



APPENDIX C. TECHNICAL MEMORANDUM #3 – POLICY REVIEW AND BEST PRACTICES



FOR ALL IRON COUNTY

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:



Iron County
82 North 100 East
Cedar City, UT 84720

Prepared by:

Kimley»»Horn

1850 West Ashton Boulevard
Suite 150
Lehi, UT 84043

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.

TABLE OF CONTENTS

1. INTRODUCTION	6
2. PREVIOUS AND ONGOING PLANS REVIEW	7
2.1. DOCUMENTS SUMMARY BY GFA	8
2.1.1. Cedar City GFA	8
2.1.2. Enoch City GFA	8
2.1.3. East and West Iron County GFA	8
2.2. KEY FINDINGS	9
2.3. NATIONAL BEST PRACTICES REVIEW.....	10
2.4. STATE-LEVEL POLICIES REVIEW	12
2.4.1. Utah Strategic Highway Safety Plan & Zero Fatalities	12
2.4.2. UDOT Vulnerable Road User Safety Assessment (VRU).....	13
2.4.3. UDOT Administrative Rule R930-6	13
2.4.4. UDOT's Road Map	13
2.4.5. UDOT Speed Management Studies.....	14
2.4.6. HB290.....	14
3. PUBLIC FEEDBACK.....	15
3.1. SURVEY COMMENT REVIEW	16
3.1.1. Evaluation Process.....	16
3.1.2. Comment Themes.....	16
4. JURISDICTIONAL INTERVIEWS.....	19
4.1. COMMUNICATION AND COORDINATION	20
4.2. GROWTH AND DEVELOPMENT	20
4.3. VULNERABLE ROAD USE SAFETY & TRANSIT	20
4.4. PROJECT PRIORITIZATION & FUNDING	20
5. RECOMMENDATIONS	21
5.1. ACCESS MANAGEMENT PLAN.....	21
5.2. ACTIVE TRANSPORTATION PLANNING.....	22
5.3. SPEED LIMIT SETTING AND SPEED MANAGEMENT	22
5.4. PROVEN SAFETY COUNTERMEASURES IN DESIGN STANDARDS	24
5.5. SAFE ROUTES TO SCHOOL PLANS	26
5.6. DEVELOPMENT REVIEW STANDARDS	27
5.7. PROJECT PROGRAMMING	27
5.8. CLEAR CROSS-AGENCY COMMUNICATION	27
5.9. TRANSPORTATION SAFETY EDUCATION PROGRAM	27
5.10. SAFETY TERMINOLOGY IN PLANS, POLICIES, AND STUDIES.....	28

LIST OF FIGURES

Figure 1. UDOT’s Mission and Quality of Life Framework..... 14

Figure 2. Access vs. Mobility 21

Figure 3. Pedestrian survival rate at different vehicle impact speeds 23

Figure 4. FHWA Proven Safety Countermeasures in Rural Communities 24

LIST OF TABLES

Table 1. Previous or Ongoing Plans Reviewed 7

Table 2. Summary of Engagement Themes 18

Table 3. FHWA Proven Safety Countermeasures in Rural Communities..... 24

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.

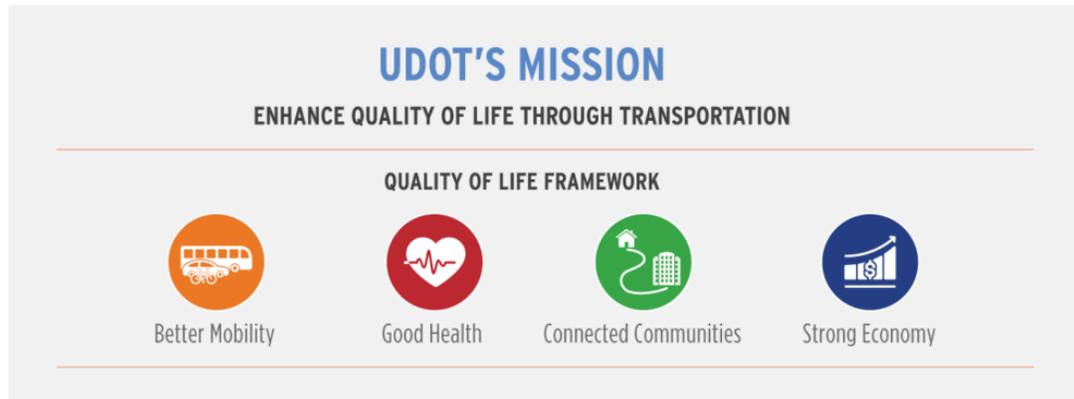


Figure 1. UDOT’s Mission and Quality of Life Framework

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.

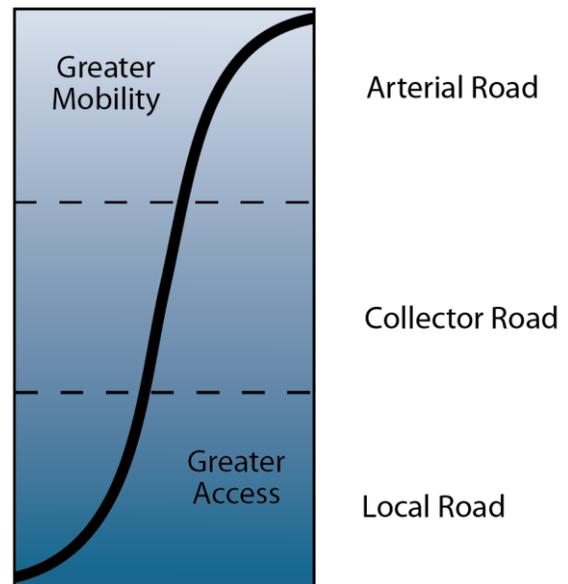


Figure 2. Access vs. Mobility

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.

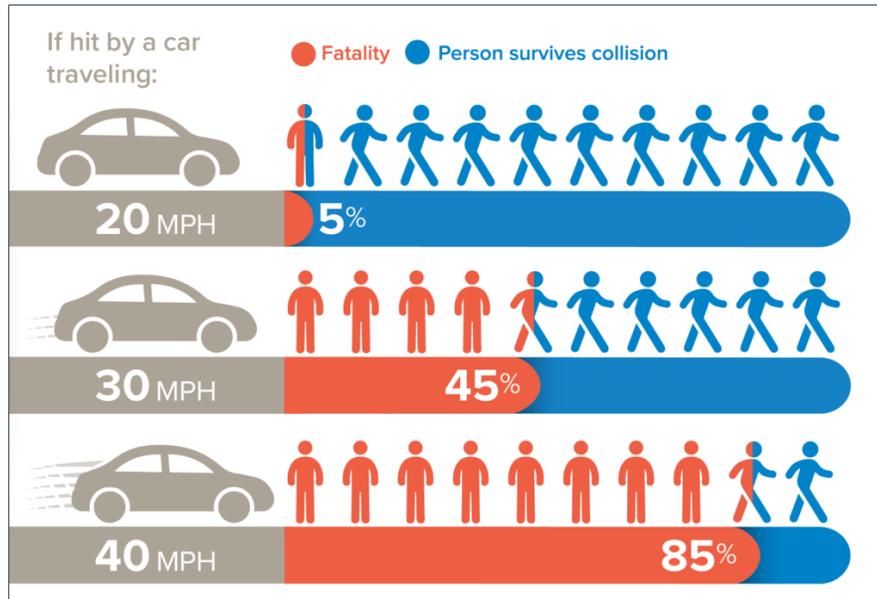


Figure 3. Pedestrian survival rate at different vehicle impact speeds¹⁰

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.