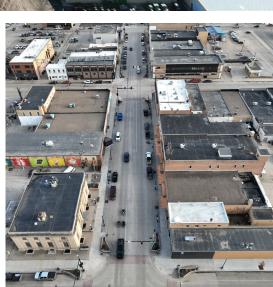


Williston Area Infrastructure Safety Action Plan April 2024









CONTENTS

1. What is a Safety Action Plan?	1
Safety Action Plan Guidance & Leadership	2
National Context	3
Safe System Approach	3
Vulnerable Road Users	6
2. Roadway Safety in Williston	1
Plans, Policies, and Programs	2
Laws and Ordinances	6
Infrastructure Safety Analysis	7
Equity Analysis	
3. Community Outreach & Feedback	29
Community Outreach Process and Methods	
Community Outreach Results	
4. Vision & Goals	37
Progress Reporting	
Progress Reporting	41 43
Progress Reporting	
Progress Reporting	
Progress Reporting 5. Implementation Engineering Countermeasures Non-Engineering Countermeasures	41 43 44 46 47
Progress Reporting	41 43 44 46 47 48
Progress Reporting	41 43 44 46 47 48 49
Progress Reporting	41 43 44 46 47 48 49 65



FIGURES

Figure 1. 2018-2022 Crash Heat Map	9
Figure 2. Crash severity by mode	. 10
Figure 3. All Modes HIN Crashes - Intersection Relationship	. 12
Figure 4. All Modes HIN Crashes - NDDOT Focus Area	. 13
Figure 5. Auto HIN Crashes - Intersection Relationship	. 14
Figure 6. Pedestrian HIN Crashes – Intersection Relationship	. 15
Figure 7. Auto HIN Crashes - NDDOT Focus Area	. 15
Figure 8. Pedestrian HIN Crashes - NDDOT Focus Area	. 16
Figure 9. Motorcycle HIN - Intersection Relationship	. 17
Figure 10. Motorcycle HIN Crashes - NDDOT Focus Area	. 18
Figure 11. Priority Area Crashes - Intersection Relationship	. 19
Figure 12. Motorcycle HIN Crashes - NDDOT Focus Area	. 20
Figure 13. Severe crashes (all modes) and high-injury street segments	. 21
Figure 14. Severe automobile crashes and high-injury street segments	. 22
Figure 15. Severe pedestrian crashes and high-injury street segments	. 23
Figure 16. Severe motorcycle crashes and high-injury street segments	. 24
Figure 17: Disadvantaged Communities - Equity Scores	. 28
Figure 18. Public Comment Map	. 33
Figure 19. Example of Temporary Curb Extensions	. 56
Figure 20. Project Map	. 58
Figure 21. Curb Ramp Evaluation Results Map	. 59
Figure 22. Sidewalk Evaluation Results Map	. 60
Figure 23. Sidewalk Gap Locations Map	. 61

TABLES

Table 1. Overview of State and Local Plans and Policies	3
Table 2. State and Local Regulations for the Safe Operation of Motor Vehicles.	7
Table 3. KABCO Injury Scale	10
Table 4. Equity Indicator Matrix	27
Table 5. Focus Groups	31
Table 6. Units in Crash or Near Miss	32
Table 7. Focus Group Feedback Summary	34
Table 8. Open House Project Prioritization Results	35
Table 9. Safety Action Plan Annual Progress Reporting	42
Table 10. Curb Ramp and Sidewalk Evaluation	48
Table 11. Implementation Table	
Table 12. Associated Unit and Noncompliant Costs	57
Table 13. Prioritized Project List	62
Table 14. Projects Within Disadvantaged Communities	



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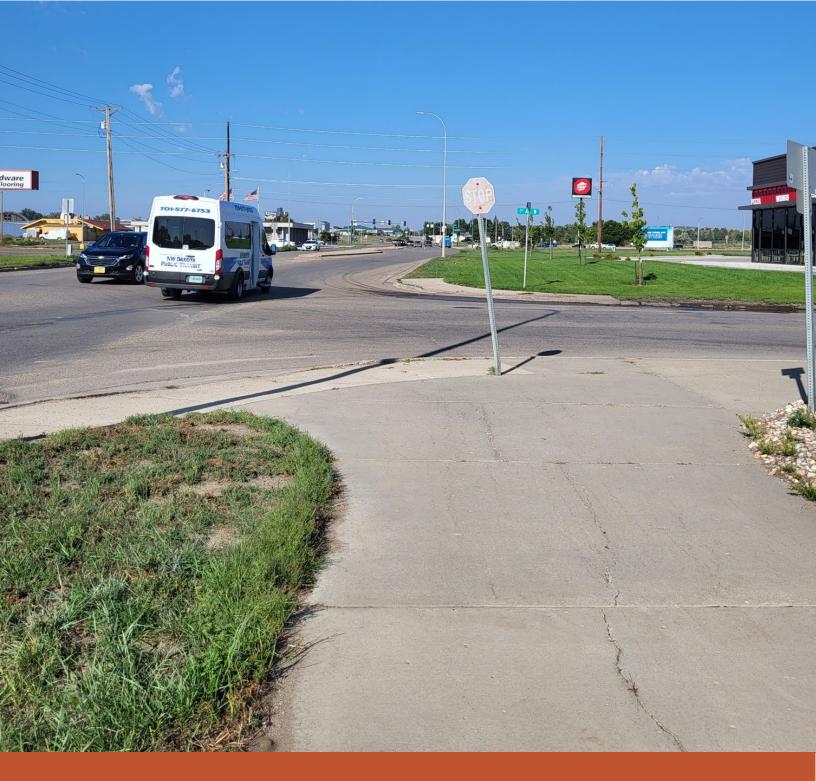
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1. What is a Safety Action Plan?

SAFETY ACTION PLAN GUIDANCE & LEADERSHIP

Working Group Committee

Guidance

The Working Group Committee was comprised of City of Williston staff and those listed in the Acknowledgements foreword including citizen representatives, City technical staff, parks and recreation, and City emergency services. The committee provided critical guidance of the Safety Action Plan by convening, providing direction, and reviewing materials at major milestones throughout development of the Safety Action Plan.

Below is a summary of Working Group Meetings and critical highlights:

Working Group Meeting #1 – November 30, 2023

The committee was introduced to the Safety Action Plan, summarized committee roles and responsibilities, reviewed ongoing public engagement strategies and next steps, and discussed what would make a successful plan. The insight of what each member thought would make a successful plan was used to guide the consultant team in developing the Safety Action Plan.

Working Group Meeting #2 – January 18, 2024

The committee discussed public engagement progress and reviewed draft results of the crash analysis, High Injury Network (HIN), and Equity Analysis. Comments and feedback received helped the consultant team refine drafts and focus on specific topical areas related to safety and the draft analyses, and locations of interest to the committee. The consultant team used feedback from the committee to take a deeper dive into interesting observations of the crash data and other areas of interest to the community.

Working Group Meeting #3 – February 29, 2024

The committee reviewed the engagement summary for the first project phase and discussed upcoming engagement advertisements and activities. Also, the committee reviewed and discussed crash profiles (crash themes), plan vision and goals, strategies and projects, and next steps. Feedback provided at this meeting guided refinements of strategies and projects.

Working Group Meeting #4 – March 20, 2024

The committee reviewed the draft Safety Action Plan, implementation, and recommended projects. The consultant team used feedback from the committee to make further refinements to the draft final document, projects, and strategies.





This meeting confirmed that the Safety Action Plan would meet expectations of the committee and would forward the established safety goals and objectives.

Leadership and Monitoring

Moving forward, the City of Williston intends to ask members of the Working Group Committee to be involved in a newly created Infrastructure Safety Project Review Committee. The Infrastructure Safety Project Review Committee will provide leadership in implementation and monitoring of the Safety Action Plan moving forward as outlined at the beginning of this document in Resolution No. 24-003.

NATIONAL CONTEXT

The Bipartisan Infrastrcture Law (BIL) enacted by the U.S. Congress in 2021 established the Safe Streets and Roads for All (SS4A) Grant Program. The SS4A program provides discretionary grants to local, regional, and Tribal governments focused on the prevention of deaths and serious injuries on our local and regional roadway system. The SS4A program helps to implement the U.S. Department of Transportation's (USDOT) National Roadway Safety Strategy, which focuses on eliminating deaths and serious injuries across the nation's roadway system.

The **Safety Action Plan (SAP) is the basic building block** to guiding local and regional approaches through projects and strategies to address safety risks on the roadway system. The SAP uses analysis of historic crash information combined with roadway system user and community input to identify projects and strategies. The U.S. Department of Transportation has adopted a Safe System Approach, which is a guiding paradigm in the development of the SAP.

SAFE SYSTEM APPROACH

The Safe System Approach is the foundational strategy for the Vision Zero movement and is proven to substantially reduce fatalities and serious injuries. USDOT has adopted the Safe System Approach to address contributing crash factors and promote layers of protection to prevent crashes and mitigate crash severity. This approach recognizes that humans make mistakes, humans are vulnerable, and redundant measures are needed to protect all road users.



Traditional Approach

VS.

- Traffic deaths are inevitable
- Aims to fix humans
- Expects perfect human behavior
- Prevents crashes
- Exclusively addresses traffic engineering
- Doesn't consider disproportionate impacts

Safe System Approach

- Traffic deaths are preventable
- Aims to fix systems
- Humans make mistakes
- Prevents fatal and serious crashes
- Considers the roadway system as a whole
- Considers road safety as an issue of social equity

The Safe System Approach guided by five core elements.

Core Elements of the Safe System Approach

SAFE ROAD USERS

All road users, including those walking, biking, riding, and driving, should always operate in a safe and responsible manner when on the roadway.





SAFE SPEEDS

Safer speed setting, education, and enforcement are promoted across all road environments to reduce kinetic forces associated with crashes to a tolerable level on the human body.

SAFE VEHICLES

Vehicles are designed incorporating the latest technology and used in appropriate ways (such as always wearing a seat belt) to minimize crash severity and frequency.







SAFE ROADS

Roads are designed to accommodate human mistakes, encourage safe behavior, and reduce crash severity and frequency.



POST-CRASH CARE

Receiving quick emergency medical care following a crash is essential to assist those who have been injured and to reduce fatalities.







VULNERABLE ROAD USERS

Vulnerable road users are people walking, biking, or rolling. People within a motor vehicle or on a motorcycle are not included in this definition. Vulnerable road users are unprotected from motor vehicles and are therefore especially vulnerable to the devastating impact of a motor vehicle crash. According to the National Highway Traffic Safety Administration, vulnerable road users accounted for a growing share of all roadway fatalities in recent years.¹ Just between the years 2020 and 2021, pedestrian fatalities were estimated to have increased by 13 percent and bicyclist fatalities by five percent. **The U.S. Department of Transportation labels this increase in fatalities with respect to vulnerable road users as a crisis and that "substantial, comprehensive action to significantly reduce serious and fatal injuries on the Nation's roadways."** It must also be added that the conditions and areas with additional risk to vulnerable road users likewise should be included in this call for action.



Vulnerable Road User Sever Crashes in Williston

Between 2018 and 2022, 16% of all fatal and serious injury crashes involved pedestrians and bicyclists.

Motorcyclists

While not defined as vulnerable road users, motorcyclists lack the protections that motor vehicle drivers and passengers have access to, such as seat belts and airbags. Nationwide, 5,579 motorcyclists were killed in 2020, which is the highest number of motorcyclists killed since the National Highway Traffic Safety Administration began tracking crash data in 1975. Severe motorcycle crashes are also a serious concern in Williston. Between 2018 and 2022, 38% of all fatal and serious injury crashes in Williston involved motorcyclists. The Safety Action Plan evaluates the issues behind motorcycle crashes and identifies strategies to significantly reduce and eventually eliminate fatal and serious injury crashes.

Motorcyclist Severe Crashes in Williston



Between 2018 and 2022, 38% of all fatal and serious injury crashes involved motorcyclists.

¹ https://www-fars.nhtsa.dot.gov/Main/index.aspx





PLANS, POLICIES, AND PROGRAMS

Several plans, policies, and programs address road safety at the national, state, and local levels. State and local laws governing the operation of motor vehicles are primarily designed to promote road safety.

National policies and programs include the Complete Streets movement, Safe Routes to School (SRTS), Operation Lifesaver, and the Americans with Disabilities Act (ADA). These policies emphasize the need to accommodate all travel modes. While Williston encourages planning for multimodal facilities, the City has not formally adopted a Complete Streets policy, Safe Routes to School program, or ADA Transition Plan.

Statewide plans include the Strategic Highway Safety Plan (Vision Zero Plan), the Long-Range Transportation Plan, the Freight and Rail Plan, and an active transportation plan (ND Moves). NDDOT's top priority is to ensure safety for all road users. The North Dakota Century Code (NDCC) governs the operation motor vehicles and dictates crash reporting procedures.

At the local level, the Williston-Williams County Regional Transportation Plan and Corridor Studies provide recommendations for future road improvements. These documents include access management guidelines and specific countermeasures (e.g., channelized intersections) to reduce crash risks. Williston's Code of Ordinances establishes local speed limits, motor vehicle laws, and penalities. **Table 1** summarizes the relationship of each plan and policy to various safety strategies.





Table 1. Overview of State and Local Plans and Policies

Plan/Policy (Level)	Counter- Measures	Complete Streets	Traffic Calming	Education	Equity	Monitoring/ Enforcement
Strategic Highway Safety Plan (State	3	2	3	3	3	2
ND Moves (State)	3	3	3	3	3	2
Long Range Transportation Plan (State)	2	2	2	2	2	2
Freight and Rail Plan (State)	3	1	1	3	2	3
Williston-Williams County RTP (Local)	2	2	1	1	1	2
Corridor Studies (Local)	3	1	1	1	1	2
Williston City Code (Local)	2	1	2	1	1	3

Key:

1 Limited focus of plan or policy

2 Moderate focus of plan or policy

3 Primary focus of plan or policy

Strategic Highway Safety Plan

The Strategic Highway Safety Plan – commonly known as the Vision Zero Plan – is North Dakota's statewide, comprehensive safety plan. Federal law requires NDDOT to maintain and regularly update the plan. North Dakota has adopted the Vision Zero strategy with a goal to eliminate all traffic fatalities and serious injuries. The Vision Zero Plan follows the Safe System Approach.

County Statistics

The State Highway Safety Plan documents traffic fatalities by county for the years 2017-2021. The top four counties are Cass, Grand Forks, Williams, and McKenzie (unordered). Williams County also ranks among the top four counties with the highest number of crashes resulting in serious injury, along with Cass, Burleigh, and Ward Counties. With the exception of McKenzie County, these are the most populous counties in North Dakota, which include the cities of Fargo, Bismarck, Grand Forks, and Minot, as well as Williston.



2

Vulnerable Populations

Public engagement for the Vision Zero Plan included virtual consultation with representatives from the City of Williston and Williams County. The City identified its most vulnerable road users as the non-white population, members of zerovehicle households, and older populations. These demographics are most vulnerable when traveling through intersections or accessing destinations such as senior centers, parks, grocery stores, and transit stations. Two critical areas of concern include high motor vehicle speeds and a lack of dedicated infrastructure for pedestrians and bicyclists.

VRU Assessment

The 2024-2028 Vision Zero Plan includes a Vulnerable Road Users safety assessment, which is a new requirement under the Bipartisan Infrastructure Law. The VRU identified and ranked 44 high priority locations throughout the state, including two locations in Williston.



High Priority VRU Locations in Williston

- Main Street between 8th Street and 1st Street (#18 of 21 corridors in North Dakota)
- Main Street & 2nd Street (#2 of 23 intersections in North Dakota)

Freight and Rail Plan

The Freight and Rail Plan (FRP) includes strategies and countermeasures to reduce crashes involving freight vehicles and crashes at highway-rail grade crossings. Using 2019 Streetlight data, the FRP estimated that Williams County has 8,300 truck trips per day, trailing only McKenzie County (9,500) and Cass County (10,000). Statewide crash maps show that Williams County is a hotspot for crashes involving freight vehicles.

Freight Vehicle Crashes

The Williams/McKenzie County region has the highest concentration of fatal and injury-related crashes involving freight vehicles in North Dakota.



ND Moves

Pedestrians, bicyclists, and other non-motorized traffic are vulnerable roadway users. Many people who rely on these travel modes do not do so by choice. Vulnerable roadway users include those without access to a motor vehicle, racial minorities, and elderly/disabled persons. ND Moves, North Dakota's active transportation plan, contains policies, strategies, and implementation measures that promote safety and equity for non-motorized roadway users and transit users. The plan includes a menu of design treatments for urban roadway corridors with various traffic volumes, including sidewalks, bike lanes, advisory shoulders, and shared use trails. The gap analysis for Williston identified nearly 10 roadway miles with missing facilities.

Williston-Williams County Regional Transportation Plan and Corridor Studies

The Regional Transportation Plan (2017) guides the development and improvement of the transportation system in Williston and Williams County. Goal 4.1 pertains to safety.



RTP Goal 4.1

Develop and maintain a transportation network that promotes safety for all users.

The Regional Transportation Plan emphasizes access management as a strategy to improve travel safety. Access management controls the spacing of intersections and driveways on arterial and collector roadways. Various roadway design strategies may be deployed to reduce the number of conflict points at intersections (e.g., channelization).

The Regional Transportation Plan explicitly prioritizes projects that maximize safety and/or preserve existing facilities. When there are specific safety concerns on a project corridor or intersection, a traffic impact study is recommended.

As a companion project to the Regional Transportation Plan, five corridor studies were completed on state/federal highways:

- **US Highway 2** US Highway 85 S to US Highway 85 N
- **US Highway 2** Montana State Line to US Highway 85 (4-Mile Corner)
- **US Highway 2/85** US Highway 85/US Highway 85B to US Highway 85 (13-Mile Corner)



- ND Highway 1804 Little Muddy River Crossing to 123rd Avenue/County Road 24
- ND Highway 1804 US Highway 2 to Little Muddy River Crossing

Each corridor study includes a list of roadway improvement options that are prioritized for completion in the short-term (up to year 2020), mid-term (2020 to 2030), or long-term (2030 to 2040+). The improvement type is classified as Safety, Access, or Monitor/Study. Specific recommendations include access modifications/closure, traffic control changes, and turn lane/roadway reconfigurations. Many projects have been completed since the corridor studies were adopted.

LAWS AND ORDINANCES

The operation of motor vehicles is regulated under Title 39 of the North Dakota Century Code (Motor Vehicles) and Chapter 10 of the City of Williston Code of Ordinances (Motor Vehicles and Traffic). Many laws are designed specifically to reduce the risk of serious/fatal crashes. The City Code incorporates North Dakota statutes, as applicable.

Vehicle Operation

The Williston City Ordinance includes provisions for the use of motor vehicles, motorcycles, and bicycles within the City's jurisdictional area. Nonmotorized traffic, including bicycles and horses, are generally subject to the same standards as motor vehicle drivers and must obey all traffic laws, including obedience to traffic control devices and yield to other road users. Bicycles must be equipped with lights/reflectors for night-time riding and cannot be ridden on sidewalks within a business district.

Speed Limits

Addressing speed is a crucial step to making Williston's streets safer. Both the likelihood of a crash and the severity of a crash increase as vehicle speed increases. Higher speeds diminish drivers' ability to recognize and avoid potential conflicts and increase the force of impact, which increases the chances of fatalities and serious injuries.

Article V of Williston's Code of Ordinances establishes speed limits for roadways within the City's jurisdiction. The speed limit for collectors and minor arterials is 30 miles per hour, except for Second Avenue West from 18th Street to 26th Street (35 miles per hour). All other local streets are 25 miles per hour. Section 10-167 establishes the fines for speeding, which range from \$5 to over \$100, depending on the extent to which the speed limit is exceeded.



Driving under the Influence

Driving under the influence of drugs or alcohol ranges from a Class B misdemeanor to a Class C felony, depending on the number of prior offenses. Punishment includes a fine of \$500 to \$1,500 and an order for addiction evaluation by a licensed addition treatment program. A first-time aggregated offense (alcohol concentration above 0.16 of 1%) and repeat offenses are also punishable by imprisonment.

Distracted Driving

A distracted driver is **six times** more likely to crash than a drunk driver. Texting while driving is illegal and carries a \$100 fine in North Dakota. Drivers under age 18 are prohibited from using a phone for any purpose while driving, except in emergency situations.

Table 2. State and Local Regulations for the Safe Operation of Motor Vehicles

Law/Regulation	North Dakota Century Code	Williston City Ordinance
Driving under the influence of alcohol/drugs	39-08-01	10-12 to 10-16
Reckless driving	39-08-03	10-8; 10-161
Distracted driving	39-08-23	
Distracted driving - minors	39-08-24	
Child restraints	39-21-41	10-39
Safety belts	39-21-41	10-40

INFRASTRUCTURE SAFETY ANALYSIS

Crash Analysis

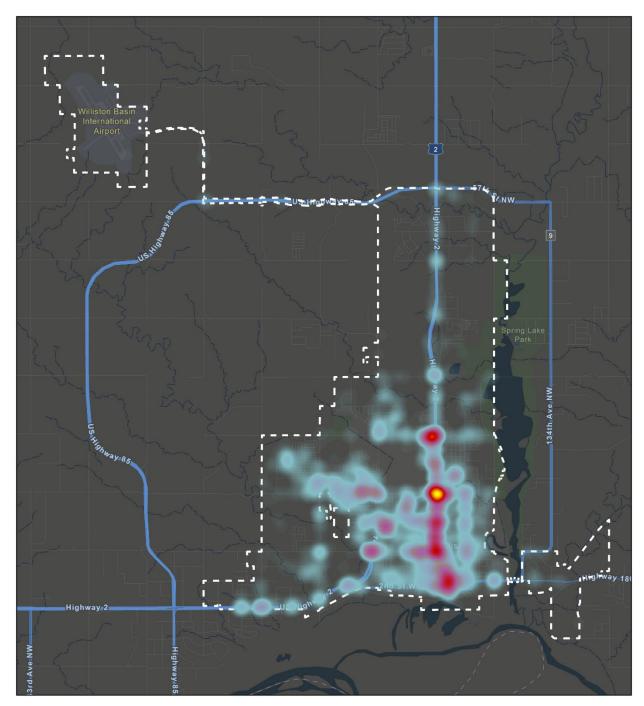
Between 2018 and 2022, over 2,700 crashes were recorded within the City of Williston, of which 50 resulted in fatal or serious injuries. An analysis of these crashes was completed to identify crash trends among five modes: automobile, heavy vehicle, pedestrian, bicycle, and motorcycle. The analysis includes an examination of the crashes by mode by basic crash report variables such as



roadway characteristics or roadway ownership/jurisdiction. The trends identified in the crash trend summary may be used by the City to help prioritize roadway safety investments in the future. **Figure 1** shows the crash density of crashes occurring between 2018 and 2022. The full crash analysis is provided in **Appendix A**.



Figure 1. 2018-2022 Crash Heat Map





All Modes Crash Heatmap 2018-2022



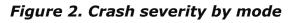


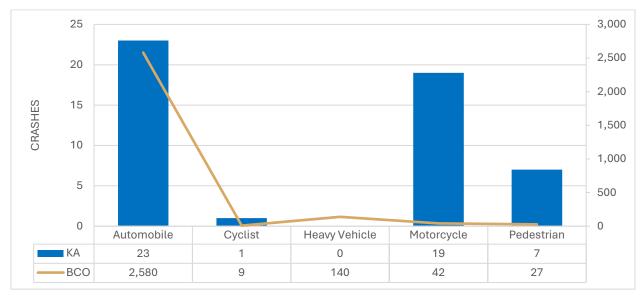
Throughout the safety analysis, crash trends are summarized by "**KA**" indicating fatal and serious injury crashes and "**BCO**," which includes non-serious injuries. The KABCO injury scale is used and includes the designations shown on **Table 3** below.

Table 3. KABCO Injury Scale

Severe (more injurious)	Non-Severe (less injurious)
 K - involves a fatal injury A - incapacitating injury (serious injury) 	 B - non-incapacitating injury C - possible injury O - no injury or a property damage-only (PDO) crash

As seen in **Figure 2**, the vast majority of crashes involved automobiles but motorcyclists were involved in a disproportionate number of the severe crashes.





The crash report variables that were examined include:

- Year
- Month of year
- Day of week
- Time of day

- Number of vehicles
- Mode
- Roadway jurisdiction
- Relation to intersection

Key observations from this analysis include:



All Modes of Transportation

- Fatal and serious injury crashes tend to peak in summer months.
- Fatal and serious injury crashes tend to peak on Saturdays.
- Fatal and serious injury crashes tend to peak during afternoon and evening hours.

Automobile Crashes

- Most fatal and serious injury crashes occurred during daylight hours.
- Most fatal and serious injury crashes occurred at four-way intersections.

Heavy Vehicles Crashes

• No heavy vehicle operators were killed or seriously injured.

Bicyclist Crashes

- The single fatal or serious injury crash occurred during daylight conditions.
- The single fatal or serious injury crash was not intersection related.

Pedestrian Crashes

- Most fatal and serious injury pedestrian crashes occurred during dark (lighted) conditions.
- None of the fatal and serious injury pedestrian crashes occurred at an intersection.

Motorcycle Crashes

- Most fatal and serious injury crashes occurred during daylight conditions.
- Most of the fatal and serious injury intersection crashes occurred at uncontrolled intersections.

Developing a High Injury Network

A High Injury Network (HIN) is a collection of street segments that have the highest concentrations of severe crashes. A HIN not only highlights the most crash-prone segments of corridors within a study area (such as Williston's municipal boundary), but it also facilitates the selection of project limits for projects to address the safety issues on those highlighted segments.

A HIN is developed by calculating the density of severe crashes along all streets in a study area and selecting minimum crash density thresholds for including segments in the HIN. The goal is to select a threshold for each mode of transportation that results in neither too large nor too small of a portion of the network being highlighted. In cases where there are too few severe crashes or the



crashes are too spread out, even the lowest reasonable threshold won't result in any segments highlighted. For a more detailed description of the steps involved in the developing the HINs for Williston, see **Appendix B**.

Overview of Results

HIN networks were developed for the following modes of transportation:

All Modes

• Pedestrian

• Automobile

Motorcycle

Note that HINs could not be developed for crashes involving heavy vehicles or cyclists because there were so few severe crashes for those modes and the severe crashes that did occur were spread out across the network instead of being concentrated on specific corridors.

Contributing Factors / Crash Profiles

Further analysis of the HIN crashes provided insight into contributing crash factors. A summary of the analysis is provided by HIN mode below:

All Modes

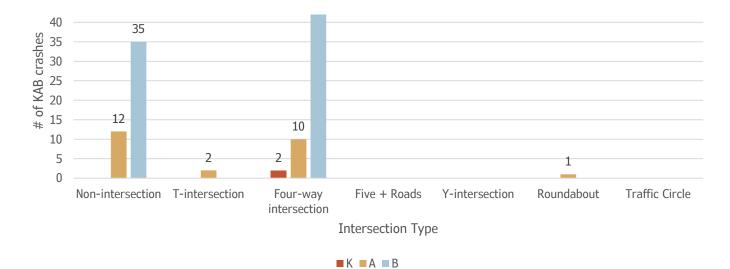


Figure 3. All Modes HIN Crashes - Intersection Relationship

Four-way intersections made up 52 percent of K, A, and B crashes and 100 percent of K crashes on the all modes HIN. Non-intersections comprised 45 percent of K, A, and B crashes and 48 percent of A crashes on the all modes HIN. There were two A crashes at T-intersections and one A crash at a roundabout.



Of the crashes on the all modes HIN, 52 percent had no traffic control, 31 percent were traffic signal controlled, 12 percent were stop sign controlled, and four percent were yield sign controlled.

Angle (not specific) crashes comprised 37 percent of K, A, and B crashes and 100 percent of K crashes on the all modes HIN. Non-collision with MV in transport crashes made up 33 percent of K, A, and B crashes and 44 percent of A crashes on the all modes HIN. Rear-end crashes comprised 16 percent of K, A, and B crashes and 12 percent of A crashes on the all modes HIN. Head-on crashes made up nine percent of K, A, and B crashes and eight percent of A crashes on the all modes HIN. Sideswipe crashes comprised five percent of K, A, and B crashes and eight percent of A crashes on the all modes HIN.

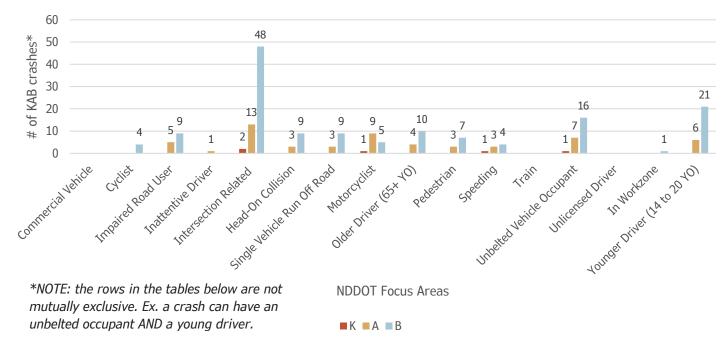


Figure 4. All Modes HIN Crashes - NDDOT Focus Area

The five most common crash factors for the all modes HIN include intersection related, younger driver (14-20 years old), unbelted vehicle occupant, motorcyclist, impaired road user and older driver (65+ years old). The deadliest all mode HIN crash factors were intersection related, motorcyclist, speeding, and unbelted vehicle occupant.



Auto

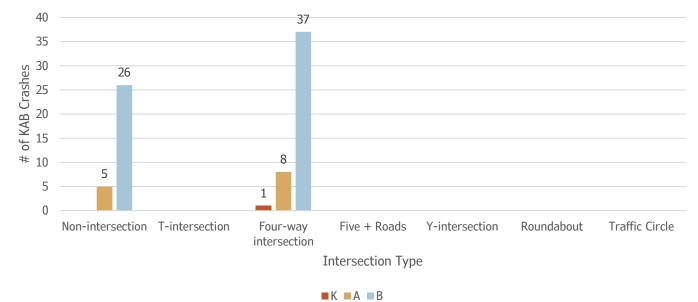


Figure 5. Auto HIN Crashes - Intersection Relationship

Four-way intersections made up 60 percent of K, A, and B crashes and 100 percent of K crashes on the auto HIN. Non-intersections comprised 40 percent of K, A, and B crashes and 38 percent of A crashes on the auto HIN.

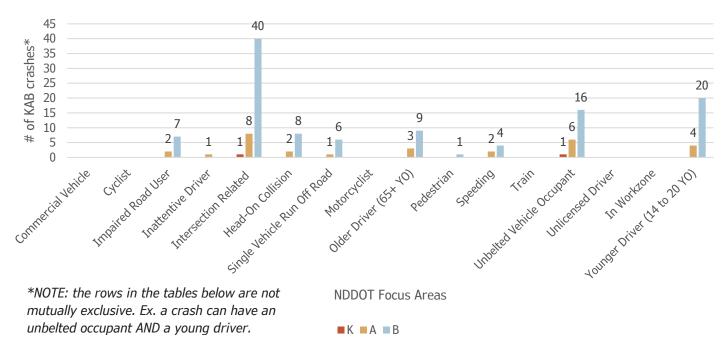
Of the crashes on the auto HIN, 44 percent had no traffic control, 39 percent were traffic signal controlled, 13 percent were stop sign controlled, and four percent were yield sign controlled.

Angle (not specific) crashes comprised 48 percent of K, A, and B crashes and 100 percent of K crashes on the auto HIN. Rear-end crashes made up 21 percent of K, A, and B crashes and 15 percent of A crashes on the auto HIN. Non-collision with motor vehicle in transport crashes comprised 17 percent of K, A, and B crashes and 23 percent of A crashes on the auto HIN. Head-on crashes made up 12 percent of K, A, and B crashes and 15 percent of A crashes on the auto HIN. Sideswipe crashes comprised two percent of K, A, and B crashes on the auto HIN.

The five most common crash factors for the auto HIN include intersection related, younger driver (14-20 years old), unbelted vehicle occupant, older driver (65+ years old), and head-on collision. The deadliest auto HIN crash factors were intersection related and unbelted vehicle occupant.



Figure 7. Auto HIN Crashes - NDDOT Focus Area



Pedestrian

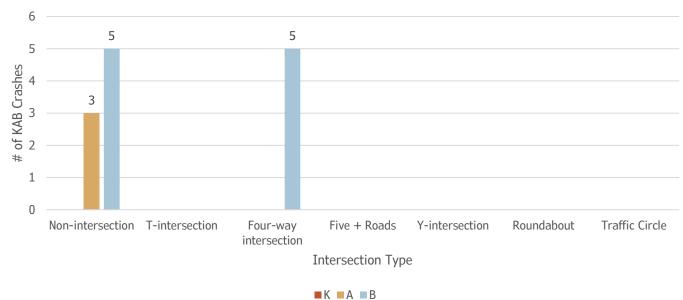


Figure 6. Pedestrian HIN Crashes – Intersection Relationship

Four-way intersections made up 38 percent of K, A, and B crashes on the pedestrian HIN. Non-intersections comprised 62 percent of K, A, and B crashes and 100 percent of A crashes on the pedestrian HIN.



Of the crashes on the pedestrian HIN, 77 percent had no traffic control and 23 percent were traffic signal controlled.

Daylight lighting conditions were reported for 38 percent of K, A, and B crashes on the pedestrian HIN. Dark (lighted) conditions were reported for 23 percent of K, A, and B crashes and 100 percent of A crashes on the pedestrian HIN. For the other K, A, and B crashes (39 percent) on the pedestrian HIN, unknown or dawn lighting conditions were reported.

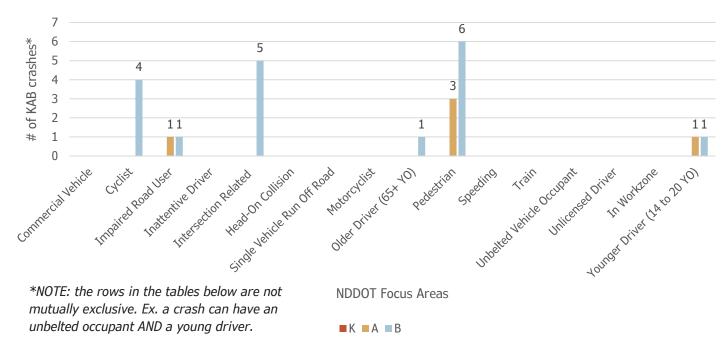


Figure 8. Pedestrian HIN Crashes - NDDOT Focus Area

The five most common crash factors for the pedestrian HIN include intersection related, cyclist, younger driver (14-20 years old), impaired road user, and older driver (65+ years old).



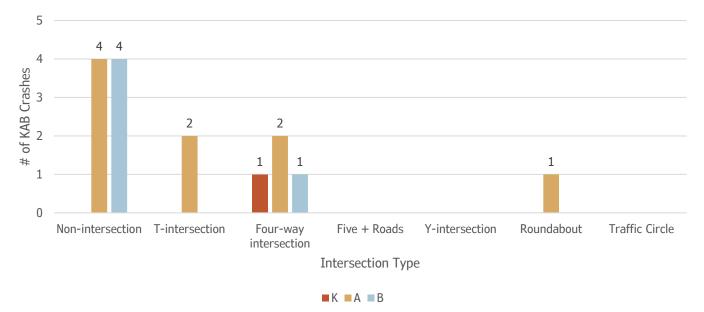


Figure 9. Motorcycle HIN - Intersection Relationship

Non-intersection related crashes made up 53 percent of K, A, and B crashes and 44 percent of A crashes on the motorcycle HIN. Four-way intersections comprised 27 percent of K, A, and B crashes and 100 percent of K crashes on the motorcycle HIN. T-intersections made up 13 percent of K, A, and B crashes and 22 percent of A crashes on the motorcycle HIN. There was one A motorcycle crash at a roundabout.

Of the crashes on the motorcycle HIN, 73 percent had no traffic control, 20 percent were stop sign controlled, and seven percent were yield sign controlled.

Non-collision with motor vehicle in transport comprised 60 percent of K, A, and B crashes and 56 percent of A crashes on the motorcycle HIN. Sideswipe crashes made up 20 percent of K, A, and B crashes and 22 percent of A crashes on the motorcycle HIN. Angle (not specific) crashes comprised 13 percent of K, A, and B crashes and 100 percent of K crashes on the motorcycle HIN. Rear end crashes made up seven percent of K, A, and B crashes and 11 percent of A crashes on the motorcycle HIN.

The five most common crash factors for the motorcycle HIN include intersection related, single vehicle run off road, impaired road user, head-on collision, and speeding. The deadliest motorcycle HIN crash factors were intersection related and speeding.



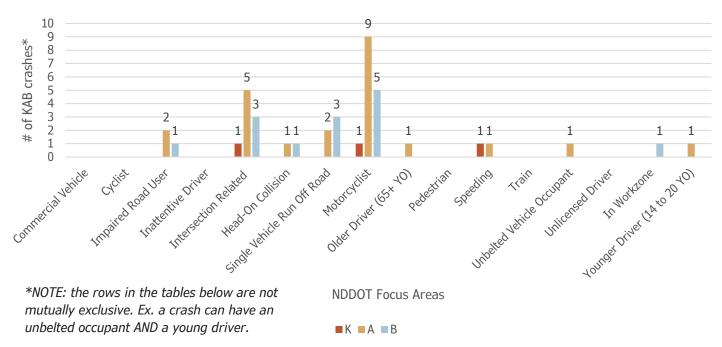


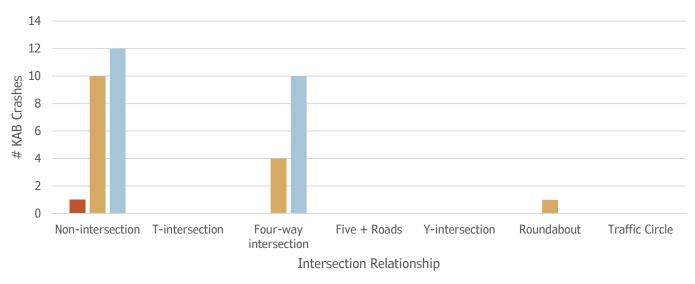
Figure 10. Motorcycle HIN Crashes - NDDOT Focus Area

Other Priority Transportation Areas

Throughout discussions with the Working Group Committee, the safety of people traveling to and from schools, parks, and recreation facilities was identified as of utmost importance to the community. The public engagement as part of the Safety Action Plan validated the importance of safety to and from these locations, as safety concerns were expressed by many members of the public through survey results and discussions at engagement meetings. Specific safety concerns near schools, parks, and recreation facilities was brought up in virtually every discussion the project team had with various members of the community. In addition to the modal HIN crash profile analysis above, a separate crash profile analysis was conducted for crashes that occurred within a ¼-mile radius of schools and parks and recreation facilities.







■K ■A ■B

Non-intersection crashes made up 61 percent of K, A, and B crashes, 100 percent of K crashes, and 67 percent of A crashes in Williston's priority areas. Four-way intersections comprised 37 percent of K, A, and B crashes and 27 percent of A crashes on priority areas.

Of the crashes in priority areas, 79 percent had no traffic control, 11 percent were traffic signal controlled, eight percent were stop sign controlled, and three percent were yield sign controlled.

Non-collision with motor vehicle in transport crashes comprised 68 percent of K, A, and B crashes,100 percent of K crashes, and 67 percent of A crashes in priority areas. Angle (not specific) made up 16 percent of K, A, and B crashes and 13 percent of A crashes in priority areas. Sideswipe crashes comprised 10 percent of K, A, and B crashes and 13 percent of A crashes in priority areas. Rear-end and head-on crashes made up six percent of K, A, and B crashes in priority areas.

The five most common crash factors for Williston's priority areas include intersection related, motorcyclist, pedestrian, younger driver (14-20 years old), and single vehicle run off road. The deadliest priority area crash factors were inattentive driver, single vehicle run off road, motorcyclist, and speeding.



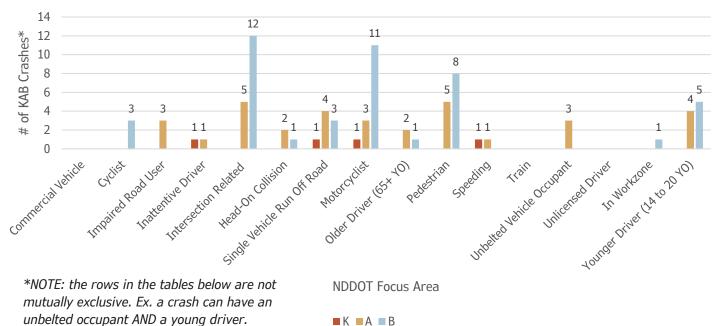


Figure 12. Motorcycle HIN Crashes - NDDOT Focus Area



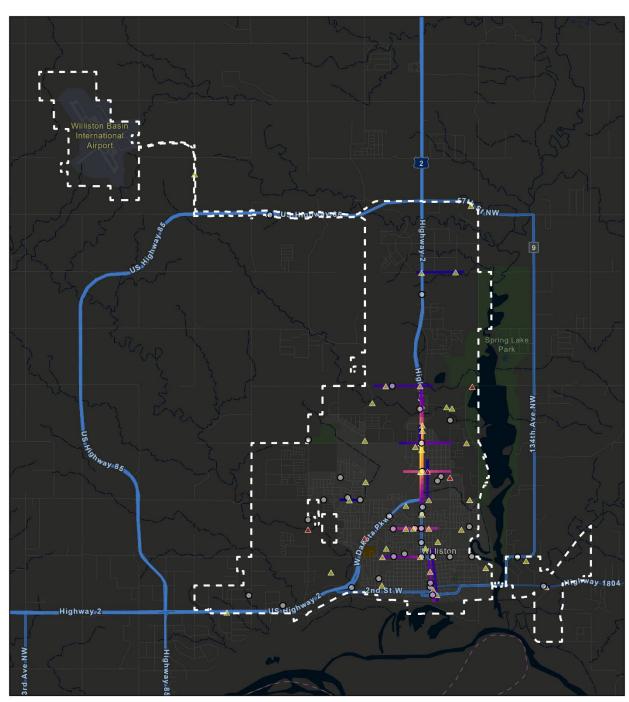


Figure 13. Severe crashes (all modes) and high-injury street segments



All Modes High-Injury Street Segments





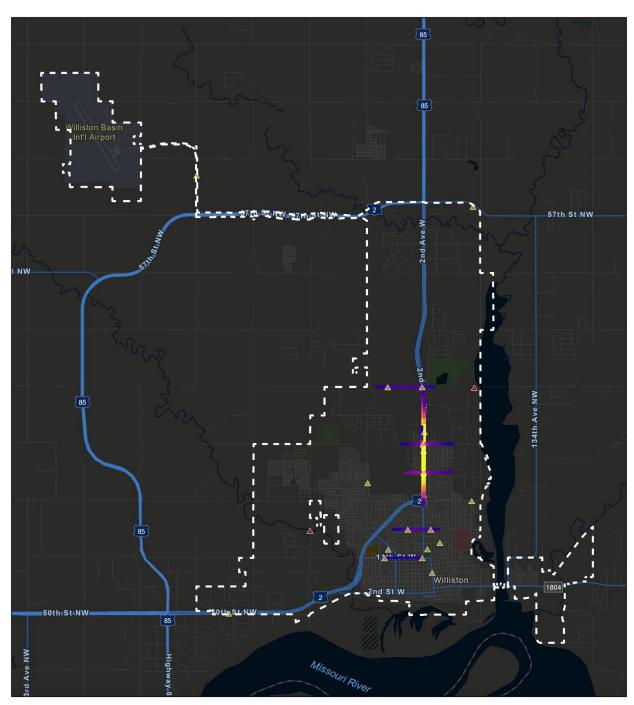
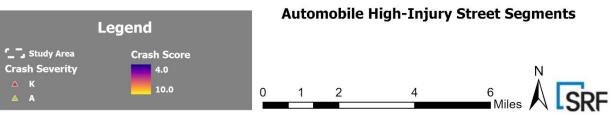


Figure 14. Severe automobile crashes and high-injury street segments





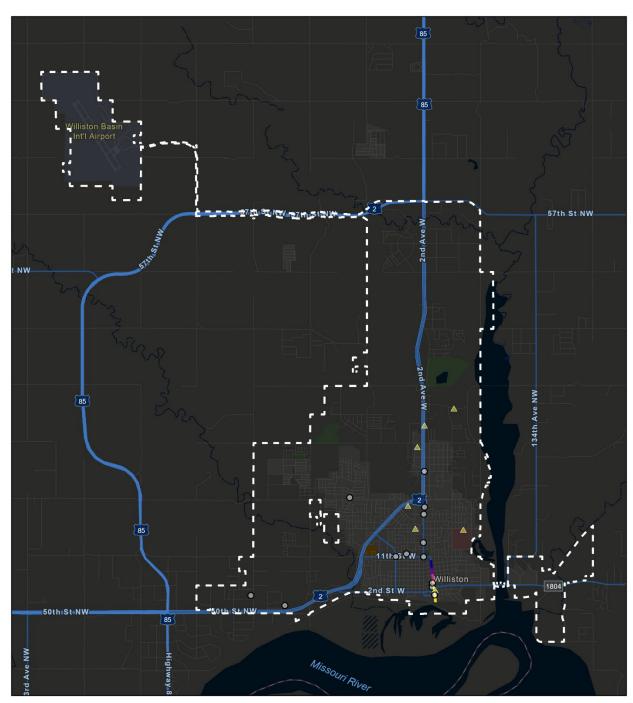
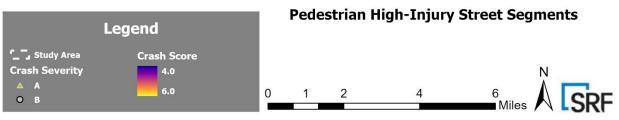


Figure 15. Severe pedestrian crashes and high-injury street segments





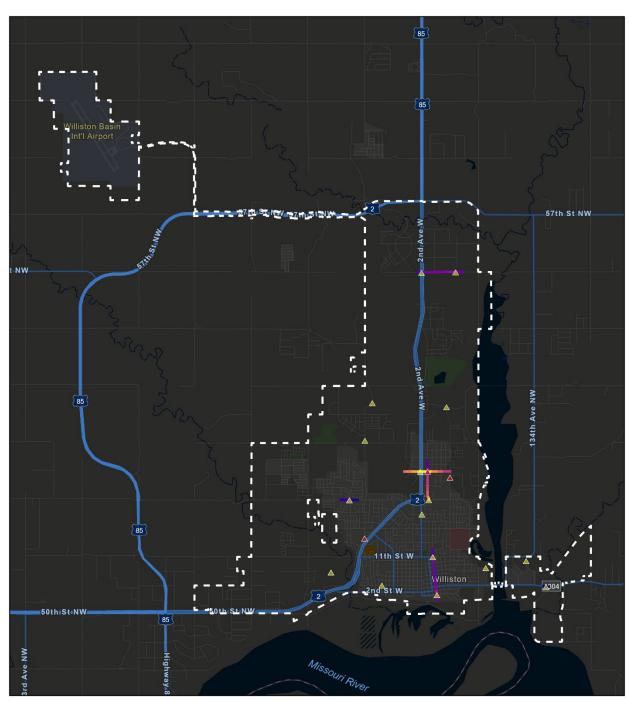


Figure 16. Severe motorcycle crashes and high-injury street segments



Motorcycle High-Injury Street Segments





EQUITY ANALYSIS

What does Equity Mean?

According to the U.S. Department of Transportation, equity in transportation seeks fairness in mobility and accessibility to meet the needs of all community members. A central goal of transportation is to facilitate social and economic opportunities by providing equitable levels of access to affordable and reliable transportation options based on the needs of the populations being served, particularly populations that are traditionally disadvantaged.

Does Equity Apply to Williston?

Yes. North Dakota has populations considered to be disadvantaged and/or underserved however, this looks a lot different in North Dakota than in major cities on the coasts, or other places in the U.S. The following indicators were present in at least one area of the City, and are notable compared to entire City, County, State, and/or national statistics.

Indicators of Disadvantaged Populations in Williston

Transportation Insecurity. This occurs when people are unable to get to where they need to go to meet the needs of their daily life regularly, reliably, and safely². This indicator considers lack of transportation access, transportation cost burden, and transportation safety—a combination of data collected from various federal agencies.

Social Vulnerability. This measures lack of employment, educational attainment, poverty, housing tenure, access to broadband, and housing cost burden as well as identifying household characteristics such as age, disability status and English proficiency². All data is pulled from the American Community Survey.

Health Vulnerability. This assesses the increased frequency of health conditions that may result from exposure to air, noise, and water pollution, as well as lifestyle factors such as poor walkability, car dependency, and long commute times.² All data is pulled from the Center for Disease Control.

Climate & Disaster Risk Burden. This reflects various climate natural disaster risks.² Those with more applicability to Williston include changes in precipitation and extreme weather. Data is pulled from the Federal Emergency Management Agency, Department of Interior, and U.S. Geological Survey.

² <u>https://www.transportation.gov/priorities/equity/justice40/etc-explorer-indicator-table</u>



Zero Vehicle Households. Households that report no vehicles.³ These households are more likely to walk, bike, or use alternative means of transportations, which makes them more vulnerable to transportation safety risks.

Housing Cost Burden. Households are considered cost budened when they spend more than 30 percent of their income on rent, mortgage and other housing needs.³ These household are more likely to use alternative means of transportation, which makes them more vulnerable to transportation safety risks.

20-Plus Minute Work Commute. Households that report a work commute longer than 20 minutes.³ These households spend more time in their vehicle which increases their risk using the road system.

Younger than 18 and Older than 65. These populations are more likely to use alternative means of transportation as the ability to access vehicular transportation is limited. This makes these populations more vulnerable to transportation safety risks.

Minority. Nationwide, households headed by people of color are less likely than white households to have access to a vehicle.⁴ These households are more likely to walk, bike, or use alternative means of transportations, which makes them more vulnerable to transportation safety risks.

Limited English Proficiency. Those with limited English proficiency can experience a lack of access to information. For example, because emergency information is frequently communicated only in English, non-English speaking communities are vulnerable and can lack access to critical information needed to stay safe.⁵

Below Poverty Rate. Households below the poverty rate have less income to direct toward vehicle-related expenses. Therefore, these households are more likely to use alternative means of transportation, which makes them more vulnerable to transportation safety risks.

Equity Score

Based on Census Tracts and Census Block Groups, **Table 4** shows where different disadvantaged population indicators are present. Many geographies have multiple indicators present. Based on the number of indicators present, an "equity score" has been attributed to each geography. A map of the equity scores based on the various Census geographies is provided in **Figure 17**.

⁵ <u>https://www.transportation.gov/priorities/equity/justice40/etc-explorer</u>



³ According the to American Community Survey

⁴ <u>https://nationalequityatlas.org/indicators/Car_access</u>

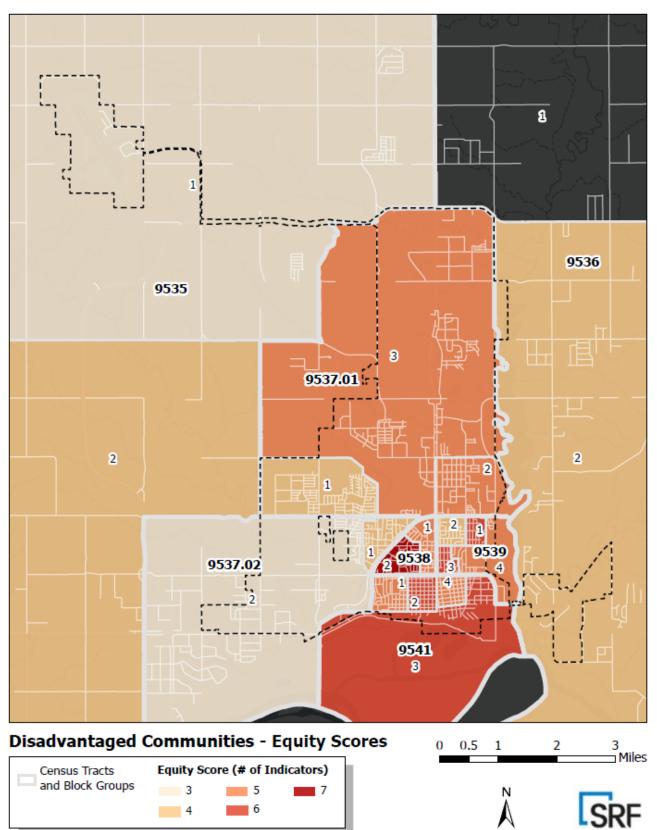
Table 4. Equity Indicator Matrix

Census Geography		USDOT ETC Explorer Data			Census Data												
Census Tract	Block Group	Climate & Disaster Risk	Environmental	Health	Social	Transportation	Disadvantaged	Zero-Vehicle	Disabled	Housing Cost Burden	Commute	Dependent Age (Over 65)	Dependent Age (Under 18)	Minority	Limited English	Below Poverty Rate	TOTAL EQUITY SCORE
9535	1					\checkmark					\checkmark	\checkmark					3
	2					✓					✓	✓		✓			4
9536	2					✓					✓	\checkmark				\checkmark	4
	1				\checkmark	\checkmark		\checkmark		✓							4
9537.01	2				✓	✓		✓		✓						✓	5
	3				✓	✓				✓				✓			5
9537.02	1				\checkmark	✓						\checkmark		\checkmark			4
0007102	2				✓	✓						✓					3
9538	1			✓		✓	✓			✓							5
5566	2			✓		✓	✓			✓		✓			✓		7
	1			✓													6
9539	2			✓													4
5565	3			✓		✓	\checkmark					✓	✓				6
	4																5
	1			✓			\checkmark					\checkmark					5
05.44	2			✓		\checkmark	\checkmark					\checkmark				\checkmark	6
9541	3			✓		\checkmark	\checkmark							\checkmark		\checkmark	6
	4																5



Roadway Safety in Williston







Williston Safety Action Plan

3. Community Outreach & Feedback

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Williston Safety Action Plan

COMMUNITY OUTREACH PROCESS AND METHODS

Community feedback is critical in ensuring the Plan's applicability and efficacy in Williston. Outreach to the community is important as the Plan will be used by the City Commission, City staff, and other partners to make decisions impacting the community for the foreseeable future. The outreach process occurred in two phases.

Phase 1

Phase 1 occurred at the beginning of the planning process to understand the community's thoughts with respect to transportation safety. The below graphic highlights phase 1 engagement timing, tools, and participation.



Phase 2

The Williston Safety Infrastructure Plan public engagement and outreach process culminated in an open house held on March 20, 2024. The open house was held at the Williston Public Library in the evening hours and consisted of an opportunity for individuals to walk through an exhibit of the plan as well as participate in a prioritization exercise for the proposed projects. There was also a brief presentation of the project during the evening.

Twenty-one individuals attended the open house and participated in open dialogue and discussions with the consultant team and city staff.

The project prioritization exercise consisted of each participant being given a total of 16 votes which they could disperse as desired among the various projects. This exercise indicated that the highest priority project was improvements to the Central Campus area, and the second highest priority project was the multi-use path along 32nd Ave and 42nd Street. The Central Campus area was an outlier in number of votes, with a large lead.



Tools

Tools used to gather community feedback included an online survey and comment map, focus group meetings, and a community open house.

Online Survey and Comment Map

The online community survey and comment map was promoted through postcards with a survey QR code and was distributed at two community events. It was also distributed to Senior Center participants, via the Community Action Partnership, and with books at the library, and was promoted via social media, the City's website, a press release from the City's Communication Department, and a push notification from the Williston School District via ParentSquare. The survey was open from October through December 2023. It asked residents to share locations of concern, traveling habits, personal experiences, and ideas to improve travel safety, etc.

Focus Groups

Focus groups interviewed are described in **Table 5**. Meetings were held throughout the fall of 2023.

Group Name	Representation
Chamber of Commerce	The Chamber of Commerce Focus Group provided general representation of the Williston business community, including members of the Williston Area Chamber of Commerce.
Recreation	The Recreation Focus Group included individuals that have a strong interest in parks and recreation activities, such as walking, biking, and/or running. The focus group members included representation from the Williston Parks and Recreation District, the Williston Housing Authority, the Williston School District, and others hosting or partaking in physical activities that interact with the area's transportation network.
Targeted User	The Targeted User Focus Group was comprised of people who work with unique users of the transportation system in Williston such as those facing poverty, disability, and other vulnerable populations. The group included representation from the Upper Missouri Health Unit, Northwest Dakota Public Transit, Senior Center, and Olive Motherhood, an organization providing mental, emotional, and social supports for mothers. In addition, the group included a state legislator and an individual representing the visually impaired.
Citizen	The Citizen Focus Group was comprised of members of the general public who were identified via an open solicitation for members—anyone in the community with an interest in transportation safety.

Table 5. Focus Groups



Williston Safety Action Plan

3

Group Name Representation

Student	The Student Focus Group included students from Williston High School. The participants included 2-3 students from each of the following grades: 9, 10, 11, and 12.
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COMMUNITY OUTREACH RESULTS

A detailed summary of community outreach results is provided in **Appendix D.**

Online Survey and Comment Map

Over 99% of survey respondents indicate that they generally drive to get around. The next most common modes were walking (32.5%) and biking (14.4%). Using a wheelchair/mobility device, taking the bus, and using ride-share services were each selected by less than 3% of respondents.

The two top safety concerns of respondents in Williston included reckless/careless driving (54.9%) and speeding (50.3%).

More than 72% of respondents have personally witnessed or been directly involved in a vehicle crash or near miss. The following responses (**Table 6**) were provided regarding who was involved in the crash or near miss.

Response	Count	Percentage
Vehicle(s)	219	67.2%
Pedestrian(s)	66	20.3%
Bicyclist(s)	26	8%
Other	6	1.8%

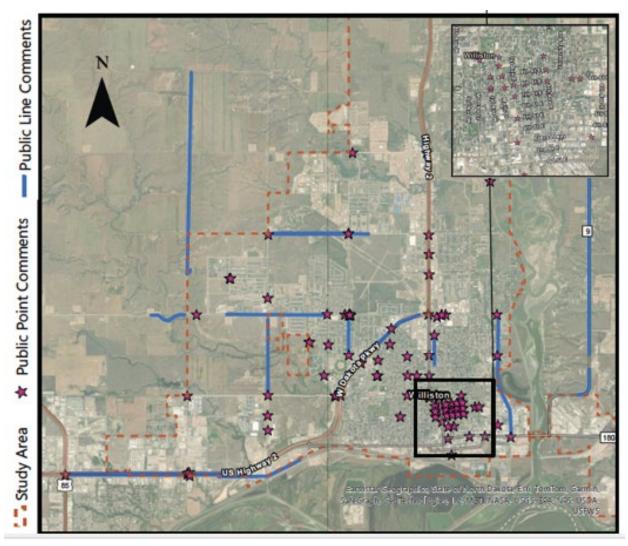
Table 6. Units in Crash or Near Miss

The online comment map gathered more than 125 specific points and street segments that the public deemed areas of particular concern. **Figure 18** shows the places within the Williston area marked by respondents.



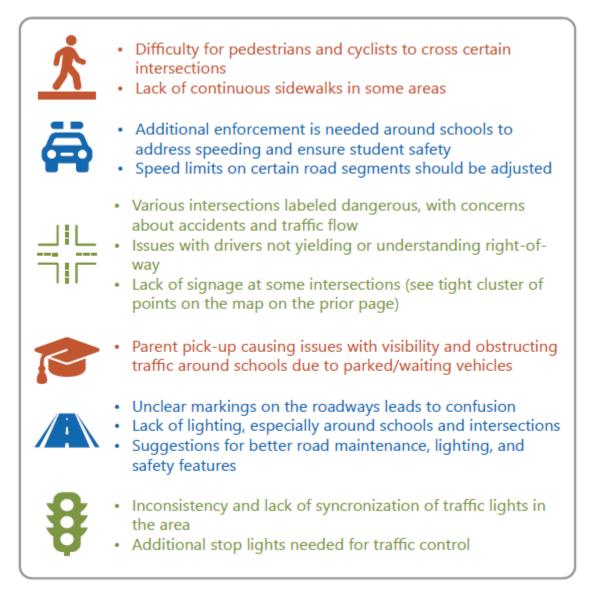
Community Outreach and Feedback







Online comment map summary:



Focus Groups

Table 7 provides a summary of feedback received from each focus group.

Table 7. Focus Group Feedback Summary

Group Name	Feedback Summary
Chamber of Commerce	 Snow removal is an ongoing challenge that creates safety concerns Driver education is needed, especially for navigating roundabouts and other intersections with no stop control Lack of nighttime visibility in certain areas, coupled lack of pavement marking and/or poorly removed old markings that leads to confusion



Williston Safety Action Plan

Group Name	Feedback Summary
Recreation	 Lack of bike and pedestrian system connectivity (sidewalks, paths, bike lanes, and crossings) Conflicts between on-street parking, bikes, and driving lanes Growing need for safe routes to school, school pick-up/drop-off Need for improved crossing visibility Improved lighting for the benefit of bicyclists and pedestrians
Targeted User	 Lack of sidewalks and paths near heavy-pedestrian areas, such as parks and grocery stores Improved lighting for the benefit of pedestrians Appreciate accessible pedestrian signals Downtown; more is needed Reliance on public and private rideshare and transit, especially for seniors Parking practices can obscure intersection visibility
Citizen	 Electric scooters present unique challenges and opportunities Need for increased speeding enforcements Downtown Main St. improvements have benefited safety of all users Consider improved signal timing to reduce delays and rear end crashes
Student	 Concerns with speeding in certain areas Interest in improvements to multiuse trail system Improved pick-up/drop-off at schools, especially Central Campus

Open House

Table 8 lists implementation project priority received from the public during the open house.

 Table 8. Open House Project Prioritization Results

Project	Brief Project Description	Public Open House Priority
Central Campus	W. Highland Drive and 14th Street W. from 6th Avenue to 14th Avenue. Curb extensions, ADA improvements, and enhanced pedestrian crossings.	1
32nd Avenue W.	32nd Avenue W. from approximately 32nd Street W. to 42nd Street. Multiuse trail improvements (tied to 42nd Street trail at public open house)	2
42nd Street	42nd Street from 32nd Avenue W. to 16th Street. Multiuse trail improvements (tied to 32nd Avenue trail at public open house)	2



Community Outreach and Feedback

5
5

Project	Brief Project Description	Public Open House Priority
US Highway 2	US Highway 2 from 42nd Street to 58th Street. Frontage road access closures.	3
US Highway 2 & 42nd Street W.	Additional advance intersection warning lights for northbound traffic (installed south of 42nd Street)	3
26th Street	Restriping	4
Main Street	Main Street from 6th Street to 9th Street. Curb extensions, ADA improvements, enhanced pedestrian crosswalks. Main Street from 6th Street to Front Street, enhanced pedestrian crosswalks.	5
11th Street W.	11th Street W. from Davidson Drive to 14th Avenue W. Curb extensions, ADA improvements, and enhanced pedestrian crossings.	6
US Highway 2 & 42nd Street W.	Median alternative. Rerouted/restricted access to the frontage road and sidewalk connections.	7
18th Street	18th Street from 6th Avenue to 4th Avenue. Curb extensions, ADA improvements, and enhanced pedestrian crossings.	8
US Highway 2 & 42nd Street W.	East frontage road reroute. Rerouted/restricted access to the frontage road and sidewalk connections.	9





4. Vision & Goals

Williston Safety Action Plan

Vision: Zero fatalities and serious injuries on the transportation system

The City of Williston desires transformative change in order to achieve it's vision for the safety of it's transportation infrastructure. Eliminating fatalities and serious injuries requires City leadership and staff to priortize the issue, and to work closely with it's transportation partners to do the same. Achieving the vision requires tremendous effort focused on physical/engineering efforts and various nonengineering efforts, such as education, enforcement, and agency collaboration. **Our vision will be measured on an annual basis starting in 2025, by the percent reduction in severe crashes. This vision will be achieved within 20 years (2045).** The following goals outline the big picture efforts in working toward the vision:

- 1. Elevate the need to address safety improvements for all users across the City's transportation system.
- 2. Collaborate with partner agencies in a shared mission to improve transportation safety.
- **3.** Create a culture of safe driving behavior.





Goal 1: Elevate the need to address safety improvements for all users across the City's transportation system.

Objectives

- A. All street crossings are compliant with the American with Disabilities Act.
- B. Create a sidewalk gap program to help connect existing sidewalks and paths and keep vulnerable users off the roadway.
- C. In order to provide a safe alternate mode for vulnerable users, support existing transit service and efforts to expand transit service.
- D. The Capital Improvement Program will have a focus on improving transportation safety.
- E. Infrastructure maintenance and safety are connected issues.
- F. Close lighting gaps across the transportation system.
- G. Priortize access management as part of federal aid reconstruction projects in HIN areas.

Shifting Focus to Safety



The City of Williston has been working hard to expand and complete its transportation infrastructure since oil and gas development activity surged 10 to 15 years ago. Lately much of the City's focus has been on building out Williston Square, which includes redevelopment of the City's old airport property. The time is ripe to shift more focus and capital investment towards improving the safety of the City's transportation infrastrcture in a comprehensive manner.

Accomodating all Modes



Our engagement with high school students and stakeholders with different types of disability made it clear that while Williston's transportation infrastructure is a complete, comprehensive system for drivers, that is not the case for walkers, bicyclists, and other alternative modes of transportation (such as transit). It is understand that many either are unable to drive due to age (e.g. students) or due to disability. For these vulnerable users, the City's

transportation system poses many barriers to travel, such as sidewalk gaps, a lack of lighting, or a lack of safe street crossings.





Goal 2: Collaborate with partner agencies in a shared mission to improve transportation safety.

Objectives

- A. Partner with Williston School District #7 and Williston State College to systemically improve the safety of routes to city schools.
- B. Partner with the Williston Park and Recreation District to systematically improve the safety of routes to city parks.
- C. Continue to partner with the State Department of Transportation to improve the safety of state routes and federal aid-eligble routes in Williston.

Safe Park and School Access



This Plan provides a strong starting point in improving safe access to Williston's school and park sites. However, in order to make comprehensive change to improving safety for how vulnerable users access these facilities, the City must work closely with Williston School District #7 and the Parks and Recreation District. In addition to designing for safer access to these facilities, other options should be considered, such as scheduling changes to reduce congestion around these sites or parent education.



4

Goal 3: Create a culture of safe driving behavior.

- A. Closely monitor driver behavior in HIN areas.
- B. Provide special focus on enforcement and education efforts to improve motorcyclist safety.
- C. Promote awareness of traffic rules.
- D. Enforce existing traffic laws.

Traffic Monitoring



The City owns a traffic monitoring trailer that has been deployed at select locations across the city to help monitor traffic behavior and improve decision-making. The trailer is a device that could be deployed to HIN corridors to help driver behavior, especially speeds, as a possible contributing factor to crashes in these areas.

Red Light Enforcement



An additional mechanism that will help with enforcement is a red light detection system that simplifies the Police Department's efforts in catching those who run red lights.

Targeting Motorcyclists



Additional emphasis on driver education and enforcement for motorcyclists is needed. 22 out of 37 severe motorcycle crashes (between 2018 and 2022) were single unit crashes, meaning just the motorcyclist was involved. The majority of severe motorcycle crashes in this same timeframe involved violation of traffic laws and reckless driving.

PROGRESS REPORTING

As led by the City Engineering Department, the Infrastructure Safety Project Review Committee will consistently monitor Safety Action Plan progress and report directly to the Board of City Commissioners on an annual basis by vision and goal area. Table 8 should be considered the minimum metrics to monitor progress and



a more comprehensive list may be developed by the Safety Project Review Committee over time.

Table 9. Safety Action Plan Annual Progress Reporting

Reporting Area	Responsibility	Key Partners	Annual Progress Report Highlights
Vision: Zero fatalities and serious injuries on the transportation system	Engineering Department	NDDOT	 Percent change of serious injury crashes from previous year and trend since Safety Action Plan adoption (2024); and Percent change of fatal crashes from previous year and trend since Safety Action Plan adoption (2024).
Goal 1: Elevate the need to address safety improvements for all users across the City's transportation system.	Engineering Department / Planning & Zoning Department	Northwest Dakota Public Transit	 Number of ADA ramps brought into compliance and how many remain noncompliant; and Status of Sidewalk Gap Program including length of gaps filled; and Ridership data trends from Northwest Dakota Public Transit; and Overview of CIP, specific to anticipated safety impacts; and Number of lighting projects.
Goal 2: Collaborate with partner agencies in a shared mission to improve transportation safety.	Engineering Department / Planning & Zoning Department	School District #7, Parks and Recreation District, NDDOT	 Status of coordination and safety improvements on routes to school; and Status of coordination and safety improvements on routes to parks and recreation facilities; and Overview of STIP, specific to anticipated safety impacts in City limits.
Goal 3: Create a culture of safe driving behavior.	Engineering Department / Planning & Zoning Department	Police Department, Fire Department and EMS	 Enforcement data and trends; and Status of enforcement and educational campaigns.





5. Implementation

Williston Safety Action Plan

ENGINEERING COUNTERMEASURES

The following engineering design countermeasures are integral to the recommended projects listed in this Plan.

Access Management

Access management refers to the design, application, and control of entry and exit points along a roadway. This includes intersections with other roads and driveways that serve adjacent properties. Thoughtful access management along a corridor can simultaneously enhance safety for all modes, facilitate walking and biking, and reduce trip delay and congestion. Examples of access management strategies recommended in this Plan include limiting allowable movements with raised medians (right-in/right-out only) and reducing highway access points.

Lighting

Nationwide, the number of fatal crashes occurring in daylight is about the same as those that occur in darkness. However, the nighttime fatality rate is three times the daytime rate because only 25 percent of vehicle miles traveled (VMT) occur at night. At nighttime, vehicles traveling at higher speeds may not have the ability to stop once a hazard or change in the road ahead becomes visible by the headlights. Therefore, lighting can be applied continuously along segments and at spot locations such as intersections and pedestrian crossings to reduce the chances of a crash.

Curb Extensions

Curb extensions reduce the width of the roadway by extending the curb into the parking lane. This shortens pedestrian crossing distances and reduces the time needed to cross the street. Curb extensions also provide the pedestrian with a safer place from which to watch for oncoming vehicles. Drivers are encouraged to slow down when approaching intersections and mid-block crossings, making turns, and traveling through intersections.

High Visibility Crosswalk Markings

High-visibility crosswalks use patterns (i.e., bar pairs, continental, ladder) visible to both the driver and pedestrian from farther away compared to traditional transverse line crosswalks. According to the Federal Highway Administration (FHWA), they should be considered at all midblock pedestrian crossings and uncontrolled intersections.



Rapid Rectangular Flashing Beacons (RRFBs)

To enhance pedestrian conspicuity and increase driver awareness at uncontrolled, marked crosswalks, pedestrian actuated Rectangular Rapid Flashing Beacons (RRFBs) can be installed to accompany a pedestrian warning sign. RRFBs consist of two, rectangular-shaped yellow indications, each with a light-emitting diode (LED)-array-based light source. RRFBs flash with an alternating high frequency when activated to enhance the conspicuity of pedestrians at the crossing to drivers.

Road Diet

A typical Road Diet typically involves converting an existing four-lane, undivided roadway segment to a three-lane segment consisting of two through lanes and a center, two-way left-turn lane. Road Diets improve safety by reducing the speed differential. On a four-lane undivided road, vehicle speeds can vary between travel lanes, and drivers frequently slow or change lanes due to slower or stopped vehicles (e.g., vehicles stopped in the left lane waiting to turn left). Drivers may also weave in and out of the traffic lanes at high speeds. In contrast, on three-lane roads with center turn lanes the vehicle speed differential is limited by the speed of the lead vehicle in the through lane, and through vehicles are separated from left-turning vehicles.

Sidewalks & Multiuse Trails

Sidewalks and multiuse trails separated from the roadway are the preferred accommodation for pedestrians and other forms of active transportation. Sidewalks and multiuse trails provide many benefits beyond safety, including mobility and healthier communities. In addition to reducing walking (or rolling) along roadway crashes, sidewalks and multiuse trails reduce other active transportation-related crashes. According to FHWA, roadways without sidewalks are more than twice as likely to have pedestrian crashes as sites with sidewalks on both sides of the street.

Advanced Intersection Warning Signs

Advanced intersection warning signs can help alert drivers to the presence of an intersection ahead. Signs can be placed with sufficient distance prior to the intersection to allow drivers to perceive and react. They can also be installed on both sides of the roadway to solicit greater awareness.

Red Light Confirmation Lights

Red-light confirmation lights enhance safety at signalized intersections by helping police enforce red light compliance. This results in a reduction of red-light running



violations. The confirmation lights are auxiliary lights connected to a traffic-control signal to help law enforcement officers more efficiently and safely issue citations for drivers who violate the red light of the traffic signal.

NON-ENGINEERING COUNTERMEASURES

Not all approaches to improving roadway safety in Williston include physical improvements or changes to the system. A theme for non-engineering countermeasures to improving roadway safety is ongoing diligence on the part of the City and its partners in having a comprehensive approach to roadway safety.

Safe Routes Studies

"Safe Routes to School" has been a longstanding program that uses a variety of education, engineering and enforcement strategies that help make routes safer for children to walk and bicycle to school and encouragement strategies to entice more children to walk and bike. In Williston, a need has been identified to improve walking and biking access to schools and to park facilities.

Based on public input and analysis of crash data, several project recommendations are included in this Plan that will improve walking and biking access within ¼ mile from schools and parks. However, additional infrastructure improvements and other strategies may be necessary to improve walking and biking access to schools and parks. Therefore, a specific study of access to these facilities is recommended in partnership with Williston School District #7 and the Parks and Recreation District to ensure a comprehensive approach to safer walking and biking access.

HIN Corridor Enhanced Enforcement & Monitoring

The high injury network (HIN) developed through this Plan's in-depth analysis of crash data provides an opportunity to focus not only engineering countermeasures, but also non-engineering countermeasures, such as focused law enforcement and traffic monitoring efforts.

Pavement Marking Maintenance

Public input gathered through this Plan identified faded/worn pavement markings as an issue that contributes to driver confusion, resulting in roadway safety concerns. In addition, input noted that roadways with new pavement markings may not include fully obliterated/removed former pavement markings, also adding to driver confusion. It is important to maintain pavement markings on a regular schedule, following installation best practices and minimum reflectivity as provided by FHWA. The City has needs to ensure old pavement markings are properly obliterated/removed.



Support for Transit Service

As part of the development of this Plan, the consultant team engaged with a focus group representing vulnerable users. Input from the group noted that a general lack of transit use may contribute to safety concerns for vulnerable users. When opportunities for transit use are missed, that means more vulnerable users are walking or rolling and are vulnerable to vehicular traffic. Focus group members explained the need to elevate awareness of transit service in Williston, as provided by Northwest Dakota Public Transit.

Transit Service and Roadway Safety

"The best way to avoid crashes is to avoid cars, and getting people onto public transport is key"⁶

ADA ACCESSIBILITY AND SAFETY

The Safety Action Plan aims to have a comprehensive approach to improving safety for all, including vulnerable users who walk and use mobility devices. With respect to transportation, the goal of the Americans with Disabilities Act (ADA) is to ensure that pedestrians with disabilities (who may use mobility devices) have an equal opportunity to use the public rights-of-way in the transportation system. In response to this need, this Plan includes an evaluation of transportation facilities in the City of Williston to understand which facilities are compliant with ADA, and which are not. Evaluated facilities specifically included:

- **Curb ramps** (wheelchair ramps) that provide access between the sidewalk and roadway for people using wheelchairs, strollers, walkers, hand carts, bicycles, and also for pedestrians with mobility problems who have trouble stepping up and down high curbs; and
- **Sidewalks** existing sidewalk providing mobility for people using wheelchairs, strollers, walkers, hand carts, bicycles, and also pedestrians; and
- **Sidewalk Gaps** gap in the sidewalk network or where a sidewalk would typically be found but does not exist today.

Curb ramp and sidewalk ADA evaluations and sidewalk gap identification focused on specific areas in Williston that have high pedestrian traffic, areas near schools

⁶ <u>https://cities-today.com/public-transport-play-key-role-helping-reduce-road-deaths/</u>



and businesses and in older portions of town. Field data collection was performed in the Fall of 2023 through a digital mapping application. Point data was collected for curb ramps and sidewalks, with sidewalk point data representing the typical condition of facilities for the specific block face. Sidewalk gap data was also collected as points, representing the specific block face where the gap exists.

The resulting inventory of curb ramps and sidewalks consisted of the evaluation of the following facilities using the Public Right-of-Way Accessibility Guidelines (PROWAG) and yielded the results in **Table 9**.

Table 10. Curb Ramp and Sidewalk Evaluation

Facility	Total # Evaluated	Total # Compliant	Percent Compliant
Curb Ramp	1,000	165	17%
Sidewalk	595	292	49%

Typically, improvements to achieve ADA compliance will be made either as a retrofit or as a part of a capital project. The following are examples of projects that the City of Williston or its partners will undertake:

- Intersection corner ADA improvements
- Sidewalk/Trail ADA Improvements

IMPLEMENTATION ACTIONS

Specific action items are necessary to implement the Plan, with specific City departments identified to champion implementation, key partner organizations, a timeline to track implementation, and relative level of investment expected to implement each action item. Refer to **Table 11**.

Investment Level Key:

- *High: Capital investment in a physical project, likely including significant City labor investment as well.*
- Moderate: While not involving a physical project, may require significant investment of City labor and partner organization involvement.
- Low: Includes efforts with low investment in City labor such as changes to existing practices and approaches to collaboration with partner organizations.



Table 11. Implementation Table

Action	Responsibility	Key Partners	Timeline	Investment Level
(1) Design & Construct Identified Projects	Engineering Department	FHWA, NDDOT	10 years	High
(2) Safe Routes Studies	Engineering Department	School District #7, Parks and Recreation District	5 years	Moderate
(3) Transit Service Awareness	NW Dakota Public Transit	City of Williston, NDDOT	Ongoing	Low
(4) Establish Sidewalk Gap and ADA Retrofit Program	Engineering Department	NDDOT (along state and federal aid eligible routes)	10 years	High
(5) Traffic Calming Policy – New development, reconstructs	Engineering Department	Planning and Zoning Department	Ongoing	Low (Design Change)
(6) Motorcyclist- Targeted Education	Police Department	-	Ongoing	Moderate
(7) Enhance Traffic Enforcement in HIN Areas; Special Focus on Motorcyclists	Police Department	Engineering Department	Ongoing (Review of results after 5 years)	Moderate

PROJECT LIST

Refer to **Figure 20** for project locations. **Appendix E** includes sheets for each project with an associated concept drawing and planning-level cost estimate.

Equity Impacts

Recommended safety projects will have a positive impact on disadvantaged populations to varying degrees. Section 2 of this Plan provides an overview of the equity analysis done for the Plan, ultimately identifying an "equity score" down to the Census Block Group level that accounts for the number of disadvantaged population indicators present in different geographical areas. The projects listed in this section refer to the equity score based on the location of the recommended project. It is expected that the higher the equity score, the greater the



recommended project will benefit disadvantaged populations in improving transportation and safety and quality of life.

Permanent Safety Projects

Most project recommendations involve permanent infrastructure improvements to improve safety and involve a combination of the engineering countermeasures described earlier.

A. 32nd Avenue W. from approximately 32nd Street W. to 42nd Street – Multiuse trail improvements.

- Equity score: 4, low-moderate equity impact.
- <u>Public open house priority rank (of 9)</u>: Tied second highest priority.
- <u>Working Group priority rank (of 9)</u>: Fourth highest priority
- <u>Safety analysis</u>: Proactively responds directly to the crash factor analysis of the pedestrian HIN and priority area analysis. A majority of pedestrian involved crashes in City boundaries occur away from intersections. Strategic trail routes across the City of Williston will provide designated, contiguous, and safe walking and bicycling routes to and from essential destinations in north and northwest Williston. 32nd Avenue W. is an emerging driver of growth in the City and critical north-south mobility corridor, connecting significant residential, multi-family residential, commercial, and public/institutional land uses.

B. 42nd Street from 32nd Avenue W. to 16th Avenue – Multiuse trail improvements.

- Equity score: 5, moderate equity impact.
- <u>Public open house priority rank (of 9)</u>: Tied second highest priority.
- <u>Working group priority rank (of 9)</u>: Sixth highest priority.
- <u>Safety analysis</u>: Proactively responds directly to the crash factor analysis of the pedestrian HIN and priority area analysis. A majority of pedestrian involved crashes in City boundaries occur away from intersections. Strategic trail routes across the City of Williston will provide designated, contiguous, and safe walking and bicycling routes to and from essential destinations in northern Williston. 42nd Street is an emerging driver of growth in the City and critical east-west mobility corridor, connecting significant future residential, future multi-family residential, commercial including groceries and fresh produce, and public/institutional land uses.
- **C. US Highway 2 from 42nd Street to 58th Street** Frontage road access closures and completion of western frontage road facilitate access closures.



- <u>Equity score</u>: 5, moderate equity impact.
- <u>Public open house priority rank (of 9)</u>: Tied third highest priority.
- <u>Working group priority rank (of 9)</u>: Seventh highest priority.
- <u>Safety analysis</u>: Responds directly to the HIN analysis to improve safety and reduce severe crashes on US Highway 2. A majority of HIN crashes are intersection related, and frontage road access closures adjacent to US Highway 2 will significantly reduce crossing conflict points on the divided highway and at adjacent frontage roads to significantly improve safety and traffic operations. Responds directly to the HIN analysis to improve safety and reduce severe crashes.

D. US Highway 2 and 42nd Street W – Advance Intersection Warning

Restricted access to the frontage road and sidewalk connections. Additional advance intersection warning lights for northbound traffic (installed south of 42nd Street).

- Equity score: 5, moderate equity impact.
- <u>Public open house priority rank (of 9)</u>: Tied third highest priority.
- <u>Working group priority rank (of 9)</u>: Tied sixth highest priority.
- <u>Safety analysis</u>: Responds directly to the HIN analysis to improve safety and reduce severe crashes on US Highway 2 at the highest severity crash location on the HIN. Most HIN crashes are intersection related, and there are known severe crashes associated with speeding as a contributing factor. Because of the speed limit on US Highway 2, and the historically dangerous intersection that is US Highway 2 and 42nd Street, additional advanced intersection warning lights will be installed for northbound traffic (southbound warning light already exists) to signify to drivers when they should be prepared to stop. The advance intersection warning lights will signal drivers to be prepared to stop, decreasing dangerous decision-making associated with driving through the intersection or stopping safely.
- D. US Highway 2 from 42nd Street to 58th Street Alternative 1, Median Alternative. Rerouting/restricted access to the frontage road and sidewalk connections.
 - Equity score: 5, moderate equity impact.
 - <u>Public open house priority rank (of 9)</u>: Seventh highest priority.
 - <u>Working group priority rank (of 9)</u>: Fifth highest priority.
 - <u>Safety analysis</u>: Responds directly to the HIN analysis to improve safety and reduce severe crashes on US Highway 2 at the highest severity crash location on the HIN. A majority of HIN crashes were intersection related, and the frontage road access is very close to the intersection of 42nd Street and



US Highway 2, causing dangerous turning movements, visibility restrictions, and confusion at the intersection. The frontage road realignment on the west of US Highway 2 increases visibility for vehicles making turning movements off US Highway 2 onto westbound 42nd Street W. East of US Highway 2, a median will restrict frontage road turning movements to right-in/right-out and reduce crossing conflict points. Additional sidewalk improvements will enhance connectivity and safety for pedestrians walking along 42nd Street and/or crossing US Highway 2 to get to and from mixed density residential, commercial, and industrial land uses.

D. US Highway 2 from 42nd Street to 58th Street – Alternative 2, East frontage road reroute. Frontage road access closures.

- <u>Equity score</u>: 5, moderate equity impact.
- Public open house priority rank (of 9): Ninth highest priority.
- <u>Working group priority rank (of 9)</u>: Fifth highest priority.
- <u>Safety analysis</u>: Responds directly to the HIN analysis to improve safety and reduce severe crashes on US Highway 2 at the highest severity crash location on the HIN. A majority of HIN crashes were intersection related, and the frontage road access is very close to the intersection of 42nd Street and US Highway 2, causing dangerous turning movements, visibility restrictions, and confusion at the intersection. The frontage road realignment on the west of US Highway 2 increases visibility for vehicles making turning movements off US Highway 2 onto westbound 42nd Street W. East of US Highway 2, the frontage road is realigned which increases visibility for vehicles making turning movements off US Highway 2 onto eastbound 42nd Street W. Additional sidewalk improvements will enhance connectivity and safety for pedestrians walking along 42nd Street and/or crossing US Highway 2 to get to and from mixed density residential, commercial, and industrial land uses.

E. 18th Street from 6th Avenue to 4th Avenue – Curb extensions, ADA improvements and enhanced pedestrians crossings.

- <u>Equity score</u>: 7, high equity impact.
- Public open house priority rank (of 9): Eighth highest priority.
- <u>Working group priority rank (of 9)</u>: Tied third highest priority.
- <u>Safety analysis</u>: Responds directly to the HIN analysis to improve pedestrian safety and reduce severe crashes on 18th Street W. Curb extensions at 6th Avenue W. and 4th Avenue W. including an enhanced pedestrian crossing at 4th Avenue W. will increase visibility of pedestrians crossing 18th Street W. Redundancy of safe and enhanced pedestrian crossings will increase safety and mobility of pedestrians in the area, giving people safer, and more



frequent crossing options. Curb extensions are also known to calm traffic, which may reduce speeding as a known contributing factor on the HIN.

- F. Central Campus, W. Highland Drive and 14th Street W. from 6th Avenue to 14th Avenue – Curb extensions, ADA improvements, and enhanced pedestrian crossings.
 - Equity score: 7, high equity impact.
 - <u>Public open house priority rank (of 9)</u>: First highest priority.
 - <u>Working group priority rank (of 9)</u>: First highest priority.
 - <u>Safety analysis</u>: Responds directly to public concern and feedback received about pedestrian safety concerns at the Central Campus, home of the Williston Middle School and Bakken Elementary School. People are most concerned with students walking during busy drop off and pick up times where vehicle congestion decreases visibility of students walking and crossing the roads around campus. Curb extensions and enhanced pedestrian crossings will increase visibility of students walking to and from school or to and from their drop off or pick up location, which could be located along any of the blocks adjacent to campus. Curb extensions are also known to calm traffic, which may reduce speeding as a known contributing factor on the HIN.
- **G. 11th Street W from Davidson Drive to 14th Avenue W** Curb extensions, ADA improvements, and enhanced pedestrian crossings.
 - <u>Equity score</u>: 7, high equity impact.
 - <u>Public open house priority rank (of 9)</u>: Sixth highest priority.
 - <u>Working group priority rank (of 9)</u>: Second highest priority.
 - <u>Safety analysis</u>: Responds directly to the HIN analysis to improve pedestrian safety and reduce severe crashes on 11th Street W. Curb extensions at 15th Avenue W., 14th Avenue W., and Davidson Drive including enhanced pedestrian crossing at Davidson Drive. Curb extensions will increase visibility of pedestrians crossing 11th Street W. and decrease crossing distances. Redundancy of safe and enhanced pedestrian crossings will increase safety and mobility of pedestrians in the area, giving people safer, and more frequent crossing options to and from critical locations including the CHI St. Alexius Health Medical Center, parks and recreation facilities, and public library. Curb extensions are also known to calm traffic, which may reduce speeding as a known contributing factor on the HIN.
- **H. Main Street from 6th Street to 9th Street** Curb extensions, ADA improvements, and enhanced pedestrian crosswalks.



- <u>Equity score</u>: 5, moderate equity impact.
- <u>Public open house priority rank (of 9)</u>: Tied fifth highest priority.
- <u>Working group priority rank (of 9)</u>: Tied sixth highest priority.
- <u>Safety analysis</u>: Responds directly to the HIN analysis to improve pedestrian safety and reduce severe crashes on 11th Street W. Curb extensions at 15th Avenue W., 14th Avenue W., and Davidson Drive including enhanced pedestrian crossing at Davidson Drive. Curb extensions will increase visibility of pedestrians crossing 11th Street W. and decrease crossing distances. Redundancy of safe and enhanced pedestrian crossings will increase safety and mobility of pedestrians in the area, giving people safer, and more frequent crossing options to and from critical locations including the CHI St. Alexius Health Medical Center, parks and recreation facilities, and public library. Curb extensions are also known to calm traffic, which may reduce speeding as a known contributing factor on the HIN.

I. Main Street from 6th Street to Front Street – Enhanced pedestrian crosswalks.

- <u>Equity score</u>: 6, moderate-high equity impact.
- <u>Public open house priority rank (of 9)</u>: Tied fifth highest priority.
- <u>Working group priority rank (of 9)</u>: Seventh highest priority.
- <u>Safety analysis</u>: Responds directly to the HIN analysis to improve pedestrian safety and reduce severe crashes on Main Street. Enhanced pedestrian crossings will increase visibility of existing crossing infrastructure along Main Street and increase visibility. Redundancy of safe and enhanced pedestrian crossings will increase safety and mobility of pedestrians in the area, giving people safer, and more frequent crossing options to and from residential, commercial, and public/institutional land uses.
- J. All Signalized Intersections (26) Red light confirmation lights.
 - <u>Equity Score</u>: No equity score included due to dispersed project improvements.
 - <u>Public open house priority rank (of 9)</u>: Not prioritized at open house.
 - <u>Working group priority rank (of 9)</u>: Not prioritized by Working Group.
 - <u>Safety analysis</u>: Responds directly to public feedback and comments regarding enforcement of traffic laws in the City. Red light confirmation lights allow law enforcement to clearly observe vehicles that may run a red light any leg of the signalized intersection. The red light confirmation lights will provide a tool for law enforcement to enforce red light violations and work to build a culture of safer driving decisions within City limits.



Pilot/Demonstration Projects

- K. 26th Street W, from 32nd Avenue W to 9th Avenue W Temporary curb extensions with delineators, enhanced pedestrian crossings, multiuse trail connections and road diet via striping changes by removing and replacing existing striping.
 - <u>Equity score</u>: 5, moderate equity impact.
 - <u>Public open house priority rank (of 9)</u>: Fourth highest priority.
 - <u>Working group priority rank (of 9)</u>: Third highest priority.
 - <u>Safety analysis</u>: Responds directly to the HIN analysis and proactively responds directly to the crash factor analysis of the pedestrian HIN and priority area analysis. A temporary road diet with curb extensions will improve pedestrian safety and reduce severe crashes on 26th Street W. Changing from four-lanes to three-lanes will improve operations by providing a continuous center left turn lane. Sidewalk and trail gaps will be connected along the corridor to provide safe, continuous pedestrian and bicycle network in one of Williston's most recent growth areas providing east-west mobility to and from multi-family residential, single-family residential, commercial, and public/institutional land uses.

26th Street W is a minor arterial within the City's functional classification system of roadways. Over the past ten years, 26th Street W has been improved significantly to accommodate traffic growth and in anticipation of continued traffic growth as projected in the City's Transportation Plan. The segment of 26th Street W from 9th Avenue west to 32nd Avenue has specifically been improved to accommodate four travel lanes (two in each direction) and roundabouts at 9th Avenue, Pheasant Run, and 32nd Avenue. During the safety action planning process, this segment of 26th Street W has been identified through public and focus group input as a corridor with excessive speeding. A portion of the segment is also identified on the HIN.

Traffic counts from 2023 (provided by NDDOT) along 26th Street from 9th Avenue to 32nd Avenue have shown that corridor is well-under capacity. Observed traffic levels make the corridor a good candidate for a road diet⁷, or a conversion from four lanes to two lanes in each direction and a center turn lane. However, the City would like to reserve the opportunity to easily convert the corridor to four lanes as projected traffic levels are realized in the future. In the interim, the corridor is an opportunity to pilot a road diet on a recently widened City roadway, along with enhanced pedestrian crossings. After installation the City will monitor traffic levels, speeds, as well as pedestrian use to understand changes from the current state of

⁷ 2023 observed traffic ranges from over 5,000 average daily traffic (ADT) to just over 10,000 ADT. FHWA recommends that roadways with less than 15,000 ADT are a good candidate for road diets.



the corridor. Note that permanent sidewalk and multiuse trail connections are included in the project and are necessary to ensure pedestrian access to the temporary pedestrian crossings are assured. These sidewalk and multiuse trail connections will fill in gaps in the corridor's existing active transportation network.



Figure 19. Example of Temporary Curb Extensions

Source: https://www.dot.state.mn.us/metro/projects/robertstreet/

- L. Traffic Monitoring Trailer The City owns one traffic monitoring trailer. To help increase monitoring of traffic behavior (especially in HIN corridors) and changes to traffic behavior as a result of recommended safety projects, another monitoring trailer is necessary.
 - Equity score: Not included because this is not a project with a fixed location.
 - Public open house priority rank (of 9): Tied fifth highest priority.
 - <u>Working group priority rank (of 9)</u>: Seventh highest priority.
 - <u>Safety analysis</u>: Responds directly to public feedback and comments regarding monitoring and enforcement of traffic laws in the City. The traffic monitoring trailer provides the City and law enforcement the opportunity to monitor traffic volume and movements along streets and intersections across Williston.



Sidewalk Gap and ADA Retrofit Program

Refer to **Figures 21-23** that show the locations of non-compliant (with ADA) curb ramps, non-compliant (with ADA) sidewalks, and sidewalk gaps. Note that select areas of the City were excluded from evaluation that were recently developed and are known to be constructed with ADA-compliant infrastructure, as well as areas scheduled for street and ADA improvements. Focus was given to other areas of the City for evaluation, especially areas adjacent to schools and parks.

Forwarding Safety and Accessibility

Prioritizing and scheduling closing sidewalk gaps and ADA retrofit improvements will be established by the City Engineering Department. Factors that determine project priority may include, but are not limited to, the following:

- Severity of ADA non-compliance
- Feasibility of remedies
- Safety concerns
- Whether a location receives high public use
- Consideration should also be given to locations that would most likely not be updated by other City programs

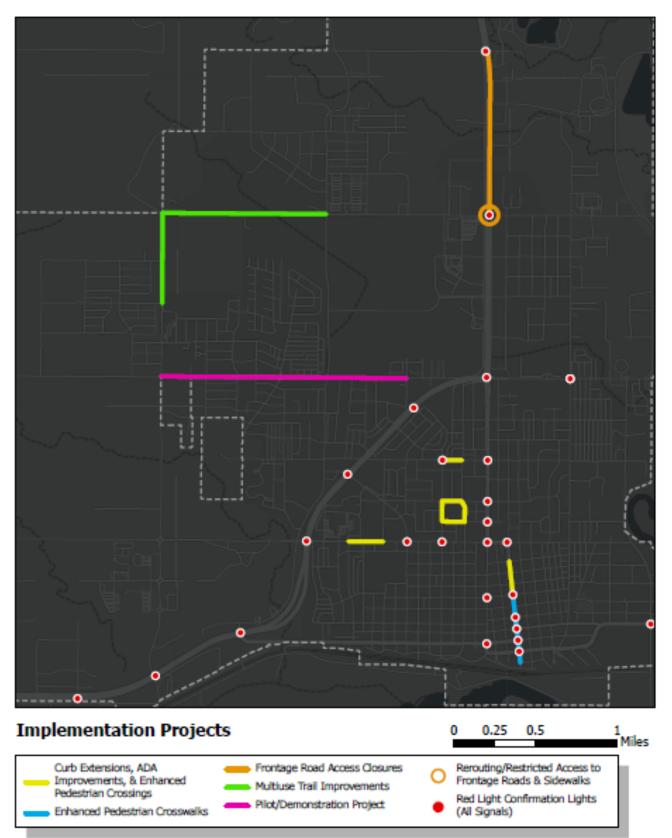
Planning-level estimates for the various types of improvements, using 2023-unit prices, are listed **Table 12**. Verification of noncompliance will be conducted by City of Williston staff in the field as projects are programmed and designed.

Infrastructure Element	Cost	Noncompliant along HIN	Cost along HIN	Total Noncompliant	Total Noncompliant Cost
Curb Ramp	\$6,000 - \$8,000 per ramp	66	\$528,000	903	\$7,224,000
Sidewalk	\$100 / LF*	10	\$20,000	303	\$606,000
Sidewalk Gaps	\$100 / LF	969 LF	\$96,900	26,547 LF	\$2,654,700

*Assumes 20 LF replaced per sidewalk data point and an average sidewalk width of 6-feet or trail width of 8- to 10-feet.



Figure 20. Project Map

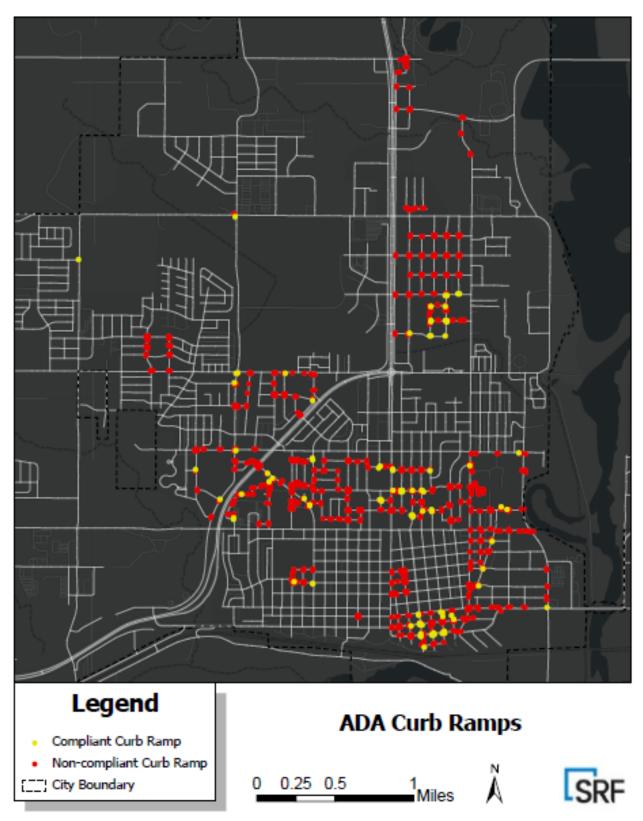




Williston Safety Action Plan

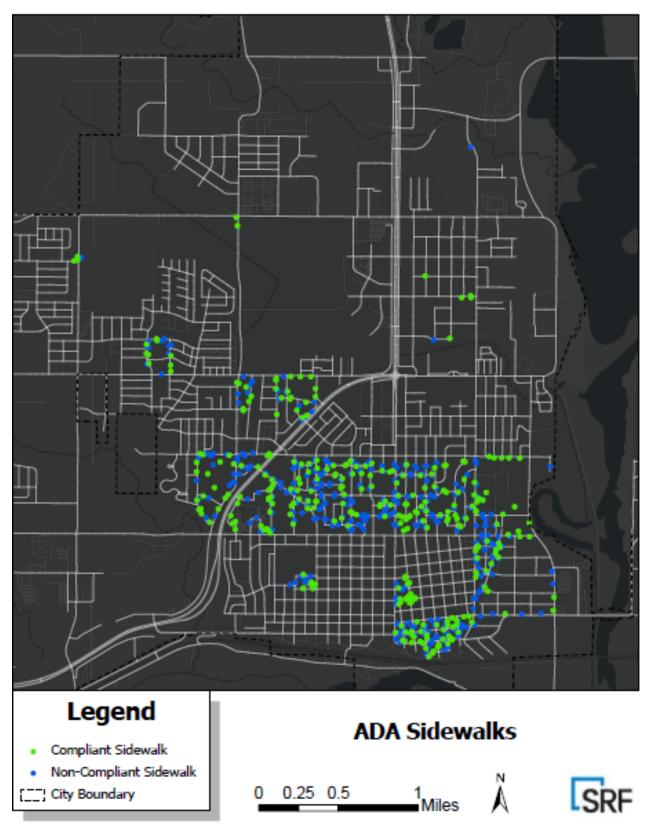


Figure 21. Curb Ramp Evaluation Results Map







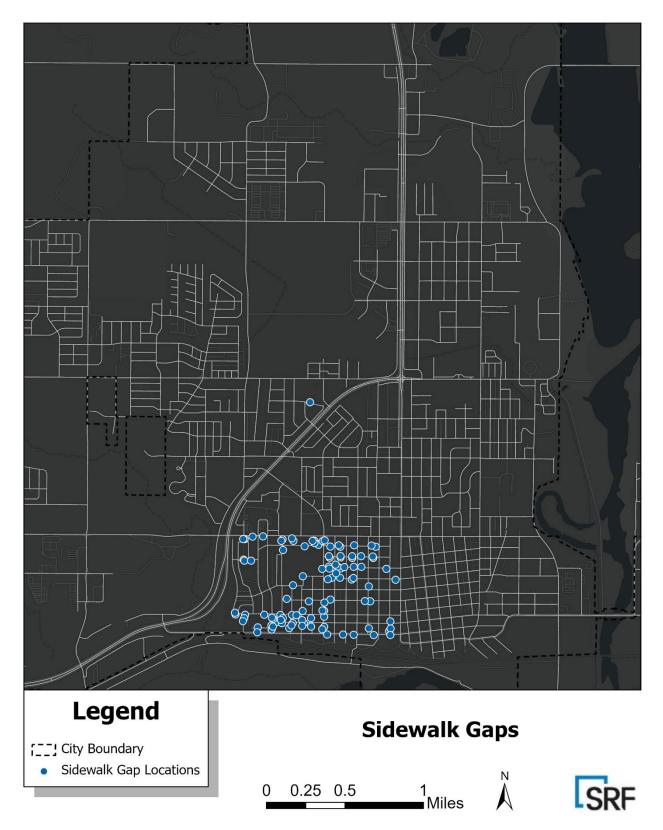




Williston Safety Action Plan

5

Figure 23. Sidewalk Gap Locations Map





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- **M. ADA Noncompliant Ramps and Sidewalks** Reconstruction of ADA noncompliant ramps and sidewalks.
 - <u>Equity score</u>: Not included because of numerous locations city-wide.
 - <u>Public open house priority rank (of 9)</u>: Not prioritized at public open house.
 - <u>Working group priority rank (of 9)</u>: Not prioritized by working group.
 - <u>Safety analysis</u>: Responds directly to the ADA inventory and analysis conducted to proactively address pedestrian and bicyclist safety and Williston's most vulnerable users of the multimodal transportation system. ADA noncompliant ramps and sidewalks would be demolished and replaced with ADA compliant infrastructure.
- **N. Sidewalk Gaps South of 11th Street** New sidewalk construction and associated infrastructure at intersections.
 - Equity score: 7, high equity impact.
 - <u>Public open house priority rank (of 9)</u>: Not prioritized at public open house.
 - <u>Working group priority rank (of 9)</u>: Not prioritized by working group.
 - <u>Safety analysis</u>: Responds directly to the HIN analysis and proactively responds directly to the crash factor analysis of the pedestrian HIN and priority area analysis. The sidewalk network gaps south of 11th Street exist in a core, established area of Williston between critical quality of life destinations including parks and recreation. New sidewalk will provide pedestrians, bicyclists and other vulnerable users safer mobility options to go about their daily lives in the core of the community.

Project Prioritization

The City of Williston considered quantitative and qualitative analyses when considering the priority of safety improvement projects. Crash analysis, HIN analysis, equity score, public feedback, and project readiness were considered when establishing the prioritized list of projects shown in **Table 13**.

Priority Rank	Project	Equity Score	Priority Area? (Y/N)	On HIN? (Y/N)	Construction Year	Comments
1	F. Central Campus, W. Highland Drive & 14th Street W.	7	Y	Ν	2025	Large impact for vulnerable users. Addresses public feedback and safety concern.

Table 13. Prioritized Project List



Williston Safety Action Plan

Page	63
raye	05

2	E. 18th Street	7	Y	Υ	2025	Improvements on HIN. Large impact for vulnerable users. Addresses public feedback and safety concern.
3	G. 11th Street W.	7	Y	Y	2025	Improvements on HIN. Large impact for vulnerable users. Addresses public feedback and safety concern.
4	J. All signalized intersections	N/A	Y	Y	2025	Improvements on HIN. Large area of impact and roadway user safety.
5	H & I. Main Street	5 & 6	Y	Y	2026	Improvements on HIN. Strategic upgrades to support vulnerable users.
6	M & N. ADA Ramps and Sidewalk, & sidewalk gaps south of 11th St.	Varies	Y	Y	2025-2027	Improvements on HIN. Large area of impact for vulnerable users and roadway user safety.
8	D. US Highway 2 & 42nd Street W. Intersection	5	Ν	Y	2025	Improvements on HIN.
9	B. 42nd Street W.	5	Y	Ν	2026	Road construction to be coordinated the same year.
9	A. 32nd Avenue W.	4	Y	Ν	2026	Road construction to be coordinated the same year.
11	C. US Highway 2	5	Y	Y	2025-2026	Improvements on HIN. Multi-year project due to USACE permitting requirements.

Priority

Area?

(Y/N)

Equity

Score

On

HIN?

(Y/N)

Construction

Year



Project

Priority

Rank

WILLISTON



Comments

WILLISTON

Page	64
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Priority Rank	Project	Equity Score	Priority Area? (Y/N)	On HIN? (Y/N)	Construction Year	Comments
12	D. Alternative 1 – US Highway 2 & 42nd Street W. Intersection	5	Ν	Y	2027	Improvements on HIN.
13	D. Alternative 2 – US Highway 2 & 42nd Street W. Intersection	5	Ν	Y	2027	Improvements on HIN. Significant ROW acquisition required.

Table 14 below breaks out percentage of project within Disadvantaged Communities as defined by the USDOT's Equitable Transportation Community (ETC) Explorer national results. The following potential project packages show that 28 to 43 percent of investments through Williston's Safety Action Plan will be spent in a Disadvantaged Community.

Table 14. Projects Within Disadvantaged Communities

Potential Project(s)	% in Disadvantaged Community	Notes
A, B, C, D, D Alternative 1, E, F, G, H, I, J, M, & N.	43.2%	Includes all (city-wide) ADA noncompliant curb ramps and sidewalks.
K & L	0%	Pilot/Demonstration Projects

Please refer to **Appendix E** for further detail.

Strategies	and	Projects	
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