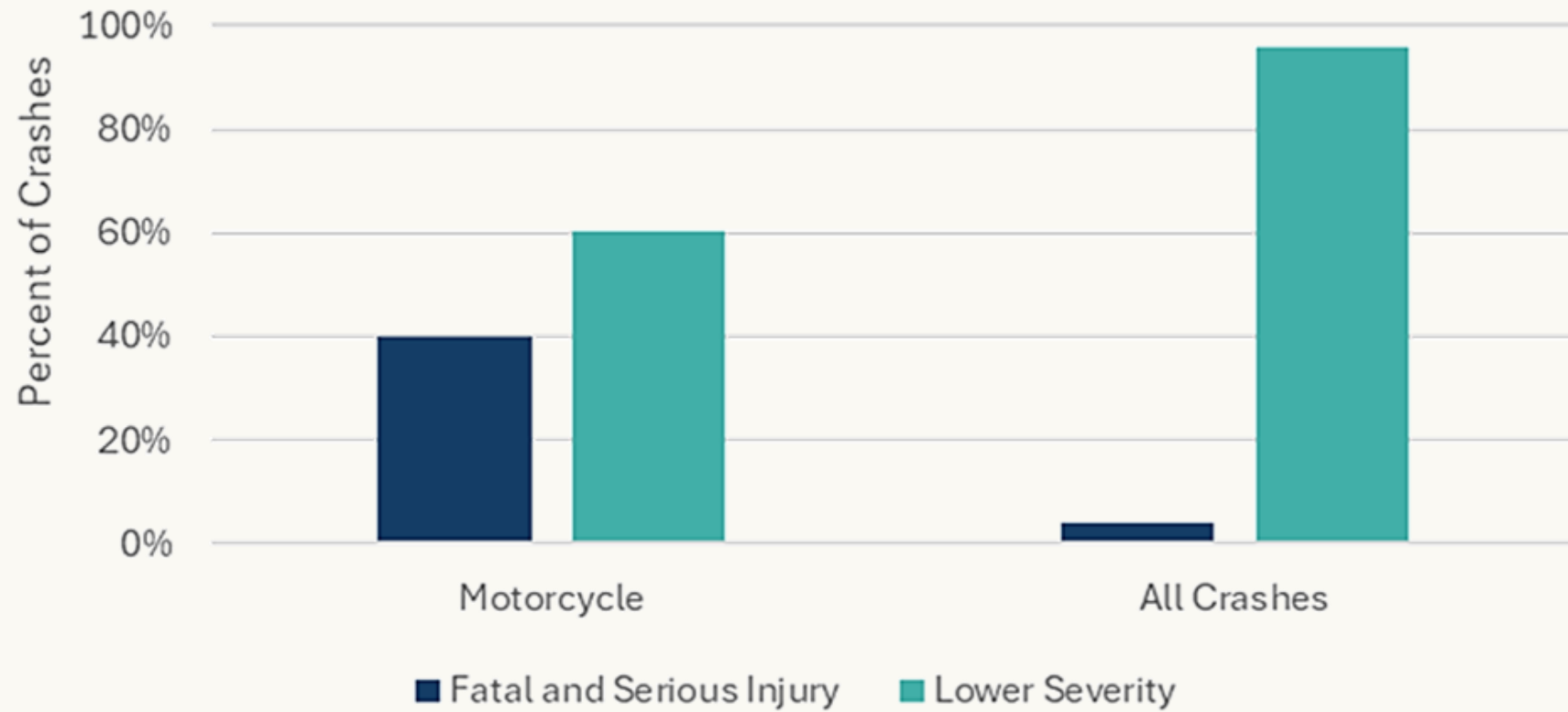


Population excludes ages younger than 15

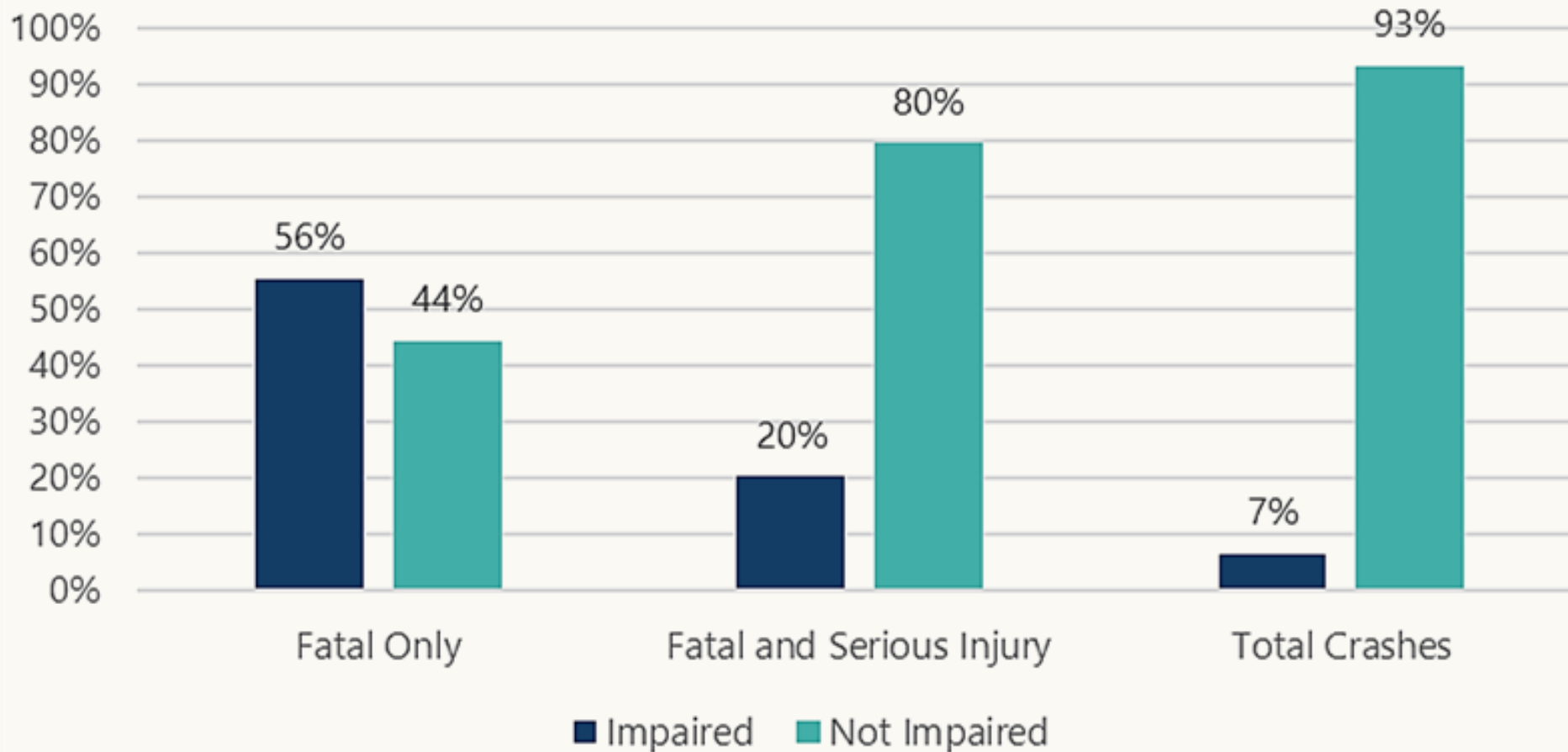
PEDESTRIANS & BICYCLISTS



MOTORCYCLISTS



IMPAIRED DRIVING



SPEEDING

"Speed-involved" crashes include drivers who were exceeding the posted speed or driving too fast for conditions (but not exceeding the posted speed limit).

- 17% of all crashes involved speed
- 19% of fatal/serious injury crashes involved speed

City's Current Speed Management Initiatives: red light/speed cameras, protected bike infrastructure, modal filters on designated bikeways, design standards update, evaluation of lower posted speeds

POTENTIAL EMPHASIS AREAS

Characteristics contributing to high proportion of fatal/serious injury crashes or more likely to result in fatal/serious injuries when a crash occurs:

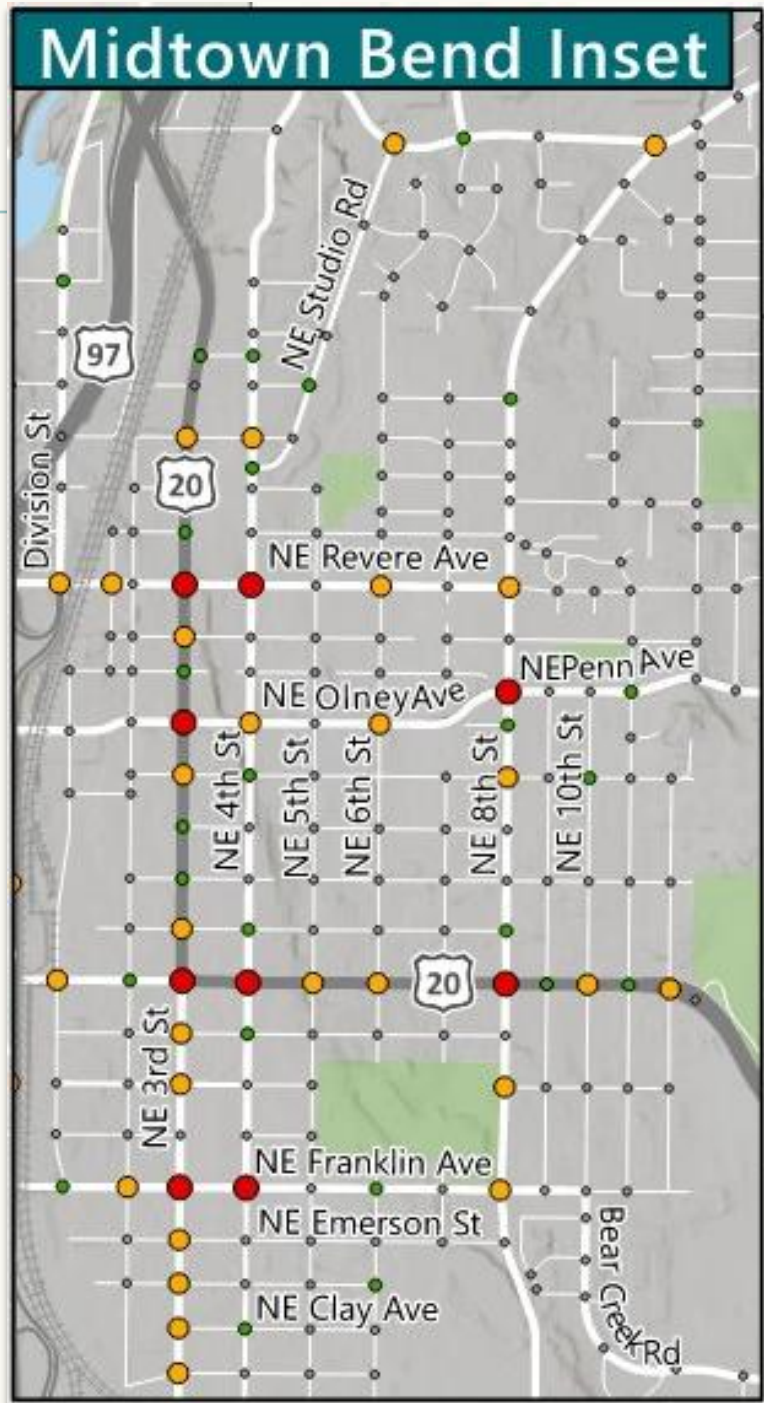
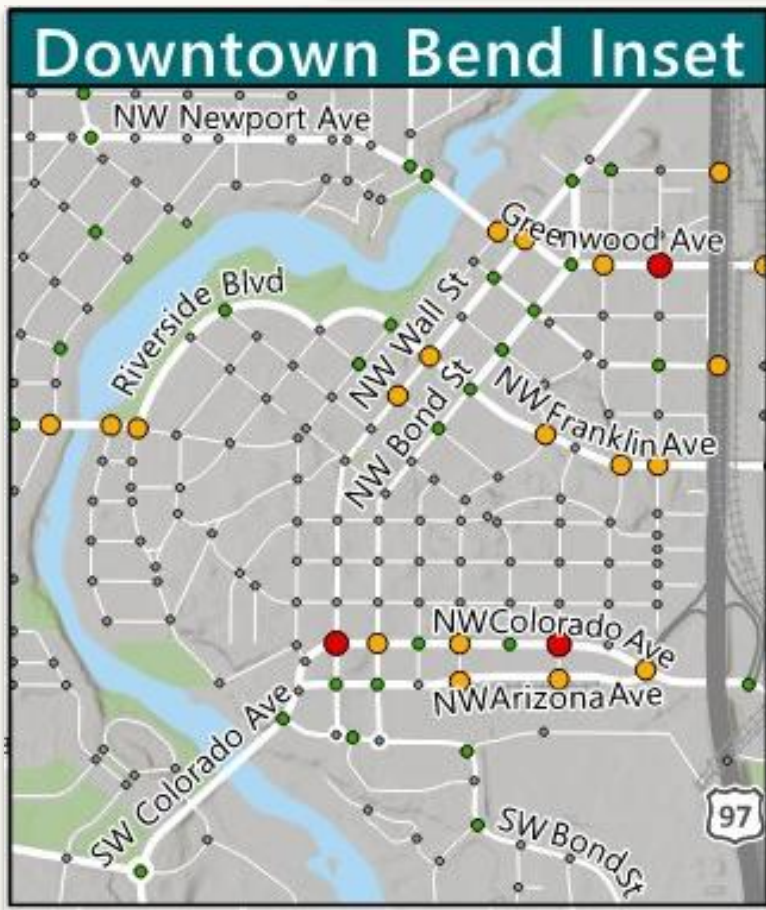
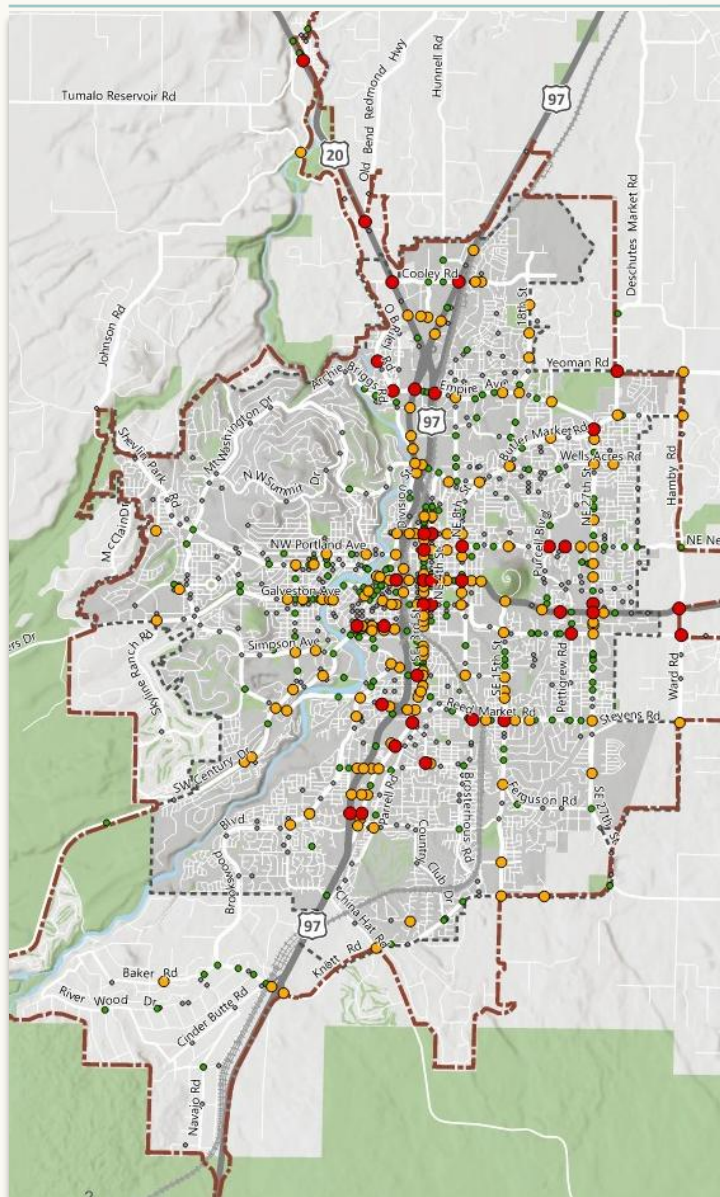
- **Young drivers (15-20) involved**
- **Alcohol impairment**
- **Aging drivers (over 65)**
- **Nighttime (dark/dawn/dusk)**
- Roadway or lane departure
- Alcohol and/or drug impairment
- Speed-related
- Motorcycle involved
- Work zones
- Bicyclist involved
- Intersections

Bold = 3 Flags | Not Bold = 2 Flags

NETWORK SCREENING EVALUATION

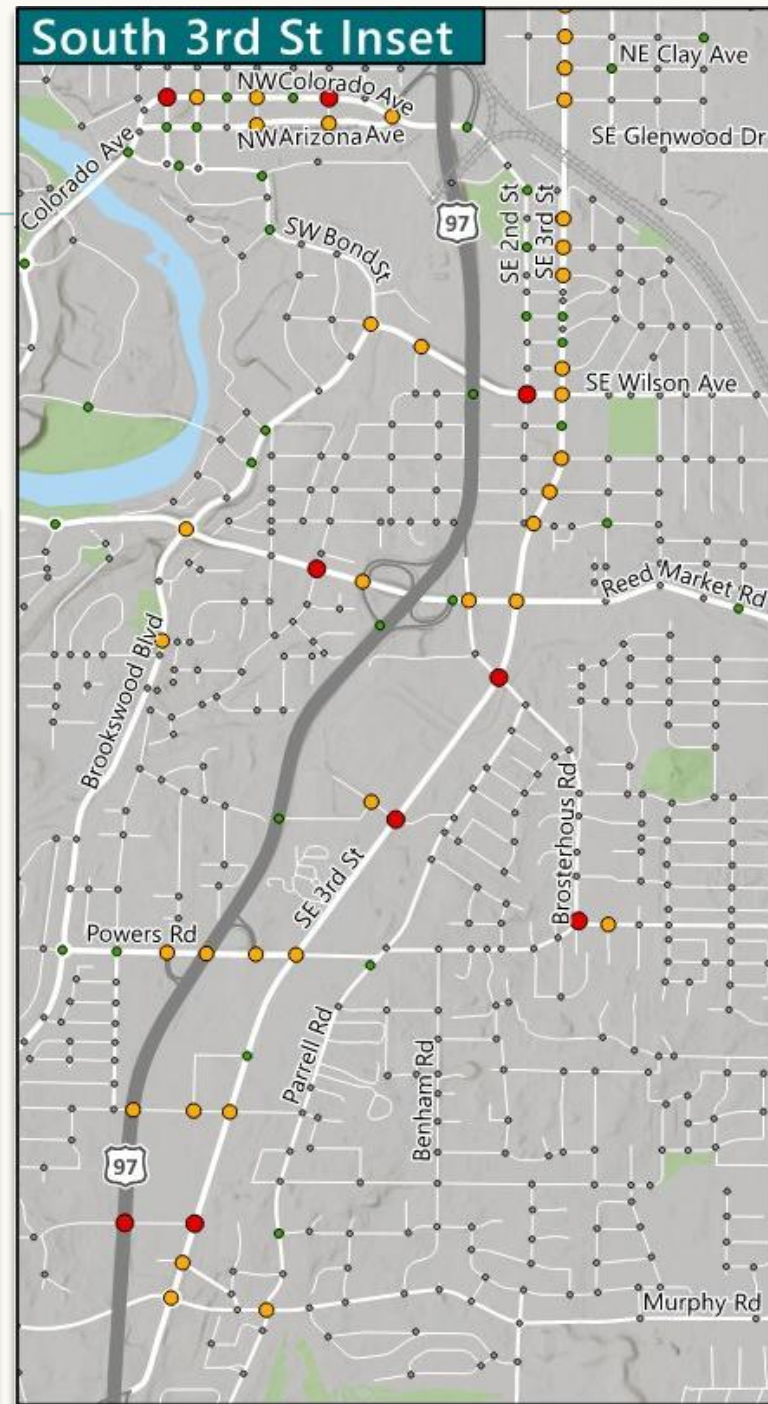
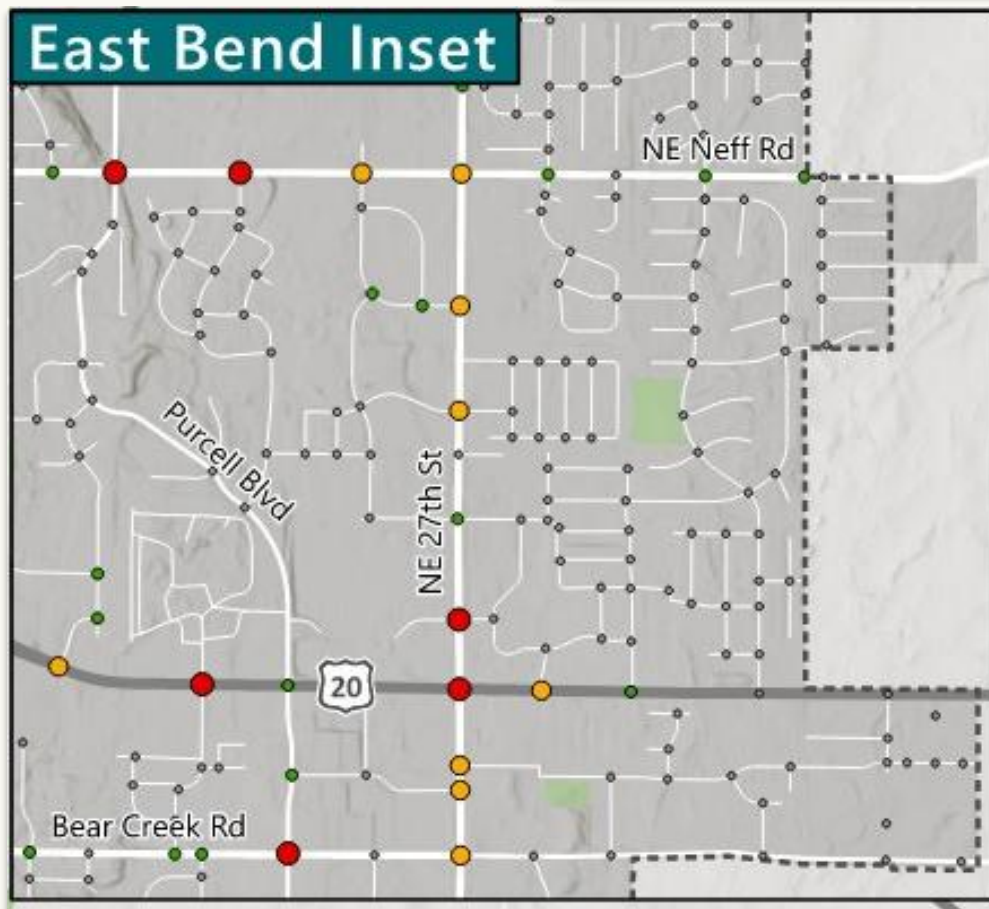
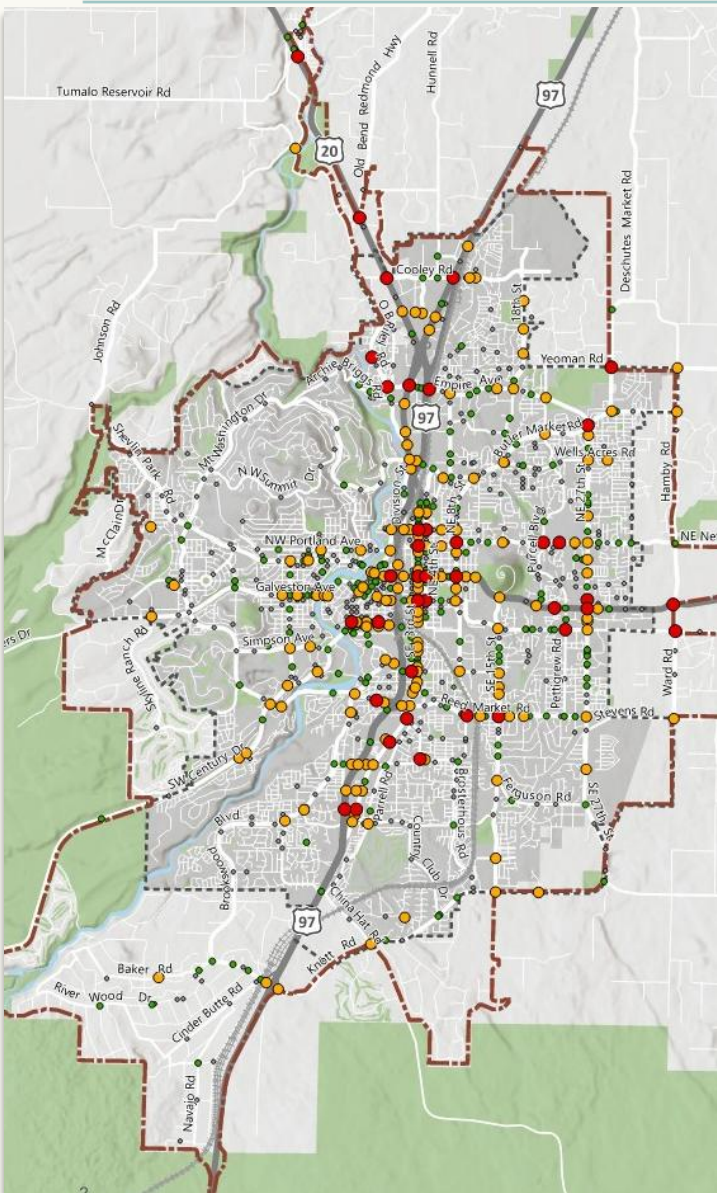
- Scans network for locations exhibiting more serious crashes and concentrations of crashes
- Crashes weighted by severity based on societal costs
 - Fatal/Serious Injury = 100
 - Minor/Possible Injury = 10
 - Property Damage Only (PDO) = 1
- Every fatal or serious injury crash equates to 100 PDO crashes
- Averaged over 5-year study period

INTERSECTIONS

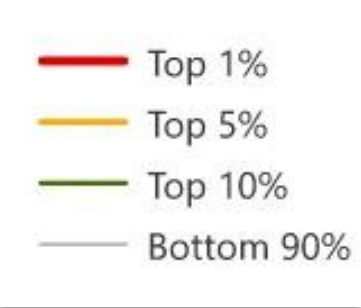
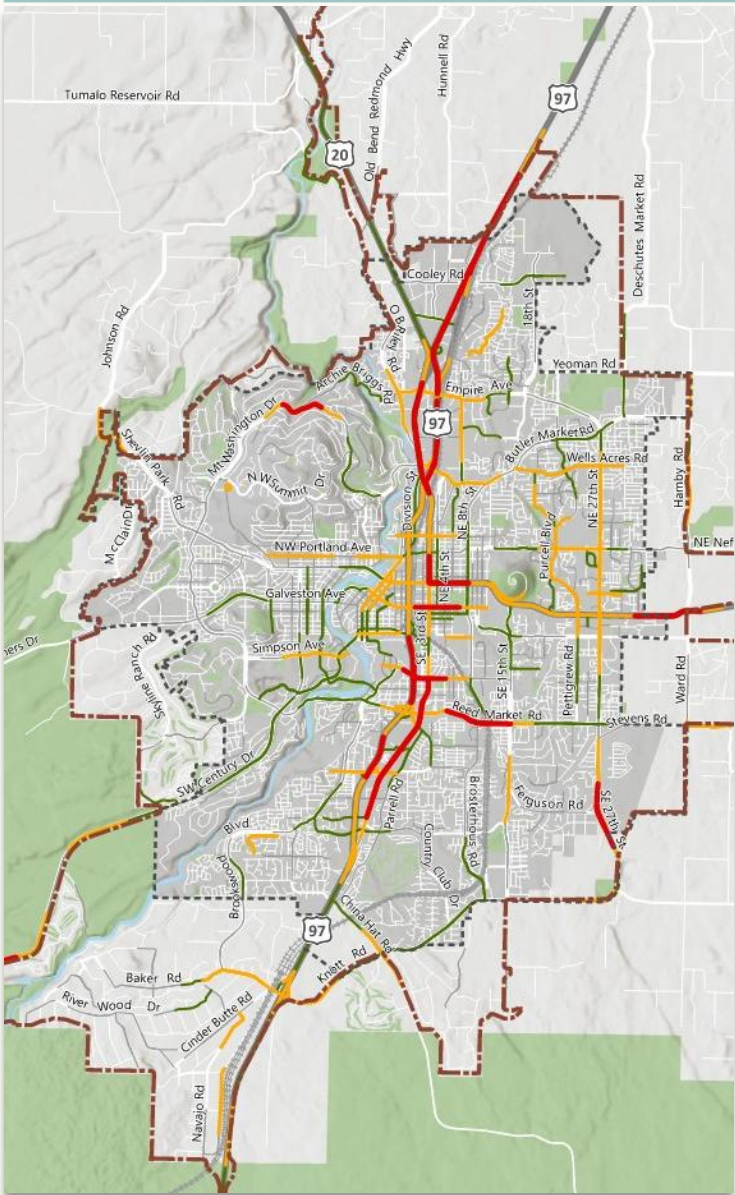


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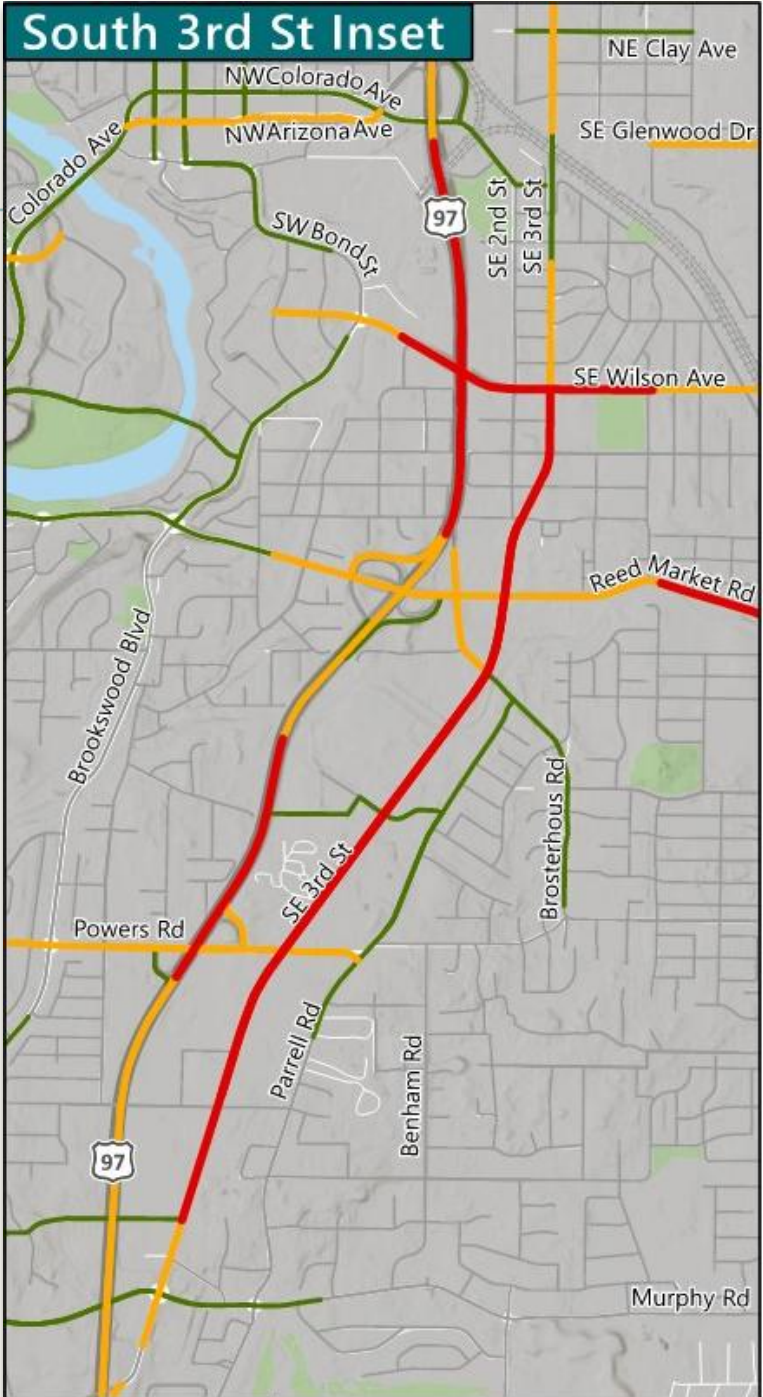
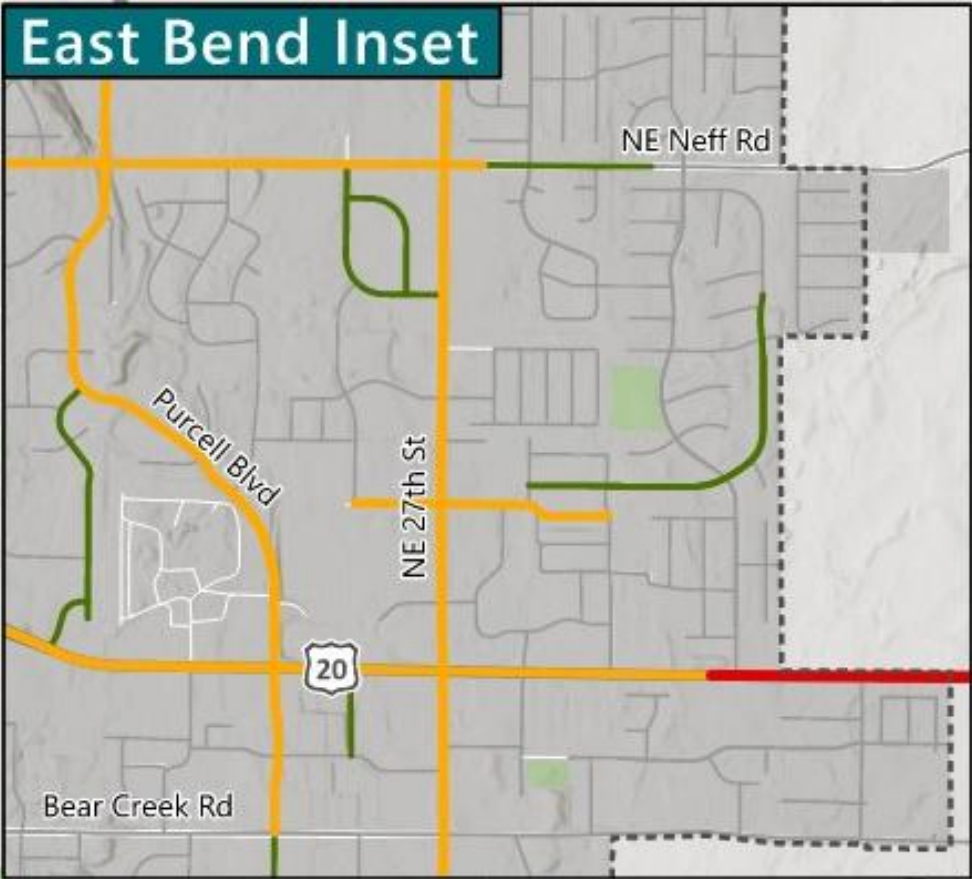
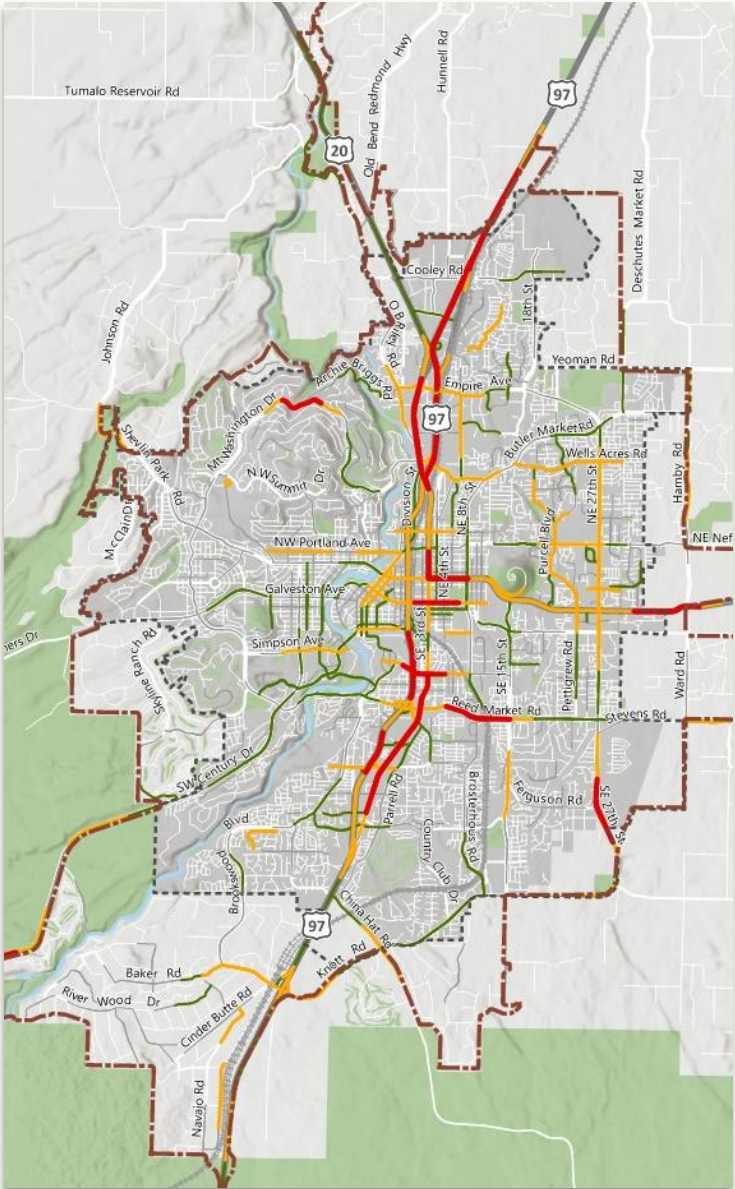
- Top 1%
- Top 5%
- Top 10%
- Bottom 90%



STREET SEGMENTS



STREET SEGMENTS



NEXT STEPS

