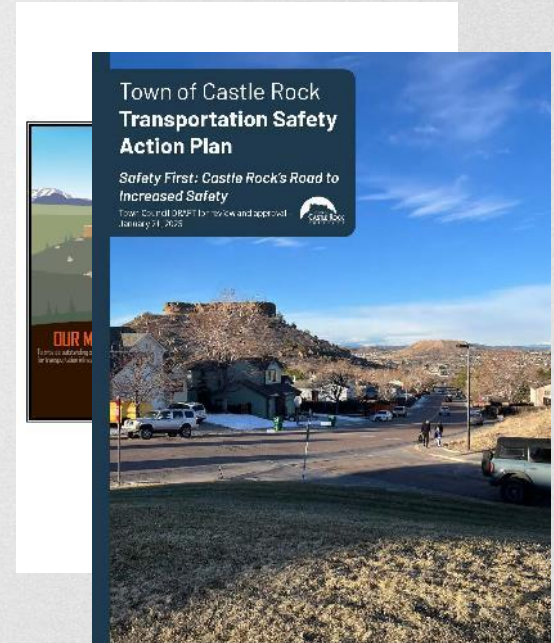
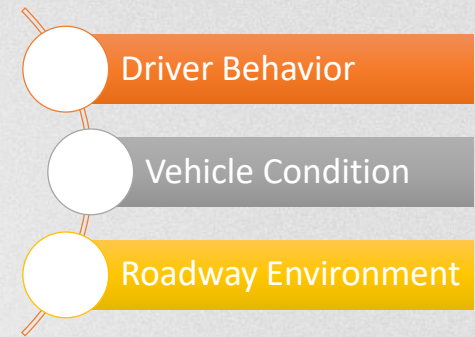


Resolution Adopting a Transportation Safety Action Plan

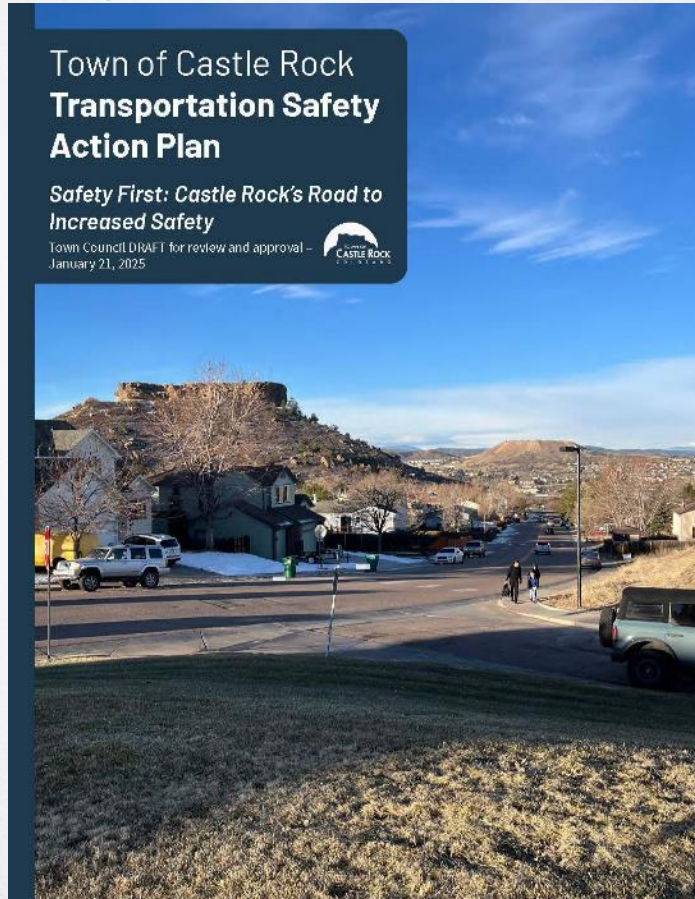
January 21th, 2025



Management Philosophy



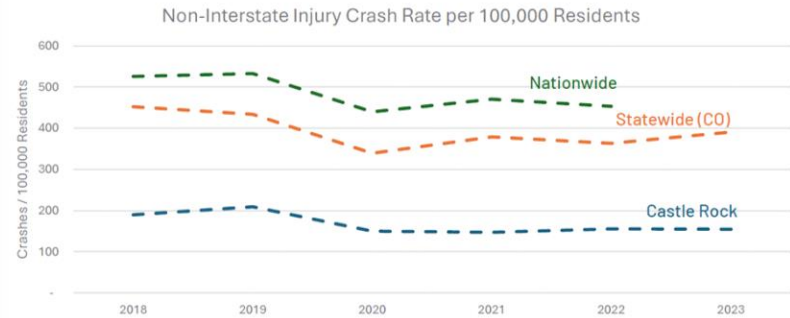
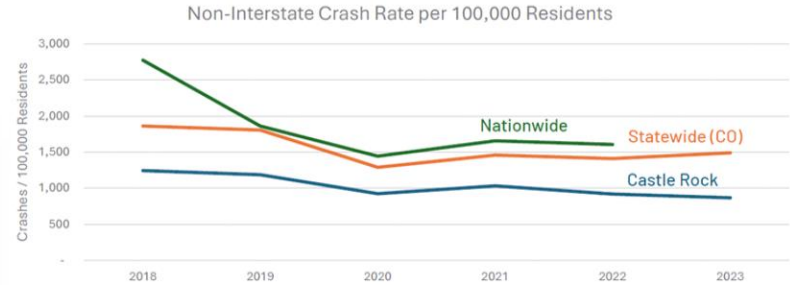
Plan Purpose



Reduce Injury &
Fatality Rates

Meet Federal Grant
Requirements

Project Background



What does this Plan Accomplish?

- A **Comprehensive Traffic Safety Analysis** that identifies common serious crash types and locations, with particular focus on vulnerable users.
- A **High Injury Network (HIN)** that maps the streets in Castle Rock with the highest historic serious and fatal crash activity and a **High Risk Network (HRN)** that maps the highest risk factors for serious crashes.
- Identifies **actions** the town will take **to improve traffic safety**.
- Prioritizes **safety interventions where the impact will be greatest**.
- Provides direction to **systemically mitigate** the most common serious injury crash types.
- **Identifies priority projects** and a prioritization methodology driven by data.
- Positions the Town to be **competitive in securing safety grants**.

S | S Safe Streets and Roads for All 4 | A (SS4A) Program Facts



The U.S. Department of Transportation (USDOT) **Safe Streets and Roads for All (SS4A)** program provides grants to local, regional, and Tribal communities for implementation, planning, and demonstration activities as part of a systematic approach to prevent deaths and serious injuries on the nation's roadways.

This roadway safety program was created by the **Biden-Harris Administration's Bipartisan Infrastructure Law**. It provides \$5 billion over 5 years to fund community-led projects that address the preventable crisis of deaths on our nation's roads, streets, and highways through safer people, roads, and vehicles; appropriate vehicle speeds; and improved post-crash care.

The SS4A program funds two types of grants:

- **Planning and Demonstration Grants** for Comprehensive Safety Action Plans, including supplemental safety planning and demonstration activities to inform an Action Plan. These can help build a pipeline of projects for future funding.
- **Implementation Grants** to implement strategies or projects identified in an existing Action Plan.

SS4A is exclusively designed to help local communities. DOT offers extensive technical assistance to potential applicants, especially first-time federal funding applicants.

For more information, use the QR code above or visit the [SS4A website](#).

SS4A grants are already making an impact nationwide

- In the first three years of funding, USDOT awarded **\$2.9 billion** to over **1,600 communities** across **all 50 states and Puerto Rico**.
- SS4A funds to improve roadway safety planning have been awarded to communities that comprise about **77% of the nation's population**.
- Awarded funds go to localities that make up **70% of all roadway fatalities**.
- Projects and activities will significantly **improve safety for all people using the road** in those communities, including drivers, passengers, pedestrians, bicyclists, people using transit, and people with disabilities.

Awards reach communities of all different sizes and safety needs:

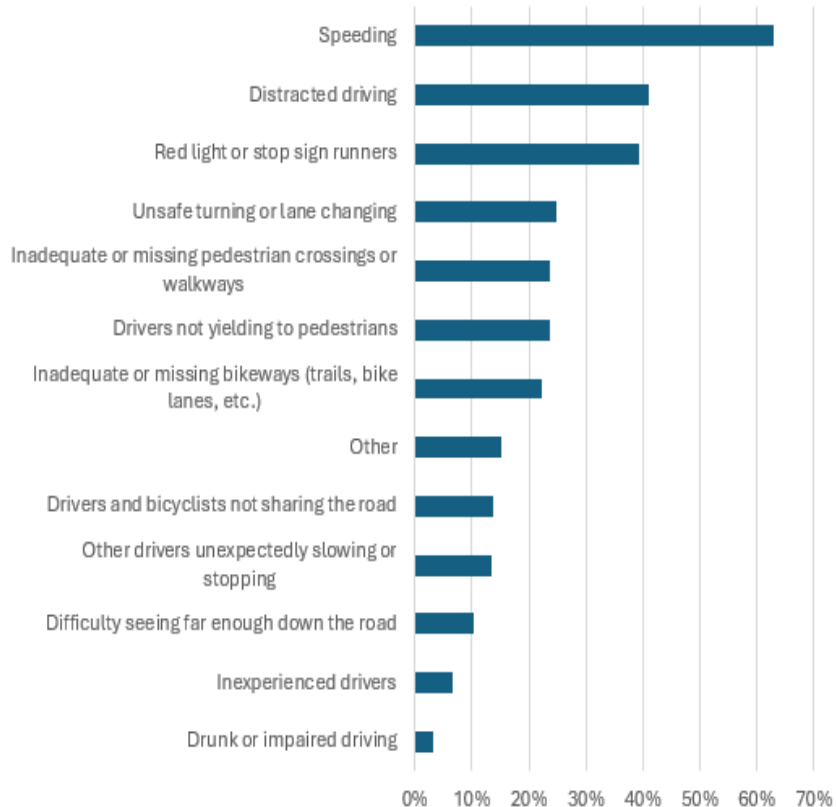
- **Rural communities** comprise around half of all grant award recipients to date.
- 816 communities (44% of award recipients) have **populations under 50,000**.
- **64 Tribal communities** were awarded SS4A funding.
- About 50% of award recipients are **new direct Federal funding recipients to USDOT**.
- Around 60% of funds will **benefit underserved communities**, providing equitable investment to places that need funding the most.



Top Traffic Concerns



Traffic Concerns Identified in Public Survey



How the Plan Will be Utilized

- Explore speed management education, enforcement, and engineering strategies
- Create a 5-year plan to complete high benefit to cost ratio projects
- Apply for FHWA, SS4A implementation grant funding
- Continue evaluating traffic control changes annually
- Continue collaboration and coordination with Police, Fire, PW Traffic, Communications, Douglas County School District, and CDOT
- Create a bi-annual report card to track performance

Staff Recommendation

Public Works Commission voted unanimously to recommend approval.

Staff recommends Town Council approve the resolution as introduced by title.

Proposed motion

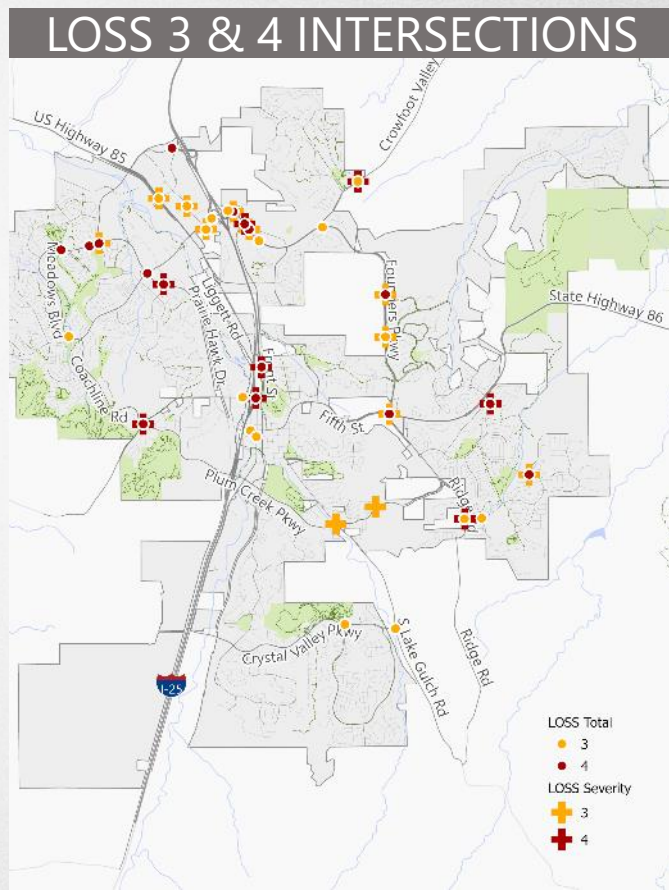
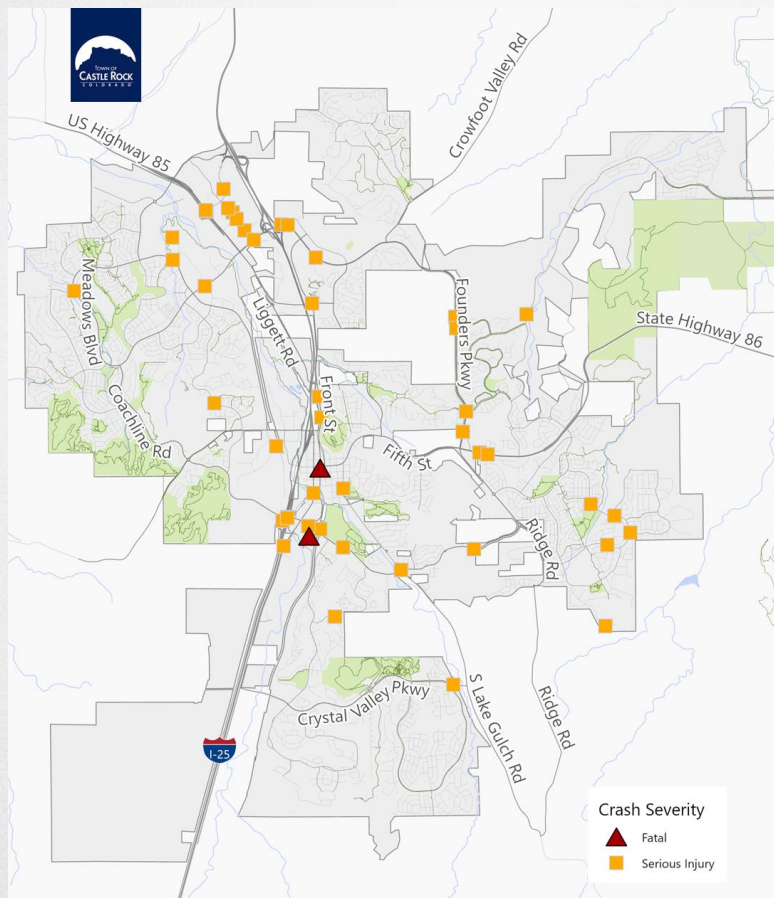
“I move Town Council approve the Resolution as introduced by title.”

Alternative:

“I move to approve the Resolution as introduced by title, with the following conditions: (list conditions)”

“I move to continue this item to the Town Council meeting on (date) to allow additional time to (list information needed).”

Serious Injury and Fatal Crashes 2018-2022





Approach Turn

16%



Ped & Bike

10%



Broadside

22%



Rear-End

8%



Roadway
Departure

35%

**These 5 Crash
Types Represent
90% of Fatal and
Seriously Injured
Crashes**

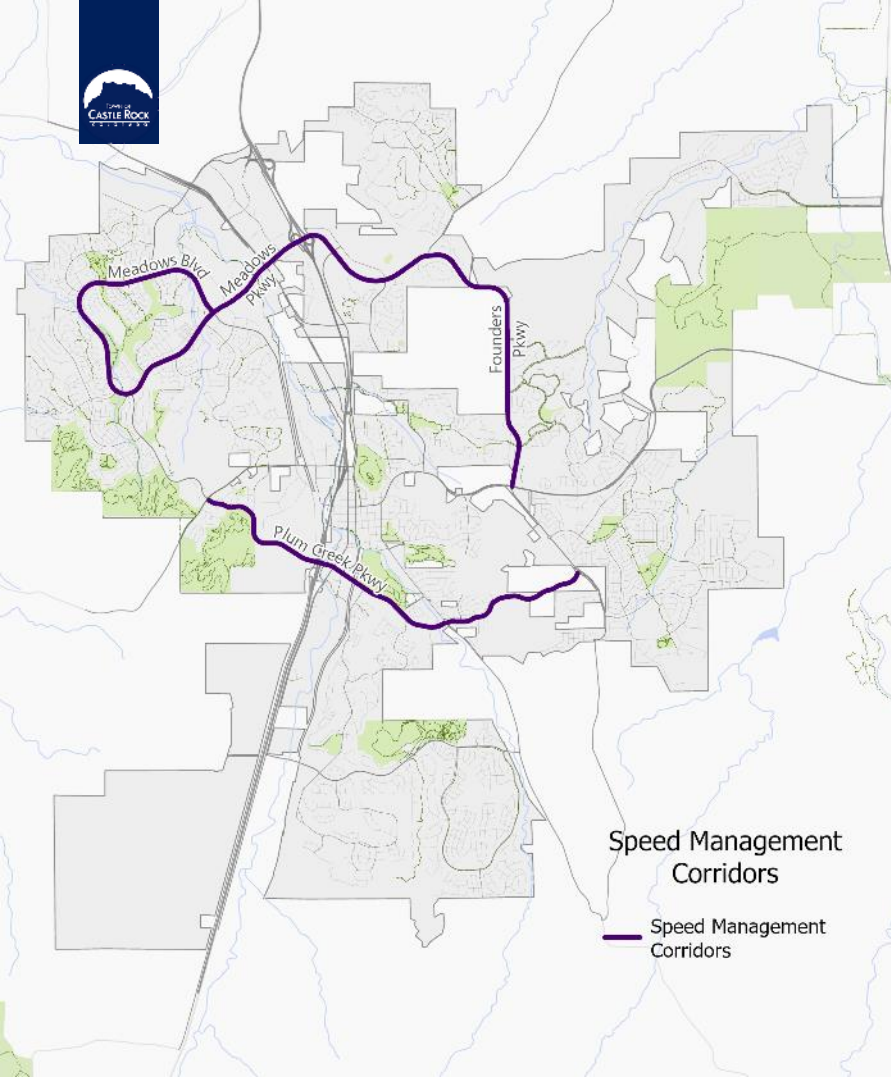
	Pedestrian & Bicyclist-Involved Crashes			Roadway Departure Crashes - Fixed Objects & Overturning Crashes			Broadside & Approach Turn Crashes at Signalized Intersections			Broadside & Approach Turn Crashes at Unsignalized Intersections			Rear-End Crashes		
	Lack of Infrastructure	Inappropriate Crossing Distance	Failure to Yield ROW	Speeding	Poor Curve Visibility	Distracted Driving	Poor Signal Visibility	Poor Signal Timing & Phasing	Signal Violation	Poor Visibility	Failure to Yield ROW	Drivers Inattentiveness	Heavy Traffic Conditions	Speeding	Weather Conditions
Counter Measures															
Install Sidewalk	●														
Install Shared-Use Path	●														
Install Bike Lane	●														
Install High Visibility Crosswalk			●												
Setback of Shared-Use Path			●												
Pedestrian Refuge Medians		●													
Curb Extension		●		●										●	
Install Pedestrian Hybrid Beacon			●												
Install Rectangular Rapid Flashing Beacon			●												
Leading Pedestrian Interval			●												
Extend Walk Phase Signal Timing			●												
Improved Pavement Friction				●										●	●
Rumble Strips						●						●			
Safety Edge						●									
Lane Narrowing				●										●	
Reduce Posted Speed Limit				●										●	
Install Speed Table			●	●										●	
Speed Feedback Sign				●										●	
Lighting	●				●		●			●					
Remove Visibility Obstructions					●		●			●					
Signal Coordination							●	●					●		
Signal Re-phasing (Extend Yellow & All Red)							●	●							
Protected Left-Turn Operations							●								
Protected Right-Turn Operations							●								
Install Traffic Support			●								●				
Roundabout			●	●					●		●		●	●	
All-Way Stop Control			●	●							●			●	
Additional Signal Head							●								
Retroreflective Backplates							●								
Flashing Beacon as Advance Warning				●			●					●		●	
Advance Dilemma-Zone Detection				●				●						●	
Signs and Marking Improvements			●		●					●					
Median Modification to Restrict/Improve Turning Movements										●					

Safety Interventions



Action Plan

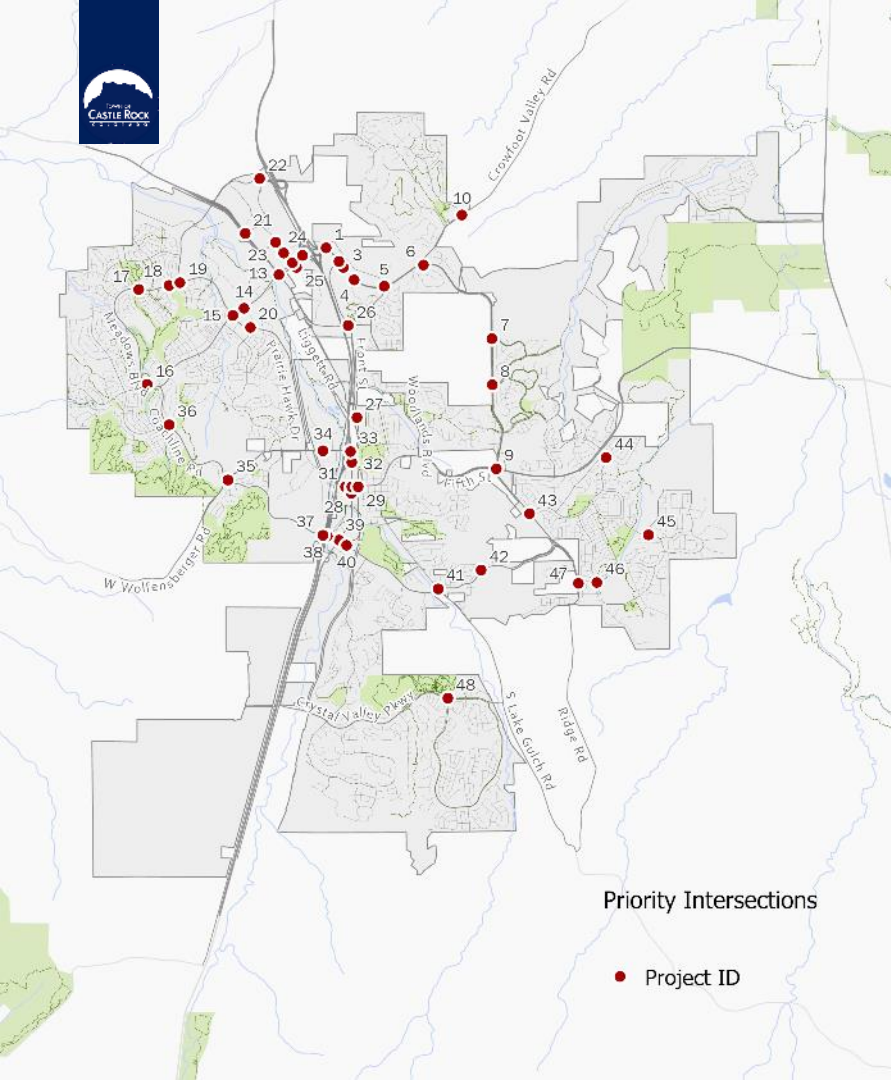
	Safer Roads	Safer Speeds	Safer People	Safer Vehicles	Post-Crash Care
Capital Projects	- Implement Safety Interventions at Priority Project Locations - Implement Systemic Safety Interventions Across the Town - Implement Quick-Build Solutions				Ensure Emergency Vehicle Preemption at All Signalized Intersections
Policy & Funding	- Prioritize Safety in Capital Improvement Projects - Update Transportation Design Criteria Manual with Safe System Principles - Prioritize Safety in Street Improvement Projects Triggered by Development - Evaluate Options for Dedicated Sustainable Revenue Stream for Safety Projects - Reference Transportation Master Plan and DRCOG Active Transportation Plan	Use Safe System Approach to Reevaluate Posted Speed Limits on Roadways Identified for Speed Management	Explore a Safe Ride Home Program Option	Connected and Autonomous (CAT) Vehicle Readiness Planning	
Enforcement & Education	- Combine Safety Improvements with Events - Maintain and Regularly Update Crash Dashboard	Explore Advanced Technology Systems and Enforcement	- High Visibility DUI Enforcement - Child Passenger Safety Program - New Driver Accountability Program - Safe Routes to School Program - Match Fines with Safety Outcomes - Pair Education with Key Engineering Countermeasures - Enforcement Priorities	Enforcement of Existing Laws Related to Vehicle Safety	Participate in National TIM Responder Training Program
Collaboration	- Evaluate Options for Public Engagement - Collaborate with Internal Stakeholders		Facilitate Interdepartmental Safety Meetings	DRCOG Vision Zero Working Group	Deploy Response Team to Investigate Serious and Fatal Crashes
Performance Monitoring & Reporting	Monitor Crash Data Before and After Safety Improvements with Ongoing Crash Statistics Report				



Speed Management Corridors

Strategies for Consideration

- Evaluate reducing speed limits, coupled with necessary enforcement and education.
- Evaluate reducing travel lane width to a maximum of 11-feet with turn lanes reduced to 10-feet, as appropriate .
- Incorporate transverse lane markings with lane narrowing.
- Consider permanent speed feedback signs flashing "Slow Down" message when speed exceeds a preset limit (most effective when coupled with enforcement).
- Define Speed Enforcement Corridors with regular, targeted speed enforcement combined with a public awareness program
- Consider intersection design revisions to cue motorists to travel slower, while benefiting pedestrians and bicyclists through shorter crossings and higher visibility



Priority Intersections

48 INTERSECTIONS

- Identified using statistical analysis as locations with a high potential for total and/or serious crash reduction
- Any Intersection with a fatality (including 2023 and 2024 fatalities)
- Prioritized using Benefit-Cost analysis and location based criteria

NOTE: Prioritized projects provide a starting point and may change as projects are implemented or needs are reevaluated



BENEFIT-COST ANALYSIS

Prioritize projects that expect to save the most lives relative to cost.



INCLUSIVE INDEX

Prioritize projects in Priority Areas.



PUBLIC COMMENT

Prioritize projects where more public comments were received of traffic safety concerns.



VULNERABLE USER CRASH HISTORY

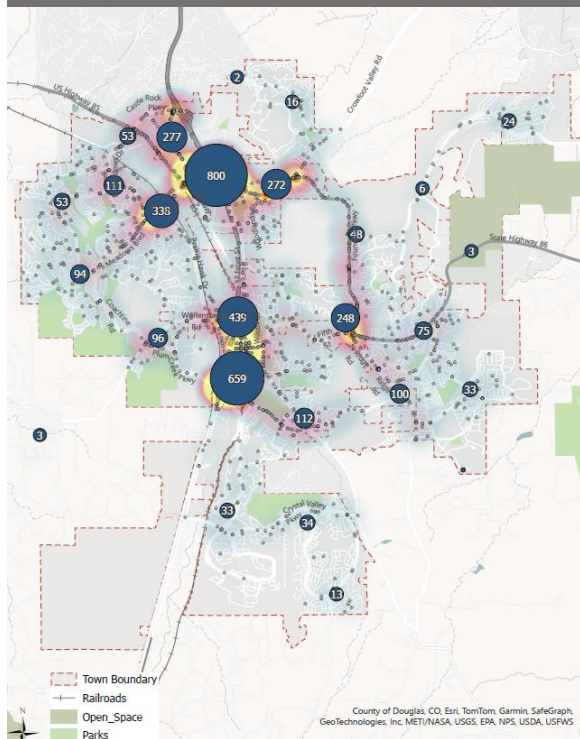
Prioritize projects with a history of crashes involving pedestrians and bicyclists.

Prioritization Guide

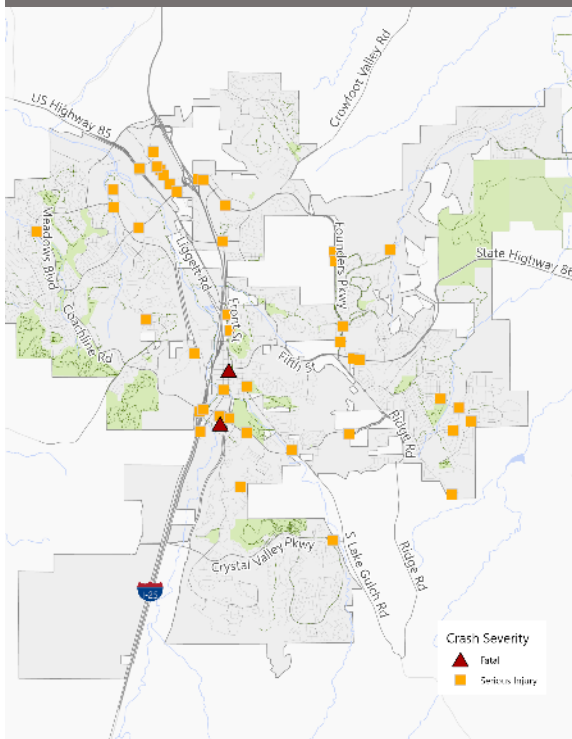
Provides guidance on how to prioritize implementation of 48 priority intersection projects based on four criteria.

Prioritization

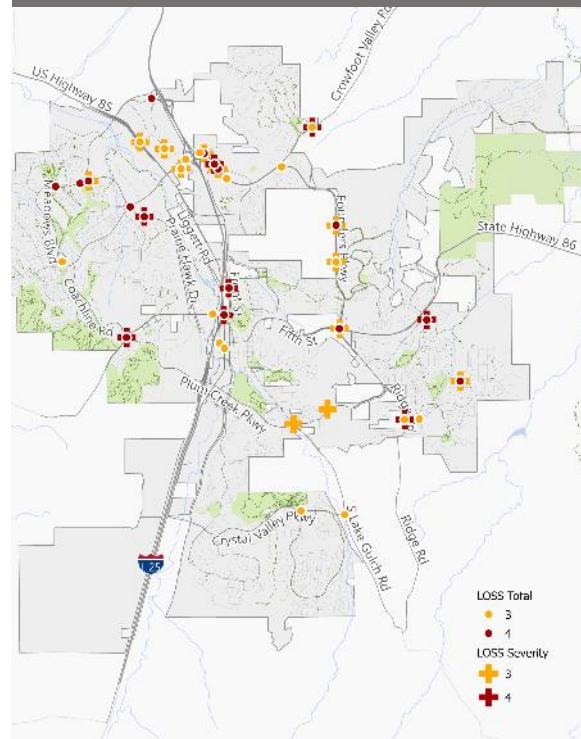
CRASH HISTORY



KSI CRASHES

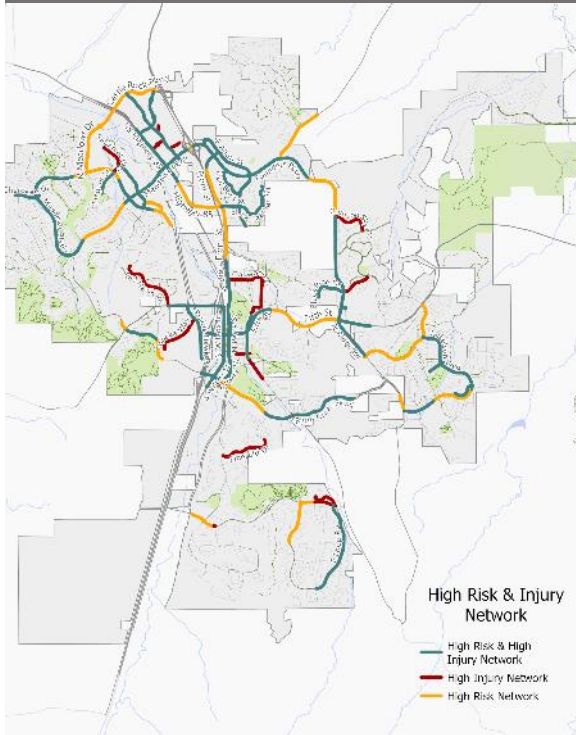


LOSS 3 & 4 INTERSECTIONS

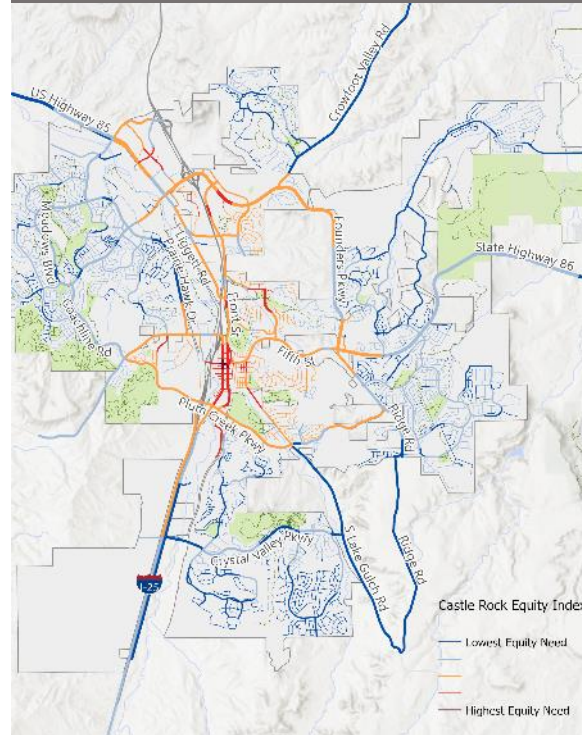


Prioritization

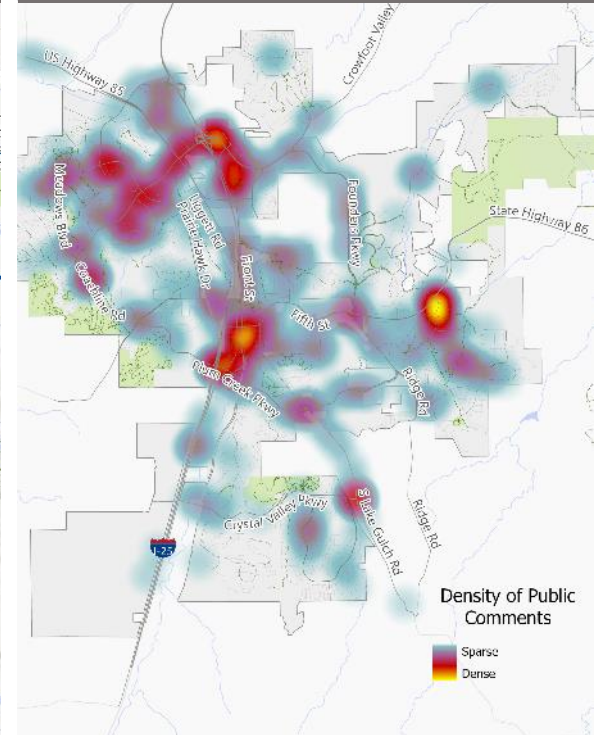
HIN & HRN



INCLUSIVE INDEX



PUBLIC INPUT





LOSS and Crash Pattern

