

TRANSPORTATION SAFETY ACTION PLAN



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SAFE STREETS AND ROADS FOR ALL SAFETY ACTION PLAN CHECKLIST

The Belton Transportation Safety Action Plan (BTSAP) meets the requirements of the U.S. Department of Transportation's Safe Streets and Roads for All (SS4A) program. The SS4A's Self Certification Eligibility Worksheet was used to guide the development of the BTSAP. The BTSAP provides guidance as the City of Belton pursues its goals to reduce roadway fatalities and serious injuries, and makes the City of Belton eligible for SS4A implementation funding to assist in implementing safety improvements. The SS4A Checklist requirements are located within the following chapters:

CHAPTER 1. LEADERSHIP AND GOAL SETTING

• Leadership and Goal Setting: This plan will be adopted by the Belton City Council to further the goal of reducing roadway fatalities and serious injuries.



CHAPTER 2. PLANNING STRUCTURE, ENGAGEMENT, AND COLLABORATION

- **Planning Structure:** The development of this plan was guided by a Task Force comprised of elected officials, city staff, community leaders, residents, and business owners.
- **Engagement and Collaboration:** Public engagement with the City of Belton community informed the safety concerns and potential solutions outline in this plan.



CHAPTER 3. TRANSPORTATION SYSTEM INVENTORY

• Safety Analysis: This chapter provides information related to the existing conditions of the City of Belton's transportation network.



CHAPTER 4. SAFETY ANALYSIS

• Safety Analysis: Baseline conditions, crash data analysis, crash severity, and systemic and specific safety needs are outlined in this chapter.



CHAPTER 5. POLICY REVIEW

• **Policy and Process Change:** An assessment of current policies, plans, and standards has been reviewed and analyzed with the goal of prioritizing safety.



CHAPTER 6. COUNTERMEASURE STRATEGIES

• Strategies and Project Selections: A comprehensive set of prioritized projects and strategies is identified to guide the City of Belton as they pursue their roadway safety goals.



CHAPTER 7. IMPLEMENTATION PLAN

• Progress and Transparency: A description of how progress will be measured over time is detailed in this chapter.

EXECUTIVE SUMMARY

The BTSAP is a forward-looking framework that reflects a shared commitment across city leadership and community members to create a safer transportation system for all users. Shaped by the federal SS4A initiative, this plan speaks directly to the City of Belton's local priorities, including the need to protect vulnerable road users (VRUs) by improving sidewalks, eliminating gaps in the sidewalk network, and making other data driven safety improvements.

By synthesizing technical analysis, public engagement, and cross-agency collaboration, this BTSAP positions the City of Belton to take immediate and measurable steps toward achieving zero traffic-related deaths and serious injuries by 2050. It is a blueprint not only for implementation, but for accountability, transparency, and lasting community impact.

VISION STATEMENT

The City of Belton is committed to improving safety for all road users. This plan is guided by the following vision statement:

The City of Belton strives to eliminate traffic fatalities and serious injury crashes on local roads by 2050.

OVERVIEW

By developing the BTSAP the City of Belton has taken a critical first step toward its long-term goal to eliminate traffic-related deaths and serious injuries by 2050. The plan was shaped through a combination of community input and data analysis, helping to identify the key factors affecting roadway safety in the City of Belton.

Grounded in the Safe System Approach and Vision Zero principles, the BTSAP pinpoints the areas of highest safety risk and outlines targeted strategies to reduce those dangers.

Between 2019 and 2023, the City of Belton experienced 3,432 traffic crashes, resulting in 9 fatalities and 57 serious injuries. VRUs include pedestrians, bicyclists, bus riders, and individuals using mobility devices. They represented a small portion of total travelers (less than 2% walk or bike to work) but accounted for nearly 20% of all deaths and serious injuries.

To reach the goal of zero traffic fatalities and serious injuries, the BTSAP emphasizes a holistic approach that prioritizes safety for everyone, especially those most at risk. The recommendations focus on infrastructure improvements, policy changes, and community engagement to create a safer transportation system for all users.

Throughout the spring and summer of 2025, the community had the opportunity to review the findings and provide input that was used to create the final plan. More than 400 people participated in this planning effort. The most common theme gathered from community input was focused on pedestrian safety and lack of sidewalks. The goals of this plan are:

- Improve pedestrian safety and comfort
- Increase safety at intersections
- Work with MoDOT to increase safety on state maintained and operated roadways
- · Advance additional programs and policies to further develop a culture of roadway safety citywide

RECOMMENDATIONS

Building on the goals outlined in the vision statement, this BTSAP identifies a set of actionable strategies tailored to the City of Belton's highest-risk locations and most pressing safety concerns. Some key recommendations include:

- Build out priority pedestrian network to connect neighborhoods, schools, and amenities
- Close sidewalk gaps and improve the sidewalk condition throughout the community by replacing existing sidewalks in poor condition
- Encourage MoDOT to study and improve MO-58, Holmes Rd, and Cedar St
- Address school-related traffic safety in the vicinity of schools throughout the City of Belton

A detailed list of projects and strategies is provided in Chapter 6.





INTRODUCTION

ABOUT THE BELTON TRANSPORTATION SAFETY ACTION PLAN

To advance the goal of eliminating traffic fatalities and serious injuries, the City of Belton received a grant from the United States Department of Transportation (USDOT) to prepare a SS4A Action Plan. This plan outlines how the city can achieve its ambitious safety objectives through a data-driven strategy that is built upon a comprehensive analysis of all crash types and trends to effectively allocate safety investments.

The BTSAP represents a significant shift from the traditional focus on moving vehicles efficiently to prioritizing safe mobility for all roadway users. It adopts a Safe System Approach, based on the principle that even a single death on our roadways is unacceptable, and human errors must be anticipated. By developing SS4Acompliant Action Plans, this effort enables the City of Belton to access further infrastructure funds aimed at bolstering roadway safety.

Th BTSAP outlines strategies and actions to be taken over the next 25 years. It is designed to address the changing needs of the city, with recommendations serving as a starting point rather than a final, all-encompassing list. The plan should be continually referred to and should respond to data trends and incorporate safety innovations and opportunities to eliminate traffic fatalities and injuries as time progresses.

COMMUNITY ANALYSIS

The City of Belton is a part of the Kansas City Metropolitan area in Cass County, Missouri with a population of approximately 24,618, according to the 2023 American Community Survey. The City of Belton shares a border with Kansas City and Grandview to the north, Raymore to the east, and unincorporated Cass County to the south, and the Village of Loch Lloyd to the west. The community is located to the south of the former Richards-Gebaur Air Force Station. The City is known for its historic roots and vibrant annual events, like Carry Nation Days, along Main Street in the historic downtown. In recent years the City of Belton has evolved from a bedroom community to Kansas City, to its own employment center with the addition of warehousing and distribution developments supported by I-49 and rail access.

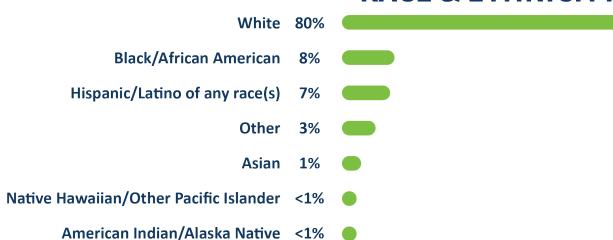
POPULATION



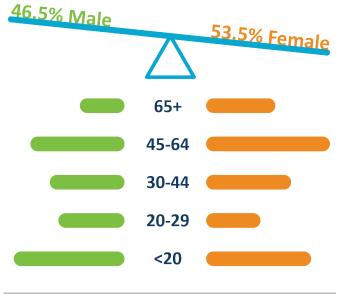


15% Individuals with Disabilitites

RACE & ETHNICITY



AGE & GENDER





Households without a vehicle available

MEANS OF TRANSPORTATION TO WORK



10% Work from Home



Source: U.S. Census Bureau, U.S. Department of Commerce, American Community Survey, ACS 5-Year Estimates Subject Tables, accessed June 2025, https://data.census.gov/table/ACSST5Y2023.S0101?q=belton+mo.

BELTON'S TRANSPORTATION SYSTEM

The City of Belton's transportation system is made up of a mix of local, state-operated, and private roadways. Out of the city's 161 centerline miles:

- 75% are maintained by the City of Belton (local roads)
- 15% are operated by the Missouri Department of Transportation (MoDOT)
- 10% are privately owned, mostly within mobile home parks and subdivisions

KEY ROADWAYS

The two most significant roads in the City of Belton are Interstate 49 (I-49) and Missouri Route 58 (MO-58). These serve as the city's main commercial corridors, supporting both freight movement and passenger travel. Both I-49 and MO-58 are maintained by MoDOT.

- I-49 runs north-south through the center of the City of Belton, effectively dividing the city east and west. It was designated as an interstate in December 2012 and will eventually connect New Orleans to Canada, intersecting nine major east-west interstates along the way.
- MO-58 is the primary east-west route in the City of Belton, splitting the city north and south. It also provides the main access point to I-49 via a major interchange.



Westover Road by Cimarron Trails Park

RAIL INFRASTRUCTURE

The City of Belton is also served by one active rail line and one historic rail line:

Canadian Pacific Kansas City (CPKC) Railway - This active freight line runs along the west side of the city and connects the City of Belton to both Mexico and Canada. It offers significant potential for industrial development, warehousing, and distribution. There are two grade-separated crossings along this line within city limits.

Historic Rail Line (Belton, Grandview & Kansas City Railroad Museum) - A second rail line runs north-south through the center of the city. While it once served freight, it is now used by hobbyists and the local railroad museum. This line crosses city streets at grade 14 times, though it sees very limited rail activity today.

SAFE SYSTEMS APPROACH

The Safe System Approach is a new way of addressing roadway safety through principles established by USDOT. These principles, shown in Figure 1, provide new ideas and approaches to help achieve the goal of eliminating fatal and serious roadway injuries. The Safe System Approach principles include:

- Death & serious injuries are unacceptable
- Humans make mistakes
- Humans are vulnerable
- Responsibility is shared
- Safety is proactive
- Redundancy is crucial

USDOT's Safe System Approach has five objectives; these are utilized in the Implementation Chapter later in this report.

- Safer People
- Safer Vehicles
- Safer Speeds
- Safer Roads
- Post-Crash Care

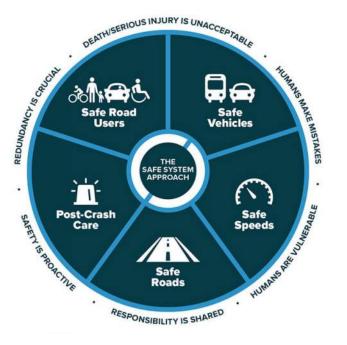


Figure 1: Safe System Approach

Source: National Roadway Safety Strategy Safe System, USDOT, Accessed July 2024.

VISION ZERO CONCEPT

The traditional approach to roadway safety accepts that traffic deaths and serious injuries are unfortunate but inevitable. It focuses on reducing crashes primarily through behavior-based strategies like enforcement and education, placing most of the responsibility on individual road users. Road design often prioritizes vehicle speed and efficiency, and safety improvements are typically reactive, implemented after serious incidents occur. Roadway safety projects like these often result in substantial long-term costs for insurance providers, healthcare systems, emergency services, and local governments after construction is completed. These can include increased insurance claims, medical expenses from crash-related injuries, emergency response operations, and infrastructure maintenance or upgrades.

Vision Zero is a multi-disciplinary approach aimed at eliminating all traffic fatalities and serious injuries on transportation networks while increasing safety, health, and mobility for all. While the primary goal of Vision Zero is to eliminate severe crashes, there are also other benefits to the community such as a reduced number of minor injury or property damage only crashes. It emphasizes a systems-based strategy where responsibility is shared between road users and system designers (e.g., planners, engineers, policymakers). Vision Zero prioritizes proactive measures, such as safer street design, lower travelling speeds, and datadriven interventions. It also centers on human vulnerability, designing roads to minimize the consequences of inevitable human errors. Vision Zero designs include back up safety measures for when one element fails, making it more expensive at first but having a lower cost long-term than the traditional approach.

Figure 2 shows the differences between the traditional approach to roadway safety and how Vision Zero changes the way roadway safety is viewed.

More information on Vision Zero can be found at https://visionzeronetwork.org/about/what-is-vision-zero/ or by scanning the QR code to the right.



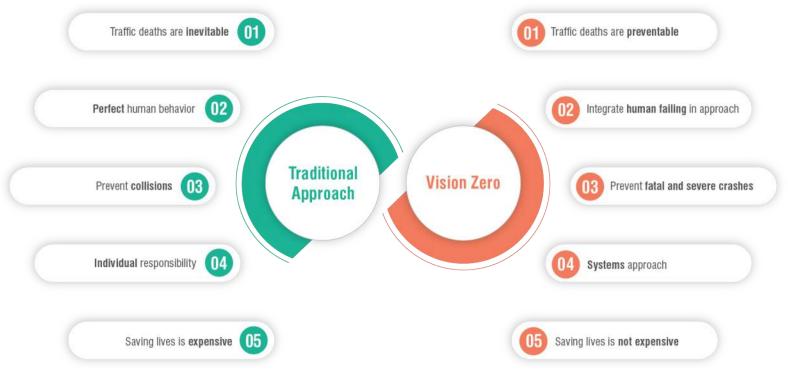


Figure 2: Traditional Approach vs Vision Zero Approach

PLAN GOALS

The following goals have been developed to improve safety on the City of Belton's roadways. These goals are found in the data and supported through community engagement. Plan recommendations have been developed to support and advance these key themes.

- Improve pedestrian safety and comfort
- Increase safety at intersections
- Work with MoDOT to increase safety on state maintained and operated roadways
- Advance additional programs and policies to further develop a culture of roadway safety citywide





CHAPTER 1: **LEADERSHIP AND GOAL SETTING**





CHAPTER 2: PLANNING STRUCTURE, ENGAGEMENT, & COLLABORATION

The BTSAP prioritizes projects that address the safety challenges faced by travelers in the City of Belton. To better understand the challenges of the City of Belton's roadways, the project team utilized a public engagement approach that incorporated a variety of community stakeholders, first responders, and city leaders. These perspectives and the different viewpoints shared with the project team were essential to confirm the safety data and analysis, identify community priorities for roadway safety, and to establish a framework of strategies to achieve zero traffic fatalities and serious injuries by 2050. The following strategies and resources were used to develop the BTSAP. Additional results and information are provided in Appendix B.

BELTON TRANSPORTATION SAFETY ACTION PLAN TASK FORCE

The BTSAP Task Force served as a backbone for community engagement and the creation of the final plan. The Task Force included a cross section of members from the police department, fire department / EMS, public works, administration, school district administration, business owners, and other community leaders. The Task Force met three times throughout the course of the project to offer their input and to discuss solutions to reach the goal of eliminating serious injury and fatal traffic crashes, Table 1 shows these meeting dates and topics.

Table 1: Belton Transportation Safety Action Plan Task Force Meetings

MEETING DATE	SUBJECT	LOCATION
April 16, 2025	Project Introduction, Data Analysis, and Goal Setting	Belton Public Works Conference Room
June 4, 2025	Public Input, Crash Profiles, and Pedestrian Safety	Belton Public Works Conference Room
XX XX, 2025	Draft Plan Review	Belton Public Works Conference Room

Some of the safety issues and planning priorities identified by members of the Task Force included:

- Need more sidewalks
- Students heading to or leaving schools sometimes use roadways
- Cleveland Avenue / Mill Street intersection needs improvements
- Sunrise Drive has a high number of pedestrians going between schools and the neighborhoods
- Many locations for potential interactions between vehicles and pedestrians
- Signalized crosswalks at key intersections
- Main Street and Y Highway**
- Speeding concerns
- Mill Street

- Citizens want to expand I-49 through the city limits
- I-49 / MO-58 interchange and subsequent traffic signals
- Congestion at signals
- Can contribute to rear end crashes as people attempt to make the yellow signal
- Assist emergency vehicles in getting to their destination efficiently
- Scott Avenue / MO-58 intersection
- Roadway alignment can be confusing
- People will run the traffic signal; the red timing is very long

^{**} Rectangular Rapid Flashing Beacons (RRFBs) were installed at Main Street and Y Highway after this comment was made.



PUBLIC ENGAGEMENT PROCESS

FOCUS GROUPS

Three focus groups were held throughout February and March. They involved businesses and residents, including high school students and older adults. These groups offered unique feedback on roadway safety in the City of Belton. They had some common safety concerns:

- Speeding
- Aggressive Driving
- Distracted Driving
- Confusing Infrastructure
- Poor Lighting
- Crosswalk visibility and sidewalk conditions/availability

POP-UP EVENTS

There were three pop-up events that the BTSAP used to engage with the public.

CARRY NATION DAYS

This annual event was held May 30-31, 2025 along Main Street. Attendees were asked "Why is roadway safety important to you?" and several of the responses are shown in above.

SENIOR CENTER EVENT

A pop-up was held at the Senior Center on June 26, 2025. There were 3 community members who participated.

HIGH BLUE EVENT

A pop-up was held at High Blue on July 9, 2025. There were 23 community members who participated in the public survey.





ONLINE ENGAGEMENT

To keep individuals up to date on the planning process and host the survey, a project website was developed. Throughout the project, there were a total of 391 visitors, 737 visits, and 168 contributions on the website.

PUBLIC SURVEY

A survey was conducted between March and June 2025. The survey received 76 responses from online and paper surveys and explored transportation modes, safety concerns, and comfort levels with various forms of transportation in the city. Responses came from individuals across all parts of the City of Belton, as well as the surrounding areas. The feedback from this activity helped inform the recommendations in the draft BTSAP. Some of the main takeaways are shown below. The entire survey results are available in Appendix B.

- Community members feel that the BTSAP should prioritize:
- Increased safety measures in pedestrian heavy areas, intersections, school zones, and along cycling routes
- Infrastructure improvements and maintenance
- Reduction of distracted drivers
- MO-58 is the most concerning roadway, specifically where it intersects with:
- Highway Y
- N Cedar St
- N Scott Ave
- Kentucky Rd
- ∘ I-49
- Other common recommendations were increasing traffic enforcement and conducting more frequent surface maintenance.

INTERACTIVE MAP

On the project website, 92 contributions were collected on an interactive map, shown in Figure 3. This showcased specific locations that the public identified as concerns.

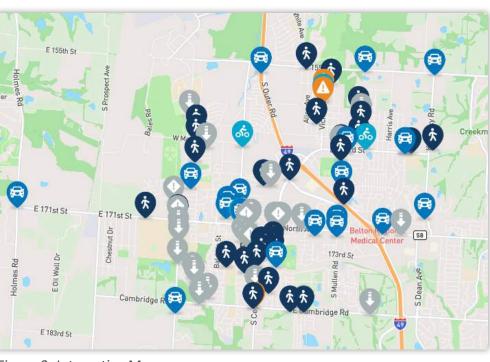


Figure 3: Interactive Map



CHAPTER 3: TRANSPORTATION SYSTEM INVENTORY

BELTON'S TRANSPORTATION NETWORK

The City of Belton's transportation network consists of city-maintained roads, state-managed highways, and privately owned roadways, all supported by a system of sidewalks, trails, bicycle facilities, and rail infrastructure. The following inventory is based on the 2024 existing transportation network in the City of Belton. These multimodal corridors connect the City of Belton to the greater Kansas City region and make it a strategically attractive location for distribution and warehousing—particularly due to its proximity to I-49 and the CPKC rail line; however, this regional connectivity also brings increased freight traffic, with larger trucks frequently using local roads to reach their destinations.

The Belton Comprehensive Plan 2050 identifies future growth potential along Holmes Road to the west of the City of Belton, where mixed-use developments and business parks are anticipated. As these areas develop, traffic volumes—particularly along MO-58—are expected to increase. These increases could impact local traffic operations and emergency response times, especially near key corridors. Planning proactively for these changes is critical to ensuring the long-term safety, accessibility, and efficiency of the City of Belton's transportation system.

ROADWAY OWNERSHIP

Roadway ownership is important for identifying jurisdictional responsibilities, prioritizing safety improvements, and coordinating infrastructure investments.

LOCAL ROADS

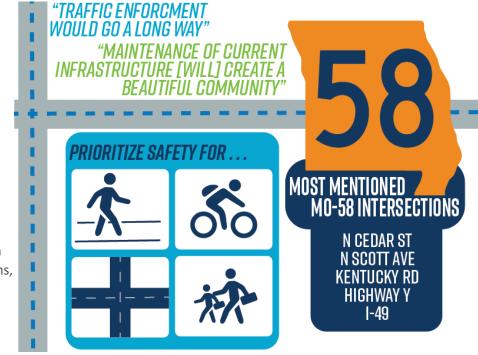
The majority of the City of Belton's roadway network (122 miles) is under city jurisdiction. These roads, shown in orange in Figure 4, form the backbone of local mobility by connecting neighborhoods, schools, parks, and commercial areas. Because these roads are owned and maintained by the city, the City of Belton has direct control over safety improvements.

STATE ROADS

The City of Belton contains 24 miles of state-managed roads, depicted in blue in Figure 4. These roads fall under the jurisdiction of MoDOT, which means the city must coordinate with MoDOT for proposed safety improvements along these routes. Ownership matters because MoDOT follows its own design standards, prioritization processes, and funding mechanisms. As such, implementing improvements may require navigating separate timelines and funding eligibility criteria. However, these corridors are often high-speed and high-volume, making state-local coordination critical to improve safety and accessibility for all road users

PRIVATE ROADS

Approximately 15 miles of roads in the City of Belton are privately owned, shown in gray in Figure 4. These roads are typically located within residential subdivisions, commercial developments, or industrial parks. It is important that transitions between local and private roadways are seamless and safe for all users, while maintaining accessibility for emergency response vehicles.



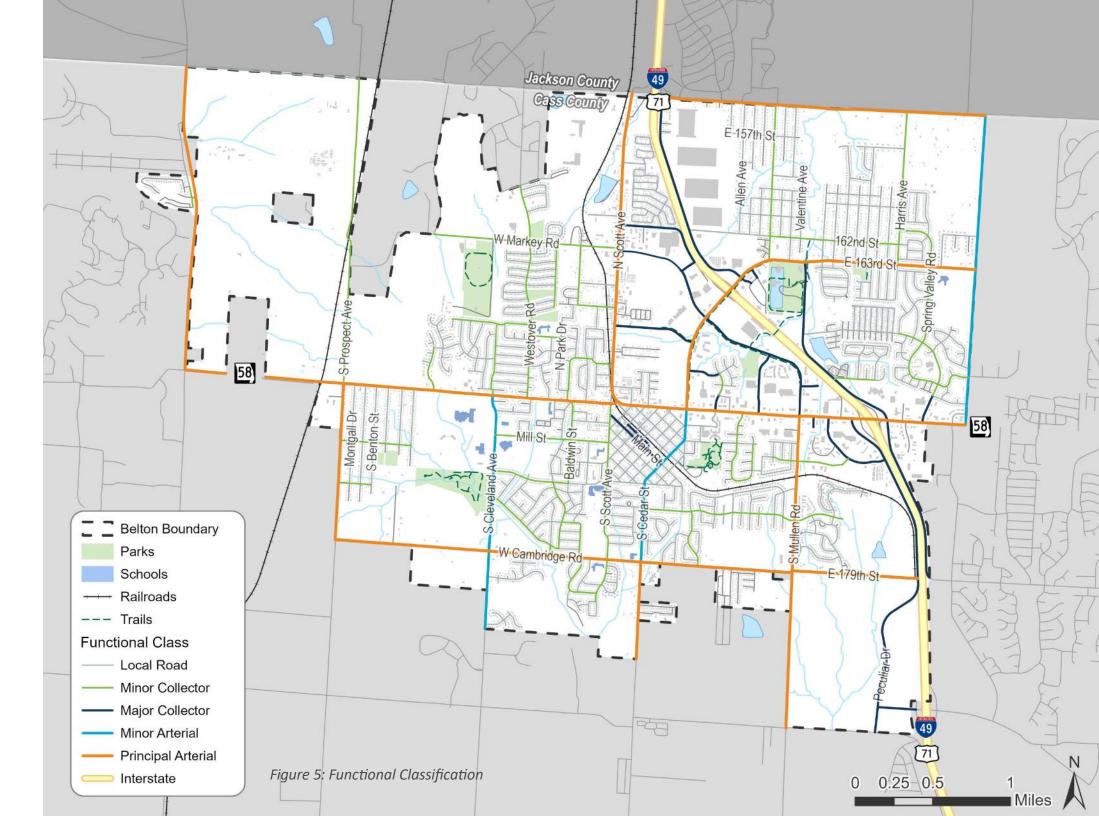


FUNCTIONAL CLASSIFICATION

The City of Belton utilizes a functional classification system for its overall street network, detailed in Table 2 and shown in Figure 5. The system identifies the role of each street and generally corresponds with design requirements that help the street fulfill that role.

Table 2: Functional Classification Descriptions

FUNCTIONAL CLASSIFICATION	DESCRIPTION
Interstate	Interstates are the highest classification of arterials and were designed and constructed with mobility and long-distance travel in mind. Roadways have a physical barrier between directional travel lanes and no at-grade, direct access to adjacent land uses.
Principal Arterial	Principal arterials provide a high degree of mobility and serve major activity centers or provide mobility throughout rural areas. These arterials usually limit direct access to adjoining land uses. Principal arterials typically have a shared-use path and/or sidewalk on each side of the roadway. Typically, a large shared-use path and a sidewalk on either side of the roadway can accommodate bicycle and pedestrian demands. Street lighting is typically auto-oriented.
Minor Arterial	Minor arterials serve geographic areas smaller than higher arterials and serve as an inter-connector between the higher arterial roadways. In rural areas, minor arterials are designed with high travel speeds and minimal interference to through movement. Street lighting is typically auto-oriented, but human-scale lights may be appropriate.
Major Collector	Major collectors serve both land access and traffic circulation by distributing trips to the greater arterial network. In the City of Belton, these roadways connect industrial land uses, commercial areas, and high-density residential developments to the rest of the roadway network. Because major collectors serve a wide variety of land uses, bike lanes, shared-use paths, or sidewalks may be appropriate. Street lighting should include human-scale features.
Minor Collector	Minor collectors provide both land access and traffic circulation but generally operate over shorter distances and lower speeds. In contrast to major collectors, these roadways serve lower density residential areas and experience less freight traffic. Large streetlights are less appropriate along these corridors and human-scale streetscapes are encouraged.
Local Road	Local roads account for the largest percentage of all roadways in terms of mileage. Local streets provide direct access to adjacent land uses and are often designed to discourage through traffic. These roadways typically allow on-street parking and feature a sidewalk on one or both sides. Most local roads only have streetlights at intersections which limits light pollution in residential neighborhoods.



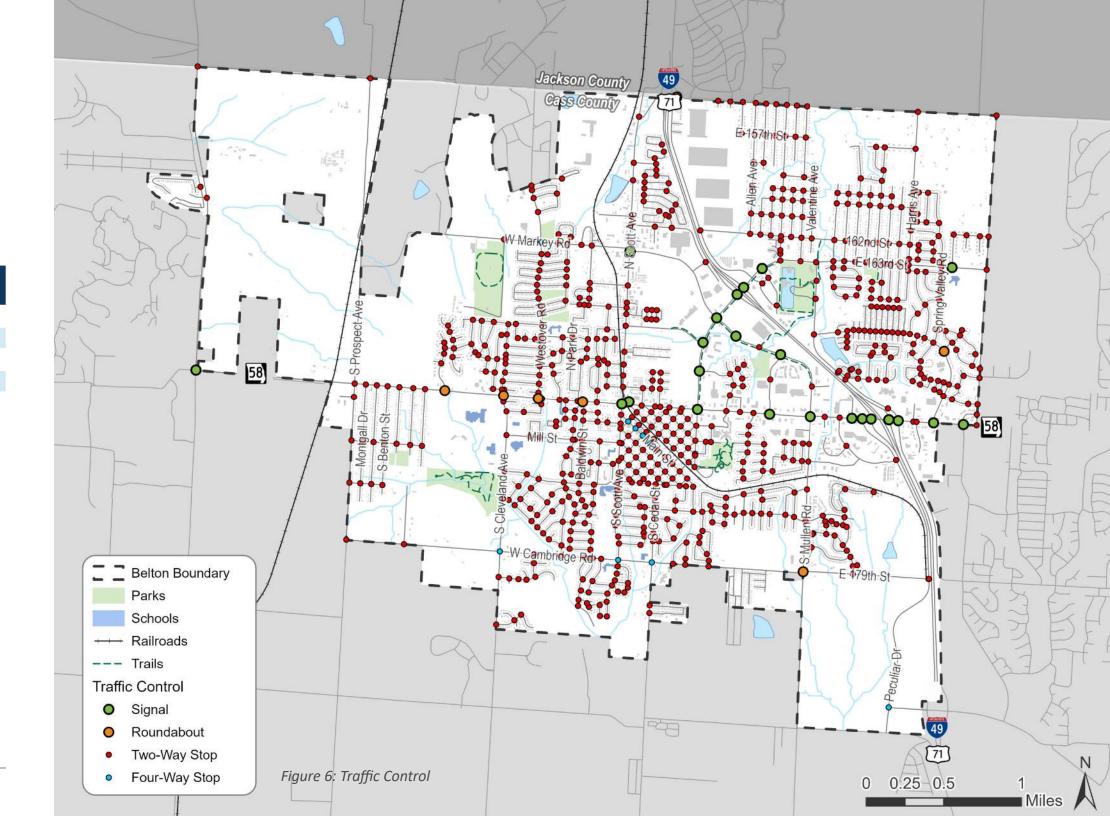
TRAFFIC CONTROL

Traffic control used within the City of Belton includes 23 traffic signals, 7 roundabouts, and over 700 stop-controlled intersections, detailed in Table 3 and shown in Figure 6. Traffic control such as signals, roundabouts, signs, and pavement markings are important tools for maintaining safety and efficiency on city and state roads. They help prevent crashes by reducing driver confusion, protecting vulnerable users, improving traffic flow through, and supporting emergency response.

Properly timed signals and modern roundabout designs can significantly reduce the likelihood and severity of angle and rear-end crashes. Clear and consistent signage and pavement markings improve driver awareness and support safer interactions with vulnerable users, including pedestrians and cyclists. Additionally, traffic controls support emergency response operations by providing predictable traffic movement and helping to manage congestion during peak hours or incidents.

Table 3: Traffic Control

TRAFFIC CONTROL	LOCAL ROADS	STATE ROADS	PRIVATE ROADS	TOTAL
Signal	10	13	0	23
Roundabout	2	5	0	7
Two-Way Stop	610	43	68	721
Four-Way Stop	8	1	0	9



SPEED LIMIT

Speed is one of the most critical factors in traffic safety. Higher vehicle speeds increase both the likelihood of a crash occurring and the severity of injuries when crashes happen. Even small increases in speed significantly raise the risk of fatal or serious injuries, especially for VRUs like pedestrians and cyclists. According to AAA Foundation for Traffic Safety, at 20 mph, a pedestrian struck by a vehicle has a roughly 10% chance of being killed. That risk rises to 40% at 30 mph and jumps to over 75% at 40 mph. Lower speeds not only reduce impact forces but also improve driver reaction time and stopping distance, making the roadway environment safer and more predictable for everyone. Speed limits along the City of Belton roads are detailed in Table 4 and shown in Figure 7.

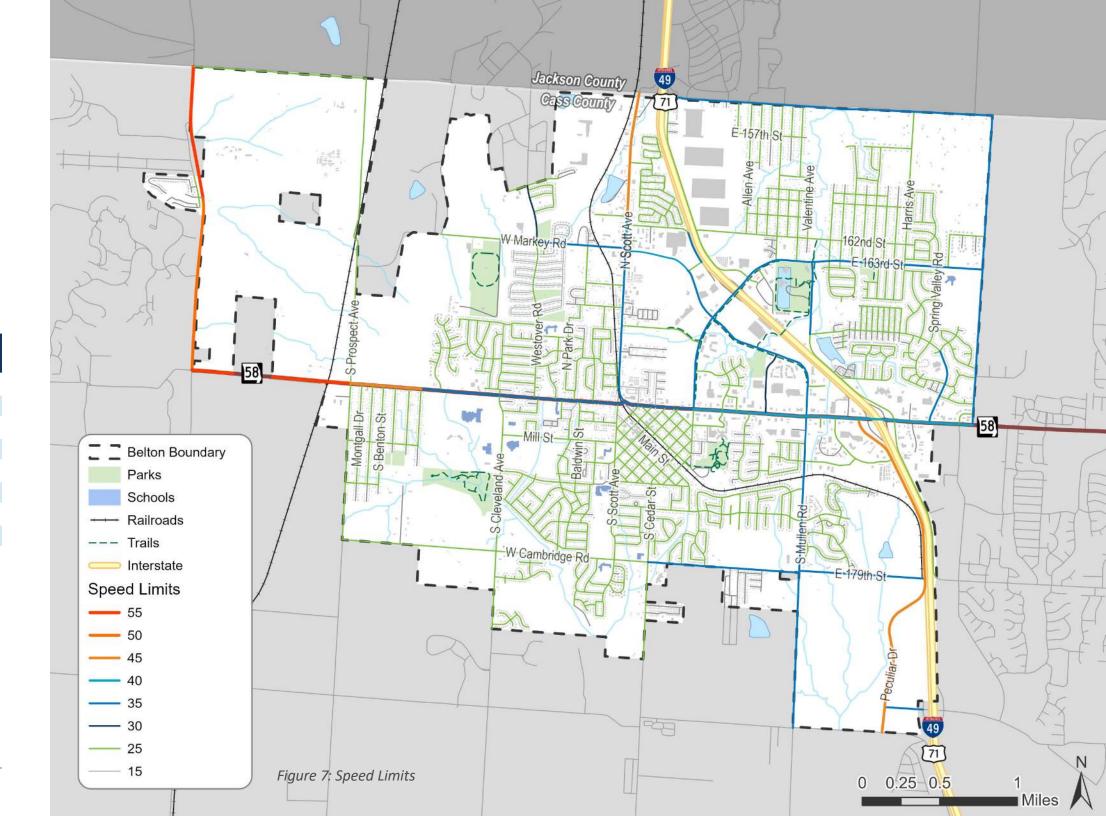
Most speed limits on state-owned roads in the City of Belton range between 35 and 55 mph, with a few exceptions:

- S Cedar Avenue is posted at 25 mph, reflecting its more residential or pedestrian-oriented character.
- I-49 has higher speed limits, ranging from 65 to 70 mph, consistent with its function as a high-speed regional corridor.

On city-maintained roads, residential streets are typically posted at 25 mph, while major arterial roads—which carry higher volumes of traffic—are generally posted at 35-45 mph.

Table 4: Speed Limits

SPEED LIMIT	LOCAL ROADS (MILES)	STATE ROADS (MILES)	TOTAL (MILES)
15	5	0	5
25	90	2	92
30	1	0	1
35	15	2	17
40	0	2	2
45	3	0	3
50	0	2	2
55	0	3	3
65	0	13	13



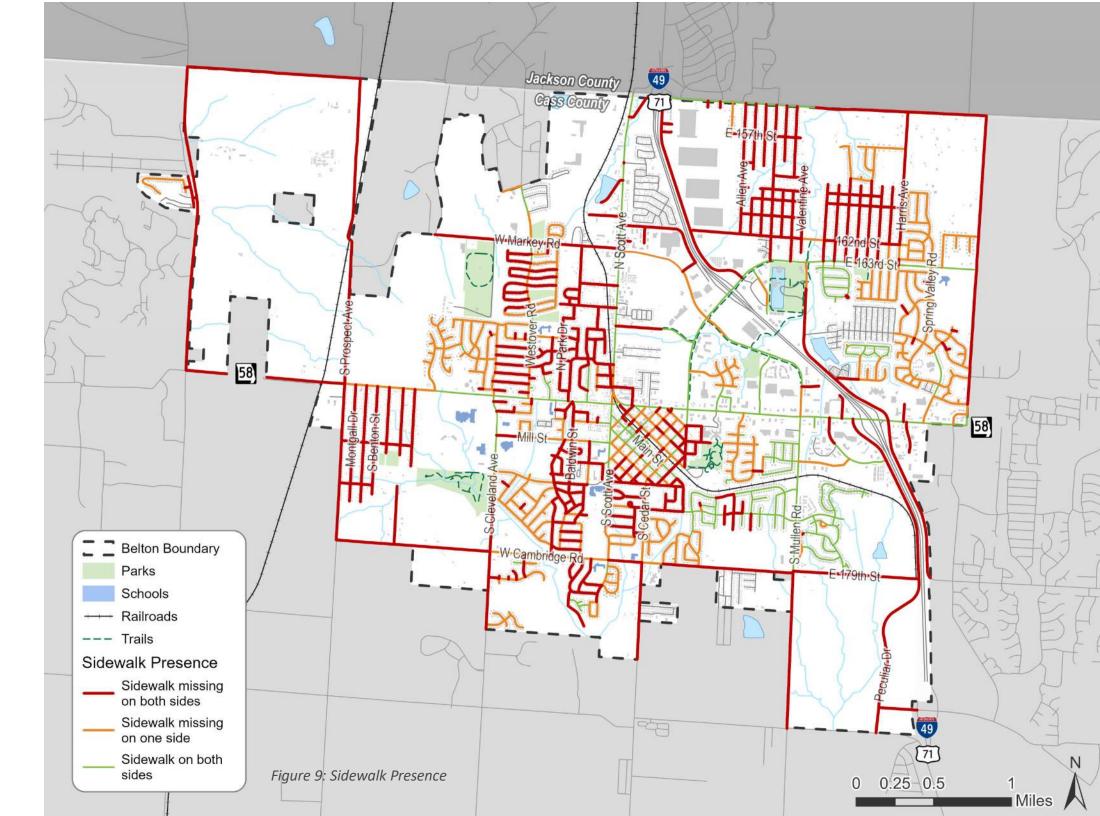
SIDEWALKS

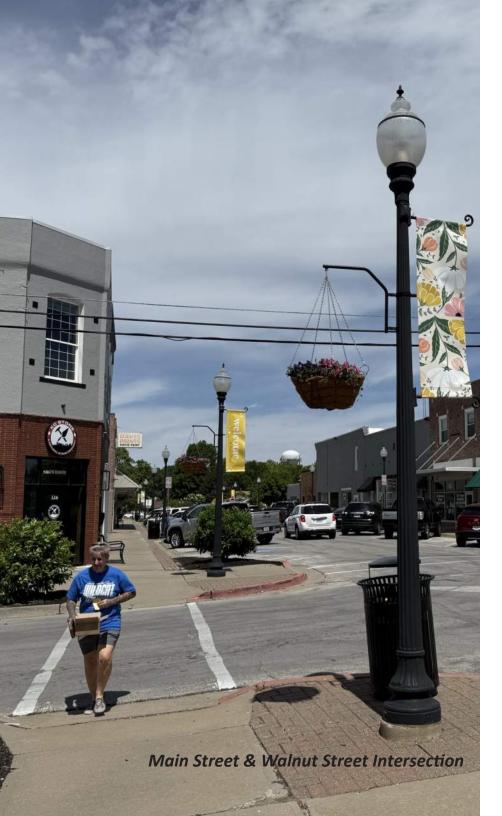
Sidewalks are a fundamental element of a safe and accessible transportation network. They provide a dedicated space for pedestrians, reduce conflicts with vehicles, and enhance overall road safety—particularly for VRUs such as children, seniors, and people with disabilities. Sidewalks support safe travel to schools, parks, and local businesses, and are essential for road users who do not drive or do not have access to a vehicle.

In addition to improving physical safety, sidewalks promote healthy and active living, encourage walking as a viable mode of transportation, and contribute to a community's overall connectivity and quality of life; however, in areas with gaps in the sidewalk network, pedestrians are often forced to walk in the street or along unpaved shoulders, increasing exposure to vehicle traffic and crash risk. Figure 8 and Figure 9 highlight the extent of this infrastructure particularly on local roads, where 99 out of 122 miles of roadway segments either lack sidewalks entirely or have sidewalks on only one side.



Figure 8: Sidewalk Gaps by Mile





CHAPTER 4: SAFETY ANALYSIS

MoDOT data from 2019 to 2023 was used to conduct a safety analysis of the City of Belton. This analysis assessed various roadway safety conditions and crash trends. Upon completion, the project team reviewed the findings with the Task Force, incorporating their feedback to identify the most vulnerable locations within the City of Belton.

CRASH SEVERITY AND TRENDS

Of the 3,432 total crashes, 1,169 (34%) occurred on local roads. Among the nine fatal crashes, none of them took place on local roads. 20 of the 57 serious injury crashes (35%) occurred on local roads. In total, fatal and serious injury crashes on local roads accounted for approximately 30% of all such high-severity crashes in the City of Belton.

2% OF ALL CRASHES IN THE CITY OF BELTON ARE FATAL OR SERIOUS INJURY

Table 5: KSI Crashes by Mode

MODE	LOCAL ROADS	STATE ROADS	TOTAL
Micromobility	4	0	4
Motorcycle	3	8	11
Passenger Vehicle	10	31	41
Pedestrian	3	7	10

Table 7: Traffic Control KSI Crash Summary

TRAFFIC CONTROL TYPE	LOCAL ROADS	STATE ROADS	TOTAL
Four – Way Stop	1	0	1
Non – Intersection	12	24	36
Signal	2	16	18
Two – Way Stop	5	6	11

Table 6: Functional Classification KSI Crash Summary

MODE	LOCAL ROADS	STATE ROADS	TOTAL
Interstate	0	16	16
Principal Arterial	5	27	32
Minor Arterial	2	3	5
Major Collector	2	0	2
Minor Collector	4	0	4
Local Road	6	0	6
Private	1	0	1

Table 8: Speed Limits KSI Crash Summary

SPEED LIMITS	LOCAL ROADS	STATE ROADS	TOTAL
25	12	3	15
35	6	3	9
40	0	23	23
45	2	0	2
55	0	2	2
65	0	15	15

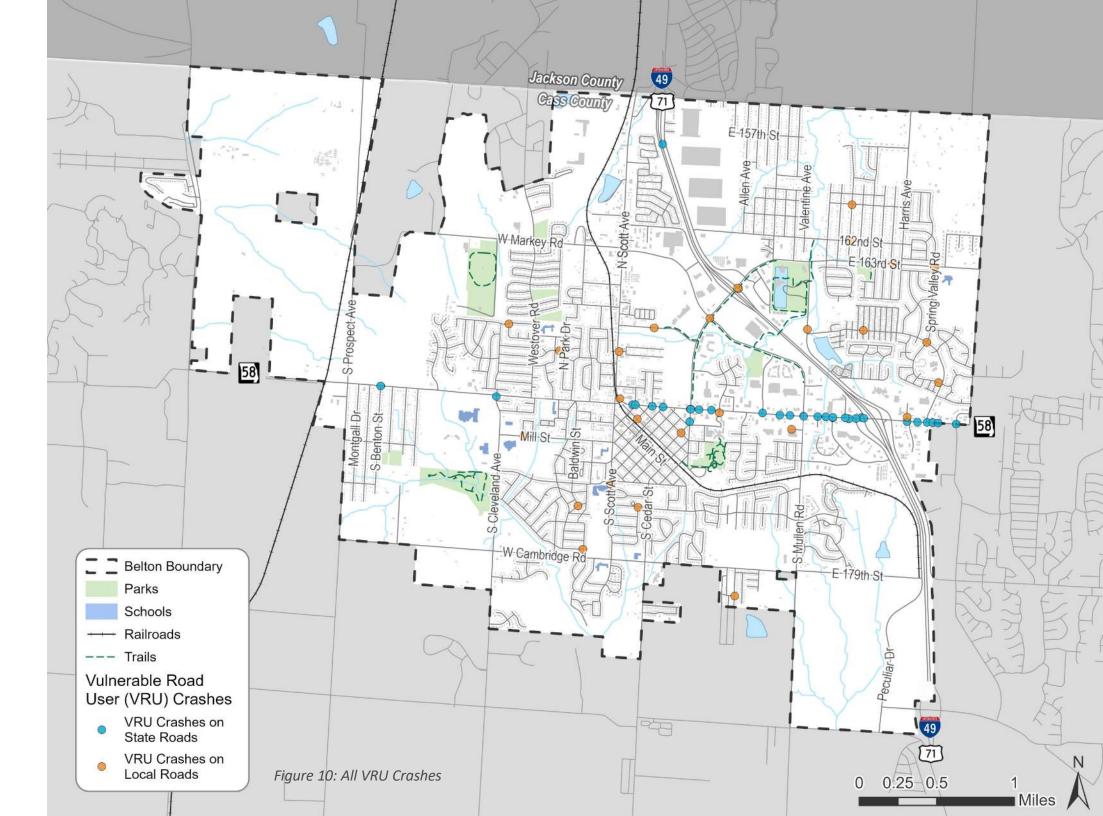
PEDESTRIAN SAFETY ANALYSIS

Bicyclists and pedestrians are considered VRUs and are much more likely to experience a serious injury or fatality from a crash in comparison to other road users. VRUs make up a disproportionate number of fatal and serious injury crashes in the City of Belton with nearly 20% of total fatal and serious Injury crashes. A VRU is anyone not in a motor vehicle who is at higher risk on the road, such as pedestrians, bicyclists, other cyclists (like those on scooters or skateboards), and highway workers on foot in work zones. This definition does not include motorcyclists.

Table 9 and Figure 10 show that pedestrians were more frequently involved in suspected serious injury and fatal crashes (11) compared to bicyclists (0). While minor injuries were the most common outcome for both groups, pedestrian crashes still exceeded bicyclist crashes.

Table 9: Pedestrian and Bicycle KSI Crash Summary

SEVERITY	LOCAL ROAD	STATE ROADS	TOTAL				
PEDESTRIAN PEDESTRIAN							
Fatal	0	1	1				
Serious Injury	3	7	10				
Minor Injury	6	6	12				
PDO	5	7	12				
	BIC	/CLE					
Fatal	0	0	0				
Serious Injury	0	0	0				
Minor Injury	7	7	14				
PDO	6	6	12				

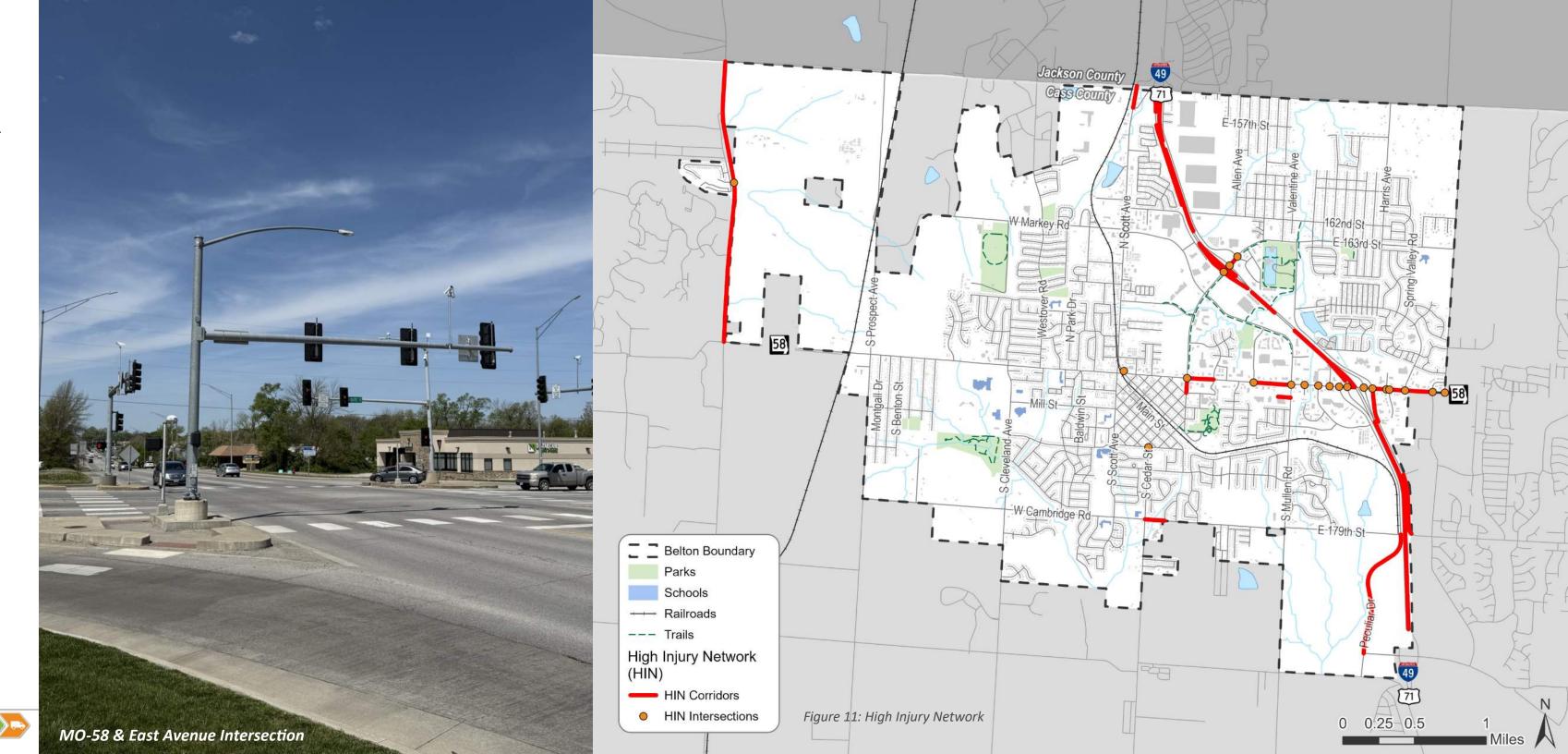


HIGH INJURY NETWORK

WHAT IS A HIGH INJURY NETWORK?

The High Injury Network (HIN) shows where the most fatal and serious injury crashes are happening in the City of Belton. It is used to identify locations where safety improvements should be prioritized. The streets that comprise the network are shown in Figure 11. The HIN is only based on where fatal or serious injury crashes occur, not where they could potentially occur.

OUT OF THE CITY OF BELTON'S 162 MILES OF ROADWAY, 7% HAVE BEEN DESIGNATED AS PART OF THE HIN



CITY OF BELTON'S HIGH INJURY NETWORK

CORRIDORS

Out of the 3,432 crashes, 2,263 (66%) of them occurred on state roads. All nine fatal crashes took place on state owned roads. 37 of the 57 serious injury crashes (65%) occurred on state roads. In total, fatal and serious injury crashes on state roads accounted for 70% of all such high-severity crashes in the City of Belton.

Most of the HIN is concentrated along I-49, with additional high-injury corridors identified on MO-58 and Holmes Road on the west side of the city. These HIN Corridors are detailed in Table 10.

Table 10: High Injury Network Corridors

HIN CORRIDOR NAME	EXTENTS	LENGTH (MILES)	SAFETY CONCERNS	FATAL AND SERIOUS CRASHES ON HIN CORRIDOR SEGMENTS
NB I-49	MO-58 to N Cass Pkwy	1.94	Run off the road	1
SB I-49	N 163rd St to MO-58	1.22	Front to front, front to rear, sideswipe, run off the road	7
SB I-49	E 155th St to N 163rd St	1.45	Sideswipe, run off the road	4
NB I-49	E 155th St to N 163rd St	1.45	Run off the road	3
MO-58	Peculiar Drive to 163rd St	1.07	Angle, pedestrian crossing major road at non- intersection, left turn at unsignalized intersection on major road	4
MO-58	S Outer Rd to Peculiar Drive	0.23		0
MO-58	Kentucky Rd to S Outer Rd	0.51	Front to rear, rear ended at intersection on major road, pedestrian crossing major road at non-intersection	5
Holmes Rd	E 155th St to E 171st St	2.18	Run off the road	1
Cambridge Rd	S Cedar St to S Scott Ave	0.14	Run off the road	1
Peculiar Drive	E Cambridge Rd to N Cass Pkwy	0.94	Run off the road	1
N Scott Ave	Arnold Ave to Scott Annex	0.15	Front to rear	1
Harmon Drive	MO-58 to W Lucy Webb Rd	1.07		0
Y Hwy	MO-58 to Central Ave	0.10	Run off road, pedestrian crossing minor street at non-intersection	2

INTERSECTIONS

There are 21 intersections on the HIN. Most of these intersections are located on MO-58, shown in Table 11.

Table 11: High Injury Network Intersections

HIN INTERSECTION NAME	SAFETY CONCERNS	FATAL AND SERIOUS CRASHES IN HIN INTERSECTION
MO-58 and Peculiar Drive	**	0
MO-58 and Powell Pkwy	Angle, red light running	2
MO-58 and Cunningham Industrial Pkwy		0
MO-58 and S Outer Rd	Angle, front to rear	4
MO-58 and east side of I-49 on/off ramps	Angle	1
MO-58 and Bel-Ray Blvd	Angle, front to front	2
Cedar St and E South Ave	Run off the road	1
MO-58 and west side of I-49 on/off ramps	Pedestrian crossing major road at non-intersection	1
Holmes Rd and 166th St	Angle	1
MO-58 and N Cedar St	Front to rear	1
E 163rd St and east side of I-49 on/off ramps		0
E 163rd St and west side of I-49 on/off ramps	Angle	1
MO-58 and N Mullen Rd	Angle	1
MO-58 and Starlight Drive		0
MO-58 and Clint Drive	Left turn at signalized intersection on major road	1
MO-58 and Kentucky Rd		0
MO-58 and Towne Center Drive	Angle	1
E 163rd St and Pointe Drive		0
MO-58 and W North Ave		0
MO-58 and Aaron Lane		0
MO-58 and Bel-Ray Place	Front to rear	1

^{**} Signal removed as of Summer 2025.

LOCATED ON STATE OWNED ROADS

HIGH RISK NETWORK

WHAT IS A HIGH RISK NETWORK?

The High-Risk Network (HRN) identifies road segments and intersections with a higher likelihood of fatal or serious injury crashes. This analysis is influenced by various risk factors such as road conditions, traffic congestion, etc. The HRN is shown in Figure 12.

26% OF THE CITY OF BELTON'S 162 MILES OF ROADWAY HAVE BEEN DESIGNATED AS PART OF THE HRN



CITY OF BELTON'S HIGH RISK NETWORK

The HRN, detailed in Table 12, encompasses much of the downtown area and its surrounding neighborhoods, classifying them as moderate to highest risk. Additionally, all roads surrounding schools in the City of Belton have been identified as part of the HRN, highlighting areas with elevated safety concerns.

Table 12: High Risk Network Corridors

HRN CORRIDOR NAME	EXTENTS	LENGTH (MILES)	FUNCTIONAL CLASS	NUMBER OF LANES
MO-58	N Scott Ave to S Prospect Ave	2.08	Principal Arterial	3
MO-58	E 163rd St to N Scott Ave	0.44	Principal Arterial	3
MO-58	Peculiar Drive to 163rd St	1.07	Principal Arterial	5
MO-58	S Outer Rd to Peculiar Drive	0.23	Principal Arterial	5
MO-58	Bel-Ray Blvd to S Outer Rd	0.23	Principal Arterial	5
Kentucky Rd	Hardee St to MO-58	0.37	Minor Arterial	2
Kentucky Rd	E 161st St to E 136rd St	0.21	Minor Arterial	2
E 163rd St	Kentucky Rd to Oakland Ave	0.92	Principal Arterial	4
E 163rd St	Cornerstone Drive to MO-58	1.07	Principal Arterial	4
N Scott Ave	W Markey Rd to MO-58	1.00	Principal Arterial	3
S Prospect Ave	MO-58 to W Cambridge Rd	1.00	Principal Arterial	2
W Cambridge Rd	S Mullen Rd to S Cleveland Ave	1.96	Principal Arterial	2
S Mullen Rd	MO-58 to W Cambridge Rd	1.00	Principal Arterial	4
S Cedar St	MO-58 to W Cambridge Rd	1.09	Minor Arterial	2
S Cedar St	W Cambridge Rd to Leisure Lane	0.33	Principal Arterial	2
S Cleveland Ave	MO-58 to Timber Creek Drive	1.17	Minor Arterial	2
S Outer Rd	Springdale Drive to MO-58	0.81	Major Collector	2
Harmon Drive	MO-58 to Custom Steel Mfg	0.81	Major Collector	2
Peculiar Drive	MO-58 to Cunningham Pkwy	0.36	Major Collector	2
Pointe Drive	E 162nd St to Stone Ridge Drive	0.56	Major Collector	2
Turner Rd	Electric Facility to N Scott Ave	0.31	Major Collector	2
Westover Rd	Tumbleweed Place to Shawn Drive	0.38	Minor Collector	2
Mill St	S Scott Ave to S Cleveland Ave	0.73	Minor Collector	2
Old Town Belton	Old Town Belton	6.70	Major Collector, Local Road	1, 2
S Scott Ave	MO-58 to Melody Lane	0.72	Minor Collector	2
E South Ave	Main St to S Scott Ave	0.49	Local Road	2
Catron Ave	Maier Drive to S Cedar St	0.25	Minor Collector	2
Maier Drive	E South Ave to Catron Ave	0.16	Local Road	2
Shady Lane	E Hargis Ave to MO-58	0.11	Local Road	2
Winesap Court	Dauphine St to Apple Bottom Lane	0.06	Local Road	2
Meadow Creek Pkwy	Cottage Circle to S Outer Rd	0.08	Minor Collector	2
Cerrito Drive	MO-58 to End of Road	0.50	Local Road	2

HRN CORRIDOR NAME	EXTENTS	LENGTH (MILES)	FUNCTIONAL CLASS	NUMBER OF LANES
Monte Verde Drive	MO-58 to End of Road	0.43	Local Road	2
Chula Vista Drive	MO-58 to Country View Park	0.43	Local Road	2
S Benton Drive	MO-58 to End of Road	0.70	Local Road	2
Chestnut Drive	MO-58 to End of Road	0.75	Local Road	2
Montgall Drive	MO-58 to End of Road	0.75	Local Road	2
E 174th St	Cerrito Drive to S Prospect Ave	0.45	Minor Collector	2
E 176th St	S Benton Drive to S Prospect Ave	0.21	Minor Collector	2
Belton Ave	Markey Rd to King Ave	0.38	Minor Collector	2
King Ave	N Scott Ave to N Park Drive	0.27	Minor Collector	2
Myron Ave	N Scott Ave to Belton Ave	0.24	Local Road	2
N Park Drive	King St to Manor Drive	0.68	Local Road	2
Hawthorne Court	Berry Ave to Airway Lane	0.10	Local Road	2
Airway Lane	Hawthorne Court to Berry Ave	0.06	Local Road	2
Berry Ave	Airway Lane to Carnegie St	0.17	Local Road	2
Sunset Lane	Berry Ave to Manor Drive	0.12	Local Road	2
Hawthorne Drive	Sunset Lane to Redbud Lane	0.04	Local Road	2
W Washington St	N Scott Ave to Berry Ave	0.10	Local Road	2
W Hargis St	N Scott Ave to Berry Ave	0.10	Local Road	2
Baldwin St	MO-58 to Sunrise Drive	0.52	Minor Collector	2
Spring Street	S Scott Ave to Baldwin St	0.24	Local Road	2
Colbern St	Mill St to Westside Drive	0.24	Local Road	2
W Walnut St	S Scott Ave to Baldwin St	0.25	Local Road	2
W Sunrise Drive	S Scott Ave to Lacy Lane	0.33	Local Road	2
Cunningham Industrial Pkwy	MO-58 to Alliance Title	0.04	Major Collector	2
Valentine Ave	162nd St to End of Road	0.47	Local Road	2
Terry Ave	163rd St to E 155th St	0.91	Local Road	2
Lawrence Ave	162nd St to E 155th St	0.66	Local Road	2
Vicie Ave	163rd St to E 155th St	1.00	Minor Collector	2
Ann Ave	162nd St to E 155th St	0.70	Local Road	2
Kay Ave	163rd St to E 155th St	0.66	Local Road	2
Allen Ave	163rd St to E 155th St	0.84	Local Road	2
White Drive	E 157th St to E 155th St	0.61	Local Road	2
E 161st St	Valentine Ave to Allen Ave	0.40	Local Road	2
E 160th Ter	Valentine Ave to Kay Ave	0.33	Local Road	2
E 160th St	Valentine Ave to Ann Ave	0.32	Local Road	2
E 159th St	Valentine Ave to Vicie Ave	0.20	Local Road	2
E 157th St	Terry Ave to White Drive	0.49	Local Road	2

HIGH INJURY + HIGH RISK NETWORK

CITY OF BELTON'S HIN + HRN

Together the HIN and HRN encompass over 33% of roads in the City of Belton. Figure 13 illustrates these roads.

EMPHASIS AREAS

The City of Belton isn't alone in envisioning a future without traffic fatalities. That's also the goal of MoDOT's Show-Me Zero, Driving Missouri Toward Safer Roads, the Missouri Strategic Highway Safety Plan (SHSP) for 2021-2025.

The emphasis areas outlined are drawn from the SHSP and have been tailored to reflect the specific safety challenges and community priorities within the City of Belton. These focus areas were selected based on a combination of crash data analysis and direct input received through public involvement events, ensuring that both technical evidence and community concerns are considered. These six emphasis areas will help guide the development of actionable recommendations and infrastructure improvements throughout the BTSAP.

VRUs

• VRUs make up a disproportionate number of fatal and serious injury crashes with nearly 20% of total crashes from 2019 to 2023.

Younger Drivers (15-24)

• Analysis of drivers ages involved in fatal and serious injury crashes reveals that the highest number of these incidents occurred among drivers aged 17 to 24.

Older Drivers (65+)

• According to the SHSP, nearly one-third of Missouri traffic fatalities involved either a younger (age 15-20) or older (age 65 or older) driver. In the City of Belton, 42% of fatal and serious crashes involved younger or older drivers.

Recreational Vehicles

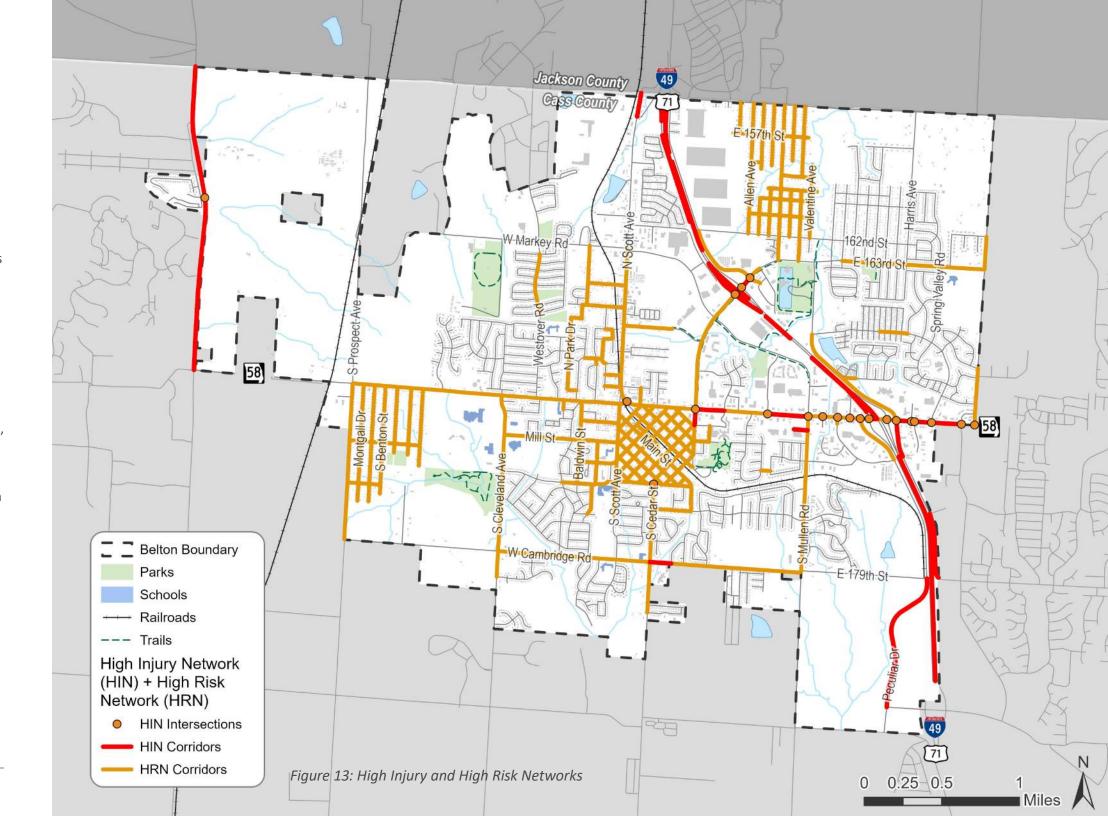
• During the public engagement process the focus groups and stakeholders were concerned with the increase in recreational vehicles usage in the City of Belton and were interested in exploring ways to best address this trend to keep every road user safe. This emphasis area focuses on safety concerns related to lowspeed and off-highway vehicles, including Recreational Off-Highway Vehicles (ROHVs), Utility Task Vehicles (UTVs), All-Terrain Vehicles (ATVs), and motorized bicycles, which may operate on or near roadways and interact with other modes of travel. In the City of Belton, three motorized bicycles were involved in serious injury crashes from 2019-2023.

Intersections

• Intersections concentrate multiple travel movements—vehicles, pedestrians, and cyclists—into a single location, increasing the potential for conflicts. Rearend collisions, often caused by distracted driving or sudden stops, are particularly common in these areas. In fact, rear-end crashes are the most frequent crash type in the City of Belton, accounting for 1,150 of 3,432 total crashes between 2019 and 2023—with 66% of them occurring at intersections. Overall, 45% of all fatal or serious injury crashes and 68% of VRU crashes occurred at intersections.

Roadway Departure

• Roadway departure crashes account for 33% of all fatal and serious injury crashes, making them the most common type of crash in the Crash Type analysis. These crashes occur when vehicle(s) left the roadway and struck a fixed object, overturned, or exited the travel way.





CHAPTER 5: POLICY AND PROCESS

Roadway safety and connectivity are key priorities in the City of Belton's recent planning initiatives. Whether focusing on specific corridors like North Scott, revitalizing districts such as downtown, or addressing citywide goals through the Belton Comprehensive Plan 2050, the City of Belton has consistently emphasized the importance of a transportation system that is safe, accessible, and comfortable for all users.

As part of this effort, the project team reviewed the most recent and relevant local plans to identify transportation safety recommendations. This analysis highlighted five core community priorities:

- Improving traffic flow and roadway efficiency to enhance both convenience and safety
- Fostering regional connectivity to strengthen links within and beyond the city
- Enhancing pedestrian mobility and safety for a more walkable community
- Expanding sidewalks and trails to support active transportation options
- Improving streetscape and aesthetics to create more inviting public spaces

The BTSAP builds on these foundational efforts by advancing these priorities through a range of proven, actionable strategies aimed at addressing safety concerns and improving connectivity.

Detailed overviews of the supporting planning efforts and their relevance to this plan are described in the following pages.



Table 13: Plan Review

PLAN NAME	PLAN SUMMARY	SUPPORTED GOALS AND OBJECTIVES
Belton Comprehensive Plan 2050	The vision for the comprehensive plan is to "cultivate a vibrant community that is accessible, connected, and forward-thinking. In our pursuit of excellence, Belton is dedicated to providing high-quality services that enhance the health and safety of residents".	 Increase mobility and connections within the City of Belton, including improved roadway, trail, and sidewalk connections. Prioritize safety improvements for all modes of travel throughout the community with potential funding sources. Update street design standards and classifications to improve efficiency, safety, and accessibility. Utilize the Complete Streets Resolution to enhance safety and mobility throughout the City of Belton. Upgrade streetscapes with improved landscaping and infrastructure, re-activate the historic downtown street grid, and improve sidewalks and connectivity.
Belton Downtown Design Guidelines	Focus on revitalizing the downtown area through strategies such as rehabilitating existing buildings, establishing uniform streetscapes, and preserving the historic character of Main Street. Promote mixed-use and transit-oriented development along prominent corridors and MO-58.	 Improve sidewalks, lighting, and parking scheme of Main Street to improve the pedestrian environment. Identify and redevelop Gateway Corridors using transit- oriented development to expand and enhance safety, accessibility, and the pedestrian environment.

BELTON COMPREHENSIVE PLAN 2050

The Belton Comprehensive Plan 2050 marked the city's first major update since 1992. Over the past three decades, the City of Belton has experienced significant growth, both in population and in the development of new businesses and community assets. Throughout the planning and public engagement process, residents consistently emphasized the importance of connectivity and having a range of transportation options.

The final plan identified five key goals aimed at enhancing connectivity and building a more accessible community for all. These goals include:

- Ensuring adequate right-of-way to support future growth
- Coordinating and expanding the city's trail network
- Designing complete streets that accommodate all modes of transportation

The BTSAP builds on these goals by introducing the HIN and HRN, along with targeted safety countermeasures outlined in Chapter 6 and implementation strategies detailed in Chapter 7.

Goals and Objectives Supported by the BTSAP

- Prioritize safety improvements for all modes of travel throughout the community
- Follow the cross section recommendations to promote complete street elements where applicable
- Improve sidewalk conditions throughout the community by developing a prioritization plan for improvements
- Increase multi-modal connections throughout the City of Belton

Overlap with the HIN or HRN

- North Scott Avenue
- Enhance pedestrian mobility through streetscape improvements, such as updated sidewalks, improved intersection crossings, and signage/lighting. Pedestrian safety throughout the corridor was a major concern of residents and business owners.
- Complete the proposed intersection and roadway extensions from Markey Road to Markey Parkway, Givan Avenue, and the North Scott Avenue/58 Highway intersection.
- Support and pursue the proposed rails-to-trails project for the conversion of the existing rail line extending from 155th Street south to Memorial Park into a community trail.
- Old Town
- Consider the conversion of Main Street from a partial one-way road to a full two-way road.
- Implement streetscaping improvements, such as wayfinding signage, plantings, lighting, and crosswalks, to enhance the pedestrian experience and aesthetics of Old Town.
- Work to fill missing gaps in the sidewalk in and around Old Town and connect into the greater trail network to support community-wide mobility.
- Graham-Effertz Area
- Complete extensions for N. Cass Parkway.
- Build high-quality streetscaping elements.



Figure 14: Belton Comprehensive Plan 2050 Cover





CHAPTER 6: COUNTERMEASURE STRATEGIES

ACTIONS

Safety improvements are essential to reduce overall roadway safety risk, especially for pedestrians walking and crossing the roadway. The implementation actions are guided by the Vision Zero resolution, which aims to eliminate all fatal and serious injury crashes, along with specific goals that direct the recommended actions in support of the vision. The following actions are recommended to reduce risk on these roadways and are divided into three categories: local roadways owned and maintained by the City of Belton, state roadways managed by MoDOT, and the pedestrian network across the City of Belton.

Each of the following recommended actions received estimated costs and approximate timeframes to implement the action. Responsible agencies to carry out the action were identified as well as the most relevant emphasis areas that the action addresses.

Timeframes:

- Near-term Implemented within 5 years
- Mid-term Targeted for 5 to 10 years
- Long-term Envisioned for 10 years or more

Estimated Cost:

- Low Less than \$100,000 to implement
- **Medium** \$100,000 to \$500,000 to implement
- High More than \$500,000 to implement

PROJECT PRIORITIZATION

Projects have been prioritized to guide implementation moving forward, however, all projects identified are important to the overall safety of the City of Belton's transportation network. Prioritization within this plan exists as a tool to identify the ideal timeframe for executing each project. Prioritization is not intended to strictly guide when projects should or can happen. The City of Belton should pursue all opportunities presented to implement the BTSAP, even if that means implementation is out of prioritization order.

All identified projects in each tier are of equal importance. Letters are used to identify projects and do not indicate one project is more important than another.



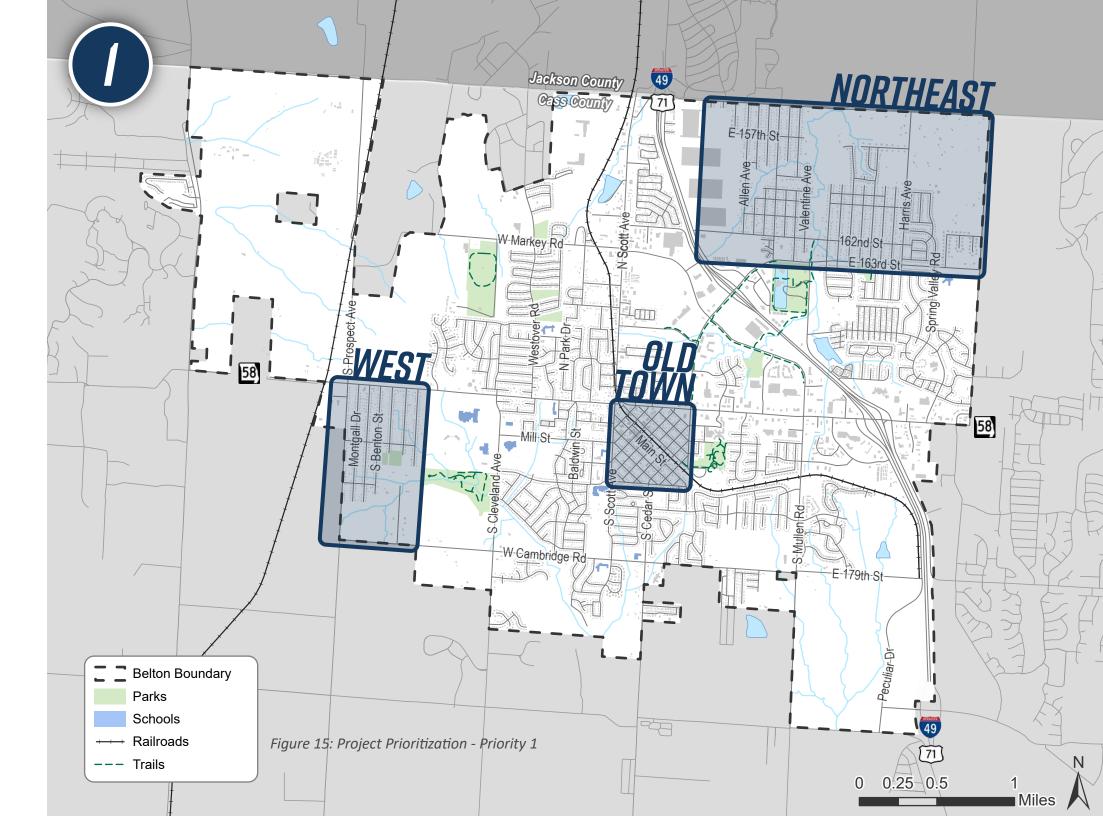
PRIORITY 1

Priority 1 projects are those that received significant support through public engagement, improve safety within the HRN, and are within the City of Belton's jurisdiction. Priority 1 areas are shown in Figure 15.

Complete roadway safety improvements in Old Town, Northeast Belton, and West Belton.

Table 14: Project Prioritization - Priority 1

ACTION	TIMEFRAME	ESTIMATED COST	RESPONSIBLE AGENCY	EMPHASIS AREA			
OVERALL RECOMMENDATIONS							
Upgrade to complete streets to provide sidewalk infrastructure at current city standards.	Near	High	City of Belton	VRU			
Install high visibility crosswalks to increase driver awareness of pedestrians crossing the road.	Near	Low	City of Belton	VRU and Intersections			
	OLD TOWN SPECI	FIC RECOMMENDATION	S				
Review offset intersections of Old Town streets, major collectors, and arterials and identify and implement safety updates.	Near	High	City of Belton	VRU and Intersections			
Construction of the Frisco Corridor Trail as identified in the Belton Comprehensive Plan 2050.	Long	High	City of Belton	VRU			
NORTHEAST SPECIFIC RECOMMENDATIONS							
Provide pedestrian refuge islands on E 163rd Street to shorten the crossing distance for pedestrians.	Mid	Medium	City of Belton	VRU			



PRIORITY 2

Priority 2 projects are those that received some support through public engagement and are within the City of Belton's jurisdiction. Priority 2 projects may overlap with Priority 1 projects but are designed to standalone if opportunity arises to implement these projects prior to those within Priority 1.

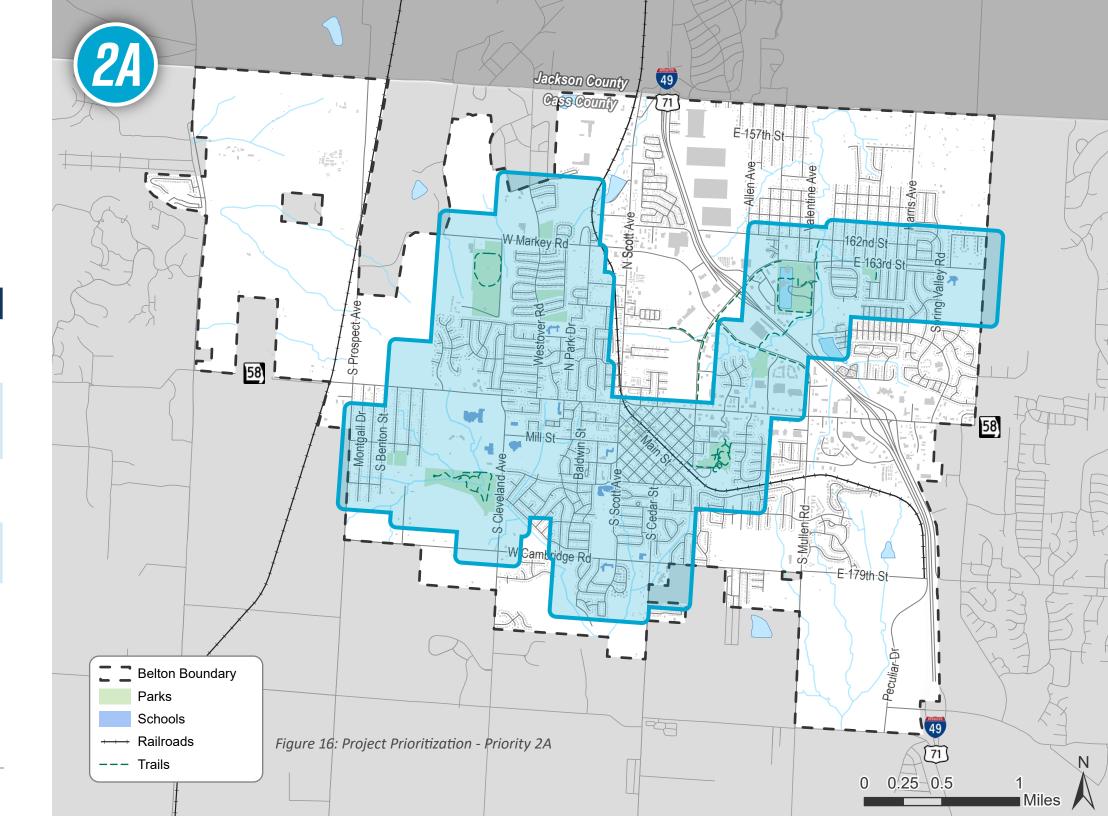


PRIORITY 2A

Complete roadway safety improvements within a ¼ mile of schools and parks. Portions of the City of Belton that are located within Priority 2A are shown in Figure 16.

Table 15: Project Prioritization - Priority 2A

ACTION	TIMEFRAME	ESTIMATED COST	RESPONSIBLE AGENCY	EMPHASIS AREA
Upgrade to complete streets to provide sidewalk infrastructure at current city standards.	Near	High	City of Belton	VRU
Install crosswalks where partial sidewalks are present and create high visibility crosswalks at intersections near schools, parks, and community amenities to increase awareness of pedestrians crossing the road.	Near	Low to Medium	City of Belton	VRU and Intersections
Provide pedestrian refuge islands on multi-lane roadways to shorten the crossing distance for pedestrians.	Mid	Medium	City of Belton	VRU
Include advanced stop bars at controlled intersections to encourage drivers to stop in advance of pedestrian crossings.	Near	Low	City of Belton	VRU
Improve circulation on W North Avenue and South Cleveland Avenue near Belton High School and Mill Creek Elementary School.	Mid	Medium to High	MoDOT, City of Belton	Advances all Emphasis Areas



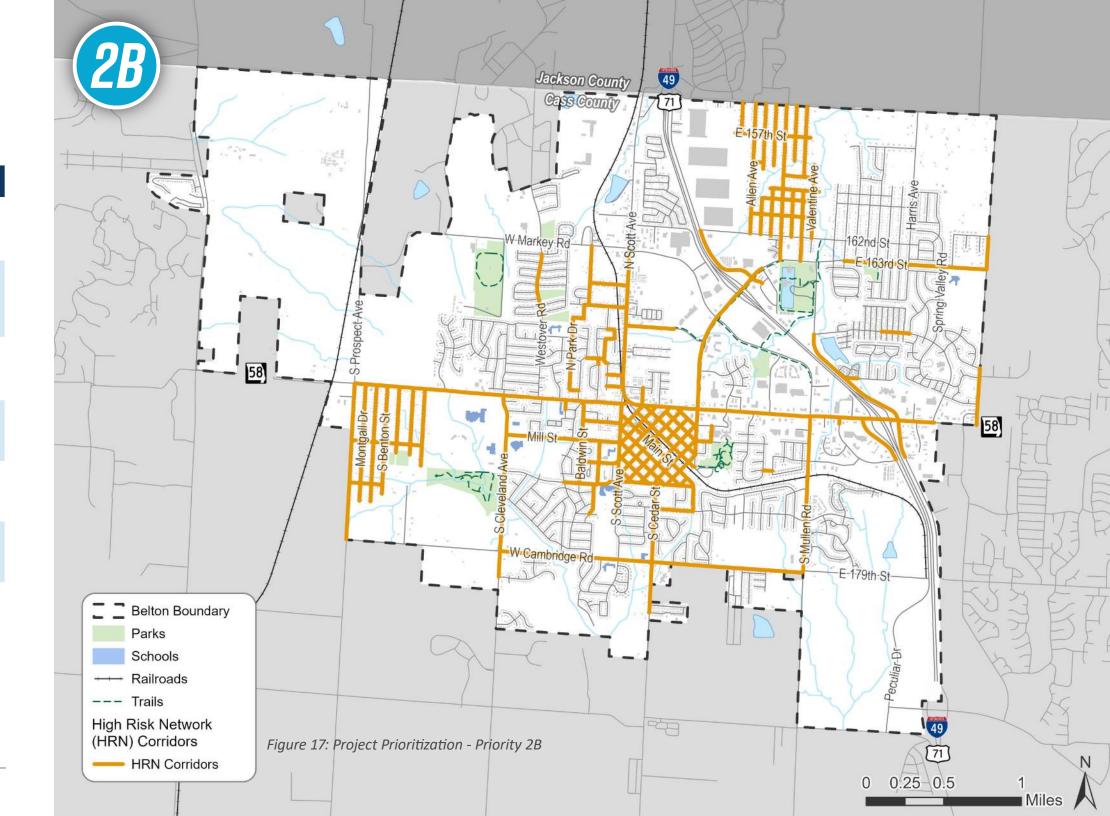


PRIORITY 2B

Complete roadway safety improvements along the HRN. The HRN is shown in Figure 17.

Table 16: Project Prioritization - Priority 2B

ACTION	TIMEFRAME	ESTIMATED COST	RESPONSIBLE AGENCY	EMPHASIS AREA
Upgrade to complete streets to provide sidewalk infrastructure at current city standards.	Near	High	City of Belton	VRU
Install crosswalks where partial sidewalks are present and create high visibility crosswalks at intersections near schools, parks, and community amenities to increase awareness of pedestrians crossing the road.	Near	Low to Medium	City of Belton	VRU and Intersections
Provide pedestrian refuge islands on multi-lane roadways to shorten the crossing distance for pedestrians.	Mid	Medium	City of Belton	VRU
Include advanced stop bars at controlled intersections to encourage drivers to stop in advance of pedestrian crossings.	Near	Low	City of Belton	VRU
Identify safety solutions for collectors at the intersections of major collectors/arterials.	Mid to Long	Medium	City of Belton, MoDOT	Advances all Emphasis Areas
Implement corridor access management on state owned roads to reduce the number of conflict points.	Mid	Medium	MoDOT	Intersections



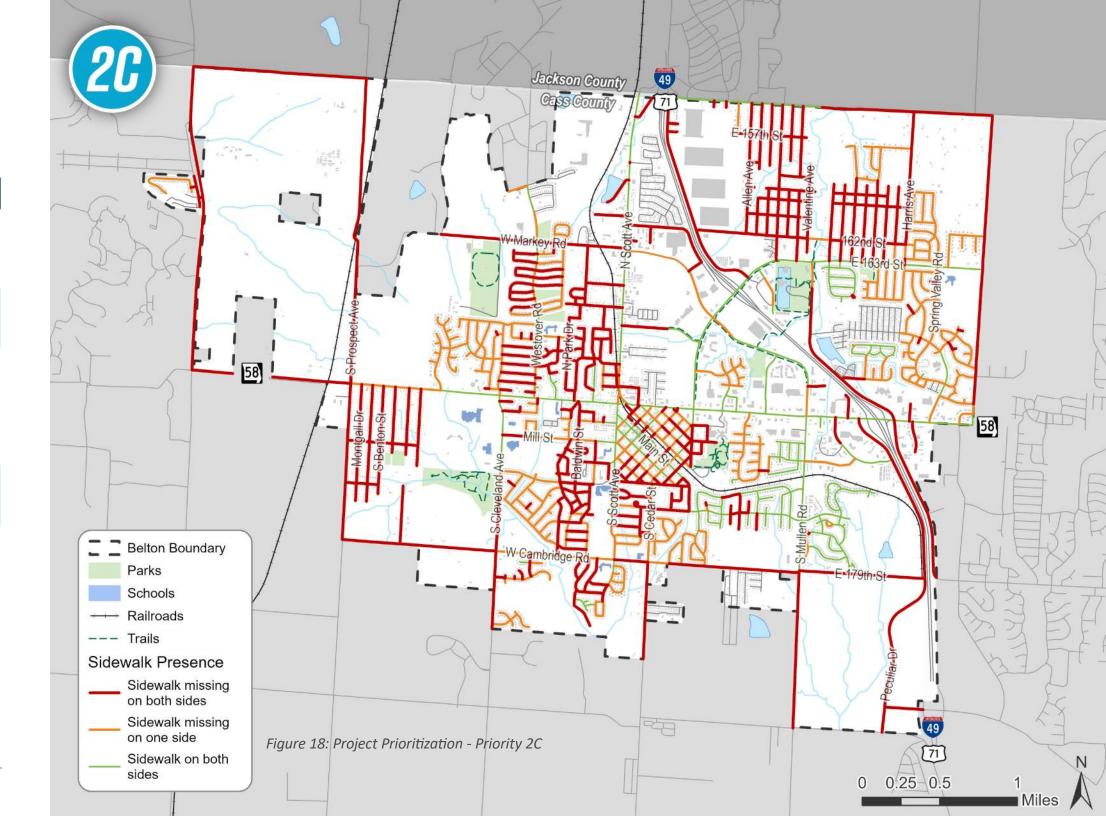


PRIORITY 2C

Close gaps in areas without sidewalks and with sidewalks on one side of the street. The presence of sidewalks in the City of Belton is shown in Figure 18.

Table 17: Project Prioritization - Priority 2C

ACTION	TIMEFRAME	ESTIMATED COST	RESPONSIBLE AGENCY	EMPHASIS AREA
Install crosswalks where partial sidewalks are present and create high visibility crosswalks at intersections near schools, parks, and community amenities to increase awareness of pedestrians crossing the road.	Near	Low to Medium	City of Belton	VRU and Intersections
Provide pedestrian refuge islands on multi-lane roadways to shorten the crossing distance for pedestrians.	Mid	Medium	City of Belton	VRU
Develop a sidewalk improvement program focusing on closing sidewalk gaps and improving sidewalk infrastructure. Construct sidewalks and perform a larger scale annual sidewalk spot replacement program that brings all existing sidewalks to meet the standards of the Public Right of Way Accessibility Guidelines (PROWAG).	Near	High	City of Belton	VRU
Upgrade to complete streets to provide sidewalk infrastructure at current city standards.	Near	High	City of Belton	VRU
Refer to and utilize the <u>FHWA's STEP Guide for Improving</u> <u>Pedestrian Safety at Uncontrolled Crossing Locations</u> when addressing pedestrian crossing issues.	Mid	Medium	City of Belton	VRU





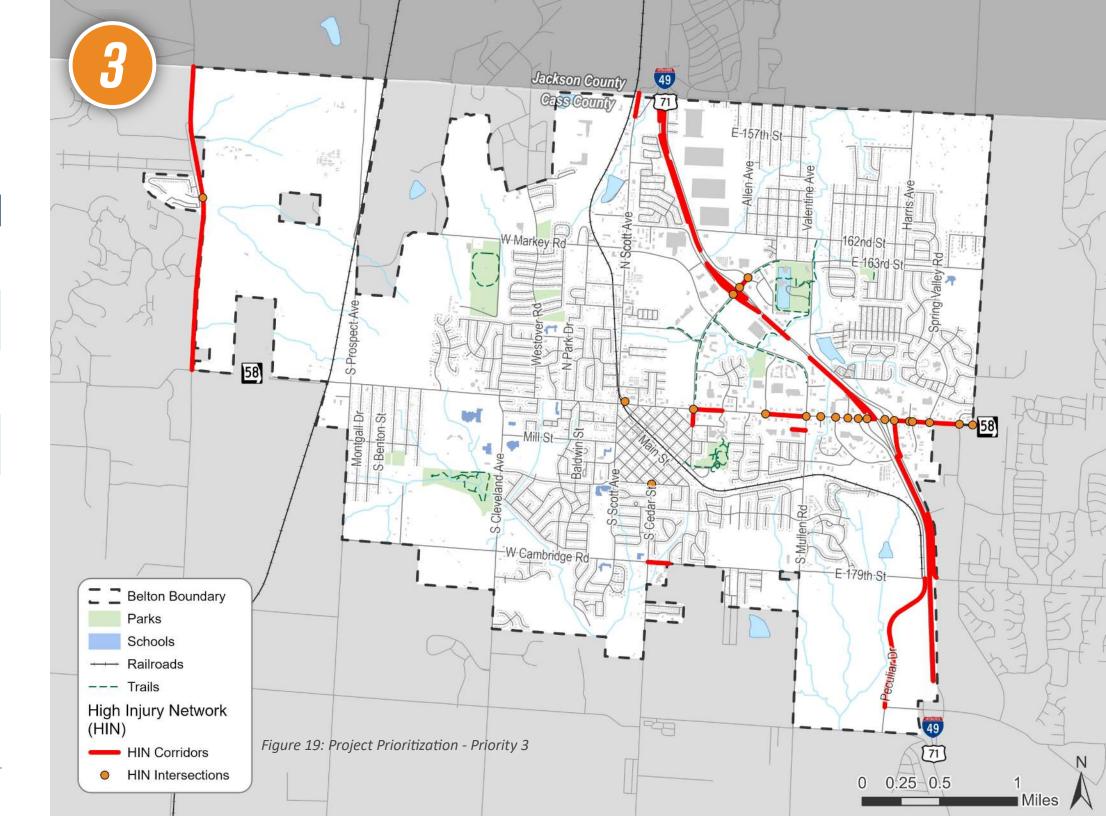
PRIORITY 3

Priority 3 projects are those that are largely outside of the City of Belton's jurisdiction and are primarily state roads. These projects will require additional MoDOT coordination and support to implement.

Complete roadway safety improvements along the HIN. The HIN is shown in Figure 19.

Table 18: Project Prioritization - Priority 3

ACTION	TIMEFRAME	ESTIMATED COST	RESPONSIBLE AGENCY	EMPHASIS AREA
Complete a study of MO-58/North Avenue and communicate the extent of safety issues on their roads in the City of Belton.	Mid	Medium	MoDOT	Advances all Emphasis Areas
Complete Holmes Road improvements.	Mid	High	MoDOT	Advances all Emphasis Areas
Use The Blueprint for Arterials in MoDOT's Kansas City District – especially when considering safety improvements on MO-58, Holmes Road, and Highway Y.	Near	Low	MoDOT	Advances all Emphasis Areas
Complete planned I-49 reconstruction project with safety improvements in 2028.	Long	High	MoDOT	Roadway Departure



SAFE SYSTEM RECOMMENDATIONS

The following recommendations are organized under each of the objectives of a Safe System as established by the FHWA, in pursuit of eliminating fatal and serious injuries in the City of Belton.

SAFER ROAD USERS

Encourage safe, responsible driving and behavior by people who use our roads, and create conditions that prioritize their ability to reach their destination unharmed.

ACTION	TIMEFRAME	ESTIMATED COST	RESPONSIBLE AGENCY	EMPHASIS AREA
Seek grants to expand the Belton School District's Driver Education Program.	Near	Low	Belton School District	Younger Drivers
Adopt a Primary Seatbelt Ordinance to allow officers to stop motorists who are not wearing seatbelts.	Near	Low	City of Belton	Advances all Emphasis Areas
Promote MoDOT's "Buckle Up, Phone Down" program to increase seatbelt usage and reduce distracted driving.	Near	Low	City of Belton, Belton School District	Advances all Emphasis Areas
Continue to support, develop, and coordinate with local TRACTION program.	Near	Low	Belton School District	Younger Drivers
Create informational brochures explaining how to use new roadway configurations in the City of Belton such as roundabouts and Diverging Diamond Interchanges (DDI).	Near	Low	City of Belton, Belton School District	Younger Drivers, Older Drivers, Intersections
Create informational brochures explaining the rules and regulations of owning and operating recreational vehicles such as ROHVs, ATVs, UTVs, and Motorized Bicycles like mini bikes.	Near	Low	City of Belton	Recreational Vehicles

SAFER ROADS

Design roadway environments to mitigate human mistakes and account for injury tolerances, to encourage safer behaviors, and to facilitate safe travel by the most VRUs.

ACTION	TIMEFRAME	ESTIMATED COST	RESPONSIBLE AGENCY	EMPHASIS AREA
Adopt a toolbox of traffic calming countermeasures, such as bump outs for use on local roads, to reduce speeding.	Mid	Low	City of Belton	VRUs
Work with Cass County to upgrade county roads prior to annexation into the City of Belton.	Long	Medium	City of Belton, Cass County	Advances all Emphasis Areas
Collaborate with neighboring communities such as Loch Lloyd, Kansas City, Raymore, and Cass County to address shared roadway safety issues.	Mid	Medium	City of Belton, Loch Lloyd, City of Kansas City, City of Raymore, Cass County	Advances all Emphasis Areas

SAFER SPEEDS

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

ACTION	TIMEFRAME	ESTIMATED COST	RESPONSIBLE AGENCY	EMPHASIS AREA
Adopt design guidelines that support safe turning speeds at intersections.	Mid	Medium	City of Belton	Intersections
Review roadway design guidelines and determine if changes are necessary to support goals of the BTSAP.	Near	Low	City of Belton	Advances all Emphasis Areas



SAFER VEHICLES

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

ACTION	TIMEFRAME	ESTIMATED COST	RESPONSIBLE AGENCY	EMPHASIS AREA
Explore ways to improve the safety of the City of Belton's fleet vehicles. This could include the installation of intelligent speed assistance technology, collision avoidance systems, cameras, hands free phone/GPS holders in existing fleet vehicles and purchasing new vehicles with integrated safety technology.	Near	Low	City of Belton	Advances all Emphasis Areas
Implement additional safety measures on large vehicles operated by the City of Belton, such as sensors, high vision cabs, peep windows, cab-over-engine designs, additional mirrors, educational messaging, and enhanced driver safety.	Near	Low	City of Belton	Advances all Emphasis Areas

POST-CRASH CARE

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

ACTION	TIMEFRAME	ESTIMATED COST	RESPONSIBLE AGENCY	EMPHASIS AREA
Advocate for, identify, pursue, and allocate increased funding for Emergency Medical Services (EMS).	Near	Low	City of Belton	Advances all Emphasis Areas
Update traffic signals in high-traffic areas with vehicle pre- emption technology to turn signals red/green to move Emergency Response Vehicles through intersections quickly and safely.	Mid	Medium	City of Belton, MoDOT	Intersections
Support sending key personnel to Traffic Incident Management Responder Training (TIM Training).	Mid	Low	City of Belton	Advances all Emphasis Areas
Require regular training and simulations for emergency personnel focused on crash-related injuries, particularly in trauma care, extrication techniques, and dealing with VRU.	Mid	Medium	City of Belton	VRUs

PROVEN SAFETY COUNTERMEASURES

Proven Safety Countermeasures are strategies shown to effectively reduce roadway fatalities and serious injuries. These interventions, backed by extensive research and real-world success, are key to building safer transportation systems. The FHWA and other agencies have identified 28 countermeasures that can be adapted to different road environments based on local needs.

Implementing these countermeasures not only improves safety but also boosts community benefits by enhancing walkability, cutting down vehicle emissions, and creating healthier, more livable spaces. They can be applied quickly for immediate improvements or integrated into longer-term infrastructure projects. By adopting these evidence-based solutions, cities can reduce traffic-related injuries and deaths, ensuring both immediate and lasting safety improvements. These countermeasures should prioritize addressing safety issues on roads on the HIN and HRN.

LOCAL ROADS

While 75% of the roads in the City of Belton are owned by the city, most of these roads are classified as residential and therefore require different treatments compared to the busier, more traveled state roads. Potential countermeasures for these city-owned roads target more residential roadway types where vehicle speeds are already slower. Countermeasures for city roads include:

- Sidewalks
- Shared-use Paths
- High Visibility Crosswalks
- Application of Low-Cost Countermeasures at Stop-Controlled Intersections such as retroreflective sheeting on signposts, properly placed stop bar, and removal of obstructions that limit sight distance such as vegetation and parking

STATE ROADS

While the City of Belton does not own the major interstate and state highways in the city, the safety of these roadways directly impacts the community. These roadways also require different treatments compared to the more residential roads owned by the city. Countermeasures for state roads include:

- Corridor Access Management
- Signal Operation Improvements
- Enhanced Delineation for Horizontal Curves
- Medians and Pedestrian Refuge Islands
- Pedestrian Hybrid Beacons
- High Friction Surface Treatment





CHAPTER 7: IMPLEMENTATION

The BTSAP represents the City of Belton's commitment to reducing serious injuries and fatalities on the City of Belton's roadways.

The most serious crashes predominantly occur on roadways maintained and operated by MoDOT, which reduces the City of Belton's ability to directly impact the safety of these corridors. The success of the BTSAP relies on a collaborative framework approach which addresses long-standing infrastructure challenges to create safer, more accessible streets for everyone. Implementing the recommendations of this plan will take sustained collaboration between the City of Belton, neighboring communities, and MoDOT.

Independent of improvements requiring greater collaboration, the City of Belton has the best opportunity to reach their goals by focusing on improvements identified on the HIN and corridors lacking pedestrian infrastructure.

MEASURING PROGRESS

The SS4A program requires that progress toward the BTSAP's goals are measured over time. Ways to measure plan progress include:

- Annual review of crash data: MoDOT publishes crash data yearly; this data should be downloaded and analyzed to see if KSI crashes are trending downward. A memo outlining this analysis should be published on the City of Belton website.
- Annual review of plan recommendation completion: Each year, the City of Belton should review the recommendations of this plan and track and publish progress towards completion. This should also include identifying and completing updates to the plan to respond to trends and changes in roadway issues.

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APPENDIX

Appendix A: Existing Conditions Report

Appendix B: Public Involvement Report

Appendix C: Crash Profiles Report

Appendix D: MO-58 Safety Needs within the City of Belton

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