Superior Vision Zero Action Plan
Phase 2 Engagement Summary

March 2025

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Introduction

Recognizing the importance of implementing a regional approach to road safety, Boulder County, Lafayette, and Superior (the Partners) joined forces to apply for 2023 Safe Streets and Roads for All (SS4A) grant funding. The Partners were awarded the SS4A grant funding which enables each Partner to develop a Vision Zero Action Plan (VZAP) of their own. The VZAP will be a detailed analysis of traffic crashes and risk factors in the county or jurisdiction, and provide specific recommendations to comprehensively improve transportation safety in the coming years. The Superior Vision Zero Action Plan is being developed using community engagement to supplement the data-driven safety analysis completed for the project. Two phases of community outreach were planned in the form of public meetings and pop-up events:

- Phase 1 served as a listening session to learn from the public about traffic safety attitudes and location-specific feedback; and
- Phase 2 informed the public by presenting draft content from the Vision Zero Action Plan, including high-priority recommendations.

In winter 2024/2025, the project team implemented Phase 2 of outreach. During this phase, the community was asked to review high-level results from the safety analysis and provide feedback on proposed countermeasures. The community and stakeholder engagement efforts included a blend of in-person, virtual, and digital engagement strategies, including informational online videos, an online survey, and participation at the Superior Winter Festival. The community feedback collected in Phase 2 will be used to prioritize Vision Zero projects and specific actions Superior can implement to improve traffic safety.

Project Outreach Set-up & Promotion Information

Understanding that outreach and communication with the community was a top priority, the project team created a variety of content to promote and encourage participation in the engagement efforts for this project. Diversifying the outreach platforms allowed Superior to reach a wider array of community members for more comprehensive engagement.

Website

During Phase 1, the project team worked closely with the Partners to develop a Vision Zero Action Plan project website hosted on Boulder County's webpage. The website contains static information including project overview, project schedule, to-date safety progress in each of the jurisdictions, an opportunity to sign up for project updates, FAQs, and program contact information. It also includes information that is updated regularly including public engagement opportunities, upcoming public meetings, and past public meeting recordings and presentations. The Partners promoted the project website with their constituents, and the project team included the website address and QR code on all promotional and engagement materials.

The website can be accessed by QR code, by the abbreviated weblink, or by the full weblink:

QR Code:

Abbreviated weblink: https://boco.org/visionzeroactionplan

Full weblink: https://bouldercounty.gov/transportation/multimodal/vision-zero-action-plan/

Handouts

The project team created small handouts in both English and Spanish to promote public involvement in Phase 2 of outreach for the Vision Zero Action Plan. The handout encouraged community members to take the transportation survey and provided both a QR code and an abbreviated weblink to access the project website. The business cards were distributed at the project pop-up event to encourage community members to provide more detailed feedback.

Social Media

The project team assembled a social media calendar to promote attendance at the pop-up event and encourage online survey completion. The project team worked with the Superior communications teams to push content out through their social media channels. Each social media calendar included text content, images, and outlined the platforms for distribution (Twitter [X], Facebook, Instagram, Nextdoor, LinkedIn) for each post.

Newsletter

The project team drafted a project blurb to be distributed to residents explaining the Vision Zero Action Plan project and how residents can get involved and provide feedback. The newsletter content was distributed within the Superior Sentinel in February 2025.

Stakeholder Engagement

A Steering Committee was formed to help foster and shape the development of the Vision Zero Action Plan. The Steering Committee consisted of members from Boulder County, Lafayette, Superior, Nederland, Colorado Department of Transportation (CDOT), and advocacy agencies. Throughout the project duration, the team facilitated meetings with the Steering Committee, and targeted meetings as needed. The Stakeholder Committee convened once between Phase 1 and Phase 2 engagement efforts (Steering Committee Meeting #2), and were provided a memorandum with updates on the project status as well as an encouragement to take the online survey and share with their networks during Phase 2.

Steering Committee Meeting #2

On October 10, 2024, the project team hosted a virtual meeting with members of the Steering Committee including representatives from Boulder County, Lafayette, Superior, Nederland, Colorado Department of Transportation (CDOT), and advocacy agencies. The team reviewed information about the project scope, background, and schedule, then provided an overview of input received during Phase 1 of community outreach as well as the results of the safety analysis. Steering Committee members were asked to react to the results of the crash analysis, High-Injury Networks, and High-Risk Networks. The following discussion revolved around potential inputs focusing on roadways being used for recreation versus commuting/non-recreation. Finally, the group discussed potential outreach events and ways to support Phase 2 of engagement. The Steering Committee Meeting presentation and meeting notes are available in Appendix A.

Steering Committee December Update

In December 2024, the project team developed graphic updates for each agency that were shared with the Steering Committee members. The updates focused on a review of Phase 1 community feedback, the safety analysis findings, the High-Injury and High-Risk Networks, and an overview of the recommendation development process including example recommended actions. The Steering Committee Update specific to Superior can be found in Appendix A.

Community Engagement

Community engagement strategies included an in-person event, informational online videos, and an online survey. Community engagement materials can be found in Appendix B.

Pop-Up Event – Superior Winter Festival

The Superior pop-up event occurred on December 14th, 2024 from 1PM-5PM at the Superior Winter Festival. At the event, the project team set up boards with project background information, a summary of crash analysis statistics in Superior, and the High-Injury Network (HIN) and High-Risk Network (HRN). The project team also set up an activity that prompted the public to place stickers to indicate their level of support for the preliminary recommended countermeasures to address the top crash types in Superior. Figure 1 displays photos from the pop-up event. Overall, participants were supportive of the six countermeasures, with the exception of red light cameras and speed cameras, which sparked some concerns about privacy. There were also some concerns about the comfort of raised crossings when riding a bicycle. In addition to the sticker exercise, the project team facilitated an activity to understand priorities for where to implement safety improvements first. Participants were given 7 tokens and asked to distribute them among 4 buckets based on their top priorities. The top priority for participants was to improve walking and biking ability, followed by locations with known crash history.

Figure 1. Superior Winter Festival Pop-up Event

Informational Videos

Informational videos were posted to the project website in early 2025 to provide community members with an update on project process, present the results of the safety analysis, and describe proposed safety solutions. An introductory video provided an overview of the project, what Vision Zero is, and how the Partners are collaboratively developing their individual Vision Zero Action Plans. Next, a Superior-specific video detailed insights from the safety analysis process, including the High-Injury Network and High-Risk Network, as well as describing some of the proposed safety solutions and how they address the most common crash types in Superior. Finally, the video provided an overview of the Vision Zero Action Plan next steps, such as project prioritization, and prompted viewers to participate in the online survey.

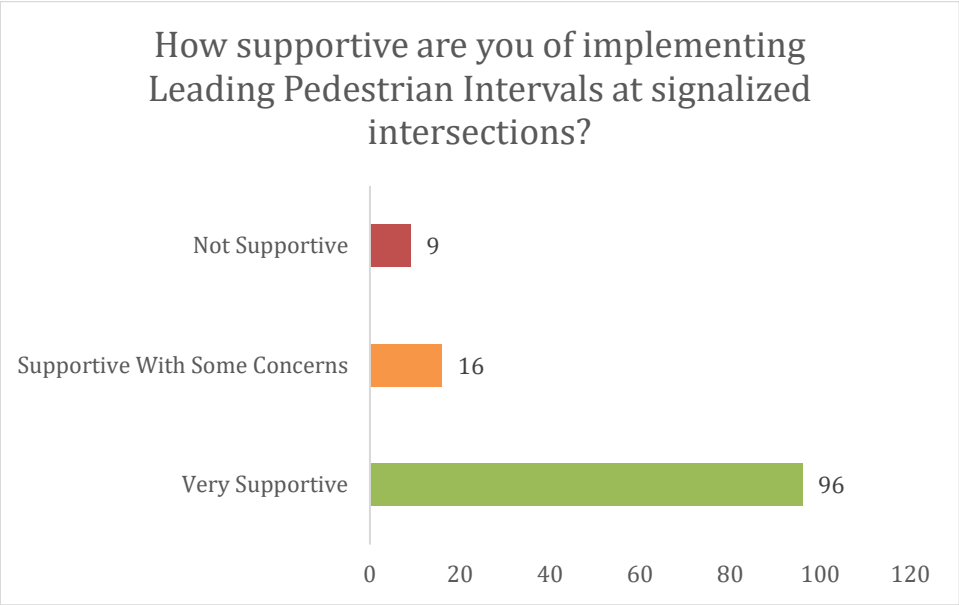
Online Survey

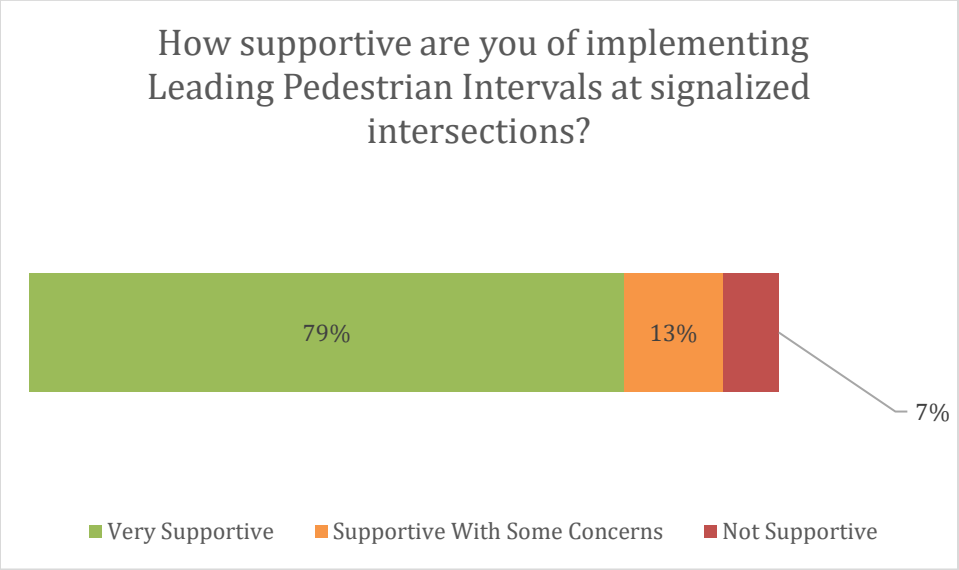
An online survey was shared with the public on SurveyMonkey and was open from December 14, 2024 through February 17, 2025. The survey presented high-level results from the safety analysis and proposed safety solutions related to the top crash types in Superior. The survey also gathered feedback about potential prioritization factors and provided the opportunity to provide additional open-ended comments. The full online survey can be viewed in **Appendix C**. There were 89 online survey results, which were supplemented by the results of the activities at the Superior Winter Festival pop-up to inform the following results.

Proposed Safety Solutions

For each of the proposed safety solutions, participants indicated their level of support for implementation within Superior and had the opportunity to share any concerns about the safety solution.

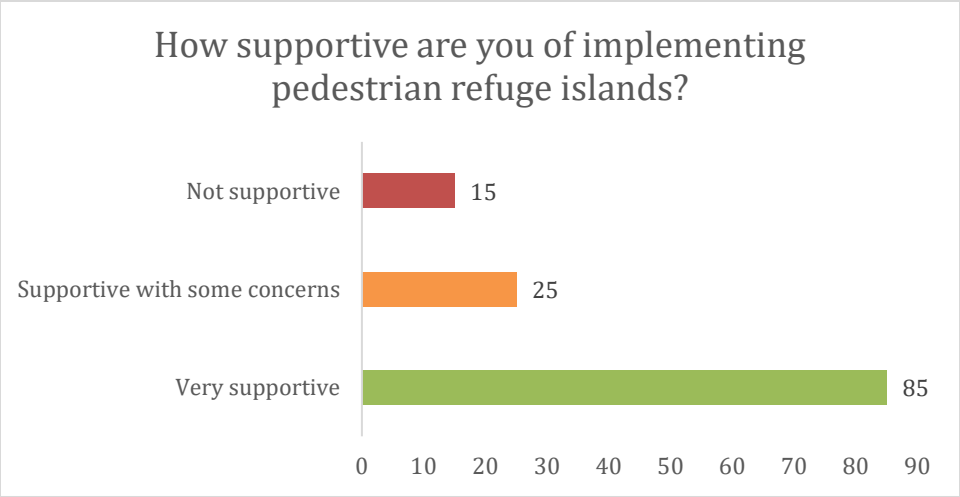
Leading Pedestrian Interval

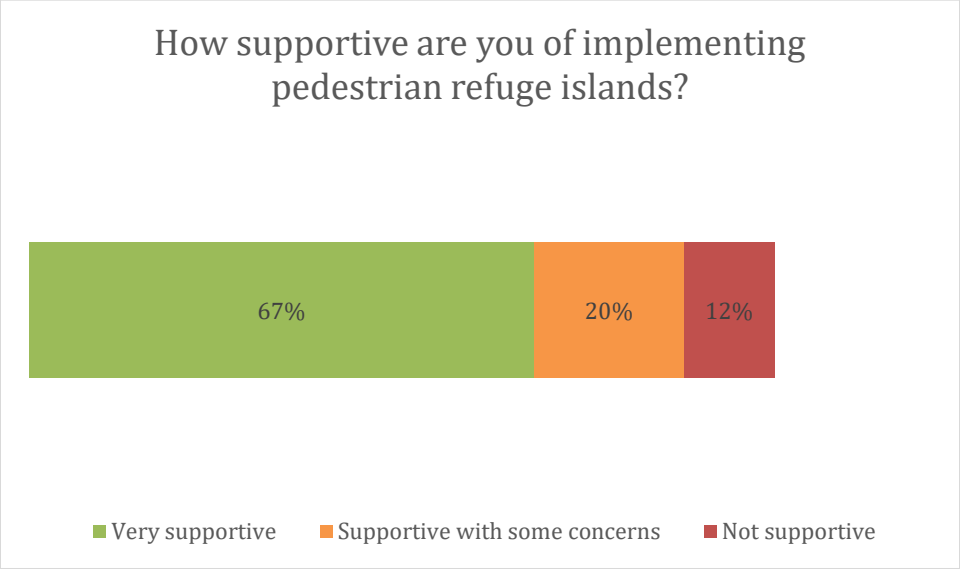




Of the 22 open-ended responses, many (45%) focused on concerns about effectiveness of Leading Pedestrian Intervals. Many of these concerns were related to not understanding how leading pedestrian intervals work, and concerns regarding their efficacy at protecting pedestrians from people running red lights or turning right on red. Responses also highlighted only installing leading pedestrian intervals at high-volume signalized intersections, such as McCaslin Rd & Marshall Rd intersection, and signalized intersections along Rock Creek Parkway. Based on the concerns shared regarding the effectiveness of leading pedestrian intervals, implementation of this countermeasure should be paired with enforcement of red-light running and focused on intersections with high volumes of both vehicles and pedestrians.

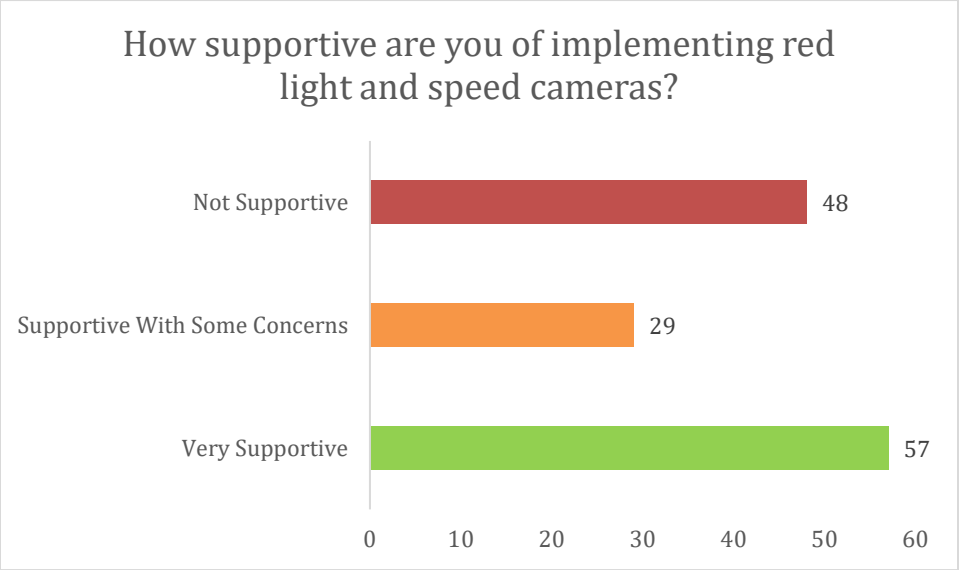
Pedestrian Refuge Islands

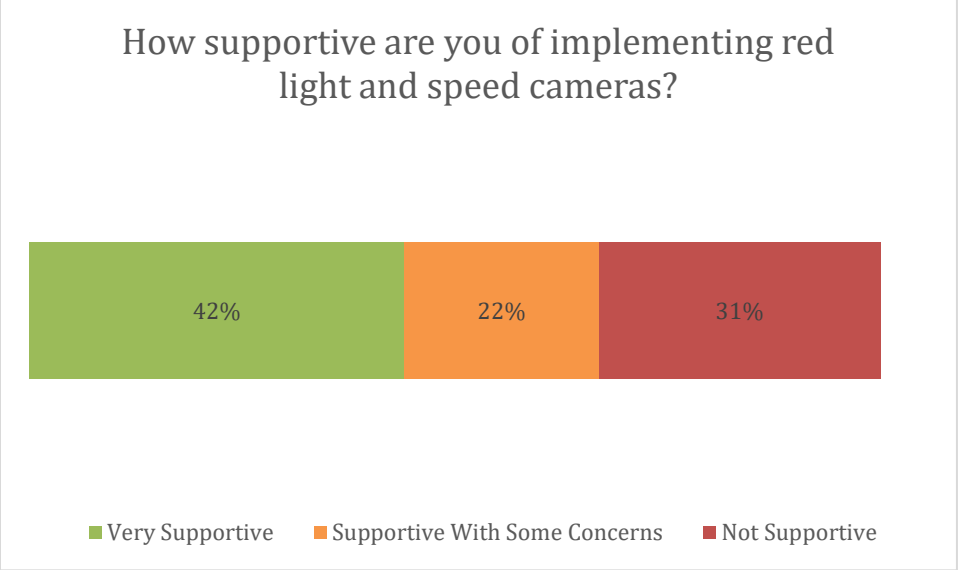




Of the 26 open-ended responses, common themes included concerns about the high cost of installation (19%), vehicles hitting the islands (19%), a desire to implement refuge islands only in areas of need (19%), and how islands may negatively impact pedestrian and cyclist safety (19%). Based on the concerns shared regarding effectiveness of pedestrian islands, implementation of this countermeasure should focus on strategic placement to minimize costs and the occurrence of vehicle collisions with the islands, as well as community education on how pedestrian refuge islands work and how to use them.

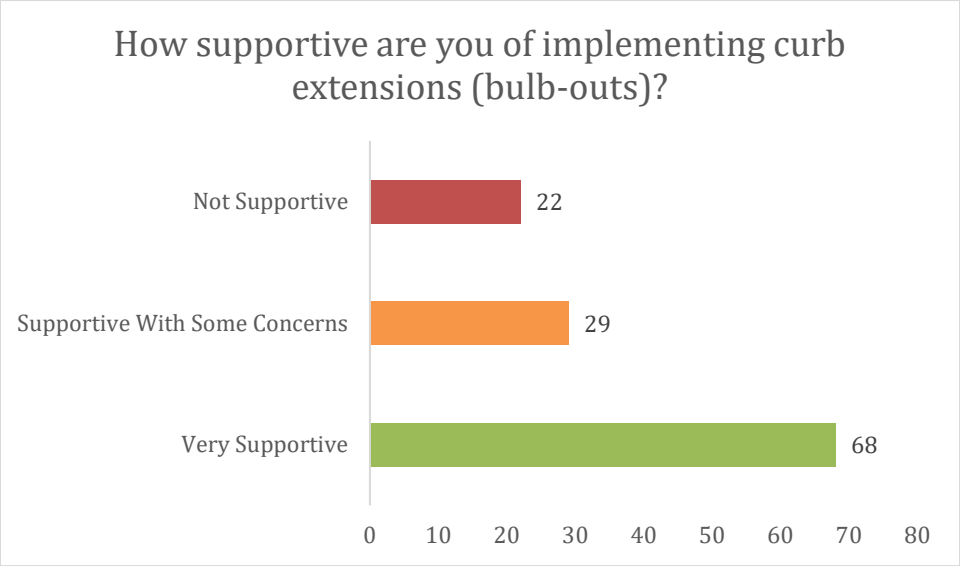
Red Light and Speed Cameras

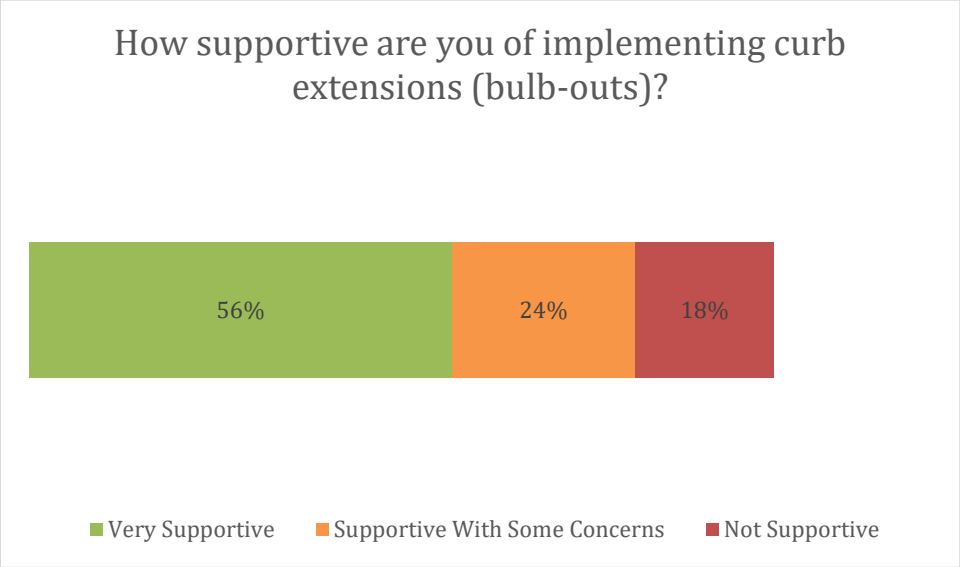




Of the 30 open-ended responses, many (30%) focused on concerns about the effectiveness of employing red light cameras. Many of these concerns related to anxious drivers resulting in more crashes, additional administrative work, and machine error. Additional concerns noted in the open-ended responses included privacy (13%) and a desire to only implement red light cameras in areas of need (7%). Based on the concerns shared regarding effectiveness of automated red light and speed cameras by the community, implementation of this countermeasure will need to focus on areas with high concentrations of speeding or red-light running, and additional engagement efforts should focus on education addressing privacy and functionality concerns.

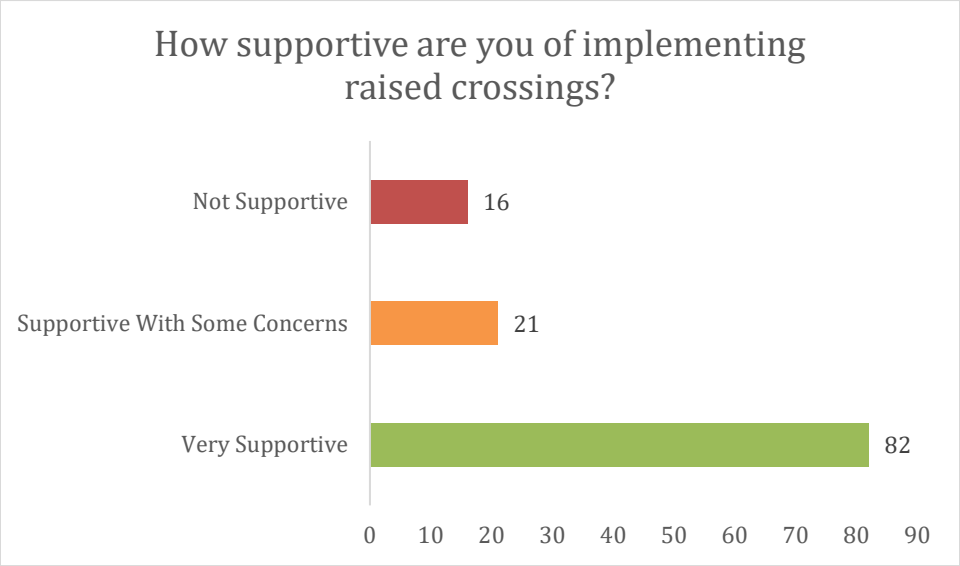
Curb Extensions (Bulb-Outs)

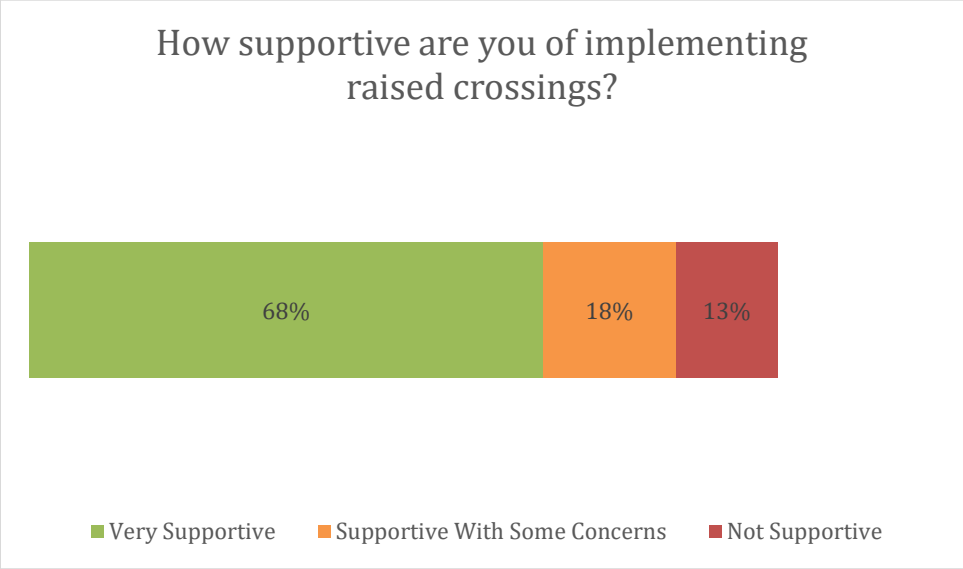




Of the 28 open-ended responses, a quarter (25%) focused on concerns about the cost of implementing curb extensions. An additional quarter (25%) of responses were related to concerns about lane changes. Many of these cited narrowed lanes, decreased number of lanes, and obstacles to driving as major concerns. Additional concerns noted in the open-ended responses included negative impacts on pedestrian and cyclist safety (14%), increased crashes (11%), traffic concerns (11%), and the desire for implementation of these measures only in areas of need (7%). Based on the concerns shared regarding costs and impacts to drivers by the community, implementation of this countermeasure should focus on maintaining existing lane configurations whenever possible while prioritizing cost effective measures that ensure safety for the community.

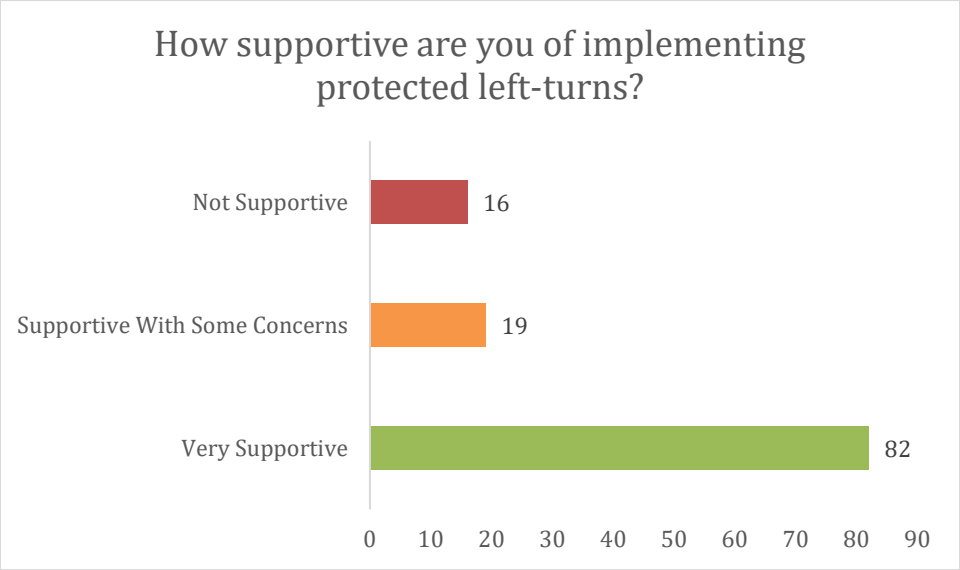
Raised Crossings

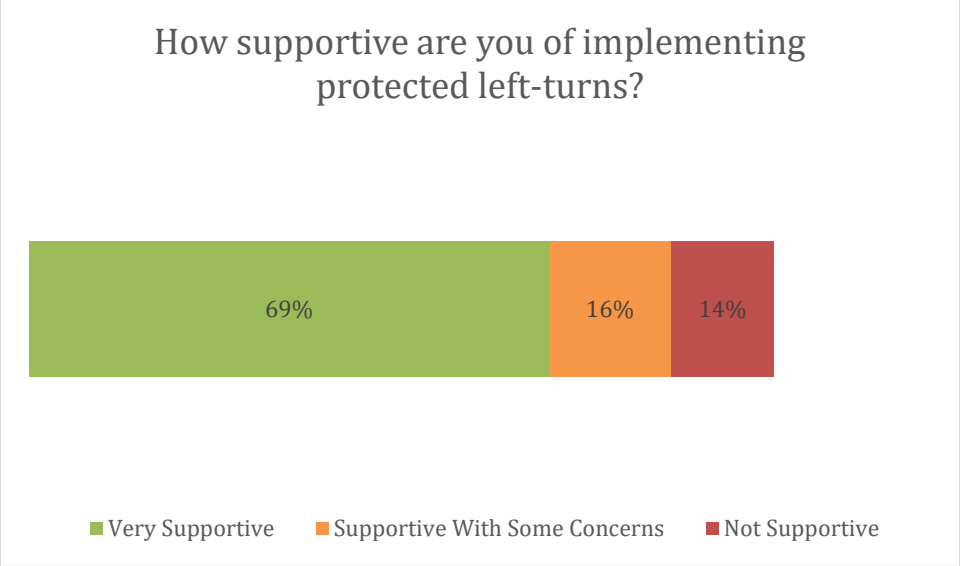




Of the 20 open-ended responses, the majority (30%) focused on concerns about implementing raised crossings only in areas of need, particularly school zones and neighborhoods. Additional concerns included visibility issues and the potential for damage to vehicles (20%). Based on the concerns shared regarding raised crossings by the community, implementation of this countermeasure should focus on areas with high concentrations of pedestrians such as school zones and neighborhoods, and prioritize visibility to reduce damage to vehicles and keep pedestrians safe.

Protected Left Turns

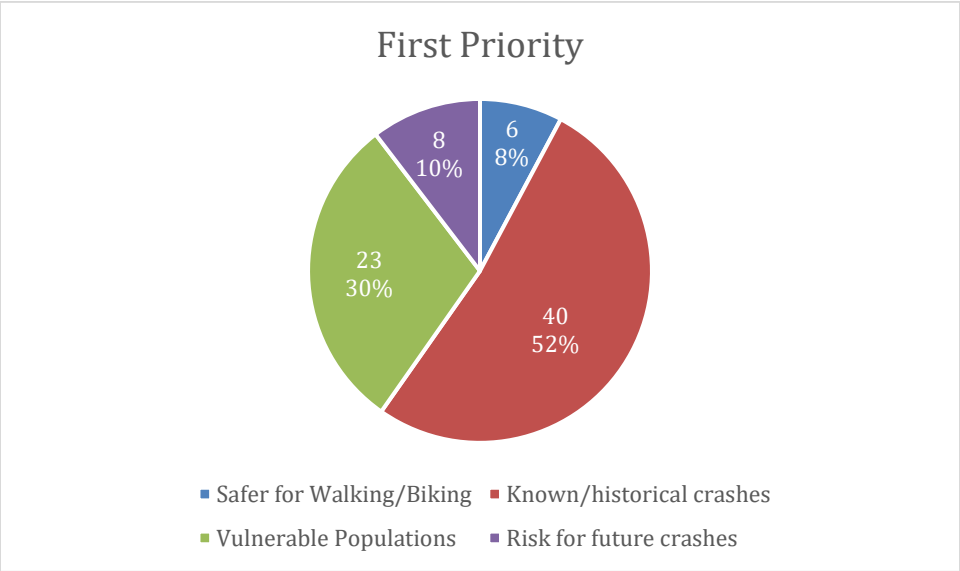




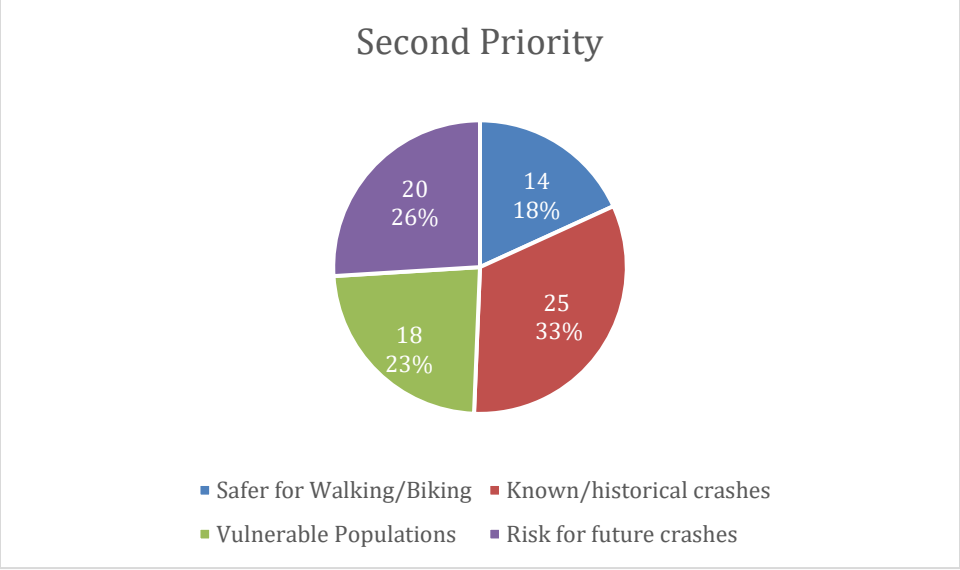
Of the 20 open-ended responses, the majority (25%) of responses focused on concerns about only implementing protected left-hand turns in areas of need. Many of these concerns are related to peak traffic hours, high-risk intersections, and areas of high pedestrian activity. Additional concerns noted in the open-ended responses included how protected left-turns may impact traffic patterns and flow (15%). Based on concerns regarding the implementation of protected left-turns shared by the community, implementation of this countermeasure should focus on areas with high concentrations of vehicular and pedestrian traffic especially during peak rush hours, while ensuring disturbances to traffic patterns are minimized.

Project Prioritization

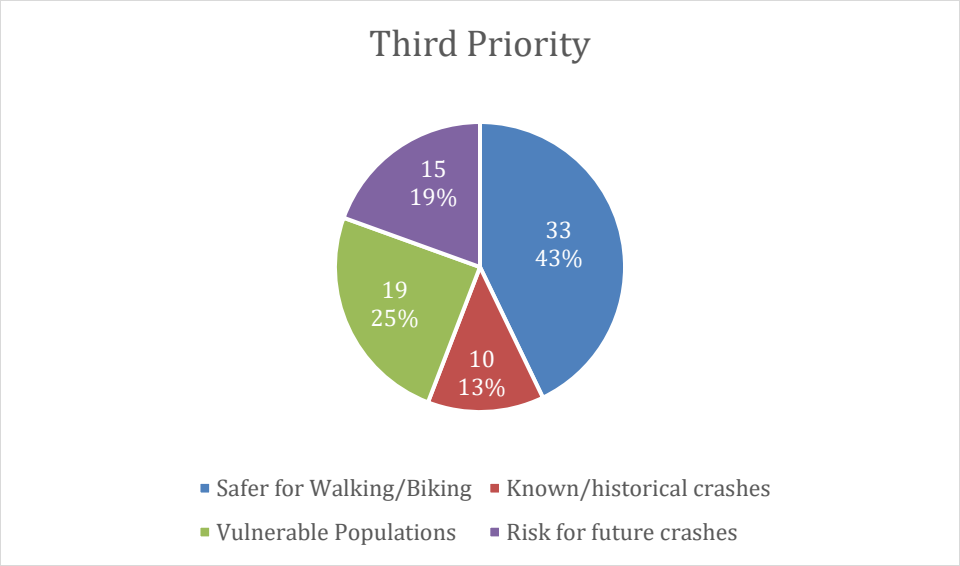
To inform prioritization of proposed projects, survey participants were asked to rank potential prioritization factors from highest to lowest priority.



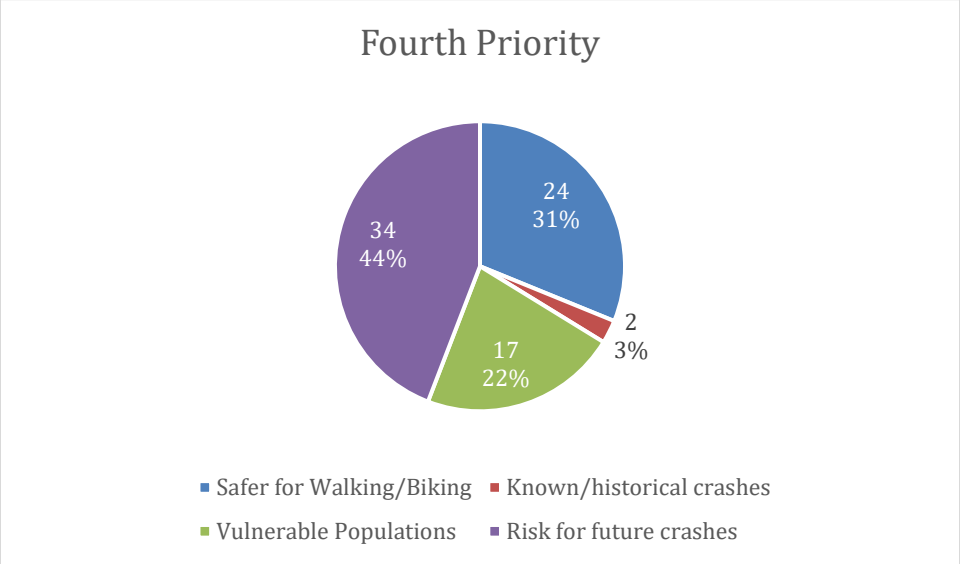
Most responses (52%) place areas of known/ historical crashes as their highest priority, while vulnerable populations were another significant factor that participants placed as their highest priority (30%). The following lower priorities were risk for future crashes (10% and safer walking and biking infrastructure (8%).



Responses indicated second priority with nearly equal proportions: known/historic crashes (33%), risk of future crashes (26%), vulnerable populations (23%), and safer walking and biking (18%)

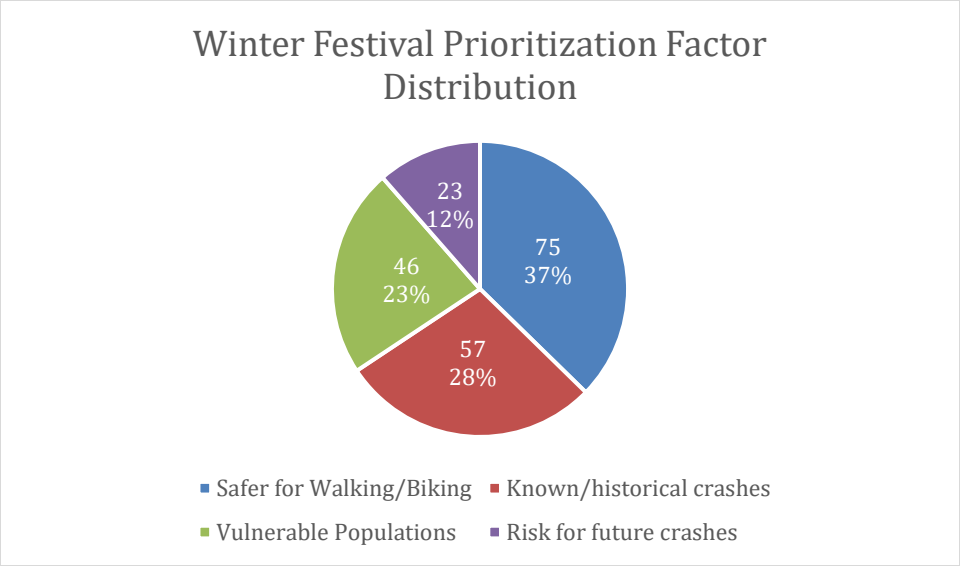


Most respondents (43%) identified making spaces safer for walking and biking was their third priority. The remaining respondents identified vulnerable populations (25%), the risk of future crashes (19%), and sites of known/ historical crashes (13%) as other lower priorities.



When identifying their lowest priority, most responses identified the risk of future crashes (44%) followed by making spaces safer for walking and biking (31%), vulnerable populations (22%), and known/ historical crashes (3%).

At the in-person Superior Winter Festival pop-up, participants were asked a similar question as the survey respondents. Participants were given 7 tokens and asked to distribute them among the four potential prioritization factors based on where they would like to see projects focused.



In person responses placed making spaces safer for walking and biking as their highest priority (37%) followed by known/ historical crash sites (28%) and vulnerable populations (23%). Responses placed the risk of future crashes as their lowest priority (12%).

Open-Ended Responses

Finally, participants were invited to share any additional thoughts on safety countermeasures or prioritization. In general, responses centered around a desire to ensure that countermeasures are not implemented needlessly and that cost is taken into account when considering the type and location of safety improvements.

Next Steps

Phase 2 outreach for the Superior Vision Zero Action Plan project solicited feedback from project stakeholders as well as over 200 in-person and virtual comments and survey responses from people who live, work, and travel through Superior. This feedback is invaluable for understanding support and prioritization of projects to ensure that solutions eliminate fatal and serious crashes in Superior. The project team will use the Phase 2 outreach results to refine strategies and actions developed within the Vision Zero Action Plan, which will be available for public review in spring 2025.

Appendices

Appendix A: Steering Committee Meeting Materials

Boulder County, Lafayette, and Superior

VISION ZERO ACTION PLANS

Steering Committee Meeting # 2

October 30, 2024

Introductions

- Name
- Organization (if applicable)
- Where do you live?





Goals of Meeting

1. **Review Project Background & Schedule**
2. **Discuss Where We've Been**
   - Phase 1 Community Outreach
   - Safety Analysis
3. **Discuss Where We're Going**
   - Working Towards the Action Plan
   - Next Steps





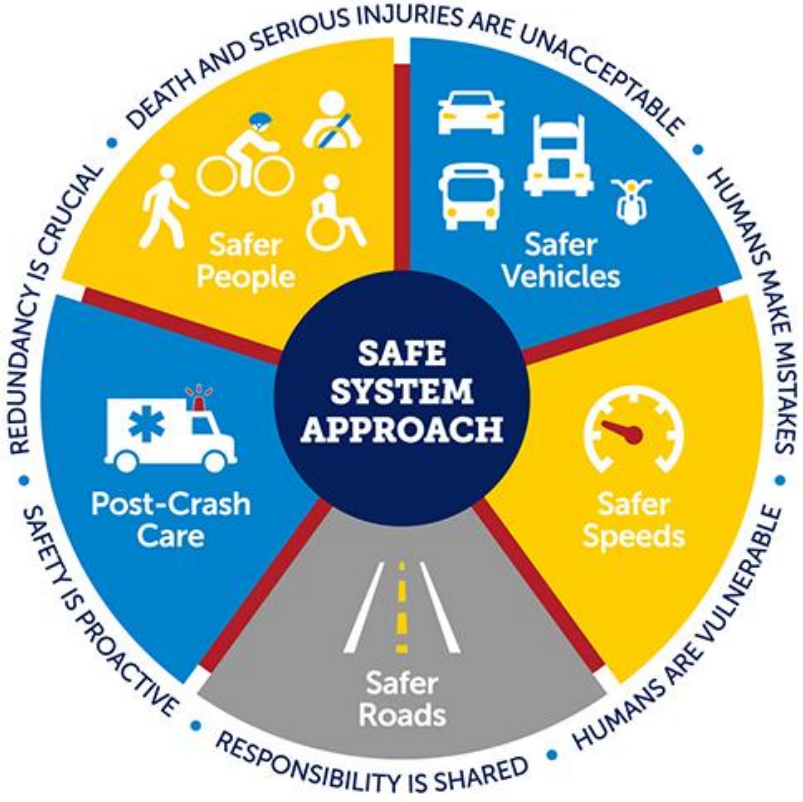
Project Background

Vision Zero & Safe System Approach

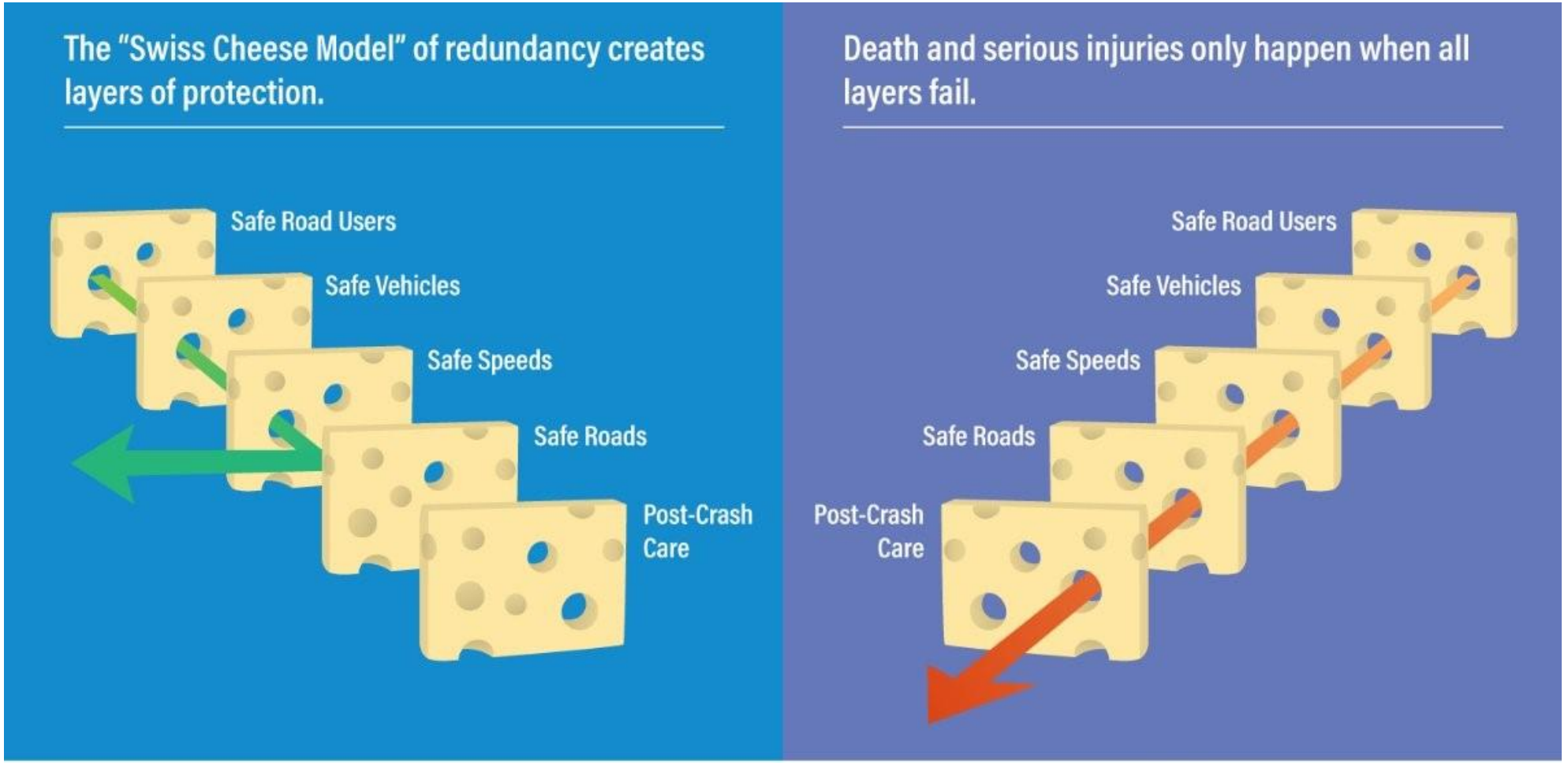
Goal: Eliminate all traffic fatalities and serious injury crashes

TRADITIONAL APPROACH		VISION ZERO
Traffic deaths are **INEVITABLE**		Traffic deaths are **PREVENTABLE**
PERFECT human behaviour	VS	Integrate **HUMAN FAILING** in approach
Prevent **COLLISIONS**		Prevent **FATAL AND SEVERE CRASHES**
INDIVIDUAL responsibility		**SYSTEMS** approach
Saving lives is **EXPENSIVE**		Saving lives is **NOT EXPENSIVE**

Source: Vision Zero Network



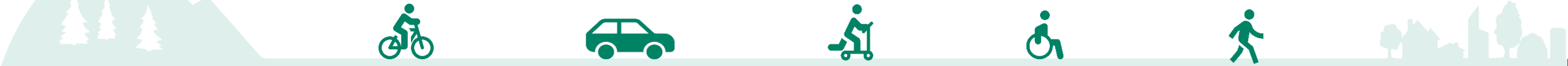
Vision Zero & Safe System Approach



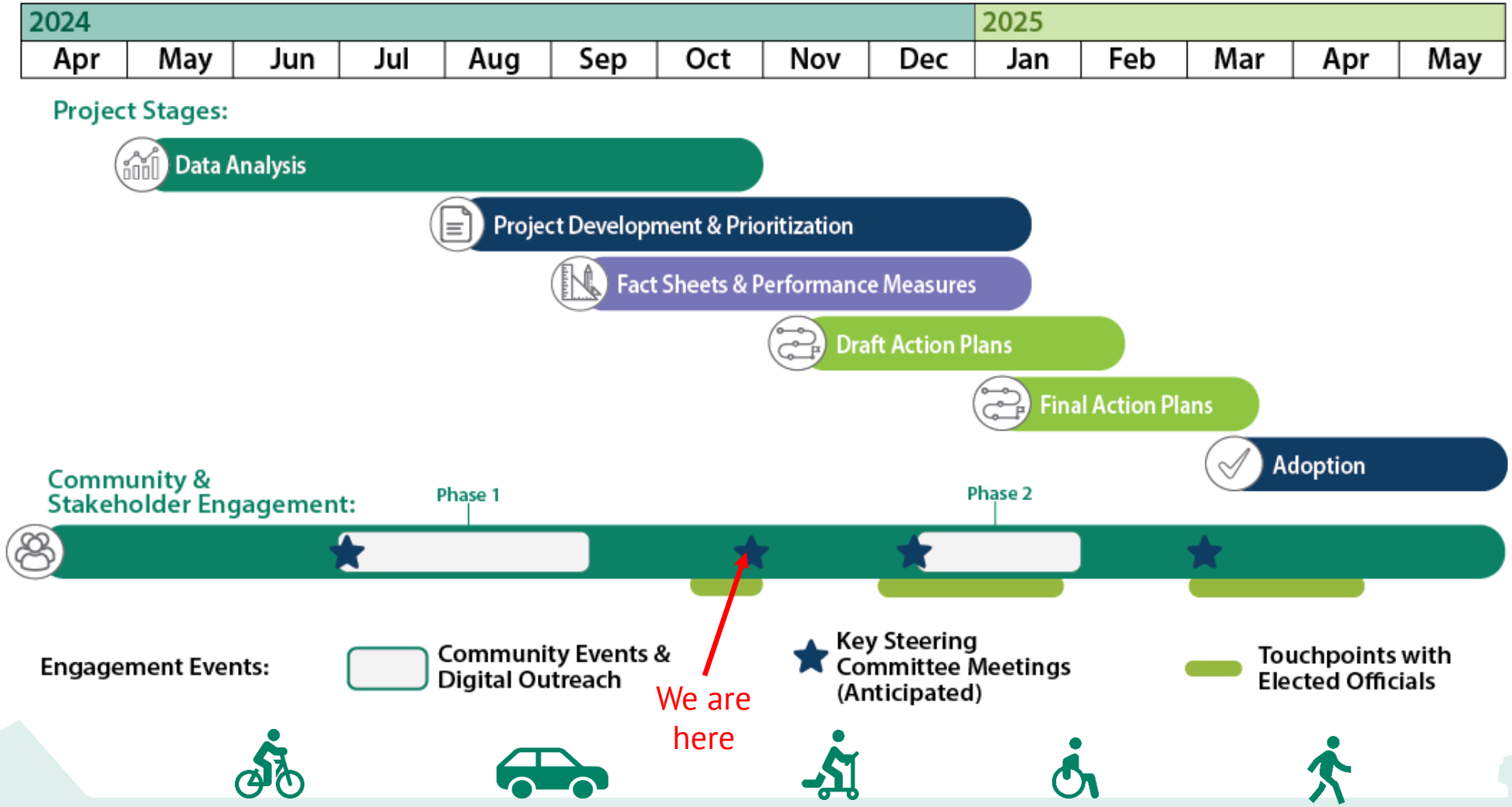
The Safe System Approach

Action Plan Development

- Deliver three standalone Vision Zero Action Plans:
  1. **Boulder County** – includes unincorporated, State Highways, Jamestown, Nederland, and Ward
  2. **City of Lafayette**
  3. **Town of Superior**
- Create list of specific actions, noting responsibility and potential funding sources for implementation.

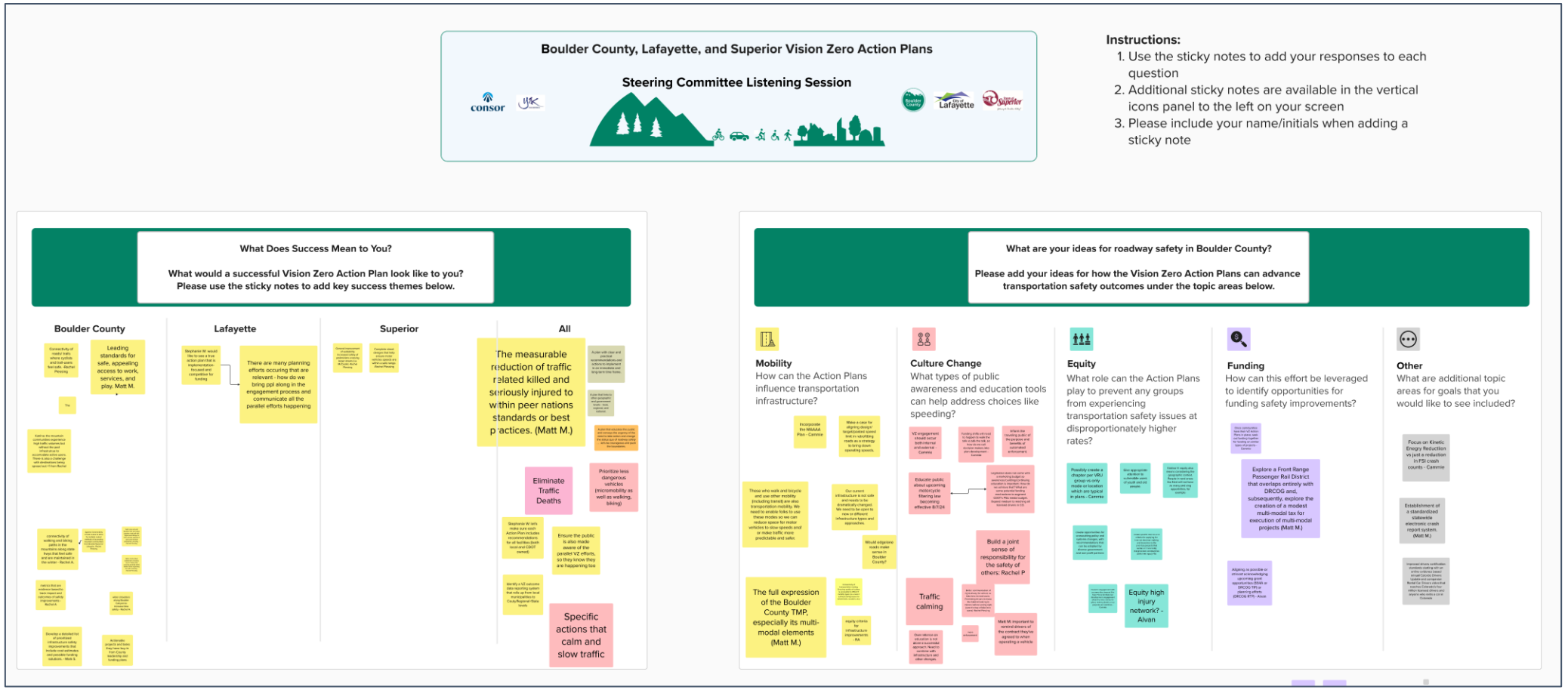


Schedule


2024
2025
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Project Stages:
Data Analysis
Project Development & Prioritization
Fact Sheets & Performance Measures
Draft Action Plans
Final Action Plans
Adoption
Community & Stakeholder Engagement:
Phase 1
Phase 2
We are here
Engagement Events:
Community Events & Digital Outreach
Key Steering Committee Meetings (Anticipated)
Touchpoints with Elected Officials

What We Covered at the June Meeting

- Project Background
- Promotion of Phase 1 Outreach
- Listening Session



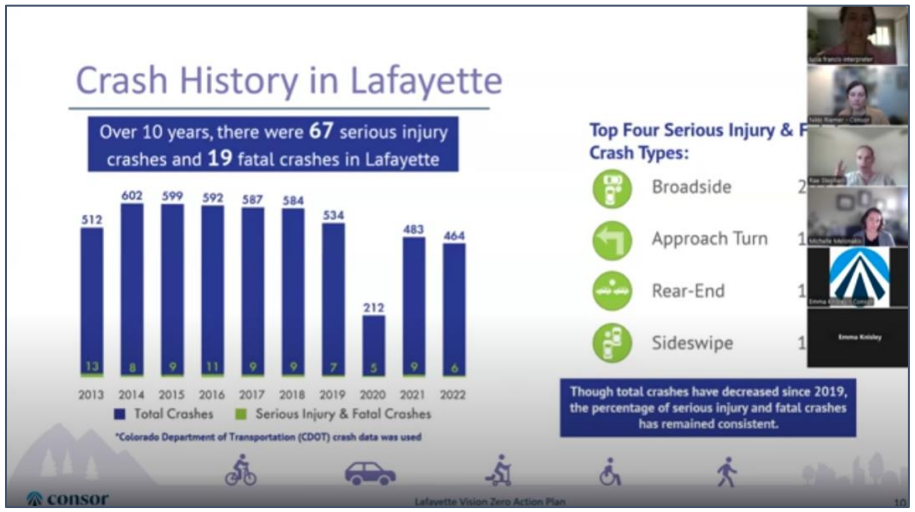
Where We've Been: Phase 1 Community Outreach

How We Collected Input for Each Partner

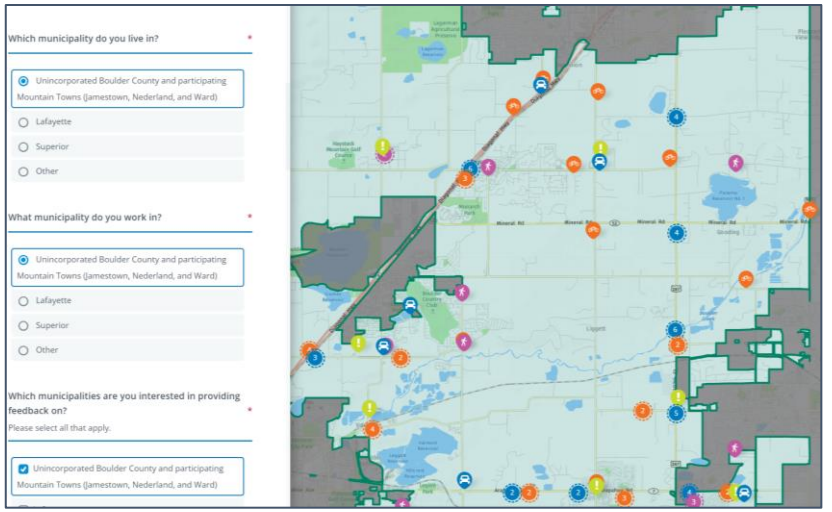
July and August 2024

In-person Pop-up Events

Virtual Public Meetings



Online Input Map & Survey



Summary of What We Heard

Online Survey Responses

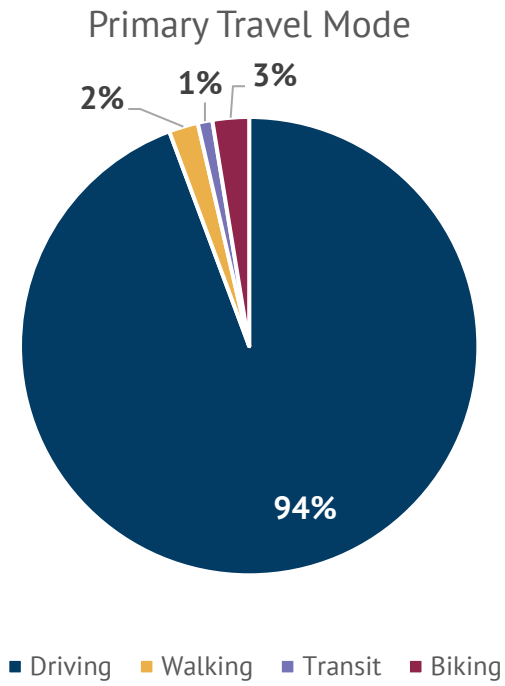
Boulder County	Lafayette	Superior
196 survey responses 309 map pins	378 survey responses 463 map pins	78 survey responses 83 map pins





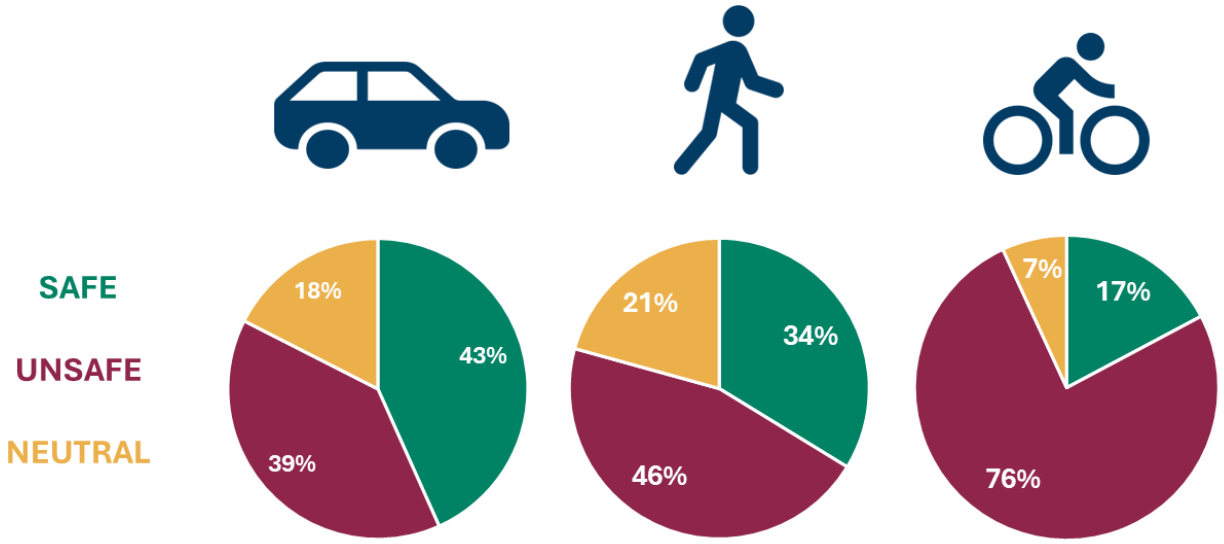
What We Heard: Boulder County & Mountain Towns

- 196 survey responses
- Majority (62%) of survey respondents live in Unincorporated Boulder County and Mountain Towns



What We Heard: Boulder County

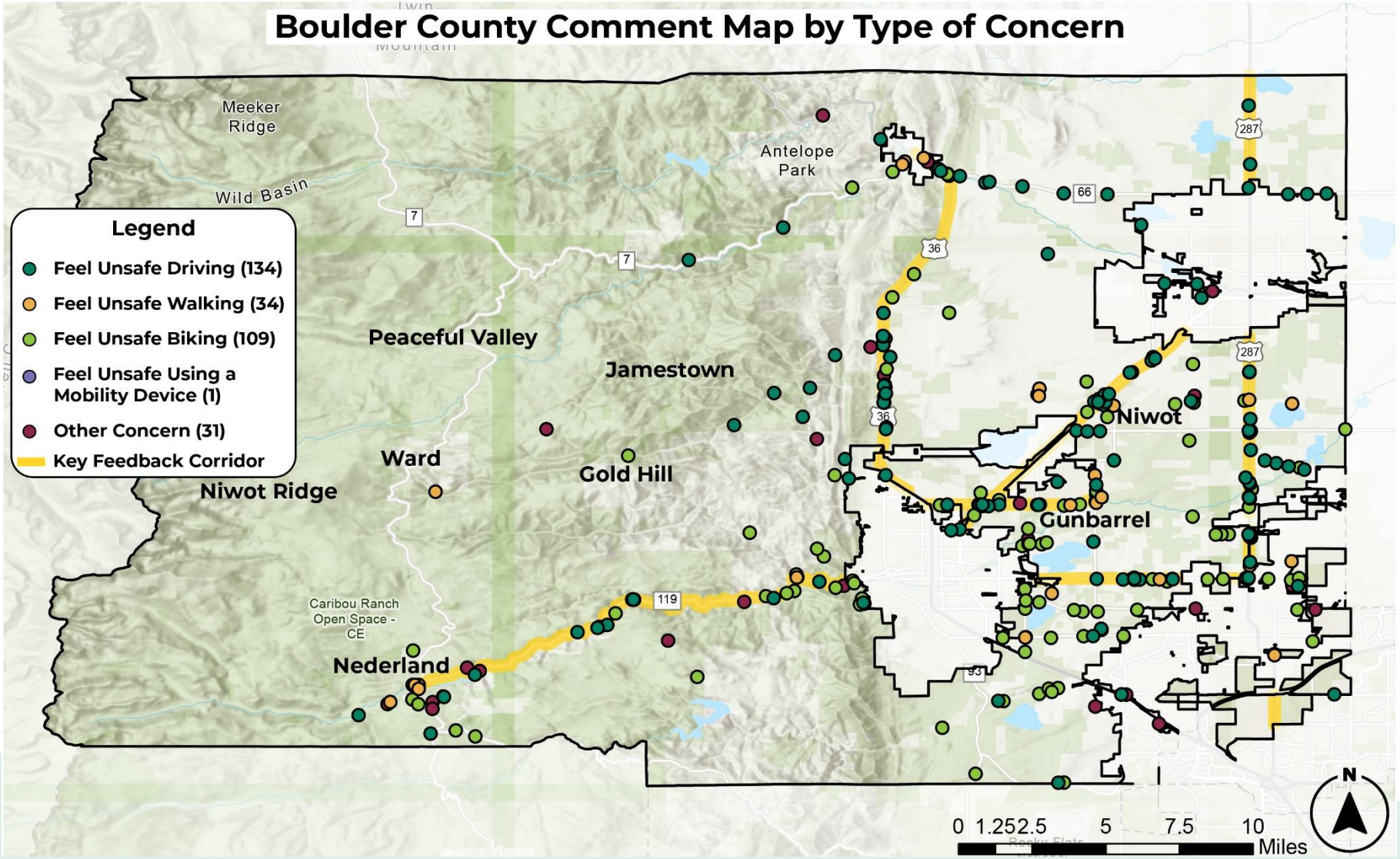
How safe do you feel traveling in Boulder County?



**The number of responding reporting to use transit or a mobility device is not significant enough to draw conclusions about the perceived safety of those modes.*

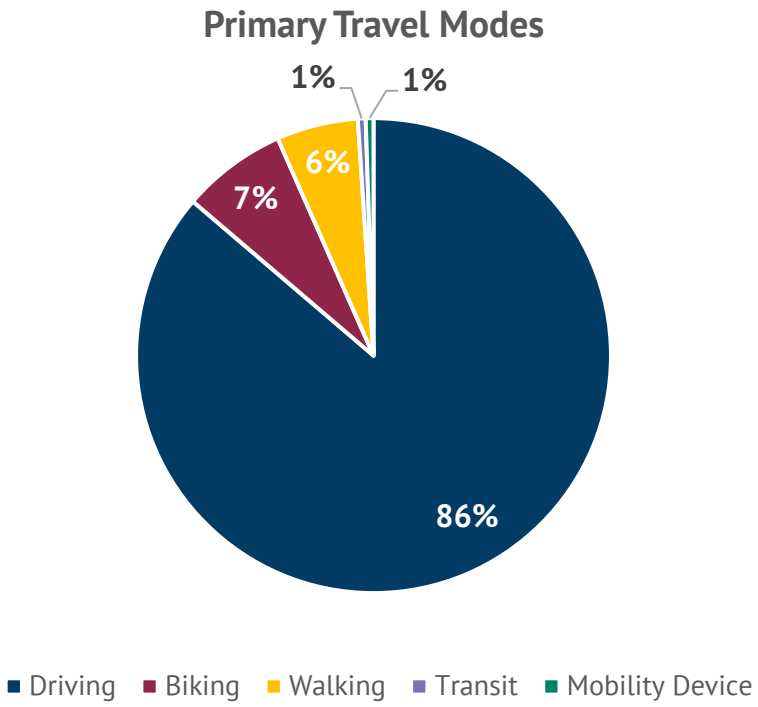
Respondents or someone they know involved in a crash in unincorporated Boulder County in past five years: **31%**

What We Heard: Boulder County (309 pins)



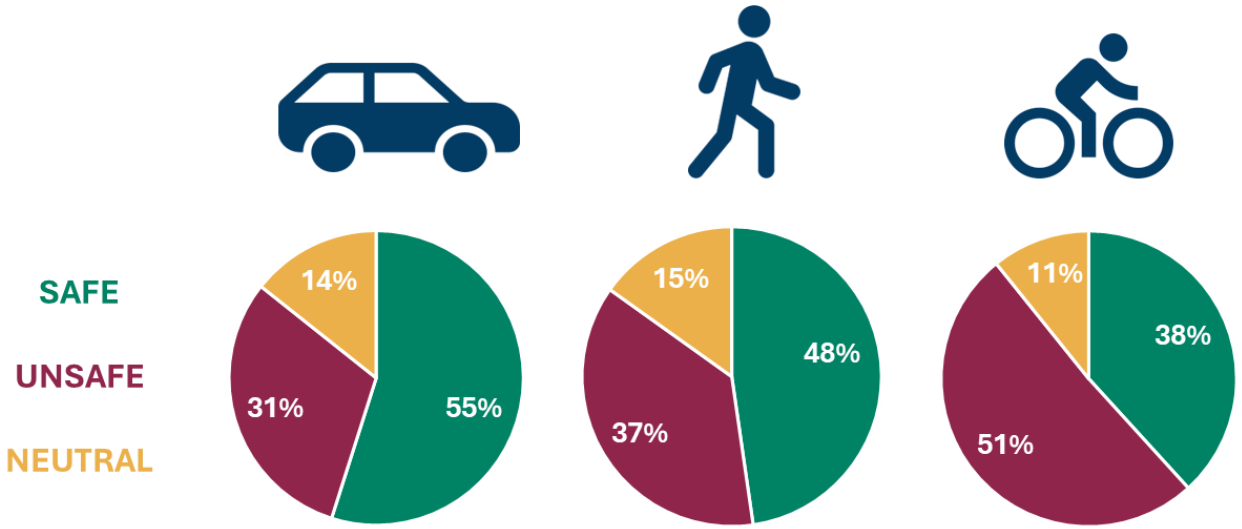
What We Heard: Lafayette

- 378 survey responses
- 463 map pins
- Majority (76%) of survey respondents live in Lafayette



What We Heard: Lafayette

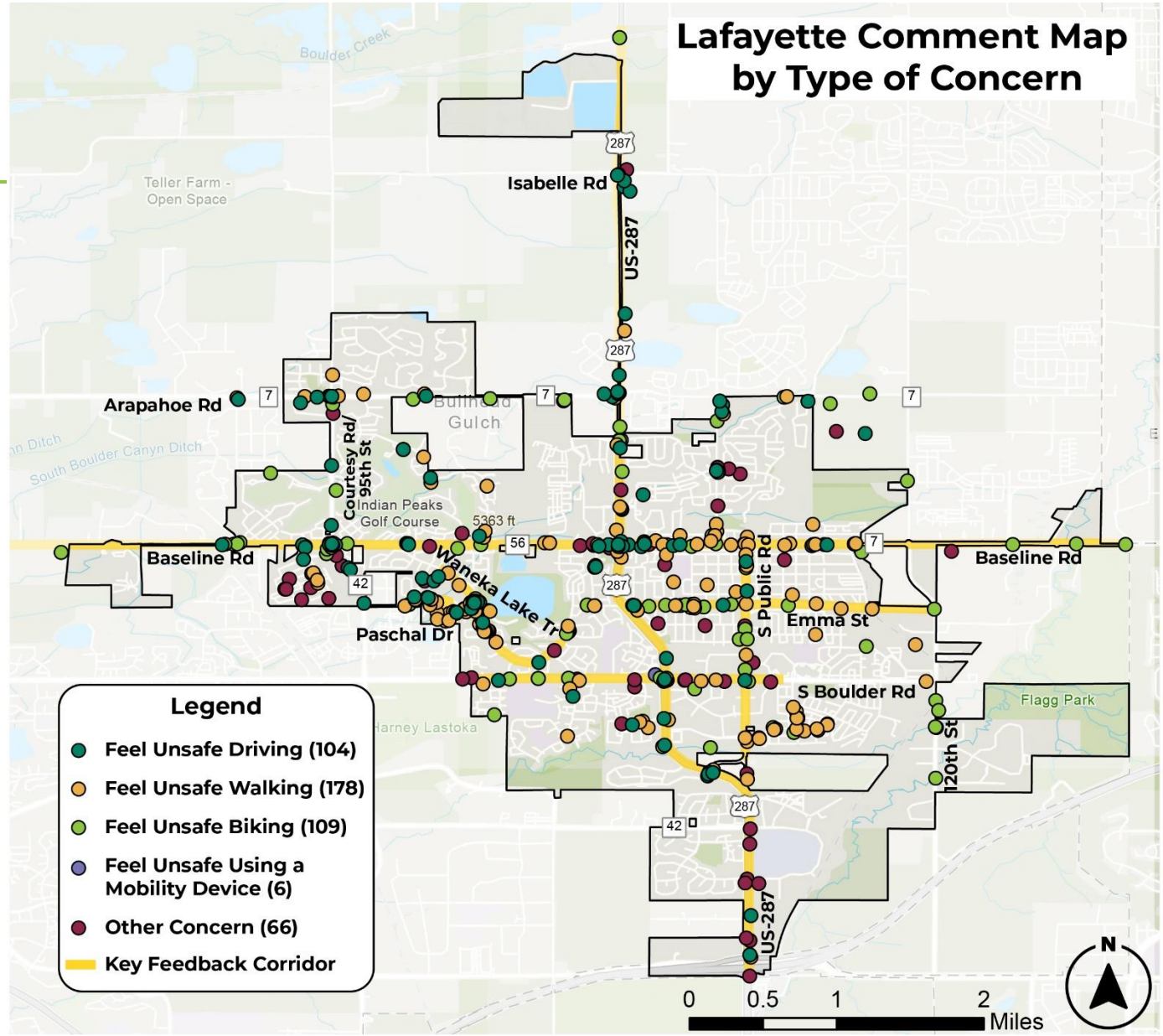
How safe do you feel traveling in Lafayette?



Respondents or someone they know involved in a crash in Lafayette in past five years: **22%**

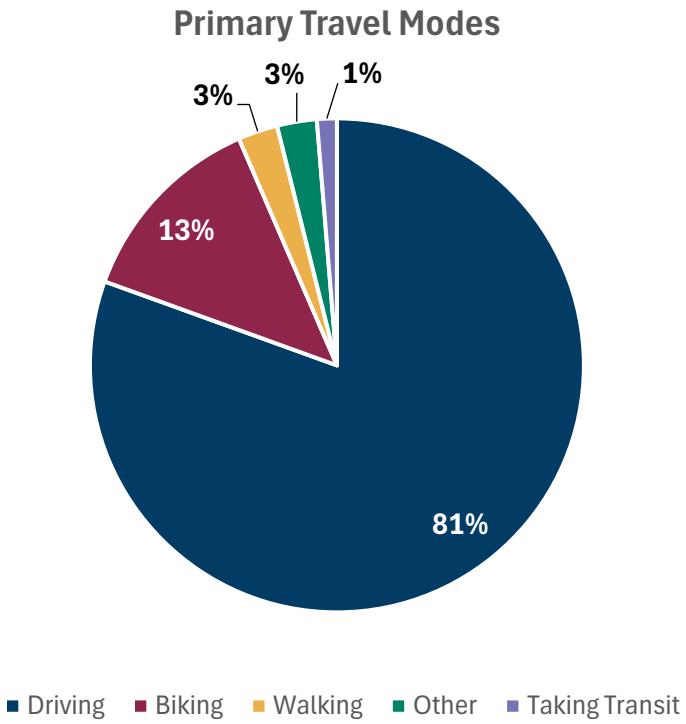
**The number of responding reporting to use transit or a mobility device is not significant enough to draw conclusions about the perceived safety of those modes.*

What We Heard: Lafayette (463 pins)



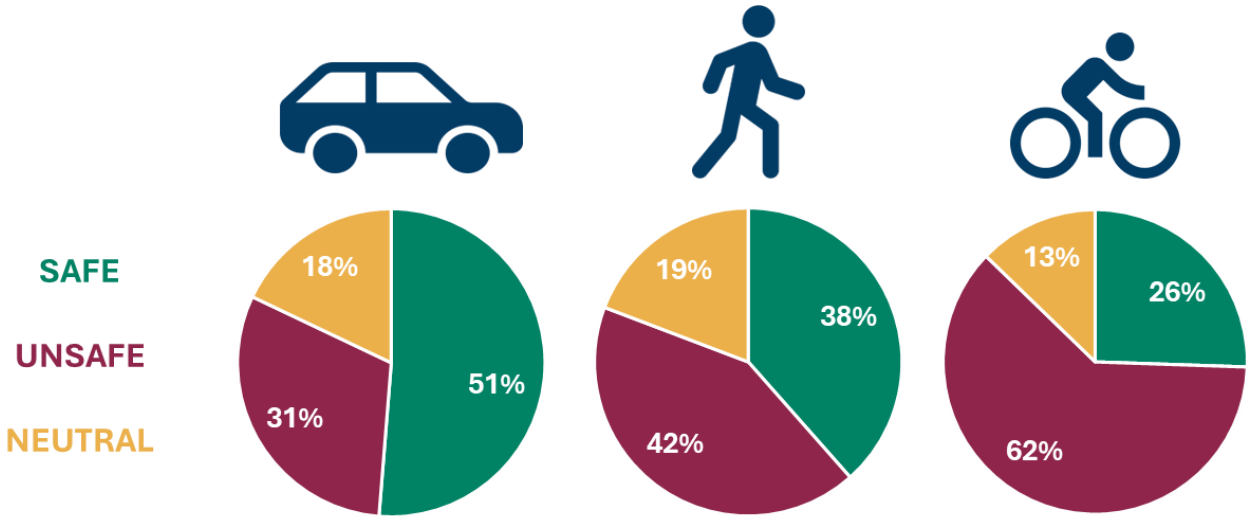
What We Heard: Superior

- 78 of survey responses
- 83 map pins
- 29% of survey respondents live in Superior while most respondents (67%) live elsewhere in Boulder County or in Lafayette.



What We Heard: Superior

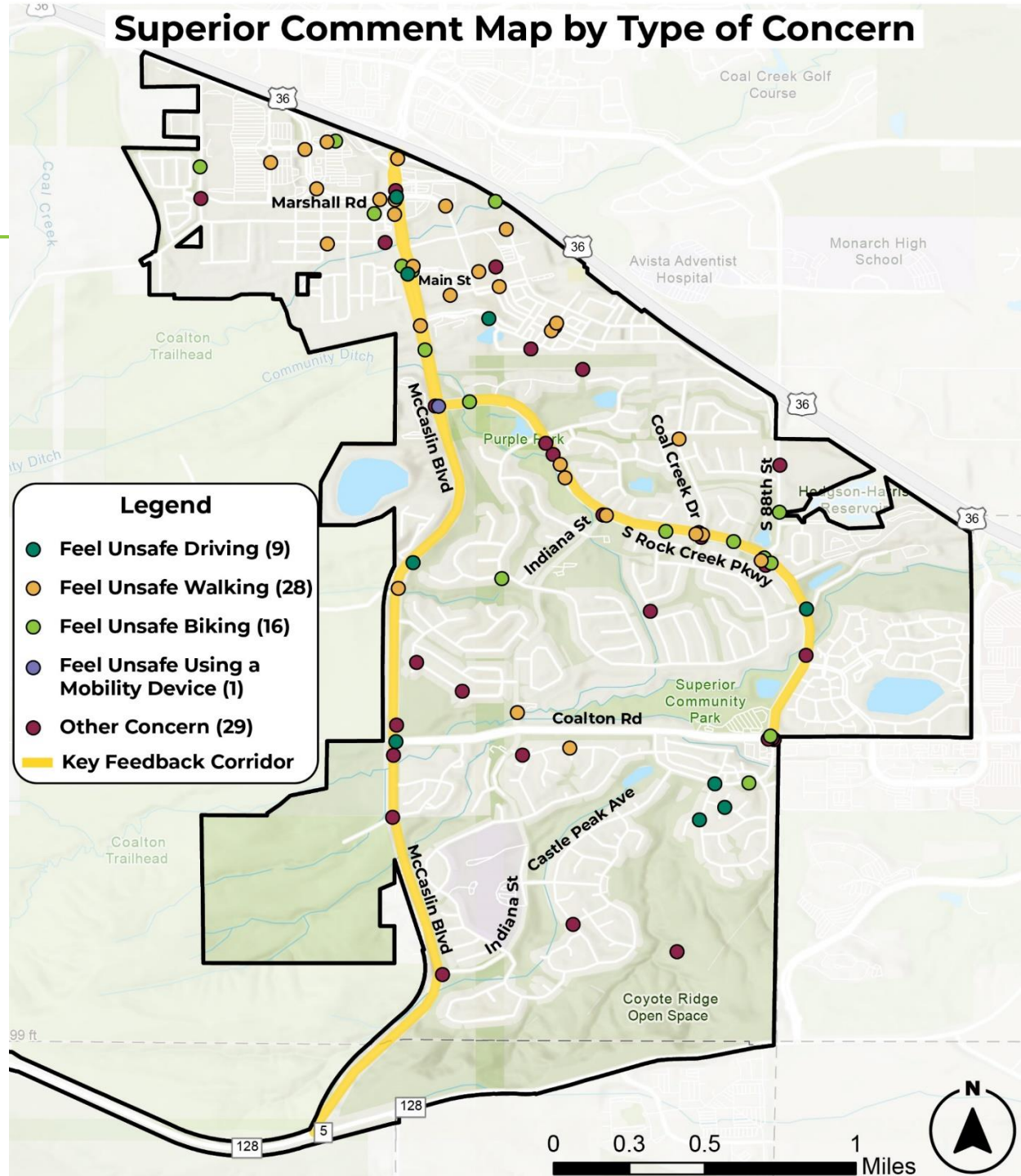
How safe do you feel traveling in Superior?



Respondents or someone they know involved in a crash in Superior in past five years: **7%**

**The number of responding reporting to use transit or a mobility device is not significant enough to draw conclusions about the perceived safety of those modes.*

What We Heard: Superior (83 pins)



Questions?

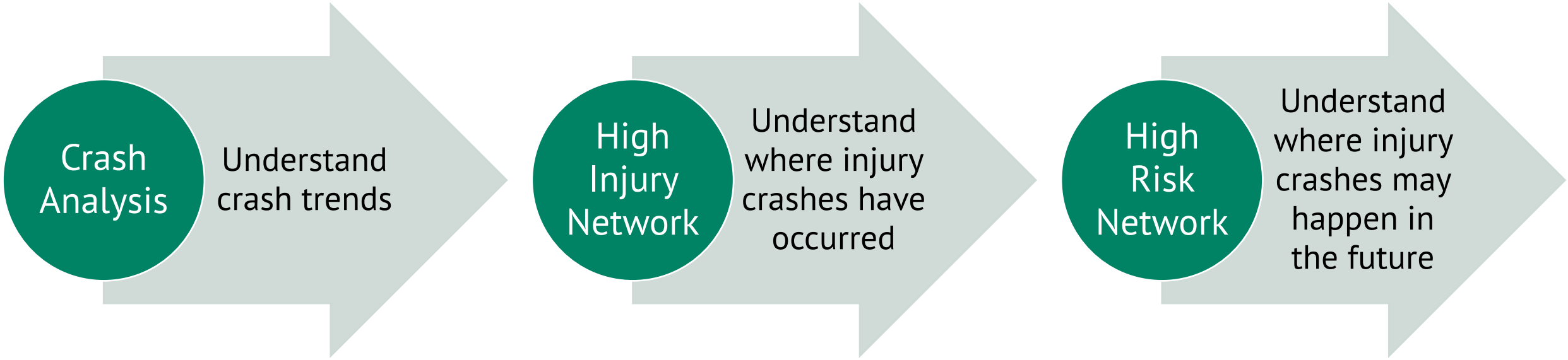




Where We've Been: Safety Analysis

Safety Analysis Process

- Detailed analysis for Unincorporated Boulder County & the Mountain Towns, Lafayette, & Superior
- Analyzed 10 years of CDOT crash data (January 2013 to December 2022)



HIN & HRN: What's the Difference?

High Injury Network

Addressing Crashes Today

Identifies locations where the top injury crashes are occurring based on historical crash data

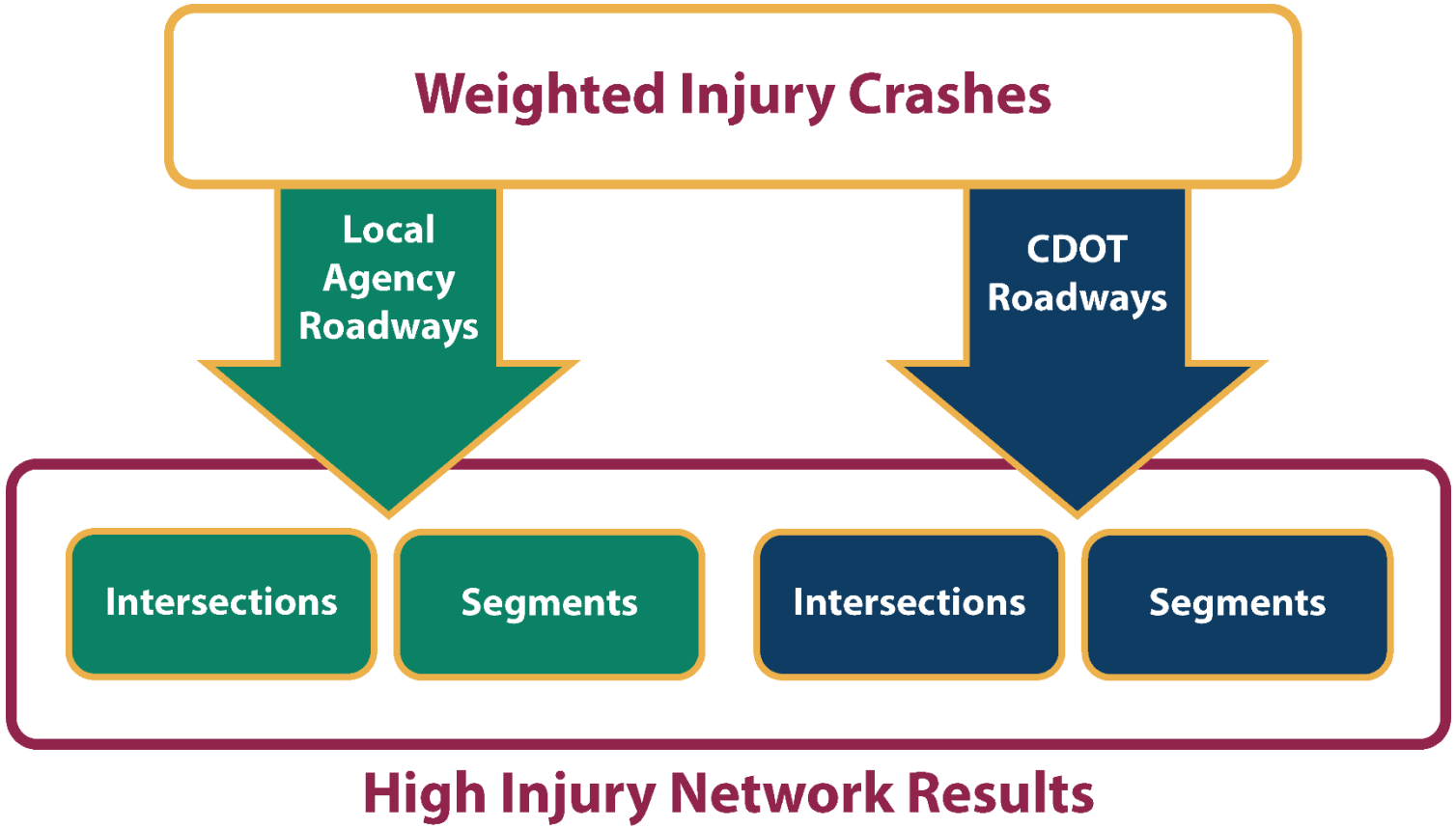
High Risk Network

Preventing Crashes Tomorrow

Identifies locations where there is high risk for potential crashes based on roadway characteristics

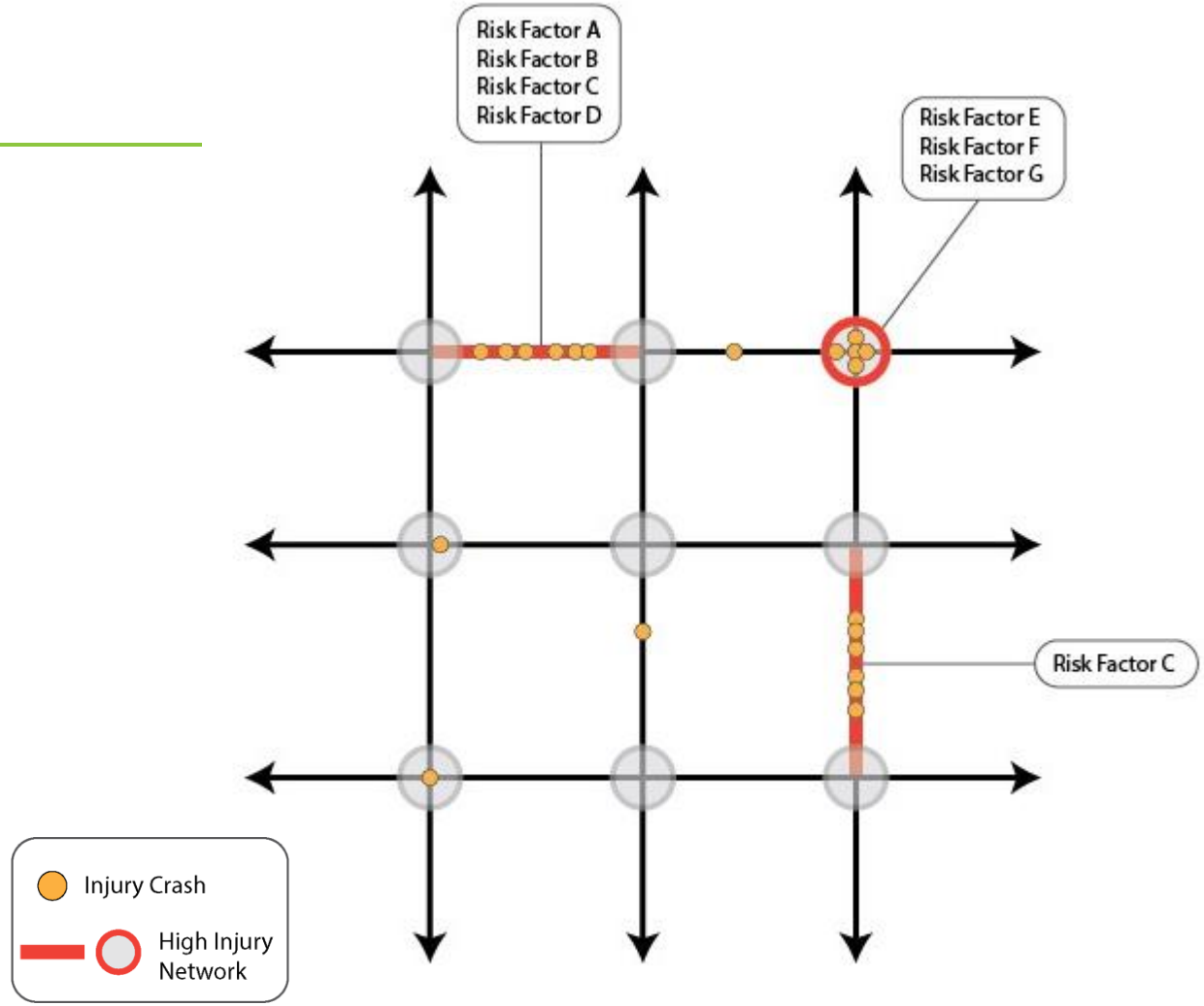
HIN Process

- Serious and fatal injury crashes weighted higher than minor injury crashes
- Local Agency roadways were analyzed separately from CDOT roadways to account for the higher number of crashes and different crash trends on DOT roadways.



HRN Process

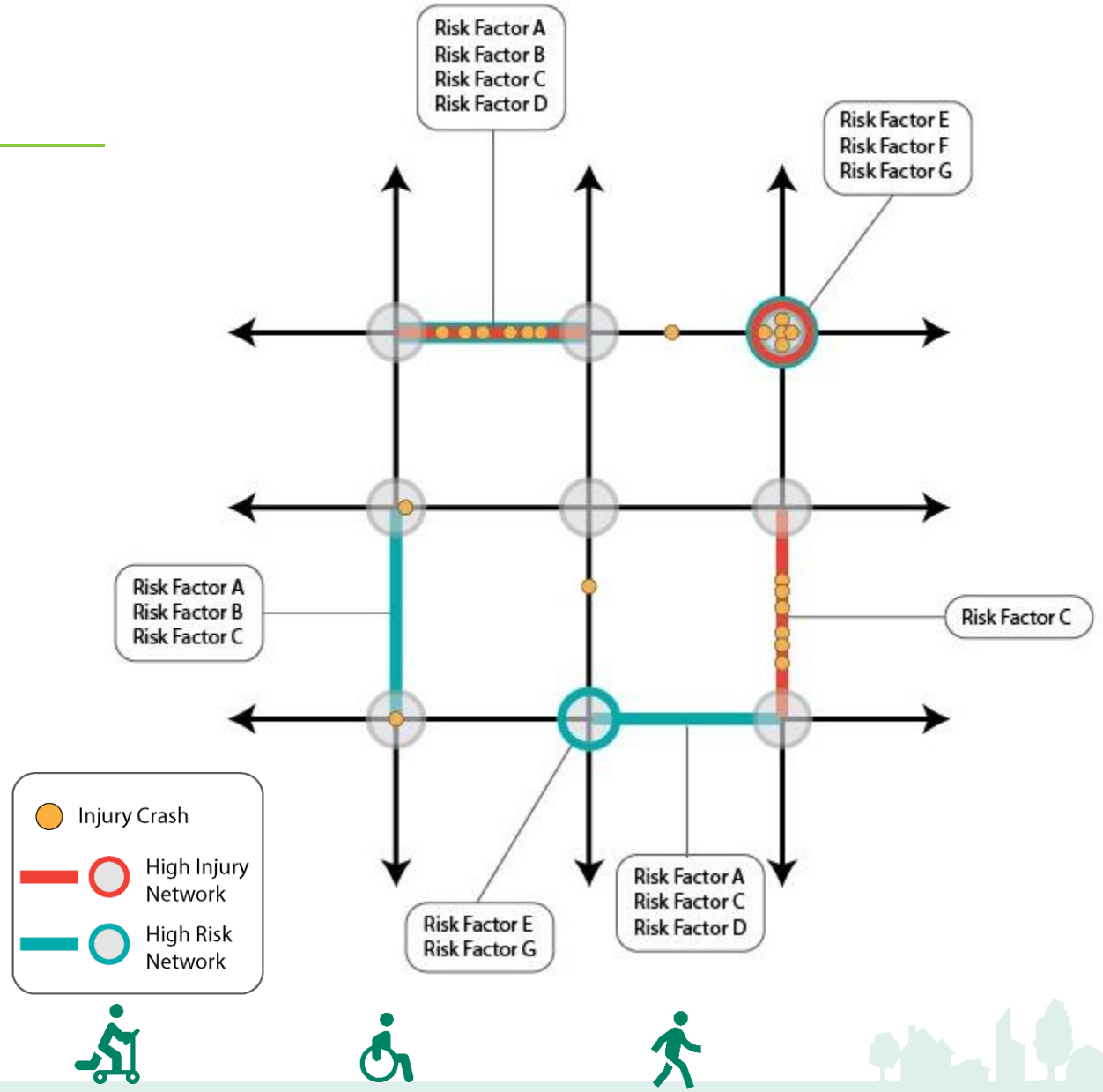
- Identified common roadway characteristics of the serious injury, fatal, and vulnerable user crashes to select risk factors



HRN Process

Example Risk Factors:

- Number of travel lanes
- Speed limit
- Roadway classification
- Intersection control
- Presence of sidewalks
- Presence of bicycle facility
- Proximity to school
- Land use
- And more….



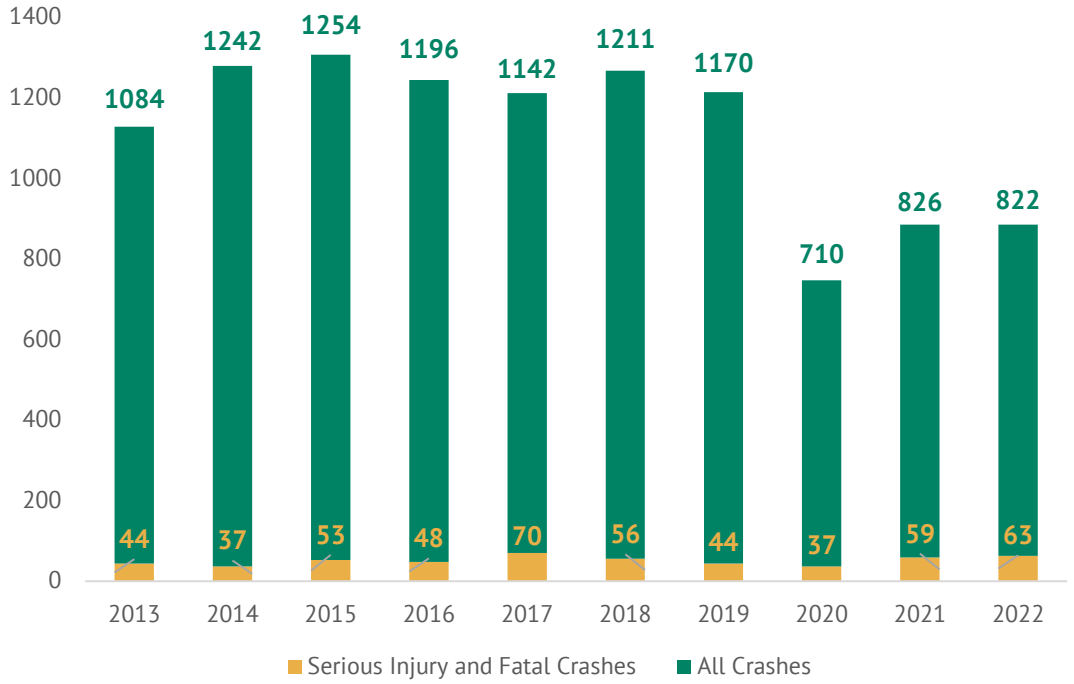
HRN Example

95th Street & Lookout Road
(HIN Intersection)

95th Street & Mineral Road
(Potential HRN Example)

Questions?

Boulder County: Safety Analysis

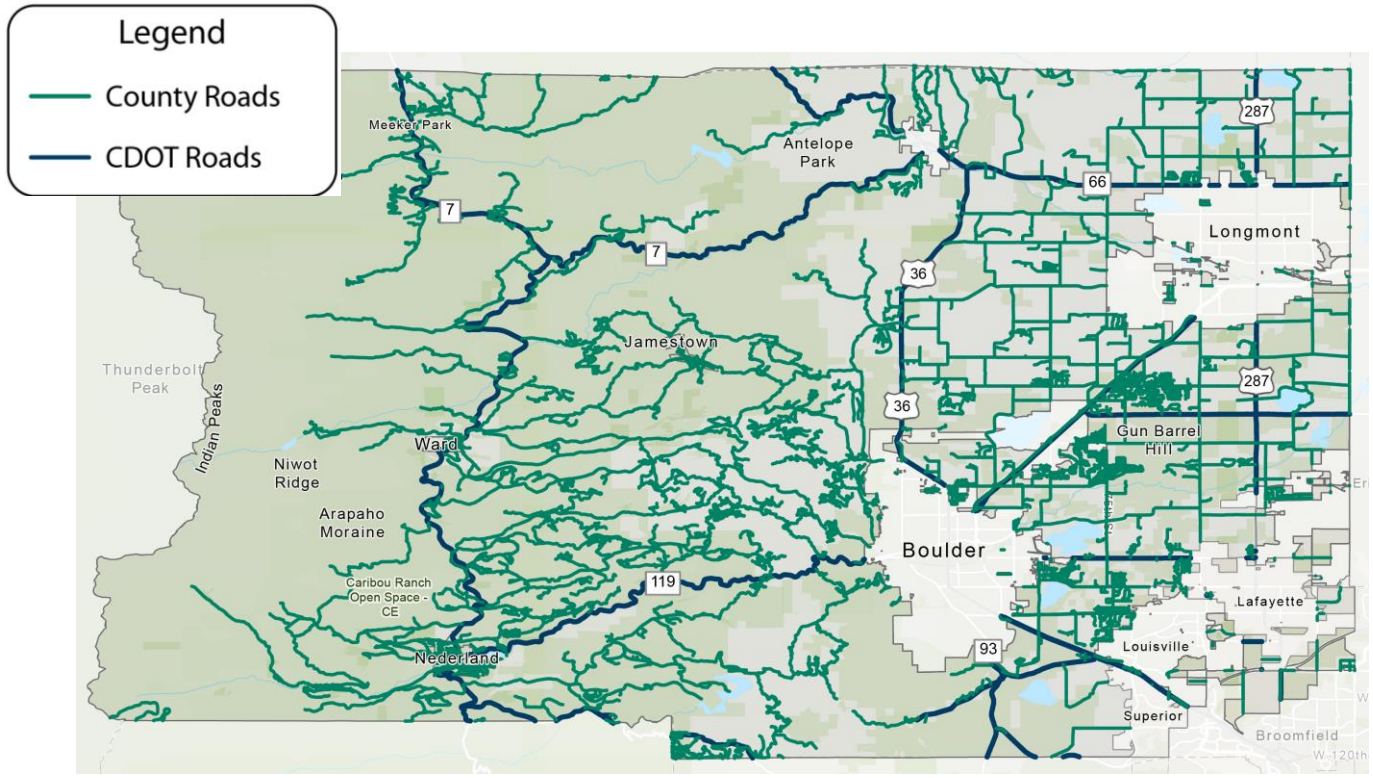


Over 10 years, **135** people died in traffic crashes in the Project Area

Although the number of crashes has decreased in recent years, **the percent of serious injury and fatal crashes has increased** since 2020

Source: Colorado Department of Transportation (CDOT) crash data

Boulder County Safety Analysis



County Roads

86% of roadway centerline miles

30% of serious injury and fatal crashes

CDOT Roads

14% of roadway centerline miles

70% of serious injury and fatal crashes

Boulder County Safety Analysis

Boulder County Roads

All Crashes

25% *Fixed Object*

23% *Rear-end*

9% *Overturning*

Serious Injury & Fatal Crashes

22% *Bicycle*

20% *Fixed Object*

15% *Overturning*

Bicycle crashes are over-represented.

CDOT Roads

All Crashes

41% *Rear-end*

13% *Fixed Object*

10% *Sideswipe*

Serious Injury & Fatal Crashes

16% *Overturning*

13% *Head-on*

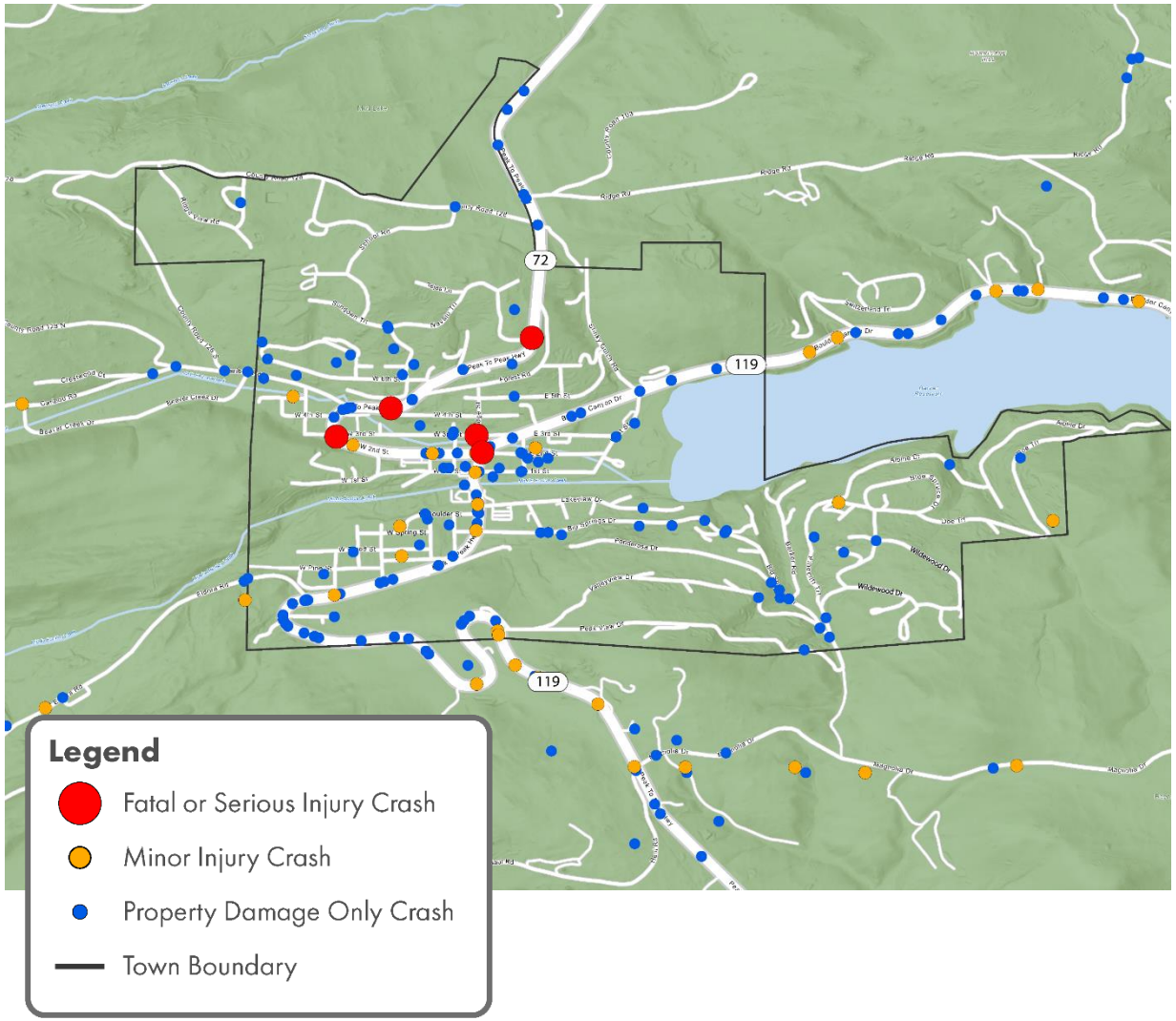
12% *Broadside*

Rear-end crashes are common, but are less likely to result in serious injury or fatality.

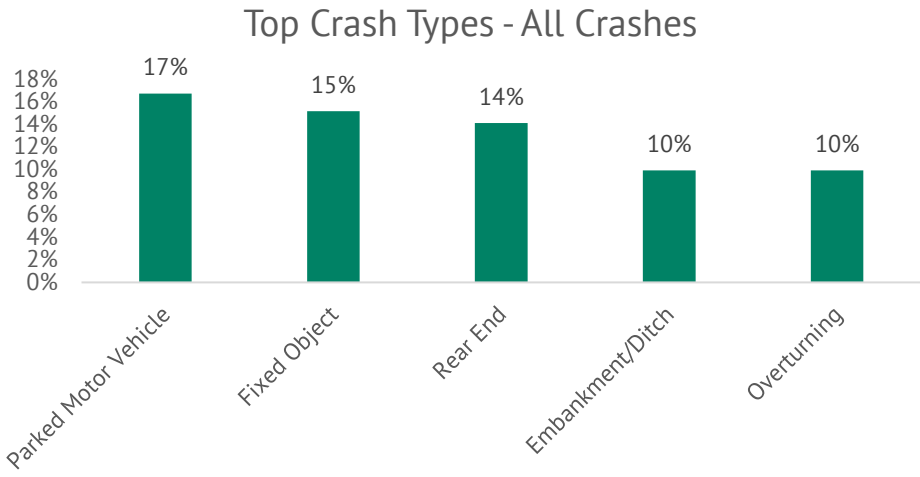




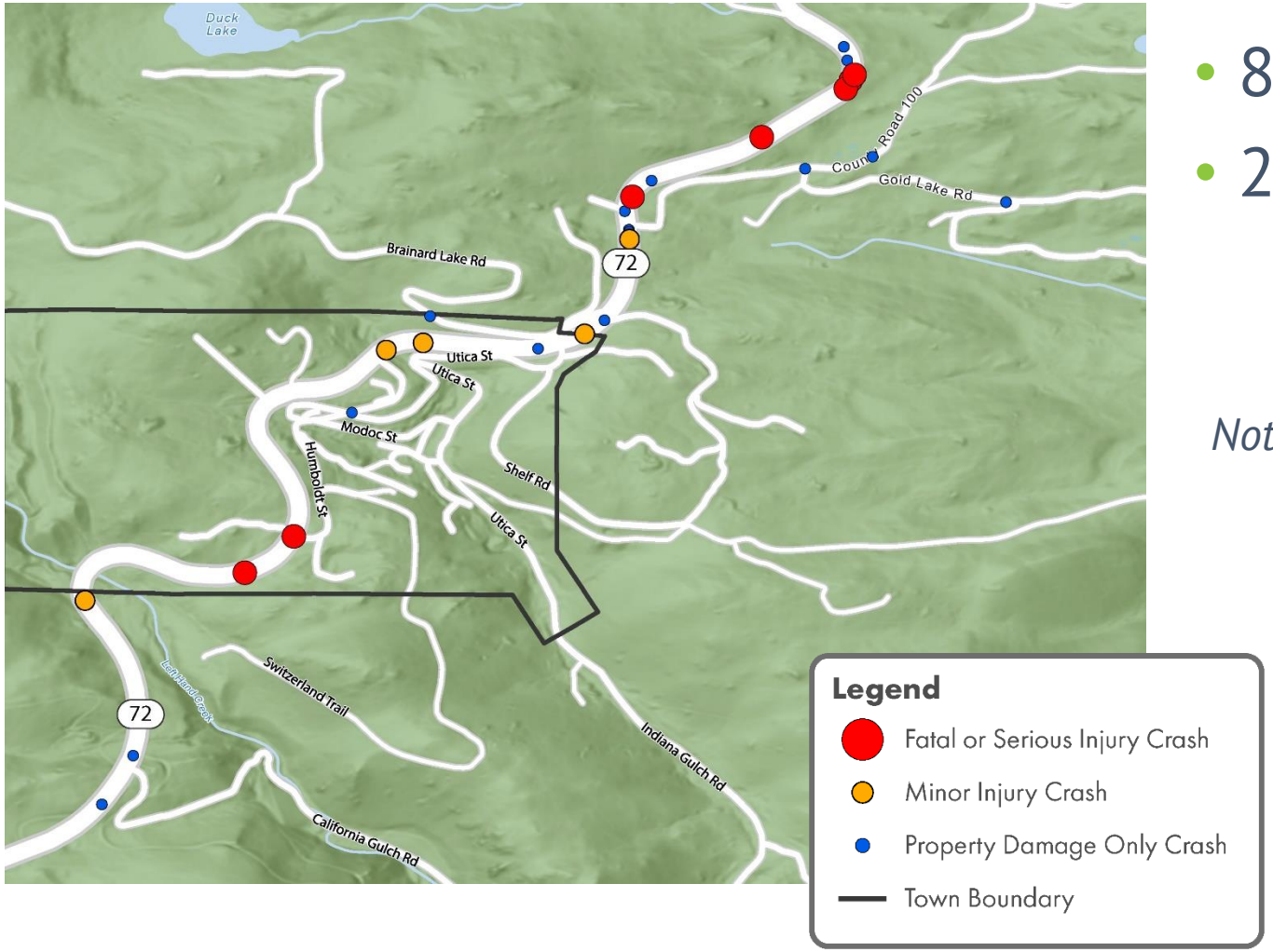
Mountain Town Zoom-in - Nederland



- 191 crashes
- 5 serious injury & fatal crashes:
  - 1 Broadside
  - 1 Pedestrian
  - 2 Head-on (1 fatal involving motorcycle)
  - 1 Fixed Object



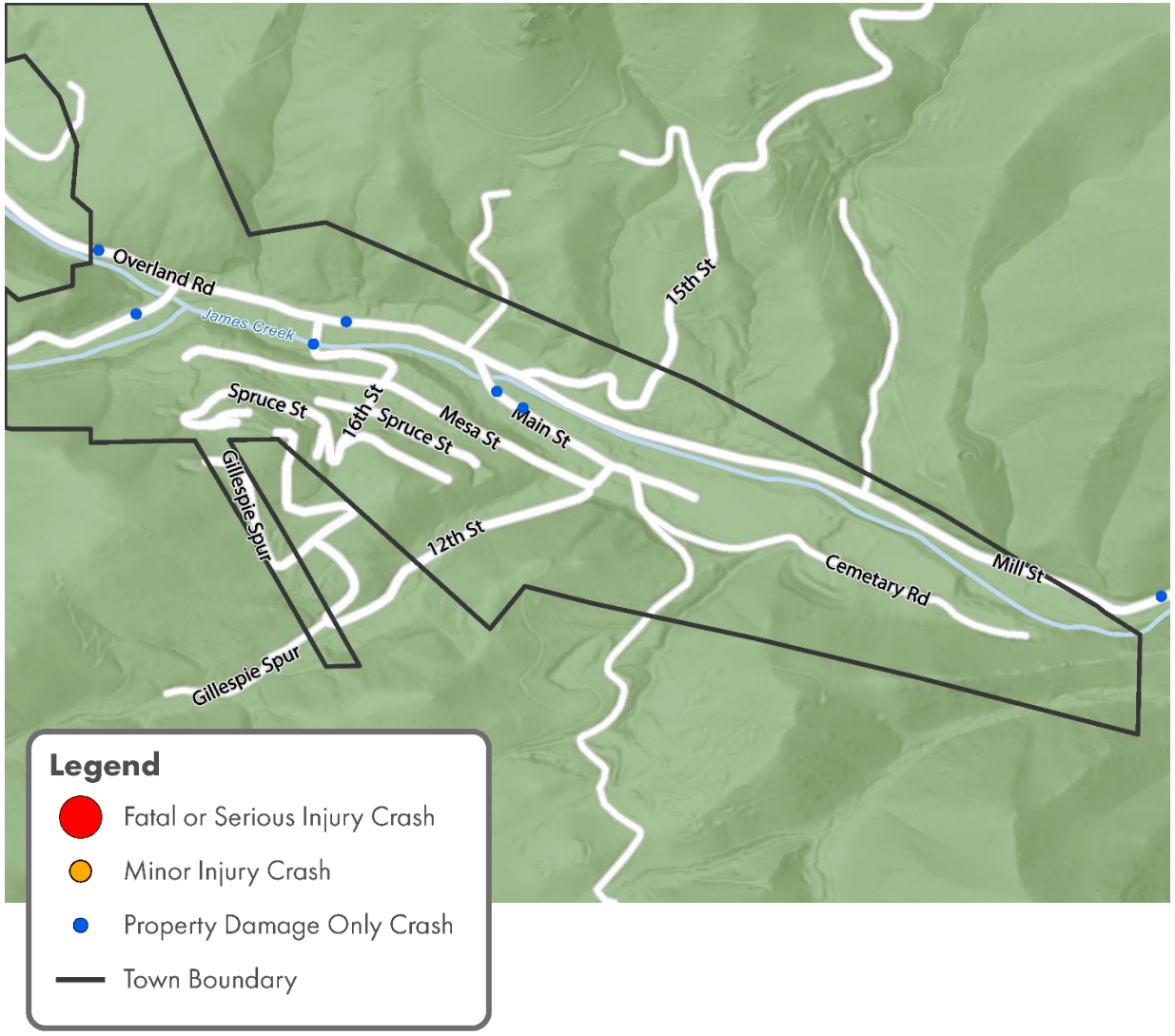
Mountain Town Zoom-in - Ward



- 8 crashes
- 2 serious injury crashes:
  - Guard Rail
  - Overturning

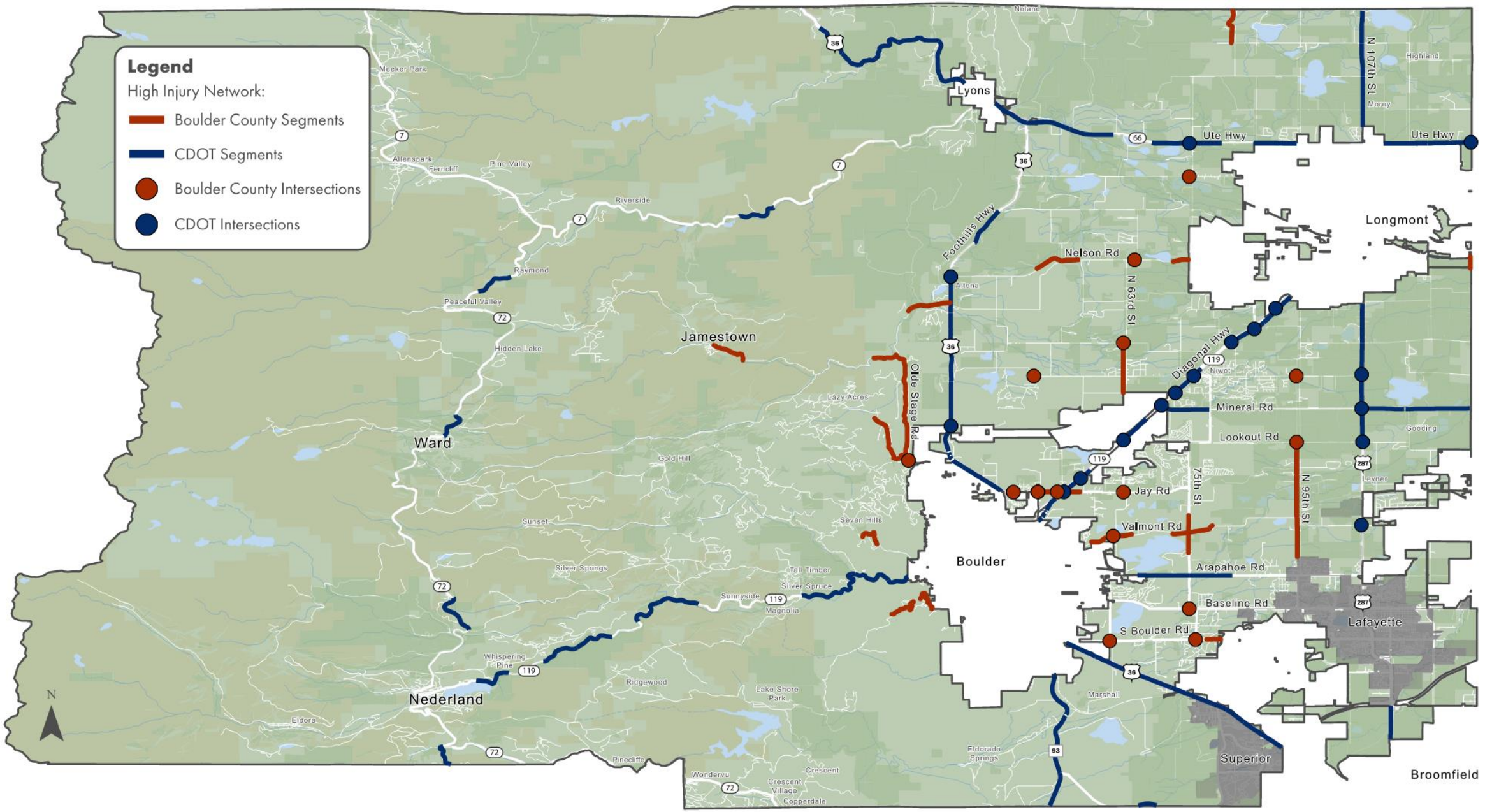
Note: Summary includes only crashes within Ward

Mountain Town Zoom-in - Jamestown



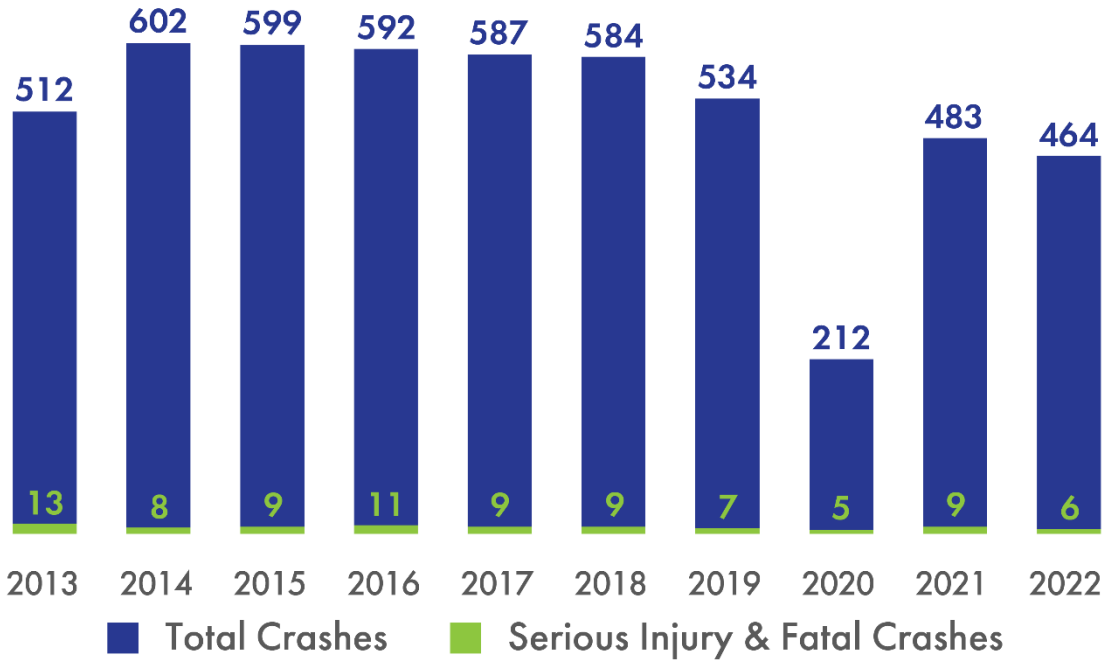
- 10 crashes
- No serious injuries or fatalities

Boulder County: High Injury Network



Lafayette: Safety Analysis

Over 10 years, there were **67** serious injury crashes and **19** fatal crashes in Lafayette



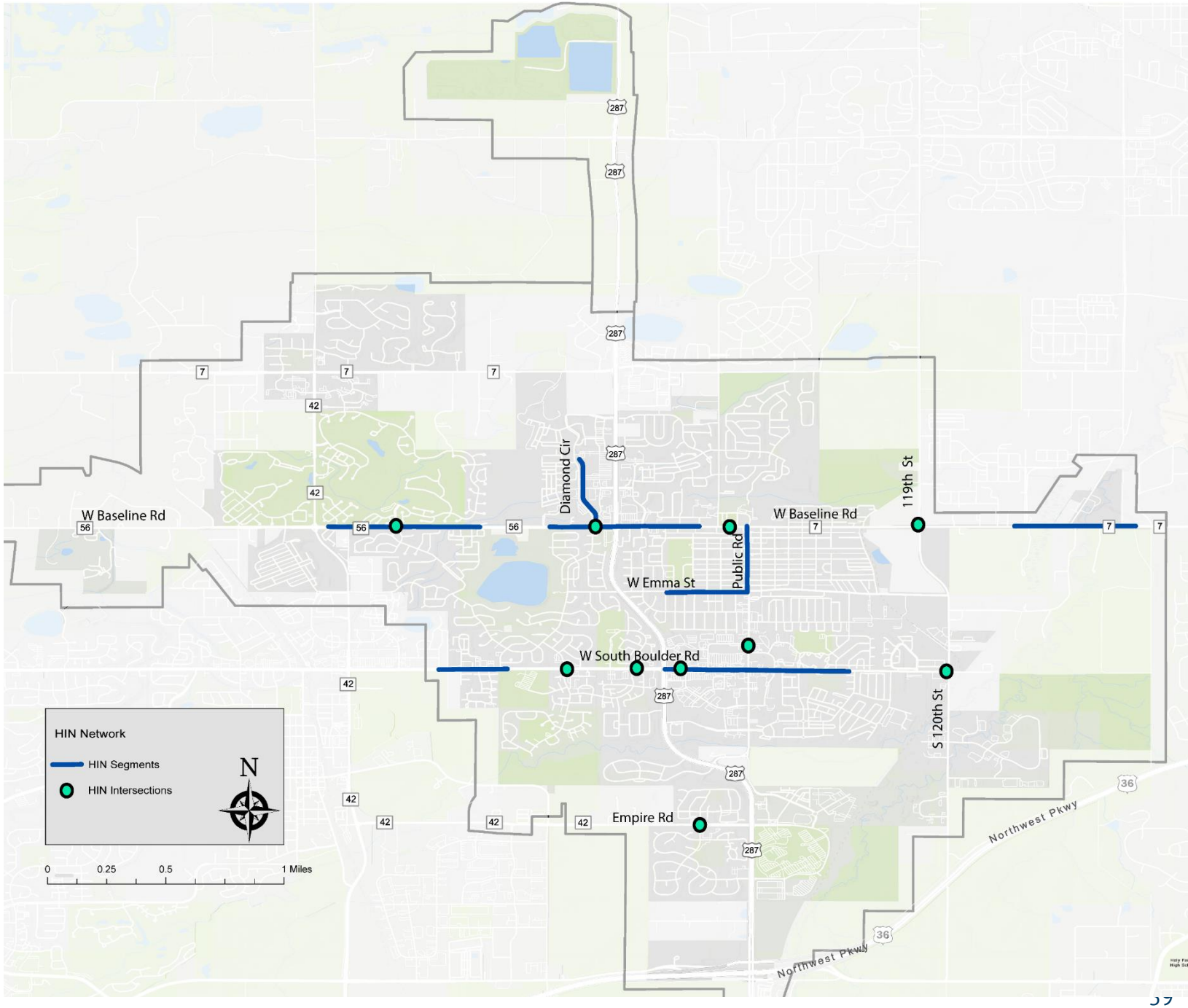
Source: Colorado Department of Transportation (CDOT) crash data

Top Four Serious Injury & Fatal Crash Types:

Broadside	20%
Approach Turn	18%
Rear-End	16%
Sideswipe	12%

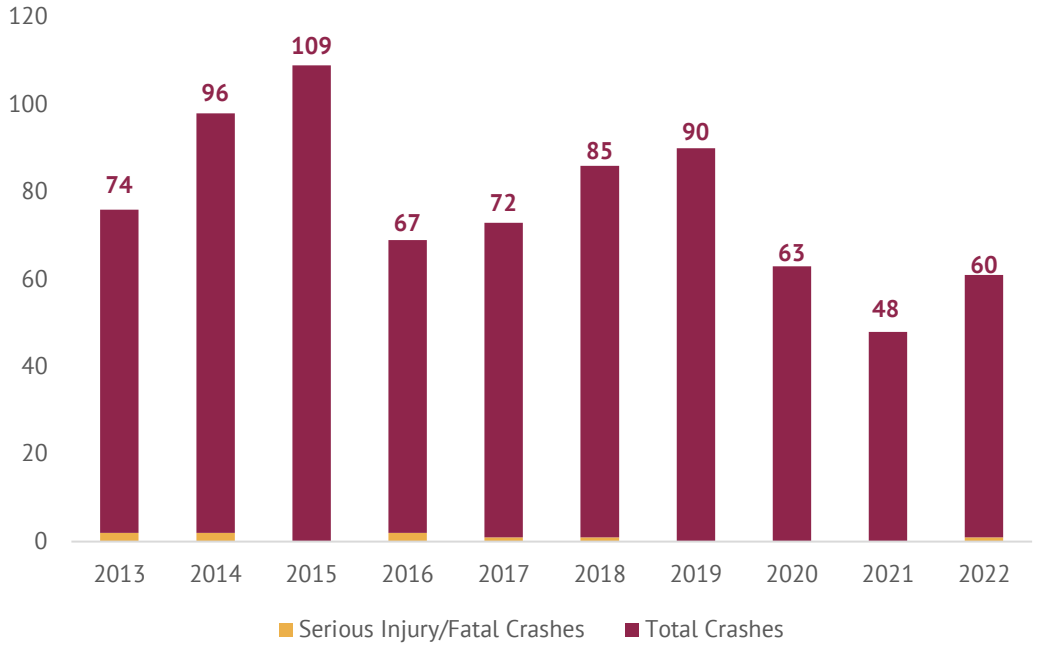
Though total crashes have decreased since 2019, the percentage of serious injury and fatal crashes has remained consistent.

Lafayette: High Injury Network

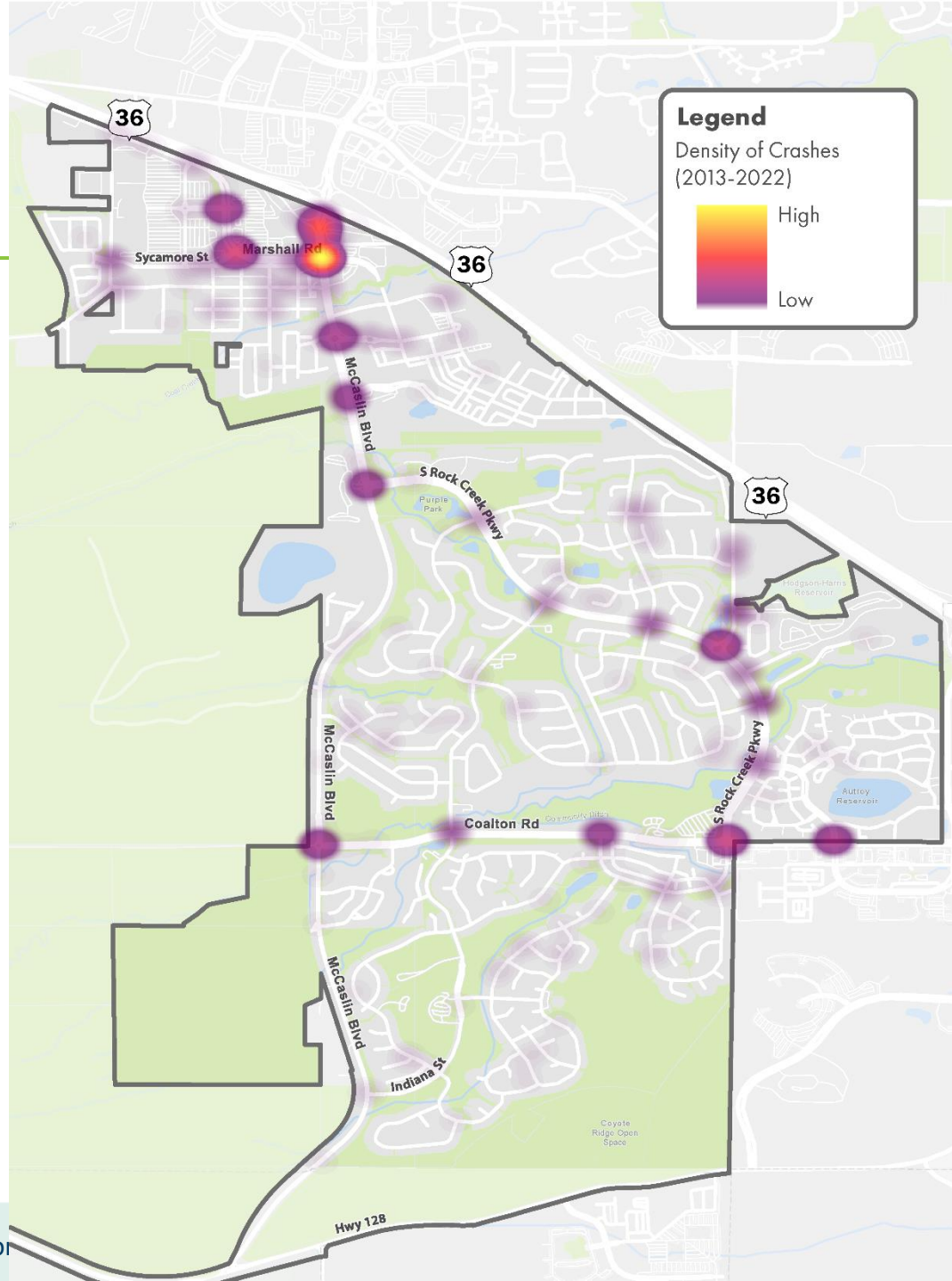


Superior: Safety Analysis

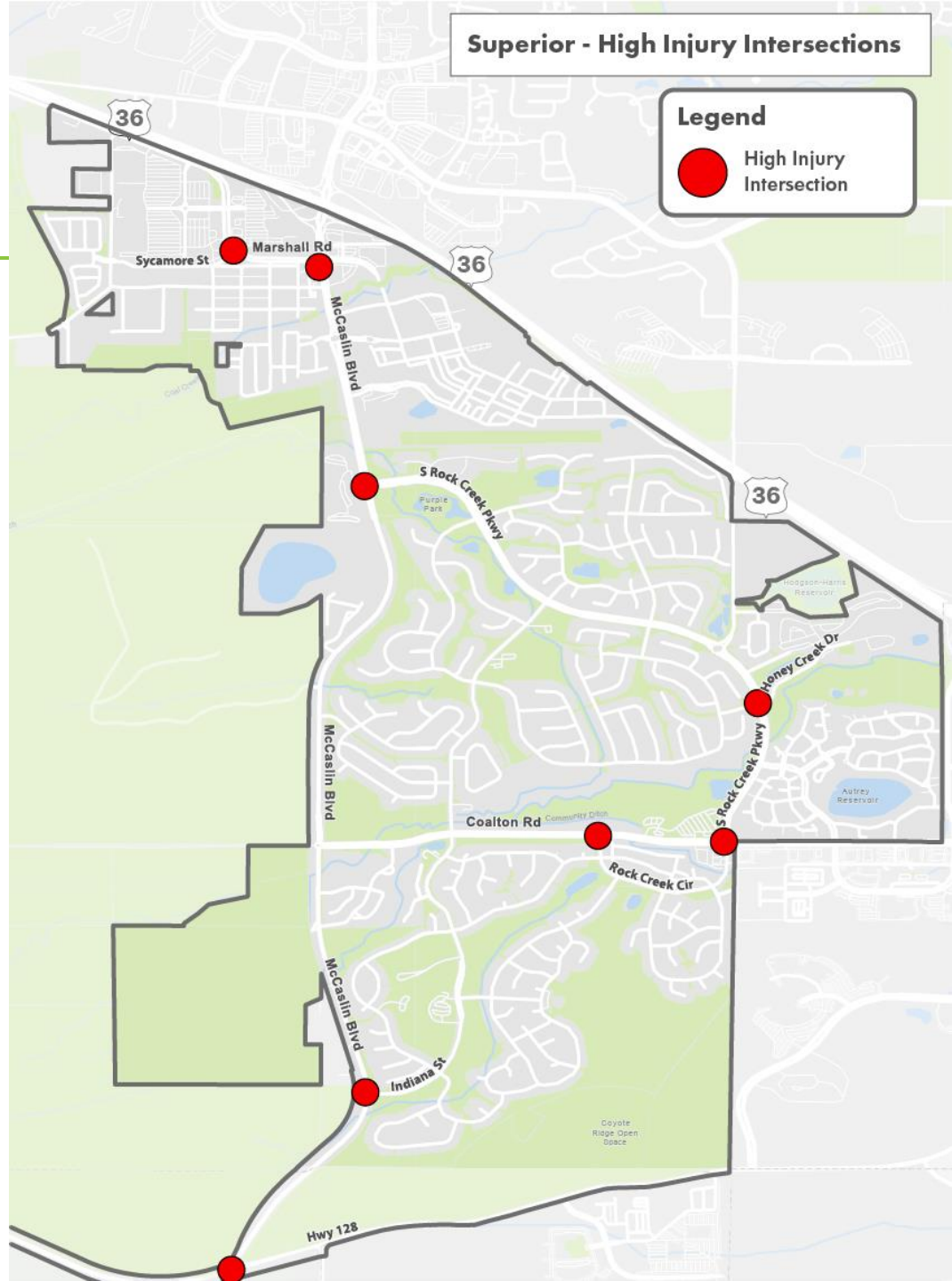
Over 10 years, there were 8 serious injury crashes and 1 fatality in Superior



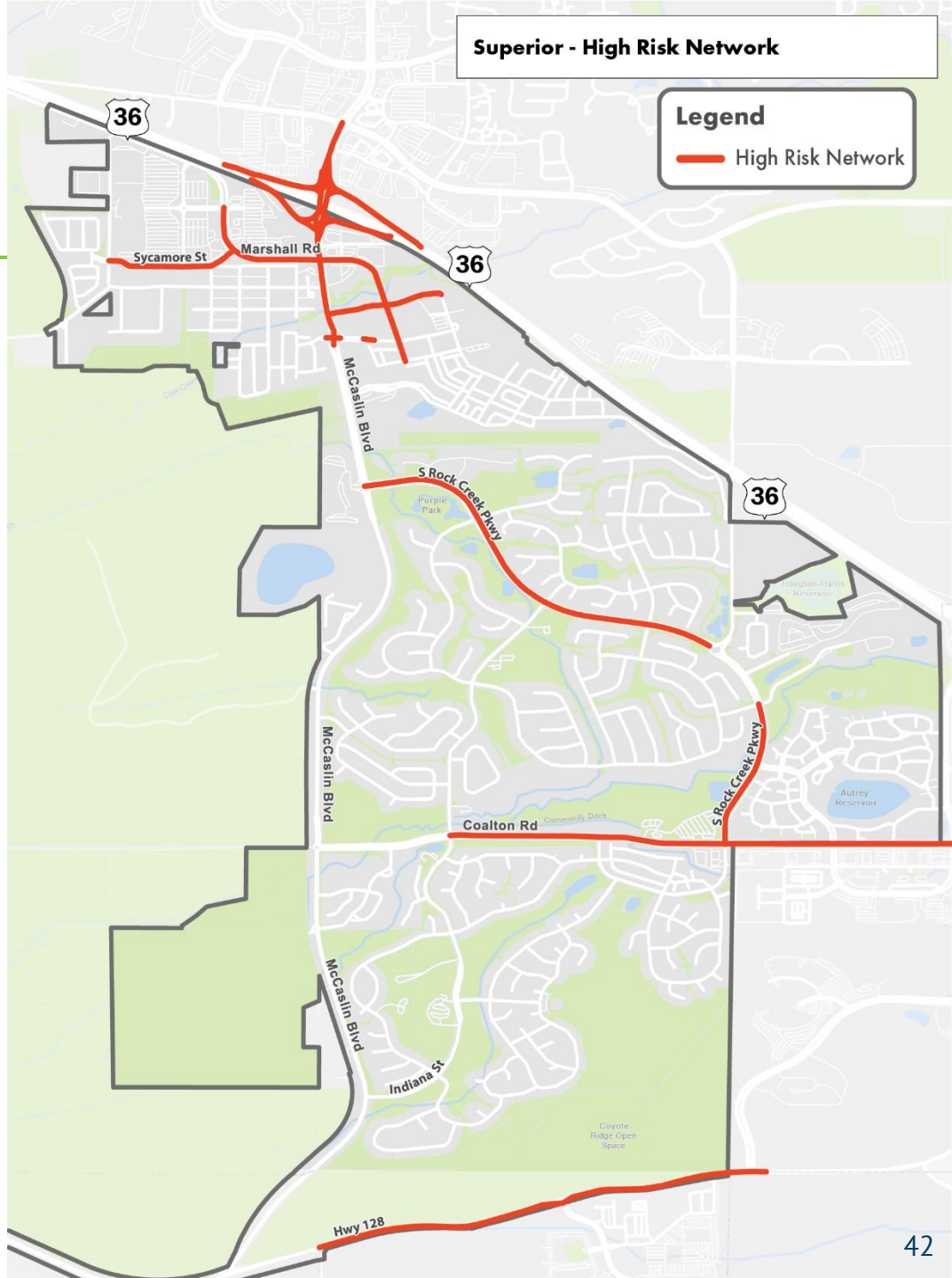
Source: Colorado Department of Transportation (CDOT) crash data



Superior: High Injury Network



Superior: High Risk Network



Discussion

- Do the results of the crash analysis, HIN, or HRN resonate with you? Are there any that are surprising?

Where We're Going: Working Towards the Action Plans





Action Plan Development

Develop Safety Strategies and Initial Recommended Actions

- Variety of Types: Infrastructure & Non-Infrastructure
- Different Applications: location based, systemic, programmatic

Public Input

Finalize Recommended Actions

- Near-term
- Mid-term
- Long-term

Action Plans

Includes additional detail/plans for priority, near-term actions

Next Steps

How You Can Help

Actions

- **Upcoming Phase 2 Outreach** Goal: Present initial recommended actions to Community
- Promote public outreach events, website, and survey
- Attend/participate!
- **Do you know of upcoming events that can help promote this outreach?**

Calendar

- **December 2024 – Early 2025:** Phase 2 Outreach
  - **December:** Superior Pop-up at Winter Fest
  - **January/February:** All other Partners pop-ups and public meetings
- **December:** Project Update (likely email)

Boulder County, Lafayette, & Superior Vision Zero Action Plans Steering Committee #2

October 30, 2024 | 10 am – 11:30 am

LOCATION: Virtual (Zoom)

Project Management Team (PMT) Members:

Liv Lewin, Boulder County, VZAP PM		Nikki Riemer, Consor
Alex Hyde-Wright, Boulder County		Emma Knisley, Consor
Mark Shisler, Boulder County		Geoffrey Weathers, Superior
Alex Bullen, Superior		George Eveleth, Boulder County
Michelle Melonakis, Lafayette		

Steering Committee Members:

Matthew Muir, Coalition 4 Cyclists		Rachel Plessing, *Superior resident*
Clark Chapman, *Boulder/Nederland area resident*		Landon Hillard, Boulder County, *Boulder resident*
Bryce Reeves, CDOT Bike/Ped Coordinator & ADA Coordinator, *Windsor resident*		Rachel Arndt, Boulder County Public Health *Nederland resident*
Craig Towler, Center for People with Disabilities, *Boulder resident*		Denice Walker, Mobility for All Ambassador *Lafayette resident*
Stephanie Walton, former DRCOG board *Lafayette resident*		Katrina Harms, Peak to Peak Housing & Human Services Alliance, Peak to Peak Scenic Byway Board member, *Nederland resident*
Alexandra Phillips, Boulder County *South Boulder resident*		Krista Nordback, Community Cycles *Boulder resident*
Cammie Edson, City of Longmont Vision Zero *Longmont resident*		John Flora, JM Flora Law Group *Superior resident*
Frank Phillips, Lafayette Planning Commission *Lafayette resident*		Amy Thompson, SRTS Boulder County School District *Gunbarrel resident*
Nick Aguilera, Boulder County		Cass Grady, Town of Nederland Sustainability Coordinator
Tierney Maris, Nederland Board of Trustees		Erik Braaten, DRCOG Senior Safety Planner

Areas with participant discussion are marked in orange text

MEETING NOTES

1. **Introductions**
2. **Meeting Goals**
    a. Review Project Background & Schedule
    b. Discuss Where We've Been

1. Phase 1 Community Outreach
2. Safety Analysis

c. Discuss Where We're Going
    1. Working Towards the Action Plan
    2. Next Steps

3. **Project Background**
    a. What is Vision Zero?
        1. Definition: Vision Zero is a transportation strategy to eliminate all traffic fatalities and serious injuries for people using all modes of transportation. Vision Zero recognizes that humans make mistakes and therefore the transportation system should be designed to minimize the consequences of human error.
    b. Safe System Approach
        1. Principals of Safe Systems:
            a. Humans Make Mistakes
            b. Humans are Vulnerable
            c. Responsibility is Shared
            d. Safety is Proactive
            e. Redundance is critical
        2. Elements
            a. Safer People
            b. Safer Vehicles
            c. Safer Speeds
            d. Safer Roads
            e. Post-Crash Care
        3. "Swiss Cheese Model"
            a. Redundancy in elements of the Safe System Approach elements creates layers of protection
            b. Death and serious injury only happen when all layers fail
    c. Action Plan Development
        1. Deliver three standalone Vision Zero Action Plans:
            a. Boulder County – includes unincorporated, State Highways, Jamestown, Nederland, and Ward
            b. City of Lafayette
            c. Town of Superior
        2. Create list of specific actions, noting responsibility and potential funding sources for implementation.
    d. Schedule
        1. Phase 1 engagement occurred in July/August
        2. Phase 2 engagement will occur in Winter 2024/2025
        3. Draft action plan by late early 2025
        4. Final action plan April 2025
    e. What We Covered at June Meeting
        1. Project Background
        2. Promotion of Phase 1 Outreach
        3. Listening Session
            a. Questions:
                1. What does Success Mean to you? What would a successful Vision Zero Action Plan look like to you?

2. What are your ideas for roadway safety in Boulder County? Please add your ideas for how the Vision Zero Action Plan can advance transportation safety outcomes under the topic areas below.

b. Input from these questions will be used as our team is developing recommendations and the action plan

4. **Where We've Been: Phase 1 Community Outreach**
    a. How We Collected Input for Each Partner (July and August 2024)
        1. In-person Pop-up Events
        2. Virtual Public Meetings
        3. Online Input Map & Survey
    b. Summary of What We Heard
        1. Online Survey Responses
            a. Boulder County: 196 survey responses, 309 map pins
            b. Lafayette: 378 survey responses, 463 map pins
            c. Superior: 78 survey responses, 83 map pins
    c. What We Heard: Boulder County & Mountain Towns
        1. 196 survey responses
        2. Majority (62%) of survey respondents live in Unincorporated Boulder County and Mountain Towns
        3. 94% of respondents drive as their primary travel mode, with 3% biking, 2% walking, and 1% taking transit
    d. What We Heard: Boulder County
        1. 31% of respondents or someone they know were involved in a crash in unincorporated Boulder County in the past 5 years
        2. Very few respondents indicated that they use transit or a mobility device as their primary mode
        3. Driving: 43% feel safe, 39% feel unsafe, 18% feel neutral
        4. Walking: 34% feel safe, 46% feel unsafe, 21% feel neutral
        5. Biking: 76% feel unsafe, 17% feel safe, 7% feel neutral
    e. What We Heard: Boulder County Map Survey (309 pins)
        1. Heard the most feedback on US 287, SH 119, and US 36 north of boulder
    f. What We Heard: Lafayette
        1. 378 survey responses
        2. 463 map pins
        3. Majority (76%) of survey respondents live in Lafayette
        4. 86% of respondents drive as their primary travel mode, with 7% biking, 6% walking, 1% taking transit, and 1% using a mobility device
    g. What We Heard: Lafayette
        1. 22% of respondents or someone they know were involved in a crash in Lafayette in the past 5 years
        2. Very few respondents indicated that they use transit or a mobility device as their primary mode
        3. Driving: 55% feel safe, 31% feel unsafe, 14% feel neutral
        4. Walking: 47% feel safe, 37% feel unsafe, 15% feel neutral
        5. Biking: 38% feel safe, 51% feel unsafe, 11% feel neutral
        6. Heard the most feedback on US 287, Baseline Road, South Boulder Road, Emma Road, Public Road

h. What We Heard: Superior
    1. 78 survey responses
    2. 83 map pins
    3. 29% of survey respondents live in Superior while most respondents (67%) live elsewhere in Boulder County or in Lafayette
    4. 81% of respondents drive as their primary travel mode, with 13% biking, 3% walking, 3% other (electric scooter, motorcycle), and 1% taking transit
i. What We Heard: Superior
    1. 7% of respondents or someone they know were involved in a crash in Superior over the last 5 years
    2. Very few respondents indicated that they use transit or a mobility device as their primary mode
    3. Driving: 51% feel safe, 31% feel unsafe, 18% feel neutral
    4. Walking: 38% feel safe, 42% feel unsafe, 19% feel neutral
    5. Biking: 26% feel safe, 62% feel unsafe, 13% feel neutral
    6. Heard most feedback on McCaslin Blvd and S Rock Creek Pkwy

5. **Where We've Been: Safety Analysis**
    a. Safety Analysis Process
        1. Detailed analysis for Unincorporated Boulder County & the Mountain Towns, Lafayette, and Superior
        2. Analyzed 10 years of CDOT crash data (January 2013 to December 2022)
        3. For each study area, developing:
            a. Crash Analysis (understand crash trends)
            b. High Injury Network (understand where injury crashes have occurred)
            c. High Risk Network (understand where injury crashes may happen in the future)
        4. Overlaying Phase 1 Community Input with this analysis to make sure we're not missing anything and to give us more context on the human behavior and human comfort
    b. HIN & HRN: What's the Difference?
        1. High Injury Network: Addressing Crashes Today
            a. Identifies locations where the top injury crashes are occurring based on historical crash data
        2. High Risk Network: Preventing Crashes Tomorrow
            a. Identifies locations where there is high risk for potential crashes based on roadway characteristics
    c. HIN Process
        1. Serious and fatal injury crashes weighted higher than minor injury crashes
            a. Minor injury = 1 point; serious injury=2 points; fatal=4 points
        2. Local Agency roadways were analyzed separately from CDOT roadways to account for the higher number of crashes and different crash trends on DOT roadways
            a. Thinking towards implementation and responsible parties

        b. Different types of crash trends on CDOT roads versus local roads
    3. Weighted Injury crashes were split into local agency roadway crashes and CDOT roadway crashes, then separated into intersection and segment crashes to determine the High Injury Network Results.
d. HRN Process
    1. Identified common roadway characteristics of the serious injury, fatal, and vulnerable road user crashes to select risk factors
    2. Identifying the elements of the roadways where injury crashes are currently occurring to understand where they might happen in the future
e. HRN Example
    1. 95th St & Lookout Rd is flagged as a HIN Intersection
    2. 95th St & Mineral Road – has similar context in terms of signalization, roadway width, has potential to be on HRN

6. **Q&A**
    a. Matt Muir: How is this weighted against the Boulder County Transportation Master Plan? The TMP seems to predict these same conditions.
        1. Nikki: Bike crashes are the top serious injury and fatal crash type on County roadways. We are developing a Bike/Ped HIN, as well as including roadways with subpar bicycle facilities as a risk on the HRN.
        2. We will also make sure recommendations and priorities align with the TMP.
    b. Stephanie Walton: How are we factoring in future development? In the list of risk factors, are we considering facilities that accommodate older adults?
        1. Nikki: We are looking at destination types (libraries, senior centers, transit facilities, etc) and determining if there are trends within the crash data in proximity to these destinations to be potential risk factors. We are also considering planned or recently completed improvements when considering locations for recommended improvements.
    c. Frank Phillips: Once we have all the recommendations assembled, do we see this moving forward into a funding phase?
        1. Nikki: Our goal is to deliver a plan to each agency that is focused on implementation, so prioritizing actions and determining high level planning cost as well as implementation responsibility and potential funding sources.
7. **Safety Findings**
    a. Boulder County: Safety Analysis
        1. The total number of crashes has decreased in recent years (following the pandemic in 2020), but the number of serious injury and fatal crashes has remained consistent, so the percentage of these crashes has increased.
        2. Over 10 years, 135 people died in traffic crashes in the project area.
        3. County roadways make up 86% of roadway centerline miles, but only 30% of serious injury and fatal crashes. CDOT roadways make up only 14% of roadway centerline miles, but 70% of serious injury and fatal crashes.

        a. Given this distribution, the project team analyzed CDOT and county roadways separately.
    4. On Boulder County roads, the top crash types were fixed object, rear-end, and overturning. However, the top serious injury and fatal crash types were bicycle, fixed object, and overturning. The disproportionate amount of serious injury and fatal bicycle crashes compared to all crashes emphasizes the vulnerability of this road user.
    5. On CDOT roads, the top crash types were rear-end, fixed object, and sideswipe. The top serious injury and fatal crash types were overturning, head-on, and broadside. Rear-end crashes are common, but they are less likely to result in serious injury and fatality.

b. Mountain Town Zoom-in – Nederland
    1. 191 crashes occurred within the Nederland boundary, including 5 serious injury and fatal crashes consisting of:
        a. 1 broadside crash
        b. 1 pedestrian crash
        c. 2 head-on crashes (1 fatal involving motorcycle)
        d. 1 fixed object crash
    2. The top crash types in Nederland were Parked motor Vehicle, Fixed Object, Rear End, Embankment/Ditch, and Overturning.

c. Mountain Town Zoom-in – Ward
    1. 8 crashes occurred within the Ward boundary, including 2 serious injury crashes consisting of
        a. 1 guard rail crash
        b. 1 overturning crash

d. Mountain Town Zoom-in – Jamestown
    1. 10 crashes occurred within the Jamestown boundary, with no serious injuries or fatalities.

e. Boulder County: High Injury Network (HIN)
    1. The HIN consists of segments and intersections broken down into county and CDOT-owned roadways with the highest concentrations of injury crashes
    2. Splitting out county-owned roadways allows us to identify segments with a high concentration of injury crashes compared to other county roadways, without being skewed by the proportionally higher CDOT roadways

f. Lafayette: Safety Analysis
    1. Similarly to Boulder County, total crashes have declined in the past few years, but the number of serious injury and fatal crashes has remained consistent.
    2. Over 10 years, there were 67 serious injury crashes and 19 fatal crashes in Lafayette.
    3. The top serious injury and fatal crash types in Lafayette were broadside, approach turn, rear-end, and sideswipe.

g. Lafayette: High Injury Network (HIN)
    1. The HIN consists of the segments and intersections with the highest concentrations of injury crashes. Some state highways (US 287, Arapahoe w/o US 287, 95th St s/o Arapahoe Road) were removed from the analysis due to having recently completed planning studies, with a desire to have a complete sense of where the most impact can be had on areas that haven't been studied yet
h. Superior: Safety Analysis
    1. Over 10 years, there were 8 serious injury crashes and 1 fatality in Superior (which occurred on Hwy 128).
    2. The majority of crashes occurred at intersections, with a hotspot of crashes at McCaslin and Marshall.
    3. Due to this concentration of crashes at intersections and the lack of concentrated injury crashes on segments, the High Injury Network consists only of intersections.
    4. The High Risk Network was developed using known risk factors such as speed limit and number of lanes. High risk segments appear around the US 36 interchange, as well as along Rock Creek Pkwy, Coalton, and Hwy 128.

8. **Discussion: Do the results of the crash analysis, HIN, or HRN resonate with you? Are there any that are surprising?**
    a. Stephanie Walton: Is there any way to break out how roadways or transportation infrastructure is being used for recreation versus commuting/non-recreation?
        1. Nikki: One thing might be able to do is look at where bicycle/pedestrian crashes are occurring, such as trail crossings, to try and determine trip purpose.
        2. Alexandra: What is the purpose of breaking down the data that way?
            a. Stephanie: assumptions and priority of investment might be different
        3. Katrina Harms: Agree with Stephanie about difference between work and recreation, especially for communities like Nederland and Ward that experience high volumes of tourists in the summertime.
        4. Michelle: Lafayette has had some conversations about using Strava data to determine locations of recreation rides, but there is concern that it may not be equitable. Also, can consider looking at exposure during peak commuting times.
        5. Krista: Wary of the danger of diving into recreation vs commuters, given that this is data we don't have and may not need. Is this data relevant for other things, such as when people are traveling? We could get this data from counts. Caution against going down that rabbit hole unless we have a better clearer reason for it. Would also like to hear more about the bike crashes as we dive into it and have maps for that specifically.
            a. Nikki: As part of our crash analysis we are looking at a variety of factors, which includes time of day and day of week, so can potentially break

down by crash type, etc. to understand more specifically when crashes are occurring.

b. Nikki: We are working on developing a bike/ped specific HIN for Boulder County, as well as diving into the locations with bike/ped crashes in Lafayette and Superior.

b. Rachel: There are places on Strava that are hot and are used a lot, which introduces potential for collisions. There are also areas that show up as gaps where there is no one riding, which can be used of evidence of where areas do not feel safe. Is the project team looking at that?

1. Nikki: We haven't specifically driven into the Strava data, but if we do go down that path it would be a combination of looking at hotspots and gaps to understand the whole picture.
2. Liv: Community input was specifically about where people don't feel safe, so we do have input from the community about where people don't feel safe biking and why, which we can use to fill in the gaps of the crash data.

c. Krista: Wanted to mention project by Portland State University, which fused Strava data with the bicycle counts provided by Boulder County, so we have an estimate across the County to try to overcome some of the bias inherent with the Strava data. It is the researchers' best estimate of where bicyclists are traveling across the County.

1. https://nitc.trec.pdx.edu/research/project/1269/Exploring_Data_Fusion_Techniques_to_Estimate_Network-Wide_Bicycle_Volumes
2. https://jbroachpdx-map-share.nextgis.com/resource/21/display?panel=none

9. **Where We're Going: Working Towards the Action Plans**
    a. Action Plan Development
        1. Develop Safety Strategies and Initial Recommended Actions
            a. Variety of Types: Infrastructure & Non-Infrastructure
            b. Different Applications: Location based, systemic, programmatic
        2. Public Input
        3. Finalize Recommended Actions
            a. Near Term
            b. Mid Term
            c. Long Term
        4. Action Plans
            a. Includes additional detail/plans for priority, near-term actions
10. **Next Steps**
    a. Actions
        1. Upcoming Phase 2 Outreach
            a. Goal: Present initial recommended actions to community
        2. Promote public engagement events, website, and survey
        3. Attend/participate
        4. Do you know of upcoming events that can help promote this outreach?

b. Calendar
    1. December 2024 – Early 2025: Phase 2 Outreach
        a. December: Superior Pop-up at Winter Fest
        b. January/February: All other Partners pop-ups and public meetings
    2. December: Project Update (likely via email)
c. Katrina: there are a handful of pop-up events in December, but can keep an eye out for events early next year
d. Stephanie: Is the Lafayette Chamber continuing Oatmeal Festival in January?
    1. Frank: Yes, Saturday January 13th
        a. Note: Post-meeting research showed that the actual date for 2025 is Tue., Jan. 14.
    2. https://festivalnet.com/27257/Lafayette-Colorado/Lifestyle-Healthy-Living-Events/Lafayette-Quaker-Oatmeal-Festival
e. Stephanie: CDOT grant was awarded to do safety improvements on US 287 as part of NAMS projects, congratulations to anyone who was involved in making that happen.

Superior Vision Zero Action Plan

Steering Committee December 2024 Update

Project Overview: Create Vision Zero Action Plans for Boulder County, Lafayette, and Superior to address roadway safety, with a Vision Zero goal of eliminating all traffic fatalities and serious injuries.

Study Area*:

The Superior plan includes all roads including local, collectors, arterials, and Colorado Department of Transportation (CDOT) roads in Superior.

Community Input Summary:

Top themes that emerged from a community survey (Summer 2024):

- McCaslin Boulevard & Marshall Road: Speeding and red-light running make this intersection feel unsafe for both drivers and people walking
- Desire for driver education how to navigate roundabouts and for more comfortable pedestrian and bicycle infrastructure at roundabouts
- McCaslin Boulevard and Rock Creek Parkway had the highest number of comments of people feeling unsafe driving, walking, and biking

Safety Analysis Findings:

The safety analysis included a detailed analysis for all roadways in the Town of Superior. Ten years of CDOT crash data was analyzed from January 2013 to December 2022. Over the ten-year analysis period, 1 person died and 8 people were seriously injured. **78% of all injury crashes in Superior include Approach Turn, Pedestrian & Bicycle Involved, Broadside at Traffic Signal, Fixed Object, or Rear-end.** Injury crashes represented in the analysis include crashes that resulted in a minor injury, serious injury, or fatality in a traffic collision event on Superior roadways. The top injury crash types are described below.

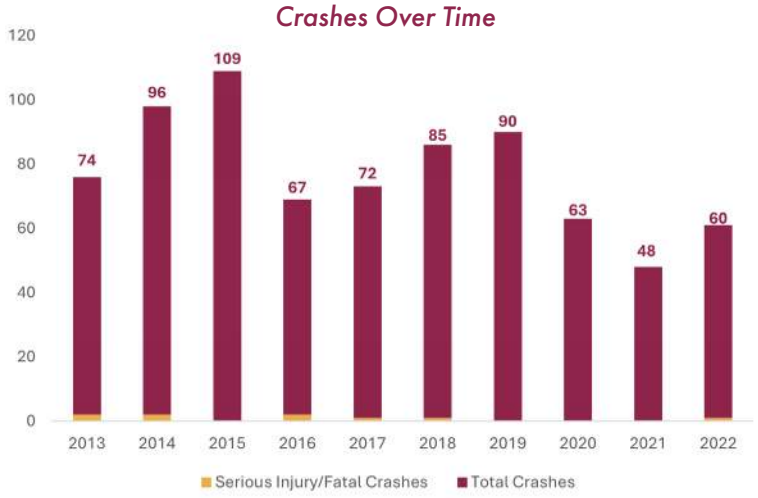
Crash Type Descriptions:

Approach Turn: Crashes that occur when someone turns left in front of oncoming traffic without yielding the right-of-way.

Pedestrian and Bicycle Involved: This crash type involves a motor vehicle and at least one person who is walking, rolling, or biking.

Broadside at Traffic Signal: Also known as a T-bone crash or an angle collision, a broadside crash at a signalized location happens when the front end of one car crashes into the side of another car at a signalized location.

Crashes Over Time



Fixed Object: This crash type involves a motor vehicle and a stationary object such as utility poles, guardrails, trees, or buildings.

Rear-end: This crash type occurs when the front of one vehicle collides with the back of another vehicle.

**Lafayette and Boulder County Vision Zero Action Plan updates are covered in separate documents.*

Superior Vision Zero Action Plan

Steering Committee December 2024 Update

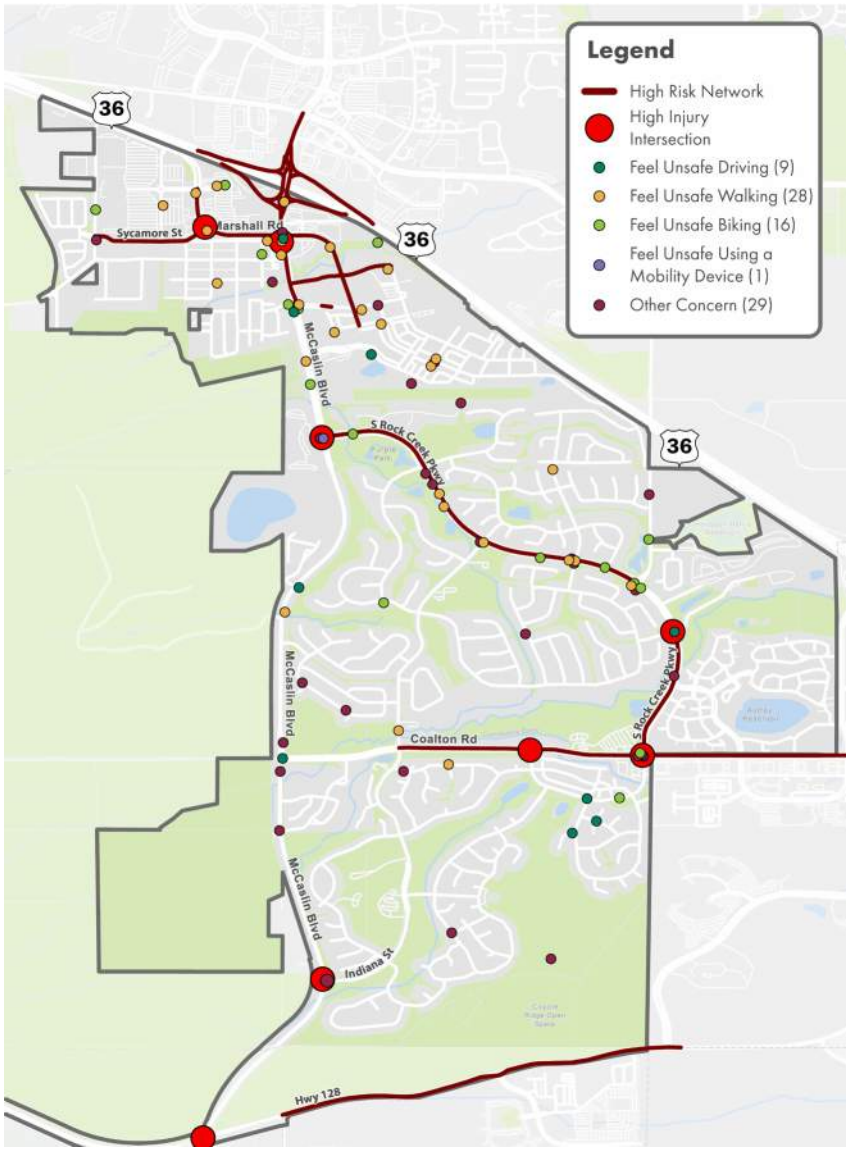
High-Injury Network & High-Risk Network

A high-injury network (HIN) is a roadway network that identifies locations where the top injury crashes are occurring based on historical crash data. This network will assist Superior in **prioritizing locations with the highest need for safety improvements.** For the development of the HIN, minor injury, severe injury, and fatal crashes were used to identify intersections with the highest concentration of injury and fatal crashes within the Town.

A high-risk network (HRN) identifies contextual factors related to historical crashes to **identify locations where there is a high risk for potential crashes based on roadway characteristics.** The HRN may reveal locations that do not necessarily have a recent history of injury crashes but have a high risk for injury crashes in the future. For the development of the HRN, the following factors were used to identify roadway segments with the highest risk of injury crashes in the future:

- Functional classification identified as a collector or arterial
- Speed limit 30 MPH or greater
- 4 or more travel lanes
- No presence of a bicycle facility
- No presence of a sidewalk facility
- Adjacent to a commercial/downtown land use
- Within ¼ mile of a school
- Unmarked or partially marked sidewalk

The map to the right displays the identified HIN and HRN in Superior, as well as pins dropped on the interactive map during the first phase of community engagement.



Superior Vision Zero Action Plan

Steering Committee December 2024 Update

Safety Challenges and Proposed Improvements

The plan will follow the FHWA's Safe System Approach and will focus recommendations for Engineering, Enforcement, Education, and Evaluation actions in the following areas:

- Safer Roads
- Safer Speeds
- Safer People

Crash trends and contributing factors for HIN segments have been identified and the project team has begun to determine safety countermeasures for top high-injury network intersections and segments and locations identified through community input. Countermeasures will be organized into safety improvements and prioritized by factors such as historical crash history, risk for future crashes, crash reduction potential, equity indicators, public input, and planning-level costs. The potential countermeasures are currently being presented to the public within the Superior Recommendations Survey. The project team will develop specific short-, mid-, and long-term recommended actions for incorporation into the Action Plans. The section below provides examples of potential recommended actions. This is currently still in draft form and not comprehensive.

Examples of the types of recommended actions that will be explored include:

Focus Area	Action	Type
Safe Roads	Install traffic signal or pedestrian hybrid beacon/HAWK on McCaslin Boulevard south of Discovery Parkway.	Engineering
	Install pedestrian crossing signage, mark crosswalk, and pedestrian refuge island at existing crossing with curb ramps on Indiana Street east of McCaslin Boulevard.	Engineering
	Construct bicycle/pedestrian shared use path at the US 36 Interchange and remove on-street bicycle facilities through the interchange.	Engineering
Safe Speeds	Pilot automated enforcement, such as red-light cameras and speed cameras at signalized intersections and arterial corridors.	Enforcement
Safe People	Implement targeted education campaigns about how to navigate roundabouts including interacting with pedestrians and bicyclists at roundabouts.	Education
All	Provide quarterly multimodal safety article in the Sentinel Newsletter.	Education

Project Next Steps:

- Q4 2024-Q1 2025: **Participate in Superior's Recommendations Survey and promote the survey within your network.** The survey is open through January 31, 2025.
- Q1 2025: Steering Committee meeting to discuss draft recommended actions; Draft Action Plan available for review
- Q2 2025: Final Action Plan

Appendix B: Pop-up Materials

Town of Superior
Vision Zero Action Plan

Recognizing the importance of implementing a regional approach to roadway safety, Boulder County, Lafayette, and Superior (the Partners) joined forces to apply for Safe Streets and Roads for All (SS4A) grant funding to address **traffic-related deaths and serious injuries**.

The grant will enable Superior to develop a **Vision Zero Action Plan (VZAP)** which will be a detailed analysis of traffic crashes and risk factors in Superior and specific recommendations to comprehensively **improve transportation safety** in the coming years.

What is Vision Zero?

Vision Zero is a community strategy to eliminate all traffic fatalities and serious injuries, while increasing safe, healthy, equitable mobility for all.

Learn More About the Plan:

boco.org/VisionZeroActionPlan

Traffic Safety Analysis

Crash Trends in Superior:

78% of all injury crashes in Superior include the following crash types:

Approach Turn: Crashes that occur when someone turns left in front of oncoming traffic without yielding the right-of-way.

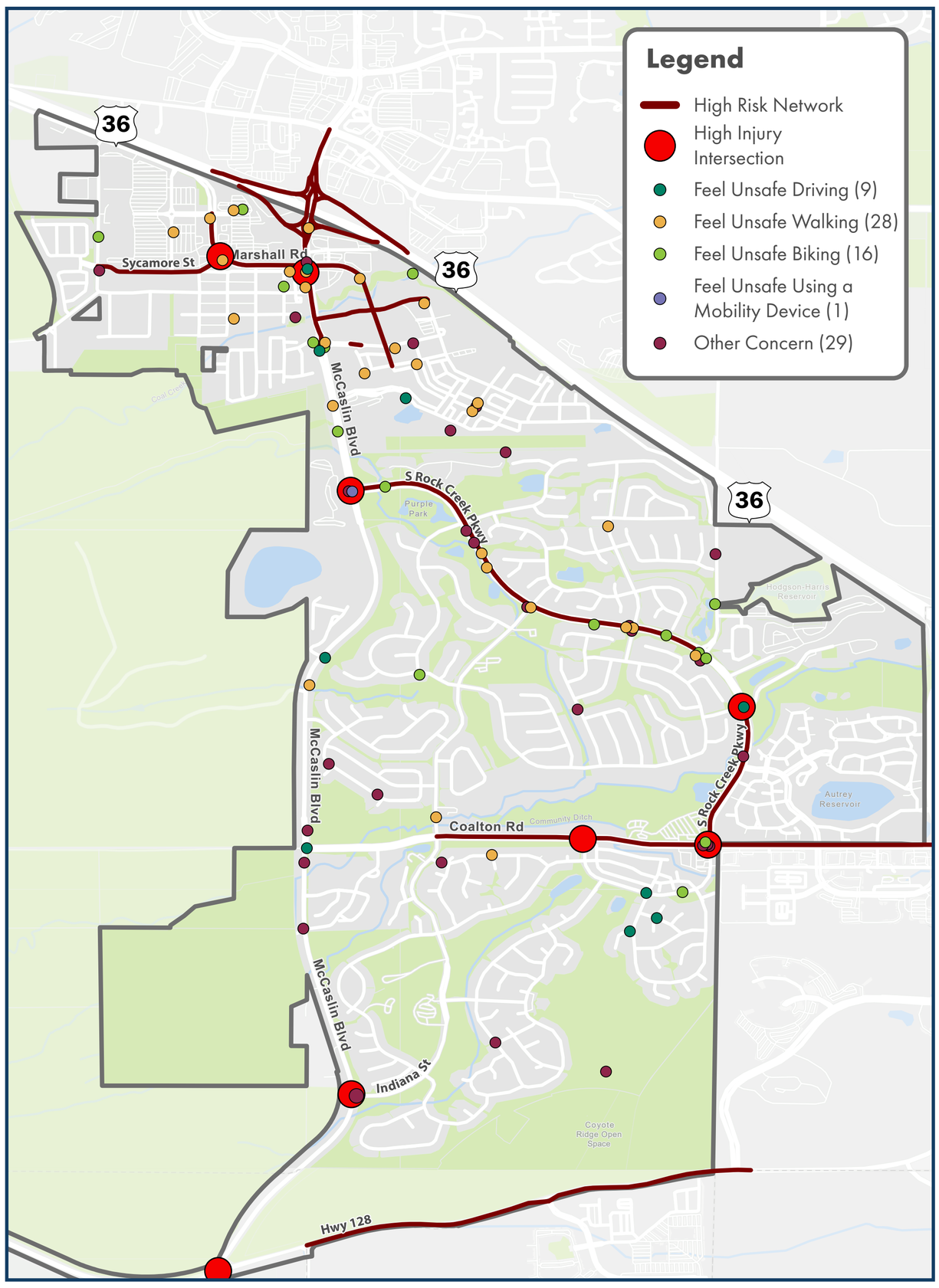
Pedestrian & Bicycle Involved: This crash type involves a motor vehicle and at least one person who is walking, rolling, or biking.

Broadside at Traffic Signal: Also known as a T-bone crash, a broadside crash at a signalized location happens when the front end of one car crashes into the side of another car at a signalized location.

Fixed Object: This crash type involves a motor vehicle and a stationary object such as utility poles, guardrails, trees, or buildings.

Rear End: This crash type occurs when the front of one vehicle collides with the back of another vehicle.

High Injury Network & High Risk Network:



A **high-injury network (HIN)** is a roadway network that identifies locations where the most injury crashes are occurring based on historical crash data.

A **high-risk network (HRN)** identifies contextual factors related to historical crashes to identify locations where there is a high risk for potential crashes in the future based on roadway characteristics.

Town of Superior Safety Countermeasures: We Want Your Input!

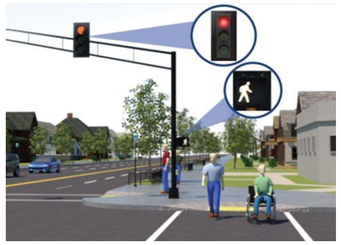
Town of Superior
Gateway To Boulder Valley®

Input Key:

- Very Supportive
- Supportive with some concern
- Not Supportive

Common factors contributing to the top injury crash types in Superior may potentially be reduced by the following countermeasures. Please indicate your level of support by placing a sticker in the dashed boxes associated with the following:

Leading Pedestrian Interval



A leading pedestrian interval (LPI) is a strategy to reduce conflicts between vehicles and people walking and biking. A LPI gives pedestrians a 3-7 second head start, allowing them to enter the crosswalk before vehicles turn or proceed which increases the visibility of pedestrians to turning drivers.

Crash Type(s) Addressed:
Pedestrian & Bicycle

Crash Reduction Potential: 13%

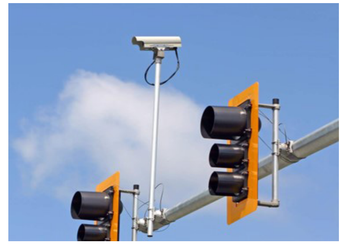
Pedestrian Refuge Islands

A pedestrian refuge island is intended to help protect pedestrians who are crossing a multilane road. The presence of a pedestrian refuge island allows pedestrians to focus on one direction of traffic at a time as they cross.

Crash Type(s) Addressed:
Pedestrian & Bicycle

Crash Reduction Potential: 56%

Red Light Cameras & Speed Cameras



Red light cameras and speed cameras are an automated system that photograph drivers and vehicles that run red lights and that are traveling faster than the legal speed limit on the roadway. Drivers are ticketed for the violation, holding them accountable for dangerous behavior

Crash Type(s) Addressed:
Broadside at Signalized Intersections
Speed-related
Rear End

Crash Reduction Potential:
Red light camera – 25%
Speed camera – 54%

Curb Extensions (Bulb-outs)

Curb extensions - also known as bulb-outs extend the curb line out into the parking lane, which reduces the effective street width. Curb extensions significantly improve pedestrian crossings by reducing the pedestrian crossing distance and improving the ability of pedestrians and motorists to see each other.

Crash Type(s) Addressed:
Pedestrian & Bicycle

Crash Reduction Potential: 37%

Raised Crossings

Raised crosswalks are ramps that provide elevated crossing areas spanning the entire width of the roadway, often placed at midblock crossings or right-turn slip lanes. These crosswalks act as traffic-calming measures that slow vehicles and allow pedestrians to cross at grade with the sidewalk.

Crash Type(s) Addressed:
Pedestrian & Bicycle

Crash Reduction Potential: 45%

Protected Left-turns

"Protected-only" phasing provides a separate phase for left-turning traffic and allowing left-turns to be made only on a green left arrow signal indication. Separate left-turn motor vehicle movements prevent turning vehicles from overlapping with the pedestrian walk phase or conflicting with oncoming vehicles.

Crash Type(s) Addressed:
Approach Turn
Pedestrian and Bicycle

Crash Reduction Potential: 99%

Appendix C: Survey Questions

Overview

Recognizing the importance of implementing a regional approach to roadway safety, Boulder County, Lafayette, and Superior joined forces and successfully applied for Safe Streets and Roads for All (SS4A) grant funding to create a Vision Zero Action Plan for each agency. **Vision Zero is a strategy to eliminate all traffic fatalities and serious injuries.**

The Boulder County Vision Zero Action Plan project kicked off earlier this year. Specific to Superior, this project has analyzed historic and potential crash activity on Superior roadways and has incorporated community input gathered this summer to characterize roadway safety. This information has been used to identify safety concerns and countermeasures to reduce harmful crash events on Superior streets.

Instructions: *Please review the summary of injury crash trends and safety analysis and proposed countermeasures and provide your feedback.* ***Your feedback is extremely important and will influence the recommendations that will be included in the final safety action plan.***

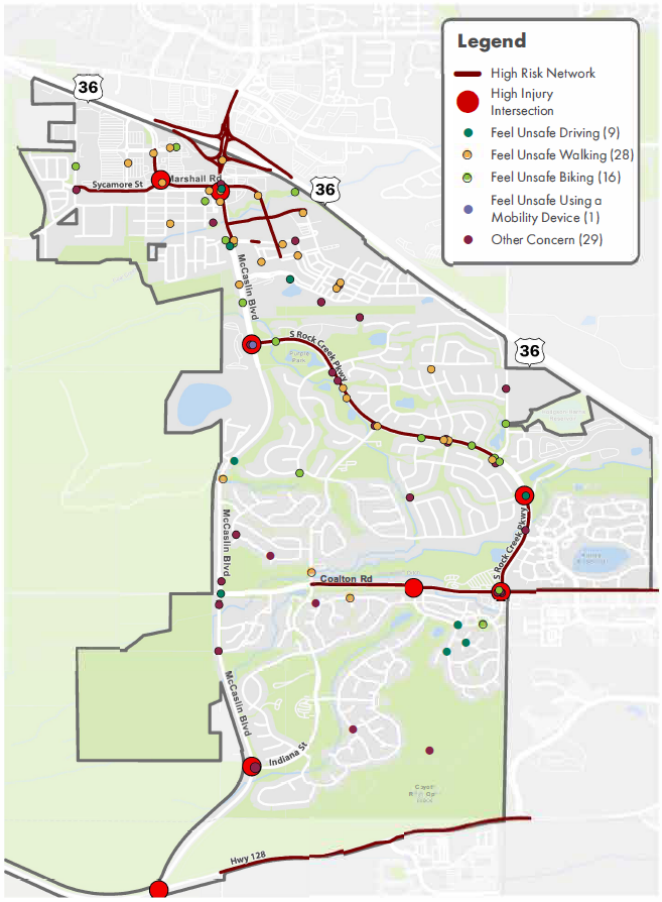
Si desea acceder a esta encuesta en español, haga clic aquí.

High Injury / High Risk Network

Definitions:

- A high-injury network (HIN) is a roadway network that identifies locations where the top injury crashes are occurring based on historical crash data.
  A high-risk network (HRN) identifies contextual factors related to historical
- crashes to identify locations where there is a high risk for potential crashes based on roadway characteristics. The HRN may reveal locations that do not necessarily have a recent history of injury crashes but have a high risk for injury crashes in the future.

The map below shows the HIN and HRN for Superior along with locations where community members indicated having safety-related concerns. Community input displayed on the map was collected over the summer of 2024 through an online survey and interactive map, virtual public meeting, and through tabling at the Superior 4th of July festival.



Crash Trends

78% of all injury crashes in Superior include Approach Turn, Pedestrian & Bicycle Involved, Broadside at Traffic Signal, Fixed Object, or Rear-End. Injury crashes represented in the analysis include crashes that resulted in a minor injury, serious injury, or fatality in a traffic collision event on Superior roadways. These are the top five injury crash types identified in Superior:

Approach Turn: Crashes that occur when someone turns left in front of oncoming traffic without yielding the right-of-way.

Pedestrian and Bicycle Involved: This crash type involves a motor vehicle and at least one person who is walking, rolling, or biking.

Broadside at Traffic Signal: Also known as a T-bone crash or an angle collision, a broadside crash at a signalized location happens when the front end of one car crashes into the side of another car at a signalized location.

Fixed Object: This crash type involves a motor vehicle and a stationary object such as utility poles, guardrails, trees, or buildings.

Rear End: This crash type occurs when the front of one vehicle collides with the back of another vehicle.

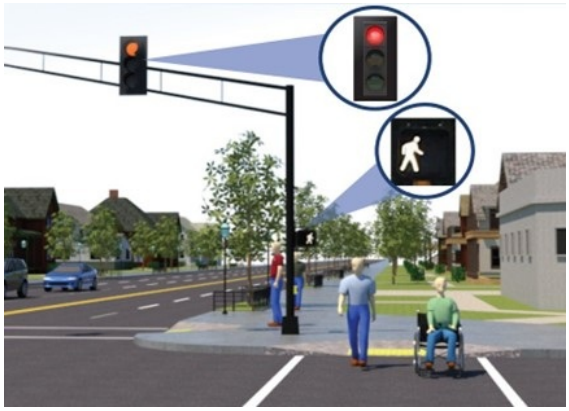
Safety Countermeasures

There are many common factors contributing to these crash types, such as speeding and lack of compliance with traffic signals. Countermeasures aimed at mitigating these factors can reduce the frequency and/or severity of traffic crashes. The crash reduction potential of each countermeasure estimates the expected reduction in crashes following implementation of the countermeasure, based on the FHWA's Crash Modification Factors Clearinghouse. Please review the countermeasures identified by the project team for Superior and indicate your level of support.

Leading Pedestrian Interval

A leading pedestrian interval (LPI) is a strategy to reduce conflicts between vehicles and people walking and biking. A LPI gives pedestrians a 3-7 second head start, allowing them to enter the crosswalk before vehicles turn or proceed which increases the visibility of pedestrians to turning drivers.

Crash Type it Addresses	Crash Reduction Potential
Pedestrian and Bicycle	13%



* 1. How supportive are you of implementing Leading Pedestrian Intervals at signalized intersections?

- ◯ Very supportive
- ◯ Supportive with some concerns
- ◯ Not supportive

2. Do you have any other comments or feedback on Leading Pedestrian Intervals? If you have concerns or are not supportive of Leading Pedestrian Intervals, please share why.

Pedestrian Refuge Islands

A pedestrian refuge island is a median with a refuge area that is intended to help protect pedestrians who are crossing a multilane road. The presence of a pedestrian refuge island at a midblock location or intersection allows pedestrians to focus on one direction of traffic at a time as they cross, and gives them a place to wait for an adequate gap in oncoming traffic before finishing the second phase of a crossing.

Crash Type it Addresses	Crash Reduction Potential
Pedestrian and Bicycle	56%

S. Coal Creek Dr & Akron Pl

* 3. How supportive are you of implementing pedestrian refuge islands?

- ◯ Very supportive
- ◯ Supportive with some concerns
- ◯ Not supportive

4. Do you have any other comments or feedback on Pedestrian Refuge Islands? If you have concerns or are not supportive of Pedestrian Refuge Islands, please share why.

Red Light Cameras and Speed Cameras

Red light cameras and speed cameras are an automated system that photograph drivers and vehicles that run red lights and that are traveling faster than the legal speed limit on the roadway. Drivers are ticketed for the violation, holding them accountable for dangerous behavior.

Crash Type it Addresses	Crash Reduction Potential
Broadside at Signalized Intersections Speed-related crashes Rear End	Red light camera – 25% Speed camera – 54%

* 5. How supportive are you of implementing red light and speed cameras?

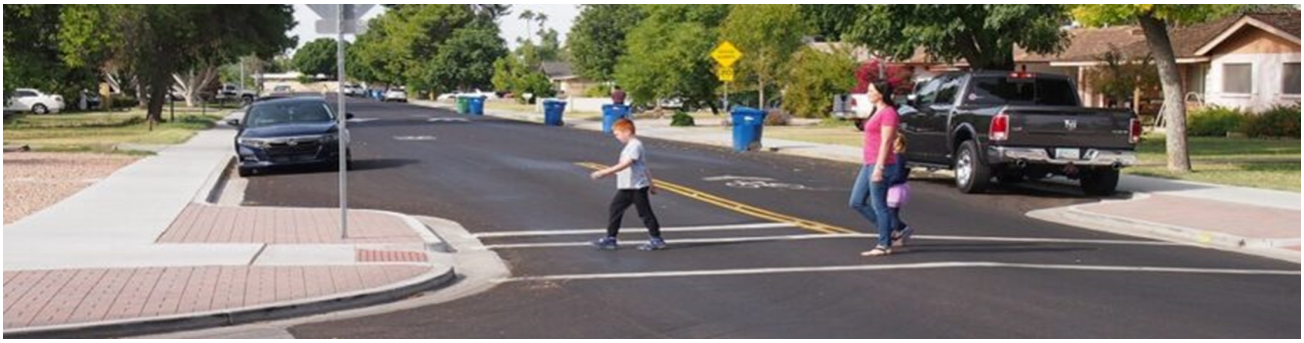
- ◯ Very supportive
- ◯ Supportive with some concerns
- ◯ Not supportive

6. Do you have any other comments or feedback on Red Light Cameras and Speed Cameras? If you have concerns or are not supportive of Red Light Cameras and Speed Cameras, please share why.

Curb Extensions (Bulb-outs)

Curb extensions - also known as bulb-outs or neckdowns extend the sidewalk or curb line out into the parking lane, which reduces the effective street width. Curb extensions significantly improve pedestrian crossings by reducing the pedestrian crossing distance, improving the ability of pedestrians and motorists to see each other, and reducing the time that pedestrians are in the street.

Crash Type it Addresses	Crash Reduction Potential
Pedestrian and Bicycle	37%



* 7. How supportive are you of implementing curb extensions (bulb-outs)?

- ◯ Very supportive
- ◯ Supportive with some concerns
- ◯ Not supportive

8. Do you have any other comments or feedback on Curb Extensions (Bulb-outs)? If you have concerns or are not supportive of Curb Extensions (Bulb-outs), please share why.

Raised Crossings

Raised crosswalks are ramps that provide elevated crossing areas spanning the entire width of the roadway, often placed at midblock crossings or right-turn slip lanes. The crosswalk is demarcated with paint and/or special paving materials. These crosswalks act as traffic-calming measures that slow vehicles and allow pedestrians to cross at grade with the sidewalk.

Crash Type it Addresses	Crash Reduction Potential
Pedestrian and Bicycle	45%

Indiana St by Superior Elementary

* 9. How supportive are you of implementing raised crossings?

- ◯ Very supportive
- ◯ Supportive with some concerns
- ◯ Not supportive

10. Do you have any other comments or feedback on Raised Crossings? If you have concerns or are not supportive of Raised Crossings, please share why.

Protected Left-turns

"Protected-only" phasing provides a separate phase for left-turning traffic and allowing left turns to be made only on a green left arrow signal indication. Separate left-turn motor vehicle movements prevent turning vehicles from overlapping with the pedestrian walk phase or conflicting with oncoming vehicles.

Crash Type it Addresses	Crash Reduction Potential
Approach Turn Pedestrian and Bicycle	99%

* 11. How supportive are you of implementing protected left-turns?

◯ Very supportive

◯ Supportive with some concerns

◯ Not supportive

12. Do you have any other comments or feedback on Protected Left-Turns? If you have concerns or are not supportive of Protected Left-Turns, please share why.

Project Prioritization

* 13. Superior will consider several factors when deciding how to prioritize implementation of recommended projects in the Action Plan. Which of the following factors do you feel should be weighed more heavily? Please rank from highest priority (1) to lowest priority (4).

_____	Prioritizing vulnerable populations (for example: elderly, young children, low income, etc.)
_____	Places where there are more known/historical crashes
_____	Locations that make it safer for walking and biking
_____	Places where there is a high risk for a serious crash in the future

14. Do you have any other comments or feedback on safety countermeasures or prioritization?

Thank you

We value your participation. Please visit boco.org/visionzeroactionplan to learn more about the Boulder County Vision Zero effort.