Gallatin County

Safe Streets For All

Action Plan

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Prepared for:
Gallatin County

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Table of Contents

Table of Contents

Acknowledgments

Numerous individuals contributed to the successful completion of this study. The following people offered guidance, support, and technical expertise throughout its duration.

Abbreviations and Acronyms

ADAS..Advanced Driver Assistance System
DUI...Driving Under the Influence
EMS...Emergency Management Systems
EMS...Emergency Medical Services
HIN...High Injury Network
ITS...Intelligent Transportation Systems
MDT..Montana Department of Transportation
MHP..Montana Highway Patrol
mph...Miles Per Hour
MPO..Metropolitan Planning Organization
MUTCD...Manual on Uniform Traffic Control Devices
NOFO..Notice of Funding Opportunity
OPI...Office of Public Instruction
RPA..Robert Peccia and Associates
SSA...Safe System Approach
SS4A...Safe Streets for All
USDOT...US Department of Transportation
VMS..Variable Messaging Sign
VSL...Variable Speed Limit

Executive Summary

ES 1. Introduction

Gallatin County was awarded funds from the Safe Streets and Roads for All (SS4A) discretionary grant program to develop an Action Plan aimed at addressing significant safety concerns within the community. This plan outlines specific strategies, projects, programs, and policies to reduce fatalities and serious injuries across the county, with a focus on the rural areas outside of Bozeman and Belgrade, which are conducting their own SS4A planning efforts. While efforts to improve safety in the county have been ongoing for years, the SS4A Action Plan presents an opportunity to closely analyze crash trends and further explore current safety issues to enhance road safety in Gallatin County.

ES 2. Outreach and Engagement

Development of the Action Plan involved comprehensive outreach to understand community concerns, share updates on progress, and involve the community in actively creating safer streets for all users.

Task Force

A Task Force was assembled to lead the development of the Action Plan. The Task Force included representatives from various county departments, Montana Department of Transportation (MDT), community leaders, and local safety partners. Members were selected for their expertise, resources, and commitment to promoting transportation safety improvements in the community.

Safety Summit

On March 12, 2025, Gallatin County hosted a Safety Summit to bring together community leaders from various disciplines to collaborate on strategies, projects, and policies aimed at addressing Gallatin County's key safety concerns.

Public Outreach

Throughout the study, multiple public outreach events were organized to update the community on the Action Plan's progress and gather feedback regarding safety needs and concerns. This included two 30-day virtual open houses, a public priorities survey, and a formal review period for the draft Action Plan.

ES 3. Baseline Data and Focus Areas

For this effort, the MDT Traffic and Safety Engineering Bureau provided crash data for the **5-year period** from January 1, 2019, to December 31, 2023. MDT's crash records included a total of **6,739 crashes** reported within Gallatin County but outside the city limits of Bozeman and Belgrade over the 5-year analysis period. Analysis of the crash records helped identify the most pressing safety concerns within the county.

Identifying the types of crashes predominantly contributing to community safety problems can help in effectively expending limited resources. For the *Gallatin County SS4A Action Plan*, four focus areas were identified:

- **Run-off-the-Road Crashes**
- **Intersection Crashes**
- **Driver Age** *(Younger and Older Drivers)*
  - <25 65+
- **High Risk Behaviors** *(Speed, Impairment, Seatbelt Use, Distractions)*
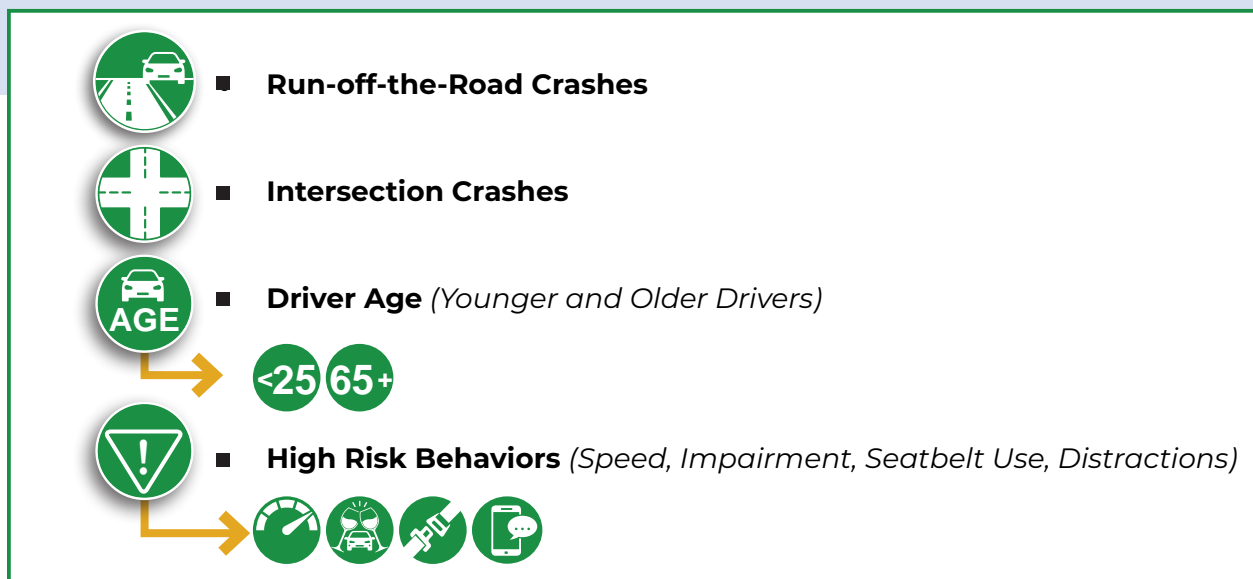
ES 4. Leadership Commitment and Goals

The overarching goal of the SS4A program is to eliminate roadway fatalities and serious injuries. Accordingly, Gallatin County has committed to the **eventual goal of zero fatalities and serious injuries** on its roadways. As a reflection of this commitment, Gallatin County has adopted the following interim goal (**Figure ES.1**):

Reduce the number of combined fatalities and suspected serious injuries on roadways in the Gallatin County SS4A planning area by half, from 46 in 2025 to 23 in 2034, through implementation of the SS4A Action Plan.
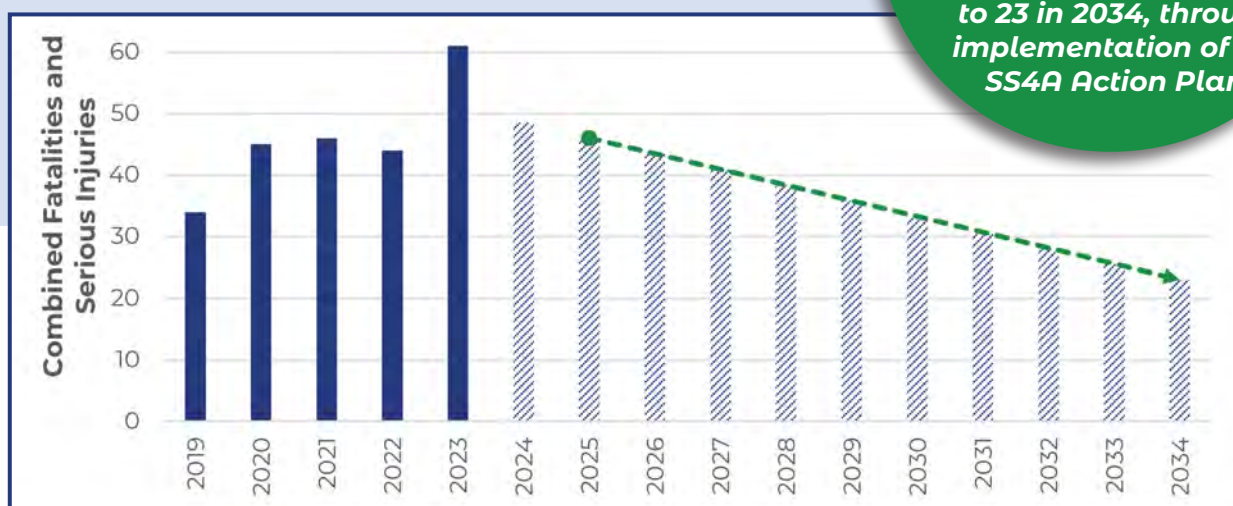
Figure ES.1: Gallatin County Interim Safety Goal

ES 5. Strategy Identification

Individual strategies were identified with the intention of reducing fatalities and serious injuries in Gallatin County and generally improving transportation safety. The strategies provide example projects, programs, and policies for reference as Gallatin County and its partners work towards safer streets for all users. These strategies can be used to assist in the future identification, development, and implementation of specific projects in the county.

Run-Off-The-Road Strategies

- Improve Curve Design
- Improve Roadside Design
- Improve Roadway Visibility and Surfacing

Intersection Strategies

- Improve Intersection Visibility
- Enhance Unsignalized Intersections
- Install or Enhance Signalized Intersections

Driver Age Strategies

- Educate Young Drivers on Safe Driving Practices
- Ensure Older Drivers are Fit to Drive
- Design the Transportation System to Ensure Accessibility for Users of All Ages

High Risk Behavior Strategies

- Promote Safe Driving Behaviors
- Eliminate Impaired Driving
- Manage Vehicular Travel Speeds
- Decrease Distracted Driving
- Increase Occupant Protection

ES 6. Project, Policy, and Program Identification

Several projects, programs, and policies are recommended to proactively address identified safety concerns from all angles, including infrastructure improvements, programs targeted at safe behaviors, and policy-based changes. The **19 recommended projects** are illustrated in **Figure ES.2**, while the recommended programs and policies are listed below.

→ Programs

- PROG-1: Curve Signing Program
- PROG-2: Shoulder Widening Program
- PROG-3: Passing Zone Review Program
- PROG-4: Roadside Management and Vegetation Control Program
- PROG-5: Systemic Safety Program
- PROG-6: Annual Crash Data Review Program
- PROG-7: Driver Age Programs
- PROG-8: High Risk Behavior Programs

→ Policies

- POL-1: Snow Removal Priority Routes
- POL-2: Street Lighting Standards
- POL-3: Cell Phone Policy
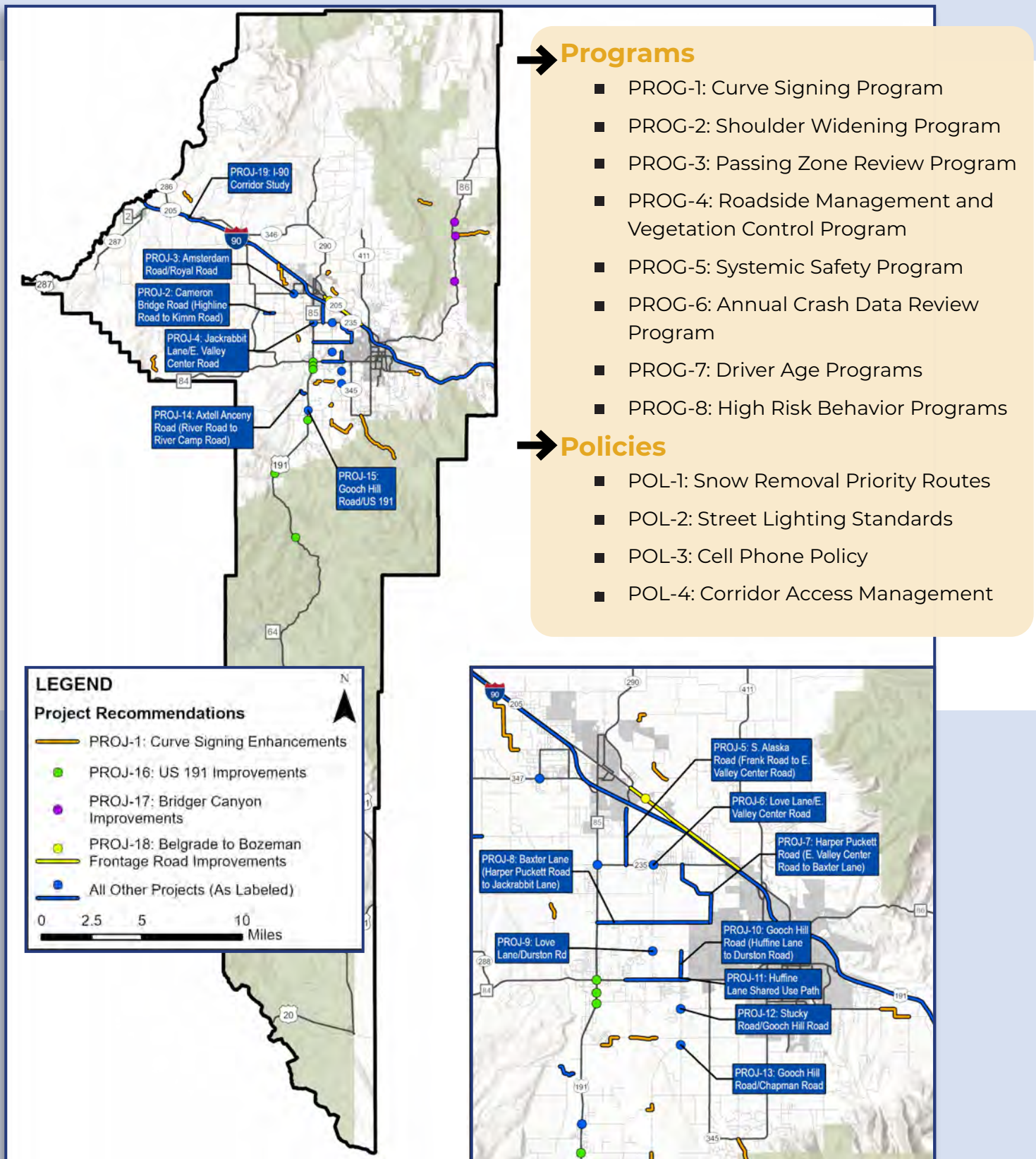- POL-4: Corridor Access Management

Figure ES.2 Recommended Safety Projects

# ES 7. Project Prioritization and Implementation

A key requirement of the SS4A program is to prioritize identified projects into specific time ranges for the deployment of safety countermeasures within the community. The **prioritization process involved evaluating projects based on criteria such as crash history, past planning efforts, estimated cost, and community and agency support**. Projects were scored and categorized into high, medium, and low priority levels to ensure that resources are focused on the most impactful safety improvements.

The *Gallatin County SS4A Action Plan* aims to improve transportation safety within the county, with the goal of reducing combined fatalities and suspected serious injuries through the implementation of the Action Plan. Gallatin County aims to secure additional SS4A grants to fund implementation of the projects and strategies contained in the Action Plan.

Future demonstration grant applications could be considered for the following list of potential programs or pilot projects to **help inform future implementation activities or systematic project implementation**.

1 **PROG-1: Curve Signing Program –** Pilot the use of the tiered curve signing techniques at high-risk curves.

2 **PROG-3: Passing Zone Review Program –** Conduct a county-wide evaluation of passing zones to ensure compliance with current MUTCD standards.

3 **POL-2: Street Lighting Standards –** Pilot the implementation of temporary street lighting at a high-risk intersection.
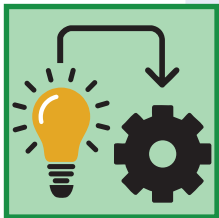
Future implementation grant funding applications could be considered for the following list of **High Priority projects** that would be outside the ability of Gallatin County or MDT to fund in the short-term.

1 **PROJ-5: Alaska Road (Frank Road to E. Valley Center Road)**

2 **PROJ-9: Love Lane/Durston Road**

3 **PROJ-11: Huffine Lane Shared Use Path**

As the Action Plan is implemented, Gallatin County will prioritize executing the identified projects while maintaining a proactive approach to addressing emerging safety concerns. The strategies outlined in the plan serve as a toolbox for developing new initiatives as needed to respond to changing trends. In addition, the county will implement programs and policies that foster continuous safety improvements, ensuring ongoing progress. Through regular evaluation and adjustments, the county will remain responsive to evolving transportation safety needs. To support this commitment, an *Annual Safety Report* will be prepared each year, offering an opportunity to reassess project priorities, evaluate community needs, and identify new projects. Achieving meaningful improvements in transportation safety will require collaboration across the **4 E's of Safety: Education, Enforcement, Engineering, and EMS.**

Chapter One

1. Introduction

Gallatin County was awarded funds from the Safe Streets and Roads for All (SS4A) discretionary grant program to complete an Action Plan identifying the most significant safety concerns in the community with implementation steps for projects and strategies to address those issues and **reduce fatalities and serious injuries** within the county. Completion of the *Gallatin County SS4A Action Plan* will enable the county to apply for other grant funds under the SS4A program to complete supplemental planning, future demonstration activities, or project implementation as needed to fulfill the identified needs of the Action Plan.

1.1. National Guidance

The SS4A discretionary grant program was established by the Bipartisan Infrastructure Law/Infrastructure Investment and Jobs Act in 2021. The program was established to fund regional, local, and Tribal initiatives through grants to prevent roadway deaths and serious injuries through planning and implementation efforts. The SS4A program supports the US Department of Transportation's (USDOT) Vision Zero – a goal of zero roadway deaths – using the Safe System Approach (SSA) (illustrated in **Figure 1**) which aims to address the safety of all road users, with specific focus on improving safety culture, increasing stakeholder collaboration, and considering the human element in crash severity reduction.

In alignment with the Vision Zero and SSA initiatives, the SS4A program provides funding to localities to help develop tools to strengthen the community's approach to roadway **safety for all roadway users** including vulnerable road users (pedestrians, bicyclists, other cyclists, and personal conveyance and micromobility users), public transportation users, motorcyclists and motor vehicle users, and commercial vehicle operators. Top priorities for the SS4A program include the following:
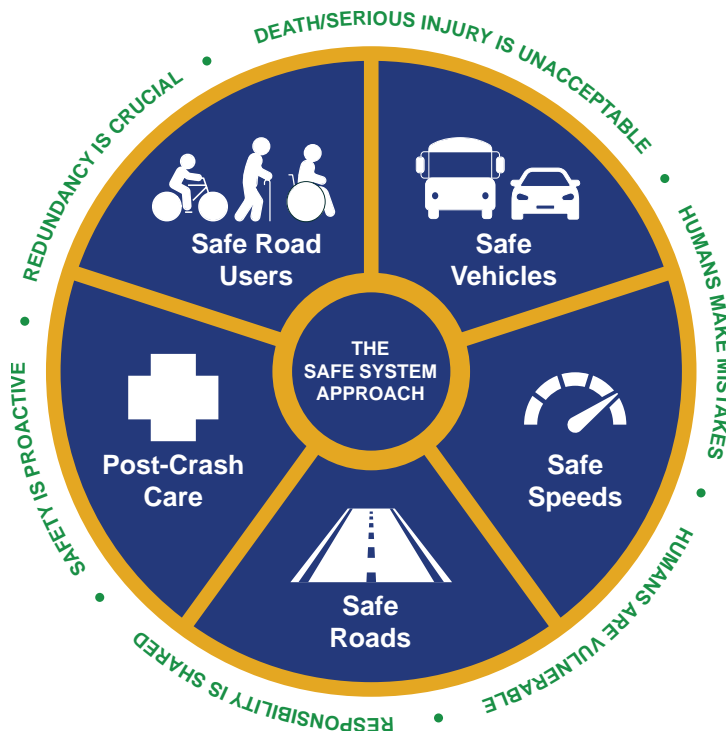
- Safety promotion to reduce roadway fatalities and serious injuries
- Low-cost, high-impact strategies
- Equitable investment in underserved communities
- Evidence-based and innovative projects and strategies
- Public and stakeholder engagement
- Alignment with the USDOT mission and priorities

Figure 1: USDOT Safe System Approach

1.2. Planning Area

The planning area focuses on **Gallatin County boundaries, excluding the Cities of Bozeman and Belgrade**, based on boundaries as of August 27, 2024, and April 3, 2024, respectively. These cities are conducting their own SS4A planning efforts within their city limits, so the *Gallatin County SS4A Action Plan* excludes these areas. This approach avoids overlap and allows for a focused effort on rural areas. Ongoing coordination between Gallatin County and the cities will ensure alignment across all SS4A planning efforts. **Figure 2** provides a map of the planning area.
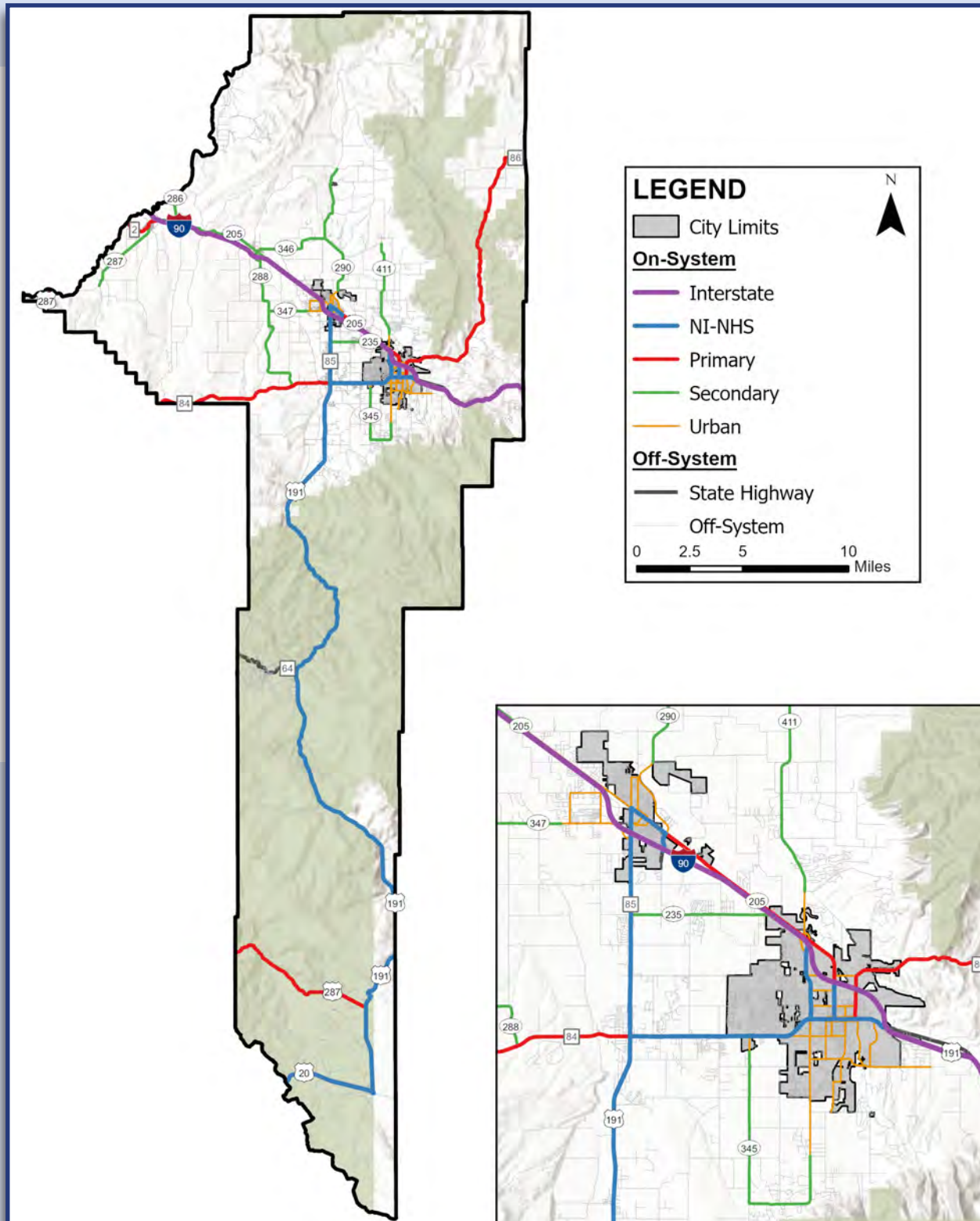

Figure 2: Gallatin County SS4A Planning Area

1.3. Relevant Plans, Programs, Policies, and Procedures

Efforts to improve safety in Gallatin County have been ongoing for many years and are reflected in past and ongoing initiatives. The *Gallatin County SS4A Action Plan* provides an opportunity to closely examine crash trends and explore current safety concerns in greater detail. This Action Plan is designed to complement and integrate with previous planning efforts, current programs and policies, and other relevant procedures established by the county, Montana Department of Transportation (MDT), and other partner agencies.

As an initial step in the process, a review of the county's past planning efforts was conducted to ensure the Action Plan aligns with the community's overall safety goals and priorities and addresses any previously identified safety concerns. Another key component of SS4A Action Plan is an assessment of the county's current programs, policies, procedures, plans, guidelines, and standards to identify opportunities to improve how established processes prioritize transportation safety. The following documents, programs, policies, and standard procedures were reviewed.

➜ Past Plans

- Greater Triangle Area Transportation Plan (2022)
- Triangle Area Trails Plan (2021)
- Gallatin County Growth Policy (2021)
- Triangle Community Plan (2020)
- US 191 Corridor Study - Four Corners to Beaver Creek (2020)
- Belgrade to Bozeman Frontage Road Corridor Study (2017)
- Bridger Canyon Corridor Planning Study (2015)

➜ Current Standards and Procedures

- Gallatin County Transportation Design and Construction Standards
- Gallatin County Subdivision Regulations
- Gallatin County Zoning Regulations
- Gallatin County Code of the West

➜ Relevant Safety Programs

- Gallatin County DUI Task Force
- Gallatin County Court Services
- Gallatin County Community Notification System
- Car Seat Safety Checks
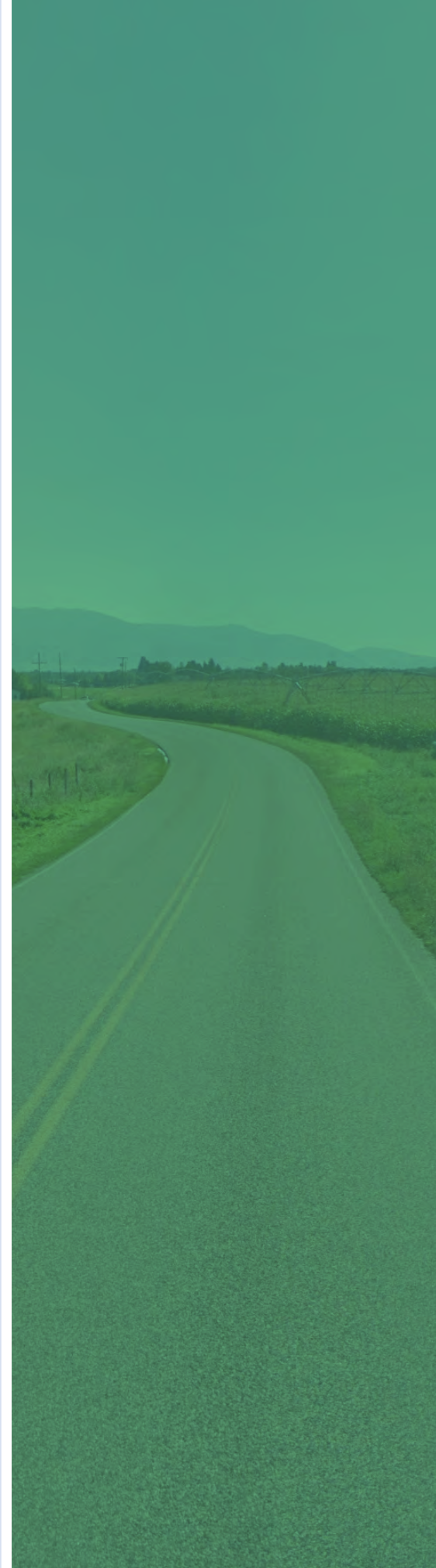
Chapter Two

2. Outreach and Engagement

Development of the Action Plan involved comprehensive outreach to understand community concerns, share updates on progress, and involve the community in actively creating safer streets for all users. Engaging with community members not only provided valuable insights but also fostered a sense of ownership and collaboration in the planning process. Additional information is provided in **Appendix A**.

2.1. Task Force

To guide the development of the Action Plan, a multidisciplinary group of stakeholders comprising representatives from various county departments, MDT, community leaders, and local safety partners formed the SS4A Task Force. Since this Task Force is expected to assist county staff in implementing the *Gallatin County SS4A Action Plan*, members were selected for their expertise, resources, and commitment to promoting transportation safety improvements in the community. Throughout the planning study, multiple Task Force meetings were held to engage these key partners at critical stages of the plan's development, ensuring their insights and feedback were integrated throughout the process.

2.2. Website

A dedicated website was created to support ongoing public engagement and provide information throughout the planning process. It included contact details, an overview of the process, meeting announcements, frequently asked questions, finalized documents, and a link to an online commenting map for public input. The website also hosted two virtual public meetings, as described in **Section 2.4**.

www.GallatinCountySS4A.com

Commenting Map

An interactive commenting map hosted on the ArcGIS platform allowed the public to share feedback throughout the planning process. Community members could leave notes, highlight areas of concern, and engage with others' comments. During the study, **174 unique comments and 38 replies were posted**. This platform facilitated valuable community input and helped effectively shape the Action Plan.
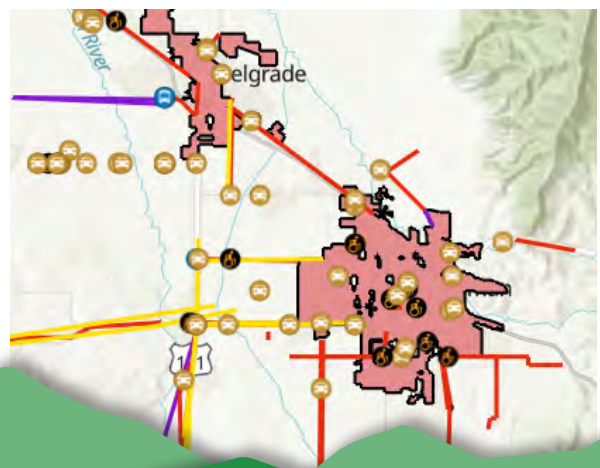
Survey

A survey was developed to **collect feedback from the public on priorities and key safety concerns**. Its purpose was to engage the community in the planning process and ensure that residents' voices were heard. The survey results were also used to tailor recommendations and ensure the Action Plan reflected the community's needs and concerns.

The survey was active throughout the month of December, coinciding with Virtual Open House #1. A total of **96 responses** were collected. The following takeaways were observed:

✓ The majority of respondents use a personal vehicle as their primary mode of transportation, though many also walk, bike, or carpool. Public transportation is used by fewer residents.

✓ Residents believe Gallatin County's roadways are safest for drivers, freight operators, and public transportation users, but most unsafe for non-motorists and motorcyclists.

✓ The community generally feels that drivers in the county are distracted, impatient, aggressive, and fast. Top perceived causes of crashes include distractions, excessive speeding, driving under the influence, congestion, and lack of enforcement.

✓ The community believes that infrastructure improvements, roadside enhancements, and traffic calming are the most effective strategies to improve safety in Gallatin County.

The community's top focus areas for addressing fatal and serious injury crashes include inattentive drivers, speed, impairment, and intersection crashes as shown in **Figure 3**.

Priority Focus Areas
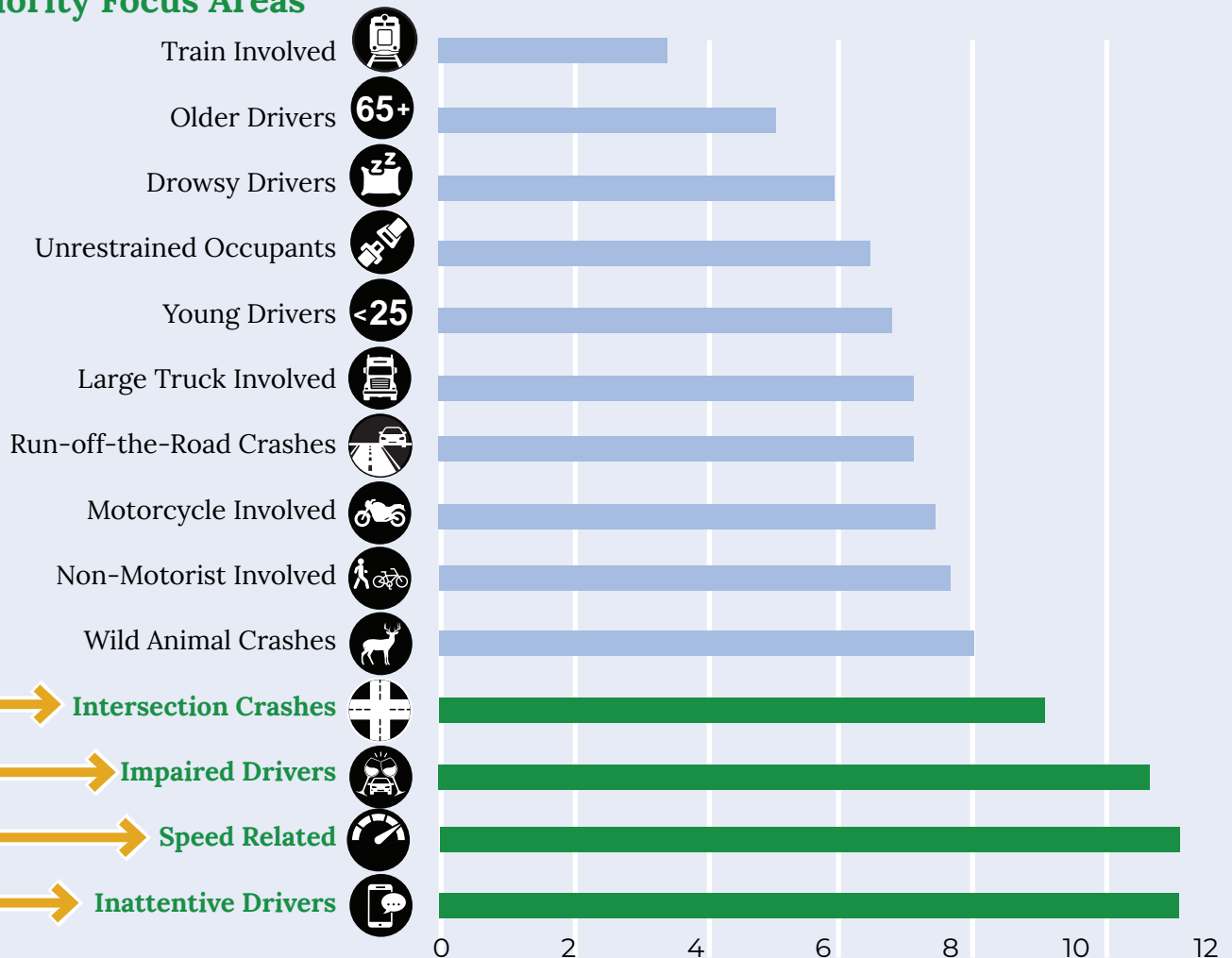
Figure 3: Public Priority Focus Areas (Survey)

2.3. Safety Summit

Safety Summit

On March 12, 2025, Gallatin County hosted a Safety Summit at the Gallatin County Detention Center Community Room. The purpose of the summit was to **bring together community leaders from a variety of disciplines**, including engineering, law enforcement, public health, education, emergency response, and multimodal advocacy, to collaborate on strategies, projects, and policies aimed at addressing Gallatin County's key safety concerns. The event also provided an opportunity to **build support for the implementation of the Action Plan**, ensuring a coordinated effort to improve road safety across the county.

Safety Summit

Formatted as an in-person workshop, the summit began with an overview of the SS4A program and a discussion of the planning process. This was followed by roundtable discussions on the four focus areas: intersection crashes, run-off-the-road crashes, driver age, and high-risk behaviors. A total of **27 stakeholders participated**, contributing their insights and expertise related to transportation safety. The event concluded with a group report-out, where participants identified opportunities and strategies to improve safety and reduce traffic fatalities and serious injuries in Gallatin County. Members of the planning team facilitated the event, answering questions and guiding the dialogue, ensuring a collaborative and productive session.

KEY TAKEAWAYS

✓ **Improve Roadside Design** (*Shoulders, Ditches, Slopes, etc.*)

✓ **Improve Intersection and Roadway Lighting**

✓ **Increase Driver's Education Opportunities**

✓ **Increase Fines & Penalties for High Risk Driving**

Safety Summit
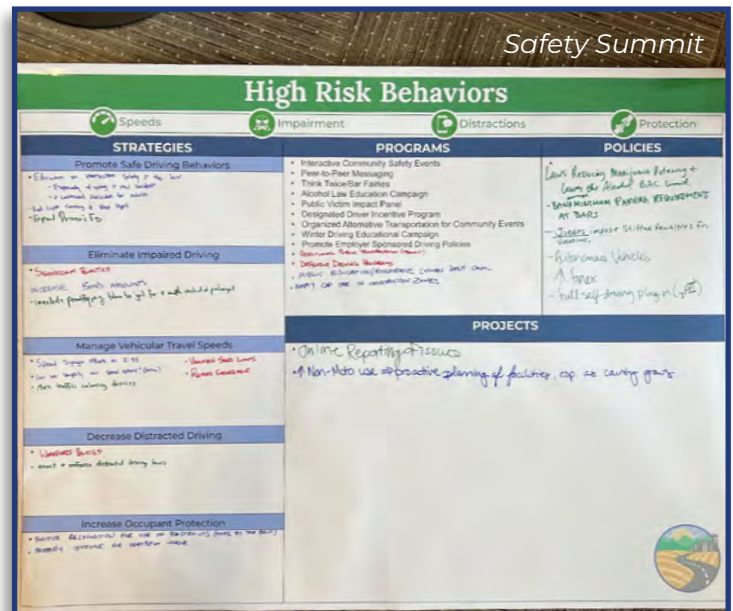
2.4. Public Outreach

Throughout the study, multiple public outreach events were organized to update the community on the Action Plan's progress and gather feedback regarding safety needs and concerns. Advance notice for each informational meeting was provided through various channels, including news releases sent to local newspapers and news stations, announcements shared via social media, emails to study contacts, and updates on the study website.

Virtual Public Meeting #1

The first Virtual Open House for the SS4A program was hosted on the project website from **Friday, December 6, 2024, to Sunday, January 5, 2025**. The purpose of the open house was to explain the SS4A program and planning process, share initial findings, gather feedback on preliminary issues and concerns within the study area, and identify community priorities for the effort.

A video was created to provide a high-level overview of the SS4A program, the development of the Action Plan, and its intended outcomes. Informational sheets summarizing key takeaways from the baseline data review were also provided to disseminate initial findings and supplement the online engagement tools.

To facilitate public participation, several engagement tools were made available. The survey, noted previously, was heavily advertised during the virtual public meeting to ensure a broad representation of community priorities and safety concerns, ensuring that participants had the opportunity to voice their opinions. An online commenting map was promoted to gather feedback on problem areas within the transportation network. A Mentimeter poll featuring open-ended questions such as **"What can YOU do to improve transportation safety in Gallatin County?"** encouraged self-reflection on safety behaviors. Participants were invited to submit feedback through these interactive platforms or by providing written responses directly to the planning team.

This virtual open house successfully engaged the community, allowing for a wide range of input to inform the SS4A planning process. Over the month-long engagement period, the survey gathered 96 responses, the comment map collected 175 comments, 9 responses were submitted via the Mentimeter poll, and 19 written comments were also received. **Figure 4** shows the website engagement over the virtual open house period.

> " Look out for pedestrians and bicycles on the roadway and at crosswalks. "

> " Better maintain roadway surfaces, fill pot holes and broken pavement at intersections. "

> " Discourage tailgating and speeding (with low law enforcement leading by example!) Create more signage for speed and control dangerous intersections. "

Figure 4: Website Engagement – Virtual Open House #1

Virtual Public Meeting #2

A second virtual open house was hosted on the project website from **Friday, April 4, 2025, to Sunday, May 4, 2025**. The open house provided an overview of the study's progress, summarized the proposed strategies, projects, programs, and policies, and offered access to the draft Action Plan. The virtual open house was held over a 30-day period, coinciding with a formal public review period for the draft plan.

The open house included a variety of interactive content to share information about the Action Plan. A short video provided the public with a high-level overview of the draft plan and proposed recommendations. More detailed information on the proposed strategies, recommendations, and prioritization process was presented through graphical exhibits. An interactive survey was also included to help the project team confirm the proposed project recommendations and prioritization approach.

The survey asked participants to rank each proposed project recommendation by priority (Highest Priority, High Priority, Medium Priority, Low Priority, Lowest Priority) and to indicate if any key project locations were missing. A total of 18 people participated in the survey.

Figure 5 summarizes the prioritization results, including a composite score for each project. The composite score was calculated by assigning 5 points to "Highest Priority" responses and 1 point to "Lowest Priority" responses, then dividing by the total number of responses. The maximum possible score was 5.

PROJ-11: Huffine Shared Use Path received both the highest number of total responses and the most "Highest Priority" selections. **PROJ-16: US 191 Improvements** received fewer responses but achieved the highest composite score. The lowest-priority projects were PROJ-14: Axtell Anceny Road, PROJ-3: Cameron Bridge Road, and PROJ-1: Curve Signing Enhancements.

Overall, the survey results generally aligned with earlier community feedback, with the exception of PROJ-3, which received several comments on the interactive map but was ranked lower in the survey.
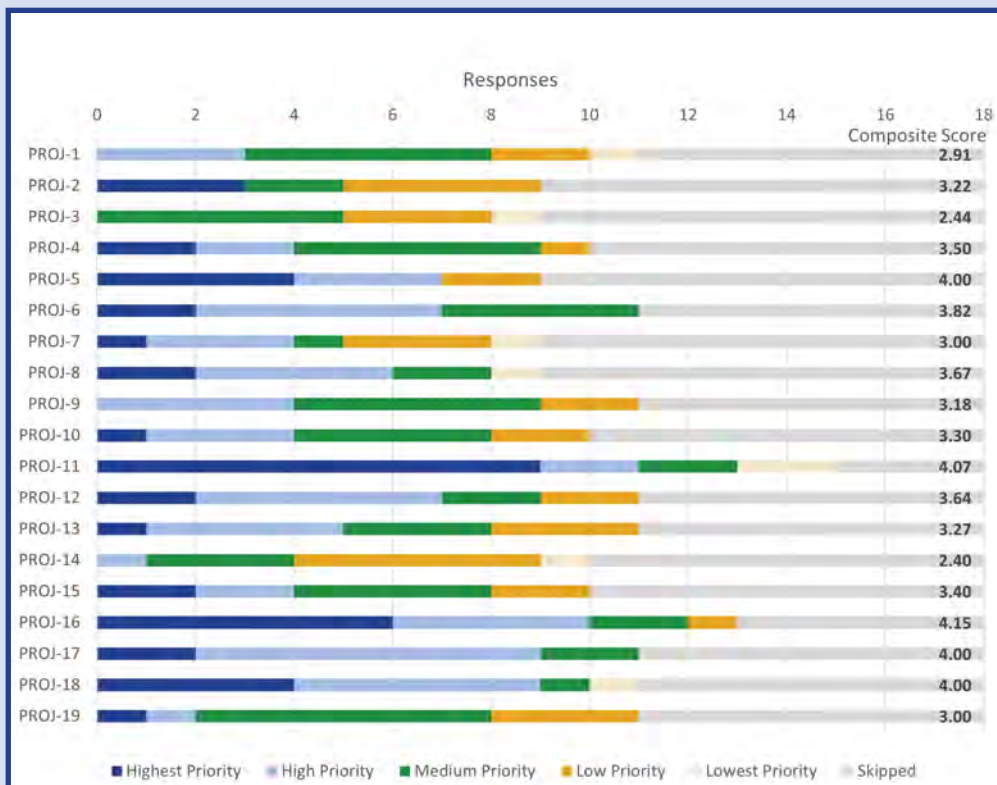

Figure 5: Virtual Open House #2 Prioritization Results

2.5. Public Comments

Throughout the planning process, a variety of public comments were collected through multiple channels, including the plan website, direct communication with study representatives, the online commenting map, and interactive exercises during virtual public meetings. This diverse feedback allowed community members to express their concerns and suggestions regarding transportation safety. Below is a summary of the key themes.

- **Increased bicycle/pedestrian infrastructure:** Many respondents emphasized the need for safer, more accessible facilities for cyclists and pedestrians. There was a strong call for expanding and improving shared-use paths, bike lanes, and widened shoulders in rural areas.

- **Lack of shoulders on county roads:** A common concern was the absence of shoulders on many county roads, which leaves little recovery space for vehicles, especially in adverse weather and road conditions. The lack of shoulders also poses a danger for cyclists and pedestrians who must share the roadway with vehicles. Residents suggested adding wider shoulders to heavily trafficked county roads.

- **Increased transit options:** Public transportation was identified as an area in need of improvement. Many respondents expressed interest in expanding bus routes to areas like Four Corners, increasing service frequency, and providing more accessible transit options, particularly for residents in rural areas without personal vehicles.

- **Slower traffic speeds:** Many community members felt that speeding was a major factor contributing to crashes and felt that lowering speed limits in certain areas could help reduce crashes and improve overall safety.

- **Driver distraction:** Many respondents identified distracted driving, such as texting or using a phone while driving, as a significant concern. Some acknowledged their own susceptibility to distractions.

- **Increased connectivity:** There was a strong desire for better connectivity between rural areas and larger communities like Bozeman and Belgrade. This includes improving road access, developing new routes, and better integrating different transportation modes to create a more seamless travel experience for residents.

- **Increased enforcement:** Several comments highlighted the need for more law enforcement to ensure traffic laws are followed, particularly in areas prone to speeding, impaired driving, and distracted driving.

- **Improved roadway maintenance:** Many residents noted that poorly maintained roads—such as those with potholes, faded striping, inadequate signage, or overgrown vegetation—contribute to crashes and hazardous driving conditions. Public input called for more consistent maintenance to improve road conditions and ensure safety for all users.

- **Accommodations for wildlife:** Wildlife collisions were frequently mentioned as a concern, especially in rural areas of the county. Respondents recommended the installation of wildlife crossing signs, underpasses, or overpasses to reduce the risk of wildlife-related incidents and protect both animals and drivers.

- **Difficulty turning from minor streets:** Residents expressed frustration with the difficulty of turning onto major roads from minor streets or driveways, particularly in areas with high traffic volumes. Suggestions included adding turning lanes, improving visibility, or creating better traffic control measures to ease these maneuvers and reduce crashes.

Chapter Three

3. Baseline Data Summary

For this effort, the MDT Traffic and Safety Engineering Bureau provided crash data for the 5-year period from **January 1, 2019, to December 31, 2023**. The data included all crashes that occurred within Gallatin County but outside the city limits of Bozeman and Belgrade. This information includes data from crash reports submitted by Montana Highway Patrol (MHP) officers and local city, county, and federal law enforcement officials. The crash reports are a summation of information from the scene of the crash provided by the responding officer. Some of the information contained in the crash reports may be subjective.

Crash records were analyzed to determine contributing factors, high-risk areas, and behavioral characteristics. User behavior, such as the use of proper safety equipment (i.e., seatbelts or helmets), impairment, and adherence to traffic laws, is analyzed only when a crash is reported. There are likely many other instances in which these and other improper behaviors occur without resulting in a reported crash. The purpose of this analysis is only to analyze the circumstances of reported crashes to identify trends and contributing factors so that the county, in coordination with local stakeholders, can address these issues and improve safety on the community's roadways.

3.1. Data Challenges and Limitations

Although historic crash data can help identify trends in behavioral and circumstantial contributors to crashes within Gallatin County, there are several challenges and limitations that should be acknowledged and considered when drawing conclusions from the data.

- **Underreported Data:** Many crashes, especially those where individuals and vehicles are unharmed, do not get reported to the police. Underreporting can limit the ability to properly and effectively manage road safety, since crash analyses can only be based on reported crash data. Similarly, near-miss occurrences often are not reported due to lack of property damage or injury. Although near-misses do not result in a reportable crash, these experiences can indicate significant safety issues that should be proactively addressed so a crash does not occur in the future.

- **Unknown Data:** For many crash records, various fields are left blank by the reporting officer. Without this information, it may be difficult to capture a complete understanding of what happened before, during, and after a crash.

- **Inconsistent Data:** Inconsistencies in reporting, either by the reporting officer or by the individual entering data into the MHP or state database, can also lead to misrepresentation of crash details.

- **Abbreviated Data:** Often times the abbreviated crash data provided by MDT does not provide a full account of the crash circumstances.

3.2. Crash Characteristics

MDT's crash records included a total of **6,739 crashes** reported within Gallatin County but outside the city limits of Bozeman and Belgrade over the 5-year analysis period. The following sections summarize crash details and other characteristics associated with these crashes. The characteristics summarized in this section were evaluated as reported by the responding officer, and no efforts have been made to correct inconsistencies or fill in missing fields.

Severity

Crash severity is categorized based on the most severe injury resulting from the crash. For example, if a crash results in a possible injury and a suspected serious injury, the crash is reported as a suspected serious injury crash. A suspected serious injury is defined as an observed injury, other than a fatality, which would prevent the injured individual from walking, driving, or normally continuing the activities they were capable of performing before the injury. The term "suspected" references an officer's observation at the time of the crash without follow-up confirmation of the nature of the person's injury. **The term "severe injuries" is used to refer to the combined total of fatal and suspected serious injuries.**

During the 5-year analysis period (2019-2023), a total of 6,739 crashes occurred involving 13,116 individuals. As shown in **Figure 6**, about 20 percent of those crashes resulted in some level of injury, and less than 3 percent were severe. There were 33 fatal crashes, resulting in 38 total fatalities, and 168 suspected serious injury crashes, with 192 total suspected serious injuries. About 14 percent of individuals involved in crashes, were injured to some degree (suspected minor or possible injury) as a result of a crash. Approximately 80 percent of crashes were reported as causing property damage only or as unknown severity.

13,116 people involved in **6,739** crashes

Fatal
33 Crashes   **38** Fatal Injuries

Serious Injury
168 Crashes   **192** Serious Injuries

Minor/Possible Injury
1,164 Crashes   **1,576** Injuries

PDO/Unknown
5,374 Crashes   **11,310** Non-Injuries
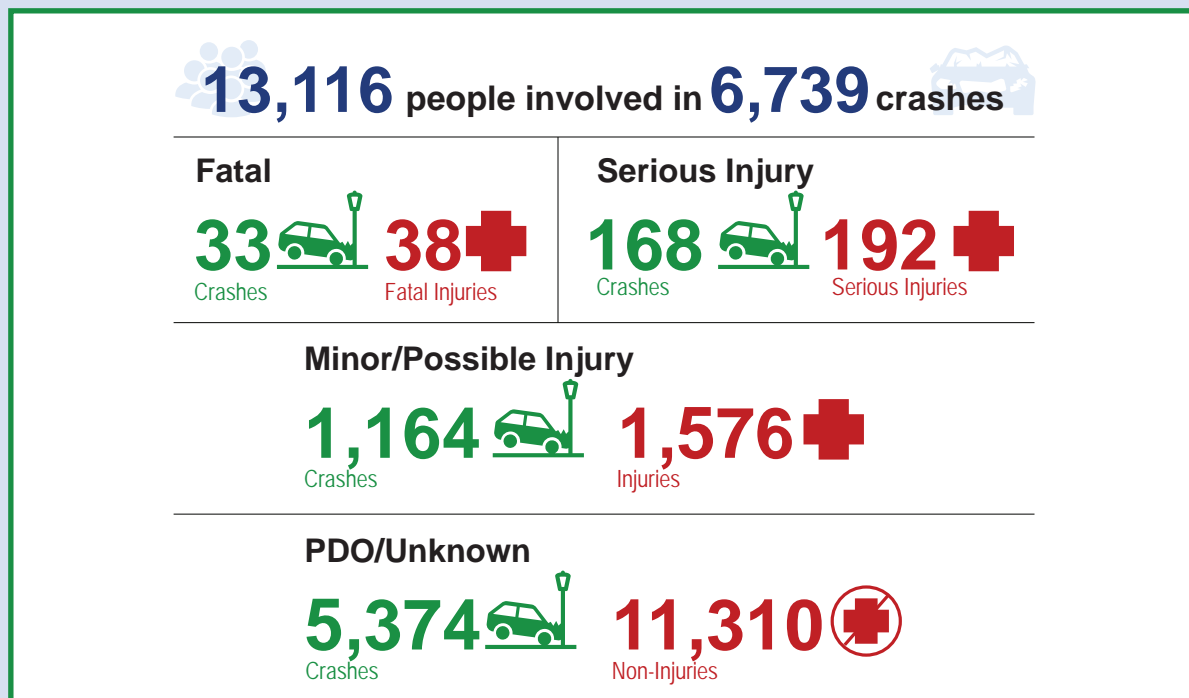
Figure 6: Total Crashes and Injuries

Evaluating crash location can help identify concentrations or area characteristics corresponding to a higher risk of occurrence. **Figure 7** shows the density of crashes across Gallatin County as well as the location of severe crashes within the study area. This map generally shows higher concentrations of crashes in areas with higher traffic volumes which are typically more congested than other areas of the county, leading to greater traffic exposure and a higher risk of conflicts. However, there are several severe injuries on low-volume county roads, which may indicate an area of concern.
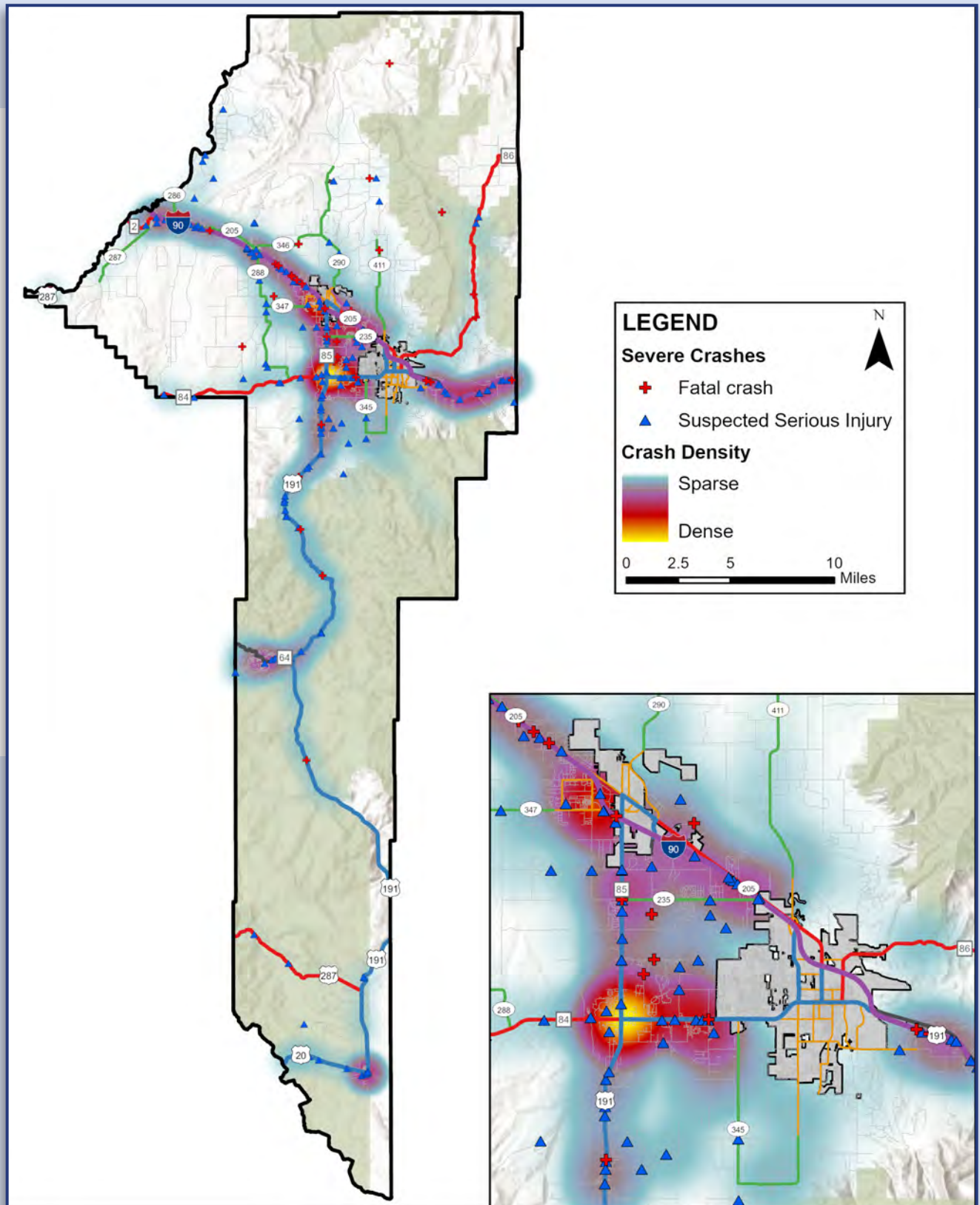
Figure 7: Crash Density and Severe Injury Locations
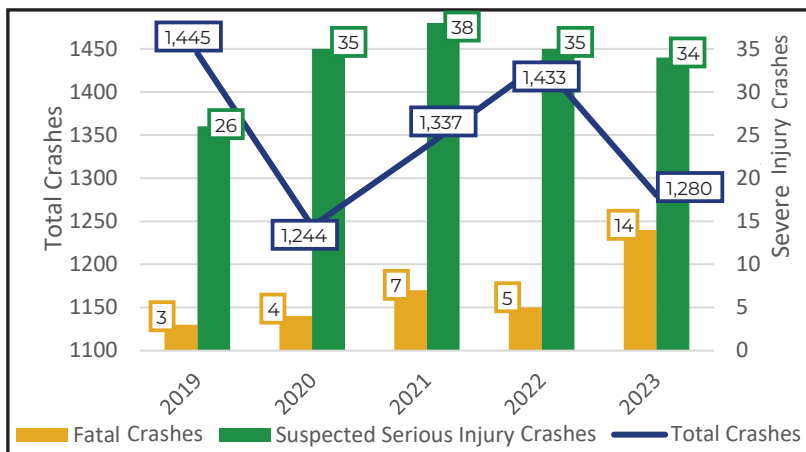
Figure 8: Total Severe Crashes by Year
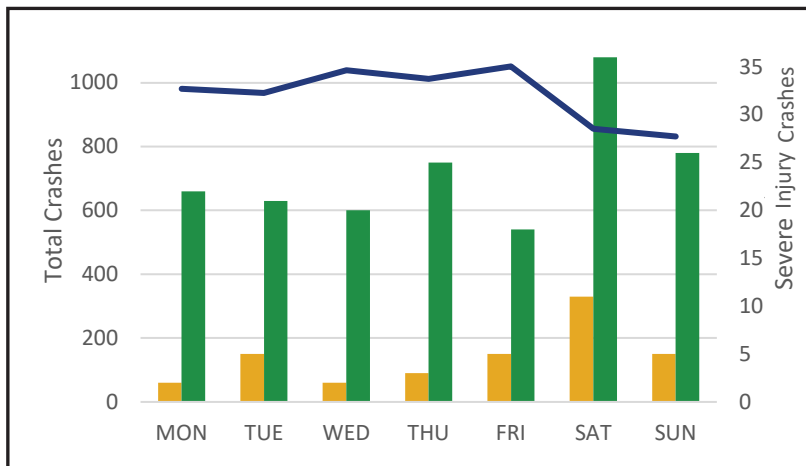
Figure 9: Total Severe Crashes by Weekday
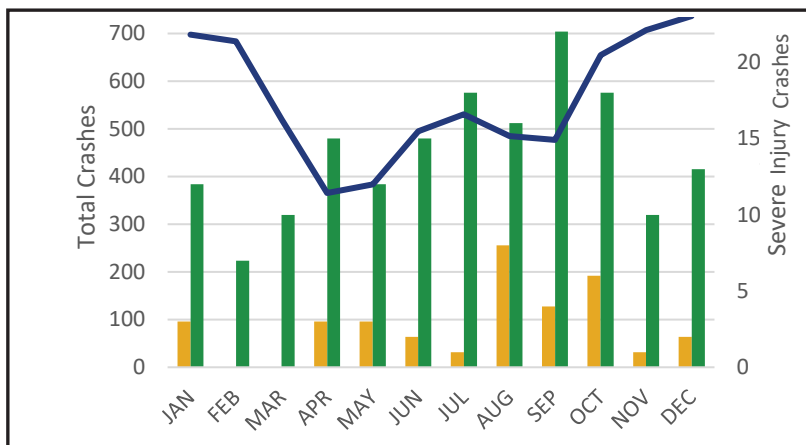
Figure 10: Total Severe Crashes by Month
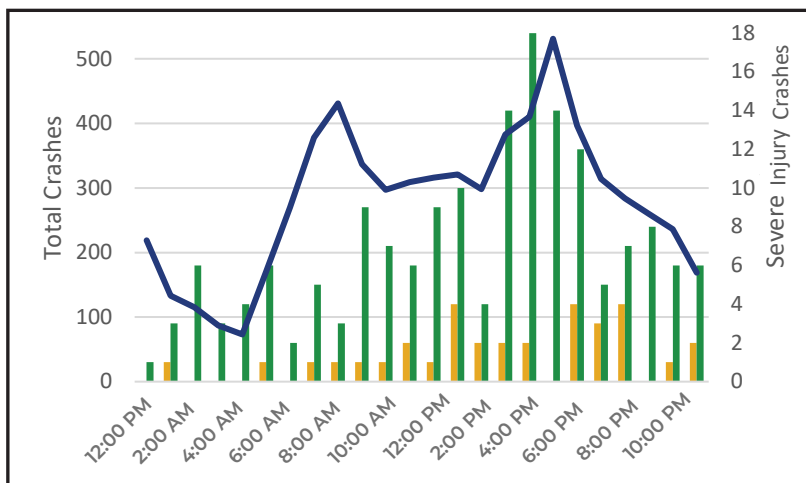
Figure 11: Total Severe Crashes by Hour

Crash Period

The number of total and severe injury crashes reported per year is presented in **Figure 8**. Crash records indicate a dip in total crashes in 2020, likely attributed to decreased driving activity during the COVID-19 pandemic, with an increase back to 2019 levels over 2021 and 2022. The number of reported crashes then decreased back to 2020 levels in 2023. The number of fatal crashes steadily increased over the 5-year period, with a small decrease in 2022. Meanwhile, serious injury crashes rose from 2019 to 2021, then decreased from 2021 to 2023.

The distribution of crashes based on the day of the week on which the crash occurred is presented in **Figure 9**. When evaluating all crashes, a higher number of crashes occurred on weekdays (75 percent) compared to weekends with the most crashes occurring on Friday. This suggests a possible trend with regular commuting patterns and generally higher traffic exposure on weekdays. However, severe crashes occurred more often on weekends.

Figure 10 shows the distribution of reported crashes based on the month in which the crash occurred. Approximately 27 percent of crashes occurred in the fall months (September through November), while 31 percent occurred in the winter months (December through February). Although crashes were lowest in the spring and summer, more severe crashes occurred in fall (30 percent) and summer (30 percent) over the 5 years.

The time-of-day distribution for crashes is presented in **Figure 11**. Prominent peaks can be seen at two points throughout the day, around 8:00 AM and 5:00 PM. Severe crashes generally follow the same pattern with a more distinct peak occurring between 3:00 PM and 6:00 PM. These timeframes likely correspond to morning and evening commutes, and school start and release times when traffic volumes are typically higher, and roadways are generally more congested. Crashes that occur during the evening, late night, and early morning hours (between 7:00 PM and 7:00 AM) make up about 25 percent of all reported crashes. However, these time periods are disproportionately represented in severe crashes (34 percent).

Intersection Relation

As shown in **Figure 12**, approximately 22 percent of all crashes occurred at an intersection or were related to an intersection (i.e., rear-end crashes related to congestion at an intersection). About 4 percent of crashes occurred at a driveway or other access type, while 73 percent occurred at a non-junction location.

In terms of severity, 76 percent of severe crashes occurred at non-junction locations. The distribution of total versus severe crashes occurring at non-junctions is very similar. This indicates that intersections do not appear to significantly influence the occurrence of crashes within the county.

Junction Type

- DRIVEWAY/ALLEY ACCESS RELATED 4%
- OTHER 1%
- INTERSECTION-RELATED 22%
- NON-JUNCTION 73%
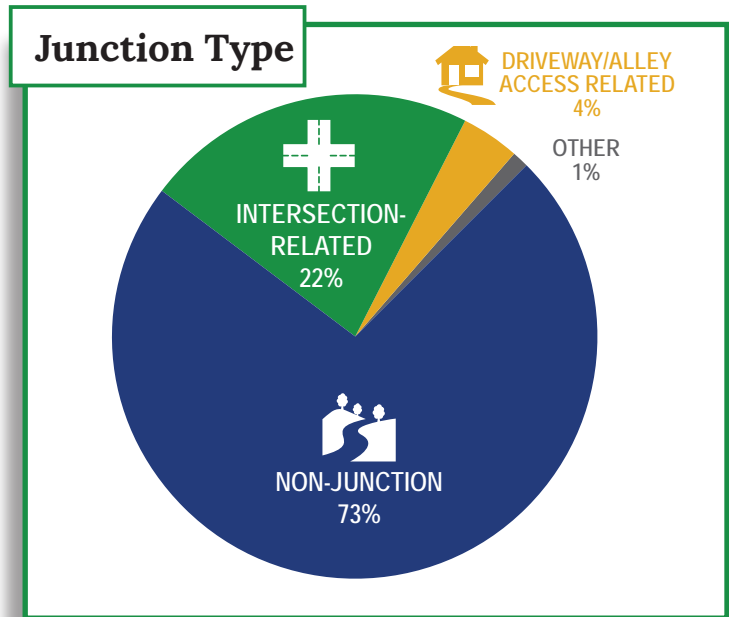
Figure 12: Crash Location

Crash Type

Multi-vehicle crashes accounted for 41 percent of all reported crashes with a total of 2,749 crashes. The most common multi-vehicle crashes were rear-end (14 percent), right-angle (9 percent), and sideswipe crashes (7 percent). Rear-end collisions contributed to 12 percent of severe crashes while right-angle collisions made up 9 percent.

Single-vehicle crashes represented 59 percent of crashes with 3,990 total crashes. Fixed-object crashes were the most common single-vehicle crash type (47 percent) but were responsible for only 15 percent of severe crashes. Fixed objects involved in crashes included utility poles/sign supports, guardrails and bridge rails, curbs, ditches, trees, and fences. Rollover crashes were the next most frequent single-vehicle incidents, (24 percent) and the most common severe crash type (35 percent). Collisions with wild animals accounted for 21 percent of single vehicle crashes.

Figure 13 presents the distribution of multiple- and single-vehicle crashes within the study area.

Crash Type	Percent
Fixed-Object	28%
Rollover	14%
Animal	12%
Pedestrian	0%
Other/Unknown	5%
Rear-End	14%
Right-Angle	9%
Sideswipe	7%
Turn	3%
Head-On	2%
Backing Vehicle	2%
Bicycle/Pedestrian	0%
Other/Unknown	3%

Figure 13: Crash Type

Vulnerable Road User Crashes

Of the 6,739 crashes that occurred during the 5-year analysis period, just under 0.5 percent involved vulnerable road users. A total of **11 bicycle and 13 pedestrian related crashes** occurred within the analysis period. About 27 percent of pedestrian and bicycle crashes were severe. Non-motorists were also reportedly involved in other crash types such as railway vehicle, rear-end, and fixed-object crashes. This indicates that a non-motorist may have been the cause of a crash but not directly involved in the collision. For example, a rear-end crash may occur when a vehicle stops for a pedestrian in a crosswalk, but the following vehicle does not see the pedestrian and does not expect the vehicle in front to stop.
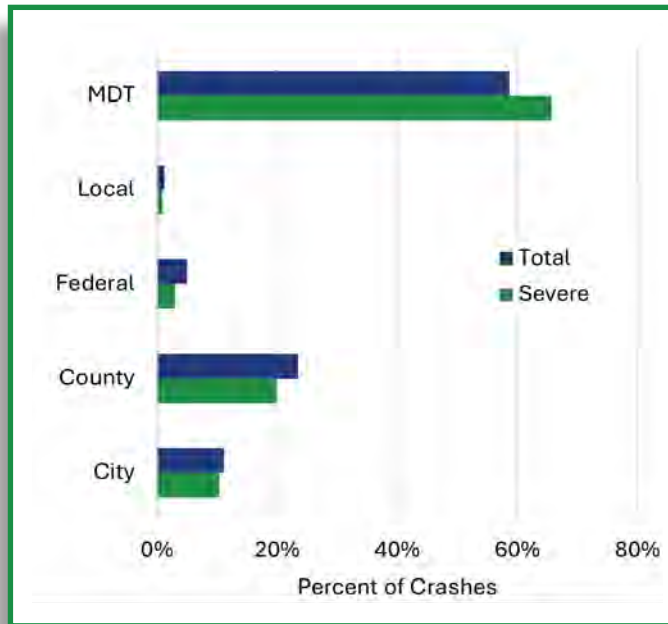
Figure 14: Crashes by Roadway Owner

Roadway Ownership

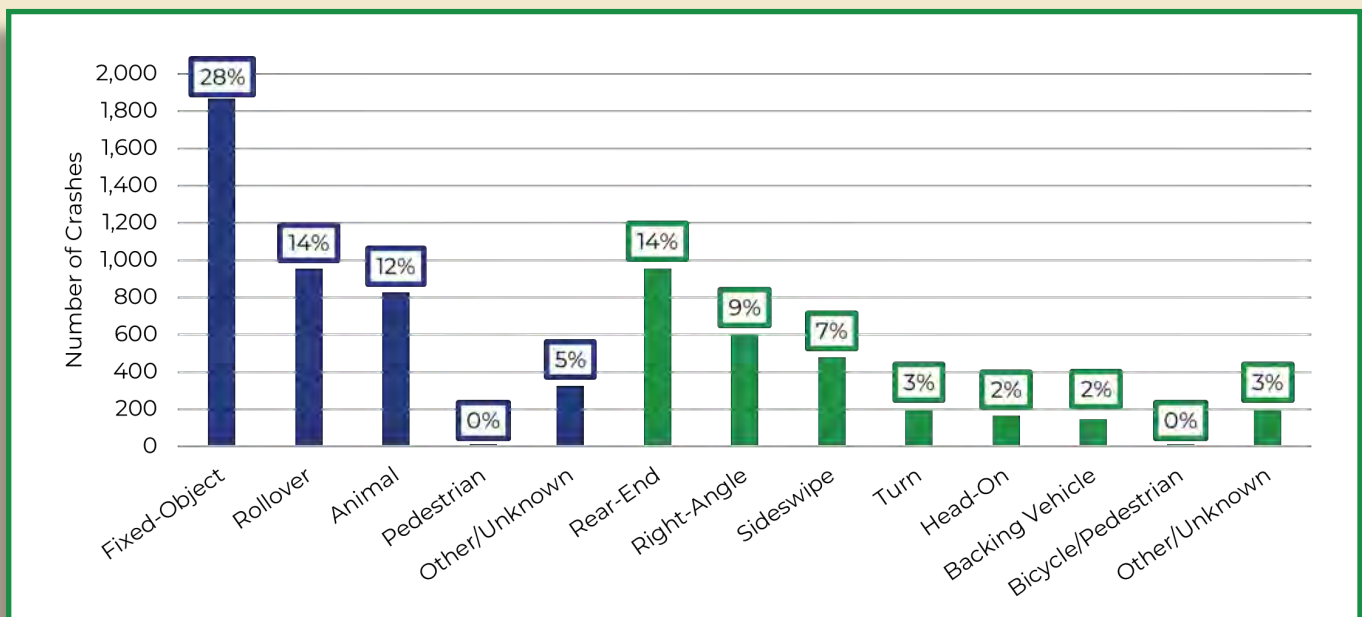As shown in **Figure 14**, approximately 59 percent of crashes occurred on MDT routes, while 23 percent of crashes occurred on Gallatin County roads. City-owned routes accounted for 11 percent of crashes, while federally-owned routes (i.e., Forest Service or National Park Service) accounted for 3 percent. Of the severe crashes, 66 percent occurred on MDT routes and 31 percent occurred on locally owned routes. These findings point out the **importance of interagency coordination** since it is not just a single agency that is responsible for the roadways where crashes occur.

Speed

Figure 15 shows the number of crashes occurring on roadways with various speed limits. While the posted speed limit doesn't necessarily indicate the speed at which a vehicle was traveling at the time of the crash, it is generally a good indication. Approximately 15 percent of crashes occurred on roadways with a posted speed limit of 25 miles per hour (mph) or less, which is typical for local, neighborhood streets. Around 27 percent of crashes took place on roads with speed limits between 30 and 45 mph, while about 28 percent occurred on roadways with speed limits ranging from 50 to 65 mph. The highest percentage of crashes, 29 percent, occurred on routes with speed limits of 70 mph or above.

Crashes occurring at 70 mph or more were much more likely to be severe than crashes occurring at any other speed. Crashes on roads with a speed limit of 70 mph or above were found to be more than twice as likely to result in a serious injury compared to crashes on roads with a speed limit of 25 mph or below.

Figure 15: Crashes by Speed Limit
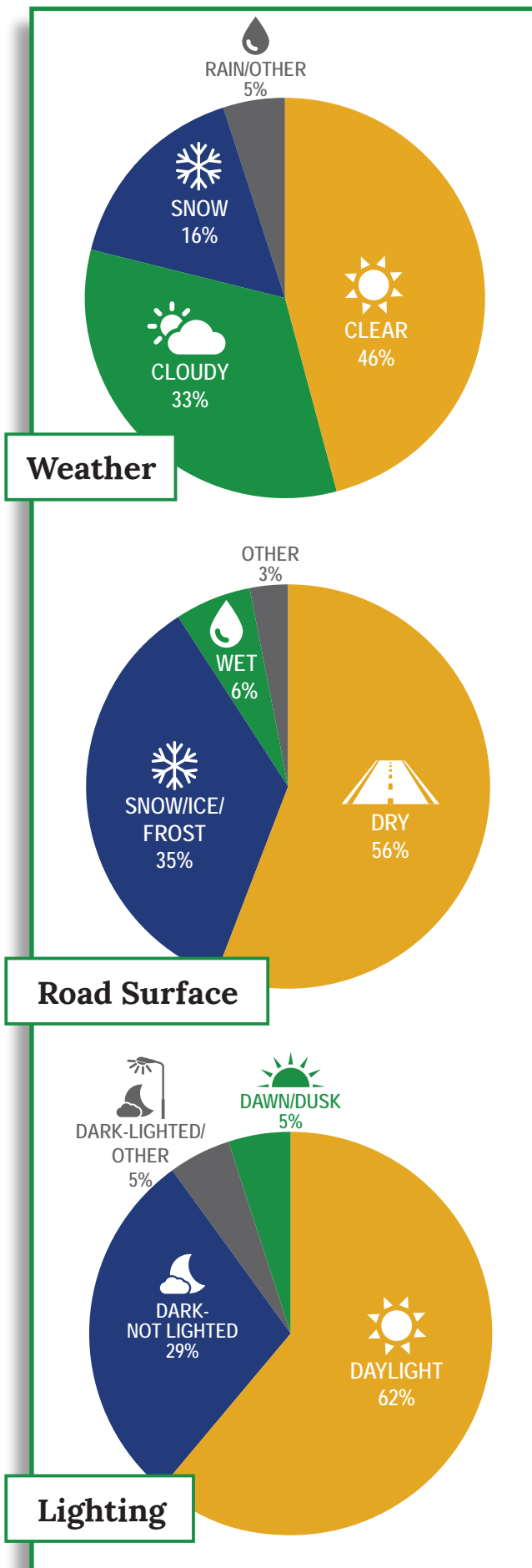
Figure 16: Weather, Road, and Lighting Conditions

Environmental Conditions

Figure 16 illustrates the percentages of crashes that occurred under various weather, road surface, and lighting conditions over the 5-year crash period. **The majority of crashes occurred when the weather was clear or cloudy** (46 and 33 percent, respectively). Approximately 16 percent of crashes occurred when it was snowing, and 3 percent occurred when it was raining. Severe crashes were most likely to occur under clear weather conditions (54 percent) and less likely to happen in adverse weather, with only 8 percent occurring in snow and 3 percent in rain.

While the majority of crashes occurred when the road surface was dry (56 percent), **about 41 percent occurred under adverse road conditions**, including snow-covered (13 percent), icy/frost-covered (22 percent), and wet (6 percent) roads. Of the severe crashes, 73 percent occurred on clear roads, while only 24 percent took place on wet, snowy, or ice- and frost-covered roads. Crashes occurring under adverse road or weather conditions could indicate a lack of maintenance of roadway facilities or a lack of skill, experience, or care driving in adverse conditions, however, this finding is inconclusive.

Overall, 62 percent of crashes in Gallatin County occurred during daylight conditions. About 34 percent of crashes occurred when it was dark outside, with about 85 percent of those **crashes occurring in locations where street lighting was not present**. The remaining 5 percent of crashes occurred at dusk or dawn. Of the severe crashes, 64 percent occurred under daylight conditions. Dark lighting conditions accounted for 28 percent of severe crashes, with 24 percent occurring on unlit roads and 4 percent on lighted roads.

Contributing Factors

In the majority of cases, contributing circumstances are not reported by local enforcement officers, however, when reported may indicate whether the crash was due to driver error or a circumstance outside the driver's control. A summary of top contributing factors is shown in **Figure 17**.

In terms of environmental circumstances, weather or lighting (glare) conditions were a contributing factor in 7 percent of crashes while animals in the roadway or physical obstructions were noted as factors in 13 percent of crashes. In terms of roadway circumstances, road surface conditions, such as wet, icy, or snow-covered surfaces, were a factor in 34 percent of crashes. Debris and obstructions in the roadway were listed as a contributing circumstance in 1 percent of crashes. Uneven road surfaces, poor shoulders, work zones, and missing or inoperative traffic control devices were each recorded as contributing circumstances in less than 1 percent of crashes.

The most common driver contributing action was driving too fast for conditions, accounting for 20 percent of drivers involved in crashes. This does not necessarily indicate the driver was speeding, rather it could mean the driver was driving too fast for the road conditions, such as snow-covered roads, work zones, or congestion. About 20 percent drivers were driving in a distracted, inattentive or careless manner at the time of the crash. Failure to keep in the proper lane (13 percent), over-correcting (10 percent), and failure to yield right-of-way (7 percent) were the next most common contributing factors. About 39 percent of drivers were found to have no contributing action in the crash.

In the study area, approximately 12 percent of all crashes involved an impaired driver, compared to 42 percent of severe crashes. Within the study area, **crashes with impaired drivers were over five times more likely to be severe**.

20% Environmental Circumstances **37%** Poor Road Conditions **12%** Impaired Drivers **20%** Distracted/Inattentive/ Careless Drivers

20% Drove Too Fast For Conditions **10%** Over Correcting **20%** Failure to Yield/Keep in Proper Lane
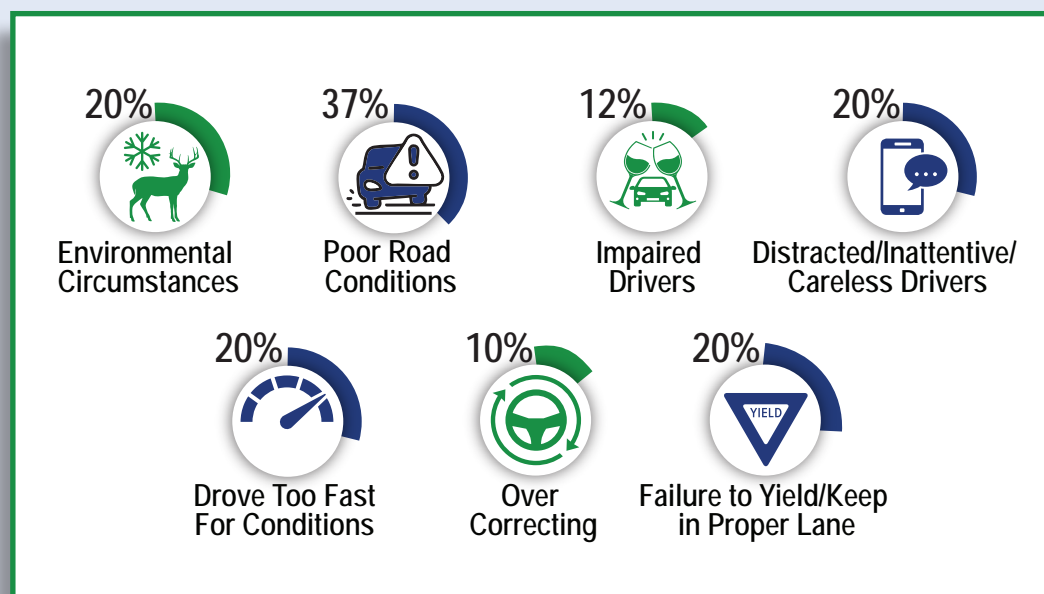
Figure 17: Top Contributing Factors in Crashes

3.3. Demographics

An important component of the crash data analysis includes consideration of demographics in terms of both the demographics of the individuals involved in crashes as well as the demographic characteristics of Gallatin County as a whole. A demographic analysis was conducted to help identify disparities of people involved in crashes as well as potential populations disproportionately affected by crashes or at a higher risk of involvement in crashes due to economic or social circumstances.

Overall, about 33 percent of drivers involved in crashes were female and 67 percent were male. About 69 percent of drivers involved in severe crashes were male, while the remaining 31 percent were female drivers. In Gallatin County, females comprise 48 percent of the population and males make up 52 percent.

The age distribution for drivers involved in crashes generally follows a typical bell curve, but skews slightly older, as shown in **Figure 18.** Drivers aged 22 through 34 make up 35 percent of drivers involved in crashes in the study area, despite composing only 16 percent of the population. The legal driving age in Montana is 14.5, and 10 drivers involved in crashes were under that age. People aged 65 and over make up 17 percent of the population but only 9 percent of drivers involved in crashes.
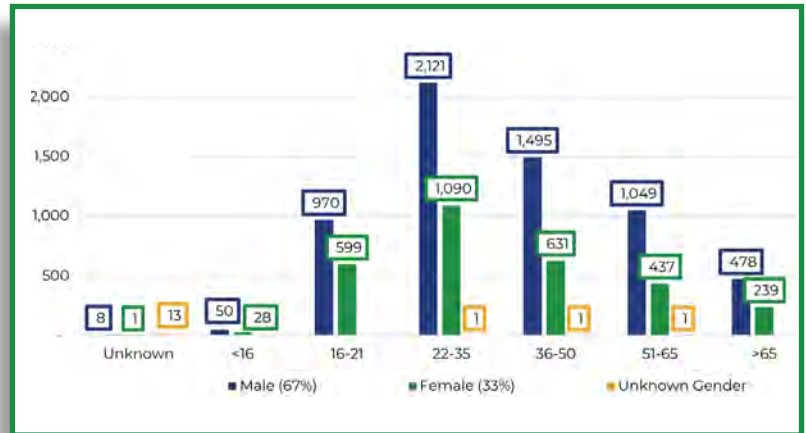
Figure 18: Driver Age and Gender

3.4. High Injury Network

A high injury network (HIN) is a screening methodology that identifies areas within the transportation system with the greatest safety concerns. Jurisdictions across the country use various methodologies to develop local HINs depending on the availability of data in their jurisdiction. A HIN was created for Gallatin County by weighing the frequency of crashes and severity of injuries resulting from crashes. This method helps identify and prioritize locations with high crash occurrences or especially severe crashes.

The HIN was calculated on an intersection and corridor basis. Both HINs were calculated in four different ways to analyze a combination of all roads compared to off-system roads both with and without crash rates. The off-system network analysis was conducted to place added emphasis on roads within the county's primary jurisdiction. The analyses that included a crash rate calculation were conducted only for parts of the network where traffic data was available. By using four different methods to visualize the HIN, areas that show up multiple times can be identified as possible problems. The HIN was the basis for the development of many of the project recommendations. Detailed HIN mapping and results can be found in **Appendix B**.
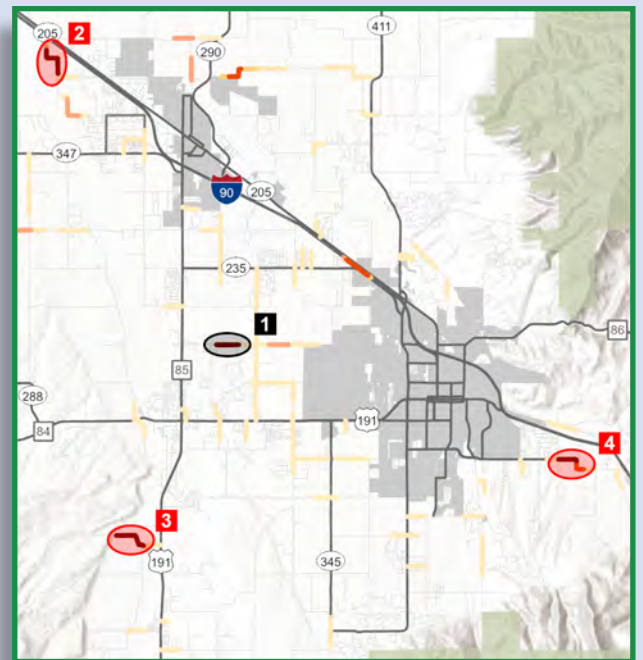
Chapter Four

4. Focus Areas

Identifying the types of crashes predominantly contributing to community safety problems can help in effectively expending limited resources. The development of focus areas represents a standard approach to roadway safety by evaluating high-risk populations, crash types, infrastructure/hazards, behaviors, and transportation modes.

In order to determine which of the focus areas are the most prevalent in Gallatin County, the number of total and severe injury crashes occurring within each focus area over the 5-year analysis period from 2019 to 2023 were totaled, as shown in **Figure 19** on the following page. It is important to consider the number of severe crashes compared to the total number of crash occurrences within each focus area. For example, although fewer crashes involved impaired drivers, a high number of severe injuries resulted from crashes involving impaired drivers. Although it is desirable to reduce the total number of crashes, the SS4A program highlights the importance of decreasing the number of severe injuries resulting from crashes.

Based on the baseline data analysis, it was determined that 4 focus areas would be selected to investigate in further detail. Due to similarities in the strategies to address certain focus areas, some of the focus areas were combined into broader categories. **The focus areas aligning with the total number of crashes and the highest severities were selected** as the focus areas that could have the greatest impact on safety within the community. These focus areas also aligned with public priorities gather through the survey discussed in **Section 2.2**. The selected focus areas are listed to the right:

- **Run-off-the-Road Crashes**

- **Intersection Crashes**

- **Driver Age** *(Younger and Older Driver Involved)*
  <25 65+

- **High Risk Behaviors** *(Speed Related, Unrestrained Occupants, Impaired Drivers, Inattentive Drivers)*
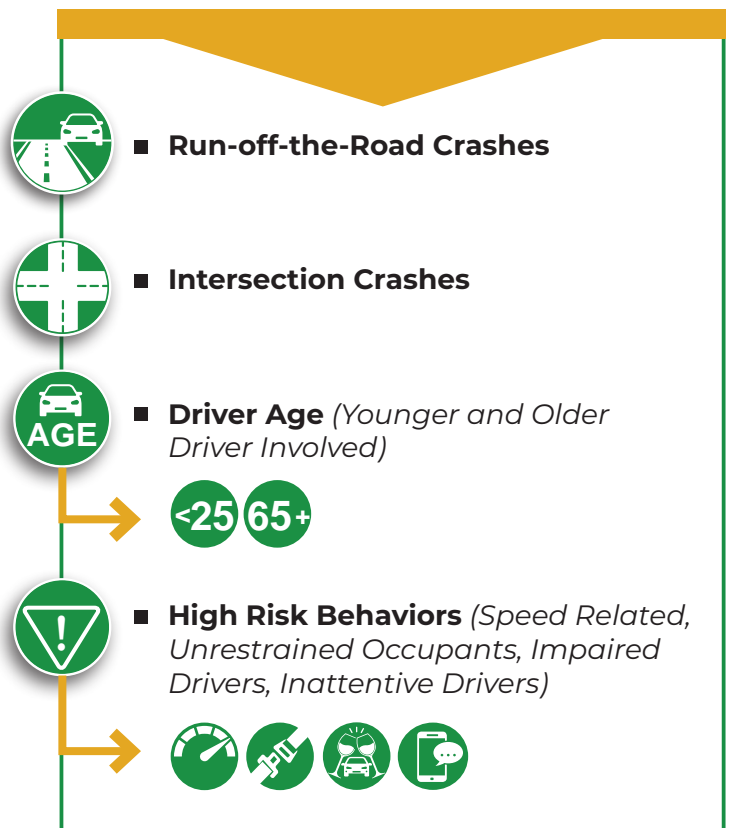
Note that there may be overlap between the focus areas. For example, a young, impaired driver crashing at an intersection would fall into at least three focus areas. Strategies addressing the selected focus areas will likely help address crash trends identified in other focus areas. The following sections describe the key focus areas, with additional detail provided in **Appendix B**.

TOTAL CRASHES

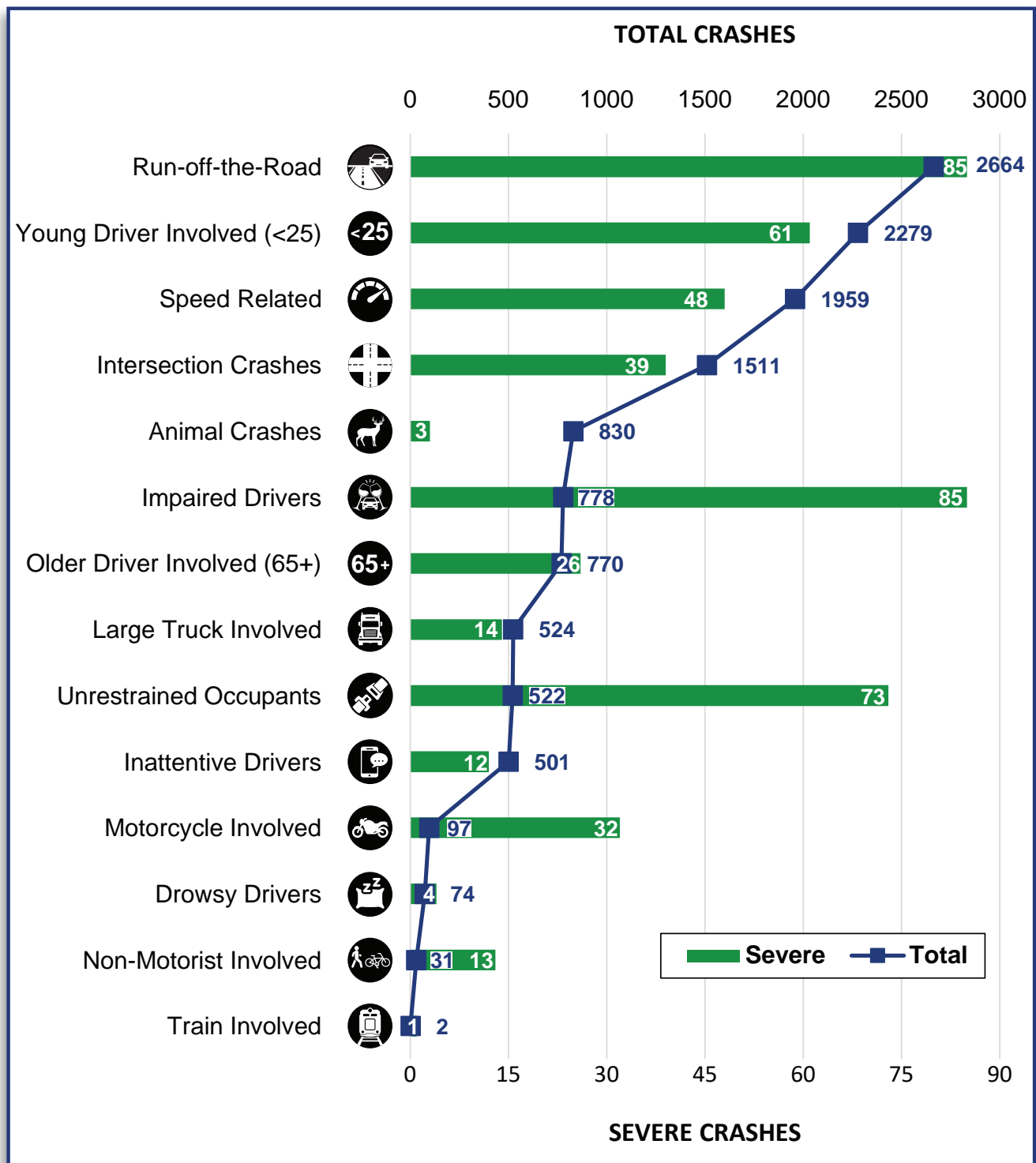| Focus Area	Severe	Total
Run-off-the-Road	85	2664
Young Driver Involved (<25)	61	2279
Speed Related	48	1959
Intersection Crashes	39	1511
Animal Crashes	3	830
Impaired Drivers	85	778
Older Driver Involved (65+)	26	770
Large Truck Involved	14	524
Unrestrained Occupants	73	522
Inattentive Drivers	12	501
Motorcycle Involved	32	97
Drowsy Drivers	4	74
Non-Motorist Involved	13	31
Train Involved	1	2

Legend: Severe, Total

SEVERE CRASHES

Figure 19: Total and Severe Crashes by Focus Area

4.1. Run-off-the-Road Crashes

A run-off-the-road crash is defined as a crash which occurs after a vehicle crosses an edge line or a center line or otherwise leaves the traveled way. Other terms used to describe these crashes include roadway departure or lane departure. A total of 2,745 run-off-the-road crashes were reported in the study area.

The analysis indicates that **weather conditions and driver behavior are the primary contributing factors** to run-off-the-road crashes in the study area. Winter weather, including icy, snowy, and wet road conditions, was found to significantly increase crash risk, particularly when vehicles failed to adjust speed in response to environmental conditions. Distracted and inattentive driving was also identified as a contributing factor to many of these crashes, as distractions can delay the driver's response to hazards or changing road conditions.

Further data analysis revealed that crashes were more frequent during commuting hours. **Nighttime run-off-the-road crashes occurred with higher frequency**, potentially attributed to reduced visibility, particularly in areas with inadequate lighting. Additionally, alcohol impairment was identified as a contributing factor to a significant number of run-off-the-road crashes.

4.2. Intersection Crashes

About a quarter of all crashes that occurred within the study area over the 5-year analysis period occurred at an intersection (876) or were related to an intersection (635).

Rear-end, right-angle, and fixed-object crashes were the most common intersection crash types. Weather conditions had a limited impact on the occurrence of intersection crashes, with fewer occurring in snow, rain, or on icy roads. Crashes were most frequent during daylight, and the majority of those that occurred at night, were on roads without street lighting. Winter months and the afternoon/evening were peak times for intersection crashes. Impaired driving, distracted driving, and failure to yield were the main contributing factors.

Intersection-related crashes had more rear-end collisions, while crashes directly at intersections involved more right-angle crashes with higher severities. Busy intersections with high traffic volumes were identified as crash hot spots, due to higher exposure rates.

Number & Severity

2,745 Crashes

27 Fatalities

108 Suspected Serious Injuries
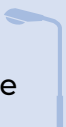
Environmental Factors

23% of crashes occurred when it was raining or snowing

55% of crashes occurred on wet, icy, snowy, or frost-covered roads

35% of the crashes occurred when it was dark outside with no street lighting

Crash Type

30% Rear-End
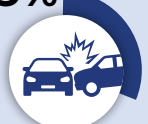
29% Right-Angle

16% Fixed-Object

8% Left Turn

4.3. Driver Age

Crashes involving younger drivers (under 25) and older drivers (65 and older) show distinct trends in the study area.

Younger drivers accounted for a third of all crashes, totaling 2,279 incidents. **Inexperience and risky behaviors** contributed to crashes such as running off the road, distracted driving, impairment, and speeding. Most crashes involving younger drivers occurred at non-junction locations, with a notable number happening during school release and evening commuting hours. Environmental factors played a role, with nearly half the crashes occurring in rainy, snowy, or icy conditions and about a third occurring at night. The most common crash types among younger drivers included fixed-object, rear-end, rollover, and right-angle crashes.

Older drivers, who accounted for 770 crashes, were most often involved in rear-end and right-angle collisions. These drivers, often facing **age-related declines in driving abilities**, experienced fewer weather-related incidents compared to younger drivers, though they still experienced crashes most frequently during the winter months. Crashes involving older drivers were predominantly during daylight hours, between 10 AM and 4 PM. While distracted driving was the most common contributing factor, older drivers were less likely to be impaired or driving too fast for conditions.

AGE

<25

Number & Severity

2,279 Crashes

2,438 are <25

65 Suspected Serious Injuries

7 Fatalities

Location

27% Non-Junction

68% Intersections

Crash Type

26% Fixed-Object

18% Rear-End

16% Roll Over

12% Right-Angle

65+

Number & Severity

770 Crashes

801 are 65+

26 Suspected Serious Injuries

3 Fatalities

Location

56%

36%

4.4. High Risk Behaviors

High-risk driving behaviors are significant contributors to crashes and severe injuries within the county. Behaviors such as speeding, failure to wear a seatbelt, driving under the influence of alcohol or drugs, and distracted or inattentive driving all **increase the likelihood of severe injuries during a crash**. Speeding reduces reaction time and vehicle control, while impairment affects judgment and coordination. Distracted driving, such as using a phone or eating, diverts attention from the road, and not wearing a seatbelt increases the risk of injury in the event of a crash. Research shows that **individuals who engage in one risky driving behavior are more likely to engage in others**, a phenomenon known as "clustering" of risky behaviors.

Speed-related crashes typically occurred at non-junction locations on high-speed, major roads, often resulting in fixed-object collisions and rollovers, with winter weather conditions, such as snow, ice, and frost, frequently playing a role. These crashes were more common in winter and during daylight hours, with younger drivers frequently involved. Contributing factors included running off the road, over-correcting, and distraction.

Crashes involving unrestrained occupants were more likely to occur with impaired drivers, a trend that is associated with clustered high-risk behaviors. These crashes often involved younger male drivers, with distractions and reckless driving being common factors. Interestingly, crashes involving unrestrained occupants were less likely to occur in adverse weather conditions, suggesting that occupants are more likely to buckle up when they perceive greater danger.

Impaired driving was notably prevalent among young males aged 22 to 35 and was overrepresented in severe crashes. Most impaired driving crashes occurred at night, typically under ideal weather and road conditions, suggesting, perhaps, that the decision to drive impaired may be deterred by adverse environmental conditions.

Distracted driving crashes often resulted in rear-end and fixed-object collisions, with some involving rollovers or right-angle crashes. These crashes were predominantly caused by younger drivers, many of whom were under 35. Most distracted driving crashes occurred in clear weather and road conditions, with impaired driving also being a factor in some cases of inattentive driving.

Number & Severity

Speed

1,959 Crashes

40 Suspected Serious Injuries

13 Fatalities

Occupant Protection

522 Crashes

537 Occupants

65 Suspected Serious Injuries

23 Fatalities

Impaired Drivers

778 Crashes

77 Suspected Serious Injuries

22 Fatalities

Distracted Drivers

1,817 Crashes

56 Suspected Serious Injuries

7 Fatalities

4.5. Leadership Commitment and Goals

The overarching goal of the SS4A program is to eliminate roadway fatalities and serious injuries. Accordingly, a requirement of the grant program is for the entity receiving funding to make an official public commitment to an eventual goal of zero roadway fatalities and serious injuries. The commitment must include a goal and timeline for eliminating roadway fatalities and serious injuries achieved through one, or both, of the following:

1 the target date for achieving zero roadway fatalities and serious injuries, OR

2 an ambitious percentage reduction of roadway fatalities and serious injuries by a specific date with an eventual goal of eliminating roadway fatalities and serious injuries.

It is common practice in safety performance tracking to set goals, or targets, based on multi-year rolling averages. The rolling average provides a better understanding of the overall data over time without eliminating outlier years with significant increases or decreases. Standard practice recommends using the average of the most recent 5 years of data. The analysis period for the plan spans the 2019 to 2023 time period and, at the time of writing, 2024 data is not available. Accordingly, the 5-year average number of combined fatalities and serious injuries from the 2019 to 2023 period was used as a starting point for goal setting. A target of 46 combined fatalities and suspected serious injuries will be set for 2025.

Gallatin County is committed to the eventual goal of zero fatalities and serious injuries on its roadways. This commitment aligns directly with Montana's Vision Zero, a statewide initiative outlined in the *Comprehensive Highway Safety Plan*, which commits to "zero fatalities and serious injuries on Montana's roads." As a reflection of this shared vision, Gallatin County has adopted the following interim goal (**Figure 20**):

> *Reduce the number of combined fatalities and suspected serious injuries on roadways in the Gallatin County SS4A planning area by half, from 46 in 2025 to 23 in 2034, through implementation of the SS4A Action Plan.*
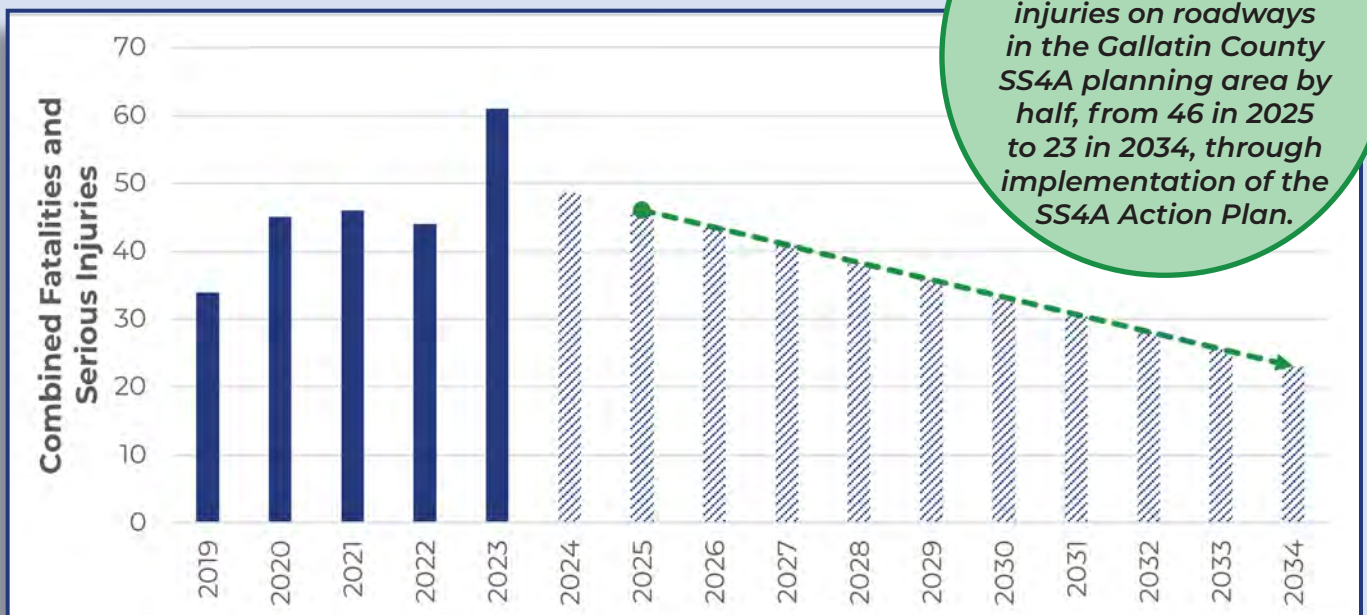

Figure 20: Gallatin County Interim Safety Goal

Chapter Five

5. Strategy Identification

Individual strategies were identified with the intention of reducing fatalities and serious injuries in Gallatin County and generally improving transportation safety. The descriptions and attributes associated with each strategy can be used by local authorities to inform investment decisions as available funding is applied to achieve community goals. The strategies are not intended to provide specific implementation actions, but rather to provide example projects, programs, and policies for reference as Gallatin County and its partners work towards safer streets for all users. These strategies can be used to assist in the future identification, development, and implementation of specific projects in the county, including those listed in **Chapter 7**.

5.1. Overview of Strategy Attributes

Strategies are broad action categories intended to help achieve community transportation safety goals. Strategies are organized according to the plan's four focus areas (Run-Off-The-Road Crashes, Intersection Crashes, Driver Age, and High Risk Behaviors). The strategies have been classified according to multiple attributes, which are intended to help agencies select appropriate strategies to address identified needs. The following attributes are included in the strategy summaries, with more details provided in **Appendix C**.

E's of Safety

Improving transportation safety requires a comprehensive approach that employs multiple approaches. A common framework is referred to as the "E's of Safety" which includes Education, Enforcement, Engineering, and Emergency Medical Services (EMS). For each strategy, the relevant E's of Safety are identified to indicate the field of technical expertise, related program of example actions, and the coordinated approach necessary to effectively implement the strategy.

- Education
- Enforcement
- Engineering
- EMS

Example Actions

A variety of example projects, programs, policies, actions, and other efforts that may relate to the proposed strategy were provided to indicate how the strategy could be applied to achieve safety goals. Ranging from educational campaigns to investments in infrastructure projects, new technologies, maintenance practices, policies, enforcement, and training, strategies are intended to address safety from numerous angles. **The list of examples is meant to be illustrative as opposed to exhaustive.** Other projects or actions not listed in the examples could be applicable to the strategy. Not all example actions will be suitable in all cases or at all locations. **Additional studies may be necessary to determine the most appropriate solution for each individual project location**.

5.2. Run-Off-The-Road Strategies

Run-off-the-road crashes are a significant safety concern, often resulting in serious injuries and fatalities. These crashes occur when a vehicle unintentionally leaves its lane, either crossing the centerline or veering off the roadway, due to a range of factors such as poor weather conditions, low visibility, or the presence of an animal on the road. Additionally, issues like road design flaws or high-risk driving behaviors—such as distraction, speeding, or impairment—can further increase the likelihood of a vehicle leaving the roadway. Given the complex nature of these incidents, reducing the occurrence of run-off-the-road crashes requires a multifaceted approach that addresses both human and environmental factors. Key strategies include enhancing road infrastructure, improving road design, and incorporating safety technologies that help prevent these crashes. In addition, addressing high-risk driving behaviors, such as those discussed in **Section 6.5**, is crucial in reducing the likelihood of vehicles departing the travel lane. Together, these strategies form a comprehensive framework for improving road safety and minimizing the severity of run-off-the-road crashes.

Improve Curve Design

Example Actions

■ **Enhanced Visibility**
- In-Lane Curve Warning Pavement Markings
- Transverse Rumble Strips
- Roadside Delineators
- Retroreflective Strips on Sign Posts
- Enhanced Sign Conspicuity (Retroreflectivity, Size, etc.)
- Slow Speed Zones Near Curves

■ **Intelligent Transportation Systems (ITS)**
- Dynamic Curve Warning Signs
- Speed Radar Feedback Signs
- Sequential Dynamic Chevrons

■ **Roadside Design Improvements**
- Increase and Maintain Clear Zones
- Slope Flattening
- Add or Widen Shoulders
- Roadside Barriers (Cable Rail, Guardrail, Concrete Barriers)

Improve Roadside Design

Example Actions

- **Wider Edge Lines**

- **Widen Shoulders**

- **Improve Shoulders**
  - SafetyEdge Shoulder Design
  - Traversable Roadside Slopes

- **Edge Line, Shoulder, and Centerline Rumble Strips**

- **Roadside and Median Barriers**
  - Cable Rail
  - Guardrail
  - Concrete Barriers
  - Increase and Maintain Clear Zones
  - Breakaway Signs and Poles

Improve Roadside Visibility and Surfacing

Example Actions
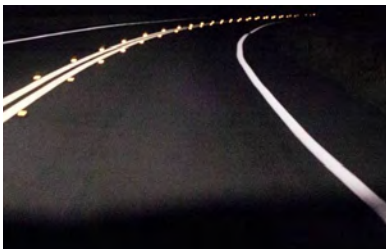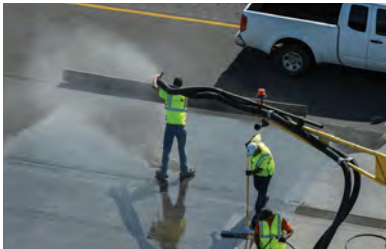
- **Roadway Lighting**

- **High-Visibility/High Durability Pavement Markings/ Signage**

- **High Friction Surface Treatment**

- **Regular Roadway Maintenance**

- **Vegetation Management**

- **Timely Snow and Ice Removal**

- **Variable Speed Limits (VSL) / Variable Messaging Signs (VMS)**

- **Wrong Way Warning Signs**

- **Emergency Weather Alert Systems**

- **Vehicle Safety Features (Lane Departure Warning, Lane Keep Assist, Electronic Stability Control, Automatic Emergency Braking)**

5.3. Intersection Strategies

Improving safety at intersections is crucial for reducing crashes and ensuring efficient traffic flow, particularly in rural and suburban areas where road conditions and traffic patterns differ significantly from urban environments. Rural intersections can be more hazardous than their urban counterparts due to higher speeds, limited visibility, and a lack of traffic control measures. The absence of urban infrastructure such as traffic signals, pedestrian crossings, and bike lanes, combined with long stretches of open road, can lead to unsafe driving behaviors and heightened crash risks. Drivers may be less prepared for sudden changes in road conditions, such as unexpected intersections, especially at night or during inclement weather. Furthermore, many rural intersections suffer from inadequate lighting, insufficient signage, or designs that do not account for the diverse mix of road users, including agricultural vehicles, heavy trucks, bicyclists, and pedestrians. Given the cost constraints and the fact that rural areas often do not require the same level of infrastructure as urban centers, addressing intersection safety issues in these regions requires tailored strategies to improve safety, reduce conflicts, and maintain smooth traffic flow without over-engineering the roadway system.

Improve Intersection Visibility

Example Actions

- Vegetation Management

- Snow Removal Management

- No Parking Zones Near Intersections

- High-Visibility/High Durability Pavement Markings/Signage

- Intersection Lighting

- Curb Extensions

- Daylighting Intersections

- Sight Line Enforcement

- Increased Education/Enforcement - (Red Light Running, Stop for Pedestrians, Look Both Ways, etc.)

Example Actions

■ Intersection Geometry/Layout
- Improve Sight Lines, Turning Radii, and Skew
- Dedicated Left/Right Turn Lanes
- Turn Lane Offsets/Channelization
- Bicycle/Pedestrian Accommodations
- Bypass Lanes on Shoulder at T-Intersections
- Left/Right Turn Acceleration Lanes

■ Restrict/Eliminate Turning Maneuvers
- Access Control Improvements
- Reduce Driveways Near Key Intersections
- Splitter Islands
- Install Median Barriers

■ Increase Driver Awareness
- High-Visibility Pavement Markings
- Stop Bar on Minor Approaches
- Retroreflective Strips on Sign Posts
- Larger Regulatory/Warning Signs
- Supplementary Signs (Double Stop Signs, Overhead Signs, etc.)
- Flashing Stop Signs
- Flashing Overhead Beacons

■ Advanced Warning
- Transverse Rumble Strips
- Advance Warning Signs
- Dynamic Warning Signs
- Pavement Markings (Stop Ahead)

■ Increased Traffic Control
- Stop Control (Two-Way/All-Way)
- Roundabout
- Signalization (If Warranted)
- Continuous T
- Reduced Conflict U-Turn (RCUT)

Install or Enhance Signalized Intersections

Example Actions

■ **Intersection Geometry/Layout**
- Improve Sight Lines and Turning Angles
- Dedicated Turn Lanes
- Turn Lane Channelization
- Bicycle/Pedestrian Accommodations

■ **Signal Phasing**
- Signal Optimization/Coordination
- Adaptive Signal Control
- Increase Yellow Change Intervals
- Increase All Red Intervals
- Dedicated Turn Phasing
- Pedestrian Phasing

■ **Increase Driver Awareness**
- High-Visibility Pavement Markings
- Turn Path Markings
- Overhead Lane Use Signs
- Retroreflective Backplates
- Advance Warning Signs/Signals
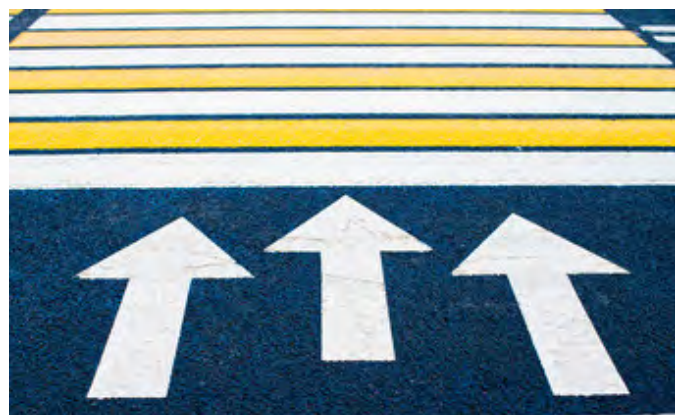
5.4. Driver Age Strategies

Addressing crashes involving younger and older drivers requires a multifaceted approach that considers their unique challenges and needs. For younger drivers, who often struggle with inexperience, cognitive overload, and social influences, strategies focus on education, training, and enforcement to build their skills and encourage safe behaviors. For older drivers, whose abilities might be affected by age-related declines in vision, flexibility, and reaction times, the emphasis is on assessing fitness to drive, providing educational resources, and adapting vehicles and road designs to support their continued mobility. By implementing these strategies, Gallatin County can create a safer driving environment that accommodates the diverse needs of drivers across all age groups.

Educate Young Drivers on Safe Driving Practices

Example Actions

- **Enforcement of Graduated Driver's Licensing laws**

- **Increase Access to and Encourage Teen Driver Education Courses**

- **Other Driver Education Programs**
  - Alive at 25
  - Share the Keys
  - What Do You Consider Lethal?
  - Checkpoints
  - Hazard Perception Training (RAPT, ACCEL, SAFE-T)
  - Montana DRIVE Workshops

- **Montana Keep Encouraging Young driver Safety (KEYS)**
  - Parent/Teen Agreement for Safe Driving Expectations
  - Parent-Teen Homework Assignments to Increase Driver Safety
  - KEYS Teen Driver Rating Form

- **Educate New Drivers on Crash Avoidance Advanced Driver Assist Systems (ADAS) Features**
  - My Car Does What?

- **Multilingual Teen Driver Educational Materials**

- **University Driver's Education – Montana Driving Laws, Winter Driving, Etc.**

- **Written Exam for State-to-State Driver's License Transfers**

- **Share the Road Training**

Ensure Older Drivers are Fit to Drive

Example Actions

■ **Licensing Agency Referrals**
- Education of Referral Procedures
- Improved Tracking and Follow Up on Referrals

■ **Formal Courses for Older Drivers**
- Smart DriverTEK
- AAA RoadWise Driver
- AARP Smart Driver Course
- NSC Defensive Driving for Mature Drivers
- On-Road Instruction

■ **Educate Caregivers/Family Members**
- How to Evaluate Driving Ability
- How to Approach Driver's License Restrictions

■ **Promote Vehicle Adaptive Devices (Seat Belt Extenders, Leg Lifter, Swivel Seats, Adapted Key Holders, etc.)**

Design the Transportation Systems to Ensure Accessibility for Users of All Ages

Example Actions

■ **Intersection Geometry and Layout**
- Reduce Intersection Skew
- Increase Intersection Sight Distance
- Widen Roadway Lanes
- Left and Right Turn Lane Offset and Channelization
- Delineation (Edgelines, Curblines, Centerlines)

■ **Roadway and Roadside Enhancements**
- High Visibility/Contrasting Pavement Markings
- Clearly Legible and Visible Signage and Signals
- Advance Warning Signs / Pavement Markings
- Directional Signs
- Intersection / Street Lighting
- High Friction Surface Treatments
- Work Zone Visibility

■ **Educate Drivers on Crash Avoidance ADAS Features**

■ **Promote Ride Share and Transit Options**

■ **Promote Accessibility for Walking and Biking**
- Adjust Pedestrian Signal Walking Speeds to Demographics
- Accessible Pedestrian Signals
- Leading Pedestrian Intervals
- Dedicated / Separated Non-Motorized Facilities

5.5 High Risk Behavior Strategies

Addressing high-risk driving behaviors is crucial for improving road safety and reducing crashes, injuries, and fatalities. Unsafe behaviors such as impaired driving, speeding, distracted driving, and not using seatbelts or helmets contribute to nearly 70% of severe injury crashes in Gallatin County. By promoting responsible driving through education, enforcement, and legislation, the county can create a culture of safety that encourages safer choices. This protects individuals, reduces traffic incidents, lowers healthcare costs, and boosts public confidence in road safety.

Promote Safe Driving Behaviors

Example Actions

- **Conduct High Visibility Enforcement Campaigns**

- **Multilingual Safe Driver Educational Materials**

- **Teen & Adult Defensive Driving Courses**

- **Civilian Dash Cams**

- **Encourage Safe Driving Behaviors**
  - Outreach/Education at Community Events
  - Employer Safety Policies for Company Vehicles
  - Engage School Students in Peer-to-Peer Safety Messaging
  - Incentive Programs

- **Lobby State Legislation for Law Changes**
  - Increased Penalties for Driving Under the Influence (DUI) & Speeding
  - Lower Blood Alcohol Concentration / Drug Potency Limits
  - Primary Seatbelt Laws
  - Universal Helmet Laws
  - Statewide Cell Phone Laws
  - Red Light / Speed Enforcement Cameras

Decrease Distracted Driving

Example Actions

- **Educational Campaigns**
  - #IDontDUIT (I Don't Drive Under the Influence of Technology!)
  - Talk, Text, Crash
  - Every Second Matters
  - Put the Phone Away or Pay
  - Eyes Up, Phone Down
  - EyesDrive

- **Promote Technology Solutions**
  - Smart Phone Apps/Cell Phone Blocking Technology
  - ADAS in Vehicles

- **Promote Teen Traffic Safety**
  - Increase Education on the Graduated Driver Licensing Law in Montana
  - Encourage Parents/Teens to Sign Teen Driver Contracts

- **Enforcement**
  - Cell Phone Ordinances
  - Employer-Based Distracted Driving Policies
  - Law Enforcement Training to Identify & Document Distracted Driving

Eliminate Impaired Driving

Example Actions

■ **Enforcement**
- Sobriety Checkpoints
- Saturation Patrols
- Alcohol Measuring Devices
- Alcohol Vendor Compliance Checks
- Treatment Court
- Court Monitoring Programs
- Drug Recognition Experts / Drug Evaluation and Classification program
- Standardized Field Sobriety Testing Training
- Advanced Roadside Impaired Driving Enforcement program

■ **Education Campaigns**
- Mass Education on Montana Alcohol Laws (Social Host Responsibility, Zero Tolerance, Refusing Field Sobriety Tests, DUI Limits, DUI Penalties, etc.)
- Think Twice (Expand to County Establishments)
- Youth Education Programs (Fatal Vision Goggles, Peer-To-Peer Programs, Role Plays, Drunk-Driving Crash Reenactments [e.g., "Every 15 Minutes"]
- Victim Impact Panels
- If you feel different, you drive different
- Drive High, Get a DUI

■ **Promote Sober Rides Home**
- NHTSA SaferRide App
- Designated Driver Incentive Programs
- Bar Fairies Program (Expand to County Establishments)
- Safe Rides Home Program
- Organized Transportation for Large Community Events
- Promote & Expand Transit Options

Manage Vehicular Travel Speeds

Example Actions

■ **Review Posted Speed Limits**
- Speed Studies
- Special Speed Zones
- Context Sensitive Speeds

■ **Traffic Calming**
- Speed Bumps/Humps/Speed Tables/Raised Crosswalks
- Visual Friction (Paint, Art, Vegetation, Objects)
- Narrowed Roadways/Curb Extensions
- Roundabouts/Traffic Circles
- Horizontal Roadway Shifts (Chicanes)
- ITS/Dynamic Speed Feedback Signage
- Variable Speed Limits (Stationary or Trailers)
- Warning Signage (Reduce Speed, Curve Ahead)
- Refuge Islands, Reallocated Roadway Width to Bike Accommodations)

Manage Vehicular Travel Speeds (Continued)

Example Actions

- **Speed Enforcement**

- **Education Campaigns**
  - Slow Down for School Zones
  - Ice and Snow...Take It Slow
  - Drive Like Your Kids Live Here

- **Intelligent Speed Assistance Technologies in Vehicles**

Increase Occupant Protection

Example Actions

- **Educational Campaigns**
  - Seat Belts Save Lives
  - Buckle Up. Every Trip. Every Time.
  - "Walk Under the Bar – Booster Seat in the Car"
  - Respect-A-Cage Exhibit / Room to Live
  - Buckle up Battles

- **Enforcement**
  - Click It or Ticket
  - Primary Enforcement Laws
  - Universal Motorcycle Helmet Laws

- **Buckle Up Montana Coalition**

- **Seatbelt Surveys**

- **Child Passenger Safety Training**

- **Child Restraint Inspection Stations**

- **Saved by the Belt Program**

- **Motorcyclist Protection and Conspicuity**
  - Impact-Resistant Clothing
  - Continuous Headlight Use
  - Brightly Colored Clothing
  - Retroreflective Devices
  - Free/Discounted Helmet Distribution through Partnerships with Local Organizations

Chapter Six

6. Project, Policy, and Program Identification

This chapter outlines recommended projects, programs, and policies intended to proactively address identified safety concerns from all angles, including infrastructure improvements, programs targeted at safe behaviors, and operational improvements. The recommendations can be developed as stand-alone efforts, or, in some cases, combined with other efforts as appropriate. There may be cost savings and efficiencies gained by packaging improvements together.

6.1. Recommendation Attributes

All recommendations are categorized according to the implementation type, including projects, programs, and policies. **Projects** include physical implementation actions which result in changed infrastructure and can range from simple signing or striping to larger-scale reconstruction. **Programs** include activities meant to incrementally inform or improve transportation safety conditions. Programs are typically the basis for future policy decisions but could also be the outcome of implementing specific policies. **Policies** are most often established through laws and ordinances but could also take the form of planning documents or procedures adopted by government agencies. Institutionalizing a policy typically requires dedicated funding and comprehensive technical guidance as well as enforcement mechanisms to ensure that there are consequences if the policy is not implemented as intended. Policy changes take time and diligence but can be a powerful way to ensure that adequate staff and resources are being directed toward processes and procedures that will support a safe and healthy community.

Some supporting information is provided, with additional details provided in **Appendix C** to assist with future implementation efforts. The following sections provide an overview of the attribute categories outlined for each recommendation to help inform and guide future project, program, and policy development.

Recommendation

Planning-level recommendations are defined broadly to provide flexibility during future implementation phases as additional coordination and investigations occur.

Implementation Partners

Although Gallatin County is serving as the lead agency for implementation of recommendations contained in the Action Plan, implementation of the identified safety strategies, projects, programs, and policies will require cooperation and support from multiple partners. In addition to the county, supportive efforts from partners including MDT, the cities of Bozeman and Belgrade, the towns of Manhattan, Three Forks, Big Sky, and West Yellowstone, law enforcement, school districts, local advocacy groups and organizations, emergency service providers, and individuals/businesses will be needed to successfully improve safety in Gallatin County.

Estimated Cost

Planning-level cost estimates were developed for each of the project recommendations. The estimates include costs for design engineering, mobilization, construction, drainage, utility adjustments, and anticipated easements. Contingencies are provided to account for unknown factors at this planning-level stage. All costs are provided in 2025 dollars since the date of implementation is unknown at this time. **Appendix C** contains additional planning-level cost estimate information with unit pricing for each option. Estimated costs for program and policy recommendations are not included due to the highly variable nature of these recommendations.

Timeframe

The timing and feasibility of implementing projects depends on several factors, including funding availability, project complexity, right-of-way requirements, and other project delivery considerations. Estimated implementation timeframes were assigned to each of the project recommendations based on expected project delivery timelines and current funding availability. These timeframes are not commitments but are intended to reflect the relative need, complexity, and potential funding sources for each project. The timeframes are defined as follows:

- **Short-term:** Implementation is feasible within a 0- to 5-year period.
- **Mid-term:** Implementation is feasible within a 5- to 10-year period.
- **Long-term:** Implementation is feasible within a 10- to 20-year period.

6.2 Project Recommendations

The following project recommendations are designed to address site-specific safety concerns identified through an analysis of historic crash trends and feedback from public and stakeholder outreach. These projects align with previously established planning recommendations and **focus on high-benefit, low-cost solutions** that maximize safety improvements while also being mindful of funding constraints. There is a targeted **emphasis on improving safety on low-volume county roads**. It is recognized that safety concerns also exist on higher-volume routes under the jurisdiction of MDT or city governments, though there are alternate project nomination processes and funding sources for improvements on these routes that are outside the purview of Gallatin County's jurisdiction. The following recommendations reflect a thoughtful, strategic approach to road safety that prioritizes both immediate needs and long-term, sustainable improvements. **Figure 21** illustrates the location of recommended projects within the planning area. Note, **project numbering is not indicative of priority or need**.
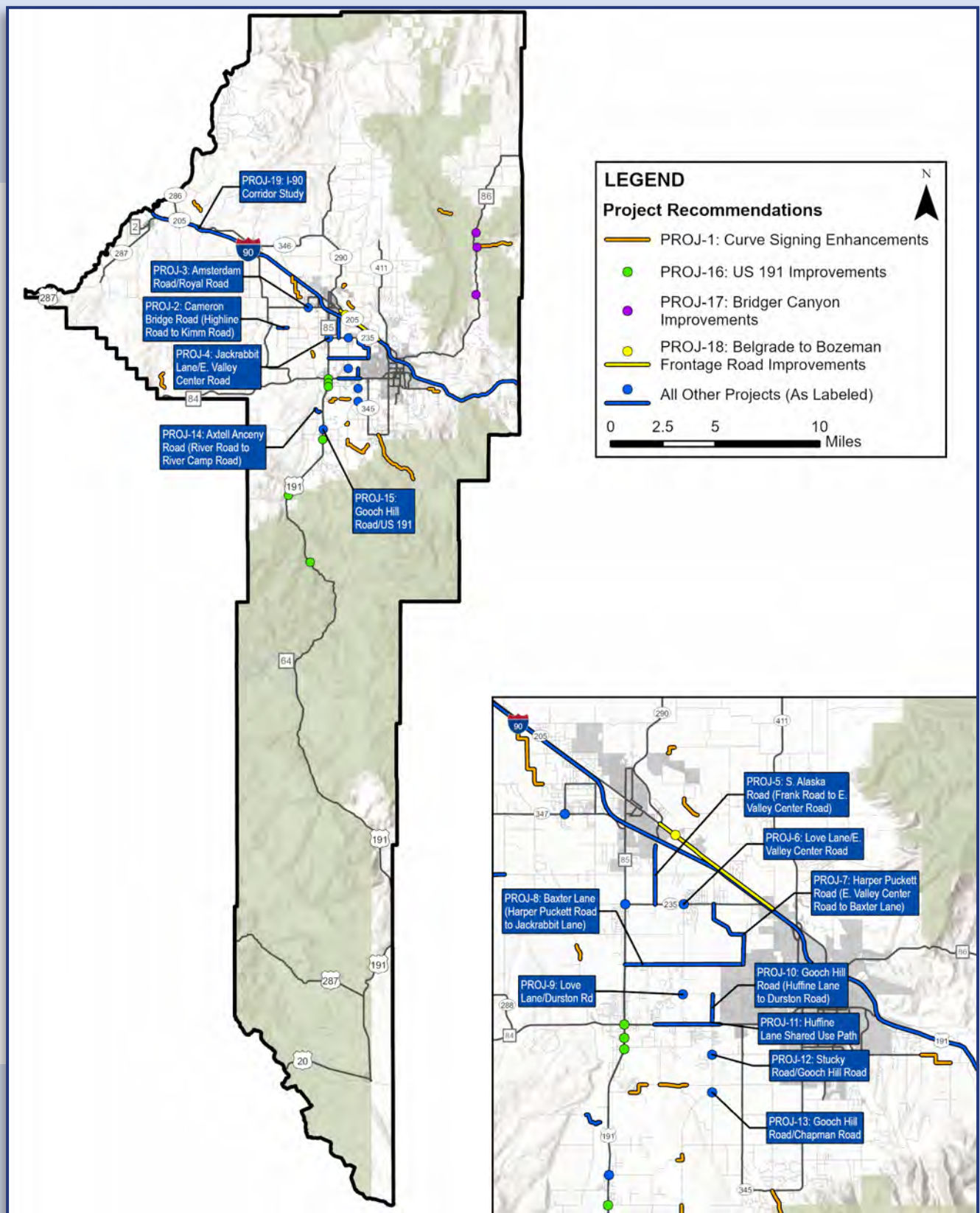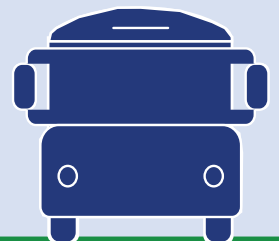
Figure 21: Recommended Projects

PROJ-1: Curve Signing Enhancements

Recommendation: Implement the tired curve signing system from the *Greater Triangle Area Transportation Plan* at spot locations identified on the HIN.

- <u>Thorpe Road (Rottweiler Lane to Frontage Road)</u> – Tiers 2 & 3, possible reconstruction
- <u>Cottonwood Road (Derek Way to Enders Road)</u> – Tier 2
- <u>Blackwood Road (Beatty Road to Quentin Way)</u> – Tier 2, possible shoulder widening
- <u>Blackwood Road (Elk Grove Lane to Kimber Court)</u> – Tier 2, possible reconstruction
- <u>Bozeman Trail Road (Mount Ellis Lane to Fort Ellis Road)</u> – Tiers 2 & 3, possible reconstruction
- <u>Gooch Hill Road/Enders Road</u> – Tier 2
- <u>Brackett Creek Road (Bridger Canyon Road to Horse Creek Road)</u> – Tier 2
- <u>Madison Road (North of Norris Road)</u> – Tier 1
- <u>Penwell Bridge Road (Roundup Boulevard to Thompson Field Lane)</u> – Tier 2
- <u>Tubb Road (Airport Road to Jetway Drive)</u> – Tier 2
- <u>Logan Trident Road (RP 2.6 to 4.2)</u> – Tiers 1 & 2
- <u>River Road (North of Bryan Road)</u> - Tier 1
- <u>Fairy Lake Road (RP 4.3 to 4.9)</u> – Tier 1
- <u>Hyalite Road (19th Ave to Hyalite Reservoir)</u> – Tier 1

Implementation Partners:	**Estimated Cost:**	**Timeframe:**
Gallatin County, MDT, Forest Service, Cities, Towns	$1,500 - $3,000 per curve	Short-Term

PROJ-2: Amsterdam Road/Royal Road

Recommendation: Install enhanced traffic control at the intersection, either a traffic signal or roundabout, depending on warrants. Consider intersection lighting in the short-term.

Implementation Partners:	**Estimated Cost:**	**Timeframe:**
Gallatin County, MDT, Utility Providers, Adjacent Landowners	$1.1M (signal), $2.2M (roundabout)	Mid-Term

PROJ-3: Cameron Bridge Road (Highline Road to Kimm Road)
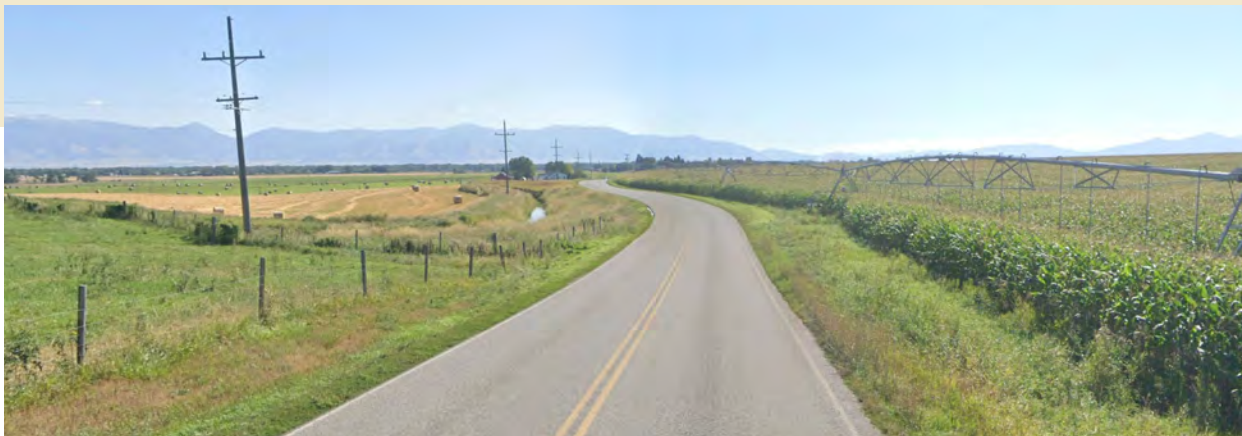
Recommendation: Enhance visibility in this section through low-cost countermeasures and possible long-term reconstruction.

Implementation Partners:
Gallatin County, Adjacent Landowners, Utility Providers

Estimated Cost: $46,000 (low cost improvements), $2.2M (reconstruction)

Timeframe:
Short- to Long-Term

PROJ-4: Jackrabbit Lane/E. Valley Center Road

Recommendation: Monitor to see how safety conditions change with improvements. Consider protected left-turn phasing.

Implementation Partners:
MDT, Gallatin County, Adjacent Landowners

Estimated Cost:
$77,000

Timeframe:
Short-Term

PROJ-5: S. Alaska Road (Frank Road to E. Valley Center Road)

Recommendation: Reconstruct roadway to meet current standards, incorporate roundabouts at Cameron Bridge Road and E. Valley Center Road intersections, and install non-motorized accommodations.

Implementation Partners: Gallatin County, MDT, Utility Providers, Adjacent Landowners

Estimated Cost: $36.7M

Timeframe: Long-Term

PROJ-6: Love Lane/E. Valley Center Road

Recommendation: Install enhanced traffic control at the intersection, with the type and configuration determined based on an intersection control evaluation.

Implementation Partners: Gallatin County, MDT, Utility Providers, Adjacent Landowners

Estimated Cost: $2.7M - $6.6M

Timeframe: Mid-Term

PROJ-7: Harper Puckett Road (E. Valley Center Road to Baxter Lane)

Recommendation: Install curve signing enhancements and consider widening shoulders.

Implementation Partners:
Gallatin County, Adjacent Landowners, Utility Providers

Estimated Cost:
$40,000 (curve signing), $2.1M (shoulder widening)

Timeframe:
Short- to Long-Term

PROJ-8: Baxter Lane (Harper Puckett Road to Jackrabbit Lane)

Recommendation: Reconstruct the corridor to meet current standards including wider shoulders, potential turn lanes, and non-motorized accommodations. Consider enhanced delineation as a short-term improvement.

Implementation Partners:
Gallatin County, City of Bozeman, MDT, Adjacent Landowners, Utility Providers

Estimated Cost:
$130,000 (delineation), $27.6M (reconstruction)

Timeframe:
Short-to Long-Term

PROJ-9: Love Lane/Durston Rd

Recommendation: Reconfigure intersection as a roundabout.

Implementation Partners:
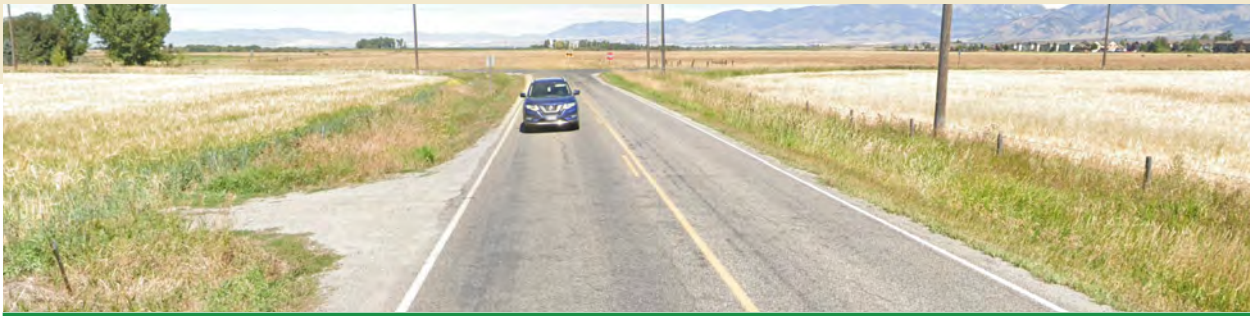Gallatin County, Utility Providers, Adjacent Landowners

Estimated Cost:
$7.3M

Timeframe:
Mid-Term

PROJ-10: Gooch Hill Road (Huffine Lane to Durston Road)

Recommendation: Enhance visibility and reduce conflicts in this section through low-cost intersection safety countermeasures and eventual long-term reconstruction.

Implementation Partners: Gallatin County, MDT, Adjacent Landowners, Utility Providers

Estimated Cost: $5,000 (Durston Road), $910,000 (Huffine Lane), $13.8M (reconstruction)

Timeframe: Short-to Long-Term

PROJ-11: Huffine Lane Shared Use Path
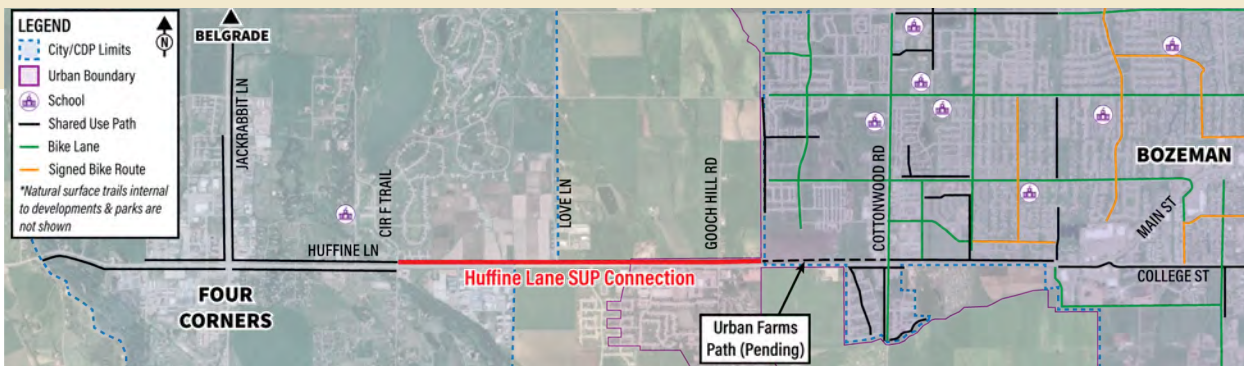
Recommendation: Complete the shared use path between Circle F Trail and Bozeman City Limits to create a continuous non-motorized route between Four Corners and Bozeman.

Implementation Partners: Gallatin County, MDT, Gallatin Valley Land Trust, Adjacent Landowners, Utility Providers

Estimated Cost: $3.5M

Timeframe: Mid-Term

PROJ-12: Stucky Road/Gooch Hill Road
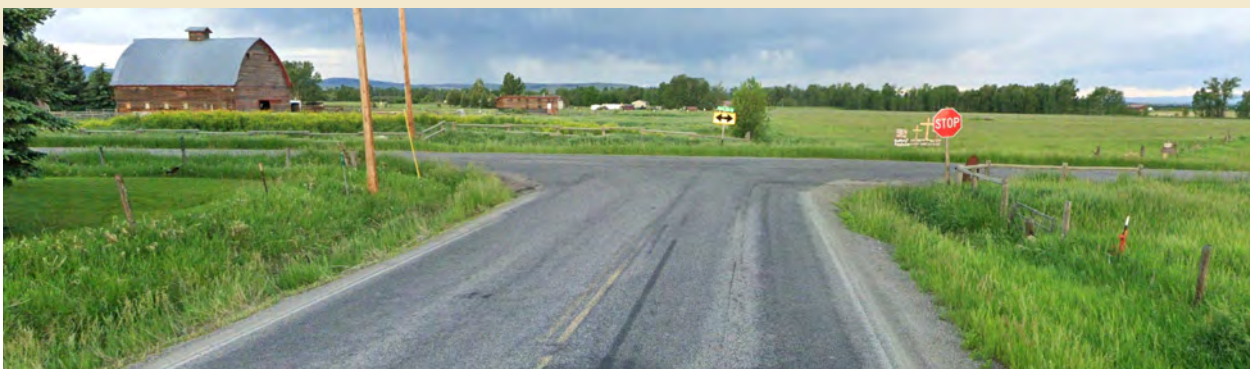
Recommendation: Install low-cost countermeasures to improve visibility of the intersection.

Implementation Partners: Gallatin County, Adjacent Landowners, Utility Providers

Estimated Cost: $8,000

Timeframe: Short-Term

PROJ-13: Gooch Hill Road/Chapman Road

Recommendation: Install low-cost countermeasures to improve visibility, traction, and driver understanding of the intersection.

Implementation Partners:	Estimated Cost:	Timeframe:
Gallatin County, Adjacent Landowners, Utility Providers	$7,000	Short-Term

PROJ-14: Axtell Anceny Road (River Road to River Camp Road)

Recommendation: Install signage to better clarify the roadway configuration and consider intersection realignment.

Implementation Partners:	Estimated Cost:	Timeframe:
Gallatin County, MDT, Adjacent Property Owners	$19,000 (curve signing), $50,000 (realignment)	Short- to Mid-Term

PROJ-15: Gooch Hill Road/US 191

Recommendation: Install enhanced traffic control at the intersection, with the type and configuration determined based on an intersection control evaluation. Consider intersection lighting or other visibility enhancements in the short-term.

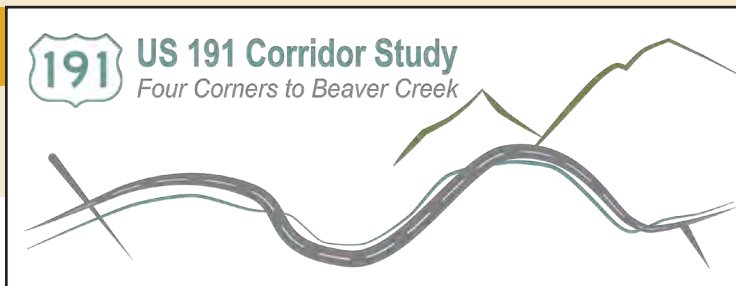| Implementation Partners:	Estimated Cost:	Timeframe:
Gallatin County, MDT, Utility Providers, Adjacent Landowners	$15,000 (visibility enhancements), $1.7M - $3.1M (traffic control)	Short- to Long-Term

PROJ-16: US 191 Improvements

US 191 Corridor Study
Four Corners to Beaver Creek

Recommendation: Complete the following recommendations from MDT's 2020 *US 191 Corridor Study (Four Corners to Beaver Creek Road).*

- <u>Four Corners Intersection (S1)</u> - Modify business access; install second westbound left-turn lane; add pedestrian crossing treatments
- <u>3rd Street to 2nd Street (S2)</u> - Replace or widen bridge based on future needs of the highway
- <u>Bozeman Hot Springs/Cobb Hill/Lower Rainbow Road (S3)</u> - Consolidate approaches and realign intersection; improve intersection/roadway lighting
- <u>Cottonwood Road (S7)</u> - Install additional traffic control and realign intersection as warranted.
- <u>Advance Warning Signs (S-16)</u> – Install curve warning signs for substandard roadway elements, (RP 61.2 is specifically on the HIN)
- <u>Substandard Curve Modification (S17-a)</u> - Reconstruct horizontal and vertical curves North of Spanish Creek (RP 69.2 to 68.5)

Implementation Partners:
MDT, Gallatin County, Adjacent Landowners, Utility Providers

Estimated Cost:
$3.9M (S1), $3.5M (S2), $1.3M (S3), $1.5M - $3.8M (S7), $310,000 (S16), $4.9M (S17-a)

Timeframe:
Short- to Long-Term

PROJ-17: Bridger Canyon Improvements

BRIDGER CANYON
Corridor Planning Study

Recommendation: Complete the following recommendations from MDT's 2015 *Bridger Canyon Corridor Planning Study.*

- 2.b: Horizontal and Vertical Curve Improvements with Shoulder Widening – RP 20.8 to 22.0
- 4.a: Approach Sight Distance Mitigation/Intersection Realignment - RP 18.8 (Brackett Creek)
- 4.b: Intersection Realignment - RP 18.8 (Brackett Creek)
- RP 13.5 – RP 14.2 – High friction surfacing or advance warning signs with advisory speeds

Implementation Partners:
MDT, Gallatin County, Bozeman-Yellowstone International Airport, Adjacent Landowners, Utility Providers

Estimated Cost:
$770,000 (2.b), $70,000 (4.a), $610,000 (4.b), $380,000 (RP 13.5)

Timeframe:
Short- to Mid-Term

PROJ-18: Belgrade to Bozeman Frontage Road Improvements

BELGRADE to BOZEMAN corridor FRONTAGE ROAD study

Recommendation: Complete the following recommendations from MDT's 2017 *Belgrade to Bozeman Frontage Road Corridor Study*.

- 3: Airport Road Intersection Improvements - Install an eastbound left-turn lane and/or traffic signal when warranted.
- 8: Passing Zone Modifications - Evaluate and modify existing passing and no-passing signing and striping to meet current standards.
- 9: Install Centerline Rumble Strips - Construct centerline rumble strips along the rural portions of the corridor as appropriate.
- 10: Develop Separated Shared Use Path - Investigate opportunities to develop a path between Bozeman and Belgrade.
- 11: Roadway Reconstruction - Reconstruct the corridor to include one travel lane in each direction, center left-turn lane (where appropriate), and eight-foot shoulders.

Implementation Partners:	**Estimated Cost:**	**Timeframe:**
MDT, Gallatin County, City of Bozeman, City of Belgrade, Adjacent Landowners, Utility Providers	$1.7M - $2.4M (3), $40,000 (8), $50,000 (9), $2.0M per mile (10), $15.1M (11)	Short- to Long-Term

PROJ-19: I-90 Corridor Study

Recommendation: Conduct a corridor study in coordination with MDT to evaluate safety concerns on I-90 through Gallatin County.

Implementation Partners:	**Estimated Cost:**	**Timeframe:**
MDT, Gallatin County, Cities, Towns	$250,000 - $300,000	Short-Term

6.2. Program Recommendations

Several programs have been identified to support project recommendations and improve safety within the focus areas. These programs take a dual approach, addressing safety through engineering solutions and behavioral strategies. Engineering initiatives focus on infrastructure improvements through roadway design and maintenance, while behavioral programs emphasize education, enforcement, and public awareness to encourage safer behaviors. Together, these strategies aim to reduce crashes and injuries, enhancing community safety.

PROG-1: Curve Signing Program

Tier	Description/Applicability	Strategies
Tier 1 – Horizontal Alignment Warning Signs	Used in advance of horizontal curves on roadways that are functionally classified as either arterials or collectors and have more than 1,000 AADT when the difference between the speed limit and the advisory speed meets standards given by MUTCD. Should be used in most cases.	• Horizontal Alignment Warning Signs • Speed Advisory Plaques
Tier 2 – Supplemental Curve Warning Signs	Use additional traffic control devices within the curve to help guide motorists through curves that violate driver expectancy. Should be used in addition to, and sometimes in place of, Tier 1 signs.	• Combination Curve/Intersection Signs • Combination Horizontal Alignment/Advisory Speed Sign • Chevron Alignment Sign • One-Direction Large Arrow Sign
Tier 3 – Enhanced Signing Countermeasures	Enhanced signage countermeasures used increase the number of drivers who perceive and react to basic curve warning devices. Should be used in combination with Tier 1 and Tier 2 signage.	• Larger Devices • Retroreflective Strip on Sign Post • Highly Retroreflective and Fluorescent Sheeting • Doubling-Up Devices • Flashing Beacons • Dynamic Curve Warning System

Recommendation:
Develop a structured program to systematically sign curves on county roads.

Implementation Partners:
Gallatin County, Cities, Towns, MDT
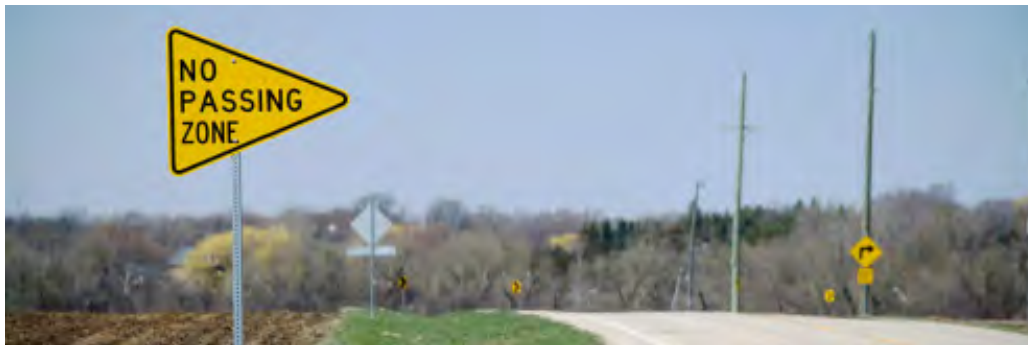
PROG-2: Shoulder Widening Program

Recommendation:
Develop a structured program to systematically widen shoulders on county roads.

Implementation Partners: Gallatin County, Cities, Towns, MDT, Private Developers, Adjacent Landowners

PROG-3: Passing Zone Review Program

Recommendation: Review passing zones for compliance with the Manual on Uniform Traffic Control Devices (MUTCD) and make necessary adjustments.

Implementation Partners:
Gallatin County, Cities, Towns, MDT

PROG-4: Roadside Management & Vegetation Control Program

Recommendation:
Develop a program to address roadside maintenance, vegetation control, and snow storage.

Implementation Partners:
Gallatin County, Cities, Towns, MDT, Adjacent Landowners

PROG-5: Systemic Safety Program
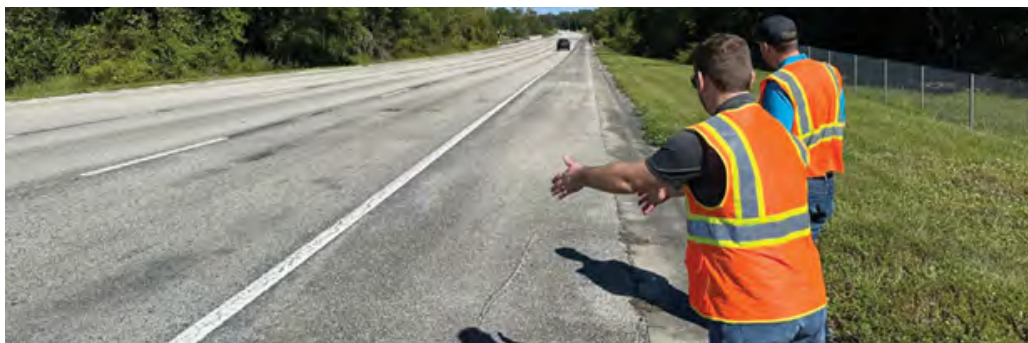
Recommendation:
Develop data collection procedures for inventorying and assessing the conditions of roadway elements (signs, striping, vegetation, etc.) during regular maintenance activities.

Implementation Partners:
Gallatin County, Cities, Towns, MDT

PROG-6: Annual Crash Data Review Program

Recommendation:
Develop a procedure for conducting annual crash data reviews to inform proactive safety improvements. Incorporate findings into the county's Annual Report **Appendix D**.

Implementation Partners:
Gallatin County, MDT, Consultants

PROG-7: Driver Age Programs

Recommendation:
- Develop a **Gallatin County Parent-Teen Driving Agreement** and promote it through local high schools. Accompany the contract with a list of teen driver educational courses that parents could consider enrolling their students, in addition to driver's ed offered by the state.
- Make **driver's education more accessible to students**, including low-income students/families and home-schooled students. This may involve offering classes as part of the school curriculum, allowing private driver's safety courses in Montana, or coordinating with local insurance agencies, businesses, and organizations to establish a **grant program for students/families** who cannot afford to enroll in state driver's ed courses.
- Develop a **defensive driving course for drivers of all ages**, similar to the Montana Office of Public Instruction's (OPI) D.R.I.V.E., an advanced driving course in Lewistown.
- Coordinate with the City-County Health Department to identify, develop, and distribute **educational pamphlets focused on older driver traffic safety** to physicians' offices, law enforcement agencies, and caregiver agencies. The pamphlets should describe the process for referring older drivers for licensing screening, discuss how to talk to older adults about driving limitations, and offer educational resources for older drivers to improve their driving abilities. (such as AARP's Improve Your Driving Skills and Save Program or Smart Driving Course).
- Similar to car seat safety checks, host **traffic safety events for older adults**, to include vehicle safety checks, fitting for vehicle adaptive devices, or a driving skills course.
- Work with the Montana Motor Vehicle Division to **improve license re-testing referral program**, including electronic reporting and follow-up to ensure re-testing is completed.

Implementation Partners:
Gallatin County, Physicians, Law Enforcement, Caregiver Agencies, Schools, Montana OPI (Driver's Education), Montana Department of Justice/Motor Vehicle Division, AARP, Council on Aging

PROG-8: High Risk Behavior Programs

Recommendation:
- Host an **interactive community event** to engage the public in road safety, featuring activities like Buckle Up Battles and Impaired Driving Goggle Obstacle Courses. These hands-on activities can raise awareness about seat belt use and the dangers of impaired driving in an engaging, memorable way.
- Partner with local schools, and school organizations like Future Community Career Leaders of America (FCCLA), Distributive Education Clubs of America (DECA), and Future Farmers of America (FFA), to create a **county-wide peer-to-peer messaging** campaign that encourages students to promote safe driving behaviors among their peers. Incentivize participation with prizes for schools or students who participate. Encourage students to consider action items listed in the Action Plan strategies.
- Expand the Bozeman-based **Think Twice** and **Bar Fairies** programs to county bars and establishments, educating patrons on the risks of impaired driving and promoting responsible drinking.
- Conduct an **alcohol focused educational campaign** centered around Montana's alcohol laws, including topics like Social Host Responsibility, DUI limits, and penalties. Focus on high schools, college campuses, and local bar establishments to reach a broad audience, ensuring these laws are understood by both young people and adults.
- Host a **Victim Impact Panel** to highlight the consequences of impaired, distracted, and other high-risk driving behaviors. Speakers could include victims, families, first responders, or treatment professionals. Schools and college campuses may serve as a powerful venue for these panels to reach new drivers and those at risk of engaging in such behaviors.
- Partner with local bars to create a **Designated Driver Incentive Program** that rewards those who commit to driving sober. This could include drink discounts or other incentives for designated drivers.
- Collaborate with local tow companies, AAA, and MDT to reinstate and expand **Operation Tipsy Tow** in Gallatin County during holiday periods, with potential for year-round implementation. Explore partnerships with **local DUI defense attorneys to sponsor free or discounted rideshare services** as an alternative to impaired driving.
- Develop and promote an organized **alternative transportation option for major community events** like concerts, football games, parades, and rodeos to prevent impaired driving. Options might include free shuttles, discounted ride services, or designated driving zones.
- Launch a **winter driving educational campaign** to raise awareness about the challenges of driving on snow and ice, including proper vehicle maintenance and safe driving techniques.
- Encourage citizens to use **insurance-sponsored safe driving apps/trackers** and/or to **install dash cams** to help raise awareness of high-risk behaviors and support law enforcement activities aimed at changing safety culture.
- Encourage local businesses, especially trucking companies and those with delivery operations, to develop and implement **employer-sponsored driving policies** that promote safe driving practices among employees. This could include guidelines on personal driving behavior and company vehicle use.

Implementation Partners:
Gallatin County, DUI Task Force, MDT, Bars/Restaurants, Schools/Colleges/Universities, Large Employers, Courts/Attorneys, Community Event Organizers/Venues, Tow Operators, AAA

6.3. Policy Recommendations

Based on a review of current regulations, policies, procedures, and planning documents, the following policy changes have been identified to help formalize and enhance Gallatin County's transportation safety efforts. Adopting formal policies helps create a framework for consistent implementation, increases the regulatory authority to enforce safety measures, and drives systemic change to reduce underlying safety risks within the county.

POL-1: Snow Removal Priority Routes

Recommendation:
Develop and publish priority routes for snow removal.

Implementation Partners:
Gallatin County, Cities, Towns, MDT

POL-2: Street Lighting Standards
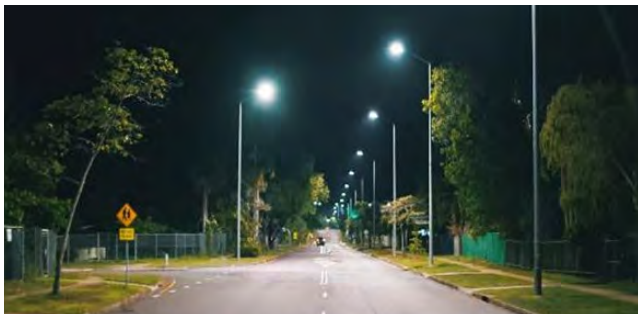
Recommendation:
Establish street lighting standards for county roadways and intersections.

Implementation Partners:
Gallatin County, Cities, Towns, MDT, Private Developers

POL-3: Cell Phone Policy

Recommendation:
Implement a county-wide ordinance prohibiting the use of handheld devices while driving.

Implementation Partners:
Gallatin County,
Law Enforcement

POL-4: Corridor Access Management
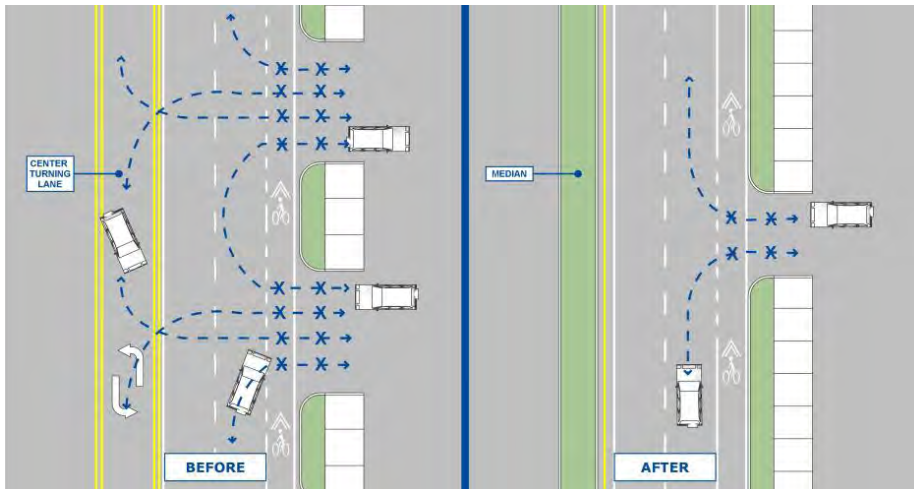
Recommendation:
Develop access control plans/resolutions for all routes under the jurisdiction of the Montana Transportation Commission and other high-volume arterials.

Implementation Partners:
Gallatin County, Cities, Towns, MDT, Private Developers

Chapter Seven

Project Prioritization and Implementation

A key requirement of the SS4A program is to prioritize identified projects into specific time ranges for the deployment of safety countermeasures within the community. This section outlines the prioritization process developed for the Action Plan and details the steps necessary for future implementation efforts. By establishing clear timelines for project execution, the county can effectively address safety concerns while ensuring a systematic approach to enhancing roadway safety.

6.4. Prioritization

Through public outreach, stakeholder engagement, and coordination with partner agencies, a project prioritization process was developed to determine which recommended projects should be prioritized for funding and implementation. Each project was scored using a comprehensive set of criteria, considering past planning efforts, safety needs, community and agency support, overall cost, and anticipated benefits. This structured **approach enables the county to focus resources on the most impactful safety improvements, while accounting for funding limitations** and available funding opportunities. Below is a description of the prioritization criteria, with each criterion scored low, medium, or high as outlined in **Table 1** on the following page.

- **Crash History:** Projects addressing areas with a history of safety issues, particularly those involving severe injuries, were prioritized. This criterion was based on crash data from 2019 to 2023, with particular focus on the HIN. Since the HIN takes into account factors like crash frequency, severity, and rates, areas with many low-severity crashes on low-volume roads could be overrepresented. To address this, projects were also evaluated based on the frequency of severe injuries in those areas. Locations with recent severe injuries, even if outside the five-year analysis period, were also considered.

- **Past Planning:** Projects identified in previous planning efforts were prioritized to ensure continuity and alignment with long-term community safety and transportation goals. Relevant plans include the *Greater Triangle Area Transportation Plan*, *Gallatin County Intersections Project,* and *Triangle Trails Plan*, among others developed by partner agencies.

- **Estimated Cost:** Projects were evaluated based on their present planning-level cost estimates and the anticipated benefits relative to implementation costs. Lower-cost projects were prioritized to make the most of available funding. However, projects offering significant benefits or those likely to be competitive for discretionary funding received higher scores, even if their costs were higher. The evaluation considered both safety and operational improvements as benefits, while construction costs and potential environmental impacts were assessed as costs. It's important to note that the evaluation focused on current benefits and costs, but the benefit/cost ratio may change over time due to factors such as travel trends, economic conditions, or shifts in community needs.

- **Project Support:** Community and partner support is crucial for project success. Therefore, projects reflecting the needs and preferences of residents and stakeholders were prioritized. This criterion was evaluated based on feedback gathered from the public and stakeholders through various channels, including the online commenting map, surveys, written comments, the Safety Summit, and Task Force meetings. The assessment was qualitative in nature.

| CRITERION			SCORE		
			Low	Medium	High
1 Crash History		HIN	No Crashes	Bottom 90% on HIN	Top 10% or Higher on HIN
		Severe Injuries	No Severe Injuries	1+ Serious Injuries	1+ Fatalities
2 Past Planning			Not Identified	Identified in 1 Past Planning Effort	Identified in 2+ Past Planning Efforts
3 Estimated Cost		Cost-Basis	High Cost ($1M+)	Mid Cost ($100k - $1M)	Low Cost (<$100k)
		Benefit/Cost	Costs Likely Exceed Benefits	Costs Likely Equal to Benefits	Benefits Likely Exceed Costs
4 Project Support		Community	No comments	Some comments	Many comments
		Partners	Low Support	Medium Support	High Support

Table 1: Prioritization Criteria

Based on the combined scores from all prioritization criteria, projects were categorized into high (⌃), medium (—), and low (⌄), priority levels. This prioritization scheme is designed to identify projects that are expected to be highly beneficial and supported by the community and thus should be prioritized for available funds. Note that **projects that are realistically expected to be implemented only in the long term may still be classified as high priority. This designation signals that the project should be considered for discretionary grants or other non-traditional funding sources.** The results of the prioritization process are summarized in **Table 2**.

ID	Project Name	Estimated Cost	Timeframe	Priority
PROJ-1	**Curve Signing Enhancements**	$1,500 - $3,000 per curve	Short-Term	⌃
PROJ-2	**Amsterdam Rd/Royal Rd**	$1.1M (signal) $2.2M (roundabout)	Mid-Term	⌄
PROJ-3	**Cameron Bridge Rd (Highline Rd to Kimm Rd)**			
	Low Cost Improvements	$46,000	Short-Term	⌃
	Reconstruction	$2.2M	Long-Term	—
PROJ-4	**Jackrabbit Ln/E. Valley Center Rd**	$77,000	Short-Term	⌃
PROJ-5	**S. Alaska Rd (Frank Rd to E. Valley Center Rd)**	$36.7M	Long-Term	⌃
PROJ-6	**Love Ln/E. Valley Center Rd**	$2.7M -$6.6M	Mid-Term	—
PROJ-7	**Harper Puckett Rd (E. Valley Center Rd to Baxter Ln)**			
	Curve Signing Enhancements	$40,000	Short-Term	⌃
	Shoulder Widening	$2.1M	Long-Term	—
PROJ-8	**Baxter Ln (Harper Puckett Rd to Jackrabbit Ln)**			
	Delineation	$130,000	Short-Term	⌃
	Reconstruction	$27.6M	Long-Term	⌃
PROJ-9	**Love Ln/Durston Rd**	$7.3M	Mid-Term	⌃
PROJ-10	**Gooch Hill Rd (Huffine Ln to Durston Rd)**			
	Intersection Signing Enhancements (Durston Rd)	$5,000	Short-Term	—
	Right-Turn Lane, Lighting, Non-Moto Upgrades(Huffine Ln)	$910,000	Mid-Term	—
	Corridor Reconstruction	$13.8M	Long-Term	⌄
PROJ-11	**Huffine Ln Shared Use Path**	$3.5M	Mid-Term	⌃
PROJ-12	**Stucky Rd/Gooch Hill Rd**	$8,000	Short-Term	—
PROJ-13	**Gooch Hill Rd/Chapman Rd**	$7,000	Short-Term	—

Table 2: Project Prioritization Results

ID	Project Name	Estimated Cost	Timeframe	Priority
PROJ-14	**Axtell Anceny Rd (River Rd to River Camp Rd)**			
	Curve Signing Enhancements	$19,000	Short-Term	⊖
	Intersection Realignment	$50,000	Mid-Term	⊖
PROJ-15	**Gooch Hill Rd/US 191**			
	Intersection Visibility Enhancements	$15,000	Short-Term	⌃
	Traffic Control Improvements	$1.7 M - $3.1M	Long-Term	⊖
PROJ-16	**US 191 Improvements**			
	Four Corners Intersection (S1)	$3.9M	Mid-Term	⌃
	3rd St to 2nd St (S2)	$3.5M	Mid-Term	⌄
	Bozeman Hot Springs/Cobb Hill/Lower Rainbow Rd (S3)	$1.3M	Mid-Term	⌄
	Cottonwood Rd (S7)	$1.5M - $3.8M	Mid-Term	⌄
	Advance Warning Signs (S-16)	$310,000	Short-Term	⌃
	Substandard Curve Modification (S17-a)	$4.9M	Long-Term	⌄
PROJ-17	**Bridger Canyon Improvements**			
	Curve Improvements with Shoulder Widening (2.b)	$770,000	Mid-Term	⌃
	Sight Distance Mitigation/Intersection Realignment (4.a)	$70,000	Short-Term	⊖
	Intersection Realignment (4.b)	$610,000	Mid-Term	⌄
	RP 13.5 – RP 14.2	$380,000	Short-Term	⊖
PROJ-18	**Belgrade to Bozeman Frontage Rd Improvements**			
	Airport Rd Intersection Improvements (3)	$1.7M - $2.4M	Mid-Term	⌄
	Passing Zone Modifications (8)	$40,000	Short-Term	⊖
	Install Centerline Rumble Strips (9)	$50,000	Short-Term	⊖
	Develop Separated Shared Use Path (10)	$2.0M per mile	Mid-Term	⊖
	Roadway Reconstruction (11)	$15.1M	Long-Term	⌄
PROJ-19	**I-90 Corridor Study**	$250,000 - $300,000	Short-Term	⌃

Table 2: Project Prioritization Results (Continued)
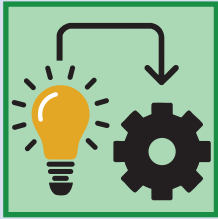
6.5. Implementation and Next Steps

The *Gallatin County SS4A Action Plan* aims to improve transportation safety within the county, with the goal of reducing combined fatalities and suspected serious injuries on roadways in the planning area by half— from 46 in 2025 to 23 by 2034—through the implementation of the Action Plan. While **specific funding for the proposed improvements has not yet been secured**, the county is committed to advancing the recommended safety projects as funding becomes available.

To help the county identify the most cost-effective projects with the greatest potential to address safety concerns, the recommended projects have been prioritized into high, medium, and low categories. Additionally, implementation timeframes (short-term, mid-term, and long-term) have been established to provide a reasonable expectation for when projects may be implemented, based on current funding availability. These **prioritization and implementation timeframes are intended as an initial guide but will remain flexible to adapt to changes in funding, crash trends, or community priorities**.

To support the county's ongoing commitment to safety improvements, an Annual Safety Report will be prepared each year **Appendix D**. This report provides the opportunity to adjust project priorities, assess current community needs, and identify new projects as necessary. It will offer greater transparency and help track progress in addressing safety issues throughout Gallatin County and will be made available on the county's website for public viewing.

As the Action Plan is implemented, the county will focus on executing the identified projects while staying proactive in addressing developing safety concerns. The strategies outlined in the plan provide a toolbox for developing new projects and initiatives as needed to respond to emerging trends. Additionally, the county will implement programs and policies that support proactive safety improvements, ensuring continuous progress. Through regular evaluation and adjustments, the county will remain responsive to changes in transportation safety needs.

Supplemental Planning

In addition to securing planning funds to complete the SS4A Action Plan, Gallatin County was awarded funds for supplemental planning to further enhance the plan. The goal of this supplemental planning effort is to make the plan more actionable and effective for implementation. Up to five supplemental planning efforts may be identified through stakeholder coordination, public input, and county needs. These activities may include detailed crash analyses for specific locations, field investigations, preliminary designs, initial program development, or enhanced public engagement. The findings and recommendations from these efforts will inform the development of a complementary safety plan, which will be produced as an amendment to this Action Plan.

Future SS4A Funding Opportunities

This Action Plan was developed by funding from the USDOT SS4A grant program. The program funds two grant types, (1) planning and demonstration grants and (2) implementation grants. The Action Plan was developed using a planning and demonstration grant. Future opportunities to apply for additional grants are expected to be available under the SS4A program to fund the demonstration and implementation of the projects and strategies contained in this plan.

Once the Action Plan is adopted, Gallatin County could pursue a grant to conduct demonstration activities to inform future project development activities for projects and programs recommended in the Action Plan. The county could also apply for implementation grant funds to implement projects and strategies identified in the Action Plan to address a specific roadway safety problem. Eligible projects and strategies can be infrastructural, behavioral, and/or operational activities.

For **demonstration grants**, USDOT seeks to fund temporary safety improvements that inform Action Plans by testing proposed project and strategy approaches to determine future benefits and future scope. Activities must measure potential benefits through data collection and evaluation to inform future implementation at a systematic level. Eligible demonstration activities include feasibility studies, MUTCD engineering studies, or pilot programs related to behavioral activities or new technologies. Demonstration activities may not involve permanent roadway reconstruction.

For **implementation grants**, USDOT has historically sought to award funds to projects and strategies that reduce roadway fatalities and serious injuries; align with and comprehensively address identified safety problems; employ low-cost, high-impact strategies over a wide geographical area; incorporate engagement and collaboration into how projects and strategies are executed; and will be able to complete the full scope of funded projects and strategies within 5 years after the establishment of a grant agreement. As an additional consideration, the USDOT may factor in elements such as community characteristics, geographic diversity, and alignment with broader federal priorities when comparing highly rated applications and selecting awards.

Implementation grants provide Federal funds to implement projects and strategies identified in a Comprehensive Safety Action Plan. The proposed action should include specific intervention types, address common safety risk characteristics, and be located on the Action Plan's high-injury network to the extent practicable.

The SS4A program was established in 2021, with funding authorized through 2026. Gallatin County received funds from the 2023 grant cycle, and the 2024 grant cycle closed on August 29, 2024. Future grant funding is anticipated to be available in Federal fiscal years 2025 and 2026, subject to review and modification by the current Federal Administration. To be competitive for implementation grant funds under the SS4A program, Gallatin County may start with High Priority projects identified in **Section 7.1**. The county should also initiate the project development process for the priority project(s) to ensure adequate project readiness. This means demonstrating the ability to execute and complete the full scope of work in the application proposal within 5 years of when the grant agreement is executed, with a particular focus on design and construction, as well as environmental, permitting, and approval processes. The Notices of Funding Opportunity (NOFOs) from past funding cycles provide additional information about SS4A application requirements for reference in preparing for upcoming opportunities, and updated information about the program is expected to be provided by the current Federal Administration.

Future demonstration grant applications could be considered for the following list of potential programs or pilot projects to **help inform future implementation activities or systematic project implementation**. Additional research should be conducted to ensure the proposed activities fully align with grant criteria outlined in the applicable NOFO.

- **PROG-1: Curve Signing Program** – Pilot the use of the tiered curve signing techniques at high-risk curves, such as Thorpe Road or Bozeman Trail Road. Conduct a before/after study to evaluate the impacts of various signing techniques.

- **PROG-3: Passing Zone Review Program -** Conduct a county-wide evaluation of passing zones to ensure compliance with current MUTCD standards. Consider including an evaluation of the safety impacts of removing passing zones on higher-speed county roads, such as Gooch Hill Road or Baxter Lane.

- **POL-2: Street Lighting Standards** – Pilot the implementation of temporary street lighting at a high-risk intersection, such as Stucky Road/ Gooch Hill Road or S. Alaska Road/E. Valley Center Road, and conduct a before/after study to evaluate the safety impacts.

Future implementation grant funding applications could be considered for the **following list of High Priority projects** that would be outside the ability of Gallatin County or MDT to fund in the short-term. Careful consideration of USDOT funding criteria would be needed to determine relative competitiveness in seeking Federal grant funding. Furthermore, if the county intends to pursue funds during the 2025 or 2026 grant cycles, it would be beneficial to begin preliminary engineering for the project(s) to ensure the county can meet project readiness criteria.
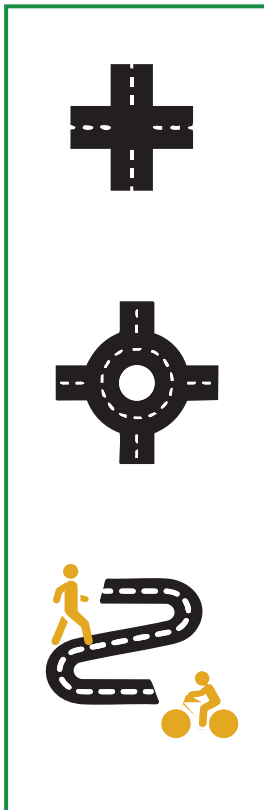
- **PROJ-5: Alaska Road (Frank Road to E. Valley Center Road) –** This corridor, as well as the adjoining intersections were identified on the HIN and have been the subject of past county planning efforts. Beyond identified crash trends, and county capacity and safety concerns, the public was highly vocal about the need for improvements to this stretch of roadway.

- **PROJ-9: Love Lane/Durston Road –** This intersection was identified as the second highest scoring intersection on the off-system only HIN, and the fifth highest scoring intersection on the full system HIN. Short-term improvements have been made to improve safety at the intersection but are not anticipated to be sustainable over the long-term given increasing traffic volumes in the area. The county has already identified a roundabout as the preferred long-term solution through a comprehensive intersection control evaluation process.

- **PROJ-11: Huffine Lane Shared Use Path –** A shared use path has long been a priority for Gallatin County and its residents to enhance safety, mobility, and connectivity between urban and rural regions of the county. Huffine Lane is a high-speed, high-volume roadway but provides a direct route into Bozeman with multiple segments of the roadway appearing on the HIN. The Huffine Lane/Gooch Hill Road intersection also appears as the third highest scoring intersection on the HIN, primarily due to a bicyclist fatality in 2022. Accordingly, consider combining the path with non-motorized accommodations and intersection visibility improvements recommended under **PROJ-10**.

Implementation Process

Figure 22 illustrates the project implementation process. As the Action Plan progresses, projects will move from the planning stage to development and, eventually, construction. Public involvement will be a key part of all phases. The general next steps for project implementation are as follows:

1. A funding source(s) is identified and secured.

2. The project is nominated for implementation by the county or other partner agency (such as MDT).

3. Feasibility studies, environmental investigations, and other development processes are completed as applicable.

4. A design is completed for the project and approved by responsible agency(ies) as needed.

5. Right-of-way or easements are acquired for the project, if necessary.

6. The project is constructed.

The recommended projects are designed with the flexibility to be completed individually or combined with other projects into larger efforts, depending on funding availability and other considerations. Cost savings may be achieved by grouping similar projects together.
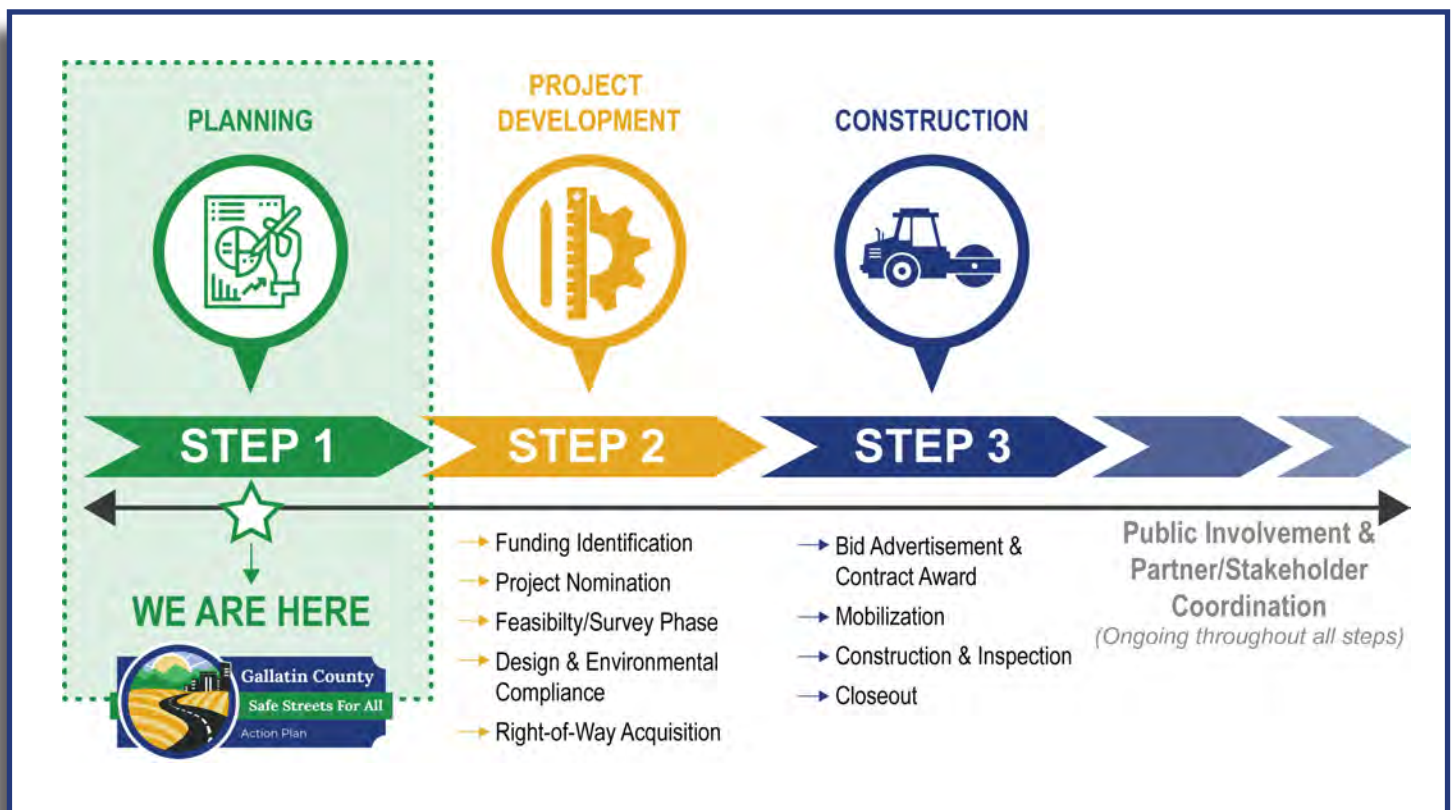

Figure 22: Project Development Process

6.6. Additional Considerations

Achieving meaningful improvements in transportation safety requires cooperation across the 4 E's of Safety—Education, Enforcement, Engineering, and EMS. Partners representing these elements must work together in a coordinated effort to address the diverse factors that contribute to road safety. While engineering solutions such as road design improvements and infrastructure enhancements are important, they can fall short if not reinforced through education and enforcement. For instance, changes to speed limits or cell phone ordinances may be well-intentioned but will not have the desired impact unless drivers are educated about the changes and enforcement is consistent. Public awareness campaigns and law enforcement efforts must be ongoing to ensure that safety measures are respected and effective. Safety is not a one-time effort—it requires continuous monitoring, education, and enforcement to maintain its momentum and effectiveness.

In addition to collaboration within the 4 E's, effective multiagency coordination is crucial for the successful implementation of safety improvements across Gallatin County. The Action Plan primarily focuses on the rural regions of the county and the urban-rural interface with the Cities of Bozeman and Belgrade, each of which is working on its own transportation safety initiatives. **To ensure a cohesive and consistent approach, all plans must align in their messaging and objectives.** This alignment is particularly important as the City of Bozeman was recently established as a Metropolitan Planning Organization (MPO) and is embarking on its first MPO transportation planning effort. The MPO boundary extends beyond the city limits, with both Belgrade and Gallatin County as partners. As such, future transportation efforts should align with the safety priorities outlined in this Action Plan, as well as those in the respective Action Plans of Bozeman and Belgrade, to ensure county-wide consistency in addressing safety issues.

Furthermore, many of the highest-volume roadways in Gallatin County are MDT highways, and much of the densest development occurs on roadways within cities and towns. While this Action Plan primarily focuses on routes under county jurisdiction, improving safety across the entire region will require coordination with MDT, local jurisdictions, and other partner agencies. **Multiagency collaboration will be essential to ensure that safety improvements are implemented effectively across all jurisdictions**, fostering a unified effort to reduce traffic-related incidents and improve overall safety throughout Gallatin County.