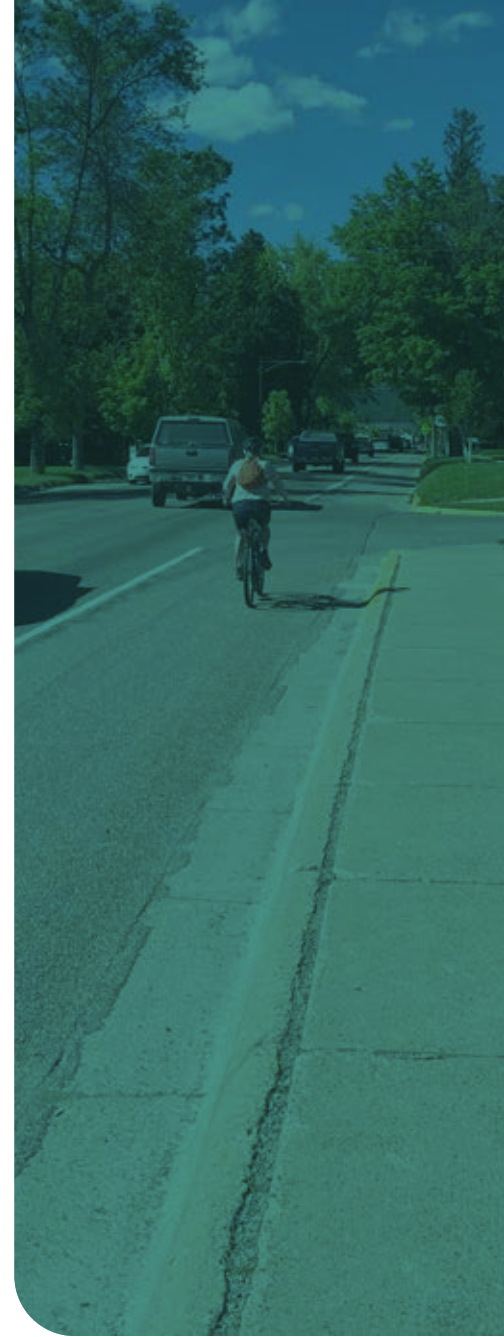


Whitefish Safe Streets For All

Action Plan

DRAFT

December 20, 2024



In memory of



Susi Kohler

As a dedicated Muldown Elementary crossing guard, Susi loved her job helping children safely cross the street and was passionate about safe routes to school.

Table of Contents

Table of Contents	I
Tables.....	II
Figures.....	II
Appendices	II
1. Introduction	1
1.1. Action Plan Outline.....	1
1.2. National Guidance	2
1.3. Planning Area.....	3
1.4. Relevant Supporting Documents	4
2. Outreach and Engagement	5
2.1. Task Force.....	5
2.2. Website	5
2.3. Stakeholder Outreach	6
2.4. Public Outreach.....	6
2.5. Public Comments.....	8
3. Baseline Data Summary	9
3.1. Data Challenges and Limitations	9
3.2. Crash Characteristics.....	10
3.3. Demographics	15
4. Focus Areas	19
5. Leadership Commitment and Goals	21
5.1. Fatality and Serious Injury Goals	21
5.2. Focus Area Goals.....	21
6. Strategy Identification	23
6.1. Overview of Strategy Attributes.....	23
6.2. Non-Motorist Involved Strategies.....	25
6.3. Intersection Strategies	30
6.4. Inattentive Driver Strategies.....	34
6.5. Speed Related Strategies	38
7. Project, Policy, and Program Identification	41
7.1. Recommendation Attributes	41
7.2. Project Recommendations	43
7.3. Program Recommendations	60
7.4. Policy Recommendations.....	67
8. Project Prioritization and Implementation	72
8.1. Prioritization	72
8.2. Implementation.....	76

Table of Contents

Tables

Table 1: Highest Scoring Intersections.....	16
Table 2: Highest Scoring Segments	18
Table 3: Prioritization Criteria	72
Table 4: Prioritization Results.....	73

Figures

Figure 1: Safe Systems Approach	2
Figure 2: Study Area	3
Figure 3: Crashes Reported By Year	10
Figure 4: Crash Occurrence By Month	10
Figure 5: Crashes by Day of the Week.....	10
Figure 6: Crashes by Hour.....	10
Figure 7: Crash and Injury Severity	11
Figure 9: Intersection Relation	11
Figure 8: Crash Density and Severity (2018-2022 MDT).....	12
Figure 10: Crash Types.....	13
Figure 11: Roadway Ownership.....	13
Figure 12: Speed Limit.....	13
Figure 13: Weather, Road, and Lighting Conditions	14
Figure 14: Top Contributing Factors.....	14
Figure 15: Driver Demographics.....	15
Figure 16: Intersection Safety Scores.....	17
Figure 17: Segment Safety Scores.....	18
Figure 18: Focus Areas.....	19
Figure 19: Project Locations	43
Figure 20: Project Development Process	76

Appendices

- Appendix A: Engagement Summary
- Appendix B: Baseline Data Summary

1. Introduction



The City of Whitefish 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 City limits. Completion of the *Whitefish SS4A Action Plan* will enable the City 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. Action Plan Outline

The *Whitefish SS4A Action Plan* is organized into eight chapters.

Chapter 1: Introduction provides an overview of national SS4A program guidance, introduces the planning area, and outlines relevant supporting documents consulted in development of the plan, with additional detail included in **Appendix B**.

Chapter 2: Outreach and Engagement summarizes efforts to involve the community in development of the Action Plan, including Task Force meetings, a walk audit, stakeholder meetings, City Council coordination, and a variety of public outreach including the Walk N Roll event, website postings and an online commenting map, and two in-person public meetings. Additional information is provided in **Appendix A**.

Chapter 3: Baseline Data Summary provides an overview of crash data analysis occurring within the Whitefish City limits from 2018 to 2022, including crash characteristics, demographic details, and the High Injury Network (HIN). Additional information is provided in **Appendix B**.

Chapter 4: Focus Areas summarizes the four focus areas selected for the Action Plan, including 1) non-motorists (pedestrians and bicyclists), 2) intersections, 3) inattentive drivers, and 4) speeds. The selected categories reflect baseline data analysis and public/stakeholder input.

Chapter 5: Leadership Commitment and Goals outlines fatality and serious injury goals and focus area goals, in fulfillment of SS4A program requirements. Goals identify target actions to measure progress toward eliminating fatalities and serious injuries on Whitefish roadways.

Chapter 6: Strategy Identification presents a series of broad-based strategies associated with each of the four focus areas. Strategies involve the Es of Safety (Education, Enforcement, Engineering, and EMS) and follow the Safe Systems Approach with specific attention on safe road users, vehicles, road, and speeds. Example actions range 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. Information in this chapter is intended to assist in the future identification, development, and implementation of specific projects in Whitefish, including those listed in Chapter 7.

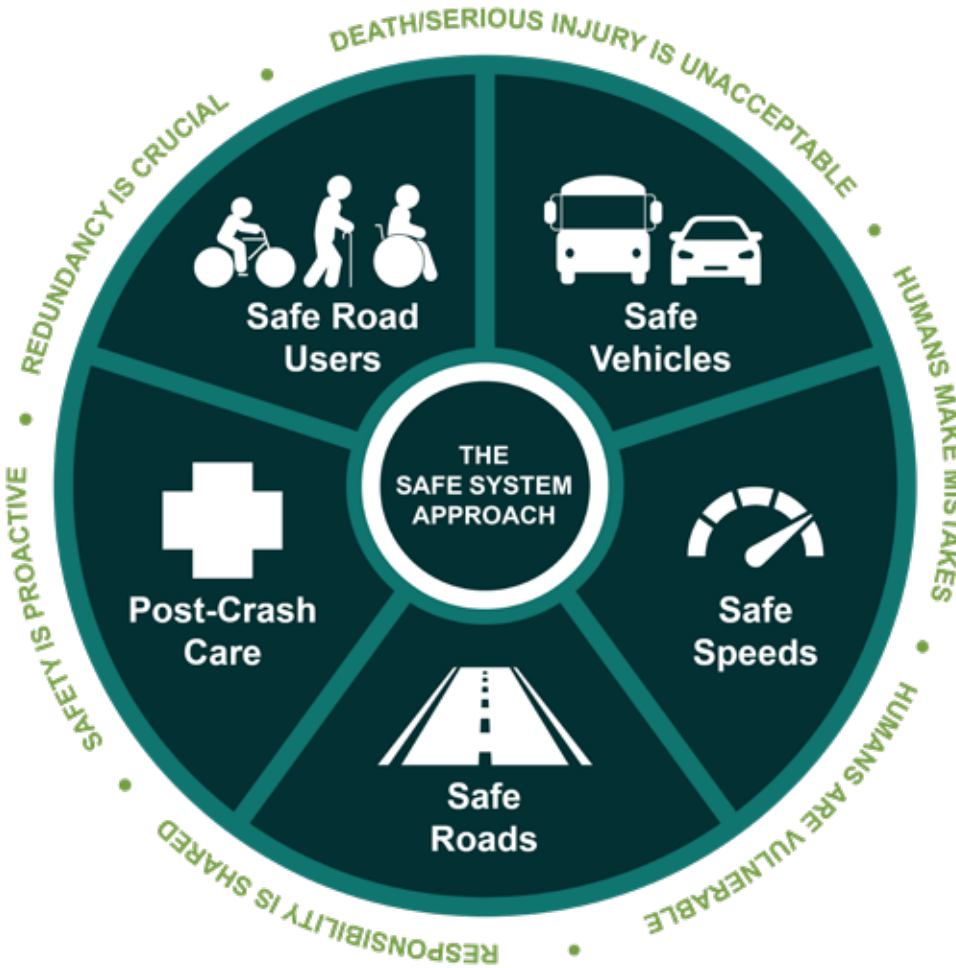
Chapter 7: Project, Policy, and Program Identification describes specific projects, programs, and policies recommended to proactively address transportation safety concerns from all angles, including infrastructure improvements, programs targeted at safe behaviors, and operational improvements. The recommendations can be developed as stand-alone efforts, or, in some cases, combined with other efforts as appropriate. Planning-level cost estimates were developed for each of the project recommendations.

Chapter 8: Project Prioritization and Implementation 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 City can effectively address safety concerns while ensuring a systematic approach to enhancing roadway safety.

1.2. National Guidance

The SS4A discretionary grant program was established by the Bipartisan Infrastructure Law/Infrastructure Investment 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 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 US Department of Transportation (USDOT) mission and priorities (equity, climate and sustainability, quality job creation, economic strength and global competitiveness)

Figure 1: Safe Systems Approach



1.3. Planning Area

This planning effort focused on the area bounded by the Whitefish City limits. **Figure 2** provides a map of the planning area. Note that the land surrounding the Amtrak rail lines, including the Wisconsin Avenue viaduct, is not annexed into the City and therefore is not included in the analysis.

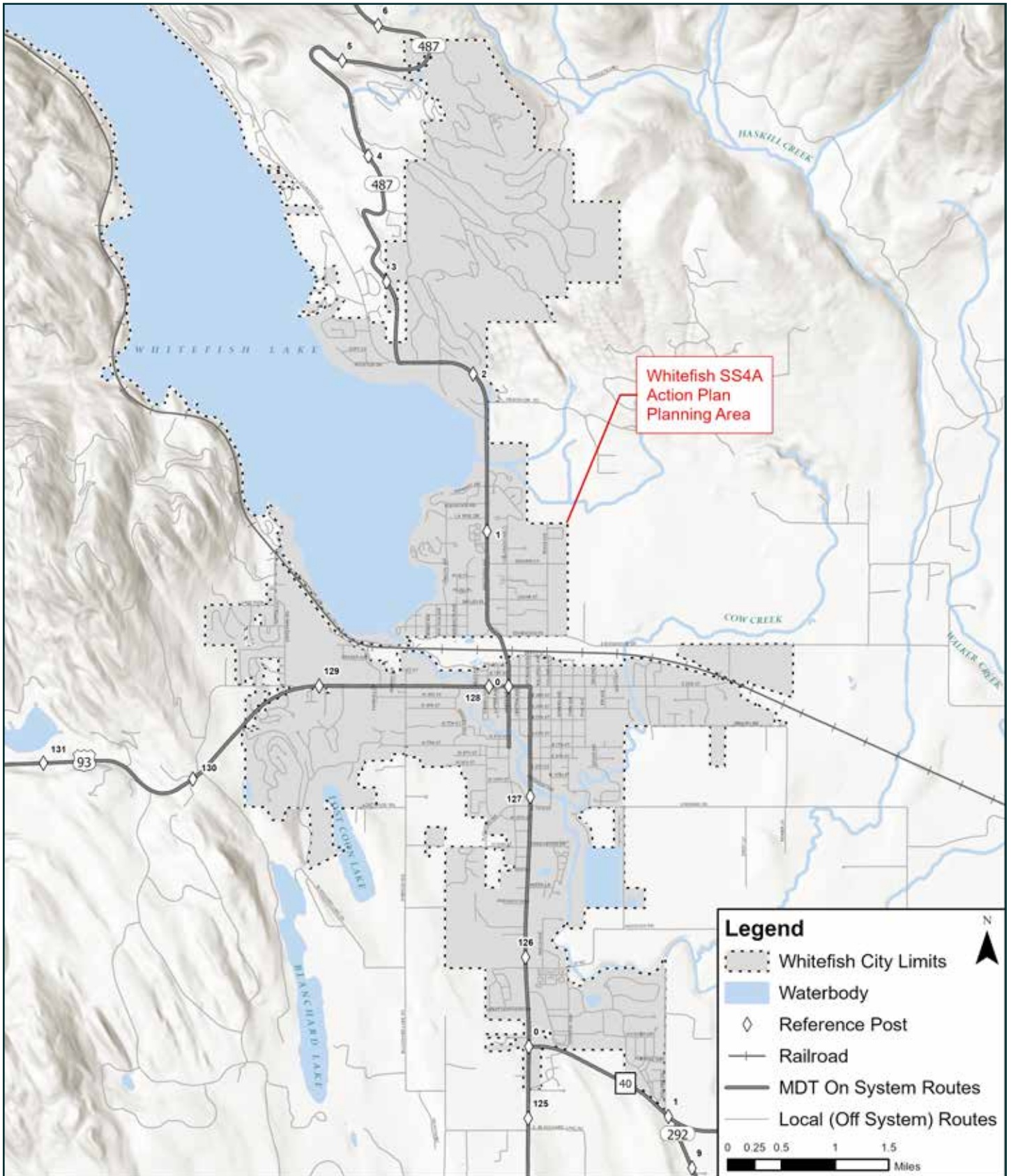


Figure 2: Study Area 3

1.4. Relevant Supporting Documents

Efforts to improve safety in the Whitefish community have been ongoing for many years and are reflected in past planning initiatives. The *Whitefish SS4A Action Plan* provides an opportunity to closely examine crash trends and explore safety concerns in greater detail. This Action Plan is designed to complement and integrate with previous transportation plans, current growth policies, and other relevant planning documents developed by the City, Montana Department of Transportation (MDT), and partner agencies in recent years. As a first step, a review of the City's past planning efforts was conducted to ensure the Action Plan aligns with the community's safety goals and addresses previously identified concerns. A review of the following plans and studies was conducted for this planning effort. A detailed review of each document is provided in [Appendix B](#).

- ✓ City Code of Whitefish (2024)
- ✓ Whitefish Transportation Plan (2022)
- ✓ Downtown Whitefish Highway Study (2022)
- ✓ Whitefish Highway 93 South Corridor Plan (2021)
- ✓ Whitefish Sustainable Tourism Management Plan (2020)
- ✓ City of Whitefish Engineering Standards (2019)
- ✓ City of Whitefish Parking Management Plan (2019)
- ✓ City of Whitefish Traffic/Transportation Report (2019)
- ✓ Wisconsin Avenue Corridor Plan (2018)
- ✓ Downtown Business District Master Plan (2018)
- ✓ City of Whitefish Climate Action Plan (2018)
- ✓ Connect Whitefish Bicycle and Pedestrian Plan (2016)
- ✓ Whitefish Highway 93 West Corridor Plan (2015)
- ✓ City of Whitefish Safe Routes to School Plan (2011)
- ✓ City of Whitefish Parks and Recreation Master Plan (2013)

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 City departments, MDT, community leaders, and local safety partners formed the SS4A Task Force. Since this Task Force is expected to assist City staff in implementing the *Whitefish SS4A Action Plan*, members were selected for their expertise, resources, and commitment to promoting transportation safety improvements in the community. Throughout the planning study, four 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.

Walk Audit

On the morning of June 5, 2024, members of the Task Force gathered at Muldown Elementary School to conduct a walk audit of key locations for potential safety improvements. The audit aimed to observe areas of concern within Whitefish, discuss issues, and brainstorm potential solutions for the *Whitefish SS4A Action Plan*. Locations included Muldown Elementary School, Whitefish Middle School, Whitefish High School, Memorial Park, Ashar Avenue/Creekview Drive, various intersections along 2nd Street (including Spokane, Central, Baker, Lupfer, and Miles Avenues), as well as Baker Avenue at 1st and 13th Streets.

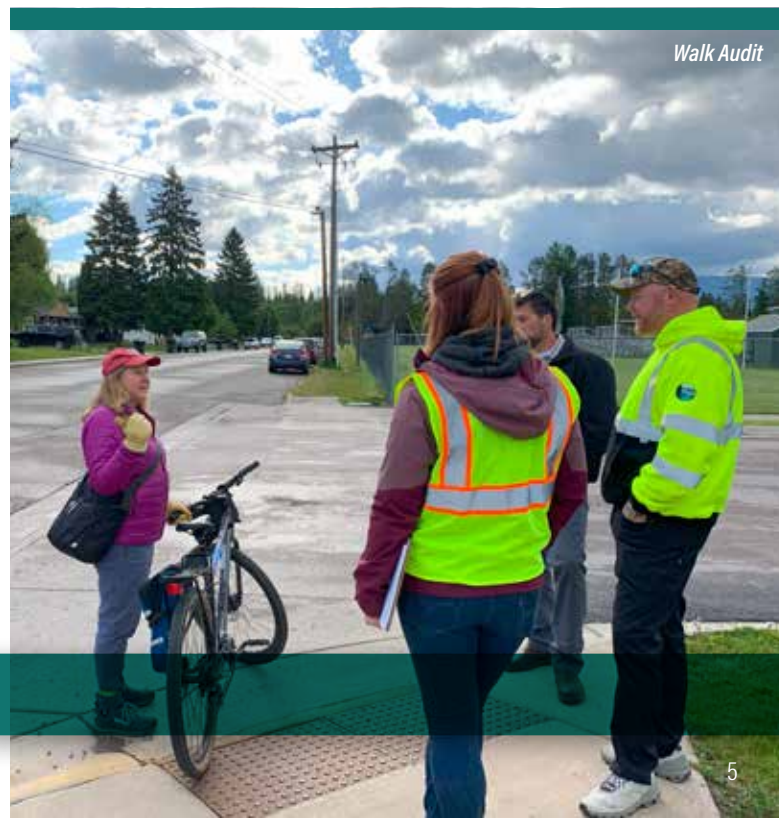
In addition, representatives from the consulting team performed a field review of other high-priority locations based on crash trends. One team member also conducted a bike tour around Whitefish to assess non-motorized facilities, identify safety concerns, and explore potential solutions. This hands-on approach allowed both the Task Force and consulting team to gain a thorough understanding of site conditions, enabling a proactive approach to address the community's safety needs effectively.

2.2. Website

A dedicated website was established to facilitate ongoing public engagement and share information throughout the planning process. Two easy-to-remember URLs, WhitefishSafeStreets.com and WhitefishSafeStreets.org, were created to guide users to the site developed and hosted by the consulting team. The website included contact information, an overview of the planning process, meeting announcements, frequently asked questions, and finalized documents. It also featured a link to an online commenting map for public input. The City plans to keep the website active after completion of the Action Plan completion to provide annual updates and inform the community about specific safety improvements.

Commenting Map

An interactive commenting map hosted on the ArcGIS platform allowed the public to share feedback throughout the planning process. Users could leave notes, highlight areas of concern, and engage with others' comments. During the study, 322 unique comments and 27 replies were posted, garnering an additional 97 likes. Notably, comments related to pedestrian and bicycle issues accounted for the majority, making up 70 percent of the total feedback. This platform facilitated valuable community input and helped effectively shape the Action Plan.



Walk Audit

2.3. Stakeholder Outreach

Effective stakeholder engagement is at the heart of the SS4A initiative, ensuring that a wide range of voices contribute to the development of the Action Plan. To understand these varied perspectives, the consulting team conducted a series of targeted meetings to discuss transportation safety concerns and gather insights from various partner organizations. This collaborative effort was complemented by ongoing coordination with the Whitefish City Council, which plays a crucial role in formally committing to the goal of zero roadway fatalities and serious injuries. By fostering dialogue with both stakeholders and local governing bodies, the SS4A program aims to create a comprehensive, community-driven approach to enhancing roadway safety.

Stakeholder Meetings

To gather targeted feedback, the consulting team conducted interviews with several stakeholders. These conversations aimed to introduce the *Whitefish SS4A Action Plan* and identify transportation safety concerns within the community. Over several months, multiple meetings with stakeholder groups were held, both in-person and virtually. Participants included representatives from diverse organizations, such as the Whitefish Police Department (WPD), Whitefish Schools, Explore Whitefish, Dream Adaptive, Safe Trails Whitefish, MDT, and the Big Mountain Commercial Association (BMCA). This inclusive approach ensured a variety of perspectives were considered, providing valuable insights from all user groups within the community.



Walk N Roll

City Council Coordination

An important component of the SS4A program is the official public commitment by a governing body to achieve the eventual goal of zero roadway fatalities and serious injuries. The Whitefish City Council is expected to make this commitment and has been kept informed throughout the plan's development.

The planning team met with the City Council at two critical points in the study process. On October 7, 2024, a presentation of initial study findings and preliminary recommendations was provided at a City Council work session in the City Council Chambers. The planning team will also present the final Action Plan to the City Council in an in-person meeting as part of the approval and adoption process. This coordination ensured that the Council was actively involved and supportive of the SS4A initiative.

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. This included news releases sent to local newspapers and news stations, as well as interviews conducted by City of Whitefish staff for local news features. Additionally, announcements were shared via posters placed around town, social media posts from the City of Whitefish and partner agencies, emails to study contacts, and updates on the study website.

Walk N Roll Event

Connect Whitefish, a community-based group engaged in advocacy, education, awareness, and promotion of biking and walking in Whitefish, along with several sponsor agencies, organized an event to encourage residents to walk, bike, or roll to downtown Whitefish. The "Walk N Roll" event was held on Tuesday, June 4, 2024, from 5:00 p.m. to 7:30 p.m. Central Avenue was closed to vehicular traffic and community members were invited to learn about bike safety, adaptive recreation, health benefits of human powered transportation, local trails, and bike commuting. The City of Whitefish set up a table at the event to share information about the Action Plan, promote the first public open house, and collect initial community feedback.



Public Meeting #1

The City of Whitefish hosted the first SS4A public informational meeting on June 5, 2024, at Whitefish City Hall in the Council Chambers. The purpose of the meeting was to provide an overview of the Action Plan process, share initial findings from the baseline safety data analysis, and offer an opportunity for the public to ask questions and share their safety concerns. The meeting was formatted as an open house with drop-in hours from 4:00 p.m. to 7:00 p.m. A total of 28 people signed in at the open house, and additional attendees were present but chose not to sign in.

Exhibits providing an overview of the SS4A process and crash data were set up around the Council Chambers. Multiple interactive stations included a word cloud exercise, focus areas voting, whiteboard, and commenting map. City of Whitefish and consultant staff were available to answer questions and gather input from the public.



Public Meeting #2

A second public meeting was held on October 8, 2024, at Whitefish City Hall in the Council Chambers. The purpose of the meeting was to share proposed improvement strategies, projects, and programmatic changes to address identified safety focus areas and offer an opportunity for the public to ask questions and provide feedback. The meeting was formatted as an open house with drop-in hours from 5:30 p.m. to 7:30 p.m. A total of 11 people signed in at the open house, additional attendees were present but chose not to sign in.

Exhibits were set up around the Council Chambers with information pertaining to community feedback to date, focus areas and goals, the Safe Streets for All approach, proposed focus area strategies, project locations, programs, and policies, next steps in the planning process, and study contact information. An interactive station was set up for people to indicate their priority locations for safety improvements in Whitefish.



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 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 and insights gathered from the public input received.

School Routes

The safety of school routes is a critical concern, particularly due to the presence of unsafe crossings and a lack of sidewalks for children traveling to school. Enhancements are needed to ensure that students can navigate their routes safely. This includes implementing better crosswalks and effective traffic control measures in proximity to schools, which would help protect students who walk or bike to school.

Crosswalks and Signage

Many crosswalks in the community are poorly marked or have become faded due to regular plowing and heavy traffic. This lack of visibility can create dangerous situations for pedestrians. Therefore, there is a pressing need for clearer signage and well-maintained markings, especially at intersections where visibility is compromised. Improving these elements will enhance pedestrian safety and encourage more individuals to cross streets confidently.

Sidewalk Connectivity

A significant number of areas lack proper sidewalks, forcing pedestrians to walk in roadways, which poses considerable safety risks. To address this issue, extending sidewalks and developing shared use paths is essential for connecting residential neighborhoods with schools and other key areas. Improved sidewalk connectivity will facilitate safer pedestrian movement throughout the community and promote walking as a viable transportation option.



Sidewalk ends at Columbia Ave and Riverside Ave intersection



Traffic Speed and Calming Measures

High vehicle speeds on numerous roads have raised concerns about safety for all road users. Residents have called for measures such as reduced speed limits, the installation of speed bumps, and the incorporation of traffic calming designs, such as roundabouts. Additionally, there are increasing worries that speeding vehicles often do not yield to pedestrians, particularly near busy intersections, making it imperative to implement effective traffic calming strategies.



Bike Infrastructure

There is a strong demand for improved bike infrastructure in the community, particularly the establishment of protected bike lanes on busy streets where cyclists currently share space with vehicles. Additionally, requests for designated bike paths and better connections to existing trails have been made to enhance safety and accessibility for cyclists. This infrastructure improvement is crucial for promoting biking as a safe and convenient mode of transportation.



Accessibility

Accessibility remains a significant issue, particularly at busy intersections and near schools where crossings are often not equipped for individuals with mobility challenges. Ensuring that all crossings are accessible will create a more inclusive environment and allow everyone, regardless of physical ability, to navigate the community safely.



Community Safety

The increase in traffic due to new developments has raised substantial concerns about transportation safety. Community members are advocating for measures that ensure safe access to bus stops and local businesses. By prioritizing safety in planning and development efforts, the community can foster an environment where all residents feel safe while traveling, regardless of transportation mode.



Public Awareness and Education

Community education on bike and pedestrian safety has been identified as a key component in improving awareness among both drivers and non-motorists. Initiatives aimed at raising public awareness can help reduce crashes and enhance overall safety for all road users. Engaging the community in educational campaigns will foster a culture of safety and encourage responsible behavior on the roads.

3. Baseline Data Summary







For this effort, the MDT Traffic and Safety Engineering Bureau provided crash data for the five -year period from January 1, 2018, to December 31, 2022. The data included all crashes occurring within Whitefish City limits over the five-year analysis period. This information includes data from crash reports submitted by Montana Highway Patrol (MHP) officers and local City, County, Tribal, 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. WPD data was also reviewed and is summarized in **Appendix B**, however MDT data was used for the majority of the analysis due to the level of detail available.

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 City, 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 the Whitefish area, several challenges and limitations should be acknowledged and considered when drawing conclusions from the data.

- 
Underreported Data: Many crashes, especially those where individuals and vehicles are unharmed, are not 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 **530 crashes** reported within the Whitefish City limits over the five-year analysis period extending from **January 1, 2018, to December 31, 2022**. The following sections summarize crash details and other characteristics associated with these crashes that occurred over the analysis period. 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.

Year

The number of crashes reported per year by MDT is presented in **Figure 3**. MDT data indicated a decline in crashes between 2018 and 2021, with a large spike in crashes in 2022.

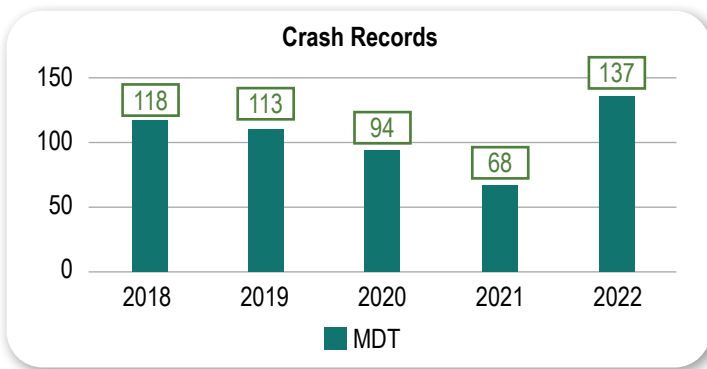


Figure 3: Crashes Reported By Year

Month

Figure 4 shows the distribution of reported crashes based on the month of the year in which the crash occurred. Approximately 29 percent of crashes occurred in the **summer months** (June through August), while 35 percent occurred in the **winter months** (December through February). Crashes were lowest in the spring and fall, which are shoulder seasons for visitation in Whitefish. The highest number of crashes occurred in January.

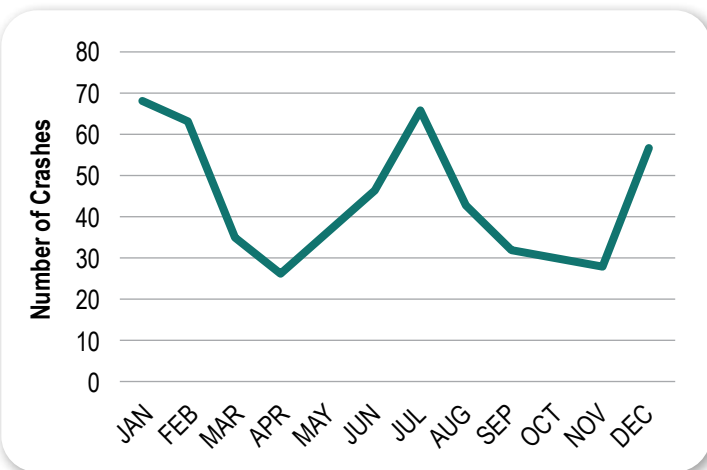


Figure 4: Crash Occurrence By Month

Day of the Week

A higher number of crashes occurred on weekdays (82 percent) compared to weekends. This suggests a **possible trend with regular commuting patterns** and generally **higher traffic exposure on weekdays**. The greatest number of crashes were recorded on Wednesdays. The distribution of crashes based on the day of the week on which the crash occurred is presented in **Figure 5**.

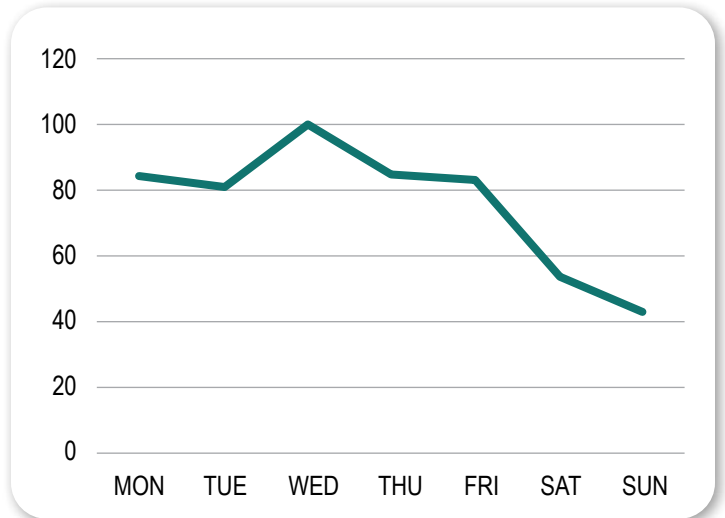


Figure 5: Crashes by Day of the Week

Time of Day

The time-of-day distribution for crashes is presented in **Figure 6**. Prominent peaks occur at 8:00 a.m., around 12:00 p.m., and between 3:00 p.m. and 5:00 p.m. with smaller peaks building over the course of the day. These time frames likely correspond to **morning and evening commutes, lunchtime hours, and school start and release times** when traffic volumes are typically higher and roadways are generally more congested. The most crashes occurred during the 4:00 p.m. hour. Crashes in the evening, late night, and early morning hours were fairly rare.

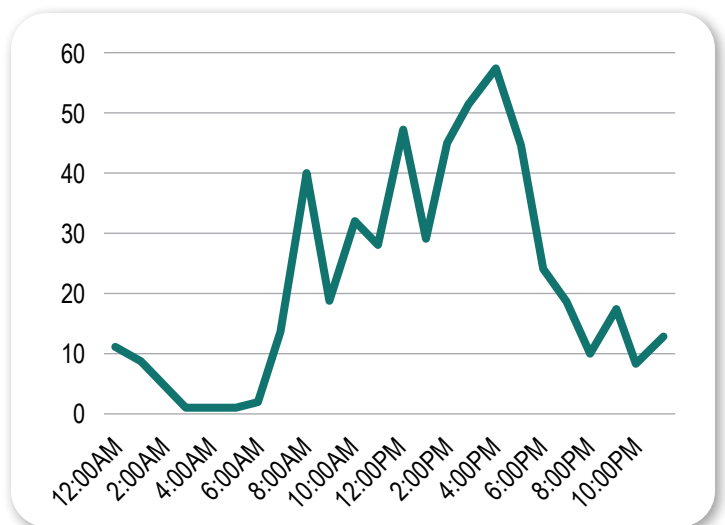


Figure 6: Crashes by Hour

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 five-year analysis period, a total of **530 crashes occurred involving 1,109 individuals**. As shown in **Figure 7**, about 16 percent of those crashes resulted in some level of injury, and less than 1.5 percent were severe. There were two fatal crashes, resulting in **two total fatalities**, and five suspected serious injury crashes, resulting in **six total suspected serious injuries**. A total of 109 of the 1,109 individuals involved in crashes (about 10 percent), received a suspected minor or possible injury as a result of a crash. Approximately 84 percent of crashes were reported as causing property damage only (PDO) or as unknown severity.

1,109 people involved in **530** crashes

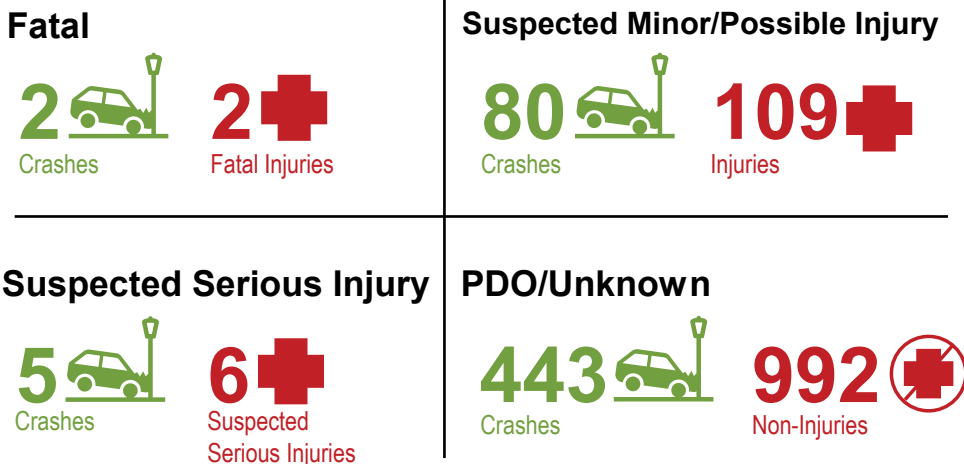


Figure 7: Crash and Injury Severity

Location

Evaluating crash location can help identify concentrations or area characteristics corresponding to a higher risk of occurrence. **Figure 8** on the following page shows the density of crashes across Whitefish as well as the location of severe crashes within the study area. This map shows **higher concentrations of crashes in the downtown area and along US 93**. These areas have higher traffic volumes and are typically more congested than other areas of the City, leading to **greater traffic exposure and a higher risk of conflicts**. Similarly, five out of seven severe crashes occurred on US 93, which carries the highest traffic volumes and has the highest speed limits contributing to both a higher probability of conflicts as well as higher risks of injury when a crash occurs.

Intersection Relation

Approximately 20 percent of all crashes occurred at an intersection and an additional 33 percent of crashes were related to an intersection (i.e., rear-end crashes). About 4 percent of crashes occurred at a driveway or other access type, while 43 percent occurred at a non-junction location, as illustrated in **Figure 9**. In terms of severity, five out of seven severe crashes occurred at an intersection or were related to an intersection. Two severe crashes, one fatal and one serious, occurred at non-junction locations.

In urban areas, non-junction crashes tend to occur on local, neighborhood streets with lower speed limits, helping to reduce the risk of injury when a crash does occur. Intersection crashes in urban areas can be more severe due to the angle at which crashes occur (right-angle or head-on).

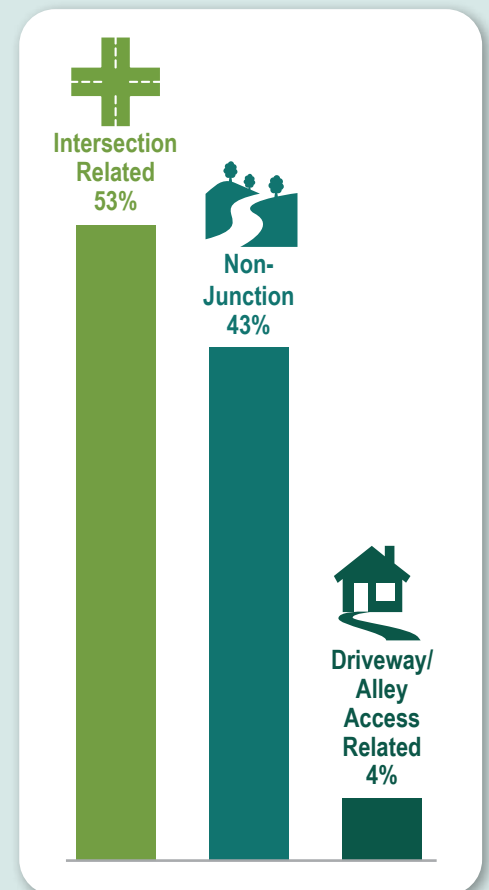


Figure 9: Intersection Relation

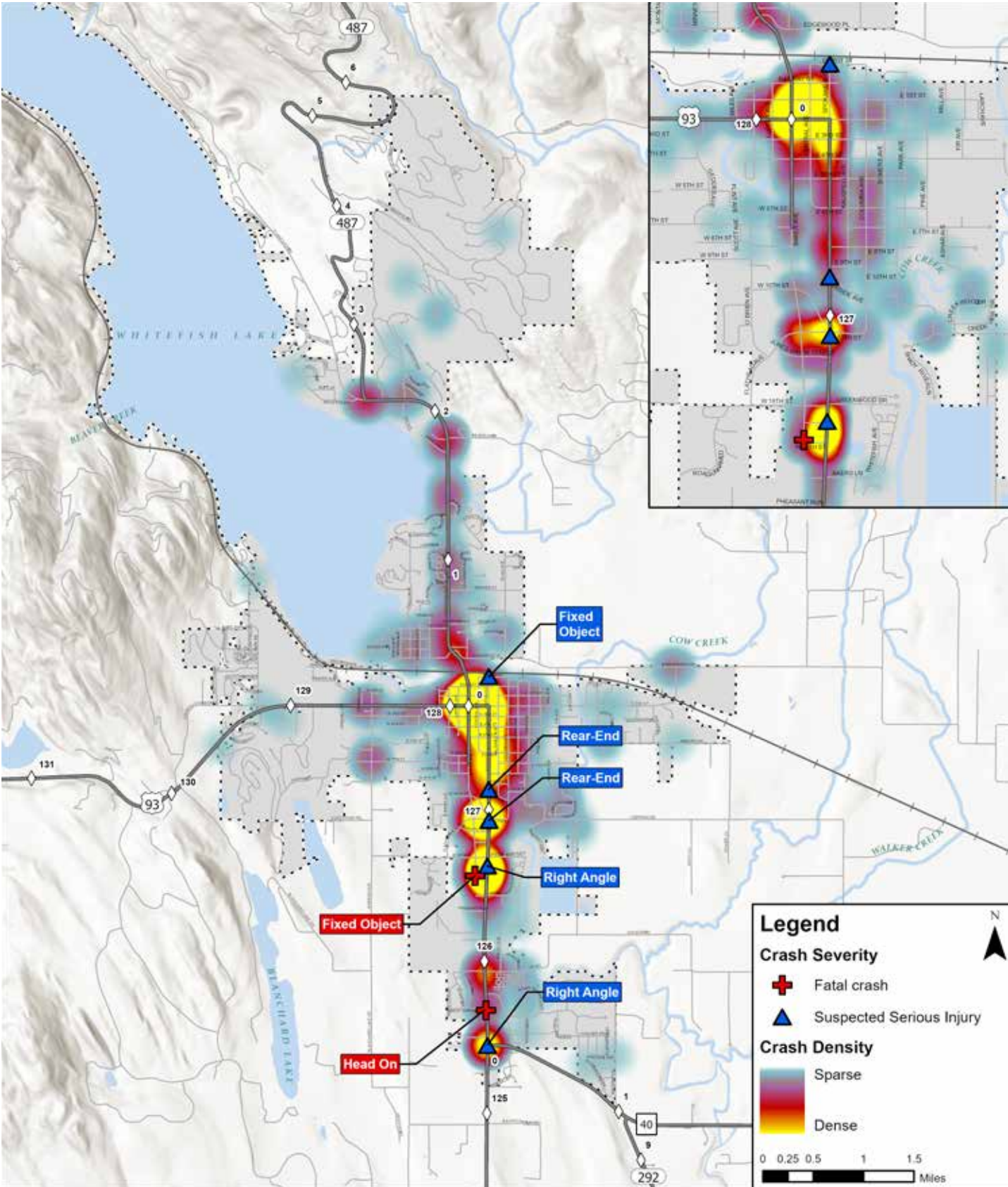


Figure 8: Crash Density and Severity (2018-2022 MDT)

Crash Type

Multi-vehicle crashes accounted for 83 percent of all reported crashes with a total of 439 crashes. The most common multi-vehicle crashes were rear-end (37 percent), right-angle (15 percent), and sideswipe crashes (13 percent), which are all typical crash types of congested urban areas.

Single-vehicle crashes represented 17 percent of crashes with 91 total crashes. Fixed-object crashes were the most commonly reported single-vehicle crash type accounting for 48 percent of those crashes, and nine percent of crashes overall. Fixed objects involved in crashes included utility poles/sign supports, guardrail and bridge rails, curbs, ditches, trees, and fences. Wild animal, rollover, and pedestrian involved crashes each accounted for five percent of single-vehicle crashes.

Figure 10 presents the distribution of both multiple- and single-vehicle crashes within the study area.

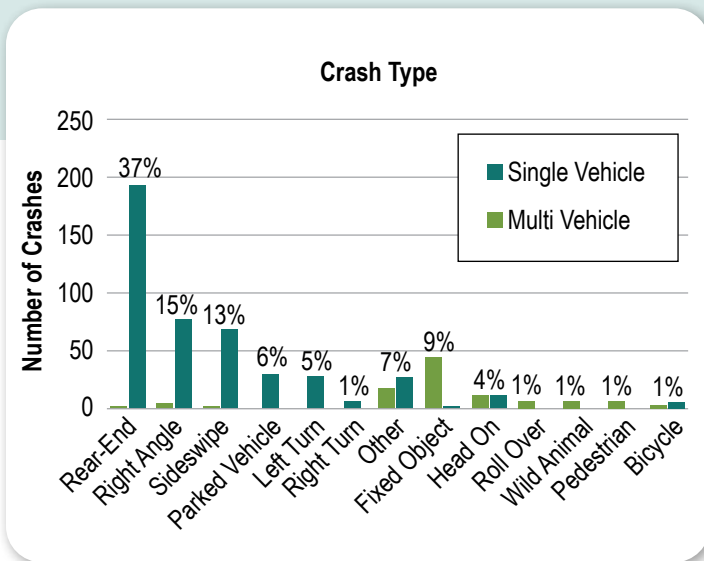


Figure 10: Crash Types

Vulnerable Road User Crashes

Of the 530 crashes that occurred during the five-year analysis period, just under 2 percent involved vulnerable road users. A total of **four bicycle** and **five pedestrian related crashes** occurred within the analysis period. None of the crashes were reported to involve severe injuries. Of all the people involved in crashes, 47 or about 4 percent were categorized as non-motorists. Interestingly, many of the non-motorists were reportedly involved in other crash types (besides pedestrian or bicycle involved crashes) such as rear-end, right-angle, or sideswipe 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. Similarly, a sideswipe could occur if a vehicle swerves around a bicyclist into a vehicle in the neighboring lane.

Roadway Ownership

As shown in **Figure 11**, approximately 72 percent of crashes occurred on routes owned and maintained by the City of Whitefish, while the remaining 28 percent occurred on MDT-owned routes, such as US 93, Baker Avenue, and Wisconsin Avenue. Of the seven severe crashes, five occurred on MDT on-system routes (US 93) while the other two occurred on locally owned routes. These findings point out the **importance of interagency coordination** since multiple agencies within the City of Whitefish are responsible for the maintenance and improvement of roadways

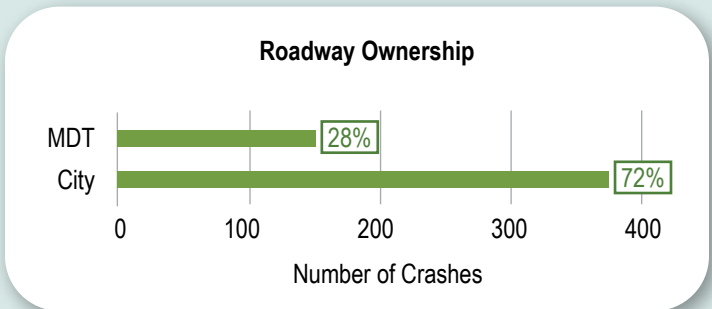


Figure 11: Roadway Ownership

Speed

Figure 12 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 **60 percent** of crashes occurred on roadways with a **posted speed limit of 25 miles per hour (mph) or less**, which is currently the standard speed limit for local and collector streets. Although a greater number of crashes occurred on lower speed roadways, these crashes **tended to be less severe**, resulting in lower crash severities.

Approximately 2 percent of crashes occurred on roadways with speed limits greater than 60 mph, which is typical of rural highways. Crash severity was much higher on high-speed roadways even though a smaller number of crashes occurred.

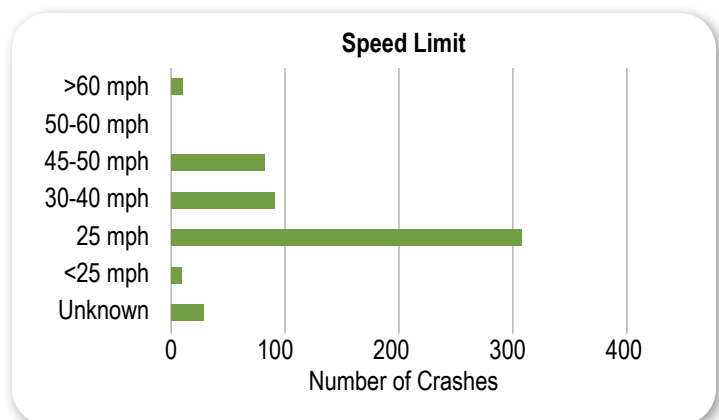


Figure 12: Speed Limit

Environmental Conditions

Figure 13 illustrates the percentages of crashes that occurred under various weather, road surface, and lighting conditions over the five-year crash period. The majority of crashes occurred when the weather was **clear** (53 percent) or **cloudy** (28 percent). Approximately 15 percent of crashes occurred when it was snowing, and three percent occurred when it was raining. Although the majority of crashes occurred when the road surface was dry (58 percent), about **40 percent occurred under adverse road conditions**. About 18 percent of crashes occurred on snow-covered roads, 12 percent on ice, or frost-covered roads, and 11 percent on wet 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. **All but 1 of the severe crashes occurred under clear weather conditions on dry roads.** One of the suspected serious injury crashes, a rear-end collision, occurred on a snowy day with wet roads.

Overall, 77 percent of crashes in Whitefish occurred during **daylight** conditions. About 20 percent of crashes occurred when it was dark outside, with about 75 percent of those crashes occurring in locations where street lighting was present. The remaining 2 percent of crashes occurred at dawn or dusk. Of the seven severe crashes, five occurred under daylight conditions. One of the fatal crashes occurred under dark lighting conditions without street lighting and one suspected serious injury crash occurred at dawn. Both crashes were fixed-object crashes at or related to an intersection.

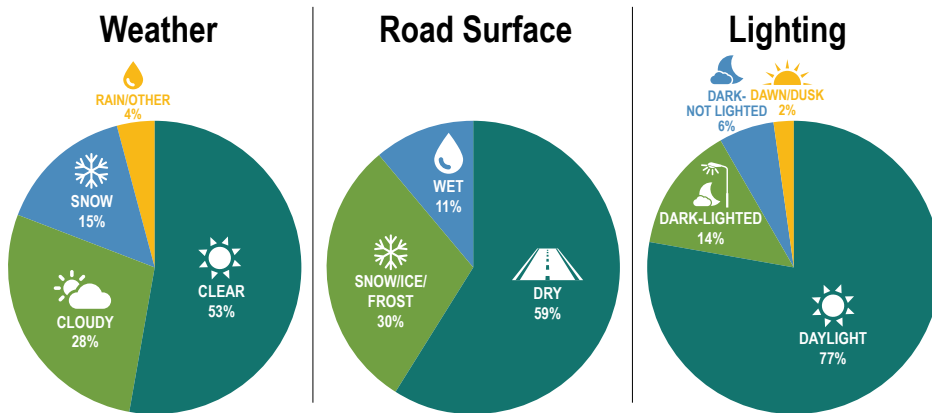


Figure 13: Weather, Road, and Lighting Conditions

Contributing Circumstances and Actions

In the majority of cases, contributing circumstances are not reported by local enforcement officers, however, when reported can indicate whether the crash was due to **driver error** or a **circumstance outside the driver's control**. Over the five-year analysis period, contributing circumstances were only included in about 15 percent of crash reports; in all other crashes, these fields were left blank. A summary of top contributing factors is shown in Figure 14.

Environmental circumstances including weather conditions, glare, animals in the roadway, or physical obstructions were noted as factors in about 12 percent of crashes. Road surface conditions, such as wet, icy, or snow-covered surfaces, were a factor in 14 percent of crashes.

When listed, the **most common** contributing driver action was driving in a **distracted, inattentive, or careless manner**, accounting for almost 30 percent of drivers. Following too closely, driving too fast for conditions, and failure to yield right-of-way were each listed as contributing actions for about 10 percent of drivers. Approximately 8 percent of crashes involved an impaired driver under the influence of drugs or alcohol. Both of the **fatalities** in the study area **involved an impaired driver**.

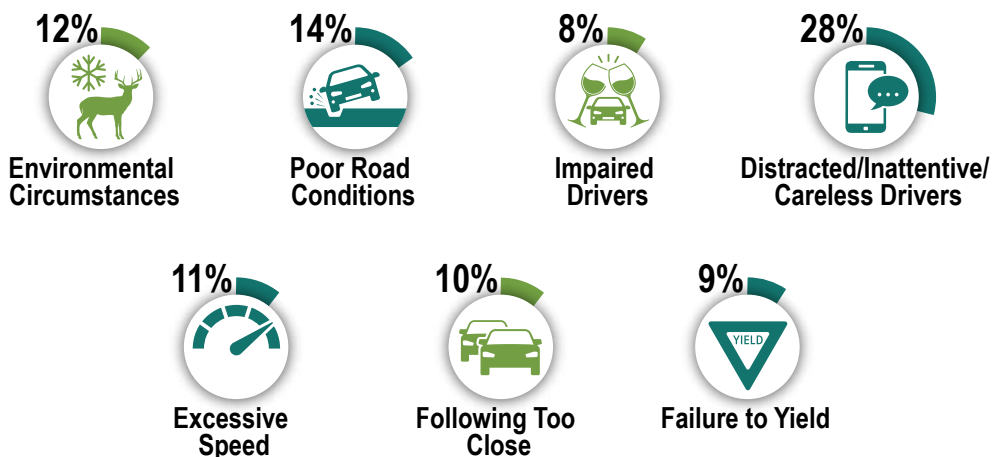


Figure 14: Top Contributing Factors

3.3. Demographics

An important analysis component includes consideration of demographics in terms of both the **demographics of the individuals** involved in crashes as well as the demographic **characteristics of the Whitefish area** as a whole. This analysis helps identify disparities of people involved in crashes as well as potential **disadvantaged populations** that may either be disproportionately affected by crashes or have a higher risk of involvement in crashes due to economic or social circumstances.

Individuals Involved in Crashes

Understanding the characteristics of individuals involved in crashes may help identify populations for educational campaign focus or identify groups chronically involved in crashes that may need special consideration during project design.

Overall, about 41 percent of individuals involved in crashes were female including 43 percent of drivers. Males accounted for 48 percent of all individuals involved in crashes, including 53 percent of drivers. For approximately 11 percent of people involved in crashes, the gender type was listed as unknown. Males accounted for both fatalities and three of the six suspected serious injuries.

The age distribution for drivers involved in crashes generally follows a typical bell curve, but skews slightly older, as shown in **Figure 15**, with the highest proportion of involved individuals in the 22- to 35-year age range. Approximately 14 percent of drivers involved in crashes were over the age of 65.

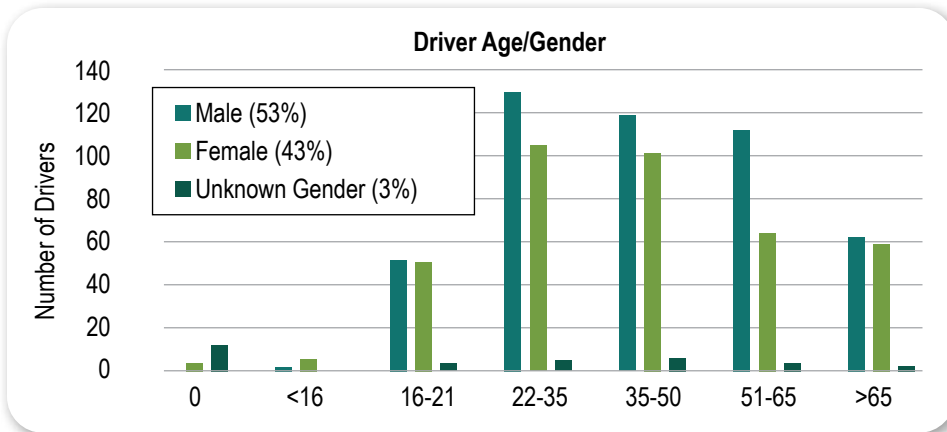


Figure 15: Driver Demographics

Transportation Equity

To address underinvestment in disadvantaged communities, the USDOT developed the Justice40 Initiative (J40). The initiative helps transportation agencies identify and prioritize projects that benefit communities facing barriers to affordable, equitable, reliable, and safe transportation. In accordance with J40, the USDOT developed a tool called the Equitable Transportation Community (ETC) Explorer which provides data that allows agencies to understand how a community is experiencing transportation disadvantage based on five components of disadvantage relating to transportation insecurity, environmental pollutant exposure, socioeconomic conditions, health conditions, and climate and disaster risk.

The ETC Explorer calculates the cumulative impacts of each disadvantage component across each census tract and uses percentile rankings to determine each census tracts' component score against all other census tracts both nationally and on a statewide basis. Based on an analysis for

the study area, **none of the census tracts in the City of Whitefish are identified as being overall transportation disadvantaged on either a statewide or national basis.** However, some census tracts qualify as disadvantaged for specific disadvantage indicators. On a national scale, most of the Whitefish area is identified as **disadvantaged due to transportation insecurity** due to factors such as auto-dependency, lack of access to public transportation, or long walking distances between key destinations such as medical services, grocery stores, parks, schools, and higher education. Additional information about disadvantaged status is provided in **Appendix B.**

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 the Whitefish area 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.

In general, the frequency of crashes and severe injuries in Whitefish is low, with no more than one fatal or suspected serious injury crash having occurred in a given area. For this reason, it is important to take into consideration the safety performance in comparison to the number of total crashes and severe injuries to better understand potential crash trends and safety concerns. Crash circumstances may affect whether crashes occurred due to problematic infrastructure conditions, repeated improper driver behaviors, or chance circumstances that could not have otherwise been prevented.

Intersections

The intersection HIN analysis calculated a safety score at each intersection by selecting crashes within 250 feet of each intersection. **Table 1** presents characteristics of the intersections with the highest intersection safety scores. The highest scoring intersection was Baker Avenue and 19th Street, which is configured as a 90-degree curve with driveways intersecting the curve. This intersection was the location of a crash resulting in one fatality and one suspected serious injury in addition to several other minor crashes. Flashing chevrons have been installed at the intersection in recent years to help mitigate safety concerns. Of the other highest scoring intersections, five are signalized and five are two-way stop-controlled (TWSC).

Table 1: Highest Scoring Intersections

Rank/Intersection	Control Type	# of Crashes	# of Severe Injuries
1 Baker Avenue / 19th Street	None	6	2
2 US 93 / Great Northern Drive	TWSC	4	1
3 US 93 / Commerce Street	Signal	19	1
4 US 93 / MT 40	Signal	19	1
5 Baker Avenue / 2nd Street	Signal	21	0
6 Spokane Avenue / 13th Street	Signal	16	1
7 Spokane Avenue / 10th Street	TWSC	16	0
8 Spokane Avenue / 19th Street	TWSC	17	0
9 Baker Avenue / 1st Street	TWSC	17	0
10 Spokane Avenue / 3rd Street	TWSC	13	0
11 US 93 / JP Road	Signal	12	0

Figure 16 shows intersections with the highest safety scores and includes 2022 annual average daily traffic (AADT) volumes for select roadways to provide a comparison of crash trends to traffic volumes. In general, a higher number of crashes is expected at **intersections with higher volumes due to increased exposure**. An intersection with a high crash score and comparatively low traffic volumes could be cause for concern.



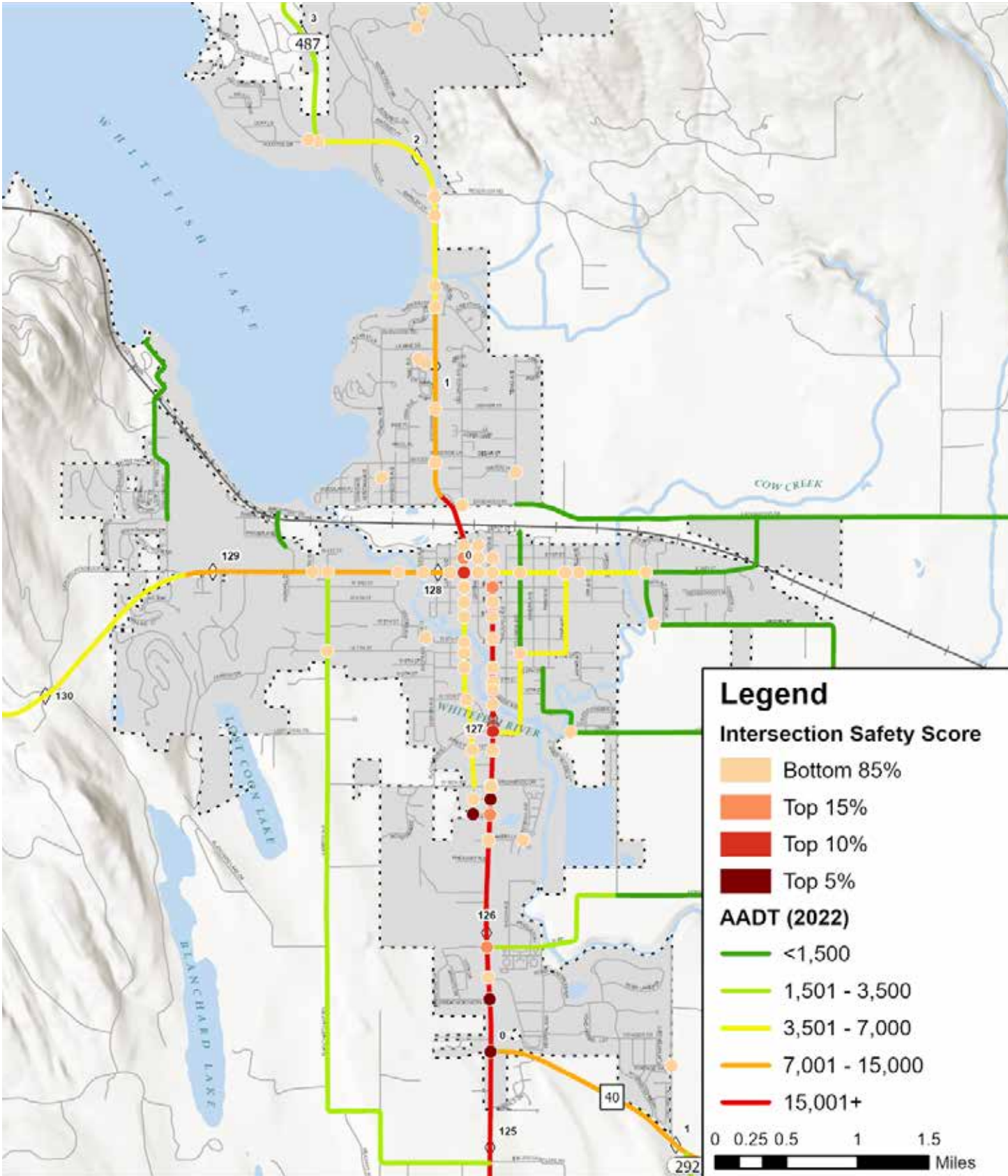


Figure 16: Intersection Safety Scores

Roadway Segments

The roadway segment HIN analysis evaluated the roadway network in 0.5-mile segments to compare roadway segments of equal length. **Figure 17** shows segments with the highest safety scores, and **Table 2** tabulates the characteristics of the segments with the highest scores. In general, all of the top-scoring segments are on roadways with higher traffic volumes and consequently higher risk of collisions.

Table 2: Highest Scoring Segments

Rank/Roadway	Extent	Length (mi)	# of Crashes	# of Severe Injuries
1 Baker Avenue	10th Street – 19th Street	0.5	27	2
2 US 93	MT 40 – JP Road	0.5	39	2
3 19th Street	Baker Avenue – Spokane Avenue	0.1	21	0
4 US 93	Akers Lane – Whitefish River	0.6	70	2
5 Baker Avenue	5th Street – Viaduct	0.5	56	0
6 Spokane Avenue	6th Street – Depot Street	0.5	52	1
7 2nd Street	Somers Avenue – Miles Avenue	0.5	47	0
8 Spokane Avenue	Whitefish River – 4th Street	0.5	38	0
9 1st Street	O'Brien Avenue – Spokane Avenue	0.25	31	0
10 Central Avenue	5th Street – Depot Street	0.4	29	0

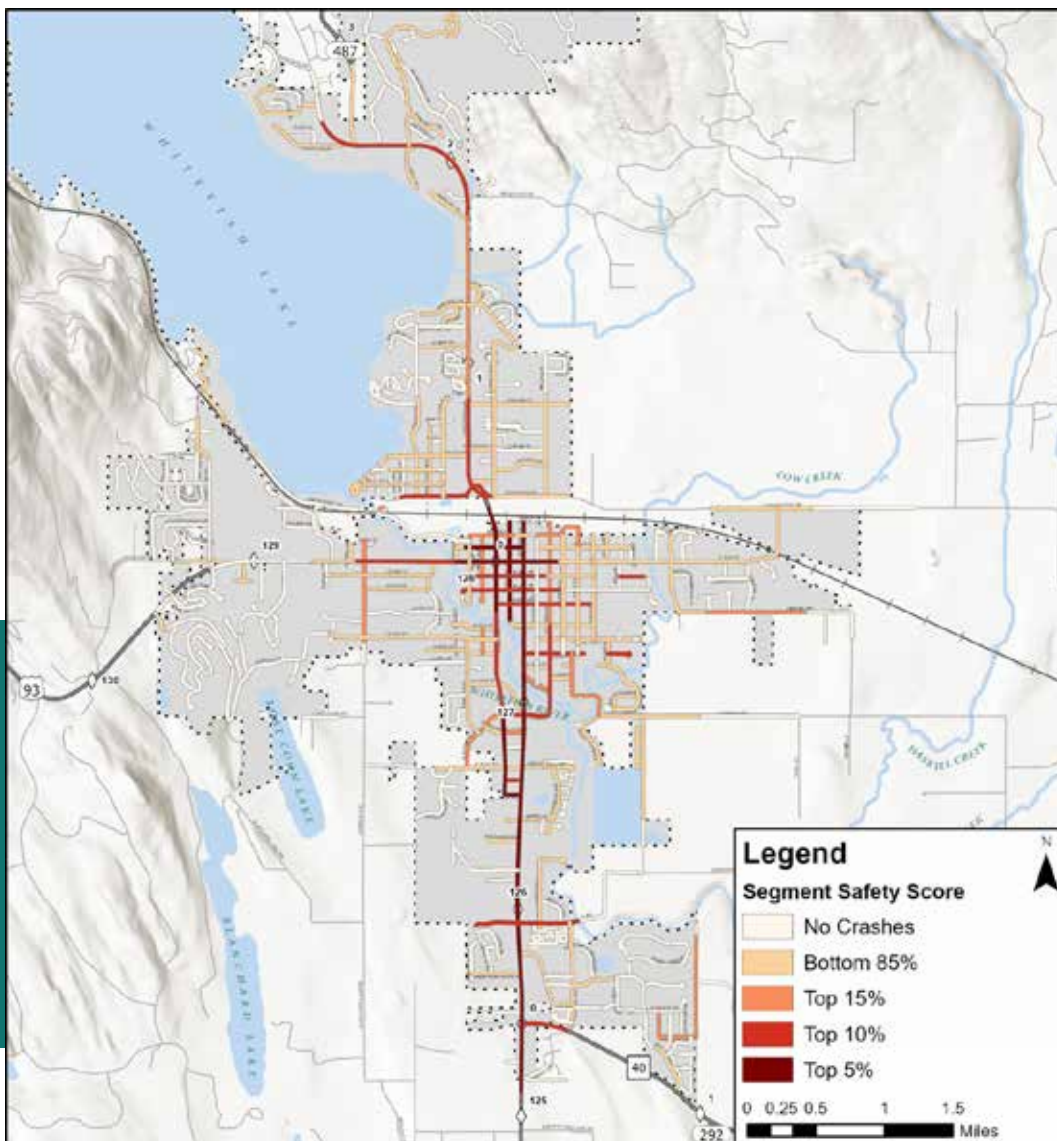


Figure 17: Segment Safety Scores

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. Based on baseline data analysis and public/stakeholder input, four primary focus areas were selected for the *Whitefish SS4A Action Plan*, as illustrated in **Figure 18**. The following sections describe selected focus areas, with additional detail provided in **Appendix B**.

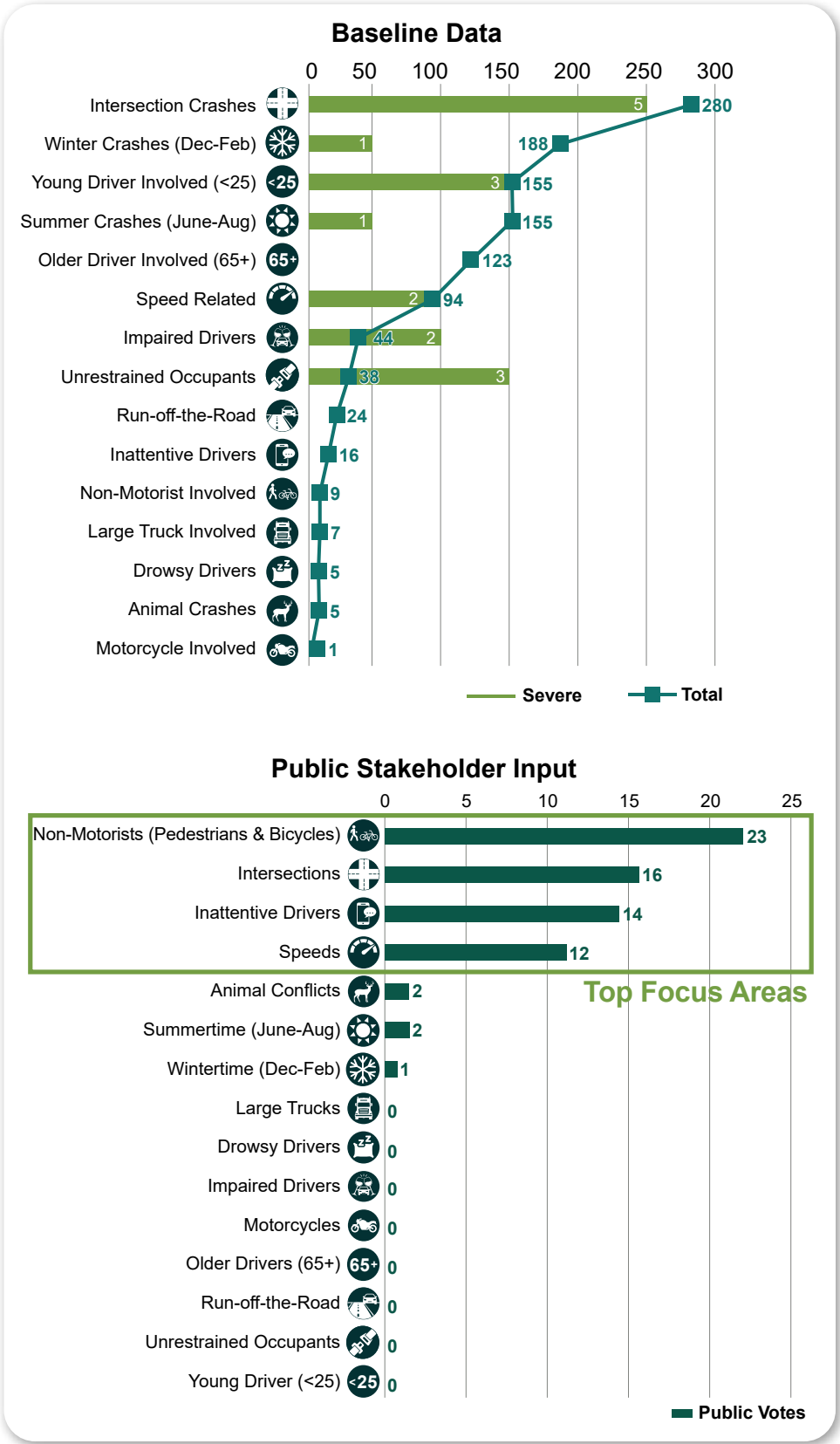


Figure 18: Focus Areas



Non-Motorist Involved Crashes

Pedestrians and bicyclists are active in the Whitefish area and have been both directly and indirectly involved in multiple crashes. A total of **32 non-motorist involved crashes** were identified, including four bicycle crashes, five pedestrian crashes, and an additional 23 crashes involving non-motorists in some capacity based on the person-type characteristics associated with the crash records. The majority of these crashes resulted in property damage only (75 percent), and **16 percent resulted in possible injuries**. Findings suggest that driver awareness of non-motorists may be lacking, though non-motorist attentiveness also appears to be a concern.

The relatively low number of reported pedestrian and bicycle crashes in the Whitefish area does not indicate a lack of safety concerns. National research has demonstrated **consistent underreporting of crashes involving pedestrians and bicyclists**, with as many as 44-75 percent of pedestrian crashes and 7-46 percent of bicyclist crashes missing from police-reported crash data.¹ Collisions involving non-motorists are not always reported by those involved, especially if no injury or property damage occurs. Feedback from the public and stakeholders indicated the lack of non-motorist crashes could be due to both **near-misses** as well as a **general avoidance** of walking and bicycling due to perceived or experienced unsafe conditions. For these reasons, **pedestrian and bicyclist safety is a top priority for the City of Whitefish**.

Intersection Crashes

Over **half of all the crashes in Whitefish** over the five-year analysis period occurred at an intersection (105) or were related to an intersection (175). A **fatality** resulted from one of the intersection crashes and **three resulted in suspected serious injuries**. Overall, 81 percent of the intersection crashes resulted in property damage only. None of the intersection related crashes resulted in a fatality and one resulted in suspected serious injuries. Overall, 77 percent of the intersection crashes resulted in property damage only.

Overall, crashes at intersections and intersection related crashes generally followed similar trends. Distinctions included more **rear-end collisions** associated with intersection related crashes while intersection crashes resulted in more **angle crashes with higher severities**. Also, a higher proportion of intersection related

crashes occurred under adverse winter related road or weather conditions and involved drivers following too closely and **driving too fast for conditions**. In terms of location, the downtown Whitefish area, the 13th Street and Baker/Spokane Avenues, US 93/19th Street, and US 93/MT 40 intersections were all hot spots for intersection crashes. These are all **high-volume intersections** with significant traffic volumes and turning movements.

Inattentive Drivers

Distracted driving is prevalent in the Whitefish area and a contributing factor in many of the area's crashes. A total of **210 individuals**, including 205 drivers and five non-motorists, were reported as **driving in a distracted, inattentive, or careless manner**, resulting in 189 crashes. Additionally, 16 individuals in 15 crashes were specifically coded as a distracted driver.

The most common crash types resulting from distracted drivers included rear-end, sideswipe, right-angle, and fixed-object crashes. Distracted drivers involved in crashes skewed slightly younger compared to overall crashes. Other common contributing factors (besides distracted/inattentive driving) included **following too closely, driving too fast for conditions, and failure to yield right-of-way**.

Speed Related Crashes

A total of **70 individuals**, including 69 drivers and one non-motorist, were reported as driving too fast for conditions or exceeding the posted speed limit, resulting in 69 total crashes. Speed was considered a contributing action in about 13 percent of all crashes in Whitefish over the five-year analysis period. Over the same period, **62 speed related violations** were also recorded, accounting for 18 percent of all citations.

Based on feedback from the public and stakeholders, speeding is a high-priority safety concern in Whitefish. The community perceives that **vehicles travel too fast**, which can make the roadway environment **uncomfortable for other users, especially non-motorists**. Feedback from the Whitefish Police Department indicates vehicles typically abide by posted speed limits or travel just over the speed limit. This discrepancy could indicate posted speeds are too high for the context and the desired comfort levels of non-motorists, and that further investigation may be warranted.

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.



5.1. Fatality and Serious Injury Goals

Based on the findings in this report, fatal and suspected serious injury crashes are already comparatively low in the Whitefish area. In 3 of the 5 years studied, the community achieved zero fatalities, and in 2019, Whitefish achieved zero fatalities and suspected serious injuries.

Accordingly, the City of Whitefish has committed to a goal of **zero fatalities and suspected serious injuries by 2030** to allow the City enough time to acquire funding to implement the strategies and projects recommended in this Action Plan to make progress towards the goal of zero.

5.2. Focus Area Goals

In addition to a commitment to zero roadway fatalities and serious injuries, the City of Whitefish desires to set other goals that can help the City track progress towards reducing crashes and improving overall safety and comfort for all transportation users. The goals are centered around the key focus areas of the Action Plan.



Non-Motorist Involved Focus Area

Develop a non-motorist count program to continually measure the number of people who walk and bike for transportation purposes, with the goal **to increase the number of people who walk and bike in Whitefish by 10 percent over the next five years.**



Intersection Crashes Focus Area

Using the strategies defined in the Action Plan, **complete at least two intersection safety improvement projects per year** to improve safety at intersections identified on the HIN over the next five years.



The City of Whitefish desires a transportation system that is safe and comfortable for pedestrians, bicyclists, and other non-motorists to use on a daily basis. It is envisioned that progress towards creating a safe multimodal roadway environment will help encourage more people to walk, bike, and roll, thereby reducing the number of vehicles on the road and reducing the potential for conflicts. Increases in pedestrian and bicycle activity will be an indication of improved non-motorist safety and comfort.

To improve safety at intersections, the City of Whitefish will begin by targeting safety concerns at the highest scoring intersections on the HIN. Additional intersection safety improvement projects will be implemented as funding allows.





Inattentive Drivers Focus Area

Reduce the number of crashes involving inattentive/distracted driving by five percent over the next five years.



Many crashes that occurred in the Whitefish area could have been prevented had the driver or non-motorist been focused on the task of safe transportation. Achievement of this goal will require investment in educational campaigns targeted at changing driver and non-motorist behavior as well as increased investment in targeted enforcement to curb distracted driving, especially the use of cell phones. To enable more accurate tracking, WPD officers should receive enhanced training to ensure contributing circumstances related to distracted driving are correctly reported.



Speed Related Focus Area

Complete at least two speed related or traffic calming projects per year over the next five years to encourage slower speeds.



To address speed related crashes, a first step will be determination of whether current speed limits are appropriate for the context of the roadway. If the speed limit is determined to be too high, the City could pursue lowering speed limits on local roads. If the speed limit is determined to be appropriate but cars are traveling above the posted speeds, implementation of traffic calming projects could help reduce travel speeds in high-risk locations. High-risk locations may include non-motorized crossings, routes to schools, community gateway areas, or residential areas.



6. Strategy Identification



Individual strategies were identified with the intention of reducing fatalities and serious injuries in Whitefish 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 the City of Whitefish 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 Whitefish, including those listed in Chapter 7.

Safe Systems Approach

The strategies were selected based on the SSA, a national framework that aims to improve transportation safety by reinforcing multiple layers of protection to both prevent crashes from happening and minimize the harm caused to those involved when crashes do occur.² It is a holistic and comprehensive approach that prioritizes the elimination of crashes that result in death and serious injuries. The approach recognizes that humans are vulnerable and make mistakes, the responsibility for roadway safety is shared, safety partners should be proactive and address deficiencies before crashes occur, and redundancy in the transportation system is crucial. To support these objectives, the SSA is categorized according to the five elements below.



Safe Road Users: Encourage safe, responsible behavior by people who use Montana's roads and create conditions that prioritize their ability to reach their destination unharmed. This element focuses on the behaviors of both drivers and non-motorists.



Safe Vehicles: Expand the availability of vehicle systems and features that help to prevent crashes and minimize the impact of crashes on both occupants and non-occupants.



Safe Roads: Design roadway environments to mitigate human mistakes and account for injury tolerances, to encourage safer behaviors, and to facilitate safe travel by the most vulnerable users.



Safe Speeds: Promote safer speeds in all roadway environments through a combination of thoughtful, equitable, context-appropriate roadway design, appropriate speed-limit setting, targeted education, outreach campaigns, and enforcement.



Post-Crash Care: Enhance the survivability of crashes through expedient access to emergency medical care, while creating a safe working environment for vital first responders and preventing secondary crashes through robust traffic incident management practices.

6.1. Overview of Strategy Attributes

Strategies are broad action categories intended to help achieve the community's transportation safety goals. Strategies are organized according to the community's four focus areas (Non-Motorist Involved, Intersection Crashes, Inattentive Drivers, and Speed Related). Strategies are also classified according to multiple attributes, which are intended to help agencies select appropriate strategies to address identified needs. The attributes indicate relevant safety framework elements, implementation examples, and supporting references to guide and inform future project identification and development.

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 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

Given the City of Whitefish's jurisdictional capacity and the identified focus areas for this effort, emphasis was placed on the Safe Road Users, Safe Roads, and Safe Speeds elements of the SSA. Post-crash care is a vital component of roadway safety but outside of the City's direct control. The City will continue to work with health care providers and first responders to further the community's goals while also ensuring timely emergency response and care. The Safe Vehicles element is also outside the purview of the City. In the *National Road Safety Strategy*, this element is mainly targeted at vehicle manufacturers and rulemaking at the federal level.³ For the *Whitefish SS4A Action Plan*, efforts to address this element focus primarily on bicycles and other personal conveyance devices such as wheelchairs, scooters, and skateboards, in addition to educating the public about available vehicle technologies that can help improve safety.

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. A list of locations identified by the public for potential safety improvements is provided in [Appendix B](#). 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.

Resources and Guidance

Several of the proposed strategies were developed based on national guidance and proven safety countermeasures. Where applicable, references to the Federal Highway Administration's (FHWA) *Proven Safety Countermeasures*⁴ and the National Highway Traffic Safety Administration (NHTSA) *Countermeasures that Work*⁵ are provided. Additionally, various resources are provided to assist partners with implementation efforts.



6.2. Non-Motorist Involved Strategies



Everyone is a pedestrian at various times. An individual walking to a parked car, standing in a driveway, running on the sidewalk, or rolling a wheelchair across a curb ramp is considered a pedestrian. Drivers are required to yield to pedestrians in marked and unmarked crosswalks and on sidewalks, though pedestrians should still be vigilant about ensuring drivers can see them before entering a vehicle's path. On the other hand, bicyclists are expected to follow the same standard practices as motorists such as riding on the right side of the roadway and are considered a vehicle when sharing the roadway. Since bicycles are much smaller than motorized vehicles, bicyclists are encouraged to abide by "see and be seen" principles such as communicating intent with looking, yielding, and signaling; avoiding vehicle blind spots; and using extreme caution near commercial vehicles and buses that have a harder time spotting smaller modes of travel.

The SS4A program encourages local governments to create safe streets for all roadway users including motorists and non-motorists. Accommodating non-motorists can be achieved through a variety of means including shared roadways, dedicated facilities, and off-network trails. The City of Whitefish already has a robust network of pedestrian and bicycle facilities but desires a comprehensive, connected, and accessible network that makes it easy to choose to walk or bike instead of driving a personal vehicle. It is the community's hope and intent that by making walking and biking safer and more convenient, vehicular activity will be reduced and, in turn, traffic conflicts will also be reduced, thereby improving transportation safety and operations overall. Strategies aimed at improving safety and comfort for non-motorists and generally encouraging safe and proper non-motorist behavior are outlined in the following sections.



Maintain Existing Non-Motorized Facilities

Maintaining non-motorized facilities—such as sidewalks, bike paths, trails, and pedestrian crossings—is crucial for ensuring safety, accessibility, and usability year-round for pedestrians and cyclists. Proper maintenance helps prevent conflicts, prolongs the lifespan of the facilities, and supports increased active transportation. City staff should regularly inspect facilities for wear and tear, damage, or potential hazards in addition to performing regular maintenance to keep facilities clear, accessible, and safe. To support continued use, failing or non-standard facilities should be repaired, upgraded to current standards, or replaced. Maintenance should extend beyond the physical surface and include striping and pavement markings, signage, lighting, railings, and other features. To ensure consistency and increase efficiency, maintenance efforts can be coordinated with broader transportation project development and roadway maintenance efforts.

Safe Systems Approach:

Safe Roads

E's of Safety:



Education



Enforcement



Engineering

Example Actions:

- Winter Snow and Ice Removal
- Annual Restriping
- Vegetation Management
- Sweeping and Debris Removal
- Sidewalk and ADA Upgrade/Replacement
- Surface Repairs
- Routine Inspections



Source: Adobe Stock



Source: Bike Walk Wichita



Source: MDT



Source: Houston Public Works

Resources and Guidance:

- *Pedestrian & Bicyclist Safety: Maintenance Measures*⁶ (FHWA)
- *Construction Techniques to Lessen Maintenance for Sidewalks and Paths*⁷ (FHWA)

Enhance Existing Non-Motorized Facilities

To improve safety at existing non-motorized facilities, various enhancements can be installed such as visibility enhancements, additional non-motorist protections, reduced crossing distances, and technology integrations. Implementing smart signage and adaptive signals can help alert drivers to the presence of non-motorists, while using high-intensity LED lighting, reflective materials, and colorful markings can improve visibility of non-motorist spaces. Additionally, installing physical barriers that increase the distance from vehicular travel lanes can provide improved protection for non-motorized users. These and other enhancements to non-motorized facilities can help create a safer, more accessible and user-friendly environment for pedestrians and bicyclists. To ensure effective implementation, improvements can also be paired with community engagement and safety campaigns to promote awareness of improvements and gauge community support.

● Safe Systems Approach:

Safe Roads

● E's of Safety:



Education



Engineering



The Ashar Ave/Creekview Dr Crosswalk could be a potential location to install crosswalk enhancements to improve visibility and safety.

● Example Actions:

- Crosswalk Enhancements
 - High Visibility Pavement Markings
 - Painted Crosswalks / Art Installations
 - Raised crosswalks
 - Refuge Islands
 - Curb Bulb-outs
 - Rectangular Rapid Flashing Beacons (RRFB)
 - Pedestrian Hybrid Beacon (PHB)/High-Intensity Activated Crosswalks (HAWK)
 - Non-Motorist Traffic Control (i.e. Stop/Yield Signs)
- Physical Separation of Motorists/Non-Motorists
 - Grassy Boulevards
 - Raised Curbs
 - Planters
 - Concrete Barriers
 - Plastic, Steel, or Concrete Bollards
 - Painted Buffers
 - Pedestrian Bridges or Tunnels
- Lighting (Crosswalk/Facility Illumination)
- Intelligent Transportation Systems (ITS)
 - Variable Messaging

● Resources and Guidance:

- *Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations*⁸ (FHWA)
- *Proven Safety Countermeasures: Crosswalk Visibility Enhancements⁹, Medians and Pedestrian Refuge Islands in Urban and Suburban Areas¹⁰, Pedestrian Hybrid Beacons¹¹, and Rectangular Rapid Flashing Beacons¹²* (FHWA)
- *Advancing Pedestrian and Bicyclist Safety: A Primer for Highway Safety Professionals*¹³ (NHTSA)
- *Accessible Sidewalks and Street Crossings: An Informational Guide*¹⁴ (FHWA)
- *Guidance for Determining Pedestrian Crossing Treatment at Uncontrolled Locations*¹⁵ (MDT)
- *New Study Shows Streets Are Safer with Asphalt Art*¹⁶

Install New Non-Motorized Facilities

Installing new non-motorized facilities, including connecting gaps in existing facilities, extending existing facilities, or constructing new facilities in other areas, can significantly impact safety for all road users. Providing a dedicated space for non-motorists helps reduce conflicts with faster-moving vehicles by minimizing interactions. Connecting existing facilities also creates continuous, predictable routes for non-motorized users, which helps drivers anticipate where they might encounter pedestrians and bicyclists, reducing the likelihood of crashes. Additionally, the presence of non-motorized facilities on or adjacent to roadways can serve as visual cues for drivers to slow down and be more cautious. However, non-motorized facilities should be carefully planned to reduce unintended risks, such as when bike lanes or sidewalks end abruptly, causing non-motorists to immediately merge with traffic. To ensure effective implementation, installation of new facilities can be paired with community engagement and safety campaigns to promote awareness of improvements, gauge community support, and encourage safe and proper use of new facilities.

Safe Systems Approach:

Safe Roads

E's of Safety:



Education



Engineering

Example Actions:

- New Facilities (per *Connect Whitefish Pedestrian and Bicycle Master Plan*)
 - Sidewalks
 - Bike Lanes
 - Shared Roadways/Bike Boulevards
 - Shared Use Paths
 - Trails
- Complete Streets Policy/Design



Resources and Guidance:

- *Compete Streets*¹⁷ (FHWA)
- *Complete Streets*¹⁸ (Smart Growth America)
- *Complete Streets: Best Policy and Implementation Practices*¹⁹ (APA)
- *Complete Streets Policy*²⁰ (City of Missoula)
- *Pedestrian and Bicycle Facilities and Trails*²¹ (MDT)
- *BIKESAFE Countermeasures: Bike Lanes*²², *Wide Curb Lanes*²³, *Separate Shared Use Path*²⁴, *Share the Path Treatments*²⁵, and *Separated Bike Lanes*²⁶ (FHWA)
- *Proven Safety Countermeasures: Bicycle Lanes*²⁷, *Walkways*²⁸, and *Road Diets (Roadway Reconfiguration)*²⁹ (FHWA)

Encourage Safe and Proper Walking/Biking

To encourage safe walking and biking behaviors, it is essential to address specific behaviors and promote choices and practices that enhance safety. Educational campaigns should focus on the dangers of distractions, such as using smartphones while walking or biking, and emphasize the importance of staying alert. Promoting helmet use is also crucial and can be achieved through helmet distribution programs, educational workshops, and helmet fitting events, often in partnership with local organizations and bike shops. Enhancing visibility involves encouraging the use of reflective clothing and bike lights, particularly at night or in low-light conditions, and distributing reflective gear through community events and schools. To encourage more non-motorist activity, organizing community events like “bike to work” days and “walking school buses” along with incentive programs and challenges can make walking and biking more appealing and practical for residents. Coordinating with local bike shops to run joint safety campaigns, offer discounts on safety gear, and host workshops can further support these efforts. Education campaigns can also focus specifically on safe school crossing behaviors, including only crossing in designated locations, waiting for crossing guard cues, and walking alongside bikes in crosswalks. By combining all of these strategies, the Whitefish community can foster safer walking and biking habits, promote active transportation, and ultimately enhance overall road safety.

● Safe Systems Approach:

Safe Road Users, Safe Vehicles

● E's of Safety: Education, Enforcement



Education



Engineering



Source: Cascade Bicycle Club

● Example Actions:

- Increase Availability/Visibility of Walking/Biking Resources
 - Maps (Preferred, Accessible, Connected Routes)
 - QR Codes on Rental Bikes
 - Easy to Find, Central Website with Maps, Safety Tips, etc.
- Traffic Safety Events
 - Bike To Work Days
 - Walking School Buses
 - Bike Rodeos
- E-Bike Regulations and Safety Education
- Education Campaigns & Incentives
 - Light/White/Bright Clothing, Helmets
 - Reflective Gear and Personal Lighting
 - Proper Awareness (i.e., Avoidance of Texting, Headphones, Ear Buds)
 - Rules of the Road
- Safe Routes to School (SRTS)
- Journeys From Home School Curriculum

● Resources and Guidance:

- *Countermeasures That Work – Pedestrian Safety*³⁰ (NHTSA)
- *Countermeasures That Work – Bicycle Safety*³¹ (NHTSA)
- *Safe Routes Partnership Publications*³²
- *National Center for Safe Routes to School Publications*³³
- *Electric Bikes and Scooters Snapshot of State Laws*³⁴

6.3. Intersection Strategies



Roadway networks consist of an interconnected system of streets and highways, with intersections representing the critical points where these roadways cross and where conflicts between roadway users can occur. Intersection crashes are especially prevalent in urban areas due to high traffic volumes, congestion, and complex intersection layouts. The mix of diverse road users—including cars, trucks, bicyclists, and pedestrians—can lead to varied behaviors and interactions that heighten crash risks. Frequent signal changes and limited space can contribute to impatient driving and tight maneuvering, while numerous access points create additional opportunities for conflicts. Distractions and congestion further exacerbate the chances of driver inattention and poor decision making. Additionally, outdated or inadequate infrastructure may fail to manage the high volume and complexity of traffic effectively, increasing the risk of congested-related conflicts. The following strategies target safety improvements at intersections to better manage traffic and reduce user conflicts.



Enhance Signalized Intersections

Enhancing signalized intersections to improve safety involves several key strategies. Optimizing signal timing, such as through adaptive signal control and coordinated timing, improves traffic flow and reduces congestion-related conflicts. Advanced technologies like pedestrian intervals, countdown timers, and dedicated turn signals further enhance safety by separating driver and pedestrian movements. Improved visibility through better signage and lighting ensures that signals are clear, while infrastructure upgrades like protected bike lanes, crosswalks, and curb extensions help provide safer spaces for pedestrians and cyclists. By integrating these improvements, intersections can better accommodate all road users to minimize crashes and enhance overall safety. Additional coordination between the City and MDT will be needed to discuss current signal phasing and potential improvements.

Safe Systems Approach:

Safe Roads

E's of Safety:



Engineering

Example Actions:

- Pedestrian Phasing
 - Leading Pedestrian Intervals (LPI)
 - Lengthened Walk Phases
 - Pedestrian Actuation
 - Pedestrian Scramble/Barn Dance
- Vehicle Phasing
 - Signal Optimization
 - Increase Yellow Change Intervals
 - Increase All Red Intervals
 - Dedicated Turn Phasing
 - Right-On-Red Restrictions
- Visibility Improvements
 - Intersection Lighting
 - High-Visibility Pavement Markings
 - Overhead Lane Use Signs
 - Retroreflective Backplates
 - Advance Warning Signs/Signals
- Intersection Geometry/Layout
 - Improve Sight Lines and Turning Angles
 - Dedicated Turn Lanes
 - Bicycle/Pedestrian Accommodations



Resources and Guidance:

- *Proven Safety Countermeasure: Leading Pedestrian Intervals³⁵, Yellow Change Intervals³⁶, Backplates with Retroreflective Borders³⁷, and Dedicated Left- and Right-Turn Lanes at Intersections³⁸* (FHWA)
- *Intersection Safety Strategies³⁹* (FHWA)



Enhance Unsignalized Intersections

Enhancing safety at unsignalized intersections involves several key strategies aimed at reducing conflicts and improving visibility for all road users. Raised crosswalks with high-visibility pavement markings can heighten motorist awareness of crossings. Implementing curb bulb-outs shortens crossing distances and improves sightlines, making pedestrians more visible to drivers. Splitter islands can be used to reduce full access movements, channeling traffic in safer, more controlled directions with less potential for crossing conflicts. Flashing stop signs and advance warning signs enhance safety by alerting drivers to the need to slow down or stop. Increased traffic control measures, such as roundabouts, two-way or all-way stop controls, and signalization when warrants are met, can help manage vehicle flow and reduce the risk of crashes in some cases. These combined strategies make unsignalized intersections safer and more predictable, ultimately reducing the likelihood of crashes and improving traffic flow overall.

● **Safe Systems Approach:**
Safe Roads

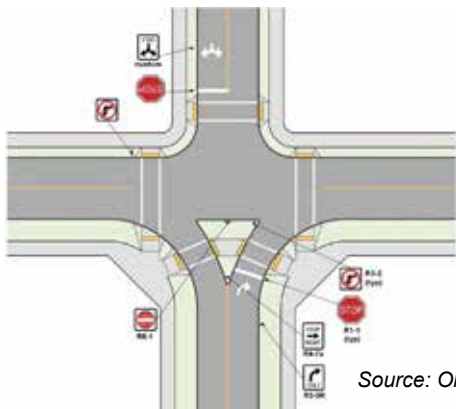
● **E's of Safety:**



Engineering

● **Example Actions:**

- Raised Crosswalks
- High-Visibility Pavement Markings
- Curb Bulb-outs
- Splitter Islands
- Flashing Stop Signs
- Advance Warning Signs
- Increased Traffic Control
 - Stop Control (Two-Way/All-Way)
 - Roundabouts
 - Signalization (If Warranted)



Source: Ohio DOT



Source: Great Greater Washington



Source: City of Bozeman



Source: RPA

● **Resources and Guidance:**

- *Proven Safety Countermeasure: Systemic Application of Multiple Low-Cost Countermeasures at Stop-Controlled Intersections⁴⁰ and Roundabouts⁴¹* (FHWA)
- *Unsignalized Intersection Improvement Guide⁴²* (ITE)
- *Low-Cost Safety Enhancements for Stop-Controlled and Signalized Intersections⁴³* (FHWA)

Improve Intersection Visibility and Safety

Improving safety and visibility at both signalized and unsignalized intersections involves several targeted strategies to enhance sight distance for both motorized and non-motorized traffic. Clearing obstructions, such as trimming trees, removing on-street parking, and clearing snow, ensures that sightlines are not blocked. Enhancing lighting with well-placed intersection- and pedestrian-scale lights improves visibility in low-light conditions. Design adjustments like curb extensions and maintaining clear sight distance triangles help improve visibility and reduce conflicts between users. Reflective materials, such as high-visibility signage and pavement markings, make critical information more noticeable. Additionally, advance warning systems, including flashing and advance warning signs, alert drivers to upcoming intersections and potential hazards. Complementing these physical improvements with public education and enforcement efforts also helps reinforce the importance of these measures and ensures compliance. By combining these strategies, intersections become safer and more navigable, ensuring all road users can see and react to potential risks effectively.

Safe Systems Approach:

Safe Roads

E's of Safety:



Education



Enforcement



Engineering



Example Actions:

- Daylighting Intersections
- Curb Extensions
- High-Visibility Pavement Markings/Signage
- Intersection Lighting
- Vegetation Management
- Snow Removal Management
- No Parking Zones Near Intersections
- Flashing Stop Signs
- Advanced Warning Signs
- Increased Enforcement (Red Light Running, Stop for Pedestrians, etc.)
- Education Campaigns
 - All Intersections Are Crosswalks, Stop for Pedestrians
 - Driver Report Cards at Intersections



Resources and Guidance:

- *Improving Intersections for Pedestrians and Bicyclists Informational Guide*⁴⁴ and *Fact Sheets*⁴⁵ (FHWA)
- *Guidance to Improve Pedestrian and Bicyclist Safety at Intersections*⁴⁶ (NCHRP)
- *Proven Safety Countermeasure: Lighting*⁴⁷ (FHWA)
- *Research Report: Street Lighting for Pedestrian Safety*⁴⁸ (FHWA)
- *Lighting Handbook*⁴⁹ (FHWA)
- *Pedestrian Lighting Primer*⁵⁰ (FHWA)
- *Driver Report Cards*⁵¹ (Seattle Department of Transportation)



6.4. Inattentive Driver Strategies

Distractions are prevalent in our daily lives and have become more commonplace while driving, walking, and bicycling. Distracted driving is defined in three main categories: visual (taking eyes off the road), manual or tactile (taking hands off the wheel), and cognitive distractions (taking mind off the road) and includes any activity that diverts a person's attention from the task of safe driving. Distractions can occur both inside and outside the vehicle. Examples of distractions include talking or texting on a cell phone, eating or drinking, talking to passengers, tending to children or pets, interacting with audio/video equipment, electronic gaming devices, or a navigation system, or focusing attention on something occurring outside the vehicle. Conducting any of these activities while driving can increase the risk of a crash occurring. The following strategies target distracted driving through educational campaigns, implementation and enforcement of regulations, and infrastructure improvements to focus drivers on the task of driving.



Promote Distraction-Free Driving

In recent years, distracted driving has been the focus of many national campaigns due to its increasing prevalence in crashes. These campaigns aim to reduce distracted driving by raising awareness of the issue and consequences, encouraging behavioral changes, and promoting safer driving practices overall. Integrating distracted driving education into school curricula and driver's education programs can be an effective way to target teen drivers. Using simulations, interactive activities, and personal testimonials can make the campaigns and lessons engaging and impactful. There are also many apps and in-vehicle technologies available that help drivers stay focused by blocking notifications or providing alerts if they're veering off course. Publicizing these tools through educational campaigns can be a good way to promote increased use. Encouraging the community to hold their children, spouses, family members, and friends accountable for distracted driving can also be an effective way to promote safe driving practices.

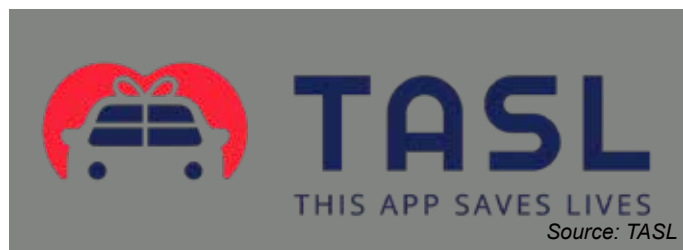
Safe Systems Approach:

Safe Road Users, Safe Vehicles

E's of Safety:



Education



Example Actions:

- Educational Campaigns
 - Every Second Matters
 - Put the Phone Away or Pay
 - Eyes Up, Phone Down
 - EyesDrive
- Promote Technology Solutions
 - Smart Phone Apps/Cell Phone Blocking Technology
 - Advanced Driver Assistance Systems (ADAS) in Vehicles
- Target Teen Drivers
 - Increase Education on the Graduated Driver Licensing Law in Montana
 - Encourage Parents/Teens to Sign Teen Driver Contracts



Resources and Guidance:

- *Traffic Safety Marketing: Distracted Driving* (NHTSA)⁵²
- *Everything You Need for Distracted Driving Awareness Month* (National Safety Council)⁵³
- *Every Second Matters* (Travelers Institute)⁵⁴
- *Put the Phone Away or Pay* (NHSTA)⁵⁵
- *EyesDrive – Awareness Behind the Wheel*⁵⁶
- *AAA Parent-Teen Driving Agreement*⁵⁷

Penalize Distracted Driving

Montana is the only state in the nation that has no laws at the statewide level banning cellphone use or texting while driving, although a driver can be held accountable for negligence and incur liability for damages if they are involved in a crash while using a mobile device. Whitefish, on the other hand, does have local laws that prohibit the use of handheld cell phones and other handheld electronic devices while driving. The law also prohibits bicyclists from using handheld devices when operating a bicycle within the Whitefish City limits. Individual states and localities have also started enforcing laws against distracted walking and fining pedestrians that are using cell phones while walking. Some jurisdictions have also expanded their laws to prohibit all cell phone (handheld or hands-free) use by minors and/or drivers with provisional permits. Additionally, some employers are adopting distracted driving policies to help reduce distractions in company vehicles.

One of the City's focus area goals is to reduce the number of distracted drivers involved in crashes. In order to effectively track this statistic, responding officers need to consistently and thoroughly document distracted driving as a contributing factor in crash reports. To ensure consistency across the department, additional training may be required. Proof of distractions can be difficult to obtain, especially if drivers are unwilling to self-report.

Safe Systems Approach:

Safe Road Users

E's of Safety:



Education



Enforcement

Example Actions:

- High visibility enforcement of cell phone ordinance and other distractions
- Encourage employers to implement distracted driving policies
- Law enforcement training to identify and document distracted driving as a contributing factor
- Expand cell phone ordinance to include all cell phone use by minors and/or drivers with learner or provisional permits



Source: Connecticut Department of Transportation



Source: Ultimate Defensive Driving



Source: Flathead Beacon



Source: Google Earth

Resources and Guidance:

- *Employer Distracted Driving Policy*^{58,59} (NSC)
- *Countermeasures That Work – Distracted Driving*⁶⁰ (NHTSA)
- *High Visibility Enforcement (HVE) Toolkit*⁶¹ (NHTSA)

Counteract Distracted Driving

Distracted driving significantly raises the likelihood of crashes, as drivers are less able to respond promptly to sudden changes in traffic conditions, road hazards, or other vehicles and more likely to drift out of the travel lane creating increased risk of head-on, sideswipe, and run-off-the-road crashes as well as conflicts with non-motorists. In addition to education and enforcement, some engineering strategies have the potential to address distracted driving from an infrastructure standpoint. Such strategies focus on making the travel way more visible and alerting drivers when they drift out of the travel way. In-vehicle lane departure warning systems can also provide real-time alerts to drivers. While education and enforcement are more effective at changing distracted driving behaviors, these efforts can help reduce the risk of a crash when distracted driving does occur.

● **Safe Systems Approach:**
Safe Roads, Safe Vehicles

● **E's of Safety:**



Engineering

● **Example Actions:**

- Edge Line, Centerline, and Transverse Rumble Strips
- Wide and Bright Pavement Markings/ Striping
- Concrete Medians and Median Barriers
- Roadway Lighting
- Separated Non-Motorist Facilities
- ITS Technologies
- Lane Departure Warning Systems



Source: Traffic Safety Supply



Source: mycardoeswhat.org



Source: Cree Lighting



Source: crossroads

● **Resources and Guidance:**

- *Proven Safety Countermeasures: Longitudinal Rumble Strips and Stripes on Two-Lane Roads⁶², Median Barriers⁶³, and Wider Edge Lines⁶⁴ (FHWA)*



6.5. Speed Related Strategies

Speed and crash severity are inextricably linked. Crashes are more likely to result in serious or fatal injuries when vehicles are traveling at higher speeds. Since pedestrians and bicyclists travel much slower than motorists and do not have exterior barriers, such as a vehicle, to protect themselves on the roadway, they are much more susceptible to severe injuries, even at slower speeds. The following strategies target reduced travel speeds through lower speed limits, enforcement, traffic calming measures, and designing roads to naturally slow down traffic to support reduced severity of crashes and improve overall road safety.



Review Posted Speed Limits

Motorists drive at the speed they feel comfortable, taking the weather condition, surrounding environment, and complexity of the roadway into account. In some cases, the travel speed or posted speed limit could be higher than what is considered safe for the area given the surrounding environmental context and usage. Higher speeds also reduce the time drivers have to react to unexpected situations, such as a pedestrian crossing the street or a bicyclist entering the roadway. Lowering speed limits in busy areas with high non-motorist traffic such as urban areas, school zones, downtown areas, and residential neighborhoods, can reduce both the risk of crashes occurring and the severity of crashes when they do occur. However, changing a posted speed limit does not automatically lower travel speeds, so changed speed limits should be paired with enforcement efforts and other physical improvements to ensure the roadway context matches the desired speed.

Managing posted speed limits involves both state and local authorities. MDT sets and adjusts speed limits for state or federally funded on-system routes, which mainly includes highways and interstates, per statutory regulations. Speed limit changes are posted only after a traffic and safety engineering study has been conducted and (where applicable) approved by the Transportation Commission. Local governments, on the other hand, have jurisdiction over speed limits on municipal roads and streets, with more flexibility to customize speed limits based on unique local conditions through ordinances and public consultations, reflecting specific community needs and safety concerns. Coordination between state and local entities is crucial, however, especially where their jurisdictions overlap.

Safe Systems Approach: Safe Roads, Safe Speeds

E's of Safety:



Enforcement



Engineering

Example Actions:

- Speed studies
- Special speed zones (schools, high use areas, work zones)
- Jurisdiction-wide speed limits

Example Locations:

- School zones
- Low-volume streets serving residential/ neighborhood areas
- Downtown area
- Other areas with high pedestrian usage



Resources and Guidance:

- *Consistent Speed Limits for Vulnerable Road Users, Noteworthy Speed Management Practices*⁶⁵ (FHWA)
- *Proven Safety Countermeasure: Appropriate Speed Limits for All Road Users*⁶⁶ and *Speed Safety Cameras*⁶⁷ (FHWA)
- *Safe Speeds on City Streets – Creating a Neighborhood Traffic Management Program*⁶⁸ (City of Missoula)
- *City Limits – Setting Safe Speed Limits on Urban Streets*⁶⁹ (NACTO)
- *Local Engineering Study Example of Setting Speeds Limits Based on Context*⁷⁰ (City of Missoula)
- *Countermeasures That Work – Speeding and Speed Management*⁷¹ (NHTSA)

Reduce Vehicular Travel Speeds

Since drivers are primarily influenced by roadway conditions, lowering speed limits alone is unlikely to change speed patterns without changes to roadway features or context. When it is not appropriate to lower a roadway's speed limit, other engineering countermeasures typically referred to as traffic calming measures may be implemented to help alter driver behavior and create safer conditions for all users. These strategies may include horizontal and vertical displacements (chicanes or speed bumps), traffic control devices (roundabouts, traffic circles, ITS), road narrowing measures (curb extensions or medians), and other visual friction (landscaping, art, parklets). These strategies are intended to alter the roadway environment to change the driver's perception of the roadway and encourage voluntary decisions to slow vehicular speeds.

Safe Systems Approach:

Safe Roads, Safe Speeds

E's of Safety:



Enforcement



Engineering



Source:
Clear Roads



Source: Western Systems

Example Actions:

- Traffic Calming
 - Speed Bumps/Humps/Speed Tables/Speed Cushions/Raised Crosswalks
 - Advisory Bike Lanes
 - Visual Friction (Paint, Art, Vegetation, Objects)
 - Narrowed Roadways/Curb Extensions
 - Roundabouts/Traffic Circles
 - Horizontal Roadway Shifts (Chicanes)
 - ITS/Dynamic Speed Feedback Signage
 - Variable Speed Limit Trailers
 - Warning Signage (Reduce Speed, Curve Ahead)
- Enhanced Multimodal Environment (Bulb-outs, Pedestrian Refuge Islands, Reallocated Roadway Width to Bike Lanes)
- Speed Enforcement
- Education Campaigns
 - Slow Down for School Zones
 - Ice and Snow...Take It Slow
 - Drive Like Your Kids Live Here



Source: City of Bozeman

Resources and Guidance:

- *Whitefish Transportation Plan (City of Whitefish)*⁷²
- *Measures for Managing Speed*⁷³ (ITE)
- *Traffic Calming to Slow Vehicle Speeds*⁷⁴ (USDOT)
- *Traffic Calming ePrimer*⁷⁵ (FHWA)
- *Winter Driving Safety Brochure*⁷⁶ (IDOT)
- *Social Media Campaigns for Winter Driving*⁷⁷ (National Weather Service)
- *School Area Speed Limit and Signing*⁷⁸ (SRTS Guide)
- *24/7/365 School Area Speed Limits*⁷⁹ (City of Bozeman)
- *Pop-Up Traffic Calming & Placemaking*⁸⁰ (WTI)

7. 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.

7.1. 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, striping, or landscaping 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.

A variety of additional information is also provided 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.

Background

The description provides an overview of the identified safety concern(s) that the recommendation is intended to address. In some cases, the safety concern was identified through historic crash data or the HIN, while others were identified through field reviews and public or stakeholder input. Additional background information to give context to the recommendation is also provided where applicable.

Recommendation

Recommendations are grouped together by area, in the case of infrastructure improvements, or by general effort type, in the case of program and policy recommendations. For several of the infrastructure improvements, conceptual drawings illustrating recommended improvements are provided. Planning-level recommendations are defined broadly to provide flexibility during future implementation phases as additional coordination and investigations occur.

Related Strategies

Recommended projects, programs, and policies employ the focus area strategies outlined in [Chapter 6](#). Relevant strategies are listed for each recommendation. It is intended that the implementing agency can reference the general strategy description for more implementation ideas and guidance.

Past Planning Relation

In many cases, the project, program, or policy recommendations have been identified in past planning efforts. References to past documents and recommendations are provided where applicable to supply additional context and support for the *Whitefish SS4A Action Plan* recommendations.



Other Considerations

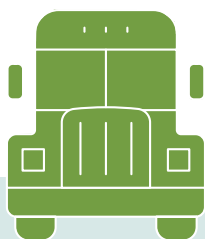
Project recommendations forwarded from the Action Plan will be subject to the City's standard project development processes. This typically includes project-specific design activities such as stakeholder coordination, environmental impact analysis and permitting, utility conflict mitigation, traffic and safety analysis, hydraulic and geotechnical investigations, and right-of-way acquisition based on project location and design features. For projects that may substantially and permanently impact MDT routes, the MDT System Impact Action Process may apply and additional coordination with MDT may also be necessary. Notable project development considerations are listed for each recommendation such as potential stakeholder interests, possible coordination needs, resources and site features, indirect effects, and other factors to be addressed during project development.

Implementation Partners

Although the City of Whitefish is serving as the lead agency for implementation of the 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 City, supportive efforts from partners including MDT, law enforcement, school districts, local advocacy groups and organizations, emergency service providers, and individuals will be needed to successfully improve safety in Whitefish.

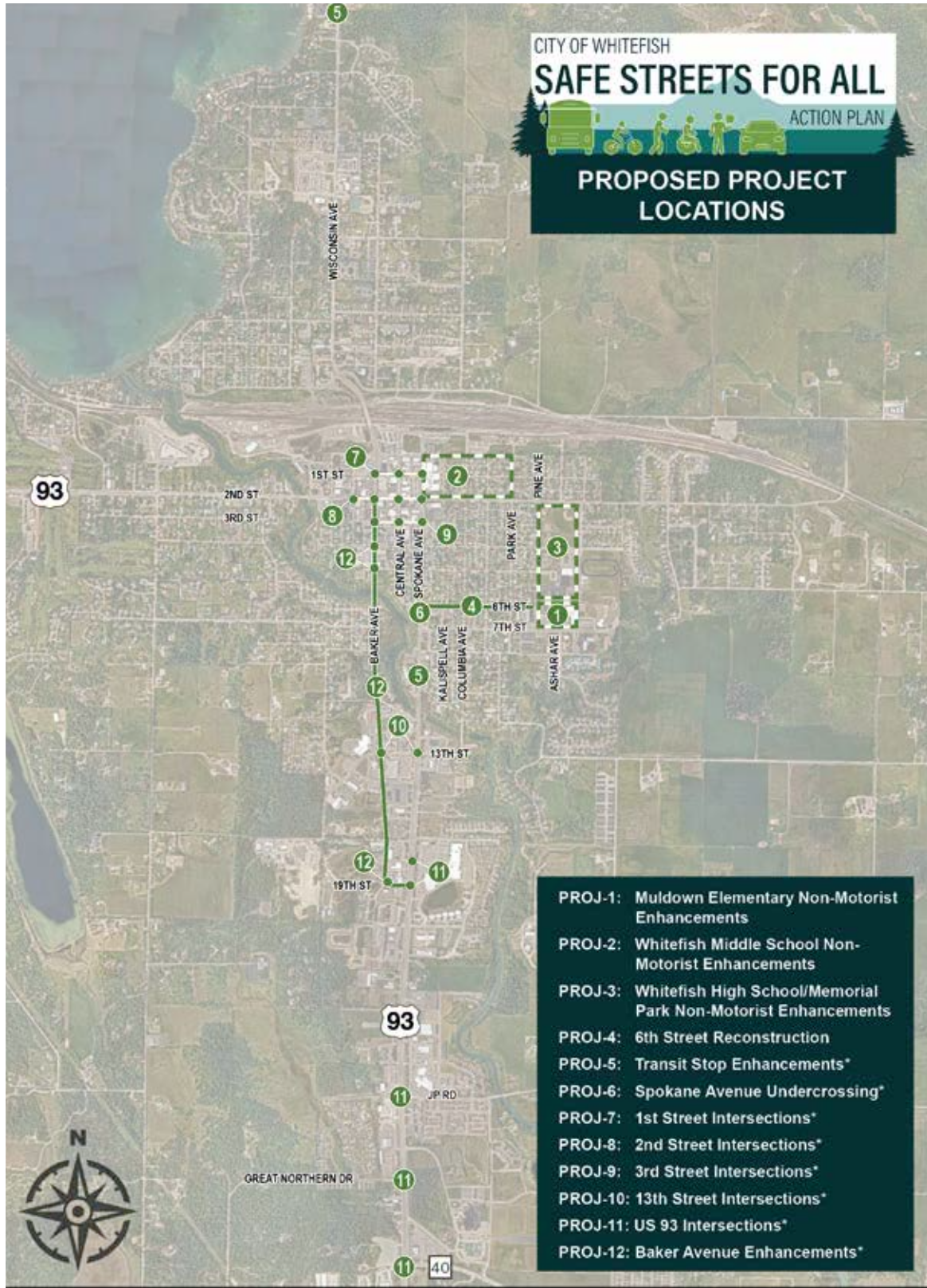
Estimated Cost

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 A** 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.



7.2. Project Recommendations

A list of projects has been developed to help address site-specific safety concerns identified through the historic crash trend analysis and through public/stakeholder outreach. Projects incorporate elements of the focus area strategies and align with past planning recommendations. **Figure 19** illustrates the location of recommended projects within the planning area.



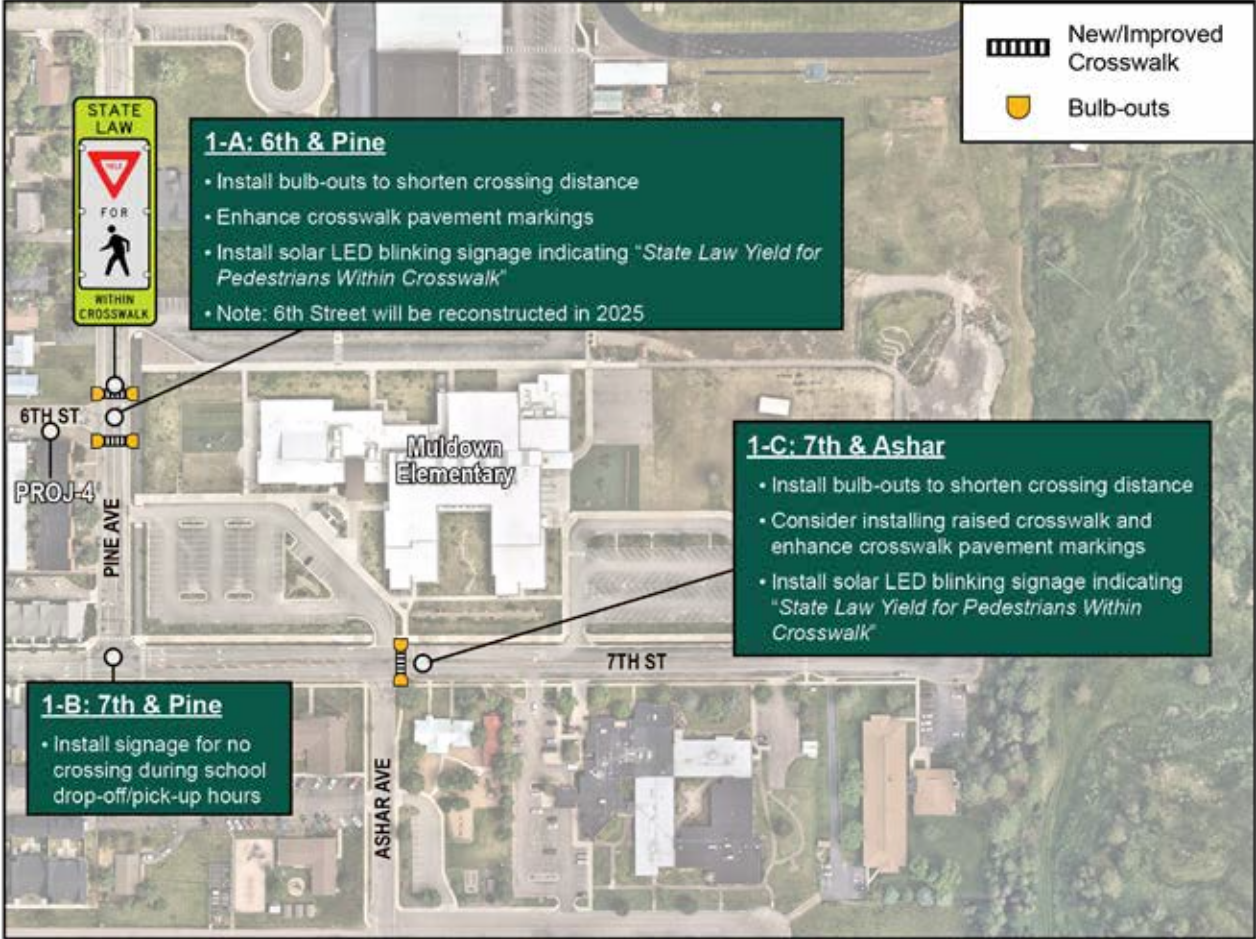
*Potential projects located on MDT routes would require additional study and coordination with MDT to proceed.

Figure 19: Project Locations

PROJ-1

PROJ-1: Muldown Elementary School

BACKGROUND: Ongoing coordination has occurred between the City of Whitefish and the Whitefish School District to consider pedestrian safety improvements in the vicinity of Muldown Elementary School. Community members, parents, and school personnel cite near-misses in crosswalks, speeding through school zones, poor yielding rates, and distracted drivers as key safety concerns near the elementary school. The conditions make the area feel generally unsafe and parents fear for their children’s safety when walking or biking to school. Although these concerns were not directly evidenced in crash trends, the need for pedestrian prioritization, safe crossings, and slower speeds around the school to encourage more school children to walk and bike to school has been heavily reiterated by the community. The City is planning to reconstruct 6th Street in 2025 with a shared use path (SUP) on the south side of the street and a primary crossing on the south leg of the 6th St/Pine Ave intersection.



RECOMMENDATION: Improve crosswalks adjacent to Muldown Elementary School to enhance non-motorist safety and comfort and encourage walking and biking to school by enhancing visibility, encouraging slow speeds, and improving circulation at the school.

RELATED STRATEGIES:

- ✓ Enhance Existing Non-Motorized Facilities
- ✓ Install New Non-Motorized Facilities
- ✓ Encourage Safe and Proper Walking/ Biking
- ✓ Enhance Unsignalized Intersections
- ✓ Improve Intersection Visibility and Safety
- ✓ Promote Distraction-Free Driving
- ✓ Reduce Vehicular Travel Speeds

PAST PLANNING RELATION:

- Elements of this recommendation were included in **TSM-5** of the *Whitefish Transportation Plan*, including crosswalk striping, high visibility pedestrian-actuated signs, and student stand-back lines behind curb backs.

OTHER CONSIDERATIONS:

- Infrastructure improvements should be combined with education and enforcement strategies to reinforce proper behavior in the school zone.
- Prepare updated maps and informational pamphlets to let parents know the preferred location for student drop-off/pick-up.

IMPLEMENTATION PARTNERS:

City of Whitefish, Whitefish School District

ESTIMATED COST: \$3,000-\$130,000

1-A: \$130,000, **1-B:** \$3,000, **1-C:** \$110,000

PROJ-2

PROJ-2: Whitefish Middle School

BACKGROUND: Whitefish Middle School is located on the corner of Spokane Avenue and 2nd Street, where US 93 makes a turn. Congestion in this area results from highway-related traffic, as well as general congestion from school pick-up and drop-off. Middle School drop-off/pick-up is discouraged immediately at the school and entry via the west entrance (on Spokane Avenue) is not allowed. Many students living in the adjacent neighborhoods use 1st Street as a priority route to walk or bike to school, despite the lack of dedicated non-motorized facilities.

Parents who drive their students to school are encouraged to park one or more blocks away and have students walk the remaining blocks or drop students off at Depot Park. However, many parents still use Spokane Avenue between Railway Street and 2nd Street. The stop sign at Spokane Avenue and 1st Street is sometimes ignored. The intersection previously had a flashing stop sign in the northbound direction, but the sign was moved to the Ashar Avenue/7th Street intersection and has not been replaced.

Along Spokane Avenue, some parents have been observed dropping off children while still in the travel lane to avoid congested areas. Speeding and failure to yield at the 2nd Street and Kalispell intersection has been noted by community members. Additionally, parking near the intersection can limit visibility of the crosswalk. Finally, the pedestrian hybrid beacon at the 2nd Street/Pine Avenue crosswalk has been identified as a safety concern due to visibility issues associated with the height of the flashing light and sun glare in the morning.



RECOMMENDATION: Improve crosswalks and non-motorized facilities around the Whitefish Middle School to enhance non-motorist safety and comfort and encourage walking and biking to school by enhancing visibility, encouraging slow speeds, and improving circulation at the school.

RELATED STRATEGIES:

- ✓ Encourage Safe and Proper Walking/Biking
- ✓ Enhance Unsignalized Intersections
- ✓ Improve Intersection Visibility and Safety
- ✓ Promote Distraction-Free Driving
- ✓ Review Posted Speed Limits

PAST PLANNING RELATION:

- Crosswalk improvements were recommended in **ENG-5** from the *Whitefish SRTS Plan*. Improvements were installed at all intersections except 2nd/Spokane.
- Reconstruction of Spokane Avenue has been identified in the *Downtown Whitefish Highway Study* and the *Whitefish Transportation Plan (MSN-16)*.

OTHER CONSIDERATIONS:

- Coordinate with WPD to modify school zone limits and to ensure changes are enforced.
- Add a second crossing guard at the Kalispell Avenue and 2nd Street intersection to ensure full coverage of the entire intersection.
- Combine infrastructure efforts with education efforts. For example, prepare maps and informational pamphlets to let parents know the preferred location for student drop-off/pick-up.

IMPLEMENTATION PARTNERS:

City of Whitefish, Whitefish School District

ESTIMATED COST: \$3,000-\$130,000

2-A: \$32,000, **2-B:** \$4,000, **2-C:** \$460,000, **2-D:** \$52,000

PROJ-3

PROJ-3: Whitefish High School/Memorial Park

BACKGROUND: As the City of Whitefish considers improvements to school circulation patterns, a potential alternate pick-up and drop-off point has been identified at Memorial Park, just north of Whitefish High School.

3-A: Memorial Park Muldown parents sometimes use the high school parking lot for drop-off and pick-up, though it is discouraged, which contributes to congestion and safety concerns for students walking between lots. An alternative drop-off location at Memorial Park could help ease congestion and improve safety for children walking and biking to school. Memorial Park is owned by the City of Whitefish and leased to the Glacier Twins. A revised parking configuration and non-motorized improvements, including sidewalk infill and crosswalk improvements, have been proposed at the park.

3-B: High School Although there is currently a pedestrian path behind the high school for school children to walk from Memorial Park to the elementary and high schools, some improvements are needed to enhance comfort and safety from the park to school grounds. Fencing along the path may be needed to provide pedestrian separation from high school parking areas. Additionally, sidewalks and shared use paths on the west side of the school (Pine Avenue) are discontinuous. Filling these gaps will provide safe, connected facilities for high school students to walk or bike to school. With the passage of the Whitefish High School academic expansion and athletic improvements bond on September 17, 2024, there may be opportunities to complete transportation safety improvements in coordination with site planning for the school.



RECOMMENDATION: Improve non-motorized facilities, parking, and crosswalks around Whitefish High School to provide connectivity to an alternate drop-off/pick-up lot at Memorial Park and enhance pedestrian comfort, safety, and connectivity in the area.

RELATED STRATEGIES:

- ✓ Enhance Existing Non-Motorized Facilities
- ✓ Install New Non-Motorized Facilities
- ✓ Encourage Safe and Proper Walking/Biking
- ✓ Enhance Unsignalized Intersections
- ✓ Promote Distraction-Free Driving

PAST PLANNING RELATION:

- The City of Whitefish has proposed improvements to Memorial Park, including revised parking configurations, additional parking stalls, sidewalks along the perimeter of the park, and improved crosswalks. This visionary plan was approved by the City Park Board in February 2024 but is dependent on improvements to enhance pedestrian connectivity to Whitefish High School and Muldown Elementary School.

OTHER CONSIDERATIONS:

- The Whitefish School District’s proposed bond to support academic and athletic improvements at Whitefish High School was passed in September 2024. Coordinating efforts could reduce construction costs and streamline implementation.
- A crossing guard may be needed to facilitate crossings on 4th Street.
- Combine infrastructure efforts with education efforts. For example, prepare maps and informational pamphlets to let parents and student drivers know the preferred location for student drop-off/pick-up and routes to/from school.
- If the sidewalk on Pine Ave is replaced with a shared use path, bike lanes on Pine Ave may no longer be necessary.

IMPLEMENTATION PARTNERS:

City of Whitefish, City Park Board, Whitefish School District

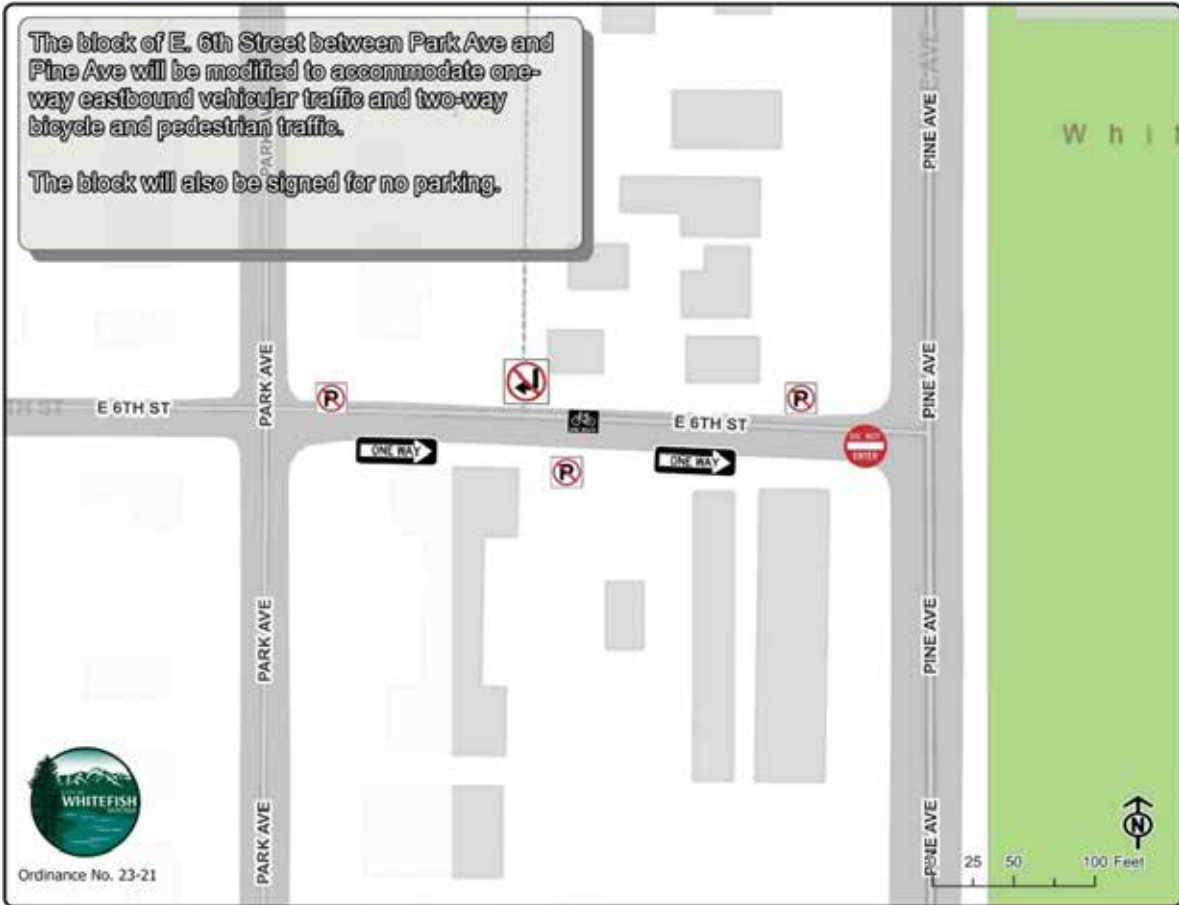
ESTIMATED COST: \$550,000-\$1,200,000

3-A: \$1,200,000, **3-B:** \$550,000

PROJ-4

PROJ-4: 6th Street Improvements

BACKGROUND: Prior to the reconstruction of Muldown Elementary School in 2020, 5th Street was the primary route to Whitefish High School and Muldown Elementary School from Spokane Avenue. Since completion of the renovations and reconfiguration of the entrances, 6th Street has become a more popular route. In the fall of 2023, 6th Street between Park Avenue and Pine Avenue was converted to a one-way street to help improve efficiency during busy student drop-off and pick-up times while also reducing potential conflicts between vehicles and pedestrians due to congestion and the narrow width of 6th Street. The new configuration also eliminates left-turns from Pine Avenue to 6th Street which helps with traffic flow during peak periods. The roadway currently lacks accessible sidewalks and curb ramps along most of its length and does not have any bicycle accommodations. To address these concerns, the City will be reconstructing 6th Street in 2025 and designating the street as a safe route to school following reconstruction. A shared use path will be installed on the south side of the street, and the south leg of the 6th St/Pine Ave intersection will be designated as a primary school crossing.



RECOMMENDATION: Reconstruct 6th Street and designate as a safe route to school. Include pedestrian and bicycle accommodations and traffic calming as needed to ensure safe and slow vehicular travel speeds along the route.

RELATED STRATEGIES:

- ✓ Install New Non-Motorized Facilities
- ✓ Reduce Vehicular Travel Speeds

IMPLEMENTATION PARTNERS:

City of Whitefish, Adjacent Businesses and Property/Utility Owners

ESTIMATED COST: \$2,600,000

PAST PLANNING RELATION:

- This recommendation was included as **MSN-29** in the *Whitefish Transportation Plan*.
- Elements of **ENG-2** from the *Whitefish SRTS Plan* (5th Street Bike/Ped Route) are still applicable, even though the priority has now shifted to 6th Street.
- **C33** in the *Connect Whitefish Pedestrian & Bicycle Master Plan* recommends curbing and sidewalk on 6th Street between Kalispell and Pine Avenues.

OTHER CONSIDERATIONS:

- Prioritize snow removal on 6th Street, with special focus on preventing berms that limit pedestrian safety and access. preferred location for student drop-off/pick-up

PROJ-5: Enhanced Transit Stops

BACKGROUND: Transit services in the Whitefish area are provided by the Shuttle Network of Whitefish (S.N.O.W.) Bus, which provides free rides between Whitefish Mountain Resort and downtown Whitefish, and the Mountain Climber, which provides general and paratransit services within Flathead County. The S.N.O.W. Bus, which is a service provided by the Big Mountain Commercial Association (BMCA), operates daily during the resort’s winter and summer operating seasons. The Mountain Climber offers on-demand rides with \$1 fares for each trip and therefore does not have fixed bus stops. There is limited infrastructure in place at the fixed S.N.O.W. bus stops and the stop types and level of pedestrian connectivity vary. In particular, there are two stops that are challenging for BMCA in terms of connectivity and safety. Currently, the stops at The Pine Lodge and The Lodge at Whitefish Lake require the bus to stop in the travel lane on Spokane Avenue and Wisconsin Avenue, respectively, at locations with connected sidewalk but without adequate lighting, pavement markings, and/or signage to facilitate pedestrian crossings. There have been several complaints about safety at these transit stops.

In general, increased accessibility of the transit system helps promote equitable transportation options and can help increase ridership. Incorporating universal design elements can help increase the equity of the transit system and reduce operational costs by reducing the need for paratransit services and improving efficiency at stops. The elements that each bus stop should provide, at a minimum, are listed below.⁸¹

- **Landing Area** – The landing area must allow for lifts or ramps to be deployed on a suitable surface to permit a wheelchair to maneuver safely on and off the bus.
- **Pedestrian Connections** – A landing area of 5-feet wide by 8-feet long must be connected to a sidewalk of at least 4-feet wide.
- **Curb Ramps** – These shall be designed to conform to state and federal ADA standards.
- **Signage** – Appropriate signage must be used to mark the location of the bus stop. Route and schedule information should also be supplied at each bus stop.
- **Safety and Security** – Bus stops should not have hazardous conditions that could be potentially unsafe to users. The area should be well lit and free of obstacles.

Both of these stops are located on MDT routes and abut utility lines and private property. Any improvements would need to comply with Montana Code Annotated §61-8-354, MDT’s *Bus Stop Review/Approval Requirements*⁸², *Surface Transportation Resource Procedure – MDT Bus Stops*⁸³, and MDT’s standard encroachment requirements, as applicable. Enhanced facilities would require coordination with MDT, City of Whitefish, the lodges, and adjacent property/utility owners to determine appropriate location and design of bus stop and associated pedestrian features.



RECOMMENDATION: Enhance the safety and connectivity of existing transit stops and improve the S.N.O.W. Bus stops at The Pine Lodge and The Lodge at Whitefish Lake.

RELATED STRATEGIES:

- ✓ Enhance Existing Non-Motorized Facilities
- ✓ Install New Non-Motorized Facilities
- ✓ Encourage Safe and Proper Walking/Biking
- ✓ Enhance Unsignalized Intersections
- ✓ Promote Distraction-Free Driving

PAST PLANNING RELATION:

- A conceptual site plan for the bus stop at The Lodge at Whitefish Lake was previously developed in 2022, however concerns regarding configuration and impacts were raised. Additional coordination would be required to advance a project design.

OTHER CONSIDERATIONS:

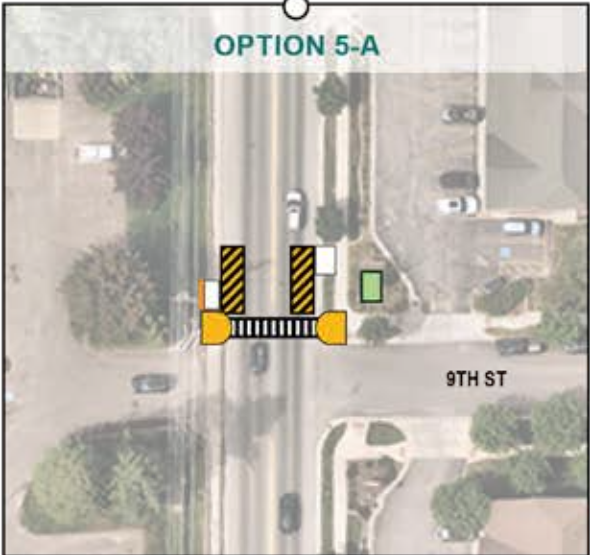
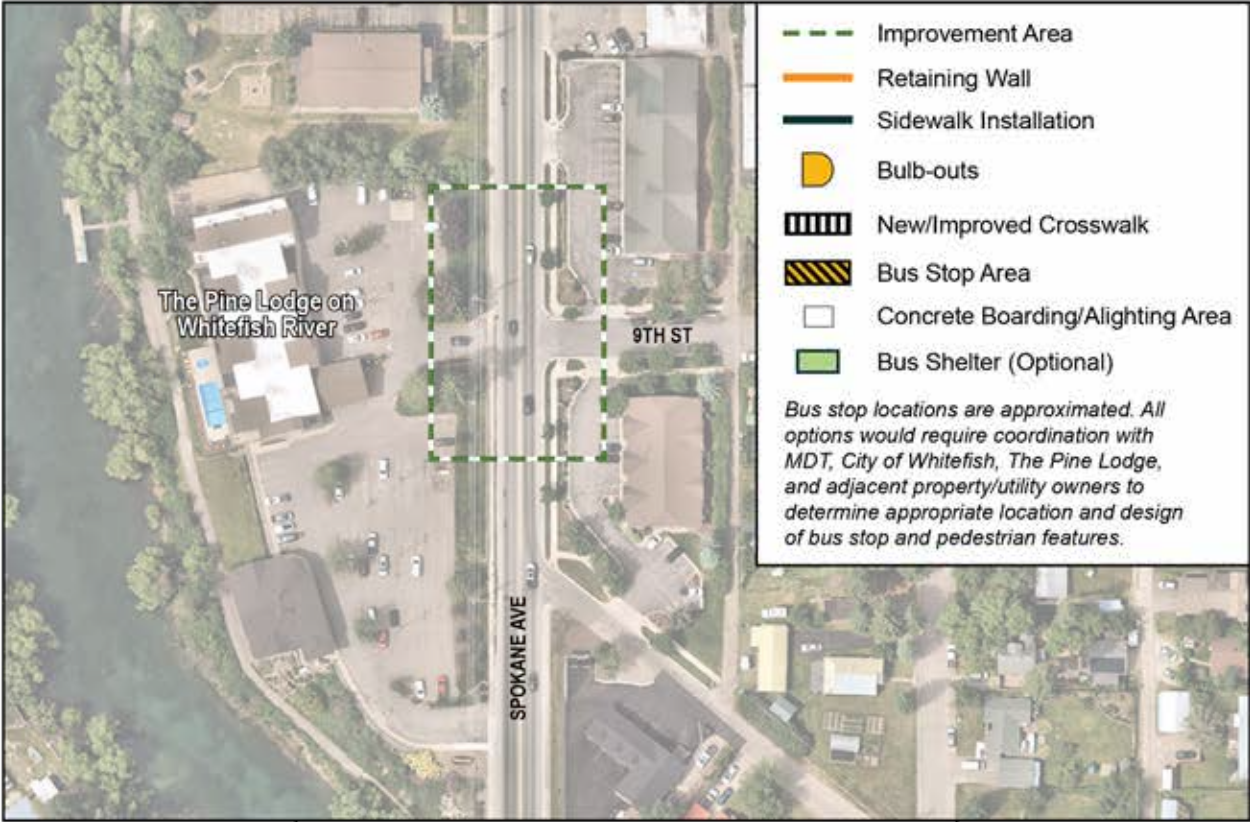
- The *National Association of City Transportation Officials’ (NACTO) Transit Street Design Guide*⁸⁵ or the *Transit Cooperative Research Program’s Guidelines for the Location and Design of Bus Stops*⁸⁶ can be referenced for specific standards and guidance.
- Buses stopping in the travel lane can block traffic, causing delays and potentially increasing congestion.
- Coordination would be required with MDT, the City of Whitefish, the lodges, and adjacent property/utility owners.
- The availability of space and the cost implications of constructing and maintaining bus pull-outs should be considered versus using existing travel lanes.
- All improvements would need to comply with applicable regulations, policies, and procedures.

IMPLEMENTATION PARTNERS:

City of Whitefish, BMCA, MDT, Adjacent Businesses and Property/Utility Owners

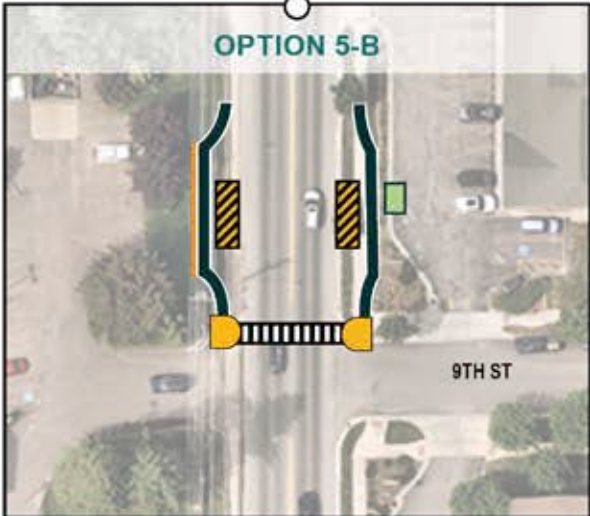
ESTIMATED COST: \$190,000-\$1,200,000

5-A: \$190,000, **5-B:** \$350,000, **5-C:** \$260,000, **5-D:** \$1,200,000



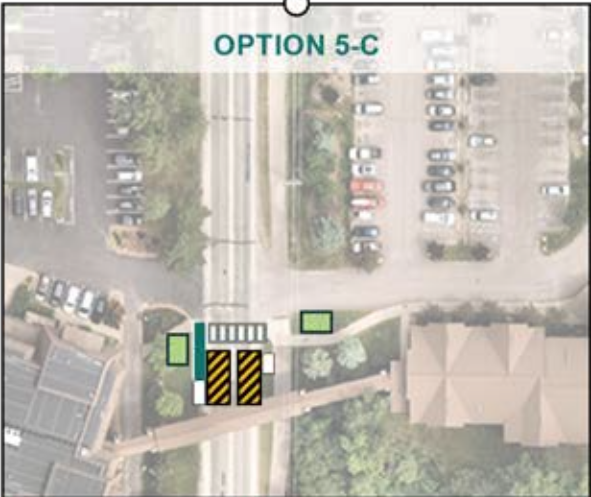
Bus Stop In Travel Lane

- Install striping to indicate bus stop within travel lane
- Install concrete boarding/alighting area at bus stop and reconstruct retaining wall
- Install bulb-outs and new crosswalk across Spokane Ave
- Install lighting and signage
- Install optional bus shelter



Bus Stop Outside Travel Lane

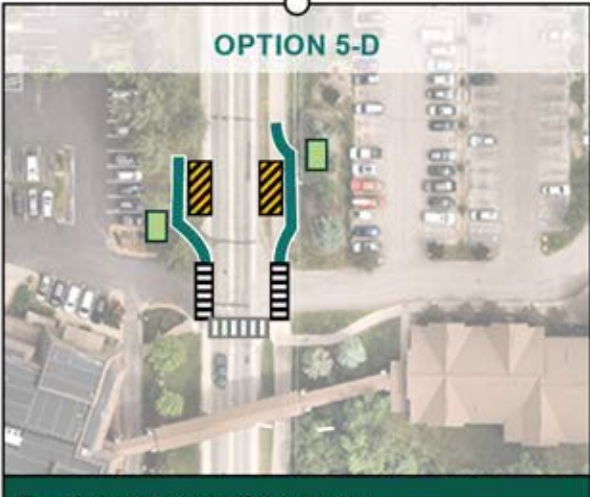
- Widen roadway to install bus pullouts adjacent to travel lanes
- Install retaining wall on west side of bus pullout
- Replace sidewalk
- Install bulb-outs and new crosswalk across Spokane Ave
- Install lighting and signage
- Install optional bus shelter



OPTION 5-C

Bus Stop In Travel Lane

- Install striping to indicate bus stop within travel lane
- Install concrete boarding/alighting area at bus stop
- Install new/relocated pedestrian path from bus stop leading to existing crosswalk
- Install lighting and signage
- Install optional bus shelter(s)



OPTION 5-D

Bus Stop Outside Travel Lane

- Widen roadway to install bus pullouts adjacent to travel lanes
- Install new crosswalks across driveways leading to existing crosswalk on Wisconsin Ave
- Install new/relocated pedestrian path from bus stop leading to existing crosswalk
- Install optional bus shelter(s)

PROJ-6

PROJ-6: Spokane Avenue Pedestrian/Bicycle Undercrossing

BACKGROUND: Spokane Avenue carries some of the highest traffic volumes in the Whitefish area and is a barrier to pedestrians and bicyclists. Currently, the Whitefish River Trail follows the banks of the Whitefish River from 2nd Street/Miles Avenue and terminates where it meets Spokane Avenue.

6-A: Spokane Avenue (6th Street to 7th Street Vicinity) A grade-separated pedestrian crossing of Spokane Avenue is desired by the community to enhance connectivity and safety and to encourage more non-motorized activity in the area. A crossing near 6th Street or 7th Street would facilitate connectivity to the schools on the east side of town.

6-B: 7th Street Extension Community members have voiced strong support for the extension of 7th Street between Spokane Avenue and Kalispell Avenue. Coupled with a grade-separated crossing underneath Spokane Avenue, an extension of 7th Street would provide additional connectivity to the River Trail and an alternate east-west route to school.



RECOMMENDATION: Install a shared use path between the existing Whitefish River Trail and the 6th Street pedestrian/bicycle corridor (**PROJ-4**) via an underpass underneath Spokane Avenue. Consider extending 7th Street from Spokane Avenue to Kalispell Avenue.

RELATED STRATEGIES:

- ✓ Install New Non-Motorized Facilities

PAST PLANNING RELATION:

- This recommendation was included as **C52** in the *Connect Whitefish Bicycle and Pedestrian Master Plan*.
- A recommendation for extension of 7th Street was included as **MSN-11** in the *Whitefish Transportation Plan*.

OTHER CONSIDERATIONS:

- Consider coordinating implementation with reconstruction of US 93, if a project is advanced from the *Downtown Whitefish Highway Study* and/or *Downtown Whitefish Master Plan*.
- Coordination with MDT would be required for any improvements impacting Spokane Avenue.

IMPLEMENTATION PARTNERS:

City of Whitefish, MDT, Safe Trails Whitefish, DREAM Adaptive, Adjacent Businesses and Property/Utility Owners

ESTIMATED COST: \$750,000-\$2,800,000

6-A: \$2,800,000, **6-B:** \$750,000

PROJ-7

PROJ-7: 1st Street Improvements

BACKGROUND: 1st Street provides an alternate east-west route to US 93 (2nd Street) and provides direct connectivity to Whitefish Middle School, making it a popular roadway for motorists and non-motorists alike. Safety concerns at intersections within this corridor include the following.

7-A: 1st Street/Baker Avenue A rectangular rapid flashing beacon (RRFB) and curb bulb-outs were installed at this intersection in 2014 with SRTS funding. Yet, this intersection was identified as the ninth highest-scoring intersection on the HIN due to a high frequency of crashes. Historic crash trends and City input indicate that the poles for the RRFB are hit frequently by southbound vehicles coming off the viaduct due to speed, poor road conditions, and general visibility issues. The Baker Avenue underpass, which was constructed in 2020 has helped redirect some pedestrian traffic. The City is also planning a project to widen the pedestrian/bicycle path over the viaduct in 2026 to enhance connectivity and safety for non-motorists.

7-B: 1st Street/Central Avenue A food truck park and live music venue opened in the northwest corner of the 1st Street and Central Avenue intersection during the summer of 2024. Since then, pedestrian safety concerns have been noted due to frequent crossings at the intersection, oftentimes by pedestrians who are not paying attention to oncoming traffic. The intersection is four-way stop controlled with bulb-outs on all corners, creating a pedestrian-focused environment. Enhanced crosswalks could help make this popular pedestrian crossing more prominent and visible to oncoming traffic.



RECOMMENDATION: Improve key intersections on 1st Street corridor to enhance pedestrian safety, reduce vehicular speeds, and increase intersection visibility.

RELATED STRATEGIES:

- ✓ Enhance Existing Non-Motorized Facilities
- ✓ Enhance Unsignalized Intersections
- ✓ Improve Intersection Visibility and Safety
- ✓ Reduce Vehicular Travel Speeds

PAST PLANNING RELATION:

- A pedestrian hybrid beacon was originally recommended at the 1st Street/ Baker Avenue intersection in the *Whitefish SRTS Plan (ENG-9)*.
- **TSM-4** of the *Whitefish Transportation Plan* recommends a safety/ operational evaluation of the 1st Street/Baker Avenue intersection.

OTHER CONSIDERATIONS:

- Coordination with MDT would be required for any improvements at the Baker Avenue intersection.

IMPLEMENTATION PARTNERS:

City of Whitefish, MDT

ESTIMATED COST: \$2,000-\$1,600,000

7-A: \$10,000 (Relocate RRFB), **7-A:** \$400,000 (Signal), **7-A:** \$1,600,000 (Signal w/ Reconfiguration), **7-B:** \$2,000 (Pavement Markings), **7-B:** \$24,000 (Street Art)

PROJ-8

PROJ-8: 2nd Street Improvements

BACKGROUND: West of Spokane Avenue, 2nd Street becomes part of US 93 as well as one of the core streets in Downtown Whitefish. In 2010, the City of Whitefish received a TIGER Grant to reconstruct 2nd Street between Spokane Avenue and Baker Avenue to improve traffic operations and safety while also creating a pedestrian-oriented streetscape. As traffic has continued to increase, additional safety issues have been identified, resulting in the segment of 2nd Street between Somers Avenue and Miles Avenue scoring seventh on the HIN. Primary safety concerns occur at four key intersections, as discussed below.

8-A: 2nd Street/Lupfer Avenue This intersection is at the crest of a hill with parking on both sides, making the crosswalk difficult to see. When the highway was reconstructed, MDT added curb bulb-outs on Lupfer and painted the crosswalks on 2nd Street. However, the bulb-outs do not extend on 2nd Street, the crosswalks are not signed, and the paint has faded over the years, reducing visibility of the crossing. A day school is located in the area, and children frequently go on walks outside using this crosswalk. Pedestrian safety and visibility at this crossing are key concerns.

8-B: 2nd Street/Baker Avenue This intersection was the fifth highest scoring intersection on the HIN. During peak periods, Baker Avenue often backs up to 7th Street or beyond contributing to several rear-end crashes during stop and go traffic. The corresponding congestion, lengthy delays, and brief green intervals, especially for left-turning vehicles, also results in rushed turning movements in narrow gaps. This is a dangerous maneuver for the vehicles, as well as pedestrians who have a walk signal at the same time as the permissive left-turn phase. Right on red turning movements can also cause conflicts with pedestrian crossings. The City would like to consider a barn dance or pedestrian scramble-style crossing to help facilitate pedestrian and vehicular movements more efficiently. Although Baker Avenue south of 2nd Street is signed no trucks, many trucks still use the route, contributing to additional safety concerns. Due to space constraints, adding additional turn bays, modifying turning radii, and other safety improvements are difficult at this intersection.

8-C: 2nd Street/Central Avenue This is the busiest pedestrian crossing in Montana, according to MDT. When the TIGER grant was issued, there was discussion about installing a pedestrian-actuated signal at this intersection to prioritize pedestrians at certain times of day. The current signal timing causes traffic to stop on 2nd Street, sometimes in the middle of the crosswalk. The City would like to consider a barn dance or pedestrian scramble-style crossing to help facilitate pedestrian and vehicular movements more safely and efficiently.

8-D: 2nd Street/Spokane Avenue Pedestrian-vehicle conflicts have been identified by City staff and community members at this intersection. The signal timing is such that vehicles traveling eastbound on 2nd Street receive a green light at the same time that east/west pedestrians have a walk light. Eastbound, right-turning vehicles frequently execute this turning movement without looking for pedestrians in the crosswalk. The southwest corner of the intersection also has a very large radius to accommodate truck traffic, making the eastbound right turn easy to execute at high speeds, and making the crossing distance longer. Eastbound pedestrians on the south leg of the intersection often fail to look for cars is intending to turn right, potentially stepping out in front of a turning vehicle. School children often use this intersection as it is adjacent to Whitefish Middle School, located on the northeast corner.



RECOMMENDATION: Implement intersection improvements along 2nd Street to improve pedestrian safety and reduce congestion-related crashes.

RELATED STRATEGIES:

- ✓ Enhance Existing Non-Motorized Facilities
- ✓ Enhance Signalized Intersections
- ✓ Improve Intersection Visibility and Safety

PAST PLANNING RELATION:

- Minor improvements to 2nd Street were identified in the *Downtown Whitefish Highway Study*.

OTHER CONSIDERATIONS:

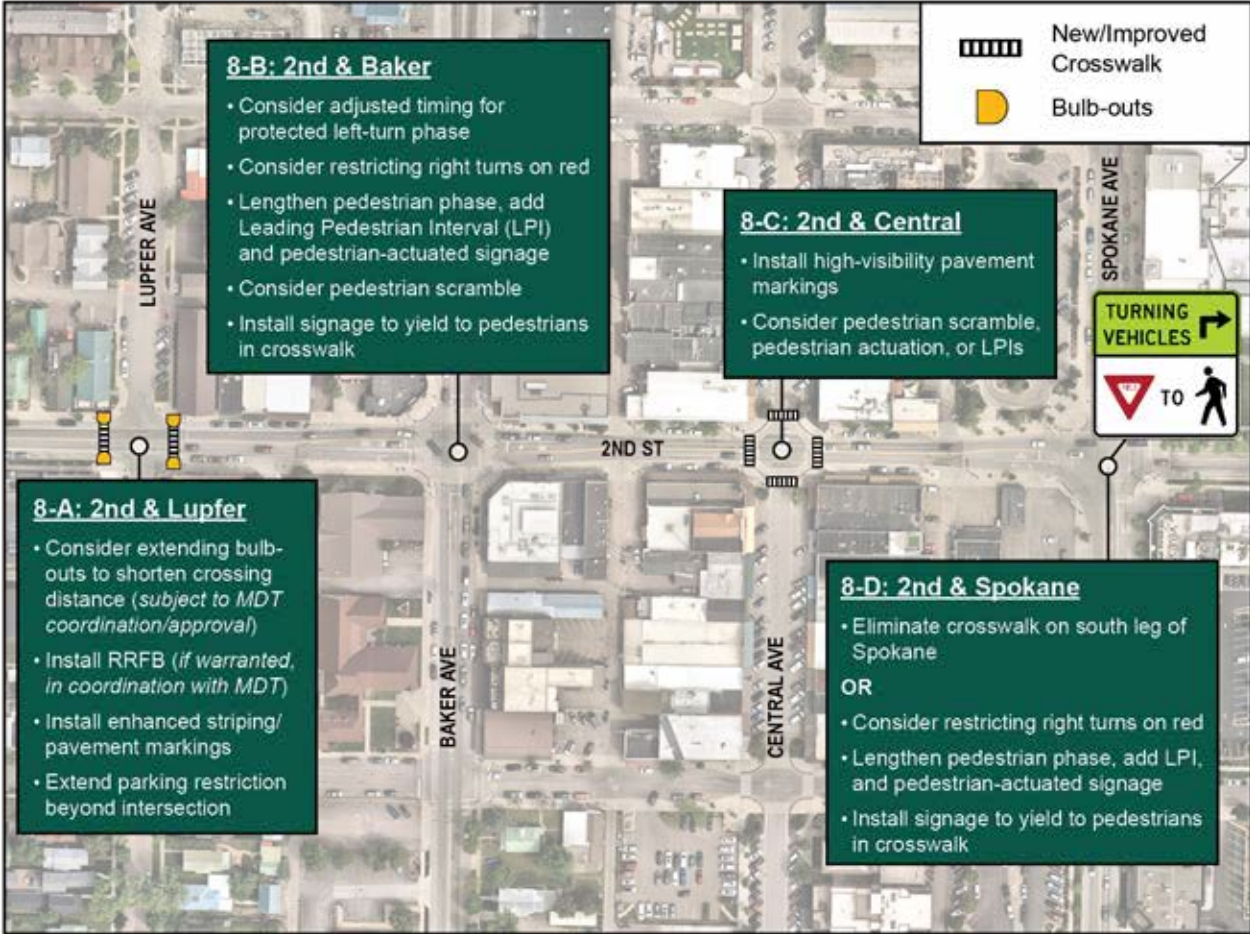
- Additional investigation would be needed to determine if signal modifications would adversely affect the traffic operations on the highway and at the intersections.
- Coordination with MDT would be required for any improvements to 2nd Street.
- There are plans to expand the Firebrand Hotel to the west side of Spokane Avenue, likely increasing pedestrian activity in the area.

IMPLEMENTATION PARTNERS:

City of Whitefish, MDT

ESTIMATED COST: \$4,000-\$160,000

8-A: \$160,000, **8-B:** \$5,000, **8-C:** \$4,000, **8-D:** \$5,000



PROJ-9

PROJ-9: 3rd Street Improvements

BACKGROUND: Like 1st Street, 3rd Street parallels 2nd Street and provides an alternative to the highway for downtown visitors. The route is busy for both vehicular and non-motorized traffic. In particular, the Baker Avenue, Central Avenue, and Spokane Avenue intersections are heavily used by pedestrians, and community members have cited concerns over the safety of the crossings at these intersections.

9-A: 3rd Street/Baker Avenue The Baker Avenue intersection is two-way stop-controlled on the 3rd Street legs, with crosswalks on all four legs. Community members have indicated that lighting and crosswalk improvements are needed, as well as improved sidewalk connectivity on the west leg paralleling the south side of 3rd Street. Community members have also noted that drivers on Baker Avenue often swerve to the right to pass vehicles who are waiting to turn left at this intersection, which is a safety concern especially when pedestrians are in the crosswalk. Bulb-outs could help shorten the pedestrian crossing distance and alleviate safety concerns from these types of maneuvers.

9-B: 3rd Street/Central Avenue The Central Avenue intersection is all-way stop controlled with curb bulb-outs on all corners and natural-colored pavement crosswalks. High visibility pavement markings could help alert drivers to the possible presence of pedestrians at the intersection.

9-C: 3rd Street/Spokane Avenue The Spokane Avenue intersection is the tenth highest scoring intersection on the HIN. The intersection already has painted crosswalks, but the paint has faded over the years. The crossing also lacks signage or other non-motorist treatments such as a rectangular rapid flashing beacon (RRFB). Pedestrians wishing to cross Spokane Avenue often use this intersection as an alternative to the 2nd Street crossing due to safety concerns.



RECOMMENDATION: Implement pedestrian crossing improvements at the Central Avenue and Spokane Avenue intersections.

- RELATED STRATEGIES:**
- ✓ Enhance Existing Non-Motorized Facilities
 - ✓ Enhance Unsignalized Intersections
 - ✓ Improve Intersection Visibility and Safety

- PAST PLANNING RELATION:**
- The *Connect Whitefish Pedestrian and Bicycle Master Plan* recommended crosswalk improvements at the 3rd Street and Spokane Avenue intersection (S9).

- OTHER CONSIDERATIONS:**
- Coordination with MDT would be required for improvements to the Baker Avenue and Spokane Avenue intersections.

IMPLEMENTATION PARTNERS:
City of Whitefish, MDT

ESTIMATED COST: \$2,000-\$220,000
9-A: \$220,000, **9-B:** \$2,000, **9-C:** \$6,000

PROJ-10: 13th Street Improvements

BACKGROUND: 13th Street intersects both Baker and Spokane Avenues and provides access to the east and west sides of town. In past planning efforts, 13th Street has provided the southern east-west connection to proposed couplet configurations with Spokane and Baker Avenues. The City of Whitefish and MDT have considered the merits of reclassifying 13th Street between Baker Avenue and Spokane Avenue as an on-system route, either an urban or secondary highway to match the context of the route and qualify for federal funding for reconstruction efforts. Prior to full reconstruction, individual intersection improvements could be considered in the interim to address safety concerns.

10-A: 13th Street / Baker Avenue Baker Avenue between 10th and 19th Street was the highest scoring roadway segment on the HIN, in part due to crashes occurring at the 13th Street intersection. This four-way stop-controlled intersection has become very congested with traffic backing up as far as the Whitefish River during peak periods. The Wave Fitness Center, a gas station, and grocery store are all located adjacent to the intersection and add to the congestion and turning conflicts. Pedestrian crossing treatments could be considered to help improve safety for the many community members who walk to the Wave and the Glacier Medical Center, located just north of the intersection. A roundabout or signal could also be explored but may be difficult due to land constraints (roundabout), the proximity of other traffic signals (at 13th Street/Spokane Avenue), and warrant requirements (signals).

10-B: 13th Street / Spokane Avenue This intersection scored the sixth highest on the intersection-based HIN due to a higher frequency of crashes. The intersection is signalized with a timing plan that is adjusted seasonally to account for differences in school and tourism-related traffic patterns. During peak periods, it can be difficult to turn left at the intersection, so protected left-turn phasing could be considered in the interim before full reconfiguration is pursued. Short-term improvements could also address the lack of crosswalk and pedestrian signal on the north leg of the intersection. At the intersection, Spokane Avenue drops from a four-lane highway to a two-lane highway in the northbound direction. The lane drops and turn lane configurations can be confusing for drivers who are unfamiliar with the intersection. Past planning efforts have identified intersection reconstruction as a priority to address safety and operations in this location.



RECOMMENDATION: Revise the intersection configuration at Spokane Avenue and install pedestrian crossing improvements at adjoining intersections on 13th Street.

RELATED STRATEGIES:

- ✓ Enhance Existing Non-Motorized Facilities
- ✓ Enhance Signalized Intersections
- ✓ Enhance Unsignalized Intersections

IMPLEMENTATION PARTNERS:

City of Whitefish, MDT, Adjacent Businesses and Property/Utility Owners

ESTIMATED COST: \$2,000-\$3,200,000

10-A: \$2,000 (Pavement Markings), **10-A:** \$130,000 (Study), **10-A:** \$310,000 (Signal), **10-A:** \$3,200,000 (Roundabout), **10-B:** \$1,100,000

PAST PLANNING RELATION:

- Pedestrian improvements were identified at the 13th Street and Spokane Avenue intersection in the *Connect Whitefish Pedestrian and Bicycle Master Plan (S8)*.
- Intersection improvements on 13th Street were identified in the *Downtown Whitefish Highway Study* as part of a larger reconstruction effort.
- **TSM-2** in the *Whitefish Transportation Plan* carries forward intersection improvements at 13th Street and Spokane Avenue from the *US Highway 93 South Corridor Plan*.

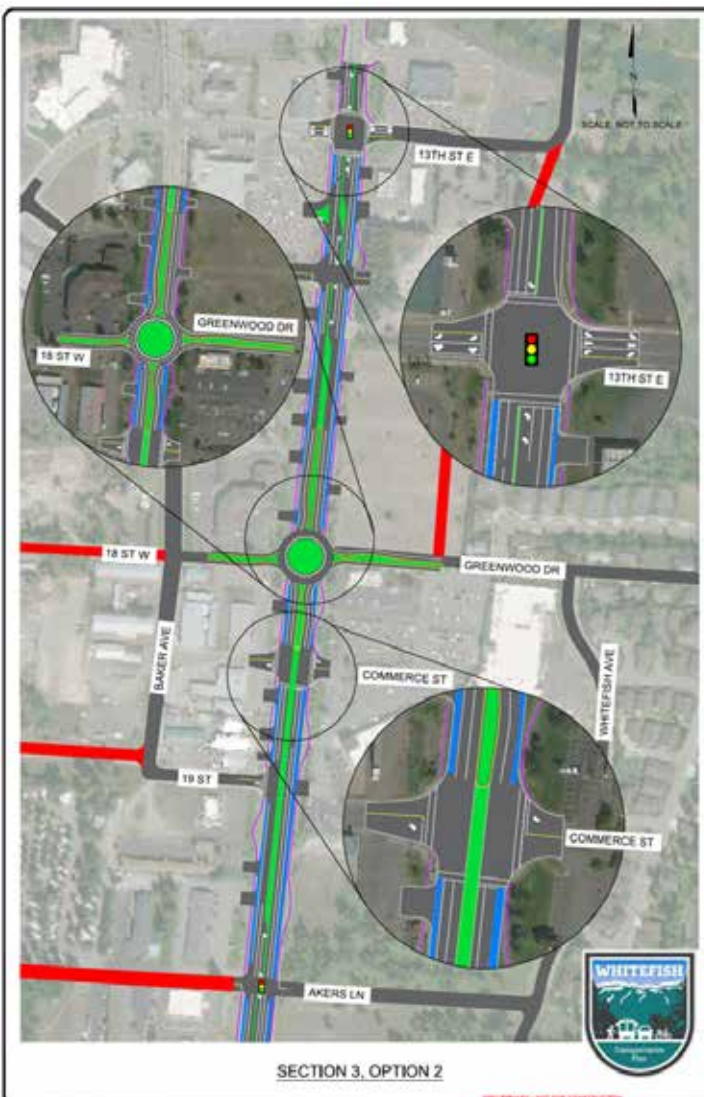
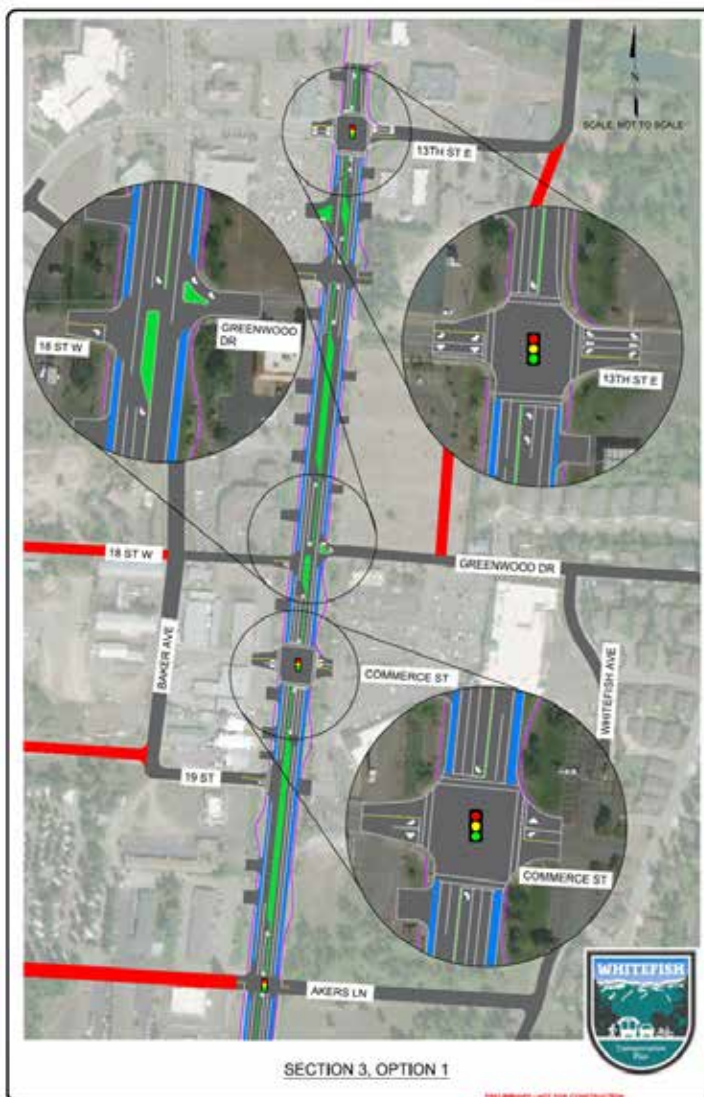
OTHER CONSIDERATIONS:

- MDT coordination will be required for improvements to the Spokane Avenue intersection. If the federal system class is changed, additional coordination will apply.

PROJ-11: US 93 Improvements (HWY 40 to 13th St)

BACKGROUND: US 93 from MT 40 to JP Road scored second highest on the segment-based HIN and US 93 from Akers Lane to the Whitefish River scored fourth highest. Several of the intersections in this stretch also scored highly on the intersection-based HIN. US 93 provides the primary ingress and egress to Whitefish from the south and therefore carries the highest traffic volumes in the City. The City of Whitefish, in coordination with MDT, has been considering improvements to US 93 South for many years with the most recently preferred improvements being outlined in the *Whitefish Transportation Plan*. The transportation plan breaks the segment of US 93 from MT 40 to 13th Street into three segments, with two reconfiguration options for some of the segments, as illustrated in the figures below. Note, none of the intersections in Section 2 (JP Road to Akers Lane) were identified in the HIN and are therefore not shown. The intersections on the HIN are discussed in more detail as follows.

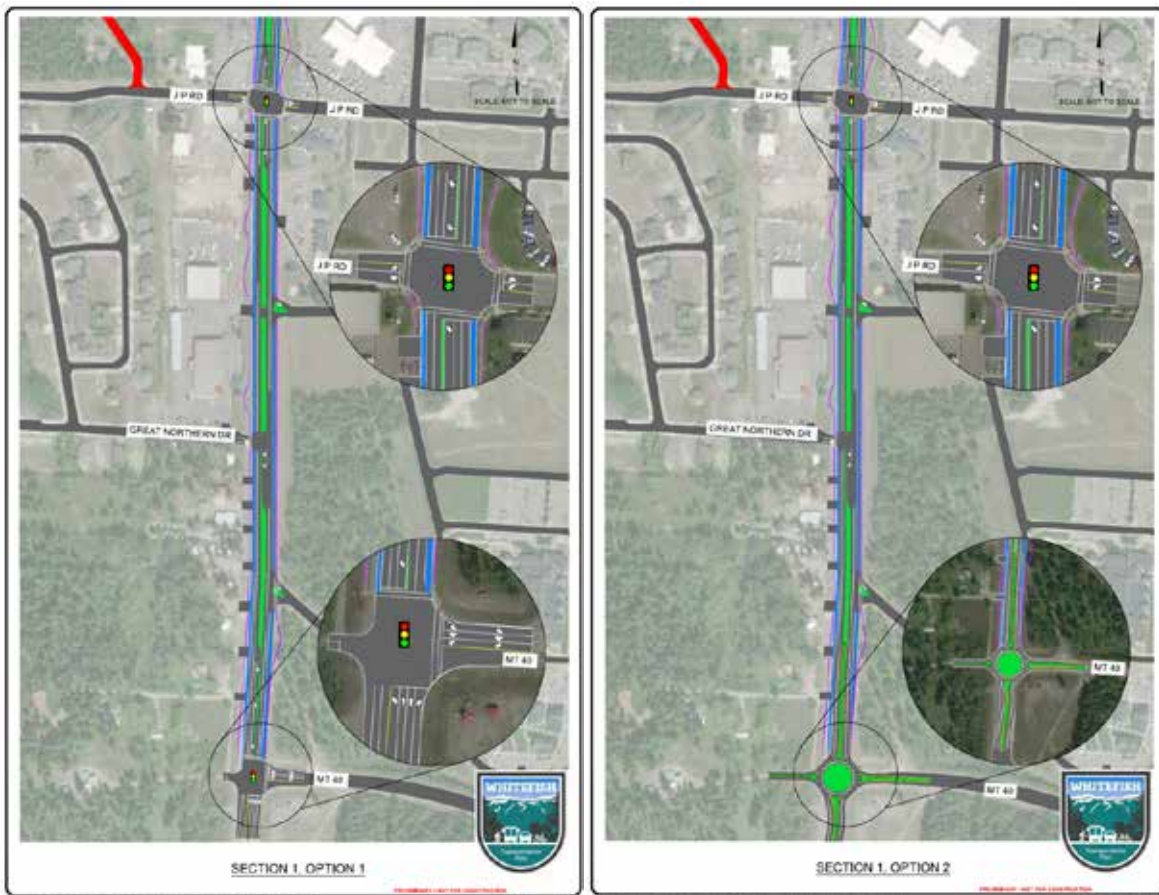
US 93 / Commerce Street This intersection was the third highest scoring intersection on the HIN. Pedestrians commonly cross between the Napa Auto Parts store and the Sportsman & Ski Haus on the south side of the intersection. Right-turn on red movements can be very dangerous for pedestrians at this intersection. Two options are proposed for the intersection, depending on what configuration is pursued at Greenwood Drive. Option 1 introduces a raised median on US 93 through the intersection to prevent left-turns onto US 93 at Greenwood Drive and would perpetuate the existing signal and lane configuration at US 93/Commerce Street with the addition of raised medians separating north- and southbound traffic. Option 2 introduces a roundabout at Greenwood Drive and includes raised medians through the US 93/Commerce Street intersection restricting left turns onto the highway. To facilitate safer pedestrian movements in the short term, or if Option 1 is pursued, bulb-outs could be considered to reduce the pedestrian crossing distance across the highway. The signal timing could also be reviewed to either provide an LPI or an extended pedestrian crossing phase. Right-turn-on-red restrictions could be considered in addition to pedestrian actuated signage to alert oncoming drivers of pedestrians' presence in the crosswalk. US 93 / 19th Street This intersection scored eighth highest on the HIN. Drivers often use 19th Street as a cut through to get to Baker Avenue and avoid the light at Commerce Street. The lack of intersection control at this intersection contributes to conflicts when drivers attempt to turn in small gaps. Both of the suggested corridor configurations in this segment propose raised medians along US 93 through the 19th Street intersection to restrict turning movements to right-in, right-out only. As a short-term solution, a center island on the 19th Street approach could be installed to limit turning movements.



US 93 Improvements (13th Street to Akers Lane) US 93/JP Road This intersection scored 11th highest on the HIN with almost all rear-end crashes due to congestion. Both Options 1 and 2 perpetuate the existing signal and lane configuration with the addition of raised center medians separating north and southbound traffic. Retroreflective backplates could also be installed on the signal heads to increase the visibility of the intersection.

US 93 / Great Northern Drive This intersection scored second highest on the HIN due to a fatal head on crash occurring in the vicinity of the intersection but unrelated to the intersection itself. Both corridor reconstruction options recommend installing a raised center median on US 93 but allowing for a dedicated northbound left-turn lane for vehicles turning from US 93 to Great Northern Drive.

US 93 / MT 40 This intersection scored fourth highest on the HIN. Just south of the intersection the speed limit drops from 65 mph to 45 mph as the highway enters Whitefish City Limits. Community members cite speeding concerns in the area. Option 1 perpetuates the existing signalized intersection and lane configuration but introduces raised medians adjacent to the southbound left-turn lane. Option 2 proposes a multi-lane roundabout to help improve operations while also promoting lower speeds and reducing turning conflicts. Although crosswalks are located on the north and east legs, adjoining sidewalks are only provided on either side of the north leg continuing northbound. As the area develops, additional sidewalk to adjacent properties should be installed, and additional turn lanes may be considered to accommodate increasing traffic volumes.



RECOMMENDATION: Install access management and intersection improvements as outlined in the *Whitefish Transportation Plan*. Consider shorter-term, small-scale improvements before full reconstruction can be achieved.

RELATED STRATEGIES:

- ✓ Enhance Existing Non-Motorized Facilities
- ✓ Enhance Signalized Intersections
- ✓ Enhance Unsignalized Intersections
- ✓ Improve Intersection Visibility and Safety
- ✓ Reduce Vehicular Speeds

PAST PLANNING RELATION:

- Corridor improvements on US 93 were identified in the *US Highway 93 South Corridor Plan* and *Whitefish Transportation Plan (MSN-17, MSN-18, MSN-19)*.

OTHER CONSIDERATIONS:

- Coordination with MDT will be required for any improvements to US 93. Access management changes will require coordination with adjacent property owners.
- Feasibility investigations will be required to determine the best configuration for the corridor.

IMPLEMENTATION PARTNERS:

City of Whitefish, MDT, Adjacent Businesses and Property/Utility Owners

ESTIMATED COST: \$21,900,000-\$29,900,000

11-A: \$21,900,000 (Option 1), **11-A:** \$29,900,000 (Option 2)

PROJ-12

PROJ-12: Baker Avenue Improvements

BACKGROUND: In past planning efforts, Baker Avenue has been considered as an alternate, parallel route to Spokane Avenue as part of a proposed couplet configuration. The City of Whitefish and MDT have considered the merits of reclassifying Baker Avenue between 7th Street and 13th Street as an urban route to match the northern half of the route (2nd Street to 7th Street) and qualify for federal funding for reconstruction efforts. Prior to reconstruction, individual intersection and non-motorized improvements could be considered to address safety concerns. While several of the previous recommendations include improvements to Baker Avenue, additional Baker Avenue recommendations include the following.

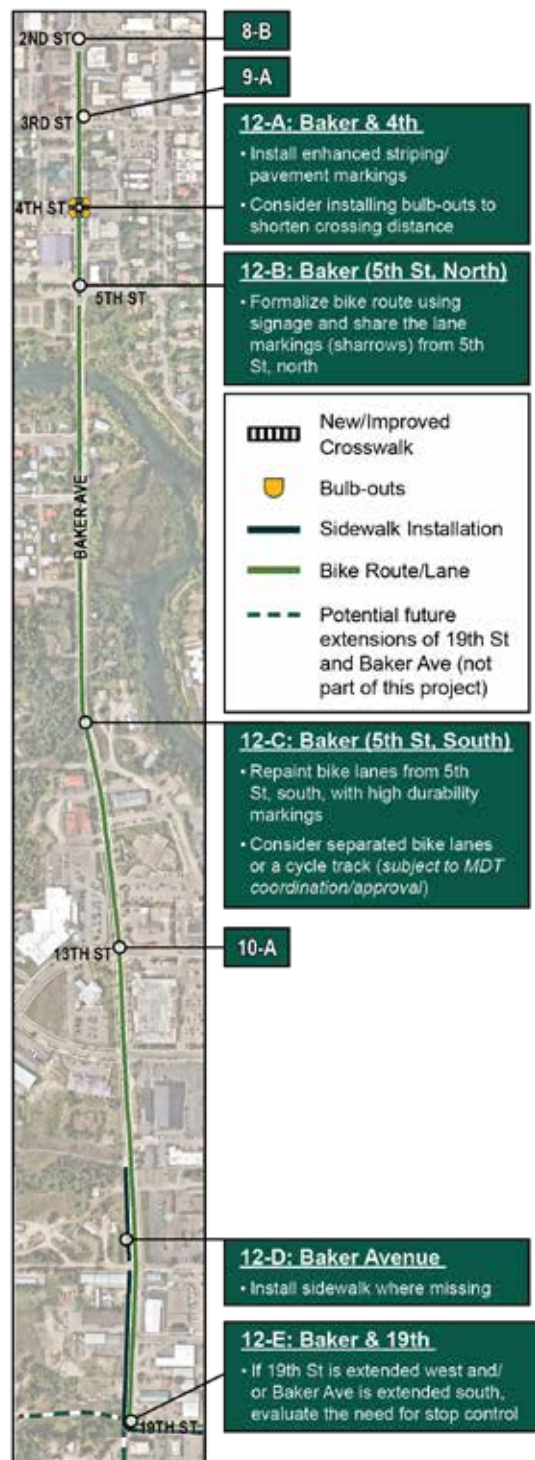
12-A: Baker Avenue/4th Street The 4th Street intersection is two-way stop-controlled on the 4th Street legs, with painted crosswalks on all four legs. Community members have indicated that crosswalk improvements are needed.

12-B: Baker Avenue Bike Lanes (5th Street, North) There are currently no dedicated bicycle facilities on Baker Avenue north of 5th Street, despite the section being designated as a bike route in the Bicycle and Pedestrian Plan. The existing bike lanes end at 5th Street and force bicyclists to take the lane heading north across the viaduct. Improvements to formalize the bike route and alert drivers to the possible presence of bicyclists in the lane are needed.

12-C: Baker Avenue Bike Lanes (5th Street, South) Bike lanes are striped on Baker Avenue generally from 5th Street to 19th Street. However, the bike lanes drop over the Whitefish River bridge due to space constraints causing a pinch point for bicyclists. Additionally, local cyclists cite safety concerns in the curved section of Baker Avenue just north of 10th Street due to drivers failing to stay in the travel lane through the curves. Consistent off tracking has led to faded bike lane striping making it appear as though the bike lane has ended. At a minimum, restriping is needed, although separated bike lanes or a cycle track are desired by the community.

12-D: Baker Avenue Sidewalk Infill Towards the southern end of Baker Avenue, south of the fire department access, the sidewalks on the east side of the roadway end. A shared use path is provided on the west side of Baker Avenue between 15th Street and 18th Street. Sidewalk connectivity and accessibility on the west side of the roadway is especially important to DREAM Adaptive whose main office is located on the west side of Baker Avenue between 18th Street and Commerce Street and whose primary clientele is individuals with mobility challenges.

12-E: Baker Avenue/19th Street Baker Avenue from 10th Street to 19th Street was identified as the highest scoring segment on the HIN, primarily due to the fatal crash at the Baker Avenue/19th Street intersection, which was consequently the highest scoring intersection on the HIN. While the intersection technically has four legs, the south and west legs are driveways, so the intersection essentially functions as a 90-degree curve. Following the fatal crash in October 2018, a series of flashing chevron signs were installed at the intersection to warn southbound drivers of the 90-degree curve. Only property damage and possible injury crashes have occurred at the intersection since the signs were installed. If access control improvements were to be installed on US 93 (see PROJ-11), it is likely that the crash frequency would also decrease due to reduced use of the 19th Street to Baker Avenue cut through to avoid the signal at US 93/Commerce Street. If the west and south legs are ever formalized as a through street, consider stop control at the intersection.



RECOMMENDATION: Install various intersection and non-motorist enhancements at select locations along Baker Avenue. Improve bike lanes along length of Baker Avenue and consider durable pavement markings, a separated facility, and/or extensions through the downtown. Infill sidewalk where missing on west side of Baker Avenue.

RELATED STRATEGIES:

- ✓ Install New Non-Motorized Facilities
- ✓ Enhance Existing Non-Motorized Facilities
- ✓ Enhance Unsignalized Intersections

PAST PLANNING RELATION:

- Reconstruction of Baker Avenue has been identified in the *Downtown Whitefish Highway Study* and the *Whitefish Transportation Plan (MSN-20)*. Extending Baker Avenue from 19th Street south to JP Road as a major collector is also recommended (*MSN-6*).

OTHER CONSIDERATIONS:

- Coordination with MDT is required north of 7th Street.

IMPLEMENTATION PARTNERS:

City of Whitefish, MDT, Adjacent Businesses and Property/Utility Owners

ESTIMATED COST: \$6,000-\$1,700,000

12-A: \$160,000, **12-B:** \$6,000, **12-C:** \$110,000 (Repaint), **12-C:** \$1,700,000 (Separated w/ Barrier), **12-C:** \$1,500,000 (Separated w/ Boulevard), **12-D:** \$300,000, **12-E:** \$100,000

7.3. Program Recommendations

Several programs have been identified to help support project recommendations and generally make progress towards improving safety within the identified focus areas. The programs broadly address transportation safety across the community through education, enforcement, and systematic infrastructure improvements.



PROG-1

PROG-1: Non-Motorized Audit

BACKGROUND: Through public and stakeholder coordination, the status of sidewalks and curb ramps within the City of Whitefish relative to Americans with Disabilities Act (ADA) standards was highlighted.

To allow individuals with disabilities to access public facilities, State and local governments must conduct a comprehensive right-of-way audit and create a transition plan to upgrade facilities to meet the most current ADA standards. Accessible pedestrian facilities include sidewalks, curb ramps, transit stops, crosswalks, and signalized intersections.

Additionally, non-motorized facilities in multiple locations within the City of Whitefish are discontinuous or in need of repair or maintenance. A comprehensive audit would be beneficial to understand the current condition and level of connectivity of non-motorized facilities and identify issues such as sidewalk and shared use path gaps and worn pavement markings.



Source: RPA

RECOMMENDATION: Conduct a non-motorized audit across the City and prioritize upgrades. Consider implementing a program to gradually upgrade all substandard or discontinuous facilities.

RELATED STRATEGIES:

- ✓ Maintain Existing Non-Motorized Facilities
- ✓ Install New Non-Motorized Facilities

PAST PLANNING RELATION:

- N/A

OTHER CONSIDERATIONS:

- Consider publishing maps that identify the most connected and accessible routes for disabled individuals.
- Including disabled individual(s) and adjacent residents in the audit could be beneficial to understand the perspective of people with lived experience.

IMPLEMENTATION PARTNERS: City of Whitefish, MDT, Dream Adaptive

PROG-2

PROG-2: Non-Motorist Count Program

BACKGROUND: One of the community’s focus area goals is to develop a non-motorist count program to track the number of people who walk and bike in the City. Progress towards creating a safe multimodal roadway environment will help encourage more people to choose to walk and bike rather than drive, thereby reducing the potential for conflicts. Counts can be conducted manually by paid or volunteer observers, using automated sensors (such as infrared or video cameras), or through a combination of methods. Counts should be collected regularly in a consistent and repeatable manner to help understand variations over time. Beyond using the count data to track progress toward encouraging more non-motorized activity, the data can be used to inform decisions on prioritizing infrastructure improvements based on usage levels, such as adding bike lanes, improving crosswalks, or enhancing pedestrian pathways.

To help facilitate a non-motorized count program, among other recommended programs, a bicycle and pedestrian coordinator could be beneficial. A bicycle and pedestrian coordinator is typically a City staff member responsible for planning, implementing, and managing all programs and policies related to bicycling and walking infrastructure and initiatives. City staff have also noted that a dedicated staff position could serve as the point person for all activities pertaining to walking and bicycling, which would reduce confusion across departments and with outside stakeholders regarding implementation responsibilities.

TECHNOLOGY	MODE TYPE					FACILITY TYPE			
	PEDESTRIAN AND BICYCLE MIXED	PEDESTRIAN AND BICYCLE BY MODE	PEDESTRIAN ONLY	BICYCLE ONLY	BICYCLE IN MIXED MOTOR VEHICLE TRAFFIC	SHARED USE PATH	SIDEWALK	ON-STREET BIKE LANE	ON-STREET MIXED TRAFFIC
Passive infrared detectors	●		●			●	●		
Active infrared detectors	●		●			●	●		
Radio beam detectors	●	●	●			●	●		
Pneumatic tubes				●	●	●		●	●
Inductive loop detectors				●	●	●		●	●
Piezoelectric sensors				●		●		●	
Automated video	●	●	●	●	●	●	●	●	●
Combination Inductive loop/ infrared detectors	●	●	●	●		●	●		
Manual field data counts	●	●	●	●	●	●	●	●	●

Source: Colorado DOT Non-Motorized Monitoring Program Evaluation and Implementation Plan, Appendix B: Pedestrian and Bicycle Volume Data Collection Toolkit

RECOMMENDATION: Develop and implement a non-motorist count program to support community safety goals.

RELATED STRATEGIES:
 ✓ Encourage Safe and Proper Walking/Biking

IMPLEMENTATION PARTNERS:
 City of Whitefish, Volunteers

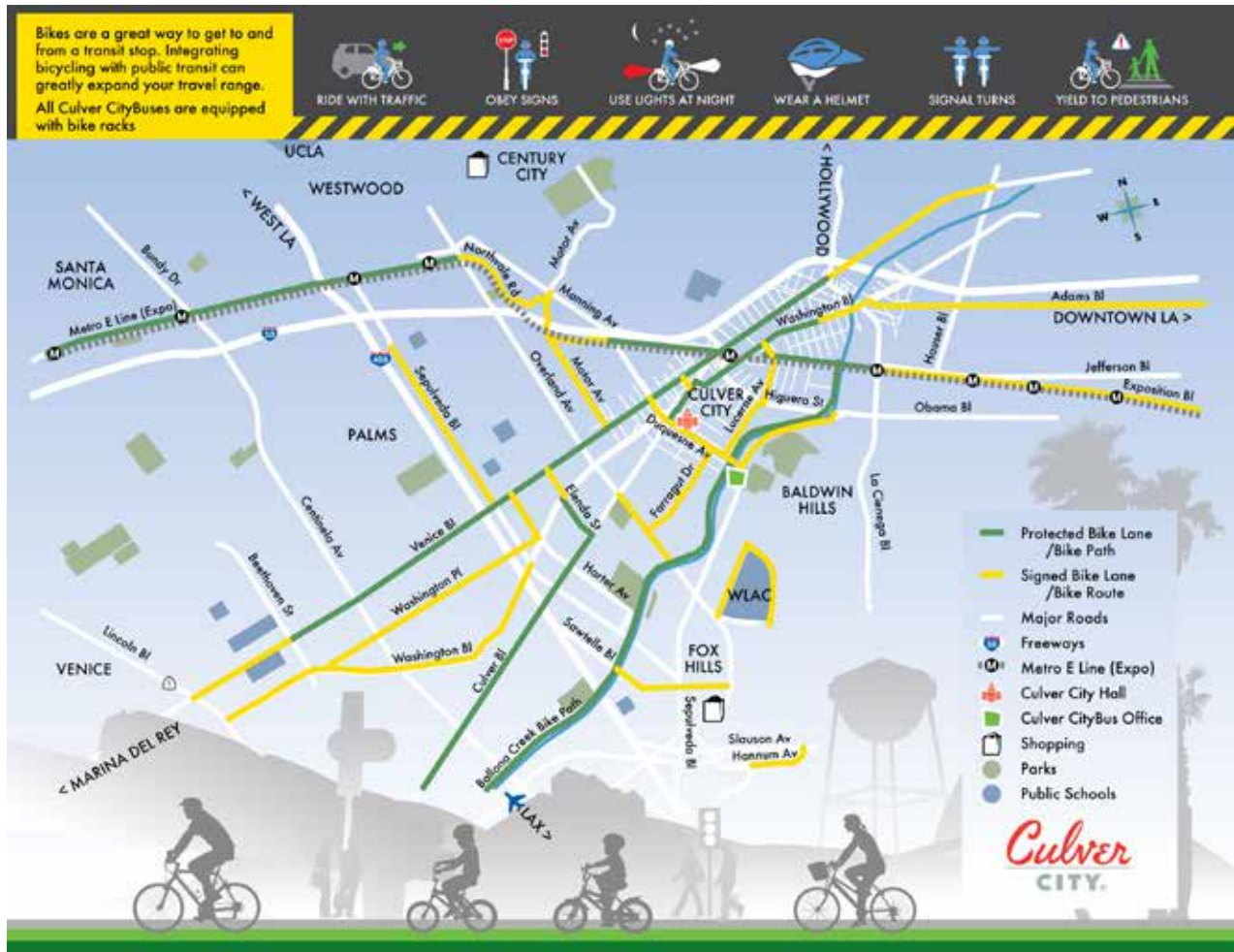
PAST PLANNING RELATION:
 • N/A

OTHER CONSIDERATIONS:
 • Develop a bicycle and pedestrian coordinator position to lead implementation and oversight of non-motorist related projects, programs, and policies.

PROG-3

PROG-3: Walking/Biking/Transit Resources

BACKGROUND: Many community members feel that Whitefish’s pedestrian and bicycle facilities are convenient and easy to use but think more could be done to encourage additional community members to walk and bike instead of drive. The community generally feels that the streets would be safer if fewer people drove personal vehicles and instead turned to alternative modes such as walking, biking, carpooling, or taking transit. Possible resources include a website with information about navigating the City’s non-motorized network, easy-to-use maps highlighting preferred routes between key destinations, QR codes pointing to such website, safety tips and rules of the road for non-motorists, and more. Resources could be promoted through local organizations such as Explore Whitefish or Safe Trails Whitefish, bike rental shops, hotels, City Hall, schools, and other local partners. To help facilitate the development and distribution of these resources, a bicycle and pedestrian coordinator could be beneficial.



Source: Culver City Bike Route Map

RECOMMENDATION: Develop materials to help promote alternative modes and safe behaviors.

RELATED STRATEGIES:

- ✓ Encourage Safe and Proper Walking/Biking

PAST PLANNING RELATION:

- N/A

OTHER CONSIDERATIONS:

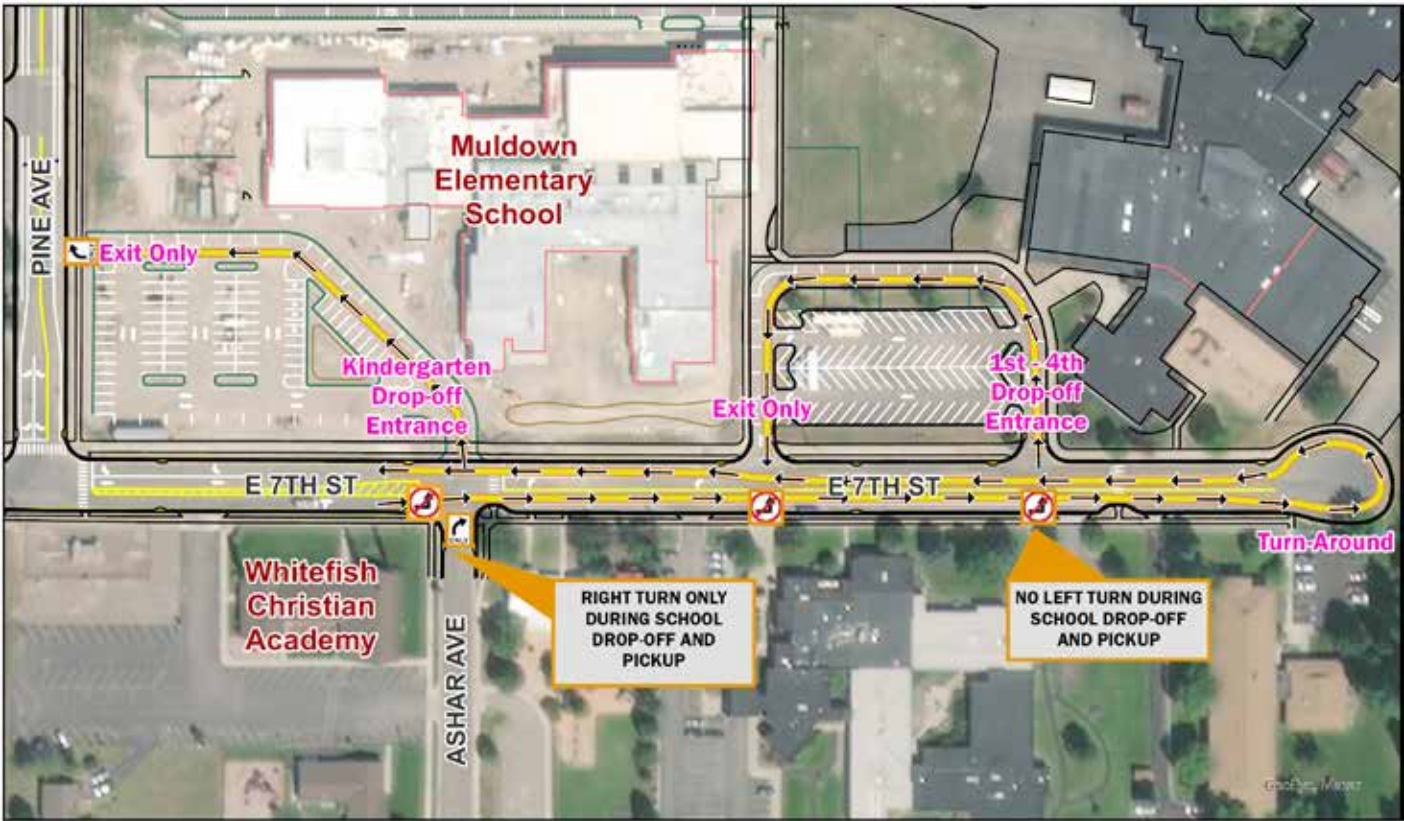
- Develop a bicycle and pedestrian coordinator position to lead implementation and oversight of non-motorist related projects, programs, and policies.

IMPLEMENTATION PARTNERS: City of Whitefish, Local Businesses and Organizations

PROJ-4

PROG-4: Targeted School Traffic Safety Campaign

BACKGROUND: Safety around schools is of utmost concern to the Whitefish community, especially for children who walk or bike to school. School personnel, including crossing guards, cite poor driving behavior including distracted driving (by cell phones, eating/drinking, etc.), speeding, failure to yield to pedestrians in crosswalks, and general disobedience of posted traffic signs. To promote safety and reduce conflicts, administrators have identified specific routes and pick-up/drop-off locations at each school. The City of Whitefish, in coordination with the School District, has developed maps to distribute to parents at the beginning of the school year, like the one illustrated below. Additional materials and activities could be developed as part of a comprehensive campaign to target traffic safety at schools. Such materials could include maps highlighting preferred pick-up/drop-off routes as well as walking/biking routes and prohibited movements or videos demonstrating proper driving behavior. Administrators have suggested partnering with film/photography, journalism, and geography classes at the high school to develop an educational campaign geared toward parents and high school drivers reminding everyone to slow down and pay attention when driving in school zones. Educational materials could be developed for young school children to take home to their parents to encourage safe driving behaviors around the schools. Family-friendly events could also be included in the campaign with activities such as bike rodeos, helmet fitting and decorating, and crosswalk practice. High visibility enforcement efforts, described in PROG-5 could also be a beneficial component of the safety campaign.



Source: Muldown Elementary

RECOMMENDATION: Work with Whitefish Schools to develop a targeted campaign aimed at improving traffic safety within school zones.

RELATED STRATEGIES:

- ✓ Encourage Safe and Proper Walking/Biking
- ✓ Promote Distraction-Free Driving
- ✓ Reduce Vehicular Travel Speeds

PAST PLANNING RELATION:

- N/A

OTHER CONSIDERATIONS:

- Consider the most effective timing of the campaign, possibly in coordination with the start of school in the fall.

IMPLEMENTATION PARTNERS: City of Whitefish, Whitefish School District, WPD, Community Health Partners, Western Transportation Institute

PROG-5

PROG-5: High Visibility Enforcement

BACKGROUND: High visibility enforcement refers to policing strategies designed to deter traffic violations and improve public safety by increasing the presence and visibility of law enforcement officers in the community. The intent is to make police presence more noticeable and discourage improper driving behaviors as a result of the perceived risk of getting caught. High visibility enforcement is most effective when paired with educational campaigns to promote awareness of both law enforcement activities and proper driving behavior. An effective program may include a combination of foot, bicycle, and vehicle patrols as well as visible uniforms and marked vehicles to enhance the officers' presence. In particular, high visibility enforcement has been suggested as a potential strategy around the schools at the beginning of the school year to reinforce proper driving behavior in school zones such as slow speeds, distraction free driving, and yielding to pedestrians.



Source: Bozeman Fire Department

RECOMMENDATION: Conduct high visibility enforcement to target specific behaviors such as speeding, distracted driving, impaired driving, or driving in school zones or to target traffic safety related specific events or holidays.

RELATED STRATEGIES:

- ✓ Encourage Safe and Proper Walking/Biking
- ✓ Promote Distraction-Free Driving
- ✓ Penalize Distracted Driving
- ✓ Reduce Vehicular Travel Speeds

PAST PLANNING RELATION:

- N/A

OTHER CONSIDERATIONS:

- N/A

IMPLEMENTATION PARTNERS:

City of Whitefish, WPD, Montana Highway Patrol, Whitefish School District

PROG-6

PROG-6: Traffic Calming Program

BACKGROUND: Traffic calming involves changing the physical roadway environment to reduce the negative effects of motor vehicle use, alter driver behavior, and improve comfort and safety for non-motorized street users. Traffic-calming techniques are typically aimed at lowering vehicle speeds, decreasing truck volumes, and/or reducing the amount of cut-through traffic in a given area. Traffic calming elements can either be incorporated into the initial design of a roadway or retrofitted into existing streets. The City already provides a list of acceptable traffic calming measures but does not specifically require the use of traffic calming measures through the development review process. Some of the City’s adopted street design standards have also been adjusted to achieve calming effects, such as reducing lane widths to encourage slower speeds. However, the City often receives requests from residents for traffic calming in their neighborhoods but struggles with the maintenance and cost of implementing traffic calming measures when warranted. Other jurisdictions have implemented traffic calming programs which outline the process for residents to request traffic studies to investigate the merits of traffic calming measures and to implement temporary or permanent solutions. Effective programs also establish expectations for community involvement and required levels of support for changes, as well as required cost sharing and maintenance agreements.



Source: Western Transportation Institute

RECOMMENDATION: Implement a traffic calming program that formalizes a method to identify and address concerns.

- RELATED STRATEGIES:**
- ✓ Counteract Distracted Driving
 - ✓ Reduce Vehicular Travel Speeds

PAST PLANNING RELATION:

- N/A

OTHER CONSIDERATIONS:

- The *Whitefish Transportation Plan* provides a traffic calming “toolbox” and the *City Engineering Standards* contain a list of acceptable traffic calming measures.

IMPLEMENTATION PARTNERS: City of Whitefish, WPD, Whitefish School District, Western Transportation Institute

7.4. Policy Recommendations

Based on a review of current City regulations, policies, procedures, and planning documents, a few policy changes were identified to help formalize City programs and achieve intended outcomes. The recommended policies could help establish a framework upon which to develop new and enhance existing programs and ensure consistent implementation. Adopting formal policies gives the City's efforts a regulatory basis and the authority to enforce its implementation to help drive systemic change for underlying safety issues.



POL-1

POL-1: E-Bike Regulation Modifications

BACKGROUND: E-bikes are becoming very popular in the Whitefish area, with several e-bike rental shops located in town. While e-bikes make biking accessible to a broader population, there are also safety concerns associated with e-bikes' higher speeds compared to traditional bikes. Since e-bikes are more approachable for novice or average riders who are potentially less comfortable using on-street facilities, e-bike riders have been observed using sidewalks in town. This creates a safety issue and potential conflicts between pedestrians and cyclists, especially in the downtown area. City codes allow Type 1 and 2 e-bikes on SUPs and bike lanes, and State law generally allows bicycles on sidewalks except where prohibited. There have been different interpretations of City codes and State laws by recent Whitefish Police Chiefs, however it is generally accepted that traditional and e-bikes are presently allowed on all City sidewalks. To reduce conflicts with e-bikes, the City could consider a policy that restricts e-bike use on sidewalks in certain areas, such as the downtown, or restricts use on sidewalks in general. The City could also develop informational materials targeted at e-bike safety to distribute through local e-bike rental shops and other tourist focused areas such as hotels.



Source: Corona-Norco Unified School District, Be Safe, Bike Smart Safety Campaign

RECOMMENDATION: Develop a policy regulating e-bike use on sidewalks and in the downtown area.

RELATED STRATEGIES:
✓ Encourage Safe and Proper Walking/Biking

PAST PLANNING RELATION:
• N/A

OTHER CONSIDERATIONS:
• Consider coordinating efforts with **PROG-2** to distribute educational materials.
• Policy changes require City Council approval.

IMPLEMENTATION PARTNERS: City of Whitefish, Local Businesses and Organizations

POL-2 POL-2: Formalized Safe Routes to School Policy

BACKGROUND: In 2011, the City of Whitefish completed a *SRTS Plan* aimed at increasing the number of students who walk and bike to school in Whitefish. The plan also developed several recommended projects to address non-motorized safety around the City’s schools. However, the City has not enacted a formal policy nor has it updated its *SRTS Plan* in many years. While the *Whitefish SS4A Action Plan* is intended to advance planning for SRTS, a more formalized ordinance or policy may be needed to secure funding to make the necessary changes in the City, such as implementing projects to improve pedestrian and bicycle routes to schools.

Adopting a formal policy could help secure funding to implement new or continue existing programs related to school children safety. For example, funding could help perpetuate the bicycle and pedestrian safety education curriculum (adapted from the *K-8: Journeys from Home, Walking and Bicycling* curriculum) which has been taught at Whitefish schools for the past 30 years. The program is currently in flux due to increasing class sizes, staffing shortages, and changing schedules. Funding could also help formalize a crossing guard program which standardizes several facets of the crossing guard position. Such policies may establish a system to identify locations where guards are needed, regulate the hiring and training of guards in their responsibilities, provide uniforms and proper equipment (flashing paddles, reflective all-season clothing, etc.), and secure a funding stream to ensure the program’s success.



Source: Oregon Department of Transportation SRTS Program

RECOMMENDATION: Develop a policy to formalize SRTS planning and help secure funding for programs to support SRTS efforts such as education curriculum and crossing guard training.

RELATED STRATEGIES:

- ✓ Encourage Safe and Proper Walking/Biking

PAST PLANNING RELATION:

- N/A

OTHER CONSIDERATIONS:

- Policy changes require City Council approval.

IMPLEMENTATION PARTNERS:

City of Whitefish, Whitefish School District, Western Transportation Institute

POL-3: Complete Streets Policy

BACKGROUND: Complete streets are streets that are designed, built, and operated to accommodate safe access for all users including pedestrians, bicyclists, transit riders, and motorists. Complete streets standards recognize the importance of fitting the design to the unique context and needs of different street typologies. Although the City of Whitefish strives to design its streets to serve the needs of all users, the City does not yet have a formal complete streets policy. The Whitefish Transportation Plan recommends that the City continue to incorporate complete streets concepts into the project planning, programming, and implementation processes in addition to developing and adopting a formal complete streets policy. Adopting a formal policy would require changes to City planning and zoning codes and transportation design standards to ensure new facilities are constructed in a way that accommodates all users and enhances safety, mobility, and equity within the community.



It is a transportation approach that provides space for...

People Curb ramps, crosswalks, and curb extensions for pedestrians to safely cross streets and access destinations	Bikes Designated connected routes and low-stress facilities that support people riding bikes, e-bikes and scooters	Cars Traffic calming measures and design cues to foster slower speeds and driver awareness of vulnerable road users	Mass Transit Bus pullouts, shelters, transit-only lanes, and signal priority to create transit-friendly roadways	Shared Mobility Ample curb-side space for shared bike and scooter parking that separates users from traffic, and keeps sidewalks clear and safe	Freight Blend freight activity and policy into multi-modal design, reduce conflicts with other modes of transportation	Social Refuge Street furniture, parks, lighting, and public green spaces that promote gathering and social interaction
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Source: Ohio, Kentucky, Indiana Regional Council of Governments

RECOMMENDATION: Develop a complete streets policy to ensure future transportation projects serve the diverse needs of all roadway users.

RELATED STRATEGIES:

- ✓ Encourage Safe and Proper Walking/Biking
- ✓ Reduce Vehicular Travel Speeds

PAST PLANNING RELATION:

- The *Whitefish Transportation Plan* and *Whitefish Sustainable Tourism Plan* recommend that the City develop and adopt a formal complete streets policy.

OTHER CONSIDERATIONS:

- Policy changes require City Council approval.
- Changes to existing design standards and development codes may be necessary to align with the complete streets policy.

IMPLEMENTATION PARTNERS: City of Whitefish

Other Policies Considered

Several transportation-based policy decisions have been discussed and recommended in past planning documents. While not directly safety-related, these policy discussions provide important background for the *Whitefish SS4A Action Plan* and the implementation of transportation improvements. Relevant policy recommendations are summarized here for reference purposes but not directly recommended as part of this planning effort.

Transportation Advisory Committee

Most urban areas across the state have an established Transportation Advisory Committee (TAC) which advises and cooperatively assists a jurisdiction in assessing and prioritizing local transportation needs. TACs typically meet at least quarterly to discuss and make recommendations on various transportation-related improvements and issues. Coordination with federal, state, and local agencies is a key role of the TAC. Whitefish does not yet have an established TAC but is considering development of a TAC to support coordinated transportation planning efforts.

Regional Transit Coordination

The *Whitefish Transportation Plan* recognizes the need for increased coordination within the City of Whitefish and across Flathead County to provide a transit system that is more capable of accommodating future transit system demands. The transportation plan recommends formation of a regional transit entity with partners such as nearby cities, schools, Chambers of Commerce, BMCA, local businesses, Flathead Valley Community College, Logan Health Care, Glacier National Park, and the National Forest Service. The recommended first step includes the development of a memorandum of understanding (MOU) which outlines the roles and responsibilities of each partner within an eventual regional transit organization, and the process and timeline by which such an organization will be formed.

Initial execution of a more localized MOU could be focused initially on the development and formation of a mobility management organization, such as Missoula in Motion, which addresses transportation and mobility needs within an area. As a future step, the organization of a regional Transit Authority could be appropriate to coordinate regional transit services within Flathead County. These efforts would help make it easier and safer to choose to walk, bike, or take transit for daily transportation purposes.

State Highway System Designation Modifications

The *Whitefish Transportation Plan* explored the appropriateness of re-designating Baker Avenue and Wisconsin Avenue as potential candidates for the state highway system. The Primary, Secondary, and Urban Highway designation processes are guided by Montana law, Montana Transportation Commission policy, and MDT guidelines.⁸⁴ The designation of eligible routes must adhere to the following principles:

- In each system, routes shall be designated on the basis of a planned connected system (MCA 60-1-102(3)).
- System mileage should be distributed on a reasonable and fair basis within the geographic area the system is designed to serve.
- All systems should be properly integrated with each on-system route connected to another equal or higher on-system route.

Based on the planning-level assessment conducted in the transportation, Wisconsin Avenue does not fit all the eligibility criteria. Baker Avenue appears to fit all existing eligibility criteria. At a minimum, the transportation plan recommended that the Urban designation on Baker Avenue be extended south to 13th Street, and that 13th Street be classified as Urban from Baker Avenue to Spokane Avenue. Re-designating these routes as public highways would qualify the roadways for state apportionments of federal-aid highway funds which could help accelerate future project implementation. However, re-designating these routes would also increase the level of MDT and FHWA coordination required to implement improvements.

Traffic Impact Studies

The City of Whitefish already has an established traffic impact study process, however, the *Whitefish Transportation Plan* recommends recommended improvements to the format and content requirements of traffic impact studies in accordance with prevailing standards and industry best practices. The process improvements could help the City mitigate impacts from larger developments.

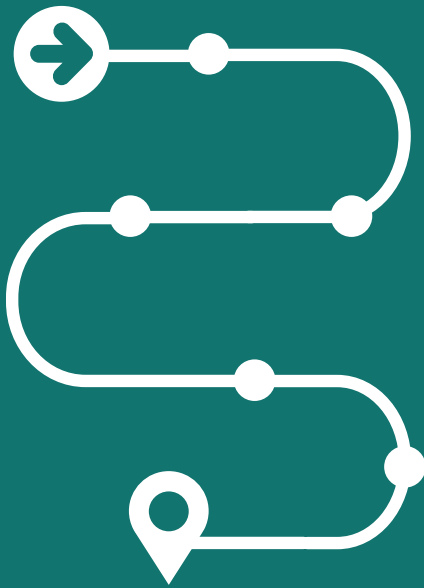
Parking Management

The City of Whitefish is actively working to implement its 2019 *Parking Management Plan*. Since implementing the plan, the City has designated a staff person to enforce short-term and long-term parking regulations in the downtown area and created an employee-only all-day parking program downtown. Additional goals and action items are outlined in the plan to help manage parking, improve safety, and reduce congestion. Such efforts include a neighborhood parking program, education effort related to multimodal transportation options, paid parking, shared parking with businesses, parking permit programs, park-n-ride facilities, and improved enforcement of snow removal requirements.



8. 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 City can effectively address safety concerns while ensuring a systematic approach to enhancing roadway safety.



8.1. Prioritization

Through public and stakeholder outreach, along with 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 based on a comprehensive set of criteria that considered past planning efforts, safety needs, community support, and overall cost. This structured approach helps the City focus its resources on the most impactful safety improvements. The prioritization criteria are described below. Each criterion was scored on a qualitative scale reflecting negative, neutral, or positive (🔻, ⚪, 🟩) based on the conditions outlined in [Table 3](#).

- **Recommended in a Past Planning Effort:** Projects that have previously been identified in planning documents were given priority to ensure continuity in community safety and transportation initiatives. Past City planning documents include the *Whitefish Transportation Plan*, *Connect Whitefish Bicycle and Pedestrian Master Plan*, and *Whitefish SRTS Plan*, among other partner agency-led efforts.
- **Supported by Crash Data:** Projects that address areas with a history of safety issues received higher priority. This criterion was scored according to the analysis of crashes occurring between 2018 and 2022, specifically the high injury network.
- **Supported by the Community:** Community support is vital to the success of project implementation, therefore projects that reflect the needs and preferences of residents were prioritized. This criterion was evaluated from two perspectives: (1) interactions from the information-gathering phase of the planning effort including comments recorded during Public Meeting #1 and on the commenting map and (2) targeted votes during the second public meeting or comments from the Task Force based on preliminary recommendations.
- **Estimated Cost:** Planning-level cost estimates were prepared for each project. This criterion was evaluated based on the implementation cost and level of complexity. Higher-cost projects are typically more complex and will likely require more resources, planning, and coordination, leading to longer implementation timelines. Lower-cost improvements, on the other hand, can likely be achieved relatively quickly with fewer resources. Projects that already have identified funding, regardless of estimated cost, scored highly.

Table 3: Prioritization Criteria

Criterion	Score		
	🔻	⚪	🟩
1 Past Planning	Not Identified	Acknowledged but Not Directly Recommended	Recommended
2 Crash Data	No Crashes	Bottom 85% on HIN	Top 15% or Higher on HIN
3 Community Support	Commenting Map/ Public Meeting #1	0 Comments	1-9 Comments and/or Interactions
	Public Meeting #2/ Task Force	0 Votes	1-9 Votes and/or Comments
4 Estimated Cost	High Cost (\$1M+)	Mid Cost (\$150k - \$1M)	Low Cost (<\$150k) or Dedicated Funding

Based on the combined scores of all prioritization criteria, the projects were sorted into short-, mid-, and long-term timeframes indicating when the project should be expected to be implemented. The short-term timeframe covers a period of 1 to 5 years, mid-term indicates a period of 6 to 10 years, and long-term reflects a period of 11 to 20 years. The selected timeframe considers how well each project aligns with the prioritization criteria as well as the overall cost, with the implementation costs weighted more heavily. Priority projects demonstrate benefits that outweigh project costs and can reasonably be expected to be funded with available City funds. Results of the prioritization process are summarized in **Table 4**.

Table 4: Prioritization Results

PROJ-1	Past Plans	Crash Data	Comment Map/Mtg 1	Mtg 2/ Task Force	Cost	Cost Estimate	Timeframe
Proj-1 Muldown Elementary School							
<u>1-A: 6th & Pine</u>	⬆️	⬇️	⬇️	⬇️	⬆️	\$130,000	Short
<u>1-B: 7th & Pine</u>	⬆️	⬇️	⬇️	⬇️	⬆️	\$3,000	Short
<u>1-C: 7th & Ashar</u>	⬆️	⬇️	⬇️	⬇️	⬆️	\$110,000	Short
PROJ-2	Past Plans	Crash Data	Comment Map/Mtg 1	Mtg 2/ Task Force	Cost	Cost Estimate	Timeframe
Proj-2 Whitefish Middle School							
<u>2-A: 1st & Spokane</u>	⬇️	⬇️	⬇️	⬇️	⬆️	\$32,000	Mid
<u>2-B: 2nd & Kalispell</u>	⬇️	⬇️	⬇️	⬇️	⬆️	\$4,000	Mid
<u>2-C: 1st Street Sidewalk</u>	⬇️	⬇️	⬇️	⬇️	⬇️	\$460,000	Long
<u>2-D: 2nd & Pine</u>	⬇️	⬇️	⬆️	⬇️	⬆️	\$52,000	Short
PROJ-3	Past Plans	Crash Data	Comment Map/Mtg 1	Mtg 2/ Task Force	Cost	Cost Estimate	Timeframe
Proj-3 Whitefish High School/Memorial Park							
<u>3-A: Memorial Park</u>	⬆️	⬇️	⬇️	⬇️	⬆️	\$1.2M	Mid
<u>3-B: Whitefish High School</u>	⬆️	⬇️	⬇️	⬇️	⬆️	\$550,000	Mid
PROJ-4	Past Plans	Crash Data	Comment Map/Mtg 1	Mtg 2/ Task Force	Cost	Cost Estimate	Timeframe
Proj-4 6th Street Improvements							
<u>4-A: 6th Street Improvements</u>	⬆️	⬇️	⬆️	⬇️	⬆️	\$2.6M	Mid

PROJ-5

Past Plans	Crash Data	Comment Map/Mtg 1	Mtg 2/ Task Force	Cost	Cost Estimate	Timeframe
Proj-5 Enhanced Transit Stops						
<u>5-A: Pine Lodge Bus Stop in Travel Lane</u>	⬇️	⬇️	⬇️	⬆️	\$150,000	Mid
<u>5-B: Pine Lodge Bus Stop Outside Travel Lane</u>	⬇️	⬇️	⬇️	⬇️	\$350,000	Long
<u>5-C: Lodge at Whitefish Lake Bus Stop in Travel Lane</u>	⬇️	⬆️	⬇️	⬇️	\$260,000	Mid
<u>5-D: Lodge at Whitefish Lake Bus Stop Outside Travel Lane</u>	⬇️	⬆️	⬇️	⬇️	\$1.2M	Mid

PROJ-6

Past Plans	Crash Data	Comment Map/Mtg 1	Mtg 2/ Task Force	Cost	Cost Estimate	Timeframe
Proj-6 Spokane Avenue Pedestrian/Bicycle Undercrossing						
<u>6-A: Spokane Ave/6th-7th St Vicinity</u>	⬆️	⬇️	⬆️	⬇️	\$2.8M	Mid
<u>6-B: 7th Street</u>	⬆️	⬇️	⬆️	⬇️	\$750,000	Long

PROJ-7

Past Plans	Crash Data	Comment Map/Mtg 1	Mtg 2/ Task Force	Cost	Cost Estimate	Timeframe
Proj-7 1st Street Improvements						
<u>7-A: 1st & Baker</u>	⬆️	⬆️	⬇️	⬇️	\$10,000 - \$1.6M	Short (RRFB) Long (Signal)
<u>7-B: 1st & Central</u>	⬇️	⬇️	⬇️	⬆️	\$2,000 - \$24,000	Mid

PROJ-8

Past Plans	Crash Data	Comment Map/Mtg 1	Mtg 2/ Task Force	Cost	Cost Estimate	Timeframe
Proj-8 2nd Street Improvements						
<u>8-A: 2nd & Lupfer</u>	⬇️	⬇️	⬆️	⬇️	\$160,000	Mid
<u>8-B: 2nd & Baker</u>	⬆️	⬆️	⬆️	⬆️	\$5,000	Short
<u>8-C: 2nd & Central</u>	⬇️	⬇️	⬆️	⬆️	\$4,000	Short
<u>8-D: 2nd & Spokane</u>	⬆️	⬇️	⬆️	⬆️	\$5,000	Short

PROJ-9

Past Plans	Crash Data	Comment Map/Mtg 1	Mtg 2/ Task Force	Cost	Cost Estimate	Timeframe
Proj-9 3rd Street Improvements						
<u>9-A: 3rd & Baker</u>	⬇️	⬇️	⬆️	⬇️	\$220,000	Mid
<u>9-B: 3rd & Central</u>	⬇️	⬇️	⬇️	⬆️	\$2,000	Mid
<u>9-C: 3rd & Spokane</u>	⬆️	⬆️	⬇️	⬆️	\$6,000	Short

PROJ-10

	Past Plans	Crash Data	Comment Map/ Mtg 1	Mtg 2/ Task Force	Cost	Cost Estimate	Timeframe
Proj-10 13th Street Improvements							
<u>10-A: 13th & Baker</u>	⬆️	⚠️	⚠️	⬆️	⚠️	\$2,000 - \$3.2M	Short (RRFB) Long (Signal/ Roundabout)
<u>10-B: 13th & Spokane</u>	⬆️	⬆️	⬆️	⬆️	⬇️	\$1.1M	Mid

PROJ-11

	Past Plans	Crash Data	Comment Map/ Mtg 1	Mtg 2/ Task Force	Cost	Cost Estimate	Timeframe
Proj-11 US 93 Improvements (Hwy 40 to 13th St)							
<u>11-A: 13th to MT 40</u>	⬆️	⬆️	⬇️	⬆️	⬇️	\$21.9M - \$29.9M	Long

PROJ-12

	Past Plans	Crash Data	Comment Map/ Mtg 1	Mtg 2/ Task Force	Cost	Cost Estimate	Timeframe
Proj-12 Baker Avenue Improvements							
<u>12-A: Baker & 4th</u>	⬇️	⚠️	⚠️	⬆️	⚠️	\$160,000	Mid
<u>12-B: Baker (5th St, North)</u>	⬆️	⬆️	⚠️	⬆️	⬆️	\$6,000	Short
<u>12-C: Baker (5th St, South)</u>	⬆️	⬆️	⚠️	⬆️	⚠️	\$110,000 - \$1.7M	Short (Repaint) Mid (Cycle Track)
<u>12-D: Baker Ave Sidewalks</u>	⬇️	⬆️	⚠️	⬆️	⚠️	\$52,000	Mid
<u>12-E: Baker & 19th</u>	⬆️	⬆️	⬇️	⬆️	⬇️	\$100,000	Long

8.2. Implementation

The *Whitefish SS4A Action Plan* aims to enhance transportation safety in Whitefish, with a target of zero deaths and serious injuries on city roadways by 2030. While specific funding for the proposed improvements has not yet been secured, the City is committed to implementing a minimum number of safety projects annually in support of identified focus area goals. These include initiatives such as a non-motorist count program, intersection improvements, campaigns against distracted driving, and implementation of traffic calming measures.

To help the City identify the most cost-effective projects with the highest potential for addressing safety concerns, the recommended projects have been prioritized into short-, mid-, and long-term implementation timeframes. This prioritized list serves as an initial guide but is intended to be dynamic to easily adapt to changes in funding, crash trends, or community priorities.

As implementation of the Action Plan progresses, it is expected that new projects will be identified, enhancing the City’s safety efforts. The strategies outlined in this plan function as a toolbox, ready to address community safety needs as they emerge. This flexible approach allows for continual reassessment and adjustment to ensure the most pressing safety concerns are addressed in a timely and effective manner.

Figure 20 illustrates the project implementation process. As the Action Plan is implemented, projects will be advanced from the planning stage into the project development and eventual construction phases. Public involvement should occur throughout all phases. The general next steps for implementation are as follows:

- 1 A funding source(s) is identified and secured.
- 2 The project is nominated for implementation by the City 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 have been developed with the intent that separate project components (i.e., 8-C or 9-B) can be completed individually or combined with other components and/or projects into a larger effort, depending on funding availability and other considerations. Cost savings may be realized by combining similar projects.

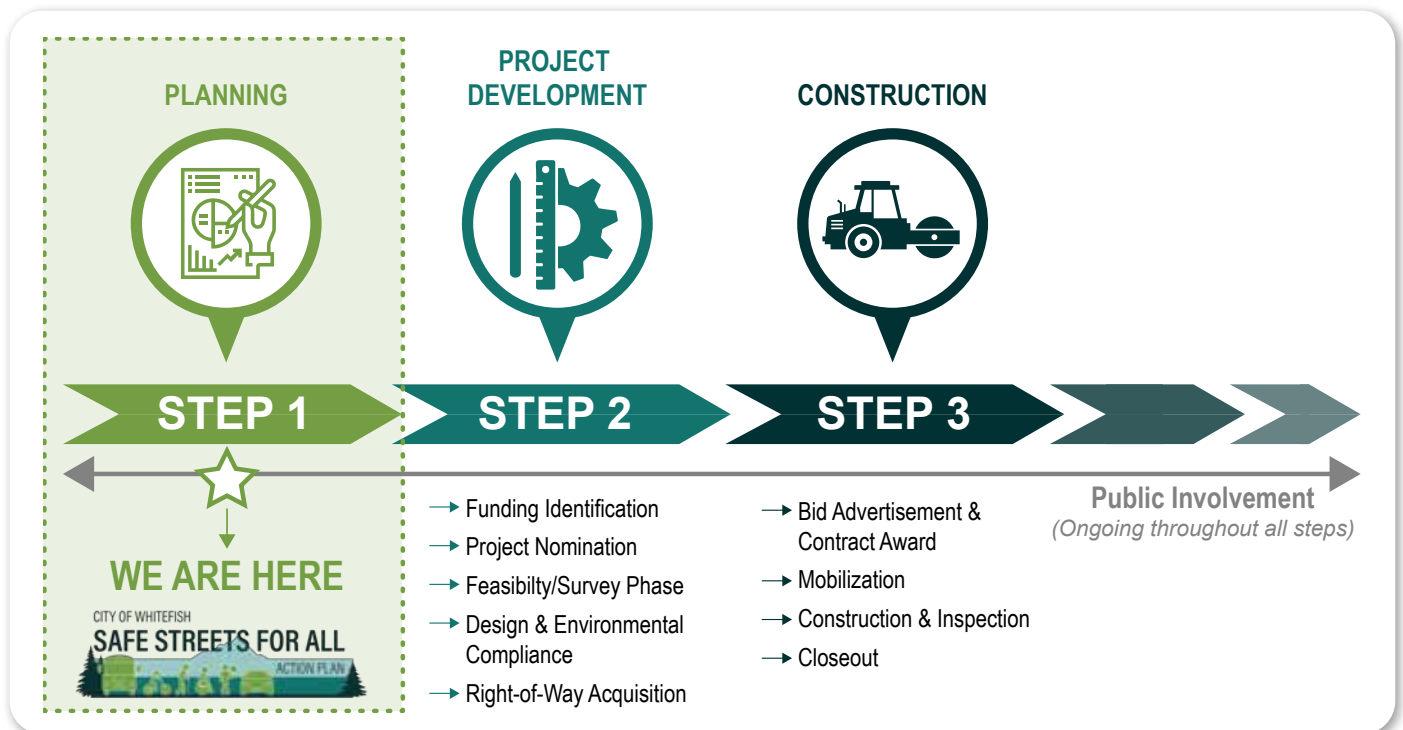


Figure 20: Project Development Process

SS4A Implementation Grants

This Action Plan was developed, in part, 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 implementation of the projects and strategies contained in this plan.

Once the Action Plan is adopted, the City will be eligible for implementation grant funds. These funds can be used to implement projects and strategies identified in an Action Plan to address a specific roadway safety problem. Eligible projects and strategies can be infrastructural, behavioral, and/or operational activities. Implementation grants may also include supplemental planning and demonstration activities to inform an existing Action Plan, or project-level planning, design, and development activities. Applicants must have adopted an eligible Action Plan to apply for an implementation grant.

For implementation grants, USDOT seeks to award funds to projects and strategies that save lives and reduce roadway fatalities and serious injuries; incorporate equity, engagement, and collaboration into how projects and strategies are executed; use effective practices and strategies; consider climate change, sustainability, and economic competitiveness in project and strategy implementation; and will be able to complete the full scope of funded projects and strategies within 5 years after the establishment of a grant agreement. Additional award consideration will be made for implementation grant applicants that have a high percentage of funds benefiting underserved communities, are in rural areas, request less than \$10 million in Federal funds, support geographic diversity amongst the implementation grant award recipients, have a finalized comprehensive safety action plan, and/or have a high Killed and Serious Injuries (KSI) per \$1 million in Federal funding rate.

Implementation grant applicants must identify the safety problems to be addressed, the relevant geographic locations (i.e., corridors, intersections), and the projects and strategies they plan to implement based on their 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 by the Bipartisan Infrastructure Law in 2021, with funding authorized through 2026. Whitefish received funds from the 2023 grant cycle, and the 2024 grant cycle recently closed. Future grant funding is anticipated to be available in Federal fiscal years 2025 and 2026. To be competitive for Federal grant funds under the SS4A program, the

City of Whitefish should prioritize projects identified on the HIN. The City 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.

Future implementation grant funding applications could be considered for the **following list of potential projects based on HIN scoring along with mid- to high-level cost estimates** that would be outside the ability of City of Whitefish 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 City 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 City can meet project readiness criteria.



- 1** **PROJ 10-B: 13th Street/Spokane Avenue:** This intersection scored sixth highest on the intersection-based HIN due to a higher frequency of crashes. With an estimated cost of \$1.1M, this location may be a good candidate for an implementation grant application in coordination between the City of Whitefish and MDT.
- 2** **PROJ-11: US 93 Improvements (HWY 40 to 13th St):** US 93 from MT 40 to JP Road scored second highest on the segment-based HIN, and US 93 from Akers Lane to the Whitefish River scored fourth highest. Several of the intersections in this stretch also scored highly on the intersection-based HIN. With a total estimated cost up to \$29.9M, this location may be a good candidate for an implementation grant application in coordination between the City of Whitefish and MDT.
- 3** **PROJ 7-A: 1st Street/Baker Avenue:** This intersection was identified as the ninth highest-scoring intersection on the HIN due to a high frequency of crashes. With an estimated cost up to \$1.6M, this location may be a good candidate for an implementation grant application in coordination between the City of Whitefish and MDT.

References

- 1 US DOT Pedestrian and Bicycle Information Center, Safety, https://www.pedbikeinfo.org/factsfigures/facts_safety.cfm
- 2 USDOT, What Is a Safe System Approach?, October 13, 2022, <https://www.transportation.gov/NRSS/SafeSystem>
- 3 USDOT, National Road Safety Strategy, <https://www.transportation.gov/NRSS>
- 4 FHWA, Proven Safety Countermeasures, <https://highways.dot.gov/safety/proven-safety-countermeasures>
- 5 NHTSA, Countermeasures That Work: A Highway Safety Countermeasure Guide For State Highway Safety Offices Tenth Edition, 2020, https://www.nhtsa.gov/sites/nhtsa.gov/files/2021-09/15100_Countermeasures10th_080621_v5_tag.pdf
- 6 FHWA, Maintenance Measures, <https://highways.dot.gov/safety/pedestrian-bicyclist/guide-maintaining-pedestrian-facilities-enhanced-safety/5-maintenance>
- 7 FHWA, Construction Techniques to Lessen Maintenance for Sidewalks and Paths, <https://highways.dot.gov/safety/pedestrian-bicyclist/guide-maintaining-pedestrian-facilities-enhanced-safety/6-construction>
- 8 FHWA, Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations, 2022, <https://highways.dot.gov/safety/data-analysis-tools/rsdp/rsdp-tools/guide-improving-pedestrian-safety-uncontrolled-crossing>
- 9 FHWA, Crosswalk Visibility Enhancements, 2021, <https://highways.dot.gov/safety/proven-safety-countermeasures/crosswalk-visibility-enhancements>
- 10 FHWA, Medians and Pedestrian Refuge Islands in Urban and Suburban Areas, 2021, <https://highways.dot.gov/safety/proven-safety-countermeasures/medians-and-pedestrian-refuge-islands-urban-and-suburban-areas>
- 11 FHWA, Pedestrian Hybrid Beacon, 2021, <https://highways.dot.gov/safety/proven-safety-countermeasures/pedestrian-hybrid-beacons>
- 12 FHWA, Rectangular Rapid Flashing Beacons (RFB), 2021, <https://highways.dot.gov/safety/proven-safety-countermeasures/rectangular-rapid-flashing-beacons-rrfb>
- 13 NHTSA, Advancing Pedestrian and Bicyclist Safety: A Primer for Highway Safety Professionals, April 2016, https://www.nhtsa.gov/sites/nhtsa.gov/files/812258-peds_bike_primer.pdf
- 14 FHWA, Accessible Sidewalks and Street Crossings: An Informational Guide, 2003, https://nacto.org/docs/usdg/accessible_sidewalks_and_street_crossings_boodlal.pdf
- 15 MDT, Guidance for Determining Pedestrian Crossing Treatment at Uncontrolled Locations, November 2019, https://www.mdt.mt.gov/other/webdata/external/cadd/design_memos/2019-11-01_Pedestrian_Crossing_Treatment_Guidance.pdf
- 16 Mosquera, N., Nachemson, J., and Andersson, D., New Study Shows Streets Are Safer with Asphalt Art, April 14, 2022, <https://www.bloomberg.org/blog/new-study-shows-streets-are-safer-with-asphalt-art/>
- 17 FHWA, Complete Streets in FHWA, <https://highways.dot.gov/complete-streets>
- 18 Smart Growth America, Complete Streets, <https://smartgrowthamerica.org/what-are-complete-streets/>
- 19 McCann, B. and Rynne, S., America Planning Association, PAS Report 559, Complete Streets: Best Policy and Implementation Practices, April 1, 2010, <https://www.planning.org/publications/report/9026883/>
- 20 City of Missoula, Resolution #7473, Complete Streets Policy, August 24, 2009, <https://www.ci.missoula.mt.us/DocumentCenter/View/2154/Resolution-7473?bidId=>
- 21 MDT, Pedestrian and Bicycle Facilities and Trails (Multimodal Transportation Infrastructure), <https://mdt.mt.gov/research/toolkit/m1/pptools/ds/pbf.aspx>
- 22 FHWA Bike Safe, Bike Lanes, http://www.pedbikesafe.org/bikesafe/countermeasures_detail.cfm?CM_NUM=11
- 23 FHWA Bike Safe, Wide Curb Lanes, http://www.pedbikesafe.org/bikesafe/countermeasures_detail.cfm?CM_NUM=12
- 24 FHWA Bike Safe, Separate Shared-Use Path, http://www.pedbikesafe.org/bikesafe/countermeasures_detail.cfm?CM_NUM=31
- 25 FHWA Bike Safe, Share the Path Treatments, http://www.pedbikesafe.org/bikesafe/countermeasures_detail.cfm?CM_NUM=34

References

- 26 FHWA Bike Safe, Separated Bike Lanes,
http://www.pedbikesafe.org/bikesafe/countermeasures_detail.cfm?CM_NUM=5
- 27 FHWA, Bicycle Lanes, 2021, <https://highways.dot.gov/safety/proven-safety-countermeasures/bicycle-lanes>
- 28 FHWA, Walkways, 2021, <https://highways.dot.gov/safety/proven-safety-countermeasures/walkways>
- 29 FHWA, Road Diets (Roadway Reconfiguration), 2021,
<https://highways.dot.gov/safety/proven-safety-countermeasures/road-diets-roadway-reconfiguration>
- 30 NHTSA, Countermeasures that Work – Pedestrian Safety,
<https://www.nhtsa.gov/book/countermeasures-that-work/pedestrian-safety/countermeasures>
- 31 NHTSA, Countermeasures that Work – Bicycle Safety,
<https://www.nhtsa.gov/book/countermeasures-that-work/bicycle-safety/countermeasures>
- 32 Safe Routes Partnership, Our Publications, <https://saferoutespartnership.org/resources/publications>
- 33 Pedestrian Bicycle Information Center, National Center for Safe Routes to School, https://www.pedbikeinfo.org/resources/resources_details.cfm?id=4976
- 34 Montana Transportation Interim Committee, Electric Bikes and Scooters Snapshot of State Laws, September 2019, <https://leg.mt.gov/content/Committees/Interim/2019-2020/Transportation/Committee-Topics/Autonomous-Electric/e-bikes-montana.pdf>
- 35 FHWA, Leading Pedestrian Interval, 2021,
<https://highways.dot.gov/safety/proven-safety-countermeasures/leading-pedestrian-interval>
- 36 FHWA, Yellow Change Interval, 2021,
<https://highways.dot.gov/safety/proven-safety-countermeasures/yellow-change-intervals>
- 37 FHWA, Backplates with Retroreflective Borders, 2021,
<https://highways.dot.gov/safety/proven-safety-countermeasures/backplates-retroreflective-borders>
- 38 FHWA, Dedicated Left- and Right-Turn Lanes at Intersections, 2021,
<https://highways.dot.gov/safety/proven-safety-countermeasures/dedicated-left-and-right-turn-lanes-intersections>
- 39 FHWA, Intersection Safety Strategies: Second Edition,
<https://safety.fhwa.dot.gov/intersection/stop/fhwasa15085.pdf>
- 40 FHWA, Systemic Application of Multiple Low-Cost Countermeasures at Stop-Controlled Intersections, 2021,
<https://highways.dot.gov/safety/proven-safety-countermeasures/systemic-application-multiple-low-cost-countermeasures-stop>
- 41 FHWA, Roundabouts, 2021, <https://highways.dot.gov/safety/proven-safety-countermeasures/roundabouts>
- 42 ITE, Unsignalized Intersection Improvement Guide, <https://toolkits.ite.org/uiig/uiig-information.aspx>
- 43 FHWA, Low-Cost Safety Enhancements for Stop-Controlled and Signalized Intersections, July 2020,
<https://safety.fhwa.dot.gov/intersection/stop/fhwasa09020.pdf>
- 44 FHWA, Improving Intersections for Pedestrians and Bicyclists Informational Guide, Publication Number FHWA-SA-22-017, April 2022, <https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-06/fhwasa22017.pdf>
- 45 FHWA, Improving Intersections for Pedestrians and Bicyclists Fact Sheets, Publication Number FHWA-SA-22-037, 2022, <https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-06/fhwasa22041.pdf>
- 46 TRB, NCHRP Research Report 926: Guidance to Improve Pedestrian and Bicyclist Safety at Intersections, April 30, 2019, <https://www.trb.org/Main/Blurbs/180624.aspx>
- 47 FHWA, Lighting, <https://highways.dot.gov/safety/proven-safety-countermeasures/lighting>
- 48 FHWA, Research Report: Street Lighting for Pedestrian Safety, 2022,
<https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-09/StreetLightingPedestrianSafety.pdf>
- 49 FHWA, Lighting Handbook, 2023,
https://highways.dot.gov/sites/fhwa.dot.gov/files/2023-05/FHWA-Lighting-Handbook_0.pdf
- 50 FHWA, Pedestrian Lighting Primer, 2022,
https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-09/Pedestrian_Lighting_Primer_Final.pdf
- 51 Bancroft, E., Seattle Department of Transportation Blog, VISION ZERO | New signs at crosswalks remind drivers to stop for people walking or rolling, as first step in a larger public education campaign, March 18, 2022, <https://sdotblog.seattle.gov/2022/03/18/new-signs-stopping-for-people-crossing-the-street/>

References

- 52 NHSTA, Traffic Safety Marketing, Distracted Driving,
<https://www.trafficsafetymarketing.gov/get-materials/distracted-driving>
- 53 National Safety Council, Everything You Need for Distracted Driving Awareness Month,
<https://www.nsc.org/road/distracted-driving-awareness-month/ddam-materials>
- 54 Travelers Institute, Every Second Matters: Distracted Driving Initiative,
<https://www.travelers.com/travelers-institute/distracted-driving>
- 55 NHTSA, Put the Phone Away or Pay, 2024,
<https://www.trafficsafetymarketing.gov/safety-topics/distracted-driving/put-phone-away-or-pay>
- 56 Teen Street Skills, Eyes Drive: Awareness Behind the Wheel, <https://www.eyesdrive.org/>
- 57 AAA Traffic Safety Programs, Driving Contracts, 2006,
<https://www.aaa.com/AAA/057/static/safety/Parent-Teen.DrivingContracts.pdf>
- 58 National Safety Council, Employers are Making a Difference, https://www.nsc.org/road/safety-topics/distracted-driving/distracted-driving-for-employers?srsId=AfmBOop7q6txsoWgqMeqLCMUHz7Wg5d3zQNpRkVEbQbWCTkTU_FDHPmN
- 59 National Safety Council, Sample Distracted Driving Policy,
https://www.nsc.org/getmedia/9fff60d8-c158-4011-983d-9f1b4c12e8cc/DDAM-Distracted-Driving-Sample-Policy_FNL.docx?srsId=AfmBOooMRExI8F5zwZwbap4tW-WhaxbuCaZYI9bp6kxeUY80_gZE-ECB
- 60 NHTSA, Countermeasures that Work – Distracted Driving,
<https://www.nhtsa.gov/book/countermeasures-that-work/distracted-driving/countermeasures>
- 61 NHTSA, High Visibility Enforcement Toolkit,
<https://www.nhtsa.gov/enforcement-justice-services/high-visibility-enforcement-hve-toolkit>
- 62 FHWA, Longitudinal Rumble Strips and Stripes on Two-Lane Roads, 2021,
<https://highways.dot.gov/safety/proven-safety-countermeasures/longitudinal-rumble-strips-and-stripes-two-lane-roads>
- 63 FHWA, Median Barriers, 2021,
<https://highways.dot.gov/safety/proven-safety-countermeasures/median-barriers>
- 64 FHWA, Wider Edge Lines, 2021,
<https://highways.dot.gov/safety/proven-safety-countermeasures/wider-edge-lines>
- 65 FHWA, Consistent Speed Limits for Vulnerable Road Users, Noteworthy Speed Management Practices,
https://safety.fhwa.dot.gov/speedmgt/ref_mats/fhwas20047/sec8.cfm
- 66 FHWA, Appropriate Speed Limits for All Road Users, 2021,
<https://highways.dot.gov/safety/proven-safety-countermeasures/appropriate-speed-limits-all-road-users>
- 67 FHWA, Speed Safety Cameras, 2021,
<https://highways.dot.gov/safety/proven-safety-countermeasures/speed-safety-cameras>
- 68 City of Missoula, Safe Speeds on City Streets – Creating a Neighborhood Traffic Management Program, April 2021, <https://www.ci.missoula.mt.us/DocumentCenter/View/56381/Safe-Speeds-on-City-Streets>
- 69 NACTO, City Limits – Setting Safe Speed Limits on Urban Streets, Summer 2020,
<https://nacto.org/safespeeds/>
- 70 City of Missoula, Grove Street Engineering Study, July 8, 2024,
<https://pub-missoula.escribemeetings.com/filestream.ashx?DocumentId=308361>
- 71 NHTSA, Countermeasures that Work – Speeding and Speed Management,
<https://www.nhtsa.gov/book/countermeasures-that-work/speeding-and-speed-management/countermeasures>
- 72 City of Whitefish, Whitefish Transportation Plan, 2022,
<https://www.cityofwhitefish.org/DocumentCenter/View/3324/WhitefishTransPlan---Final-October-2022>

References

- 73 ITE, Measures for Managing Speed, <https://www.ite.org/technical-resources/topics/speed-management-for-safety/measures-for-managing-speed/>
- 74 USDOT, Traffic Calming to Slow Vehicle Speeds, Updated August 12, 2019, <https://www.transportation.gov/mission/health/Traffic-Calming-to-Slow-Vehicle-Speeds>
- 75 FHWA, Traffic Calming ePrimer, <https://highways.dot.gov/safety/speed-management/traffic-calming-eprimer>
- 76 Indiana DOT, Winter Driving Safety, https://www.in.gov/indot/files/IceSnow_brochure.pdf
- 77 National Weather Service, Social Media: Winter Driving, <https://www.weather.gov/wrn/winter-driving-sm>
- 78 SRTS Guide, School Area Speed Limit and Signing, http://guide.saferoutesinfo.org/engineering/school_area_speed_limit_and_signing.cfm
- 79 City of Bozeman, Speed Limit Work – Complete!, August 9, 2023, <https://www.bozeman.net/departments/transportation-engineering/transportation-safety#:~:text=We%20removed%20the%20time%20of.of%20the%20time%20of%20day.>
- 80 Western Transportation Institute, Pop-Up Traffic Calming & Placemaking, https://westerntransportationinstitute.org/wp-content/uploads/2024/02/4w8403-Pop-Up-Traffic-Calming-Primer_Final.pdf
- 81 National Association of City Transportation Officials, Transit Street Design Guide, Accessible Paths & Slopes, April 2016, <https://nacto.org/publication/transit-street-design-guide/stations-stops/stop-design-factors/accessible-paths-slopes/>
- 82 Montana Department of Transportation, Bus Stop Review & Approval Requirements, No Date.
- 83 Montana Department of Transportation, Surface Transportation Resource Procedure - MDT Bus Stops, 2020
- 84 MDT, Highway System Modification Process, April 2019, <https://www.mdt.mt.gov/publications/docs/manuals/System-Mod.pdf>
- 85 NACTO, Transit Street Design Guide, April 2016, <https://nacto.org/publication/transit-street-design-guide/station-stop-elements/>
- 86 Transit Cooperative Research Program, Report 19, Guidelines for the Location and Design of Bus Stops, National Academy Press, 1996.