



FOR ALL IRON COUNTY

May 2025

IRON COUNTY SAFETY ACTION PLAN

Final Report

Iron County Safety Action Plan

Final Report

May 2025

Prepared for:



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AADT	Annual Average Daily Traffic
AASHTO	American Association of State Highway and Transportation Officials
ADA	American with Disabilities Act
BIL	Bipartisan Infrastructure Law
CCRI	Crash Contributing Risk Indicator
CMF	Crash Modification Factor
FCAOG	Five County Association of Governments
FHWA	Federal Highway Administration
GFA	Geographic Focus Area
HSIP	Highway Safety Improvement Program
HSM	Highway Safety Manual
HPI	Healthy Places Index
ICRPO	Iron County Regional Planning Organization
ITS	Intelligent Transportation System
NHTSA	National Highway Traffic Safety Administration
PHB	Pedestrian Hybrid Beacon
PSC	Proven Safety Countermeasure
RPO	Regional Planning Organization
RRFB	Rectangular Rapid Flashing Beacon
RTAC	Regional Transportation Advisory Committee
RTEC	Rural Transportation Executive Council
SAP	Safety Action Plan
SHSP	Strategic Highway Safety Plan
SRTS	Safe Routes to School
SS4A	Safe Streets and Roads for All
SUU	Southern Utah University
SVI	Social Vulnerability Index
TWLTL	Two-way Left-turn Lane
UDOT	Utah Department of Transportation
USDOT	United States Department of Transportation
usRAP	United States Road Assessment Program

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1. INTRODUCTION

1. INTRODUCTION

Between 2019 and 2023, there were 44 fatalities and 243 serious injuries on roadways in Iron County. The number of fatalities more than doubled between 2019 and 2023, from 4 fatalities in 2019 to 11 fatalities in 2023, as shown in **Figure 1**. The number of serious injuries has increased since 2019 with a high of 61 serious injuries occurring in 2021.

Recognizing these trends, a Safety Action Plan (SAP) for all Iron County was prepared to develop a holistic, well-defined strategy to reduce roadway fatalities and serious injuries. The SAP analyzes safety needs, identifies high-risk locations and factors contributing to crashes, and prioritizes strategies to address them.

The SAP was prepared with funding from the Safe Streets and Roads for All (SS4A) discretionary grant program¹. The grant program was established by the Bipartisan Infrastructure Law (BIL) with \$5 billion in appropriated funds to fund plans, strategies, and infrastructure improvements to prevent roadway fatalities and serious injuries of all roadway users. The SS4A grant program is in effect from 2022 to 2026.

The Iron County SAP was completed on May 12, 2025, to meet eligibility criteria for the 2025 Notice of Funding Opportunity. The SAP is posted and publicly available at <https://ironcounty.net/engineering/safety-action-plan>.

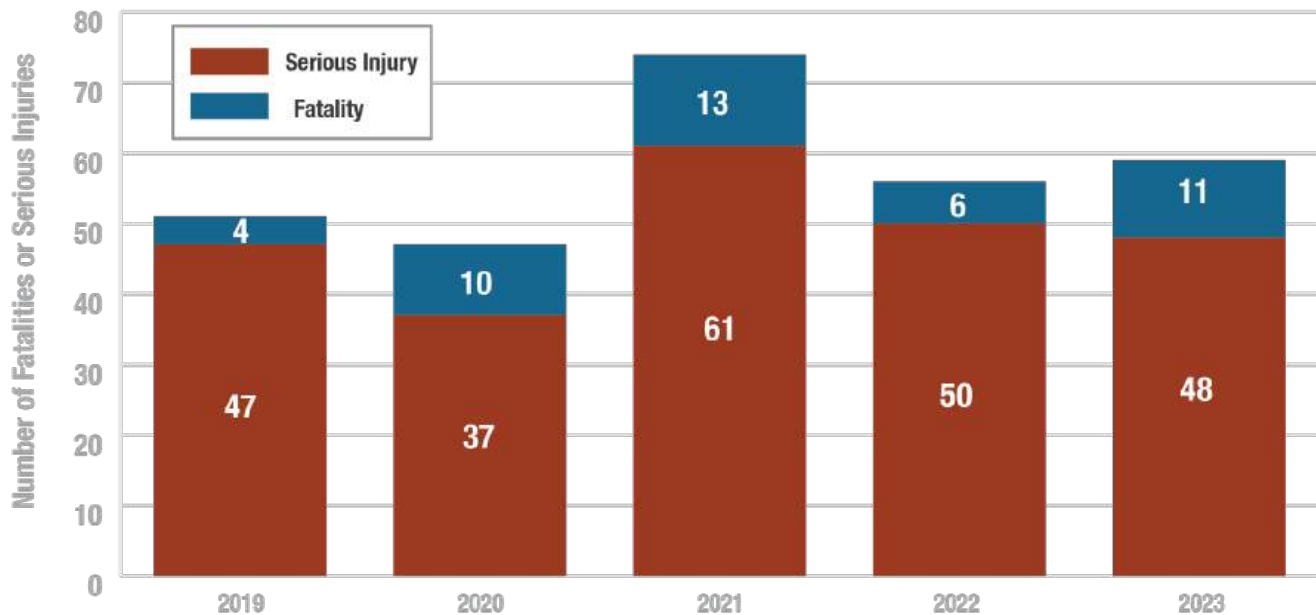


Figure 1. Fatalities and Serious Injuries in Iron County, 2019 to 2023

¹ <https://www.transportation.gov/grants/SS4A>

Safe Streets and Roads for All (SS4A) Grant Program

The purpose of the SS4A discretionary grant program is to fund regional and local initiatives to prevent roadway deaths and serious injuries of all roadway users including pedestrians, bicyclists, public transportation users, motorists, and others. The program supports the goal of zero roadway deaths using the United States Department of Transportation (USDOT) Safe System Approach.

The grant program provides funding for two types of grants: Planning and Demonstration Grants and Implementation Grants (see **Figure 2**). Iron County secured a Planning and Demonstration Grant to develop this SAP for all Iron County including municipalities and jurisdictions within the county.



PLANNING AND DEMONSTRATION GRANT

Planning and Demonstration Grants are used to develop, complete, or supplement an Action Plan. These grants also fund supplemental safety planning activities and safety demonstration activities in support of an Action Plan.



IMPLEMENTATION GRANT

To implement projects and strategies identified in an Action Plan to address a roadway safety problem. Projects and strategies may be infrastructural behavioral, and/or operational activities. Implementation Grants may also include supplemental safety planning and safety demonstration activities to inform an existing Action Plan, and project-level planning, design, and development activities.

Figure 2. SS4A Grant Funding Opportunities

The SAP meets eligibility requirements that will allow Iron County and local jurisdictions in the county to apply for supplemental Planning and Demonstration Grants or Implementation Grants from the SS4A grant program.

Action Plan Elements

An eligible Action Plan within the SS4A grant program is determined by a Self-Certification Eligibility Worksheet. The Self-Certification Eligibility Worksheet (keep the link) details components of an Action Plan, summarized in **Table 1**. The Iron County SAP will satisfy requirements of an Action Plan.

Table 1. Action Plan Elements

ACTION PLAN ELEMENT	
An eligible Action Plan must include the following two elements:	
1. Safety Analysis of:	<ul style="list-style-type: none"> Existing conditions and historical trends. Crashes by location, severity and contributing factor. Systemic and specific safety needs.
2. Identify a comprehensive set of projects .	
In addition, the Action Plan must include at least three of the remaining five elements:	
1. Leadership's public commitment to an eventual goal of zero fatalities and serious injuries, a date to reach zero, or setting targets to achieve significant declines in roadway fatalities and serious injuries.	
2. Oversight by a committee charged with plan development, implementation, and monitoring.	
3. Engagement with the public and relevant stakeholders to inform plan development.	
4. Opportunities to improve plans, guidelines, and standards.	
5. A process to measure and report progress over time.	

SAP Approach

To ensure the SAP satisfies all elements required of an eligible Action Plan, the following tasks in **Table 2** were completed in development of the plan.

Table 2. Iron County SAP Tasks

SAFETY ACTION PLAN TASK	ACTION
TASK 1: Leadership Commitment and Goal Setting	A Regional Safety Commitment Resolution was adopted by the Iron County Rural Planning Organization (RPO). The Regional Safety Commitment Resolution is provided to each jurisdiction for consideration for adoption.
TASK 2: Planning Structure	A SAP Committee consisting of representatives from local jurisdictions, Iron County, Utah Department of Transportation (UDOT), and other agencies was organized for the SAP. The Committee oversaw the SAP development and deliverables.
TASK 3: Safety Analysis	An analysis of crash history, existing data and trends, identification of risk factors, high-risk locations, and a high-injury network was completed.
TASK 4: Engagement and Collaboration	Community engagement and outreach was completed through stakeholder workshops, community events, a project website, online mapping and surveys, and advertisement. The project website provided the public and stakeholders the opportunity to identify locations of concern, review materials, and view upcoming events and deliverables.
TASK 5: Policy and Process Changes	Existing policies, programs, and plans were reviewed, and opportunities for change or development were identified.
TASK 6: Strategy and Project Selections	The SAP recommends and prioritizes countermeasures, strategies, and locations to help prevent fatal and serious injury crashes in the county.
TASK 7: Progress and Transparency	The SAP details how the county will track progress towards goals in the Regional Safety Commitment Resolution and the dashboard created for this task.
TASK 8: Final Report and Safety Resolution	The final report summarizes the Safety Action Plan findings and recommendations. The final report was presented to the Iron County Commission for review and adoption.

SAP Study Area

The Iron County SAP study area encompasses all of Iron County, including local jurisdictions, as illustrated in **Figure 3**. To organize the jurisdictions and unincorporated areas of Iron County into more detailed analysis areas, Iron County was divided into five Geographic Focus Areas (GFA). **Table 3** lists the GFAs and which jurisdictions or areas comprise each GFA.

Table 3. GFAs and Jurisdictions

GEOGRAPHIC FOCUS AREA (GFA)	JURISDICTIONS/BOUNDARIES
Cedar City	Cedar City (excluding I-15)
Enoch City	Enoch City (excluding I-15)
East Iron County	Parowan City Paragonah Town Kanarraville Town Brian Head Town The Paiute Indian Tribe of Utah Unincorporated areas of Iron County, east of SR 130 and SR 56 (excluding Cedar City and Enoch City)
West Iron County	Unincorporated areas of Iron County, west of SR 130 and SR 56 (excluding Cedar City and Enoch City)
Interstate-15 (I-15)	From milepost 41 to milepost 101

The SS4A grant program defines an Underserved Community (would this be capitalized? Not sure) consistent with the definition of an Area of Persistent Poverty (APP). Areas of Persistent Poverty are defined in the Infrastructure Investment and Jobs Act using the following criteria:

- » Any county that has consistently had 20 percent or more of the population living in poverty during the 30-year period preceding November 15, 2021, as measured by the 1990 and 2000 decennial census and the most recent annual Small Area Income Poverty Estimates as estimated by the Bureau of the Census
- » Any census tract with a poverty rate exceeding 20 percent, as measured by the 2014 – 2018 5-year data series available from the American Community Survey of the Bureau of the Census
- » Any territory or possession of the United States

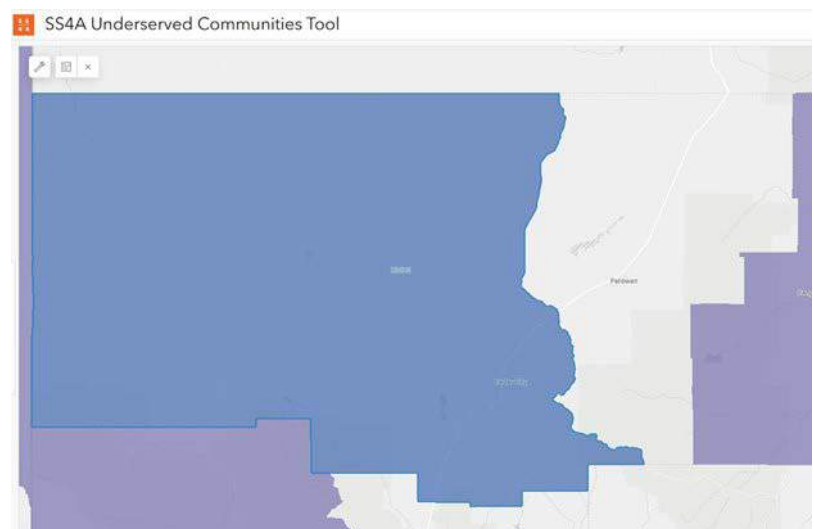


Figure 3. Underserved Communities Tool

A review of the SS4A Underserved Communities Tool (linked: <https://www.transportation.gov/grants/ss4a/identifying-underserved-communities>) shows that 11 of the 12 census tracts, or 92% of Iron County's population, are defined as Underserved Communities as shown in **Figure 3**. The easternmost census tract of Iron County (Census Tract 1101) including portions of Brian Head Town, Paragonah Town, and Parowan City is not identified as an Underserved Community.



Figure 4. Iron County SAP Study Area and GFAs

Interstate 15 (I-15) is managed and maintained by the Utah Department of Transportation (UDOT). However, state governments are not eligible to apply for funding through the SS4A grant program. As such, the SAP defined I-15 as its own GFA and reviewed crash data for the I-15 corridor in Iron County but does not make recommendations for improvements to I-15.

For other state-owned and maintained routes outside of I-15, UDOT may partner with local jurisdictions or agencies to complete or implement improvements or strategies identified in the SAP. Therefore, those roadways are included in the SAP processes and analyses.

SAP Committee

A SAP Committee was organized to oversee the development, implementation, and monitoring of the Action Plan. The Iron County SAP Committee was comprised of representatives from local jurisdictions, UDOT, and other agencies. The committee met monthly to review, discuss, and coordinate SAP elements and tasks. The Committee provided valuable information in identifying key stakeholders and insight that guided the safety analysis, preferred countermeasure and safety strategies selections, and safety priorities for the SAP. The Iron County SAP Committee members and the organizations represented are listed in **Table 4**.

Table 4. Iron County SAP Committee Members

MEMBER	ORGANIZATION
Rich Wilson	Iron County
Reed Erickson	Iron County
Merilee Wilson	Iron County
Mike Bleak	Iron County Commission
Russell Robertson	Federal Highway Administration (FHWA)
Trevor Hart	Federal Highway Administration (FHWA)
Nate Wiberg	Five County Association of Governments (FCAOG)
Cody Christensen	Five County Association of Governments (FCAOG)
Rob Dotson	Enoch City
Kent Fugal	Cedar City
Dan Jessen	Parowan City
Todd Robinson	Paragonah Town
Tyler Allred	Kanarraville Town
Heidi Loveland	Kanarraville Town
Bret Howser	Brian Head Town
Shane Parashonts	Paiute Indian Tribe of Utah
Tracy Munson	Utah Department of Transportation (UDOT)
Chris Hall	Utah Department of Transportation (UDOT)
Cody Marchant	Utah Department of Transportation (UDOT)
Laurie Huntsman	Utah Zero Fatalities



2. REGIONAL SAFETY COMMITMENT RESOLUTION

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The SAP builds consensus across Iron County on the importance of improving safety for all roadway users. To underscore a regional commitment to safety, the Iron County Rural Planning Organization (ICRPO) was designated as the agency to adopt a Regional Safety Commitment Resolution. The ICRPO represents Iron County and the municipalities and jurisdictions within it. The Regional Safety Commitment Resolution was presented to the ICRPO for review and was adopted on March 5, 2025. Agencies and communities within the ICRPO are encouraged to review and adopt the Regional Safety Commitment Resolution within their own agency or jurisdiction.

Iron County RPO Information

The ICRPO is a transportation planning organization that includes a regional policy group, an advisory committee, and a program manager. The ICRPO operates as part of the Five County Association of Governments (FCAOG) which serves southwestern Utah. The ICRPO is responsible for several key planning responsibilities within Iron County including: developing a transportation project priority list; establishing access management agreements; conducting modeling and build-out studies; facilitating public participation in the planning process; and a creating a Long-Range Transportation Plan (LRTP), among other duties.

Within the ICRPO, the Rural Transportation Advisory Committee (RTAC) and the Rural Transportation Executive Council (RTEC) convene bi-monthly, bringing together agency and municipal leaders from across the region. The Regional Safety Commitment Resolution was presented to the RTAC on February 4, 2025 for review and to the RTEC for adoption on March 5, 2025.

Regional Safety Commitment Resolution

The Iron County SAP Regional Safety Commitment Resolution sets a goal to significantly reduce traffic fatalities and serious injuries among all road users in Iron County by 50% by 2040, with the ultimate aim to achieve zero traffic fatalities and serious injuries. A copy of the Regional Safety Commitment Resolution is provided on the following page.

Progress Monitoring

Monitoring and tracking progress towards goals outlined in the Safety Commitment Resolution are essential for implementing the Safe System Approach. Details on monitoring including the use of the safety dashboard and performance measures are provided in **Section 9**.



IRON COUNTY RURAL PLANNING ORGANIZATION

A resolution committing to a goal to significantly reduce traffic fatalities and serious injuries in Iron County among all road users by 2040 with a Zero Fatalities goal to achieve zero traffic fatalities and serious injuries

WHEREAS the Iron County Rural Planning Organization is the officially designated Rural Planning Organization for Iron County and all the local communities; and

WHEREAS between 2019 and 2023, in Iron County, 44 people died and another 243 people were seriously injured due to roadway crashes, where 30% of fatalities and serious injuries occurred on Interstate 15 (I-15); and

WHEREAS crashes that result in death or serious injury are preventable, and the Iron County Rural Planning Organization acknowledges that the only acceptable goal is to eliminate deaths and serious injuries to all roadway users; and

WHEREAS having safe, user-friendly streets is one of the goals of the adopted 2023-2050 Utah Strategic Highway Safety Plan; and

WHEREAS creating safe, user-friendly streets will encourage active transportation, improving population health, air quality, and overall public well-being; and

WHEREAS, while jurisdictions in Iron County cannot fully control all of the factors that contribute to collisions, such as distractions, impairment, and aggressive driving, jurisdictions can play a crucial role in promoting traffic safety; and

WHEREAS the Safety Action Plan for Iron County presents the Rural Planning Organization for Iron County's commitment and strategies to reduce deaths and serious injuries of all roadway users.

NOW, THEREFORE LET IT BE RESOLVED, by the Iron County Rural Planning Organization:

1. Iron County Rural Planning Organization supports proactively utilizing a "Safe System Approach" to improve safety for all roadway users, rather than relying on a reactive approach to address roadway fatalities or serious injuries, and
2. Iron County Rural Planning Organization declares that any roadway fatality or serious injury is unacceptable and supports reasonable measures to prevent roadway crashes, and
3. Iron County Rural Planning Organization establishes a goal of eliminating deaths and serious injuries and supports Utah Zero Fatalities strategies, and
4. Iron County Rural Planning Organization establishes a goal of reducing roadway fatalities and serious injuries by 50% by 2040, and
5. Iron County Rural Planning Organization will measure the progress towards these regional goals and will provide regional quantitative metrics that are reported annually.

Adopted on March 5, 2025



Mayor Mollie Halterman, Chair



3. SAFE SYSTEM APPROACH

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Safe System Approach






The Safe System Approach (**Figure 5**) was adopted by the USDOT as the guiding paradigm to address roadway safety.³

The Safe System Approach considers five objectives of a safe transportation system, summarized in **Table 5**. Achieving zero traffic fatalities and serious injuries requires strengthening each objective and building upon the foundational principles of the Safe System Approach as illustrated in **Figure 5**.



Figure 5. FHWA Safe System Approach

Table 5. Safe System Approach Objectives

 SAFER PEOPLE	Encourage safe, responsible driving and behavior including those who walk, bike, drive, ride transit or travel by other modes and create conditions that prioritize their ability to reach their destination unharmed.
 SAFER VEHICLES	Expand the availability of vehicle systems and features that help to prevent crashes and minimize the impact of crashes on both occupants and non-occupants.
 SAFER SPEEDS	Humans are less likely to survive high-speed crashes. Promote safer speeds in all roadway environments through a combination of thoughtful, equitable, context-appropriate roadway design, appropriate speed-limit setting, targeted education, outreach campaigns, and enforcement.
 SAFER ROADS	Design streets to mitigate human mistakes and account for injury tolerances, encourage safer behaviors and facilitate safe travel by the most vulnerable users. An example includes physically separating people traveling at different speeds.
 POST-CRASH CARE	People who are injured in crashes rely on emergency first responders to quickly locate and stabilize their injuries and transport them to medical facilities. Post-crash care also includes forensic analysis at the crash site, traffic incident management and other activities.

3 <https://www.transportation.gov/safe-system-approach>

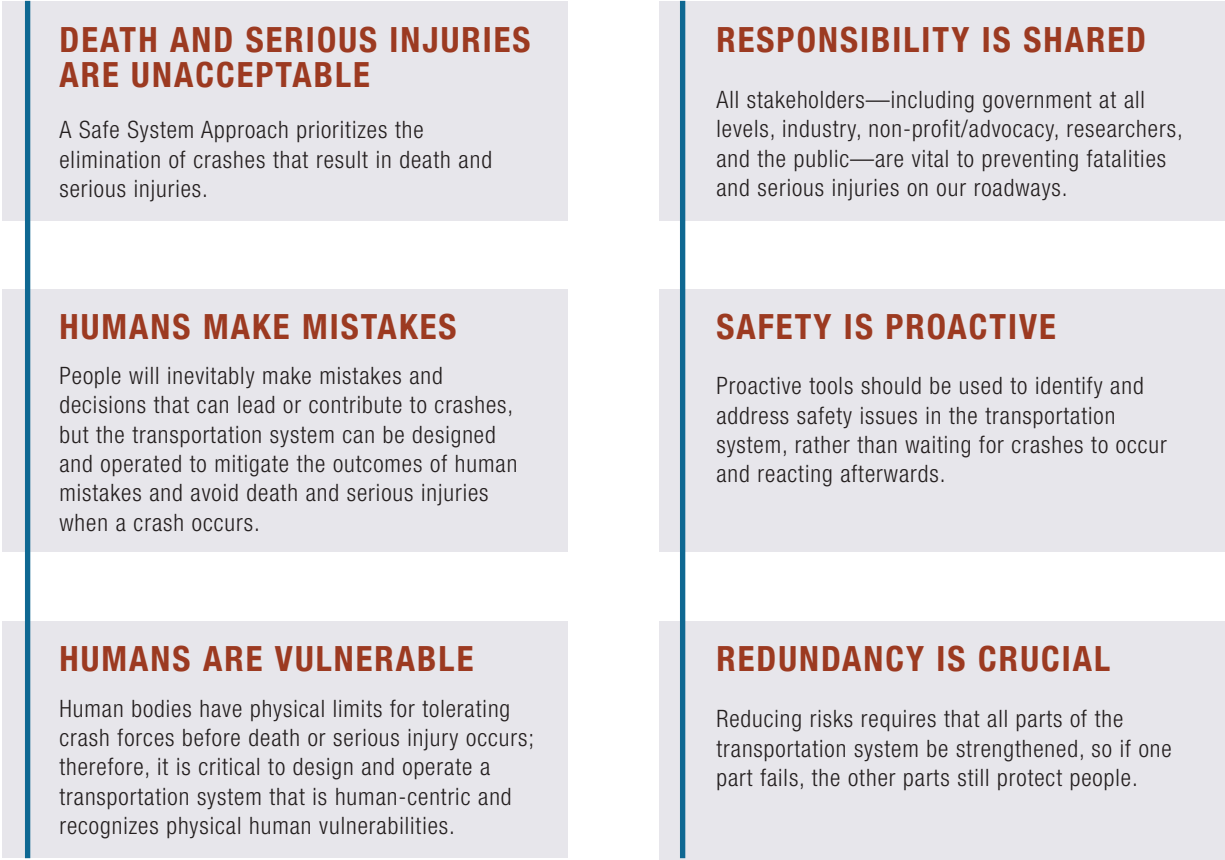


Figure 6. Safe System Approach Principles

Implementing the Safe System Approach requires moving away from traditional safety paradigms, as summarized in Figure 7.

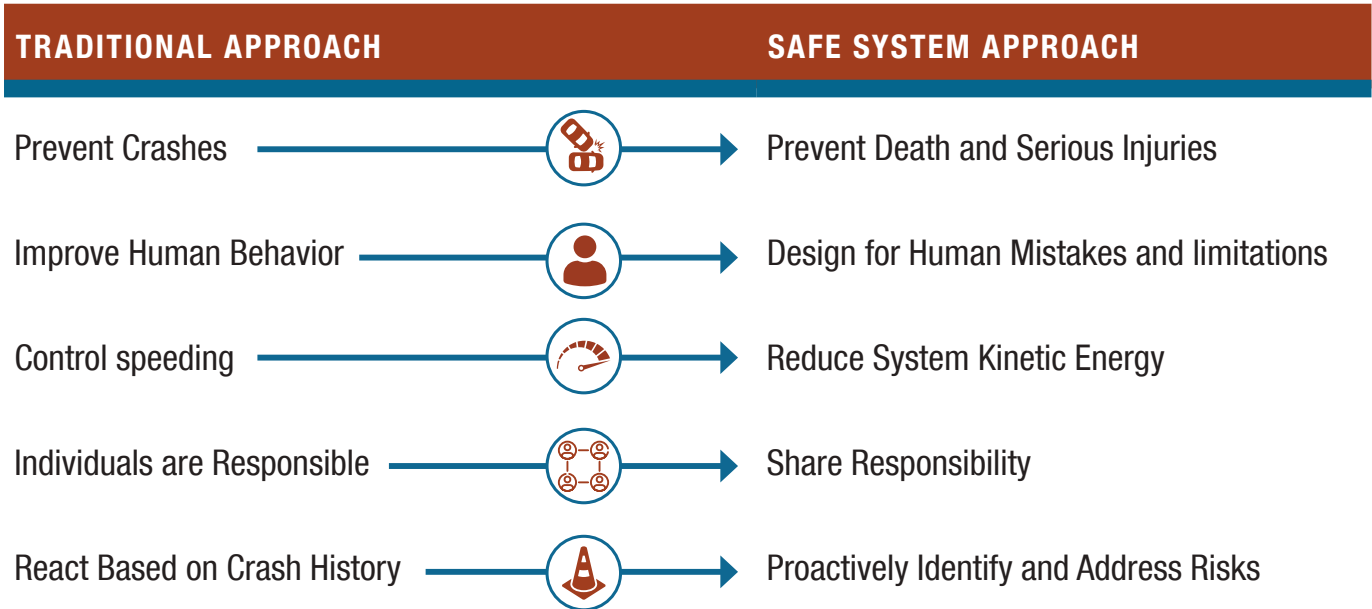


Figure 7. Safe System Approach Paradigm

Safe System Approach Strategies

The USDOT has advanced an initiative for a collection of Proven Safety Countermeasures (PSC)⁴. The PSCs are designed for all road users and various road types – rural and urban areas, arterial to local roadways, and intersections to roadway segments. The USDOT encourages agencies to prioritize and implement the PSCs to reduce roadway fatalities and serious injuries. More information on strategies and countermeasures is provided in **Section 7**.





4. ENGAGEMENT SUMMARY

4. ENGAGEMENT SUMMARY

To develop a more complete and effective SAP, Iron County and the project team engaged stakeholders and communities to gather feedback and perspectives on transportation safety in Iron County.

A robust stakeholder engagement and community outreach plan was executed to ensure all users of the transportation system had the opportunity to inform and contribute to the SAP. The information and feedback gathered from engagement efforts was used throughout the SAP development to inform the safety analysis, recommended strategies, and potential project locations and improvements.

The engagement strategy of the SAP satisfies the engagement and collaboration element requirements of an Action Plan as noted in the FHWA Self-Certification Eligibility Worksheet to include:

DID THE ACTION PLAN DEVELOPMENT INCLUDE ALL THE FOLLOWING ACTIVITIES?

- » Engagement with the public and relevant stakeholders, including the private sector and community groups;
- » Incorporation of information received from the engagement and collaboration into the plan; and
- » Coordination that included inter- and intra-governmental cooperation and collaboration, as appropriate.

Stakeholder Engagement

Iron County, the SAP Committee, and the project team engaged stakeholders to ensure those responsible for different aspects of the County's transportation network were included. To accompany transportation system users' feedback, stakeholders included planning, maintenance, funding staff, and other community members who share responsibility for creating communities where people enjoy living were engaged.

Key stakeholders included: **City, Town, and agency staff, elected officials, advocacy group representatives, health departments, law enforcement and emergency responders, UDOT staff, school district representatives, business owners, and residents of Iron County.**

The SAP collected information from stakeholders and the community through a variety of engagement activities, summarized in the following sub-sections.

SAFETY LAUNCH WEBINAR

The development of the SAP was initiated with a Safety Launch webinar on November 14th, 2024. More than 30 stakeholders representing varying groups such as municipalities, Iron County, UDOT, health departments, advocacy groups, school districts, residents, and other organizations attended the event.

The project team introduced attendees to the SAP project, outlined how to get involved and participate in the SAP, and shared the project website for viewing progress and collecting feedback. The Safety Launch webinar included an overview of desired project outcomes and described how local jurisdictions could support a regional safety commitment and prepare to submit SS4A grant applications to fund safety improvements or additional planning and demonstration activities in their community. A copy of the Safety Launch presentation and attendee list is included in **Appendix B**.

GEOGRAPHIC FOCUS AREA WORKSHOPS

The SAP included two rounds of planning workshops in each Geographic Focus Area (GFA) to solicit feedback from key stakeholders and community members. These workshops provided insight on transportation challenges faced by Iron County transportation system users.

GFA Workshop #1 – Safety Analysis

The first round of GFA Workshops, or GFA Workshop #1, took place in December 2024 (see **Figure 8** and **Figure 9**). A workshop was conducted in each GFA to provide an overview of the SS4A grant program, the SAP process, project schedule and tasks, and the safety analysis methodology and results. A portion of the workshop was dedicated to gathering stakeholder and community feedback regarding the safety analysis results, including if attendees felt the analysis reflected existing conditions, their experience, and insights or other information regarding the area's transportation safety.

At each GFA Workshop, segments and intersections identified in the safety analysis high-injury or high-risk networks were reviewed using maps to understand if the locations were consistent with stakeholder and community experiences. Stakeholder input from GFA Workshop #1 was considered during the process of selecting locations and strategies for potential safety improvement projects. GFA Workshop #1 locations, attendees, agencies represented, and materials can be found in **Appendix B**.

Discussions focused on the safety analysis findings areas of concern, as well as location specific safety concerns throughout the GFA were discussed and reviewed. Stakeholders provided valuable feedback including:

- » Noted areas of concern with vehicle speeding, particularly in residential neighborhoods (local streets) and school zone areas.
- » Noted areas with planned development and expected high growth.
- » Locations to prioritize safe school and pedestrian crossings.
- » Near-miss crash locations and high congestion areas that users may be avoiding.
- » General observations on user safety including vehicle speeding, crossings at unmarked locations, and dedicated active transportation space.



Figure 8. Cedar City GFA Workshop #1



Figure 9. West Iron County GFA Workshop #1

GFA Workshop #2 – Strategies and Projects

The second round of GFA workshops, or GFA Workshop #2 occurred in February 2025 (**Figure 10**, **Figure 11**, and **Figure 12**). The purpose of the second round of workshops was to solicit feedback concerning the identified safety improvement project locations and proposed countermeasures.

At each workshop, locations previously identified by the safety analysis and refined using feedback from GFA Workshop #1 were reviewed using maps and accompanied by project information sheets summarizing the identified safety concerns and proposed strategies and countermeasures for that location. Attendees were asked about the viability of each proposed safety improvement project and to note any additional locations or countermeasures that should be included. Stakeholder input from GFA Workshop #2 was used to refine the proposed strategies and project locations. GFA Workshop #2 locations, attendees, agencies represented, and materials are provided in **Appendix B**.

Note, a Workshop #2 was not held for the I-15 GFA as I-15 is a State-Governed roadway and UDOT, as a State Government agency, is not eligible for SS4A funding. Project strategies and countermeasures were not identified for I-15.

Attendee feedback included:

- » Where future growth is anticipated and validating that recommended projects could be applicable to multiple locations throughout the County.
- » Strategies to improve crossings, especially at high-pedestrian or school-zone roadways.
- » Rural focused countermeasures, especially for two-lane higher speed roadways and minor roads that intersect those roadways, and those that connect at a skewed angle.
- » Prioritizing school zone safety improvements.
- » Dedicating space to active transportation. Separated bicycle lanes, shared-use paths, etc.
- » Feedback on project sheet information, including information to show and how to display the data.
- » General consensus on identified strategies, countermeasures, and locations.



Figure 10. Enoch City GFA Workshop #2



Figure 11. Cedar City GFA Workshop #2



Figure 12. East Iron County GFA Workshop #2

Community Outreach

Soliciting input from the public provides an understanding of individuals' unique experiences, which better informs the safety analysis results, countermeasure strategies, and proposed locations and projects.

PROJECT WEBSITE

Opportunities for the public to provide input on the SAP were focused on virtual engagement through a project website, interactive map, survey, and social media outreach. The project website⁵ provided the public with project information, study area maps, an interactive map where they could leave location-specific feedback and suggestions, a survey, event details, and a set of frequently asked questions. **Figure 13** shows the project website homepage.



Figure 13. Project Website Homepage

CEDAR CITY TRAFFIC SAFETY COMMUNITY MEETING

The project team attended the Cedar City Traffic Safety Community Meeting organized by the Utah Department of Public Safety - Highway Safety Office held at the Southern Utah University (SUU) Hunter Alumni Center on October 17, 2024. The meeting included representatives from Cedar City, Utah Highway Patrol, UDOT, Zero Fatalities, Southwest Utah Public Health Department, and Cedar City and SUU Police. The event was open to the public and attended by students, faculty, and residents of the community. The event shared information and collected feedback from participants on ways to improve transportation safety in Iron County. Members of the project team shared information about the SAP, directed visitors to the project website, and asked for participation in a survey (**Figure 14**). During the event, the project team collected survey responses and had one-on-one conversations with attendees and students.



Figure 14. Cedar City Traffic Safety Community Meeting

ONLINE INTERACTIVE MAP

An online interactive map embedded into the project website was used to aggregate public comments and highlight potential locations for safety-focused improvements. The mapping tool allowed respondents to comment on four categories: bicycle safety, pedestrian safety, vehicle safety, or other feedback and place those comments on locations they navigated to using the map (see **Figure 15**).

There were 95 unique comments submitted on the interactive map during the comment period. Of the 95 comments, the total of each category was as follows. A list of the map comments is provided in **Appendix C**.

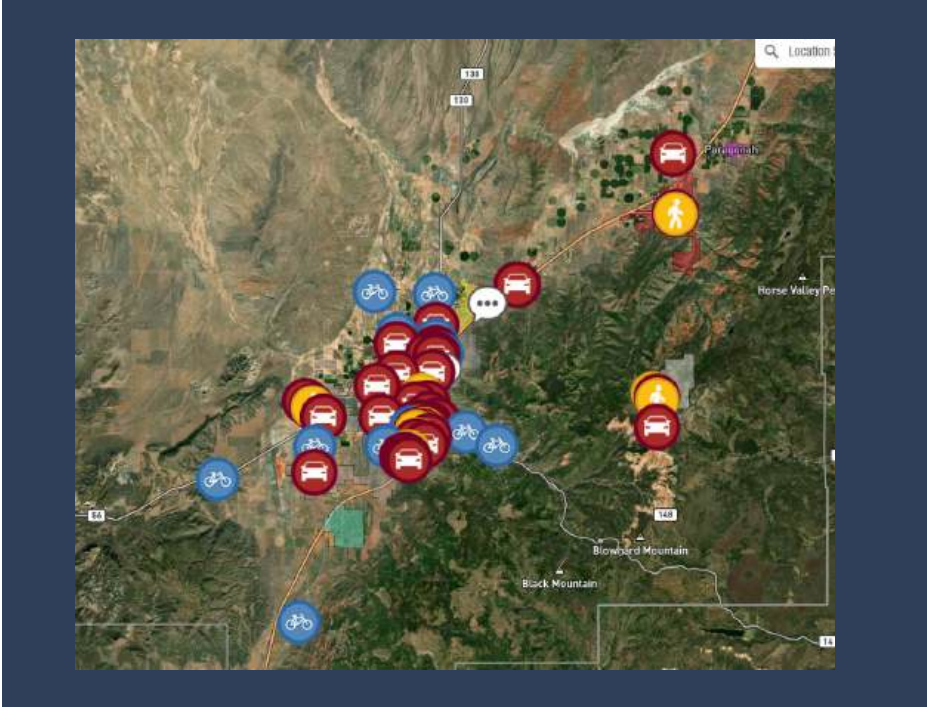


Figure 15. Online Interactive Map

 <p>Bicycle Safety: 16</p>	 <p>Vehicle Safety: 54</p>
 <p>Pedestrian Safety: 22</p>	 <p>Other Feedback: 3</p>

Common locations identified on the map include:

- » Old Highway 91 throughout the County
- » SR 130 in Cedar City (Main Street) and Enoch City
- » 600 South in Cedar City
- » Lund Highway
- » SR 143 in Brian Head Town
- » SR 130 and 3000 North Intersection

Common safety concerns or topics from the online interactive map comments include:

- » **Pedestrian and bicyclist safety:** a need for dedicated bike lanes, active transportation space, and separation from vehicle traffic, as well as risky intersections and crossings.
- » **Road conditions:** rough surface conditions, narrow roadways, and worn or faded pavement markings.
- » **Traffic congestion:** signal timing, risky intersections, and the need for turn lanes.
- » **Visibility:** sight obstructions including vegetation, signage, and the need for street lighting.
- » **Compliance:** users not obeying traffic laws, concerns with drivers speeding, and stop sign compliance.

Online Interactive Map Update

In February 2025 the interactive map was updated to reflect the identified locations of potential safety improvement projects for roadways and intersections (see **Figure 16**). These locations and project details were available for stakeholder and public comment to help inform the potential project locations and components. The map was updated in preparation for the second round of GFA workshops.

SURVEY

A survey provided stakeholders and residents the opportunity to give input on transportation safety in Iron County. Respondents were asked about their primary mode of travel, preferred safety improvements, and highest transportation safety concerns, among other questions. The survey was available online at the project website and print copies were distributed at engagement activities. A copy of the survey and a record of survey feedback is included in **Appendix B**.

Survey Key Findings

The following findings and trends were noted based on survey responses:

- » Most respondents (99%) indicated they regularly use a personal vehicle as a form of transportation.
 - » 59% of respondents indicated they regularly walk as a form of transportation.
 - » 32% of respondents indicated they regularly bike as a form of transportation.
- » Respondents identified distracted driving (65%), people ignoring traffic laws (60%), and blocked views when turning (51%) as the most concerning safety issues.
- » Most respondents (94%) indicated they are an Iron County resident.
- » Of the respondents that answered the demographic questions, 51% identified as female and 44% identified as male.
- » The majority of respondents (83%) identified as white or Caucasian.
- » The most frequently requested roadway improvements include:

<ul style="list-style-type: none"> » Additional bike lanes » Improved intersections » School zone safety improvements 	<ul style="list-style-type: none"> » Improved lighting » Improved crosswalks
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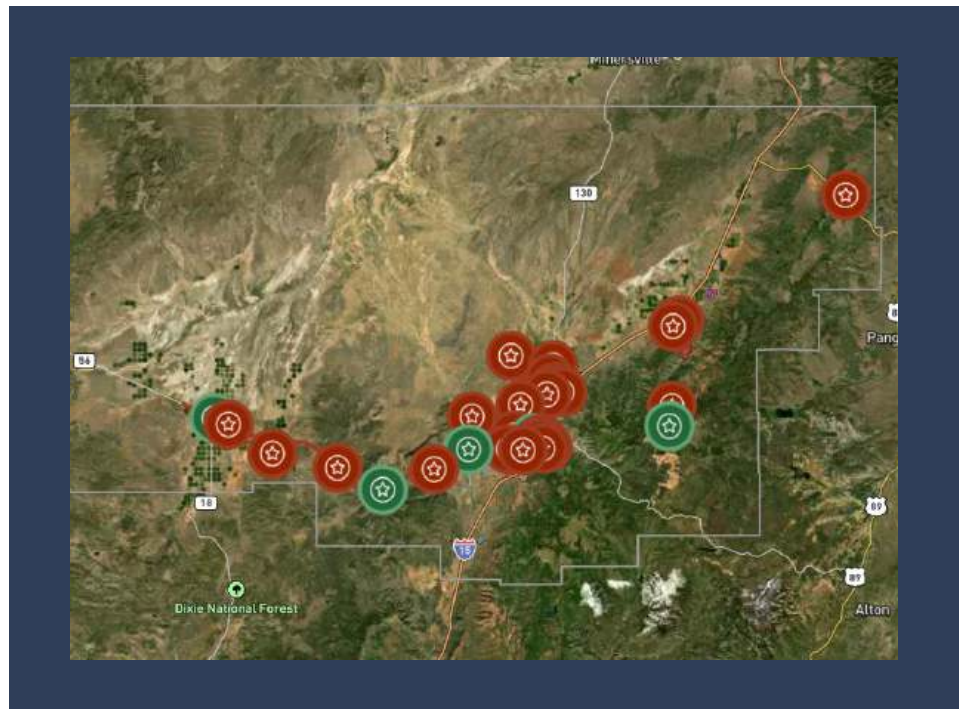


Figure 16. Online Interactive Map Update

ADVERTISING

The SAP and project website were advertised to the community using the following methods:

- » Requests to local Facebook groups to post project information and gather feedback from group members.
- » Requests to local governments to share project information in their email updates, newsletters, or other communication methods.
- » Requests to advocacy and student groups to share information with their networks.
 - » An email was distributed to all Southern Utah University (SUU) students and faculty by an SUU administrator.
- » A newspaper advertisement was run in the *Iron County Today* in the December 15-21, 2024, edition, requesting participation and involvement in the SAP, survey, and project website.
- » Three in-person pop-up events in different communities to share project information and request participation in the SAP.
- » Flyers (see **Figure 17**) and table tents posted at locations around Iron County, including:
 - » Iron County Bus Garage
 - » SUU Student Center
 - » Cedar City Festival Hall
 - » Enoch City Senior Center and Library
 - » Cedar Band of Paiutes Health Clinic
 - » Cedar Band of Paiutes Administration Offices
 - » D&D Variety Store
- » Flyers and table tents were delivered to public buildings and services in each GFA, including:
 - » Iron County Sheriff's Office
 - » Cedar City Police
 - » Enoch City Police
 - » Newcastle Fire Station
 - » Parowan Police Station and Post Office
 - » City or Town offices for Cedar City, Kanarraville Town, Enoch City, Parowan City, Brian Head Town, and Paragonah Town

Advertisement materials are provided in **Appendix B**.

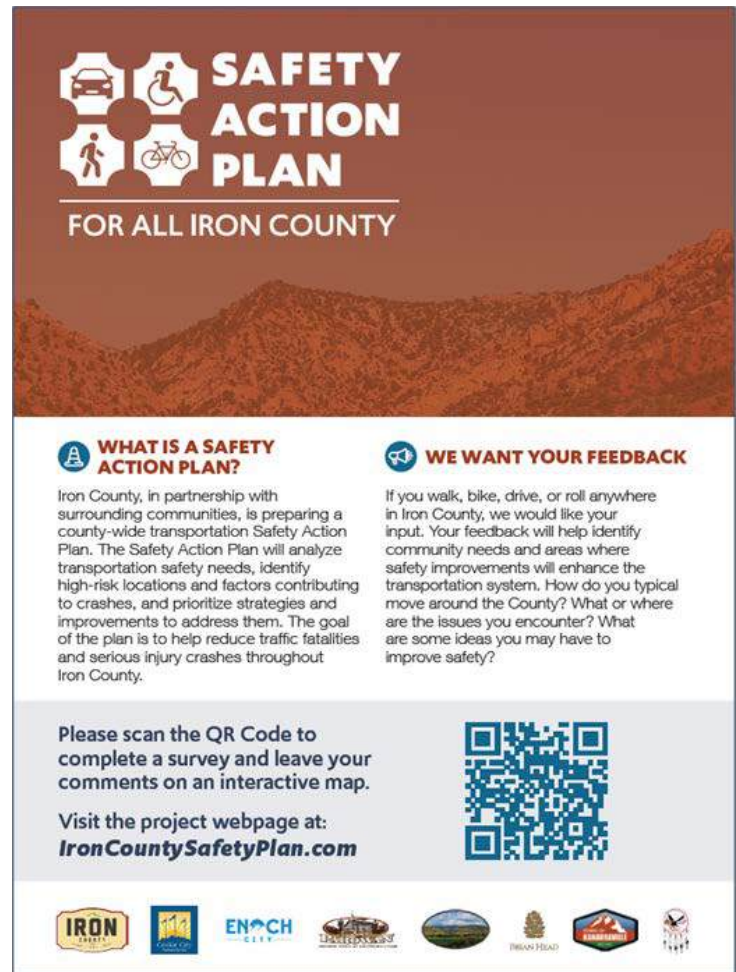


Figure 17. SAP Project Information Flyer

COMMUNITY POP-UP EVENTS

Members of the project team participated in community “pop-up” events around Iron County between December 2024 and January 2025. The purpose of these events was to share project information and solicit feedback from individuals who may not participate online or at other project meetings.

D & D Variety Stakeholder Outreach - December 20, 2024

The D & D Variety store is located on Highway 56 in Cedar City. The project team met with patrons of the store and encouraged them to complete surveys and provide feedback on their transportation habits and safety concerns (see **Figure 18**).



Figure 18. Pop-up Event at the D & D Variety Store

Parowan Birthday Party Luncheon – January 13, 2025

The Parowan Birthday Party Luncheon is held every year in Parowan City. Project team members shared project information, answered questions, shared a brief overview of the SAP to the assembled group, and distributed SAP fliers to participants (see **Figure 19**). Participants took posters to display throughout the City at commonly visited places, including the post office.



Figure 19. Pop-up Event at the Parowan Birthday Party Luncheon

SUU Men's Basketball Game – January 23, 2025

The SUU men's basketball game took place in the America First Event Center on January 23, 2025. Project team members distributed surveys and project fliers (see **Figure 20**). Many fans completed surveys while others scanned the QR code on the project poster to complete online.



Figure 20. Pop-up Event at an SUU Basketball Game



5. SAFETY ANALYSIS

5. SAFETY ANALYSIS

The SAP included an extensive safety analysis of the Iron County transportation network. The results of the safety analyses were used in developing a High-Risk Network identifying the highest safety priority roadway segments and intersections in Iron County.

The safety analysis conducted for the Iron County SAP satisfies the required SS4A Action Plan elements. Requirements for the safety analysis element of an Action Plan, as noted on the FHWA Self-Certification Eligibility Worksheet, include:

DOES THE ACTION PLAN INCLUDE ALL THE FOLLOWING?

- » Analysis of existing conditions and historical trends to baseline the level of crashes involving fatalities and serious injuries across a jurisdiction, locality, Tribe, or region;
- » Analysis of the location where there are crashes, the severity, as well as contributing factors and crash types;
- » Analysis of systemic and specific safety needs is also performed, as needed (e.g., high risk road features, specific safety needs of relevant road users; and,
- » A geospatial identification (geographic or locational data using maps) of higher risk locations.

Methodology Overview

Figure 21 provides an overview of the safety analyses performed for the SAP. Each safety analysis component uses different datasets or methodology to identify high-risk locations to create a High-Risk Network. The four safety analyses combined lead to a high-risk score and network, from which potential safety improvement project locations were identified. The High-Risk Network represents locations with the greatest potential for safety improvement.

The following two subsections (Crash Data Collection and Utah SHSP) provide an overview of information for Iron County and GFAs that contribute to the safety analysis.

The remaining subsections, starting with Historic Crash Analysis, detail the safety analysis components that directly contribute to the resulting High-Risk Network.

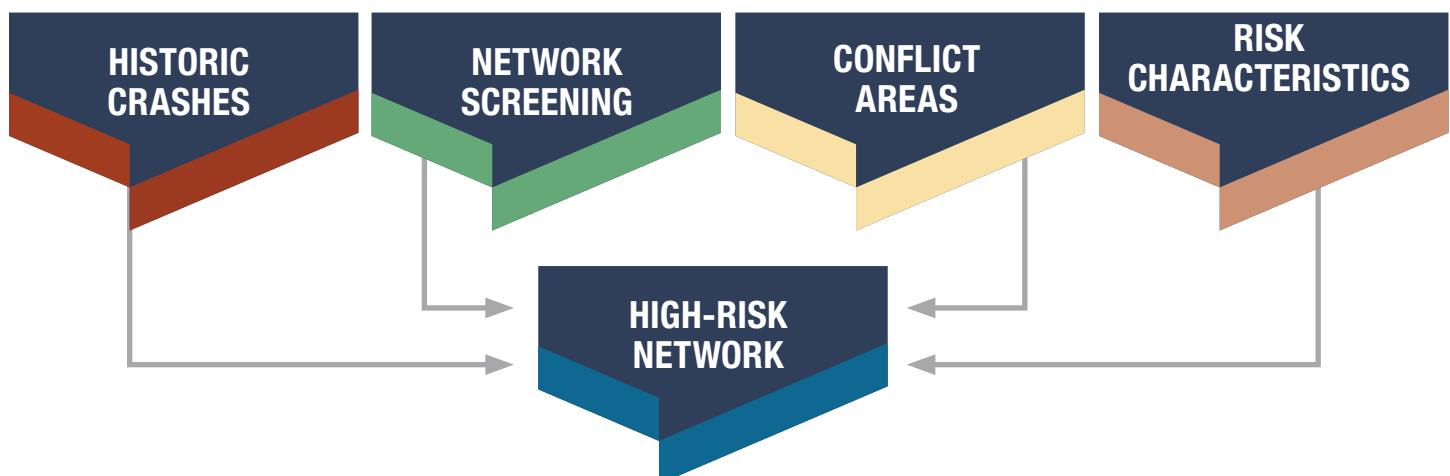


Figure 21. Safety Analysis Components

Crash Data Collection

Crash data was obtained from UDOT's database for the most recent complete five-year period at the time of the analysis, 2019 to 2023. Crashes reported to UDOT within the Iron County SAP study area are included in this analysis. The project team recognizes that some crashes may have occurred that may not be reported. The analysis uses crash description terminology presented in the crash reports available in the UDOT database.

Two methods were applied to review the historic crash data, each informing the identification of safety strategies, locations, and potential countermeasures. Countermeasures refer to specific actions or infrastructure elements designed to improve transportation safety. The two methodologies for reviewing crash history include:

Historic Crash Review: Provides an overview of the most frequent crash types and common contributing factors.

Utah Strategic Highway Safety Plan (SHSP) Emphasis Area Comparison: Crashes in Iron County are grouped based on the Utah SHSP Emphasis Areas and are compared to statewide crash data.

Each of these analyses informs future phases of the SAP. Crash data was summarized for all of Iron County and for each individual GFA, which is provided in **Appendix A**.

HISTORIC CRASH OVERVIEW

A total of 5,185 crashes occurred in Iron County from 2019 to 2023. **Figure 22** shows that the highest number of crashes (1,125) occurred in 2019. While crashes decreased in 2020 as compared to 2019, the number of crashes occurring each year has since increased.

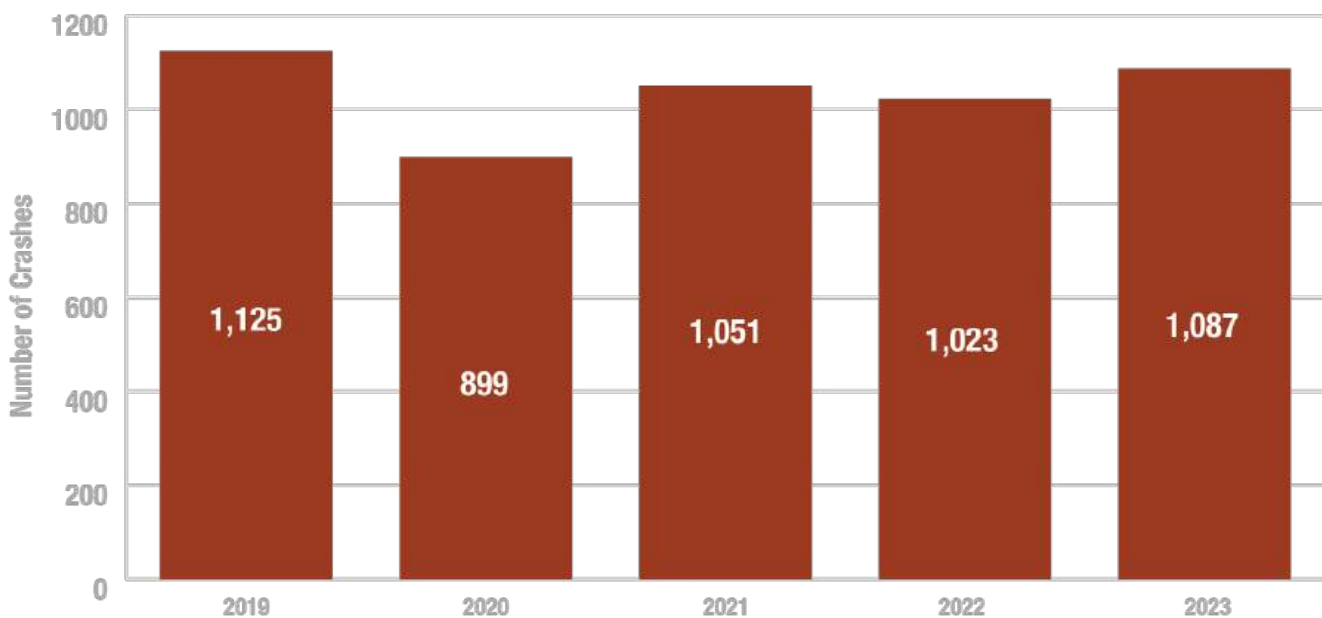


Figure 22. Crashes by Year, 2019-2023

Table 6 summarizes crashes by severity and route type in Iron County. A review of the data shows:

- » Approximately twice as many fatal crashes occurred on State Routes as compared to non-State Routes.
- » The total number of crashes that occurred on State Routes is more than double that of non-State Routes. Nearly 20% of crashes in Iron County occurred on I-15.
- » Approximately 5% of the crashes in Iron County were fatal or serious injury crashes.

Table 6. Crashes by Severity, 2019-2023

ROUTE TYPE	STATE ROUTE		NON-STATE ROUTES		OVERALL TOTAL	
CRASH SEVERITY	CRASHES		CRASHES		CRASHES	
	#	%	#	%	#	%
Fatal	27	0.8%	12	0.7%	39	0.8%
Suspected Serious Injury	109	3%	83	5%	192	3.7%
Suspected Minor Injury	428	12%	203	13%	631	12.2%
Possible injury	517	14%	202	13%	719	13.9%
No Injury / Property Damage Only	2,503	70%	1,101	69%	3,604	69.5%
Total	3,584	100%	1,601	100%	5,185	100%

FATAL AND SERIOUS INJURY CRASH INFORMATION

The number of fatal and serious injury crashes by year is summarized in **Figure 23**. The highest number of fatal and serious injury crashes in the five-year analysis period occurred in 2021 with 11 fatal crashes and 40 serious injury crashes.

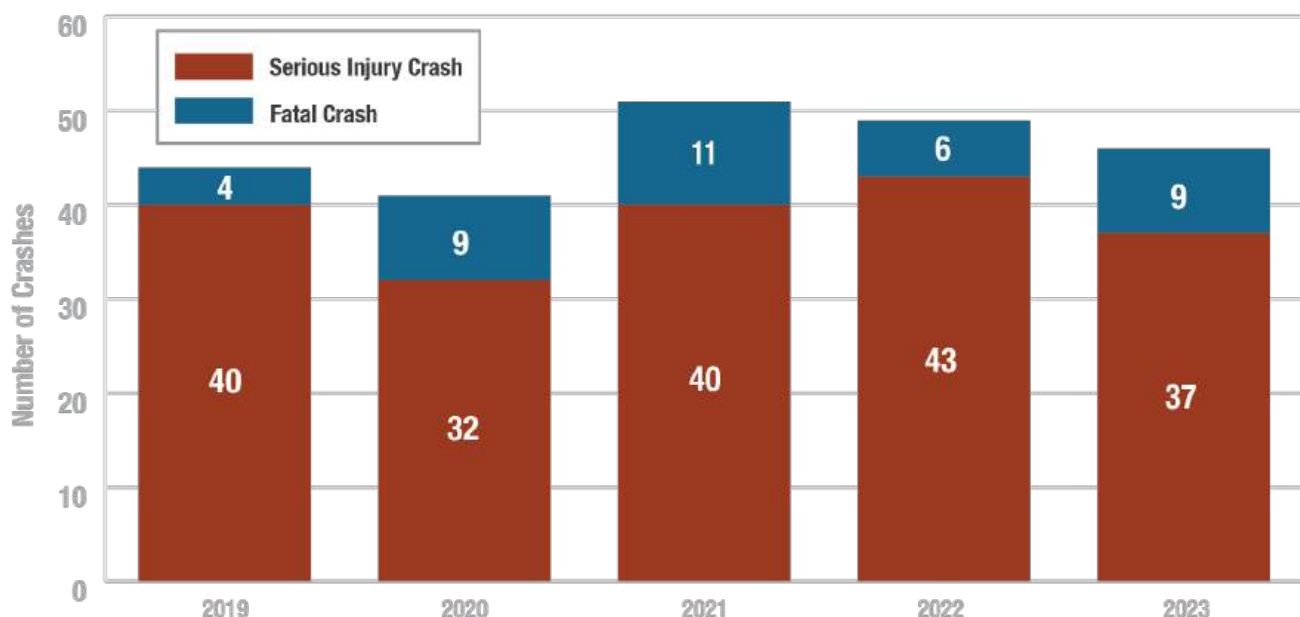


Figure 23. Number Of Fatal and Serious Injury Crashes by Year in Iron County, 2019-2023

Manner of Collision

The manner of collision reported for a crash represents how two vehicles initially collided.⁶ The three most frequent manners of collision that resulted in a fatal or serious injury crash are single vehicle crashes, sideswipe crashes, and angle crashes as shown in **Figure 24**.

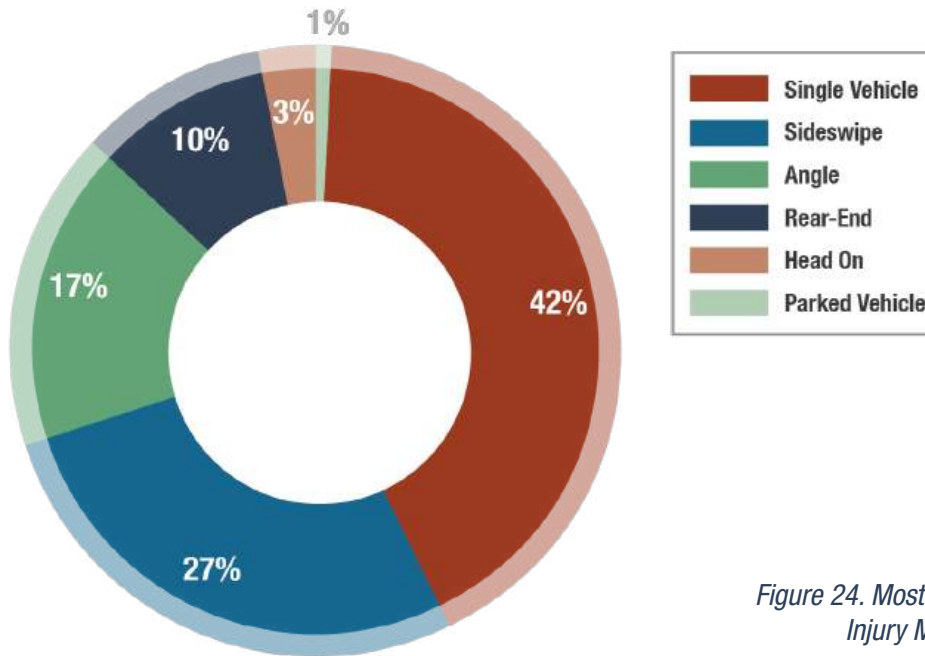


Figure 24. Most Common Fatal and Serious Injury Manners of Collision

Crash Types

The ten most common crash types for Iron County are summarized in **Figure 25**. The three most common crash types are roadway departure crashes, highway crossover crashes, and “other” crashes. The crash type “other” may indicate a unique crash scenario not already identified as a crash type or a gap in data collection.

Crash type represents a query of multiple data fields, including the manner of collision. Each crash is assigned only one primary crash type; examples include left turns at intersections, rear-ends, crossover, and roadway departure crashes.

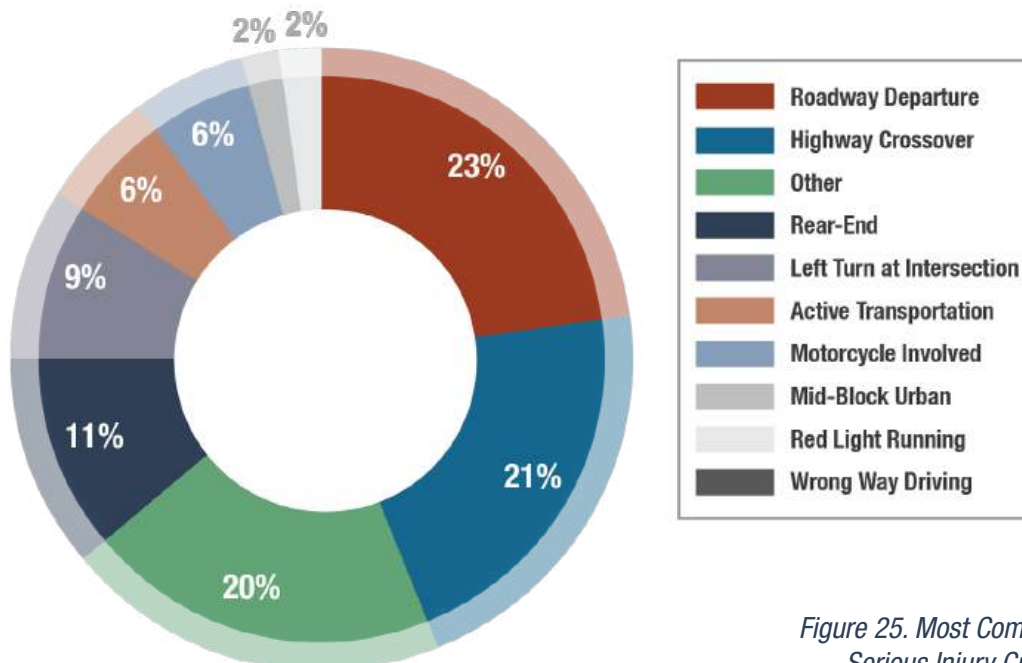


Figure 25. Most Common Fatal and Serious Injury Crash Types

⁶ The recorded manner of collision may overlap with the recorded crash type, as manner of collision is a more detailed categorization as compared to crash type

Driver Contributing Factors

Several factors may contribute to a single crash; however, the driver contributing factors shown in **Figure 26** only represent the first driver related contributing factor as recorded in the crash report. The first driver contributing factor recorded in the crash report indicates the primary cause of a crash. A review of the data shows that the three most frequent driver contributing factors are failing to keep in proper lanes, failing to yield proper right-of-way, and speeding. Note, the second most frequent driver contributing factor is “Other/Unknown,” which may indicate a unique scenario or highlight a gap in data collection. The data shows that 19% of reported crashes from 2019 to 2023 were reported as “Other/Unknown” for the driver contributing factor.

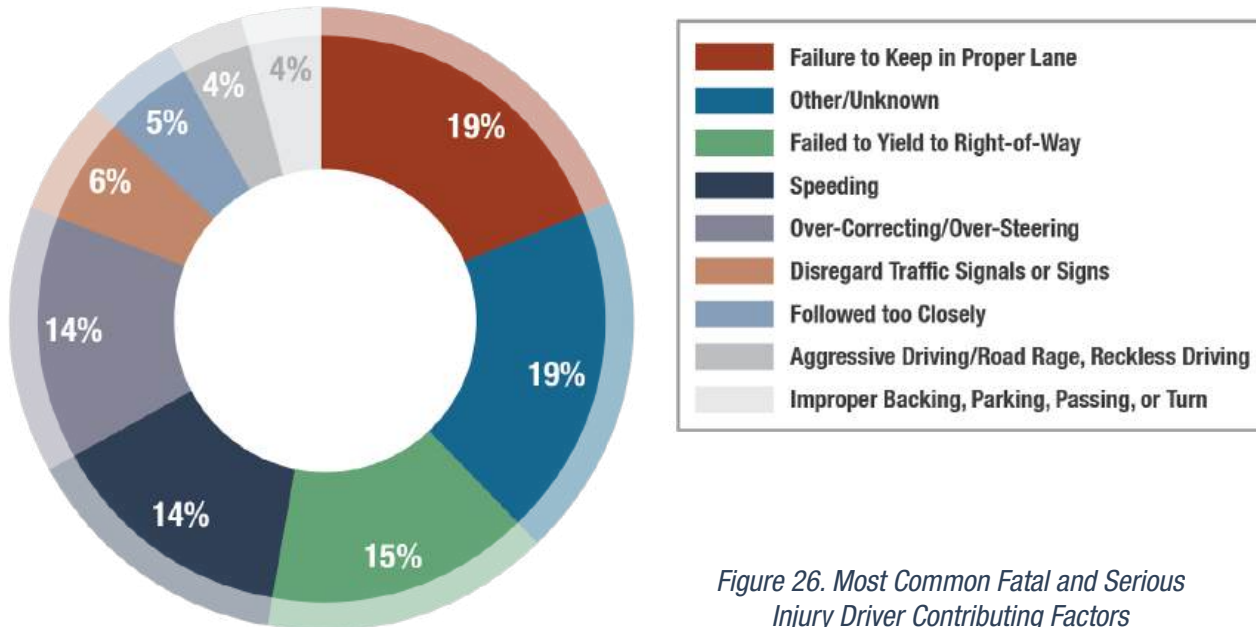


Figure 26. Most Common Fatal and Serious Injury Driver Contributing Factors

Vulnerable Road Users

Vulnerable road users include pedestrians and bicyclists. The crash data shows 38 crashes involving pedestrians and 31 crashes involving bicyclists occurred from 2019 to 2023. **Figure 27** shows bicycle-related crashes have decreased since 2019 while pedestrian-related crashes increased after 2019, but in 2023, returned to a lower number. **Figure 28** provides an overview of the fatal and serious injury crashes involving vulnerable road users and shows that both fatal and serious injury crashes involving pedestrians have increased since 2019. The locations of these crashes showed a prevalence along major roads such as 200 North (SR 56), Main Street (SR 130), and Cross Hollow Road. There were no fatal crashes involving a bicyclist between 2019 and 2023.

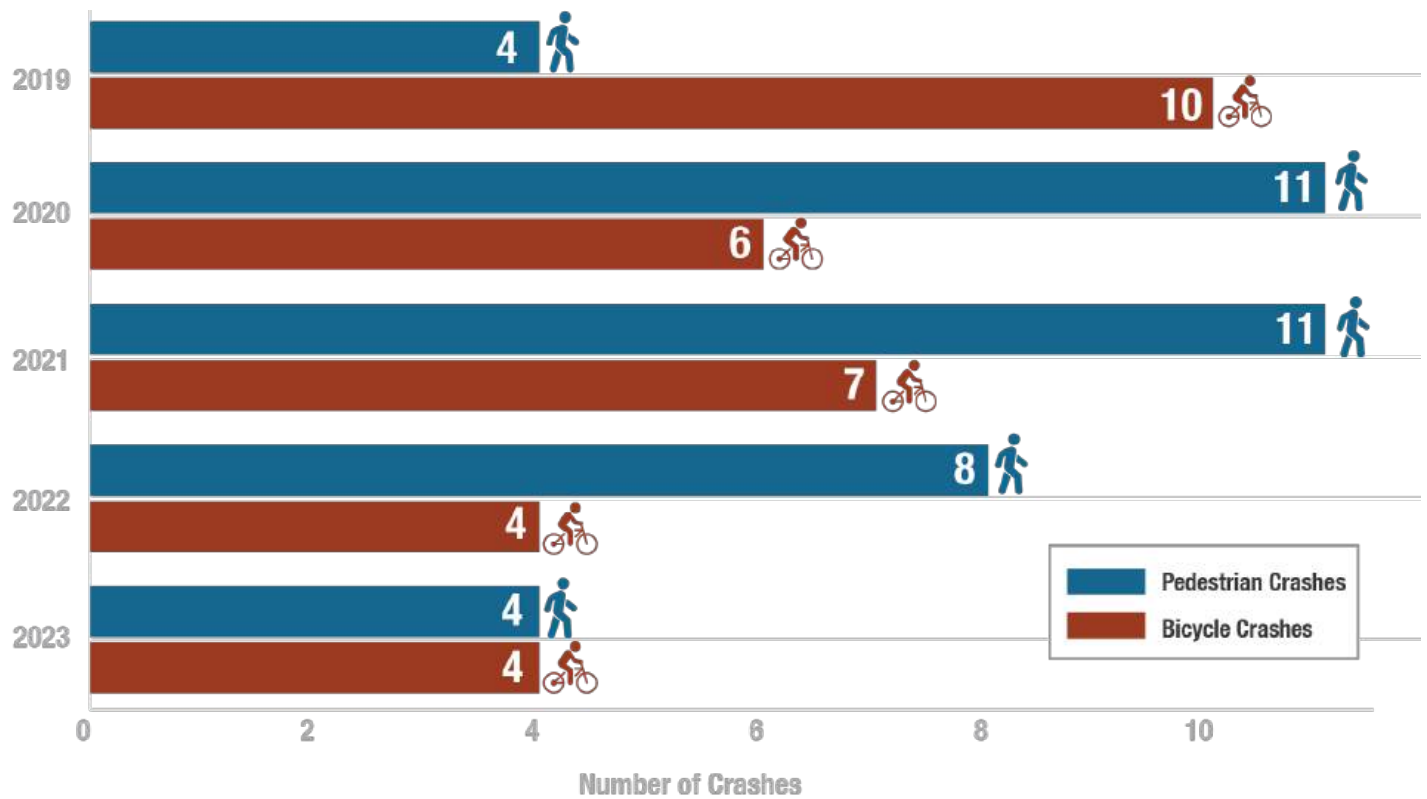


Figure 27. Vulnerable User Crashes by Year, 2019-2023

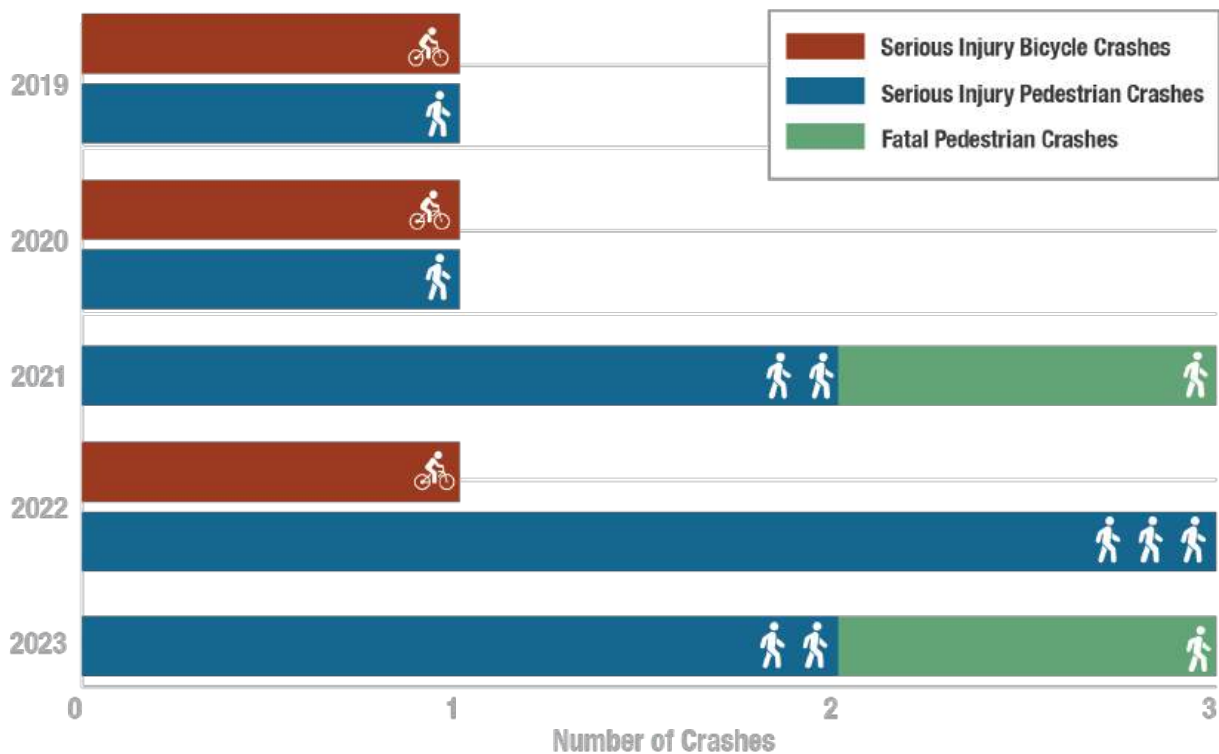


Figure 28. Fatal and Serious Vulnerable User Crashes by Year, 2019-2023

Utah State Strategic Highway Safety Plan

Utah's goal is to achieve zero traffic-related fatalities as documented in the Utah Strategic Highway Safety Plan (SHSP)⁷. An SHSP is a requirement of the Highway Safety Improvement Program (HSIP) (23 U.S.C. § 148) and is a statewide coordinated safety plan that provides a comprehensive framework for reducing fatalities and serious injuries on all public roads. The Utah SHSP identifies eleven different emphasis areas for safety to help reach the Zero Fatalities goal. The SAP recommendations build upon the identified emphasis areas in the Utah SHSP.

UTAH SHSP EMPHASIS SAFETY AREAS

The 11 emphasis areas from the SHSP are grouped into three categories, shown in **Figure 29**.

To provide insight into emphasis areas in Iron County and each GFA, the number of fatalities and serious injuries corresponding to each emphasis area is compared to the total number occurring in Utah statewide.

A ranking is assigned to each emphasis area for all of Utah, Iron County, and each GFA, based on the frequency of fatalities and serious injuries for that emphasis area. A fatality or serious injury may be assigned to multiple emphasis areas. **Table 7** includes the total fatalities and serious injuries by emphasis area, and ranks the emphasis area by the number of traffic fatalities and serious injuries. The table compares rankings for all of Utah, Iron County, and each GFA. Detailed SHSP emphasis area comparisons are provided for each GFA in **Appendix A**.

This analysis helps to determine priority emphasis areas for Iron County and each individual GFA, based on whether the ranked frequency of fatalities and serious injuries within the GFA differ from the statewide or County total rankings.

The following five emphasis areas resulted in the highest frequency of fatalities and serious injuries in Iron County. It should be noted the same five emphasis areas are identified for statewide crashes, but in a different order. Some individual GFAs have different emphasis areas identified.

1. Roadway departure
2. No safety restraints
3. Speed-related
4. Intersection
5. Teen driver

























UTAH EMPHASIS AREAS	
BEHAVIORAL	 Aggressive Driving
	 Distracted Driving
	 Impaired Driving
	 Use of Safety Restraints
	 Speed Management
	 Teen Driving Safety
	 Senior Safety
CRASH TYPES	 Roadway Departure Crashes
	 Intersection Safety
VULNERABLE USERS	 Motorcycle Safety
	 Pedestrian Safety
	 Bicycle Safety

Figure 29. Utah SHSP Emphasis Areas

⁷ <https://www.udot.utah.gov/shsp/fivees.html>

Table 7. Utah SHSP Emphasis Safety Area Rank Comparison

CATEGORY	UTAH SHSP EMPHASIS SAFETY AREA	STATEWIDE		IRON COUNTY		CEDAR CITY GFA	ENOCH CITY GFA	EAST IRON COUNTY GFA	WEST IRON COUNTY GFA	I-15 GFA
		FATALITIES AND SERIOUS INJURIES	RANK	FATALITIES AND SERIOUS INJURIES	RANK	RANK	RANK	RANK	RANK	RANK
		9,470	#	287	#	#	#	#	#	#
BEHAVIORAL	 Teen Driver	1,695	4	54	5	3	5	6	3	6
	 Older Driver	1,565	7	49	6	2	3	5	9	4
	 Speed-Related	2,268	3	78	3	7	9	2	2	3
	 Aggressive Driving	615	11	19	10	9	8	9	9	9
	 Distracted Driving	732	10	28	8	10	6	10	10	5
	 Impaired Driving	1,100	8	27	9	11	7	5	6	7
	 No Safety Restraints	1,627	5	85	2	8	1	4	4	2
CRASH TYPES	 Intersection	3,683	1	67	4	1	2	8	5	11
	 Roadway Departure	3,372	2	132	1	4	4	1	1	1
VULNERABLE USERS	 Motorcycle	1,571	6	40	7	5	10	3	7	8
	 Pedestrian	1,000	9	15	11	6	11	11	11	10
	 Bicycle*	303	12	3	12	12	12	12	12	12

*Bicyclists are not one of the eleven Utah SHSP emphasis areas but was included as part of the SAP safety analysis.

Historic Crash Analysis

Understanding the types and locations of crashes is an important aspect of analyzing the safety conditions of a roadway network. The first component of the SAP safety analysis is to identify locations with an elevated risk of crashes (see **Figure 30**). The initial step of this analysis is to spatially reference crashes that occurred within the study area. The following networks were created using historic crash data in Iron County to contribute to the High-Risk Network:

- » **High-Crash Network:** Represents roadways and intersections that experience high crash rates and where most crashes occur.
- » **High-Injury Network:** Represents roadways and intersections where fatal, serious, and minor injury crashes often occur.

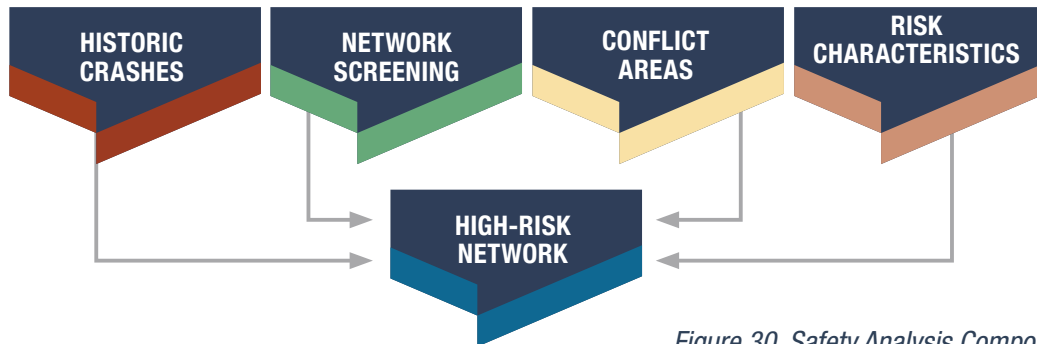


Figure 30. Safety Analysis Components

HIGH-CRASH NETWORK

Concentrations of crashes were identified by spatially referencing crashes to individual intersections and roadways, and calculating a crash rate (crashes of all severities per mile) for each roadway segment. For each intersection, a rate of crashes per entering vehicles was calculated. Entering vehicle data was obtained from UDOT.

The resulting High-Crash Network represents locations where crashes of all severities are occurring at a higher rate in comparison to other locations. The High-Crash Network displays locations where 50% of all crashes in Iron County have occurred on the transportation network.

HIGH-INJURY NETWORK

The High-Injury Network was developed by spatially referencing fatal, serious, and minor injury crashes to the roadway network. An “injury rate” of fatal, serious injury, and minor injury crashes per mile was calculated for each roadway segment. A similar injury rate was calculated for intersections as injury crashes per million entering vehicles.

The resulting High-Injury Network represents roadways and intersections where 50% of fatal, serious, and minor injury crashes occurred in Iron County. Adjacent roadway segments were combined to illustrate more complete corridors or locations with safety issues.

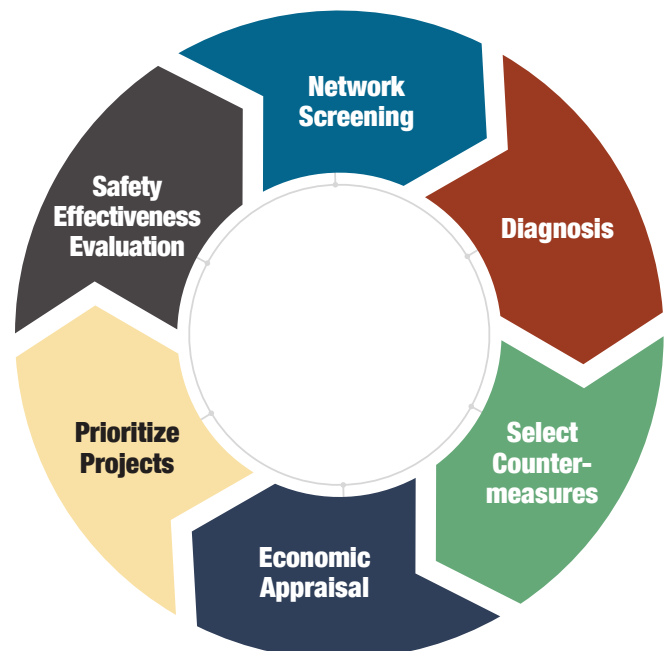


Figure 31. Roadway Safety Management Process

Network Screening

The Highway Safety Manual (HSM), Volume 1 Part B, Roadway Safety Management Process outlines the process for agencies to monitor and reduce crash frequency and severity on existing roadway networks. The basic structure of the Roadway Safety Management Process is illustrated in **Figure 31** and starts with a network screening.

Network screening identifies and ranks locations from most likely to least likely to realize a reduction in crash frequency with the implementation of a particular countermeasure or set of countermeasures. Locations identified as most likely to benefit from a reduction in crash frequency are then evaluated in more detail to identify crash patterns, contributing factors, and appropriate countermeasures. The network screening analysis applied in the SAP is based on the HSM Volume 1, Part B, Chapter 4.

The network screening steps included the following:

1. Establish sub-populations of roadway segments and intersections with similar characteristics. Roadway segments are grouped by their roadway functional classification. Roadway functional classifications include interstate or freeway ramps, major arterials, secondary arterials, collector arterials, and local streets. Intersections are grouped by their control type, either signalized or unsignalized.
2. Calculate individual crash rates for each sub-population.
3. Identify locations with higher crash rates than expected by comparing to the sub-population level crash rates. This is known as the critical crash rate analysis.

CRITICAL CRASH RATE

The critical crash rate (CCR) analysis compared the observed crash rate to the expected crash rate at a particular location, based on the facility type and traffic volume using a calculated average crash rate for the specific type of intersection or roadway segment being analyzed. Additional details concerning the critical crash rate calculations are provided in **Appendix A**. A critical crash rate differential was determined for each intersection and roadway segment by calculating the difference of the location-specific critical crash rate and the expected critical crash rate. A positive critical crash rate differential indicates a location with higher-than-expected crashes or a location with a greater potential for safety improvement, these locations completed the Network Screening component of the safety analysis (See **Figure 30**). The roadways and intersections identified through the CCR process represented those with the highest potential for safety improvement and were considered as potential project locations.

Conflict Areas

Conflict Areas analysis used data provided by Replica, obtained for Iron County, to proactively address areas of potential safety risks. Replica provides a digital application called Safe Streets Planner that combines detailed multimodal data with driving event data to identify and prioritize high conflict or risky corridors.

Replica's collected cellular data includes indicators of certain risky behaviors including speeding, distracted driving, and hard-braking. The number of instances or "events" of risky behaviors is used to calculate a risk score for each roadway. Risky events captured in the data include speeding, phone handling, sudden braking, sudden acceleration, and suspected collisions (or near-miss collisions). Risk scores are calculated to represent the proportion of risky events to the number of total vehicle trips on a roadway. Roadways with higher risk scores represent roadways with the most safety conflicts.

The following metrics were isolated in Replica to identify high-risk roadways in Iron County from the data provided:

- » Speeding Events
- » Non-Speeding Events: suspected collisions (or near-miss type locations), phone handling (distracted driving), and sudden braking
- » Active Transportation (pedestrians and bicyclist) high-risk corridors

The maximum risk score is 100 points. Roadways with a risk score of 80 or more in any of the Replica metrics analyzed were included in the Conflict Area Network for Iron County (see **Figure 30**).

Roadway Characteristic Risk Analysis

A roadway characteristic risk analysis was completed to identify characteristics that may contribute to fatal and serious injury crashes occurring on roadways within the SAP study area, using the following two sub-analyses:

- » Crash Profile Risk Assessment
- » usRAP Risk Factors Analysis

CRASH PROFILE RISK ASSESSMENT

The Crash Profile Risk Assessment reviewed fatal and serious injury crashes in the SAP study area to identify attributes that correspond to a higher frequency of fatal and serious injury crashes. A point value was assigned to each characteristic or attribute based on the frequency. A risk factor score was calculated for each state and federal aid roadway. Note, the dataset used in this analysis is only available for state or federal aid routes.

The Crash Profile Risk factor scoring framework is detailed in **Appendix A**. The roadway characteristic data used in this assessment was extracted from UDOT's United States Road Assessment Program (usRAP) dataset. UDOT collects and maintains usRAP data for state and federal aid routes for the entire state. Local roads were not included in this analysis because sufficient data regarding their attributes was not available. This analysis identifies higher risk roadway segments.

USRAP RISK FACTORS ANALYSIS

The usRAP data is a proactive tool for analyzing the safety of a roadway. Within the tool, the road network data is coded into segments and roadway attributes for each segment, and then assessed and scored by a technician. Software, known as ViDA, outputs a star rating for each roadway segment on a 1 to 5 scale.

Star ratings consider road infrastructure attributes known to impact the likelihood of a crash and its severity. The roadway's star rating is based on the presence or absence of these roadway design and traffic control features (shoulder widths, striping, rumble strips, medians, etc.). Stars are awarded depending on the level of safety that is "built-in" to the roadway. Separate star ratings are assigned for vehicle occupants, bicyclists, and pedestrians.

Five-star roadways have the most safety-related design and traffic control features. One-star roadways have the fewest safety related design and traffic operational features. The candidates for safety improvements usually fall in the two star and below range. Roadways with a star rating of 1 – 2 contributed to the High-Risk Network. A combination of the Crash Profile Risk Assessment and usRAP Risk Factor Analysis contributed to creating the Risk Characteristic component of the safety analysis, see **Figure 30**.

High-Risk Network

The four safety analysis methodologies identified roadway segments or intersections that may benefit from safety improvements to reduce fatalities and serious injuries.

To provide focused information for decisions regarding prioritization of safety improvements, an overlay of each analysis methodology was completed to develop the High-Risk Network for Iron County. Locations displayed on the High-Risk Network are those identified with the highest safety risk. Note that the High-Risk Network includes intersections identified in the high crash network, high-injury network and the critical crash rate analysis. See **Table 8** for a breakdown of contributing analyses to the High-Risk Network. The High-Risk Network is illustrated in **Figure 32**.

Table 8. Safety Analysis Components of the High-Risk Network

HIGH-RISK NETWORK	SAFETY ANALYSIS COMPONENTS			
	HISTORIC CRASH ANALYSIS (HIGH-CRASH AND HIGH-INJURY NETWORKS)	NETWORK SCREENING (CCR)	CONFLICT AREAS	ROADWAY CHARACTERISTIC RISK ANALYSIS
Roadway Segments	X	X	X	X
Intersections	X	X		

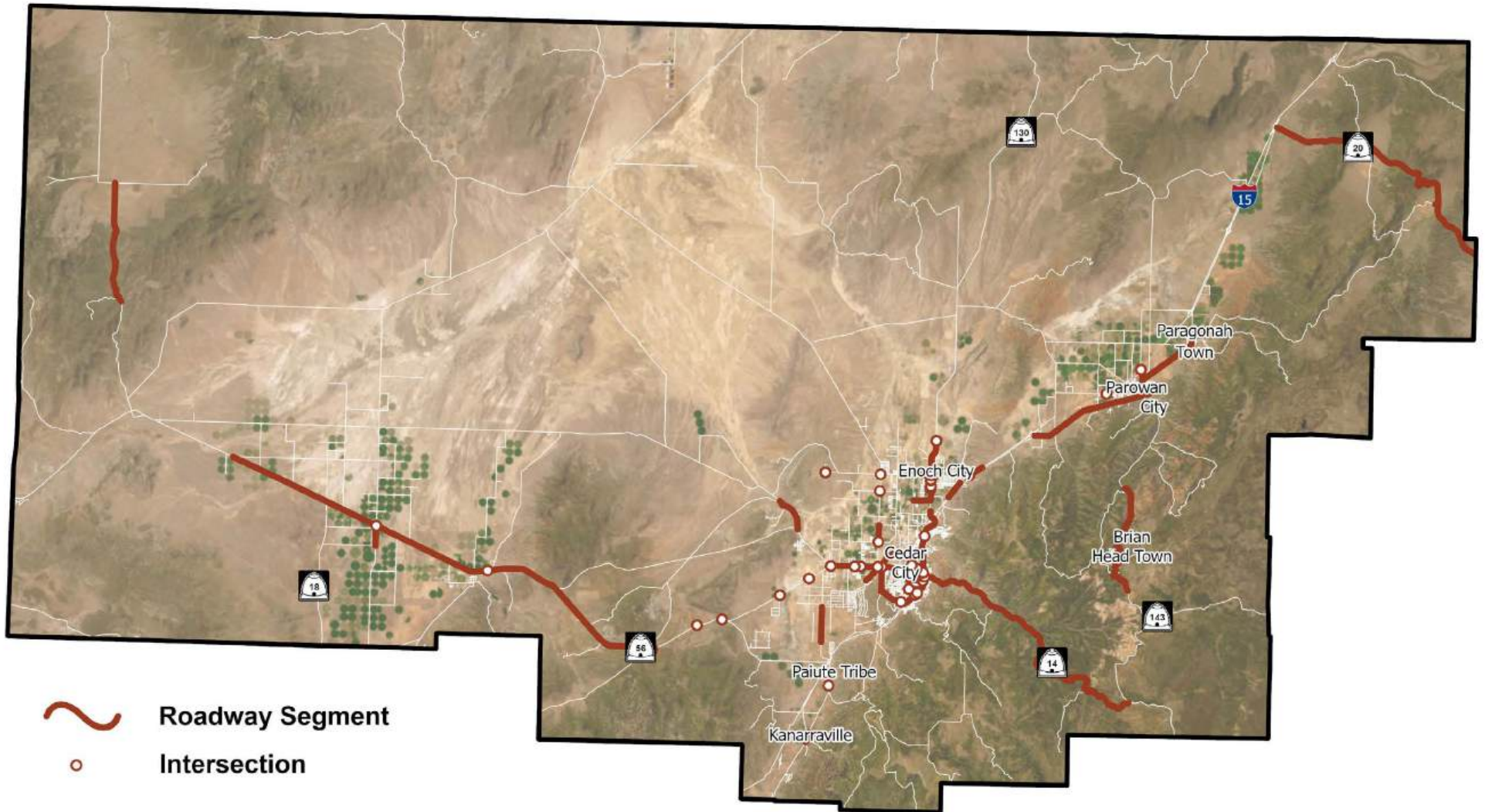


Figure 32. High-Risk Network in Iron County



6. STRATEGIES AND SOLUTIONS

6. STRATEGIES AND SOLUTIONS

A key outcome of the SAP is a set of safety strategies and countermeasures that can be implemented to reduce the frequency of transportation related fatalities and serious injuries in Iron County at specific or potential project locations.

Safety Strategies

National and state level safety strategies were used to assist the SAP Committee and project team in identifying effective strategies and countermeasures for Iron County. Transportation safety countermeasures were identified from the following sources:

- » [FHWA Proven Safety Countermeasures](#)
- » [National Highway Traffic Safety Administration \(NHTSA\) Countermeasures That Work](#)
- » FHWA [Pedestrian Safety Guide and Countermeasure Selection System](#) (PEDSAFE) and [Bicycle Safety Guide and Countermeasure Selection System](#) (BIKESAFE)
- » [Crash Modification Factor](#) (CMF) Clearinghouse
- » [UDOT's Countermeasure Fact Sheets](#)
- » Other published Safety Action Plans

FHWA PROVEN SAFETY COUNTERMEASURES

FHWA has identified 26 proven safety countermeasures (PSCs) to reduce fatal and serious injury crashes. Additionally, FHWA has highlighted PSCs specifically applicable to Rural Communities or more rural applications (**Figure 33**).

Countermeasures are categorized into speed management, pedestrian/bicyclist, roadway departure, intersections, and crosscutting categories. The countermeasures by category are shown in **Figure 34**.

These PSCs can support Iron County and its communities to prevent and reduce the frequency of fatal and serious injury crashes.

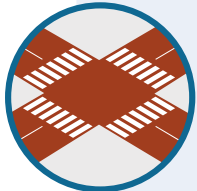


Figure 33. FHWA Proven Safety Countermeasures in Rural Communities



SPEED MANAGEMENT

- ◀ Appropriate Speed Limits for All Road Users
- ◀ Variable Speed Limits



INTERSECTIONS

- ◀ Backplates with Retroreflective Borders
- ◀ Corridor Access Management
- ◀ Yellow Change Intervals
- ◀ Dedicated Left- and Right-Turn Lanes at Intersections
- ◀ Reduced Left-Turn Conflict Intersections
- ◀ Roundabouts
- ◀ Systemic Application of Multiple Low-Cost Countermeasures at Stop-Controlled Intersections



ROADWAY DEPARTURES

- ◀ Enhanced Delineation for Horizontal Curves
- ◀ Longitudinal Rumble Strips and Stripes on Two-Lane Roads
- ◀ Median Barriers
- ◀ Roadside Design Improvements at Curves
- ◀ Safety Edge
- ◀ Wider Edge Lines



PEDESTRIANS/BICYCLISTS

- ◀ Bicycle Lanes
- ◀ Crosswalk Visibility Enhancements
- ◀ Leading Pedestrian Interval
- ◀ Medians and Pedestrian Refuge Islands in Urban and Suburban Areas
- ◀ Pedestrian Hybrid Beacon
- ◀ Rectangular Rapid Flashing Beacons (RRFB)
- ◀ Road Diets (Roadway Configuration)
- ◀ Walkways



CROSSCUTTING

- ◀ Local Road Safety Plans
- ◀ Pavement Friction Management
- ◀ Road Safety Audit

Figure 34. FHWA Proven Safety Countermeasures

ADDITIONAL SAFETY STRATEGIES

In addition to the FHWA PSCs, countermeasures identified from other sources contributed to safety strategies and improvements recommended in the SAP.

NHTSA's Countermeasures that Work

NHTSA's Countermeasures That Work is a comprehensive guide published by the National Highway Traffic Safety Administration (NHTSA) that evaluates the effectiveness of behavioral safety countermeasures. In the context of the SAP, this resource helps agencies identify evidence-based strategies to address driver behavior, including impaired driving, speeding, and seat belt use.

FHWA PEDSAFE and BIKESAFE

FHWA's PEDSAFE and BIKESAFE systems are guides intended to provide users with the latest strategies for improving the safety and mobility of those who walk and bike. The guides provide a combination of countermeasures, implementation components, and cases studies. In the context of the SAP, this resource can help agencies identify, select, and implement countermeasures appropriate specifically for pedestrians and bicyclists.

CMF Clearinghouse Website

The CMF Clearinghouse Website provides a regularly updated online repository of Crash Modification Factors (CMF) for numerous researched countermeasures. The CMF Clearinghouse summaries published information on each countermeasure including how it was developed, the statistical properties of crash reduction, and a grading scale based on factors like data sources and study sample sizes. CMF are factors used to calculate the expected number of crashes after the implementation of a given countermeasure. Smaller CMFs indicate a greater reduction in crashes. For example, a countermeasure that reduces crashes by 80% will have a CMF of 0.20 (20%). In the context of the SAP, this resource helps agencies research and identify a variety of countermeasures applicable to improving transportation safety.

UDOT's Countermeasure Fact Sheets

The UDOT Countermeasure Fact Sheets provides information on safety countermeasures specific applications in Utah. It includes information on countermeasure effectiveness, implementation guidelines, and associated crash reduction factors. In the context of the SAP, the fact sheet may help agencies identify and implement targeted safety improvements by offering data-driven insights on countermeasures that reduce fatal and serious injury crashes in Utah.

Countermeasure Toolbox

A Safety Countermeasure Toolbox was compiled to assist agencies in selecting appropriate safety countermeasures for their community. The toolbox is organized by roadway segment and intersection related countermeasures. The countermeasures are also grouped by the needs they are intended to address. Needs include vulnerable road users, speeding, intersection safety, etc. Note, some countermeasures are applicable to broad areas and users while others are targeted to address specific needs. Multiple countermeasures may need to be implemented together to address needs. The countermeasure toolbox is provided in **Appendix D**.

The following pages provide a brief description of countermeasures that were considered and used throughout the SAP process. The countermeasures are sorted first by application location: roadway segments or intersections. Then countermeasures are grouped by type of improvement or need being addressed such as countermeasures directed to roadway curve improvements, crossing type improvements, roadside design improvements, or other applications.

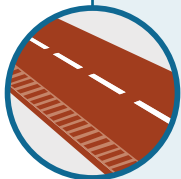
ROADWAY SEGMENT COUNTERMEASURES



Install 6-in. Edge Line (Both Sides of Roadway) - Increases visibility, especially at night and in poor weather. 6 inch edge lines provide clearer guidance, helping drivers maintain their lane position. Improved lane adherence reduces the risk of roadway departure crashes.

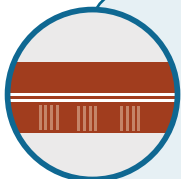
Install 4-in. Centerline and Edge Line Striping (Paint) - Improves Lane visibility and delineation. These markings help drivers maintain proper lane positioning, especially in low-light conditions. Better lane guidance reduces the potential for head-on and run-off-road crashes.

Install 4-in. Retroreflective Centerline and Edge Lines - Improves nighttime visibility and lane delineation. The enhanced reflectivity provides better guidance, reducing driver confusion and lane departures. Clearer lane markings help prevent crashes, especially in low-light conditions.

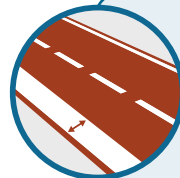


Install Edge Line Rumble Strips - Create audible and vibratory warnings when vehicles drift toward the shoulder. These strips alert distracted or drowsy drivers, preventing lane departures. Keeping vehicles in their lanes reduces the risk of run-off-road crashes.

Install Centerline Rumble Strips - Provide tactile and auditory alerts to drivers who cross into opposing lanes. They help prevent head-on and opposite-direction sideswipe collisions by encouraging lane compliance



Install Transverse Rumble Strips Prior to Curve - Provides tactile and auditory warnings to approaching drivers. These strips alert drivers to reduce speed and prepare for a curve. Slowing vehicles before curves decreases the likelihood of curve-related crashes.



Extend Unpaved Shoulder 2 ft (Both Sides of Roadway) - Provides additional recovery space for vehicles that leave the roadway. This extra space allows drivers to regain control, reducing the likelihood of run-off-road crashes.

Install 4 ft Paved Shoulder (Both Sides of Roadway) - Provides additional recovery space for vehicles, reducing the risk of run-off-road crashes. Paved shoulders can also enhance safety by accommodating multiple road users including pedestrians and bicyclists.



Install Medians (Back-to-Back Curb) - Provides a physical barrier that separates opposing traffic, reducing head-on and left-turn crashes. These medians limit dangerous crossing movements.



Install Medians and Pedestrian Refuge Islands - Provide safe stopping points for pedestrians crossing multi-lane roads. They allow pedestrians to cross one direction of traffic at a time, reducing exposure to traffic. This enhances pedestrian safety and reduces conflict points with turning vehicles.



Lane Narrowing - Reduces the width of vehicle travel lanes, often through restriping or adding buffers for bicyclists or pedestrians. Narrower lanes naturally encourage slower driving speeds and increase driver focus.

Widen Roadway and Install Two-Way Left-Turn Lane - Reduces conflicts by providing a dedicated space for turning vehicles. This minimizes rear-end and sideswipe crashes by keeping turning vehicles out of travel lanes. Safer left-turn movements reduce the risk of crashes.



Install or Upgrade Curve Signage to Enhanced Delineations - Uses bright, retroreflective materials and larger signs to increase curve visibility. These signs alert drivers to approaching curves, encouraging appropriate speed adjustments.

Install Speed Activated Flashers on Chevron Signs - Illuminate chevron signs when vehicles approach at excessive speeds, providing an immediate visual warning. These flashers alert drivers to reduce speed before entering dangerous curves.

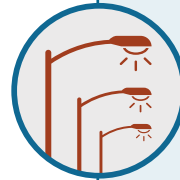
Install In-Lane Curve Warning Pavement Markings - Provide visual cues directly on the pavement, alerting drivers to upcoming curves. This enhances curve awareness and encourages speed reduction. Increased driver attention reduces the risk of curve-related crashes.

Install High Friction Surface Treatment (HFST) on Curve - Increases pavement friction at critical curve locations, improving vehicle traction and reducing skidding. HFST helps vehicles maintain control on curves, especially in wet or slippery conditions.



Install 6 ft Sidewalk (Both Sides of Roadway) - Provide a designated space for pedestrians, separated from vehicle traffic. Installing sidewalks on both sides of a roadway increases pedestrian safety by reducing the likelihood of pedestrian-vehicle interactions.

Install A Separated 12 ft. Shared-Use Path - Accommodates pedestrians, bicyclists, and other non-motorized users, separated from the roadway. The separation significantly reduces conflicts between vulnerable users and vehicles.



Install Highway Lighting - Improves nighttime visibility for drivers, pedestrians, and bicyclists. Properly lit roadways enhance driver reaction times and reduce the likelihood of crashes in low-visibility conditions. Enhanced lighting reduces nighttime crash severity and frequency.



Driver Feedback Speed Limit Signs - Display vehicle speeds to approaching drivers, encouraging them to slow down when exceeding the posted speed limit. These signs use radar to detect speeds and provide real-time feedback, raising driver awareness.

Driver Feedback Speed Limit Signs on Rural Curves - Alert drivers to their speed as they approach potentially hazardous curves, encouraging speed reduction. These signs are strategically placed before curves to give drivers time to adjust their speed.



Install Guardrail - Provides a protective barrier that prevents vehicles from leaving the roadway, especially on curves or embankments. They redirect errant vehicles and minimize the severity of crashes. Properly placed guardrails reduce the potential for fatal off-road crashes.

Install Post-Mounted Delineators - Increases edge of travel way visibility and guides drivers through curves, intersections, and other road features. Provides visual cues, especially in low-light conditions, enhancing driver awareness. Improved guidance reduces run-off-road and curve-related crashes.

Install Concrete Barrier - Provides a rigid, protective barrier that prevents vehicle crossovers and errant vehicle departures. They are effective at containing high-speed vehicles and reducing crash severity. Barriers prevent head-on collisions and protect vulnerable roadside areas.



Install Bicycle Lanes - Designate space exclusively for bicyclists, typically with pavement markings and signage. They provide a safer, dedicated area for bicyclists, separating them from motor vehicle traffic and reducing conflicts between bicyclists and vehicles.

Install Buffered Bicycle Lanes (Curb Separated) - Adds a physical separation between bicyclists and vehicles using curbs or raised elements. This increased separation protects bicyclists from encroaching vehicles and further reduces conflicts with traffic.

Convert Traditional/Buffered Bike Lanes to Separated Lane with Flexible Delineator Posts - Provides a physical buffer between bicyclists and vehicles. Delineator posts increase driver awareness and prevent vehicle encroachment into bicycle lanes.



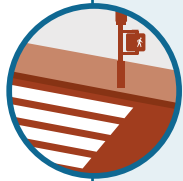
Install Paved Bus Pullout - Provide a designated area for buses to stop outside the travel lane. This prevents buses from blocking traffic and reduces the likelihood of rear-end collisions. Pullouts enhance safety for both passengers and passing vehicles.



Conduct A Road Safety Audit (RSA) - A formal evaluation by a multidisciplinary team to identify safety concerns and recommend improvements. RSAs assess potential hazards and suggest mitigation measures. Addressing identified issues helps prevent crashes.



INTERSECTION COUNTERMEASURES



Install High-Visibility Crosswalk (Including Lighting) - Uses bold markings (e.g., continental or ladder styles) with enhanced lighting to improve pedestrian visibility. The increased visibility helps drivers detect crossing pedestrians earlier, especially at night.

Install Extended Time Pushbutton - Allows pedestrians who need extra time to cross to extend the signal phase. These pushbuttons accommodate slower-moving pedestrians, ensuring they can safely clear the intersection.

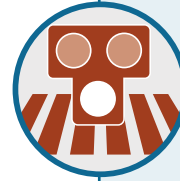
Install Raised Crosswalk and Signage - Elevates pedestrian crossings, decreasing speeds and increasing pedestrian visibility. Accompanying signage alerts drivers to yield to crossing pedestrians. Slower speeds and increased driver awareness reduce pedestrian crash frequency and severity.

Install High Visibility Crosswalk Markings and Signage - Uses bold pavement markings and signage to alert drivers to pedestrian crossings. The increased visual cues improve driver awareness and compliance. Enhanced crosswalks reduce pedestrian crashes by improving visibility.



Install High-Visibility Crosswalk (Including RRFB) - Uses bold pavement markings, signage, and bright, flashing lights to alert drivers to pedestrian crossings. The flashing beacons activate when pedestrians approach, significantly increasing driver awareness.

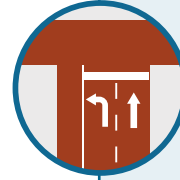
Install Rectangular Rapid Flashing Beacons (RRFB) - Uses bright, flashing lights to warn drivers of pedestrians crossing the roadway. Activated by pedestrians, RRFBs draw driver attention and prompt yielding behavior.



Install Pedestrian Hybrid Beacons (PHB) or HAWK - Uses flashing and solid lights to control vehicle movements and allow pedestrians to cross safely. These signals create clear gaps in traffic for safe crossings. PHBs greatly reduce pedestrian crashes at midblock locations.



Install Pedestrian Refuge Island - Provides a safe space in the center of the roadway for pedestrians crossing multiple lanes. They allow pedestrians to cross one direction of traffic at a time, reducing exposure to traffic. Refuge islands can decrease the number of pedestrian related crashes



Install Left Turn Lanes - Provides space for slower, turning vehicles, removing them from the through traffic flow. This separation reduces rear-end and angle crashes by minimizing conflicts between turning and through vehicles.

Create Positive Offset of Existing Left-Turn Lanes (Pavement Markings and Curb Work, No Widening) - Realigns opposing left-turn lanes to improve driver visibility of oncoming traffic. This change reduces sightline obstructions and minimizes risky turning maneuvers.

Install Right Turn Lanes - Provides space for turning vehicles to exit the through traffic flow, reducing rear-end crashes. Separating right-turning vehicles improves intersection efficiency and reduces conflicts. Safer turning movements lead to fewer intersection involved crashes.

Realign Intersection Approach to Reduce or Eliminate Skew - Improves sightlines and reduces complex turning movements. Better alignment simplifies driver decision-making, reduces turning conflicts, and reduces the risk of severe intersection crashes.



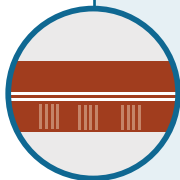
Implement Leading Pedestrian Interval (LPI) Signal Timing - Gives pedestrians a 3-7 second head start to enter the crosswalk before vehicles receive a green light. This early entry makes pedestrians more visible and reduces conflicts with turning vehicles.

Change Left-Turn Timing from Permissive Only to Flashing Yellow Arrow - Provides drivers more clarity by indicating when left turns are allowed but not protected. This reduces driver confusion and improves gap selection.

Change Left-Turn Timing from Permissive to Protected - Provides left-turning vehicles a dedicated green arrow and removes the need for drivers to judge gaps in opposing traffic, reducing conflicts.

Change 5-Section Doghouse to Flashing Yellow Arrow - Simplifies driver decision-making for left turns by clearly indicating when drivers must yield to oncoming traffic.

Install a Rural Intersection Control Warning System (RWIS) - Uses dynamic flashing beacons and signage to alert drivers of approaching traffic at rural intersections. These systems provide real-time warnings, improving driver awareness and reducing risky maneuvers.



Install Transverse Rumble Strips on Minor Approach - Provides placed auditory and tactile warnings to drivers approaching intersections. These strips alert inattentive drivers, reducing the risk of failure-to-yield crashes.



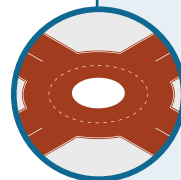
Clear and Grub - Removes vegetation and obstacles that obstruct sightlines at intersections. Improved sight distance allows drivers to detect and react to potential hazards more quickly. Better visibility reduces the likelihood of intersection crashes.



Install Pedestrian Refuge Island - Provides a safe space in the center of the roadway for pedestrians crossing multiple lanes. They allow pedestrians to cross one direction of traffic at a time, reducing exposure to traffic. Refuge islands can decrease the number of pedestrian related crashes.



Perform an Intersection Control Evaluation (ICE) and Implement - Assesses the best control type (signals, roundabouts, or stop signs) to improve safety and operations. Implementing the optimal control can reduce crash potential and improve traffic flow.



Convert Existing Intersection to Modern Roundabout (Single Lane) - Replaces traditional intersections with a circular layout where traffic flows counterclockwise. Roundabouts reduce conflict points, slow vehicle speeds, and minimize crash severity.



Right-In-Right-Out Access Treatment - Restricts left-turn movements at driveways or intersections, reducing conflict points. Vehicles enter and exit only via right turns, preventing risky crossing maneuvers. Limiting left-turns reduces the frequency of angle crashes.

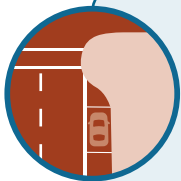


Stop-Control Intersection Signage - Improves visibility and awareness at stop-controlled intersections. Larger, retroreflective signs or supplemental signs alert drivers earlier, reducing the likelihood of failure-to-yield crashes.

Install Second Stop Sign and Stop Ahead Sign - Reinforces the need for drivers to stop. This redundancy improves driver compliance and reduces the likelihood of failure-to-yield crashes.

Install Beacon on Stop Sign - Uses flashing lights to draw driver attention to the intersection. The increased visibility improves driver compliance to stop signs. Better compliance reduces intersection crashes, particularly at night or in low-visibility conditions.

Upgrade Signs and Pavement Markings (Paved Approach) - Enhances driver guidance and intersection visibility by providing, more visible signage and markings to reduce driver confusion.



Install Bulbouts - Bulbouts, or curb extensions, extend the sidewalk into the roadway, reducing crossing distance and slowing the speed of turning vehicles. Bulbouts improve pedestrian visibility and safety.



Opinion of Probable Cost Estimates

Opinion of probable costs were prepared for each countermeasure type to be used as planning level estimates. Additionally, other project cost components including mobilization, traffic control, contingency for unknown items, preconstruction engineering/design, and construction engineering/management were estimated. All cost estimates were developed using the latest available 2024 or 2025 dollar estimates from recently completed UDOT projects and the UDOT Concept Cost Estimate Form⁸, which provides percentage assumptions for other project components based on locations and project complexities.

The estimated project total does not include any adjustment for future inflation and must be reevaluated before project scoping, design, or implementation. Inflation rates per year are provided in the UDOT Concept Cost Estimate Form and may be used as an estimate for local jurisdictions. For example, an inflation factor of 1.23 would be applied to project costs prepared in 2025 but planned to be constructed in 2030 (a project in 5-years). The following inflation factors in **Table 9** may be used to estimate project costs for future years using the inflation rates provided in the UDOT Concept Cost Estimate Form.

Table 9. Future Year Cumulative Inflation Factors

YEAR	CUMULATIVE INFLATION FACTOR FOR FUTURE YEARS (TO BE APPLIED TO 2025 COST ESTIMATE)
2030	1.23
2035	1.46
2040	1.75
2045	2.08
2050	2.49

For the countermeasures identified and used in the Iron County SAP, the assumptions used in developing opinion of probable costs are provided in **Appendix D**.

Safety Improvement Projects and Case Studies

Location-specific safety improvements were developed for multiple locations throughout the County in coordination with the SAP Committee. The improvements and locations were identified from the safety analysis findings, the High-Risk Network, and engagement feedback received in the SAP process.

Additionally, case study information sheets for common scenarios or typical locations throughout the County were developed as a resource to show an example of safety strategies and countermeasures that may be applied in similar locations.

PROJECT INFORMATION SHEETS

Project Information Sheets were prepared to provide examples and relative costs of safety-focused projects that could be implemented at locations throughout Iron County. A wide range of potential project locations and types of countermeasures were identified throughout Iron County. A minimum of five locations were identified from each GFA. In total, 29 Project Information Sheets were developed from the resulting High-Risk Network locations and locations identified through received feedback.

Project Information Sheets were not prepared for each location identified on the High-Risk Network. The locations where

8 <https://www.udot.utah.gov/connect/business/design/roadway-design/>

Project Information Sheets were prepared represent priority areas and project types based on SAP Committee review and comments. Project Information Sheets were developed for each location listed in **Table 10**. *Note, the projects are not numbered or listed in order of priority* – project numbers were assigned for convenience in displaying information and correlate to the Project Information Sheets provided in **Appendix E**.

Table 10. Proposed Project Location Information

PROJECT NUMBER	PROJECT LOCATION	JURISDICTION(S)	GFA(S)
1	Main Street (SR 130) from 3000 North to South I-15 Interchange	Cedar City, UDOT	Cedar City GFA
2	SR 289/SUU Loop	Cedar City, UDOT	Cedar City GFA
3	600 South, 800 South, 860 West School Area	Cedar City	Cedar City GFA
4	Cross Hollow Road from SR 56 to Royal Hunte Drive/Providence Court Drive	Cedar City	Cedar City GFA
5	Westview Drive from SR 56 to 2700 South	Cedar City, Iron County	Cedar City GFA, East Iron County GFA
6	SR 56 from Iron Springs Road to Airport Road	Cedar City, UDOT	Cedar City GFA
7	SR 56 and Airport Road Intersection	Cedar City, UDOT	Cedar City GFA
8	SR 56 from Airport Road to Main Street (SR 130)	Cedar City, UDOT	Cedar City GFA
9	Midvalley Road from Lund Highway to Old Highway 91	Enoch City, Iron County	Enoch City GFA, West Iron County GFA
10	SR 130 from 3000 North to Midvalley Road	Enoch City, UDOT	Enoch City GFA
11	SR 130 from Midvalley Road to 6400 North	Enoch City, UDOT	Enoch City GFA
12	4200 North from SR 130 to Half Mile Road	Enoch City	Enoch City GFA
13	3600 North from Bulldog Road to SR 130	Enoch City	Enoch City GFA
14	Old Highway 91 from SR 130 to Midvalley Road	Enoch City	Enoch City GFA
15	Comstock and Pinto intersections with SR 56	Iron County, UDOT	East Iron County GFA, West Iron County GFA
16	SR 56 Rural Local Intersections (7700 West)	Iron County, UDOT	East Iron County GFA
17	SR 56 from Comstock Road to Iron Springs Road	Iron County, UDOT	East Iron County GFA, West Iron County GFA
18	200 South (SR 143) from I-15 to SR 143	Parowan City, UDOT	East Iron County GFA

PROJECT NUMBER	PROJECT LOCATION	JURISDICTION(S)	GFA(S)
19	Main Street (SR 274) from I-15 to 300 South	Parowan City, UDOT	East Iron County GFA
20	SR 143 from Dry Lakes Road to Vasels Road	Brian Head Town, Iron County, UDOT	East Iron County GFA
21	Brian Head, SR 143 Intersections (Snowshoe Village Road and Vasels Road)	Brian Head Town, UDOT	East Iron County GFA
22	SR 20 from Burnt Peak Road to Bear Valley Road	Iron County, UDOT	East Iron County GFA
23	SR 56 from 2400 West to Main Street (New Castle)	Iron County, UDOT	West Iron County GFA
24	SR 56 & SR 18 (Beryl Junction)	Iron County, UDOT	West Iron County GFA
25	Bench Road from SR 56 to Newcastle Hills	Iron County	West Iron County GFA
26	SR 56 from Main Street (New Castle) to Comstock Road	Iron County, UDOT	West Iron County GFA, East Iron County GFA
27	Iron Springs Road from SR 56 to Comstock Road	Iron County, Cedar City	West Iron County GFA
28	Lund Highway from SR 56 to Midvalley Road	Iron County, Cedar City	West Iron County GFA
29	Lund Highway from Midvalley Road to 7000 North	Iron County, Cedar City	West Iron County GFA

The Project Information Sheets detail the following for each location:

- » Project location characteristics
- » Crash history
- » Recommended safety countermeasures
- » Opinions of probable costs for each improvement
- » Photos of existing conditions
- » A summary map showing locations and types of recommended improvements.

It should be noted that the opinions of probable cost for each improvement were estimated using the latest available 2024 or 2025 dollar estimates from recently completed UDOT projects and the cost database. The estimated project total includes factors beyond individual countermeasure material costs, including mobilization, traffic control, a contingency for unknown items, preconstruction engineering/design, and construction engineering/management. The estimated project total does not include right-of-way costs or adjustments for future inflation and must be reevaluated before project scoping, design, or implementation.

The Project Information Sheets are organized by GFA in **Appendix E**. An example Project Information Sheet and an explanation of information included is provided in **Figure 35** through **Figure 39**.

LOCATION CHARACTERISTICS

PROJECT NUMBER: 1

Location: Main Street (SR 130)
Project Extents: 3000 North to South I-15 Interchange
Roadway Classification: Other Principal Arterial, State Route
Jurisdiction(s): Cedar City, UDOT
Underserved Community: Yes

Safety Action Plan GFA(s): Cedar City GFA
GFA Emphasis Areas: Intersections, Older Drivers, Teen Drivers

Shows which of the 11 Utah SHSP emphasis areas are frequent in the project's GFA

Indicates if a project location is within an underserved census tract

Project location



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Segment Characteristics

Length:	6.23
Speed Limit:	30-45 mph
Roadway Lanes:	4
Daily Traffic Volume (AADT):	18,600
Median Type:	TWLT
Number of Key Intersections	11

Why was this location identified?

High Crash Network:	Yes ✓
High Injury Network:	Yes ✓
Network Screening:	Yes ✓
Conflict Areas:	No ✗
Risk Characteristics:	Yes ✓
Community Feedback:	Yes ✓

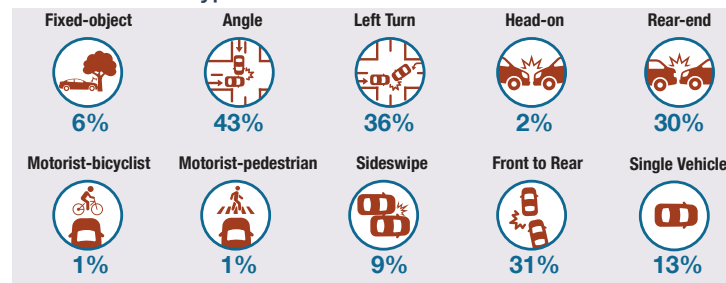
Safety analysis feedback & results

Location Crash History

Crash Severity (2019 - 2023)	
Fatal Crashes:	2
Serious Injury Crashes:	15
Minor Injury Crashes:	106
Possible Injury Crashes:	131
No Injury/PDO Crashes:	589
Total Crashes:	843
Equivalent Property Damage Crashes:	7,095

Crash history for project location

Location Crash Type



Crash types for crashes at this project location

Figure 35. Example Project Information Sheet, Page 1

LOCATION INFORMATION













Key Intersection Crash History

PROJECT NUMBER: 1

Intersection Roadway	Total Crashes	Fatal and Serious Injury Crashes	Angle	Left Turn	Rear End	Head On	Sideswipe	Roadway Departure	Pedestrian	Bike
Old Highway 91	24		8	10	12		2	1		
Fir Street	29		14	12	5	2	7	1		
300 West	19		10	2	5		1	3		1
600 South	35	1	17	10	13		3			
200 South	29	1	20	12	9					
Center Street	36	1	14	5	13	1	2	2	2	
200 North (SR 56)	105		57	48	23	2	13	4	2	2
Coal Creek Road	19		8	7	9			1		
1045 North	36	1	14	8	15		3			1
1925 North	41	2	19	16	12	1	3	1	1	
3000 North	52		28	29	14	6	1			1

Significant intersection crash history

Percentage of crashes in each Utah SHSP Emphasis Area for this project location

Utah Emphasis Areas		
Behavioral		Aggressive Driving 0%
		Distracted Driving 9%
		Impaired Driving 1%
		Use of Safety Restraints 2%
		Speed Management 5%
		Teen Driving Safety 34%
		Senior Safety 21%
Crash Types		Roadway Departure Crashes 6%
		Intersection Safety 64%
Vulnerable Users		Motorcycle Safety 2%
		Pedestrian Safety 1%
		Bicycle Safety 1%

Other Applicable Locations/Scenarios:

- Principal arterial, four lane roadways with a center two-way left-turn limit and speed limits between 30 and 45 mph with numerous driveway access locations and intersections may benefit from similar safety countermeasures. Locations may include SR 56 (200 North) in Cedar City and SR 130 in Enoch City.

Roadway characteristics where these types of countermeasures may be applicable, including locations in Iron County

Comments, Feedback, Ongoing Projects:

- Pedestrian and bicycle conflicts with vehicles
- Vehicle speeding
- Lack of protected crossings
- High (and increasing) Vehicle traffic volumes
- Access management and control

Other comments or feedback from engagement activities specific to this project location

Figure 36. Example Project Information Sheet, Page 2

EXISTING CONDITIONS

PROJECT NUMBER: 1

Notes:

- ROW may need to be acquired to accommodate bicycle lanes and/or turn lanes

Other notes and observations



1925 North Intersection Southbound, near Canyon View High School



Historic Downtown Midblock Crossing at Night



Google Street View image of Southbound Approach 200 South, Typical Signalized Intersection (www.googlemaps.com)



Typical Five-Lane Cross Section, Northbound near Canyon Center Drive



Typical Five-Lane Cross Section, Southbound near Cemetery

LOCATION RECOMMENDATIONS

Project Description

PROJECT NUMBER: 1

This project recommends a series of safety countermeasures to improve pedestrian, bicyclist, and vehicle mobility while addressing crash trends and community concerns. Sidewalks, buffered bike lanes, and lighting all improve active transportation safety. To improve intersection safety and traffic flow, right-turn lanes on and off Main Street are recommended at several key intersections. High-visibility crosswalk markings are recommended at multiple locations and a pedestrian hybrid beacon at a midblock location near Canyon View High School. Leading Pedestrian Intervals (LPI) at signalized intersections for pedestrians to establish themselves in the crosswalk before vehicle movements are recommended. Additionally, it is recommended that left-turn signal timing be adjusted to Flashing Yellow Arrows at signalized intersection that are permissive only to help reduce the risk of left-turn crashes. A Roadway Safety Audit is recommended for the entire project limits to involve UDOT, the City, and the community in the discussion of additional improvements and safety needs along the corridor. Improvements that will require further evaluation include, center medians, bulbouts, and additional midblock crossing locations.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Sidewalk	DI Sargent Drive to 3000 North and from Interstate Drive to Desert Pines Drive
Buffer Bicycle Lanes	Entire corridor
Highway Lighting	Old Highway 91 to Desert Pines Drive
Road Safety Audit	Entire corridor
Right Turn Lanes, Left Turn Lanes	Old Highway 91 northbound, 800 South north and southbound, 300 West north and southbound, 600 South north and southbound, 200 South all approaches, Center Street north, south, and eastbound, 200 North and southbound, Coal Creek Road south and eastbound, 1045 North and southbound
Left Turn Lanes	Fir Street, 300 West
High-Visibility Crosswalks with RRFB	Midblock between Harding Avenue and Hoover Drive
Leading Pedestrian Intervals	800 South, Center Street, 200 North, and 1925 North
Intersection Control Evaluation	300 South
Flashing Yellow Arrows	200 South, 800 South, Coal Creek Road, 1045 North, and 3000 North
Pedestrian Hybrid Beacon or HAWK	Midblock by Canyon View High School

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install 6 ft. Sidewalk (both sides of roadway)	1.75	MILE	\$761,000	\$1,331,750
Install Buffered Bicycle Lanes (Curb Separated)	6.23	MILE	\$651,000	\$4,055,730
Install Highway Lighting	0.511	MILE	\$300,000	\$153,300
Conduct a Road Safety Audit	1	LOC	\$25,000	\$25,000
Install Right-Turn Lanes	20	LANE	\$127,000	\$2,540,000
Implement Leading Pedestrian Interval (LPI) Signal Timing	4	INT	\$3,000	\$12,000
Perform an Intersection Control Evaluation and Implement	1	INT	\$225,000	\$225,000
Change Left-turn Timing from Permissive Only to Flashing Yellow Arrow	4	INT	\$8,000	\$32,000
Change a 5-section "Doghouse" to Flashing Yellow Arrow	1	INT	\$8,000	\$8,000
Install Pedestrian Hybrid Beacons (PHB) or HAWK	1	EACH	\$250,000	\$250,000
Install Pedestrian Hybrid Beacons (PHB) or HAWK	1	EACH	\$250,000	\$250,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.

Improvement Subtotal	\$8,632,780
Estimated Construction Cost Total¹	\$11,729,253
Estimated Project Total²	\$14,165,000
Local Match³	\$2,833,000

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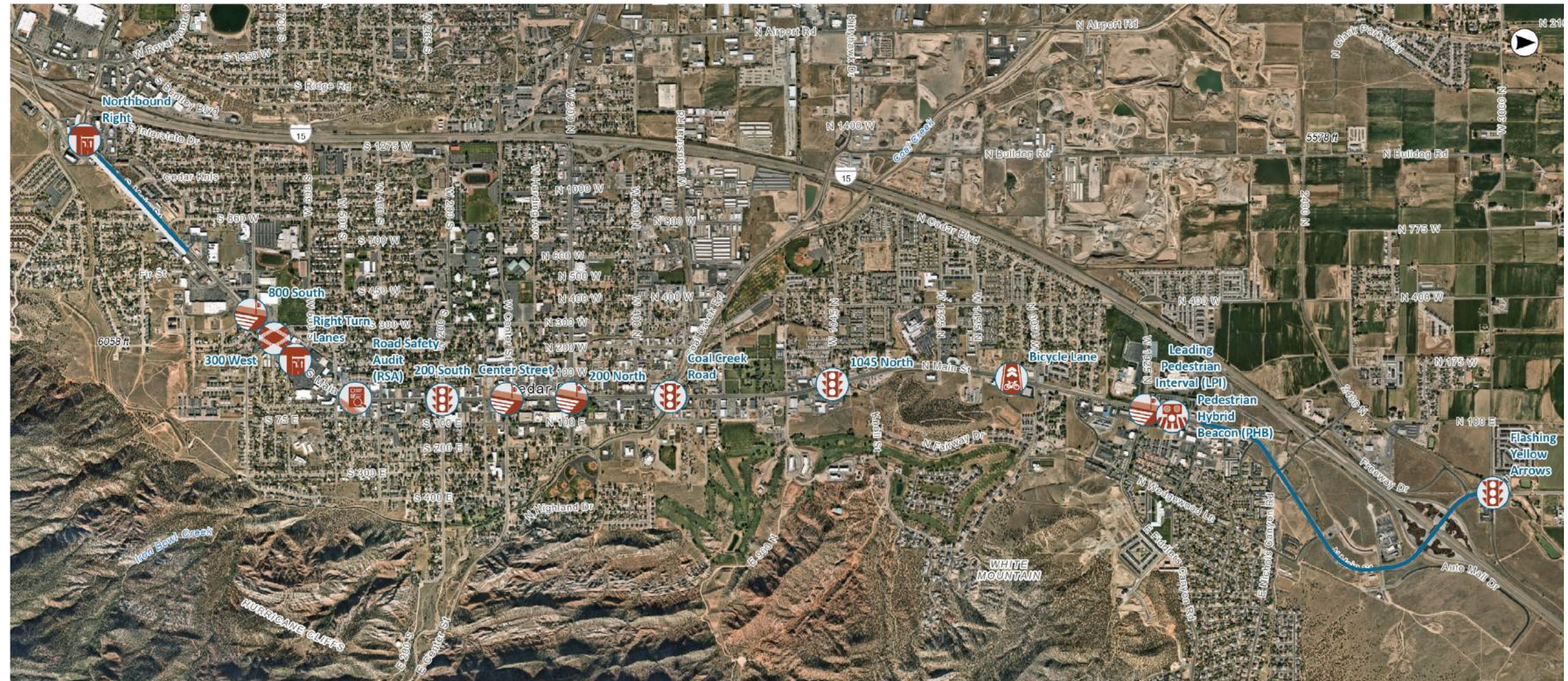
Local match required for an SS4A Implementation Grant

Construction cost plus engineering, design, and management

Figure 38. Example Project Information Sheet, Page 4

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 1



Main Street (SR 130) from 3000 North to South I-15 Interchange

Road Safety Audit (RSA), Entire Corridor	800 South Leading Pedestrian Interval (LPI)	300 West Intersection Control Evaluation (ICE)	200 South Flashing Yellow Arrow	Center Street Leading Pedestrian Interval (LPI)	200 North Leading Pedestrian Interval (LPI)	Coal Creek Road Flashing Yellow Arrow	1045 North Flashing Yellow Arrow
Bike Lanes, Entire Corridor	800 South Flashing Yellow Arrow	300 West North and Southbound Right Turn Lanes	200 South Right Turn Lanes, All Approaches	Center Street Right Turn Lanes, North, South, and Eastbound	200 North Right Turn Lanes, North and Southbound	Coal Creek Road Right Turn Lanes, South and Eastbound	1045 North Right Turn Lanes, North and Southbound
Highway Lighting	800 South North and Southbound Right Turn Lanes						
Sidewalk							

Project area map and locations of recommended countermeasures

Countermeasures identified for this project location

Figure 39. Example Project Information Sheet, Page 5

CASE STUDY INFORMATION SHEETS

The case study information sheets were developed to show typical scenarios and locations that are found throughout Iron County. The case studies may be used by agencies and jurisdictions to select effective safety countermeasures and strategies at similar locations in their community or area.

The case study information sheets are a compilation of potential safety improvement countermeasures selected from the Countermeasure Toolbox that are not specific to a particular location and may be applicable at multiple locations. The case study information sheets include the following information:

- » A general description of the overall improvement types
- » A detailed description of the different components that may be included in a safety improvement project
- » Typical application scenarios
- » Crash types the improvement may help address
- » General cost information (low, medium, high)
- » Considerations to note when evaluating the improvement type (utilities, locations, spacing, component options, etc.)
- » Potential locations in Iron County that this type of improvement may be applicable to

A total of six case study information sheets were developed to capture general safety countermeasures and improvement for typical scenario including those listed below. The complete set of case studies are provided in **Appendix F**:

- » Enhanced Pedestrian and School Crossings
- » Unsignalized Intersections
- » Signalized Intersections
- » Skewed Intersections with Major Roadways
- » Two-Lane Highways
- » Three-or Five-Lane Roadways

An example Case Study Information Sheet is provided in **Figure 40** and **Figure 41**.

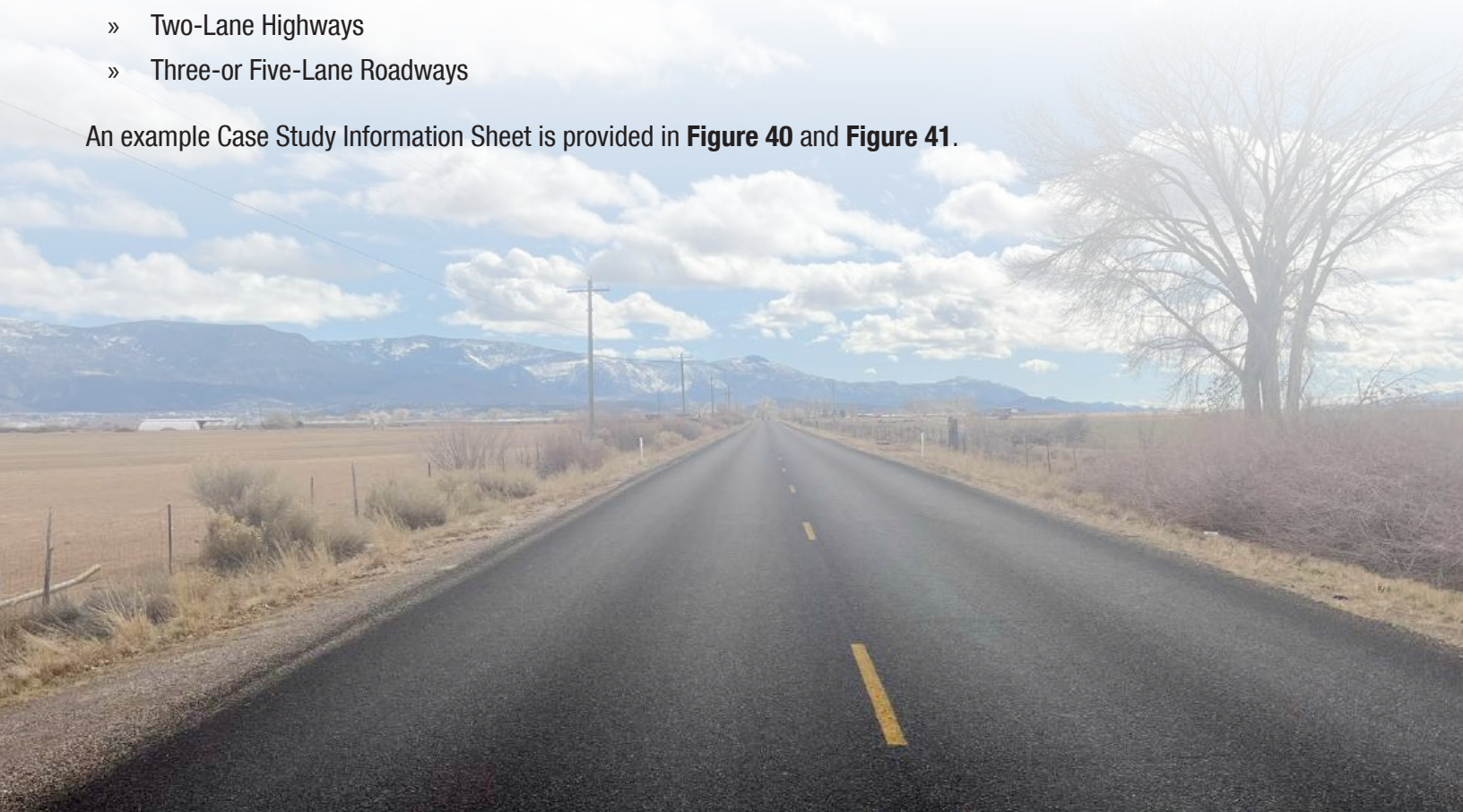
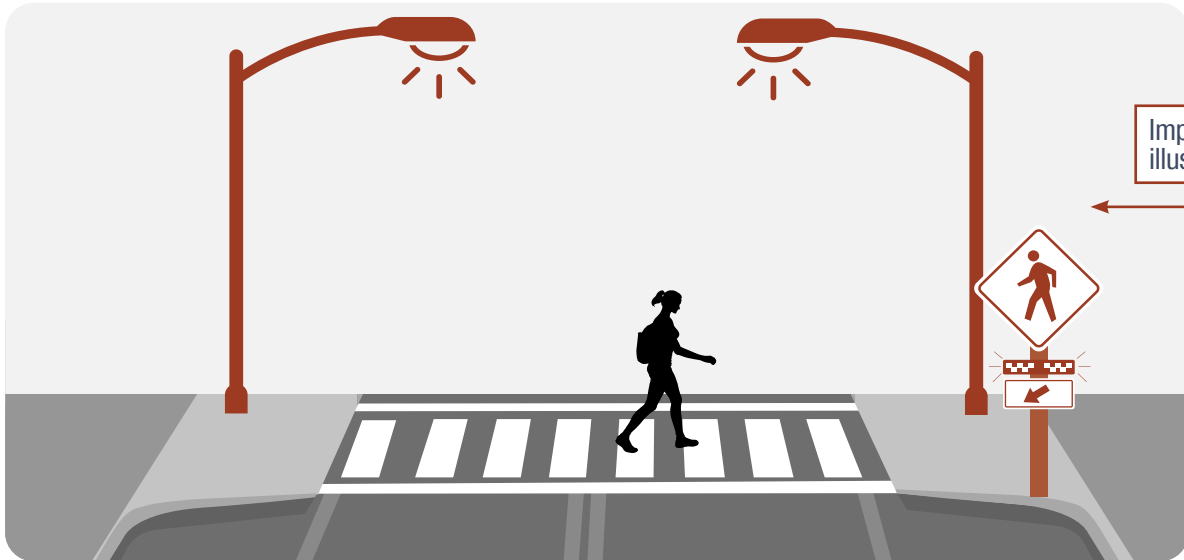


Figure 40. Example Case Study Information Sheet, Page 1

CASE STUDY: Enhanced Pedestrian and School Crossings



Improvement illustration

Crosswalk visibility enhancements include safety countermeasures that improve pedestrian safety when crossing roadways by shortening crossing distances, increasing visibility of pedestrians to motorists, and reducing vehicle speeds approaching the crossing. Countermeasures may include crosswalk striping, enhanced signage, lighting improvements, bulb outs and refuge islands. Other countermeasures may include Rectangular Rapid Flashing Beacon (RRFB) signage or a Pedestrian Hybrid Beacon (PHB) type crossings.

Components

- High-visibility paint patterns can be implemented for the crossing making the area and pedestrians more visible to motorists. Signage helps alert motorists of the crossing and potential pedestrians in the area. Lighting at the crossing increases nighttime visibility of pedestrians to motorists.
- Bulb outs on either one or both sides of the roadway shorten the required crossing distance for pedestrians, improve pedestrian visibility to motorists, and help reduce turning speeds for vehicles. Bulb outs can consist of either curb extensions or pavement markings/stripping.
- Pedestrian refuge islands allow pedestrians a shorter crossing distance and the ability to cross only one direction of traffic at a time. Refuge islands are especially beneficial on multilane roadways where pedestrians are required to cross multiple lanes of traffic.
- Rectangular Rapid Flashing Beacon (RRFB) signage is activated by a pedestrian at a crossing and flash rectangular LEDs on the sign with alternating high frequency to help capture a motorist's attention and alert them to a crossing pedestrian. For multilane crossings, RRFBs may be mounted on either side of one direction of travel.
- Pedestrian Hybrid Beacons are overhead traffic signals activated by a pedestrian push button that stop vehicles and allows pedestrians to cross the roadway. PHBs, (sometimes called HAWKS) include a controller and operate as a traffic signal, typically accompanied by other high-visibility crossing countermeasures such as signage, striping, lighting, and refuge islands. PHBs help facilitate pedestrian crossings in high pedestrian areas, particularly at mid-block crossings.

Improvement Components

Applications

Local or collector type roadways with intersections, mid-block crossings, or school zone crossings. Typically on roadways with speed limits 40 MPH or less.

PHBs may be applied on arterials or other multilane roadways with long crossing distances, more traffic, and higher speeds.

Crash Types



Improvement details

Costs



Low (for visibility enhancements only)
(Note: High for PHB signals.)

Page 1 of 2

Figure 41. Example Case Study Information Sheet, Page 2

CASE STUDY: Enhanced Pedestrian and School Crossings

Considerations

Not all countermeasures are applicable for each crossing location. The following are some considerations that should be evaluated in selecting safety countermeasures at crossing locations.



High-visibility crossings with signage or other enhancements should be placed in areas where pedestrians would normally not walk out of their way to cross at a typical intersection or crosswalk. Typically these improvements help enhance or create a mid-block crossing away from a standard intersection, however, some components are applicable at a typical unsignalized intersection. These countermeasures are also applicable to school areas or known areas of high pedestrian activity.

Improvement considerations



On-street parking must be restricted approaching bulb outs as to not block visibility of pedestrians to motorists. Bulb outs should not extend into the travel lanes. Bicycle lanes need to be considered in the roadway cross section, particularly at the bulb out locations. Drainage should also be considered, especially if bulb outs are extending or covering curb and gutter.

- Bulb outs are ideal on either side of the crossing, if only one side of the crossing is feasible, that may still be installed as an improvement to the crossing. Bulb outs reduce turning radii. Consider if the location serves high numbers of trucks or buses.



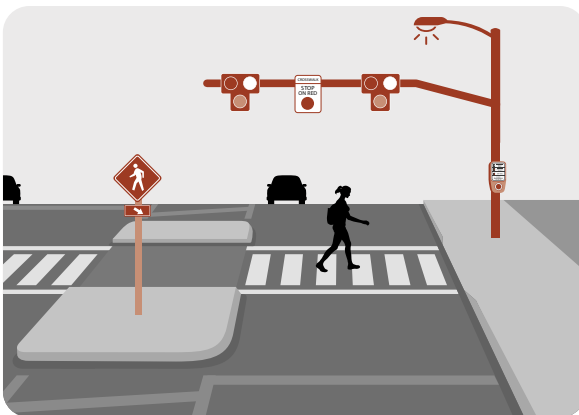
Refuge islands should be clear of sight obstructions such as landscaping or signage so that motorists and pedestrians have clear lines of sight. Median islands should be accompanied with signage or flashing signage.



RRFBs may be located on each side of the road or on both sides for a single direction travel lane. The signs may be solar powered in rural areas. Best practice includes RRFB signage on each side of the roadway and in the center median for both directions of travel, when feasible.



PHBs and RRFBs should be installed in high-pedestrian areas. Consider the spacing and proximity of locations, so that motorists do not discount flashing signs or become accustomed to them.



Potential Locations

- SUU Loop (SR 289), Cedar City
- 1925 North, Cedar City
- 600 South, Cedar City
- 860 West, Cedar City
- Center Street (SR 14), Cedar City
- Main Street (SR 274), Parowan City
- 200 South (SR 143), Parowan City
- SR 143, Brian Head Town
- Main Street, Paragonah Town
- Old Highway 91, Enoch City, Kanarraville Town
- Midvalley Road, Enoch City
- Existing crossing locations with only a signed or marked crossing
- School crossings

Applicable locations



7. POLICY AND PROCESS CHANGES

7. POLICY AND PROCESS CHANGES

Development of the SAP is grounded on the fundamental principles of the Safe System Approach, recognizing that transportation safety cannot be improved solely by capital improvements.

To prioritize safety, all aspects of community operations - planning, design, and maintenance – along with all users of the transportation system must prioritize safety and embrace meaningful changes to existing practices, policies, and procedures. Regional collaboration helps create a safe transportation system focused on the five key objectives of the Safe System Approach: Safer People, Safer Vehicles, Safer Speeds, Safer Roads, and Post-Crash Care.

A review of the transportation processes and policies of Iron County and local jurisdictions fulfills the Policy and Process Review requirement component of a Safety Action Plan as outlined in the FHWA Self-Certification Eligibility Worksheet:

ARE BOTH OF THE FOLLOWING TRUE?

- » The plan development included an assessment of current policies, plans, guidelines, and/or standards to identify opportunities to improve how processes prioritize safety; and
- » The plan discusses implementation through the adoption of revised or new policies, guidelines, and/or standards.

Previous and Ongoing Plans Review and Summary

Policies, plans, guidelines, and standards of agencies within Iron County were reviewed to identify opportunities for enhancing transportation safety and reducing the frequency of fatal and serious injury crashes. A summary of the reviewed documents is provided in **Table 11**.

Table 11. Previous Plans Reviewed

JURISDICTION BY GEOGRAPHIC FOCUS AREA (GFA)	PLAN/DOCUMENT NAME (YEAR COMPLETED)
CEDAR CITY GFA	
Cedar City	<ul style="list-style-type: none"> • Transportation & Active Transportation Master Plan (2021) • General Plan (2023) • UDOT Access Agreements (ongoing) • Cedar Valley Belt Route Access Plan (2023)
ENOCH CITY GFA	
Enoch City	<ul style="list-style-type: none"> • Transportation & Active Transportation Master Plan (2021) • General Plan (2023) • Transportation Impact Fee Analysis (2022)
EAST AND WEST IRON COUNTY GFAS	
Iron County	<ul style="list-style-type: none"> • Iron County General Plan (1995) • Iron County Transportation Master Plan (2023)
Parowan City	<ul style="list-style-type: none"> • General Plan (2021) • Transportation Master Plan (2024)
Paragonah Town	<ul style="list-style-type: none"> • General Regulations • Traffic Code
Brian Head Town	<ul style="list-style-type: none"> • Town Center Plan (2018) • Commercial Corridor Transportation Study (2022)
Iron County Rural Planning Organization	<ul style="list-style-type: none"> • Regional Transportation Plan (2013) • Access Management Agreement • Project Priority List • Concept Design Form

The reviewed policies, plans, guidelines, and standards are summarized to highlight transportation safety themes identified across multiple documents. Findings are synthesized for jurisdictions by GFA and are detailed in **Appendix C**.

Key Findings

Many jurisdictions in the Iron County SAP study area share similar goals for improving transportation safety. Some jurisdictions already incorporate detailed guidelines such as standard street cross sections with minimum pedestrian environment standards, traffic calming practices, and transit integration. General Plans often emphasize goals relating to an efficient and safe transportation system, promoting safe pedestrian and bicycle infrastructure, and addressing access management in collaboration with UDOT. Additionally, transportation plans and corridor studies focus on addressing safety through roadway classifications, access management, and intersection improvements.

The following policies and best practices identified through the plan reviews may be further explored and recommended for adoption or integration throughout Iron County's communities to enhance transportation safety:

- » Incorporate **FHWA's Proven Safety Countermeasures** into design standards and future projects.
- » Collaborate with the Iron County School District to establish **Safe Route to School** programs.
- » Explore **traffic calming** strategies or policies in community areas, school zones, and surrounding neighborhoods.
- » Develop **speed limit setting** policies and a **speed management plan** to address high vehicle speeds and determine appropriate speed limits for different contextual environments.
- » Develop **access management standards or policies** to guide planners and engineers, especially in areas experiencing rapid growth.
- » Launch transportation safety **education programs** addressing safety concerns like distracted driving, obeying traffic laws, and pedestrian safety.

National Best Practices and Resources Review

This section highlights several national transportation safety policies and manuals that can support efforts to advance transportation safety initiatives. These resources may be utilized by jurisdictions and the County in advancing and prioritizing transportation safety. A summary of each resource and a link to the document or policy is provided in **Table 12**. More detailed information and additional resources are included in **Appendix C**.



Table 12. National Best Practices and Resources Review

NATIONAL RESOURCE
<u>American Association of State Highway and Transportation Officials (AASHTO): A Policy on Geometric Design of Highways and Streets (2018)</u> - Provides guidelines for highway and street geometric design.
<u>Federal Highway Administration: Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD)</u> - Establishes national standards for the design, installation, and maintenance of traffic signs, signals, and pavement markings.
<u>National Safety Council: Road to Zero: A Plan to Eliminate Roadway Deaths (2018)</u> - Aims to eliminate fatal and serious injuries on U.S. roads by 2050 through policy changes, data-driven decisions, public awareness, technology, and collaboration.
<u>Federal Highway Administration: Zero Deaths and Safe System</u> - The Safe System Approach is a policy rooted in “Vision Zero” that aims to prevent deaths and serious injuries by designing road infrastructure that anticipates human mistakes.
<u>Pedestrian and Bicycle Information Center: Safe Routes to School Online Guide</u> - The program aims to enhance the safety, accessibility, and convenience of walking and biking routes to schools through infrastructure improvements and educational campaigns.
<u>Federal Highway Administration: Traffic Calming ePrimer</u> - The ePrimer is an online resource that guides communities in implementing traffic calming measures like speed bumps, roundabouts, and road narrowing to improve road safety and quality of life.
<u>Smart Growth America: Complete Streets</u> - Is a planning and design approach that ensures safe and accessible streets for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities.
<u>Federal Highway Administration: Achieving Multimodal Networks: Applying Design Flexibility and Reducing Conflicts (2016)</u> - This publication provides guidance for practitioners aiming to develop multimodal transportation networks that are safe, comfortable, and accessible for users of all ages and abilities.
<u>Federal Highway Administration: Separated Bike Lane Planning and Design Guide (2015)</u> - This guide offers planning and design guidance for separated bike lanes, including design options, intersection treatments, and case studies.
<u>Federal Highway Administration: Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations</u> - Offers strategies and recommendations to enhance safety for pedestrians at crossings without signals or stop signs.
<u>American Association of State Highway and Transportation Officials: Guide for the Development of Bicycle Facilities, 4th Edition (2012)</u> - This updated edition incorporates extensive research and current best practices in bicycle infrastructure design, covering planning, design, and on/off-road facilities like bike lanes and shared-use paths.
<u>American Association of State Highway and Transportation Officials: Guide for the Planning, Design, and Operation of Pedestrian Facilities, 2nd Edition (2021)</u> - The purpose of this guide is to provide guidance on the planning, design, and operation of pedestrian facilities along streets and highways.
<u>U.S. Access Board: Americans with Disabilities Act Accessibility Standards</u> - Accessibility standards issued under the Americans with Disabilities Act (ADA) apply to places of public accommodation, commercial facilities, and state and local government facilities in new construction, alterations, and additions.

State-Level Policies and Resources Review

Table 13 highlights Utah-specific best practices that were reviewed and incorporated into the policy and process change recommendations. While created at the State level, these resources can also serve as a guide for local jurisdictions or agencies in crafting policies that enhance and prioritize transportation safety.

Table 13. State of Utah Resources Review

STATE OF UTAH RESOURCES
<p>Utah Strategic Highway Safety Plan & Zero Fatalities - The goal of Zero Fatalities is fundamentally based on the belief that even a single loss is one too many. To achieve this, five key behaviors were identified that contribute to fatalities: drowsy driving, distracted driving, impaired driving, aggressive driving, and not wearing seat belts. The Zero Fatalities goal is integral to the Utah Strategic Highway Safety Plan (SHSP).</p> <p>The Utah SHSP aims to achieve the goal of zero fatalities through the “Five E’s”: Engineering, Education, Enforcement, and Emergency response are the foundational principles to improve roadway safety for Everyone.</p>
<p>UDOT Vulnerable Road User Safety Assessment (VRU) - This document analyzes safety trends and needs to vulnerable road users (VRUs), which include pedestrians, bicyclists, and other non-motorized roadway travelers.</p>
<p>UDOT Administrative Rule R930-6 - UDOT Administrative Rule R930-6 details access management guidelines for different categories of state-owned and maintained roadways. The access management guidelines include spacing standards, turn lane standards, and design requirements. Threshold requirements for turning lanes, access driveways and traffic impact studies are also detailed in R930-6.</p>
<p>UDOT’s Road Map - UDOT’s mission statement “Enhance quality of life through transportation” weaves through the department’s practices and standards. Their Quality-of-Life Framework emphasizes four areas: Better Mobility, Good Health, Connected Communities, and Strong Economy. One of the department’s strategic goals is to see zero crashes, injuries, and fatalities on Utah roads, emphasizing their commitment to safety throughout the State.</p>
<p>UDOT Speed Management Studies - The UDOT Speed Management Studies document provides eleven information sheets on traffic calming measures that are considered within the FHWA’s Safe System Approach as methods of slowing traffic. Information sheets include where traffic calming measures are typically applied, what speed reduction they could achieve, and high-level cost information.</p>
<p>HB290 - During the 2025 legislative session, House Bill 290: Bicycle Lane Safety Amendments, passed, further enhancing bicycle safety on Utah roads. The bill more clearly defines a “bicycle lane” as part of a highway designated by a highway authority through striping, signage, pavement markings, or barriers for preferential or exclusive use of bicycle, electric-bicycles, and motor-assisted scooter traffic.</p>

Engagement Feedback Review

Feedback received at GFA workshops were combined with responses gathered from the online map and the online/in-person surveys. The engagement process collected over 900 unique comments. Common themes emerged from the comments that did not directly translate into specific infrastructure projects. To ensure these comments were noted and reviewed for recommendations, the project team categorized comments into general themes which informed the policy and process change recommendations. Comments were organized into 10 primary themes and one “other” category that includes important, but less-frequently mentioned feedback. **Table 14** provides a summary of these themes along with a brief description. A more detailed review of the feedback can be found in **Appendix C**.

Table 14. Engagement Feedback Themes

FEEDBACK THEME	DESCRIPTION
Access Management and Turn Lanes	Comments regarding better business access control, clear turn lanes, roadway widening (lanes, turn lanes, or shoulders)
Active Transportation and School Zone Safety	Comments related to bicycle and pedestrian safety, including the need for safer active transportation infrastructure (sidewalks, crossings, school zone safety, connectivity, and infrastructure).
Congestion and Growth	Concerns regarding traffic congestion and increased traffic on roadways due to planned growth in the area.
Enforcement	Drivers not obeying traffic laws (such as speeding and red-light running) and the need for increased enforcement.
Intersection and Roadway Geometry/Design (including access driveways)	Difficulty navigating larger intersections. Comments regarding narrow shoulders, drainage, and curves.
Intersection Control	Request for new/upgraded control devices at intersections, including signals and stop-controlled intersections. Desire for longer left-turns at traffic signals.
Limited Visibility	Comments regarding limited or blocked visibility due to vegetation, signage, or parked vehicles.
Roadway Maintenance and Pavement Markings	Comments regarding maintenance for roadways (to address cracks, breaking, potholes, etc.) and faded or missing pavement markings and striping.
Speed Limits and Speeding	Comments related to vehicle speeding, wanting adjusted speed limits, or speed limit signage.
Street Lighting	Requests for additional street lighting particularly at intersections and areas with pedestrian activity.
Other	Education, livestock/wildlife crashes, on-street parking, and transit.

Jurisdictional Interviews

The project team met with jurisdictions in the Iron County SAP study area to identify specific needs and potential gaps in existing transportation safety policies and processes. These discussions focused on the current integration of safety within policies or resources, potential enhancements to those resources, and discussion of new policies or guidelines to prioritize transportation safety. The following jurisdictions provided information as part of the policy and process change task:

» Iron County » ICRPO » Cedar City » Enoch City » Brian Head Town

INTERVIEWS SUMMARY

The following topics were discussed with interviewees as part of the plans and policy review.

Communication and Coordination

There is strong interest among agencies for improved coordination for regional planning, project prioritization, and jurisdictional coordination. Guidance on policies, standards, procedures, and points of contact for agencies were identified as a key need.

Growth and Development

Expected regional growth has prompted several agencies to consider developing standards and policies to guide development of communities, commercial areas, and roadways that are constructed or change. Not all communities have implemented or established clear standards for access management, traffic impact study warrant thresholds or requirements, traffic calming policies or guidance, or specific transportation impact fees.

Active Transportation Use Safety & Transit

Most jurisdictions mentioned the need for expanded and improved active transportation infrastructure. Opportunities for cross-jurisdictional collaboration are limited and typically involved the ICRPO or UDOT. Additionally, there is a lack in coordination between jurisdictions and schools in planning Safe Routes to School programs.

While some jurisdictions operate private or public transit services, others have shown interest in expanding transit options to expand transportation for residents and visitors. However, gaps remain in regional transit coordination and funding strategies. UDOT, in partnership with Cedar City, is currently conducting the Cedar City Transit Study to identify strategies for enhancing public transit within the Cedar City area.

Project Prioritization & Funding

Although the ICRPO plays a vital role in unifying planning efforts to address the County's expected growth, it operates without dedicated implementation funding. The need for guidance for prioritization and funding was identified. Currently, agencies and communities must navigate competitive application processes to secure funding.

Recommendations

The review of policies, plans, and resources, along with stakeholder and community engagement, and jurisdictional interviews were conducted to inform the recommendations related to policies and procedures. These recommendations aim to develop resources and tools, or build upon existing resources and tools, to enhance transportation safety in Iron County for all roadway users. The following recommendations are summarized in the sections below:

- | | |
|---|--|
| » Access Management Plan | » Development Review Standards |
| » Active Transportation Planning | » Project Programming |
| » Speed Limit Setting and Speed Management | » Transportation Safety Education Programs |
| » Proven Safety Countermeasures in Design Standards | » Safety Terminology |
| » Safe Routes to School Plans | » Clear Cross-Agency Communication |

ACCESS MANAGEMENT PLAN

An Access Management Plan is a policy framework that guides the design, application, placement, and operation of driveways, intersections, and other access points on roadways to maintain roadway safety for all modes, including facilitating safe pedestrian and bicyclist movements.

Access Management Plans can streamline and establish clear standards for driveway and curb cut spacing, therefore minimizing conflict points, improving safety, and maintaining traffic flow while reducing congestion on major roads. Access Management Plans should be created in partnership with regional and state transportation agencies to ensure consistency on regionally important roads owned and maintained at the state or county level.

Additional access management resources include [Access Management](#) practices as outlines in FHWA's Proven Safety Countermeasures and the USDOT's Office of Operations [Access Management](#) page.

An access management plan may be something individual jurisdictions and/or the County consider developing and adopting.

ACTIVE TRANSPORTATION PLANNING

A need was identified for active transportation planning and improved coordination among agencies in Iron County. Currently, the County does not have an official County-wide Active Transportation Plan. An Active Transportation Plan can be a resource for the County and other agencies by promoting regional coordination, enhancing the connectivity of the transportation network, and improving safety for some of the most vulnerable roadway users.

A County or Regional Active Transportation Plan may identify high-priority safety improvements, address infrastructure gaps, establish design standards to foster safe, consistent facilities for all ages and abilities A plan may also, identify and prepare agencies to engage funding sources.

SPEED LIMIT SETTING AND SPEED MANAGEMENT

It is recommended that Iron County develop a speed limit setting procedure and a speed management plan. These tools would help jurisdictions set appropriate speed limits and focus improvements on areas with high vehicle speeding or locations or where vehicles and vulnerable road users share facilities. Addressing speed is fundamental in the Safe System Approach for creating safer streets.

FHWA provides guidance on how to develop a [Speed Management Program](#) specific to local, small urban areas and rural roads. The [USLIMITS2 Tool](#) is designed to assist in setting reasonable, safe, and consistent speed limits for roadways. The tool uses not only the 85th percentile speed, but also 50th percentile speeds and incorporates other roadway aspects such as segment lengths, average daily traffic, alignment, roadway characteristics, presence of bike lanes or on-street parking, number of driveways, number of signals, number of crashes, and the number of injury and fatal crashes to determine a recommended posted speed limit.

Consider a Speed Management Plan or policy/procedure in speed limit setting.

PROVEN SAFETY COUNTERMEASURES IN DESIGN STANDARDS

FHWA Proven Safety Countermeasures (PSCs) are valuable strategies to assist Iron County and its communities to prevent fatal and serious injury crashes. These countermeasures should be considered when revising design standards or establishing new standards for design elements such as bicycle lanes, shoulder widths and types, signage, and other roadway features.

Consider PSCs and their application guidance when updating or creating new design standards.

SAFE ROUTES TO SCHOOL PLANS

Iron County and its jurisdictions should participate in the development of Safe Routes to School plans (SRTS), as they are critical for ensuring that children can safely walk and bike to school. Collaboratively creating SRTS plans opens opportunities to implement improvement projects such as traffic calming or neighborhood slow zones.

The Safe Routes Partnership created a [toolkit](#) in 2015, that offers rural specific best practices and strategies for developing Safe Routes to School programs. Rural school children face distinct challenges such as long distances, high vehicles speeds, limited sidewalks, and schools situated near regional highways.

Coordinate with Iron County School District and other agencies in developing Safe Routes to School plans to promote school zone safety.

DEVELOPMENT REVIEW STANDARDS

Jurisdictions should update existing standards or establish clear guidelines for reviewing new development. It is recommended that development review checklists include elements such as public amenities in the area, traffic impact study thresholds, design considerations, active transportation connectivity and design, and how development impact fees are collected and used. Additionally, jurisdictions may consider transportation impact fees specifically dedicated to address transportation improvements or providing public amenities like sidewalks or trails.

Jurisdictions should ensure development review standards are clear, include the appropriate considerations for their community, and prioritize transportation safety.

PROJECT PROGRAMMING

Establishing a collaborative and county-wide project programming process to identify and prioritize transportation infrastructure projects, similar to a capital improvement plan, could help secure consistent funding for safety improvements.

This process should engage all local jurisdictions and regional agencies such as the ICRPO, the school district, and UDOT. A well-defined project programming will help the County align priorities with state-level objectives. Programming practices could be developed as part of the County Transportation Master Plan, County General Plan, or Active Transportation Plan, or built upon the existing RPO project list coordination.

Develop a programming and prioritization process for transportation projects.

TRANSPORTATION SAFETY EDUCATION PROGRAMS

Education and awareness campaigns/programs can be implemented and build on existing programs provided by the NHTSA and FHWA for bicycle safety, distracted driving, pedestrian safety, speeding, or seat belt safety. Jurisdictions should develop tailored initiatives targeting specific safety concerns relevant to their jurisdictions and surrounding areas.

Coordination with UDOT's Zero Fatalities Program, health departments, community centers, schools, and affected establishments can strengthen driver education and promote safe practices for all road users.

Implement education and awareness campaigns/programs by promoting existing programs provided by FHWA, NHTSA, or UDOT for bicycle safety, distracted driving, pedestrian safety, speeding, or seat belt safety.

SAFETY TERMINOLOGY

Future updates to plans, studies, and policies should adopt consistent and accurate terminology when describing crashes involving vehicles. A review of previous plans revealed instances where the term "accident" is used to describe vehicle crashes. It is recommended to replace the term "accident" or "collision" with "crash" throughout these documents. Using the word "crash" aligns with industry best practices, emphasizing the role of human actions.

Include consistent and appropriate terminology, using the term "crash" when referring to an event involving a vehicle and a collision to help promote transportation safety as a responsibility of everyone in the community.

CLEAR CROSS-AGENCY COMMUNICATION

Strengthening cross-agency communication is essential to achieving the County's transportation and safety goals. Establishing a structured forum or regular meetings among government agencies, local jurisdictions, law enforcement, and other interested parties, would facilitate the efficient sharing of information and alignment of priorities. Improved collaboration helps prevent redundancy in efforts and financial expenditures, while promoting a unified vision for addressing shared challenges.

Establishing clear cross-agency communication practices can be applied county-wide, encouraging collaboration between jurisdictions and agencies, but also internally for each jurisdiction.



8. PROGRESS MONITORING AND EVALUATION

8. PROGRESS MONITORING AND EVALUATION

The Iron County SAP serves as a guide for Iron County, the ICRPO, local jurisdictions, and others responsible for transportation safety to advance implementation of strategies, improvements, and policies.

Recognizing the importance of accountability and performance monitoring to reduce transportation fatalities and serious injuries, Iron County in partnership with the ICRPO will oversee the implementation of ongoing monitoring of the SAP.

The SAP, as noted on the FHWA Self-Certification Eligibility Worksheet includes the following questions:

DID THE ACTION PLAN INCLUDE ALL THE FOLLOWING?

- » A description of how progress will be measured over time that includes, at a minimum, outcome data.
- » The plan is posted publicly online.

The recommended approach to monitoring SAP implementation progress includes the following:

Leadership: Iron County staff in partnership with the ICRPO will assume leadership of the SAP and promote its implementation in the County. The ICRPO will be responsible for regular implementation tracking and operate as the regional leaders in supporting partners as needs arise.

Annual Evaluation: When the most recent, complete year's crash data is available, the ICRPO will assess Iron County's progress toward eliminating transportation fatalities and serious injuries as proposed in the Regional Safety Commitment Resolution detailed in **Section 2**.

Refreshing the SAP: The County and ICRPO anticipate that the SAP will be refreshed or updated as needed.

Other Planning Efforts: Iron County and the ICRPO will remain informed of current and new local and statewide safety programs, policies, and guidelines or standards. Iron County and the ICRPO continually review this information to identify opportunities to build upon the current SAP and coordinate with local communities.



Crash Monitoring Dashboard

The project team developed a Crash Monitoring Dashboard to help agencies monitor safety trends and progress towards eliminating fatalities and serious injuries. The crash dashboard is an online tool that provides Iron County and agencies an accessible way to visualize and summarize annual crash details, trends, contributing factors, and safety emphasis areas.

Utah's statewide crash data is housed on AASHTOware's Numetric platform and is regularly updated with the most recent crash reports. Having the Dashboard as part of UDOT's crash reporting system eliminates the need for the County or ICRPO to externally process crash data. Iron County and the ICRPO have access to the dashboard with the crash data linked to UDOT's database. This dashboard will aid the County and ICRPO to fulfill the annual monitoring and reporting element of an Action Plan. **Figure 42** shows a portion of the dashboard and the presentation of historic crash data.



Figure 42. Iron County Fatal and Serious Injury Dashboard Preview

Regional Monitoring and Performance Measures

Monitoring progress towards the goals established in the Regional Safety Commitment Resolution and the implementation of this SAP is critical. Performance measures will be evaluated annually by Iron County and the ICRPO and reported on the project website. The following information and performance measures are recommended to be monitored:

- » County-wide fatal and serious injury crash totals
- » Fatal and serious injury crash totals, excluding I-15
- » Annual crash totals and trends
- » Time of day crash trends

- » Contributing factors
 - » Manner of collision crash trends
 - » Weather condition crash trends
 - » Lighting condition crash trends
 - » Roadway surface condition crash trends
 - » Crash summary trends
 - » Posted speed limit crash trends
- » SHSP Emphasis Areas
- » Vulnerable Roadway Users
 - » Fatal and serious injury crash totals involving pedestrians
 - » Fatal and serious injury crash totals involving bicycles
 - » Manner of collision crash trends
 - » Weather condition crash trends
 - » Lighting condition crash trends
 - » Roadway surface condition crash trends
 - » Crash summary trends
 - » Posted speed limit crash trends of day crash trends

To ensure continued progress in implementing the SAP, Iron County will update the SAP, as needed, to reflect recent safety performance measure data. Future revisions to the SAP for Iron County will evaluate progress toward established safety goals in the Regional Safety Commitment Resolution. Updates will also identify upcoming safety projects for inclusion in Statewide programs such as the FCAOG RTP and UDOT LRTP.

As there are no federal mandates governing updates to Safety Action Plans, Iron County has the flexibility to tailor the update process to meet regional needs. If data sources remain unchanged or indicate that no modifications to the safety emphasis areas are necessary, a streamlined update may focus on tracking project implementation and progress toward performance targets. However, if analysis reveals shifts in crash patterns that require adjustments to safety priorities, a more in-depth process that includes enhanced community and stakeholder engagement may be warranted.



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Appendix D. Safety Countermeasure Toolbox and Cost Estimate Assumptions

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APPENDIX A. TECHNICAL MEMORANDUM #1 – SAFETY ANALYSIS RESULTS



FOR ALL IRON COUNTY

March 2025

Iron County Safety Action Plan

Technical Memorandum #1 – Safety Analysis

Iron County Safety Action Plan

Technical Memorandum #1 – Safety Analysis

March 2025

Prepared for:



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In Partnership with:



Statutory notice

23 U.S.C. § 407: US Code - Section 407: Discovery and admission as evidence of certain reports and surveys

Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 144 and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

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1. INTRODUCTION

Between 2019 and 2023 there were 44 fatalities and 243 serious injuries on roadways in Iron County. The number of fatalities more than doubled between 2019 and 2023, from 4 fatalities in 2019 to 9 fatalities in 2023, as shown in Figure 1. While the number of serious injuries in 2023 is lower than 2019, serious injury crashes in 2021 and 2022 were higher than serious injury crashes in 2023.

Recognizing these trends, Iron County is preparing a Safety Action Plan (SAP) to develop a holistic, well-defined strategy to reduce roadway fatalities and serious injuries on Iron County roadways. The SAP will analyze safety needs, identify high-risk locations and factors contributing to crashes, and prioritize strategies to address them.

The SAP will meet eligibility requirements that will allow Iron County and local jurisdictions in Iron County to apply for Implementation Grants from the United States Department of Transportation (USDOT) Safe Streets and Roads for All (SS4A) discretionary grant program¹. The grant program was established by the Bipartisan Infrastructure Law (BIL) with \$5 billion in appropriated funds. The SS4A grant program is in effect from 2022 to 2026.

Technical Memorandum #1 provides an overview of the safety analysis methodology and results, contributing to identification of a high-risk network. The high-risk network will inform high safety risk locations and strategies to address the present risks.

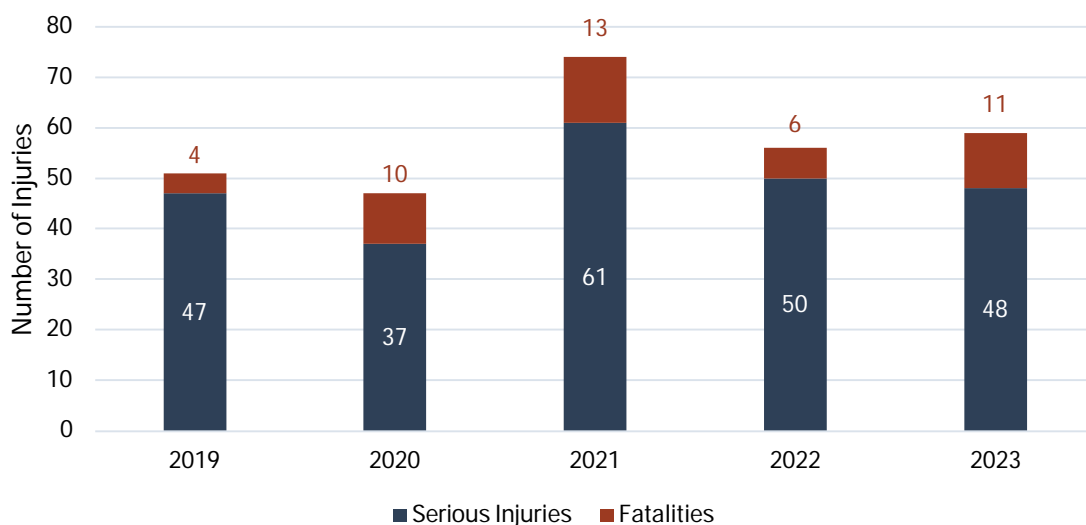


Figure 1. Fatalities and Serious Injuries in Iron County, 2019 to 2023

¹ <https://www.transportation.gov/grants/SS4A>

1.1. Safe Streets and Roads for All (SS4A) Grant Program

The purpose of the SS4A discretionary grant program is to fund regional and local initiatives to prevent roadway deaths and serious injuries of all users of roadways including pedestrians, bicyclists, public transportation users, motorists, and others. The program supports the goal of zero roadway deaths using the USDOT Safe System Approach².

The grant program provides funding for two types of grants: Planning and Demonstration Grants and Implementation Grants.

Planning and Demonstration Grants: These provide funding to prepare an Action Plan with the goal to prevent roadway fatalities and serious injuries in a region. The Action Plan identifies the most significant roadway safety concerns in a community, and implementation of projects and strategies to address roadway safety issues.

Implementation Grants: These provide funding to implement projects and strategies identified in an Action Plan aimed at addressing a roadway safety problem. Projects and strategies may include infrastructure, behavioral, or operational activities. To apply for an Implementation Grant, applicants must have a completed and qualifying Action Plan.

Iron County secured a Planning and Demonstration Grant to develop this SAP for all of Iron County including municipalities and agencies within Iron County.

1.2. Action Plan Components

An eligible Action Plan must include the following two elements:

- Safety analysis of:
 - Existing conditions and historical trends.
 - Crashes by location, severity and contributing factor.
 - Systemic and specific safety needs.
- Identify a comprehensive set of projects.

In addition, the Action Plan must include at least four of the remaining six elements:

- Public commitment to an eventual goal of zero fatalities and serious injuries, a date to reach zero, or setting targets to achieve significant declines in roadway fatalities and serious injuries.
- Oversight by a committee charged with plan development, implementation, and

² <https://www.transportation.gov/safe-system-approach>

monitoring.

- Engagement with the public and relevant stakeholders to inform plan development.
- Opportunities to improve, plans, guidelines, and standards.
- A process to measure and report progress over time.

The Iron County SAP will satisfy all requirements of an Action Plan.

1.3. SAP Development Process

The SAP will serve as a guide for jurisdictions to identify and prioritize solutions to improve safety. Development of the SAP includes the tasks as listed in Table 1.

Table 1. Iron County SAP Tasks

Safety Action Plan Task	Purpose
Task 1: Leadership and Goal Setting	A Safety Commitment Resolution will be presented to the Iron County Rural Planning Organization (RPO) for consideration for adoption. The Safety Commitment Resolution will be provided to each jurisdiction for consideration for adoption.
Task 2: Planning Structure	A SAP Sub-Committee of representatives from local jurisdictions, Iron County, and the Utah Department of Transportation (UDOT). The Sub-Committee oversees the SAP development and deliverables.
Task 3: Safety Analysis	An analysis of crash history, existing data and trends, identification of risk factors, high-risk locations, and a high-injury network.
Task 4: Engagement and Collaboration	Community engagement and outreach through stakeholder workshops, pop-up events, printed flyer distribution, online advertisements, and a project website. The project website includes an interactive map where stakeholders and members of the public may leave comments and identify locations of concern, review materials, and view upcoming events and deliverables.
Task 5: Policy and Process Changes	Existing policies, programs, and practices will be reviewed that may impact safety. Opportunities for change will be identified.

Safety Action Plan Task	Purpose
	Potential engineering, enforcement, education, and policies or practices will be recommended.
Task 6: Strategy and Project Type Recommendations	The SAP will recommend and prioritize countermeasures, strategies, and project types to help prevent fatal and serious injury crashes in the County.
Task 7: Final Report and Safety Resolution	A final report will summarize study findings and recommendations. The final report and safety commitment resolution will be presented to the Iron County RPO and local jurisdictions for review and adoption.

1.4. Safe System Approach

SAP recommendations will be based on the USDOT Safe System Approach, a guiding paradigm to address roadway safety and mitigate the risk inherent in complex transportation systems.

The Safe System Approach includes principles and elements to prevent crashes from happening and minimizing injury should a crash occur. The approach focuses on human mistakes and vulnerability to help design and operate a transportation system with redundancy in place to protect all users of the system. The Safe System Approach includes the principles as summarized in Figure 2.

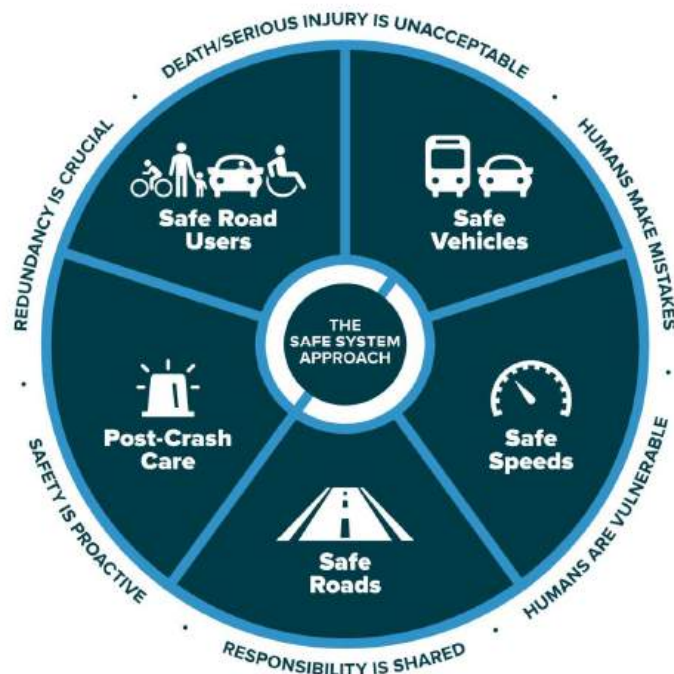


Figure 2. Safe System Approach

Source: USDOT

The Safe System Approach considers five elements of a safe transportation system, summarized in Table 2. Achieving zero traffic fatalities and serious injuries requires strengthening each element, building upon the foundational principles as illustrated in Figure 2 and Table 3.

Table 2. Safe System Approach Elements






Safe System Approach Element		Description
	Safer people	Encourage safe, responsible driving and behavior including those who walk, bike, drive, ride transit or travel by other modes and create conditions that prioritize their ability to reach their destination unharmed.
	Safer vehicles	Expand the availability of vehicle systems and features that help to prevent crashes and minimize the impact of crashes on both occupants and non-occupants.
	Safer speeds	Humans are less likely to survive high-speed crashes. Promote safer speeds in all roadway environments through a combination of thoughtful, equitable, context-appropriate roadway design, appropriate speed-limit setting, targeted education, outreach campaigns and enforcement.
	Safer roads	Design streets to mitigate human mistakes and account for injury tolerances, encourage safer behaviors and facilitate safe travel by the most vulnerable users. An example includes physically separating people traveling at different speeds.
	Post-crash care	People who are injured in crashes rely on emergency first responders to quickly locate and stabilize their injuries and transport them to medical facilities. Post-crash care also includes forensic analysis at the crash site, traffic incident management and other activities.

Table 3. Safe System Approach Principles

Safe System Approach Principals	
<p>Death and serious injuries are unacceptable</p> <p>The Safe System Approach prioritizes the elimination of crashes that result in deaths and serious injuries.</p>	<p>Responsibility is shared</p> <p>All stakeholders—including government at all levels, industry, non-profit and advocacy, researchers and the public—are vital to preventing fatalities and serious injuries on our roadways.</p>

Safe System Approach Principals	
Humans make mistakes People will make mistakes and decisions that can lead or contribute to crashes, but the transportation system can be designed and operated to mitigate the outcomes of human mistakes and avoid deaths and serious injuries when a crash occurs.	Humans are vulnerable Human bodies have physical limits for tolerating crash forces before death or serious injury occurs; therefore, it is critical to design and operate a transportation system that is human-centric and recognizes physical human vulnerabilities.
Safety is proactive Proactive tools should be used to identify and address safety issues in the transportation system, rather than waiting for crashes to occur and reacting afterwards.	Redundancy is crucial Reducing risks requires that all parts of the transportation system be strengthened, so if one part fails, the other parts still protect people.

Implementing the Safe System Approach requires moving away from traditional safety paradigms, as summarized in Figure 3.



Figure 3. Safe System Approach Paradigm

1.5. Utah State Strategic Highway Safety Plan

Utah's goal is to achieve zero traffic-related fatalities as documented in the Utah Strategic Highway Safety Plan (SHSP). A SHSP is a requirement of the Highway Safety Improvement Program (HSIP) (23 U.S.C. § 148) and is a statewide-coordinated safety plan that provides a comprehensive framework for reducing fatalities and serious injuries on all public roads. The Utah SHSP identifies eleven different emphasis areas for safety to reach the Zero Fatalities goal. The SAP recommendations will build upon the identified emphasis areas in the Utah SHSP.

1.6. Document Organization

This technical memorandum is organized into the following sections:

- Section 1 introduces the SAP and provides background information on the SS4A grant program and Safe System Approach.
- Section 2 describes the study area.
- Section 3 details a crash analysis including a crash history overview and comparison to the Utah SHSP.
- Section 4 describes the safety analysis methodologies and results.
- Section 5 details next steps for the SAP.
- Section 6 introduces the Appendices including the individual Geographic Focus Area (GFA) safety analysis results.

2. STUDY AREA

The Iron County SAP study area includes all of Iron County, including jurisdictions within the County, as illustrated in Figure 4. To organize the jurisdictions and unincorporated areas of Iron County into manageable analysis areas, the county was divided into five Geographic Focus Areas (GFA). Table 4 lists jurisdictions/areas by GFA. The safety analyses presented in the appendices of this Technical Memorandum #1 are organized by GFA. Roadways within the study area are divided into two categories:

- State Routes: UDOT-maintained roads
- Non-State Routes: Local jurisdiction-maintained roads

Table 4. GFA and Jurisdictions

Geographic Focus Area (GFA)	Jurisdictions/Boundaries
Cedar City	Cedar City (excluding I-15)
Enoch City	Enoch City (excluding I-15)
East Iron County	Parowan City Paragonah Town Kanarraville Town The Paiute Tribe of Utah Unincorporated areas of Iron County, east of SR 130 and SR 56 (excluding Cedar City and Enoch City)
West Iron County	Unincorporated areas of Iron County, west of SR 130 and SR 56 (excluding Cedar City and Enoch City)
Interstate-15 (I-15)	From milepost 41 to milepost 101

The Interstate 15 (I-15) corridor is defined as a GFA. I-15 is managed and maintained by the Utah Department of Transportation. However, state departments of transportation are not eligible to apply for SS4A funds. As such, the SAP will review crash data for the I-15 corridor, but will not make recommendations for improvements to I-15.

For other state-owned and maintained routes, outside of I-15, UDOT may partner with local jurisdictions or agencies to complete or implement improvements or strategies identified in the SAP. Therefore, those roadways are included in the SAP process and analyses.



Figure 4. Iron County SAP Study Area and GFAs

3. HISTORICAL CRASHES

Crash data was obtained from the UDOT database for the most recent complete five-year period, 2019 to 2023. Crashes reported to UDOT are included in this analysis. The project team recognizes that some crashes occur that are not reported. The analysis uses crash description terminology as presented in the crash reports. Information from historical crashes will inform future phases of the SAP.

Two methods were applied to review the historical crash data, each informing the identification of safety strategies, locations, and potential countermeasures. Countermeasures refer to specific actions or infrastructure elements designed to improve safety. The goal of the identified safety strategies and proposed countermeasures in the SAP is to reduce traffic fatalities and serious injuries. The two methodologies for reviewing crash history include:

- Historic Crash Review: Provides an overview of the most frequent crash types and common contributing factors.
- Utah SHSP Emphasis Area Comparison: Crashes in Iron County are grouped based on the Utah SHSP Emphasis Areas and are compared to statewide crash data.

Each of these analyses informs future phases of the SAP development.

3.1. Historic Crash Review

A historic crash review was conducted for the most recent complete five-year period, 2019 to 2023, for crashes that occurred on Iron County roadways. The crash data was summarized for all of Iron County, and for each individual GFA, in the following categories:

- Crashes by Year
- Crashes by Severity and Route Type
- Fatal and Serious Injury Crashes by Year
- Fatal and Serious Injury Crashes by Manners of Collision
- Fatal and Serious Injury Crashes by Crash Types
- Fatal and Serious Injury Crashes by Driver Contributing Factors
- Vulnerable User Crashes by Year
- Fatal and Serious Injury Vulnerable User Crashes

3.1.1.1. All Crashes

A total of 5,185 crashes occurred in Iron County from 2019 to 2023. Figure 5 shows that the highest number of crashes (1,125) occurred in 2019. While crashes decreased in 2020 as compared to 2019, the number of crashes occurring each year has since increased.

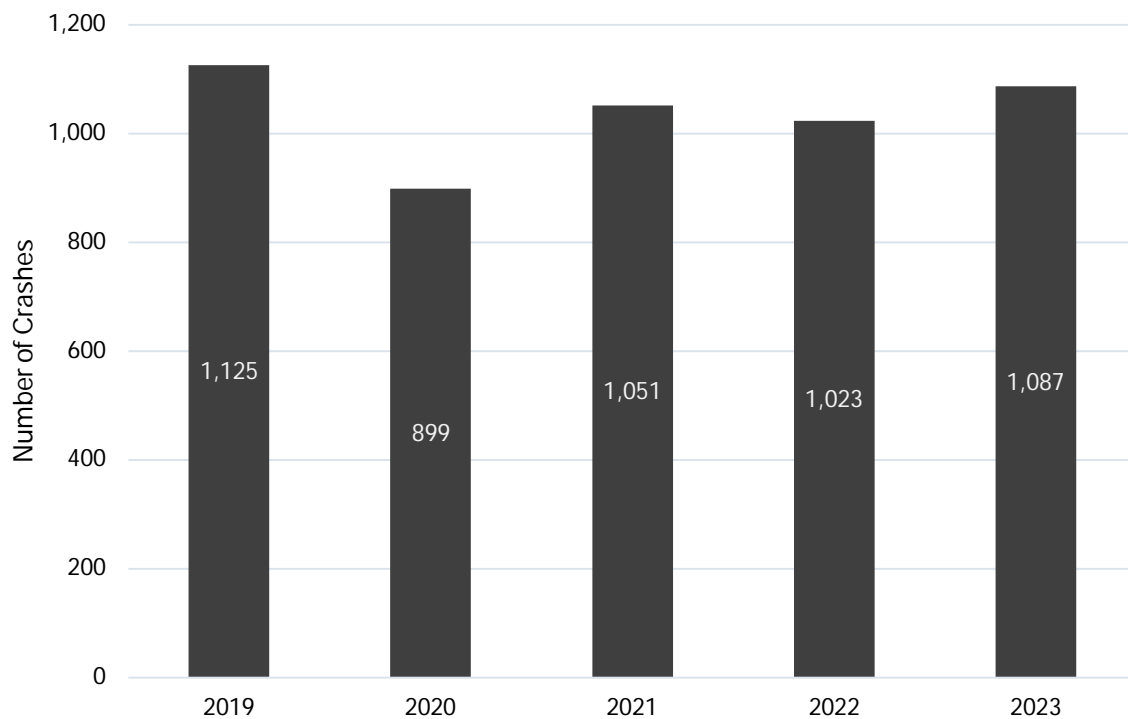


Figure 5. Crashes by Year in Iron County, 2019-2023

Table 5 summarizes crashes by severity and route type in Iron County for the five-year period (2019-2023). A review of the data shows:

- Approximately twice as many fatal crashes occurred on State Routes as compared to non-State Routes.
- The total number of crashes that occurred on State Routes is more than double that of non-State Routes.
- Approximately 5% of the crashes in Iron County were fatal or serious injury crashes.

Table 5. Crashes by Severity, 2019-2023

Route Type	State Route		Non-State Routes		Overall Total	
Crash Severity	Crashes		Crashes		Crashes	
	#	%	#	%	#	%
Fatal	27	0.8%	12	0.7%	39	0.8%
Suspected Serious Injury	109	3%	83	5%	192	3.7%
Suspected Minor Injury	428	12%	203	13%	631	12.2%
Possible injury	517	14%	202	13%	719	13.9%
No Injury / Property Damage Only	2,503	70%	1,101	69%	3,604	69.5%
Total	3,584	100%	1,601	100%	5,185	100%

3.1.2. Fatal and Serious Injury Crashes

The number of fatal and serious injury crashes by year is summarized in Figure 6. The number of crashes resulting in fatalities or serious injuries increased from 2019 to 2022. The highest number of fatal and serious injury crashes in the five-year analysis period occurred in 2021 with 11 fatal crashes and 40 serious injury crashes.

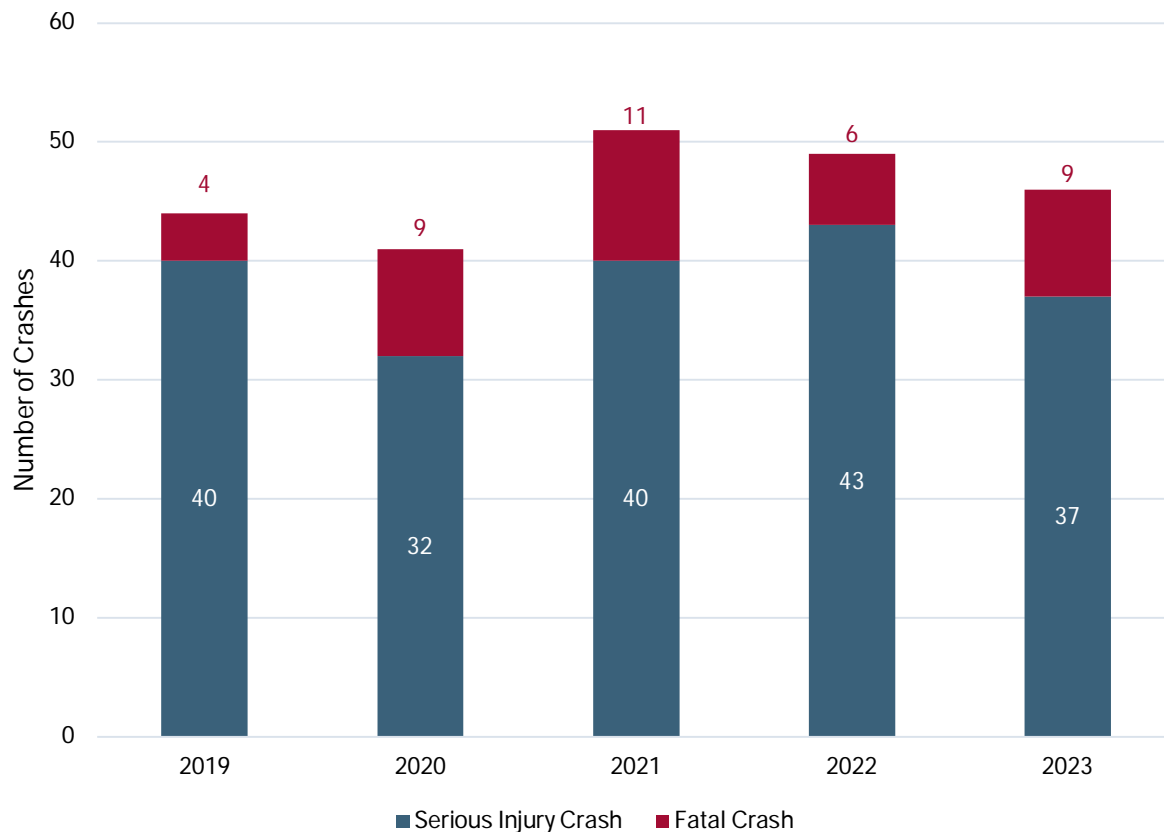


Figure 6. Number Of Fatal and Serious Injury Crashes by Year in Iron County, 2019-2023

The locations of the fatal and serious injury crashes are displayed in Figure 7 and show a prevalence along major roads such as I-15, SR-56, and SR-130.

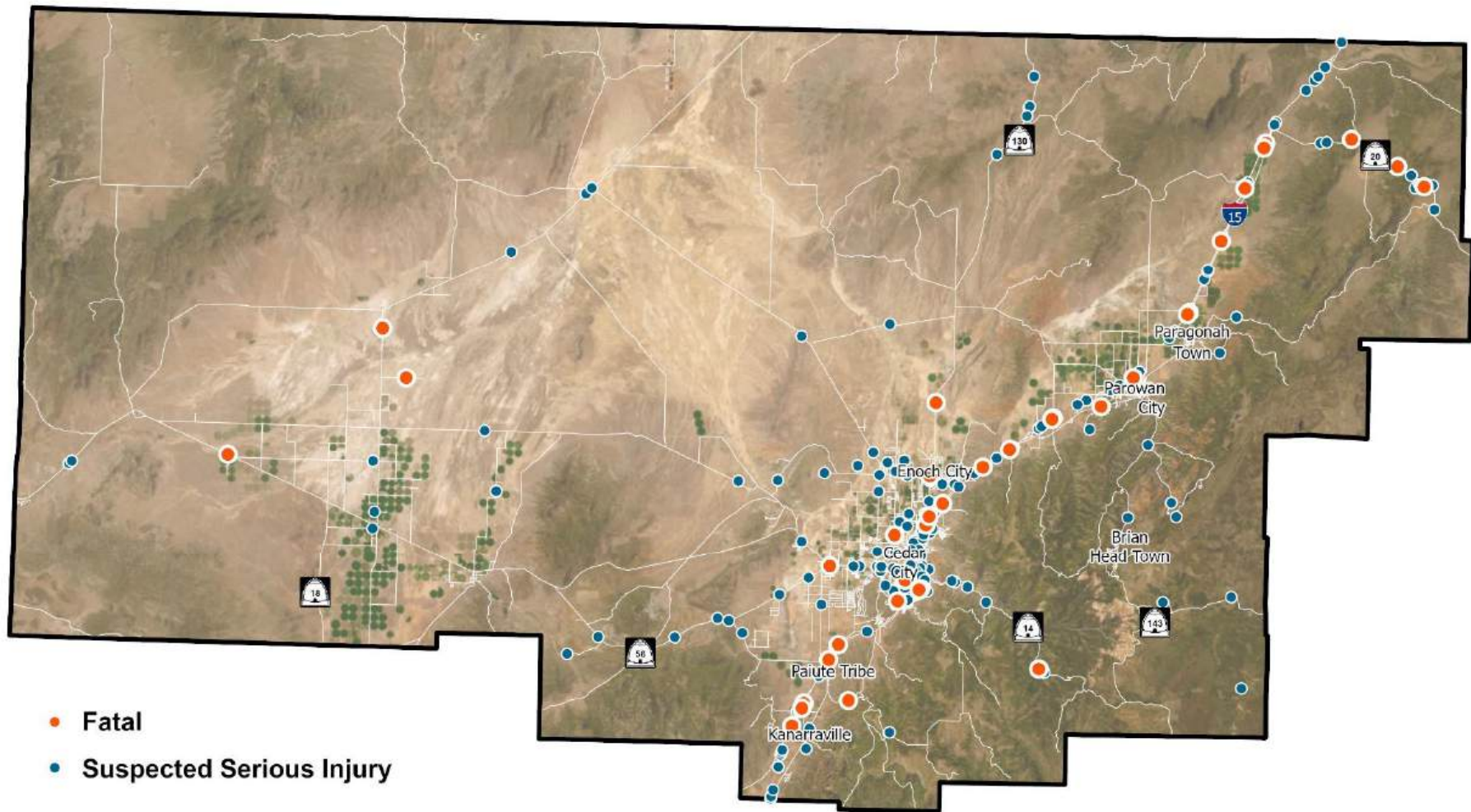


Figure 7. Fatal and Serious Injury Crashes in Iron County, 2019-2023

3.1.2.1. *Manner of Collision*

An overview of fatal and serious injury crashes by the most common manners of collision categories is shown in Figure 8. The manner of collision represents how two vehicles initially collided.³ The three most frequent manners of collision that resulted in a fatality or serious injury are single vehicle crashes, sideswipe crashes, and angle crashes.

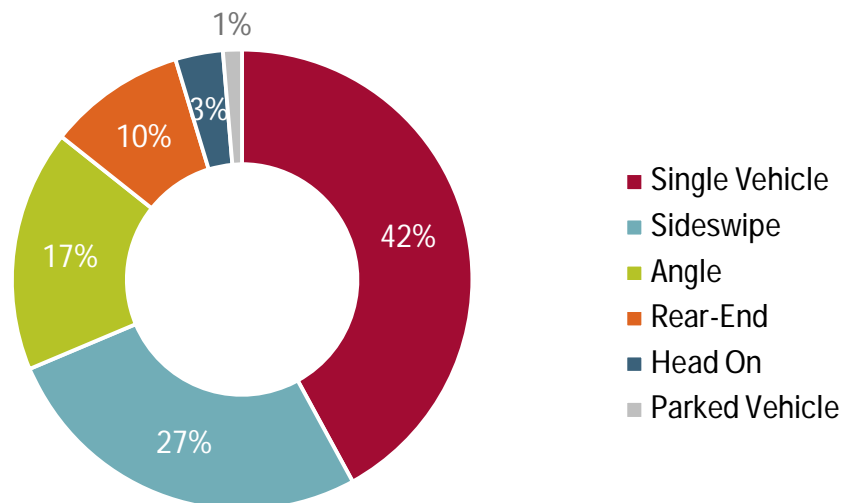


Figure 8. Most Common Fatal and Serious Injury Manners of Collision

3.1.2.2. *Crash Types*

The most common crash types for fatal and serious injury crashes are shown in Figure 9. Crash type represents a query of multiple data fields, including the manner of collision. Each crash is assigned only one primary crash type; examples include left turns at intersections, rear -ends, sideswipes, and roadway departure crashes.

The top 10 crash types for Iron County are summarized in Figure 9. The three most common crash types are roadway departure crashes, highway crossover crashes and “other” crashes. The crash type “other” may indicate a unique crash scenario or a gap in data.

³ The recorded manner of collision may overlap with the recorded crash type, as manner of collision is a more detailed categorization as compared to crash type that is summarized in Section 3.1.2.2.

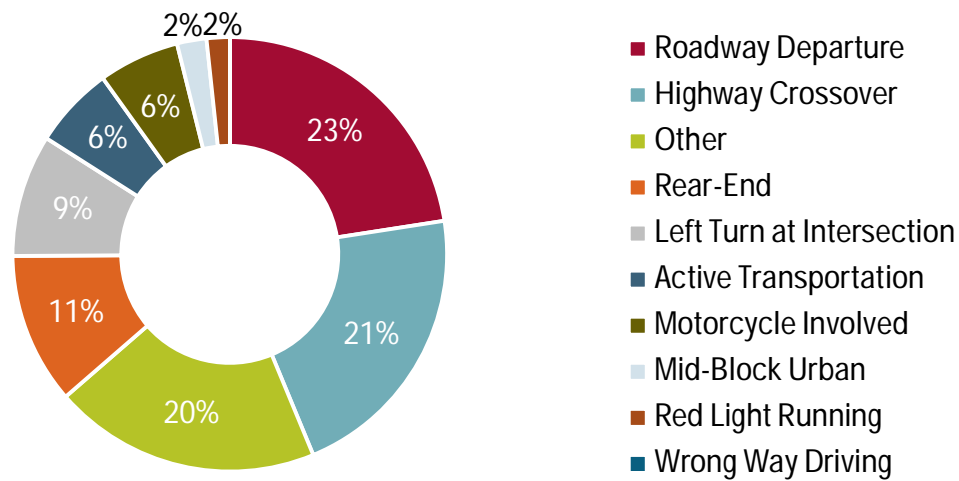


Figure 9. Most Common Fatal and Serious Injury Crash Types

3.1.2.3. Contributing Factors

Several factors may contribute to a single crash; however, the driver contributing factors shown in Figure 10 only represent the first driver-specific contributing factor as recorded in the crash report. The first driver contributing factor recorded in the crash report indicates the primary cause of a crash. A review of the data shows that the three most frequent driver contributing factors are failing to keep in proper lanes, failing to yield proper right-of-way, and speeding. The second most frequent driver contributing factor is "Other/Unknown," which may indicate a unique scenario or highlight a gap in data collection. The data shows that 19% of reported crashes from 2019 to 2023 did not have a reported driver contributing factor.

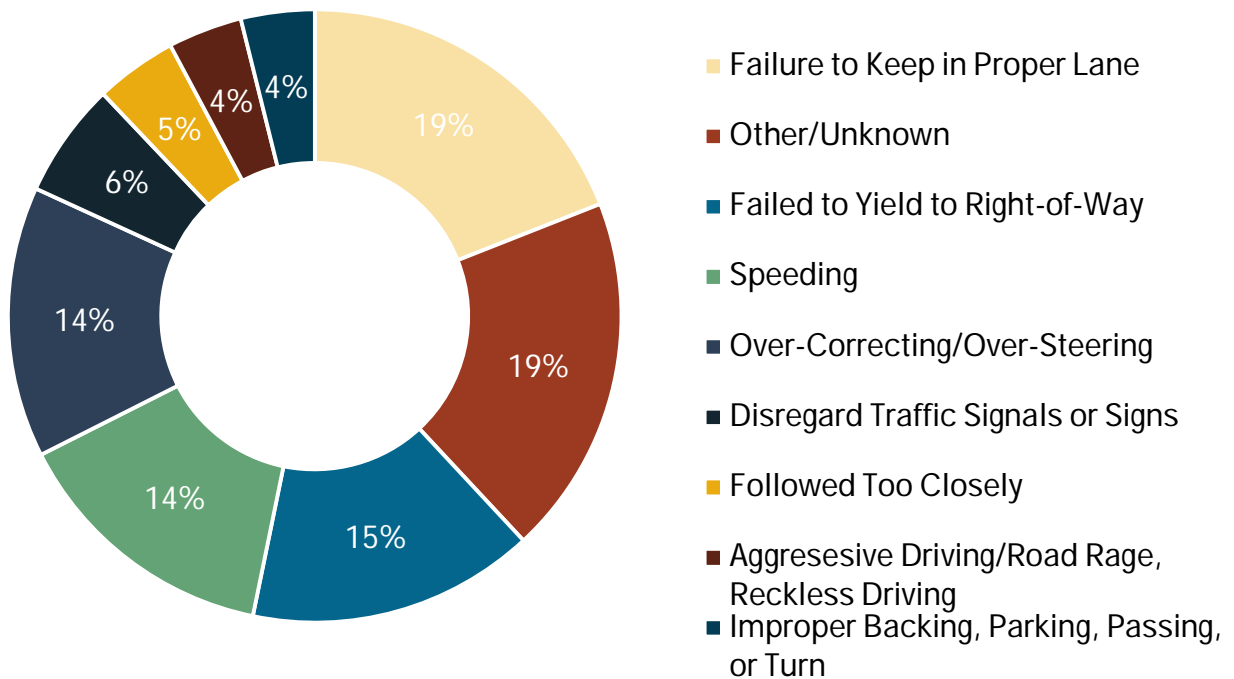


Figure 10. Most Common Fatal and Serious Injury Driver Contributing Factors

3.1.2.4. Vulnerable User Crashes

Vulnerable road users include pedestrians and bicyclists. The crash data shows 38 crashes involving pedestrians and 31 crashes involving bicyclists occurred from 2019 to 2023. Figure 11 shows bicycle-related crashes have decreased since 2019. Pedestrian-related crashes increased significantly after 2019, but in 2023, returned to a lower amount. Figure 12 provides an overview of the fatal and serious injury vulnerable user crashes and shows that both fatal and serious injuries for pedestrians have increased since 2019. The locations of these crashes are displayed in Figure 13 and show a prevalence along major roads in Cedar City such as 200 North (SR-56), Main Street, and Cross Hollow Road.

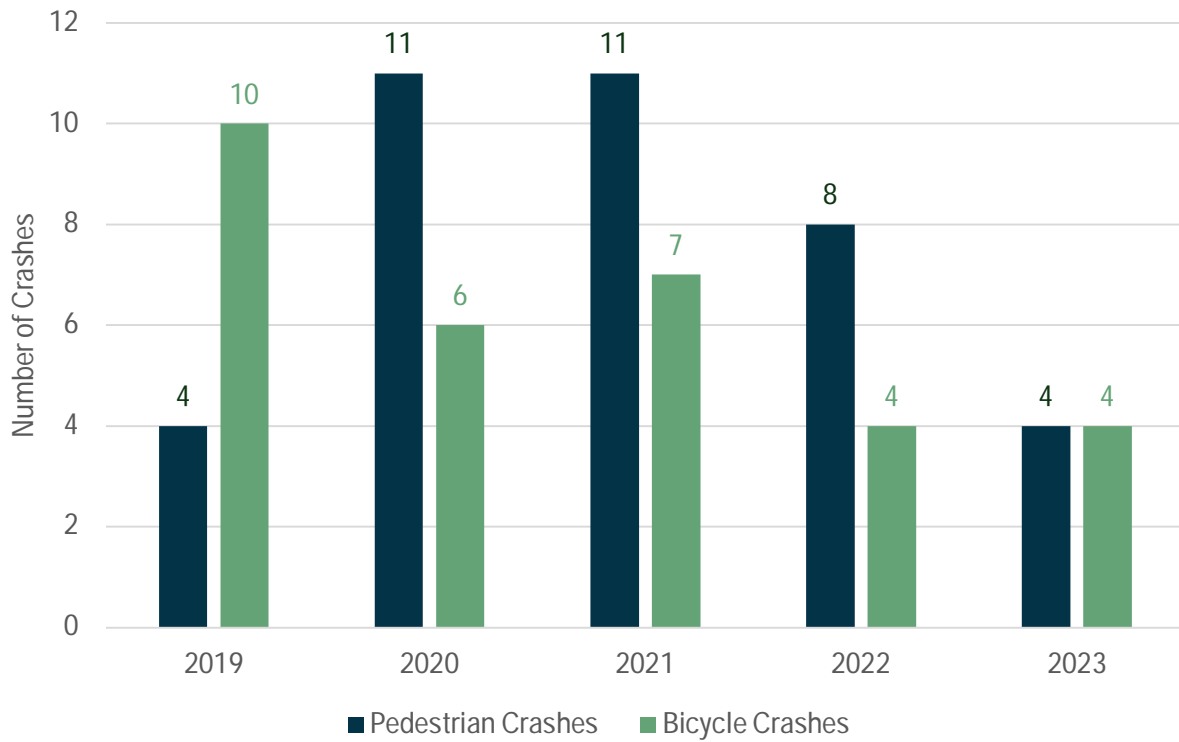


Figure 11. Vulnerable User Crashes by Year, 2019-2023

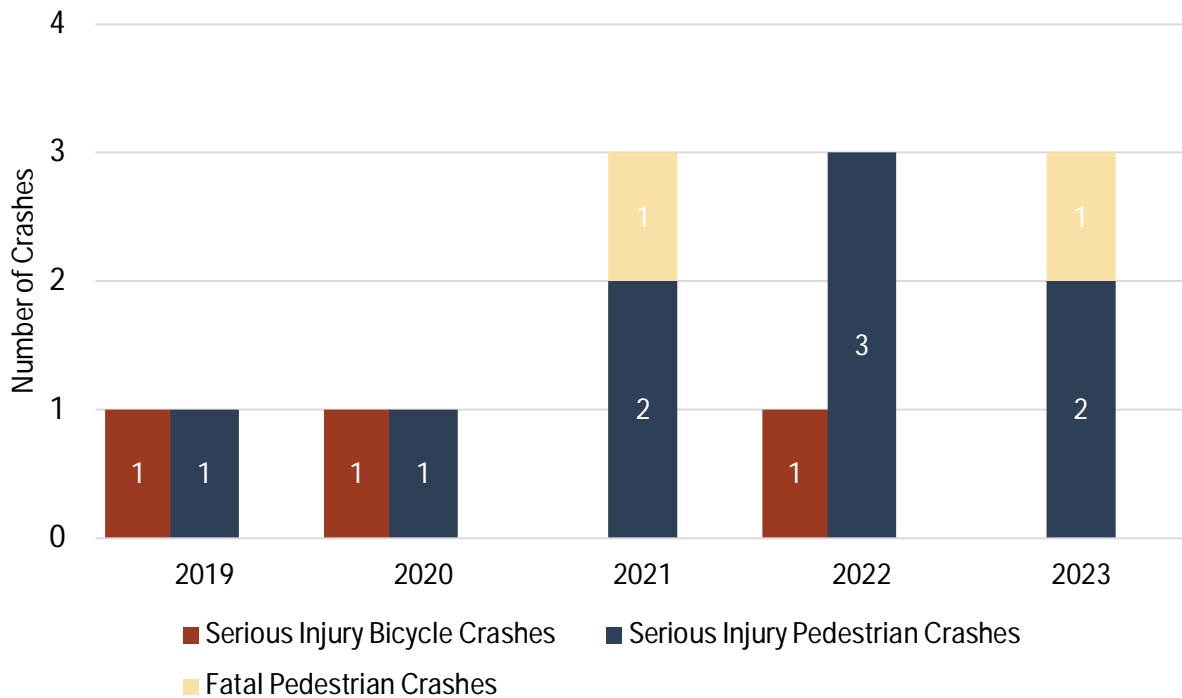


Figure 12. Fatal and Serious Vulnerable User Crashes by Year, 2019-2023

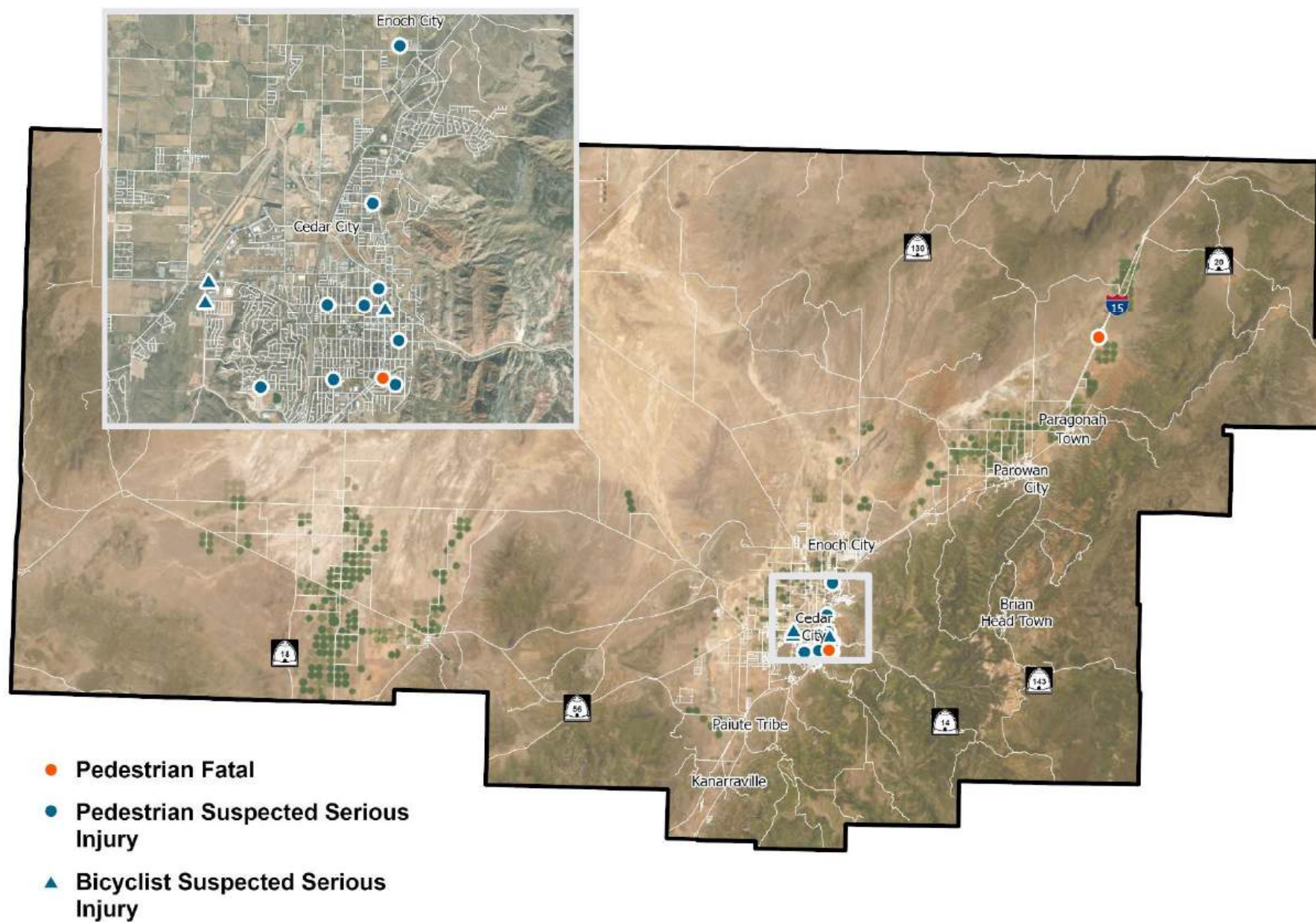


Figure 13. Fatal and Serious Injury Vulnerable User Crashes in Iron County, 2019-2023

3.2. Utah SHSP Emphasis Safety Areas

The Utah SHSP identifies 11 emphasis safety areas, grouped into three categories, to focus the effort of reducing traffic fatalities and serious injuries throughout the State of Utah. The Utah SHSP emphasis safety areas are shown in Figure 14.

To provide insight to emphasis areas in Iron County and each GFA, the number of fatalities and serious injuries corresponding to each emphasis area is compared to the total occurring in Utah.

A ranking is assigned to each emphasis area for the state, Iron County, and each GFA, based on the frequency of fatalities and serious injuries for that emphasis area. A fatality or serious injury may be assigned to multiple emphasis areas. Table 6 includes the total fatalities and serious injuries by emphasis area, and the rank order of emphasis area by the number of traffic fatalities and serious injuries. The table compares rankings for all of Utah, Iron County, and each GFA. Detailed SHSP emphasis area comparisons are provided for each GFA in Appendix A.

This analysis helps to determine priority emphasis areas for Iron County and each GFA, based on whether the ranked frequency of fatalities and serious injuries within the GFA are significantly different from the statewide or County total rankings.

The following five emphasis areas have the highest frequency of fatalities and serious injuries in Iron County. The SAP will identify strategies to address these priority emphasis areas:

1. Roadway departure
2. No safety restraints
3. Speed-related
4. Intersection
5. Teen driver

Utah SHSP Emphasis Safety Areas

- Teen Driving Safety
- Senior Safety
- Speed Management
- Aggressive Driving
- Distracted Driving
- Impaired Driving
- Use of Safety Restraints
- Intersection Safety
- Roadway Departure
Crashes
- Motorcycle Safety
- Pedestrian Safety

Figure 14. Utah SHSP Emphasis Areas

Table 6. Utah SHSP Emphasis Safety Area Rank Comparison

Category	Utah SHSP Emphasis Safety Area	Statewide		Iron County		Cedar City GFA	Enoch City GFA	East Iron County GFA	West Iron County GFA	I-15 GFA
		Fatalities and Serious Injuries	Rank	Fatalities and Serious Injuries	Rank	Rank	Rank	Rank	Rank	Rank
		9,470	#	287	#	#	#	#	#	#
Driver	Teen Driver	1,695	4	54	5	3	5	6	3	6
	Older Driver	1,565	7	49	6	2	3	5	9	4
	Speed-Related	2,268	3	78	3	7	9	2	2	3
	Aggressive Driving	615	11	19	10	9	8	9	9	9
	Distracted Driving	732	10	28	8	10	6	10	10	5
	Impaired Driving	1,100	8	27	9	11	7	5	6	7
	No Safety Restraints	1,627	5	85	2	8	1	4	4	2
Roadway	Intersection	3,683	1	67	4	1	2	8	5	11
	Roadway Departure	3,372	2	132	1	4	4	1	1	1
Vulnerable Users	Motorcycle	1,571	6	40	7	5	10	3	7	8
	Pedestrian	1,000	9	15	11	6	11	11	11	10
	Bicycle*	303	12	3	12	12	12	12	12	12

*Bicyclists are not one of the eleven Utah SHSP emphasis areas but was included as part of the SAP safety analysis.

4. SAFETY ANALYSIS METHODOLOGIES

The High-Risk Network for the SAP is developed using multiple safety analyses that identify roadway segments and intersections with the highest safety risk and needs. The High-Risk Network represents locations with the largest potential for safety improvement. The following methodologies contribute to the identification of a High-Risk Network:

- Historic Crashes
- Network Screening
- Conflict Areas
- Risk Characteristics

Figure 15 an overview of the safety analyses performed for the SAP. Each safety analysis component uses different data sets or methodology to help determine high-crash, high-injury, or high-risk locations to identify the resulting High-Risk Network. The four safety analyses combined leads to a High-Risk Score and Network from which potential safety improvement project locations may be identified. The High-Risk Network provides focused information for decisions regarding prioritization of safety improvements.

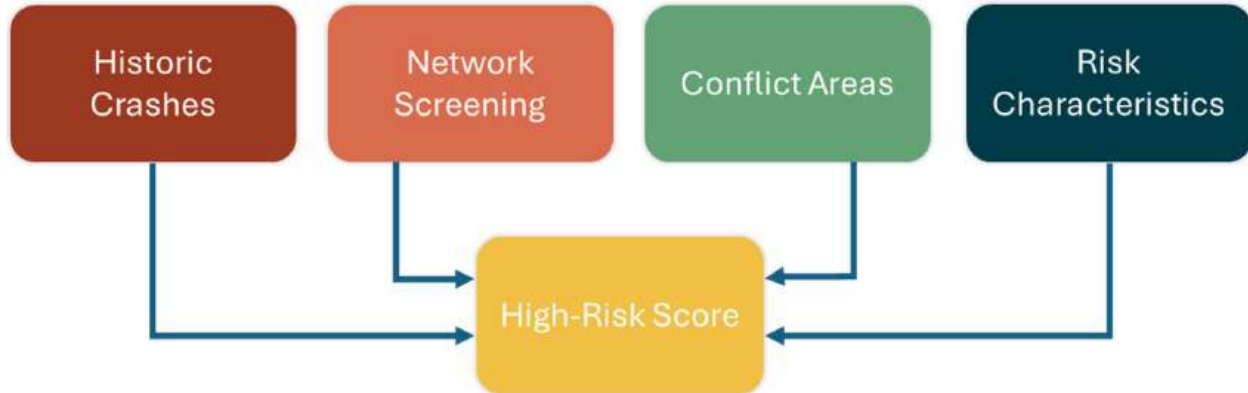


Figure 15. Safety Analysis Components

4.1. Historic Crash Analysis

Understanding the types and locations of vehicle crashes is an important part of analyzing the safety conditions of a roadway network. A component of the SAP is to identify locations with an elevated risk of crashes. The initial step of this analysis is to spatially reference crashes that occurred within the study area.

The following networks were created using the historic crash locations:

- High-Crash Network: Represents roadways and intersections that experience high crash rates and where most crashes occur
- High-Injury Network: Represents roadways and intersections where fatal and serious injury crashes often occur

4.1.1. High-Crash Network

Concentrations of crashes were identified by spatially referencing crashes to individual intersections and roadways, and calculating a crash rate (crashes per mile, all severities) for each roadway segment. For each intersection, a rate of crashes per entering vehicles was calculated. Entering vehicles data was obtained from UDOT.

The resulting High Crash Network represents locations where crashes are occurring at a higher rate in comparison to other locations.

The roadway network shown in Figure 16 illustrates the resulting High-Crash Network. The High-Crash Network includes locations where 50% of all crashes have occurred on the transportation network.

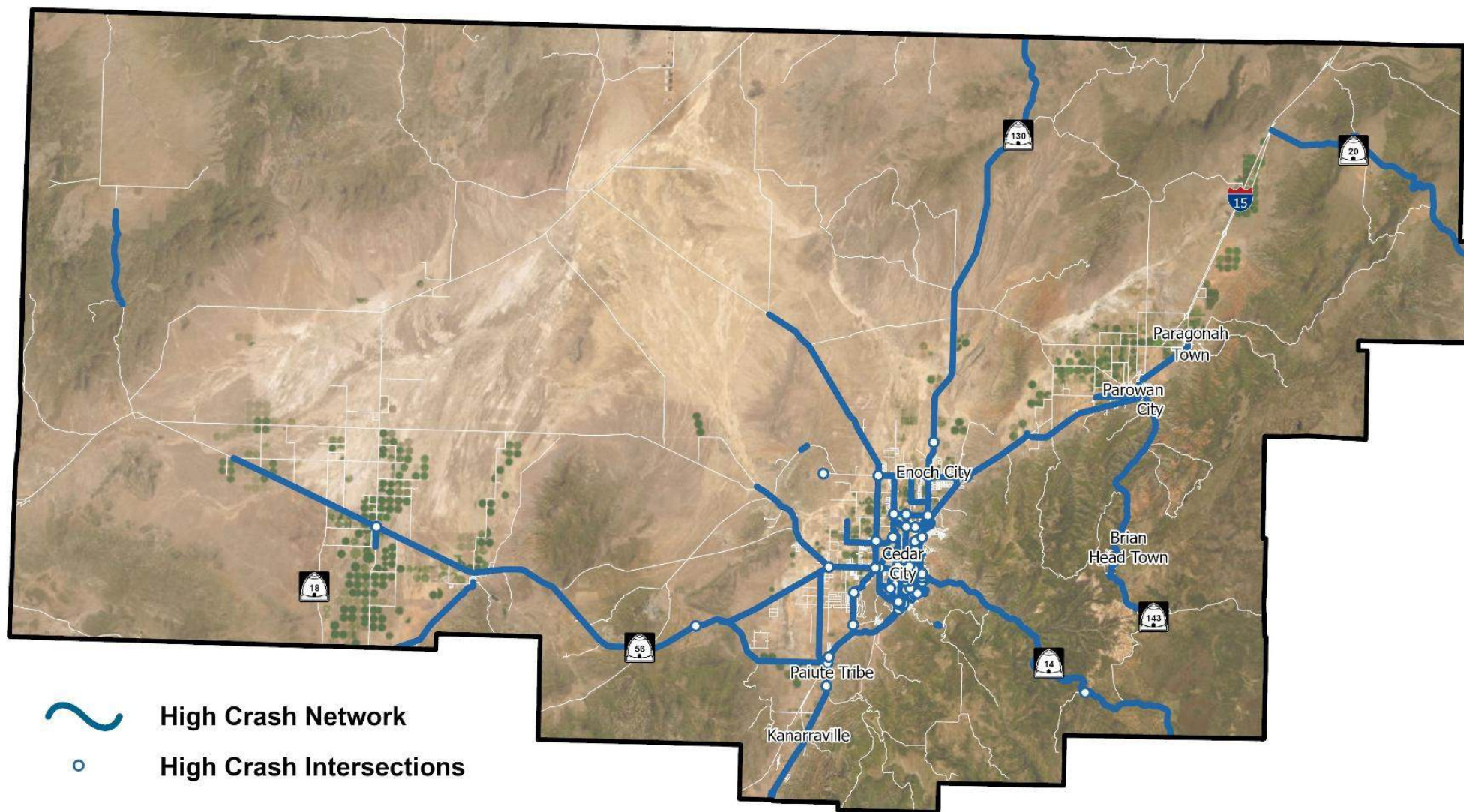


Figure 16. High-Crash Network in Iron County

4.1.2. High-Injury Network

The Safe System Approach strategies and countermeasures seek to not only reduce the number of crashes that occur, but also reduce the severity when a crash does occur. Identifying locations of fatal and serious injury crashes is key to detecting patterns in location or characteristics of the roadways or intersections that are potentially impacting the frequency of severe injury or fatal crashes.

The High-Injury Network was identified by spatially referencing fatal and injury crashes to the roadway network. An “injury rate” of fatal, serious injury, and minor injury crashes per mile was calculated for each roadway segment. A similar injury rate was calculated for intersections as, crashes per million entering vehicles.

Figure 17 shows the resulting High-Injury Network, which represents roadways and intersections where 50% of fatal and injury crashes occurred. Adjacent roadway segments were combined to illustrate more complete corridors or locations with safety issues.

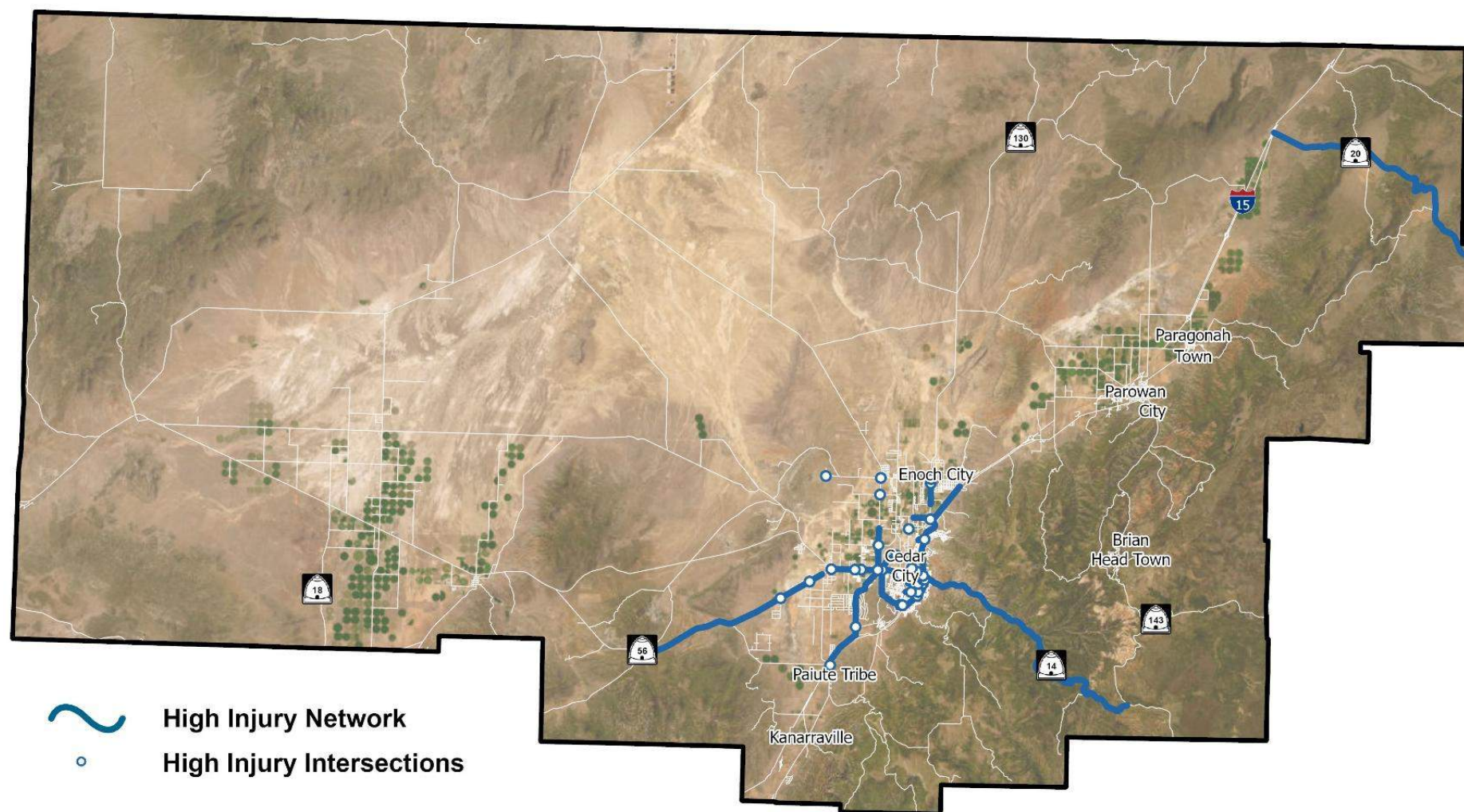


Figure 17. High-Injury Network in Iron County

4.2. Network Screening

The Highway Safety Manual, Volume 1 Part B, Roadway Safety Management Process outlines the process for agencies to monitor and reduce crash frequency and severity on existing roadway networks. The basic structure of the Roadway Safety Management Process is illustrated in Figure 18 and starts with a network screening.

Network screening identifies and ranks locations from most likely to least likely to realize a reduction in crash frequency with the implementation of a particular countermeasure or set of countermeasures. Locations identified as most likely to benefit from a reduction in crash frequency are then evaluated in more detail to identify crash patterns, contributing factors, and appropriate countermeasures. The network screening analysis applied in the SAP is based on the Highway Safety Manual Volume 1, Part B, Chapter 4.

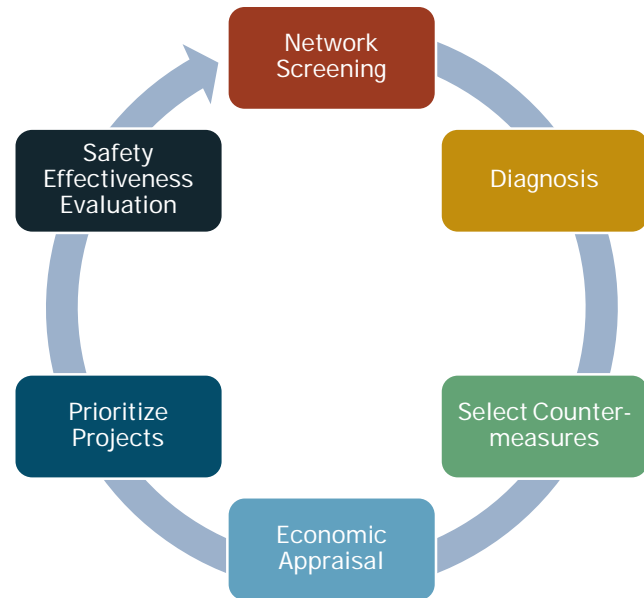


Figure 18. Roadway Safety Management Process

The network screening steps included the following:

1. Establish sub-populations of roadway segments and intersections with similar characteristics. Roadway segments are grouped by their roadway functional classification. Roadway functional classifications include interstate or freeway ramps, major arterials, secondary arterials, collector arterials and local streets. Intersections are grouped by their control type, either signalized or unsignalized.
2. Calculate individual crash rates for each sub-population.
3. Identify locations with more crashes than expected by comparing to the sub-population level crash rates. This is known as the *critical crash rate analysis*.

Each crash metric is summarized in the following sections and the detailed results for Each GFA is provided in Appendix A.

4.2.1. Critical Crash Rate

The critical crash rate method is a statistical review of locations to determine where risk is higher as compared to similar locations with the same functional classification and similar traffic volumes. It also helps to identify systemic patterns that may be prioritized and addressed.

The critical crash rate analysis compares the observed crash rate to the expected crash rate at a particular location, based on the facility type and traffic volume using a calculated average crash rate for the specific type of intersection or roadway segment being analyzed. Based on UDOT collected traffic volumes and a weighted crash rate for each facility type, a critical crash rate threshold is established at the 95% confidence level to determine locations with higher crash rates that are unlikely to be random. The threshold is calculated for each location based on its traffic volume and the crash profile of similar facilities, consistent with equations specified in the Highway Safety Manual, Chapter 4.

A critical crash rate differential is determined for each intersection and roadway segment by calculating the difference of the location-specific critical crash rate and the expected critical crash rate. A positive critical crash rate differential indicates a location with higher-than-expected crashes or a location with a potential for safety improvement.

The analysis identifies intersections and roadway segments with the highest critical crash rate differentials for all roadways and intersections in Iron County

4.2.2. Network Screening Results

Roadway segments and intersections identified through critical crash rate analysis are shown in Figure 19. These locations represent those with a positive critical crash rate differential. A positive critical crash rate differential is an indication of a location with a potential for safety improvement. A detailed list of each roadway segment and intersection is provided in Appendix A with the associated number of crashes. These locations represent those with the highest potential for safety improvement and should be considered as potential project locations.

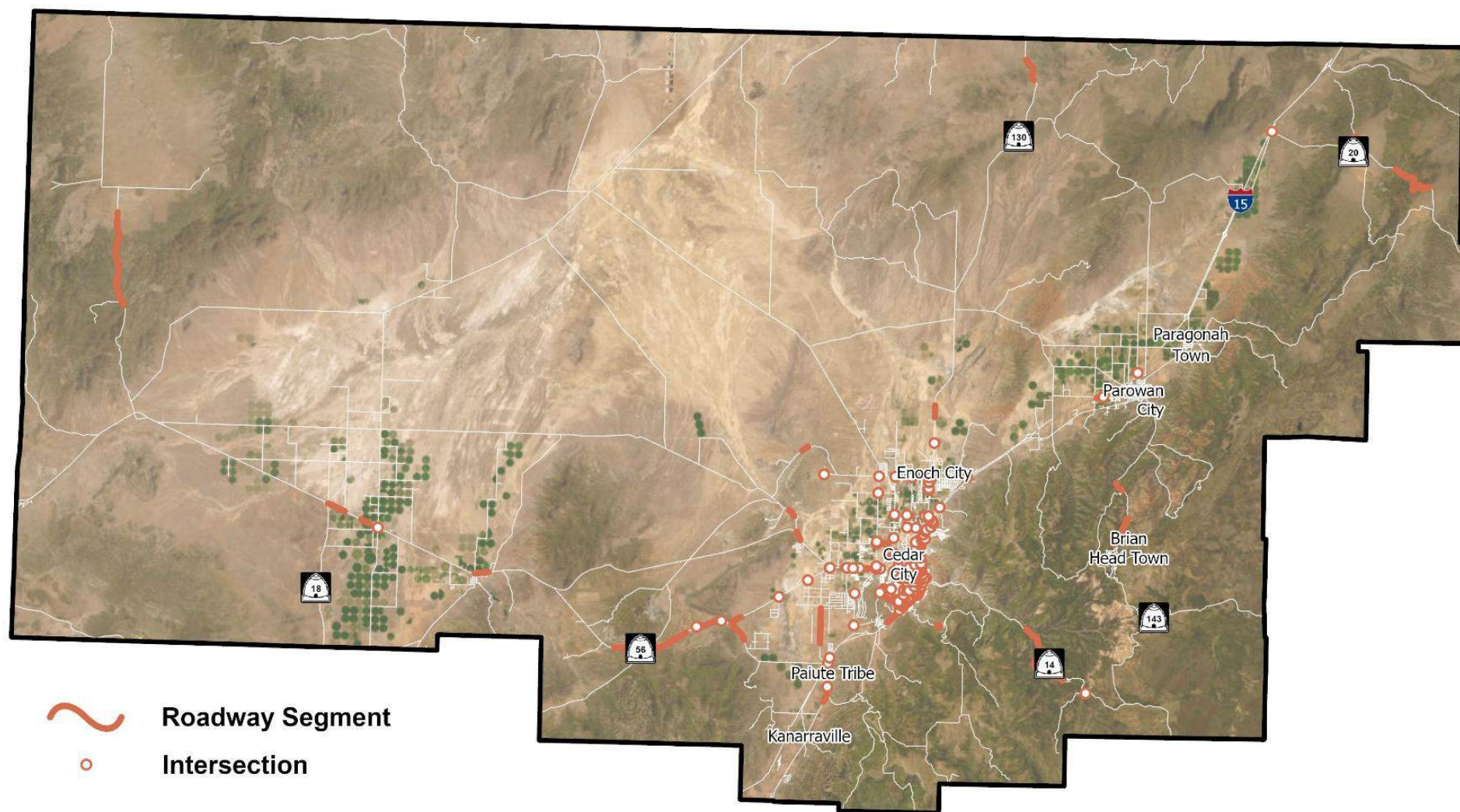


Figure 19. Critical Crash Rate Roadway Network in Iron County

4.3. Conflict Areas

Conflict Areas analysis used data provided by Replica, obtained for the Iron County area, to proactively address areas of greater potential safety risks. Replica is an online data platform that aggregates cellular data to identify mobility patterns and trends in travel. Replica provides a digital application called Safe Streets Planner that combines detailed multimodal data with driving event data to identify and prioritize high conflict or risk corridors.

Replica's cellular data includes indicators of certain risky behaviors including speeding, distracted driving, and hard-braking. The number of instances or "events" of risky behaviors is used to calculate a risk score for each roadway. Risky events captured in the data include speeding, phone handling, sudden braking, sudden acceleration, and suspected collisions (or near-miss collisions). Risk scores are calculated to represent the proportion of risky events to the number of total vehicle trips on a roadway. Roadways with higher risk scores represent roadways with the most safety conflicts.

The following metrics were isolated in Replica to identify the highest risk roadways in Iron County from the data set:

- Speeding
- Non-Speeding Events: Suspected Collisions, Phone Handling (Distracted Driving), and Sudden Braking
- Active Transportation (pedestrians and bicyclist) high-risk corridors

The maximum risk score is 100 points. Roadways with a risk score of 80 or more in any of the Replica metrics analyzed are included in the Replica Conflict Network shown in Figure 20 and Figure 21 for Iron County.

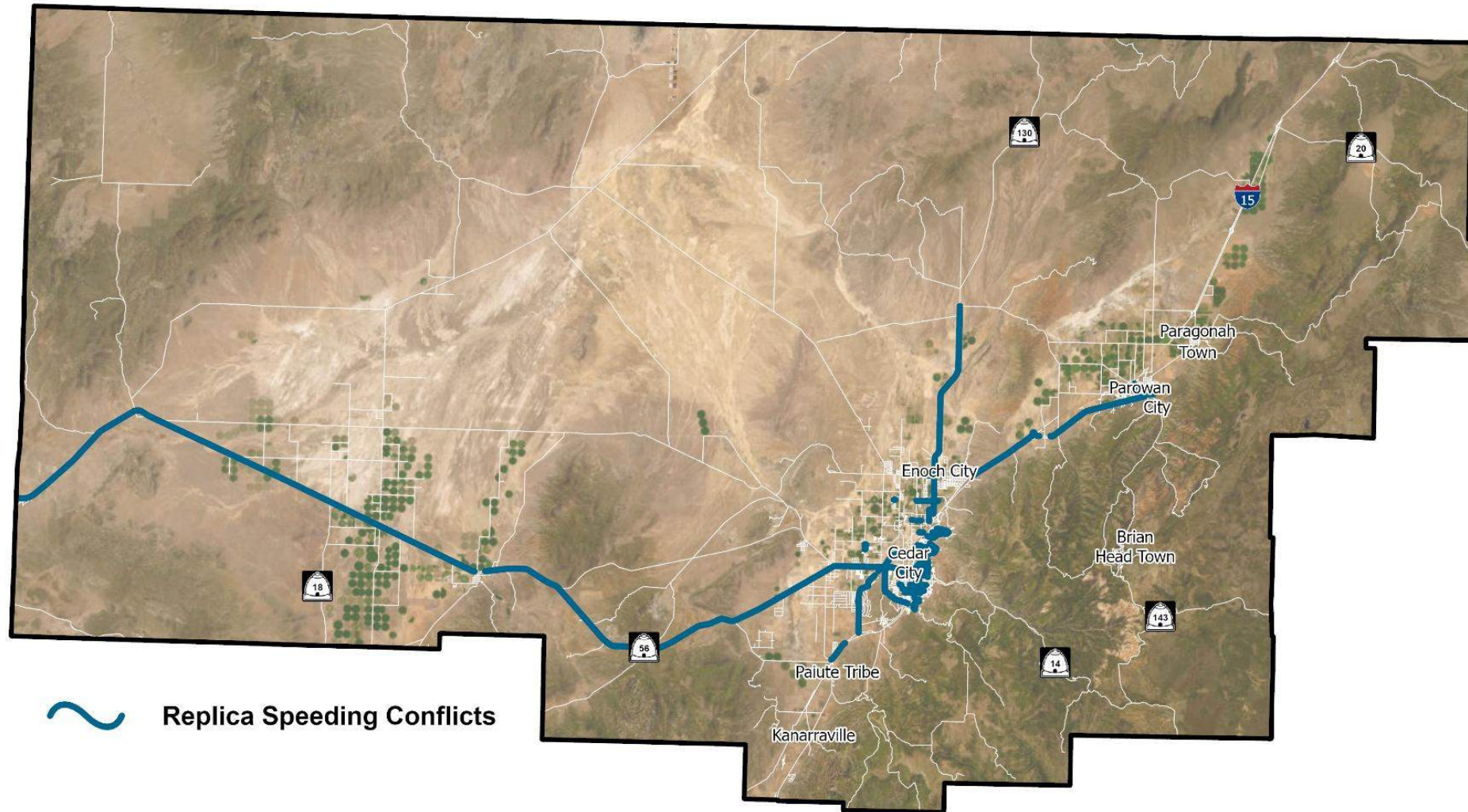


Figure 20. Replica Speeding High-Risk Roadway Network in Iron County

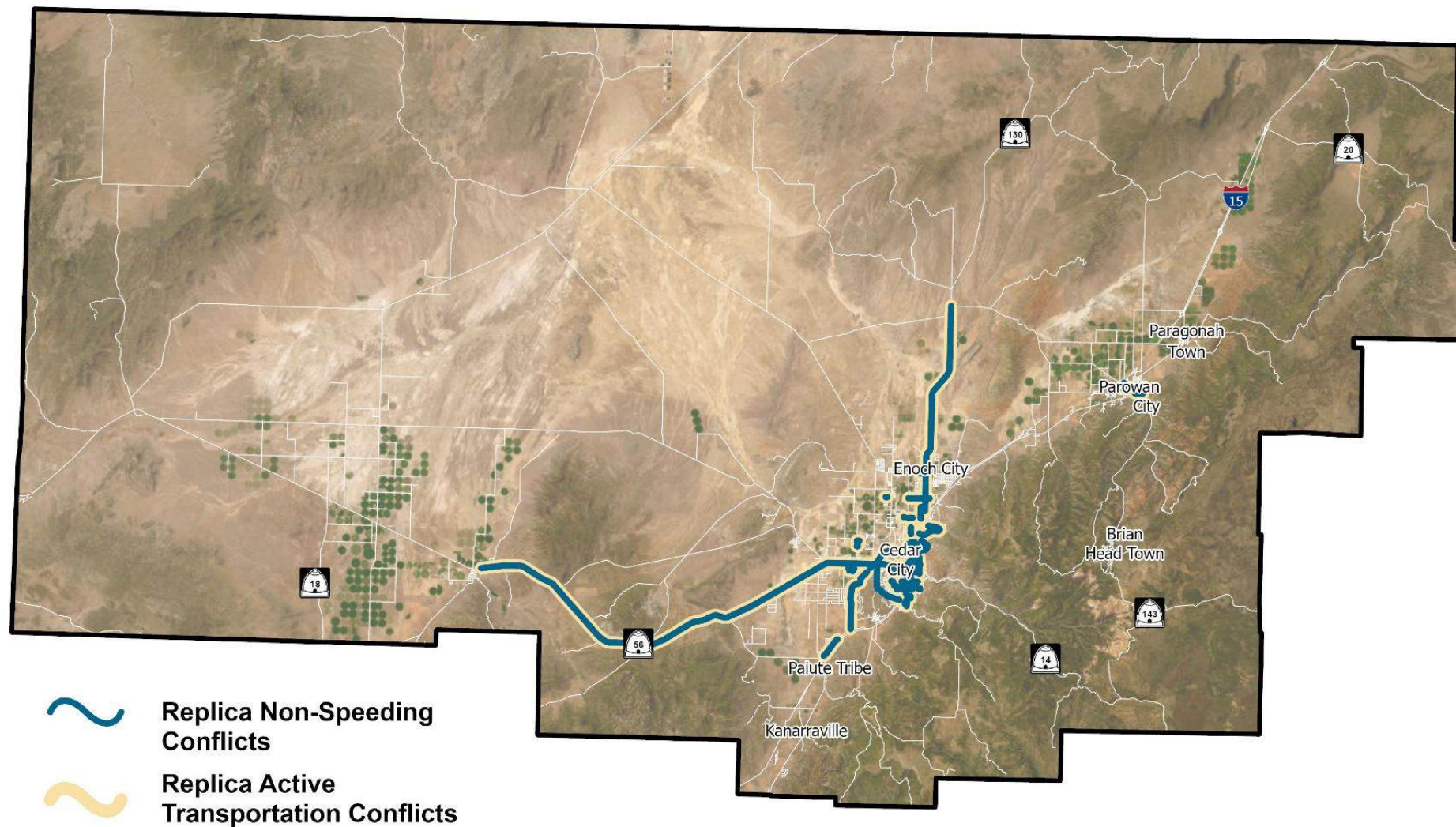


Figure 21. Replica Non-Speeding Roadway Network in Iron County

4.4. Roadway Characteristics Risk Analysis

A roadway characteristic risk analysis was performed to identify characteristics that may lead to fatal and serious injury crashes occurring on roadway segments within each GFA, using the following two sub-analyses:

- Crash Profile Risk Assessment
- usRAP Risk Factors Analysis

4.4.1. Crash Profile Risk Assessment

The Crash Profile Risk Assessment reviewed fatal and serious injury crashes reported in the SAP study area to identify attributes that correspond to a higher frequency of fatal and serious injury crashes. A point value was assigned to each characteristic or attribute based on the frequency per the review. A risk factor score was calculated for each state and federal aid route. Note, the dataset used in this analysis is only available for state or federal aid routes.

Table 7 outlines the Crash Profile Risk factor scoring framework. The roadway characteristic data used in this assessment is extracted from UDOT's United States Road Assessment Program (usRAP) dataset. UDOT collects and maintains usRAP data for state and federal aid routes for the entire state. Local roads were not included in this analysis because sufficient data regarding their attributes is not available. This analysis identifies roadway segments where improvements may be made to reduce potential for crashes. Figure 22 shows the Crash Profile Risk network in Iron County.

Table 7. Crash Profile Risk Assessment Scoring

Risk Factor	Characteristic	Measurement & Points	Max Points	Explanation
Traffic Volume	Average Annual Daily Traffic (AADT)	1: <750 2: 750-1,000 3: 1,000-1,350 4: 1,350-2,000 5: 2,000+	5	A review of regional crash data shows that: Roadways with more than 2,000 ADT experience approximately 75.4% of all crashes. Roadways with ADT of 10,000 to 20,000 experience approximately 66.3% of all fatal and serious injury crashes.
Speed	Speed Limit – Miles Per Hour (MPH)	1: ≤ 25 2: 30 MPH 3: 40 MPH 4: 50 MPH	5	A review of regional crash data shows that:

Risk Factor	Characteristic	Measurement & Points	Max Points	Explanation
		5: ≥ 60 MPH		71.4% of fatal and serious injury crashes occurred on roadways with a posted speed limit of 50 MPH. 21.4% of fatal and serious injury crashes occurred on roadways with a posted speed limit of 40 MPH or less. 7.1% of fatal and serious injury crashes occurred on roadways with a posted speed limit of 60 mph or above.
Roadway Type	Cross Section	2: 4 Lane Undivided 3: 2 Lane w/TWLTL 4: 4 Lane w/TWLTL 5: 2 Lane Undivided	5	A review of regional crash data shows that: 36.8% of fatal and serious injury crashes in rural areas occurred on two-lane undivided roadways. 30.2% of fatal and serious injury crashes in rural areas occurred on four-lane undivided roadways. 26.6% of fatal and serious injury crashes in rural areas occurred on four-lane roadways with TWLTL.
Lighting Condition	Presence of Lighting	0: Lighting 5: No Lighting	5	FHWA estimates that lighting can reduce crashes by up to 28% (for night-time injury crashes).
Access Density	Presence of Commercial Access	0: No Commercial Access 5: Commercial Access	5	5.6% of fatal and serious injury crashes occurred on segments with at least one commercial access.
Centerline Condition	Presence of Centerline Rumble Strip	0: Rumble Strip 5: No Rumble Strip	5	FHWA estimates that centerline longitudinal rumble strips can reduce head-on fatal and serious injury crashes by 44%-64%
Shoulder Condition	Presence of Shoulder Rumble Strip	0: Rumble Strip 5: No Rumble Strip	5	FHWA estimates that shoulder rumble strips can reduce single vehicle, run-off-road fatal and serious injury crashes on two lane rural roads by 13%-51%
Shoulder Condition	Presence of Paved Shoulder	1: $\geq 3.3'$ Paved Shoulder 3: $< 3.3'$ Paved Shoulder 5: No Paved Shoulder	5	11.3% of fatal and serious injury crashes occurred on segments with non-paved shoulders.
Roadside Hazard	Presence of Fixed Object	0: No Roadway Fixed Object 1: Distance to Fixed Object ($\geq 16.4'$)	5	HSM crash prediction models for urban roadways segments indicate a reduction in total crashes with greater offsets to fixed objects

Risk Factor	Characteristic	Measurement & Points	Max Points	Explanation
		3: Distance to Fixed Object (3.3'-< 16.4') 5: Distance to Fixed Object (< 3.3')		
Geometrics	Curve	0: No Curve or Gentle Curve 2: Moderate Curve 5: Sharp or Very Sharp Curve	5	25.4% of fatal and serious injury crashes in the study area occurred on roadways with sharp or very sharp curves.

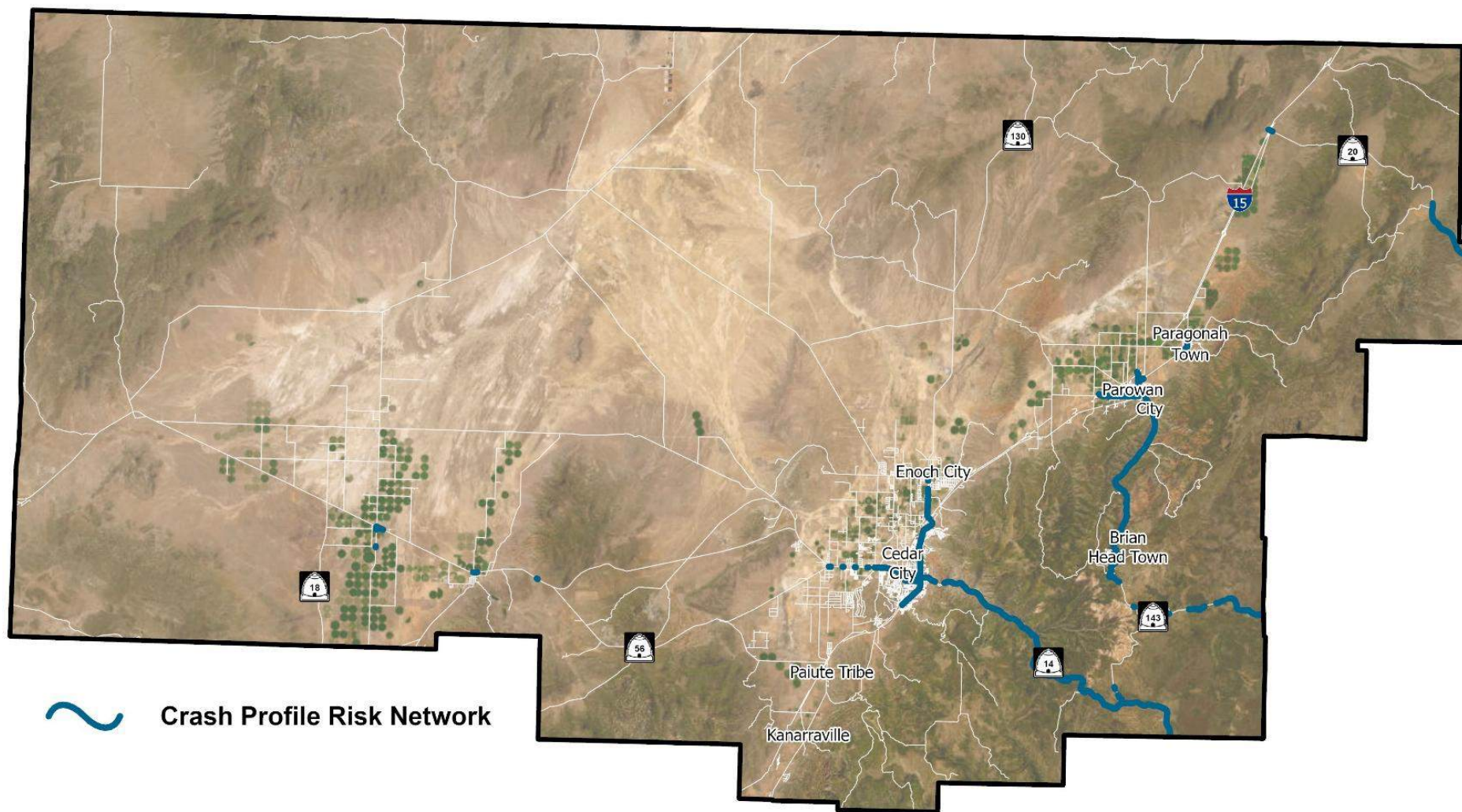


Figure 22. Crash Profile Risk Roadway Network in Iron County

4.4.2. usRAP Risk Factors Analysis

The usRAP is a proactive tool for analyzing the safety of a roadway. usRAP is recommended to be supplemented by other crash data and safety assessments.

Software (known as ViDA) analyzes usRAP roadway data and outputs star ratings on a 1-5 scale for vehicle, pedestrian, and bicycle risk. Star ratings are assigned to each segment of a roadway network. Star ratings consider road infrastructure attributes known to impact the likelihood of a crash occurring and its severity. A roadway's star rating is based on the presence or absence of design and traffic control features. Stars are awarded depending on the level of safety that is "built-in" to the roadway. Five-star roadways have the most safety-related design and traffic control features. One-star roadways have the fewest safety-related design and traffic operational features. In practice, 5-star rated roads are rare. The safest roads are usually in the 3 star and above range. The best candidates for safety improvements usually fall in the 2 star and below range.

Separate star ratings are assigned for vehicle occupants, bicyclists, and pedestrians. The star ratings consider factors related to both crash likelihood and crash protection. Previous research has demonstrated that the vehicle-occupant star ratings for roads are strongly related to fatal and serious injury crash frequencies. Figure 23 provides a summary of the usRAP star rating system including characteristics that lead to the star rating.



Information from usRAP Summary Memorandum

Figure 23. usRAP Star Rating Description

Figure 24 shows the usRAP star rating for all Iron County. Segments with a 1–2-star rating within each GFA are summarized in each GFA in Appendix A.

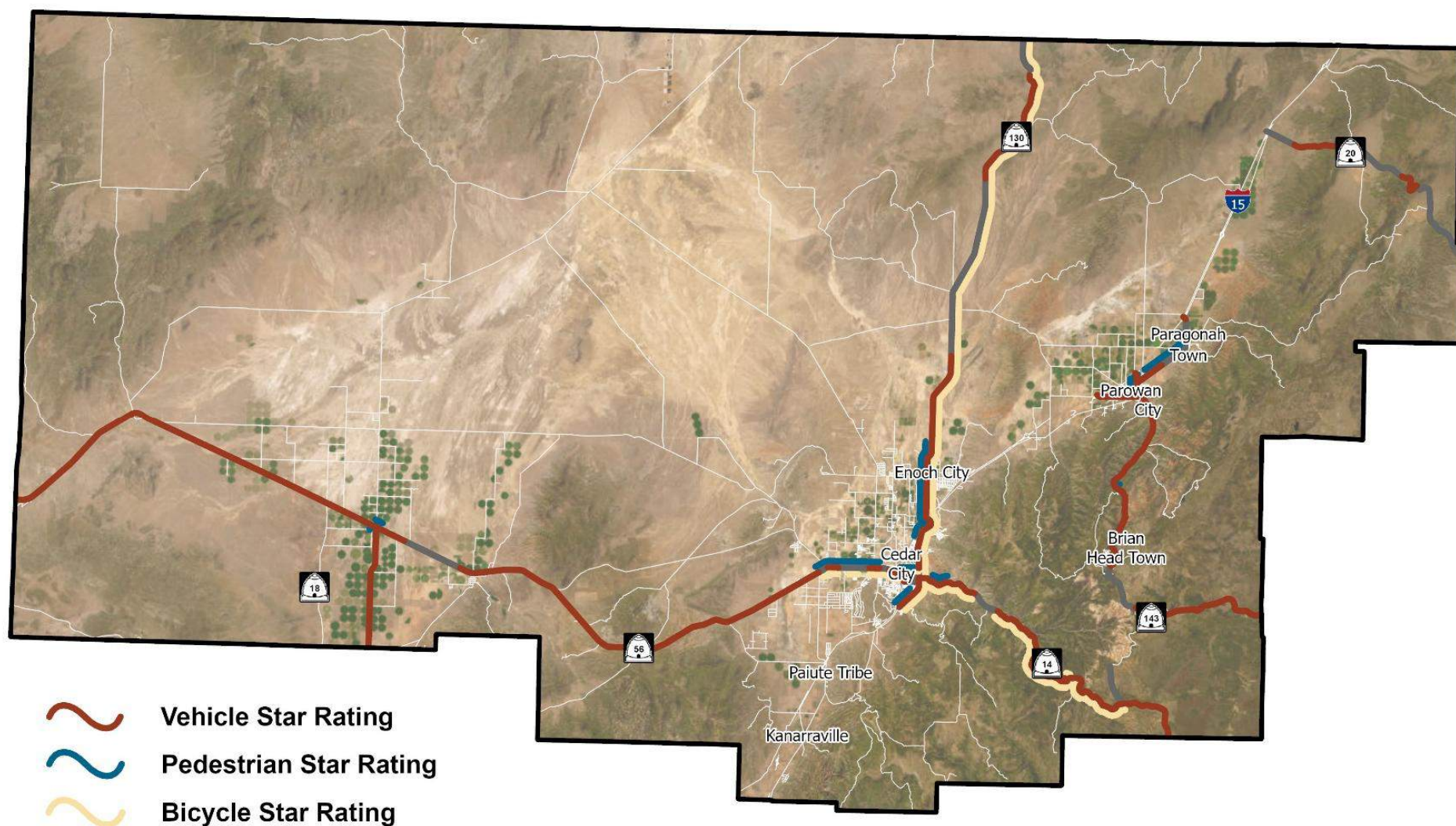


Figure 24. usRAP Risk Star Rating Roadway Network in Iron County

4.5. High-Risk Network Identification

Each of the safety analysis methodologies identified roadway segments or intersections that may benefit from safety improvements to reduce fatalities and serious injuries.

To provide focused information for decisions regarding prioritization of safety improvements, an overlay of each analysis methodology is created to form a High-Risk Network.

Locations included on the High-Risk Network are those identified with the highest safety risk. Note that the High-Risk Network includes intersections identified in the high crash network, high-injury network and the critical crash rate analysis. The High-Risk Network is illustrated in Figure 25.

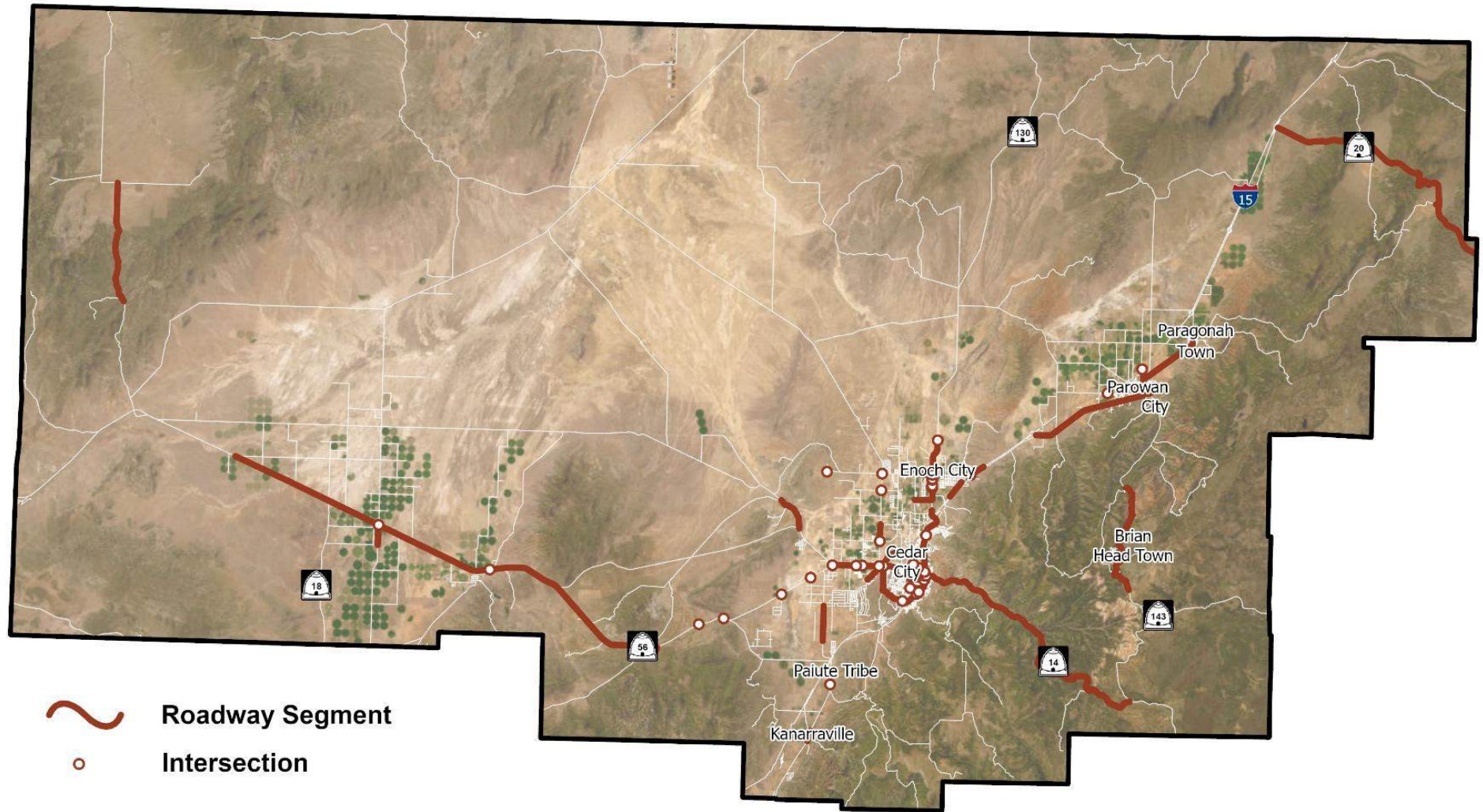


Figure 25. High-Risk Network in Iron County

5. CONCLUSION AND NEXT STEPS

The Safety Action Plan for Iron County will develop a holistic strategy to reduce traffic fatalities and serious injuries on Iron County roadways. The SAP recommendations will be based on the Safe System Approach, a guiding paradigm to address roadway safety and mitigate the risk inherent in complex transportation systems.

The SAP will prioritize strategies to address safety needs identified from the crash analysis. The crash analysis identified trends based on a historical review of crashes and a comparison to the Utah SHSP emphasis areas.

- Historical crash analysis: Provides an overview of the most frequent crash types and contributing factors.
- Utah SHSP Emphasis Area Comparison: Crashes in Iron County are grouped based on the Utah SHSP Emphasis Areas and are compared to statewide crash data.

The resulting High-Risk Network is a product of the overlay of several individual safety analysis of the roadway and intersection network.

- High-Crash Network: Includes roadways and intersections on which 50% of all crashes occurred and experience high crash rates.
- High-Injury Network: Includes roadways and intersections on which 50% of fatal and serious injury crashes occurred.
- Network Screening: Identifies and ranks locations from most likely to least likely to realize a reduction in crash frequency with the implementation of a particular countermeasure or set of countermeasures.
- Conflict Areas: Identifies roadways where risky, unsafe behaviors typically occur.
- Risk Characteristics: Includes roadways with characteristics that typically contribute to fatal and serious injury crashes.

The crash analysis and High-Risk Network will help inform the identification of locations where safety recommendations could be considered. These locations will be reviewed with stakeholders at workshops scheduled for February 2025. The stakeholders may also discuss the types of safety-focused projects that should be considered. Based on input from the sub-committee, potential projects and strategies will be identified for high priority locations.

6. GEOGRAPHIC FOCUS AREA ANALYSIS RESULTS

A summary of safety analysis results based on the methodologies described in this report for each GFA are compiled in Appendix A. Table 8 identifies the Appendix number by GFA.

Table 8. GFA Directory for Appendix A

Geographic Focus Area	Appendix #
Cedar City	A1
Enoch City	A2
East Iron County	A3
West Iron County	A4
Interstate-15 (I-15)	A5

7. APPENDICES

7.1. Appendix A – Geographic Focus Areas Safety Analysis and Results

7.1.1. Appendix A.1 Cedar City GFA Safety Analysis and Results

7.1.2. Appendix A.2 Enoch City GFA Safety Analysis and Results

7.1.3. Appendix A.3 East Iron County GFA Safety Analysis and Results

7.1.4. Appendix A.4 West Iron County GFA Safety Analysis and Results

7.1.5. Appendix A.5 Interstate 15 GFA Safety Analysis and Results



APPENDIX A.1. CEDAR CITY GFA SAFETY ANALYSIS AND RESULTS

TECHNICAL MEMORANDUM #1

APPENDIX A1

CEDAR CITY GEOGRAPHIC FOCUS AREA SAFETY ANALYSIS

Statutory Notice

23 U.S.C. § 409: US Code - Section 409: Discovery and admission as evidence of certain reports and surveys

Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway- highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

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1. INTRODUCTION

Appendix A1 summarizes the safety analysis performed for the Cedar City Geographic Focus Area (GFA) as part of the Safety Action Plan for all Iron County (SAP).

The safety analysis identified roadway segments and intersections with the highest safety risk and need. The resulting High-Risk Network represents locations with the largest potential for safety improvement. The network helps inform the identification of potential project locations that may be further considered in the SAP.

1.1. Safety Analysis

The safety analysis methodologies are presented in **Section 4** of Technical Memorandum #1 and include the components shown in **Figure 1**. Results of each component are shown in **Table 1**.

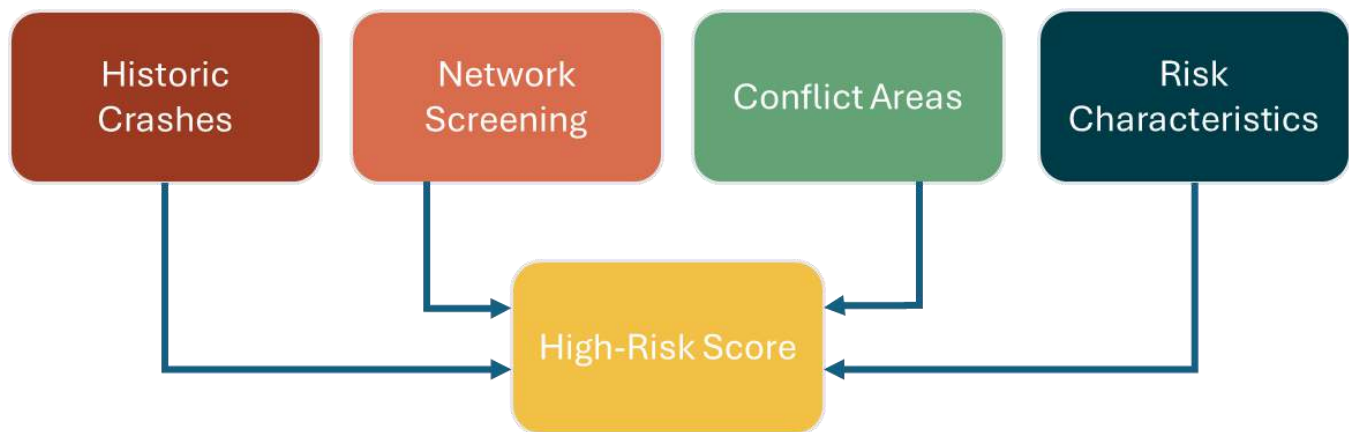


Figure 1. Safety Analysis Components

Table 1. Safety Analysis Components and Results

Safety Analysis Component	Analysis Result(s)
Historical Crash Overview	Frequent crash types and common contributing factors.
Strategic Highway Safety Plan (SHSP) Emphasis Area Analysis	Ranked emphasis areas based on GFA, Iron County, or Statewide crashes.
Historical Crash Analysis	High-crash network.
	High-risk network.
Network Screening Analysis	Critical crash rate network.
Conflict Areas	Speeding, phone handling, sudden braking, and suspected collision networks.
Risk Characteristics	Crash Profile Risk Assessment
	usRAP Risk Factors Analysis

1.2. Appendix Organization

Appendix A1 is organized into the following sections:

- **Section 1** – Introduction
- **Section 2** – Cedar City GFA Study Area and Roadway Network
- **Section 3** – Historic Crash Overview
- **Section 4** – Historic Crash Analysis
- **Section 5** – Network Screening Analysis
- **Section 6** – Conflict Areas
- **Section 7** – Roadway Characteristic Risk Analysis
- **Section 8** – High-Risk Network

2. STUDY AREA

The SAP study area includes each jurisdiction within Iron County. To organize the Iron County jurisdictions and unincorporated areas into manageable analysis areas, Iron County was divided into five GFAs. The Cedar City GFA, shown in **Figure 2**, includes the incorporated boundary of Cedar City.

The safety analyses presented in this appendix are specific to the Cedar City GFA.

Figure 2 highlights the roadway network within the Cedar City GFA study area. Roadways within the study area are divided into the following categories:

- State Routes: Roadways maintained by the Utah Department of Transportation (UDOT)
- Non-State Routes: Jurisdiction-maintained roads

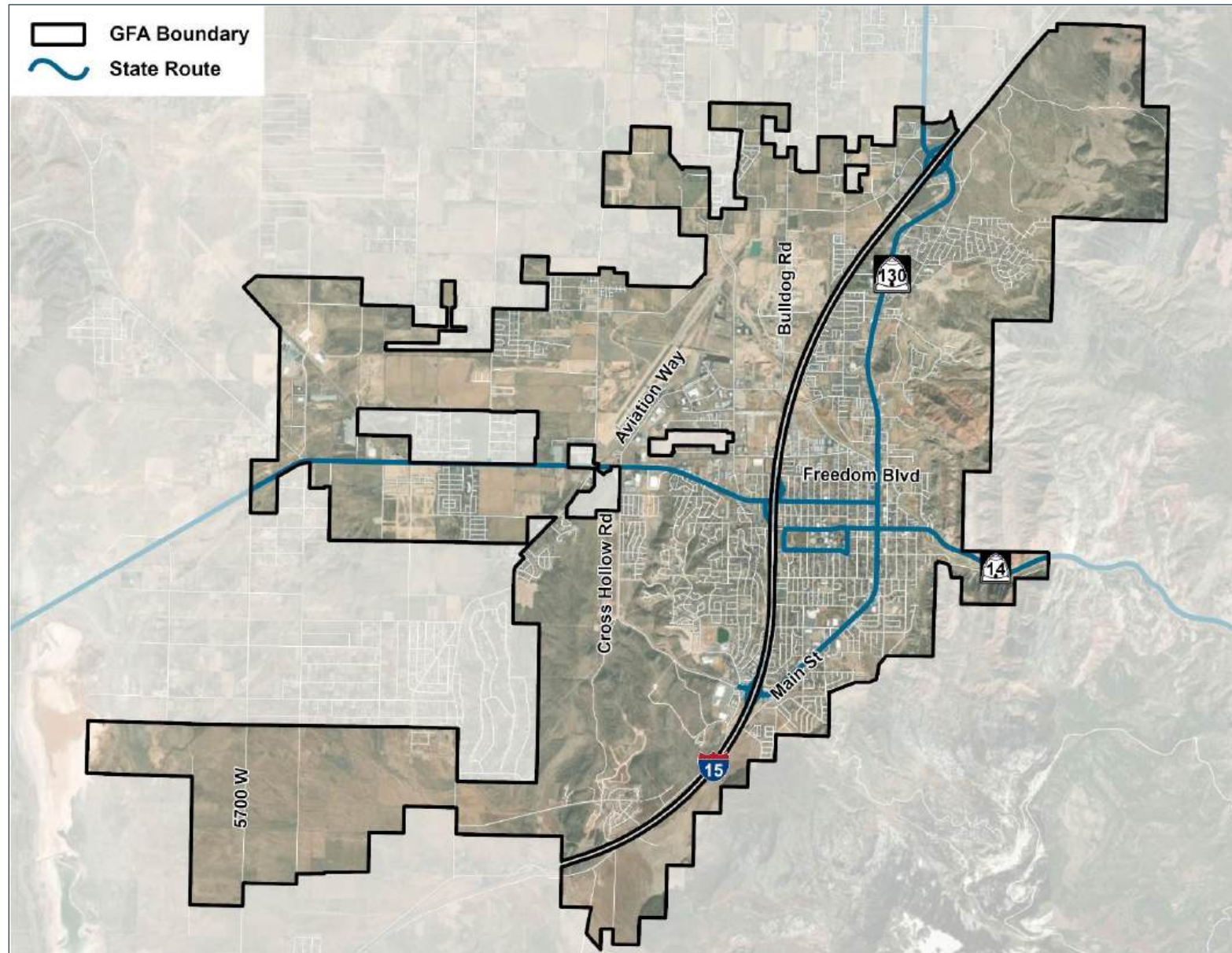


Figure 2. Cedar City GFA Study Area

3. HISTORIC CRASH OVERVIEW

Crash data was obtained from the UDOT database for the most recent completed five-year period, 2019 to 2023. A historic crash review specific to the Cedar City GFA is summarized below.

3.1. Overall Crashes

Figure 3 provides an overview of annual crashes for the Cedar City GFA separated by crash severity. Crash severity is reported as fatal, serious injury, or all other crashes (minor injury, possible injury, or property damage only). A review of the crash data reveals the following:

- The total number of crashes was highest in 2019. After a decrease of all crash severities in 2020, there has been a steady increase in the total number of crashes from 2020 to 2023.
- The number of fatal and serious injury crashes has more than doubled between 2019 and 2023, increasing every year.

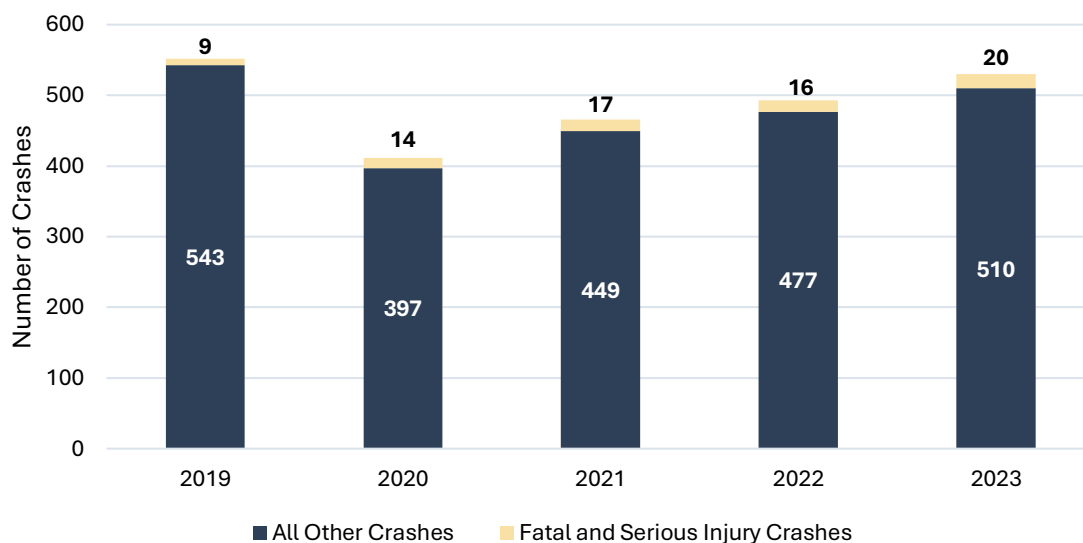


Figure 3. Cedar City GFA Crashes by Year

Table 2 provides an overview of crashes by severity and route type within the Cedar City GFA. A review of the data reveals the following:

- 54% of crashes occurred on State Routes.
- More serious injury crashes occur on non-state routes (40) compared to State Routes (29).
- Fatal and serious injury crashes make up between 3-4% of all crashes in the Cedar City GFA.
- 70% of crashes in the GFA results in no injury or property damage only (PDO).
- Nearly 50% of all the crashes in Iron County occurred within the Cedar City GFA.

Table 2. Crash Severity by Route Type for the Cedar City GFA

Route Type	State Route		Non-State Route		GFA Total		% of Iron County
Crash Severity	Crashes		Crashes		Crashes		%
	#	%	#	%	#	%	
Fatal	4	0.3%	3	0.3%	7	0.3%	18%
Suspected Serious Injury	29	2%	40	4%	69	3%	36%
Suspected Minor Injury	171	13%	147	13%	318	13%	50%
Possible Injury	215	16%	119	11%	334	14%	46%
No Injury / Property Damage Only	909	68%	815	73%	1,724	70%	48%
Route Total	1,328	100%	1,124	100%	2,452	100%	47%

3.2. Fatal and Serious Injury Crashes

The number of fatal and serious injury crashes by year is summarized in **Figure 4**. A review of the crash data reveals the following:

- An overall increase in fatal and severe injury crashes from 2019 to 2023.
- Fatal crashes reached a maximum of four (4) fatal crashes occurring in one year, 2021.
- The number of serious injury crashes has more than doubled since 2019.

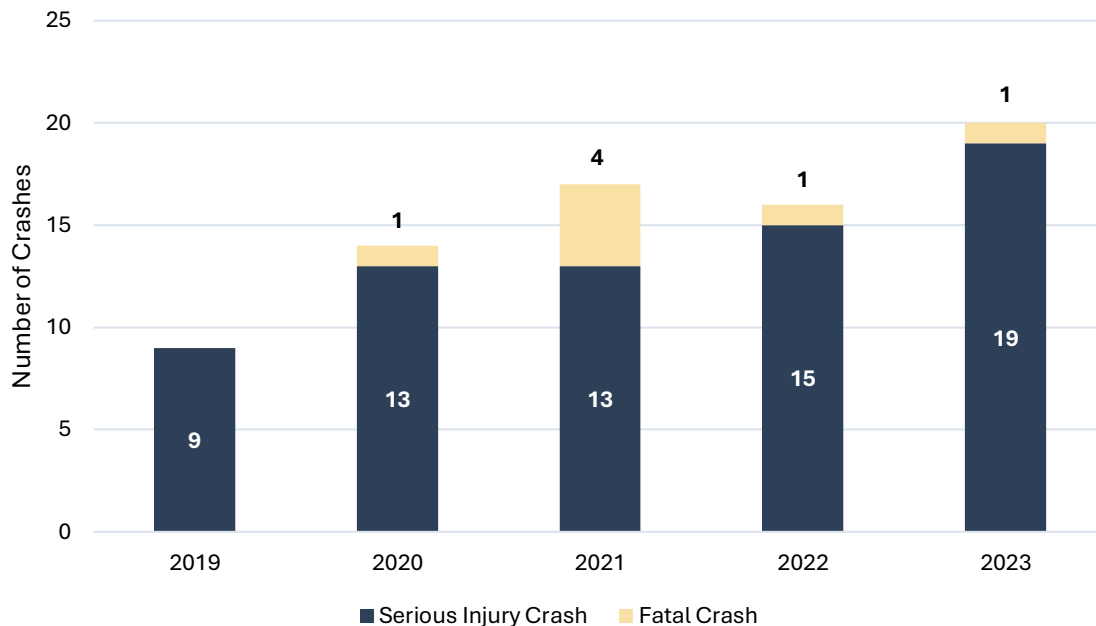


Figure 4. Cedar City GFA Fatal and Serious Injury Crashes by Year

The locations of the fatal and serious injury crashes are displayed in **Figure 5** and show a prevalence of serious injury crashes along Main Street (SR 130) and 200 North (SR 56). Concentrations of crashes around the Royal Hunt Drive/Providence Center Driver & Cross Hollow Road intersection and the intersections with SR 130 near 600 South were observed to be areas where fatal crashes have occurred.

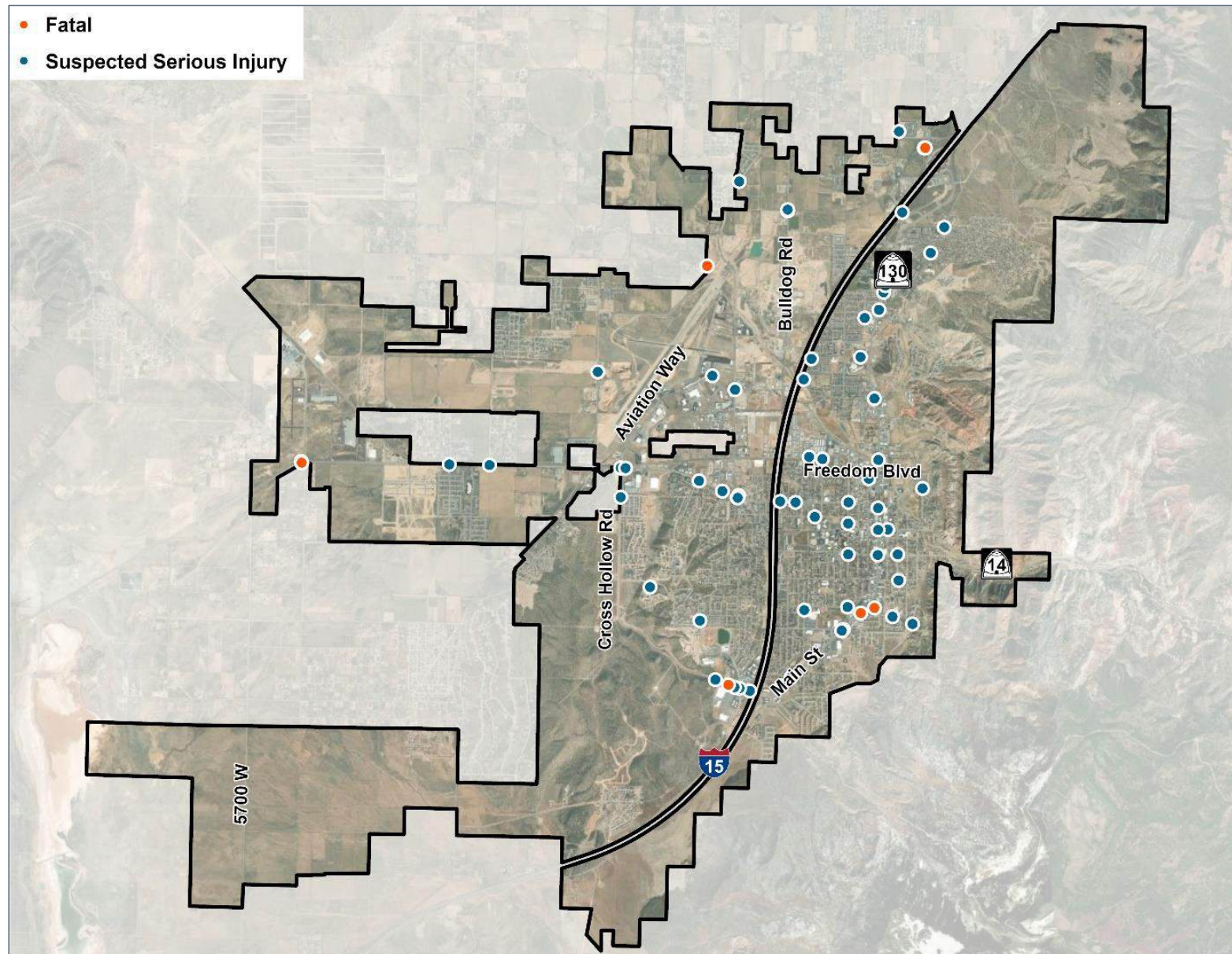


Figure 5. Fatal and Serious Injury Crashes in the Cedar City GFA

3.2.1. Manner of Collision

An overview of fatal and serious injury crashes by the most common manners of collisions is shown in **Figure 6**. The manner of collision represents how two vehicles initially collided. The recorded manner of collision may overlap with the recorded crash type, as manner of collision is a more detailed categorization compared to crash type that is summarized in Section 3.3.2. The three most frequent manners of collision that resulted in a fatality or serious injury crash are angle crashes, single vehicle crashes, and rear-end crashes.

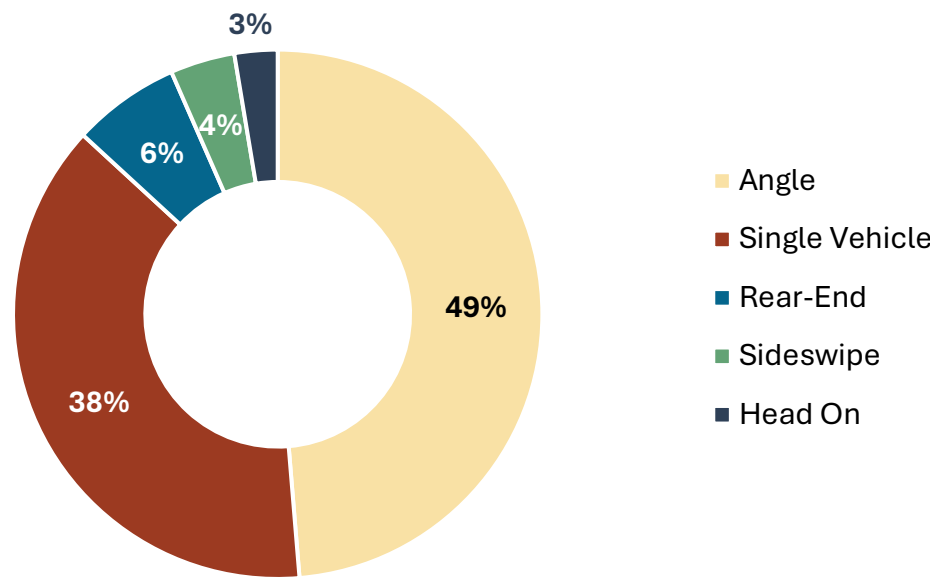


Figure 6. Most Common Fatal and Serious Injury Manners of Collision for the Cedar City GFA

3.2.2. Crash Types

Crash type represents a query of multiple data fields, including the manner of collision. Each crash is assigned only one primary crash type, examples include left turns at intersections, rear -ends, sideswipes, and roadway departure crashes.

The most common crash types for the Cedar City GFA are summarized in **Figure 7**. The three most frequent fatal and serious injury crash types are left turns at intersections, active transportation (pedestrians or bicyclists), and a crash type recorded as “Other.” The next most frequent crash type is roadway departures which include running off the road and lane departure. The crash type “other” may indicate a unique crash scenario or a gap in available data.

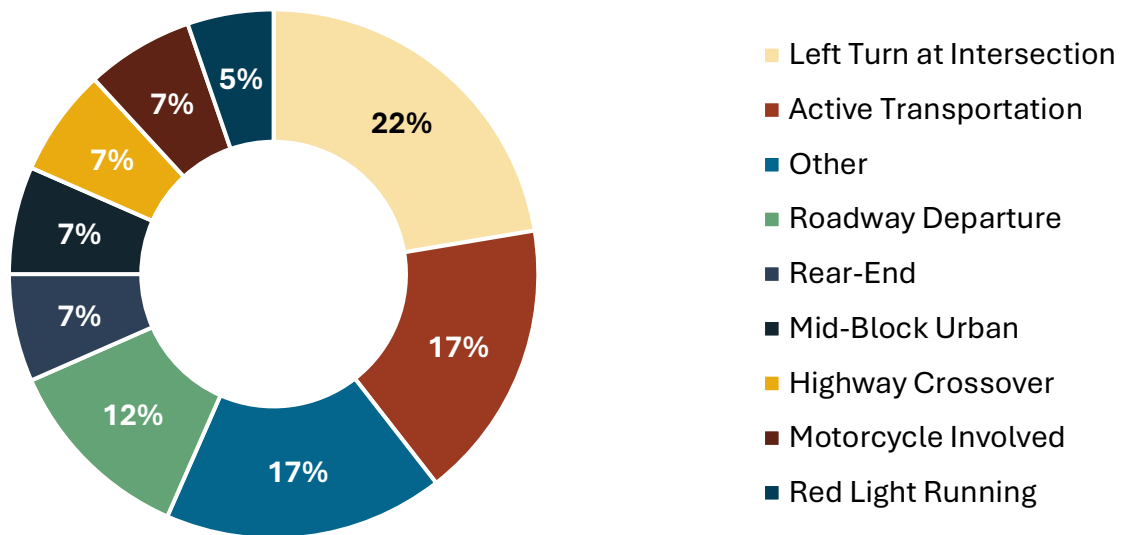


Figure 7. Most Common Fatal and Serious Injury Crash Types for the Cedar City GFA

3.2.3. Driver Contributing Factors

Several factors may contribute to a single crash; however, the driver contributing factors shown in **Figure 8** only represent the first driver specific contributing factor as recorded in the crash report. The first driver contributing factor recorded in the crash report indicates the primary cause of a crash. The data shows that the three most frequent driver contributing factors are vehicles failing to yield to proper right-of-way, disregarding traffic signals, and over-correcting or oversteering. The second most frequent driver contributing factor is “Other/Unknown” which may indicate a unique scenario or highlight a gap in data collection.

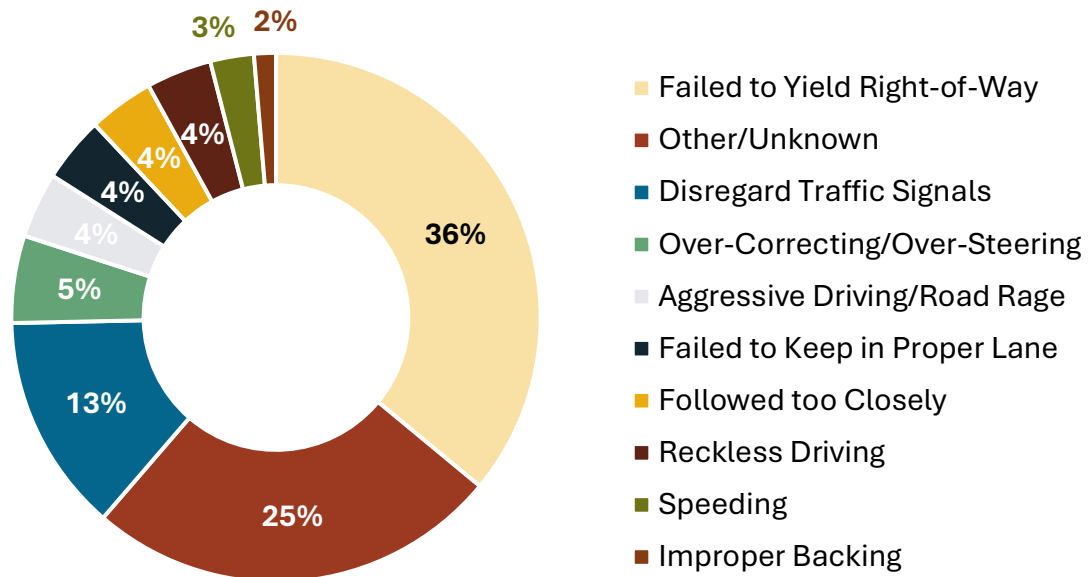


Figure 8. Most Common Fatal and Serious Injury Crash Driver Contributing Factors for the Cedar City GFA

3.2.4. Vulnerable User Crashes

Vulnerable road users include pedestrians and bicyclists. The data shows 34 crashes involving pedestrians and 26 crashes involving bicyclists in the Cedar City GFA from 2019 to 2023. **Figure 9** shows that the number of pedestrian and bicycle crashes have decreased since 2020.

Figure 10 summarizes fatal and serious injury pedestrian and bicycle crashes. While the total number of vulnerable user crashes decreased, fatalities and serious injuries increased.

The locations of the fatal and serious injury vulnerable user crashes are displayed in **Figure 11** and show a prevalence along major roads such as 200 North (SR 56) and Main Street (SR 130).

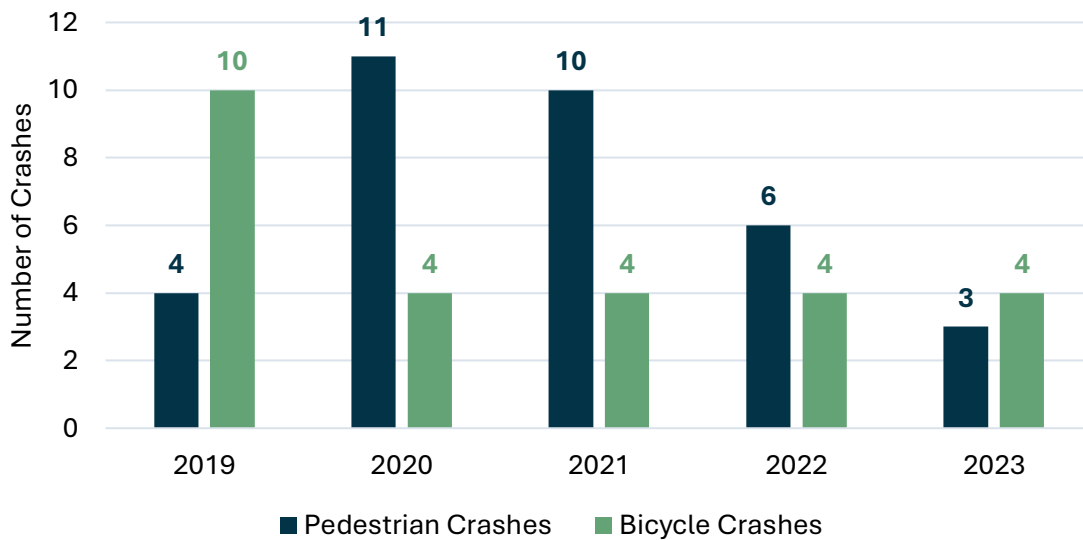


Figure 9. Vulnerable User Crashes by Year for the Cedar City GFA

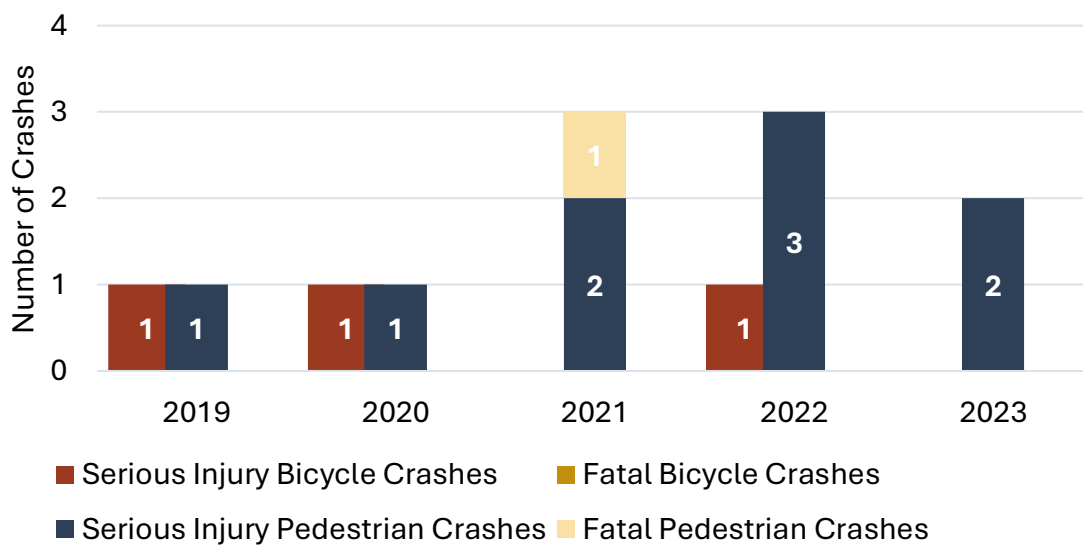


Figure 10. Fatal and Serious Injury Vulnerable User Crashes by Year for the Cedar City GFA

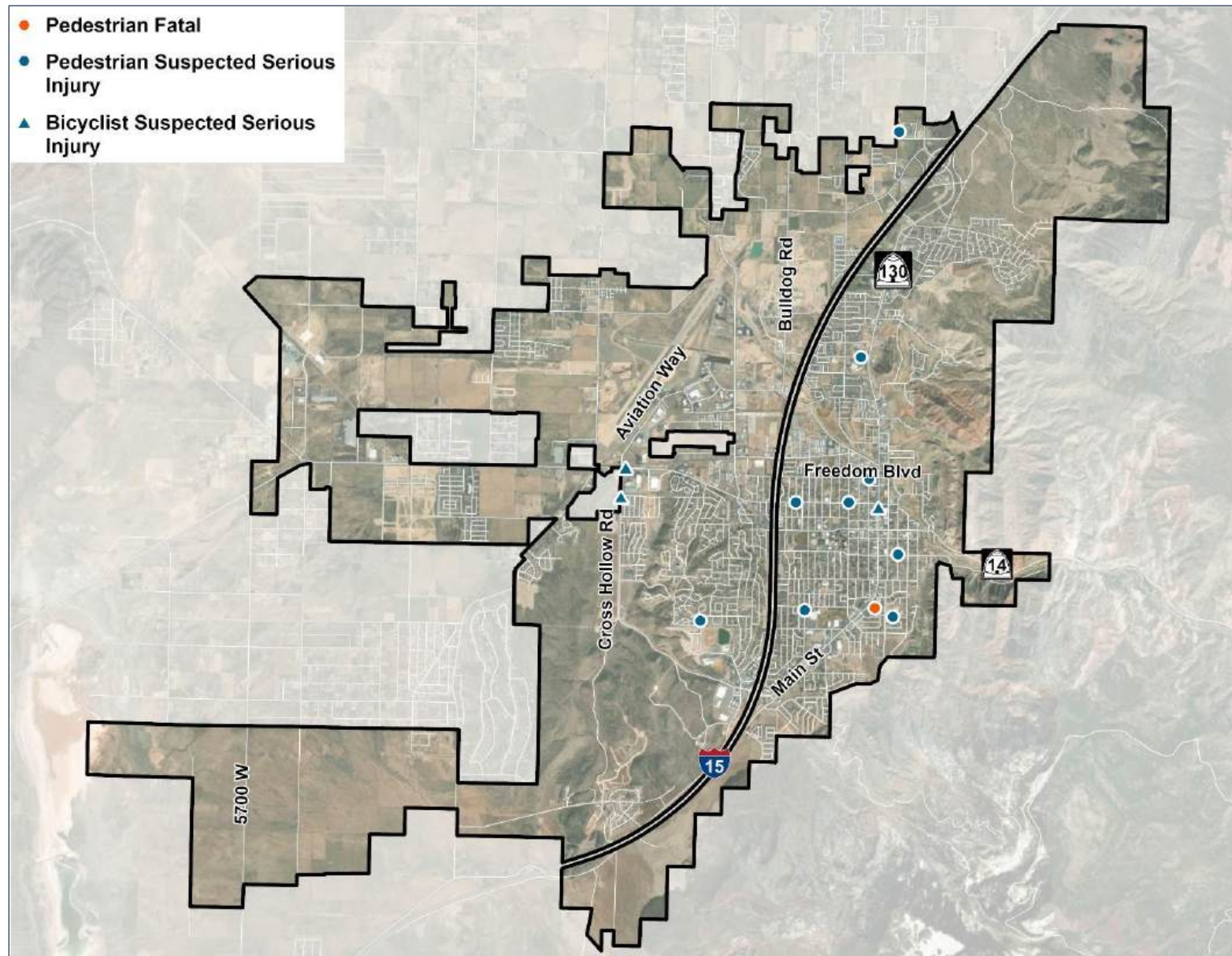


Figure 11. Fatal and Serious Injury Pedestrian and Bicycle Crashes in the Cedar City GFA

3.3. Utah SHSP Emphasis Safety Area Analysis

The SHSP emphasis area analysis ranks the frequency of fatalities and serious injuries in the Cedar City GFA for each of the eleven Utah SHSP emphasis safety areas. A fatality or serious injury may be assigned to multiple emphasis areas.

The rankings of the emphasis areas compare the Cedar City GFA, the state of Utah, and all of Iron County.

This analysis helps to determine priority emphasis areas for the Cedar City GFA, based on whether the ranked frequency of fatalities and serious injuries within the GFA are significantly different than the statewide or County rankings.

Table 3 summarizes the Utah SHSP Emphasis Area comparison analysis. The following emphasis areas have the highest frequency of fatalities and serious injuries in the Cedar City GFA. The SAP will identify strategies to address these priority emphasis areas:

- Intersections
- Older Drivers
- Teen Drivers
- Roadway Departure
- Motorcycles

Table 3. Utah SHSP Emphasis Area Comparison for the Cedar City GFA

Category	Utah SHSP Safety Emphasis Area	Statewide		Iron County		Cedar City GFA		
		Fatalities and Serious Injuries	Rank	Fatalities and Serious Injuries	Rank	Fatalities and Serious Injuries	Rank	Change in Rank from County
Driver	Teen Driver	1,695	4	54	5	19	3	2
	Older Driver	1,565	7	49	6	20	2	4
	Speed-Related	2,268	3	78	3	11	7	-4
	Aggressive Driving	615	11	19	10	10	9	1
	Distracted Driving	732	10	28	8	8	10	-2
	Impaired Driving	1,100	8	27	9	3	11	-2
	No Safety Restraints	1,627	5	85	2	10	8	-6
Roadway	Intersection	3,683	1	67	4	42	1	3
	Roadway Departure	3,372	2	132	1	16	4	-3
Special Users	Motorcycle	1,571	6	40	7	15	5	2
	Pedestrian	1,000	9	15	11	13	6	5
	Bicycle*	303	12	3	12	3	12	0

**While Bicycles are not one of the eleven Utah SHSP emphasis areas, they are included as part of the CSAP safety analysis.*

4. HISTORIC CRASH ANALYSIS

A component of the SAP is to identify locations with an elevated risk of crashes. The initial step of this analysis is to spatially reference crashes that occurred within the study area.

The following networks were created in the historic crash analysis using the historic crash locations:

- **High-Crash Network:** Represents roadways and intersections on which the most crashes occur and experience high crash rates.
- **High-Injury Network:** Represents roadways and intersection on which fatal and injury crashes typically occur.

4.1. High-Crash Network

The roadway network shown in **Figure 12** is identified as the High-Crash network. The High-Crash network includes locations on which 50% of all crashes in the GFA occurred and locations experiencing high crash rates.

4.2. High-Injury Network

Figure 13 shows the identified High-Injury network. The High-Injury network represents the roadways on which 50% of fatal and injury crashes have occurred.

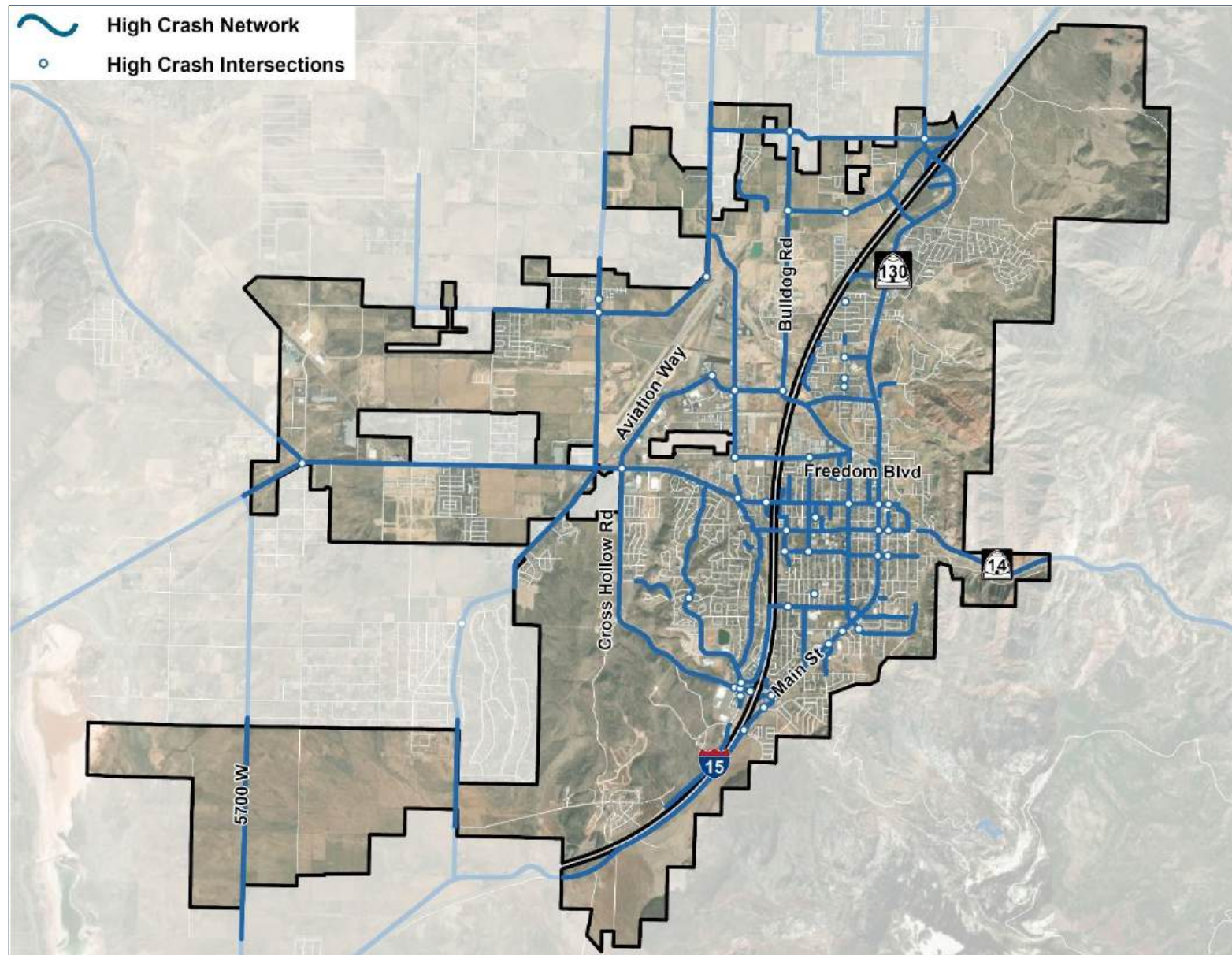


Figure 12. High-Crash Network for the Cedar City GFA

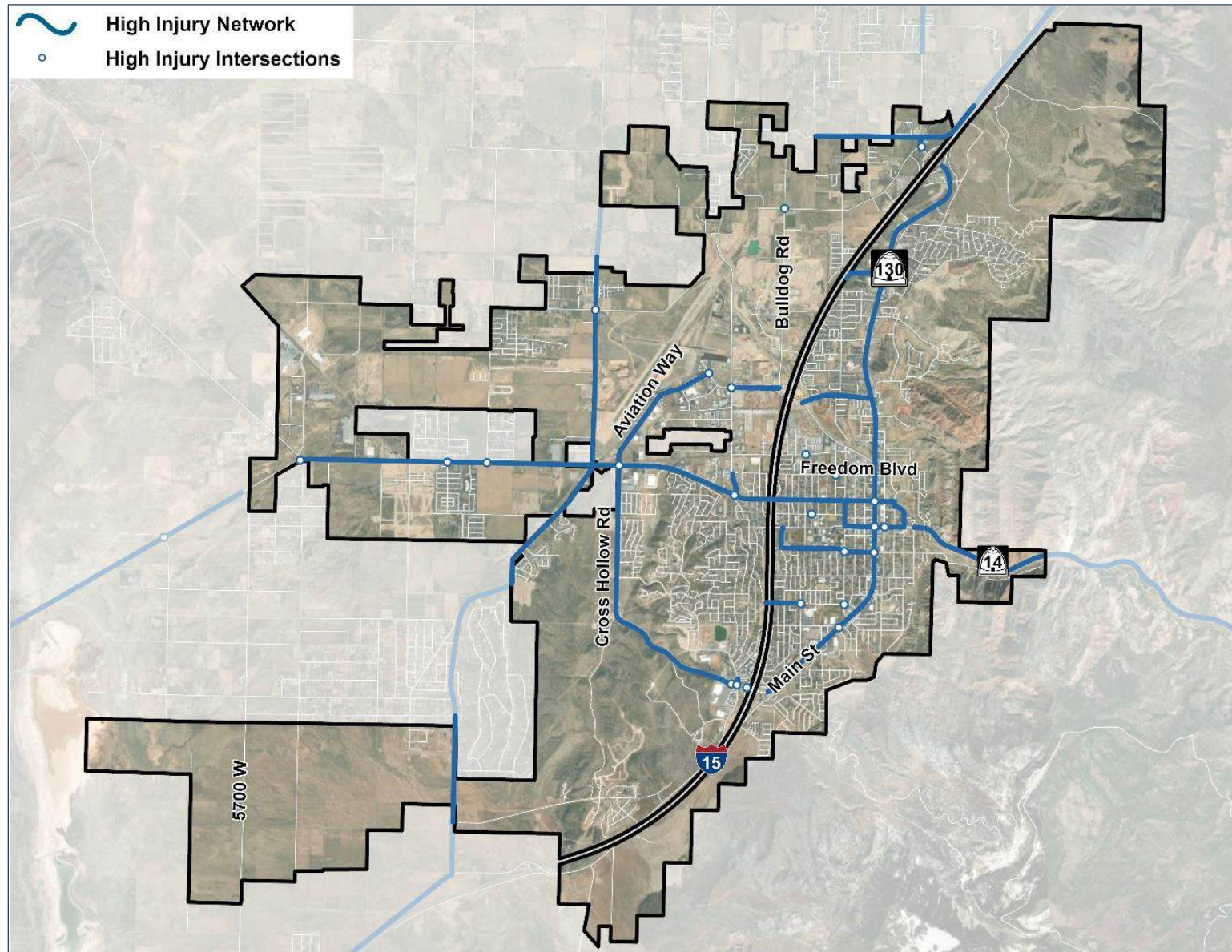


Figure 13. High-Injury Network for the Cedar City GFA

5. NETWORK SCREENING ANALYSIS

A network screening analysis was prepared for the Cedar City GFA informed by a Critical Crash Rate (CCR) analysis. Network screening methodology is detailed in Technical Memorandum #1. A positive CCR differential is an indication of a location with a potential for safety improvement (PSI). All roadways and intersection with a positive CCR differential are shown in **Figure 14**.

These locations represent those with the highest potential for safety improvements and should be considered as project candidate locations.

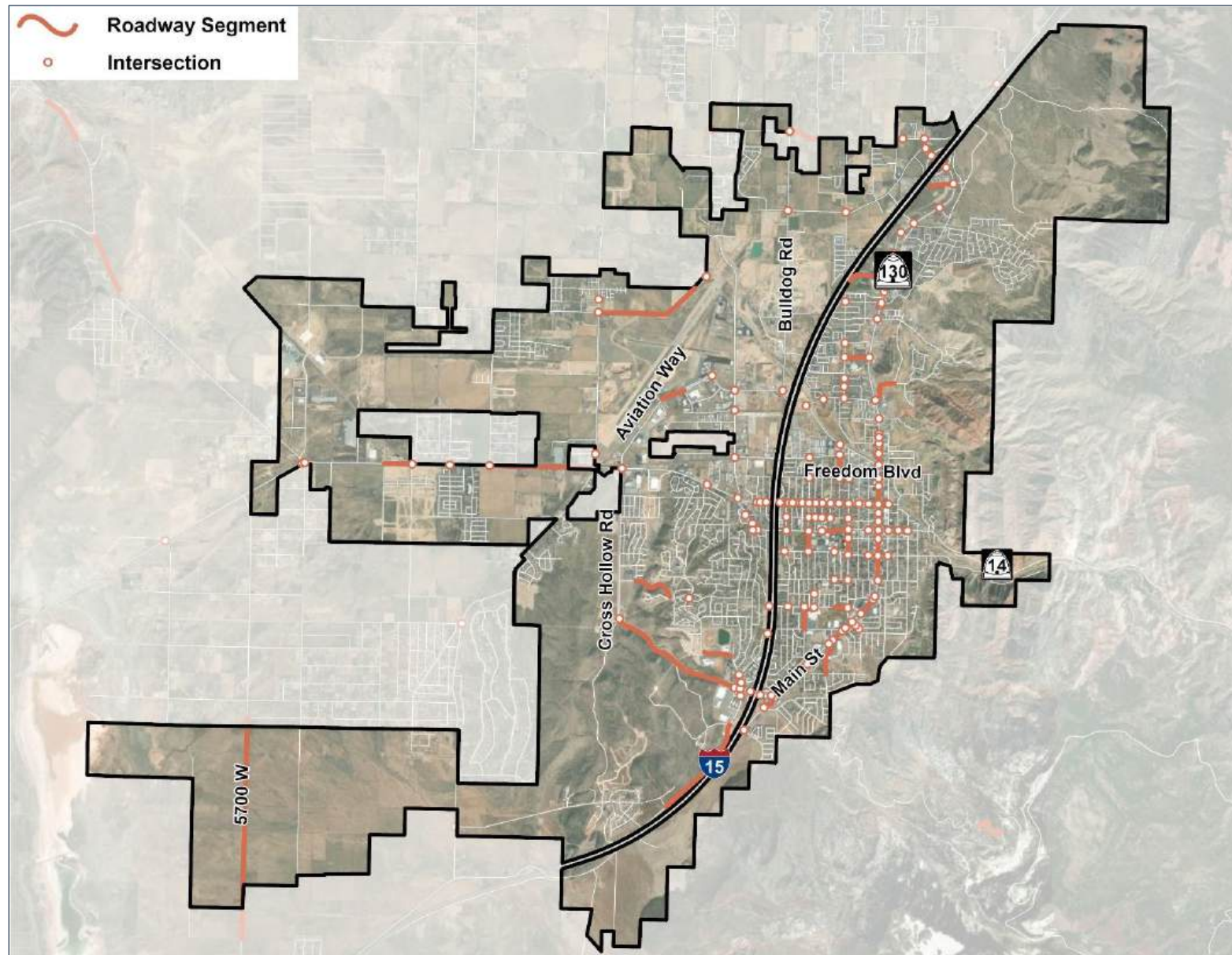


Figure 14. Critical Crash Rate (CCR) Network for the Cedar City GFA

6. CONFLICT AREAS

The conflict area analysis used Replica data obtained for the Iron County area to proactively address areas of greater safety risks. The following data and metrics were isolated in Replica to identify higher risk roadways in the GFA and Iron County:

- Speeding
- Non-Speeding Events: Suspected Collisions, Phone Handling (Distracted Driving), and Sudden Braking
- Active Transportation (pedestrians and bicyclist) high-risk corridors

A maximum risk score within Replica is 100 points. Roadways with a risk score of 80 or more in any of the Replica metrics analyzed are included in the Replica Conflict Networks shown in **Figure 15** and **Figure 16** for the Cedar City GFA.

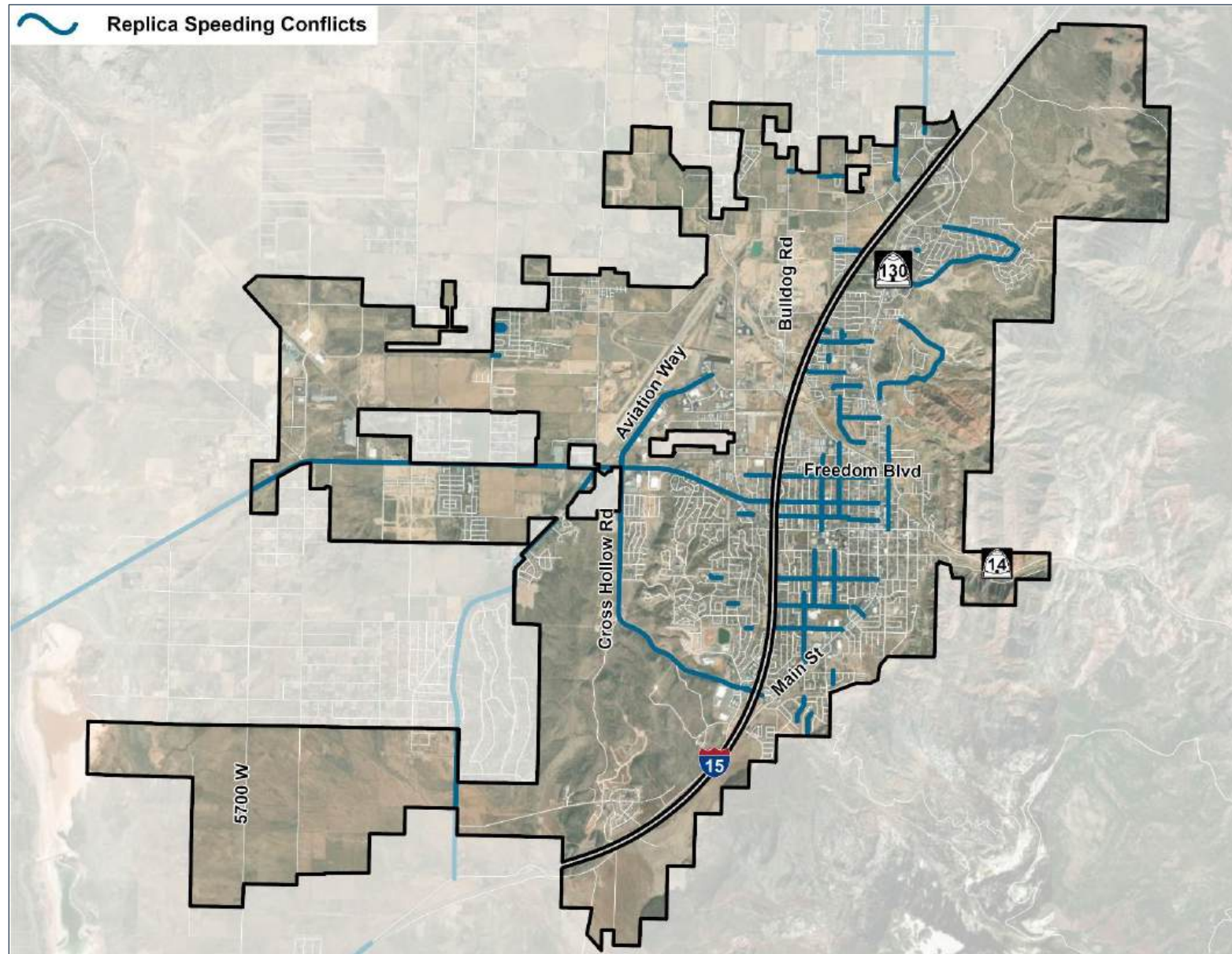


Figure 15. Replica Speeding Conflict Areas for the Cedar City GFA

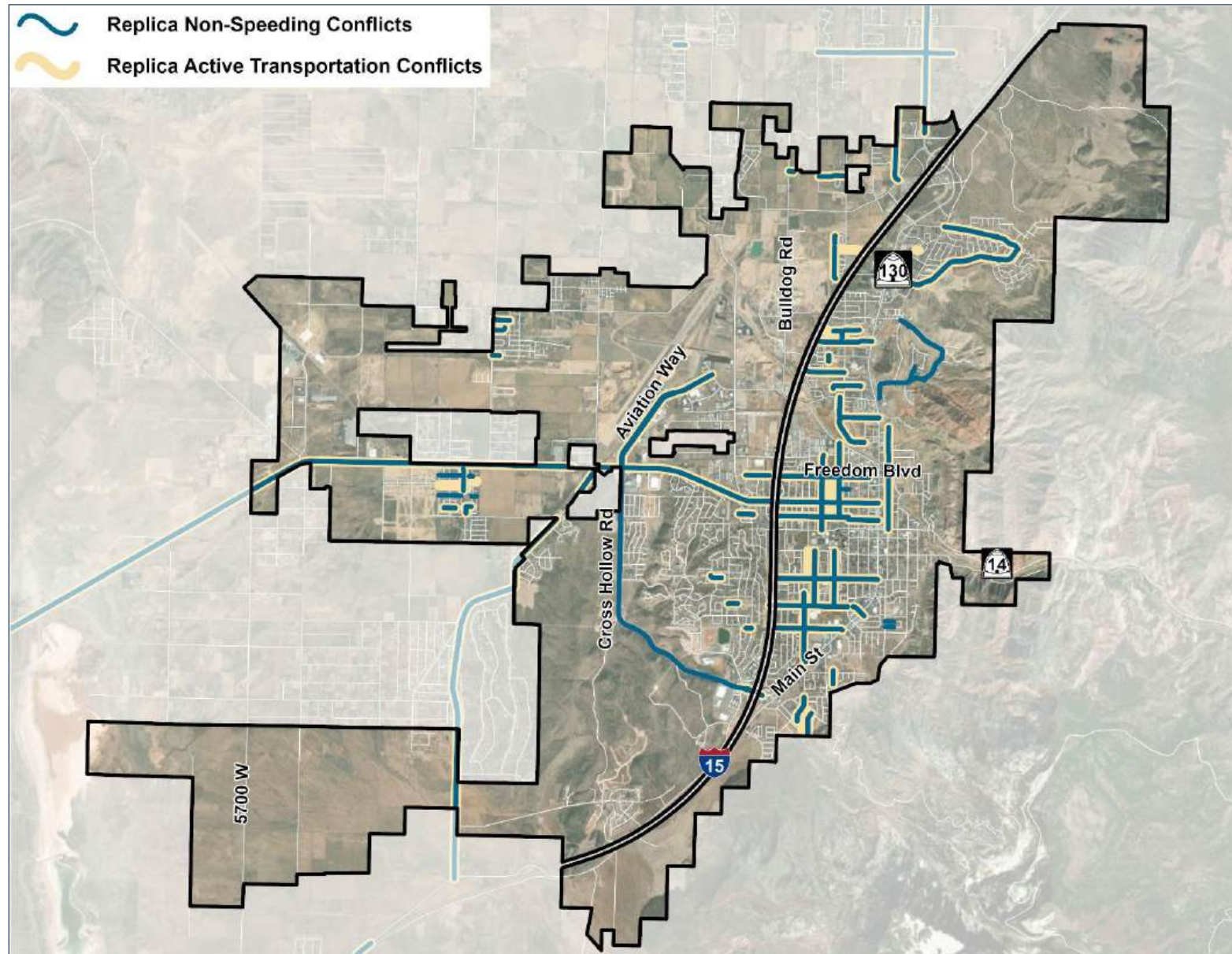


Figure 16. Replica Non-Speeding and Active Transportation Conflict Areas for the Cedar City GFA

7. ROADWAY CHARACTERISTIC RISK ANALYSIS

A roadway characteristic risk analysis was performed using the following sub-analyses:

- Crash Profile Risk Assessment
- usRAP Risk Assessment

7.1. Crash Profile Risk Assessment

This crash profile risk assessment sub-analysis identifies common roadway characteristics for roadways where fatal and serious injury crashes have occurred. Based on various roadway characteristic risks identified from crash report analysis, a risk score was assigned to major routes within the Cedar City GFA. A breakdown of the risk assessment scoring is reported in **Section 4.4** of Technical Memorandum #1. This assessment is limited to state and federal routes since the roadway characteristic data is only available for those route types. The results of the Crash Profile Risk Assessment are mapped in **Figure 17**.

7.2. usRAP Risk Assessment

A roadway characteristic risk assessment was performed using roadway feature data collected for Utah's state routes. The risk assessment was performed using usRAP data and tools. The output of the usRAP tool is a star rating, or risk rating, for vehicle, pedestrian, and bicyclist features. This assessment is limited to state and federal routes since the roadway characteristic data is only available for those route types. The results of the usRAP risk assessment by star rating are mapped in **Figure 18**.

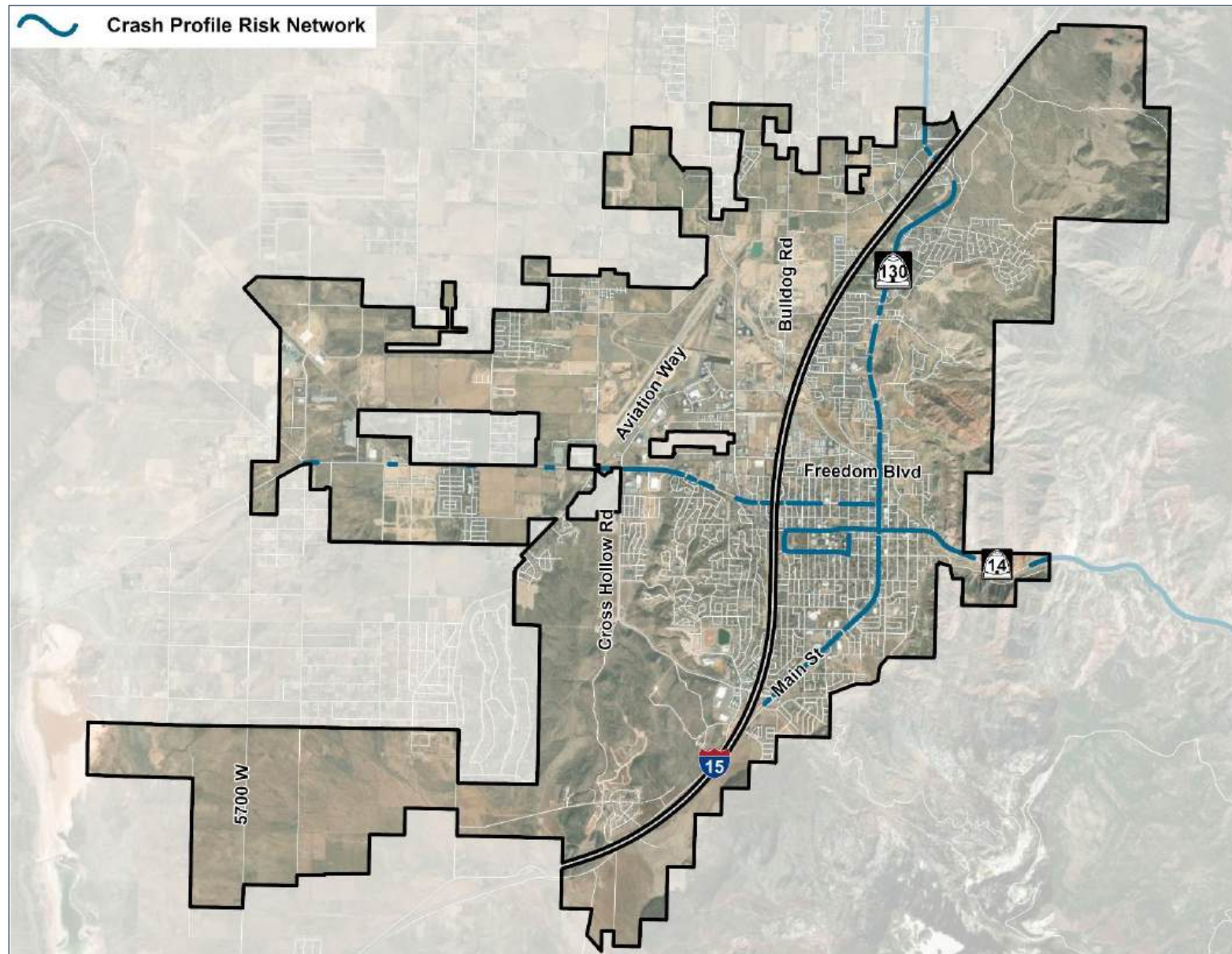


Figure 17. Crash Profile Risk Network for the Cedar City GFA

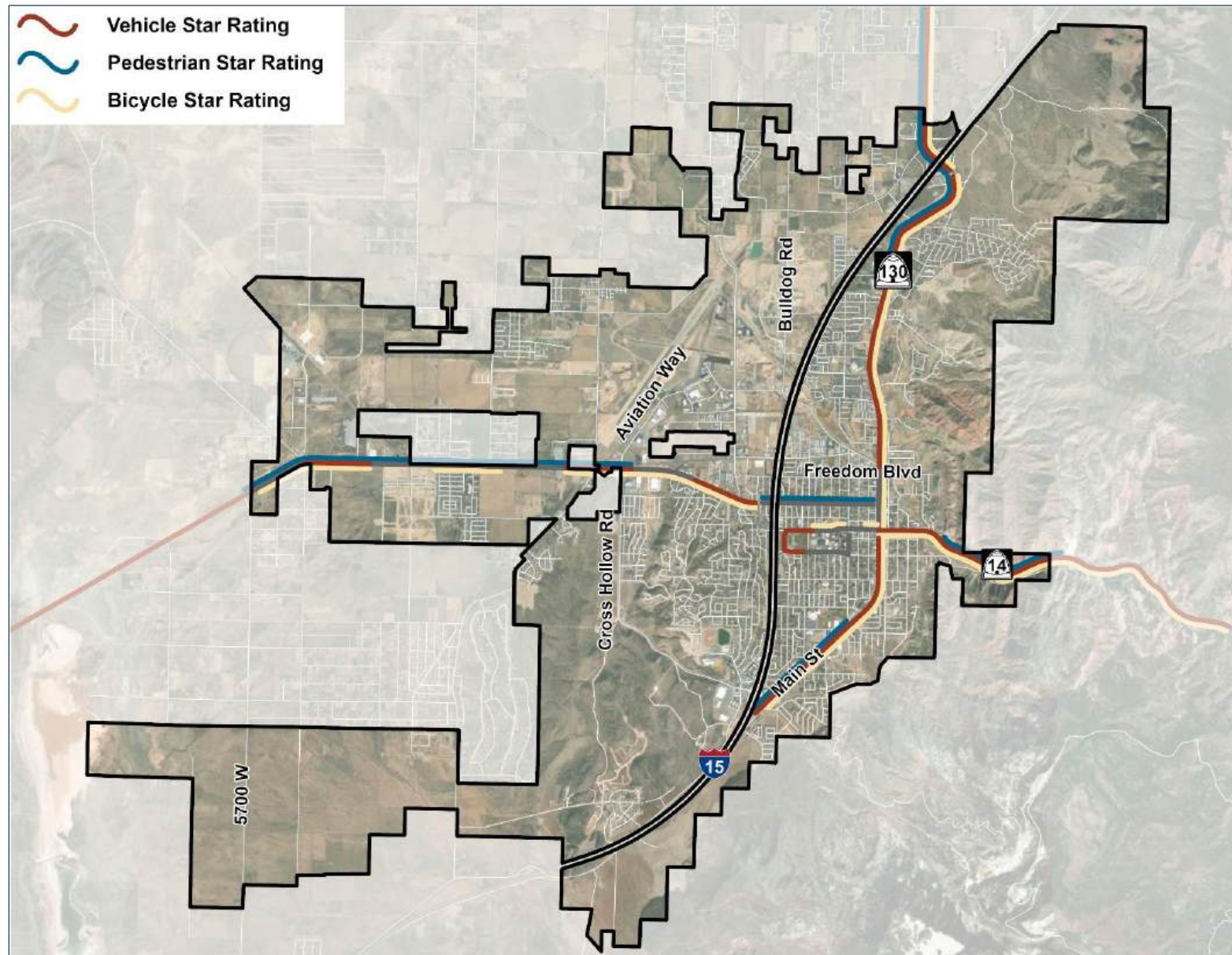


Figure 18. usRAP Risk Network – Star Ratings for the Cedar City GFA

8. HIGH-RISK NETWORK

Each of the safety analysis methodologies identified roadway segments or intersections in the Cedar City GFA that may benefit from safety improvements to reduce fatal and serious injury crashes.

To provide focused information for decisions regarding prioritization of safety improvements, an overlay of each analysis methodology was created to form a High-Risk Network.

A high-risk score, from zero to five, was determined using the approach in **Table 4**. Any location with a positive high-risk score may be considered for safety improvements. Locations with a risk score of three or greater are to be prioritized in the High-Risk Network

The Cedar City GFA High-Risk Network is shown in **Figure 19**. **Table 5** and **Table 6** provide an overview of the high priority roadway segments and intersections included in the High-Risk Network that were presented to stakeholders for comment in December 2024. Up to ten roadway segments and 20 intersections were listed if a location had a positive risk score.

Table 4. High-Risk Scoring Criteria

High Risk Category	Safety Analysis	Scoring Criteria	Risk Score
Historic Crashes	High Crash Network	Highest number of crashes per miles	1
	High Injury Network	Highest number of fatal and injury crashes per mile	1
Network Screening	Critical Crash Rates	Positive critical crash rate differential	1
Conflict Areas	Replica - Speeding Areas	Speeding conflict risk score of 80+	1/3
	Replica - Non-Speeding Areas	Non-speeding conflict risk score of 80+	1/3
	Replica - Active Transportation Areas	Active transportation conflict risk score of 80+	1/3
Risk Characteristics	Crash Profile Risk	Crash Profile Risk score of 60+	1/4
	usRAP Vehicle Star Rating	Star Rating of 1 - 2	1/4
	usRAP Pedestrian Star Rating	Star Rating of 1 - 2	1/4
	usRAP Bicycle Star Rating	Star Rating of 1 - 2	1/4
Maximum High-Risk Score			5

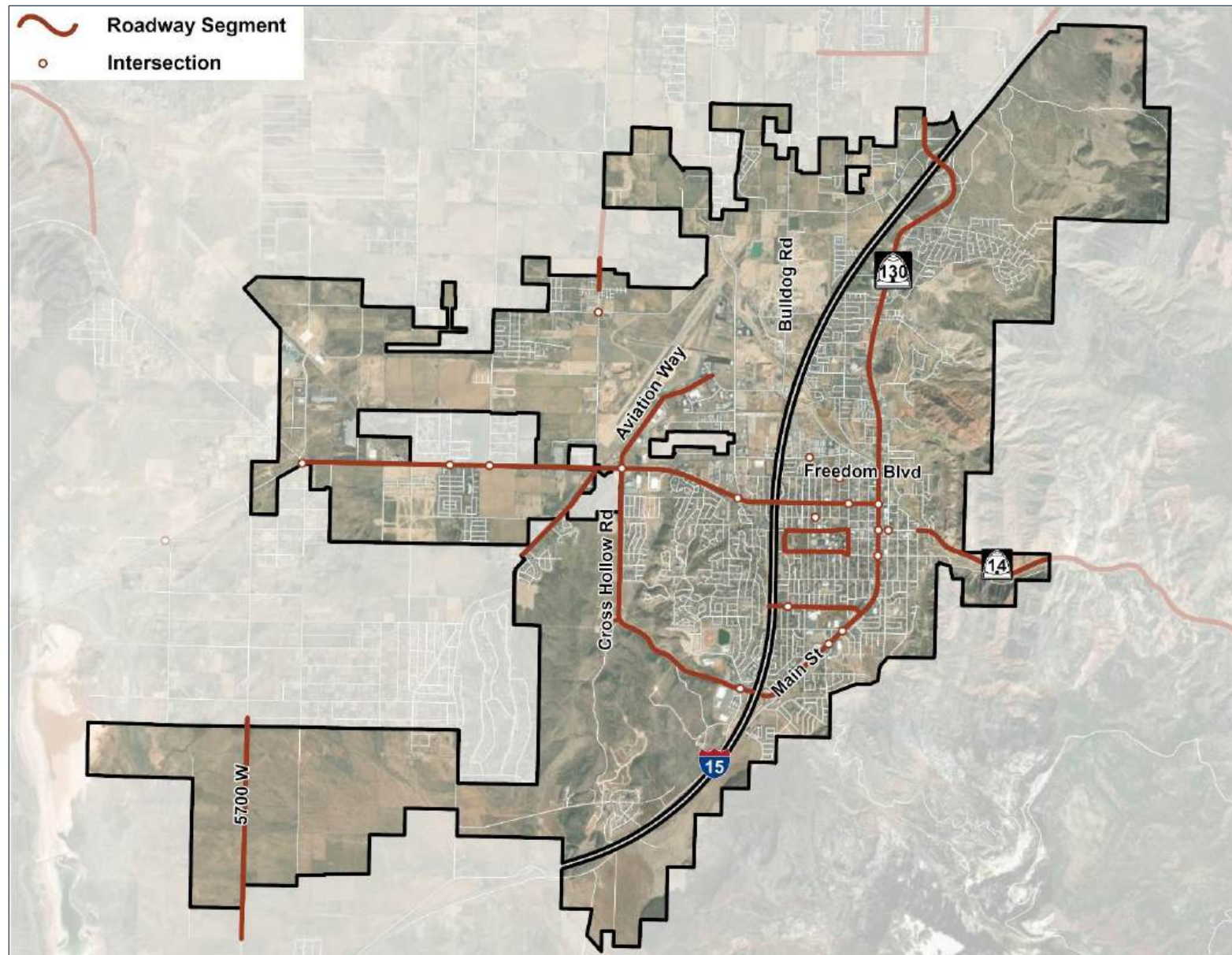


Figure 19. High-Risk Network for the Cedar City GFA

Table 5. Priority High-Risk Roadways for the Cedar City GFA

Roadways				Safety Analysis									
Roadway	Extents	Length (miles)	Functional Classification	High Crash Network	High Injury Network	Critical Crash Rate	Replica Speeding	Replica Non Speeding	Replica Active Transportation	Crash Profile Risk	usRAP Vehicle Star Rating	usRAP Pedestrian Star Rating	usRAP Bicycle Star Rating
State Routes													
Main Street (SR 130)	1045 North to I-15	6.0	Other Principal Arterial	X	X	X				X	X	X	X
200 North (SR 56)	Iron Springs Road to I-15	4.5	Other Principal Arterial	X	X	X	X	X	X	X	X	X	X
200 North (SR 56)	I-15 to Main Street (SR 130)	1.0	Other Principal Arterial	X	X	X	X	X	X	X		X	X
SUU Loop (SR 289)	1150 West to 300 West	1.5	Minor Arterial	X	X	X				X	X		X
Center Street (SR 14)	400 East to Right Hand Canyon Road	4.5	Minor Arterial	X	X					X	X	X	X
Non- State Routes													
Cross Hollow Road	SR 56 to I-15	3.0	Minor Arterial	X	X	X	X	X	X				
Aviation Way	SR 56 to Airport Road	1.5	Major Collector	X	X	X	X	X	X				
600 South	I-15 to Main Street (SR 130)	1.0	Major Collector	X	X		X	X	X				
5700 West	1400 South to 3200 South	2.3	Major Collector	X		X							
Westview Drive	SR 56 to 200 South	1.0	Major Collector	X	X		X	X	X				

Table 6. Priority High-Risk Intersections for the Cedar City GFA

Intersections		Safety Analysis			Supporting Networks						
Intersection	Number of Crashes	High Crash Network	High Injury Network	Critical Crash Rate	Replica Speeding	Replica Non Speeding	Replica Active Transportation	Crash Profile Risk	usRAP Vehicle Star Rating	usRAP Pedestrian Star Rating	usRAP Bicycle Star Rating
Signalized Intersections											
Cross Hollow Road/Aviation Way & SR 56	44	X	X	X	X	X	X	X	X	X	X
Westview Drive/3100 West & SR 56	27	X	X	X	X	X	X	X	X	X	X
Main Street (SR 130) & 1925 North	41	X	X	X	X	X	X	X	X	X	X
Airport Road/College Way & SR 56	69	X	X	X	X	X	X	X	X		X
Main Street (SR 130) & 800 South	36	X	X	X	X	X	X		X	X	X
Main Street & SR 56	106	X	X	X	X	X	X	X			X
Providence Center Drive & Cross Hollow Road	50	X	X	X	X	X	X				
Main Street (SR 130) & 200 South	29	X	X	X				X	X		X
Main Street (SR 130) & Center Street (SR 14)	36	X	X	X				X	X		X
300 West & SR 56	31	X		X	X	X	X	X		X	
Unsignalized Intersections											
100 East & Center Street (SR 14)	11	X	X	X	X	X	X	X	X		X
Iron Springs Road & SR 56	11	X	X	X	X	X	X			X	X
700 West & Harding Avenue	7	X	X	X	X	X	X				
400 West & 400 North	5	X	X	X	X	X	X				
3900 West & SR 56	6		X	X	X	X	X			X	X

Intersections		Safety Analysis			Supporting Networks						
Intersection	Number of Crashes	High Crash Network	High Injury Network	Critical Crash Rate	Replica Speeding	Replica Non Speeding	Replica Active Transportation	Crash Profile Risk	usRAP Vehicle Star Rating	usRAP Pedestrian Star Rating	usRAP Bicycle Star Rating
4200 West & SR 56	6		X	X	X	X	X			X	X
Main Street (SR 13) & Fir Street	24	X		X				X	X	X	X
800 West & Industrial Road	6	X	X	X							
Lund Highway & 1600 West	14	X	X	X							
1100 West & 600 South	22	X		X	X	X	X				



APPENDIX A.2. ENOCH CITY GFA SAFETY ANALYSIS AND RESULTS

TECHNICAL MEMORANDUM #1

APPENDIX A2

ENOCH CITY GEOGRAPHIC FOCUS AREA SAFETY ANALYSIS

Statutory Notice

23 U.S.C. § 409: US Code - Section 409: Discovery and admission as evidence of certain reports and surveys

Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway- highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

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1. INTRODUCTION

Appendix A2 summarizes the safety analysis performed for the Enoch City Geographic Focus Area (GFA) as part of the Safety Action Plan for all Iron County (SAP).

The safety analysis identified roadway segments and intersections with the highest safety risk and need. The resulting High-Risk Network represents locations with the largest potential for safety improvement. The network helps inform the identification of potential project locations that may be further considered in the SAP.

1.1. Safety Analysis

The safety analysis methodologies are presented in **Section 4** of Technical Memorandum #1 and include the components shown in **Figure 1**. Results of each component are shown in **Table 1**.

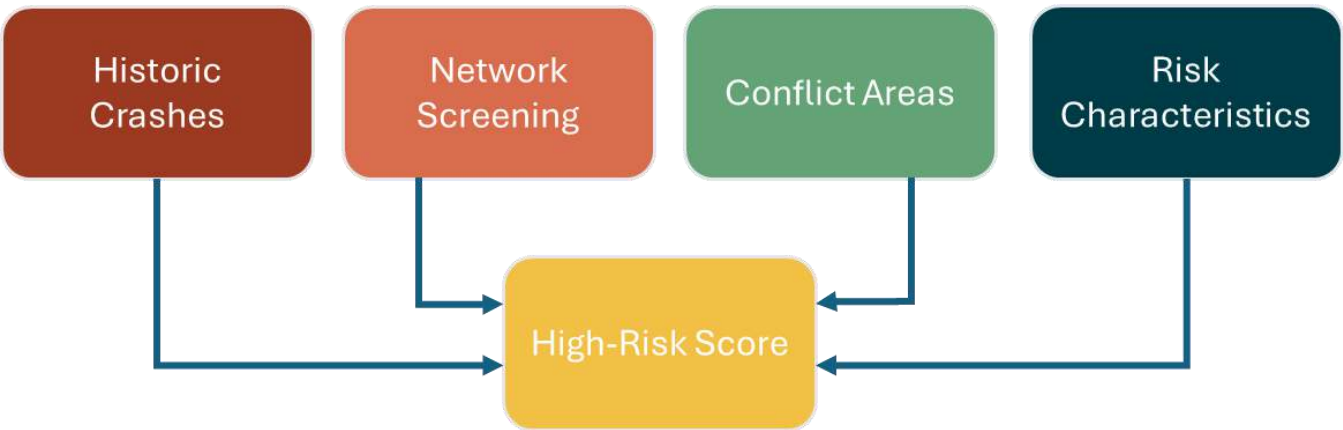


Figure 1. Safety Analysis Components

Table 1. Safety Analysis Components and Results

Safety Analysis Component	Analysis Result(s)
Historical Crash Overview	Frequent crash types and common contributing factors.
Strategic Highway Safety Plan (SHSP) Emphasis Area Analysis	Ranked emphasis areas based on GFA, Iron County, or Statewide crashes.
Historical Crash Analysis	High-crash network.
	High-risk network.
Network Screening Analysis	Critical crash rate network.
Conflict Areas	Speeding, phone handling, sudden braking, and suspected collision networks.
Risk Characteristics	Crash Profile Risk Assessment
	usRAP Risk Factors Analysis

1.2. Appendix Organization

Appendix A2 is organized into the following sections:

- **Section 1** – Introduction
- **Section 2** – Enoch City GFA Study Area and Roadway Network
- **Section 3** – Historic Crash Overview
- **Section 4** – Historic Crash Analysis
- **Section 5** – Network Screening Analysis
- **Section 6** – Conflict Areas
- **Section 7** – Roadway Characteristic Risk Analysis
- **Section 8** – High-Risk Network

2. STUDY AREA

The SAP study area includes each jurisdiction within Iron County. To organize the Iron County jurisdictions and unincorporated areas into manageable analysis areas, Iron County was divided into five GFAs. The Enoch City GFA, shown in **Figure 2**, includes the incorporated boundary of Enoch City.

The safety analyses presented in this appendix are specific to the Enoch City GFA.

Figure 2 highlights the roadway network within the Enoch City GFA study area. Roadways within the study area are divided into the following categories:

- State Routes: Roadways maintained by the Utah Department of Transportation (UDOT)
- Non-State Routes: Jurisdiction-maintained roads

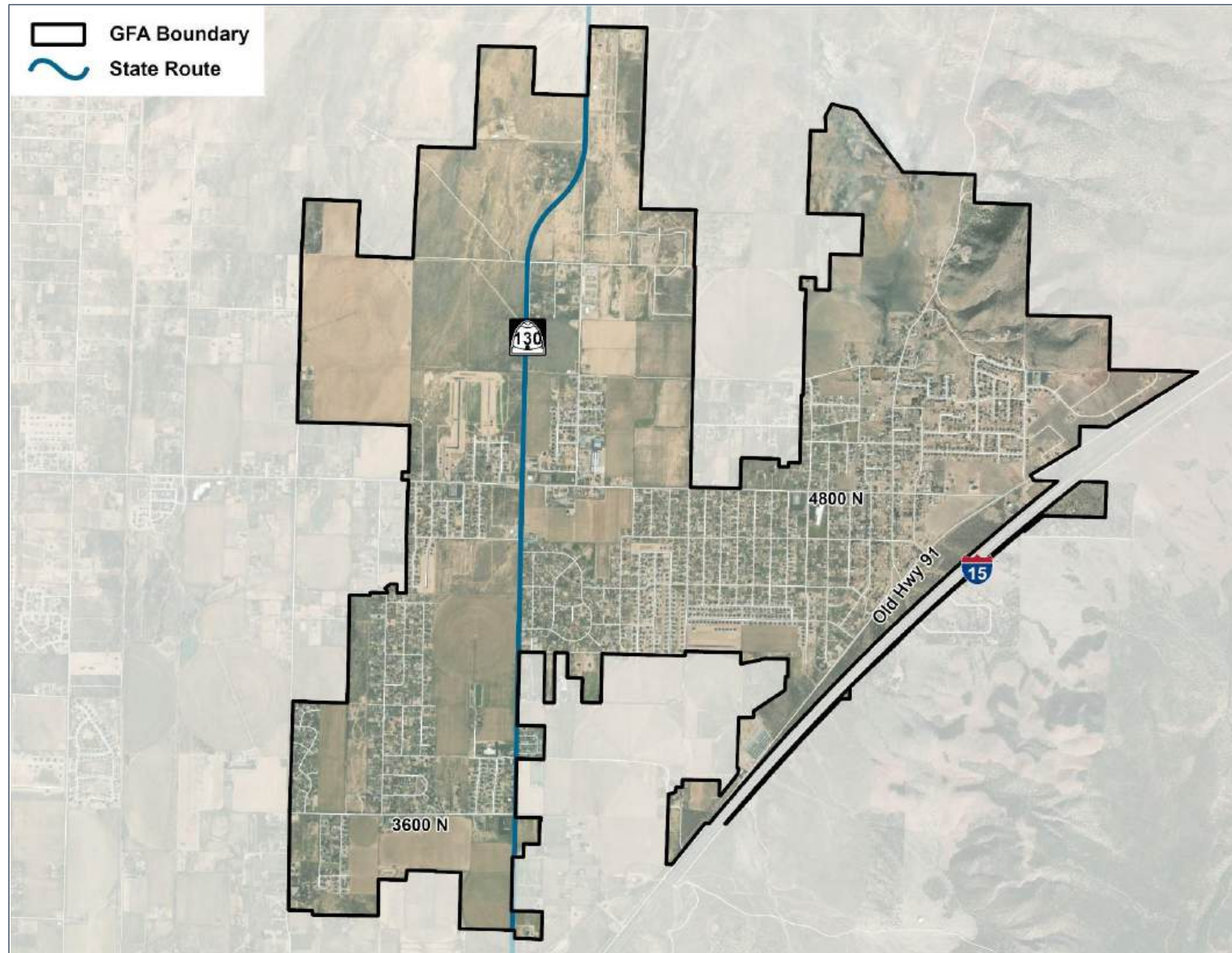


Figure 2. Enoch City GFA Study Area

3. HISTORIC CRASH OVERVIEW

Crash data was obtained from the UDOT database for the most recent completed five-year period, 2019 to 2023. A historic crash review specific to the Enoch City GFA is summarized below.

3.1. Overall Crashes

Figure 3 provides an overview of annual crashes for the Enoch City GFA separated by crash severity. Crash severity is reported as fatal, serious injury, or all other crashes (minor injury, possible injury, or property damage only). A review of the crash data reveals the following:

- The total number of crashes was highest in 2020. There has since been a gradual decrease in the number of crashes and the number of crashes in 2023 is less than in 2019, 5 years ago.
- No fatal or serious injury crashes occurred in 2022 and only 1 occurred in 2023. In the most recent five years the number of fatal and serious injury crashes has never been greater than two per year.

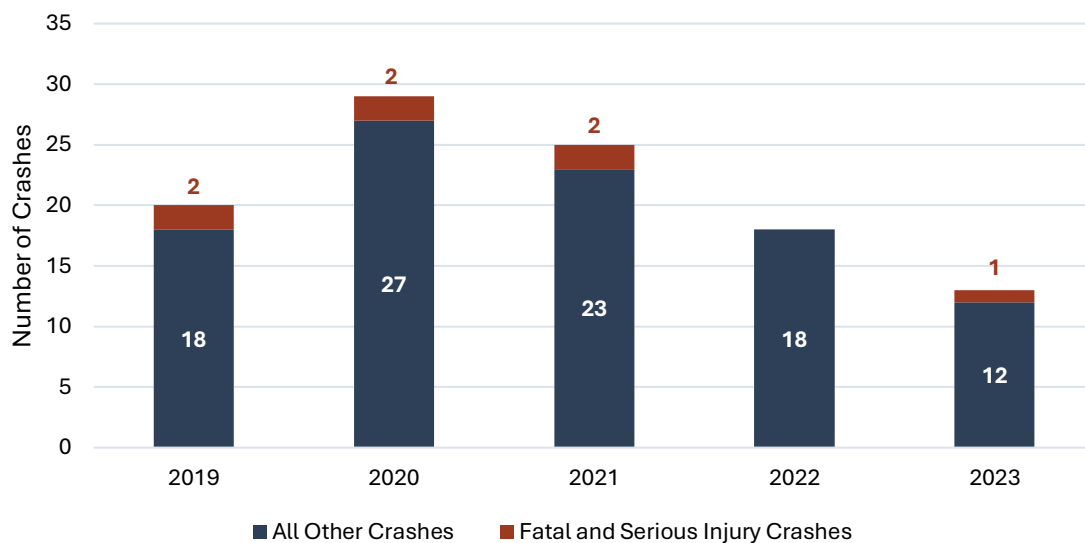


Figure 3. Enoch City GFA Crashes by Year

Table 2 provides an overview of crashes by severity and route type within the Enoch City GFA. A review of the data reveals the following:

- 38% of crashes occurred on State Routes.
- All the fatal crashes in the GFA occurred on non-state routes
- Fatal and serious injury crashes make up between 3-5% of all crashes in the Enoch City GFA.
- 61% of crashes in the GFA resulted in no injury or property damage only (PDO).
- 5% of all the fatal crashes in Iron County occurred within the Enoch City GFA.

Table 2. Crash Severity by Route Type for the Enoch City GFA

Route Type	State Route		Non-State Route		GFA Total		% of Iron County
Crash Severity	Crashes		Crashes		Crashes		%
	#	%	#	%	#	%	
Fatal	0	0%	2	3%	2	2%	5%
Suspected Serious Injury	2	5%	3	5%	5	5%	3%
Suspected Minor Injury	7	18%	7	11%	14	13%	2%
Possible Injury	8	20%	12	18%	20	19%	3%
No Injury / Property Damage Only	23	58%	41	63%	64	61%	2%
Route Total	40	100%	65	100%	105	100%	2%

3.2. Fatal and Serious Injury Crashes

The number of fatal and serious injury crashes by year is summarized in **Figure 4**. A review of the crash data reveals the following:

- No fatal crashes occurred in 2021, 2022, and 2023.
- The combination of fatal and serious injury crashes has never exceeded two per year.
- The number of fatal and serious injuries have decreased between 2019 and 2023.

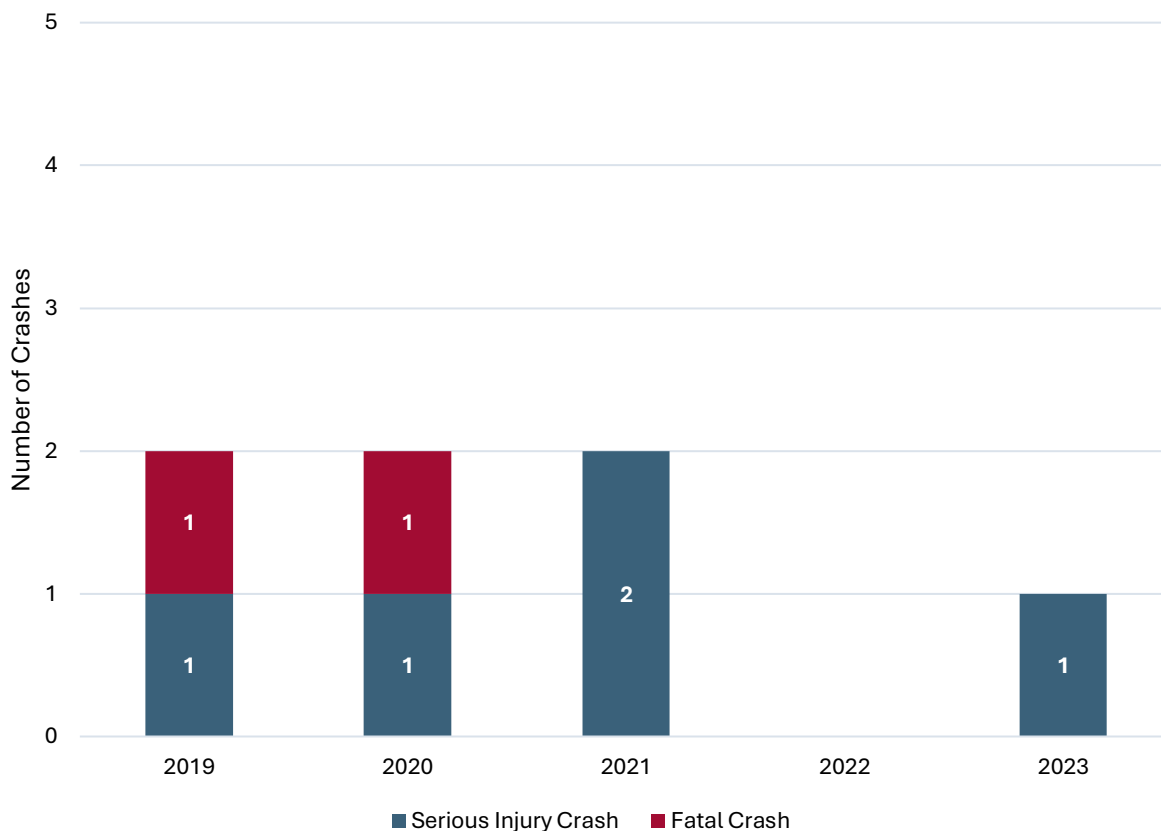


Figure 4. Enoch City GFA Fatal and Serious Injury Crashes by Year

The locations of the fatal and serious injury crashes are displayed in **Figure 5** shows both fatal crashes occurring at the intersection of SR 130 and 4800 North. There is also a prevalence of severe crashes along Main Street (SR 130) and in the residential areas surrounding Stage Coach Lane.

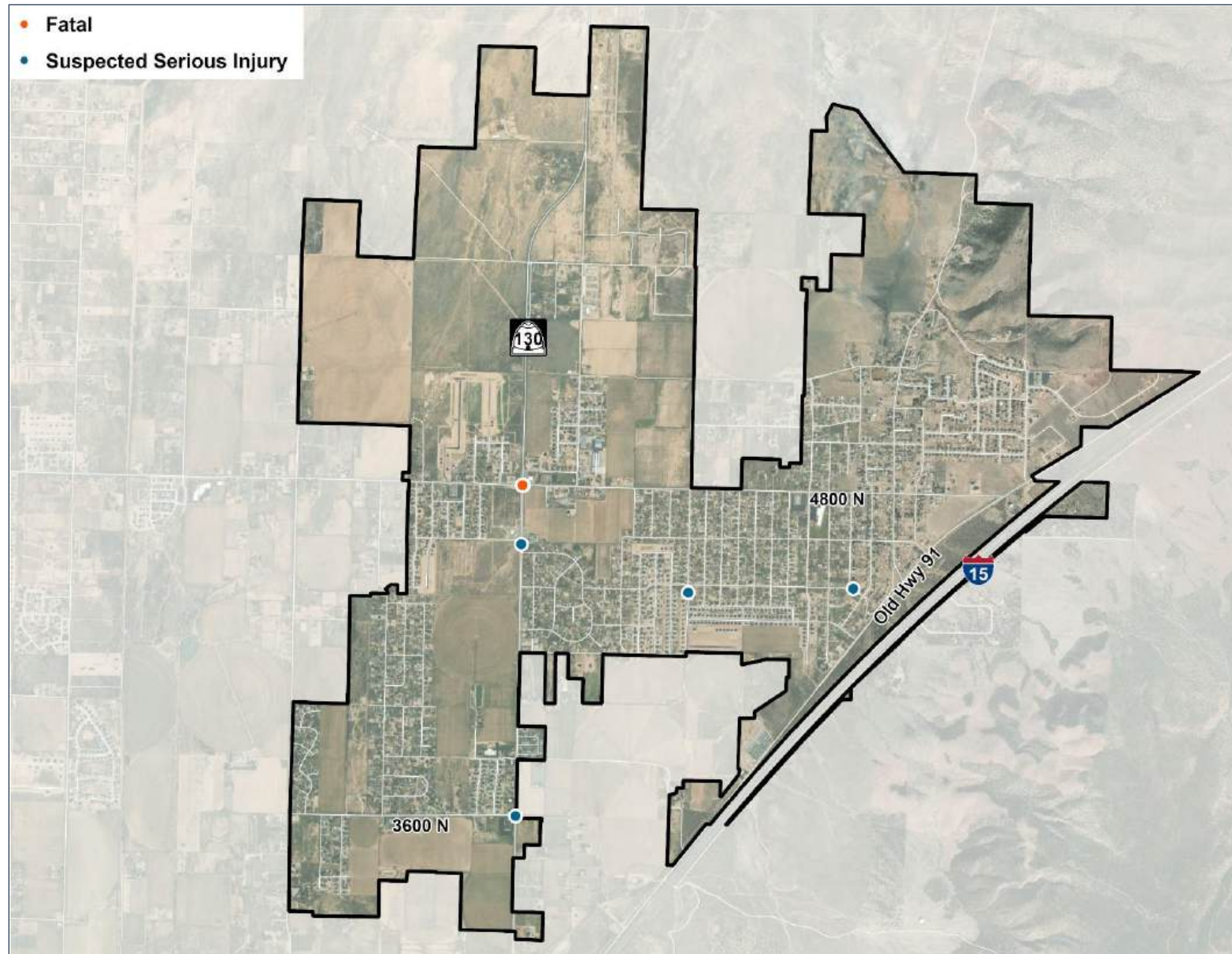


Figure 5. Fatal and Serious Injury Crashes in the Enoch City GFA

3.2.1. Manner of Collision

An overview of fatal and serious injury crashes by the most common manners of collisions is shown in **Figure 6**. The manner of collision represents how two vehicles initially collided. The recorded manner of collision may overlap with the recorded crash type, as manner of collision is a more detailed categorization compared to crash type that is summarized in Section 0. The three most frequent manners of collision that resulted in a fatality or serious injury crash are angle crashes, rear-end crashes, and parked vehicle crashes.

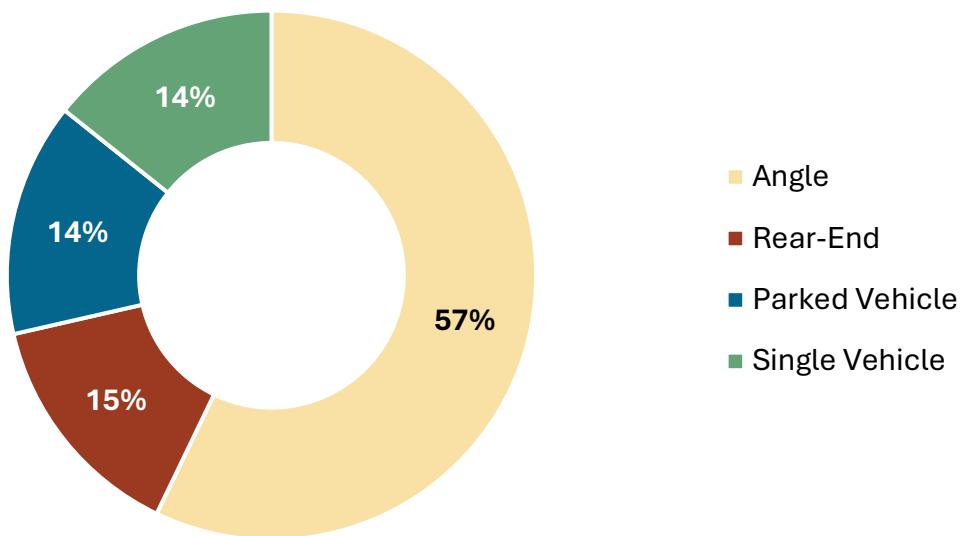


Figure 6. Most Common Fatal and Serious Injury Manners of Collision for the Enoch City GFA

3.2.2. Crash Types

Crash type represents a query of multiple data fields, including the manner of collision. Each crash is assigned only one primary crash type, examples include left turns at intersections, rear -ends, sideswipes, and roadway departure crashes.

The most common crash types for the Enoch City GFA are summarized in **Figure 7**. The three most frequent fatal and serious injury crash types are recorded as “Other,” roadway departures, and rear-end crashes. The crash type “other” may indicate a unique crash scenario or a gap in available data.

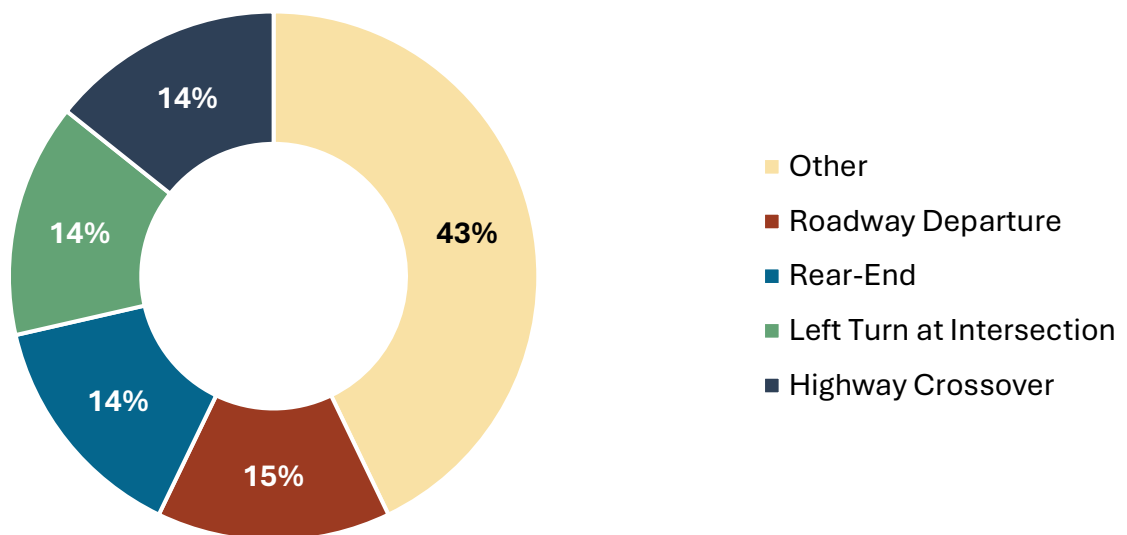


Figure 7. Most Common Fatal and Serious Injury Crash Types for the Enoch City GFA

3.2.3. Driver Contributing Factors

Several factors may contribute to a single crash; however, the driver contributing factors shown in **Figure 8** only represent the first driver specific contributing factor as recorded in the crash report. The first driver contributing factor recorded in the crash report indicates the primary cause of a crash. The data shows that the three most frequent driver contributing factors are vehicles failing to yield to proper right-of-way, disregarding traffic signals, and reckless or aggressive driving.

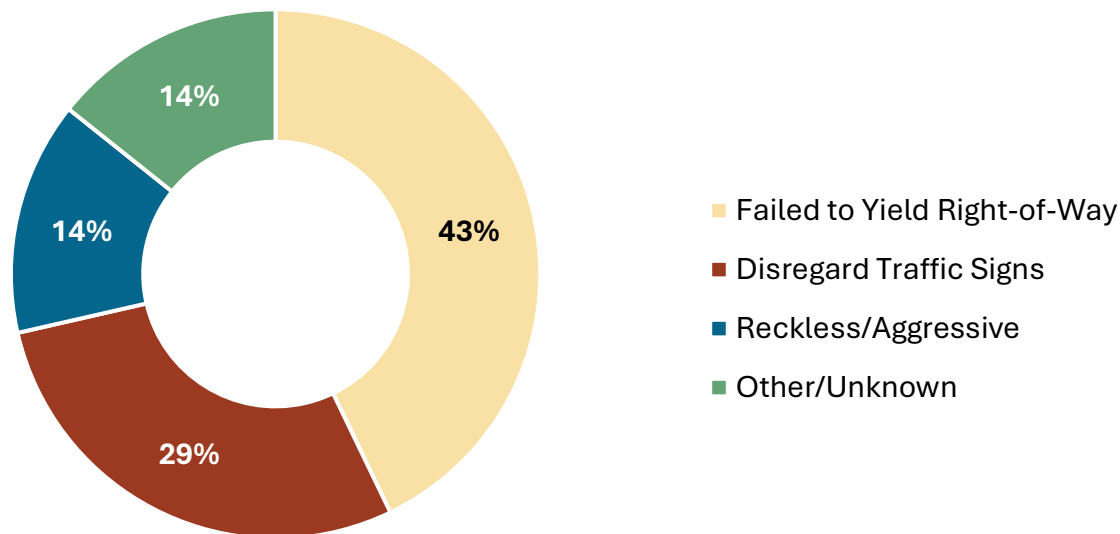


Figure 8. Most Common Fatal and Serious Injury Crash Driver Contributing Factors for the Enoch City GFA

3.2.4. Vulnerable User Crashes

Vulnerable road users include pedestrians and bicyclists. The data shows one crash involving a pedestrian and 3 crashes involving bicyclists occurred in the Enoch City GFA from 2019 to 2023. No fatal or serious injury crashes involving a pedestrian or bicyclist occurred in the Enoch City GFA in the five-year analysis period.

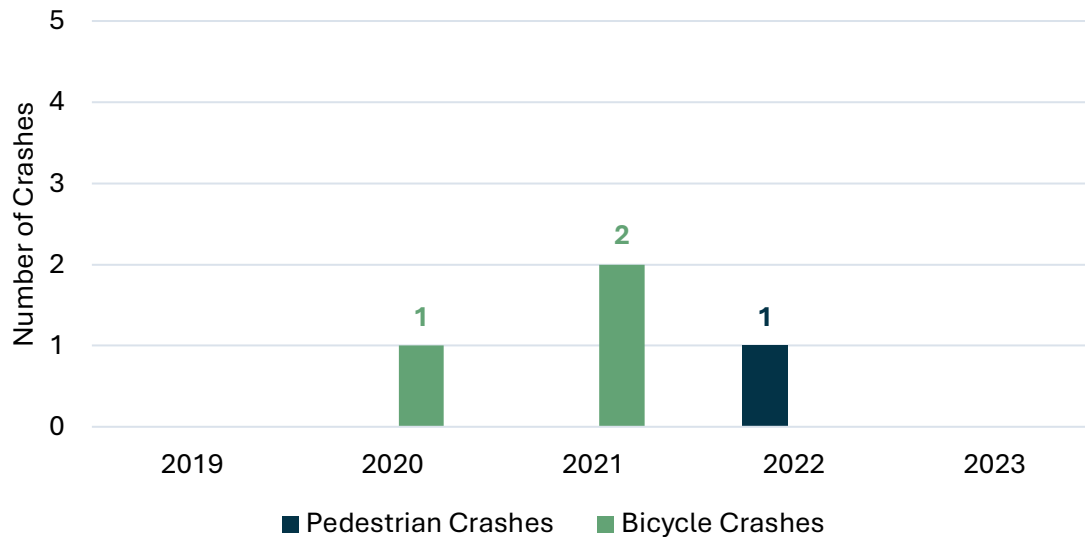


Figure 9. Vulnerable User Crashes by Year for the Enoch City GFA

3.3. Utah SHSP Emphasis Safety Area Analysis

The SHSP emphasis area analysis ranks the frequency of fatalities and serious injuries in the Enoch City GFA for each of the eleven Utah SHSP emphasis safety areas. A fatality or serious injury may be assigned to multiple emphasis areas.

The rankings of the emphasis areas compare the Enoch City GFA, the state of Utah, and all of Iron County.

This analysis helps to determine priority emphasis areas for the Enoch City GFA, based on whether the ranked frequency of fatalities and serious injuries within the GFA are significantly different than the statewide or County rankings.

Table 3 summarizes the Utah SHSP Emphasis Area comparison analysis. The following emphasis areas have the highest frequency of fatalities and serious injuries in the Enoch City GFA. The SAP will identify strategies to address these priority emphasis areas:

- No Safety Restraints
- Intersections
- Older Drivers
- Roadway Departures
- Teen Drivers

Table 3. Utah SHSP Emphasis Area Comparison for the Enoch City GFA

Category	Utah SHSP Safety Emphasis Area	Statewide		Iron County		Enoch City GFA		
		Fatalities and Serious Injuries	Rank	Fatalities and Serious Injuries	Rank	Fatalities and Serious Injuries	Rank	Change in Rank from County
Driver	Teen Driver	1,695	4	54	5	2	5	0
	Older Driver	1,565	7	49	6	3	3	3
	Speed-Related	2,268	3	78	3	0	9	-6
	Aggressive Driving	615	11	19	10	1	8	2
	Distracted Driving	732	10	28	8	2	6	2
	Impaired Driving	1,100	8	27	9	1	7	2
	No Safety Restraints	1,627	5	85	2	8	1	1
Roadway	Intersection	3,683	1	67	4	7	2	2
	Roadway Departure	3,372	2	132	1	2	4	-3
Special Users	Motorcycle	1,571	6	40	7	0	10	-3
	Pedestrian	1,000	9	15	11	0	11	0
	Bicycle*	303	12	3	12	0	12	0

**While Bicycles are not one of the eleven Utah SHSP emphasis areas, they are included as part of the CSAP safety analysis.*

4. HISTORIC CRASH ANALYSIS

A component of the SAP is to identify locations with an elevated risk of crashes. The initial step of this analysis is to spatially reference crashes that occurred within the study area.

The following networks were created in the historic crash analysis using the historic crash locations:

- **High-Crash Network:** Represents roadways and intersections on which the most crashes occur and experience high crash rates.
- **High-Injury Network:** Represents roadways and intersection on which fatal and injury crashes typically occur.

4.1. High-Crash Network

The roadway network shown in **Figure 10** is identified as the High-Crash network. The High-Crash network includes locations on which 50% of all crashes in the GFA have occurred and locations experiencing high crash rates.

4.2. High-Injury Network

Figure 11 shows the identified High-Injury network. The High-Injury network represents the roadways on which 50% of fatal and injury crashes have occurred.

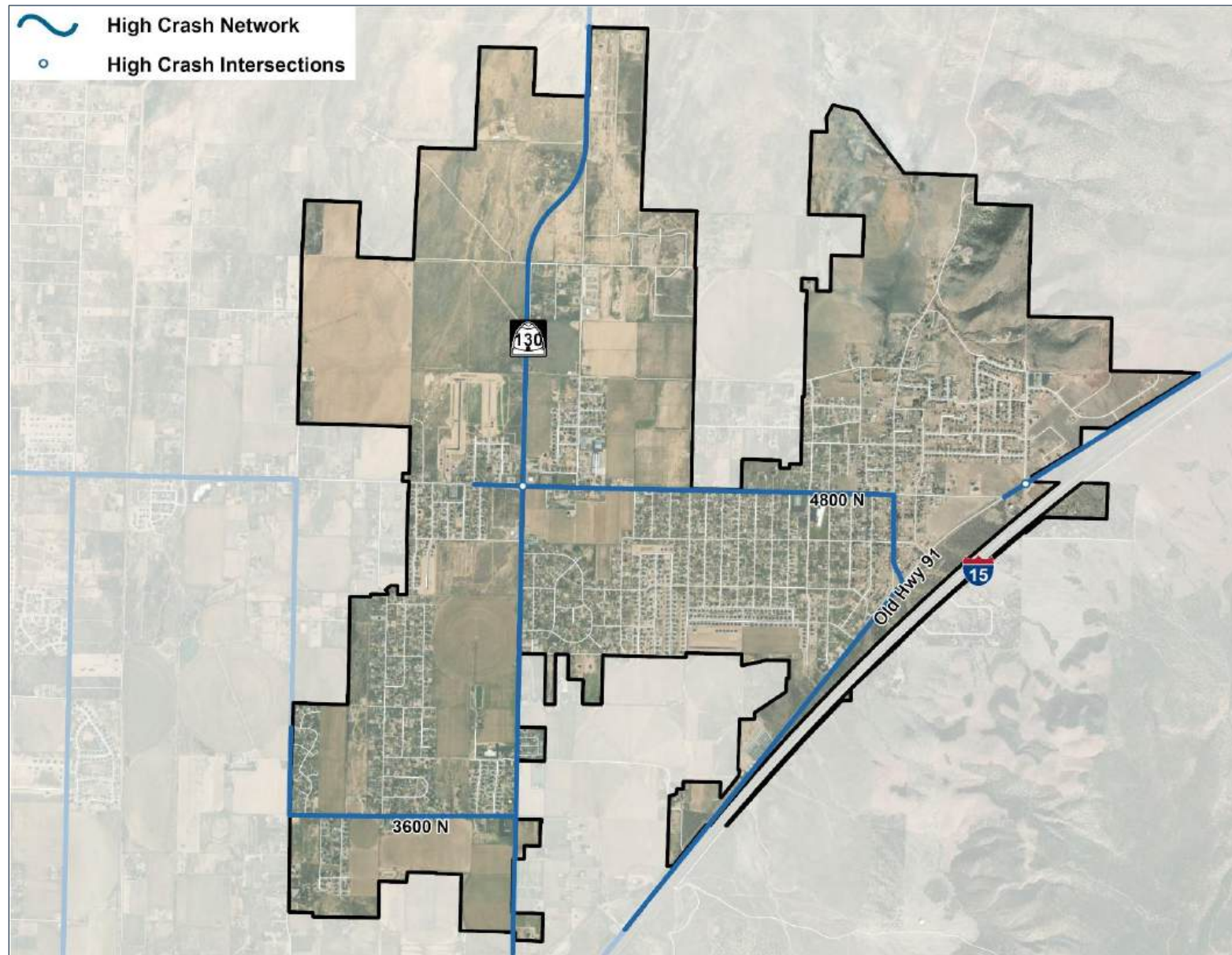


Figure 10. High-Crash Network for the Enoch City GFA

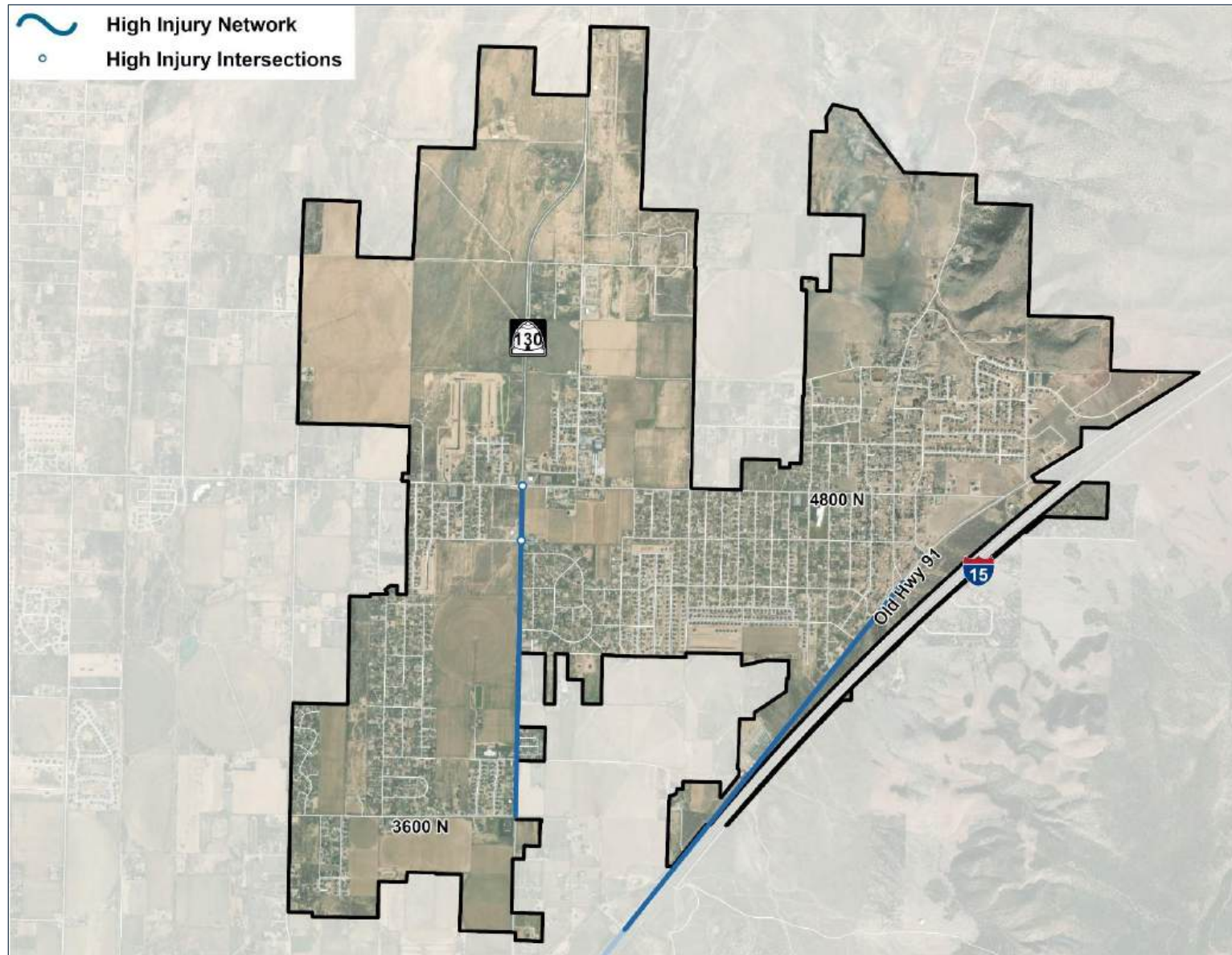


Figure 11. High-Injury Network for the Enoch City GFA

5. NETWORK SCREENING ANALYSIS

A network screening analysis was prepared for the Enoch City GFA informed by a Critical Crash Rate (CCR) analysis. Network screening methodology is detailed in Technical Memorandum #1. A positive CCR differential is an indication of a location with a potential for safety improvement (PSI). All roadways and intersection with a positive CCR differential are shown in **Figure 12**.

These locations represent those with the highest potential for safety improvements and should be considered as project candidate locations.

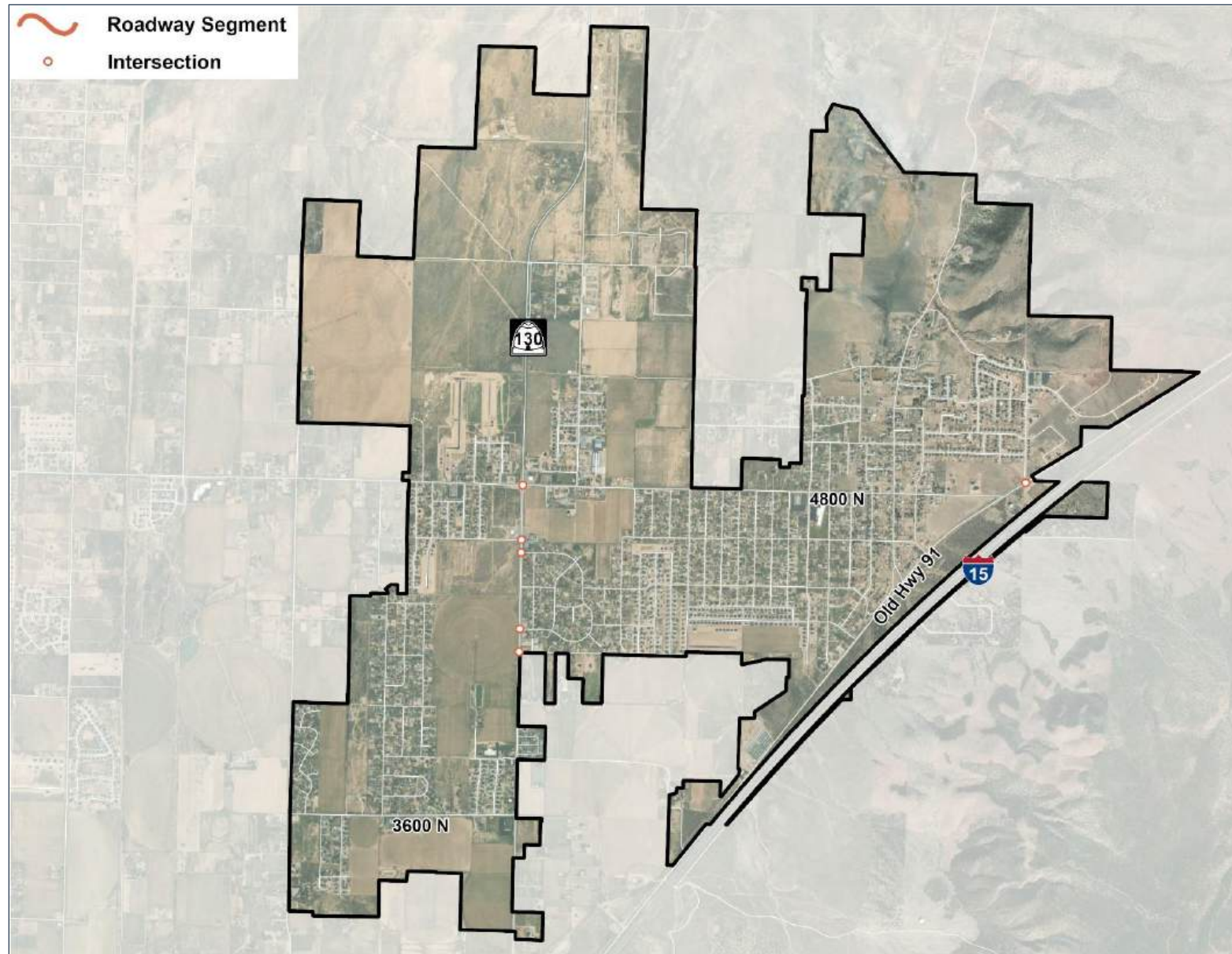


Figure 12. Critical Crash Rate (CCR) Network for the Enoch City GFA

6. CONFLICT AREAS

The conflict area analysis used Replica data obtained for the Iron County area to proactively address areas of greater safety risks. The following data and metrics were isolated in Replica to identify higher risk roadways in the GFA and Iron County:

- Speeding
- Non-Speeding Events: Suspected Collisions, Phone Handling (Distracted Driving), and Sudden Braking
- Active Transportation (pedestrians and bicyclist) high-risk corridors

A maximum risk score within Replica is 100 points. Roadways with a risk score of 80 or more in any of the Replica metrics analyzed are included in the Replica Conflict Networks shown in **Figure 13** and **Figure 14** for the Enoch City GFA.

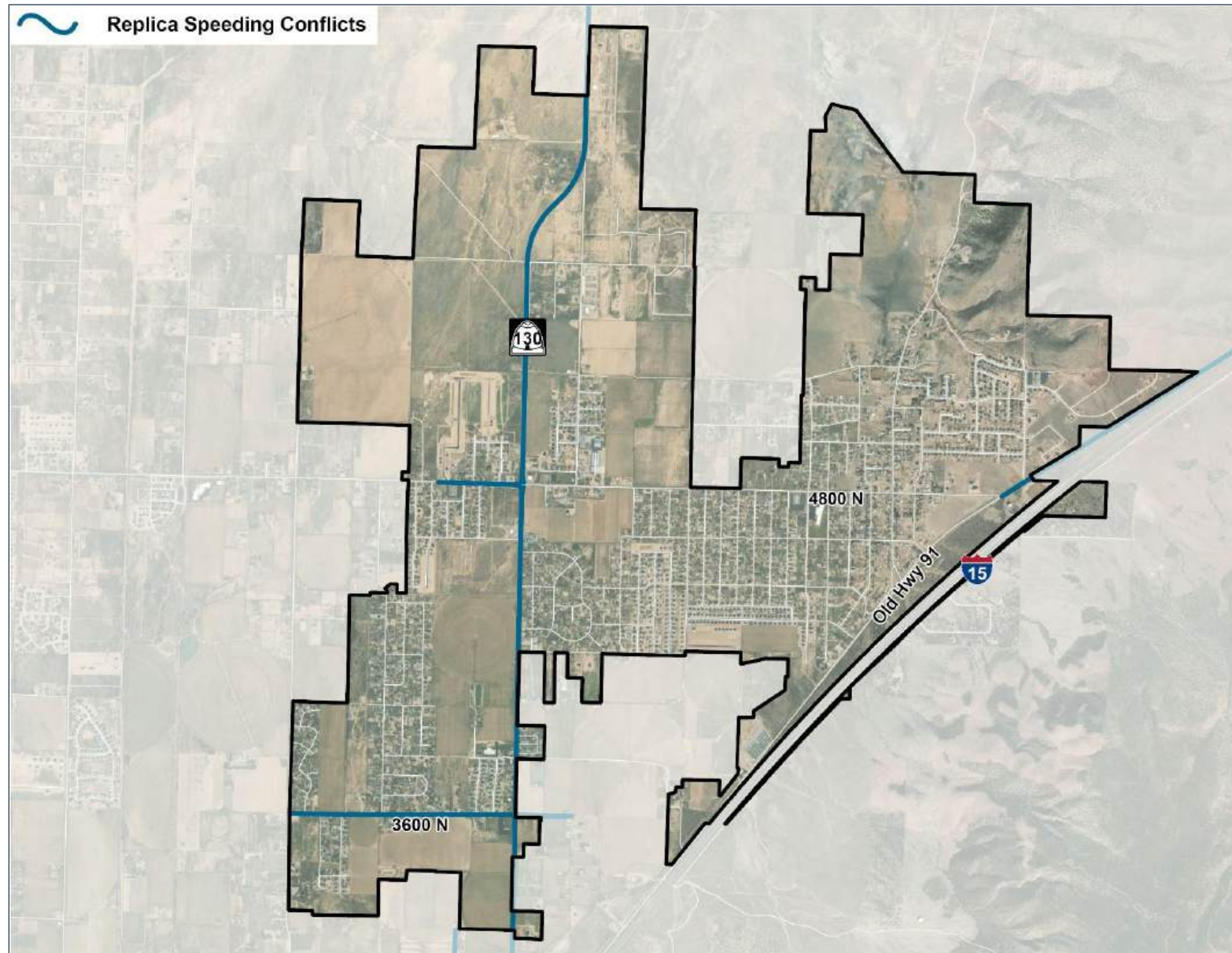


Figure 13. Replica Speeding Conflict Areas for the Enoch City GFA

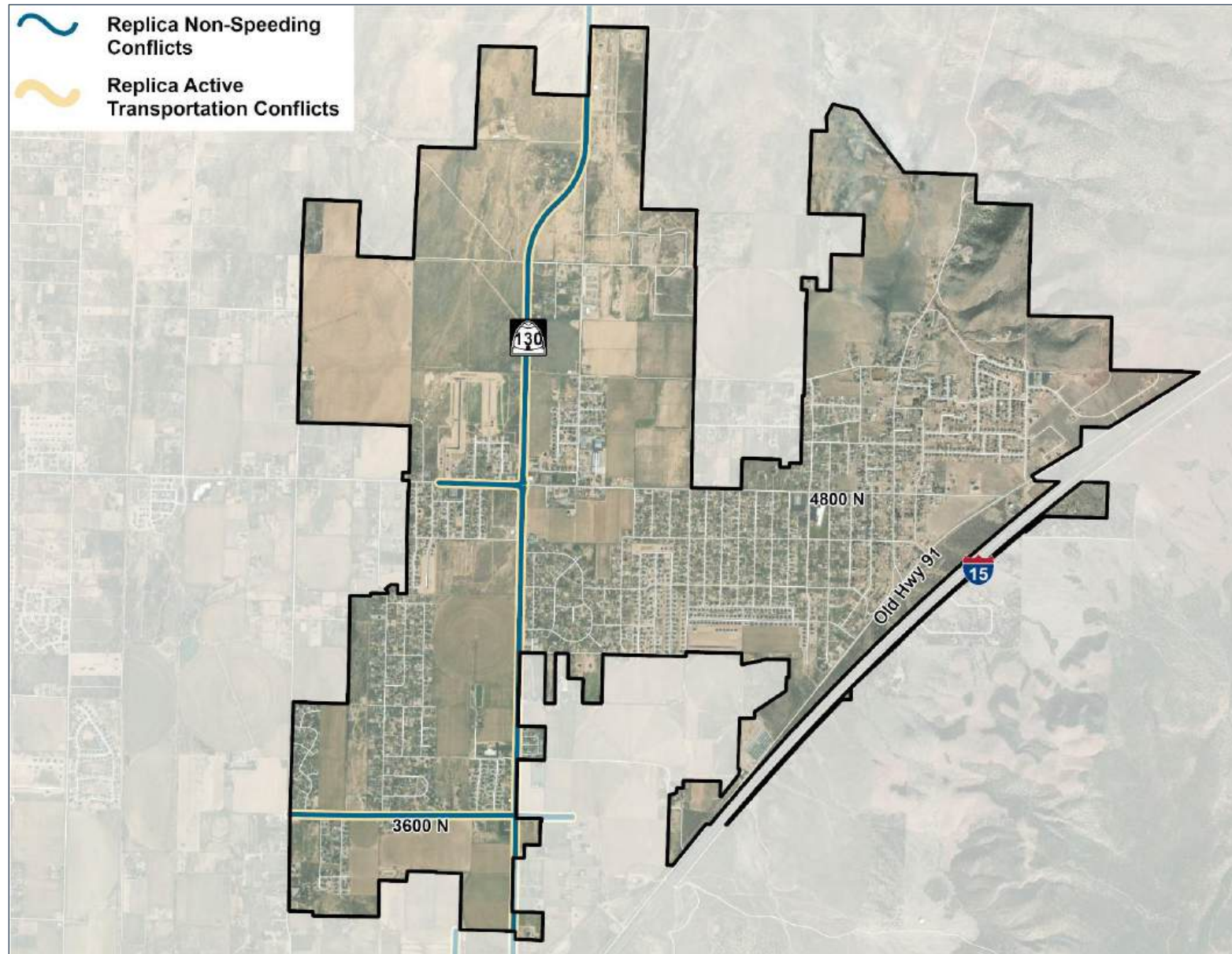


Figure 14. Replica Non-Speeding and Active Transportation Conflict Areas for the Enoch City GFA

7. ROADWAY CHARACTERISTIC RISK ANALYSIS

A roadway characteristic risk analysis was performed using the following sub-analyses:

- Crash Profile Risk Assessment
- usRAP Risk Assessment

7.1. Crash Profile Risk Assessment

This crash profile risk assessment sub-analysis identifies common roadway characteristics for roadways where fatal and serious injury crashes have occurred. Based on various roadway characteristic risks identified from crash report analysis, a risk score was assigned to major routes within the Enoch City GFA. A breakdown of the risk assessment scoring is reported in **Section 4.4** of Technical Memorandum #1. This assessment is limited to state and federal routes since the roadway characteristic data is only available for those route types. The results of the Crash Profile Risk Assessment are mapped in **Figure 15**.

7.2. usRAP Risk Assessment

A roadway characteristic risk assessment was performed using roadway feature data collected for Utah's state routes. The risk assessment was performed using usRAP data and tools. The output of the usRAP tool is a star rating, or risk rating, for vehicle, pedestrian, and bicyclist features. This assessment is limited to state and federal routes since the roadway characteristic data is only available for those route types. The results of the usRAP risk assessment by star rating are mapped in **Figure 16**.

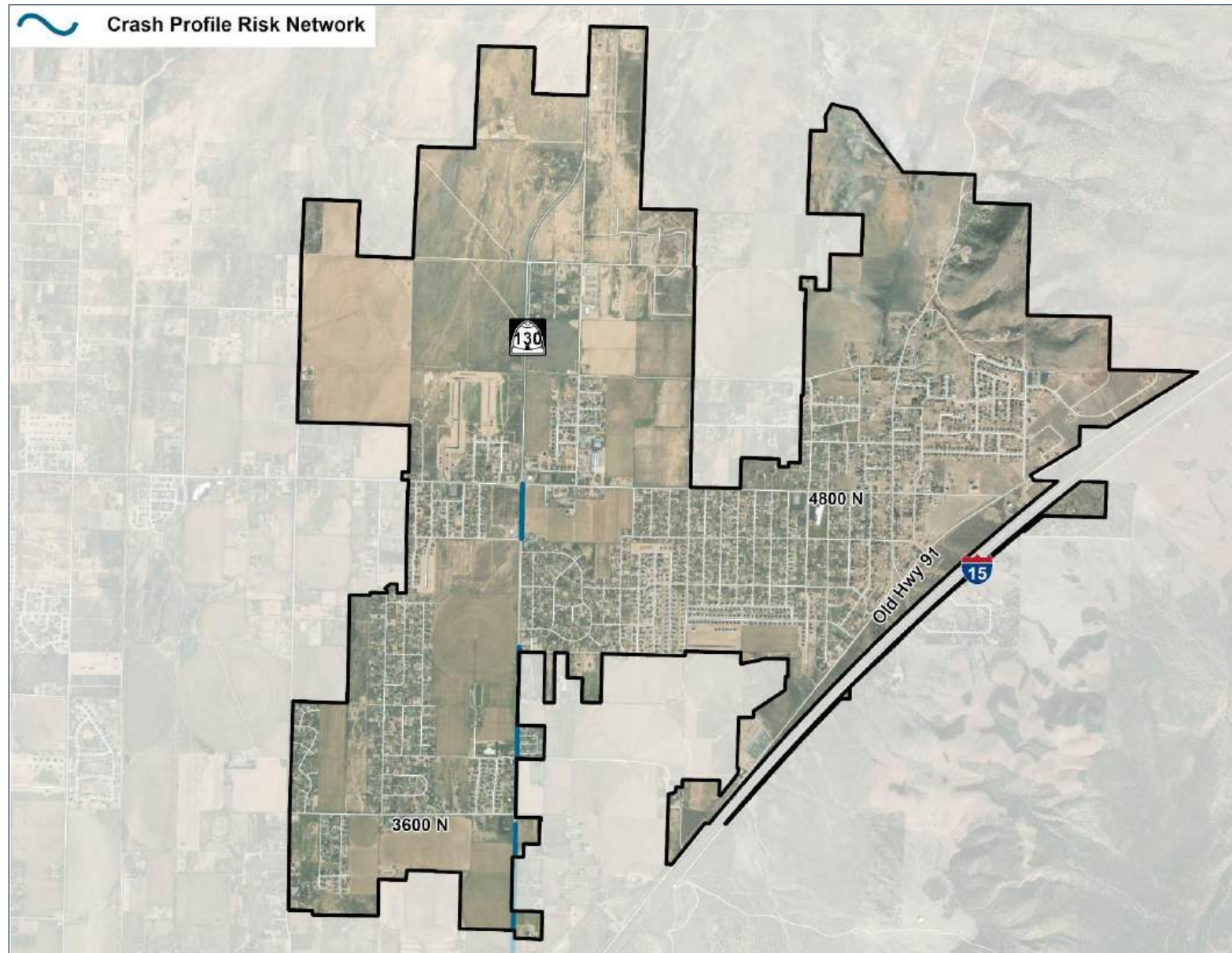


Figure 15. Crash Profile Risk Network for the Enoch City GFA

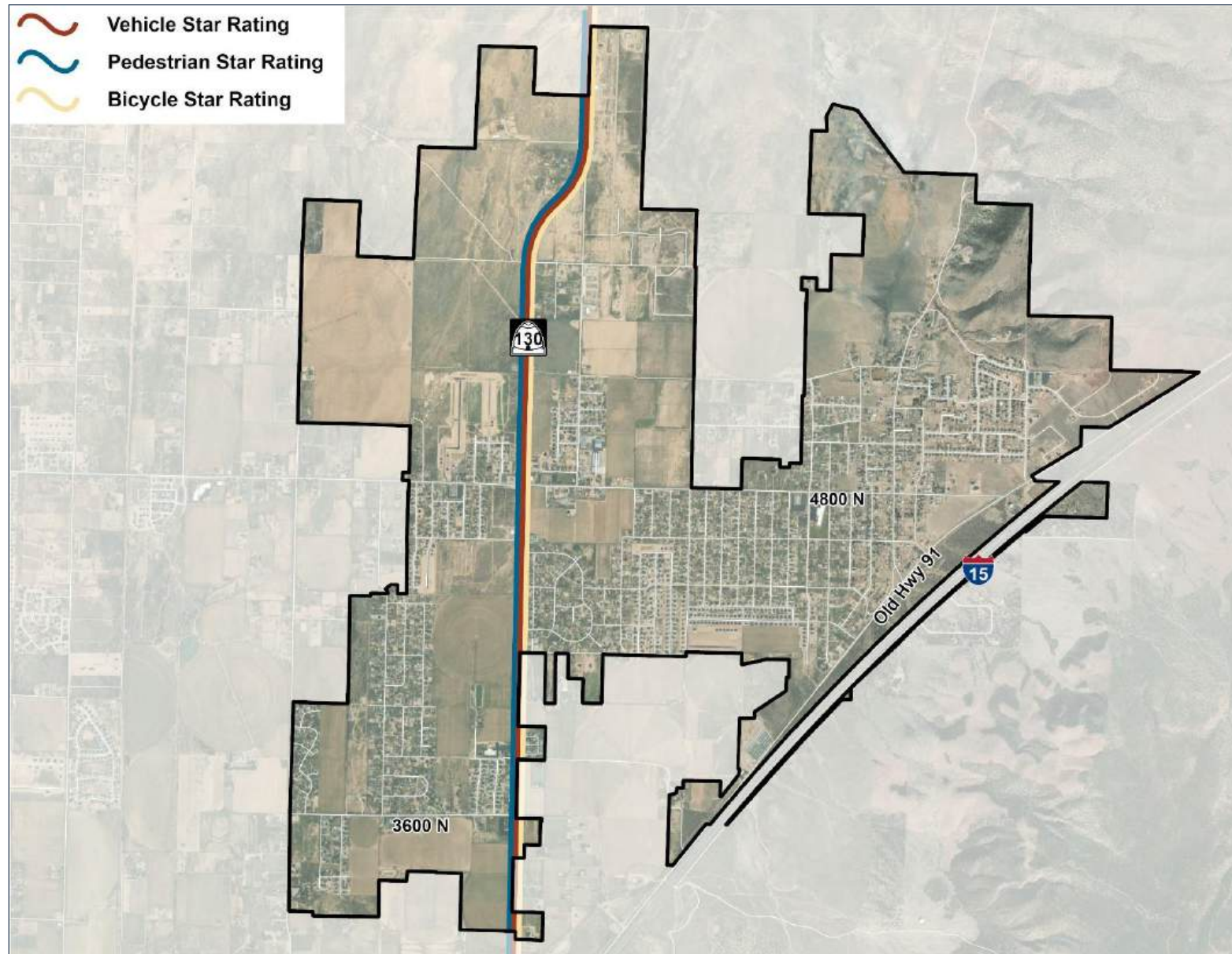


Figure 16. usRAP Risk Network – Star Ratings for the Enoch City GFA

8. HIGH-RISK NETWORK

Each of the safety analysis methodologies identified roadway segments or intersections in the Enoch City GFA that may benefit from safety improvements to reduce fatal and serious injury crashes.

To provide focused information for decisions regarding prioritization of safety improvements, an overlay of each analysis methodology was created to form a High-Risk Network.

A high-risk score, from zero to five, was determined using the approach in **Table 4**. Any location with a positive high-risk score may be considered for safety improvements. Locations with a risk score of three or greater are to be prioritized in the High-Risk Network

The Enoch City GFA High-Risk Network is shown in **Figure 17**. **Table 5** and **Table 6** provide an overview of the high priority roadway segments and intersections included in the High-Risk Network that were presented to stakeholders for comment in December 2024. Up to ten roadway segments and 20 intersections were listed if a location had a positive risk score.

Table 4. High-Risk Scoring Criteria

High Risk Category	Safety Analysis	Scoring Criteria	Risk Score
Historic Crashes	High Crash Network	Highest number of crashes per miles	1
	High Injury Network	Highest number of fatal and injury crashes per mile	1
Network Screening	Critical Crash Rates	Positive critical crash rate differential	1
Conflict Areas	Replica - Speeding Areas	Speeding conflict risk score of 80+	1/3
	Replica - Non-Speeding Areas	Non-speeding conflict risk score of 80+	1/3
	Replica - Active Transportation Areas	Active transportation conflict risk score of 80+	1/3
Risk Characteristics	Crash Profile Risk	Crash Profile Risk score of 60+	1/4
	usRAP Vehicle Star Rating	Star Rating of 1 - 2	1/4
	usRAP Pedestrian Star Rating	Star Rating of 1 - 2	1/4
	usRAP Bicycle Star Rating	Star Rating of 1 - 2	1/4
Maximum High-Risk Score			5

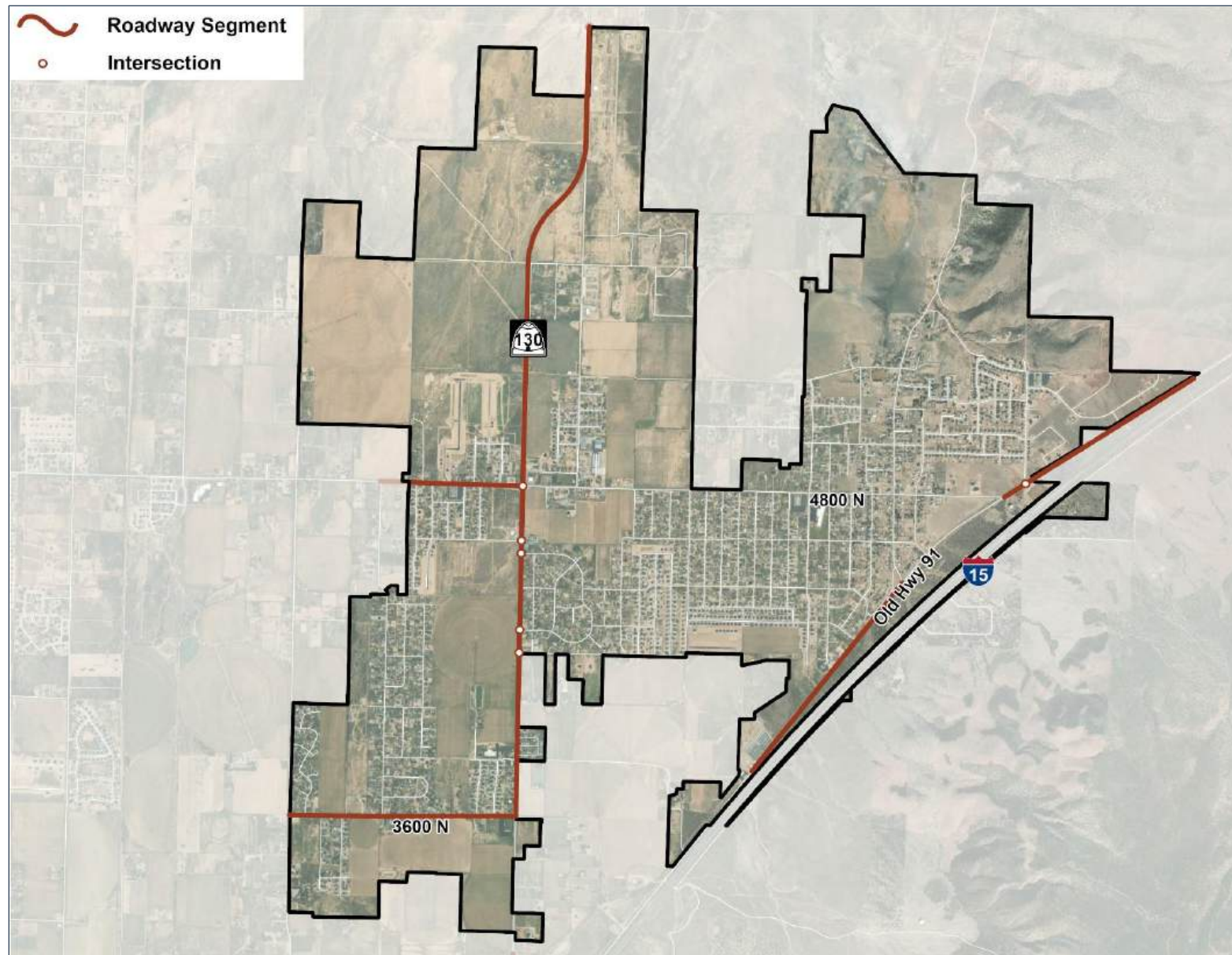


Figure 17. High-Risk Network for the Enoch City GFA

Table 5. Priority High-Risk Roadways for the Enoch City GFA

Roadways				Safety Analysis									
Roadway	Extents	Length (miles)	Functional Classification	High Crash Network	High Injury Network	Critical Crash Rate	Replica Speeding	Replica Non Speeding	Replica Active Transportation	Crash Profile Risk	usRAP Vehicle Star Rating	usRAP Pedestrian Star Rating	usRAP Bicycle Star Rating
State Routes													
Minersville Highway (SR 130)	3600 North to Midvalley Road	1.5	Other Principal Arterial	X	X		X	X	X	X	X	X	X
Minersville Highway (SR 130)	Midvalley Road to 6400 North	2.5	Minor Arterial	X		X	X	X	X	X	X	X	X
Non- State Routes													
Midvalley Road	SR 130 to Driftwood Lane	0.8	Major Collector	X			X	X	X				
Old Highway 91	940 East to Enoch Road	1.5	Major Collector	X	X								
Old Highway 91	Midvalley Road to Ravine Road	1.0	Major Collector	X			X						
3600 North	Bulldog Road to SR 130	1.0	Minor Collector	X			X	X	X				

Table 6. Priority High-Risk Intersections for the Enoch City GFA

Intersections		Safety Analysis			Supporting Networks						
Intersection	Number of Crashes	High Crash Network	High Injury Network	Critical Crash Rate	Replica Speeding	Replica Non Speeding	Replica Active Transportation	Crash Profile Risk	usRAP Vehicle Star Rating	usRAP Pedestrian Star Rating	usRAP Bicycle Star Rating
Unsignalized Intersections											
SR 130 & Midvalley Road	17	X	X	X				X	X	X	X
SR 130 & 4600 North	3		X	X	X	X	X	X	X	X	X
SR 130 & 6400 North	5	X		X	X	X	X		X	X	X
SR 130 & 4200 North	3			X	X	X	X	X	X	X	X
SR 130 & Blue Sky Drive North	4			X	X	X	X		X	X	X
Heather Hue Road & Old Highway 91	3			X	X	X	X		X	X	X
SR 130 & Blue Sky Drive South	3			X	X	X	X		X	X	X



APPENDIX A.3. EAST IRON COUNTY GFA SAFETY ANALYSIS AND RESULTS

TECHNICAL MEMORANDUM #1

APPENDIX A3

EAST IRON COUNTY GEOGRAPHIC FOCUS AREA SAFETY ANALYSIS

Statutory Notice

23 U.S.C. § 409: US Code - Section 409: Discovery and admission as evidence of certain reports and surveys

Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway- highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

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1. INTRODUCTION

Appendix A3 summarizes the safety analysis performed for the East Iron County Geographic Focus Area (GFA) as part of the Safety Action Plan for all Iron County (SAP).

The safety analysis identified roadway segments and intersection with the highest safety risk and need. The resulting High-Risk Network represents locations with the largest potential for safety improvement. The network helps informs the identification of potential project locations that may be further considered in the SAP.

1.1. Safety Analysis

The safety analysis methodologies are presented in **Section 4** of Technical Memorandum #1 and include the components shown in **Figure 1**. Results of each component are shown in **Table 1**.

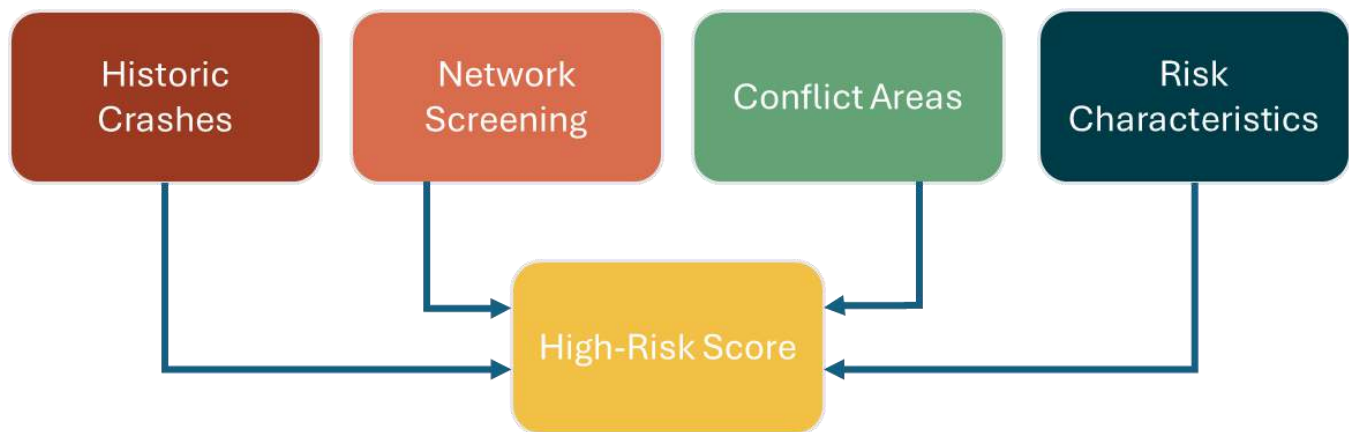


Figure 1. Safety Analysis Components

Table 1. Safety Analysis Components and Results

Safety Analysis Component	Analysis Result(s)
Historical Crash Overview	Frequent crash types and common contributing factors.
Strategic Highway Safety Plan (SHSP) Emphasis Area Analysis	Ranked emphasis areas based on GFA, Iron County, or Statewide crashes.
Historical Crash Analysis	High-crash network.
	High-risk network.
Network Screening Analysis	Critical crash rate network.
Conflict Areas	Speeding, phone handling, sudden braking, and suspected collision networks.
Risk Characteristics	Crash Profile Risk Assessment
	usRAP Risk Factors Analysis

1.2. Appendix Organization

Appendix A3 is organized into the following sections:

- **Section 1** – Introduction
- **Section 2** – East Iron County GFA Study Area and Roadway Network
- **Section 3** – Historic Crash Overview
- **Section 4** – Historic Crash Analysis
- **Section 5** – Network Screening Analysis
- **Section 6** – Conflict Areas
- **Section 7** – Roadway Characteristic Risk Analysis
- **Section 8** – High-Risk Network

2. STUDY AREA

The SAP study area includes each jurisdiction within Iron County. To organize the Iron County jurisdictions and unincorporated areas into manageable analysis areas, Iron County was divided into five GFAs. The East Iron County GFA, shown in **Figure 2**, includes State Route (SR) 130 and sections of SR 56 to approximately Bumblebee Road. The following jurisdictions and agencies east of SR 130 and SR 56 are included in the East Iron County GFA:

- Brain Head Town
- Kanarraville
- The Paiute Indian Tribe of Utah
- Paragonah Town
- Parowan City
- Unincorporated Iron County

The safety analyses presented in this appendix are specific to the East Iron County GFA.

Figure 2 highlights the roadway network within the East Iron County GFA study area. Roadways within the study area are divided into the following categories:

- State Routes: Roadways maintained by the Utah Department of Transportation (UDOT)
- Non-State Routes: Jurisdiction-maintained roads

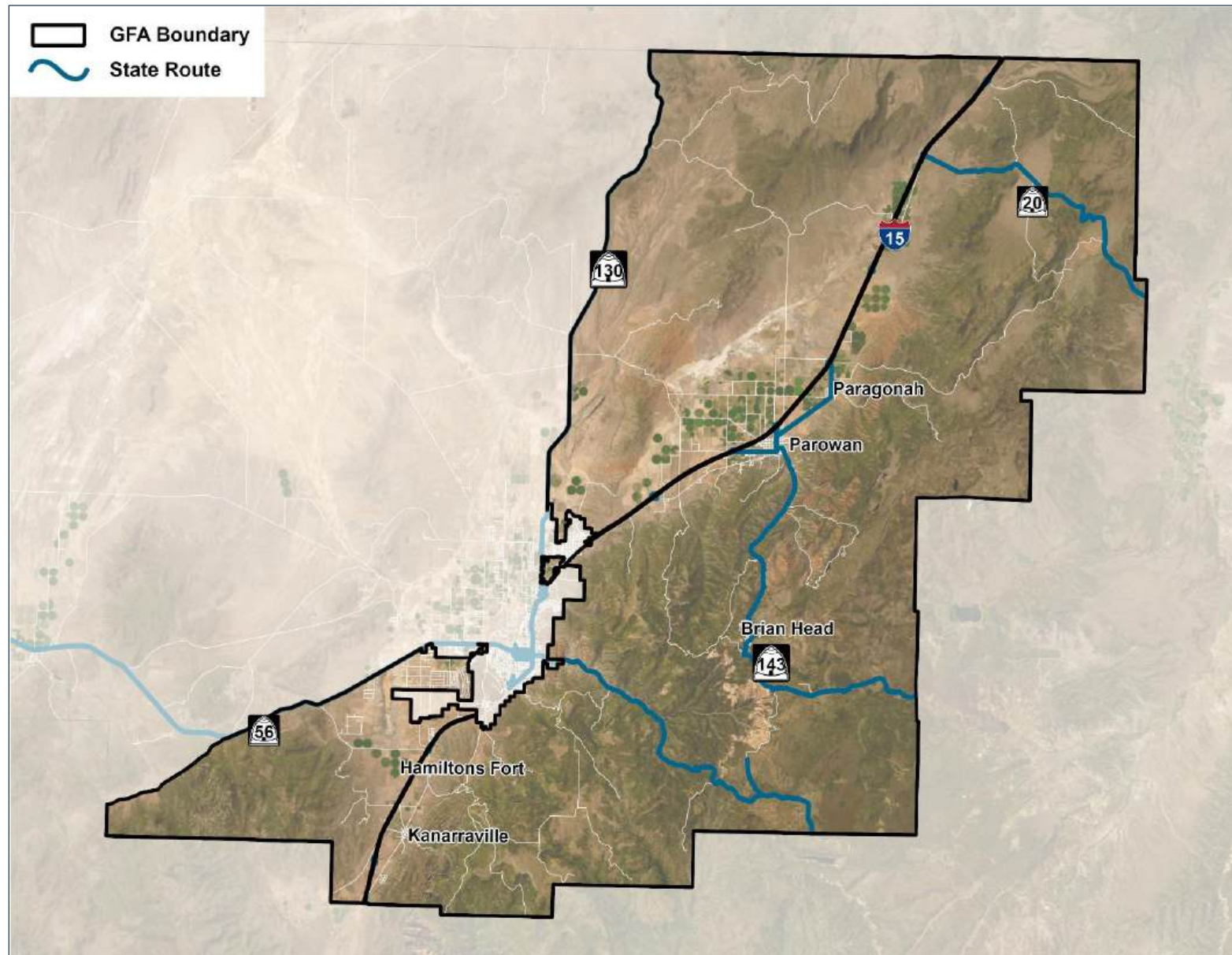


Figure 2. East Iron County GFA Study Area

3. HISTORIC CRASH OVERVIEW

Crash data was obtained from the UDOT database for the most recent completed five-year period, 2019 to 2023. A historic crash review specific to the East Iron County GFA is summarized below.

3.1. Overall Crashes

Figure 3 provides an overview of annual crashes for the East Iron County GFA separated by crash severity. Crash severity is reported as fatal, serious injury, or all other crashes (minor injury, possible injury, or property damage only). A review of the crash data reveals the following:

- The total number of crashes was highest in 2021. Crash severities remained relatively constant from 2019 to 2020.
- The number of fatal and serious injury crashes was the highest in 2022 (16) and slightly decreased in 2023 (11).

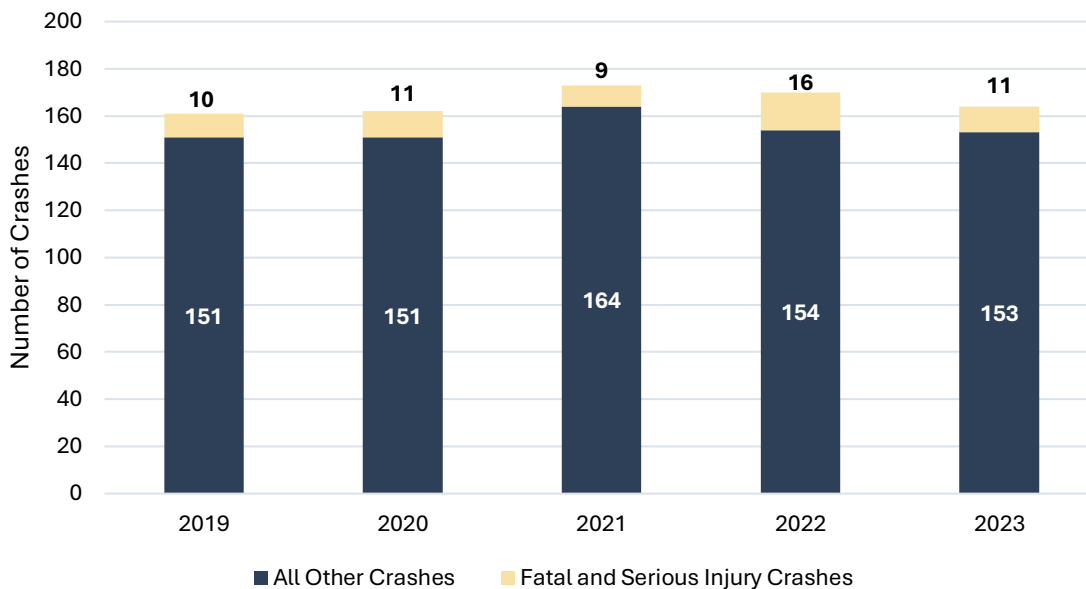


Figure 3. East Iron County GFA Crashes by Year

Table 2 provides an overview of crashes by severity and route type within the East Iron County GFA. A review of the data reveals the following:

- 76% of crashes occurred on State Routes.
- More serious injury crashes occur on State Routes (30) compared to non-state routes (16).
- Fatal and serious injury crashes make up approximately 7% of all crashes in the East Iron County GFA.
- 67% of crashes in the GFA results in no injury or property damage only (PDO).
- 16% of all the crashes in Iron County occurred within the East Iron County GFA.

Table 2. Crash Severity by Route Type for the East Iron County GFA

Route Type	State Route		Non-State Route		GFA Total		% of Iron County
Crash Severity	Crashes		Crashes		Crashes		%
	#	%	#	%	#	%	
Fatal	6	1%	5	2%	11	1%	28%
Suspected Serious Injury	30	5%	16	8%	46	6%	24%
Suspected Minor Injury	82	13%	25	12%	107	13%	17%
Possible Injury	72	11%	37	18%	109	13%	15%
No Injury / Property Damage Only	438	70%	119	59%	557	67%	15%
Route Total	628	100%	202	100%	830	100%	16%

3.2. Fatal and Serious Injury Crashes

The number of fatal and serious injury crashes by year is summarized in **Figure 4**. A review of the crash data reveals the following:

- An overall increase in fatal and severe injury crashes from 2019 to 2023.
- The number of fatal crashes have increased since 2019, reaching a maximum of four (4) fatal crashes occurring in 2022.

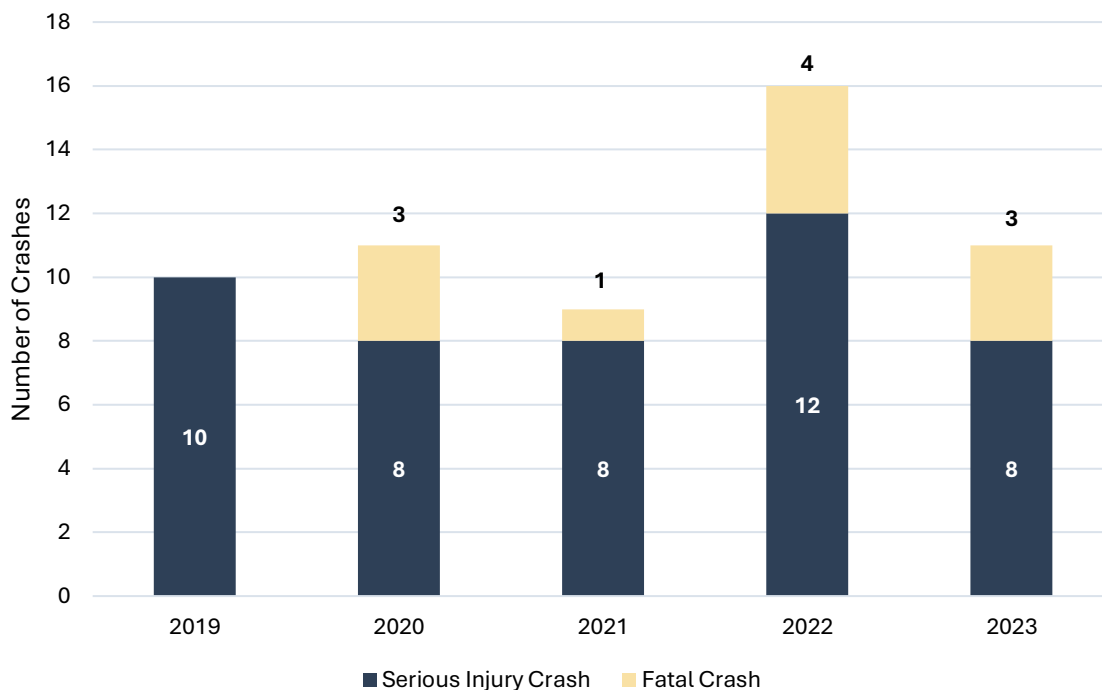


Figure 4. East Iron County GFA Fatal and Serious Injury Crashes by Year

The locations of the fatal and serious injury crashes are displayed in **Figure 5** and show a prevalence of serious injury crashes along SR 20, SR 56, and SR 14. The SR 20 corridor was observed to be an area where a greater number of fatal crashes have occurred.

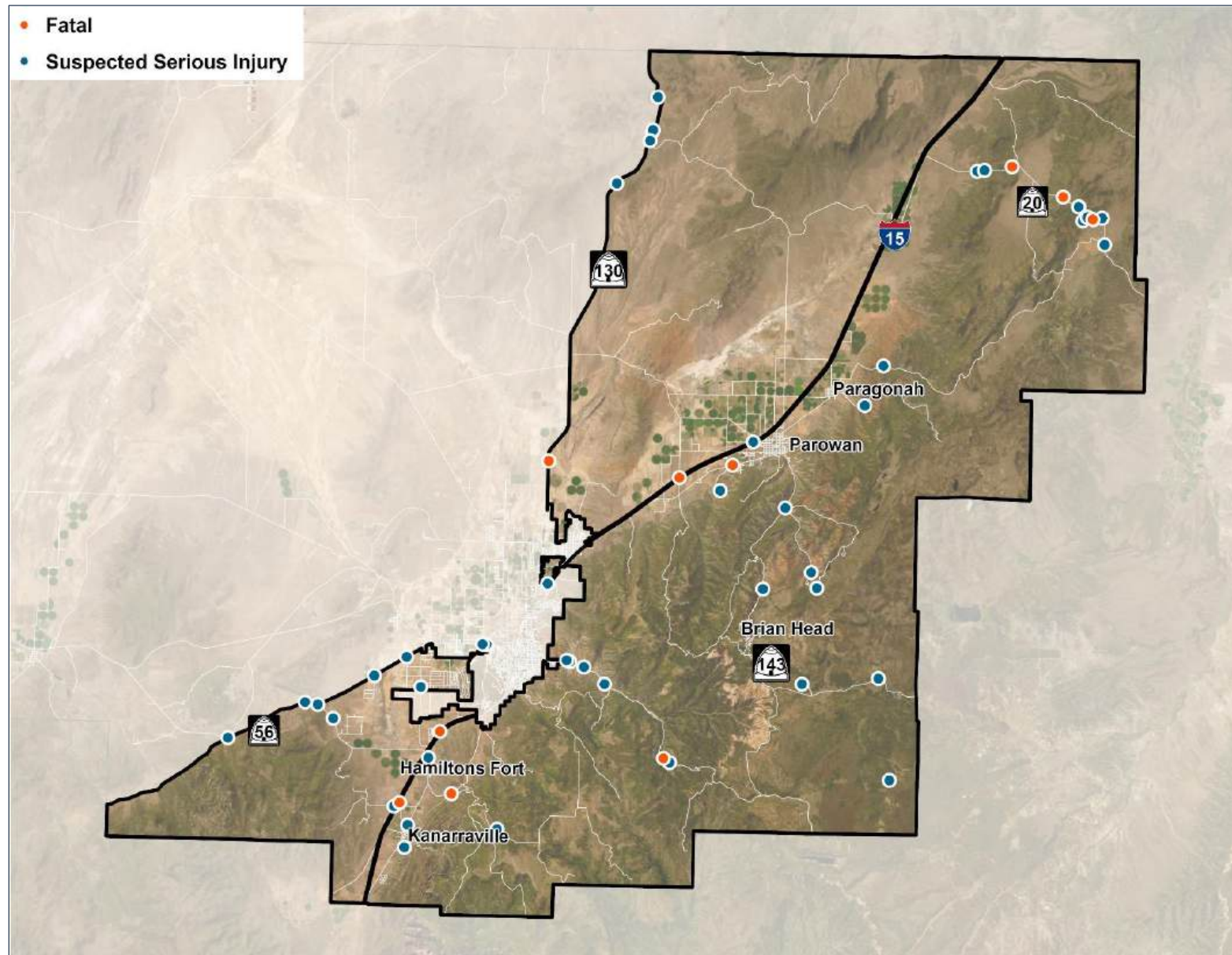


Figure 5. Fatal and Serious Injury Crashes in the East Iron County GFA

3.2.1. Manner of Collision

An overview of fatal and serious injury crashes by the most common manners of collisions is shown in **Figure 6**. The manner of collision represents how two vehicles initially collided. The recorded manner of collision may overlap with the recorded crash type, as manner of collision is a more detailed categorization compared to crash type that is summarized in Section 3.3.2. The three most frequent manners of collision that resulted in a fatality or serious injury crash are single vehicle crashes, head on crashes, and rear-end crashes.

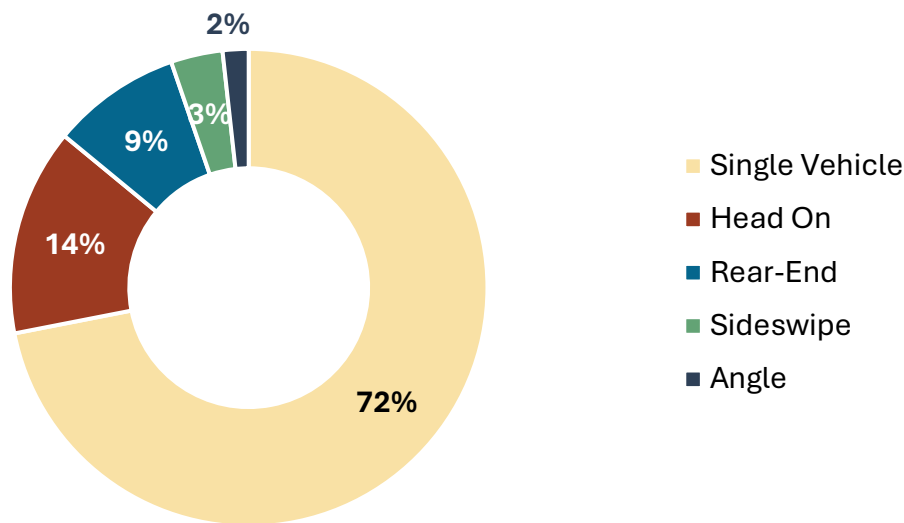


Figure 6. Most Common Fatal and Serious Injury Manners of Collision for the East Iron County GFA

3.2.2. Crash Types

Crash type represents a query of multiple data fields, including the manner of collision. Each crash is assigned only one primary crash type, examples include left turns at intersections, rear -ends, sideswipes, and roadway departure crashes.

The most common crash types for the East Iron County GFA are summarized in **Figure 7**. The three most frequent fatal and serious injury crash types are roadway departures, highway crossovers, and a crash type recorded as “Other.” The crash type “other” may indicate a unique crash scenario or a gap in available data.

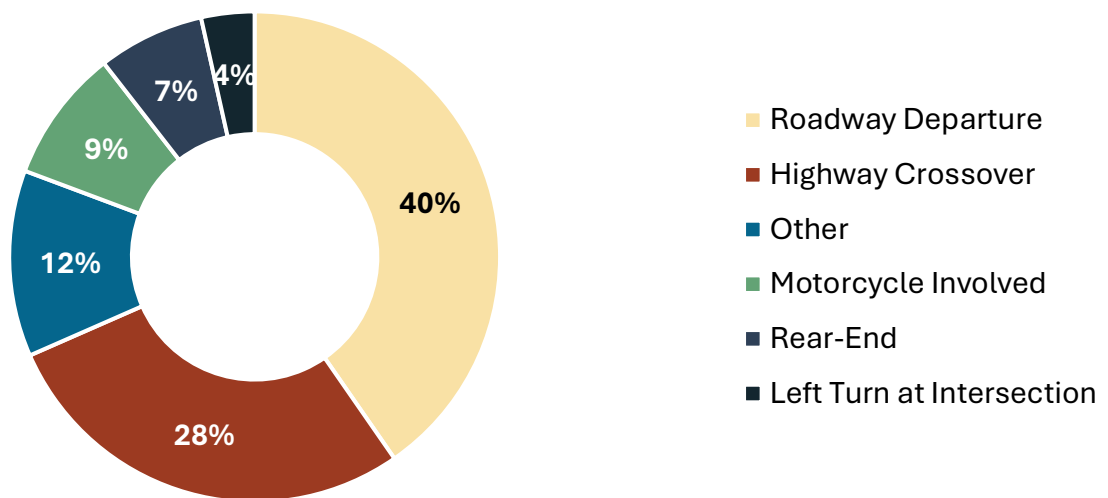


Figure 7. Most Common Fatal and Serious Injury Crash Types for the East Iron County GFA

3.2.3. Driver Contributing Factors

Several factors may contribute to a single crash however, the driver contributing factors shown in **Figure 8** only represent the first driver specific contributing factor as recorded in the crash report. The first driver contributing factor recorded in the crash report indicates the primary cause of a crash. The data shows that the three most frequent driver contributing factors include speeding, failure to keep in the proper lane, and “Other/Unknown”. The “Other/Unknown” contributing crash factor may indicate a unique scenario or highlight a gap in data collection.

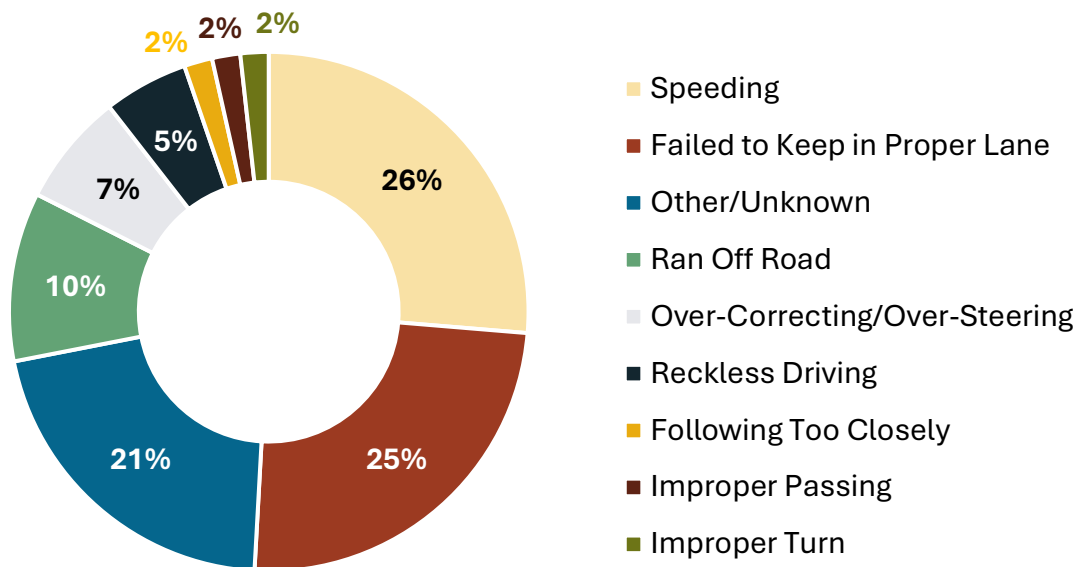


Figure 8. Most Common Fatal and Serious Injury Crash Driver Contributing Factors in the East Iron County GFA

3.2.4. Vulnerable User Crashes

Vulnerable road users include pedestrians and bicyclists. The data shows one crash involving a pedestrian and two crashes involving bicyclists in the East Iron County GFA from 2019 to 2023.

Figure 9 shows that the number of pedestrian and bicycle crashes have decreased since 2022.

No fatal or serious injury vulnerable user crashes occurred in the five-year analysis period.

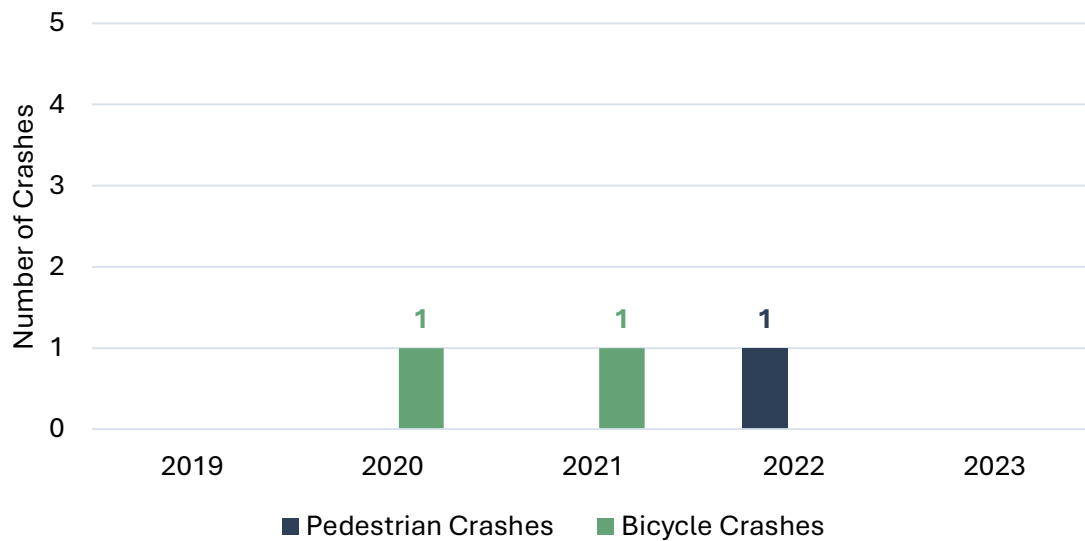


Figure 9. Vulnerable User Crashes by Year for the East Iron County GFA

3.3. Utah SHSP Emphasis Safety Area Analysis

The SHSP emphasis area analysis ranks the frequency of fatalities and serious injuries in the East Iron County GFA for each of the eleven Utah SHSP emphasis safety areas. A fatality or serious injury may be assigned to multiple emphasis areas.

The rankings of the emphasis areas compare the East Iron County GFA, the state of Utah, and all of Iron County.

This analysis helps to determine priority emphasis areas for the East Iron County GFA, based on whether the ranked frequency of fatalities and serious injuries within the GFA are significantly different than the statewide or County rankings.

Table 3 summarizes the Utah SHSP Emphasis Area comparison analysis. The following emphasis areas have the highest frequency of fatalities and serious injuries in the East Iron County GFA. The SAP will identify strategies to address these priority emphasis areas:

- Roadway Departure
- Speed-Related
- Motorcycles
- No Safety Restraints
- Older Drivers

Table 3. Utah SHSP Emphasis Area Comparison for the East Iron County GFA

Category	Utah SHSP Safety Emphasis Area	Statewide		Iron County		East Iron County GFA		
		Fatalities and Serious Injuries	Rank	Fatalities and Serious Injuries	Rank	Fatalities and Serious Injuries	Rank	Change in Rank from County
Driver	Teen Driver	1,695	4	54	5	10	6	-1
	Older Driver	1,565	7	49	6	11	5	1
	Speed-Related	2,268	3	78	3	29	2	1
	Aggressive Driving	615	11	19	10	4	9	1
	Distracted Driving	732	10	28	8	2	10	-2
	Impaired Driving	1,100	8	27	9	9	7	2
	No Safety Restraints	1,627	5	85	2	15	4	-2
Roadway	Intersection	3,683	1	67	4	6	8	-4
	Roadway Departure	3,372	2	132	1	44	1	0
Special Users	Motorcycle	1,571	6	40	7	16	3	4
	Pedestrian	1,000	9	15	11	0	11	0
	Bicycle*	303	12	3	12	0	12	0

**While Bicycles are not one of the eleven Utah SHSP emphasis areas, they are included as part of the CSAP safety analysis.*

4. HISTORIC CRASH ANALYSIS

A component of the SAP is to identify locations with an elevated risk of crashes. The initial step of this analysis is to spatially reference crashes that occurred within the study area.

The following networks were created in the historic crash analysis using the historic crash locations:

- **High-Crash Network:** Represents roadways and intersections on which the most crashes occur and experience high crash rates.
- **High-Injury Network:** Represents roadways and intersection on which fatal and injury crashes typically occur.

4.1. High-Crash Network

The roadway network shown in **Figure 10** is identified as the High-Crash network. The High-Crash network includes locations on which 50% of all crashes in the GFA occurred and locations experiencing high crash rates.

4.2. High-Injury Network

Figure 11 shows the identified High-Injury network. The High-Injury network represents the roadways on which 50% of fatal and injury crashes have occurred.

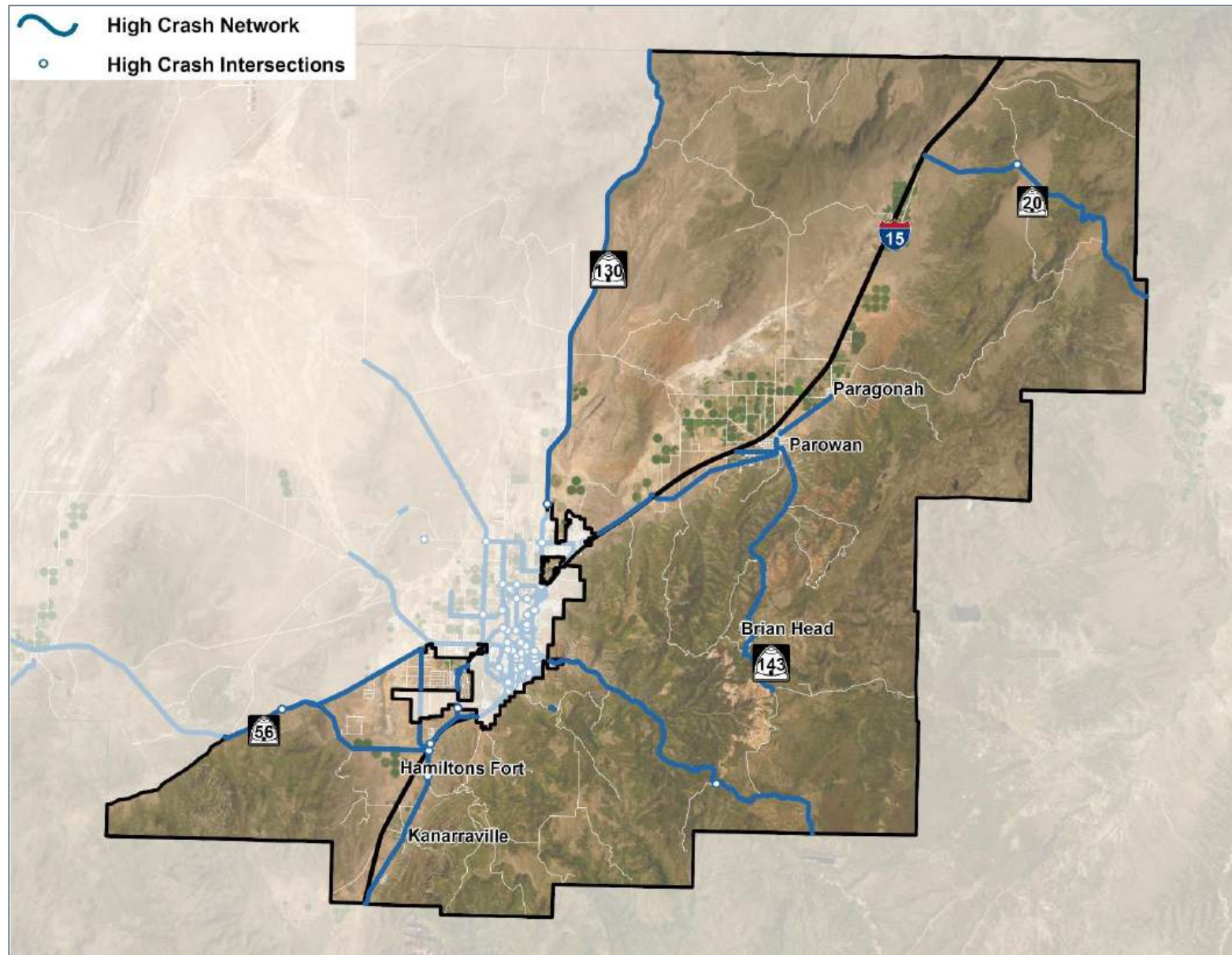


Figure 10. High-Crash Network for the East Iron County GFA

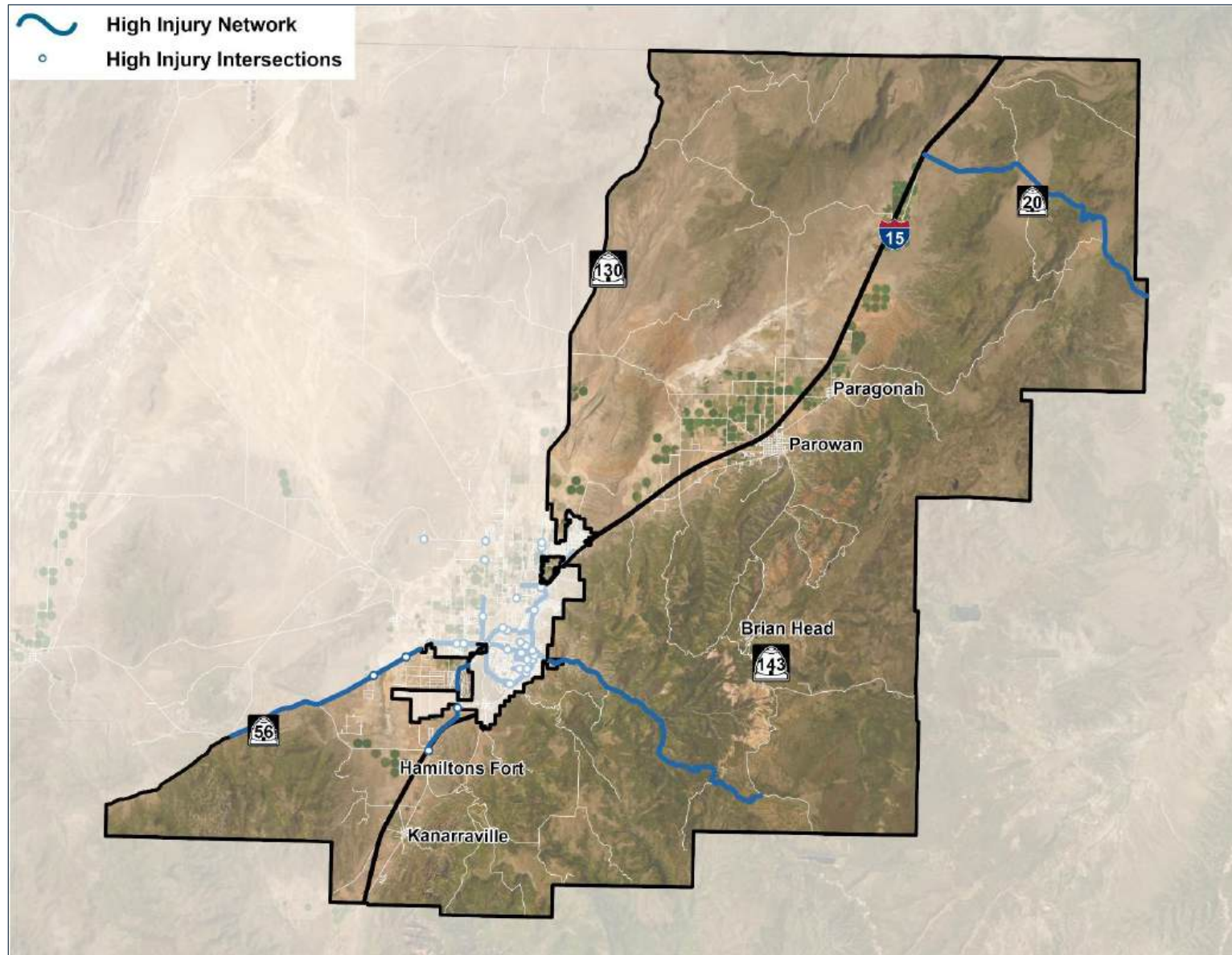


Figure 11. High-Injury Network for the East Iron County GFA

5. NETWORK SCREENING ANALYSIS

A network screening analysis was prepared for the East Iron County GFA informed by a Critical Crash Rate (CCR) analysis. Network screening methodology is detailed in Technical Memorandum #1. A positive CCR differential is an indication of a location with a potential for safety improvement (PSI). All roadways and intersection with a positive CCR differential are shown in **Figure 12**.

These locations represent those with the highest potential for safety improvements and should be considered as project candidate locations.

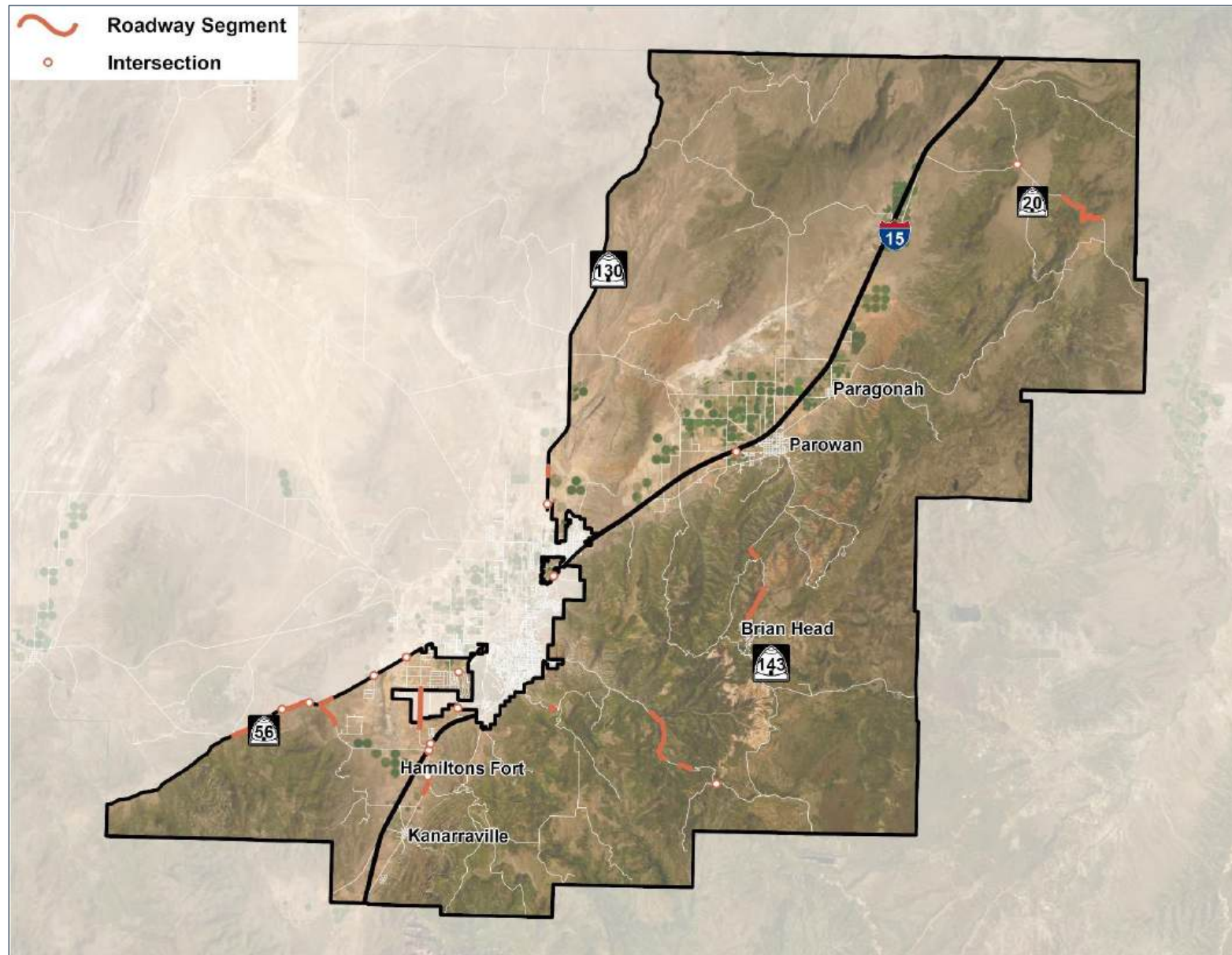


Figure 12. Critical Crash Rate (CCR) Network for the East Iron County GFA

6. CONFLICT AREAS

The conflict area analysis used Replica data obtained for the Iron County area to proactively address areas of greater safety risks. The following data and metrics were isolated in Replica to identify higher risk roadways in the GFA and Iron County:

- Speeding
- Non-Speeding Events: Suspected Collisions, Phone Handling (Distracted Driving), and Sudden Braking
- Active Transportation (pedestrians and bicyclist) high-risk corridors

A maximum risk score within Replica is 100 points. Roadways with a risk score of 80 or more in any of the Replica metrics analyzed are included in the Replica Conflict Networks shown in **Figure 13** and **Figure 14** for the East Iron County GFA.

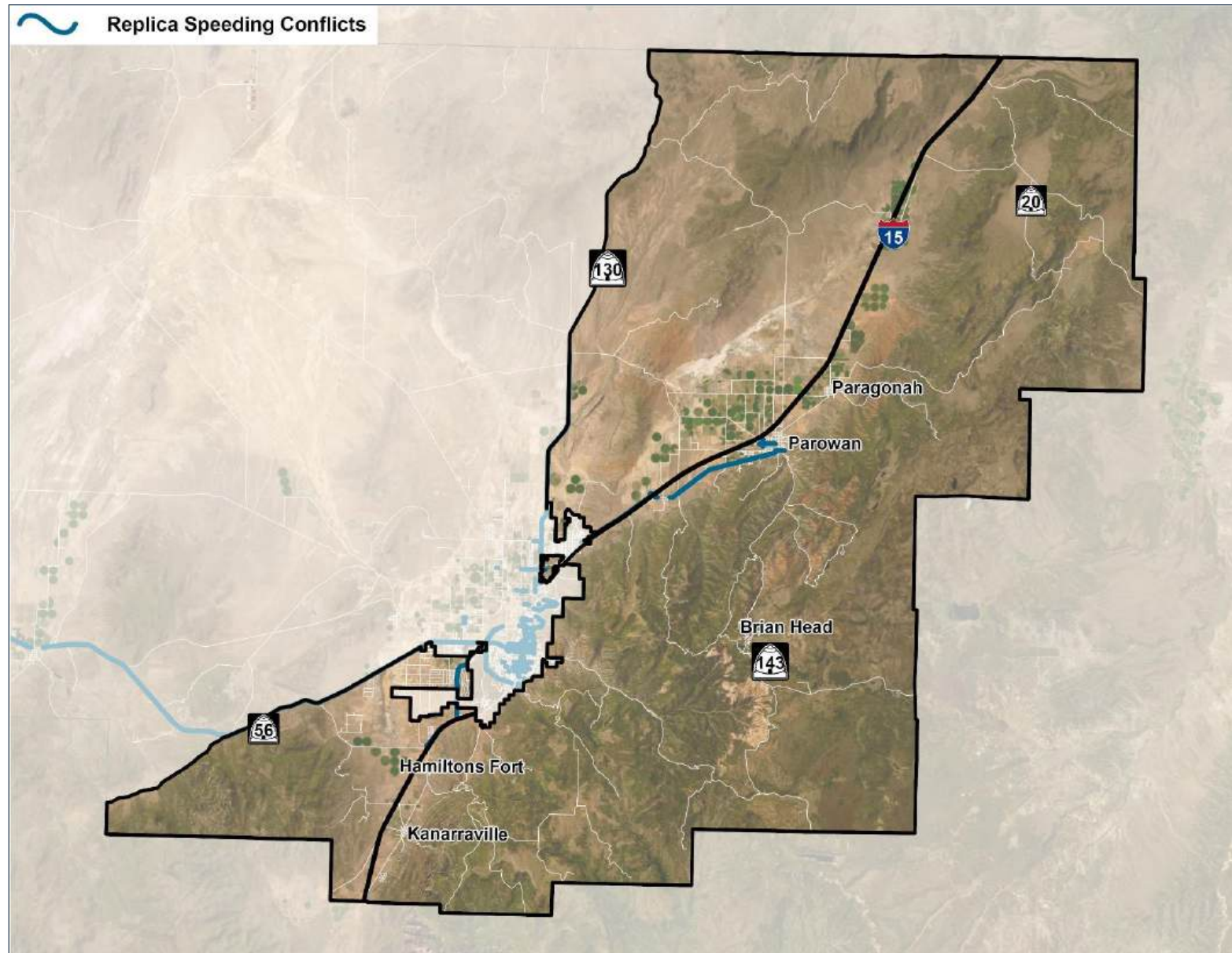


Figure 13. Replica Speeding Conflict Areas in the East Iron County GFA

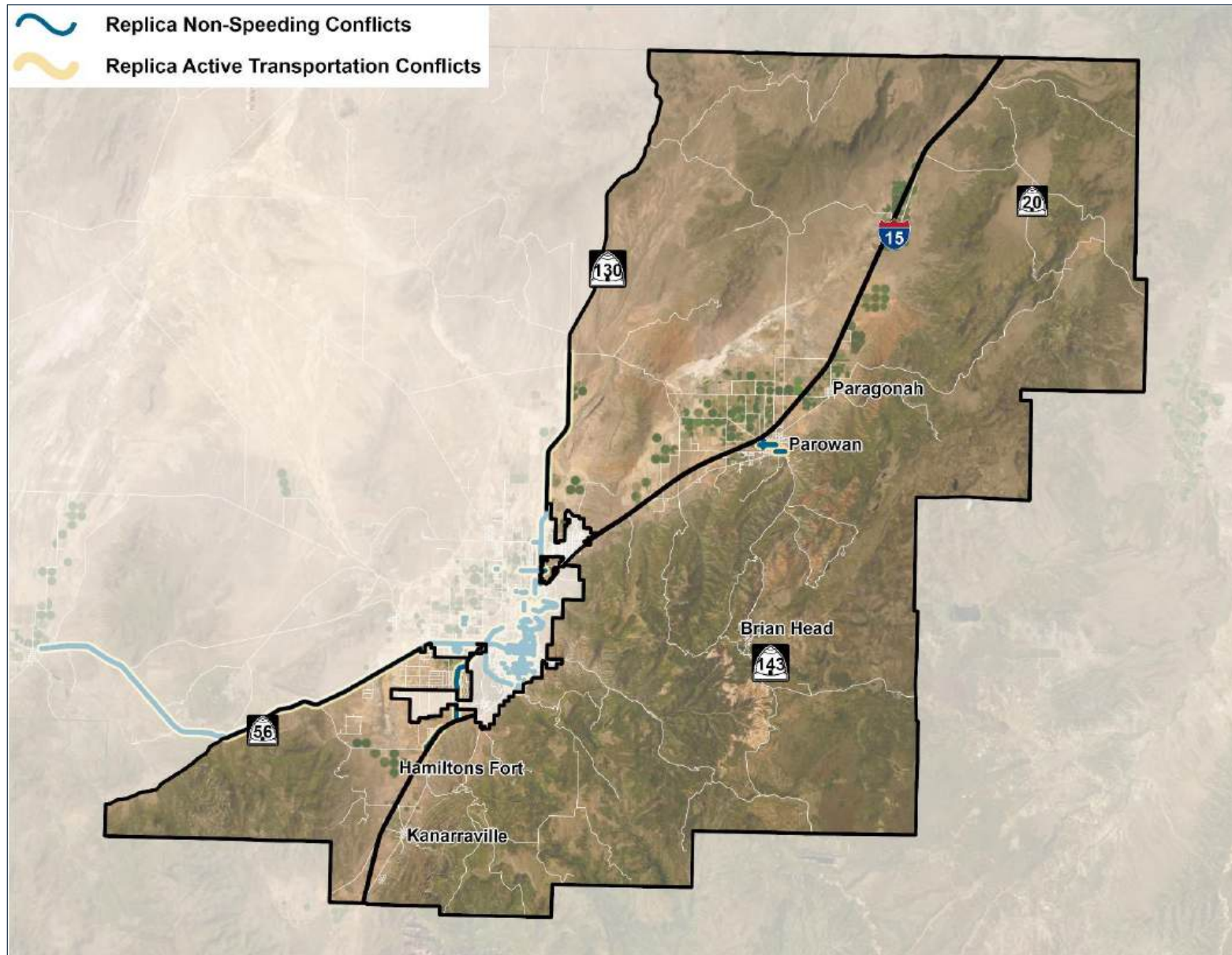


Figure 14. Replica Non-Speeding and Active Transportation Conflict Areas for the East Iron County GFA

7. ROADWAY CHARACTERISTIC RISK ANALYSIS

A roadway characteristic risk analysis was performed using the following sub-analyses:

- Crash Profile Risk Assessment
- usRAP Risk Assessment

7.1. Crash Profile Risk Assessment

This crash profile risk assessment sub-analysis identifies common roadway characteristics for roadways where fatal and serious injury crashes have occurred. Based on various roadway characteristic risks identified from crash report analysis, a risk score was assigned to major routes within the East Iron County GFA. A breakdown of the risk assessment scoring is reported in **Section 4.4** of Technical Memorandum #1. This assessment is limited to state and federal routes since the roadway characteristic data is only available for those route types. The results of the Crash Profile Risk Assessment are mapped in **Figure 15**.

7.2. usRAP Risk Assessment

A roadway characteristic risk assessment was performed using roadway feature data collected for Utah's state routes. The risk assessment was performed using usRAP data and tools. The output of the usRAP tool is a star rating, or risk rating, for vehicle, pedestrian, and bicyclist features. This assessment is limited to state and federal routes since the roadway characteristic data is only available for those route types. The results of the usRAP risk assessment by star rating are mapped in **Figure 16**.

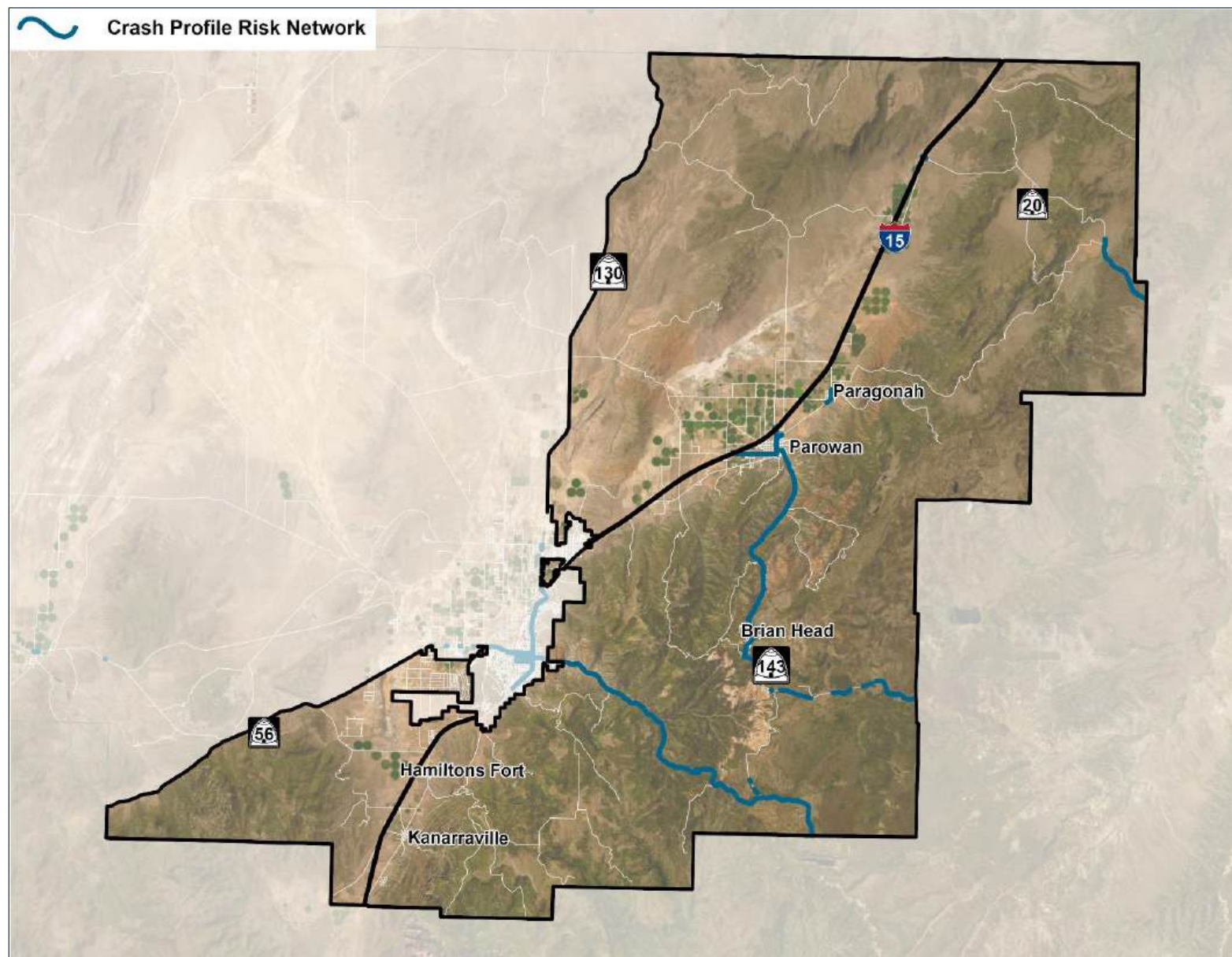


Figure 15. Crash Profile Risk Network for the East Iron County GFA

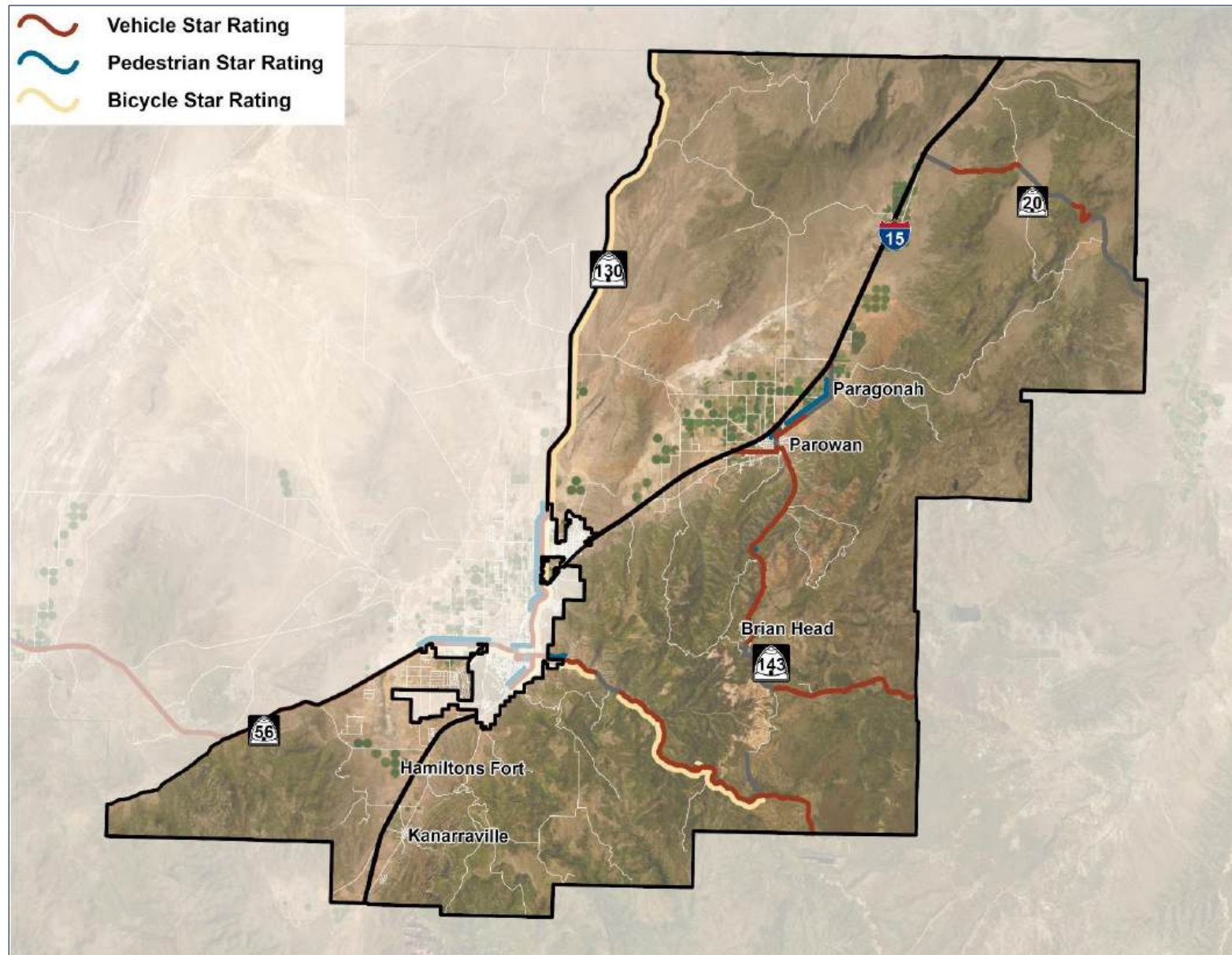


Figure 16. usRAP Risk Network – Star Ratings for the East Iron County GFA

8. HIGH-RISK NETWORK

Each of the safety analysis methodologies identified roadway segments or intersections in the East Iron County GFA that may benefit from safety improvements to reduce fatal and serious injury crashes.

To provide focused information for decisions regarding prioritization of safety improvements, an overlay of each analysis methodology was created to form a High-Risk Network.

A high-risk score, from zero to five, was determined using the approach in **Table 4**. Any location with a positive high-risk score may be considered for safety improvements. Locations with a risk score of three or greater are to be prioritized in the High-Risk Network

The East Iron County GFA High-Risk Network is shown in **Figure 17**. **Table 5** and **Table 6** provide an overview of the high priority roadway segments and intersections included in the High-Risk Network that were presented to stakeholders for comment in December 2024. Up to ten roadway segments and 20 intersections were listed if a location had a positive risk score.

Table 4. High-Risk Scoring Criteria

High Risk Category	Safety Analysis	Scoring Criteria	Risk Score
Historic Crashes	High Crash Network	Highest number of crashes per miles	1
	High Injury Network	Highest number of fatal and injury crashes per mile	1
Network Screening	Critical Crash Rates	Positive critical crash rate differential	1
Conflict Areas	Replica - Speeding Areas	Speeding conflict risk score of 80+	1/3
	Replica - Non-Speeding Areas	Non-speeding conflict risk score of 80+	1/3
	Replica - Active Transportation Areas	Active transportation conflict risk score of 80+	1/3
Risk Characteristics	Crash Profile Risk	Crash Profile Risk score of 60+	1/4
	usRAP Vehicle Star Rating	Star Rating of 1 - 2	1/4
	usRAP Pedestrian Star Rating	Star Rating of 1 - 2	1/4
	usRAP Bicycle Star Rating	Star Rating of 1 - 2	1/4
Maximum High-Risk Score			5

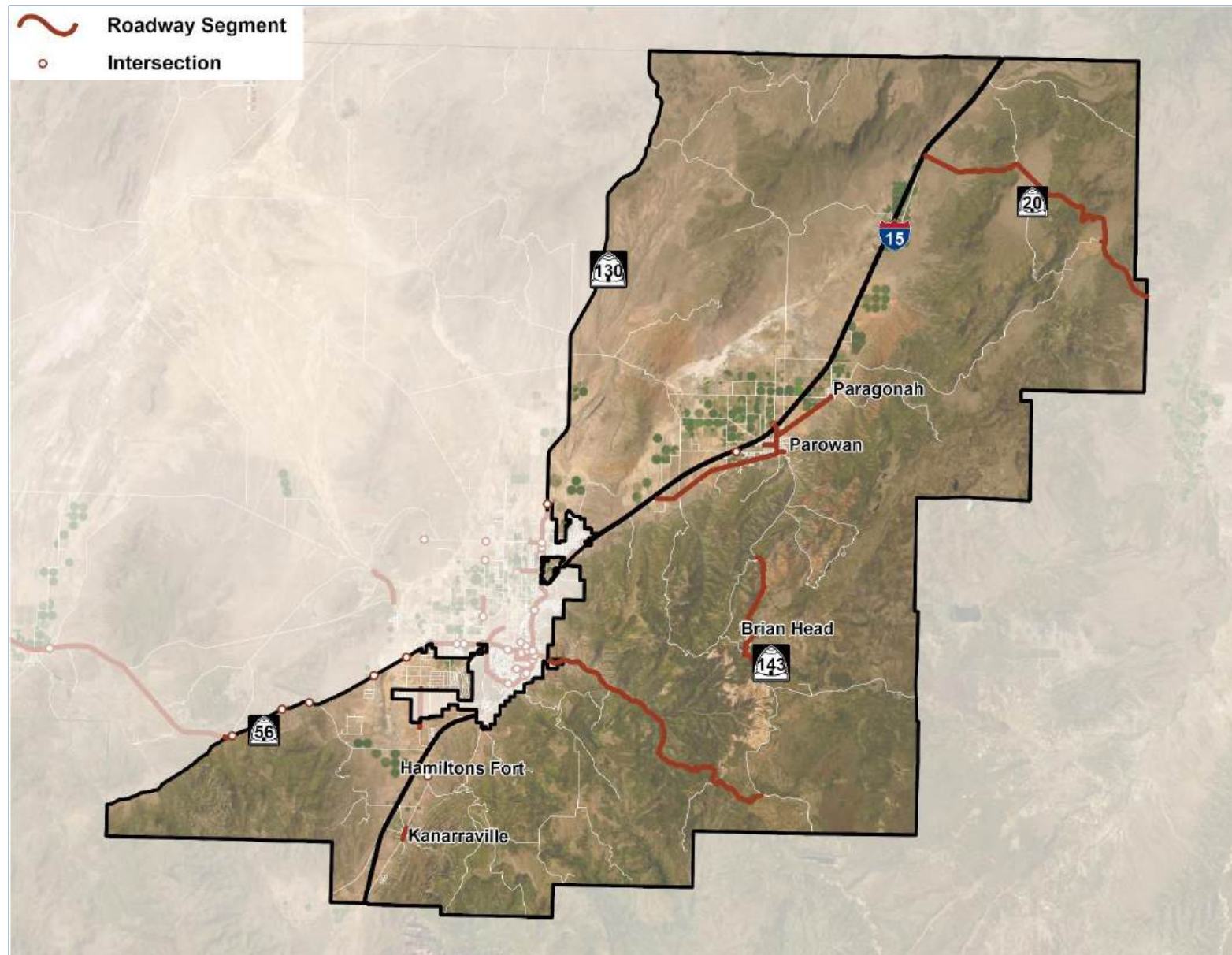


Figure 17. High-Risk Network for the East Iron County GFA

Table 5. Priority High-Risk Roadways for the East Iron County GFA

Roadways				Safety Analysis									
Roadway	Extents	Length (miles)	Functional Classification	High Crash Network	High Injury Network	Critical Crash Rate	Replica Speeding	Replica Non Speeding	Replica Active Transportation	Crash Profile Risk	usRAP Vehicle Star Rating	usRAP Pedestrian Star Rating	usRAP Bicycle Star Rating
State Routes													
SR 14	Kolob Road to SR 148	13.0	Minor Arterial	X	X	X				X	X	X	
SR 20	I-15 to Iron County Limits	17.0	Other Principal Arterial	X	X	X				X	X		
SR 143	Dry Lakes Road to Forest Road	7.8	Minor Arterial	X		X				X	X		
SR 271	SR 274 to 200 South	3.8	Major Collector	X						X	X	X	
SR 274	Center Street to I-15	1.25	Minor Arterial	X						X	X	X	
Non- State Routes													
Old Highway 91	200 East to 300 South	1.8	Minor Collector	X			X						
200 South	Main Stret (SR 143) to Center Street (SR 143)	0.5	Local Street				X	X	X				
100 North	600 West to Main Street (SR 274)	0.7	Local Street				X	X	X				
Main Street (Summit)	I-15 to 200 East	0.7	Minor Collector	X			X						
Main Street (Kanarraville)	400 South to 300 North	0.6	Major Collector	X									

Table 6. Priority High-Risk Intersections for the East Iron County GFA

Intersections		Safety Analysis			Supporting Networks						
Intersection	Number of Crashes	High Crash Network	High Injury Network	Critical Crash Rate	Replica Speeding	Replica Non Speeding	Replica Active Transportation	Crash Profile Risk	usRAP Vehicle Star Rating	usRAP Pedestrian Star Rating	usRAP Bicycle Star Rating
Unsignalized Intersections											
Old Highway 91 & 5100 South	3	X		X							
I-15 Northbound Ramp & 2nd South	6			X				X	X		
I-15 Southbound Ramp & Main Street	3			X					X		
Comstock Road & SR 56	2				X	X	X		X		
11600 West & SR 56	4	X		X	X	X	X		X		
Bumblebee Drive & SR 56	3			X	X	X	X		X		
7700 West & SR 56	3		X	X	X	X	X		X		
6300 West & SR 56	3		X	X	X	X	X		X		
Old Highway 91 & 5100 South	3	X		X							
I-15 Northbound Ramp & 2nd South	6			X				X	X		



APPENDIX A.4. WEST IRON COUNTY GFA SAFETY ANALYSIS AND RESULTS

TECHNICAL MEMORANDUM #1

APPENDIX A4

WEST IRON COUNTY GEOGRAPHIC FOCUS AREA SAFETY ANALYSIS

Statutory Notice

23 U.S.C. § 409: US Code - Section 409: Discovery and admission as evidence of certain reports and surveys

Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway- highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

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1. INTRODUCTION

Appendix A4 summarizes the safety analysis performed for the West Iron County Geographic Focus Area (GFA) as part of the Safety Action Plan for all Iron County (SAP).

The safety analysis identified roadway segments and intersection with the highest safety risk and need. The resulting High-Risk Network represents locations with the largest potential for safety improvement. The network helps informs the identification of potential project locations that may be further considered in the SAP.

1.1. Safety Analysis

The safety analysis methodologies are presented in **Section 4** of Technical Memorandum #1 and include the components shown in **Figure 1**. Results of each component are shown in **Table 1**.

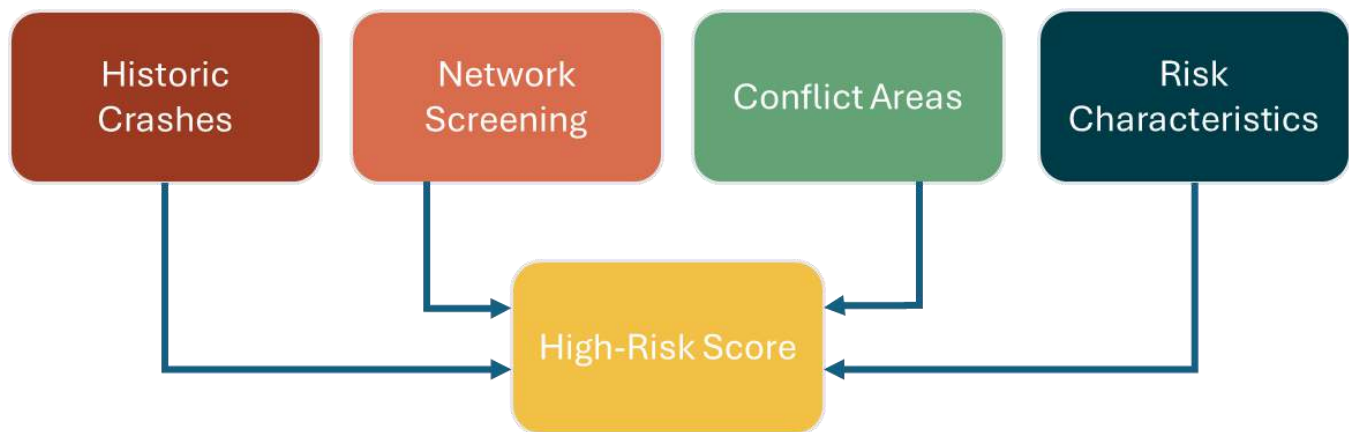


Figure 1. Safety Analysis Components

Table 1. Safety Analysis Components and Results

Safety Analysis Component	Analysis Result(s)
Historical Crash Overview	Frequent crash types and common contributing factors.
Strategic Highway Safety Plan (SHSP) Emphasis Area Analysis	Ranked emphasis areas based on GFA, Iron County, or Statewide crashes.
Historical Crash Analysis	High-crash network.
	High-risk network.
Network Screening Analysis	Critical crash rate network.
Conflict Areas	Speeding, phone handling, sudden braking, and suspected collision networks.
Risk Characteristics	Crash Profile Risk Assessment
	usRAP Risk Factors Analysis

1.2. Appendix Organization

Appendix A4 is organized into the following sections:

- **Section 1** – Introduction
- **Section 2** – West Iron County GFA Study Area and Roadway Network
- **Section 3** – Historic Crash Overview
- **Section 4** – Historic Crash Analysis
- **Section 5** – Network Screening Analysis
- **Section 6** – Conflict Areas
- **Section 7** – Roadway Characteristic Risk Analysis
- **Section 8** – High-Risk Network

2. STUDY AREA

The SAP study area includes each jurisdiction within Iron County. To organize the Iron County jurisdictions and unincorporated areas into manageable analysis areas, Iron County was divided into five GFAs. The West Iron County GFA, shown in **Figure 2**, includes the incorporated boundary of Enoch City.

The safety analyses presented in this appendix are specific to the West Iron County GFA.

Figure 2 highlights the roadway network within the West Iron County GFA study area. Roadways within the study area are divided into the following categories:

- State Routes: Roadways maintained by the Utah Department of Transportation (UDOT)
- Non-State Routes: Jurisdiction-maintained roads

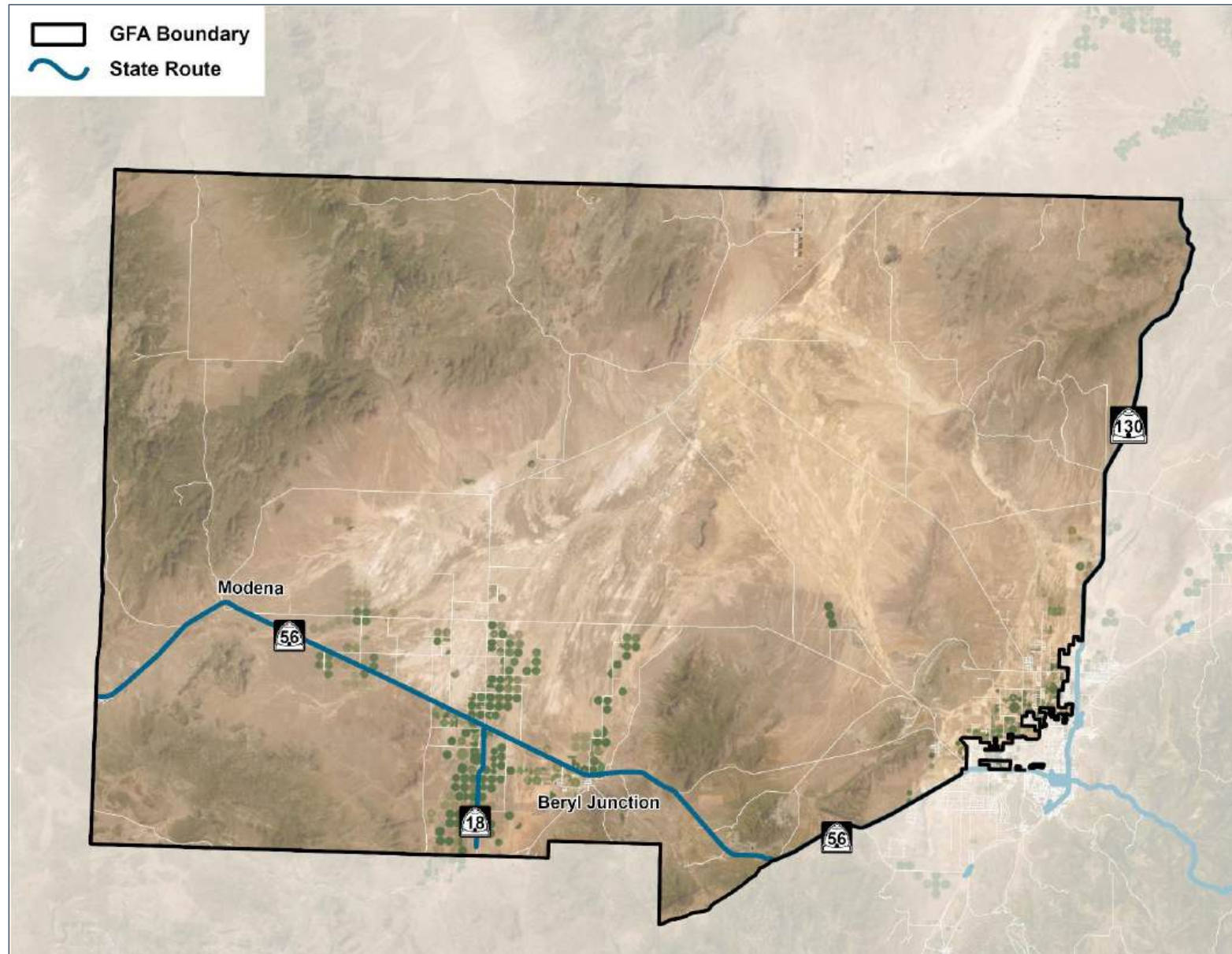


Figure 2. West Iron County GFA Study Area

3. HISTORIC CRASH OVERVIEW

Crash data was obtained from the UDOT database for the most recent completed five-year period, 2019 to 2023. A historic crash review specific to the West Iron County GFA is summarized below.

3.1. Overall Crashes

Figure 3 provides an overview of annual crashes for the West Iron County GFA separated by crash severity. Crash severity is reported as fatal, serious injury, or all other crashes (minor injury, possible injury, or property damage only). A review of the crash data reveals the following:

- The total number of crashes was highest in 2021 and 2023. There has since been a gradual increase in the number of crashes and the number of crashes in 2023 is greater than in 2019, 5 years ago.
- Fatal and serious injury crashes were highest in 2021 and 2022, with the lowest number of fatal and serious injury crashes occurring in 2023.

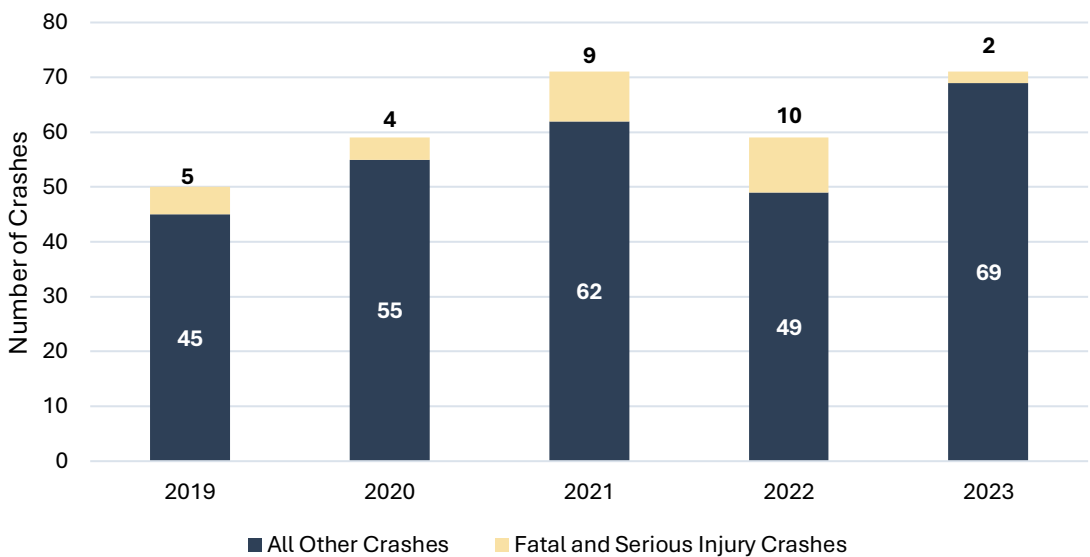


Figure 3. West Iron County GFA Crashes by Year

Table 2 provides an overview of crashes by severity and route type within the West Iron County GFA. A review of the data reveals the following:

- 34% of crashes occurred on State Routes.
- Fatal and serious injury crashes make up approximately 10% of all crashes in the West Iron County GFA.
- 63% of crashes in the GFA resulted in no injury or property damage only (PDO).
- 8% of all the fatal crashes in Iron County occurred within the West Iron County GFA.

Table 2. Crash Severity by Route Type for the West Iron County GFA

Route Type	State Route		Non-State Route		GFA Total		% of Iron County
Crash Severity	Crashes		Crashes		Crashes		%
	#	%	#	%	#	%	
Fatal	1	1%	2	1%	3	1%	8%
Suspected Serious Injury	3	3%	24	12%	27	9%	14%
Suspected Minor Injury	12	12%	24	12%	36	12%	6%
Possible Injury	16	15%	34	17%	50	16%	7%
No Injury / Property Damage Only	72	69%	122	59%	194	63%	5%
Route Total	104	100%	206	100%	310	100%	6%

3.2. Fatal and Serious Injury Crashes

The number of fatal and serious injury crashes by year is summarized in **Figure 4**. A review of the crash data reveals the following:

- No fatal crashes occurred in 2019, 2020, and 2023.
- The number of fatal and serious injuries have decreased between 2019 and 2023.

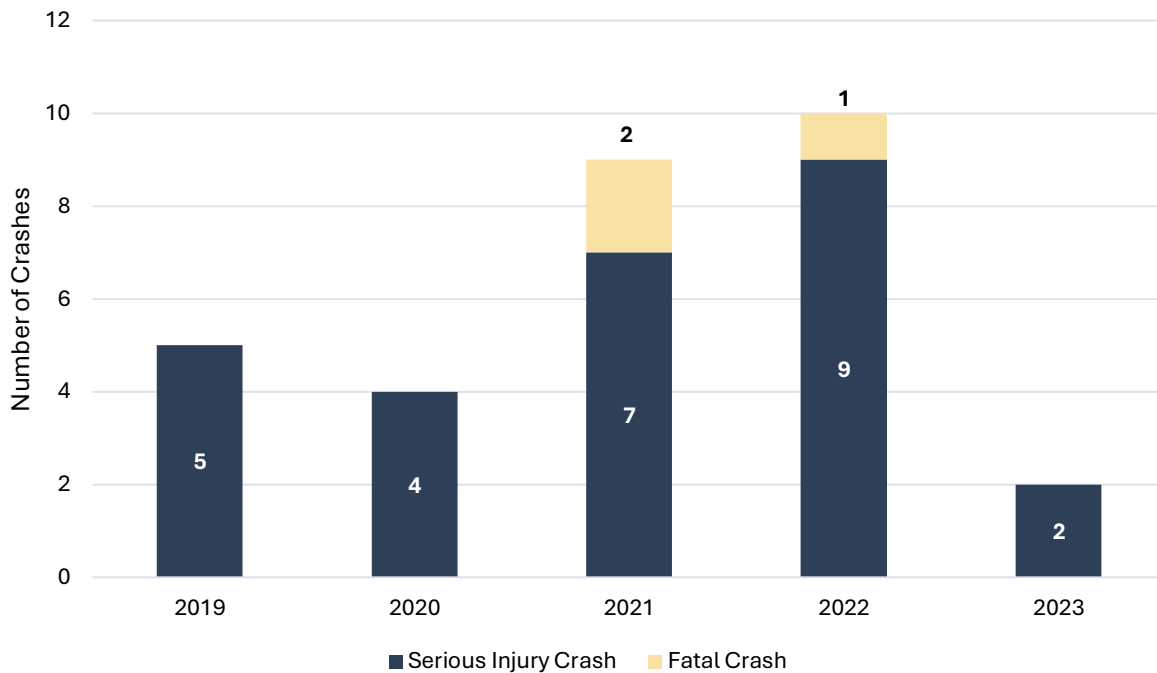


Figure 4. West Iron County GFA Fatal and Serious Injury Crashes by Year

The locations of the fatal and serious injury crashes are displayed in **Figure 5** which shows the fatal crashes occurring on SR 56, SR 18, and a rural road off of SR 18. There is also a prevalence of severe crashes north of Cedar City.

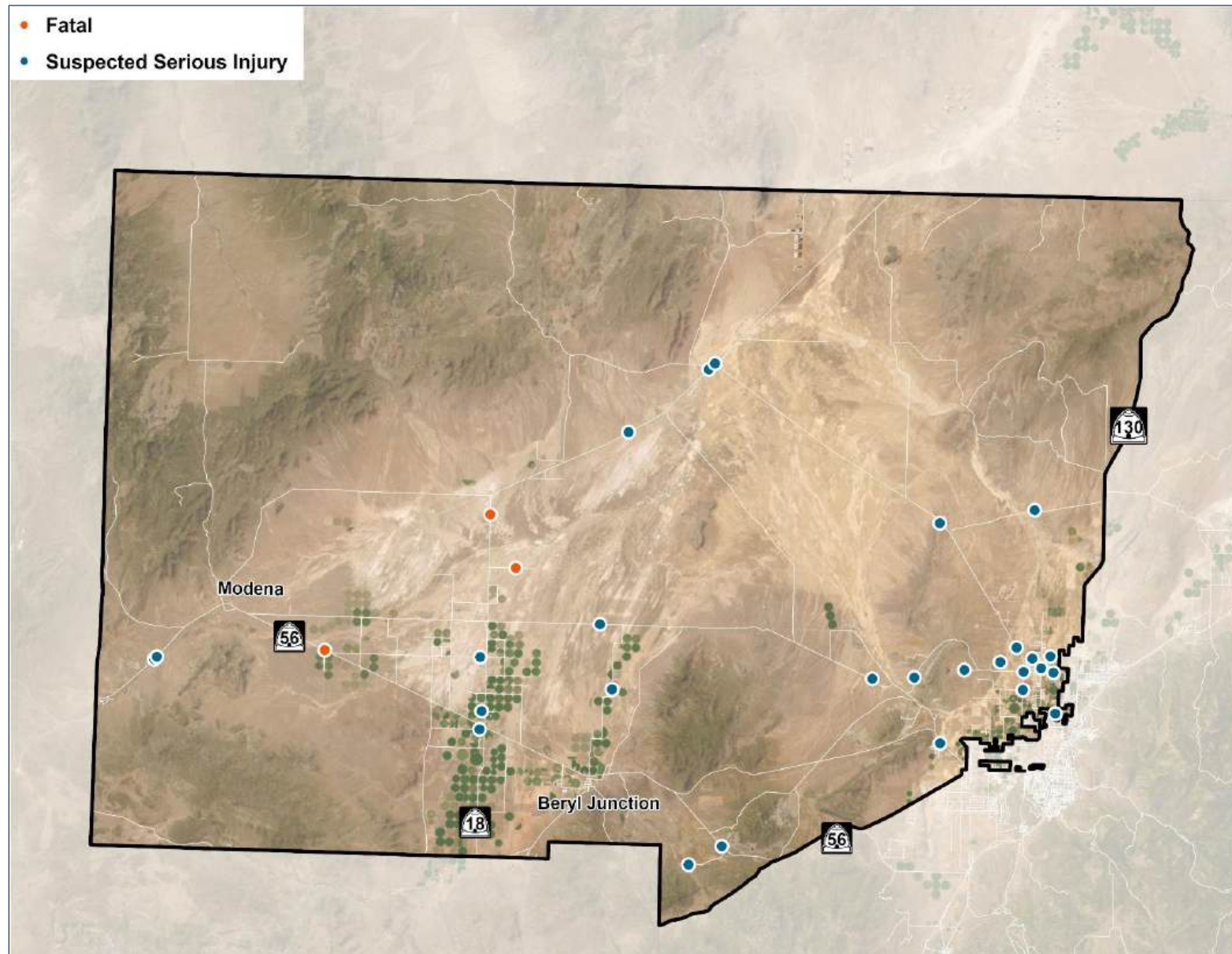


Figure 5. Fatal and Serious Injury Crashes in the West Iron County GFA

3.2.1. Manner of Collision

An overview of fatal and serious injury crashes by the most common manners of collisions is shown in **Figure 6**. The manner of collision represents how two vehicles initially collided. The recorded manner of collision may overlap with the recorded crash type, as manner of collision is a more detailed categorization compared to crash type that is summarized in Section 3.3.2. The three most frequent manners of collision that resulted in a fatality or serious injury crash are single vehicle crashes, angle crashes, and parked vehicle crashes.

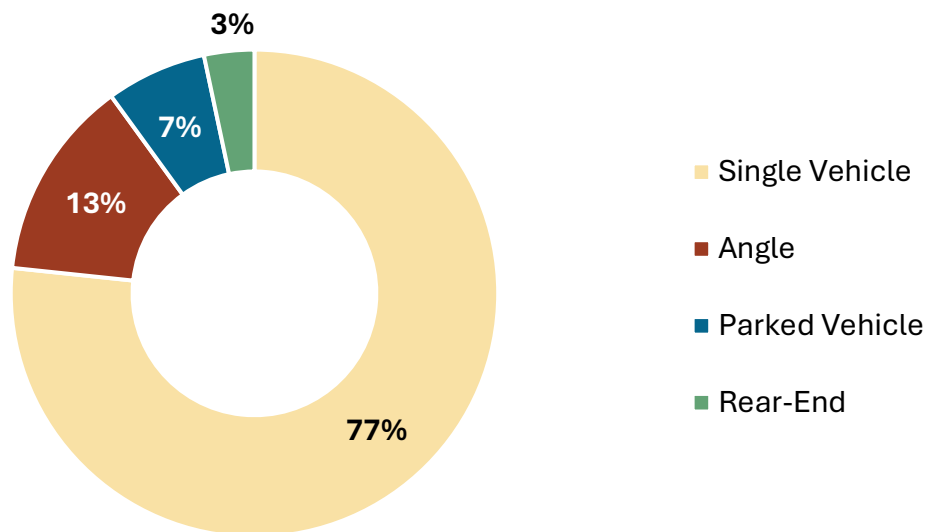


Figure 6. Most Common Fatal and Serious Injury Manners of Collision for the West Iron County GFA

3.2.2. Crash Types

Crash type represents a query of multiple data fields, including the manner of collision. Each crash is assigned only one primary crash type, examples include left turns at intersections, rear -ends, sideswipes, and roadway departure crashes.

The most common crash types for the West Iron County GFA are summarized in **Figure 7**. The three most frequent fatal and serious injury crash types are recorded as “Other,” roadway departures, and highway crossover crashes. The crash type “other” may indicate a unique crash scenario or a gap in available data.

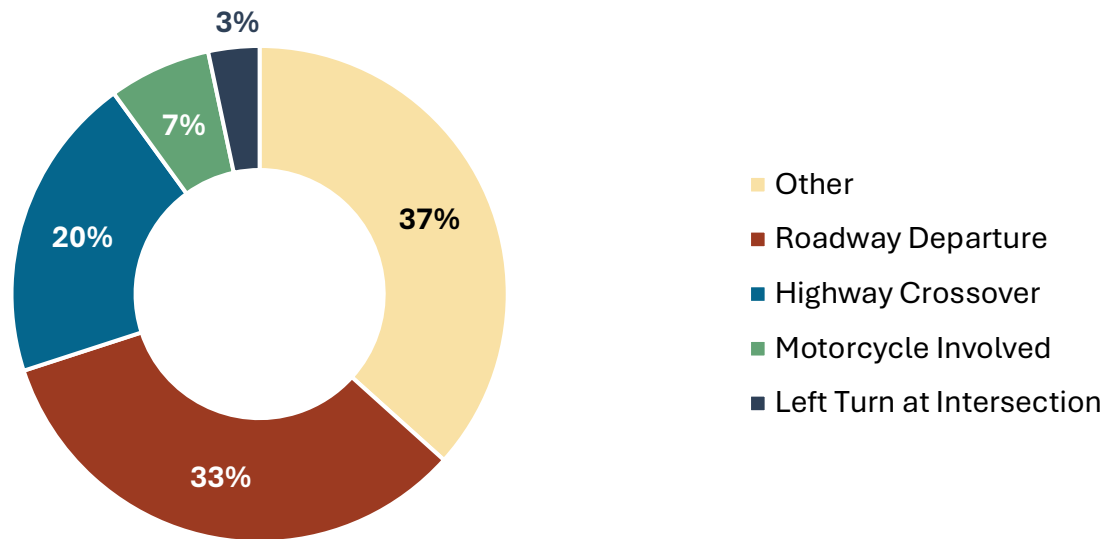


Figure 7. Most Common Fatal and Serious Injury Crash Types for the West Iron County GFA

3.2.3. Driver Contributing Factors

Several factors may contribute to a single crash however, the driver contributing factors shown in **Figure 8** only represent the first driver specific contributing factor as recorded in the crash report. The first driver contributing factor recorded in the crash report indicates the primary cause of a crash. The data shows that the three most frequent driver contributing factors are over-correcting or over-steering, failing to keep to the proper lane, and speeding.

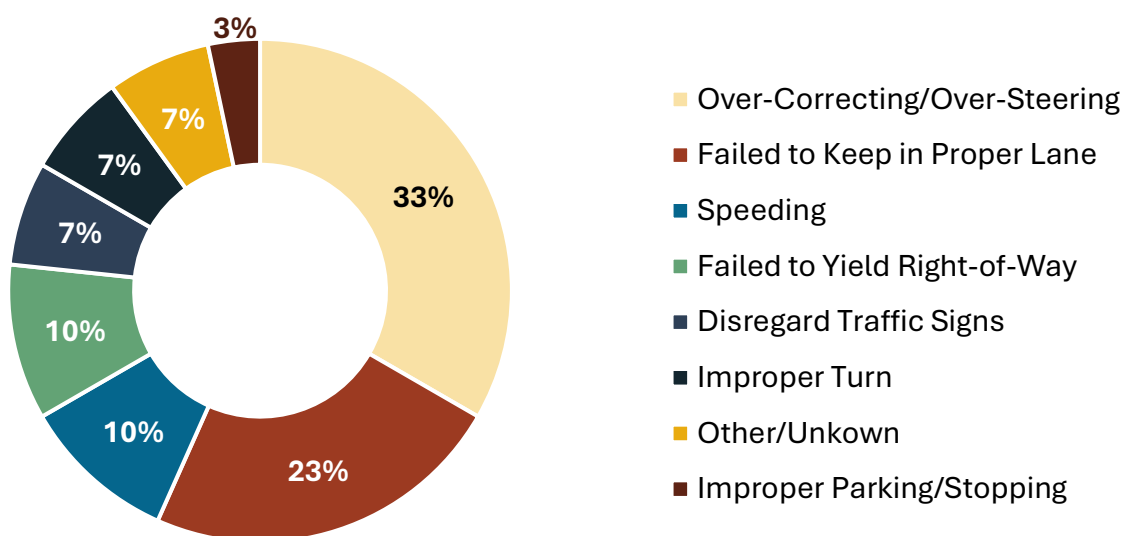


Figure 8. Most Common Fatal and Serious Injury Crash Driver Contributing Factors in the West Iron County GFA

3.2.4. Vulnerable User Crashes

No vulnerable user crashes involving a pedestrian or bicyclist occurred in the West Iron County GFA in the five-year analysis period.

3.3. Utah SHSP Emphasis Safety Area Analysis

The SHSP emphasis area analysis ranks the frequency of fatalities and serious injuries in the West Iron County GFA for each of the eleven Utah SHSP emphasis safety areas. A fatality or serious injury may be assigned to multiple emphasis areas.

The rankings of the emphasis areas compare the West Iron County GFA, the state of Utah, and all of Iron County.

This analysis helps to determine priority emphasis areas for the West Iron County GFA, based on whether the ranked frequency of fatalities and serious injuries within the GFA are significantly different than the statewide or County rankings.

Table 3 summarizes the Utah SHSP Emphasis Area comparison analysis. The following emphasis areas have the highest frequency of fatalities and serious injuries in the West Iron County GFA. The SAP will identify strategies to address these priority emphasis areas:

- Roadway Departures
- Speed-related
- Teen Drivers
- No Safety restraints
- Intersections

Table 3. Utah SHSP Emphasis Area Comparison for the West Iron County GFA

Category	Utah SHSP Safety Emphasis Area	Statewide		Iron County		West Iron County GFA		
		Fatalities and Serious Injuries	Rank	Fatalities and Serious Injuries	Rank	Fatalities and Serious Injuries	Rank	Change in Rank from County
Driver	Teen Driver	1,695	4	54	5	16	3	2
	Older Driver	1,565	7	49	6	2	9	-3
	Speed-Related	2,268	3	78	3	19	2	1
	Aggressive Driving	615	11	19	10	2	10	0
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Roadway	Intersection	3,683	1	67	4	12	5	-1
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Special Users	Motorcycle	1,571	6	40	7	5	7	0
	Pedestrian	1,000	9	15	11	0	11	0
	Bicycle*	303	12	3	12	0	12	0

**While Bicycles are not one of the eleven Utah SHSP emphasis areas, they are included as part of the CSAP safety analysis.*

4. HISTORIC CRASH ANALYSIS

A component of the SAP is to identify locations with an elevated risk of crashes. The initial step of this analysis is to spatially reference crashes that occurred within the study area.

The following networks were created in the historic crash analysis using the historic crash locations:

- **High-Crash Network:** Represents roadways and intersections on which the most crashes occur and experience high crash rates.
- **High-Injury Network:** Represents roadways and intersection on which fatal and injury crashes typically occur.

4.1. High-Crash Network

The roadway network shown in **Figure 9** is identified as the High-Crash network. The High-Crash network includes locations on which 50% of all crashes in the GFA occurred and locations experiencing high crash rates.

4.2. High-Injury Network

Figure 10 shows the identified High-Injury network. The High-Injury network represents the roadways on which 50% of fatal and injury crashes have occurred.

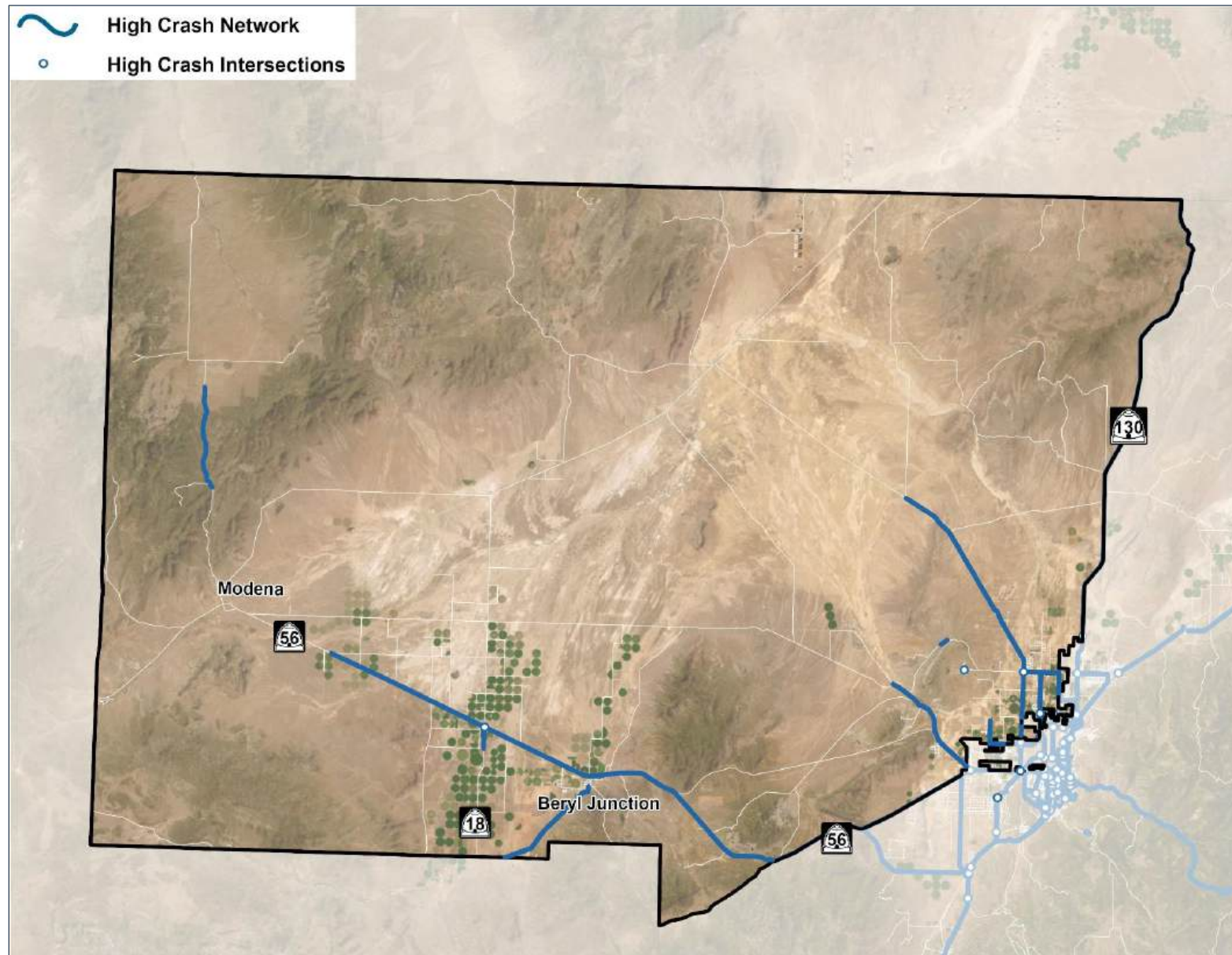


Figure 9. High-Crash Network for the West Iron County GFA

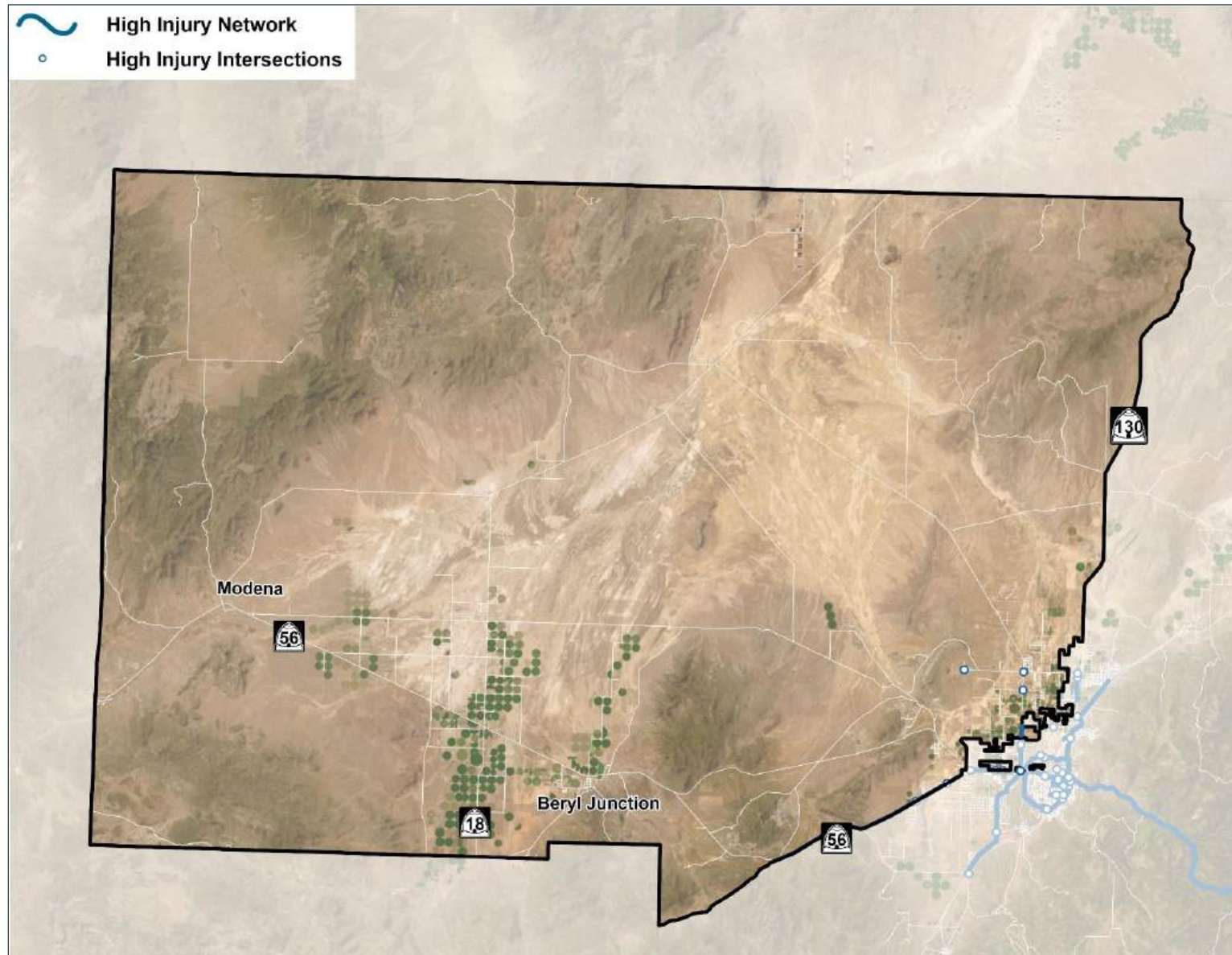


Figure 10. High-Injury Network for the West Iron County GFA

5. NETWORK SCREENING ANALYSIS

A network screening analysis was prepared for the West Iron County GFA informed by a Critical Crash Rate (CCR) analysis. Network screening methodology is detailed in Technical Memorandum #1. A positive CCR differential is an indication of a location with a potential for safety improvement (PSI). All roadways and intersection with a positive CCR differential are shown in **Figure 11**.

These locations represent those with the highest potential for safety improvements and should be considered as project candidate locations.

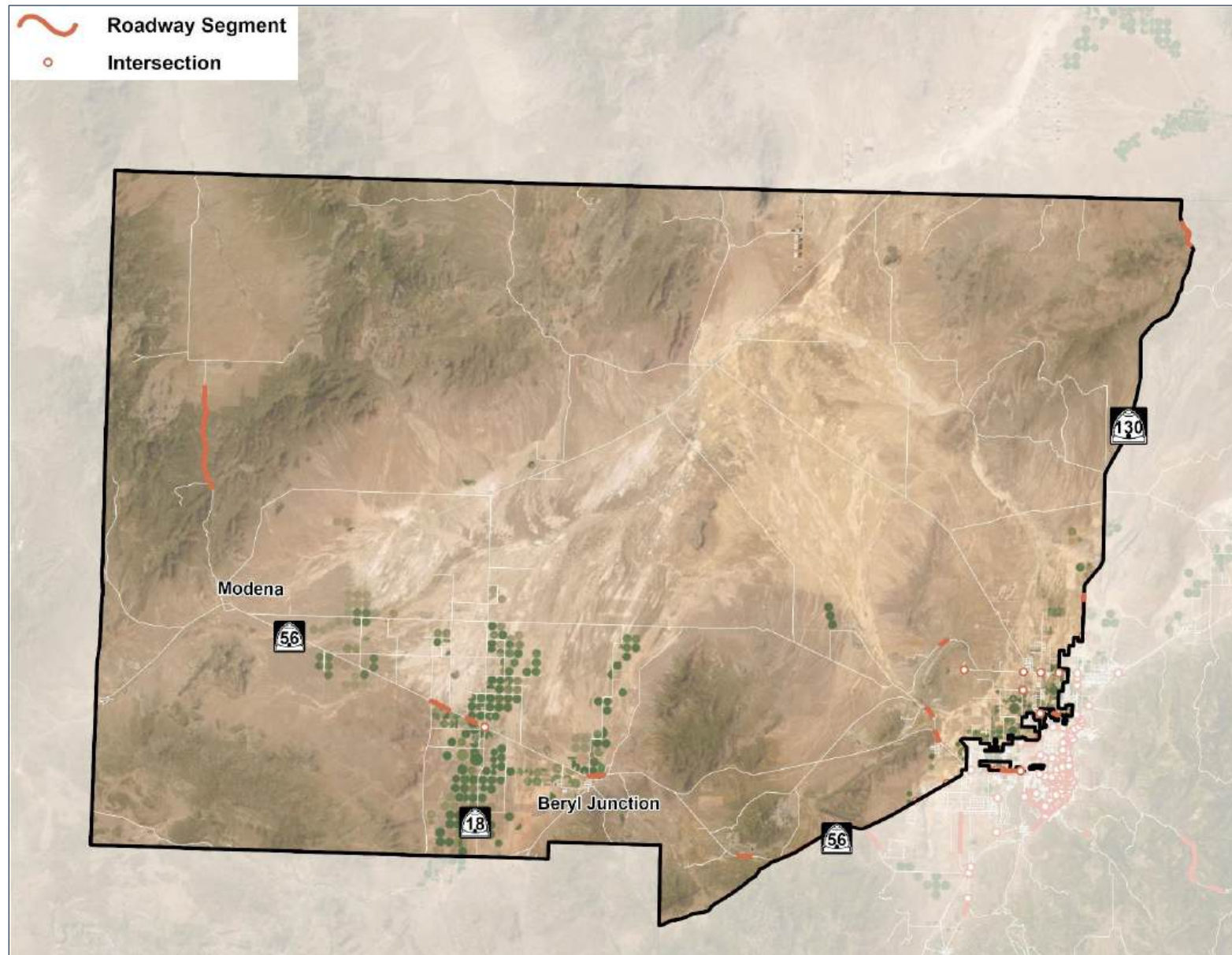


Figure 11. Critical Crash Rate (CCR) Network for the West Iron County GFA

6. CONFLICT AREAS

The conflict area analysis used Replica data obtained for the Iron County area to proactively address areas of greater safety risks. The following data and metrics were isolated in Replica to identify higher risk roadways in the GFA and Iron County:

- Speeding
- Non-Speeding Events: Suspected Collisions, Phone Handling (Distracted Driving), and Sudden Braking
- Active Transportation (pedestrians and bicyclist) high-risk corridors

A maximum risk score within Replica is 100 points. Roadways with a risk score of 80 or more in any of the Replica metrics analyzed are included in the Replica Conflict Networks shown in **Figure 12** and **Figure 13** for the West Iron County GFA.

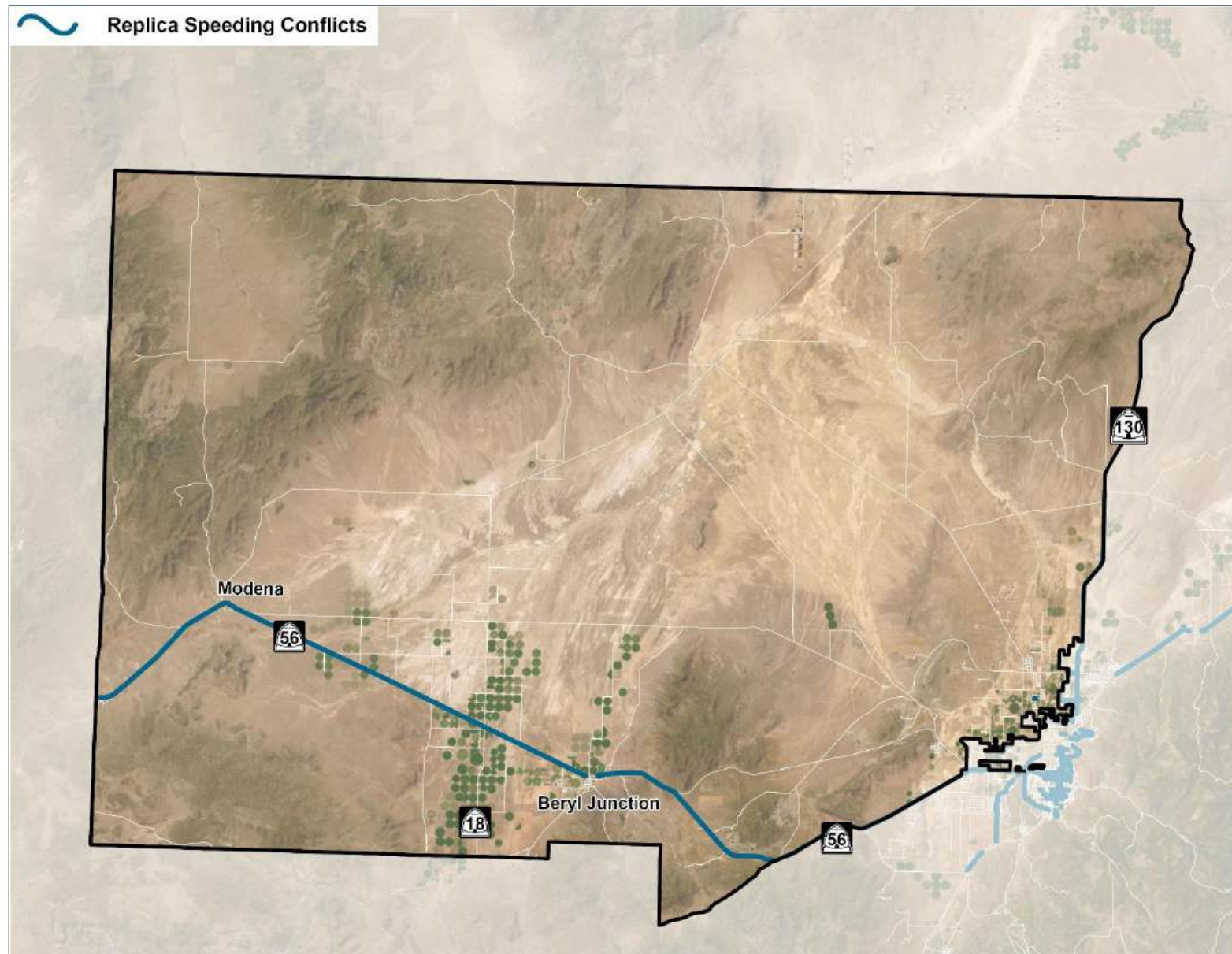


Figure 12. Replica Speeding Conflict Areas in the West Iron County GFA

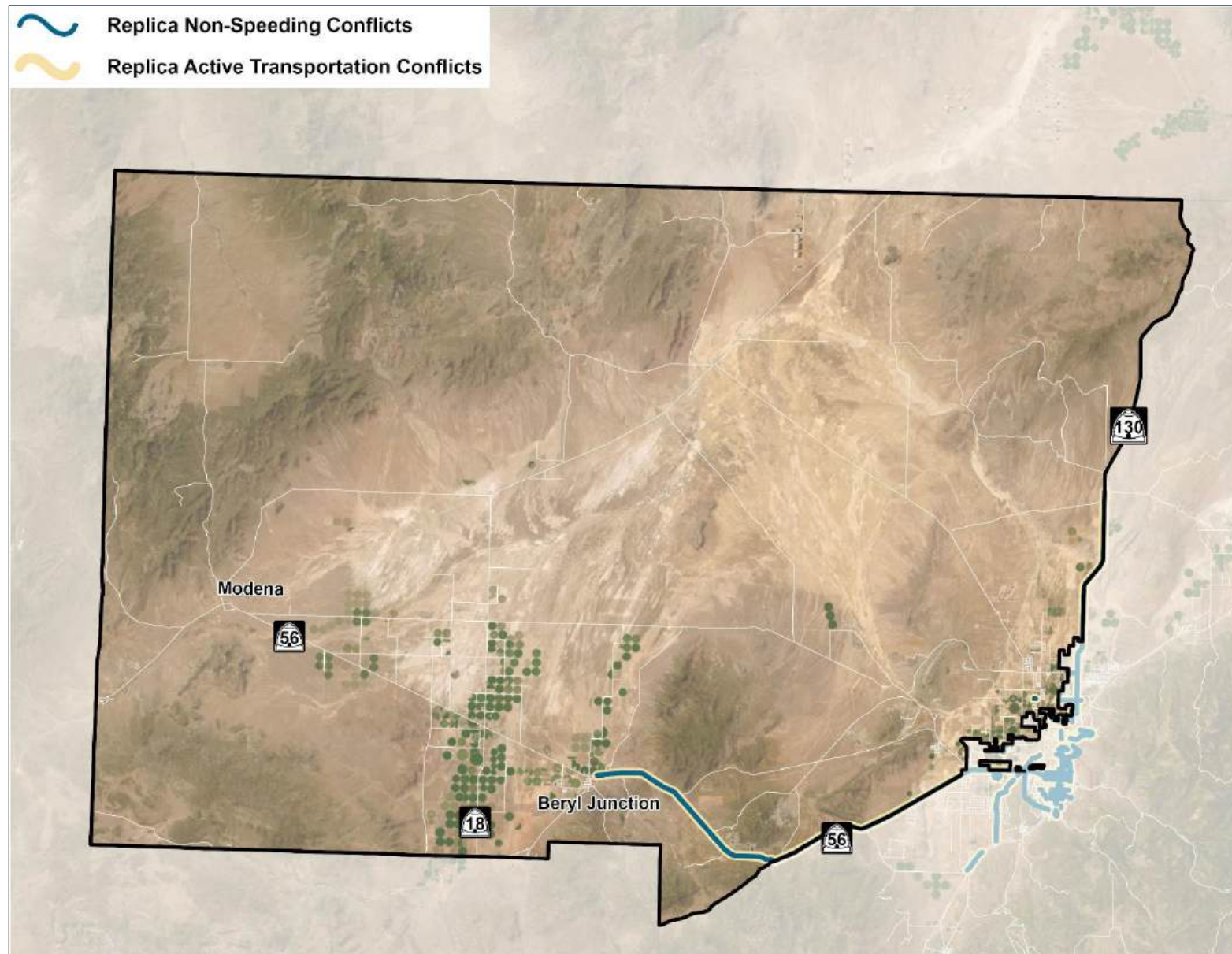


Figure 13. Replica Non-Speeding and Active Transportation Conflict Areas for the West Iron County GFA

7. ROADWAY CHARACTERISTIC RISK ANALYSIS

A roadway characteristic risk analysis was performed using the following sub-analyses:

- Crash Profile Risk Assessment
- usRAP Risk Assessment

7.1. Crash Profile Risk Assessment

This crash profile risk assessment sub-analysis identifies common roadway characteristics for roadways where fatal and serious injury crashes have occurred. Based on various roadway characteristic risks identified from crash report analysis, a risk score was assigned to major routes within the West Iron County GFA. A breakdown of the risk assessment scoring is reported in **Section 4.4** of Technical Memorandum #1. This assessment is limited to state and federal routes since the roadway characteristic data is only available for those route types. The results of the Crash Profile Risk Assessment are mapped in **Figure 14**.

7.2. usRAP Risk Assessment

A roadway characteristic risk assessment was performed using roadway feature data collected for Utah's state routes. The risk assessment was performed using usRAP data and tools. The output of the usRAP tool is a star rating, or risk rating, for vehicle, pedestrian, and bicyclist features. This assessment is limited to state and federal routes since the roadway characteristic data is only available for those route types. The results of the usRAP risk assessment by star rating are mapped in **Figure 15**.

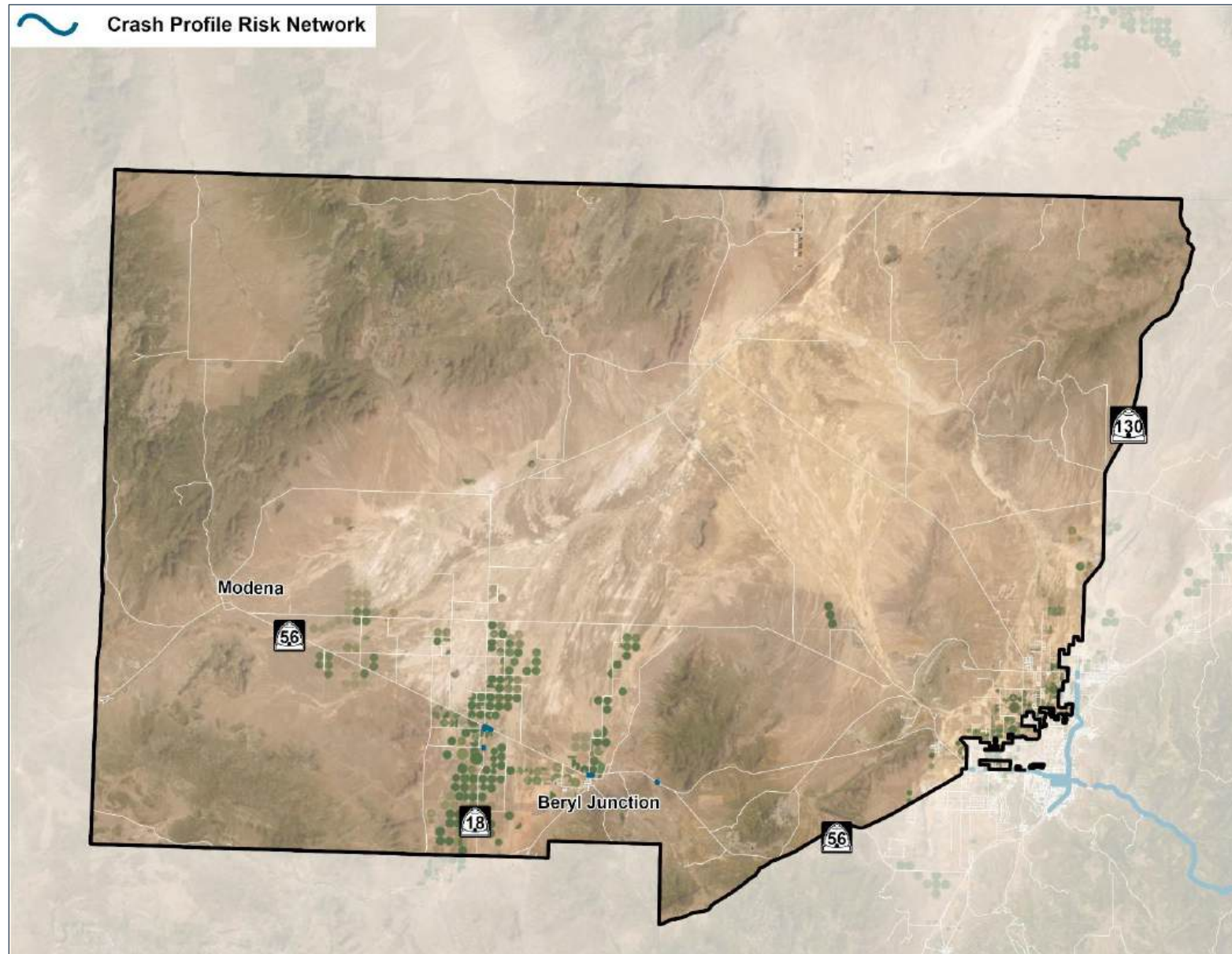


Figure 14. Crash Profile Risk Network for the West Iron County GFA

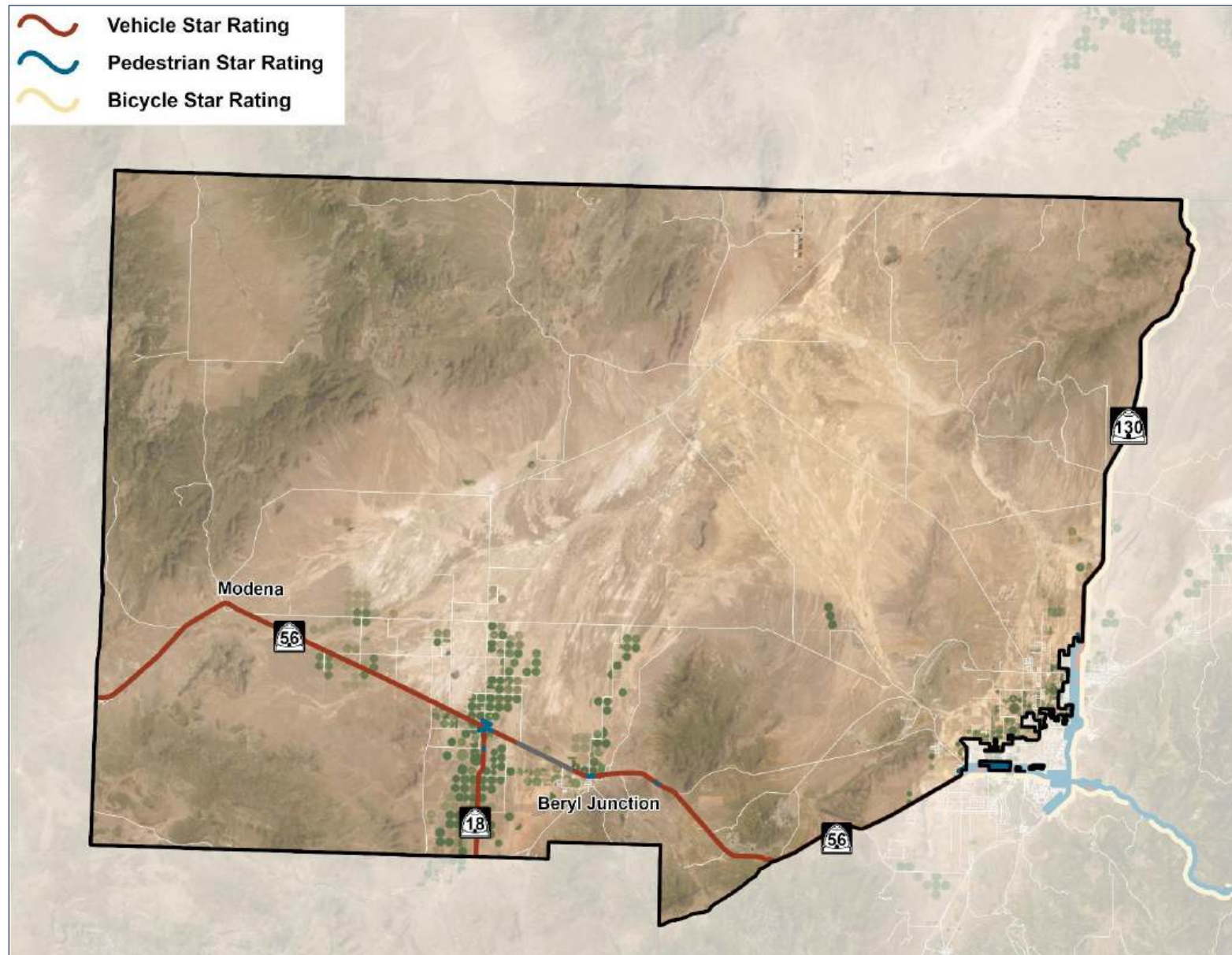


Figure 15. usRAP Risk Network – Star Ratings for the West Iron County GFA

8. HIGH-RISK NETWORK

Each of the safety analysis methodologies identified roadway segments or intersections in the West Iron County GFA that may benefit from safety improvements to reduce fatal and serious injury crashes.

To provide focused information for decisions regarding prioritization of safety improvements, an overlay of each analysis methodology was created to form a High-Risk Network.

A high-risk score, from zero to five, was determined using the approach in **Table 4**. Any location with a positive high-risk score may be considered for safety improvements. Locations with a risk score of three or greater are to be prioritized in the High-Risk Network

The West Iron County GFA High-Risk Network is shown in **Figure 16**. **Table 5** and **Table 6** provide an overview of the high priority roadway segments and intersections included in the High-Risk Network that were presented to stakeholders for comment in December 2024. Up to ten roadway segments and 20 intersections were listed if a location had a positive risk score.

Table 4. High-Risk Scoring Criteria

High Risk Category	Safety Analysis	Scoring Criteria	Risk Score
Historic Crashes	High Crash Network	Highest number of crashes per miles	1
	High Injury Network	Highest number of fatal and injury crashes per mile	1
Network Screening	Critical Crash Rates	Positive critical crash rate differential	1
Conflict Areas	Replica - Speeding Areas	Speeding conflict risk score of 80+	1/3
	Replica - Non-Speeding Areas	Non-speeding conflict risk score of 80+	1/3
	Replica - Active Transportation Areas	Active transportation conflict risk score of 80+	1/3
Risk Characteristics	Crash Profile Risk	Crash Profile Risk score of 60+	1/4
	usRAP Vehicle Star Rating	Star Rating of 1 - 2	1/4
	usRAP Pedestrian Star Rating	Star Rating of 1 - 2	1/4
	usRAP Bicycle Star Rating	Star Rating of 1 - 2	1/4
Maximum High-Risk Score			5

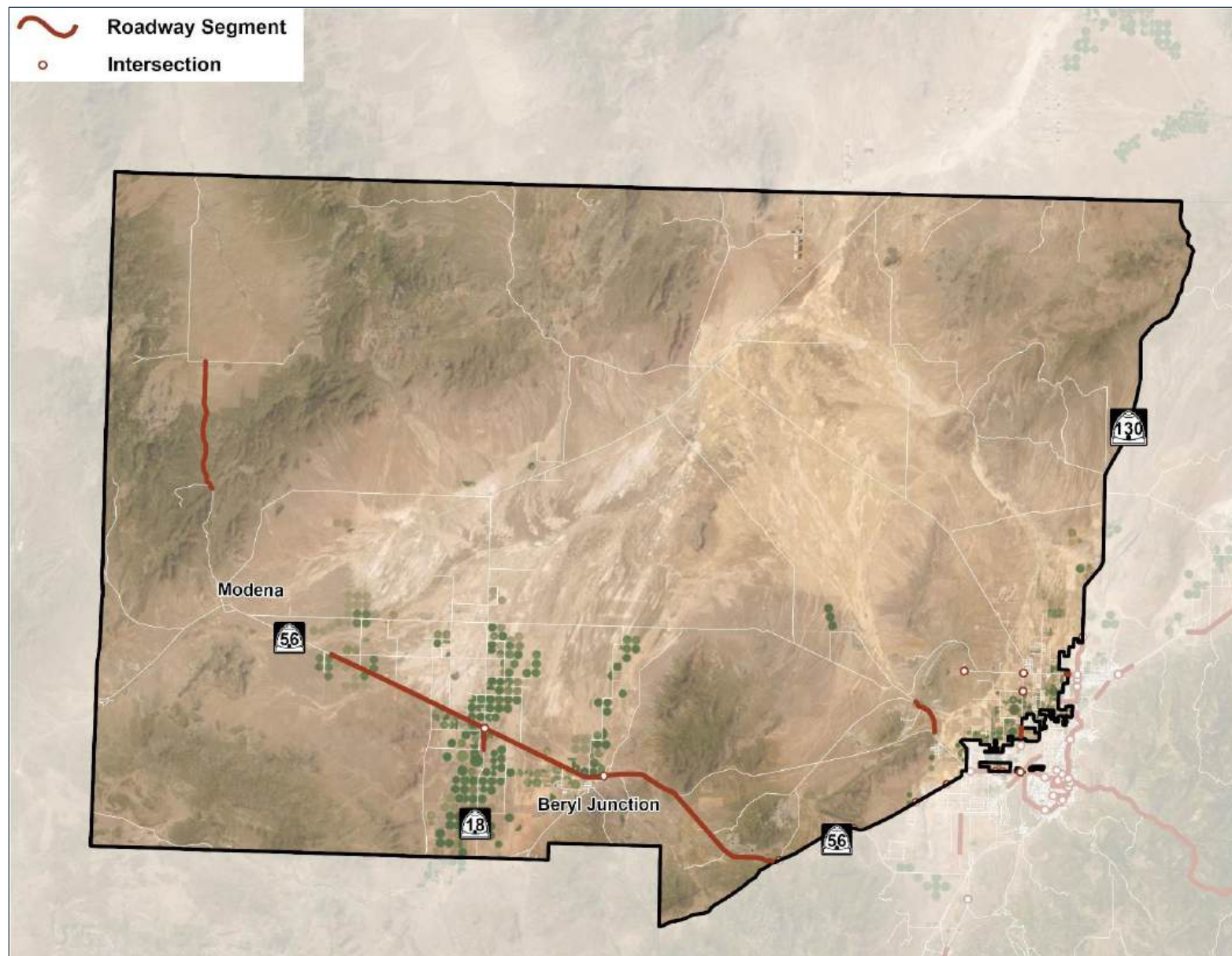


Figure 16. High-Risk Network for the West Iron County GFA

Table 5. Priority High-Risk Roadways for the West Iron County GFA

Roadways				Safety Analysis									
Roadway	Extents	Length (miles)	Functional Classification	High Crash Network	High Injury Network	Critical Crash Rate	Replica Speeding	Replica Non Speeding	Replica Active Transportation	Crash Profile Risk	usRAP Vehicle Star Rating	usRAP Pedestrian Star Rating	usRAP Bicycle Star Rating
State Routes													
SR 56	National Forest Road to Main Street	12.3	Minor Arterial	X		X	X	X	X	X	X		
SR 56	Main Street to 3200 north	15.9	Minor Arterial	X		X	X			X	X	X	
SR 18	800 South to SR 56	1.3	Minor Arterial	X						X	X	X	
Non- State Routes													
Iron Springs Road	Desert Mound Road to Comstock Road	2.3	Major Collector	X		X							
3100 West	1775 North to 2400 North	0.8	Major Collector	X	X								
Modena Canyon Road	M X Ranch to Hamblin Valley Road	7.3	Local Street	X		X							

Table 6. Priority High-Risk Intersections for the West Iron County GFA

Intersections		Safety Analysis			Supporting Networks						
Intersection	Number of Crashes	High Crash Network	High Injury Network	Critical Crash Rate	Replica Speeding	Replica Non Speeding	Replica Active Transportation	Crash Profile Risk	usRAP Vehicle Star Rating	usRAP Pedestrian Star Rating	usRAP Bicycle Star Rating
Unsignalized Intersections											
SR 18 & SR 56	7	X		X	X			X	X	X	
5700 West & Midvalley Road	3	X	X	X							
3100 West & Midvalley Road	7	X	X	X							
100 North & SR 56	2				X	X	X		X		
100 North & 4000 North	3		X	X							



APPENDIX A.5. INTERSTATE 15 GFA SAFETY ANALYSIS AND RESULTS

TECHNICAL MEMORANDUM #1

APPENDIX A5

I-15 GEOGRAPHIC FOCUS AREA SAFETY ANALYSIS

Statutory Notice

23 U.S.C. § 409: US Code - Section 409: Discovery and admission as evidence of certain reports and surveys

Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway- highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

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1. INTRODUCTION

Appendix A5 summarizes the safety analysis performed for the Interstate 15(I-15) Geographic Focus Area (GFA) as part of the Safety Action Plan for all Iron County (SAP).

I-15 was isolated as its own GFA because the interstate facilities are not eligible for Safe Streets and Roads for All (SS4A) funding. However, I-15 is the primary north-south connection through Iron County and serves the other GFAs included in the SAP.

An overview of historic crashes is provided in this appendix. A High-Risk Network was not developed for the I-15 GFA because the interstate will not be advanced to identifying SS4A eligible safety project locations.

1.1. Appendix Organization

Appendix A5 is organized into the following sections:

- Section 1 – Introduction
- Section 2 – I-15 GFA Study Area
- Section 3 – Historic Crash Overview
- Section 4 – Conflict Areas

2. STUDY AREA

The SAP study area includes each jurisdiction within Iron County. To organize the Iron County jurisdictions and unincorporated areas into manageable analysis areas, Iron County was divided into five GFAs. The I-15 GFA, shown in Figure 1, includes approximately 60 miles of I-15 from milepost 42 to mile post 101.

The historic crash summaries presented in this appendix are specific to the I-15 GFA which includes crashes occurring on the main lanes of I-15 and interchange ramps.

Figure 1 highlights the I-15 GFA study area and surrounding jurisdictions.



Figure 1. I-15 GFA Study Area

3. HISTORIC CRASH OVERVIEW

Crash data was obtained from the UDOT database for the most recent completed five-year period, 2019 to 2023. A historic crash review specific to the I-15 GFA is summarized below.

3.1. Overall Crashes

Figure 2 provides an overview of annual crashes for the I-15 GFA separated by crash severity. Crash severity is reported as fatal, serious injury, or all other crashes (minor injury, possible injury, or property damage only). A review of the crash data reveals the following:

- The total number of crashes has fluctuated over the five-year analysis period, reaching the highest number of crashes in 2019, 2021, and 2023.
- An average number of 12 fatal and serious injury crashes have occurred each year.
- 4% of the crashes that occurred in 2023 were fatal or serious injury crashes.

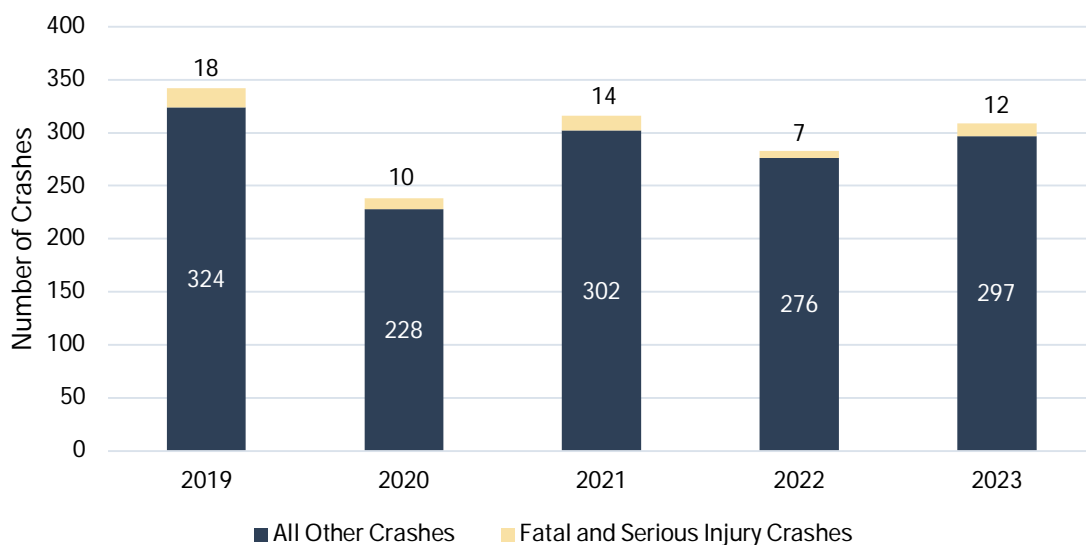


Figure 2. I-15 GFA Crashes by Year

Table 1 provides an overview of crashes by severity within the I-15 GFA and a comparison to all crashes analyzed in Iron County. A review of the data reveals the following:

- 71% of crashes resulted in no injury or property damage only.
- 41% of all fatal crashes in Iron County occurred on I-15.
- Crashes on I-15 make up 29% of all crashes that occurred in Iron County between 2019 and 2023.
- At least 23% of each crash severity in Iron County occurred on I-15.

Table 1. Crash Severity by Route Type for the I-15 GFA

Route Type	State Route (GFA Total)		% of Iron County
Crash Severity	Crashes		%
	#	%	
Fatal	16	1%	41%
Suspected Serious Injury	45	3%	23%
Suspected Minor Injury	156	11%	25%
Possible Injury	206	14%	29%
No Injury / Property Damage Only	1,061	71%	29%
Route Total	1,484	100%	29%

3.2. Fatal and Serious Injury Crashes

The number of fatal and serious injury crashes by year is summarized in Figure 3. A review of the crash data reveals the following:

- An overall decrease in fatal and severe injury crashes from 2019 to 2023.
- The number of fatal crashes has increased since 2019, reaching a maximum of five (5) fatal crashes occurring in 2023.

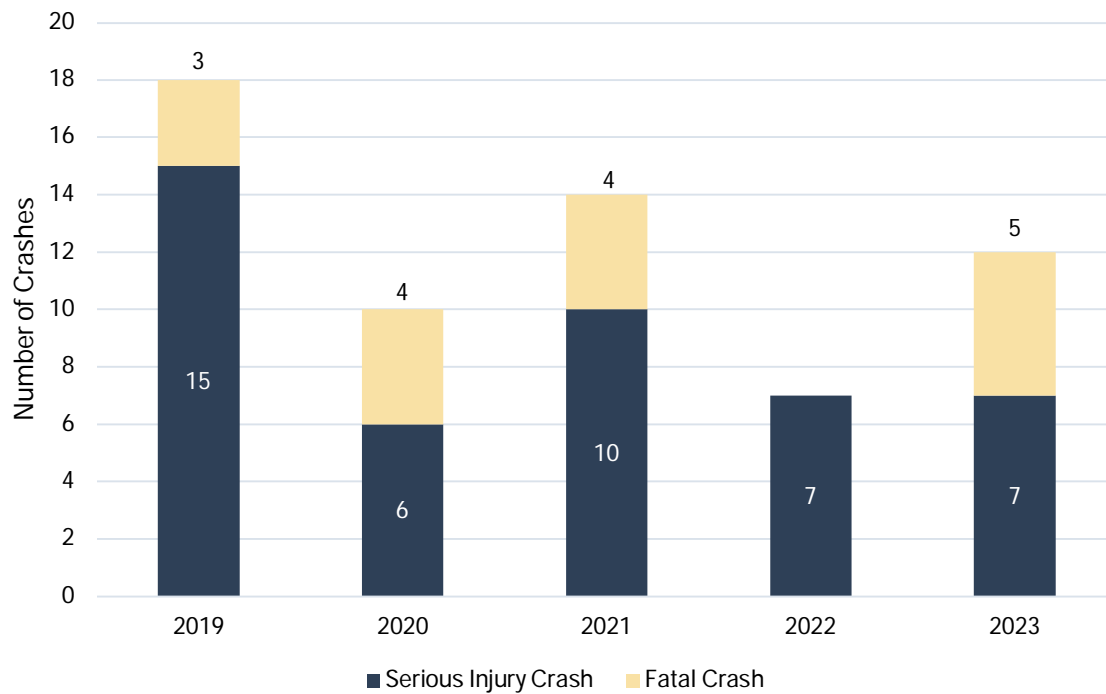


Figure 3. I-15 GFA Fatal and Serious Injury Crashes by Year

The locations of the fatal and serious injury crashes are displayed in Figure 4 and show a prevalence of fatal injury crashes at interchanges and intersections with I-15.

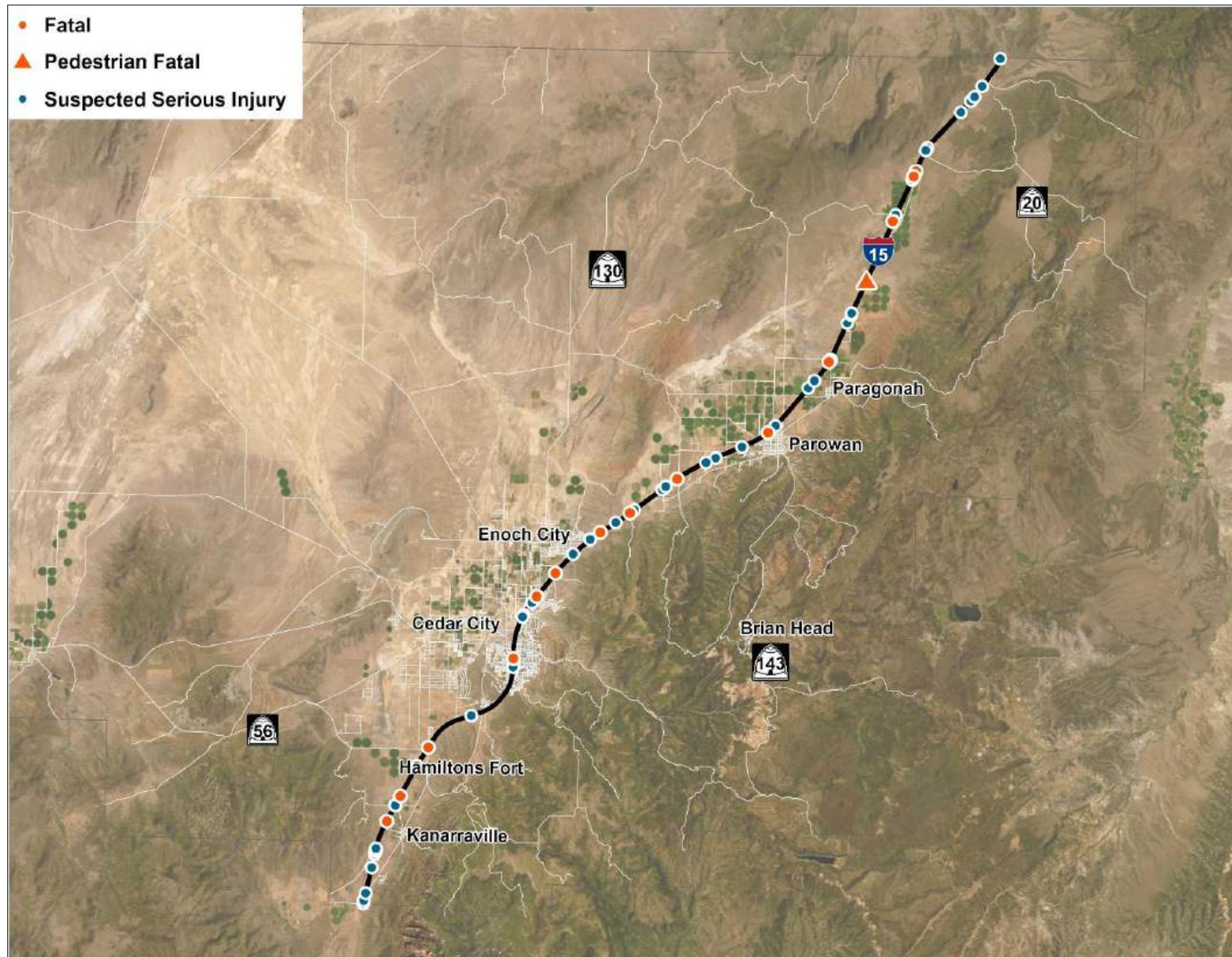


Figure 4. Fatal and Serious Injury Crashes in the I-15 GFA

3.2.1. Manner of Collision

An overview of fatal and serious injury crashes by the most common manners of collisions is shown in Figure 5. The manner of collision represents how two vehicles initially collided. The recorded manner of collision may overlap with the recorded crash type, as manner of collision is a more detailed categorization compared to crash type that is summarized in Section 3.2.2. The three most frequent manners of collision that resulted in a fatal or serious injury crash are single vehicle crashes, rear-end crashes, and sideswipe crashes.

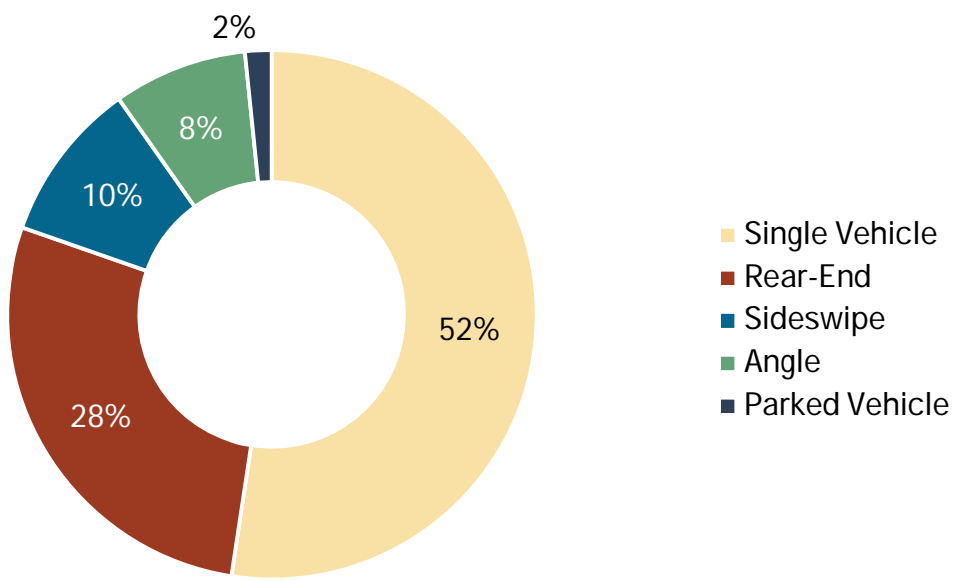


Figure 5. Most Common Fatal and Serious Injury Manners of Collision for the I-15 GFA

3.2.2. Crash Types

Crash type represents a query of multiple data fields, including the manner of collision. Each crash is assigned only one primary crash type, examples include left turns at intersections, rear -ends, sideswipes, and roadway departure crashes.

The most common crash types for the I-15 GFA are summarized in Figure 6. The three most frequent fatal and serious injury crash types are highway crossovers, rear-end crashes, and a crash type recorded as “Other.” The crash type “other” may indicate a unique crash scenario or a gap in available data. The next most frequent crash type is roadway departures which include running off the road and lane departures.

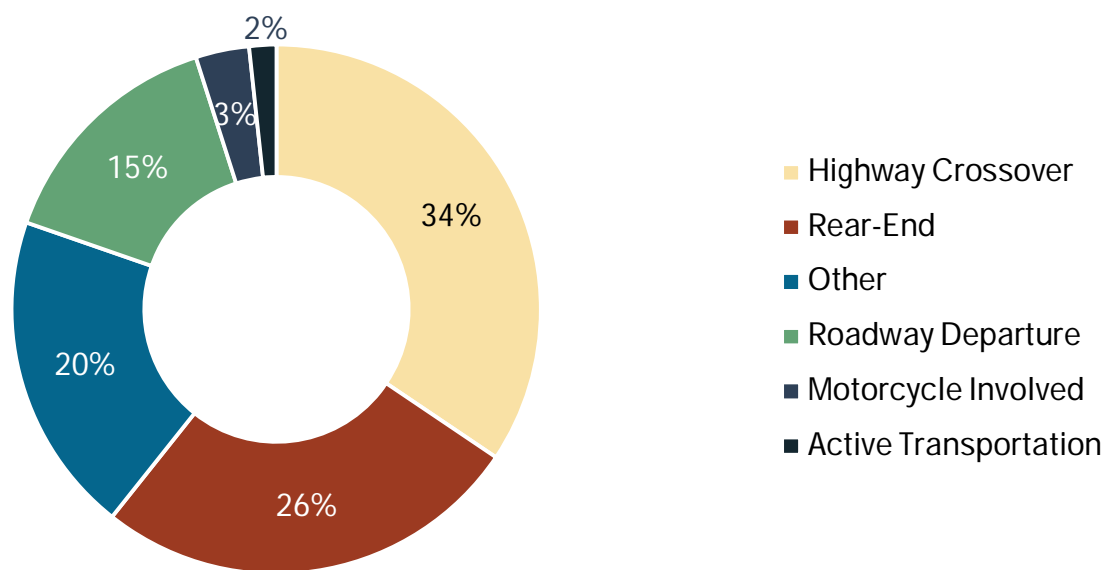


Figure 6. Most Common Fatal and Serious Injury Crash Types for the I-15 GFA

3.2.3. Driver Contributing Factors

Several factors may contribute to a single crash; however, the driver contributing factors shown in Figure 7 only represent the first driver specific contributing factor as recorded in the crash report. The first driver contributing factor recorded in the crash report indicates the primary cause of a crash. The data shows that the three most frequent driver contributing factors include failure to keep in the proper lane, speeding, and "Other/Unknown". The "Other/Unknown" contributing crash factor may indicate a unique scenario or highlight a gap in data collection.

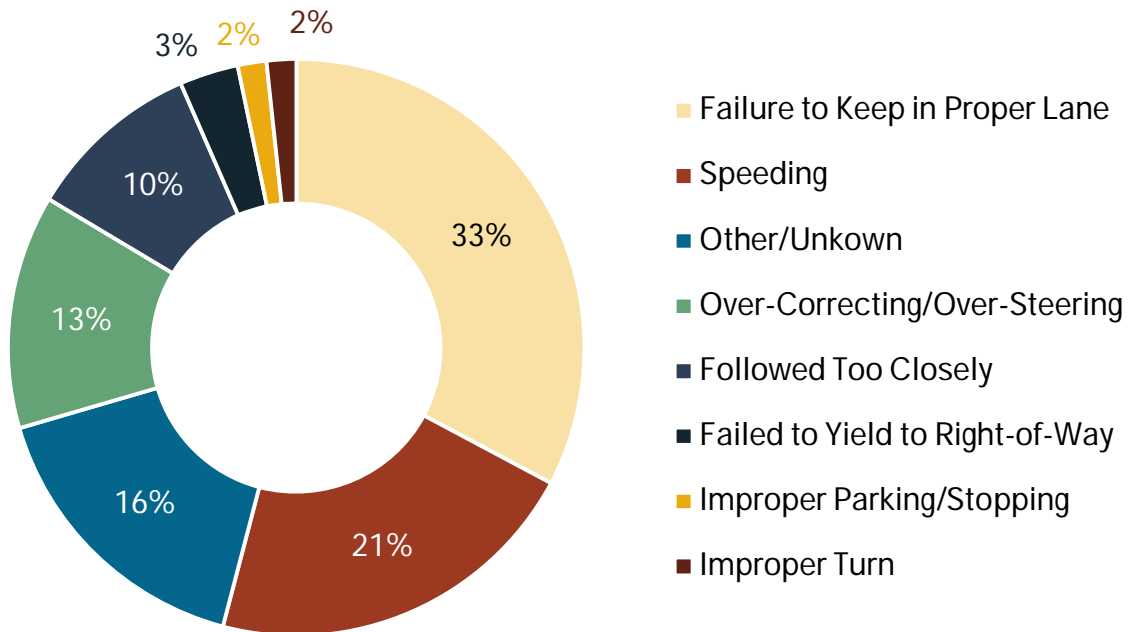


Figure 7. Most Common Fatal and Serious Injury Crash Driver Contributing Factors in the I-15 GFA

3.2.4. Vulnerable User Crashes

Vulnerable road users include pedestrians and bicyclists. The data shows two crashes involving pedestrians and zero crashes involving bicyclists in the I-15 GFA from 2019 to 2023. The pedestrian involved crashes occurred in 2021 and 2023, the 2023 crash resulted in a fatality.

3.3. Utah SHSP Emphasis Safety Area Analysis

The SHSP emphasis area analysis ranks the frequency of fatalities and serious injuries in the I-15 GFA for each of the eleven Utah SHSP emphasis safety areas. A fatality or serious injury may be assigned to multiple emphasis areas.

The rankings of the emphasis areas compare the I-15 GFA, the state of Utah, and all of Iron County.

This analysis helps to determine priority emphasis areas for the I-15 GFA, based on whether the ranked frequency of fatalities and serious injuries within the GFA are significantly different than the statewide or County rankings.

Table 2 summarizes the Utah SHSP Emphasis Area comparison analysis. The following emphasis areas have the highest frequency of fatalities and serious injuries in the I-15 GFA. The SAP identified the priority emphasis areas for the I-15 GFA:

- Roadway Departure
- No Safety Restraints
- Speed-Related
- Older Drivers
- Distracted Driving

Table 2. Utah SHSP Emphasis Area Comparison for the I-15 GFA

Category	Utah SHSP Safety Emphasis Area	Statewide		Iron County		I-15 GFA		
		Fatalities and Serious Injuries	Rank	Fatalities and Serious Injuries	Rank	Fatalities and Serious Injuries	Rank	Change in Rank from County
Driver	Teen Driver	1,695	4	54	5	7	6	-1
	Older Driver	1,565	7	49	6	13	4	2
	Speed-Related	2,268	3	78	3	19	3	0
	Aggressive Driving	615	11	19	10	2	9	1
	Distracted Driving	732	10	28	8	13	5	3
	Impaired Driving	1,100	8	27	9	7	7	2
	No Safety Restraints	1,627	5	85	2	37	2	0
Roadway	Intersection	3,683	1	67	4	0	10	-6
	Roadway Departure	3,372	2	132	1	47	1	0
Special Users	Motorcycle	1,571	6	40	7	4	8	-1
	Pedestrian	1,000	9	15	11	2	11	1
	Bicycle*	303	12	3	12	0	12	0

**While Bicycles are not one of the eleven Utah SHSP emphasis areas, they are included as part of the CSAP safety analysis.*

4. CONFLICT AREAS

The conflict area analysis used Replica data obtained by the County to proactively address areas of greater safety risks. The following data and metrics were isolated in Replica to identify higher risk roadways in the GFA and Iron County:

- Speeding
- Non-Speeding Events: Suspected Collisions, Phone Handling (Distracted Driving), and Sudden Braking

A maximum risk score within Replica is 100 points. Roadways with a risk score of 80 or more in any of the Replica metrics analyzed are shown in Figure 8 for the I-15 GFA. Approximately 20 miles of I-15 has an elevated risk of speeding, phone handling, and sudden braking identified by Replica. The section of highest risk on I-15 is from milepost 51 to milepost 71, with sudden braking prevalent at both Cedar City interchanges.



Figure 8. Replica Speeding Conflict Areas in the I-15 GFA

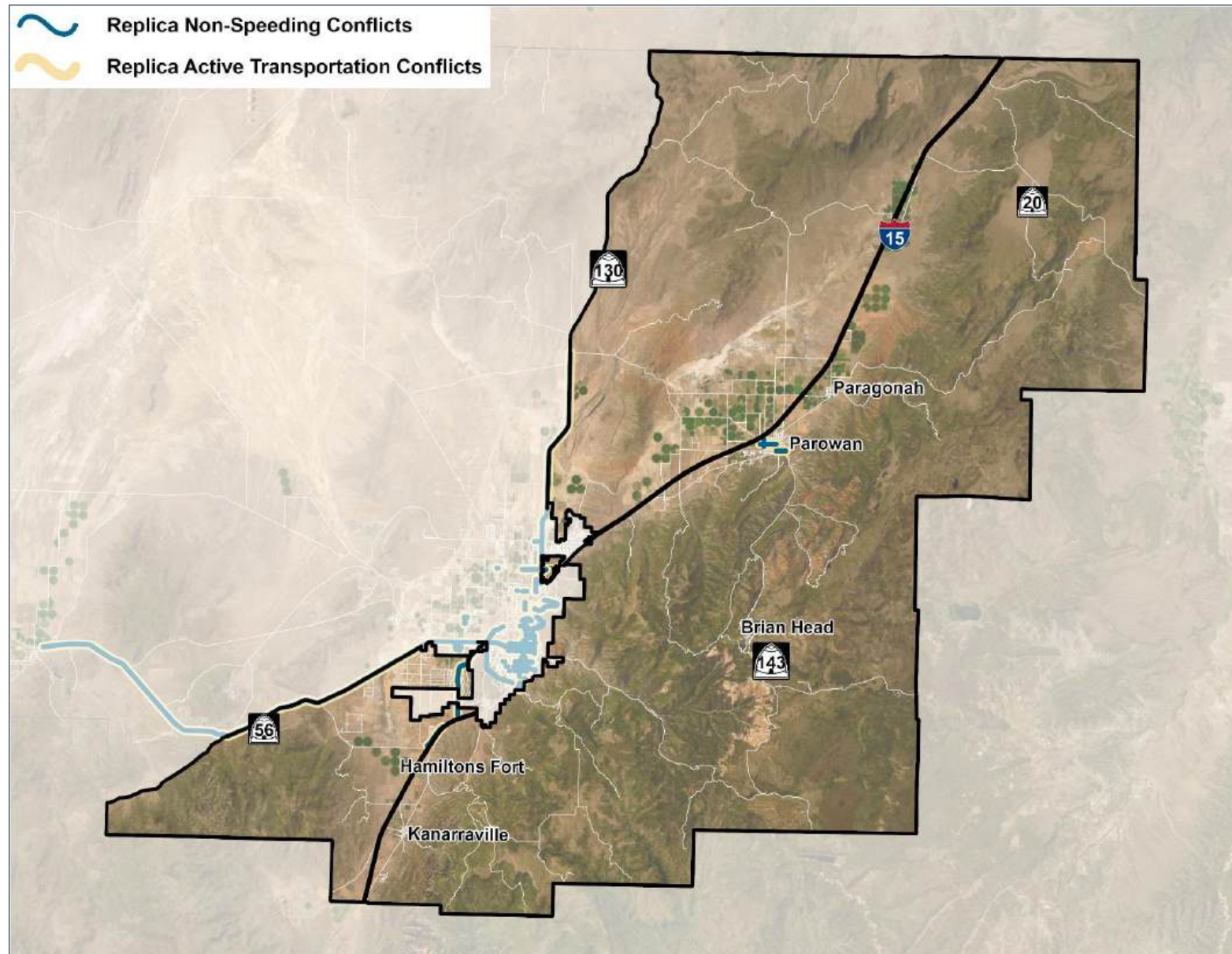


Figure 9. Replica Non-Speeding and Active Transportation Conflict Areas for the I-15 GFA

5. CONCLUSION

I-15 is managed and maintained by the Utah Department of Transportation. However, state departments of transportation are not eligible to apply for SS4A funds. As such, the Iron County SAP reviewed crash data for the I-15 corridor but will not make recommendations for improvements to I-15.

Historic crash overview findings were presented to the Iron County Rural Planning Organization in December 2024.



APPENDIX B. TECHNICAL MEMORANDUM #2 – ENGAGEMENT SUMMARY



March 2025

Safety Action Plan for All Iron County

Technical Memorandum #2 – Engagement Summary

Safety Action Plan for All Iron County

Technical Memorandum #2 – Engagement Summary

March 2025

Prepared for:



Iron County
82 North 100 East
Cedar City, UT 84720

Prepared by:

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In Partnership with:



Statutory notice

23 U.S.C. § 407: US Code - Section 407: Discovery and admission as evidence of certain reports and surveys

Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 144 and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

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- E. Online Survey Data
- F. Advertising Materials

1. INTRODUCTION

Iron County is preparing a Safety Action Plan (SAP) to develop a holistic, well-defined strategy to reduce roadway fatalities and serious injuries on roadways throughout Iron County. The SAP will analyze safety needs, identify high-risk locations and factors contributing to crashes, and prioritize strategies to address them.

To develop a more complete and effective SAP, Iron County and the project team engaged identified stakeholders and communities using various strategies to gather feedback and perspectives on transportation safety in Iron County.

A robust stakeholder engagement and community outreach plan was included in the SAP to ensure all users of the transportation system had the opportunity to inform and contribute to the SAP development, as well as detail their experiences using the transportation system in Iron County.

The engagement strategy of the Iron County SAP satisfies the Engagement and Collaboration element of an Action Plan, which is required as part of the FHWA Safe Streets and Roads for All (SS4A) grant program. Requirements for the Engagement and Collaboration element of a Safety Action Plan, as noted on previous FHWA Self-Certification Eligibility Worksheets within the SS4A grant program include:

Did the Action Plan development include ALL the following activities?

- Engagement with the public and relevant stakeholders, including the private sector and community groups;
- Incorporation of information received from the engagement and collaboration into the plan; and
- Coordination that included inter- and intra-governmental cooperation and collaboration, as appropriate.

Technical Memorandum #2 provides a summary of engagement efforts for the SAP including the SAP Committee, identified stakeholder engagement, and community outreach. The information and feedback gathered from engagement efforts have been used throughout the SAP to inform the safety analysis, recommended strategies, and potential project locations and improvements.

2. SAFETY ACTION PLAN COMMITTEE

Establishing an SAP Committee to oversee and be involved in the development, implementation, and monitoring of the plan is a requirement of the SS4A grant program. The Iron County SAP Committee comprised of representatives from local jurisdictions and the Utah Department of Transportation (UDOT). The Committee has met monthly to review, discuss, and coordinate SAP efforts. The Committee provided valuable information to identify key stakeholders and provided insights that guided the safety analysis approach, preferred countermeasure and safety strategies selection, and safety priorities for the SAP. The Committee will continue to monitor and coordinate SAP implementation. The Iron County SAP Committee members are listed in **Table 1**.

Table 1. Iron County SAP Committee Members

Name	Organization
Rich Wilson	Iron County
Reed Erickson	Iron County
Merilee Wilson	Iron County
Mike Bleak	Iron County Commission
Russell Robertson	Federal Highway Administration (FHWA)
Trevor Hart	Federal Highway Administration (FHWA)
Nate Wiberg	Five County Association of Governments
Cody Christensen	Five County Association of Governments
Rob Dotson	Enoch City
Kent Fugal	Cedar City
Dan Jessen	Parowan City
Todd Robinson	Paragonah Town
Tyler Allred	Kanarraville Town
Heidi Loveland	Kanarraville Town
Bret Howser	Brian Head Town
Shane Parashonts	Paiute Indian Tribe of Utah
Tracy Munson	Utah Department of Transportation (UDOT)
Chris Hall	Utah Department of Transportation (UDOT)
Cody Marchant	Utah Department of Transportation (UDOT)
Laurie Huntsman	Utah Zero Fatalities

3. STAKEHOLDER ENGAGEMENT

Iron County, the SAP Committee, and the project team engaged stakeholders to ensure those responsible for other aspects of the County's transportation network were included. To accompany transportation system users' feedback, stakeholders included planning, maintenance, and funding staff and any other community members who are responsible for creating communities where people enjoy living. Key stakeholders included City, Town, and agency staff, elected officials, advocacy groups, health departments, law enforcement and emergency responders, UDOT, school districts, business owners, and residents of Iron County. The SAP collected information from stakeholders and the community through a variety of engagement activities, summarized below.

3.1. Safety Launch Webinar

The development of the SAP was initiated with a Safety Launch webinar on November 14th, 2024. More than 30 stakeholders representing varying stakeholder groups such as municipalities, Iron County, UDOT, health departments, advocacy groups, school districts, residents, and other organizations attended the event.

The project team introduced attendees to the SAP project, outlined how to get involved in the SAP, and shared the project website for viewing the SAP progress and collecting comments. The Safety Launch included an overview of desired project outcomes and described how local jurisdictions could support a regional safety commitment and prepare to submit SS4A grant applications to fund safety improvements in their communities. Figure 1 shows the virtual Safety Launch Meeting. A copy of the Safety Launch presentation and attendee list is included in Appendix A.



Figure 1. Iron County SAP Safety Launch Meeting

3.2. Geographic Focus Area Workshops

The Iron County SAP study area includes the entire County. For more detailed safety analysis and recommendations, the project team divided the County into five Geographic Focus Areas (GFAs). The GFAs are summarized in **Table 2** and shown in Figure 2.

The project team hosted two rounds of planning workshops in each GFA to solicit feedback from key stakeholders and community members. These workshops provided insight on issues facing the residents of Iron County.

Table 2. Iron County SAP Geographic Focus Areas (GFAs)

Geographic Focus Area (GFA)	Areas or Jurisdictions Included
Cedar City	Cedar City (excluding I-15)
Enoch City	Enoch City (excluding I-15)
East Iron County	Parowan City Paragonah Town Kanarraville Town The Paiute Indian Tribe of Utah Unincorporated areas of Iron County, east of SR 130 and SR 56 (excluding Cedar City and Enoch City)
West Iron County	Unincorporated areas of Iron County, west of SR 130 and SR 56 (excluding Cedar City and Enoch City)
Interstate-15 (I-15)	From milepost 41 to milepost 101



Figure 2. Iron County SAP Study Area and GFAs

3.2.1. GFA Workshop #1 – Safety Analysis

The first round of GFA Workshops, or GFA Workshop #1 took place between December 3 – 5, 2024. A workshop was held in each GFA to provide an overview of the SS4A Grant Program, the Iron County SAP process, the project schedule and components, and the safety analysis results. A portion of the workshop was dedicated to gathering stakeholder and community feedback regarding the safety analysis results, including if stakeholders felt the analysis matched existing conditions, if their experiences were reflected in the analysis results, and if they had any insights or other information regarding the transportation safety. A copy of the workshop materials and compiled feedback are included in Appendix B.

At each GFA workshop, segments and intersections identified in the safety analysis as areas experiencing safety issues were reviewed using large maps to understand if the locations were consistent with stakeholder and community experiences. Attendees were asked to note any additional locations they felt have significant safety issues. Stakeholder input from GFA Workshop #1 was considered during the process of selecting locations for potential safety countermeasure projects. GFA Workshop #1 locations, attendees, and agencies represented in addition to the project team are summarized in **Table 3**.

Table 3. Workshop #1 Attendees

GFA	Agency Represented/Attendee
Enoch City GFA	<ul style="list-style-type: none"> • Enoch City Manager - Rob Dotson • Enoch City Council - Deborah Lay
Held at the Enoch City Offices on December 3, 2024	<ul style="list-style-type: none"> • Enoch City Council - Bob Tingey • Enoch City Planning Commission Member - Delaine Findlay • Enoch City Planning Commission Chair - Leonard Correa • Enoch City Police Chief - Jackson Ames • Enoch City Building Inspector - Lynn Nielson • Enoch City Public Works – Hayden White • Enoch City Utilities - Carrie Horton • Iron County Engineer - Rich Wilson • Resident/Business Owner - BJ Knudson

GFA	Agency Represented/Attendee
Interstate 15 (I-15) GFA Held as part of the Iron County RPO Meeting – Enoch City Offices on December 3, 2024	<ul style="list-style-type: none"> • Enoch City – Rob Dotson • UDOT – Tracy Munson • Parowan City – Dan Jessen • Cedar City – Kent Fugal • Iron County Planner– Reed Erickson • Iron County Engineer – Richard Wilson • Enoch City – Hayden White • Enoch City – Leonard Correa • Five County Association of Governments – Nate Wiberg
West Iron County GFA Held at the Newcastle Fire Station on December 4, 2024	<ul style="list-style-type: none"> • Resident - Steven Christensen • Resident – Mr. Christensen • Resident - Mason Jones • Resident - Eric Jones • Resident - Don Forsyth • Newcastle Volunteer Firefighter • Iron County Engineer- Rich Wilson
East Iron County GFA Held at the Parowan City Offices on December 4, 2025	<ul style="list-style-type: none"> • Parowan City Manager - Dan Jessen • Parowan City Mayor – Mollie Halterman • Parowan City Council - Sharon Downey • Parowan City Council – John Dean • Parowan Planning and Zoning - Troy Hoyt • Parowan Public Works – Aldo Biasi • Brian Head Resort - Dave Craner • Brian Head City Manager - Bret Howser • Kanarraville Town Clerk - Heidi Loveland • Iron County Engineer - Reed Erickson
Cedar City GFA Held at Festival Hall Conference Center on December 4, 2024	<ul style="list-style-type: none"> • Cedar City Engineer – Kent Fugal • Parowan City – Kim Lovell • UDOT Region 4 Engineer – Tracy Munson • Iron County School District - Steve Burton • Cedar City Police Chief – Darren Adams • Iron County Commissioner – Marilyn Wood

GFA	Agency Represented/Attendee
	<ul style="list-style-type: none"> • Iron County/Cedar City Economic Development Director – David Johnson • Iron County Sheriff – Ken Carpenter • Intermountain Health - Trent Cuaresma • Iron County Planner - Reed Erickson • Iron County Engineer – Rich Wilson

3.2.1.1. Enoch GFA Workshop #1 Key Takeaways

- Discussion on Midvalley Road including improved crossing locations, sidewalks and spaces for active transportation, utility considerations, and the intersection with Lund Highway.
- Noted areas of concern with vehicle speeding in residential neighborhoods and local streets.
- Noted areas with expected development and growth (Enoch City Recreation Complex, areas adjacent SR 130, SR 130 and Old Highway 91, etc.).
- Discussion regarding Old Highway 91 including commuter vehicle congestion, increased active transportation use (especially bicycles), pavement condition, and potential improvements.

3.2.1.2. Interstate 15 (I-15) GFA Workshop #1 Key Takeaways

- Discussion on interchange safety.
- Discussion on why I-15 is included in the safety analysis as part of the SAP, but that specific countermeasures or projects will not be identified for the area.

3.2.1.3. West Iron County GFA Workshop #1 Key Takeaways

- Near-miss crash locations, including intersections with SR 56 and vehicles pulling out in front of high-speed (and speeding) vehicles on SR 56.
- General vehicle speeding issues, particularly through Main Street in Newcastle and near the elementary school.
- Concerns with future freight traffic and how SR 56 is used as an alternative route from Nevada.
- Discussed a need for bus pullout locations along SR 56.

3.2.1.4. East Iron County GFA Workshop #1 Key Takeaways

- Coordination of identified countermeasures and projects with the recently completed Transportation Master Plan and Active Transportation Plan.
- SR 143 (200 South) and SR 274 (Main Street) being the primary gateways to Brian Head and the expected growth and traffic volume increases.
- The need for safe school and pedestrian crossings in Paragonah, Kanarraville, and other locations in Parowan.

- Incorporating recommendations from the Brian Head Commercial Corridor Transportation study for SR 143 in Brian Head.

3.2.1.5. *Cedar City GFA Workshop #1 Key Takeaways*

- Implementing identified recommendations from UDOT's Road Safety Audit around SUU campus.
- Adjacent development to Lund Highway, SR 56, Cross Hollow Road, etc. and appropriate countermeasures for residential areas.
- Intersection safety concerns on SR 56, Main Street (SR-130), Iron Springs Road, etc.

3.2.2. GFA Workshop #2 – Strategies and Projects

The second round of GFA workshops, or GFA Workshop #2 occurred between February 19 – 20, 2025. The purpose of this workshop was to solicit feedback concerning the selected safety countermeasures and project locations. A copy of the workshop materials and compiled feedback is included in Appendix C.

At each workshop, locations previously identified in GFA Workshop #1 as the high-risk network were reviewed using large maps and accompanied by project information sheets summarizing the identified safety concerns, contributing factors at that particular location, and the identified strategies and countermeasures recommended for that location. Stakeholders were asked about the viability of each proposed safety improvement and to note any additional locations or countermeasures that could be included in the SAP. Stakeholder input from GFA Workshop #2 was used to refine potential project locations, countermeasure recommendations, and opinions of probable costs. GFA Workshop #2 details and agencies represented are summarized in **Table 4**. Note, a Workshop #2 was not held with the I-15 GFA as I-15 is a state-managed roadway and UDOT, as a state DOT, is not eligible for SS4A Grant Program funding. Project strategies and countermeasures were not identified for I-15.

Table 4. Workshop #2 Attendees

GFA	Agency Represented/Attendee
East Iron County GFA	<ul style="list-style-type: none"> • Parowan City Council - David Burton • Parowan City Mayor - Mollie Halterman • Iron County Engineer - Rich Wilson
Held at the Parowan City Offices on February 19, 2025	<ul style="list-style-type: none"> • Kanarraville Town Clerk - Heidi Loveland • Parowan City Manager - Dan Jessen • Parowan City Council - John Dean

GFA	Agency Represented/Attendee
West Iron County GFA Held at the Newcastle Fire Station on February 19, 2025	<ul style="list-style-type: none"> • Iron County Planner – Reed Erickson • Iron County Sheriff - Ken Carpenter • Dixie Power - Jed Gardner • Newcastle Fire Department - Wayne Peterson • Newcastle Fire Department - Layne Anderson
Cedar City GFA Held at Festival Hall Conference Center on February 20, 2025	<ul style="list-style-type: none"> • SUU Facilities Manager - Ben Johnson • Cedar City Fire Marshal - Mike Shurtz • Southwest Utah Public Health Department - Savannah Nelson • Cedar City Manager - Paul Bittmenn • Cedar City Engineer - Kent Fugal • Iron County Engineer – Richard Wilson • Iron County Emergency Manager - George Colson • Intermountain Health - Trent Cuaresma • SUU Assistant Professor - Justin DeBlauw • UDOT Region 4 Planning Manager - Chris Hall • Cedar City Council - Scott Phillips
Enoch City GFA Held at the Enoch City Offices on February 20, 2025	<ul style="list-style-type: none"> • Enoch City Council - Debra Ley • Enoch City Council - David Harris • UDOT Region 4 Planning Manager - Chris Hall • Iron County Planner – Reed Erickson • Iron County Engineer – Richard Wilson • Enoch City Manager - Rob Dotson • Enoch City Public Works – Hayden White • Resident/Business Owner - BJ Knudson

3.2.2.1. *East Iron County GFA Workshop #2 Key Takeaways*

- Discussion regarding improvements to Main Street in Parowan, including:
 - Intersection realignment at SR 271 and SR 274.
 - Active transportation considerations including improved crossing locations and connections to the regional active transportation network and parks.
- The expected increase of visitors to Brian Head, tripling the current number of visitors.

- Discussion on improvements to SR 143 (200 South) in Parowan including a current sidewalk infill project, adjacent new developments incoming, and the ultimate cross section including a shared-use path.
- The need for enhanced pedestrian crossings on Main Street in both Paragonah and Kanarraville.
- Future commercial growth near the interchanges and ensuring safety is incorporated into future changes.

3.2.2.2. West Iron County GFA Workshop #2 Key Takeaways

- Turn lane needs off of SR 56 at multiple locations.
- SR 56 identified safety need areas including rural intersections, curves, passing/climbing lanes, passing zones, striping, signage, and rumble strips.
- Discussion on bus pullout improvements.
- Discussion on potential shoulder widenings and specifically the increased bicycle traffic on SR 56 between Cedar and Newcastle.

3.2.2.3. Cedar City GFA Workshop #2 Key Takeaways

- Considerations for fire trucks' ability to navigate intersections and other infrastructure changes.
- School zone safety needs to be prioritized with sidewalk infill projects, enhanced crossing locations, and better visibility of pedestrians to motorists.
- Space for active transportation (sidewalks, trails, crossings, bike lanes, etc.).
- Consider safety strategies like crosswalk visibility and the use of flashing signage or beacons.
- Discussion of shoulder widening and the safety to bicyclists and motorists. Where possible, separated bicycle lanes are preferred.
- Edits recommended to the project information sheets to make them more readable and digestible for the agencies that will be using them.

3.2.2.4. Enoch City GFA Workshop #2 Key Takeaways

- Attendees discussed the project information sheets for identified locations:
 - Midvalley Road from Lund Highway to Old Hwy 91
 - SR-130 from 3000 North to Midvalley Road
 - SR-130 from Midvalley Road to 6400 North
 - Old Highway 91 from SR-130 to Midvalley Road
 - 4200 North from SR-130 to Half Mile Road
 - 3600 North from Bulldog Road to SR-130
 - Lund Highway from SR-56 to Midvalley Road

- General consensus on identified strategies and countermeasures. Some project areas may be expanded.
- Discussion on crossing enhancements and safety, including space for active transportation users.

4. COMMUNITY OUTREACH

Soliciting input from the public provides an understanding of individuals' unique experiences, which better informs the strategies and proposed safety improvement projects.

Opportunities for the public to provide input on the SAP were focused on virtual engagement with a project website, interactive map, community survey, and social media outreach. The project website¹ provided the public with project information, study area maps, an interactive map where they could leave comments and suggestions, the community survey, event details, and a set of frequently asked questions. The website went live in November 2024, and as of March 20, 2025, there were a total of 938 unique site visits. December 5th had the highest amount of activity with 293 visitors, when the website was actively advertised at the GFA workshops.



Figure 3. Project Website Homepage

¹ Safety Action Plan for All Iron County. <https://www.ironcountysafetyplan.com/>

4.1. Cedar City Traffic Safety Community Meeting

The project team attended the Cedar City Traffic Safety Community Meeting organized by the Utah Department of Public Safety Highway Safety Office. The event was held at the Southern Utah University Hunter Alumni Center on October 17, 2024. This was the first public event the project team attended to engage with the community. The meeting included representatives from Cedar City, Utah Highway Patrol, UDOT, Zero Fatalities, Southwest Utah Public Health Department, and Cedar City and SUU Police. The event was open to all and attended by students, faculty and residents of the community. The intent of the event was to share information and collect feedback from participants on ways to improve transportation safety in Iron County. Members of the project team shared information about the SAP, directed them to the project website, and asked for participation in a survey. During the event, the project team collected 25 surveys, had one-on-one conversations with participants, and visited with students.



Figure 4. Cedar City Traffic Safety Community Meeting

4.2. Online Interactive Map

An online interactive map embedded into the project website was used to aggregate public comments and highlight potential locations for safety-focused improvements. The mapping tool allowed respondents to comment on four categories: bicycle safety, pedestrian safety, vehicle safety or other feedback and place those comments to wherever they navigated to on the map.

There were 95 unique comments submitted on the interactive map during the comment period. Of the 95 comments, the total of each category was as follows:

- Bicycle Safety: 16
- Pedestrian Safety: 22
- Vehicle Safety: 54
- Other Feedback: 3

A full list of the map comments is provided in Appendix D.

Common locations noted as concerns on the map include:

- Highway 91 (Old Highway 91)
- SR 130, Cedar City and Enoch City
- 600 South, Cedar City
- Lund Highway
- Main Street Cedar City
- SR 130 and 3000 North Intersection



Figure 5. Interactive Map

Typical issues and safety concerns recorded in the comments include:

- Pedestrian and bicyclist safety including the need for dedicated bike lanes, active transportation space and separation from vehicle traffic/risky intersections, and crossings.
- Road conditions: rough surface conditions, narrow roadways, and worn or faded pavement markings.
- Traffic congestion: signal timing, risky intersections, and the need for turn lanes.
- Visibility: sight obstructions including vegetation, signage, and the need for lighting.
- Compliance: motorists not obeying traffic laws, concerns with driver speeding, and stop sign compliance.

4.2.1. Interactive Map Update

On February 18, 2025, the interactive map was updated to reflect the locations of potential safety improvement projects for identified roadways and intersections. These projects were open for public comment to help inform the potential project locations and components.



Figure 6. Interactive Map Update

4.3. Public Online Survey

Along with the interactive map, an optional survey allowed respondents to provide their thoughts about transportation safety in Iron County. Respondents were asked their primary mode of travel, their preferred top safety improvements, and top three safety concerns. There were 374 unique responses submitted. On average, it took respondents five minutes to complete the survey, and 100% of the people that began the survey completed it. A copy of the survey and a record of survey feedback is included in Appendix E.



**SAFETY
ACTION
PLAN**
FOR ALL IRON COUNTY

Iron County Safety Action Plan Survey

1. Do you travel on Iron County roadways?

☐ Yes

☐ No

2. What modes of transportation do you use regularly? (select all that apply)

☐ Personal vehicle

☐ Bike

☐ Walk

☐ Bus

Figure 7. Portion of the Online Survey

4.3.1. Survey Key Findings

The following findings and trends were noted from the survey responses:

- Most respondents (99%) indicated they regularly use a personal vehicle as a form of transportation.
 - 59% of respondents indicated they regularly walk as a form of transportation.
 - 32% of respondents indicated they regularly bike as a form of transportation.
- Respondents identified distracted driving, people ignoring traffic laws, and blocked views as the most concerning safety issues.
 - Distracted driving (65%).
 - People ignoring traffic laws while driving (60%).
 - View blocked when turning (51%).
- Most respondents (94%) indicated they are a resident of Iron County.
- Of the respondents that answered the demographic questions, 51% identified as female and 44% identified as male.
- The majority of respondents (83%) identified as white or Caucasian.
- The most frequently requested roadway improvements:
 - Additional bike lanes.
 - Improved intersections.
 - School zone safety improvements.
 - Improved lighting.

- Improved crosswalks.

4.4. Community Advertising

The SAP and project website was advertised to the community in the following ways:

- Requests to local Facebook groups to post project information and feedback requests to group members.
- Requests to local governments to share project information in their email updates, newsletters or other communication methods.
- Requests to advocacy and student groups (SUU) to share information with their networks.
 - An email was distributed to all SUU Students and Faculty by an SUU Administrator.
- A newspaper advertisement run in the *Iron County Today* in December 2024 requesting participation and involvement in the SAP, survey, and project website.
- Three in-person pop-up community events in communities to share project information and request participation in the SAP (these events are summarized in Section 4.5).
- Flyers and table tents posted at locations around Iron County, including:
 - Iron County Bus Garage
 - Southern Utah University Student Center
 - Cedar City Festival Hall
 - Enoch City Senior Center
 - Enoch Library
 - Newcastle Fire Station
 - Cedar Band of Paiutes Health Clinic
 - Cedar Band of Paiutes Administration Offices
 - Parowan City Council Chambers



Figure 8. Project Information Flyer

- Flyers and table tents were delivered to public buildings and services in each GFA, including:
 - Iron County Sheriff's Office
 - Cedar City Police
 - Enoch City Police
 - Newcastle Fire Station
 - Parowan Police
 - City or Town offices for Cedar City, Kanarrville Town, Enoch City, Parowan City, Brian Head Town and Paragonah Town

Copies of the advertisement materials are included in Appendix F.

4.5. Community Pop-Up Events

Members of the project team hosted several community “pop-up” events at locations around Iron County between December 2024 and January 2025. The purpose of these outreach events was to share project information and encourage feedback from individuals who may not participate online or at other meetings.

4.5.1. D & D Variety Stakeholder Outreach - December 20, 2024

The D & D Variety store is located in Cedar City on Highway 56. The owners of the store are supportive of the safety action plan. In addition to the project representatives, the owners encouraged patrons to fill out surveys and get involved in the SAP by providing feedback for the project.



Figure 9. D & D Variety Store Community Pop-Up

4.5.2. Parowan Birthday Party Luncheon – January 13, 2025



Figure 10. Parowan Birthday Party Luncheon Community Pop-Up

This event is held every year in Parowan City. Project representatives set up a table to share project information, answer questions, share a brief overview of the SAP efforts to the assembled group, and distribute SAP fliers to participants. Some participants took posters to place throughout the City including the Post Office.

4.5.3. SUU Men's Basketball Game – January 23, 2025

The game took place in the America First Arena on the SUU campus. Project representatives set up a table outside the arena before the game started. As fans entered the facility, project representatives distributed surveys and project fliers. Many fans agreed to fill out paper surveys, others scanned the QR code on the project poster and increased the traffic to the project website.



Figure 11. SUU Basketball Game Community Pop-up

5. APPENDICES

- A. Safety Launch Meeting Materials
- B. GFA Workshops #1 Materials
- C. GFA Workshops #2 Materials
- D. Interactive Map Data
- E. Online Survey Data
- F. Advertising Materials

Appendix A

Safety Launch Meeting Materials

SAFETY ACTION PLAN FOR ALL IRON COUNTY REGIONAL SAFETY LAUNCH MEETING

November 14th, 2024



WELCOME!



Meeting & Project Purpose

Prepare a transportation Safety Action Plan for all Iron County



FOR ALL IRON COUNTY

- Iron County
- Cedar City
- Enoch City
- Parowan City
- Paiute Indian Tribe of Utah
- Brian Head Town
- Paragonah Town
- Kanarraville Town
- Utah Department of Transportation

Meeting Agenda



Introductions



Safe Streets and Roads for All (SS4A) Program



Safe System Approach



Safety Action Plan (SAP) Overview



Geographic Focus Areas



What Have We Learned So Far

What is a Safety Action Plan?



Goal

Reduce traffic fatalities and serious injury crashes throughout all Iron County

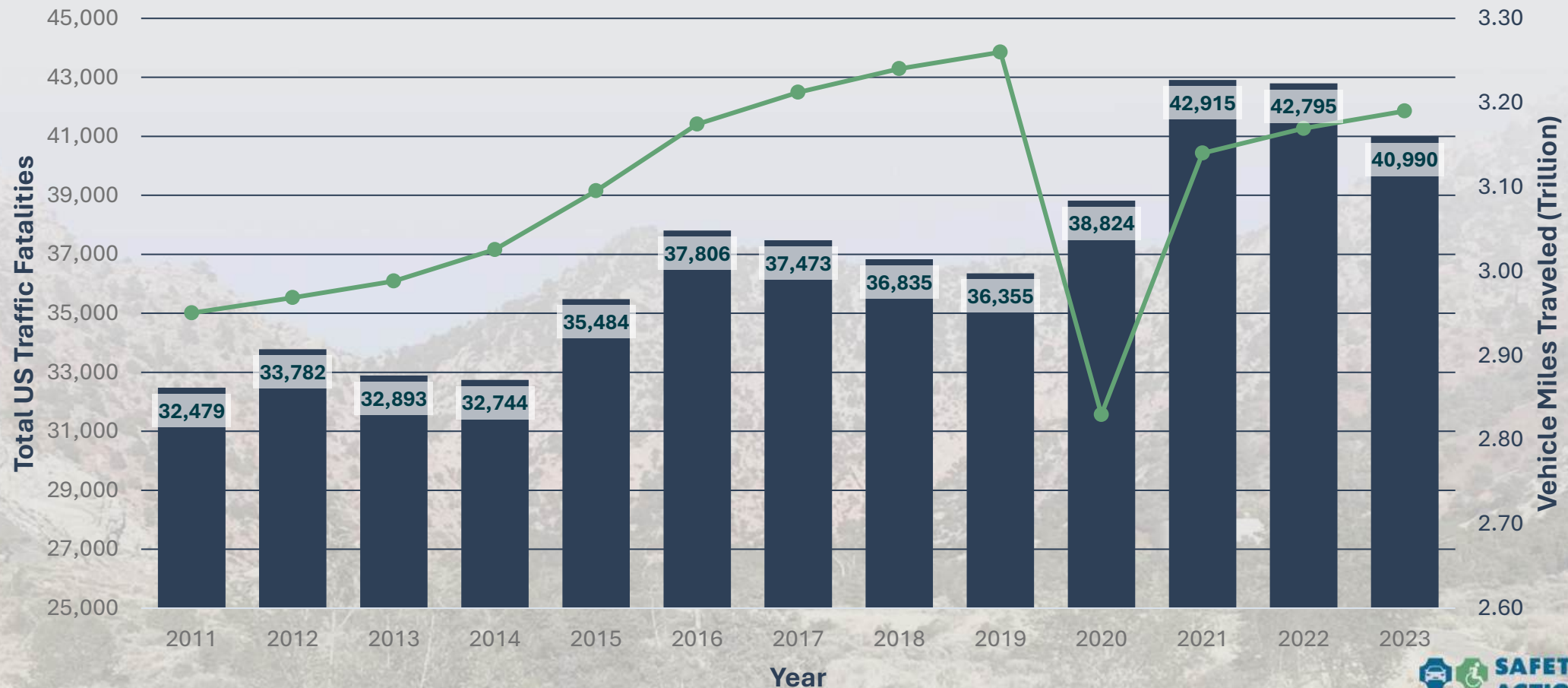


Elements of a Safety Action Plan

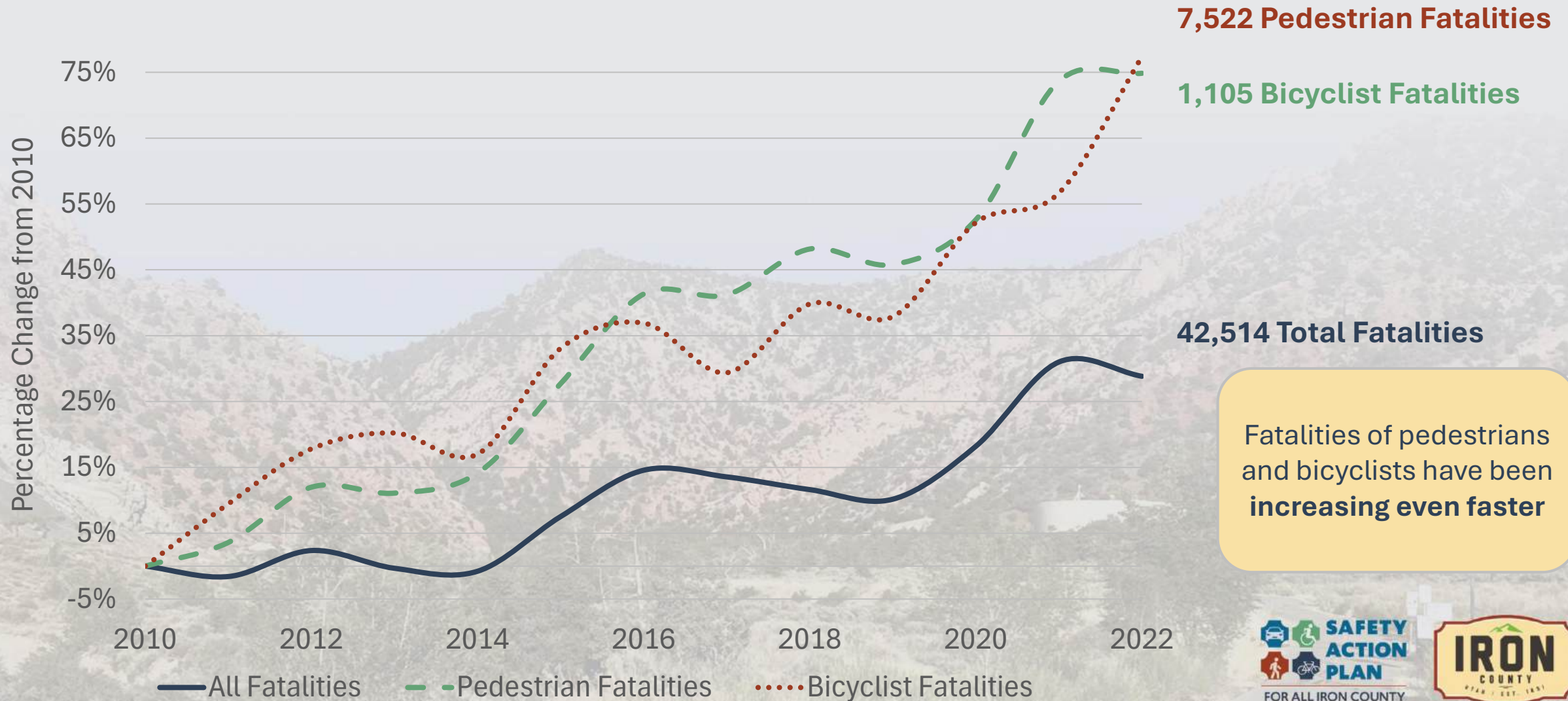
A Safety Action Plan analyzes safety needs, identifies high-injury and high-risk locations and factors contributing to crashes, and prioritizes strategies and improvements to address them.

Why are Safety Action Plans Needed?

Total US Traffic Fatalities and VMT (2011-2023)



We Have a National Roadway Safety Problem

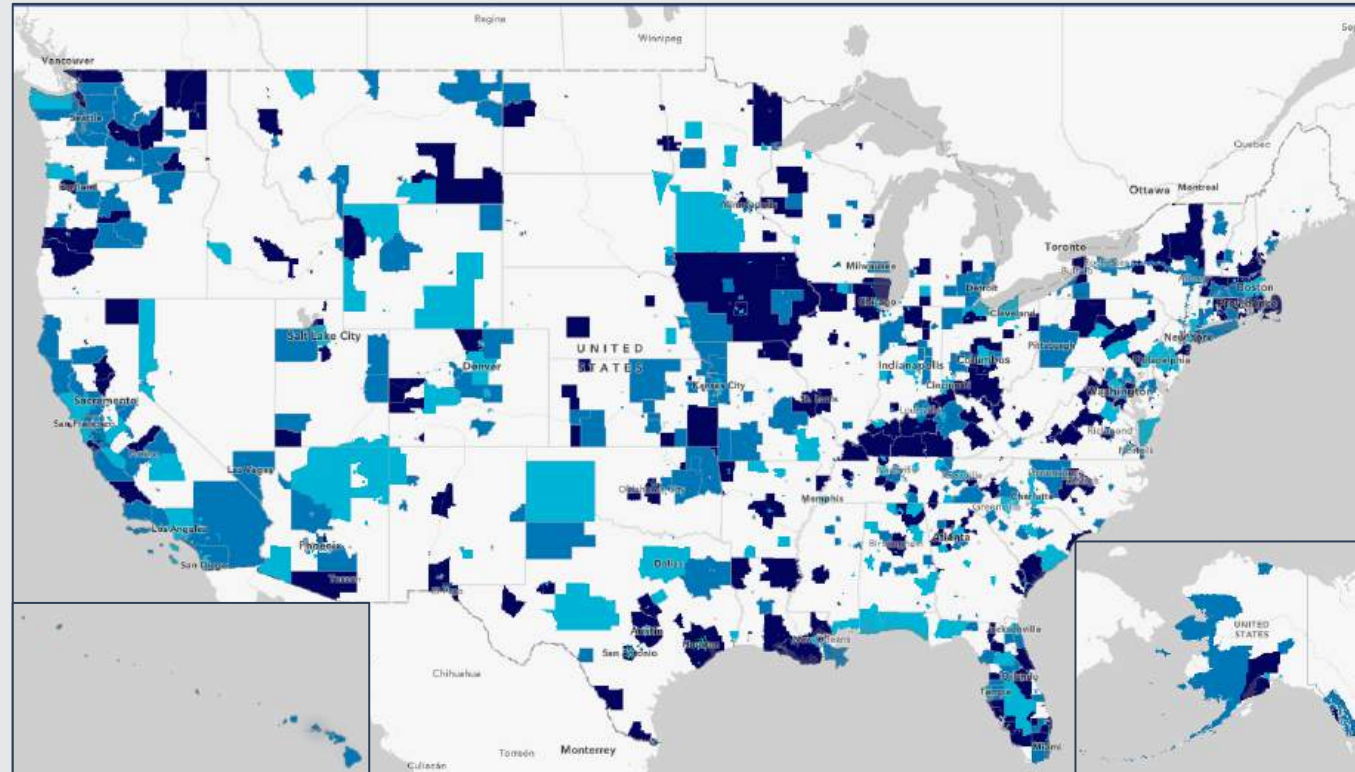


Safe Streets and Roads for All (SS4A) Grant Program



Safe Streets and Roads for All (SS4A)

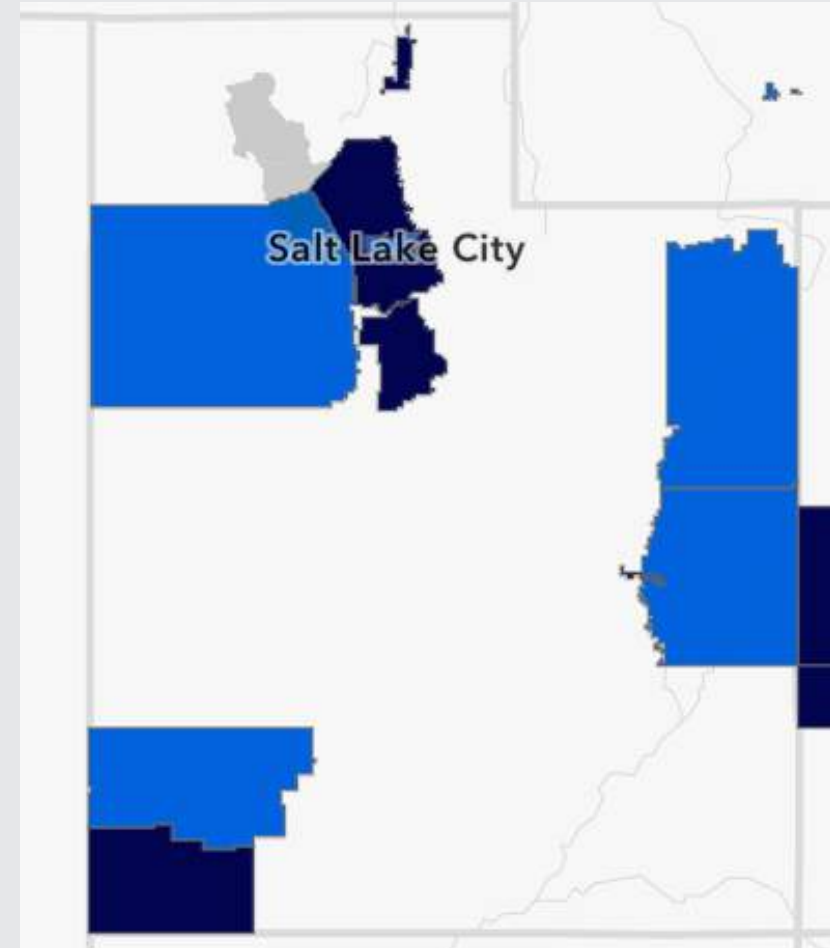
- Bipartisan Infrastructure Law (BIL) established SS4A grant program
 - \$5 billion over 5 years (FY22-26)
 - Two grant types:
 - Planning & demonstration
 - Implementation



Source: USDOT

Safe Streets and Roads for All (SS4A)

- Cache Metropolitan Planning Organization
- Cedar City
- City of Green River
- City of Moab
- City of Orem
- Five County Association of Governments
- **Iron County**
- Mountainland Association of Governments
- Richmond City
- Salt Lake City
- Tooele County
- Uintah County
- Wasatch Front Regional Council



Source: USDOT



SS4A Self-Certification Eligibility Checklist

A Safety Action Plan must include the following:

- ☑ Safety Analysis
 - ☑ Existing conditions and historical trends
 - ☑ Crashes by location, severity, and contributing factor
 - ☑ Systemic and specific safety needs
 - ☑ Geospatial identification of higher risk locations
- ☑ Identification of comprehensive set of projects and strategies

SS4A Self-Certification Eligibility Checklist

..And must complete 4 of the 6 elements:

1. Leadership Commitment
 - ☒ Governing body publicly commit to a zero fatalities and serious injury goal
2. Plan Development
 - ☒ Committee charged with plan development, implementation, and monitoring
3. Development Activities
 - ☒ Engagement with public and relevant stakeholders
4. Equity
 - ☒ Data-driven, inclusive, and representative processes
5. Policies, Plans, Guidelines, and/or Standards
 - ☒ Assessment policies, plans, guidelines, and/or standards
6. Progress
 - ☒ Description on how progress will be measured over time

Safe System Approach



Safe System Approach

Safe Road Users



Safe Vehicles



Safe Speeds



Safe Roads



Post-Crash Care



Safe System Approach Elements



**Death and Serious Injuries
are Unacceptable**



Responsibility is Shared



People Make Mistakes



Humans are Vulnerable



Safety is Proactive

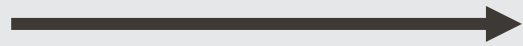


Redundancy is Crucial

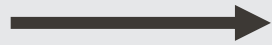
Where are we on the safe system journey?

Traditional approach

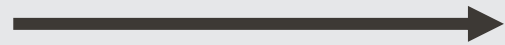
Prevent crashes



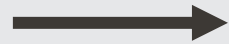
Improve human behavior



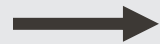
Control speeding



Individuals are responsible



React based on crash history



Safe system approach

Prevent death and serious injuries

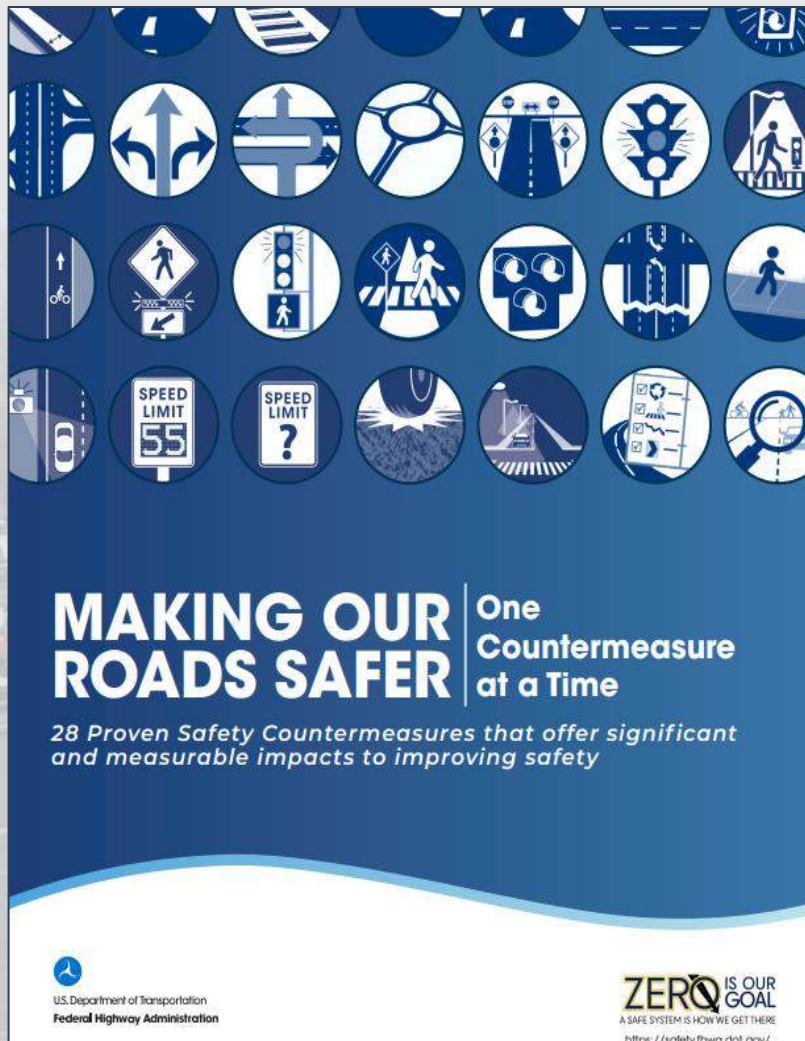
Design for human mistakes and limitations

Reduce system kinetic energy

Share responsibility

Proactively identify and address risks

Double Down on What Works



“Transportation agencies are strongly encouraged to consider widespread implementation of proven safety countermeasures to accelerate the achievement of local, state, and national safety goals.”

– US Department of Transportation



Rural Focus



Rural agencies and communities should consider addressing at least one of four focus areas:

- Roadway Departure
- Pedestrian/Bicyclist
- Intersections
- Speed Management



FHWA Proven Safety Countermeasures



Crosswalk Visibility Enhancements



Rumble Strips and Striping



Roundabouts

<https://highways.dot.gov/safety/proven-safety-countermeasures>

Implementing the Safety System Approach is our shared responsibility, and *we all have a role.*



www.pedbikeimages.org/DanBurden



www.pedbikeimages.org/DanBurden



www.pedbikeimages.org/MikeCynecki



Deseret News/Brice Tucker

Safety Action Plan for All Iron County

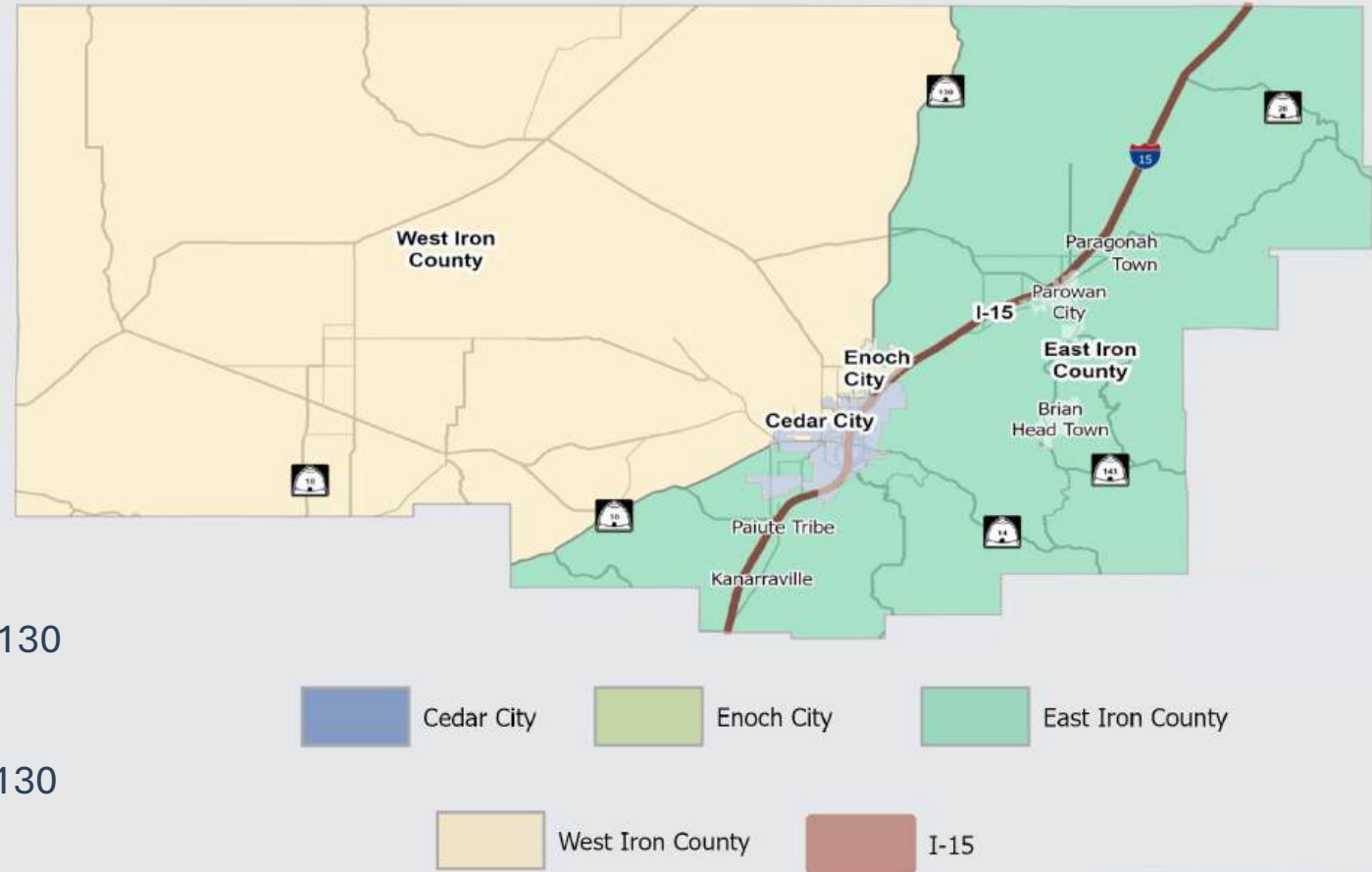


Safety Action Plan Overview

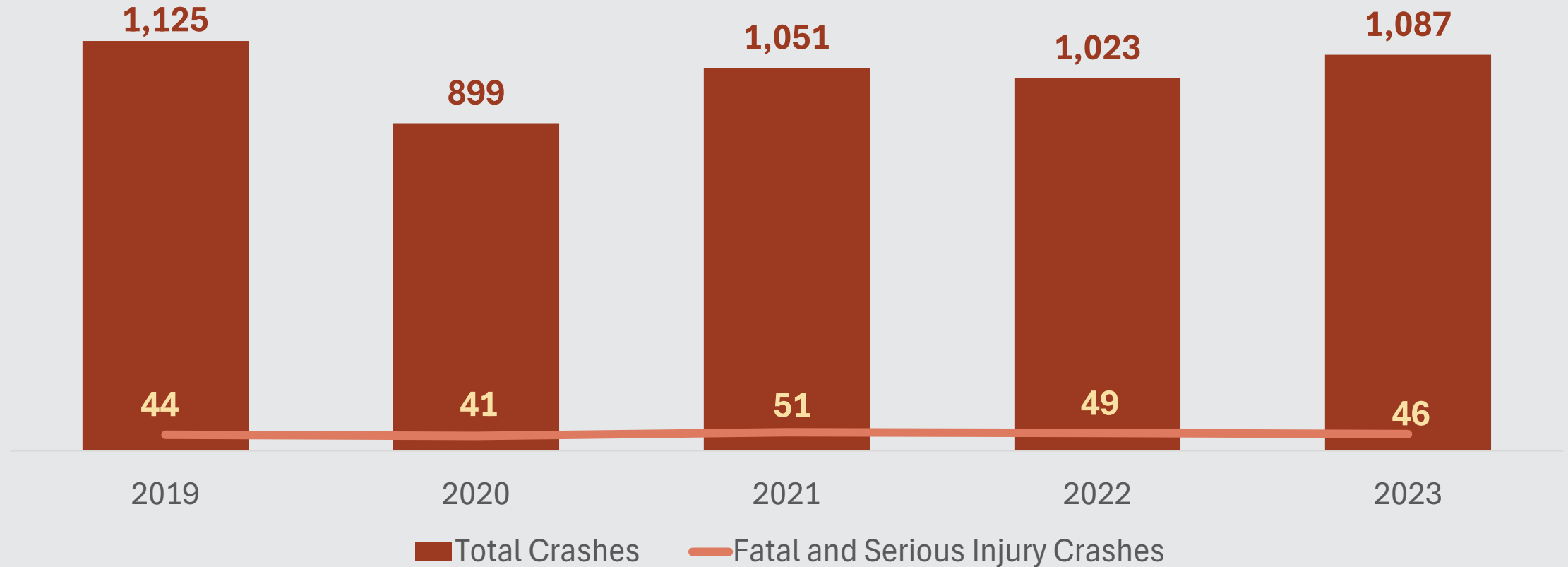


Geographic Focus Areas

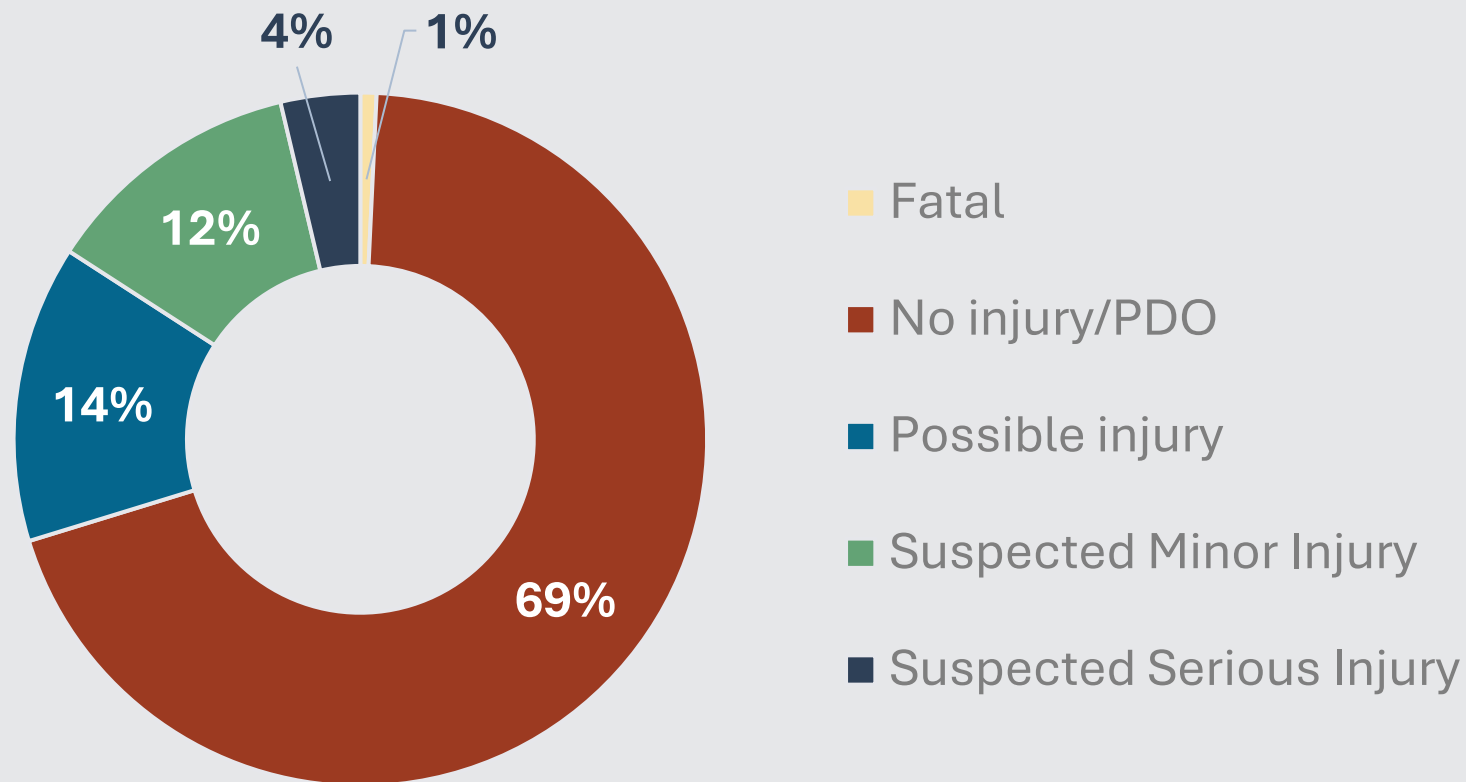
1. Cedar City
2. Enoch City
3. East Iron County
 - I. Kanarraville Town
 - II. Paragonah Town
 - III. Parowan City
 - IV. Brian Head Town
 - V. Paiute Indian Tribe of Utah
 - VI. Unincorporated Iron County, east of SR 130
4. West Iron County
 - I. Unincorporated Iron County, west of SR 130
5. Interstate 15 (I-15)



Iron County Crash History Overview



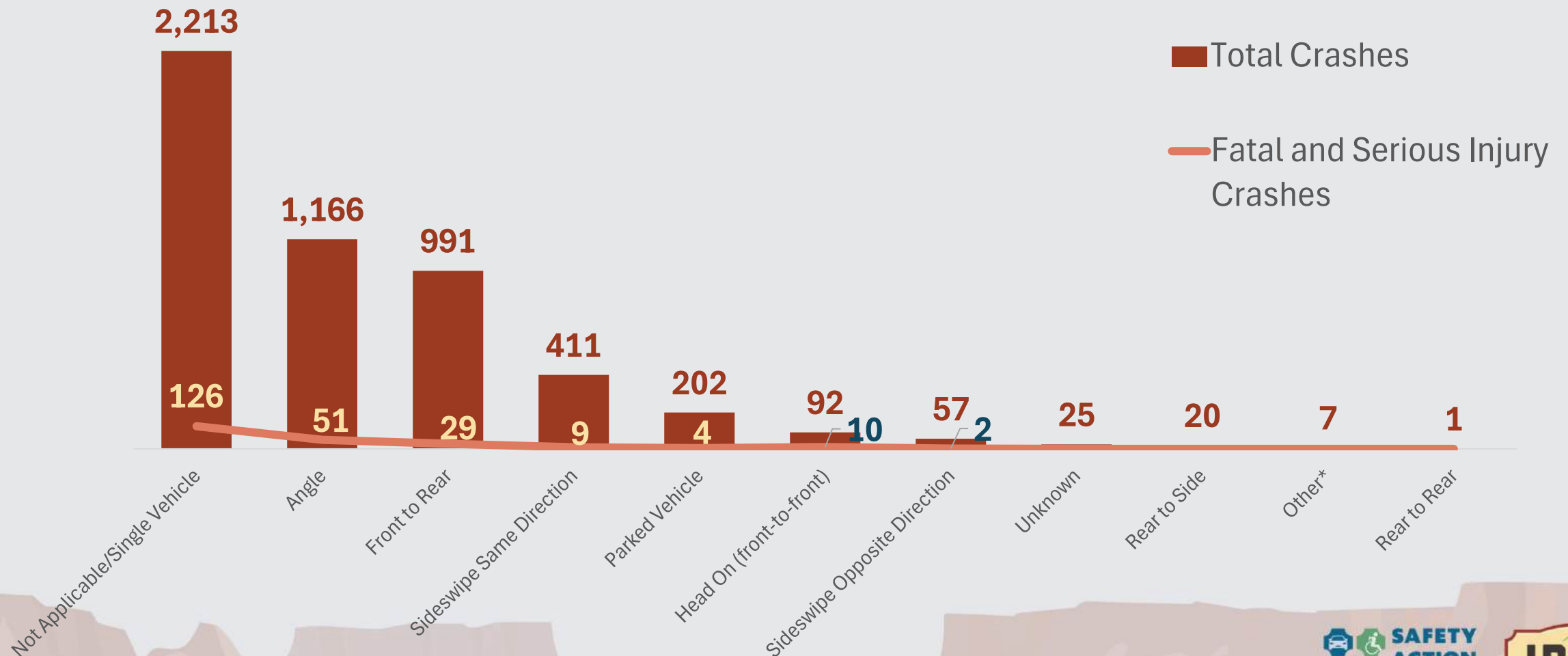
Iron County Crash History Overview



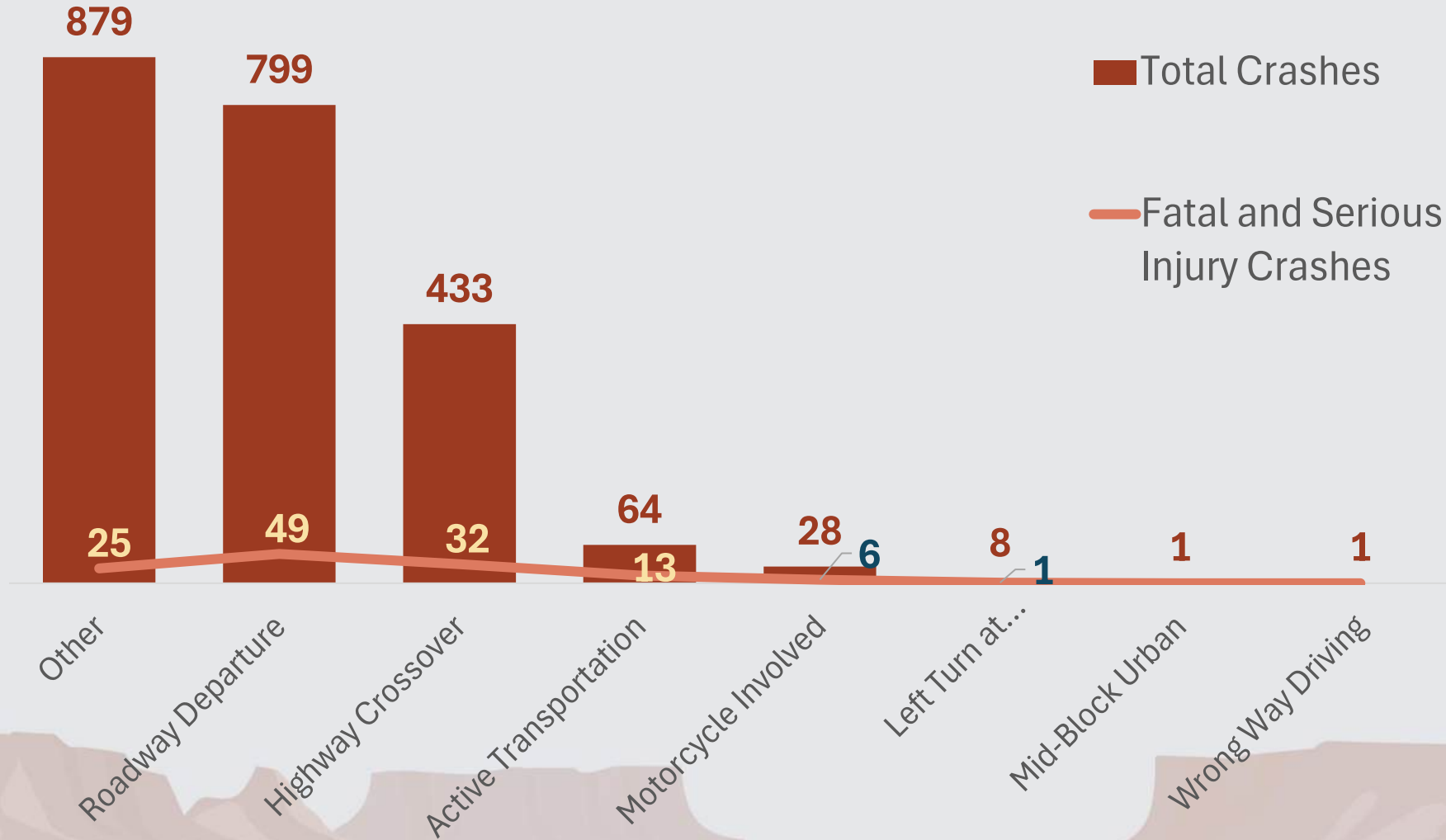
15% of crashes on I-15 resulted in an injury or fatality

1 of every 5 VRU involved crashes resulted in a serious injury or fatality

Manner of Collision



Single Vehicle Crash Types



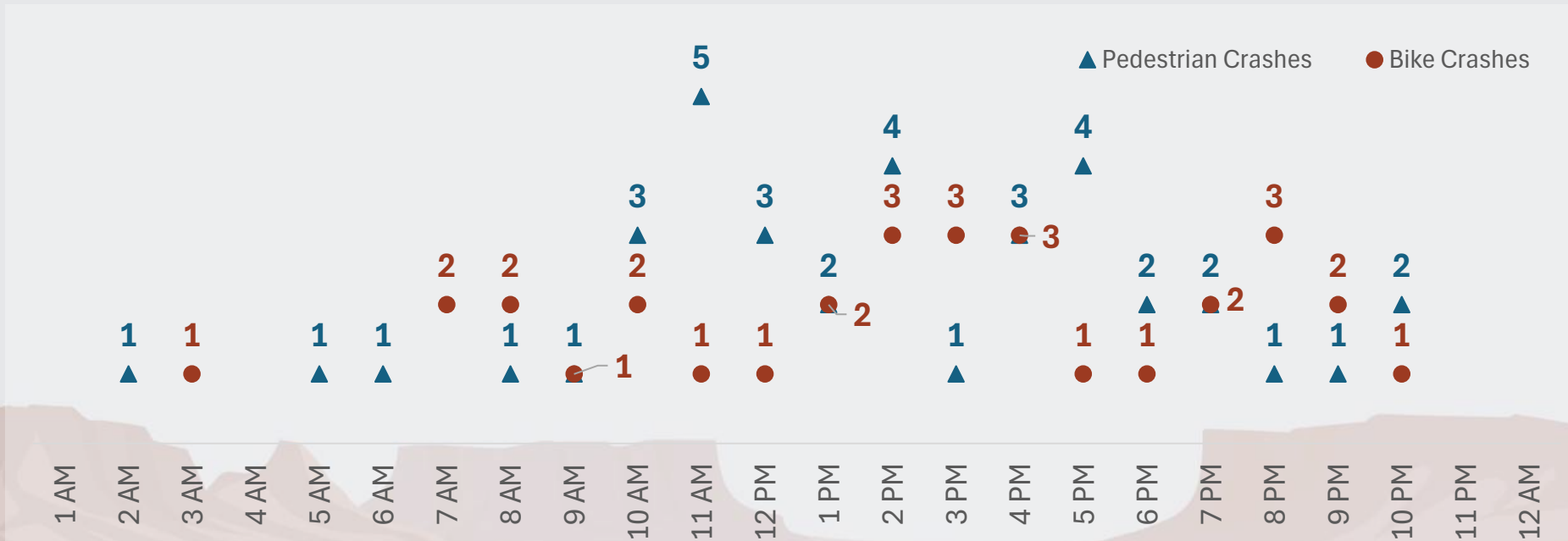
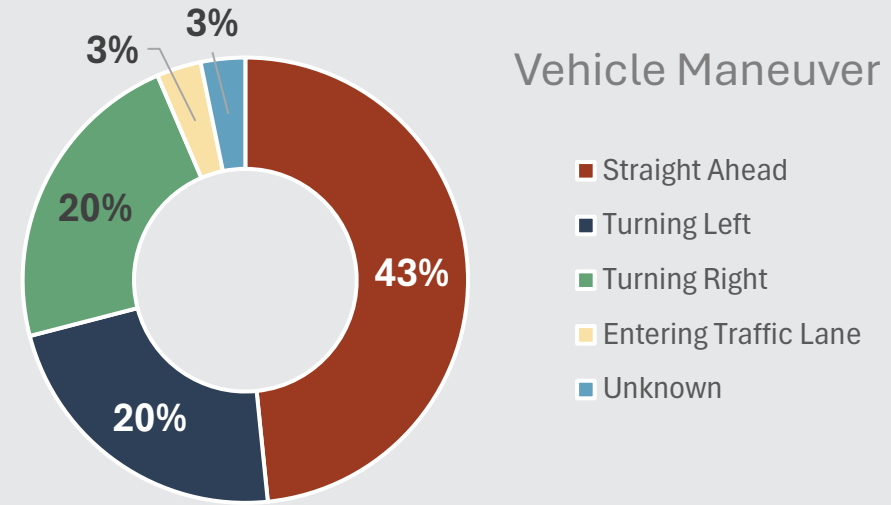
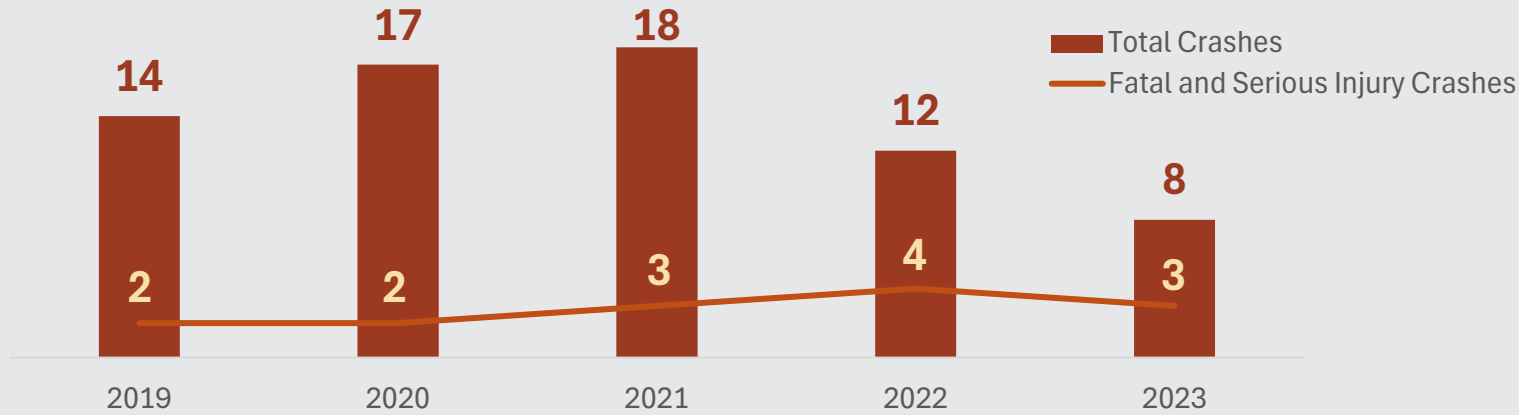
■ Total Crashes

— Fatal and Serious Injury Crashes

20% of VRU involved crashes resulted in a serious injury or fatality

“Other” may indicate data disparities

Active Transportation Crashes



78% of VRU crashes occurred in daylight conditions

Utah Strategic Highway Safety Plan (SHSP)

Emphasis Areas



DRIVER BEHAVIOR

- ⇒ Teen Driver
- ⇒ Older Driver
- ⇒ Speed-Related
- ⇒ Aggressive Driving
- ⇒ Distracted Driving
- ⇒ Impaired Driving
- ⇒ No Safety Restraints



ROADWAYS

- ⇒ Intersection
 - > Angle
 - > Left Turns
- ⇒ Roadway Departure
 - > Run Off Road / Overturned



VULNERABLE ROAD USERS

- ⇒ Motorcycle
- ⇒ Pedestrian
- ⇒ Bicyclist*

*note that while bicyclist-involved crashes are not one of the 11 Utah SHSP emphasis areas, bicyclist-involved fatal and serious injuries are included in this analysis.

SHSP Emphasis Areas Comparison

Category	Utah SHSP Safety Emphasis Area	Statewide		Iron County	
		Fatalities & Serious Injuries	Rank	Fatalities & Serious Injuries	Rank
Driver	Teen Driver	1,695 (18%)	4	54 (19%)	5
	Older Driver	1,565 (21%)	7	49 (17%)	6
	Speed-Related	2,268 (32%)	3	78 (27%)	3
	Aggressive Driving	615 (8%)	11	19 (7%)	10
	Distracted Driving	732 (6%)	10	28 (10%)	8
	Impaired Driving	1,100 (49%)	8	27 (9%)	9
	No Safety Restraints	1,627 (30%)	5	85 (30%)	2
Roadway	Intersection	3,683 (27%)	1	67 (23%)	4
	Roadway Departure	3,372 (47%)	2	132 (46%)	1
Special Users	Motorcycle	1,571 (15%)	6	40 (14%)	7
	Pedestrian	1,000 (15%)	9	15 (5%)	11
	Bicycle*	303 (3%)	12	3 (1%)	12

*note that while bicyclist-involved crashes are not one of the 11 Utah SHSP emphasis areas, bicyclist-involved fatal and serious injuries are included in this analysis.

Upcoming Workshops

- GFA Workshops (December 3rd and 4th)
 - City staff and officials (police/fire, engineering, planning, emergency services, etc.)
 - City/Town Councils
 - Planning Commissions
 - Community organizations
 - Employers/business owners
- Purpose:
 - Review high crash locations for specific GFA
 - Review high risk locations for specific GFA
 - Confirm findings in your community
 - Provide input on potential strategies

Project Website

IronCountySafetyPlan.com

- Interactive map for feedback and comments
- Project survey
- Access documents

Next Steps

- Complete safety analysis
- Participate in a GFA Workshop
- Provide feedback via the project website
- Begin dialogue with elected officials
 - Prepare to support a Regional Safety Commitment Resolution
 - Prepare for local match requirements

**For additional information or questions, please
contact:**

**Rich Wilson
rwilson@ironcounty.net
435.477.2373**

**Eric Sweat
eric.sweat@kimley-horn.com
385.831.2008**



Safety Launch Attendee List
November 14, 2024

Name (original name)	Email	Join time	Leave time
Amalia Andrews	amalia.andrews@kimley-horn.com	11/14/2024 13:42	11/14/2024 15:03
Eric Sweat (Kimley-Horn)		11/14/2024 13:46	11/14/2024 13:47
Eric Sweat (Kimley-Horn)		11/14/2024 13:47	11/14/2024 15:03
Nancy.Cozzens		11/14/2024 13:49	11/14/2024 13:49
Natasha Nava		11/14/2024 13:49	11/14/2024 13:58
Nancy.Cozzens		11/14/2024 13:49	11/14/2024 14:56
Hayden		11/14/2024 13:50	11/14/2024 13:56
Trent Cuaresma		11/14/2024 13:52	11/14/2024 13:58
Clarisse Lunt		11/14/2024 13:53	11/14/2024 13:58
Rob - Enoch City		11/14/2024 13:56	11/14/2024 13:58
Leo's iPad		11/14/2024 13:56	11/14/2024 13:58
Nate Wiberg Five County AOG/DMPO		11/14/2024 13:56	11/14/2024 13:58
mshurtz.fire		11/14/2024 13:58	11/14/2024 13:59
Kent Fugal		11/14/2024 13:58	11/14/2024 13:58
Hayden		11/14/2024 13:58	11/14/2024 13:58
James Lunt (Clarisse Lunt)		11/14/2024 13:58	11/14/2024 15:02
Leo's iPad		11/14/2024 13:58	11/14/2024 15:03
Jaide (Kimley-Horn)		11/14/2024 13:58	11/14/2024 13:59
Nate Wiberg Five County AOG/DMPO		11/14/2024 13:58	11/14/2024 15:03
Rob - Enoch City		11/14/2024 13:58	11/14/2024 15:03
Kent Fugal		11/14/2024 13:58	11/14/2024 15:03
Hayden		11/14/2024 13:58	11/14/2024 14:55
Trent Cuaresma		11/14/2024 13:58	11/14/2024 15:03

Safety Launch Attendee List
November 14, 2024

Name (original name)	Email	Join time	Leave time
mshurtz.fire		11/14/2024 13:59	11/14/2024 14:55
rachelm		11/14/2024 13:59	11/14/2024 13:59
mark halterman		11/14/2024 13:59	11/14/2024 13:59
mark halterman		11/14/2024 13:59	11/14/2024 14:49
rachelm		11/14/2024 13:59	11/14/2024 15:03
Jaide (Kimley-Horn)		11/14/2024 13:59	11/14/2024 15:03
Natasha Nava		11/14/2024 13:59	11/14/2024 13:59
Jackson		11/14/2024 13:59	11/14/2024 13:59
Paul Bittmenn (Natasha Nava)		11/14/2024 13:59	11/14/2024 15:03
Jackson Ames (Jackson)		11/14/2024 13:59	11/14/2024 15:03
Jessica Kinross (Utah Division of Wildlife)		11/14/2024 14:00	11/14/2024 14:00
Reed Erickson		11/14/2024 14:00	11/14/2024 14:00
Jessica Kinross (Utah Division of Wildlife)		11/14/2024 14:00	11/14/2024 15:03
juliegroo		11/14/2024 14:00	11/14/2024 14:00
Reed Erickson		11/14/2024 14:00	11/14/2024 15:03
juliegroo		11/14/2024 14:00	11/14/2024 15:03
Chet Loveland		11/14/2024 14:00	11/14/2024 14:01
Jackie Grant		11/14/2024 14:00	11/14/2024 14:01
Jackie Grant		11/14/2024 14:01	11/14/2024 14:50
Chet Loveland		11/14/2024 14:01	11/14/2024 15:03
Brent Crowther (Kimley-Horn)		11/14/2024 14:01	11/14/2024 14:01
David		11/14/2024 14:01	11/14/2024 14:01
Brent Crowther (Kimley-Horn)		11/14/2024 14:01	11/14/2024 15:03

Safety Launch Attendee List
November 14, 2024

Name (original name)	Email	Join time	Leave time
David		11/14/2024 14:01	11/14/2024 15:02
Cody Christensen		11/14/2024 14:01	11/14/2024 14:01
Ryan Gurr		11/14/2024 14:01	11/14/2024 14:01
Ryan Gurr		11/14/2024 14:01	11/14/2024 14:22
Cody Christensen		11/14/2024 14:01	11/14/2024 14:55
Maria Twitchell		11/14/2024 14:02	11/14/2024 14:02
Maria Twitchell		11/14/2024 14:02	11/14/2024 14:46
Ben Cozzens		11/14/2024 14:03	11/14/2024 14:03
Ben Cozzens		11/14/2024 14:03	11/14/2024 15:02
Merilee Wilson		11/14/2024 14:03	11/14/2024 14:04
Nate Houchen		11/14/2024 14:04	11/14/2024 14:04
Merilee Wilson		11/14/2024 14:04	11/14/2024 15:03
Nate Houchen		11/14/2024 14:04	11/14/2024 14:13
Dante Vega-Lopez		11/14/2024 14:05	11/14/2024 14:05
Dante (SUU Student Association) (Dante Vega-Lopez)		11/14/2024 14:05	11/14/2024 14:31
Richard		11/14/2024 14:05	11/14/2024 14:05
Richard		11/14/2024 14:05	11/14/2024 15:03
Savannah's Phone		11/14/2024 14:06	11/14/2024 14:06
Savannah's Phone		11/14/2024 14:06	11/14/2024 14:29
Kevin Garrett		11/14/2024 14:07	11/14/2024 14:07
Kevin Garrett		11/14/2024 14:07	11/14/2024 15:03
Bret Howser		11/14/2024 14:09	11/14/2024 14:09
Bret Howser		11/14/2024 14:09	11/14/2024 14:55

Safety Launch Attendee List
November 14, 2024

Name (original name)	Email	Join time	Leave time
Nate Houchen		11/14/2024 14:11	11/14/2024 14:12
Nate Houchen		11/14/2024 14:12	11/14/2024 15:03
Lisa Beck		11/14/2024 14:18	11/14/2024 14:18
Lisa Beck		11/14/2024 14:18	11/14/2024 15:03
Jared		11/14/2024 14:29	11/14/2024 14:31
Jared		11/14/2024 14:31	11/14/2024 14:55
Paul Cozzens		11/14/2024 14:37	11/14/2024 14:37
Paul Cozzens		11/14/2024 14:37	11/14/2024 15:03

Appendix B.

GFA Workshops #1 Materials

SAFETY ACTION PLAN FOR ALL IRON COUNTY

WORKSHOP #1 SAFETY ANALYSIS

December 2024



Meeting Agenda



Introductions



Safe Streets and Roads for All (SS4A) Program



Safety Action Plan (SAP) Overview



Workshop Activity



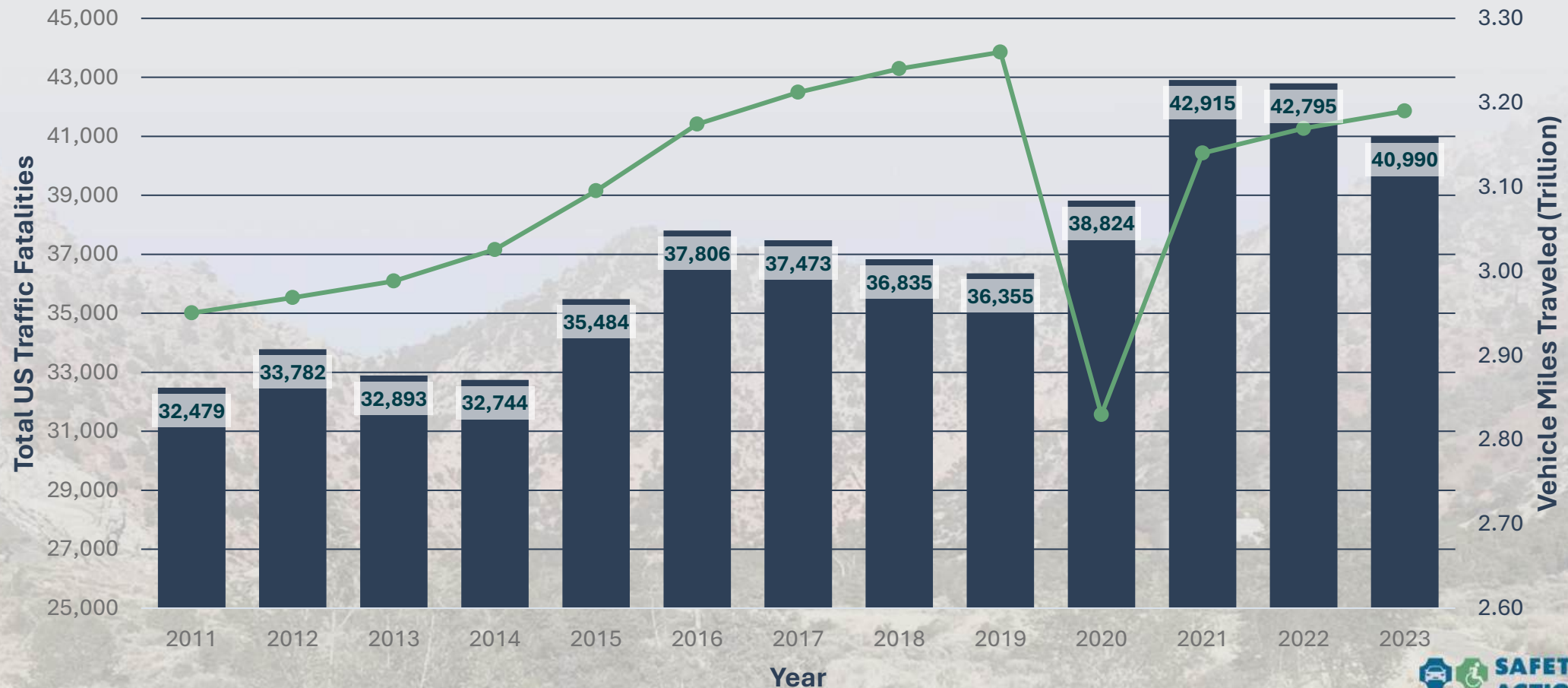
Report Back

Safe Streets and Roads for All (SS4A) Grant Program

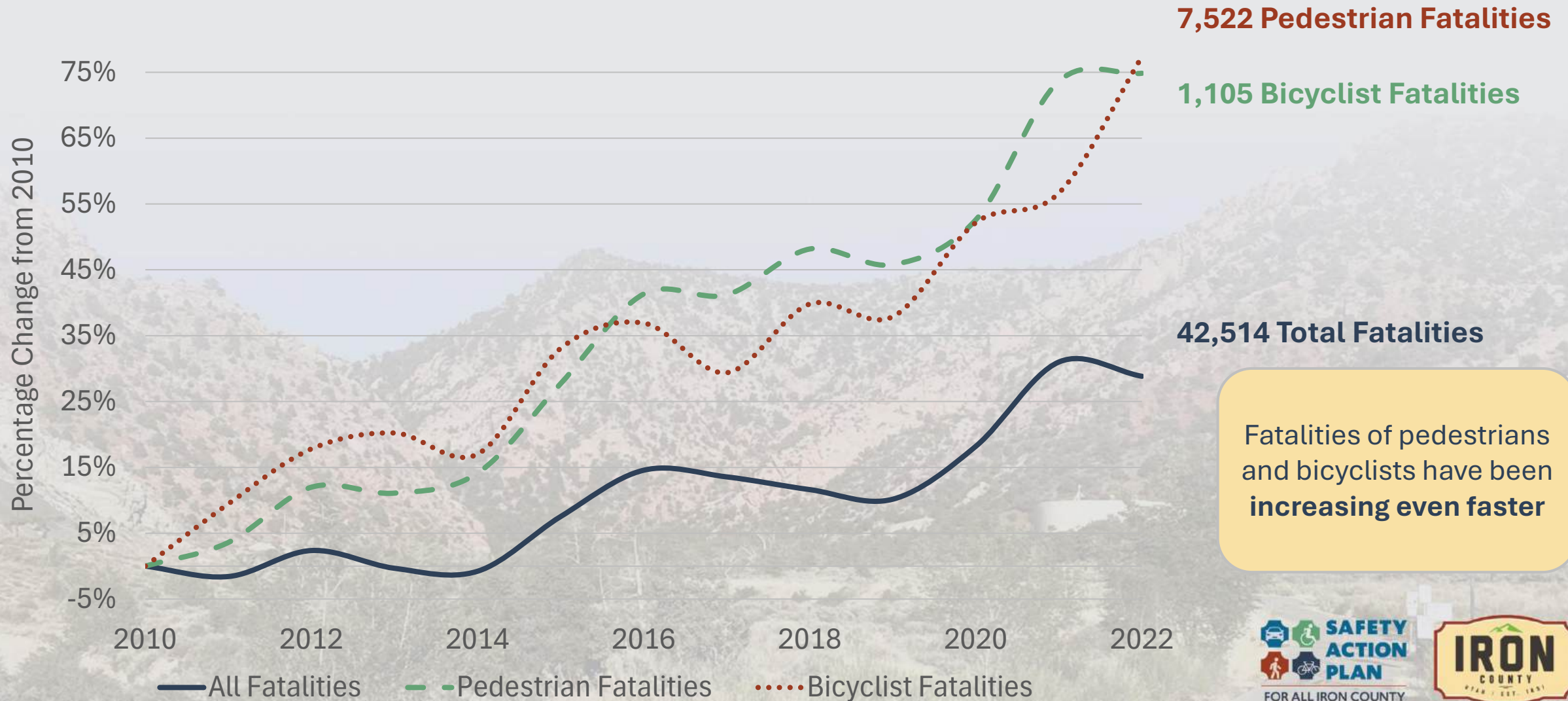


Why are Safety Action Plans Needed?

Total US Traffic Fatalities and VMT (2011-2023)



We Have a National Roadway Safety Problem



What is a Safety Action Plan?



Goal

Reduce traffic fatalities and serious injury crashes throughout all Iron County

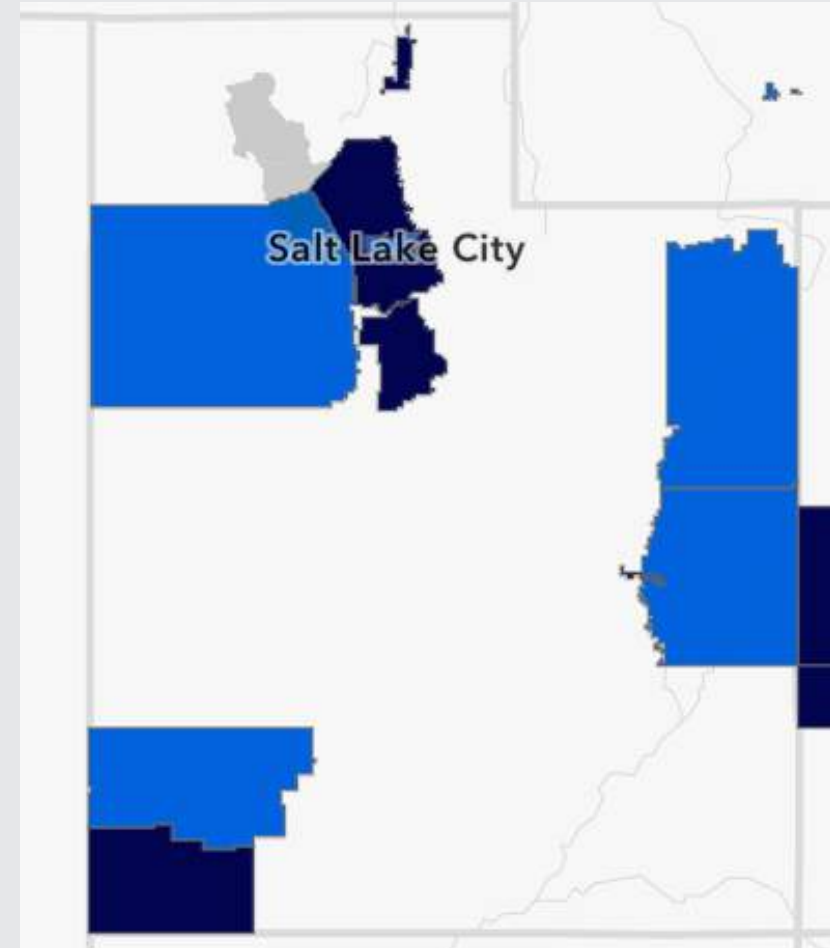


Elements of a Safety Action Plan

A Safety Action Plan analyzes safety needs, identifies high-injury and high-risk locations and factors contributing to crashes, and prioritizes strategies and improvements to address them.

Safe Streets and Roads for All (SS4A)

- Bipartisan Infrastructure Law (BIL) established SS4A grant program
 - \$5 billion over 5 years (FY22-26)
 - Two grant types:
 - Planning & demonstration
 - Implementation



Source: USDOT

SS4A Self-Certification Eligibility Checklist

A Safety Action Plan must include the following:

- ☑ Safety Analysis
 - ☑ Existing conditions and historical trends
 - ☑ Crashes by location, severity, and contributing factor
 - ☑ Systemic and specific safety needs
 - ☑ Geospatial identification of higher risk locations
- ☑ Identification of comprehensive set of projects and strategies

SS4A Self-Certification Eligibility Checklist

..And must complete 4 of the 6 elements:

1. Leadership Commitment
 - ☒ Governing body publicly commit to a zero fatalities and serious injury goal
2. Plan Development
 - ☒ Committee charged with plan development, implementation, and monitoring
3. Development Activities
 - ☒ Engagement with public and relevant stakeholders
4. Equity
 - ☒ Data-driven, inclusive, and representative processes
5. Policies, Plans, Guidelines, and/or Standards
 - ☒ Assessment policies, plans, guidelines, and/or standards
6. Progress
 - ☒ Description on how progress will be measured over time

Safety Action Plan (SAP) Overview

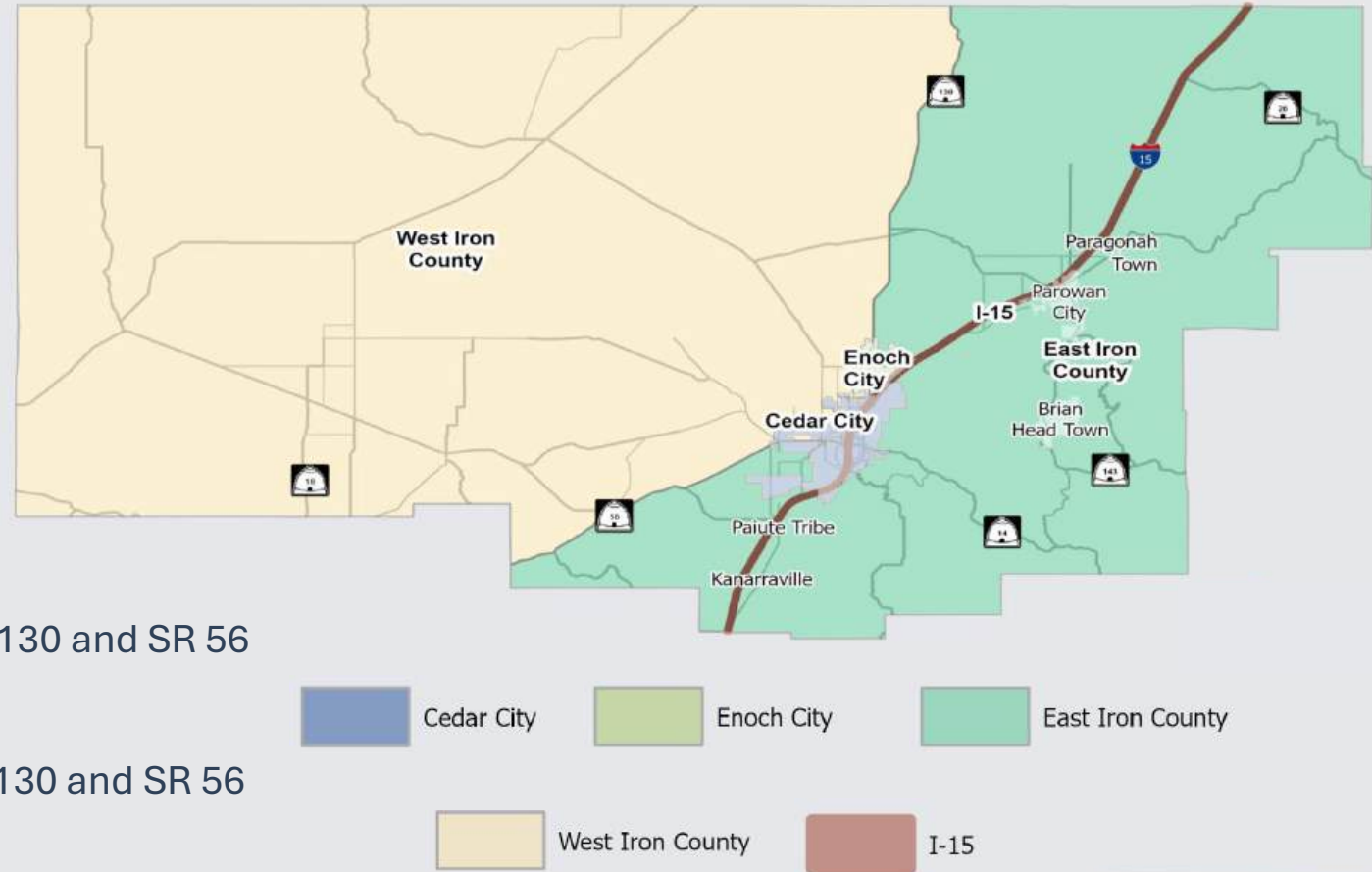


Safety Action Plan Overview



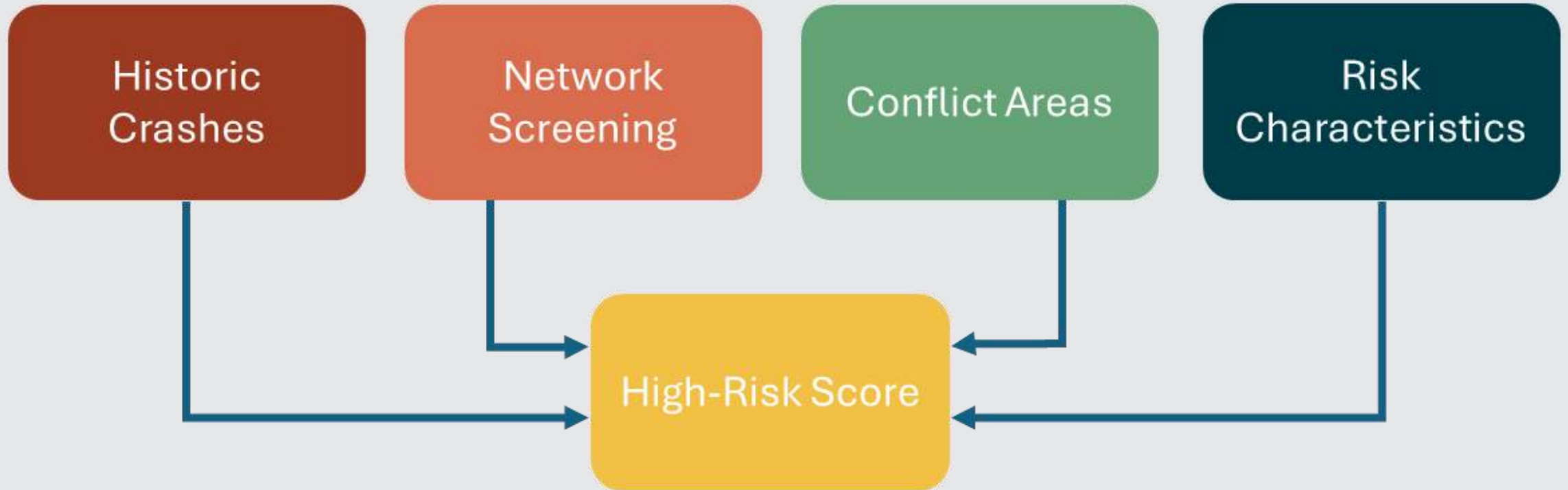
Geographic Focus Areas (GFA)

1. Cedar City
2. Enoch City
3. East Iron County
 - I. Kanarraville Town
 - II. Paragonah Town
 - III. Parowan City
 - IV. Brian Head Town
 - V. Paiute Indian Tribe of Utah
 - VI. Unincorporated Iron County, east of SR 130 and SR 56
4. West Iron County
 - I. Unincorporated Iron County, west of SR 130 and SR 56
5. Interstate 15 (I-15)



Geographic Focus Area (GFA) Workshop #1 Safety Analysis

Safety Analysis



REPLICA

Identifies higher risk roadways by analyzing driver behavior, road usage, and community demographics.

Data source: Michelin Mobility Intelligence (MMI) (i.e., cellular and GPS data).

Represents: Identifies and prioritizes high-risk corridors based on different driving metrics.

Example Data: Phone handling, sudden braking, suspected collisions, and speeding events.



Assigns road segments a 1–5-star rating based on the roadway’s safety features and characteristics to identify hazardous road sections.

Data source: Video footage analyzed in 100-meter segments.

Represents: Safety of road segments for drivers, bicyclists, and pedestrians based on roadway design, features, and characteristics.

Example Data: Traffic volume, speed, lighting, shoulder conditions, rumble strips, access density, roadway geometry, etc.

Historic Crashes

Based on...	Historic Crashes, 2019-2023
Analyzes...	Crashes per mile or segment of roadway
Results in...	1. High Crash Network 2. High Injury Network

Conflict Areas

Based on...	Replica Safe Streets Planner (cellular and GPS data)
Analyzes...	Roadways by high-risk areas
Results in...	Replica Conflict Network

Network Screening

Based on...	Historic Crashes, 2019-2023
Analyzes...	Roadways and intersections by expected vs. actual crash rates
Results in...	Critical Crash Rate Network

Risk Characteristics

Based on...	usRAP Roadway Data
Analyzes...	Roadways by design and physical characteristics
Results in...	1. usRAP Network (star rating) 2. Crash Profile Risk Network

Interactive Workshop

Review tabletop maps and safety analysis packet

- What is your highest safety concern in your jurisdiction?
- Do the identified segments and intersections make sense?
- Are there other safety needs (segments/intersections, etc.) that are not identified?
- As you consider potential safety projects, are there high priority locations?
- Is there a clear and immediate possible project?
 - Roadway segment
 - Intersection
 - Project elements
- What education/outreach tools do you have available?

Reporting Back



Group Discussion

- Do the identified segments and intersections make sense?
- Are there other safety needs (segments/intersections, etc.) that are not identified?
- Is there a clear and immediate possible project?
 - Roadway segment
 - Intersection
 - Project elements

Upcoming Workshops

- GFA Workshop #2
 - February 2025
 - Review project locations
 - Review safety countermeasures and strategies

Project Website

IronCountySafetyPlan.com

- Interactive map for feedback and comments
- Project survey
- Access documents

Next Steps

- Participate in the next GFA Workshop
- Provide feedback via the project website
- Begin (or continue) dialogue with elected officials
 - Prepare to support a Regional Safety Commitment Resolution
 - Prepare for local match requirements

**For additional information or questions, please
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**Eric Sweat
eric.sweat@kimley-horn.com
385.831.2008**



Cedar City GFA

- High-Risk Intersection
- High-Risk Roadway

0 0.25 0.5 1 Miles

N

① ② Safe valley routes

④ Geometry, Bus, Semi-Trucks, Connections

it takes
two stops

parallel
strip

3500
strip
? turn

Grain

③ 100 W Union Street Pedestrians
Safety Bulb outs

①

Cedar City GFA

- High-Risk Intersection
- High-Risk Roadway

0 0.25 0.5 1 Miles

N

③ All of Lund Hwy traffic significantly increased. 5 subdivisions going in, 1/2 more to come.

⑤ New housing and helicopter landing in 1+ yr.

⑥ Pulling out is tough + speeding

② Needs stoplight

① Main 1/2 Coal Crk not enough lighting for pedestrians on intersection

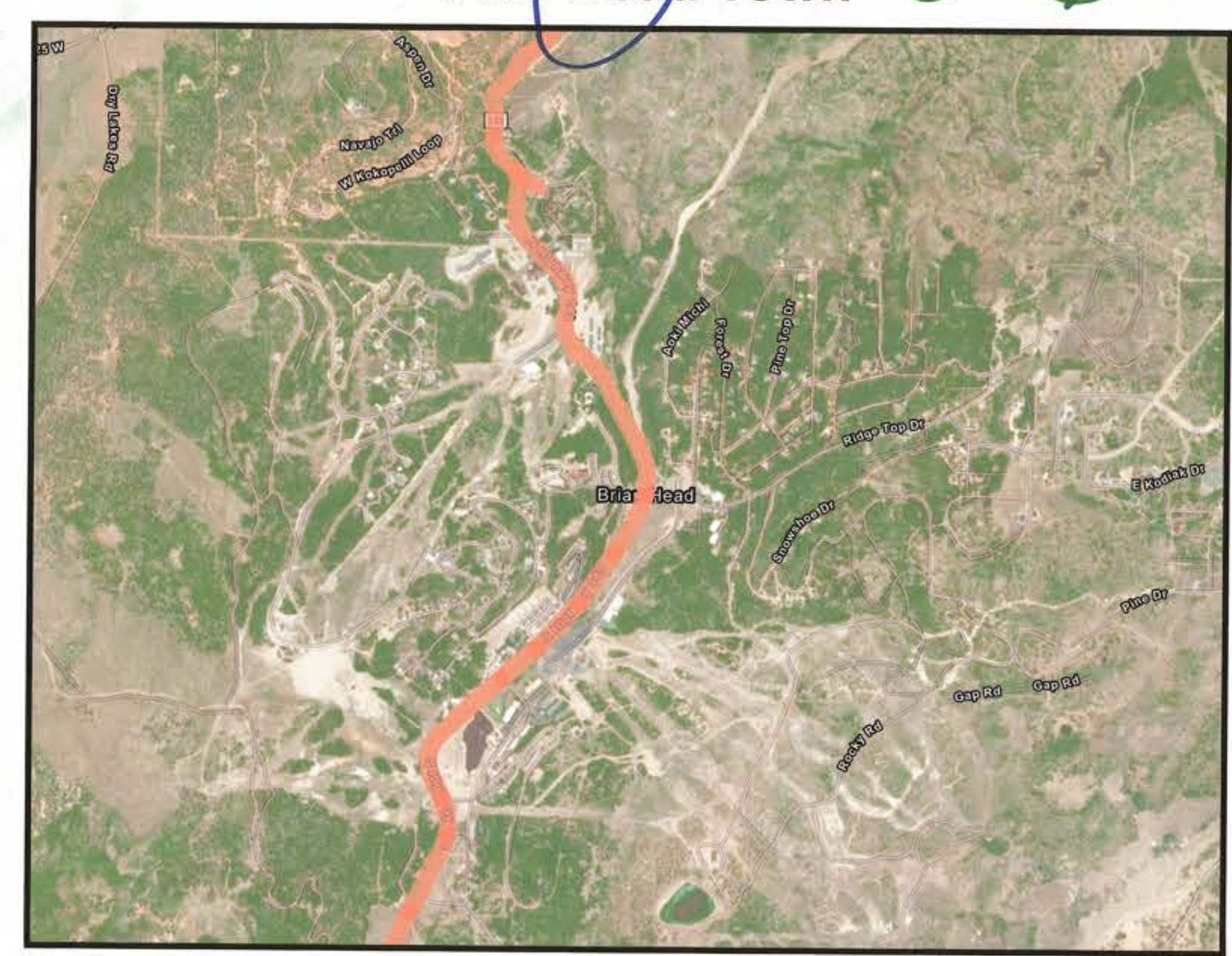
④ Deceleration Lane?

②

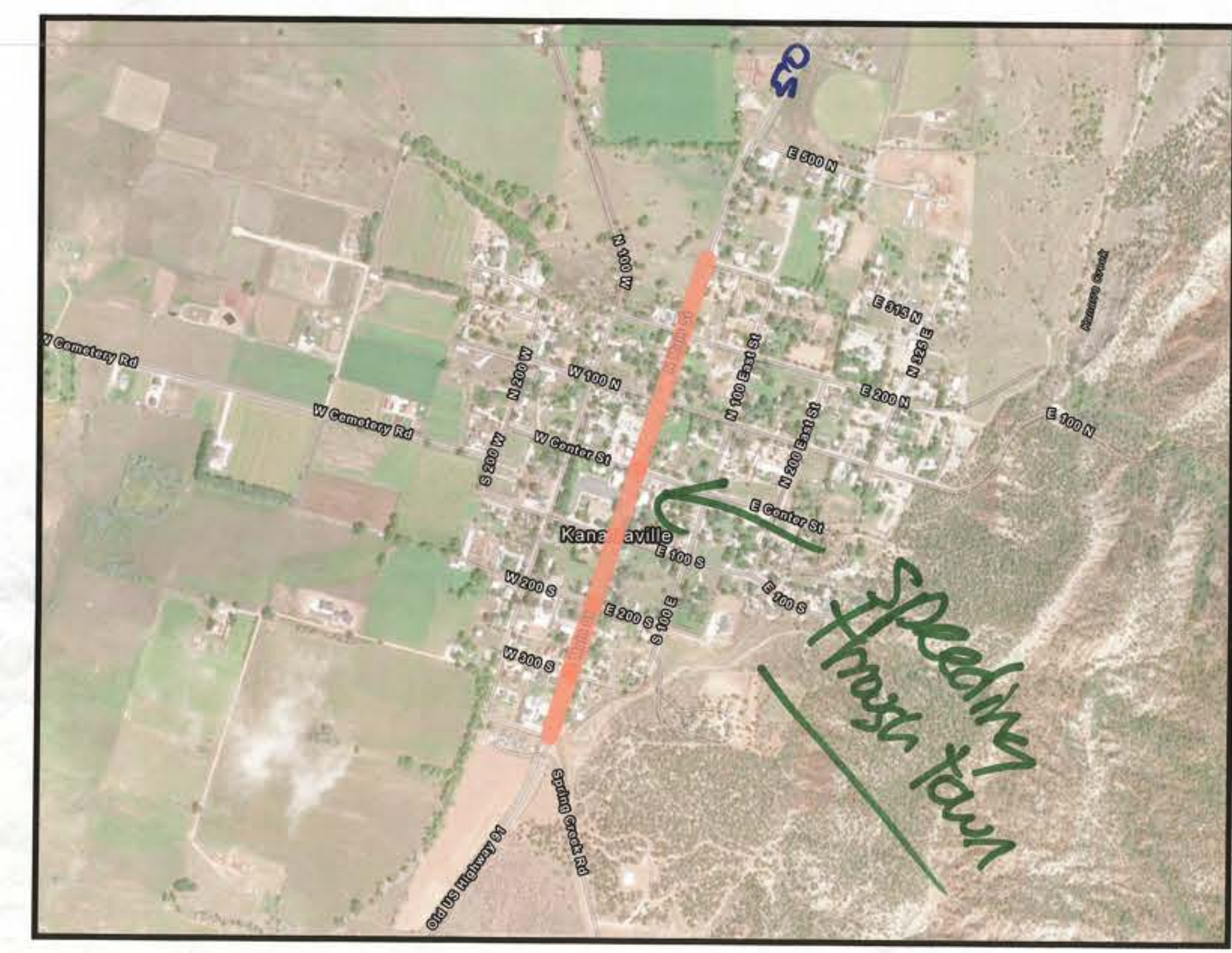
Enoch - Mud Valley Rd + 2300 W.

*DWR App - clear hit
 Parowan to I-15
 Utah Roadkill*

Brian Head Town



Kanarraville Town



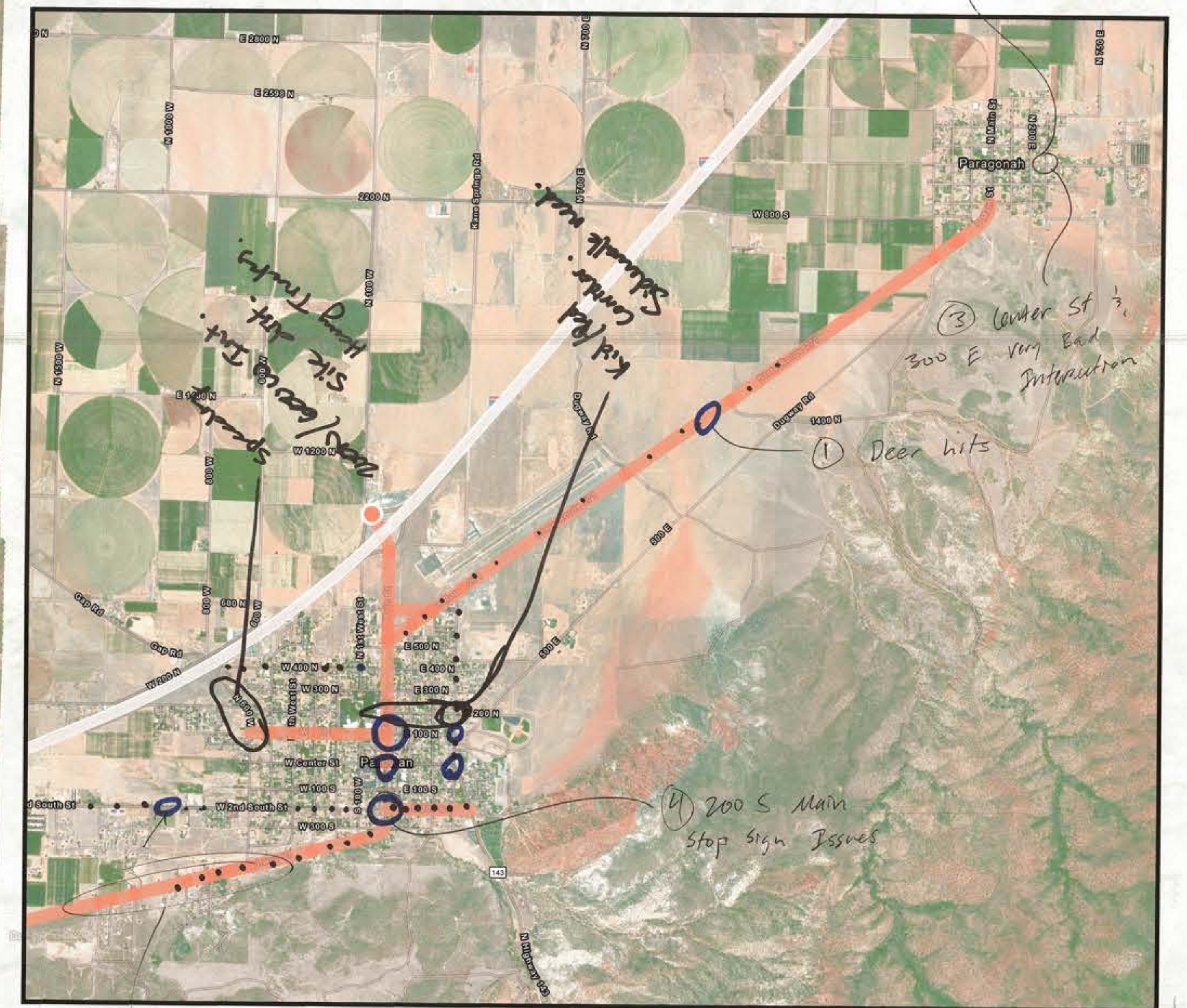
*Speeding
 Frost town*

*Multiple Roll Overs
 Both Summer & Winter*

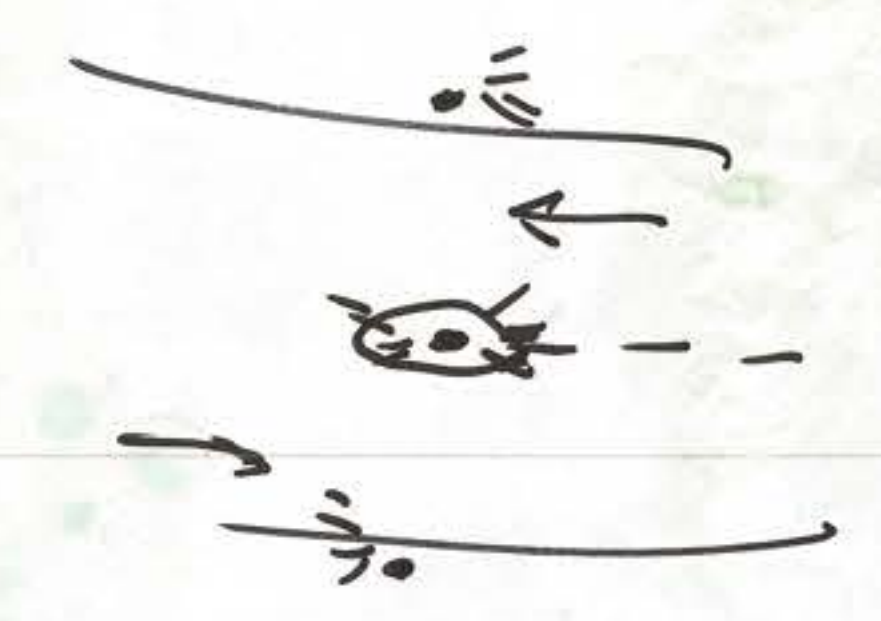


*quadrail
 winter*

Parowan & Paragonah



*② School Crossing Main St.
 Crosswalks*



*⑤ 300 E / Center
 Bikes 4-plex
 geometry*

*③ Center St 300 E
 very Bad
 Intersection*

① Deer hits

*④ 200 S Main
 stop sign Issues*

*⑥ Deer Hits Hwy 91
 200 N*

*Parowan to Brian Head
 I-15*

Poor Pedestrian Behavior
Not using Trails ①

East Iron County GFA

High-Risk Intersection

High-Risk Roadway

0

1.5

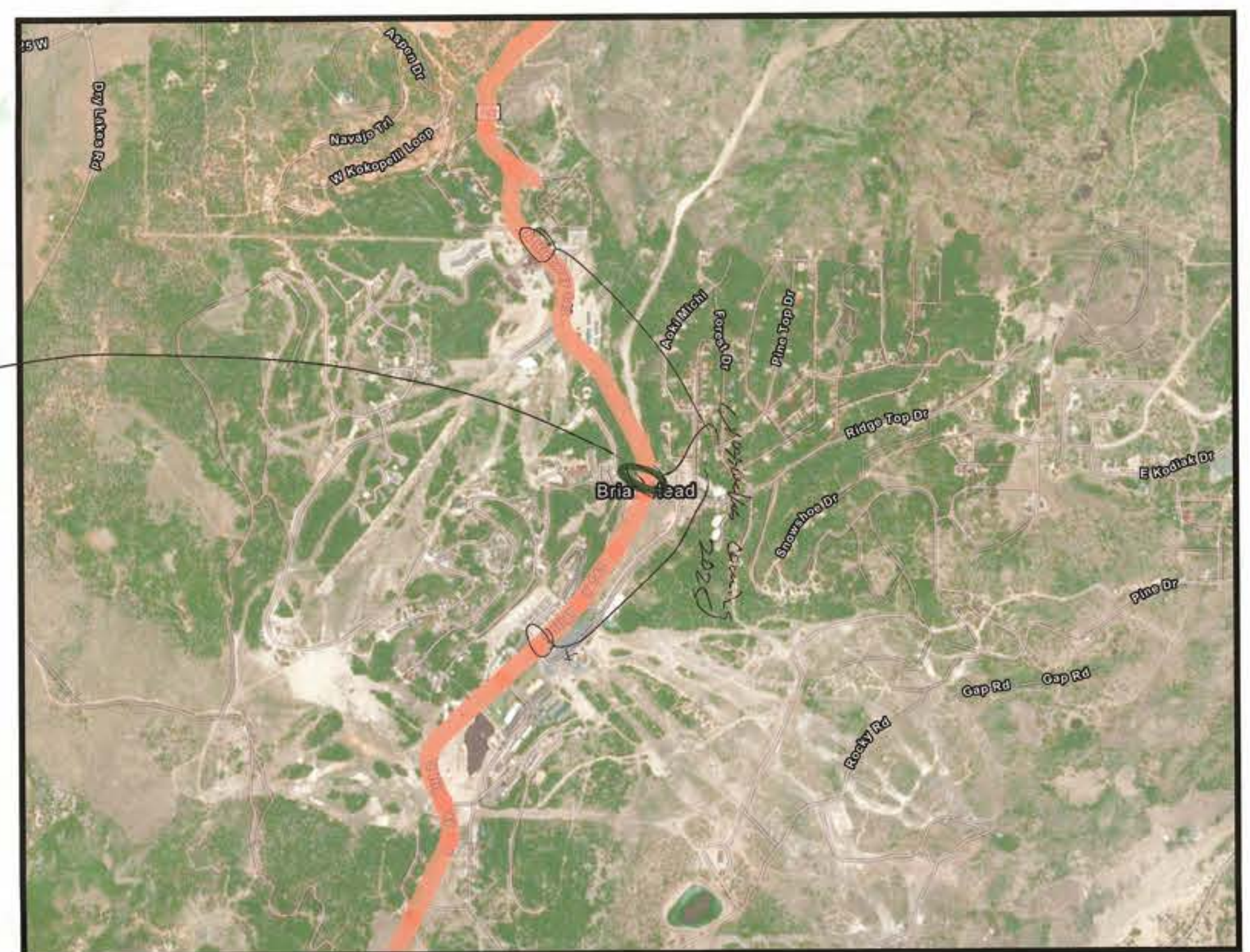
3

6

Miles

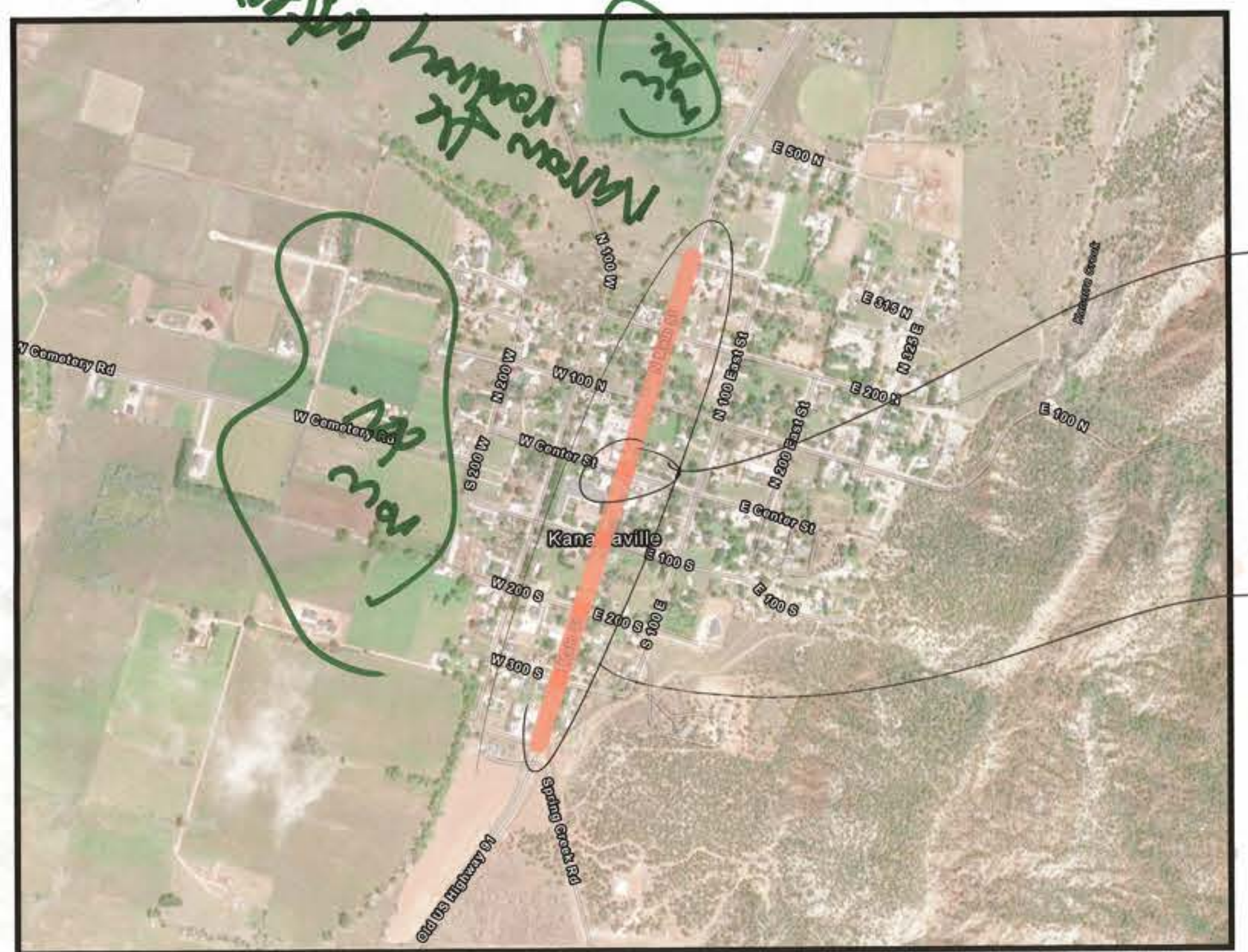
N

Brian Head Town



Intersection Steam Engine Dr. / Hwy 143
- local bus accident says there's been a bunch of near misses here
- Town Hall parking driveway close to intersection
- Confusing to ~~be~~ out-of-towners
- Will be putting a crosswalk in the same spot

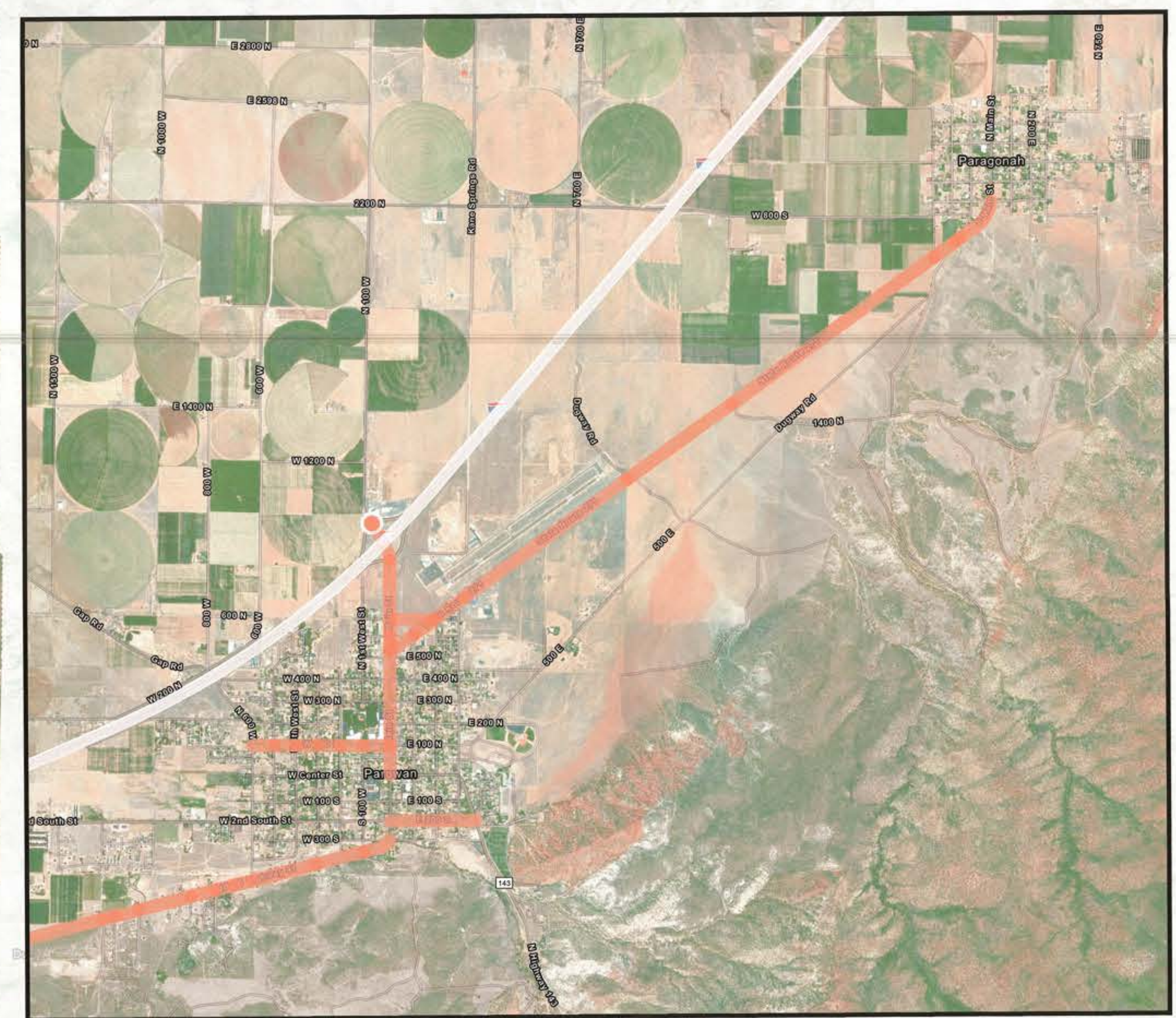
Kanarraville Town



⑧ Pedestrian safety / crosswalks Main Street / Center

⑨ High speeds on Highway 91 through town

Parowan & Paragonah



- ① Poor pedestrian Behavior, Not using Trails
- ② Speeding above limit
- ③ Enforcement for speeding
- ④ Deer strikes ⑤
- ⑥ Bikes, Pedestrian Access and Safety
- ⑦ Speed coming from Brian Head
- ⑩ SP-194 500 lot subdivision congestion New Hamming

Deer strike

Woods Ranch Pull-out

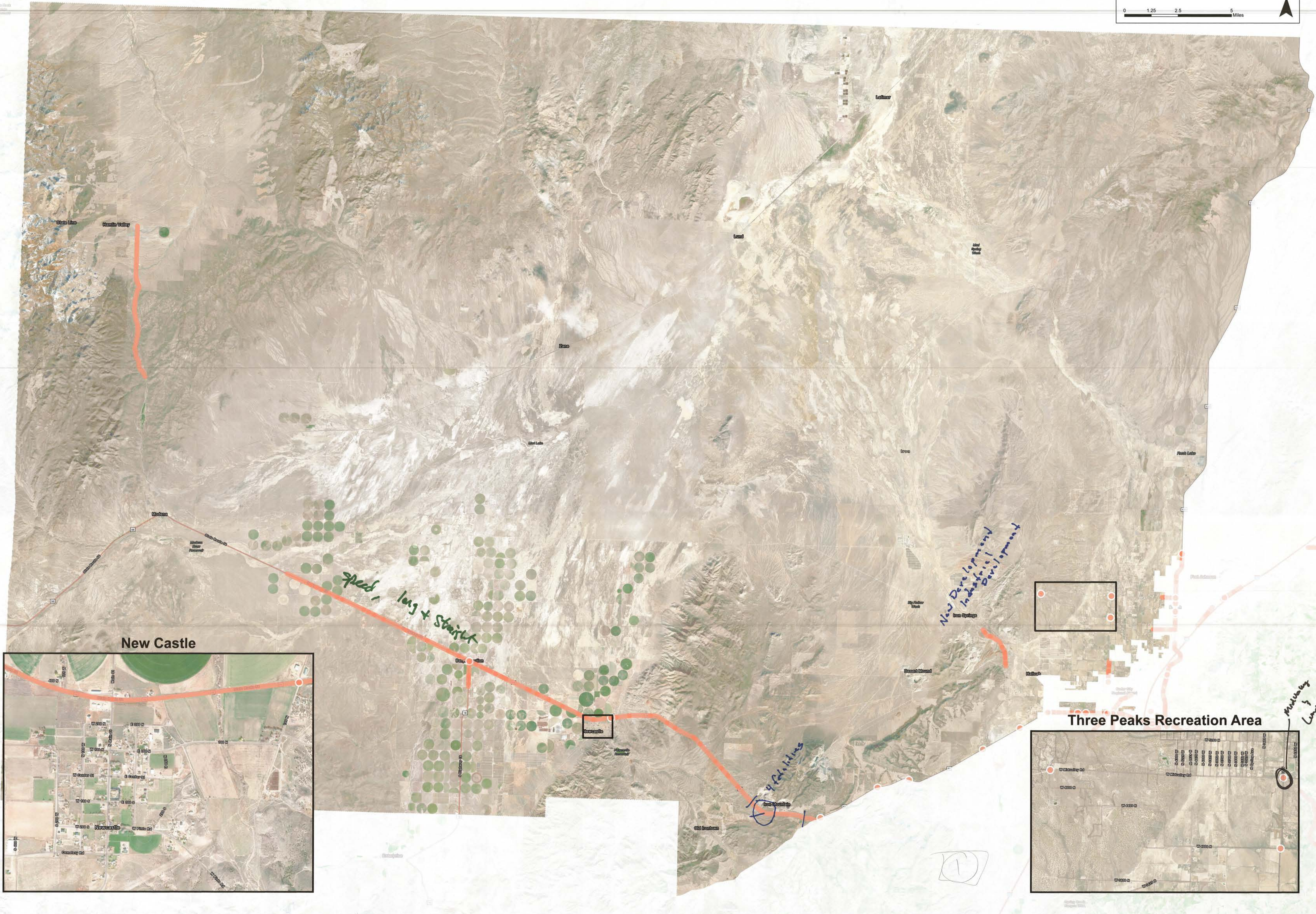
Breaker on SR14

New Park Tunnel

West Iron County GFA

- High-Risk Intersection
- High-Risk Roadway

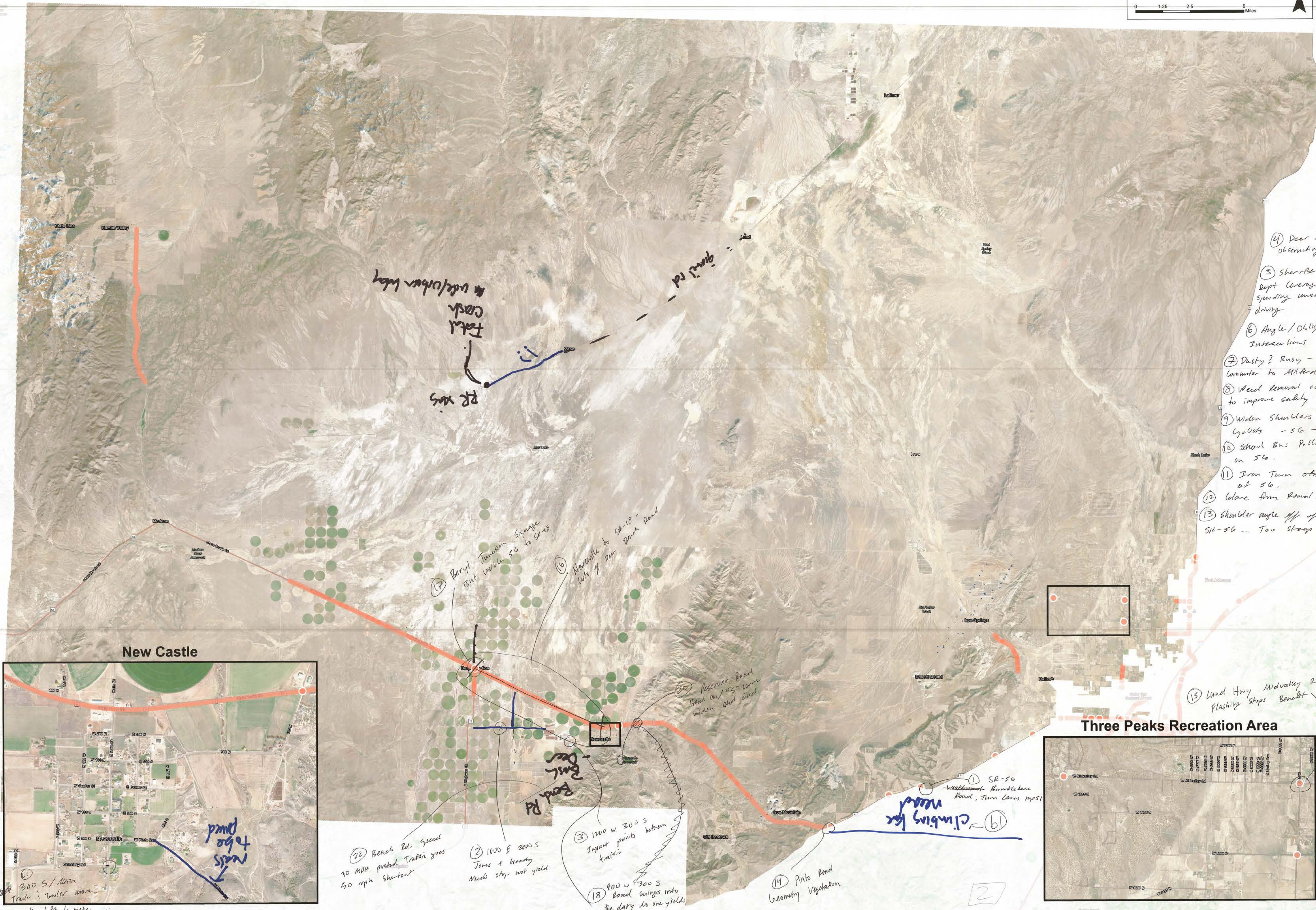
0 1.25 2.5 5 Miles



West Iron County GFA

- High-Risk Intersection
- High-Risk Roadway

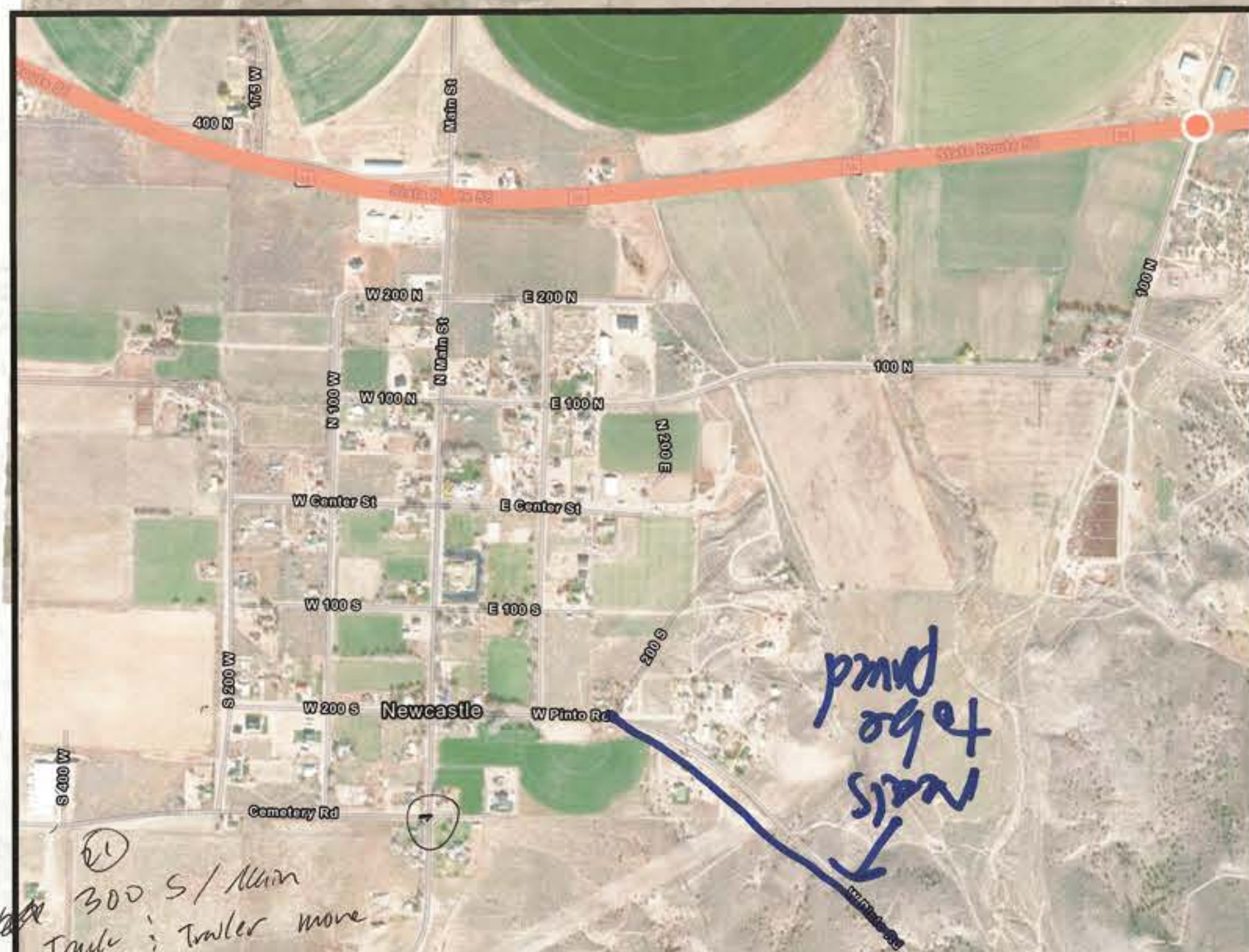
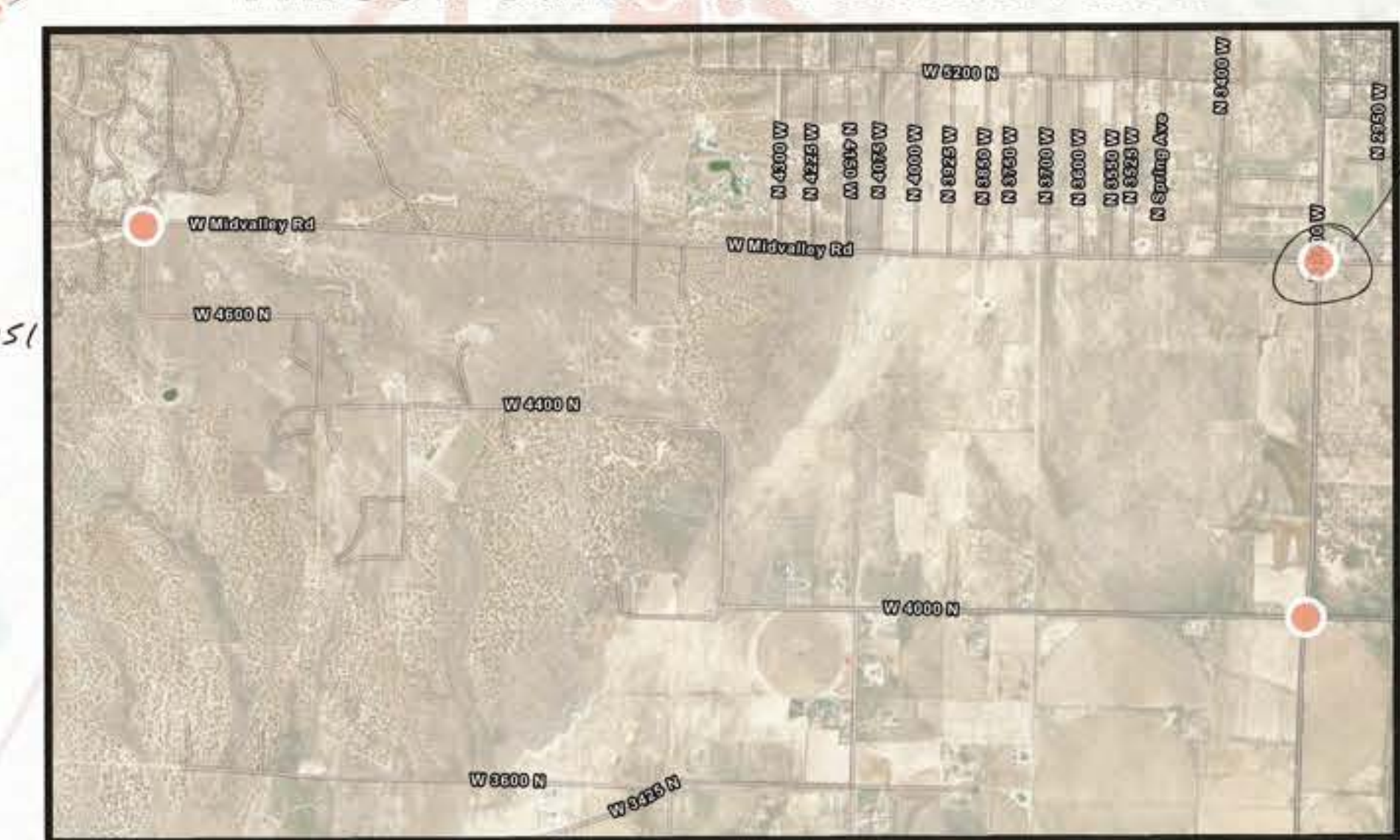
0 1.25 2.5 5 Miles



- (4) Deer some obstructing view
- (5) Short Rt Dept Coverage speeding unsafe driving
- (6) Angle/Obligue Intersections
- (7) Dusty? Busy - Comuter to Milford
- (8) Weed Removal on 56 to improve safety
- (9) Widen Shoulders for Cyclists - 56 -
- (10) School Bus Pollutants on 56
- (11) Iron Town off at 56
- (12) Glare from Rural Signs
- (13) Shoulder angle off of SR-56 ... Too steep

- (15) Lund Hwy Midvalley Rd Flashing Stops Beneft

Three Peaks Recreation Area



to the left to make the turn. Tree interference

- (22) Bench Rd. Speed 30 MPH pushed Trailer goes 60 mph Shuntent
- (2) 1000 E 2000 S Jones + bending Needs stop not yield
- (3) 1200 W 300 S Impact points traffic
- (18) 800 W 300 S Road swings into the dairy do not yield Milgro.

- (20) Reservoir Road Head on 45° curve widen and direct

- (14) Pinto Road Geometry Vegetation

- (19) SR-56 Road, Turn Lanes 1951
- (1) Climbing for

Enoch City GFA

● High-Risk Intersection

— High-Risk Roadway

0 0.13 0.25 0.5 Miles

N

*Disturbed
Drainage
Subsidence*

*all along SR150
acc./killed
+ site det.*

*Turn lanes
on SR150*

*bus on
SR150
W. main*

*No Pedestrian Access
other than streets*

No pedic.

*see bus
1/4 mi*

sidings

*turn
lanes.*

no SR

turn/accel lanes

Bus

Pedestrian

Access

AK

AK

AK

AK

AK

AK

AK

AK

AK

AK

AK

AK

AK

AK

AK

AK

AK

AK

*Ditch
at
junction*

+

+

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+

+

*turn lanes
on SR150*

*turn lanes
on SR150*

*turn lanes
on SR150*

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Enoch City GFA

High-Risk Intersection
High-Risk Roadway

0 0.13 0.25 0.5 Miles

N

- 1 Turning into wrong lane, cell phones, education on signaling
- 2 Use signals, turn into correct lanes, cell phone safety, education
- 3 Education on Pedestrian: Bikes using city streets
- 4 Broken edges on road
- 5 Underage ATV drivers
- 6 Trails - Pedestrians not on roads

13 Dog Park
Wildlife Reserve
on a dirt
road,
Future
Issue
Trails

7 No Guidance in
Mid Valley

10 Ice Risk, Future
Congestion

11 Soccer field congestion,
Ped/Hybrid weaving

15 Stopping on 91
to turn into driveways.
Stopping for E's on 91

14 Dip
Bulldog Ice

12 Soccer Lane
15 Mile Vehicle

8 Bypass Rd from
Maverik under I-15 to
Loves

9 Congestion in front of Maverik

7



“A plan to provide local governments the means to make strategic roadway safety improvements”

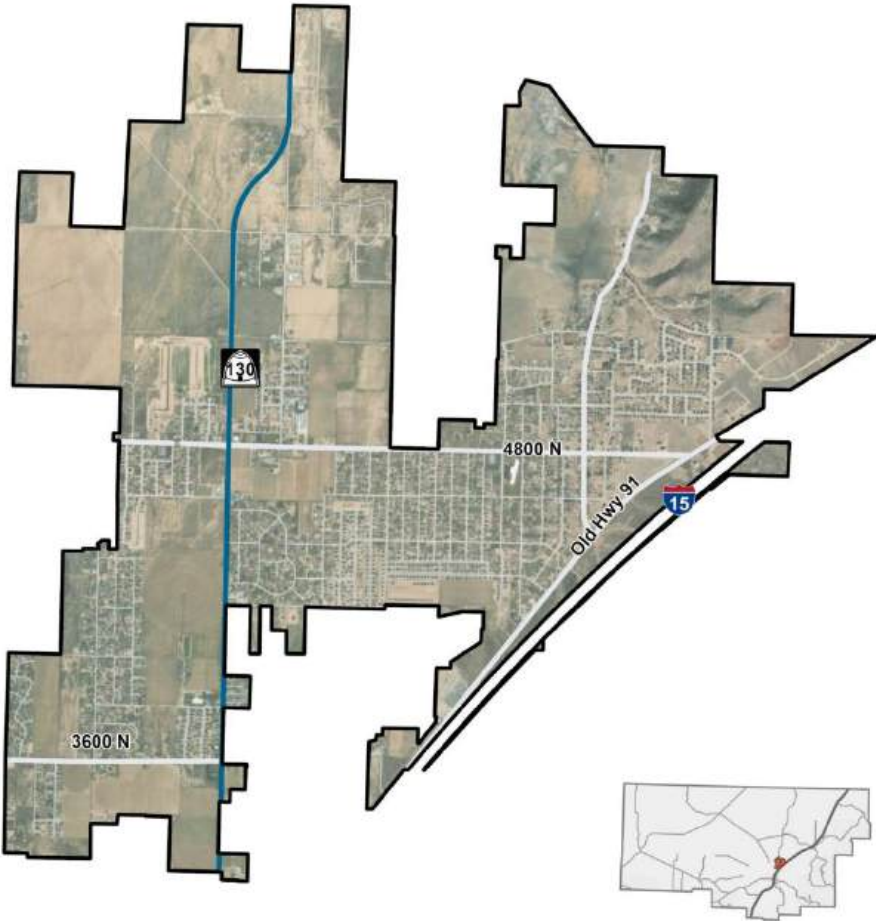
Iron County, in partnership with surrounding communities, is preparing a county-wide Safety Action Plan (SAP). The SAP will present a **holistic, well-defined strategy** to **reduce roadway fatalities and serious injuries** for all of Iron County.

The SAP will **analyze** safety needs, **identify** high-risk locations and factors contributing to crashes, and **prioritize** strategies to address them.

The SAP will meet eligibility requirements that allow local jurisdictions to apply for **Implementation Grants** from the United States Department of Transportation (USDOT) Safe Streets and Roads for All (SS4A) discretionary grant program. The grant program was established by the Bipartisan Infrastructure Law (BIL) with \$5 billion in appropriated funds, 2022-2026. A SAP must include the following elements, as specified by FHWA to satisfy eligibility requirements to apply for an implementation grant:

State Route: Roadways owned, operated, and maintained by UDOT

Non-State Routes: Other non-UDOT roadways – typically minor arterials and collectors, and residential streets



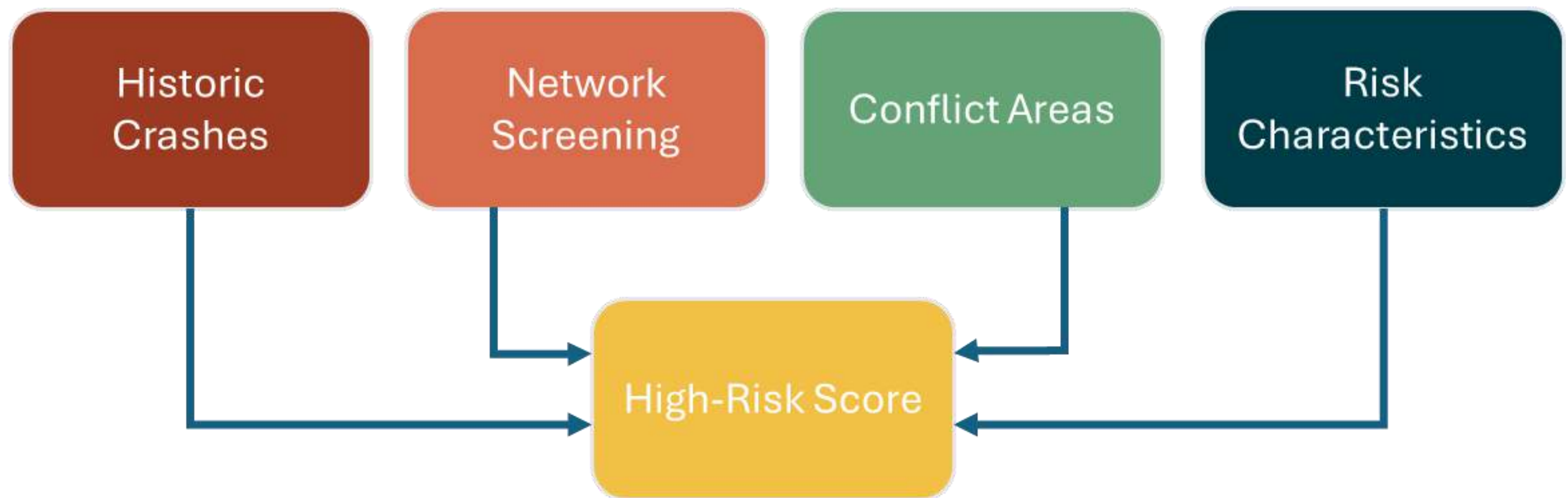
Self-Certification Checklist

Plan must include the following:

- ☐ Safety Analysis
 - ☐ Existing conditions and historical trends
 - ☐ Crashes by location, severity, and contributing factor
 - ☐ Systemic and specific safety needs
 - ☐ Geospatial identification of higher risk locations
- ☐ Identification of comprehensive set of projects and strategies

...And must complete 4 of the 6 elements to the right:

- | | |
|---|---|
| 1. Leadership Commitment <ul style="list-style-type: none"><input type="checkbox"/> Governing body publicly commit to a zero fatalities and serious injury goal | 4. Equity <ul style="list-style-type: none"><input type="checkbox"/> Data-driven, inclusive, and representative processes |
| 2. Plan Development <ul style="list-style-type: none"><input type="checkbox"/> Committee charged with plan development, implementation, and monitoring | 5. Policies, Plans, Guidelines, and/or Standards <ul style="list-style-type: none"><input type="checkbox"/> Assessment of policies, plans, guidelines, and/or standards |
| 3. Development Activities <ul style="list-style-type: none"><input type="checkbox"/> Engagement with public and relevant stakeholders | 6. Progress <ul style="list-style-type: none"><input type="checkbox"/> Description on how progress will be measured over time |





Identifies higher risk roadways by analyzing driver behavior, road usage, and community demographics.

- Data source:**

Michelin Mobility Intelligence (MMI) (i.e. cellular and GPS data).
- Represents:**

Identifies and prioritizes high-risk corridors based on different driving metrics.
- Example Data:**

Phone handling, sudden braking, suspected collisions, and speeding events.



Assigns road segments a 1–5-star rating based on the roadway’s safety features and characteristics to identify hazardous road sections.

- Data source:**

Video footage analyzed in 100-meter segments.
- Represents:**

Safety of road segments for drivers, bicyclists, and pedestrians based on roadway design, features, and characteristics.
- Example Data:**

Traffic volume, speed, lighting, shoulder conditions, rumble strips, access density, roadway geometry, etc.



Historic Crashes

Based on...	Historic Crashes, 2019-2023
Analyzes...	Crashes per mile or traffic volumes
Results in...	1. High Crash Network 2. High Injury Network

Conflict Areas

Based on...	Replica Safe Streets Planner
Analyzes...	Roadways by high-risk areas
Results in...	Replica Conflict Network

Network Screening

Based on...	Historic Crashes, 2019-2023
Analyzes...	Roadways and intersections by expected vs. actual crash rates
Results in...	Critical Crash Rate Network

Risk Characteristics

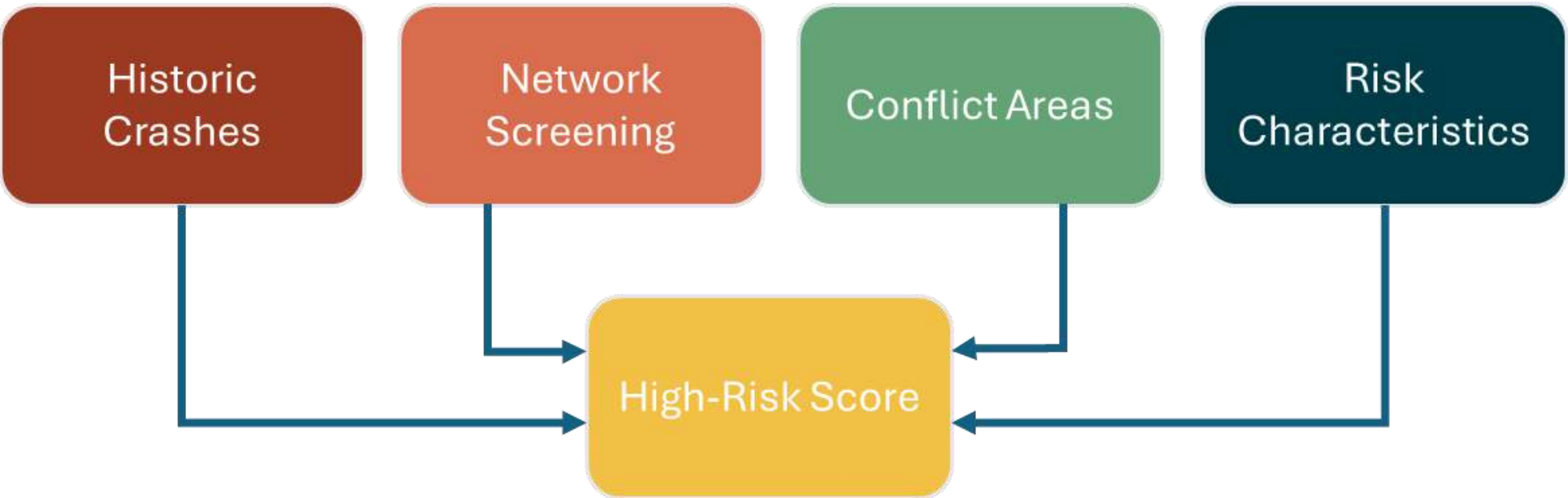
Based on...	usRAP Roadway Data
Analyzes...	Roadways by design and physical characteristics
Results in...	1. usRAP Network (star rating) 2. Crash Profile Risk Network



Each safety analysis methodology identifies locations that are **candidates for safety improvements** to reduce fatalities and serious injury crashes.

To provide focused information for jurisdictional decisions regarding **prioritization of safety improvements**, a **Risk Score** (0 to 5), was assigned to the transportation network. Any location with a positive Risk Score may be considered for safety improvements. Locations with a Risk Score of **“3”** or greater are to be prioritized in the **High-Risk Network**.

A map of the resulting High-Risk Network is provided on page 6, pages 7 and 8 provide a detailed list of the top priority locations (roadway segments and intersections).

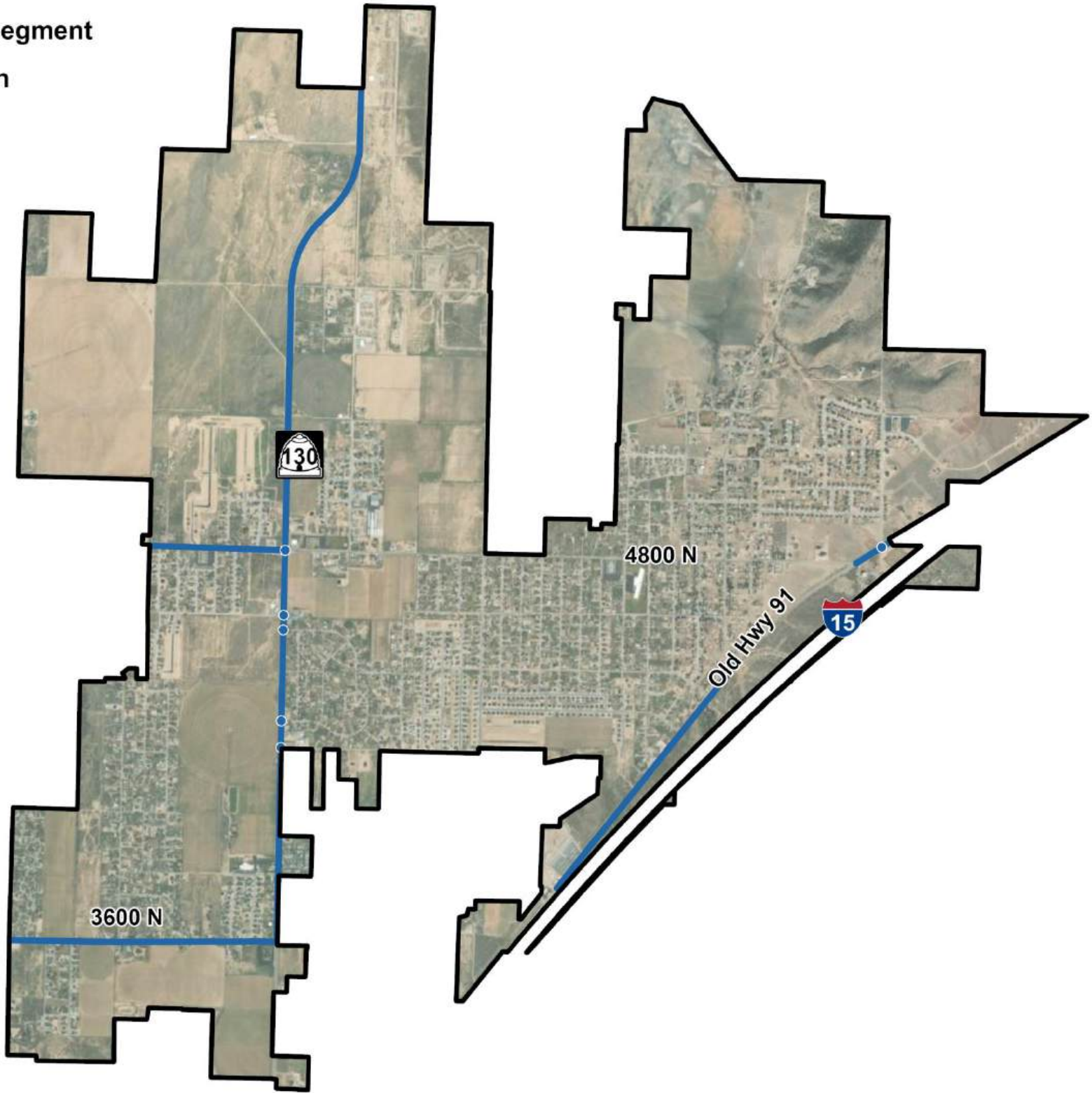


High Risk Category	Safety Analysis	Scoring Criteria	Risk Score	Page #
Historical Crashes	High Crash Network	Highest number of crashes per miles	1	11
	High Injury Network	Highest number of fatal and injury crashes per mile	1	12
	Critical Crash Rates	Positive critical crash rate differential	1	13
Network Screening	Replica - Speeding Areas	Speeding conflict risk score of 80+	1	14
	Replica - Non-Speeding Areas	Non-speeding conflict risk score of 80+		15
	Replica - Active Transportation Areas	Active transportation conflict rick score of 80+		16
Conflict Areas	Crash Profile Risk	Crash Profile Risk score of 60+	1	17
Risk Characteristics	usRAP Vehicle Star Rating	Star Rating of 1 - 2		
	usRAP Pedestrian Star Rating	Star Rating of 1 - 2		
	usRAP Bicycle Star Rating	Star Rating of 1 - 2		

Maximum High-Risk Score* 5

High-Risk Score

 Roadway Segment
 Intersection



High-Risk
Network



Roadways				Safety Analysis									
Roadway	Extents	Length (miles)	Functional Classification	High Crash Network	High Injury Network)	Critical Crash Rate	Replica Speeding	Replica Non Speeding	Replica Active Transportation	Crash Profile Risk	usRAP Vehicle Star Rating	usRAP Pedestrian Star Rating	usRAP Bicycle Star Rating
State Routes													
Minersville Highway (SR 130)	3600 North to Midvalley Road	1.5	Other Principal Arterial	X	X		X	X	X	X	X	X	X
Minersville Highway (SR 130)	Midvalley Road to 6400 North	2.5	Minor Arterial	X		X	X	X	X	X	X	X	X
Non- State Routes													
Midvalley Road	SR 130 to Briftwood Lane	0.8	Major Collector	X			X	X	X				
Old Highway 91	940 East to Enoch Road	1.5	Major Collector	X	X								
Old Highway 91	Midvalley Road to Ravine Road	1.0	Major Collector	X			X						
3600 North	Bulldog Road to SR 130	1.0	Minor Collector	X			X	X	X				



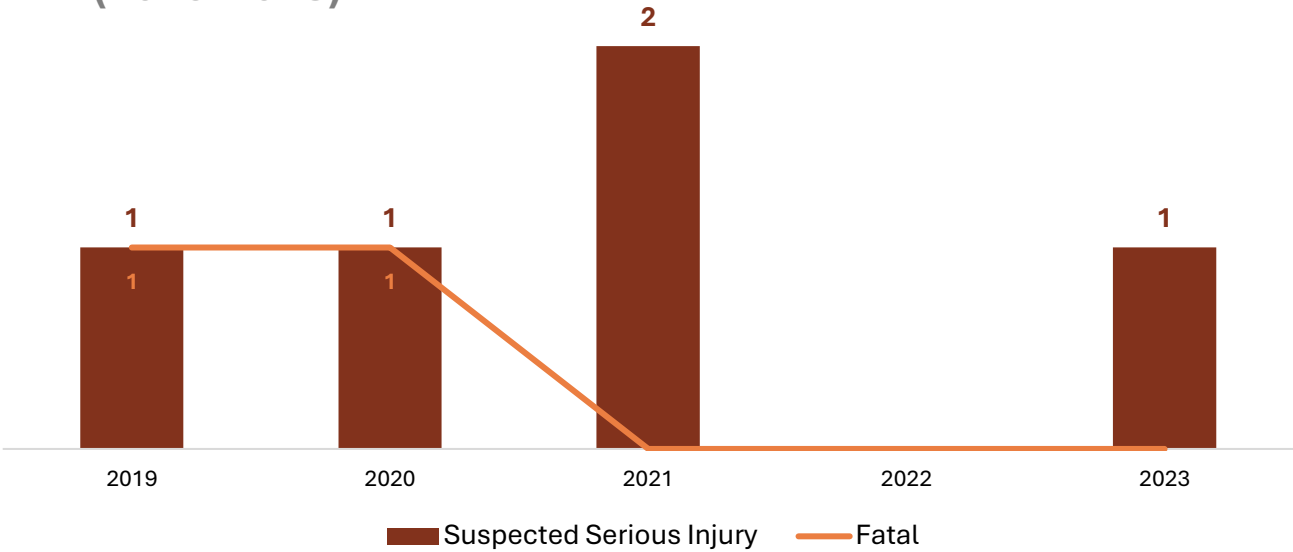
Intersections		Safety Analysis			Supporting Networks						
Intersection	Number of Crashes	High Crash Network	High Injury Network	Critical Crash Rate	Replica Speeding	Replica Non Speeding	Replica Active Transpor tation	Crash Profile Risk	usRAP Vehicle Star Rating	usRAP Pedestrian Star Rating	usRAP Bicycle Star Rating
Unsignalized Intersections											
SR 130 & Midvalley Road	17	X	X	X				X	X	X	X
SR 130 & 4600 North	3		X	X	X	X	X	X	X	X	X
SR 130 & 6400 North	5	X		X	X	X	X		X	X	X
SR 130 & 4200 North	3			X	X	X	X	X	X	X	X
SR 130 & Blue Sky Drive North	4			X	X	X	X		X	X	X
Heather Hue Road & Old Highway 91	3			X	X	X	X		X	X	X
SR 130 & Blue Sky Drive South	3			X	X	X	X		X	X	X

SUPPORTING INFORMATION

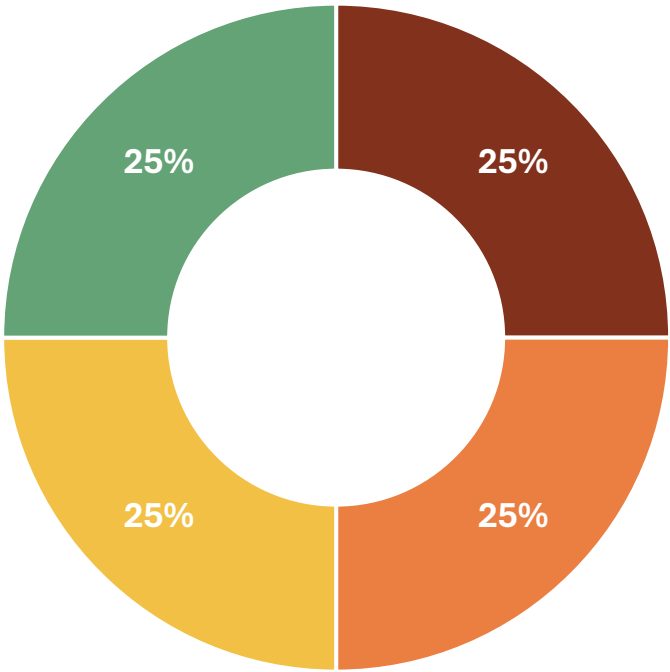


Route Type	State Route		Non-State Routes		Overall Total		% of Iron County
Crash Severity	Crashes		Crashes		Crashes		%
	#	%	#	%	#	%	
Fatal	0	0%	2	3%	2	2%	5%
Suspected Serious Injury	2	5%	3	5%	5	5%	3%
Suspected Minor Injury	7	18%	7	11%	14	13%	2%
Possible injury	8	20%	12	18%	20	19%	3%
No Injury / Property Damage Only	23	58%	41	63%	64	61%	2%
Total	40	100%	65	100%	105	100%	2%

Annual Fatal and Serious Injury Crashes (2019-2023)

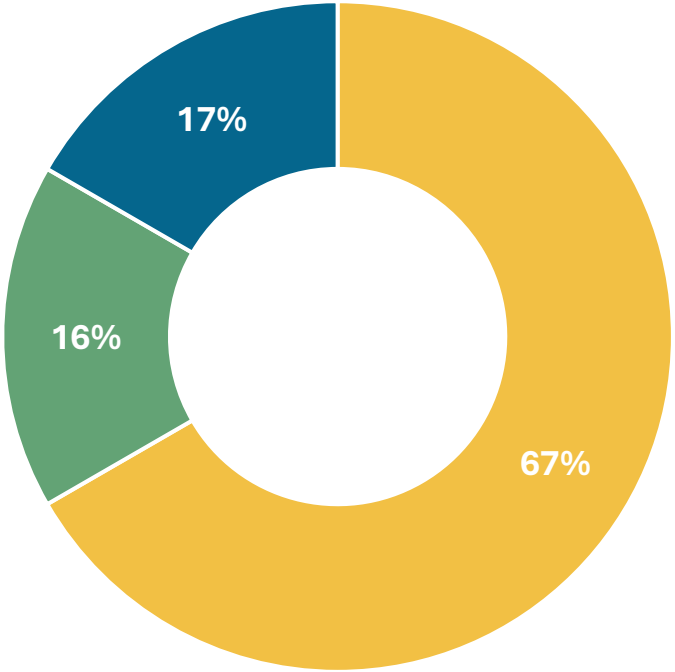


Fatal & Serious Manners of Collision



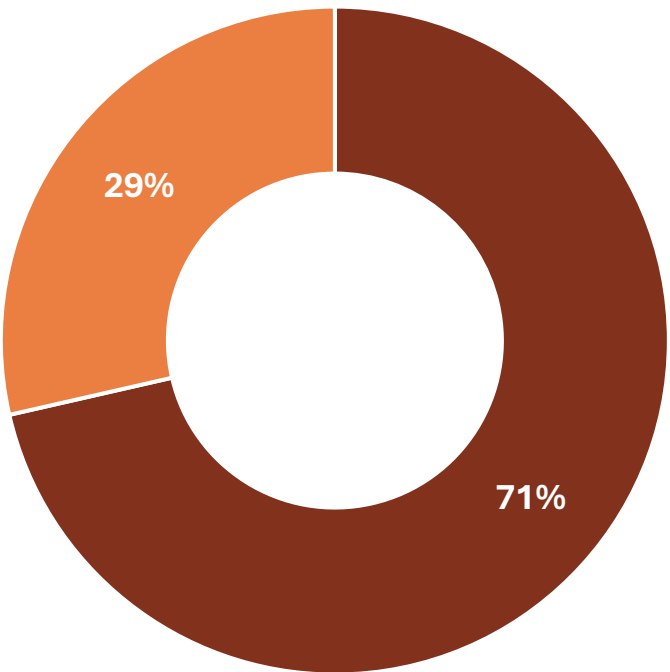
- Roadway Departure
- Left Turn at Intersection
- Rear-End
- Highway Crossover

Top 5 Fatal & Serious Injury Crash Types



- Angle
- Front to Rear
- Parked Vehicle

Crash Lighting Conditions



- Daylight
- Dark - Not Lighted

Historical Crashes

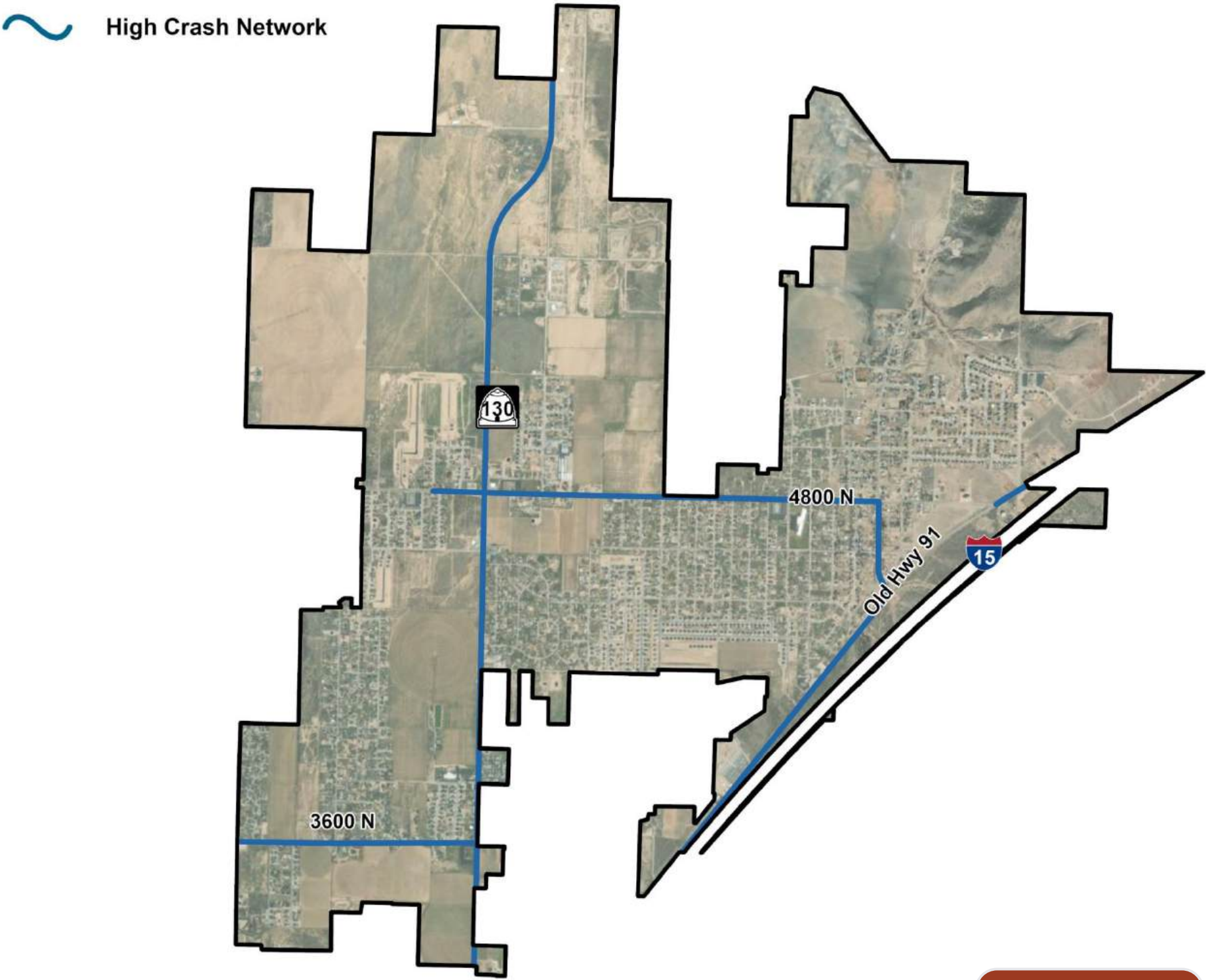
70% of all Enoch crashes occur on 20% of the Enoch City GFA’s roadways

Understanding the types and locations of vehicle crashes is an important part of analyzing the safety conditions of a roadway network.

A component of the SAP is to identify locations with an **elevated risk** of crashes. The initial step of this analysis is to spatially reference crashes that occurred within the GFA. Next, a crash rate of total crashes (all severities) per mile is calculated for each roadway segment. This calculation helps identify frequency of crashes regardless of severity.

The roadway network to the right is identified as the **High-Crash Network**.

The High Crash Network includes roadways on which 40% of all crashes occurred throughout the County.



Historic
Crashes

20% of all injury crashes in Enoch occur on 10% of the Enoch City GFA’s roadways

A proactive approach to reducing and eliminating traffic fatalities and serious injuries requires an investigation of the conditions that contribute to severe traffic crashes. The Safe System Approach includes safety strategies and countermeasures that seek to not only reduce the number of crashes that occur but also **reduce the severity** when a crash does occur.

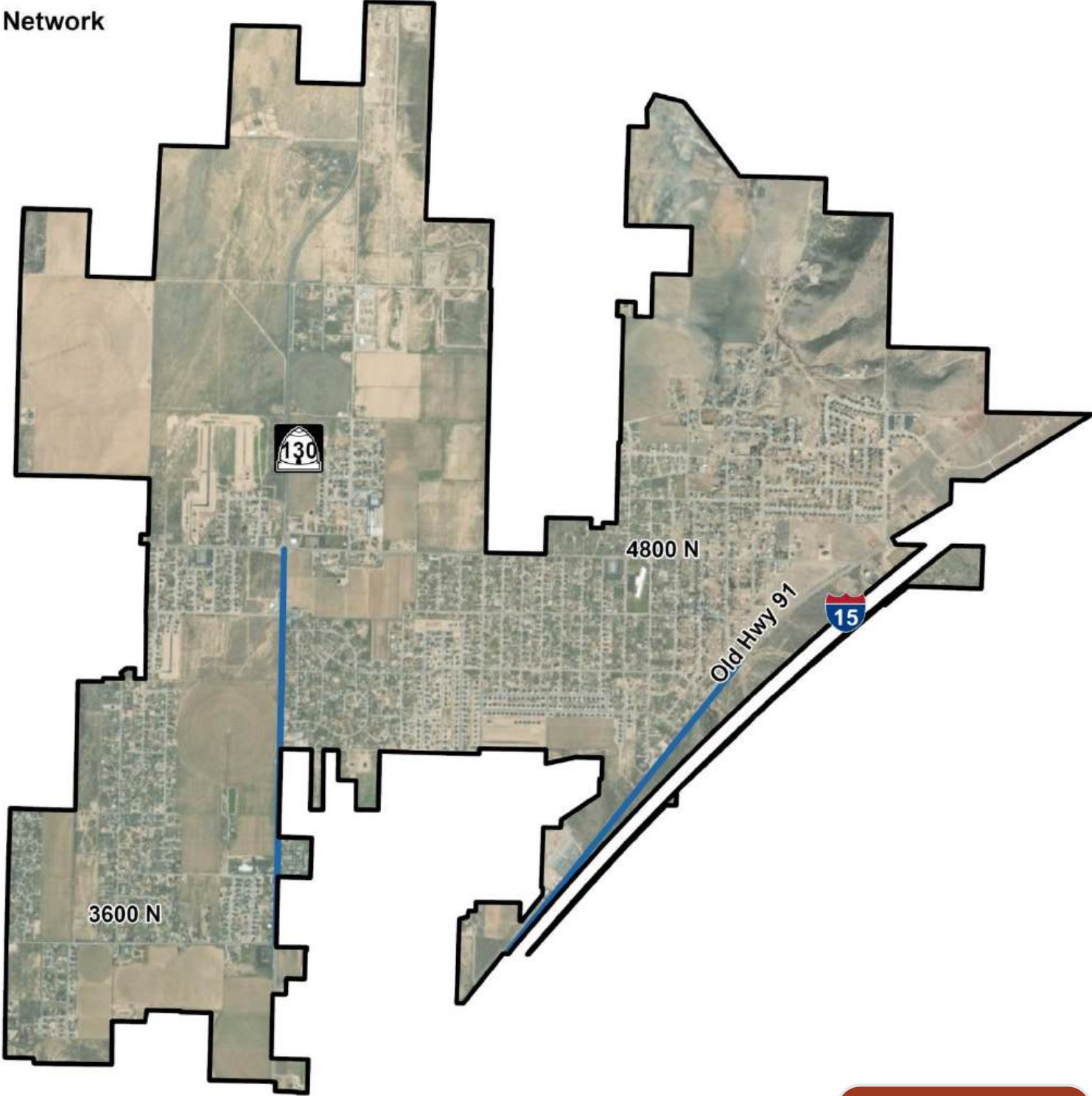
Identifying locations of fatal and injury crashes is a key step in detecting any patterns in the **location** or **characteristics** of roadways or intersections that are potentially impacting the frequency of injury crashes.

A **High-Injury Network** is created by spatially referencing fatal, serious injury, and minor-injury crashes to the roadway network. An “injury rate” of fatal and injury crashes per mile is calculated for each roadway segment.

The map to the right shows the **High-Injury Network**, which represents the roadways on which 60% of fatal and injury crashes in the County have occurred.

Note, the roadway segments identified in both the high crash and high injury networks represent locations with the highest crash rates. Roadway segments may be combined to illustrate more complete corridors.

 High Injury Network



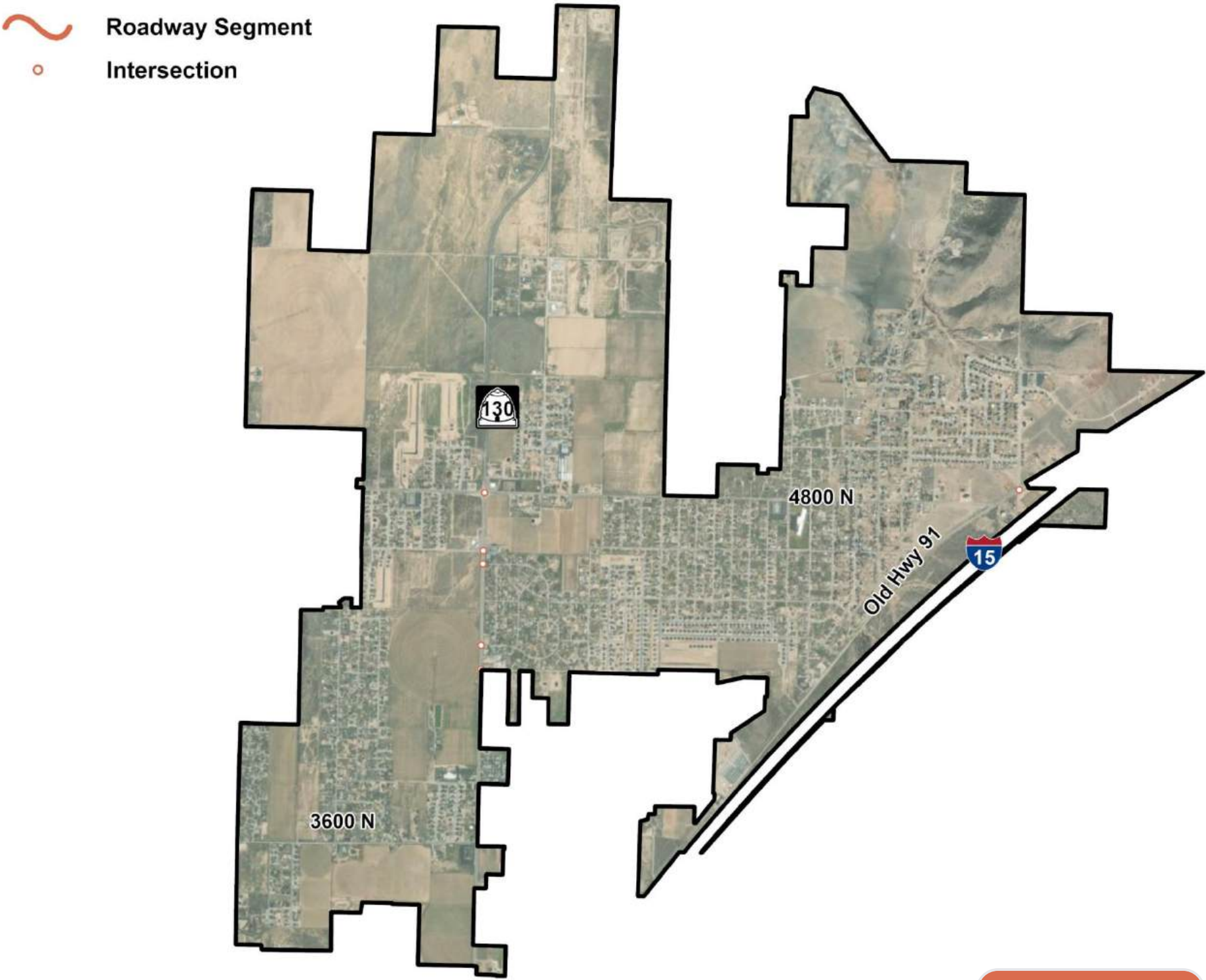
Historic
Crashes

Locations where historic crashes have exceeded expected crash rates based on similar characteristics

The Critical Crash Rate (CCR) analysis compares the **observed** crash rate of a location to the **expected** crash rate based on similar locations with similar traffic volumes. Each GFA was analyzed individually to calculate CCRs specific to the GFAs demographics and facilities.

A location with a **positive** CCR indicates higher-than-expected crash rates and a potential for safety improvement. The higher the CCR value, the larger the potential to improve safety at that location.

The map to the right illustrates the **Critical Crash Rate Network** that includes roadway segments and intersections with a potential for safety improvement based on the CCR analysis in the Enoch City GFA.



Network
Screening

Identifying potential conflict and high-risk areas using data from speeding events

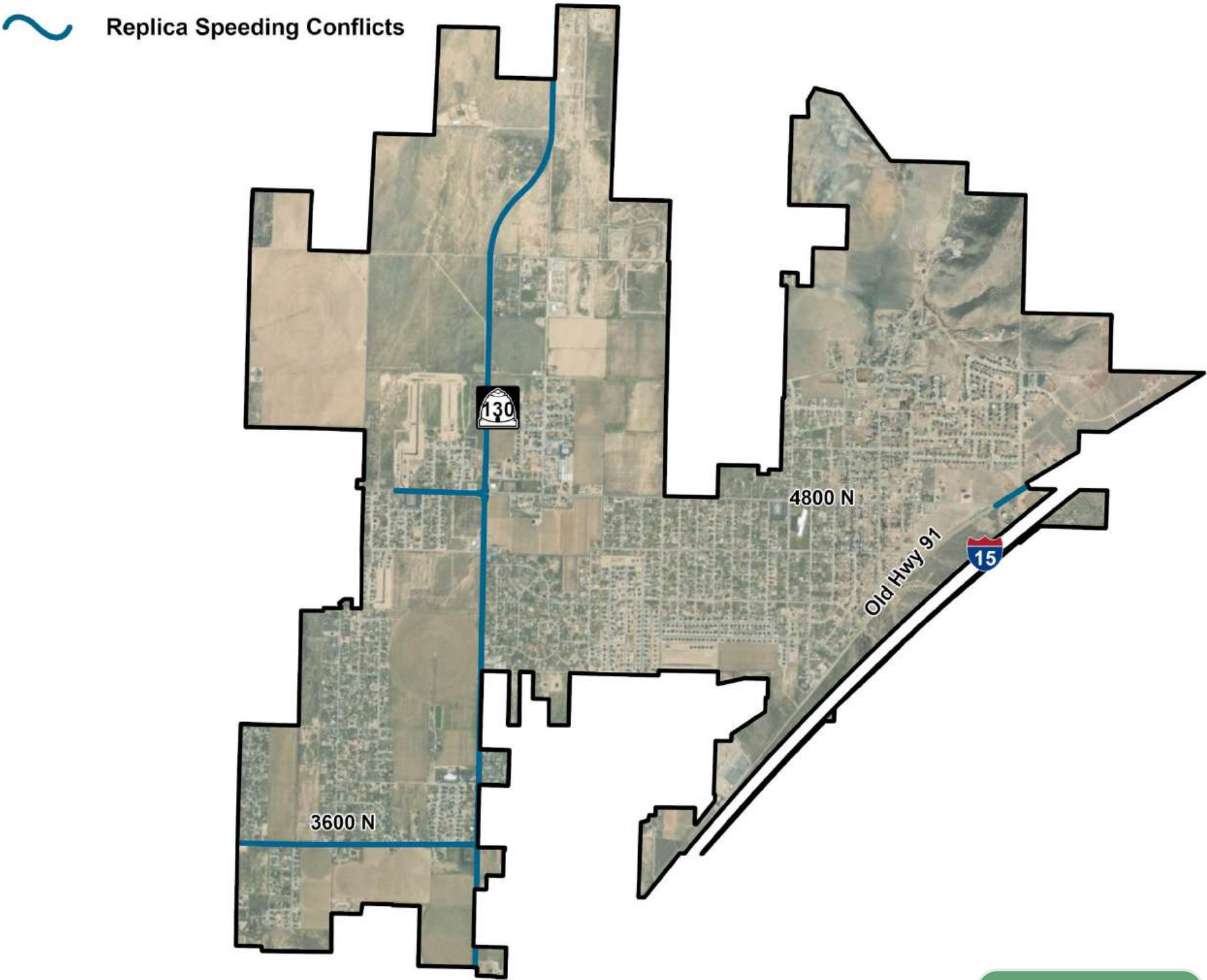
Replica is an online data platform that aggregates cellular data provided mobility **patterns** and **trends**. Replica provides a digital application called **Safe Streets Planner** that combines detailed multimodal data with driving event data to identify and prioritize high conflict corridors.

Replica’s cellular data includes indicators of risky behaviors like **speeding**. The number of instances or “events” of risky behaviors is used to calculate a risk score for a roadway. **Risk scores** are calculated to represent the proportion of risky events to the number of total trips on a roadway. Roadways with higher risk scores represent roadways with the most safety conflicts.

The following metrics were isolated in Replica to identify the highest risk roadways in Iron County:

- Speeding
- Non-Speeding Events: Suspected Collisions, Phone Handling (Distracted Driving), and Sudden Braking
- Active Transportation (pedestrians and bicyclist) high-risk corridors

The maximum risk score is 100 points. Roadways with a speeding risk score of 80 or more are included in the **Replica Speeding Conflict Network** shown to the right.



Conflict Areas

Identifying potential conflict and high-risk areas using data from events such as phone-handling, sudden braking, and suspected crashes

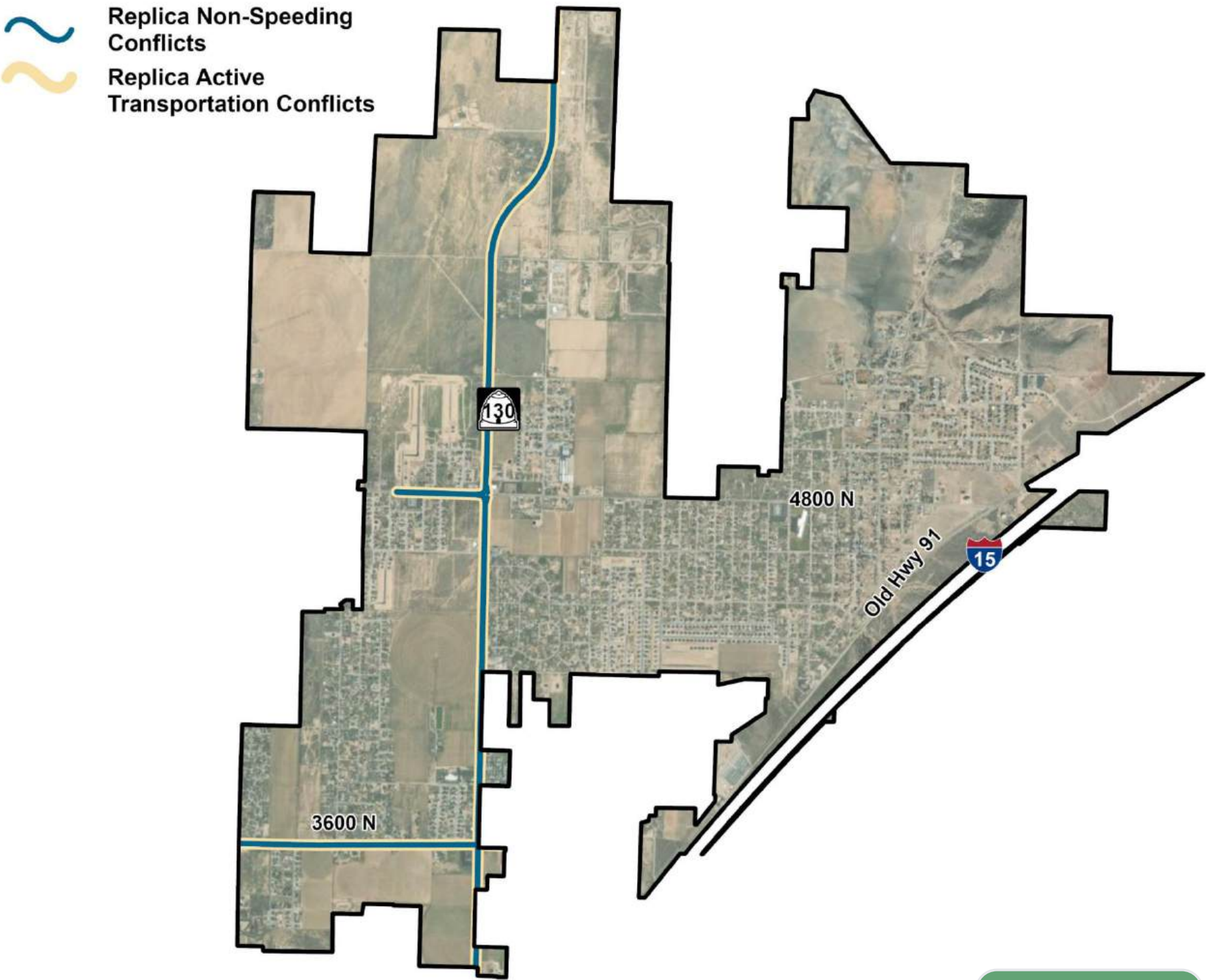
Replica is an online data platform that aggregates cellular data provided mobility **patterns** and **trends**. Replica provides a digital applications called **Safe Streets Planner** that combines detailed multimodal data with driving event data to identify and prioritize high conflict corridors.

Replica’s cellular data includes indicators of certain risky behaviors; **speeding, distracted driving, and hard-braking**. The number of instances or “events” of risky behaviors is used to calculate a risk score for a roadway. Risky events captured in the data include phone handling, sudden braking, suspected collisions, and speeding. **Risk scores** are calculated to represent the proportion of risky events to the number of total trips on a roadway. Roadways with higher risk scores represent roadways with the most safety conflicts.

The following metrics were isolated in Replica to identify the highest risk roadways in Iron County:

- Speeding
- Non-Speeding Events: Suspected Collisions, Phone Handling (Distracted Driving), and Sudden Braking
- Active Transportation (pedestrians and bicyclist) high-risk corridors

The maximum risk score is 100 points. Roadways with a risk score of 80 or more in non-speeding events of the Replica metrics analyzed are included in the **Replica Non-Speeding Conflict Network** shown to the right.



Conflict Areas

Evaluation of roadway characteristics contributing to risk based on locations of historic crashes

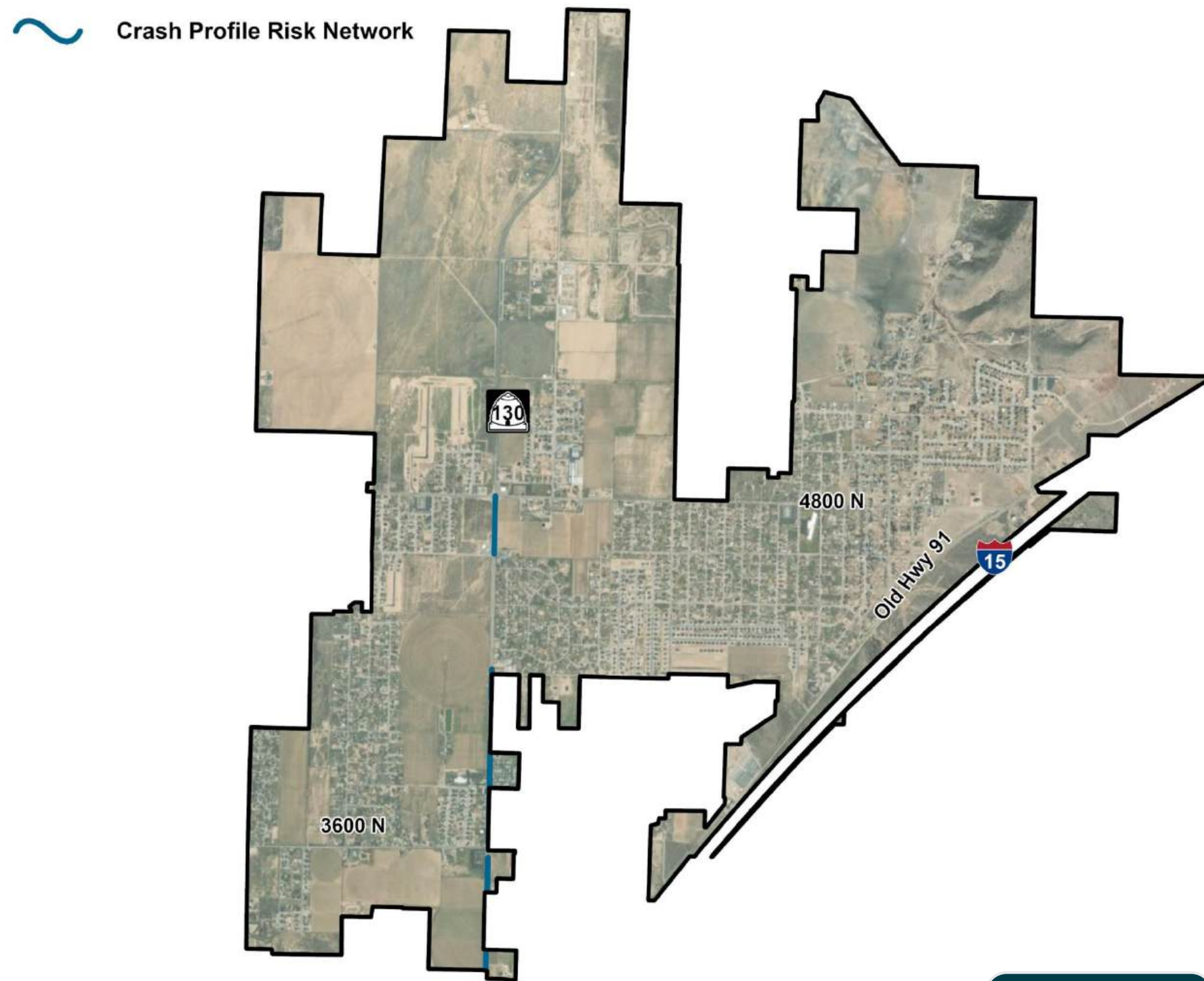
The **Crash Profile Risk Assessment** reviewed fatal and serious injury crashes reported in Iron County to identify attributes that correspond to a higher frequency of fatal and serious injury crashes.

Characteristics considered include:

- Traffic volumes
- Speed limits
- Roadway cross-section
- Lighting condition
- Access Density
- Rumble strips
- Paved shoulder
- Roadside hazards
- Roadway Geometry (curves)

The crash profile risk score, has a maximum value of 100 points. A roadway segment with a score of 60 or higher is a candidate for safety improvements.

The **Crash Profile Risk Network** of the highest scoring roadway segments is shown to the right.



Risk
Characteristics

A risk rating based on the design and traffic control attributes of the roadway

The United States Road Assessment Program (**usRAP**) is a proactive tool for analyzing the safety of a roadway.

Star ratings are assigned to each segment of the roadway network. Only State Highways are included in the roadway network for this data set. Star ratings consider roadway infrastructure and attributes known to impact the likelihood of a crash and its severity. Attributes include roadway type, width, shoulders, speed limit, traffic volumes, etc.

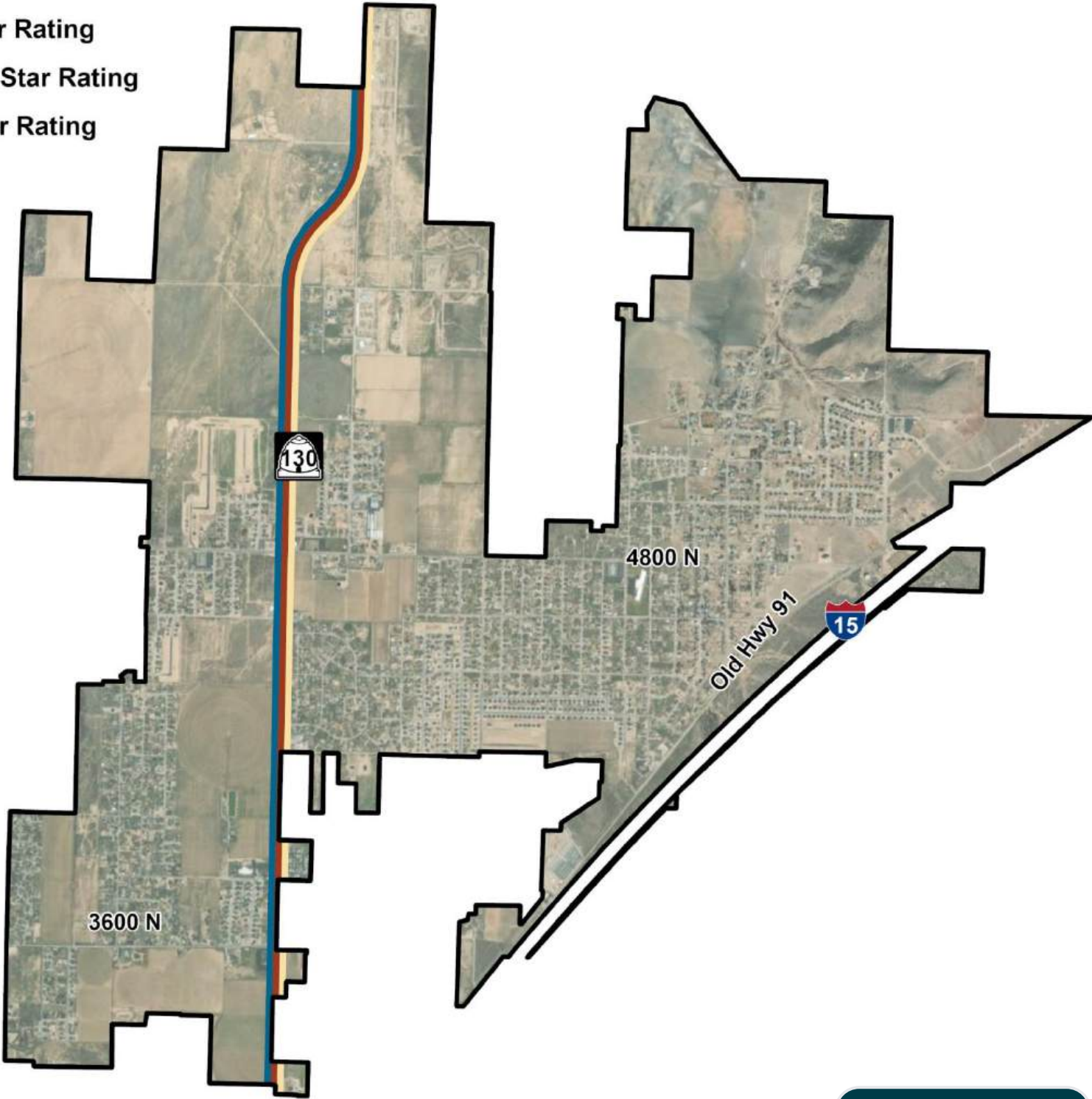
The roadway’s star rating is based on the presence or absence of these design and traffic control features.

5-star roadways have the **most** safety-related design and traffic control features. **1**-star roadways have the **fewest** safety-related design and traffic operational features.

Star ratings are assigned for a vehicle , pedestrian, and bicyclist category.

The roadways highlighted in the **usRAP Network** to the right have a star rating of **1** or **2** in the vehicle, pedestrian, or bicyclist category of usRAP ratings.

- Vehicle Star Rating
- Pedestrian Star Rating
- Bicycle Star Rating



Risk
Characteristics

“A plan to provide local governments the means to make strategic roadway safety improvements”



Goal
The SAP will present a **holistic, well-defined strategy** to **reduce roadway fatalities and serious injuries** for all of Iron County.



Safety Action Plan Elements
The SAP will **analyze** safety needs, **identify** high-risk locations and factors contributing to crashes, and **prioritize** strategies to address them.

The SAP will meet eligibility requirements that allow local jurisdictions to apply for **Implementation Grants** from the United States Department of Transportation (USDOT) Safe Streets and Roads for All (SS4A) discretionary grant program. The grant program was established by the Bipartisan Infrastructure Law (BIL) with \$5 billion in appropriated funds, 2022-2026. A SAP must include the following elements, as specified by FHWA to satisfy eligibility requirements to apply for an implementation grant:



Self-Certification Checklist

Plan must include the following:

- ☐ **Safety Analysis**
 - ☐ Existing conditions and historical trends
 - ☐ Crashes by location, severity, and contributing factor
 - ☐ Systemic and specific safety needs
 - ☐ Geospatial identification of higher risk locations
- ☐ Identification of comprehensive set of projects and strategies

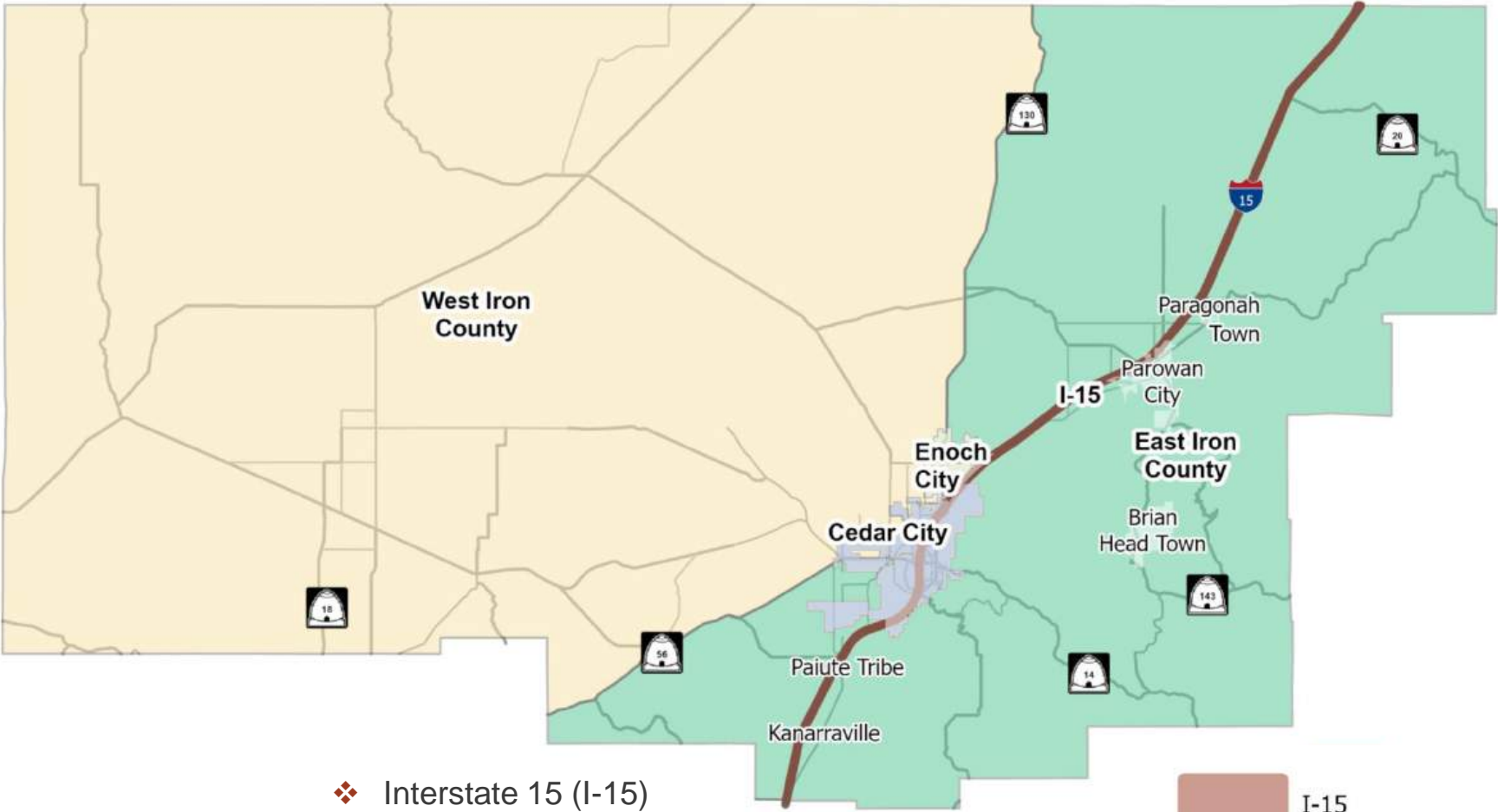
...And must complete 4 of the 6 elements to the right:

- | | |
|--|--|
| 1. Leadership Commitment <ul style="list-style-type: none"><input type="checkbox"/> Governing body publicly commit to a zero fatalities and serious injury goal | 4. Equity <ul style="list-style-type: none"><input type="checkbox"/> Data-driven, inclusive, and representative processes |
| 2. Plan Development <ul style="list-style-type: none"><input type="checkbox"/> Committee charged with plan development, implementation, and monitoring | 5. Policies, Plans, Guidelines, and/or Standards <ul style="list-style-type: none"><input type="checkbox"/> Assessment of policies, plans, guidelines, and/or standards |
| 3. Development Activities <ul style="list-style-type: none"><input type="checkbox"/> Engagement with public and relevant stakeholders | 6. Progress <ul style="list-style-type: none"><input type="checkbox"/> Description on how progress will be measured over time |

A Safety Action Plan for **All** of Iron County

The SAP study area includes each jurisdiction in Iron County, illustrated to the right. To organize the number of jurisdictions and unincorporated areas into manageable analysis pieces, Iron County was divided into Geographic Focus Areas (GFA). The jurisdictions captured in each GFA are listed and shown in the image to the right.

Interstate 15 (I-15) was isolated as its own GFA because interstate facilities are not eligible for SS4A funding. However, I-15 is the major connection through Iron County and interacts with the other GFAs analyzed in the SAP.



Safety Action Plan Schedule Overview



- ❖ Interstate 15 (I-15)
- ❖ Cedar City
- ❖ Enoch City
- ❖ East Iron County
 - Kanarraville Town
 - Paragonah Town
 - Parowan City
 - Brian Head Town
 - Paiute Indian Tribe of Utah
 - Unincorporated Iron County, east of SR 130 and SR 56
- ❖ West Iron County
 - Unincorporated Iron County, west of SR 130 and SR 56



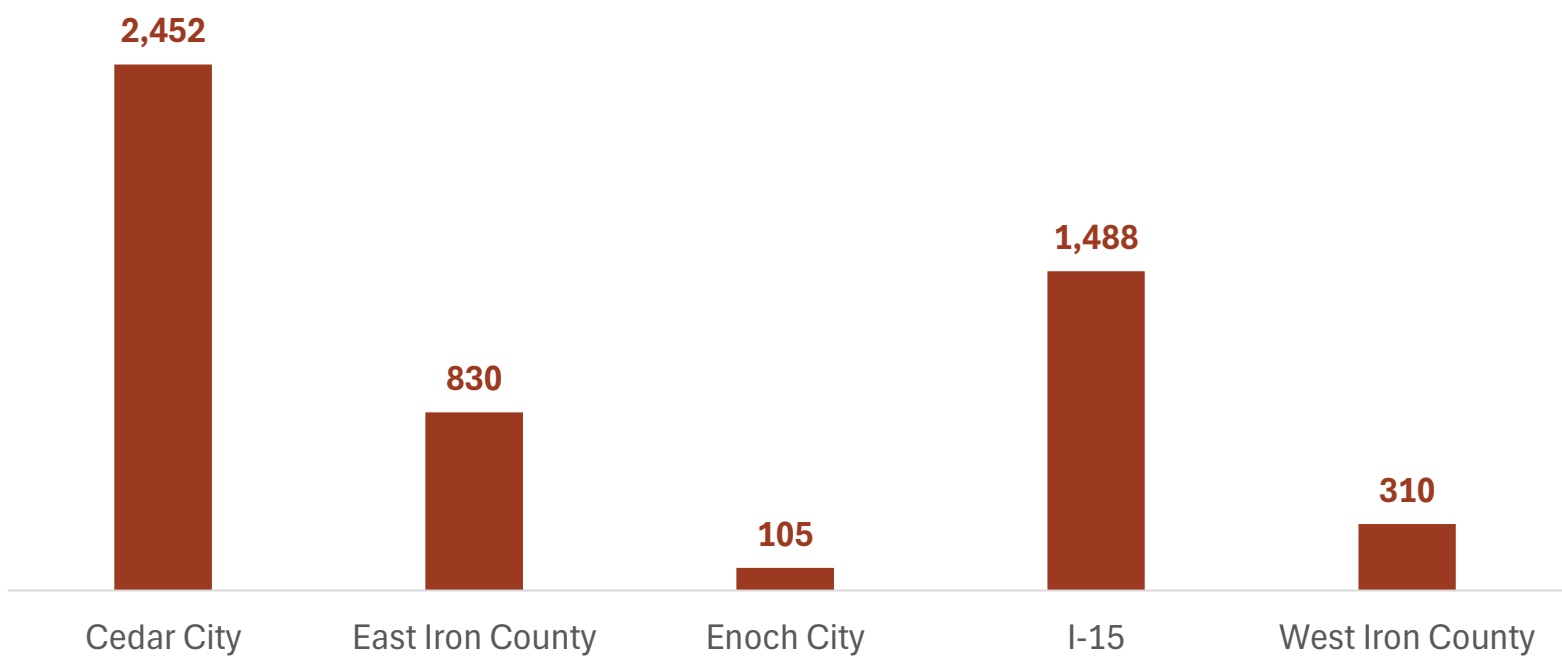
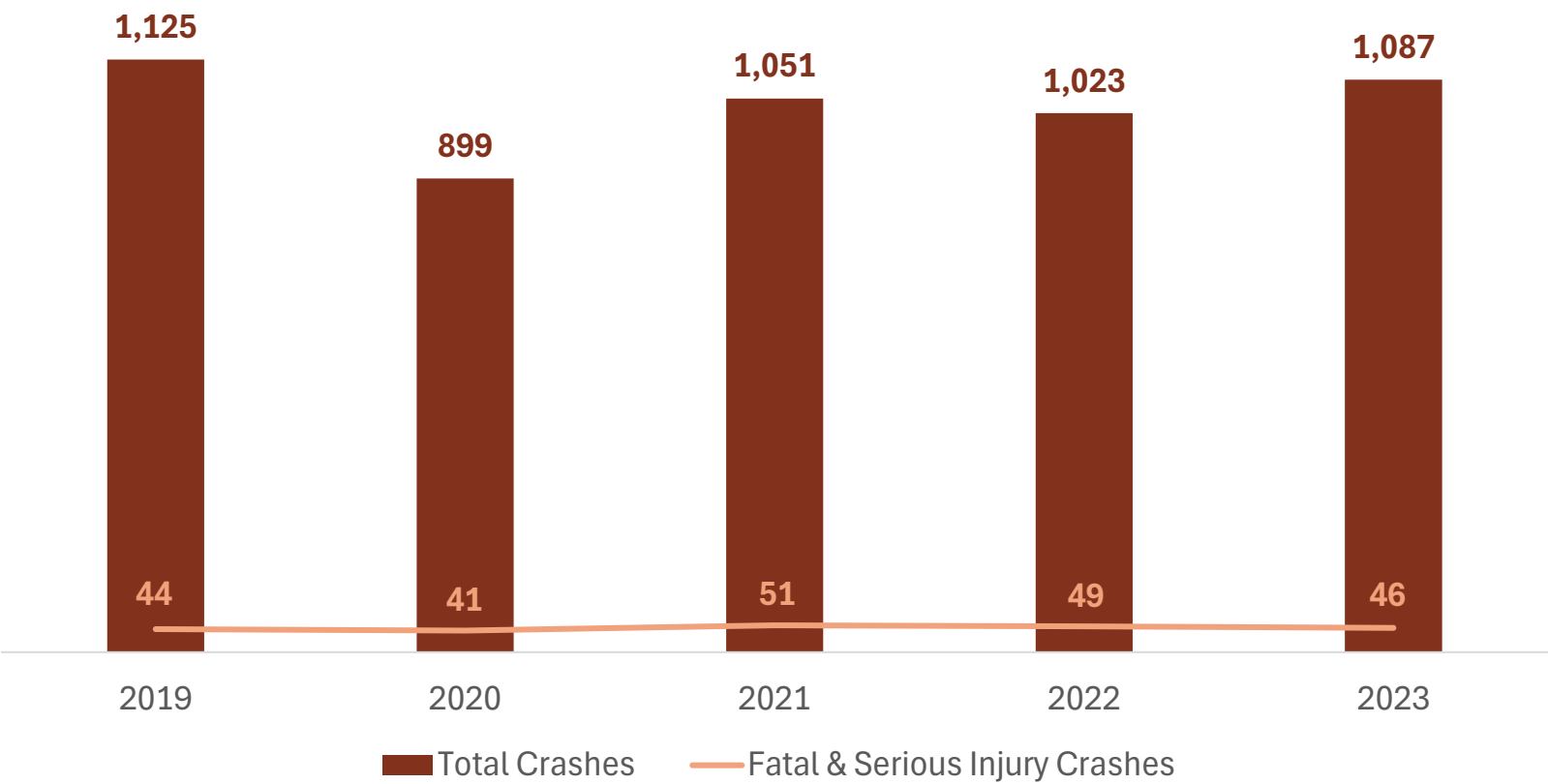
The number of vehicle crashes have **Increased** in the most recent years

The most crashes occurred in 2019. Even though the number of crashes decreased greatly in 2020, as of 2023 there are almost the same number of crashes occurring as there were at the highest in 2019. Note, the number of fatal and serious injury crashes have slightly decreased in the last 3 years.

- ❖ The number of fatal and serious injury crashes reached the highest in 2021 and remains higher than the number of severe crashes in 2019
- ❖ 1 of every 5 pedestrian and/or bicyclist involved crashes resulted in a fatality or serious injury
- ❖ The number of fatal and serious injury crashes involving a pedestrian and/or bicyclist has remained constant over the last 5 years

Iron County Crashes (2019-2023)

Crash Severity	Crashes	
	#	%
Fatal	39	1%
Suspected Serious Injury	192	4%
Suspected Minor Injury	631	12%
Possible injury	719	14%
No Injury / Property Damage Only	3,604	70%
Total	5,185	100%



❖ Nearly 30% of all crashes in Iron County occur in I-15

30% of all Iron County crashes occur on I-15

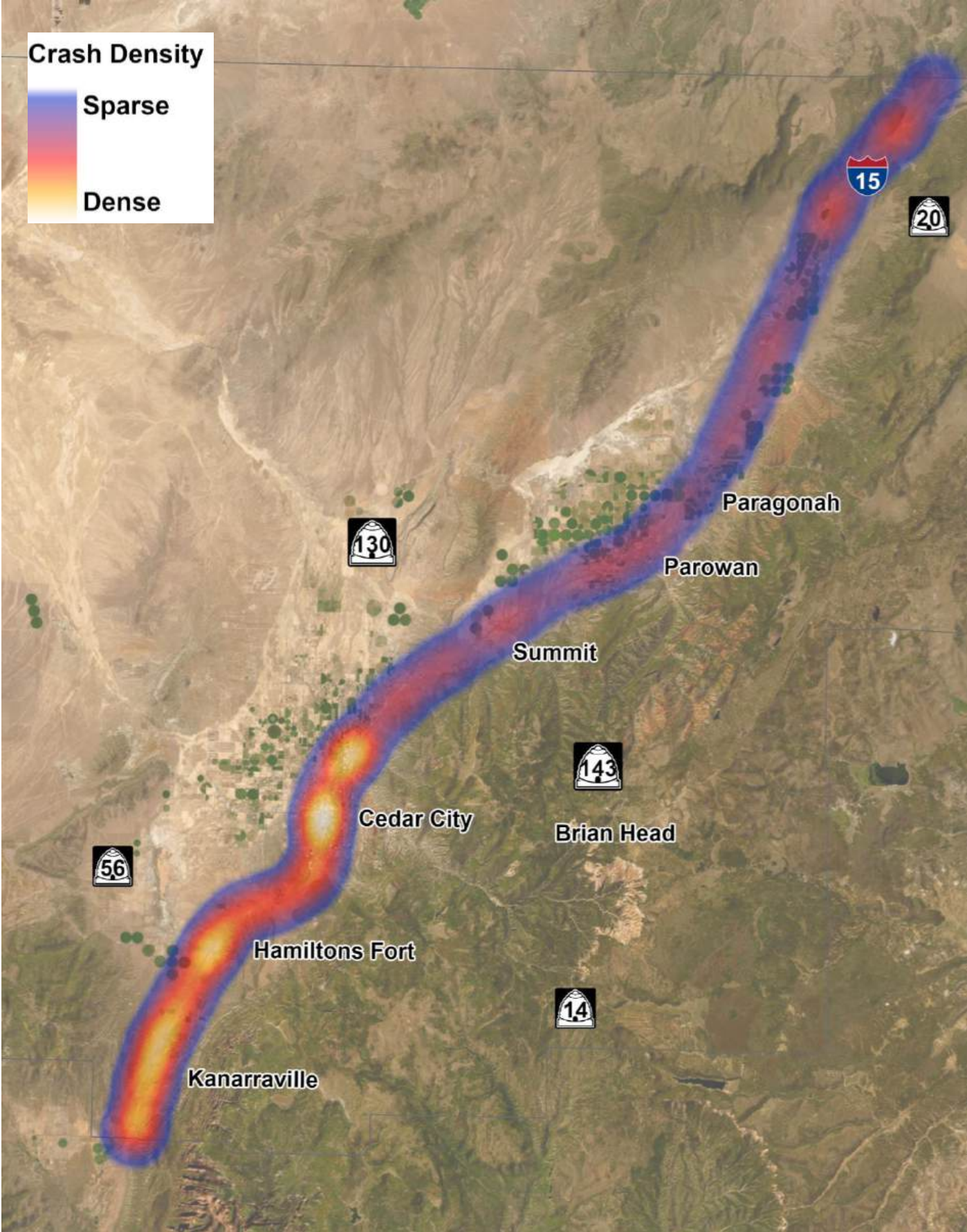
Approximately 60 miles of Interstate 15 (I-15) travel through Iron County. I-15 from milepost 42 to milepost 101 connects the jurisdictions throughout Iron County and other southern Utah destinations like Saint George.

The interstate is a divided facility with median barriers and guardrails in few sections. The speed limit ranges from 75 to 80 miles per hour.

The section of I-15 to the right shows the crash density of crashes that have occurred between 2019 and 2023.

I-15 Crash Severity (2019-2023)

Crash Severity	Total Crashes		% of Iron County Crashes
	#	%	
Fatal	16	1%	41%
Suspected Serious Injury	45	3%	23%
Suspected Minor Injury	156	11%	25%
Possible injury	206	14%	29%
No Injury / Property Damage Only	1,061	71%	29%
Total	1,484	100%	29%



FATAL & SERIOUS INJURY CRASHES

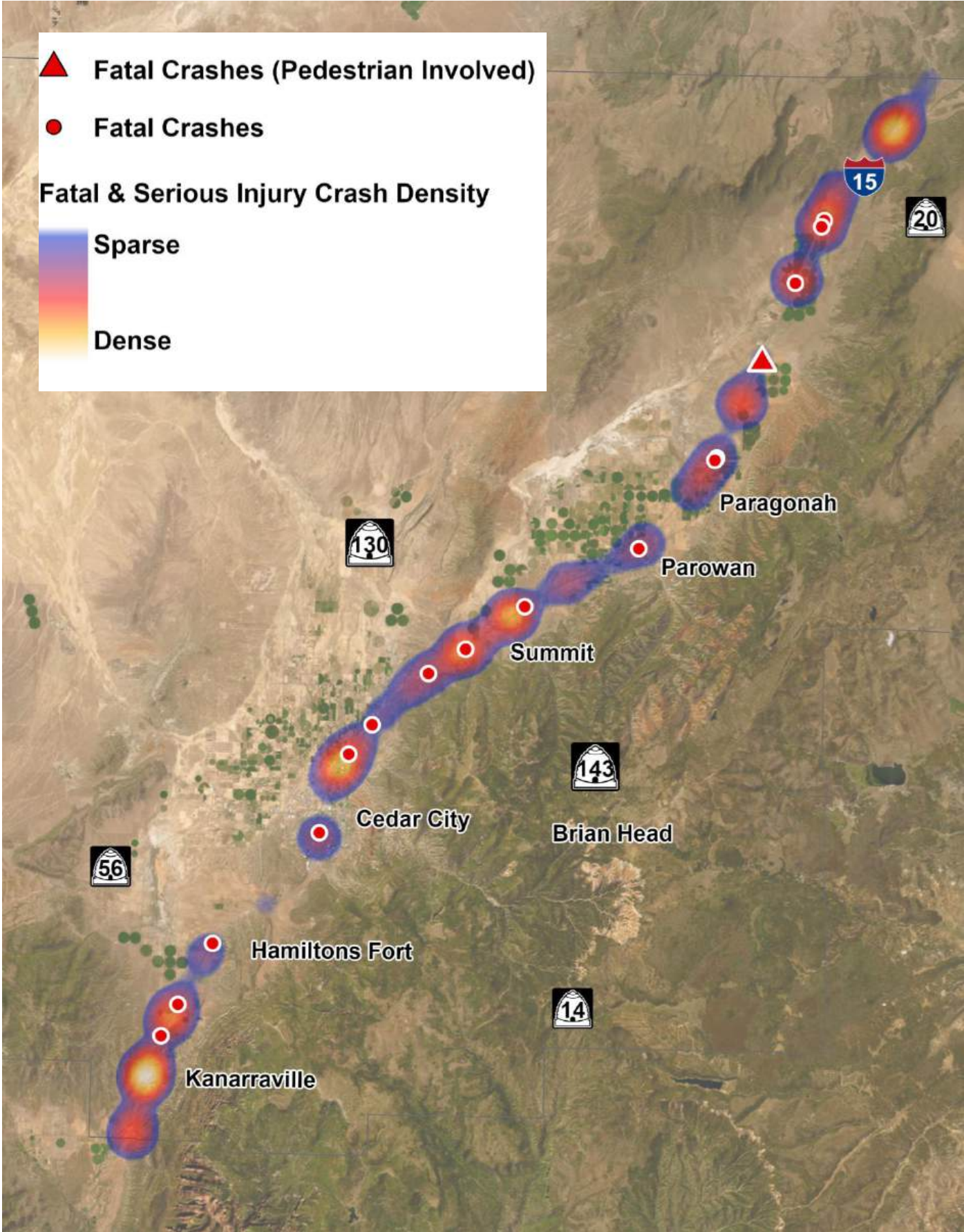
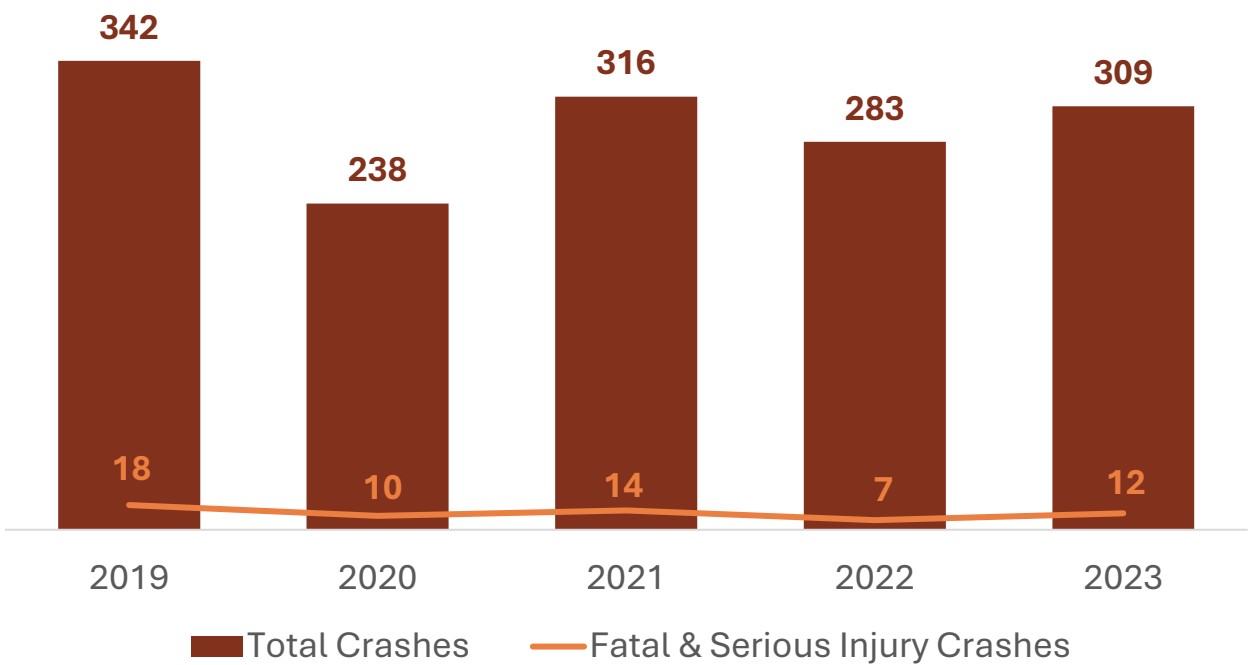
I-15



1 in 4 Fatal or Serious Injury Crashes in Iron County occur on I-15

- ❖ The map to the right shows the density of fatal and serious injury crashes, highlighting the locations of fatal crashes
- ❖ One pedestrian fatality occurred in the early morning and involved a DUI
- ❖ All motorcycle fatal and serious injury crashes occurred between Enoch and Parowan
- ❖ 26% of fatal and serious injury crashes involved heavy trucks
- ❖ 16% of fatal and serious injury crashes involved distracted driving
- ❖ 3 of the 61 fatal and serious injury crashes were DUI involved

Annual Crashes (2019-2023) on I-15

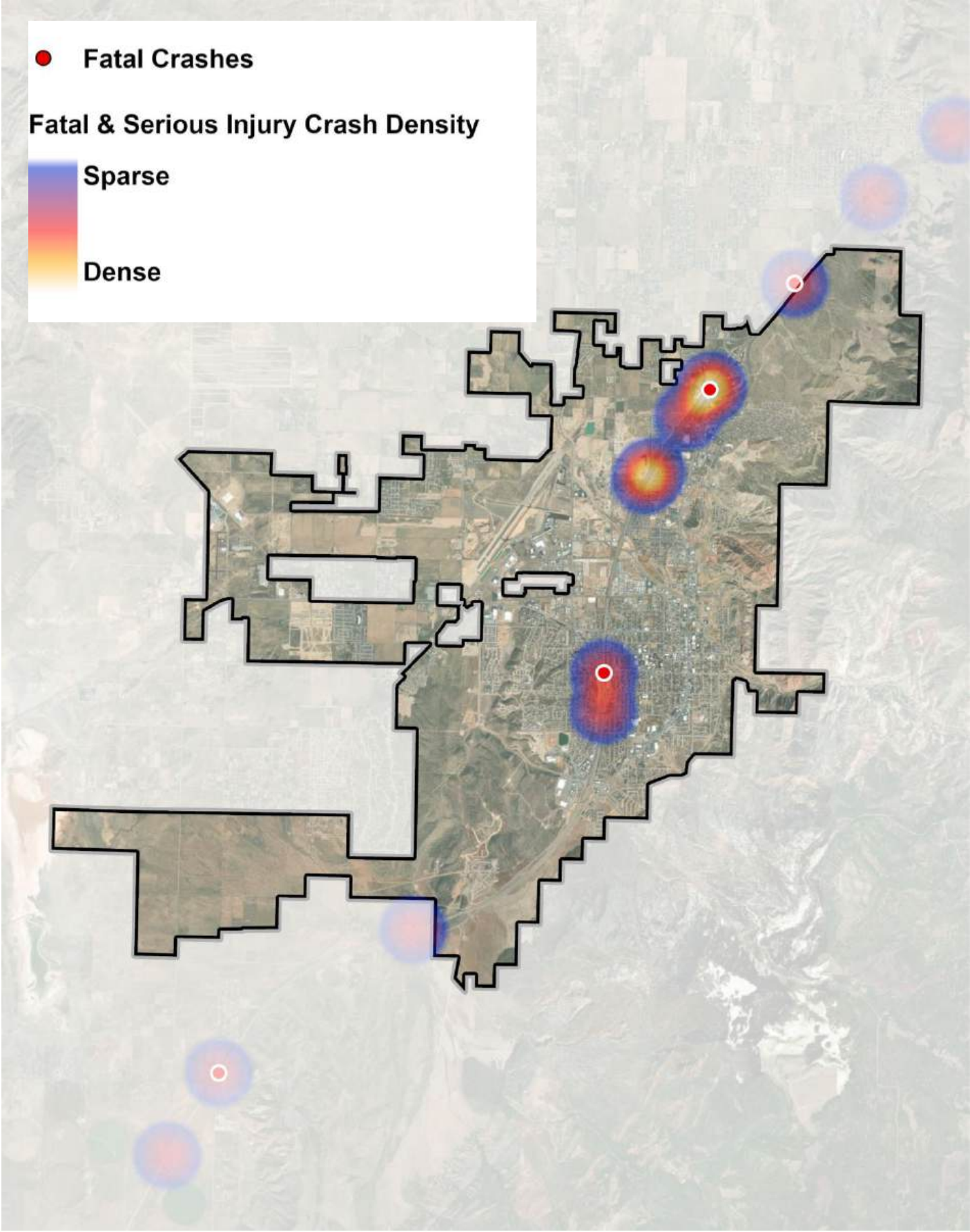


Nearly 25% of crashes on I-15 occur in Cedar City

- ❖ Over 10% of the fatal and serious injury crashes on I-15 occurred in Cedar City.
- ❖ The density of fatal and serious injury crashes surrounding Cedar City are shown to the right, with the fatal crashes highlighted.
- ❖ The most severe crashes occur at the interchanges.

I-15 Crashes by Jurisdiction (2019-2023)

Jurisdiction	Total Crashes		Fatal & Serious Injury Crashes	
	#	%	#	%
Cedar City	340	23%	7	11%
Enoch City	46	3%	1	2%
Parowan Town	31	2%	2	3%
Paiute Tribe	44	3%	1	2%



REPLICA

Identifies higher risk roadways by analyzing driver behavior, road usage, and community demographics.

- Data source:** Michelin Mobility Intelligence (MMI) (i.e., cellular and GPS data)
- Represents:** Identifies and prioritizes high-risk corridors based on different driving metrics.
- Example Data:** Phone handling, sudden braking, suspected collisions, and speeding events.
- ❖ On approximately 20 miles of I-15, from milepost 51 to milepost 71, Replica identified an elevated risk of speeding, phone handling, and sudden braking.
 - ❖ Risk scores of at least 80 of 100 points represent a high risk and are highlighted in red to the right.
 - ❖ Sudden braking was also prevalent at both Cedar City interchanges (Exit 59 and 57).
 - ❖ One component of the SAP is to identify areas with safety risks and proactively address issues



HISTORIC CRASH TRENDS

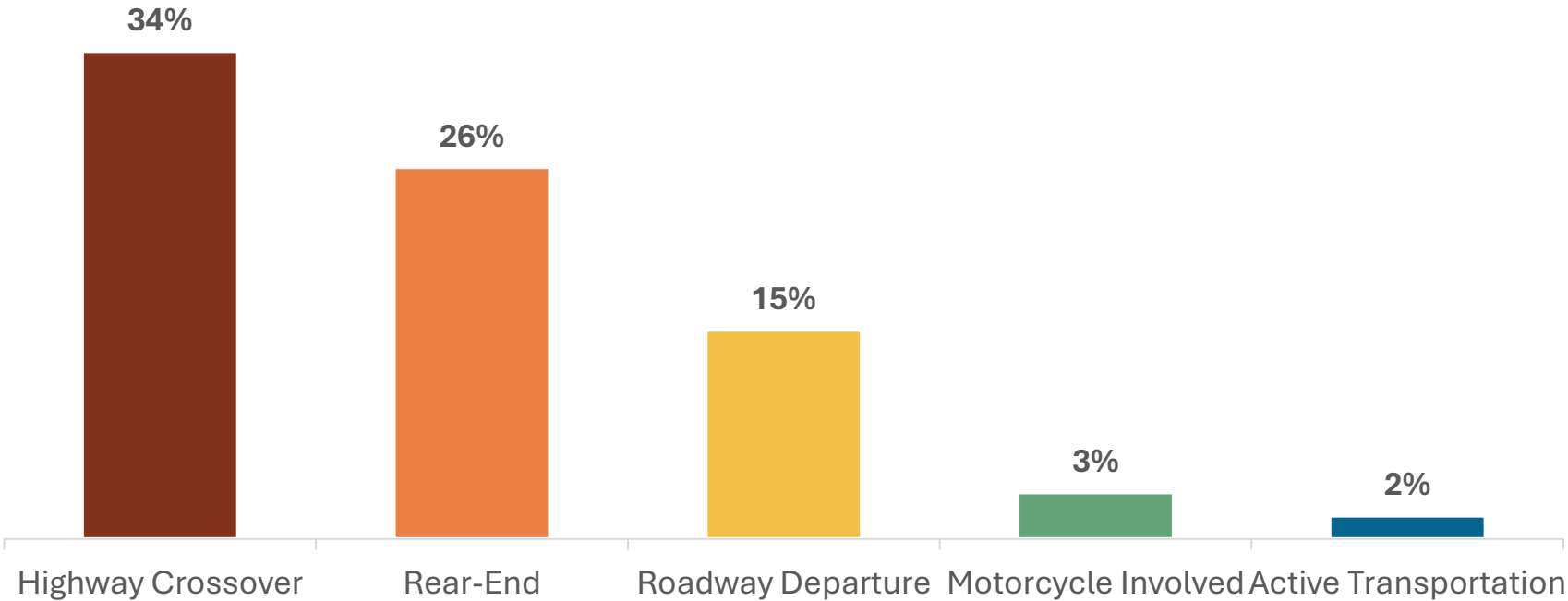
I-15



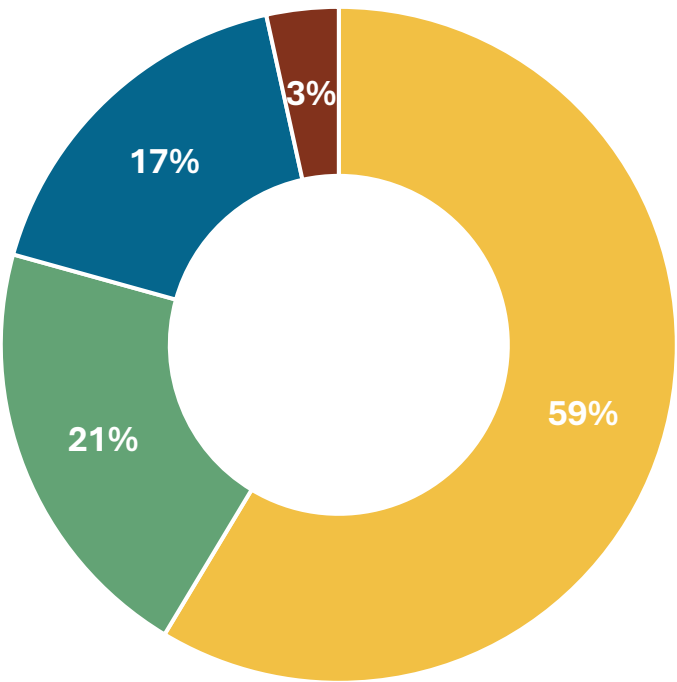
16 fatal of crashes occurred on I-15 between 2019-2023

- ❖ 44% of fatal crashes and 31% of serious injury crashes involved highway crossovers
- ❖ 38% of fatal crashes and 24% of serious injury crashes involved vehicle overturns/rollovers
- ❖ 50% of roadway departure crashes occurred in dark, not lighted conditions
- ❖ Most overturn/rollovers occurred between Cedar City and Parowan

Manner of Collision – Fatal & Serious Injury Crashes

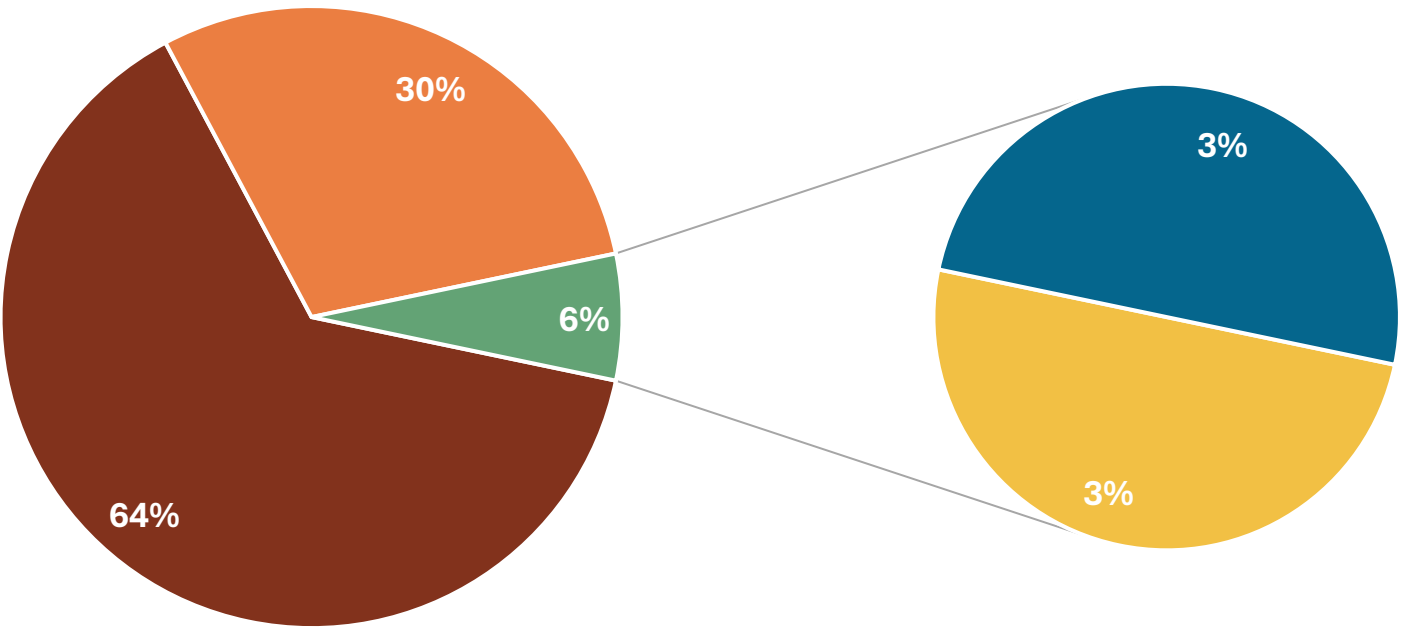


Crash Types – Fatal & Serious Injury Crashes



Front to Rear
Angle
Sideswipe
Parked Vehicle

Lighting Conditions – Fatal & Serious Injury Crashes



Daylight
Dark - Not Lighted
Dawn
Dusk

Historical Crashes



“A plan to provide local governments the means to make strategic roadway safety improvements”

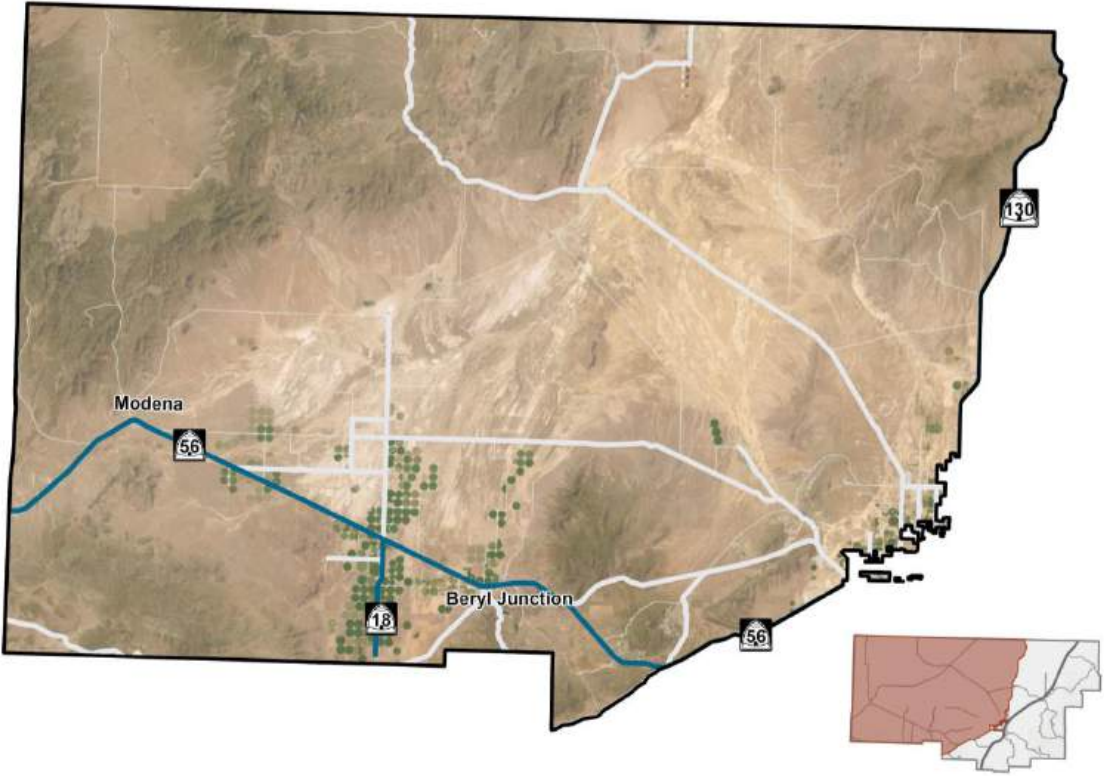
Iron County, in partnership with surrounding communities, is preparing a county-wide Safety Action Plan (SAP). The SAP will present a **holistic, well-defined strategy** to **reduce roadway fatalities and serious injuries** for all of Iron County.

The SAP will **analyze** safety needs, **identify** high-risk locations and factors contributing to crashes, and **prioritize** strategies to address them.

The SAP will meet eligibility requirements that allow local jurisdictions to apply for **Implementation Grants** from the United States Department of Transportation (USDOT) Safe Streets and Roads for All (SS4A) discretionary grant program. The grant program was established by the Bipartisan Infrastructure Law (BIL) with \$5 billion in appropriated funds, 2022-2026. A SAP must include the following elements, as specified by FHWA to satisfy eligibility requirements to apply for an implementation grant:

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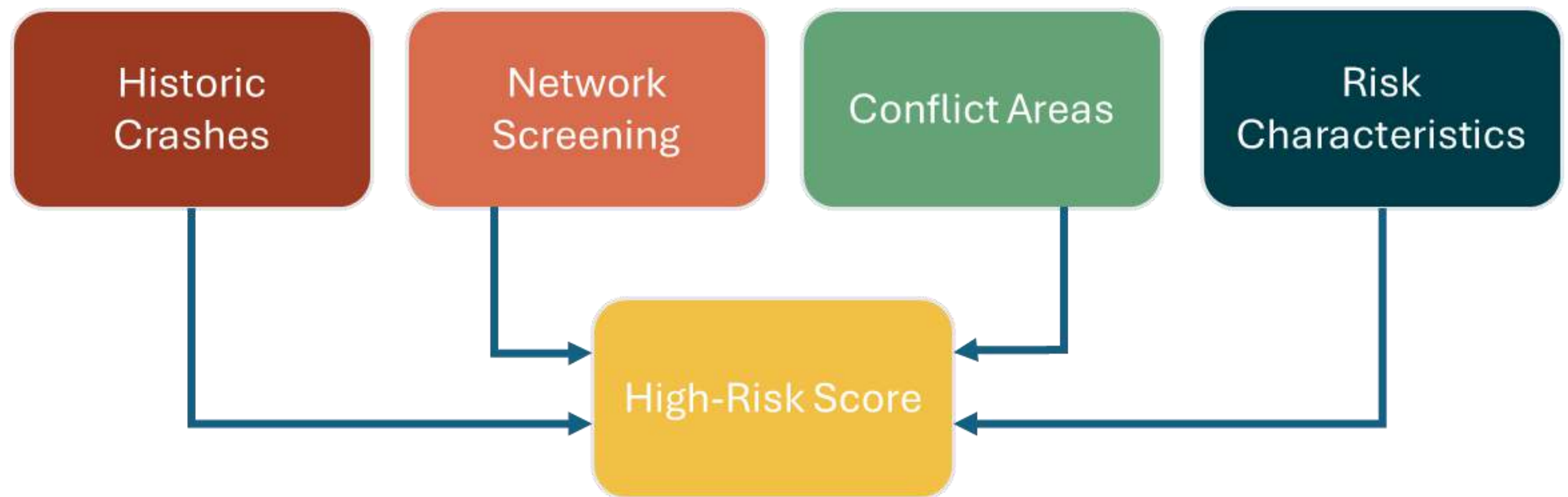
Self-Certification Checklist

Plan must include the following:

- ☐ **Safety Analysis**
 - ☐ Existing conditions and historical trends
 - ☐ Crashes by location, severity, and contributing factor
 - ☐ Systemic and specific safety needs
 - ☐ Geospatial identification of higher risk locations
- ☐ **Identification of comprehensive set of projects and strategies**

...And must complete 4 of the 6 elements to the right:

- | | |
|--|--|
| <div>1. Leadership Commitment<ul style="list-style-type: none"><input type="checkbox"/> Governing body publicly commit to a zero fatalities and serious injury goal</div> | <div>4. Equity<ul style="list-style-type: none"><input type="checkbox"/> Data-driven, inclusive, and representative processes</div> |
| <div>2. Plan Development<ul style="list-style-type: none"><input type="checkbox"/> Committee charged with plan development, implementation, and monitoring</div> | <div>5. Policies, Plans, Guidelines, and/or Standards<ul style="list-style-type: none"><input type="checkbox"/> Assessment of policies, plans, guidelines, and/or standards</div> |
| <div>3. Development Activities<ul style="list-style-type: none"><input type="checkbox"/> Engagement with public and relevant stakeholders</div> | <div>6. Progress<ul style="list-style-type: none"><input type="checkbox"/> Description on how progress will be measured over time</div> |





Identifies higher risk roadways by analyzing driver behavior, road usage, and community demographics.

- Data source:**

Michelin Mobility Intelligence (MMI) (i.e. cellular and GPS data).
- Represents:**

Identifies and prioritizes high-risk corridors based on different driving metrics.
- Example Data:**

Phone handling, sudden braking, suspected collisions, and speeding events.



Assigns road segments a 1–5-star rating based on the roadway’s safety features and characteristics to identify hazardous road sections.

- Data source:**

Video footage analyzed in 100-meter segments.
- Represents:**

Safety of road segments for drivers, bicyclists, and pedestrians based on roadway design, features, and characteristics.
- Example Data:**

Traffic volume, speed, lighting, shoulder conditions, rumble strips, access density, roadway geometry, etc.



Historic Crashes

Based on...	Historic Crashes, 2019-2023
Analyzes...	Crashes per mile or traffic volumes
Results in...	1. High Crash Network 2. High Injury Network

Conflict Areas

Based on...	Replica Safe Streets Planner
Analyzes...	Roadways by high-risk areas
Results in...	Replica Conflict Network

Network Screening

Based on...	Historic Crashes, 2019-2023
Analyzes...	Roadways and intersections by expected vs. actual crash rates
Results in...	Critical Crash Rate Network

Risk Characteristics

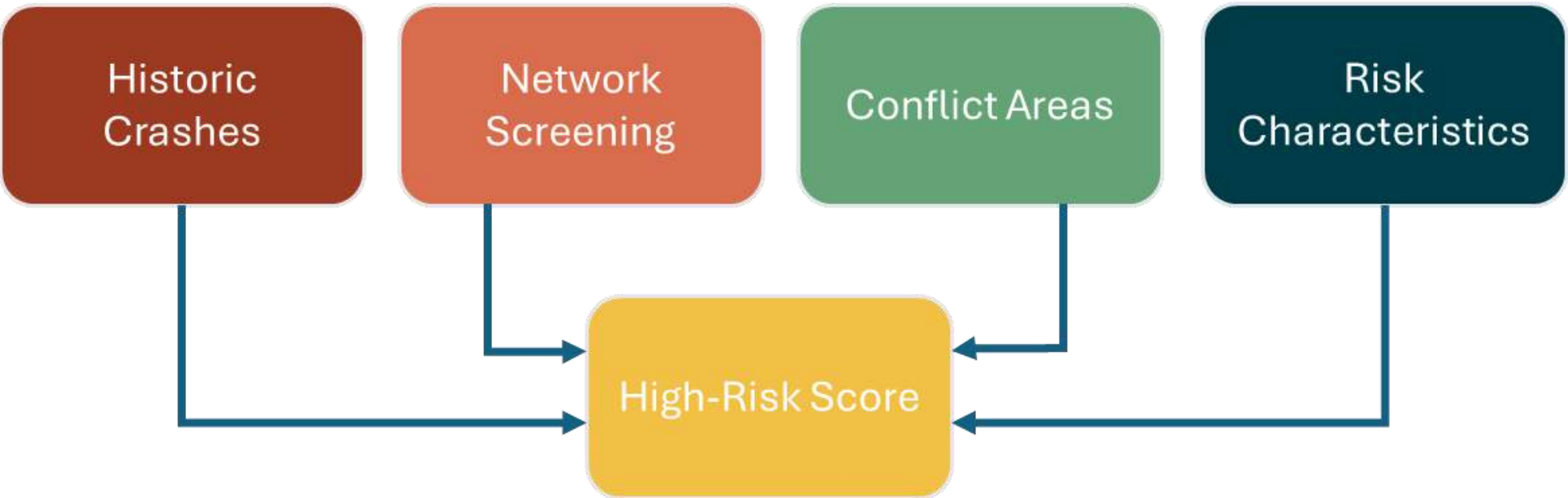
Based on...	usRAP Roadway Data
Analyzes...	Roadways by design and physical characteristics
Results in...	1. usRAP Network (star rating) 2. Crash Profile Risk Network



Each safety analysis methodology identified locations that are **candidates for safety improvements** to reduce fatalities and serious injury crashes.

To provide focused information for jurisdictional decisions regarding **prioritization of safety improvements**, a **Risk Score** (0 to 5), was assigned to the transportation network. Any location with a positive Risk Score may be considered for safety improvements. Locations with a Risk Score of **“3”** or greater are to be prioritized in the **High-Risk Network**.

A map of the resulting High-Risk Network is provided on page 6, pages 7 and 8 provide a detailed list of the top priority locations (roadway segments and intersections).



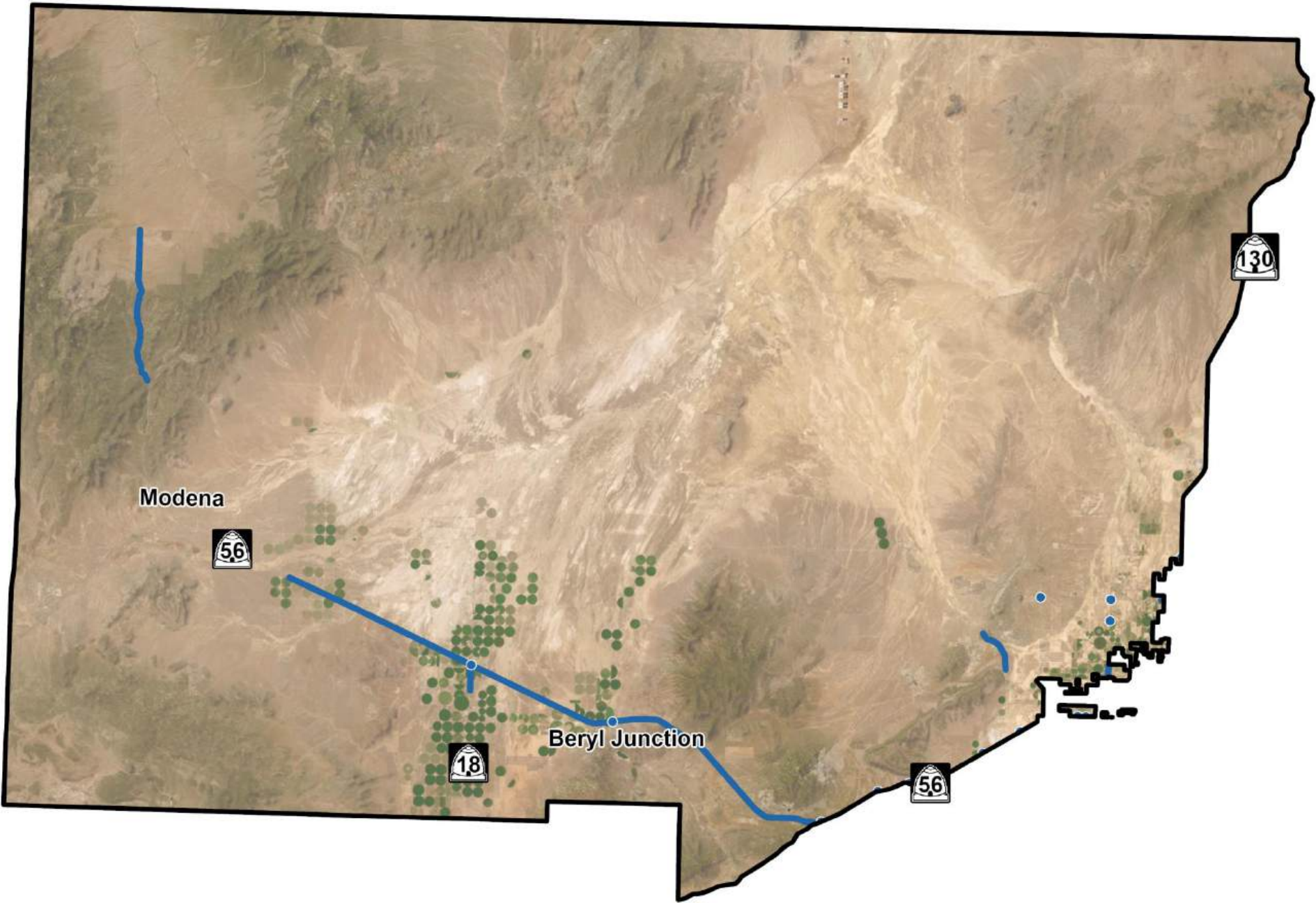
High Risk Category	Safety Analysis	Scoring Criteria	Risk Score	Page #
Historical Crashes	High Crash Network	Highest number of crashes per miles	1	11
	High Injury Network	Highest number of fatal and injury crashes per mile	1	12
	Critical Crash Rates	Positive critical crash rate differential	1	13
Network Screening	Replica - Speeding Areas	Speeding conflict risk score of 80+	1	14
	Replica - Non-Speeding Areas	Non-speeding conflict risk score of 80+		15
	Replica - Active Transportation Areas	Active transportation conflict rick score of 80+		16
Conflict Areas	Crash Profile Risk	Crash Profile Risk score of 60+	1	17
Risk Characteristics	usRAP Vehicle Star Rating	Star Rating of 1 - 2		
	usRAP Pedestrian Star Rating	Star Rating of 1 - 2		
	usRAP Bicycle Star Rating	Star Rating of 1 - 2		

Maximum High-Risk Score* 5

High-Risk Score

*See Supporting Information for more details on each scoring criteria

 Roadway Segment
 Intersection



High-Risk
Network



Roadways				Safety Analysis									
Roadway	Extents	Length (miles)	Functional Classification	High Crash Network	High Injury Network)	Critical Crash Rate	Replica Speeding	Replica Non Speeding	Replica Active Transportation	Crash Profile Risk	usRAP Vehicle Star Rating	usRAP Pedestrian Star Rating	usRAP Bicycle Star Rating
State Routes													
SR 56	National Forest Road to Main Street	12.3	Minor Arterial	X		X	X	X	X	X	X		
SR 56	Main Street to 3200 north	15.9	Minor Arterial	X		X	X			X	X	X	
SR 18	800 South to SR 56	1.3	Minor Arterial	X						X	X	X	
Non- State Routes													
Iron Springs Road	Desert Mound Road to Comstock Road	2.3	Major Collector	X		X							
3100 West	1775 North to 2400 North	0.8	Major Collector	X	X								
Modena Canyon Road	M X Ranch to Hamblin Valley Road	7.3	Local Street	X		X							



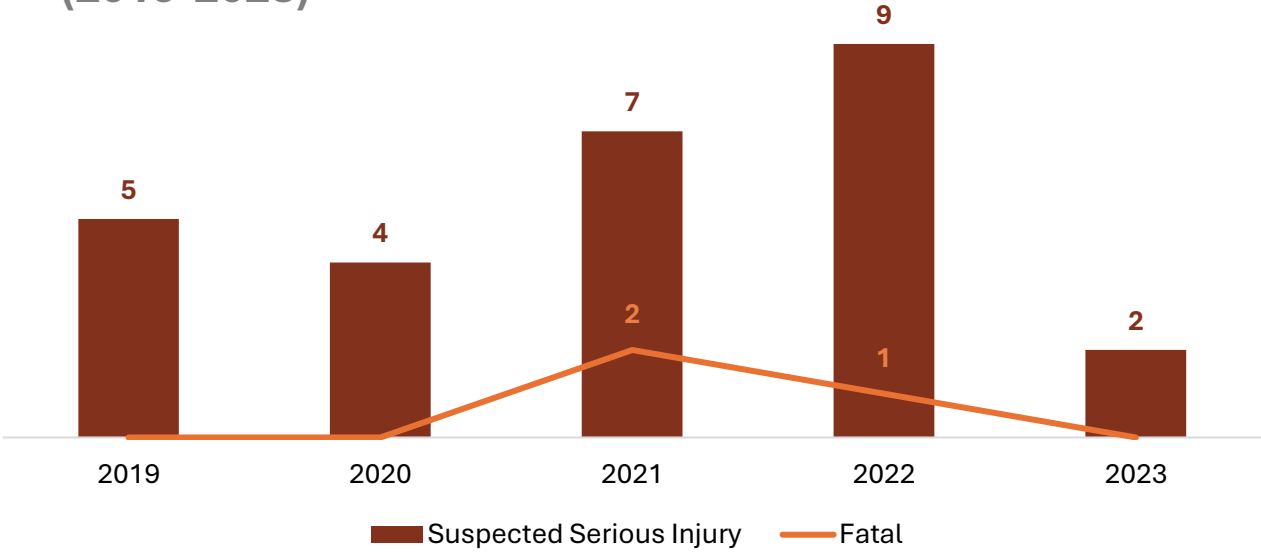
Intersections		Safety Analysis			Supporting Networks						
Intersection	Number of Crashes	High Crash Network	High Injury Network	Critical Crash Rate	Replica Speeding	Replica Non Speeding	Replica Active Transportation	Crash Profile Risk	usRAP Vehicle Star Rating	usRAP Pedestrian Star Rating	usRAP Bicycle Star Rating
Unsignalized Intersections											
SR 18 & SR 56	7	X		X	X			X	X	X	
5700 West & Midvalley Road	3	X	X	X							
3100 West & Midvalley Road	7	X	X	X							
100 North & SR 56	2				X	X	X		X		
100 North & 4000 North	3		X	X							

SUPPORTING INFORMATION

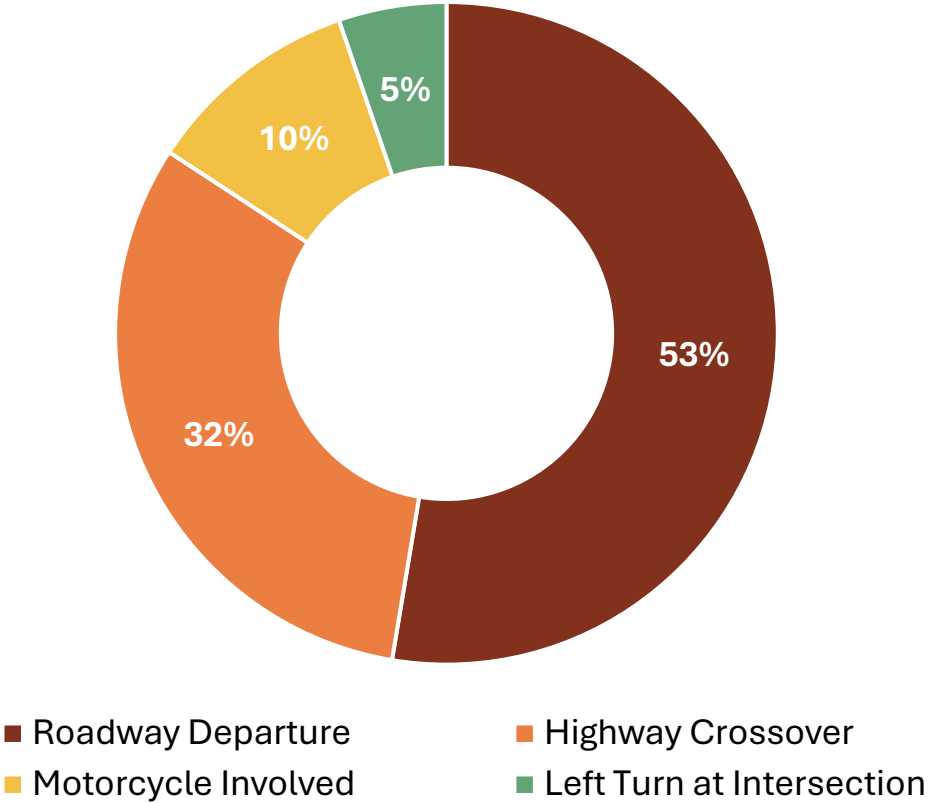


Route Type	State Route		Non-State Routes		Overall Total		% of Iron County
Crash Severity	Crashes		Crashes		Crashes		%
	#	%	#	%	#	%	
Fatal	1	1%	2	1%	3	1%	8%
Suspected Serious Injury	3	3%	24	12%	27	9%	14%
Suspected Minor Injury	12	12%	24	12%	36	12%	6%
Possible injury	16	15%	34	17%	50	16%	7%
No Injury / Property Damage Only	72	69%	122	59%	194	63%	5%
Total	104	100%	206	100%	310	100%	6%

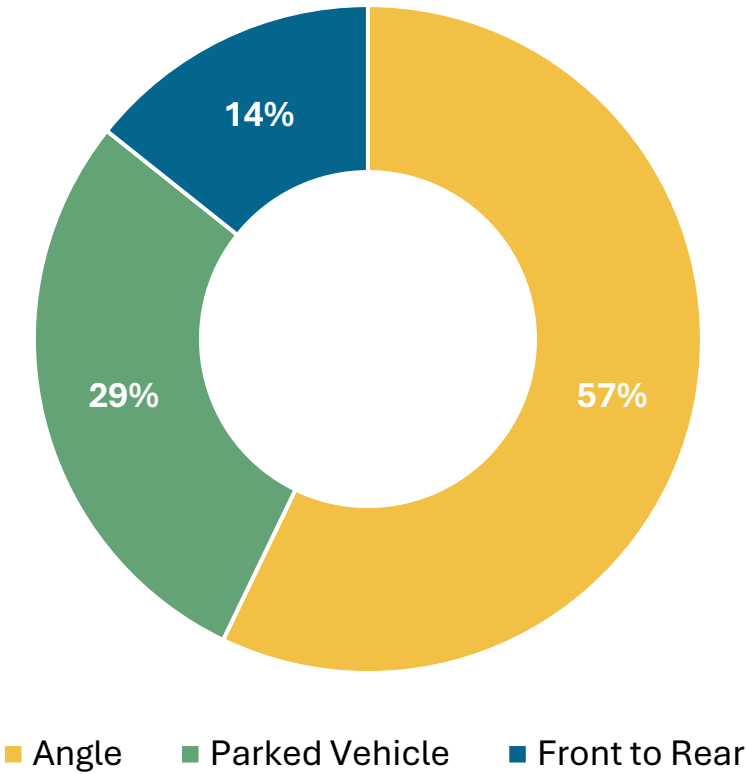
Annual Fatal and Serious Injury Crashes (2019-2023)



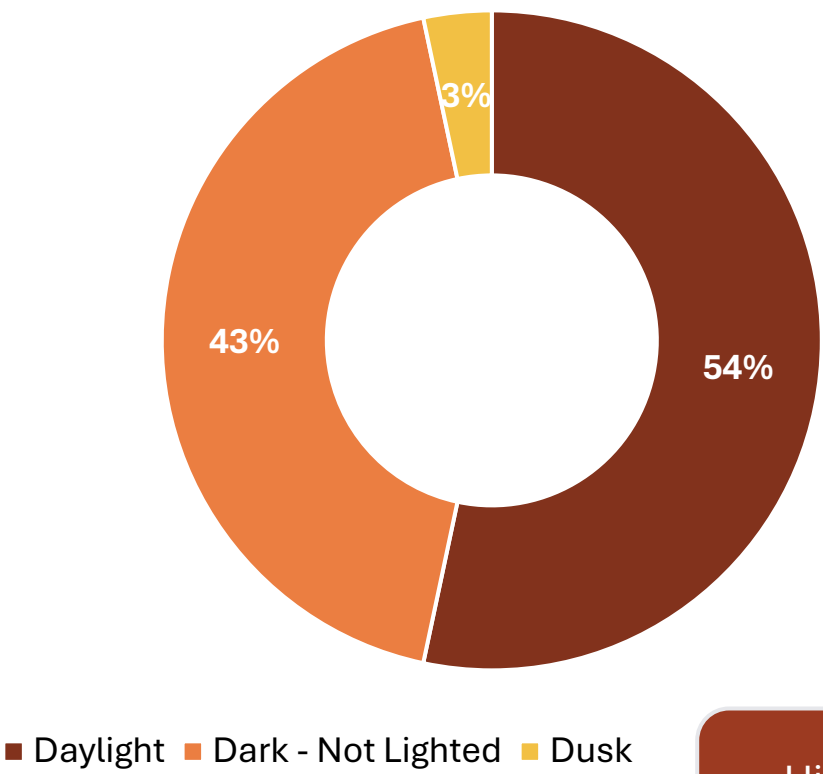
Fatal & Serious Manners of Collision



Top 5 Fatal & Serious Injury Crash Types



Crash Lighting Conditions



Historical Crashes


60% of all West Iron County crashes occur on 10% of the West Iron County GFA’s roadways

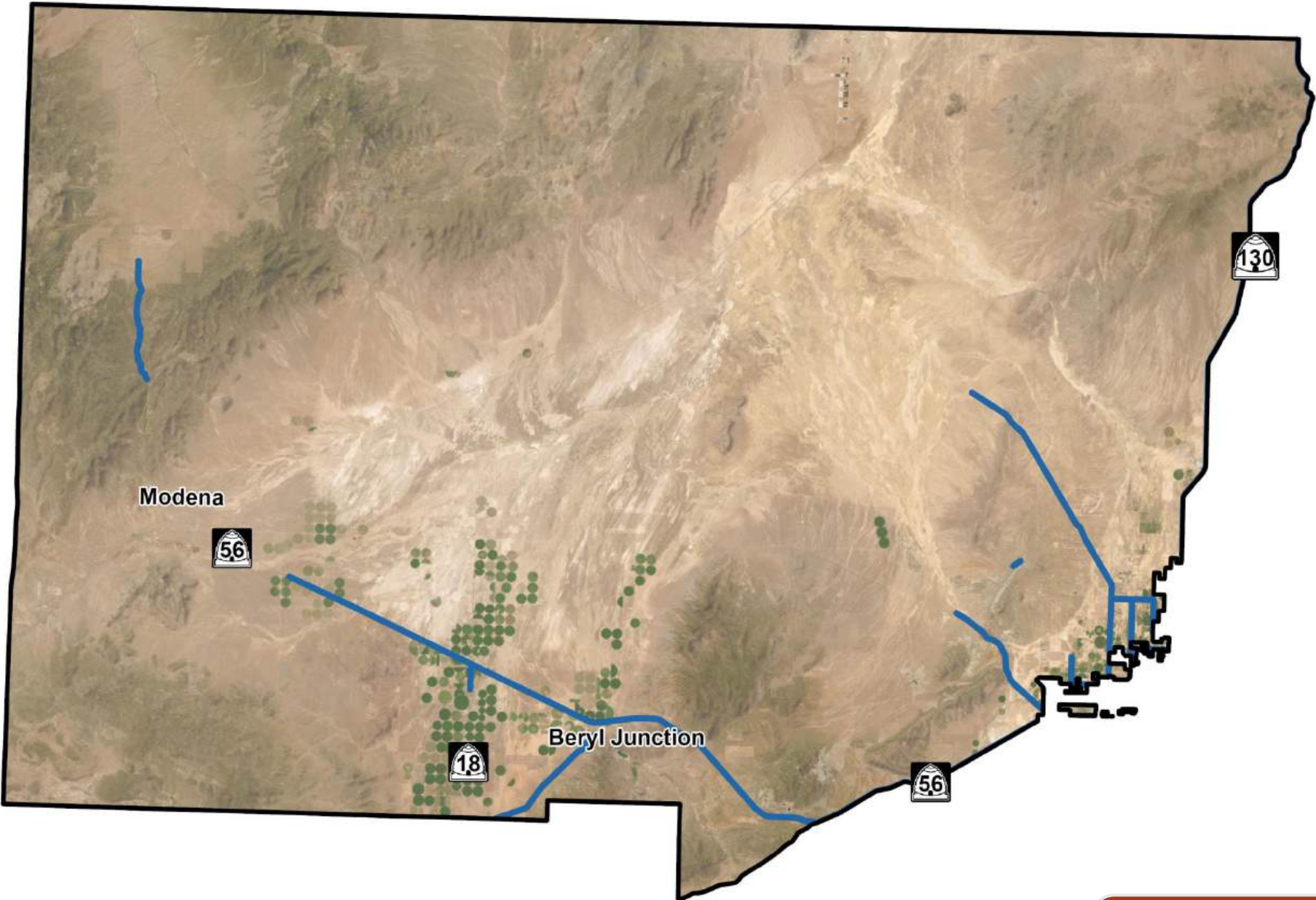
Understanding the types and locations of vehicle crashes is an important part of analyzing the safety conditions of a roadway network.

A component of the SAP is to identify locations with an **elevated risk** of crashes. The initial step of this analysis is to spatially reference crashes that occurred within the GFA. Next, a crash rate of total crashes (all severities) per mile is calculated for each roadway segment. This calculation helps identify frequency of crashes regardless of severity.

The roadway network to the right is identified as the **High-Crash Network**.

The High Crash Network includes roadways on which 40% of all crashes occurred throughout the County.

 High Crash Network



Historic
Crashes

20% of all West Iron County injury crashes occur at 3 of the West Iron County GFA’s intersections

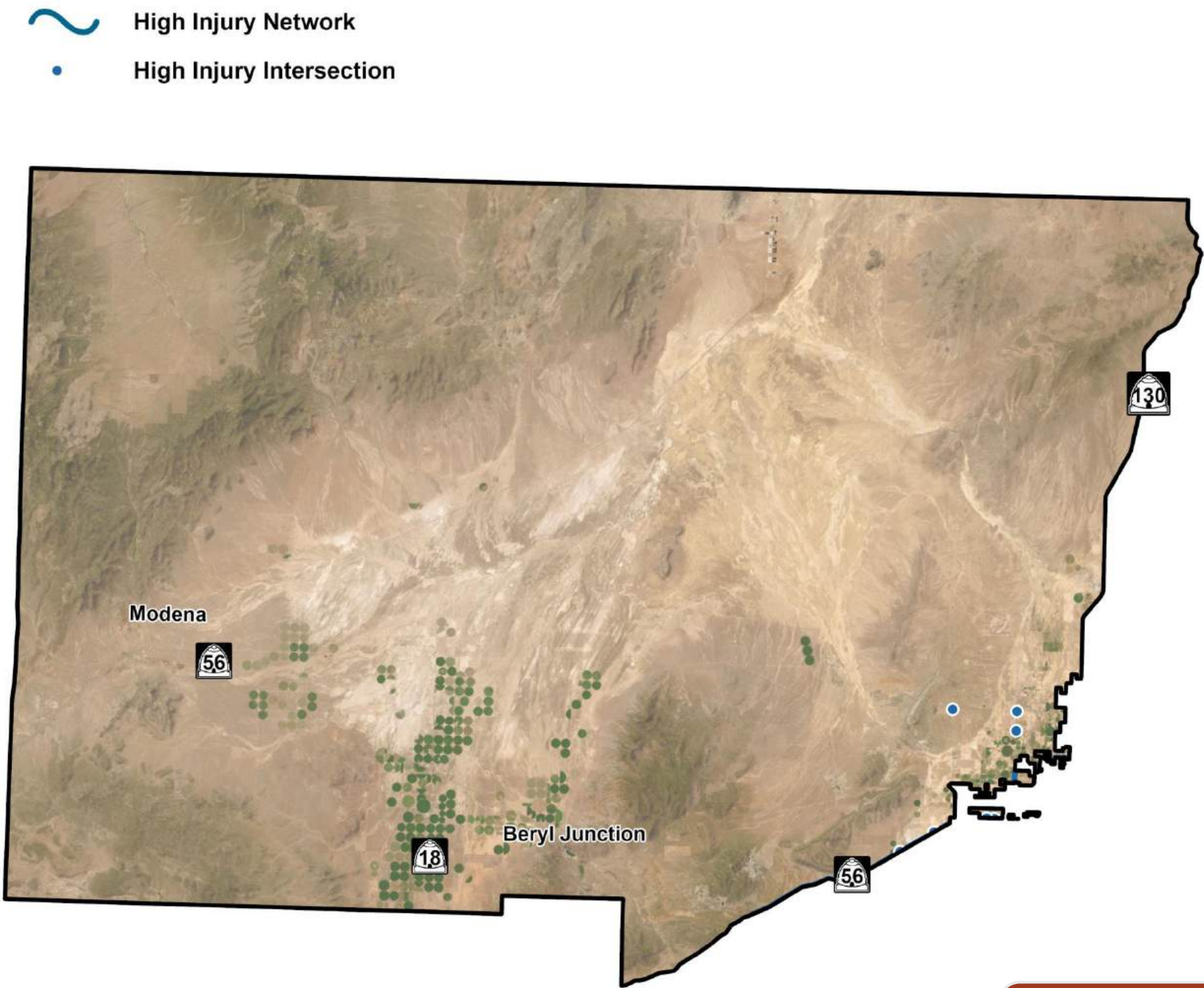
A proactive approach to reducing and eliminating traffic fatalities and serious injuries requires an investigation of the conditions that contribute to severe traffic crashes. The Safe System Approach includes safety strategies and countermeasures that seek to not only reduce the number of crashes that occur but also **reduce the severity** when a crash does occur.

Identifying locations of fatal and injury crashes is a key step in detecting any patterns in the **location** or **characteristics** of roadways or intersections that are potentially impacting the frequency of injury crashes.

A **High-Injury Network** is created by spatially referencing fatal, serious injury, and minor-injury crashes to the roadway and intersection network. An “injury rate” of fatal and injury crashes per mile and per entering vehicles is calculated for each location.

The map to the right shows the **High-Injury Network**, which represents the roadways and intersections on which 60% of fatal and injury crashes in the County have occurred.

Note, the roadway segments and intersections identified in both the high crash and high injury networks represent locations with the highest crash rates. Locations may be combined to illustrate more complete corridors.



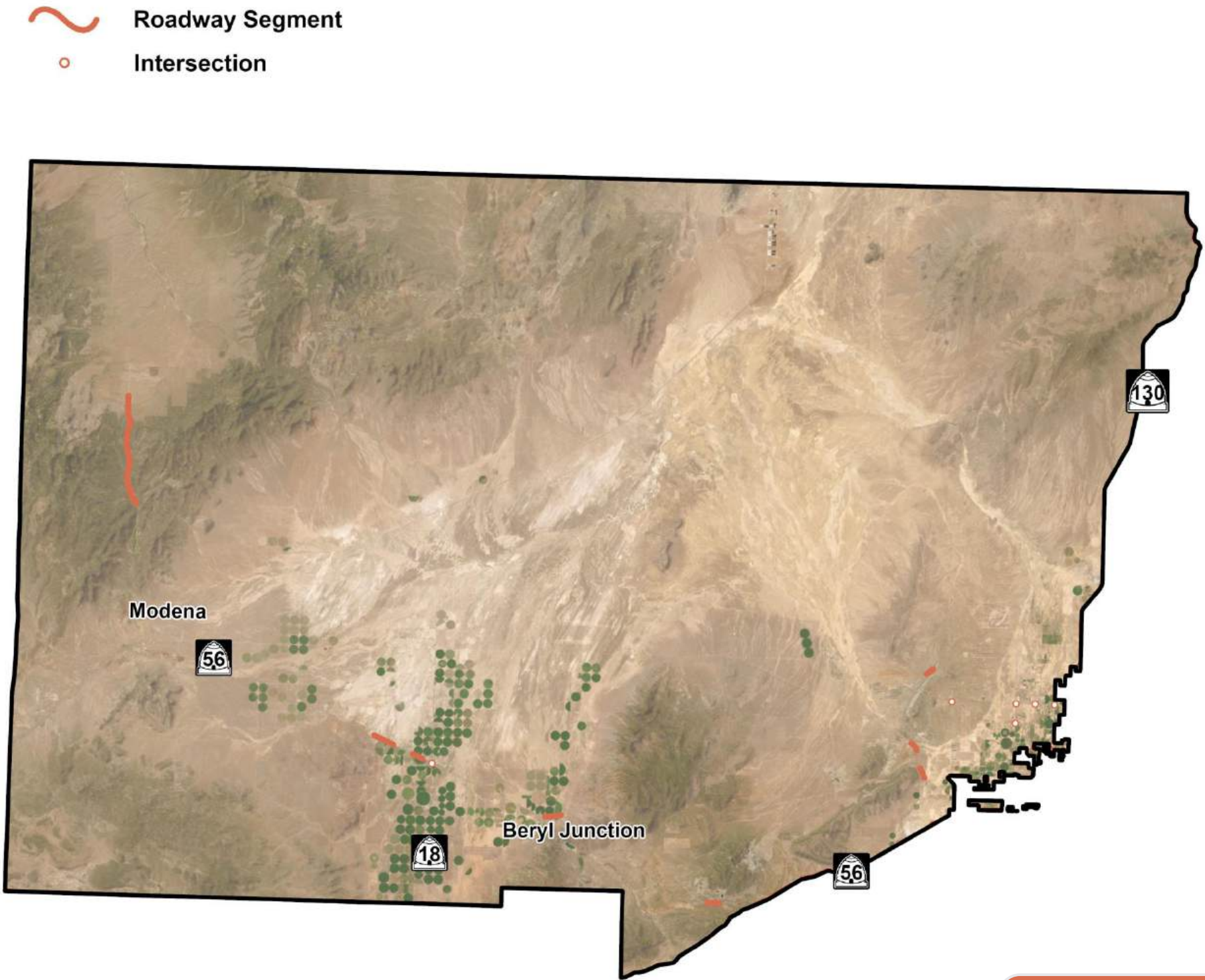
Historic Crashes

Locations where historic crashes have exceeded expected crash rates based on similar characteristics

The Critical Crash Rate (CCR) analysis compares the **observed** crash rate of a location to the **expected** crash rate based on similar locations with similar traffic volumes. Each GFA was analyzed individually to calculate CCRs specific to the GFAs demographics and facilities.

A location with a **positive** CCR indicates higher-than-expected crash rates and a potential for safety improvement. The higher the CCR value, the larger the potential to improve safety at that location.

The map to the right illustrates the **Critical Crash Rate Network** that includes roadway segments and intersections with a potential for safety improvement based on the CCR analysis in the West Iron County GFA.



Network
Screening

Identifying potential conflict and high-risk areas using data from speeding events

Replica is an online data platform that aggregates cellular data provided mobility **patterns** and **trends**. Replica provides a digital application called **Safe Streets Planner** that combines detailed multimodal data with driving event data to identify and prioritize high conflict corridors.

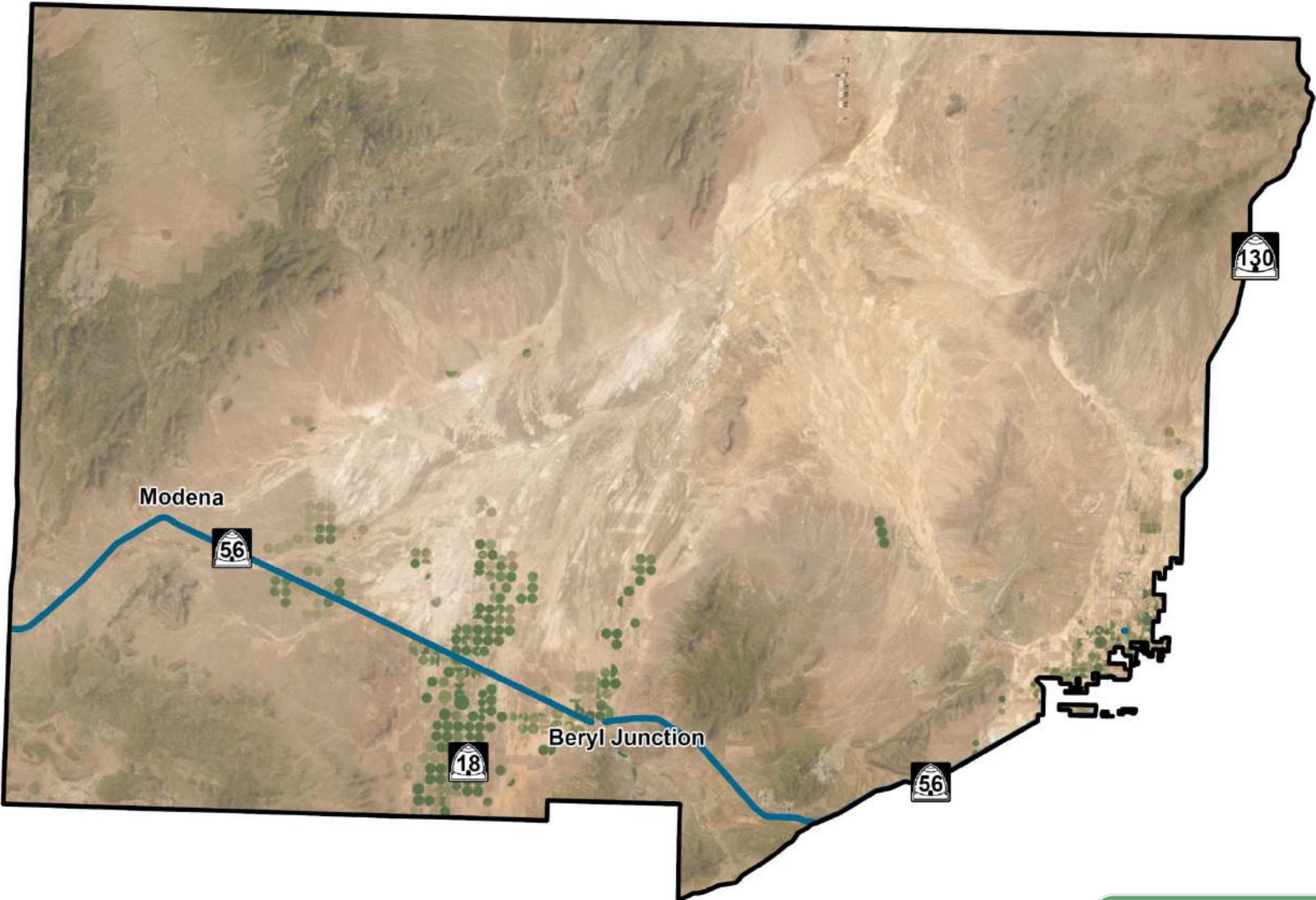
Replica’s cellular data includes indicators of risky behaviors like **speeding**. The number of instances or “events” of risky behaviors is used to calculate a risk score for a roadway. **Risk scores** are calculated to represent the proportion of risky events to the number of total trips on a roadway. Roadways with higher risk scores represent roadways with the most safety conflicts.

The following metrics were isolated in Replica to identify the highest risk roadways in Iron County:

- Speeding
- Non-Speeding Events: Suspected Collisions, Phone Handling (Distracted Driving), and Sudden Braking
- Active Transportation (pedestrians and bicyclist) high-risk corridors

The maximum risk score is 100 points. Roadways with a speeding risk score of 80 or more are included in the **Replica Speeding Conflict Network** shown to the right.

 Replica Speeding Conflicts



Conflict Areas

REPLICA NON-SPEEDING CONFLICT NETWORK WEST IRON CO. GFA



Identifying potential conflict and high-risk areas using data from events such as phone-handling, sudden braking, and suspected crashes

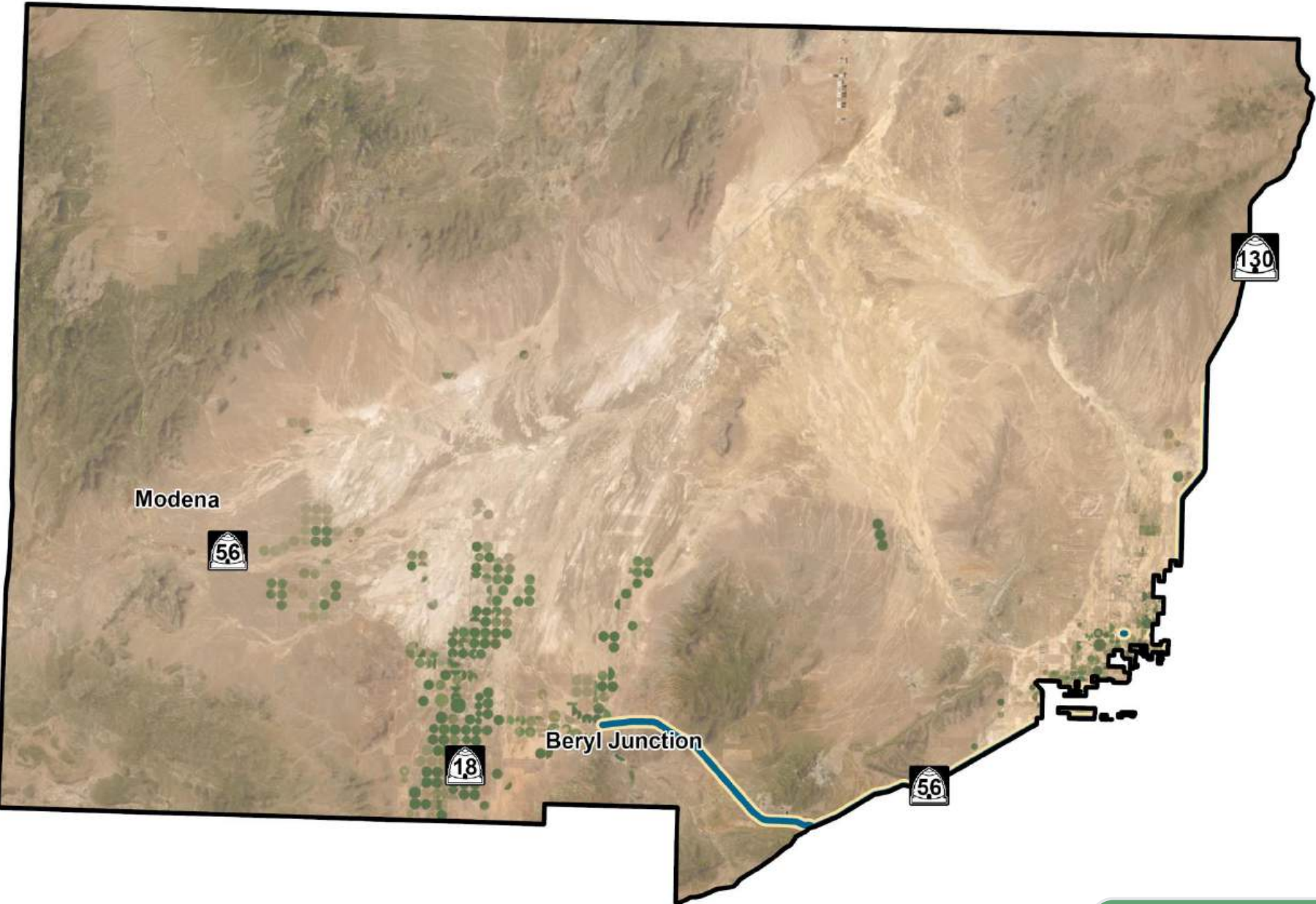
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Replica’s cellular data includes indicators of certain risky behaviors; **speeding, distracted driving, and hard-braking**. The number of instances or “events” of risky behaviors is used to calculate a risk score for a roadway. Risky events captured in the data include phone handling, sudden braking, suspected collisions, and speeding. **Risk scores** are calculated to represent the proportion of risky events to the number of total trips on a roadway. Roadways with higher risk scores represent roadways with the most safety conflicts.

The following metrics were isolated in Replica to identify the highest risk roadways in Iron County:

- Speeding
- Non-Speeding Events: Suspected Collisions, Phone Handling (Distracted Driving), and Sudden Braking
- Active Transportation (pedestrians and bicyclist) high-risk corridors

The maximum risk score is 100 points. Roadways with a risk score of 80 or more in non-speeding events of the Replica metrics analyzed are included in the **Replica Non-Speeding Conflict Network** shown to the right.



Conflict Areas

Evaluation of roadway characteristics contributing to risk based on locations of historic crashes

The **Crash Profile Risk Assessment** reviewed fatal and serious injury crashes reported in Iron County to identify attributes that correspond to a higher frequency of fatal and serious injury crashes.

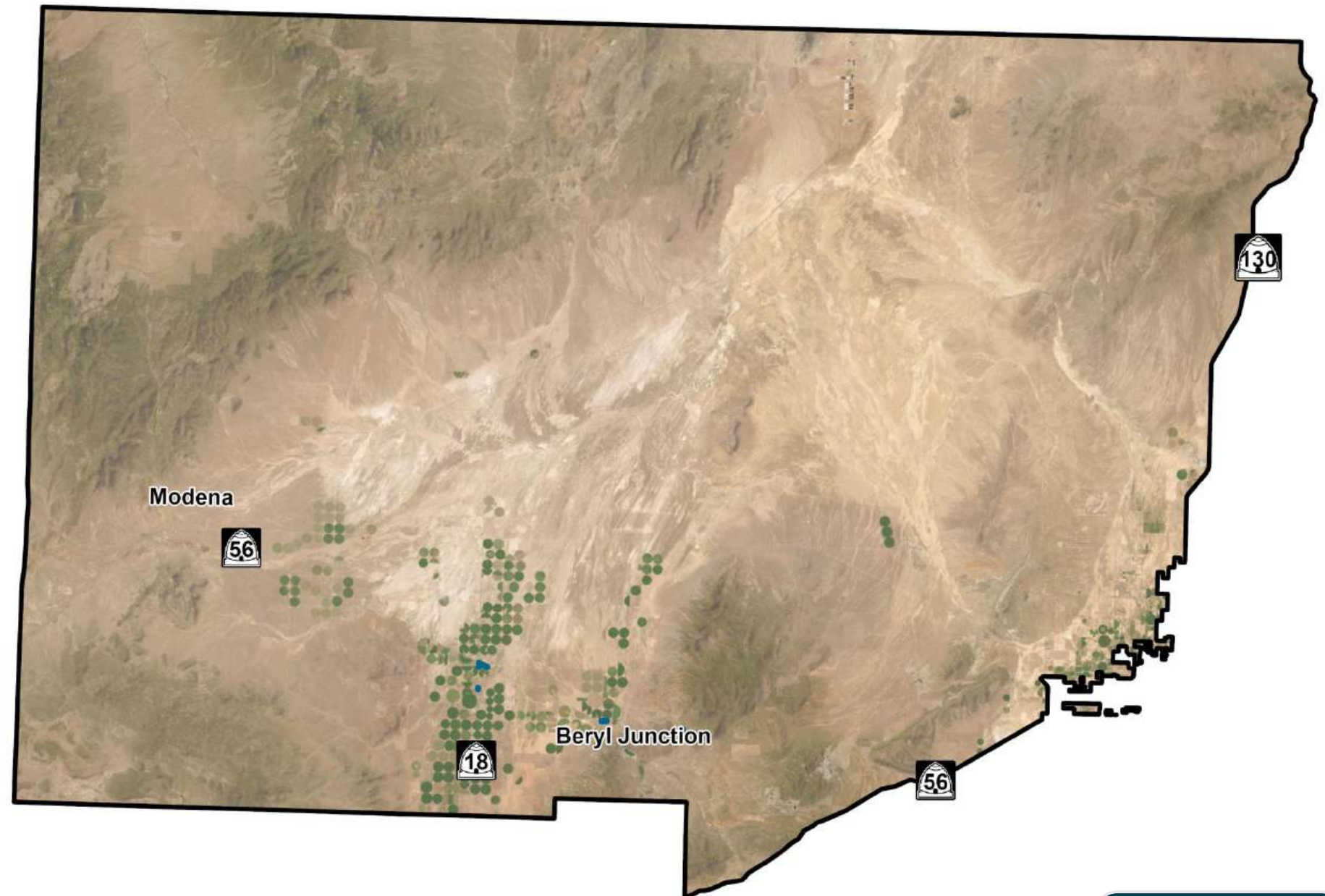
Characteristics considered include:

- Traffic volumes
- Speed limits
- Roadway cross-section
- Lighting condition
- Access Density
- Rumble strips
- Paved shoulder
- Roadside hazards
- Roadway Geometry (curves)

The crash profile risk score, has a maximum value of 100 points. A roadway segment with a score of 60 or higher is a candidate for safety improvements.

The **Crash Profile Risk Network** of the highest scoring roadway segments is shown to the right.

Crash Profile Risk Network



Risk
Characteristics

A risk rating based on the design and traffic control attributes of the roadway

The United States Road Assessment Program (**usRAP**) is a proactive tool for analyzing the safety of a roadway.

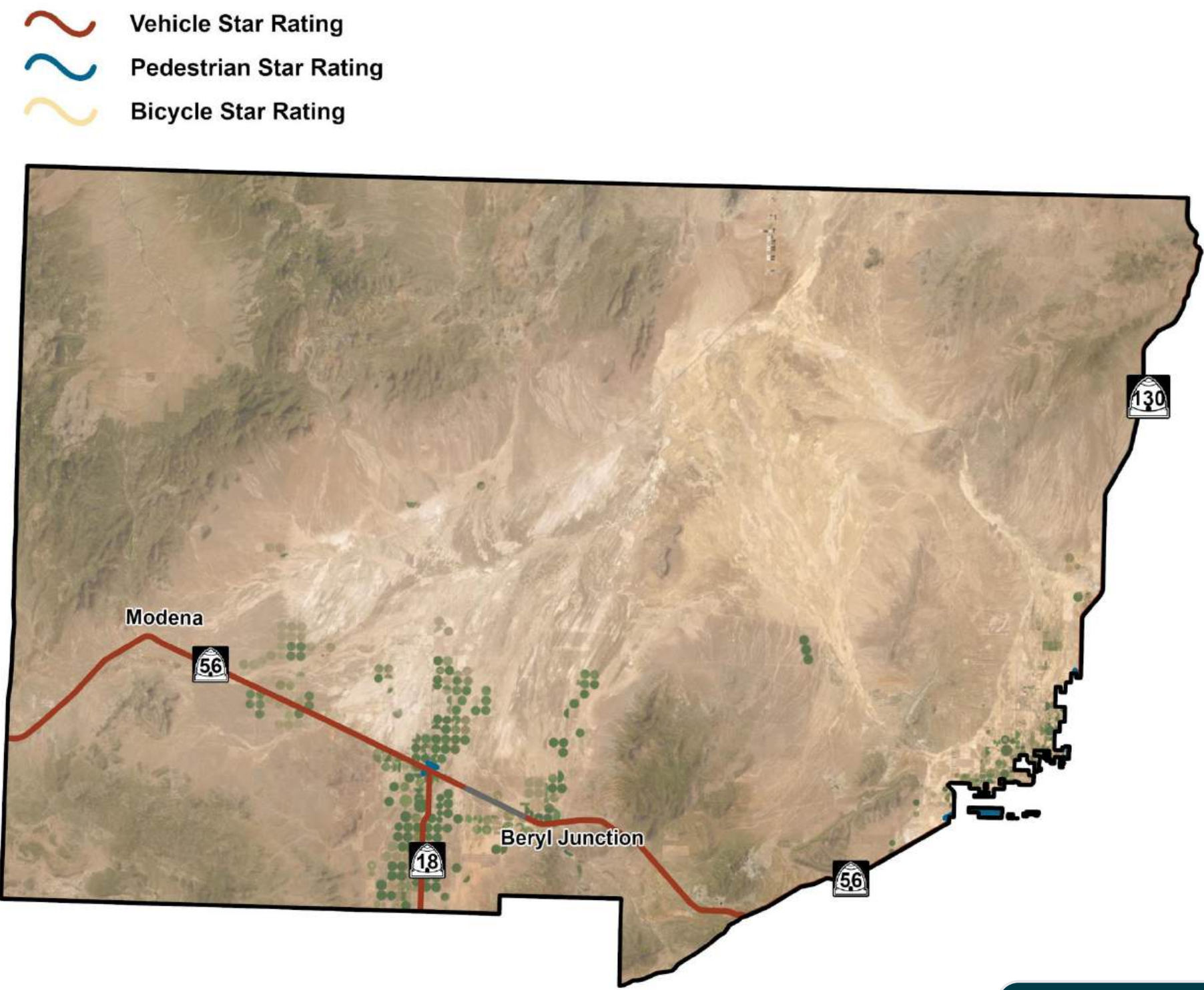
Star ratings are assigned to each segment of the roadway network. Only State Highways are included in the roadway network for this data set. Star ratings consider road infrastructure attributes known to impact the likelihood of a crash and its severity. Attributes include roadway type, width, shoulders, speed limit, traffic volumes, etc.

The roadway’s star rating is based on the presence or absence of these design and traffic control features.

5-star roadways have the **most** safety-related design and traffic control features. **1**-star roadways have the **fewest** safety-related design and traffic operational features.

Star ratings are assigned for a vehicle , pedestrian, and bicyclist category.

The roadways highlighted in the **usRAP Network** to the right have a star rating of **1** or **2** in the vehicle, pedestrian, or bicyclist category of usRAP ratings.



Risk
Characteristics



“A plan to provide local governments the means to make strategic roadway safety improvements”

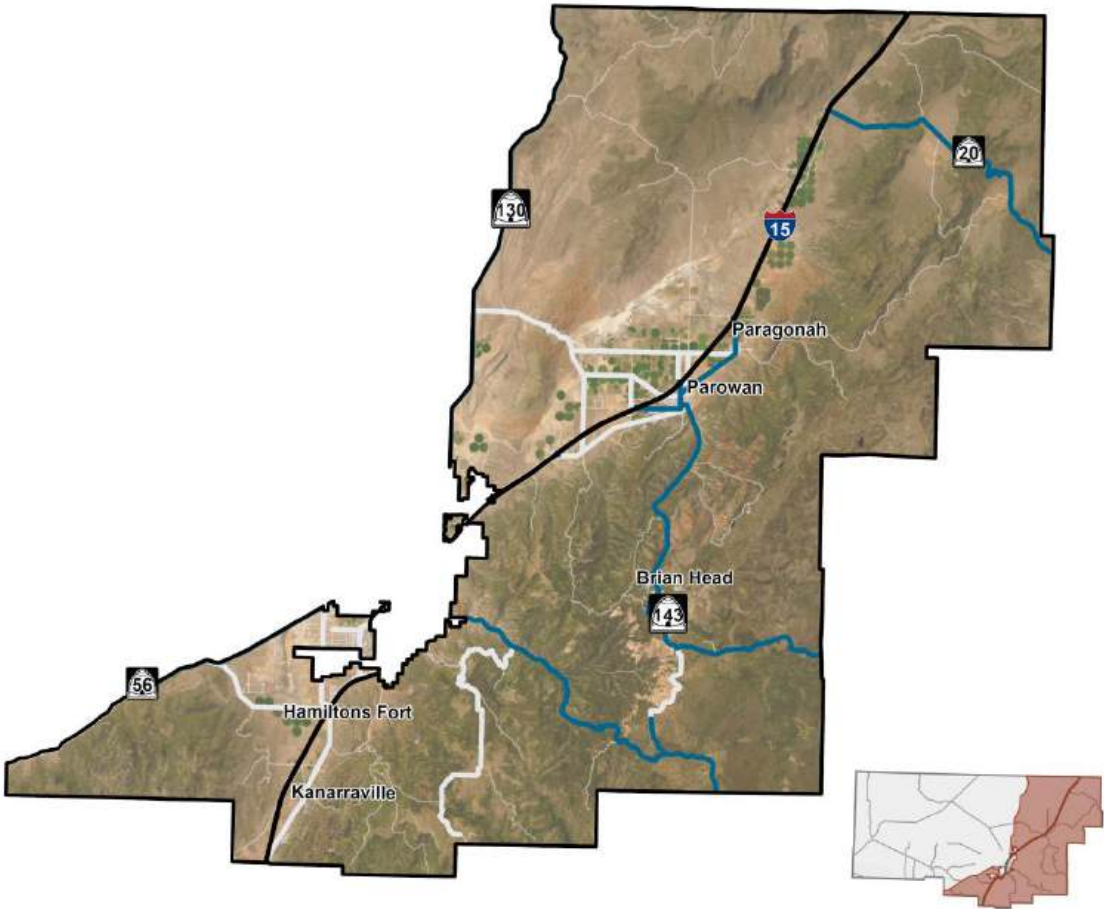
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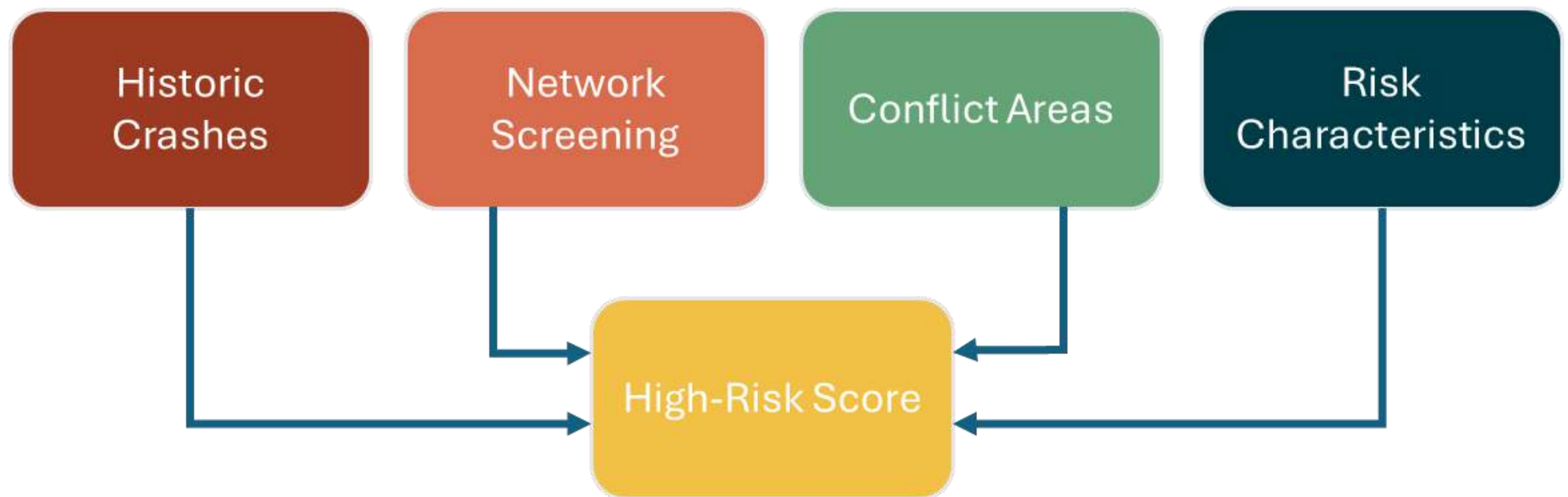
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Plan must include the following:

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 - ☐ Geospatial identification of higher risk locations
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...And must complete 4 of the 6 elements to the right:

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- Example Data:** Traffic volume, speed, lighting, shoulder conditions, rumble strips, access density, roadway geometry, etc.



Historic Crashes

Based on...	Historic Crashes, 2019-2023
Analyzes...	Crashes per mile or traffic volumes
Results in...	1. High Crash Network 2. High Injury Network

Conflict Areas

Based on...	Replica Safe Streets Planner
Analyzes...	Roadways by high-risk areas
Results in...	Replica Conflict Network

Network Screening

Based on...	Historic Crashes, 2019-2023
Analyzes...	Roadways and intersections by expected vs. actual crash rates
Results in...	Critical Crash Rate Network

Risk Characteristics

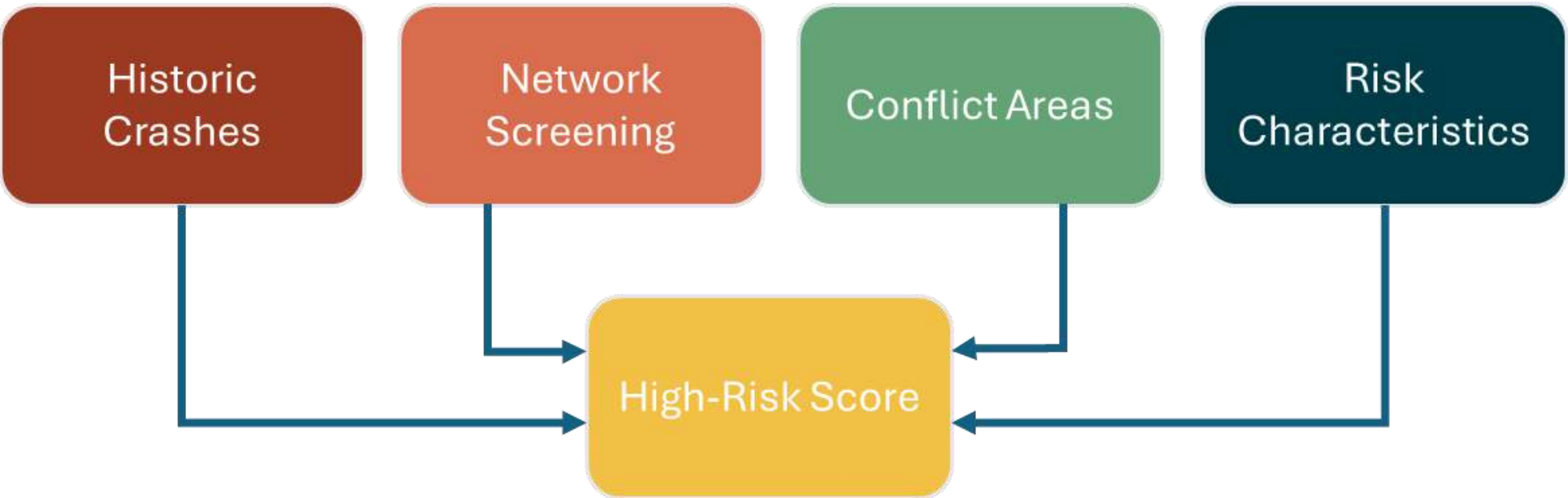
Based on...	usRAP Roadway Data
Analyzes...	Roadways by design and physical characteristics
Results in...	1. usRAP Network (star rating) 2. Crash Profile Risk Network



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A map of the resulting High-Risk Network is provided on page 6, pages 7 and 8 provide a detailed list of the top priority locations (roadway segments and intersections).

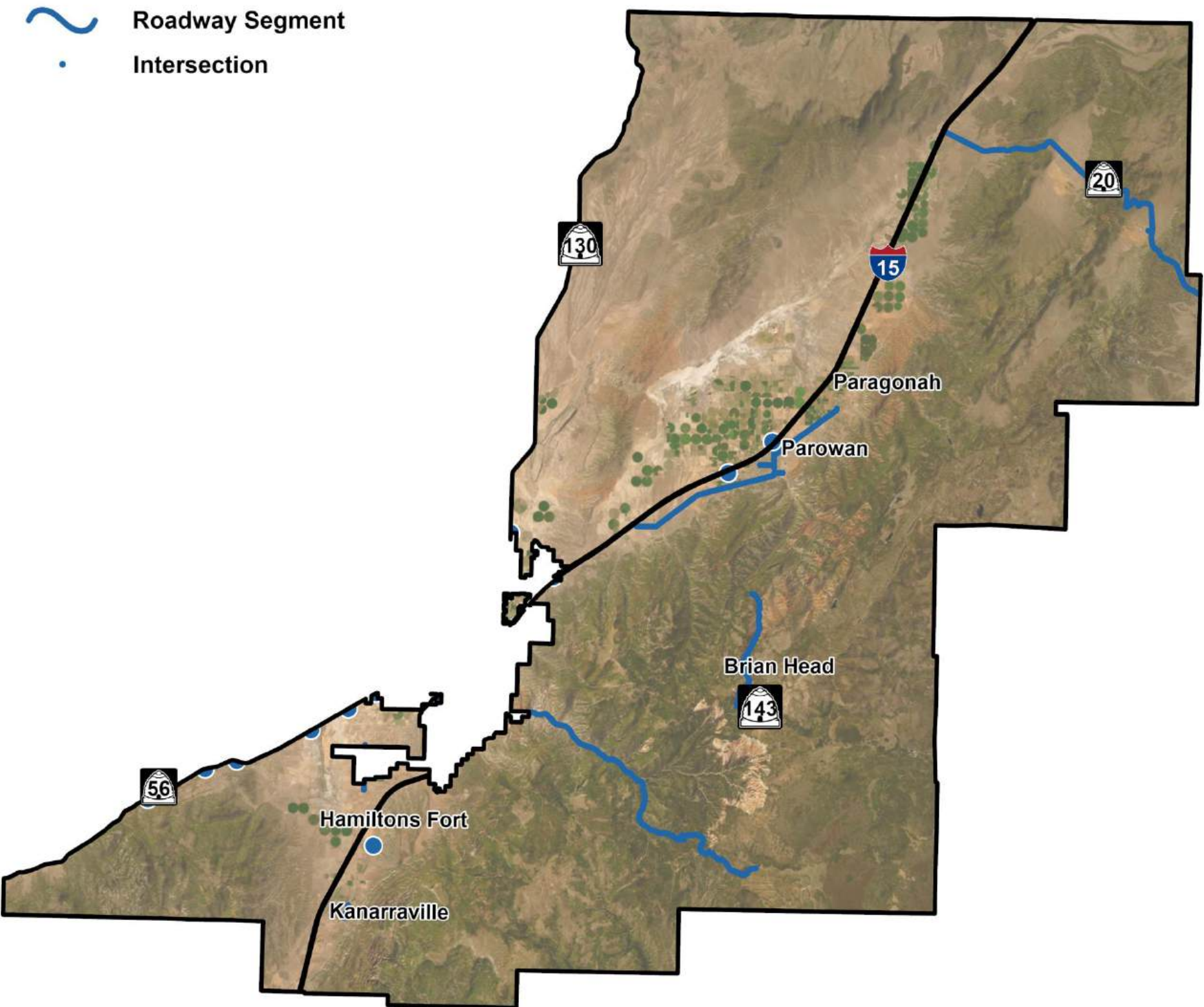


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Conflict Areas	Crash Profile Risk	Crash Profile Risk score of 60+	1	17
Risk Characteristics	usRAP Vehicle Star Rating	Star Rating of 1 - 2		
	usRAP Pedestrian Star Rating	Star Rating of 1 - 2		
	usRAP Bicycle Star Rating	Star Rating of 1 - 2		

Maximum High-Risk Score* 5

High-Risk Score

*See Supporting Information for more details on each scoring criteria



High-Risk
Network



Roadways				Safety Analysis									
Roadway	Extents	Length (miles)	Functional Classification	High Crash Network	High Injury Network)	Critical Crash Rate	Replica Speeding	Replica Non Speeding	Replica Active Transportation	Crash Profile Risk	usRAP Vehicle Star Rating	usRAP Pedestrian Star Rating	usRAP Bicycle Star Rating
State Routes													
SR 14	Kolob Road to SR 148	13.0	Minor Arterial	X	X	X				X	X	X	
SR 20	I-15 to Iron County Limits	17.0	Other Principal Arterial	X	X	X				X	X		
SR 143	Dry Lakes Road to Forest Road	7.8	Minoir Arterial	X		X				X	X		
SR 271	SR 274 to 200 South	3.8	Major Collector	X						X	X	X	
SR 274	Center Street to I-15	1.25	Minor Arterial	X						X	X	X	
Non- State Routes													
Old Highway 91	200 East to 300 South	1.8	Minor Collector	X			X						
200 South	Main Stret (SR 143) to Center Street (SR 143)	0.5	Local Street				X	X	X				
100 North	600 West to Main Street (SR 274)	0.7	Local Street				X	X	X				
Main Street (Summit)	I-15 to 200 East	0.7	Minor Collector	X			X						
Main Street (Kannaraville)	400 South to 300 North	0.6	Major Collector	X									



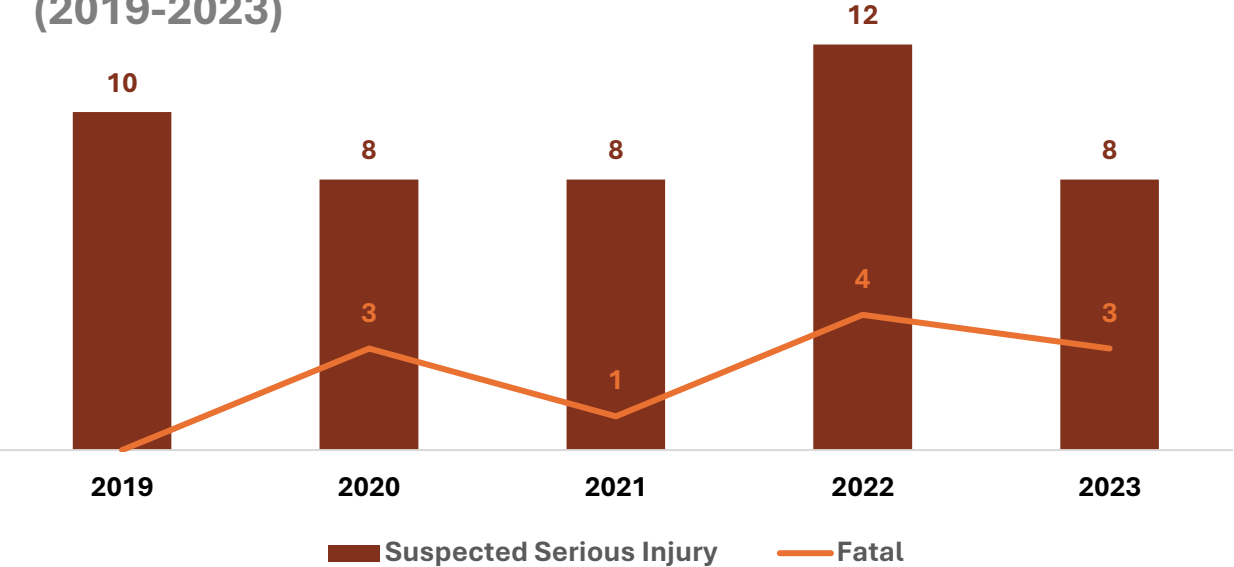
Intersections		Safety Analysis			Supporting Networks						
Intersection	Number of Crashes	High Crash Network	High Injury Network	Critical Crash Rate	Replica Speeding	Replica Non Speeding	Replica Active Transportation	Crash Profile Risk	usRAP Vehicle Star Rating	usRAP Pedestrian Star Rating	usRAP Bicycle Star Rating
Unsignalized Intersections											
Old Highway 91 & 5100 South	3	X		X							
I-15 Northbound Ramp & 2nd South	6			X				X	X		
I-15 Southbound Ramp & Main Street	3			X					X		
Comstock Road & SR 56	2				X	X	X		X		
11600 West & SR 56	4	X		X	X	X	X		X		
Bumblebee Drive & SR 56	3			X	X	X	X		X		
7700 West & SR 56	3		X	X	X	X	X		X		
6300 West & SR 56	3		X	X	X	X	X		X		

SUPPORTING INFORMATION

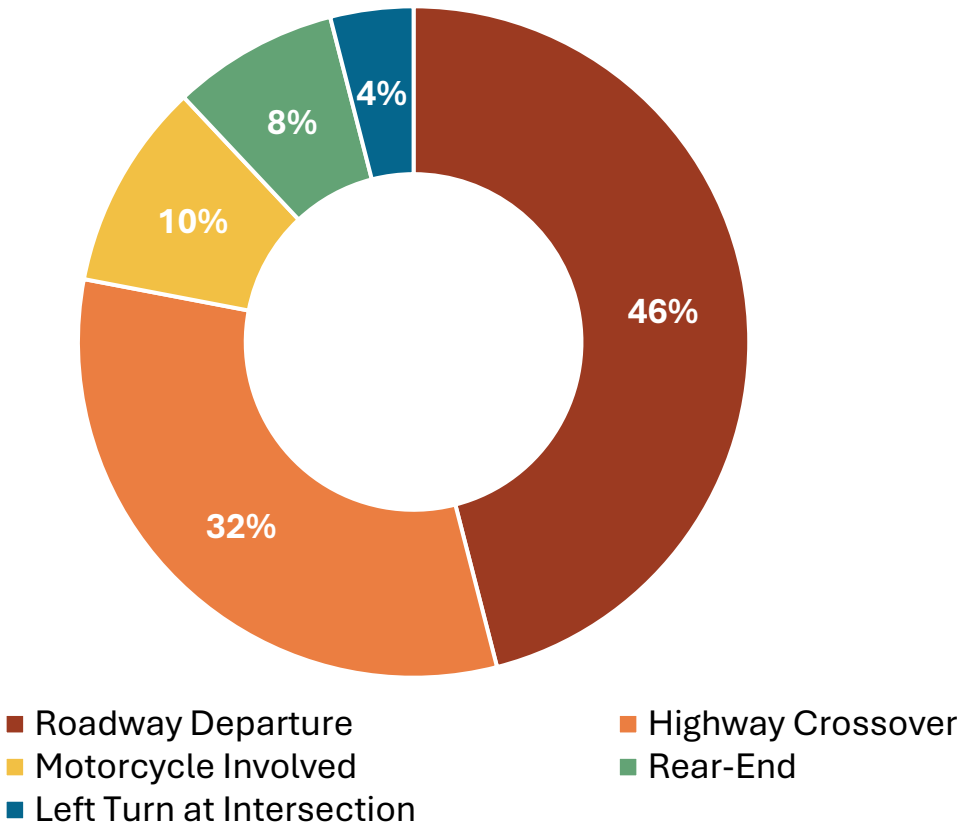


Route Type	State Route		Non-State Routes		Overall Total		% of Iron County
Crash Severity	Crashes		Crashes		Crashes		%
	#	%	#	%	#	%	
Fatal	6	1%	5	2%	11	1%	28%
Suspected Serious Injury	30	5%	16	8%	46	6%	24%
Suspected Minor Injury	82	13%	25	12%	107	13%	17%
Possible injury	72	11%	37	18%	109	13%	15%
No Injury / Property Damage Only	438	70%	119	59%	557	67%	15%
Total	628	100%	202	100%	830	100%	16%

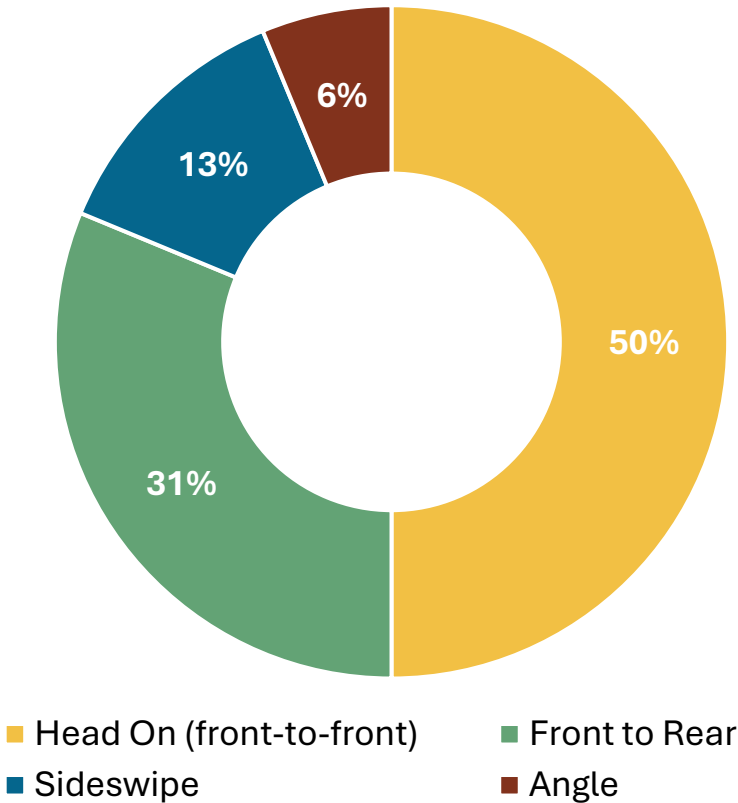
Annual Fatal and Serious Injury Crashes (2019-2023)



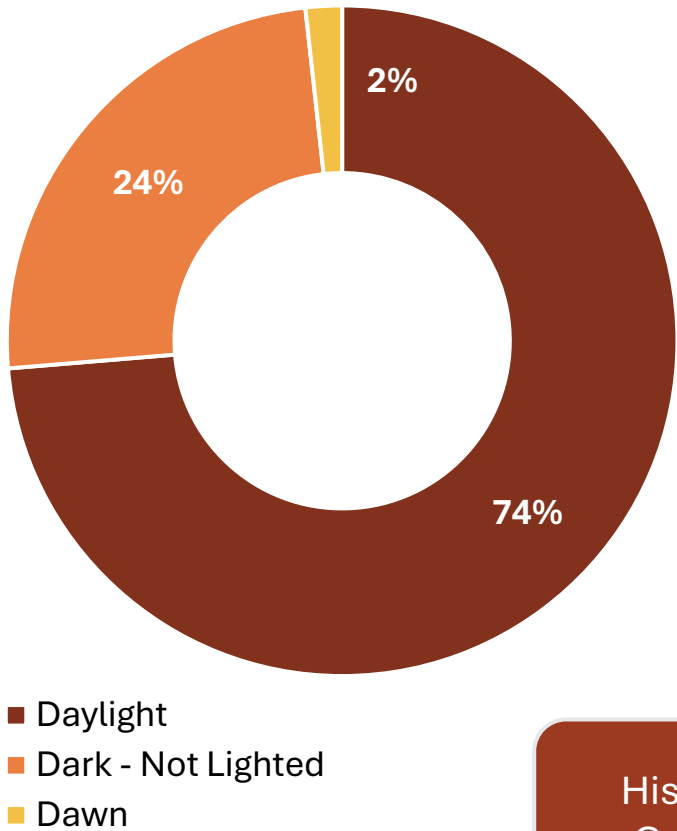
Fatal & Serious Manners of Collision



Top 5 Fatal & Serious Injury Crash Types



Crash Lighting Conditions



Historical Crashes

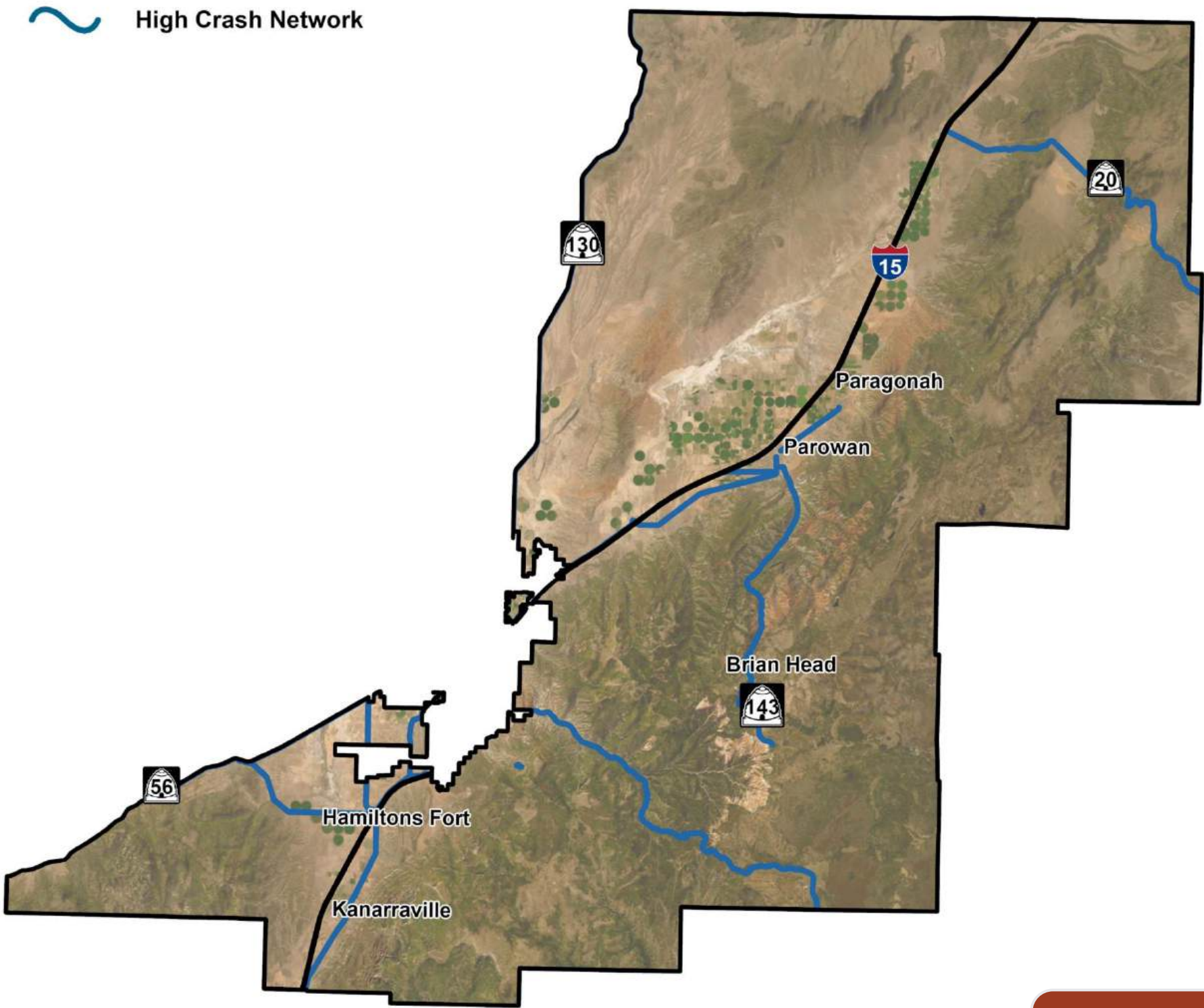
10% of all Iron County crashes occur on 20% of the East Iron County GFA’s roadways

Understanding the types and locations of vehicle crashes is an important part of analyzing the safety conditions of a roadway network.

A component of the SAP is to identify locations with an **elevated risk** of crashes. The initial step of this analysis is to spatially reference crashes that occurred within the GFA. Next, a crash rate of total crashes (all severities) per mile is calculated for each roadway segment. This calculation helps identify frequency of crashes regardless of severity.

The roadway network to the right is identified as the **High-Crash Network**.

The High Crash Network includes roadways on which 40% of all crashes occurred throughout the County.



Historic
Crashes

50% of all East Iron County injury crashes occur on 5% of the East Iron County GFA’s roadways

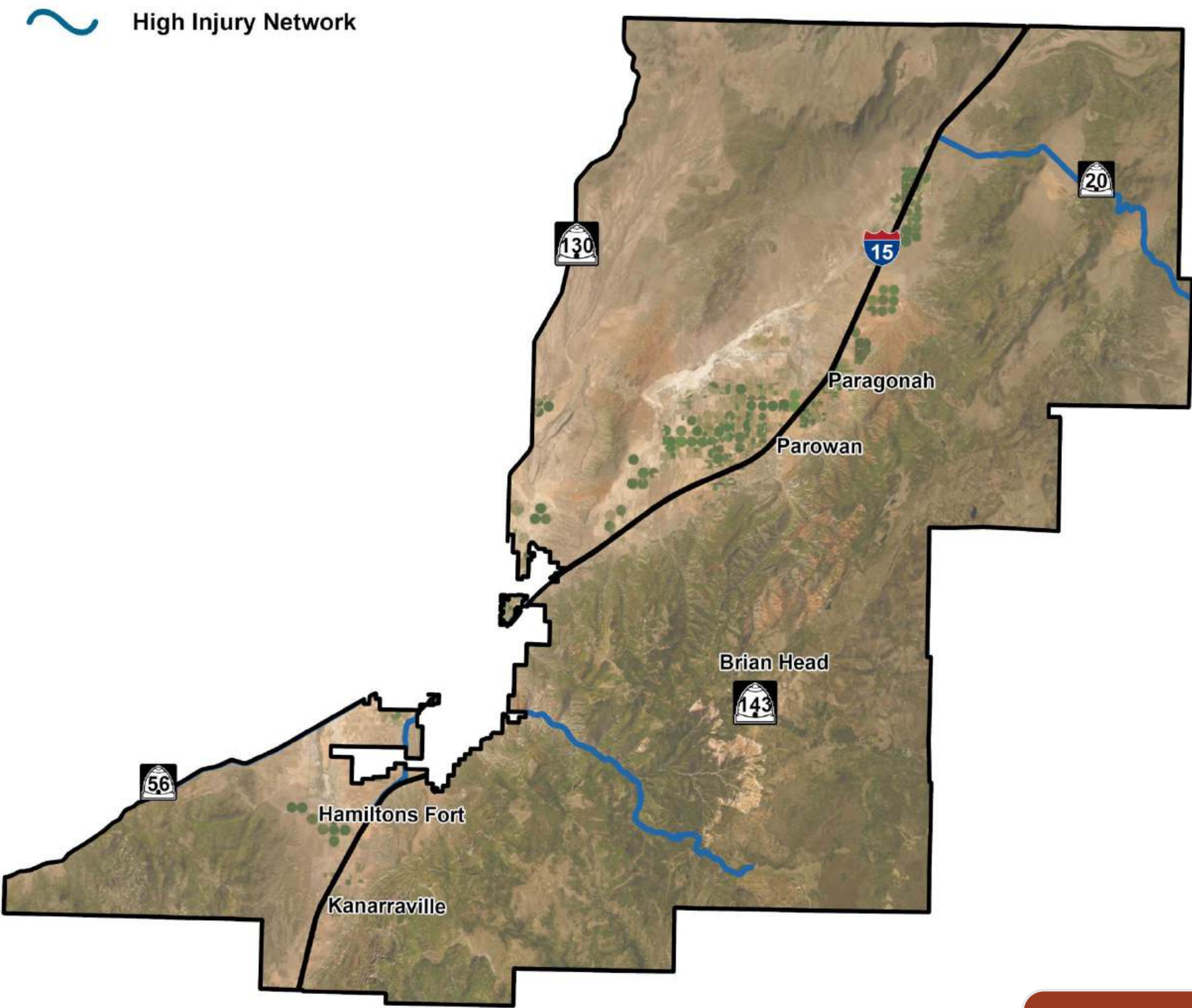
A proactive approach to reducing and eliminating traffic fatalities and serious injuries requires an investigation of the conditions that contribute to severe traffic crashes. The Safe System Approach includes safety strategies and countermeasures that seek to not only reduce the number of crashes that occur but also **reduce the severity** when a crash does occur.

Identifying locations of fatal and injury crashes is a key step in detecting any patterns in the **location** or **characteristics** of roadways or intersections that are potentially impacting the frequency of injury crashes.

A **High-Injury Network** is created by spatially referencing fatal, serious injury, and minor-injury crashes to the roadway network. An “injury rate” of fatal and injury crashes per mile is calculated for each roadway segment.

The map to the right shows the **High-Injury Network**, which represents the roadways on which 60% of fatal and injury crashes in the County have occurred.

Note, the roadway segments identified in both the high crash and high injury networks represent locations with the highest crash rates. Roadway segments may be combined to illustrate more complete corridors.



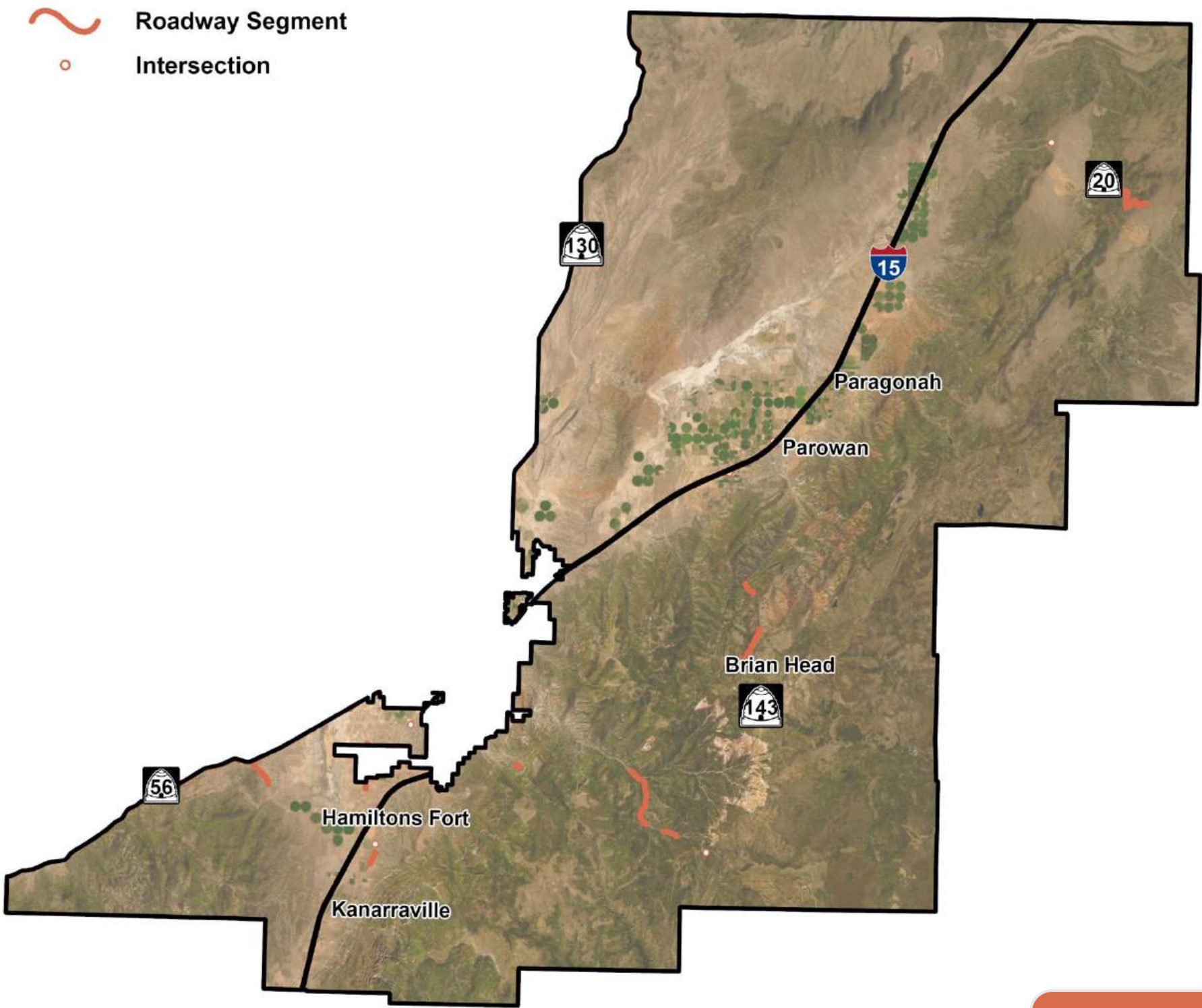
Historic
Crashes

Locations where historic crashes have exceeded expected crash rates based on similar characteristics

The Critical Crash Rate (CCR) analysis compares the **observed** crash rate of a location to the **expected** crash rate based on similar locations with similar traffic volumes. Each GFA was analyzed individually to calculate CCRs specific to the GFAs demographics and facilities.

A location with a **positive** CCR indicates higher-than-expected crash rates and a potential for safety improvement. The higher the CCR value, the larger the potential to improve safety at that location.

The map to the right illustrates the **Critical Crash Rate Network** that includes roadway segments and intersections with a potential for safety improvement based on the CCR analysis in the East Iron County GFA.



Network
Screening

REPLICA NON-SPEEDING CONFLICT NETWORK EAST IRON CO. GFA



Identifying potential conflict and high-risk areas using data from events such as phone-handling, sudden braking, and suspected crashes

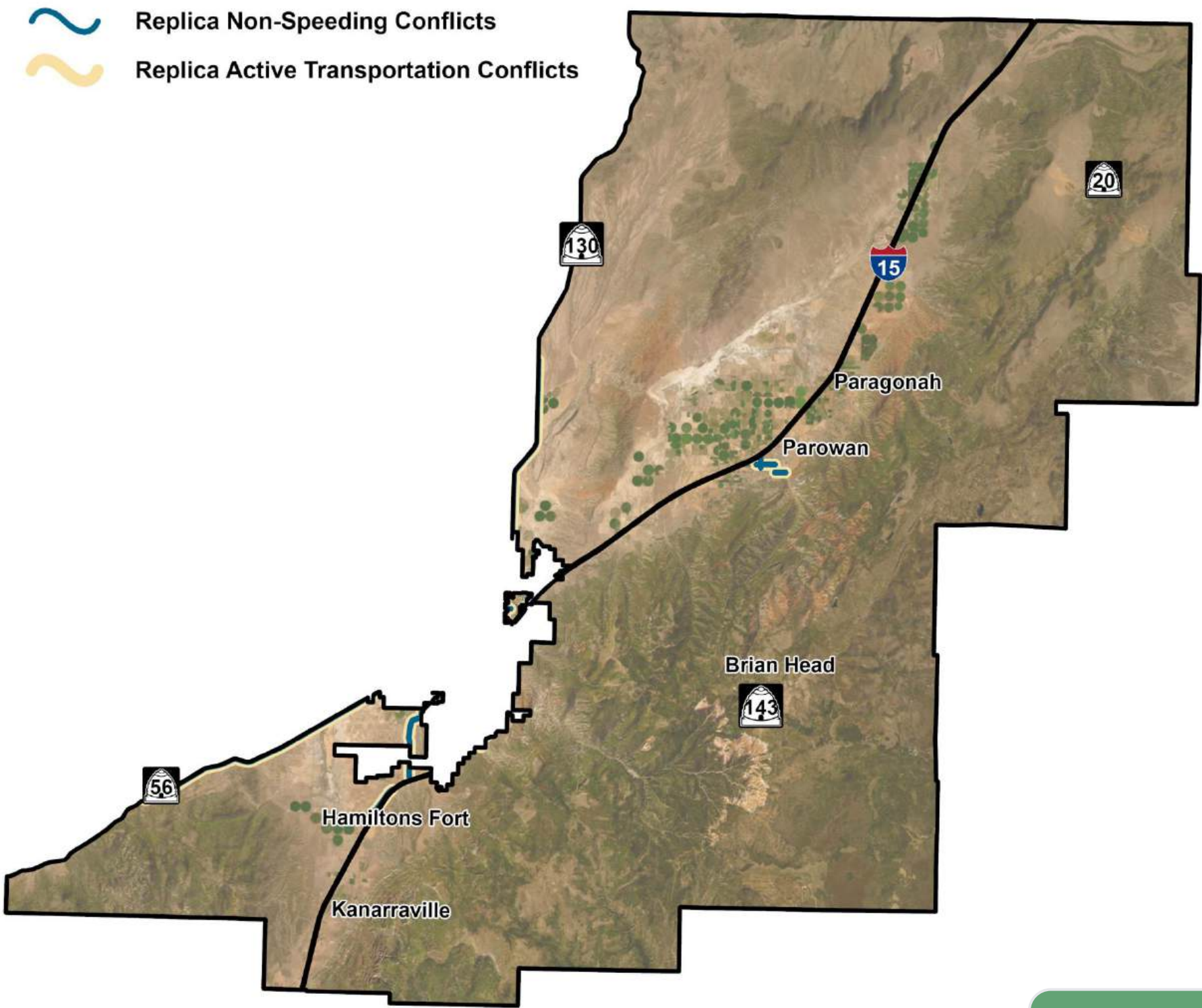
Replica is an online data platform that aggregates cellular data provided mobility **patterns** and **trends**. Replica provides a digital applications called **Safe Streets Planner** that combines detailed multimodal data with driving event data to identify and prioritize high conflict corridors.

Replica’s cellular data includes indicators of certain risky behaviors; **speeding, distracted driving, and hard-braking**. The number of instances or “events” of risky behaviors is used to calculate a risk score for a roadway. Risky events captured in the data include phone handling, sudden braking, suspected collisions, and speeding. **Risk scores** are calculated to represent the proportion of risky events to the number of total trips on a roadway. Roadways with higher risk scores represent roadways with the most safety conflicts.

The following metrics were isolated in Replica to identify the highest risk roadways in Iron County:

- Speeding
- Non-Speeding Events: Suspected Collisions, Phone Handling (Distracted Driving), and Sudden Braking
- Active Transportation (pedestrians and bicyclist) high-risk corridors

The maximum risk score is 100 points. Roadways with a risk score of 80 or more in non-speeding events of the Replica metrics analyzed are included in the **Replica Non-Speeding Conflict Network** shown to the right.



Conflict Areas

Evaluation of roadway characteristics contributing to risk based on locations of historic crashes

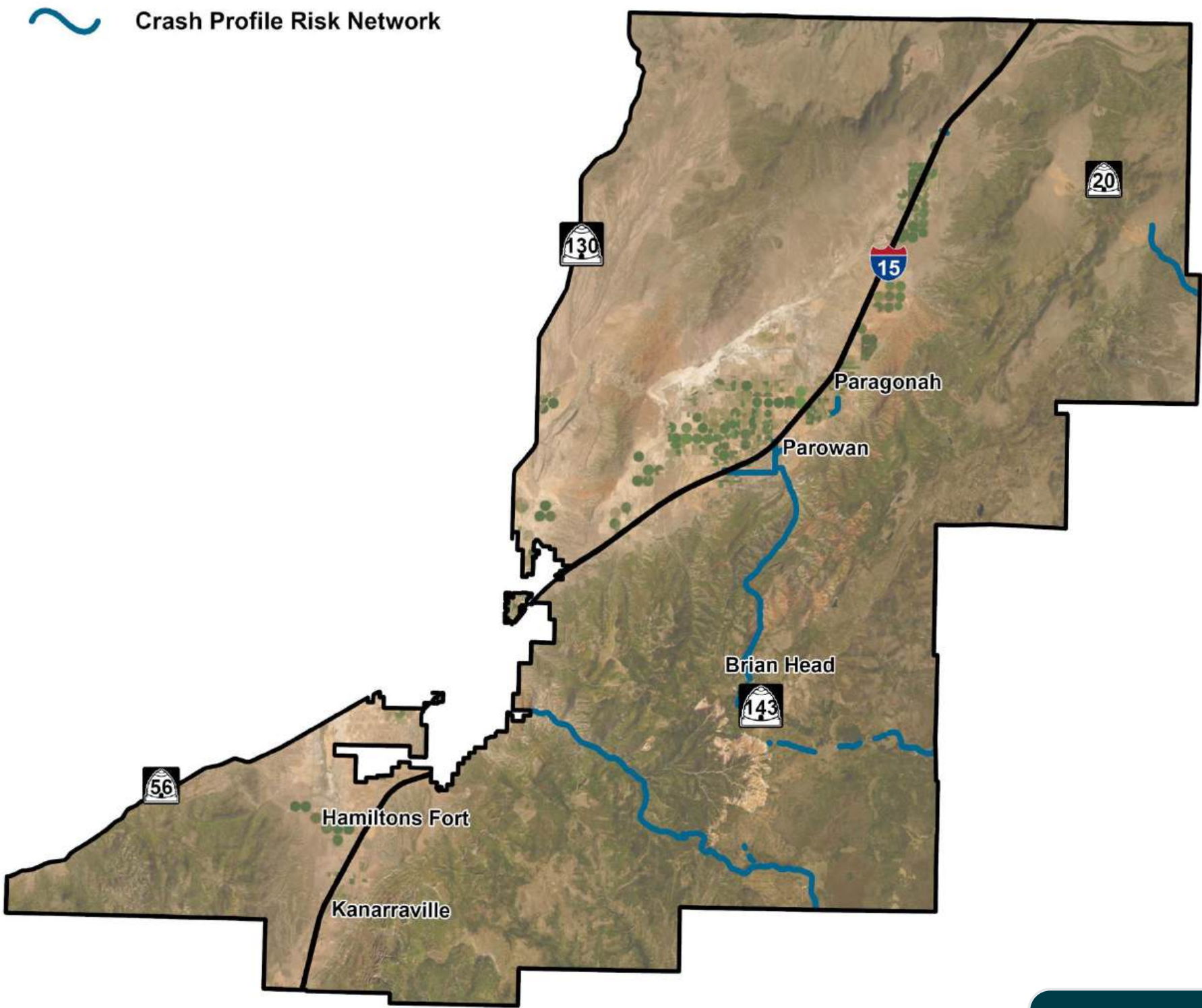
The **Crash Profile Risk Assessment** reviewed fatal and serious injury crashes reported in Iron County to identify attributes that correspond to a higher frequency of fatal and serious injury crashes.

Characteristics considered include:

- Traffic volumes
- Speed limits
- Roadway cross-section
- Lighting condition
- Access Density
- Rumble strips
- Paved shoulder
- Roadside hazards
- Roadway Geometry (curves)

The crash profile risk score, has a maximum value of 100 points. A roadway segment with a score of 60 or higher is a candidate for safety improvements.

The **Crash Profile Risk Network** of the highest scoring roadway segments is shown to the right.



Risk
Characteristics

A risk rating based on the design and traffic control attributes of the roadway

The United States Road Assessment Program (**usRAP**) is a proactive tool for analyzing the safety of a roadway.

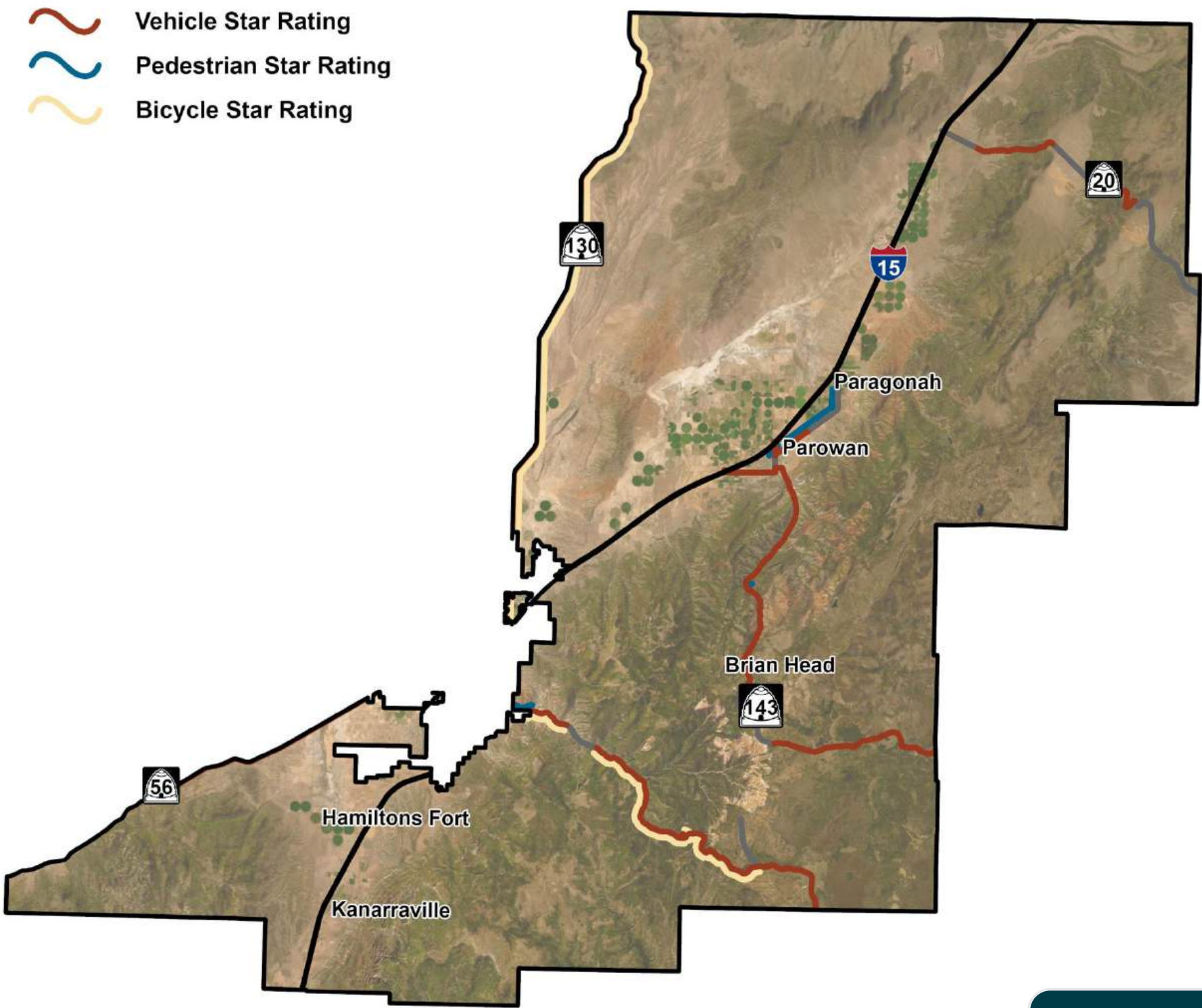
Star ratings are assigned to each segment of the roadway network. Only State Highways are included in the roadway network for this data set. Star ratings consider road infrastructure attributes known to impact the likelihood of a crash and its severity. Attributes include roadway type, width, shoulders, speed limit, traffic volumes, etc.

The roadway’s star rating is based on the presence or absence of these design and traffic control features.

5-star roadways have the **most** safety-related design and traffic control features. **1**-star roadways have the **fewest** safety-related design and traffic operational features.

Star ratings are assigned for a vehicle , pedestrian, and bicyclist category.

The roadways highlighted in the **usRAP Network** to the right have a star rating of **1** or **2** in the vehicle, pedestrian, or bicyclist category of usRAP ratings.



Risk
Characteristics



“A plan to provide local governments the means to make strategic roadway safety improvements”

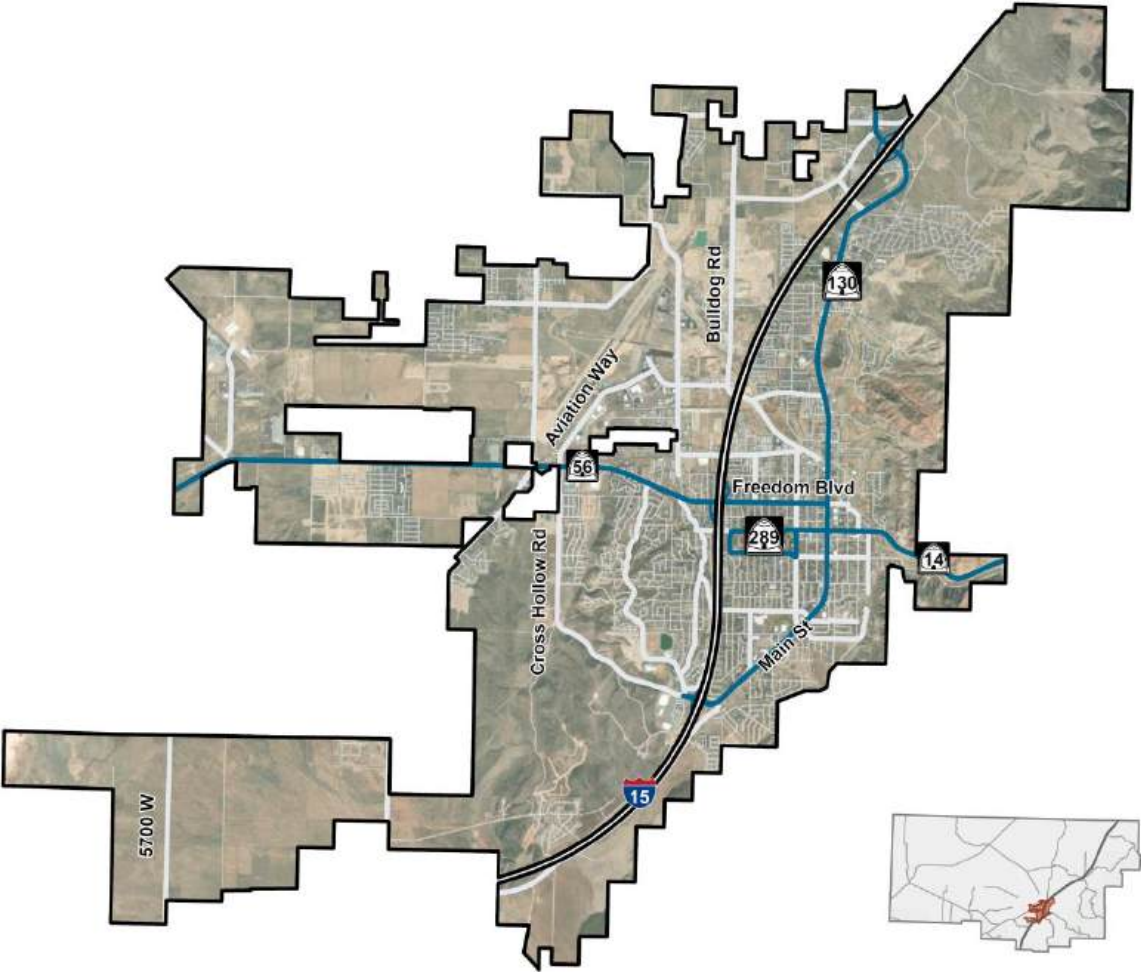
Iron County, in partnership with surrounding communities, is preparing a county-wide Safety Action Plan (SAP). The SAP will present a **holistic, well-defined strategy** to **reduce roadway fatalities and serious injuries** for all of Iron County.

The SAP will **analyze** safety needs, **identify** high-risk locations and factors contributing to crashes, and **prioritize** strategies to address them.

The SAP will meet eligibility requirements that allow local jurisdictions to apply for **Implementation Grants** from the United States Department of Transportation (USDOT) Safe Streets and Roads for All (SS4A) discretionary grant program. The grant program was established by the Bipartisan Infrastructure Law (BIL) with \$5 billion in appropriated funds, 2022-2026. A SAP must include the following elements, as specified by FHWA to satisfy eligibility requirements to apply for an implementation grant:

State Route: Roadways owned, operated, and maintained by UDOT

Non-State Routes: Other non-UDOT roadways – typically minor arterials and collectors, and residential streets



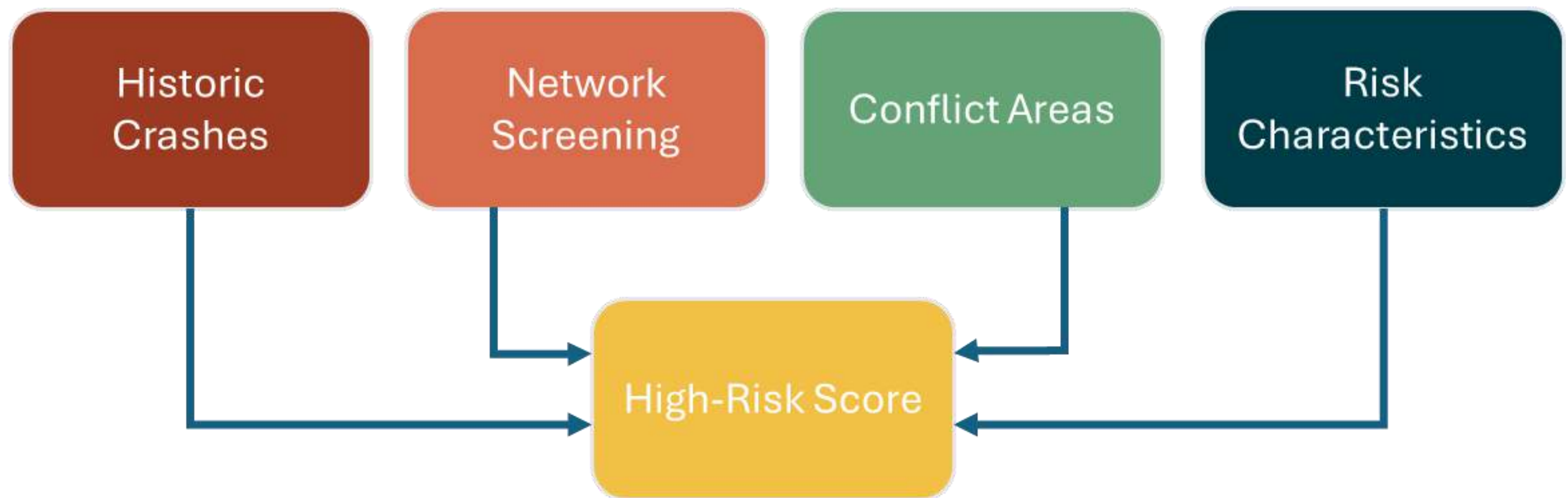
Self-Certification Checklist

Plan must include the following:

- ☐ Safety Analysis
 - ☐ Existing conditions and historical trends
 - ☐ Crashes by location, severity, and contributing factor
 - ☐ Systemic and specific safety needs
 - ☐ Geospatial identification of higher risk locations
- ☐ Identification of comprehensive set of projects and strategies

...And must complete 4 of the 6 elements to the right:

- | | |
|---|---|
| 1. Leadership Commitment <ul style="list-style-type: none"><input type="checkbox"/> Governing body publicly commit to a zero fatalities and serious injury goal | 4. Equity <ul style="list-style-type: none"><input type="checkbox"/> Data-driven, inclusive, and representative processes |
| 2. Plan Development <ul style="list-style-type: none"><input type="checkbox"/> Committee charged with plan development, implementation, and monitoring | 5. Policies, Plans, Guidelines, and/or Standards <ul style="list-style-type: none"><input type="checkbox"/> Assessment of policies, plans, guidelines, and/or standards |
| 3. Development Activities <ul style="list-style-type: none"><input type="checkbox"/> Engagement with public and relevant stakeholders | 6. Progress <ul style="list-style-type: none"><input type="checkbox"/> Description on how progress will be measured over time |





Identifies higher risk roadways by analyzing driver behavior, road usage, and community demographics.

- Data source:**

Michelin Mobility Intelligence (MMI) (i.e. cellular and GPS data).
- Represents:**

Identifies and prioritizes high-risk corridors based on different driving metrics.
- Example Data:**

Phone handling, sudden braking, suspected collisions, and speeding events.



Assigns road segments a 1–5-star rating based on the roadway’s safety features and characteristics to identify hazardous road sections.

- Data source:**

Video footage analyzed in 100-meter segments.
- Represents:**

Safety of road segments for drivers, bicyclists, and pedestrians based on roadway design, features, and characteristics.
- Example Data:**

Traffic volume, speed, lighting, shoulder conditions, rumble strips, access density, roadway geometry, etc.



Historic Crashes

Based on...	Historic Crashes, 2019-2023
Analyzes...	Crashes per mile or traffic volumes
Results in...	1. High Crash Network 2. High Injury Network

Conflict Areas

Based on...	Replica Safe Streets Planner
Analyzes...	Roadways by high-risk areas
Results in...	Replica Conflict Network

Network Screening

Based on...	Historic Crashes, 2019-2023
Analyzes...	Roadways and intersections by expected vs. actual crash rates
Results in...	Critical Crash Rate Network

Risk Characteristics

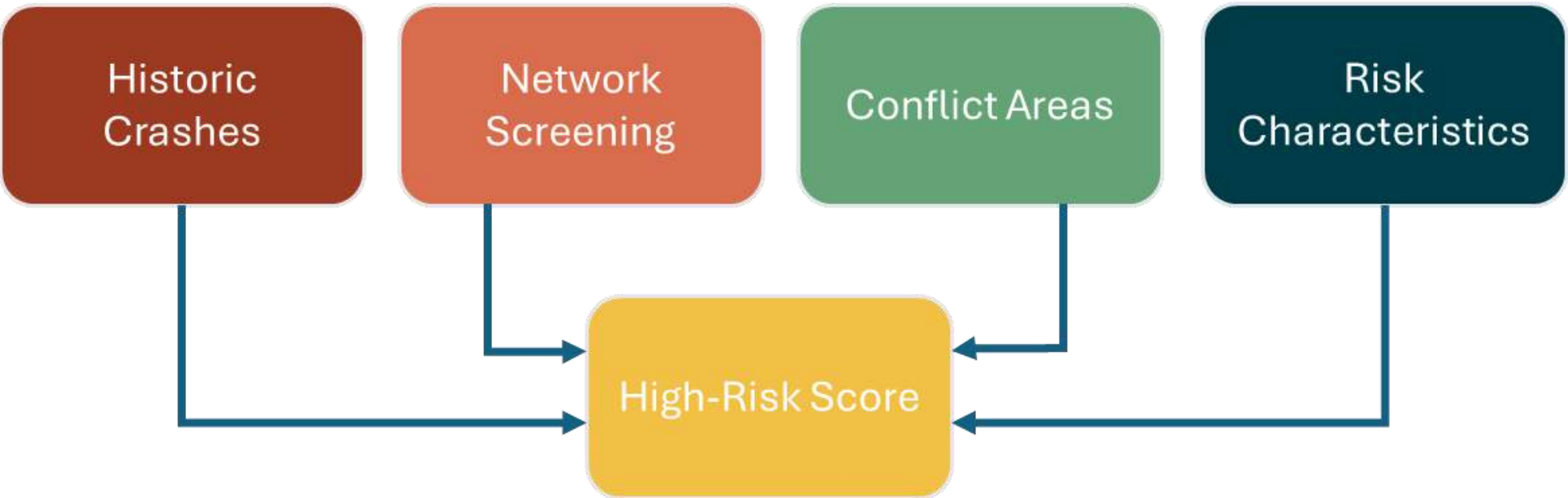
Based on...	usRAP Roadway Data
Analyzes...	Roadways by design and physical characteristics
Results in...	1. usRAP Network (star rating) 2. Crash Profile Risk Network



Each safety analysis methodology identified locations that are **candidates for safety improvements** to reduce fatalities and serious injury crashes.

To provide focused information for jurisdictional decisions regarding **prioritization of safety improvements**, a **Risk Score** (0 to 5), was assigned to the transportation network. Any location with a positive Risk Score may be considered for safety improvements. Locations with a Risk Score of **“3”** or greater are to be prioritized in the **High-Risk Network**.

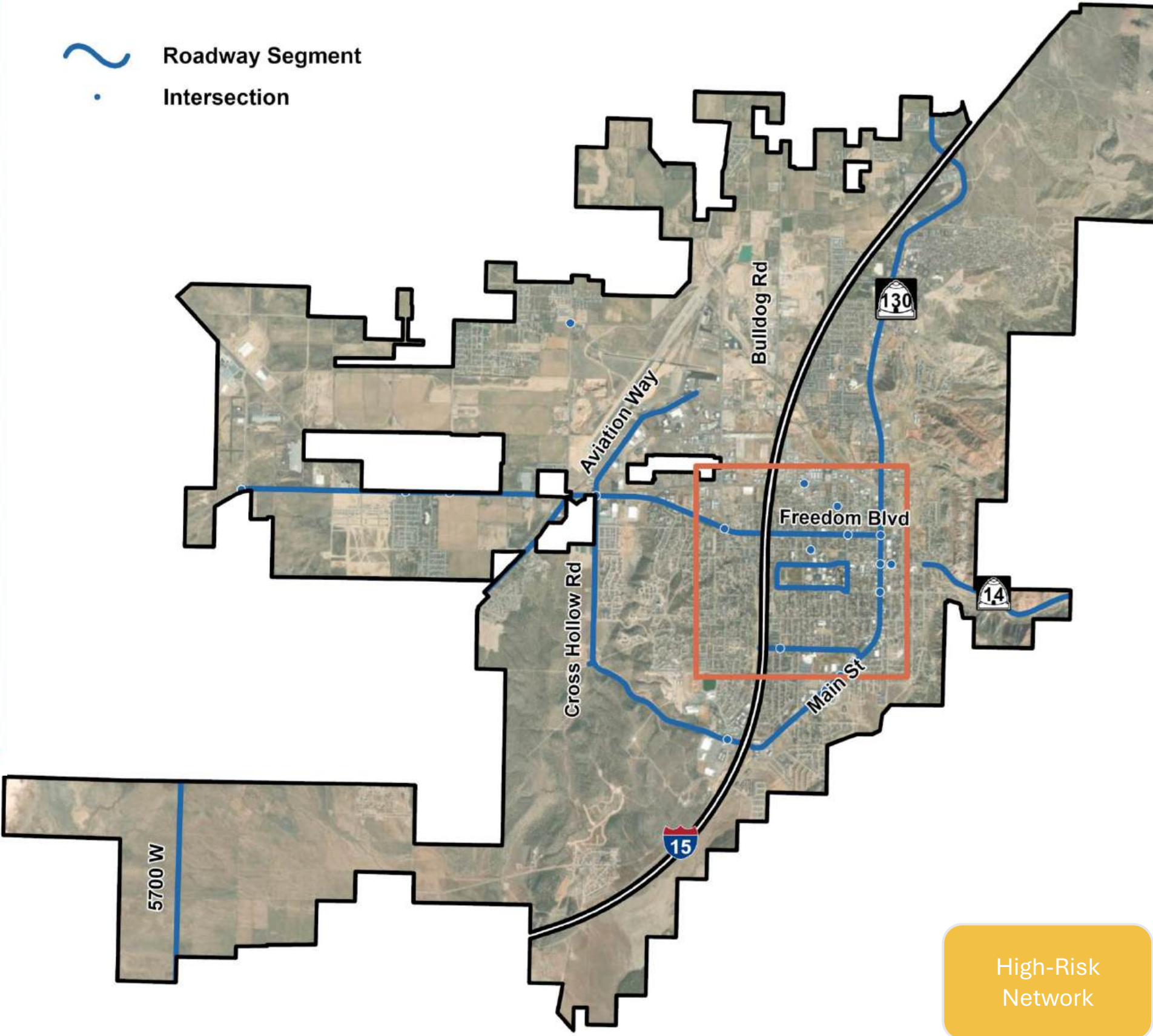
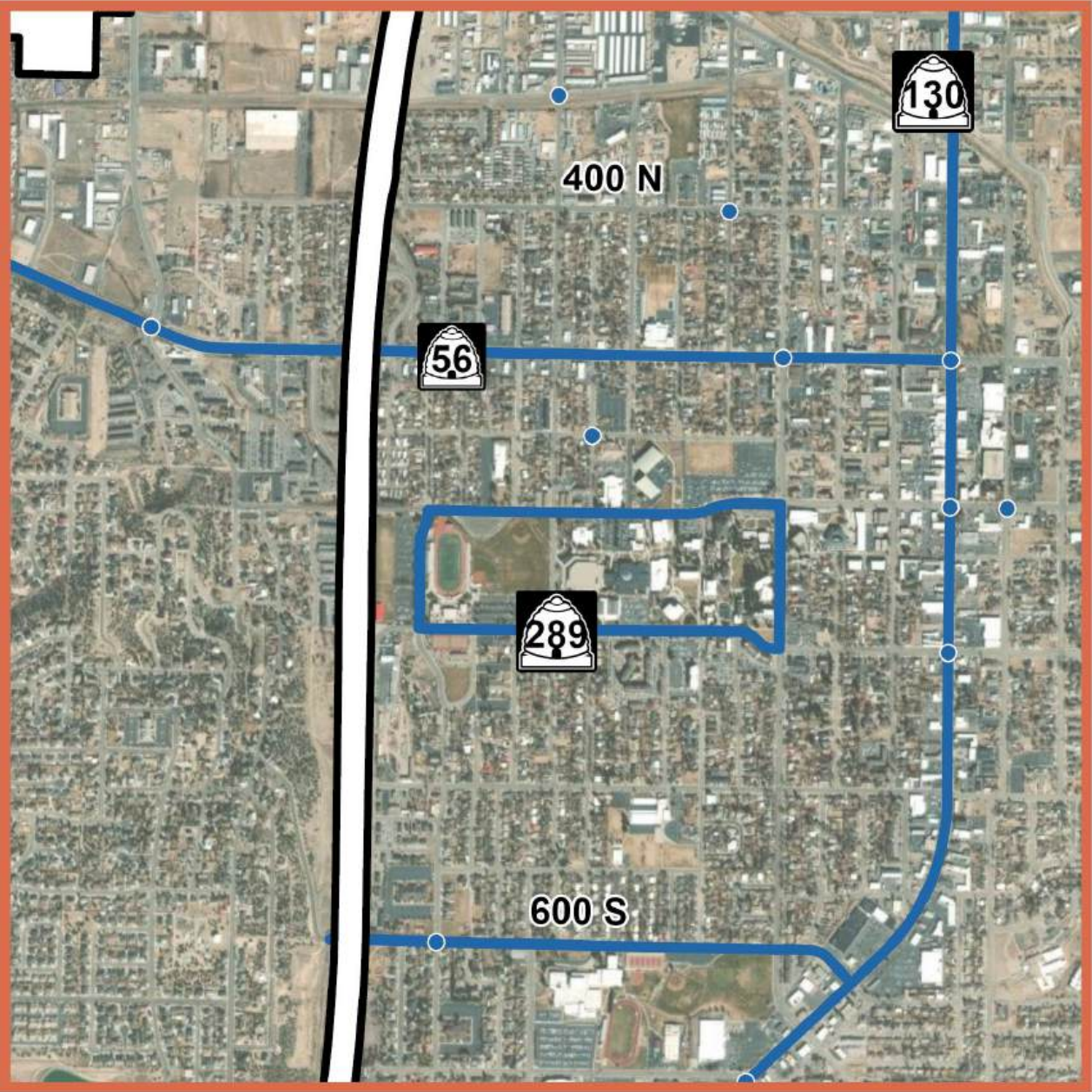
A map of the resulting High-Risk Network is provided on page 6, pages 7 and 8 provide a detailed list of the top 10 priority locations (roadway segments and intersections).



High Risk Category	Safety Analysis	Scoring Criteria	Risk Score	Page #
Historical Crashes	High Crash Network	Highest number of crashes per miles	1	11
	High Injury Network	Highest number of fatal and injury crashes per mile	1	12
	Critical Crash Rates	Positive critical crash rate differential	1	13
Network Screening	Replica - Speeding Areas	Speeding conflict risk score of 80+	1	14
	Replica - Non-Speeding Areas	Non-speeding conflict risk score of 80+		15
	Replica - Active Transportation Areas	Active transportation conflict rick score of 80+		16
Conflict Areas	Crash Profile Risk	Crash Profile Risk score of 60+	1	17
Risk Characteristics	usRAP Vehicle Star Rating	Star Rating of 1 - 2		17
	usRAP Pedestrian Star Rating	Star Rating of 1 - 2		
	usRAP Bicycle Star Rating	Star Rating of 1 - 2		

Maximum High-Risk Score* 5

High-Risk Score





Roadways				Safety Analysis									
Roadway	Extents	Length (miles)	Functional Classification	High Crash Network	High Injury Network)	Critical Crash Rate	Replica Speeding	Replica Non Speeding	Replica Active Transportation	Crash Profile Risk	usRAP Vehicle Star Rating	usRAP Pedestrian Star Rating	usRAP Bicycle Star Rating
State Routes													
Main Street (SR 130)	1045 North to I-15	6.0	Other Principal Arterial	X	X	X				X	X	X	X
200 North (SR 56)	Iron Springs Road to I-15	4.5	Other Principal Arterial	X	X	X	X	X	X	X	X	X	X
200 North (SR 56)	I-15 to Main Street (SR 130)	1.0	Other Principal Arterial	X	X	X	X	X	X	X		X	X
SUU Loop (SR 289)	1150 West to 300 West	1.5	Minor Arterial	X	X	X				X	X		X
Center Street (SR 14)	400 Eat to Right Hand Canyon Road	4.5	Minor Arterial	X	X					X	X	X	X
Non- State Routes													
Cross Hollow Road	SR 56 to I-15	3.0	Minor Arterial	X	X	X	X	X	X				
Aviation Way	SR 56 to Airport Road	1.5	Major Collector	X	X	X	X	X	X				
600 South	I-15 to Main Street (SR 130)	1.0	Major Collector	X	X		X	X	X				
5700 West	1400 South to 3200 South	2.3	Major Collector	X		X							
Westview Drive	SR 56 to 200 South	1.0	Major Collector	X	X		X	X	X				

HIGH-RISK INTERSECTIONS

CEDAR CITY GFA



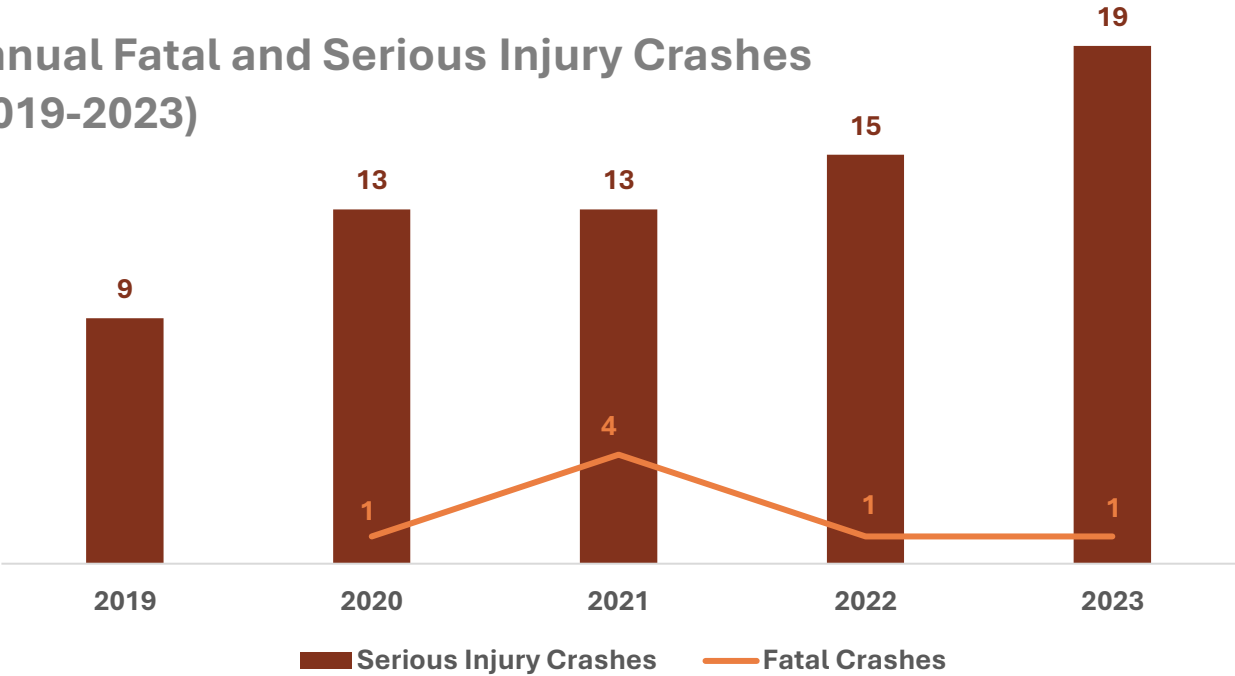
Intersections		Safety Analysis			Supporting Networks						
Intersection	Number of Crashes	High Crash Network	High Injury Network	Critical Crash Rate	Replica Speeding	Replica Non Speeding	Replica Active Transportation	Crash Profile Risk	usRAP Vehicle Star Rating	usRAP Pedestrian Star Rating	usRAP Bicycle Star Rating
Signalized Intersections											
Cross Hollow Road/Aviation Way & SR 56	44	X	X	X	X	X	X	X	X	X	X
Westview Drive/3100 West & SR 56	27	X	X	X	X	X	X	X	X	X	X
Main Street (SR 130) & 1925 North	41	X	X	X	X	X	X	X	X	X	X
Airport Road/College Way & SR 56	69	X	X	X	X	X	X	X	X		X
Main Street (SR 130) & 800 South	36	X	X	X	X	X	X		X	X	X
Main Street & SR 56	106	X	X	X	X	X	X	X			X
Providence Center Drive & Cross Hollow Road	50	X	X	X	X	X	X				
Main Street (SR 130) & 200 South	29	X	X	X				X	X		X
Main Street (SR 130) & Center Street (SR 14)	36	X	X	X				X	X		X
300 West & SR 56	31	X		X	X	X	X	X		X	
Unsignalized Intersections											
100 East & Center Street (SR 14)	11	X	X	X	X	X	X	X	X		X
Iron Springs Road & SR 56	11	X	X	X	X	X	X			X	X
700 West & Harding Avenue	7	X	X	X	X	X	X				
400 West & 400 North	5	X	X	X	X	X	X				
3900 West & SR 56	6		X	X	X	X	X			X	X
4200 West & SR 56	6		X	X	X	X	X			X	X
Main Street (SR 13) & Fir Street	24	X		X				X	X	X	X
800 West & Industrial Road	6	X	X	X							
Lund Highway & 1600 West	14	X	X	X							
1100 West & 600 South	22	X		X	X	X	X				

SUPPORTING INFORMATION

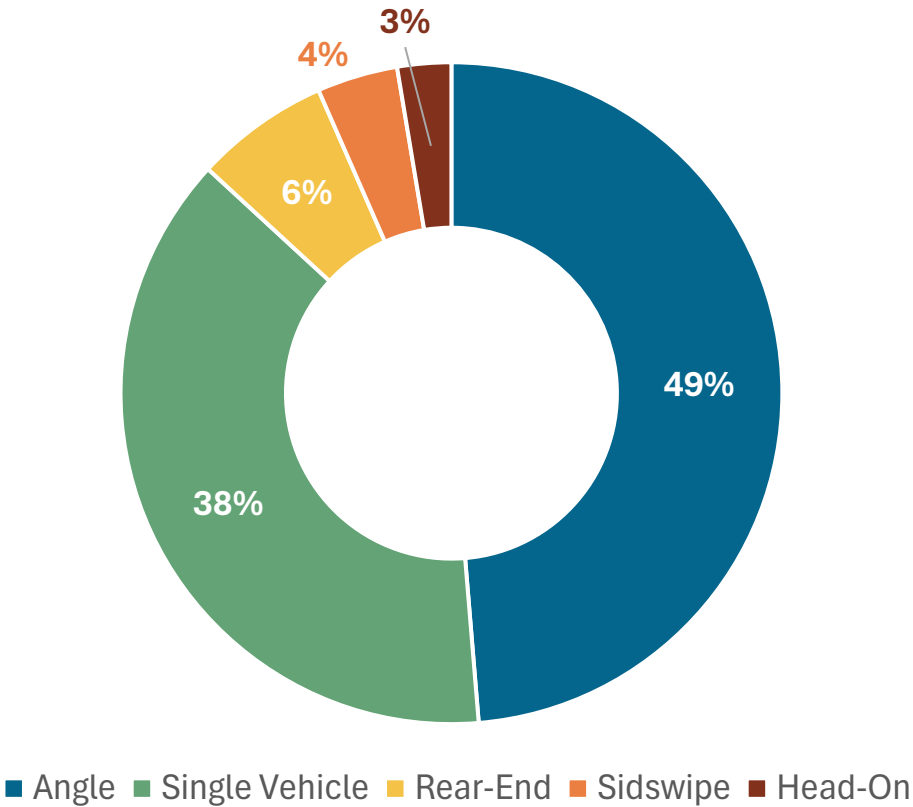


Route Type	State Route		Non-State Routes		Overall Total		% of Iron County
Crash Severity	Crashes		Crashes		Crashes		%
	#	%	#	%	#	%	
Fatal	4	0.3%	3	0.3%	7	0.3%	36%
Suspected Serious Injury	29	2%	40	4%	69	3%	72%
Suspected Minor Injury	171	13%	147	13%	318	13%	101%
Possible injury	215	16%	119	11%	334	14%	93%
No Injury / Property Damage Only	909	68%	815	73%	1,724	70%	96%
Total	1,328	100%	1,124	100%	2,452	100%	47%

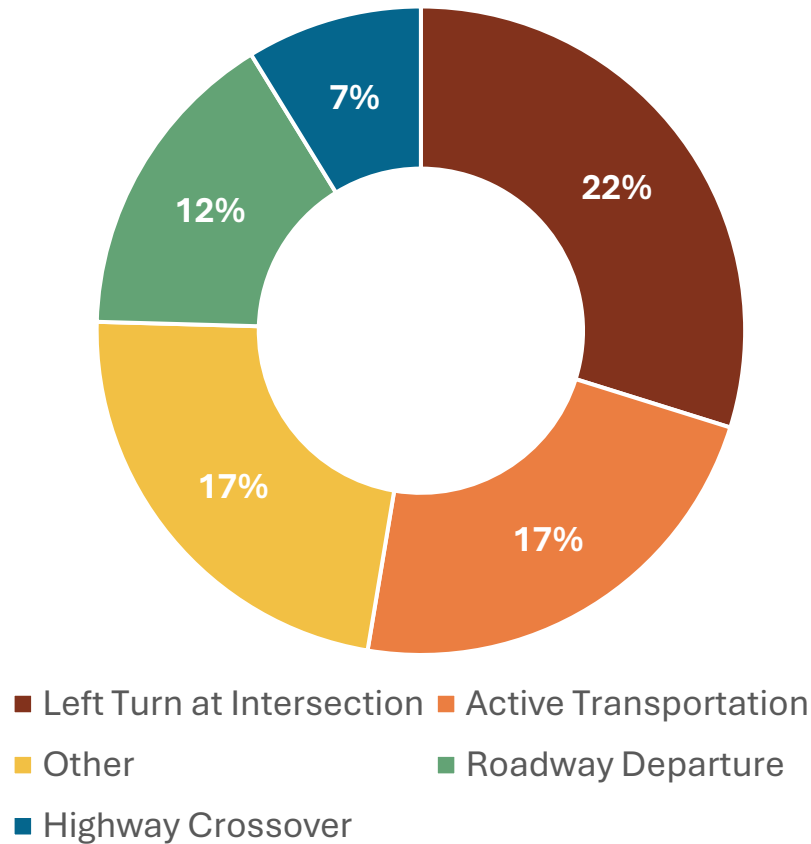
Annual Fatal and Serious Injury Crashes (2019-2023)



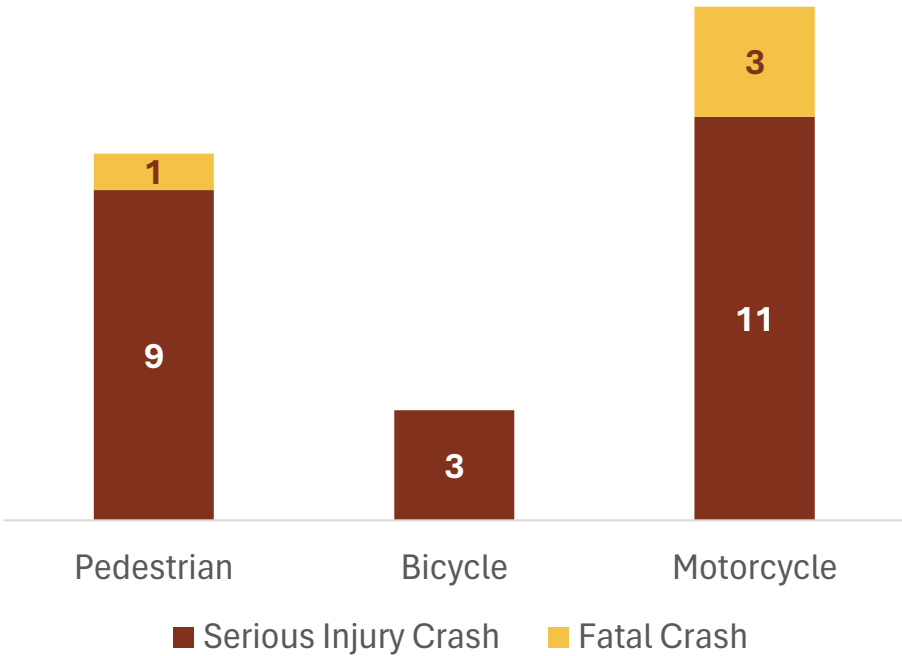
Fatal & Serious Manners of Collision



Top 5 Fatal & Serious Injury Crash Types



Active Transportation Crashes



Historical Crashes

40% of all Iron County crashes occur on 25% of the Cedar City GFA’s roadways

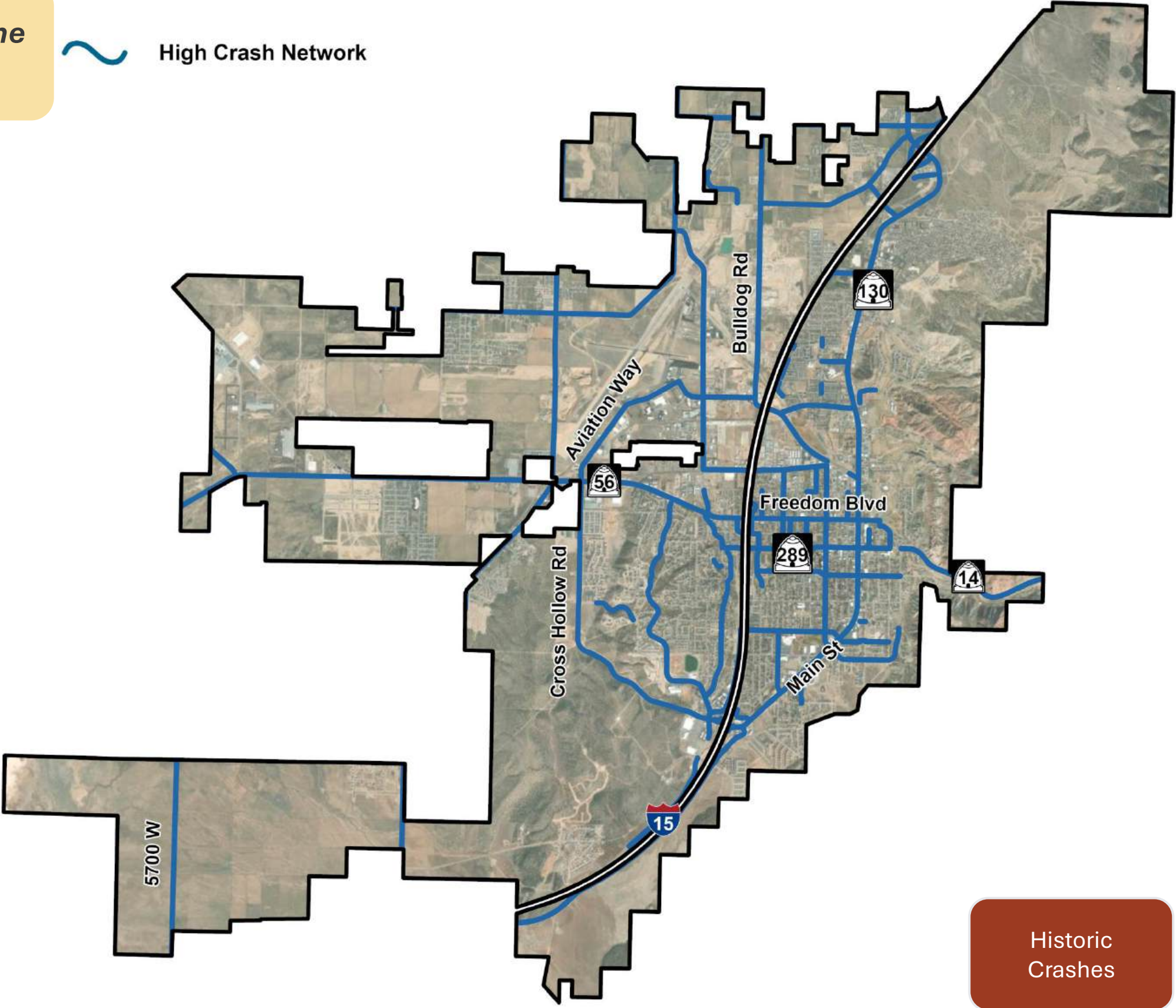
Understanding the types and locations of vehicle crashes is an important part of analyzing the safety conditions of a roadway network.

A component of the SAP is to identify locations with an **elevated risk** of crashes. The initial step of this analysis is to spatially reference crashes that occurred within the GFA. Next, a crash rate of total crashes (all severities) per mile is calculated for each roadway segment. This calculation helps identify frequency of crashes regardless of severity.

The roadway network to the right is identified as the **High-Crash Network**.

The High Crash Network includes roadways on which 40% of all crashes occurred throughout the County.

 High Crash Network



Historic Crashes

30% of all Iron County injury crashes occur on 10% of the Cedar City GFA’s roadways

A proactive approach to reducing and eliminating traffic fatalities and serious injuries requires an investigation of the conditions that contribute to severe traffic crashes. The Safe System Approach includes safety strategies and countermeasures that seek to not only reduce the number of crashes that occur but also **reduce the severity** when a crash does occur.

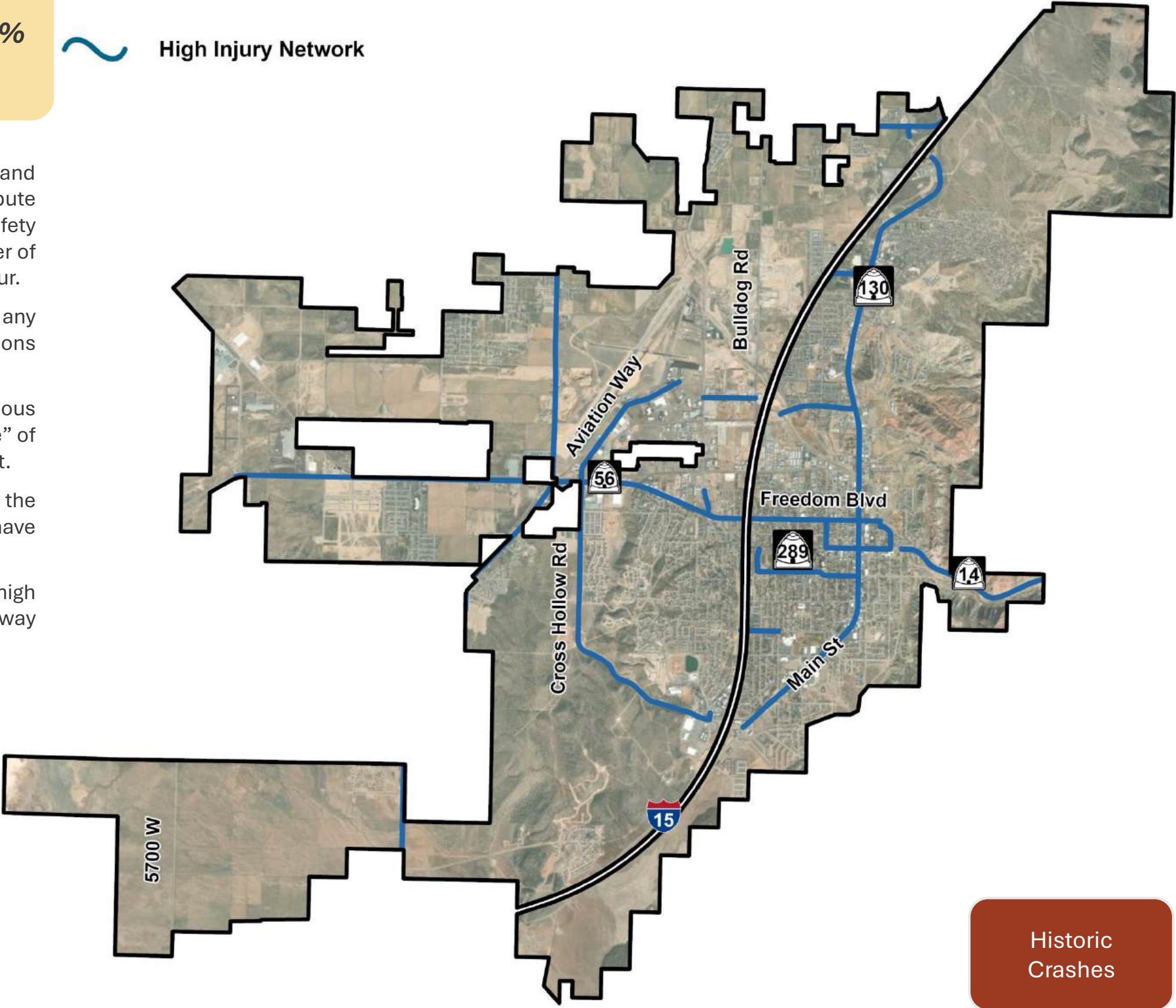
Identifying locations of fatal and injury crashes is a key step in detecting any patterns in the **location** or **characteristics** of roadways or intersections that are potentially impacting the frequency of injury crashes.

A **High-Injury Network** is created by spatially referencing fatal, serious injury, and minor-injury crashes to the roadway network. An “injury rate” of fatal and injury crashes per mile is calculated for each roadway segment.

The map to the right shows the **High-Injury Network**, which represents the roadways on which 60% of fatal and injury crashes in the County have occurred.

Note, the roadway segments identified in both the high crash and high injury networks represent locations with the highest crash rates. Roadway segments may be combined to illustrate more complete corridors.

~ High Injury Network



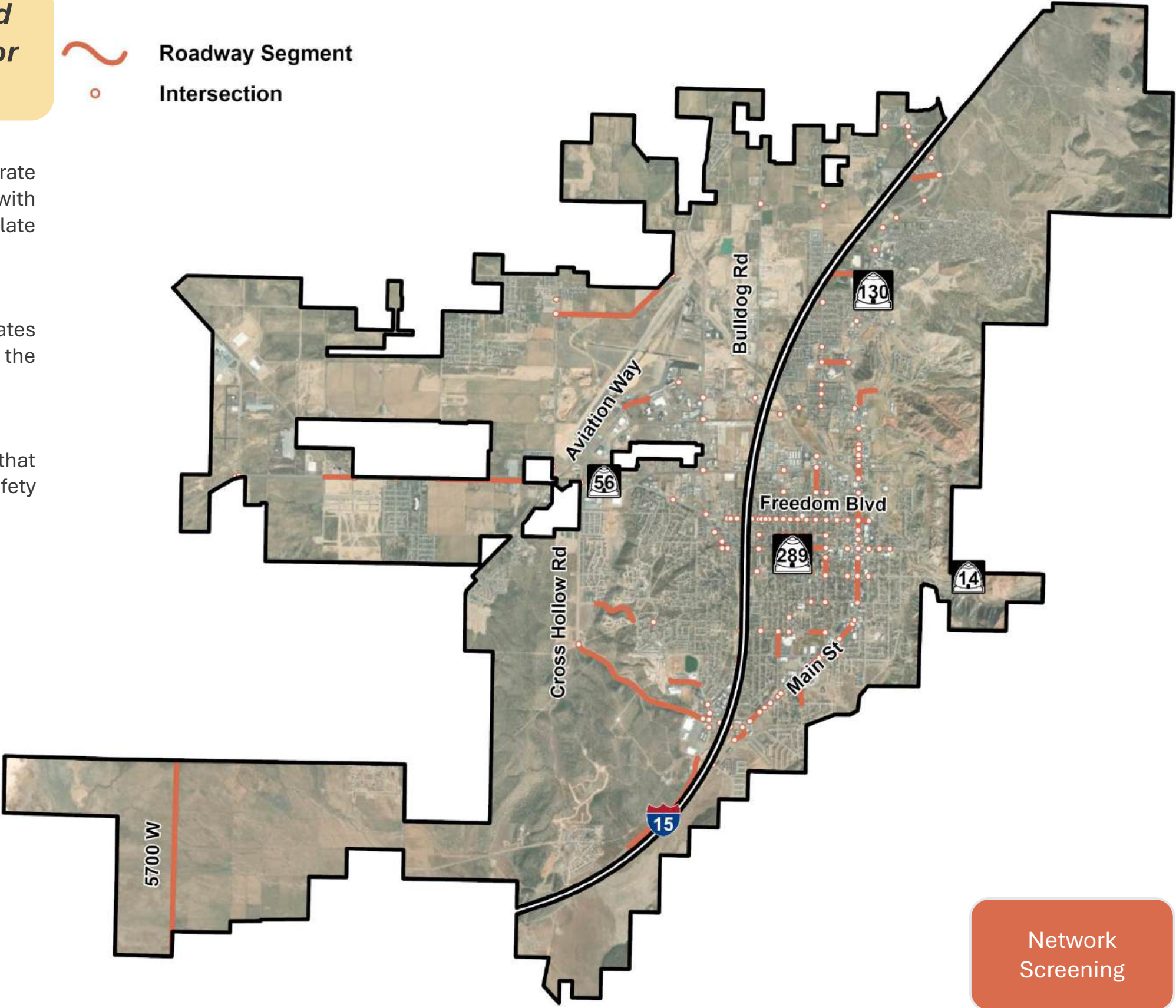
Historic
Crashes

Locations where historic crashes have exceeded expected crash rates based on similar roadway or intersection characteristics

The Critical Crash Rate (CCR) analysis compares the **observed** crash rate of a location to the **expected** crash rate based on similar locations with similar traffic volumes. Each GFA was analyzed individually to calculate CCRs specific to the GFAs demographics and facilities.

A location with a **positive** CCR indicates higher-than-expected crash rates and a potential for safety improvement. The higher the CCR value, the larger the potential to improve safety at that location.

The map to the right illustrates the **Critical Crash Rate Network** that includes roadway segments and intersections with a potential for safety improvement based on the CCR analysis in the Cedar City GFA.



Identifying potential conflict and high-risk areas using data from speeding events

Replica is an online data platform that aggregates cellular data provided mobility **patterns** and **trends**. Replica provides a digital application called **Safe Streets Planner** that combines detailed multimodal data with driving event data to identify and prioritize high conflict corridors.

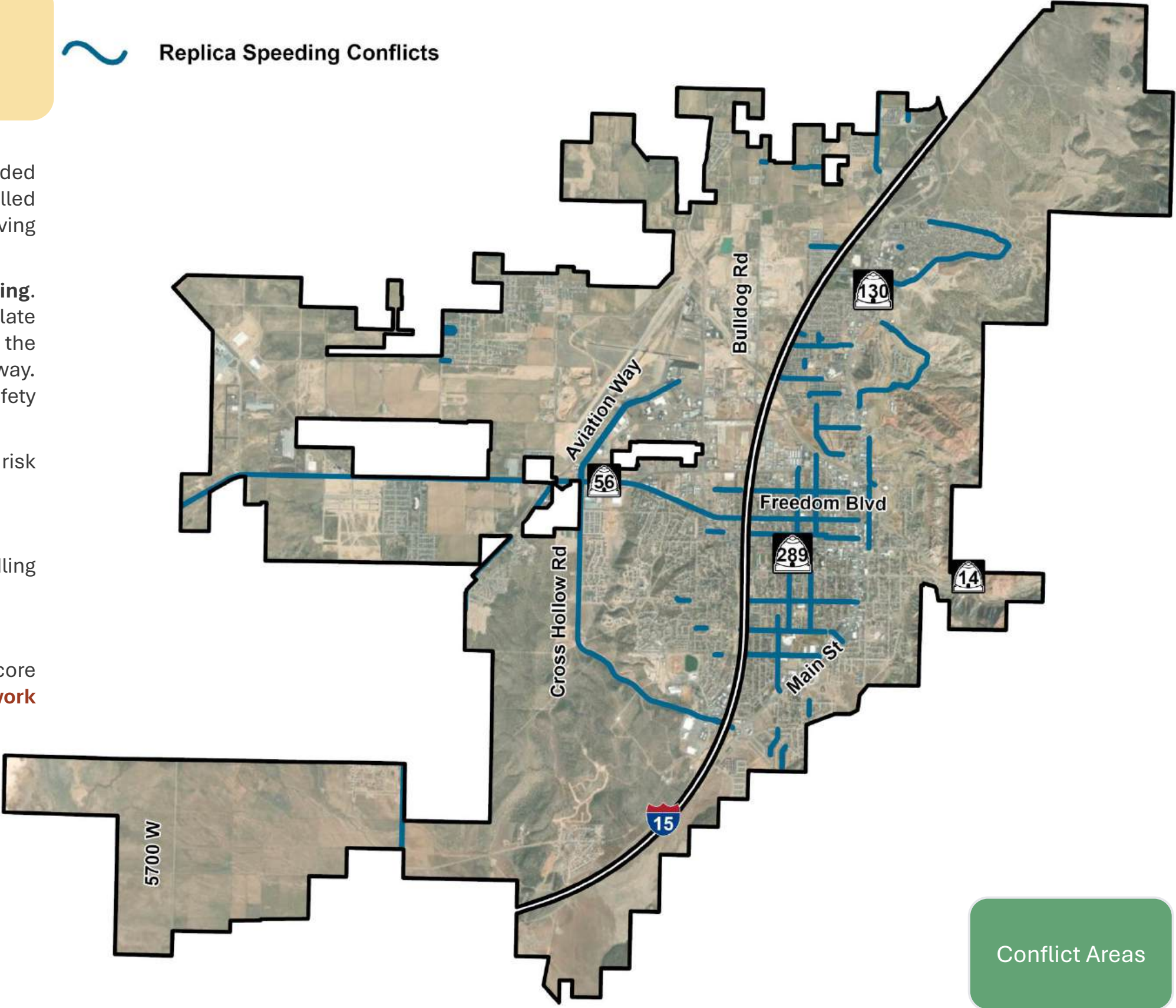
Replica’s cellular data includes indicators of risky behaviors like **speeding**. The number of instances or “events” of risky behaviors is used to calculate a risk score for a roadway. **Risk scores** are calculated to represent the proportion of risky events to the number of total trips on a roadway. Roadways with higher risk scores represent roadways with the most safety conflicts.

The following metrics were isolated in Replica to identify the highest risk roadways in Iron County:

- Speeding
- Non-Speeding Events: Suspected Collisions, Phone Handling (Distracted Driving), and Sudden Braking
- Active Transportation (pedestrians and bicyclist) high-risk corridors

The maximum risk score is 100 points. Roadways with a speeding risk score of 80 or more are included in the **Replica Speeding Conflict Network** shown to the right.

~ Replica Speeding Conflicts



Conflict Areas

Identifying potential conflict and high-risk areas using data from events such as phone-handling, sudden braking, and suspected crashes

Replica is an online data platform that aggregates cellular data provided mobility **patterns** and **trends**. Replica provides a digital applications called **Safe Streets Planner** that combines detailed multimodal data with driving event data to identify and prioritize high conflict corridors.

Replica’s cellular data includes indicators of certain risky behaviors; **speeding**, **distracted driving**, and **hard-braking**. The number of instances or “events” of risky behaviors is used to calculate a risk score for a roadway. Risky events captured in the data include phone handling, sudden braking, suspected collisions, and speeding. **Risk scores** are calculated to represent the proportion of risky events to the number of total trips on a roadway. Roadways with higher risk scores represent roadways with the most safety conflicts.

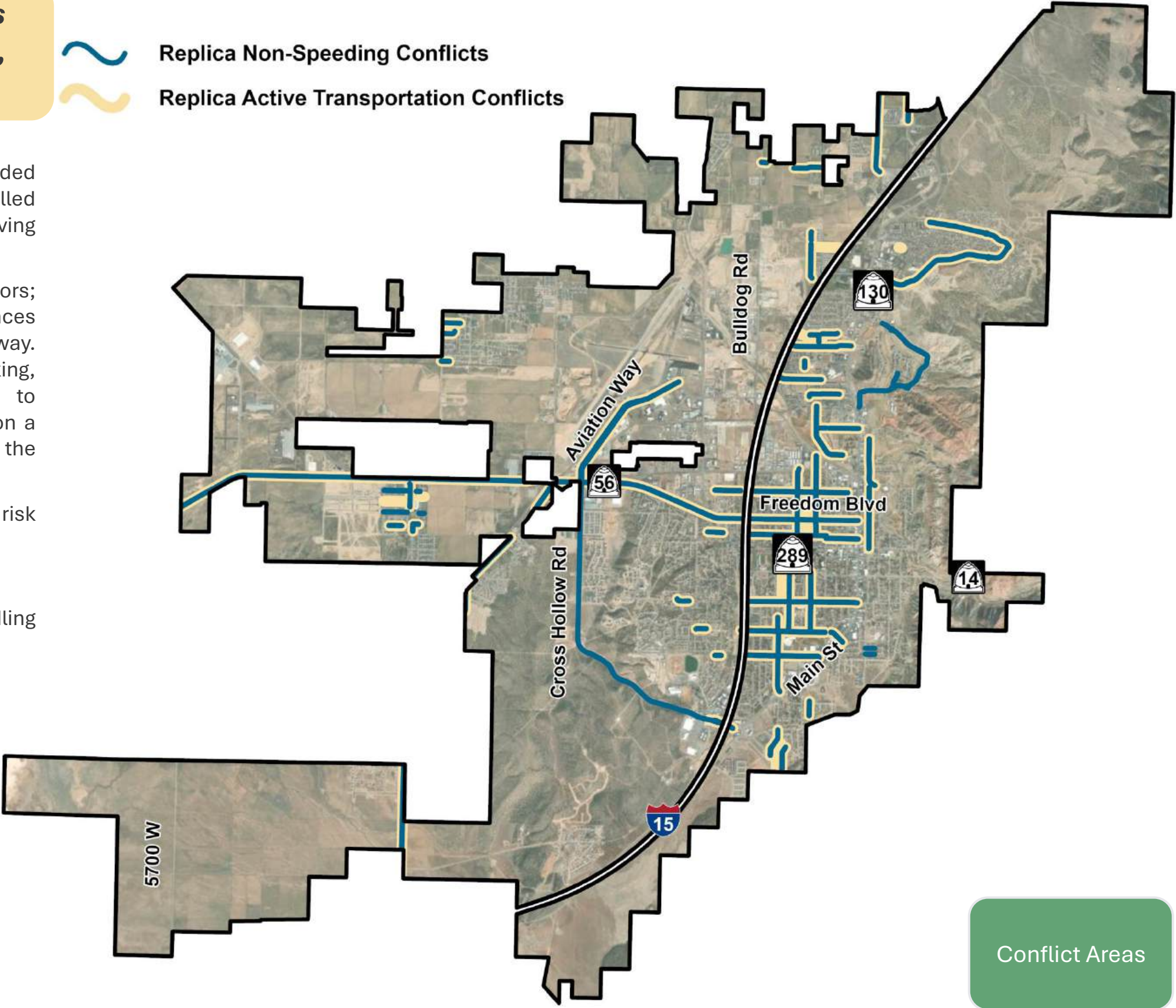
The following metrics were isolated in Replica to identify the highest risk roadways in Iron County:

- Speeding
- Non-Speeding Events: Suspected Collisions, Phone Handling (Distracted Driving), and Sudden Braking
- Active Transportation (pedestrians and bicyclist) high-risk corridors

The maximum risk score is 100 points. Roadways with a risk score of 80 or more in non-speeding events of the Replica metrics analyzed are included in the **Replica Non-Speeding Conflict Network** shown to the right.

 Replica Non-Speeding Conflicts

 Replica Active Transportation Conflicts



Conflict Areas

Evaluation of roadway characteristics contributing to risk based on locations of historic crashes

The **Crash Profile Risk Assessment** reviewed fatal and serious injury crashes reported in Iron County to identify attributes that correspond to a higher frequency of fatal and serious injury crashes.

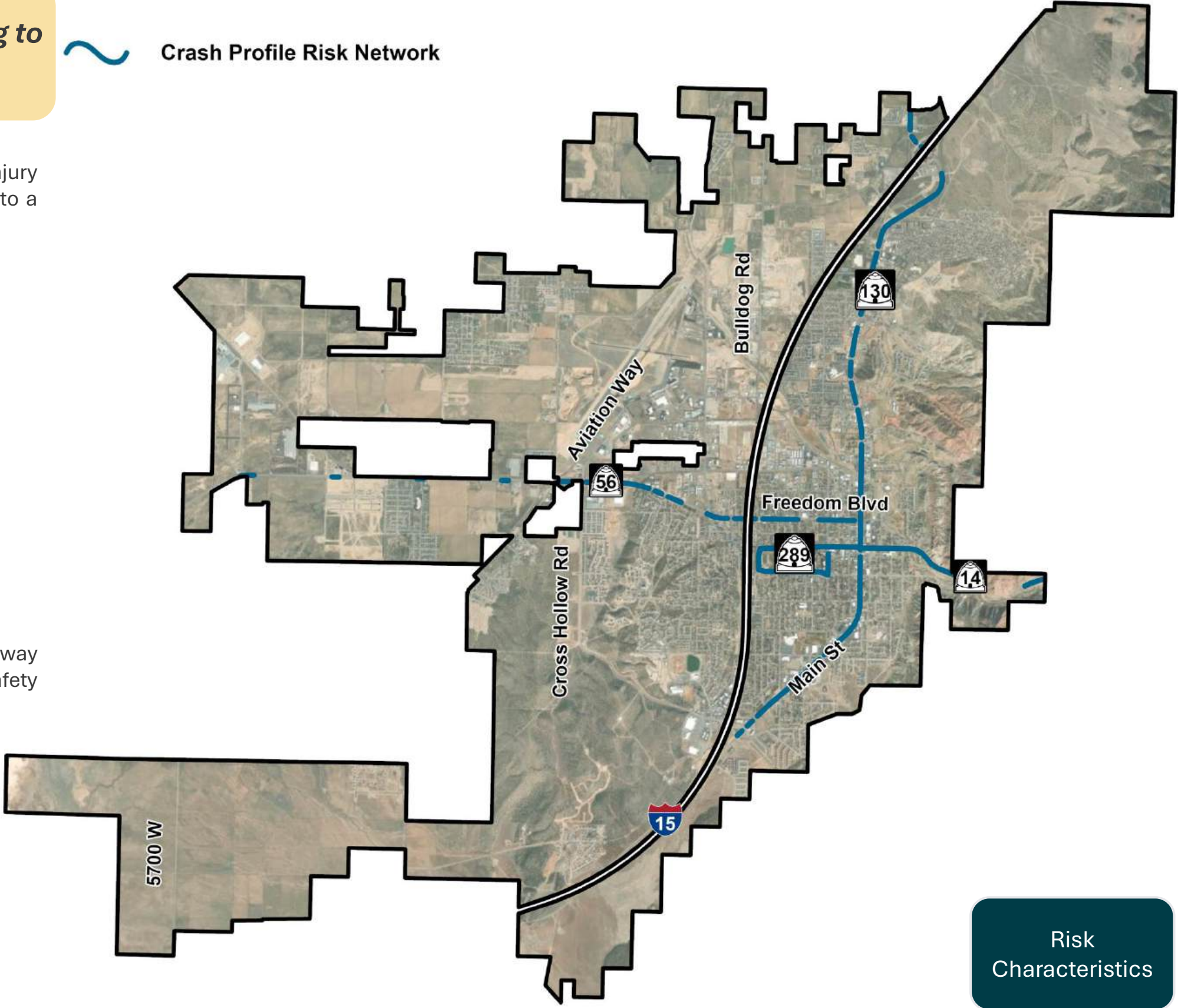
Characteristics considered include:

- Traffic volumes
- Speed limits
- Roadway cross-section
- Lighting condition
- Access Density
- Rumble strips
- Paved shoulder
- Roadside hazards
- Roadway Geometry (curves)

The crash profile risk score, has a maximum value of 100 points. A roadway segment with a score of 60 or higher is a candidate for safety improvements.

The **Crash Profile Risk Network** of the highest scoring roadway segments are shown to the right.

Crash Profile Risk Network



Risk
Characteristics

A risk rating based on the design and traffic control attributes of the roadway

The United States Road Assessment Program (**usRAP**) is a proactive tool for analyzing the safety of a roadway.

Star ratings are assigned to each segment of the roadway network. Only State Highways are included in the roadway network for this data set. Star ratings consider road infrastructure attributes known to impact the likelihood of a crash and its severity. Attributes include roadway type, width, shoulders, speed limit, traffic volumes, etc.

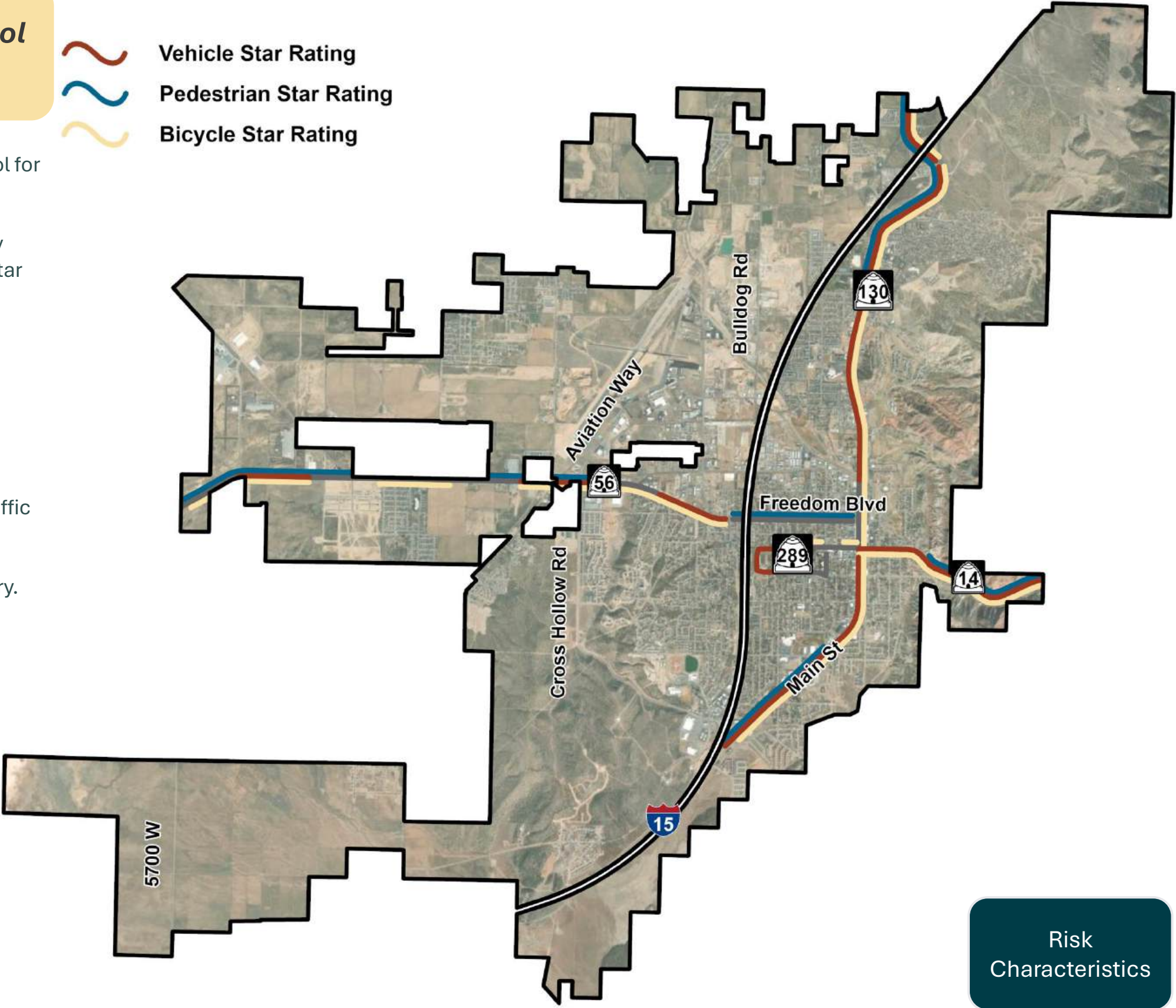
The roadway’s star rating is based on the presence or absence of these design and traffic control features.

5-star roadways have the **most** safety-related design and traffic control features. **1**-star roadways have the **fewest** safety-related design and traffic operational features.

Star ratings are assigned for a vehicle , pedestrian, and bicyclist category.

The roadways highlighted in the **usRAP Network** to the right have a star rating of **1** or **2** in the vehicle, pedestrian, or bicyclist category of usRAP ratings.

-  Vehicle Star Rating
-  Pedestrian Star Rating
-  Bicycle Star Rating



Risk
Characteristics

Appendix C.

GFA Workshops #2 Materials

SAFETY ACTION PLAN FOR ALL IRON COUNTY

WORKSHOP #2

Strategies and Projects

February 2025



Meeting Agenda



Project Updates and Schedule



Safety Improvement Strategies



Best Practices and Policy

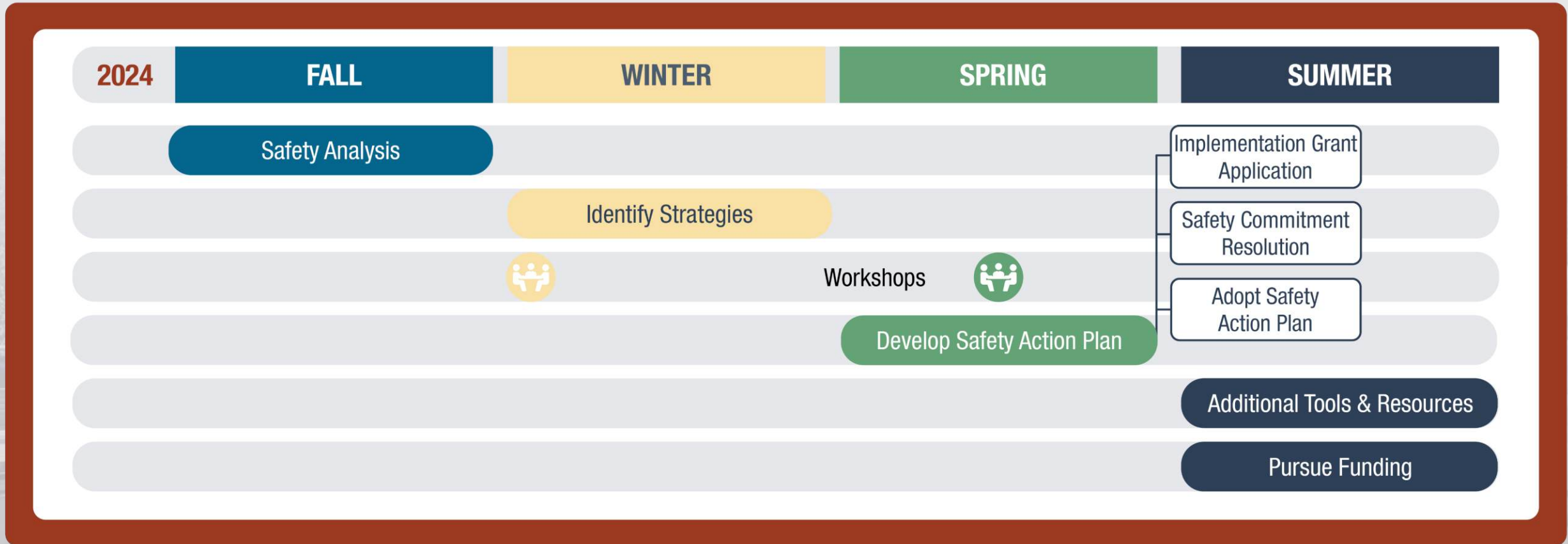


Project Information Sheets



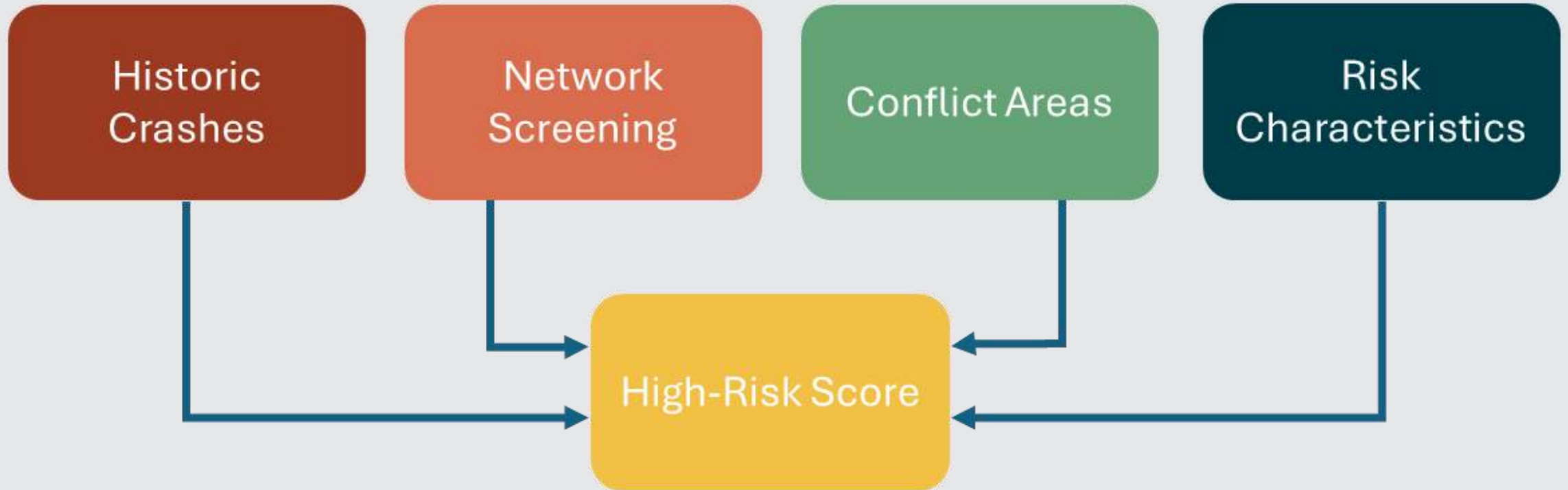
Workshop Activity

Safety Action Plan Overview

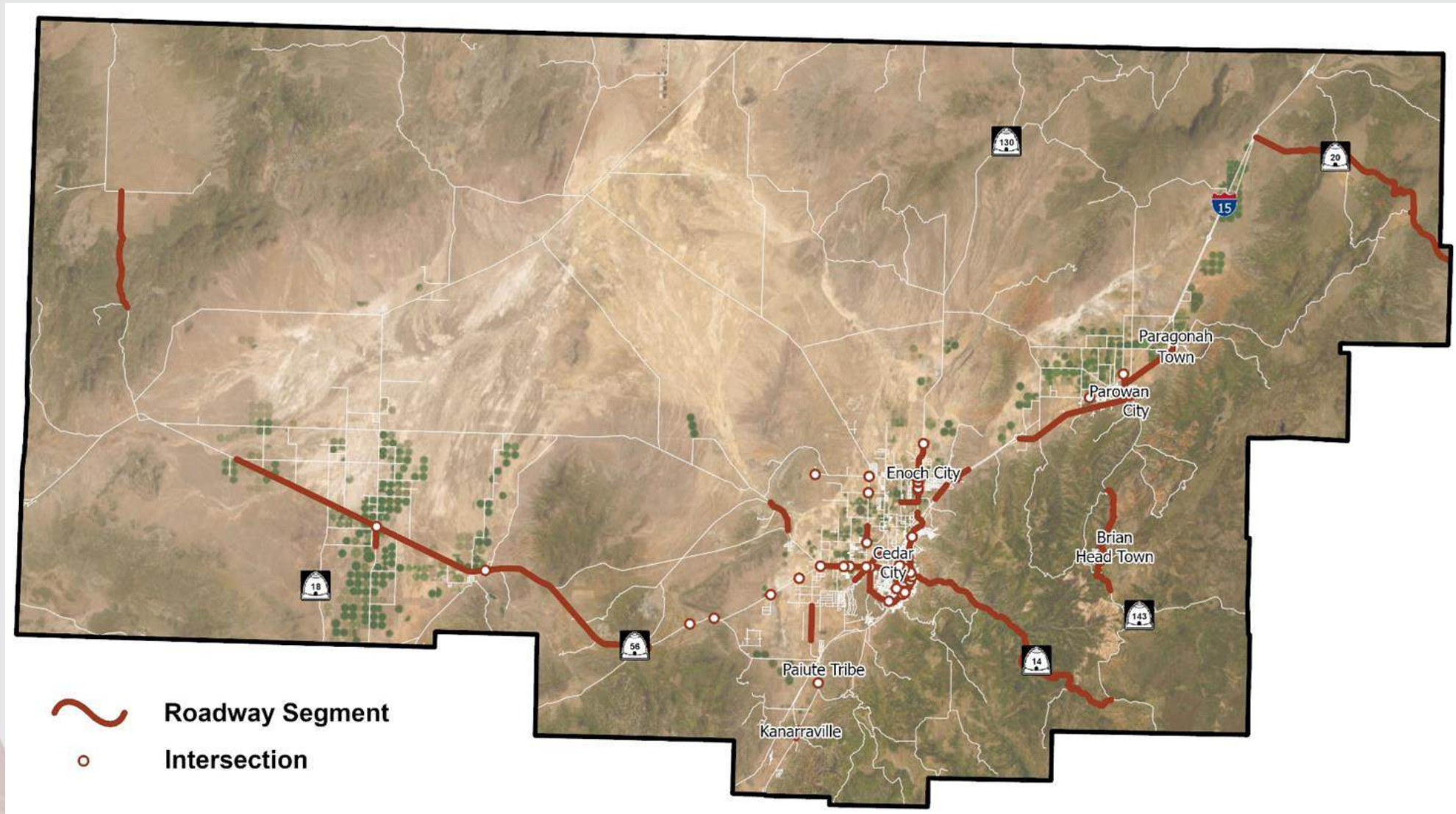


Geographic Focus Area (GFA) Workshop #1 Overview

Safety Analysis

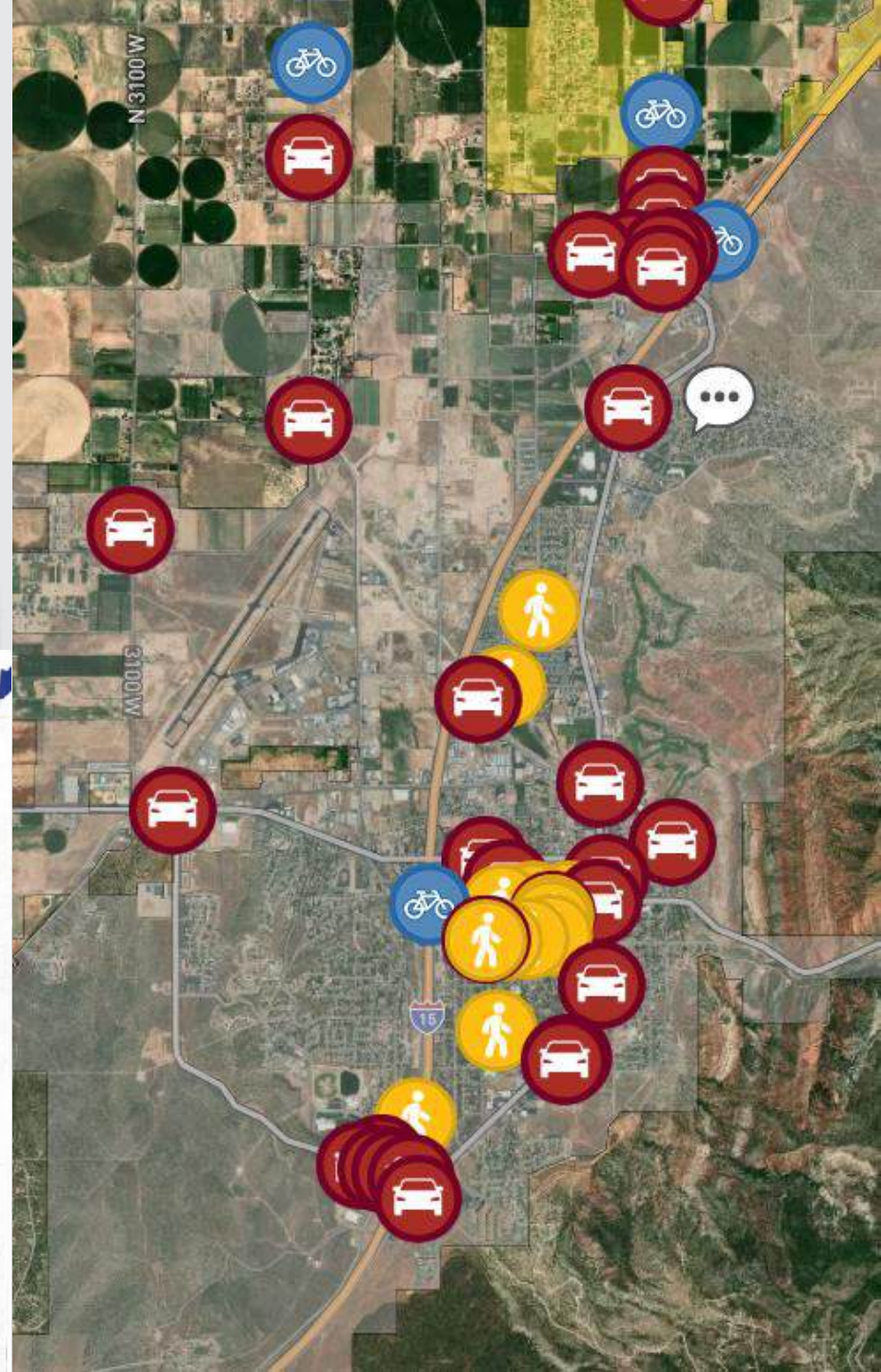
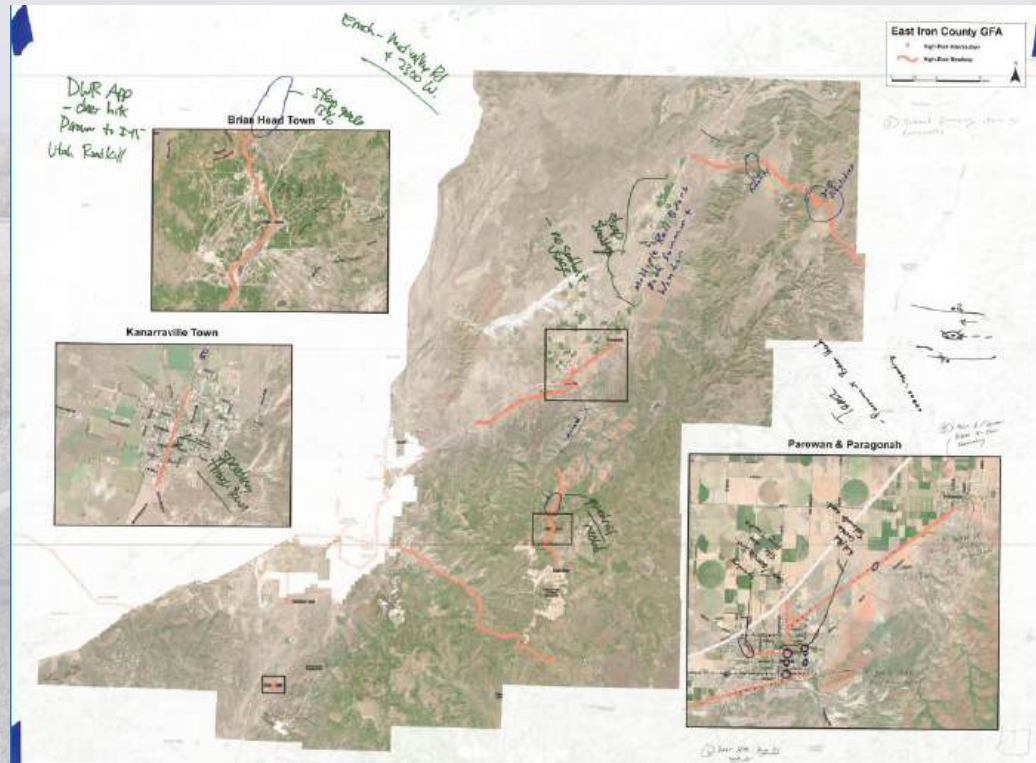


High-Risk Network



Community Feedback

- Online/Printed Surveys (374 responses)
- Online Interactive Map (95 comments)
- Workshop #1



Safety Improvement Strategies



Sources of Safety Strategies

1. FHWA Proven Safety Countermeasures
2. NHTSA Countermeasures That Work
3. FHWA PEDSAFE and BIKESAFE Systems
4. Crash Modification Factor Clearinghouse
5. Other Safety Action Plans

Safety Countermeasure Emphasis Areas



Speeding Strategies

- Variable Speed Limits
- Driver Feedback Speed Limit Signs
- Bulb-outs
- On-Pavement Speed Markings
- Transverse Rumble Strips



Pedestrian Strategies

- Protected Intersections
- High-Visibility Crosswalks
- Raised Crosswalks
- Medians and Pedestrian Refuge Islands
- Pedestrian Hybrid Beacons (PHB) or HAWK Signal



Bicyclist Strategies

- Painted Bicycle Lanes
- Buffered Bicycle Lanes
- Bicycle Ramps
- Shared Sidewalk Signs



Run Off Road Strategies

- Wider Edge Lines
- Edge Line Rumble Strips
- Post-Mounted Delineators
- Shoulder Widening
- Guardrail
- Safety Edge



Curve Strategies

- Curve Warning Signage
- In-Lane Curve Pavement Markings
- Speed Activated Flashers on Chevron Signs
- Transverse Rumble Strips Prior to Curves
- Retroreflective Strips on Curve Signage



Intersection Strategies

- Turn Lanes
- Signalization
- Roundabouts
- Signal Visibility Enhancements

Rural Focus



Rural agencies and communities should consider addressing at least one of four focus areas:

- Roadway Departures
- Pedestrian/Bicyclists
- Intersections
- Speed Management



Crosswalk Visibility Enhancements



- High-visibility crosswalks can reduce pedestrian injury crashes up to **40%**
- Intersection lighting can reduce pedestrian crashes up to **42%**
- Advance yield or stop markings and signs can reduce pedestrian crashes up to **25%**



<https://highways.dot.gov/safety/proven-safety-countermeasures>

Rectangular Rapid Flashing Beacons (RRFB)



- RRFBs can reduce crashes up to **47%** for pedestrian crashes
- RRFBs can increase motorist yielding rates up to **98%** (varies by speed limit, number of lanes, crossing distance, and time of day)



Pedestrian Hybrid Beacon (PHB)



- PHBs can reduce pedestrian crashes up to **55%**
- PHBs can reduce the total number of crashes up to **29%**



Shoulder Widening on Rural Roads



- Shoulders provide space for:
 - Emergency storage of disabled vehicles
 - Enforcement activities
 - Crash avoiding maneuvers
 - Vehicle recovery (run-off the road)
- Improve vulnerable user accommodations
- Offset from fixed objects



Wider Edge Lines



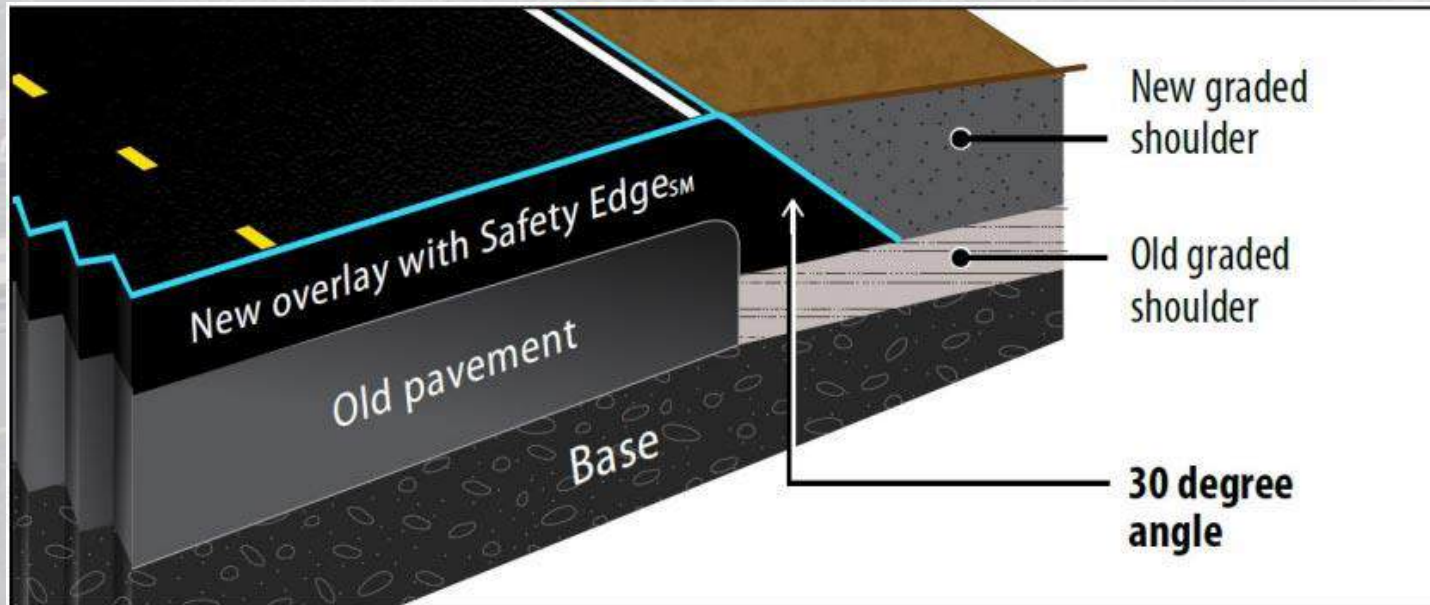
- Wider edge lines can reduce crashes up to **37%** for non-intersection, fatal and injury crashes on rural, two-lane roads
- Up to **22%** for fatal in injury crashes on rural freeways
- Wider edge lines have a benefit cost ratio of **25:1** For fatal and serious injury crashes on two-lane rural roads



Safety Edge



- Shapes the pavement edge to eliminate vertical drop off:
 - **21%** reduction in run-off road crashes
 - **11%** reduction in fatal and serious injury crashes
 - **700:1** to **1,500:1** benefit cost ratio



Rural Safety Countermeasures

Additional strategies to reduce roadway fatalities and serious injuries on rural roadways including:

- Speed Activated Flashers on Chevron Signs
- Transverse Rumble Strips Prior to Curves
- Guardrails



Countermeasures at Stop Control Intersection



- Up to **27%** reduction of fatal and injury crashes at rural intersections
- Average cost-benefit ratio of **12:1**
- Oversized advance intersection warning signs
- Retroreflective sheeting on signposts
- Enhanced pavement markings
- Clear and grub



Best Practices and Policy



SS4A Self-Certification Eligibility Checklist

A Safety Action Plan must complete 4 of the 6 elements:

1. Leadership Commitment
 - ☒ Governing body publicly commit to a zero fatalities and serious injury goal
2. Plan Development
 - ☒ Committee charged with plan development, implementation, and monitoring
3. Development Activities
 - ☒ Engagement with public and relevant stakeholders
4. Equity
 - ☒ Data-driven, inclusive, and representative processes
5. Policies, Plans, Guidelines, and/or Standards
 - ☒ Assessment policies, plans, guidelines, and/or standards
6. Progress
 - ☒ Description on how progress will be measured over time

Policy Review

- 17 local and region planning documents
 - General Plans
 - Transportation Master Plans
 - Municipal Codes
- Local discussions
 - Current policies, procedures, standards
 - What may be missing that would help you in your position?



February 2025

Iron County Safety Action Plan

DRAFT Technical Memorandum #3 - Policy and Process Changes

Project Information Sheets



Project Information Sheets

- Project Number
- Location Information
- Key Intersections, identified in the safety analysis
- Project Location

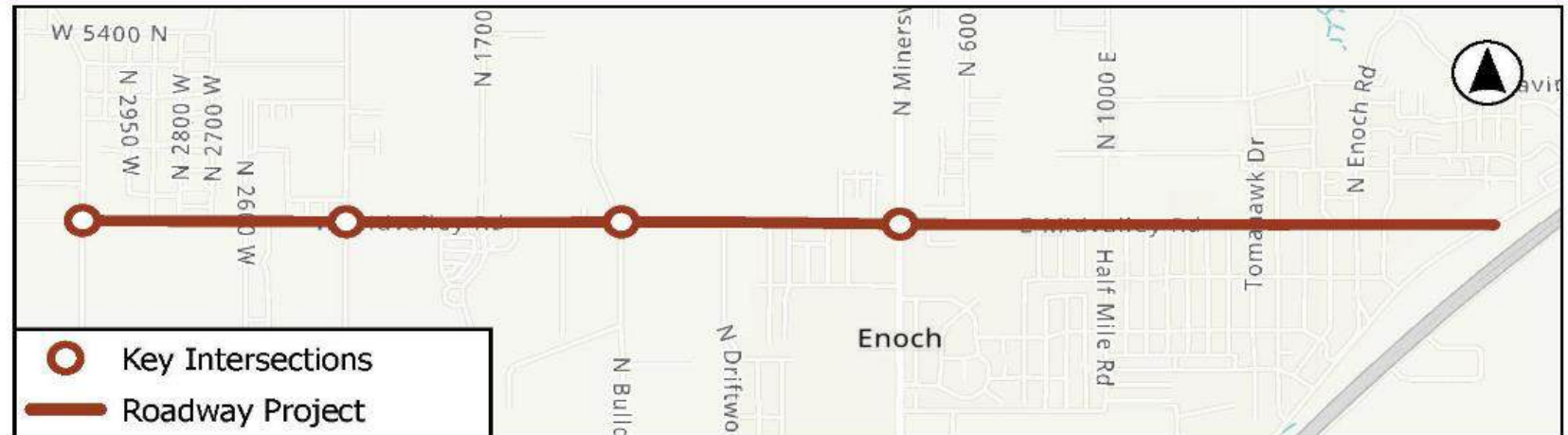


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Project Information Sheet

Project Name: Midvalley Road from Lund Highway to Old Highway 91
Roadway Classification: Major Collector, Federal Aid Route
Jurisdiction(s): Enoch City, Unincorporated Iron County
GFA(s): Enoch City GFA, West Iron County GFA
GFA Emphasis Areas: Safety Restraints, Intersections, Older Drivers
Equity Review: Utah Healthy Places

Key Intersections:
Lund Highway
2300 West
Bulldog Road
SR 130



Project Information Sheets

- Roadway Characteristics
- Crash History

Project Information & Safety Analysis Summary

Roadway Characteristics

Length (miles):	5.14
Speed Limit (mph):	35
Daily Traffic Volume (AADT):	4,014
Lane, Median Type:	2, NA
Number of Key Intersections:	4

Why was this location identified?

High Crash Network:	✓
High Injury Network:	
Network Screening:	
Conflict Areas:	✓
Risk Characteristics:	

Roadway Crash History

Crash Severity (2019 - 2023)

Fatal Crashes (K)	2
Serious Injury Crashes (A)	2
Minor Injury Crashes (B)	1
Possible Injury Crashes (C)	8
No Injury/PDO Crashes (O)	20
Total Crashes	33
Total EPDO Crashes	2,033

Crash Types

Angle	15
Rear End (RE)	2
Sideswipe (SS)	2
Head On (HO)	1
Left Turns (LT)	3
Roadway Departure (RD)	5
Single Vehicle (SV)	12

Vulnerable Road Users

Pedestrian (Ped)	-
Bicyclist (Bike)	-

Emphasis Areas

Speeding (S)	3
Unrestrained (U)	25
Intersection (I)	22

Project Information Sheets

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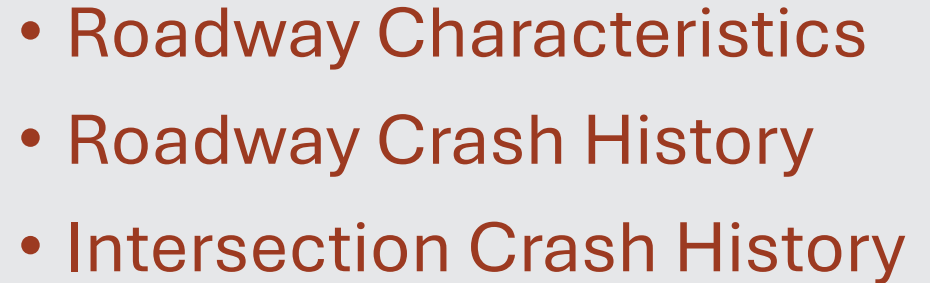
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Emphasis Areas	
Speeding (S)	3
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Key Intersection Crash History

[illegible]

- [illegible]

Case Study Projects

In addition to the location specific project sheets. Typical improvements at common locations that could be implemented at similar characteristics will include:

- Intersections
 - Signalized
 - Unsignalized
 - Skewed approaches
 - Turn lanes on and off a 2-lane, high-speed roadway (SR 56, SR 130, etc.)
- Roadways
 - 2-lane, high-speed
 - 3-5 lanes with a two-way left-turn lane
 - Local streets

Interactive Workshop

Review tabletop maps and project information sheets

- Are these your highest priority safety locations?
- Do the suggested countermeasure make sense for your area?
 - What would you add or remove?
- Are there other safety improvements that may be applicable?
 - Are there improvements you feel could be implemented in multiple areas?
- What education/outreach tools do you have available, or do you need?

Project Website

IronCountySafetyPlan.com

- Interactive map for feedback and comments on projects or locations
- Access documents

Next Steps

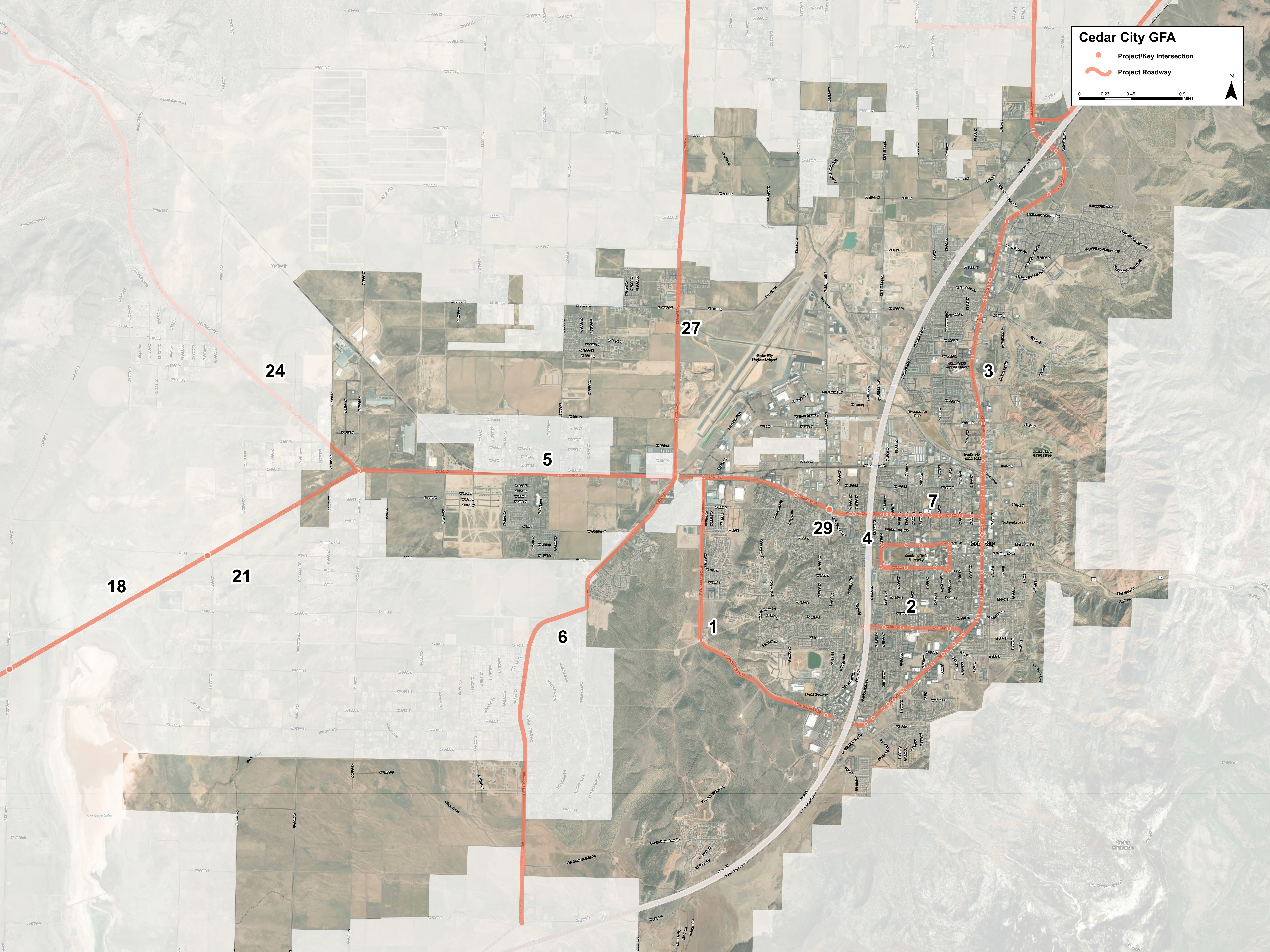
- Provide feedback via the project website
- Continue dialogue with elected officials
 - Prepare to support a Regional Safety Commitment Resolution
 - Prepare for local match requirements

**For additional information or questions, please
contact:**

**Rich Wilson
rwilson@ironcounty.net
435.477.2373**

**Eric Sweat
eric.sweat@kimley-horn.com
385.831.2008**

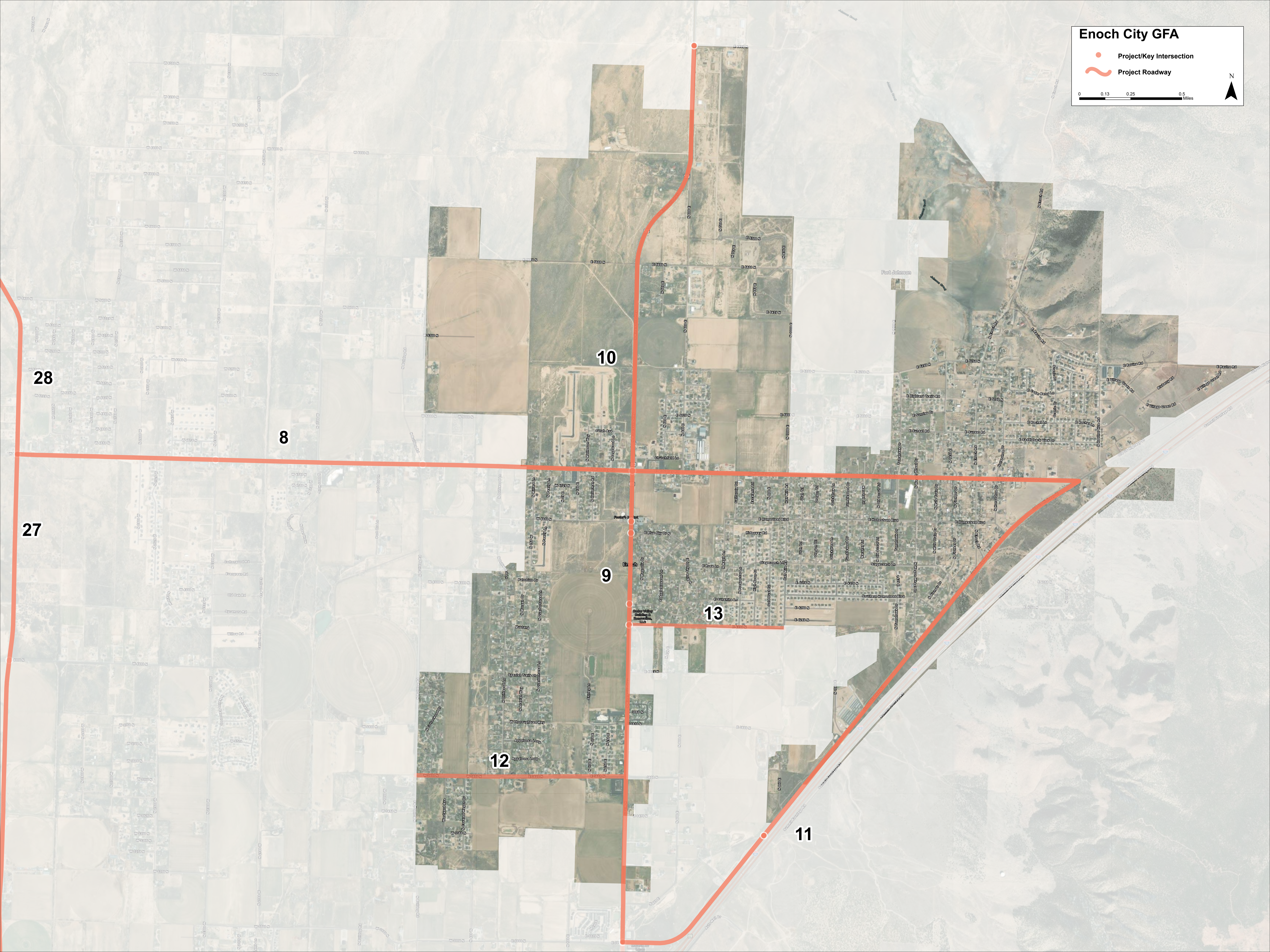




Enoch City GFA

- Project/Key Intersection
- Project Roadway

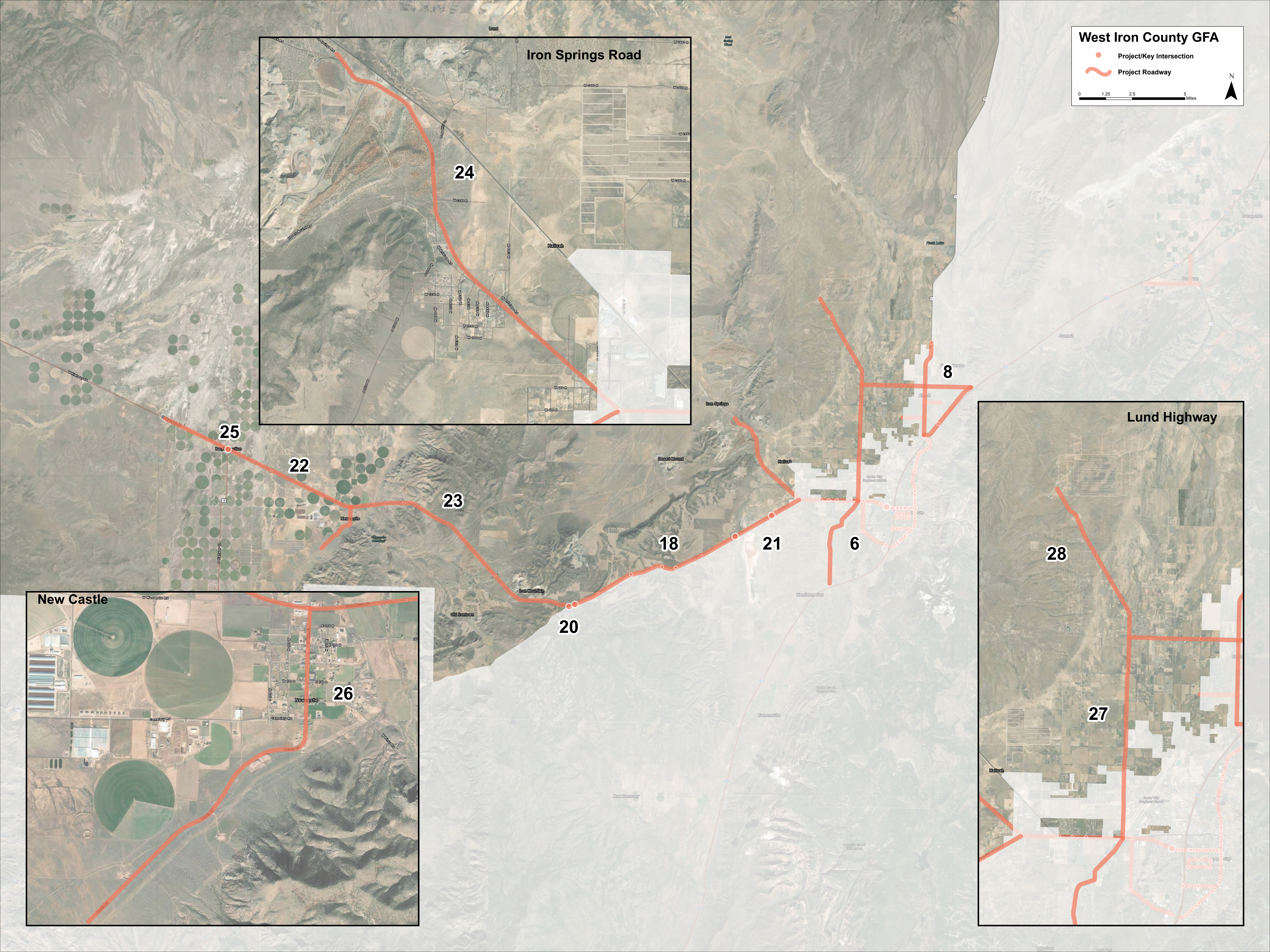
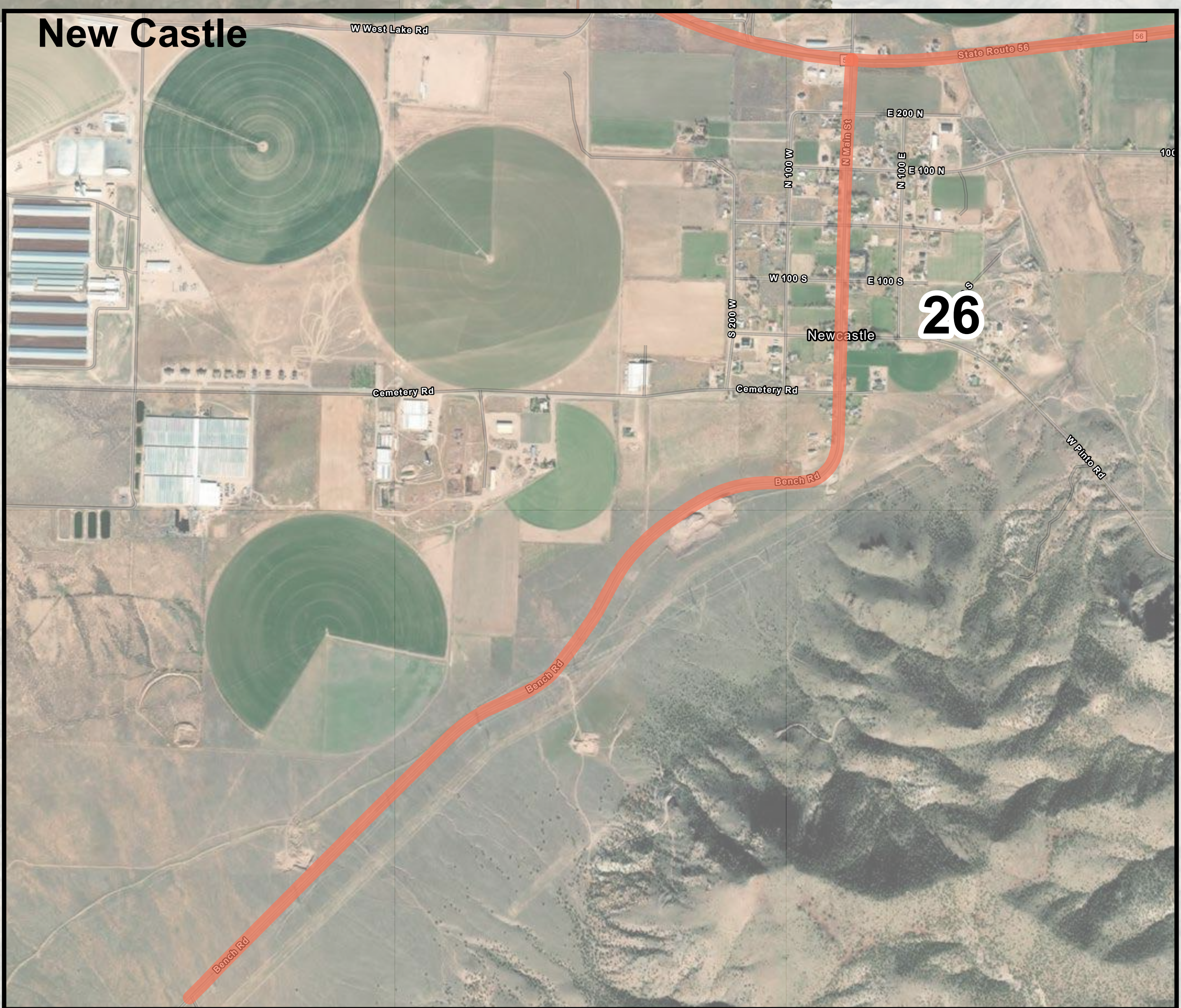
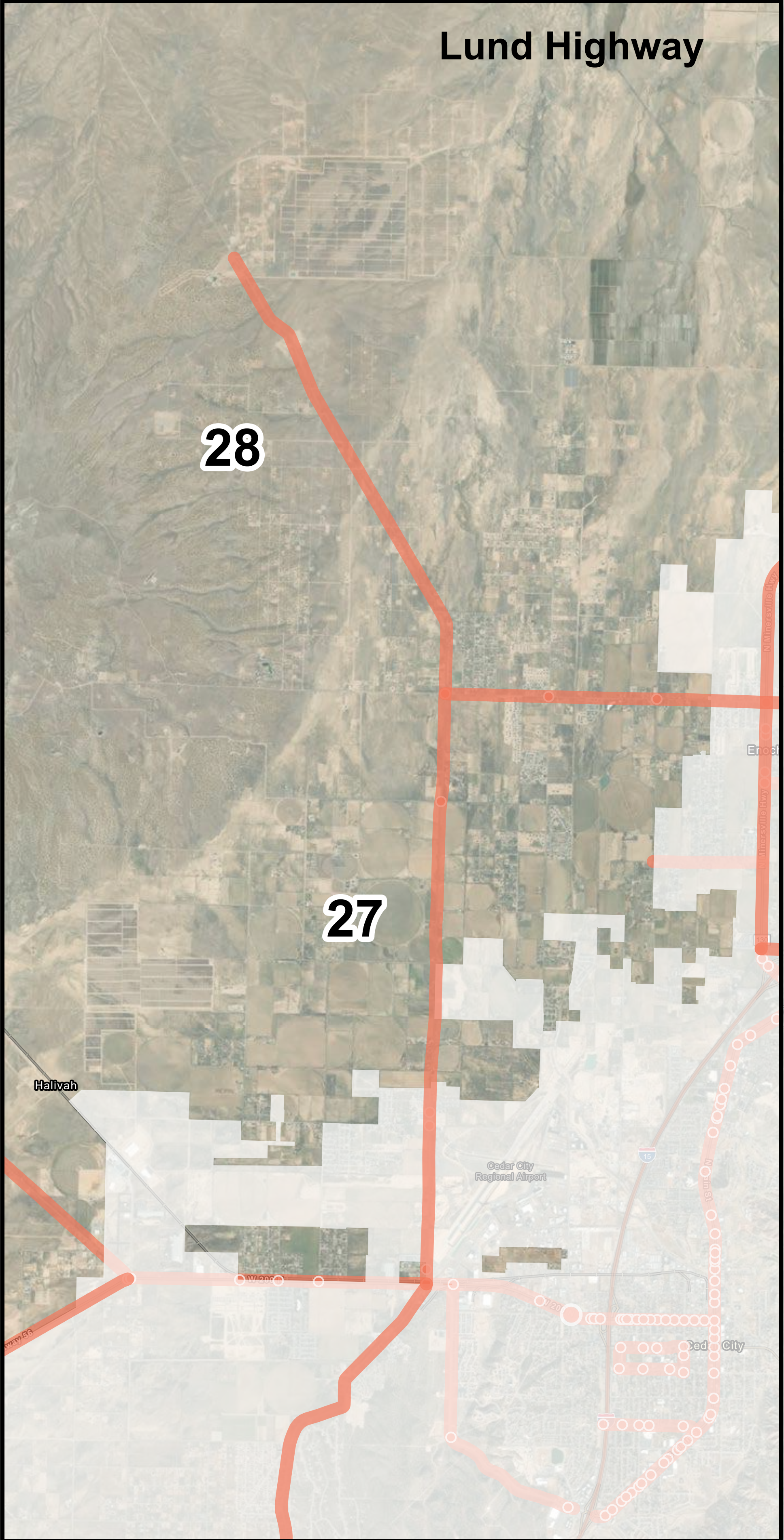
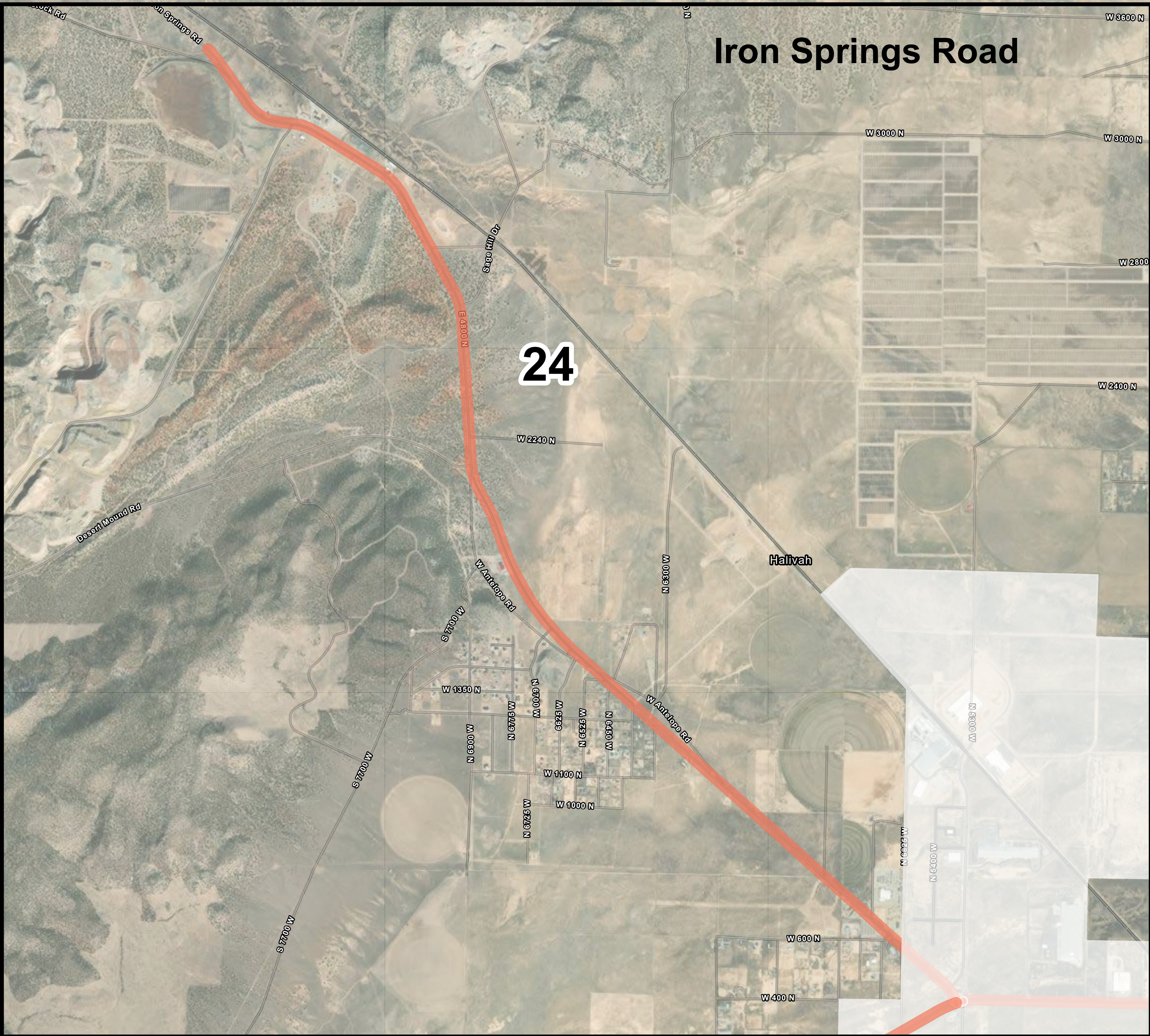
0 0.13 0.25 0.5 Miles



West Iron County GFA

- Project/Key Intersection
- Project Roadway

0 1.25 2.5 5 Miles



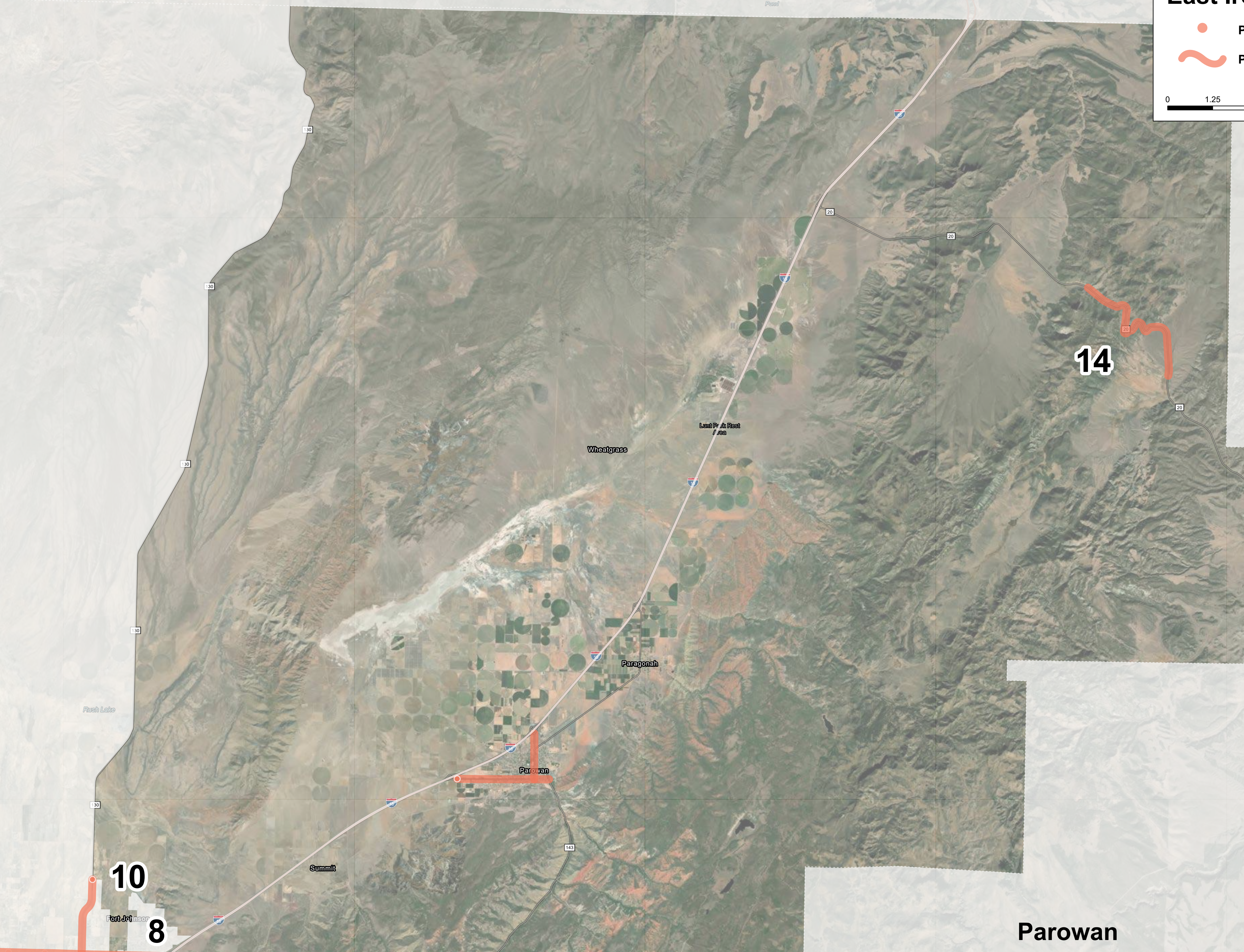
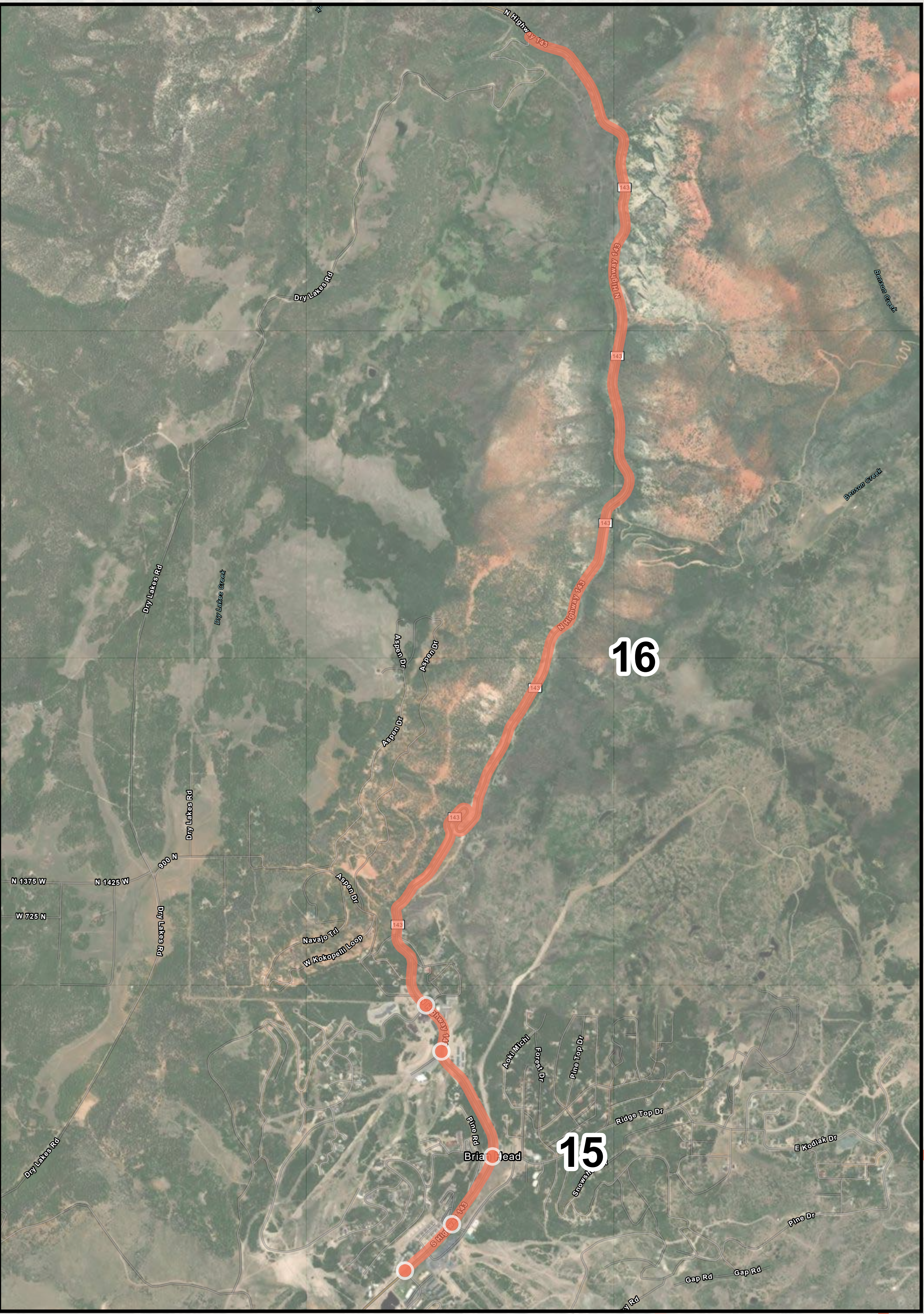
East Iron County GFA

- Project/Key Intersection
- Project Roadway

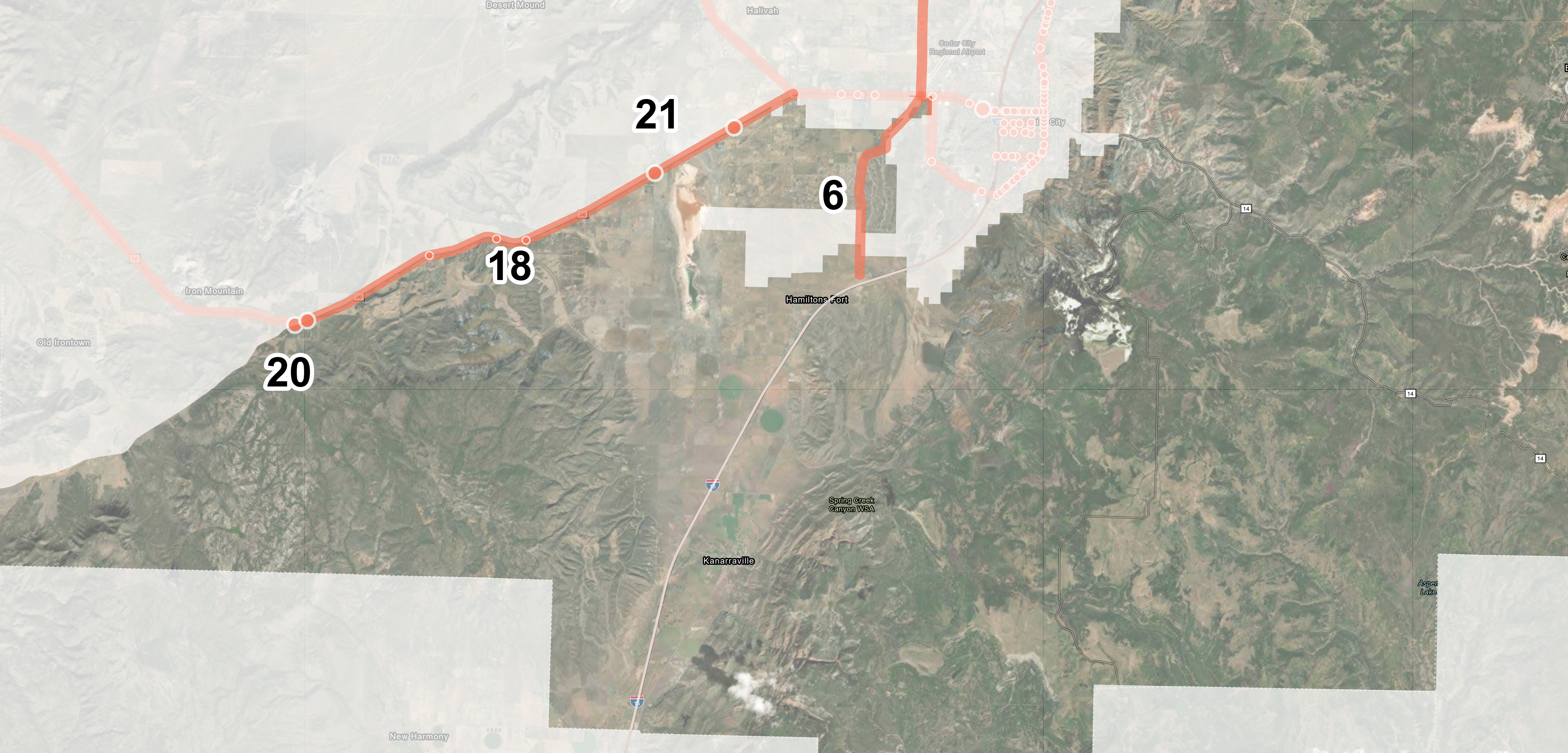
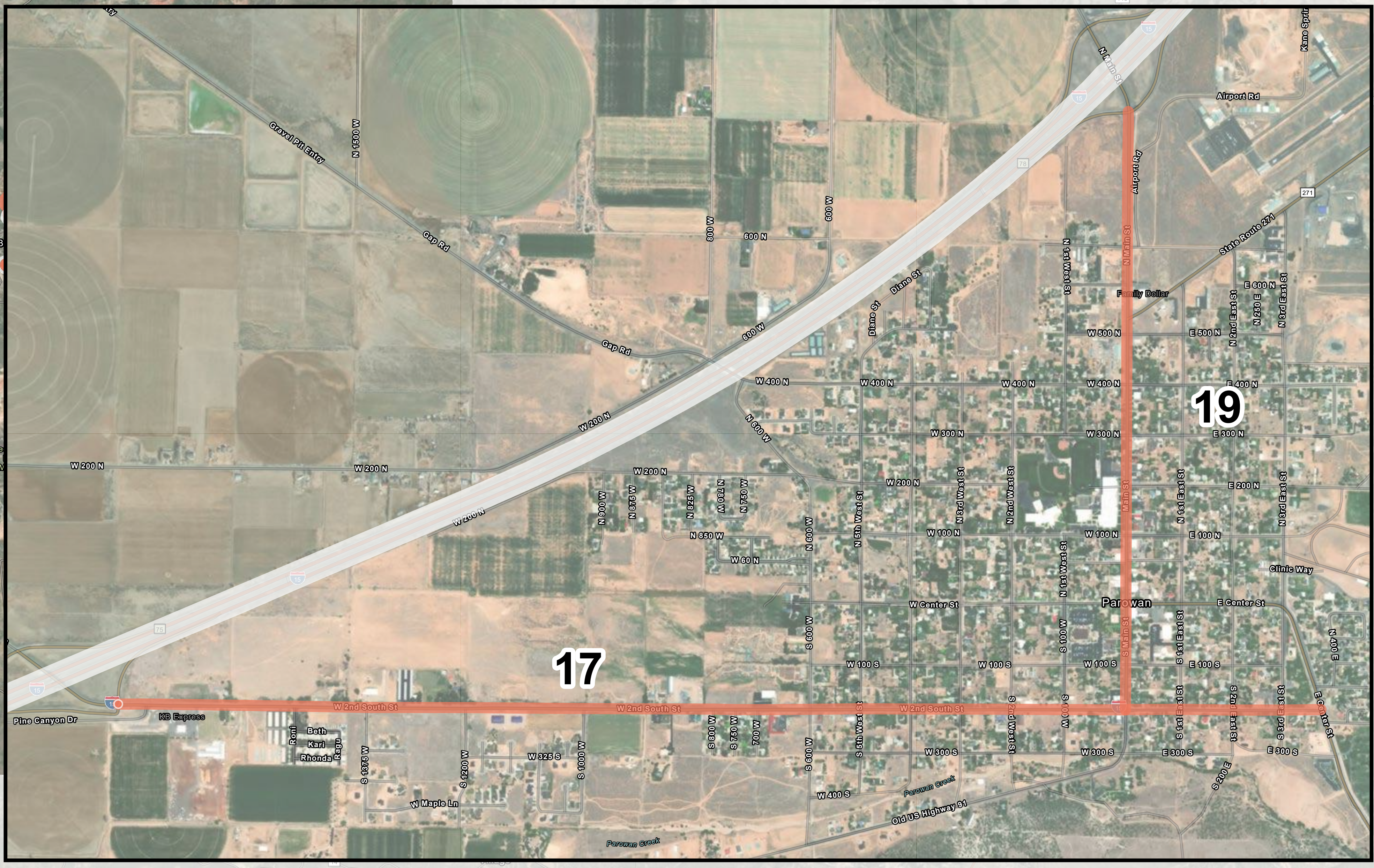
0 1.25 2.5 5 Miles



Brian Head Town



Parowan



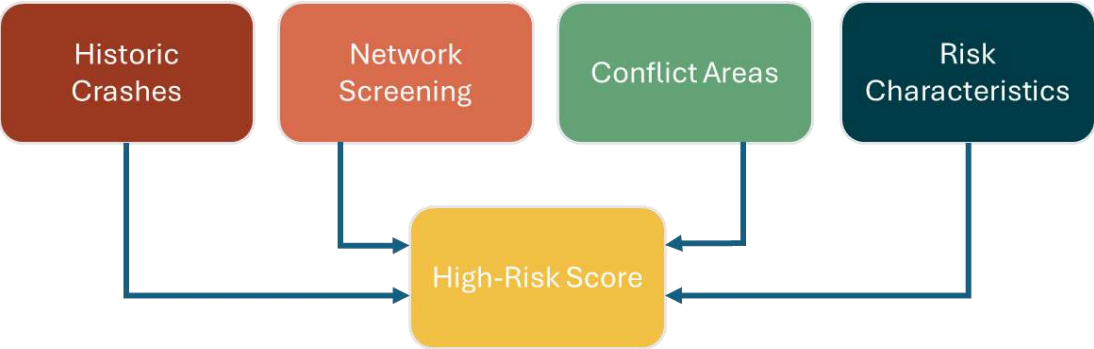


“A plan to provide local governments the means to make strategic roadway safety improvements”

Iron County, in partnership with surrounding communities, is preparing a county-wide Safety Action Plan (SAP). The SAP will present a **holistic, well-defined strategy** to **reduce roadway fatalities and serious injuries** for all of Iron County.

The SAP will **analyze** safety needs, **identify** high-risk locations and factors contributing to crashes, and **prioritize** strategies to address them.

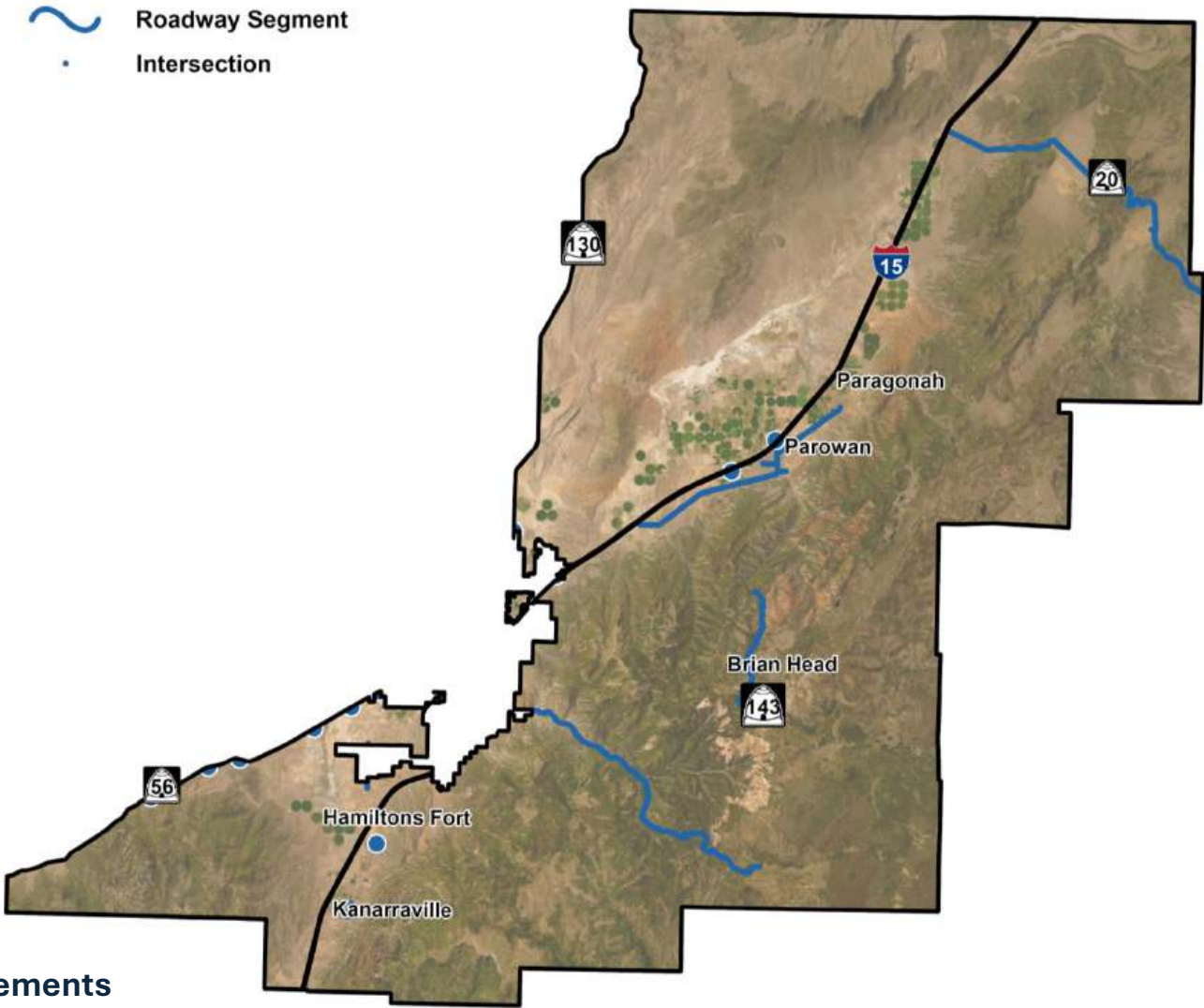
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Self-Certification Checklist

Plan must include the following:

- ☐ Safety Analysis
 - ☐ Existing conditions and historical trends
 - ☐ Crashes by location, severity, and contributing factor
 - ☐ Systemic and specific safety needs
 - ☐ Geospatial identification of higher risk locations
- ☐ Identification of comprehensive set of projects and strategies



Safe System Approach Elements

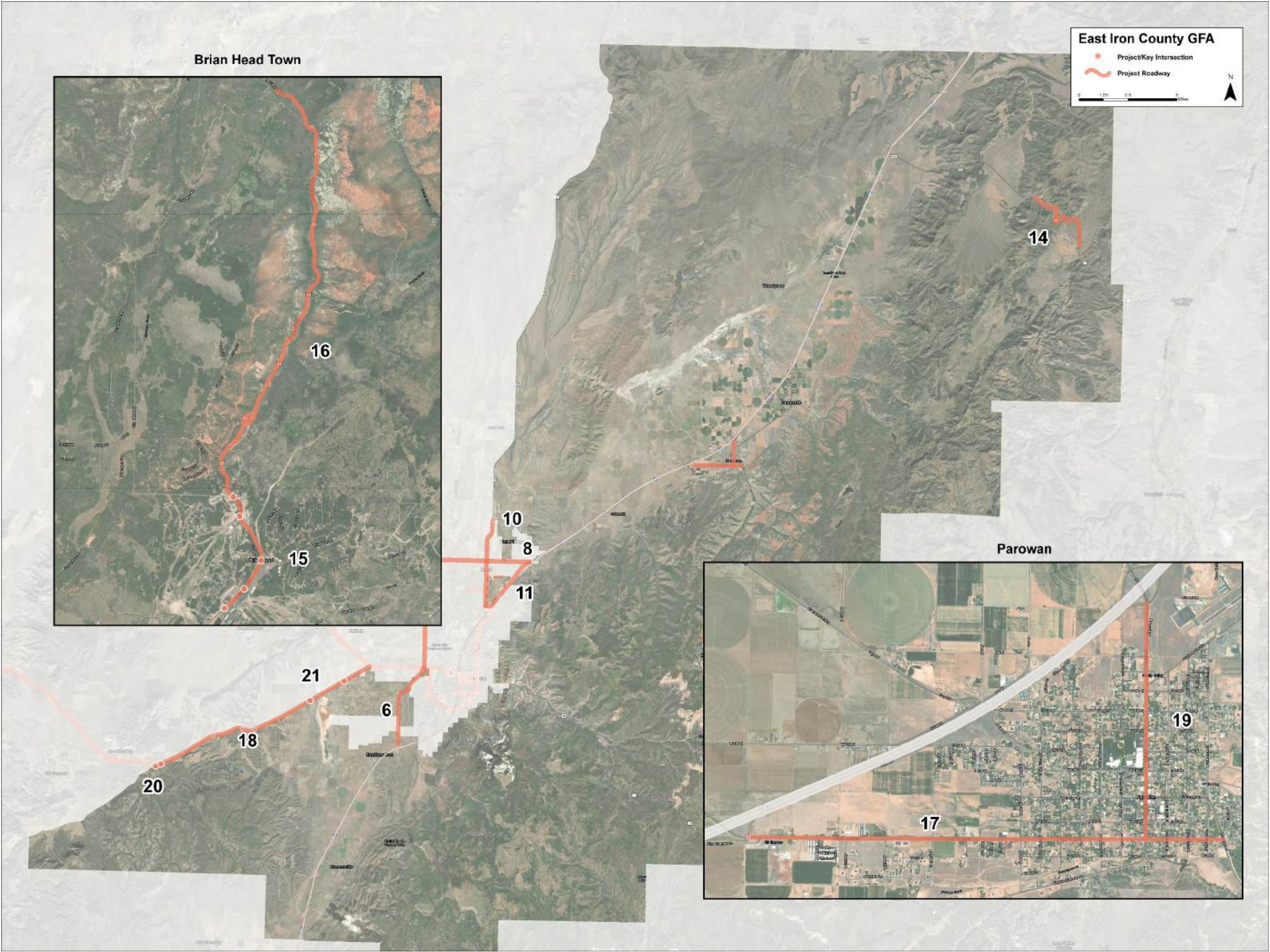
	Safe Road users	Encourage safe, responsible driving and behavior including those who walk, bike, drive, ride transit or travel by other modes and create conditions that prioritize their ability to reach their destination unharmed.
	Safe Vehicles	Expand the availability of vehicle systems and features that help to prevent crashes and minimize the impact of crashes on both occupants and non-occupants.
	Safe Speeds	Humans are less likely to survive high-speed crashes. Promote safer speeds in all roadway environments through a combination of thoughtful, equitable, context-appropriate roadway design, appropriate speed-limit setting, targeted education, outreach campaigns and enforcement.
	Safe Roads	Design streets to mitigate human mistakes and account for injury tolerances, encourage safer behaviors, and facilitate safe travel by the most vulnerable users. An example includes physically separating people traveling at different speeds.
	Post-crash Care	People who are injured in crashes rely on emergency first responders to quickly locate and stabilize their injuries and transport them to medical facilities. Post-crash care also includes forensic analysis at the crash site, traffic incident management and other activities.

PROJECT LOCATIONS

EAST IRON COUNTY GFA



Project Number	Project Location
6	Westview Drive from SR 56 to 2700 South
8	Midvalley Road from Lund Highway to Old Highway 91
10	SR 130 from Midvalley Road to 6400 North
11	Old Highway 91 from SR 130 to Midvalley Road
14	SR 20 from Burnt Peak Road to Bear Valley Road
15	Brian Head, SR 143 Intersections
16	SR 143 from Dry Lakes Road to Vasels Road
17	200 South from I-15 to SR 143
18	SR 56 from Iron Springs Road to Comstock Road
19	Main Street (SR 274) from I-15 to 200 South (SR 143)
20	SR 56 Mountainous intersection (Comstock, Pinto)
21	SR 56 Rural Local Intersections (7700 West)



SAFETY STRATEGIES

EAST IRON COUNTY GFA



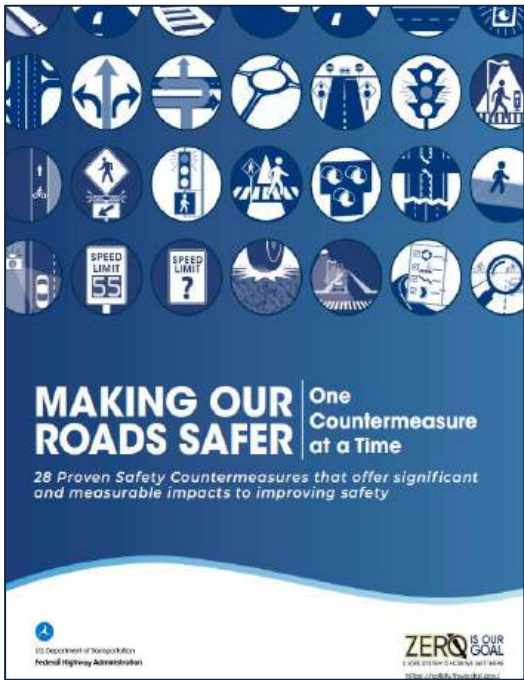
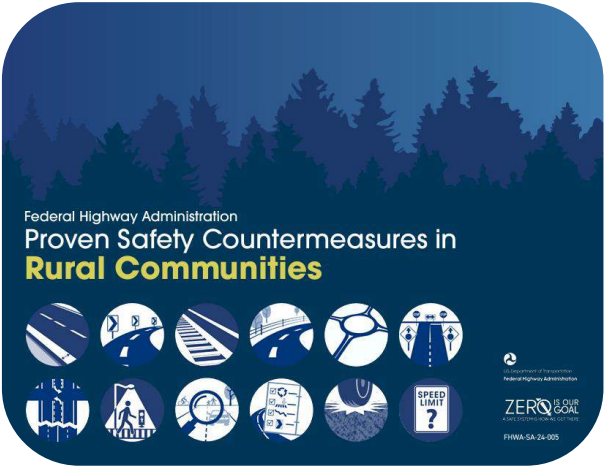
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Project Information sheets include:

- Project location details
- Roadway/intersection characteristics
- Crash history
- Project description
- Safety improvements
- Probable costs



Speeding Strategies

- Variable Speed Limits
- Driver Feedback Speed Limit Signs
- Traffic Calming- Bulbouts
- On-Pavement Speed Markings
- Transverse Rumble Strips



Run Off Road Strategies

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- Post-Mounted Delineators
- Shoulder Widening
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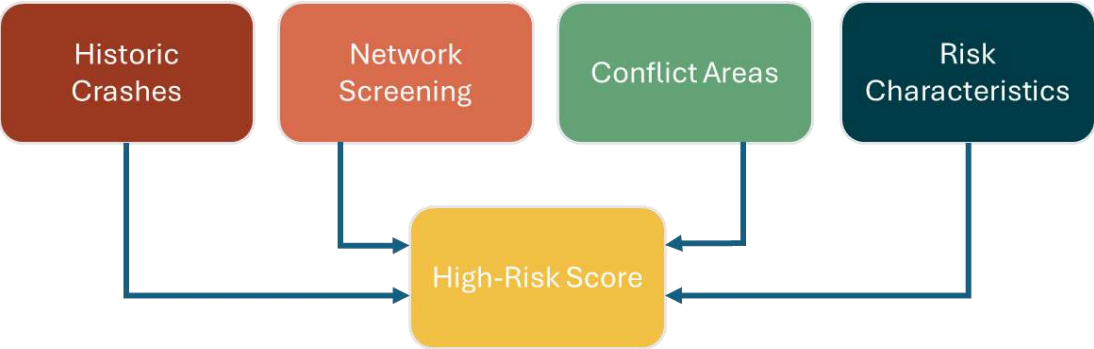


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Roadway Segment
Intersection



Safe System Approach Elements

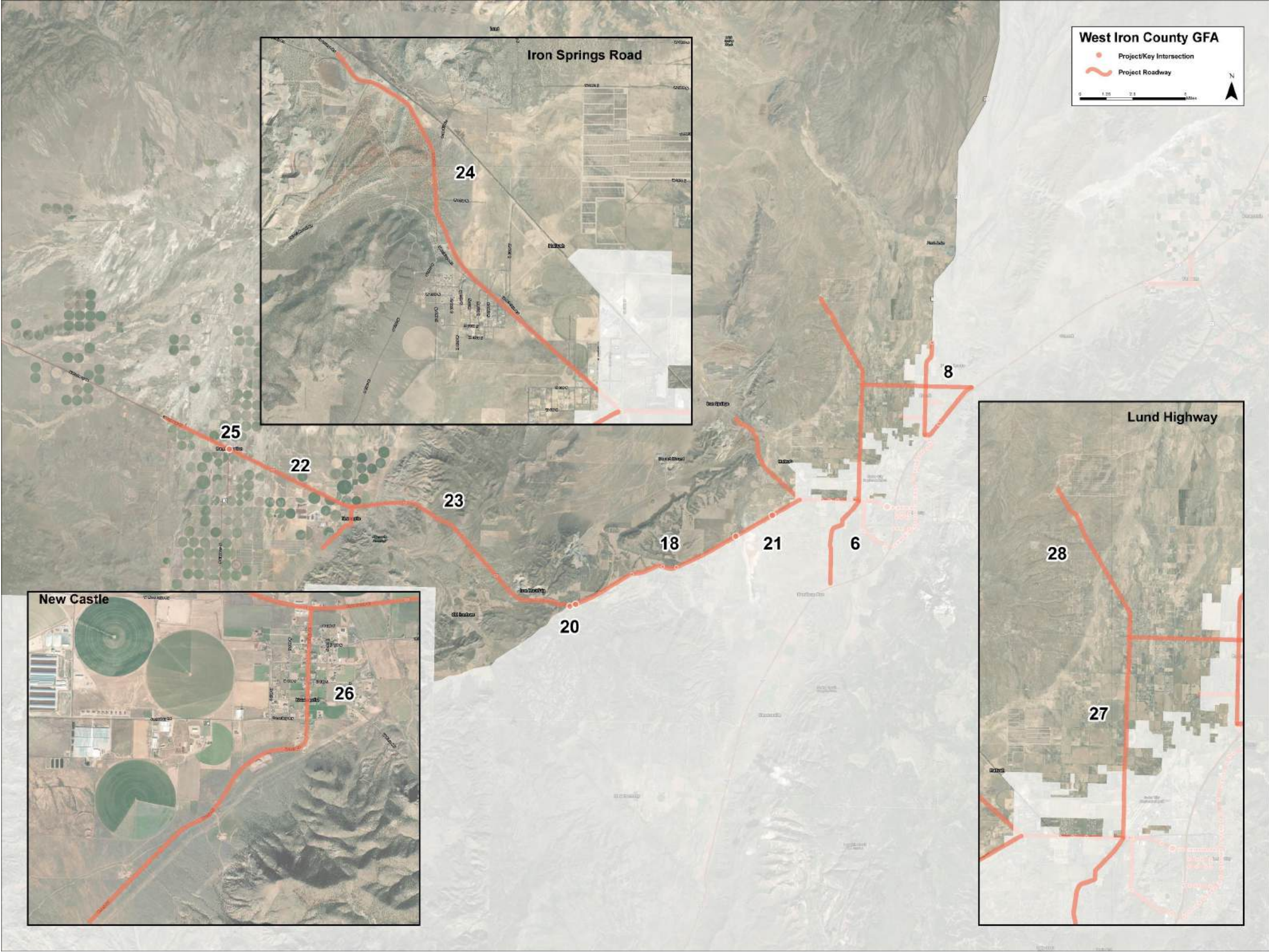
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21	SR 56 Rural Local Intersections (7700 West)
22	SR 56 from 2400 West to Main Street (New Castle)
23	SR 56 from Comstock Road to Main Street (New Castle)
24	Iron Springs Road from SR 56 to Comstock Road
25	SR 56 & SR 18 (Beryl Junction)
26	Bench Road from SR 56 to Newcastle Hills
27	Lund Highway from SR 56 to Midvalley Road
28	Lund Highway from Midvalley Road to 7000 North



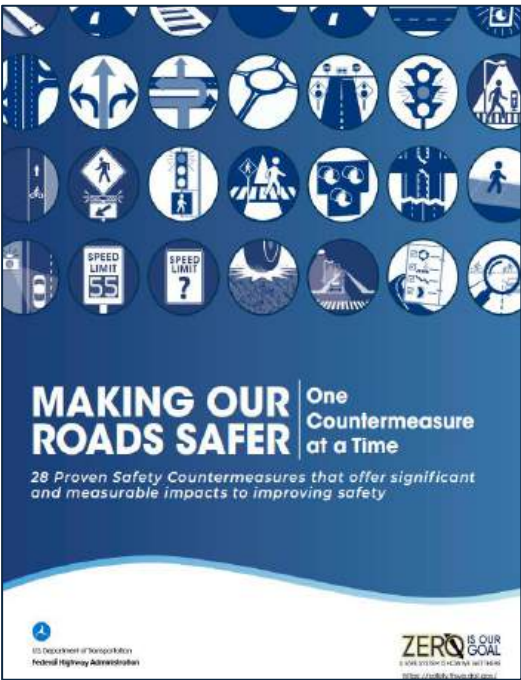
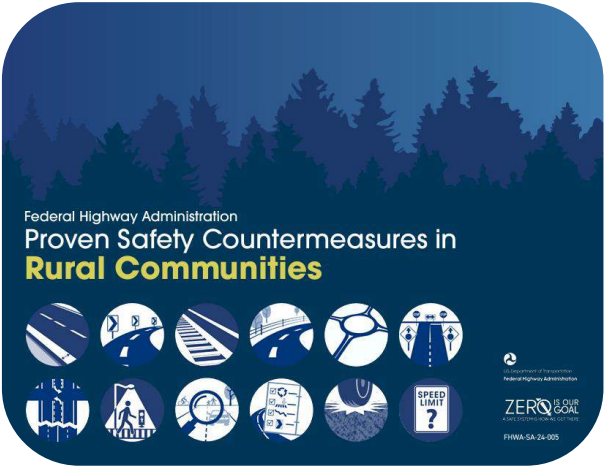
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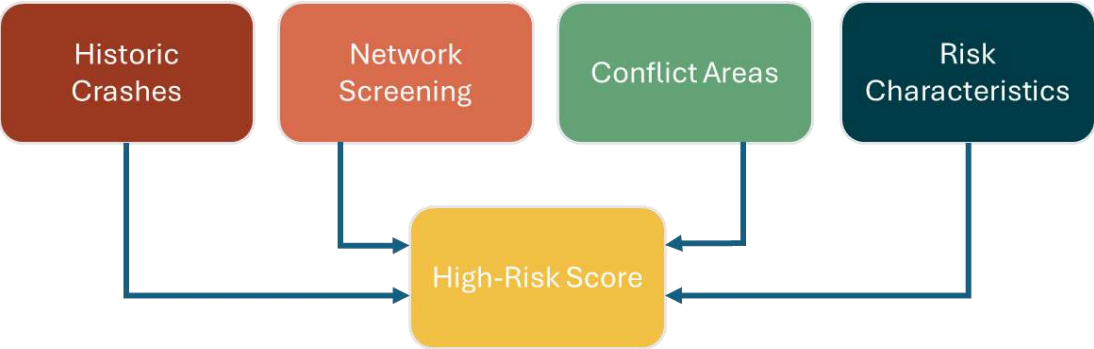
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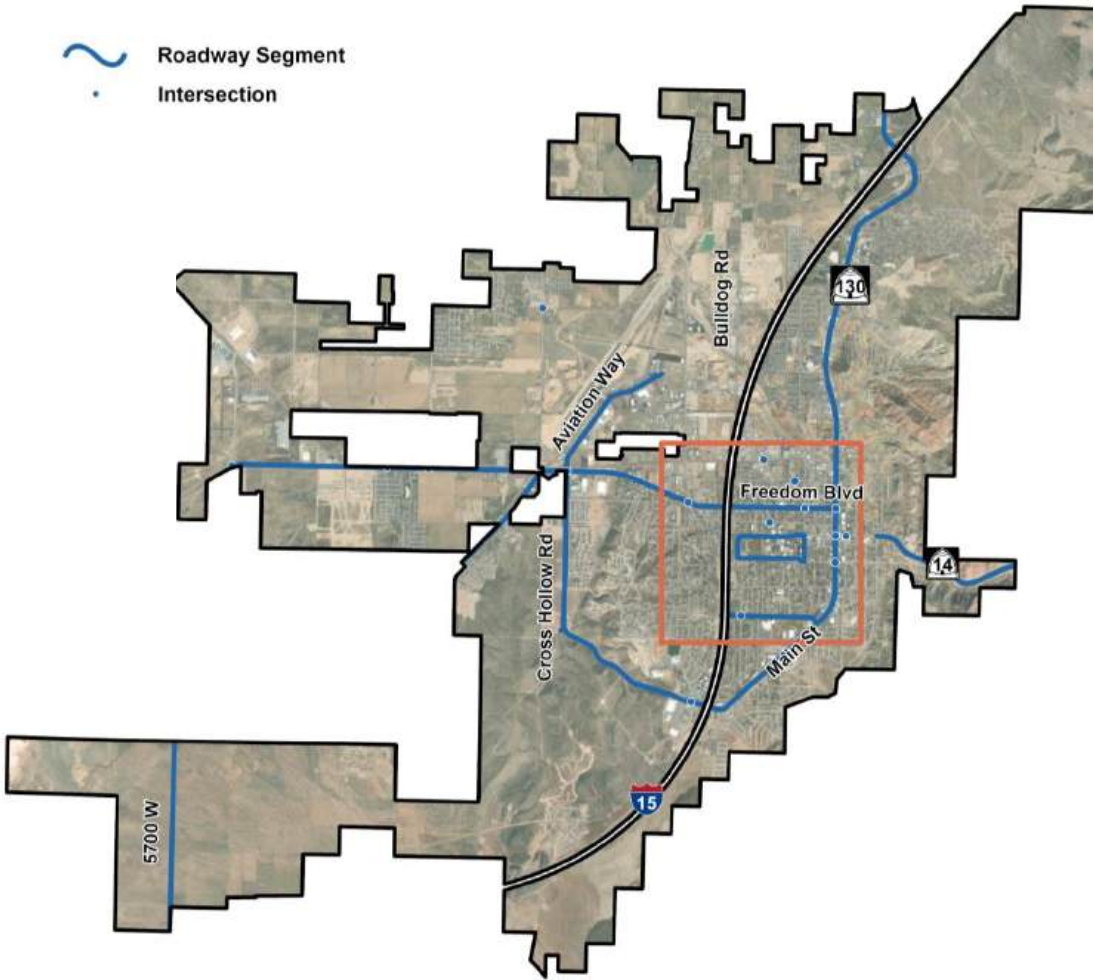
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Self-Certification Checklist

Plan must include the following:

- ☐ Safety Analysis
 - ☐ Existing conditions and historical trends
 - ☐ Crashes by location, severity, and contributing factor
 - ☐ Systemic and specific safety needs
 - ☐ Geospatial identification of higher risk locations
- ☐ Identification of comprehensive set of projects and strategies



Safe System Approach Elements

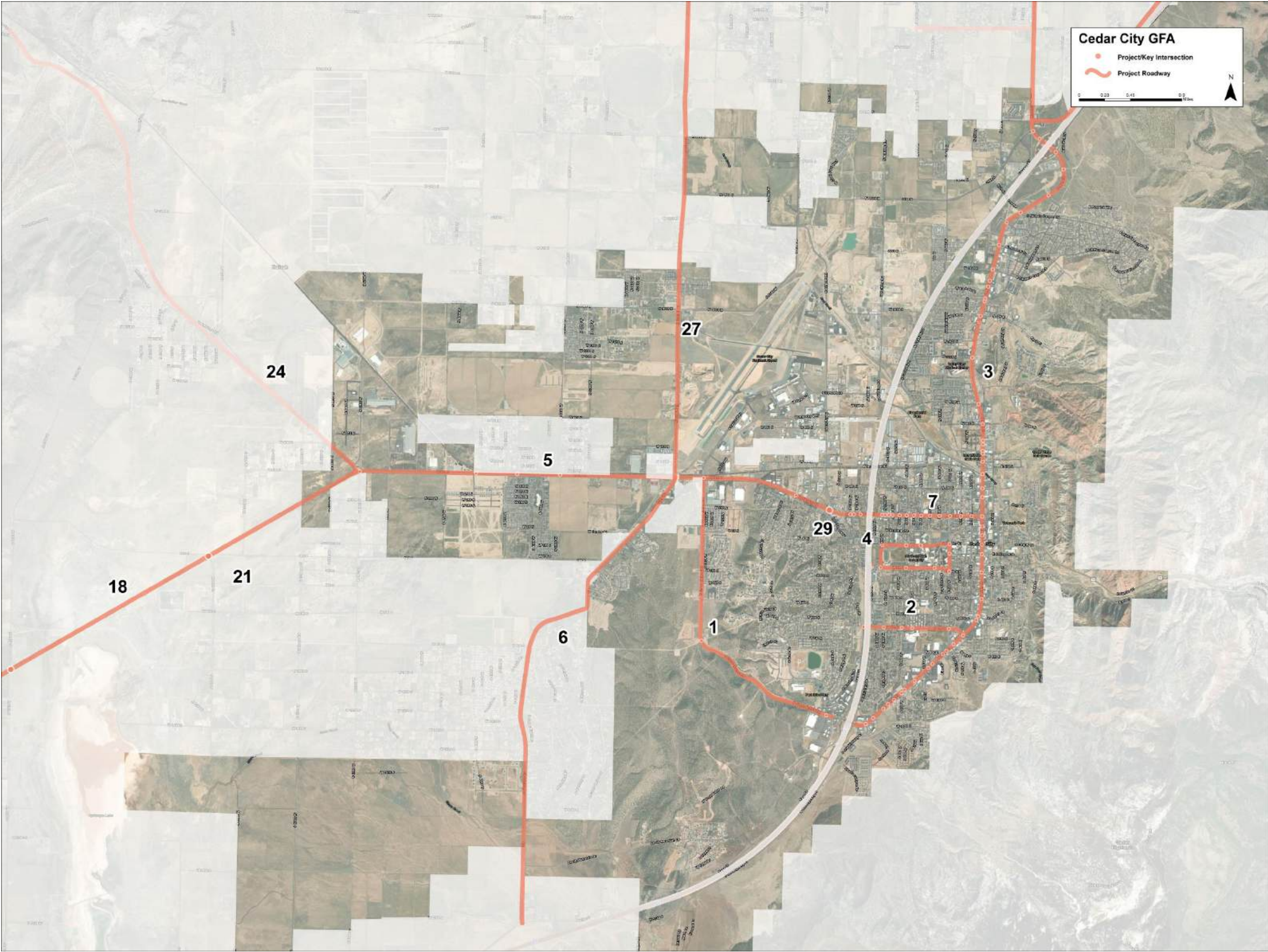
	Safe Road users	Encourage safe, responsible driving and behavior including those who walk, bike, drive, ride transit or travel by other modes and create conditions that prioritize their ability to reach their destination unharmed.
	Safe Vehicles	Expand the availability of vehicle systems and features that help to prevent crashes and minimize the impact of crashes on both occupants and non-occupants.
	Safe Speeds	Humans are less likely to survive high-speed crashes. Promote safer speeds in all roadway environments through a combination of thoughtful, equitable, context-appropriate roadway design, appropriate speed-limit setting, targeted education, outreach campaigns and enforcement.
	Safe Roads	Design streets to mitigate human mistakes and account for injury tolerances, encourage safer behaviors, and facilitate safe travel by the most vulnerable users. An example includes physically separating people traveling at different speeds.
	Post-crash Care	People who are injured in crashes rely on emergency first responders to quickly locate and stabilize their injuries and transport them to medical facilities. Post-crash care also includes forensic analysis at the crash site, traffic incident management and other activities.

PROJECT LOCATIONS

CEDAR CITY GFA



Project Number	Project Location
1	Cross Hollow Road from SR 56 to Royal Hunte Drive/Providence Court Drive
2	600 South from Sage Drive to Main Street (SR 130)
3	Main Street (SR 130) from 3000 North to South I-15 Interchange
4	SUU Loop
5	SR 56 from Iron Springs Road to Airport Road
6	Westview Drive from SR 56 to 2700 South
7	SR 56 from Airport Road to Main Street (SR 130)
18	SR 56 from Iron Springs Road to Comstock Road
21	SR 56 Rural Local Intersections (7700 West and 5300 West)
24	Iron Springs Road from SR 56 to Comstock Road
27	Lund Highway from SR 56 to Midvalley Road
29	SR 56 and Airport Road Intersection



SAFETY STRATEGIES

CEDAR CITY GFA



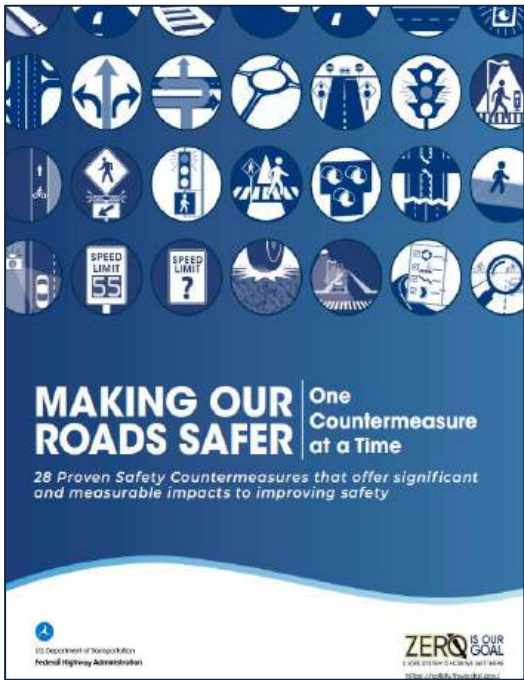
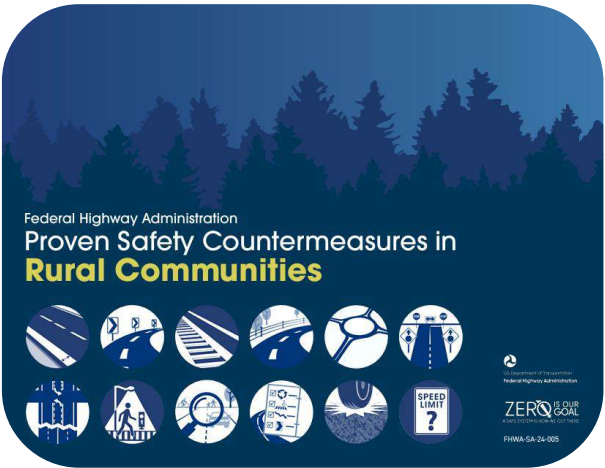
“Transportation agencies are strongly encouraged to consider widespread implementation of proven safety countermeasures to accelerate the achievement of local, state, and national safety goals”

Project recommendations pull from the following safety resources:

- FHWA Proven Safety Countermeasures
- NHTSA Countermeasures That Work
- FHWA PEDSAFE and BIKESAFE Systems
- Crash Modification Factor Clearinghouse
- Other Safety Action Plans

Project Information sheets include:

- Project location details
- Roadway/intersection characteristics
- Crash history
- Project description
- Safety improvements
- Probable costs



Speeding Strategies

- Variable Speed Limits
- Driver Feedback Speed Limit Signs
- Traffic Calming- Bulbouts
- On-Pavement Speed Markings
- Transverse Rumble Strips



Run Off Road Strategies

- Wider Edge Lines
- Edge Line Rumble Strips
- Post-Mounted Delineators
- Shoulder Widening
- Guardrail
- Safety Edge



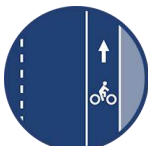
Pedestrian Strategies

- Protected Intersections
- High-Visibility Crosswalks
- Raised Crosswalks
- Medians and Pedestrian Refuge Islands
- Pedestrian Hybrid Beacons (PHB) or HAWK Signal



Curve Strategies

- Curve Warning Signage
- In-Lane Curve Pavement Markings
- Speed Activated Flashers on Chevron Signs
- Transverse Rumble Strips Prior to Curves
- Retroreflective Strips on Curve Signage



Bicyclist Strategies

- Painted Bicycle Lanes
- Buffered Bicycle Lanes
- Bicycle Ramps
- Shared Sidewalk Signs



Intersection Strategies

- Turn Lanes
- Signalization
- Roundabouts
- Signal Visibility Enhancements

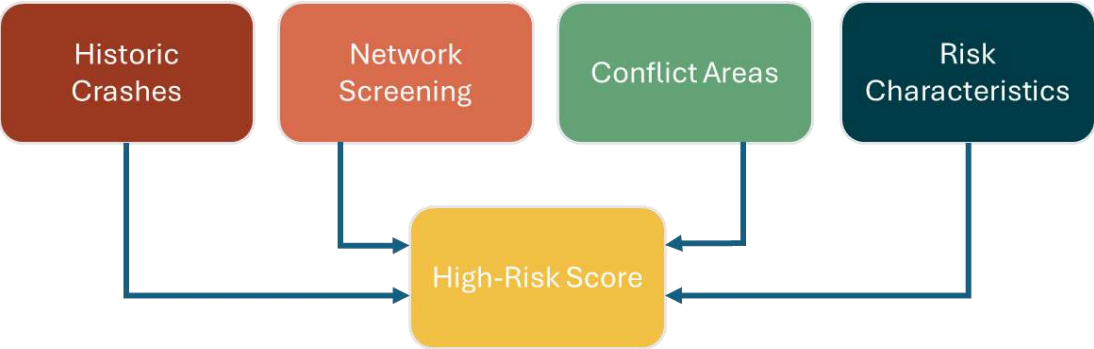


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Roadway Segment
Intersection



Safe System Approach Elements

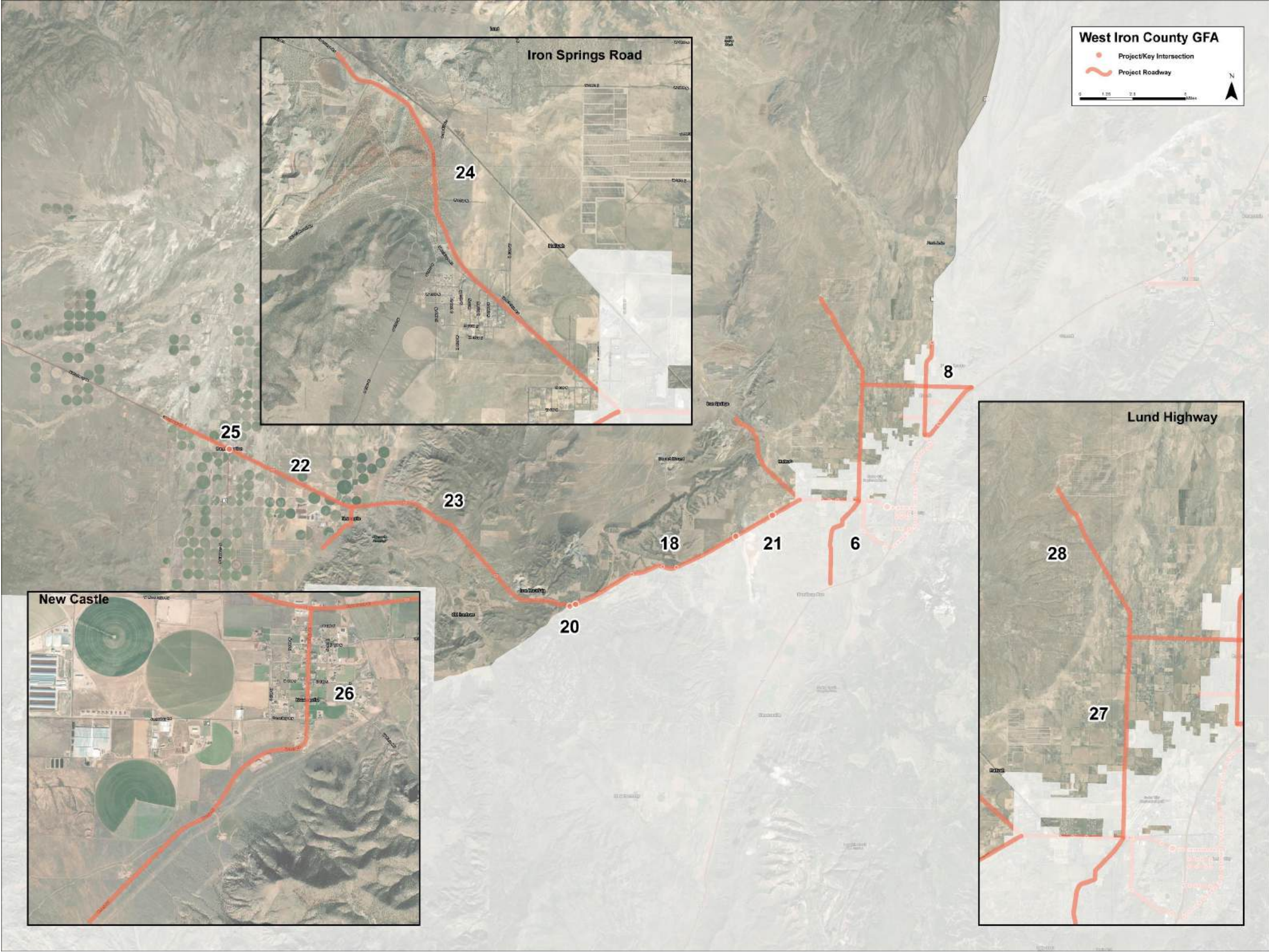
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PROJECT LOCATIONS

WEST IRON COUNTY GFA



Project Number	Project Location
6	Westview Drive from SR 56 to 2700 South
8	Midvalley Road from Lund Highway to Old Highway 91
18	SR 56 from Iron Springs Road to Comstock Road
20	SR 56 Mountainous intersection (Comstock, Pinto)
21	SR 56 Rural Local Intersections (7700 West)
22	SR 56 from 2400 West to Main Street (New Castle)
23	SR 56 from Comstock Road to Main Street (New Castle)
24	Iron Springs Road from SR 56 to Comstock Road
25	SR 56 & SR 18 (Beryl Junction)
26	Bench Road from SR 56 to Newcastle Hills
27	Lund Highway from SR 56 to Midvalley Road
28	Lund Highway from Midvalley Road to 7000 North



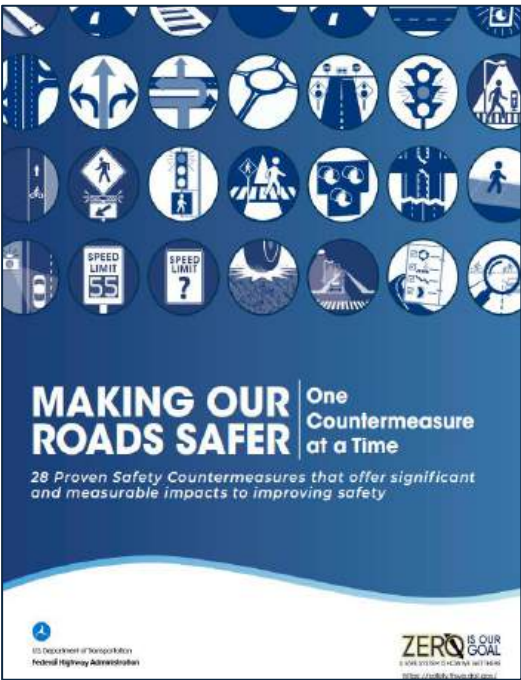
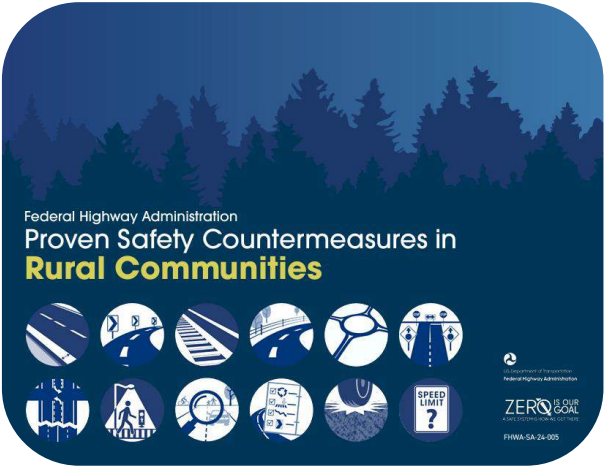
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Intersection Strategies

- Turn Lanes
- Signalization
- Roundabouts
- Signal Visibility Enhancements

Takeaways:

GROUP PROJECT NUMBERS

- Interest expressed for a pedestrian/school crossing case study project
 - 600 South in Cedar City, Parowan Main Street, Paragonah Main Street, and Kanarraville Old Highway 91
- Rural curve countermeasures were frequently discussed, including flashing/dynamic chevrons and enhanced delineation
- Updating 2 ft shoulder recommendations where cyclists are present to 4 ft shoulders
- Where shoulder widening is not possible the recommendation is to lessen the slope of the existing shoulder/roadway
- Stop controlled intersection issues included not yielding, shooting the gap, and limited sight distance.
 - Signal warrants along SR 56 from Iron Springs to Airport Road
 - All way stop warrant at Lund Highway and Midvalley Road
 - Realigning skewed intersections
- Turn lanes, climbing lanes, and acceleration/deceleration lanes to separate vehicles from the main travel lanes
 - Turn lanes off of SR 56 and other major streets
 - Climbing lanes on SR 56 through the canyon
 - Acceleration/deceleration lanes around the Pinto and Comstock intersections with SR 56
- General consideration should be taken for school buses, industrial vehicles, and emergency responders.

Workshop Notes:

Cedar City:

- Issues of fire trucks at intersections
- Concerned about emergency preemption at signaled pedestrian crossings
- Concerns with the school areas, network of sidewalk and trails
 - Crossing Main Street at 1045 North, near the medical clinic, 1925 North/Fiddlers Canyon, 2200 North
- Cyclist expressed concerns with shoulders vs bike lanes etc.
- Center Street & 100 West current crossing bad
- School crossing at 820 South and along 860 West
- Concerns on Cross Hollow at the major turn
- Opening a new widening project on Industrial Road from Airport Road to 400 West
- 1925 North school crossing for the neighborhoods, existing tunnel, fragmented sidewalk, kids walking, crossing northbound under the freeway
 - “Other locations” Sidewalk gaps or filling gaps projects
- Increased traffic at SR 56 intersections: 4050 West, 4200 West, 4500 West
- Signalize 4500 West
- Iron Springs intersection really wide, lots to cross

- Vehicles using the SR 56 west bound TWLTL to speed and illegally pass
- Crossing at Center Street at the mouth of the canyon
- 600 West highlighted from 400 North to Harding Road
 - “Other locations” School crossing case study

East Iron County:

- Email project sheets to Brian Head
- Packets were given to Molly (Parowan Mayor)

West Iron County:

- Rural curves on SR 18 near Bob Hope, 3-4 access on the curve
 - Access to two lane high way location case study
- WB climbing lane on SR 56 just west of Bumble Bee (Mouth of the canyon), Woolseys
- Lots of speeding and illegal passing

Project Notes:

1. Cross Hollow Road
 - a. Be more clear about the location of where the countermeasures are recommended
 - b. Medians instead of centerline rumble strips
2. 600 South in Cedar City
 - a. Extend project around the high school, along 860 West to Main Street
 - b. Include 855 South and 800 South
3. Main Street in Cedar City
 - a. 600 South signalized
 - b. Fir Street, lots of issues
 - c. 400 South people avoid because it is not signalized
 - d. 860 South, buses making right turns and making everyone slow down
 - e. Include a school area project like #3 for Parowan, Enoch, Kanarraville crossings
4. SUU Loop
 - a. Continue SR 289 to the canyon
 - b. Include context about the incoming roundabout
 - c. Include other undergoing projects
6. West View
 - a. Revise to match cross sections
 - b. Sinusoidal rumble strips instead of grooved
8. Midvalley Road in Enoch
 - a. All Way Stop warrant at Lund Highway
 - b. Equal traffic on Midvalley and Lund Highway, potentially more traffic on the side street (Midvalley)
 - c. In support of driver feedback speed limit signs
 - d. Change 2 ft shoulder to 4 ft shoulder
 - e. “Low” on the list of concern, but may get including in a county wide “school area” type case project

- f. Mentioned a high cost of the High visibility crosswalk (with RRFB)
 - g. Mentioned drainage issues and utility conflicts for the potential curb and gutter for both sides of the roadway
 - h. There is currently a crossing guard
 - i. Potential TWLTL?
- 9. SR 130: 3000 North to Midvalley Road
 - a. This is in the works
 - b. 12 ft separated side path on one side and 6 ft sidewalk on other
 - c. Remove edge line rumble strips, eventual 5 lane cross section and homes
 - d. Tentative on highway lighting -REMOVE
 - e. Remove bicycle lane? - LEAVE
- 10. SR 130: Midvalley Road to 6400 North
 - a. Update speed limit
 - b. Deceleration lanes at 5600 North, development driven
 - c. Look into “quiet” rumble strips that are louder in the vehicle than outsides - SINUSODAL
- 11. Old Highway 91
 - a. Crossing at the water tank and recreational area mentioned, but not sure if they want to invite pedestrians to cross there - ADD
 - b. Expected growth with the ice rink, vet museum, and new housing units
 - c. Add Heather Hue as a skewed intersection - IGNORE
 - d. Enoch road corrected? Sign moved to square up the approach, looks fixed remove
 - e. Lots of bicyclists – ADD PATH
 - f. Update 2 ft shoulder to 4 ft shoulder
 - g. Portion of 91 to be repaved next year
 - h. Walking path on the west exists
 - i. ROW needed to widen
- 12. 3600 North in Enoch
 - a. This road used for the prep school buses
 - b. Update 2 ft shoulder to 4 ft
 - c. Already has a path most of the way but is needed on the west (?) side - IGNORE
- 13. 4200 North
 - a. Include SR 130 intersection, hard to turn onto SR 130
 - b. Need turn lanes? – LEAVE AS IS
 - c. “Something doesn’t work here” – vehicles in the right turn lane block the view for vehicles on the minor street
 - d. Growth expected with new developments to the south
 - e. Add a comment or community check mark to the information sheets
- 15. Brian Head Intersections
 - a. Brian head to expand visitors from 300K to 1 million
- 16. SR 143 to Brian Head
 - a. Really good support for the flashing chevrons
- 17. 200 South (SR 143) in Parowan
 - a. Cut the project short at Main Street

- b. Sidewalk project already in the works from the Grace Church to 1000 West (spring)- remove but note
- c. 3rd South ped bridge crossing
- d. Look into the 3rd East and SR 143 intersection?
- e. Need better traffic counts in the winter during peak ski season
- f. Remove 6 ft sidewalk on both sides, south side already has sidewalk and north side to have a path eventually
- g. Look into a crossing location near the hotel
- h. Speed limit study?
- i. Highest priority is finishing the south side of the sidewalk
- j. Second priority is widening the lanes
- k. Third priority is finishing the north side, filling the irrigation ditch for a shared path
- l. KEEP EVERYTHING ADD NEW FRONTAGE ROAD INTERSECTION BY THE PAROWAN SIGN

18. SR 56: Iron Springs to Comstock

- a. Bus stop just east of Bumble Bee Drive
 - i. Viki's
 - ii. In front of the Beryl Fire Department
 - iii. 2400 West, past the junction
 - iv. Bus stopping in the lanes still and not pulling over
- b. Make sure shoulders aren't too steep
- c. Pave a pull out near the rock-climbing area
- d. Additional deer signage
- e. Support turn lanes at Bumble Bee, EBR, WBL
- f. WB passing lane around MP 38
- g. WB passing lane MP 36
- h. Reduce the number for centerline rumble strips (present on most of the roadway)
- i. Additional "intersection ahead" signage

19. Main Street in Parowan

- a. Extend to 300 South
- b. Ped bridge in final design
- c. Look at the center street and the 3rd East intersections? Ped activity with the pool and park
- d. Include the intersection with 274
- e. Add a Kanarraville crossing on 91 (townhall, post office, and park), include speed limit feedback signs (SB existing)
- f. Add Paragonah ped crossing
- g. Systemic pedestrian crossing project
- h. Look at including more crossing south of Center Street
- i. Look into the UDOT Rural policy check list????
- j. Check for speed limit studies
- k. Turning main Street into a "Pedestrian Mall" high ped zone, 274 to Paragonah
- l. 100 East lost of ROW, Push Active transportation improvements to 100 East?
- m. 300 East lots of ROW, speeding issues

- n. ADD CROSSING TO 100 and 200 SOUTH
- 20. Comstock and Pinto Intersection
 - a. Rename the project
 - b. Deceleration lanes into Pinto (residential), EBR, AND EB Acceleration – turn lane cost
 - c. Shift change at mines cause issues
 - d. Blind turn at Pinto and drainage issues, causing ice problems
 - e. Right turn into Comstock
 - f. Acceleration lane leaving Comstock, EB acceleration, WBR
- 21. 7700 West and 6300 West intersections – Remove make a case study
 - a. More traffic at 7700 West
 - b. 6300 West is already square
 - c. Use 5700 West as an example for turn lanes and signs off of SR 56
 - d. 6450 West also an example
- 22. SR 56: around Beryl Junction
 - a. No missing fatalities within the last 5 years
 - b. Noted very steep shoulders, update 2 ft shoulder to 4 ft
- 23. SR 56: Comstock Road to Main Street (New Castle)
 - a. Address county wide turn lanes, curve improvements, rural highway improvements
- 25. Beryl Junction
 - a. Close calls almost monthly from people trying to close the gap
 - b. EBR onto SR 18, flat, good sight distance
 - c. Need shoulders
 - d. Move stop bars so people can pull far enough forward - ADD
 - e. Cyclists on the road
 - f. Bike races
 - g. Main way to Enterprise
 - h. Remove intersection lighting, already there? KEEP
 - i. Maybe remove the transverse rumble strips on the minor approaches? REMOVE
 - j. Intersection ahead or activated blinking intersection signage RIAWS look for a cost? only detect on Beryl
 - k. Asked to check out the S curve by Bob Hope area, 3-4 access roadways on the curves (2 miles south of the junction)
 - l. School ahead signage
 - m.



n.



26. Main Street – Bench Road in New Castle

- a. Striping
- b. High speeds
- c. Animal related crashes
- d. There is existing lighting at 300 South, not sure on if it is adequate

27. Lund

- a. All way stop warrant at Midvalley
- b. Add signal warrant in additional

Appendix D.

Interactive Map Data

Description	Photo Caption	Category	Replies	Map Layer	Created On	Lat	Lng
The Brush on this corner is blocking the view of drivers. It would be nice to get it cleared for obvious safety reasons	N/A	Vehicle Safety	N/A	Jurisdictions	1/13/25	37.882349126948	-112.830049700547
We love that the path here get us out of the traffic for a bit. We would really appreciate if there were a paved connection back onto the road.	N/A	Bicycle Safety	N/A	Jurisdictions	1/14/25	37.6630439311607	-113.103002887729
A bike path that could get us from this point To the bike path, just north of Walmart would be super helpful. Going through this whole interchange on a bike is pretty risky. It would be a traffic route to be able to circle the city from the bike path on the east benches, past the Walmart traffic, And then continuing down cross Hollow and then continuing just east of the airport	N/A	Bicycle Safety	N/A	Jurisdictions	1/14/25	37.6528809352126	-113.080050916527
Crossing this bridge on a bike with traffic is precarious. A separate path that could join up with Bike path would be wonderful	N/A	Bicycle Safety	N/A	Jurisdictions	1/14/25	37.6945809258819	-113.073782385872
This roadway is too narrow to Support safe biking. A bike lane from Cedar to Newcastle would be very appreciated	N/A	Bicycle Safety	N/A	Jurisdictions	1/14/25	37.6382972276844	-113.262942332004
This 4-way stop has terrible visibility with parked cars and seldom do drivers actually stop and pay attention. It has high traffic in the day and speeding and low visibility at night.	N/A	Pedestrian Safety	N/A	Jurisdictions	1/30/25	37.67888424785	-113.073885027129
Every winter, cars coming down this hill and around the bend end up slipping and sliding into the ditch or even onto the campus. Even more so when they have to stop for the pedestrian crossing ahead. The area needs more traffic calming, both for this reason and pedestrian safety.	N/A	Vehicle Safety	N/A	Jurisdictions	1/30/25	37.6742072231039	-113.068405689038
Find the traffic engineer that times the lights up in Salt Lake City for 6200S/Redwood and pay him good money for a week's worth of work and fire whoever came up with this sorry excuse of a signal pattern.	N/A	Vehicle Safety	N/A	Jurisdictions	1/30/25	37.6544516842702	-113.08236362571
Iron Sps Road from "Y" to Shooting Range turn-off, needs bike/jogging lane	N/A	Pedestrian Safety	N/A	Jurisdictions	11/20/24	37.6922163056956	-113.172293623739
Iron Springs Rd - need turning lane at business and subdivisions	N/A	Vehicle Safety	N/A	Jurisdictions	11/20/24	37.6926330700328	-113.172869682311
Lund Highway - needs biking and jogging lane.	N/A	Bicycle Safety	N/A	Jurisdictions	11/20/24	37.7791934478931	-113.113774709084
From SR 56 to Kanarraville, needs bike/jogging lane	N/A	Bicycle Safety	N/A	Jurisdictions	11/20/24	37.663111676552	-113.170514138137
Pedestrians Cross without a crosswalk here. Risking themselves and Drivers.	N/A	Pedestrian Safety	N/A	Jurisdictions	11/20/24	37.6756698346686	-113.066875620074
Crosswalk present. Pedestrians are not stopping to wait for cars to come to a stop. They are pressing the crosswalk light as they are walking, and this can cause accidents. Pedestrians should press the light and wait for when it is safe to cross.	N/A	Vehicle Safety	N/A	Jurisdictions	11/20/24	37.6762279451132	-113.066919355814
Bicycles should not be aloud on State Highways, Especially hwy 14. There are may narrow and blind spots. Its only a matter of time before someone on a bike or in a car are seriously injured.	N/A	Bicycle Safety	N/A	Jurisdictions	11/20/24	37.6738348214952	-113.027414589217
Old Hwy 91 from Cedar to Summit is in horrible condition. its very rough. Its worse when there is water on the road way because of the rutting in the road not allowing the water to sheet off. The subgrade needs to be improved and then paved or chip seal.	N/A	Vehicle Safety	N/A	Jurisdictions	11/21/24	37.784196418491	-112.978085957409
Hwy 130 needs to be 2 lane. The traffic is increasing. and getting more and more congested.	N/A	Vehicle Safety	N/A	Jurisdictions	11/21/24	37.7341683203822	-113.055270076657
Need street lighting at this intersection and along Highway 56 to Cedar.	N/A	Vehicle Safety	N/A	Jurisdictions	11/21/24	37.6848379694036	-113.161990129687
I often encounter cyclists on Hwy 91 and it is incredibly nerve wracking to drive with them because there is no shoulder. I have often considered the possibility of biking to work, but the thought of biking along this road honestly frightens me out of it. I wish there was some way to expand the shoulder to accommodate cyclists.	N/A	Bicycle Safety	N/A	Jurisdictions	11/21/24	37.7323694702426	-113.049594968868
Dangerous intersection. Vehicles block intersection, so opposing traffic at green lights can't go through. Lights need to be sequenced better.	N/A	Vehicle Safety	N/A	Jurisdictions	11/21/24	37.6542770604529	-113.081608190143
Dangerous intersection. Vehicles block intersection so opposing traffic can't go through causing a backup through the light to Walmart.	N/A	Vehicle Safety	N/A	Jurisdictions	11/21/24	37.6547452350099	-113.083356990408
Sidewalks blocked by large tumbleweeds and debris. Needs to be cleared to be more ADA compliant.	N/A	Pedestrian Safety	N/A	Jurisdictions	11/21/24	37.6591939297012	-113.081209292667
Widen Highway 91 enough for bikes and/or joggers alongside of the road or add paved bike path so pedestrians are not in the roadway.	N/A	Bicycle Safety	N/A	Jurisdictions	11/21/24	37.5307618053194	-113.185742656295
2300 W (Bauer Rd.) needs to have improved shoulders/widening for all the new traffic from growth in the valley beyond 3000 N. The proposed sub-division between 3000 N and Monarch Meadows needs to have a turnout lane each on 2300W & 3000N for vehicles so the flow of traffic is not impeded.	N/A	Vehicle Safety	N/A	Jurisdictions	11/22/24	37.7393301452994	-113.092407762771
Cars parked on 3000 N need to be towed after 24hrs. Many of these vehicles are parked indefinitely!	N/A	Vehicle Safety	N/A	Jurisdictions	11/22/24	37.7313410335427	-113.05835526335
Cars parked on Lund hwy. need to be towed after 24hrs. Many of these vehicles are parked indefinitely! (Vehicle Safety)	N/A	Vehicle Safety	N/A	Jurisdictions	11/22/24	37.7083453792823	-113.111137608883
The time at this intersection in the morning backs up traffic beyond both of the Maverick entrances, and will only get worse with the new businesses east of the bowing ally. The evening traffic turning right is bumper to bumper. If another business is added on the SE corner before this is fixed, fixing this intersection will only be harder. Two lane round-about with dedicated right turns are needed.	N/A	Vehicle Safety	N/A	Jurisdictions	11/22/24	37.7313188566157	-113.055205291912
3000 N needs to be widened	N/A	Vehicle Safety	N/A	Jurisdictions	11/25/24	37.731238011829	-113.062713291042

The intersection of S. Main Street and Old Highway 91, the pavement markings are worn and difficult to see especially at night. This is a busy area now and the presence of the remainder of the old markings compound the issue.	N/A	Vehicle Safety	N/A	Jurisdictions	11/25/24	37.8382183018556	-112.827505152086
1045 N: Crosswalk at North Cedar Blvd to Park	N/A	Pedestrian Safety	N/A	Jurisdictions	11/25/24	37.6951951502413	-113.07177994651
Lower speeds and more patrols on 5700 W	N/A	Vehicle Safety	N/A	Jurisdictions	11/25/24	37.6432952495098	-113.170665222553
Put a stop sign instead of a yield by baseball fields and Highland	N/A	Vehicle Safety	N/A	Jurisdictions	11/25/24	37.6822761795694	-113.054156493276
Mavrick - the addition of the diesel has created a hazard as large trucks try to enter and exit station. So many near misses every day as drivers dart out from the station to turn left onto old 91.	N/A	Vehicle Safety	N/A	Jurisdictions	12/3/24	37.7314498682307	-113.054061155861
Develop better signage and designation for shuttle stops to educate visitors on the existing free shuttle within town	N/A	Pedestrian Safety	N/A	Jurisdictions	12/5/24	37.7027875765872	-112.849293745578
Future resort development will put a lot of strain on this intersection. Burt's Road will be the primary access to a new base area in the next 10 years, this intersection is not equipped to handle the extra traffic.	N/A	Vehicle Safety	N/A	Jurisdictions	12/5/24	37.6999839128942	-112.845338117154
The crossing of two pedestrian trails put pressure on this already busy intersection. The town plans to put in a crossing in the near future, but traffic flows needs evaluated. Maybe a good place for a roundabout?	N/A	Pedestrian Safety	N/A	Jurisdictions	12/5/24	37.6979557804481	-112.845046090881
Trailhead Parking mixes with a busy intersection for resort employees using the year-round access road. Poor signage results in many cars getting stuck trying to turn around at a gate further up where it turns to resort use area. Could use some signage about what the road is for (no public access, no turnaround) as well as a larger parking area for an increasingly popular recreation area, especially in winter when highway 143 closes nearby.	N/A	Vehicle Safety	N/A	Jurisdictions	12/5/24	37.6774686646501	-112.845257863804
Cars often don't see pedestrians, even when the lights are flashing. Also, cars don't wait for pedestrians to clear this crosswalk before entering.	N/A	Pedestrian Safety	N/A	Jurisdictions	12/5/24	37.6761772571304	-113.066811404882
Bicyclists often ride on the wrong side of the street creating many near miss incidents.	N/A	Bicycle Safety	N/A	Jurisdictions	12/5/24	37.6741425401031	-113.072684856658
Northbound Old Highway 91 traffics frequently run this stop sign at speed due to sign placement/distracted driving.	N/A	Vehicle Safety	N/A	Jurisdictions	12/5/24	37.6525809776348	-113.080903207795
Traffic gets extremely backed up at this intersection in the morning and evening (commute times) people get impatient and try to make turns they shouldn't. A traffic light would be helpful.	N/A	Vehicle Safety	N/A	Jurisdictions	12/5/24	37.6942151734193	-113.074592671834
No sidewalk on this side of the street causes pedestrians to J walk across North Field to get to the sidewalk on the other side.	N/A	Pedestrian Safety	N/A	Jurisdictions	12/5/24	37.7015451639585	-113.068214295556
Vehicles frequently use shoulder as right turn lane though it is not labeled as such.	N/A	Vehicle Safety	N/A	Jurisdictions	12/5/24	37.684935795448	-113.106727202465
Left turns being allowed out of these businesses is extremely dangerous this close to a busy intersection.	N/A	Vehicle Safety	N/A	Jurisdictions	12/5/24	37.6870680026015	-113.061810706848
Pedestrian hazard walking from parking lot. Suggest putting in a crosswalk. People will not walk to the 300 W crossing or the crossing further west.	N/A	Pedestrian Safety	N/A	Jurisdictions	12/5/24	37.6773375727964	-113.06885528036
Too much traffic for not being a roundabout or even a four-way stop. Needs attention severely.	N/A	Vehicle Safety	N/A	Jurisdictions	12/5/24	37.6741518062744	-113.073837654232
Walking from the new parking lot across the street without traffic signals or a roundabout is nearly life threatening. It is complicated by the low rising sun in the mornings when driving eastward. It makes seeing pedestrians nearly impossible with the sun behind them.	N/A	Pedestrian Safety	N/A	Jurisdictions	12/5/24	37.6740729267864	-113.073780116433
View of oncoming traffic from North Bauer Rd is impeded by tall sagebrush and other bushes for vehicles at stop sign on 2200 N headed East to North Airport Road. Fence line needs to be cleared on property (2200 N and Bauer Road).	N/A	Vehicle Safety	N/A	Jurisdictions	12/5/24	37.7173182914398	-113.09240760555
Additional pedestrian crosswalk needed. pedestrians do not walk to corner on the west or to the crosswalk to the east.	N/A	Pedestrian Safety	N/A	Jurisdictions	12/5/24	37.6741482306536	-113.072213711118
Additional crosswalk needed. Pedestrians parking in the parking lot do not walk westward to crosswalk and are in more danger from vehicles coming from the top of the hill from the east.	N/A	Pedestrian Safety	N/A	Jurisdictions	12/5/24	37.6742025060523	-113.06941767707
Additional crosswalk. Pedestrians do not always use crosswalks to get to parking lot or parked cars across the road.	N/A	Pedestrian Safety	N/A	Jurisdictions	12/5/24	37.6744798232393	-113.066924853281
Highway 14 should be widened to allow for more bicycle safety. Our area is a highly traveled area for cyclists. Taking efforts to protect them and not restrict their use of roads should be a priority.	N/A	Bicycle Safety	N/A	Jurisdictions	12/5/24	37.6636991787186	-112.997702850918
Pedestrians cross here often. It might be worthwhile to look into making all the roads around campus "pedestrian priority zones" like they have designed in Europe. This would give priority to pedestrians anywhere on the road and cars using the road are secondary or "guests". Studies show that it is effective in protecting pedestrians, making drivers more aware, and lowers vehicle speeds.	N/A	Pedestrian Safety	N/A	Jurisdictions	12/5/24	37.6770626304817	-113.072219855924
During Shakespeare, pedestrians often cross around this area when walking from parking lots to the north. The larger conversation is to finally make from 100 W to 300 W a walking/event/downtown area. This idea has been kicked down the road long enough. The burden of closing the road each night for road noise is unnecessary if it was transformed into a beautiful area for gathering, shopping, walking, events, etc.	N/A	Pedestrian Safety	N/A	Jurisdictions	12/5/24	37.6773775653788	-113.065156054544

Minersville Hwy from Enoch into Cedar City is a mess!! The amount of traffic is not supported by the 2 lane hwy, especially in the mornings and evenings. The light by Maverik and the Bowling Alley gets backed up very quickly during everyone's morning commute. The VERY SHORT extra lane by the car wash for south bound traffic creates a huge bottle neck. Many cars try merging into that lane, stopping traffic from getting through the light. It is especially bad in the winter during snowy weather. The extra turning lanes added along the Hwy in the North bound lane also cause driving hazards. Many people I think get impatient trying to get onto Minersville Hwy (due to the high level of traffic) will pull out if someone is in the turning lane without realizing there is a car not visible behind the car turning which has caused multiple accidents.	N/A	Vehicle Safety	N/A	Jurisdictions	12/5/24	37.7366124007584	-113.055240709644
The Providence area in Cedar City is very congested!! Lots of accidents, very difficult for emergency responders to get through traffic.	N/A	Vehicle Safety	N/A	Jurisdictions	12/5/24	37.6550489727121	-113.084909852968
often times people don't stop until they see that the traffic going the opposite way has stopped to allow pedestrians to pass through, and even then, sometimes they don't stop.	N/A	Pedestrian Safety	N/A	Jurisdictions	12/6/24	37.6761663551621	-113.066917009526
Cars parked on the side of the road often make it extremely difficult to see whether it is safe to pass through traffic. I often have to rely on pedestrians crossing the street to know if it's safe or not to go.	N/A	Vehicle Safety	N/A	Jurisdictions	12/6/24	37.6788376440994	-113.071739358085
vehicles often don't actually stop to look for traffic that is passing through and proceed to go when it's not safe.	N/A	Vehicle Safety	N/A	Jurisdictions	12/6/24	37.6643082169373	-113.065218605764
vehicles often don't actually stop to look for traffic that is passing through and proceed to go when it's not safe.	N/A	Vehicle Safety	N/A	Jurisdictions	12/6/24	37.6641043825971	-113.065483348541
When waiting to turn right in the marked straight/turn lane with my blinker on, other drivers will frequently pull up next to me in the shoulder to also turn right. There either needs to be made an actual turn lane on the shoulder, or more clear road markings indicating that there is not a separate right turn lane	N/A	Vehicle Safety	N/A	Jurisdictions	12/6/24	37.6773002771387	-113.06196898379
This needs to be an actual intersection. Between students who walk to school, who are driving, parents coming and going, busses, and the number of Success students crossing here everyday, not forcing all traffic to stop is terrifying.	N/A	Pedestrian Safety	N/A	Jurisdictions	12/6/24	37.6665800727541	-113.07263643588
Where this isn't anything here to slowdown cars, even low traffic times are terrifying because cars are often going 45+ MPH.	N/A	Vehicle Safety	N/A	Jurisdictions	12/6/24	37.6741456251496	-113.073690025513
It is difficult to see when cars are coming around this bend. From state dignitaries to everyday college students, everyone crosses here.	N/A	Pedestrian Safety	N/A	Jurisdictions	12/6/24	37.6772289125915	-113.068804515606
This is a pretty busy intersection for drivers and pedestrians alike, and cars are often still driving at 45 MPH. Simply trying to make a right turn here is often precarious.	N/A	Vehicle Safety	N/A	Jurisdictions	12/6/24	37.6703781871742	-113.061648992369
I rarely use this intersection when I don't see someone running a red light, often very fast and in large vehicles. I would like to see cameras put here to be a 24/7 deterrent to aggressive behavior.	N/A	Vehicle Safety	N/A	Jurisdictions	12/6/24	37.6808529029665	-113.073928132501
This area needs to be designed better. There are still people to don't adhere to the right turn only in the previous intersection, and trying to navigate getting into and out of businesses here without a lot of space to maneuver makes it dangerous. And making a left turn from Sage to Royal Hunte is ridiculous. It's all significantly worse when there is any even in town.	N/A	Vehicle Safety	N/A	Jurisdictions	12/6/24	37.6559103246954	-113.084928359761
Many people walk, run, and bike on this road with little shoulder space. adding a bike lane, path, or sidewalk would be very appreciated for all who navigate this road.	N/A	Bicycle Safety	N/A	Jurisdictions	12/6/24	37.7472566179842	-113.092364724983
Bicycle lanes in several areas of the county would improve safety. High priorities should be Airport Road, Kitty Hawk Drive, Bulldog Road, Highway 56, at least to the Iron Springs Road, and Old Highway 91 to Parowan and to Kanarrville. Travel by bicycle is a wonderful possibility but it needs to be safer on the roads.	N/A	Bicycle Safety	N/A	Jurisdictions	12/7/24	37.7775742544382	-113.056915414852
Bike lanes exist around campus, but there is student housing west of this viaduct and this narrow bridge often sees bicycle and pedestrian traffic. Safety could be improved with a wider bridge like was done on Kittyhawk Drive. Designated crosswalks from apartments to the south side of the road would also be helpful.	N/A	Bicycle Safety	N/A	Jurisdictions	12/9/24	37.6770635901532	-113.079843920883
Nichols Canyon Rd gets a lot of traffic. Safety for vehicles and pedestrians would be improved in this high-density housing area if Wedgewood Lane connected to 2375 N. in Fiddler's Canyon.	N/A	Other Feedback	N/A	Jurisdictions	12/9/24	37.7189479583446	-113.04929150957
I am surprised there haven't been more accidents here. It looks next to impossible to turn left from Cobblecreek onto Main. The curve makes it difficult to see cars coming until they are only a short distance away.	N/A	Vehicle Safety	N/A	Jurisdictions	12/9/24	37.7183942482086	-113.058876942073
The transition from road to parking lot is steep here and vehicles take way too long to enter. This slows the progression into the lot and puts cars at risk of the oncoming traffic.	N/A	Vehicle Safety	N/A	Jurisdictions	12/9/24	37.6553455379609	-113.087099810283
This whole parking lot (from Lin's south) is significantly congested. Too much happening in a very small space.	N/A	Vehicle Safety	N/A	Jurisdictions	12/9/24	37.6793725011075	-113.061183331397
This road could be used for bicycle commuting between Cedar and Enoch if bike lanes were added along with signage warning cars of bicycles along the route.	N/A	Bicycle Safety	N/A	Jurisdictions	12/9/24	37.7429242540082	-113.055497224288
An additional interchange in this area may help reduce the amount of traffic needing to use Old Highway 91 and the congestion at SR-130 & 3000 N, especially as the growth continues in this direction in the Enoch area.	N/A	Other Feedback	N/A	Jurisdictions	12/11/24	37.7685406683153	-113.00594534777

Left turns from 2400 N to N Main St are dangerous because cars on Main St go fast through here (the speed limit is high)	N/A	Vehicle Safety	N/A	Jurisdictions	12/11/24	37.7300623172492	-113.055285356398
Pull out is lower than the highway and the deceleration lane blocks view of on coming traffic. Unsafe.	N/A	Vehicle Safety	N/A	Jurisdictions	12/11/24	37.7538521168995	-113.055214062999
I agree with the poor condition of Hwy 91 in Enoch. It is bad for vehicles, especially in bad weather.	N/A	Vehicle Safety	N/A	Jurisdictions	12/18/24	37.784215024689	-112.977960530517
There are many cyclists that ride down Hwy 91 and it is a safety concern. The shoulder of the road is often rough and dangerous, with crumbling asphalt and loose gravel, and it is difficult to share the road with vehicles as there is not enough room for a cycle lane as it is now.	N/A	Bicycle Safety	N/A	Jurisdictions	12/18/24	37.7842902181309	-112.977783504723
This is very dangerous. Westbound traffic is stopping to turn left into the driveway and backing traffic onto Main Street. This driveway needs to be right in/right out. It shouldn't have been built.	N/A	Vehicle Safety	N/A	Jurisdictions	12/18/24	37.6951455891649	-113.063145480129
This area doesn't function well. The southbound left turn lane stacks cars beyond this intersection plus there are cars exiting the Starbucks parking lot. Too many traffic movements in a short span.	N/A	Vehicle Safety	N/A	Jurisdictions	12/18/24	37.6559274303262	-113.084774359106
This intersection is on the corner of the Iron County Preschool and South Elementary School. It is a 2-way stop, stopping traffic going east-west. When school is close to starting and when it gets out, kids run and bike home across this intersection (heading east in the morning and west in the afternoons) without stopping to watch first for traffic. (no matter how often their mothers tell them to watch for traffic). I have been calling the city for YEARS to get a 4-way stop there and crosswalks so the kids can cross 700 west safely before and after school. With the high school south of this intersection and Success Academy and SUU North of it, I have witnessed many close calls. Please let's save the children!	N/A	Pedestrian Safety	N/A	Jurisdictions	12/20/24	37.6683559434324	-113.072598047074
Crossing the 600 South for school from 940 west, 860 west, and 780 west is absolutely impossible before school starts, during lunch break, after school, and during evening events. Kids get impatient and dart across. There have been kids hit by cars and many very close calls. We thought that the pedestrian light at 700 west across 600 south and the 4-way stop at 1100 west and 600 south would help this problem but it hasn't AT ALL. With younger, less experienced drivers being the most prevalent in this area, We need a 4-way stop and crosswalks painted here!	N/A	Pedestrian Safety	N/A	Jurisdictions	12/20/24	37.6665536496171	-113.074359937025
This mal-aligned intersection is (for whatever reason...?) difficult for younger, less experienced drivers to figure out. I live north of this intersection on 860 west. Often, when I am driving east on 600 s, I signal and slow to make my left hand turn onto 860 west, the drivers at the stop sign to my right (turning west) misinterpret my slowing as a stop, as if it was a 4-way stop, and dart out to turn left right in front of me! I have avoided crashing into any of these cars, however, I have seen several terrible accidents there, too. I suggest that we make this intersection a 4-way stop with painted crosswalks (it is SO DIFFICULT to cross 600 south to go to the school!). This would also slow traffic down a bit in an area where drivers tend to want to speed.	N/A	Vehicle Safety	N/A	Jurisdictions	12/20/24	37.6665263298041	-113.074199159722
These driveways coming out of Panda Express and MACU, and the one coming out of the Starbucks and Cafe Rio onto Royal Hunte Drive need to be closed off. I have seen many accidents here because of these driveways, especially when drivers want to turn left out of them	N/A	Vehicle Safety	N/A	Jurisdictions	12/20/24	37.655653222859	-113.085014375208
When driving from south to north through this intersection, you must be in the left lane as the right lane is right turn only, so if you want to make a right turn onto Sage Drive, you must switch lanes freakishly fast (and hope the car in the Starbucks driveway doesn't assume you're turning into that driveway) in order to be over to the right to make your turn in time. This right lane should be done away with OR make the right turn only on the south side of the intersection be a straight or turn lane again.	N/A	Vehicle Safety	N/A	Jurisdictions	12/20/24	37.6550618699911	-113.085085003469
The right lane heading south that ends at the Walmart parking lot driveway needs to either be NOT there OR have large white right turn only arrows painted into it. Many drivers don't notice the merge to the left sign and are terribly confused and surprised that their lane ends, sending them into a panic to get into the left lane, most of the time without looking who they are cutting off first.	N/A	Vehicle Safety	N/A	Jurisdictions	12/20/24	37.65476546	-113.085304322239
This left lane here heading west gets full up with left-turners and often clogs the intersection behind them. I suggest trimming down this cement barrier as much as possible to make the left turn lane longer, thus ending the left lane/left turn cars pile-ups.	N/A	Vehicle Safety	N/A	Jurisdictions	12/20/24	37.6548517099362	-113.08361066934
Bentley Blvd is my go-to street to avoid turning left where Sage Drive meets Royal Hunte Drive! However, I have never seen a posted speed limit on this road. It's part residential, part business. It would be good to have a speed limit sign posted along this road so I know if I am speeding or driving too slowly.	N/A	Other Feedback	N/A	Jurisdictions	12/21/24	37.6585141936299	-113.083534720281

This is a dangerous intersection. When trying to turn east or west from iron springs road, you cannot see oncoming traffic from the east if there is a semi in the westbound turning lane (turning onto iron springs road). There have been several fatalities and numerous serious accidents here in the last 10 years and it will only continue to get worse with the ongoing and increasing development in this area and further west on iron springs road.	N/A	Vehicle Safety	N/A	Jurisdictions	1/2/25	37.6849208154103	-113.162028335064
This road needs to be improved (and maintained). Surface is in poor condition. This road needs to be widened to include turning lanes. With all the new development happening in this area and the increase in traffic by large semi's it will only get worse.	N/A	Vehicle Safety	N/A	Jurisdictions	1/2/25	37.6967938314178	-113.179140815131
Bridge needs to be widened. Almost too tight for 2 vehicles.	N/A	Vehicle Safety	N/A	Jurisdictions	1/8/25	37.8374669327705	-112.827696452552
Bridge is barely wide enough for vehicles, let alone pedestrians or bikers. Would be nice to add a walking bridge next to the existing bridge so as not to be on the road with vehicles.	N/A	Pedestrian Safety	N/A	Jurisdictions	1/8/25	37.8374750674124	-112.827622991965
Edge of road needs repair making it difficult to stay in the lane.	N/A	Vehicle Safety	N/A	Jurisdictions	1/8/25	37.8378715431971	-112.827539062834



Map View

Jurisdictions

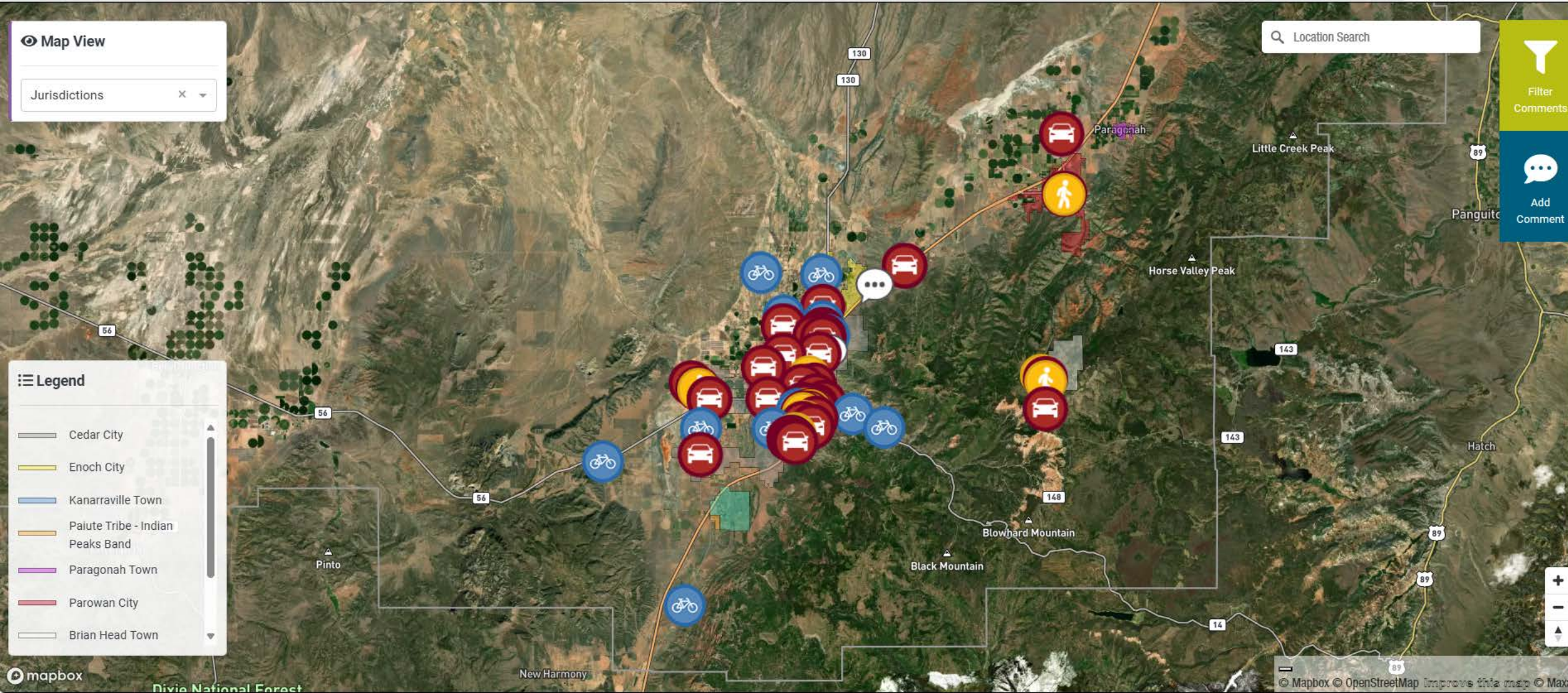
Legend

- Cedar City
- Enoch City
- Kanarrville Town
- Paiute Tribe - Indian Peaks Band
- Paragonah Town
- Parowan City
- Brian Head Town

Location Search

Filter Comments

Add Comment





Location Search

Filter Comments

Add Comment

Map View

Proposed Projects

Legend

- Potential Intersection Improvement Projects
- Potential Roadway Safety Improvement Projects
- Parowan City
- Cedar City
- Enoch City
- Paiute Tribe - Indian Peaks Band

Appendix E.

Online Survey Data



Iron County Safety Action Plan Survey

1. Do you travel on Iron County roadways?

☐ Yes

☐ No

2. What modes of transportation do you use regularly?
(select all that apply)

☐ Personal vehicle

☐ Bike

☐ Walk

☐ Bus

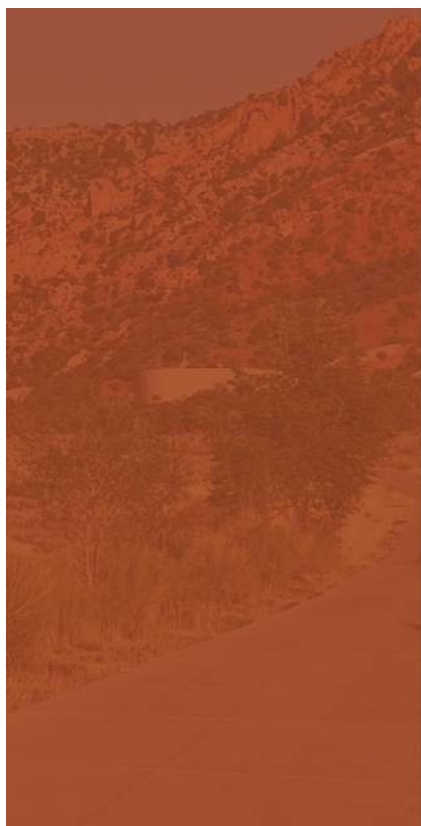
☐ On-demand vehicle (Uber/Lyft)

☐ Other (please specify)



3. Which of the following safety issues concern you the most? (Select all that apply to you)

- ☐ Distracted driving
- ☐ Pedestrian safety in school zones
- ☐ People ignoring traffic laws while driving
- ☐ Narrow, broken, or missing sidewalks.
- ☐ Missing or inadequate bike lanes or paths
- ☐ Aggressive driving
- ☐ Redlight running/not stopping at stop signs
- ☐ High vehicle speeds
- ☐ Not enough time to cross the street
- ☐ Lack of access for people with disabilities
- ☐ Drivers failing to yield to pedestrians and cyclists
- ☐ View blocked when turning
- ☐ Poorly maintained roads
- ☐ Not enough crosswalks
- ☐ Not enough street lighting
- ☐ Other (please specify)



4. Of the list safety issues above, what are your top 3 concerns?

Concern 1

Concern 2

Concern 3

5. What areas or roadways in Iron County do you think could benefit from safety improvement projects?

6. What types of safety improvements would you like to see in Iron County? Please include the type of improvement and specific location, if applicable. (Examples may include improve signs, pavement markings, pedestrian crossings, lighting, bicycle and pedestrian facilities, speed management, etc.)

7. Please share any additional comments, concerns, or suggestions about roadway safety in Iron County.

Tell us about you:

8. Are you a resident of Iron County?

☐ Yes

☐ No

9. What is your gender?

☐ Female

☐ Male

☐ Prefer not to answer



10. What is your age range?

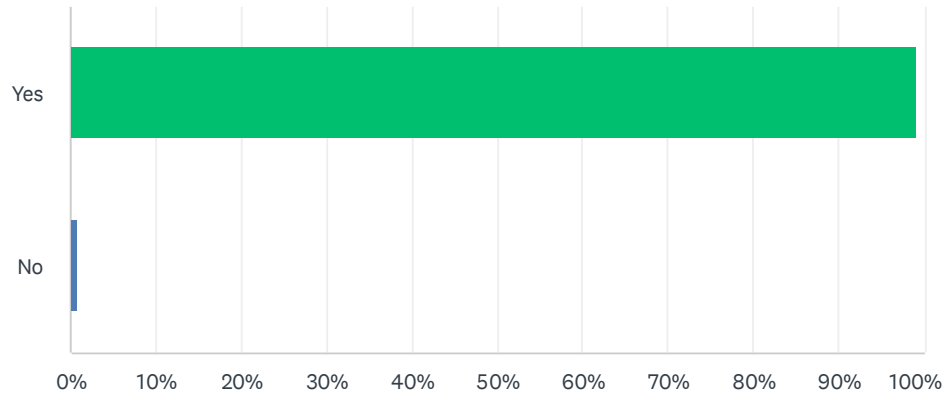
- ☐ Under 20
- ☐ 20-29
- ☐ 30-39
- ☐ 40-49
- ☐ 50-59
- ☐ 60 or older

11. Describe your ethnicity/race.

- ☐ American Indian or Alaska Native
- ☐ Asian or Asian American
- ☐ Black or African American
- ☐ Hispanic or Latino
- ☐ Native Hawaiian or other Pacific Islander
- ☐ White or Caucasian
- ☐ Two or more races
- ☐ Prefer not to answer
- ☐ Other (please specify)

Q1 Do you travel on Iron County roadways?

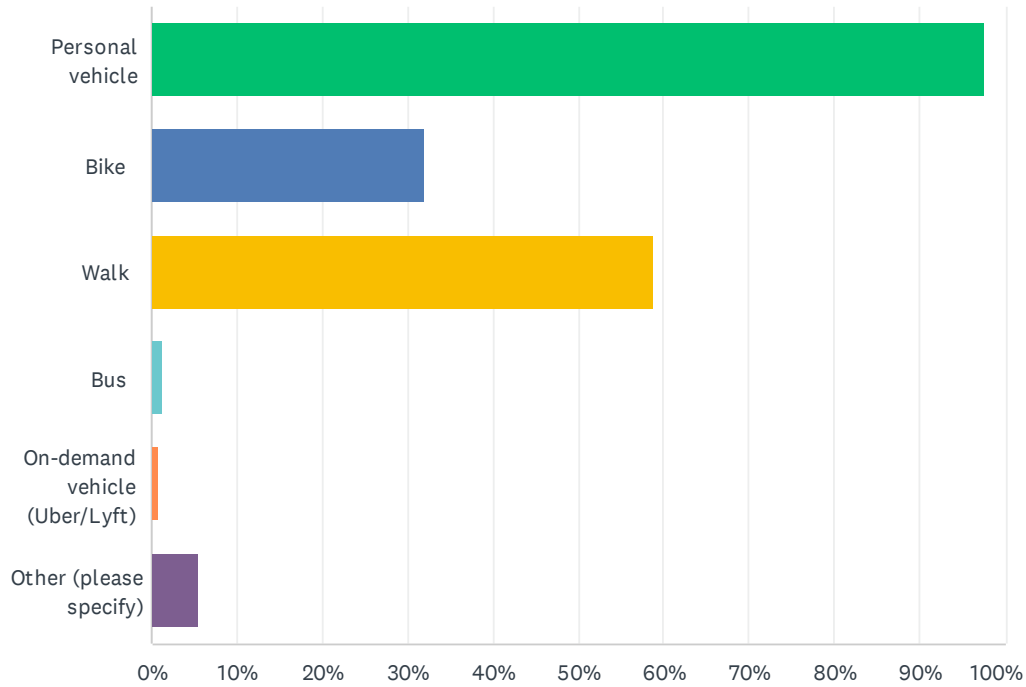
Answered: 373 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	99.20%	370
No	0.80%	3
TOTAL		373

Q2 What modes of transportation do you use regularly? (select all that apply)

Answered: 372 Skipped: 2



ANSWER CHOICES	RESPONSES	
Personal vehicle	97.58%	363
Bike	31.99%	119
Walk	58.87%	219
Bus	1.34%	5
On-demand vehicle (Uber/Lyft)	0.81%	3
Other (please specify)	5.65%	21
Total Respondents: 372		

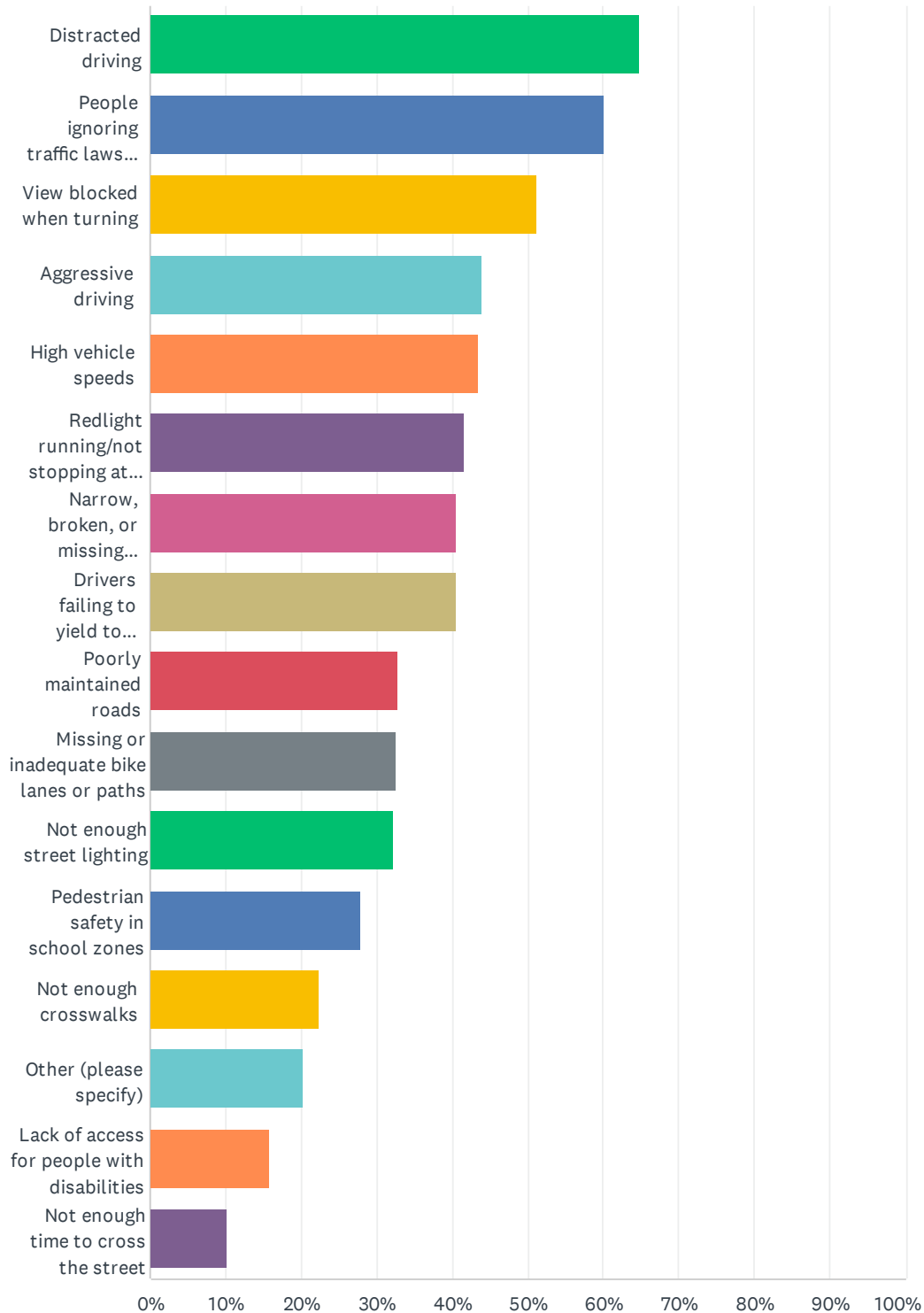
#	OTHER (PLEASE SPECIFY)	DATE
1	4 wheeler	1/26/2025 9:07 AM
2	Work vegicle	1/25/2025 5:21 PM
3	transport	1/25/2025 8:26 AM
4	Horseback moving sheep	1/24/2025 5:00 PM
5	Farm Implements, Tractors, Heavy Truck etc.	1/13/2025 1:28 PM
6	Motorcycle	1/11/2025 2:07 PM
7	Diss	12/19/2024 8:49 PM

Iron County Safety Action Plan Survey

8	Deliver Meals on Wheels in truck.	12/15/2024 8:11 AM
9	Work Vehicle	12/6/2024 11:04 AM
10	Motorcycle	12/5/2024 9:11 PM
11	Electric Scooter	12/5/2024 5:51 PM
12	Friends cars	12/5/2024 5:40 PM
13	Side by side	12/5/2024 5:25 PM
14	roller skating	12/5/2024 3:43 PM
15	State Vehicle	12/5/2024 3:37 PM
16	electric scooter	12/5/2024 3:30 PM
17	ATV / UTV	12/1/2024 7:16 PM
18	Work	11/27/2024 10:40 AM
19	motorcycle	11/21/2024 8:55 AM
20	Run	11/20/2024 5:49 PM
21	Semi Truck	11/20/2024 5:40 PM

Q3 Which of the following safety issues concern you the most? (Select all that apply to you)

Answered: 372 Skipped: 2



Iron County Safety Action Plan Survey

ANSWER CHOICES	RESPONSES	
Distracted driving	64.78%	241
People ignoring traffic laws while driving	60.22%	224
View blocked when turning	51.08%	190
Aggressive driving	43.82%	163
High vehicle speeds	43.55%	162
Redlight running/not stopping at stop signs	41.67%	155
Narrow, broken, or missing sidewalks.	40.59%	151
Drivers failing to yield to pedestrians and cyclists	40.59%	151
Poorly maintained roads	32.80%	122
Missing or inadequate bike lanes or paths	32.53%	121
Not enough street lighting	32.26%	120
Pedestrian safety in school zones	27.96%	104
Not enough crosswalks	22.31%	83
Other (please specify)	20.16%	75
Lack of access for people with disabilities	15.86%	59
Not enough time to cross the street	10.22%	38
Total Respondents: 372		

#	OTHER (PLEASE SPECIFY)	DATE
1	Pot holes, damaged roads poor condition	1/26/2025 7:33 PM
2	Exit 75 is DANGEROUS. Worst exit I've ever seen. Ice on the cattle guard acts like ice. I'm surprised there aren't more wrecks there.	1/26/2025 9:07 AM
3	Drivers with those horrible LED lights that blind you	1/24/2025 5:14 PM
4	Preservation of the Designated Livestock Trails	1/24/2025 5:00 PM
5	Need 4 way stops at center/main and 200South/main	1/24/2025 4:11 PM
6	Lack of paved road 200 East on 300 South in Parowan	1/24/2025 12:41 PM
7	1. too much traffic for what the roads can currently handle 2. pedestrians are not safe on main roads such as 2300 W, Midvalley Rd	1/12/2025 1:59 PM
8	Vehicles pulling onto busy streets without adequate space	1/11/2025 2:07 PM
9	Woefully few and inadequate dedicated bike lanes.	1/8/2025 2:02 PM
10	With all the new construction. Traffic on 56 is becoming a nightmare.	1/6/2025 5:39 PM
11	Confusing lane designations.	1/6/2025 11:10 AM
12	Yellow light are too brief.	1/2/2025 1:32 PM
13	Inadequate filling of cracks in bike paths resulting in rough rides	1/2/2025 11:22 AM
14	Left turn lanes not green for long enough	1/2/2025 10:47 AM
15	The wide roads encourage people to make their own lanes and drive around other cars (when they don't know why the car in front of them is stopped).	12/23/2024 11:22 AM

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16	Poorly designed dangerous intersection at Iron Springs Road and 56	12/19/2024 11:45 AM
17	Distractions on road crossing; sign swinging; bike paths	12/19/2024 6:52 AM
18	Illegal lane changes	12/18/2024 11:43 AM
19	Enoch 1810e hwy 91 narrows abruptly, making it difficult sometimes to stay safe. This is mostly North Bound travel.	12/18/2024 10:57 AM
20	Not enough space for the drivers we have on the road, bad traffic, and therefore irresponsible driving	12/16/2024 2:46 PM
21	Headlights at night being too bright, or miss-aligned	12/11/2024 2:37 PM
22	Pedestrians, bike riders need to be in light colored clothing at night	12/10/2024 11:19 AM
23	Deep gutters	12/9/2024 11:10 AM
24	Elderly drivers	12/9/2024 9:28 AM
25	Deer/wildlife on Roads	12/9/2024 7:35 AM
26	The ridiculous underpass at the first cedar city exit	12/8/2024 12:50 PM
27	Inadequate snow plowing on side streets	12/7/2024 11:15 PM
28	Parowan— Out of towners assuming main and center is a four way stop. Giant potholes on 2nd n and 3rd east corner as you head to recreation areas	12/7/2024 6:46 AM
29	Pedestrians failing to look both ways before crossing the street	12/6/2024 9:03 PM
30	Construction	12/6/2024 1:57 PM
31	Turn lanes are not clear. Sometimes people pull off the main lane to turn. Sometimes they don't. Having a committed green turn arrow at stop lights would be amazing! Sometimes I see it but mostly people are anxiously trying to sneak a quick left turn because an opportunity may not come or there is a long line of traffic waiting to turn. Congestion by Walmart, any left turns on Main Street or Walmart area is often risky. I consider myself aware as a driver & I find myself taking risks and hoping for the best.	12/6/2024 12:39 PM
32	far too many drivers sit in the middle of intersections in turn lanes and then everyone has to wait for them to turn after lights turn - this is especially bad at the intersections of 200 N & Main and University Blvd & Main	12/6/2024 12:38 PM
33	Traffic light rotations need to be refined for traffic patterns. South Main is a nightmare. Lots of accidents on 56, I suspect due to the yellow arrow combined with yellow light. I feel it creates two people trying to beat the red and they collide.	12/6/2024 12:11 PM
34	Plowing into the bike lanes	12/6/2024 10:04 AM
35	to many unnecessary stop signs	12/6/2024 9:48 AM
36	Pedestrians walking out into traffic without concerns for the danger	12/6/2024 9:12 AM
37	Left turn signals need to be longer to let traffic through. When only 2 of 10 cars get through then the left signal goes to flashing yellow, people get impatient, then run a red light because nobody gets through the flashing yellow because oncoming traffic is too heavy. The flashing yellow left was great 10-20 years ago, it doesn't apply anymore!!!!	12/6/2024 7:50 AM
38	Hard to tell roads apart. Especially on the roads behind the buildings lining mainstreet on the west side.	12/6/2024 12:11 AM
39	Too many four way stops	12/5/2024 9:35 PM
40	Deep dips on curbs of roads	12/5/2024 9:24 PM
41	Downtown Main Street is poorly lit, and the crosswalk there by Bulloch drugs Orleans Thriftway is dangerous	12/5/2024 9:11 PM
42	Not enough left turn lights and intersections without lights	12/5/2024 8:06 PM
43	Distracted	12/5/2024 6:26 PM

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44	Distracted	12/5/2024 6:26 PM
45	People walking in the dark with no flashlight and students jaywalking instead of using the crosswalk	12/5/2024 6:00 PM
46	improved signage for pedestrian crossings on domestic streets	12/5/2024 5:39 PM
47	North Elementry Cross Walk should be a Light, too many cars never let people leave the school safely after picking up their kids and heading south to SUU for Swim Class	12/5/2024 5:29 PM
48	Not enough traffic light in fast developing areas of the county (4200 and 56)	12/5/2024 5:24 PM
49	Kids riding bikes carelessly	12/5/2024 4:28 PM
50	Clearly painted roads. Many seem to be faded, and it sometimes confuses other drivers. Also, a stoplight at Iron Spring Elem. and Hwy. 56 is sorely needed.	12/5/2024 4:22 PM
51	Many roads do not have any lines or markings.	12/5/2024 4:12 PM
52	speed limits of the roads going north. lund is 50 mph, 2300 w is 40, and the 130 is 55 mph. Can those be adjusted?	12/5/2024 4:11 PM
53	Not enough traffic lights	12/5/2024 3:56 PM
54	Teens driving 4 wheelers and side-by-sides through my neighborhood. Oftern without helmets.	12/5/2024 3:55 PM
55	Some parking lot "driveways" are very deep and cause damage to cars. I'm specifically thinking of businesses along Main Street in Cedar City.	12/5/2024 3:47 PM
56	General enforcement or lack thereof.	12/5/2024 3:46 PM
57	traffic coming different speeds from each direction	12/5/2024 3:43 PM
58	Cyclists riding in the middle of narrow, busy roads	12/5/2024 3:39 PM
59	No signaling	12/5/2024 3:33 PM
60	Lack of left turn lights on busy roads	12/5/2024 3:31 PM
61	Not enough sidewalks	12/5/2024 11:18 AM
62	Drivers not diming their lights or tailgating to close.	12/5/2024 10:20 AM
63	No lines painted	12/4/2024 12:33 AM
64	Very congested roads. There are too many people. It is too hard to turn onto mainstreet.	12/2/2024 9:26 PM
65	Extreme congestion	12/2/2024 9:20 PM
66	Lack of marked paths along paved roades	12/1/2024 7:16 PM
67	Exit 51 south bound needs a three way stop	11/24/2024 6:29 AM
68	Left turns onto old us hwy 91 exiting from southbound 15 Can't see oncoming traffic when turning left. Terrible blind spot. And new building at that ramp has blinding bright lights at dusk	11/23/2024 4:53 PM
69	Vehicles parked on the side of the road obstructing view from cars to either cross the street safely walking or in a car.	11/22/2024 11:25 AM
70	Create dedicated turn lanes Utah drivers think it's ok to turn right and cross the solid whit line.	11/21/2024 9:45 PM
71	Lack of designated turn lanes on Hwy 56	11/21/2024 4:11 PM
72	Not enough lanes on busy roads to carry the flow of traffic.	11/21/2024 11:06 AM
73	Traffic congestion, especially around school zones.	11/21/2024 8:50 AM
74	Not enough green turn lights at crucial intersections!	11/21/2024 8:19 AM
75	Bicyclists on State Highways. Especially Hwy 14	11/20/2024 5:12 PM

Q4 Of the list safety issues above, what are your top 3 concerns?

Answered: 348 Skipped: 26

ANSWER CHOICES	RESPONSES
Concern 1	100.00% 348
Concern 2	96.84% 337
Concern 3	87.64% 305

#	CONCERN 1	DATE
1	Lack of bike lanes	1/30/2025 10:10 PM
2	Drivers failing to yield	1/30/2025 1:46 PM
3	Poorly maintained roads	1/27/2025 9:32 PM
4	commercial vehicle (bottom dump, livestock) aggressive driving	1/27/2025 9:01 AM
5	Narrow lanes	1/26/2025 7:33 PM
6	Exit 75	1/26/2025 9:07 AM
7	Sidewalks	1/25/2025 4:06 PM
8	No sidewalks	1/25/2025 2:54 PM
9	Safety in school zones	1/25/2025 1:34 PM
10	Running Stop lights and stop signs	1/25/2025 11:05 AM
11	Poorly maintained roads	1/25/2025 10:24 AM
12	High vehicle speeds	1/25/2025 9:39 AM
13	Street lighting	1/25/2025 9:29 AM
14	Aggressive drivers	1/25/2025 8:28 AM
15	aggressive driving	1/25/2025 8:26 AM
16	Speed	1/25/2025 8:08 AM
17	Drivers ignoring stop signs	1/25/2025 5:29 AM
18	No side walks	1/24/2025 6:06 PM
19	High Speed	1/24/2025 5:27 PM
20	I only listed 3. You can't fix stupid, inattentive drivers	1/24/2025 5:14 PM
21	Need a stoplight in Parowan at Center & Main.	1/24/2025 5:14 PM
22	Ignorance of drivers regarding driving when livestock are present.	1/24/2025 5:00 PM
23	Drivers seem to tailgate.	1/24/2025 4:35 PM
24	Speeding	1/24/2025 4:17 PM
25	High vehicle speeds	1/24/2025 4:11 PM
26	Speeding	1/24/2025 4:05 PM
27	No bike lane	1/24/2025 2:54 PM
28	Distracted driving	1/24/2025 1:59 PM

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29	Broken or missing sidewalks	1/24/2025 1:03 PM
30	Not stopping at stop sign.	1/24/2025 1:03 PM
31	Distracted drivers	1/24/2025 1:01 PM
32	Traffic speed	1/24/2025 1:00 PM
33	People not obeying the laws	1/24/2025 12:43 PM
34	Distracted drivers	1/24/2025 12:42 PM
35	Traffic not obeying stop signs on 200 South on the East Side of town	1/24/2025 12:41 PM
36	Poorly maintained roads	1/24/2025 12:33 PM
37	Bike paths	1/24/2025 12:22 PM
38	Drivers failing to yield	1/21/2025 10:46 AM
39	Drivers failing to yield	1/21/2025 8:37 AM
40	Inadequate and nonexistent bike lanes	1/19/2025 4:58 PM
41	Improved busing	1/18/2025 5:14 PM
42	Unsafe speeds	1/18/2025 6:19 AM
43	Sidewalks broken, uneven and blocked by dead shrubbery especially all 200S Parowan	1/17/2025 10:36 AM
44	Distracted driving (mostly people looking a phones)	1/15/2025 6:58 PM
45	Ignoring traffic laws/speeding/distracted (drivers in general)	1/14/2025 11:43 PM
46	People choosing to make left turns in front of oncoming traffic that is too close	1/13/2025 8:29 PM
47	People choosing to make left turns in front of oncoming traffic that is too close	1/13/2025 8:29 PM
48	View Blocked When Turning	1/13/2025 1:28 PM
49	Red light running	1/13/2025 1:13 PM
50	Roads need repair	1/13/2025 11:27 AM
51	Amount of traffic already on roads with high density homes being built to cause more traffic issues	1/12/2025 1:59 PM
52	Residential speeding	1/11/2025 2:07 PM
53	Missing or inadequate bike lanes	1/9/2025 5:41 PM
54	Drivers failing to yield to pedestrians	1/8/2025 5:11 PM
55	Dedicated bike lanes	1/8/2025 2:02 PM
56	Safety for cyclists	1/7/2025 11:07 AM
57	people not stopping at stop signs	1/7/2025 10:24 AM
58	Intersection of 200 north and Main Street. Sometimes takes 3 light cycles to make a left turn off on main street	1/6/2025 5:39 PM
59	People ignoring traffic laws while driving	1/6/2025 11:10 AM
60	Speeds	1/6/2025 9:12 AM
61	Unsafe driving and lack of parking near SUU	1/4/2025 8:47 AM
62	It is so dangerous to be a pedestrian. I have had so many near misses.	1/3/2025 8:38 PM
63	View blocked when turning	1/3/2025 9:07 AM
64	Distracted drivers	1/3/2025 6:50 AM
65	Distracted drivers	1/2/2025 8:36 PM

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66	Pedestrian Safety	1/2/2025 8:19 PM
67	Street lighting	1/2/2025 7:16 PM
68	Red light running/not stopping at stop signs, especially at the 3000 N and Old Minersille Hwy.	1/2/2025 7:06 PM
69	Drivers failing to yield to pedestrians and cyclists.	1/2/2025 1:32 PM
70	Inadequate filling of cracks in bike paths	1/2/2025 11:22 AM
71	Drivers distracted by phone	1/2/2025 11:15 AM
72	Sidewalk continuity	1/2/2025 10:47 AM
73	high vehicle speeds	1/2/2025 10:21 AM
74	Not enough street lighting	12/31/2024 12:27 PM
75	I really worry about the safety of my children near any road in Cedar. There is not enough visibility and most people think their vehicles should have the right of way.	12/31/2024 10:19 AM
76	Aggressive driving	12/31/2024 10:05 AM
77	Missing or inadequate lanes or paths!	12/31/2024 9:55 AM
78	Aggressive drivers	12/31/2024 9:23 AM
79	Narrow, broken, or missing sidewalks	12/31/2024 9:19 AM
80	Not enough traffic lights on west highway 56	12/23/2024 6:33 PM
81	Drivers crossing the street till last minute	12/23/2024 2:42 PM
82	Other	12/23/2024 11:22 AM
83	People ignoring traffic laws (cell phones)	12/23/2024 10:00 AM
84	Distracted driving	12/23/2024 9:57 AM
85	Pedestrian safety in school zones	12/23/2024 9:56 AM
86	Pedestrian safety in school zones	12/23/2024 9:54 AM
87	People ignoring traffic laws	12/23/2024 9:51 AM
88	Poorly maintained roads	12/23/2024 9:50 AM
89	Drivers failing to yield to pedestrians	12/23/2024 9:46 AM
90	People ignoring traffic law	12/22/2024 10:58 AM
91	Street Lighting at intersections- city streets	12/20/2024 9:45 PM
92	Crosswalks and school safety	12/20/2024 5:32 PM
93	High speed	12/20/2024 4:10 PM
94	Distracted	12/19/2024 8:49 PM
95	Narrow, broken, or missing sidewalks (or sidewalks with so much plant overgrowth they are unusable)	12/19/2024 8:44 PM
96	Speeding	12/19/2024 4:40 PM
97	Sidewalks should be consistent and connect all areas of Cedar and extend into Enoch	12/19/2024 3:14 PM
98	Poorly maintained Iron Springs Road	12/19/2024 11:45 AM
99	Ignoring traffic laws, not stopping at stopping signs	12/19/2024 8:03 AM
100	Running red lights	12/19/2024 6:52 AM
101	People ignoring traffic laws	12/18/2024 4:11 PM
102	Distracted Driving	12/18/2024 12:37 PM

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103	Distracted driving	12/18/2024 11:43 AM
104	North Bound Highway 91 issue at 1810 East.	12/18/2024 10:57 AM
105	Poorly maintained roads	12/18/2024 10:26 AM
106	Running red lights	12/18/2024 7:22 AM
107	pedestrian safety in school zones	12/17/2024 6:44 AM
108	My "Other"	12/16/2024 2:46 PM
109	Distracted drivers	12/15/2024 8:11 AM
110	Inadequate spacing for cyclists on roadways	12/14/2024 8:16 PM
111	Narrow broken sidewalks	12/13/2024 10:28 PM
112	Missing sidewalks	12/13/2024 2:09 PM
113	Distracted Driving	12/13/2024 10:37 AM
114	Aggressive Driving	12/11/2024 2:37 PM
115	People ignoring traffic laws while driving	12/11/2024 12:19 PM
116	On the bridge headed to SUU the left side of the sidewalk is unfinished and it's just not enjoyable to walk on it or safe.	12/11/2024 11:42 AM
117	Not enough street lighting	12/11/2024 10:00 AM
118	Drivers failing to yield to pedestrians	12/10/2024 2:51 PM
119	Distracted Driving	12/10/2024 2:21 PM
120	Distracted drivers - phones, eating	12/10/2024 11:19 AM
121	View blocked when turning	12/10/2024 8:41 AM
122	High Vehicle Speeds	12/9/2024 9:07 PM
123	Drivers failing to yield	12/9/2024 8:06 PM
124	Pedestrian safety in University area	12/9/2024 1:27 PM
125	Distracted Driving	12/9/2024 12:53 PM
126	Inadequate bike lanes or paths	12/9/2024 11:46 AM
127	Distracted Driving	12/9/2024 11:38 AM
128	Distracted driving	12/9/2024 11:10 AM
129	Lack of access for people w/ disabilities	12/9/2024 10:03 AM
130	Elderly drivers	12/9/2024 9:28 AM
131	Distracted Driving	12/9/2024 7:35 AM
132	view blocked when turning	12/8/2024 5:23 PM
133	Running stop signs	12/8/2024 5:13 PM
134	Poorly Maintained roads	12/8/2024 4:30 PM
135	Texting while driving	12/8/2024 2:18 PM
136	That underpass	12/8/2024 12:50 PM
137	View blocked when turning	12/8/2024 6:49 AM
138	View blocked while turning	12/8/2024 6:30 AM
139	People ignoring traffic laws	12/7/2024 11:15 PM
140	View blocked when turning	12/7/2024 7:38 AM

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141	Kids crossing the roads safely	12/7/2024 6:46 AM
142	Distracted Driving	12/6/2024 9:03 PM
143	View blocked when turning	12/6/2024 5:56 PM
144	Aggressive driving	12/6/2024 3:22 PM
145	Yielding to Pedestrians	12/6/2024 1:57 PM
146	Aggressive drivers	12/6/2024 1:53 PM
147	Traffic Laws	12/6/2024 1:18 PM
148	Inadequate street lighting.	12/6/2024 12:39 PM
149	pedestrian safety in school zones	12/6/2024 12:38 PM
150	Aggressive drivers	12/6/2024 12:29 PM
151	Traffic light timing	12/6/2024 12:11 PM
152	Drivers being aware of pedestrians and cyclists	12/6/2024 11:27 AM
153	Many roads are just big enough for the big vehicles traveling Iron county roads and any persons on the side of the road (walking, running, biking) can create a potentially deadly situation	12/6/2024 11:25 AM
154	Street conditions	12/6/2024 11:20 AM
155	View blocked when turning	12/6/2024 11:10 AM
156	Parowan needs bike lanes everywhere. We have two bike shops and everyone is out riding and it's dangerous!	12/6/2024 11:10 AM
157	Aggressive Driving	12/6/2024 11:04 AM
158	Distracted driving	12/6/2024 10:25 AM
159	Blocked view while turning	12/6/2024 10:23 AM
160	Distracted driving	12/6/2024 10:11 AM
161	Drivers failing to yield to bikes	12/6/2024 10:04 AM
162	Lack of traffic light	12/6/2024 10:03 AM
163	Street lighting, particularly on Cross Hollow Road	12/6/2024 9:59 AM
164	Redlight running	12/6/2024 9:51 AM
165	too many unnecessary stop signs	12/6/2024 9:48 AM
166	Distracted driving people on their phones	12/6/2024 9:22 AM
167	Lack of bike lanes	12/6/2024 9:19 AM
168	Pedestrians walking in front of moving vehicles	12/6/2024 9:12 AM
169	Lack of access for people with disabilities	12/6/2024 9:05 AM
170	vision while turning	12/6/2024 9:00 AM
171	Lack of access for people with disabilities	12/6/2024 8:41 AM
172	Red light running	12/6/2024 8:34 AM
173	View blocked when turning	12/6/2024 8:27 AM
174	Not enough street lighting	12/6/2024 8:09 AM
175	Missing or broken sidewalks	12/6/2024 8:07 AM
176	Distracted Driving	12/6/2024 7:50 AM

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177	Running Red lights	12/6/2024 7:50 AM
178	Distracted Driving	12/6/2024 7:46 AM
179	Distracted driving	12/6/2024 7:24 AM
180	View blocked when turning	12/6/2024 2:09 AM
181	Narrow, broken, and missing sidewalks	12/6/2024 12:40 AM
182	Not Enough Time to Cross the Street	12/6/2024 12:32 AM
183	Failure to stop	12/6/2024 12:18 AM
184	Distracted driving	12/6/2024 12:14 AM
185	Telling the roads apart.	12/6/2024 12:11 AM
186	Distracted driving	12/5/2024 10:10 PM
187	Too many four way stops	12/5/2024 9:35 PM
188	Poorly maintained roads	12/5/2024 9:31 PM
189	People inching out because they cant see around vehicles	12/5/2024 9:24 PM
190	Pedestrian	12/5/2024 9:18 PM
191	Red light running/ not stopping at stop signs	12/5/2024 9:16 PM
192	Not enough street lights	12/5/2024 9:11 PM
193	Distracted driving	12/5/2024 8:09 PM
194	Speeding	12/5/2024 8:06 PM
195	High speeds	12/5/2024 7:49 PM
196	the safety of people walking due to drivers being distracted	12/5/2024 7:31 PM
197	Drivers failing to yield to pedestrians	12/5/2024 7:08 PM
198	People blatantly ignoring traffic rules	12/5/2024 7:04 PM
199	Not enough street lighting	12/5/2024 7:03 PM
200	Drivers failing to yield to pedestrians	12/5/2024 6:43 PM
201	aggressive driving	12/5/2024 6:38 PM
202	Not having safe sidewalks	12/5/2024 6:37 PM
203	Red light running	12/5/2024 6:26 PM
204	Red light running	12/5/2024 6:26 PM
205	People love speeding down the road like jerks.	12/5/2024 6:24 PM
206	Distracted driving	12/5/2024 6:18 PM
207	Distracted driving	12/5/2024 6:16 PM
208	Poor lighting or people walking without a flashlight	12/5/2024 6:00 PM
209	Sidewalks	12/5/2024 5:51 PM
210	View blocked when turning	12/5/2024 5:40 PM
211	distracted driving	12/5/2024 5:39 PM
212	Street lighting	12/5/2024 5:36 PM
213	Distracted driving	12/5/2024 5:35 PM
214	Drivers failing to yield to pedestrians and cyclists	12/5/2024 5:31 PM

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215	Angry Tail Gating Drivers who are Speeding	12/5/2024 5:29 PM
216	Distracted driving	12/5/2024 5:25 PM
217	Not enough traffic lights to handle growth	12/5/2024 5:24 PM
218	Not enough street lights around campus, especially the 4 way stop at the football field	12/5/2024 5:14 PM
219	Missing sidewalks	12/5/2024 5:03 PM
220	View blocked when turning	12/5/2024 4:46 PM
221	School Zones	12/5/2024 4:40 PM
222	Drivers swerving	12/5/2024 4:33 PM
223	poorly maintained roads	12/5/2024 4:31 PM
224	Kids riding bikes carelessly	12/5/2024 4:28 PM
225	Poorly maintained roads	12/5/2024 4:26 PM
226	drivers running red lights, particularly drivers turning left at major intersections	12/5/2024 4:22 PM
227	Aggressive driving	12/5/2024 4:22 PM
228	View blocked when turning	12/5/2024 4:16 PM
229	people ignoring traffic laws while driving	12/5/2024 4:14 PM
230	Red light running. Particularly where there either aren't turn lights or where they never actually go green, only flashing yellow.	12/5/2024 4:13 PM
231	Blocked turns	12/5/2024 4:12 PM
232	Drivers not yielding to pedestrians and bikes	12/5/2024 4:12 PM
233	view blocked when turning	12/5/2024 4:11 PM
234	Running of red lights	12/5/2024 4:09 PM
235	Lack of sidewalks and safe pathways for pedestrians	12/5/2024 4:08 PM
236	Traffic laws/running red lights	12/5/2024 4:07 PM
237	High vehicle speeds	12/5/2024 4:04 PM
238	Distracted Driving	12/5/2024 3:59 PM
239	Drivers failing to yield to pedestrians and cyclists	12/5/2024 3:59 PM
240	Distracted driving	12/5/2024 3:56 PM
241	Other (young drivers on side-by-sides)	12/5/2024 3:55 PM
242	high vehicle speeds	12/5/2024 3:52 PM
243	Not stopping at stop signs	12/5/2024 3:51 PM
244	Not enough street lighting	12/5/2024 3:47 PM
245	View blocked when turning	12/5/2024 3:46 PM
246	Red light running	12/5/2024 3:46 PM
247	Redlight running/not stopping at stop signs	12/5/2024 3:44 PM
248	Bad sidewalks	12/5/2024 3:43 PM
249	drivers failing to yield to pedestrians and cyclist	12/5/2024 3:43 PM
250	Aggressive Driving	12/5/2024 3:43 PM
251	Drivers failing to yield to pedestrians and cyclists.	12/5/2024 3:42 PM
252	Not Enough Street Lighting	12/5/2024 3:41 PM

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253	High vehicle speeds	12/5/2024 3:40 PM
254	Redlight running/not stopping at stop signs	12/5/2024 3:39 PM
255	Distracted Drivers	12/5/2024 3:39 PM
256	Red light running	12/5/2024 3:39 PM
257	Not enough street lighting	12/5/2024 3:38 PM
258	Distracted driving	12/5/2024 3:38 PM
259	Pedestrian safety, especially around the SUU campus	12/5/2024 3:37 PM
260	People ignoring traffic laws	12/5/2024 3:37 PM
261	People need more sidewalks and walking paths. We also need more bike lanes. In general we need to be more pedestrian friendly. At the very least this needs to happen around "town" and HWY 56, Cross hollow, basically all the areas near SUU so that students without a vehicle can live and work here.	12/5/2024 3:37 PM
262	Distracted driving	12/5/2024 3:37 PM
263	Not enough lighting	12/5/2024 3:36 PM
264	Not enough sidewalks and cross walks	12/5/2024 3:34 PM
265	Distracted driving	12/5/2024 3:34 PM
266	Lack of access for people with disabilities	12/5/2024 3:34 PM
267	Not enough crosswalks	12/5/2024 3:33 PM
268	No signaling	12/5/2024 3:33 PM
269	View Blocked	12/5/2024 3:31 PM
270	View blocked when turning	12/5/2024 3:31 PM
271	Congestion/traffic	12/5/2024 3:31 PM
272	not enough street lighting	12/5/2024 3:30 PM
273	Aggressive driving	12/5/2024 3:30 PM
274	It is so dangerous to be a pedestrian. I have had so many near misses.	12/5/2024 3:04 PM
275	View blocked when turning on the intersection of center and main in Parowan	12/5/2024 2:32 PM
276	It is so dangerous to be a pedestrian. I have had so many near misses.	12/5/2024 1:19 PM
277	Sidewalks are in horrible condition. Lifted, missing, icy, occluded with trees/shrubs.	12/5/2024 12:43 PM
278	Sidewalks	12/5/2024 11:47 AM
279	Poorly maintained roads	12/5/2024 11:18 AM
280	Impatient drivers	12/5/2024 10:20 AM
281	Too many cars on the small road	12/4/2024 9:05 PM
282	No lines painted	12/4/2024 12:33 AM
283	Turning left	12/2/2024 9:26 PM
284	Extreme congestion	12/2/2024 9:20 PM
285	High speeds & lack of enforcement	11/30/2024 5:28 PM
286	ivingDistdracted	11/27/2024 10:40 AM
287	Pedestrian safety in school zones	11/26/2024 8:56 AM
288	View blocked when turning	11/26/2024 7:40 AM

Iron County Safety Action Plan Survey

289	Poorly maintained roads	11/25/2024 2:10 PM
290	Spending through kanarraville and hwy91	11/24/2024 6:29 AM
291	Blind spot on left turn onto old us hwy 91 from southbound 15	11/23/2024 4:53 PM
292	Vehicles parked on the side of the road obstructing view from cars to either cross the street safely walking or in a car.	11/22/2024 11:25 AM
293	Aggressive driveing	11/22/2024 10:59 AM
294	Increased traffic on older unimproved roads	11/22/2024 10:19 AM
295	Bike lanes iron county needs more	11/21/2024 9:45 PM
296	Missing sidewalks	11/21/2024 9:29 PM
297	Iron County has a reputation for drivers being very aggressive towards cyclists. Many people who move here and are use to cycling on the roads sell their bikes due to being so unsafe.	11/21/2024 8:17 PM
298	See other	11/21/2024 4:11 PM
299	Aggressive Driving	11/21/2024 12:14 PM
300	Poorly maintained roads	11/21/2024 12:05 PM
301	Missing or inadequate bike lanes	11/21/2024 11:19 AM
302	Too many cars on the small road	11/21/2024 11:13 AM
303	South Interchange needs to have another lane added in both directions.	11/21/2024 11:06 AM
304	Rouge/Extreme Speeding	11/21/2024 10:17 AM
305	Distracted Driving	11/21/2024 9:56 AM
306	View blocked when turning	11/21/2024 9:54 AM
307	View blocked when turning	11/21/2024 9:52 AM
308	Aggressive driving	11/21/2024 9:49 AM
309	Winter weather!!!!	11/21/2024 9:45 AM
310	speed	11/21/2024 9:41 AM
311	Missing bike lanes	11/21/2024 9:38 AM
312	Queuing at lights	11/21/2024 9:32 AM
313	High speeds	11/21/2024 9:29 AM
314	Distracted Driving	11/21/2024 9:26 AM
315	Not enough street lighting.	11/21/2024 9:22 AM
316	Distracted Driving	11/21/2024 9:15 AM
317	High vehicle speeds	11/21/2024 9:05 AM
318	running red lights	11/21/2024 8:55 AM
319	Not enough street lighing	11/21/2024 8:53 AM
320	Pedestrian safety in school zones	11/21/2024 8:53 AM
321	Traffic congestion, especially around school zones.	11/21/2024 8:50 AM
322	Not enough left green turn lights at crucial intersections	11/21/2024 8:19 AM
323	Speeding on W600S near Cedar High School	11/21/2024 7:58 AM
324	Speeding	11/20/2024 6:03 PM
325	People ignoring traffic laws	11/20/2024 6:02 PM

Iron County Safety Action Plan Survey

326	Redlight running	11/20/2024 5:57 PM
327	Not enough street lighting.	11/20/2024 5:55 PM
328	View block	11/20/2024 5:52 PM
329	Speeds	11/20/2024 5:51 PM
330	Distracted Driving	11/20/2024 5:49 PM
331	Red Light & Stop Sign Violation	11/20/2024 5:46 PM
332	View blocked while turning	11/20/2024 5:44 PM
333	Aggressive driving	11/20/2024 5:42 PM
334	tailgating	11/20/2024 5:40 PM
335	Pedestrian Safety	11/20/2024 5:37 PM
336	Tail gating	11/20/2024 5:12 PM
337	GRID LOCKING	11/20/2024 2:25 PM
338	Distracted Drivers	11/20/2024 1:05 PM
339	Distracted driving	11/20/2024 1:00 PM
340	Road maintenance, old highway 91	11/20/2024 12:55 PM
341	School Zones.	11/20/2024 12:45 PM
342	Poorly maintained roads	11/20/2024 12:25 PM
343	Sufficient Active transportation lanes	11/16/2024 3:31 PM
344	Distractive driver	11/15/2024 1:24 PM
345	People ignoring traffic laws	11/14/2024 2:55 PM
346	Bicycle safety	10/17/2024 8:40 PM
347	Missing or inadequate bike lanes	10/17/2024 7:39 PM
348	Distracted driving	10/17/2024 5:24 PM
#	CONCERN 2	DATE
1	Aggressive driving	1/30/2025 10:10 PM
2	Not enough crosswalks	1/30/2025 1:46 PM
3	View blocked when turning	1/27/2025 9:32 PM
4	bike lanes / emergency lanes	1/27/2025 9:01 AM
5	Damaged roads	1/26/2025 7:33 PM
6	Bridge accessing 91 is freaking SCARY. Yikes.	1/26/2025 9:07 AM
7	Blocked views	1/25/2025 4:06 PM
8	People running stop signs	1/25/2025 2:54 PM
9	Missing Sidewalks	1/25/2025 1:34 PM
10	failure to signal it is a big deal	1/25/2025 11:05 AM
11	High vehicle speeds	1/25/2025 10:24 AM
12	Poorly maintained roads	1/25/2025 9:39 AM
13	Poorly maintained roads	1/25/2025 9:29 AM
14	Speeding	1/25/2025 8:28 AM

Iron County Safety Action Plan Survey

15	very high speeds	1/25/2025 8:26 AM
16	Road maintenance	1/25/2025 8:08 AM
17	Lack of sidewalks and/or bike lanes along frequently traveled roads	1/25/2025 5:29 AM
18	Speedung	1/24/2025 6:06 PM
19	Blocked View	1/24/2025 5:27 PM
20	We need more bike/pedestrian pathways around town and up Parowan Canyon	1/24/2025 5:14 PM
21	Driving to fast on Main St.	1/24/2025 4:35 PM
22	Aggressive driving	1/24/2025 4:17 PM
23	Distracted drivers	1/24/2025 4:11 PM
24	Not stoping for stop signs	1/24/2025 4:05 PM
25	No sidewalk	1/24/2025 2:54 PM
26	Poor sidewalks	1/24/2025 1:59 PM
27	More lights on roads	1/24/2025 1:03 PM
28	No sidewalks	1/24/2025 1:03 PM
29	Running stop signs in Parawan	1/24/2025 1:01 PM
30	Bad road conditions	1/24/2025 1:00 PM
31	Poorly maintained roads	1/24/2025 12:43 PM
32	No walking paths	1/24/2025 12:42 PM
33	200 S is a residential street NOT for Commercial vehicles using 200South from Maverick to Canyon Road	1/24/2025 12:41 PM
34	Pedestrian/school crossings	1/24/2025 12:33 PM
35	Road maintenance	1/24/2025 12:22 PM
36	Missing bike infrastructure	1/21/2025 10:46 AM
37	Missing bike infrastructure	1/21/2025 8:37 AM
38	Narrow, broken sidewalks	1/19/2025 4:58 PM
39	More crosswalks	1/18/2025 5:14 PM
40	Distracted drivers	1/18/2025 6:19 AM
41	Pedestrian crosswalks not painted or designated in Parowan ated at critical crossings	1/17/2025 10:36 AM
42	Inadequate bike lanes	1/15/2025 6:58 PM
43	Need more paths/trails	1/14/2025 11:43 PM
44	Inability at intersections to see oncoming traffic due to large vehicles or trailers, parked too close to the intersection	1/13/2025 8:29 PM
45	Inability at intersections to see oncoming traffic due to large vehicles or trailers, parked too close to the intersection	1/13/2025 8:29 PM
46	High Vehicle Speeds	1/13/2025 1:28 PM
47	Ignoring traffic laws	1/13/2025 1:13 PM
48	Speeding	1/13/2025 11:27 AM
49	Roads aren't adequate for pedestrian or bicycle traffic	1/12/2025 1:59 PM
50	Pulling onto busy street without space	1/11/2025 2:07 PM
51	High vehicle speeds	1/9/2025 5:41 PM

Iron County Safety Action Plan Survey

52	Not enough crosswalks	1/8/2025 5:11 PM
53	Dedicated bike lanes	1/8/2025 2:02 PM
54	Slow down	1/7/2025 11:07 AM
55	people not looking where they are going	1/7/2025 10:24 AM
56	Intersection of 56 and cross hollow. Congestion is causing frequent accidents to occur	1/6/2025 5:39 PM
57	View blocked when turning	1/6/2025 11:10 AM
58	road conditions	1/6/2025 9:12 AM
59	Not enough crosswalks in town	1/4/2025 8:47 AM
60	Distracted drivers.	1/3/2025 8:38 PM
61	People ignoring traffic laws while driving	1/3/2025 9:07 AM
62	Broken sidewalks	1/3/2025 6:50 AM
63	Broken sidewalks	1/2/2025 8:36 PM
64	Missing Sidewalk	1/2/2025 8:19 PM
65	Missing sidewalks	1/2/2025 7:16 PM
66	High Vehicle speeds, especially on Old Minersville Highway.	1/2/2025 7:06 PM
67	Missing sidewalks or bike lanes.	1/2/2025 1:32 PM
68	Missing or inadequate bike lanes or paths	1/2/2025 11:22 AM
69	Drivers driving on walk/bike lane on Cove Drive. No proper marking's & have had numerous drivers almost hit me countless times.	1/2/2025 11:15 AM
70	Bike lanes	1/2/2025 10:47 AM
71	distracted driving	1/2/2025 10:21 AM
72	view blocked when turning	12/31/2024 12:27 PM
73	There is no way for someone with limited abilities to feel safe on our sidewalks not to mention that if you are using anything with wheels (like a stroller or a wheelchair) more often you are forced into the street by poorly maintained sidewalks that slant every which way.	12/31/2024 10:19 AM
74	Distracted driving	12/31/2024 10:05 AM
75	Aggressive driving around cyclists (people don't obey the laws around cyclists).	12/31/2024 9:55 AM
76	Need more sidewalks	12/31/2024 9:23 AM
77	Missing or inadequate bike land or paths	12/31/2024 9:19 AM
78	Accidents at Iron Springs Rd and hwy 56	12/23/2024 6:33 PM
79	Drivers failing to yield to pedestrians and cyclists.	12/23/2024 11:22 AM
80	Sidewalks	12/23/2024 10:00 AM
81	Redlight running	12/23/2024 9:57 AM
82	Distracted driving	12/23/2024 9:56 AM
83	View blocked when turning	12/23/2024 9:54 AM
84	Distracted driving	12/23/2024 9:51 AM
85	Distracted driving	12/23/2024 9:50 AM
86	Speeding	12/22/2024 10:58 AM
87	Congested traffic flow- we are growing	12/20/2024 9:45 PM

Iron County Safety Action Plan Survey

88	Distracted drivers	12/20/2024 5:32 PM
89	Red light running	12/20/2024 4:10 PM
90	Speed	12/19/2024 8:49 PM
91	Distracted driving	12/19/2024 8:44 PM
92	Aggressive driving	12/19/2024 4:40 PM
93	In some areas we have insufficient crosswalks. In others, individuals are simply too lazy to walk to the locations where crosswalks are	12/19/2024 3:14 PM
94	Dangerous intersection at Iron Springs and 56	12/19/2024 11:45 AM
95	Speeds, especially on 5700 w	12/19/2024 8:03 AM
96	sign swingers on corners	12/19/2024 6:52 AM
97	Lack of a coordinated system of bike lanes and paths, including equestrian paths	12/18/2024 4:11 PM
98	Safety in school Zones	12/18/2024 12:37 PM
99	Aggressive driving	12/18/2024 11:43 AM
100	It is difficult to see Heather Hue when traveling North Bound on highway 91.	12/18/2024 10:57 AM
101	Aggressive driving	12/18/2024 10:26 AM
102	Obstruction at intersections	12/18/2024 7:22 AM
103	aggressive driving	12/17/2024 6:44 AM
104	Failing to yield to pedestrians/bikes	12/15/2024 8:11 AM
105	Inadequate sidewalks for walkers on roadways	12/14/2024 8:16 PM
106	Distracted driving	12/13/2024 10:28 PM
107	not enough street lighting	12/13/2024 2:09 PM
108	Ignoring traffic laws	12/13/2024 10:37 AM
109	Bright Headlights	12/11/2024 2:37 PM
110	Poorly maintained roads	12/11/2024 12:19 PM
111	Distracted driving	12/11/2024 10:00 AM
112	Not enough street lighting	12/10/2024 2:51 PM
113	Aggressive Driving	12/10/2024 2:21 PM
114	Pedestrians wandering across the street looking at phones	12/10/2024 11:19 AM
115	Distracted driving	12/10/2024 8:41 AM
116	Distracted Driving	12/9/2024 9:07 PM
117	Missing or inadequate bike lanes/paths	12/9/2024 8:06 PM
118	People ignoring traffic laws	12/9/2024 1:27 PM
119	Drivers failing to yield to pedestrians and bicycles	12/9/2024 12:53 PM
120	Narrow broken or missing sidewalks	12/9/2024 11:46 AM
121	View Blocked when Turning	12/9/2024 11:38 AM
122	High vehicle speeds	12/9/2024 11:10 AM
123	Distracted driving	12/9/2024 10:03 AM
124	Distracted driving	12/9/2024 9:28 AM
125	Deer/wildlife on Roads	12/9/2024 7:35 AM

Iron County Safety Action Plan Survey

126	high vehicle speeds	12/8/2024 5:23 PM
127	High speed	12/8/2024 5:13 PM
128	distracted driving	12/8/2024 4:30 PM
129	Running yellow lights too close	12/8/2024 2:18 PM
130	Police not obeying the traffic laws and almost hitting people	12/8/2024 12:50 PM
131	Missing or inadequate bike lanes or paths	12/8/2024 6:49 AM
132	Missing bike/scooter/exerciser lane	12/8/2024 6:30 AM
133	Pedestrian safety in school zones	12/7/2024 11:15 PM
134	Distracted Driving	12/7/2024 7:38 AM
135	Tourist traffic	12/7/2024 6:46 AM
136	High Speed Vehicles	12/6/2024 9:03 PM
137	Not enough crosswalks	12/6/2024 5:56 PM
138	Distracted driving	12/6/2024 3:22 PM
139	Blocked Views	12/6/2024 1:57 PM
140	Vehicle speeds	12/6/2024 1:53 PM
141	Distracted Driving	12/6/2024 1:18 PM
142	Dedicated green turn arrows in intersections/not enough time to turn or cross the street.	12/6/2024 12:39 PM
143	impatient/aggressive driving	12/6/2024 12:38 PM
144	Speeding	12/6/2024 12:29 PM
145	Street lights in turning areas	12/6/2024 12:11 PM
146	Distracted driving	12/6/2024 11:27 AM
147	On many of the back roads between Cedar and Enoch there is little concern for the speed limit or indications of no passing	12/6/2024 11:25 AM
148	Street lighting	12/6/2024 11:20 AM
149	Bad drivers	12/6/2024 11:10 AM
150	Parowan needs more sidewalks. We shouldn't have to walk in the dirt or on private property or easements that are so muddy we slip and slide.	12/6/2024 11:10 AM
151	Distracted Driving	12/6/2024 11:04 AM
152	Failure to yield	12/6/2024 10:25 AM
153	Failure to yield	12/6/2024 10:23 AM
154	Pedestrian traffic	12/6/2024 10:11 AM
155	Aggressive drivers	12/6/2024 10:04 AM
156	High traffic shopping areas (Walmart) where semi's park on the side of the road and you can't see properly to enter traffic	12/6/2024 9:59 AM
157	Drivers failing to yield to pedestrians and cyclists	12/6/2024 9:51 AM
158	Not enough street lighting	12/6/2024 9:48 AM
159	Drivers failing to yield to pedestrians	12/6/2024 9:22 AM
160	Not enough crosswalks (especially on Main Street)	12/6/2024 9:19 AM
161	Distracted driving	12/6/2024 9:12 AM

Iron County Safety Action Plan Survey

162	view blocked when turning	12/6/2024 9:05 AM
163	missing sidewalks	12/6/2024 9:00 AM
164	High vehicle speeds	12/6/2024 8:41 AM
165	Aggressive driving	12/6/2024 8:34 AM
166	distracted driving	12/6/2024 8:27 AM
167	Distracted driving	12/6/2024 8:09 AM
168	Not enough bike lanes	12/6/2024 8:07 AM
169	Aggressive Driving	12/6/2024 7:50 AM
170	my "Other" concern. This is bad, real bad!!!	12/6/2024 7:50 AM
171	Aggressive Driving	12/6/2024 7:46 AM
172	missing bike lanes and paths	12/6/2024 7:24 AM
173	Distracted driving	12/6/2024 2:09 AM
174	Pedestrian safety in school zones	12/6/2024 12:40 AM
175	View Blocked when Turning	12/6/2024 12:32 AM
176	Aggressive driving, particularly turning left in busy traffic	12/6/2024 12:18 AM
177	Excessive speed	12/6/2024 12:14 AM
178	Not very much street lighting on non main roads.	12/6/2024 12:11 AM
179	failure to yield to pedestrians	12/5/2024 10:10 PM
180	Not enough crosswalks	12/5/2024 9:35 PM
181	Drivers not waiting for pedestrians	12/5/2024 9:31 PM
182	Use of middle lane, suicide lane	12/5/2024 9:24 PM
183	Ignoring traffic laws	12/5/2024 9:18 PM
184	Distracted driving	12/5/2024 9:16 PM
185	Poorly maintained roads	12/5/2024 9:11 PM
186	People ignoring traffic laws while driving	12/5/2024 8:09 PM
187	Distracted drivers	12/5/2024 8:06 PM
188	Not enough time to cross the street	12/5/2024 7:49 PM
189	speeding and swerving around cars going the speed limit	12/5/2024 7:31 PM
190	Red light running/not stopping at stop signs	12/5/2024 7:08 PM
191	Lack of pedestrian awareness	12/5/2024 7:04 PM
192	Poorly maintained roads	12/5/2024 7:03 PM
193	View blocked when turning	12/5/2024 6:43 PM
194	narrow, broken, or missing sidewalks	12/5/2024 6:38 PM
195	No lighting at dark	12/5/2024 6:37 PM
196	Distracted driving	12/5/2024 6:26 PM
197	Distracted driving	12/5/2024 6:26 PM
198	There's not enough crosswalks.	12/5/2024 6:24 PM
199	Aggressive driving	12/5/2024 6:18 PM

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200	Aggressive drivers	12/5/2024 6:16 PM
201	Jaywalking	12/5/2024 6:00 PM
202	Bike Lanes	12/5/2024 5:51 PM
203	Distracted driving	12/5/2024 5:40 PM
204	blocked views	12/5/2024 5:39 PM
205	Potholes and horrible roads	12/5/2024 5:36 PM
206	Aggressive or thoughtless driving	12/5/2024 5:35 PM
207	Not enough crosswalks	12/5/2024 5:31 PM
208	Time to turn at a light, people speeding thru the yellow when they should have stopped	12/5/2024 5:25 PM
209	distracted driving	12/5/2024 5:24 PM
210	All of the entrances to get anywhere are so deep and I hear people scraping their cars so often because of the aggressive dips	12/5/2024 5:14 PM
211	Not enough cross walks	12/5/2024 5:03 PM
212	Narrow, broken, or missing sidewalks.	12/5/2024 4:46 PM
213	Distracted Driving	12/5/2024 4:40 PM
214	Drivers 15 under speed limit with no hazards	12/5/2024 4:33 PM
215	distracted driving	12/5/2024 4:31 PM
216	Pedestrian safety in school zones	12/5/2024 4:28 PM
217	Distracted Driving	12/5/2024 4:26 PM
218	Drivers ignoring traffic laws	12/5/2024 4:22 PM
219	People ignoring traffic laws while driving	12/5/2024 4:22 PM
220	not enough crosswalks (around the SUU area)	12/5/2024 4:16 PM
221	pedestrian safety in school zones	12/5/2024 4:14 PM
222	Aggressive driving	12/5/2024 4:13 PM
223	Inadequate lighting esp. around SUU	12/5/2024 4:12 PM
224	dravers failing to yeild to pedestrians	12/5/2024 4:09 PM
225	Lack of bike paths	12/5/2024 4:08 PM
226	Lack of bike lanes	12/5/2024 4:07 PM
227	Not enough street lighting	12/5/2024 4:04 PM
228	Redlight Running	12/5/2024 3:59 PM
229	Distracted driving	12/5/2024 3:59 PM
230	Running stop signs	12/5/2024 3:56 PM
231	Drivers failing to yeild	12/5/2024 3:55 PM
232	distracted driving	12/5/2024 3:52 PM
233	View blocked when turning	12/5/2024 3:51 PM
234	Some parking lot "driveways" are very deep and cause damage to cars. I'm specifically thinking of businesses along Main Street in Cedar City.	12/5/2024 3:47 PM
235	Red light running	12/5/2024 3:46 PM
236	Aggressive driving	12/5/2024 3:46 PM

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237	View blocked when turning	12/5/2024 3:44 PM
238	blocked view when turning	12/5/2024 3:43 PM
239	Aggressive driving	12/5/2024 3:43 PM
240	Ignoring traffic laws while driving	12/5/2024 3:43 PM
241	View blocked when turning.	12/5/2024 3:42 PM
242	Distracted Driving	12/5/2024 3:41 PM
243	redlight running/not stopping at stop signs	12/5/2024 3:40 PM
244	Drivers failing to yield to pedestrians and cyclists	12/5/2024 3:39 PM
245	Drivers ignoring traffic laws	12/5/2024 3:39 PM
246	View blocked while turning	12/5/2024 3:39 PM
247	Inadequate bike lanes	12/5/2024 3:38 PM
248	View blocked when turning	12/5/2024 3:38 PM
249	Distracted drivers looking at their cell phone	12/5/2024 3:37 PM
250	Aggressive Driving	12/5/2024 3:37 PM
251	More crosswalks would be very helpful. Some areas do not have crosswalks and they are really needed.	12/5/2024 3:37 PM
252	Failing to yield	12/5/2024 3:37 PM
253	People ignoring traffic laws	12/5/2024 3:36 PM
254	View Blocked when turning	12/5/2024 3:34 PM
255	People ignoring traffic laws while driving	12/5/2024 3:34 PM
256	Poorly maintained roads	12/5/2024 3:34 PM
257	View blocked when turning	12/5/2024 3:33 PM
258	People ignoring laws	12/5/2024 3:33 PM
259	Lack of left turn light	12/5/2024 3:31 PM
260	Not enough time to cross the street	12/5/2024 3:31 PM
261	poorly maintained roads	12/5/2024 3:30 PM
262	Street lighting	12/5/2024 3:30 PM
263	Distracted drivers.	12/5/2024 3:04 PM
264	Street lighting in Parowan because of deer	12/5/2024 2:32 PM
265	Distracted drivers.	12/5/2024 1:19 PM
266	Cars who roll through stop signs. Speeding.	12/5/2024 12:43 PM
267	Blocked views when turning	12/5/2024 11:47 AM
268	Not enough sidewalks	12/5/2024 11:18 AM
269	drivers not respecting slow moving vehicles. - tractors, livestock hauling equipment etc	12/5/2024 10:20 AM
270	The roads aren't striped properly	12/4/2024 9:05 PM
271	Poorly maintained roads	12/4/2024 12:33 AM
272	Crowded streets	12/2/2024 9:26 PM
273	Red light running	12/2/2024 9:20 PM
274	Aggressive driving ad lack of enforcement	11/30/2024 5:28 PM

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275	Agggresive driving	11/27/2024 10:40 AM
276	Distracted Drivers	11/26/2024 8:56 AM
277	People ignoring traffic laws	11/26/2024 7:40 AM
278	View blocked when turning	11/25/2024 2:10 PM
279	View blocked	11/24/2024 6:29 AM
280	Poorly maintained roads	11/23/2024 4:53 PM
281	Pedesrin safety in school zones	11/22/2024 11:25 AM
282	View blocked	11/22/2024 10:59 AM
283	Wear & tear from continuous commercial traffic (larger, heavier) vehicles	11/22/2024 10:19 AM
284	WAY SLOWER SPEED ON MAIN STREET	11/21/2024 9:45 PM
285	Not enough crosswalks	11/21/2024 9:29 PM
286	Distracted driving is out of control. every time I look around I see people on their phones.	11/21/2024 8:17 PM
287	Poorly maintained roads	11/21/2024 4:11 PM
288	Distracted Driving	11/21/2024 12:14 PM
289	Aggressive driving	11/21/2024 12:05 PM
290	Drivers failing to yield to pedestrians and cyclists	11/21/2024 11:19 AM
291	The roads aren't striped properly	11/21/2024 11:13 AM
292	Main street needs another lane added in both directions.	11/21/2024 11:06 AM
293	Sunday Free For All (Inadequate police coverage)	11/21/2024 10:17 AM
294	high vehicle speeds	11/21/2024 9:56 AM
295	Distracted driving	11/21/2024 9:54 AM
296	redlight running	11/21/2024 9:52 AM
297	not enough crosswalks	11/21/2024 9:49 AM
298	Disability access	11/21/2024 9:45 AM
299	people not following rules, running light	11/21/2024 9:41 AM
300	Ignoring traffic laws	11/21/2024 9:38 AM
301	Speed	11/21/2024 9:32 AM
302	Distracted driving	11/21/2024 9:29 AM
303	Red light & stop sign running	11/21/2024 9:26 AM
304	Aggressive Driving	11/21/2024 9:22 AM
305	high speeds	11/21/2024 9:15 AM
306	Distracted driving	11/21/2024 9:05 AM
307	high vechicle speeds	11/21/2024 8:55 AM
308	distracted driving	11/21/2024 8:53 AM
309	Narrow, broken or missing sidewalks	11/21/2024 8:53 AM
310	People parking close to corners so that drivers can't see traffic when turning	11/21/2024 8:50 AM
311	Poorly maintained roads (Parowan)	11/21/2024 8:19 AM
312	Too many driers on cell phones	11/21/2024 7:58 AM

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313	Aggressive Driving	11/20/2024 6:03 PM
314	View blocked when turning	11/20/2024 6:02 PM
315	Lack of access to folks w/ disabilities	11/20/2024 5:57 PM
316	Narrow broken, missing sidewalks	11/20/2024 5:55 PM
317	Distraction	11/20/2024 5:52 PM
318	Distracted Driving	11/20/2024 5:51 PM
319	Not enough time to cross street	11/20/2024 5:49 PM
320	Peds -v- Vehicle Yielding	11/20/2024 5:46 PM
321	Distracted driving	11/20/2024 5:44 PM
322	Red light running	11/20/2024 5:42 PM
323	short lights around railroads, not giving enough time to turn	11/20/2024 5:40 PM
324	Narrow, Missing Paths, Lanes	11/20/2024 5:37 PM
325	fast driving	11/20/2024 5:12 PM
326	POORLY ENGINEERED INTER SECTIONS SUCH AS THE ONE BY WALMART`	11/20/2024 2:25 PM
327	Safety in School Zoner	11/20/2024 1:05 PM
328	Speeding	11/20/2024 1:00 PM
329	Bike paths not on the highway	11/20/2024 12:55 PM
330	Not stopping at stop signs.	11/20/2024 12:45 PM
331	Sewer pot holes	11/20/2024 12:25 PM
332	Deteriorating roads	11/16/2024 3:31 PM
333	Sidewalks, not enough, or just to end	11/15/2024 1:24 PM
334	Redlight running/not stopping at stop signs	11/14/2024 2:55 PM
335	Pedestrian safety	10/17/2024 8:40 PM
336	People ignoring traffic laws while driving	10/17/2024 7:39 PM
337	View blocked when turning	10/17/2024 5:24 PM
#	CONCERN 3	DATE
1	Fast driving	1/30/2025 10:10 PM
2	People Ignoring traffic laws while driving	1/30/2025 1:46 PM
3	Distracted driving	1/27/2025 9:32 PM
4	Pot holes	1/26/2025 7:33 PM
5	Poorly maintained roas	1/25/2025 4:06 PM
6	More crosswalks needed on Main Street	1/25/2025 2:54 PM
7	Missing bike lanes	1/25/2025 1:34 PM
8	distracted driving... including me	1/25/2025 11:05 AM
9	Narrow, missing, or broken sidewalks	1/25/2025 10:24 AM
10	People ignoring traffic laws	1/25/2025 9:39 AM
11	People ignoring traffic laws	1/25/2025 9:29 AM
12	Increasing crime	1/25/2025 8:28 AM

Iron County Safety Action Plan Survey

13	Sidewalks	1/25/2025 8:08 AM
14	Distracted drivers	1/25/2025 5:29 AM
15	No lighting	1/24/2025 6:06 PM
16	Road Maintenance	1/24/2025 5:27 PM
17	Get ride of the stop signs on 200 South in Parowan	1/24/2025 5:14 PM
18	Congestion around the Walmart.	1/24/2025 4:35 PM
19	Distracted driving	1/24/2025 4:17 PM
20	Narrow or missing sidewalks	1/24/2025 4:11 PM
21	Not enough police force./ Pulling over speeders	1/24/2025 4:05 PM
22	Aggressive drivers	1/24/2025 1:59 PM
23	People disobeying traffic laws	1/24/2025 1:03 PM
24	Speeding	1/24/2025 1:03 PM
25	Road maintenance	1/24/2025 1:01 PM
26	Distracted driving	1/24/2025 1:00 PM
27	Aggressive driving	1/24/2025 12:43 PM
28	Bike lanes	1/24/2025 12:42 PM
29	Speeding and lack of enforcement	1/24/2025 12:33 PM
30	distracted drivers	1/24/2025 12:22 PM
31	Aggressive driving	1/21/2025 10:46 AM
32	Aggressive driving	1/21/2025 8:37 AM
33	Not enough street lighting	1/19/2025 4:58 PM
34	Red light runners	1/18/2025 6:19 AM
35	Lack of bike lanes designated on major avenues in Parowan	1/17/2025 10:36 AM
36	View blocked while turning (can't see crossing traffic while stopped behind stop sign/white line)	1/15/2025 6:58 PM
37	View blocked when turning	1/14/2025 11:43 PM
38	Distracted Driving	1/13/2025 1:28 PM
39	Poorly maintained roads	1/13/2025 1:13 PM
40	Distracted driving	1/13/2025 11:27 AM
41	Distracted drivers	1/11/2025 2:07 PM
42	Drivers failing to yield to pedestrians and cyclists	1/9/2025 5:41 PM
43	Lack of access for people with disabilities	1/8/2025 5:11 PM
44	Dedicated, paved bike lanes	1/8/2025 2:02 PM
45	Beware	1/7/2025 11:07 AM
46	people not stopping at stop signs	1/7/2025 10:24 AM
47	With all of the new construction in the industrial center No of HW 56 west and all of the subdivisions going in to the South of HW 56, the congestion will become almost catastrophic. City planning needs to establish another East /West access road and a shopping center in west Cedar City to alleviate pushing most of cedar's shopping off of Center Street and the South exchange.	1/6/2025 5:39 PM
48	Distracted driving	1/6/2025 11:10 AM

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49	Poor views when turning	1/4/2025 8:47 AM
50	Poorly maintained roads	1/3/2025 9:07 AM
51	Narrow or no bike lanes	1/3/2025 6:50 AM
52	Narrow or no bike lanes	1/2/2025 8:36 PM
53	Confusing road markings	1/2/2025 8:19 PM
54	Road maintenance	1/2/2025 7:16 PM
55	Not enough street lighting, especially on 3000 N.	1/2/2025 7:06 PM
56	Yellow lights are too brief.	1/2/2025 1:32 PM
57	People ignoring traffic laws while driving	1/2/2025 11:22 AM
58	Drivers running stop signs	1/2/2025 11:15 AM
59	Left turn lanes	1/2/2025 10:47 AM
60	missing or inadequate bike lanes or paths	1/2/2025 10:21 AM
61	Lack of access for people with disabilities	12/31/2024 12:27 PM
62	I have had to teach my kids that green does not mean go. It means look and make sure everyone is stopping then go.	12/31/2024 10:19 AM
63	High speed	12/31/2024 10:05 AM
64	Poorly maintained roads. We need street cleaners and better quality roads.	12/31/2024 9:55 AM
65	Lack of access for people with disability	12/31/2024 9:19 AM
66	Traffic light needed on street that Iron Springs Elementary is on and Hwy 56	12/23/2024 6:33 PM
67	Distracted Driving	12/23/2024 11:22 AM
68	Street lighting	12/23/2024 10:00 AM
69	Ignoring traffic laws	12/23/2024 9:57 AM
70	Narrow sidewalks	12/23/2024 9:56 AM
71	Running red lights	12/23/2024 9:54 AM
72	Poorly maintained roads	12/23/2024 9:51 AM
73	Ignoring laws	12/23/2024 9:50 AM
74	Bike lanes	12/22/2024 10:58 AM
75	Crosswalks aren't lit up or painted often enough	12/20/2024 9:45 PM
76	Drivers failing to yeild	12/20/2024 5:32 PM
77	Missing bike lanes and paths	12/20/2024 4:10 PM
78	Tail gating	12/19/2024 8:49 PM
79	Drivers failing to yield to pedestrians	12/19/2024 8:44 PM
80	Distracted Driving	12/19/2024 4:40 PM
81	Aggressive or Distracted driving	12/19/2024 3:14 PM
82	Garbage on and by roads on the way to the landfill	12/19/2024 11:45 AM
83	Red light running, stop sign running	12/19/2024 8:03 AM
84	bike paths especially on the road in the valley where they are narrow.	12/19/2024 6:52 AM
85	Aggressive Driving	12/18/2024 12:37 PM
86	Illegal lane change	12/18/2024 11:43 AM

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87	Heavy traffic at light at Maverick and Bowling alley. I believe that it will just get worse.	12/18/2024 10:57 AM
88	Narrow, broken or kissing sidewalks	12/18/2024 10:26 AM
89	Distracted driving	12/18/2024 7:22 AM
90	distracted driving	12/17/2024 6:44 AM
91	Poorly maintained roads	12/15/2024 8:11 AM
92	Inadequate trails integrated within the community for leisure and exercise (within walking distance of cedar city communities) to foster health and fitness lifestyles	12/14/2024 8:16 PM
93	Aggressive Driving	12/13/2024 10:37 AM
94	Ignoring Traffic Laws	12/11/2024 2:37 PM
95	Distracted driving	12/11/2024 12:19 PM
96	View blocked when turning	12/11/2024 10:00 AM
97	Distracted driving	12/10/2024 2:51 PM
98	Poorly maintained roads	12/10/2024 2:21 PM
99	Pedestrians need light colored clothing or reflectors at night.	12/10/2024 11:19 AM
100	People ignoring traffic laws	12/10/2024 8:41 AM
101	Aggressive Driving	12/9/2024 9:07 PM
102	View blocked when turning	12/9/2024 8:06 PM
103	Inconsistently marked traffic lines/bike lanes	12/9/2024 1:27 PM
104	Aggressive driving	12/9/2024 12:53 PM
105	Distracted driving	12/9/2024 11:46 AM
106	Aggressive Driving	12/9/2024 11:38 AM
107	Deep gutters	12/9/2024 11:10 AM
108	Vehicle speeds	12/9/2024 10:03 AM
109	Drivers ignoring/being ignorant of the law	12/9/2024 9:28 AM
110	Narrow, broken, or missing sidewalks	12/9/2024 7:35 AM
111	aggressive driving	12/8/2024 5:23 PM
112	Ignoring school zones	12/8/2024 5:13 PM
113	people rolling thru stop signs	12/8/2024 4:30 PM
114	Using the DECELERATION lane for travel or to merge into traffic.	12/8/2024 2:18 PM
115	Gutters so deep and sharp they pop tires near 400 and Dewey	12/8/2024 12:50 PM
116	Not enough street lighting	12/8/2024 6:49 AM
117	Not enough street lighting	12/8/2024 6:30 AM
118	View blocked when turning	12/7/2024 11:15 PM
119	Rural county roads for ranchers - maintenance/grading	12/7/2024 6:46 AM
120	Pedestrians failing to look both ways before crossing the street	12/6/2024 9:03 PM
121	Aggressive driving	12/6/2024 5:56 PM
122	Narrow, broken, or missing sidewalks.	12/6/2024 3:22 PM
123	Street Lighting	12/6/2024 1:57 PM
124	Distracted drivers	12/6/2024 1:53 PM

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125	Red light/stop sign running	12/6/2024 1:18 PM
126	Well marked roads and lanes.	12/6/2024 12:39 PM
127	redlight running	12/6/2024 12:38 PM
128	Road conditions	12/6/2024 12:29 PM
129	Broken sidewalks	12/6/2024 11:27 AM
130	Light times	12/6/2024 11:20 AM
131	Not enough street lighting	12/6/2024 11:10 AM
132	200 in Parowan needs a lower speed limit. It now connects residential neighborhoods that are closer to the freeway with the rest of Parowan and it's unsafe!	12/6/2024 11:10 AM
133	Redlight Running	12/6/2024 11:04 AM
134	Not enough lighting	12/6/2024 10:25 AM
135	Bike lanes	12/6/2024 10:23 AM
136	Red light running	12/6/2024 10:11 AM
137	Missing or narrow sidewalks	12/6/2024 10:04 AM
138	Highway 56 needs more adequate sidewalks	12/6/2024 9:59 AM
139	No enough crosswalks	12/6/2024 9:51 AM
140	High vehicle speeds	12/6/2024 9:22 AM
141	Drivers failing to yield to pedestrians and bicyclists	12/6/2024 9:19 AM
142	Drivers failing to yield to pedestrians	12/6/2024 9:12 AM
143	Redlight running	12/6/2024 9:05 AM
144	Distracted driving	12/6/2024 8:41 AM
145	High vehicle speeds in residential neighborhoods	12/6/2024 8:34 AM
146	not enough street lighting	12/6/2024 8:27 AM
147	People ignoring traffic laws while driving	12/6/2024 8:09 AM
148	Drivers not looking for cyclists or pedestrians	12/6/2024 8:07 AM
149	Ignoring Traffic Laws	12/6/2024 7:50 AM
150	Pedestrians getting run over!	12/6/2024 7:50 AM
151	Drivers failing to yield to pedestrians	12/6/2024 7:46 AM
152	running red lights	12/6/2024 7:24 AM
153	People ignoring traffic laws	12/6/2024 2:09 AM
154	Drivers running/not stopping at stop signs	12/6/2024 12:40 AM
155	Not Enough Street Lighting	12/6/2024 12:32 AM
156	View blocked when turning	12/6/2024 12:18 AM
157	Poor visibility while turning	12/6/2024 12:14 AM
158	Lack of access for disabilities	12/5/2024 10:10 PM
159	Pedestrian safety	12/5/2024 9:35 PM
160	Confusing bike lanes at intersections	12/5/2024 9:31 PM
161	High vehicle speeds	12/5/2024 9:16 PM

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162	Views are blocked when turning and stop signs are blocked by low hanging trees	12/5/2024 9:11 PM
163	Missing or inadequate bike lanes or paths	12/5/2024 8:09 PM
164	Better planing of roadways by City.	12/5/2024 8:06 PM
165	Broken sidewalks/no sidealks	12/5/2024 7:49 PM
166	High speed vehicles	12/5/2024 7:08 PM
167	Unmaintained sidewalks	12/5/2024 7:04 PM
168	View blocked when turning	12/5/2024 7:03 PM
169	Distracted driving	12/5/2024 6:43 PM
170	view blocked when driving	12/5/2024 6:38 PM
171	Too many pot holes	12/5/2024 6:37 PM
172	People ignoring traffic laws	12/5/2024 6:26 PM
173	People ignoring traffic laws	12/5/2024 6:26 PM
174	People ignoring traffic laws	12/5/2024 6:18 PM
175	Not respecting bike lanes- people putting trash cans in bikes lanes forcing bikes into car traffic	12/5/2024 6:16 PM
176	It is hard to turn left anywhere in Cedar without a light	12/5/2024 6:00 PM
177	Bad Drivers	12/5/2024 5:51 PM
178	High vehicle speeds	12/5/2024 5:40 PM
179	drivers and pedestrians	12/5/2024 5:39 PM
180	Distracting driving	12/5/2024 5:36 PM
181	Red light running, aggressive or poorly timed left turns into traffic	12/5/2024 5:35 PM
182	Not enough street lighting	12/5/2024 5:31 PM
183	drivers failing to yield	12/5/2024 5:24 PM
184	NOT PLOWING ROADS GOOD ENOUGH	12/5/2024 5:14 PM
185	Drivers failing to yield to pedestrians	12/5/2024 5:03 PM
186	Distracted driving	12/5/2024 4:46 PM
187	Lack of Stopping at lights or stop signs	12/5/2024 4:40 PM
188	Lack of turning lane space	12/5/2024 4:33 PM
189	lack of access for people with disabilities	12/5/2024 4:31 PM
190	Aggressive driving	12/5/2024 4:28 PM
191	Not enough street lighting	12/5/2024 4:26 PM
192	Unnecessary blind corners	12/5/2024 4:22 PM
193	Other--Clearly painted roads. Stoplight at Iron Spring Elem/Hwy 56.	12/5/2024 4:22 PM
194	Aggressive driving	12/5/2024 4:16 PM
195	aggressive driving	12/5/2024 4:14 PM
196	Blocked views	12/5/2024 4:13 PM
197	Street Markings	12/5/2024 4:12 PM
198	views blocked when turning	12/5/2024 4:09 PM
199	Drivers failing to yield to pedestrians and cyclists	12/5/2024 4:08 PM

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200	Sidewalk maintenance/access for people with disabilities	12/5/2024 4:07 PM
201	Aggressive driving	12/5/2024 4:04 PM
202	View Blocked When Turning	12/5/2024 3:59 PM
203	Aggressive driving	12/5/2024 3:59 PM
204	Failing to yeild	12/5/2024 3:56 PM
205	View blocked	12/5/2024 3:55 PM
206	visibility impairments (signs, vegetation, parked vehicles)	12/5/2024 3:52 PM
207	Distracted driving	12/5/2024 3:51 PM
208	View blocked when turning	12/5/2024 3:47 PM
209	Ignoring traffic laws	12/5/2024 3:46 PM
210	Not enough time to turn on lights	12/5/2024 3:46 PM
211	Narrow, broken, or missing sidewalks.	12/5/2024 3:44 PM
212	distracted driving	12/5/2024 3:43 PM
213	Narrow, broken, missing sidewalks	12/5/2024 3:43 PM
214	Red light and stop sign runnning	12/5/2024 3:43 PM
215	People ignoring traffic laws while driving.	12/5/2024 3:42 PM
216	Poorly Maintained Roads	12/5/2024 3:41 PM
217	aggressive driving	12/5/2024 3:40 PM
218	View blocked when turning	12/5/2024 3:39 PM
219	Distracted driving	12/5/2024 3:39 PM
220	Pedestrian safety in school zones	12/5/2024 3:38 PM
221	Not enough street lighting	12/5/2024 3:38 PM
222	Drivers running red lights (speeding up when the light turns yellow)	12/5/2024 3:37 PM
223	Redlight running/not stopping at stop signs	12/5/2024 3:37 PM
224	Blocked view	12/5/2024 3:37 PM
225	High vehicle speeds	12/5/2024 3:36 PM
226	Not enough safety for cyclists	12/5/2024 3:34 PM
227	View blocked when turning	12/5/2024 3:34 PM
228	Not enough street lighting	12/5/2024 3:34 PM
229	Not stopping at stop signs	12/5/2024 3:33 PM
230	Distracted driving	12/5/2024 3:33 PM
231	Aggressive driving	12/5/2024 3:31 PM
232	Not enough street lighting	12/5/2024 3:31 PM
233	narrow, broken, missing sidewalks	12/5/2024 3:30 PM
234	Ignoring tragic laws	12/5/2024 3:30 PM
235	School zone safety	12/5/2024 2:32 PM
236	Bike lanes or paths that just end.	12/5/2024 12:43 PM
237	Bike trails	12/5/2024 11:47 AM

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238	Not enough street lights	12/5/2024 11:18 AM
239	Drivers speeding through a stop light while turning left & merging the the far right line mid turn.	12/5/2024 10:20 AM
240	Lack of warning signs	12/4/2024 9:05 PM
241	Not enough street lighting	12/4/2024 12:33 AM
242	Build up of traffic at stop lights	12/2/2024 9:26 PM
243	Distracted driving	12/2/2024 9:20 PM
244	Some street designs	11/30/2024 5:28 PM
245	Lighting and adequate walking places, sidewalks etc.	11/27/2024 10:40 AM
246	Missing or inadequate bike lanes	11/26/2024 8:56 AM
247	red light running	11/26/2024 7:40 AM
248	Vehicle speeds	11/25/2024 2:10 PM
249	Just tar and gravel, repeat. Tar gravel and repeat. Never see lasting repair	11/23/2024 4:53 PM
250	View blocked when turning	11/22/2024 11:25 AM
251	Redlight running	11/22/2024 10:59 AM
252	Cyclists have no room on a majority of highways in the county. Passing vehicles must travel into opposing lanes.	11/22/2024 10:19 AM
253	CREATE DEDICATED TURN LANES RIGHT	11/21/2024 9:45 PM
254	Distracted driving	11/21/2024 9:29 PM
255	Aggressive driving, "rolling coal" and tires sticking out with little coverage all seem to be a common theme in Iron County.	11/21/2024 8:17 PM
256	Broken sidewalks	11/21/2024 4:11 PM
257	Red light running/ not stopping at stop signs	11/21/2024 12:14 PM
258	View Blocked when turning.	11/21/2024 12:05 PM
259	Poorly maintained roads	11/21/2024 11:19 AM
260	Lack of warning signs	11/21/2024 11:13 AM
261	MInersville Hwy needs another lane added in both directions	11/21/2024 11:06 AM
262	Motorized vehicles on trails (east bench)	11/21/2024 10:17 AM
263	red light running	11/21/2024 9:56 AM
264	Narrow broken or missing sidewalks	11/21/2024 9:54 AM
265	Poorly maintained roads	11/21/2024 9:52 AM
266	high vehicle speeds	11/21/2024 9:49 AM
267	Distracted Driving	11/21/2024 9:45 AM
268	lack of dedicated left turn signals	11/21/2024 9:41 AM
269	Running stop signs	11/21/2024 9:38 AM
270	Ped/Car interactions	11/21/2024 9:32 AM
271	Aggressive driving	11/21/2024 9:29 AM
272	people ignoring traffic laws	11/21/2024 9:26 AM
273	people ignoring traffic laws	11/21/2024 9:22 AM
274	ignoring turn lanes	11/21/2024 9:15 AM

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275	Ignoring traffic laws	11/21/2024 9:05 AM
276	distracted drivers, cell phones, texting	11/21/2024 8:55 AM
277	missing sidewalks	11/21/2024 8:53 AM
278	Missing bike lanes	11/21/2024 8:53 AM
279	narrow, broken, or missing sidewalks.	11/21/2024 8:50 AM
280	Speed on Freeway, going speed limit and drivers fly by you, ridiculous at 80 mph	11/21/2024 8:19 AM
281	Worn pavement markings, especially lanes and crosswalks, many would be helped by reflective traffic paint.	11/21/2024 7:58 AM
282	Distracted Driving	11/20/2024 6:03 PM
283	Not enough crosswalk	11/20/2024 6:02 PM
284	drivers failing to yield to peds	11/20/2024 5:57 PM
285	people ignoring traffic laws	11/20/2024 5:55 PM
286	People	11/20/2024 5:52 PM
287	Red Light/Stop Sign Running	11/20/2024 5:51 PM
288	Not stopping at red lights	11/20/2024 5:49 PM
289	Ped Safety in school news	11/20/2024 5:46 PM
290	Aggressive driving	11/20/2024 5:44 PM
291	Drivers failing to yield	11/20/2024 5:42 PM
292	lack of driver education	11/20/2024 5:40 PM
293	lack of access for people with disabilities	11/20/2024 5:37 PM
294	Bicyclists on State Highways	11/20/2024 5:12 PM
295	TOO MANY CARS ON THE ROADWAYS, EVERY INTERSECTION IS HAZARDOUS	11/20/2024 2:25 PM
296	Aggressive driving	11/20/2024 1:05 PM
297	Failure to yield/stop	11/20/2024 1:00 PM
298	Poorly maintained roads.	11/20/2024 12:45 PM
299	Narrow or broken sidewalks	11/20/2024 12:25 PM
300	Distracted drivers	11/16/2024 3:31 PM
301	Narrow roads	11/15/2024 1:24 PM
302	Drivers failing to yield	11/14/2024 2:55 PM
303	Distracted driving	10/17/2024 8:40 PM
304	Pedestrian safety in school zones	10/17/2024 7:39 PM
305	Street lighting	10/17/2024 5:24 PM

Q5 What areas or roadways in Iron County do you think could benefit from safety improvement projects?

Answered: 311 Skipped: 63

#	RESPONSES	DATE
1	A bike lane along 56 by the railroad tracks	1/30/2025 10:10 PM
2	I find the 4-way stop at 800 W and Harding Avenue is troublesome, at best, for pedestrians. It is very busy with both pedestrians and vehicles through the day when university students are out. At night, or on weekends, trucks and cars treat the stop sign like it doesn't even exist and don't give way to pedestrians. I am genuinely surprised there hasn't been a pedestrian fatality there. I think it would be a great investment to do intersection daylighting there, preferably with physical impediments. Better yet, it should be a roundabout with pedestrian refuge, but I understand the road there has little room to work with.	1/30/2025 1:46 PM
3	rural	1/27/2025 9:01 AM
4	All of them, conditions need major improvement with law enforcement pulling people over for road rage and bullying people on the road. Fix pot holes and other road issues that cause damage to cars and could cause traffic accidents. Speed, lights and maybe fix the round about so it doesn't block so much traffic. Walmart could use another entrance and large trucks should not be able to park by the entrance to Walmart very obstructed views with high speeds	1/26/2025 7:33 PM
5	Parowan	1/25/2025 4:06 PM
6	Parowan streets	1/25/2025 10:24 AM
7	Field road between Parowan and paragonah	1/25/2025 9:39 AM
8	Highway 91 vehicles consistently travel well above the posted limit. Running red lights and rolling through stop signs is common, some drivers are very aggressive speeding, multiple lane changes,	1/25/2025 8:28 AM
9	15	1/25/2025 8:26 AM
10	200s in parowan, need a crosswalk or some sort of driver slow down method at 300 E. and Highway 14 or Center St. of Parowan	1/25/2025 8:08 AM
11	200 south in Parowan West of Main Street Needs a sidewalk or bike lanes or both. Mostly for kids getting to and from school.	1/25/2025 5:29 AM
12	200 s in parowan. Center st parowan. Sr 56 cedar old highway from summit to cedar.	1/24/2025 6:06 PM
13	Parowan. Main Street = blocked views turning onto Main Street. 200 S. needs to have a reduced speed, possibly 35 mph from freeway into town.	1/24/2025 5:27 PM
14	If you pay attention you don't have a problem. It is not the roads, it's the drivers.	1/24/2025 5:14 PM
15	The intersection in Cedar City by Panda Express & Cafe Rio and Jack-In-The-Box. That whole area is terrible to navigate!!	1/24/2025 5:14 PM
16	Lund highway	1/24/2025 5:00 PM
17	Bike path along Coal Creek need the expansion joints filled in.	1/24/2025 4:35 PM
18	Parowan, Paragonah and outlying areas to the North especially airport road in Parowan	1/24/2025 4:17 PM
19	200 South. (Too much traffic to Brian Head from Maverick to the Park	1/24/2025 4:11 PM
20	Main / center street	1/24/2025 4:05 PM
21	200s parowan	1/24/2025 2:54 PM
22	Sidewalks in parowan, add a traffic light so pedestrians can cross safely	1/24/2025 1:59 PM

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23	Center/main 200 S/main 600 w 300 n	1/24/2025 1:03 PM
24	70% of the roads in Parowan	1/24/2025 1:01 PM
25	Highway 91 Enoch to Parowan Lund highway Cross hollows	1/24/2025 1:00 PM
26	All of them	1/24/2025 12:43 PM
27	Parowan	1/24/2025 12:42 PM
28	All of Parowan	1/24/2025 12:33 PM
29	Parowan / paragonah area are lacking in maintenance and trails compared to cedar area	1/24/2025 12:22 PM
30	Around southern Utah university	1/21/2025 10:46 AM
31	Around southern Utah university	1/21/2025 8:37 AM
32	Main Street; 200 West and 300 West and 1045 North.	1/19/2025 4:58 PM
33	Stop Light on 1600 and main.	1/18/2025 5:14 PM
34	Talon Dr - aggressive speeds and disregard for speed limit and people (lots of children) crossing the street. It has been an ongoing problem that is ignored.	1/18/2025 6:19 AM
35	Crosswalks & bike lanes on 200S in Parowan.	1/17/2025 10:36 AM
36	Main Street, the sidewalk near the start of the trail on North cedar boulevard (weeds and bushes cover the sidewalk and there's curb to climb up to get on the trail instead of a driveway type entrance), a way for bikes/runners to go over the north interchange safely, Minersville highway for runners/bikers.	1/14/2025 11:43 PM
37	Providing bike lanes on Highway 56 From Cedar to Newcastle	1/13/2025 8:29 PM
38	Providing bike lanes on Highway 56 From Cedar to Newcastle	1/13/2025 8:29 PM
39	Parowan Valley. 2200 north 100 west intersection has tall sagebrush that blocks the view of drivers and is very dangerous.	1/13/2025 1:28 PM
40	The one by Walmart	1/13/2025 1:13 PM
41	I-15 Between Parowan and Cedar needs repaving	1/13/2025 11:27 AM
42	Midvalley Rd, 2300 W, Lund	1/12/2025 1:59 PM
43	South end of Cedar Knolls. Main Street.	1/11/2025 2:07 PM
44	Everywhere outside of the SUU campus area	1/9/2025 5:41 PM
45	Increased number of crosswalks are desperately needed around SUU's campus, but these are so often ignored by drivers beyond campus, it's hard to say any specific area is of greatest need.	1/8/2025 5:11 PM
46	In Cedar City, 200 North and Main Street speed limits are too fast with way too many curb cuts.	1/8/2025 2:02 PM
47	Parowan City due to high traffic during skiing and Mnt bike season	1/7/2025 11:07 AM
48	200 S & Main in Parowan	1/7/2025 10:24 AM
49	The roads around Southern Utah University Campus and downtown Cedar City.	1/6/2025 11:10 AM
50	Old Highway 91 between SR130 and Summit. SR130 MP6 and MP10.	1/6/2025 9:12 AM
51	Areas surrounding SUU. Could there be a parking garage with a skywalk or something? There is inadequate crosswalks on the south main area (around TJ Maxx).	1/4/2025 8:47 AM
52	Parowan!	1/3/2025 8:38 PM
53	We need more retail on the North side of town to alleviate the huge traffic issues on the south side.	1/3/2025 1:48 PM
54	Old Highway 91 form Minersville highway though Enoch	1/3/2025 9:07 AM

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55	North Cedar City	1/3/2025 6:50 AM
56	North Cedar City	1/2/2025 8:36 PM
57	There is a missing Sidewalk by Ridge Park (62 S 1650 W St, Cedar City, UT 84720). It is hard parking on the road with getting children out of the car, aggressive drivers on a narrow road. However, there is a missing sidewalk between the parking lot and park. A beautiful park but extremely difficult/dangerous to unload/load children into the car.	1/2/2025 8:19 PM
58	3000 N	1/2/2025 7:16 PM
59	The north side of Cedar City could definitely use more lighting and better traffic light patterns. However, the entire area of Cedar City could use better drainage and drainage maintenance.	1/2/2025 7:06 PM
60	Main Street, 200 North, and Bulldog Road. All sections need improvements.	1/2/2025 1:32 PM
61	Iron County roadways seem to be generally well-maintained	1/2/2025 11:22 AM
62	Cove Drive. Redirect construction trucks to other routes vs. taking short cuts on Cove Drive bet Cross Hollow & Freedom Blvd.	1/2/2025 11:15 AM
63	Main St from exit 57 north through town--people speed all the time.	1/2/2025 10:21 AM
64	200 and main street need more cross walks. Especially main Street. The downtown area is great but then you have to walk long busy blocks to the next cross walk.	12/31/2024 10:19 AM
65	Cedar City.	12/31/2024 9:55 AM
66	Ridge Rd needs sidewalk, minersville hwy could use a light or something near the preparatory school	12/31/2024 9:23 AM
67	Ridge And Casa Loma need sidewalks, they are very dangerous to pedestrians and cyclists	12/31/2024 9:19 AM
68	Highway 56	12/23/2024 6:33 PM
69	No answer. Sorry I can't think of any now.	12/23/2024 2:42 PM
70	More green arrows	12/23/2024 10:01 AM
71	Downtown	12/23/2024 10:00 AM
72	West View 800 W (off west view)	12/23/2024 9:57 AM
73	Westview Drive	12/23/2024 9:56 AM
74	Fiddlers Hwy 56	12/23/2024 9:54 AM
75	Main Street	12/23/2024 9:51 AM
76	Intersection near Walmart	12/23/2024 9:50 AM
77	Walmart area stoplight	12/23/2024 9:48 AM
78	Hwy 56	12/22/2024 10:58 AM
79	South interchange and intersection at Panda Express- poor lighting- crosswalks not painted Bridge going over I-15 connecting to Cedar High- highly traveled Intersection by Smiths Extremely hard to turn left into TJMaxx	12/20/2024 9:45 PM
80	Fiddlers elementary	12/20/2024 5:32 PM
81	Lund hwy needs bike lanes. Midvalley needs bike lanes. Hwy 56 needs a separate bike path.	12/20/2024 4:10 PM
82	Iron spring road, lund highway and 5700 west	12/19/2024 8:49 PM
83	Sidewalks on Main Street on the north side of town (north of coal creek). A safer way to cross traffic at Fiddlers Canyon and Wedgewood Lane.	12/19/2024 8:44 PM
84	Residential neighborhoods. Flashing radar speed monitors, traffic bumps etc.	12/19/2024 4:40 PM
85	There is a gap in sidewalk services near the highway on and off ramps. Bulldog road seems to serve as a major alternative and could benefit from sidewalks and bike paths.	12/19/2024 3:14 PM
86	Use the 7 million dollars you have to rebuild Iron Springs Road and redesign the intersection	12/19/2024 11:45 AM

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	with 56.	
87	5700 w, lower speeds on main street from north freeway exit to south freeway exit. A light at IFA. entrance	12/19/2024 8:03 AM
88	All	12/19/2024 6:52 AM
89	Mid valle, 4200 North, old highway 91 and Minersville highway	12/18/2024 4:11 PM
90	Intersection at Main and 3000 N Also Walmart area and Starbucks drive through.	12/18/2024 12:37 PM
91	South Mountain & Westview	12/18/2024 11:43 AM
92	My above three concerns.	12/18/2024 10:57 AM
93	Highway 91	12/18/2024 10:26 AM
94	Iron Springs Road, Lund Highway - 1600 N, south Main St near the IFA plaza, Royal Hunt intersection by Walmart,	12/18/2024 7:22 AM
95	Midvalley road	12/17/2024 6:44 AM
96	More roundabouts! Flashing crosswalk light at 100 W and Center Street between Home on the Range and the photography studio.	12/16/2024 2:46 PM
97	Old Highway 91 between summit and Cedar. Road condition is Horrible !! Turn lights at intersection of Bowling Alley, Maverick, Tagg n Go on North of Cedar. SUU has strobes on 300 West for Pedestrians. Add these on heavy traffic pedestrian and School Crossings. Red Canyon road needs better maintenance. Freeway signs utilized more for distracted driving.	12/15/2024 8:11 AM
98	Westview Dr and 1525 S is a dangerous intersection to navigate.	12/14/2024 8:16 PM
99	1) The overpass on Center street and the overpass on 600 S are not in good shape for pedestrians, and certainly not in good shape for people using wheelchairs. If both sides of the overpass had good pedestrian paths, bikes could also easily use them. There isn't enough room for two way pedestrian traffic on those paths. On 600 South at the end of the overpass, Cedar High and SUU students are also having to dart across the street to get to Sage Dr. There isn't a safe or obvious location for crossing. 2) Cross Hollow Road has a lot of pedestrians, local kids, bike riders but there is a large patch of the road without sidewalk. 3) Improved lighting near SUU Campus on center street from the overpass to the AFEC would be helpful for pedestrians and help drivers to see them better. 4) South Main also lacks a safe and obvious location for students to cross to get to the neighborhoods around Greenslake drive/ Dutch Bros. The speed limit is 45 mph on a 4 lane road, and we often see youth darting across the street here, which is so risky.	12/13/2024 2:09 PM
100	Cedar City Main Street	12/13/2024 10:37 AM
101	Coal Creek and Bulldog- needs a round-a bout; and at Minersville Highway and Hwy 91	12/11/2024 2:37 PM
102	The diamond exchange, roads in older neighborhoods	12/11/2024 12:19 PM
103	The bridge connecting college way to suu	12/11/2024 11:42 AM
104	1600N west could use some street lights (ones that point down to avoid light pollution)	12/11/2024 10:00 AM
105	Any roads besides Main Street and burger alley (there's like no lighting anywhere besides those roads)	12/10/2024 2:51 PM
106	There should be a school slow down or traffic light at the intersection where Iron Springs Elementary exits onto Highway 56. There are frequent accidents there, which will only increase as the city expands in that direction - especially given the high posted speeds on Highway 56.	12/10/2024 2:21 PM
107	I don't drive IC roads enough to express an opinion.	12/10/2024 11:19 AM
108	Fiddlers Canyon/Ashtown Forest. Development has made getting out of Fiddlers Canyon on Fiddlers Canyon Road a nightmare. Having a left turn lane right across from an entry into a business . 200 North all the way out Highway 56 needs to be studied due to increase in building in the area.	12/10/2024 8:41 AM
109	The Canyon View Highschool and Police Station area could be benefit from safety improvement projects.	12/9/2024 9:07 PM

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110	E 3000 N/ N Old Highway 91 from the Maverik to the Frontage Road. The east bench trail and Cross Hollow trail connection. S Main St between Thunderbird Way and W 600 S	12/9/2024 8:06 PM
111	The university area has too many distracted drivers driving above the speed limit and not obeying traffic laws.	12/9/2024 1:27 PM
112	The southern I-15 underpass, as well as the intersection of Cross Hollows and Royal Hunt (I know it is going to be fixed soon, let's just hope it is done intelligently). Intersection of Highway 56 and the Iron Springs Road.	12/9/2024 12:53 PM
113	A safe bike path from Enoch to Cedar city. Biking along Old Hwy 91 or Minersville highway is not ideal.	12/9/2024 11:46 AM
114	All throughout the city there are gutters that are so deep that the bottom of my car or bumper scrapes. I drive a modest Honda Accord. Also the area of S Main Street and the 15 can be dangerous. I come off the highway from the south and have to look to the right behind me to assess oncoming traffic to merge. I was rear-ended by another vehicle coming off that offramp because I stopped before merging in.	12/9/2024 11:10 AM
115	All of them!	12/9/2024 10:03 AM
116	Providence center area, main street	12/9/2024 9:28 AM
117	Add deer fencing or other wildlife restrictions along SR 130 near E Canyon Commercial Ave	12/9/2024 7:35 AM
118	I think a lot of places everywhere will benefit a lot. Really nowhere is perfect	12/8/2024 5:23 PM
119	Areas that need lighted stop signs.	12/8/2024 5:13 PM
120	I can't name any right now, but I know them when I'm bouncing down them.	12/8/2024 4:30 PM
121	Highways 14, 56, and west view Drive.	12/8/2024 2:18 PM
122	See above	12/8/2024 12:50 PM
123	For anyone exercising (running/walking etc) or scooter or bike riding most streets need a dedicated lane and better lighting.	12/8/2024 6:49 AM
124	Most traveled areas (around SUU and Cedar/Canyon View High Schools) Main Street- hard to see around parked cars when turning onto main street	12/8/2024 6:30 AM
125	Main Street, 200 N	12/7/2024 11:15 PM
126	Parowan— Out of towners assuming main and center is a four way stop. Giant potholes on 2nd n and 3rd east corner as you head to recreation areas (Pickleball courts, baseball fields)	12/7/2024 6:46 AM
127	700 West south of the university. Drivers often speed down this long street.	12/6/2024 9:03 PM
128	Enoch	12/6/2024 3:22 PM
129	Residential Streets and Parking Lots	12/6/2024 1:57 PM
130	200 North, East of the freeway to Main.	12/6/2024 1:53 PM
131	Intersection of main Street and 200 N. Also turn off of W. Royal Hunt Drive and Sage Drive.	12/6/2024 1:18 PM
132	Main street south of downtown; the Walmart intersections (so stressful I try to avoid it), peripheral streets with increased traffic (Lund, Westview - so dark and twisty). Headlights often blind the view at night. Recent lane markings on Westview is SUPER APPRECIATED!	12/6/2024 12:39 PM
133	the intersection at North Main and Fiddlers Canyon Drive is super busy and I worry about safety of the middle and high schoolers at the end of the school day	12/6/2024 12:38 PM
134	S Westview and Highway 91 intersection. Hard to see without lights.	12/6/2024 12:11 PM
135	Sidewalk repair on 820 South in Cedar City (sidewalk is unsafe for blind residents)	12/6/2024 11:27 AM
136	Yellow lights	12/6/2024 11:20 AM
137	In Cedar City near SUU campus.	12/6/2024 11:10 AM
138	Parowan.	12/6/2024 11:10 AM

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139	Old Hwy 91 from Enoch to I-15	12/6/2024 11:04 AM
140	Highway 56 between Cove and Lund Cross Hollow, north of Silver Silo	12/6/2024 10:25 AM
141	The shop access roads by walmart	12/6/2024 10:11 AM
142	800 W Industrial rd	12/6/2024 10:04 AM
143	The intersection of Iron Springs road and Highway 56. Several people have died in crashes at that intersection. There needs to be a traffic light at that intersection.	12/6/2024 10:03 AM
144	Highway 56, Cross Hollow Road	12/6/2024 9:59 AM
145	Big dip getting bitter on 200 W across from new parking lot, before the church 800 W & 200 S needs AT LEAST a four-way stop. It is absolutely horrible for drivers and pedestrians. Completely normal to see people driving 45+ from 300 W to 1150 W. Dewey Ave and 200 S is a law suit waiting to happen Another forced stop on 600 S in front of Cedar High Stop light at 400 S & Main Cameras on lights at 200 N & 800 W to give tickets to all who speed through. The intersection by Jack in the Box but I have no idea how to fix it.	12/6/2024 9:51 AM
146	Cove up by the temple is so dark at night.	12/6/2024 9:48 AM
147	Main Street, especially between Cedar Knolls and 400 South	12/6/2024 9:19 AM
148	Removing the diverging diamond interchange near the lighthouse. Put in a roundabout at every 4-way stop. (People will learn how to use roundabouts)	12/6/2024 9:12 AM
149	Main street	12/6/2024 9:05 AM
150	Main St in Cedar City, both north and south, is rife with distracted driving and excessive speeding.	12/6/2024 8:41 AM
151	Everywhere around SUU and Highway 14 needs to be widened both directions	12/6/2024 8:34 AM
152	Longer freeway on ramps	12/6/2024 8:27 AM
153	Sidewalks near schools/SUU and neighborhoods within 1 mile of schools/SUU.	12/6/2024 8:07 AM
154	The intersection at coal creek road and 1045 N really needs a light/ round about.	12/6/2024 7:53 AM
155	Main Street and 200 W 200 W East bound to Hwy 15 Any left hand turn with a flashing yellow left signal!	12/6/2024 7:50 AM
156	Adding flashing lights when someone is crossing in a high vehicle area, such as the one on Main street. Placing those around the University and k-12 schools would be helpful.	12/6/2024 7:46 AM
157	Midvalley Rd.needs a bike path. Lund Hwy needs a bike path. 2300 W needs a bike path. More speed traps need to be set up, especially on Lund and Midvalley.	12/6/2024 7:24 AM
158	areas near SUU	12/6/2024 2:09 AM
159	All of Cedar City would benefit from complete (and well maintained) sidewalks, and pedestrian friendly pathways. Especially in the area from South Main Street near Golden Corral, all the way down to Wells Fargo.	12/6/2024 12:40 AM
160	I think the main crosswalk at SUU by the PE building and business building has a very short time for those crossing to cross, especially for individuals who are disabled and slower. The time to cross is barely adequate for an able bodied person.	12/6/2024 12:32 AM
161	Hwy 91 and greens lake blvd, Main Street, cedar city	12/6/2024 12:18 AM
162	The roadways and parking lots behind the buildings running along the west side of main street near the north end of SUU campus.	12/6/2024 12:11 AM
163	By the university, down mainstreet, by all off ramps	12/5/2024 10:10 PM
164	Around SUU	12/5/2024 9:35 PM
165	cross Hollow Fast traffic	12/5/2024 9:24 PM
166	The intersection of Royal Hunte Dr. and Cross Hollow. People Turing left onto Royal Hunte Dr. always try to go at the same time as me turning right. They need to yield to oncoming traffic but always try to race us. At least a sign to at least clarify would be appreciated.	12/5/2024 9:18 PM

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167	Highway 56 Main Street - from south to north Roads around Walmart All roads around the University Lund Highway, particularly from Highway 56 to 1600 North West View Drive	12/5/2024 9:16 PM
168	Downtown Main Street all the way to Walmart. We have a lot too much growth without prudent forward thinking to address that from a traffic standpoint.	12/5/2024 9:11 PM
169	South interchange by Walmart. Get a jump on the intersection at Main and 200 N where the new (unwanted) Maverick is going.	12/5/2024 8:06 PM
170	300 west-800w there's a lot of broken sidewalks and overgrown areas that make walking unsafe and inaccessible. Several of the lights in the area do not have good crosswalk timers and I can't cross the street safely	12/5/2024 7:49 PM
171	Cedar Main Street between 200N and 400 S needs reduced speeds, more crosswalks, and bike lanes. Cross Hollow/S Main and Sage Dr/Royal Hunte Dr	12/5/2024 7:08 PM
172	North main. I run there regularly and it is very difficult as a pedestrian	12/5/2024 7:04 PM
173	Areas with a lot of traffic and areas closest to schools	12/5/2024 6:43 PM
174	Around Cedar City area	12/5/2024 6:38 PM
175	All of the residential streets in the Parowan area	12/5/2024 6:37 PM
176	Hwy 56 Main St through town Providence Ctr roads	12/5/2024 6:26 PM
177	Hwy 56 Main St through town Providence Ctr roads	12/5/2024 6:26 PM
178	More crosswalks around SUU	12/5/2024 6:24 PM
179	The south interchange is awful. It gets extremely backed up and people end up blocking the intersections so you can't go when the light turns green	12/5/2024 6:18 PM
180	Stop signs needed on E 400 South where it crosses S 300 East. The confusing intersection of Main and I-15 is awful.. especially for bikes/pedestrians.	12/5/2024 6:16 PM
181	Cedar Main Street, the roads by SUU	12/5/2024 6:00 PM
182	Sidewalks between Cedar Canyon and SUU especially. The whole system by Walmart.	12/5/2024 5:51 PM
183	The Three Peaks directional travel routes. They're in really rough condition and very dimly lit.	12/5/2024 5:40 PM
184	Every one	12/5/2024 5:36 PM
185	We live in Enoch, but Cedar is pretty bad. Especially around Lin's and Home Depot areas. Lots of badly timed left turns and aggressive drivers.	12/5/2024 5:35 PM
186	200 N Cedar City	12/5/2024 5:31 PM
187	North Elementary School area it was never designed for the currently doubling student capacity ingress and egress from the campus on foot or by car	12/5/2024 5:29 PM
188	The roads on 56 are always dirty owing to 1) construction and 2) landfill debris. I think street cleaning should happen more often	12/5/2024 5:24 PM
189	By campus and neighborhood roads	12/5/2024 5:14 PM
190	The intersection of sage dr. And w royal hunter dr.	12/5/2024 5:10 PM
191	Cross walks and sidewalks be put in or improved	12/5/2024 5:03 PM
192	Main Street and Providence need more room. Lots of pot holes and broken cements are dangerous for children, disabled people, and pets.	12/5/2024 4:33 PM
193	3900 West	12/5/2024 4:31 PM
194	All the surroundings of schools, universities, commerce	12/5/2024 4:28 PM
195	The area by WalMart, Cafe Rio, Walgreens, Starbucks, Del Taco, Freeway ramps - this entire area is a mess and dangerous a lot of times. Also the area by Wendy, Burger King, Freeway ramps-this area is also a mess, lots of people run the lights and don't yield when making a right hand turn on a red light to get on to I-15 northbound. This on-ramp is also a mess. A lot of	12/5/2024 4:26 PM

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drives don't move over for oncoming traffic and it is hard to merge in when you can't see what is coming until you get to the top and there is not much room before merging.

196	all major intersections with stoplights.	12/5/2024 4:22 PM
197	Many of the feeder roads onto Hwy 56 (turn lane/lane marking/stoplight at Iron Springs Elem.). Some feeder roads on main (such as by Smith's).	12/5/2024 4:22 PM
198	I'm not sure.	12/5/2024 4:14 PM
199	56 and main. Anywhere turning left when heading north on main. Old hwy 91 and green lakes dr. (Way too many people run that stop sign)	12/5/2024 4:13 PM
200	The intersection at 2300 w and airport road could use lighting as it can get fairly busy at night and kids ride bikes nearby.	12/5/2024 4:11 PM
201	intersections where pedestrians cross, areas where view is blocked where turning	12/5/2024 4:09 PM
202	Downtown main street going from the library all the way up towards Walmart in Cedar City. That street is incredibly busy with traffic and not safe for pedestrians or cyclists.	12/5/2024 4:08 PM
203	All of them, but particularly Main Street and the areas around SUU's campus. The Providence Center area should also be prioritized.	12/5/2024 4:07 PM
204	There's a need for more lighting on Freedom Blvd and the more residential areas near it, especially near Harding Ave. Additionally, there needs to be traffic signs and lights added to the growing traffic areas north such as Northfield Road.	12/5/2024 4:04 PM
205	Any area near any Maverik gas station (there seem to be a lot of out-of-towners who aren't familiar with traffic patterns that cause a lot of potential dangers, so some clearer signage might help non-locals navigate more safely??). Any of the intersections along Royal Hunte Dr and Providence Dr, especially during school release hours. It's hard to make turns against traffic without lights or signals, and there are lots of cars parked along streets that make seeing up the lanes for oncoming traffic difficult.	12/5/2024 3:59 PM
206	I live and commute mostly in the nearby vicinity of SUU so I cannot say much about other areas. I think that 600 south between Smiths and the interstate has a lot of stop signs are hard to see because of foliage in the way.	12/5/2024 3:59 PM
207	South Main Street	12/5/2024 3:56 PM
208	Main street in Cedar City, 200 S and 200 N, Center Street, and the Providence area.	12/5/2024 3:52 PM
209	North end of Main Street, lots of people roll through stop signs turning onto Main Street.	12/5/2024 3:51 PM
210	As mentioned above, some parking lot "driveways" are very deep and cause damage to cars. I'm specifically thinking of businesses along Main Street in Cedar City.	12/5/2024 3:47 PM
211	The 4 way stop by Lins, the light by the Panda Express, the light by brads food hut, and almost every light with a right turn	12/5/2024 3:46 PM
212	All of Main Street from Lin's to Walmart.	12/5/2024 3:46 PM
213	Intersection of Old Highway 91 and Greenslake. Individuals driving North on Old Highway frequently run the stop sign because of sign placement/visibility/speed of highway coming into town.	12/5/2024 3:44 PM
214	Main Street and Highway 56, 200 North.	12/5/2024 3:43 PM
215	300W	12/5/2024 3:43 PM
216	Walmart intersection	12/5/2024 3:43 PM
217	Around SUU campus, Cedar Main Street, and Parowan Main Street when school is in session.	12/5/2024 3:42 PM
218	The intersection (Royal Hunte Drive) by TekShine and Starbucks and the Airport Road intersection with Maverick and Tagg N Go	12/5/2024 3:41 PM
219	The roads around SUU campus have a lot of bumps and holes that make my car groan a lot. Also the interstate is so sketchy. I'm almost certain I'm going to die there some day because of other drivers and no fault of my own. Utah drivers are quite literally the worst.	12/5/2024 3:40 PM

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220	North Main Street, Northfield Road to Coal Creek connection, around busy businesses.	12/5/2024 3:39 PM
221	The area over by Walmart in Cedar City.	12/5/2024 3:39 PM
222	Neighborhood around SUU	12/5/2024 3:38 PM
223	Honestly, all areas. The newer residential areas (for example, around the hospital) could use improvements when it comes to increasing the view when turning.	12/5/2024 3:38 PM
224	Around the SUU campus.	12/5/2024 3:37 PM
225	Midvalley Road - sidewalks or pedestrian areas. That road is SCARY as a pedestrian. Get your police force/sheriffs out to actually patrol and provide tickets for traffic violations	12/5/2024 3:37 PM
226	HWY 56, some of the roads that surround the campus.	12/5/2024 3:37 PM
227	All suu surrounding roadways face lots of drivers that are clearly on their phone while driving. All nearing roadways also have a lot of people speeding to turn even when people are on the cross walk	12/5/2024 3:37 PM
228	200 North. People running stops signs and travel far too fast	12/5/2024 3:36 PM
229	slower speeds in residential neighborhoods - like 15 mph	12/5/2024 3:35 PM
230	Around SUU campus with more sidewalks and bike support	12/5/2024 3:34 PM
231	450 W has been a MESS ever since they worked on it last year. The large swaths of 200N/Hwy 56 that have no sidewalk are awful. Many of the shelters for the CATS busses are inaccessible because of poorly maintained sidewalks. Most sidewalks in the older neighborhoods in town are uneven and difficult to navigate with strollers/wheelchairs.	12/5/2024 3:34 PM
232	By suu some of the stop signs are difficult to see as they are unlighted and blocked by trees	12/5/2024 3:33 PM
233	All	12/5/2024 3:33 PM
234	200 / Freedom	12/5/2024 3:31 PM
235	not sure	12/5/2024 3:30 PM
236	Near Walmart	12/5/2024 3:30 PM
237	Parowan!	12/5/2024 3:04 PM
238	Parowan	12/5/2024 2:32 PM
239	Parowan!	12/5/2024 1:19 PM
240	I'm in Cedar City. Can't speak for the rest of the county but there are dozens of projects that could be done within city limits.	12/5/2024 12:43 PM
241	Pot holes, more access to bike trails and better views	12/5/2024 11:47 AM
242	Parowan's roads need a lot of work and so does old Hwy 91 from summit to cedar city.	12/5/2024 11:18 AM
243	Old 91 enoch - summit is extremely rough & is very difficult when towing livestock trailers. Lund Highway the motorist go to fast & dont respect the heavy hauling trucks	12/5/2024 10:20 AM
244	Lund Highway 2300 West Bulldog Rd. and Highway 56 and Westview Drive	12/4/2024 9:05 PM
245	Enoch rd, E Midvally road, and old highway 91	12/4/2024 12:33 AM
246	SR-130 Old Hwy 91	12/3/2024 6:50 AM
247	South i15 intersection. Walmart stop lights. School areas.	12/2/2024 9:26 PM
248	Cross Hollow, Royal Hunt, South main street	12/2/2024 9:20 PM
249	The amount of ATV / UTV is going up, Need marked pathways with signs.	12/1/2024 7:16 PM
250	4200 N & Minersville in Enoch, S. Main & S 300 W and W Cross Hollow Rd & W Royal Hunte Dr. in Cedar City.	11/30/2024 5:28 PM
251	Bulldog from Kitty hawk to 3000 north. 3900 west from sr56 to equestrian point. All of Iron springs road Knoll street from main to the round about, lighting and sidewalks, painted lines,	11/27/2024 10:40 AM

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	speed limit signs Crosswalks on 200 north. Crosswalks main street north of 400 north	
252	North end school zones.	11/26/2024 8:56 AM
253	HWY 130 needs to be bigger with side lanes	11/26/2024 7:40 AM
254	1700 W n/o Midvalley	11/25/2024 2:10 PM
255	Exit 51 and old hwy 91	11/24/2024 6:29 AM
256	Westview drive between hwy 56 and old US HWY 91	11/23/2024 4:53 PM
257	Northfield Road is dangerous. between all the parked cars on the road, cars not obeying the speed limits, and no cross walks, it is an unsafe road.	11/22/2024 11:25 AM
258	2300 W Midvalley rd. Lund Hwy.	11/22/2024 10:19 AM
259	Near 1700 N main St. and Falcon Dr. CVHS and CVMS schools nearby.	11/22/2024 9:51 AM
260	Main Street 200 Hwy 56 from Main Street west to iron springs rd Westview Lund Hwy	11/21/2024 9:45 PM
261	The underpass by canyon view high and middle not having sidewalks on both sides. Also, students are crossing that road really dangerously there.	11/21/2024 9:29 PM
262	The South freeway exit underpass is a mess. We also have many intersections that need lights. Putting up islands in the major intersections to stop people from crossing double yellows would help a lot.	11/21/2024 8:17 PM
263	Hwy 56 More speed limit signs on minersville hwy The frontage road between Enoch and Summit might as well be dirt!	11/21/2024 4:11 PM
264	Highway 91. The "X" intersection on cross hallow road. That is a terrible intersection. Whoever thought that was a good idea needs a new career choice.	11/21/2024 12:14 PM
265	South Interchange! Do away with the Diverging Diamond!	11/21/2024 12:05 PM
266	Highway 91	11/21/2024 11:19 AM
267	Lund Highway 2300 West Bulldog Rd. and Highway 56 and Westview Drive	11/21/2024 11:13 AM
268	Any busy traveled street or highway.	11/21/2024 11:06 AM
269	1045 N: Crosswalk at North Cedar Blvd To Park Extreme Speeding Events: 1045 N: 50 mph + hourly morning rush hour Main St: Downtown Old 91: 80 MPH + need raised crosswalks	11/21/2024 10:17 AM
270	SUU campus, Parowan streets, Coal Creek Area, North Cedar City	11/21/2024 9:56 AM
271	More uhp	11/21/2024 9:54 AM
272	Water way entrances to businesses too steep	11/21/2024 9:52 AM
273	For winter - residential close to Sw, main roads. Generally most travelled roads	11/21/2024 9:45 AM
274	200 and Main, 5700 West speeds are too high	11/21/2024 9:41 AM
275	Northfield road	11/21/2024 9:38 AM
276	Intown & speed on rural roads	11/21/2024 9:32 AM
277	SR-56/200 North | Cross Hollow Exits 57 interchange	11/21/2024 9:29 AM
278	Main Street through Downtown	11/21/2024 9:26 AM
279	Canyon Road by East Elementary Stoplight	11/21/2024 9:22 AM
280	N Main & E Nichols Canyon Road	11/21/2024 9:15 AM
281	Roadways without a lot of lighting. More rural areas (farmland)	11/21/2024 9:05 AM
282	South and North Freeway Entrances/Exits Intersection at the entrance to Enoch where the bowling alley is. Intersection by walmart and panda express.	11/21/2024 9:05 AM
283	main street. Running red lights.	11/21/2024 8:55 AM
284	Spanish Trails	11/21/2024 8:53 AM

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285	Roads by CVHS and CVMS Hwy 56 Airport road North Intersection by walmart	11/21/2024 8:53 AM
286	areas near both Cedar High and Canyon View High and Middle school.	11/21/2024 8:50 AM
287	Specifically the intersection of S. Main St. and Old Highway 91 (and south on 91). The pavement markings are worn and difficult to see, especially at night. This is a busy area now and the presence of the remainder of the old markings compound the issue.	11/21/2024 7:58 AM
288	Main Street, Around schools	11/20/2024 6:03 PM
289	Main street exists from TJ Maxx area, several roads have people parking to block visibility at turns.	11/20/2024 6:02 PM
290	Main St, Center St, Around Campus & Downtown	11/20/2024 5:57 PM
291	Old Highway 91 into & out of Enoch, Old Highway 91 south of Cedar City, 3000 N. needs to be widened	11/20/2024 5:55 PM
292	Alot decr. in accidents/crime possibly?	11/20/2024 5:52 PM
293	5700 W Speeds too high, 200N & Main	11/20/2024 5:51 PM
294	Main street, around airport, around SUU, around walmart	11/20/2024 5:49 PM
295	Main Street	11/20/2024 5:44 PM
296	The intersection of Main Street (UT 130) and Providence CTR Dr.	11/20/2024 5:42 PM
297	I think there is very little improvement needed as far as infrastructure, other than that stupid south interchange	11/20/2024 5:40 PM
298	Old Hwy 91 from Enoch to Summit	11/20/2024 5:12 PM
299	ALL INTERSECTIONS WE NEED ANOTHER HIGHWAY THAT CONNECTS HIGHWAY 56 WITH MAIN STREET	11/20/2024 2:25 PM
300	North end of town. Fix the meter holes on the roads.	11/20/2024 1:05 PM
301	Most county roads seem to be in satisfactory condition for most of the year.	11/20/2024 1:00 PM
302	Highway 91 from enoch to cedar city	11/20/2024 12:55 PM
303	School zones. Intersection of 200 S. & Main Street in Parowan. 200 S in Parowan is a danger zone from the freeway all the way up to Hwy 143. The bridge coming into Parowan from Hwy 91, by Maverik. It's hard to see around and it is narrow.	11/20/2024 12:45 PM
304	South Round about	11/20/2024 12:25 PM
305	Hwy 91 from Enoch to Cedar Intersection of Hwy 91 & SR 130	11/16/2024 3:31 PM
306	200 south in Parowan side walk need to be put in from 600 west to I-15 heading west.	11/15/2024 1:24 PM
307	Major intersections on SR-130 in Cedar City	11/14/2024 2:55 PM
308	Main Street and around suu	10/17/2024 8:40 PM
309	All of them honestly. A lot of drivers don't stop before the stop sign or appropriate spot at a red light which blocks the road when cycling on the left margin. This makes it uncomfortable for people at crosswalks, it makes them feel like they're an inconvenience. In addition this makes it dangerous for cyclist on the road. Drivers not stopping at appropriate positions at crosswalks makes it dangerous for cyclist on the road, the vehicle is too far foreword or pops out past the stop sign and makes it so the cyclist almost hit the car or merge into the lane next to them which will most likely have a vehicle. A good example of this is the intersection of Fir St and Main Street.	10/17/2024 8:05 PM
310	All between Cedar and Enoch, main Street of Cedar, around campus.	10/17/2024 7:39 PM
311	Sidewalks and lighting on blind corner of knoll st by the ford dealership	10/17/2024 5:24 PM

Q6 What types of safety improvements would you like to see in Iron County? Please include the type of improvement and specific location, if applicable. (Examples may include improve signs, pavement markings, pedestrian crossings, lighting, bicycle and pedestrian facilities, speed management, etc.)

Answered: 287 Skipped: 87

#	RESPONSES	DATE
1	This is very personal to me, but I think there needs to be street lighting on 1000W north of 200N. It's a sketchy area with the motels around. Do intersection daylighting on neighborhood streets, especially around the college and 800W/Harding Avenue. Make a safer place for pedestrians to cross over the freeway on University Boulevard. Put a sidewalk and/or a bicycle lane, or even a paved trail along main street up to Old Highway 91. On an unrelated note, fix the steep, damaged parking lot entrances endemic to Cedar City. Namely the north exit of Lin's, O'Reilly, and Jiffy Lube. Also, hire someone to time the lights correctly on the diverging diamonds at the Iron Bowl. The traffic engineers up in Salt Lake can make them flow correctly, so why are we inducing double the traffic by making drivers stop twice?	1/30/2025 1:46 PM
2	Signs and LEO enforcement of speed / safety.	1/27/2025 9:01 AM
3	Paint lines, fix pot holes and entrance dips,bicycle lanes	1/26/2025 7:33 PM
4	Better sidewalks and fewer potholes	1/25/2025 4:06 PM
5	Paths to walk and ride bikes on	1/25/2025 2:54 PM
6	Properly Maintained streets	1/25/2025 10:24 AM
7	Maintenance	1/25/2025 9:39 AM
8	Lighting in small towns, fixing potholes	1/25/2025 9:29 AM
9	Change the yellow left turn signals to something safer. Repair lane markings. Consider marked bike lanes on higher traveled bike use roads.	1/25/2025 8:28 AM
10	speed management	1/25/2025 8:26 AM
11	Sidewalk or bike lanes or both. A few designated crosswalk areas to safely get across 200 south... One near the market (people cross from the motel to the market, and kids riding bikes to school cross near there at about 600W	1/25/2025 5:29 AM
12	Old highway from summit to cedar. This road needs re done and painted. Needs a good shoulder for riding bikes. This road sucks.	1/24/2025 6:06 PM
13	See above. Bike/pedestrian paths. Not in favor of much additional lighting. It ruins our "dark skys". Also something needs to be done for the off ramp onto 200 S. since it was decided to allow development on the corner. You can't even turn into the hotel parking lot!	1/24/2025 5:27 PM
14	None	1/24/2025 5:14 PM
15	More sidewalks/Paved pathways all around town.	1/24/2025 5:14 PM
16	More signage along Designated Livestock Trails	1/24/2025 5:00 PM
17	Speed mgmt on all primary and secondary streets Parowan and Paragonah	1/24/2025 4:17 PM
18	Speed management particularly from 200 S. up past the cemetery	1/24/2025 4:11 PM
19	Speed management center street/ main	1/24/2025 4:05 PM
20	A light in parowan	1/24/2025 1:59 PM

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21	Speed management in neighborhoods Stop lite at Center/main and 200 S/main Increase red/no parking area on main and center.	1/24/2025 1:03 PM
22	Moore Street lights major stop signs should be more better such as flashing lights on each stop sign	1/24/2025 1:01 PM
23	More designated livestock trail signs Reduce sxs usage	1/24/2025 1:00 PM
24	Road maintenance, road signs, lighting	1/24/2025 12:43 PM
25	Bicycle and walking paths in Parowan would be so beneficial.	1/24/2025 12:42 PM
26	Paving and crossing signs	1/24/2025 12:33 PM
27	bike and walking paths in Parowan paragonah area	1/24/2025 12:22 PM
28	Driving laws enforced around the university. Better lighting around the university for cyclists and pedestrians.	1/21/2025 10:46 AM
29	Driving laws enforced around the university. Better lighting around the university for cyclists and pedestrians.	1/21/2025 8:37 AM
30	A Pedestrian crossing and speed bump on 1045 North by Centennial Park. More frequent bus availability on the weekend. Increased bus routes. During snow removal keeping the corners of streets clear instead of heaping the snow there. Street lighting along Cold Creek Road, and 300 West.	1/19/2025 4:58 PM
31	Pedestrian crossings, seating at bus stops, schedules at bus stops, lighting at bus stops.	1/18/2025 5:14 PM
32	Speed bump or police ticketing drivers.	1/18/2025 6:19 AM
33	Paint pedestrian crossings & Mark with solar powered flashing signs.	1/17/2025 10:36 AM
34	We need more trails even if they're by a road but keep bikes and runners away from the road. Maybe call boxes along a few random parts of the trails for emergencies?	1/14/2025 11:43 PM
35	Please add more bike lanes or widen roads to provide more space to share with autos	1/13/2025 8:29 PM
36	Please add more bike lanes or widen roads to provide more space to share with autos	1/13/2025 8:29 PM
37	Clearing of brush on intersections where a driver cannot see the oncoming traffic	1/13/2025 1:28 PM
38	Speed management	1/13/2025 1:13 PM
39	Lighting	1/13/2025 11:27 AM
40	bike/walking lanes do not build more town homes!!	1/12/2025 1:59 PM
41	Speed humps on residential streets with habitual speeding. Educational signage.	1/11/2025 2:07 PM
42	Bike lanes More lights Bike facilities Speed management	1/9/2025 5:41 PM
43	Same as the answer above.	1/8/2025 5:11 PM
44	Perhaps a few roundabouts to slow traffic on Main and 200 North in Cedar. Any additional dedicated bike lanes would be greatly appreciated however late they may be.	1/8/2025 2:02 PM
45	Bike lanes road repairs,lights	1/7/2025 11:07 AM
46	Stop light at 200 S and Main in Parowan, Utah	1/7/2025 10:24 AM
47	Extended red curbs around stop signs to make it easier to see when turning.	1/6/2025 11:10 AM
48	Speeds on SR130 should be reduced to 45MPH between MP6 and MP10. The entire road on Old Highway 91 between SR130 and Summit needs to be replaced and bike lanes added.	1/6/2025 9:12 AM
49	Parowan needs help. No traffic lights. No cross walk lights.	1/3/2025 8:38 PM
50	I would like to see an improved walking, Bicycle and ATV Trail along old Highway 91 from the ATV under path north of Enoch to 3000 north. There are a lot of people uses that area for those actives and the road is narrow and it is hard to pass bikers and walks on the road. The intersection at Minersville and 3000 N and the traffic pattern going east past the Maverik with the addition of the Truck fueling go in to Maverick the Road is unsafe with Truck blocking the	1/3/2025 9:07 AM

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road multiple times a day. And with the new and proposed business going in that area it is getting worse.

51	Bicycle lanes, better sidewalks, more crosswalks	1/3/2025 6:50 AM
52	Bicycle lanes, better sidewalks, more crosswalks	1/2/2025 8:36 PM
53	Making a Sidewalk between parking lot and Ridge park or cutting some of the grass to create better parking closer to the park.	1/2/2025 8:19 PM
54	Better lighting on 3000 N. Lower speeds on Old Minersville Highway. Better traffic lighting patten on 3000 N and Old Minersville Highway. The intersection by Walmart needs better traffic patterns and speeds.	1/2/2025 7:06 PM
55	Have raised crosswalks on intersections with stoplights. Require all drivers to stop until green even when turning right. Yellow lights should last at least 2 seconds plus one seconds for every 10 MPH of the speed limit; for example, a 25 MPH intersection should have a yellow light lasting at least 4.5 seconds. It might not be long enough, but it's a start. Any road or street with parallel parking must be limited to 20 MPH. If that is unacceptable, get rid of parallel parking.	1/2/2025 1:32 PM
56	Connecting sections of bike and pedestrian trails with one another - e.g. missing connection between west end of Cross Hollow bike path and newer path to Cross Hollow Event Center, then missing bike paths between Cross Hollow Event Center and Coal Creek Path.	1/2/2025 11:22 AM
57	All you listed above	1/2/2025 11:15 AM
58	speed management	1/2/2025 10:21 AM
59	Light up the area around Evans beauty college. That whole area is so dark. Also, turning on roads where someone is blocking the view sucks (north field road). People park so close to the intersection it's hard to see incoming traffic.	12/31/2024 12:27 PM
60	I think having side walks that are easy to walk on with strollers or wheelchairs should be considered as well as more frequent pedestrian crossing signs on 200 and main street. As well as more public transportation so there are less cars on the road.	12/31/2024 10:19 AM
61	Creating, more, actual trails for cyclists and pedestrians separate from the roads with cars. Cedar City has Coal Creek Trail but it would be amazing if we can have this trail extend and go around the entire city and maybe even connect to other cities (like Enoch and Parawon for example).	12/31/2024 9:55 AM
62	The sidewall on the bridge that crosses the interstate on Sage is broken and needs repair.	12/31/2024 9:19 AM
63	Speed management on Highway 56	12/23/2024 6:33 PM
64	Personally I don't like bumpy roads. Also the lighting can be improved. Don't like driving on dark roads.	12/23/2024 2:42 PM
65	Pavement markings, lighting on streets	12/23/2024 10:00 AM
66	Stripping on 800 west	12/23/2024 9:57 AM
67	Bicycle lanes and turning lanes on main side roads like westview drive.	12/23/2024 9:56 AM
68	Crosswalk at all schools. Fiddlers school does not have one, I see kids almost get hit every day.	12/23/2024 9:54 AM
69	Fix potholes, add street lights	12/23/2024 9:51 AM
70	Lighting, pavement markings	12/23/2024 9:50 AM
71	More stoplights on Main Street	12/23/2024 9:48 AM
72	Speed management	12/22/2024 10:58 AM
73	More lighting at all intersections Painted crosswalk lines- dangerous esp for pedestrians at South intersection by Panda Express and intersection by Smiths South Elementary could use a flashing school zone- speed reminder sign on the north side	12/20/2024 9:45 PM
74	Crosswalks in school zones crossing gaurds	12/20/2024 5:32 PM

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75	Speeding and distracted driving are the worst culprits. More bike paths are needed.	12/20/2024 4:10 PM
76	Marking, speed and passing	12/19/2024 8:49 PM
77	Safer ways to cross Fiddlers Canyon road at Wedgewood Lane or up closer to the elementary school. People fly down Fiddlers Canyon too fast and it is not safe being a pedestrian.	12/19/2024 8:44 PM
78	Lighting, speed bumps, radar flashing speed signs etc	12/19/2024 4:40 PM
79	I would love to continue seeing improvements to visibility of roadway lines, a reduction in the number of vehicles using headlights that actually reduce the visibility of drivers around them, and increased acceptance of sidewalks and bike paths to main roadways.	12/19/2024 3:14 PM
80	Iron Springs isn't the only road in disrepair but it is the one I am most concerned about. Sooner or later there will be a major accident or environmental catastrophe due to the negligent disrepair of Iron Springs Road AND the fact that the county allowed heavy industrial development without adequate infrastructure.	12/19/2024 11:45 AM
81	Speed humps through south mountain neighborhood. Slower speeds and daily patrols on 5700 w. Slower speeds on all of main street. A pedestrian overpass at school on 200	12/19/2024 8:03 AM
82	Roundabouts get a bad rap, they are very effective if they are in an area with minimal truck traffic. Bike lane throughout the valley.	12/19/2024 6:52 AM
83	Improved signage	12/18/2024 4:11 PM
84	Maverick on SR 130 the big rig trucks block the road when the pumps are full, making it impossible to make right and left tuens.	12/18/2024 12:37 PM
85	Illegal lanes changes	12/18/2024 11:43 AM
86	See above	12/18/2024 10:57 AM
87	A traffic light by Sportsman's Warehouse for exiting that shopping plaza would benefit those wanting to turn left. A dedicated left turn signal at Royal Hunt and Cross Hollow at the Panda Express corner.	12/18/2024 7:22 AM
88	more easy to use/single lane roundabouts	12/17/2024 6:44 AM
89	Updated curb painting for no-parking zones	12/16/2024 2:46 PM
90	In areas of high pedestrian traffic, use signs like SUU has on 300 West Pavement markings help, however maintaining markings is also critical. Iron County has grown so fast that 10 year plans have become obsolete. New traffic patterns need to be designed and implemented. Keep to the Right except to pass needs to be enforced better. Too many people drive on inside lanes obstructing (Impeding) traffic on multiple lane roads. Better downlighting at high traffic Intersections. Intersections need Turn Signals that activate during heavy traffic.. Note: Cedar City main had Turn signal lights before St. George did. Cedar Main and 1600 North needs light with Turn Signal.	12/15/2024 8:11 AM
91	Inadequate bike lane or shoulder on the following roadways (both directions): Westview Dr, South Mountain Dr, Old Highway 91, S Providence Center Dr, Lund Hwy, Hwy 14	12/14/2024 8:16 PM
92	I would like to see more consistent enforcement of traffic rules.	12/13/2024 10:37 AM
93	Street Lighting	12/11/2024 2:37 PM
94	A sidewalk please!	12/11/2024 11:42 AM
95	That whole area to get onto the free way (we all know the one) is really complex for no reason.	12/11/2024 10:00 AM
96	Pedestrian crossings and lighting	12/10/2024 2:51 PM
97	Better road markings and speed management on Highway 56.	12/10/2024 2:21 PM
98	I don't drive IC roads enough to express an opinion.	12/10/2024 11:19 AM
99	Fiddlers Canyon Road and Wedgewood Lane intersection needs a stop light.	12/10/2024 8:41 AM
100	Speed trackers and a intersection under the highway bridge by CVHS, or speed trackers around KB.	12/9/2024 9:07 PM

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101	Bike lane or separated path along N Old Highway 91. Overpass or underpass for pedestrians and cyclists to get from the E Bench trail/S Old Highway 91 to Walmart/ Cross Hollow path. Pedestrian crossing on S Main St between Thunderbird Way and W 600 S.	12/9/2024 8:06 PM
102	In addition to what I mentioned above, I would love to see the county improve shoulders on roads outside of town so that bikers would have better and safer options. I think this would improve the amount of people utilizing bikes and could potentially reduce the number of vehicles.	12/9/2024 1:27 PM
103	Midvalley road in Enoch is quite narrow in places, and walk paths are not always adequate. People speed up half mile road in Enoch. A posted speed limit might help.	12/9/2024 11:46 AM
104	Updated handicapped locations, markings, and devices.	12/9/2024 10:03 AM
105	Honestly, a lot of safety would be solved by introducing better public transit. Getting more people off the roads would fix more than refining what we have (outside of dealing with elderly drivers that probably aren't fit to be driving - though public transit may solve that by giving them an alternative).	12/9/2024 9:28 AM
106	Bicycle and Pedestrian markings and pathways	12/9/2024 7:35 AM
107	It is very difficult to see in some areas when cars park right on the edge of curbs, or when nature is very large	12/8/2024 5:23 PM
108	More lighted stop signs.	12/8/2024 5:13 PM
109	It's mostly in Cedar, but I'm not a fan of when the roads get resurfaced and it takes months to get the turn arrows and other intersection markings repainted.	12/8/2024 4:30 PM
110	Speed management on U56	12/8/2024 2:18 PM
111	See above	12/8/2024 12:50 PM
112	lighting, bicycle and pedestrian facilities, less cars parked on street or not so close to where you have to turn on to main street.	12/8/2024 6:49 AM
113	lighting, bicycle and pedestrian facilities	12/8/2024 6:30 AM
114	A project to train folks in the basic rules of the road - especially the difference between a shoulder and a turn lane and how to use a 4-way stop. Painting/signage might help	12/7/2024 11:15 PM
115	Better pavement markings about where people shouldn't be parking. Although I admit this shouldn't be necessary.	12/7/2024 7:38 AM
116	Pedestrian lights on main and center in Parowan.	12/7/2024 6:46 AM
117	Speed bumps on 700 W. south of the university.	12/6/2024 9:03 PM
118	More crosswalks around the SUU campus, less street parking by corners because then I can't see around the trucks when I am trying to turn	12/6/2024 5:56 PM
119	Enoch needs sidewalks and improved walking paths, and street lights.	12/6/2024 3:22 PM
120	More lights on 200 North, East of the freeway to Main. At times cars are trying to enter that rode from side roads and waiting for a while so they become impatient.	12/6/2024 1:53 PM
121	Improved intersection timing and enforcement of red, yellow, green light and turning and signals.	12/6/2024 1:18 PM
122	Speed management going north on Main after the I-15 exit 57. Speed management past walmart going west/north on Cross Hollow. Lighting on Lund and Westview type roads. (Increased traffic volume and so hard to see at night). Road construction and signage - signs and cones will pop up and then stay up without work being done. It is confusing for daily drivers to know if signs are truly what is going on. With the growth of Cedar, it would be great to have traffic flow studies going on to help living here be more enjoyable. Going into town to shops is a challenge. Many times I will not go to all the places because it feels almost impossible to get on and off main street in the spots I need to and being mindful of other drivers waiting behind me.	12/6/2024 12:39 PM
123	Pedestrian and cyclists awareness, better lighting on South end of Main Street in Cedar	12/6/2024 11:27 AM
124	Improve traffic lights and congestion	12/6/2024 11:20 AM

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125	Better lighting in residential streets. Street corners cleared so there's a clear view when turning.	12/6/2024 11:10 AM
126	Give us bike paths and trails, give us sidewalks, lower the speed limit on 200 and please put in a crosswalk from the grocery store to the motel. Please consider flashing stop signs that say it is not a 4 way stop on Main Street at Center and Main Street at 200. Please reduce the amount of people who are able to blow through Main at 200 heading up the mountain, they treat the residential roads like a freeway and have lost their bumpers at the big dip at Lions Park. Please put bumpy things at the bottom of the mountain near the cemetery to let people know they need to reduce their speed when traveling down Center or 200. Essentially, we need people to respect our community and not go so fast our kids are in danger. A blinking crosswalk across Center that connects 300 from Lions Park to the Fairgrounds would be great too. The road turns there and people are usually doing 50 - 70 mph coming down the mountain and kids cross there to get home from school, to the pool and park or the opposite way to the fairgrounds. It should take another fatality in Parowan for us to make these important changes.	12/6/2024 11:10 AM
127	Brighter pedestrian-activated flashers at 300 W and Shakespeare Avenue in Cedar City. Could the flashers be red lights?	12/6/2024 11:04 AM
128	More sidewalks, especially on the larger roads mentioned above More accessibility for bikes, skateboards, etc. Expand the current walking paths (and connect them), so that pedestrian and bike traffic can utilize those, instead of sharing the road with cars	12/6/2024 10:25 AM
129	On main street in Cedar city, there are people who park on the sides, blocking the view of the people turning onto main street. It would be great if that was discouraged more for the safety of the people turning.	12/6/2024 10:23 AM
130	Street lighting and signs	12/6/2024 10:11 AM
131	800 W and 200 N light is too short to cross on a bike. Bike lane on 800 W Coal Creek and 300 W. There's an entrance to the park but no crosswalk. With the construction on Industrial, there's no good place to walk along the road that isn't extremely narrow.	12/6/2024 10:04 AM
132	Lighting in Mountain Shadows neighborhood	12/6/2024 9:59 AM
133	Speed management and failing to yield to pedestrians/cyclists are where I think potential lawsuits and deaths are most likely to happen. And I think the only way you are going to stop or even slow down any of this is with an active citation system for offenders.	12/6/2024 9:51 AM
134	More pedestrian crossings (with lights) between Cedar Knolls (North Main) and 400 South Main. There are often people jaywalking because there are not enough crosswalks and it's a wildly dangerous place to jaywalk. Part of why it's dangerous is because of the steep driveways and blind turns onto Main Street. Cars are unpredictable because it's difficult to turn on or off of Main Street.	12/6/2024 9:19 AM
135	Strategies to stop drivers using phones while driving (e.g. fixed cameras and fines). Teach pedestrians how to cross the road safely.	12/6/2024 9:12 AM
136	Clear distinctions between turn lanes vs shoulder/bike lanes. I often find my self waiting to turn right in a marked straight/turn lane with my blinker on only to have another driver pull up next to me on the right also trying to turn	12/6/2024 8:56 AM
137	I think Main St in Cedar City could greatly benefit from speed management.	12/6/2024 8:41 AM
138	another stoplight on main street by Big O tires	12/6/2024 8:27 AM
139	All streets should have contiguous sidewalks, and all major roads should have dedicated bike lanes.	12/6/2024 8:07 AM
140	speed management, improve signs, lighting	12/6/2024 7:50 AM
141	Any place there is a flashing yellow left signal, those need to be, green arrows. Green long enough to left the 10 or so cars lined up to go through, then go to yellow, then Red and that's it! You are not a small town anymore and flashing yellow signals is just getting people hurt!!!	12/6/2024 7:50 AM
142	Street Lighting- County areas where there are homes and subdivisions. There can be a lack of street lighting in the more rural areas, (Enoch, Mountain Shadows Subdivision, etc.)	12/6/2024 7:46 AM
143	The bike path that ends south of Centennial Park doesn't have a curb cut and is dangerous for	12/6/2024 7:24 AM

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cyclists and walkers with strollers. The drivers speeding throughout the county is out of control. More speeding stops and higher fines may help. The existing bike paths are really great and every new development ought to have REQUIRED pedestrian and bike paths. Especially the huge developments like the one on West Hwy 56 called Iron West. All the developments along Lund should have bike paths that allow residents to access town on a bike safely. Same situation with the Midvalley developments. All these places should have bike and pedestrian access. The new retail space on Cross Hollow should connect to a bike and pedestrian path system to get to residences in the area. Same with the Midvalley-Minersville Hwy retail developments - they should have pathways to connect to the surrounding residential areas.

144	ticketing vehicles that are parked too close to stop signs near SUU.	12/6/2024 2:09 AM
145	Improved stop signs. I would also really like to see better complete sidewalks for pedestrians, especially along South Main street (Near Golden Corral all the way to Wells Fargo, the sidewalks are missing in complete sections, and not well maintained) in Cedar City, and the surrounding neighborhoods so families with young children can feel safer walking around our beautiful community.	12/6/2024 12:40 AM
146	It is hard to see on many side streets when turning due to cars parked all along the sides of the road. On W 1045 N there is no turn lane for cars to turn left onto the many side streets and complexes, which I have seen cause other drivers who aren't turning to swerve around a car who is trying to turn, instead of waiting behind them, which is quite dangerous. When drivers do actually wait and don't swerve around the driver who is trying to turn, it can immensely hold up traffic if there is a lot of oncoming traffic and the person turning left has to wait to turn. Every time I turn left onto one of these streets it feels very risky because of this. And like drivers behind me may hit my car because they don't pay attention to my left hand turn signal.	12/6/2024 12:32 AM
147	Improved signage on roads too wide for easy recognition of stop signs. Barriers in areas where turning left is simply reckless and where people should be advised to go around the block to a protected left at a light.	12/6/2024 12:18 AM
148	Management of foliage and vegetation near intersections, as to afford a better view of the road in all directions	12/6/2024 12:14 AM
149	Putting up more signs indicating which direction a road is going when it is a one way road. Specifically, the roads behind the buildings that run along the west side of main street. It could also use more street lights on the roads behind these buildings. Ie the buildings behind bullock drug, main street books, bright future tattoos, etc. More lights on non-main roads that are hard to see at night.	12/6/2024 12:11 AM
150	Pedestrian crossing lights, lighting, speed management signs with flashers for speeding, disability walk signs	12/5/2024 10:10 PM
151	Improved crosswalks around SUU campus. Specifically around Bristlecone Hall and the new parking lot.	12/5/2024 9:35 PM
152	A sign to clarify that we can't both be going at the same time. A sign that says "Left turn yield to oncoming traffic" by the cross walk pole or on the traffic light itself. Something to clarify. In my case there have been 3 *very* close calls there. This sign would at least help assign fault when an accident occurs.	12/5/2024 9:18 PM
153	Speed management, traffic control during especially busy times a day on highway 56 Better lighting along highway 56 Traffic light at intersection 1600 N and Lund Highway	12/5/2024 9:16 PM
154	See above, Alternate routes to get from one end of town to the other That does not go through residential area	12/5/2024 9:11 PM
155	Police presence on all roadways, especially main Street. Something done with the South interchange. Left turns lights that always work on main Street.	12/5/2024 8:06 PM
156	Street lights would be nice, good sidewalks too. 300 west is well traveled and people often speed along that residential street. Maybe some speed bumps would be beneficial	12/5/2024 7:49 PM
157	Having hidden patrol cars	12/5/2024 7:31 PM
158	Cedar Main St through downtown, it would be really better to have an ALTERNATE route mother-south through town that didn't have as many intersections/driveways so that cars could travel N-S but people on foot/bike/wheel chair could safely move through downtown (they're the	12/5/2024 7:08 PM

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ones going to local businesses anyway). Turn lanes for E/W bound traffic at the Cross Hollow-Royal Hunt Dr intersection need to have overhead signs. The paint wears off quickly and there is often confusion about what you can do from which lane. There needs to be sidewalks and bike lanes in many more places (e.g. Hwy 56, Westview, Lund Hwy) so that people can use active transport safely

159	At busy 4 way stops I feel unsafe crossing at times. Maybe a pedestrian sign underneath the stop sign to keep people aware	12/5/2024 6:43 PM
160	Better bicycle paths and lanes, better sidewalks so pedestrians don't trip and so they are accessible for those with disabilities	12/5/2024 6:38 PM
161	Need traffic lanes to be painted...very hard to see in rain or darkness Better speed management and red light running	12/5/2024 6:26 PM
162	Need traffic lanes to be painted...very hard to see in rain or darkness Better speed management and red light running	12/5/2024 6:26 PM
163	More speed limit signs on Main street. I can never figure out how fast I'm supposed to go	12/5/2024 6:24 PM
164	A redesign of the interchange there is too wide of concrete in the middle. If that was decreased the turn lane at the ends could extend further and ease some of the backed up traffic. Also the inter section of 1100 west and 600 south gets very backed up also and it sometimes backs up all the way over the bridge and to the next intersection. This blocks any entrance and exit of 1175 west. And can even block traffic exiting sage drive.	12/5/2024 6:18 PM
165	Bicycle and pedestrian facilities. More police presence targeting aggressive and distracted drivers. Uber/Lyft More public transportation options.	12/5/2024 6:16 PM
166	The light by Smith's needs better timing for East/West travelers. Pedestrians barely have enough time to cross the road, and drivers end up running a red light so they don't get stuck at the light a second time. People visiting the baseball fields by Lin's often park in the road on the north side (instead of in the provided parking lot), and it makes driving on that road feel very unsafe. It's too narrow, and pedestrians walk into the road without looking (often times it's children so drivers have to be extremely cautious), and it's putting them in danger. There should be no baseball parking allowed on the street. People who live on Highland and the nearby streets are most affected by this issue.	12/5/2024 5:51 PM
167	I want to see more speed limit signs and more sufficient lighting.	12/5/2024 5:40 PM
168	Better roads and no potholes and people not being on phones and better lighting on streets	12/5/2024 5:36 PM
169	Longer left hand greens before blinking yellow. People run those lights a lot. Left turn on the frontage road to turn toward Home Depot in that big intersection needs to be longer. Sometimes only one or two trucks gets through. So people run it.	12/5/2024 5:35 PM
170	Improvement in amount of pedestrian crossings and adequate streets lighting through out the county	12/5/2024 5:31 PM
171	More lighting, reflective street lines, and speed limits updated on car navigation feeds	12/5/2024 5:29 PM
172	4200 (Buena Vista) off of 56 is a hard neighborhood to exit now that there's so much more traffic from the west. Unlike Alta Vista we have no other way to get out of the neighborhood	12/5/2024 5:24 PM
173	Lighting	12/5/2024 5:14 PM
174	A side walk on the north side 1150west center street	12/5/2024 5:03 PM
175	Speed management, fix potholes and cracked side walls, more lights in dark alleys	12/5/2024 4:33 PM
176	improved roads, improved pedestrian and bicycle facilities,	12/5/2024 4:31 PM
177	Laws are made, and signals have been placed but there are no law enforcement officials to make laws respected	12/5/2024 4:28 PM
178	Better lighting would make it safer for drivers to see pedestrians. Flashing lights at the school zones as students are crossing the street. No left turns and/or a median by the entrance/exit for Del Taco, Panda (businesses on that corner) and no left turns and/or median from those leaving Starbucks, Cafe Rio	12/5/2024 4:26 PM
179	The city installed more stoplights with left-turn lights, but then doesn't use them on a regular	12/5/2024 4:22 PM

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basis. We should be utilizing the left turn light and NOT the flashing yellow, including when the left-turn light is green and then turns flashing yellow. We have too many drivers in this city who feel entitled to run a red left-turn light because the car in front of them had to heed right-of-way during a flashing yellow. I've seen up to three cars at a time run the red light because of this. We need to give those turning left consistent and longer right-of-way. We also need consistent traffic light patterns. Drivers get confused when the traffic light pattern changes every few minutes, and in some cases from cycle to cycle. For example, the Main St/Fiddlers Canyon light changes its pattern constantly. Mornings between 7:30-8am are notoriously inconsistent. Cars needing to turn south onto Main St from Fiddlers will get backed up almost half a block at times because the light is only letting two cars through before it turns yellow. Turning left onto I 15 South from North Main has a similar problem.

180	Mainly feeder road markings and the stoplight listed previously. Westview and Lund onto Hwy. 56 also has two/three feeder lanes, and people don't frequently know which lane to be in to go straight, turn, etc., and they tend to drift into both of the two lanes on Hwy. 56 (both the far right and the more center, correct lane) when turning left.	12/5/2024 4:22 PM
181	Making pedestrian crossing around main street more obvious to the drivers.	12/5/2024 4:14 PM
182	Increase lighting at crosswalks. Also when turning left off main while heading north, increase the green turn signal time.	12/5/2024 4:13 PM
183	2300 w north of midvalley road doesn't have any markings on it. Painting the double yellow line on it at least would help as sometimes it is hard to see the edge of the road, and having some marking will help.	12/5/2024 4:11 PM
184	Traffic management	12/5/2024 4:09 PM
185	Slow the speed of main street, decrease the number of car lanes to make way for safe infrastructure for pedestrians and cyclists. Make intersections narrower so pedestrians do not have to cross so far while encouraging cars to slow down when turning. Add bike lanes that are protected from car traffic. Add speed bumps over crosswalks by SUU.	12/5/2024 4:08 PM
186	More bike lanes everywhere. The ones around SUU are great, but they need to be extended away from campus instead of just ending. Reducing the speed limit on Main Street should be considered. With the increased development that has happened both north and south of downtown, 45 mph is probably too high. Traffic flow through the light in the Providence Center area is rough. The left hand turn signal to turn south onto Providence Center Drive is too short, which backs traffic up and makes the entire area unsafe for motorists, pedestrians, and bikers. I don't understand why we even have left hand turn signals at the major intersections since most of them aren't programmed to turn green. With the increase in traffic through town, having those turn signals actually work would probably help with traffic flow and reduce the number of cars that continue to turn after the light has turned red.	12/5/2024 4:07 PM
187	reflectors on paint lines for main high-traffic areas such as Main Street, Freedom Blvd, and University Blvd.	12/5/2024 4:04 PM
188	Signage, pavement markings, sidewalks, etc.	12/5/2024 3:59 PM
189	More bike lanes. Bike lanes separated from main traffic by a curb. Grass medians or other features in the road have been shown to cause people to drive slower. Signs reminding drivers that cross traffic does not have a stop sign.	12/5/2024 3:59 PM
190	Another traffic light on South Main Street	12/5/2024 3:56 PM
191	Traffic calming, especially bump outs at major intersections with pedestrian crossings, plus speed limit enforcement, and parking enforcement. Lower speed limits on south Main Street would likely help with dangerous left turns as more and more businesses get added.	12/5/2024 3:52 PM
192	Honestly, adding enough street lighting throughout Cedar would be beneficial. Specifically within the residential areas.	12/5/2024 3:47 PM
193	Create right turn lanes, I have almost been hit 5 times this week because someone used the shoulder of the road to turn right, while I was in the correct lane	12/5/2024 3:46 PM
194	More/longer solid green turn lights every time. Repaint turn only lanes (especially from Home Depot turning towards the freeway).	12/5/2024 3:46 PM
195	Turn lane pavement markings are usually worn or nonexistent. People tend to create a right	12/5/2024 3:44 PM

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turn lane even if it is not there.

196	South Main Street and Highway 56 both transition from a fast speed to a slower speed. Do we need another stop light? Slower speed limits? It is hard to navigate when half the traffic coming toward you is speeding up and the other half is (or should be) slowing down. 200 North in front of Taco Bell needs a cement partition like the one in front of Burger King. Many people use the turning lane as the "Taco Bell turning lane". This disrupts the safe flow of traffic in that area who want to turn on to 800 West.	12/5/2024 3:43 PM
197	Safety surrounding SUU and streets that lead to entrances to SUU. They are not pedestrian friendly at all. I've seen students slip and off trip over cracked or missing sidewalks.	12/5/2024 3:43 PM
198	More traffic enforcement. It rare to see a car pulled over in Iron County. People have no regard for traffic laws here because they know there is little chance of getting stopped by the police.	12/5/2024 3:43 PM
199	There is a crosswalk East of SUU's museum that needs awareness lighting. Block curb parking back (red curb) from 200 N. to Main St. in Parowan so turns can be made safely onto Main when school is in session. The view to pull out of the high school's (Parowan) South parking lot is obstructed by street parking also. High-school students frequently pull out in front of oncoming traffic.	12/5/2024 3:42 PM
200	More Street lighting throughout town would be beneficial. A stop light or round about or something by the Royal Hunte Drive Location I mentioned.	12/5/2024 3:41 PM
201	The interstate, all of it, especially between Cedar City and Parowan. More law enforcement. I often see people going 90 or 100 down the interstate. Also the tailgating is horrid on the interstate.	12/5/2024 3:40 PM
202	We need better patrol of people running red lights. Everyone is so impatient, the amount of times there are near misses in intersections on Main Street and 200 N are really concerning. Also, we need better traffic flow around Coal Creek/Main Street intersection, left hand turns out of business there shouldn't not be allowed. Also, we need no parking zones at intersections that turn onto busy roads, people park so close to the corner it's impossible to see oncoming traffic. Especially turning onto Main Street at the no light/no stop sign intersections on North Main and turning onto Coal Creek road from 300 and 400 W.	12/5/2024 3:39 PM
203	speed limit enforcement on main street	12/5/2024 3:39 PM
204	Heavy parking on neighborhood streets that causes blind spots for drivers.	12/5/2024 3:39 PM
205	More lighting in neighborhoods, especially during winter when it gets dark and sidewalks are icy. Also the cross walks in front of Cedar Hall have torn up sidewalks either way.	12/5/2024 3:38 PM
206	Improve view onto roads when turning without a 4 way stop. This could mean having to limit parking on those roads to allow for better visibility. Increased lighting on all sidewalks especially in areas with (student) housing. More regular policing of driving behaviors, including distracted driving and drunk driving.	12/5/2024 3:38 PM
207	The more bicycle lanes in Cedar City the better, with more visible markings. Also, adding cross walks near campus. In particular, a cross walk at the corner of 200S and 700W would be helpful. A lot of people cross the road there, including high school students on their way to Success Academy.	12/5/2024 3:37 PM
208	Pedestrian access along Midvalley road. There is very little pedestrian access along roads in the north part of the county along busy roads	12/5/2024 3:37 PM
209	I'd suggest more signage and enforcement for distracted driving near the busy roadways. As well as better traffic control methods for popular highway entrances, particularly the one near Walmart.	12/5/2024 3:37 PM
210	More lighting in neighborhoods	12/5/2024 3:36 PM
211	bike lanes for the entire town including the Providence area	12/5/2024 3:35 PM
212	There are always election signs and other advertisements at the intersection of College Way and 200 N that make turning right harder, especially when other cars creep forward.	12/5/2024 3:34 PM
213	Improve/add more pavement markings and signs.	12/5/2024 3:34 PM
214	We need reflective lines dividing roads everywhere. It is so hard to see the lanes when it is	12/5/2024 3:34 PM

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	dark/snowing/raining. Streetlights all around town don't properly illuminate streets.	
215	Lighting around SUU campus and easier to view stop signs	12/5/2024 3:33 PM
216	More pedestrian crossings Better lighting in areas where deer are present	12/5/2024 3:31 PM
217	not sure	12/5/2024 3:30 PM
218	Parowan needs help. No traffic lights. No cross walk lights.	12/5/2024 3:04 PM
219	Intersection of center and main in Parowan needs a traffic light	12/5/2024 2:32 PM
220	Parowan needs help. No traffic lights. No cross walk lights.	12/5/2024 1:19 PM
221	Bicycle and pedestrian facilities, lighting	12/5/2024 11:47 AM
222	More side walk throughout all of parowan and re pave old 91 from summit to cedar city.	12/5/2024 11:18 AM
223	MORE designated livestock trail signs. !!!!	12/5/2024 10:20 AM
224	There's just so many people on this road not enough lighting at intersections hard to see from 1600 W. onto Lund Highway not enough stoplight time at Lund Highway and 56 Also, it's hard to come out on iron Springs	12/4/2024 9:05 PM
225	Most of Enoch needs new lines painted on the roads, street lights at the roundabout wouldn't be a bad idea either.	12/4/2024 12:33 AM
226	Turn lanes	12/3/2024 6:50 AM
227	The entrance at JoAnns. All of the school zones need lights, or other ways to get in and out. 200 N is so hard to turn left onto. More stop lights.	12/2/2024 9:26 PM
228	Add access to Providence center drive from Old Highway 91 near Greenslake Dr (Old overpass). Also add an additional turning lanes from Royal Hunt Dr onto Cross Hollow.	12/2/2024 9:20 PM
229	ATV / UTV Path	12/1/2024 7:16 PM
230	Review need for traffic signals an settings, better street markings, and increased enforcement.	11/30/2024 5:28 PM
231	3900 west needs lines painted as well as the road being the same width. Also adequate speed signage. Same issue with Iron springs road and lund highway. Mentioned above, knoll street in Cedar city. I believe center line striping on Right hand canyon from SR14 to the end of the pavement Speed signs showing your speed from Vandenburg eastbound on old 91. The same on the other side of the underpass coming from kannaraville going west under the underpass. It is a 25 speed limit with a lot of traffic going both directions and no one goes that slow.	11/27/2024 10:40 AM
232	Speed limit lowered, improved lighting, speed management.	11/26/2024 8:56 AM
233	speed management	11/26/2024 7:40 AM
234	Paving and maintaining county roads where taxes are paid	11/25/2024 2:10 PM
235	Three way stop off exit 51 south bound. Speed bumps in town of kanarraville	11/24/2024 6:29 AM
236	Havnt seen center lines or outside border markers painted on the road in some time. Hwy 91	11/23/2024 4:53 PM
237	No parking areas, speed management, cross walks, signage	11/22/2024 11:25 AM
238	Additional round-a-bouts at heavily congested intersections in the county	11/22/2024 10:19 AM
239	Pedestrian facility or air walk. Pedestrian lights at the second crosswalk near the football field.	11/22/2024 9:51 AM
240	Dotted white line at right turn intersection alloying drivers to turn right next to curb most states it's illegal to turn right over a solid white line. Slow Main Street speed down to 25 mph from I15 to I15 Dedicated bike lane on Main Street from I15 on the south to midvalley rd on the north	11/21/2024 9:45 PM
241	Improvement across town with a shoulder to turn corners in. Southern freeway exit needs a complete redo.	11/21/2024 8:17 PM
242	Hwy 56 More speed limit signs on minersville hwy The frontage road between Enoch and Summit might as well be dirt!	11/21/2024 4:11 PM
243	Potholes on main St. in Cedar. Potholes at entrance and exit to Lins and Walmart	11/21/2024 12:05 PM

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244	Bike paths--or at least good shoulders on the road. There's no safe way to get from Enoch to Cedar on a bike. Also, HWY 91 has no lines on the sides. It's scary in the dark and winter.	11/21/2024 11:19 AM
245	There's just so many people on this road not enough lighting at intersections hard to see from 1600 W. onto Lund Highway not enough stoplight time at Lund Highway and 56 Also, it's hard to come out on iron Springs	11/21/2024 11:13 AM
246	I would like to see the roundabout taken out of Enoch, and replaced with a stop light, the roundabout was a very stupid idea in the first place and complicates traffic flow at that intersection. With the new businesses being put in out there, it is only going to get worse as more traffic increases on Minersville Hwy, and Midvalley Road.	11/21/2024 11:06 AM
247	Police bike patrols, abolish ATV use in town (most are illegally operated by unlicensed underaged uninsured and unregistered motorists	11/21/2024 10:17 AM
248	speed management I-15	11/21/2024 9:56 AM
249	More uhp and city police	11/21/2024 9:54 AM
250	Same as above	11/21/2024 9:52 AM
251	Pedestrian crossing, speed management	11/21/2024 9:49 AM
252	Improve plowing, salting, or other winter methods across all of town. Management of ice!	11/21/2024 9:45 AM
253	Lower speed past the Y on 56, it goes to 65 but there is a left turn right there. Lower speeds and more patrols on 5700 W.	11/21/2024 9:41 AM
254	More bike lanes	11/21/2024 9:38 AM
255	More pedestrian friendly facilities	11/21/2024 9:29 AM
256	1) Speed management 2) Establish a right turn lane going E on Hwy 56 @ Cross Hollows light	11/21/2024 9:26 AM
257	Pedestrian crosswalk at Park on 100 E by Elks Lighted Stop sign at Canyon Park West. Easier and safer travel from East Cedar to West	11/21/2024 9:22 AM
258	Bigger speed limit signs!!! Mayne a round about on campus	11/21/2024 9:15 AM
259	Lighting in more rural areas and more street signs	11/21/2024 9:05 AM
260	Hwy 56 sidewalk / lack of bike lane Airport road sidewalk / lack of bike lane	11/21/2024 8:53 AM
261	No parking zones close to the street going through the underpass at the CVHS/CVMS practice field	11/21/2024 8:50 AM
262	Main St. & 200, more green left turn arrow, same at intersection by Walmart, and too much building and congestion in that Walmart area.	11/21/2024 8:19 AM
263	Lights programed to allow more flow from through consecutive lights. Often times after the current light you are at turns green there will be another light just a block in front of you that has now turned red and so you have to stop again. Stop go stop go stop just let it flow geez. Mainly down main street and down 200 near Maverik, Ramada inn and Wendy's.	11/21/2024 8:18 AM
264	Speeding seems to be an issue on Northfield Rd.	11/21/2024 7:58 AM
265	Reduced speed, enforcement	11/20/2024 6:03 PM
266	lighting, parking on roadsides	11/20/2024 6:02 PM
267	Slower speeds, increased traffic lights specifically to left turns, more speed traps + enforcement	11/20/2024 5:57 PM
268	more bike paths, more crosswalks	11/20/2024 5:55 PM
269	Improve Signs, Pavement markings	11/20/2024 5:52 PM
270	Pavement markings	11/20/2024 5:51 PM
271	Fix sidewalks, Put a stop sign instead of a yield by baseball fields & Highland	11/20/2024 5:49 PM
272	Please more enforcement!	11/20/2024 5:46 PM

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273	Improve signs	11/20/2024 5:44 PM
274	People don't know how to use the turning lane	11/20/2024 5:42 PM
275	Longer green lights around railroads to allow semis enough time to turn, driver education.	11/20/2024 5:40 PM
276	I've noticed a lot of signs throughout the county that are faded and leaning.	11/20/2024 5:12 PM
277	Pedestrian crossings in school zone-make the cross lines bigger and more of them.	11/20/2024 1:05 PM
278	The signs could always be improved to meet MUTCD standards. I've noticed lots of bullet holes and fading signs throughout the county.	11/20/2024 1:00 PM
279	Bicycle paths in Enoch	11/20/2024 12:55 PM
280	200 S & Main in Parowan, intersection needs a stop light. 200 S, especially East of Main St. has people speeding and running stop signs all of the time. So, speed management would be huge.	11/20/2024 12:45 PM
281	Please improve the pot holes and the sewer main holes	11/20/2024 12:25 PM
282	Active transportation lanes on Hwy 91. Improved roadway on Hwy 91, improved traffic flow @ hwy 91 & SR 130	11/16/2024 3:31 PM
283	Walmart interchange needs to be fixed. We need another ramp on that side of town to get on and off the freeway. The turn at the lights get congested all the time.	11/15/2024 1:24 PM
284	Speed management.	11/14/2024 2:55 PM
285	Bicycle and pedestrian protected lanes	10/17/2024 8:40 PM
286	Improve enforcement of the laws towards drivers, seek out drivers rolling coal on cyclist, educate everyone that our neighbors are all out on the road and being safe drivers means we all get home safely. In addition make the waking path more comfortable, the deep cracks make it an unpleasant ride on bicycles and also the foot bridges along them have only dirt leading up to them which erodes, making it an abrupt bump. Maybe designate the sheep bridges and animal crossings underneath accessible to cyclist and pedestrians, they're safe and allow more direct access throughout to.	10/17/2024 8:05 PM
287	More no right turning lanes on the North entrance of I-15. Better cycling space whether it be wider or bike lanes from Cedar to Enoch and out to Three Peaks or just West. More bikability on Main Street and more safe ways to cross the street on the South end of Main Street from Smith's to Walmart.	10/17/2024 7:39 PM

Q7 Please share any additional comments, concerns, or suggestions about roadway safety in Iron County.

Answered: 125 Skipped: 249

#	RESPONSES	DATE
1	I very much appreciate the approach to roadway design in the university area and historic, but outside of those two narrow areas, car traffic gets very unsafe.	1/30/2025 1:46 PM
2	None	1/25/2025 4:06 PM
3	More traffic enforcement.	1/25/2025 8:28 AM
4	im a truckdriver and go through your county 2 times a day would love to give a officer a ride along so they could see first hand	1/25/2025 8:26 AM
5	Education in the schools from SRO's to refresh students understanding of bicycle and ATV/scooter/ebike rules of the road and traffic safety laws.	1/25/2025 5:29 AM
6	Comments have been made above.	1/24/2025 5:14 PM
7	As the county grows, we would like to see more police visibility in the area. County	1/24/2025 4:11 PM
8	200 south and main. Stop signs know one stops for	1/24/2025 4:05 PM
9	A light in parowan for people to walk safely	1/24/2025 1:59 PM
10	It would be nice if Parowan had sidewalks, especially in neighborhoods	1/24/2025 1:03 PM
11	Constant speeding running stop signs is drive to drivers not paying attention to pedestrians walking with their small animals or their young kids	1/24/2025 1:01 PM
12	Please get Google maps and Apple Maps to change sending vehicles up the shortcut to Brianhead instead of using the correct way down main to Center to Canyon.	1/24/2025 12:41 PM
13	Redesign the city streets to be more people friendly with wider corners, middle of the road reservations, etc. Research Reader's Digest article about safe street design.	1/19/2025 4:58 PM
14	Please address this ongoing problem before someone gets hurt.	1/18/2025 6:19 AM
15	Clear the dead shrubbery blocking portions of the sidewalk along 200S in Parowan.	1/17/2025 10:36 AM
16	In my experience most people have been great when I'm running or riding my bike on the roads. But there are a couple of places where I don't feel safe because of the quantity of traffic and the speed but I would like to. Especially the North interchange overpass and Minersville highway.	1/14/2025 11:43 PM
17	Please keep Iron county a country/rural setting. Please encourage builders to invest in schools, roadways, walking paths, etc and not to build high density home communities with townhomes and apartments	1/12/2025 1:59 PM
18	I've called the police to try to get speeding on my street reduced. The city put up a speed indicating sign, but it has only been partially effective. Cedar Knolls is not patrolled and about the only residential street that runs from south main to 200 North... more needs to be done.	1/11/2025 2:07 PM
19	As an SUU employee who walks to/from campus everyday, I cannot count the number of times that a driver has narrowly missed running me over. This includes drivers running red lights and/or stop signs, drivers ignoring me as a pedestrian in a crosswalk, and drivers failing to yield right of way. I am honestly surprised that more people aren't hit every year.	1/8/2025 5:11 PM
20	It is dangerous, inconvenient, and environmentally idiotic for my wife and me to have to put the rack on our vehicle and transport our bikes to STG in order to be able to ride in peace and safety. Many of the main arteries in Cedar are very trashy, in large part due to open box pick ups spewing litter at high speeds. I suspect the citizens would be willing to help clean up the trash if there were some public commitment to their safety while cleaning up the roads.	1/8/2025 2:02 PM

Iron County Safety Action Plan Survey

21	Speed	1/7/2025 11:07 AM
22	Cedar City can't keep pushing all of the traffic growth from the new construction going on west of the Airport, on both sides of cross hollow road, the industrial park, west Cedar City So of 56 all onto 56. Cedar is creating a traffic flow issue that eventually will become unsustainable. Additionally, Cedar Coty is forcing almost everyone in the valley to shop on Main Street or in the Walmart complex off of the South interchange. Cedar City planners need to start looking at an alternative shopping center in the western part of the valley.	1/6/2025 5:39 PM
23	As Cedar and Enoch Grow they need to review there plans on how to get people in and out of the city's and the plan need to include walking and biking	1/3/2025 9:07 AM
24	More lights and less 4 way stops.	1/2/2025 7:06 PM
25	No additional safety concerns.	1/2/2025 11:22 AM
26	Cameras	1/2/2025 11:15 AM
27	Cars do not like cyclists on the road and become very aggressive around cyclists. We need to create a separate trail for cyclists and pedestrians for everyone's safety.	12/31/2024 9:55 AM
28	The entrance and exit to Cedar High School are confusing and dangerous. Alao, the flashing stop signs on 600 S. are fantastic! They help me be mindful. Than you for that!	12/31/2024 9:19 AM
29	I just think we need regular reminder training	12/23/2024 11:22 AM
30	Better marked construction areas on roadways	12/23/2024 9:56 AM
31	Drivers are ignoring g speed limits and texting while driving. I don't feel safe on these roads anymore.	12/20/2024 4:10 PM
32	Drivers need to more aware of pedestrians all around town.	12/19/2024 8:44 PM
33	Thank you for caring!	12/19/2024 4:40 PM
34	The traffic laws need to be enforced. Police need to pull people over and give hefty tickets. Enforce expired tags, red light running etc.	12/19/2024 8:03 AM
35	We need bike lanes on Hwy 91 and Sr 130.	12/18/2024 12:37 PM
36	Running red lights- it happens daily in this county.	12/18/2024 7:22 AM
37	Bike, scooter, etc. users need to follow correct traffic patterns!!!! They need to get off sidewalks, bike WITH traffic, not against, and follow traffic signs like a vehicle! It's hard to be a responsible driver when you can't trust bike traffic to follow the rules.	12/16/2024 2:46 PM
38	People in General are in too much of a hurry. Speeding, Distracted Driving, heavy traffic are all factors for issues. I drive a Lot.. Impeding traffic is one thing I see most. Distracted Driving is next. Then you have those that should give more time to get somewhere. Had one on I-15 last night. I was passing a car and a Ford truck came up on rear bumper and turned on off road lights on me.. If Anything would have happened to my car or even tapped on my brakes, I would not be entering this information. Aggressive Driving, Definitely !!	12/15/2024 8:11 AM
39	Make texting while driving just as much of a felony as drunk driving.	12/11/2024 10:00 AM
40	Drivers often ignore pedestrians in crosswalks with the walk signs illuminated when they are making a right turn on red or making an unprotected left turn.	12/9/2024 8:06 PM
41	I can't believe that you are going to let them build a Maverik at the corner of Main St. and 200 North. This is already a very dangerous intersection and the placement of this business at this intersection is going to exponentially compound the problem.	12/9/2024 12:53 PM
42	It is way better than LA.	12/9/2024 10:03 AM
43	On the subject of public transit - we are already developing a trail system that goes entirely around town. Imagine if we had the same for public transit. Even just one line would intensely improve traffic and lifestyle in Cedar. We have the space for it now, but only barely. As the city continues to grow, we may lose that space and it will make the infrastructure much more difficult and expensive to implement. Now is the time to make a plan, not when it is too late. Or we can wait for the flying cars from Back to the Future.....	12/9/2024 9:28 AM

Iron County Safety Action Plan Survey

44	Overall I feel like the Roads Department does an excellent job maintaining the roads and providing safe pathways. I appreciate the chance to suggest improvements.	12/9/2024 7:35 AM
45	Thanks for doing this.	12/8/2024 4:30 PM
46	When people are biking or riding a scooter or exercising in the dark, it is very difficult to see them unless they have a light or a lot of reflective clothing	12/8/2024 6:30 AM
47	At the bottom of Interstate Drive there is a new stop sign to accommodate the new duplexes in that area. Would a yield sign suffice here?	12/6/2024 9:03 PM
48	SO many pedestrians have been hit recently. I know of at least 6 separate, severe instances this past month alone. Makes me afraid to drive AND walk.	12/6/2024 1:57 PM
49	Please better enforce people not yielding the right of way in busy intersections. Especially those that speed through at the last second of a yellow or "yield" light when they should stop.	12/6/2024 1:18 PM
50	I like to drive and I am an aware driver who can adapt. This is a risky region to drive in and I am so glad you are requesting feedback! Thank you for your work and efforts to increase traffic safety and efficiency in Cedar City!	12/6/2024 12:39 PM
51	too many drivers use the turn lane as a cruise and merge lane - they turn onto main from another street (Canyon Commercial Ave and 1600 north are the worst) and then cruise in the turn lane until a spot opens up to merge	12/6/2024 12:38 PM
52	I encourage you to have more community events in Parowan. We are the county seat but often forgotten or overlooked and involving families and business owners in these decisions would be beneficial for all.	12/6/2024 11:10 AM
53	Less stop signs.	12/6/2024 9:48 AM
54	Making Cedar more pedestrian and bike friendly could help decrease traffic. Lots of people live close to the places they need to go and might choose to bike or walk if they felt safe doing so. (It would also be super helpful to have more bike racks so people could lock up their bikes).	12/6/2024 9:19 AM
55	Some of the sign posted speed limits are very high and drivers still exceed them excessively. for example the I-15 is 80 miles an hour, but it's common to see vehicles going in excess of 90 miles an hour.	12/6/2024 9:12 AM
56	people park their big trucks on roads and you can't see when turning out into traffic.	12/6/2024 9:00 AM
57	I do appreciate our plows diligence and efficiency in clearing our roadways.	12/6/2024 8:41 AM
58	I doubt that our local government can do much except advocate at the state level, but tinted windows are very dangerous for cyclists and pedestrians who cannot make eye contact with drivers to ensure they are seen and are safe to cross roads. Tinted windows should be banned from the front windows of all vehicles in Utah.	12/6/2024 8:07 AM
59	Good lord, see above. If I haven't made myself clear, then you are not listening!	12/6/2024 7:50 AM
60	The lack of planning by this community is not acceptable. All the new developments being approved have no requirements to create a community or connections to shopping and other developments. With all the excellent "Strong Town" models that exist, the planners should be following best practices. The Strong Town people even came to Cedar City (and were paid to do so) and gave a clear plan of action that no one seemed to care about. We need a way to hold our planning commission accountable for new developments. Also, rezoning isn't protecting people who live in a rural area and don't want a development of townhomes in their backyard. I don't feel like residents have any say in how developments and rezoning is approved. I've lived here for 35 years and feel like the greed and lack of vision is at an all-time high.	12/6/2024 7:24 AM
61	There is so many stop signs. And so many roads that could use some stop signs throughout cedar.	12/6/2024 12:11 AM
62	With all of the construction and growth happening in Iron County, most of the main streets in the county were not built to handle the additional traffic we are experiencing. It appears it will only get worse. Highway 56 should be a 6 lane highway, with turning lanes while turning right. at all intersections. Traffic control is needed between 7:30a to at least 9a, at the lunch hour and between 4:30p and 6p. This may help to curtail the number of cars running red lights, speeding and aggressive driving.	12/5/2024 9:16 PM

Iron County Safety Action Plan Survey

63	Better planing	12/5/2024 8:06 PM
64	The lights are dangerous to cross at. The light at the corner of Lin's and the library is particularly dangerous. Cars don't have enough time to turn left, and don't pay attention to pedestrians crossing. I've almost gotten hit at least 6 times when I had the right of way	12/5/2024 7:49 PM
65	The country should *build infrastructure* before allowing housing development. A good plan for growth will include traffic needs and those needs should be in place BEFORE development happens.	12/5/2024 7:08 PM
66	Require driving tests for older (over 70) drivers on license renewal. Require driving test &/or safe driving classes for anyone with 2 or more driving infractions in one year.	12/5/2024 6:26 PM
67	Require driving tests for older (over 70) drivers on license renewal. Require driving test &/or safe driving classes for anyone with 2 or more driving infractions in one year.	12/5/2024 6:26 PM
68	Overall, Iron County is great- especially thanks to all of the snowplow folks!! Really appreciate everything you do! Thank you!!	12/5/2024 6:16 PM
69	None.	12/5/2024 5:40 PM
70	I'd like to see frontage roads in any new commercial developments along Main or 56	12/5/2024 5:39 PM
71	N/A	12/5/2024 5:36 PM
72	None	12/5/2024 5:35 PM
73	The turn lanes are hard to use safely due to blocked view, and little room to drive especially with cyclist interference.	12/5/2024 4:33 PM
74	maybe start issuing tickets to any "wheeled" or "pedestrian" not obeying the law	12/5/2024 4:28 PM
75	A lot of our roads are really rough and need to be repaired. Make sure stop signs are readable in all of Iron County. For example the one on 600 North and Main Street in Parowan doesn't even look like a stop sign (other than the shape) because it is so faded. There are others that one just came to mind as I was recently on that street.	12/5/2024 4:26 PM
76	The police department is really losing out on a cash crop by not stationing officers at these signals and ticketing those who are running lights. It's widely known the corner of 200 N and Main St is notorious for accidents due to the issues I've mentioned. Additionally, I'm surprised by how many blind corners I deal with in Cedar. Even when the view should be clear, someone has put up a sign or has parked a vehicle near the corner making it difficult to see oncoming traffic. I've seen drivers choose to park in the street even when there is a parking lot immediately available (eg. Spirit Fitness on N Main). All of these seemingly harmless things contribute to visibility issues.	12/5/2024 4:22 PM
77	I appreciate you asking. I wish you good luck. Thanks.	12/5/2024 4:22 PM
78	I think the roadways are fairly safe here. I am more worried about the drivers.	12/5/2024 4:14 PM
79	The whole "downtown" cedar city area is getting quite busy. would be nice to work out an additional driving lane. Maybe even one that must turn right at each light would help.	12/5/2024 4:11 PM
80	Adding pedestrian friendly infrastructure helps encourage people to use it instead of driving everywhere, decreasing traffic and making cedar an overall better and safer place. Thank you for taking the time to improve Iron County!	12/5/2024 4:08 PM
81	These efforts should probably include an education campaign and increased enforcement of existing laws. Too many people in this town don't give a damn about anyone else's safety, especially that of pedestrians and cyclists. That needs to change.	12/5/2024 4:07 PM
82	I've recently been made aware that UTA has the authority for this but I want to see our more high-risk crossing areas with mural art (paint) because studies show it decreases conflict between drivers and pedestrians. Including helping pedestrians feel safer when crossing. there seems to be a connection to drivers slowing down more when there's more art present on the crosswalk.	12/5/2024 4:04 PM
83	I think the biggest issue with road safety is distracted and aggressive drivers, and I think it would do a lot if these behaviors were punished more.	12/5/2024 3:59 PM
84	I am also concerned about aggressive driving on the back roads, particularly intentional	12/5/2024 3:52 PM

Iron County Safety Action Plan Survey

aggression towards pedestrians and bicyclists. Some sound and pollution ordinances for mufflers would be great.

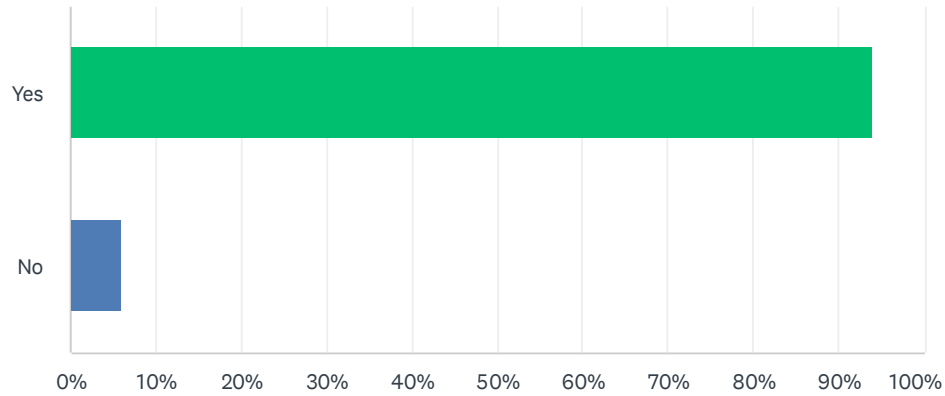
85	Also, the interchange by the south freeway exit (near Walmart), is a bit of a mess.	12/5/2024 3:47 PM
86	lights for more left turns, it's getting harder and harder to make left turns on "warning" lights	12/5/2024 3:46 PM
87	I feel that law enforcement breaks the driving laws more than they protect/enforce turning laws, etc.	12/5/2024 3:46 PM
88	Is it possible to disable crossing lights near SUU during non-peak hours or teach our university students how to safely navigate crossing the street by themselves? Sometimes it takes longer for the light to stop traffic than it would if the individual would merely wait for oncoming traffic to pass.	12/5/2024 3:43 PM
89	Rural roads need infrastructure for the growth of Cedar City	12/5/2024 3:43 PM
90	The interstate needs way more enforcement, for even going like 8 over. If you are going 10 over, you should certainly be getting pulled over.	12/5/2024 3:40 PM
91	Restrict cyclists on Hwy 14 and other busy, narrow, rural roads.	12/5/2024 3:39 PM
92	It may be important to tend to the elderly also and make sure they are safe in their homes.	12/5/2024 3:36 PM
93	There is a proposal for a round about by SUU, I think a light might be better.	12/5/2024 3:34 PM
94	In general, Cedar City is not very walkable because of poorly maintained sidewalks, inadequate crosswalks, and shitty drivers. It would be great if our taxes went to improving the walkability of more than historic Main Street.	12/5/2024 3:34 PM
95	not sure	12/5/2024 3:30 PM
96	Examination of traffic should be done during winter time when the people from the resort are driving through.	12/5/2024 2:32 PM
97	1st motorist forget there are deer crossing the roads in the dark & many motorist are going to fast for night time when deer are out. 2nd motorist do not respect the livestock hauling equipment or livestock trailing down the road.	12/5/2024 10:20 AM
98	Something needs to be done at iron Springs and Highway 56	12/4/2024 9:05 PM
99	Left turns are almost impossible, due to traffic and blocked views.	12/2/2024 9:26 PM
100	The turning lanes back up way too far on Royal Hunt Dr, and Bentley Blvd. Turning south on Providence center Dr from Cross Hollows is another horrible spot. It backs up Cross Hollows several lights up main street while people wait to turn south.	12/2/2024 9:20 PM
101	As the local population continues to expand, new residents need to be encouraged to embrace to slower pace of life in Iron County.	11/30/2024 5:28 PM
102	I believe any of our major two lane roads in the county would benefit from center lines painted clearly and as often as needed so they can be plainly seen. Any places that have heavy traffic volume would benefit from the signs showing your speed with a speed limit sign . (3900 west, bulldog, iron springs, beryl highway, 2300 west to name a few.)	11/27/2024 10:40 AM
103	I'm growing concerned about the number of sink holes that continue to require mending.	11/26/2024 8:56 AM
104	All the trucks that speed on hwy 91 and kill the 🦌 .	11/24/2024 6:29 AM
105	Iron county is an AMAZING PLACE TO LIVE please get it into the 21st century. THANK YOU!!!!	11/21/2024 9:45 PM
106	Iron county in general is the worst place in Utah for driver and cyclists coexisting. Between the aggressive drivers and the distracted drivers it's a nightmare. I won't let my kids ride their bikes down the road let alone myself riding to work or anything along those lines.	11/21/2024 8:17 PM
107	Stop closing down Main Street in cedar city for events Find a new home for such	11/21/2024 4:11 PM
108	Something needs to be done at iron Springs and Highway 56	11/21/2024 11:13 AM
109	Main street in Cedar City needs to have all the potholes fixed.	11/21/2024 11:06 AM

Iron County Safety Action Plan Survey

110	Cite Wrong Way Parking. It is rampant and illegal. On many occasions I have been confronted by people "surprise" pulling out into traffic - I have no where to go to avoid collision! Sunday Free For All: Illegal ATVS-Underaged, unlicensed, unregistered, uninsured. Virtually no police Unmaintained/Unlicensed cars + trailer (windshields, exhaust, brakes) Motorized vehicles on bike paths	11/21/2024 10:17 AM
111	N/A	11/21/2024 9:56 AM
112	Snow is scary and a lot of college students may be unprepared	11/21/2024 9:45 AM
113	Speed, distracted driving, running lights. Lack of dedicated left turn signals.	11/21/2024 9:41 AM
114	Lines painted brighter on roads between lanes. Views blocked by turns and signs overgrown & weeds & brush. Crosswalks not painted bright enough.	11/21/2024 9:22 AM
115	Make wider R turn lanes and slower speed limits around blind corners, like the one by sherriffs office.	11/21/2024 9:15 AM
116	N/A	11/21/2024 9:05 AM
117	Start enforcing traffic laws. Cedar City wasn't built for this insane growth. Selfish developers, Selfish politicians, Greedy families, out of control University have ruined Cedar.	11/21/2024 8:55 AM
118	I only usually travel through on I-15 and occasionally visit family around Cedar	11/20/2024 5:58 PM
119	Greater driver education on safe rules of the ROA	11/20/2024 5:55 PM
120	Good luck!	11/20/2024 5:52 PM
121	Please more enforcement!	11/20/2024 5:46 PM
122	Thanks!	11/20/2024 5:42 PM
123	I do t know that there is much need for improvement in traffic handling. There needs to be more enforcement of the rules of the road.	11/20/2024 1:00 PM
124	The influx of tourists in Parowan has created issues for locals, especially at the 200 S, Main Street intersection, and then East on 200 S.	11/20/2024 12:45 PM
125	Improve enforcement of the laws towards drivers, seek out drivers rolling coal on cyclist, educate everyone that our neighbors are all out on the road and being safe drivers means we all get home safely. In addition make the waking path more comfortable, the deep cracks make it an unpleasant ride on bicycles and also the foot bridges along them have only dirt leading up to them which erodes, making it an abrupt bump. Maybe designate the sheep bridges and animal crossings underneath accessible to cyclist and pedestrians, they're safe and allow more direct access throughout to. All of them honestly. A lot of drivers don't stop before the stop sign or appropriate spot at a red light which makes blocks my view when trying to turn. This makes it uncomfortable for people at crosswalks, it makes them feel like they're an inconvenience. In addition this makes it dangerous for cyclist on the road. Drivers not stopping at appropriate positions at crosswalks makes it dangerous for cyclist on the road, the vehicle is too far foreword or pops out past the stop sign and makes the cyclist almost hit the car or merge into the lane next to them which will most likely have a vehicle.	10/17/2024 8:05 PM

Q8 Are you a resident of Iron County?

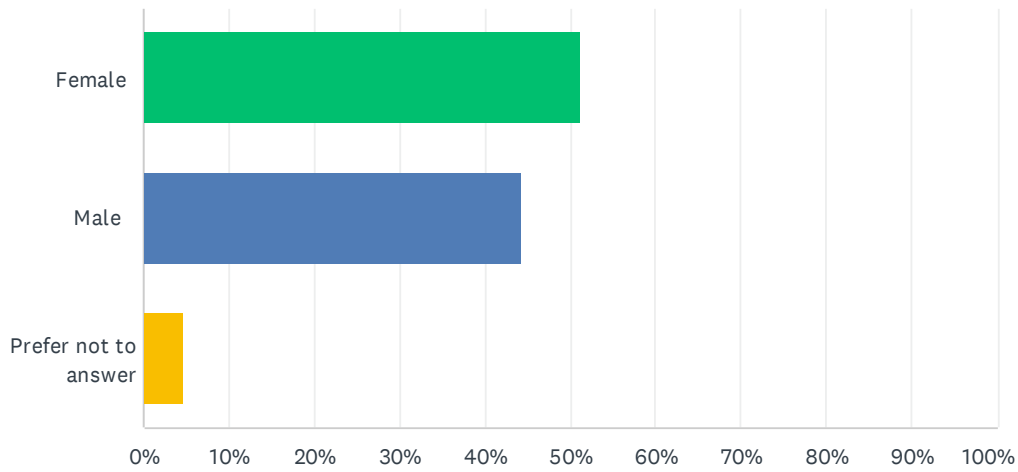
Answered: 371 Skipped: 3



ANSWER CHOICES	RESPONSES	
Yes	94.07%	349
No	5.93%	22
TOTAL		371

Q9 What is your gender?

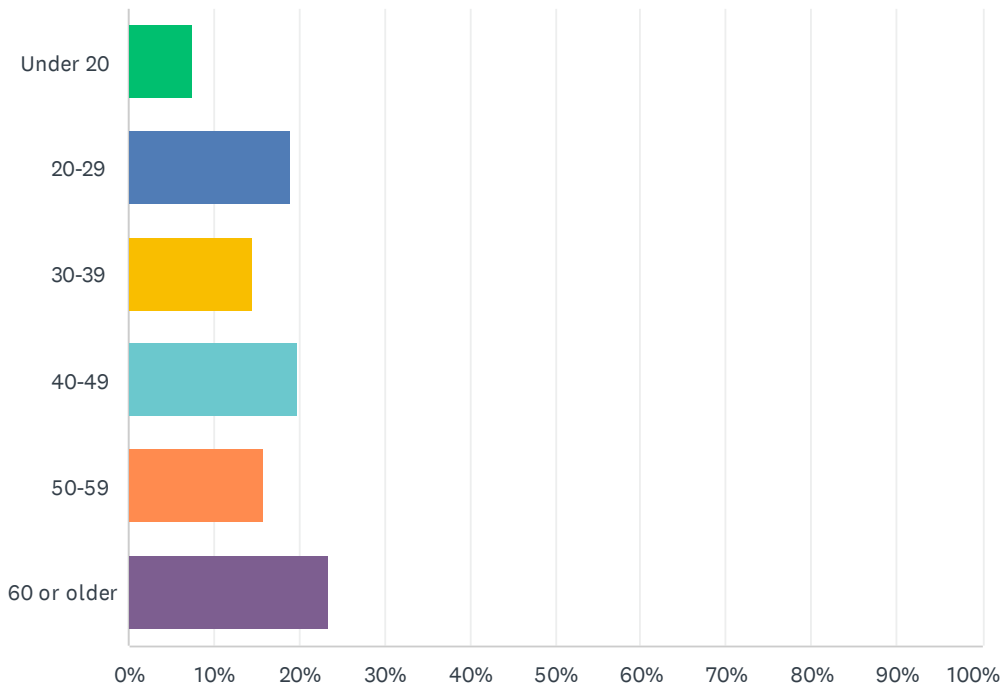
Answered: 370 Skipped: 4



ANSWER CHOICES	RESPONSES	
Female	51.08%	189
Male	44.32%	164
Prefer not to answer	4.59%	17
TOTAL		370

Q10 What is your age range?

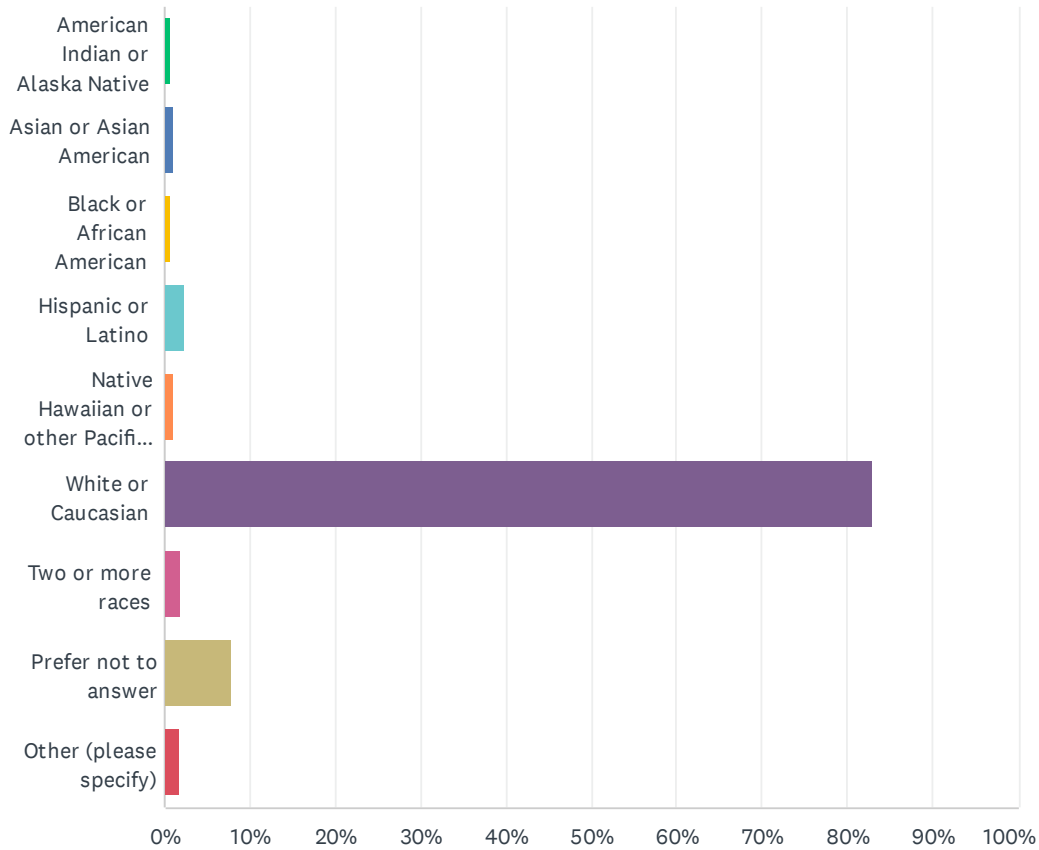
Answered: 370 Skipped: 4



ANSWER CHOICES	RESPONSES	
Under 20	7.57%	28
20-29	18.92%	70
30-39	14.59%	54
40-49	19.73%	73
50-59	15.68%	58
60 or older	23.51%	87
TOTAL		370

Q11 Describe your ethnicity/race.

Answered: 370 Skipped: 4



ANSWER CHOICES		RESPONSES
American Indian or Alaska Native		0.54% 2
Asian or Asian American		1.08% 4
Black or African American		0.54% 2
Hispanic or Latino		2.43% 9
Native Hawaiian or other Pacific Islander		1.08% 4
White or Caucasian		82.97% 307
Two or more races		1.89% 7
Prefer not to answer		7.84% 29
Other (please specify)		1.62% 6
TOTAL		370

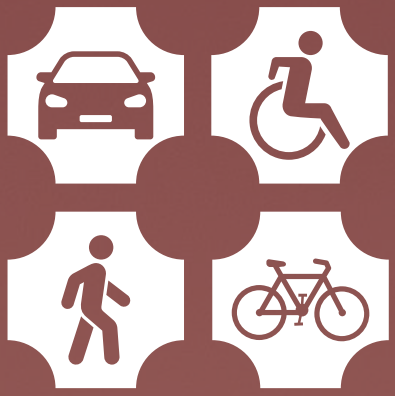
#	OTHER (PLEASE SPECIFY)	DATE
1	American	12/19/2024 8:49 PM

Iron County Safety Action Plan Survey

2	This is irrelevant and you do not need to ask this question	12/19/2024 11:45 AM
3	Mix	12/5/2024 9:11 PM
4	Why does my race matter?	12/5/2024 7:04 PM
5	Smooth Papaya	11/21/2024 9:05 AM
6	Not relevant	10/17/2024 8:05 PM

Appendix F

Advertising Materials



SAFETY ACTION PLAN

FOR ALL IRON COUNTY



WHAT IS A SAFETY ACTION PLAN?

Iron County, in partnership with surrounding communities, is preparing a county-wide transportation Safety Action Plan. The Safety Action Plan will analyze transportation safety needs, identify high-risk locations and factors contributing to crashes, and prioritize strategies and improvements to address them. The goal of the plan is to help reduce traffic fatalities and serious injury crashes throughout Iron County.



WE WANT YOUR FEEDBACK

If you walk, bike, drive, or roll anywhere in Iron County, we would like your input. Your feedback will help identify community needs and areas where safety improvements will enhance the transportation system. How do you typically move around the County? What or where are the issues you encounter? What are some ideas you may have to improve safety?

Please scan the QR Code to view our website and complete a survey.

Visit the project webpage at:

IronCountySafetyPlan.com



----- Forwarded message -----

From: **Tiger Funk via SUUDPS** <suudps@lists.suu.edu>

Date: Thu, Dec 5, 2024 at 3:28 PM

Subject: Improving Safety in Iron County

To: <suudps@lists.suu.edu>

Dear SUU,

Like safety on campus, safety in and around our communities is best enhanced when people share their ideas about how improvements can be made. Iron County has asked us to communicate with everyone on our campus about an effort being made to improve safety in the county.

We encourage you to visit the website by clicking this link (<https://www.ironcountysafetyplan.com/>) or following the QR code on the attached flyer for more information and to provide your input for the study. As you go through the questions, please consider your personal experiences and those of your friends, family, and children.

Thank you for all you do to help keep SUU and Iron County safe!

Warm regards,
Tiger.



Tiger Funk | Vice President of Operations
SOUTHERN UTAH UNIVERSITY

385 S. 1275 W., Cedar City, UT 84720

O (435) 586-7786 | C (435) 590-8451



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FOR ALL IRON COUNTY

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WREATHS

« CONTINUED FROM PAGE 5

and freedom for all.

Cedar High School National Honor Society Students were privileged to serve our community by volunteering for 'Wreaths Across America' honoring veterans and preserving their legacy.

Mayor Greens remarks: The United States of America was founded on the timeless ideals of freedom, justice and equality. Our nation stands as a shining beacon of liberty to the world, and it is only because of the sacrifices of so many that can call this land home. We thank those who have served, and those who gave their lives to keep us free. We shall not forget. We shall remember. We must ensure that future generations never forget that price of freedom, and that they carry this legacy forward. 'God Bless Our Veterans, and God Bless America!'

Scott Phillips, concluded: These 1,378 fresh, live wreaths placed on each Veterans grave symbolize our respect for those who have served and are serving in the armed forces, as well as their families, who make daily sacrifices on our behalf. To the children who attended, we want you to understand that the freedoms you enjoy did not come without a cost. One day, you may be called upon to carry this legacy forward.

A heartfelt thank you to all the sponsors and hundreds of volunteers who have donated their time and resources to make this ceremony possible.

On behalf of the Wreaths Across America Cedar City Board and our local sponsors, the Bald Eagle Chapter of the Daughters of the American Revolution, we wish each of you a safe, peaceful, and blessed holiday season and thank you to everyone who attended and participated.

*Thank you for remembering,
honoring and teaching.*



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Iron County, in partnership with surrounding communities, is preparing a county-wide transportation Safety Action Plan. The Safety Action Plan will analyze transportation safety needs, identify high-risk locations and factors contributing to crashes, and prioritize strategies and improvements to address them. The goal of the plan is to help reduce traffic fatalities and serious injury crashes throughout Iron County.



WE WANT YOUR FEEDBACK

If you walk, bike, drive, or roll anywhere in iron County, we would like your input. Your feedback will help identify community needs and areas where safety improvements will enhance the transportation system. How do you typically move around the County? What or where are the issues you encounter? What are some ideas you may have to improve safety?

Please scan the QR Codes to complete a survey and leave your comments on an interactive map.

Visit the project webpage at:
IronCountySafetyPlan.com



Survey



Website



Do you walk, bike, drive or roll anywhere in Iron County? We want your feedback!

Iron County, in partnership with surrounding communities, is preparing a county-wide safety action plan. The Safety Action Plan will analyze safety needs, identify high-risk locations and factors contributing to crashes, and prioritize strategies to address them.

Visit www.ironcountysafetyplan.com for more information and to share your feedback on roadway safety in Iron County.



WE WANT YOUR FEEDBACK!



APPENDIX C. TECHNICAL MEMORANDUM #3 – POLICY REVIEW AND BEST PRACTICES



March 2025

Safety Action Plan for All Iron County

Technical Memorandum #3 – Policy and Process Changes

Safety Action Plan for All Iron County

Technical Memorandum #3 – Policy and Process Changes

March 2025

Prepared for:



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In Partnership with:



Statutory notice

23 U.S.C. § 407: US Code - Section 407: Discovery and admission as evidence of certain reports and surveys

Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 144 and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

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1. INTRODUCTION

Iron County is preparing a Safety Action Plan (SAP) to develop a holistic, well-defined strategy to reduce roadway fatalities and serious injuries throughout Iron County. The SAP analyzes safety needs, identifies high-risk locations and factors contributing to crashes, and prioritizes strategies to address them.

The SAP development process is based on core elements of the Federal Highway Administration (FHWA) Safe System Approach¹ and recognizes that transportation safety cannot be improved by capital improvements alone. All community operations including planning, design, maintenance, and all users of the transportation system need to prioritize safety and consider meaningful improvements to existing practices, policies, and procedures. The region and communities working together helps create a safe transportation system which includes *Safer People, Safer Vehicles, Safer Speeds, Safer Roads*, and *Post-Crash Care* – the objectives of the Safe System Approach.

A review of local jurisdictions and Iron County’s transportation practices and policies satisfies the Policy and Process Review element of an Action Plan within the FHWA Safe Streets and Roads for All (SS4A) grant program. Requirements for this element of an Action Plan, as noted on previous FHWA Self-Certification Eligibility Worksheets within the SS4A grant program, include:

Are BOTH of the following true?

- The plan development included an assessment of current policies, plans, guidelines, and/or standards to identify opportunities to improve how processes prioritize safety; and
- The plan discusses implementation through the adoption of revised or new policies, guidelines, and/or standards.

Technical Memorandum #3 provides a summary of reviewed plans, policies, and guidelines and related documents, highlights key findings from policy interviews, and includes recommendations to promote and prioritize safety in Iron County.

¹ <https://www.transportation.gov/safe-system-approach>

While these recommendations are intended to serve as a resource for safety improvements, they also support individual communities with a foundation for future SS4A and other program grant applications. Rural Planning Organizations (RPOs) can stimulate a collaborative process to address needs that no single jurisdiction can tackle alone. This memorandum also notes opportunities through which the RPO could lead Iron County in advancing safety in the region.

2. PREVIOUS AND ONGOING PLANS REVIEW

Policies, plans, guidelines, and standards of jurisdictions within the County were reviewed to identify potential opportunities to advance transportation safety and help reduce the frequency of fatal and serious injury crashes. General plans, transportation master plans, active transportation plans, and corridor studies as well as traffic ordinances on the local and County levels were reviewed to evaluate the current state of safety policies and practices. **Table 1** summarizes documents reviewed.

Table 1. Previous or Ongoing Plans Reviewed

Jurisdiction by Geographic Focus Area (GFA)	Plan/Document Name (Year Completed)
Cedar City GFA	
Cedar City	<ul style="list-style-type: none"> • Transportation & Active Transportation Master Plan (2021) • General Plan (2023) • UDOT Access Agreements (ongoing) • Cedar Valley Belt Route Access Plan (2023)
Enoch City GFA	
Enoch City	<ul style="list-style-type: none"> • Transportation & Active Transportation Master Plan (2021) • General Plan (2023) • Transportation Impact Fee Analysis (2022)
East and West Iron County GFAs	
Iron County	<ul style="list-style-type: none"> • Iron County General Plan (1995) • Iron County Transportation Master Plan (2023)
Parowan City	<ul style="list-style-type: none"> • General Plan (2021) • Transportation Master Plan (2024)
Paragonah Town	<ul style="list-style-type: none"> • General Regulations • Traffic Code
Brian Head Town	<ul style="list-style-type: none"> • Town Center Plan (2018) • Commercial Corridor Transportation Study (2022)
Iron County Rural Planning Organization	<ul style="list-style-type: none"> • Regional Transportation Plan (2013) • Access Management Agreement

Jurisdiction by Geographic Focus Area (GFA)	Plan/Document Name (Year Completed)
	<ul style="list-style-type: none"> • Project Priority List • Concept Design Form

2.1. Documents Summary by GFA

The policies, plans, guidelines, and standards reviewed for each GFA are summarized in the following subsections. The summary includes transportation safety themes that were noted across multiple documents and synthesized for GFA-wide findings.

2.1.1. Cedar City GFA

- Established goals to enhance safety for pedestrians, bicyclists, and drivers.
- Emphasize traffic calming on streets serving schools and continuing the existing grid system.
- Recently updated roadway functional classifications and general characteristics.
- Identified preferred alternative alignments and intersection designs for the Cedar Valley Belt Route.
- An access management agreement between Cedar City and UDOT for state-owned roadways.

2.1.2. Enoch City GFA

- Established goals to develop safe and efficient vehicle and active transportation systems.
- Promote safe and alternative forms of transportation.
- Calls for the development of a Safe Routes to School program and non-motorized travel plan.
- Calls for the creation, adoption, and enforcement of an access management plan/ordinance.
- Recently updated roadway functional classifications and general characteristics.

2.1.3. East and West Iron County GFA

- Identified current and future roadway functional classifications.
- Brian Head Town:
 - Emphasizes creating pedestrian-friendly communities and investing in elements that promote active lifestyles.
 - Town's top priorities include creating a safe transportation system with safe interactions between travel modes and equal access to infrastructure.

- Identified needs for access management and traffic calming on SR 143, since it is a commercial corridor for the Town.
- Providing safe and user-friendly OHV infrastructure and improving public transit to alleviate parking and traffic.
- Parowan City:
 - Established a goal to create a comprehensive transportation system for all modes of travel.
 - City ordinance with city-wide road design standards that call for the inclusion of safe sidewalks and maintaining a grid patterned street network.
- Paragonah established a city-wide 30 mph speed limit unless otherwise posted.

2.2. Key Findings

Many jurisdictions in the Iron County SAP study area have similar goals of improving transportation safety. Some jurisdictions already refer to detailed guidelines, such as standard street cross sections with minimum pedestrian environment standards or the inclusion of traffic calming and transit integration. General plans typically focus on goals relating to creating an efficient and safe transportation system, promoting safe pedestrian and bicycle infrastructure, and addressing access management in collaboration with UDOT where applicable. Other transportation master plans and corridor studies focus on addressing safety through roadway classifications, access, and intersection improvements.

The following policies and best practices may be further investigated and recommended for adoption or integration throughout Iron County's communities to improve transportation safety:

- Incorporate **FHWA Proven Safety Countermeasures** into design standards and future projects.
- Collaborate with the Iron County School District to establish **Safe Route to School** programs.
- Explore **traffic calming** strategies or policies in community areas, school zones, and surrounding neighborhoods.
- Develop **speed limit setting** policies or a **speed management plan** to address high vehicle speeds.
- Develop **access management standards or policies** to guide planners and engineers, especially in areas experiencing rapid growth.
- Implement transportation safety **education programs** addressing safety concerns like distracted driving, obeying traffic laws, and pedestrian safety.

2.3. National Best Practices Review

This section identifies some of the national transportation safety policies and manuals that may be used in advancing transportation safety. These resources may be utilized by jurisdictions and the County in advancing transportation safety in the County. A summary of each resource and a link to the document or policy is provided.

- [American Association of State Highway and Transportation Officials \(AASHTO\): A Policy on Geometric Design of Highways and Streets \(2018\)](#) - Provides updated guidelines for highway and street geometric design, introducing a flexible, multimodal, and performance-based approach. This manual incorporates context classifications (rural, suburban, urban, etc.) alongside traditional roadway types to guide design decisions and includes policies on functional classification to define roadways by their role and service to vehicles.
- [Federal Highway Administration: Manual on Uniform Traffic Control Devices for Streets and Highways \(MUTCD\)](#) - Establishes national standards for the design, installation, and maintenance of traffic signs, signals, and pavement markings across the United States. It ensures consistency and uniformity in traffic control devices to promote safety, reduce confusion, and facilitate efficient movement for all road users, including drivers, pedestrians, and cyclists.
- [National Safety Council: Road to Zero: A Plan to Eliminate Roadway Deaths \(2018\)](#) - Aims to eliminate fatal and serious injuries on U.S. roads by 2050 through policy changes, data-driven decisions, public awareness, technology, and collaboration. It references the Third Horizon (2047) Vision, which helps leaders plan for future urban, transportation, and societal changes by identifying opportunities and challenges.
- [Federal Highway Administration: Zero Deaths and Safe System](#) - The Safe System Approach is a policy rooted in “Vision Zero” that aims to prevent deaths and serious injuries by designing road infrastructure that anticipates human mistakes. It is guided by six principles, including shared responsibility, human vulnerability, proactive safety, and the importance of redundancy.

- [Pedestrian and Bicycle Information Center: Safe Routes to School Online Guide](#) - The program aims to enhance the safety, accessibility, and convenience of walking and biking routes to schools through infrastructure improvements and educational campaigns. Key steps in creating the program include gathering input, identifying solutions, planning, securing funding, and ongoing evaluation. Encouraging policy changes is essential for sustaining the program.
- [Federal Highway Administration: Traffic Calming ePrimer](#) - The ePrimer is an online resource that guides communities in implementing traffic calming measures like speed bumps, roundabouts, and road narrowing to improve road safety and quality of life. It offers detailed planning, design, and evaluation information to create safer, more walkable, and livable environments by reducing vehicle speeds and volume.
- [Smart Growth America: Complete Streets](#) - Is a planning and design approach that ensures safe and accessible streets for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. Policies must include 10 key elements, including establishing a vision, prioritizing underserved communities, applying to all projects, allowing limited exceptions, and measuring progress.
- [Federal Highway Administration: Achieving Multimodal Networks: Applying Design Flexibility and Reducing Conflicts \(2016\)](#) - This publication provides guidance for practitioners aiming to develop multimodal transportation networks that are safe, comfortable, and accessible for users of all ages and abilities. It emphasizes the importance of design flexibility and offers strategies to mitigate conflicts between different transportation modes.
- [Federal Highway Administration: Separated Bike Lane Planning and Design Guide \(2015\)](#) - This guide offers planning and design guidance for separated bike lanes, including design options, intersection treatments, and case studies. It serves as a resource for transportation professionals to create safe, effective bike lanes, promoting a more sustainable and equitable transportation system.
- [Federal Highway Administration: Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations](#) - Offers strategies and recommendations to enhance safety for pedestrians at crossings without signals or stop signs. It provides design solutions, best practices, and practical guidance to address common challenges at these locations, aiming to reduce pedestrian crashes and improve overall safety at uncontrolled crossings.

- [American Association of State Highway and Transportation Officials: Guide for the Development of Bicycle Facilities, 4th Edition \(2012\)](#) - This updated edition incorporates extensive research and current best practices in bicycle infrastructure design, covering planning, design, and on/off-road facilities like bike lanes and shared-use paths. It includes an inclusive design approach and updates on pedestrian considerations.
- [American Association of State Highway and Transportation Officials: Guide for the Planning, Design, and Operation of Pedestrian Facilities, 2nd Edition \(2021\)](#) - The purpose of this guide is to provide guidance on the planning, design, and operation of pedestrian facilities along streets and highways. Specifically, the guide focuses on identifying effective measures for accommodating pedestrians on public rights-of-way. This guide also recognizes the profound effect that land use planning and site design have on pedestrian mobility and addresses these topics as well.
- [U.S. Access Board: Americans with Disabilities Act Accessibility Standards](#) - Accessibility standards issued under the Americans with Disabilities Act (ADA) apply to places of public accommodation, commercial facilities, and state and local government facilities in new construction, alterations, and additions. The ADA Standards are based on minimum guidelines set by the Access Board.

2.4. State-Level Policies Review

The following resources include some of the State of Utah-specific best practices that were reviewed and incorporated into the policy and process change recommendations. These resources may also serve as a guide to local jurisdictions or agencies in developing policies that promote transportation safety.

2.4.1. Utah Strategic Highway Safety Plan & Zero Fatalities

The Utah Safety Leadership Executive Committee (USLEC) was formed in 2003 by several Utah agencies to address the increasing number of traffic-related fatalities. The goal of Zero Fatalities is fundamentally based on the belief that even a single loss is one too many. To achieve this, the USLEC identified five key behaviors that contribute to fatalities: drowsy driving, distracted driving, impaired driving, aggressive driving, and not wearing seat belts. The Zero Fatalities goal is integral to the Utah Strategic Highway Safety Plan (SHSP)², and

² <https://www.udot.utah.gov/shsp/fivees.html>

supports the nationwide goal *Towards Zero Deaths*, which sets the vision for no traffic fatalities on U.S. roads.

The Utah SHSP aims to achieve the goal of zero fatalities through the “Five E’s”: **E**ngineering, **E**ducation, **E**nforcement, and **E**mergency response are the foundational principles to improve roadway safety for **E**veryone.

2.4.2. UDOT Vulnerable Road User Safety Assessment (VRU)

This document³ analyzes safety concerns for vulnerable road users (VRUs), which include pedestrians, bicyclists, and other non-motorized roadway travelers. The report identified that since 2020, fatal or serious injury crashes involving a vulnerable road user have increased. High-risk areas were determined to be primarily along arterial roads where mixed traffic increases the likelihood of a crash occurring. VRU-involved crashes have more frequently occurred during evening hours in urban areas, with pedestrians being the most affected group.

2.4.3. UDOT Administrative Rule R930-6

UDOT Administrative Rule R930-6⁴ details access management guidelines for different categories of state-owned and maintained roadways. The access management guidelines include spacing standards, turn lane standards, and design requirements.

In addition, R930-6 establishes access categories to provide specific guidance for different roadway contexts. Access categories consider traffic volumes, speed limits, and land use context (urban/rural) to provide appropriate design standards. R930-6 also includes access permit application procedures and requirements that UDOT uses when developments are proposed on or that may affect state roadways. Threshold requirements for turning lanes, access driveways and traffic impact studies are also detailed in R930-6.

2.4.4. UDOT’s Road Map

UDOT’s mission statement “Enhance quality of life through transportation” weaves through the department’s practices and standards. Their Quality-of-Life Framework⁵ emphasizes four areas: Better Mobility, Good Health, Connected Communities, and Strong Economy. These distinct focus areas shown in **Figure 1** aim to achieve the department’s mission. One

³ <https://zerofatalities.com/wp-content/uploads/2023/11/UDOT-VRU-Assessment-Report-Final-signed.pdf>

⁴ <https://drive.google.com/file/d/1a0YNDy9Z8bFxE121JP5XJNW0rw9Ft3/view>

⁵ <https://www.udot.utah.gov/connect/about-us/>

of the department’s strategic goals is to see zero crashes, injuries, and fatalities on Utah roads, emphasizing their commitment to safety throughout the State.

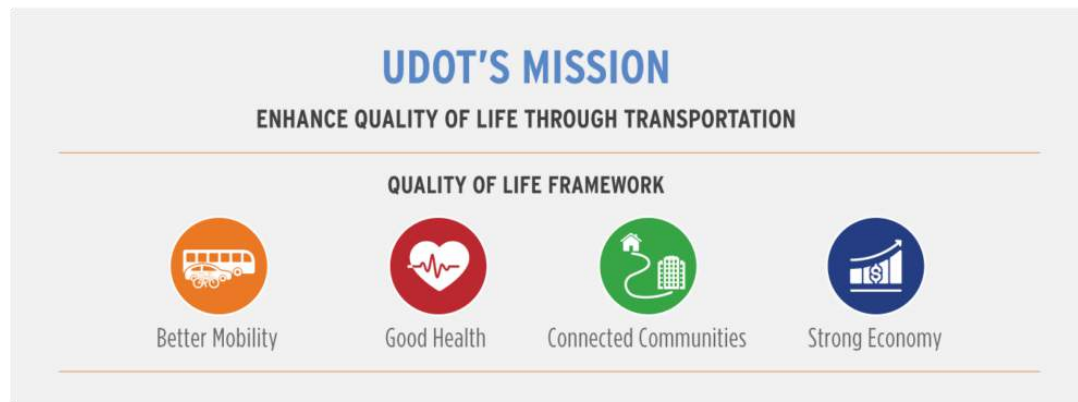


Figure 1. UDOT's Mission and Quality of Life Framework

2.4.5. UDOT Speed Management Studies

The UDOT Speed Management Studies document⁶ provides methods of slowing traffic, especially where actual vehicle speeds do not match the road’s posted speed limit or roadway context, or when 85th percentile speeds are higher than posted speed limits.

The document provides eleven information sheets on traffic calming measures that are considered within the FHWA’s Safe System Approach. Information sheets include where traffic calming measures are typically applied, what speed reduction they could achieve, and high-level cost information.

2.4.6. HB290

During the 2025 legislative session, House Bill 290: Bicycle Lane Safety Amendments, passed, further enhancing bicycle safety on Utah roads. The bill more clearly defines a “bicycle lane” as part of a highway designated by a highway authority through striping, signage, pavement markings, or barriers for preferential or exclusive use of bicycle, electric-bicycles, and motor-assisted scooter traffic. Shared lanes intended for both, motor vehicle and bicycle travel are explicitly excluded from being designated at bicycle lane.

6

https://maps.udot.utah.gov/wadocuments/Data/Region4/SR_258_and_SR_118_Corridor_Study/Speed%20Management%20Info%20Sheets_2021_06_24.pdf

Additionally, HB290 restricts motor vehicles from driving or parking within designated bicycle lanes unless a vehicle crosses the bicycle lane to make a turn, for emergency or service vehicles performing official duties, or when needing to avoid obstacles or complying with traffic control devices. Finally, the bill also mandates cities and UDOT to minimize obstruction of bicycle lanes due to construction of maintenance activities. If obstructing the bicycle lane is not possible, appropriate detours must be provided to ensure route continuity and bicyclist safety. This bill is planned to go into effect on May 7th, 2025.

3. PUBLIC FEEDBACK

The project team engaged with stakeholders and the communities to gather feedback and gain an understanding of safety needs in Iron County. Stakeholders included city and agency staff, elected officials, advocacy or community groups, health departments, law enforcement, UDOT, school districts, business leaders, and residents. Forms of engagement included:

- **Safety Launch Webinar:** a webinar introducing the Safety Action Plan process, what will be included, how people could get involved, and a charge to provide feedback with more than 30 participating stakeholders.
- **Geographic Focus Area (GFA) Workshops:** two rounds of workshops as part of the SAP development in each GFA (except only one for the I-15 GFA) to solicit feedback from stakeholders and community members. A total of nine workshops were held. The first round of workshops focused on the safety analysis results and ensuring people had an opportunity to review, add, or comment on the safety analysis results. The second workshop focused on proposed safety strategies and project locations and details to ensure people had an opportunity to review and comment.
- **Online Interactive Map:** the project website included an interactive online map where residents and stakeholders to leave location and topic specific comments. The map allowed users to comment on four categories: bicycle safety, pedestrian safety, vehicle safety, and other feedback. 95 unique locations and comments were gathered in this process.
- **Online or In-person Survey:** a survey was available online or in-person during outreach where public and stakeholders could provide transportation safety-related feedback and collect demographic data of the respondents. The survey received 374 unique responses.
- **Community Advertising:** the project website including the map available for comments and the survey were advertised to the County in a variety of ways

including: Iron County Today advertisement, Facebook, fliers and table-top information stands distributed to local agencies, jurisdictions, and public buildings.

- **Community Pop-ups:** three community pop-up events provided an opportunity to distribute project information and solicit community feedback at a variety of locations. Outreach was conducted at the D&D Variety Store, Southern Utah University, and Parowan City. More detailed information about the project's engagement efforts can be found in *Technical Memorandum #2 – Engagement Summary*.

3.1. Survey Comment Review

The safety analysis revealed areas of improvement that can be achieved through [FHWA's Proven Countermeasures](#). However, while reviewing map and survey comments, common themes emerged among respondents' comments that don't translate directly to a potential specific infrastructure type project. To ensure these comments were noted and reviewed for recommendations, the project team summarized comments by general theme that have been used to inform policy and project recommendations. The themes are summarized in Section 3.1.2 below.

3.1.1. Evaluation Process

All engagement comments received and GFA workshop feedback were aggregated with responses recorded from the online map and the online/in-person surveys. Since the survey gave respondents the opportunity to provide additional, open-ended comments in addition to targeted safety-related questions, the entire engagement process collected over 900 unique comments. All comments were anonymous; therefore, respondents may have completed the online survey more than once or participated in multiple pop-up events and duplicated responses were noted.

3.1.2. Comment Themes

All comments were evaluated and assigned themes. Common themes were combined into 10 primary themes and an "other" category that includes important, but less-often mentioned concerns. A breakdown of comments per theme is as follows:

- Access Management & Roadway Capacity
 - Respondents frequently mentioned wanting better business access control and clear left turn lanes to avoid blocking traffic. This category also includes comments about widening the roadway to add additional turn or merging lanes or paving or extending shoulders.

- Active Transportation & School Zone safety
 - This theme includes all comments related to bicycle and pedestrian safety, the request for safer active transportation infrastructure included, sidewalks, crossings, school-zone related safety for pedestrians crosswalks, connectivity, and more transportation network amenities/infrastructure. This category received the most overall comments.
- Congestion & Growth Concerns
 - Respondents have concerns regarding congestion and increased traffic on existing roads due to continued growth in the area.
- Enforcement
 - Survey respondents mentioned that they frequently observe other drivers not obeying traffic laws and would like to see more law and traffic enforcement. Speeding and red-light-running were among the most frequently mentioned traffic violations observed.
- Intersection & Road Geometry, Roadway Design (including driveway access geometry)
 - Respondents provided feedback on their experience navigating through larger intersections they consider confusing and difficult to maneuver through. This category also incorporates comments about narrow shoulders and deep culverts or drainage areas in front of driveways.
- Intersection Control
 - This category includes comments regarding intersection control systems, including signalized and stop-controlled intersections. Requests for new/upgraded control devices at intersections was a frequent comment. Respondents also mentioned a desire for longer left-turn phases to complete left-turns at signals. Concern over how to accommodate increased growth and truck traffic at certain locations with current intersection layouts.
- Limited Visibility
 - This theme incorporates comments about limited visibility due to overgrown vegetation, signage, or vehicles parked too close to intersections/driveways that obstruct the view of oncoming traffic.
- Roadway Maintenance & Pavement Markings
 - Respondents frequently mentioned a need for roadway maintenance, including filling potholes/ cracks. This category includes many comments about faded pavement markings or missing roadway striping or markings.
- Speed Limits & Speeding

- Speed related comments were among the top three themes; comments mostly directed to vehicles driving above the speed limit. Comments also included asking for lower speed limits or better/ more frequent speed limit signs along roadways.
- Street Lighting
 - Requests for more street lighting, especially around intersections and in areas with high levels of pedestrian activity, were frequently noted in the survey.
- Other
 - The “other” category includes themes that were mentioned throughout the engagement process that didn’t fit well into the primary categories. Themes included in the “other” category related to the following topics:
 - Education, livestock/wildlife, parking, and transit

Table 2. Summary of Engagement Themes

Category	Percentage of Comments Received
Access management & roadway capacity	7.1%
Active Transportation safety (incl. ADA) School zone safety (2.1%)	23.6%
Growth, congestion	6.2%
Enforcement	8.3%
Intersection & road geometry, roadway design	2.6%
Intersection control	13.2%
Limited visibility	6.1%
Road maintenance & pavement markings	8.9%
Speed limit & speeding	10.2%
Street lighting	6.2%
Other: Education (1.7%) Livestock, wildlife (1.0%) Parking (2.6%) Transit (0.7%) SUU-related (1.7%)	7.6%

4. JURISDICTIONAL INTERVIEWS

As part of the policy and process change development, the project team met with jurisdictions and municipalities within the study area to better understand their specific needs or potential gaps in current transportation safety policies and processes. These discussions were intended to understand the current inclusion of safety in policies or resources and help identify potential improvements to those resources regarding safety or identify new policies or guidelines that would assist in advancing transportation safety.

The following jurisdictions were interviewed as part of the policy and process change task:

- Iron County
- Five County AOG (RPO)
- Cedar City
- Enoch City
- Brian Head Town

Discussion topics included current resources and what is used often or what resources they felt may have been missing or wanted by the agency, development review processes, region-wide coordination and planning, and inter-agency communication. The strengths and weaknesses of existing resources revealed a need to expand elements of the developmental review process including impact fees, access management, traffic impact studies, and active transportation connections.

A desire for structured impact fee collection and distribution was expressed by multiple jurisdictions. And coordinating active transportation facilities, Safe Routes to School planning, and maintenance friendly infrastructure is crucial for smooth safety improvement implementation.

Other topics discussed included traffic calming strategies/ policies, sidewalk and crosswalk prioritization for new construction and maintenance, bicycle infrastructure design standards, and if/how a municipality would like to incorporate transit into their transportation systems.

An understanding of how each jurisdiction collaborates with one another was also helpful to identify data and communication gaps.

The following is a summary of additional topics and areas of potential need or concern discussed with jurisdictions. Although not every topic is a concern in each community,

systemic or County-wide improvements may allow communities to be proactive in their resources and planning.

4.1. Communication and Coordination

Interviewees expressed a desire for improved communication and coordination with state agencies, especially UDOT and the Iron County Rural Planning Organization (ICRPO). There was uncertainty about the appropriate contacts for specific requests or coordination efforts. Clear and accessible guidelines on UDOT's policies, standards, procedures, and points of contact were mentioned as a key need.

4.2. Growth and Development

The expected growth in the region has agencies looking towards developing standards and policies that they may refer as communities, commercial areas, and roadways are built or begin to change. Not all communities implement or have clear standards for access management, traffic impact studies, or traffic calming.

4.3. Vulnerable Road Use Safety & Transit

Most jurisdictions mentioned the need for expanded and improved active transportation infrastructure and safety. However, such decisions are largely made internally or coordinated only with the RPO, limiting opportunities for cross-jurisdictional collaboration. Feedback also revealed a gap in coordination between jurisdictions and schools regarding Safe Routes to School planning. School zone related safety concerns appear to be predominately driven by parent advocacy groups rather than proactive institutional planning.

Additionally, some jurisdictions operate private or public transit services while others have expressed interest in expanding transit options to provide greater mobility and mode choices for residents and visitors. However, gaps remain in regional transit coordination and funding strategies.

4.4. Project Prioritization & Funding

While the ICRPO plays a role in consolidating planning efforts to address the County's expected growth, it operates without dedicated implementation funding. The RPO transportation improvement list is also not required to be included in UDOT's Statewide Transportation Improvement Program but is offered to UDOT to include in long range planning. Each community must still navigate competitive application processes to secure state funding. Funding of identified safety improvement projects is of concern.

5. RECOMMENDATIONS

The policy and resource reviews, stakeholder and community engagement, and jurisdictional interviews were completed to inform the development of the following recommendations related to policies and procedures. The intent of these recommendations is to develop resources and tools, or build upon existing resources and tools, to advance transportation safety in Iron County for all roadway users. The recommendations are in pursuit of reducing and eventually eliminating fatal and serious injury crashes occurring in Iron County.

5.1. Access Management Plan

An Access Management Plan is a policy framework that guides the design, application, placement, and operations of driveways, intersections, and other land access points on roadways to maintain roadway safety for all modes, including facilitating safe pedestrian and bicyclist movements, and efficiency.

Access Management Plans can streamline and establish clear standards for driveway and curb cut spacing, therefore minimizing conflict points, improving safety, and maintaining traffic flow while reducing congestion on major roads. Access Management Plans should be created in partnership with regional and state transportation agencies to ensure consistency on regionally important roads owned and maintained at the state or county level. **Figure 2** illustrates the correlation between greater mobility through fewer access points and higher speeds along arterial roads and greater land access through more access points and slower speeds on local roads.

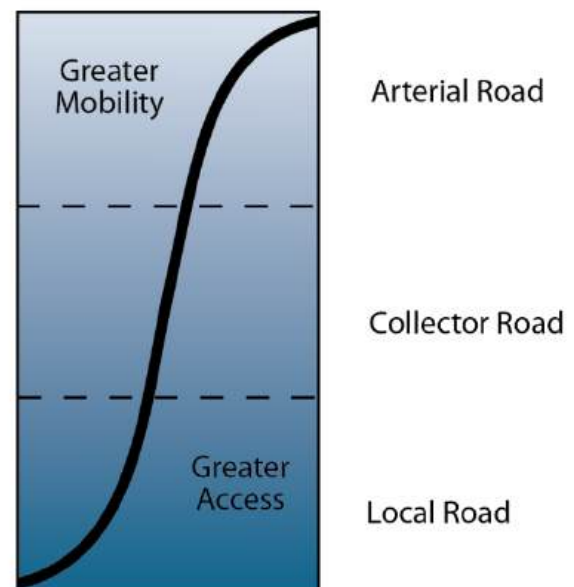


Figure 2. Access vs. Mobility

Additional access management resources include [Access Management](#) practices as outlined in FHWA's Proven Safety Countermeasures and the DOT's Office of Operations [Access Management](#) page.

An access management plan may be something individual jurisdictions consider or the County as a whole.

5.2. Active Transportation Planning

A need was identified for active transportation planning and coordination amongst agencies in the County. The County does not currently have an official County active transportation plan. An active transportation plan can be a resource for the County and other agencies by supporting regional coordination and connectivity of the transportation network. FHWA supports states and regional planning organizations with guidelines on safe pedestrian and bicycle infrastructure and well as funding to build and maintain active transportation infrastructure.

A County active transportation plan may identify high-priority facilities and safety improvements, address infrastructure gaps, establish design standards to foster safe, consistent facilities for all ages and abilities, and identify and prepare to engage funding sources. County-wide collaboration may also contribute to securing funding for identified actions.

5.3. Speed Limit Setting and Speed Management

Studies have shown the consequences of speeding on fatalities and serious injuries in crashes. National data⁷ shows that one-third of fatal crashes are speed-related. Speed management is one important method for helping reduce fatalities and serious injuries.

Speed is especially important in areas where vehicles and vulnerable road users mix. Drivers typically drive at a speed that feels reasonable for themselves, rather than at speeds that are safe for all road users. Figure 3 shows that a pedestrian struck by a vehicle traveling 40 mph has only a 15% likelihood of surviving; whereas at 20 mph a pedestrian would have a 95% chance of surviving.⁸

FHWA recommends states and local jurisdictions set appropriate speed limits to reduce the significant risks drivers impose on others. Addressing speed is fundamental to the Safe System Approach to make streets safer, and a growing body of research shows that speed limit changes alone can lead to measurable declines in speeds and crashes.⁹

⁷ <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813473>

⁸ Pilkinton, Paul. Reducing the speed limit to 20 mph in urban areas: Child deaths and injuries would be decreased. BMJ, Published April 29, 2000.

⁹ Hu, W. and J. Cicchino (2019). Lowering the speed limit from 30 to 25 mph in Boston: effects on vehicle speeds. Insurance Institute for Highway Safety.

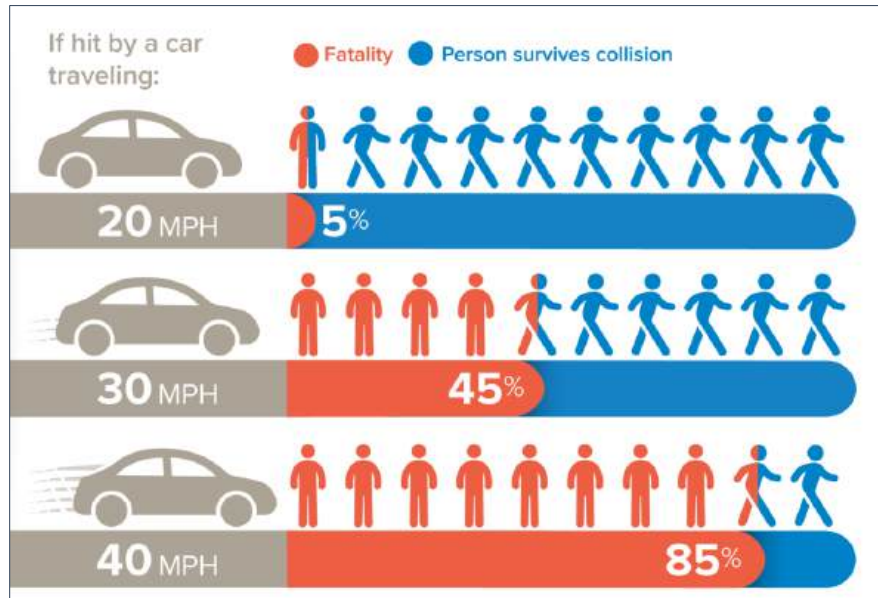


Figure 3. Pedestrian survival rate at different vehicle impact speeds¹⁰

FHWA provides guidance on how to develop a speed management program specific to local, small urban areas and rural roads. A speed management program includes the following steps:

- **Step 1** Identify speeding issues by using crash data and site reviews/public input.
- **Step 2** Identify countermeasures that may address the problem.
- **Step 3** Implement countermeasures.
- **Step 4** Evaluate projects and/or programs to determine the progress being made towards the goals identified for the entire Speed Management Program.

The USLIMITS2 Tool¹¹ is designed to assist in setting reasonable, safe, and consistent speed limits for roadways. The tool uses not only the 85th percentile speed, but also 50th percentile speeds, segment lengths, average daily traffic, alignment, roadway characteristics, presence of bike lanes or on-street parking, number of driveways, number of signals, number of crashes, and the number of injury and fatal crashes to determine a recommended posted speed limit.

¹⁰ <https://smartgrowthamerica.org/why-safety-and-speed-are-fundamentally-incompatible-a-visual-guide/>

¹¹ <https://safety.fhwa.dot.gov/uslimits/>

5.4. Proven Safety Countermeasures in Design Standards

FHWA has identified 28 proven safety countermeasures (PSCs) to reduce serious injury and fatal crashes. The countermeasures included should be considered when updating design standards or looking to create standards for various design items such as bicycle lanes, shoulder widths and types, signage, etc.

Table 3 summarizes PSCs applicable to small urban and rural communities¹². Click on the countermeasure name to learn more of the countermeasures, it’s components, and effectiveness. These PSCs can support Iron

County and its communities to prevent and reduce the frequency of fatal and serious injury crashes. The countermeasures included should be considered when updating design standards or looking to create standards for various design items such as bicycle lanes, shoulder widths and types, signage, etc.



Figure 4. FHWA Proven Safety Countermeasures in Rural Communities

Table 3. FHWA Proven Safety Countermeasures in Rural Communities

Proven Safety Countermeasure	Description
Roadway Departure	
<i>Rumble Strips</i>	Alert drivers when they leave the roadway across the edge line or center line through the generation of noise and vibration.
<i>Wider Edge Lines</i>	Enhance the visibility of travel lane boundary from a normal 4-inch width to a 6-inch width.
<i>Enhanced Delineation for Horizontal Curves</i>	Pavement markings, curve warning markings, retroreflective strips on signposts, delineators, chevron signs, dynamic curve warning signs, and sequential dynamic chevrons placed either in advance of curve, within curve, or both. All

¹²https://highways.dot.gov/sites/fhwa.dot.gov/files/2024-01/FHWA_PSCs_in_Rural_Communities_508.pdf

Proven Safety Countermeasure	Description
	enhanced delineations provide additional warnings to motorists.
<i>Roadside Design Improvements at Curves</i>	May include vegetation management, delineation, removal of roadside objects, clear zone widening, adding or widening shoulders, and installing roadside barrier.
Intersections	
<i>Roundabouts</i>	An alternative intersection design in which traffic travels in one direction around a center median. Roundabout lower vehicle speeds and reduces the number of conflict points compared to a typical intersection.
<i>Dedicated Left and Right-Turn Lanes at Intersections</i>	Provides physical separation between slower, stopped, or turning traffic from the adjacent through movements.
<i>Systemic Application of Multiple Low-Cost Countermeasures at Stop-Controlled Intersections</i>	Low-cost countermeasures including enhanced signing and pavement markings to increase drivers' awareness of potential conflicts.
<i>Corridor Access Management</i>	Access management addresses the design, application, placement, and operations of driveways, intersections, and other land access points to improve safety and efficiency. Additional information is shared in Section 5.1 of this document.
Pedestrian/Bicyclist	
<i>Crosswalk Visibility Enhancements</i>	Providing enhanced lighting, signing, and pavement markings to increase crosswalk and pedestrian visibility to drivers.
<i>Rectangular Rapid Flashing Beacons (RRFB)</i>	Rectangular Rapid Flashing Beacon (RRFB) signage is activated by a pedestrian at a crossing and flash rectangular LEDs on the sign with alternating high frequency to help capture a motorist's attention and alert them to a crossing pedestrian. For multilane crossings, RRFBs may be mounted on either side of one direction of travel.

Proven Safety Countermeasure	Description
<i>Bicycle Lanes</i>	Providing designated bicycle lanes can improve safety and provide recreation and community opportunities for a wider range of bicyclists. Bicycle lanes separated by delineator posts can reduce crashes up to 53% ¹³ . Bicycle facilities should match adjacent roadway conditions and follow appropriate space separations.
<i>Walkways</i>	Walkways, sidewalks, or shared use paths can greatly enhance pedestrians' experience walking and accessing essential places in their communities. Walkways should be designed to ADA standards, with directional curb ramps in combination with appropriate crossing facilities like marked or signaled crossings. Walkways can also greatly improve pedestrian connectivity, potentially making pedestrian trips shorter compared to vehicle trips.

5.5. Safe Routes to School Plans

Iron County and its jurisdictions should participate in the development of applicable Safe Routes to School plans (SRTS) as it is critical to ensuring children can walk and bike to school safely. However, based on jurisdiction feedback, these plans are solely developed by the Iron County School District. Collaboratively creating SRTS plans provides the opportunity to collaborate on other targeted improvement projects like traffic calming elements or neighborhood slow zones, which all contribute to transportation network safety.

The Safe Routes Partnership created a [toolkit](#) in 2015, providing rural specific best practices and approaches to developing Safe Routes to School, as rural school children face unique challenges including long distances, high vehicle speeds, few sidewalks, and schools located near regional highways, among other obstacles.

The counties and jurisdictions involved can go beyond developing walking routes and also include programming such as “bike to school” or “walking school bus” days where schools and public safety agencies collaborate to provide a fun and safe environment for children to bike or walk to school.

¹³ <https://highways.dot.gov/safety/proven-safety-countermeasures/bicycle-lanes>

5.6. Development Review Standards

Jurisdictions should revise existing or create clear development review standards for new developments in their communities. Development review checklists are suggested to include detailing public amenities included in the area, traffic impact study thresholds, design considerations, active transportation connectivity and design, and how development impacts are collected and used. Jurisdictions may consider transportation impact fees that would address transportation improvements or provide public amenities like sidewalks or trails as a resource to emphasize safety in the transportation network.

5.7. Project Programming

Establishing a collaborative and county-wide project programming process that identifies and prioritizes transportation and infrastructure projects, similar to a capital improvement plan, may assist in prioritizing transportation safety and securing funding for improvements in the future. This approach should involve all local jurisdictions and regional agencies such as the RPO, the school district, and UDOT. This will help the County align priorities with state-level objectives and identify and secure future funding for successful implementation. A programming and prioritization process may be developed as part of the County Transportation Master Plan or Active Transportation Plan.

5.8. Clear Cross-agency Communication

Strengthening cross-agency communication is essential to effectively meet the area's transportation and safety goals. By establishing a structured forum or regular meetings among government agencies, local jurisdictions, law enforcement, and other interested parties, information can be easily shared across agencies and priorities better aligned. Enhanced collaboration prevents duplication of efforts and fosters a unified vision for addressing shared challenges.

This recommendation can be applied county-wide, encouraging collaboration between jurisdictions and agencies, but also internally for each jurisdiction. Involving relevant departments in project discussions, development reviews, or municipal priority setting is critical to efficient and holistic planning practices.

5.9. Transportation Safety Education Program

Implement education and awareness campaigns/programs by promoting existing programs provided by the National Highway Traffic Safety Administration (NHTSA) and FHWA for bicycle safety, distracted driving, pedestrian safety, speeding, or seat belt safety. For these

programs to be known, jurisdictions should focus on these existing programs or create programs that are area specific. These programs can be coordinated with UDOT's Zero Fatalities Program, health departments, community centers, schools, and effected establishments to strengthen driver education and proper safety educate to all road users.

5.10. Safety Terminology in Plans, Policies, and Studies

It is recommended that future updates to plans, studies, and policies include consistent and appropriate terminology when referring to an event involving a vehicle and a collision. During the review of previous plans and document, certain documents use the word "accident" to describe the event involving a vehicle collision. It is recommended to replace the term "accident" or "collision" with "crash" wherever it occurs. The recommended wording of "crash" is consistent with the industry's best practices on describing the importance of human actions, infrastructure, and policies in road safety.



APPENDIX D. SAFETY COUNTERMEASURE TOOLBOX AND COST ESTIMATE ASSUMPTIONS

**The provided cost estimates represent planning-level estimates. The cost estimates were developed using the latest available unit material costs from Materials Masterworks Database, the UDOT Concept Cost Estimate Form, and project team input and experience.*

Safety Countermeasure	Description	Cost Estimate*
Install High-Visibility Crosswalk (including lighting)	Uses bold markings (e.g., continental or ladder styles) with enhanced lighting to improve pedestrian visibility. The increased visibility helps drivers detect crossing pedestrians earlier, especially at night. Enhanced crosswalks reduce pedestrian-related crashes by making pedestrians more noticeable.	\$38,000 / Crossing
Install High-Visibility Crosswalk (including RRFB)	Uses bright, flashing lights to alert drivers to pedestrian crossings. The flashing beacons activate when pedestrians approach, significantly increasing driver awareness. This combination reduces pedestrian crashes by prompting drivers to yield.	\$17,000 / Crossing
Implement Leading Pedestrian Interval (LPI) Signal Timing	Gives pedestrians a 3-7 second head start to enter the crosswalk before vehicles receive a green light. This early entry makes pedestrians more visible and reduces conflicts with turning vehicles. LPIs lower pedestrian-vehicle crash risk and increase pedestrian safety.	\$3,000 / Intersection
Install a Extended Time Pushbutton	Allows pedestrians who need extra time to cross to extend the signal phase. These pushbuttons accommodate slower-moving pedestrians, ensuring they can safely clear the intersection. Longer crossing times reduce the likelihood of pedestrian crashes.	\$500 / Each
Install Intersection Lighting	Enhances nighttime visibility for all road users, illuminating pedestrians, cyclists, and vehicles. Better lighting improves driver reaction time and reduces crash likelihood in low-visibility conditions. Properly lit intersections help prevent severe and fatal crashes.	\$35,000 / Intersection
Install Left-Turn Lanes	Provides space for turning vehicles, removing them from the through traffic flow. This separation reduces rear-end and angle crashes by minimizing conflicts between turning and through vehicles. Left-turn lanes enhance safety by reducing intersection congestion.	\$153,000 / Lane
Create Positive Off-Set of Existing Left-Turn Lanes (pavement markings and curb work, no widening)	Realigns opposing left-turn lanes to improve driver visibility of oncoming traffic. This change reduces sightline obstructions and minimizes risky turning maneuvers. Improved visibility lowers the risk of left-turn crashes.	\$16,000 Intersection
Install Right-Turn Lanes	Provides space for turning vehicles to exit the through traffic flow, reducing rear-end crashes. Separating right-turning vehicles improves intersection efficiency and reduces conflicts. Safer turning movements lead to fewer intersection crashes.	\$127,000 / Lane
Convert Existing Intersection to Modern Roundabout (Single Lane)	Replaces traditional intersections with a circular layout where traffic flows counterclockwise. Roundabouts reduce conflict points, slow vehicle speeds, and minimize crash severity. Their design significantly reduces fatal and serious injury crashes.	\$1,900,000 / Intersection
Stop-Control Intersection Signage	Improves visibility and awareness at stop-controlled intersections. Larger, retroreflective signs or supplemental signs alert drivers earlier, reducing the likelihood of failure-to-yield crashes. Improved signage enhances driver compliance and intersection safety.	\$4,000 / Intersection
Perform an Intersection Control Evaluation and Implement	Assesses the best control type (signals, roundabouts, or stop signs) to improve safety and operations. Implementing the optimal control reduces crash potential and improves traffic flow. Proper intersection control selection minimizes conflict points and crash severity.	\$225,000 / Intersection

**The provided cost estimates represent planning-level estimates. The cost estimates were developed using the latest available unit material costs from Materials Masterworks Database, the UDOT Concept Cost Estimate Form, and project team input and experience.*

Safety Countermeasure	Description	Cost Estimate*
Change Left-turn Timing from Permissive Only to Flashing Yellow Arrow	Gives drivers more clarity by indicating when left turns are allowed but not protected. This change reduces driver confusion and improves gap selection. Better decision-making lowers left-turn crash risks.	\$8,000 / Intersection
Change Left-turn Timing from Permissive to Protected	Gives left-turning vehicles a dedicated green arrow. This removes the need for drivers to judge gaps in opposing traffic, reducing conflicts. Protected left-turns significantly reduce angle and left-turn crashes.	\$8,000 / Intersection
Change a 5-section "Doghouse" to Flashing Yellow Arrow	Simplifies driver decision-making for left turns. The flashing yellow arrow clearly indicates when drivers must yield to oncoming traffic. This change improves understanding and reduces left-turn crashes.	\$8,000 / Intersection
Right-in-Right-out Access Treatment	Restricts left-turn movements at driveways or intersections, reducing conflict points. Vehicles enter and exit only via right turns, preventing risky crossing maneuvers. Limiting left-turns reduces severe angle crashes.	\$11,000 / Driveway
Install Raised Crosswalk and Signage	Elevates pedestrian crossings, slowing vehicle speeds and increasing pedestrian visibility. Accompanying signage alerts drivers to yield to crossing pedestrians. Slower speeds and increased driver awareness reduce pedestrian crash severity.	\$41,000 / Each
Install Pedestrian Refuge Island	Provides a safe space in the center of the roadway for pedestrians crossing multiple lanes. They allow pedestrians to cross one direction of traffic at a time, reducing exposure. Refuge islands significantly lower pedestrian crash risk.	\$75,000 / Each
Install High Visibility Crosswalk Markings and Signage	Uses bold pavement markings and signage to alert drivers to pedestrian crossings. The increased visual cues improve driver awareness and compliance. Enhanced crosswalks reduce pedestrian crashes by improving visibility.	\$7,000 / Crossing
Install Pedestrian Hybrid Beacons (PHB) or HAWK	Uses flashing and solid lights to control vehicle movements and allow pedestrians to cross safely. Activated by pedestrians, these signals create clear gaps in traffic for safe crossings. PHBs greatly reduce pedestrian crashes at midblock locations.	\$250,000 / Each
Install Bulbouts (2)	Extends the sidewalk into the roadway, reducing crossing distance and slowing turning vehicles. By shortening pedestrian exposure to traffic, they improve pedestrian safety. Bulbouts increase driver yielding and reduce pedestrian crashes.	\$54,000 / Each
Install Rectangular Rapid Flashing Beacons (RRFB)	Warns drivers of pedestrians crossing the roadway. Activated by pedestrians, RRFBs draw driver attention and prompt yielding behavior. Increased driver awareness reduces pedestrian-vehicle conflicts.	\$10,000 / Crossing
Clear and Grub	Removes vegetation and obstacles that obstruct sightlines at intersections. Improved sight distance allows drivers to detect and react to potential hazards more quickly. Better visibility reduces the likelihood of intersection crashes.	\$1,000 / Leg

**The provided cost estimates represent planning-level estimates. The cost estimates were developed using the latest available unit material costs from Materials Masterworks Database, the UDOT Concept Cost Estimate Form, and project team input and experience.*

Safety Countermeasure	Description	Cost Estimate*
Install Transverse Rumble Strips on Minor Approach	Provides auditory and tactile warnings to drivers approaching intersections. These strips alert inattentive drivers, reducing the risk of failure-to-yield crashes. Better driver awareness lowers crash potential.	\$1,000 / Leg
Upgrade Signs and Pavement Markings (Paved Approach)	Enhances driver guidance and intersection visibility. Clearer, more visible signage and markings reduce driver confusion. Improved guidance reduces crash frequency and severity.	\$3,000 / Leg
Install Second Stop Sign and Stop Ahead Sign	Reinforces the need for drivers to stop. This redundancy improves driver compliance and reduces the likelihood of failure-to-stop crashes. Double signage enhances safety at stop-controlled intersections.	\$1,500 / Leg
Install Beacon on Stop Sign	Uses flashing lights to draw driver attention to the intersection. The increased visibility improves driver compliance with stop signs. Better compliance reduces intersection crashes, particularly at night or in low-visibility conditions.	\$5,000 / Each
Realign Intersection Approach to Reduce or Eliminate Skew	Improves sightlines and reduces complex turning movements. Better alignment simplifies driver decision-making and reduces turning conflicts. Correcting skewed approaches lowers the risk of severe intersection crashes.	\$329,000 / Leg
Install a Rural Intersection Control Warning System (RICWS)	Uses dynamic flashing beacons and signage to alert drivers of approaching traffic at rural intersections. These systems provide real-time warnings, improving driver awareness and reducing risky maneuvers. Enhanced driver awareness lowers the likelihood of severe crashes at rural intersections.	\$100,000 / Intersection

Install Intersection Lighting					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Underground service pedestal - power source	each	\$ 660.00	1	\$ 660.00	
40' Signal Pole Luminaire	each	\$ 300.00	4	\$ 1,200.00	
15' Mast Arm	each	\$ 162.00	4	\$ 648.00	
LED Luminaire	each	\$ 312.00	4	\$ 1,248.00	
Foundation	each	\$ 3,137.00	4	\$ 12,548.00	
Junction Box	each	\$ 2,000.00	4	\$ 8,000.00	
Items not Estimated	lump	\$ 10,000.00	1	\$ 10,000.00	
Total/Intersection				\$	35,000

Install Right Turn Lane					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Concrete Sidewalk	sq ft	\$ 15.00	1765	\$ 26,473.11	
Remove Concrete Curb and Gutter	ft	\$ 10.00	385	\$ 3,854.70	
Pavement Marking Paint	ft	\$ 0.50	300	\$ 150.00	
Clearing and Grubbing	acre	\$ 15,000.00	0.1	\$ 1,222.74	
Concrete Curb and Gutter Type B1	ft	\$ 50.00	357	\$ 17,834.45	
Relocate Sign	Each	\$ 250.00	5	\$ 1,250.00	
UTBC (Plan Quantity)	cu yd	\$ 80.00	88	\$ 7,012.35	Assumes a 27" Pavement Section (7" HMA, 8" UTBC, 12" GB)
HMA 1/2 Inch	Ton	\$ 160.00	153	\$ 24,518.67	Assumes a 27" Pavement Section (7" HMA, 8" UTBC, 12" GB)
Granular Borrow	cu yd	\$ 70.00	131	\$ 9,203.70	Assumes a 27" Pavement Section (7" HMA, 8" UTBC, 12" GB)
Roadway Excavation	cu yd	\$ 35.00	296	\$ 10,354.17	Assumes 295' turn lane, 12' width
Items not estimated	lump	\$ 25,000.00	1	\$ 25,000.00	Signal Pole Relocate and new foundation. Doesn't account for ROW
Total/Lane				\$	127,000

Install Left Turn Lane					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Concrete Sidewalk	sq ft	\$ 15.00	1765	\$ 26,473.11	
Remove Concrete Curb and Gutter	ft	\$ 10.00	385	\$ 3,854.70	
Clearing and Grubbing	acre	\$ 15,000.00	0.1	\$ 1,222.74	
Concrete Curb and Gutter Type B1	ft	\$ 50.00	357	\$ 17,834.45	
Relocate Sign	Each	\$ 250.00	5	\$ 1,250.00	
UTBC (Plan Quantity)	cu yd	\$ 80.00	133	\$ 10,666.67	Assumes a 29" Pavement Section (7" HMA, 8" UTBC, 12" GB)
HMA 1/2 Inch	Ton	\$ 160.00	233	\$ 37,296.00	Assumes a 29" Pavement Section (7" HMA, 8" UTBC, 12" GB)
Granular Borrow	cu yd	\$ 70.00	200	\$ 14,000.00	Assumes a 29" Pavement Section (7" HMA, 8" UTBC, 12" GB)
Roadway Excavation	cu yd	\$ 35.00	318	\$ 11,121.14	Assumes 450' x 12'
Remove Pavement Marking Paint	ft	\$ 2.00	1350	\$ 2,700.00	450', 2 centerline stripes, 1 edge line
Pavement Marking Paint	ft	\$ 0.50	2100	\$ 1,050.00	450', 2 centerline stripes, 1 edge line, 1 Lane
Items not estimated	lump	\$ 25,000.00		\$ -	Signal Pole Relocate and new foundation. Doesn't account for ROW
Total/Lane				\$	128,000

Convert Existing Intersection to Modern Roundabout - 1 Lane					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Huntsville ICE Concept	Lump	\$ 1,930,000.00	1	\$ 1,930,000.00	
Cedar City ICE Concept	Lump	\$ 1,620,000.00	1	\$ 1,620,000.00	
Tremonton ICE Concept	Lump	\$ 2,850,000.00	1	\$ 2,850,000.00	
Spanish Fork ICE Concept	Lump	\$ 2,126,500.00	1	\$ 2,126,500.00	Roadway, pavement marking
Total/Intersection				\$	2,132,000

Convert Existing Intersection to Modern Roundabout - 2 Lane					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Magna ICE Concept	Lump	\$ 2,220,000.00	1	\$ 2,220,000.00	Roadway, pavement marking and lighting costs
St. George Bluff Street ICE Concept	Lump	\$ 2,404,900.00	1	\$ 2,404,900.00	Roadway, pavement marking and lighting costs
Helper ICE Concept	Lump	\$ 2,571,400.00	1	\$ 2,571,400.00	Roadway, pavement marking and lighting costs
Total/Intersection				\$	2,399,000

Install Bulbouts (Two)					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Concrete Curb and Gutter Type B1	ft	\$ 50.00	200	\$ 10,000.00	Assumes 6 ft shoulder for parking, not for pedestrian crossings on both legs
Concrete Flatwork 6 Inch	sq ft	\$ 15.00	2000	\$ 30,000.00	Assumes 6 ft shoulder for parking, not for pedestrian crossings on both legs
Asphalt Tie-In	Ton	\$ 200.00	40	\$ 8,000.00	Assumes 6 ft shoulder for parking, not for pedestrian crossings on both legs
Roadway Excavation	cu yd	\$ 35.00	93	\$ 3,240.74	Assumes 6 ft shoulder for parking, not for pedestrian crossings on both legs
Remove Concrete Curb & Gutter	ft	\$ 10.00	200	\$ 2,000.00	Assumes 6 ft shoulder for parking, not for pedestrian crossings on both legs
Total/Pair of Bulbouts				\$	54,000
Install Raised Crosswalk					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Concrete Flatwork 8-11 Inch Thick	sq ft	\$ 25.00	528	\$ 13,200.00	2 lanes
Perpendicular/Parallel Pedestrian Access Ramp	Each	\$ 7,500.00	2	\$ 15,000.00	Assume 2 pedestrian access ramps for two-stage crossing
Concrete Curb and Gutter Type B1	ft	\$ 50.00	60	\$ 3,000.00	
Remove Curb and Gutter	ft	\$ 10.00	60	\$ 600.00	
Remove Pavement	Cu Yd	\$ 25.00	18	\$ 450.00	Assumes two 12-ft lanes, 30' long, 8 inches of pavement removal
Asphalt Tie-In	Ton	\$ 200.00	10	\$ 2,000.00	4' pave cut on either side of raised crosswalk
Pavement Message (Preformed Thermoplastic)	Each	\$ 325.00	2	\$ 650.00	3 markings, 2 lanes
Sign Assembly	Each	\$ 850.00	4	\$ 3,400.00	Assume one crosswalk sign for crossing as well as one crosswalk ahead sign for each direction (4 total)
Pavement Message (Preformed Thermoplastic)	Each	\$ 325.00	6	\$ 1,950.00	Assume six 1'x10' messages for crosswalk striping
Total/Crossing or Location				\$	41,000
Change Left-Turn Timing from Permissive to Flashing Yellow Arrow					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Type Type IV Signal Head	Each	\$ 1,760.00	4	\$ 7,040.00	Includes removal of existing head
Total/Intersection				\$	8,000
Change Left-Turn Timing from Permissive to Protected or Protected/Permissive					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Type Type IV Signal Head	Each	\$ 1,760.00	4	\$ 7,040.00	Includes removal of existing head
Total/Intersection				\$	8,000
Change a 5-Section Doghouse Signal to Flashing Yellow Arrow					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Type Type IV Signal Head	Each	\$ 1,760.00	4	\$ 7,040.00	Includes removal of existing head
Total/Intersection				\$	8,000
Install High-Visibility Crosswalk (Including RRFB)					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Sign Type A-2	sq ft	\$ 50.00	32	\$ 1,600.00	Advanced Warning Sign (Oversized W3-1)
Sign Post P2	Each	\$ 150.00	4	\$ 600.00	Advanced Warning Sign
Small Sign Tubular Steel Post Base (B1)	Each	\$ 400.00	4	\$ 1,600.00	Advanced Warning Sign
Retroreflective strip	each	\$ 50.00	4	\$ 200.00	
Solar RRFB	Each	\$ 5,000.00	2	\$ 10,000.00	Assumes two solar sign assemblies (one on each side of road)
Pavement Message (Preformed Thermoplastic)	ft	\$ 50.00	60	\$ 3,000.00	Assumes 12-ft lanes (ladder style crosswalk). Item is quantified by 12" thermoplastic (ft)
Total/Crossing				\$	17,000
Stop-Control Intersection Signage					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Sign Type A-2	sq ft	\$ 50.00	32	\$ 1,600.00	Advanced Warning Sign (Oversized W3-1)
Sign Post P2	Each	\$ 150.00	4	\$ 600.00	Advanced Warning Sign
Small Sign Tubular Steel Post Base (B1)	Each	\$ 400.00	4	\$ 1,600.00	Advanced Warning Sign
Retroreflective strip	each	\$ 50.00	4	\$ 200.00	
Total/Intersection				\$	4,000

Install High-Visibility Crosswalk Markings and Signage					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Sign Assembly	Each	\$ 850.00	4	\$ 3,400.00	Assume one crosswalk sign for crossing as well as one crosswalk ahead sign for each direction (4 total)
Pavement Message (Preformed Thermoplastic)	ft	\$ 50.00	60	\$ 3,000.00	Assumes 12-ft lanes (ladder style crosswalk). Item is quantified by 12" thermoplastic (ft)
Total/Crossing				\$	7,000

Install Pedestrian Refuge Island					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Concrete Flatwork 6 Inch thick	Sq ft	\$ 15.00	1400	\$ 21,000.00	Assume 50'x14' median on either side of crossing
Perpendicular/Parallel Pedestrian Access Ramp	Each	\$ 7,500.00	4	\$ 30,000.00	Assume 4 pedestrian access ramps for two-stage crossing
Curb Type B5	ft	\$ 35.00	200	\$ 7,000.00	Assume 100' median on either side of crossing
Sign Assembly	Each	\$ 850.00	6	\$ 5,100.00	Assume 2 crosswalk signs (each direction) for crossings as well as one object marker sign each direction
Pavement Message (Preformed Thermoplastic)	Each	\$ 325.00	20	\$ 6,500.00	Assume high-vis crosswalk for two twelve-foot lanes (20 messages)
Plowable end section	Each	\$ 2,500.00	2	\$ 5,000.00	
Total/Crossing				\$	75,000

Clear and Grub					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Clearing & Grubbing	LEG	\$ 573.92	1	\$ 573.92	Assumes clearing 10-ft wide both sides of the road for 250-ft
Total/Leg				\$	1,000

Install Transverse Rumble Strips on Intersection Approach					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Ground-in Rumble Strip	LEG	\$ 2.00	240	\$ 480.00	Assumes each leg has 4 12-ft wide lanes each direction, with 5 sets of strips on each let
Total/Leg				\$	1,000

Upgrade Signs and Pavement Markings (Paved Approach)					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Remove/Replace Sign	Each	\$ 650.00	2	\$ 1,300.00	Assumes 2 signs per leg, re-use sign posts
Remove/Replace Striping	LEG	\$ 1.00	2500	\$ 2,500.00	Assumes 4-lane roadway, refreshing 500-ft of striping
Total/Leg				\$	3,000

Install Second Stop Sign and Stop Ahead Sign					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Sign Type A-1	Sq ft	\$ 42.00	6	\$ 252.00	Assumes two signs
Sign Post P2	Each	\$ 144.00	2	\$ 288.00	Assumes two signs
Small Sign Tubular Steel Post Base (B1)	Each	\$ 400.00	2	\$ 800.00	Assumes two signs
Total/Leg				\$	1,500

Install Beacon on Stop Sign					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Stop Sign Beacon Installation	Each	\$ 5,000.00	1	\$ 5,000.00	
Total/Leg				\$	5,000

Realign Intersection Approaches to Reduce or Eliminate Skew					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Remove Pavement	Cu Yd	\$ 25.00	1185	\$ 29,625.00	Assumes two 12-ft lanes, 4 legs for 500' each direction. 8 inches of pavement removal
Replace Pavement	Ton	\$ 250.00	1184	\$ 296,000.00	Assumes two 12-ft lanes, 4 legs for 500' each direction. 8 inches of pavement (ssphalt) replacement
Sign Type A-1	Sq ft	\$ 42.00	6	\$ 252.00	Assumes two signs
Sign Post P2	Each	\$ 144.00	2	\$ 288.00	Assumes two signs
Small Sign Tubular Steel Post Base (B1)	Each	\$ 400.00	2	\$ 800.00	Assumes two signs
Pavement Marking Paint	gal	\$ 85.00	21	\$ 1,789.47	assume 4 inch white lines (2 edgeline, 2 center, 2 legs), 190 ft/gal
Total/Leg				\$	329,000

Create Positive Off-Set of Existing Left-Turn Lanes at an Intersection					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Remove Pavement Marking	ft	\$ 3.00	1345	\$ 4,035.00	Assumes 2' offset and no new pavement required
Pavement Marking Paint	Gal	\$ 85.00	28	\$ 2,387.16	Assumes paint, two coats, 8" striping
Pavement Message (Preformed Thermoplastic)	Each	\$ 325.00	2	\$ 650.00	
Remove Pavement Message	Each	\$ 120.00	2	\$ 240.00	
Remove Concrete Curb	ft	\$ 10.00	190	\$ 1,900.00	
Concrete Curb Type M2	ft	\$ 45.00	185	\$ 8,325.00	
Total/Intersection				\$	18,000

Install Rectangular Rapid Flashing Beacons (RRFB)					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Solar RRFB	Each	\$ 5,000.00	2	\$ 10,000.00	Assumes two solar sign assemblies (one on each side of road)
Total/Location				\$	10,000

Install Pedestrian Hybrid Beacon (PHB) or HAWK					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
PHB	Lump	\$ 250,000.00	1	\$ 250,000.00	
Total/Location				\$	250,000

Install Right-in Right-out Only Access Driveway					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Curb Type B5	ft	\$ 35.00	100	\$ 3,500.00	Assuming porkchop can be mounted on existing asphalt and no removal/widening of existing asphalt is necessary
Concrete Flatwork 6 Inch thick	Sq ft	\$ 15.00	250	\$ 3,750.00	
Pavement Marking Paint	ft	\$ 0.50	300	\$ 150.00	
Sign Assembly	Each	\$ 850.00	4	\$ 3,400.00	
Total/Location				\$	11,000

**The provided cost estimates represent planning-level estimates. The cost estimates were developed using the latest available unit material costs from Materials Masterworks Database, the UDOT Concept Cost Estimate Form, and project team input and experience.*

Safety Countermeasure	Description	Cost Estimate*
Install Driver Feedback Speed Limit Signs	Displays vehicle speeds to approaching drivers, encouraging them to slow down when exceeding the posted speed limit. These signs use radar to detect speeds and provide real-time feedback, raising driver awareness. By promoting lower speeds, they help reduce the likelihood and severity of crashes.	\$11,000 / Each
Install Driver Feedback Speed Limit Signs on Rural Curves	Alerts drivers to their speed as they approach potentially hazardous curves, encouraging speed reduction. These signs are strategically placed before curves to give drivers time to adjust their speed. Slowing vehicles before curves reduces the risk of lane departure crashes and rollover incidents.	\$11,000 / Each
Lane Narrowing	Reduces the width of vehicle travel lanes, often through restriping or adding buffers for bikes or pedestrians. Narrower lanes naturally encourage slower driving speeds and increase driver focus. Lower speeds reduce the severity of crashes and create a safer environment for all road users.	\$37,000 / Each
Install Medians (Back-To-Back Curb)	Provides a physical barrier that separates opposing traffic, reducing head-on and left-turn crashes. These medians limit dangerous crossing movements and provide a refuge for pedestrians. By restricting risky maneuvers, they enhance safety and reduce severe crash rates.	\$654,000 / Mile
Install Bicycle Lanes	Designates space exclusively for cyclists, typically with pavement markings and signage. They provide a safer, dedicated area for bicyclists, separating them from motor vehicle traffic. Bicycle lanes reduce conflicts between cyclists and motorists, lowering the risk of serious crashes.	\$44,000 / Mile
Install Buffered Bicycle Lanes (Curb Separated)	Adds a physical separation, often using curbs or raised elements, between cyclists and vehicle lanes. This increased separation protects cyclists from encroaching vehicles. By enhancing safety and reducing cyclist exposure to motor traffic, the likelihood of serious crashes is minimized.	\$651,000 / Mile
Install a Separated 12 ft. Shared-use Path	Accommodates pedestrians, cyclists, and other non-motorized users, separated from the roadway. The separation significantly reduces conflicts between vulnerable users and vehicles. Providing a safe, off-road option minimizes the potential for fatal and serious injury crashes.	\$627,000 / Mile
Convert Traditional/Buffered Bike Lanes to Separated Lane with Flexible Delineator Posts	Provides a physical buffer between cyclists and motor vehicles. These posts increase driver awareness and prevent vehicle encroachment into bike lanes. The added protection significantly reduces collision risk for cyclists.	\$106,000 / Mile
Install Medians and Pedestrian Refuge Islands	Provides safe stopping points for pedestrians crossing multi-lane roads. They allow pedestrians to cross one direction of traffic at a time, reducing exposure. This improvement enhances pedestrian safety and reduces the chance of fatal crashes.	\$871,000 / Mile
Install 6 ft. Sidewalk (both sides of roadway)	Provides a designated space for pedestrians, separated from vehicle traffic. Installing sidewalks on both sides of a roadway increases pedestrian safety by reducing the likelihood of pedestrian-vehicle interactions. This separation helps lower pedestrian fatalities and serious injuries.	\$761,000 / Mile

**The provided cost estimates represent planning-level estimates. The cost estimates were developed using the latest available unit material costs from Materials Masterworks Database, the UDOT Concept Cost Estimate Form, and project team input and experience.*

Safety Countermeasure	Description	Cost Estimate*
Install Highway Lighting	Improves nighttime visibility for drivers, pedestrians, and cyclists. Properly lit roadways enhance driver reaction times and reduce the likelihood of crashes in low-visibility conditions. Enhanced lighting reduces nighttime crash severity and frequency.	\$300,000 / Mile
Conduct a Road Safety Audit	A Road Safety Audit (RSA) is a formal evaluation by a multidisciplinary team to identify safety concerns and recommend improvements. RSAs proactively assess potential hazards and suggest mitigation measures. Addressing identified issues helps prevent crashes and reduce injury severity.	\$25,000 / Location
Install 6" Edge Line (Both Sides of Road)	Increases visibility, especially at night and in poor weather. These edge lines provide clearer guidance, helping drivers maintain their lane position. Improved lane adherence reduces the risk of roadway departure crashes.	\$8,000 / Mile
Install Edge Line Rumble Strips	Creates audible and vibratory warnings when vehicles drift toward the shoulder. These strips alert distracted or drowsy drivers, preventing lane departures. Keeping vehicles in their lanes reduces the risk of run-off-road crashes.	\$5,000 / Mile
Install Centerline Rumble Strips	Provides tactile and auditory alerts to drivers who cross into opposing lanes. They help prevent head-on and opposite-direction sideswipe collisions by encouraging lane discipline. This reduces the likelihood of severe and fatal crashes.	\$5,000 / Mile
Install Post-Mounted Delineators	Increases visibility and guide drivers through curves, intersections, and other road features. They provide visual cues, especially in low-light conditions, enhancing driver awareness. Improved guidance reduces off-road and curve-related crashes.	\$4,000 / Mile
Install and/or Upgrade Curve Signage to Enhanced Delineations	Uses bright, retroreflective materials and larger signs to increase curve visibility. These signs alert drivers to approaching curves, encouraging appropriate speed adjustments. Improved warning systems reduce curve-related crashes.	\$3,000 / Curve
Install In-Lane Curve Warning Pavement Markings	Provides visual cues directly on the pavement, alerting drivers to upcoming curves. These markings enhance curve awareness and encourage speed reduction. Increased driver attention reduces the risk of curve-related crashes.	\$3,000 / Curve
Install High Friction Surface Treatment (HFST) on Curve	Increases pavement friction at critical curve locations, improving vehicle traction and reducing skidding. It helps vehicles maintain control on curves, especially in wet or slippery conditions. Enhanced grip reduces run-off-road crashes and curve-related fatalities.	\$53,000 / Curve
Extend Unpaved Shoulder 2 ft. (both sides of roadway)	Provides additional recovery space for vehicles that leave the roadway. This extra space allows drivers to regain control, reducing the likelihood of run-off-road crashes. Wider shoulders also reduce conflicts with pedestrians and cyclists.	\$27,000 / Mile
Install 4" Retroreflective Centerline and Edge Lines	Improves nighttime visibility and lane delineation. The enhanced reflectivity provides better guidance, reducing driver confusion and lane departures. Clearer lane markings help prevent crashes, especially in low-light conditions.	\$96,000 / Mile

**The provided cost estimates represent planning-level estimates. The cost estimates were developed using the latest available unit material costs from Materials Masterworks Database, the UDOT Concept Cost Estimate Form, and project team input and experience.*

Safety Countermeasure	Description	Cost Estimate*
Install Speed Activated Flashers on Chevron Signs	Illuminates chevron signs when vehicles approach at excessive speeds, providing an immediate visual warning. These flashers alert drivers to reduce speed before entering dangerous curves. Early warnings decrease the risk of curve-related crashes.	\$6,000 / Each
Install Transverse Rumble Strips Prior to Curve	Provides tactile and auditory warnings to approaching drivers. These strips alert drivers to reduce speed and prepare for the curve. Slowing vehicles before curves decreases the likelihood of curve-related crashes.	\$1,000 / Curve
Install Guardrail	Provides a protective barrier that prevents vehicles from leaving the roadway, especially on dangerous curves or embankments. They redirect errant vehicles and minimize the severity of crashes. Properly placed guardrails reduce the potential for fatal off-road crashes.	\$188,000 / Mile
Widen Roadway and Install Two-Way Left-Turn Lane	Reduces conflicts by providing a dedicated space for turning vehicles. This minimizes rear-end and sideswipe crashes by keeping turning vehicles out of the travel lanes. Safer left-turn movements reduce the risk of severe collisions.	\$1,526,000 / Mile
Install Paved Bus Pullout	Provides a designated area for buses to stop outside the travel lane. This prevents buses from blocking traffic and reduces the likelihood of rear-end collisions. Pullouts enhance safety for both passengers and passing vehicles.	\$20,000 / Each
Install 4-ft Paved Shoulder (both sides of roadway)	Provides additional space for errant vehicles, cyclists, and pedestrians. It offers a recovery area for vehicles, reducing the risk of run-off-road crashes. Paved shoulders enhance safety by accommodating multiple road users.	\$709,000 / Mile
Install 4" Centerline and Edge Line Striping (Paint)	Improves lane visibility and delineation. These markings help drivers maintain proper lane positioning, especially in low-light conditions. Better lane guidance reduces the potential for head-on and run-off-road crashes.	\$73,000 / Mile
Install Concrete Barrier	Provides a rigid, protective barrier that prevents vehicle crossovers and errant vehicle departures. They are effective at containing high-speed vehicles and reducing crash severity. Barriers prevent head-on collisions and protect vulnerable roadside areas.	\$915,000 / Mile

Install Driver Feedback Speed Limit Signs					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Driver Feedback Speed Limit Sign	Each	\$ 5,500.00	2	\$ 11,000.00	Assumes 1 sign each direction, Sign material cost is around 4.5k, 1k for install
Total/Each				\$	11,000

Install Medians (Back-to-back Curb)					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Type B5 Curb	ft	\$ 35.00	10560	\$ 369,600.00	Assumes center median with back to back B5 and no sidestreets
Remove Pavement For Curb Installation	sq yd	\$ 14.00	2933		Assumes removing width of curbs (1') plus 2' on either side to account for curb installation (5' wide total)
UTBC (Plan Quantity)	cu yd	\$ 80.00	521		Assumes a 27" Pavement Section (7" HMA, 8" UTBC, 12" GB)
HMA 1/2 Inch	Ton	\$ 160.00	912		Assumes a 27" Pavement Section (7" HMA, 8" UTBC, 12" GB)
Granular Borrow	cu yd	\$ 70.00	782		Replacement of 2' on either side of curb for curb installation (4' wide total) Assumes a 27" Pavement Section (7" HMA, 8" UTBC, 12" GB)
Total/Mile				\$	370,000

Install Bicycle Lanes					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Pavement Message (Preformed Thermoplastic)	Each	\$ 325.00	42	\$ 13,728.00	Assumes no additional pavement needed. Bike rider/ arrow assumed every 500'
Sign Type A-1	Sq ft	\$ 50.00	30	\$ 1,500.00	Assumes signs every 1000' on both sides. Bike lane sign (3 sq ft each)
Sign Type A-2	sq ft	\$ 60.00	40	\$ 2,400.00	Assumes signs every 1000' on both sides. No parking sign
Sign Post P2	Each	\$ 200.00	10	\$ 2,000.00	Assumes signs every 1000' on both sides.
Small Sign Tubular Steel Post Base (	Each	\$ 400.00	10	\$ 4,000.00	Assumes signs every 1000' on both sides.
Remove Pavement Marking Paint	ft	\$ 2.00	5280	\$ 10,560.00	
Pavement Marking Paint	gal	\$ 85.00	111	\$ 9,448.42	assume 4 inch white lines (2 each side), 190 ft/gal
Total/Mile				\$	44,000

Install Buffered Bicycle Lanes (Striping Only, No Barrier)					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Pavement Marking Paint	gal	\$ 85.00	167	\$ 14,172.63	Assumes no sidestreets, 3' buffer both sides. Assumes no additional pavement needed. Assume 4 inch white lines (4 each side), 190 ft/gal, no cross hatching in buffer
Pavement Message	Each	\$ 325.00	42	\$ 13,728.00	Assumes bike rider/arrow assumed every 500'
Sign Type A-1	Sq ft	\$ 50.00	30	\$ 1,500.00	Assumes signs every 1000' on both sides. Bike lane sign
Sign Type A-2	sq ft	\$ 60.00	40	\$ 2,400.00	Assumes signs every 1000' on both sides. No parking sign
Sign Post P2	Each	\$ 200.00	10	\$ 2,000.00	Assumes signs every 1000' on both sides.
Small Sign Tubular Steel Post Base (	Each	\$ 400.00	10	\$ 4,000.00	Assumes signs every 1000' on both sides.
Remove Pavement Marking Paint	ft	\$ 2.00	5280	\$ 10,560.00	
Total/Mile				\$	49,000

Install Buffered Bicycle Lanes (Curb Separated)					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Pavement Marking Paint	gal	\$ 85.00	167	\$ 14,172.63	Assumes no sidestreets, 3' buffer both sides. Assumes no additional pavement needed. Assume 4 inch white lines (4 each side), 190 ft/gal, no cross hatching in buffer
Pavement Message	Each	\$ 325.00	42	\$ 13,728.00	Assumes bike rider/arrow assumed every 500'
Sign Type A-1	Sq ft	\$ 50.00	30	\$ 1,500.00	Assumes signs every 1000' on both sides. Bike lane sign
Sign Type A-2	sq ft	\$ 60.00	40	\$ 2,400.00	Assumes signs every 1000' on both sides. No parking sign
Sign Post P2	Each	\$ 200.00	10	\$ 2,000.00	Assumes signs every 1000' on both sides.
Small Sign Tubular Steel Post Base (B1)	Each	\$ 400.00	10	\$ 4,000.00	Assumes signs every 1000' on both sides.
Remove Pavement Marking Paint	ft	\$ 2.00	5280	\$ 10,560.00	
Type B5 Curb	ft	\$ 28.50	21120	\$ 601,920.00	Assumes median with back to back B5 and no sidestreets. Both sides of road
Total/Mile				\$	651,000

Convert Traditional Bicycle Lanes to Separated Bicycle Lanes with Flexible Delineators					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Flexible Delineator Post	Each	\$ 200.00	528	\$ 105,600.00	Assumes delineators every 20' (<45 mph, otherwise 40') on both sides, no sidestreets.
Total/Mile				\$	106,000

New High-Visibility Crosswalk at Midblock locations					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Lighting	Lump	\$ 10,200.00	2	\$ 20,400.00	Includes 40' Highway Luminaire Pole (Slip Base), 15' Luminaire Arm, LED Luminaire B, Type III, MV, PC
Underground service pedestal - power source	each	\$ 1,500.00	1	\$ 1,500.00	Lighting
Foundation	each	\$ 3,137.00	2	\$ 6,274.00	Lighting
Junction Box	each	\$ 2,000.00	2	\$ 4,000.00	Lighting
Pavement Message (Preformed Thermoplastic)	ft	\$ 15.00	144	\$ 2,160.00	Assumes 4 12-ft lanes and 2 4-ft shoulders (ladder style crosswalk). Item is quantified by 12" thermoplastic (ft)
Sign Type A-1	Sq ft	\$ 50.00	5	\$ 250.00	
Sign Post P2	Each	\$ 200.00	5	\$ 1,000.00	
Small Sign Tubular Steel Post Base (	Each	\$ 400.00	5	\$ 2,000.00	
Total/Crossing				\$	38,000

Install Medians and Pedestrian Refuge Islands					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Concrete Curb Type B5	ft	\$ 28.50	9840	\$ 280,440.00	Assumes 100' intersection every 1320' and 10' crosswalks
Remove Pavement For Median Insta	sq ft	\$ 14.00	39360		Assumes removing width of median
Replace Pavement	sq ft	\$ 16.00	19680		Replacement on either side of median for curb installation
Concrete Flatwork 6 Inch Thick	sq ft	\$ 15.00	39360	\$ 590,400.00	Assumes existing 14' TWLTL and Crosswalks
Total/Mile				\$	871,000

Install Raised Medians on Roads with TWLTL					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Concrete Curb Type B5	ft	\$ 28.50	9120	\$ 259,920.00	Assumes 100' intersection every 750' and 10' crosswalks
Roadway Excavation (Plan Quantity)	cu yd	\$ 50.00	3133	\$ 156,635.80	Assumes 29" cross-section, 12" pavement section
Replace Pavement	sq ft	\$ 16.00	18240	\$ 291,840.00	Replacement on either side of median for curb installation
Concrete Flatwork 6 Inch Thick	sq ft	\$ 15.00	35000	\$ 525,000.00	Assumes existing 12' TWLTL and Crosswalks
Total/Mile				\$	1,234,000

Install 6-ft. Sidewalk (Both Sides of Roadway)					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Concrete Sidewalk	sq ft	\$ 12.00	63360	\$ 760,320.00	Assumes 6' sidewalk, no sidestreets both sides
Total/Mile				\$	761,000

Median Barriers on Divided Highways (Concrete Barrier)					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Cast-In-Place Concrete Constant Slope	ft	\$ 160.00	10456	\$ 1,672,960.00	Assumes no sidestreets both sides
Crash Cushion Type D (MASH)	Each	\$ 35,000.00	4	\$ 140,000.00	Assumes end sections on both sides
Total/Mile				\$	1,813,000

Install 6" Edgeline Striping (Both Sides of Roadway)					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Pavement Marking Paint	gal	\$ 85.00	83	\$ 7,086.32	Assumes both sides of road, qty is in 4" equiv
Total/Mile				\$	8,000

Install Edgeline Rumblestrips					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Longitudinal Rumble Strip - Asphalt	ft	\$ 0.50	8448	\$ 4,224.00	Assumes no sidestreets, both sides
Total/Mile				\$	5,000

Install Centerline Rumblestrips					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Longitudinal Rumble Strip - Asphalt	ft	\$ 0.50	8448	\$ 4,224.00	Assumes no sidestreets, both sides
Total/Mile				\$	5,000

Install Post-Mounted Delineators					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Delineator Type 1	Each	\$ 100.00	20	\$ 2,000.00	Assumes no sidestreets, no curves, delineators on both sides of road
Flexible Delineator Post - Type 1	Each	\$ 85.00	20	\$ 1,700.00	
Total/Mile				\$	4,000

Install or Upgrade Curve Signage					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Sign Type A-1	sq ft	\$ 50.00	11	\$ 562.50	Includes W1-2 warnings signs and W13-1 Speed Advisory Plaque
Sign Post P2	Each	\$ 200.00	1	\$ 200.00	For above signs
Small Sign Tubular Steel Post Base (B1)	Each	\$ 400.00	1	\$ 400.00	For above signs
Sign Type A-1	sq ft	\$ 50.00	5	\$ 250.00	Added cost per W1-8 Chevron
Sign Post P2	Each	\$ 200.00	1	\$ 200.00	Added cost per W1-8 Chevron
Small Sign Tubular Steel Post Base (B1)	Each	\$ 400.00	1	\$ 400.00	Added cost per W1-8 Chevron
Total/Curve				\$	3,000

Install In-Lane Curve Warning Pavement Markings					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Pavement Message (Preformed Thermoplastic)	Each	\$ 300.00	7	\$ 2,100.00	Two bars, four letters (SLOW) and an arrow
Total/Curve				\$	3,000

Install Safety Edge					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
HMA 1/2 Inch	Ton	\$ 140.00	117.487	\$ 16,448	Assumes 5" HMA safety edge section, assumes both sides of road, no sidestreets - 1 mile length
UTBC (Plan Quantity)	cu yd	\$ 80.00	971	\$ 77,711.60	Assumes a 4 ft x 7 inch UTBC section behind the safety edge, assumes both sides of the road
Total/Mile				\$	95,000

Install High Friction Surface Treatment (HFST) on Curve					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
High Friction Pavement	Ton	\$ 250.00	172	\$ 43,094	Assumes 2-lane highway with 2' shoulders. Assumes 1000' curve with 1000' radius. Assumes 150 lb/cu ft
Rotomilling - 1 Inch	sq yd	\$ 3.00	3064	\$ 9,193.33	Assumes 2-lane highway with 2' shoulders. Assumes 1000' curve with 1000' radius
Total/Mile				\$	53,000

Extend Unpaved Shoulder (2-ft., Both Sides of the Roadway)					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
UTBC (Plan Quantity)	cu yd	\$ 80.00	326	\$ 26,074.07	Assumes a 2 ft x 10 inch UTBC shoulder, assumes no sidestreets
Total/Mile				\$	27,000

Install 2-ft. Paved Shoulder (Both Sides of the Roadway)					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
UTBC (Plan Quantity)	cu yd	\$ 80.00	521	\$ 41,718.52	Assumes 8" section, both sides of road. Assumes no sidestreets
HMA 1/2 Inch	Ton	\$ 140.00	912	\$ 127,635.20	Assumes 7" section, both sides of road. Assumes no sidestreets
Granular Borrow	cu yd	\$ 70.00	782	\$ 54,755.56	Assumes 12" section, both sides of road. Assumes no sidestreets
Remove Pavement	sq yd	\$ 14.00	391	\$ 5,475.56	Assumes removal of 1-ft existing shoulder on each sides
Total/Mile				\$	230,000

Install Lighting					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Highway Lighting	Lump	\$ 300,000.00	1	\$ 300,000.00	Assumes 20 poles each side of road, junction box wiring, and power source
Total/Mile				\$	300,000

Install 4" Retroreflective Centerline and Edge Lines					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Remove Existing Striping	ft	\$ 1.00	21120	\$ 21,120.00	Assumes 2 lines of stripe (2 edge lines, 2 centerline)
Retroreflective Thermoplastic Striping	ft	\$ 3.50	21120	\$ 73,920.00	Assumes 2 lines of stripe (2 edge lines, 2 centerline)
Total/Mile				\$	96,000

Clear and Grub					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Clearing & Grubbing	Mile	\$ 48,484.85	1	\$ 48,484.85	Assumes clearing 10-ft on both sides of the road
Total/Mile				\$	49,000

Install Speed Activated Flashers on Chevron Signs					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Speed-Activated Flasher Sign	EACH	\$ 5,500.00	1	\$ 5,500.00	Assumed similar cost to driver speed feedback sign
Total/Mile				\$	6,000

Install Transverse Rumble Strips Prior to Curve					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Ground-In Rumble Strips	EACH	\$ 2.00	480	\$ 960.00	assumes 2 12-ft lanes each direction, 5 sets of strips on each side of curve
Total/Mile				\$	1,000

Install Guardrail					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
W-Beam Guardrail	FT	\$ 35.00	5280	\$ 184,800.00	Assumes 6-ft wood post
W-Beam Guardrail Anchor Type I	EACH	\$ 1,600.00	2	\$ 3,200.00	Assumes End Sections
Total/Mile				\$	188,000

Install Concrete Barrier					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Cast in Place Concrete constant slope barrier - 42 inch	FT	\$ 160.00	5280	\$ 844,800.00	CIP Concrete Constraint Slope Barrier - 42 inch
Crash Cushion Type D (MASH)	Each	\$ 35,000.00	2	\$ 70,000.00	Assumes end sections on both sides
Total/Mile				\$	915,000

Install a Separated 12-ft. Shared-use Path					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Roadway Excavation (Plan Quantity)	cu yd	\$ 50.00	2347	\$ 117,333.33	Assumes 12" section, 12' wide
UTBC (Plan Quantity)	cu yd	\$ 80.00	782	\$ 62,577.78	Assumes 4" section, 12' wide
HMA 1/2 Inch	Ton	\$ 140.00	3126	\$ 437,606.40	Assumes 8" section, both sides of road. Assumes no sidestreets
Pavement Marking Paint	gal	\$ 85.00	28	\$ 2,362.11	1 4" stripe 190 ft/gallon
Pavement Message	Each	\$ 325.00	11	\$ 3,432.00	Assumes bike rider/walker every 500' or messages at crossings
Sign Type A-1	Sq ft	\$ 50.00	5	\$ 250.00	Assumes signs every 1000'
Sign Post P2	Each	\$ 200.00	5	\$ 1,000.00	Assumes signs every 1000'
Small Sign Tubular Steel Post Base (B1)	Each	\$ 400.00	5	\$ 2,000.00	Assumes signs every 1000'
Total/Mile				\$	627,000

Widen Roadway to Install Two-Way Left-Turn Lane					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Roadway Excavation (Plan Quantity)	cu yd	\$ 50.00	6160	\$ 308,000.00	Assumes 27" section, 14' TWLTL
UTBC (Plan Quantity)	cu yd	\$ 80.00	1825	\$ 146,014.81	Assumes 8" section, 14' TWLTL
HMA 1/2 Inch	Ton	\$ 140.00	4103	\$ 574,358.40	Assumes 7" section, 14' TWLTL, 4' sawcut existing pavement
Granular Borrow	cu yd	\$ 70.00	2738	\$ 191,644.44	Assumes 12" section, 14' TWLTL
Pavement Marking Paint	gal	\$ 85.00	139	\$ 11,810.53	Assumes 4-inch lines (2 white on sides, 2 solid yellow + 1 broken yellow eq) - 190 gallon/ft.
Type B1 Curb & Gutter	ft	\$ 50.00	5280	\$ 264,000.00	Assumes curb and gutter one side of road
Remove Concrete Curb & Gutter	ft	\$ 10.00	5280	\$ 52,800.00	Assumes removing curb and gutter on one side of road
Remove Pavement	sq yd	\$ 14.00	782	\$ 10,951.11	4' wide
Total/Mile				\$	1,560,000

Install Paved Bus Pullout					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Roadway Excavation (Plan Quantity)	cu yd	\$ 50.00	119	\$ 5,925.93	Assumes 27" section, 80' x 16' asphalt pad
UTBC (Plan Quantity)	cu yd	\$ 80.00	32	\$ 2,528.40	Assumes 8" section, 80' x 16' asphalt pad
HMA 1/2 Inch	Ton	\$ 140.00	58	\$ 8,122.24	Assumes 7" section, 84' x 16' asphalt pad
Granular Borrow	cu yd	\$ 70.00	47	\$ 3,318.52	Assumes 12" section, 80' x 16' asphalt pad
Total/Pullout				\$	20,000

Install 4-ft. Paved Shoulder (Both Sides of the Roadway)					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
UTBC (Plan Quantity)	cu yd	\$ 80.00	1043	\$ 83,437.04	Assumes 8" section, 4' wide
HMA 1/2 Inch	Ton	\$ 140.00	3647	\$ 510,540.80	Assumes 7" section, 8' wide
Granular Borrow	cu yd	\$ 70.00	1564	\$ 109,511.11	Assumes 12" section, 4' wide, both sides of road. Assumes no sidestreets
Remove Pavement	sq yd	\$ 14.00	391	\$ 5,475.56	Assumes removal of 1-ft existing shoulder on each sides
Total/Mile				\$	709,000

Install 4" Paint Centerline and Edge Lines					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Remove Pavement Marking	ft	\$ 3.00	21120	\$ 63,360.00	Assumes 2 lines of stripe (2 edge lines, 2 centerline)
Pavement Marking Paint	gal	\$ 85.00	111	\$ 9,448.42	Assumes 2 lines of 4" stripe (2 edge lines, 2 centerline), 190 ft/gal
Total/Mile				\$	73,000

Lane Narrowing					
Item	Unit	Unit Cost	Quantity	Total Cost	Notes
Remove Pavement Marking	ft	\$ 3.00	10560	\$ 31,680.00	Striping on Both Sides of Road. Assumes no sidestreets. Assumes 2 lanes
Pavement Marking Paint	gal	\$ 85.00	56	\$ 4,724.21	2 lines of 4" stripe (2 edge lines), 190 ft/gal
Total/Mile				\$	37,000.00



APPENDIX E. PROJECT INFORMATION SHEETS

Project Number	Project Location	Jurisdiction(s)	GFA(s)
1	Main Street (SR 130) from 3000 North to South I-15 Interchange	Cedar City, UDOT	Cedar City GFA
2	SR 289/SUU Loop	Cedar City, UDOT	Cedar City GFA
3	600 South, 800 South, 860 West School Area	Cedar City	Cedar City GFA
4	Cross Hollow Road from SR 56 to Royal Hunte Drive/Providence Court Drive	Cedar City	Cedar City GFA
5	Westview Drive from SR 56 to 2700 South	Cedar City, Iron County	Cedar City GFA, East Iron County GFA
6	SR 56 from Iron Springs Road to Airport Road	Cedar City, UDOT	Cedar City GFA
7	SR 56 and Airport Road Intersection	Cedar City, UDOT	Cedar City GFA
8	SR 56 from Airport Road to Main Street (SR 130)	Cedar City, UDOT	Cedar City GFA
9	Midvalley Road from Lund Highway to Old Highway 91	Enoch City, Iron County	Enoch City GFA, West Iron County GFA
10	SR 130 from 3000 North to Midvalley Road	Enoch City, UDOT	Enoch City GFA
11	SR 130 from Midvalley Road to 6400 North	Enoch City, UDOT	Enoch City GFA
12	4200 North from SR 130 to Half Mile Road	Enoch City	Enoch City GFA
13	3600 North from Bulldog Road to SR 130	Enoch City	Enoch City GFA
14	Old Highway 91 from SR 130 to Midvalley Road	Enoch City	Enoch City GFA
15	Comstock and Pinto intersections with SR 56	Iron County, UDOT	East Iron County GFA, West Iron County GFA
16	SR 56 Rural Local Intersections (7700 West)	Iron County, UDOT	East Iron County GFA
17	SR 56 from Comstock Road to Iron Springs Road	Iron County, UDOT	East Iron County GFA, West Iron County GFA
18	200 South (SR 143) from I-15 to SR 143	Parowan City, UDOT	East Iron County GFA
19	Main Street (SR 274) from I-15 to 300 South	Parowan City, UDOT	East Iron County GFA
20	SR 143 from Dry Lakes Road to Vasels Road	Brian Head Town, Iron County, UDOT	East Iron County GFA
21	Brian Head, SR 143 Intersections (Snowshoe Village Road and Vasels Road)	Brian Head Town, UDOT	East Iron County GFA
22	SR 20 from Burnt Peak Road to Bear Valley Road	Iron County, UDOT	East Iron County GFA
23	SR 56 from 2400 West to Main Street (New Castle)	Iron County, UDOT	West Iron County GFA
24	SR 56 & SR 18 (Beryl Junction)	Iron County, UDOT	West Iron County GFA
25	Bench Road from SR 56 to Newcastle Hills	Iron County	West Iron County GFA
26	SR 56 from Main Street (New Castle) to Comstock Road	Iron County, UDOT	West Iron County GFA, East Iron County GFA
27	Iron Springs Road from SR 56 to Comstock Road	Iron County, Cedar City	West Iron County GFA
28	Lund Highway from SR 56 to Midvalley Road	Iron County, Cedar City	West Iron County GFA
29	Lund Highway from Midvalley Road to 7000 North	Iron County, Cedar City	West Iron County GFA



APPENDIX E.1. CEDAR CITY GFA PROJECT INFORMATION SHEETS

LOCATION CHARACTERISTICS

Location: Main Street (SR 130)

Project Extents: 3000 North to South I-15 Interchange

Roadway Classification: Other Principal Arterial, State Route

Jurisdiction(s): Cedar City, UDOT

Underserved Community: Yes

PROJECT NUMBER: 1

Safety Action Plan GFA(s): Cedar City GFA

GFA Emphasis Areas: Intersections, Older Drivers, Teen Drivers



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Segment Characteristics

Length:	6.23
Speed Limit:	30-45 mph
Roadway Lanes:	4
Daily Traffic Volume (AADT):	18,600
Median Type:	TWLT
Number of Key Intersections	11











Why was this location identified?

High Crash Network:	Yes	✓
High Injury Network:	Yes	✓
Network Screening:	Yes	✓
Conflict Areas:	No	✗
Risk Characteristics:	Yes	✓
Community Feedback:	Yes	✓

Location Crash History

Crash Severity (2019 - 2023)	
Fatal Crashes:	2
Serious Injury Crashes:	15
Minor Injury Crashes:	106
Possible Injury Crashes:	131
No Injury/PDO Crashes:	589
Total Crashes:	843
Equivalent Property Damage Crashes:	7,095

Location Crash Type

Fixed-object	Angle	Left Turn	Head-on	Rear-end
				
6%	43%	36%	2%	30%
Motorist-bicyclist	Motorist-pedestrian	Sideswipe	Front to Rear	Single Vehicle
				
1%	1%	9%	31%	13%













LOCATION INFORMATION

Key Intersection Crash History

PROJECT NUMBER: 1

Intersection Roadway	Total Crashes	Fatal and Serious Injury Crashes	Angle	Left Turn	Rear End	Head On	Sideswipe	Roadway Departure	Pedestrian	Bike
Old Highway 91	24		8	10	12		2	1		
Fir Street	29		14	12	5	2	7	1		
300 West	19		10	2	5		1	3		1
600 South	35	1	17	10	13		3			
200 South	29	1	20	12	9					
Center Street	36	1	14	5	13	1	2	2	2	
200 North (SR 56)	105		57	48	23	2	13	4	2	2
Coal Creek Road	19		8	7	9			1		
1045 North	36	1	14	8	15		3			1
1925 North	41	2	19	16	12	1	3	1	1	
3000 North	52		28	29	14	6	1			1

Utah Emphasis Areas

Behavioral		Aggressive Driving	0%
		Distracted Driving	9%
		Impaired Driving	1%
		Use of Safety Restraints	2%
		Speed Management	5%
		Teen Driving Safety	34%
		Senior Safety	21%
Crash Types		Roadway Departure Crashes	6%
		Intersection Safety	64%
Vulnerable Users		Motorcycle Safety	2%
		Pedestrian Safety	1%
		Bicycle Safety	1%

Other Applicable Locations/Scenarios:

- Principal arterial, four lane roadways with a center two-way left-turn limit and speed limits between 30 and 45 mph with numerous driveway access locations and intersections may benefit from similar safety countermeasures. Locations may include SR 56 (200 North) in Cedar City and SR 130 in Enoch City.

Comments, Feedback, Ongoing Projects:

- Pedestrian and bicycle conflicts with vehicles
- Vehicle speeding
- Lack of protected crossings
- High (and increasing) Vehicle traffic volumes
- Access management and control

EXISTING CONDITIONS

PROJECT NUMBER: 1



1925 North Intersection Southbound, near Canyon View High School

Notes:

- ROW may need to be acquired to accommodate bicycle lanes and/or turn lanes



Historic Downtown Midblock Crossing at Night



Google Street View image of Southbound Approach 200 South, Typical Signalized Intersection (www.googlemaps.com)



Typical Five-Lane Cross Section, Northbound near Canyon Center Drive



Typical Five-Lane Cross Section, Southbound near Cemetery

LOCATION RECOMMENDATIONS

Project Description

PROJECT NUMBER: 1

This project recommends a series of safety countermeasures to improve pedestrian, bicyclist, and vehicle mobility while addressing crash trends and community concerns. Sidewalks, buffered bike lanes, and lighting all improve active transportation safety. To improve intersection safety and traffic flow, right-turn lanes on and off Main Street are recommended at several key intersections. High-visibility crosswalk markings are recommended at multiple locations and a pedestrian hybrid beacon at a midblock location near Canyon View High School. Leading Pedestrian Intervals (LPI) at signalized intersections for pedestrians to establish themselves in the crosswalk before vehicle movements are recommended. Additionally, it is recommended that left-turn signal timing be adjusted to Flashing Yellow Arrows at signalized intersection that are permissive only to help reduce the risk of left-turn crashes. A Roadway Safety Audit is recommended for the entire project limits to involve UDOT, the City, and the community in the discussion of additional improvements and safety needs along the corridor. Improvements that will require further evaluation include, center medians, bulbouts, and additional midblock crossing locations.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Sidewalk	DI Sargent Drive to 3000 North and from Interstate Drive to Desert Pines Drive
Buffer Bicycle Lanes	Entire corridor
Highway Lighting	Old Highway 91 to Desert Pines Drive
Road Safety Audit	Entire corridor
Right Turn Lanes, Left Turn Lanes	Old Highway 91 northbound, 800 South north and southbound, 300 West north and southbound, 600 South north and southbound, 200 South all approaches, Center Street north, south, and eastbound, 200 North and southbound, Coal Creek Road south and eastbound, 1045 North and southbound
Left Turn Lanes	Fir Street, 300 West
High-Visibility Crosswalks with RRFB	Midblock between Harding Avenue and Hoover Drive
Leading Pedestrian Intervals	800 South, Center Street, 200 North, and 1925 North
Intersection Control Evaluation	300 South
Flashing Yellow Arrows	200 South, 800 South, Coal Creek Road, 1045 North, and 3000 North
Pedestrian Hybrid Beacon or HAWK	Midblock by Canyon View High School

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install 6 ft. Sidewalk (both sides of roadway)	1.75	MILE	\$761,000	\$1,331,750
Install Buffered Bicycle Lanes (Curb Separated)	6.23	MILE	\$651,000	\$4,055,730
Install Highway Lighting	0.511	MILE	\$300,000	\$153,300
Conduct a Road Safety Audit	1	LOC	\$25,000	\$25,000
Install Right-Turn Lanes	20	LANE	\$127,000	\$2,540,000
Implement Leading Pedestrian Interval (LPI) Signal Timing	4	INT	\$3,000	\$12,000
Perform an Intersection Control Evaluation and Implement	1	INT	\$225,000	\$225,000
Change Left-turn Timing from Permissive Only to Flashing Yellow Arrow	4	INT	\$8,000	\$32,000
Change a 5-section "Doghouse" to Flashing Yellow Arrow	1	INT	\$8,000	\$8,000
Install Pedestrian Hybrid Beacons (PHB) or HAWK	1	EACH	\$250,000	\$250,000
Install Pedestrian Hybrid Beacons (PHB) or HAWK	1	EACH	\$250,000	\$250,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

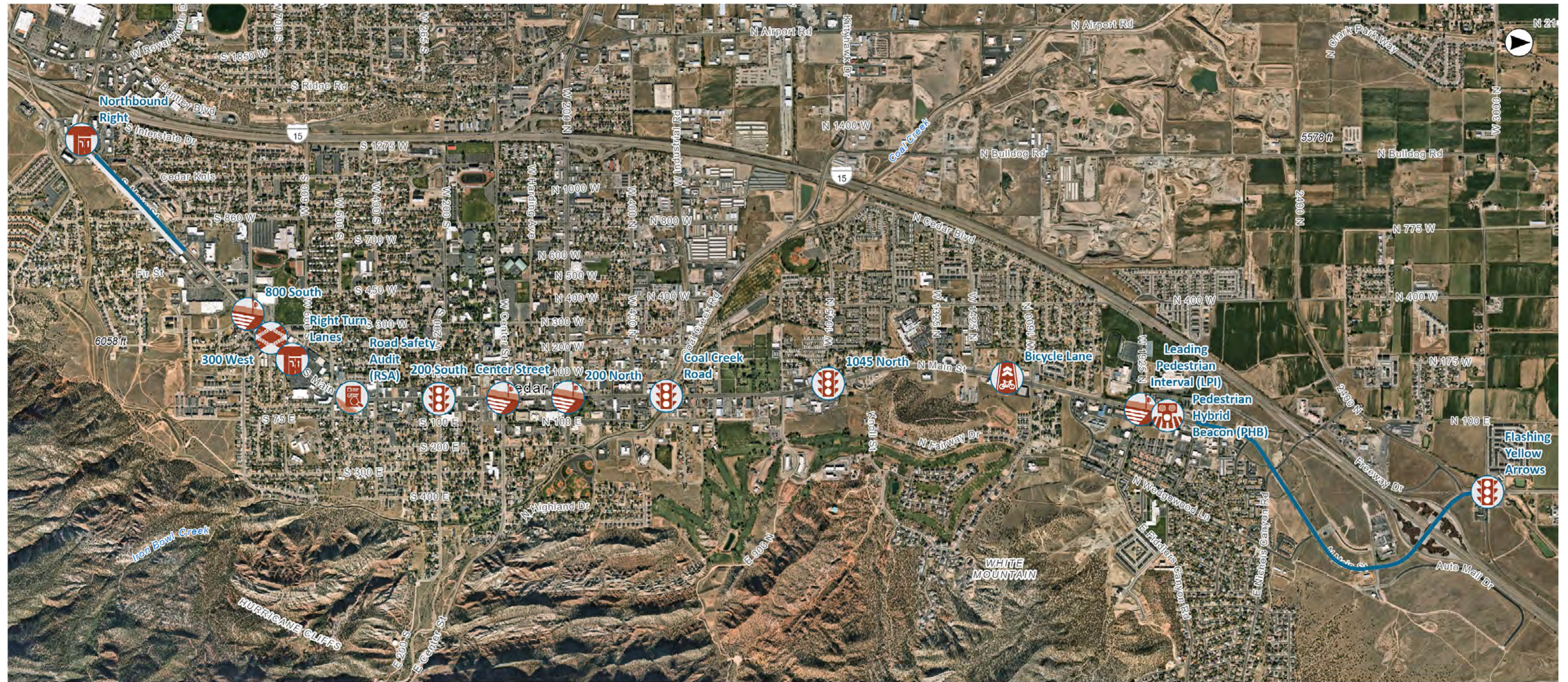
2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.



















Improvement Subtotal	\$8,632,780
Estimated Construction Cost Total¹	\$11,729,253
Estimated Project Total²	\$14,165,000
Local Match³	\$2,833,000

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 1



Main Street (SR 130) from 3000 North to South I-15 Interchange

- | | 800 South | 300 West | 200 South | Center Street | 200 North | Coal Creek Road | 1045 North |
|--|---|---|--|---|--|---|--|
|  Road Safety Audit (RSA), Entire Corridor |  Leading Pedestrian Interval (LPI) |  Intersection Control Evaluation (ICE) |  Flashing Yellow Arrow |  Leading Pedestrian Interval (LPI) |  Leading Pedestrian Interval (LPI) |  Flashing Yellow Arrow |  Flashing Yellow Arrow |
|  Bike Lanes, Entire Corridor |  Flashing Yellow Arrow |  North and Southbound Right Turn Lanes |  Right Turn Lanes, All Approaches |  Right Turn Lanes, North, South, and Eastbound |  Right Turn Lanes, North and Southbound |  Right Turn Lanes, South and Eastbound |  Right Turn Lanes, North and Southbound |
|  Highway Lighting | | | | | | | |
|  Sidewalk |  North and Southbound Right Turn Lanes | | | | | | |

LOCATION CHARACTERISTICS

Location: SUU Loop, SR 289

Project Extents: 1150 West to Highland Drive

Roadway Classification: Minor Arterial, State Route

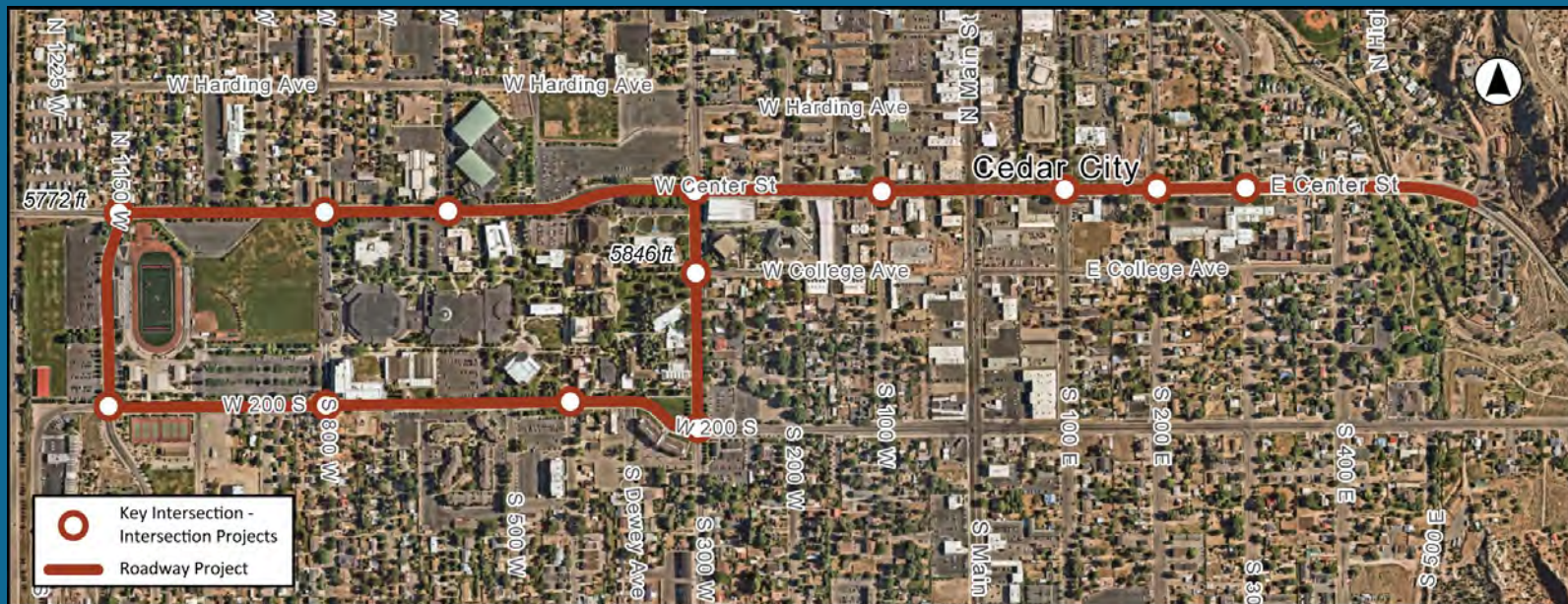
Jurisdiction(s): Cedar City, UDOT

Underserved Community: Yes

PROJECT NUMBER: 2

Safety Action Plan GFA(s): Cedar City GFA

GFA Emphasis Areas: Intersections, Older Drivers, Teen Drivers



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Segment Characteristics

Length:	2.44
Speed Limit:	25-30 mph
Roadway Lanes:	2
Daily Traffic Volume (AADT):	4,500
Median Type:	TWLT
Number of Key Intersections	13











Why was this location identified?

High Crash Network:	Yes	✓
High Injury Network:	Yes	✓
Network Screening:	Yes	✓
Conflict Areas:	No	✗
Risk Characteristics:	Yes	✓
Community Feedback:	Yes	✓

Location Crash History

Crash Severity (2019 - 2023)	
Fatal Crashes:	0
Serious Injury Crashes:	2
Minor Injury Crashes:	21
Possible Injury Crashes:	21
No Injury/PDO Crashes:	108
Total Crashes:	152
Equivalent Property Damage Crashes:	916

Location Crash Type













Fixed-object	Angle	Left Turn	Head-on	Rear-end
				
7%	47%	18%	0%	21%
Motorist-bicyclist	Motorist-pedestrian	Sideswipe	Front to Rear	Single Vehicle
				
3%	2%	9%	22%	12%

LOCATION INFORMATION

Key Intersection Crash History

PROJECT NUMBER: 2

Intersection Roadway	Total Crashes	Fatal and Serious Injury Crashes	Angle	Left Turn	Rear End	Head On	Sideswipe	Roadway Departure	Pedestrian	Bike
1100 West & Thunderbird Way										
1150 West & Center Street	34		19	1	8		2	1		2
800 West & Center Street	5		3	1	2					
600 West & Center Street	3				1					1
300 West & Center Street	14		8	3	3		1	1	2	
Shakespeare Lane & 300 West	6				5					
300 West & Thunderbird Way	7	1	4	1	1		1			
450 West & Thunderbird Way	7				2		1	3		

Utah Emphasis Areas		
Behavioral		Aggressive Driving 1%
		Distracted Driving 8%
		Impaired Driving 3%
		Use of Safety Restraints 1%
		Speed Management 10%
		Teen Driving Safety 43%
		Senior Safety 13%
Crash Types		Roadway Departure Crashes 10%
		Intersection Safety 67%
Vulnerable Users		Motorcycle Safety 3%
		Pedestrian Safety 2%
		Bicycle Safety 3%

Other Applicable Locations/Scenarios:

Minor arterial, state routes (25-30 mph) that serve school locations with a need for improved pedestrian crossing safety may benefit from similar safety countermeasures. Other school locations may include the following. Please note that similar countermeasures may be used for other areas with identified pedestrian crossing needs.

- 100 North and Main Street (SR 274) roadways, (Parowan Elementary and High School)
- 400 South, 500 South, and 450 West roadways (South Elementary)
- 400 North, 600 West, and 500 West roadways (Cedar North Elementary)
- 200 East and East Center Street roadways (Cedar East Elementary)
- 400 West, 1925 North, Fiddlers Canyon, and Wedgewood Lane roadways (Canyon View Middle and High Schools, Fiddler's Canyon Elementary)
- Midvalley Road, Wagon Wheel Drive and Deer Hollow Drive roadways (Enoch Elementary and Three Peaks Elementary)
- 4050 West and surrounding roadways (Iron Springs Elementary)
- Royal Hunte Drive and Cove Drive roadways (Cedar Middle School)

Comments, Feedback, Ongoing Projects:

- Roadway Safety Audit previously completed in September 2024
- Roundabout planned at 1150 West and University Boulevard intersection

EXISTING CONDITIONS

PROJECT NUMBER: 2

Notes:

- Need additional crossing locations, safer crossings, or Pedestrian refuge islands
- Explore way finding or Pedestrian fences to redirect pedestrians to crossings
- Re-evaluate speeds and on street parking



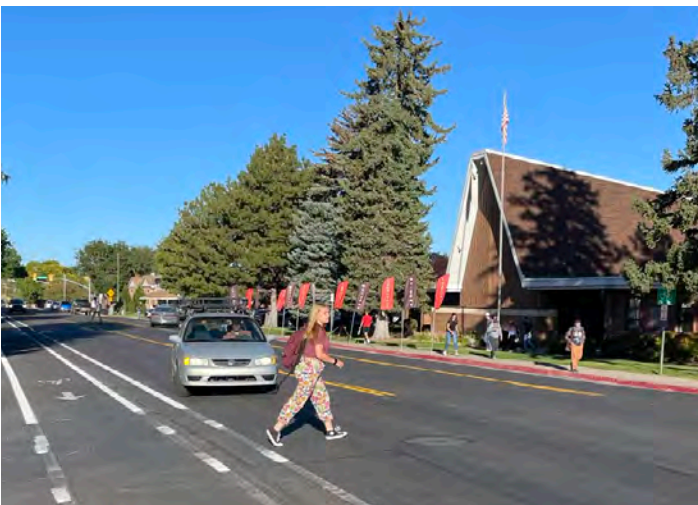
100 West & University Boulevard Crossings



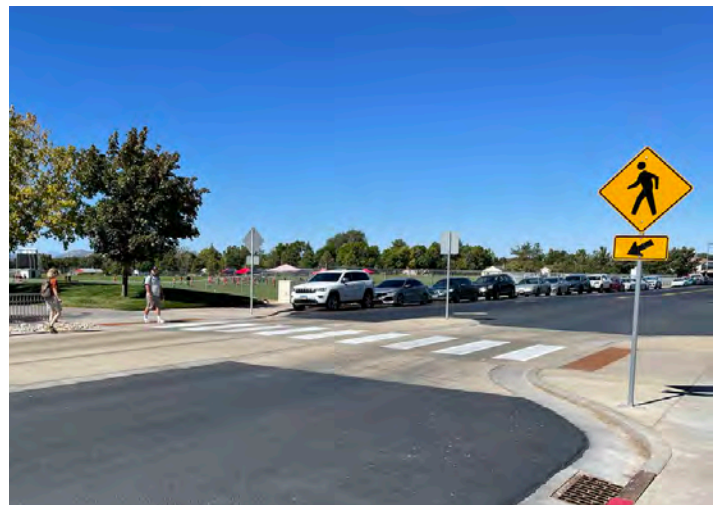
5000 West Pedestrian Hybrid Beacon



Eastbound SR 14, Crossing to East Cedar Elementary



Pedestrian Crossing University Boulevard



SUU Raised Crossing on 800 West

LOCATION RECOMMENDATIONS

Project Description

PROJECT NUMBER: 2

This project builds upon recommendations included in a Roadway Safety Audit (RSA) completed by UDOT in September 2024. Proposed roadway safety improvements include medians and pedestrian refuge islands, narrowing lanes to reduce vehicle speeds, and improved pedestrian ramps. Proposed intersection safety improvements include a raised crosswalk at 450 West, high-visibility crosswalks along 1150 West, Leading Pedestrian Intervals (LPI), and improved lighting. Rectangular Rapid Flashing Beacons (RRFBs) are recommended at 300 West & Shakespeare Lane to replace malfunctioning units. Right-turn lanes to reduce congestion at multiple intersections.

These recommendations aim to address concerns related to pedestrian crossings, speeding, insufficient pedestrian crossing times, and traffic movements at four-way stops. Additional recommendations included in the RSA should be considered and implemented.

An improved crossing such as a PHB or a high-visibility crossing with RRFBs should be considered on SR 14 between Main Street and Canyon Park, to facilitate the East Elementary, planned growth and connections north of Center Street, and Coal Creek shared-use path active transportation connections.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Median and Pedestrian Refuge Islands	Surrounding SUU
Lane Narrowing	Surrounding SUU
Highway Lighting	Surrounding SUU
High-Visibility Crosswalk	Thunderbird Way (Dewey Avenue, 450 West, 700 West, 800 West, 1150 West) University Blvd (1150 West, 600 West)
Right Turn Lanes	1150 West & Thunderbird Way and 100 West & Center Street
Leading Pedestrian Intervals	All signalized intersections
Rectangular Rapid Flashing Beacons (RRFB)	300 West & Shakespeare Lane to replace malfunctioning units
Raised Crosswalk	450 West

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install Medians and Pedestrian Refuge Islands	1.08	MILE (URBAN)	\$871,000	\$940,680
Lane Narrowing	1.08	MILE	\$37,000	\$39,960
Install Highway Lighting	1.08	MILE	\$300,000	\$324,000
Install High Visibility Crosswalk Markings and Signage	17	XING	\$7,000	\$119,000
Install Right-Turn Lanes	2	LANE	\$127,000	\$254,000
Implement Leading Pedestrian Interval (LPI) Signal Timing	3	INT	\$3,000	\$9,000
Install Rectangular Rapid Flashing Beacons (RRFB)	1	XING	\$10,000	\$10,000
Install Raised Crosswalk and Signage	1	EACH	\$41,000	\$41,000
Install High-Visibility Crosswalk (including RRFB)	3	XING	\$17,000	\$51,000
Install Bulbouts (2)	1	EACH	\$54,000	\$54,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.

Improvement Subtotal	\$1,842,640
Estimated Construction Cost Total¹	\$2,562,564
Estimated Project Total²	\$2,986,000








Local Match³ **\$597,200**

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 2



SUU Loop, SR 289 from 1150 West to Highland Drive













- 
 Lighting, Surrounding SUU
- 
 Enhanced Crossings
- 
 High-Visibility Crossing
- 
 Rectangular Rapid Flashing Beacon (RRFB)
- 
 Leading Pedestrian Intervals (LPI)
- 
 Turn Lanes
- 
 Medians and Lane Narrowing

LOCATION INFORMATION

Key Intersection Crash History

PROJECT NUMBER: 3

Intersection Roadway	Total Crashes	Fatal and Serious Injury Crashes	Angle	Left Turn	Rear End	Head On	Sideswipe	Roadway Departure	Pedestrian	Bike
Sage Drive	10		3	4	4	1	1	1		
1100 West	22		18	8	3					
860 West	5	1	2	2				1	1	
700 West	3		1				1			
300 West	9	1	6		1			1		1

Utah Emphasis Areas		
Behavioral		Aggressive Driving 2%
		Distracted Driving 16%
		Impaired Driving 0%
		Use of Safety Restraints 0%
		Speed Management 8%
		Teen Driving Safety 47%
		Senior Safety 19%
Crash Types		Roadway Departure Crashes 7%
		Intersection Safety 73%
Vulnerable Users		Motorcycle Safety 2%
		Pedestrian Safety 3%
		Bicycle Safety 1%

Other Applicable Locations/Scenarios:

Local or collector streets (25 mph) adjacent or surrounding school areas with school pedestrian traffic to and from school, and crossing the roadways, may benefit from similar safety countermeasures. Other locations school include the following (please note any area with pedestrian traffic seeking improved crossing may benefit from similar countermeasures):

- 400 South, 500 South, and 450 West roadways (South Elementary)
- 400 North, 600 West, and 500 West roadways (Cedar North Elementary)
- 200 East and East Center Street roadways (Cedar East Elementary)
- 400 West, 1925 North, Fiddlers Canyon, and Wedgewood Lane roadways (Canyon View Middle and High Schools, Fiddler's Canyon Elementary)
- Midvalley Road, Wagon Wheel Drive and Deer Hollow Drive roadways (Enoch Elementary and Three Peaks Elementary)
- 4050 West and surrounding roadways (Iron Springs Elementary)
- Royal Hunte Drive and Cove Drive roadways (Cedar Middle School)
- 100 North and Main Street (SR 274) roadways, (Parowan Elementary and High School)
- Beryl Highway (Escalante Valley School)

Comments, Feedback, Ongoing Projects:

- Eastbound buses turning off of Main Street onto 860 West must slow down suddenly in order to make the turn
- The project includes 860 West and 800 South as they are common bus routes and walking paths for students
- Improved crossings needed.

EXISTING CONDITIONS

PROJECT NUMBER: 3

Notes:

- Wide crossing distances
- Faded striping
- On street parking on either side
- “Crossing ahead signage” and speed feedback signs already existing on 600 South



600 South and 860 West Crossing



600 South Cross Section



Rectangular Rapid Flashing Beacon Crossing on 600 South at 700 West Intersection



Rectangular Rapid Flashing Beacon Crossing on 800 South



Southbound 860 West, Typical Cross Section

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 3

Project Description

This project recommends safety countermeasures in the school areas between 600 South, 800 south, and 860 West. Completing sidewalk gaps provides a safe route for pedestrians, particularly students walking to and from Cedar High School. High-visibility crosswalks with Rectangular Rapid Flashing Beacons (RRFBs) are recommended at several locations connecting the high school, seminary building, and technical college to facilitate safe pedestrian crossings. Curb bulb outs should be considered to enhance pedestrian visibility and encourage slower vehicle speeds. To address crash patterns at 1100 West and 600 South, roadway restriping to accommodate left-turn lanes is proposed for the eastbound and westbound approaches of 1100 West and the northbound approach of Sage Drive. Intersection lighting at 1100 West improves nighttime visibility. New or refreshed center and edge line striping on along the entire project is recommended to create a narrower feel for vehicles and help mitigate vehicle speeds in the area, as well as delineate on-street parking vs. travel lanes. These improvements aim to mitigate safety concerns including speeding, pedestrian crossings, and angle or left-turn crashes.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Sidewalk	Surrounding the overpass where there are gaps
Center and edge line striping	Entire corridor
High-Visibility Crosswalk	Sage Drive, near 940 West, 700 West, 450 West, and 860 West
Positive Off-Set at Intersections	1100 West and Sage Drive
Intersection Lighting	1100 West

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install 6 ft. Sidewalk (both sides of roadway)	0.26	MILE	\$761,000	\$197,860
Install 4" Centerline and Edge Line Striping (Paint)	1.77	MILE	\$73,000	\$129,210
Install High-Visibility Crosswalk (including RRFB)	5	XING	\$17,000	\$85,000
Create Positive Off-Set of Existing Left-Turn Lanes (pavement markings and curb work, no widening)	2	INT	\$16,000	\$32,000
Install Intersection Lighting	1	INT	\$35,000	\$35,000
Install Bulbouts (2)	3	EACH	\$54,000	\$162,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.

Improvement Subtotal	\$641,070
Estimated Construction Cost Total ¹	\$929,555
Estimated Project Total ²	\$1,228,000
Local Match ³	\$245,600

Center and Edge Lines, Entire Project

High-Visibility Crosswalk with RRFB

Restriping Right Turn Lanes

Intersection Lighting













Sidewalk

LOCATION INFORMATION

Key Intersection Crash History

PROJECT NUMBER: 4

Intersection Roadway	Total Crashes	Fatal and Serious Injury Crashes	Angle	Left Turn	Rear End	Head On	Sideswipe	Roadway Departure	Pedestrian	Bike
Walmart Driveway	10	1	7	1	1			1		
Silver Silo Driveway	3		1				1	2		

Utah Emphasis Areas		
Behavioral	 Aggressive Driving	1%
	 Distracted Driving	12%
	 Impaired Driving	3%
	 Use of Safety Restraints	3%
	 Speed Management	18%
	 Teen Driving Safety	31%
	 Senior Safety	25%
Crash Types	 Roadway Departure Crashes	22%
	 Intersection Safety	39%
Vulnerable Users	 Motorcycle Safety	4%
	 Pedestrian Safety	0%
	 Bicycle Safety	1%

Other Applicable Locations/Scenarios:

Minor arterial, higher speed (45 mph), two lane roadways may benefit from similar safety countermeasures. This location includes horizontal curves and higher than typical active transportation use due to the proximity to existing trails. Similar locations include:

- Westview Drive
- Lund Highway
- Old Highway 91
- Iron Springs Road
- SR 56
- South Mountain Drive

Comments, Feedback, Ongoing Projects:

- Many comments regarding the curve near the Silver Silo Bakery
- Comments on the Cross Hollow Trail and the connection to the Roadway
- Bicyclist activity along the entire corridor
- Speeding issues concentrated around the curves and more rural area south of the Silver Silo Bakery

EXISTING CONDITIONS

PROJECT NUMBER: 4

Notes:

- Pedestrian level lighting along portions of the east side
- Highway lighting near the intersection with SR 56
- Crashes due to adverse roadway conditions



Cross Hollow Road, Typical Curve



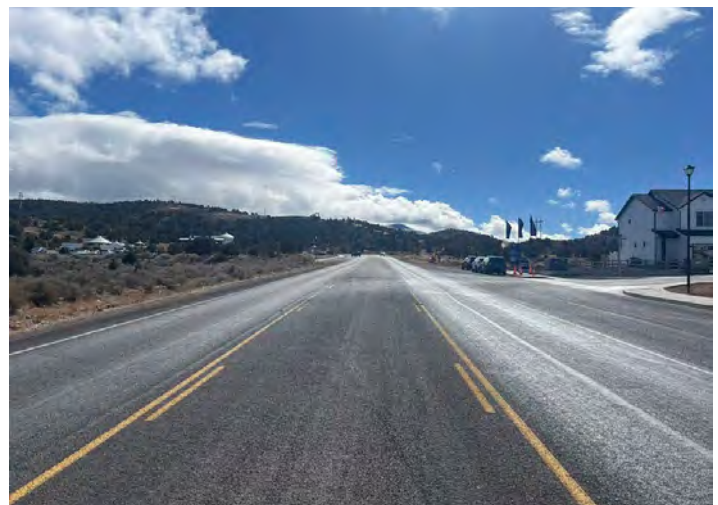
Northbound Approach to Silver Silo Bakery Access



Typical Cross Section Between Walmart and Silver Silo Bakery



Typical Cross Section Northbound Between Silver Silo Bakery and SR 56



Typical Cross Section Southbound Between Silver Silo Bakery and SR 56

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 4

Project Description

Proposed safety countermeasures to Cross Hollow Road help address vehicle and active transportation safety. Safety countermeasures include a high-visibility crosswalk for a Cross Hollow Trail crossing, delineated bicycle lanes, and curve delineation improvements for roadway curves. Enhanced lighting and roadway delineation like signage, rumble strips, and striping are recommended. Driver feedback speed limit signs may improve speed limit compliance. Medians are recommended in the section of roadway from the Silver Silo to the I-15 interchange for access management purposes.

Note, the current South Cedar Interchange project is planned to improve the Royal Hunte Drive intersection and surround accesses in the area.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Buffered or Striped Bicycle Lanes	Silver Silo Bakery to SR 56
Curve Signage	Near the Silver Silo Bakery curve, and the two curves south.
Driver Feedback Speed Limit Signs	Westbound from Walmart, northbound near the bakery, southbound from SR 56, and eastbound from the bakery
Post Mounted Delineators	From Silver Silo Bakery and southeast
Medians (back-to-back curb)	Silver Silo Bakery to Royal Hunte Drive/Providence Center Drive
Intersection Lighting	Cody Drive and near the Silver Silo Bakery
High-Visibility Crosswalk	At the connection to the Cross Hollow Trail
Centerline and Edge Lines	Silver Silo Bakery to SR 56

Opinion of Probable Cost



Improvement	QTY.	Unit	Unit Price	Item Cost
Install Bicycle Lanes	1.35	MILE	\$44,000	\$59,400
Convert Traditional/Buffered Bike Lanes to Separated Lane with Flexible Delineator Posts	1.35	MILE	\$106,000	\$143,100
Install 4" Retroreflective Centerline and Edge Lines	1	MILE	\$96,000	\$96,000
Install and/or Upgrade Curve Signage to Enhanced Delineations	3	CURVE	\$3,000	\$9,000
Install Driver Feedback Speed Limit Signs	4	EACH	\$11,000	\$44,000
Install Post-Mounted Delineators	1.2	MILE	\$4,000	\$4,800
Install Medians (Back-To-Back Curb)	1	MILE	\$654,000	\$654,000
Install Intersection Lighting	2	INT	\$35,000	\$70,000
Install High-Visibility Crosswalk (including RRFB)	1	XING	\$17,000	\$17,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.


2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.


Improvement Subtotal	\$1,097,300
Estimated Construction Cost Total ¹	\$1,556,355
Estimated Project Total ²	\$2,055,000
Local Match ³	\$411,000

 Bike Lane,
Entire Corridor

Dynamic Speed Limit Signs



High-Visibility Crosswalk
with RRFB

 Intersection Lighting

Retroreflective Center and Edge Lines, Median (Back-to-Back Curb)

 Enhanced Curve Signage

LOCATION CHARACTERISTICS

Location: Westview Drive

Project Extents: SR 56 to Old Highway 91

Roadway Classification: Major Collector, Federal Aid Route

Jurisdiction(s): Cedar City, Unincorporated Iron County

Underserved Community: Yes

PROJECT NUMBER: 5

Safety Action Plan GFA(s): Cedar City GFA, East Iron County GFA

GFA Emphasis Areas: Intersections, Older Drivers, Teen Drivers



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Segment Characteristics

Length:	4.51
Speed Limit:	45-50 mph
Roadway Lanes:	2
Daily Traffic Volume (AADT):	2,200
Median Type:	NA
Number of Key Intersections	2











Why was this location identified?

High Crash Network:	Yes	✓
High Injury Network:	Yes	✓
Network Screening:	No	✗
Conflict Areas:	Yes	✓
Risk Characteristics:	No	✗
Community Feedback:	Yes	✓

Location Crash History

Crash Severity (2019 - 2023)	
Fatal Crashes:	0
Serious Injury Crashes:	0
Minor Injury Crashes:	8
Possible Injury Crashes	5
No Injury/PDO Crashes:	18
Total Crashes:	31
Equivalent Property Damage Crashes:	226

Location Crash Type













Fixed-object	Angle	Left Turn	Head-on	Rear-end
				
42%	16%	19%	0%	16%
Motorist-bicyclist	Motorist-pedestrian	Sideswipe	Front to Rear	Single Vehicle
				
0%	0%	3%	16%	65%

LOCATION INFORMATION

Key Intersection Crash History

PROJECT NUMBER: 5

Intersection Roadway	Fatal and Serious Injury Crashes	Angle	Left Turn	Rear End	Head On	Sideswipe	Roadway Departure	Pedestrian	Bike
800 South	4			1	1			2	
South Mountain Drive	6		1	1				5	

Utah Emphasis Areas		
Behavioral	 Aggressive Driving	0%
	 Distracted Driving	32%
	 Impaired Driving	3%
	 Use of Safety Restraints	6%
	 Speed Management	13%
	 Teen Driving Safety	61%
	 Senior Safety	23%
Crash Types	 Roadway Departure Crashes	39%
	 Intersection Safety	52%
Vulnerable Users	 Motorcycle Safety	0%
	 Pedestrian Safety	0%
	 Bicycle Safety	0%

Other Applicable Locations/Scenarios:

Major collector, higher speed (45-50 mph) roadways may benefit from similar safety countermeasures. This location serves residential areas, has roadway curvature with minimal shoulders, direct driveway accesses and intersections, and is located in a fast growing residential area of the County. Other locations may include:

- Lund Highway
- Iron Springs Road
- Cross Hollow Road
- Old Highway 91
- Midvalley Road
- South Mountain Drive
- Bulldog Road
- 5700 West
- 2400 North
- Airport Road
- 2300 West

Comments, Feedback, Ongoing Projects:

- Turn lanes are needed for busier intersections
- Nighttime visibility concerns
- Lack of shoulders and High bicycle traffic
- Consider the quieter sinusoidal rumble strips as opposed to typical grooved rumble strips

EXISTING CONDITIONS

PROJECT NUMBER: 5

Notes:



Culvert South of the South Mountain Drive Intersection



Northbound near South Mountain Drive, Typical Cross Section



Southbound Curves Near 400 South



Southbound near 800 South, Typical Cross Section



Southbound near Center Street

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 5

Project Description

This project recommends several safety countermeasures to address roadway departures, visibility, and intersection safety concerns. Proposed countermeasures include installing driver feedback speed limit signs to encourage safer speeds, wider shoulders, edge line rumble strips, and wider 6" edge lines to help address roadway departure crashes. Curve warning signage is recommended for four major curves on the corridor. Intersection lighting is also proposed to improve nighttime visibility as many crashes have occurred in dark, unlit conditions. To reduce the risk of angle crashes and highway crossover incidents, turn lanes are recommended at the key intersections.

Note, the Cedar City Transportation Master Plan shows a capital improvement project for Westview Drive of Widen with Bike Lane to be completed 2021-2030.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Driver Feedback Speed Limit Signs	On each major curve
6" Edge Lines	Full corridor
Edge Line Rumble Strips	Full corridor
Curve Signage	All curves along the corridor
Roadway Widening and TWLTL	Full corridor
4 ft Paved Shoulder	Full corridor
Bicycle Lanes	Full corridor
Left-Turn Lanes	Southbound on South Mountain Drive, northbound on 800 South
Right-Turn Lanes	Westbound on South Mountain Drive, southbound and eastbound on 800 South
Intersection Lighting	South Mountain Drive, 1800 South, 1125 South, 800 South, Benson Way

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install Driver Feedback Speed Limit Signs on Rural Curves	4	EACH	\$11,000	\$44,000
Install 6" Edge Line (Both Sides of Road)	4.51	MILE	\$8,000	\$36,080
Install Edge Line Rumble Strips	4.51	MILE	\$5,000	\$22,550
Install and/or Upgrade Curve Signage to Enhanced Delineations	4	CURVE	\$3,000	\$12,000
Widen Roadway and Install Two-Way Left-Turn Lane	4.51	MILE	\$1,560,000	\$7,035,600
Install 4-ft Paved Shoulder (both sides of roadway)	4.51	MILE	\$709,000	\$3,197,590
Install Bicycle Lanes	4.51	MILE	\$44,000	\$198,440
Install Left-Turn Lanes	2	LANE	\$153,000	\$306,000
Install Right-Turn Lanes	3	LANE	\$127,000	\$381,000
Install Intersection Lighting	5	INT	\$35,000	\$175,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

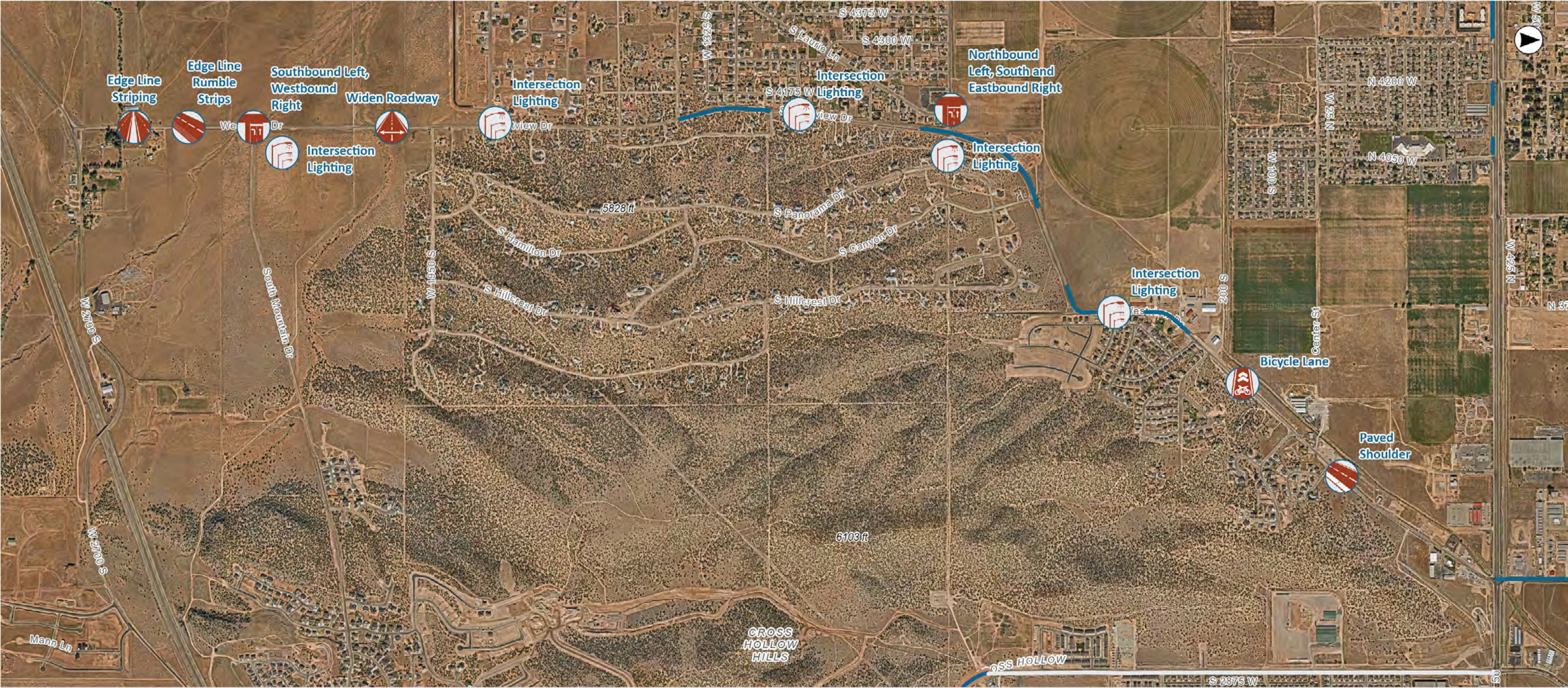
2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.

Improvement Subtotal	\$11,408,260
Estimated Construction Cost Total¹	\$15,476,151
Estimated Project Total²	\$20,729,000
Local Match³	\$4,145,800

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 5



Westview Drive from SR 56 to Old Highway 91

- Enhanced Curve Delineation
- 6" Edge Lines, Entire Corridor
- Edge Line Rumble Strips, Entire Corridor
- Roadway Widening and TWLTL, Entire Corridor
- Bike Lane, Entire Corridor
- 4 foot Pave Shoulder, Entire Corridor
- Turn Lanes
- Intersection Lighting

LOCATION CHARACTERISTICS

Location: SR 56

Project Extents: Iron Springs Road to Airport Road

Roadway Classification: Other Principal Arterial, State Route

Jurisdiction(s): Cedar City, UDOT

Underserved Community: Yes

PROJECT NUMBER: 6

Safety Action Plan GFA(s): Cedar City GFA

GFA Emphasis Areas: Intersections, Older Drivers, Teen Drivers



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Segment Characteristics

Length:	4.2
Speed Limit:	50 mph
Roadway Lanes:	4
Daily Traffic Volume (AADT):	6,500
Median Type:	TWLTL
Number of Key Intersections	8











Why was this location identified?

High Crash Network:	Yes	✓
High Injury Network:	Yes	✓
Network Screening:	Yes	✓
Conflict Areas:	Yes	✓
Risk Characteristics:	Yes	✓
Community Feedback:	Yes	✓

Location Crash History

Crash Severity (2019 - 2023)	
Fatal Crashes:	2
Serious Injury Crashes:	9
Minor Injury Crashes:	20
Possible Injury Crashes	30
No Injury/PDO Crashes:	90
Total Crashes:	151
Equivalent Property Damage Crashes:	3,339

Location Crash Type













Fixed-object  15%	Angle  35%	Left Turn  28%	Head-on  3%	Rear-end  32%
Motorist-bicyclist  0%	Motorist-pedestrian  0%	Sideswipe  5%	Front to Rear  33%	Single Vehicle  24%

LOCATION INFORMATION

Key Intersection Crash History

PROJECT NUMBER: 6

Intersection Roadway	Total Crashes	Fatal and Serious Injury Crashes	Angle	Left Turn	Rear End	Head On	Sideswipe	Roadway Departure	Pedestrian	Bike
Iron Springs Road	11	3	8	6			1	2		
5300 West	3			1		1		2		
4500 West	3									
4200 West	6	1	3	2	2			1		
3900 West	6	1	4	2	1					
Westview Drive	27	1	11	9	15			1		
Cross Hollow Road	41	2	23	18	9	1	3	1		
Cove Drive	8		3	3	4			1		

Utah Emphasis Areas		
Behavioral	 Aggressive Driving	1%
	 Distracted Driving	8%
	 Impaired Driving	4%
	 Use of Safety Restraints	5%
	 Speed Management	9%
	 Teen Driving Safety	35%
	 Senior Safety	16%
Crash Types	 Roadway Departure Crashes	13%
	 Intersection Safety	66%
Vulnerable Users	 Motorcycle Safety	1%
	 Pedestrian Safety	0%
	 Bicycle Safety	0%

Other Applicable Locations/Scenarios:

State route, two lanes each direction and a center two-way left-turn lane in an suburban to rural area with a 50 mph speed limit type roadways may benefit from similar safety countermeasures. This location serves industrial, commuting, and typical residential traffic. There is planned residential and commercial growth all along and immediately adjacent to the corridor. Similar locations in the County include SR 130 (Main Street) in Cedar City, SR 56/200 North in Cedar City, and SR 130 in Enoch City.

Comments, Feedback, Ongoing Projects:

- Planned commercial (industrial) and residential development in the area and immediately adjacent the roadway. The current unsignalized intersections are going to see an increase in traffic.
- Planned residential and regional park development south of SR 56.
- Evaluate intersections for traffic signals as development continues.
- Considerations should be taken near the Iron County Elementary School for pedestrian safety and vehicle traffic congestion.
- Increased bicyclist activity in the area.

EXISTING CONDITIONS

PROJECT NUMBER: 6

Notes:

- Incomplete sections of sidewalk
- E-scooter observed on the shoulder



Eastbound SR 56 Near 4700 West



E-Scooter using the Shoulder



Incomplete Sidewalk near 4050 West



SR 56 and 4050 West Intersection



Westbound SR 56 near 4700 West

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 6

Project Description

This project recommends safety countermeasures including driver feedback speed limit signs, in-filling sidewalk gaps, and wider edge lines. Several intersections along SR 56 experience angle, left-turn, and rear-end crashes. To help mitigate these crash types, traffic signal warrants should be evaluated at multiple intersections. Right-turn lanes are recommended on SR 56 at multiple intersections. Installing a painted bicycle lane in the shoulder, as recommended in the Cedar City Active Transportation Plan, improves active transportation facilities in the area.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Driver Feedback Speed Limit Signs	Between 4200 West and 3100 West
Sidewalk	Segments between 4500 West and 4050 West
6" Edge Line	Full corridor
Road Safety Audit	Full corridor
Bicycle Lanes	Full corridor
Right-Turn Lanes	Eastbound at Cross Hollow Road, Eastbound at 4200 West, Eastbound at 4050 West, Westbound at 3900 West, Westbound at 4200 West

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install Driver Feedback Speed Limit Signs	2	EACH	\$11,000	\$22,000
Install 6 ft. Sidewalk (both sides of roadway)	0.352272727	MILE	\$761,000	\$268,080
Install 6" Edge Line (Both Sides of Road)	4.23	MILE	\$8,000	\$33,840
Conduct a Road Safety Audit	1	LOC	\$25,000	\$25,000
Install Bicycle Lanes	4.23	MILE	\$44,000	\$186,120
Install Right-Turn Lanes	5	LANE	\$127,000	\$635,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

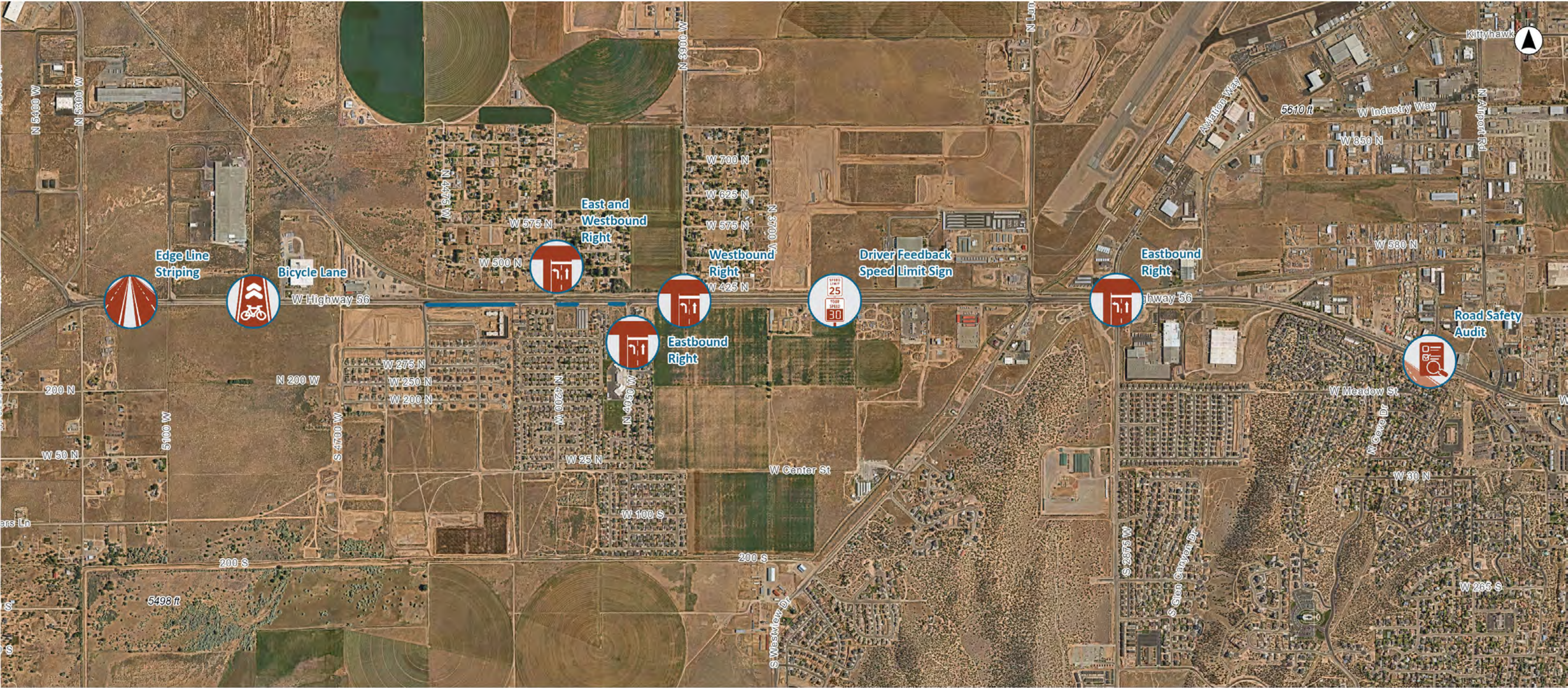
2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.

Improvement Subtotal	\$1,170,040
Estimated Construction Cost Total¹	\$1,654,553
Estimated Project Total²	\$2,178,000
Local Match³	\$435,600

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 6



SR 56 from Iron Springs Road to Airport Road

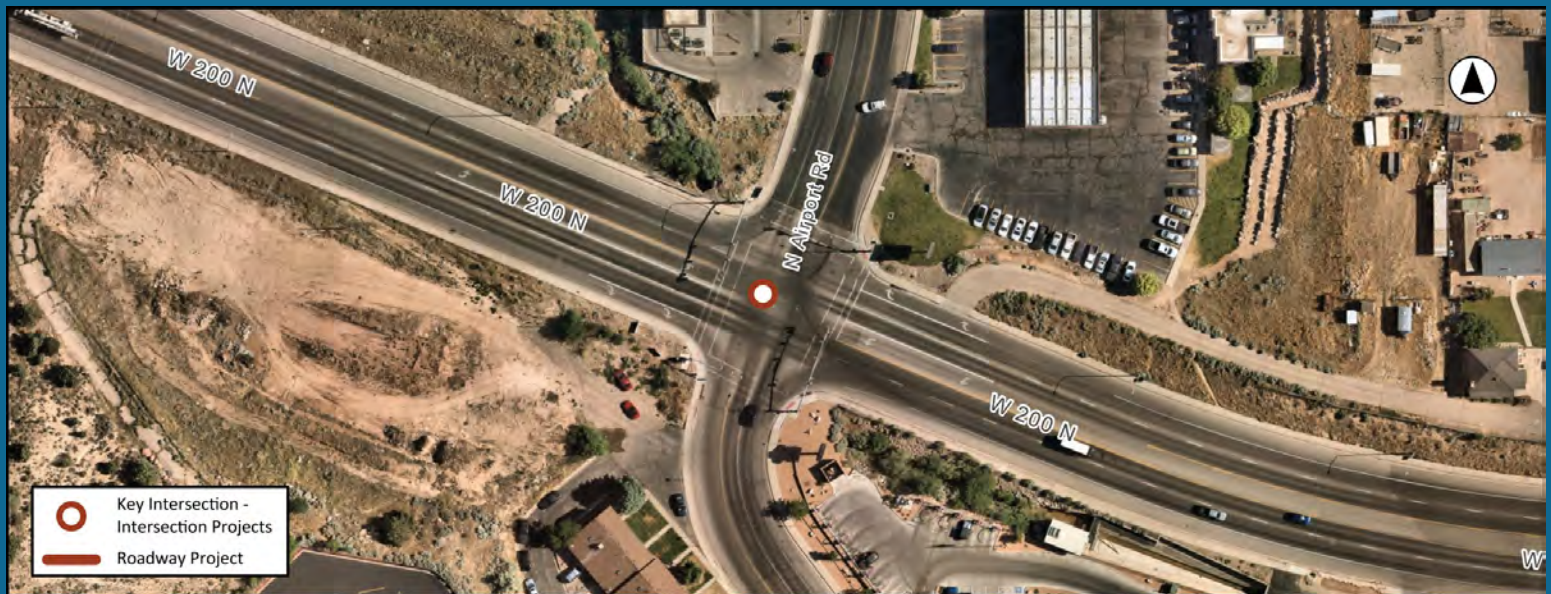
- 6" Edge Line, Entire Corridor
- Bike Lane, Entire Corridor
- Road Safety Audit, Entire Corridor
- Turn Lanes
- Dynamic Speed Limit Sign
- Sidewalk

LOCATION CHARACTERISTICS

Location: SR 56 & Airport Road Intersection
Project Extents: NA
Intersection Control: Signalized
Jurisdiction(s): Cedar City, UDOT
Underserved Community: Yes

PROJECT NUMBER: 7

Safety Action Plan GFA(s): Cedar City GFA
GFA Emphasis Areas: Intersections, Older Drivers, Teen Drivers



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Intersection Characteristics

Intersection Control Type:	Signalized
Speed Limits (major, minor):	35 mph, 40 mph
Approaches:	4
Daily Entering Volume:	21,000
Turn Lanes (Y/N):	Yes
Lighting:	Yes

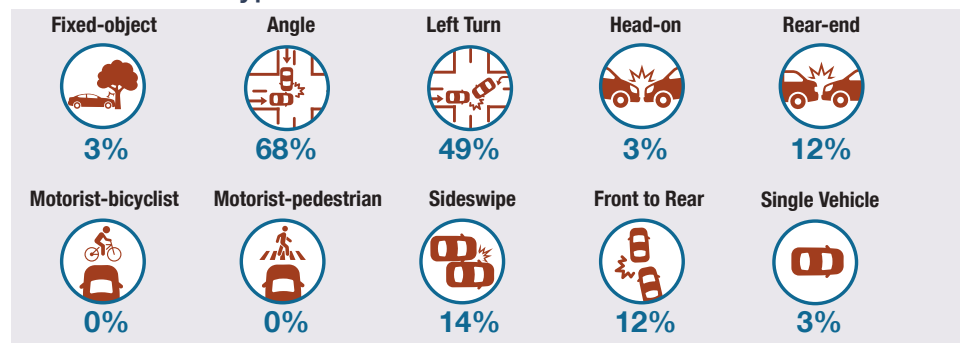
Why was this location identified?

High Crash Network:	Yes ✓
High Injury Network:	Yes ✓
Network Screening:	Yes ✓
Conflict Areas:	Yes ✓
Risk Characteristics:	Yes ✓
Community Feedback:	Yes ✓

Location Crash History













Crash Severity (2019 - 2023)	
Fatal Crashes:	0
Serious Injury Crashes:	4
Minor Injury Crashes:	12
Possible Injury Crashes	9
No Injury/PDO Crashes:	44
Total Crashes:	69
Equivalent Property Damage Crashes:	738

Location Crash Type



LOCATION INFORMATION

PROJECT NUMBER: 7

Utah Emphasis Areas						
Behavioral				Crash Types	Vulnerable Users	
1% Impaired Driving 	6% Distracted Driving 	22% Teen Driving Safety 	0% Aggressive Driving 	7% Roadway Departure Crashes 	1% Motorcycle Safety 	0% Pedestrian Safety 
1% Speed Management 	1% Use of Safety Restraints 	22% Senior Safety 		90% Intersection Safety 	0% Bicycle Safety 	

Other Applicable Locations/Scenarios:

Multi-lane signalized intersections with existing turn lanes and long distance pedestrian crossings may benefit from similar safety countermeasures. Similar locations include:

- Existing signalized intersections along SR 56 (Aviation Way, Cove Drive, 3100 West, 300 West, etc.)
- Existing signalized intersections along SR 130/Main Street (200 South, 1045 North, etc.)

Comments, Feedback, Ongoing Projects:

- Left-turn crashes were common (including those disregarding the signal)
- Sight distance concerns for turning vehicles

EXISTING CONDITIONS

PROJECT NUMBER: 7

Notes:



Eastbound Signal Heads



Southbound Approach on Airport Road



Maverik Access Driveway on Airport Road



Eastbound Approach on SR 56



Northbound Approach on College Way

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 7

Project Description

Proposed safety countermeasures are targeted to address the high number of left-turn and angle related crashes at this intersection. Adjusting the left-turn signal timing from permissive-protected to protected only phasing reduces left-turn conflicts and driver hesitation. Installing an extended time push button on the crosswalks crossing SR 56 help improve pedestrian safety for users that may need extra time to cross five lanes of traffic on SR 56. It is also proposed to convert the existing all-movement access (southern access to Maverik) to a right-in, right-out only type access driveway. An Intersection Control Evaluation is recommended to identify additional issues and solutions for this location.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Protected Left Turn Phasing	SR 56 & Airport Road
Extended Time Pushbutton	SR 56 & Airport Road
Right-in-Right-out Access Treatment	Maverik driveway north of SR 56 & Airport Road

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Change left-turn Timing from Permissive to Protected	1	INT	\$8,000	\$8,000
Install a Extended Time Pushbutton	4	EACH	\$500	\$2,000
Right-in-Right-out Access Treatment	1	DRIVEW	\$11,000	\$11,000

1: Includes mobilization (10%0, traffic control (5%), items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000

2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design

3: 20% of estimated project total toward Safe Streets for All implementation grants


Improvement Subtotal	\$21,000
Estimated Construction Cost Total ¹	\$30,850
Estimated Project Total ²	\$36,000
Local Match ³	\$7,200

LOCATION RECOMMENDATIONS


PROJECT NUMBER: 7




SR 56 & Airport Road Intersection



Crosswalk Improvements



Signal Timing Improvements



Access Management Improvements

LOCATION CHARACTERISTICS

PROJECT NUMBER: 8

Location: SR 56

Project Extents: Airport Road to Main Street (SR 130)

Roadway Classification: Other Principal Arterial, State Route

Jurisdiction(s): Cedar City, UDOT

Underserved Community: Yes

Safety Action Plan GFA(s): Cedar City GFA

GFA Emphasis Areas: Intersections, Older Drivers, Teen Drivers



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Segment Characteristics

Length:	1.34
Speed Limit:	35 mph
Roadway Lanes:	4
Daily Traffic Volume (AADT):	16,100
Median Type:	TWLT
Number of Key Intersections	12

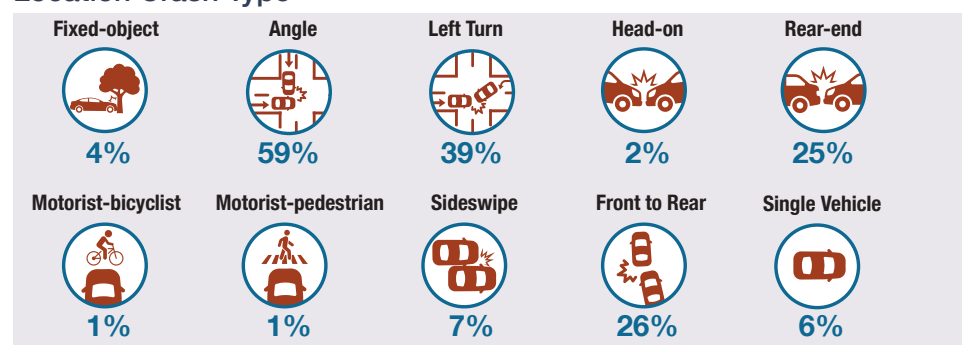
Why was this location identified?

High Crash Network:	Yes	✓
High Injury Network:	Yes	✓
Network Screening:	Yes	✓
Conflict Areas:	Yes	✓
Risk Characteristics:	Yes	✓
Community Feedback:	Yes	✓

Location Crash History

Crash Severity (2019 - 2023)	
Fatal Crashes:	0
Serious Injury Crashes:	2
Minor Injury Crashes:	32
Possible Injury Crashes:	34
No Injury/PDO Crashes:	147
Total Crashes:	215
Equivalent Property Damage Crashes:	1,302

Location Crash Type















LOCATION INFORMATION

Key Intersection Crash History

PROJECT NUMBER: 8

Intersection Roadway	Total Crashes	Fatal and Serious Injury Crashes	Angle	Left Turn	Rear End	Head On	Sideswipe	Roadway Departure	Pedestrian	Bike
1600 West	6		4	4	1					
1550 West	6		5	4	1					
1400 West	30		13	11	13		1	1	1	
1150 West	8		5	4	3					
1100 West	14		11	6	2		1			
1050 West	7		5	3	1		1			
1000 West	10	1	7	4			2	1	1	
800 West	25		15	7	7	1	2	1		
700 West	10		6	3	2	1				
400 West	6		1	1	2		1	2		
300 West	30	1	16	3	10		2		1	1
100 West	20		15	5	2	1				2

Utah Emphasis Areas

Behavioral		Aggressive Driving	0%
		Distracted Driving	13%
		Impaired Driving	1%
		Use of Safety Restraints	0%
		Speed Management	2%
		Teen Driving Safety	30%
		Senior Safety	18%
Crash Types		Roadway Departure Crashes	3%
		Intersection Safety	81%
Vulnerable Users		Motorcycle Safety	1%
		Pedestrian Safety	1%
		Bicycle Safety	1%

Other Applicable Locations/Scenarios:

State route, two lanes each direction and a center two-way left-turn lane in an urban area with a 35 mph speed limit type roadways may benefit from similar safety countermeasures. In addition to typical vehicle and pedestrian traffic, this location serves schools and commercial areas with numerous access driveways. Similar locations in the County include SR 130 (Main Street) in Cedar City and SR 130 in Enoch City

Comments, Feedback, Ongoing Projects:

- Desire for additional and better visible crosswalks
- Concern of Vehicle speed in the area
- Concerns with all the Access driveways and turning vehicles into and out of those locations
- Vegetation noted as an issue on the sidewalks
- No designated space for bicyclists

EXISTING CONDITIONS

PROJECT NUMBER: 8

Notes:

- Almost every minor street intersection has Pedestrian ramps but No marked crosswalks



1225 West Crossing



1225 West Intersection Curbed Median, Westbound



Eastbound 35 MPH Speed Limit and Driveways



Pedestrian Ramp to the Sidewalk



Westbound Queue near 1150 West and Turning Vehicles

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 8

Project Description

This project includes various safety countermeasures and includes recommendations from the Cedar City Active Transportation Plan. Recommendations include medians and pedestrian refuge islands, curbed center medians, bulbouts, and extended time pushbuttons to improve crossings and limit vehicle conflict points. High-visibility crosswalks and painted bicycle lanes are also recommended. Adjusting left-turn signal timing to flashing yellow arrows or protected at intersections along the corridor help mitigate angle and left turn crashes.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Medians and Pedestrian Refuge Islands	600 West
Road Safety Audit	Full corridor
Medians (Back-To-Back Curb)	Eastbound and westbound approaches of the following: 800 West, 300 West, Main Street
Bicycle Lanes	Full corridor
Pedestrian Hybrid Beacon or HAWK	600 West
Flashing Yellow Arrow	800 West, 300 West
Protected Left-Turn Timing	1400 West
Extended Time Pushbutton	Each signalized intersection
Bulbouts	600 West
High-Visibility Crosswalk	1000 West
Pedestrian Refuge Island	1000 West

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install Medians and Pedestrian Refuge Islands	0.07	MILE (URBAN)	\$871,000	\$60,970
Conduct a Road Safety Audit	1	LOC	\$25,000	\$25,000
Install Medians (Back-To-Back Curb)	0.321969697	MILE	\$654,000	\$210,568
Install Bicycle Lanes	1.34	MILE	\$44,000	\$58,960
Install Pedestrian Hybrid Beacons (PHB) or HAWK	1	EACH	\$250,000	\$250,000
Change left-turn timing from permissive only to Flashing Yellow Arrow	2	INT	\$8,000	\$16,000
Change left-turn Timing from Permissive to Protected	1	INT	\$8,000	\$8,000
Install a Extended Time Pushbutton	6	EACH	\$500	\$3,000
Install Bulbouts (2)	1	EACH	\$54,000	\$54,000
Install High-Visibility Crosswalk (including RRFB)	1	XING	\$17,000	\$17,000
Install Pedestrian Refuge Island	1	EACH	\$75,000	\$75,000
Install Pedestrian Refuge Island	1	EACH	\$75,000	\$75,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.

Improvement Subtotal	\$778,498
Estimated Construction Cost Total ¹	\$1,125,973
Estimated Project Total ²	\$1,312,000
Local Match ³	\$262,400

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 8



SR 56 from Airport Road to Main Street (SR 130)



Road Safety Audit (RSA),
Entire Corridor



Bike Lanes,
Entire Corridor



Curbed Medians





Protected Left Turns



Extended Time
Pushbutton

600 West

 Pedestrian Hybrid Beacon (PHB) Pedestrian Refuge Island

Bulb Outs















APPENDIX E.2. ENOCH CITY GFA PROJECT INFORMATION SHEETS

LOCATION INFORMATION

Key Intersection Crash History

PROJECT NUMBER: 9

Intersection Roadway	Total Crashes	Fatal and Serious Injury Crashes	Angle	Left Turn	Rear End	Head On	Sideswipe	Roadway Departure	Pedestrian	Bike
Lund Highway	7	1	7	1						
2300 West	4		2		1					
Bulldog Road	3		2	1		1				
SR 130	17	3	13	4	1	1		1		

Utah Emphasis Areas		
Behavioral	 Aggressive Driving	0%
	 Distracted Driving	10%
	 Impaired Driving	6%
	 Use of Safety Restraints	6%
	 Speed Management	6%
	 Teen Driving Safety	29%
	 Senior Safety	15%
Crash Types	 Roadway Departure Crashes	19%
	 Intersection Safety	75%
Vulnerable Users	 Motorcycle Safety	0%
	 Pedestrian Safety	0%
	 Bicycle Safety	0%

Other Applicable Locations/Scenarios:

Major collector, 35 mph speed limit, two-lane roadways may benefit from similar safety countermeasures. This location serves schools, commercial, and residential areas. Other locations may include:

- Lund Highway
- Airport Road
- Westview Drive
- Iron Springs Road
- 200 South (Parowan)
- South Mountain Drive
- Old Highway 91

Comments, Feedback, Ongoing Projects:

- Traffic queuing at the Lund Highway intersection
- Consider a signal or all-way stop intersection at Lund Highway and Midvalley Road; warrant studies are recommended
- School improvements should be prioritized near Three Peaks and Enoch Elementary
- Drainage and utility conflicts for potential curb and gutter on both sides of the roadway
- Vehicle speeding concerns on the corridor
- Need pavement markings and striping refreshed

EXISTING CONDITIONS

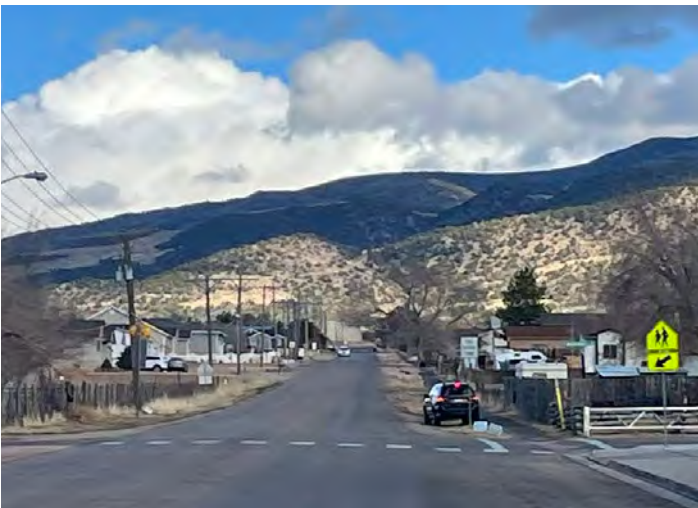
PROJECT NUMBER: 9

Notes:

- Consider the potential of a two way left turn lane where there is right of way



Eastbound Approach to 2700 West



Eastbound Approach to Wagon Wheel Crossing



Eastbound near Three Peaks Elementary School



Westbound Approach to Lund Highway Intersection



Westbound Cross Section and Unpaved Shoulder

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 9

Project Description

This project recommends safety countermeasures including driver feedback speed limit signs, enhanced visibility crosswalks with RRFB signage, and raised crosswalks aimed at mitigating speeds in the school area. A combination of bicycle lanes and paved 4-ft shoulders is recommended to provide pedestrian and bicycle facilities. The project includes filling sidewalk gaps connecting existing sidewalk and paved shoulder on undeveloped sections of Midvalley Road. Refreshed pavement markings, stop-controlled intersection improvements, and intersection lighting is recommended at key locations on the corridor.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Driver Feedback Speed Limit Signs	1810 East westbound, Deer Hollow Drive eastbound and westbound
Bicycle Lanes	Full corridor
Sidewalk	Completing gaps around developments
4 ft Paved Shoulder	Completing gaps where there is not development
Center and Edge Line Striping	Full corridor
Intersection Lighting	Lund Highway
Stop-Control Signage	2300 West, Bulldog Lane
High-Visibility Crosswalk	Wagon Wheel Drive School Crossing
Raised Crosswalk	Wagon Wheel Drive School Crossing

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install Driver Feedback Speed Limit Signs	3	EACH	\$11,000	\$33,000
Install Bicycle Lanes	5.14	MILE	\$44,000	\$226,160
Install 6 ft. Sidewalk (both sides of roadway)	1	MILE	\$761,000	\$761,000
Install 4-ft Paved Shoulder (both sides of roadway)	2.2	MILE	\$709,000	\$1,559,800
Install 4" Centerline and Edge Line Striping (Paint)	5.14	MILE	\$73,000	\$375,220
Install Intersection Lighting	1	INT	\$35,000	\$35,000
Stop-Control Intersection Signage	2	INT	\$4,000	\$8,000
Install High-Visibility Crosswalk (including RRFB)	1	XING	\$17,000	\$17,000
Install Raised Crosswalk and Signage	1	EACH	\$41,000	\$41,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.

Improvement Subtotal	\$3,056,180
Estimated Construction Cost Total¹	\$4,200,843
Estimated Project Total²	\$5,546,000
Local Match³	\$1,109,200

Center and Edge Lines, Entire Corridor

Bike Lane, Entire Corridor

Dynamic Speed Limit Signs

Enhanced Stop Control Signage

Intersection Lighting

High Visibility, Raised Crossing

4 foot Paved Shoulder

Sidewalk

LOCATION CHARACTERISTICS

PROJECT NUMBER: 10

Location: SR 130

Project Extents: 3000 North to Midvalley Road

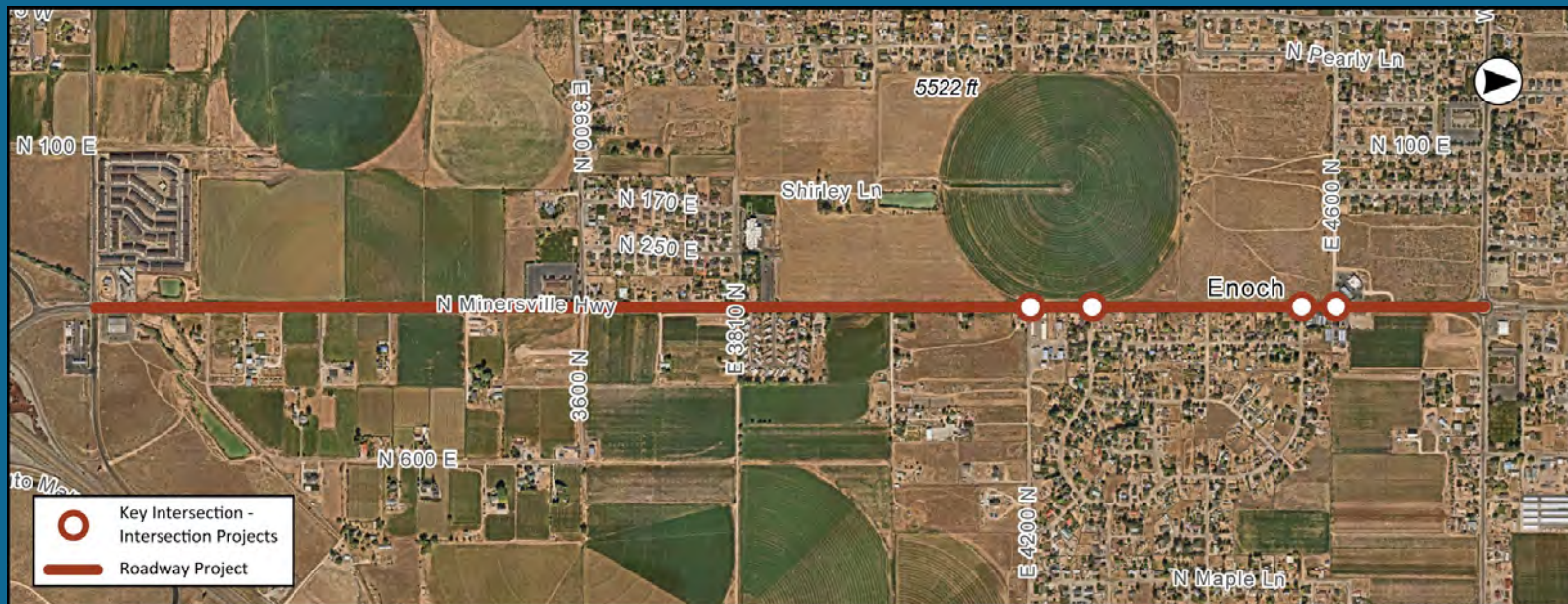
Roadway Classification: Other Principal Arterial, State Route

Jurisdiction(s): Enoch City, UDOT

Underserved Community: Yes

Safety Action Plan GFA(s): Enoch City GFA

GFA Emphasis Areas: Safety Restraints, Intersections, Older Drivers



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Segment Characteristics

Length:	2.3
Speed Limit:	55 mph
Roadway Lanes:	2
Daily Traffic Volume (AADT):	10,900
Median Type:	TWLT
Number of Key Intersections	4











Why was this location identified?

High Crash Network:	Yes ✓
High Injury Network:	Yes ✓
Network Screening:	No ✗
Conflict Areas:	Yes ✓
Risk Characteristics:	Yes ✓
Community Feedback:	Yes ✓

Location Crash History

Crash Severity (2019 - 2023)	
Fatal Crashes:	0
Serious Injury Crashes:	2
Minor Injury Crashes:	5
Possible Injury Crashes:	8
No Injury/PDO Crashes:	19
Total Crashes:	34
Equivalent Property Damage Crashes:	381

Location Crash Type













Fixed-object	Angle	Left Turn	Head-on	Rear-end
				
15%	26%	15%	0%	32%
Motorist-bicyclist	Motorist-pedestrian	Sideswipe	Front to Rear	Single Vehicle
				
3%	0%	12%	35%	26%

LOCATION INFORMATION

Key Intersection Crash History

PROJECT NUMBER: 10

Intersection Roadway	Total Crashes	Fatal and Serious Injury Crashes	Angle	Left Turn	Rear End	Head On	Sideswipe	Roadway Departure	Pedestrian	Bike
4200 North	3		2	1			1			
Blue Sky Drive South	3		2	1						
Blue Sky Drive North	4				1		1	1		
4600 North	3	1			1			1		1

Utah Emphasis Areas		
Behavioral	 Aggressive Driving	0%
	 Distracted Driving	12%
	 Impaired Driving	0%
	 Use of Safety Restraints	12%
	 Speed Management	6%
	 Teen Driving Safety	50%
	 Senior Safety	6%
Crash Types	 Roadway Departure Crashes	15%
	 Intersection Safety	56%
Vulnerable Users	 Motorcycle Safety	3%
	 Pedestrian Safety	0%
	 Bicycle Safety	3%

Other Applicable Locations/Scenarios:

Principal arterial, two-lane with a center two-way left-turn lane, higher speed (55 mph) roadways may benefit from similar safety countermeasures. This location serves residential, commercial, and active transportation traffic and is a primary connecting route used for commuting between Cedar City and Enoch City. Other locations may include:

- Midvalley Road
- Lund Highway
- Iron Springs Road
- SR 56
- Cross Hollow Road
- Westview Drive

Comments, Feedback, Ongoing Projects:

- Large residential developments are planned for the area and adjacent to SR 130.
- Trail feasibility study may determine a trail/path should be located on SR 130 or Old Highway 91.
- Vehicle speeding along the corridor.
- Increased pedestrian and bicycle activity along the corridor

EXISTING CONDITIONS

PROJECT NUMBER: 10

Notes:



Blue Sky North Drive Intersection with SR 130



Northbound Approaching 4200 North



Northbound Cross Section near Cottonwood Lane



Northbound near 3850 North



Southbound near Blue Sky South Drive

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 10

Project Description

This project recommends several safety countermeasures to improve visibility, address roadway departure type crashes, and increase driver awareness. Proposed improvements include installing intersection lighting, delineators and retroreflective pavement striping, and driver feedback speed limit signs. Additionally, intersection ahead signs are recommended to improve driver awareness and reduce the risk of angle-related crashes.

Note, the Enoch City Transportation Master Plan lists plans for SR 130 (to be completed between 2021-2030) as a widened roadway with a separated path. The current cross-section of the road is one lane in each direction and a two-way left-turn lane, with right-turn lanes at some intersecting roadways.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Post-Mounted Delineators	Entire corridor
Driver Feedback Speed Limit Signs	Northbound and Southbound approaches of 3800 North
Sidewalk	Entire corridor
Bicycle Lanes	Entire corridor
2 ft Paved Shoulder	Entire corridor
Stop-Control Signage	4200 South, Blue Sky Drive South, Blue Sky Drive North, 4600 North
Right-Turn Lanes	Southbound acceleration lane at Thoroughbred Way, northbound acceleration lane at Blue Sky Drive North
Intersection Lighting	4200 South, Blue Sky Drive South, Blue Sky Drive North, 4600 North

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install Post-Mounted Delineators	2.3	MILE	\$4,000	\$9,200
Install Driver Feedback Speed Limit Signs	2	EACH	\$11,000	\$22,000
Install 6 ft. Sidewalk (both sides of roadway)	2.3	MILE	\$761,000	\$1,750,300
Install Bicycle Lanes	2.3	MILE	\$44,000	\$101,200
Install 4-ft Paved Shoulder (both sides of roadway)	2.3	MILE	\$709,000	\$1,630,700
Install 4" Retroreflective Centerline and Edge Lines	2.3	MILE	\$96,000	\$220,800
Stop-Control Intersection Signage	4	INT	\$4,000	\$16,000
Install Right-Turn Lanes	2	LANE	\$127,000	\$254,000
Install Intersection Lighting	4	INT	\$35,000	\$140,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

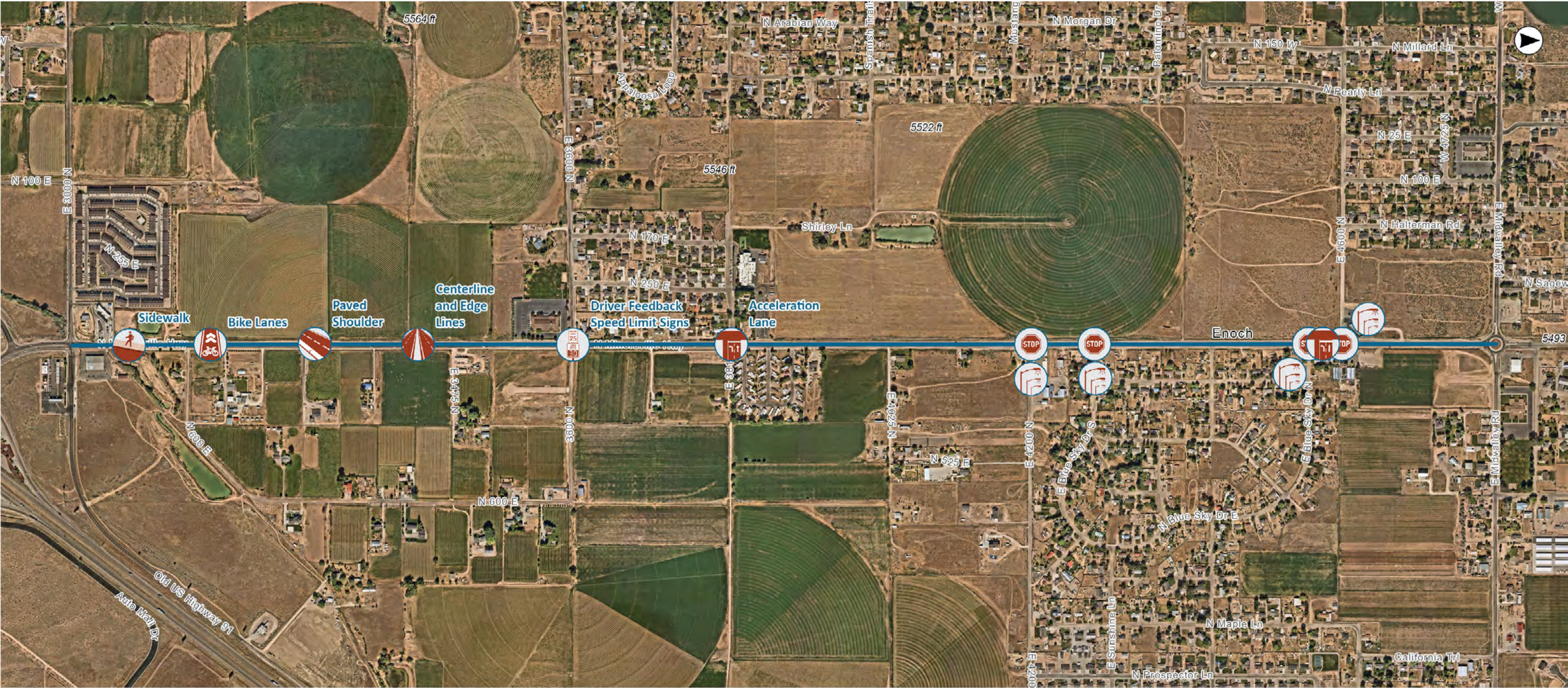
2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.










Improvement Subtotal	\$4,144,200
Estimated Construction Cost Total¹	\$5,669,670
Estimated Project Total²	\$7,006,000
Local Match³	\$1,401,200

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 10



SR 130 from 3000 North to Midvalley Road

-  Sidewalk,
Entire Corridor
-  Bike Lane,
Entire Corridor
-  4 foot Paved Shoulder,
Entire Corridor
-  Retroreflective Center
and Edge Lines,
Entire Corridor
-  Dynamic Speed
Limit Sign
-  Acceleration
Lanes
-  Intersection Ahead
Signage
-  Intersection
Lighting
-  Post-Mounted
Delineators

LOCATION CHARACTERISTICS

PROJECT NUMBER: 11

Location: SR 130

Project Extents: Midvalley Road to 6400 North

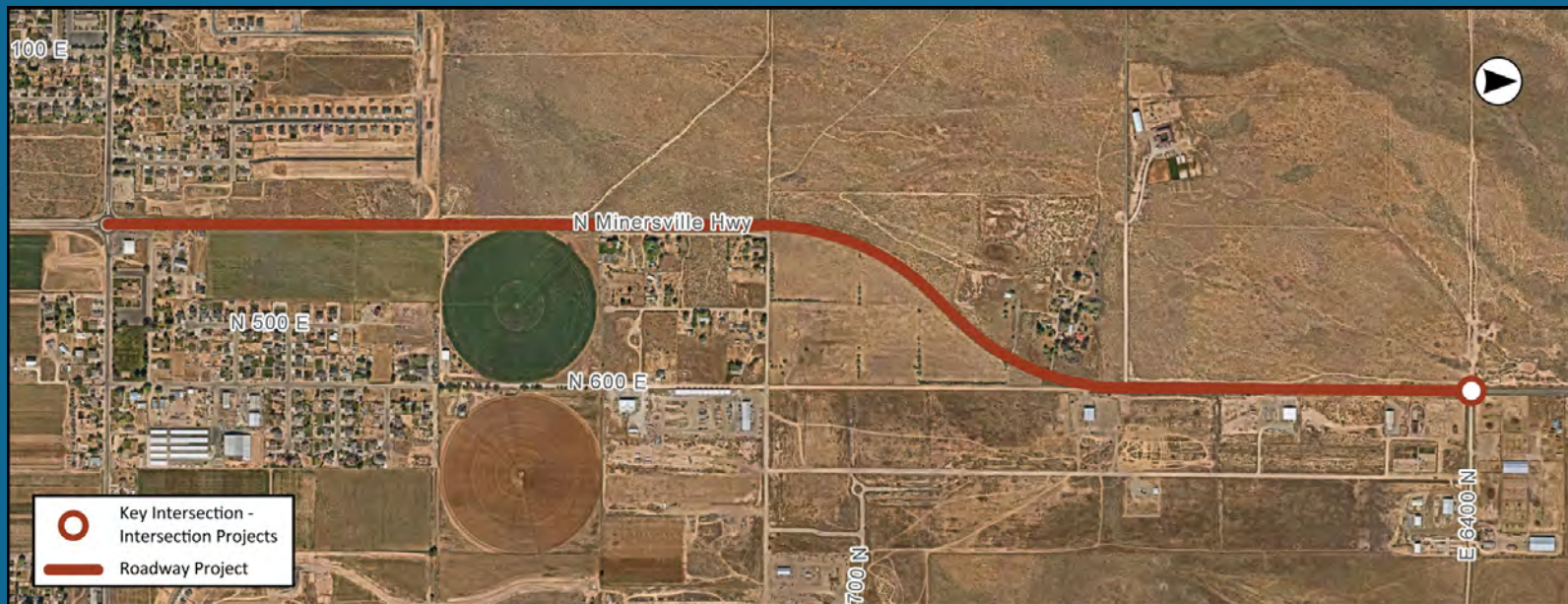
Roadway Classification: Minor Arterial, State Route

Jurisdiction(s): Enoch City, UDOT

Underserved Community: Yes

Safety Action Plan GFA(s): Enoch City GFA, East Iron County GFA

GFA Emphasis Areas: Safety Restraints, Intersections, Older Drivers



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Segment Characteristics

Length:	2.15
Speed Limit:	55 mph
Roadway Lanes:	2
Daily Traffic Volume (AADT):	2,800
Median Type:	NA
Number of Key Intersections	1











Why was this location identified?

High Crash Network:	Yes	✓
High Injury Network:	No	✗
Network Screening:	Yes	✓
Conflict Areas:	Yes	✓
Risk Characteristics:	Yes	✓
Community Feedback:	Yes	✓

Location Crash History

Crash Severity (2019 - 2023)	
Fatal Crashes:	0
Serious Injury Crashes:	0
Minor Injury Crashes:	1
Possible Injury Crashes	4
No Injury/PDO Crashes:	12
Total Crashes:	17
Equivalent Property Damage Crashes:	72

Location Crash Type













Fixed-object	Angle	Left Turn	Head-on	Rear-end
				
12%	18%	12%	0%	0%
Motorist-bicyclist	Motorist-pedestrian	Sideswipe	Front to Rear	Single Vehicle
				
0%	6%	0%	0%	82%

LOCATION INFORMATION

Key Intersection Crash History

PROJECT NUMBER: 11

Intersection Roadway	Total Crashes	Fatal and Serious Injury Crashes	Angle	Left Turn	Rear End	Head On	Sideswipe	Roadway Departure	Pedestrian	Bike
6400 North	5							1		

Utah Emphasis Areas		
Behavioral	 Aggressive Driving	0%
	 Distracted Driving	12%
	 Impaired Driving	0%
	 Use of Safety Restraints	18%
	 Speed Management	6%
	 Teen Driving Safety	0%
	 Senior Safety	12%
Crash Types	 Roadway Departure Crashes	29%
	 Intersection Safety	12%
Vulnerable Users	 Motorcycle Safety	0%
	 Pedestrian Safety	6%
	 Bicycle Safety	0%

Other Applicable Locations/Scenarios:

Minor arterial, higher speed (55 mph), two lane roadways may benefit from similar safety countermeasures. This location includes horizontal curves with narrow shoulders and a number of minor road connections. Similar locations include:

- Westview Drive
- Lund Highway
- Old Highway 91
- Iron Springs Road
- SR 56
- South Mountain Drive
- Cross Hollow Road
- 5700 West

Comments, Feedback, Ongoing Projects:

- Recommendations to align with the Enoch City Active Transportation Plan
- Some improvements identified may be led by Planned development in the area
- Consider sinusoidal rumble strips for areas near residential or Planned residential.
- Sight distance at intersections is difficult.

EXISTING CONDITIONS

PROJECT NUMBER: 11

Notes:



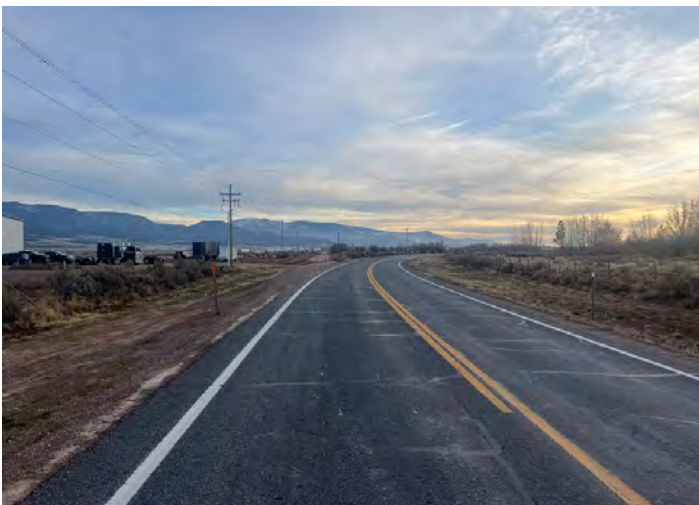
Northbound approaching 5600 North and curves



Northbound Curves



Northbound Typical Roadway Cross Section



Southbound Approaching Curve Between 6400 North and 5600 North



Southbound near 5600 North

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 11

Project Description

This project recommends several safety countermeasures to enhance roadway visibility, alert drivers to roadway departures, and improve intersection operations. Proposed enhancements include installing a 4-foot paved shoulder with edge line rumble strips, to alert drivers of roadway departures and provide additional space for recovery and bicycles. Turn lanes at 5600 North and 6400 North are recommended to address public concerns and separate speed differentials of vehicles. Intersection lighting is recommended to improve nighttime visibility and reduce the frequency of crashes occurring in dark, unlit conditions. Additionally, a driver speed feedback sign southbound before entering the curve, along with installing curve signage on each approach alerting drivers of their speed and upcoming roadway configuration is recommended.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
2 ft Paved Shoulder	Full corridor
Edge Line Rumble Strips	Full corridor
Curve Signage	Curves along corridor
Driver Feedback Speed Limit Signs	Southbound approaching first horizontal curve
Right-Turn Lanes	5600 North and 6400 North
Left-Turn Lanes	Southbound at 5600 North
Intersection Lighting	6400 North

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install 4-ft Paved Shoulder (both sides of roadway)	2.15	MILE	\$709,000	\$1,524,350
Install Edge Line Rumble Strips	2.15	MILE	\$5,000	\$10,750
Install and/or Upgrade Curve Signage to Enhanced Delineations	2	CURVE	\$3,000	\$6,000
Install Driver Feedback Speed Limit Signs	1	EACH	\$11,000	\$11,000
Install Right-Turn Lanes	2	LANE	\$127,000	\$254,000
Install Left-Turn Lanes	1	LANE	\$153,000	\$153,000
Install Intersection Lighting	1	INT	\$35,000	\$35,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.

Improvement Subtotal	\$1,994,100
Estimated Construction Cost Total¹	\$2,767,035
Estimated Project Total²	\$3,374,000
Local Match³	\$674,800

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 11



SR 130 from Midvalley Road to 6400 North



2 foot Paved Shoulder,
Entire Corridor



Edge Line Rumble Strips,
Entire Corridor



Turn Lanes



Enhanced Curve Signage















Dynamic Speed Limit Sign



Intersection Lighting

LOCATION INFORMATION

PROJECT NUMBER: 12

Utah Emphasis Areas						
Behavioral				Crash Types	Vulnerable Users	
50% Impaired Driving 	0% Distracted Driving 	0% Teen Driving Safety 	0% Aggressive Driving 	100% Roadway Departure Crashes 	0% Motorcycle Safety 	0% Pedestrian Safety 
50% Speed Management 	0% Use of Safety Restraints 	0% Senior Safety 		50% Intersection Safety 	0% Bicycle Safety 	

Other Applicable Locations/Scenarios:

4200 North is a local roadway, 25 mph that serves primarily residential areas but connects to a major arterial. This location is representative of many locations throughout the County and cities/towns within. Other local, residential neighborhood type roadways with future planned residential growth immediately surrounding may benefit from similar safety countermeasures.

Comments, Feedback, Ongoing Projects:

- Need for a consistent Cross section for the Roadway
- New developments Planned to the south
- Noted by the community as an area of Concern in regards to speeding and anticipated future traffic volumes

EXISTING CONDITIONS

PROJECT NUMBER: 12

Notes:

- Existing northbound turn lane with SR 130, consider westbound right turn lane from 4200 North



Eastbound near Gold Dust Trail



Eastbound near Prospector Lane



Northbound Right Turn Lane onto 4200 North



Westbound Approaching SR 130



Westbound near High Noon Street

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 12

Project Description

This project recommends installing 4" reflective centerline and edge lines to improve lane visibility and installing driver speed feedback signs for driver awareness of vehicle speeding. Infilling sidewalk gaps on the north side of the roadway is also recommended. This segment was identified in community outreach as a typical local roadway with high vehicle speeding activity and growth potential with future developments nearby.

Note, the Enoch City Transportation Master Plan lists future plans for 4200 North as a new roadway with a side path. The current cross-section of the road is 28 feet of pavement for travel lanes and a separated 6 foot sidewalk on the north side of the roadway.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Retroreflective Center and Edge Lines	Full corridor
Sidewalk	525 East to High Noon Street
Driver Feedback Speed Limit Signs	High Noon Street and Triple Deuce Circle

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install 4" Retroreflective Centerline and Edge Lines	0.77	MILE	\$96,000	\$73,920
Install 6 ft. Sidewalk (both sides of roadway)	0.185	MILE	\$761,000	\$140,785
Install Driver Feedback Speed Limit Signs	2	EACH	\$11,000	\$22,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.


Improvement Subtotal	\$236,705
Estimated Construction Cost Total ¹	\$343,232
Estimated Project Total ²	\$454,000
Local Match ³	\$90,800

LOCATION RECOMMENDATIONS


PROJECT NUMBER: 12




4200 North from SR 130 to Half Mile Road




Retroreflective Center and Edge lines, Entire Corridor



Dynamic Speed Limit Signs



Sidewalk



LOCATION CHARACTERISTICS

PROJECT NUMBER: 13

Location: 3600 North

Project Extents: Bulldog Road to SR 130

Roadway Classification: Minor Collector, Federal Aid Route

Jurisdiction(s): Enoch City

Underserved Community: Yes

Safety Action Plan GFA(s): Enoch City GFA

GFA Emphasis Areas: Safety Restraints, Intersections, Older Drivers



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Segment Characteristics

Length:	1.02
Speed Limit:	30 mph
Roadway Lanes:	2
Daily Traffic Volume (AADT):	3,100
Median Type:	NA
Number of Key Intersections	0











Why was this location identified?

High Crash Network:	Yes	✓
High Injury Network:	No	✗
Network Screening:	No	✗
Conflict Areas:	Yes	✓
Risk Characteristics:	No	✗
Community Feedback:	Yes	✓

Location Crash History

Crash Severity (2019 - 2023)	
Fatal Crashes:	0
Serious Injury Crashes:	0
Minor Injury Crashes:	1
Possible Injury Crashes:	1
No Injury/PDO Crashes:	2
Total Crashes:	4
Equivalent Property Damage Crashes:	32













Location Crash Type

Fixed-object	Angle	Left Turn	Head-on	Rear-end
				
0%	25%	0%	0%	50%
Motorist-bicyclist	Motorist-pedestrian	Sideswipe	Front to Rear	Single Vehicle
				
25%	0%	0%	50%	25%

LOCATION INFORMATION

Key Intersection Crash History

PROJECT NUMBER: 13

Utah Emphasis Areas						
Behavioral				Crash Types	Vulnerable Users	
0% Impaired Driving 	25% Distracted Driving 	50% Teen Driving Safety 	0% Aggressive Driving 	0% Roadway Departure Crashes 	0% Motorcycle Safety 	0% Pedestrian Safety 
0% Speed Management 	0% Use of Safety Restraints 	0% Senior Safety 		75% Intersection Safety 	25% Bicycle Safety 	

Other Applicable Locations/Scenarios:

3600 North is a minor collector, 30 mph roadway that serves primarily residential areas but also churches and schools and connects to a major arterial. This location is representative of many locations throughout the County and cities/towns within. Other minor collector roadways that connect residential and other uses, with future planned growth immediately surrounding may benefit from similar safety countermeasures.

Comments, Feedback, Ongoing Projects:

- Adjacent areas are Planned for residential growth
- School buses travel this route to and from the School
- Serves School transport for kids walking, biking, and vehicles dropping-off/picking-up.

EXISTING CONDITIONS

PROJECT NUMBER: 13

Notes:



Eastbound Approaching SR 130



Eastbound near Driftwood Lane



South Side of Roadway Approaching 250 East



Westbound Between SR 130 and 250 East



Westbound near Driftwood Lane

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 13

Project Description

This project recommends installing driver feedback speed limit signs to encourage safer speeds and retroreflective centerline and edge lines to improve nighttime visibility and lane guidance. These enhancements aim to address safety concerns by increasing driver awareness and reducing vehicle speeds. A 4-ft paved shoulder and bike lanes is recommended to improve bicyclist safety. This segment was identified in community outreach as a typical collector roadway with high vehicle speeding activity and growth potential from nearby developments.

Note, the Enoch City Transportation Master Plan lists future plans for 3600 North as a widened roadway with a bicycle lane. The current cross-section of the road is 28 feet of pavement for travel lanes and separated 6 foot sidewalk on the north side of the roadway.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Driver Feedback Speed Limit Signs	Cottonwood Drive and 250 East
Retroreflective Center and Edge Lines	Full corridor
4 ft Paved Shoulder	Full corridor
Bicycle Lanes	Full corridor

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install Driver Feedback Speed Limit Signs	2	EACH	\$11,000	\$22,000
Install 4" Retroreflective Centerline and Edge Lines	1.02	MILE	\$96,000	\$97,920
Install 4-ft Paved Shoulder (both sides of roadway)	1.02	MILE	\$709,000	\$723,180
Install Bicycle Lanes	1.02	MILE	\$44,000	\$44,880

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.

Improvement Subtotal	\$887,980
Estimated Construction Cost Total¹	\$1,273,773
Estimated Project Total²	\$1,732,000
Local Match³	\$346,400

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 13



3600 North from Bulldog Road to SR 130

-  Dynamic Speed Limit Signs
-  4 foot Paved Shoulder, Entire Corridor
-  Retroreflective Center and Edge Lines, Entire Corridor
-  Bike Lane, Entire Corridor

LOCATION CHARACTERISTICS

PROJECT NUMBER: 14

Location: Old Highway 91

Project Extents: SR 130 to Midvalley Road

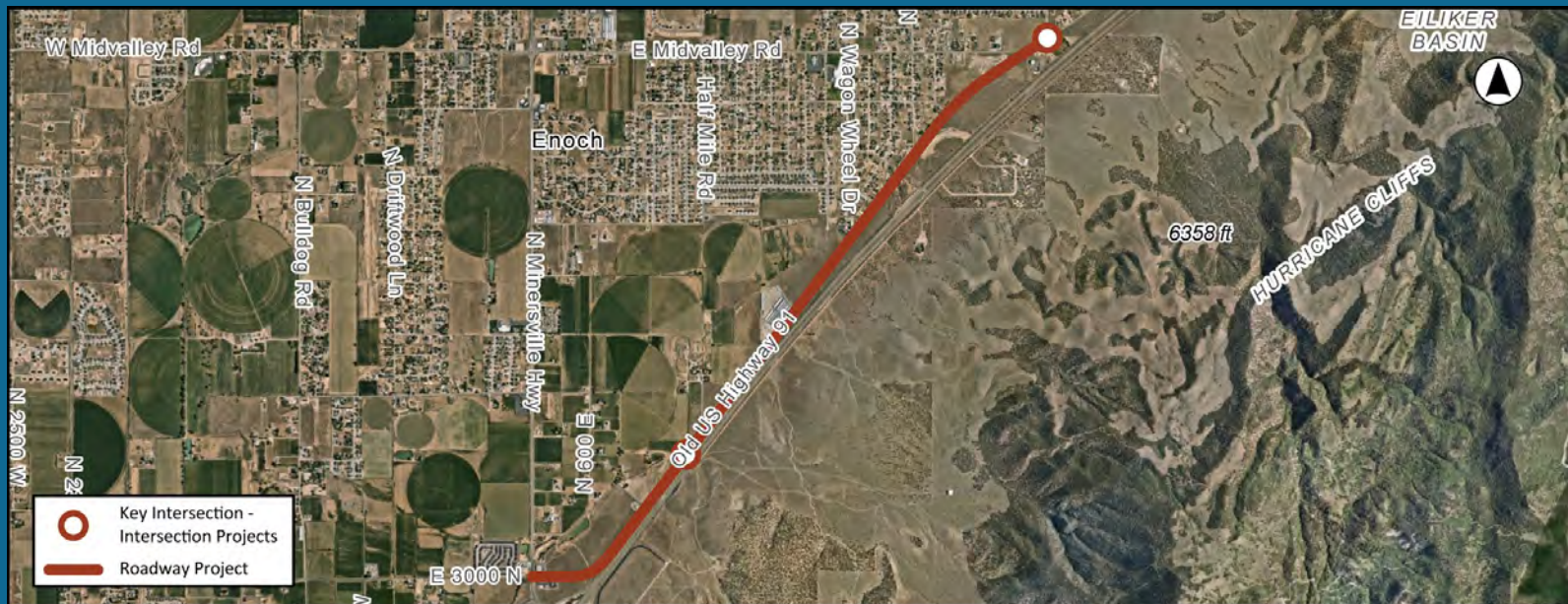
Roadway Classification: Major Collector, Federal Aid Route

Jurisdiction(s): Enoch City

Underserved Community: Yes

Safety Action Plan GFA(s): Enoch City GFA

GFA Emphasis Areas: Safety Restraints, Intersections, Older Drivers



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Segment Characteristics

Length:	3.37
Speed Limit:	45-55 mph
Roadway Lanes:	2
Daily Traffic Volume (AADT):	6,100
Median Type:	NA
Number of Key Intersections	2











Why was this location identified?

High Crash Network:	Yes	✓
High Injury Network:	Yes	✓
Network Screening:	No	✗
Conflict Areas:	No	✗
Risk Characteristics:	No	✗
Community Feedback:	Yes	✓

Location Crash History

Crash Severity (2019 - 2023)	
Fatal Crashes:	0
Serious Injury Crashes:	1
Minor Injury Crashes:	1
Possible Injury Crashes	3
No Injury/PDO Crashes:	22
Total Crashes:	27
Equivalent Property Damage Crashes:	163

Location Crash Type













Fixed-object	Angle	Left Turn	Head-on	Rear-end
				
19%	22%	30%	0%	22%
Motorist-bicyclist	Motorist-pedestrian	Sideswipe	Front to Rear	Single Vehicle
				
0%	0%	11%	26%	37%

LOCATION INFORMATION

Key Intersection Crash History

PROJECT NUMBER: 14

Intersection Roadway	Total Crashes	Fatal and Serious Injury Crashes	Angle	Left Turn	Rear End	Head On	Sideswipe	Roadway Departure	Pedestrian	Bike
Summit Frontage Road	5		2	1	1					
Heather Hue Road	3		2		1					

Utah Emphasis Areas		
Behavioral	 Aggressive Driving	4%
	 Distracted Driving	4%
	 Impaired Driving	0%
	 Use of Safety Restraints	4%
	 Speed Management	11%
	 Teen Driving Safety	48%
	 Senior Safety	11%
Crash Types	 Roadway Departure Crashes	19%
	 Intersection Safety	30%
Vulnerable Users	 Motorcycle Safety	4%
	 Pedestrian Safety	0%
	 Bicycle Safety	0%

Other Applicable Locations/Scenarios:

Major collector, higher speed (45-55 mph), two-lane roadways may benefit from similar safety countermeasures. This location has higher traffic volumes (compared to other areas within the County) due to being a major connection between Cedar City and Enoch City, and sees more bicyclists than typical. Other locations may include:

- Lund Highway
- SR 271 between Paragonah and Parowan
- Airport Road
- Westview Drive
- Iron Springs Road
- Midvalley Road
- 200 South (Parowan)
- Old Highway 91 (Summit, Kanarraville)
- South Mountain Drive
- Bench Road

Comments, Feedback, Ongoing Projects:

- There is a current trail (shared-use path) feasibility study for Enoch to Cedar City via a portion of Old Highway 91. The study will help identify the route for a trail connecting to Cedar City.
- A planned mill and fill pavement reconstruction for Old Highway 91 is planned for the near term (before 2027), helping to address pavement condition and striping concerns heard in the Safety Action Plan outreach.
- No current crossing at the Enoch City recreational Complex
- Expected growth due to the ice rink, veterans museum, and housing developments in the area
- High bicycle activity along the roadway
- Vehicle speeding issues

EXISTING CONDITIONS

PROJECT NUMBER: 14

Notes:

- Several skewed intersections with side streets
- Right of way potentially need to widen the Roadway or provide bicycle lanes



Google Street View image of Northbound Approach to Heather Hue Road and Enoch Rec Complex



Google Street View image of Southbound Approach to Midvalley Road



Southbound at Enoch Road



Google Street View image of Typical Cross Section Southbound



Typical Cross Section

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 14

Project Description

Safety countermeasures are aimed to help address vehicle and bicycle safety by separating movements for users. Proposed improvements include a shared-use path along Old Highway 91, shoulder widening, and striping for a bicycle lane. Intersection turn lanes are proposed to separate slowing vehicles from through traffic vehicles. Skewed approaches to Old Highway 91 are recommend to be realigned. A high-visibility crossing with RRFBs is proposed between the existing trail and the Enoch Rec Complex near Heather Hue Road.

Note, there is a current trail feasibility study for Enoch to Cedar City via a portion of Old Highway 91. The study will help identify the route for a trail connecting to Cedar City. Additionally, it is assumed a mill and fill pavement reconstruction will occur on Old Highway 91 in the near term (before 2027) helping to address pavement condition and striping concerns heard in the Safety Action Plan outreach.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
12 ft Shared-use Path	Full corridor
4 ft Paved Shoulders	Full corridor
Bicycle Lanes	Full corridor
Realigned Intersection	Wagon Wheel Drive, Heather Hue Road, Southern Homestead Boulevard
Left-Turn Lanes	Midvalley Road and 1810 East
Right-Turn Lanes	Midvalley Road, 1810 East, Enoch Road, Southern Homestead Boulevard, and Wagon Wheel Drive
High-Visibility Crosswalk	Near Heather Hue Road to the Enoch Rec Complex

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install a Separated 12 ft. Shared-use Path	3.37	MILE	\$627,000	\$2,112,990
Install 4-ft Paved Shoulder (both sides of roadway)	3.37	MILE	\$709,000	\$2,389,330
Install Bicycle Lanes	3.37	MILE	\$44,000	\$148,280
Realign Intersection Approach to Reduce or Eliminate Skew	2	LEG	\$329,000	\$658,000
Install Left-Turn Lanes	2	LANE	\$153,000	\$306,000
Install Right-Turn Lanes	5	LANE	\$127,000	\$635,000
Install High-Visibility Crosswalk (including RRFB)	1	XING	\$17,000	\$17,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.

Improvement Subtotal	\$6,266,600
Estimated Construction Cost Total¹	\$8,534,910
Estimated Project Total²	\$11,467,000
Local Match³	\$2,293,400

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 14



Old Highway 91 from SR 130 to Midvalley Road

-  Bike Lane, Entire Corridor
-  4 foot Paved Shoulder, Entire Corridor
-  12 foot Shared-Use Path Entire Corridor
-  Turn Lanes
-  Intersection Realignment and Turn Lanes
-  Rectangular Rapid Flashing Beacon (RRFB)



APPENDIX E.3. EAST IRON COUNTY GFA PROJECT INFORMATION SHEETS

LOCATION CHARACTERISTICS

PROJECT NUMBER: 15

Location: Comstock Road and Pinto Road

Project Extents: Comstock Road & SR 56 and Pinto Road & SR 56

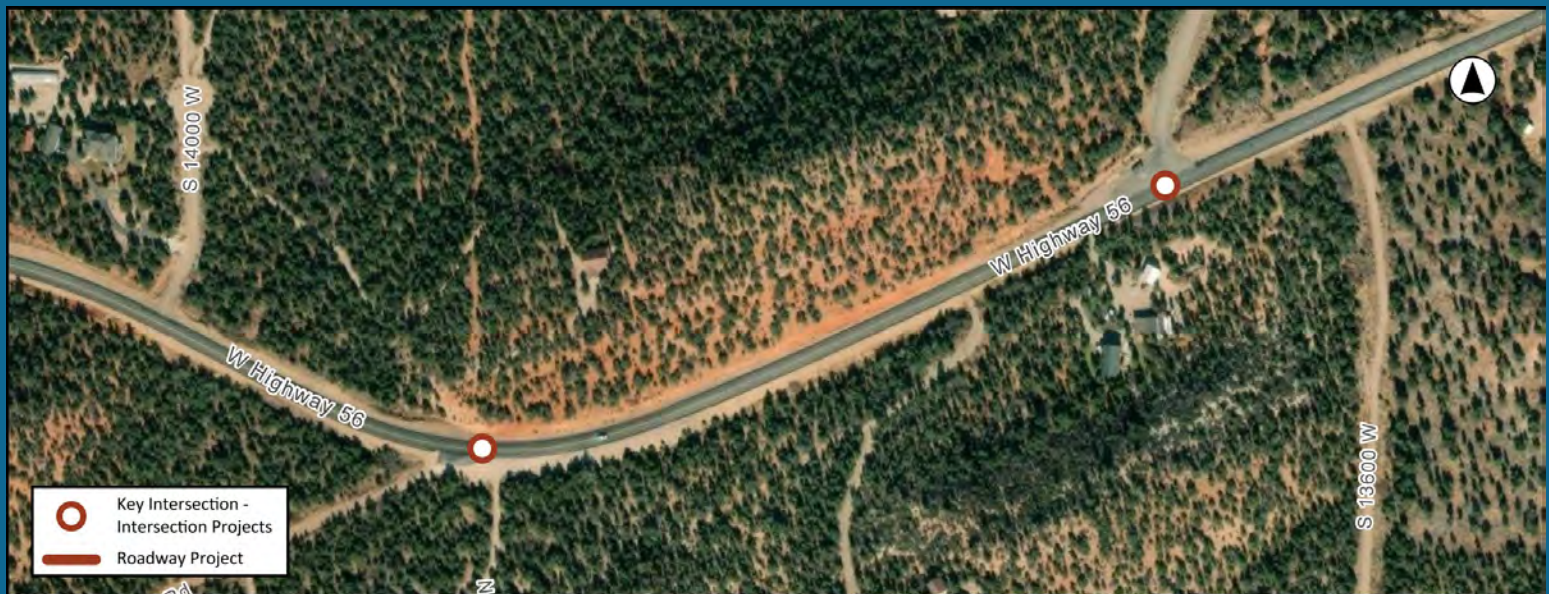
Intersection Control: Two-way Stop Controlled

Jurisdiction(s): Unincorporated Iron County, UDOT

Underserved Community: Yes

Safety Action Plan GFA(s): East Iron County GFA, West Iron County GFA

GFA Emphasis Areas: Roadway Departures, Speed-Related, Motorcycles



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Intersection Characteristics

Intersection Control Type:	Two-way Stop Controlled
Speed Limits (major, minor):	65 mph, 35 mph
Approaches:	3
Daily Entering Volume:	3,500
Turn Lanes (Y/N):	No
Lighting:	No











Why was this location identified?

High Crash Network:	No	✗
High Injury Network:	No	✗
Network Screening:	No	✗
Conflict Areas:	Yes	✓
Risk Characteristics:	Yes	✓
Community Feedback:	Yes	✓

Location Crash History













Crash Severity (2019 - 2023)	
Fatal Crashes:	0
Serious Injury Crashes:	1
Minor Injury Crashes:	0
Possible Injury Crashes	0
No Injury/PDO Crashes:	3
Total Crashes:	4
Equivalent Property Damage Crashes:	95

Location Crash Type

Fixed-object	Angle	Left Turn	Head-on	Rear-end
				
25%	0%	0%	0%	0%
Motorist-bicyclist	Motorist-pedestrian	Sideswipe	Front to Rear	Single Vehicle
				
0%	0%	0%	0%	100%

LOCATION INFORMATION

PROJECT NUMBER: 15

Utah Emphasis Areas						
Behavioral				Crash Types	Vulnerable Users	
0% Impaired Driving 	0% Distracted Driving 	0% Teen Driving Safety 	0% Aggressive Driving 	25% Roadway Departure Crashes 	0% Motorcycle Safety 	0% Pedestrian Safety 
25% Speed Management 	0% Use of Safety Restraints 	25% Senior Safety 		50% Intersection Safety 	0% Bicycle Safety 	

Other Applicable Locations/Scenarios:

Other skewed intersections with a high-speed, rural, two-lane highway or along a curve may benefit from similar safety countermeasures. Locations include intersections with the following roadways:

- SR 56 (Bumblebee Drive, 9300 West, 8900 West, 7700 West, etc.)
- Iron Springs Road
- Lund Highway
- Old Highway 91
- SR 130 North of Enoch City
- SR 18

Comments, Feedback, Ongoing Projects:

- Shift changes at the mines cause congestion
- Limited sight distance and difficulty turning onto SR 56
- Blind turn into Pinto from SR 56

EXISTING CONDITIONS

PROJECT NUMBER: 15

Notes:

- Consider deceleration and acceleration lanes to separate vehicles making turning /merging movements from the main travel lanes



Comstock Road intersection with SR 56



Eastbound Approach to Comstock Road Intersection



Looking East from the Pinto Road Intersection



Looking west on SR 56 from the Pinto Road intersection



Westbound at Comstock Road Intersection

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 15

Project Description

Safety countermeasures are recommended at the intersections of Pinto Road and Comstock Road with SR 56. Pinto Road approaches SR 56 at a skew - removing obstacles and clearing and grubbing the area will help improve sight distance. A proposed westbound right-turn lane at Comstock Road and eastbound right-turn lane at Pinto will separate speed differentials of vehicles turning from the higher speed through movement lanes. An eastbound acceleration lane from Comstock to SR 56 will also help vehicles accepting less than ideal gaps in traffic and give them space to accelerate. Improvements to the curves include installing transverse rumble strips and pavement marking and upgrading or refreshing the chevron signs with retroreflectivity or speed activated flashers to catch motorists' attention. Intersection lighting at Comstock Road is recommended to illuminate the mail boxes and trash pick up area at this intersection. These improvements aim to address the high number of run-off the road crashes and risk characteristics of high speed roadways and curves.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Transverse Rumble Strips	Comstock Road and Pinto Road
Curve Signage	Comstock Road and Pinto Road
In-Lane Curve Warnings	Comstock Road and Pinto Road
Speed Activated Flashers on Chevrons	Between Comstock Road and Pinto Road
Right-Turn Lanes	Westbound into Comstock Road, eastbound into Pinto Road
Clear and Grub	Comstock Road and Pinto Road
Intersection Lighting	Comstock Road
Acceleration Lane	Eastbound from Pinto Road

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install Transverse Rumble Strips Prior to Curve	2	CURVE	\$1,000	\$2,000
Install and/or Upgrade Curve Signage to Enhanced Delineations	2	CURVE	\$3,000	\$6,000
Install In-Lane Curve Warning Pavement Markings	2	CURVE	\$3,000	\$6,000
Install Speed Activated Flashers on Chevron Signs	6	EACH	\$6,000	\$36,000
Install Right-Turn Lanes	2	LANE	\$127,000	\$254,000
Clear and Grub	2	LEG	\$1,000	\$2,000
Install Intersection Lighting	1	INT	\$35,000	\$35,000
Acceleration Lane	1	LANE	\$153,000	\$153,000

1: Includes mobilization (10%), traffic control (5%), items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000

2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design

3: 20% of estimated project total toward Safe Streets for All implementation grants

Improvement Subtotal	\$494,000
Estimated Construction Cost Total ¹	\$716,300
Estimated Project Total ²	\$985,000
Local Match ³	\$197,000

LOCATION RECOMMENDATIONS


PROJECT NUMBER: 15





Comstock Road and Pinto Road


- 

Turn Lanes
- 

Transverse Rumble Strips
- 

Acceleration Lane
- 

Intersection Lighting
- 

Clear and Grub
- 

Enhance Curve Delineation, Speed Activated Chevrons, In-Lane Curve Warnings

LOCATION CHARACTERISTICS

PROJECT NUMBER: 16

Location: SR 56 Rural, Local Skewed Intersections

Project Extents: 7700 West, 6300 West

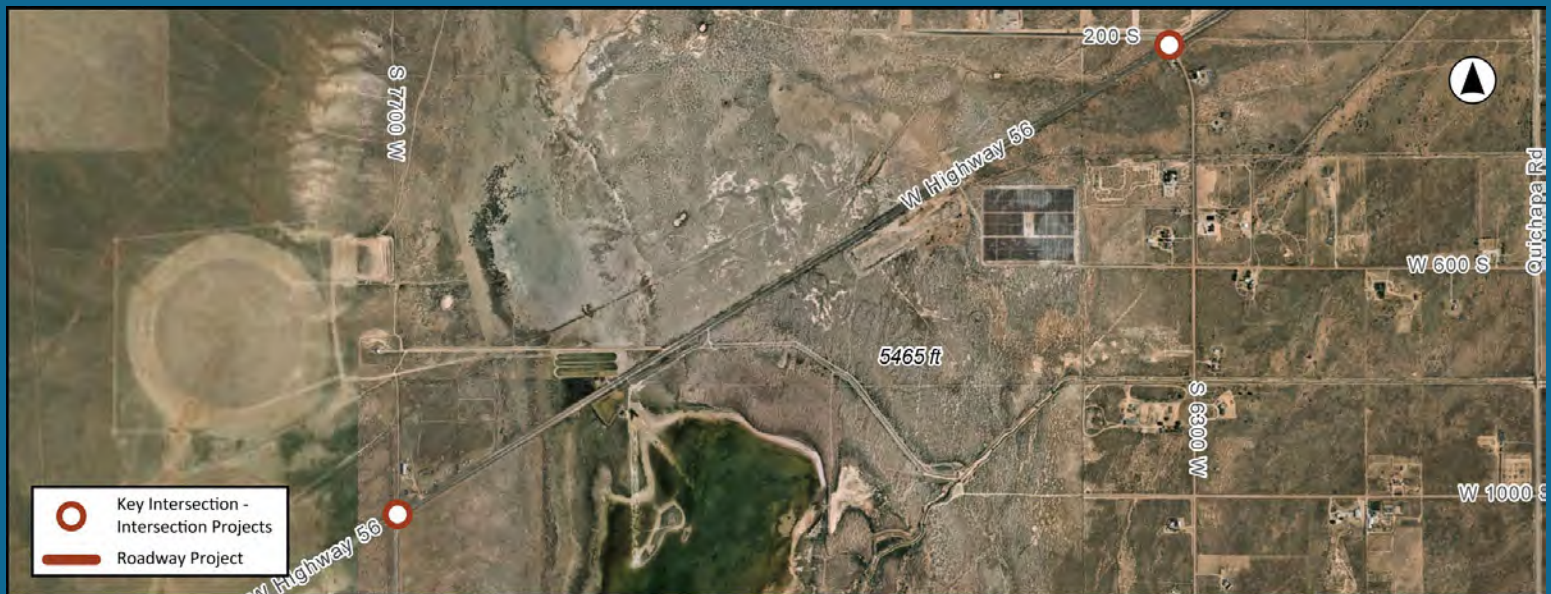
Intersection Control: Two-way Stop Controlled

Jurisdiction(s): Unincorporated Iron County, UDOT

Underserved Community: No

Safety Action Plan GFA(s): East Iron County
GFA

GFA Emphasis Areas: Roadway Departures,
Speed-Related, Motorcycles



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Intersection Characteristics

Intersection Control Type:	Two-way Stop Controlled
Speed Limits (major, minor):	65 mph, 25 mph
Approaches:	3
Daily Entering Volume:	3,800
Turn Lanes (Y/N):	No
Lighting:	No











Why was this location identified?

High Crash Network:	No	✗
High Injury Network:	Yes	✓
Network Screening:	Yes	✓
Conflict Areas:	Yes	✓
Risk Characteristics:	Yes	✓
Community Feedback:	Yes	✓

Location Crash History













Crash Severity (2019 - 2023)	
Fatal Crashes:	0
Serious Injury Crashes:	2
Minor Injury Crashes:	2
Possible Injury Crashes	0
No Injury/PDO Crashes:	4
Total Crashes:	8
Equivalent Property Damage Crashes:	227

Location Crash Type

Fixed-object	Angle	Left Turn	Head-on	Rear-end
				
13%	0%	50%	0%	25%
Motorist-bicyclist	Motorist-pedestrian	Sideswipe	Front to Rear	Single Vehicle
				
0%	0%	13%	63%	25%

LOCATION INFORMATION

PROJECT NUMBER: 16

Utah Emphasis Areas						
Behavioral				Crash Types	Vulnerable Users	
0% Impaired Driving 	25% Distracted Driving 	50% Teen Driving Safety 	0% Aggressive Driving 	38% Roadway Departure Crashes 	0% Motorcycle Safety 	0% Pedestrian Safety 
25% Speed Management 	13% Use of Safety Restraints 	0% Senior Safety 		63% Intersection Safety 	0% Bicycle Safety 	

Other Applicable Locations/Scenarios:

Minor road approaches to a two-lane, high speed (55-65 mph) rural type arterial may benefit from similar safety countermeasures. This intersection is common throughout the County in rural areas. This location mimics improvements in place at the SR 56 and 5700 West intersection. Other applicable locations include:

- Multiple intersections with SR 56 (Bumblebee Road, Comstock Road, Main Street in Newcastle, etc.)
- Intersections with SR 130 north of Enoch City (6400 North, etc.)
- Intersections to Lund Highway, Iron Springs Road, SR 143, SR 18, SR 14, Old Highway 91, etc.

Comments, Feedback, Ongoing Projects:

- Turning onto or off of SR 56 feels scary due to vehicles traveling at high speeds
- Intersections can “sneak up on” drivers if they are not attentive

EXISTING CONDITIONS

PROJECT NUMBER: 16

Notes:



6300 West Approach to SR 56



7700 West, Aerial View



Northbound 7700 West Approach to SR 56



Turning from 6300 West to SR 56 Eastbound



Westbound SR 56 Approaching 6300 West

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 16

Project Description

At skewed intersections with SR 56 safety countermeasure can include right- and left- turn lanes to separate traffic movements and address turning and rear-end crash types. Intersection lighting is also recommended to improve nighttime visibility and address crashes occurring in dark, unlit conditions. The intersection of 7700 West may also be realigned to eliminate the skew with SR 56. Intersection ahead signage is proposed at each intersection.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Left-Turn Lanes	Westbound at 6300 West, westbound at 7700 West
Intersection Lighting	6300 West
Right-Turn Lanes	Westbound at 6300 West, eastbound at 7700 West
Realigned Intersection	7700 West

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install Left-Turn Lanes	2	LANE	\$153,000	\$306,000
Install Intersection Lighting	1	INT	\$35,000	\$35,000
Install Right-Turn Lanes	2	LANE	\$127,000	\$254,000
Realign Intersection Approach to Reduce or Eliminate Skew	1	LEG	\$329,000	\$329,000
Upgrade Signs and Pavement Markings (Paved Approach)	4	LEG	\$3,000	\$12,000

1: Includes mobilization (10%), traffic control (5%), items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000

2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design

3: 20% of estimated project total toward Safe Streets for All implementation grants

Improvement Subtotal	\$936,000
Estimated Construction Cost Total ¹	\$1,338,600
Estimated Project Total ²	\$1,760,000
Local Match ³	\$352,000

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 16



SR 56 Rural, Local Skewed Intersections: 7700 West, 6300 West

- Intersection Realignment
- Intersection Lighting
- Stop-Controlled Intersection Sign Improvements
- Turn Lanes

LOCATION CHARACTERISTICS

PROJECT NUMBER: 17

Location: SR 56

Project Extents: Iron Springs Road to Comstock Road

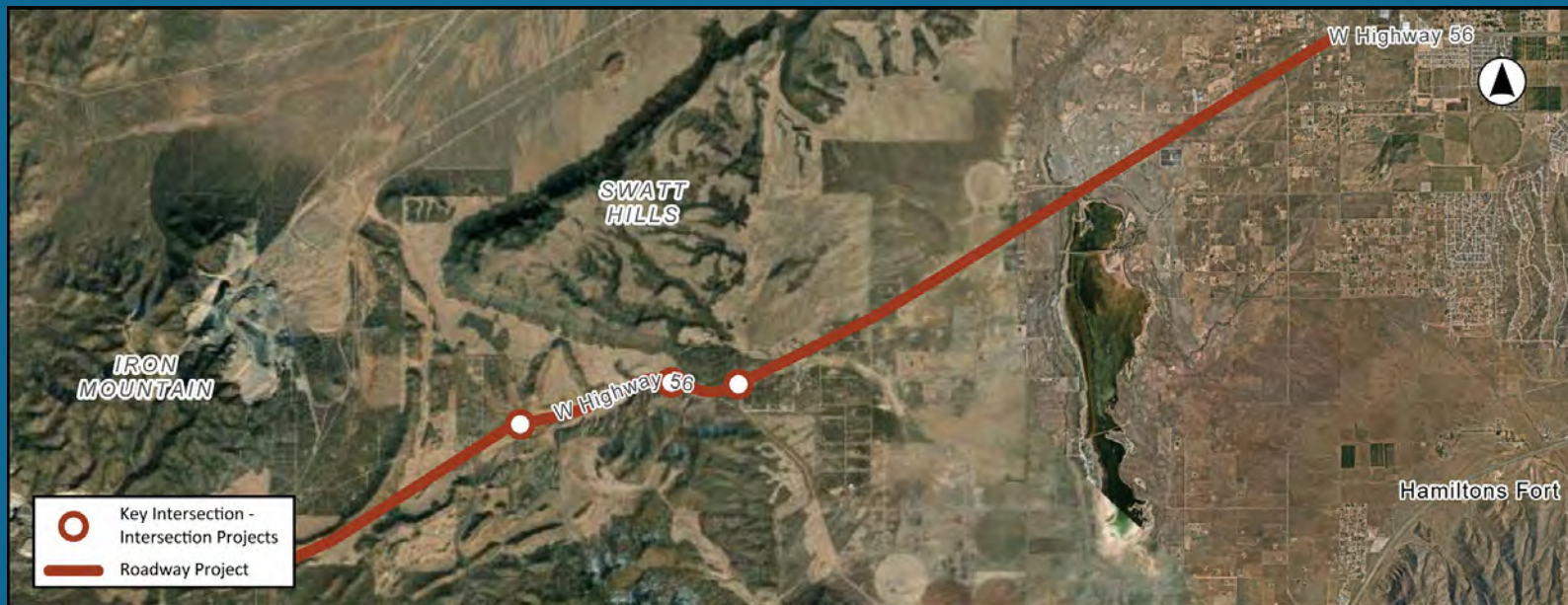
Roadway Classification: Minor Collector, State Route

Jurisdiction(s): Unincorporated Iron County, UDOT

Underserved Community: Social Vulnerability Index

Safety Action Plan GFA(s): East Iron County GFA, West Iron County GFA

GFA Emphasis Areas: Roadway Departures, Speed-Related, Motorcycles



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Segment Characteristics

Length:	11.91
Speed Limit:	65 mph
Roadway Lanes:	4
Daily Traffic Volume (AADT):	2,300
Median Type:	NA-TWLTL
Number of Key Intersections	3











Why was this location identified?

High Crash Network:	Yes ✓
High Injury Network:	Yes ✓
Network Screening:	Yes ✓
Conflict Areas:	Yes ✓
Risk Characteristics:	Yes ✓
Community Feedback:	Yes ✓

Location Crash History

Crash Severity (2019 - 2023)	
Fatal Crashes:	0
Serious Injury Crashes:	3
Minor Injury Crashes:	9
Possible Injury Crashes	8
No Injury/PDO Crashes:	72
Total Crashes:	92
Equivalent Property Damage Crashes:	605

Location Crash Type













Fixed-object	Angle	Left Turn	Head-on	Rear-end
				
23%	1%	2%	0%	5%
Motorist-bicyclist	Motorist-pedestrian	Sideswipe	Front to Rear	Single Vehicle
				
0%	0%	3%	5%	90%

LOCATION INFORMATION

Key Intersection Crash History

PROJECT NUMBER: 17

Intersection Roadway	Total Crashes	Fatal and Serious Injury Crashes	Angle	Left Turn	Rear End	Head On	Sideswipe	Roadway Departure	Pedestrian	Bike
11600 West	4							2		
Bumblebee Drive (west)	3		1					1		
Bumblebee Drive (east)										

Utah Emphasis Areas		
Behavioral		Aggressive Driving 1%
		Distracted Driving 2%
		Impaired Driving 1%
		Use of Safety Restraints 3%
		Speed Management 15%
		Teen Driving Safety 15%
		Senior Safety 13%
Crash Types		Roadway Departure Crashes 20%
		Intersection Safety 5%
Vulnerable Users		Motorcycle Safety 2%
		Pedestrian Safety 0%
		Bicycle Safety 0%

Other Applicable Locations/Scenarios:

Minor arterial, two-lane, higher speed (65 mph) roadways in a rural setting may benefit from similar safety countermeasures. This location includes vertical climbing and horizontal roadway curvature for vehicles to navigate. Other locations may include:

- Other portions of SR 56
- SR 143
- SR 20
- SR 130 north of Enoch City
- Old Highway 91

Comments, Feedback, Ongoing Projects:

- Increasing popularity for bicyclists.
- Many curves to navigate at high speeds.
- Vehicles speeding through canyons and curves.
- High number of animal related crashes; consider the need for additional signage or animal fencing.
- Concerns with crashes occurring in dark, unlit conditions.

EXISTING CONDITIONS

PROJECT NUMBER: 17

Notes:

- Bus stops:
- East of Bumblebee Dive
- Beryl Fire department
- 2400 West



Bus Stop Warning Signage



Iron Springs Road Southbound



Typical SR 56 Cross Section Eastbound



Typical SR 56 Cross Section Westbound



Westbound Approaching Curves

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 17

Project Description

This project recommends safety countermeasures on SR 56 to help address roadway departure, nighttime visibility issues, and intersection safety concerns. Proposed countermeasures include edge line rumble strips, shoulder widening, and centerline rumble strips to help address roadway departure crash types. Curve signage (chevron signs) should be installed or updated before curves both eastbound and westbound. Additionally, intersection lighting is recommended to improve visibility and reduce the risk of crashes occurring in dark, unlit conditions. Westbound left-turn and eastbound right-turn lanes are proposed at Bumblebee Drive to separate vehicles making those movements.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Edge Line Rumble Strips	Full corridor
2 ft Paved Shoulders	Full corridor (2 miles of shoulder pre-existing)
Centerline Rumble Strips	Full corridor
Curve Signage	Eastbound and westbound on curves near Bumblebee Drive
Climbing Lane	MP 46.2 to MP 45.2
Intersection Lighting	Bumblebee Drive
Left-Turn Lanes	Westbound at Bumblebee Drive
Right-Turn Lanes	Eastbound at Bumblebee Drive

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install Edge Line Rumble Strips	12.07	MILE	\$5,000	\$60,350
Install 4-ft Paved Shoulder (both sides of roadway)	10	MILE	\$709,000	\$7,090,000
Install Centerline Rumble Strips	12	MILE	\$5,000	\$60,000
Install and/or Upgrade Curve Signage to Enhanced Delineations	4	CURVE	\$3,000	\$12,000
Widen Roadway to Install Climbing Lane	1	MILE	\$1,070,000	\$1,070,000
Install Intersection Lighting	1	INT	\$35,000	\$35,000
Install Left-Turn Lanes	1	LANE	\$153,000	\$153,000
Install Right-Turn Lanes	1	LANE	\$127,000	\$127,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.

Improvement Subtotal	\$8,607,350
Estimated Construction Cost Total ¹	\$11,694,923
Estimated Project Total ²	\$13,625,000
Local Match ³	\$2,725,000

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 17



SR 56 from Iron Springs Road to Comstock Road

- Center and Edge Line Rumble strips, Entire Corridor
- 4 foot Paved Shoulder, Entire Corridor
- Turn Lanes
- Intersection Lighting
- Climbing Lane
- Enhanced Curve Delineation

LOCATION CHARACTERISTICS

Location: 200 South (SR 143)

Project Extents: I-15 to Main Street/SR 143

Roadway Classification: Minor Arterial, State Route

Jurisdiction(s): Parowan City, UDOT

Underserved Community: No

PROJECT NUMBER: 18

Safety Action Plan GFA(s): East Iron County
GFA

GFA Emphasis Areas: Roadway Departures,
Speed-Related, Motorcycles



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Segment Characteristics

Length:	2.14
Speed Limit:	50-40 mph
Roadway Lanes:	2
Daily Traffic Volume (AADT):	3,600
Median Type:	TWLTL
Number of Key Intersections	1











Why was this location identified?

High Crash Network:	Yes	✓
High Injury Network:	No	✗
Network Screening:	No	✗
Conflict Areas:	Yes	✓
Risk Characteristics:	Yes	✓
Community Feedback:	Yes	✓

Location Crash History

Crash Severity (2019 - 2023)	
Fatal Crashes:	0
Serious Injury Crashes:	0
Minor Injury Crashes:	1
Possible Injury Crashes:	1
No Injury/PDO Crashes:	6
Total Crashes:	8
Equivalent Property Damage Crashes:	36

Location Crash Type













Fixed-object	Angle	Left Turn	Head-on	Rear-end
				
38%	0%	13%	0%	13%
Motorist-bicyclist	Motorist-pedestrian	Sideswipe	Front to Rear	Single Vehicle
				
0%	0%	25%	13%	50%

LOCATION INFORMATION

Key Intersection Crash History

PROJECT NUMBER: 18

Intersection Roadway	Total Crashes	Fatal and Serious Injury Crashes	Angle	Left Turn	Rear End	Head On	Sideswipe	Roadway Departure	Pedestrian	Bike
NB I-15 Off Ramp	5				1		1	3		

Utah Emphasis Areas		
Behavioral	 Aggressive Driving	0%
	 Distracted Driving	13%
	 Impaired Driving	0%
	 Use of Safety Restraints	25%
	 Speed Management	38%
	 Teen Driving Safety	13%
	 Senior Safety	13%
Crash Types	 Roadway Departure Crashes	50%
	 Intersection Safety	13%
Vulnerable Users	 Motorcycle Safety	0%
	 Pedestrian Safety	0%
	 Bicycle Safety	0%

Other Applicable Locations/Scenarios:

State Route, minor arterial roadways with a center two-way left-turn lane and a 40-50 mph speed limit may benefit from similar safety countermeasures. This location serves a mix of traffic including local, visitors, and vehicles passing through to a destination (in this case Brian Head). Other locations may include:

- SR 14, Cedar City
- Midvalley Road, Enoch City
- Old Highway 91 through Summit and Kanarraville
- SR 271, Paragonah Town

Comments, Feedback, Ongoing Projects:

- Recommendations are similar to those identified in the Parowan Active Transportation Plan (2024)
- Sidewalk infill project in progress from the Grace Christian Church to 1000 West
- Desire for improved traffic counts in peak winter/ski season
- Consider a speed limit study
- Priorities are as follow: complete the south sidewalk first. After, lane additions, crossing improvements, and the path along the north side of the roadway.
- 200 South from Main Street to SR 143 also required improvements and is identified as a long-term project. It is currently used too often as a cut-through from Main Street to SR 143 Canyon Road

EXISTING CONDITIONS

PROJECT NUMBER: 18

Notes:

- 200 South from Main Street to SR 143 also required improvements and is identified as a long-term project. It is currently used too often as a cut-through from Main Street to SR 143 Canyon Road



Eastbound Approaching Main Street (SR 130)



Eastbound at Main Street (SR 130) Intersection



End of South Sidewalk



Three-Lane Cross Section



Two-Lane Cross Section

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 18

Project Description

This project builds upon concepts and recommendations for 200 South (SR 143) found in the Parowan Active Transportation Plan (2024). Proposed safety countermeasures include filling sidewalk gaps, adding a shared use path, and roadway widening with a two way left turn lane and new edge line striping. Intersection improvements include high-visibility crosswalks, lighting, and flashing beacons on crosswalks at key intersections on the corridor. Pedestrian refuge islands, raised crosswalk, and bulb-outs at the entering intersections from each side of the corridor are recommended to create a gateway to the City and alert motorists of pedestrian activity.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
12 ft Shared-use Path	Entire corridor
Retroreflective center and edge lines	Entire corridor
Sidewalk	1000 West to Phillips 66 Station
Roadway Widening and TWLTL	Main Street to 400 West
High-Visibility Crosswalk	Frontage Road Intersection, 1375 West, 1000 West, 500 West, 200 West, Main Street
Pedestrian Refuge Island	Main Street, Frontage Road
Rectangular Rapid Flashing Beacon (RRFB)	Frontage Road Intersection, 1375 West, 1000 West, 500 West, 200 West, Main Street
Bulbouts	Main Street, Frontage Road
Raised Crosswalk	Main Street, Frontage Road

Opinion of Probable Cost













Improvement	QTY.	Unit	Unit Price	Item Cost
Install a Separated 12 ft. Shared-use Path	2.14	MILE	\$627,000	\$1,341,780
Install 4" Retroreflective Centerline and Edge Lines	2.14	MILE	\$96,000	\$205,440
Install 6 ft. Sidewalk (both sides of roadway)	0.4	MILE	\$761,000	\$304,400
Widen Roadway and Install Two-Way Left-Turn Lane	0.5	MILE	\$1,560,000	\$780,000
Install High-Visibility Crosswalk (including lighting)	6	XING	\$38,000	\$228,000
Install Pedestrian Refuge Island	2	EACH	\$75,000	\$150,000
Install Rectangular Rapid Flashing Beacons (RRFB)	6	XING	\$10,000	\$60,000
Install Bulbouts (2)	2	EACH	\$54,000	\$108,000
Install Raised Crosswalk and Signage	2	EACH	\$41,000	\$82,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.

Improvement Subtotal	\$3,259,620
Estimated Construction Cost Total¹	\$4,475,487
Estimated Project Total²	\$5,214,000
Local Match³	\$1,042,800

	Frontage Road	1375 West	1000 West	500 West	200 West	Main Street	
							
							
							
							

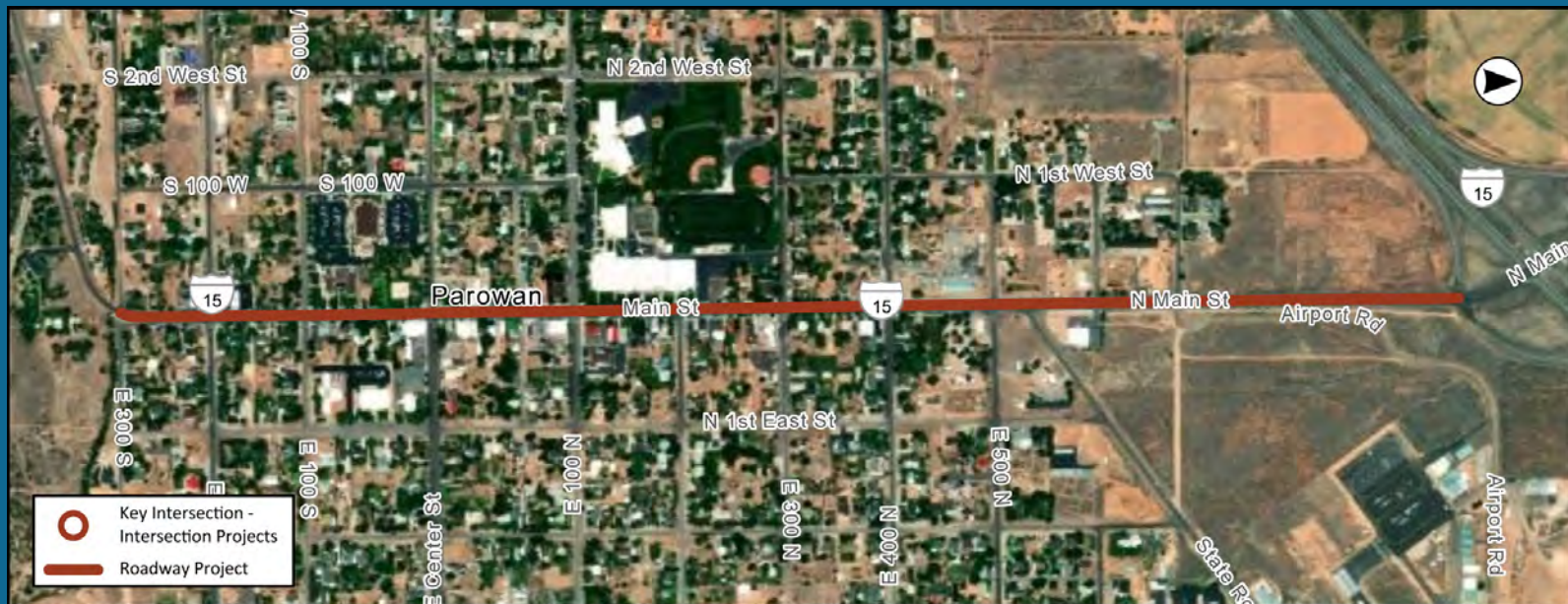
LOCATION CHARACTERISTICS

Location: Main Street (SR 274)
Project Extents: I-15 to 300 South
Roadway Classification: Minor Arterial, State Route
Jurisdiction(s): Parowan City, UDOT
Underserved Community: No

PROJECT NUMBER: 19

Safety Action Plan GFA(s): East Iron County
 GFA

GFA Emphasis Areas: Roadway Departures,
 Speed-Related, Motorcycles



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Segment Characteristics

Length:	1.36
Speed Limit:	30 mph
Roadway Lanes:	2
Daily Traffic Volume (AADT):	2,700
Median Type:	TWLT
Number of Key Intersections	0











Why was this location identified?

High Crash Network:	Yes	✓
High Injury Network:	No	✗
Network Screening:	No	✗
Conflict Areas:	No	✗
Risk Characteristics:	Yes	✓
Community Feedback:	Yes	✓

Location Crash History













Crash Severity (2019 - 2023)	
Fatal Crashes:	0
Serious Injury Crashes:	0
Minor Injury Crashes:	1
Possible Injury Crashes:	2
No Injury/PDO Crashes:	3
Total Crashes:	6
Equivalent Property Damage Crashes:	43

Location Crash Type

Fixed-object	Angle	Left Turn	Head-on	Rear-end
				
17%	17%	33%	0%	0%
Motorist-bicyclist	Motorist-pedestrian	Sideswipe	Front to Rear	Single Vehicle
				
0%	0%	33%	0%	17%

LOCATION INFORMATION

PROJECT NUMBER: 19

Utah Emphasis Areas						
Behavioral				Crash Types	Vulnerable Users	
0% Impaired Driving 	33% Distracted Driving 	67% Teen Driving Safety 	0% Aggressive Driving 	33% Roadway Departure Crashes 	0% Motorcycle Safety 	0% Pedestrian Safety 
17% Speed Management 	0% Use of Safety Restraints 	17% Senior Safety 		50% Intersection Safety 	0% Bicycle Safety 	

Other Applicable Locations/Scenarios:

State Routes or similar types of roadways that serve as Main Street for smaller or rural communities with pedestrian use may benefit from similar safety countermeasures. This location serves both a school area (High School with students crossing the road often) and the business-focused part of the City. Other similar locations throughout the County may include:

- Main Street (SR 271), Paragonah Town
- Old Highway 91, Kanarraville
- SR 143, Brian Head
- Midvalley Road, Enoch City
- SR 14, Cedar City
- Main Street (SR 130), Cedar City

Comments, Feedback, Ongoing Projects:

- Recommendations are similar to those identified in the Parowan Active Transportation Plan (2024); intent to create a pedestrian priority zone from 400 North to 200 South
- High number of crossing pedestrians to the High School, restaurant, pools, parks, fairgrounds, etc.
- Speeding vehicles in the area
- Need additional crossings south of center Street
- Brian Head and resorts are expecting and planning for growth and visitorship in the future, most of those people pass through Parowan Main Street.

EXISTING CONDITIONS

PROJECT NUMBER: 19

Notes:

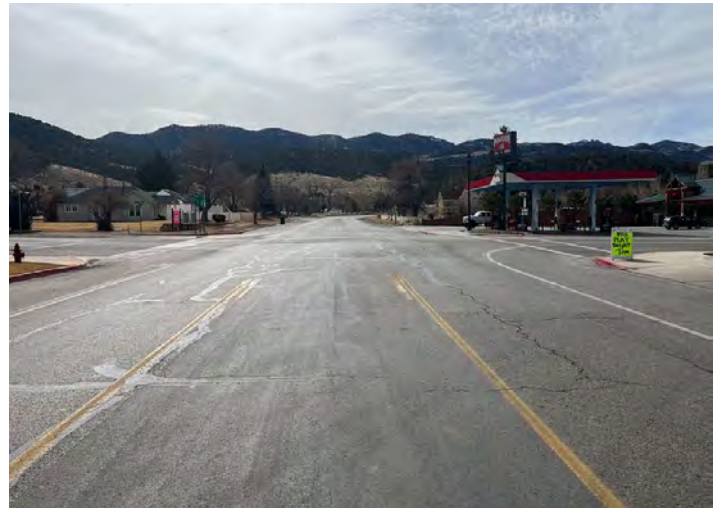
- Pedestrians observed crossing at unmarked locations



100 North Crossing near Parowan High School



200 North Crossing



Northbound Approach to 200 South



SR 271 Approach to Main Street



Typical Cross Section with On Street Parking

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 19

Project Description

This project builds upon concepts and recommendations for Main Street (SR 274) found in the Parowan Active Transportation Plan (2024). The safety countermeasures are intended to create a pedestrian priority zone on Main Street (400 North to 200 South) in Parowan, including gateway type intersections and improvements to capture motorist's attention. Intersection improvements include high visibility crosswalks, bulbouts, pedestrian hybrid beacons or rectangular rapid-flashing beacons, refuge islands, and lighting. Re-aligning the skewed approach of SR 271 to SR 274 and repainting edge line striping are also recommended.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Retroreflective Center and Edge Lines	Entire corridor
High-Visibility Crosswalk	400 North, 300 North, 200 North, 100 North, 100 South, 200 South
Pedestrian refuge Island	400 North, 200 South
Rectangular Rapid Flashing Beacon (RRFB)	400 North, 100 North, 200 South
Raised Crosswalk	400 North, 200 South
Bulbouts	400 North, 200 North, 100 North, Center Street, 200 South
Pedestrian Hybrid Beacon or HAWK	Center Street
Realign Intersection	Intersection of SR 271 and SR 274

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install 4" Retroreflective Centerline and Edge Lines	1.36	MILE	\$96,000	\$130,560
Install High-Visibility Crosswalk (including lighting)	6	XING	\$38,000	\$228,000
Install Pedestrian Refuge Island	2	EACH	\$75,000	\$150,000
Install Rectangular Rapid Flashing Beacons (RRFB)	3	XING	\$10,000	\$30,000
Install Raised Crosswalk and Signage	2	EACH	\$41,000	\$82,000
Install Bulbouts (2)	10	EACH	\$54,000	\$540,000
Install Pedestrian Hybrid Beacons (PHB) or HAWK	1	EACH	\$250,000	\$250,000
Realign Intersection Approach to Reduce or Eliminate Skew	1	LEG	\$329,000	\$329,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.

Improvement Subtotal	\$1,739,560
Estimated Construction Cost Total ¹	\$2,423,406
Estimated Project Total ²	\$2,824,000
Local Match ³	\$564,800

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 19



Main Street (SR 274) from I-15 to 300 South

- | | | | | | | | |
|---|---|---|---|--|--|---|--|
| Retroreflective Center and Edge Lines, Entire Corridor
Intersection Approach Realignment | 200 South
Raised Crosswalk with Refuge Island | 100 South
High Visibility Crosswalk | Center Street
Pedestrian Hybrid Beacon (PHB)
Bulb Outs | 100 North
High Visibility Crosswalk with RRFB
Bulb Outs | 200 North
High Visibility Crosswalk
Bulb Outs | 300 North
High Visibility Crosswalk | 400 North
Raised Crosswalk with Refuge Island
Rectangular Rapid Flashing Beacon (RRFB)
Bulb Outs |
|---|---|---|---|--|--|---|--|

LOCATION CHARACTERISTICS

PROJECT NUMBER: 20

Location: SR 143

Project Extents: Dry Lakes Road to Vasels Road

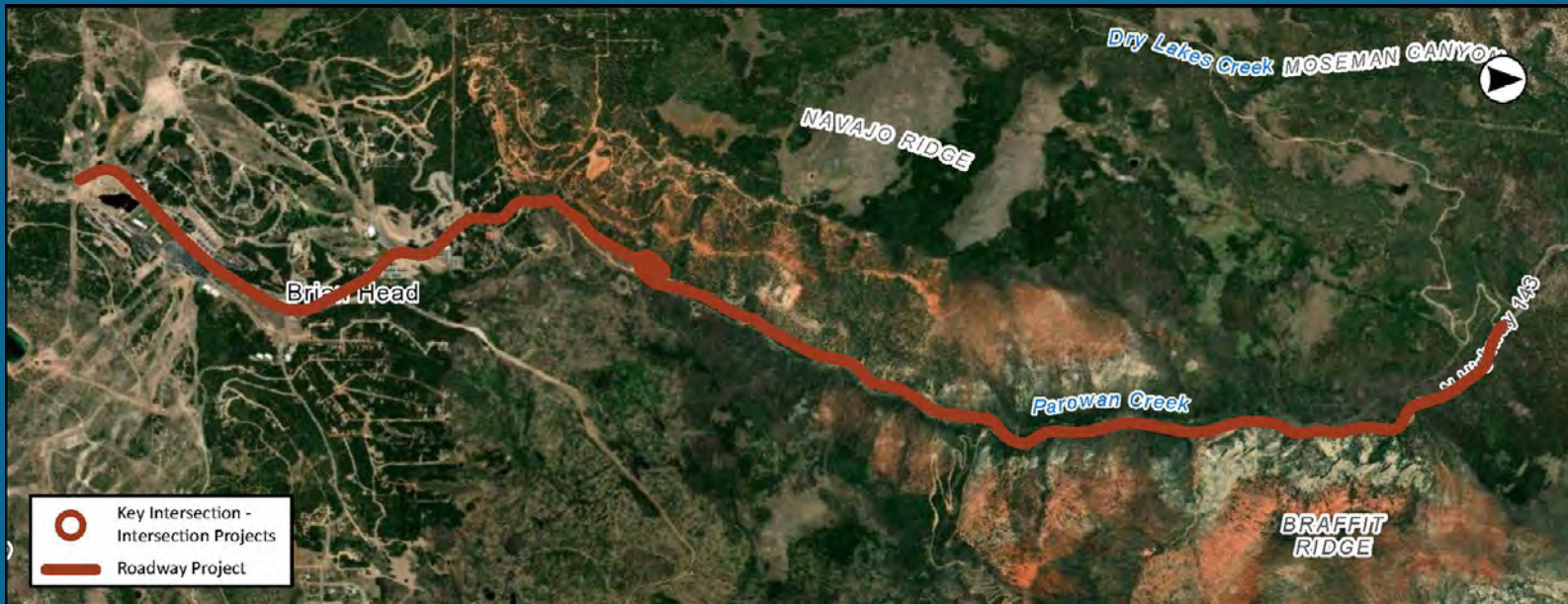
Roadway Classification: Minor Arterial, State Route

Jurisdiction(s): Brian Head, Unincorporated Iron County, UDOT

Underserved Community: No

Safety Action Plan GFA(s): East Iron County GFA

GFA Emphasis Areas: Roadway Departures, Speed-Related, Motorcycles



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Segment Characteristics

Length:	5.4
Speed Limit:	50 mph
Roadway Lanes:	2
Daily Traffic Volume (AADT):	1,000
Median Type:	NA
Number of Key Intersections	0











Why was this location identified?

High Crash Network:	Yes	✓
High Injury Network:	No	✗
Network Screening:	Yes	✓
Conflict Areas:	No	✗
Risk Characteristics:	Yes	✓
Community Feedback:	Yes	✓

Location Crash History













Crash Severity (2019 - 2023)	
Fatal Crashes:	0
Serious Injury Crashes:	1
Minor Injury Crashes:	2
Possible Injury Crashes:	2
No Injury/PDO Crashes:	17
Total Crashes:	22
Equivalent Property Damage Crashes:	168

Location Crash Type

Fixed-object	Angle	Left Turn	Head-on	Rear-end
				
59%	0%	0%	0%	9%
Motorist-bicyclist	Motorist-pedestrian	Sideswipe	Front to Rear	Single Vehicle
				
0%	0%	14%	9%	73%

LOCATION INFORMATION

PROJECT NUMBER: 20

Utah Emphasis Areas						
Behavioral				Crash Types	Vulnerable Users	
0% Impaired Driving 	0% Distracted Driving 	9% Teen Driving Safety 	0% Aggressive Driving 	64% Roadway Departure Crashes 	0% Motorcycle Safety 	0% Pedestrian Safety 
41% Speed Management 	5% Use of Safety Restraints 	9% Senior Safety 		0% Intersection Safety 	0% Bicycle Safety 	

Other Applicable Locations/Scenarios:

Two-lane, higher speed (50 mph) roadways in a canyon setting with curves and minimal shoulders may benefit from similar safety countermeasures. Within Brian Head, the roadway serves as Main Street including multiple driveway accesses and minor road intersections. Other locations may include:

- SR 20
- SR 14
- SR 56
- Old Highway 91

Comments, Feedback, Ongoing Projects:

- Recommendations similar to those identified in the Brian Head Commercial Corridor Transportation Study (2022)
- Brian Head and Resort are forecasting and planning for large increases the number of annual visitors
- Improvements should be coordinated closely with the identified intersection improvements within Brian Head Town.
- Brian Head and resorts are expecting and planning for growth and visitorship in the future

EXISTING CONDITIONS

PROJECT NUMBER: 20

Notes:

- Severe S curve, Consider dynamic curve warning signage



ATV Trail Connection



Curve Advisory Speed Limit



Northbound S Curve



S Curve Advisory Speed Limit



Typical Cross Section

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 20

Project Description

This project builds upon the Brian Head Commercial Corridor Transportation Study completed in 2022 and also includes areas of SR 143 between Parowan and Brian Head. The SR 143 safety countermeasures include installing concrete barrier and enhancing delineation for curves to help address run off the road crashes that are common in areas of SR 143. The recommendations also includes widening the roadway for a center two-way left-turn lane from Vasels Road to Steam Engine Drive and Navajo Lodge to Hunter Ridge Drive, including shoulder improvements (widening and landscaping rocks) for the length of the Town. These improvements aim to improve access management, pedestrian safety, reduce vehicle speeds, and improve mobility in Brian Head Town for all users.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Curve Signage	The S curve and any curves less than ~90 degrees
Concrete Barrier	MP 11.6-MP 11.9 and MP 12.1-MP 12.7
Extend Unpaved Shoulder 2 ft	Vasels Road to Hunter Ridge Drive
6" Edge Lines	Vasels Road to Hunter Ridge Drive
Roadway Widening and TWLTL	Vasels Road to Steam Engine Drive and Navajo Lodge to Hunter Ridge Drive

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install and/or Upgrade Curve Signage to Enhanced Delineations	8	CURVE	\$3,000	\$24,000
Install Concrete Barrier	0.9	MILE	\$915,000	\$823,500
Extend Unpaved Shoulder 2 ft. (both sides of roadway)	1.2	MILE	\$27,000	\$32,400
Install 6" Edge Line (Both Sides of Road)	1.2	MILE	\$8,000	\$9,600
Widen Roadway and Install Two-Way Left-Turn Lane	0.9	MILE	\$1,560,000	\$2,800,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.





Improvement Subtotal	\$3,689,500
Estimated Construction Cost Total¹	\$5,055,825
Estimated Project Total²	\$5,891,000
Local Match³	\$1,178,200

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 20



SR 143 from Dry Lakes Road to Vasels Road

-  Curve Signage
-  Roadway Widening, 2 foot Unpaved Shoulder, and 6" Edge Lines
-  2 foot Unpaved Shoulder and 6" Edge Lines
-  Concrete Barrier

LOCATION CHARACTERISTICS

PROJECT NUMBER: 21

Location: Brian Head, SR 143 Intersections
Project Extents: Snowshoe Village Road and Vasels Road
Intersection Control: Two-way Stop Controlled
Jurisdiction(s): Brian Head Town, UDOT
Underserved Community: No

Safety Action Plan GFA(s): East Iron County GFA
GFA Emphasis Areas: Roadway Departures, Speed-Related, Motorcycles



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY











Improvement Location Information & Safety Analysis Summary

Intersection Characteristics		Why was this location identified?	
Intersection Control Type:	Two-way Stop Controlled	High Crash Network:	No ✗
Speed Limits (major, minor):	50 mph, 25 mph	High Injury Network:	No ✗
Approaches:	3	Network Screening:	No ✗
Daily Entering Volume:	1,700	Conflict Areas:	No ✗
Turn Lanes (Y/N):	No	Risk Characteristics:	Yes ✓
Lighting:	Yes	Community Feedback:	Yes ✓

Location Crash History













Crash Severity (2019 - 2023)	
Fatal Crashes:	0
Serious Injury Crashes:	0
Minor Injury Crashes:	0
Possible Injury Crashes:	0
No Injury/PDO Crashes:	0
Total Crashes:	0
Equivalent Property Damage Crashes:	0

Location Crash Type

Fixed-object  0%	Angle  0%	Left Turn  0%	Head-on  0%	Rear-end  0%
Motorist-bicyclist  0%	Motorist-pedestrian  0%	Sideswipe  0%	Front to Rear  0%	Single Vehicle  0%

LOCATION INFORMATION

PROJECT NUMBER: 21

Utah Emphasis Areas						
Behavioral				Crash Types	Vulnerable Users	
0% Impaired Driving 	0% Distracted Driving 	0% Teen Driving Safety 	0% Aggressive Driving 	0% Roadway Departure Crashes 	0% Motorcycle Safety 	0% Pedestrian Safety 
0% Speed Management 	0% Use of Safety Restraints 	0% Senior Safety 		0% Intersection Safety 	0% Bicycle Safety 	

Other Applicable Locations/Scenarios:

Other intersections located along a Main Street of a rural or smaller town, higher speed, gateway-type intersections to a pedestrian and active transportation area may benefit from similar safety countermeasures. Also two-lane roadways in a Main Street setting that require improved pedestrian crossings. Other locations may include:

- 200 South (SR 143), Parowan City
- Main Street (SR 274), Parowan City
- Main Street (SR 271), Paragonah Town
- Main Street (Old Highway 91), Kanarraville
- SR 14, Cedar City
- High pedestrian areas on two-lane roadways (Schools, commercial areas, etc.)

Comments, Feedback, Ongoing Projects:

- Recommendations similar to those identified in the Brian Head Commercial Corridor Transportation Study (2022)
- Brian Head and Resort are forecasting and planning for large increases the number of annual visitors
- Improvements should be coordinated closely with the identified roadway segment improvements identified in Brian Head Town and portions of SR 143 in the canyon.
- Brian Head and resorts are expecting and planning for growth and visitorship in the future

EXISTING CONDITIONS

PROJECT NUMBER: 21



Navajo Lodge Entrance

Notes:

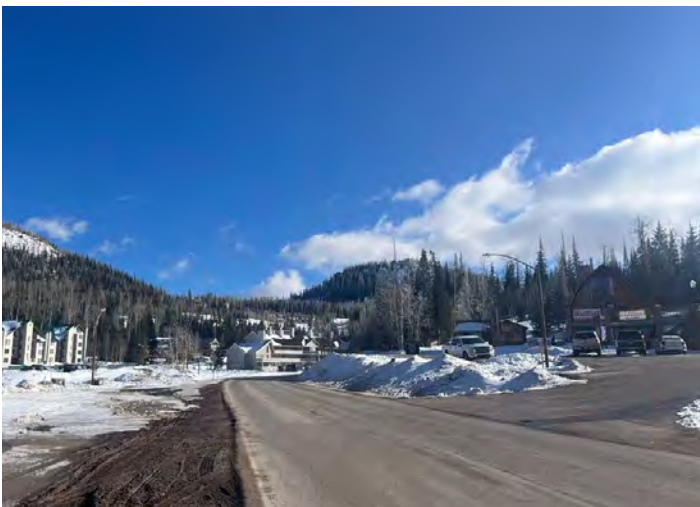
- Intersections with difficult Sight distance due to hills, curves, etc.



Northbound near Vasels Road



Snowshow Village Road



Southbound near Vasels Road



Typical Cross Section and Pedestrian in Shoulder

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 21

Project Description

This project builds upon the Brian Head Commercial Corridor Transportation Study completed in 2022. The proposed safety countermeasures include converting traditional intersections to roundabouts at the Navajo Lodge intersection (Snowshoe Village Road) and South Loop Road (Vasels Road). In addition, driver feedback speed limit signs can accompany the roadway in approach to the roundabouts. These improvements serve as gateways to Brian Head Town to slow motorists and capture motorists attention. These improvements aim to address pedestrian safety, vehicle speeding, and serve as gateways to Brian Head Town.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
High-Visibility Crosswalk	In construction
Bulbouts	In construction
Roundabout	Snowshoe Village Road, South Loop Road
Rectangular Rapid Flashing Beacon (RRFB)	Snowshoe Village Road, South Loop Road
Install Driver Feedback Speed Limit Signs	Snowshoe Village Road, South Loop Road

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install Driver Feedback Speed Limit Signs	2	EACH	\$11,000	\$22,000
Convert Existing Intersection to Modern Roundabout (Single Lane)	2	INT	\$1,900,000	\$3,800,000

1: Includes mobilization (10%0, traffic control (5%), items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000

2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design

3: 20% of estimated project total toward Safe Streets for All implementation grants

Improvement Subtotal	\$3,822,000
Estimated Construction Cost Total ¹	\$5,234,700
Estimated Project Total ²	\$6,299,000
Local Match ³	\$1,259,800

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 21



Brian Head, SR 143 Intersections



LOCATION CHARACTERISTICS

PROJECT NUMBER: 22

Location: SR 20

Project Extents: Burnt Peak Road to Bear Valley Road

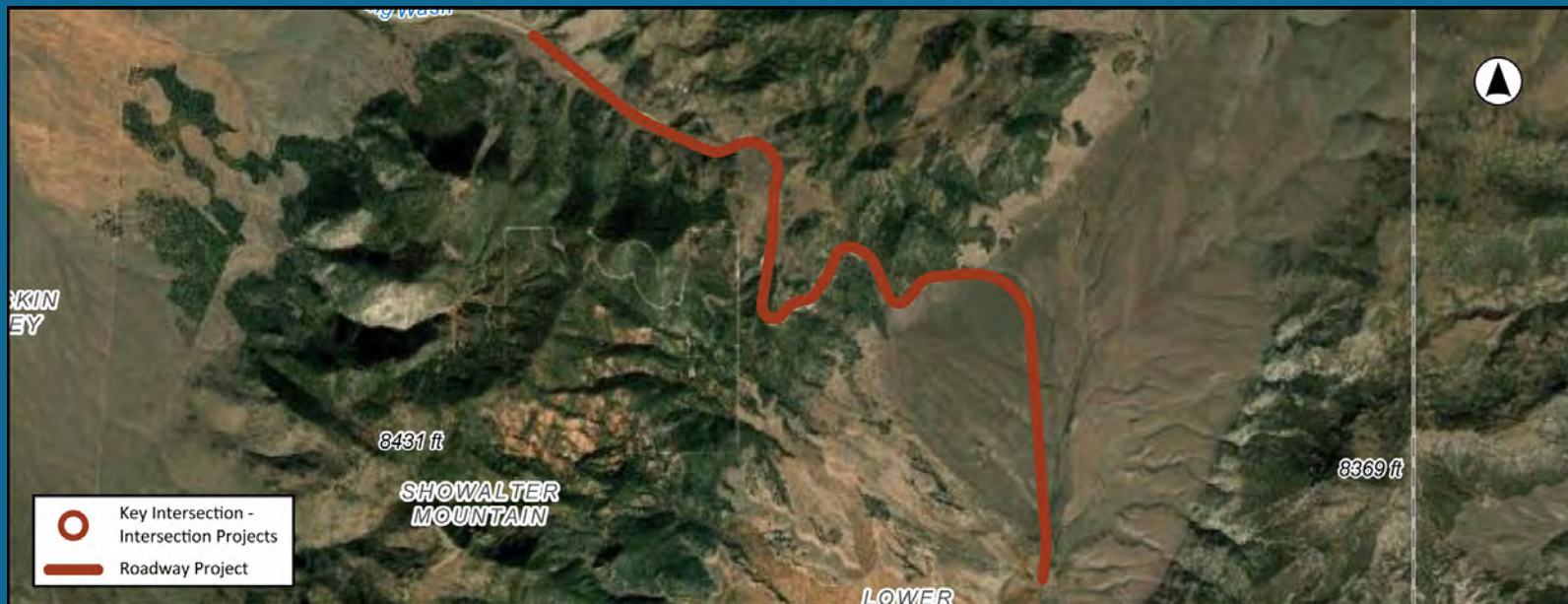
Roadway Classification: Other Principal Arterial, State Route

Jurisdiction(s): Unincorporated Iron County, UDOT

Underserved Community: No

Safety Action Plan GFA(s): East Iron County GFA

GFA Emphasis Areas: Roadway Departures, Speed-Related, Motorcycles



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Segment Characteristics

Length:	4.74
Speed Limit:	35-65 mph
Roadway Lanes:	4
Daily Traffic Volume (AADT):	2,500
Median Type:	Passing lanes
Number of Key Intersections	0











Why was this location identified?

High Crash Network:	Yes ✓
High Injury Network:	Yes ✓
Network Screening:	Yes ✓
Conflict Areas:	No ✗
Risk Characteristics:	Yes ✓
Community Feedback:	Yes ✓

Location Crash History













Crash Severity (2019 - 2023)	
Fatal Crashes:	3
Serious Injury Crashes:	6
Minor Injury Crashes:	13
Possible Injury Crashes	3
No Injury/PDO Crashes:	61
Total Crashes:	86
Equivalent Property Damage Crashes:	3493

Location Crash Type

Fixed-object  67%	Angle  2%	Left Turn  0%	Head-on  1%	Rear-end  1%
Motorist-bicyclist  0%	Motorist-pedestrian  1%	Sideswipe  2%	Front to Rear  1%	Single Vehicle  91%

LOCATION INFORMATION

PROJECT NUMBER: 22

Utah Emphasis Areas						
Behavioral				Crash Types	Vulnerable Users	
3% Impaired Driving 	1% Distracted Driving 	14% Teen Driving Safety 	0% Aggressive Driving 	66% Roadway Departure Crashes 	9% Motorcycle Safety 	1% Pedestrian Safety 
59% Speed Management 	1% Use of Safety Restraints 	9% Senior Safety 		2% Intersection Safety 	0% Bicycle Safety 	

Other Applicable Locations/Scenarios:

High-speed curved roadways, particularly in mountainous areas such as this location may benefit from similar safety countermeasures:

- SR 143 between Parowan to Brian Head
- SR 14 east of Cedar City
- SR 56 west portion of the County

Comments, Feedback, Ongoing Projects:

- Existing Eastbound driver speed limit feedback signs but none in the westbound direction
- Speed limit to be evaluated and the reduced speed limit extended to include additional curves in the Roadway
- Motorcycle speeding prevalent
- Area has had improvements in the past

EXISTING CONDITIONS

PROJECT NUMBER: 22

Notes:



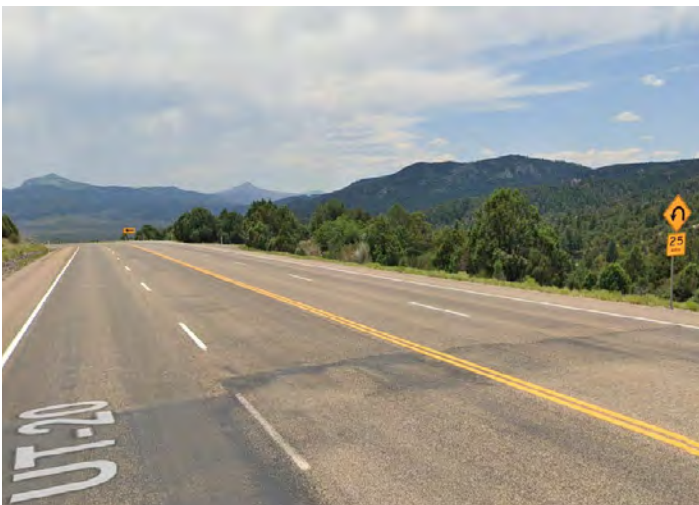
Google Street View image of Curve Advisory Speed Limit



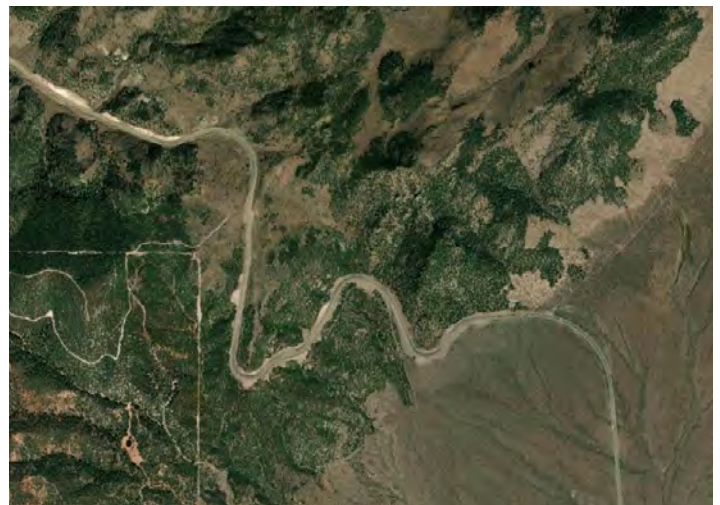
Google Street View image of Guardrail and Chevrons



Google Street View image of Passing Lane Cross Section



Google Street View image of Southbound Curve Warnings



SR 20 Curves

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 22

Project Description

This project recommends safety countermeasures to help address curve-related, roadway departure, and speeding-related crashes. Countermeasures include installing dynamic (speed-activated) flashing beacons on chevron and curve warning signs, driver feedback speed limit signs to encourage safer speeds, and in-lane curve warning pavement markings to provide additional visual guidance for drivers. Transverse rumble strips are recommended before curves to alert drivers to reduce speed. Additionally, a high-friction surface treatment is proposed on curves to improve traction and reduce the likelihood of skidding. The 35 MPH reduced speed limit may be extended to include additional curved portions of the roadway experiencing high crash totals and injuries.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Driver Feedback Speed Limit Signs	Southbound on major curve, eastbound on first curve, westbound beginning of curves, northbound straightaway
In-lane Curve Warning Pavement Markings	All curves on corridor
Transverse Rumble Strips Prior to Curves	All curves on corridor
Guardrail	MP 9.5 - MP 9.75
High Friction Surface Treatment	All curves on corridor
Speed Activated Flashers on Chevron Signs	All curves on corridor

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install Driver Feedback Speed Limit Signs	4	EACH	\$11,000	\$44,000
Install In-Lane Curve Warning Pavement Markings	16	CURVE	\$3,000	\$48,000
Install Transverse Rumble Strips Prior to Curve	16	CURVE	\$1,000	\$16,000
Install Guardrail	0.25	MILE	\$188,000	\$47,000
Install High Friction Surface Treatment (HFST) on Curve	8	CURVE	\$53,000	\$424,000
Install Speed Activated Flashers on Chevron Signs	8	EACH	\$6,000	\$48,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.

Improvement Subtotal	\$627,000
Estimated Construction Cost Total ¹	\$909,150
Estimated Project Total ²	\$1,060,000
Local Match ³	\$212,000

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 22



SR 20 from Burnt Peak Road to Bear Valley Road





APPENDIX E.4. WEST IRON COUNTY GFA PROJECT INFORMATION SHEETS

LOCATION CHARACTERISTICS

PROJECT NUMBER: 23

Location: SR 56

Project Extents: 2400 West to Main Street (New Castle)

Roadway Classification: Minor Arterial, Major Collector, State Route

Jurisdiction(s): Unincorporated Iron County, UDOT

Underserved Community: Yes

Safety Action Plan GFA(s): West Iron County GFA

GFA Emphasis Areas: Roadway Departures, Speed-Related, Teen Drivers



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Segment Characteristics

Length:	9.71
Speed Limit:	65 mph
Roadway Lanes:	2
Daily Traffic Volume (AADT):	1,100
Median Type:	NA
Number of Key Intersections	0











Why was this location identified?

High Crash Network:	Yes	✓
High Injury Network:	No	✗
Network Screening:	Yes	✓
Conflict Areas:	Yes	✓
Risk Characteristics:	Yes	✓
Community Feedback:	Yes	✓

Location Crash History













Crash Severity (2019 - 2023)	
Fatal Crashes:	0
Serious Injury Crashes:	0
Minor Injury Crashes:	2
Possible Injury Crashes	6
No Injury/PDO Crashes:	12
Total Crashes:	20
Equivalent Property Damage Crashes:	111

Location Crash Type

Fixed-object	Angle	Left Turn	Head-on	Rear-end
				
20%	20%	15%	0%	5%
Motorist-bicyclist	Motorist-pedestrian	Sideswipe	Front to Rear	Single Vehicle
				
0%	0%	0%	5%	75%

LOCATION INFORMATION

PROJECT NUMBER: 23

Utah Emphasis Areas						
Behavioral				Crash Types	Vulnerable Users	
5% Impaired Driving 	5% Distracted Driving 	20% Teen Driving Safety 	0% Aggressive Driving 	40% Roadway Departure Crashes 	0% Motorcycle Safety 	0% Pedestrian Safety 
10% Speed Management 	0% Use of Safety Restraints 	10% Senior Safety 		20% Intersection Safety 	0% Bicycle Safety 	

Other Applicable Locations/Scenarios:

Minor arterial, two-lane, higher speed (65 mph) roadways with minimal shoulders in a rural setting may benefit from similar safety countermeasures. Other locations may include:

- Other portions of SR 56
- SR 18
- Lund Highway
- Iron Springs Road
- SR 130 north of Enoch City
- Old Highway 91
- SR 271

Comments, Feedback, Ongoing Projects:

- Steep shoulders; additional feel or work may be required for widening shoulders
- Vehicles speeding through the area
- More major intersections feel less safe due to vehicle speeds
- Concerns regarding buses and school children; currently stop and load/unload kids directly on SR 56
- High number of animal related crashes; consider the need for additional signage or animal fencing

EXISTING CONDITIONS

PROJECT NUMBER: 23

Notes:



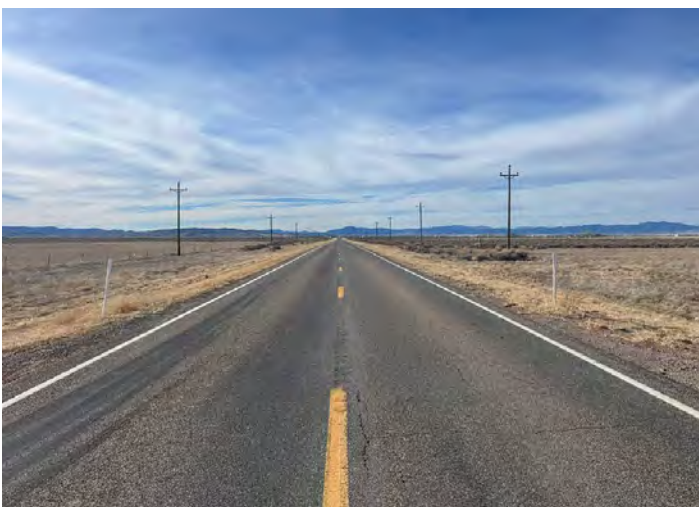
Bar V Road Intersection



Eastbound at Beryl Junction



Northbound at Newcastle Main Street Intersection



Typical Cross Section



Westbound at Beryl Junction

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 23

Project Description

This project includes safety countermeasures on SR 56 to address speeding and roadway departure related crashes. Proposed improvements include installing 4-foot paved shoulders for additional vehicle recovery space. Installing edge line rumble strips also help address run off the road crashes and wider edge lines are recommended to enhance visibility. Additionally, driver feedback speed limit signs are proposed near Beryl Junction and the intersection of SR 56 and Newcastle Main Street to address concerns about speeding. Paved bus-stop pullouts are included along the corridor based on feedback received - exact locations will need to be determined in coordination with the school.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
2 ft Paved Shoulder	Full corridor
Edge Line Rumble Strips	Full corridor
Driver Feedback Speed Limit Signs	Eastbound and westbound near Beryl Junction, eastbound and westbound near Newcastle Main Street
6" Edge Line	Full corridor
Bus Pullouts	Will be determined in coordination with the school.

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install 4-ft Paved Shoulder (both sides of roadway)	9.71	MILE	\$709,000	\$6,884,390
Install Edge Line Rumble Strips	9.71	MILE	\$5,000	\$48,550
Install Driver Feedback Speed Limit Signs	2	EACH	\$11,000	\$22,000
Install 6" Edge Line (Both Sides of Road)	9.71	MILE	\$8,000	\$77,680
Install Paved Bus Pullout	6	EACH	\$20,000	\$120,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

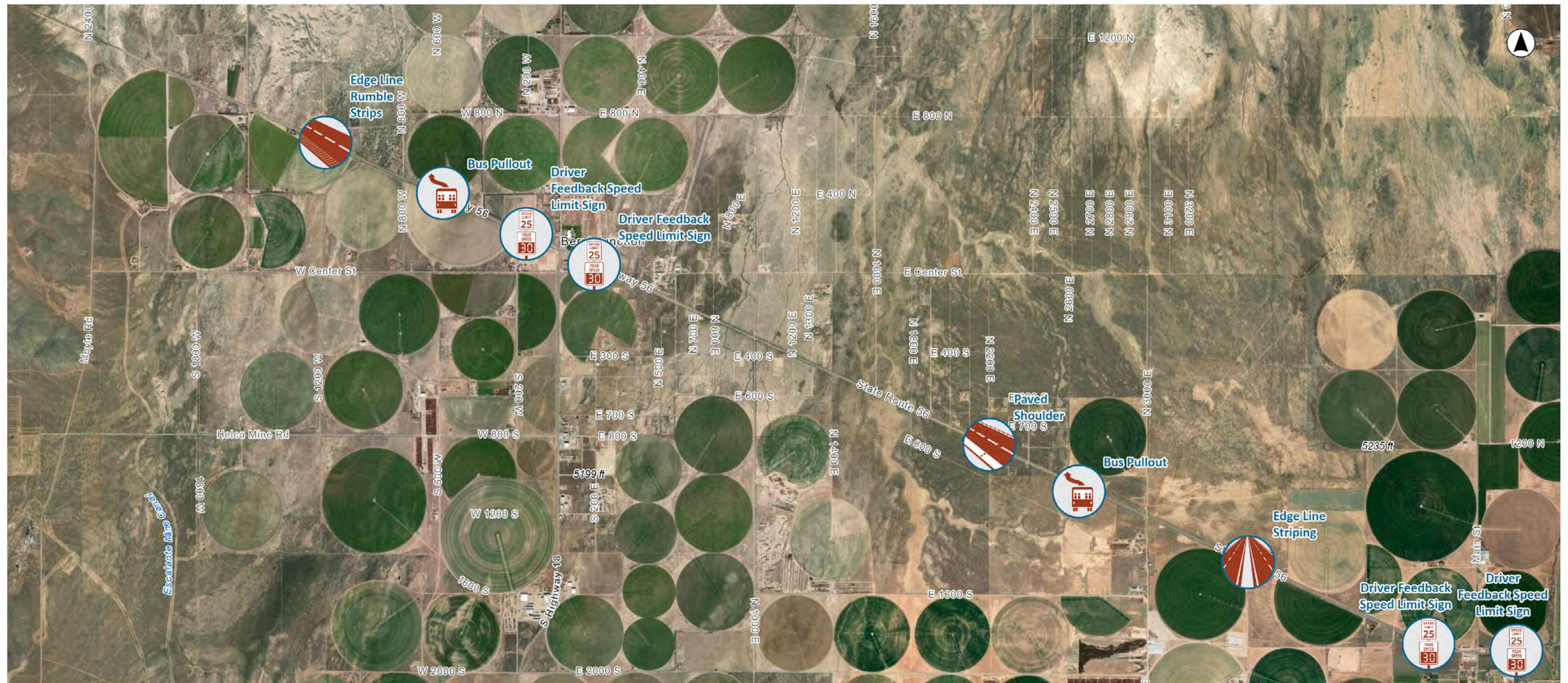
2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.

Improvement Subtotal	\$7,152,620
Estimated Construction Cost Total ¹	\$9,731,037
Estimated Project Total ²	\$11,537,000
Local Match ³	\$2,307,400

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 23



SR 56 from 2400 West to Main Street (New Castle)



2 foot Paved Shoulder,
Entire Corridor



6" Edge Lines,
Entire Corridor



Edge Line Rumble Strips,
Entire Corridor



Dynamic Speed Limit Signs



Bus Pullouts,
To be placed at existing bus stops

LOCATION CHARACTERISTICS

PROJECT NUMBER: 24

Location: Beryl Junction

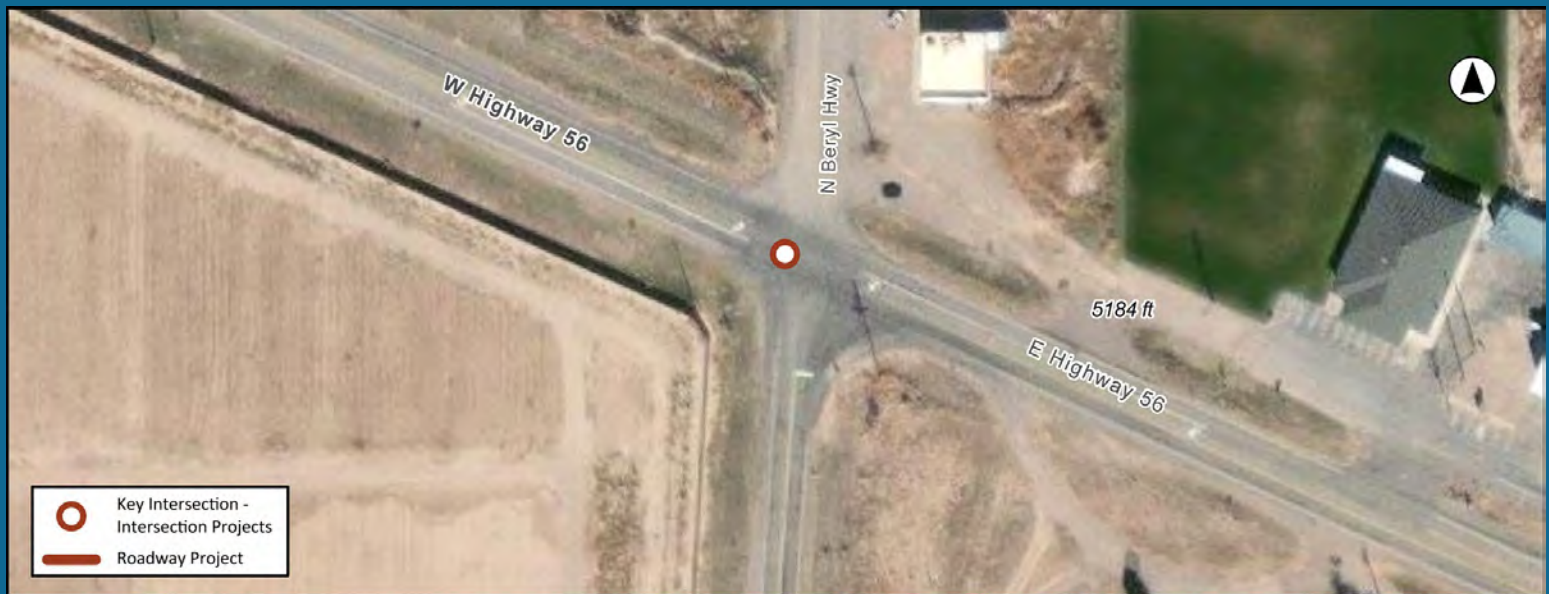
Project Extents: SR 56 & SR 18

Intersection Control: Two-way Stop Controlled

Jurisdiction(s): Unincorporated Iron County, UDOT

Underserved Community: Yes

Safety Action Plan GFA(s): West Iron County GFA
GFA Emphasis Areas: Roadway Departures, Speed-Related, Teen Drivers



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Intersection Characteristics

Intersection Control Type:	Two-way Stop Controlled
Speed Limits (major, minor):	65 mph, 65 mph
Approaches:	4
Daily Entering Volume:	2,000
Turn Lanes (Y/N):	Yes
Lighting:	Yes











Why was this location identified?

High Crash Network:	Yes ✓
High Injury Network:	Yes ✓
Network Screening:	Yes ✓
Conflict Areas:	No ✗
Risk Characteristics:	Yes ✓
Community Feedback:	Yes ✓

Location Crash History













Crash Severity (2019 - 2023)	
Fatal Crashes:	0
Serious Injury Crashes:	0
Minor Injury Crashes:	1
Possible Injury Crashes	0
No Injury/PDO Crashes:	6
Total Crashes:	7
Equivalent Property Damage Crashes:	26

Location Crash Type

Fixed-object  0%	Angle  86%	Left Turn  14%	Head-on  0%	Rear-end  14%
Motorist-bicyclist  0%	Motorist-pedestrian  0%	Sideswipe  0%	Front to Rear  14%	Single Vehicle  0%

LOCATION INFORMATION

PROJECT NUMBER: 24

Utah Emphasis Areas						
Behavioral				Crash Types	Vulnerable Users	
0% Impaired Driving 	14% Distracted Driving 	14% Teen Driving Safety 	0% Aggressive Driving 	0% Roadway Departure Crashes 	0% Motorcycle Safety 	0% Pedestrian Safety 
0% Speed Management 	0% Use of Safety Restraints 	14% Senior Safety 		100% Intersection Safety 	0% Bicycle Safety 	

Other Applicable Locations/Scenarios:

- Two-way, stop-controlled intersections of two higher speed rural (two-lane) highways may benefit from similar improvements.
- There are many locations similar to this throughout the County. SR 56, SR 130, Iron Springs Road, etc. all have many minor roadway intersections.

Comments, Feedback, Ongoing Projects:

- Nighttime visibility concerns
- Concerns with vehicles pulling out in front of others that are traveling too fast
- Major intersection to the school (bus traffic)

EXISTING CONDITIONS

PROJECT NUMBER: 24



Aerial View

Notes:

- Lacking shoulders
- Consider a Rural intersection Conflict Warning system



Eastbound at Beryl Junction



Northbound at Beryl Junction



Southbound on Beryl Highway



Westbound at Beryl Junction

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 24

Project Description

Lower-cost rural stop controlled intersection countermeasures include installing secondary stop signs, 'Stop Ahead' signs, beacons, transverse rumble strips, and accompanying pavement markings indicating that an intersection is ahead. Transverse rumble strips on approaches to the intersection provide a physical alert to drivers approaching the intersection that a stop is upcoming. Additional lighting improves visibility at night and retroreflective strips on sign posts may also be included. Turn lanes are recommended to help separate vehicle speed differentials for vehicles traveling through and making a turn. A Rural Intersection Control Warning System (RICWS) should be considered at the junction to provide advanced warning to vehicles on SR 56 of any slow or stopped vehicles entering SR 56 from the intersection.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Intersection Lighting	Highway 56 and Highway 18
Transverse Rumble Strips on Minor Approaches	Southbound Approach
Upgraded Signs and Pavement Markings	Northbound and Southbound Approaches
RICWS	Highway 56 and Highway 21
Right-Turn Lanes	Westbound Approach

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install Intersection Lighting	1	INT	\$35,000	\$35,000
Install Transverse Rumble Strips on Minor Approach	1	LEG	\$1,000	\$1,000
Upgrade Signs and Pavement Markings (Paved Approach)	4	LEG	\$3,000	\$12,000
Install Second Stop Sign and Stop Ahead Sign	2	LEG	\$1,500	\$3,000
Install Beacon on Stop Sign	1	EACH	\$5,000	\$5,000
Install Right-Turn Lanes	1	LANE	\$127,000	\$127,000
Install a Rural Intersection Control Warning System (RICWS)	1	INT	\$100,000	\$100,000

1: Includes mobilization (10%0, traffic control (5%), items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000

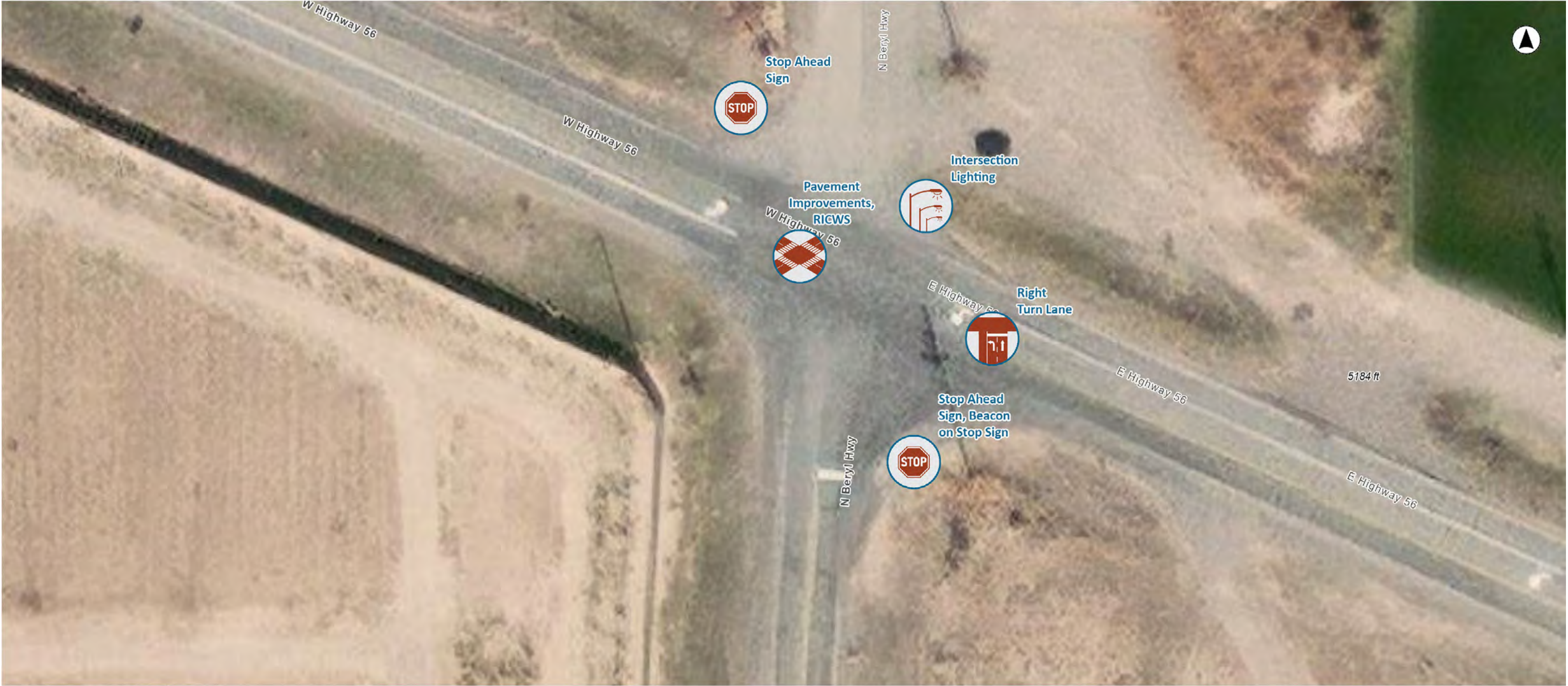
2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design

3: 20% of estimated project total toward Safe Streets for All implementation grants


Improvement Subtotal	\$283,000
Estimated Construction Cost Total ¹	\$410,350
Estimated Project Total ²	\$529,000
Local Match ³	\$105,800

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 24




Beryl Junction (SR 56 & SR 18)




Systemic Low-Cost Stop-Controlled Intersection Countermeasures

- Upgraded Signs
- Refresh Pavement Markings
- Transverse Rumble Strips on Minor Approaches
- Rural Intersection Control Warning Systems (RICWS)



Stop Sign Advanced Warnings



Westbound Right Turn Lane



Intersection Lighting

LOCATION CHARACTERISTICS

Location: Main Street/Bench Road

Project Extents: SR 56 to Newcastle Hills

Roadway Classification: Minor Arterial, Federal Aid Route

Jurisdiction(s): Unincorporated Iron County

Underserved Community: Yes

PROJECT NUMBER: 25

Safety Action Plan GFA(s): West Iron County GFA

GFA Emphasis Areas: Roadway Departures, Speed-Related, Teen Drivers



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Segment Characteristics

Length:	2.63
Speed Limit:	30 mph
Roadway Lanes:	2
Daily Traffic Volume (AADT):	1,100
Median Type:	NA
Number of Key Intersections	0











Why was this location identified?

High Crash Network:	Yes	✓
High Injury Network:	No	✗
Network Screening:	No	✗
Conflict Areas:	No	✗
Risk Characteristics:	No	✗
Community Feedback:	Yes	✓

Location Crash History













Crash Severity (2019 - 2023)	
Fatal Crashes:	0
Serious Injury Crashes:	0
Minor Injury Crashes:	0
Possible Injury Crashes	1
No Injury/PDO Crashes:	4
Total Crashes:	5
Equivalent Property Damage Crashes:	14

Location Crash Type

Fixed-object  20%	Angle  20%	Left Turn  20%	Head-on  0%	Rear-end  20%
Motorist-bicyclist  0%	Motorist-pedestrian  0%	Sideswipe  0%	Front to Rear  20%	Single Vehicle  60%

LOCATION INFORMATION

PROJECT NUMBER: 25

Utah Emphasis Areas						
Behavioral				Crash Types	Vulnerable Users	
0% Impaired Driving 	0% Distracted Driving 	60% Teen Driving Safety 	0% Aggressive Driving 	40% Roadway Departure Crashes 	0% Motorcycle Safety 	0% Pedestrian Safety 
0% Speed Management 	0% Use of Safety Restraints 	0% Senior Safety 		20% Intersection Safety 	0% Bicycle Safety 	

Other Applicable Locations/Scenarios:

Minor arterial roadways (30 mph speed limit) that transverse through both residential and rural areas may benefit from similar safety countermeasures. Similar locations include:

- Airport Road
- Westview Drive
- Iron Springs Road
- Midvalley Road
- 200 South (Parowan)
- Old Highway 91
- South Mountain Drive

Comments, Feedback, Ongoing Projects:

- Concerns with lack of or faded roadway paint striping
- High vehicle speeds in the area, particularly as vehicles use Bench Road as a cutoff between SR 18 and Newcastle (don't slow down once they enter Newcastle)
- High number of animal related crashes south of Newcastle. Wildlife fencing may be considered.

EXISTING CONDITIONS

PROJECT NUMBER: 25

Notes:

- Existing light at 300 South



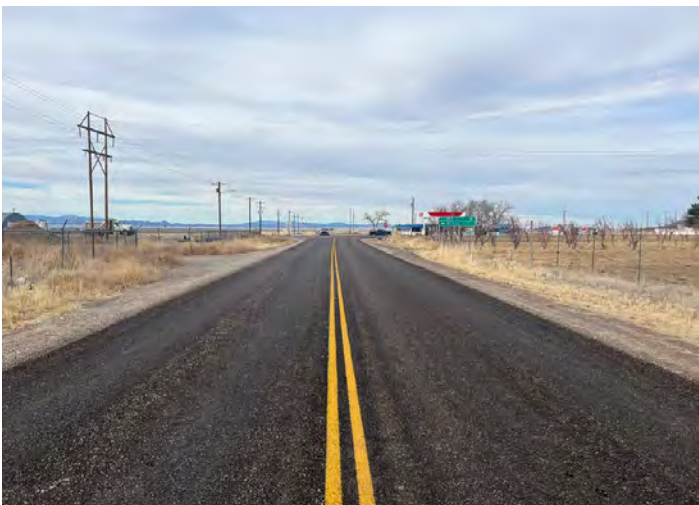
Bench Road Cross Section



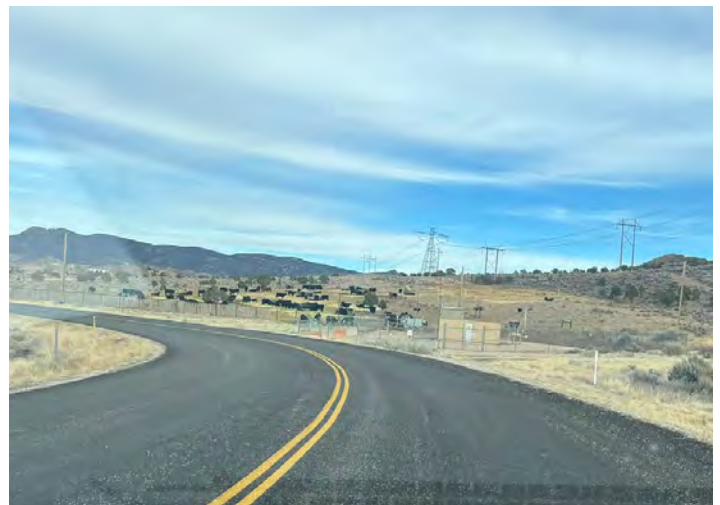
Cross Section near 300 South



Northbound Approaching Bench Road Curves



Northbound Approaching SR 56



Northbound Curve near 300 South

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 25

Project Description

This project recommends safety countermeasures to mitigate vehicle speeds and roadway departure crashes. Driver feedback speed limit signs are recommended to regulate the transitioning speeds in and out of Newcastle. As the gateway to Newcastle from the south, enhanced lighting is recommended at 300 South. Along the curves of Bench Road wider edge lines and extending the unpaved shoulder may help mitigate severe roadway departure crashes.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Driver Feedback Speed Limit Signs	Entering Newcastle from SR 56, south of 300 South (both directions)
6" Edge Line	300 South to end of project limits
Extend Unpaved Shoulder 2 ft	300 South to end of project limits
Intersection Lighting	300 South

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install Driver Feedback Speed Limit Signs	3	EACH	\$11,000	\$33,000
Install 6" Edge Line (Both Sides of Road)	1.7	MILE	\$8,000	\$13,600
Extend Unpaved Shoulder 2 ft. (both sides of roadway)	1.7	MILE	\$27,000	\$45,900
Install Intersection Lighting	1	INT	\$35,000	\$35,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.

Improvement Subtotal	\$127,500
Estimated Construction Cost Total ¹	\$184,875
Estimated Project Total ²	\$245,000
Local Match ³	\$49,000

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 25



Main Street/Bench Road from SR 56 to Newcastle Hills

- Dynamic Speed Limit Signs
- 6" Edge Line from 300 South
- 2 foot Unpaved Shoulder from 300 South
- Intersection Lighting

LOCATION CHARACTERISTICS

PROJECT NUMBER: 26

Location: SR 56

Project Extents: Comstock Road to Main Street (New Castle)

Roadway Classification: Minor Arterial, State Route

Jurisdiction(s): Unincorporated Iron County, UDOT

Underserved Community: Yes

Safety Action Plan GFA(s): West Iron County GFA, East Iron County GFA

GFA Emphasis Areas: Roadway Departures, Speed-Related, Teen Drivers



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Segment Characteristics

Length:	12.52
Speed Limit:	65 mph
Roadway Lanes:	2
Daily Traffic Volume (AADT):	2,300
Median Type:	NA
Number of Key Intersections	0

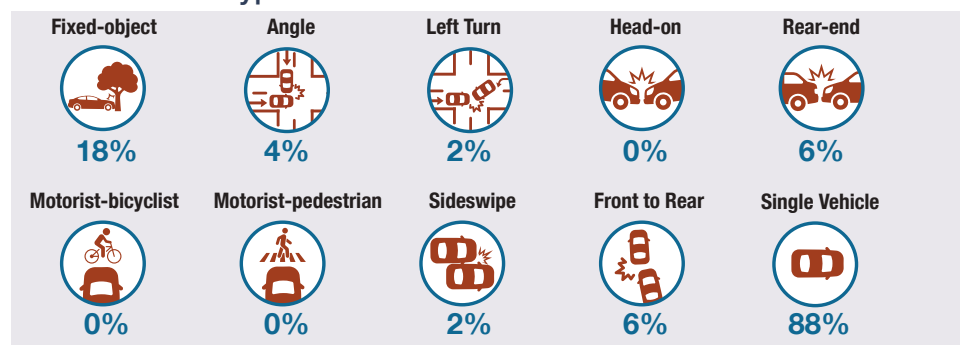
Why was this location identified?

High Crash Network:	Yes	✓
High Injury Network:	No	✗
Network Screening:	Yes	✓
Conflict Areas:	Yes	✓
Risk Characteristics:	Yes	✓
Community Feedback:	Yes	✓

Location Crash History













Crash Severity (2019 - 2023)	
Fatal Crashes:	0
Serious Injury Crashes:	1
Minor Injury Crashes:	3
Possible Injury Crashes:	7
No Injury/PDO Crashes:	39
Total Crashes:	50
Equivalent Property Damage Crashes:	260

Location Crash Type



LOCATION INFORMATION

PROJECT NUMBER: 26

Utah Emphasis Areas						
Behavioral				Crash Types	Vulnerable Users	
2% Impaired Driving 	4% Distracted Driving 	4% Teen Driving Safety 	0% Aggressive Driving 	20% Roadway Departure Crashes 	0% Motorcycle Safety 	0% Pedestrian Safety 
4% Speed Management 	2% Use of Safety Restraints 	8% Senior Safety 		8% Intersection Safety 	0% Bicycle Safety 	

Other Applicable Locations/Scenarios:

Minor arterial, two-lane, higher speed (65 mph) roadways with minimal shoulders in a rural setting may benefit from similar safety countermeasures. This location includes vertical climbing and horizontal roadway curvature for vehicles to navigate. Other locations may include:

- Other portions of SR 56
- SR 143
- SR 20
- SR 130 north of Enoch City
- Old Highway 91

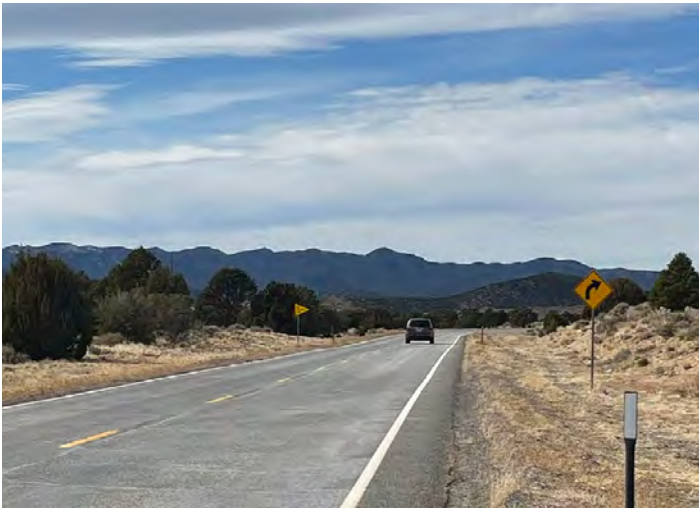
Comments, Feedback, Ongoing Projects:

- Increasing popularity for bicyclists
- Many curves to navigate at high speeds
- Concerns regarding buses and school children
- Vehicles speeding through canyons and curves
- High number of animal related crashes; consider the need for additional signage or animal fencing
- Concerns with crashes occurring in dark, unlit conditions

EXISTING CONDITIONS

PROJECT NUMBER: 26

Notes:



Curve Warnings



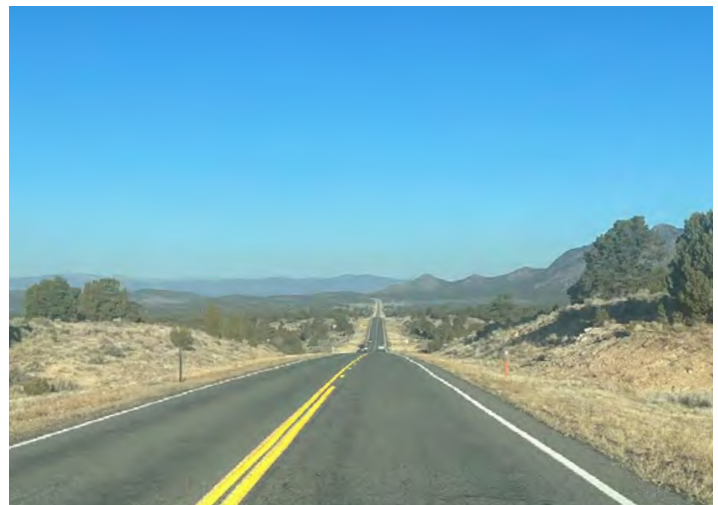
Curves Near Pinto Road Intersection



Eastbound Approaching Comstock Road



Typical Cross Section



Westbound Passing Areas

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 26

Project Description

Sections of SR 56 have recently been resurfaced, but additional safety countermeasures including shoulder widening, edge line rumble strips, and wider edge lines are recommended. Infilling centerline rumble strips are also recommended. Upgraded curve signage is recommend throughout the corridor especially in locations surrounding Comstock Road and Pinto Road. A passing lane westbound from milepost 44 to mile post 43 is recommended to mitigate passing and speeding through the canyon. Driver feedback speed limit signs are also recommended to address speeding. Intersection lighting is recommended at Main Street (Newcastle) and near milepost 42 where there is an unpaved electrical energy facility access and nighttime crashes have occurred. A bus pull out may also be paved near New Castle for the local school buses.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
2 ft Paved Shoulder	Full corridor
6" Edge Line	Full corridor
Edge Line Rumble Strips	Full corridor (approximately 2.5 miles of pre-existing rumble strips)
Centerline Rumble Strips	Wherever not present
Curve Signage	All curves on the corridor
Driver Feedback Speed Limit Signs	Newcastle Main Street
Bus Pullouts	In coordination with school district
Climbing Lanes	MP 44-43
Intersection Lighting	Newcastle Main Street

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install 4-ft Paved Shoulder (both sides of roadway)	12.52	MILE	\$709,000	\$8,876,680
Install 6" Edge Line (Both Sides of Road)	12.52	MILE	\$8,000	\$100,160
Install Edge Line Rumble Strips	10	MILE	\$5,000	\$50,000
Install Centerline Rumble Strips	2	MILE	\$5,000	\$10,000
Install and/or Upgrade Curve Signage to Enhanced Delineations	10	CURVE	\$3,000	\$30,000
Install Driver Feedback Speed Limit Signs	1	EACH	\$11,000	\$11,000
Install Paved Bus Pullout	2	EACH	\$20,000	\$40,000
Widen Roadway to Install Climbing Lane	1	MILE	\$1,070,000	\$1,070,000
Install Intersection Lighting	1	INT	\$35,000	\$35,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.

Improvement Subtotal	\$10,222,840
Estimated Construction Cost Total ¹	\$13,875,834
Estimated Project Total ²	\$16,266,000
Local Match ³	\$3,253,200

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 26



SR 56 from Comstock Road to Main Street (New Castle)

- Enhanced Curve Delineation
- Passing Lane
- 4 foot Paved Shoulder, Entire Corridor
- Center and Edge Lines, Entire Corridor
- Center and Edge Line Rumble Strips, Entire Corridor
- Dynamic Speed Limit Sign
- Intersection Lighting
- Bus Pullouts

LOCATION CHARACTERISTICS

Location: Iron Springs Road

Project Extents: SR 56 to Comstock Road

Roadway Classification: Major Collector, Federal Aid Route

Jurisdiction(s): Unincorporated Iron County, Cedar City

Underserved Community: Yes

PROJECT NUMBER: 27

Safety Action Plan GFA(s): West Iron County GFA

GFA Emphasis Areas: Roadway Departures, Speed-Related, Teen Drivers



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Segment Characteristics

Length:	5.17
Speed Limit:	55 mph
Roadway Lanes:	2
Daily Traffic Volume (AADT):	1,900
Median Type:	NA
Number of Key Intersections	0











Why was this location identified?

High Crash Network:	Yes	✓
High Injury Network:	No	✗
Network Screening:	Yes	✓
Conflict Areas:	No	✗
Risk Characteristics:	No	✗
Community Feedback:	Yes	✓

Location Crash History













Crash Severity (2019 - 2023)	
Fatal Crashes:	0
Serious Injury Crashes:	0
Minor Injury Crashes:	1
Possible Injury Crashes:	2
No Injury/PDO Crashes:	10
Total Crashes:	13
Equivalent Property Damage Crashes:	50

Location Crash Type

Fixed-object	Angle	Left Turn	Head-on	Rear-end
				
31%	0%	8%	0%	0%
Motorist-bicyclist	Motorist-pedestrian	Sideswipe	Front to Rear	Single Vehicle
				
0%	0%	0%	0%	100%

LOCATION INFORMATION

PROJECT NUMBER: 27

Utah Emphasis Areas						
Behavioral				Crash Types	Vulnerable Users	
0% Impaired Driving 	8% Distracted Driving 	0% Teen Driving Safety 	0% Aggressive Driving 	38% Roadway Departure Crashes 	0% Motorcycle Safety 	0% Pedestrian Safety 
8% Speed Management 	0% Use of Safety Restraints 	0% Senior Safety 		8% Intersection Safety 	0% Bicycle Safety 	

Other Applicable Locations/Scenarios:

Major Collector, higher speed (55 mph), two lane roadways that connect many residential areas and have adjacent growth planned may benefit from similar safety countermeasures. This location has an increase growth in the immediate surroundings. Similar locations include:

- SR 130 in Enoch
- Westview Drive
- Lund Highway
- Old Highway 91
- South Mountain Drive

Comments, Feedback, Ongoing Projects:

- A lot of planned industrial growth; anticipating higher truck traffic than typical
- Vehicle speeding in the area
- Turns from or to Iron Springs are difficult to complete
- Access management should be implemented
- Nighttime visibility concerns.
- High number of animal related crashes; consider animal fencing in areas
- Bicyclist use along Iron Springs Road mixing with high speed vehicle traffic.

EXISTING CONDITIONS

PROJECT NUMBER: 27

Notes:



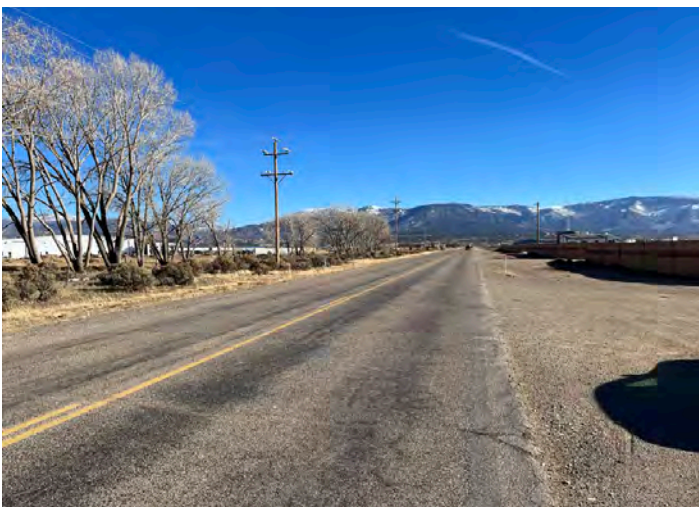
Iron Springs & SR 56 Intersection



Northbound Approaching Bowman's Cowboy Kitchen



Typical Approaches to Intersections



Temporary Traffic Signal



Typical Cross Section (2)

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 27

Project Description

Safety countermeasures identified for Iron Springs Road include driver feedback speed limit signs, wider edge lines with rumble strips, and shoulder widening. Along the curves, post-mounted delineators and upgraded curve signage is recommended. At multiple intersections with minor streets intersection lighting and turn lanes are recommended to increase visibility and separate slowing vehicles from mainline traffic. The area is experience residential and commercial (industrial growth) and access management as development continues will be beneficial to enhance safety for all users.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Driver Feedback Speed Limit Signs	5300 West
6" Edge Line	Full corridor
4 ft Paved Shoulder	Full corridor
Edge Line Rumble Strips	Full corridor
Post-Mounted Delineators	Full corridor
Curve Signage	All curves along corridor
Intersection Lighting	6400 West, 6300 West, Iron Springs Resort RV Park Intersection
Right-Turn Lanes	Bowman's Cowboy Kitchen Intersection, 5600 West, New Development Access
Left-Turn Lanes	5600 West, New Development Access, 6300 West, Paiute Avenue

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install Driver Feedback Speed Limit Signs	2	EACH	\$11,000	\$22,000
Install 6" Edge Line (Both Sides of Road)	5.15	MILE	\$8,000	\$41,200
Install 4-ft Paved Shoulder (both sides of roadway)	5.15	MILE	\$709,000	\$3,651,350
Install Edge Line Rumble Strips	5.15	MILE	\$5,000	\$25,750
Install Post-Mounted Delineators	5.15	MILE	\$4,000	\$20,600
Install and/or Upgrade Curve Signage to Enhanced Delineations	6	CURVE	\$3,000	\$18,000
Install Intersection Lighting	3	INT	\$35,000	\$105,000
Install Right-Turn Lanes	3	LANE	\$127,000	\$381,000
Install Left-Turn Lanes	4	LANE	\$153,000	\$612,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.

Improvement Subtotal	\$4,876,900
Estimated Construction Cost Total ¹	\$6,658,815
Estimated Project Total ²	\$8,790,000
Local Match ³	\$1,758,000

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 27



Iron Springs Road from SR 56 to Comstock Road

- Enhanced Curve Delineation
- 6" Edge Lines and Delineators, Entire Corridor
- 4 foot Pave Shoulder, Entire Corridor
- Edge Line Rumble Strips, Entire Corridor
- Turn Lanes
- Intersection Lighting
- Dynamic Speed Limit Sign

LOCATION CHARACTERISTICS

Location: Lund Highway

Project Extents: SR 56 to Midvalley Road

Roadway Classification: Local, Federal Aid Route

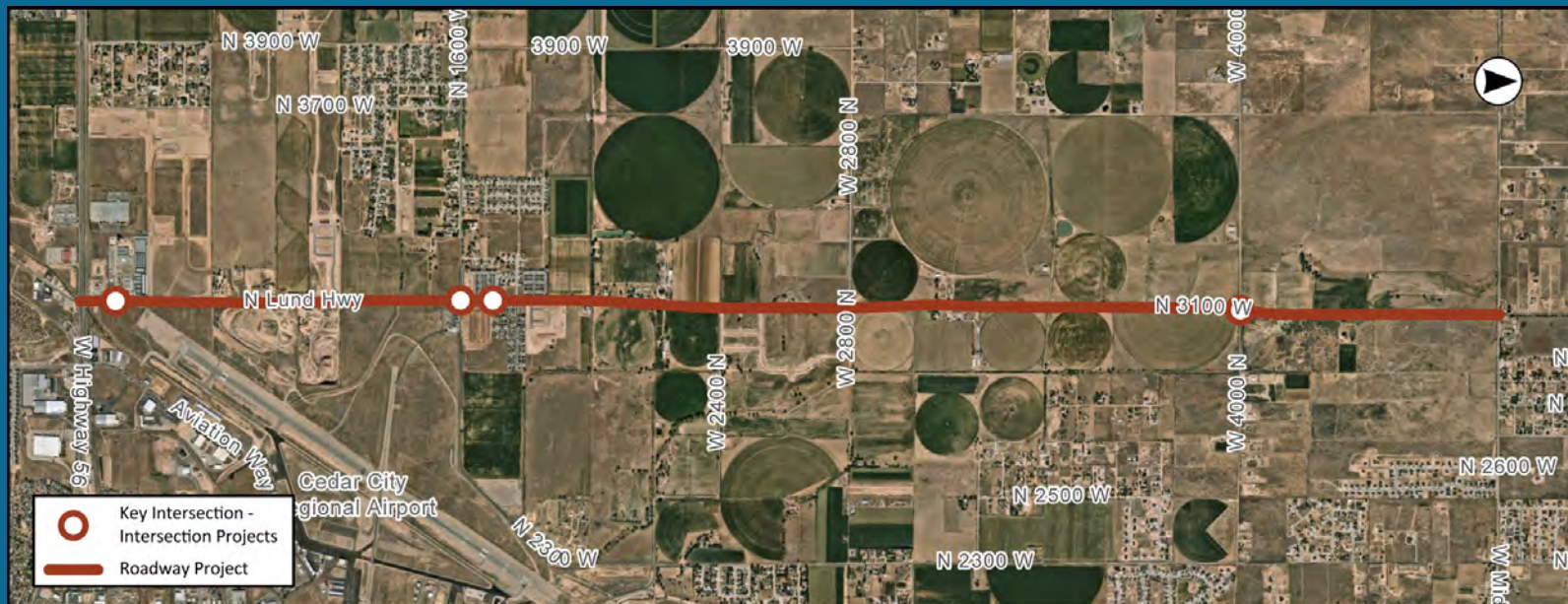
Jurisdiction(s): Unincorporated Iron County, Cedar City

Underserved Community: Yes

PROJECT NUMBER: 28

Safety Action Plan GFA(s): West Iron County
GFA, Cedar City GFA

GFA Emphasis Areas: Roadway Departures,
Speed-Related, Teen Drivers



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Segment Characteristics

Length:	5.51
Speed Limit:	50 mph
Roadway Lanes:	2
Daily Traffic Volume (AADT):	2,900
Median Type:	NA
Number of Key Intersections	4











Why was this location identified?

High Crash Network:	Yes ✓
High Injury Network:	Yes ✓
Network Screening:	No ✗
Conflict Areas:	No ✗
Risk Characteristics:	No ✗
Community Feedback:	Yes ✓

Location Crash History

Crash Severity (2019 - 2023)	
Fatal Crashes:	0
Serious Injury Crashes:	2
Minor Injury Crashes:	7
Possible Injury Crashes	8
No Injury/PDO Crashes:	31
Total Crashes:	48
Equivalent Property Damage Crashes:	432

Location Crash Type













Fixed-object  23%	Angle  25%	Left Turn  17%	Head-on  2%	Rear-end  17%
Motorist-bicyclist  0%	Motorist-pedestrian  0%	Sideswipe  4%	Front to Rear  21%	Single Vehicle  48%

LOCATION INFORMATION

Key Intersection Crash History

PROJECT NUMBER: 28

Intersection Roadway	Total Crashes	Fatal and Serious Injury Crashes	Angle	Left Turn	Rear End	Head On	Sideswipe	Roadway Departure	Pedestrian	Bike
500 North	3				2			1		
1600 North	14		11	3		1		2		
Acacia Lane	3			1						
4000 North	3	1			1					

Utah Emphasis Areas		
Behavioral	 Aggressive Driving	2%
	 Distracted Driving	15%
	 Impaired Driving	0%
	 Use of Safety Restraints	0%
	 Speed Management	10%
	 Teen Driving Safety	27%
	 Senior Safety	13%
Crash Types	 Roadway Departure Crashes	25%
	 Intersection Safety	46%
Vulnerable Users	 Motorcycle Safety	4%
	 Pedestrian Safety	0%
	 Bicycle Safety	0%

Other Applicable Locations/Scenarios:

Major Collector, higher speed (50 mph), two lane roadways that connect many residential areas and have adjacent growth planned may benefit from similar safety countermeasures. This location has an increase growth in the immediate surroundings. Similar locations include:

- SR 130 in Enoch
- Westview Drive
- Iron Springs Road
- Old Highway 91
- South Mountain Drive
- Cross Hollow Road
- 2300 West
- Bulldog Road
- Airport Road

Comments, Feedback, Ongoing Projects:

- Area has a lot of residential growth planned and currently in construction
- All way stop or signal warrant at the intersection with Midvalley Road
- High vehicle speeds through the area
- Popular road bicycling route
- Nighttime visibility concerns
- Intersection with 1600 North becoming very busy

EXISTING CONDITIONS

PROJECT NUMBER: 28

Notes:



Cross Section north of 1775 North



Cross Section north of SR 56



Curves north of 2800 North



Northbound Approaching Acacia Lane



Northbound Approaching Midvalley Road

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 28

Project Description

This project includes safety countermeasures to mitigate speeding, roadway departure, and intersection related crashes. Improvements typical to rural highways include shoulder widening, wider edge line striping, and edge line rumble strips. Driver feedback speed limit signs and advanced stop-controlled intersection may help mitigate vehicle speeds along the roadway. Additional intersection lighting and transverse rumble strips on the minor approaches are recommended to increase driver awareness at intersections with Lund Highway.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Driver Feedback Speed Limit Signs	Between: Midvalley Road & 4000 North, 4000 North & 2800 North (2 signs), 2800 North & 2400 North, 2400 North & 1600 North, 1600 North & Highway 56
4 ft Paved Shoulders	Entire corridor
6" Edge Lines	Entire corridor
Edge Line Rumble Strips	Entire corridor
Bicycle Lanes	Highway 56 to 1600 North
Intersection Lighting	Pointe West Way, 1600 North, Sycamore Lane/1775 North, 2400 North, 2800 North, 4000 North
Stop-Control Signage	Pointe West Way, 1600 North, Sycamore Lane/1775 North, 2400 North, 2800 North, 4000 North
Transverse Rumble Strips on Minor Approaches	1600 North, 2800 North, 4000 North

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install Driver Feedback Speed Limit Signs	6	EACH	\$11,000	\$66,000
Install 4-ft Paved Shoulder (both sides of roadway)	5.56	MILE	\$709,000	\$3,942,040
Install 6" Edge Line (Both Sides of Road)	5.56	MILE	\$8,000	\$44,480
Install Edge Line Rumble Strips	5.56	MILE	\$5,000	\$27,800
Install Bicycle Lanes	1.45	MILE	\$44,000	\$63,800
Install Edge Line Rumble Strips	5.56	MILE	\$5,000	\$27,800
Install Intersection Lighting	6	INT	\$35,000	\$210,000
Stop-Control Intersection Signage	6	INT	\$4,000	\$24,000
Install Transverse Rumble Strips on Minor Approach	6	LEG	\$1,000	\$6,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.

Improvement Subtotal	\$4,411,920
Estimated Construction Cost Total¹	\$6,031,092
Estimated Project Total²	\$7,962,000
Local Match³	\$1,592,400

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 28



Lund Highway from SR 56 to Midvalley Road

- | | | | | | | | |
|---|--|---|--|---|---|--|--|
| <ul style="list-style-type: none"> 4 foot Paved Shoulder, Entire Corridor 6" Edge Lines, Entire Corridor Edge Line Rumble Strips, Entire Corridor | <ul style="list-style-type: none"> Dynamic Speed Limit Signs Bike Lane | <p>Pointe W Way</p> <ul style="list-style-type: none"> Intersection Lighting Intersection Ahead Signage | <p>1600 North</p> <ul style="list-style-type: none"> Transverse Rumble Strips Intersection Lighting Intersection Ahead Signage | <p>1775 North</p> <ul style="list-style-type: none"> Intersection Lighting Intersection Ahead Signage | <p>2400 North</p> <ul style="list-style-type: none"> Intersection Lighting Intersection Ahead Signage | <p>2800 North</p> <ul style="list-style-type: none"> Transverse Rumble Strips Intersection Lighting Intersection Ahead Signage | <p>4000 North</p> <ul style="list-style-type: none"> Transverse Rumble Strips Intersection Lighting Intersection Ahead Signage |
|---|--|---|--|---|---|--|--|

LOCATION CHARACTERISTICS

PROJECT NUMBER: 29

Location: Lund Highway

Project Extents: Midvalley Road to 8000 North

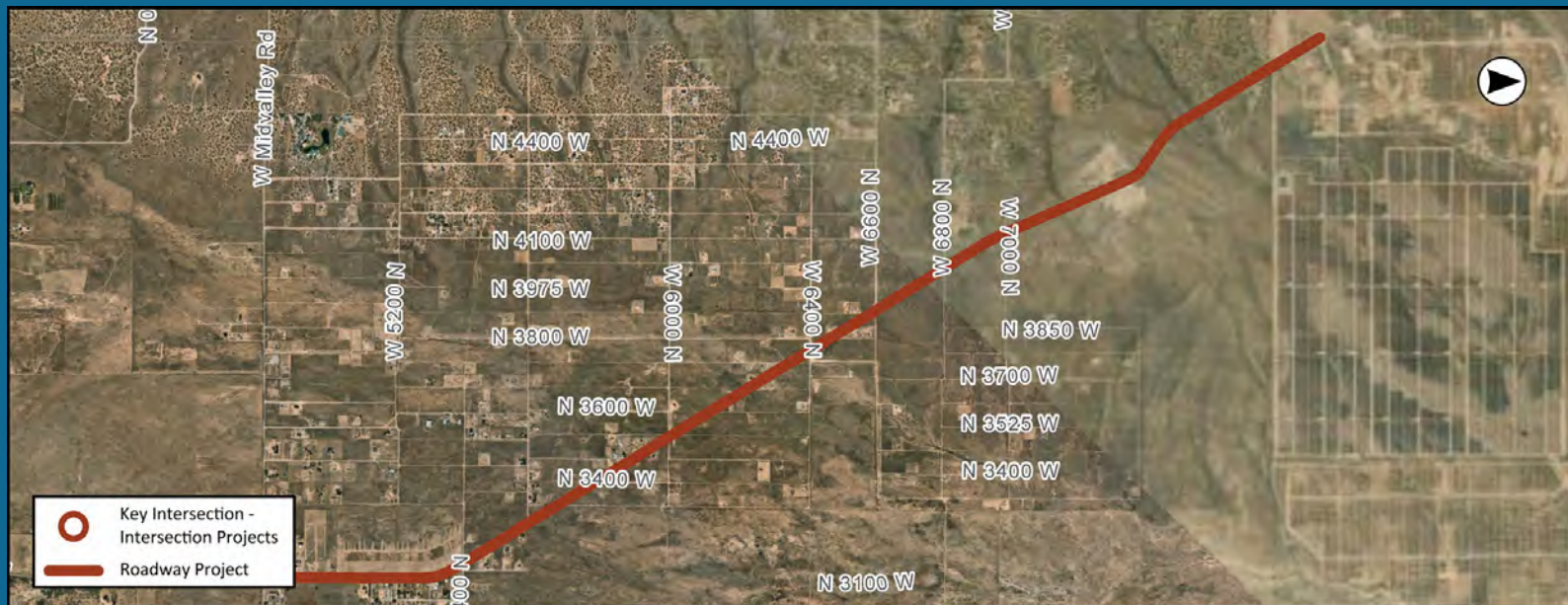
Roadway Classification: Minor Collector, Federal Aid Route

Jurisdiction(s): Unincorporated Iron County, Cedar City

Underserved Community: Yes

Safety Action Plan GFA(s): West Iron County GFA

GFA Emphasis Areas: Roadway Departures, Speed-Related, Teen Drivers



LOCATION INFORMATION & SAFETY ANALYSIS SUMMARY

Improvement Location Information & Safety Analysis Summary

Segment Characteristics

Length:	4.62
Speed Limit:	50 mph
Roadway Lanes:	2
Daily Traffic Volume (AADT):	400
Median Type:	NA
Number of Key Intersections	0











Why was this location identified?

High Crash Network:	Yes	✓
High Injury Network:	No	✗
Network Screening:	No	✗
Conflict Areas:	No	✗
Risk Characteristics:	No	✗
Community Feedback:	Yes	✓

Location Crash History













Crash Severity (2019 - 2023)	
Fatal Crashes:	0
Serious Injury Crashes:	1
Minor Injury Crashes:	2
Possible Injury Crashes:	0
No Injury/PDO Crashes:	4
Total Crashes:	7
Equivalent Property Damage Crashes:	135

Location Crash Type

Fixed-object	Angle	Left Turn	Head-on	Rear-end
				
29%	0%	0%	0%	0%
Motorist-bicyclist	Motorist-pedestrian	Sideswipe	Front to Rear	Single Vehicle
				
0%	0%	0%	0%	100%

LOCATION INFORMATION

PROJECT NUMBER: 29

Utah Emphasis Areas						
Behavioral				Crash Types	Vulnerable Users	
0% Impaired Driving 	14% Distracted Driving 	29% Teen Driving Safety 	0% Aggressive Driving 	71% Roadway Departure Crashes 	0% Motorcycle Safety 	0% Pedestrian Safety 
71% Speed Management 	0% Use of Safety Restraints 	0% Senior Safety 		0% Intersection Safety 	0% Bicycle Safety 	

Other Applicable Locations/Scenarios:

Minor collector, higher speed (40 or 50 mph), two lane roadways may benefit from similar safety countermeasures. This location includes horizontal curves and numerous access driveways or minor road intersections. Similar locations include:

- Westview Drive
- Old Highway 91
- Iron Springs Road
- 2300 West
- Airport Road
- Bulldog Road
- Bench Road
- SR 271
- SR 18
- SR 56
- Old Iron Town Road
- Comstock Road
- Bumblebee Lane

Comments, Feedback, Ongoing Projects:

- Roadway traffic is increasing due to growth in the area
- Speeding along the corridor
- Shoulders often used for walking or bicyclists
- Visibility limited at intersections

EXISTING CONDITIONS

PROJECT NUMBER: 29

Notes:



Chevron Signs



Curve near 5300 North



Curve Warnings north of 7000 North



Northbound from 5400 North



Typical Cross Section

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 29

Project Description

Safety countermeasures to encourage safer speeds transversing curves include driver feedback speed limit signs in both directions. Widening shoulders, installing edge line rumble strips, and installing wider edge line striping help mitigate roadway departure crashes. Several unpaved roadways intersect Lund Highway at an angle and may benefit from additional signage or delineation at intersections. Delineating each access allows vehicles traveling on Lund Highway to better anticipate intersecting traffic. Installing (and upgrading existing) curve signage at the curves north of 7000 North is proposed. As development continues to grow in the area, more stop-controlled intersection countermeasures or turn lanes should be considered.

Note, improvements for the Midvalley Road and Lund Highway intersection are included on the Midvalley Road project information sheet.

This project description represents potential safety improvement strategies that could be implemented at this location, as well as other locations with similar conditions. Additional improvement strategies could be considered subject to engineering analysis.

Recommended Improvements	Location
Driver Feedback Speed limit Signs	5400 North curve
4 ft Paved Shoulder	Entire corridor
6" Edge Lines	Entire Corridor
Post-Mounted Delineators	Entire Corridor
Edge Line Rumble Strips	Entire corridor
Curve Signage	Both curves north of 7000 North

Opinion of Probable Cost

Improvement	QTY.	Unit	Unit Price	Item Cost
Install Driver Feedback Speed Limit Signs on Rural Curves	2	EACH	\$11,000	\$22,000
Install 4-ft Paved Shoulder (both sides of roadway)	4.62	MILE	\$709,000	\$3,275,580
Install 6" Edge Line (Both Sides of Road)	4.62	MILE	\$8,000	\$36,960
Install Post-Mounted Delineators	4.62	MILE	\$4,000	\$18,480
Install Edge Line Rumble Strips	4.62	MILE	\$5,000	\$23,100
Install and/or Upgrade Curve Signage to Enhanced Delineations	2	CURVE	\$3,000	\$6,000

1: Includes mobilization, traffic control (5%), and items not estimated / contingency (30%). Mobilization is 10% +/- of the subtotal with minimum of \$2,500 and a maximum of \$75,000.

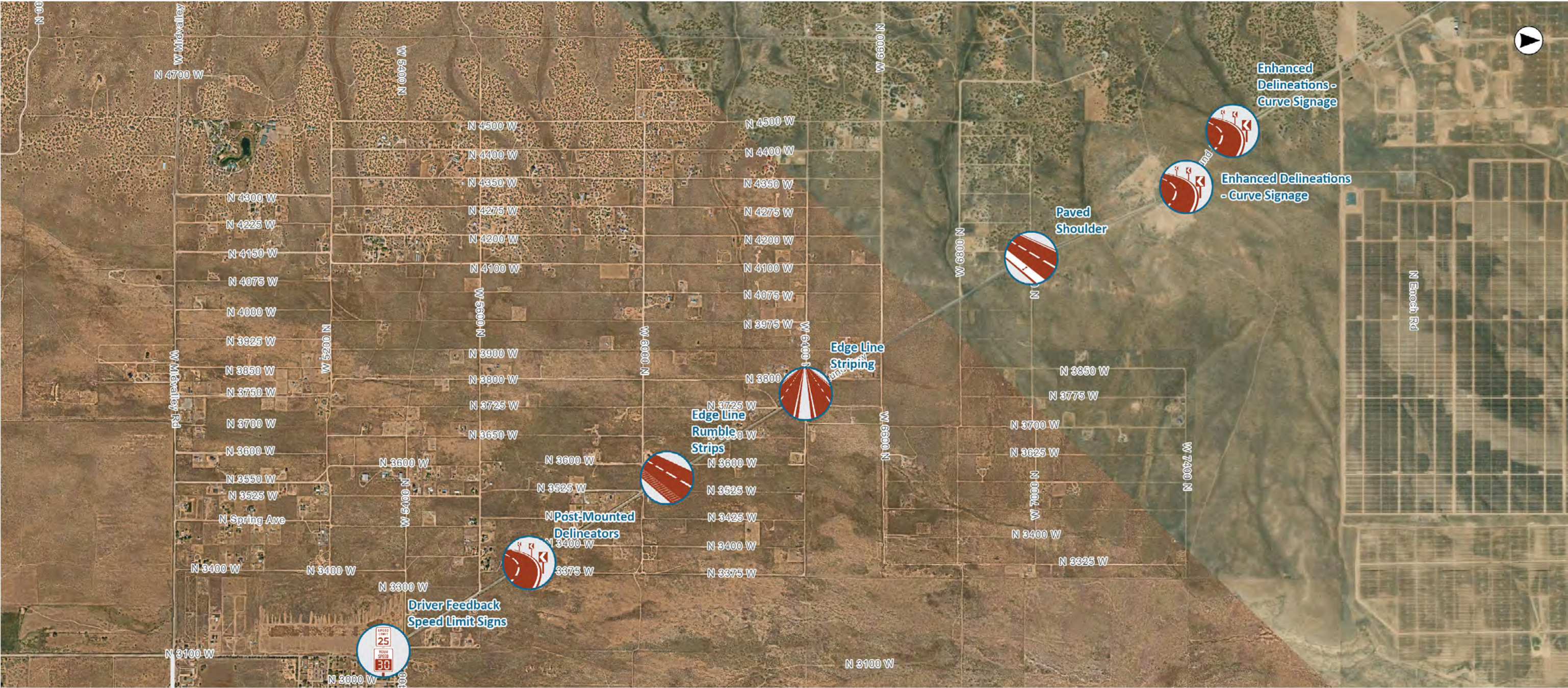
2: Includes preconstruction engineering/design (12%) and construction engineering/management (15%). Utilities and right of way not included and should be evaluate during feasibility study/ design.

3: 20% of estimated project total toward Safe Streets for All Implementation Grants.

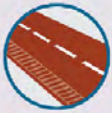




Improvement Subtotal	\$3,382,120
Estimated Construction Cost Total ¹	\$4,640,862
Estimated Project Total ²	\$6,126,000
Local Match ³	\$1,225,200

LOCATION RECOMMENDATIONS

PROJECT NUMBER: 29



Lund Highway from Midvalley Road to 8000 North

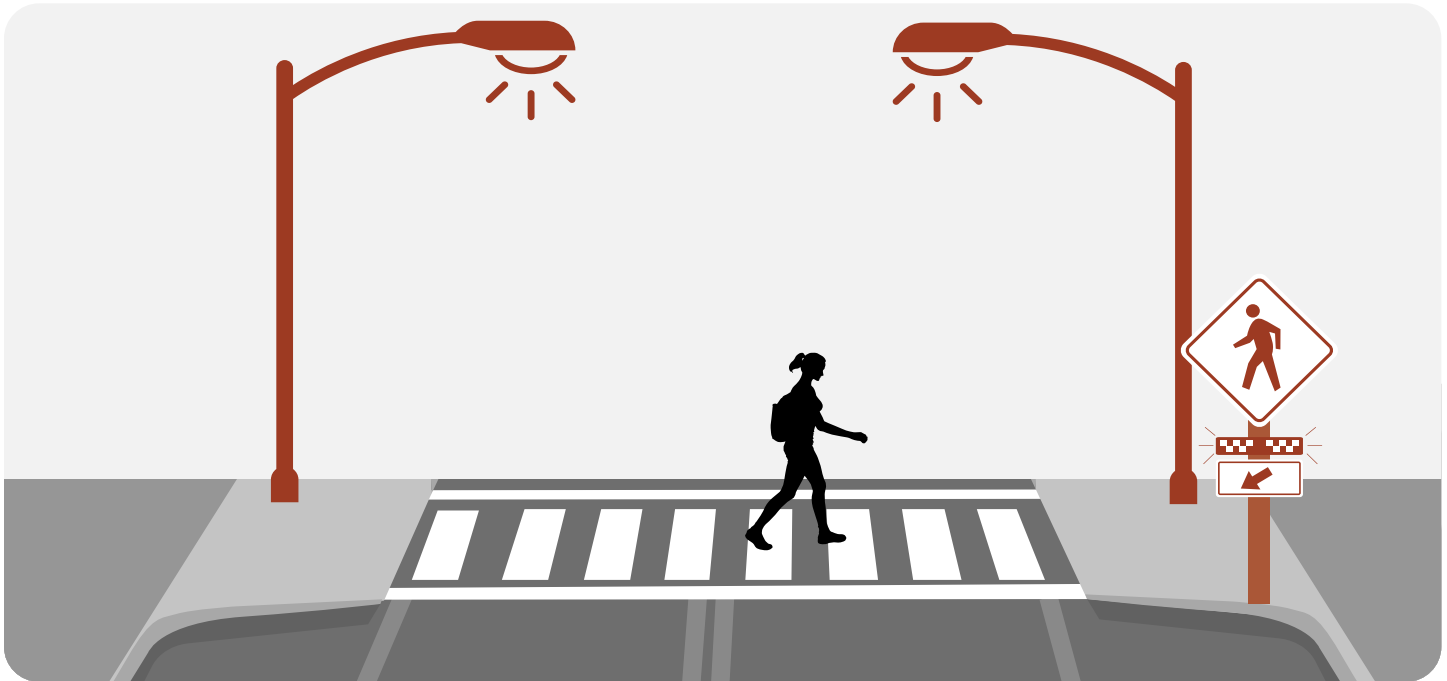
-  Edge Line Rumble Strips, Entire Corridor
-  6" Edge Line, Entire Corridor
-  4 foot Paved Shoulder Entire Corridor
-  Dynamic Speed Limit Sign
-  Enhanced Delineations, Curves and Driveways



APPENDIX F. CASE STUDY INFORMATION SHEETS

CASE STUDY:

Enhanced Pedestrian and School Crossings



Crosswalk visibility enhancements include safety countermeasures that improve pedestrian safety when crossing roadways by shortening crossing distances, increasing visibility of pedestrians to motorists, and reducing vehicle speeds approaching the crossing. Countermeasures may include crosswalk striping, enhanced signage, lighting improvements, bulb outs and refuge islands. Other countermeasures may include Rectangular Rapid Flashing Beacon (RRFB) signage or a Pedestrian Hybrid Beacon (PHB) type crossings.

Components

- High-visibility paint patterns can be implemented for the crossing making the area and pedestrians more visible to motorists. Signage helps alert motorists of the crossing and potential pedestrians in the area. Lighting at the crossing increases nighttime visibility of pedestrians to motorists.
- Bulb outs on either one or both sides of the roadway shorten the required crossing distance for pedestrians, improve pedestrian visibility to motorists, and help reduce turning speeds for vehicles. Bulb outs can consist of either curb extensions or pavement markings/stripping.
- Pedestrian refuge islands allow pedestrians a shorter crossing distance and the ability to cross only one direction of traffic at a time. Refuge islands are especially beneficial on multilane roadways where pedestrians are required to cross multiple lanes of traffic.
- Rectangular Rapid Flashing Beacon (RRFB) signage is activated by a pedestrian at a crossing and flash rectangular LEDs on the sign with alternating high frequency to help capture a motorist's attention and alert them to a crossing pedestrian. For multilane crossings, RRFBs may be mounted on either side of one direction of travel.
- Pedestrian Hybrid Beacons are overhead traffic signals activated by a pedestrian push button that stop vehicles and allows pedestrians to cross the roadway. PHBs, (sometimes called HAWKs) include a controller and operate as a traffic signal, typically accompanied by other high-visibility crossing countermeasures such as signage, striping, lighting, and refuge islands. PHBs help facilitate pedestrian crossings in high pedestrian areas, particularly at mid-block crossings.

Applications

Local or collector type roadways with intersections, mid-block crossings, or school zone crossings. Typically on roadways with speed limits 40 MPH or less.

PHBs may be applied on arterials or other multilane roadways with long crossing distances, more traffic, and higher speeds.

Crash Types



Costs



Low (for visibility enhancements only)
(Note: High for PHB signals.)

CASE STUDY:

Enhanced Pedestrian and School Crossings

Considerations

Not all countermeasures are applicable for each crossing location. The following are some considerations that should be evaluated in selecting safety countermeasures at crossing locations.



High-visibility crossings with signage or other enhancements should be placed in areas where pedestrians would normally not walk out of their way to cross at a typical intersection or crosswalk. Typically these improvements help enhance or create a mid-block crossing away from a standard intersection, however, some components are applicable at a typical unsignalized intersection. These countermeasures are also applicable to school areas or known areas of high pedestrian activity.



On-street parking must be restricted approaching bulb outs as to not block visibility of pedestrians to motorists. Bulb outs should not extend into the travel lanes. Bicycle lanes need to be considered in the roadway cross section, particularly at the bulb out locations. Drainage should also be considered, especially if bulb outs are extending or covering curb and gutter.

- Bulb outs are ideal on either side of the crossing, if only one side of the crossing is feasible, that may still be installed as an improvement to the crossing. Bulb outs reduce turning radii. Consider if the location serves high numbers of trucks or buses.



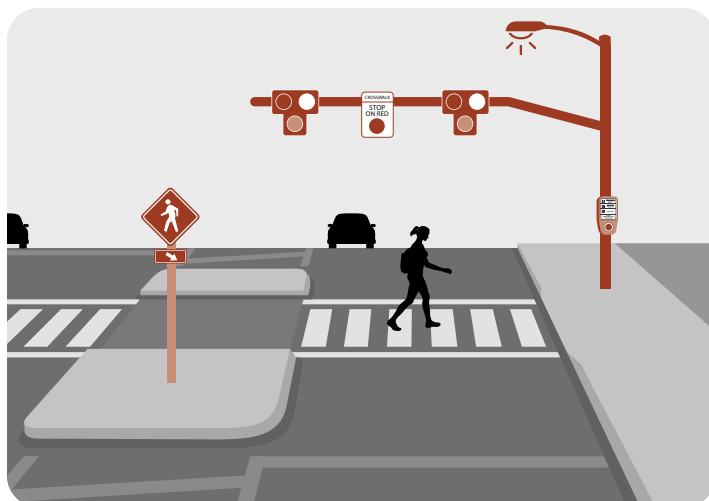
Refuge islands should be clear of sight obstructions such as landscaping or signage so that motorists and pedestrians have clear lines of sight. Median islands should be accompanied with signage or flashing signage.



RRFBs may be located on each side of the road or on both sides for a single direction travel lane. The signs may be solar powered in rural areas. Best practice includes RRFB signage on each side of the roadway and in the center median for both directions of travel, when feasible.



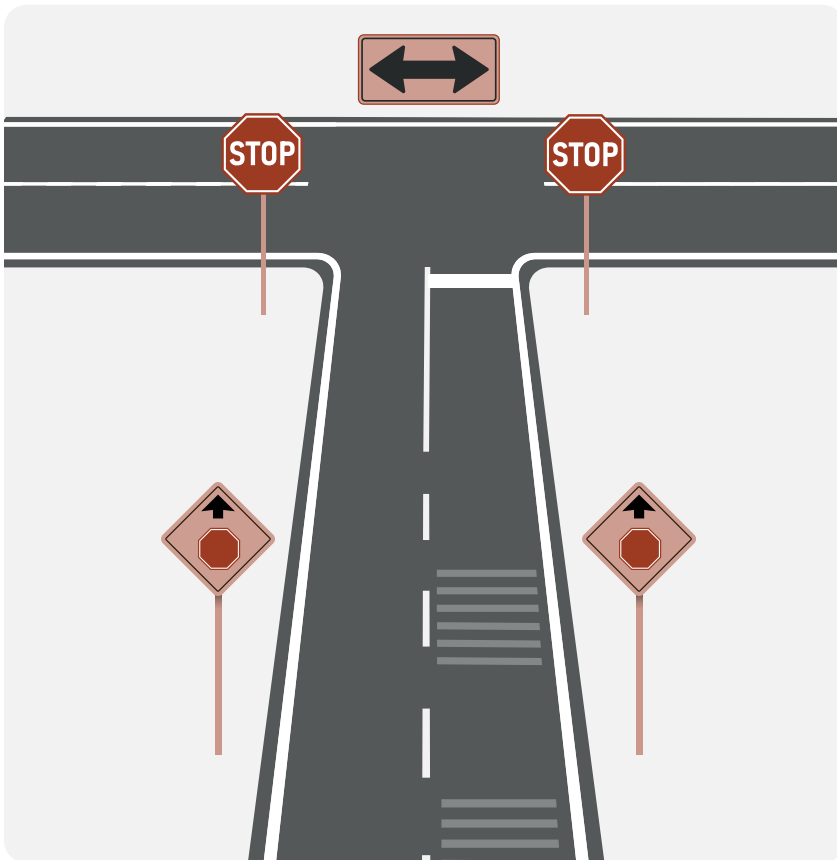
PHBs and RRFBs should be installed in high-pedestrian areas. Consider the spacing and proximity of locations, so that motorists do not discount flashing signs or become accustomed to them.



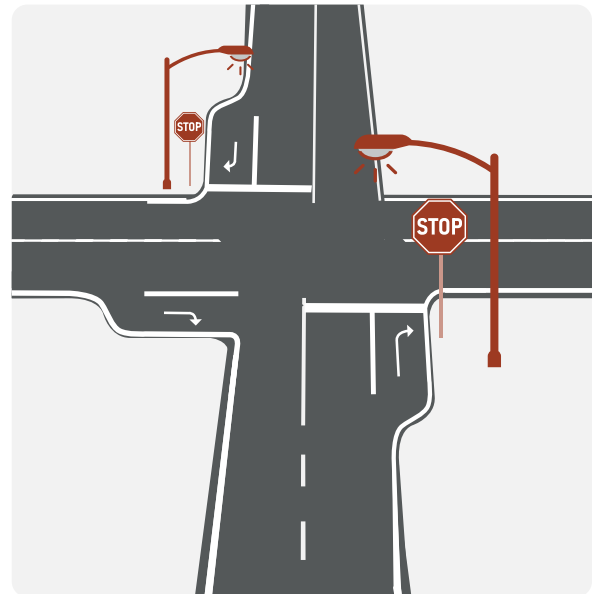
Potential Locations

- SUU Loop (SR 289), Cedar City
- 1925 North, Cedar City
- 600 South, Cedar City
- 860 West, Cedar City
- Center Street (SR 14), Cedar City
- Main Street (SR 274), Parowan City
- 200 South (SR 143), Parowan City
- SR 143, Brian Head Town
- Main Street, Paragonah Town
- Old Highway 91, Enoch City, Kanarraville Town
- Midvalley Road, Enoch City
- Existing crossing locations with only a signed or marked crossing
- School crossings

CASE STUDY: Unsignalized Intersections



A combination of several low-cost safety countermeasures may be installed to improve safety at unsignalized intersections. Countermeasures may include installing turn lanes, upgraded signage, and improved striping. Intersection lighting and rumble strips may also be incorporated.



Components

- Left- or right-turn lanes provide separation of movements and speeds at an intersection.
- Signage improvements may include 'stop ahead' or 'intersection ahead' signage or stop sign improvements such as an additional sign, larger sign, or signage with flashing beacons.
- Striping improvements may include installing new or refreshing old pavement striping, installing retroreflective striping, or widening the striping beyond typical lane line widths to help delineate the roadway or stop bar locations.
- Intersection lighting may also be considered to help address nighttime visibility and crashes.
- Transverse rumble strips on the minor intersection approaches help alert motorists of an upcoming intersection, stop sign, or stopped vehicles.

Applications

Unsignalized intersections of minor roads (to either other minor roadways or more major roadways).

Crash Types



Costs



CASE STUDY:

Unsignalized Intersections

Considerations

Not all countermeasures are applicable for each unsignalized intersection. The following are some considerations that should be evaluated in selecting safety countermeasures at unsignalized intersections.



Ensure sight distances are maintained with the addition of signage, turn lanes, or lighting. For lighting to be included in low-cost measures the availability of power needs to be evaluated.



Ensure signing complies with the MUTCD guidelines on traffic control devices or local jurisdiction standards.



Consider striping enhancements or installation during regularly scheduled maintenance, resurfacing or reconstruction of the roadway.

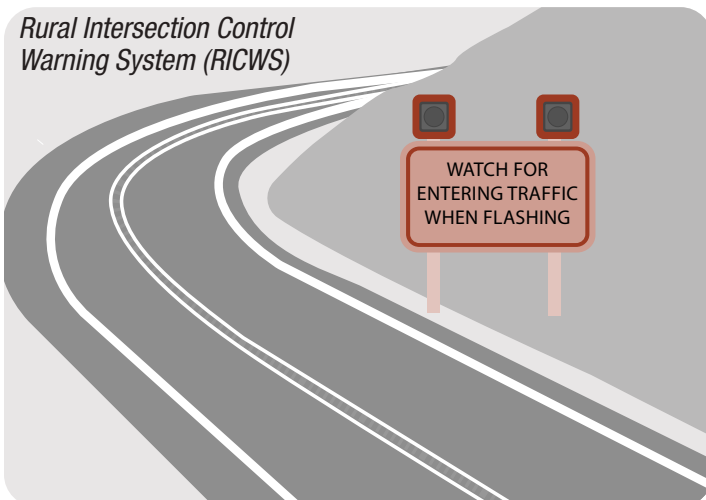


An all-way stop-control, signal warrant, or intersection control evaluation study may be required if traditional countermeasures may not be feasible or effective for a particular location.



RICWS are a much higher cost countermeasure that may be considered at intersections with high major street traffic and low, infrequent minor street traffic.

*Rural Intersection Control
Warning System (RICWS)*

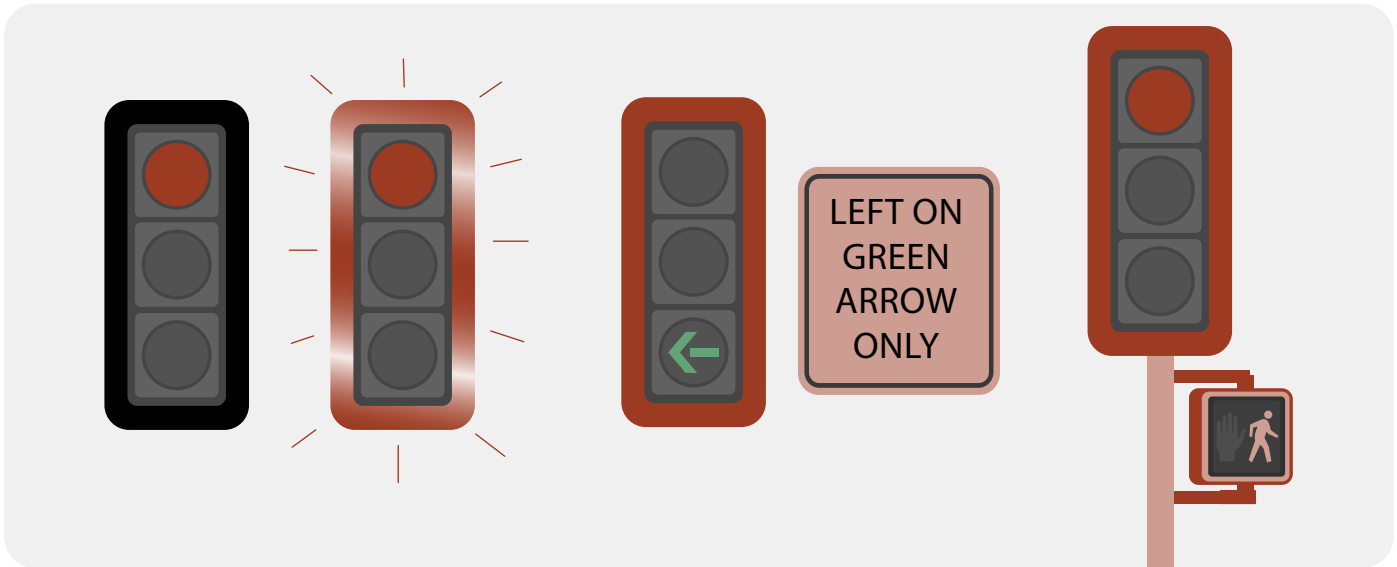


Potential Locations

- Berly Junction (SR 18 & SR 56)
- Main Street and SR 56, Newcastle
- Midvalley Road intersections
- Lund Highway intersections
- Old Highway 91 intersections

CASE STUDY:

Signalized Intersections



Various safety countermeasures may be applied at signalized intersections. Countermeasures may include signal timing adjustments, signal infrastructure components such as signal heads or lighting, and lane geometries at the intersection.

Components

- Retroreflective traffic signal backplates that border signal heads improve the visibility of the signal heads to motorists. Retroreflective backplates, different signal head types, and lighting may all help address poor visibility or distracted driving issues.
- Traffic signal timing and phasing improvements such as Leading Pedestrian Intervals (LPI) or left-turn priority phasing help facilitate pedestrians in crosswalks and improve pedestrian visibility to motorists. LPIs allow pedestrians to enter crosswalks before vehicles are allowed to make the turning movement.
- Left- or right-turn lanes provide separation of movements and speeds at an intersection.

Applications

Signalized intersections

Crash Types



Costs



Low

(Medium if lighting or turn lanes are involved.)

CASE STUDY:

Signalized Intersections

Considerations

Each signalized intersection should be carefully evaluated for which types of safety concerns are present. Some considerations to evaluate before applying identified countermeasures include:



Backplates may be a systemic one-time improvement for traffic signal heads at relatively low costs compared to other improvements or infrastructure changes.

- Signal timing for coordinated signals, or signals along a corridor may need to be revisited when LPIs or changes to left-turn phases are implemented. Implementing left-turn phase changes or LPIs will require signal retiming and evaluation.



Audible pedestrian signals should be considered at all signalized crossings.



Installing turn lanes extend required pedestrian crossing times. Bulb outs or median refuge islands may be considered in these locations to help shorten the required pedestrian crossing distances.



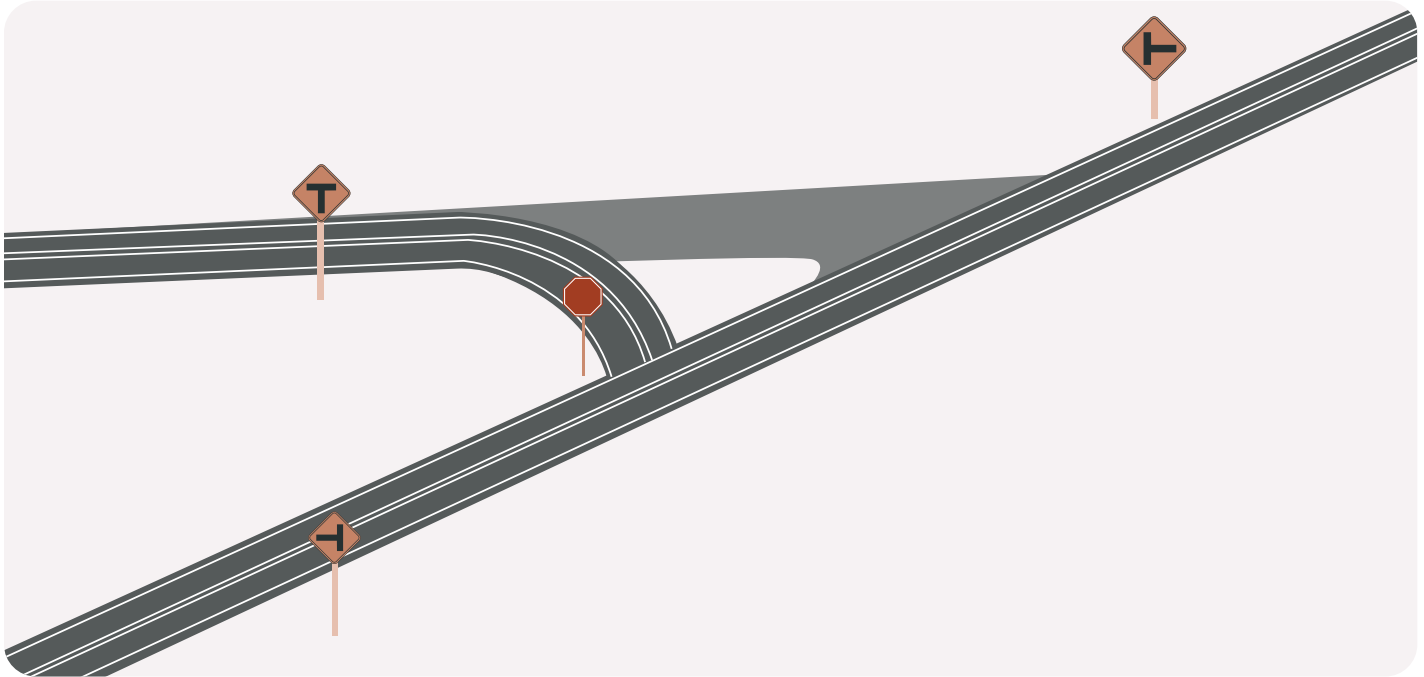
*200 North (SR 56) &
Main Street (SR 130)*

Potential Locations

- Signalized Intersections with SR 56 (200 North) including: Airport Road, Aviation Way, Cove Drive, Ramp Intersections, 800 West, 300 West.
- Signalized intersections with Main Street (SR 130) in Cedar City: Old Highway 91, 800 South, 600 South, 200 South, Center Street, 200 North, Coal Creek Road, 1045 North, 1925 North, 3000 North.

CASE STUDY:

Skewed Intersections with Major Roadways



A misaligned or skewed roadway approach (typically a more minor local or collector type roadway to a larger collector or arterial type roadway) creates sight issues for motorists and increases crash risk to all roadway users, including pedestrians and bicyclists. Realignment countermeasures including repaving, striping, signage, and roadway configurations provide better sight distance and visibility at the intersection for all users.

Components

- Realignment of a roadway approach should include new pavement, signage, and striping for the minor roadway approach.
- Other countermeasures may be paired with realignment such as intersection lighting, turn lanes, crosswalk visibility enhancements or other unsignalized intersection improvements.

Applications

Skewed minor road approaches and intersections with major roads.

Crash Types



Costs



Medium

(Note, ROW acquisition may be required making this improvement a high cost)

CASE STUDY:

Skewed Intersections with Major Roadways

Considerations

Each intersection is unique and will require evaluation of existing conditions. The following should be considered before applying identified safety countermeasures.



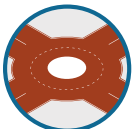
Right-of-way may need to be acquired for the realignment of a roadway approach. Evaluate potential impacts to existing utilities or required utility relocations if the roadway was to be realigned.



Adequate curve radii and tangential approach lengths of the minor roadways need to be included or maintained in the realigned roadway approach.



For some minor intersection approaches where rerouting is available and the transportation network is connected in the area, consider terminating the minor road connection to the major road as part of access management.



Roundabouts or alternative intersection layouts may be considered in certain situations to help resolve skewed approaches, particularly if multiple legs of the intersection approach at odd angles.



7700 West & SR 56

Potential Locations

- Intersections with SR 56 including 7700 West, Comstock Road, and Pinto Road.
- Intersections with Lund Highway such as 5400 North, 6000 North, and 6400 North
- Intersections with Old Highway 91 in Enoch City such as Midvalley Road, Enoch Road, and Heather Hue Road
- Intersections with Old Highway 91 between Parowan City and Summit.
- Intersections with Iron Springs Road such as 6300 West and 1600 North
- Various locations in Iron County where the minor road approach to an intersection is at a skewed angle.

CASE STUDY:

Two-Lane Highways



Two-lane, high-speed highways are common in Iron County and in rural areas. Various safety countermeasures may be applicable for different settings, but mostly directed towards addressing single-vehicle crashes such as run-off the road or crossover type crashes that are common on these types of roadways.

Components

- Shoulder widening provides additional recovery space for vehicles, emergency areas, and provides space for bicyclists, wider edge line striping, or edge line rumble strips.
- Striping may include refreshing existing striping, installing edge line striping if not present, converting to more retroreflective striping, or installing wider striping.
- Rumble strips may be implemented on the edge lines and/or centerline of the roadway. Rumble strips may be either the typical grooved style or a sinusoidal style (sometimes called “mumble” strips since they are quieter to the driver, typically used in more residential areas. Rumble strips provide physical indicators to motorists of lane or roadway departures or crossovers.
- These roadway types often navigate curves or slopes. Installing, or enhancing existing signage to help delineate the roadway and curves provide additional guidance and captures motorist’s attention. Countermeasures may include installing signage, enhancing existing signage with flashing beacons or retroreflectivity, reflective delineators, guardrail, or striping improvements.

Applications

Two-lane roadways or corridors with typically higher-speeds in a more rural setting.

Crash Types



Costs



CASE STUDY:

Two-Lane Highways

Considerations

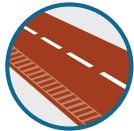
Not all of the countermeasures detailed may be applicable to each location. Consider the context of the roadway and surrounding conditions, including the prevalent crash types historically experienced at the location.



Consider striping enhancements or installation at regularly scheduled maintenance, resurfacing, or reconstruction of the roadway.



Consider required width of shoulders accounting for potentially wider striping, rumble strips, and bicycle lanes.



Consider installing sinusoidal rumble strips (or “mumble” strips) in lieu of typical grooved rumble strips where noise is a concern (near residential or recreation areas). If the area experiences high on-roadway bicycle users, the use of rumble strips needs to be evaluated.



In bicycling areas, ensure shoulder widening includes adequate width for striping, rumble strips (if applicable) and a bicycle lane.



Ensure all signage complies with the MUTCD guidelines on traffic control devices.



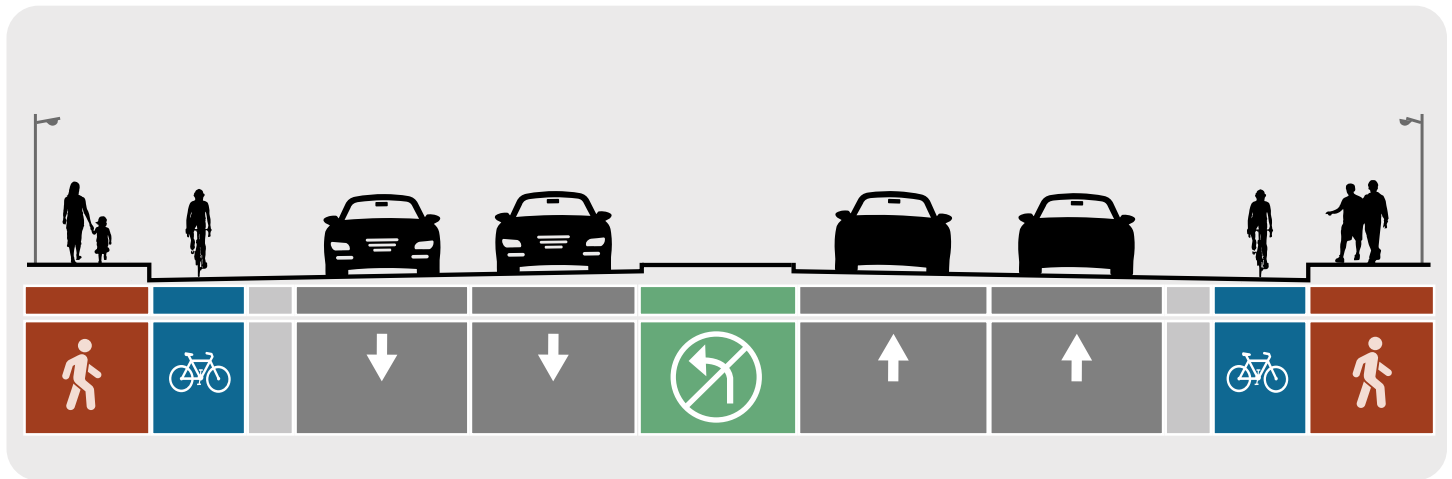
Minersville Highway (SR 130)

Potential Locations

- SR 56
- SR 130
- Lund Highway
- Old Highway 91
- Iron Springs Road
- Westview Drive
- SR 143
- SR 271

CASE STUDY:

Three-or Five-Lane Roadways



Roadways with three to five lanes of travel present several safety risks for all roadway users. These types of roadways typically have higher traffic volumes, limited active transportation space, and signalized intersections or access driveways creating conflict points for all roadway users. Dedicated pedestrian and bicyclist space and access management strategies help reduce the number of conflict points on a roadway.

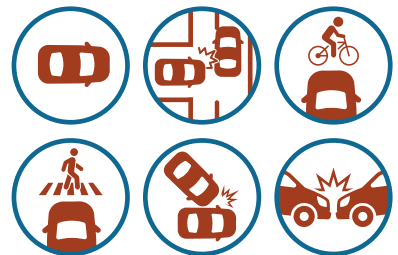
Components

- Bicycle lanes and sidewalks help create a safer space for non-motorized users and contribute to a more connected active transportation network. Buffered bike lanes may be striping only, a physical barrier, or separated pathways or trails. Shoulder widening may also help accommodate the bicycle lanes, striping, and signage.
- Access management strategies include the design, location, and density of ingress and egress points along a roadway or corridor and includes intersections with other roadways and access driveways. Reducing, restricting, and strategically planning accesses on the roadway helps reduce the number of conflict points, especially left-turn conflicts, for all roadway users.
- Center curbed medians is an infrastructure countermeasure that separates directional traffic and helps manage other vehicle movements such as left-turns. Medians may also serve non-motorized users by creating refuge islands for crossings and provide space for enhanced signage at crossings.

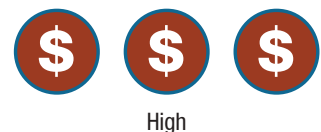
Applications

Suburban or urban multilane roadways with higher traffic volumes, many access driveways or intersections, and typically a center two-way left-turn lane.

Crash Types



Costs



CASE STUDY:

Three-or Five-Lane Roadways

Considerations

Existing conditions and land use context should be considered before implementing safety countermeasures. Applicable consideration include:



Widening the roadway or shoulders may require right-of-way acquisition and relocation of existing infrastructure or utilities. In bicycling areas, ensure shoulder widening includes adequate width for a buffered bicycle lane.



Consider connections to trails or other active transportation network components when installing bicycle lanes or sidewalks.



Prioritize separated, buffered, and then traditional painted bicycle lanes, especially on high traffic volume and higher speed roadways. Separation may be completed by curbing, barrier, or striping. Buffered bike lanes may be accomplished with posts or painting.

- Separated or buffered bicycle lanes should consider interactions with access driveways, on-street parking, and maintenance (particularly winter maintenance, including snowplows and snow removal operations).



Consider striping enhancements or installation during regularly scheduled maintenance, resurfacing, or reconstruction of the roadway.



When medians are proposed, consider implementing additional improvements such as refuge islands for pedestrian crossings or enhanced signage for crosswalks using the medians.



Evaluate access types, density, and locations along the entire corridor and implement restrictions or consolidation when applicable.



Cedar City Main Street (SR 130)

Potential Locations

- Main Street (SR 130), Cedar City and Enoch City
- 200 North (SR 56)
- SR 56
- Midvalley Road
- Cross Hollow Road
- Westview Drive
- Main Street (SR 274) Parowan City
- SR 143 Brian Head