CITY OF BOERNE

Comprehensive Safety Action Plan

DRAFT MARCH 2026

Safety Action Plan BOERNE

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Acknowledgements

The Comprehensive Safety Action Plan was developed by the City of Boerne, as well as agencies, organizations, and stakeholders from the Boerne Area. This report documents a comprehensive set of projects and strategies to eliminate roadway fatalities and serious injuries within Boerne. The information presented herein is planning level only and is not meant to represent the support or commitment of any potential partners.

DISCLAIMER

This material was funded in part through grant(s) from the Federal Highway Administration of the U.S. Department of Transportation. The views and opinions of the authors expressed herein do not necessarily state or reflect those of the U.S. Department of Transportation or the Texas Department of Transportation.

23 United States Code Section 407
Discovery and admission as evidence of certain reports and surveys

Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

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Executive Summary

The City of Boerne Comprehensive Safety Action Plan (CSAP) establishes a clear, data-driven roadmap to **eliminate roadway fatalities and serious injuries on City maintained streets over the next 20 years**. Building on the City's adopted Vision Zero commitment and leadership in transportation safety, the CSAP affirms that traffic deaths and serious injuries are preventable and unacceptable and that safety must be proactively embedded into every transportation decision from planning and design to operations and policy.

The CSAP was developed through a multidisciplinary and community-informed process guided by a Safety Task Force composed of City staff, elected officials, regional partners, public safety agencies, school district representatives, and community stakeholders. The plan aligns local priorities with state and federal safety initiatives, including the Texas Strategic Highway Safety Plan (SHSP), the Safe System Approach, and the U.S. Department of Transportation's (USDOT) National Roadway Safety Strategy, ensuring consistency with best practices while tailoring solutions to Boerne's unique Hill Country context.

Figure ES.1. Safe System Approach | Source: Federal Highway Administration (FHWA)

2,342
CRASHES

24
PEDESTRIAN AND BICYCLE RELATED CRASHES

10%
OF THE CRASHES ARE FATAL AND SEVERE-INJURY CRASHES

8%
OF FATAL AND SEVERE-INJURY CRASHES INVOLVE VULNERABLE ROAD USERS

48%
OF CRASHES ARE INTERSECTION RELATED

PLANNING STRUCTURE

The vision of the CSAP is to create a transportation system where no one is killed or seriously injured on Boerne's streets, regardless of age, ability, or mode of travel. Guided by Vision Zero principles and the Safe System Approach, the CSAP establishes a long-term goal of achieving zero roadway fatalities and serious injuries within the next 20 years by prioritizing safety over speed and convenience. This plan advances that vision through data-driven decision-making and proactive safety investments. By focusing on reducing crash severity, protecting vulnerable road users, and targeting high-risk locations, the CSAP provides a clear and accountable framework to deliver measurable safety outcomes and foster a lasting culture of safety throughout the Boerne community.

STRATEGIC PRIORITIES FOR ADVANCING TRANSPORTATION SAFETY

ROADWAY AND INTERSECTION SAFETY

Improve road design and infrastructure through proven safety countermeasures to reduce crash frequency and severity for all road users, including pedestrians, bicyclists, and motorists.

COMMUNITY FOCUSED SAFETY INVESTMENTS

Prioritize safety improvements in locations where crash history and roadway conditions have the greatest impact on community activity areas, including schools, parks, downtown districts, civic centers, and recreational areas.

PUBLIC EDUCATION AND AWARENESS

Foster a culture of safety through public awareness and promote safe behaviors through educational campaigns, outreach programs, and community events.

DATA-DRIVEN DECISION MAKING AND ACCOUNTABILITY

Guide safety investments using data analysis to identify high-risk areas, measure outcomes, and ensure accountability through ongoing evaluation and transparent reporting.

COLLABORATION AND STRATEGIC PARTNERSHIPS

Leverage the City's leadership in transportation safety by fostering and strengthening partnerships with government agencies, law enforcement, and community organizations to plan and implement safety strategies.

SAFETY ANALYSIS

A comprehensive analysis of crash data from 2020 to 2024, supplemented by a Downtown Pedestrian Study and community input, identified systemic safety challenges across the roadway network. While fatal crashes are relatively infrequent, injury crashes persist and disproportionately affect vulnerable road users, particularly pedestrians and bicyclists. Forty-eight percent (48%) of all crashes occur at intersections, and a small portion of the roadway network accounts for a majority of fatal and serious injury crashes. These findings reinforce the need to focus on crash severity reduction, not just crash frequency, and to prioritize locations with high pedestrian activity and complex traffic interactions.

Using a critical crash rate methodology consistent with Federal Highway Administration (FWHA) guidance, the City identified a High-Injury Network (HIN) representing approximately 15% of City roadway mileage while capturing the majority of fatal, serious, and vulnerable road user crashes. The HIN provides the analytical foundation for prioritizing investments where they can deliver the greatest safety benefit. The HIN is shown in **Figure ES.2.**

TARGETED APPROACH

Focus locations were selected through a targeted, severity-based process that combined crash history, critical crash rate analysis, public input, and guidance from the Safety Task Force (STF). While priority corridors and intersections within the High-Injury Network (HIN) were identified for further evaluation, downtown Boerne was advanced as a focused pedestrian priority area due to its elevated pedestrian activity, closely spaced intersections, and higher risk of severe outcomes for vulnerable road users.

A dedicated downtown pedestrian evaluation was used to supplement crash data with on-the-ground observations of pedestrian behavior, crossing demand, roadway geometry, and operational conditions, ensuring that locations with high exposure and safety risk were captured even where crash frequency alone was limited. The downtown Boerne Pedestrian Study is provided in the **Appendix**. Findings from this targeted approach directly informed the development of location-specific safety recommendations presented in **Chapter 6** of the CSAP.

SYSTEMIC APPROACH

In addition to targeted, location-specific investments, a systemic safety approach was applied to address common risk factors that contribute to fatal and serious injury crashes across the roadway network. Rather than focusing solely on individual high-crash locations, the systemic approach identifies roadway characteristics, behaviors, and conditions that are repeatedly associated with severe crashes and applies proven countermeasures broadly where similar conditions exist. These lower cost, scalable treatments prioritize roadways within the HIN while improving baseline safety citywide, particularly for pedestrians and other vulnerable road users.

The systemic approach complements the downtown pedestrian evaluation and targeted projects by delivering near-term safety benefits, supporting rapid implementation, and reinforcing the Safe System principle that safer outcomes are achieved through redundancy and network-wide risk reduction. Systemic countermeasures and implementation strategies are detailed in **Chapter 6** of the CSAP.

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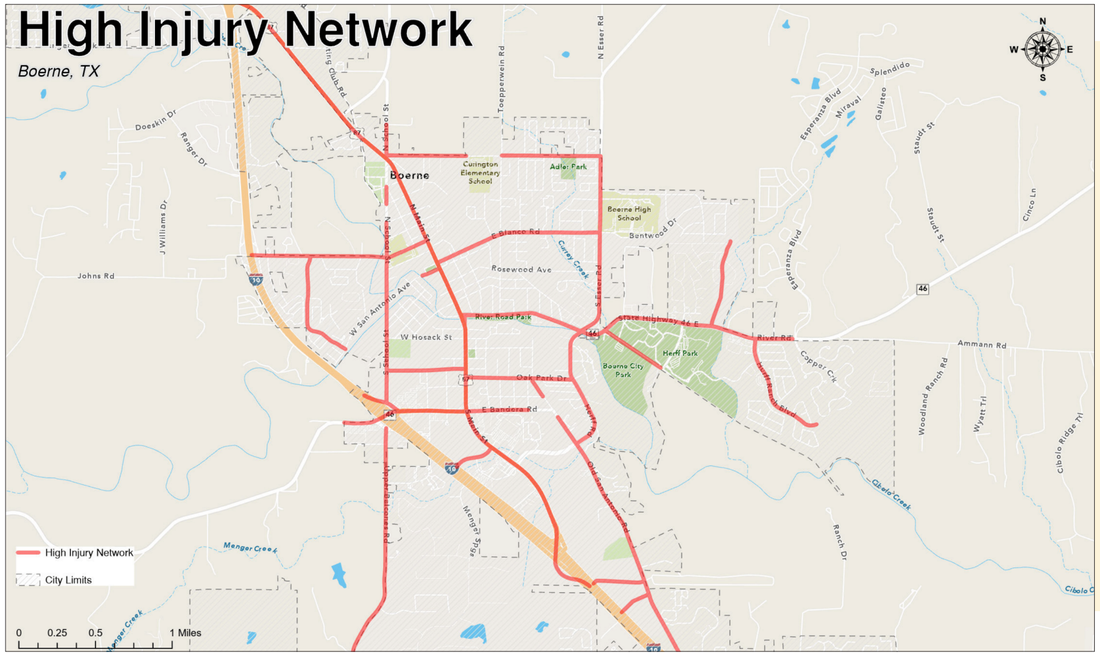


Figure ES.2: High Injury Network | Source: City of Boerne, TxDOT, FWHA; 7/20/2025.

ENGAGEMENT AND COLLABORATION

Public engagement was paramount to the development of the CSAP. Through online surveys, interactive mapping tools, pop-up events, and in-field audits, more than 1,100 mobility-focused responses were collected. **Community members consistently identified intersection safety, downtown conditions, and pedestrian safety as top priorities.** Nearly all intersections and corridors identified by the public fall within the High-Injury Network, validating the data-driven approach and reinforcing alignment between technical analysis and community identified priorities.

		FY 2025							FY 2026					
		JUN	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
ENGAGEMENT	SAFETY TASK FORCE MEETING		●		●	●								
	PUBLIC ENGAGEMENT ACTIVITY					●		●		●	●	●		
	ONLINE ACTIVITY				●	●								

● STF Workshop (Planning Structure) ● Survey ● Council Meeting (Leadership Commitment) ● Public Meeting

IMPLEMENTATION PLAN

The CSAP outlines a balanced implementation program that combines targeted infrastructure projects, systemic safety countermeasures, non-infrastructure initiatives, and policy and process updates. Priority infrastructure projects focus on high-risk intersections and corridors and include proven countermeasures such as roundabouts, improved intersection geometry, pedestrian refuge islands, rapid-flashing beacons, and signal upgrades. Systemic improvements such as sidewalks, enhanced pavement markings, flashing yellow arrows, retroreflective signal backplates, and leading pedestrian intervals provide cost-effective opportunities to improve baseline safety across the network.

Recognizing that not all safety benefits require immediate capital investment, the plan also advances near-, mid- and long-term non-infrastructure actions, including Safe Routes to School planning, corridor studies, intersection control evaluations, and road safety audits. **These efforts establish a strong foundation for future projects, improve readiness for grant funding, and deliver early safety benefits.**

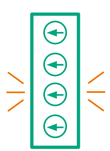
To ensure long-term success, the CSAP recommends policy and procedural updates that institutionalize safety into development review, capital planning, and operations. The plan emphasizes accountability, transparency, and continuous improvement through regular monitoring, annual progress reporting, and updates to the HIN as conditions evolve.

Together, the strategies and actions outlined in this CSAP provides the City with a clear, implementable, and community-supported roadmap to reduce traffic-related fatalities and serious injuries.Since adopting its Vision Zero commitment in August 2022, Boerne has affirmed that safety is a shared responsibility and a core value. Through data-driven investments, strong partnerships, and the integration of safety into everyday decision-making, the City is positioned to make measurable progress toward a transportation system that is safe for all users, regardless of age, ability, or mode of travel.

STRATEGY AND PROJECT SELECTIONS

INFRASTRUCTURE PROJECTS THAT INCLUDE LOCATION-SPECIFIC AND SYSTEMIC IMPROVEMENTS:

- Targeted intersection projects are shown in **Figure ES.3**
- Targeted corridor projects are shown in **Figure ES.3**.
- Systemic projects include:

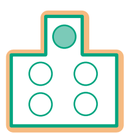


FLASHING YELLOW ARROW

SIDEWALKS

LEADING PEDESTRIAN INTERVALS

ENHANCED PAVEMENT MARKINGS



RETROREFLECTIVE BORDERS

SAFETY PLANNING PROJECTS INCLUDE:

- Safe Routes to School Plan
- Corridor Study – W. Bandera St. from IH-10 to S. Main St. as shown in **Figure ES.3**.
- Intersection Control Evaluations (ICE), as shown in **Figure ES.3**.
- Road Safety Audits (RSA), as shown in **Figure ES.3**.

POLICY AND PROCESS CHANGES

- **Improve roadway and intersection safety** by updating design standards and operational guidance to incorporate proven safety countermeasures, including enhanced crosswalk guidance, modernized traffic signal timing, improved intersection analysis for development along the HIN, and updated roundabout design practices.

- **Prioritize community-focused safety investments** in locations with the greatest safety impact on daily activity, including downtown Boerne, school areas, parks, and civic destinations, through pedestrian-focused parking management, Safe Routes to School planning, and continued implementation of ADA accessibility improvements.

- **Strengthen public education and awareness**s by promoting safe travel behaviors through community education campaigns, bicycle and roundabout safety outreach, distracted-driving education for students, and youth engagement programs in partnership with Boerne ISD.

- **Advance data-driven decision-making and accountability** by coordinating with regional and state partners, maintaining and regularly updating a community-focused HIN, monitoring pedestrian activity and roadway conditions, and using performance data to guide annual investment priorities.

- **Expand collaboration and strategic partnerships** by formalizing a public-facing transportation safety forum to support Vision Zero implementation, align enforcement and education efforts, and sustain coordinated action among City departments, law enforcement, schools, regional agencies, and community organizations.

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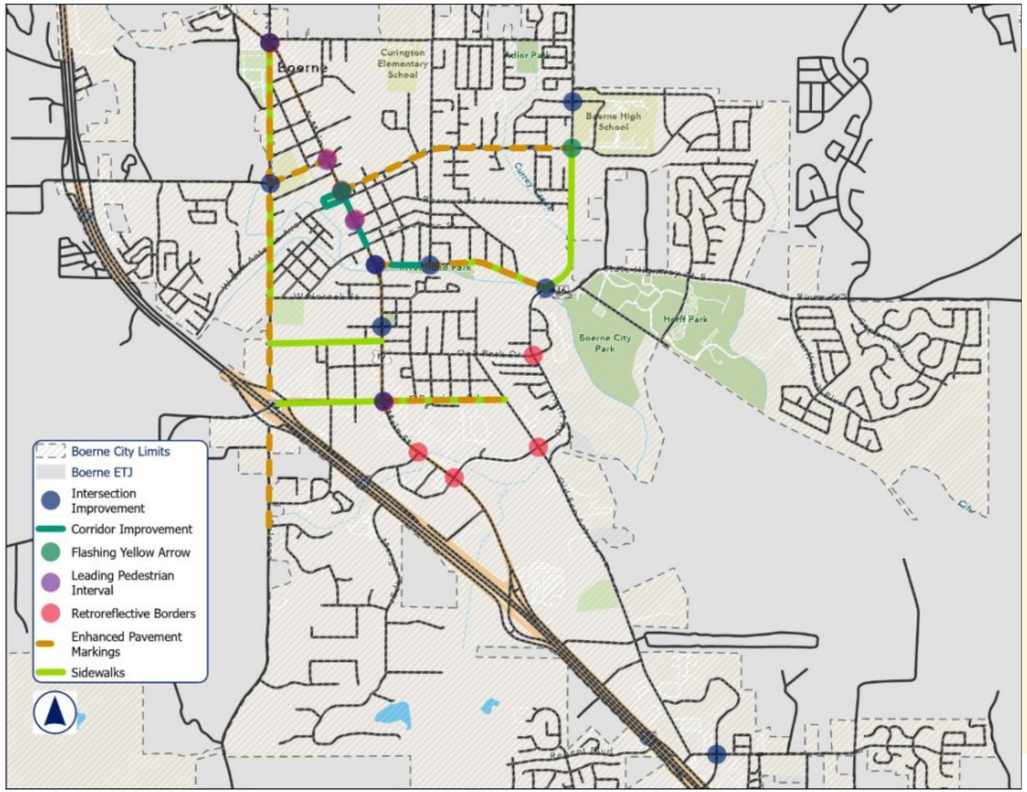

Figure ES.3. Implementation Plan Projects

CHAPTER 1
Leadership Commitment

The City of Boerne is committed to eliminating transportation related fatalities and serious injuries on city-maintained streets and reaffirms its **Goal Zero** target to achieve this outcome within the next 20 years. This commitment builds upon the City's Vision Zero statement, which was formally adopted in 2022, and reflects Boerne's continued leadership in prioritizing safety as a core transportation value.

Through this Comprehensive Safety Action Plan, the City affirms that traffic deaths and serious injuries are preventable and that safety is a shared responsibility across planning, engineering, operations, enforcement, and community engagement. Boerne commits to a Safe System approach that emphasizes proactive, data-driven strategies, advances safety outcomes that benefit all users, and establishes accountability, sustained investment, and measurable progress to ensure safe travel for people of all ages and abilities, regardless of how they move.

SAFE STREETS AND ROADS FOR ALL (SS4A) HISTORY

Vision Zero is a global road safety strategy focused on eliminating traffic fatalities and serious injuries by recognizing that crashes are preventable and must be addressed through a multidisciplinary, systems-based approach. First implemented in Sweden in the 1990s, Vision Zero has since been adopted by communities worldwide to create safer, more resilient transportation systems. In Texas, this philosophy was reinforced in May 2019 when the Texas Transportation Commission adopted the Road to Zero policy, directing TxDOT to work toward eliminating traffic fatalities statewide by 2050. This commitment is further advanced through TxDOT's Texas Strategic Highway Safety Plan (SHSP), which establishes a statewide, data-driven framework for reducing roadway fatalities and serious injuries by focusing on priority emphasis areas, proven countermeasures, and coordinated action among transportation agencies, local governments, law enforcement, public health, and community partners.

For growing Hill Country communities like Boerne, the goals and strategies outlined in the SHSP are especially relevant, as the community experiences a mix of local traffic, regional through-traffic, rural local roadways, and vibrant downtown.

Aligning local safety efforts with the SHSP helps ensure consistency with statewide priorities while allowing solutions to be tailored to Boerne's unique roadway context and community needs.

At the federal level, the Infrastructure Investment and Jobs Act (IIJA), enacted in November 2021, established the Safe Streets and Roads for All (SS4A) discretionary grant program, providing $5 billion over five years (2022–2026) to support local and regional efforts to prevent roadway deaths and serious injuries. In support of this program, the U.S. Department of Transportation released the National Roadway Safety Strategy (NRSS) in January 2022, which embraces the Safe System Approach prioritizing roadway designs that reduce the likelihood of crashes and minimize the severity of injuries when crashes do occur. This approach is further reinforced through USDOT's Complete Streets guidance, which promotes roadway designs that safely accommodate all users, regardless of age, ability, or travel mode.

SAFETY GUIDING PRINCIPLES

SAFE SYSTEMS APPROACH

The Safe Systems Approach was pioneered in the 1990's by Swedish road safety expert, Claes Tingvall and serves as the framework and mechanism for implementing the Vision Zero Action Plan. This approach recognizes shared responsibility among policymakers, system designers, operators, and roadway users, and prioritizes creating a transportation system that is resilient, forgiving, and centered on protecting human life. There are six key principles that can be utilized to implement the elements of the Safe Systems Approach, and are as follows:

DEATH OR SERIOUS INJURY IS UNACCEPTABLE

Focusing attention on preventing fatal and severe crashes over minor crashes so residents are better protected on the City's roads.

HUMANS MAKE MISTAKES

Human error is inevitable, leading to crashes, but a roadway system that accounts and accommodates for this fact can mitigate the effects (avoiding serious injury or death).

HUMANS ARE VULNERABLE

Human tolerance to crashes is a recognized and measurable benchmark (kinetic energy transfer can be measured) and should be incorporated into design considerations.

RESPONSIBILITY IS SHARED

No single party is responsible for crash prevention alone, but collectively all parties are responsible. This includes transportation designers and engineers, users, law enforcement, vehicle manufacturers, and publicly appointed decisionmakers.

SAFETY IS PROACTIVE

Rather than responding to tragedy, measures should be taken beforehand to identify and mitigate potential risk.

REDUNDANCE IS CRUCIAL

Affecting change requires strengthening all Safe Systems elements. If one element fails, redundancy prevents systemwide failure, ensuring people are protected.

There are five complementary objectives outlined by the U.S. Department of Transportation (USDOT) that correspond and support implementation of the Safe Systems Approach are as follows:

1. **SAFER PEOPLE** – Encourage safe and responsible behavior by all roadway users and create conditions that support everyone's ability to travel safely and reach their destination unharmed.
2. **SAFER ROADS** – Design roadway environments that mitigate human mistakes and account for injury tolerances, encourage safer behaviors, and protect the most vulnerable roadway users.
3. **SAFER VEHICLES** – Expand the availability and use of vehicle technologies and features that help prevent crashes and minimize the severity of injuries for both occupants and non-occupants.
4. **SAFER SPEEDS** – Promote safer speeds across all roadway environments through a combination of roadway design, targeted education and outreach, and consistent enforcement.
5. **POST-CRASH CARE** – Improve crash survivability through timely access to emergency medical services, safe and effective traffic incident management, and protection for first responders and roadway users during incident response.

Figure 1.1: Safe System Approach

TEXAS STRATEGIC HIGHWAY SAFETY PLAN (SHSP)

SAFE SYSTEMS APPROACH

As an additional strategy to support Boerne's Vision Zero commitment, the City will align its local safety efforts with the Texas Strategic Highway Safety Plan (SHSP). Developed by TxDOT, the SHSP is a comprehensive, data-driven framework that guides statewide efforts to reduce traffic fatalities and serious injuries through crash data analysis, identification of high-risk locations, and prioritization of evidence-based countermeasures. The SHSP focuses on eight safety emphasis areas and promotes coordinated action among state, regional, and local partners to advance the shared goal of zero roadway fatalities. **The eight safety emphasis areas are:**

DISTRACTED DRIVING

Addressing incidents caused by driver distraction, including mobile device use and in-vehicle distractions.

IMPAIRED DRIVING

Reducing incidents where at least one driver was identified as having consumed alcohol, drugs, or other impairing

INTERSECTION SAFETY

Improving safety where crashes occur within the boundary of an intersection or when the first harmful approach occurs on an approach to or exit from an intersection.

OCCUPANT PROTECTION

Increasing the use of seat belts, child safety seats, and other occupant protection measures.

ROADWAY AND LANE DEPARTURES

Preventing incidents involving vehicles running off the road or head-on collisions.

SPEED-RELATED

Addressing crashes involving excessive or unsafe speeds as the contributing factor.

VULNERABLE ROAD USERS

Improving safety for pedestrians and bicyclists, who are at greater risk of serious injury.

POST CRASH CARE

Enhancing the survivability of crashes through emergency response, traffic incident management, and efficient crash investigation.

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CHAPTER 2
Planning Structure

A clear and transparent planning structure supports the City of Boerne's Vision Zero commitment by ensuring roadway safety efforts are coordinated across departments, partner agencies, and community stakeholders. This structure defines roles and responsibilities, establishes decision-making and advisory processes, and integrates technical expertise, community input, and leadership direction to guide how safety initiatives are developed, prioritized, and implemented. By providing a consistent framework aligned with state and federal safety principles, including the Safe System Approach, Boerne is positioned to sustain long-term progress toward eliminating traffic fatalities and serious injuries.

PLANNING COMMITTEE MEMBERSHIP

The Safety Task Force (STF) was established to guide development of the Boerne CSAP, build shared understanding and ownership of the plan, and provide critical input at key milestones throughout the planning process. The STF was composed of City of Boerne staff and elected officials, Kendall County elected officials, local independent school district representatives, emergency response team members, along with public representatives including local organizations and business owners, ensuring a multidisciplinary and community-informed perspective. The STF convened for a series of structured meetings and activities to support plan development, including:

MEETING 1
Kick-Off & Goal-Setting
July 31, 2025

MEETING 2
Safety Analysis
(High-Injury Network, Downtown Ped Study)
September 11, 2025

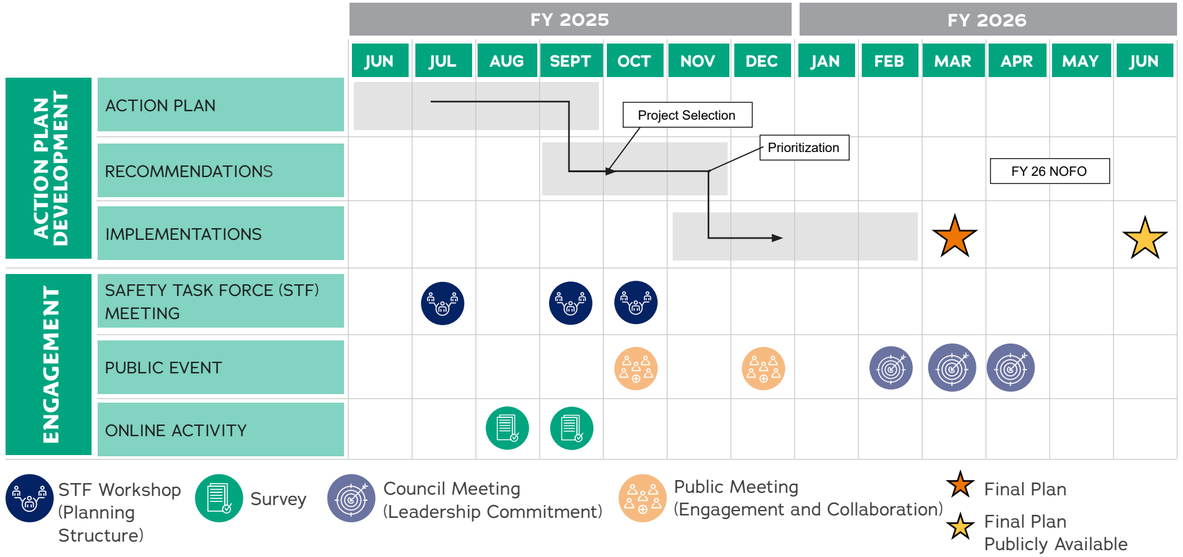
MEETING 3
Priority Considerations and Project Selection
October 23, 2025

INTERSECTION SAFETY ASSESSMENT
STF In-Field Review
October 24, 2025

Throughout the process, the STF played an active role as champions of the plan, helping to build internal alignment and community awareness that will carry forward into implementation. During multiple work sessions, the STF collaboratively developed a mission statement that clearly articulates the purpose of the plan and Boerne's commitment to supporting the safety of all roadway users now and into the future by **achieving zero roadway fatalities and serious injuries on Boerne's roadways within the next 20 years.**

PROJECT TIMELINE

The timeline for STF and Public Meetings for the City's CSAP is shown below:



SAFETY ANALYSIS

A comprehensive analysis of crash data from 2020 to 2024, supplemented by a Downtown Pedestrian Study and community input, identified systemic safety challenges across the roadway network. While fatal crashes are relatively infrequent, injury crashes persist and disproportionately affect vulnerable road users, particularly pedestrians and bicyclists. Nearly half of all crashes occur at intersections, and a small portion of the roadway network accounts for a majority of fatal and serious injury crashes. These findings reinforce the need to focus on crash severity reduction, not just crash frequency, and to prioritize locations with high pedestrian activity and complex traffic interactions.

VISION AND GOALS

VISION FRAMEWORK

The vision for the Boerne CSAP, shaped through meaningful community input, provides a clear foundation for creating a safer and more connected transportation system. This vision is organized around three integrated components: **Guiding Principles**, **Goal Statements**, and **Actions**.

The Guiding Principles define the City's core safety themes, emphasizing Safe System design, community-focused mobility, a strong culture of safety, data-informed decision-making, and collaborative partnerships. These principles inform the Goal Statements, which articulate the City of Boerne's long-term safety objectives. Building on these goals, the Actions identify the practical steps needed to achieve them, including policy and process updates, operational strategies, infrastructure improvements, education efforts, and coordinated partnership initiatives.

The goal statements and associated actions are compiled into an implementation program to guide the City and its partners on its road to zero traffic deaths and serious injuries in the next 20 years.

CSAP GUIDING PRINCIPLES

The Guiding Principles and associated Goal Statements are outlined below. The associated actions for each Guiding Principle can be found in **Chapter 8: Progress and Transparency.**

ROADWAY AND INTERSECTION SAFETY

Improve road design and infrastructure through proven safety countermeasures to reduce crash frequency and severity for all road users, including pedestrians, bicyclists, and motorists.

COMMUNITY FOCUSED SAFETY INVESTMENTS

Prioritize safety improvements in locations where crash history and roadway conditions have the greatest impacts on community activity areas, including schools, parks, downtown districts, civic centers, and recreational areas.

PUBLIC EDUCATION AND AWARENESS

Foster a culture of safety through public awareness about road safety and promote safe behaviors through educational campaigns, outreach programs, and community events.

DATA-DRIVEN DECISION MAKING AND ACCOUNTABILITY

Guide safety investments using data analysis to identify high-risk areas, measure outcomes, and ensure accountability through ongoing evaluation and transparent reporting.

COLLABORATION AND STRATEGIC PARTNERSHIPS

Leverage the City's leadership in transportation safety by fostering and strengthening partnerships with government agencies, law enforcement, and community organizations to plan, implement, and sustain safety strategies.

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CHAPTER 3
Boerne State of Transportation Safety

An understanding of the City's current State of Safety is established through a comprehensive, data-driven analysis of crash history, community impacts, existing roadway conditions, key safety observations, and other contributing factors. This analysis is informed by both quantitative data and qualitative insights, including a focused Downtown Pedestrian Study that examines pedestrian activity, crossing behavior, roadway design, and crash patterns within Boerne's historic downtown. Together, these analyses highlight how roadway safety issues affect residents, visitors, businesses, and overall community vitality, and provide a foundation for identifying priority locations, shaping safety strategies, and guiding project selection throughout the plan.

Findings from the Downtown Pedestrian Study were incorporated into the broader safety analysis by supplementing crash data with on-the-ground observations of pedestrian activity, roadway design, and operational conditions. This information helped identify locations where risk may be elevated due to high pedestrian exposure or design constraints, even where crash history alone is limited. Integrating these insights strengthened the High-Injury Network and informed project prioritization by ensuring that safety strategies address both documented crash patterns and real-world community use.

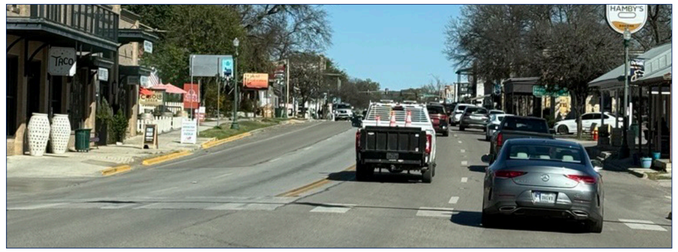
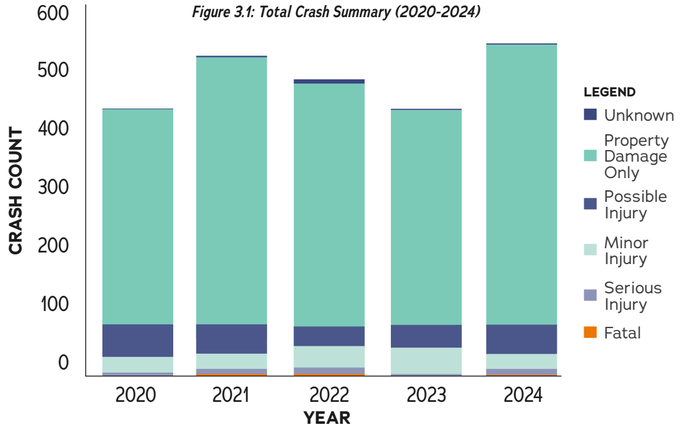


Figure 3.1: Total Crash Summary (2020-2024)



CITYWIDE CRASH TRENDS

Citywide crash severity trends in Boerne from 2020 through 2024 indicate that the transportation system is characterized by a high proportion of non-injury (N) crashes, with injury crashes comprising a smaller but persistent share of total reported crashes each year. Among injury outcomes, suspected minor injury (B) crashes and possible injury (C) crashes account for the largest proportion and show higher percentages in the most recent years of analysis, indicating a continued presence of moderate-severity crash outcomes across the network.

Suspected serious injury (A) crashes exhibit year-to-year variability, with higher percentages observed in select years, reflecting fluctuations in crash severity rather than a consistent trend. Fatal (K) crashes were infrequent over the five-year period, occurring only in 2021 and 2022; however, even isolated fatal events represent unacceptable outcomes under a Safe System approach.

Overall, these trends highlight the importance of prioritizing strategies that reduce crash severity and mitigate the risk of serious and fatal injuries, consistent with FHWA guidance emphasizing severity-based analysis over crash frequency alone and a focus on protecting vulnerable road users.

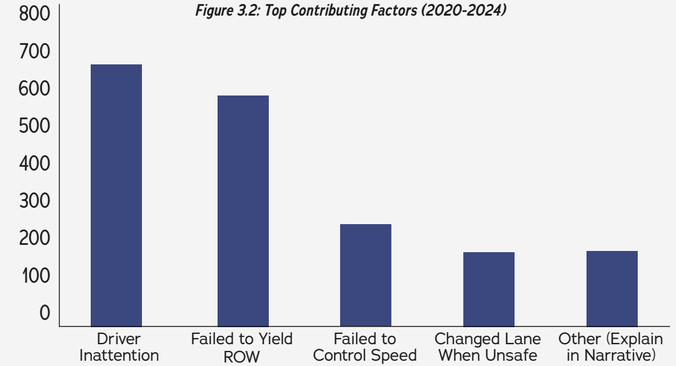
YEAR	K FATAL INJURY		A SUSPECTED SERIOUS INJURY		B SUSPECTED MINOR INJURY		C POSSIBLE INJURY		N NOT INJURED		99 UNKNOWN	
2020		0%	4	13%	25	13%	51	27%	340	18%	1	7%
2021	2	40%	7	23%	32	17%	40	21%	440	23%	3	21%
2022	2	40%	9	29%	38	20%	30	16%	388	20%	5	36%
2023		0%	3	10%	44	23%	37	19%	302	16%	3	21%
2024	1	20%	8	26%	52	27%	33	17%	440	23%	2	14%

Table 3.1: Total Crashes By Severity (2020 – 2024) *Shaded = the two highest years by percentage*

The top contributing factors for crashes in the City for the past five years are represented in **Figure 3.2**. “Distraction” or “Driver Inattention” and “Failed to Yield ROW” are the most cited contributing factor for crashes in Boerne representing 29% and 26% of the crashes, respectively. These contributing factors were listed in more than double the number of crashes when compared to the third most common contributing factor – “Failure to Control Speed” or “Speeding”.

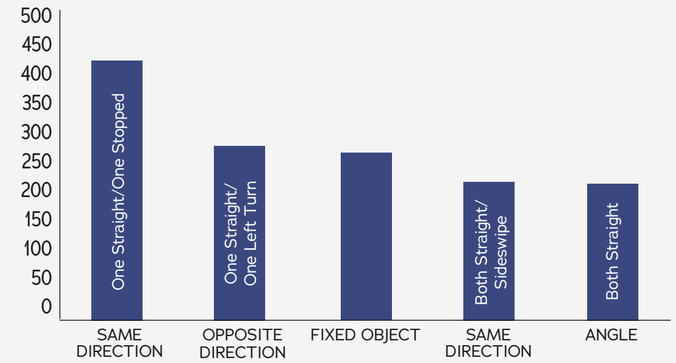
These results identify that the City of Boerne has a unique issue with distraction and failure to yield ROW since more than 25% of its crashes involved these top contributing factors.

Figure 3.2: Top Contributing Factors (2020-2024)



The predominant manners of collision for crashes involving vehicles in Boerne are shown in **Figure 3.3**. The most common collision types include ‘Same Direction – One Straight – One Stopped’ (18%), ‘Opposite Direction – One Straight – One Left Turn’ (12%), and Fixed Object (11%). ‘Same Direction – One Straight – One Stopped’ represents rear-end crashes, typically occurring in congested or stop-and-go traffic conditions. ‘Opposite Direction – One Straight – One Left Turn’ describes crashes in which a vehicle making a left turn is struck by an opposing vehicle traveling straight, often at intersections or driveway access points. ‘Fixed Object’ crashes involve a single vehicle striking a non-motorized object, such as roadside infrastructure or other stationary features, and are often associated with roadway lane departure events.

Figure 3.3: Top Contributing Factors (2020-2024)



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CRASH HEAT MAP

A crash heat map was created to highlight the density of crashes within the City of Boerne from 2020 – 2024 as seen in Figure XX. This map is a visual representation of the pure density of crash counts at various locations in Boerne. While the crash heat map does not account for traffic volumes, number of lanes, or speed limits, these factors do affect the frequency of crashes.

The highest concentration of crashes occur along IH-10, SH 46, W. Bandera Road and Main Street, particularly in the downtown area between Johns Road and River Road. The largest densities on the crash heat map are near the intersections of River Road & Herff Road/Esser Road and River Road & Main Street. A summary of the crash count from 2020 to 2024 for each crash severity is provided in **Table 3.2**.

CRASH SEVERITY	CRASH COUNT	PERCENTAGE
K – Fatal Injury	5	0.2%
A – Suspected Serious Injury	31	1%
B – Suspected Minor Injury	191	8%
C – Possible Injury	191	8%
N – Not Injured	1910	82%
99 - Unknown	14	0.6%

Table 3.2: Crash Severity Breakdown

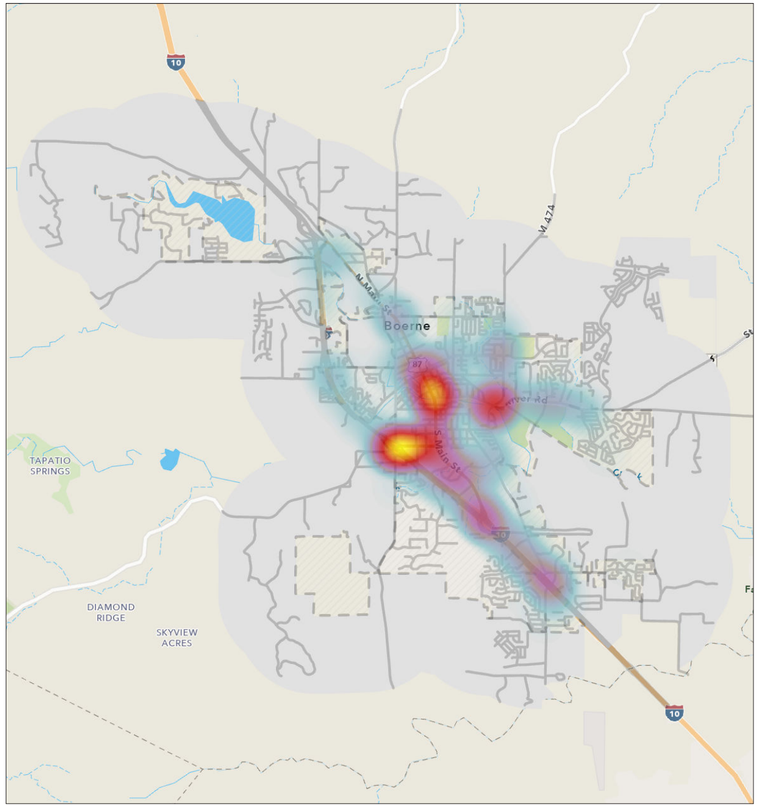

Figure 3.4: Crash Heat Map

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HIGH CRASH INTERSECTIONS

Approximately 49% of all the crashes in Boerne occur at intersections. Intersections can easily become safety hazards for all roadway users since these are areas where the most conflicts for vehicles, pedestrians, and bicyclists occur. In the City of Boerne, the intersection at River Rd & Herff Rd had the most crashes over the five-year study period. **Figure 3.4** contains a map that contains the locations of the high crash intersections in the City.

RANK	INTERSECTION	TOTAL NUMBER OF CRASHES
1	River Rd & Herff Rd	107
2	River Rd & Main St	99
3	E. Blanco Rd & Main St	36
4	Christus Pkwy & Main St	33
5	Herff Rd & Main St	29
6	W. Bandera Rd & Main St	26
7	Adler St. & N. School St	24
8	Charger Blvd & River Rd	24
9	Scenic Loop Rd & IH 10	20
10	Plant Ave & E Blanco Rd	18

Table 3.3: High Crash Intersections

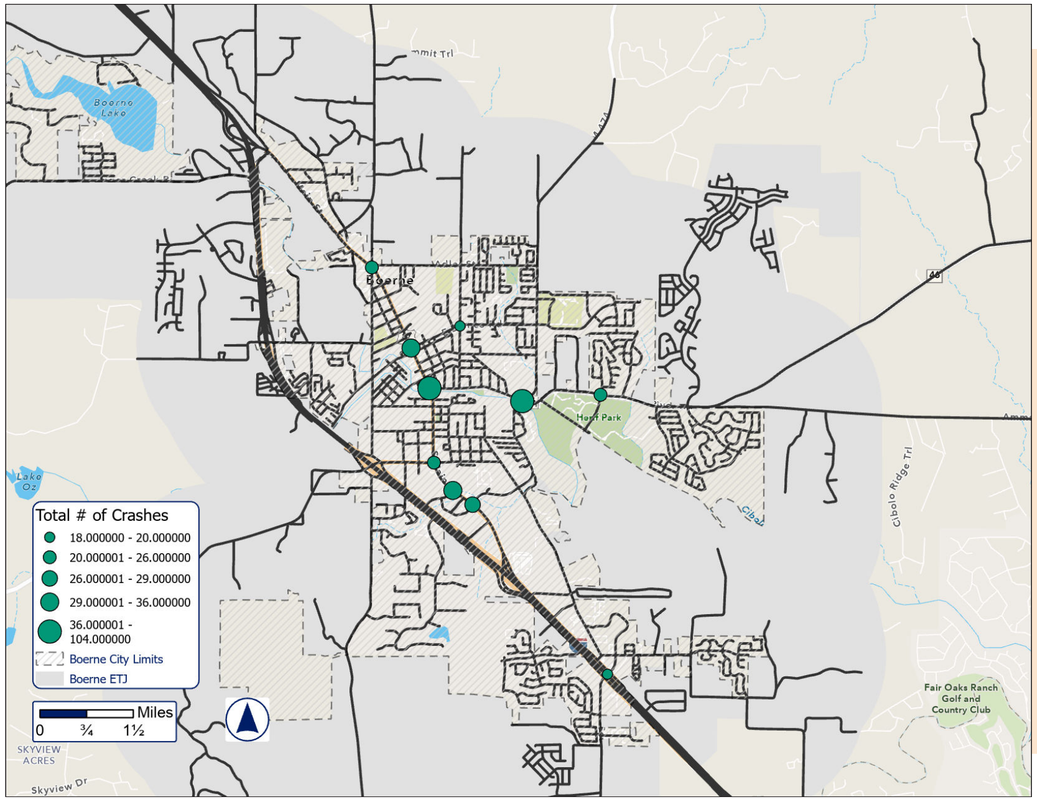

Figure 3.4: High Crash Intersections Map

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BICYCLE & PEDESTRIAN CRASHES

During a crash involving vulnerable road users, the most vulnerable to fatal or serious injuries are the pedestrian or bicyclist. This fact is further supported by the crash history in Boerne. In the past five years, the City has experienced 16 pedestrian crashes and 8 bicyclist crash as shown in **Figure 3.5**. Of the 24 crashes that involved pedestrians or bicyclists, 18 of them resulted in fatality, suspected serious injury or suspected minor injury.

On average pedestrian and bicycle crashes are more severe than vehicle-only crashes in the City. While only 9% of vehicle-only crashes are fatal, suspected serious, or suspected minor injury crashes, 75% of pedestrian and bicyclist crashes are a KAB crash. A comparison between bicycle/pedestrian and vehicle-only crashes by severity is shown in **Table 3.4**.

Highlight Vulnerable Road Users disproportionately experience higher-severity crashes (+)

CRASH SEVERITY	VEHICLES	BICYCLE/PEDESTRIAN	DIFFERENCE
K – Fatal Injury	0.1%	13%	12.4%
A – Suspected Serious Injury	1%	25%	23.9%
B – Suspected Minor Injury	8%	38%	29.6%
C – Possible Injury	8%	17%	8.6%
N – Not Injured	82%	8%	-74.0%
99 - Unknown	0.6%	0%	-0.6%

Table 3.4: Vehicles by Bicycles & Pedestrian by Crash Severity

There is a notable concentration of pedestrian and bicycle crashes within Boerne's downtown area, reflecting a convergence of higher pedestrian activity, closely spaced intersections, and access-oriented land uses. Downtown environments typically experience elevated exposure for vulnerable road users due to increased walking and bicycling activity, frequent crossing movements, and interactions with turning vehicles. As a result, even when overall crash frequencies are lower than on higher-speed corridors, the risk of serious injury is elevated due to the inherent vulnerability of pedestrians and bicyclists.

This pattern indicates a need for targeted improvements to pedestrian and bicycle facilities in downtown Boerne, including measures that reduce vehicle speeds, improve crossing visibility, and minimize conflict points. A technical memorandum documenting a City of Boerne Downtown Pedestrian Study is included in **Appendix XX**.

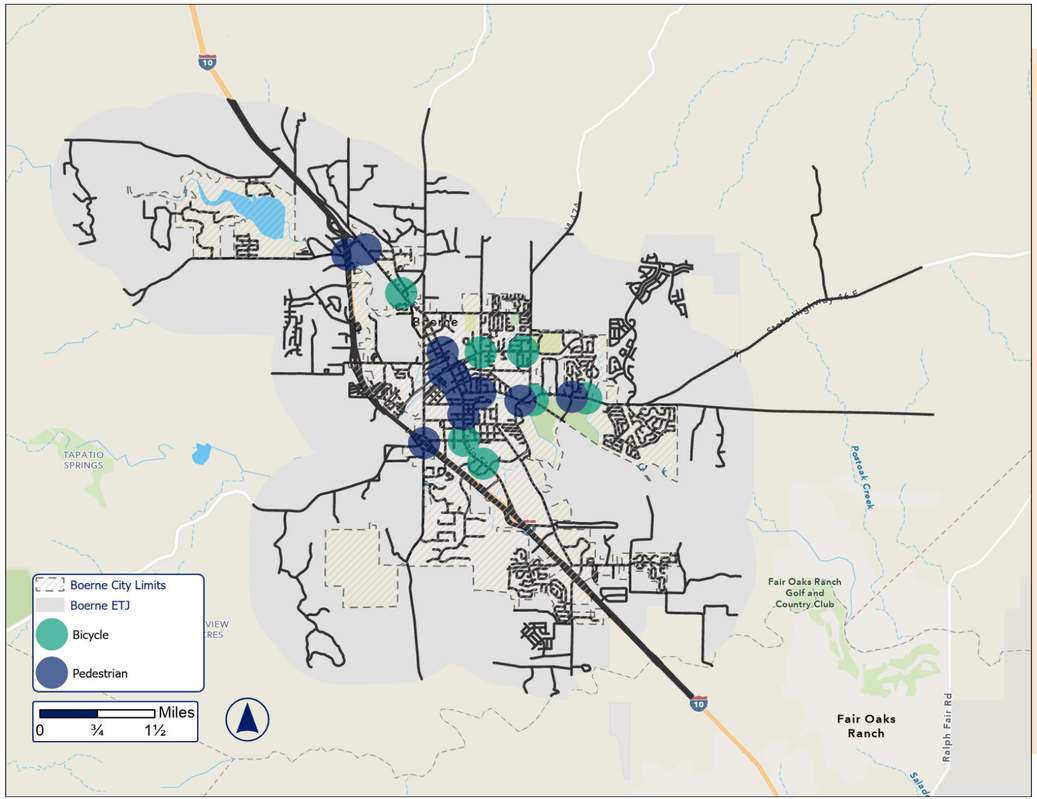

Figure 3.5 Bicycle & Pedestrian Crashes

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CRITICAL CRASH RATE METHOD

The Federal Highway Administration (FHWA) outlines methods to calculate crash rates to prioritize locations where safety improvements are most needed. Outlined in the Highway Safety Manual, Section 4.4.4.5 on Page 4-41, the critical crash rate method identifies crash hotspots by comparing the observed crash rate at a roadway segment to the expected crash rate based on similar functional classification and traffic volumes. If the observed crash rate exceeds the expected crash rate, the roadway segment is considered to have a critical crash rate and is considered for the HIN.

An ArcGIS Pro model was created to calculate the critical crash rate and supporting calculations for each roadway segment in the City. The model assigns crashes to an adjacent segment and performs the calculations in the order outlined by the FHWA. The following section outlines the process used in the calculation of the critical crash rate using fatal and severe crashes from the previous five years (2020-2024) in Boerne.

CRITICAL CRASH RATE CALCULATION

The following three steps were followed to calculate the critical crash rate for each road segment in Boerne:

ASSIGNING DATA TO ROAD SEGMENTS

Calculating the critical crash rate requires three data inputs: roadway functional classification, daily traffic volumes, and crash counts. Since different factors, such as higher traffic volumes, more travel lanes, and higher speed limits, can inflate crash rates, the normalization and comparison of these rates are crucial. The critical crash rate compares road segments that have similar roadway functional classification and normalizes daily traffic volumes to calculate crashes at a more even level based on their commonalities.

CALCULATE VARIABLES OF CRITICAL CRASH RATE

The critical crash rates were calculated using the equations outlined in the FHWA's Highway Safety Manual. The observed crash rate represents the existing KAB crashes on each road segment per 100 million vehicle-miles traveled. For the expected average crash rate per 100 million vehicle-miles traveled calculations, the daily volumes for each functional class were normalized. Furthermore, roadways were only compared to other roadways that were similar; for example, local roads were only compared to local roads. **Figure 3.6** outlines the data inputs needed to calculate the critical crash rate.

CALCULATE CRITICAL CRASH RATE RATIO

A ratio is used to identify the magnitude of difference between the observed and expected crash rates. If the ratio is greater than 1.0 or the observed crash rate is higher than the expected crash rate, then that road segment's crash history was greater than the other road segments that share the same functional classification. Any segments with a ratio of 1.0 or greater were flagged as potential HIN segments.

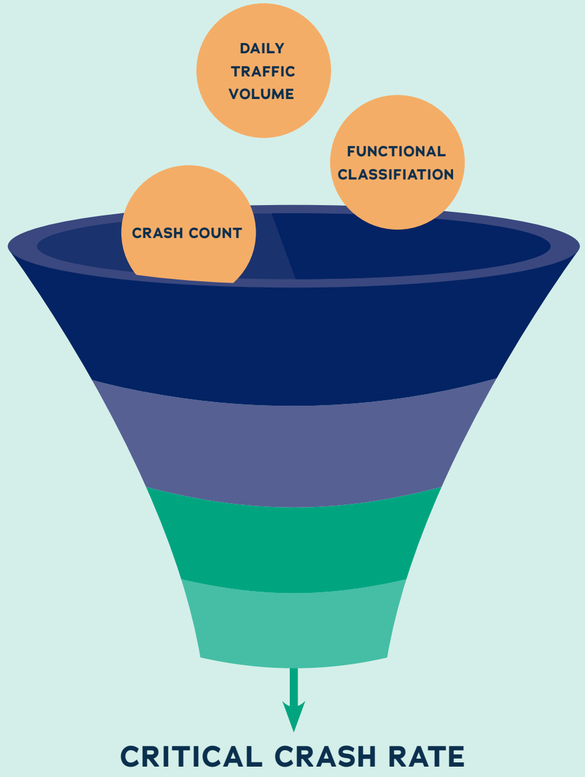

Figure 3.6 Critical Crash Rate

HIN DEVELOPMENT AND RESULTS

A high-injury network (HIN) is defined as a set of roadway segments, intersections, or other transportation facilities that exhibit a disproportionately high occurrence of crashes resulting in fatal or serious injury outcomes. The HIN is identified using traffic crash data and quantitative performance measures that account for crash frequency and severity. The primary purpose of the HIN is to support data-driven prioritization of transportation safety investments and to guide the allocation of limited resources toward locations with the greatest potential for safety benefit.

Identification and prioritization of facilities within the HIN is a critical component of a Safe System based approach to reducing fatal and severe crashes. Establishing the HIN provides a foundational analytical framework that informs subsequent evaluation and selection of safety countermeasures and roadway improvement strategies. The objective of the analysis was to maximize the capture of vehicle-only KAB crashes as well as bicycle and pedestrian KAB crashes while minimizing the total percentage of City maintained roadway mileage included in the network. To refine the initial model output, assumptions were applied to account for roadway segments with limited or incomplete exposure data. Specifically, 15% of total roadway miles were assumed within the analysis to ensure appropriate representation of the overall network. In addition, Interstate Highway 10 (IH-10) was excluded from the HIN, as it falls outside City jurisdiction and is not representative of facilities typically addressed through municipal transportation planning, design, and implementation.

These refinements ensured that the resulting HIN reflects facilities over which the City has direct control and can reasonably implement safety improvements.

In addition to the corridor-based analysis, the downtown pedestrian area was included as a **focused component of the HIN due to its higher concentration of pedestrian activity, conflict points, and access-oriented land uses**. Although crash frequencies in downtown areas may be lower on a per-segment basis, the elevated exposure of vulnerable road users and the severity potential of conflicts warranted inclusion of this area within the HIN framework. This approach ensures that pedestrian-oriented environments with high safety risk relative to use are appropriately reflected in the City's safety prioritization process.

The final HIN includes roadway segments exhibiting a concentration of KAB crashes over the most recent five-year analysis period and demonstrating higher than expected crash occurrence relative to the broader network. While not all segments within the HIN experienced a KAB crash, the spatial influence of severe crashes often extends beyond the immediate crash location. To improve network continuity and analytical coherence, gaps between adjacent high-crash segments were filled to better reflect the functional and safety context of the roadway system. Boerne's HIN consists of approximately 23 miles of roadway while capturing 72% of KAB crashes, 40% of K crashes, and 87.5% of bicycle and pedestrian crashes.

A summary of all segments included in the HIN is shown in **Table 3.5,** and a map of the City's HIN is shown in **Figure 3.6**.

	LENGTH (MILES)	INJURY CRASH COUNT				TOTAL CRASH COUNT
		KAB	K	A	B	
Within City Limits Network	153	227	5	31	191	2,342
High-Injury Network	23	164	2	19	143	1,721
High-Injury Network Percentage of Total	**15%**	**72%**	**40%**	**61%**	**75%**	**73%**

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HIN SEGMENT	LIMITS		LENGTH (MILES)	CRASHES				DAILY VOLUMES
	FROM	TO		K	A	B	TOTAL KABS	
W Bandera Bridge	Backage Rd	Backage Rd	0.22	1	0	10	11	56,906
W Bandera	Wanda	Water St	0.11	0	0	6	6	15,755
W Bandera	HEB Access	Norris Ln	0.14	0	0	6	6	15,755
River	Champion	Herff Ranch	0.3	0	1	4	5	7,300
E Blanco	S Esser	Stonegate Rd	0.12	0	0	4	4	7,322
N Esser	Greyhound Ln	Deer Creek	0.06	0	0	4	4	7,322
River	City Park	Sharon	0.16	0	0	4	4	10,748
S Main	Rosewood	W San Antonio	0.1	0	0	3	3	19,904
E Blanco	Main	Saunders	0.11	0	0	1	1	9,200
River	South Main	Pecan St	0.08	0	0	1	1	12,883
S Main	E Theissen	James	0.05	0	1	0	1	19,904
South Main	James	Rosewood	0.08	0	0	0	0	19,904
W Bandera	WB IH 10 Frontage Rd	Whataburger Access	0.08	0	0	0	0	9,603
E Blanco	Saunders	Harz	0.1	0	0	0	0	9,200

Crashes from TxDOT's CRIS for 2020-2024. Crash Rate per 100 million vehicle miles traveled. K = Fatal Crash I A = Suspected Serious Injury Crash I B = Suspected Minor Injury Crash

Table 3.5 Top 14 High-Injury Network Segments

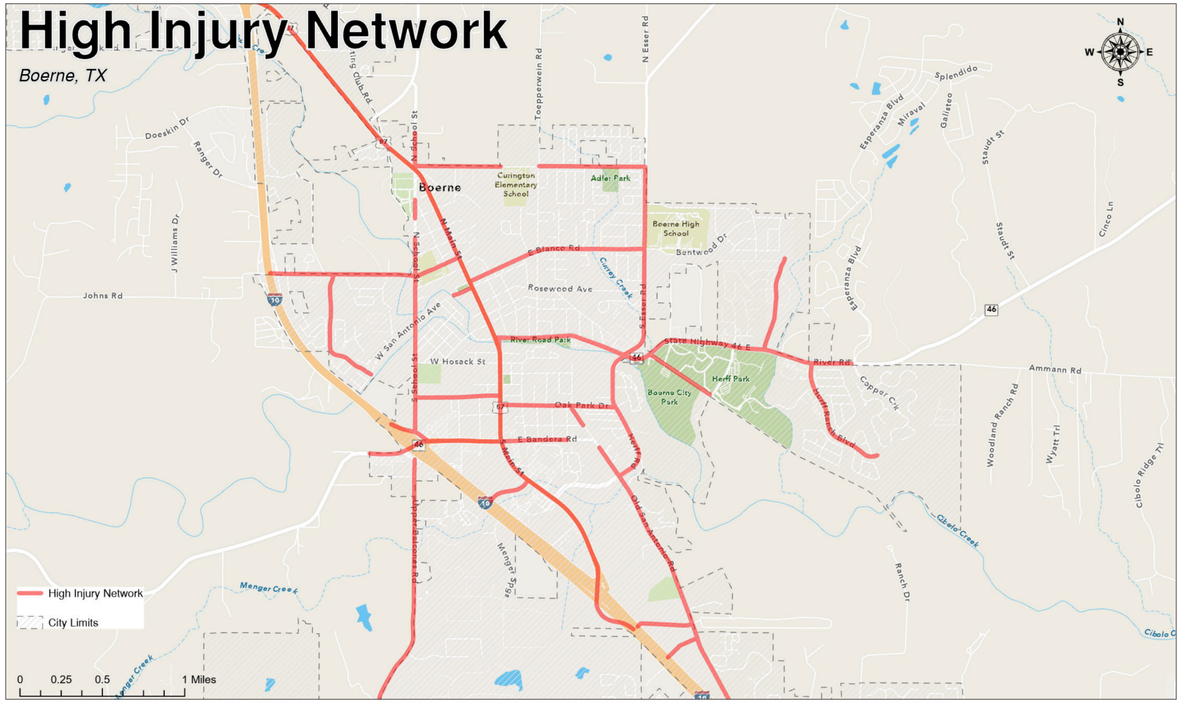

Figure 3.6 Boerne High-Injury Network

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CHAPTER 4
Community-Focused Safety Outcomes for All Road Users

For the City of Boerne CSAP, a community-focused approach guides how safety needs are identified and how future investments are prioritized. This approach recognizes that different areas of the City and different road users experience varying levels of exposure, risk, and access to safety infrastructure, and that safety strategies should be tailored accordingly. Rather than applying uniform solutions citywide, the Plan emphasizes directing resources to locations and user groups where safety concerns are most pronounced such as areas with high pedestrian activity (focused on downtown), frequent conflicts with vulnerable road users and vehicles, and a history of severe crashes.

By focusing on local conditions and community needs, the City is better able to address uneven safety challenges, reduce the likelihood of fatal and serious injury crashes, and deliver practical, effective safety improvements that benefit all road users.

COMMUNITY CONCERNS AND IDENTIFICATION OF VULNERABLE USER AREAS

While the City is not located within census tracts designated as USDOT-defined Underserved Communities, this CSAP applies a Safe System Approach consistent with Vision Zero principles. Equity within this plan is defined by observed safety outcomes and exposure, rather than solely by federal demographic thresholds. This approach reflects USDOT guidance and best practices, which recognize that serious and fatal injury risk can be highly localized and context-dependent.

For Boerne, locally underserved areas are identified based on disproportionate safety risk to vulnerable roadway users, including pedestrians, bicyclists, older adults, and people with disabilities who are typically overrepresented in fatal and serious injury crashes. Analysis of local crash data, roadway characteristics, traffic speeds and volumes, and land-use context indicates that downtown Boerne and areas near parks, trailheads, and plaza centers experience higher pedestrian exposure and elevated crash risk compared to other parts of the city. These conditions are driven by concentrated walking activity, frequent street crossings, on-street parking, tourism and special events, and interactions between local traffic and regional through-traffic.

Consistent with Safe System principles, the Plan emphasizes proactive, data-driven identification of risk rather than reactive responses to individual crash locations. Crash history and systemic safety analysis show that fatal and serious injury crashes in Boerne are concentrated:

- Along higher-speed corridors that transition into lower-speed downtown streets,
- At complex or closely spaced intersections, particularly where turning movements and pedestrian crossings overlap, and
- In locations with limited or inconsistent pedestrian and bicycle infrastructure, including gaps in sidewalks, crossings, and accessible facilities.

Although these areas may not meet federal definitions of underserved communities, the **documented concentration of severe crash outcomes and high pedestrian exposure demonstrates a disproportionate safety burden**, particularly in and around downtown Boerne. These findings support targeted safety strategies and investments focused on preventing roadway fatalities and serious injuries, with priority given to locations where vulnerable users are most exposed and at risk.

Figure 4.1 illustrates locally identified vulnerable user areas, highlighting downtown Boerne and other priority corridors and intersections with elevated pedestrian exposure and crash risk.

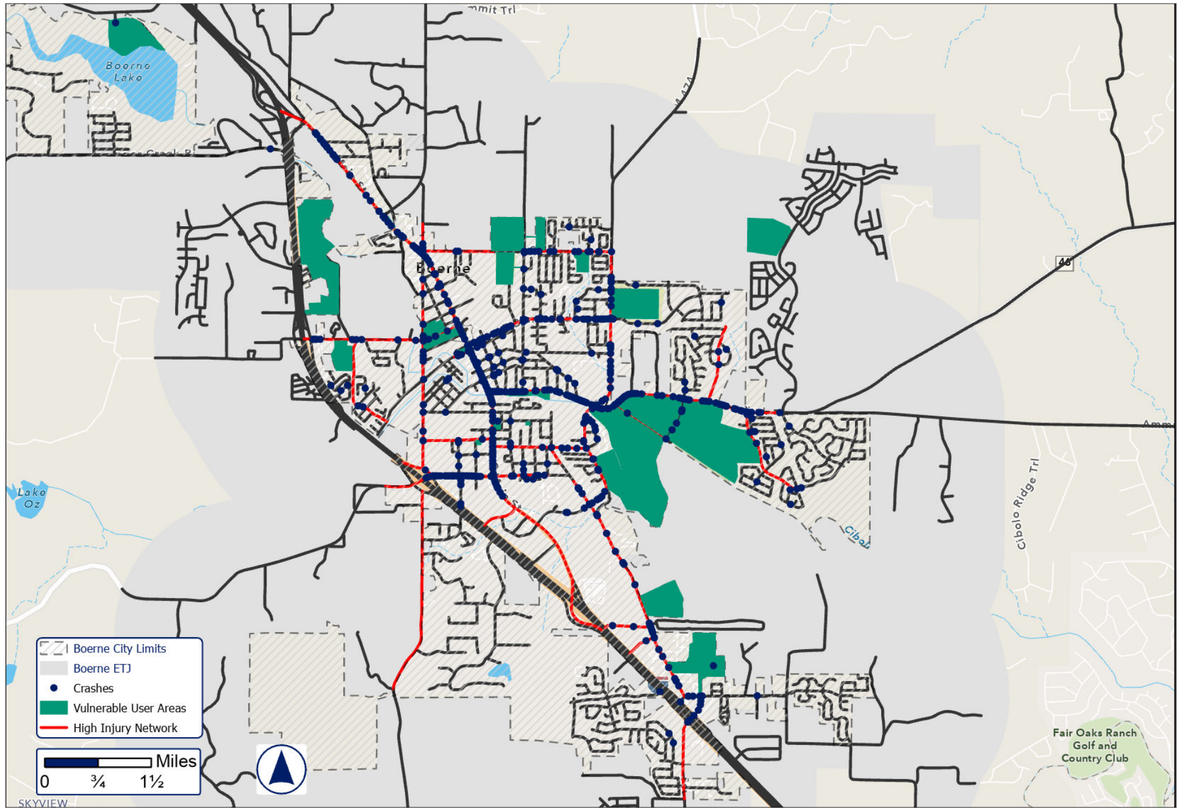

Figure 4.1 Vulnerable User Area

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LOCAL DEMOGRAPHICS, TRAVEL PATTERNS, AND DOWNTOWN CONTEXT

Boerne's demographic and travel characteristics reflect its role as a **regional destination and growing Hill Country community** within the San Antonio-New Braunfels Metropolitan Statistical Area (MSA). Daily commuting, regional pass-through traffic, tourism, and special events contribute to fluctuating traffic volumes on a roadway network that includes both neighborhood streets and higher-speed state and regional corridors. These travel patterns introduce **higher-speed vehicle traffic into areas with significant pedestrian activity**, particularly in the historic downtown core.

Downtown Boerne functions as a multimodal activity center, with a high concentration of shops, restaurants, civic uses, trails, and community events that generate substantial walking activity throughout the day and evening. Pedestrians frequently cross streets mid-block and at unsignalized intersections, interact with on-street parking maneuvers, and share space with bicyclists and delivery vehicles. When combined with vehicle speeds, turning conflicts, and constrained right-of-way, these conditions increase the likelihood that conflicts may result in severe outcomes for vulnerable users.

Compared to outlying areas of the city, downtown Boerne exhibits:

- Higher pedestrian exposure, including older adults, visitors unfamiliar with local streets, and people with mobility or visual impairments;
- Short, local trips made on foot or bicycle that intersect with regional traffic; and
- Limited recovery margin in the event of a crash due to lower tolerance for speed and design inconsistencies.

Figure 4.2 summarizes travel characteristics, including commute patterns and mode share, to contextualize pedestrian exposure and safety risk within Boerne and its downtown core.

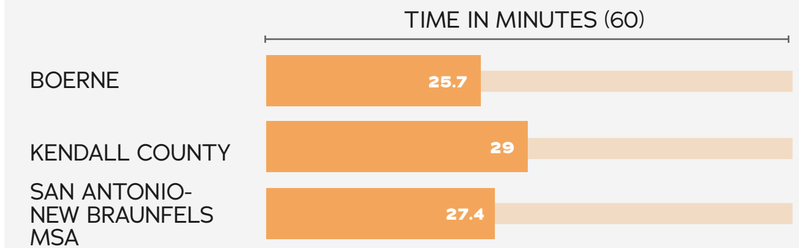

Figure 4.2 Commute Times

The median commute time to work for Boerne residents is 25.7 minutes. In comparison to Kendall County residents commute is about 29 minutes, and in comparison with the San Antonio-New Braunfels MSA, Boerne residents commute 1.7 minutes minutes less.

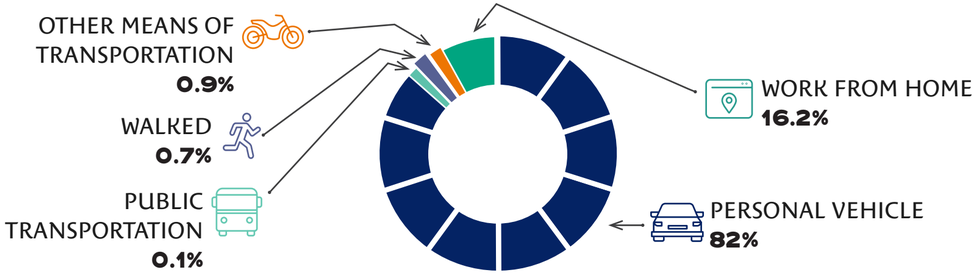

Figure 4.3 Transportation to Work

CRASH HISTORY AND SEVERITY TRENDS IN VULNERABLE USER AREAS

There were 158 total KAB crashes within the vulnerable user area over the last five years (2020-2024), representing approximately 70% of all KAB crashes observed in the City over the same period. Additionally, over the last five years, 19 out of the 24 total bicycle and pedestrian crashes were in the vulnerable user areas (79%).

Throughout the City, 9.7% of all crashes are KABs, whereas in disadvantaged census tracts, this number is 10.4%. Although the difference is modest, the higher percentage of KAB crashes within the vulnerable user areas (10.4% compared to 9.7% citywide) suggests disproportionate crash severity, reinforcing the need for targeted safety strategies in these locations.

CRASH SEVERITY	CITYWIDE	VULNERABLE USER AREAS	DIFFERENCE
K – Fatal Injury	0.2%	0.1%	-0.1%
A – Suspected Serious Injury	1%	2%	0.2%
B – Suspected Minor Injury	8%	9%	0.6%
C – Possible Injury	8%	7%	-0.8%
N – Not Injured	82%	81%	-0.1%
99 - Unknown	0.6%	0.7%	0.1%

Shaded = Vulnerable Road Users disproportionately experience higher-severity crashes

Table 4.1 Citywide vs. Vulnerable User Area Crash Severity

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CHAPTER 5
Engagement and Collaboration

Public engagement for the Boerne Comprehensive Safety Action Plan utilized a combination of online tools, in-person pop-up events, and targeted promotional materials to gather input from the community. This approach was intended to reach a broad range of road users and encourage participation from residents, community leaders, and key stakeholders with firsthand knowledge of local transportation conditions.

Engagement activities were designed to capture perspectives on roadway safety across all travel modes, including driving, walking, and bicycling. Feedback collected through surveys, public events, and outreach efforts helped identify safety concerns, high-risk locations, and areas where improvements are most needed.

ONLINE ENGAGEMENT

Online engagement materials prioritized clear communication and ease of participation, allowing community members to provide input at their convenience. Multiple online touchpoints supported continued involvement throughout the planning process and helped maintain consistent communication with residents and stakeholders.

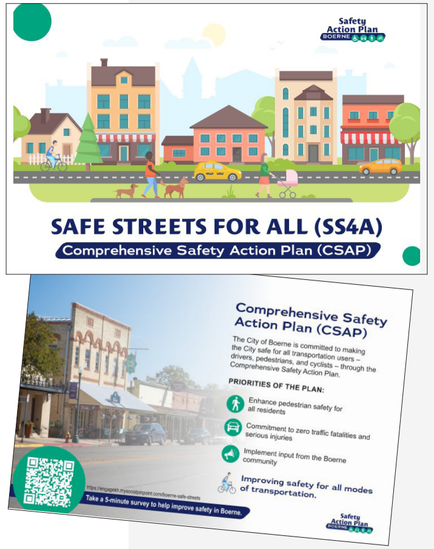
Social Pinpoint was used throughout the development of the Comprehensive Safety Action Plan as a central online hub. The platform provided information on upcoming engagement opportunities, hosted survey links, and served as a repository for plan materials. Through online surveys and interactive maps, Boerne residents had two opportunities to share feedback on transportation safety within the City. Overall, the online engagement effort was well received and generated positive feedback from both residents and stakeholders.

SURVEY

The Boerne CSAP Safety Survey aimed at collecting information on demographics, commute, mode choice, and roadway safety concerns. The survey was comprised of 33 questions. This survey was available on the project website and at the in-person public events, where a postcard was given with a QR code that directed you to the survey on the website.

To capture a comprehensive understanding of community needs and priorities, the City of Boerne placed a strong emphasis on gathering direct public input throughout the planning process. Multiple surveys and engagement activities were evaluated to ensure community perspectives meaningfully informed the Comprehensive Safety Action Plan therefore, reflecting the City's commitment to understanding how safety improvements will impact residents' everyday experiences.

Across the Boerne Community Survey, the Boerne ADA Transition Plan Survey, the Boerne Safety Action Plan Survey, the Boerne Market Days CSAP activity, and the Alamo Area Metropolitan Planning Organization (AAMPO) Long Range Transportation Plan exercise, **a total of 1,149 mobility focused responses were collected**. As shown in the graph on the following page, **Figure 5.1,** 36% of the responses identified pedestrian and vehicle safety as the highest priorities, while 7% of the responses focused on bicycle safety emerging as an additional concern.



CSAP Survey Postcard

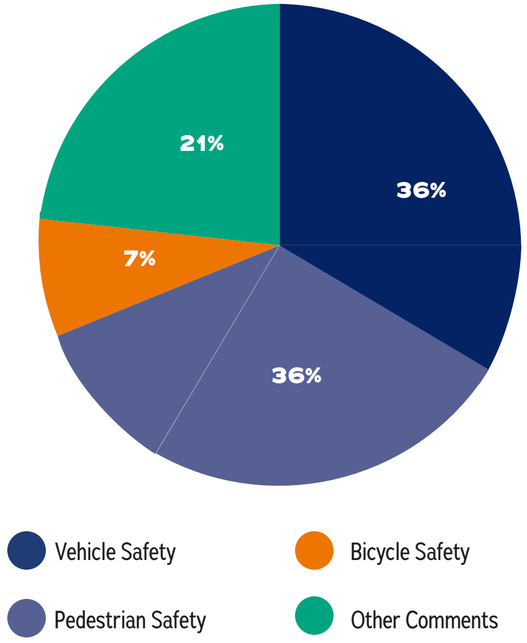


Figure 5.1 Mobility Focused Public Input

To further illustrate these mobility focused priorities, the graph below provides a detailed breakdown of the specific transportation priorities the community wants to focus on.

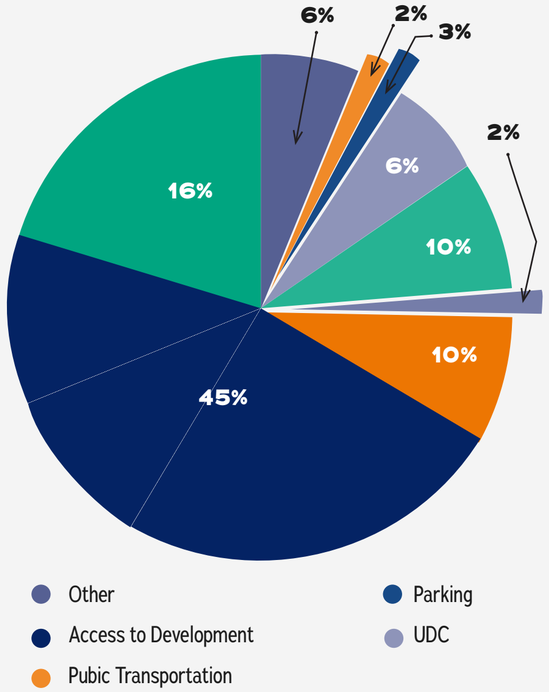


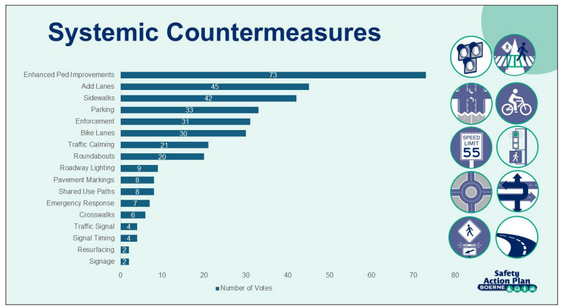
Figure 5.2 Transportation Priorities

Based on the focus area selection results, intersection safety emerged as the highest-priority emphasis area, followed by safety concerns within the downtown network, particularly along Main Street and River Road.

In addition to selecting focus areas, participants were asked to prioritize specific intersections and corridor segments identified along the High-Injury Network (HIN). This input was used to further refine and validate priority locations for evaluation and potential countermeasure development. The resulting prioritized intersections and corridors are summarized to the right.

Of the results shown to the right, 98% of the intersections and 71% of the corridors identified by the community fall within the High Injury Network (HIN). As part of the survey, participants were also asked to select which systemic countermeasures they would want to see implemented throughout the City of Boerne.

The results of those selections are presented below.



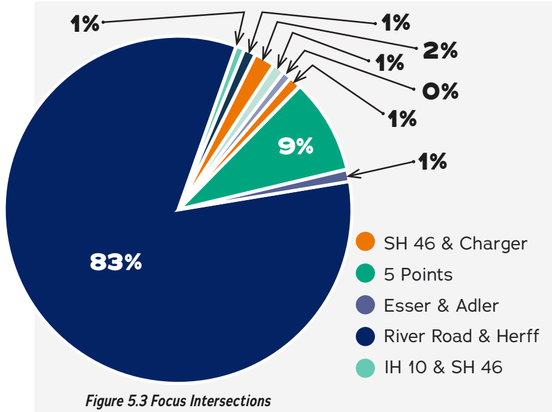


Figure 5.3 Focus Intersections

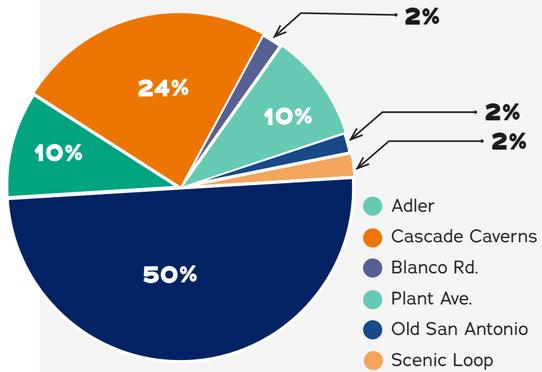


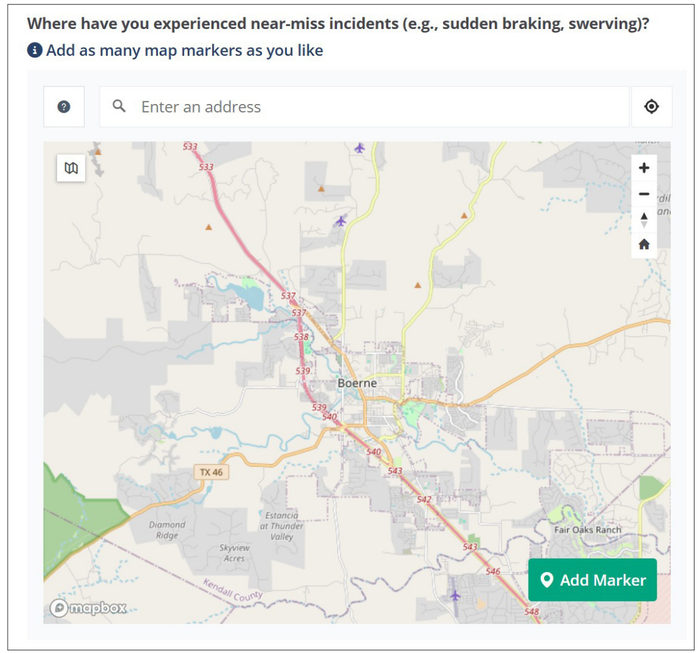
Figure 5.3 Focus Corridors

INTERACTIVE MAP

Using interactive maps in the Boerne Safety Action Plan Survey, visitors could provide feedback on the following:

- Where they have experienced near-miss incidents?
- Where they notice pedestrians walking outside of a marked crosswalks?
- Where downtown Boerne could benefit from safety countermeasures?
- Where lighting conditions are poor at night?
- Which intersections had poor visibility due to being blocked by landscaping, signage or parked vehicles?

This engagement tool allowed users to place a point on the map and provide their own comment about the location. The image to the right represents a visual example of one of the interactive map questions on the survey.



Interactive Map survey example

IN-PERSON ENGAGEMENT

In-person engagement activities were conducted during periods of heightened community activity to maximize visibility and participation. One such opportunity occurred on Saturday, September 13, 2025, when engagement coincided with Boerne Market Days and a first responder support event ("Tug the Truck"), with active participation from the Boerne Fire Department, Boerne Police Department, and Kendall County Sheriff's Office. The overlap of these events contributed to elevated pedestrian and vehicle activity across the downtown area and surrounding corridors, creating a highly effective environment for direct outreach. Leveraging this context allowed project staff to engage with a broad cross-section of residents, visitors, and public safety personnel, strengthening the quality and relevance of feedback collected during the in-person engagement effort.

Boerne Market Days Pop-up

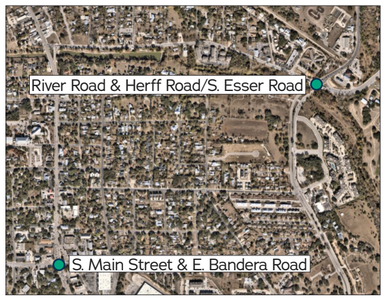
During the pop-up event, participants were asked to identify their top three intersections where they would like to see transportation safety improvements by placing dots on a roll-plot showing multiple intersections throughout the City of Boerne that had been previously prioritized by the Safety Task Force. Participants were also invited to identify desired safety improvements along two downtown roadway segments that are a focus of the Downtown Pedestrian Study: Main Street from Johns Road to Kronkosky and River Road from Main Street to Plant Street. For each segment, participants placed sticky notes on separate roll-plot sheets to share specific safety concerns and project ideas. In addition, informational flyers were distributed that provided a brief overview of the Comprehensive Safety Action Plan and included a QR code directing participants to the online survey hosted on the project website.

The second in-person engagement activity occurred on October 24, 2025 and consisted of an Intersection Safety Audit (ISA) field review conducted at two intersections identified by the STF as top safety priorities.

The intersections of River Road & Herff Road/S. Esser Road and S. Main Street & E. Bandera Road were selected based on their location on the HIN and documented patterns of severe and frequent crashes.

The ISA provided an opportunity for the project team, City representatives, public safety partners and members of the STF to observe existing conditions in the field and evaluate how roadway design, traffic control, operations, and surrounding land uses may be contributing to safety concerns for all modes of transportation. Observations focused on identifying potential conflict points, visibility constraints, operational challenges, and vulnerable user crossing conditions. Findings from the ISA were used to inform the identification of targeted, context-sensitive safety improvements and to support the development of data-driven recommendations for inclusion in the CSAP. The ISA pre- and post- assessment documents can be found in the Appendix.

In-field



ISA In-Field Review Locations

CHAPTER 6
Strategy and Project Selections

The CSAP was developed to reduce traffic-related fatalities and serious injuries through data-driven analysis, community engagement, and targeted infrastructure and policy improvements, with particular attention to downtown Boerne and other areas with high pedestrian exposure and elevated safety risk. The CSAP framework includes Strategy and Project Selections, Policy and Process Changes, and Progress and Transparency; and organizes the components of the Plan. All projects and activities are grounded in Safe System Approach principles and draw from the Vision Zero Toolkit (FHWA SA-23-026) and other USDOT guidance.

To identify near-, mid-, and long-term actions, the Safety Task Force (STF) participated in an action-planning workshop focused on selecting strategies, projects, policies, and activities. During the workshop, STF members reviewed detailed concepts for potential safety improvements along priority corridors, intersections, and downtown activity areas identified as vulnerable user locations. This process allowed participants to identify specific safety needs and opportunities within these high-risk environments. The STF then evaluated and discussed each option to develop a prioritized list of improvements for inclusion in the Action Plan.

1. **Projects were primarily prioritized based on the following criteria:**
2. **Does the project improve safety, particularly for pedestrians and other vulnerable roadway users?**
3. **Does the project support CSAP goals (accommodate multiple modes, improve mobility, and implement adopted plans)?**
4. **Does the project have strong potential for near-term implementation?**

TARGETED INFRASTRUCTURE PROJECTS

Safety analysis, community input, and stakeholder feedback informed the development of planning-level recommendations for focus corridors, priority intersections, and systemic safety countermeasures. The STF refined these recommendations to produce a prioritized list of infrastructure projects **(Table 6.1)** for the implementation plan. These projects incorporate proven safety countermeasures designed to address identified crash patterns and create a safer built environment for all users.

Although safety needs were identified along high-crash corridors and intersections, implementing these improvements requires time for planning, environmental review, design, and funding. Accordingly, the infrastructure project list emphasizes safety upgrades along corridors within the High-Injury Network and at identified high-crash intersections. Planning level concepts and details for each infrastructure project are provided below.

LOCATION	DESCRIPTION	BENEFITS
INTERSECTION PROJECTS		
River Rd & Plant Ave	Improve intersection geometry	Removes conflict points, improves traffic flow and improves pedestrian safety.
Main St & River Rd	Install a southbound left-turn deceleration lane and improve intersection geometry.	Channelizes traffic flow, improves mobility, and removes conflict points.
Main St & Adler/ School St	Install a traffic signal for the Addler St approach.	Controls traffic flow, improves pedestrian safety, and removes conflict points.
S. Main St & W. Bandera Rd	Improve intersection geometry on the northeast corner and directionalize pedestrian ramps.	Channelizes traffic flow, improves mobility, removes conflict points, and improves pedestrian safety.
Cascade Caverns Rd & Scenic Loop	Install a traffic signal and turn lane	Controls traffic flow, improves pedestrian safety, and removes conflict points.
INTERSECTION PROJECTS		
S. Main St. (E. San Antonio Ave to E. Theissen St)	Install an enhanced pedestrian refuge island, a northbound left-turn lane along S. Main St, a rectangular rapid flashing beacon, and curb extensions.	Improves pedestrian safety, channelizes traffic flow, improves mobility, and removes conflict points.
W. Blanco Rd (Main Plaza) (N. Main St to S. ain St)	Partially convert W. Blanco Rd to a one-way street, install a roundabout, a rectangular rapid flashing beacon, and improve pavement markings.	Increases traffic capacity, removes conflict points, improves traffic flow, and improves pedestrian safety.
River Rd (Pecan St to Mesquite St)	Install an enhanced crossing pedestrian refuge island and a rectangular rapid flashing beacon.	Improves pedestrian safety.

Table 6.1 Prioritized list of infrastructure projects

→ Intersection 1: River Rd & Plant Ave

PROJECT INFORMATION:

Description: Install a roundabout.

Located on HIN.

Estimated cost: $2,030,000

SAFETY IMPACT:

Benefits: Removes conflict points, improves traffic flow and improves pedestrian safety.

Expected Crash Reduction: 35%

Combined Crash Modification Factor (CMF): 0.65

Benefit-Cost Ratio: 5.13

**Crash history from TxDOT CRIS 2020-2024, based on crashes reported within 200 ft of intersection center.*

PROJECT READINESS:

May Require Utility Relocation

May Require ROW Acquisition

River & Plant Conceptual Layout

→ Intersection 2: Main St & River Rd

PROJECT INFORMATION:

Description: Install a southbound left-turn deceleration lane and improve intersection geometry.

Located on HIN.

Estimated cost: $305,000

SAFETY IMPACT:

Benefits: Channelizes traffic flow, improves mobility, and removes conflict points.

Expected Crash Reduction: 43%

Combined Crash Modification Factor (CMF): 0.572

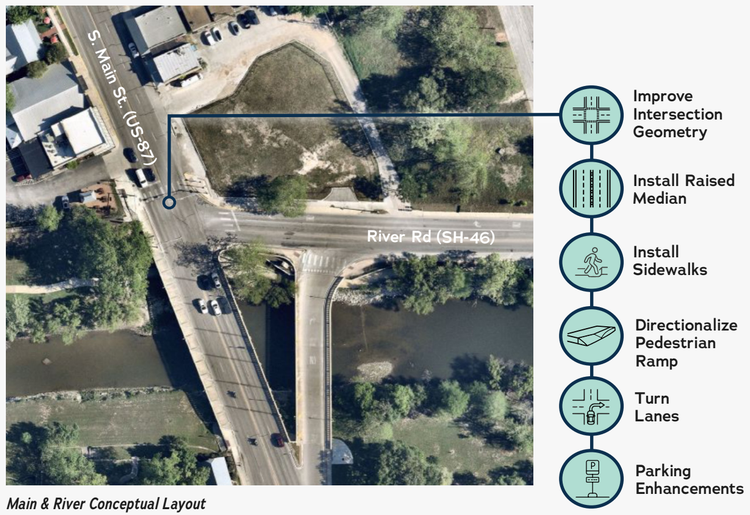
Benefit-Cost Ratio: 490.74

**Crash history from TxDOT CRIS 2020-2024, based on crashes reported within 200 ft of intersection center.*

PROJECT READINESS:

May Require Utility Relocation

May Require ROW Acquisition



Main & River Conceptual Layout

→ Intersection 3: Main St & Adler/School St

PROJECT INFORMATION:

Description: Install a traffic signal for the Adler St approach.

Located on HIN.

Estimated cost: $181,900

SAFETY IMPACT:

Benefits: Controls traffic flow, improves pedestrian safety, and removes conflict points.

Expected Crash Reduction: 44%

Combined Crash Modification Factor (CMF): 0.56

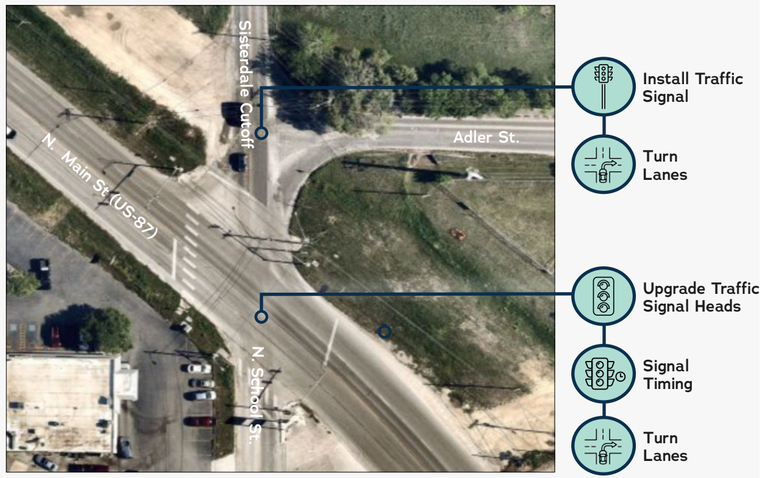
Benefit-Cost Ratio: 59.02

** Crash history from TxDOT CRIS 2020-2024, based on crashes reported within 200 ft of intersection center.*

PROJECT READINESS:

Does Not Require Utility Relocation

Does Not Require ROW Acquisition



5 Points Conceptual Layout

→ Intersection 4: S. Main St & W. Bandera Rd

PROJECT INFORMATION:

Description: Install a southbound left-turn deceleration lane and improve intersection geometry.

Located on HIN.

Estimated cost: $305,000

SAFETY IMPACT:

Benefits: Channelizes traffic flow, improves mobility, and removes conflict points.

Expected Crash Reduction: 43%

Combined Crash Modification Factor (CMF): 0.572

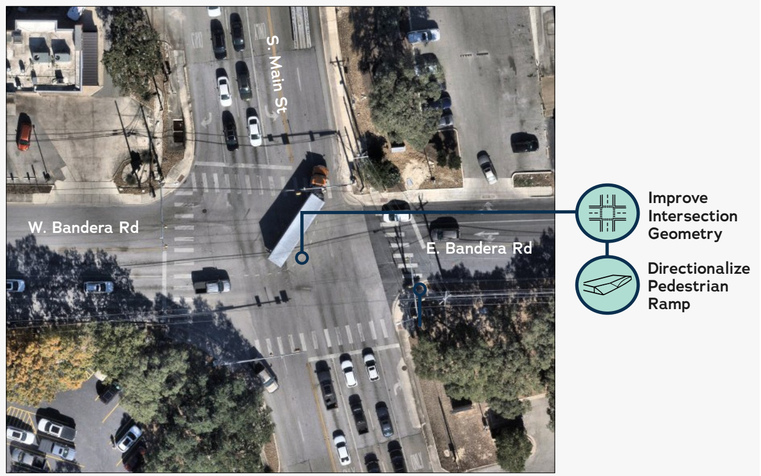
Benefit-Cost Ratio: 490.74

** Crash history from TxDOT CRIS 2020-2024, based on crashes reported within 200 ft of intersection center.*

PROJECT READINESS:

May Require Utility Relocation

May Require ROW Acquisition



S.Main St. & Bandera Conceptual Layout

→ Intersection 5: Cascade Caverns Rd & Scenic Loop

PROJECT INFORMATION:

Description: Install a traffic signal.

Located on HIN.

Estimated cost: $970,000

SAFETY IMPACT:

Benefits: Controls traffic flow, improves pedestrian safety, and removes conflict points.

Expected Crash Reduction: 44%

Combined Crash Modification Factor (CMF): 0.56

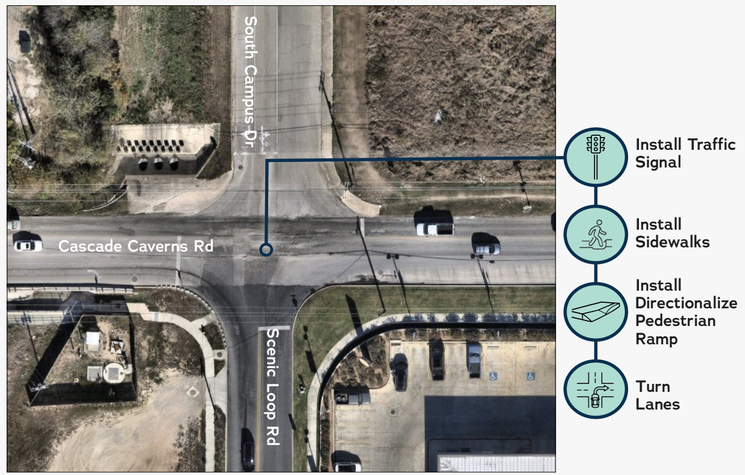
Benefit-Cost Ratio: 2.84

**Crash history from TxDOT CRIS 2020-2024, based on crashes reported within 200 ft of intersection center.*

PROJECT READINESS:

Does Not Require Utility Relocation

May Require ROW Acquisition



Cascade Caverns Rd & Scenic Loop Conceptual Layout

→ Corridor 1: S. Main St

PROJECT LIMITS: FROM E. SAN ANTONIO AVE TO E. THEISSEN ST.

PROJECT INFORMATION:

Description: Install an enhanced pedestrian refuge island, a northbound left-turn lane along S. Main St, a rectangular rapid flashing beacon, and curb extensions.

Located on HIN.

Estimated cost: $1,040,000

SAFETY IMPACT:

Benefits: Improves pedestrian safety, channelizes traffic flow, improves mobility, and removes conflict points.

Expected Crash Reduction: 89%

Combined Crash Modification Factor (CMF): 0.109

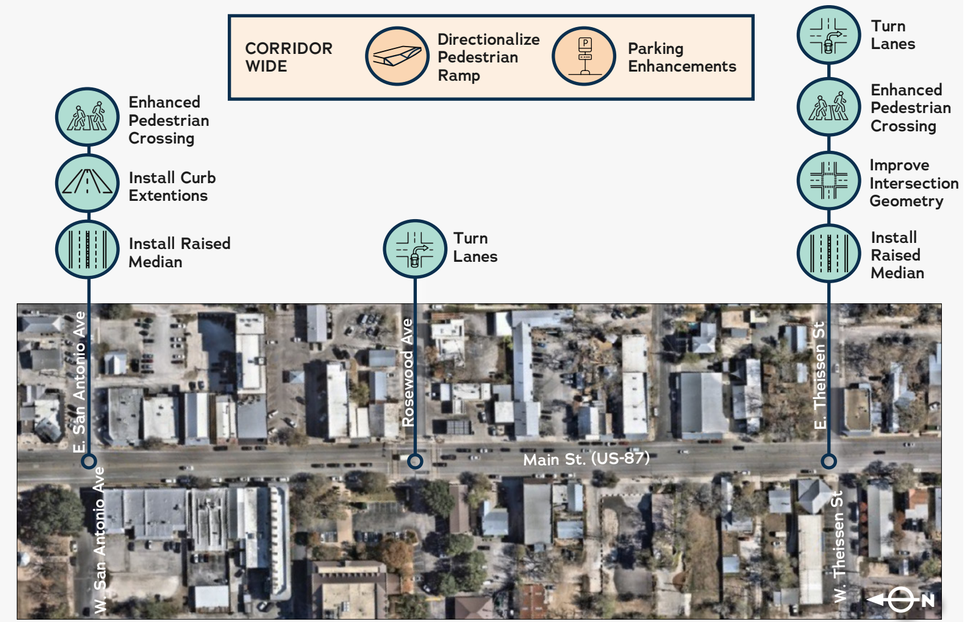
Benefit-Cost Ratio: 98.96

** Crash history from TxDOT CRIS 2020-2024.*

PROJECT READINESS:

Does not require utility relocation

Does not require ROW acquisition



S. Main (E. San Antonio to E. Theissen) Conceptual Layout

→ Corridor 2: W. Blanco Rd (Main Plaza Area- Loop from N. Main St to S. Main St)

PROJECT LIMITS: LOOP FROM N. MAIN ST TO S. MAIN ST.

PROJECT INFORMATION:

Description: Partially convert W. Blanco Rd to a one-way street, install a roundabout, a rectangular rapid flashing beacon, and improve pavement markings.

Located on the HIN.

Estimated cost: $960,000

SAFETY IMPACT:

Benefits: Increases traffic capacity, removes conflict points, improves traffic flow, and improves pedestrian safety.

Expected Crash Reduction: 72%

Combined Crash Modification Factor (CMF): 0.281

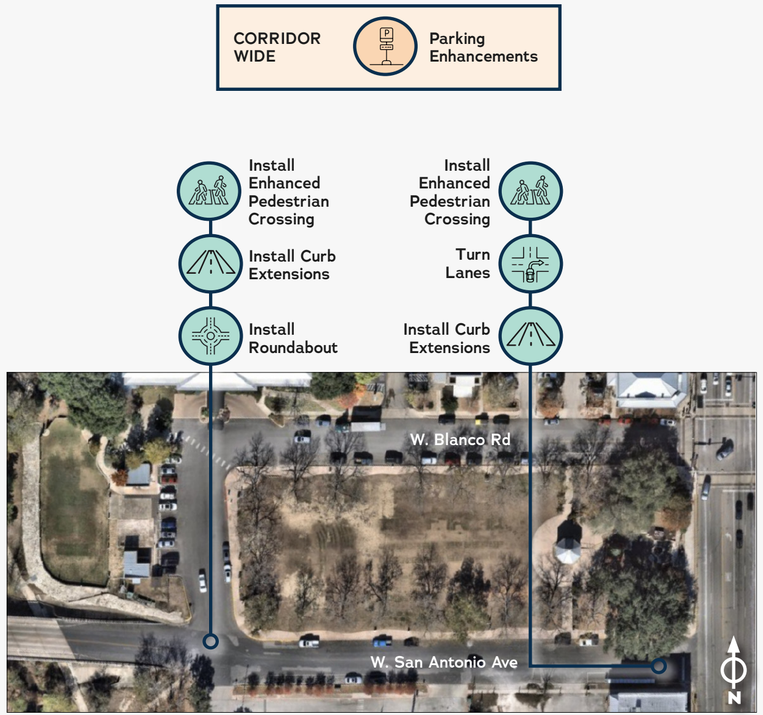
Benefit-Cost Ratio: 5.69

**Crash history from TxDOT CRIS 2020-2024.*

PROJECT READINESS:

May Require Utility Relocation

Does Not Require ROW Acquisition



W. Blanco (Main Plaza) Conceptual Layout

→ Corridor 3: River Rd

PROJECT LIMITS: CORRIDOR 3: PECAN STEEET TO MESQUITE ST

PROJECT INFORMATION:

Description: Install an enhanced crossing pedestrian refuge island and a rectangular rapid flashing beacon.

Located on HIN.

Estimated cost: $250,000

SAFETY IMPACT:

Benefits: Improves pedestrian safety.

Expected Crash Reduction:83%

Combined Crash Modification Factor (CMF): 0.167

Benefit-Cost Ratio: 183.72

**Crash history from TxDOT CRIS 2020-2024.*

PROJECT READINESS:

Does Not Require Utility Relocation

Does Not Require ROW Acquisition

River (Pecan to Mesquite) Conceptual Layout

SYSTEMIC COUNTERMEASURES

Systemic safety countermeasures are low-cost, proven treatments that can be deployed broadly across the transportation network to address common crash risk factors rather than individual locations. These countermeasures focus on roadway features and behaviors consistently associated with severe crashes and offer the opportunity for broader safety benefits with faster implementation. In the City of Boerne, systemic countermeasures are intended to complement targeted corridor and intersection-specific projects by improving baseline safety conditions citywide, with emphasis on roadways within the HIN to maximize crash reduction potential and improve safety outcomes for all road users. **Table 6.2** summarizes the systemic countermeasures proposed city-wide.

LOCATION	DESCRIPTION	BENEFITS
3 Miles	Install 6-foot sidewalks.	Improves pedestrian safety and provides enhanced ADA accessibility.
5 Miles	Implement wide edge lines and high contrast crosswalk markings.	Improves driver awareness, pedestrian and driver safety, and improves driver guidance.
2 Intersections	Convert existing left-turn permissive-protected movements to flashing yellow arrow.	Reduces opposing left-turn movements, improves driver safety, and reduces delay.
9 Intersections	Install backplates with retroreflective borders.	Increase signal visibility, driver safety, and driver awareness.

Table 6.2 Systemic Countermeasure Project List

DRAFT MARCH 2026

→ Systemic Improvement 1: Sidewalks

PROJECT INFORMATION:

Description: Install 6-foot sidewalks.

Potential Limits: 3 miles

Estimated Unit Cost: $65.50/SY.

Estimated Total Cost: $700,900

SAFETY IMPACT:

Safe System Approach Element: Safer Roads

Benefits: Improves pedestrian safety and provides enhanced ADA accessibility.

HSIP Work Code: 407

Expected crash Reduction: 50%

PROJECT READINESS:

Does Not Require Utility Relocation

Does Not Require ROW Acquisition

Source: FHWA

→ Systemic Improvement 2: Enhanced Pavement Markings

PROJECT INFORMATION:

Description: Implement wide edge lines and high contrast crosswalk markings.

Potential Limits: 5 miles

Estimated Edge Line Unit Cost: $1.75/LF.

Estimated High Contrast Crosswalk Unit Cost: $13.50/LF.

Estimated Total Cost: $80,000

SAFETY IMPACT:

Safe System Approach Element: Safer Roads

Benefits: Implement wide edge lines and high contrast crosswalk markings.

HSIP Work Code: 401

Expected Crash Reduction: 20%

PROJECT READINESS:

Does Not Require Utility Relocation

Does Not Require ROW Acquisition

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→ Systemic Improvement 3: Flashing Yellow Arrows (FYA)

PROJECT INFORMATION:

Description: Convert existing left-turn permissive-protected movements to flashing yellow arrow.

Potential Locations: 2 Intersections

Estimated Unit Cost: $310/EA.

Estimated Total Cost: $10,000

SAFETY IMPACT:

Safe Systems Approach: Safer Roads

Benefits: Reduces opposing left-turn movements, improves driver safety, and reduces delay.

HSIP Work Code: 138

Expected Crash Reduction: 40%

PROJECT READINESS:

Does Not Require Utility Relocation

Does Not Require ROW Acquisition

Source: FHWA

→ Systemic Improvement 4: Retroreflective Borders

PROJECT INFORMATION:

Description: Install backplates with retroreflective borders.

Potential Locations: 9 intersections

Estimated Unit Cost: $200/ea.

Estimated Total Cost: $35,000

SAFETY IMPACT:

Safe Systems Approach: Safer Roads

Benefits: Increase signal visibility, driver safety, and driver awareness.

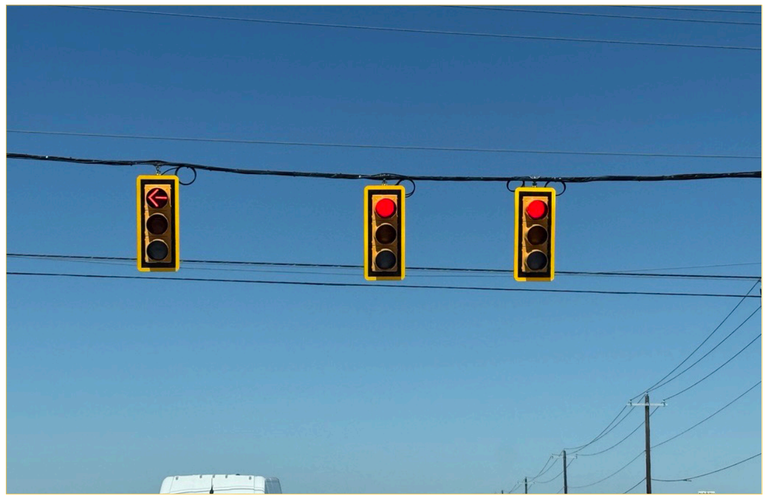
HSIP Work Code: 108

Expected Crash Reduction: 10%

PROJECT READINESS:

Does Not Require Utility Relocation

Does NOT require ROW Acquisition



Location: SH 46 & FM 3351

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→ Systemic Improvement 5 | Leading Pedestrian Intervals (LPI)

PROJECT INFORMATION:

Description: Implement leading pedestrian intervals (LPI).

Potential Locations: 4 Intersections.

Estimated Total Cost: $20,000

SAFETY IMPACT:

Safe Systems Approach: Safer Roads & Safer People

Benefits: Reduces pedestrian-vehicle conflicts and increases pedestrian safety.

HSIP Work Code: 109

Expected Crash Reduction: 16%

PROJECT READINESS:

Does Not Require Utility Relocation

Does Not Require ROW Acquisition

Source: FHWA

NON-INFRASTRUCTURE PROJECTS

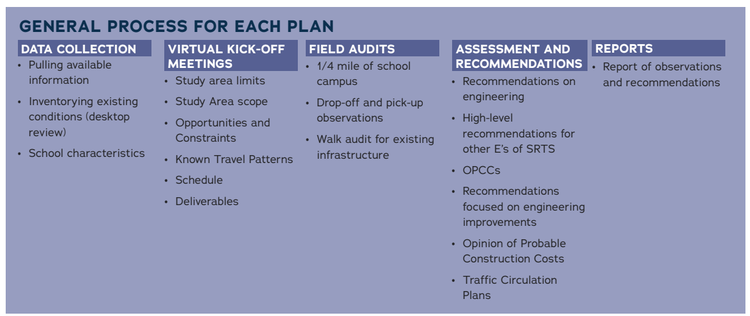
While infrastructure projects are a critical component of the implementation plan, near-term implementation of many capital improvements is constrained by funding availability and project delivery timelines. To advance safety improvements in the short term, the CSAP recommends a suite of non-infrastructure projects that can be implemented more quickly and at lower cost, such as planning efforts, design guidance, policies, procedures, and programmatic activities. These actions are intended to establish a strong foundation for future infrastructure investments while delivering immediate safety benefits.

Planning and quick build non-infrastructure projects recommended for the City of Boerne include:

- Safe Routes to School planning throughout the City of Boerne
- Corridor study along W. Bandera St. from IH-10 Frontage Roads to S. Main St
- Conduct preliminary Intersection Control Evaluations (ICE) for 2 Intersections:
  - *Main St & Addler/School St,*
  - *River Rd & Herff Rd*
- Conduct Road Safety Audits (RSA) or 3 intersections:
  - *Main St & Kronkowsky St,*
  - *Esser Rd & Greyhound Ln,*
  - *Johns Rd & N. School St*

SAFE ROUTES TO SCHOOL PLAN

The STF identified school-area circulation and safe access for students walking and bicycling as an important objective of this CSAP, particularly given Boerne's limited roadway connectivity, constrained street grid, and recurring congestion during peak school arrival and dismissal periods. While the documented crash history does not show a concentrated pattern of fatal or serious injury crashes within active school zones, operational challenges such as vehicle queuing, turning conflicts, and limited pedestrian crossing opportunities create conditions that increase risk for students and families. A Safe Routes to School (SRTS) Plan would provide a proactive framework to evaluate both safety and circulation conditions and to identify improvements around school campuses before severe crashes occur.



The development of an SRTS Plan aligns with supplemental planning activities eligible under the SS4A program and complements regional and local safety priorities.

City of Boerne SRTS Vision:

- Identify focus analysis and improvements at Esser Road & Greyhound Lane and Johns Road & School Street, where school-related traffic activity, turning movements and pedestrian crossings intersection.
- Identify how students currently walk and bicycle to school and where circulation constraints, connectivity gaps, or traffic conflicts create barriers.
- Recommend improvements such as sidewalks, enhanced crossings, traffic calming, improved pick-up and drop-off operations, and school zone signage.
- Support school and community-led initiatives, including walking and biking groups, crossing guard programs, and safety education.
- Establish a clear process to prioritize and fund pedestrian, bicycle, and operational improvements near schools that also reduce congestion and improve overall traffic flow.

By focusing on education, engagement, planning, and circulation management, an SRTS Plan would improve safety for vulnerable users while addressing Boerne's broader mobility challenges and building long-term community support for active transportation.

CORRIDOR STUDY: W. BANDERA ST. FROM IH-10 FRONTAGE ROADS TO S. MAIN ST

The STF identified targeted corridor planning as a key strategy to advance the goals of the Plan. Crash data obtained from the Texas Department of Transportation's Crash Records Information System (CRIS) indicates that approximately 200 crashes occurred along W. Bandera Street between the IH-10 frontage roads and S. Main Street over the past five years (2020–2024), including 18 crashes suspected of resulting in minor injury.

While these crashes are distributed throughout the corridor rather than concentrated at a single location, the pattern reflects systemic safety challenges influenced by corridor land-use and access characteristics, including dense commercial development, numerous driveways and access points, closely spaced intersections, and frequent turning movements. These conditions increase the potential for conflicts among vehicles, pedestrians, and bicyclists, supporting the need for a proactive, corridor-wide planning approach rather than isolated, location-specific treatments.

The study would establish a comprehensive framework to evaluate existing conditions and identify strategies to reduce fatal and serious injury risk for all roadway users.

The corridor study would enable the City of Boerne to:

- *Analyze multimodal safety, access, and operational conditions along and across the corridor*
- *Identify systemic risk factors related to speeds, access management, crossings, and intersection operations*
- *Develop planning-level safety strategies and concept recommendations consistent with the Safe System Approach*
- *Coordinate with TxDOT, regional partners, and community stakeholders to align corridor safety priorities*
- *Establish a prioritized roadmap to support future project development and SS4A implementation grant applications*
- *By focusing on analysis, coordination, and planning rather than immediate construction, the W. Bandera Road Corridor Safety Study would position the City to advance cost-effective, scalable safety improvements and strengthen readiness for future infrastructure investments consistent with the CSAP and SS4A program goals.*

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INTERSECTION CONTROL EVALUATIONS (ICE)

The STF identified two complex intersections, Main Street & Adler/School Street (5-Points) and River Road & Herff Road for further evaluation. The combination of geometric complexity, traffic demands, and multimodal activity at these locations creates conditions that merit a proactive evaluation of intersection control strategies.Crash data indicates that intersection-related crashes are a meaningful contributor to risk at both locations. At 5-Points, a total of 24 crashes were documented within the most recent five-year period (2020-2024), including 1-A crash. At River Road & Herff Road, 104 intersection-related crashes were recorded during the same period, of which included 17 KAB crashes and 2 were pedestrian or bicycle related. The frequency and nature of conflicts at these intersections dictate the need for a systematic evaluation of intersection control and design.

ICE provides a structured, performance-based framework to compare feasible intersection control alternatives based on safety performance, operational efficiency, and multimodal accommodation, while accounting for site constraints and surrounding context. Through this process, the City can assess existing conditions, screen potential alternatives, and identify planning-level concepts that reduce systemic safety risks such as conflict points, vehicle speeds, and pedestrian and bicyclist exposure. By focusing on data-driven evaluation rather than immediate construction, ICE efforts complement corridor-level planning, support coordination with TxDOT and regional partners, and help position projects for future SS4A implementation funding consistent with the CSAP and the Safe System Approach.

ROAD SAFETY AUDITS (RSA)

The STF identified specific locations where in-field, multidisciplinary review would provide additional insight into site-specific safety risks that may not be fully captured through desktop analysis alone. Road Safety Audits (RSAs) are particularly well-suited for locations with a history of severe crashes, high levels of vulnerable road user activity, or complex land-use and operational conditions that influence how people travel and interact within the roadway environment.

The intersection of Main Street & Kronkosky Street has experienced a documented pedestrian fatality that occurred in 2022, underscoring the need for a focused evaluation of pedestrian safety, visibility, speeds, and crossing conditions within this area of downtown Boerne. This location is situated within a high-activity context that includes Veterans Plaza, on-street parking, nearby commercial businesses, and regular church and school-related activities, all of which contribute to elevated pedestrian volumes, frequent turning movements, and varied curbside activity throughout the day.

Through the RSA process, the City would conduct on-site field reviews to observe traffic operations, pedestrian and bicycle movements, parking activity, sight distance, signage, lighting, and driver behavior under a range of conditions, including peak activity periods. The audits would identify contributing factors to crashes and near-misses and develop planning-level countermeasure concepts that address both systemic and location-specific safety risks, with particular emphasis on improving safety for pedestrians and other vulnerable road users in this downtown setting.

CHAPTER 7
Policy and Procedures

Policy and procedural updates are recommended to support Boerne's goal of eliminating traffic-related fatalities and serious injuries. These changes embed safety considerations into development review, capital planning, and daily operations, ensuring consistent, data-driven decision-making across City departments. Informed by CSAP safety analysis and STF input, the recommended updates advance a proactive Safe System approach and strengthen Boerne's ability to reduce risk for all road users.

These policies directly support safety improvements in downtown Boerne and along priority corridors by ensuring that pedestrian activity, access management, and speed management are systematically considered in planning, design, and implementation decisions.

Policy recommendations are organized by each guiding principle identified by the STF and based on the Safe Systems approach and the Texas Strategic Highway Safety Plan (SHSP). The recommendations are provided in **Table XX.**

GUIDING PRINCIPLE - ROADWAY AND INTERSECTION SAFETY

→ **GOAL:** Improve road design and infrastructure through proven safety countermeasures to reduce crash frequency and severity for all road users including pedestrians, bicyclists and motorists.

FOCUS AREA	ELEMENT	RECOMMENDED ACTION	LOCAL POLICY
Vulnerable Road User	Crosswalks	Develop crosswalk guidelines	No existing policy
Intersection Safety	Traffic Signal Guidelines	Develop traffic signal/ traffic signal timing standards that include adding protective left-turn phases, improvement clearance intervals, and/or coordinating signals	No existing policy
	Traffic Impact Analysis (TIA)	Update TIA guidelines to include safety analysis for developments proposed to be located along the HIN which may include ICE efforts at key study intersections for consideration of roundabouts and/or alternative intersection designs.	City of Boerne Engineering Design Manual, Chapter 4
	Roundabouts	Update roundabout design standards for development proposals that include new roundabouts or the retrofit of existing intersections, consistent with applicable NCHRP guidance and design vehicle requirements.	City of Boerne Engineering Design Manual

GUIDING PRINCIPLE - COMMUNITY-FOCUSED SAFETY INVESTMENTS

→ **GOAL:** Prioritize safety improvements in locations where crash history and roadway conditions have the greatest impacts on community activity areas, including schools, parks, downtown districts, civic centers, and recreational areas.

FOCUS AREA	ELEMENT	RECOMMENDED ACTION	LOCAL POLICY
Vulnerable Road User	Parking	Develop and implement a Downtown Parking Management Program that prioritizes pedestrian safety and access to guide curb management and parking operations	No existing policy
Vulnerable Road User	Schools	Develop a Safe Routes to School Program for schools in the Boerne Independent School District	No existing policy
Vulnerable Road User	Accessibility	Progress an ADA Transition Plan	City of Boerne – ADA Transition Plan, January 2024

GUIDING PRINCIPLE - PUBLIC EDUCATION AND AWARENESS

→ **GOAL:** Foster a culture of safety through public awareness about road safety and promote safe behaviors through educational campaigns, outreach programs, and community events.

FOCUS AREA	ELEMENT	RECOMMENDED ACTION	LOCAL POLICY
Vulnerable Road Users, Intersection Safety	Engagement	Create an education campaign and host Bike Rodeos, Roundabout Rodeo, to educate the public on safe cyclist practices and roundabout use	No existing policy
Distracted Driving	Education	Develop a distracted driving awareness program aimed at high school students	No existing policy
Vulnerable Road Users	Engagement	Develop a safety student ambassador program with Boerne ISD to engage high school students in transportation safety messaging and data-collection	No existing policy

GUIDING PRINCIPLE - DATA DRIVEN DECISION MAKING AND ACCOUNTABILITY

→ **GOAL:** Guide safety investments using data analysis to identify high-risk areas, measure outcomes and ensure accountability through ongoing evaluation and transparent reporting.

FOCUS AREA	ELEMENT	RECOMMENDED ACTION	LOCAL POLICY
All	Performance Monitoring & Reporting	Coordinate with AAMPO and TxDOT to publish crash performance outcomes	No existing coordination
All	HIN & Data-Driven Prioritization	Maintain a community focused High-Injury Network to regularly update crash history, actively adjust investment priorities annually based on crash data, monitor pedestrian activity and roadway conditions to prioritize downtown projects, infrastructure and non-infrastructure projects and adjust strategies based on these performances and community feedback	No existing policy

DRAFT MARCH 2026

GUIDING PRINCIPLE - COLLABORATION AND STRATEGIC PARTNERSHIPS

→ **GOAL:** Leverage the City's leadership in transportation safety by fostering and strengthening partnerships with government agencies, law enforcement and community organizations to plan, implement, and sustain safety strategies

FOCUS AREA	ELEMENT	RECOMMENDED ACTION	LOCAL POLICY
Intersection Safety	Engagement	Establish a public facing Boerne Transportation Safety Task Force to expand on the Vision Zero and Safe Systems framework to identify safety performance measures, monitor safety transportation progress and align enforcement priorities within the HIN	Existing Internal Boerne Engineering and Mobility Traffic and Safety Task Force (non-public facing)

CHAPTER 8
Progress and Transparency

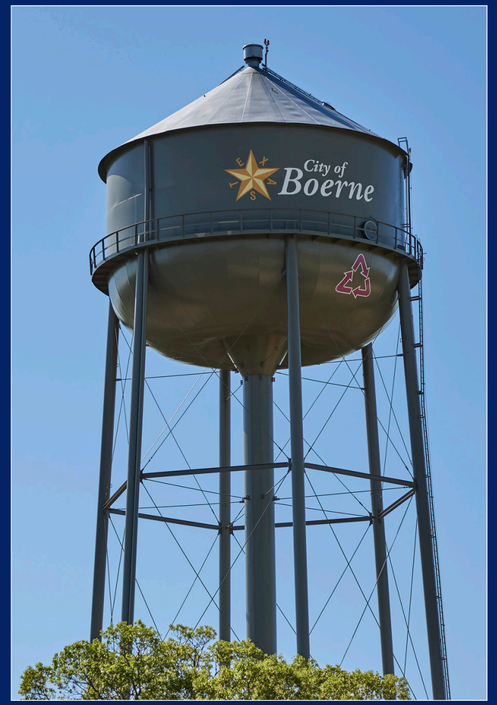
PLAN ADMINISTRATION

The City of Boerne, in coordination with its partners, is responsible for administering and implementing the Plan. City staff will oversee day-to-day implementation, coordination, monitoring, and updates to the Plan to ensure it remains responsive to changing safety conditions and community priorities.

- **CITY DEPARTMENTS:** The Engineering and Mobility Department will serve as the lead department responsible for coordinating implementation activities, tracking progress, maintaining the Implementation Program, and providing regular updates to City Council. Other departments, including Planning, Police, and Parks & Recreation will support implementation within their respective areas of responsibility.

- **CITY COUNCIL:** City Council will review progress updates, provide guidance on priorities, and make decisions related to funding allocations, policy changes, and regulatory actions necessary to advance CSAP strategies and projects.

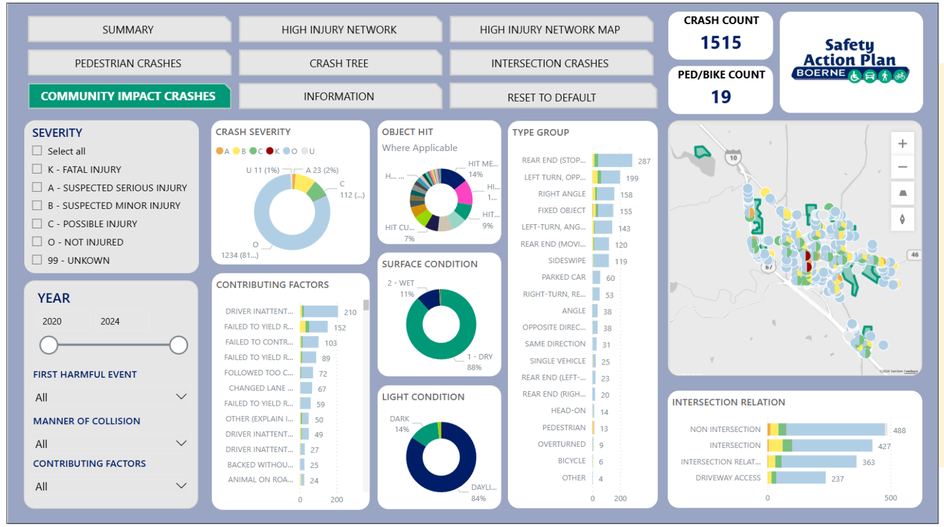
- **SAFETY TASK FORCE AND PARTNER AGENCIES:** STF will continue to play a key role during implementation by supporting City staff, reviewing progress, and providing technical and community-based insight into CSAP actions and initiatives. The STF will also help facilitate coordination among City departments, regional partners, TxDOT, and the community to maintain momentum and accountability throughout implementation.



MONITORING PROGRESS

Public engagement and transparency are essential to sustaining the momentum of the Plan. To communicate progress and maintain accountability, the City will prepare an annual progress report summarizing implementation status, completed actions, and key accomplishments from the previous year.

The Engineering and Mobility Department will prepare an annual report and present it to City Council.



Power BI Dashboard

Progress tracking will be supported by the City's safety dashboard, which summarizes crash trends and highlights behavioral, design, and environmental factors influencing safety outcomes. As new data becomes available, the dashboard will be updated to illustrate trends, evaluate progress toward CSAP goals, and help inform future projects and policy decisions.

PARTNER AGENCIES

Implementation of the Plan will rely on close coordination among local, regional, and institutional partners. Key partners include City departments such as Engineering & Mobility, Police, Fire, Utilities, and Economic Development, working in collaboration with regional and state transportation agencies. Coordination with Kendall County and neighboring jurisdictions is essential to address safety needs along shared corridors and within overlapping transportation networks.

Partnerships with Boerne Independent School District, local businesses, and community organizations will support safety improvements near schools, activity centers, and commercial districts. Ongoing collaboration with regional planning entities will further strengthen data sharing, funding alignment, project delivery, and public engagement. Together, these partnerships will advance Boerne's Vision Zero and Safe System goals by supporting coordinated, data-driven, and community-focused safety investments.

KEY PARTNER AGENCIES INCLUDE:

- Texas Department of Transportation (TxDOT)
- Boerne Independent School District (BISD)
- Alamo Area Metropolitan Planning Organization (AAMPO)
- Boerne Chamber of Commerce
- Boerne Fire Department
- Boerne Police Department
- Kendall County
- Boerne Engineering & Mobility Department
- Boerne Economic Development Department
- Boerne Utilities Department
- Boerne Downtown District Business Owners
- Kendall County, Boerne, Fair Oaks Transportation Committee

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FUNDING SOURCES

The immediate next step for most improvements is to estimate cost of improvements, commit local funds, and submit a grant application. Common funding sources for safety improvement projects include USDOT's SS4A and TxDOT's HSIP. Projects funded by FHWA programs will be required to comply with TxDOT Local Government Project procedures.

A brief description of common funding sources for infrastructure safety projects is provided below.

USDOT SS4A IMPLEMENTATION GRANT

Implementation Grants fund projects and strategies identified in an Action Plan that address roadway safety problems. Implementation Grants may also fund supplemental planning and demonstration activities. Applicants must have an existing Action Plan to apply for Implementation Grants or have an existing plan that is substantially similar and meets the eligibility requirements of an Action Plan.

USDOT SS4A PLANNING AND DEMONSTRATION GRANT

Used to develop a Safety Action Plan, conduct supplemental safety planning to enhance an Action Plan, and/or carry out demonstration activities to inform the development of, or an update to, an Action Plan.

TXDOT HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)

HSIP grants fund safety engineering improvements on Texas roadways. TxDOT reserves 10% of the funding for use on off-system roadway improvement projects that include countermeasures preapproved by TxDOT.

TXDOT TRANSPORTATION ALTERNATIVES SET-ASIDE (TA)

TA grants funds to assist communities in developing non-motorized transportation networks. Eligible activities include planning, engineering, and construction.

PLAN UPDATES AND AMENDMENTS

The Plan represents a snapshot in time and is intended to be a living document that evolves as conditions change. To ensure the Plan remains effective and aligns with safety outcomes, the Engineering and Mobility Department will provide annual updates to City Council on implementation progress, including recommended refinements to the HIN as crash trends and exposure patterns evolve.

A comprehensive review and update of the CSAP should occur at least every five years to reassess safety trends, evaluate the effectiveness of implemented strategies, and refine actions to support the City's long-term goal of eliminating traffic-related fatalities and serious injuries.

CHAPTER 9
Safety Action Plan

IMPLEMENTATION PLAN SCHEDULE

This Implementation Plan affirms the City's commitment to the Vision Zero principle that **traffic deaths and serious injuries are preventable and unacceptable**. Rather than treating severe crashes as inevitable outcomes of growth or travel demand, the Plan recognizes that safer streets are achieved through intentional decisions, coordinated action, and sustained investment. Each Action identified in this chapter translates Boerne's safety vision into specific, measurable, and actionable steps that can be advanced through policy changes, programs, capital improvements, and partnerships.

Collectively, these Actions provide the City with a clear and accountable roadmap for implementation linking data-driven priorities to tangible outcomes on Boerne's streets. By advancing Actions that are scalable, trackable, and aligned with community values, the City is positioned to make consistent progress toward eliminating fatal and serious injury crashes and creating a transportation system that is safe for all users, regardless of age, ability, or mode of travel.

TIMEFRAME

For each strategy, the associated Actions are assigned an estimated implementation timeframe to support prioritization, funding alignment, and informed decision-making. These timeframes help the City sequence actions and advance safety improvements in a coordinated and timely manner. Implementation timeframes are organized as near-, mid-, and long-range, based on the relative urgency, complexity, and level of effort required.

NEAR-RANGE (< 2 YEARS)

High-priority Actions that can often be implemented quickly and may result in early, visible safety benefits or "quick wins".

MID-RANGE (2- 5 YEARS)

Actions that require additional coordination, design, or funding, but are anticipated to be completed before the next CSAP update.

LONG-RANGE (> 5 YEARS)

Actions that require sustained effort, long-term planning, or significant capital investment, and are expected to deliver substantial safety benefits over time.

CONTINUOUS / PROGRAMMATIC

Actions that do not have a defined end date and should be implemented on a continual basis as part of the City's regular practices and programs.

IMPLEMENTATION SUMMARY

A summary of implementation plan actions and corresponding timeframes are provided as **Table XX**. Additional implementation efforts, beyond actions identified below are described in previous sections, should be enacted by local agencies to eliminate roadway fatalities and serious injuries in the next 20 years.

	ACTION	TIMEFRAME	PARTNER	POTENTIAL FUNDING SOURCE
Intersection Safety	**River Rd & Plant Ave** Install a roundabout	Long-	TxDOT City of Boerne Boerne Downtown District Business Owners	TxDOT HSIP SS4A
	Main St. & River Rd Install a southbound left-turn deceleration lane and improve intersection geometry	Mid-	TxDOT City of Boerne Boerne Downtown District Business Owners	
	Main St. & Adler/ School St. Install a traffic signal for the Adler St approach	Near-	TxDOT City of Boerne	
	S. Main St. & W. Bandera Rd. Improve intersection geometry on the northeast corner and directionalize pedestrian ramps	Mid-	TxDOT City of Boerne	
	Cascade Caverns Rd & Scenic Loop Install a traffic signal	Near-	City of Boerne	

ACTION		TIMEFRAME	PARTNER	POTENTIAL FUNDING SOURCE
Corridors	**S. Main St. (E. San Antonio Ave to E. Theissen St)** Install an enhanced pedestrian refuge island, a northbound left-turn lane along S. Main St, a rectangular rapid flashing beacon, and curb extensions.	Mid-	TxDOT City of Boerne Boerne Downtown District Business Owners	TxDOT HSIP SS4A
	W. Blanco Road (Main Plaza Area-Loop from N. Main St to S. Main St) Partially convert W. Blanco Rd to a one-way street, install a roundabout, a rectangular rapid flashing beacon, and improve pavement markings	Mid-	City of Boerne Boerne Downtown District Business Owners	
	River Road (Pecan St to Mesquite St) Install an enhanced crossing pedestrian refuge island and a rectangular rapid flashing beacon	Mid-	TxDOT City of Boerne Boerne Downtown District Business Owners	

ACTION		TIMEFRAME	PARTNER	POTENTIAL FUNDING SOURCE
Systemic	**Sidewalks**	Near-	TxDOT City of Boerne Boerne Downtown District Business Owners	TxDOT HSIP SS4A Implementation
	Enhanced Pavement Markings			
	Flashing Yellow Arrow (FYA)			
	Retroreflective Borders			
	Leading Pedestrian Intervals (LPIs)			

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ACTION		TIMEFRAME	PARTNER	POTENTIAL FUNDING SOURCE
Non-Infrastructure	**Safe Routes to School Plan** Throughout the City	Mid-	Boerne ISD	SS4A Supplemental Planning
	Corridor Study (W. Bandera St. from IH-10 to S. Main St.) Conduct a corridor study to determine access management and systemic safety improvements	Long-	TxDOT City of Boerne	
	Intersection Control Evaluations (ICE) Conduct intersection control evaluations at Main Street & Adler/School Street (5-Points) and River Road & Herff Road.	Long-	TxDOT City of Boerne	
	Road Safety Audits (RSA) Conduct road safety audits at Main Street & Kronkosky Street	Long-	TxDOT City of Boerne Boerne Downtown District Business Owners	

APPENDICES