



# Comprehensive Safety Action Plan

Transportation Advisory Board  
November 19<sup>th</sup>, 2024





## AGENDA

- Public Engagement Update
- CSAP Plan Outline
- Proposed Projects Review
- Performance Measures and Data Trends





01

Phase Two Public  
Engagement  
Update





# Public Engagement Update

**174** Responses via the strategy boards

**708** Responses via the online survey

**882** Total responses

Online Survey Closed November 15<sup>th</sup>

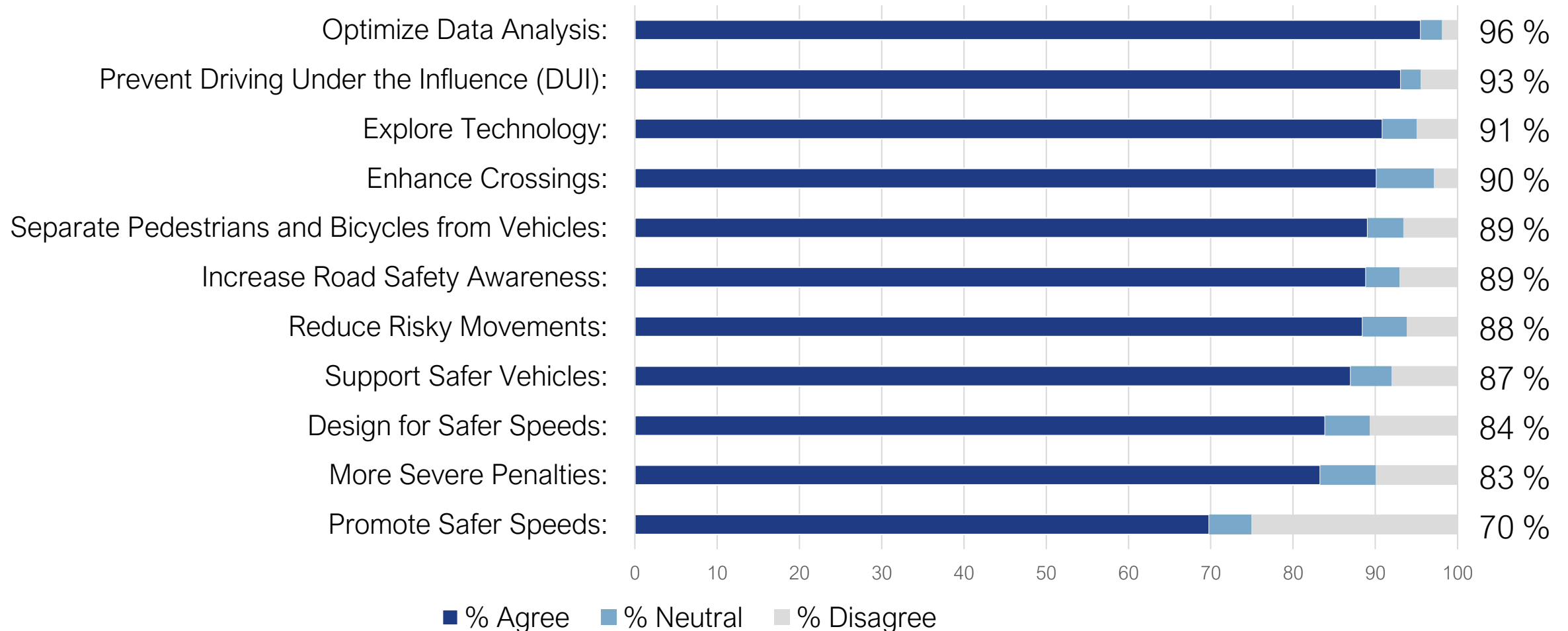
*\*Responses as of 11/12/24*





# Survey 2 Preliminary Results

## Strategy Support





02

CSAP Plan  
Outline



# Overview

- Structure following SS4A Self-Certification Eligibility Worksheet
- Report Development Timeline
  - **First draft:** End of November
  - **Second Draft:** End of January
  - **Final Report:** End of February

SS

4A

Safe Streets and Roads for All  
Self-Certification Eligibility Worksheet

All applicants should follow the instructions in the NOFO to correctly apply for a grant. See the [SS4A website](#) for more information.

Table 1 of the SS4A NOFO describes [eight components of an Action Plan](#), which correspond to the questions in this worksheet. Applicants should use this worksheet to determine whether their existing plan(s) contains the required components to be considered an eligible Action Plan for SS4A.

This worksheet is required for all SS4A **Implementation Grant** applications and any **Planning and Demonstration Grant applications to conduct Supplemental Planning/Demonstration Activities only**. Please complete the form in its entirety, do not adjust the formatting or headings of the worksheet, and upload the completed PDF with your application.

### Eligibility

An Action Plan is considered eligible for an SS4A application for an Implementation Grant or a Planning and Demonstration Grant to conduct Supplemental Planning/Demonstration Activities if the following two conditions are met:

- You can answer "YES" to Questions **3, 7, and 9** in this worksheet; *and*
- You can answer "YES" to **at least four of the six remaining** Questions, **1, 2, 4, 5, 6, and 8**.

If both conditions are not met, an applicant is still eligible to apply for a Planning and Demonstration Grant to fund the creation of a new Action Plan or updates to an existing Action Plan to meet SS4A requirements.

### Applicant Information

Lead Applicant:  UEI:

### Action Plan Documents

In the table below, list the relevant Action Plan and any additional plans or documents that you reference in this form. Please provide a hyperlink to any documents available online or indicate that the Action Plan or other documents will be uploaded in Valid Eval as part of your application. Note that, to be considered an eligible Action Plan for SS4A, the plan(s) coverage must be broader than just a corridor, neighborhood, or specific location.

Document Title	Link	Date of Most Recent Update
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# Report Outline

## 1. Safety Analysis

Quick Facts  
Collision Profiles  
High-Risk Network (HRN)

## 2. Engagement & Collaboration

Who we engaged  
What we heard  
Using Resident's Input  
Collaboration within the City  
Collaboration with intra governmental agencies

## 3. Equity Considerations

Inclusive processes  
Identification of underserved communities  
Integrating Equity into the Planning Process





# Report Outline

## 4. Policy & Processes

Current Practices  
Gap Identification  
Recommendations

## 5. Taking Action (Strategies & Projects)

Infrastructure Strategies  
Non-Infrastructure Strategies  
Strategy Prioritization & Guiding Principles  
Projects

## 6. A Path Forward (Progress & Transparency)

Performance Metrics & Ongoing Reporting  
Engagement  
Funding



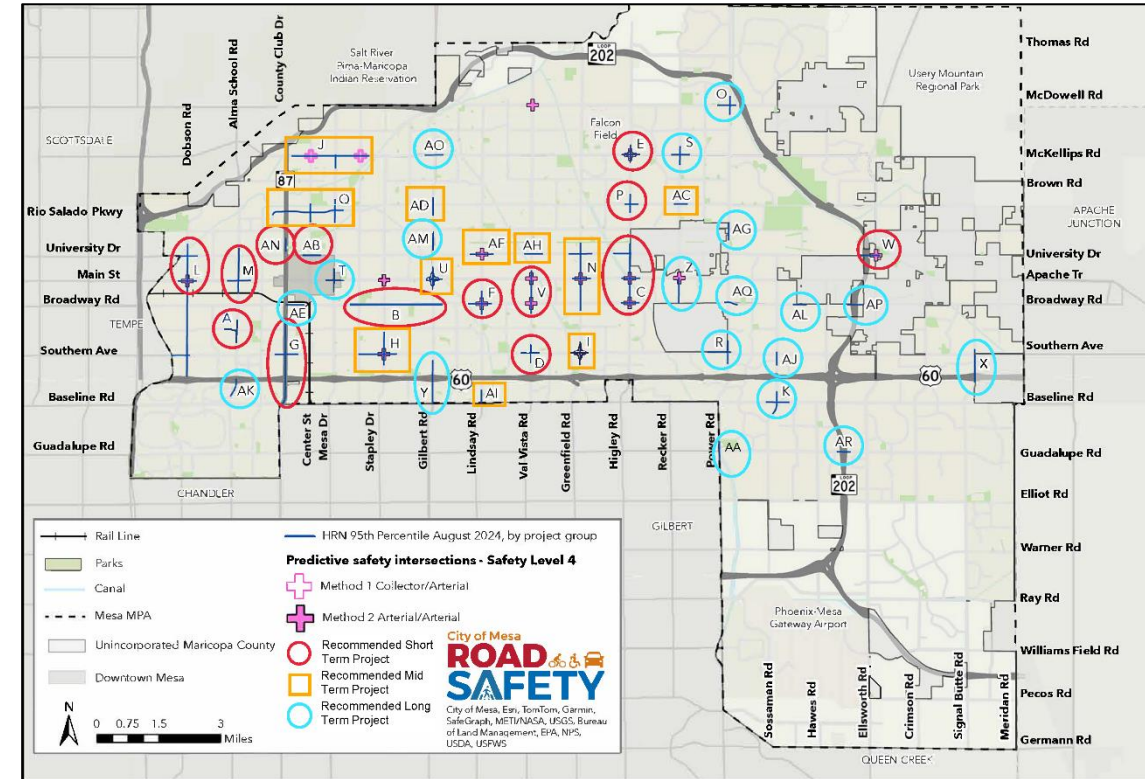
03

Proposed  
Projects Review

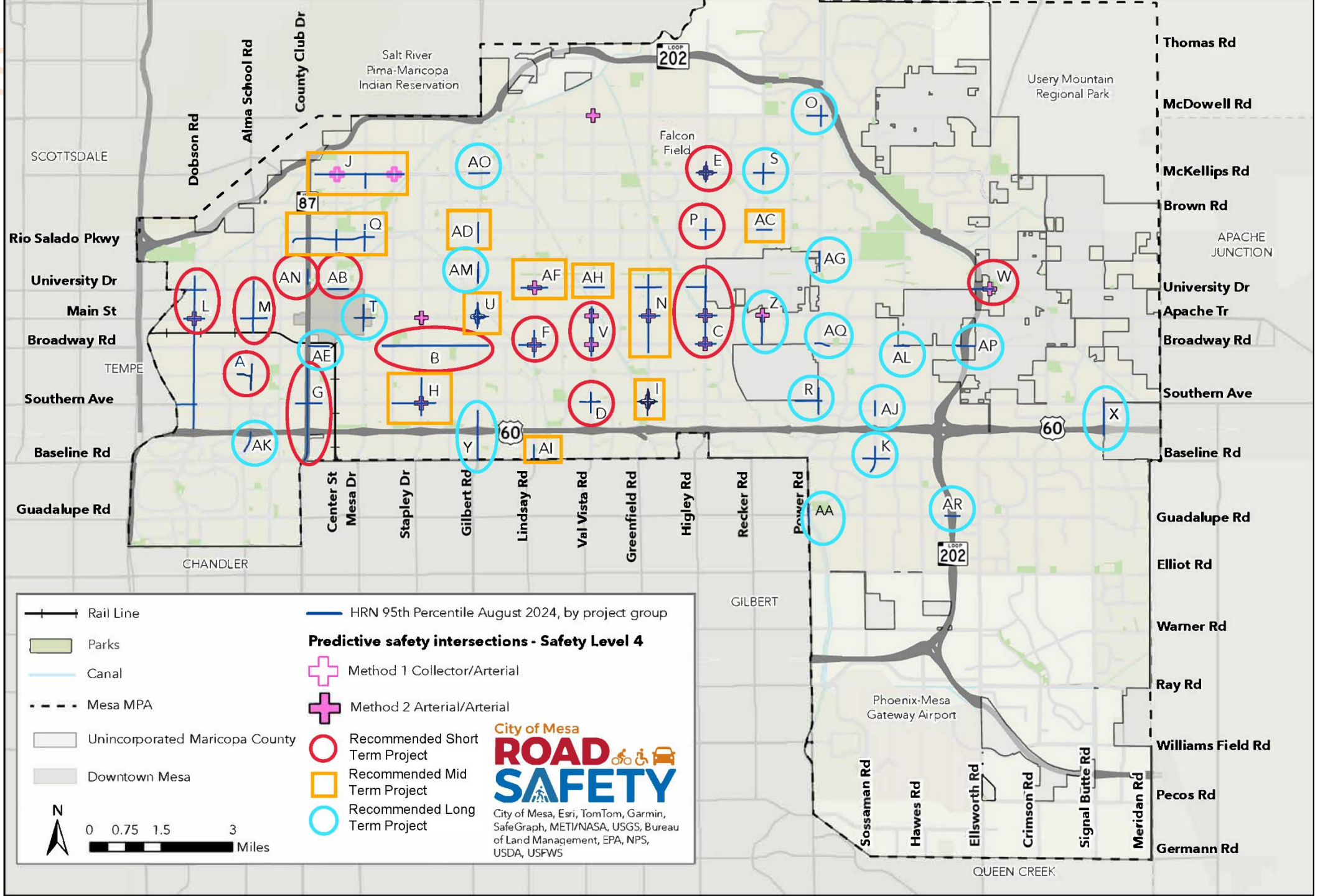


# Short Term HRN Projects

- 44 'super' segments created from HRN
  - 14 Short Term (16.83 miles)
  - 11 Mid Term (11.46 miles)
  - 19 Long Term (9.4 miles)
- Each Short Term project will have a Project Development Sheet created











# Short Term HRN Project Sheets

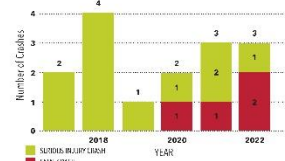
## PROJECT A SHORT TERM

**Alma School Road** (6th Avenue to Emerald Avenue) including **Pueblo Avenue** (Alma School Road to Standage)

Alma School Road (0.47 miles) has three lanes in each direction, a two-way left-turn lane in the center of the roadway, and painted bike lanes. Pueblo Avenue (0.23 miles) is unstriped, with sufficient width for one lane in each direction and additional pavement. Alma School Road has fronting residential and commercial properties and is supported by transit service. Pueblo Road has fronting houses. Within the project limits, there are two signalized intersections and two all-way stops.

### SEVERE CRASH SUMMARY

Crashes by Year and Injury Severity



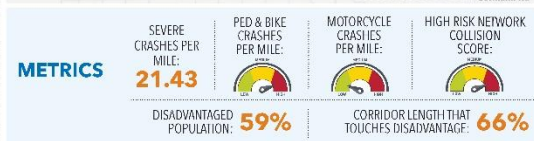
### COLLISION MANNER



PERIOD CRASH TOTAL	PED/BIKE CRASHES
15	7
TOTAL FATALITIES	TOTAL INJURIES
4	15



Travel Shed: 8, 1  
Council District: 3



### JUSTIFICATION

This project was selected for short term improvements because it has a HRN score above 9,000. Within the 0.7-mile project limits, over the last 6 years evaluated there have been 4 fatal crashes, 11 serious injury crashes, 10 pedestrian crashes, 7 bicycle crashes and 3 motorcycle crashes.

### RAISED MEDIANS

Existing Medians: 0 LF  
TMP Proposed Medians: 0 LF  
CSAP Proposed Medians: 2,490 LF

### APPLIED STRATEGIES

- Design for Safer Speeds (5, 8, 14)
- Enhance Crossing (7)
- Explore Technology
- Reduce Risky Movements (1, 2, 6)
- Separate Peds and Bike from Vehicles (15)
- Support Safer Vehicles

### ROW WIDTH

Alma School Road: 80' - 120'  
Pueblo Avenue: 80'

### SPEED LIMIT

Alma School Road: 40 mph  
Pueblo Avenue: 25 mph

### ESTIMATED CRASH REDUCTION

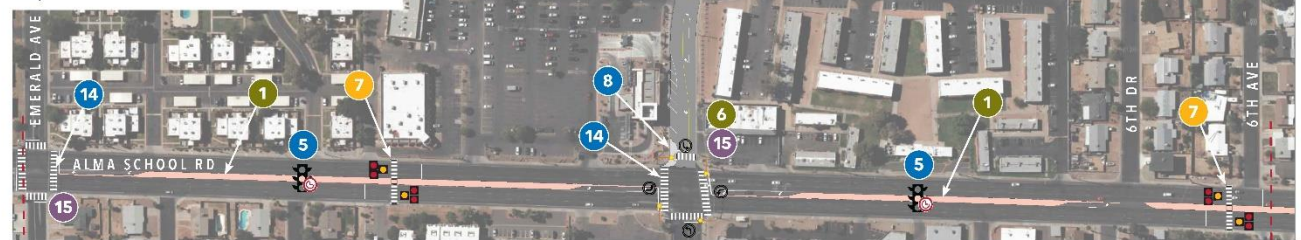
The estimated crash reduction for the top three applied strategies is:

- 60.8%, 1.52 KSI Crashes/Yr
- 1 55%, 0.55 KSI Crashes/Yr
- 7 43%, 0.14 KSI Crashes/Yr
- 6 99%, 0.83 KSI Crashes/Yr

- 1 Install raised median on Alma School Road to reduce left turn conflict points. Provide median breaks every 1/4-1/8 mile. Identify preferred location for median breaks and opportunities for driveway consolidation through access management plan.
- 2 Evaluate feasibility for a roundabout and install if appropriate to correct intersection geometry, slow vehicles, and improve all-way stop control.
- 5 Update signal timing to support vehicle progression at or below the posted speed limit.
- 6 Protect left turns at signalized intersections at identified approaches.\*
- 7 Install PHB crossing to support access to commercial and provide signalized crossing opportunity at appropriate spacing. Verify location proposed.
- 8 Construct curb bulb out at northwest corner of Alma School Road and Pueblo Ave for southbound approach to reduce crossing distance and slow vehicles.
- 14 Improve visibility of pedestrian crosswalks, providing ladder style pavement markings and stop bar.
- 15 Install pedestrian enhancements at traffic signals, such as leading pedestrian intervals (LPIs) and intersection lighting.

-- Project limits

\*Protected left turn feasibility has been evaluated through this study



DISCLAIMER: THE CONCEPT AS SHOWN WILL NEED TO BE FURTHER DEVELOPED FOLLOWING STANDARD PROJECT DEVELOPMENT PROCESSES, INCLUDING PUBLIC ENGAGEMENT ACTIVITIES.



PROPOSED PROJECT DEVELOPMENT SHEET  
PROJECT A  
Page 3 of XX



NOVEMBER 2024



PROPOSED PROJECT DEVELOPMENT SHEET  
PROJECT A  
Page 2 of XX





# PROJECT A

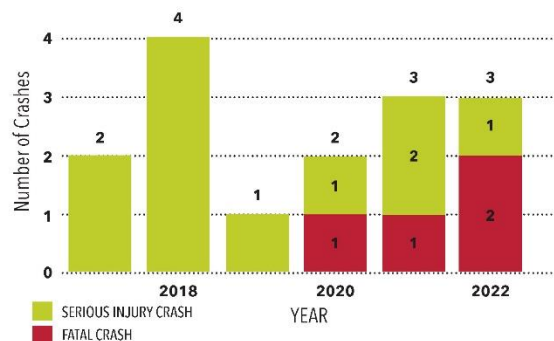
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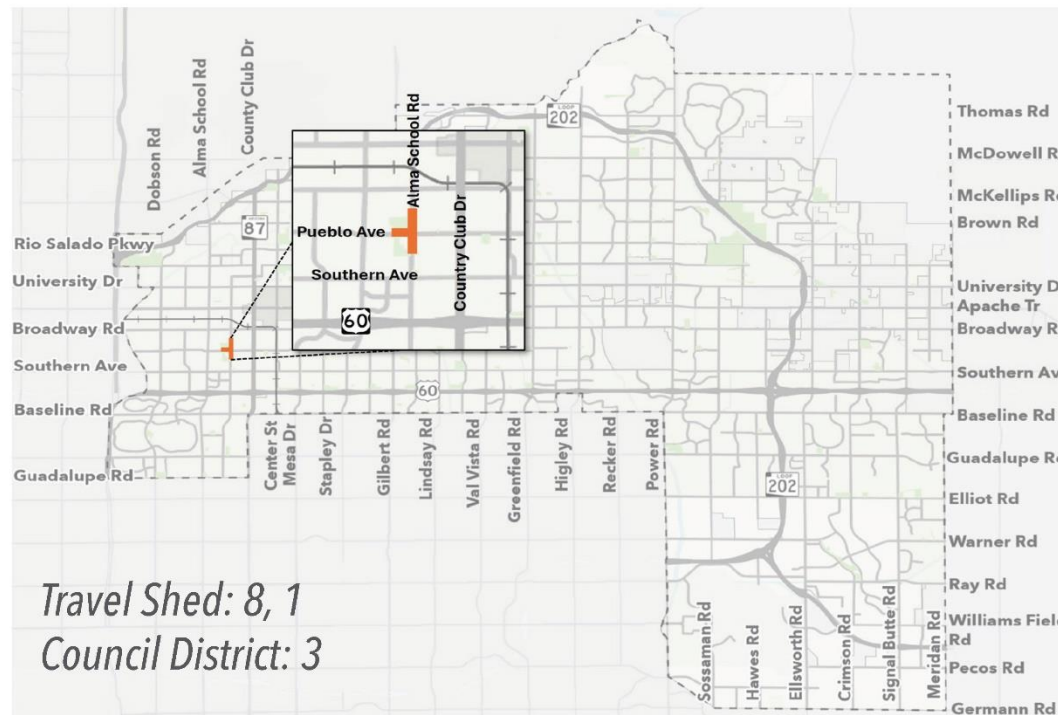
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### SEVERE CRASH SUMMARY

Crashes by Year and Injury Severity



COLLISION MANNER



### METRICS

SEVERE  
CRASHES PER  
MILE:

**21.43**

PED & BIKE  
CRASHES  
PER MILE:



MOTORCYCLE  
CRASHES  
PER MILE:



HIGH RISK NETWORK  
COLLISION  
SCORE:



DISADVANTAGED  
POPULATION:

**59%**

CORRIDOR LENGTH THAT  
TOUCHES DISADVANTAGE:

**66%**

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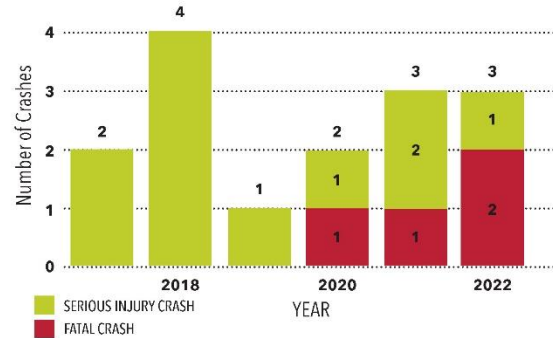
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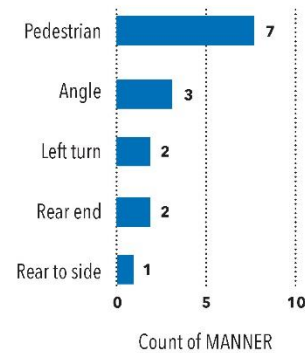


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## COLLISION MANNER



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## METRICS

21.43



DISADVANTAGED POPULATION: 59%

CORRIDOR LENGTH THAT TOUCHES DISADVANTAGE: 66%

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Enhance Crossing 7



Explore Technology



Reduce Risky Movements 1 2 6



Separate Peds and Bike from Vehicles 15



Support Safer Vehicles

## ESTIMATED CRASH REDUCTION

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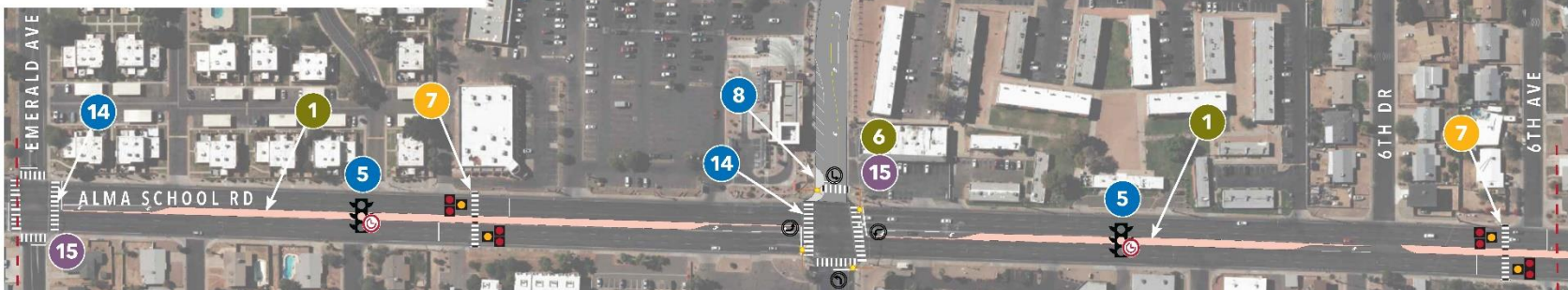
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## PLACEHOLDER PLANNING LEVEL COST ESTIMATE

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# Left-Turn Phasing Evaluation

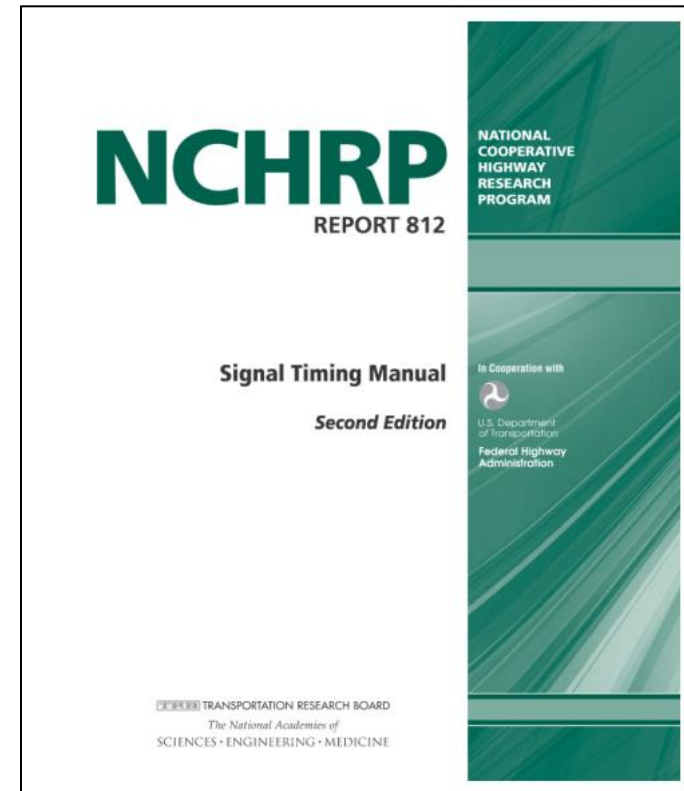
## Methodology

### Safe System Approach Principles

- Crash Severity
  - $\geq 2$  KSI left-turn crashes in 3-year period
- Time of Day and Lighting Conditions
  - Implementation beyond peak hours
- Pedestrian, Bicyclist, and Motorcyclist Involvement
- Driver Age
  - Greater injury severity



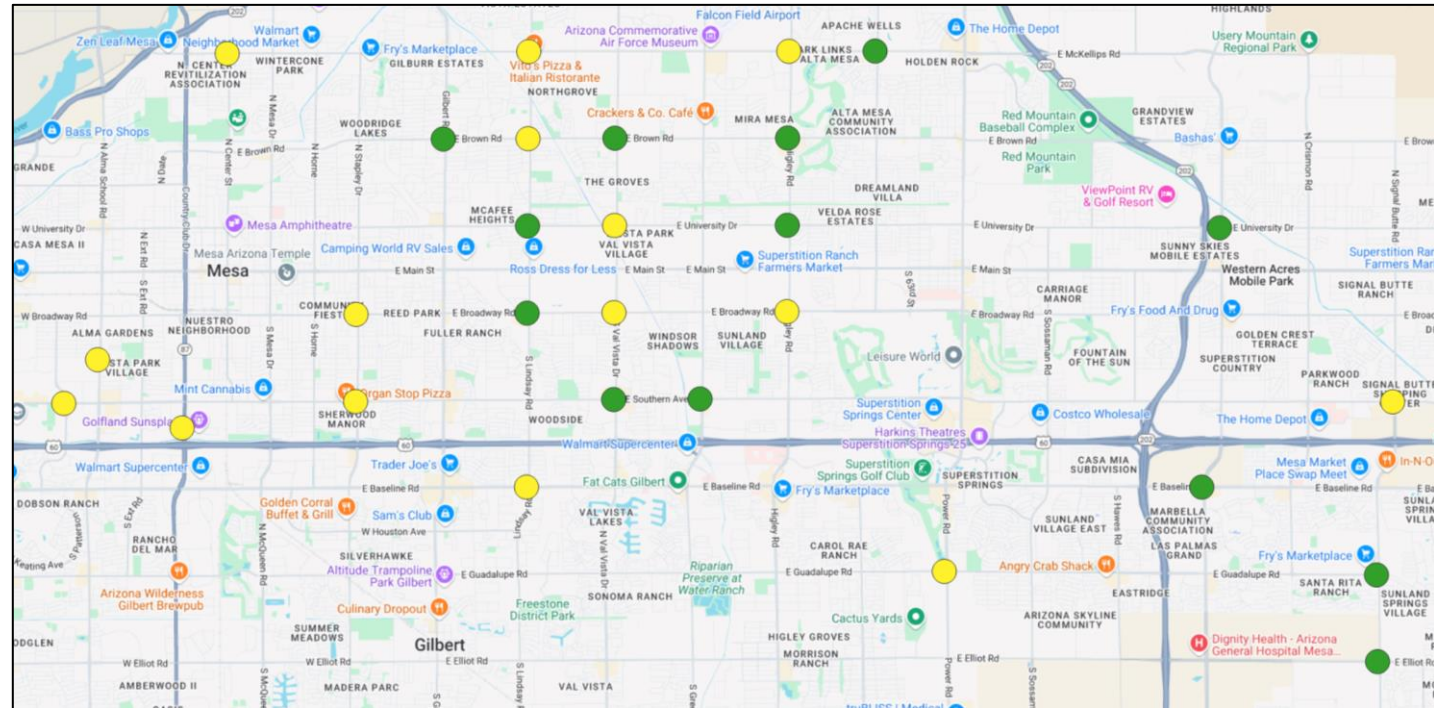
### NCHRP 812: Signal Timing Manual





# Left-Turn Phasing Evaluation

- Currently 61 of Mesa's 501 signals are fully protected
- 28 intersections in the City were selected for left-turn phasing evaluations
- 13 intersections are recommended for protected left turn phasing implementation
- These intersections account for 35 KSI crashes in the past 3 years



● = Evaluated intersection ● = Recommended protected left turn phasing intersection



04

Performance  
Measures and Data  
Trends





# Performance Monitoring

- “The City of Mesa aims to reduce fatalities and serious injuries caused by motor vehicle crashes by 30% by 2030”
- In 2022, motor vehicle crashes resulted in 248 fatalities and serious injuries
- How actions will be measured:

## Performance Metrics Symbol Key



**Programmatic  
Metric**



**Track Decrease**



**Track Increase**

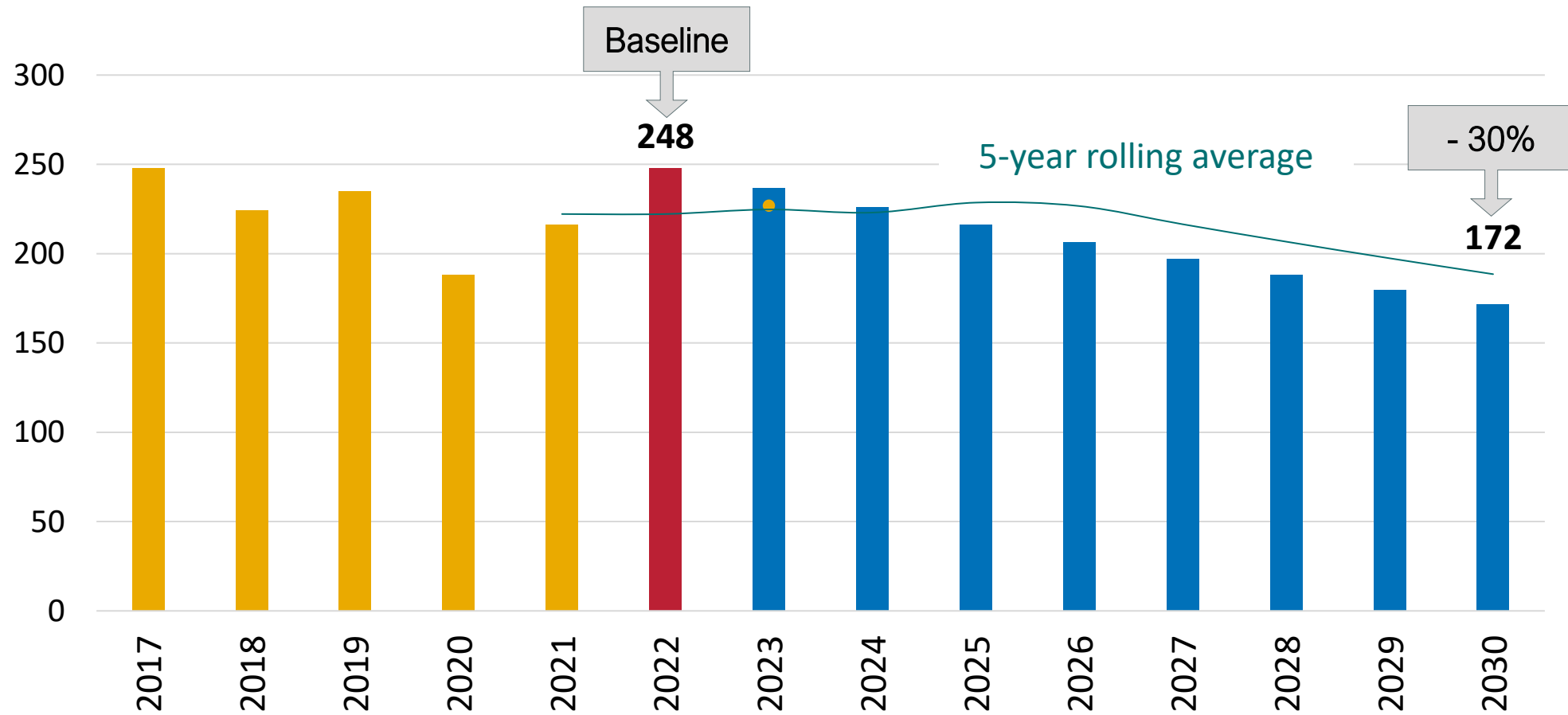


**Build or Install  
Infrastructure**



# Benchmarking

## Fatalities and Serious Injuries



*Estimated annual reduction of 10 fatalities & serious injuries per year*



05

Next Steps

# NEXT STEPS



IDENTIFY FOCUS  
AREAS AND  
STRATEGIES



DEVELOP AND  
PRIORITIZE  
PROJECTS  
Summer/Fall '24



PUBLIC  
ENGAGEMENT  
PHASE 2  
Fall '24



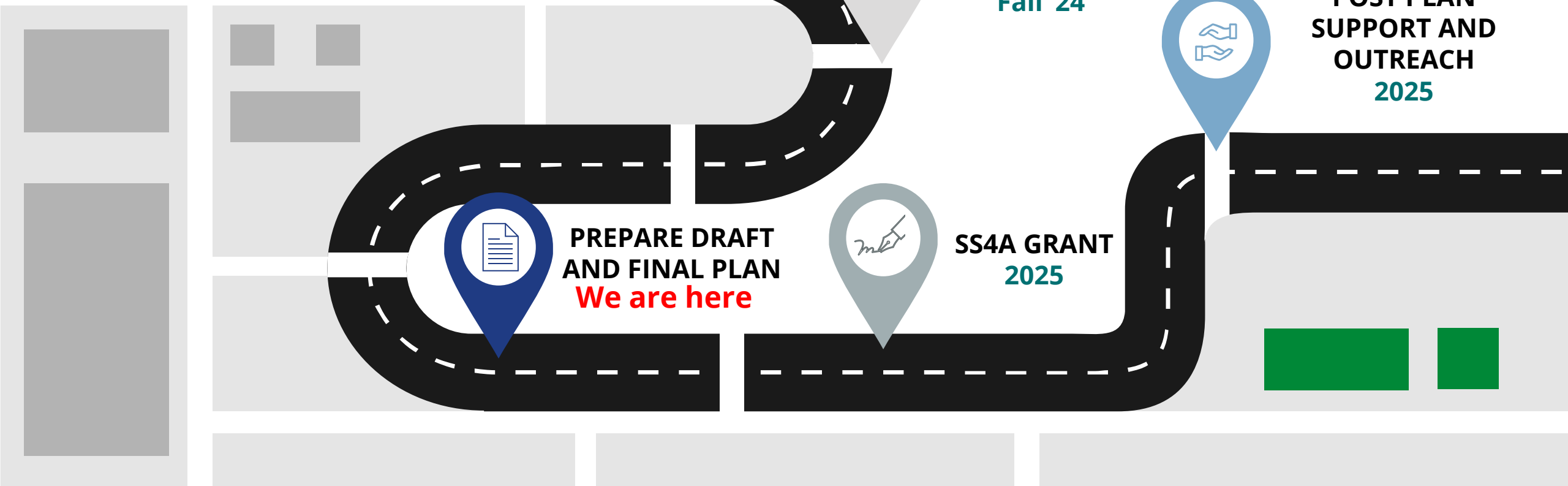
POST PLAN  
SUPPORT AND  
OUTREACH  
2025



PREPARE DRAFT  
AND FINAL PLAN  
**We are here**



SS4A GRANT  
2025







06<sup>Q & A</sup>

