CITY OF BOERNE

Comprehensive Safety Action Plan

MAY 2026

ADOPTED BY BOERNE CITY COUNCIL
MAY 12, 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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Acronyms

AADT	Average annual daily traffic
AAMPO	Alamo Area Metropolitan Planning Organization
AASHTO	American Association of State Highway and Transportation Officials
ADA	Americans with Disabilities Act
ADT	Average daily traffic
BISD	Boerne Independent School District
CIP	Capital Improvement Plan
CMF	Crash Modification Factor
CRIS	Crash Records Information System
CSAP	Comprehensive Safety Action Plan
EPDO	Equivalent Property Damange Only
FHWA	Federal Highway Administration
FY	Fiscal Year
FYA	Flashing Yellow Arrow
HIN	High-Injury Network
HSIP	Highway Safety Improvement Program
HSM	Highway Safety Manual
ICE	Intersection Control Evaluation
IIJA	Infrastructure Investment and Jobs Act (Public Law 117-58), also known as the Bipartisan Infrastructure Law
ISA	Intersection Safety Assessment
KAB	The sum of KAB (fatal, serious and minor injury) crashes
KABCO	Injury Severity Scale K - Fatal Injury A - Serious (Incapacitating) Injury B - Minor (Non-Incapacitating) Injury C - Possible Injury O - Non Injury, Property Damage Only U - Unknown Severity
LPI	Leading Pedestrian Interval
MMP	Mobility Master Plan
MSA	Metropolitan Statistical Area
MVMT	Million Vehicle Miles Traveled
NRSS	National Roadway Safety Strategy
PHB	Pedestrian Hybrid Beacon
ROW	Right-of-Way
RRFB	Rectangular Rapid Flashing Beacon
SHSP	Strategic Highway Safety Plan
SRTS	Safe Routes to Schools
SS4A	Safe Streets and Roads for All
STF	Safety Task Force
SUP	Shared-Use Path
TEV	Total entering vehicles
TIGER	Transportation Investment Generative Economic Recovery
TxDOT	Texas Department of Transportation
USDOT	United States Department of Transportation
VRU	Vulnerable User Area

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 of Boerne's adopted August 23, 2022 Vision Zero leadership comitment 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

25%
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 identification of 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, 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 E**. 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.

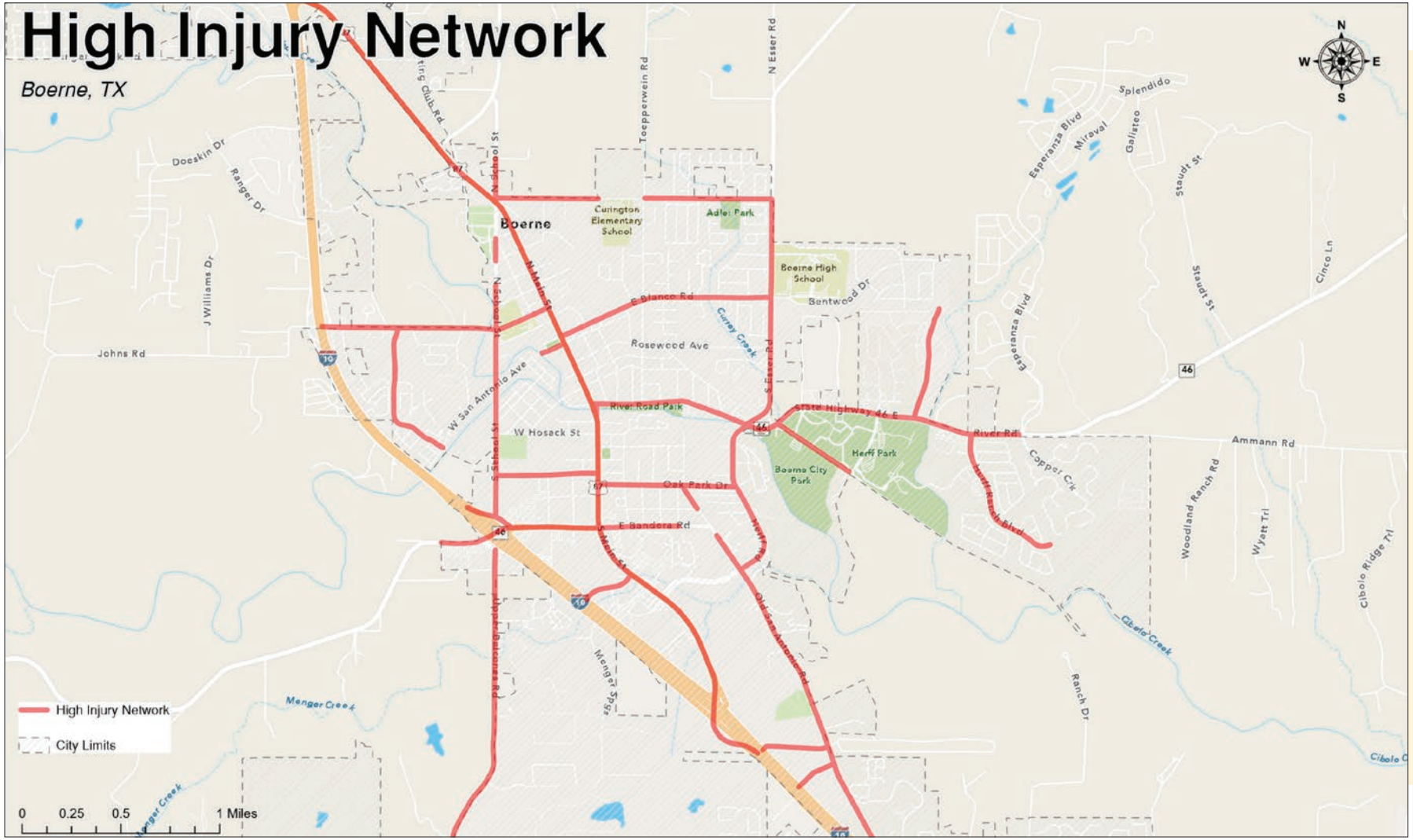


Figure ES.2: High Injury Network | Source: City of Boerne, TxDOT, FWHA; 7/20/2025.

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.

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

● STF Workshop (Planning Structure) ● Survey/Public Comment ● Intersection Safety Assessment ● Council Meeting ● Pop-Up Event ★ Adoption

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, rectangular rapid flashing beacons (RRFB), 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.**

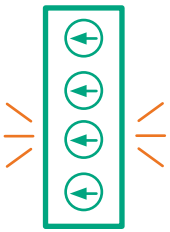
To ensure long-term success, the CSAP recommends policy and procedural updates that institutionalize safety into development review, capital planning, and operations. The plan emphasizes accountability, transparency, and continuous improvement through regular monitoring, annual progress reporting, and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

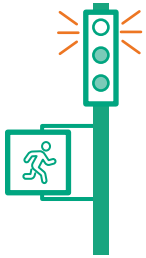
INFRASTRUCTURE PROJECTS THAT INCLUDE LOCATION-SPECIFIC AND SYSTEMIC IMPROVEMENTS:

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



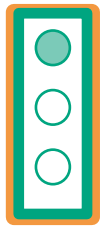
FLASHING YELLOW ARROW

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** 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.

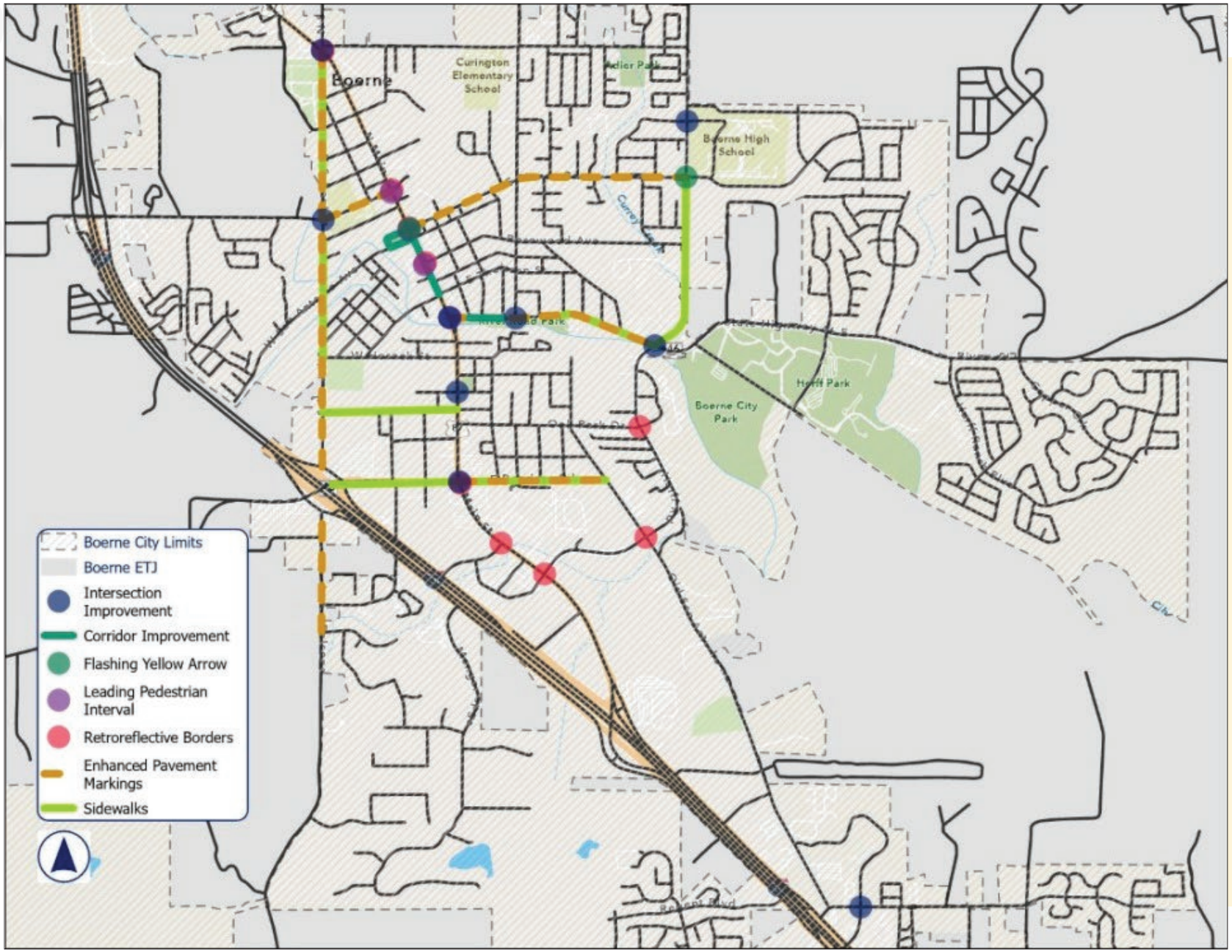


Figure ES.3: Implementation Plan Projects

CHAPTER 1
Leadership Commitment

The City of Boerne is committed to eliminating transportation related fatalities and serious injuries on City maintained roads and reaffirms its **Goal Zero** target within the next 20 years. This commitment builds on the City's Vision Zero resolution, adopted by Boerne City Council on August 23, 2022, and a mini Safety Action Plan adopted through the City's Mobility Master Plan, demonstrating sustained leadership in advancing transportation safety

Through this CSAP, 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 and regional through-traffic mixing on rural local roadways and state highways through a 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

In January 2022, in response to a recent increase in roadway fatalities and the fatality rate, the Office of the Secretary of Transportation published the National Roadway Safety Strategy (NRSS) which describes the major actions USDOT will take to make a meaningful difference in road safety. USDOT's strategy embraces the Safe System Approach provided as **Figure 1.1**. 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:

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

TxDOT built upon these safety frameworks and developed with the Texas Strategic Highway Safety Plan (SHSP) to guide 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 most relevant to safety for Texans 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

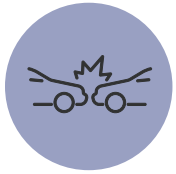
Reducing incidents where at least one driver was identified as having consumed alcohol, drugs, or other impairing substances.

INTERSECTION SAFETY

Improving safety where crashes occur within the boundary of an intersection or when the first harmful event 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.

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 between 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.

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

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

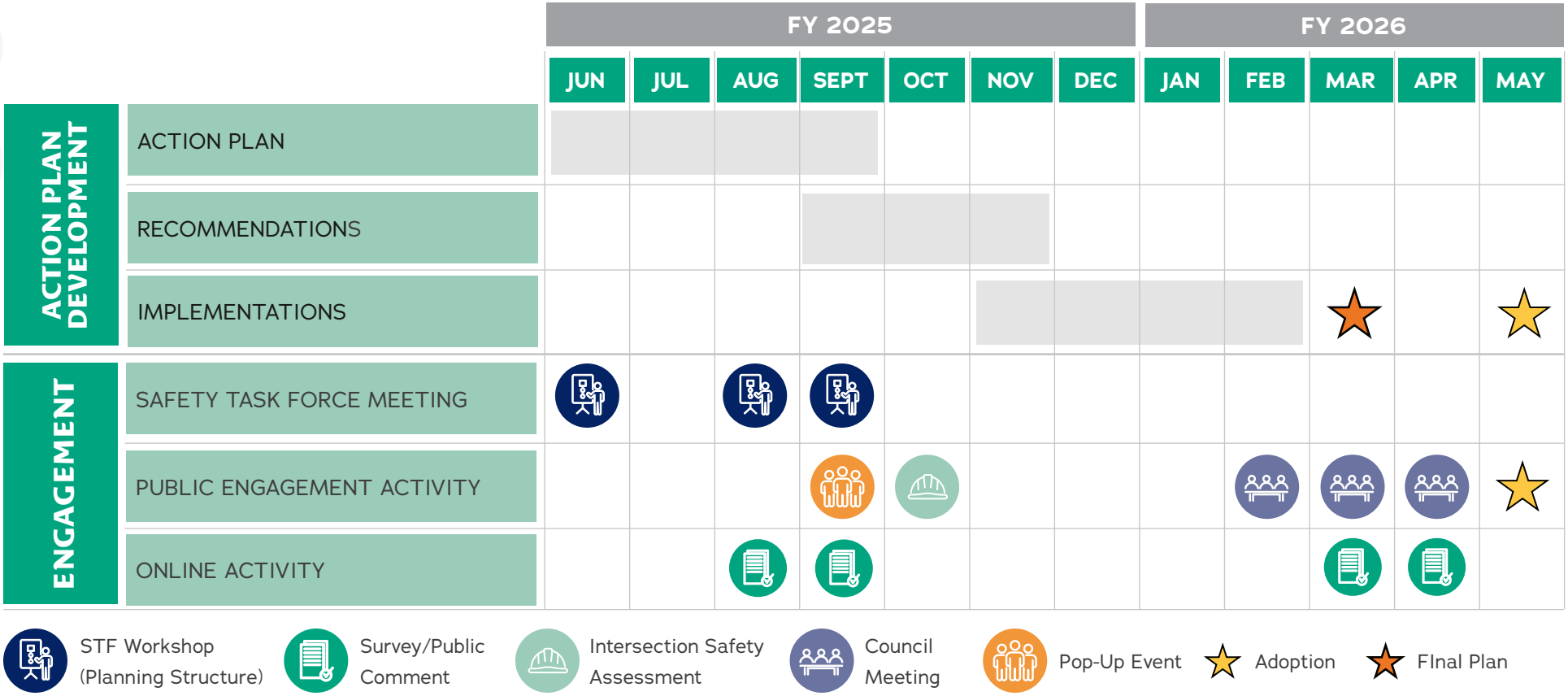
MEETING 3
Priority Considerations and Project Selection
October 23, 2025

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 the 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.

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.

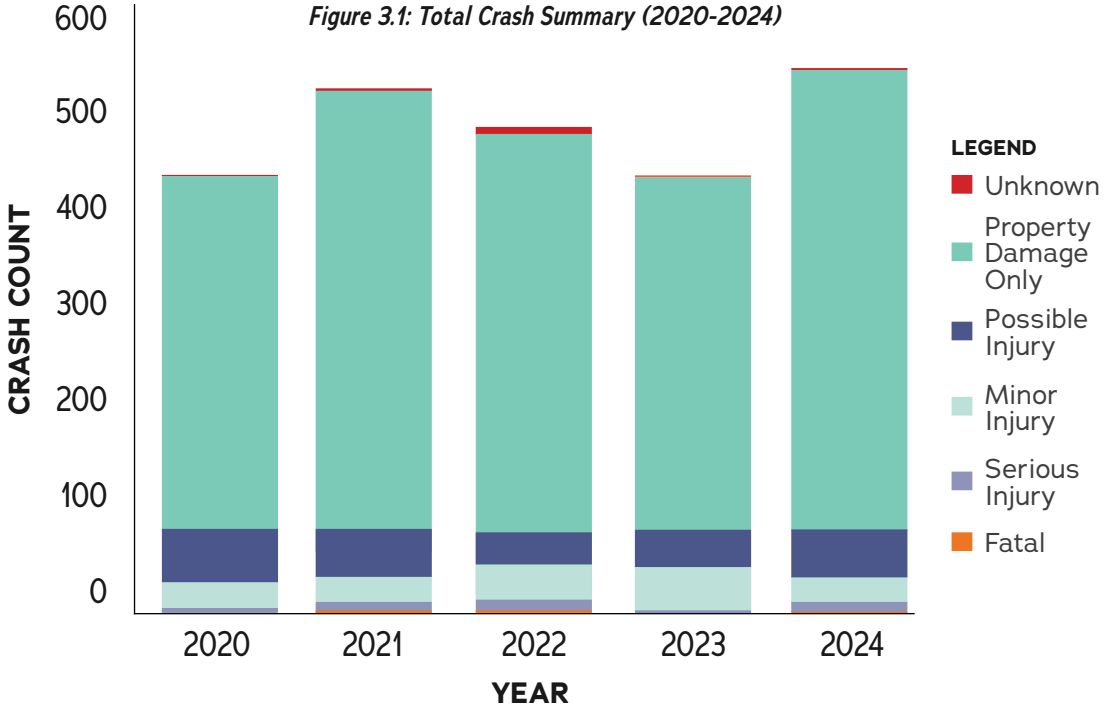


Figure 3.1: Total Crash Summary (2020-2024)

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.

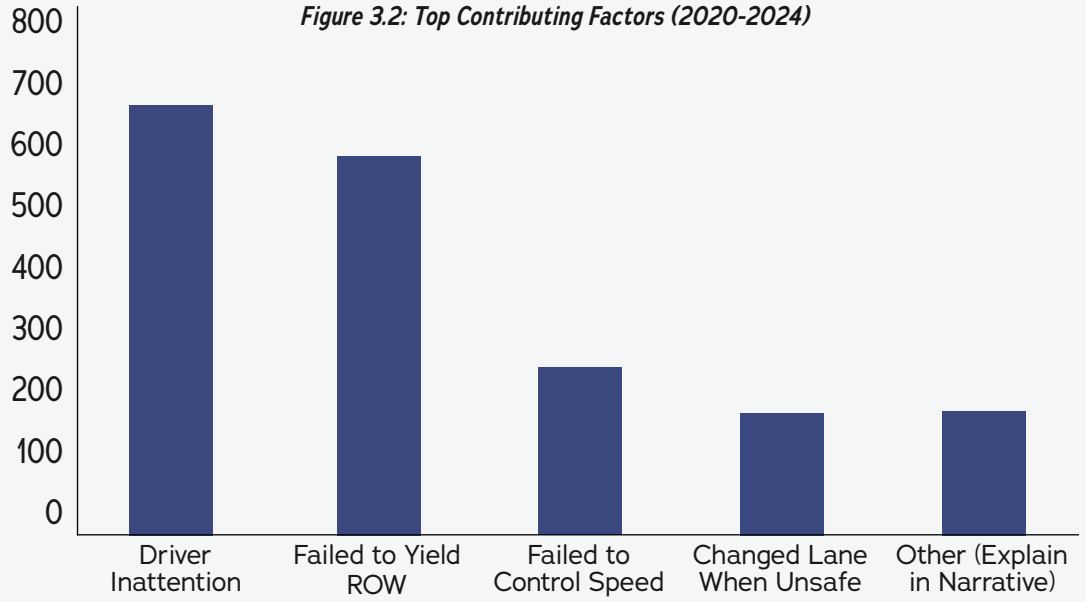
YEAR	K FATAL INJURY	A SUSPECTED SERIOUS INJURY	B SUSPECTED MINOR INJURY	C POSSIBLE INJURY	N NOT INJURED	99 UNKNOWN	TOTAL CRASHES
2020	0	4	25	51	340	1	421
2021	2	7	32	40	440	3	524
2022	2	9	38	30	388	5	472
2023	0	3	44	37	302	3	389
2024	1	8	52	33	440	2	536
TOTAL CRASHES	5	31	191	191	1910	14	2342

Table 3.1: Total Crashes By Severity (2020 – 2024)

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”.

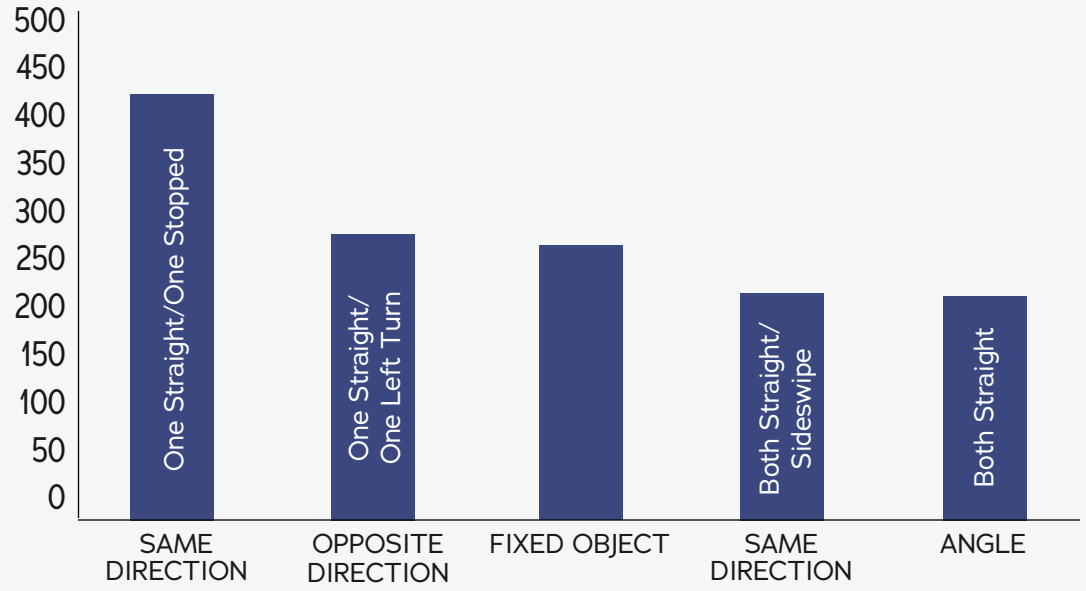
These results identify that the City of Boerne has a unique issue with distraction and failure to yield ROW since more than 25% of its crashes involved these top contributing factors.

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 Manners of Collision (2020-2024)



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 3.4**. 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

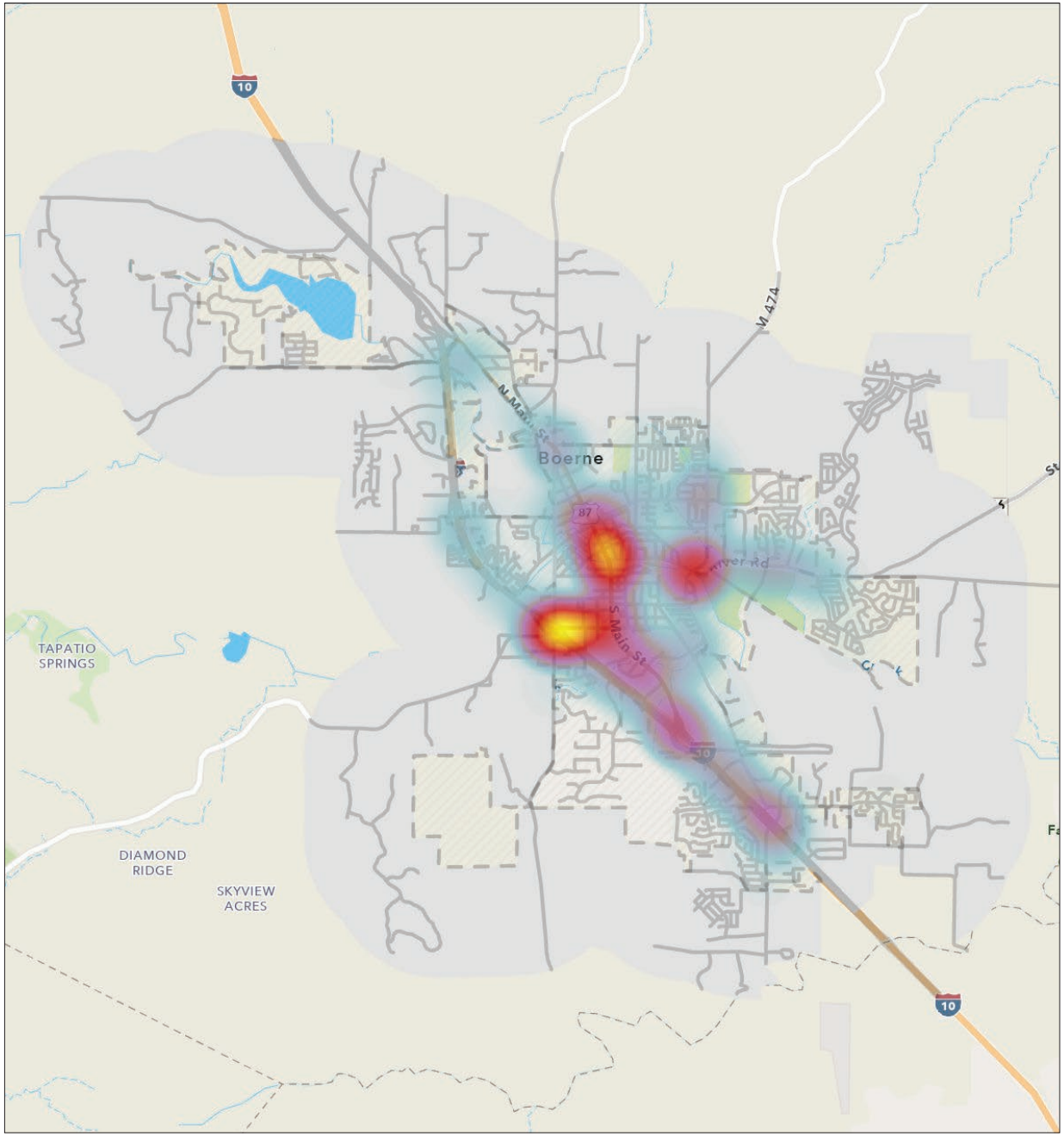


Figure 3.4: Crash Heat Map

HIGH CRASH INTERSECTIONS

Approximately 48% 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	K FATAL INJURY	A SERIOUS INJURY	B SUSPECTED MINOR INJURY	TOTAL NUMBER OF CRASHES
1	River Rd & Herff Rd	0	2	15	107
2	River Rd & Main St	0	1	9	99
3	E. Blanco Rd & Main St	0	0	2	36
4	Christus Pkwy & Main St	0	0	5	33
5	Herff Rd & Main St	0	0	1	29
6	W. Bandera Rd & Main St	0	0	3	26
7	Adler St. & N. School St	0	1	1	24
8	Charger Blvd & River Rd	0	0	4	24
9	Scenic Loop Rd & IH 10	0	0	2	20
10	Plant Ave & E Blanco Rd	0	0	4	18

Table 3.3: High Crash Intersections

**Crashes from 2022-2024*

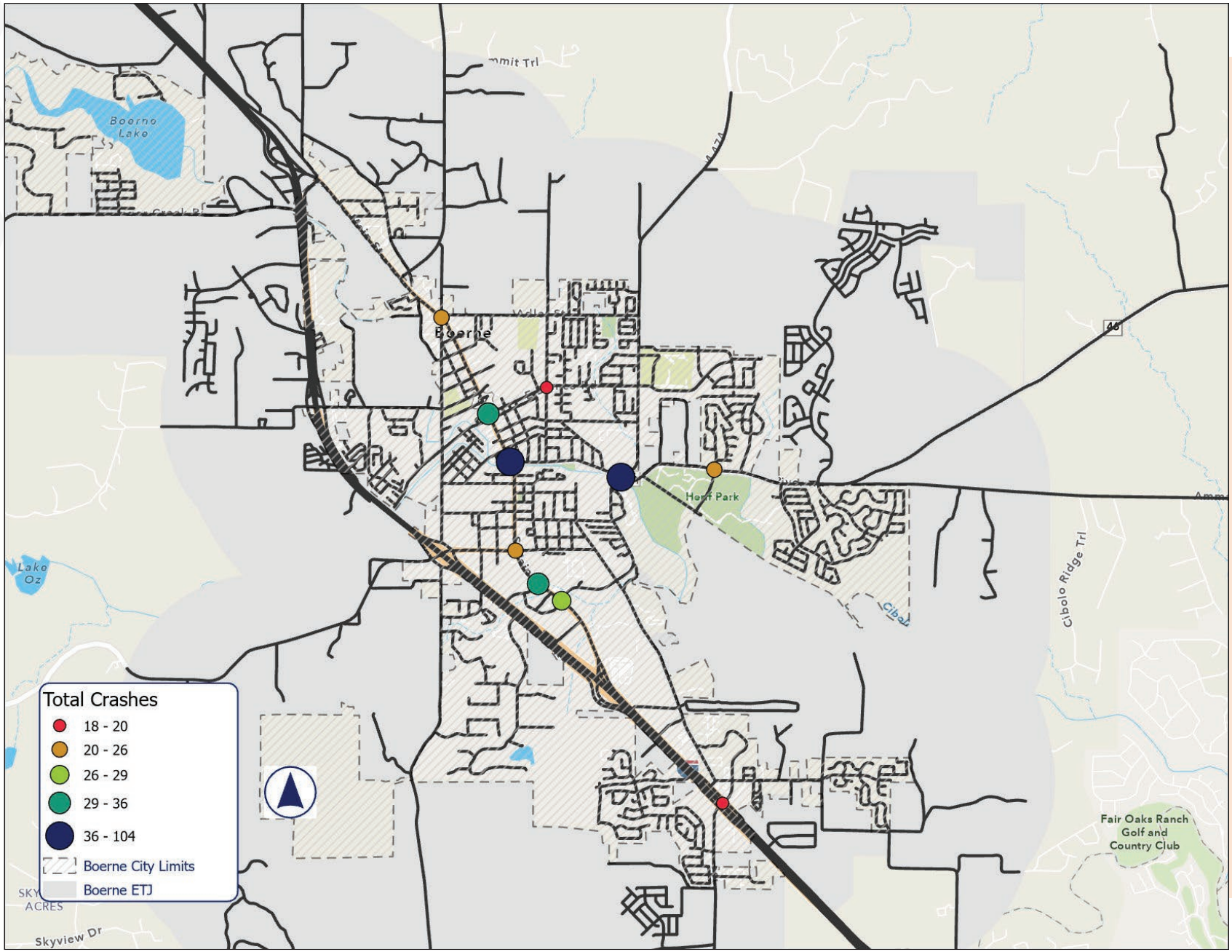


Figure 3.5: High Crash Intersections Map

BICYCLE & PEDESTRIAN CRASHES

During a crash involving vulnerable road users, the most vulnerable to fatal or serious injuries are pedestrian or bicyclist. This fact is consistent with 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 (K), suspected serious (A), or suspected minor injury crashes (B), 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**.

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, crossing movements, and interactions with turning vehicles. As a result, even when overall crash frequencies are lower 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 E**.

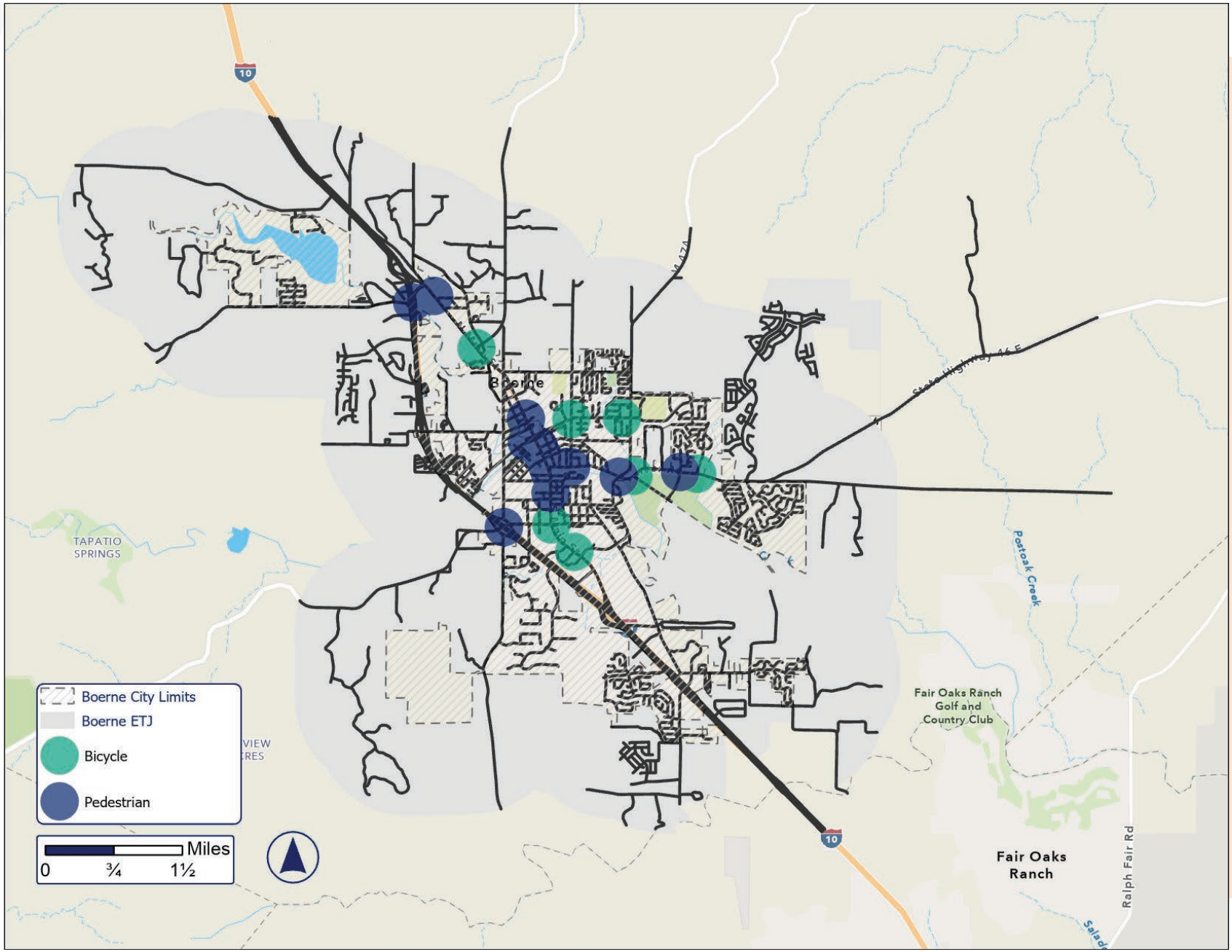


Figure 3.5: Bicycle & Pedestrian Crashes

TRANSIT AND MICROMOBILITY

Fixed-route public transportation service does not currently operate within the City of Boerne. As documented in the 2026 mode-share data in **Figure 3.6**, less than 0.1% of Boerne residents commute by public transportation, reflecting the City's auto-dependent land-use pattern and the absence of transit or other service providers within the city limits. As a result, transit rider exposure on city-maintained roadways is presently negligible, and transit user crashes are not identifiable as a distinct category in the TxDOT CRIS crash record within the 2020-2024 five-year study period.

COMMUTE TRANSPORTATION MODES	PERCENTAGES
PERSONAL VEHICLE	82%
WORK FROM HOME	16.2%
OTHER MEANS OF TRANSPORTATION	0.9%
WALKED	0.07%
PUBLIC TRANSPORTATION	0.1%

Figure 3.6: Boerne Census Mode of Transportation Details

While transit related safety risk is currently minimal, the City's 2018 Master Plan (Action 3.1.6) identifies a future transit station as a long-range goal. As regional demand grows and AAMPO's Long-Range Transportation Plan evolves, transit access points, park-and-ride facilities, and bus stop infrastructure may introduce new pedestrian exposure and access-road conflicts on city-maintained streets; particularly along IH-10 frontage roads and the W. Bandera corridor. The CSAP's strategies to improve pedestrian crossings, sidewalk continuity, and intersection safety along these corridors are therefore foundational to supporting future transit access, consistent with USDOT's Complete Streets guidance.

Micromobility including electric scooters, e-bikes, and personal conveyance devices is not a significant travel mode in Boerne, and no dockless or shared micromobility systems operate within the city limits. However, the growth of privately owned e-bikes among residents using the City's No.9 Trail and Cibolo Nature trails system and downtown routes is an emerging pattern. The pedestrian and bicycle safety improvements proposed in this CSAP, including enhanced crossings, refuge islands, and sidewalk upgrades, provide the infrastructure foundation that would support safe micromobility use as this mode of transportation grows.

FREIGHT AND COMMERCIAL VEHICLES

Freight and commercial vehicles including semi-trucks, delivery vehicles, and utility service provider vehicles are a key component of the roadway user mix on several City and TxDOT maintained corridors in Boerne. In alignment with the TxDOT freight route system identified in **Figure 3.7,** elevated truck activity is concentrated along IH-10 and associated frontage roads, W. Bandera Road and Business US 87 (Main Street), which functions as a regional through-route. Fixed-object crashes accounting for approximately 11% of all crashes citywide and commonly associated with lane-departure events involving larger vehicles, are most prevalent along W. Bandera Road, a corridor included on the HIN due to its elevated crash rate relative to similar functional classifications. Community input reinforced safety concerns related to commercial vehicle operations, including excessive truck speeds along Main Street and delivery vehicle parking conflicts within the travel lane on Esser Road and Blanco Road. These conditions create increased crash risk and exposure for all road users, particularly pedestrians in downtown and mixed-use areas. While freight operations along IH-10 fall largely outside City jurisdiction, the SS4A framework emphasizes proactive safety improvements at freight transition points such as city-maintained frontage roads, roadway approaches, driveway access areas, and corridors where freight routes interface with pedestrian oriented land uses. These locations present meaningful opportunities for targeted strategies to reduce crash severity, improve multi-modal safety, and better manage commercial vehicle movements within the City's control.

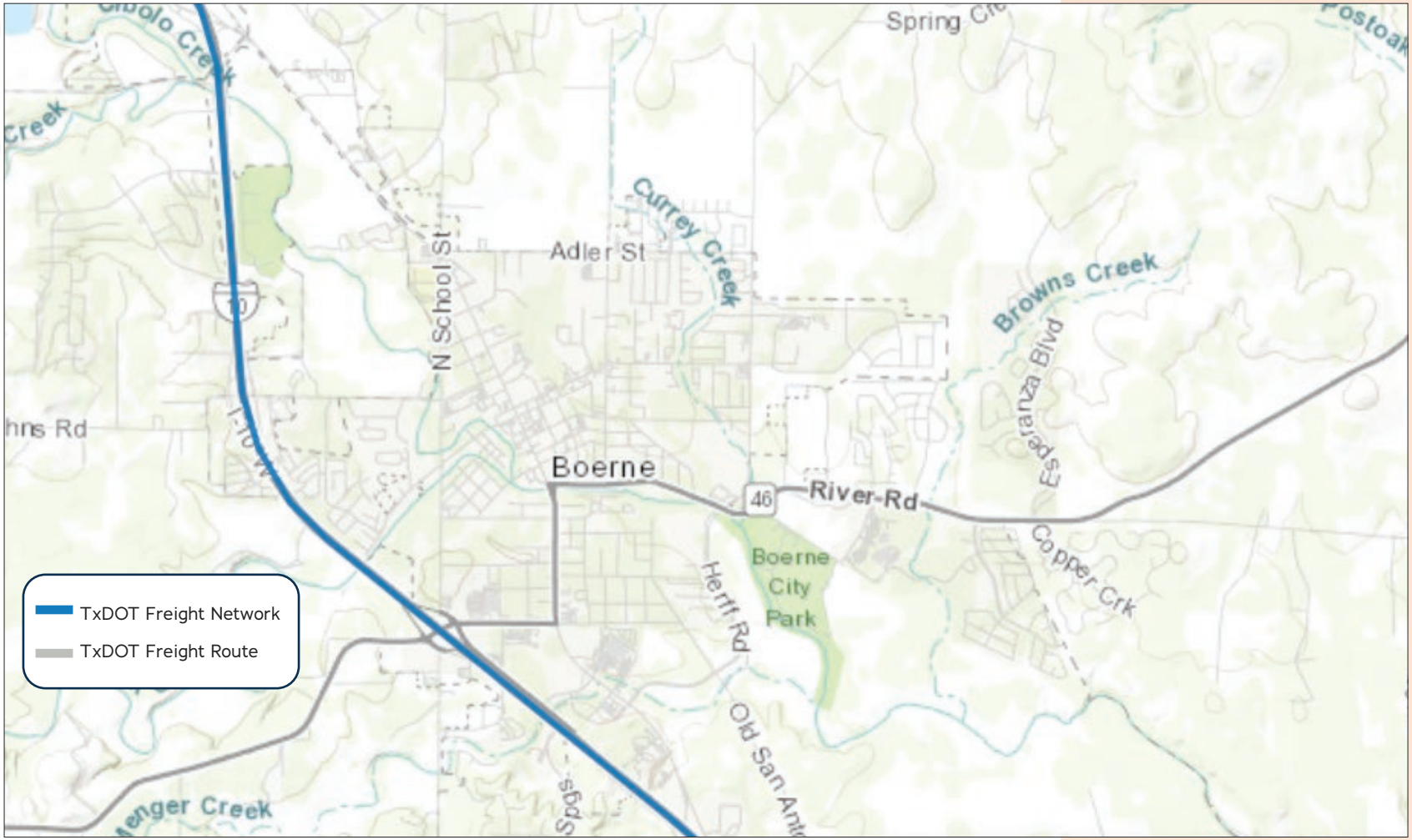


Figure 3.7: TxDOT Texas National Highway Freight Network

CRITICAL CRASH RATE METHOD

The Federal Highway Administration (FHWA) along with American Association of State Highway and Transportation Officials (AASHTO) define the methodology and guidance to calculate crash rates to assist in prioritizing locations where safety improvements are most needed. Outlined in the Highway Safety Manual (HSM), the 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 crash rate and is considered for the HIN.

An ArcGIS Pro model was created to calculate the crash rate and supporting calculations for each roadway segment in the City. The model assigns crashes to an adjacent segment and performs the calculations. The following section outlines the process used in the calculation of the crash rate using fata (K), serious injury (A) and suspected minor injury (B) crashes from the previous five years (2020-2024) in Boerne.

CRITICAL CRASH RATE CALCULATION

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

ASSIGNING DATA TO ROAD SEGMENTS

Calculating the 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 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 CRASH RATE

The crash rates were calculated using the equations outlined in the HSM. The observed crash rate represents the existing KAB crashes on each road segment per million vehicle-miles traveled. For the expected average crash rate per 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 3.8** outlines the data inputs needed to calculate the crash rate.

CALCULATE CRASH RATE

The crash rate was calculated and compared to the expected crash rate for similar facilities. A resulting ratio greater than 1.0 indicates that the observed crash rate exceeds the expected rate, meaning the segment experiences more crashes than comparable roadways with the same functional classification. Segments with a ratio of 1.0 or greater were identified as potential High Injury Network (HIN) segments.

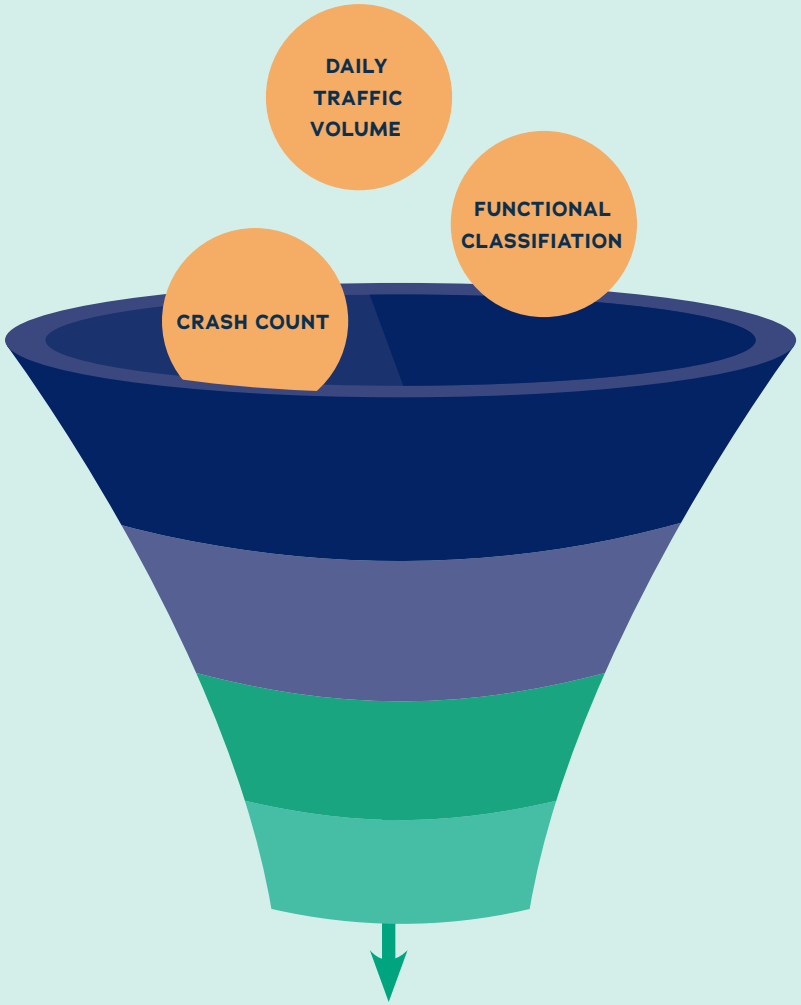


Figure 3.8: Critical Crash Rate

HIGH INJURY NETWORK 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 actively generating 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 that capture 72% of KAB crashes.

A summary of all segments included in the HIN is shown in **Table 3.6,** and a map of the City's HIN is shown in **Figure 3.9**.

	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%**

Table 3.5: City of Boerne Crash Summary

K = Fatal Crash | A = Suspected Serious Injury Crash | B = Suspected Minor Injury Crash

ROADWAY	FROM	TO	CLASSIFICATION	LENGTH (MI)	AADT	TOTAL CRASH COUNT	K	A	B	TOTAL CRASHES	CRASH RATE (MVMT)
N Esser	Greyhound Ln	Deer Creek	Collector	0.06	7,322	13	0	0	4	4	4.99
E Blanco	S Esser	Stonegate Rd	Collector	0.12	7,322	31	0	0	4	4	2.49
W Bandera	Wanda	Water St	Arterial	0.25	15,755	12	0	0	12	12	1.67
River Rd	City Park	Sharon	Arterial	0.16	10,748	24	0	0	4	4	1.27
River Rd	Champion	Herff Ranch	Arterial	0.30	7,300	23	0	1	4	5	1.25
S Main	E Theissen	James	Arterial	0.05	19,904	19	0	1	0	1	0.55
River Rd	S Main	Pecan St	Arterial	0.08	12,883	16	0	0	1	1	0.53
W Bandera Bridge	Backage Rd	Backage Rd	Arterial	0.22	56,906	143	1	0	10	11	0.48
S Main	W San Antonio	Rosewood	Arterial	0.18	19,904	31	0	0	3	3	0.46
E Blanco	Saunders	Harz	Collector	0.21	9,200	14	0	0	1	1	0.28

Crashes from TxDOT's CRIS for 2020-2024. Crash Rate per million vehicle miles traveled. Roadway classification is based on the City of Boerne Major Thoroughfare Plan.

AADT = Average Annual Daily Traffic | K = Fatal Crash | A = Suspected Serious Injury Crash | B = Suspected Minor Injury Crash

Table 3.6: Top High-Injury Network Segments

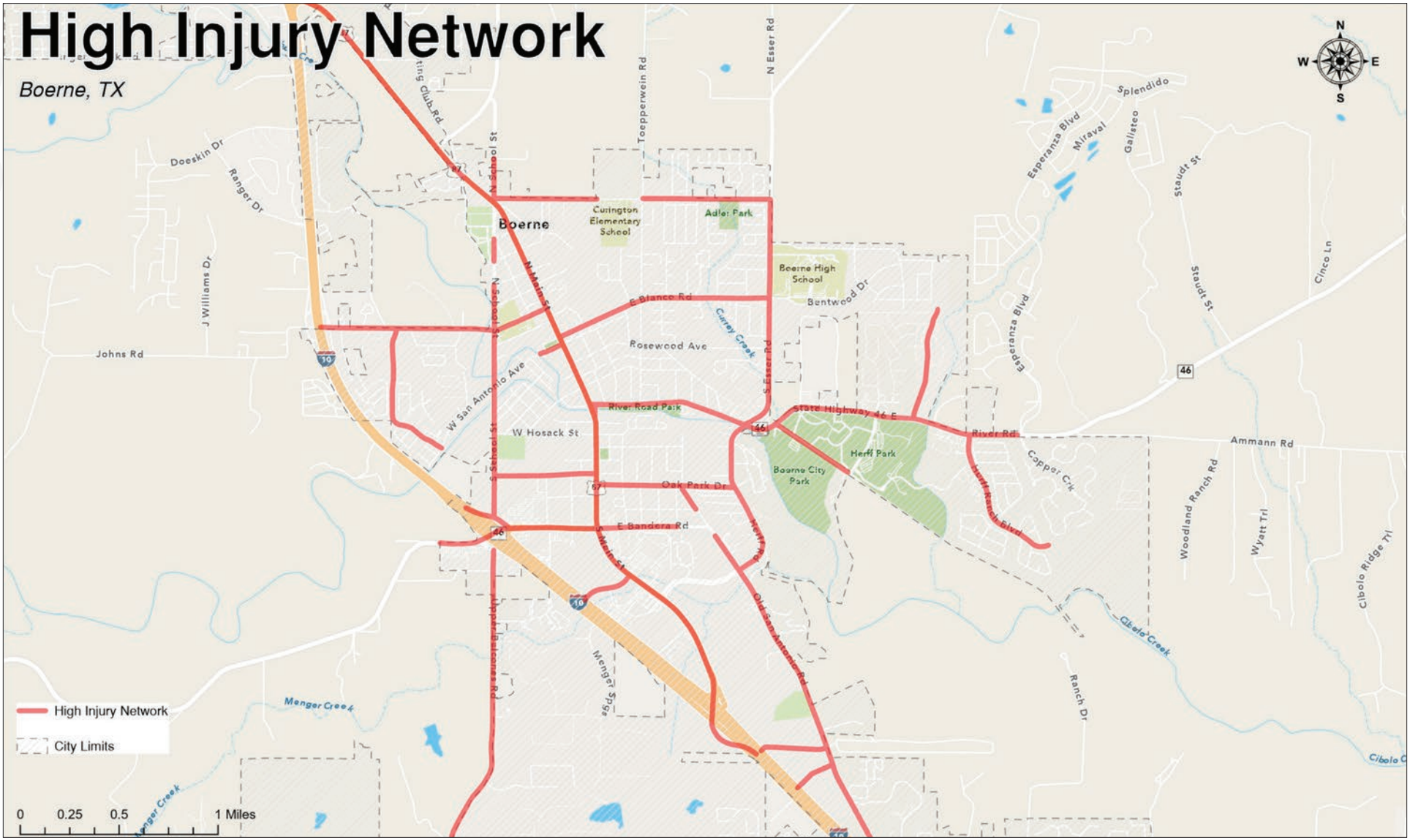


Figure 3.9: Boerne High-Injury Network

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, 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 POPULATION CENSUS TRACTS

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.

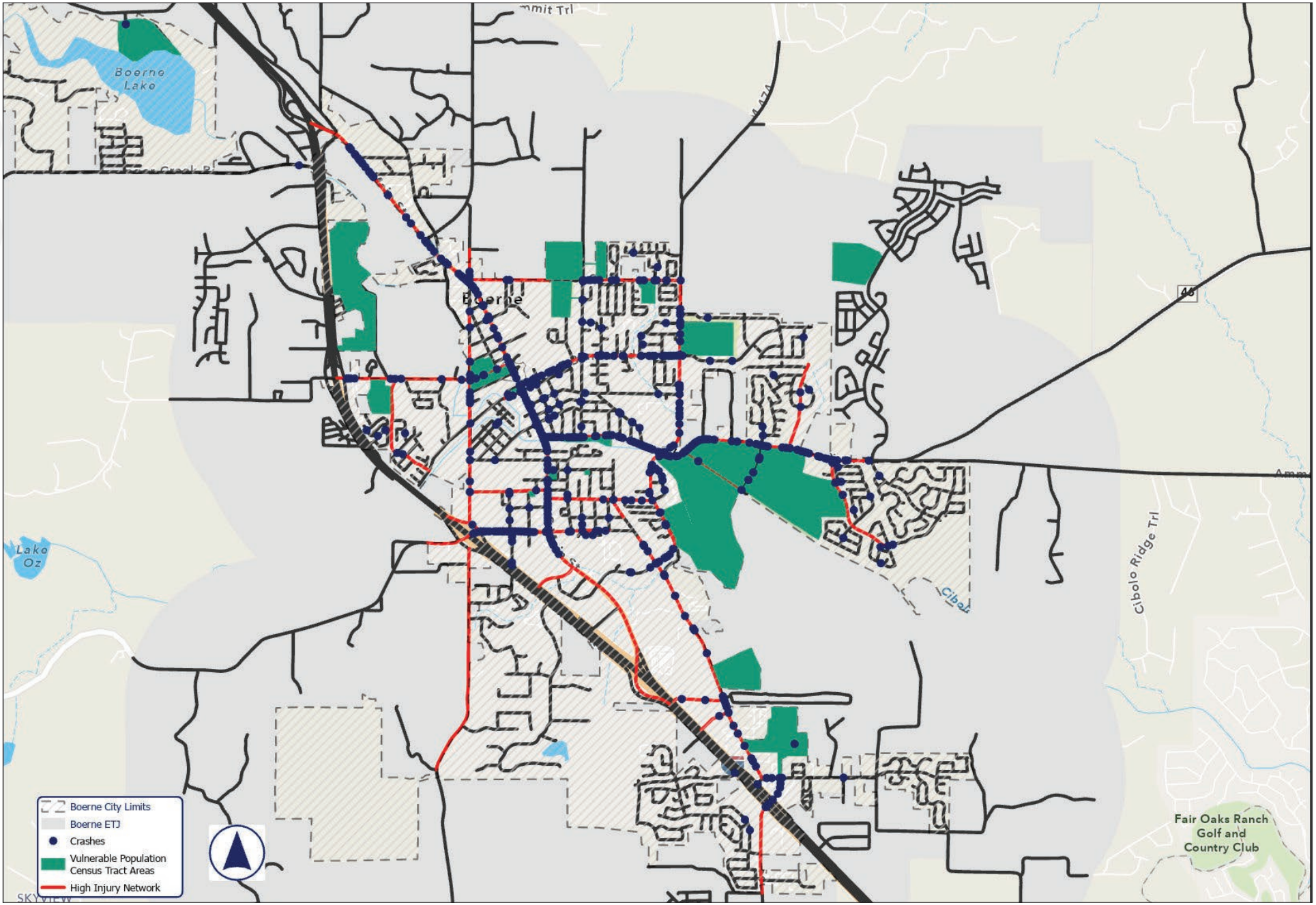


Figure 4.1: Vulnerable Population Census Tract Areas

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.

Figures 4.2 and 4.3 summarize travel characteristics, including commute patterns and mode share, to contextualize pedestrian exposure and safety risk within Boerne and its downtown core.

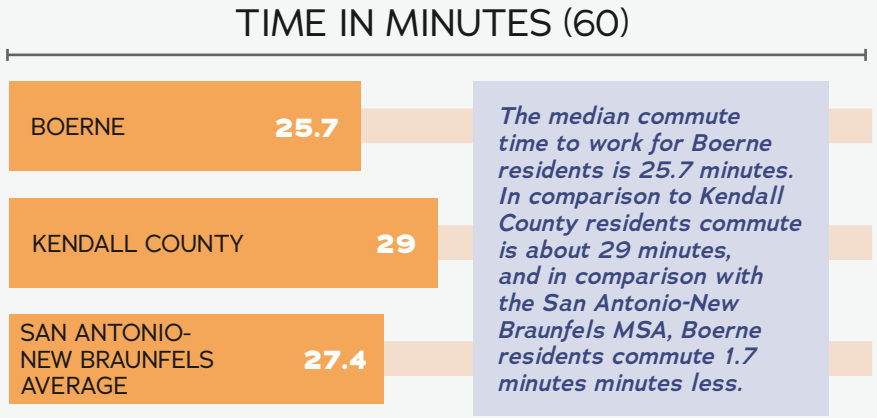


Figure 4.2: Commute Times

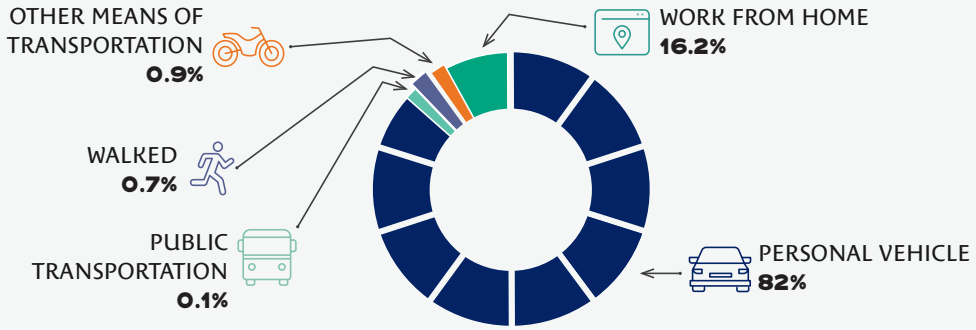


Figure 4.3: Transportation to Work

CRASH HISTORY AND SEVERITY TRENDS IN VULNERABLE POPULATION CENSUS TRACTS

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, 21 out of the 24 total bicycle and pedestrian crashes were in the HIN areas (87.5%).

Throughout the City, 9.7% of all crashes are KABs, whereas in disadvantaged census tracts, this number is 9.9%. Although the difference is negligible, the higher percentage of bike and pedestrian KAB crashes within the vulnerable population census tracts suggests disproportionate crash severity, reinforcing the need for targeted safety strategies in these locations.

Figure 4.4: Downtown Boerne

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 5.2**, 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.

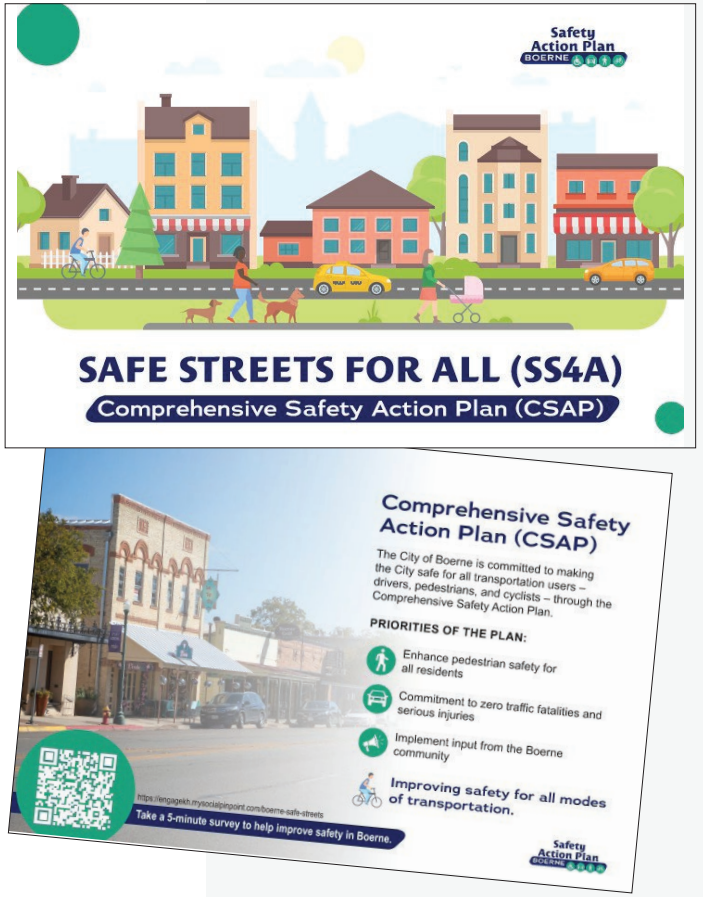


Figure 5.1: CSAP Survey Postcard

Figure 5.2: Mobility Focused Public Responses

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. **The results of those selections are presented to the below.**

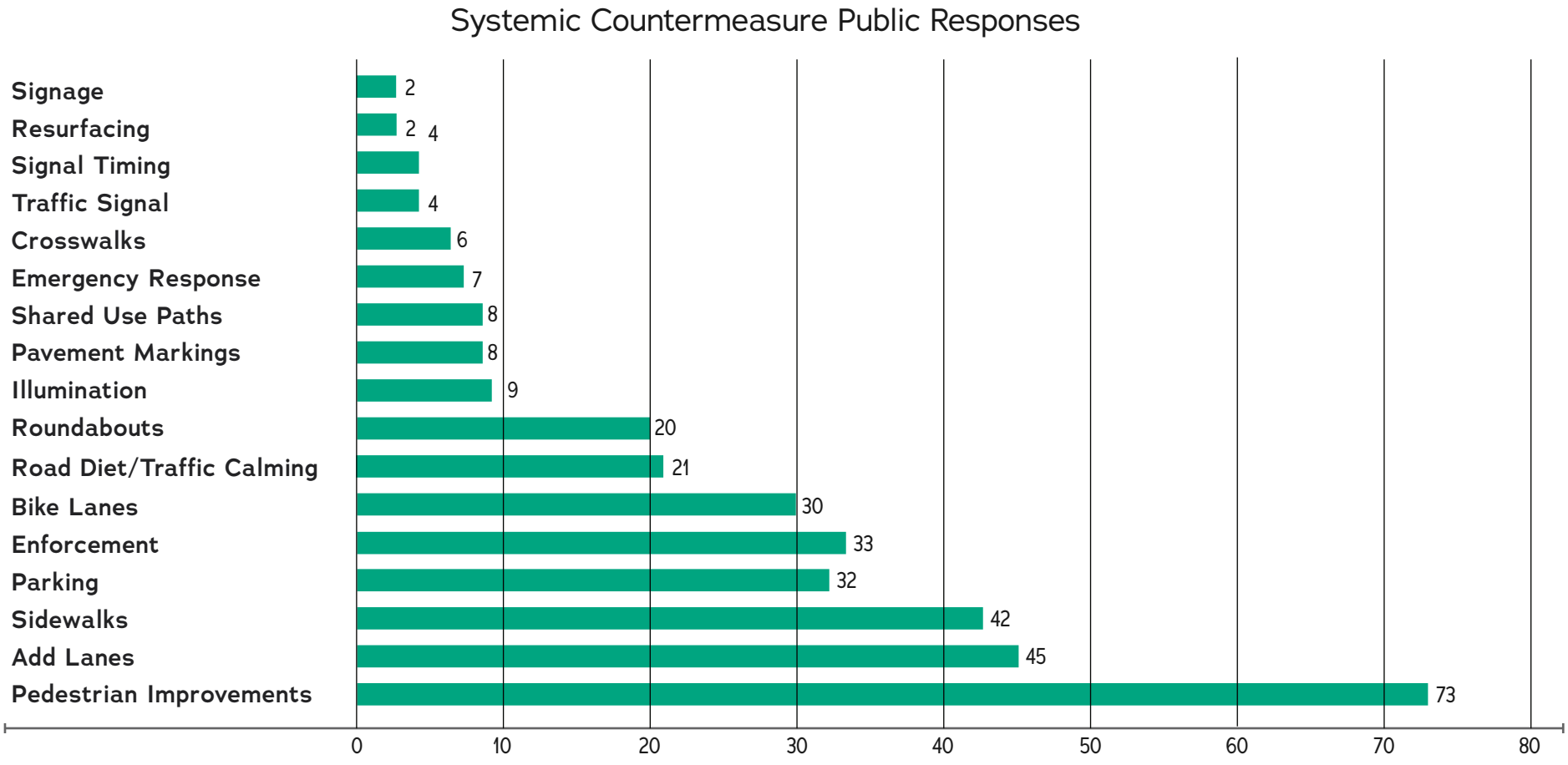


Figure 5.3: Systemic Countermeasure Public Responses

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 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 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.

FOCUS INTERSECTIONS	RESPONSES
River Rd & Herff	169
5 Points	18
Main & River Rd	4
SH 46 & Charger	3
IH 10 & SH 46	2
Johns Rd & School Rd	2
Esser & Greyhound	2
Esser & Adler	1
Oak Park & Main	1
Schweppe & Oak Park	1
TOTAL	**203**

Figure 5.4: Public Identified Focus Intersections

FOCUS CORRIDORS	RESPONSES
Adler St	4
Cascade Caverns	10
Blanco Rd	1
Plant Avenue	4
Old San Antonio	1
Scenic Loop	1
River Rd	21
TOTAL	**42**

Figure 5.5: Public Identified 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 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.

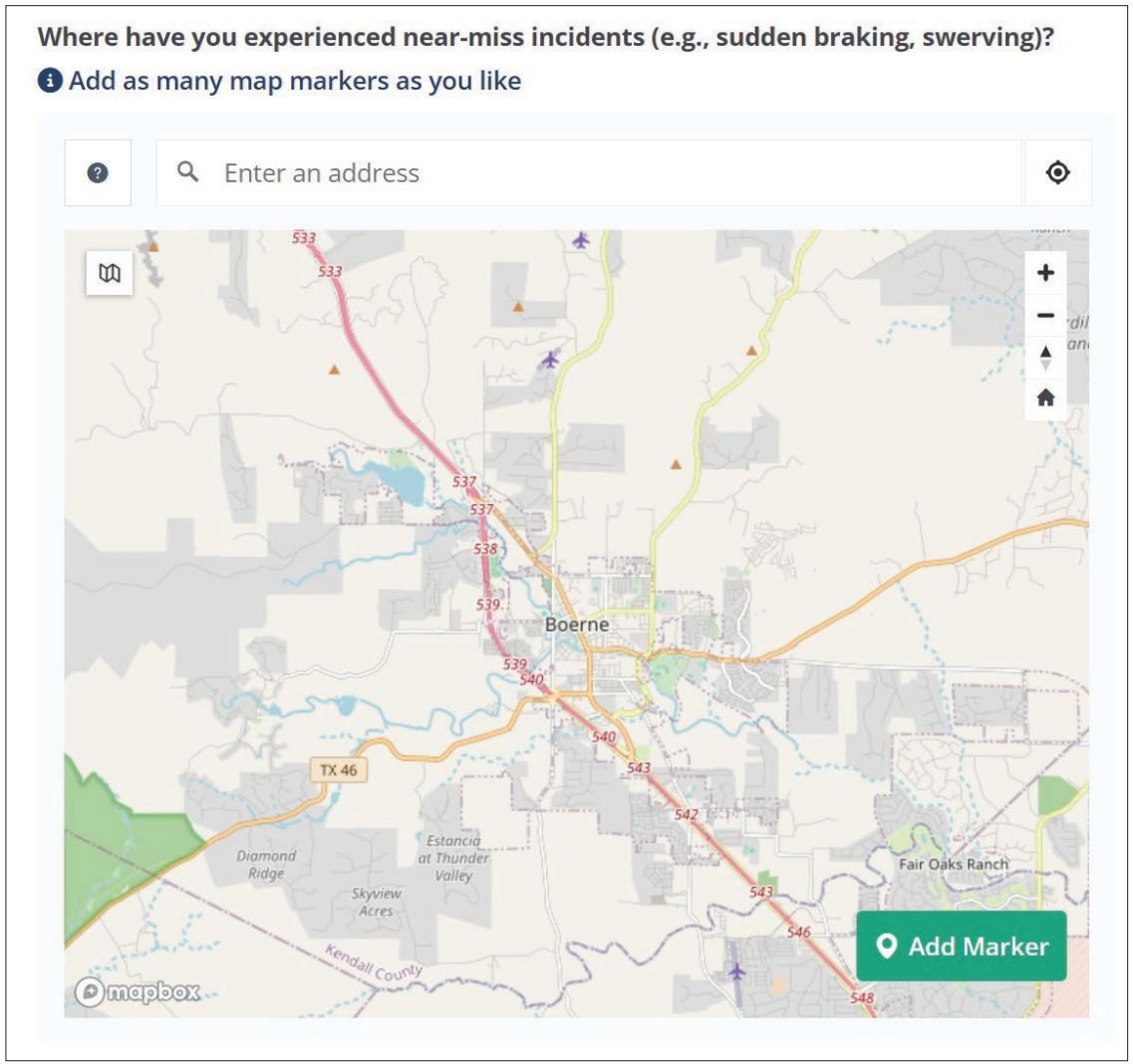


Figure 5.6: Interactive Map Survey Example

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.

Figure 5.7: 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 Avenue. For each segment, participants placed sticky notes on separate roll-plot sheets to share specific safety concerns and project ideas. In addition, informational postcards 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 Assessment (ISA) field review conducted at two intersections identified by the Safety Task Force 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 Safety Task Force 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 C.**

Figure 5.8: Site Visit Team

Figure 5.9: Intersection Safety Assessment 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 participated in an action-planning workshop focused on selecting strategies, projects, policies, and activities. During the workshop, Safety Task Force 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 Safety Task Force then evaluated and discussed each option to develop a prioritized list of improvements.

PROJECTS WERE PRIMARILY PRIORITIZED BASED ON THE FOLLOWING CRITERIA:

1. **Does the project improve safety, particularly for pedestrians and other vulnerable roadway users?**
2. **Does the project support CSAP goals (accommodate multiple modes, improve mobility, and implement adopted plans)?**
3. **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 Safety Task Force 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 HIN and at identified high-crash intersections. Planning level concepts and details for each infrastructure project are summarized in the table below.

	LOCATION	DESCRIPTION	BENEFITS
ID	**INTERSECTION PROJECTS**		
1	River Rd & Plant Ave	Install a roundabout.	Removes conflict points, improves traffic flow and improves pedestrian safety.
2	Main St & River Rd	Install a southbound left-turn deceleration lane and improve intersection geometry.	Channelizes traffic flow, improves mobility, and removes conflict points.
3	Main St & Adler/ School St (5 Points)	Modify traffic signal and reconfigure intersection to add a traffic signal to Adler Street and turn-lanes on Main St.	Controls traffic flow, improves pedestrian safety, and removes conflict points.
4	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.
5	Cascade Caverns Rd & Scenic Loop	Install a traffic signal and turn lane.	Controls traffic flow, improves pedestrian safety, and removes conflict points.
ID	**CORRIDOR PROJECTS**		
1	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.
2	W. Blanco Rd (Main Plaza) (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.	Increases traffic capacity, removes conflict points, improves traffic flow, and improves pedestrian safety.
3	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: Infrastructure Projects

→ Intersection 1: River Rd & Plant Ave

PROJECT INFORMATION:

Description: Install a roundabout.

☑ Located on HIN.

Estimated Construction Cost: $2,030,000

SAFETY IMPACT:

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

Expected Crash Reduction: 35%

Benefit-Cost Ratio: 5.13

PROJECT READINESS:

May Require Utility Relocation

May Require ROW Acquisition

Environmental Impacts: To be Determined

Project Development: Conceptual Design Complete

OTHER PROJECT CONSIDERATIONS:

Roundabout conceptual design was designed consistent with NCHRP guidance that addressed emergency vehicle access, and included stakeholder coordination with the Boerne Fire Department and Police Department to evaluate emergency vehicle clearance at priority intersections.

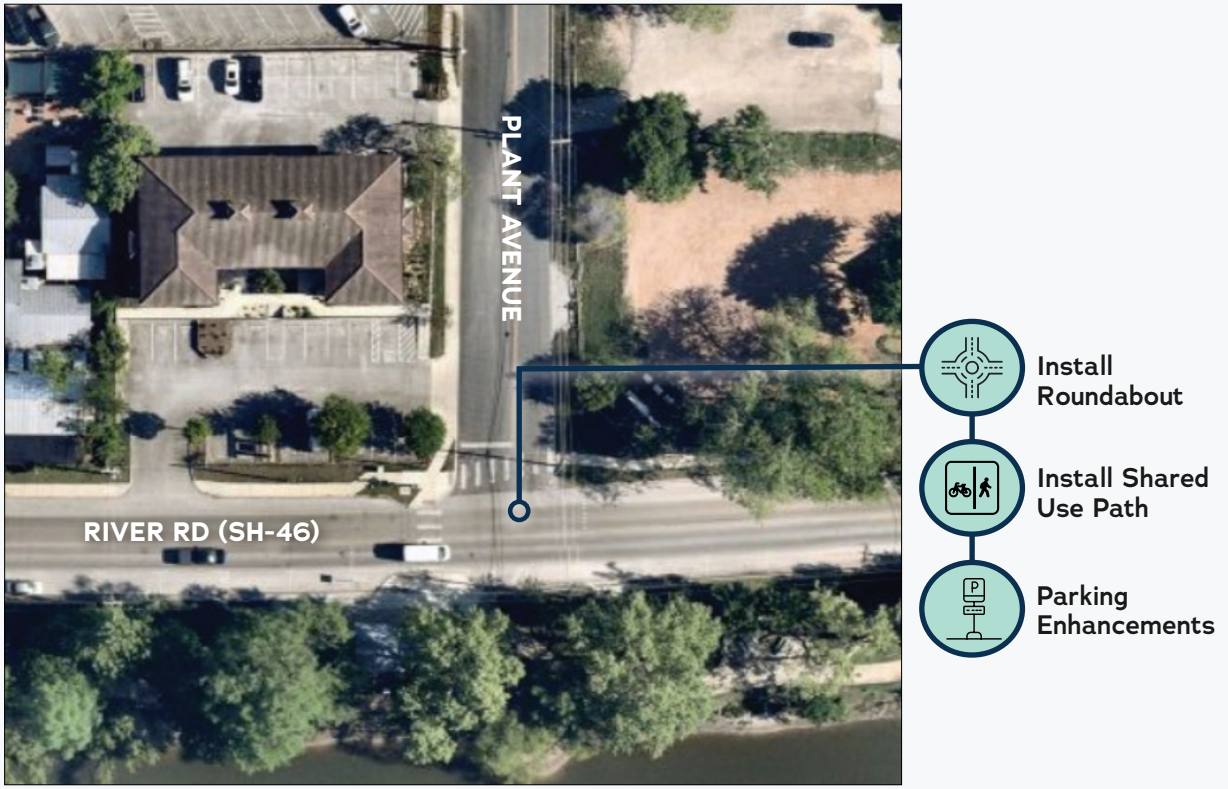


Figure 6.2: River Rd (SH-46) & Plant Avenue

→ Intersection 2: Main St & River Rd

PROJECT INFORMATION:

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

☑ Located on HIN.

Estimated Construction Cost: $305,000

SAFETY IMPACT:

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

Expected Crash Reduction: 43%

Benefit-Cost Ratio: 490.74

PROJECT READINESS:

May Require Utility Relocation

May Require ROW Acquisition

Environmental Impact: To be Determined

Project Development: Conceptual Design Complete

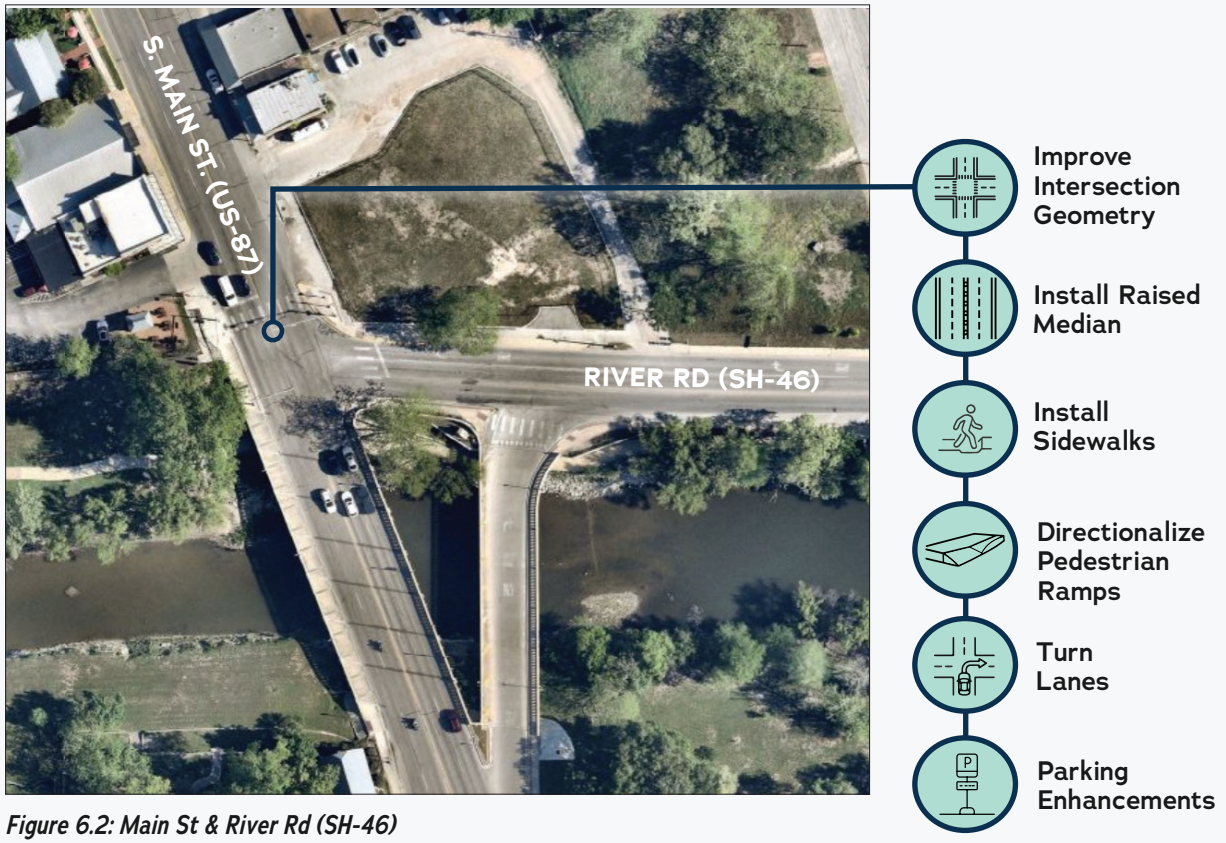


Figure 6.2: Main St & River Rd (SH-46)

→ Intersection 3: Main St & Adler/School St

PROJECT INFORMATION:

Description: Modify traffic signal and reconfigure intersection to add a traffic signal to Adler Street and turn-lanes on Main St.

☑ Located on HIN.

Estimated Construction Cost: $1,200,00

SAFETY IMPACT:

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

Expected Crash Reduction: 44%

Benefit-Cost Ratio: 8.95

PROJECT READINESS:

Does Not Require Utility Relocation

Does Not Require ROW Acquisition

Project Development: Conceptual Design Complete

Public Engagement: Agency Coordination On-Going

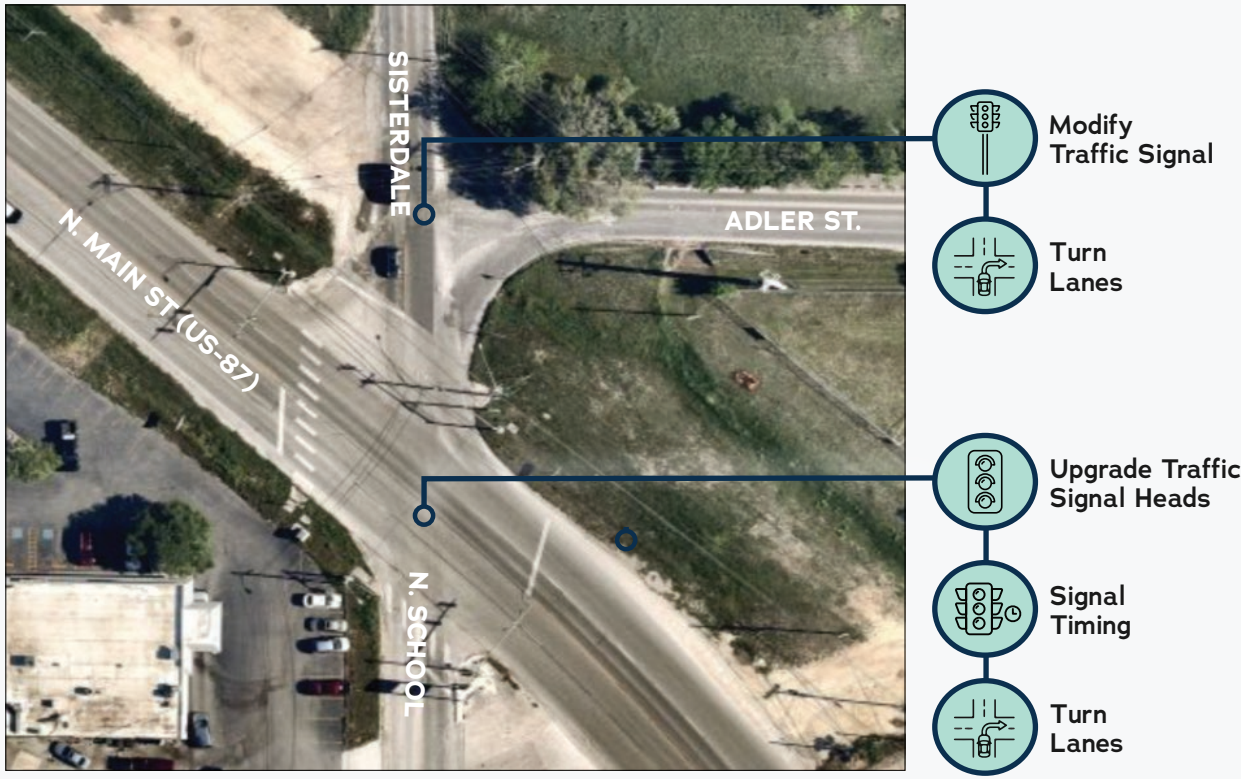


Figure 6.4: Main St & Adler St/School St (5 Points)

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

PROJECT INFORMATION:

Description: Improve intersection geometry on the northeast corner and directionalize pedestrian ramps.

☑ Located on HIN.

Estimated Construction Cost: $575,000

SAFETY IMPACT:

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

Expected Crash Reduction: 43%

Benefit-Cost Ratio: 21.50

PROJECT READINESS:

May Require Utility Relocation

May Require ROW Acquisition

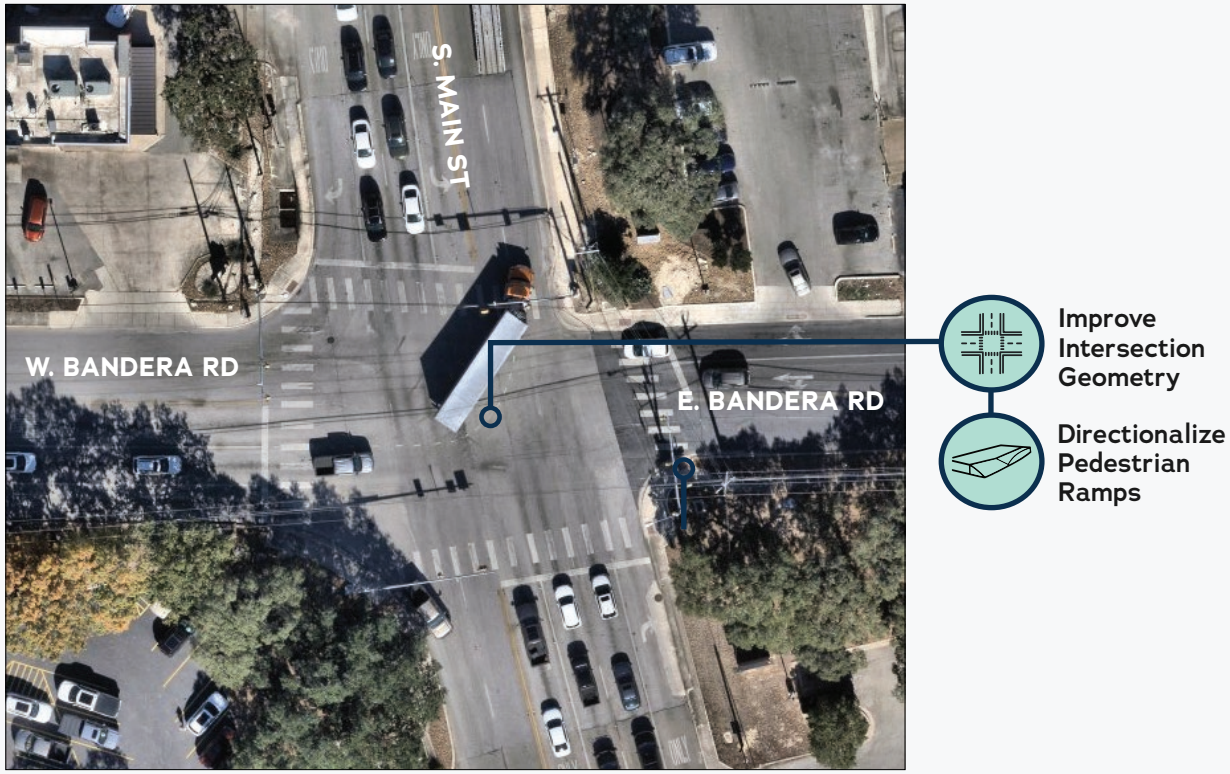


Figure 6.5: S. Main St & W. Bandera Rd

→ Intersection 5: Cascade Caverns Rd & Scenic Loop

PROJECT INFORMATION:

Description: Install a traffic signal and turn lane.

☒ Not Located on HIN.

Estimated Construction Cost: $970,000

SAFETY IMPACT:

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

Expected Crash Reduction: 44%

Benefit-Cost Ratio: 2.84

PROJECT READINESS:

Does Not Require Utility Relocation

May Require ROW Acquisition

Environmental Impacts: To be Determined

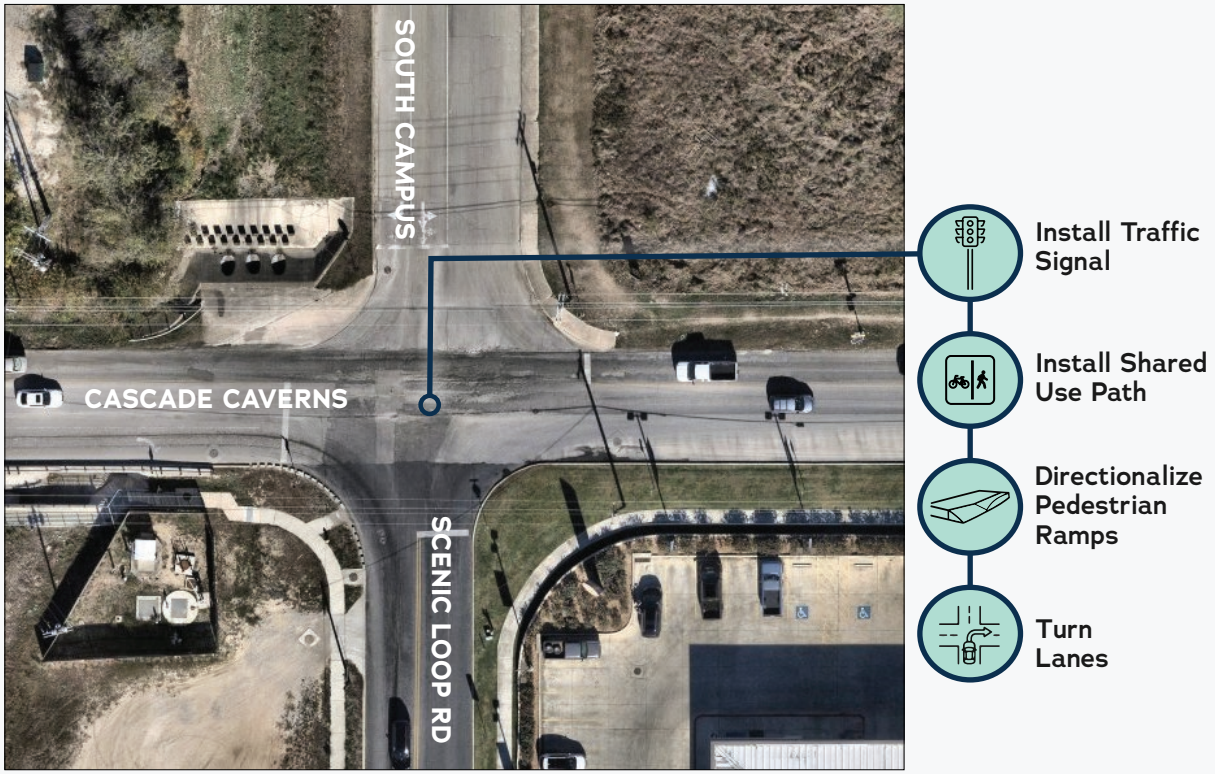


Figure 6.6: Cascade Caverns Rd & Scenic Loop

→ 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 improve pavement markings.

☑ Located on HIN.

Estimated Construction Cost: $1,040,000

SAFETY IMPACT:

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

Expected Crash Reduction: 89%

Benefit-Cost Ratio: 98.96

PROJECT READINESS:

Does Not Require Utility Relocation

Does Not Require ROW Acquisition

Environmental Impacts: To be Determined

Project Development: Conceptual Design Complete

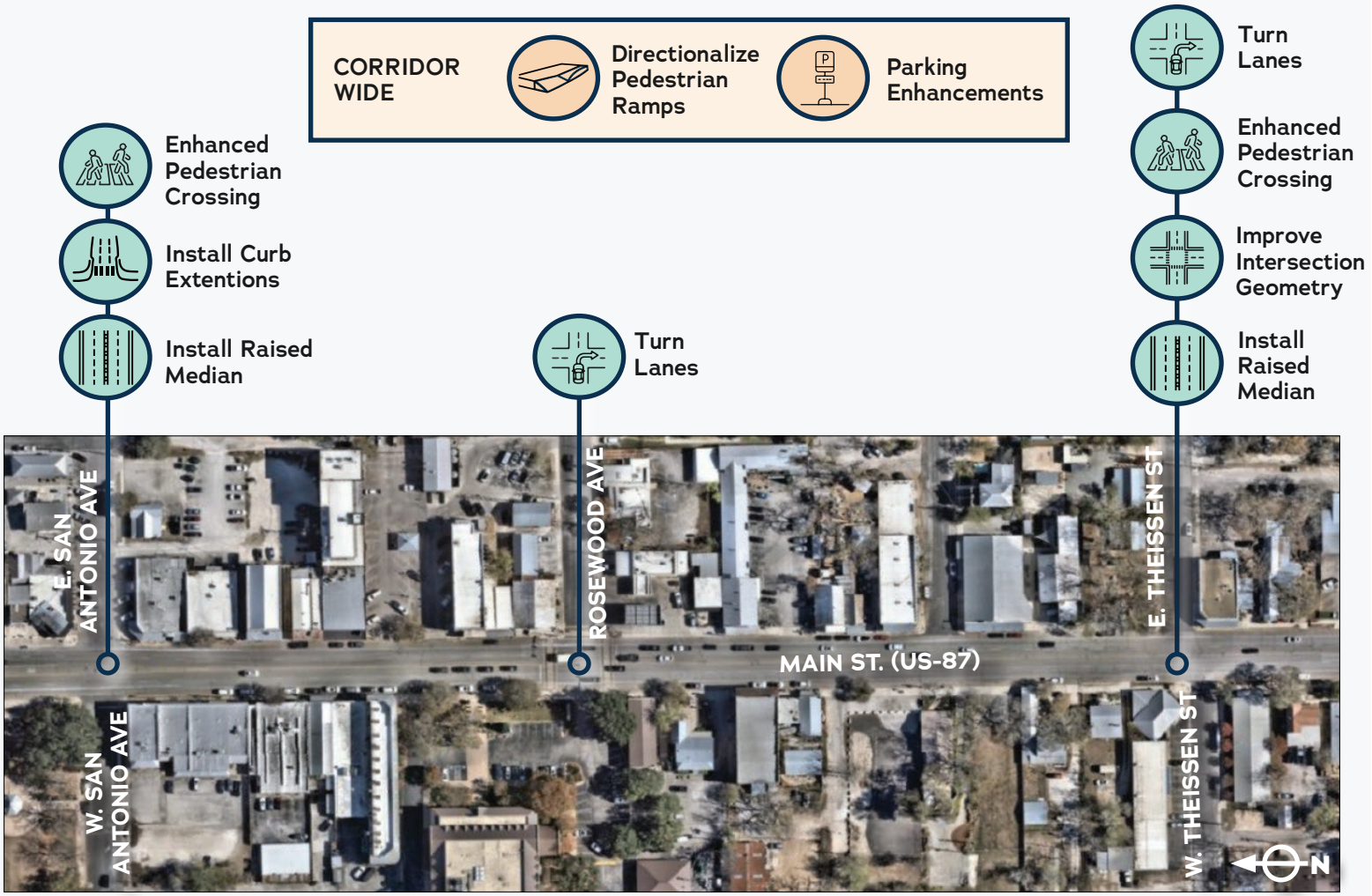


Figure 6.7: S. Main St (E. San Antonio Ave to E. Theissen St)

→ 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 Construction Cost: $960,000

SAFETY IMPACT:

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

Expected Crash Reduction: 72%

Benefit-Cost Ratio: 5.69

PROJECT READINESS:

May Require Utility Relocation

Does Not Require ROW Acquisition

Environmental Impacts: To be Determined

Project Development: Conceptual Design Complete

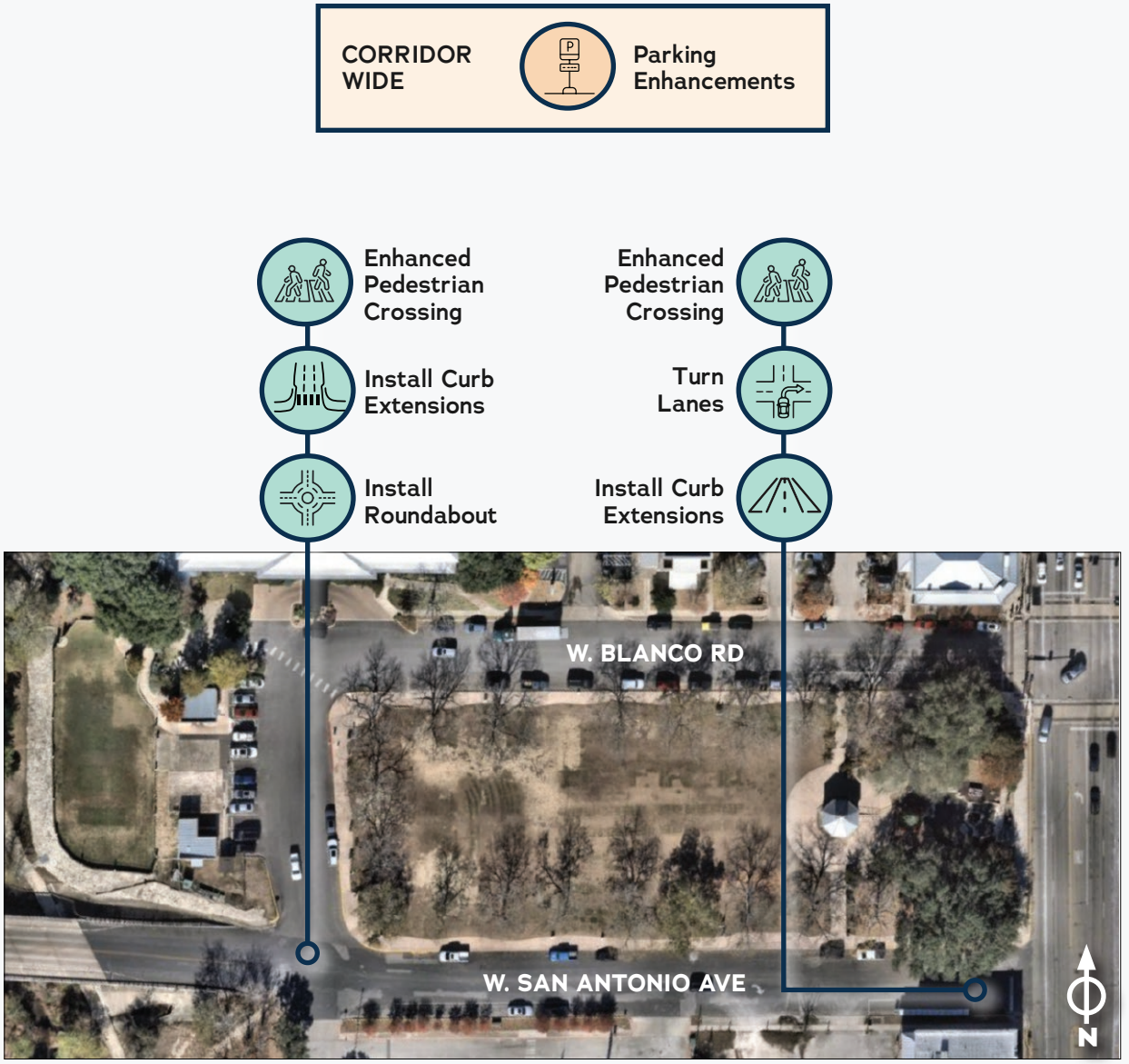


Figure 6.8: W. Blanco Rd (Main Plaza Area - Loop from N Main St to S Main St)

→ Corridor 3: River Rd

PROJECT LIMITS: PECAN ST TO MESQUITE ST

PROJECT INFORMATION:

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

☑ Located on HIN.

Estimated Construction Cost: $250,000

SAFETY IMPACT:

Benefits: Improves pedestrian safety.

Expected Crash Reduction: 83%

Benefit-Cost Ratio: 183.72

PROJECT READINESS:

Does Not Require Utility Relocation

Does Not Require ROW Acquisition

Environmental Impacts: To be Determined

Project Development: Conceptual Design Complete

Figure 6.9: River Rd (Pecan St to Mesquite St)

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.

ID	LOCATION	DESCRIPTION	BENEFITS
1	3 Miles	Install 6-foot sidewalks or 10-foot shared use paths..	Improves pedestrian safety and provides enhanced ADA accessibility.
2	5 Miles	Implement wide edge lines and high contrast crosswalk markings.	Improves driver awareness, pedestrian and driver safety, and improves driver guidance.
3	2 Intersections	Convert existing left-turn permissive-protected movements to flashing yellow arrow.	Reduces opposing left-turn movements, improves driver safety, and reduces delay.
4	9 Intersections	Install backplates with retroreflective borders.	Increase signal visibility, driver safety, and driver awareness.

Table 6.2: Systemic Countermeasure Project List

→ Systemic Improvement 1: Sidewalks/Shared Use Paths

PROJECT INFORMATION:

Description: Install 6-foot sidewalks or 10-foot shared use paths.

Potential Limits: 3 miles

Estimated Construction Cost: $900,000

SAFETY IMPACT:

Safe System Approach Element: Safer Roads

Benefits: Improves pedestrian safety and provides enhanced ADA accessibility.

TxDOT HSIP Work Code: 407 and 408

Expected crash Reduction: 50%

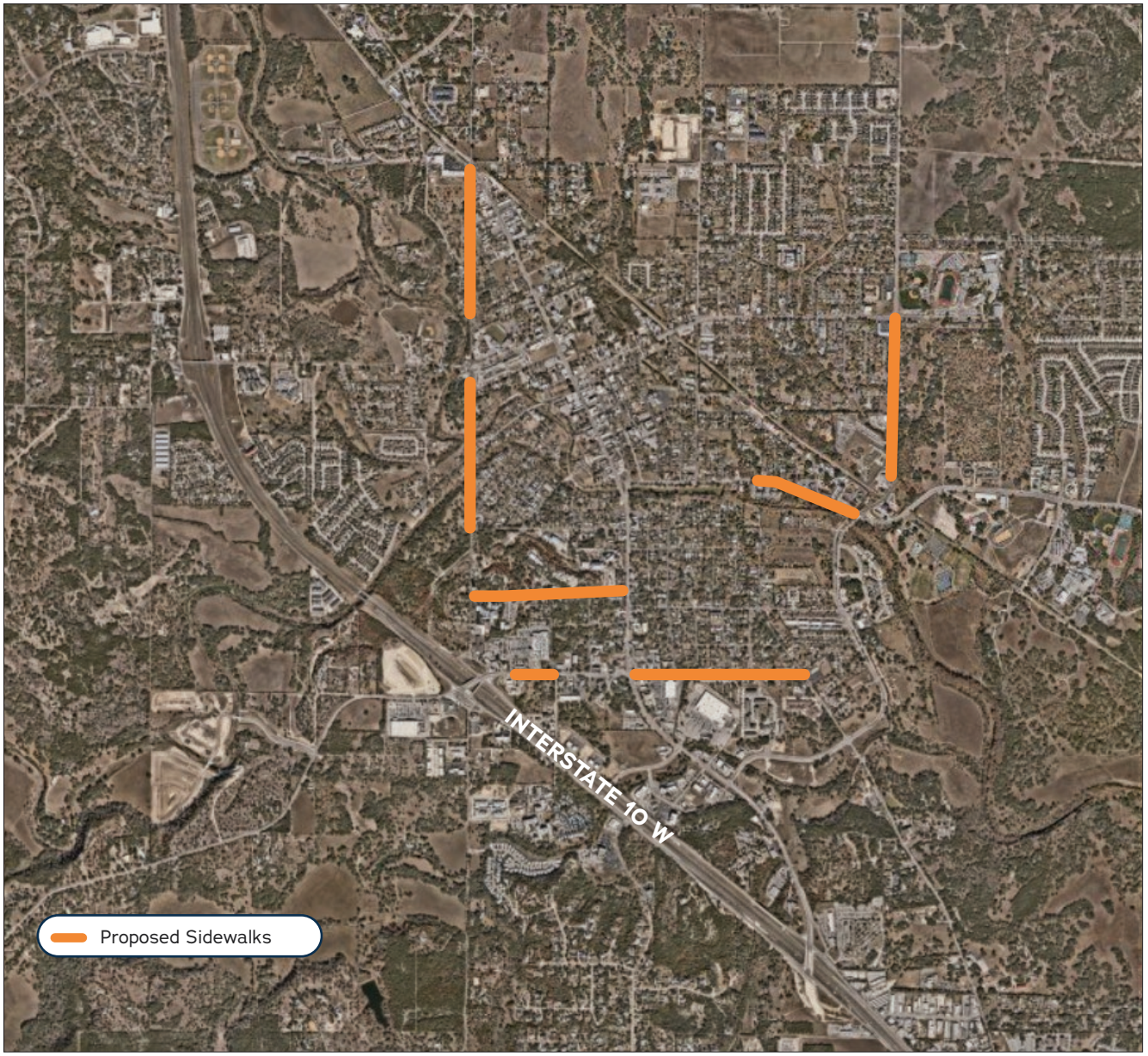
PROJECT READINESS:

Does Not Require Utility Relocation

Does Not Require ROW Acquisition

Environmental Impacts: To be Determined

Source: FHWA



Source: Nearmap

→ Systemic Improvement 2: Enhanced Pavement Markings

PROJECT INFORMATION:

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

Potential Limits: 5 miles

Estimated Construction Cost: $200,000

SAFETY IMPACT:

Safe System Approach Element: Safer Roads

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

TxDOT HSIP Work Code: 407 and 408

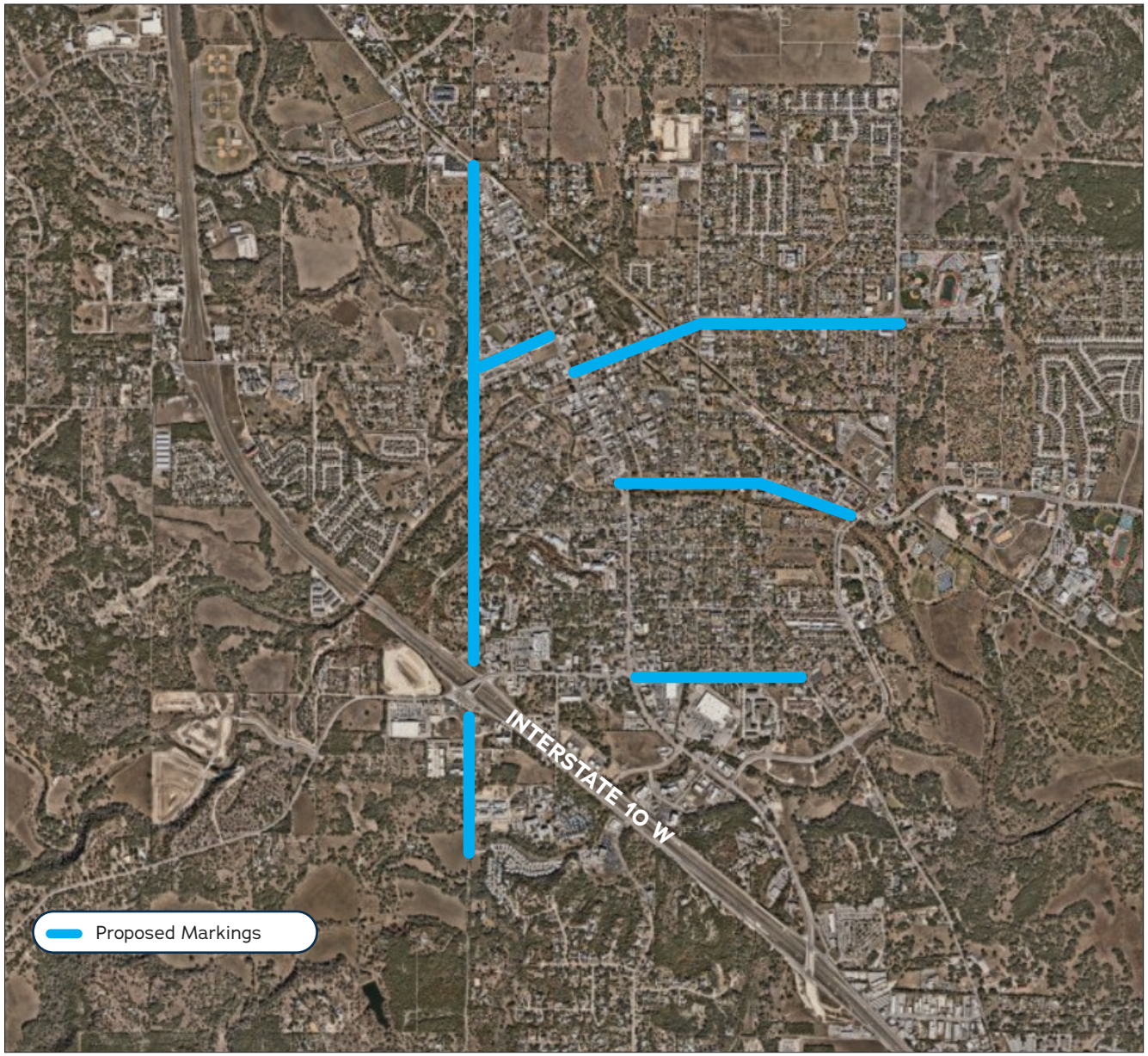
Expected Crash Reduction: 20%

PROJECT READINESS:

Does Not Require Utility Relocation

Does Not Require ROW Acquisition

Source: Texas Transportation Institute



Source: Nearmap

→ 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 Construction Cost: $50,000

SAFETY IMPACT:

Safe Systems Approach: Safer Roads

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

TxDOT HSIP Work Code: 138

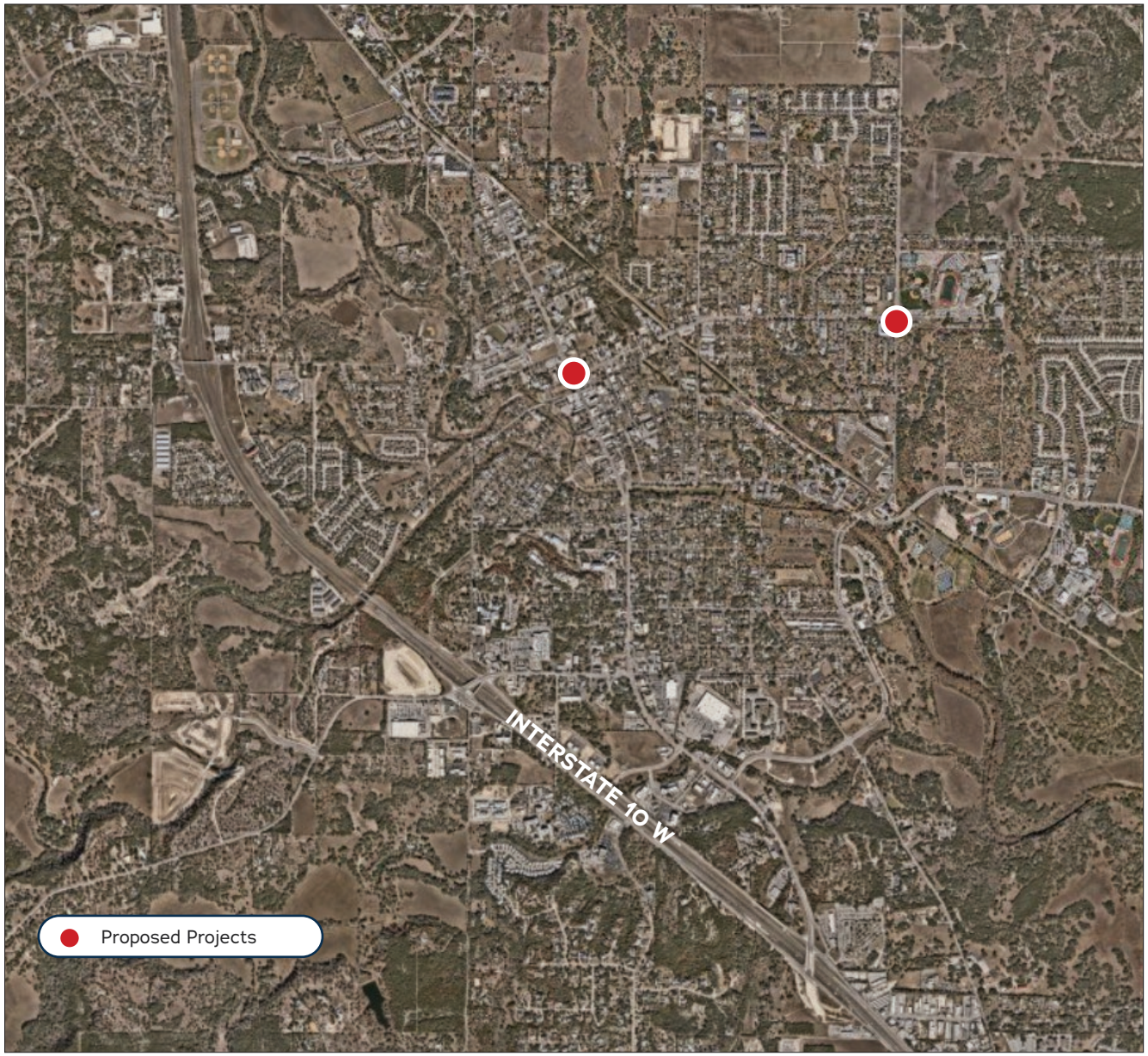
Expected Crash Reduction: 40%

PROJECT READINESS:

Does Not Require Utility Relocation

Does Not Require ROW Acquisition

Source: FHWA



Source: Nearmap

→ Systemic Improvement 4: Retroreflective Borders

PROJECT INFORMATION:

Description: Install backplates with retroreflective borders.

Potential Locations: 9 intersections

Estimated Construction Cost: $300,000

SAFETY IMPACT:

Safe Systems Approach: Safer Roads

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

TxDOT HSIP Work Code: 108

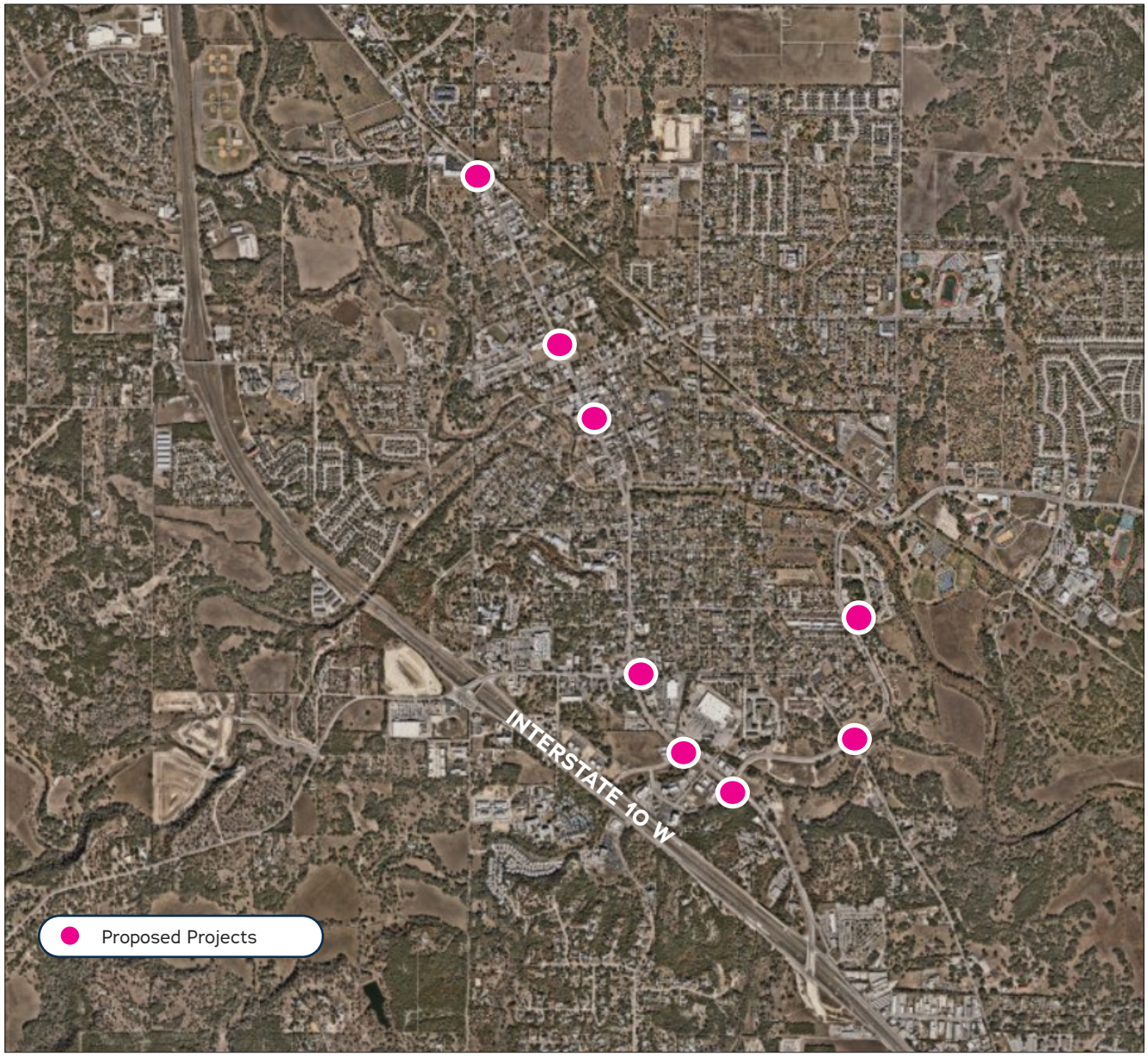
Expected Crash Reduction: 10%

PROJECT READINESS:

Does Not Require Utility Relocation

Does NOT require ROW Acquisition

Location: SH 46 & FM 3351



Source: Nearmap

→ Systemic Improvement 5 | Leading Pedestrian Intervals (LPI)

PROJECT INFORMATION:

Description: Implement leading pedestrian intervals (LPI).

Potential Locations: 4 Intersections.

Estimated Construction Cost: $50,000

SAFETY IMPACT:

Safe Systems Approach: Safer Roads & Safer People

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

TxDOT HSIP Work Code: 109

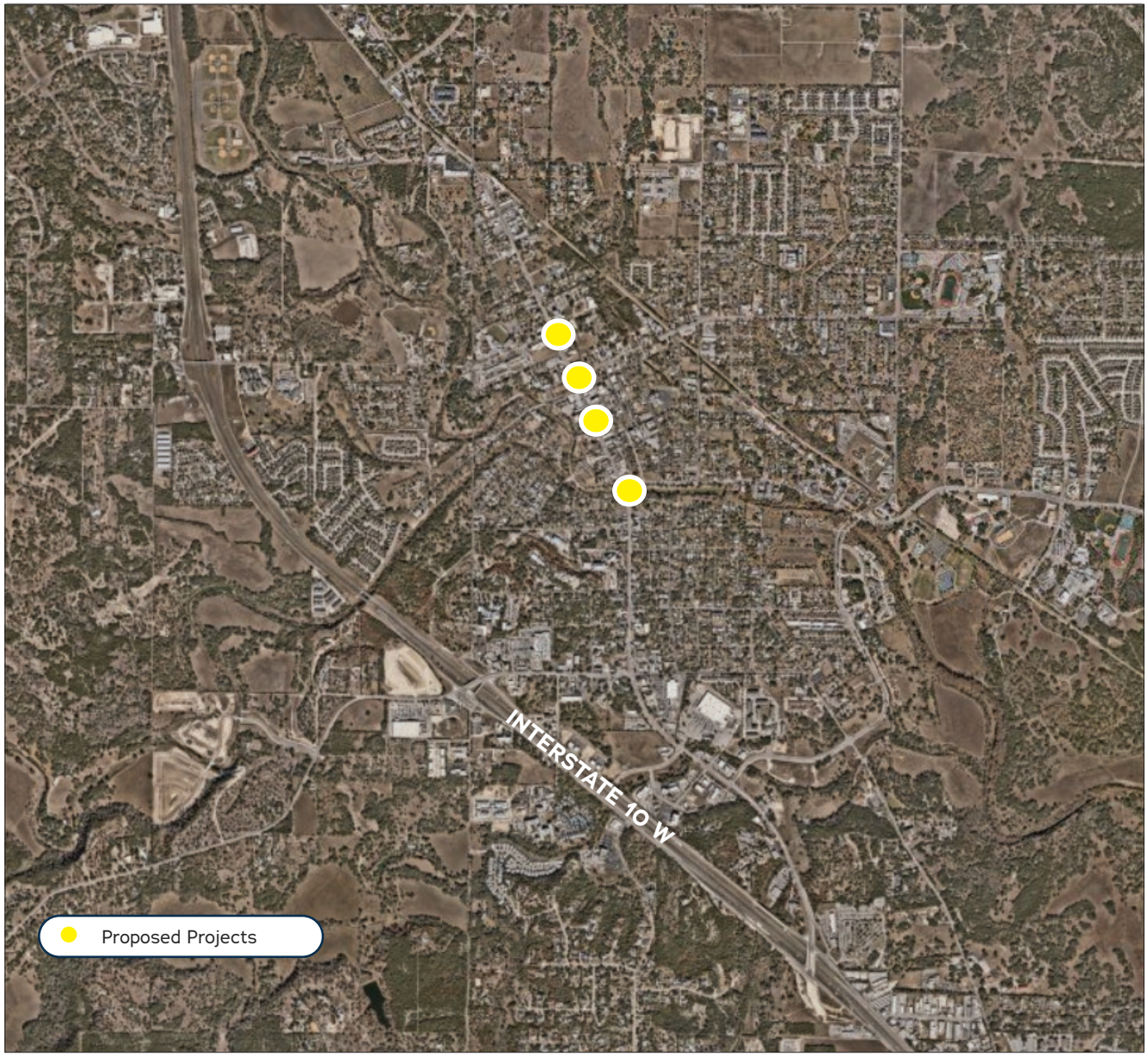
Expected Crash Reduction: 16%

PROJECT READINESS:

Does Not Require Utility Relocation

Does Not Require ROW Acquisition

Source: FHWA



Source: Nearmap

NON-INFRASTRUCTURE PROJECTS

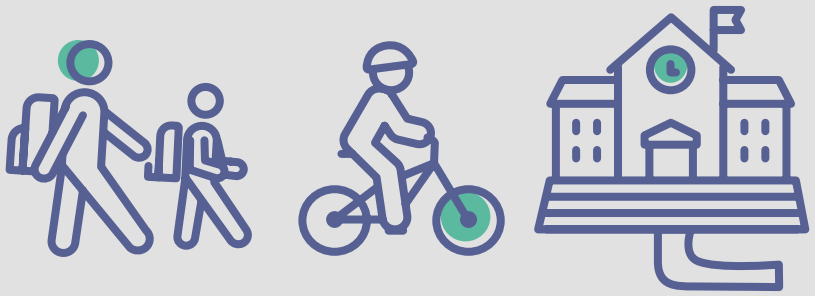
While infrastructure projects are a critical component of the implementation plan, near-term implementation of many capital improvements is constrained by funding availability and project delivery timelines. To advance safety improvements in the short term, the CSAP recommends a suite of non-infrastructure 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 & Adler School St (5 Points)*
  - *River Rd & Herff Rd*
- Conduct Road Safety Audits (RSA) for 3 intersections:
  - *Main St & Kronkowsky St,*
  - *Esser Rd & Greyhound Ln*
  - *Johns Rd & N. School St*

SAFE ROUTES

BOERNE SAFE ROUTES TO SCHOOL



SAFE ROUTES TO SCHOOL PLAN

The Safety Task Force 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.

GENERAL PROCESS FOR SAFE ROUTES TO SCHOOL PLAN

DATA COLLECTION
- Pulling available information
- Inventorying existing conditions (desktop review)
- School characteristics

VIRTUAL KICK-OFF MEETINGS
- Study area limits
- Study Area scope
- Opportunities and Constraints
- Known Travel Patterns
- Schedule
- Deliverables

FIELD AUDITS
- 1/4 mile of school campus
- Drop-off and pick-up observations
- Walk audit for existing infrastructure

ASSESSMENT AND RECOMMENDATIONS
- Recommendations on engineering
- High-level recommendations for other E's of SRTS
- OPCCs
- Recommendations focused on engineering improvements
- Opinion of Probable Construction Costs
- Traffic Circulation Plans

REPORTS
- Report of observations and recommendations

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 intersect.

» 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 all roadusers 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.

Figure 6.10: W. Bandera Road

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.

INTERSECTION CONTROL EVALUATIONS (ICE)

The Safety Task Force 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 Main St & Adler/School St (5 Points), a total of 24 crashes were documented within the most recent five-year period (2020-2024), including 1 serious injury 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 Safety Task Force 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, Procedures, and Processes

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 Safety Task Force 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 Safety Task Force and based on the Safe Systems approach and the Texas Strategic Highway Safety Plan (SHSP). The recommendations are provided in **Tables 7.1 through 7.5.**

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, PROCEDURE OR PROCESS
Vulnerable Road Users	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
	Commercial Vehicle / Truck Routes	Advance development of a truck route ordinance to designate preferred commercial vehicle routes and restrict large truck through-movements on Main Street (US 87), consistent with 2018 Master Plan Action 3.1.5	2018 Master Plan Action 3.1.5 not yet implemented

Table 7.1: Guiding Principle - Roadway and Intersection Safety

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, PROCEDURE OR PROCESS
Vulnerable Road Users	Parking	Develop and implement a Downtown Parking Management Program that prioritizes pedestrian safety and access to guide curb management and parking operations	No existing procedure
	Schools	Develop a Safe Routes to School Program for schools in the Boerne Independent School District	No existing plan
	Accessibility	Continue Progressing the ADA Transition Plan	City of Boerne – ADA Transition Plan, January 2024

Table 7.2: Guiding Principle - Community-Focused Safety Investments

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, PROCEDURE OR PROCESS
Vulnerable Road Users, Intersection Safety	Engagement	Create an education campaign and host Bike and Roundabout Rodeo to educate the public on safe cyclist practices and roundabout use	No existing procedure
Distracted Driving	Education	Develop a distracted driving awareness program aimed at high school students	No existing procedure
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 procedure

Table 7.3: Guiding Principle - Public Education and Awareness

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, PROCEDURE OR PROCESS
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 procedure

Table 7.4: Guiding Principle - Data Driven Decision Making and Accountability

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, PROCEDURE OR PROCESS
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)

Table 7.5: Guiding Principle - Collaboration and Strategic Partnerships

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:** Safety Task Force 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 Safety Task Force will also help facilitate coordination among City departments, regional partners, TxDOT, and the community to maintain momentum and accountability throughout implementation.

Figure 8.1: City of Boerne Water Tower

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.

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.

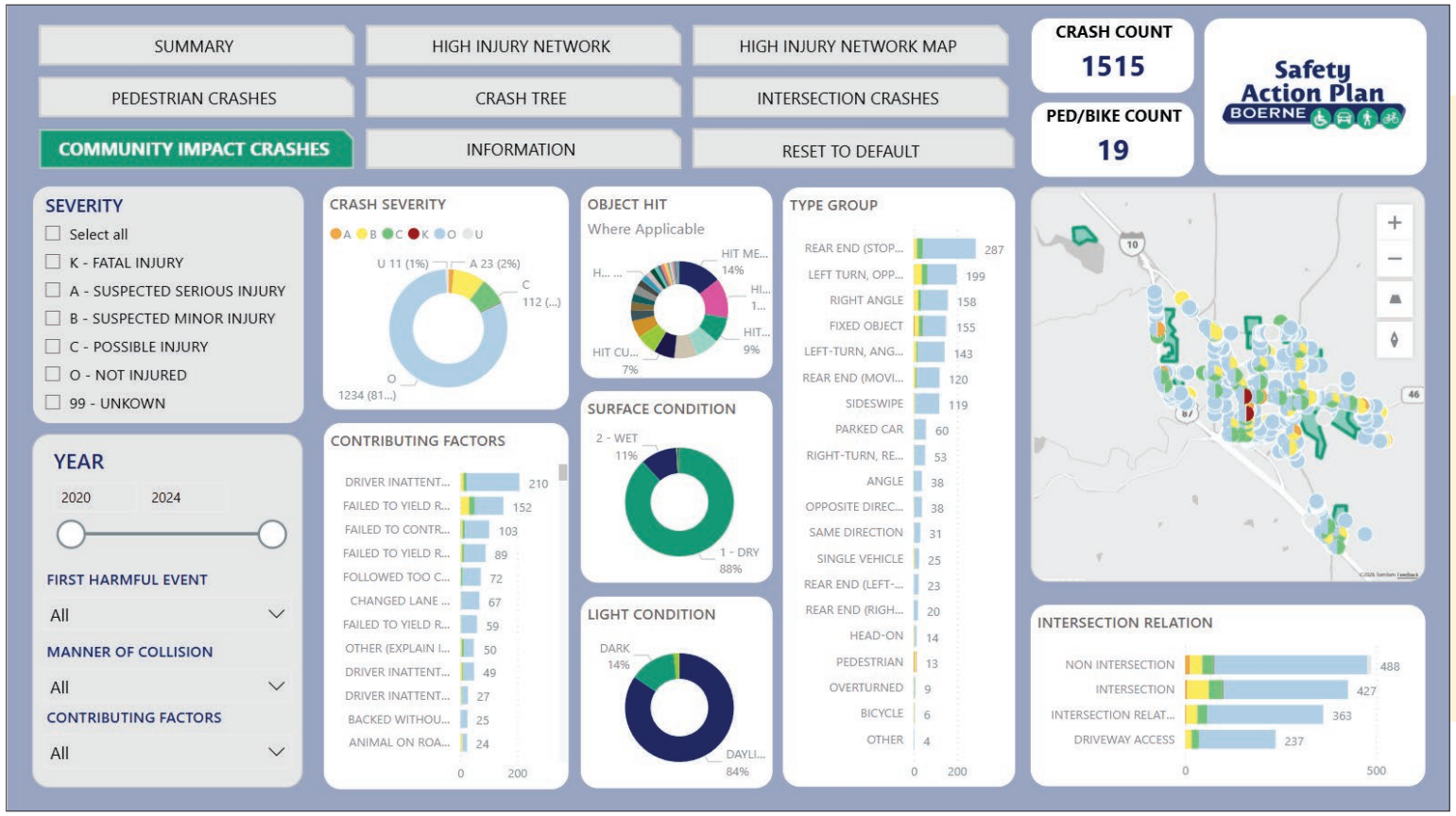


Figure 8.2: Power BI Dashboard

PARTNER AGENCIES

Implementation of the CSA{P 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:

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

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 GRANTS (TA)

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

CITY OF BOERNE CAPITAL IMPROVEMENT PLAN

Capital projects are major improvements to City facilities and infrastructure. Some projects may require years of planning and construction while others may be completed in a shorter timeframe.

SAFETY PLAN UPDATES AND AMENDMENTS

The CSAP 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

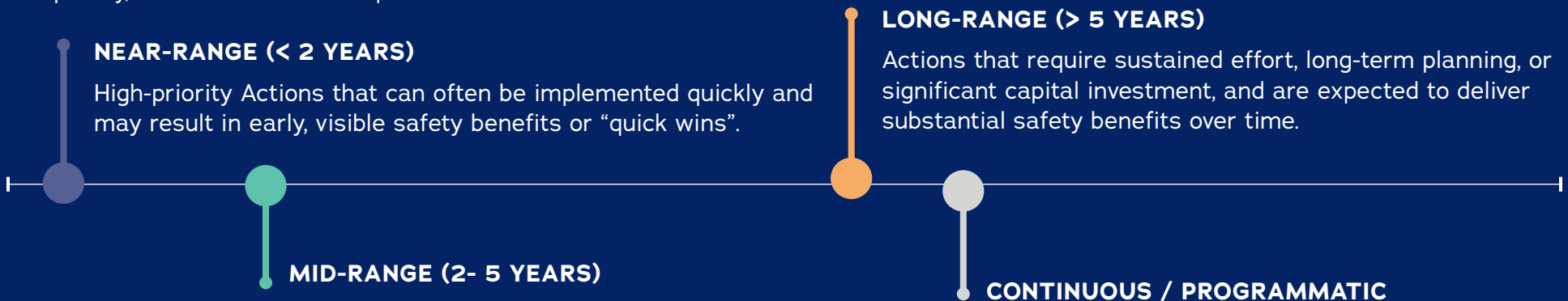
IMPLEMENTATION PLAN SCHEDULE

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 9.1**. 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	**River Rd & Plant Ave** Install a roundabout	Long	TxDOT City of Boerne Boerne Downtown District Business Owners	TxDOT HSIP SS4A Implementation
	Main St. & River Rd Install a southbound left-turn deceleration lane and improve intersection geometry	Mid		
	Main St. & Adler/ School St. Modify the traffic signal and reconfigure intersection to add a traffic signal to Adler Street and turn-lanes on Main St	Near	TxDOT City of Boerne	
	S. Main St. & W. Bandera Rd. Improve intersection geometry on the northeast corner and directionalize pedestrian ramps	Mid		
	Cascade Caverns Rd & Scenic Loop Install a traffic signal and turn-lane	Near	City of Boerne	
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 Implementation
	River Road (Pecan St to Mesquite St) Install an enhanced crossing pedestrian refuge island and a rectangular rapid flashing beacon	Mid		
	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	

Table 9.1: Implementation Plan Summary

	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)			
Non-Infrastructure	**Safe Routes to School Plan** Throughout the City	Mid	Boerne ISD	SS4A Supplemental Planning and Demonstration
	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		
	Road Safety Audits (RSA) Conduct road safety audits at Main St & Kronkowsky St, Esser Rd & Greyhound Ln, Johns Rd & N. School St	Long	TxDOT City of Boerne Boerne Downtown District Business Owners	

Table 9.1: Implementation Plan Summary (Continued)

Appendices

Safety Action Plan

BOERNE

APPENDIX A
Leadership Commitment and Resolutions

RESOLUTION NO. 2022-R52

A RESOLUTION OF THE CITY OF BOERNE, TEXAS ADOPTING A TRANSPORTATION SAFETY ACTION PLAN, TO BE MONITORED BY THE CITY COUNCIL, AND ADOPTING A GOAL ZERO FOR TRANSPORTATION RELATED FATALITIES AND SERIOUS INJURIES ON CITY MAINTAINED STREETS IN 20 YEARS

WHEREAS, a city-wide safety analysis was performed by evaluating historical crash data from 2017 to 2021 from the Texas Department of Transportation's Crash Records Information System; and

WHEREAS, a Safety Action Plan will serve as a supplemental resource to the Mobility Master Plan to highlight safety concerns within the City of Boerne and prioritize those projects that improve safety for all users navigating throughout the City; and

WHEREAS, project implementation will be monitored by a committee appointed by City Council that will receive annual reports on the progress; and

WHEREAS, Vision Zero is a nationwide initiative to reach zero traffic deaths or severe injuries, committing to a fundamental shift in how communities approach traffic safety; and

WHEREAS, the approach acknowledges that safe mobility depends on a variety of factors including but not limited to roadway design, speeds, behaviors, technology, and policies; and

WHEREAS, the City of Boerne supports and encourages the efforts by our regional partner agencies to prioritize safety improvements for people walking, bicycling, and using mobility devices and to eliminate deaths and serious injuries on our entire transportation network including all motor vehicle transportation; and

WHEREAS, the City Council of Boerne finds it in the best interest of the citizens of Boerne to adopt a Transportation Safety Action Plan and adopt a Goal Zero for transportation related fatalities and serious injuries on city maintained streets in 20 years.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF BOERNE, TEXAS:

SECTION 1. The facts, findings, recitations contained in the preamble of this resolution hereby found and declared to be true and correct and are incorporated by reference herein and expressly made part hereof, as it copied herein verbatim.

SECTION 2. That the City Council hereby adopts a Transportation Safety Action Plan, as attached in "Appendix A", and commits the City to a goal zero for transportation related fatalities and serious injuries on city maintained streets in 20 years.

PASSED and APPROVED on this the 23rd day of August, 2022.

APPROVED:

Mayor Pro Tem

ATTEST:

City Secretary

RESOLUTION NO. 2026-R25

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BOERNE, TEXAS, ADOPTING THE CITY OF BOERNE COMPREHENSIVE SAFETY ACTION PLAN (CSAP); REAFFIRMING THE CITY'S GOAL ZERO COMMITMENT TO ELIMINATE ROADWAY FATALITIES AND SERIOUS INJURIES; AND DIRECTING IMPLEMENTATION IN ACCORDANCE WITH THE SAFE STREETS AND ROADS FOR ALL (SS4A) GRANT PROGRAM REQUIREMENTS

WHEREAS, the City of Boerne adopted a Vision Zero commitment pursuant to Resolution No. 2022-R52, adopted on August 23, 2022, establishing a Goal Zero target to eliminate all transportation-related fatalities and serious injuries on City streets within 20 years; and

WHEREAS, the Infrastructure Investment and Jobs Act (IIJA) established the Safe Streets and Roads for All (SS4A) grant program, and the City was awarded an SS4A Planning and Demonstration Grant administered by the U.S. Department of Transportation in the amount of $240,000.00 federal funds with $60,000.00 local match to develop a Comprehensive Safety Action Plan; and

WHEREAS, pursuant to that grant, the City convened a Safety Task Force and, in collaboration with TxDOT, AAMPO, Kendall County, Boerne ISD, and community stakeholders, developed the Comprehensive Safety Action Plan (CSAP) through a process including crash data analysis (2020–2024), High-Injury Network identification, a Downtown Pedestrian Study, and public engagement; and

WHEREAS, the CSAP satisfies all SS4A Action Plan components required under Table 1 of the applicable Notice of Funding Opportunity, including: (1) Leadership Commitment and Goal Setting; (2) Planning Structure; (3) Safety Analysis; (4) Engagement and Collaboration; (5) Policy and Process Changes; (6) Strategy and Project Selections with near-, mid-, and long-term timeframes; and (7) Progress and Transparency measures; and

WHEREAS, adoption of this Resolution constitutes the official public leadership commitment required under the SS4A program and finalizes the CSAP for purposes of eligibility for future SS4A Implementation Grant funding; and

WHEREAS, the City Council finds that adoption of the Plan serves the public health, safety, and welfare of the citizens of Boerne;

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF BOERNE, TEXAS:

Section 1. ***Adoption and Finalization.*** The City Council adopts and finalizes the City of Boerne Comprehensive Safety Action Plan, incorporated herein by reference and on file with the City Secretary. This Resolution constitutes the City's official finalization of the Plan for SS4A program purposes.

Section 2. ***Goal Zero Reaffirmed.*** The City Council reaffirms its commitment to eliminate all roadway fatalities and serious injuries by 2046 through a Safe System approach. This commitment serves as the official public leadership commitment required under the SS4A program, consistent with Table 1, Action Plan Component 1 of the applicable Notice of Funding Opportunity.

Section 3. ***SS4A Component Certification.*** The City Council finds the CSAP satisfies all Action Plan component requirements of the SS4A program. The City Manager is directed to maintain a completed SS4A Self-Certification Eligibility Worksheet to support future Implementation Grant applications.

Section 4. ***Public Availability and Annual Reporting.*** The City Manager shall post the adopted Plan on the City's website promptly upon adoption and maintain such posting throughout implementation. The City Manager shall provide annual public reporting on progress toward reducing roadway fatalities and serious injuries, including outcome data, consistent with SS4A program requirements.

Section 5. ***Federal Reporting and Grant Compliance.*** The City Manager is directed to comply with all SS4A post-award reporting requirements under the executed grant agreement with the U.S. Department of Transportation, including quarterly performance progress reports, quarterly financial status reports (SF-425), and a final report submitted within 120 days of the end of the period of performance. All SS4A funds shall be expended within the period of performance established in the grant agreement. Implementation shall comply with all applicable federal laws and nondiscrimination requirements, including Title VI of the Civil Rights Act of 1964 and the Americans with Disabilities Act.

Section 6. ***Implementation Authority.*** The City Manager is authorized to take all actions necessary to implement the Plan, coordinate with the U.S. Department of Transportation, TxDOT, AAMPO, and other partner agencies, and pursue additional funding opportunities consistent with the strategies identified in the Plan.

Section 7. ***Effective Date.*** This Resolution shall take effect immediately upon adoption.

PASSED and APPROVED on this the 12 day of May, 2026

APPROVED:

Mayor

ATTEST:

Lori A Carroll

City Secretary

EXHIBIT A

City of Boerne Comprehensive Safety Action Plan

[Attached and incorporated by reference]

RESOLUTION NO. 2026-R26

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BOERNE, TEXAS, AUTHORIZING SUBMISSION OF AN APPLICATION TO THE U.S. DEPARTMENT OF TRANSPORTATION FOR A SAFE STREETS AND ROADS FOR ALL (SS4A) FY 2026 IMPLEMENTATION GRANT; AFFIRMING THAT THE COMPREHENSIVE SAFETY ACTION PLAN ADOPTED THIS DATE CONSTITUTES THE CITY'S QUALIFYING ACTION PLAN; COMMITTING THE REQUIRED NON-FEDERAL LOCAL MATCHING FUNDS; AND PROVIDING FOR RELATED MATTERS

WHEREAS, the City of Boerne, Texas (the "City") is committed to the safety of all persons traveling on the City's roadways, including pedestrians, bicyclists, motorists, and users of all ages and abilities; and

WHEREAS, the City formally adopted a Vision Zero commitment pursuant to Resolution No. 2022-R52, adopted on August 23, 2022, affirming that traffic deaths and serious injuries on City-maintained streets are preventable and unacceptable, and establishing a Goal Zero target to eliminate roadway fatalities and serious injuries within twenty (20) years; and

WHEREAS, the City adopted the City of Boerne Mobility Master Plan in April 2023, which includes a Safety Action Plan appendix identifying priority transportation safety projects, a High Injury Network analysis, and a prioritized capital improvement program, and which constitutes one of the qualifying planning documents for the SS4A grant program; and

WHEREAS, on May 12, 2026, the City Council adopted the City of Boerne Comprehensive Safety Action Plan (CSAP), which reaffirms the City's Goal Zero commitment to achieve zero roadway fatalities and serious injuries by the year 2046, establishes a data-driven roadmap for eliminating roadway fatalities and serious injuries through the Safe System Approach, and identifies the prioritized infrastructure projects and planning activities that form the basis of this grant application; and

WHEREAS, the CSAP was developed through a multidisciplinary Safety Task Force process involving City staff and elected officials, Kendall County elected officials, the Texas Department of Transportation, Boerne Independent School District, Boerne Police Department, Boerne Fire Department, the Alamo Area Metropolitan Planning Organization, local businesses, and community residents, with more than 1,100 mobility-focused community responses incorporated into the plan; and

WHEREAS, the CSAP identified a High Injury Network (HIN) representing approximately 15% of City roadway mileage while capturing 72% of all fatal and serious injury crashes and 87.5% of all pedestrian and bicycle crashes, and identified a five-year crash record (2020–2024) of 2,342 crashes, with 48% occurring at intersections and pedestrian crashes resulting in serious injury or fatality 52% of the time; and

WHEREAS, the City will complete prior to application submission the SS4A Self-Certification Eligibility Worksheet demonstrating that the CSAP and Mobility Master Plan, taken together, satisfy all Action Plan components required under Table 1 of the SS4A FY 2026 Notice of Funding Opportunity (NOFO); and

WHEREAS, two of the proposed project corridors — South Main Street (Business US 87) and River Road (SH 46) — are maintained by the Texas Department of Transportation, and the City is coordinating with TxDOT's Kerrville District and will obtain a signed letter, MOU, or other written documentation from TxDOT prior to application submission, consistent with the Implementation Grant eligibility requirements of Section C.1 of the SS4A FY 2026 NOFO; and

WHEREAS, the U.S. Department of Transportation has issued a Notice of Funding Opportunity for the Safe Streets and Roads for All (SS4A) FY 2026 Implementation Grant program (Funding Opportunity Number DOT-SS4A-FY26-01), which provides competitive federal funding of up to 80% of eligible project costs to implement projects and strategies identified in a qualifying safety action plan; and

WHEREAS, the City intends to submit an application for an SS4A FY 2026 Implementation Grant to fund the following activities identified in the CSAP and Mobility Master Plan:

1. Pedestrian safety improvements on South Main Street (Business US 87) from East San Antonio Avenue to East Theissen Street, including enhanced pedestrian refuge islands, Rectangular Rapid Flashing Beacons (RRFB), ADA-compliant curb ramp upgrades, curb extensions, and directionalized pedestrian ramps (projected 89% crash reduction; B/C Ratio: 98.96; no utility relocation or ROW acquisition anticipated);

2. Pedestrian safety improvements on River Road (SH 46) from Pecan Street to Mesquite Street, including an enhanced pedestrian refuge island, RRFB, ADA-compliant curb ramp upgrades, and enhanced high-visibility crosswalk pavement markings (projected 83% crash reduction; B/C Ratio: 183.72; no utility relocation or ROW acquisition anticipated);

3. Pedestrian connectivity and intersection safety improvements on West San Antonio Avenue and the West Blanco Road Main Plaza corridor, including sidewalk gap closure on a 500-foot segment of West San Antonio Avenue from South Main Street to West Blanco Road, a partial one-way street conversion on West Blanco Road, a single-lane roundabout at the West San Antonio Avenue & West Blanco Road intersection, enhanced crosswalk treatments, and pavement markings (projected 72% crash reduction on West Blanco Road corridor; B/C Ratio: 5.69; no ROW acquisition required); and

4. Supplemental planning and demonstration to develop a Safe Routes to School Plan and school circulation plans for Boerne Independent School District (BISD) campuses within the City limits, evaluating walking and bicycling conditions in surrounding neighborhoods and on campus circulation, and producing a project ready action plan with prioritized safety recommendations; and

WHEREAS, the SS4A program requires that federal grant funds not exceed 80% of total eligible project costs and that the applicant contribute a local matching share of no less than 20% of total eligible project costs from non-federal sources, consistent with 2 CFR § 200.306; and

WHEREAS, the City Council finds that the submission of this grant application and the commitment of the required local match is in the best interests of the public health, safety, and welfare of the residents of the City of Boerne;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF BOERNE, TEXAS:

Section 1. ***Qualifying Action Plan.*** The City Council affirms that the City of Boerne Comprehensive Safety Action Plan adopted by this Council on May 12, 2026, together with the City of Boerne Mobility Master Plan adopted in April 2023, constitutes the City's qualifying Action Plan for purposes of the SS4A FY 2026 Implementation Grant application, and satisfies the Leadership Commitment and Goal Setting component of the Action Plan requirements of the SS4A FY 2026 NOFO, including the City's Goal Zero commitment to achieve zero roadway fatalities and serious injuries by the year 2046. The City Manager is directed to ensure the CSAP is posted and publicly available on the City's website prior to submission of the SS4A grant application.

Section 2. ***Authorization of Application.*** The City Council hereby authorizes and directs the submission of an application to the U.S. Department of Transportation for a Safe Streets and Roads for All (SS4A) FY 2026 Implementation Grant (Funding Opportunity Number DOT-SS4A-FY26-01) for the project described in the recitals of this Resolution as "Boerne Safe Streets — Downtown Corridors and Safe Routes to Schools."

Section 3. ***Authorization of Officials.*** The City Manager is hereby authorized and directed to execute and submit the grant application and all related documents, forms, certifications, assurances, and eligibility worksheets required by the U.S. Department of Transportation, including but not limited to the Standard Form SF-424, the SS4A Self-Certification Eligibility Worksheet, and all required federal certifications, and to take all actions necessary to complete the application process and, if awarded, to accept and administer the grant in accordance with all applicable federal requirements, laws, regulations, and executive orders as conditions of grant receipt.

Section 4. ***Commitment of Local Match.*** The City Council hereby commits that the City of Boerne will provide a non-federal local matching contribution of not less than 20% of total eligible SS4A project costs, as required under the SS4A grant program and 2 CFR § 200.306. All local matching contributions shall be from non-federal sources. The City Manager is hereby authorized and directed to identify and program sufficient City capital improvement funds or other eligible non-federal funding sources to satisfy the local match requirement. Any appropriation of local match funds not included in the current adopted City budget shall be brought before the City Council for approval consistent with applicable law and in a timeframe that supports execution of the grant agreement.

Section 5. ***Federal Compliance.*** The City Council acknowledges that, as a condition of any SS4A grant award, the City will be required to comply with all applicable federal laws, regulations, and executive orders, including but not limited to Title VI of the Civil Rights Act of 1964, the Americans with Disabilities Act, Section 504 of the Rehabilitation Act of 1973, and Executive Order 14173 (Ending Illegal Discrimination and Restoring Merit-Based Opportunity). The City Manager is authorized to execute all required federal certifications and assurances on behalf of the City.

Section 6. ***Effective Date.*** This Resolution shall take effect immediately upon its adoption by the City Council.

PASSED and APPROVED on this the 12 day of May, 2026

APPROVED:

Mayor

ATTEST:

Lori L Carroll

City Secretary

APPENDIX B
Planning Structure, Safety Task Force Presentations

Safety Action Plan

BOERNE

Safety Task Force Meeting #1
July 31, 2025
10:00 AM – 12:00 PM

Agenda

- **Introductions**
- **Project Overview**
  - Comprehensive Safety Action Plan (CSAP) components
  - Project Tasks
  - Project Schedule
  - Engagement Schedule
- **Vision, Goals, and Objectives**
- **Crash History**
- **Projects**
- **Network Screening**
- **Next Steps**

Safety Action Plan BOERNE

Introductions

- **Name**
- **Organization**

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Ice Breaker Activity

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Road Safety Experience

- **Why is safety a priority to you?**
- **What aspect of road safety interests you?**
- **What does a safe street look like to you?**
- **Name a safe and/or unsafe intersection in the City of Boerne.**

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Focus Intersections

	Total Crash Count	Injury Crash Count				Total Cost Of All Crashes
		KAB	K	A	B	
Herff & Main	41	7	0	0	7	$ 2,950,400.00
Main & River	149	14	1	1	12	$ 21,900,200.00
River & Herff	118	20	0	2	18	$ 11,241,300.00
River & Charger	31	10	0	0	10	$ 3,097,200.00
Main & Blanco	21	6	0	0	6	$ 2,186,600.00

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K = Fatal Crash | A = Serious Injury Crash | B = Minor Injury Crash
Crash cost determined using “Cost to Society” metrics, identified by National Safety Council and TxDOT

Project Overview

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Safe Streets For All (SS4A) Grants

Planning and Demonstration

- Development of comprehensive safety action plans
- Supplemental planning
- Demonstration activities

Implementation

- Implementation of projects and strategies in an Action Plan
- Project-level planning, design and development
- Construction

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Comprehensive Safety Action Plan

- First step in prioritizing and securing funding for safety improvements
- Improve transportation network safety
- Significantly reducing or eliminating roadway fatalities and serious injuries
- Identify projects for implementation

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Safety Action Plan Components

1. Leadership Commitment and Goal Setting

A **Vision Zero** resolution commits to support road safety projects.

2. Planning Structure

A **Safety Task Force** is established to oversee development of the Action Plan

3. Safety Analysis

4. Community Impacts

5. Engagement and Collaboration

Public input will be received through online and in-person engagement activities.

6. Strategy and Project Selections

7. Policy and Process Changes

8. Progress and Transparency

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CSAP = Comprehensive Safety Action Plan

Role of Safety Task Force

01

Participate and provide input at meetings

02

Answer questions and encourage dialogue at public meetings

03

Oversee implementation of CSAP projects

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Schedules

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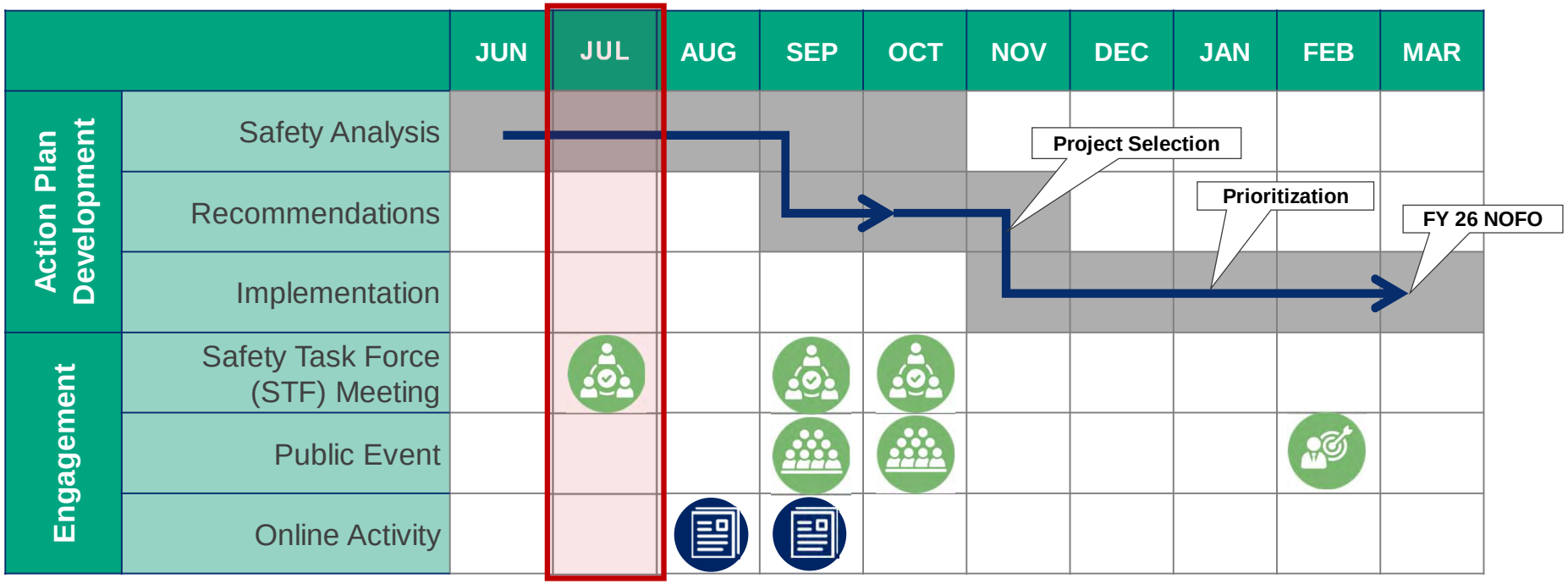
Schedule



STF Workshop
(Planning Structure)

Council Meeting
(Leadership Commitment)

Meeting

Workshop

Presentation

Public Meeting
(Engagement and Collaboration)

In-Field Audit

Survey

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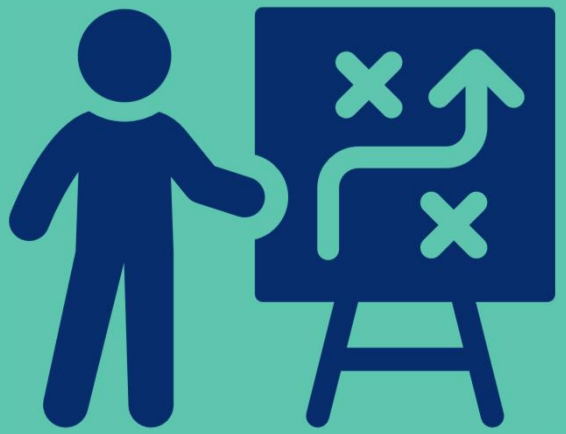
Vision, Goals and Objectives



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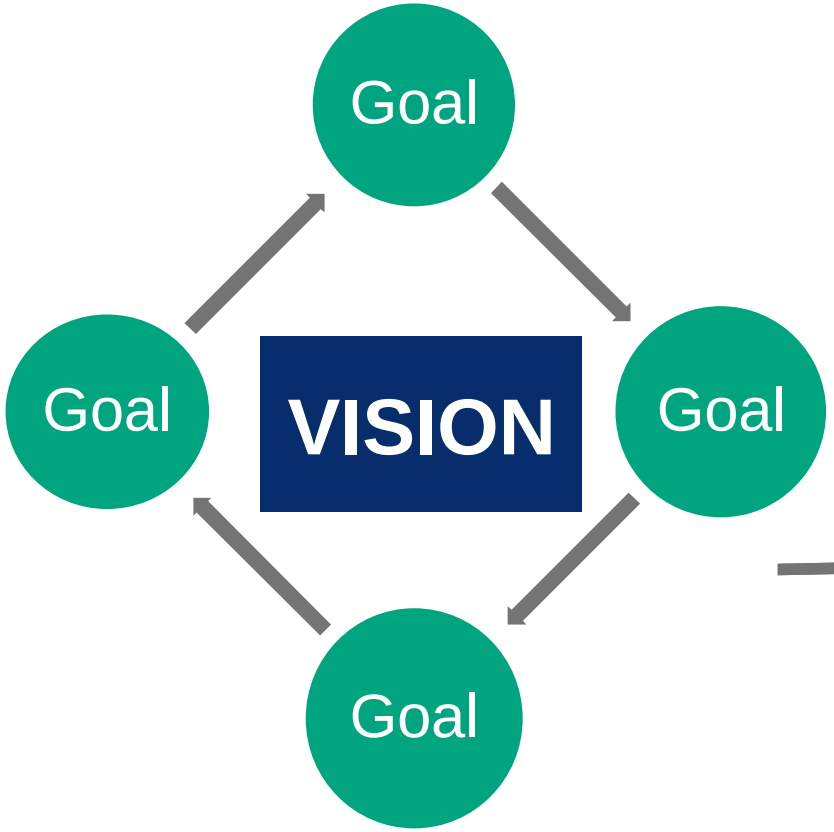
Vision, Goals, and Objectives



Objective – Measurable milestone or checkpoint, which supports the goals and vision

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Goals and Objectives

What are your priorities and objectives for the CSAP?

- The CSAP is a success if… a failure if…
- The CSAP process should include…
- The CSAP as a deliverable should look like…
- An outcome of the CSAP should be…

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Crash History

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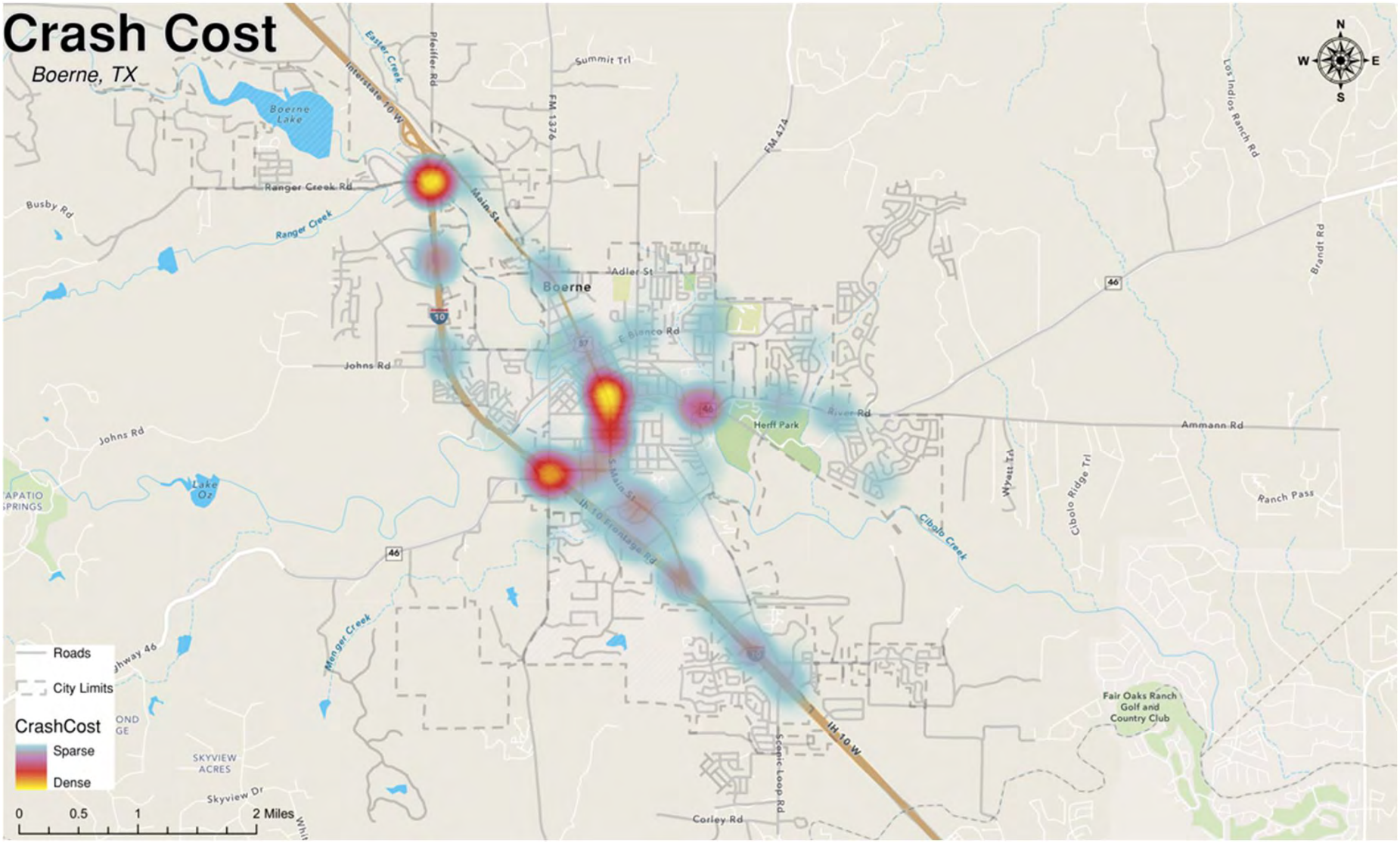
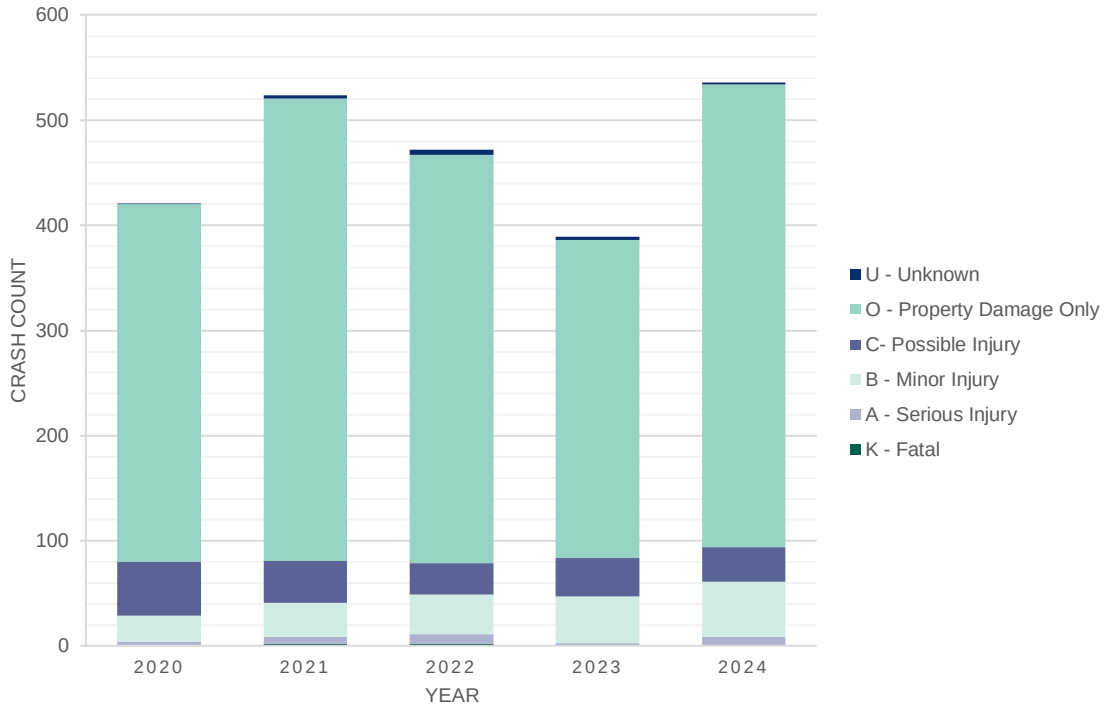
Crash Location and Severity



Crash Overview



Crashes from 2020-2024
TxDOT C.R.I.S. (Crash Records Information System) Query Database

2,342
reported crashes from 2020 to 2024

278
fatal and serious injury crashes

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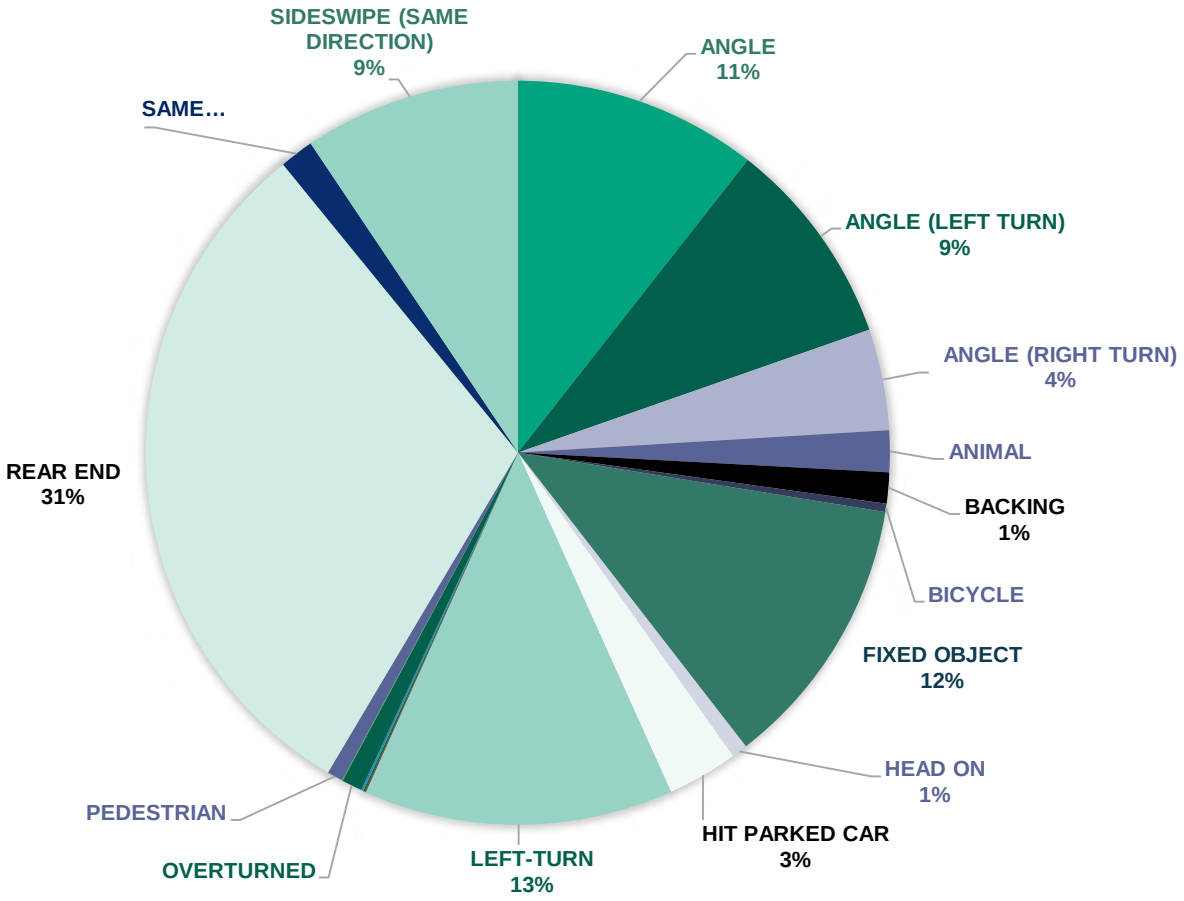
Crash Types (All Crashes)



49% intersection crashes

72% of crashes occurred “on system”

24 bicycle and pedestrian crashes (1%)

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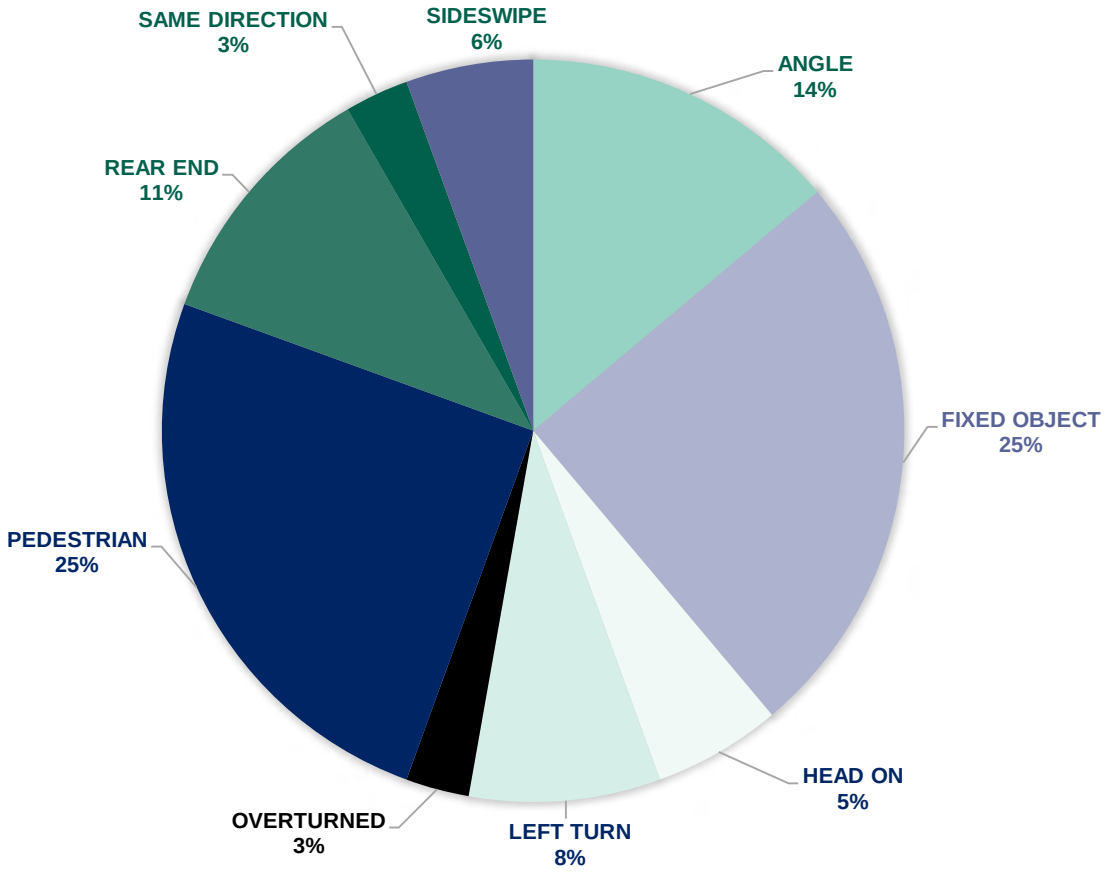
Crash Types (Fatal and Serious Injury)



Arrows indicate comparison to all crash percentages

38% intersection crashes ↓

80% of crashes occurred "on system" ↑

24 bicycle and pedestrian crashes (67%) ↑

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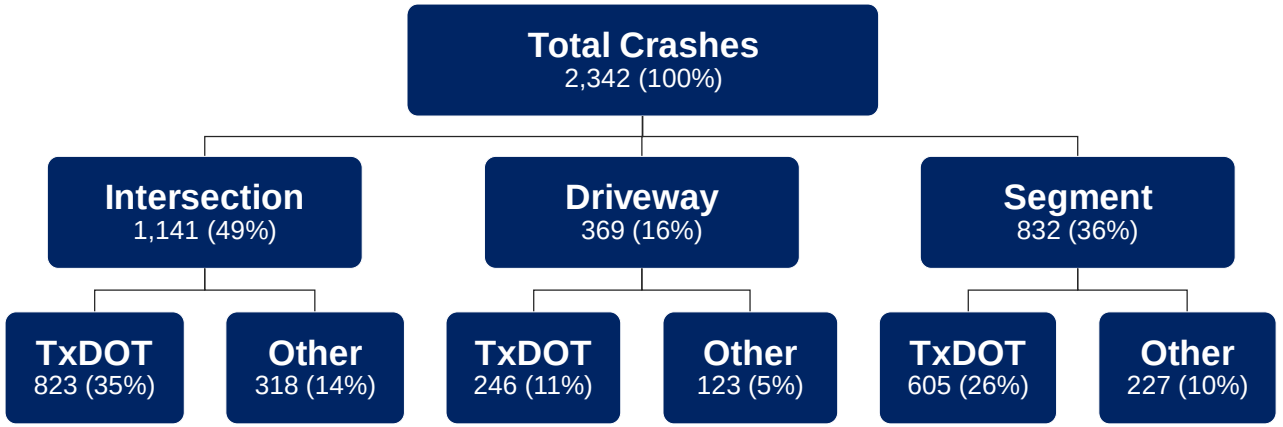
K = Fatal Crash | A = Serious Injury Crash

Crash Tree

All Severity Crashes

Roadway Part

Roadway Ownership



Crash Type

	On-System Intersection		Off-System Intersection		On-System Driveway		Off-System Driveway		On-System Segment		Off-System Segment	
Angle	260	32%	145	46%	92	37%	59	48%	4	1%	3	1%
Backing	6	1%	1	0%	0	0%	0	0%	1	0%	0	0%
Bicycle	29	4%	20	6%	9	4%	3	2%	156	26%	63	28%
Head On	1	0%	0	0%	0	0%	0	0%	11	2%	4	2%
Left-Turn	126	15%	38	12%	106	43%	16	13%	3	0%	1	0%
Opposite – Dir.	27	3%	10	3%	1	0%	8	7%	4	1%	6	3%
Other	0	0%	0	0%	0	0%	2	2%	3	0%	2	1%
Overturned	6	1%	1	0%	0	0%	0	0%	13	2%	1	0%
Parked Car	1	0%	2	1%	0	0%	8	7%	18	3%	43	19%
Pedestrian	5	1%	4	1%	0	0%	0	0%	6	1%	1	0%
Rear End	306	37%	88	28%	34	14%	27	22%	202	33%	59	26%
Same – Dir.	28	3%	4	1%	1	0%	0	0%	2	0%	0	0%
Sideswipe	27	3%	3	1%	3	1%	0	0%	153	25%	34	15%
Single Vehicle	1	0%	2	1%	0	0%	0	0%	29	5%	10	4%
Total	823	100%	318	100%	246	100%	123	100%	605	100%	227	100%

Projects

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Needs and Projects

Where are the opportunities to implement road safety projects?

- Where are the high-crash locations?
- What is the problem?
- What is a potential solution?
- What is the challenge to implement the solution?

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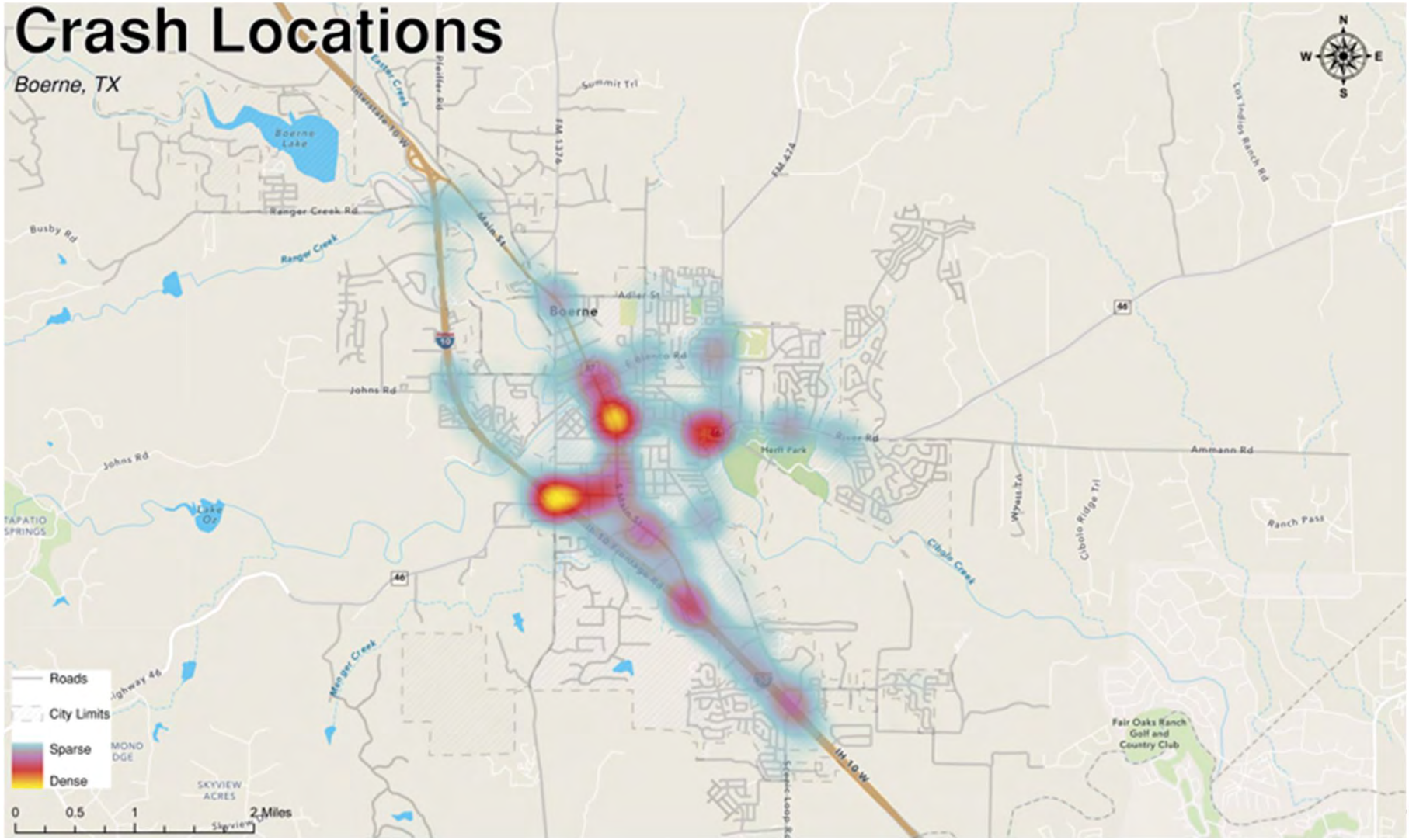
Crash Density



Network Screening:
High Injury Network

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High Injury Network

A High-Injury Network is

- A geospatial identification of higher-risk locations
- A subset of roadway segments which account for a high percentage of crashes
- A way to prioritize projects and future improvements based on whether the location is on the high-injury network
- Considered as part of implementation funding opportunities through SS4A

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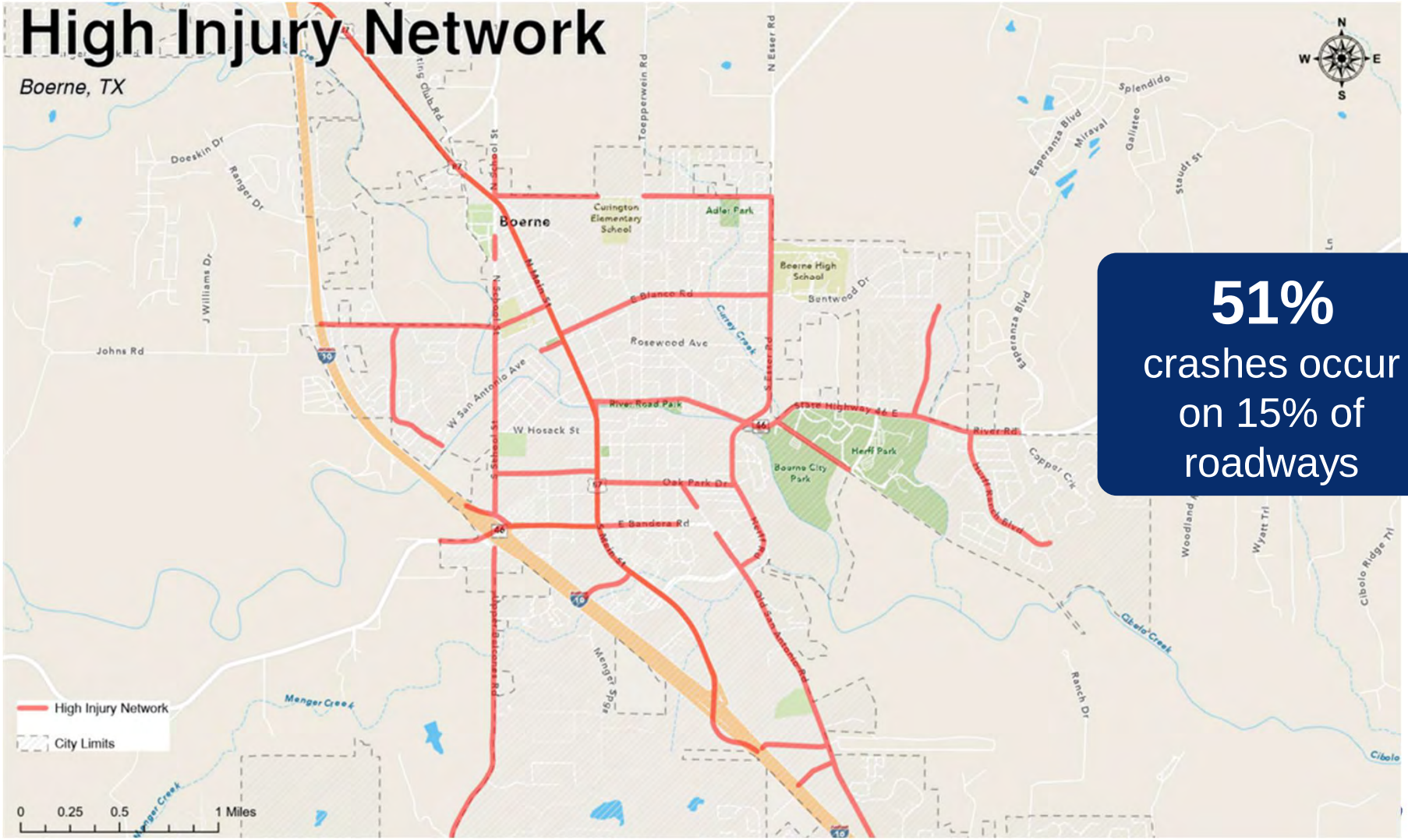
High Injury Network Map



51%
crashes occur on 15% of roadways

High Injury Network Statistics

	Length	Injury Crash Count				Total Crash Count
		KAB	K	A	B	
Within City Limits Network	153	278	5	35	238	2,342
High-Injury Network	23	164	2	19	143	1,721
High-Injury Network Percentage of Total	**15%**	**72%**	**40%**	**61%**	**75%**	**73%**

K = Fatal Crash | A = Serious Injury Crash | B = Minor Injury Crash

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Crashes from 2020-2024, TxDOT C.R.I.S. (Crash Records Information System) Query Database

Network Screening:
Focus Location Activity

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Focus Location Activity

Objective: Rank locations based on their potential for crash reduction.

Process:

Organize into groups of 3-4

Review statistics tables

Select performance measures/ranking method

Rank locations (top 3-5)

Prepare to discuss your ranking method and top locations

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Roadway Segment Table

ID	Classification	Length (Miles)	AADT	Crash Rate (MVMT)	Crash Cost ($100K)		EPDO		Ped + Bike		Crash Count	K	A	B	Total KAB Crashes		Sum of K & A	
					Total	Per Mile	Total	Per Mile	Total	Per Mile							Total	Per Mile
1	Arterial	0.11	15,755	17.07	37.03	336.6	699	6,352	0	0.0	54	0	0	6	6	54.5	0	0.0
2	Collector	0.12	7,322	19.33	16.75	139.6	316	2,633	1	8.3	31	0	0	4	4	33.3	0	0.0
3	Arterial	0.08	12,883	8.51	5.82	72.8	110	1,373	0	0.0	16	0	0	1	1	12.5	0	0.0
4	Collector	0.06	7,322	16.21	12.65	210.8	239	3,977	0	0.0	13	0	0	4	4	66.7	0	0.0
5	Arterial	0.08	9,603	9.99	5.29	66.1	100	1,247	0	0.0	14	0	0	0	0	0.0	0	0.0
6	Arterial	0.14	15,755	16.89	31.22	223.0	589	4,208	0	0.0	68	0	0	6	6	42.9	0	0.0
7	Arterial	0.08	19,904	2.06	1.71	21.4	32	403	0	0.0	6	0	0	0	0	0.0	0	0.0
8	Collector	0.11	9,200	2.17	3.00	27.3	57	514	0	0.0	4	0	0	1	1	9.1	0	0.0
9	Arterial	0.22	56,906	6.26	199.16	905.3	3,758	17,081	1	4.5	143	1	0	10	11	50.0	1	4.5
10	Collector	0.10	9,200	5.96	3.52	35.2	66	664	0	0.0	10	0	0	0	0	0.0	0	0.0
11	Arterial	0.16	10,748	7.65	19.53	122.1	368	2,303	1	6.3	24	0	0	4	4	25.0	0	0.0
12	Arterial	0.10	19,904	6.88	20.55	205.5	388	3,878	3	30.0	25	0	0	3	3	30.0	0	0.0
13	Arterial	0.05	19,904	10.46	16.91	338.2	319	6,382	1	20.0	19	0	1	0	1	20.0	1	20.0
14	Arterial	0.30	7,300	5.75	30.66	102.2	578	1,928	0	0.0	23	0	1	4	5	16.7	1	3.3

Crashes from TxDOT's CRIS for 2020-20234 Crash Rate per 100 million vehicle miles traveled.
AADT = Average Annual Daily Traffic | EPDO = Equivalent Property Damage Only
K = Fatal Crash | A = Suspected Serious Injury Crash | B = Suspected Minor Injury Crash
Roadway classification is based on the City of Boerne Major Thoroughfare Plan.
Crash Cost determined using "cost to society" metrics; created by National Safety Council, determined by TxDOT

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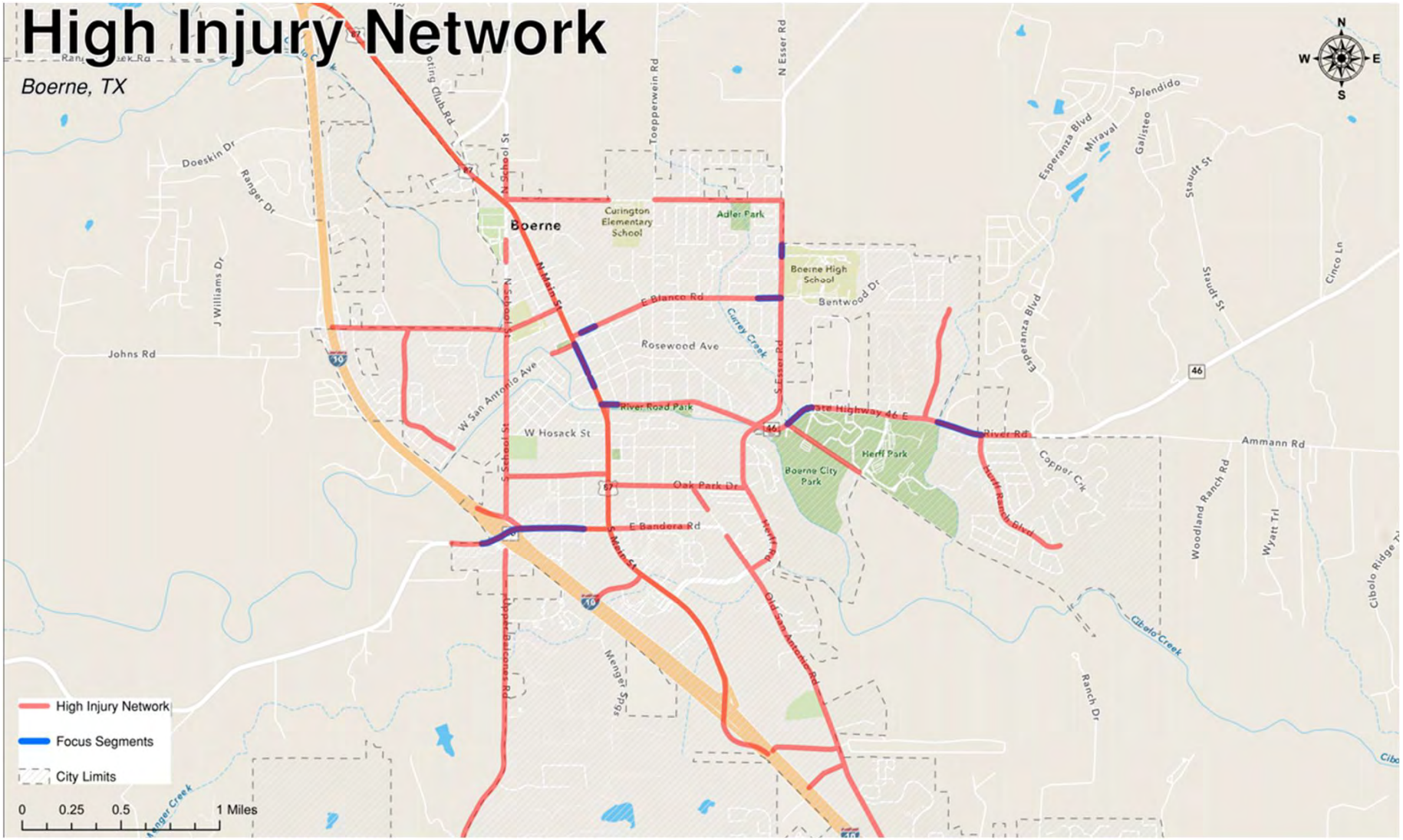
Roadway Segment Map



Roadway Segment Table

ID	Roadway	From	To	Classification	Length (Miles)	AADT	Crash Rate (MVMT)	Crash Cost ($100K)		EPDO		Ped + Bike		Crash Count	K	A	B
								Total	Per Mile	Total	Per Mile	Total	Per Mile				
1	W Bandera	Wanda	Water St	Arterial	0.11	15,755	17.07	37.03	336.6	699	6,352	0	0.0	54	0	0	6
2	E Blanco	S Esser	Stonegate Rd	Collector	0.12	7,322	19.33	16.75	139.6	316	2,633	1	8.3	31	0	0	4
3	River	South Main	Pecan St	Arterial	0.08	12,883	8.51	5.82	72.8	110	1,373	0	0.0	16	0	0	1
4	N Esser	Greyhound Ln	Deer Creek	Collector	0.06	7,322	16.21	12.65	210.8	239	3,977	0	0.0	13	0	0	4
5	W Bandera	WB IH 10 Frontage Rd	Whataburger Access	Arterial	0.08	9,603	9.99	5.29	66.1	100	1,247	0	0.0	14	0	0	0
6	W Bandera	HEB Access	Norris Ln	Arterial	0.14	15,755	16.89	31.22	223.0	589	4,208	0	0.0	68	0	0	6
7	South Main	James	Rosewood	Arterial	0.08	19,904	2.06	1.71	21.4	32	403	0	0.0	6	0	0	0
8	E Blanco	Main	Saunders	Collector	0.11	9,200	2.17	3.00	27.3	57	514	0	0.0	4	0	0	1
9	W Bandera Bridge	Backage Rd	Backage Rd	Arterial	0.22	56,906	6.26	199.16	905.3	3,758	17,081	1	4.5	143	1	0	10
10	E Blanco	Saunders	Harz	Collector	0.10	9,200	5.96	3.52	35.2	66	664	0	0.0	10	0	0	0
11	River	City Park	Sharon	Arterial	0.16	10,748	7.65	19.53	122.1	368	2,303	1	6.3	24	0	0	4
12	S Main	Rosewood	W San Antonio	Arterial	0.10	19,904	6.88	20.55	205.5	388	3,878	3	30.0	25	0	0	3
13	S Main	E Theissen	James	Arterial	0.05	19,904	10.46	16.91	338.2	319	6,382	1	20.0	19	0	1	0
14	River	Champion	Herff Ranch	Arterial	0.30	7,300	5.75	30.66	102.2	578	1,928	0	0.0	23	0	1	4

Crashes from TxDOT's CRIS for 2020-20234 Crash Rate per million vehicle miles traveled.
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Roadway classification is based on the City of Boerne Major Thoroughfare Plan.
Crash Cost determined using "cost to society" metrics; created by National Safety Council, determined by TxDOT

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Next Steps

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Upcoming Events

August

- Project Website Live
- Survey Opens

September

- Survey Closes
- Boerne Market Days (9/13) – Pop-Up Meeting #1
- **Safety Task Force Workshop #2 (9/11)**

October

- **Safety Task Force Workshop #3 (10/23)**

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Engagement Opportunities

Online Engagement

- Project Website to provide an online version of in-person activities

In-Person Meeting Opportunities

- Boerne Market Days (9/13) – Pop-Up Meeting #1
  - Activities Include:
    - Interactive Map
    - Introductory Survey
    - Priority Ranking Activity
- Oct. Event TBD
  - Activities Include:
    - Project Selection

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Safety Action Plan

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Safety Task Force Meeting #2
September 11, 2025
10:00 AM – 12:00 PM

Agenda

- Vision, Goals and Objectives
- Downtown Pedestrian Study
- Implementation Plan Framework
- Project Selection Activity
  - Systemic Countermeasures
  - Infrastructure
  - Non-Infrastructure
- Next Steps

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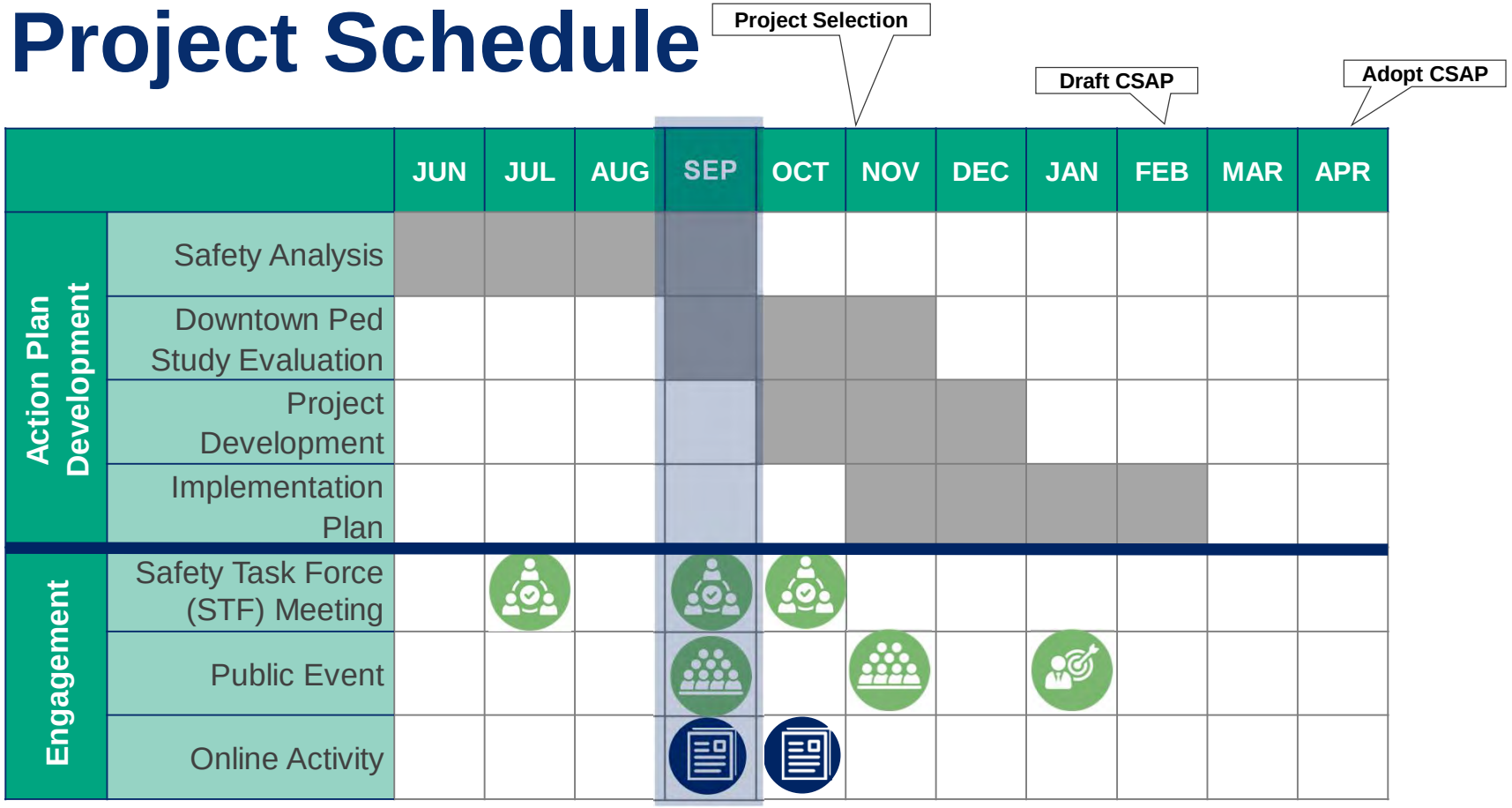
Project Schedule



STF Workshop
(Planning Structure)

Council Meeting
(Leadership Commitment)

Public Engagement
(Engagement and Collaboration)

Survey

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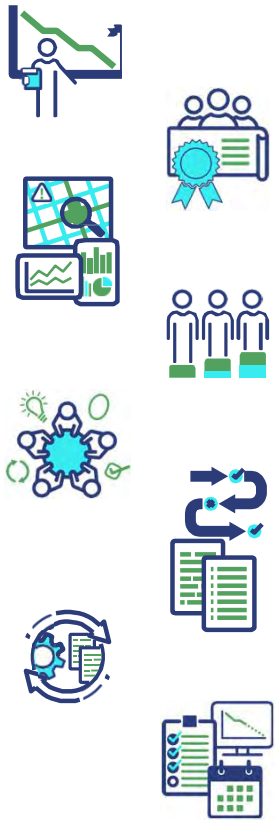
CSAP Components



Objectives, goals and visions will be presented to City Council.

- Leadership commitment and goal setting

Complete. Used to **develop** list of potential projects and strategies.

- Planning structure
- Safety analysis

- Engagement and collaboration
- **Strategy and project selections**
- **Policy and process changes**
- Progress and transparency

The **purpose of today's workshop** is to select **infrastructure projects** and **non-infrastructure activities** to guide the development of the implementation plan.

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Vision, Goals and Objectives

Vision: Eliminate all traffic fatalities and serious injuries, by building a safer, healthier transportation system that serves every corner of our community.

- Accommodate all modes of transportation
  - Enhance safety for vulnerable users by creating safe walking routes to schools
  - Foster a culture of safety and community through public engagement
- Improve mobility through safety
  - Reduce intersection related crashes
  - Reduce congestion related crashes
  - Improve school zone safety
- Build upon previous plans and studies
  - Use crash data to guide investments
  - Use the City of Boerne Mobility Master Plan

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Downtown Pedestrian Study

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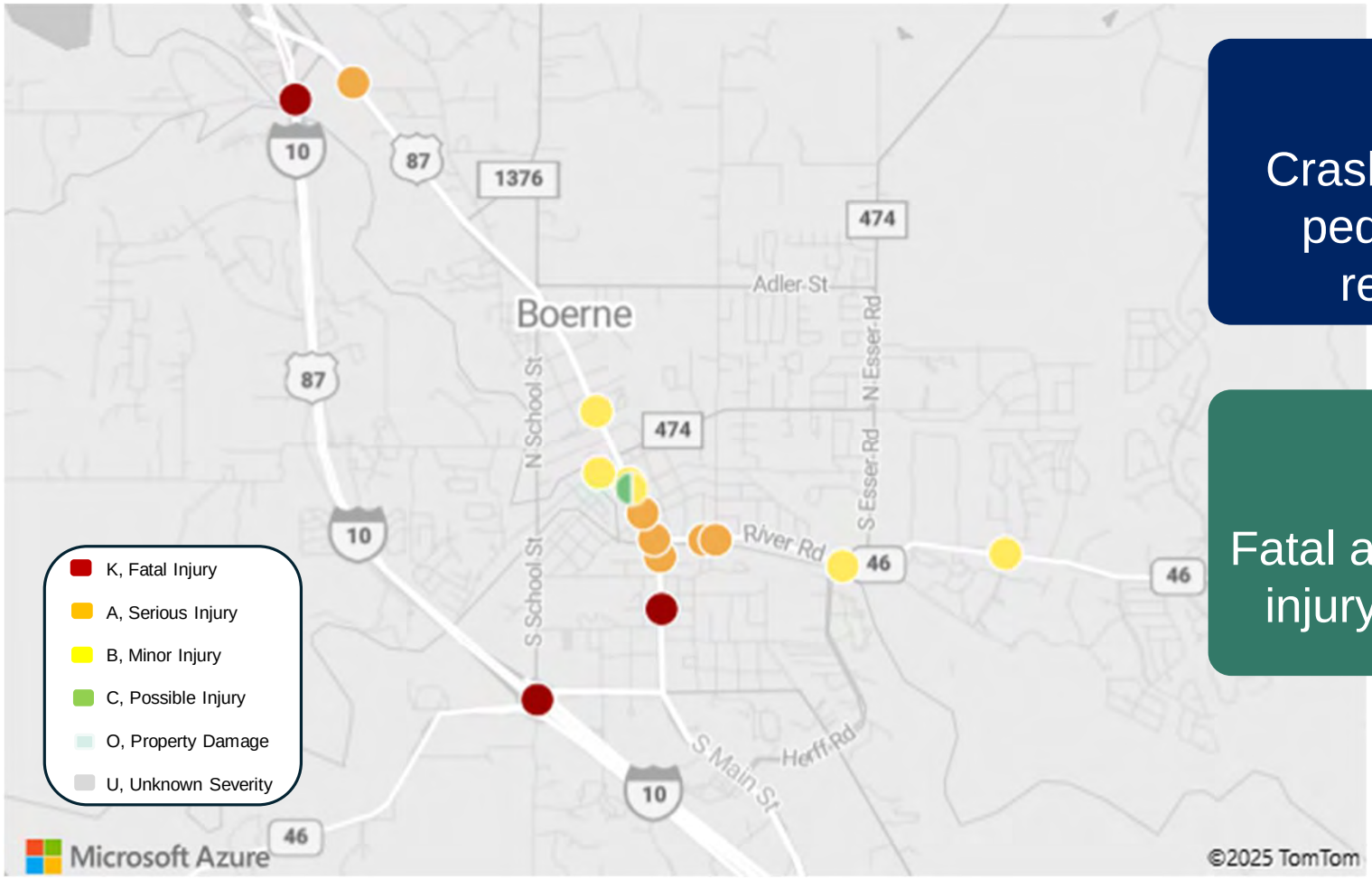
Crash History



16
Crashes were pedestrian related

9
Fatal and serious injury crashes

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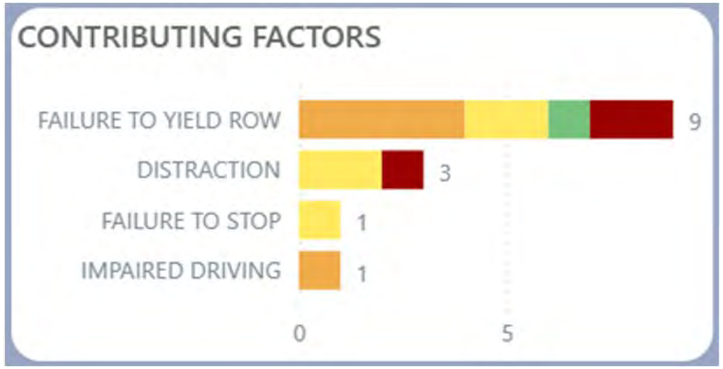
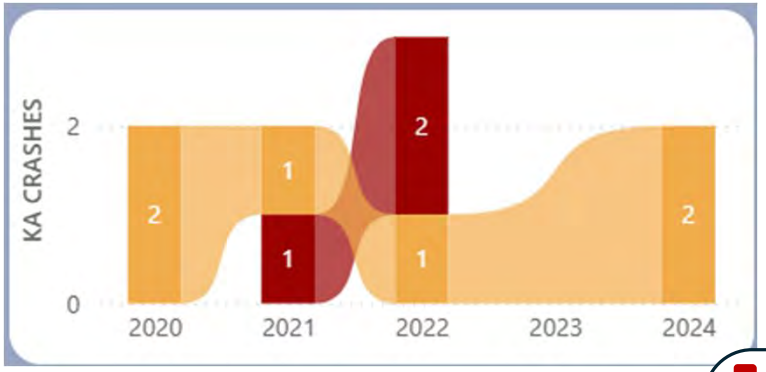
Pedestrian Crash Details

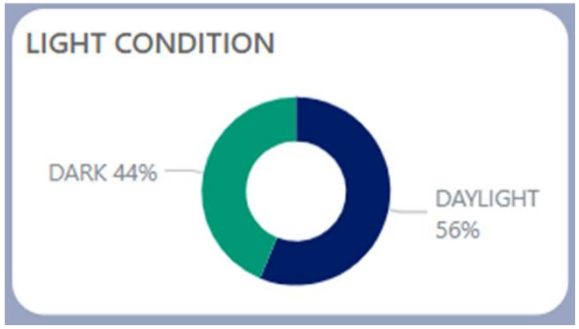
Contributing Factors



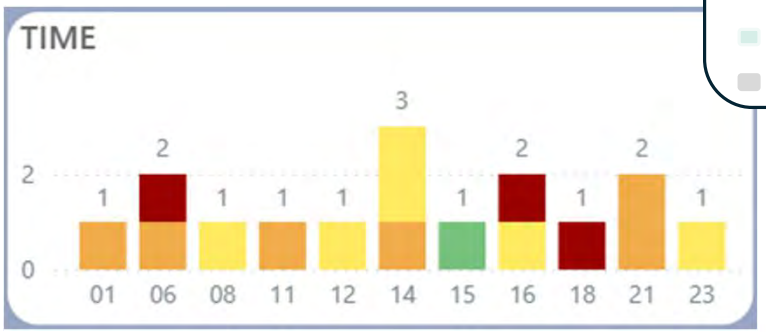
Crash Severity



Lighting Conditions



Time of Day



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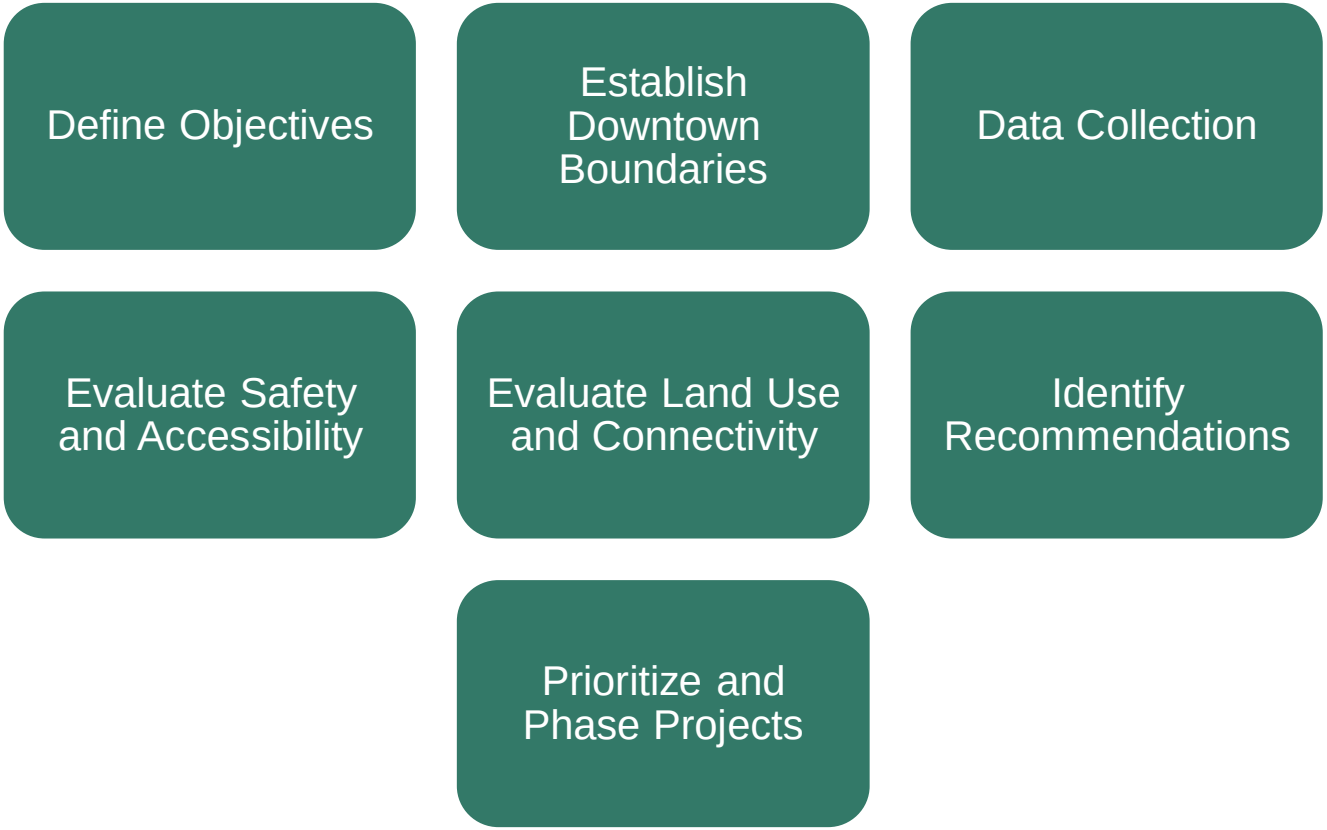
Downtown Pedestrian Framework



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Objectives

What do we want to achieve with the Downtown Pedestrian Study?

- Improving pedestrian safety
- Enhancing accessibility for all users
- Improve pedestrian safety while supporting local businesses downtown
- Planning for future growth
- Reducing vehicle-pedestrian conflicts

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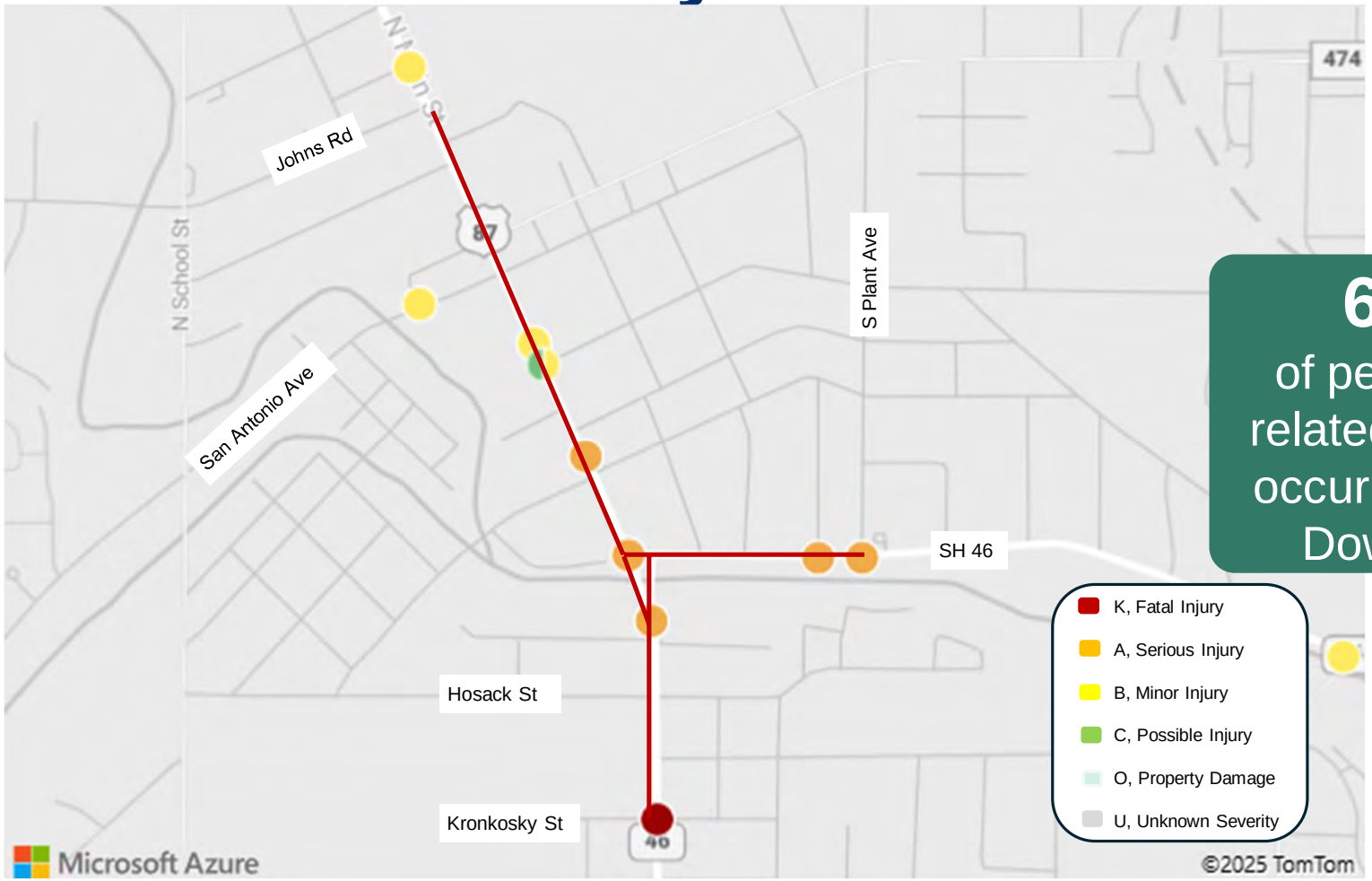
Downtown Study Area



69%
of pedestrian related crashes occurred within Downtown

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Downtown Pedestrian Study Activity

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Implementation Plan Framework

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Framework ≈ CSAP Components

Strategy and project selections

1. Implement **infrastructure** projects (location-specific and systemic projects).
2. Implement **quick-build** and **safety planning** projects.

Policy and process changes

3. Update **design guidance** to emphasize safety for all road users.
4. Incorporate the safe system approach into organization **operating procedures**.

Progress and transparency *(next meeting)*

5. Organize an **implementation process** to identify, prioritize, and implement safety projects.
6. Monitor action plan progress and publish an **implementation evaluation** of outcomes and efforts.

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Implementation Plan Framework

1. Infrastructure (Activity)
    A. Focus Corridors
    B. Focus Intersections
    C. Systemic Projects
2. Non-Infrastructure (Activity)
    A. Quick Build
    B. Safety Planning
    C. Design Guidance
    D. Operating Procedures
3. **Anything Else**
    - Selections will structure the development of the draft implementation plan
    - Selections are <u>not</u> the final opportunity to provide input

Implementation Framework:
Our comprehensive approach to prevent roadway fatalities and serious injuries will include **infrastructure** and **non-infrastructure** solutions.

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Infrastructure Activities

Systemic Countermeasures

Intersection Safety

- Retroreflective Backplates
- Stop Controlled Intersection Improvement
- Optimize Signal Phasing (Left-Turn)
- Dedicated Turn Lanes
- Restricted Crossing U-Turn

Roadway or Lane Departure

- Edge Line or Center Line Rumble Strips
- Wider Edge Lines
- Enhanced Delineation on Curves

Speed Related

- Safety Speed Cameras
- Dynamic Speed Feedback Signs
- Traffic Calming Measure

Dark or Underlit

- Safety Lighting

Pedestrian/Bicyclist

- Leading Pedestrian Interval
- Rectangular Rapid Flashing Beacon (RRFB)
- Crosswalk Visibility Enhancements

Safety Action Plan BOERNE

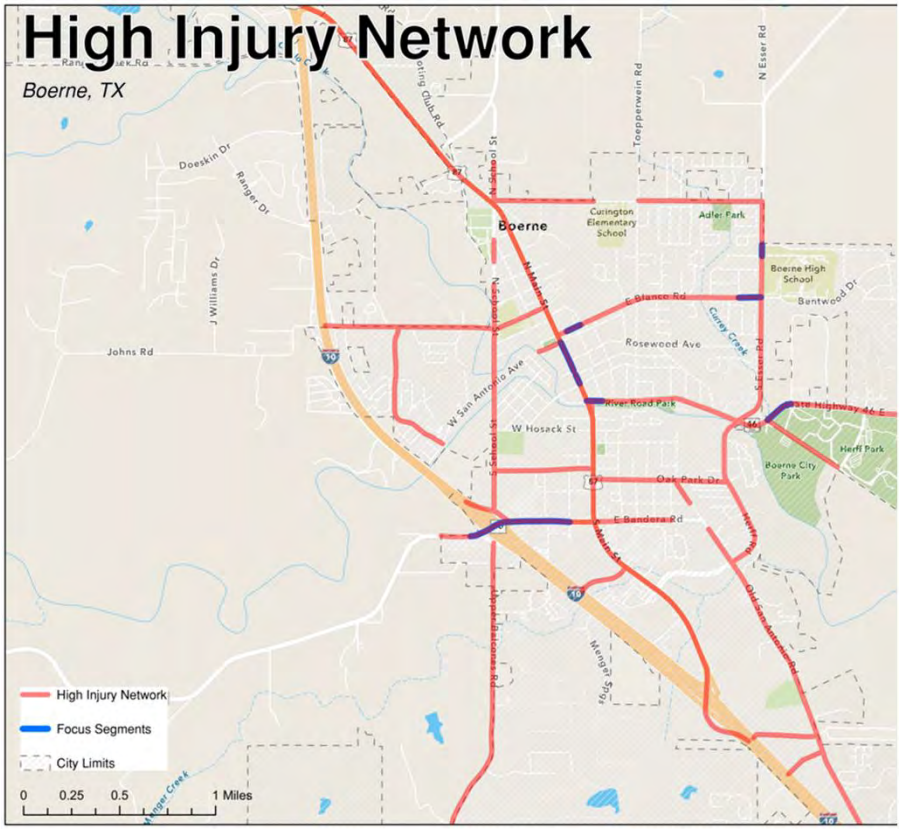
Systemic Projects Activity

Rank	Countermeasure
	Enhanced pedestrian crossings
	Roundabouts
	Sidewalks
	Turn Lanes
	Install Raised Medians
	Timing Improvements
	Edgeline Treatments
	Install LED Flashing Chevrons (Curve)
	Resurfacing
	Safety Lighting
	Traffic Calming Improvements
	Parking Improvements
	Road Diets

Rank: Low, Medium, High

Safety Action Plan BOERNE

Focus Corridors



- 51% of crashes within City of Boerne occur on 15% of roadways (23 miles)
- 14 of the highest-crash corridors were evaluated and prioritized by the Safety Task Force, and focus corridors were identified

ID	Roadway	From	To	Classification	Length (Miles)	AADT	Crash Rate (per HMVMT)	Crash Cost ($100K) Total	EPDO Total	Ped + Bike Total	Crash Count	K	A	B
1	W Bandera	Wanda	Water St	Arterial	0.11	15,755	7.369	37.03	699	0	54	0	0	8
2	E Blanco	S Esser	Stonegate Rd	Collector	0.12	7,322	9.865	16.75	316	1	31	0	0	4
3	River	South Main	Pecan St	Arterial	0.08	12,883	4.468	5.82	110	0	16	0	0	1
4	N Esser	Greyhound Ln	Deer Creek	Collector	0.06	7,322	8.405	12.65	239	0	13	0	0	4
5	W Bandera	WB IH 10 Frontage Rd	Whataburger Access	Arterial	0.08	9,803	5.301	5.29	100	0	14	0	0	0
6	W Bandera	HEB Access	Norris Ln	Arterial	0.14	15,755	8.334	31.22	589	0	68	0	0	6
7	South Main	James	Rosewood	Arterial	0.08	19,904	1.039	1.71	32	0	6	0	0	0
8	E Blanco	Main	Saunders	Collector	0.11	9,200	1.121	3.00	57	0	4	0	0	1
9	W Bandera Bridge	Backage Rd	Backage Rd	Arterial	0.22	56,906	3.098	199.16	3,758	1	143	1	0	10
10	E Blanco	Saunders	Harz	Collector	0.1	9,200	2.871	3.52	66	0	10	0	0	0
11	River	City Park	Sharon	Arterial	0.16	10,748	3.831	19.53	368	1	24	0	0	4
12	S Main	Rosewood	W San Antonio	Arterial	0.1	19,904	3.303	20.55	388	3	25	0	0	3
13	S Main	E Theissen	James	Arterial	0.05	19,904	4.790	16.91	319	1	19	0	1	0
14	River	Champion	Herff Ranch	Arterial	0.3	7,300	2.923	30.66	578	0	23	0	1	4

Safety Action Plan BOERNE

Focus Intersections

- 49% of crashes within City of Boerne occur at intersections
- Intersection crashes are a TxDOT emphasis area
- 35% of intersection related crashes are rear ends
- 35% of intersection crashes are angle crashes

Safety Action Plan BOERNE

Infrastructure Activity Instructions

- **Question:** What **infrastructure projects** are the highest priority, and should be evaluated further as the implementation plan is developed?
- **Objective:** Assign a priority/timeframe to each infrastructure project (see infrastructure matrix).

- Project Types:
  A. Focus Intersections
  B. Focus Corridors
  C. Systemic
- How were these projects developed?
  - Data driven (High-Injury Network, safety analysis, and equity analysis)
  - Informed by public input (online map, online survey, and in-person meetings)
  - Committee led (Safety Task Force)

Safety Action Plan BOERNE

Infrastructure Matrix

Rank	Project Type	2026 – 2027	2028 – 2030	2030 +
	Intersections			
	Corridors			
	Systemic			

Intersections

Herff & Main
Main & River
River & Charger
Main & Blanco
Main & Bandera
Main & Adler/School
Main & Christus
Blanco & Esser

Corridors

W. Bandera (Wanda St. to Water St.)
E. Blanco (S Esser to Stonegate Rd)
N. Esser (Greyhound to Deer Creek)
W. Bandera (HEB Access to Norris Ln)
S. Main (James to Rosewood)
Adler St (Plant Ave to N. Esser Rd)
E. Blanco (Main to Saunders)

Safety Action Plan BOERNE

Non-Infrastructure Activities

Safety Action Plan
BOERNE

Quick-Build Projects

Title	Action
Temporary construction	Construct quick-build projects using low-cost, temporary materials that have the potential to inform future permanent projects. Examples include: • paint and plastic delineator posts to experiment with temporary roadway design changes • planters, temporary speed humps/bumps, and other removable safety and traffic calming improvements.
Engineering studies	Conduct engineering studies which evaluate the benefit of safety improvements, such as: • Bicycle crossing treatments • Mid-block crossing treatments (pedestrian hybrid beacon, rectangular rapid-flashing beacon) • Signal warrant analyses • Variable speed limits • Dynamic lane use signs or reversible lane control signs
Behavioral or operational programs	Pilot (temporarily test on a small scale) new programs for behavioral or operational activities, such as: • Education campaign's messaging • Safety demonstrations repurposing public spaces (e.g., open streets pilot events) • Community engagement (e.g., bus-stop engagements to collect feedback) • Training focused on equitable and effective enforcement to address the most dangerous driver behaviors (e.g., excessive speeding, impaired driving) • Ride share or alternative transportation program in impaired driving focus area • Safe Routes to School program that incentivizes parents to lead bike trains or walking buses • Emergency services process changes (including data collection, operational plans for crash response, or trainings for EMS staff responding to crashes)
Technology programs	Pilot (temporarily test on a small scale) new programs that demonstrate safety benefits of new technologies, such as: • Variable speed limits • Safety warnings for wrong-way driving alerts • Adaptive signal timing • Signal preemption for emergency vehicles • Vehicle-to-infrastructure technology

Safety Planning Projects

Title	Action
Road safety audits	Conduct road safety audits at a priority list of intersections and roadway segments based on collision rate, severity, and equity, to identify specific issues and determine appropriate countermeasures.
Corridor study	Conduct a corridor study to evaluate existing conditions of heavily traveled and high-frequency crash corridors and identify safety and operational improvements.
Topical safety plan	Develop plans focused on topics such as speed management, vulnerable road users, accessibility for individuals with disabilities, health equity, safety-focused intelligent transportation system implementation, roadway lighting, pedestrian-scale lighting, and/or micro-mobility.
Complete streets design guide	Develop a complete streets design guide that reflects best practices in SS4A design, context-sensitive design (FYA guidance), active transportation facility design (LPI guidance), and placemaking principles.
Bicycle design guide	Develop context-sensitive guidance for bicycle facility selection and design.
Safety data collection	Develop roadway safety-related inventories such as sidewalk inventories, intersection database, or database of high-risk road features. Collect road user counts (such as pedestrian/bike counts). Create collision diagrams at high-crash locations.
Progress reporting	Report progress of action plan implementation for transparency to local stakeholders (e.g., data dashboards, summary reports of projects and strategies implemented/to be implemented).
Stakeholder engagement and collaboration	Conduct stakeholder and community engagement activities such as community pop-up events, online survey, and online map of project comments.

Design Guidance

Title	Action	Supplemental Guidance
Sidewalks	Establish/update design guidelines for sidewalk and sidewalk buffer.	FHWA (see PSC) recommends a minimum width of five feet for sidewalks set back from the curb and six feet for sidewalks at the curb face.
Directional Ramps	Establish/update design guidelines for access ramps to be directional and align with the crosswalk.	USDOT prefers the use of perpendicular curb ramps over diagonal curb ramps. Diagonal curb ramps may make it difficult to locate the clear space at the bottom of diagonal curb ramps that is outside active traffic lanes and the orientation can mislead people with vision impairments.
Leading Pedestrian Interval (LPI)	Establish criteria for reducing pedestrian-vehicle conflict, and for when to implement an LPI.	FHWA (see PSC) recommends implementing an LPI of three to seven seconds to allow pedestrians to begin crossing before vehicles enter the intersection, particularly at intersections with high turning vehicle volumes.
Bike Lanes	Establish design guidelines for bicycle facilities along roadways, and at intersections.	FHWA (see Bikeway Selection Guide) provides guidance for different types of bikeway designs for various applications and provides factors to consider when selecting what type of bikeway to construct.
Left-Turn Signal	Establish criteria for left-turn phasing, signal indication, and signage.	FHWA (see Traffic Signal Operations Handbook) provides guidance for determining left-turn operational which considers crash history, speed, traffic volume, and other factors.
Lighting	Establish criteria for roadway lighting. Establish process for maintaining streetlights and tracking lighting outages. Establish process for the public to report issues and City to respond.	FHWA (see Lighting Handbook) provides roadway lighting design and application recommendations. This includes factors to consider from the AASHTO Roadway Lighting Design Guide Warranting System such as traffic volume and night-to-day crash ratio, as well as geometric and operational factors such as number of lanes, lane widths, turn lanes, and speed.
Traffic Impact Analysis (TIA)	Establish/update TIA guidelines to include safety analysis.	TxDOT's Traffic and Safety Analysis Procedures Manual documents state guidelines which may be adopted into local policy.
Access Management	Establish/update access management guidelines for driveway location/spacing, driveway design (width and radii), and turn lane requirements.	TxDOT's Access Management Manual and NCHRP Report 1032 document state and national guidelines which may be adopted into local policy, as appropriate.
Speed	Establish/update guidance to design streets to support and encourage the target speed.	FHWA recommends a target speed be determined which considers the safest vehicle speeds for all street users. Then, streets are designed to facilitate the target speed.

Operating Procedures

Title	Action
Engagement	Maintain publicly accessible platform for residents to report road safety risks (311 or comment map), and process to respond to comments.
	Organize an annual public event which commemorates road safety Citywide. Consider an event which celebrates non-vehicle modes such as a bike ride or street festival.
	At an Agency level, dedicate a bike-to-work day to celebrate non-vehicle mode transportation.
	Include public engagement within the Agency's standard project development process. Use data, research, and USDOT guidance to prioritize the most effective education/outreach strategies.
Education	Educate Agency employees on the Safe System Approach principles (e.g., create a brochure contrasting the traditional approach).
	Implement or expand Safe Routes to Places educational programming, to support pedestrian/bicycle infrastructure in close proximity to schools, parks, and transit stops.
	Require Vision Zero training for Agency drivers, such as fleet operators, field crews, and large vehicle operators to meet certain safety practices.
Enforcement	Focus enforcement on the most dangerous behaviors based on reliable data to ensure that this is communicated effectively to ensure public understanding.
Emergency Services	Install enhanced emergency vehicle warning systems to improve the dissemination of information to all road users.
	Operate signal priority for emergency vehicles to improve response times and for transit vehicles to increase efficiency and encourage transit use.
Speed	Establish/update a neighborhood traffic calming program to reduce the number and severity of crashes on residential streets. Emphasize safety for people walking and biking by implementing countermeasures to slow vehicle speeds. Focus projects/funds in underserved communities.

Non-Infrastructure Activity Instructions

- **Question:** What **non-infrastructure projects** are the highest priority, and should be evaluated further as the implementation plan is developed?
- **Objective:** Assign a priority/timeframe to each non-infrastructure project (see non-infrastructure matrix).

- Project Types:
  D. Quick Build
  E. Safety Planning
  F. Design Guidance
  G. Operating Procedures
- How were these projects developed?
  - SS4A Funding Eligibility (CSAP Components)
  - Safe Systems Approach and Pyramid
  - Vision Zero Toolkit (FHWA-SA-23-026)

Safety Action Plan BOERNE

Non-Infrastructure Matrix

Rank	Project Type	2026 – 2027	2028 – 2030	2031 +
	Quick Build			
	Safety Planning			
	Design Guidance			
	Operating Procedures			

Rank: Low, Medium, High

- **Quick-Build |** Projects utilizing low-cost construction materials (e.g., paint, plastic bollards, signs, and pavement markings) to pilot new materials/methods prior to constructing full-scale permanent infrastructure.
- **Safety Planning |** Projects or activity which develop projects, organize resources, and garner public support for safety (excluding engineering and design).
- **Design Guidance |** Design standards which incorporate safety countermeasures to remove potential roadway conflicts, separate vulnerable road users from traveling vehicles, and/or reduce crash kinetic energy if a crash does occur.
- **Operating Procedures |** Behavioral countermeasures, such as the E's (engagement, education, enforcement, and emergency services), as well as operational countermeasures, such as speed management strategies.

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Next Steps

Safety Action Plan
BOERNE

Next Steps

- Perform intersection safety audits
- Develop Citywide and Downtown projects (based on input from Safety Task Force and Public Engagement Events)
- Create a draft report to document

Safety Action Plan BOERNE

Upcoming Events

September

- 9/4 – Survey Opens and Website Live
- **9/11 – Safety Task Force Meeting #2**
- 9/13 - Pop-Up Meeting #1 – Boerne Market Days
  - Priority Ranking Activity
  - Downtown Pedestrian Activity

October

- 10/3 – Survey Closes
- Event #2 – TBD
  - Project Selection
- **10/23 - Safety Task Force Workshop #3**
  - **Project Selection**
  - **Implementation**

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Safety Action Plan

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Safety Task Force Meeting #3
October 24, 2025
8:30 AM – 10:30 AM

Agenda

- **Public Engagement Overview**
- **Downtown Activity**
- **Intersection Activity**
- **Corridor Activity**
- **Next Steps**
- **ISA Pre-Assessment Meeting**

An Intersection Safety Assessment (ISA) **qualitatively** estimates and reports on potential road safety **issues** and identifies opportunities for **improvements** in safety for **all road users**.

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Public Engagement

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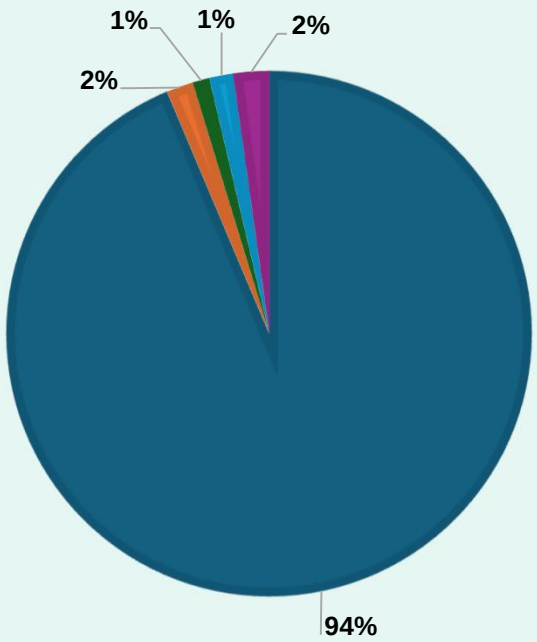
Results

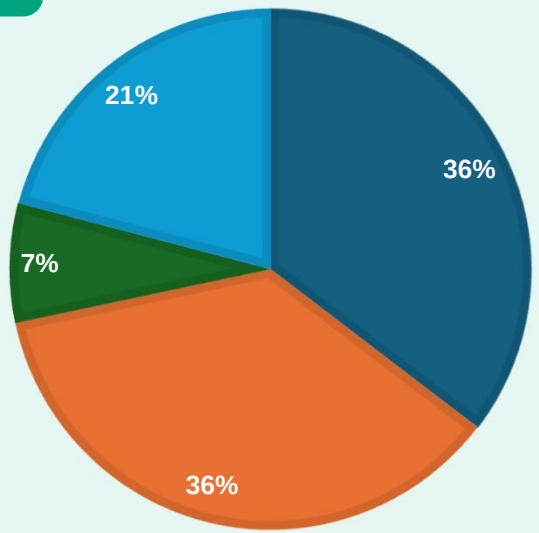
- **Boerne Community Survey**
- **Boerne ADA Transition Plan Survey**
- **Boerne Safety Action Plan Survey**
- **Boerne Market Days CSAP Activity**
- **AAMPO Long Range Transportation Plan Activity**

Participation

1149
Mobility Focused Responses



- Community Survey
- ADA Transition Plan Survey
- Safety Action Plan Survey
- AAMPO Long Range Transportation Activity
- Boerne Market Days



- Vehicle Safety
- Pedestrian Safety
- Bicycle Safety
- Other Comments

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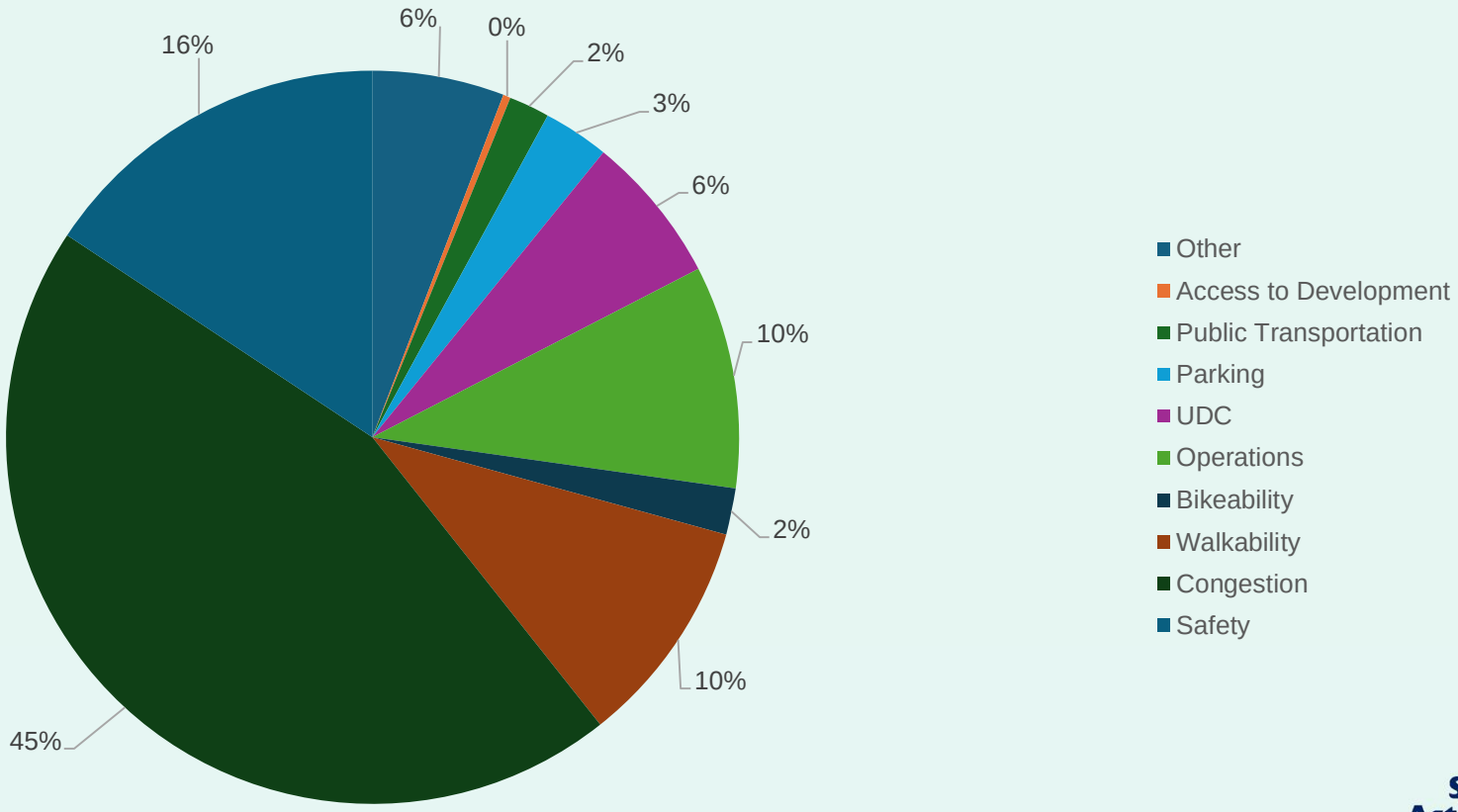
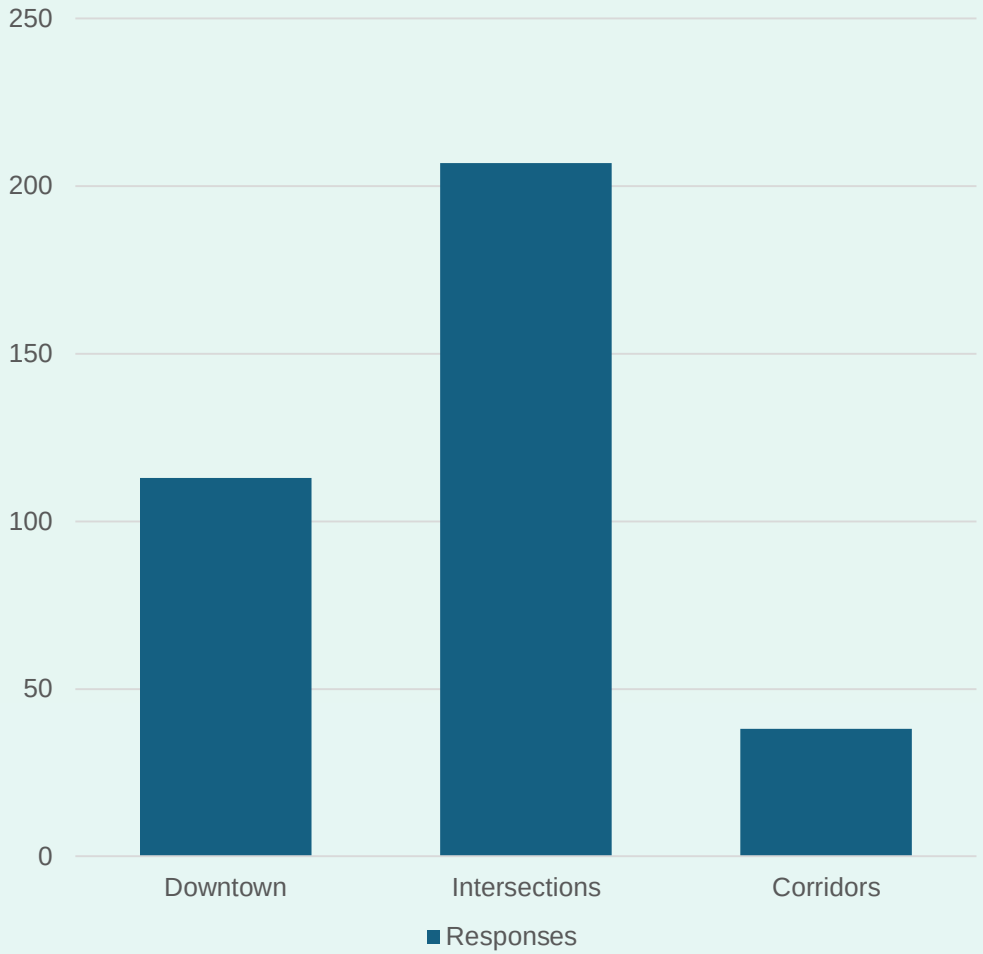
Transportation Priorities - Results

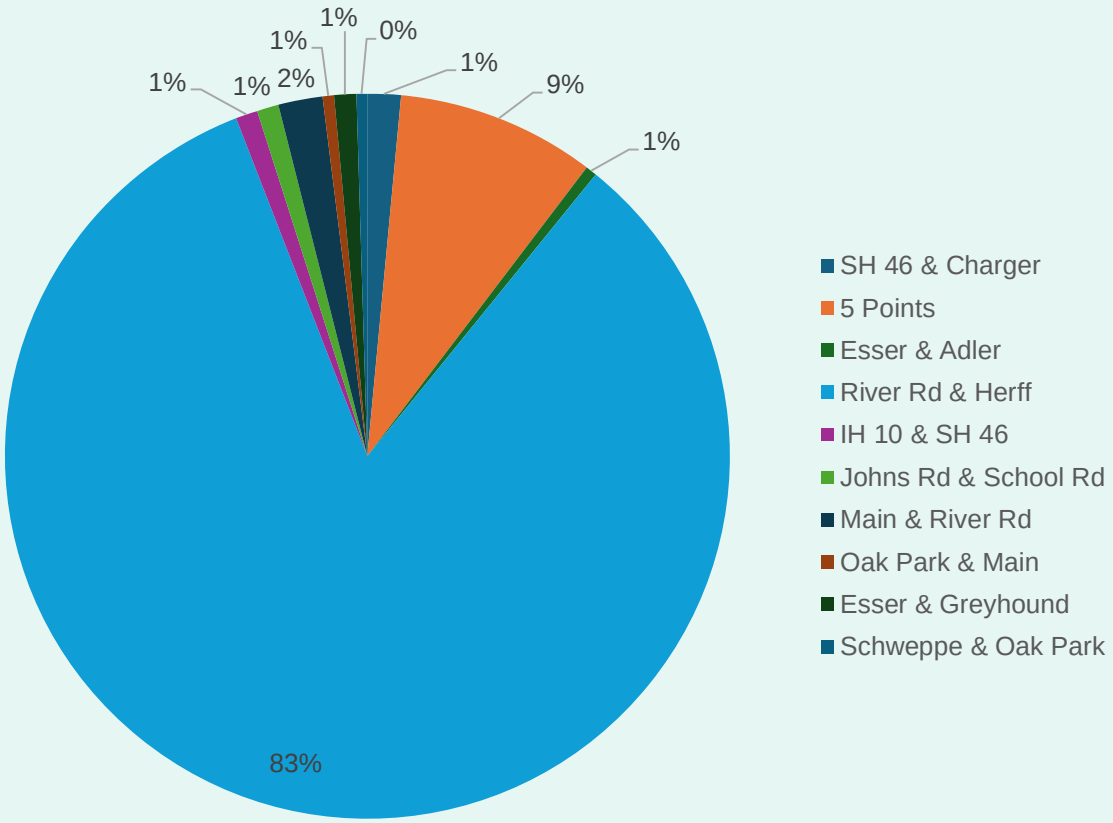


Focus Location Selection - Results



Focus Location Selection – Intersection Results

98%
identified on the HIN



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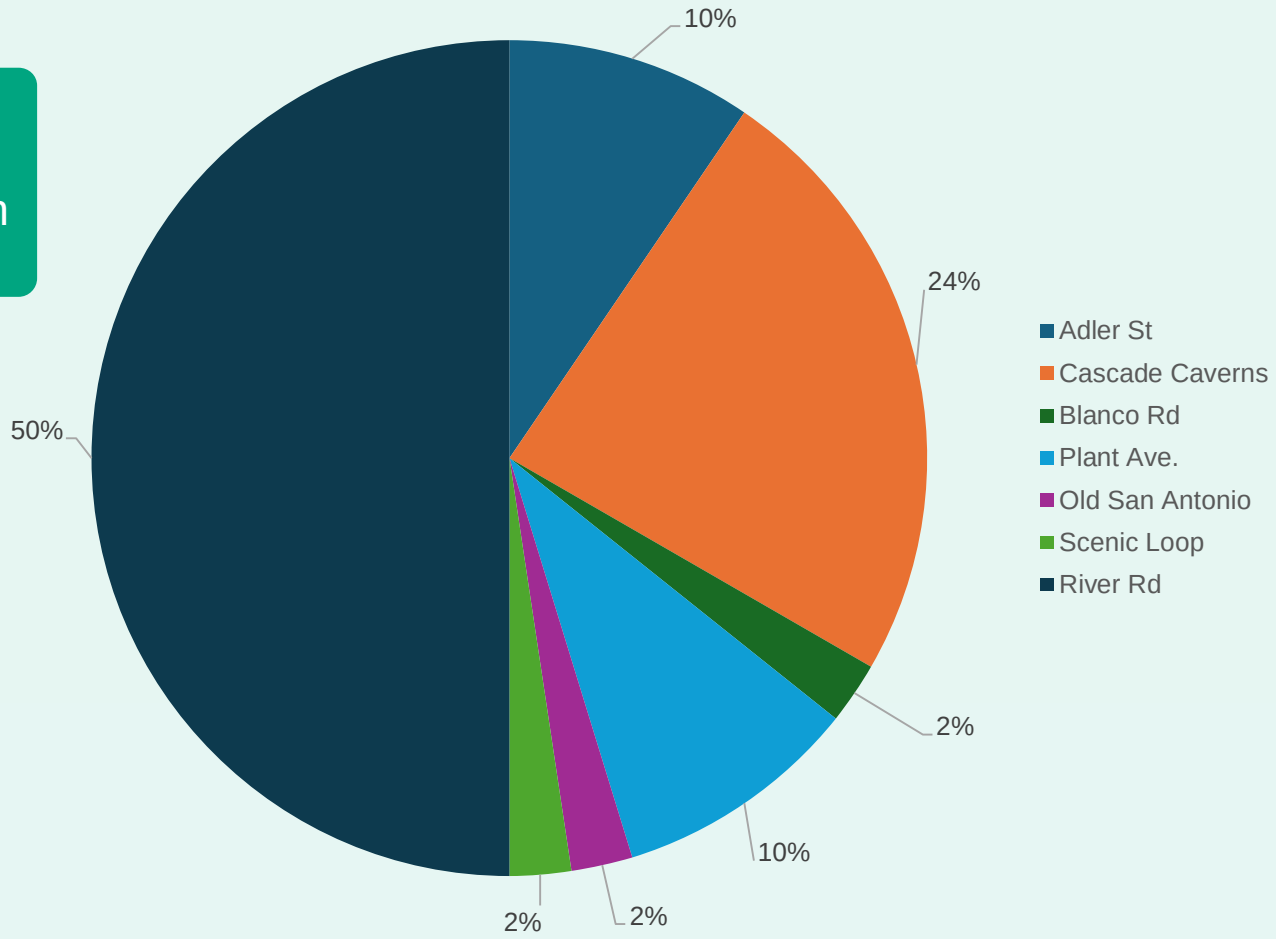
Focus Location Selection – Corridor Results

71%
identified on the HIN



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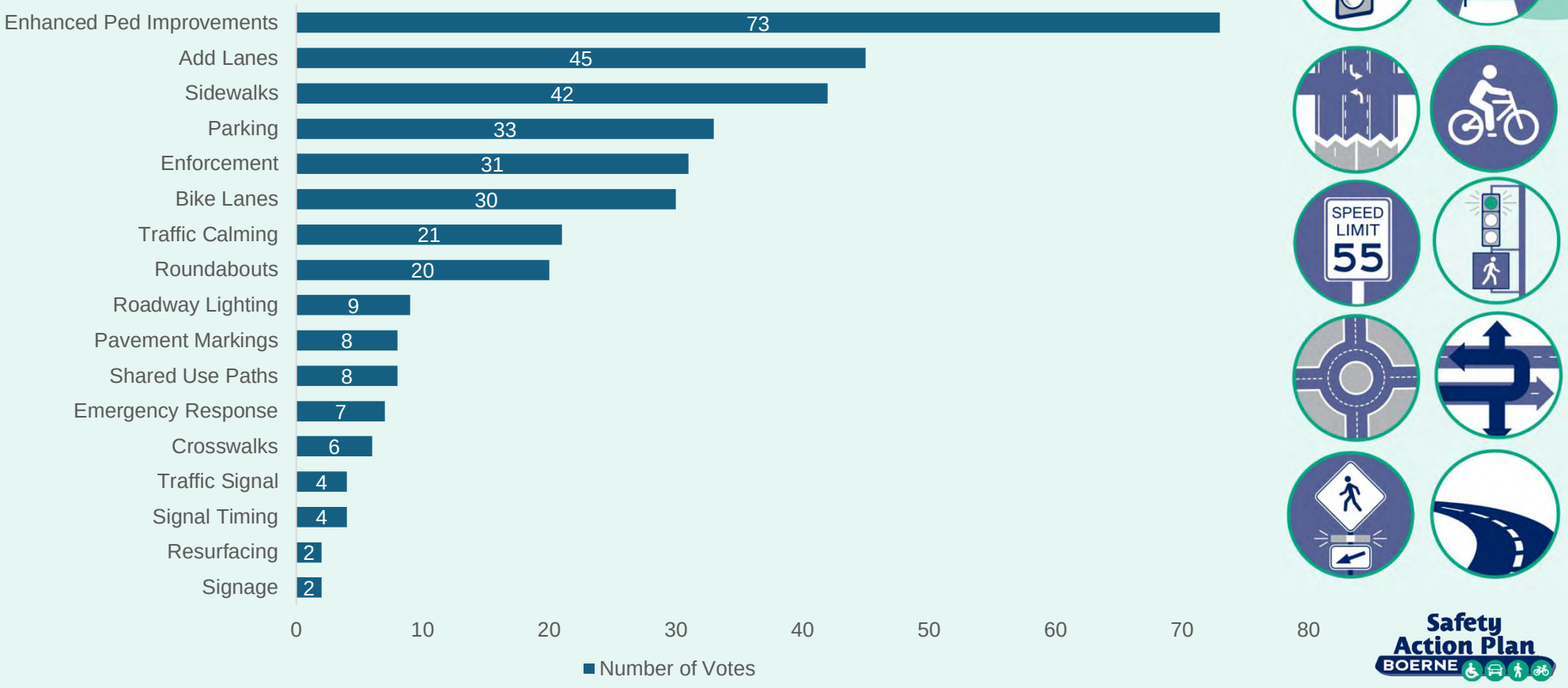
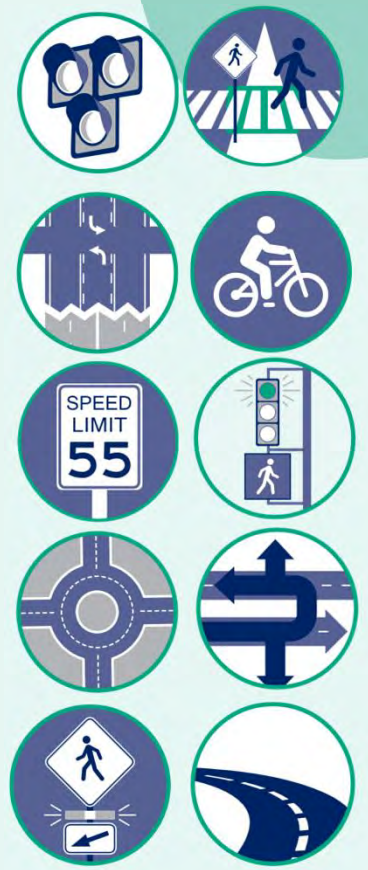
Systemic Countermeasures





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BOERNE

Downtown Pedestrian Assessment Activity

Safety Action Plan
BOERNE

Main St. & River Rd.

ON HIGH-INJURY NETWORK

ON-SYSTEM
SIGNALIZED INTERSECTION

307 Crashes
Per Hundred Million Entering Vehicles

99 Total Crashes
1 (A) Serious Injury Crash
9 (B) Minor Injury Crashes

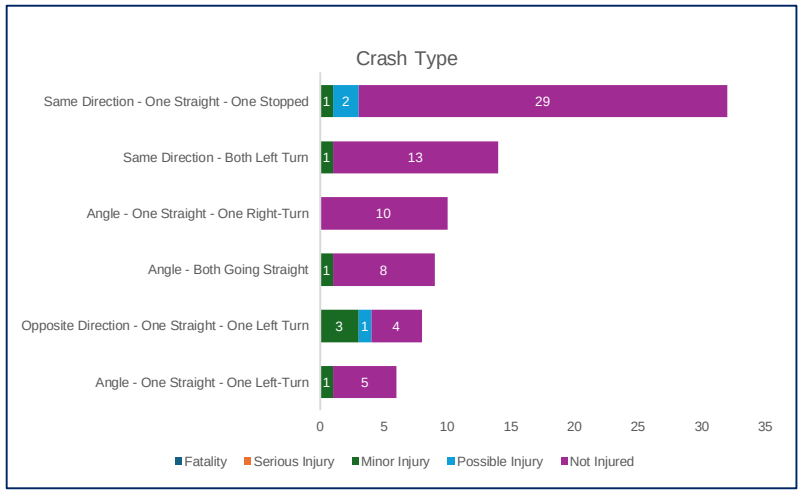
1,708 Equivalent Property Damage Only Crashes

1 Pedestrian Involved Crashes
0 Bicycle Involved Crashes

AADT 29,432
Vehicles entering the intersection

PUBLIC ENGAGEMENT
Focus Intersection

Contributing Factors
- *Distraction*
- *Failed to yield ROW*
- *Changed lane when unsafe*
- *Disregard traffic control*
- *Speeding*
- *Followed too closely*



Crash history from TxDOT Crash Records Information System C.R.I.S. 2020-2024, based on crashes reported within 250 ft of intersection center.

Safety Action Plan
BOERNE

River Rd.

Mesquite St. to Plant St.

ON HIGH-INJURY NETWORK
IDENTIFIED AS A FOCUS LOCATION

ON-SYSTEM
ARTERIAL
5 - LANES, 2 - LANES EACH DIRECTION, CENTER TWO-WAY LEFT-TURN LANE

0.05 MILE-LONG SEGMENT

Contributing Factors
- *Distraction*
- *Failure to yield ROW*
- *Speeding*
- *Followed to closely*
- *Changed lanes when unsafe*
- *Disregard traffic control*

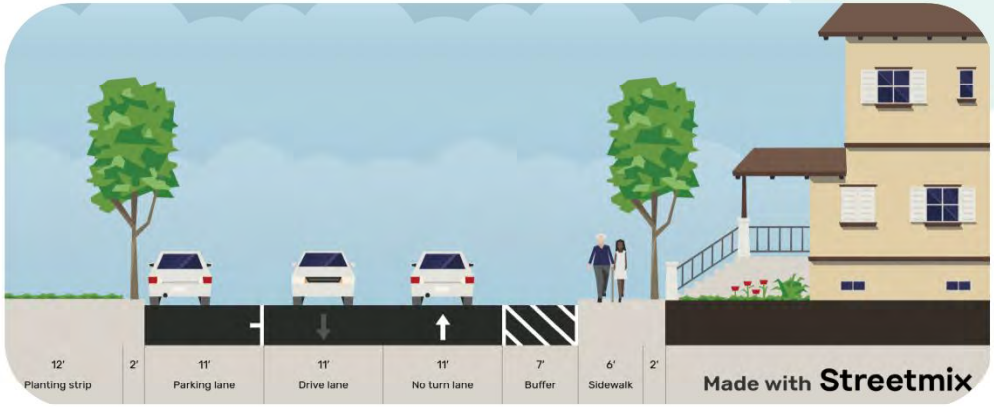
3,993 Crashes
Per Hundred Million Vehicle Miles Traveled

18 Total Crashes
5 (C) Possible Injury Crashes

124 Equivalent Property Damage Only Crashes

AADT 24,701

0 Pedestrian Involved Crashes
0 Bicycle Involved Crashes



Safety Action Plan BOERNE

Crash history from TxDOT Crash Records Information System C.R.I.S. 2020-2024, based on crashes reported within 250 ft of intersection center.

Intersection Assessment Activity

Safety Action Plan
BOERNE

Main St. & School St./Adler St.

ON HIGH-INJURY NETWORK
IDENTIFIED AS A FOCUS INTERSECTION

ON-SYSTEM
TWO-WAY STOP CONTROLLED INTERSECTION
TRAFFIC SIGNAL

124 Crashes
Per Hundred Million Entering Vehicles

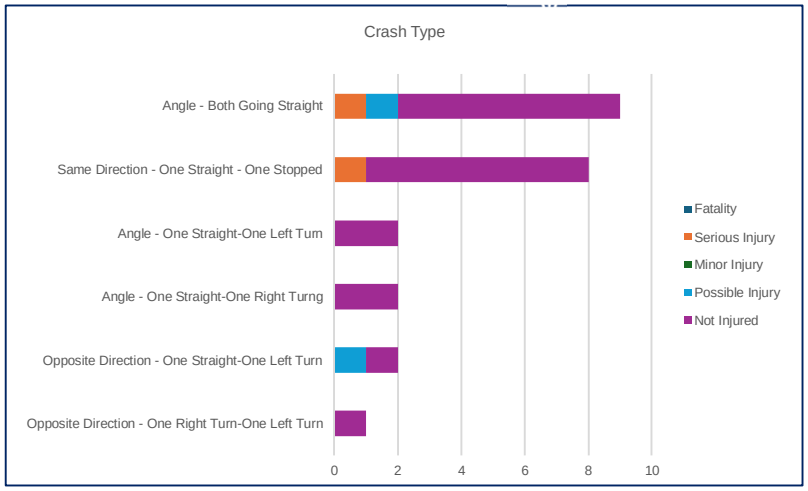
24 Total Crashes
1 (A) Serious Injury Crash
1 (B) Minor Injury Crashes

241 Equivalent Property Damage Only Crashes

0 Pedestrian Involved Crashes
0 Bicycle Involved Crashes

AADT 17,730
Vehicles Entering the Intersection

Contributing Factors
- *Distraction*
- *Failure to yield ROW*
- *Disregard traffic control*
- *Followed to closely*
- *Speeding*
- *Changed lanes when unsafe*



Crash history from TxDOT Crash Records Information System C.R.I.S. 2020-2024, based on crashes reported within 250 ft of intersection center.

Safety Action Plan
BOERNE

River Rd. & Charger Blvd.

ON HIGH-INJURY NETWORK
IDENTIFIED AS A FOCUS INTERSECTION

ON-SYSTEM
SIGNALIZED INTERSECTION

92 Crashes
Per Hundred Million Entering Vehicles

24 Total Crashes
4 (B) Minor Injury Crashes
2 (C) Possible Injury Crashes

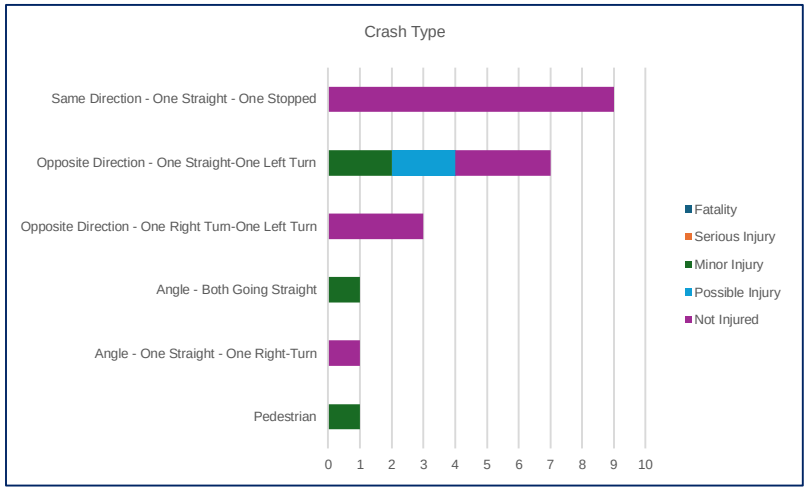
278 Equivalent Property Damage Only Crashes

1 Pedestrian Involved Crashes
0 Bicycle Involved Crashes

AADT 23,714
Vehicles Entering the Intersection

PUBLIC ENGAGEMENT
Focus Intersection

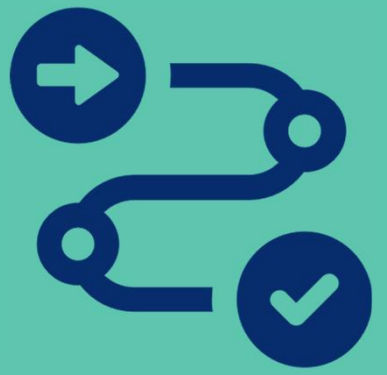
Contributing Factors
- *Failure to yield ROW*
- *Distraction*
- *Speeding*
- *Changed lanes when unsafe*
- *Disregard traffic control*
- *Unsafe turning*



Crash history from TxDOT Crash Records Information System C.R.I.S. 2020-2024, based on crashes reported within 250 ft of intersection center.

Safety Action Plan
BOERNE

Corridor Assessment Activity



Safety Action Plan
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W. Bandera

Wanda St. to Water St.

ON HIGH-INJURY NETWORK
IDENTIFIED AS A FOCUS LOCATION

ON-SYSTEM
ARTERIAL
5-LANES, TWO-LANES EACH DIRECTION, CENTER TWO-WAY LEFT-TURN LANE

15,755 Crashes
Per Million Entering Vehicles

54 Total Crashes
6 (B) Minor Injury Crashes

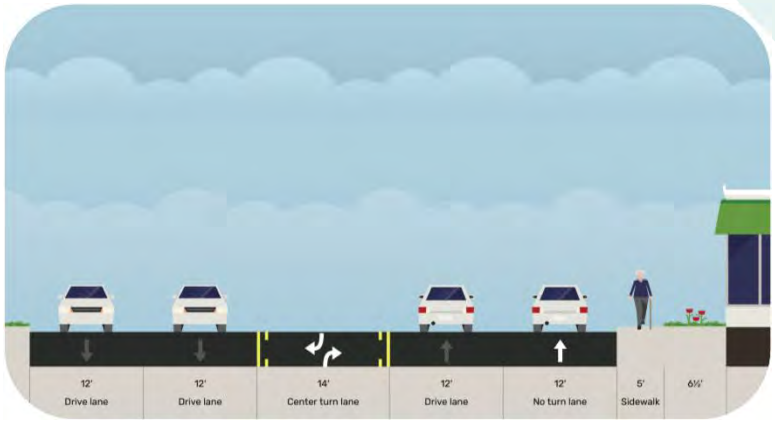
699/Mile Equivalent Property Damage Only Crashes

0.11 MILE-LONG SEGMENT

AADT 15,755 VEH PER DAY

0 Pedestrian Involved Crashes
0 Bicycle Involved Crashes

Contributing Factors
- *Failed to yield right-of-way*
- *Distraction*
- *Changed lane when unsafe*
- *Speeding*
- *Unsafe turning*



Safety Action Plan BOERNE

Crash history from TxDOT Crash Records Information System C.R.I.S. 2020-2024, based on crashes reported within 250 ft of intersection center.

Next Steps

Safety Action Plan
BOERNE

Upcoming Events

- December 2025 – Implementation Plan Meeting
- February 2025 – City Council Meeting
- March 2026 – Draft Plan Publicly Available Online
- June 2026 – Final Plan

Safety Action Plan BOERNE

Safety Action Plan

BOERNE

Intersection Safety -
Pre-Assessment Meeting
October 24, 2025

ISA Process

ISA Steps

Step	Description	Participants	Date
1	Identify project or road in-service to be assessed	City of Boerne	October 2025
2	Select ISA team	City of Boerne	October 2025
3	Conduct a pre-assessment meeting to review locations	ISA Team	October 23, 2025
4	Perform field observations under various conditions	ISA Team	October 24, 2025
5	Conduct assessment analysis and prepare report of findings	ISA Team	November 2025
6	Present assessment findings to Project Owner/Design Team	Kimley-Horn	November 2025
7	Project Owner/Design Team prepares formal response	City of Boerne	TBD
8	Incorporate findings into the project when appropriate	City of Boerne	TBD

Boerne ISAs

Objective: Identify near and long-term safety improvements at ISA locations

Safety Action Plan BOERNE

Field Review - Locations

Safety Action Plan BOERNE

Field Review - Logistics

Order	Arrival	Location	Event	Duration
1	9:00 AM	River Rd & Herff Rd/S Esser Rd	Field Review	40
2	9:45 AM	S Main St & Bandera Rd	Field Review	40
3	TBD	TEAMS Virtual Meeting	Post-Assessment Meeting	60

Safety Action Plan BOERNE

Field Review - Documentation

- **Observation:** Detailed description of field condition/event
- **Photo:** A photo and caption of observed condition/event
- **Recommendation:** Recommended improvements
- **Cost:** A planning-level cost estimate

Report potential road safety issues and identify opportunities for improvements in safety for all road users.

Safety Action Plan BOERNE

River Rd. & Herff Rd./Esser Rd.

ON HIGH-INJURY NETWORK

ON-SYSTEM
SIGNALIZED INTERSECTION

643 Crashes
Per Hundred Million Entering Vehicles

104 Total Crashes
2 (A) Serious Injury Crashes
15 (B) Minor Injury Crashes
13 (C) Possible Injury Crashes

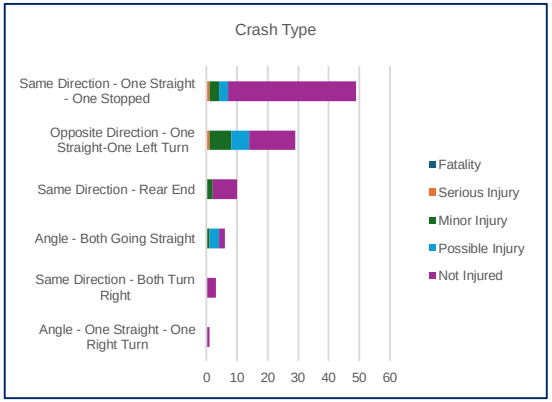
3,947 Equivalent Property Damage Only Crashes

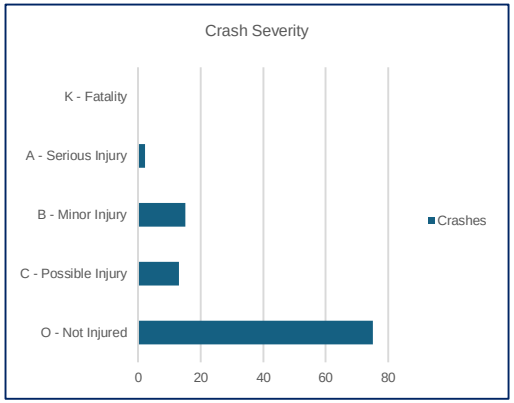
1 Pedestrian Involved Crashes
1 Bicycle Involved Crashes

AADT 14,776

PUBLIC ENGAGEMENT
Focus Intersection

Contributing Factors
- *Distraction*
- *Failure to yield ROW*
- *Disregard traffic control*
- *Followed to closely*
- *Speeding*
- *Changed lane when unsafe*





Crash history from TxDOT Crash Records Information System C.R.I.S. 2020-2024, based on crashes reported within 250 ft of intersection center.

Safety Action Plan BOERNE

Main St. & Bandera Rd.

ON HIGH-INJURY NETWORK

ON-SYSTEM
SIGNALIZED INTERSECTION

139 Crashes
Per Hundred Million Entering Vehicles

26 Total Crashes
3 (B) Minor Injury Crashes
2 (C) Possible Injury Crashes

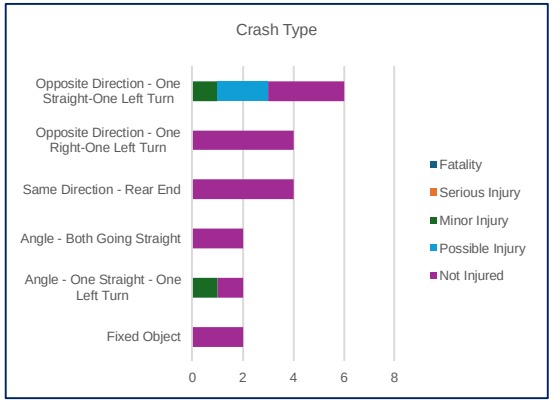
157 Equivalent Property Damage Only Crashes

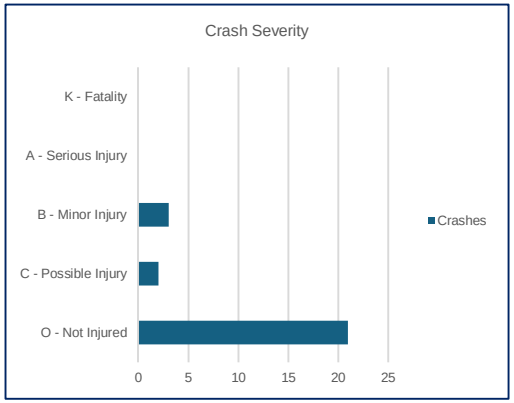
0 Pedestrian Involved Crashes
1 Bicycle Involved Crashes

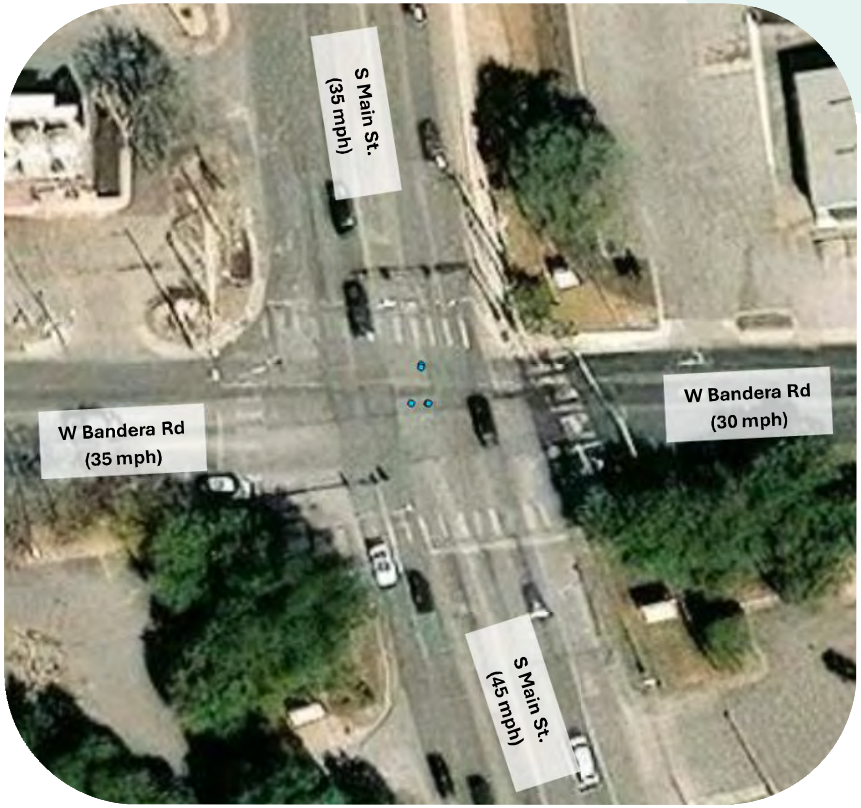
AADT 17,120

PUBLIC ENGAGEMENT
Focus Intersection

Contributing Factors
- *Failure to yield ROW*
- *Distraction*
- *Disregarding traffic control*
- *Speeding*
- *Changed lanes to closely*
- *Disregard signage or striping*







Crash history from TxDOT Crash Records Information System C.R.I.S. 2020-2024, based on crashes reported within 250 ft of intersection center.

Safety Action Plan
BOERNE

Next Steps

Safety Action Plan
BOERNE

Next Steps

ISA Team:

- Pre-Assessment Meeting – Complete
- Field Reviews – 5/31
- Post-Assessment Meeting – Virtual Meeting

Project Team:

- Organize ISA findings
- Conduct B/C analysis of improvements
- Prepare ISA report for local jurisdiction review

Safety Action Plan BOERNE

Boerne CSAP ISA – Field Review Logistics

Project:	Intersection Safety Assessments (ISA)
Purpose:	Boerne CSAP – ISA Field Reviews
Date:	October 24, 2025
Time:	9:00 AM – 11:30 AM
Locations:	River Road & Herff Road/S Esser Road S Main Street & Bandera Road
Contact:	Dawniele Metsker-Galarza, PE, PTOE (Kimley-Horn) Direct: 956-346-8482

Introduction

Thank you for participating in the Boerne Intersection Safety Assessments. An Intersection Safety Assessment (ISA), qualitatively estimates and reports on potential road safety issues and identifies opportunities for improvements in safety for all road users. Intersection characteristics and field review instructions will be discussed in the field. Your participation in the ISAs includes:

1. Attending field reviews
2. Participating in the post-assessment meeting

Field Review Logistics

ISA team members will conduct field reviews at two intersections in the City of Boerne to observe existing conditions, identify safety issues, and recommend improvements. ISA team members will conduct a post-assessment meeting to discuss field review observations and recommend improvements. Field reviews are scheduled for October 24, 2025. Details regarding ISA team, schedule and field review logistics are provided below.

Table 1 – Boerne Field Review Logistics

Arrival	Location	Meeting Spot	Type of Event	Duration
9:00 AM	River Rd & Herff Rd/S Esser Rd	369 S Esser Rd Ste 100, Boerne, TX 78006	Field Review	40
9:45 AM	S Main St & Bandera Rd	110e E Bandera Rd, Boerne, TX 78006	Field Review	40

Field Review Locations

Intersection Diagram

Intersection diagrams are created for each ISA to illustrate roadway characteristics. Diagrams include lane assignments, intersection control, posted speed limit and adjacent land uses.

Collision Diagram

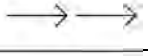
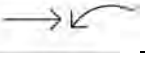
Collision diagrams are created for each ISA location by symbolizing specific crash attributes of the corresponding KAB crash types. Collision diagram taxonomy is provided as Table 2 and Table 3. Crash attributes include the following

- Crash Severity is symbolized by color
- Collision event is symbolized by shape

Table 2 – Crash Severity Chart

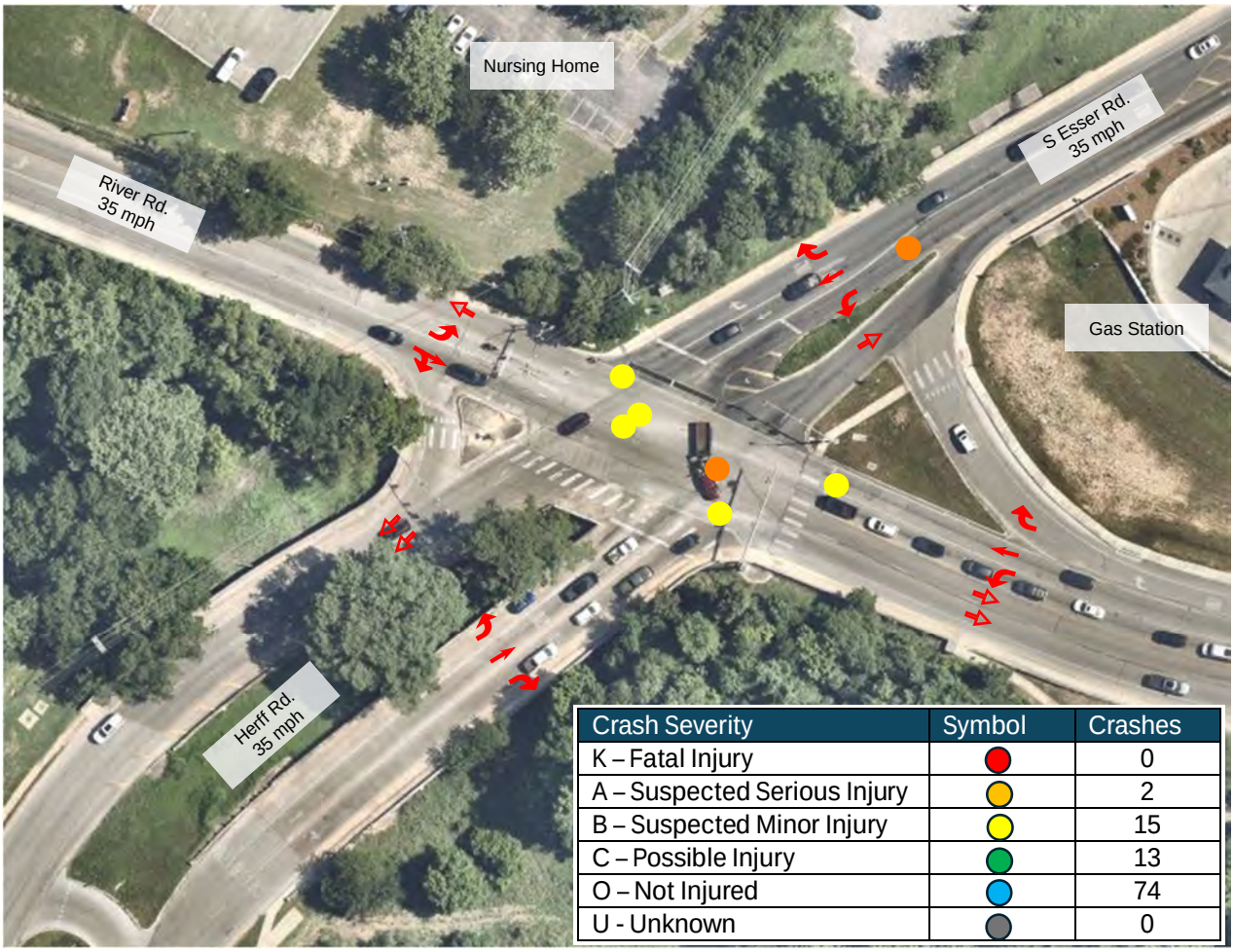
Crash Severity	Symbol
K – Fatal Injury	
A – Suspected Serious Injury	
B – Suspected Minor Injury	
C – Possible Injury	
O – Not Injured	
U - Unknown	

Table 3 – Crash Type Chart

Collision Event or Type	Symbol
Same Direction – One Straight-One Stopped	
Same Direction – Both Going Straight-Rear End	
Opposite Direction – One Straight-One Left Turn	
Angle – Both Going Straight	
Angle – One Straight-One Left Turn	
With Pedestrian	
With Cyclist	

River Rd & Herff Rd/S Esser Rd

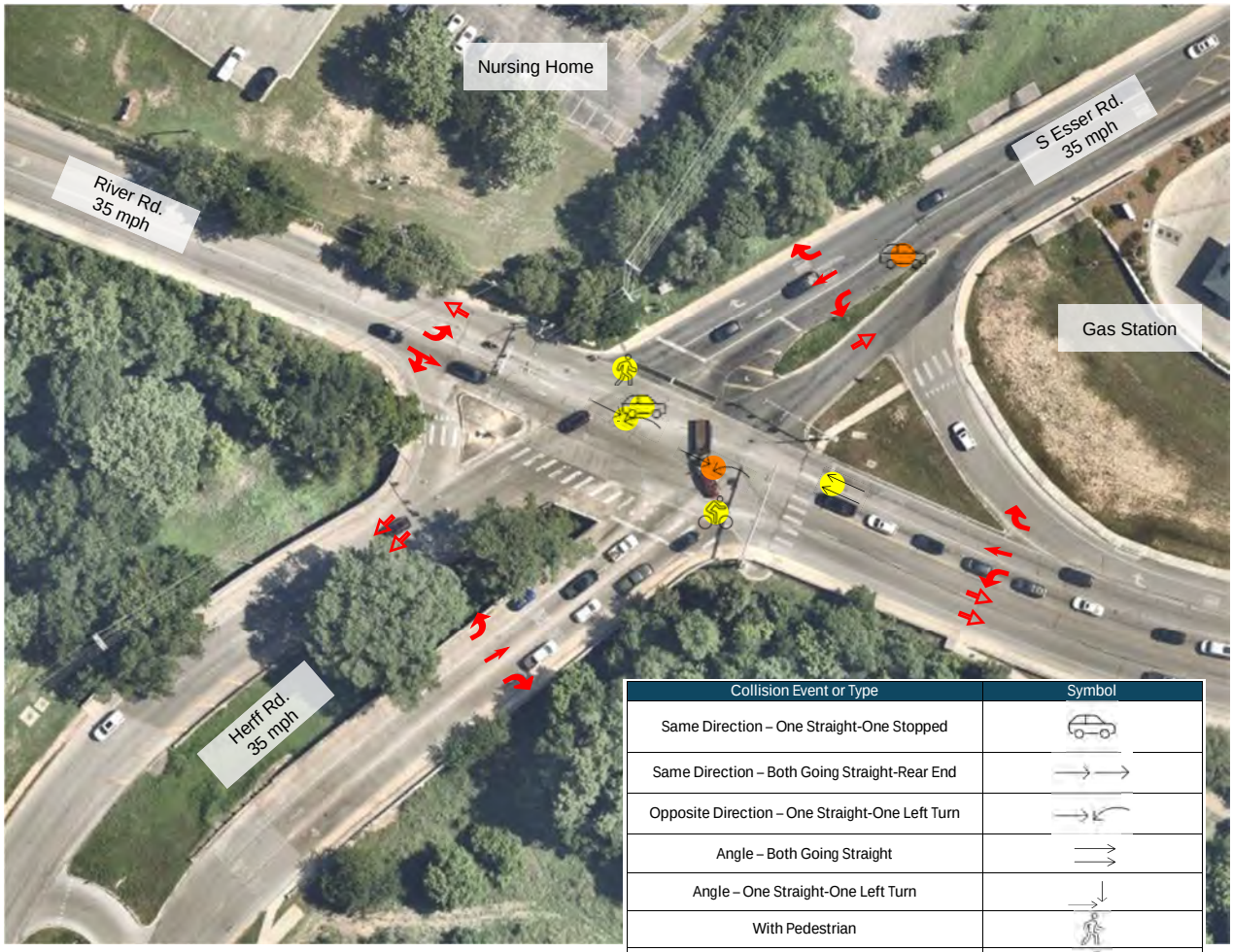
Crash Severity



Crash Severity	Symbol	Crashes
K – Fatal Injury		0
A – Suspected Serious Injury		2
B – Suspected Minor Injury		15
C – Possible Injury		13
O – Not Injured		74
U - Unknown		0

Notes:

Collision Diagram



Collision Event or Type	Symbol
Same Direction – One Straight-One Stopped	
Same Direction – Both Going Straight-Rear End	
Opposite Direction – One Straight-One Left Turn	
Angle – Both Going Straight	
Angle – One Straight-One Left Turn	
With Pedestrian	
With Cyclist	

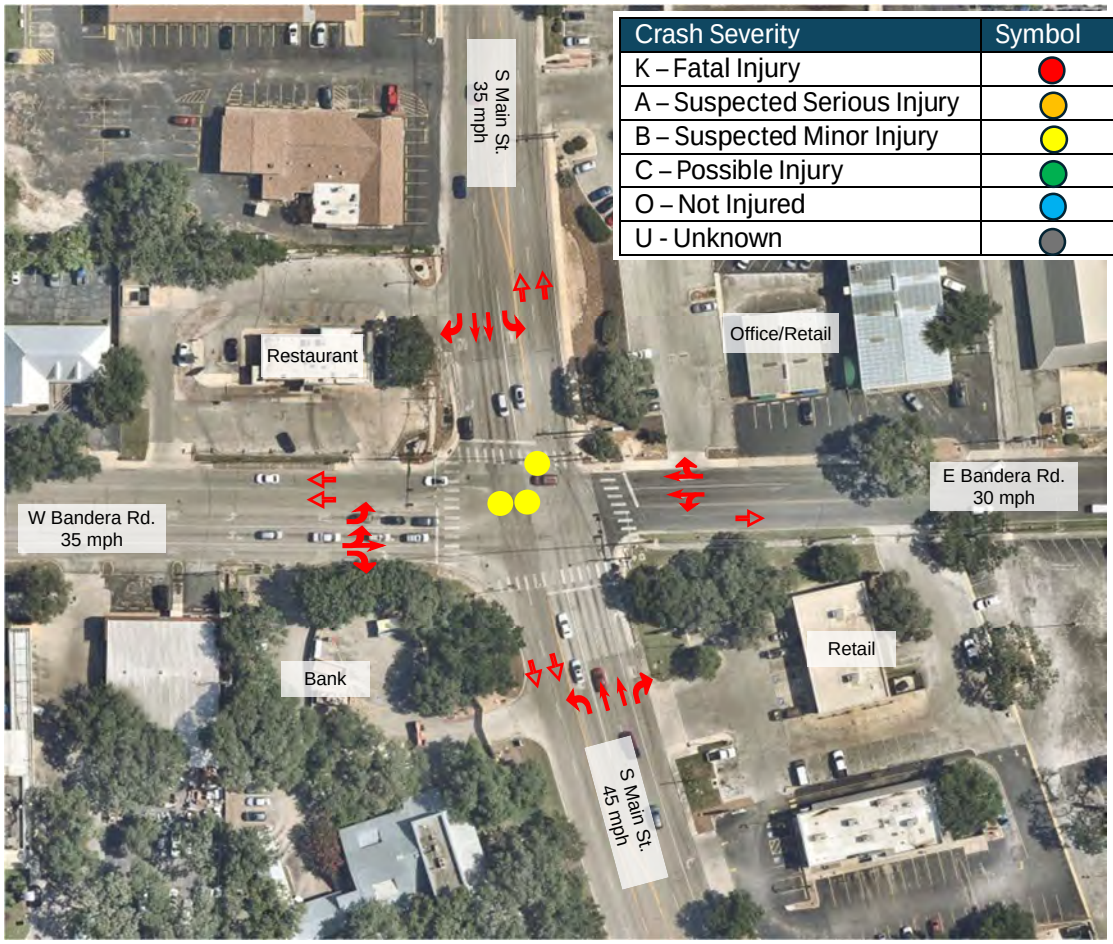
Notes:

Table 4 – River Rd & Herff Rd/S Esser Rd 2020 to 2024 Crash Summary

Crash Date	Crash ID	Crash Severity	Roadway Relation	Contributing Factors	Manner of Collision
6/19/2021	18319436	B - SUSPECTED MINOR INJURY	ON ROADWAY	DRIVER INATTENTION	SAME DIRECTION - ONE STRAIGHT-ONE STOPPED
8/3/2021	18398889	A - SUSPECTED SERIOUS INJURY	ON ROADWAY	DRIVER INATTENTION	SAME DIRECTION - ONE STRAIGHT-ONE STOPPED
8/31/2022	19089496	B - SUSPECTED MINOR INJURY	ON ROADWAY	DISREGARD STOP SIGN OR LIGHT	OPPOSITE DIRECTION - ONE STRAIGHT-ONE LEFT TURN
10/24/2022	19187008	B - SUSPECTED MINOR INJURY	ON ROADWAY	DISREGARD STOP AND GO SIGNAL	OPPOSITE DIRECTION - ONE STRAIGHT-ONE LEFT TURN
12/21/2022	19298300	B - SUSPECTED MINOR INJURY	ON ROADWAY	FAILED TO YIELD RIGHT OF WAY - TURNING LEFT	OPPOSITE DIRECTION - ONE STRAIGHT-ONE LEFT TURN
12/22/2022	19298065	B - SUSPECTED MINOR INJURY	ON ROADWAY	DRIVER INATTENTION; FAILED TO CONTROL SPEED	SAME DIRECTION - ONE STRAIGHT-ONE STOPPED
4/12/2023	19495148	A - SUSPECTED SERIOUS INJURY	ON ROADWAY	DRIVER INATTENTION; FAILED TO YIELD RIGHT OF WAY - TURNING LEFT	OPPOSITE DIRECTION - ONE STRAIGHT-ONE LEFT TURN
9/3/2023	19743990	B - SUSPECTED MINOR INJURY	ON ROADWAY	FAILED TO YIELD RIGHT OF WAY - TURNING LEFT	OPPOSITE DIRECTION - ONE STRAIGHT-ONE LEFT TURN
10/5/2023	19808881	B - SUSPECTED MINOR INJURY	ON ROADWAY	FAILED TO YIELD RIGHT OF WAY - TURNING LEFT	OPPOSITE DIRECTION - ONE STRAIGHT-ONE LEFT TURN
11/10/2023	19863691	B - SUSPECTED MINOR INJURY	ON ROADWAY	DISREGARD STOP AND GO SIGNAL	ANGLE - BOTH GOING STRAIGHT
12/6/2023	19907210	B - SUSPECTED MINOR INJURY	ON ROADWAY	FAILED TO YIELD RIGHT OF WAY - TURNING LEFT	OPPOSITE DIRECTION - ONE STRAIGHT-ONE LEFT TURN
3/31/2024	20103663	B - SUSPECTED MINOR INJURY	ON ROADWAY	OTHER (EXPLAIN IN NARRATIVE)	SAME DIRECTION - BOTH GOING STRAIGHT-REAR END
6/7/2024	20224974	B - SUSPECTED MINOR INJURY	ON ROADWAY	OTHER (EXPLAIN IN NARRATIVE)	SAME DIRECTION - BOTH GOING STRAIGHT-REAR END
7/14/2024	20284388	B - SUSPECTED MINOR INJURY	ON ROADWAY	FAILED TO YIELD RIGHT OF WAY - TURNING LEFT	OPPOSITE DIRECTION - ONE STRAIGHT-ONE LEFT TURN
8/18/2024	20342042	B - SUSPECTED MINOR INJURY	ON ROADWAY	DISTRACTION IN VEHICLE; DRIVER INATTENTION; FAILED TO YIELD RIGHT OF WAY - TO PEDESTRIAN	ONE MOTOR VEHICLE - TURNING RIGHT
9/2/2024	20368183	B - SUSPECTED MINOR INJURY	ON ROADWAY	FAILED TO YIELD RIGHT OF WAY - TO PEDESTRIAN	ONE MOTOR VEHICLE - TURNING LEFT
9/28/2024	20422260	B - SUSPECTED MINOR INJURY	ON ROADWAY	DRIVER INATTENTION	SAME DIRECTION - ONE STRAIGHT-ONE STOPPED

S Main St & Bandera Rd

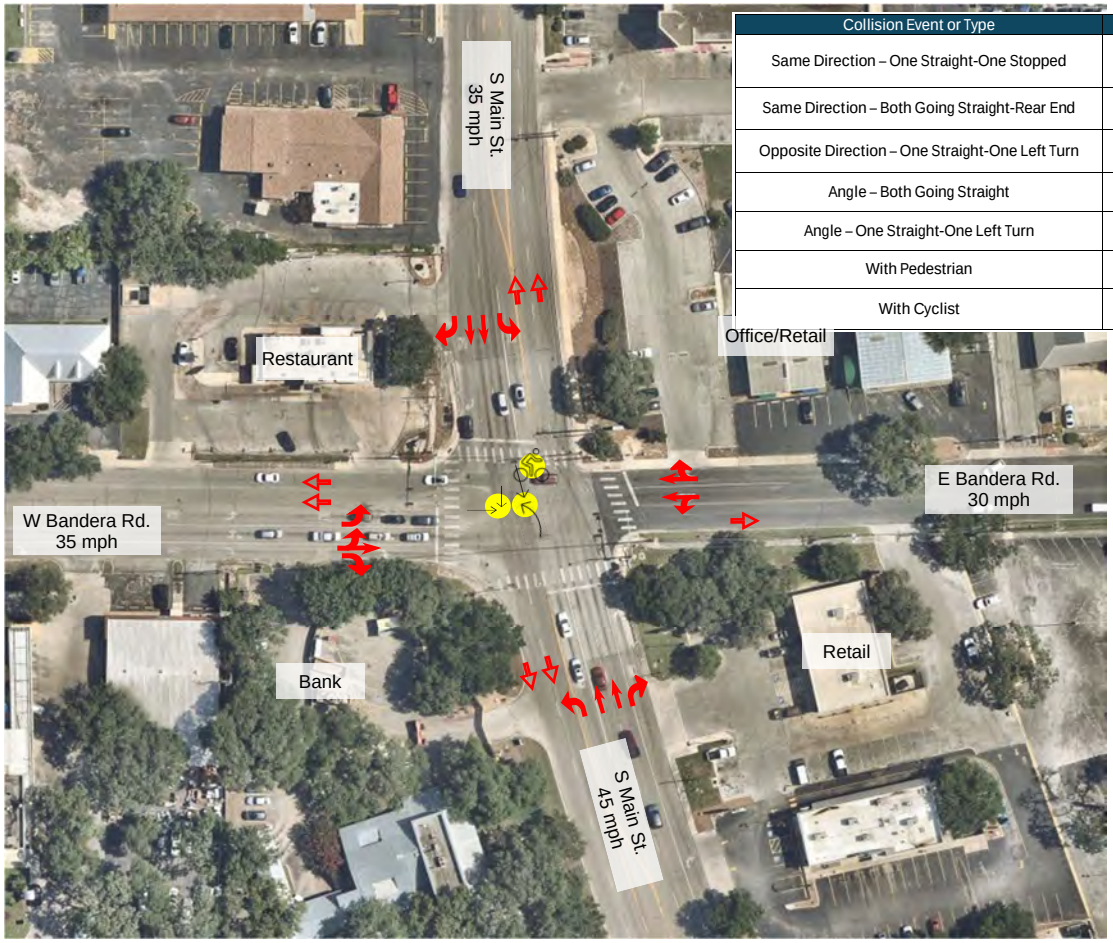
Crash Severity



Crash Severity	Symbol	Crashes
K – Fatal Injury		0
A – Suspected Serious Injury		0
B – Suspected Minor Injury		3
C – Possible Injury		2
O – Not Injured		21
U - Unknown		0

Notes:

Collision Diagram



Collision Event or Type	Symbol
Same Direction – One Straight-One Stopped	
Same Direction – Both Going Straight-Rear End	
Opposite Direction – One Straight-One Left Turn	
Angle – Both Going Straight	
Angle – One Straight-One Left Turn	
With Pedestrian	
With Cyclist	

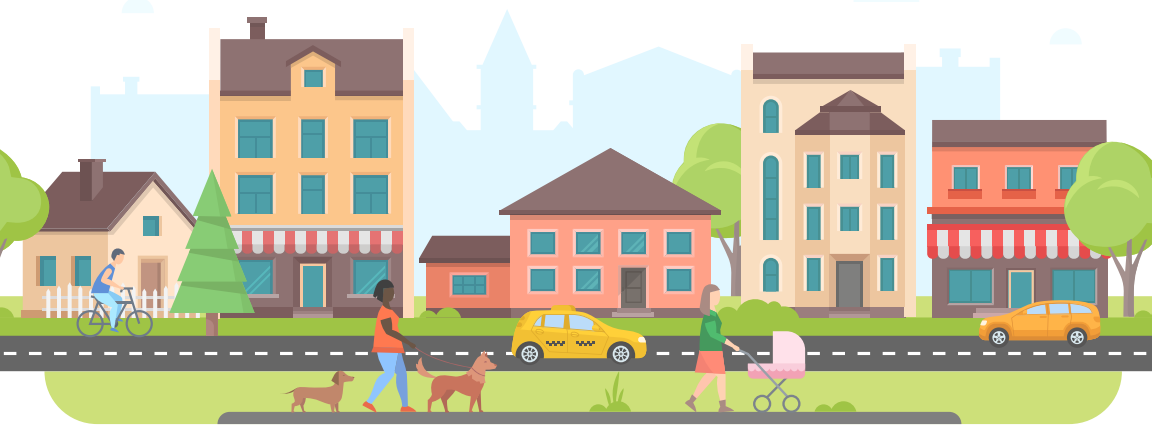
Notes:

Table 5 – 2020 to 2024 S Main St & Bandera Rd Crash Summary

Crash Date	Crash ID	Crash Severity	Roadway Relation	Contributing Factors	Manner of Collision
10/12/2022	19164824	B - SUSPECTED MINOR INJURY	ON ROADWAY	FAILED TO YIELD RIGHT OF WAY - STOP SIGN	ONE MOTOR VEHICLE - TURNING RIGHT
6/20/2023	19616566	B - SUSPECTED MINOR INJURY	ON ROADWAY	FAILED TO YIELD WARNING SIGN	ANGLE - ONE STRAIGHT-ONE LEFT TURN
12/28/2023	19947753	B - SUSPECTED MINOR INJURY	ON ROADWAY	DRIVER INATTENTION; FAILED TO YIELD RIGHT OF WAY - TURNING LEFT; OTHER (EXPLAIN IN NARRATIVE)	OPPOSITE DIRECTION - ONE STRAIGHT-ONE LEFT TURN

APPENDIX C
Engagement and Collaboration

Safety Action Plan
BOERNE



SAFE STREETS FOR ALL (SS4A)

Comprehensive Safety Action Plan (CSAP)

Comprehensive Safety Action Plan (CSAP)

The City of Boerne is committed to making the City safe for all transportation users – drivers, pedestrians, and cyclists – through the Comprehensive Safety Action Plan.

PRIORITIES OF THE PLAN:

- Enhance pedestrian safety for all residents
- Commitment to zero traffic fatalities and serious injuries
- Implement input from the Boerne community

Improving safety for all modes of transportation.

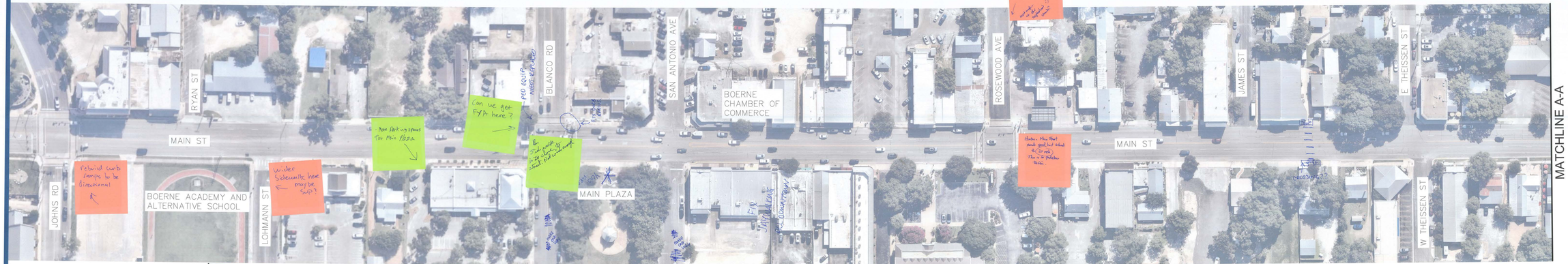
https://engagekh.mysocialpinpoint.com/boerne-safe-streets

Take a 5-minute survey to help improve safety in Boerne.

Safety Action Plan BOERNE

IDENTIFY SAFETY PROJECTS FOR MAIN STREET

Safety Action Plan
BOERNE



IDENTIFY SAFETY PROJECTS FOR RIVER ROAD

Safety Action Plan
BOERNE

WHAT ARE YOUR TOP 3 FOCUS LOCATIONS FOR SAFETY PROJECTS?

Safety Action Plan
BOERNE

W. BANDERA RD.
(WANDA ST. TO WATER ST.)

W. BANDERA RD.
(HEB ACCESS TO NORRIS LN.)

E. BLANCO RD.
(S. ESSER RD. TO STONEGATE RD.)

N. ESSER RD.
(GREYHOUND LN. TO DEER CREEK DR.)

S. MAIN ST.
(E. THEISSEN ST. TO JAMES ST.)

S. MAIN ST.
(JAMES ST. TO ROSEWOOD AVE.)

ADLER ST.
(TOEPPERWEIN RD. TO ESSER RD)

VOTE HERE

VOTE HERE

Boerne CSAP ISA – Field Review Logistics

Project:	Intersection Safety Assessments (ISA)
Purpose:	Boerne CSAP – ISA Field Reviews
Date:	October 24, 2025
Time:	9:00 AM – 11:30 AM
Locations:	River Road & Herff Road/S Esser Road S Main Street & Bandera Road
Contact:	Dawniele Metsker-Galarza, PE, PTOE (Kimley-Horn) Direct: 956-346-8482

Introduction

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Field Review Locations

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B – Suspected Minor Injury	
C – Possible Injury	
O – Not Injured	
U - Unknown	

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Collision Event or Type	Symbol
Same Direction – One Straight-One Stopped	
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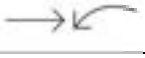
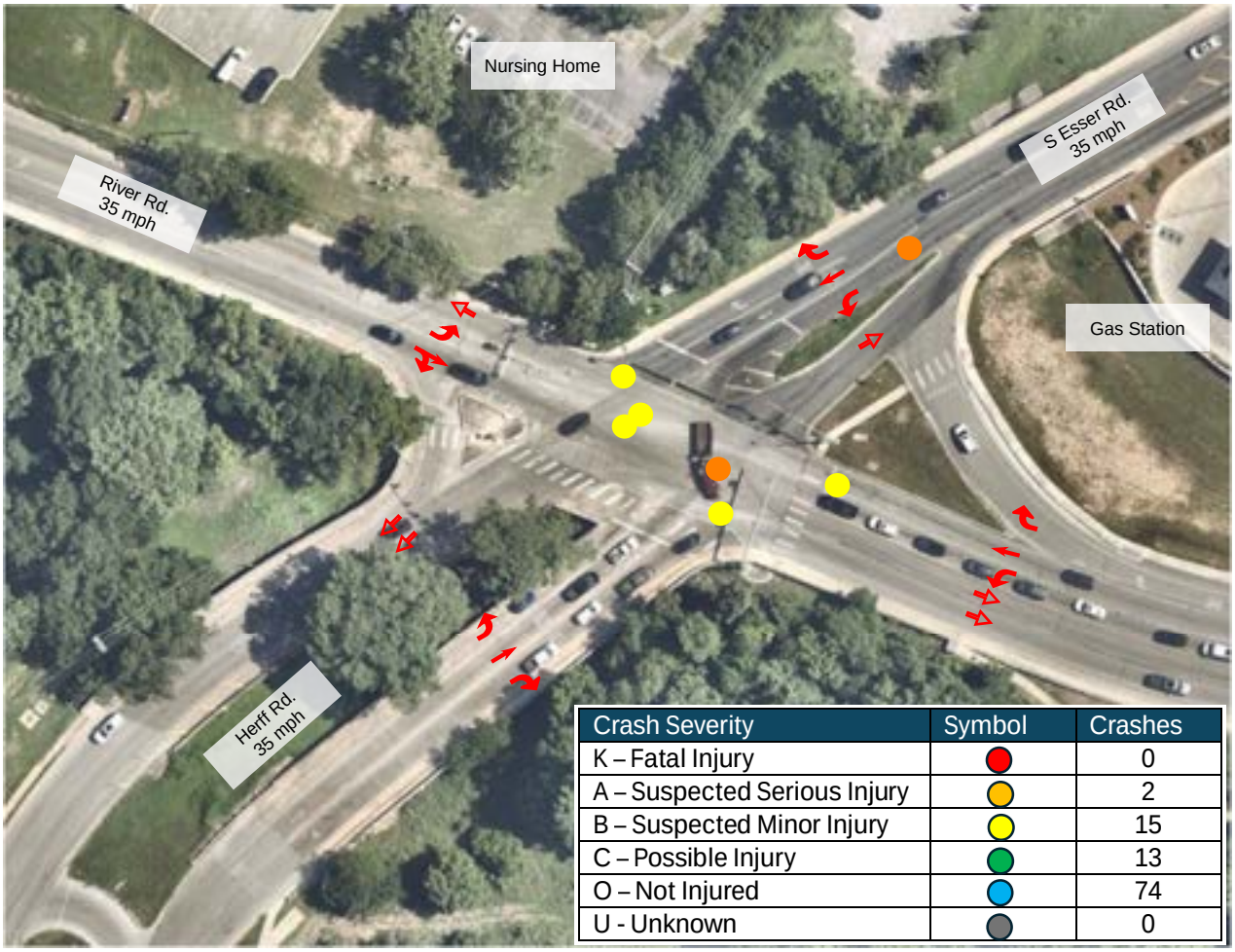
Opposite Direction – One Straight-One Left Turn	
Angle – Both Going Straight	
Angle – One Straight-One Left Turn	
With Pedestrian	
With Cyclist	

River Rd & Herff Rd/S Esser Rd

Crash Severity



Crash Severity	Symbol	Crashes
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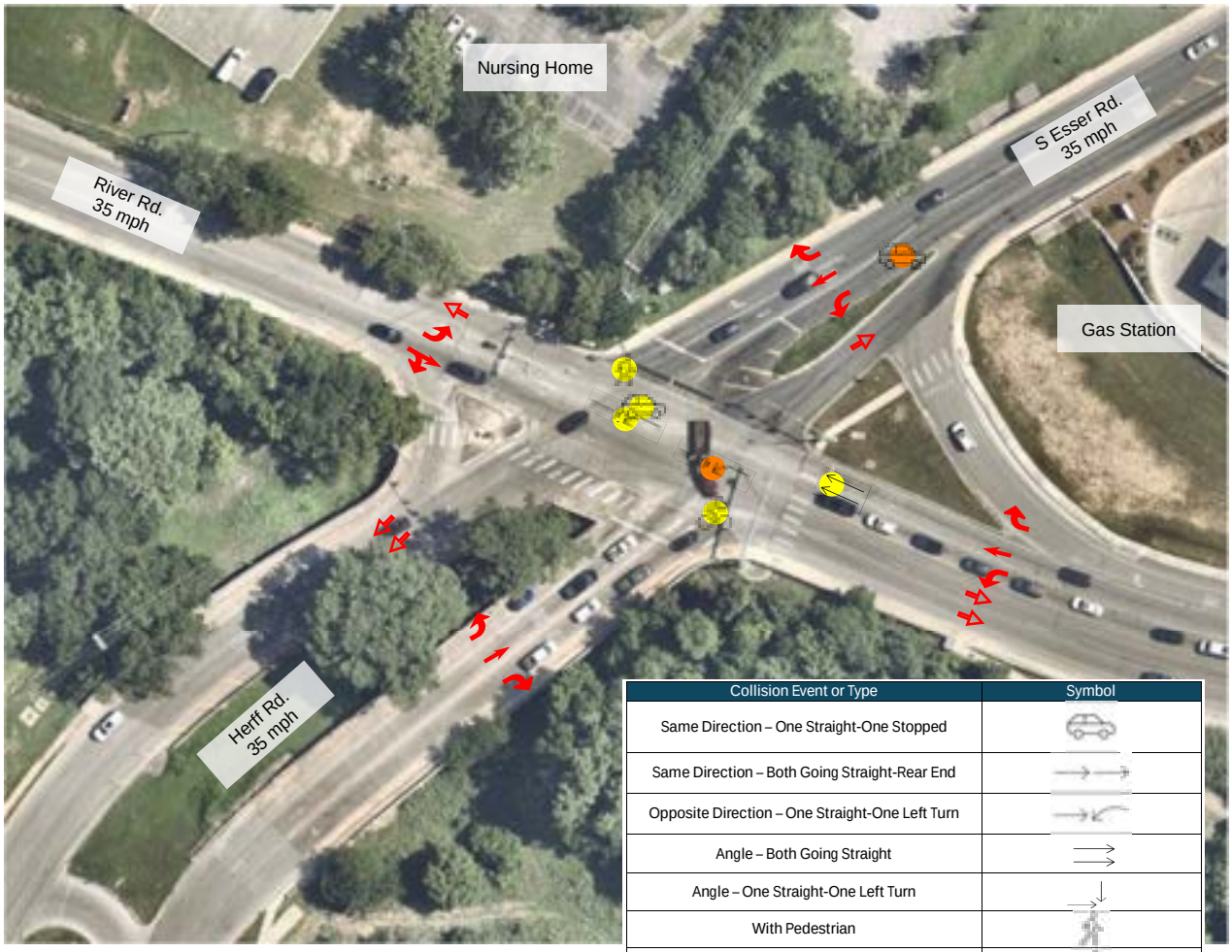
U - Unknown		0

Notes:

Collision Diagram



Collision Event or Type	Symbol
Same Direction – One Straight-One Stopped	
Same Direction – Both Going Straight-Rear End	
Opposite Direction – One Straight-One Left Turn	
Angle – Both Going Straight	
Angle – One Straight-One Left Turn	
With Pedestrian	
With Cyclist	

Notes:

Table 4 – River Rd & Herff Rd/S Esser Rd 2020 to 2024 Crash Summary

Crash Date	Crash ID	Crash Severity	Roadway Relation	Contributing Factors	Manner of Collision
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10/24/2022	19187008	B - SUSPECTED MINOR INJURY	ON ROADWAY	DISREGARD STOP AND GO SIGNAL	OPPOSITE DIRECTION - ONE STRAIGHT-ONE LEFT TURN
12/21/2022	19298300	B - SUSPECTED MINOR INJURY	ON ROADWAY	FAILED TO YIELD RIGHT OF WAY - TURNING LEFT	OPPOSITE DIRECTION - ONE STRAIGHT-ONE LEFT TURN
12/22/2022	19298065	B - SUSPECTED MINOR INJURY	ON ROADWAY	DRIVER INATTENTION; FAILED TO CONTROL SPEED	SAME DIRECTION - ONE STRAIGHT-ONE STOPPED
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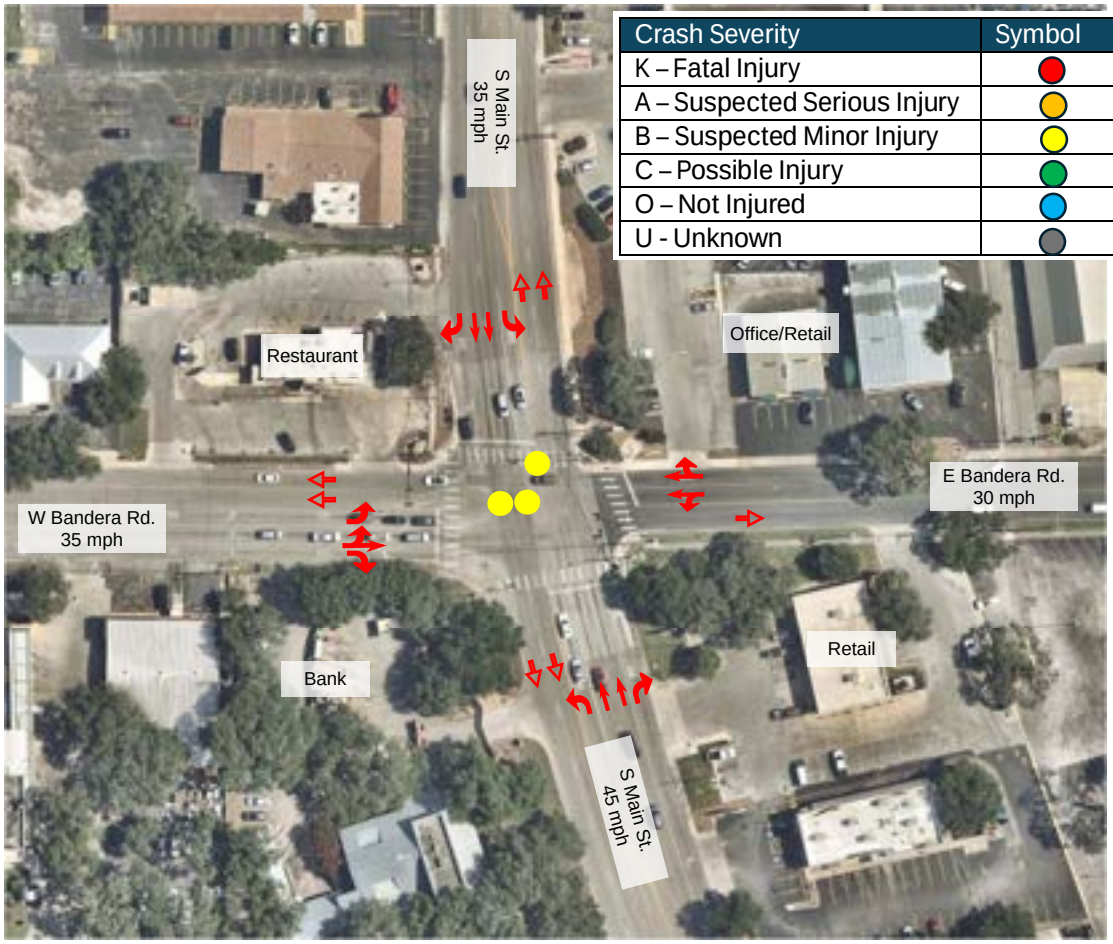
12/6/2023	19907210	B - SUSPECTED MINOR INJURY	ON ROADWAY	FAILED TO YIELD RIGHT OF WAY - TURNING LEFT	OPPOSITE DIRECTION - ONE STRAIGHT-ONE LEFT TURN
3/31/2024	20103663	B - SUSPECTED MINOR INJURY	ON ROADWAY	OTHER (EXPLAIN IN NARRATIVE)	SAME DIRECTION - BOTH GOING STRAIGHT-REAR END
6/7/2024	20224974	B - SUSPECTED MINOR INJURY	ON ROADWAY	OTHER (EXPLAIN IN NARRATIVE)	SAME DIRECTION - BOTH GOING STRAIGHT-REAR END
7/14/2024	20284388	B - SUSPECTED MINOR INJURY	ON ROADWAY	FAILED TO YIELD RIGHT OF WAY - TURNING LEFT	OPPOSITE DIRECTION - ONE STRAIGHT-ONE LEFT TURN
8/18/2024	20342042	B - SUSPECTED MINOR INJURY	ON ROADWAY	DISTRACTION IN VEHICLE; DRIVER INATTENTION; FAILED TO YIELD RIGHT OF WAY - TO PEDESTRIAN	ONE MOTOR VEHICLE - TURNING RIGHT
9/2/2024	20368183	B - SUSPECTED MINOR INJURY	ON ROADWAY	FAILED TO YIELD RIGHT OF WAY - TO PEDESTRIAN	ONE MOTOR VEHICLE - TURNING LEFT
9/28/2024	20422260	B - SUSPECTED MINOR INJURY	ON ROADWAY	DRIVER INATTENTION	SAME DIRECTION - ONE STRAIGHT-ONE STOPPED

S Main St & Bandera Rd

Crash Severity



Crash Severity	Symbol	Crashes
K – Fatal Injury		0
A – Suspected Serious Injury		0
B – Suspected Minor Injury		3
C – Possible Injury		2
O – Not Injured		21
U - Unknown		0

Notes:

Collision Diagram

Collision Event or Type	Symbol
Same Direction – One Straight-One Stopped	
Same Direction – Both Going Straight-Rear End	
Opposite Direction – One Straight-One Left Turn	
Angle – Both Going Straight	
Angle – One Straight-One Left Turn	
With Pedestrian	
With Cyclist	

Notes:

Table 5 – 2020 to 2024 S Main St & Bandera Rd Crash Summary

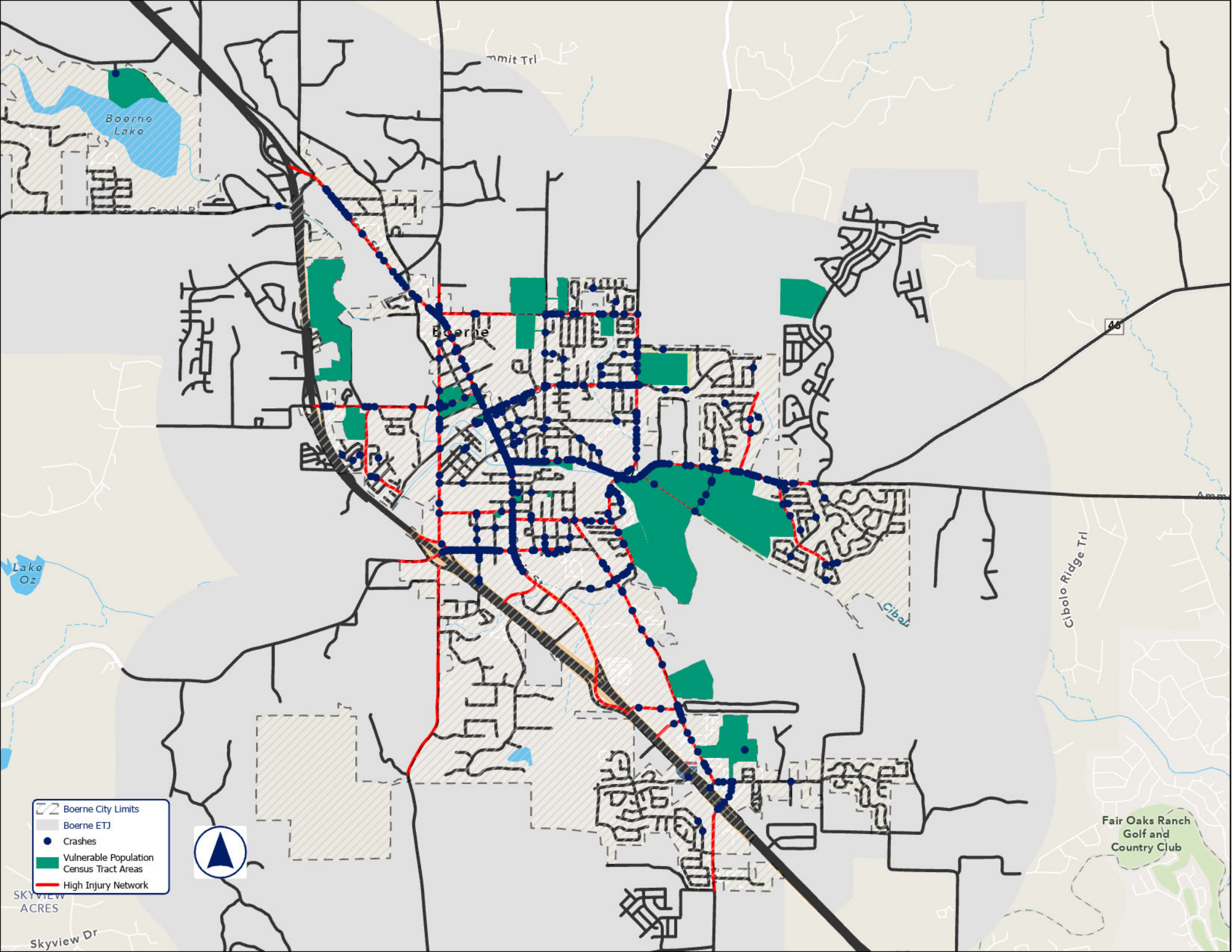
Crash Date	Crash ID	Crash Severity	Roadway Relation	Contributing Factors	Manner of Collision
10/12/2022	19164824	B - SUSPECTED MINOR INJURY	ON ROADWAY	FAILED TO YIELD RIGHT OF WAY - STOP SIGN	ONE MOTOR VEHICLE - TURNING RIGHT
6/20/2023	19616566	B - SUSPECTED MINOR INJURY	ON ROADWAY	FAILED TO YIELD WARNING SIGN	ANGLE - ONE STRAIGHT-ONE LEFT TURN
12/28/2023	19947753	B - SUSPECTED MINOR INJURY	ON ROADWAY	DRIVER INATTENTION; FAILED TO YIELD RIGHT OF WAY - TURNING LEFT; OTHER (EXPLAIN IN NARRATIVE)	OPPOSITE DIRECTION - ONE STRAIGHT-ONE LEFT TURN

APPENDIX D
Safety Analysis

Roadway Segment Table

ID	Roadway	From	To	Classification	Length (Miles)	AADT	Crash Rate (MVMT)	Crash Cost ($100K)		EPDO		Ped + Bike		Crash Count	K	A	B	Total KAB Crashes		Sum of K & A	
								Total	Per Mile	Total	Per Mile	Total	Per Mile							Total	Per Mile
1	W Bandera	Wanda	Water St	Arterial	0.11	15,755	17.07	37.03	336.6	699	6,352	0	0.0	54	0	0	6	6	54.5	0	0.0
2	E Blanco	S Esser	Stonegate Rd	Collector	0.12	7,322	19.33	16.75	139.6	316	2,633	1	8.3	31	0	0	4	4	33.3	0	0.0
3	River	South Main	Pecan St	Arterial	0.08	12,883	8.51	5.82	72.8	110	1,373	0	0.0	16	0	0	1	1	12.5	0	0.0
4	N Esser	Greyhound Ln	Deer Creek	Collector	0.06	7,322	16.21	12.65	210.8	239	3,977	0	0.0	13	0	0	4	4	66.7	0	0.0
5	W Bandera	WB IH 10 Frontage Rd	Whataburger Access	Arterial	0.08	9,603	9.99	5.29	66.1	100	1,247	0	0.0	14	0	0	0	0	0.0	0	0.0
6	W Bandera	HEB Access	Norris Ln	Arterial	0.14	15,755	16.89	31.22	223.0	589	4,208	0	0.0	68	0	0	6	6	42.9	0	0.0
7	South Main	James	Rosewood	Arterial	0.08	19,904	2.06	1.71	21.4	32	403	0	0.0	6	0	0	0	0	0.0	0	0.0
8	E Blanco	Main	Saunders	Collector	0.11	9,200	2.17	3.00	27.3	57	514	0	0.0	4	0	0	1	1	9.1	0	0.0
9	W Bandera Bridge	Backage Rd	Backage Rd	Arterial	0.22	56,906	6.26	199.16	905.3	3,758	17,081	1	4.5	143	1	0	10	11	50.0	1	4.5
10	E Blanco	Saunders	Harz	Collector	0.10	9,200	5.96	3.52	35.2	66	664	0	0.0	10	0	0	0	0	0.0	0	0.0
11	River	City Park	Sharon	Arterial	0.16	10,748	7.65	19.53	122.1	368	2,303	1	6.3	24	0	0	4	4	25.0	0	0.0
12	S Main	Rosewood	W San Antonio	Arterial	0.10	19,904	6.88	20.55	205.5	388	3,878	3	30.0	25	0	0	3	3	30.0	0	0.0
13	S Main	E Theissen	James	Arterial	0.05	19,904	10.46	16.91	338.2	319	6,382	1	20.0	19	0	1	0	1	20.0	1	20.0
14	River	Champion	Herff Ranch	Arterial	0.30	7,300	5.75	30.66	102.2	578	1,928	0	0.0	23	0	1	4	5	16.7	1	3.3

Crashes from TxDOT's CRIS for 2020-2024. Crash Rate per million vehicle miles traveled.
AADT = Average Annual Daily Traffic | EPDO = Equivalent Property Damage Only
K = Fatal Crash | A = Suspected Serious Injury Crash | B = Suspected Minor Injury Crash
Roadway classification is based on the City of Boerne Major Thoroughfare Plan.
Crash Cost determined using "cost to society" metrics; created by National Safety Council, determined by TxDOT


Boerne Lake
Boerne
Lake Oz
Cibolo Ridge Trl
Fair Oaks Ranch Golf and Country Club
SKYVIEW ACRES
Skyview Dr
46
Boerne City Limits
Boerne ETJ
Crashes
Vulnerable Population Census Tract Areas
High Injury Network

APPENDIX E
Downtown Pedestrian Study

TECHNICAL MEMORANDUM

To: Jeff Carroll, P.E.
City of Boerne
Transportation Department

From: Dawniele Metsker-Galarza, PE, PTOE
Kimley-Horn and Associates, Inc.
Firm Number F-928

Date: December 31, 2025

Subject: Boerne Comprehensive Safety Action Plan
Downtown Pedestrian Safety Evaluation

INTRODUCTION

This technical memorandum documents the findings of a focused pedestrian safety evaluation conducted within the downtown area of Boerne along Main Street and River Road. The analysis was prepared to support the Boerne Comprehensive Safety Action Plan (CSAP) by providing detailed, location-specific information on pedestrian safety conditions, risk factors, and pedestrian needs within the area.

The summarized results inform CSAP's broader safety analysis, equity assessment, and identification of priority countermeasures, particularly for vulnerable road users.

STUDY AREA

The designated study area focuses on the downtown core of Boerne, which serves as the community's cultural and commercial hub. The study area is bounded by Main Street from River Road to Johns Road and Kronkosky Street from Main Street to Elm Street. This area was strategically selected based on several critical factors:

- **Pedestrian Activity:** Downtown Boerne experiences significant amount of pedestrian traffic near its downtown areas by retail shops and restaurants. Seasonal events and tourism further amplify pedestrian volumes, making this corridor a priority for safety and mobility improvements.
- **Vehicle Activity:** Main Street functions as a primary arterial route through the City, accommodating local and through traffic. The interaction between high vehicular flow and pedestrian crossings creates potential conflict points that warrant a detailed analysis.
- **Land Use Intensity and Diversity:** The study area features a dense concentration of mixed-use development, including commercial, local schools, residential and recreational spaces. This land use pattern generates frequent pedestrian trips and increases the need for safe, accessible infrastructure.
- **Crash History:** Historical crash data indicates a pattern of pedestrian related crashes within the downtown area, enforcing the importance of targeted countermeasures to reduce crashes and enhance safety.
- **Connectivity and Access:** The area serves as a gateway to adjacent neighborhoods and regional destinations, making it a critical link in Boerne's transportation network. Improving pedestrian conditions in the downtown area will impact overall mobility and livability.

The downtown study limits are presented in **FIGURE 1**.

Figure 1 – Downtown Boerne Pedestrian Limits

Main Street from Kronkosky Street to Johns Road is a north-south corridor that extends approximately 0.80 miles. Main Street from Johns Road to River Road is classified as an Arterial on the City of Boerne Thoroughfare Plan and has a 4-lane cross-section with 2-lanes in each direction and on-street parking. The land use context on the east and west sides of Main Street is dense commercial. Right-of-way widths vary from 60 to 80 feet with a posted speed limit of 30 mph and average daily traffic volumes of 19,959 ADT. A visual summary of existing conditions is presented as **Figure 2**.

Figure 2 – Main Street, River Road to Johns Road Cross-Section

Main Street from River Road to Kronkosky Street has a 5-lane cross-section with 2-lanes in each direction and not shoulders. The land use context on the east and west sides of Main Street includes commercial land uses. Right-of-way widths vary approximately 60 to 70 feet with a posted speed limit of 35 mph and average daily traffic volumes of 23,877 ADT. A visual summary of existing conditions is presented as **FIGURE 3**.

Figure 3 – Main Street, River Road to Kronkosky Street Cross-Section

River Road from Main Street to Elm Street is an east-south corridor that extends approximately 0.40 miles. River Road is classified as an Arterial on the City of Boerne Thoroughfare Plan has a 2-lane cross-section with one-lane in each direction and on-street parking located on the south side of the road, bordering Cibolo Creek. On the north side of River Road, the land use context is commercial, while the south side of River Road is a trail system running parallel with Cibolo Creek. The right-of-way width is approximately 62 feet with a posted speed limit of 35 mph and average daily traffic volumes of 15,091 ADT. A visual summary of existing conditions is presented in **FIGURE 4.**

Figure 4 – River Road, Main Street to Elm Street Cross-Section

PEDESTRIAN NETWORK AND ACCESSIBILITY

Local and State Standards

The City of Boerne UDC identifies that sidewalk widths located along Main St and River Rd shall maintain unobstructed pedestrian zones that have at least four (4) feet width. Sidewalks are present along Main St and River Rd, ranging from 4 to 5 feet in width.

The Texas Transportation Code (Chapter 552 – Pedestrians) is the state law that governs pedestrian conduct. The following is identified in the TTC (Chapter 552):

- Drivers must yield to pedestrians crossing marked and unmarked crosswalks.
- Pedestrians may only cross in a marked crosswalk when two adjacent intersections have a traffic signal.

Downtown Pedestrian Network

The downtown pedestrian network identified along Main St. and River Rd. is generally continuous. Sidewalks are continuous along Main Street; however, variations in elevation and grade create physical barriers that limit safe and unobstructed pedestrian movements.

Along River Road, sidewalks are provided adjacent to the roadway on the north side, offering a defined pedestrian path. On the south side of River Road, the Cibolo Creek Trail runs parallel to the corridor, serving as an alternative route for pedestrians and recreational users.

At signalized intersections located at Main St. & Blanco, Main St. & Rosewood, and Main St. & River Rd., pedestrian facilities are present and include curb ramps, pushbuttons, and pedestrian signals with crosswalk striping.

PEDESTRIAN CRASH DATA HISTORY

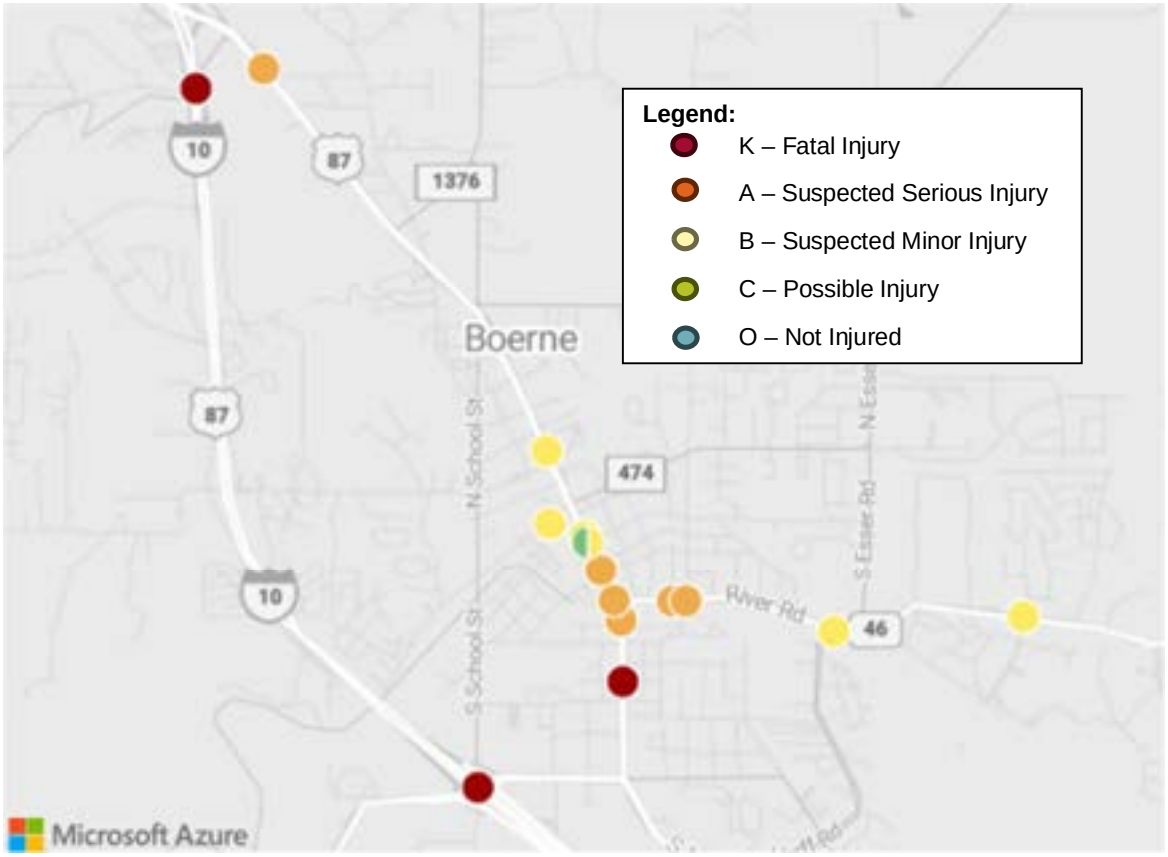
The last 5 years of pedestrian crash data was obtained through the Texas Department of Transportation Crash Records Information System (CRIS) from 2020 to 2024. Over the five-year period 16 pedestrian crashes were identified throughout the City of Boerne. The table below identifies the crash severity for the five-year period. An indexed summary of additional details regarding each crash has been provided in the **APPENDIX**. **TABLE 1** summarizes the severities for five-year pedestrian crashes.

Table 1: Boerne 5-Year Pedestrian Crash Severity

Crash Severity	Number of Crashes
K – Fatal Injury	3
A – Suspected Serious Injury	6
B – Suspected Minor Injury	6
C – Possible Injury	1
Total	**16**

A summary of all the pedestrian related crashes occurring between January 2020 and December 2024 at each intersection is provided in the **APPENDIX**. The 5-year pedestrian related crashes are included as **FIGURE 5**.

Figure 5 – 5-Year Pedestrian Related Crashes



A total of 16 pedestrian related crashes occurred from 2020 – 2024 of which 11 crashes (68%) were located within the City of Boerne downtown study area. TABLE 2 below summarizes the pedestrian crash severity.

Table 2 – Summary of Crash Severity

Downtown Study Area	K	A	B	C	O
Main St. (between Johns Rd. and Kronkosky)	1	3	4	1	0
River Rd. (between Main St. and Elm St.)	0	2	0	0	0
TOTAL	**1**	**5**	**4**	**1**	**0**

Note: Table reflects crash counts from study period. 2022 – December 2024 for pedestrian related crashes.

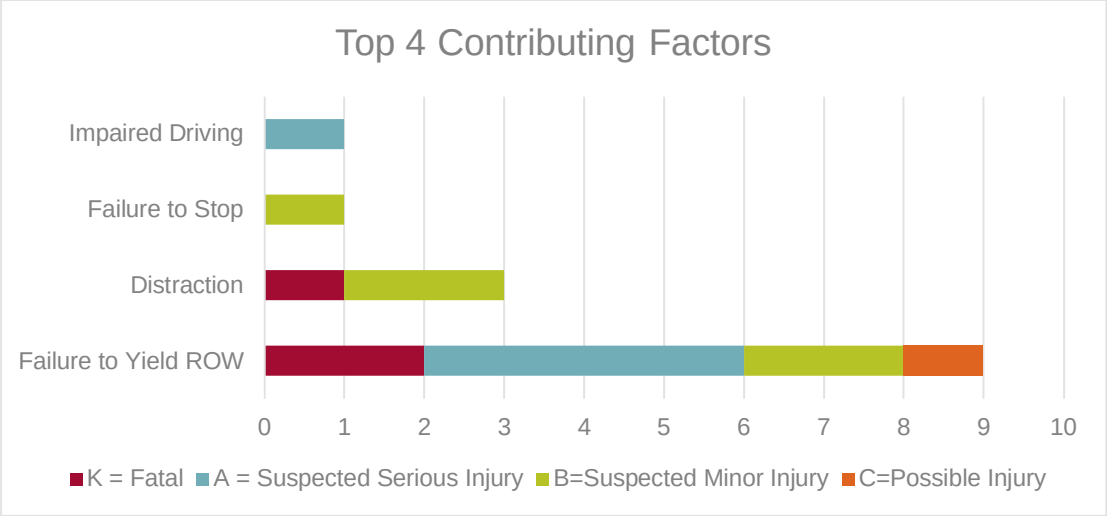
Pedestrian related crashes within the downtown study area represents a disproportionate share of serious injury crashes relative to crashes throughout the City of Boerne. Key findings include:

- Concentration of crashes along Main Street and River Road.
- Majority of crashes involve failure to yield to the right-of-way.
- Increase crash severity when road segments are greater than 30 mph.
- 56% of pedestrian related crashes occur during daylight.

- 75% of pedestrian related crashes occur during the week (Monday through Friday).

These trends indicate a need for targeted speed management, intersection design improvements, and enhanced pedestrian visibility. **TABLE 3** below summarizes the contributing factors for the pedestrian related crashes.

Table 3 – Pedestrian Crashes Contributing Factors



METHODOLOGY

The pedestrian safety evaluation combined quantitative crash and inventory analysis with qualitative field-based observations to better understand real world pedestrian conditions and behaviors. Field observations were conducted along Main Street and River Road on Saturday, September 13, 2025 and Sunday, December 28, 2025 during peak periods and recurring pedestrian-vehicle conflict locations were observed, particularly at:

- Locations with on-street parking (visibility is low with pedestrians hiding within parked vehicles)
- Unsignalized crossings on multilane roadways

Pedestrian crossings at unmarked locations were more frequently observed where spacing between adjacent signalized intersections exceeded approximately 800 feet, particularly where upstream signal operations generated usable gaps in vehicular traffic. Two-stage midblock crossings were also observed, with pedestrians utilizing gaps between opposing traffic streams to reduce crossing exposure.

Figures 5 and 6 below summarize the pedestrian crossing movements along Main Street between Blanco and Rosewood and River Road between Turner and Plant at marked and unmarked crossing locations.

Figure 5: Main Street Pedestrian Field Observations

Figure 6: River Road Pedestrian Field Observations

Equity and Vulnerable Road User Considerations

Downtown Boerne functions as a primary commercial and visitor destination and experiences consistent pedestrian activity throughout the day. Pedestrian safety concerns in this area disproportionately affect vulnerable road users, including older adults, individuals with disabilities, and visitors unfamiliar with local street layouts and traffic operations. Identified deficiencies for example long crossing distances (distances exceeding 25 feet), limited marked crossing opportunities, inconsistent sidewalk grades, and accessibility barriers at intersections increase exposure to risk for these users.

Recommended countermeasures for installation around and near downtown include:

- Pedestrian refuge islands
- Improved signal timing
- ADA compliant sidewalk and curb ramp upgrades
- Curb extensions and redefined on-street parking to improve visibility

KEY FINDINGS AND NEXT STEPS

The evaluation indicates that pedestrian activity and severity near the downtown study area is higher along Main St. and River Rd. and that existing infrastructure does not consistently prioritize pedestrian safety. Observed crash patterns align with identified operational and design opportunities, with several locations present immediate opportunities for low-cost, high-impact safety improvements.

These findings support the need of focusing within the downtown areas and reinforcing the need for pedestrian focused countermeasures and safety strategies such as curb extensions, leading pedestrian intervals, mid-block pedestrian refuge islands, and speed reduction measures. **TABLE 4** summarizes the pedestrian safety concerns and recommended countermeasures. Conceptual layouts and OPCC's can be found in the **APPENDIX**.

Table 4: Downtown Pedestrian Safety Concerns and Recommended Countermeasures

Location	Safety Concern	Recommended Countermeasure	Countermeasure Type
Main & Theissen	Long crossing distance	Pedestrian refuge island, left-turn lane	Operational, Engineering
Main & San Antonio	Long crossing distance	Pedestrian refuge island and curb-extensions	Engineering
Main Plaza	Crossing frequency	Partial conversion to one-way, roundabout, striping improvements	Operational, Engineering
River Road & Plant	Long crossing distance, crossing frequency	Roundabout	Engineering
River Road (Main St. to Plant St.)	Long crossing distance, crossing frequency	Enhanced crossing	Engineering

APPENDICES:

A. 5 Year Pedestrian Related Crash Details
B. Pedestrian Improvement Conceptual Layouts
C. Preliminary Opinions of Probable Construction Costs (OPCC)

APPENDIX A: 5 YEAR PEDESTRIAN RELATED CRASH DETAILS

CrashID	City	County	Agency	CrshSeverit	Date	Time	FHE	MOC
17607598	BOERNE	KENDALL	BOERNE POLICE DEPARTMENT	A - SUSPECTED SERIOUS INJURY	3/3/2020	625	PEDESTRIAN	ONE MOTOR VEHICLE - GOING STRAIGHT
17831643	BOERNE	KENDALL	BOERNE POLICE DEPARTMENT	A - SUSPECTED SERIOUS INJURY	5/24/2020	159	PEDESTRIAN	ONE MOTOR VEHICLE - GOING STRAIGHT
17713351	BOERNE	KENDALL	BOERNE POLICE DEPARTMENT	B - SUSPECTED MINOR INJURY	6/6/2020	2305	PEDESTRIAN	ONE MOTOR VEHICLE - TURNING LEFT
18068864	BOERNE	KENDALL	BOERNE POLICE DEPARTMENT	K - FATAL INJURY	1/11/2021	1613	PEDESTRIAN	ONE MOTOR VEHICLE - GOING STRAIGHT
18484608	BOERNE	KENDALL	BOERNE POLICE DEPARTMENT	A - SUSPECTED SERIOUS INJURY	9/18/2021	1126	PEDESTRIAN	ONE MOTOR VEHICLE - GOING STRAIGHT
18809989	BOERNE	KENDALL	BOERNE POLICE DEPARTMENT	K - FATAL INJURY	3/22/2022	646	PEDESTRIAN	ONE MOTOR VEHICLE - GOING STRAIGHT
18879260	BOERNE	KENDALL	BOERNE POLICE DEPARTMENT	B - SUSPECTED MINOR INJURY	4/29/2022	1625	PEDESTRIAN	ONE MOTOR VEHICLE - GOING STRAIGHT
19045114	BOERNE	KENDALL	BOERNE POLICE DEPARTMENT	C - POSSIBLE INJURY	8/2/2022	1531	PEDESTRIAN	ONE MOTOR VEHICLE - TURNING LEFT
19128009	BOERNE	KENDALL	BOERNE POLICE DEPARTMENT	A - SUSPECTED SERIOUS INJURY	9/22/2022	2118	PEDESTRIAN	ONE MOTOR VEHICLE - GOING STRAIGHT
19305919	BOERNE	KENDALL	BOERNE POLICE DEPARTMENT	K - FATAL INJURY	12/27/2022	1851	PEDESTRIAN	ONE MOTOR VEHICLE - GOING STRAIGHT
19534015	BOERNE	KENDALL	BOERNE POLICE DEPARTMENT	B - SUSPECTED MINOR INJURY	5/8/2023	1222	PEDESTRIAN	ONE MOTOR VEHICLE - TURNING LEFT
19600768	BOERNE	KENDALL	BOERNE POLICE DEPARTMENT	B - SUSPECTED MINOR INJURY	6/12/2023	1446	PEDESTRIAN	ONE MOTOR VEHICLE - TURNING RIGHT
20050222	BOERNE	KENDALL	BOERNE POLICE DEPARTMENT	B - SUSPECTED MINOR INJURY	2/28/2024	830	PEDESTRIAN	ONE MOTOR VEHICLE - GOING STRAIGHT
20110875	BOERNE	KENDALL	BOERNE POLICE DEPARTMENT	A - SUSPECTED SERIOUS INJURY	4/3/2024	2128	PEDESTRIAN	ONE MOTOR VEHICLE - GOING STRAIGHT
20342042	BOERNE	KENDALL	KENDALL COUNTY SHERIFF'S OFFICE	B - SUSPECTED MINOR INJURY	8/18/2024	1423	PEDESTRIAN	ONE MOTOR VEHICLE - TURNING RIGHT
20504537	BOERNE	KENDALL	BOERNE POLICE DEPARTMENT	A - SUSPECTED SERIOUS INJURY	11/15/2024	1444	PEDESTRIAN	ONE MOTOR VEHICLE - TURNING RIGHT

CrashID	City	FHE_MOC	Object	IntRelate	IntRelate_2	RdwyPrt
17607598	BOERNE	PEDESTRIAN	NOT APPLICABLE	NON INTERSECTION	NON INTERSECTION	1 - MAIN/PROPER LANE
17831643	BOERNE	PEDESTRIAN	NOT APPLICABLE	NON INTERSECTION	NON INTERSECTION	1 - MAIN/PROPER LANE
17713351	BOERNE	PEDESTRIAN	NOT APPLICABLE	INTERSECTION RELATED	INTERSECTION	1 - MAIN/PROPER LANE
18068864	BOERNE	PEDESTRIAN	NOT APPLICABLE	NON INTERSECTION	NON INTERSECTION	2 - SERVICE/FRONTAGE ROAD
18484608	BOERNE	PEDESTRIAN	NOT APPLICABLE	INTERSECTION	INTERSECTION	1 - MAIN/PROPER LANE
18809989	BOERNE	PEDESTRIAN	NOT APPLICABLE	NON INTERSECTION	NON INTERSECTION	1 - MAIN/PROPER LANE
18879260	BOERNE	PEDESTRIAN	NOT APPLICABLE	NON INTERSECTION	NON INTERSECTION	1 - MAIN/PROPER LANE
19045114	BOERNE	PEDESTRIAN	NOT APPLICABLE	INTERSECTION RELATED	INTERSECTION	1 - MAIN/PROPER LANE
19128009	BOERNE	PEDESTRIAN	NOT APPLICABLE	NON INTERSECTION	NON INTERSECTION	1 - MAIN/PROPER LANE
19305919	BOERNE	PEDESTRIAN	NOT APPLICABLE	INTERSECTION	INTERSECTION	1 - MAIN/PROPER LANE
19534015	BOERNE	PEDESTRIAN	NOT APPLICABLE	INTERSECTION RELATED	INTERSECTION	1 - MAIN/PROPER LANE
19600768	BOERNE	PEDESTRIAN	NOT APPLICABLE	INTERSECTION RELATED	INTERSECTION	1 - MAIN/PROPER LANE
20050222	BOERNE	PEDESTRIAN	NOT APPLICABLE	INTERSECTION	INTERSECTION	1 - MAIN/PROPER LANE
20110875	BOERNE	PEDESTRIAN	NOT APPLICABLE	NON INTERSECTION	NON INTERSECTION	1 - MAIN/PROPER LANE
20342042	BOERNE	PEDESTRIAN	NOT APPLICABLE	INTERSECTION RELATED	INTERSECTION	1 - MAIN/PROPER LANE
20504537	BOERNE	PEDESTRIAN	NOT APPLICABLE	INTERSECTION RELATED	INTERSECTION	1 - MAIN/PROPER LANE

CrashID	City	RdwyPrt_Adj	RdwyPrt_Int	RdwyRelate	RdwyClass	StName	StName_Int	Latitude	Longitude
17607598	BOERNE	1 - MAIN/PROPER LANE	1 - MAIN/PROPER LANE	ON ROADWAY	US & STATE HIGHWAYS	SH0046	N/A	29.78952565	-98.72532193
17831643	BOERNE	1 - MAIN/PROPER LANE	1 - MAIN/PROPER LANE	ON ROADWAY	US & STATE HIGHWAYS	US0087	N/A	29.81678011	-98.75021728
17713351	BOERNE	1 - MAIN/PROPER LANE	1 - MAIN/PROPER LANE	ON ROADWAY	CITY STREET	W BLANCO RD	W SAN ANTONIO AVE	29.79352628	-98.73333562
18068864	BOERNE	2 - SERVICE/FRONTAGE ROAD	1 - MAIN/PROPER LANE	ON ROADWAY	INTERSTATE	IH0010	N/A	29.78001069	-98.7375719
18484608	BOERNE	1 - MAIN/PROPER LANE	1 - MAIN/PROPER LANE	ON ROADWAY	US & STATE HIGHWAYS	SH0046	US0087	29.78952545	-98.72611414
18809989	BOERNE	1 - MAIN/PROPER LANE	1 - MAIN/PROPER LANE	SHOULDER	INTERSTATE	IH0010	N/A	29.81577067	-98.75418867
18879260	BOERNE	1 - MAIN/PROPER LANE	1 - MAIN/PROPER LANE	ON ROADWAY	US & STATE HIGHWAYS	US0087	N/A	29.79290276	-98.73126368
19045114	BOERNE	1 - MAIN/PROPER LANE	1 - MAIN/PROPER LANE	ON ROADWAY	CITY STREET	US0087	ROSEWOOD AVE	29.79257602	-98.73109206
19128009	BOERNE	1 - MAIN/PROPER LANE	1 - MAIN/PROPER LANE	ON ROADWAY	US & STATE HIGHWAYS	US0087	N/A	29.78853286	-98.72913759
19305919	BOERNE	1 - MAIN/PROPER LANE	1 - MAIN/PROPER LANE	ON ROADWAY	US & STATE HIGHWAYS	US0087	SH0046	29.7854149	-98.72903518
19534015	BOERNE	1 - MAIN/PROPER LANE	1 - MAIN/PROPER LANE	ON ROADWAY	US & STATE HIGHWAYS	SH0046	CHARGER BLVD	29.78870717	-98.70541984
19600768	BOERNE	1 - MAIN/PROPER LANE	1 - MAIN/PROPER LANE	ON ROADWAY	US & STATE HIGHWAYS	US0087	ROSEWOOD AVE	29.79257602	-98.73109206
20050222	BOERNE	1 - MAIN/PROPER LANE	1 - MAIN/PROPER LANE	ON ROADWAY	CITY STREET	US0087	ROCK ST	29.79723896	-98.73351573
20110875	BOERNE	1 - MAIN/PROPER LANE	1 - MAIN/PROPER LANE	ON ROADWAY	CITY STREET	US0087	N/A	29.79112266	-98.73032867
20342042	BOERNE	1 - MAIN/PROPER LANE	1 - MAIN/PROPER LANE	ON ROADWAY	CITY STREET	HERFF RD	RIVER RD	29.78797179	-98.71660353
20504537	BOERNE	1 - MAIN/PROPER LANE	1 - MAIN/PROPER LANE	ON ROADWAY	US & STATE HIGHWAYS	US0087	SH0046	29.78956795	-98.72955322

CrashID	City	Factors	FactorOther
17607598	BOERNE	PEDESTRIAN FAILED TO YIELD RIGHT OF WAY TO VEHICLE	NOT APPLICABLE
17831643	BOERNE	OTHER (EXPLAIN IN NARRATIVE)	NOT APPLICABLE
17713351	BOERNE	OTHER (EXPLAIN IN NARRATIVE)	NOT APPLICABLE
18068864	BOERNE	PEDESTRIAN FAILED TO YIELD RIGHT OF WAY TO VEHICLE;OTHER (EXPLAIN IN NARRATIVE)	CONSTRUCTION - WITHIN POSTED ROAD CONSTRUCTION ZONE (NOT RELATED TO CRASH)
18484608	BOERNE	PEDESTRIAN FAILED TO YIELD RIGHT OF WAY TO VEHICLE	NOT APPLICABLE
18809989	BOERNE	DRIVER INATTENTION; IMPAIRED VISIBILITY (EXPLAIN IN NARRATIVE)	ATTENTION DIVERTED FROM DRIVING
18879260	BOERNE	PEDESTRIAN FAILED TO YIELD RIGHT OF WAY TO VEHICLE	NOT APPLICABLE
19045114	BOERNE	FAILED TO YIELD RIGHT OF WAY - TO PEDESTRIAN	NOT APPLICABLE
19128009	BOERNE	PEDESTRIAN FAILED TO YIELD RIGHT OF WAY TO VEHICLE	NOT APPLICABLE
19305919	BOERNE	PEDESTRIAN FAILED TO YIELD RIGHT OF WAY TO VEHICLE	NOT APPLICABLE
19534015	BOERNE	FAILED TO YIELD RIGHT OF WAY - TO PEDESTRIAN	NOT APPLICABLE
19600768	BOERNE	DRIVER INATTENTION;FAILED TO YIELD RIGHT OF WAY - TO PEDESTRIAN	ATTENTION DIVERTED FROM DRIVING
20050222	BOERNE	FAILED TO STOP AT PROPER PLACE;FAILED TO YIELD RIGHT OF WAY - TO PEDESTRIAN	NOT APPLICABLE
20110875	BOERNE	HAD BEEN DRINKING;PEDESTRIAN FAILED TO YIELD RIGHT OF WAY TO VEHICLE	NOT APPLICABLE
20342042	BOERNE	DISTRACTION IN VEHICLE;DRIVER INATTENTION;FAILED TO YIELD RIGHT OF WAY - TO PEDESTRIAN	ATTENTION DIVERTED FROM DRIVING
20504537	BOERNE	FAILED TO YIELD RIGHT OF WAY - TO PEDESTRIAN	NOT APPLICABLE

CrashID	City	Factor1	Factor2	Factor3
17607598	BOERNE	PEDESTRIAN FAILED TO YIELD RIGHT OF WAY TO VEHICLE		
17831643	BOERNE	OTHER (EXPLAIN IN NARRATIVE)		
17713351	BOERNE	OTHER (EXPLAIN IN NARRATIVE)		
18068864	BOERNE	PEDESTRIAN FAILED TO YIELD RIGHT OF WAY TO VEHICLE	OTHER (EXPLAIN IN NARRATIVE)	
18484608	BOERNE	PEDESTRIAN FAILED TO YIELD RIGHT OF WAY TO VEHICLE		
18809989	BOERNE	DRIVER INATTENTION	IMPAIRED VISIBILITY (EXPLAIN IN NARRATIVE)	
18879260	BOERNE	PEDESTRIAN FAILED TO YIELD RIGHT OF WAY TO VEHICLE		
19045114	BOERNE	FAILED TO YIELD RIGHT OF WAY - TO PEDESTRIAN		
19128009	BOERNE	PEDESTRIAN FAILED TO YIELD RIGHT OF WAY TO VEHICLE		
19305919	BOERNE	PEDESTRIAN FAILED TO YIELD RIGHT OF WAY TO VEHICLE		
19534015	BOERNE	FAILED TO YIELD RIGHT OF WAY - TO PEDESTRIAN		
19600768	BOERNE	DRIVER INATTENTION	FAILED TO YIELD RIGHT OF WAY - TO PEDESTRIAN	
20050222	BOERNE	FAILED TO STOP AT PROPER PLACE	FAILED TO YIELD RIGHT OF WAY - TO PEDESTRIAN	
20110875	BOERNE	HAD BEEN DRINKING	PEDESTRIAN FAILED TO YIELD RIGHT OF WAY TO VEHICLE	
20342042	BOERNE	DISTRACTION IN VEHICLE	DRIVER INATTENTION	FAILED TO YIELD RIGHT OF WAY - TO PEDESTRIAN
20504537	BOERNE	FAILED TO YIELD RIGHT OF WAY - TO PEDESTRIAN		

CrashID	City	Factor4	Factor5	Factor_Sum	Surface	Weather	Light	Light_Sum	ADT
17607598	BOERNE			FAILURE TO YIELD ROW	1 - DRY	2 - CLOUDY	3 - DARK, LIGHTED	DARK	11542
17831643	BOERNE			OTHER	1 - DRY	1 - CLEAR	2 - DARK, NOT LIGHTED	DARK	12370
17713351	BOERNE			OTHER	1 - DRY	1 - CLEAR	2 - DARK, NOT LIGHTED	DARK	No Data
18068864	BOERNE			FAILURE TO YIELD ROW	1 - DRY	1 - CLEAR	1 - DAYLIGHT	DAYLIGHT	56906
18484608	BOERNE			FAILURE TO YIELD ROW	1 - DRY	1 - CLEAR	1 - DAYLIGHT	DAYLIGHT	12883
18809989	BOERNE			DISTRACTION	1 - DRY	1 - CLEAR	2 - DARK, NOT LIGHTED	DARK	37763
18879260	BOERNE			FAILURE TO YIELD ROW	1 - DRY	1 - CLEAR	1 - DAYLIGHT	DAYLIGHT	19904
19045114	BOERNE			FAILURE TO YIELD ROW	1 - DRY	1 - CLEAR	1 - DAYLIGHT	DAYLIGHT	19904
19128009	BOERNE			FAILURE TO YIELD ROW	1 - DRY	1 - CLEAR	3 - DARK, LIGHTED	DARK	25334
19305919	BOERNE			FAILURE TO YIELD ROW	1 - DRY	1 - CLEAR	3 - DARK, LIGHTED	DARK	25334
19534015	BOERNE			FAILURE TO YIELD ROW	1 - DRY	1 - CLEAR	1 - DAYLIGHT	DAYLIGHT	10748
19600768	BOERNE			DISTRACTION	1 - DRY	1 - CLEAR	1 - DAYLIGHT	DAYLIGHT	19904
20050222	BOERNE			FAILURE TO STOP	1 - DRY	1 - CLEAR	1 - DAYLIGHT	DAYLIGHT	17995
20110875	BOERNE			IMPAIRED DRIVING	1 - DRY	1 - CLEAR	2 - DARK, NOT LIGHTED	DARK	19904
20342042	BOERNE			DISTRACTION	1 - DRY	1 - CLEAR	1 - DAYLIGHT	DAYLIGHT	No Data
20504537	BOERNE			FAILURE TO YIELD ROW	1 - DRY	1 - CLEAR	1 - DAYLIGHT	DAYLIGHT	25334

CrashID	City	ADT_Year
17607598	BOERNE	2022
17831643	BOERNE	2022
17713351	BOERNE	No Data
18068864	BOERNE	2022
18484608	BOERNE	2022
18809989	BOERNE	2022
18879260	BOERNE	2022
19045114	BOERNE	2022
19128009	BOERNE	2022
19305919	BOERNE	2022
19534015	BOERNE	2022
19600768	BOERNE	2022
20050222	BOERNE	2022
20110875	BOERNE	2022
20342042	BOERNE	No Data
20504537	BOERNE	2022

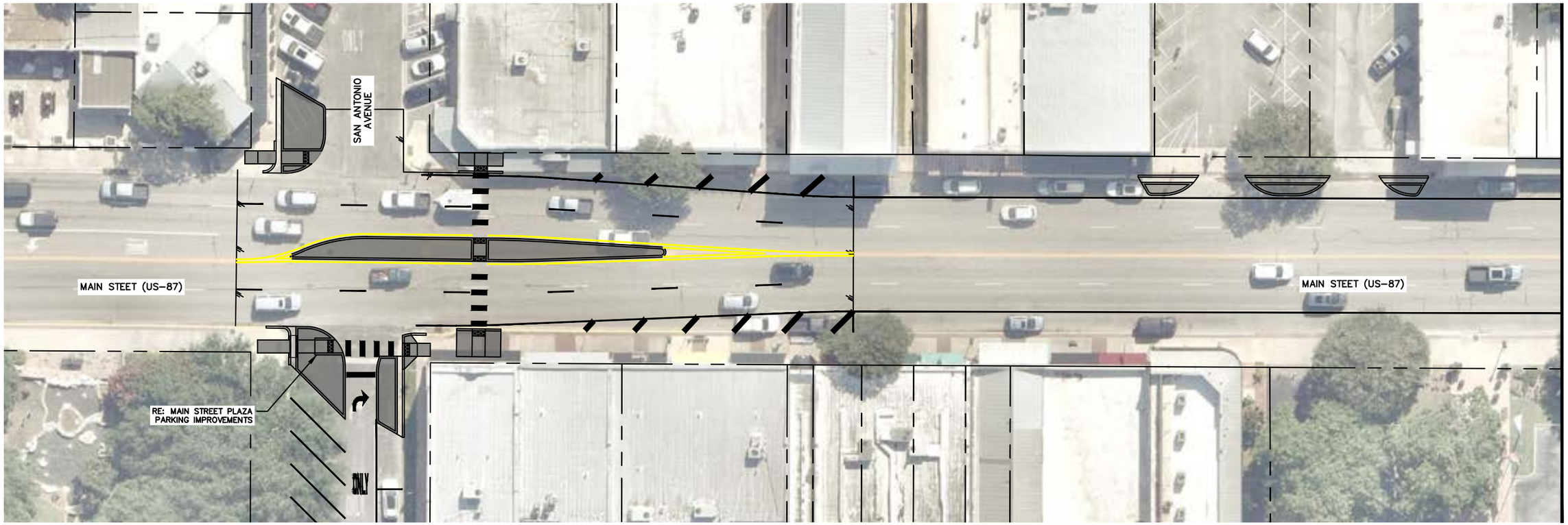
APPENDIX B: PEDESTRIAN IMPROVEMENT CONCEPTUAL LAYOUTS

PARKING COUNTS		
TOTAL NUMBER OF EXISTING SPOTS	TOTAL NUMBER OF PROPOSED SPOTS	DELTA
19	16	-3

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

SCALE: 1" = 40'



CITY OF BOERNE – SS4A SAP
MAIN STREET FROM E. SAN ANTONIO TO E. THEISSEN STREET – PEDESTRIAN IMPROVEMENTS

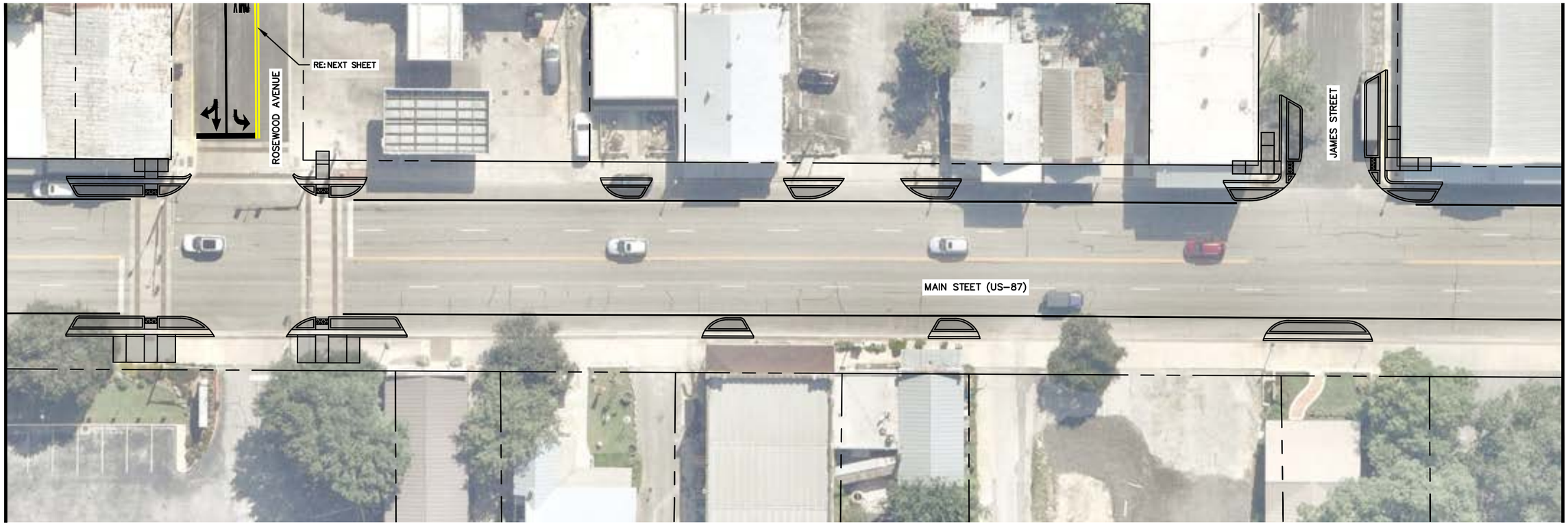
Safety Action Plan BOERNE 2025

PARKING COUNTS		
TOTAL NUMBER OF EXISTING SPOTS	TOTAL NUMBER OF PROPOSED SPOTS	DELTA
19	16	-3

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

SCALE: 1" = 40'



CITY OF BOERNE – SS4A SAP
MAIN STREET FROM E. SAN ANTONIO TO E. THEISSEN STREET – PEDESTRIAN IMPROVEMENTS

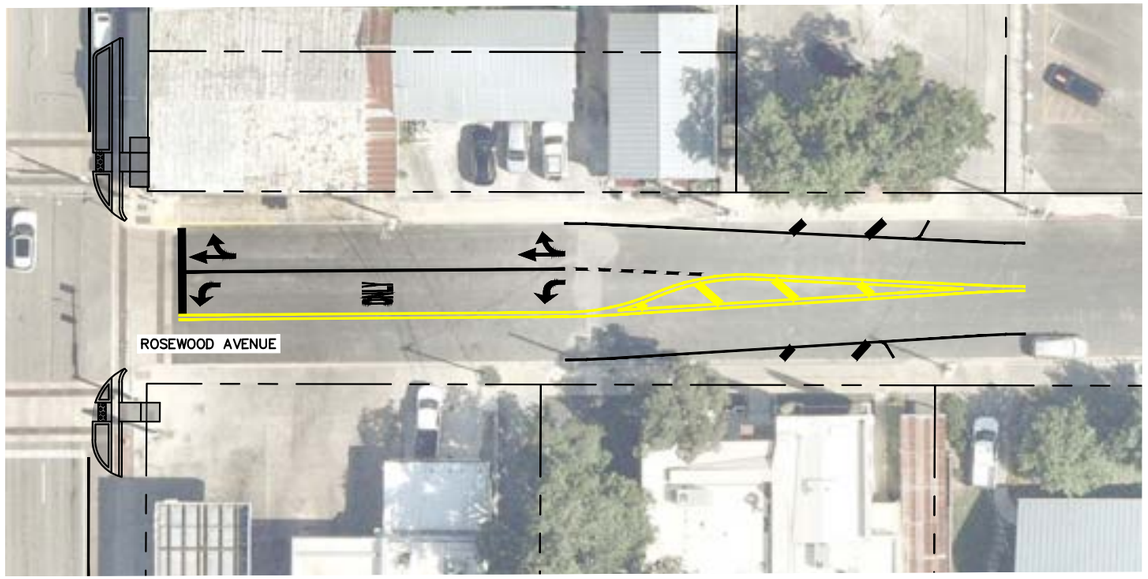
Safety Action Plan BOERNE 2025

PARKING COUNTS		
TOTAL NUMBER OF EXISTING SPOTS	TOTAL NUMBER OF PROPOSED SPOTS	DELTA
4	0	-4

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

SCALE: 1" = 40'



CITY OF BOERNE – SS4A SAP
MAIN STREET FROM E. SAN ANTONIO TO E. THEISSEN STREET – PEDESTRIAN IMPROVEMENTS

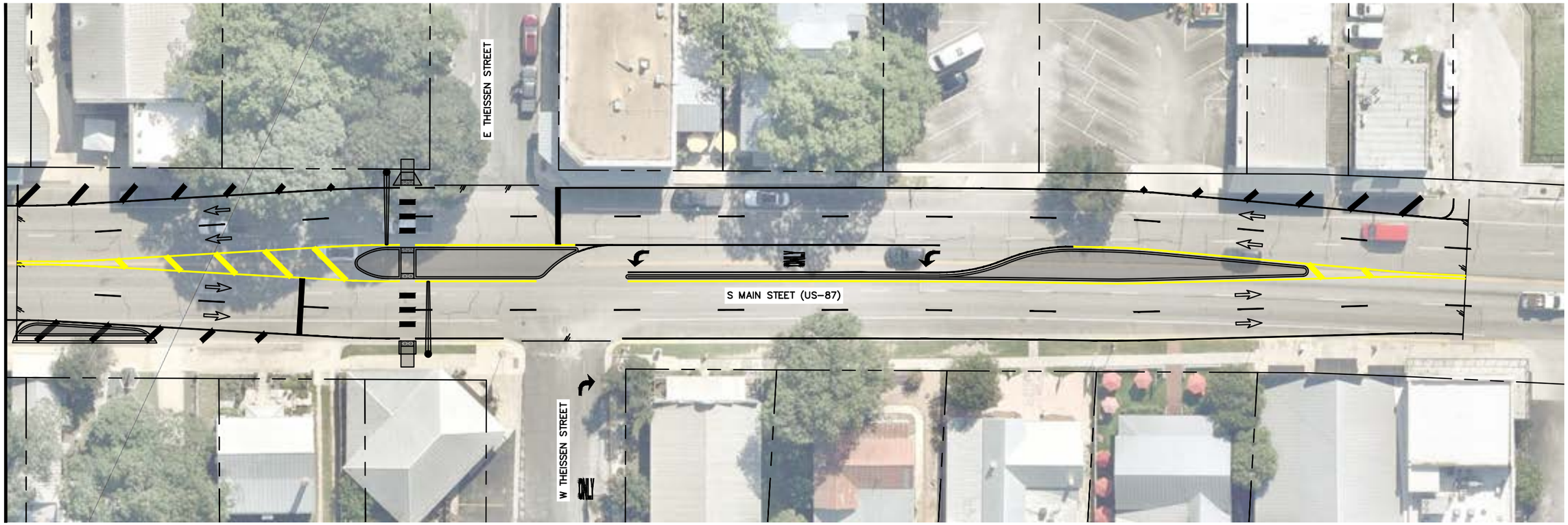
Safety Action Plan BOERNE 2025

PARKING COUNTS		
TOTAL NUMBER OF EXISTING SPOTS	TOTAL NUMBER OF PROPOSED SPOTS	DELTA
24	0	-24

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

SCALE: 1" = 40'



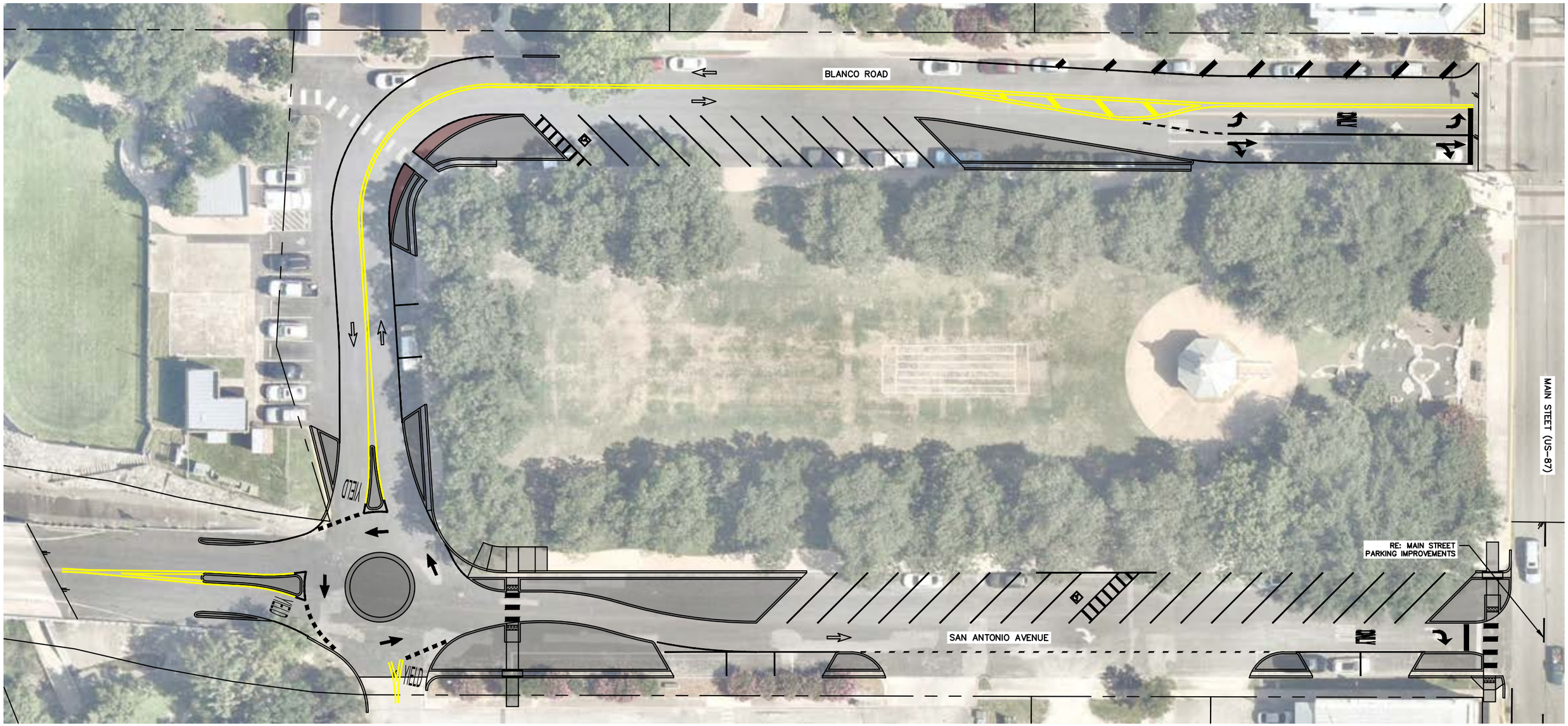
CITY OF BOERNE – SS4A SAP
MAIN STREET FROM E. SAN ANTONIO TO E. THEISSEN STREET – PEDESTRIAN IMPROVEMENTS

Safety Action Plan

PARKING COUNTS		
TOTAL NUMBER OF EXISTING SPOTS	TOTAL NUMBER OF PROPOSED SPOTS	DELTA
53	53	0

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40
SCALE: 1" = 40'



CITY OF BOERNE – SS4A SAP – MAIN STREET PLAZA – PARKING IMPROVEMENTS

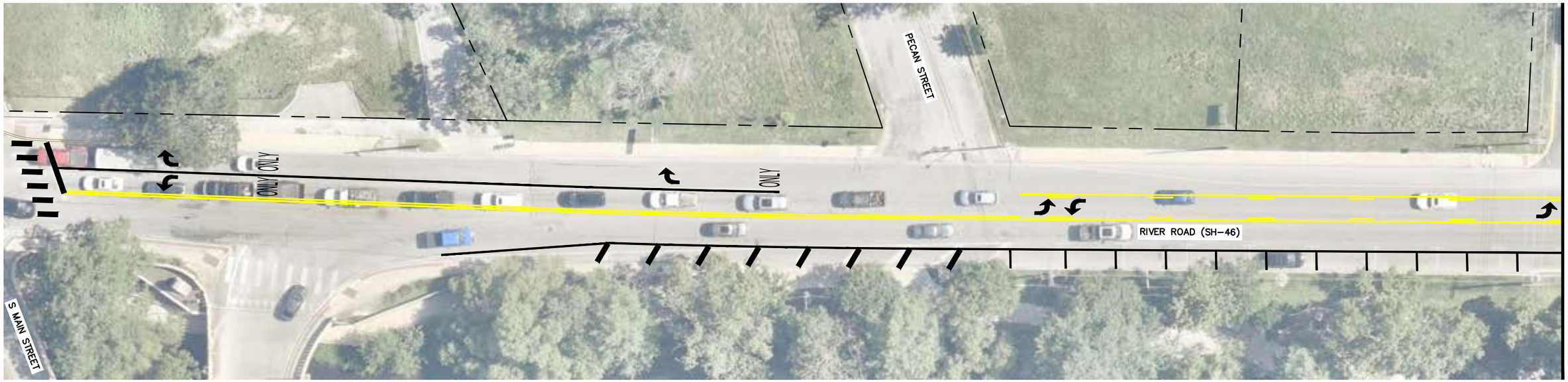
Safety Action Plan

PARKING COUNTS		
TOTAL NUMBER OF EXISTING SPOTS	TOTAL NUMBER OF PROPOSED SPOTS	DELTA
13	11	-2

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

SCALE: 1" = 40'



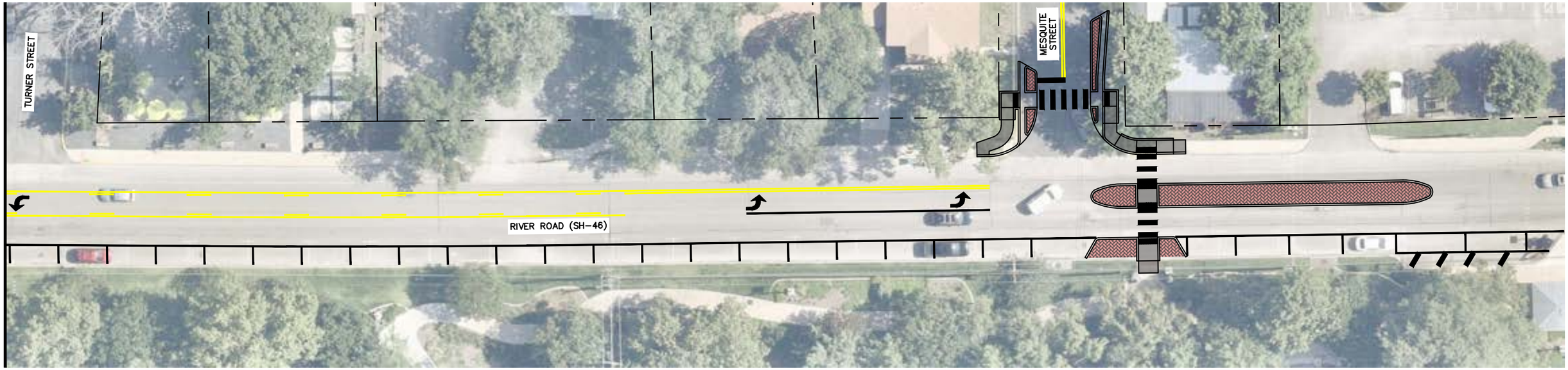
CITY OF BOERNE – SS4A SAP
RIVER ROAD FROM PECAN STREET TO MESQUITE STREET – PEDESTRIAN IMPROVEMENTS

PARKING COUNTS		
TOTAL NUMBER OF EXISTING SPOTS	TOTAL NUMBER OF PROPOSED SPOTS	DELTA
37	28	-9

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

SCALE: 1" = 40'



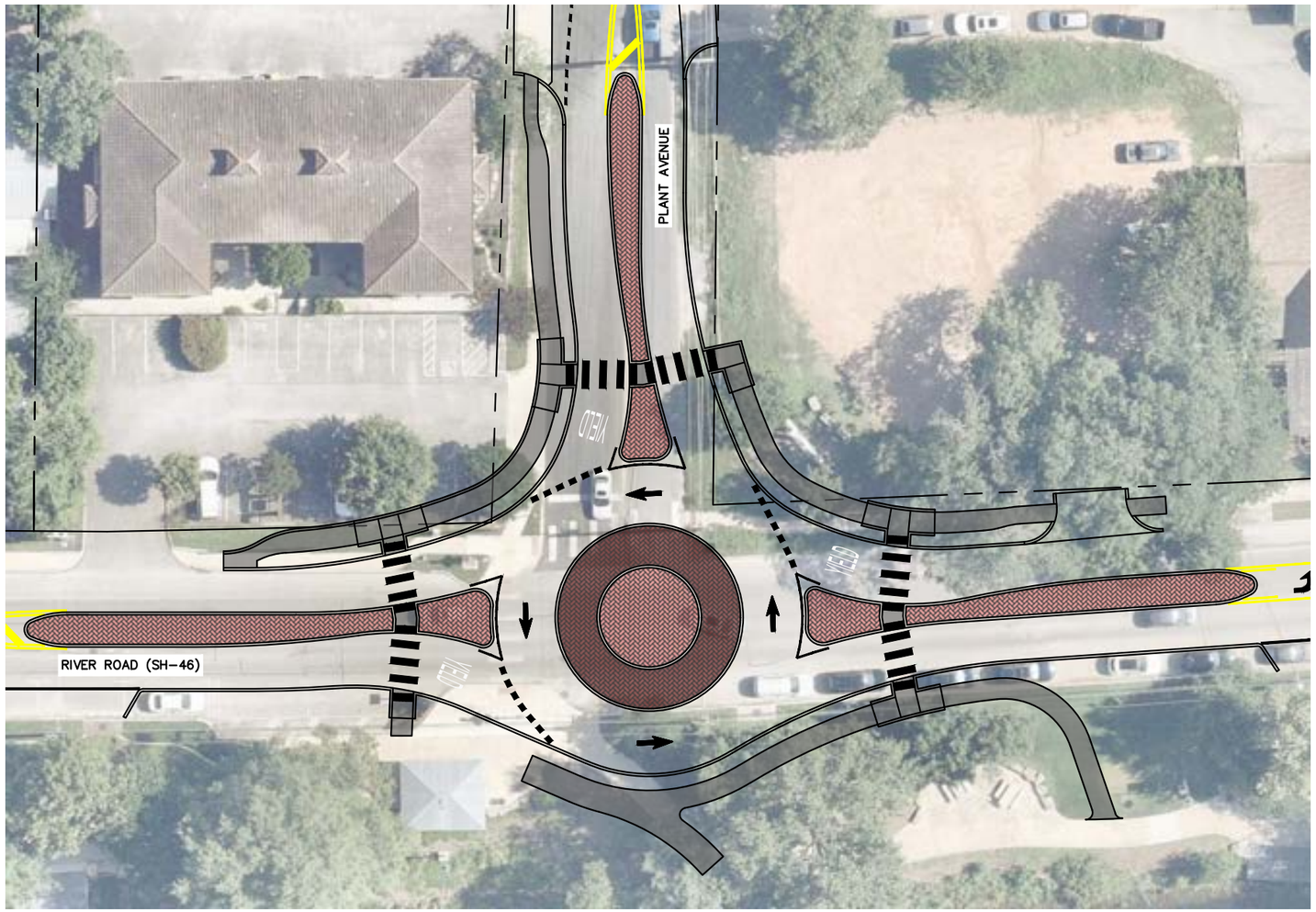
CITY OF BOERNE – SS4A SAP
RIVER ROAD FROM PECAN STREET TO MESQUITE STREET – PEDESTRIAN IMPROVEMENTS

PARKING COUNTS		
TOTAL NUMBER OF EXISTING SPOTS	TOTAL NUMBER OF PROPOSED SPOTS	DELTA
46	15	-31

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

SCALE: 1" = 40'



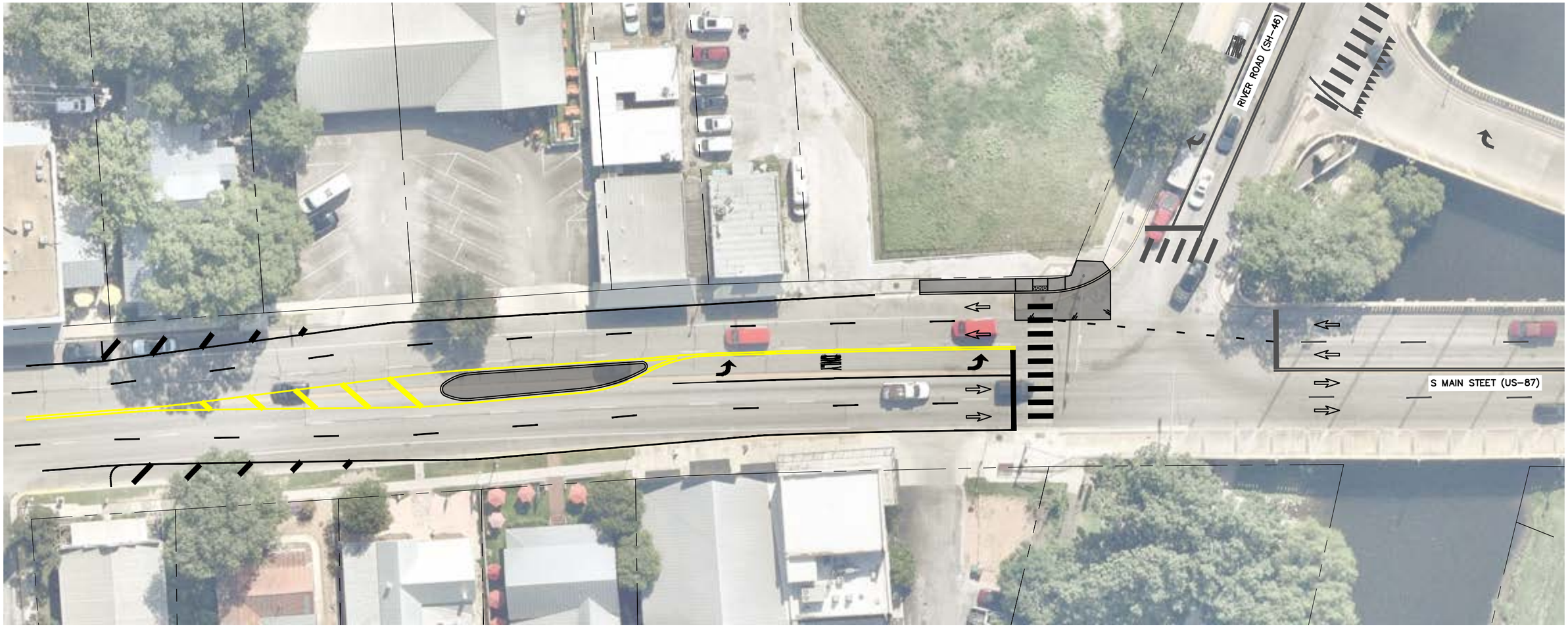
CITY OF BOERNE – SS4A SAP
RIVER ROAD AND PLANT AVENUE – ROUNDABOUT INTERSECTION IMPROVEMENTS

PARKING COUNTS		
TOTAL NUMBER OF EXISTING SPOTS	TOTAL NUMBER OF PROPOSED SPOTS	DELTA
14	1	-13

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

SCALE: 1" = 40'



CITY OF BOERNE – SS4A SAP
MAIN STREET AND RIVER ROAD – INTERSECTION IMPROVEMENTS

Safety Action Plan

APPENDIX C: PRELIMINARY OPINIONS OF PROBABLE CONSTRUCTION COST (OPCC)

City of Boerne

River Road & Plant Avenue Roundabout Intersection Improvements

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 12/23/2025

Project Information:

Name: River Road Parking Improvements Conceptual Corridor Layout

Limits: Main Street to Mequite Street

Right-of-Way Width (LF): Varies

Length (LF): 1100'

Proposed Lane Configuration: Two through lanes with TWLTL and on street parking

Description:

Construction of a three lane section with a TWLTL, on street parking and a pedestrian crossing with a raised median. Including medians, sidewalk, ramps, signage and striping

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Roadway Excavation	20	CY	$ 25.00	$ 500
2	Concrete Median	80	SY	$ 200.00	$ 16,000
3	Concrete Curb Type 1	340	LF	$ 30.00	$ 10,200
4	Concrete Sidewalk (4")	16	SY	$ 90.00	$ 1,440
5	Barrier Free Pedestrian Ramp - Type 2	2	EA	$ 1,500.00	$ 3,000
6	Barrier Free Pedestrian Ramp - Type 3	1	EA	$ 1,500.00	$ 1,500
7	Barrier Free Pedestrian Ramp - Type 7	1	EA	$ 1,500.00	$ 1,500
8	Barrier Free Pedestrian Ramp - Type 21	1	EA	$ 3,000.00	$ 3,000
9	6" Solid Yellow Pavement Marking	2,090	LF	$ 3.00	$ 6,270
10	6" Broken Yellow Pavement Marking	240	LF	$ 5.00	$ 1,200
11	8" Solid White Pavement Marking	1,560	LF	$ 4.00	$ 6,240
12	24" Solid White Pavement Marking	240	LF	$ 8.00	$ 1,920
13	White Symbol Word	3	EA	$ 300.00	$ 900
14	White Symbol Arrow	9	EA	$ 300.00	$ 2,700
15	Pavement Sealer (6")	2,330	LF	$ 1.00	$ 2,330
16	Pavement Sealer (8")	1,560	LF	$ 1.50	$ 2,340
17	Pavement Sealer (24")	240	LF	$ 4.00	$ 960
18	Pavement Sealer (Arrow)	9	EA	$ 12.00	$ 108
19	Pavement Sealer (Word)	3	EA	$ 15.00	$ 45
				Roadway Construction Cost Subtotal:	**$ 70,000**

Major Construction Component Allowances:

	Item Description	Notes	Allowance	Item Cost
☑	Mobilization		10%	$ 10,000
☑	Site Preparation/Removals		10%	$ 10,000
☑	Traffic Control		20%	$ 15,000
☑	Signage & Pavement Marking		5%	$ 5,000
☑	Erosion Control		5%	$ 5,000
☑	Landscaping	Sod & topsoil	5%	$ 5,000
Other:				
☐	None			
			Allowance Subtotal:	**$ 50,000**
			Construction Costs Subtotal	**$ 120,000**
			Construction Contingency (+/-): **30%**	**$ 40,000**
			TOTAL Construction Cost:	**$ 160,000**

City of Boerne

Main Street & Theissen Street Pedestrian Improvements

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/21/2025

Project Information:

Name: Main Street & Theissen Street Pedestrian Improvements

Limits: Theissen Street

Right-of-Way Width (LF): 76±

Length (LF): 560

Proposed Lane Configuration: 4 Lanes with raised median and hooded left

Description:

Construction of raised median with striping improvements, pedestrian ramps, and pedestrian hybrid beacon.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Roadway Excavation	60	CY	$ 8.00	$ 480
2	Embankment	70	CY	$ 25.00	$ 1,750
3	Dense-Graded Hot-Mix Asphalt TY-C (PG 70-22)	400	TON	$ 250.00	$ 100,000
4	Plane & Text Asphalt Concrete Pavement (0" to 4")	210	SY	$ 7.00	$ 1,470
5	Concrete Median	250	SY	$ 125.00	$ 31,250
6	Concrete Sidewalk (4")	12	SY	$ 100.00	$ 1,200
7	Barrier Free Pedestrian Ramp - Type 1	1	EA	$ 2,500.00	$ 2,500
8	Barrier Free Pedestrian Ramp - Type 7	1	EA	$ 2,500.00	$ 2,500
9	Barrier Free Pedestrian Ramp - Type 21	1	EA	$ 3,500.00	$ 3,500
10	6" Broken White Pavement Marking	280	LF	$ 1.50	$ 420
11	6" Solid White Pavement Marking	1,370	LF	$ 2.00	$ 2,740
12	6" Solid Yellow Pavement Marking	880	LF	$ 4.50	$ 3,960
13	24" Solid White Pavement Marking	210	LF	$ 7.00	$ 1,470
14	24" Solid Yellow Pavement Marking	70	LF	$ 8.00	$ 560
15	White Symbol Word "Only"	2	EA	$ 150.00	$ 300
16	White Symbol Arrow	3	EA	$ 300.00	$ 900
17	Pavement Sealer (6")	2,530	LF	$ 1.00	$ 2,530
18	Pavement Sealer (24")	280	LF	$ 4.00	$ 1,120
19	Pavement Sealer (Arrow)	3	EA	$ 12.00	$ 36
20	Pavement Sealer (Word)	2	EA	$ 15.00	$ 30
				Roadway Construction Cost Subtotal:	**$ 160,000**

Major Construction Component Allowances:

	Item Description	Notes	Allowance	Item Cost
☑	Mobilization		10%	$ 20,000
☑	Site Preparation/Removals		10%	$ 20,000
☑	Traffic Control		15%	$ 25,000
☑	Signage & Pavement Marking		4%	$ 10,000
☑	Erosion Control		2%	$ 5,000
☑	Pedestrian Hybrid Beacon		LS	$ 200,000
☑	Landscaping	Sod & topsoil	LS	$ 5,000
Other:				
☐	None			
			Allowance Subtotal:	**$ 285,000**
			Construction Costs Subtotal	**$ 445,000**
			Construction Contingency (+/-): **30%**	**$ 135,000**
			TOTAL Construction Cost:	**$ 580,000**

City of Boerne

Main Street Plaza Parking Improvements

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 1/7/2026

Project Information:

Name: Main Street Plaza Parking Improvements

Limits: Main Plaza

Right-of-Way Width (LF): Varies

Length (LF): N/A

Proposed Lane Configuration: Single Lane Roundabout, 2 through lanes section with angled parking, 1 way section with angled parking

Description:

Construction of a three leg roundabout intersection with raised medians, drainage fumes, pedestrian crossings, angled parking, and a one-way section.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Roadway Excavation	190	CY	$ 25.00	$ 4,750
2	Embankment	230	CY	$ 25.00	$ 5,750
3	Dense-Graded Hot-Mix Asphalt TY-C (PG 70-22) (2")	600	TON	$ 250.00	$ 150,000
4	Plane & Text Asphalt Concrete Pavement (0" to 4")	300	SY	$ 7.00	$ 2,100
5	Plane & Text Asphalt Concrete Pavement (2")	5,200	SY	$ 4.00	$ 20,800
6	Integral Color and Stamped Concrete Truck Apron	80	SY	$ 250.00	$ 20,000
7	Concrete Flume	130	SY	$ 50.00	$ 6,500
8	Concrete Median	220	SY	$ 200.00	$ 44,000
9	Monolithic Concrete Median Nose	6	EA	$ 1,500.00	$ 9,000
10	Concrete Curb Type 1	1,550	LF	$ 30.00	$ 46,500
11	Concrete Curb Type 2	100	LF	$ 35.00	$ 3,500
12	Concrete Sidewalk (4")	30	SY	$ 90.00	$ 2,700
13	ADA Rated Metal Drain Plate	50	SF	$ 4.00	$ 200
14	Barrier Free Pedestrian Ramp - Type 1 (5' Wide)	1	EA	$ 1,500.00	$ 1,500
15	Barrier Free Pedestrian Ramp - Type 2 (10' Wide)	1	EA	$ 3,000.00	$ 3,000
16	Barrier Free Pedestrian Ramp - Type 7 (5' Wide)	2	EA	$ 1,500.00	$ 3,000
17	6" Broken White Pavement Marking	60	LF	$ 3.00	$ 180
18	6" Solid White Pavement Marking	2,040	LF	$ 3.00	$ 6,120
19	6" Solid Yellow Pavement Marking	1,750	LF	$ 3.00	$ 5,250
20	8" Broken White Pavement Marking	20	LF	$ 3.50	$ 70
21	8" Solid White Pavement Marking	150	LF	$ 4.00	$ 600
22	12" Solid White Pavement Marking	80	LF	$ 6.00	$ 480
23	18" Broken White Pavement Marking	40	LF	$ 8.00	$ 320
24	24" Solid White Pavement Marking	150	LF	$ 8.00	$ 1,200
25	24" Solid Yellow Pavement Marking	30	LF	$ 10.00	$ 300
26	White Symbol Word	5	EA	$ 300.00	$ 1,500
27	White Symbol Arrow	9	EA	$ 300.00	$ 2,700
28	Accessible Parking Pavement Marking Symbol	2	EA	$ 400.00	$ 800
29	Pavement Marking Island (Red)	270	SF	$ 7.00	$ 1,890
30	Pavement Sealer (6")	3,850	LF	$ 1.00	$ 3,850
31	Pavement Sealer (8")	170	LF	$ 2.00	$ 340
32	Pavement Sealer (12")	80	LF	$ 3.00	$ 240
33	Pavement Sealer (18")	40	LF	$ 3.50	$ 140
34	Pavement Sealer (24")	180	LF	$ 4.00	$ 720
35	Pavement Sealer (Arrow)	9	EA	$ 12.00	$ 108
36	Pavement Sealer (Word)	5	EA	$ 15.00	$ 75
37	Pavement Sealer (Symbol)	2	EA	$ 85.00	$ 170
38	Pavement Sealer (Island)	270	SF	$ 1.25	$ 338
				Roadway Construction Cost Subtotal:	**$ 360,000**

Major Construction Component Allowances:

	Item Description	Notes	Allowance	Item Cost
☑	Mobilization		10%	$ 40,000
☑	Site Preparation/Removals		20%	$ 80,000
☑	Traffic Control		20%	$ 80,000
☑	Signage		10%	$ 40,000
☑	Erosion Control		5%	$ 20,000
☑	Landscaping	Sod & topsoil	10%	$ 40,000
	Other:			
			Allowance Subtotal:	**$ 300,000**
			Construction Costs Subtotal	**$ 660,000**
			Construction Contingency (+/-): 30%	**$ 200,000**
			TOTAL Construction Cost:	**$ 860,000**

City of Boerne
Main Street Parking Improvements
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 1/7/2026

Project Information:

Name: Main Street Parking Improvements
Limits: E. Blanco Road to E. Theissen Street
Right-of-Way Width (LF): Varies (76' to 82')
Length (LF): 1,300
Proposed Lane Configuration: 4 through lanes with on-street parking

Description:
Construction of raised bulbouts with drainage flumes, a pedestrian crossing with refuge, and a left turn lane.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Roadway Excavation	30	CY	$ 25.00	$ 750
2	Embankment	60	CY	$ 25.00	$ 1,500
3	Dense-Graded Hot-Mix Asphalt TY-C (PG 70-22) (2")	180	TON	$ 250.00	$ 45,000
4	Plane & Text Asphalt Concrete Pavement (0" to 4")	430	SY	$ 7.00	$ 3,010
5	Plane & Text Asphalt Concrete Pavement (2")	1,550	SY	$ 4.00	$ 6,200
6	Concrete Flume	140	SY	$ 50.00	$ 7,000
7	Concrete Median	400	SY	$ 200.00	$ 80,000
8	Concrete Curb Type 1	630	LF	$ 30.00	$ 18,900
9	Concrete Sidewalk (4")	50	SY	$ 90.00	$ 4,500
10	Barrier Free Pedestrian Ramp - Type 2 (5' Wide)	2	EA	$ 1,500.00	$ 3,000
11	Barrier Free Pedestrian Ramp - Type 2 (10' Wide)	3	EA	$ 3,000.00	$ 9,000
12	Barrier Free Pedestrian Ramp - Type 7 (5' Wide)	2	EA	$ 1,500.00	$ 3,000
13	Barrier Free Pedestrian Ramp - Type 21 (5' Wide)	1	EA	$ 3,000.00	$ 3,000
14	Barrier Free Pedestrian Ramp - Combo (5' Wide)	2	EA	$ 3,000.00	$ 6,000
15	6" Solid White Pavement Marking	2,110	LF	$ 3.00	$ 6,330
16	6" Broken White Pavement Marking	120	LF	$ 3.00	$ 360
17	6" Solid Yellow Pavement Marking	1,190	LF	$ 3.00	$ 3,570
18	8" Solid White Pavement Marking	100	LF	$ 4.00	$ 400
19	8" Broken White Pavement Marking	20	LF	$ 3.50	$ 70
20	24" Solid White Pavement Marking	180	LF	$ 8.00	$ 1,440
21	24" Solid Yellow Pavement Marking	30	LF	$ 10.00	$ 300
22	White Symbol Word "Only"	1	EA	$ 300.00	$ 300
23	White Symbol Arrow	4	EA	$ 300.00	$ 1,200
24	Pavement Sealer (6")	3,420	LF	$ 1.00	$ 3,420
25	Pavement Sealer (8")	120	LF	$ 2.00	$ 240
26	Pavement Sealer (24")	210	LF	$ 4.00	$ 840
27	Pavement Sealer (Arrow)	4	EA	$ 12.00	$ 48
28	Pavement Sealer (Word)	1	EA	$ 15.00	$ 15
				Roadway Construction Cost Subtotal:	**$ 210,000**

Major Construction Component Allowances:

	Item Description	Notes	Allowance	Item Cost
☑	Mobilization		10%	$ 20,000
☑	Site Preparation/Removals		20%	$ 40,000
☑	Traffic Control		20%	$ 40,000
☑	Signage		5%	$ 10,000
☑	Erosion Control		5%	$ 10,000
☑	Landscaping	Sod & topsoil	10%	$ 20,000
Other:				
			Allowance Subtotal:	**$ 140,000**
			Construction Costs Subtotal	**$ 350,000**
			Construction Contingency (+/-): **30%**	**$ 110,000**
			TOTAL Construction Cost:	**$ 460,000**

City of Boerne

River Road & Plant Avenue Roundabout Intersection Improvements

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 12/24/2025

Project Information:

Name: River Road & Plant Avenue Roundabout Intersection Improvements

Limits: Plant Avenue

Right-of-Way Width (LF): Varies

Length (LF): N/A

Proposed Lane Configuration: Single Lane Roundabout

Description:

Construction of a three leg roundabout intersection with raised medians and pedestrian crossings.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Roadway Excavation	1,170	CY	$ 25.00	$ 29,250
2	Embankment	400	CY	$ 25.00	$ 10,000
3	Asphalt Pavement Removal	2,500	SY	$ 45.00	$ 112,500
4	Concrete Curb Removal	880	LF	$ 15.00	$ 13,200
5	Concrete Sidewalk Removal	290	SY	$ 20.00	$ 5,800
6	Concrete Driveway Removal	100	SY	$ 45.00	$ 4,500
7	Asphalt Driveway Removal	120	SY	$ 35.00	$ 4,200
8	Dense-Graded Hot-Mix Asphalt TY-C (PG 70-22) (4")	570	TON	$ 250.00	$ 142,500
9	Dense-Graded Hot-Mix Asphalt TY-B (PG 64-22) (8")	1,140	TON	$ 225.00	$ 256,500
10	Flexible Base (6")	3,000	SY	$ 25.00	$ 75,000
11	Integral Color and Stamped Concrete Truck Apron	170	SY	$ 250.00	$ 42,500
12	Concrete Median	430	SY	$ 200.00	$ 86,000
13	Monolithic Concrete Median Nose	8	EA	$ 1,500.00	$ 12,000
14	Concrete Driveway	90	SY	$ 130.00	$ 11,700
15	Concrete Curb Type 1	780	LF	$ 30.00	$ 23,400
16	Concrete Curb Type 2	170	LF	$ 35.00	$ 5,950
17	Roundabout Central Island Retaining Wall	100	LF	$ 55.00	$ 5,500
18	Concrete Sidewalk (4")	270	SY	$ 90.00	$ 24,300
19	Concrete Sidewalk (6")	60	SY	$ 120.00	$ 7,200
20	Integral Sidewalk Wall - C1 Curb	110	LF	$ 150.00	$ 16,500
21	Barrier Free Pedestrian Ramp - Type 2	5	EA	$ 1,500.00	$ 7,500
22	Barrier Free Pedestrian Ramp - Type 7	1	EA	$ 1,500.00	$ 1,500
23	Barrier Free Pedestrian Ramp - Type 21	3	EA	$ 3,000.00	$ 9,000
24	6" Solid White Pavement Marking	130	LF	$ 3.00	$ 390
25	6" Solid Yellow Pavement Marking	990	LF	$ 3.00	$ 2,970
26	6" Broken Yellow Pavement Marking	140	LF	$ 3.00	$ 420
27	8" Broken White Pavement Marking	50	LF	$ 3.50	$ 175
28	8" Solid White Pavement Marking	460	LF	$ 4.00	$ 1,840
29	12" Solid White Pavement Marking	120	LF	$ 6.00	$ 720
30	18" Broken White Pavement Marking	40	LF	$ 8.00	$ 320
31	24" Solid White Pavement Marking	150	LF	$ 8.00	$ 1,200
32	24" Solid Yellow Pavement Marking	20	LF	$ 10.00	$ 200
33	White Symbol Word	3	EA	$ 300.00	$ 900
34	White Symbol Arrow	6	EA	$ 300.00	$ 1,800
35	Pavement Sealer (6")	1,250	LF	$ 1.00	$ 1,250
36	Pavement Sealer (8")	500	LF	$ 2.00	$ 1,000
37	Pavement Sealer (12")	120	LF	$ 3.00	$ 360
38	Pavement Sealer (18")	40	LF	$ 3.50	$ 140
36	Pavement Sealer (24")	170	LF	$ 4.00	$ 680
37	Pavement Sealer (Arrow)	6	EA	$ 12.00	$ 72
38	Pavement Sealer (Word)	3	EA	$ 15.00	$ 45
				Roadway Construction Cost Subtotal:	**$ 930,000**

Major Construction Component Allowances:

	Item Description	Notes	Allowance	Item Cost
☑	Mobilization		10%	$ 100,000
☑	Site Preparation/Removals		5%	$ 50,000
☑	Traffic Control		10%	$ 100,000
☑	Signage & Pavement Marking		5%	$ 50,000
☑	Erosion Control		5%	$ 50,000
☑	Utility Adjustments		5%	$ 50,000
☑	Storm Drain Improvements		10%	$ 100,000
☑	Landscaping	Sod & topsoil	3%	$ 30,000
Other:				
☑	ROW Acquisition	2000 SF ROW Acquisition	LS	$ 50,000
☑	Central Island Landscaping	Enhanced Central Island	LS	$ 50,000
			Allowance Subtotal:	**$ 630,000**
			Construction Costs Subtotal	**$ 1,560,000**
			Construction Contingency (+/-): 30%	**$ 470,000**
			TOTAL Construction Cost:	**$ 2,030,000**

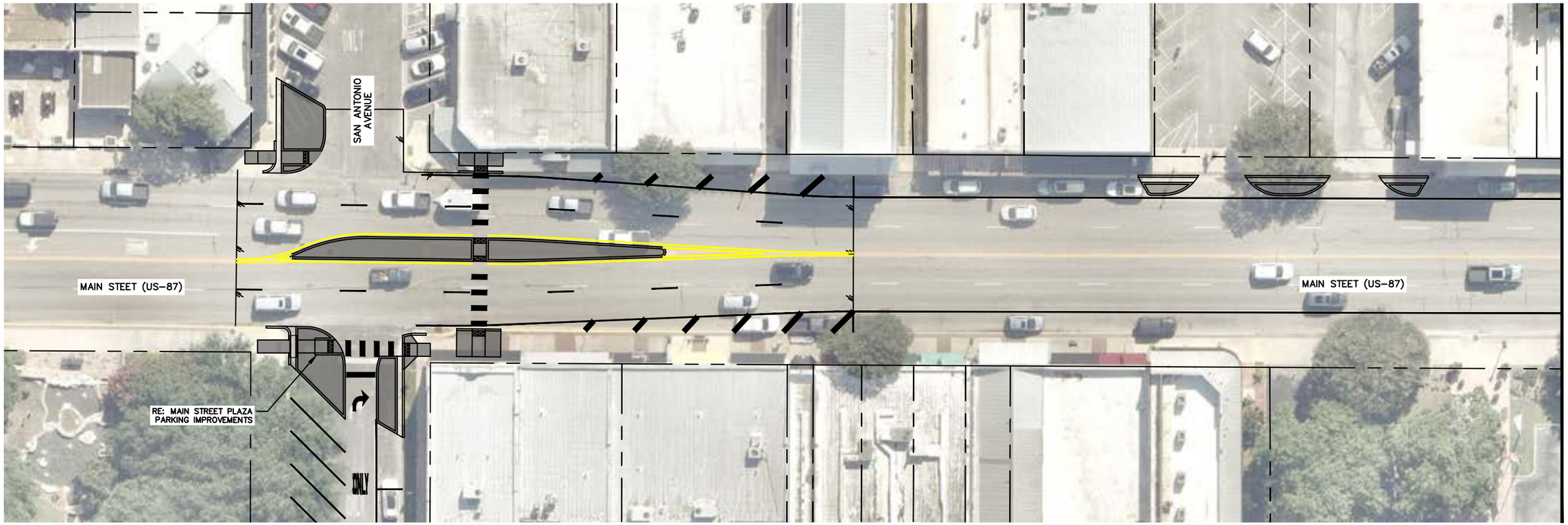
APPENDIX F
Project Selections and Strategies Conceptual Layouts

PARKING COUNTS		
TOTAL NUMBER OF EXISTING SPOTS	TOTAL NUMBER OF PROPOSED SPOTS	DELTA
19	16	-3

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

SCALE: 1" = 40'



CITY OF BOERNE – SS4A SAP
MAIN STREET FROM E. SAN ANTONIO TO E. THEISSEN STREET – PEDESTRIAN IMPROVEMENTS

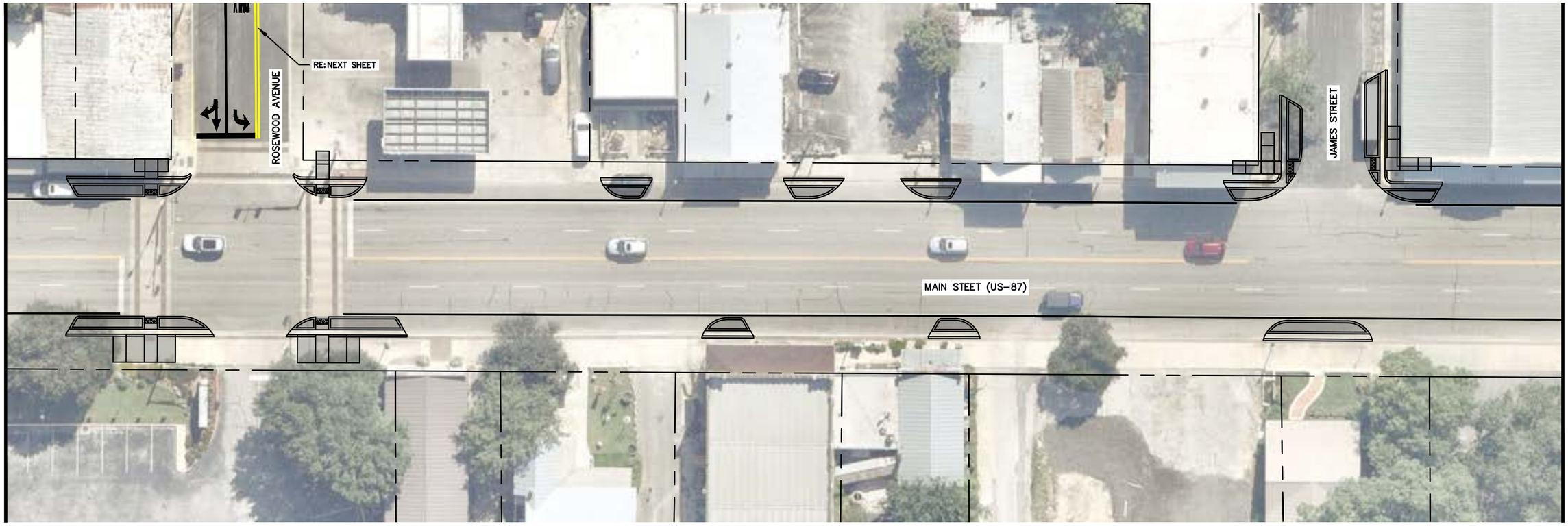
Safety Action Plan BOERNE 2025

PARKING COUNTS		
TOTAL NUMBER OF EXISTING SPOTS	TOTAL NUMBER OF PROPOSED SPOTS	DELTA
19	16	-3

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

SCALE: 1" = 40'



CITY OF BOERNE – SS4A SAP
MAIN STREET FROM E. SAN ANTONIO TO E. THEISSEN STREET – PEDESTRIAN IMPROVEMENTS

Safety Action Plan BOERNE 2025

PARKING COUNTS		
TOTAL NUMBER OF EXISTING SPOTS	TOTAL NUMBER OF PROPOSED SPOTS	DELTA
4	0	-4

NORTH

GRAPHIC SCALE IN FEET
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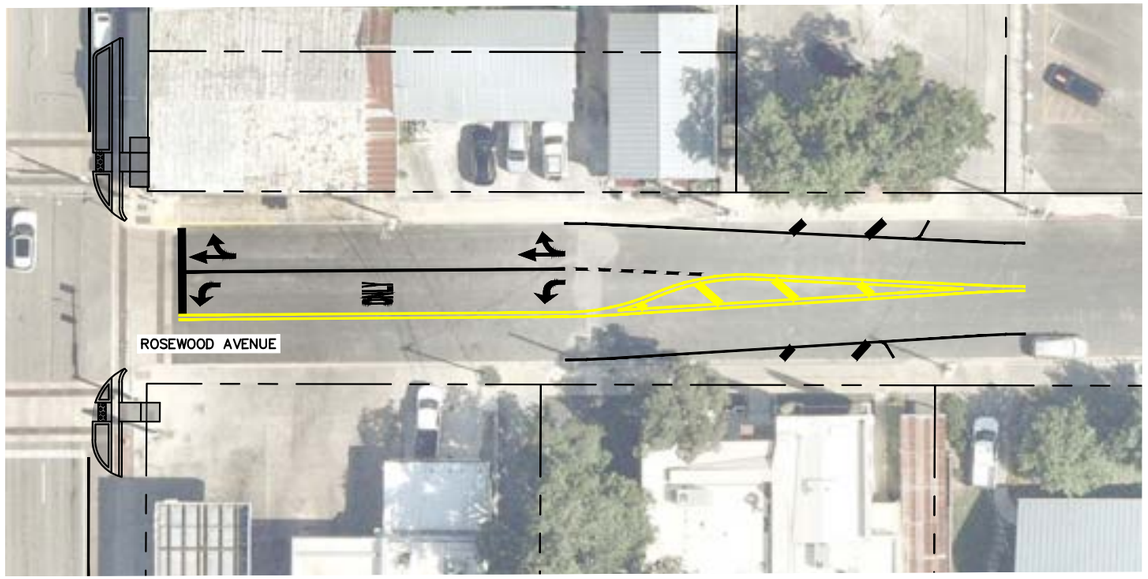
SCALE: 1" = 40'



CITY OF BOERNE – SS4A SAP
MAIN STREET FROM E. SAN ANTONIO TO E. THEISSEN STREET – PEDESTRIAN IMPROVEMENTS

Safety Action Plan BOERNE 2025

PARKING COUNTS		
TOTAL NUMBER OF EXISTING SPOTS	TOTAL NUMBER OF PROPOSED SPOTS	DELTA
24	0	-24

NORTH

GRAPHIC SCALE IN FEET
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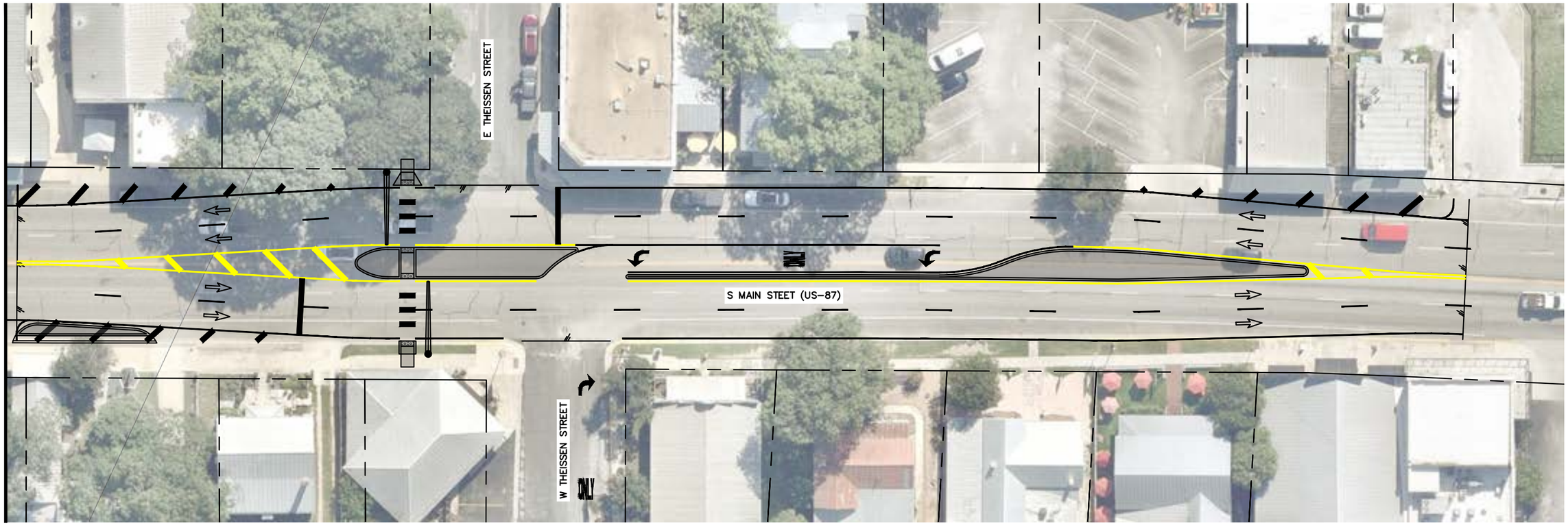
SCALE: 1" = 40'



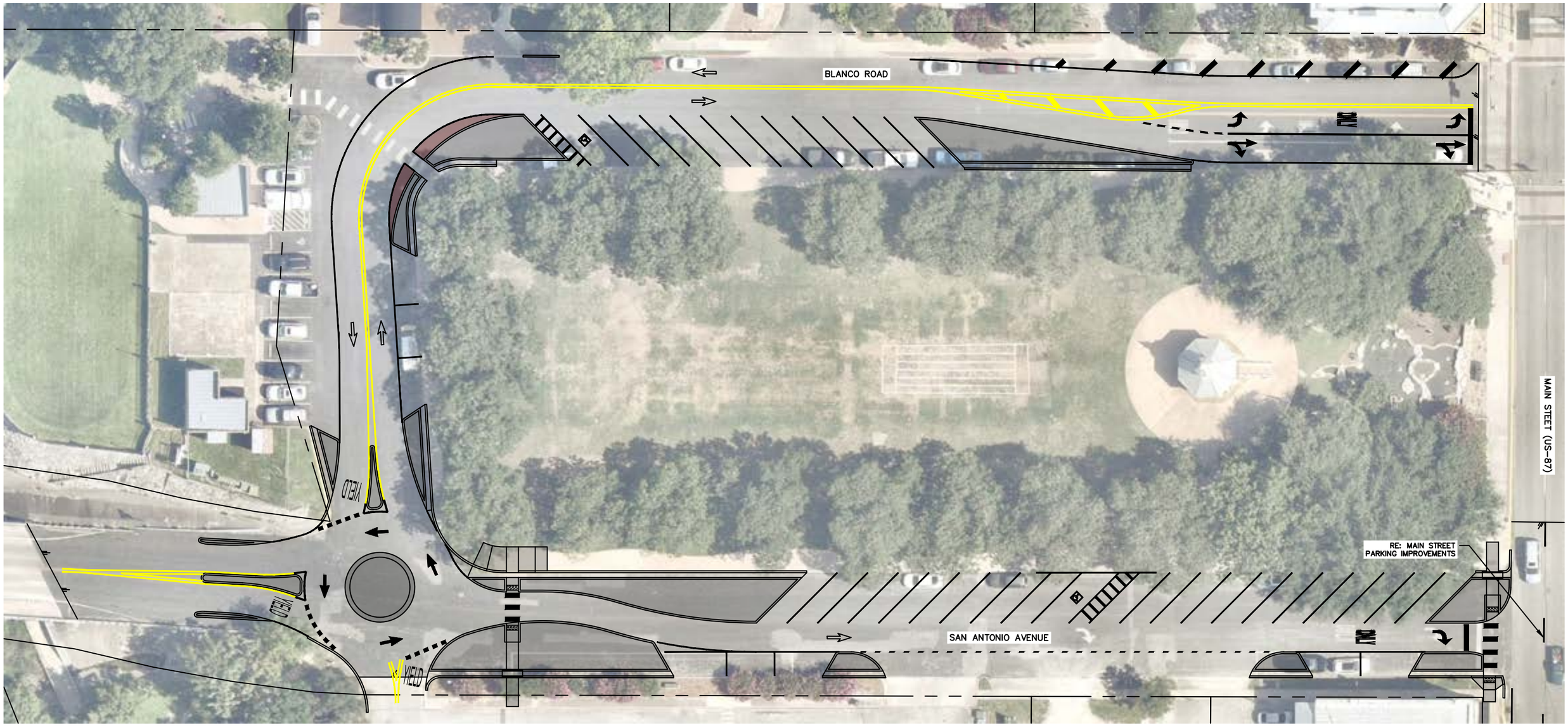
CITY OF BOERNE – SS4A SAP
MAIN STREET FROM E. SAN ANTONIO TO E. THEISSEN STREET – PEDESTRIAN IMPROVEMENTS

Safety Action Plan

PARKING COUNTS		
TOTAL NUMBER OF EXISTING SPOTS	TOTAL NUMBER OF PROPOSED SPOTS	DELTA
53	53	0

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40
SCALE: 1" = 40'



CITY OF BOERNE – SS4A SAP – MAIN STREET PLAZA – PARKING IMPROVEMENTS

Safety Action Plan

PARKING COUNTS		
TOTAL NUMBER OF EXISTING SPOTS	TOTAL NUMBER OF PROPOSED SPOTS	DELTA
13	11	-2

NORTH

GRAPHIC SCALE IN FEET
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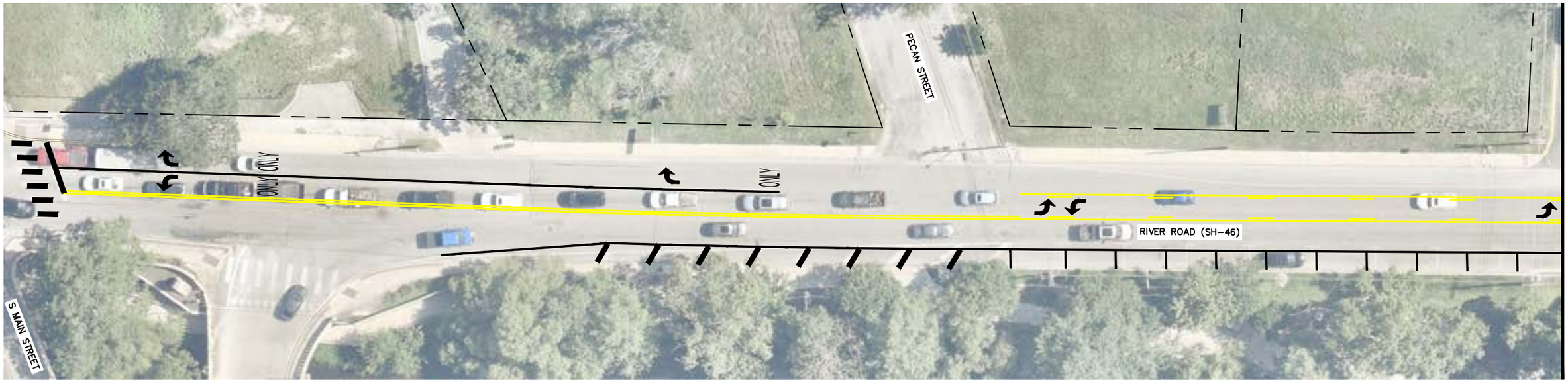
SCALE: 1" = 40'



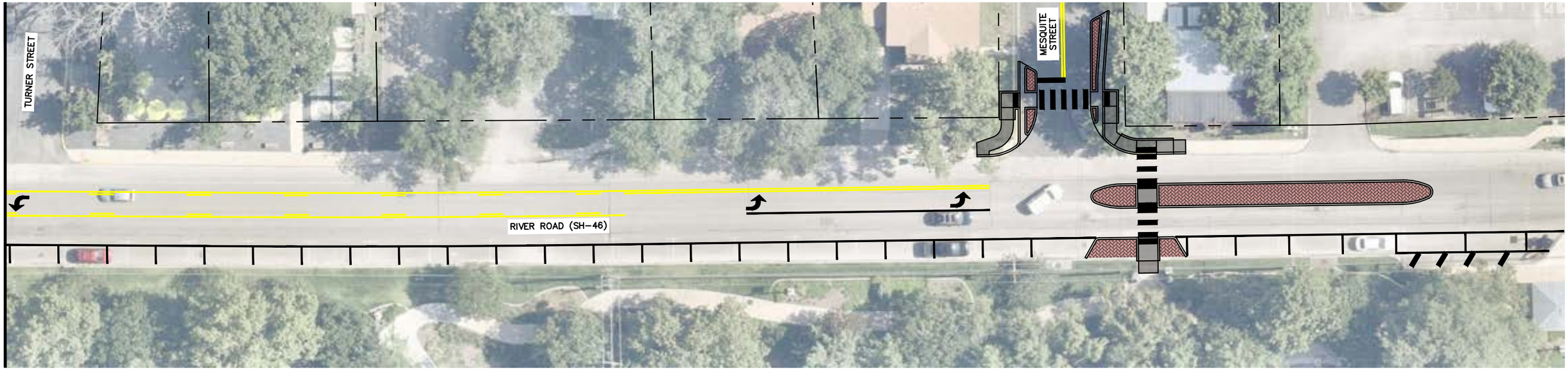
CITY OF BOERNE – SS4A SAP
RIVER ROAD FROM PECAN STREET TO MESQUITE STREET – PEDESTRIAN IMPROVEMENTS

PARKING COUNTS		
TOTAL NUMBER OF EXISTING SPOTS	TOTAL NUMBER OF PROPOSED SPOTS	DELTA
37	28	-9

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

SCALE: 1" = 40'



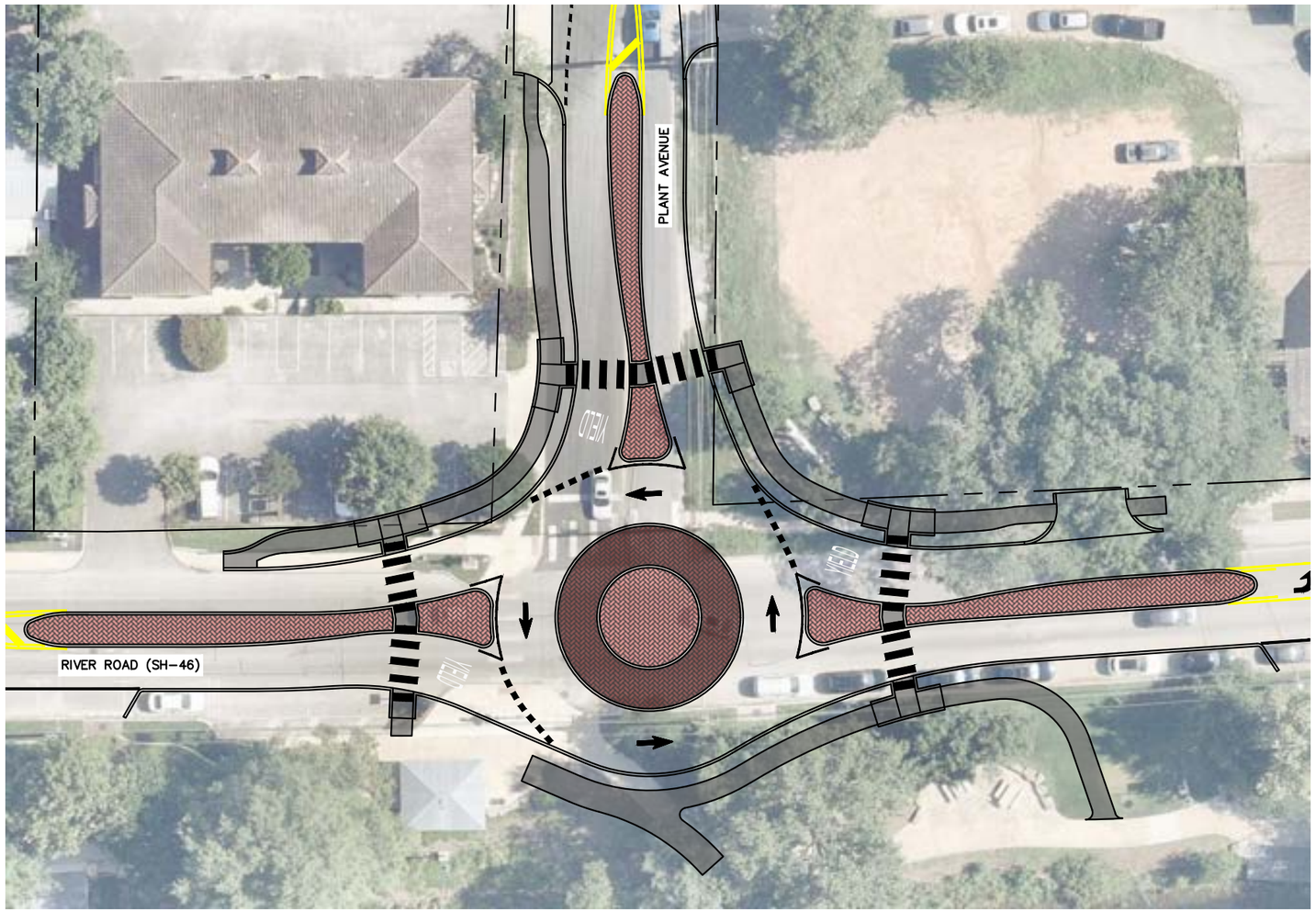
CITY OF BOERNE – SS4A SAP
RIVER ROAD FROM PECAN STREET TO MESQUITE STREET – PEDESTRIAN IMPROVEMENTS

PARKING COUNTS		
TOTAL NUMBER OF EXISTING SPOTS	TOTAL NUMBER OF PROPOSED SPOTS	DELTA
46	15	-31

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

SCALE: 1" = 40'



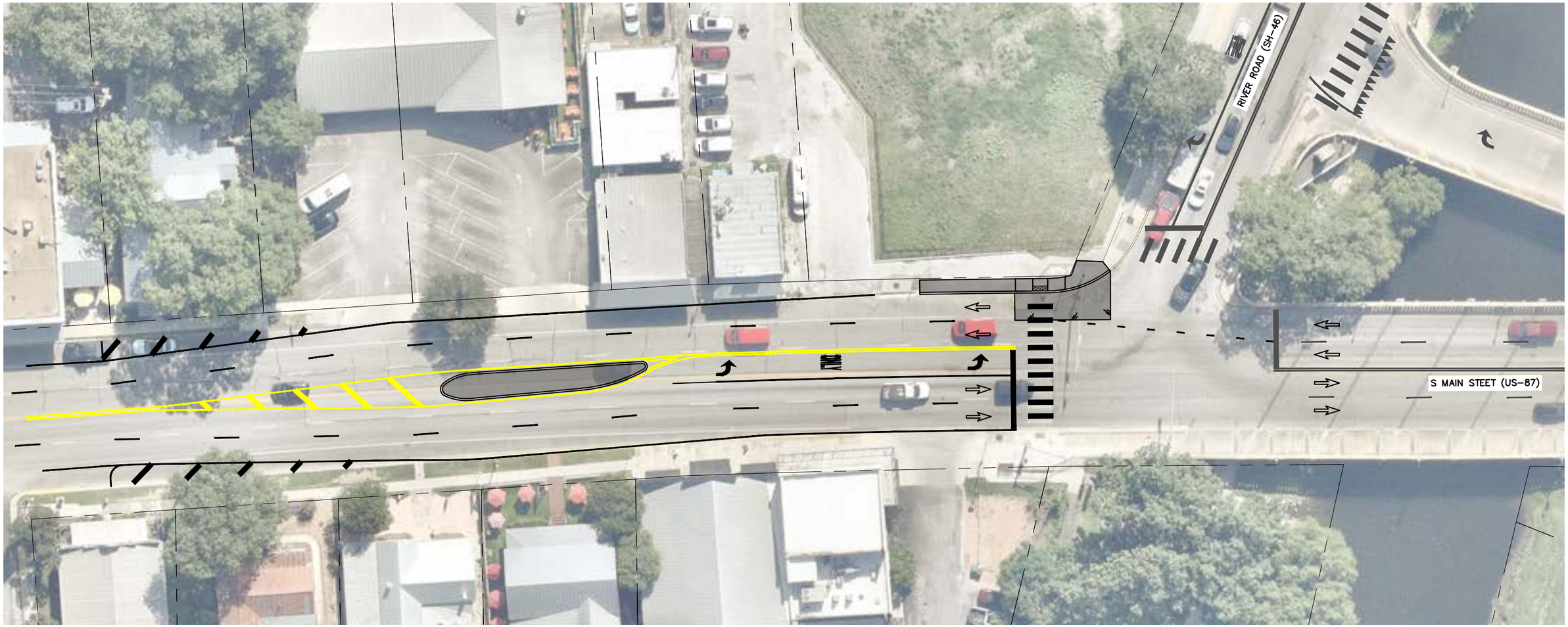
CITY OF BOERNE – SS4A SAP
RIVER ROAD AND PLANT AVENUE – ROUNDABOUT INTERSECTION IMPROVEMENTS

PARKING COUNTS		
TOTAL NUMBER OF EXISTING SPOTS	TOTAL NUMBER OF PROPOSED SPOTS	DELTA
14	1	-13

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

SCALE: 1" = 40'



CITY OF BOERNE – SS4A SAP
MAIN STREET AND RIVER ROAD – INTERSECTION IMPROVEMENTS

Safety Action Plan

CITY OF BOERNE – SS4A SAP
FIVE POINTS – INTERSECTION IMPROVEMENTS

APPENDIX G
City of Boerne Mobility Master Plan, Safety Action Plan

APPENDIX
A

SAFETY ACTION PLAN

Introduction

The purpose of the Mobility Master Plan is to develop a long-range plan that casts a vision for future transportation investment for people who walk, drive, bike, ride, or roll in and around the City of Boerne. A key component of the plan is to not only ensure the implementation not only improves mobility but improves the safety of those users.

The purpose of the Safety Action Plan is to serve as a supplemental resource to the Mobility Master Plan to highlight safety concerns within the City of Boerne and prioritize those projects that improve safety for all users navigating throughout the City of Boerne.

Tracking Progress

Project implementation will be monitored by a committee appointed by City Council that will receive annual reports on the progress made in implementing projects to coincide with annual budget and CIP processes. Once projects are implemented, performance will be measured utilizing the Texas Department of Transportation's (TxDOT) Crash Records Information System (C.R.I.S.), which reports traffic incidents monthly including crash type, crash date, crash time, crash severity, weather conditions, lighting conditions, contributing factors, and more. Performance will compare 6 months of crashes after construction is complete for a project with 6 months of data prior to commencement of construction to compare crash rates and types and avoid analysis of construction-related incidents.

APPENDIX A

SAFETY ACTION PLAN

Safety Analysis

A city-wide safety analysis was performed by evaluating historical crash data for the most recent five-years of available data from 2017 to 2021. Crash data was obtained from the Texas Department of Transportation's (TxDOT) Crash Records Information System (C.R.I.S.) which includes crashes reported on and off system. During this five-year period, a total of 2,456 crashes were reported within the City of Boerne, an average of 491 crashes per year.

2,456 TOTAL CRASHES
FROM 2017 TO 2021

Of the 2,456 crashes reported, approximately 80% where vehicular crashes only. Approximately 81% of crashes resulted in no injuries, whereas 1.5% and less than 1% resulted in serious and fatal injuries, respectively.

CRASH SEVERITY

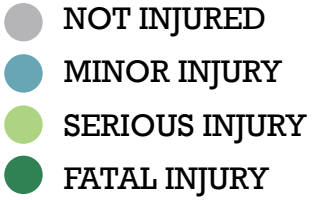
Not Injured	1986	81%
Possible Injury	241	10%
Suspected Minor Injury	180	7%
Suspected Serious Injury	33	1.5%
Unknown Injury	11	0.5%
Fatal Injury	5	0%

CRASH TYPE

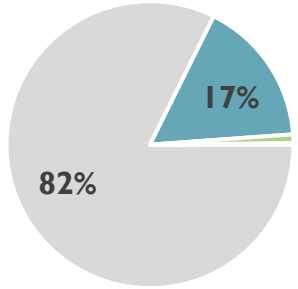
Vehicle	1,967	80%
Fixed Object	284	12%
Other	98	4%
Animal	41	2%
Overturned	33	1%
Pedestrian	21	1%
Bicycle	12	0%

Contributing factors such as surface conditions, lighting, and weather conditions were evaluated over the five-year period. Approximately 9% of crashes occurred during times of inclement weather such as rain, snow, sleet, or fog. Approximately 14% of all crashes occurred under dark conditions and of those 14%, 53% occurred in areas that lacked roadway or intersection lighting.

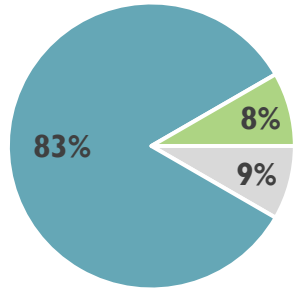
Crash Severity By Mode



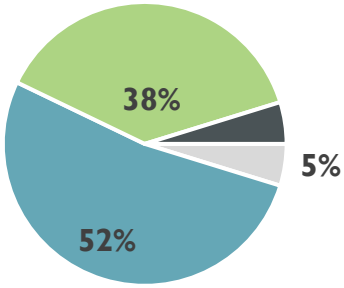
VEHICLE



BICYCLE



PEDESTRIAN

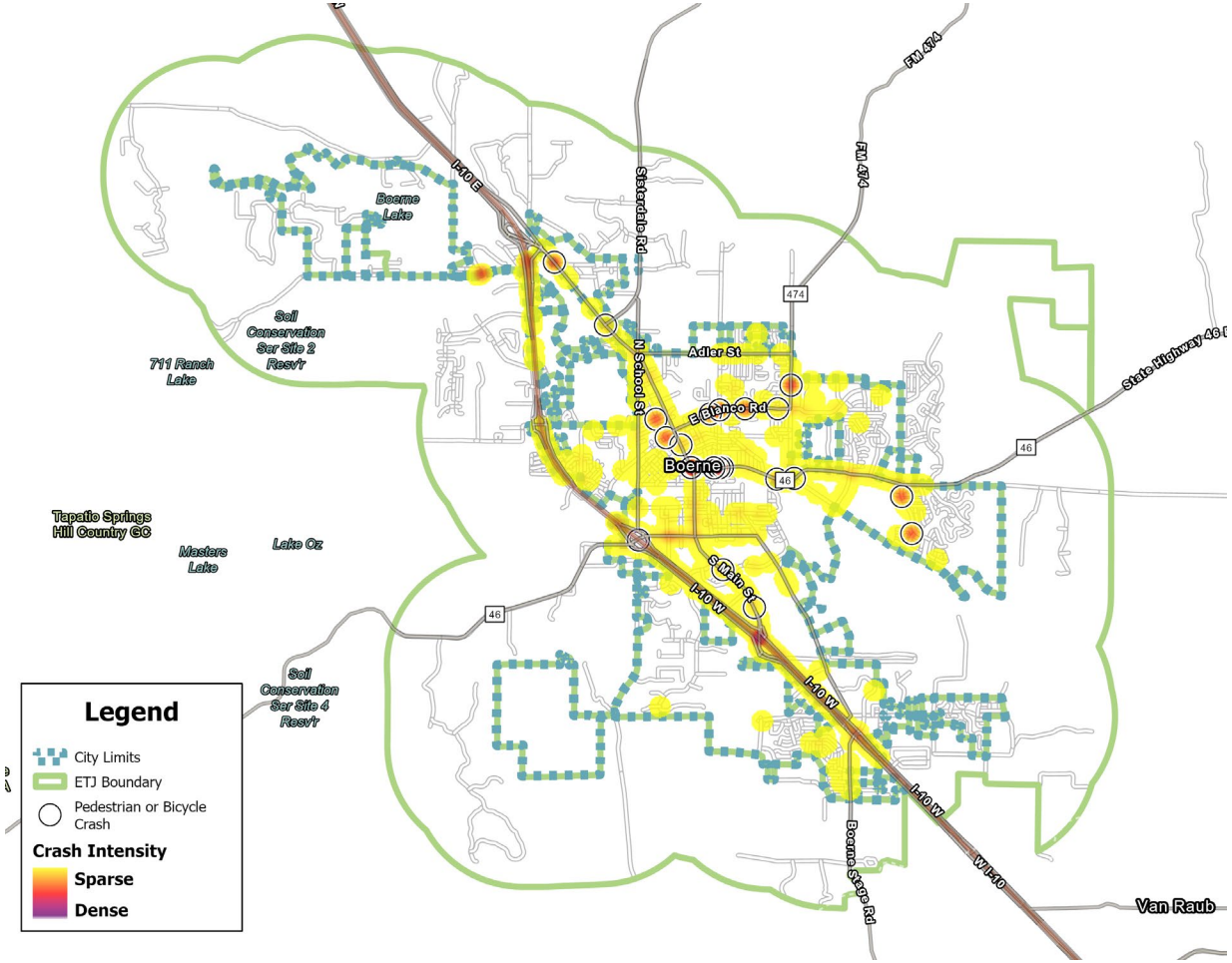


APPENDIX
A

SAFETY ACTION PLAN

Safety Analysis

A geospatial analysis of the 2,456 crashes reported from 2017 to 2021 was performed to identify the locations where crash frequency and severity was the highest as shown below. While some corridors and intersections were able to be identified as higher density locations, the frequency of crashes appear to be consistent throughout Boerne.



Corridors within the City of Boerne that exhibited the highest frequency of crashes occurred primarily on TxDOT facilities and include:

- Interstate 10
- Johns Road
- E Blanco Rd
- Main St
- River Rd
- Esser Rd

Corridors that exhibited the highest frequency of bicycle and/or pedestrian crashes included:

- Blanco Road
- Main Street
- School Street

APPENDIX
A

SAFETY ACTION PLAN

Engagement and Collaboration

The Mobility Master Plan was developed with continuous public engagement and collaboration to ensure the needs and desires of the community were reflected in the plan. A combination of in-person and virtual public engagement methods were employed to maximize public participation throughout the process. To complement these public engagement efforts, an Advisory Committee was formed to serve as representatives from the community to provide additional insight into the needs and desires of the community as well as to review and provide feedback on recommended projects. Committee members included representatives from City of Boerne Council, City of Boerne Planning and Zoning Commission, Boerne Independent School District, Texas Parks and Wildlife, and Cibolo Nature Center.

Throughout the development of the Mobility Master Plan, two open houses were held. Open House I was held on Thursday, March 3, 2022 to introduce the goals and objectives of the Mobility Master Plan, present existing conditions, and gather input from the community on perceived concerns, needs, and desires on mobility within the City of Boerne. Geospatial safety analysis was presented at this Open House. Open House II was held on Tuesday, May 17, 2022 to present the recommended bicycle and pedestrian, intersection, and roadway projects and obtain input from the community. Prioritization criteria and results for projects, including safety criteria, were presented at this Open House. In addition to the open houses, all information available at each open house was available on the project website for public review and comment throughout the duration of the process.

In addition, a business stakeholder meeting was held on Thursday, March 8, 2022 to engage local business owners to introduce the plan and obtain input on concerns, needs, and desires for mobility within the City of Boerne. Attendees were encouraged to stay engaged throughout the remainder of the process.

During engagement, safety concerns expressed by the community included a lack of connectivity for bicycle and pedestrian users and specific safety hazards at key congested intersections.

For more information regarding the engagement process, see Chapter 4 of the Mobility Master Plan.

APPENDIX
A

SAFETY ACTION PLAN

Project Selection

Projects were developed in three categories: Bicycle and Pedestrian, Intersection, and Roadway. Within each of these categories, projects were ranked based on several categories, one of which was safety. As a result of projects being ranked on several categories, projects with the highest safety need did not consistently rank high across all categories. Therefore, a safety prioritization matrix was developed to rank projects solely on their need and potential for safety improvement as a supplemental resource to the Short-Term Capital Improvement Plan presented within the Mobility Master Plan. Projects ranked by safety improvement potential are shown below. For project descriptions, see the Short-Term Capital Improvement Plan provided in Chapter 7.

In addition to projects, some safety strategies identified to be implemented City-wide include conversion of permissive left turn signals to flashing yellow arrows, restriping crosswalks with high-visibility markings, implementation of safety lighting where lacking on existing overhead power poles and signals, and enhancing mid-block pedestrian crossings with pedestrian hybrid beacons or rectangular rapid flashing beacons, as has recently been implemented in a PHB on the Old No. 9 Trail. Projects are planned to be implemented as part of the annual CIP budget process and as funding becomes available, but is not programmed at this time into any budgets.

Prioritized Safety Project List: Bicycle and Pedestrian Projects

1. **South Main Street at River Road Sidewalk Reconstruction**
2. **Johns Road Shared Use Path**
3. **Esser Road Shared Use Path**
4. **South Plant Avenue Bike Lane**
5. **Rosewood Avenue Bike Lane**
6. **Old No. 9 Greenway Connection**
7. **Cibolo Creek Trail Extension 1**
8. **Old No. 9 Greenway Extension 4**
9. **Rosewood Avenue Bike Lane**
10. **Old No. 9 Greenway Extension 2**
11. **Cibolo Creek Trail Extension 3**
12. **Currey Creek Trail Extension 1**

APPENDIX
A

SAFETY ACTION PLAN

Project Selection

Prioritized Safety Project List: Intersection Projects

1. River Road & Herff Road/Esser Road Turn-Lane Improvements (Short-Term)
2. River Road & Herff Road/Esser Road Intersection Improvements (Long-Term)
3. Charger Boulevard & SH 46 Turn-Lane Improvements
4. Main Street & Bandera Road Intersection Improvements
5. Main Street & River Road Intersection Improvements
6. Main Street & Blanco Road Traffic Signal Improvements
7. Scenic Loop Road & Cascade Cavern Traffic Signal Installation (Committed)
8. Main Street & School Street Roundabout
9. Old San Antonio Road & Herff Road Intersection Improvements
10. Main Street & Herff Road Turn-Lane Improvements
11. Sisterdale Cutoff & Adler Street Intersection Improvements (Short-Term)
12. Sisterdale Cutoff & Adler Street Roundabout (Long-Term)
13. Esser Road & Blanco Road Traffic Signal Improvements (Short-Term)
14. School Street & Johns Road Roundabout
15. Copper Creek/Esperanza Boulevard & SH 46 Intersection Improvements
16. Esser Road & Blanco Road/Bentwood Drive Roundabout (Long-Term)
17. Old San Antonio Road & Cascade Cavern Roundabout (Committed)
18. Esser Road & Adler Street Roundabout (Long-Term)
19. Esser Road & Adler Street Turn-Lane Improvements (Short-Term)
20. Main Street & Johns Road Turn-Lane Improvements

APPENDIX
A

SAFETY ACTION PLAN

Project Selection

Prioritized Safety Project List: Roadway Enhancement Projects

1 River Road Corridor Study
2 Main Street Corridor Study
3 Esser Road Restriping
4 School Street Corridor Study
5 Scenic Loop Road Widening
6 Johns Road Widening
7 Adler Street Widening
8 W Blanco Road Reconstruction
9 Ranger Creek Road Widening
10 Old San Antonio Road Widening
11 Parkway Drive Reconstruction
12 Cascade Cavern Widening
13 Upper Cibolo Creek Road Widening
14 W Kronkosky Street Reconstruction
15 N Shooting Club Road Reconstruction
16 Cascade Cavern Improvements
17 Coughran Road Realignment and Widening
18 Johns Road Realignment and Widening