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Bicycle Crash – this crash type involves a motor vehicle and at least one person who is biking or using a scooter.

Bike/Pedestrian HIN (BP HIN) –a HIN (see right) focused specifically on concentrations of crashes involving bicyclist or pedestrians.

BOCC - Board of (Boulder) County Commissioners

Broadside Crash – also known as a T-bone crash, a broadside crash happens when the front end of one car crashes into the side of another car.

CDOT – Colorado Department of Transportation

Countermeasure – an engineering solution that can be implemented to correct a crash problem or reduce the likelihood of a crash occurring.

Crash Modification Factor – used to compute the expected number of crashes after implementing a countermeasure on a street or at an intersection.

Crash Severity – refers to the extent of injury and/or property damage resulting from a traffic crash. Crash severity is categorized as property damage only, possible injury, minor injury, serious injury, or fatality.

DRCOG – Denver Regional Council of Governments

Fatal Crash – a crash resulting in one or more deaths.

FHWA – Federal Highway Administration

Fixed-Object Crash – this crash type involves a motor vehicle and a stationary object such as a utility pole, guardrail, tree, or building.

Injury Crash – a traffic crash that results in one or more individuals sustaining injuries, ranging from minor to serious (a "severe" crash as defined later includes fatalities).

High-Injury Network (HIN) – a data-driven mapping tool which identifies segments and intersections with the highest concentration of crashes resulting in injury, and serves as a tool to prioritize investment in safety projects.

Left-Turn Crash – a crash that occurs when someone turns left in front of oncoming traffic without yielding the right-of-way.

Rear-End Crash – this crash type occurs when the front of one vehicle collides with the back of another vehicle.

Safe Streets and Road for All (SS4A) – a federal, discretionary grant program with \$5 billion to be spent nationwide between 2022 and 2026 to prevent roadway deaths and serious injuries.

Serious Injury Crash – a crash that results in an incapacitating (life altering) injury.

Severe Crash – a general term encompassing both fatal and serious injury crashes.

Systemwide Safety – an approach to safety involving widely implementing improvements based on high-risk roadway features correlated with specific severe crash types

USDOT – United States Department of Transportation

Vision Zero – a transportation strategy to eliminate all traffic fatalities and serious injuries while increasing safe, healthy, equitable mobility for all. Vision Zero recognizes that humans make mistakes and therefore the transportation system should be designed to minimize the consequences of human error.

Vulnerable Road User – A pedestrian, bicyclist, or motorcyclist.







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Boulder County





OVERVIEW

Boulder County's Vision Zero goal identified in the 2020 Transportation Master Plan (TMP) is to eliminate all serious injury and fatal traffic crashes by 2035. This Vision Zero Action Plan identifies and prioritizes strategies and actions for the next ten years to work towards this goal.

The plan process included a comprehensive technical safety analysis to identify overall crash trends and high-crash locations of focus, called a High-Injury Network (HIN), as well as identifying top crash types to address systemwide.

The county completed three rounds of community engagement to support and complement this effort:

- **Summer 2024**: community members' attitudes and concerns related to traffic safety in the study area.
- **Early 2025**: initial feedback on the safety treatments (countermeasures) being considered and input on factors to consider for HIN project prioritization.
- Spring 2025: review of the draft plan.

The plan's study area covers unincorporated Boulder County, the participating mountain towns of Jamestown, Nederland, and Ward and includes both highways owned and maintained by the Colorado Department of Transportation (CDOT), as well as county-owned roads.

The plan includes a list of implementation strategies and actions. This is not a fiscally constrained plan; the county does not have all of the funding needed to implement this plan. Steps moving forward will include pursuing funding from a variety of sources and refining the prioritization of actions.

SAFETY ANALYSIS HIGHLIGHTS

Key findings based on ten years of crash data (2013-2022) include:

- **10,642** total crashes were reported, of which **496** were reported as serious injury and fatal ("severe") crashes.
- Severe crashes have fluctuated throughout the ten-year period with no sustained downward trend.
- 123 people were killed and 469 people were seriously injured.
- **174** crashes were reported involving bicyclists, **53** involving pedestrians, and **303** involving motorcyclists.
- **344** severe crashes were on CDOT highways; **152** severe crashes were on county roads.
- **149** severe crashes were at intersections; **347** severe crashes were on roadway segments.
- The highest concentrations of severe crashes were June through October. 32% of severe crashes occured in dark conditions. 88% of severe crashes occured in dry conditions.

The high-injury network (HIN) of high-crash locations includes **7% of the roadway miles** in the study area and **66% of the total severe crashes**. A Bike/Pedestrian HIN was also developed to ensure locations with high numbers of crashes with bike people biking and walking would be addressed.

The **top five crash types** systemwide account for **over 75% of all severe crashes** and include:





Single-Vehicle Crashes*





Left-Turn Crashes

*Examples of single-vehicle crashes include departing the road, colliding with fixed objects, and overturning vehicles.



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HIGH-INJURY NETWORK

Boulder County

The safety analysis also included the development of **High-Injury Networks (HINs)** for both county roads and CDOT highways to identify the segments and intersections with the highest concentration of injury and fatal crashes. The **Bike/Pedestrian HINs (BP HINs)** reflect locations with high concentrations of injury and fatal crashes involving people biking and walking. This plan identifies and prioritizes safety projects within these HINs.



Longmont

ACTION PLAN SAFER ROADS (SR)

SR Strategy 1: Implement priority safety improvements on the County High-Injury Network.

Actions:

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SR1-a. Implement improvements from Priority One HIN Fact Sheet Recommendations.

SR1-b. Analyze, develop recommendations, and implement improvements for remaining Priority One HIN intersections and segments.

SR1-c. Analyze, develop recommendations, and implement improvements for Priority Two HIN intersections and segments.

SR1-d. Analyze, develop recommendations, and implement improvements for Priority Three HIN intersections and segments.

SR1-e. Proactively identify additional funding sources for implementation.

SR1-f. Implement already planned, ongoing, or upcoming county safety projects.

Each HIN location was scored based on a set of weighted criteria that reflect community values and safety needs. Following the scoring process, all county-owned locations were grouped into three categories.

- **Priority One Projects** represent the highestscoring segments and intersections, with the greatest need and opportunity for safety impact.
- **Priority Two Projects** meet several key criteria and are strong candidates for mid-term implementation.
- **Priority Three Projects** are important for longterm planning and may become more viable as conditions change.

SR Strategy 2: Work with regional partners and municipalities to implement priority safety improvements.

Actions:

SR2-a. Provide CDOT HIN intersection data and priorities to CDOT for the next Intersection Prioritization Study.

SR2-b. Provide CDOT HIN segment data and priorities to CDOT for consideration for future projects.

SR2-c. Coordinate and collaborate with CDOT and DRCOG on relevant grant applications for CDOT HIN roadways.

SR2-d. Continue working with CDOT, DRCOG, and municipalities on key regional safety corridors to develop and implement recommendations from current and future studies.





SAFER ROADS (SR)

SR Strategy 3: Implement priority safety improvements on the Bicycle/Pedestrian High-Injury Network.

Actions:

SR3-a. Complete safety analysis, identify recommendations, and implement improvements at county locations that are on the Bike/Pedestrian HIN.

SR3-b. Provide Bike/Pedestrian HIN data and priorities to CDOT for the next Bike and Pedestrian Safety Study.

SR Strategy 4: Proactively implement systemwide priority safety improvements.

Actions:

SR4-a. Add reflective traffic signal backplates at signalized intersections.

- SR4-b. Add tubular reflectors to sign posts and stop signs.
- SR4-c. Evaluate intersection controls, identify recommendations, and implement improvements (including potential conversion to roundabouts).
- SR4-d. Develop signal operation guidelines addressing left-turn operations, Leading Pedestrian/Bike Intervals, No Right Turn on Reds at signalized intersections.
- SR4-e. Implement the Signal Operation Guidelines, including but not limited to Leading Pedestrian/Bike Intervals, No Right Turn on Reds.
- SR4-f. Identify intersections and pedestrian/bicycle crossings with no roadway lighting and install intersection lighting.
- SR4-g. Develop pedestrian crossing treatment installation guidelines to guide where to install marked crossings and pedestrian signals.
- SR4-h. Develop bicycle facility signing and striping guidelines that can be incorporated into the county's Multimodal Transportation Standards.
- SR4-i. Implement safety improvements for culverts that don't meet clear zone requirements.
- SR4-j. Partner with municipalities and neighboring counties on cross-jurisdictional planning and design for multimodal access to trails/trailheads.

SR4-k. Analyze, develop recommendations, and implement improvements that address the top crash types, using Appendix F: Countermeasure Toolkit.





SAFER SPEEDS (SS)

SS Strategy 1: Implement automated speed enforcement to reduce speeding.

Actions:

SS1-a. Work with the BOCC and CDOT to implement automated speed enforcement on CDOT roads.

SS1-b. Analyze, develop recommendations, and implement automated speed enforcement on county roads.

SS Strategy 2: Implement engineering solutions to reduce speeding.

Actions:

SS2-a. Review, update, if warranted, and implement the county's speed limit setting and signing practices.

SS2-b. Develop speed-related design elements (e.g. traffic calming) that can be incorporated into the county's Multimodal Transportation Standards.

SS2-c. Identify county roads with a high number of speed-related crashes, and install traffic calming devices where appropriate.

SS2-d. Identify CDOT highways with a high number of speed-related crashes, and work with CDOT to implement solutions.







SAFER PEOPLE (SP)

SP Strategy 1: Empower Boulder County community members to be Vision Zero stewards.

Actions:
SP1-a. Expand and distribute roadway safety messaging and campaigns, building off messaging developed by partners (e.g., CDOT, CSP, DRCOG, NHSTA).
SP1-b. Explore the creation of an ambassador program to promote roadway safety.
SP1-c. Continue convening the Vision Zero Community Partnership (VZCP).
SP1-d. Create consistent countywide Vision Zero branding and messaging.
SP1-e. Implement additional training for Boulder County staff related to vehicle operations.
SP1-f. Offer roadway safety training to the community through Mobility for All.

SP Strategy 2: Address red-light running crashes.

Actions:

- SP2-a. Evaluate and implement recommendations for county intersections, including but not limited to red-light cameras.
- SP2-b. Evaluate and implement recommendations for CDOT intersections, including but not limited to red-light cameras.







SAFETY DATA AND REPORTING (SD)

SD Strategy 1: Track and report Vision Zero progress.

Actions:
SD1-a. Report on Vision Zero progress annually.
SD1-b. Monitor and analyze ongoing crashes.
SD1-c. Develop a public-facing Vision Zero Dashboard.

SD Strategy 2: Improve the quality and completeness of safety data.

Actions:
SD2-a. Implement a safety data tool to improve data quality and facilitate analysis of crash data.
SD2-b. Research ways to obtain supplemental data for bicycle and pedestrian crashes/close calls.
SD2-c. Research ways to obtain more complete and accurate multimodal counts.
SD2-d. Evaluate vehicle telematics data from other Boulder County departments related to safety (e.g., speeds, hard stops).





OTHER ACTIONS (OA)

OA Strategy 1: Evaluate Boulder County road maintenance practices to enhance safety.

Actions:

OA1-a. Analyze, develop recommendations, and implement improvements (as warranted/feasible) to the county's road sweeping practices.

OA1-b. Analyze, develop recommendations, and implement improvements (as warranted/feasible) to the county's snow removal practices.

OA Strategy 2: Collaborate with County school districts on Vision Zero.

Actions:

OA2-a. Develop a Safe Routes to School Vision Zero Action Plan (SRTS VZAP).

OA2-b. Implement recommendations from the SRTS VZAP short- and mid-term recommendations.

OA Strategy 3: Honor the victims and families of those involved in traffic crashes.

Actions:

OA3-a. Develop a memorial sign program for victims of traffic crashes (at the request of the victim's family).

OA3-b. Participate in World Day of Remembrance for Road Traffic Victims.







OTHER ACTIONS (OA)

OA Strategy 4: Collaborate with first responders.

Actions:

OA4-a. Continue the interdisciplinary crash analysis team (CAT) with Boulder County, CDOT, and first responders that analyzes ongoing fatal and serious injury crashes.

OA4-b. Explore collaboration with hospitals to learn more about post-crash care and injuries from unreported crashes.

OA Strategy 5: Be active in Colorado transportation safety legislation.

Actions:

OA5-a. Continue advocating/participating in the development of relevant transportation safety legislation.

OA5-b. Share clear messaging with the community about relevant transportation safety legislation, particularly new laws (e.g., Hands-Free Law, Bicycle Safety Stop, Automated Traffic Enforcement, etc.).









NEXT STEPS

Achieving Vision Zero requires a combination of funding sources to support safety improvements. Boulder County will strategically pursue a variety funding types for safety improvements, including local, regional, state, and federal funding sources.

Monitoring and evaluating the effectiveness of the Boulder County VZAP is essential to ensuring progress toward a safer transportation system. The county will track the following metrics to evaluate progress towards eliminating trafficrelated fatalities, serious injuries, and the top five crash types that result in serious injury and fatalities. These metrics focus on the people impacted, not just the number of crashes.

- Number of people killed
- Number of people seriously injured
- Number of people walking and biking killed or seriously injured
- Number of people killed or seriously injured in intersection-related crashes
- Number of people killed or seriously injured in non-intersection-related crashes

In addition, the county will track the the total number of crashes, as well as progress on the implementation of the plan and the effectiveness of implemented Actions. This systemwide evaluation will support the county in continuing to make data-driven decisions and adjust strategies as needed to achieve Vision Zero goals.





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CHAPTER 1 INTRODUCTION



OVERVIEW

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Boulder County's Vision Zero goal is to eliminate serious injuries and fatal

traffic crashes in unincorporated Boulder County by 2035, as identified in the 2020 Transportation Master Plan. The county is not currently on track to meet that goal. The Boulder County Vision Zero Action Plan (VZAP) lays out steps for Boulder County to take in collaboration with partners to achieve that goal for unincorporated areas and the mountain communities of Jamestown, Nederland, and Ward. This is not a fiscally constrained plan; the county does not have all of the funding needed to implement this plan. Steps moving forward will include pursuing funding from a variety of sources and refining the prioritization of actions.

Recognizing the importance of implementing a regional approach to roadway safety, Boulder County, in collaboration with the City of Lafayette and the Town of Superior, applied and received funding from a Safe Streets and Roads for All (SS4A) grant to develop a VZAP. This initiative includes the creation of three standalone VZAPs for Boulder County, Lafayette, and Superior to improve the transportation network and ensure a cohesive regional strategy to enhance roadway safety. By fostering inter-agency collaboration and aligning safety priorities across jurisdictions, each plan will maximize its effectiveness and implementation potential.

WHAT IS VISION ZERO?

Vision Zero is an international initiative based on the principle that no loss of life on our streets is acceptable. It aims to create a transportation system that prioritizes safety, equity, and mobility for all road users with zero traffic deaths or serious injuries.

WHAT IS A VISION ZERO ACTION PLAN?

A **Vision Zero Action Plan** is a strategic document that evaluates historic crash data and system challenges and identifies Strategies and Actions to reduce the potential for significant injuries and fatalities in the future and to ensure a safe, equitable, and effective transportation system for all users.

SAFE STREETS AND ROADS FOR ALL (SS4A) GRANT PROGRAM

In 2021, the Bipartisan Infrastructure Law established the **SS4A program** with \$5 billion to be spent nationwide between 2022 and 2026. The program provides financial support for the planning and infrastructure initiatives to prevent death and serious injuries on roads and streets involving all roadway users.







Figure 1. Vision Zero Action Plan (VZAP) Study Areas

VISION ZERO ACTION PLAN (VZAP) STUDY AREAS

The Boulder County VZAP provides a data-driven, community-informed strategy to address roadway safety concerns and implement targeted solutions. The Boulder County VZAP study area encompasses unincorporated Boulder County including the mountain towns of Jamestown, Nederland, and Ward. Unincorporated Boulder County's road network includes a mix of county-owned roads and highways owned by the Colorado Department of Transportation (CDOT), with a focus on improving safety for all road users, particularly vulnerable populations such as pedestrians, bicyclists, and motorcyclists. As part of the joint grant, the City of Lafayette and the Town of Superior have also developed separate Action Plans tailored to their local needs. The remaining jurisdictions in Boulder County, including the cities of Boulder, Longmont, Louisville and the towns of Erie and Lyons are also committed to Vision Zero and have local VZAPs either completed or planned.

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Boulder County

CHAPTER 1 INTRODUCTION

WHAT IS VISION ZERO AND THE SAFE SYSTEM APPROACH?

Vision Zero is an international movement focused on eliminating all trafficrelated deaths and serious injuries. It recognizes that human error is inevitable and that the transportation system should be designed to minimize the consequences of these mistakes. Vision Zero prioritizes safety above all else, using data-driven analysis to identify the root causes of traffic crashes and addressing them with comprehensive strategies rooted in a Safe System Approach.

The Safe System Approach focuses on five key elements:

- · Safer Roads emphasizing the need for transportation infrastructure that safely accommodates multiple transportation modes.
- Safer Speeds identifying measures to reduce excessive speeds, a key contributor to the severity of traffic crashes.
- Safer People setting the framework for education and awareness, fostering a community of shared responsibility among all road users.
- Safer Vehicles expanding the accessibility of vehicle features and support • systems that help prevent crashes and minimize the impact on persons involved in crashes.
- · Post-Crash Care enhancing the survivability of crashes and preventing secondary crashes through robust traffic incident management practices.

The Boulder County VZAP focuses primarily on Safer Roads, Safer Speeds, and Safer People.



Figure 2. The Safe System Approach to Eliminating Traffic Deaths



Figure 3. Traditional Approach vs Vision Zero



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GOALS OF THE VISION ZERO ACTION PLAN

The VZAP is built around key goals to ensure a safe, equitable, and effective transportation system. These goals include:

- Develop a comprehensive plan to support the Transportation Master Plan Vision Zero goal of eliminating traffic-related fatalities and serious injuries in unincorporated Boulder County by 2035.
- Address both county roads and highways (owned by CDOT).
- Ensure the plan is actionable, fundable, and phased and that it meets FHWA VZAP requirements.
- Develop specific recommendations for top priority crash locations and identify and prioritize additional locations of focus for further analysis and recommendations.
- Prioritize equity in transportation safety investments, ensuring that historically underserved communities receive necessary improvements.

SCHEDULE

The Boulder County VZAP process began in **Spring of 2024.** Throughout the process, community members and stakeholders were consulted to ensure that recommended strategies are coordinated, feasible, and aligned with regional safety goals. Key milestones include:

- Phase One Outreach (Summer 2024): Initial engagement through the Nederland Farmers Market, Ride for Magnus event, virtual public meeting, and an online survey.
- Phase Two Outreach (Winter 2025): Further engagement through gathering feedback on proposed safety solutions at the Boulder County Winter Bike to Work Day Event, the Nederland TownTalk, and with an online video and survey.
- Phase Three Outreach (Spring 2025): Community feedback on the draft plan.
- Final Action Plan (Summer 2025): Adoption by the Board of County Commissioners.

SUMMER 2024

Data Analysis:

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Documenting major crash trends and developing the high-injury network (corridors where the most crashes are occurring).

FALL 2024

Countywide Recommendations:

Developing systemwide recommendations designed to eliminate the most prevalent crash types resulting in serious injuries or fatalities.

WINTER 2025

Project Identification & Prioritization:

Identifying and prioritizing specific Projects to address existing issues and proactive measures to address risk.

SPRING 2025

Action Plans:

Creating to-do lists of Strategies and Actions (both infrastructure, such as roadway improvements, and noninfrastructure, such as educational campaigns), noting responsibility and potential funding sources for implementation.





PAST RELEVANT PLANS AND SAFETY STUDIES

The **Boulder County VZAP** builds upon the county's previous and ongoing efforts to enhance roadway safety and multimodal connectivity. It also complements Vision Zero Action Plans completed by the jurisdictions in Boulder County, including Boulder, Lafayette, Lyons, and Superior to ensure a regional approach to transportation safety.

- **Boulder County Transportation Master Plan (TMP)** The TMP serves as the county's long-term vision for transportation and mobility. It prioritizes multimodal safety improvements, integrates Vision Zero principles, and emphasizes investments in infrastructure to protect vulnerable road users.
- **Boulder County Vision Zero Draft** A precursor to the current VZAP, this document laid the groundwork for the county's safety strategies by assessing crash data from 2009-2018 and identifying trends by corridor, mode, and crash type.
- US 287 Safety & Mobility Study This study identified critical safety issues along the US 287 corridor, a high-crash corridor with a significant number of vehicle, pedestrian, and bicycle conflicts. Recommended safety enhancements include speed management strategies, a center median barrier along rural extents, and multimodal improvements.
- CO 119-Diagonal Hwy Safety and Mobility Improvements Aimed at improving safety along the Diagonal Highway, this initiative integrates road safety measures with expanded transit, pedestrian, and bicycle infrastructure. The study focuses on reducing high-speed crashes and improving connectivity for non-motorized users.

- US 36-N. Foothills Bikeway Study This study examined the feasibility of dedicated bike lanes and multimodal safety improvements along US 36-N. Foothills Hwy to enhance bike and pedestrian safety. It provides recommendations for separated bike facilities and improved crossings at major intersections.
- Taking Action on Regional Vision Zero This Denver Regional Council of Governments (DRCOG) plan was guided by local, regional, and state stakeholders, including Boulder County, and includes an extensive data analysis of fatal and serious injury crash statistics. The plan sets out action initiatives, an implementation timeline, and measures to help track progress toward a shared goal of zero traffic-related deaths and serious injuries.



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OVERVIEW

The Federal Highway Administration (FHWA) recommends that municipalities take a holistic view of Vision Zero to create a safe system that anticipates human mistakes and reduces the impact of crashes so they are less likely to cause serious injuries or fatalities. The safety analysis for the Boulder County VZAP is based on ten years of crash data (2013-2022) provided by CDOT. This analysis aims to identify key crash trends, high-injury locations, and factors that contribute to serious and fatal crashes in the study area. The VZAP relies on a thorough understanding of motor vehicle, bicycle, pedestrian, and motorcycle crash trends to inform strategic investments in safety improvements aimed at eliminating severe crashes on roads throughout the county. **Appendix A** provides more detailed information and analysis about the crash history.

The findings from this analysis serve as the foundation for developing the **High-Injury Network (HIN)** – a tool used to identify locations with the highest concentration of injury crashes to prioritize safety improvements. The safety analysis identifies trends common amongst all crashes, but focuses more specifically on crashes resulting in minor injury, serious injury, or fatality. Reviewing these more severe crash trends is critical and aligns with the Vision Zero model of aiming to reduce fatalities and serious injuries. Additionally, community feedback from public outreach was integrated to ensure alignment between the data analysis and lived experiences of Boulder County residents. Understanding this data will allow the county to direct resources where they are needed the most for improving safety and best address the root causes of crashes.

SAFETY ANALYSIS OVERVIEW

Key findings based on ten years of crash data (2013-2022) include:



10,642 total crashes were reported, of which **496** were reported as serious injury and fatal ("severe") crashes.



Severe crashes have fluctuated throughout the ten-year period with no sustained downward trend.



123 people were killed and **469** people were seriously injured.



174 crashes were reported involving bicyclists, **53** involving pedestrians, and **303** involving motorcyclists.



344 severe crashes were on CDOT highways; **152** severe crashes were on county roads.



149 severe crashes were at intersections; **347** severe crashes were on roadway segments.



The highest concentrations of severe crashes were June through October. 32% of severe crashes occured in dark conditions. 88% of severe crashes occured in dry conditions.

Study Area Severe Crashes by Year and Severity







STUDY AREA ROADWAY NETWORK

Boulder County's roadway network includes both county-owned roads and highways that are owned, managed, and maintained by the Colorado Department of Transportation (CDOT). The CDOT highways are generally multi-lane, higher speed roadways (e.g., US 287, US 36-N. Foothills Hwy, CO 119-Diagonal Hwy). Seventy percent of the severe crashes analyzed in this plan occurred on CDOT highways.



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WHERE ARE SEVERE CRASHES OCCURRING IN THE STUDY AREA?



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WHERE ARE VULNERABLE ROAD USER CRASHES OCCURRING **IN THE STUDY AREA?**

A vulnerable road user crash is a crash that involves a pedestrian, bicyclist, or motorcyclist. When people walking, bicyclists, or motorcyclists are involved in a traffic crash, they are more likely to be seriously injured or killed. Crashes involving bicyclists were one of the most common severe crash types on county roads in the study area.

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Of all crashes involving bicyclists in the study area 29% resulted in a serious injury or fatality. The roads with the majority of the bicycle crashes include US 36-N. Foothills Hwy and CO 119-Diagonal Hwy.

Legend

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Crashes (2013 - 2022)

Of all pedestrian crashes in the study area, **38**% resulted in a serious injury or fatality. The locations with pedestrian crashes were dispersed throughout the county.

Of all motorcyclist crashes in the study area, 29% resulted in a serious injury or fatality. The roads with the most motorcycle crashes include CO 72, CO 119-Boulder Canyon, and US 36-N. Foothills Hwy.



Figure 7. Vulnerable User Crash Locations



MOUNTAIN TOWN FOCUS AREAS

Across the participating mountain towns, 209 crashes occurred during the study period (2013 –2022). Of these, two serious injury crashes occurred in Ward, four serious injury crashes occurred in Nederland, and one fatal crash involving a motorcycle occurred in Nederland. Additionally, two fatal overturning crashes and three serious injury crashes occurred just north of Ward on CO 72.

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Figure 8. Mountain Town Crash Locations

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CHAPTER 2 UNDERSTANDING THE SAFETY ISSUES

HIGH-INJURY NETWORK (HIN)

The **High-Injury Network (HIN)** is a mapping tool that identifies where the highest number of people are being killed or injured on the transportation system within the study area. This data-driven approach provides a foundation for county staff to focus resources in areas where safety improvements are most critical. The most recently available ten years of crash



TOP SEVERE CRASH TYPES

Boulder County

The Boulder County VZAP focuses its systemwide recommendations on the five crash types that consistently appeared as top contributors to injury crashes across both CDOT highways and county-owned roads within the study area. These crash types were identified as part of the systemwide analysis, which is detailed in **Appendix B**. By targeting these five crash types, the Plan aims to maximize safety benefits through a strategic and efficient application of countermeasures and infrastructure improvements along corridors of injury crashes.



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*Examples of single-vehicle crashes include departing the road, colliding with fixed objects, and overturning vehicles.



CHAPTER 3

INTEGRATING WHAT WE HEARD FROM THE COMMUNITY



CHAPTER 3 INTEGRATING WHAT WE HEARD FROM THE COMMUNITY

OVERVIEW

Community outreach was integrated throughout the planning process with both in-person and online opportunities for input. The VZAP reflects the input and collaboration of a diverse group of community members.

Four key groups were engaged throughout the planning process:

I. Community

Community members played a central role in shaping the VZAP. The project team facilitated public engagement through a mix of in-person pop-up events, virtual public meetings, in-person and virtual organizational/committee meetings, and online tools.

II. Steering Committee

The Steering Committee was composed of representatives from Boulder County, CDOT, DRCOG, staff and residents from the towns of Lafayette, Superior, and Nederland, emergency responders in the study area, as well as local and regional advocacy organizations. This group provided strategic guidance, technical expertise, and regional coordination throughout the planning process. The committee met throughout the planning process to review crash data findings, discuss community feedback, provide feedback on draft recommended actions, and shape the overall direction of the Action Plan.

III. Vision Zero Community Partnership

The Vision Zero Community Partnership (VZCP) is a group of local, regional, and statewide agency partners, Transportation Advisory Boards, bicycle advocacy groups, local school districts, and law enforcement officials to collaborate on our Vision Zero safety goals, policies, and projects. The project team provided regular updates at the quarterly VZCP meetings.

IV. Elected Officials

The planning process was also informed by engagement with the Board of County Commissioners. These leaders were briefed on the goals of the VZAP, shared insights from their constituents, and provided policy-level input to ensure that the plan aligns with local priorities and can be successfully adopted. Their participation helped secure broad support for the Action Plan's vision and built momentum toward implementation.



Figure 10. Screenshot from Steering Committee Listening Session





CHAPTER 3 INTEGRATING WHAT WE HEARD FROM THE COMMUNITY

WHEN AND HOW WE ENGAGED

- **Phase One (Summer 2024):** The purpose of this phase was to identify how people travel in the study area and locations where they feel unsafe. Engagement took place at the Nederland Farmers Market and Ride for Magnus Event, through an online survey with an interactive map, and at a virtual public meeting.
- Phase Two (Winter 2025): In this phase, feedback was gathered on draft safety recommendations through an online survey with informational videos and in-person outreach at the Boulder County Winter Bike to Work Day and Nederland TownTalk.
- **Phase Three (Spring 2025):** Finally, the public reviewed the Action Plan and provided feedback through an online survey.

Appendix C provides community outreach summaries for each phase of engagement.



Figure 11. Nederland Farmer's Market



Figure 12. Boulder County Winter Bike to Work Day

Vision Zero Action Plan Engagement Events:

Phase One:

- 6/26/24 | Steering Committee Meeting
- 6/26/24 8/31/24 | Online Survey & Map
- 7/21/24 | Nederland Farmer's Market Community Pop-Up
- 8/8/24 | Virtual Public Meeting
- 8/11/24 | Ride for Magnus Community Pop-Up

Phase Two:

- 2/11/25 3/2/25 | Informational Videos & Online Survey
- 2/14/25 | Winter Bike to Work Day Community Pop-Up
- 2/20/25 | Nederland TownTalk
- 4/23/25 | Steering Committee Meeting

Phase Three:

• 5/19/25 - 6/8/25 | Public Review of Draft Plan

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WHAT WE HEARD

PHASE ONE

During **Phase One,** community members shared input about roadway safety in the study area, particularly locations and roadway characteristics that feel unsafe. The key themes from community and stakeholder input were integrated into development of the HIN and Strategies and Actions, and included:

- **Speeding is a Major Concern.** High-speed corridors like US 287, CO 119, and South Boulder Road were frequently cited as feeling unsafe for all road users.
- Intersections Need Safety Improvements. Locations like US 287 & Oxford Road and CO 119-Diagonal Hwy & Niwot Road were highlighted for crash risks and poor pedestrian crossings.
- **Bicycle and Pedestrian Infrastructure is Lacking.** Many respondents called for protected bike lanes, safer crossings, and better walking conditions on key roads.
- **Traffic Law Enforcement is Inadequate.** Residents reported issues with red-light running, distracted driving, and failure to yield to pedestrians.
- More Speed Management and Traffic Calming are Needed. Requests for lower speed limits, roundabouts, and speed humps were common to improve road safety.

PHASE TWO

During **Phase Two,** community members reacted to proposed safety solutions and shared feedback about prioritizing implementation of countermeasures. The key themes from community and stakeholder input were integrated into Project prioritization and Strategies and Actions, and included:

- Red-Light Cameras Needed. Residents strongly support adding red-light cameras at intersections that feel unsafe to improve safety.
- **Mixed Views on Rumble Strips.** Some residents find them effective for crash prevention, while others worry they make cycling less comfortable.
- **Protected Bike Lanes a Priority.** Cyclists want separated bike paths for safety and stress the need for better intersection design to prevent conflicts with vehicles.
- **Debris and Maintenance Concerns.** Many avoid biking on roads due to debris, snow buildup, and cars encroaching on bike lanes, favoring off-street paths.

PHASE THREE

During **Phase Three**, community members reviewed and provided feedback on the Draft Plan. The key themes from community and stakeholder input will be integrated into the Final VZAP.

Placeholder - to be added after Phase Three occurs.



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CHAPTER 3 INTEGRATING WHAT WE HEARD FROM THE COMMUNITY

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INTEGRATING COMMUNITY INPUT WITH SAFETY DATA

To ensure alignment between quantitative crash data and community concerns, the HIN was compared to community input from the Phase One outreach survey and interactive map. The feedback from the community about locations feeling unsafe shares significant overlap with locations identified as having historic crash trend, and can identify locations that may be at high risk for future severe crashes, even if there have not historically been concentrations.







CHAPTER 4 HOW WE WILL ACHIEVE VISION ZERO


OVERVIEW

Boulder County

Vision Zero seeks to eliminate traffic-related fatalities and serious injuries through the **Safe System Approach**, which addresses the multiple elements of the environment and conditions that are part of a transportation system. The intent is to prioritize safety in a variety of ways at a variety of levels (e.g., roads, vehicles, and road users) which creates layers of protection so that if a human does make a mistake while traveling, the consequences are less severe.

To achieve Vision Zero, strategies are focused on a combination of engineering, enforcement, education, and evaluation countermeasures that complement each other to improve safety outcomes:

- **Engineering** tools focus on designing and improving infrastructure to reduce risks and protect road users, particularly those most vulnerable, such as pedestrians, bicyclists, and motorcyclists. This includes designing roads that separate different modes of travel and using safer materials and technologies to prevent crashes or minimize their severity.
- **Enforcement** tools ensure that traffic laws are obeyed through effective law enforcement practices, targeting risky behaviors like speeding, impaired driving, and failure to yield. This helps promote responsible driving and deters behaviors that contribute to crashes.
- **Education** tools involve raising awareness about road safety, teaching safe driving behaviors, and engaging the community in building a culture of safety through outreach, campaigns, and public engagement programs.
- **Evaluation** is essential to monitor progress, assess the effectiveness of safety interventions, and continually refine strategies to meet Vision Zero goals.





REDUNDANCY CREATES LAYERS OF PROTECTION

The majority of the actions identified in this plan are Engineering approaches related to Safe People, Safe Speeds, and Safe Roads, because these are elements that the County has the most direct control over.

The key elements involved in the overall approach include:

- Prioritizing improvements on the HIN and Bike/Pedestrian HIN for county roads.
- Working with CDOT to address improvements on the CDOT highways HIN and Bike/Pedestrian HIN.
- Systemwide improvements, particularly addressing the Top Severe Crash Types and speeds.



DEATH AND SERIOUS INJURIES ONLY OCCUR



HIGH-INJURY NETWORK PRIORITIZATION

Methodology

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To identify the most impactful locations for near-term investment, the project team developed a prioritization methodology applied to all segments and intersections within the Boulder County and CDOT HINs. Each location was scored based on a set of weighted criteria that reflect community values and safety needs.

The criteria used to prioritize Projects included:

- Crash History Locations with the highest concentrations of severe crashes.
- **Equity** Locations identified as providing the highest benefit to historically disadvantaged populations based on the segment-level equity index. This index was developed county-wide based on available federal and state census block-level tools, as well as high concentrations of low-wage jobs and locations in close proximity to schools and transit.
- **Vulnerable Road Users** Locations identified as part of the Bicycle and Pedestrian HIN with a lack of bicycle facilities.
- **Community-Identified Need** Locations with concentrations of people reporting feeling unsafe during Phase One of engagement.

The weighting for each criterion was informed by feedback gathered during Phase Two of community engagement, where participants were asked to identify the most important factors for prioritizing roadway safety investments. These results were combined with staff expertise and technical judgment to ensure the scoring framework aligned with both public input and practical implementation considerations. Further information on the equity index development and prioritization process can be found in **Appendix D**. Following the scoring process, all locations were grouped into three categories within each HIN.

- **Priority One Projects** represent the highest-scoring segments and intersections, with the greatest need and opportunity for safety impact.
- **Priority Two Projects** meet several key criteria and are strong candidates for mid-term implementation.
- **Priority Three Projects** are important for long-term planning and may become more viable as conditions change.

From the list of Priority One Projects, the project team selected six county-owned locations – three intersections and three segments – to receive additional analysis and targeted recommendations. These locations were chosen primarily based on their high prioritization scores and the absence of recent or ongoing safety projects, ensuring that resources were directed toward locations that have not yet received targeted investment. For each of these locations, the team developed a detailed Fact Sheet outlining existing conditions, key safety concerns, and tailored recommendations for improvement. These fact sheets are included in **Appendix E** and are intended to support future design and implementation, funding applications, and coordination with agency partners.

While this prioritization system provides a general implementation framework, the final order of implementation will also depend on funding availability, coordination with other planned capital and maintenance projects, and further community and agency input.

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COUNTY ROAD HIGH-INJURY NETWORK (HIN) PRIORITIZED PROJECT MAP





PRIORITIZED COUNTY ROAD HIN SEGMENTS

Segment Name	From	То		
Priority One Segments				
Valmont Road *	57th Street	6300 Block		
Lefthand Canyon Drive * 🕉	US 36-N. Foothills Hwy	W of Geer Canyon Drive		
Sunshine Canyon Drive * ඊර්	Timber Trail	Eagles Drive		
James Canyon Drive	Main Street	Mile Marker 2		
Jay Road ඵර	47th Street	55th Street		
Flagstaff Road ඵ්ර	Gregory Lane	Mile Marker 1		
Olde Stage Road ඊර්	Lefthand Canyon Drive	Lee Hill Drive		
F	Priority Two Segments			
Lee Hill Drive	Olde Stage Rd	E of Reed Ranch Road		
83rd Street	County Line Road	Yellowstone Road		
Valmont Road ඊර	Approx. 0.4mi W of 75th Street	Approx. 0.6mi E of 7th Street (end of curves)		
95th Street	Lookout Road	Boulder County Boundary		

Segment Name	From	То	
Priority Two Segments (cont.)			
Lefthand Canyon Drive	Olde Stage Road	Crossing over Left Hand Creek	
Nelson Road	Clover Basin Reservoir	75th Street	
Nelson Road	Centennial Ranch	55th Street	
Ρ	riority Three Segments		
Flagstaff Road	Mile Marker 2	Flagstaff Drive	
73rd Street ở **	E of Plateau Road	N of Nimbus Road	
E County Line Road	N of Quicksilver Road	Pike Road	
S Boulder Road	McCaslin Blvd	Ponderosa Drive	
63rd Street	Oxford Road	Monarch Road	
75th Street	UP Railroad	Red Deer Drive	

* Fact Sheet Location

Non the Bike & Pedestrian High-Injury Network (BP HIN) as well as the overall HIN

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PRIORITIZED COUNTY ROAD HIN INTERSECTIONS

Intersection Name	
Priority One Intersections	
63rd Street & Jay Road * ♂	
Lee Hill Drive & Wagonwheel Gap Road * 🕉	
61st Street & Valmont Road (Intersection Improvement Project construction	
anticipated Spring 2026)	
30th Street & Jay Road and	
51st Street & Jay Road	
63rd Street & Oxford Road	
65th Street & Nelson Road ඵ්ර	
76th Street & S Boulder Road 🔊	
51st Street & Jay Road	





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CDOT HIGHWAY HIGH-INJURY NETWORK (HIN) PRIORITIZED PROJECT MAP

Separate HIN and Bike/Pedestrian HINs were developed and prioritized for CDOT highways. The county and CDOT will work together on specific action items that integrate with CDOT's overall approach to transportation safety in the region.



PRIORITIZED CDOT HIGHWAY HIN SEGMENTS

Segment Name	From	То
	Priority One Segments	
US 287 🕉	County Road 4	South of MM 319
Arapahoe Road 🕉 **	West of MM 58	Boulder County Boundary
CO 128	Boulder County Boundary (East of MP 2)	Boulder County Boundary (W of MP3)
US 36-N. Foothills Hwy ờ	Nelson Road	Middle Fork Road
CO 119-Diagonal Hwy 🛷	MM 53	MM 54
CO 119-Diagonal Hwy	MM 45	South of MM 46
US 36-N. Foothills Hwy 🔊	Highway 7/Broadway	Jay Road
US 36-N. Foothills Hwy ờ	Longhorn Road	Highway 7/Broadway
CO 119-Boulder Canyon 🛷	MM 33	MM 34
CO 119-Boulder Canyon 🕉	MP 37	MP 38
	Priority Two Segments	
US 36	South Vrain Road	North of MM 26
Arapahoe Road 🕉	Arapahoe Ridge High School	75th Street
Ute Highway	Boulder County Boundary	US 36
US 36-N. Foothills Hwy	Highway 128	Eldorado Springs Drive
Ute Highway	Pace Street	County Line Road
US 287	Boulder County Boundary	Yellowstone Road
US 287	Yellowstone Road	County Road 4
Mineral Road	North 115th Street	County Line Road

Segment Name	From	То		
Priority Two Segments (cont.)				
Peak to Peak Highway	MM 37	Sugarloaf Road		
Peak to Peak Highway	MM 51	MM 52		
Saint Vrain Road	MM 15	MM 16		
Peak to Peak Highway	MM 44	MM 45		
US 287	Plateau Road	Oxford Road		
CO 119-Boulder Canyon	MM 27	MM 28		
CO 119-Boulder Canyon	MM 40	Boulder County Boundary		
Mineral Road	US 287	115th Street		
P	riority Three Segments			
US 36-N. Foothills Hwy	MM 29	South of MM 30		
US 36-N. Foothills Hwy	MM 28	MM 29		
Ute Highway	US 36	53rd Street		
US 36 🛷	MM 41	MM 42		
US 36 🛷	MM 42	MM 43		
CO 119-Diagonal Hwy 🕉	MM 50	MM 51		
US 36	MM 43	MM 44		
CO 119-Diagonal Hwy	South of MM 46	MM 47		
US 36-N. Foothills Hwy	County Boundary	Highway 128		
CO 119-Boulder Canvon	MM 20	MM 21		
	101101 30	IVIIVI ST		

♂ On the CDOT Highway Bike & Pedestrian High-Injury Network (BP HIN) as well as the overall CDOT HIN

not the CDOT BP HIN, not the overall CDOT HIN



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PRIORITIZED CDOT HIGHWAY HIN SEGMENTS

Segment Name	From	То	
Prior	rity Three Segments (cont	.)	
Peak to Peak Highway	Boulder County Boundary	Coal Creek Canyon Road	
Ute Highway	53rd Street	61st Street	
CO 119-Boulder Canyon	MM 39	MM 40	
112th Street	Boulder County Boundary/144th Avenue	Boulder County Boundary	
US 36	Boulder County Boundary	MM 41	
US 36	MM 40	MM 41	
Saint Vrain Road	MM 25	MM 26	
Saint Vrain Road	MM 18	MM 19	
Saint Vrain Road	MM 17	MM 18	
Saint Vrain Road	MM 16	MM 17	
Ute Highway	McCall Drive	75th Street	
US 36-N. Foothills Hwy 🕉	South of MM 30	Longhorn Road	
CO 119-Diagonal Hwy 🕉	MM 48	MM 49	
US 287	Oxford Road	Niwot Road	
US 287	Niwot Road	Mineral Road	
Mineral Road	North 115th Street	County Line Road	
US 287	Mineral Road	Lookout Road	
CO 119-Boulder Canyon	MM 38	MM 39	
Arapahoe Road	75th Street	East of MM 58	
US 36	MM 44	County Boundary	

Segment Name	From	То	
Prior	ity Three Segments (cont	.)	
Ute Highway	C & S Railroad	Pace Street	
CO 119-Boulder Canyon	MM 32	MM 33	
CO 119-Boulder Canyon	MM 29	MM 30	
US 36-N. Foothills Hwy	MM 15	Eldorado Springs Drive	
Saint Vrain Road	MM 19	Boulder County Boundary	
Saint Vrain Road	MM 14	MM 15	
Ute Highway	North 87th Street	North 95th Street	
Ute Highway	75th Street	Table Mountain Road	

み On the CDOT Bike & Pedestrian High-Injury Network (BP HIN) as well as the overall CDOT HIN

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 $_{6}$ ** Only on the BP HIN, not the overall HIN





CHAPTER 4 HOW WE WILL ACHIEVE VISION ZERO

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PRIORITIZED CDOT HIGHWAY HIN INTERSECTIONS

Intersection Name	Intersection Name
Priority One Intersections	Priority Two Intersections
Isabelle Road & US 287	83rd Street & CO 119-Diagonal Hwy
US 287 & Niwot Road	63rd Street & CO 119-Diagonal Hwy 🕉
66th Street, East County Line Road, & Ute Highway	Priority Three Intersections
CO 119-Diagonal Hwy & Niwot Road	Fordham Street & CO 119-Diagonal Hwy
US 36-N. Foothills Hwy & Hygiene Road 🌮 **	Monarch Road & CO 119-Diagonal Hwy
Priority Two Intersections	IBM Drive, Mineral Road, & CO 119-Diagonal Hwy
US 287 & Lookout Road	55th Street & CO 119-Diagonal Hwy
McConnell Drive, Stone Canyon Drive, & Ute Highway 🕉 **	Airport Road, CO 119-Diagonal Hwy, & Ogallala Road
US 36-N. Foothills Hwy & Nelson Road 🗞	Longhorn Road & US 36-N. Foothills Hwy
US 287 & Mineral Road	CDOT HIN
75th Street & Ute Highway	حکامت الله معند الله حکامت الله معند ال
CO 119-Diagonal Hwy & Jay Road	



CHAPTER 4 HOW WE WILL ACHIEVE VISION ZERO



SYSTEMWIDE APPROACH TO CRASH REDUCTION

In addition to focusing on specific locations that already have high numbers of serious injury and fatal crashes (defined here in the HIN and Bike/Pedestrian HIN), the FHWA recommends applying measures systemwide that address crash types both reactively and proactively. The reactive approach focuses on addressing safety concerns after crashes have occurred. In contrast, a proactive approach aims to prevent safety issues before they lead to crashes.

The systemwide approach to crash reduction includes some short-term recommended actions focused on improving visibility and evaluating traffic control treatments at intersections and reducing speeds and speeding, as well as providing a comprehensive toolkit of proven safety countermeasures to address the five common crash types that result in serious injuries and fatalities (see **Appendix F**).

SINGLE-VEHICLE CRASHES

Single-vehicle crashes result in **36%** of the serious injury and fatal crashes in Boulder County. Examples of single-vehicle crashes include departing from the road, colliding with fixed objects, and overturning vehicles. Some common behaviors and reliable conditions that most frequently contribute to these types of crashes include:

1. Departing from the road and colliding with fixed objects.

- Inadequate warning signs, lack of clear lane markings, and lack of roadway shoulders particularly in areas of sharp curves or elevation changes.
- b. Impaired, distracted, and aggressive driving contribute to off-road crashes as they prohibit the driver's ability to focus, react approriately, and maintain control of the vehicle. It may include behaviors such as driving under the influence, speeding, tailgating, and aggressive maneuvers.

2. Overturning vehicles

a. Impaired, distracted, and aggressive driving contribute to off-road crashes as they prohibit the driver's ability to focus, neact approriately, and maintain control of the vehicle, it may include behaviors such as driving under the influence, speeding, taligating, and aggressive maneuvers.

Figure 18. Screenshot from Appendix F: Countermeasure Toolkit







CHAPTER 5 ACTION PLAN



OVERVIEW

Boulde County

To work towards improving safety in all aspects of transportation, a targeted set of strategies and actions were developed. The Strategies and Actions focus on addressing the HINs and countywide recommendations to address the top crash types in the study area and improve safety when walking and biking. Strategies and Actions build off categories of the Safe System Approach that the county has the most control over, as well safety data and reporting and other complementary actions:

- Safer Roads emphasizing the need for transportation infrastructure that safely accommodates multiple transportation modes.
- **Safer Speeds** identifying measures to reduce excessive speeds, a key contributor to the severity of traffic crashes.
- **Safer People** setting the framework for education and awareness, fostering a community of shared responsibility among all road users.
- Safety Data and Reporting tracking and reporting on Vision Zero progress and improving data quality.
- Other Actions addressing road safety concerns through partnership with other Boulder County programs.

Each overarching Strategy identifies tangible Actions which are accompanied by next steps, team or organization responsible for leading or partnering in implementation, timeframe for implementation, and planning level cost estimates.

Timeframe to Completion		
Ongoing	Continuous	
Short-Term	1-3 years	
Mid-Term	3-5 years	
Long-Term	5-10 years	

Planning-Level Cost Estimates to Completion		
\$	Under \$50,000	
\$\$	\$50,001 - \$100,000	
\$\$\$	\$100,001 - \$500,000	
\$\$\$\$	\$500,001 - \$1,000,000	
\$\$\$\$\$	Over \$1,000,000	

Boulder County Departments and Offices that are noted as Partner or Lead responsible parties include:

Community Planning &	Communications		
Permitting	Transportation Planning		
	Engineering		
Public Works	Fleet Services		
	Road Maintenance		
Parks & Open Space Recreation & Facilit			
Human Resources			
Sheriff's Office			





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SAFER ROADS

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Boulder County

Strategy 1: Implement priority safety improvements on the County High-Injury Network.

Action	Next Steps to Achieve Action	Lead Partner(s)	Timeframe	Cost Estimate
SR1-a. Implement improvements from Priority One HIN Fact Sheet Recommendations (see Appendix E: High- Priority High-Injury Network (HIN) Project Recommendation Fact Sheets).	 63rd & Jay Rd Intersection Lee Hill Dr & Wagonwheel Gap Rd Intersection 75th St & Hygiene Rd Intersection Valmont Rd (57th St to 6300 Block) Lefthand Canyon Dr (US 36-N. Foothills Hwy to W of Geer Canyon Dr) Sunshine Canyon Dr (Timber Tr to Eagles Dr) 	Public Works – Engineering CP&P – Transportation Planning	Varies – See Fact Sheets	Varies – See Fact Sheets
SR1-b. Analyze, develop recommendations, and implement improvements for remaining Priority One HIN intersections and segments.	 Analyze crash data for remaining Priority One HIN segments and intersections to identify trends. Develop recommendations to correct crash trends. Implement improvements (as standalone projects or through other county projects or maintenance tasks). 	Public Works – Engineering CP&P – Transportation Planning	Analysis/ Recommendations: Short-Term Implementation: Mid-Term	Analysis/ Recommendations: \$ (per location) Implementation: Varies (dependent upon recommendations)
SR1-c. Analyze, develop recommendations, and implement improvements for Priority Two HIN intersections and segments.	 Analyze crash data for Priority Two HIN segments and intersections to identify trends. Develop recommendations to correct crash trends. Implement improvements (as standalone projects or through other county projects or maintenance tasks). 	Public Works – Engineering CP&P – Transportation Planning	Analysis/ Recommendations: Short-Term Implementation: Mid-Term	Analysis/ Recommendations: \$ (per location) Implementation: Varies (dependent upon recommendations)





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SAFER ROADS

Boulder County

Strategy 1 (cont.): Implement priority safety improvements on the County High-Injury Network.

Action	Next Steps to Achieve Action	Lead Partner(s)	Timeframe	Cost Estimate
SR1-d. Analyze, develop recommendations, and implement improvements for Priority Three HIN intersections and segments.	 Analyze crash data for Priority Three HIN segments and intersections to identify trends. Develop recommendations to correct crash trends. Implement improvements (as standalone projects or through other county projects or maintenance tasks). 	Public Works – Engineering CP&P – Transportation Planning	Analysis/ Recommendations: Mid-Term Implementation: Long-Term	Analysis/ Recommendations: \$ (per location) Implementation: Varies (dependent upon recommendations)
SR1-e. Proactively identify additional funding sources for implementation.	 Develop request for next Transportation Sales Tax (TST) budget. Monitor grants (see Appendix G: Funding Opportunities Summary). 	CP&P - Transportation Planning Public Works - Engineering	Short-Term	\$
SR1-f. Implement already planned, ongoing, or upcoming county safety projects.	 61st St/Valmont Rd Intersection Improvement Project 95th St/Lookout Rd Intersection Improvements Project LoBo Trail - Jay Rd Connections Project 	Public Works – Engineering CP&P – Transportation Planning	Analysis/ Recommendations: Mid-Term Implementation: Long-Term	Analysis/ Recommendations: \$ (per location) Implementation: Varies (dependent upon recommendations)





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SAFER ROADS

Boulder County

Strategy 2: Work with regional partners and municipalities to implement priority safety improvements.

Action	Next Steps to Achieve Action	Lead Partner(s)	Timeframe	Cost Estimate
SR2-a. Provide CDOT HIN intersection data and priorities to CDOT for the next Intersection Prioritization Study.	 Assemble crash data and rankings/priorities for CDOT HIN intersections. Send data to CDOT. 	CP&P – Transportation Planning CDOT	Short-Term	\$
SR2-b. Provide CDOT HIN segment data and priorities to CDOT for consideration for future projects.	 Assemble crash data and rankings/priorities for CDOT HIN segments. Send data to CDOT. 	CP&P – Transportation Planning CDOT	Short-Term	\$
SR2-c. Coordinate and collaborate with CDOT and DRCOG on relevant grant applications for CDOT HIN roadways.	 Monitor grants (see Appendix G: Funding Opportunities Summary). 	CP&P – Transportation Planning CDOT DRCOG Public Works – Engineering	Ongoing	Varies (dependent upon project application / local match)
SR2-d. Continue working with CDOT, DRCOG, and municipalities on key regional safety corridors to develop and implement recommendations from current and future studies.	 US 287 CO 119 US 36-N. Foothills Highway CO 7 South Boulder Road CO 42 Boulder-Erie Regional Trail (BERT) 	CP&P – Transportation Planning Public Works – Engineering CDOT DRCOG Municipalities within Boulder County	Ongoing	Ş





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SAFER ROADS

44.4

Boulder County

Strategy 3: Implement priority safety improvements on the Bicycle/Pedestrian High-Injury Network.

Action	Next Steps to Achieve Action	Lead Partner(s)	Timeframe	Cost Estimate
SR3-a. Complete safety analysis, identify recommendations, and implement improvements at county locations that are on the Bike/Pedestrian HIN.	 Complete at the following locations: Olde Stage Rd (Lefthand Canyon Rd to Lee Hill Dr) 65th Street & Nelson Road Sunshine Canyon Rd (Timber Trail to Eagles Dr) Valmont Rd (57th St to 6300 block) Flagstaff Rd (Gregory Ln to Mile Marker 1) Lefthand Canyon Rd (US 36-N. Foothills Hwy to W of Geer Canyon Dr) 73rd St (E of Plateau Rd to N of Nimbus Rd) S Boulder Rd & 76th St Jay Rd (30th St to 63rd St) 	Public Works – Engineering CP&P – Transportation Planning	Short- to Mid-Term	\$\$\$ - \$\$\$\$\$
SR3-b. Provide Bike/Pedestrian HIN data and priorities to CDOT for the next Bike and Pedestrian Safety Study.	 Locations include: CO 119-Boulder Canyon (Mile Marker 33-34 and Mile Marker 37-38) US 36-N. Foothills Hwy (Broadway to 26th St) Arapahoe Rd (Arapahoe Ridge High School to Boulder County Boundary) US 36-N. Foothills Hwy (Longhorn Rd to Nelson Rd) US 36-N. Foothills Hwy and Hygeine Rd US 36-N. Foothills Hwy (Jay Rd to Longhorn Rd) US 287 (County Rd 4 to S of Mile Marker 319) US 66 & Stone Canyon Dr 	CP&P – Transportation Planning CDOT	Short-Term	\$





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SAFER ROADS

Boulder County

Strategy 4: Proactively implement systemwide priority safety improvements.

Action	Next Steps to Achieve Action	Lead Partner(s)	Timeframe	Cost Estimate
SR4-a. Add reflective traffic signal backplates at signalized intersections.	 Identify signalized intersections in the county that do not have reflective traffic signal backplates and identify funding for implementation. 	Public Works – Engineering	Short-Term	\$ (per location)
SR4-b. Add tubular reflectors to sign posts and stop signs.	 Identify number of sign posts/stop signs and identify funding for implementation. 	Public Works – Engineering CP&P – Transportation Planning	Short-Term	\$ (per location)
SR4-c. Evaluate intersection controls, identify recommendations, and implement improvements (including potential conversion to roundabouts).	Utilize the CDOT Intersection Control Assessment Tool (ICAT) tool.	Public Works – Engineering CP&P – Transportation Planning	Short-Term	\$ (per location)
SR4-d. Develop signal operation guidelines addressing left-turn operations, Leading Pedestrian/Bike Intervals, No Right Turn on Reds at signalized intersections.	 Identify if will be developed in-house or through a consultant. Develop scope. Obtain funding (if needed). 	Public Works – Engineering	Short-Term	\$\$\$





SAFER ROADS

44.4

Boulder County

Strategy 4 (cont.): Proactively implement systemwide priority safety improvements.

Action	Next Steps to Achieve Action	Lead Partner(s)	Timeframe	Cost Estimate
SR4-e. Implement the Signal Operation Guidelines, including but not limited to Leading Pedestrian/Bike Intervals, No Right Turn on Reds.	Complete SR4-d Signal Operation Guidance and assess recommendations.	Public Works – Engineering	Mid-Term	\$ – \$\$ (per location)
SR4-f. Identify intersections and pedestrian/bicycle crossings with no roadway lighting and install intersection lighting.	 Identify intersections that do not have intersection lighting and pedestrian/bicycle crossings that do not have lighting within 100 feet of the crossing. Identify funding opportunties for installation of new lighting and prioritize locations that are on the HIN. 	Public Works – Engineering	Mid-Term	\$\$ - \$\$\$ (per location)
SR4-g. Develop pedestrian crossing treatment installation guidelines to guide where to install marked crossings and pedestrian signals.	 Identify if will be developed in-house or through a consultant. Develop scope. Obtain funding (if needed). 	Public Works – Engineering CP&P – Transportation Planning	Mid-Term	\$\$\$
SR4-h. Develop bicycle facility signing and striping guidelines that can be incorporated into the county's Multimodal Transportation Standards.	 Work with County Engineer to identify timeline and scope. 	Public Works – Engineering CP&P – Transportation Planning	Short-Term	\$\$\$







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SAFER ROADS

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Boulder County

Strategy 4 (cont.): Proactively implement systemwide priority safety improvements.

Action	Next Steps to Achieve Action	Lead Partner(s)	Timeframe	Cost Estimate
SR4-i. Implement safety improvements for culverts that don't meet clear zone requirements.	 Identify if will be developed in-house or through a consultant. Develop scope. Obtain funding (if needed). 	Public Works – Engineering CP&P – Transportation Planning	Mid- to Long-Term	\$\$\$\$
SR4-j. Partner with municipalities and neighboring counties on cross-jurisdictional planning and design for multimodal access to trails/trailheads.	Identify trailheads.Prioritize.Develop plans.	CP&P – Transportation Planning Parks & Open Space – Recreation & Facilities Municipalities	Short-Term	\$
SR4-k. Analyze, develop recommendations, and implement improvements that address the top crash types, using Appendix F: Countermeasure Toolkit .	 Prioritize crash types. Identify if will be developed in-house or through a consultant. Develop scope. Obtain funding (if needed). 	Public Works – Engineering CP&P – Transportation Planning	Short- to Long- Term	Analysis/ Recommendations: \$ (per crash type) Implementation: Varies (dependent upon recommendations)





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SAFER SPEEDS

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Boulder County

Strategy 1: Implement automated speed enforcement to reduce speeding.

Action	Next Steps to Achieve Action	Lead Partner(s)	Timeframe	Cost Estimate
SS1-a. Work with the BOCC and CDOT to implement automated speed enforcement on CDOT roads.	 Initial priorities: US 36-N. Foothills Hwy (Boulder's northern city limits to CO 66) US 287 (Lafayette's northern city limits to the southern city limits of Longmont) US 287 (Longmont's northern city limits to Boulder County's northern limits) 	Public Works – Engineering	Short-Term	\$\$
SS1-b. Analyze, develop recommendations, and implement automated speed enforcement on county roads.	Propose roads to the BOCC for consideration.	Public Works – Engineering	Mid- to Long-Term	\$\$\$





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SAFER SPEEDS

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Boulder County

Strategy 2: Implement engineering solutions to reduce speeding.

Action	Next Steps to Achieve Action	Lead Partner(s)	Timeframe	Cost Estimate
SS2-a. Review, update, if warranted, and implement the county's speed limit setting and signing practices.	 Coordinate a project team to outline areas in existing practices that require further review and research. Prioritize actions and roadways for implementing changes and secure funding. 	Public Works – Engineering	Mid- to Long-Term	\$\$
SS2-b. Develop speed-related design elements (e.g. traffic calming) that can be incorporated into the county's Multimodal Transportation Standards.	Work with County Engineer to identify timeline and scope.	Public Works – Engineering CP&P – Transportation Planning	Short-Term	\$\$
SS2-c. Identify county roads with a high number of speed-related crashes, and install traffic calming devices where appropriate.	 Develop a process to automate the identification of high-speed crashes with the Sheriff's Office and CSP and prioritize roadways based on analysis results. 	Public Works – Engineering Sheriff's Office Colorado State Patrol (CSP)	Mid-Term	\$ - \$\$\$\$\$
SS2-d. Identify CDOT highways with a high number of speed-related crashes, and work with CDOT to implement solutions.	 Develop a process to automate the identification of high-speed crashes with Sheriff's Office,CSP, and CDOT and prioritize roadways based on analysis results. 	Public Works – Engineering CDOT	Mid-Term	\$ - \$\$\$\$\$





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SAFER PEOPLE

44.4

Boulder County

Strategy 1: Empower Boulder County community members to be Vision Zero stewards.

Action	Next Steps to Achieve Action	Lead Partner(s)	Timeframe	Cost Estimate
SP1-a. Expand and distribute roadway safety messaging and campaigns, building off messaging developed by partners (e.g., CDOT, CSP, DRCOG, NHSTA).	 Review existing programs and identify opportunities to collaborate. Example themes to explore include impaired driving, distracted driving, fatigued driving, and speeding. 	CP&P – Transportation Planning CP&P – Communications CDOT CSP DRCOG NHTSA	Short-Term	\$\$
SP1-b. Explore the creation of an ambassador program to promote roadway safety.	 Work with Commuting Solutions to create, implement, and evaluate a pilot program. 	CP&P – Transportation Planning Commuting Solutions	Mid-Term	\$\$
SP1-c. Continue convening the Vision Zero Community Partnership (VZCP).	Continue developing content for and facilitating quarterly meetings.	CP&P – Transportation Planning	Ongoing	\$





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SAFER PEOPLE

Boulder County

Strategy 1 (cont.): Empower Boulder County community members to be Vision Zero stewards.

Action	Next Steps to Achieve Action	Lead Partner(s)	Timeframe	Cost Estimate
SP1-d. Create consistent countywide VIsion Zero branding and messaging.	 Develop Vision Zero graphics that can be used by agencies countywide. 	CP&P – Transportation Planning CP&P – Communications	Ongoing	\$
SP1-e. Implement additional training for Boulder County staff related to vehicle operations.	Research peer agency programs.	CP&P – Transportation Planning Public Works – Fleet Services Public Works – Human Resources	Mid-Term	\$\$\$
SP1-f. Offer roadway safety training to the community through Mobility for All.	Review existing training and develop scope.	CP&P - Transportation Planning	Short-Term	\$





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SAFER PEOPLE

44.4

Boulder County

Strategy 2: Address red-light running crashes.

Action	Next Steps to Achieve Action	Lead Partner(s)	Timeframe	Cost Estimate
SP2-a. Evaluate and implement recommendations for county intersections, including but not limited to red-light cameras.	 Initial priorities: South Boulder Road & Cherryvale Road 75th Street & Valmont Road 	Public Works – Engineering	Short-Term	\$ - \$\$\$ (per location)
SP2-b. Evaluate and implement recommendations for CDOT intersections, including but not limited to red-light cameras.	 Initial priorities: US 287: Mineral Road, Isabelle Road Secondary priorities (a few years after construction is complete): CO 119-Diagonal Hwy: Niwot Road, 63rd Street, Mineral Road, and 55th Street 	Public Works – Engineering CDOT	Short- to Mid-Term	\$ - \$\$\$ (per location)







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SAFETY DATA AND REPORTING

Strategy 1: Track and report Vision Zero progress.

Action	Next Steps to Achieve Action	Lead Partner(s)	Timeframe	Cost Estimate
SD1-a. Report on Vision Zero progress annually.	 Develop a report template for the VZAP action items and metrics and create report annually. 	CP&P – Transportation Planning CP&P – Communications	Ongoing	\$
SD1-b. Monitor and analyze ongoing crashes.	 Update VZAP key charts and maps and analyze changes in trends. 	CP&P – Transportation Planning	Ongoing	\$
SD1-c. Develop a public-facing Vision Zero Dashboard.	Determine scope and system requirements.	CP&P – Transportation Planning CP&P – Communications CSP	Mid-Term	\$\$





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SAFETY DATA AND REPORTING

Strategy 2: Improve the quality and completeness of safety data.

Action	Next Steps to Achieve Action	Lead Partner(s)	Timeframe	Cost Estimate
SD2-a. Implement a safety data tool to improve data quality and facilitate analysis of crash data.	 Research programs used by peer agencies (e.g., CDOT) and implement solution that best meets county needs and budget. 	Public Works – Engineering CP&P – Transportation Planning	Short-Term	\$\$ - \$\$\$
SD2-b. Research ways to obtain supplemental data for bicycle and pedestrian crashes/close calls.	 Review peer agency programs such as FHWA's Pedestrian and Bicycle Crash Analysis Tool (PBCAT). Coordinate with hospitals and urgent care facilities to share data about vulnerable user injuries resulting from traffic crashes. 	CP&P – Transportation Planning Public Works – Engineering	Mid-Term	\$
SD2-c. Research ways to obtain more complete and accurate multimodal counts.	 Review count programs and related budgets of peer agencies. 	CP&P – Transportation Planning Public Works – Engineering	Short-Term	\$
SD2-d. Evaluate vehicle telematics data from other Boulder County departments related to safety (e.g., speeds, hard stops).	 Coordinate with Parks & Open Space about ongoing implementation and Fleet Services' upcoming implementation (2025). 	CP&P – Transportation Planning Parks and Open Space Fleet Services Public Works – Engineering	Short-Term	\$





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OTHER ACTIONS

Boulder County

Strategy 1: Evaluate Boulder County road maintenance practices to enhance safety.

Action	Next Steps to Achieve Action	Lead Partner(s)	Timeframe	Cost Estimate
OA1-a. Analyze, develop recommendations, and implement improvements (as warranted/feasible) to the county's road sweeping practices.	 Research peer agency best practices and determine if adjustments to current practices are warranted. 	Public Works – Road Maintenance CP&P – Transportation Planning	Mid-Term	\$ - \$\$\$
OA1-b. Analyze, develop recommendations, and implement improvements (as warranted/feasible) to the county's snow removal practices.	 Research peer agency best practices and determine if adjustments to current practices are warranted. 	Public Works – Road Maintenance CP&P – Transportation Planning	Mid-Term	\$ - \$\$\$







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OTHER ACTIONS

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Boulder County

Strategy 2: Collaborate with County school districts on Vision Zero.

Action	Next Steps to Achieve Action	Lead Partner(s)	Timeframe	Cost Estimate
OA2-a. Develop a Safe Routes to School Vision Zero Action Plan (SRTS VZAP).	 Kick off project, including compiling project management team members, steering committee, and community outreach plan. 	CP&P – Transportation Planning Public Works – Engineering Boulder Valley and Saint Vrain School Districts (BVSD & SVVSD) Other Boulder County Municipalities	Short-Term	\$\$\$
OA2-b. Implement recommendations from the SRTS VZAP short- and mid-term recommendations.	 Assign lead agencies/staff to short-term actions and secure funding. 	CP&P – Transportation Planning Public Works – Engineering Boulder Valley and Saint Vrain School Districts (BVSD & SVVSD) Other Boulder County Municipalities	Short- and Mid-Term	\$ - \$\$\$





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OTHER ACTIONS

Strategy 3: Honor the victims and families of those involved in traffic crashes.

Action	Next Steps to Achieve Action	Lead Partner(s)	Timeframe	Cost Estimate
OA3-a. Develop a memorial sign program for victims of traffic crashes (at the request of the victim's family).	 Research peer city programs and review findings with families of past victims. 	CP&P – Transportation Planning	Short-Term	\$
OA3-b. Participate in World Day of Remembrance for Road Traffic Victims.	 Coordinate with VZCP and other partners to prepare for the upcoming commemoration on November 16, 2025. Continue participation annually. 	CP&P – Transportation Planning	Short-Term	Ş







OTHER ACTIONS

Strategy 4: Collaborate with first responders.

Action	Next Steps to Achieve Action	Lead Partner(s)	Timeframe	Cost Estimate
OA4-a. Continue the interdisciplinary crash analysis team (CAT) with Boulder County, CDOT, and first responders that analyzes ongoing fatal and serious injury crashes.	Review current process and implement improvements if warranted.	CP&P – Transportation Planning Public Works – Engineering CDOT CSP Sheriff's Office	Ongoing	\$
OA4-b. Explore collaboration with hospitals to learn more about post-crash care and injuries from unreported crashes.	 Review ongoing efforts by regional partners (e.g., DRCOG). Coordinate with hospitals and urgent care facilities to share data about vulnerable user injuries resulting from traffic crashes. 	CP&P – Transportation Planning	Short-Term	\$







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OTHER ACTIONS

Strategy 5: Be active in Colorado transportation safety legislation.

Action	Next Steps to Achieve Action	Lead <i>Partner</i> (s)	Timeframe	Cost Estimate
OA5-a. Continue advocating/participating in the development of relevant transportation safety legislation.	Coordinate with the BOCC department on relevant state transportation safety legislation.	CP&P – Transportation Planning BOCC	Ongoing	\$
OA5-b. Share clear messaging with the community about relevant transportation safety legislation, particularly new laws (e.g., Hands-Free Law, Bicycle Safety Stop, Automated Traffic Enforcement, etc.).	Identify and distribute information through county channels.	CP&P – Transportation Planning BOCC CP&P – Communications	Ongoing	\$





CHAPTER 6 A PATH FORWARD



OVERVIEW

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Achieving Vision Zero in Boulder County requires a sustained commitment to funding, implementation, and continued evaluation. Securing financial resources for safety projects and continuously monitoring progress will ensure that strategies effectively reduce crashes and improve roadway safety. By leveraging available funding and assessing the impact of implemented Actions, Boulder County can make targeted, data-driven investments that move the community toward its Vision Zero goals.

FUNDING OPPORTUNITIES FOR SAFETY IMPROVEMENTS

Implementing the Boulder County VZAP will require a combination of existing and new local, regional, state, and federal funding sources to support infrastructure improvements, policy initiatives, and safety programs. Boulder County will pursue funding opportunities that align with identified safety priorities, leveraging available grants and partnerships to maximize the impact of Vision Zero investments. A few of the potential funding sources are highlighted in this section, and the county may also explore the use of fees, additional sales taxes, and/or public-private partnerships.

Federal

The Infrastructure Investment and Jobs Act (IIJA) established the <u>Safe Streets</u> and <u>Roads for All (SS4A)</u> discretionary program with \$5 billion to be spent nationwide between 2022 and 2026. The SS4A program funds initiatives through grants to prevent roadway deaths and serious injuries. Completion of this VZAP qualifies Boulder County to apply for SS4A Implementation Grants to implement Projects and Strategies identified in the VZAP. The IIJA also created the <u>Rural and</u> <u>Tribal Assistance Pilot Program</u>, which provides funding to help rural communities advance infrastructure projects that enhance the safety, efficiency, and quality of the transportation system.

Example Action(s) that may be funded through SS4A or the Rural and Tribal Assistance Pilot Program:

- **SR1-a.** Implement improvements from Priority One HIN Fact Sheet Recommendations (see **Appendix E**).
- **SR1-b.** Analyze, develop recommendations, and implement improvements for remaining Priority One HIN intersections and segments.
- **SR1-f.** Implement already planned, ongoing, or upcoming county safety projects particularly those in rural areas.
- **SR2-d.** Continue working with CDOT, DRCOG, and municipalities on key regional safety corridors to develop and implement recommendations from current and future studies.
- **SR3-a.** Complete safety analysis, identify recommendations, and implement improvements at county locations that are on the Bike/Pedestrian HIN.
- **SR4-i.** Implement safety improvements for culverts that don't meet clear zone requirements.







State

Boulder County

The <u>Colorado Highway Safety Improvement Program (HSIP)</u> is a federal initiative administered by CDOT aimed at reducing traffic fatalities and serious injuries on public roads. It provides funding to states for safety improvement projects that are data-driven and focus on reducing crashes. The program emphasizes identifying high-risk locations and implementing cost-effective measures to enhance roadway safety for all users.

Example Action(s) that may be funded through the HSIP:

- SR4-a. Add reflective traffic signal backplates at signalized intersections.
- **SR4-f.** Identify intersections and pedestrian/bicycle crossings with no roadway lighting and install intersection lighting.

Regional

DRCOG, Denver region's Metropolitan Planning Organization (MPO), distributes federal transportation funding through a <u>Transportation Improvement Program</u> (<u>TIP</u>), which identifies all current federally funded transportation projects to be completed in the Denver region over a four-year period. The local governments that comprise DRCOG decide on a process and criteria for including projects in the TIP and awarding DRCOG-controlled federal funds, which allows the region to set and agree upon its transportation priorities. The CO 119 Bikeway is partially funded through the TIP. DRCOG also has specific "Set-Aside" Programs for the TIP; the Regional Transportation Operations and Technology Program could be a good source of funding for Action Items from this plan

Example Action(s) that may be funded through the DRCOG TIP:

 SR4-d. Develop signal operation guidelines addressing left-turn operations, Leading Pedestrian/Bike Intervals, No Right Turn on Reds at signalized intersections.

Example Action(s) that may be funded through the DRCOG TIP (cont.):

- **SR4-g.** Develop pedestrian crossing treatment installation guidelines to guide where to install marked crossings and pedestrian signals.
- SR4-k. Analyze, develop recommendations, and implement improvements that address the top crash types, using Appendix F: Countermeasure Toolkit.
- **SS1-a.** Work with the BOCC and CDOT to implement automated speed enforcement on CDOT roads.
- **SS1-b.** Analyze, develop recommendations, and implement automated speed enforcement on county roads.

Local

The **Countywide Transportation Sales Tax,** passed by voters in 2001, extended by voters in 2007, and extended in perpetuity in 2022, is a countywide 0.1 percent tax (one cent on a \$10 purchase) on all sales in Boulder County. Revenues fund transportation projects including transit service and programs, roadway safety and resilience, regional corridors, regional trails and commuter bikeways, and community mobility programs.

Example Action(s) that may be funded through the Sales Tax:

• **SP2-a.** Evaluate and implement recommendations for county intersections, including but not limited to red-light cameras.

A comprehensive list of potential funding sources detailing an overview of eligible programs, application timelines, and funding scopes to guide future investment in roadway safety is included in **Appendix G**. By proactively seeking funding and aligning projects with available financial resources, the county can accelerate the implementation of high-impact safety improvements that move Boulder County toward its Vision Zero goals.





CHAPTER 6 A PATH FORWARD

MONITORING AND EVALUATION

Monitoring and evaluating the effectiveness of the Boulder County VZAP is essential to ensuring progress toward a safer transportation system. The county will track the following metrics to evaluate progress towards eliminating trafficrelated fatalities, serious injuries, and the top five crash types that result in serious injury and fatalities. These metrics focus on the people impacted, not just number of crashes.

- Number of people killed
- Number of people seriously injured
- Number of people walking and biking killed or seriously injured
- Number of people killed or seriously injured in intersection-related crashes
- Number of people killed or seriously injured in non-intersection-related crashes

In addition, the county will track the the total number of crashes, as well as progress on the implementation of the plan and the effectiveness of implemented Actions. This systemwide evaluation will support the county in continuing to make data-driven decisions and adjust strategies as needed to achieve Vision Zero goals.

Data will be collected from crash reports, staff tracking and reporting, speed studies, and community engagement efforts to assess the impact of implemented Projects.

CONTINUOUS IMPROVEMENT

Evaluation findings will guide ongoing refinements to the Action Plan, ensuring that strategies remain effective and responsive to evolving safety challenges. By identifying successful initiatives and areas requiring enhancement, Boulder County will continuously improve its approach to achieving a safer, more accessible transportation system for all road users. This structured monitoring and evaluation framework will help ensure that the Strategies and Projects outlined in the VZAP lead to measurable safety improvements over time.

Collaboration is key to achieving Vision Zero.

Boulder County will continue to work alongside regional partners, including CDOT, DRCOG, and the municipalities within Boulder County to coordinate safety efforts across jurisdictions.



APPENDICES





APPENDIX A: SAFETY ANALYSIS TECHNICAL MEMORANDUM

APPENDIX B: SYSTEMWIDE SAFETY ANALYSIS MEMORANDUM

APPENDIX C: COMMUNITY OUTREACH SUMMARIES

APPENDIX D: PROJECT PRIORITIZATION MEMORANDUM

APPENDIX E: HIGH-PRIORITY HIGH-INJURY NETWORK (HIN) PROJECT RECOMMENDATION FACT SHEETS

APPENDIX F: COUNTERMEASURE TOOLKIT

APPENDIX G: FUNDING OPPORTUNITIES SUMMARY




APPENDIX A

SAFETY ANALYSIS TECHNICAL MEMORANDUM



APPENDIX B

SYSTEMWIDE SAFETY ANALYSIS MEMORANDUM



APPENDIX C COMMUNITY OUTREACH SUMMARIES



APPENDIX D PROJECT PRIORITIZATION MEMORANDUM



APPENDIX E

HIGH-PRIORITY HIGH-INJURY NETWORK (HIN) PROJECT RECOMMENDATION FACT SHEETS



APPENDIX F COUNTERMEASURE TOOLKIT



APPENDIX G FUNDING OPPORTUNITIES SUMMARY