



# Missoula Community Transportation Safety Plan

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Missoula Department of Public Works &  
Mobility

October 4, 2023

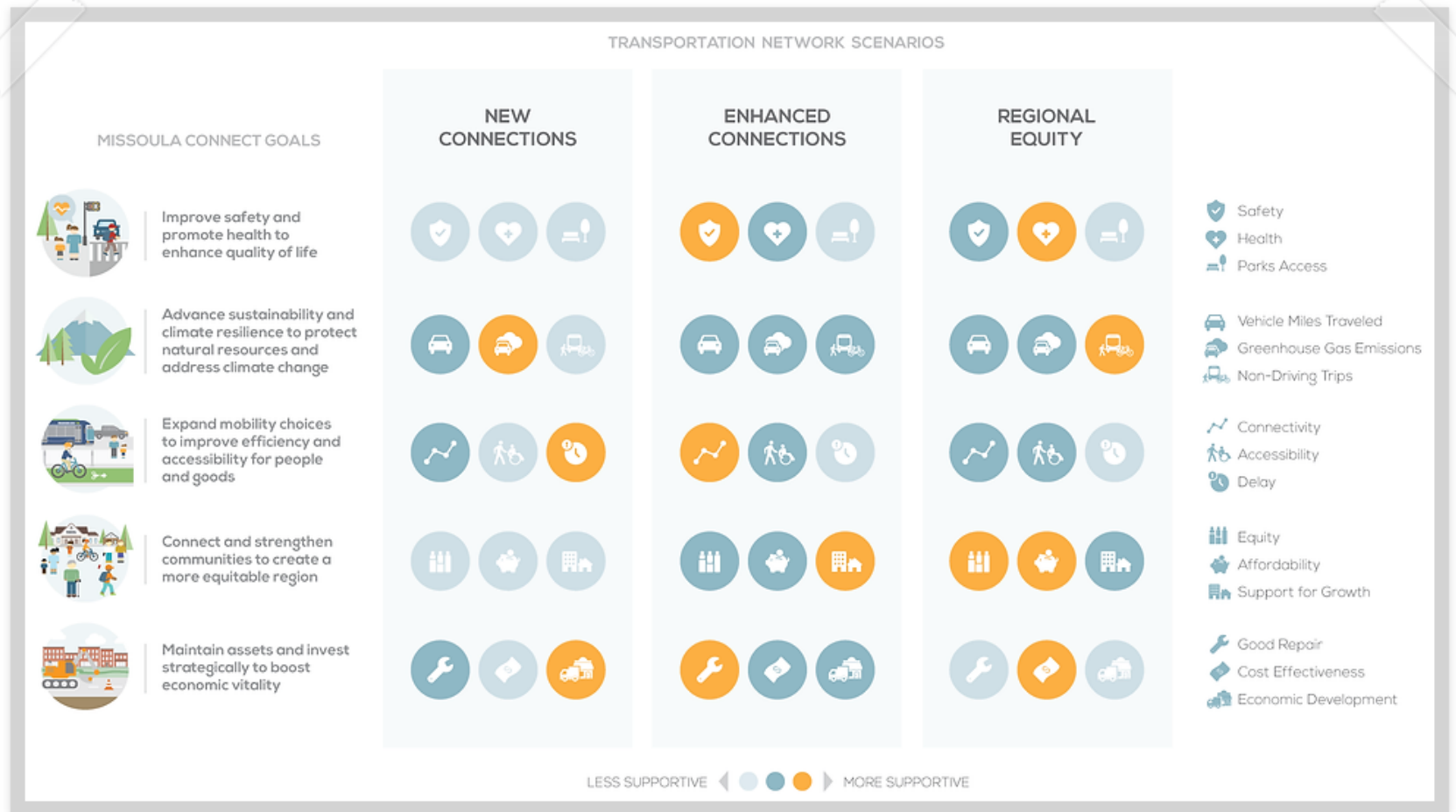


# What are we covering today?

- 1 Missoula Context
- 2 Safety Plan
- 3 Define Solutions
- 4 Implementation

# Missoula Context - Planning

- Using data to prioritize projects
- L RTP
- Community Investment Program
- Focus on Safety & Equity



# Missoula Context - Safety



**Toward Zero Deaths™**  
National Strategy on Highway Safety

## RESOLUTION 8633

A resolution establishing a Vision Zero policy to work towards zero traffic deaths and zero severe injuries

May 15, 2019



# CTSP Update

- 5-years Later → Check Status
- Data Driven Approach
- Public Involvement
  - Perception vs. Data
- Set Path for Next 5 Years



# MISSOULA

## Community Transportation Safety Plan

ENGINEERING • ENFORCEMENT • EDUCATION • EMERGENCY SERVICES

DRAFT

# Transportation Safety Advisory Committee

- Representatives from 4 E's of Safety
- Oversaw development of the CTSP
- Responsible for implementation of CTSP over next 5 years

**Table 2.1: TSAC Meeting Schedule**

MEETING	KEY OBJECTIVES
<b>TSAC Meeting #1</b> <i>September 10, 2018</i>	<ul style="list-style-type: none"> <li>• Review scope of work</li> <li>• Discuss plan development</li> <li>• Confirm TSAC members</li> <li>• Define TSAC mission and CTSP goals</li> </ul>
<b>TSAC Meeting #2</b> <i>October 29, 2018</i>	<ul style="list-style-type: none"> <li>• Review crash data</li> <li>• Discuss key safety issues in Missoula</li> <li>• Discuss public meeting preparation</li> </ul>
<b>TSAC Meeting #3</b> <i>January 31, 2019</i>	<ul style="list-style-type: none"> <li>• Share findings of first public meeting</li> <li>• Establish Emphasis Areas for CTSP</li> <li>• Inventory current and planned safety activities</li> <li>• Identify potential safety strategies</li> <li>• Prepare for Community Safety Summit</li> </ul>
<b>TSAC Meeting #4</b> <i>May 14, 2019</i>	<ul style="list-style-type: none"> <li>• Review recommended safety strategies</li> <li>• Review the draft CTSP</li> <li>• Review public comments and input received</li> </ul>



# Crash Data Analysis

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# Crash and Injury Trends

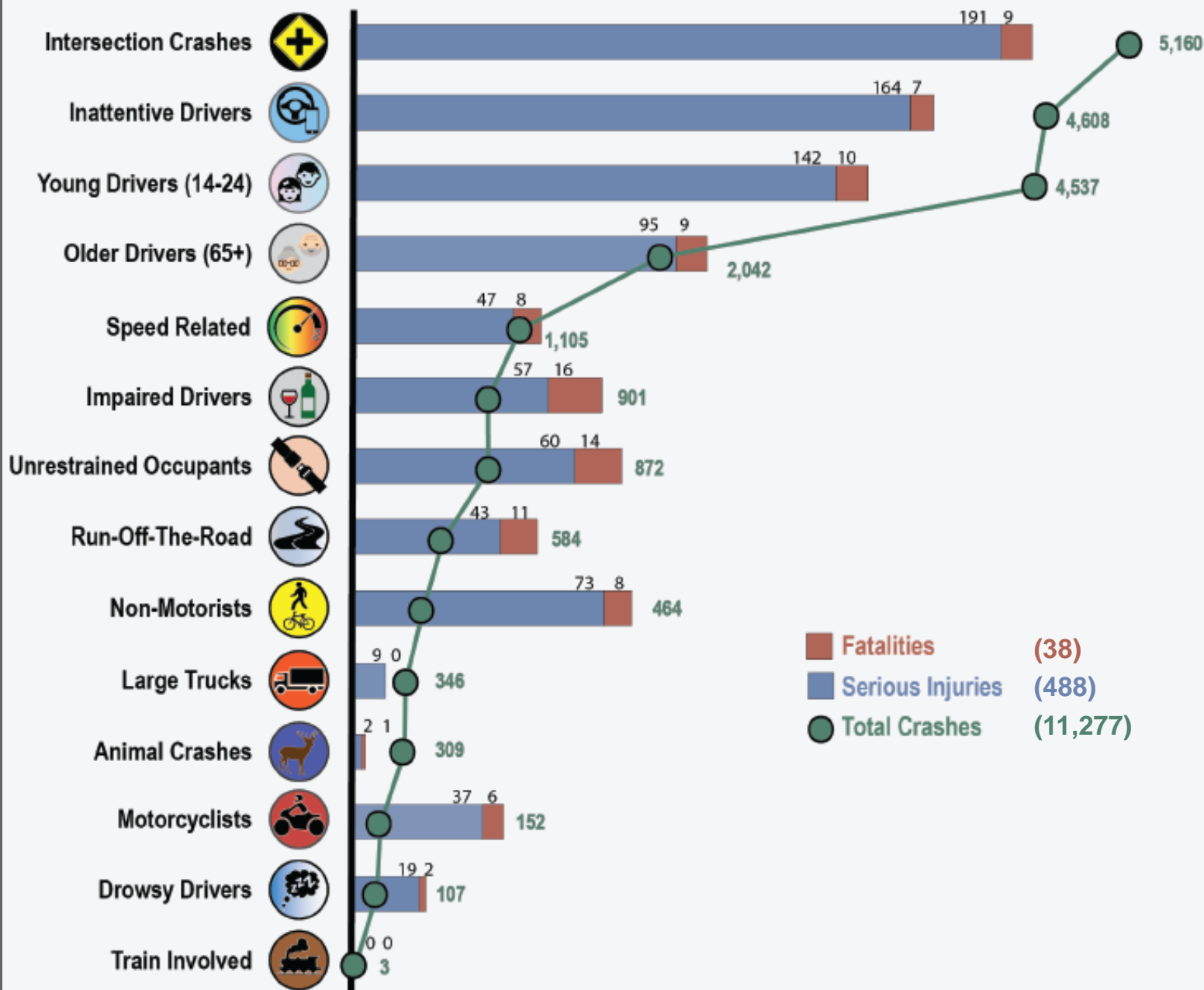


<span style="color: red;">■</span> Total Fatalities	12	7	9	15	5	7	5	5	8	13
<span style="color: blue;">■</span> Total Serious Injuries	194	198	145	124	82	98	83	84	72	69
<span style="color: green;">■</span> Total Crashes	2,208	2,085	1,958	1,906	1,687	1,832	2,180	2,280	2,539	2,446
<span style="color: green;">—●—</span> Crashes 5-Year Rolling Average				2,052	1,969	1,894	1,913	1,977	2,104	2,255
<span style="color: red;">—●—</span> Fatalities 5-Year Rolling Average				11	10	9	8	7	6	8
<span style="color: blue;">—●—</span> Serious Injuries 5-Year Rolling Average				160	149	129	106	94	84	81



# Crash Trends by Emphasis Area

Total Crashes, Fatalities, Serious Injuries by Emphasis Area (2013-2017)






# Selection of Emphasis Areas

## 2013 CTSP

- Intersection Related
- Occupant Protection
- Impaired Driving

## 2018 CTSP

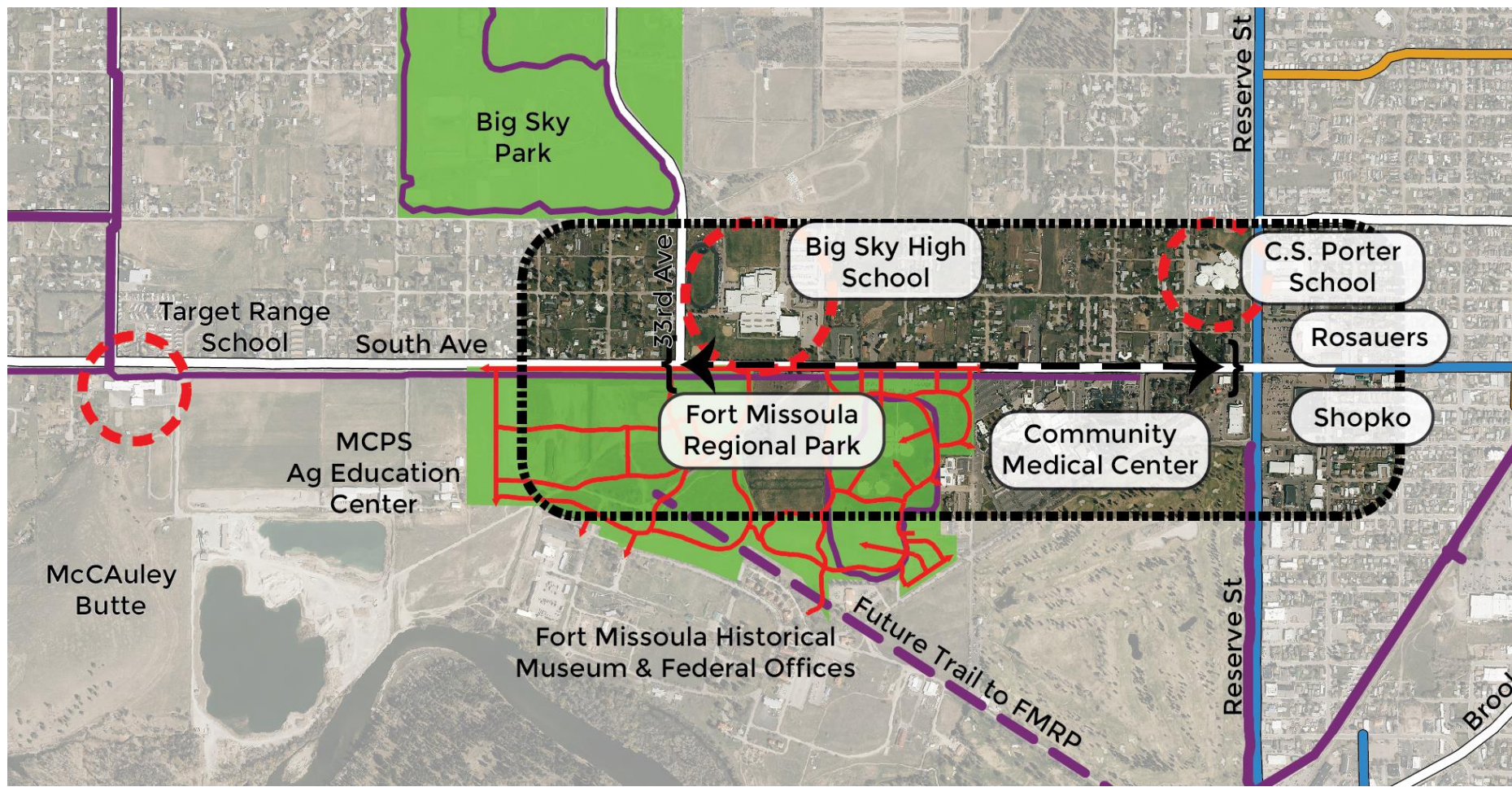
-  Intersection Crashes
-  Non-motorized Users
-  High Risk Behavior
  - Impaired Driving
  - Unrestrained Occupants
  - Inattentive Drivers



# Implementation

# Setting the stage

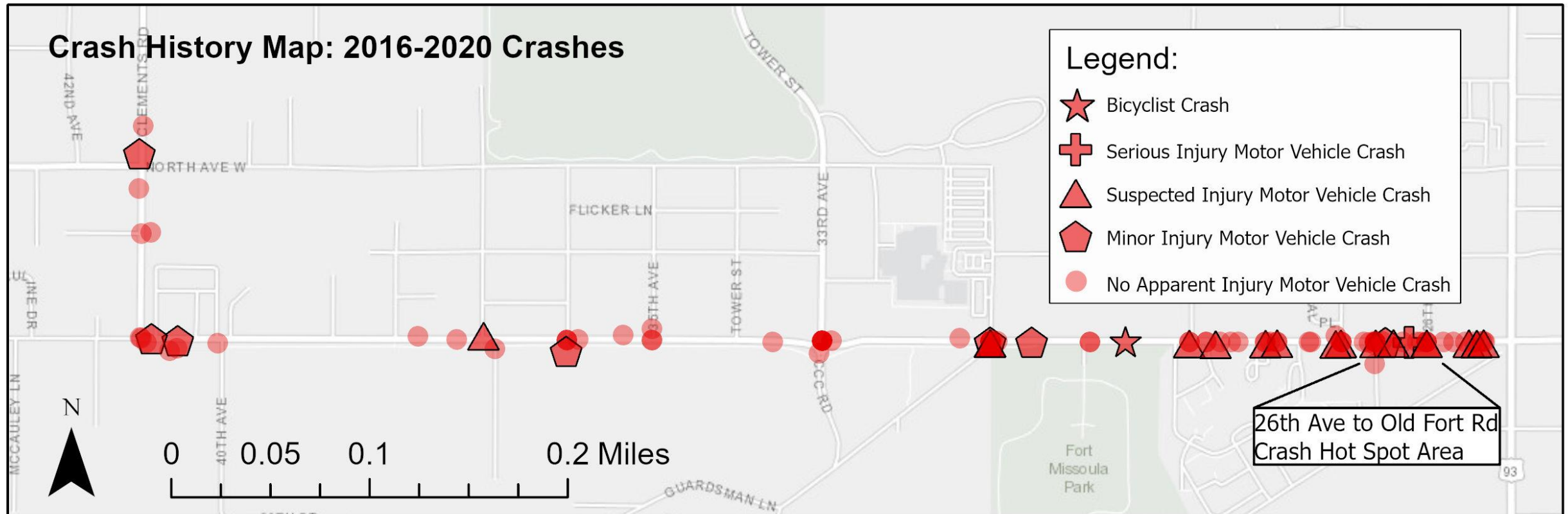
- Using data to support a broader narrative
- Find the project that best meets the criteria
- Looked for more than just a crash history – why is safety important here
- Project readiness



# Define the problem

Data sources: State crash data & PD crash reports

- Quantitative Data



# Define the problem

- **Qualitative Data**
  - Schools
  - Vulnerable populations
  - Medical campus
  - Transit users
  - Multimodal transportation corridor
  - Recreation users
  - Healthy environment



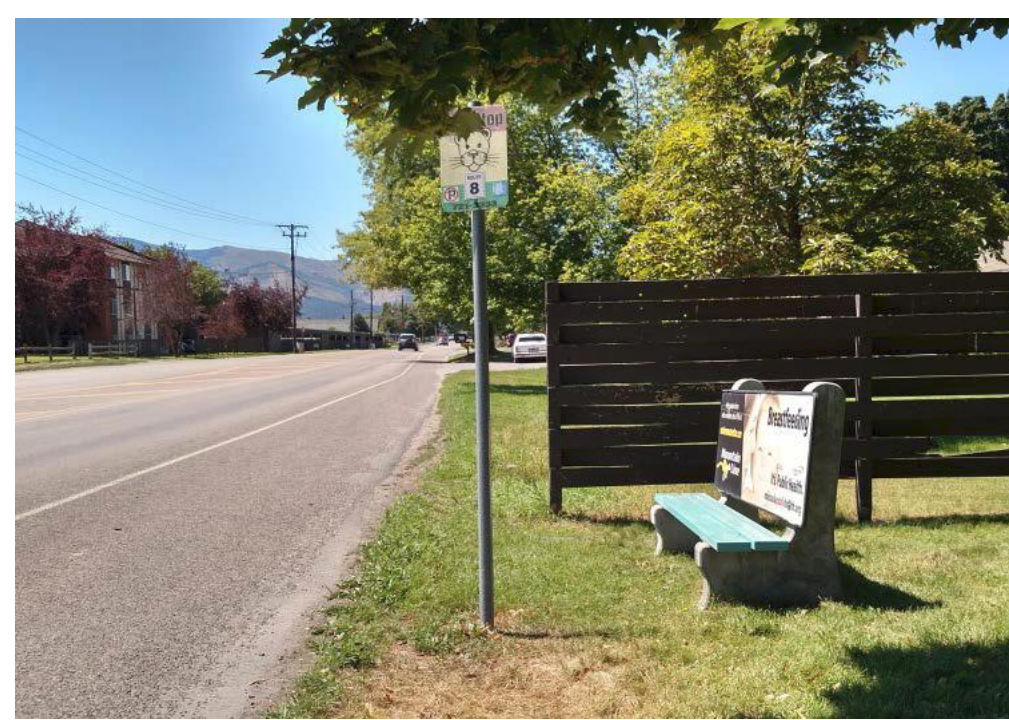
# Define the problem

- **Qualitative Data**

*"There is no sidewalk area in this block, and the side of the road had snow build-up, forcing the pedestrian to walk in the roadway..."*

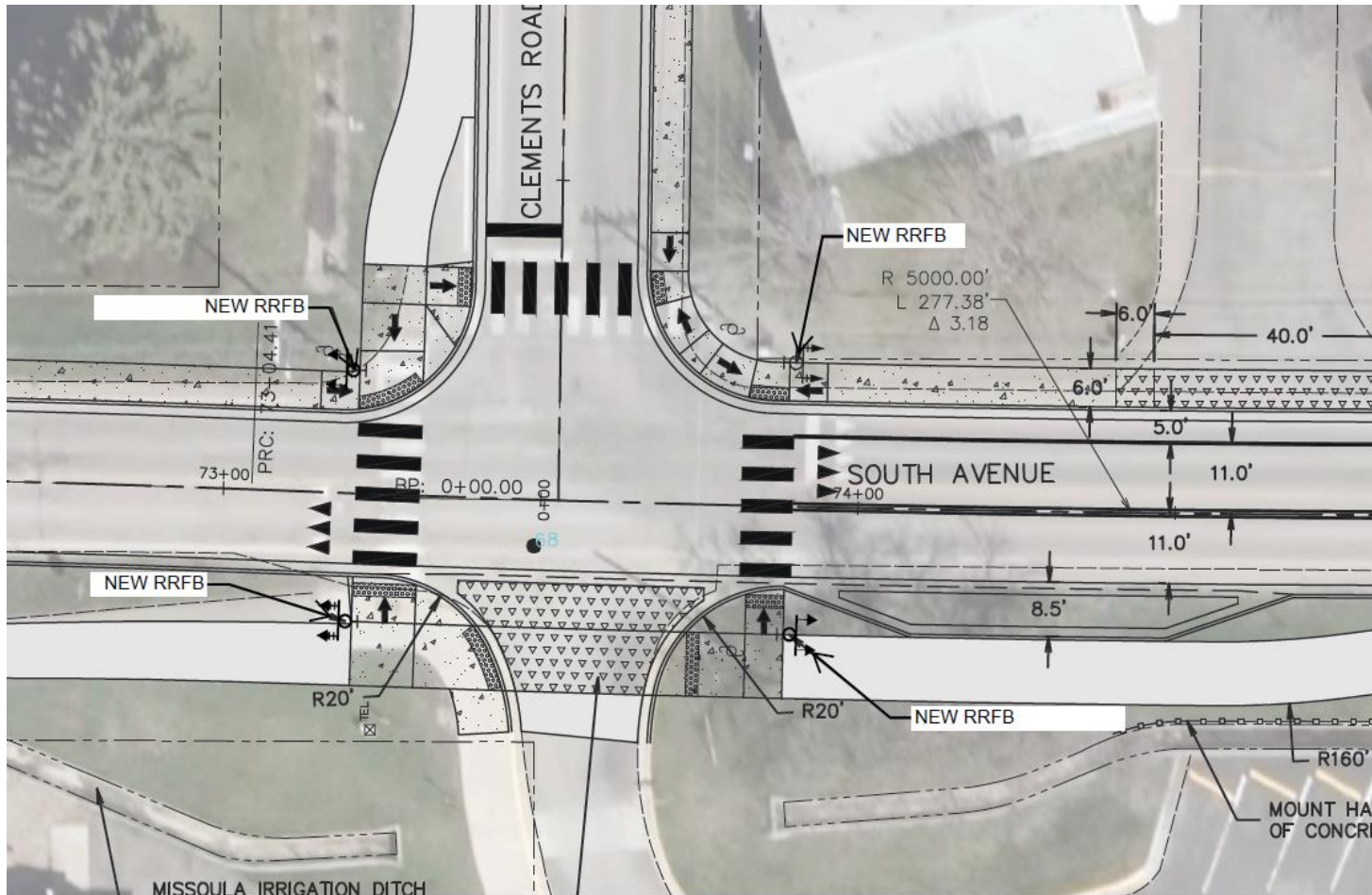
-Missoula PD Crash Report

Data sources: Police reports,  
partner interviews,  
interdisciplinary inclusive  
walk audits



# Identify Solutions

- Proven Safety Countermeasures
  - Project readiness & design



## Safety Benefits:

High-visibility crosswalks can reduce pedestrian injury crashes up to<sup>1</sup>

**40%**

Intersection lighting can reduce pedestrian crashes up to<sup>2</sup>

**42%**

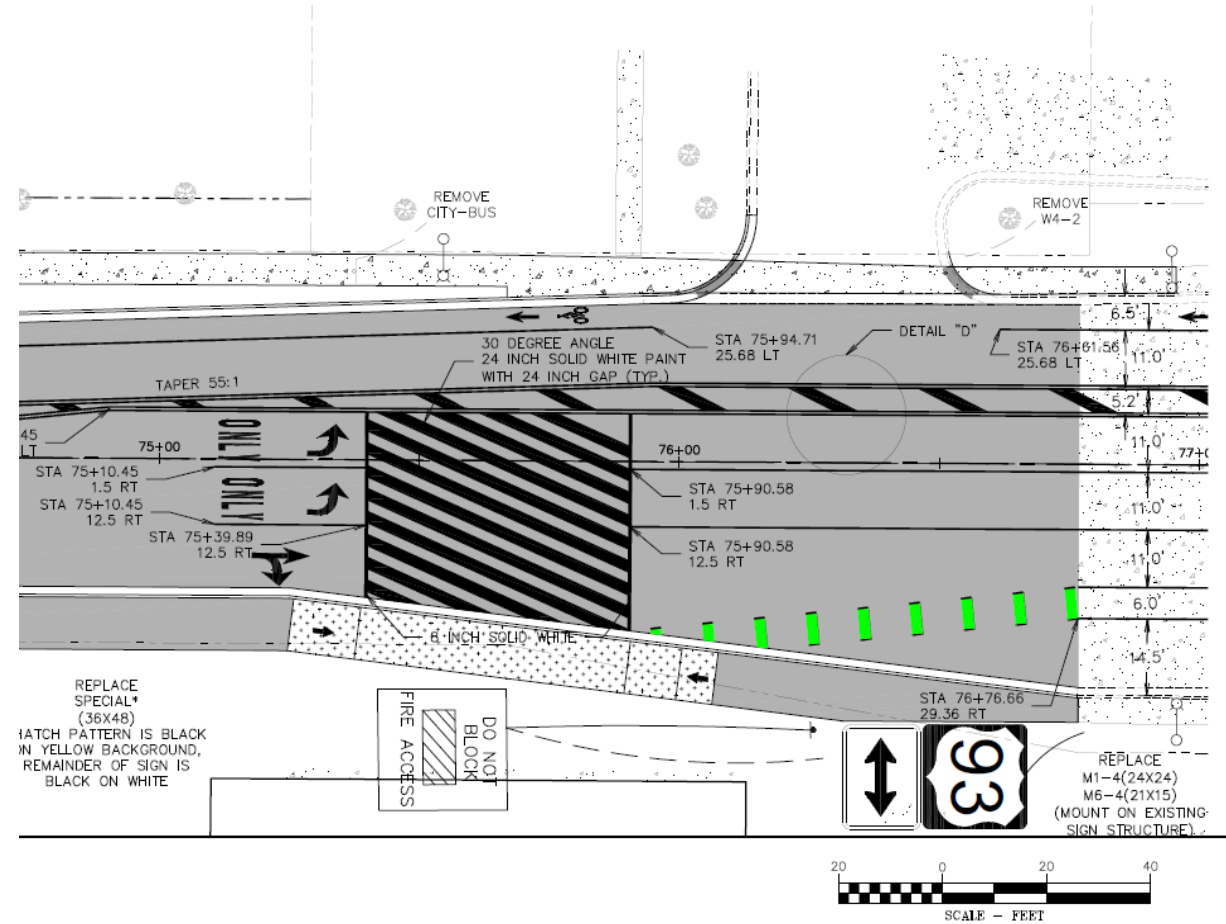
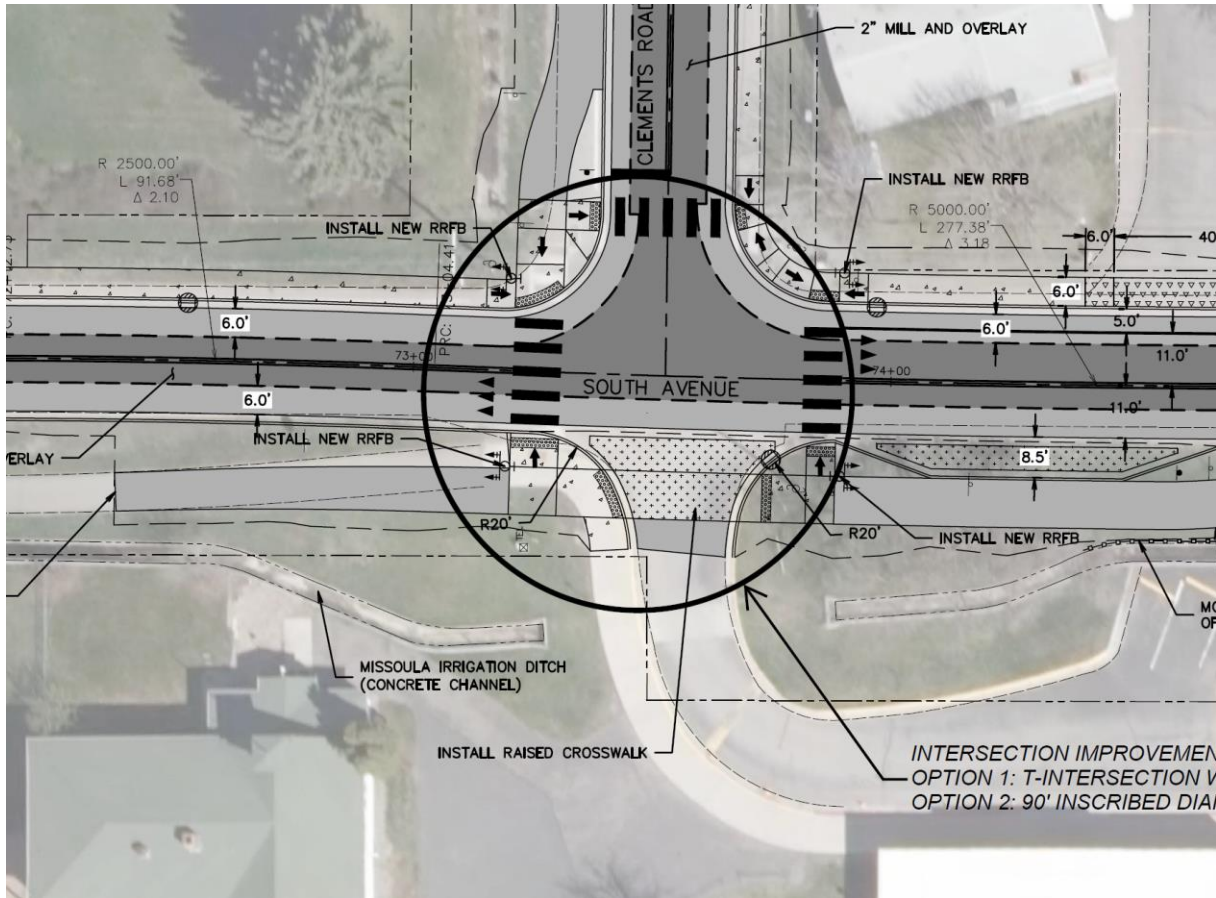
Advance yield or stop markings and signs can reduce pedestrian crashes up to<sup>3</sup>

**25%**



# Identify Solutions

- Active Transportation



# Identify Solutions

- **Equity & Engagement**
  - Foster relationships: City, County, School District
  - Don't stop at jurisdiction lines
  - Track engagement & don't avoid community discussions
  - Track citizen complaints and requests

Data source: Census data, partner statistics, schools, citizen complaints/requests for service



# **Quick Builds for Slow Speeds**

# Missoula-specific conditions

Wide streets

Uncontrolled  
Intersections

Large Truck Traffic

Lack of consistent &  
connected bike/ped  
infrastructure

Changing weather and  
sun/shade conditions

Neighborhood  
Greenways

<20 mph is the  
**appropriate speed** on  
low volume and  
residential streets

# How to Reduce Speeds? Engineering and Design?

Traffic Calming is...

- Very Effective
- Historically onerous, inequitable, and cost prohibitive



# Neighborhood Traffic Management Program

Locally-owned, Residential Streets ●

Interdepartmental Work Team ●

Coordinated with CIP & TST ●



● Clear Workflow (Proactive & Reactive Response)

● 6 Es + Quick Build Traffic Calming

● Data-Driven Analysis

# Proactive Approach

1

## Collect and Analyze Data

Identify any major contributing factors to safety concerns along greenway

2

## Assess Neighboring Streets

1 block in either direction  
Avoid pushing traffic problems one street over

3

## Select an Appropriate Intervention

Quick Build  
traffic calming  
6 Es

4

## Implement and Evaluate

Public engagement  
Collect data and revisit as needed



# Engineering - Traffic Calming

- Fast, malleable.
- Low Cost
- Blank canvas for neighborhood placemaking

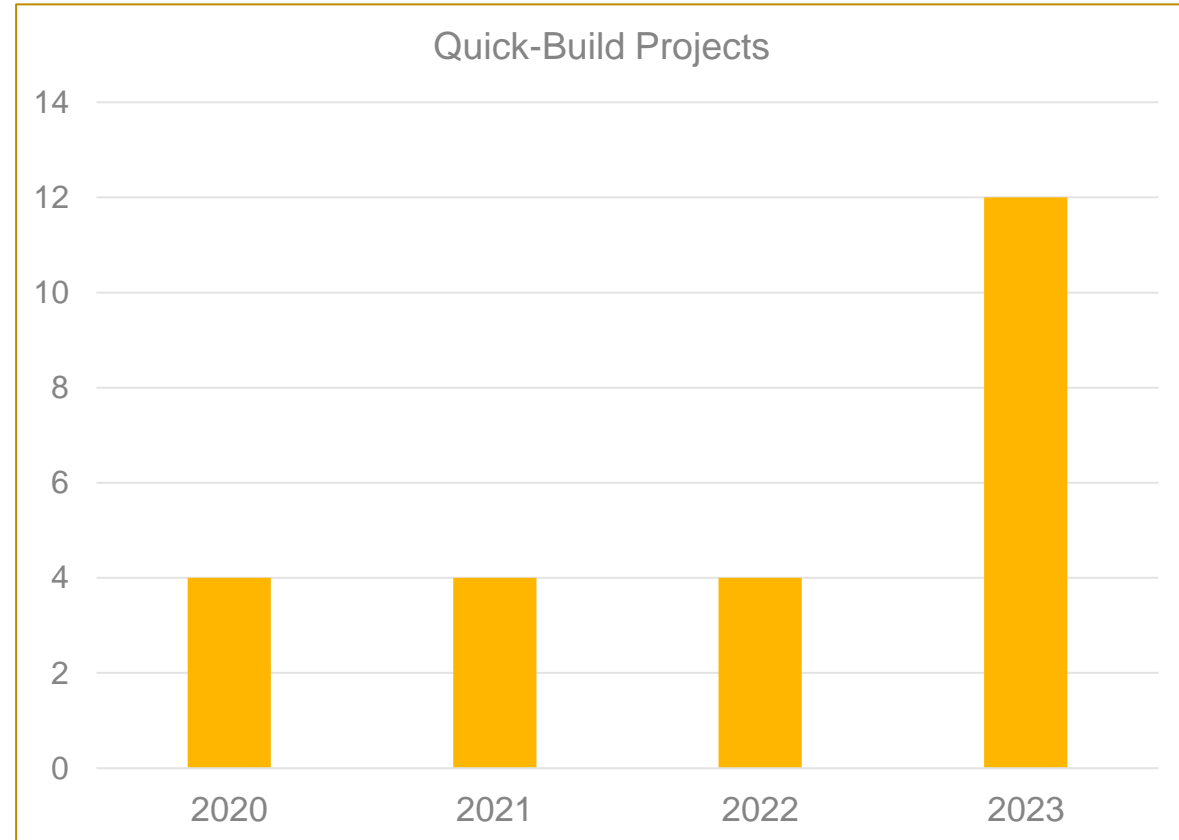


“Quick Build”

- Generates diverse public and private interest
- Serves underserved spaces
- Informs best practices for later efforts

# Results – key metrics

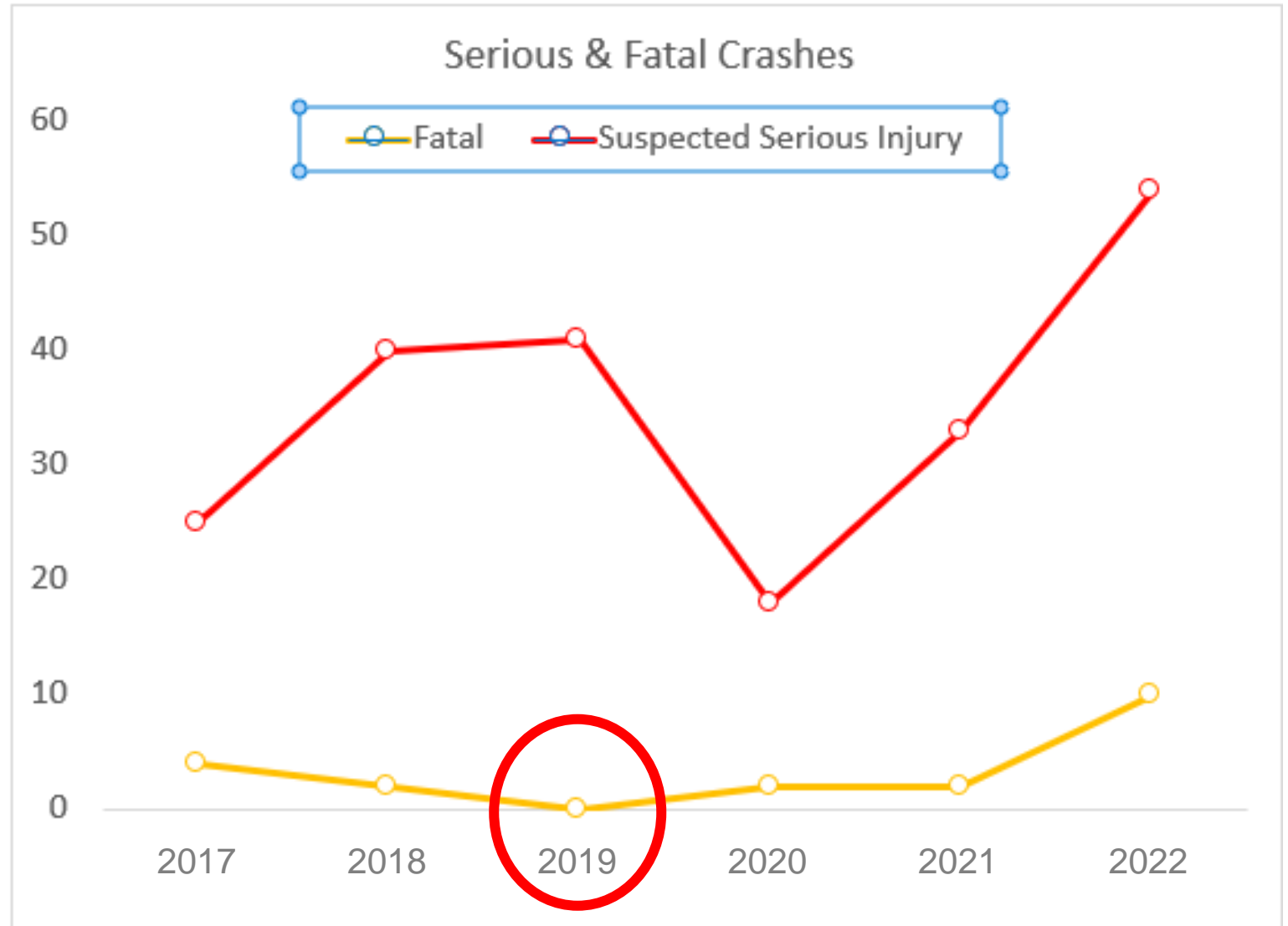
- 24 Quick-build traffic calming/safety projects to date
- 25 - 60% volume reduction
- 5 - 30% speed reduction



“Quick Build”

# City Streets

## Crash and Injury Trends



# Successes

- **Vision Zero: no fatalities on City streets in 2019**
- **Reduced speeds on local streets**
- **Continuing effort – success doesn't mean we stop**
- **Safety as a core message in project design**

**bike salmoning**/'bɪk sɑːmɒnɪŋ/ v.

1. A Cyclist that puts themselves at risk by cycling into traffic or "against the stream."



<https://www.ci.missoula.mt.us/CivicMedia?CID=Road-Safety-Channel-6#player>

# Thank you!

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