



# Universal City **SAFETY ACTION PLAN**

**APRIL 21, 2026**

# Table of Contents

|                                                           |           |                                                        |           |
|-----------------------------------------------------------|-----------|--------------------------------------------------------|-----------|
| <b>Acknowledgement.....</b>                               | <b>1</b>  | <b>Online Engagement .....</b>                         | <b>28</b> |
| <b>Executive Summary.....</b>                             | <b>2</b>  | <b>In-Person Engagement.....</b>                       | <b>29</b> |
| <b>Chapter 1: Leadership Commitment.....</b>              | <b>7</b>  | <b>Results.....</b>                                    | <b>30</b> |
| <b>Safe Systems Approach.....</b>                         | <b>8</b>  | <b>Transportation Priorities.....</b>                  | <b>30</b> |
| <b>Chapter 2. Planning Structure.....</b>                 | <b>10</b> | <b>Focus Location Feedback.....</b>                    | <b>31</b> |
| <b>Safety Task Force.....</b>                             | <b>10</b> | <b>Systemic Countermeasures.....</b>                   | <b>31</b> |
| <b>Vision.....</b>                                        | <b>11</b> | <b>Chapter 6. Strategy and Project Selections.....</b> | <b>32</b> |
| <b>Goals and Objectives.....</b>                          | <b>12</b> | <b>Infrastructure Projects.....</b>                    | <b>32</b> |
| <b>Implementation and Accountability.....</b>             | <b>12</b> | <b>Non-Infrastructure Projects.....</b>                | <b>49</b> |
| <b>Chapter 3. Safety Analysis.....</b>                    | <b>13</b> | <b>Chapter 7. Policy and Process Changes.....</b>      | <b>50</b> |
| <b>Crash Trends.....</b>                                  | <b>13</b> | <b>Policy and Procedures Review.....</b>               | <b>51</b> |
| <b>Methodology.....</b>                                   | <b>17</b> | <b>Chapter 8. Progress and Transparency.....</b>       | <b>52</b> |
| <b>Systemic Safety Analysis.....</b>                      | <b>17</b> | <b>Monitoring Progress.....</b>                        | <b>52</b> |
| <b>Countermeasure Selection.....</b>                      | <b>18</b> | <b>Chapter 9. Action Plan.....</b>                     | <b>53</b> |
| <b>Targeted Safety Analysis.....</b>                      | <b>18</b> | <b>Implementation Schedule.....</b>                    | <b>53</b> |
| <b>High Injury Network.....</b>                           | <b>19</b> | <b>Partners.....</b>                                   | <b>54</b> |
| <b>Focus Locations and Prioritization.....</b>            | <b>21</b> | <b>Funding Sources.....</b>                            | <b>54</b> |
| <b>Chapter 4. Safety Outcomes for All Road Users.....</b> | <b>24</b> | <b>Action Plan Summary.....</b>                        | <b>55</b> |
| <b>Communities of Concern.....</b>                        | <b>24</b> | <b>Abbreviations and Definitions.....</b>              | <b>58</b> |
| <b>Local Demographics and Community Context.....</b>      | <b>26</b> | <b>Appendices.....</b>                                 | <b>60</b> |
| <b>Chapter 5. Engagement and Collaboration.....</b>       | <b>27</b> |                                                        |           |

## Acknowledgements

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

### Universal City Council Members

- **Tom Maxwell** - Mayor
- **Christina Fitzpatrick** – Mayor Pro Tem
- **Bear Goolsby** – Place 2
- **Bernard Rubal** – Place 3
- **Phil Vaughan** – Place 4
- **William Shelby** – Place 5
- **Lori Putt** – Place 6

### Safety Task Force

- **Phil Vaughan** - Councilmember
- **Brandon Peterson** – Assistant Public Works Director
- **Michael Cassata, AICP, CPM** – Development Services & Economic Development Director
- **Randy Luensmann** – Director of Public Works
- **Bryan Kuhlmann** – Universal City Economic Development Corporation Member
- **Johnny Simens** – Chief of Police
- **Todd Perna, CFI** – Fire Chief
- **Stephen Rios** – Lieutenant
- **Jeff Vaughn** - Captain

### City Staff

- **Kim Turner, CPM** – City Manager
- **Randy Luensmann,** – Director of Public Works
- **Kathy Williams** – Communications Director

### Kimley-Horn

- **Dawniele Metsker-Galarza, P.E., PTOE**
- **Nolan Pierce, P.E.**
- **Alfredo Lugo**
- **Michael Lyssy, EIT**
- **Allison Neira, EIT**
- **Macie Damron**

## 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.

# Executive Summary

The Universal City Comprehensive Safety Action Plan (CSAP) establishes a clear, data-driven roadmap to **eliminate roadway fatalities and serious injuries for all road users by 2050**. Developed through funding from the U.S. Department of Transportation's Safe Streets and Roads for All (SS4A) program, this Plan reflects Universal City's commitment to Vision Zero and the Safe System Approach, recognizing that traffic-related deaths and severe injuries are preventable and that responsibility for safety is shared across the transportation system.

## Universal City 2020-2024 Crash Statistics



The CSAP was guided by a multidisciplinary Safety Task Force composed of City staff, public safety representatives, and technical experts with direct knowledge of Universal City's roadway network. The planning process combined analysis of five years (2020-2024) of crash data with meaningful community engagement to better understand local safety challenges, risk factors, and priorities. This integrated approach ensured that the Plan addresses both immediate safety concerns and long-term, systemic issues affecting people who drive, walk, bicycle, and use alternative mobility devices.

## Safety Needs

A comprehensive safety analysis identified crash trends, high-risk corridors, and intersections with a concentration of fatal and serious injury crashes. The analysis revealed that while overall crash severity has declined in recent years, total crash frequency remains elevated, and vulnerable roadway users particularly pedestrians and bicyclists are over-represented in fatal crash outcomes. Using both targeted and systemic methodologies, the City developed a High-Injury Network to focus resources where they can have the greatest impact.

**16%** of roadway miles account for **65%** of total crashes and **100%** of fatal and serious injury crashes

## Strategic Safety Goals

- Improve Safety for All Road Users**
- Make sure design accommodates all Road Users**
- Improve roadway conditions and system coordination that support timely and safe emergency response**

**Universal City Limits**  
**Universal City ETJ**  
**High-Injury Network**

**Severity**  
 ♦ A - Serious Injury  
 ✕ K - Fatal

0 1/4 1/2 Miles

Equity considerations are embedded throughout the CSAP. Although Universal City does not fall within USDOT designated Underserved Community census tracts; local demographic characteristics, land use patterns, and safety outcomes highlight areas where residents face elevated transportation risk. The City's proximity to Randolph Air Force Base, regional commuting activity to San Antonio and New Braunfels, and the presence of schools and neighborhood destinations create conditions where vulnerable users may experience disproportionate exposure to high-speed traffic. These locally observed conditions informed the Safety Task Force's identification of underserved areas and the prioritization of safety strategies consistent with SS4A guidance.

Public engagement played a central role in shaping the Plan. Through online tools, interactive mapping, surveys, and in-person pop-up events, residents shared their experiences, identified locations of concern, and helped prioritize safety investments. Community input reinforced the need for intersection improvements, speed management, pedestrian safety enhancements, and operational strategies that address dangerous driving behaviors.

**425** responses to outreach events

**70+** pins dropped  
on the interactive map

## Implementation Plan

The CSAP recommends a coordinated set of infrastructure, systemic, non-infrastructure, and policy actions designed to reduce fatal and serious injury crashes. Priority projects focus on high-injury network corridors and intersections, while systemic countermeasures such as enhanced crossings, school zone flashers, emergency vehicle preemption, and speed-management treatments, support broader, citywide safety improvements. Complementary non-infrastructure actions, including Safe Routes to School planning, ADA transition planning, and policy updates, establish a strong foundation for long-term success.

Implementation of the CSAP is supported by a clear action plan that identifies timeframes, responsible partners, and potential funding sources. Actions are categorized as short-, medium-, long-term, or ongoing to balance near-term “quick wins” with sustained, transformative change. Progress will be tracked through transparent reporting, performance monitoring, and continued coordination with regional partners, ensuring accountability over time.

Together, the strategies outlined in this CSAP moves Universal City beyond incremental safety improvements and toward a safer, more resilient transportation system. Through sustained leadership, partnership, and commitment, Universal City is positioned to make measurable progress toward its Vision Zero goal.

## Strategy and Project Selections

**Infrastructure Projects** that are location-specific and systemic projects include:

- Focus intersection projects, detailed in **Chapter 6**.
- Focus corridor projects, detailed in **Chapter 6**.
- Systemic projects, outlined in **Chapter 6**, include:



**Non-Infrastructure Projects** include:

- FM 78 & Pat Booker Road - Perform an Intersection Control Evaluation (ICE)
- Safe Routes to School Plan
- ADA Transition Plan

**Policy and Procedure Changes** include design guidance updates to emphasize safety for all road users and operating procedures that incorporate the safe system approach:

- Formalize a Transportation Safety Task Force to advance Vision Zero.
- Adopt comprehensive Traffic Impact Analysis (TIA) guidelines.
- Establish multimodal street design standards.
- Implement access management standards.
- Develop traffic signal design standards
- Adopt traffic calming policies within zoning and subdivision regulations.
- Standardize crosswalk guidance.

## Chapter 1: Leadership Commitment Purpose

The Universal City Safety Action Plan serves as the City’s guiding framework for creating a safer, more accessible transportation system for all road users in Universal City, Texas, including people who drive, walk and bicycle. The purpose of this CSAP is to identify, prioritize, and implement proven transportation safety strategies and countermeasures that reduce the risk and severity of crashes, with a long-term focus on preventing loss of life and serious injuries on the City’s roadways.

The Comprehensive Safety Action Plan (CSAP) establishes a data-driven and community-informed approach to traffic safety by analyzing crash trends and roadway conditions, engaging residents and stakeholders to better understand safety concerns, and developing project, program, and policy recommendations that address both immediate risks and systemic safety challenges. The plan also provides a clear implementation framework that emphasizes accountability, coordination with partner agencies, progress tracking, and transparency to ensure that safety investments deliver measurable results over time.

Through adoption of this CSAP, Universal City and its partner agencies affirm their commitment to a shared **vision of zero fatal and serious injury crashes on City maintained and operated roads by 2050**, recognizing that traffic-related deaths and severe injuries are preventable. This commitment reflects a proactive, collaborative, and continuous approach to improving transportation safety and enhancing quality of life for everyone who lives, works, and travels through Universal City.

## Safe Streets and Roads for All (SS4A) Program History

Vision Zero is a global road safety strategy focused on eliminating traffic fatalities and serious injuries by recognizing that crashes are preventable and require a multidisciplinary, systems-based approach. First implemented in Sweden in the 1990s, Vision Zero has since been adopted by communities worldwide. In Texas, this philosophy was reinforced in May 2019 when the Texas Transportation Commission adopted the Road to Zero policy, directing TxDOT to pursue the elimination of traffic fatalities statewide by 2050.

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 planning and implementation efforts aimed at preventing roadway deaths and serious injuries. In support of this effort, USDOT released the National Roadway Safety Strategy (NRSS) in January 2022, which embraces the Safe System Approach and emphasizes designing roadways that both reduce the likelihood of crashes and minimize harm when crashes occur. This strategy is further reinforced through USDOT’s Complete Streets guidance, which promotes roadway designs that safely accommodate all users.

Aligned with Vision Zero, the NRSS, and the SS4A program, Universal City was awarded a \$160,000 FY24 SS4A Planning and Demonstration Grant in 2024 to develop a plan that establishes a data-driven, community-informed strategy to eliminate roadway fatalities and serious injuries.

# Safe Systems Approach

The Safe System Approach is guided by the USDOT's NRSS and the foundation that will support Universal City in achieving its goal of reaching zero fatal and serious injury crashes on streets and roads within the City. This approach acknowledges both human mistakes and human vulnerability and is design to protect all roadway users.

The principles of the Safe Systems Approach include the following:

- 1 Death or Serious Injury is Unacceptable** - The Safe System Approach prioritizes the elimination of crashes that result in death and serious injuries on roadways.
- 2 Humans Make Mistakes** - People will inevitably make mistakes and decisions that can lead or contribute to crashes, but the transportation system can be designed and operated to accommodate certain types and levels of human mistakes and avoid death and serious injuries when a crash occurs.
- 3 Humans are Vulnerable** - People have physical limits for tolerating crash forces before death or serious injury occurs; therefore, it is critical to design and operate a transportation system that is human-centric and accommodates physical human vulnerabilities.
- 4 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.
- 5 Safety is Proactive** - Rather than responding to tragedy, measures should be taken beforehand to identify and mitigate potential risk.
- 6 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 elements outlined by the U.S. Department of Transportation (USDOT) that correspond and support implementation of the Safe Systems Approach:

- 1 Safer People** - Encourage safe, responsible behavior by people who use our roads and create conditions that prioritize their ability to reach their destination unharmed.
- 2 Safer Roads** - Design roadway environments to mitigate human mistakes and account for injury tolerances, to encourage safer behaviors, and to facilitate safe travel by most vulnerable users.
- 3 Safer Vehicles** - Expand the availability of vehicle systems and features that help to prevent crashes and minimize the impact of crashes for both occupants and non-occupants.
- 4 Safer Speeds** - Promote safer speeds in all roadway environments through a combination of thoughtful, context appropriate roadway design, targeted education and outreach campaigns, and enforcement.
- 5 Post-Crash Care** - Enhance the survivability of crashes through expedient access to emergency medical care, while creating a safe working environment for vital first responders and preventing secondary crashes through robust traffic incident management practices.



# Chapter 2. Planning Structure

## Safety Task Force

The Safety Task Force was established to oversee the CSAP development, implementation and monitoring. The Safety Task Force was comprised of City staff and representatives from various organizations within Universal City: fire, police, City Engineer and economic development. Based on their individual areas of professional expertise, as well as familiarity with Universal City’s transportation network, each Safety Task Force member uniquely contributed to the CSAP development. The Saftey Task Force Meetings were held on the following days:

- Meeting 1: Kick-Off & Goal-Setting, Safety Analysis (High-Injury Network) – September 2, 2025
- Meeting 2: Project Selection and Strategies, Priority Considerations – October 28, 2025
- Meeting 3: Implementation Plan – November 20, 2025

The Safety Task Force served as champions and ambassadors of the plan throughout the process and will continue to raise awareness and educate the public on its implementation. During the Kick-Off and Goal Setting meeting the Safety Task Force, a mission statement was developed to articulate the plan’s mission and outline its commitment to serving the community and stakeholders in the future.

### Safety Task Force

- **Phil Vaughan** - *Councilmember*
- **Brandon Peterson** – *Assistant Public Works Director*
- **Michael Cassata, AICP, CPM** – *Development Services & Economic Development Director*
- **Randy Luensmann** – *Director of Public Works*
- **Bryan Kuhlmann** – *Universal City Economic Development Corporation Member*
- **Johnny Simens** – *Chief of Police*
- **Todd Perna, CFI** – *Fire Chief*
- **Stephen Rios** – *Lieutenant*
- **Jeff Vaughn** - *Captain*

## Vision

Early in the development of the CSAP, the Safety Task Force identified establishing a clear, shared vision as a critical foundation for advancing transportation safety in Universal City. Through facilitated discussion and collaboration among City departments and partner agencies, the Safety Task Force assessed community needs, local roadway conditions, and recurring safety concerns to define a purpose that reflects both the City’s values and its long-term safety aspirations. This process ensured that the CSAP is grounded in local context while aligning with state and federal safety initiatives.

Eliminate roadway fatalities and serious injuries on Universal City roadways by 2050 by planning, developing, and implementing projects and policies.

This vision reflects Universal City’s commitment to a proactive and data-driven approach to safety that prioritizes human life and recognizes that serious crashes are preventable. Achieving this vision requires addressing the full transportation system to include streets, intersections, land use, operations, and behavior to ensure that people of all ages and abilities can travel safely whether they are driving, walking, bicycling, or utilizing alternative mobility devices.

## Goals and Objectives

To advance this vision, the Safety Task Force established a set of goals and objectives that guide decision-making and investment priorities. These goals emphasize reducing fatal and serious injury crashes, improving safety for vulnerable road users, addressing high-risk locations and behaviors, and enhancing coordination among City departments and partner agencies. The goals are supported by measurable objectives and actionable strategies that focus on both near-term safety improvements and long-term systemic change.

The CSAP goals and associated objectives, summarized in **Table 1**, provide a structured framework for selecting projects, advancing policy changes, and allocating resources in a manner consistent with the City’s Vision Zero commitment. Together, these goals and objectives, reflect a balanced approach that integrates all the “E”’s of road safety: Engineering, Education, Enforcement, Engagement, Emergency Response, and Evacuation.

| Goal                                                                                               | Objectives                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Improve Safety for All Road Users                                                                  | <ul style="list-style-type: none"><li>Identify high-crash locations and contributing factors.</li><li>Improve school routes through enhanced school zone design and safety measures.</li><li>Implement targeted, high-impact safety countermeasures at locations with a history of severe crashes.</li></ul>                                                      |
| Make Sure Design Accommodates All Road Users                                                       | <ul style="list-style-type: none"><li>Prioritize infrastructure investments that protect vulnerable road users, including pedestrians, bicyclists, older adults, children, and people with disabilities.</li><li>Implement proven traffic-calming and speed-management strategies that reduce crash severity and likelihood of fatal or serious injury.</li></ul> |
| Improve roadway conditions and system coordination that support timely and safe emergency response | <ul style="list-style-type: none"><li>Improve emergency response times through enhanced coordination, traffic signal upgrades and detection, access, and roadway design considerations.</li><li>Identify and address physical, operational or procedural barriers that delay post-crash care.</li></ul>                                                           |

Table 1. Goals and Objectives

## Implementation and Accountability

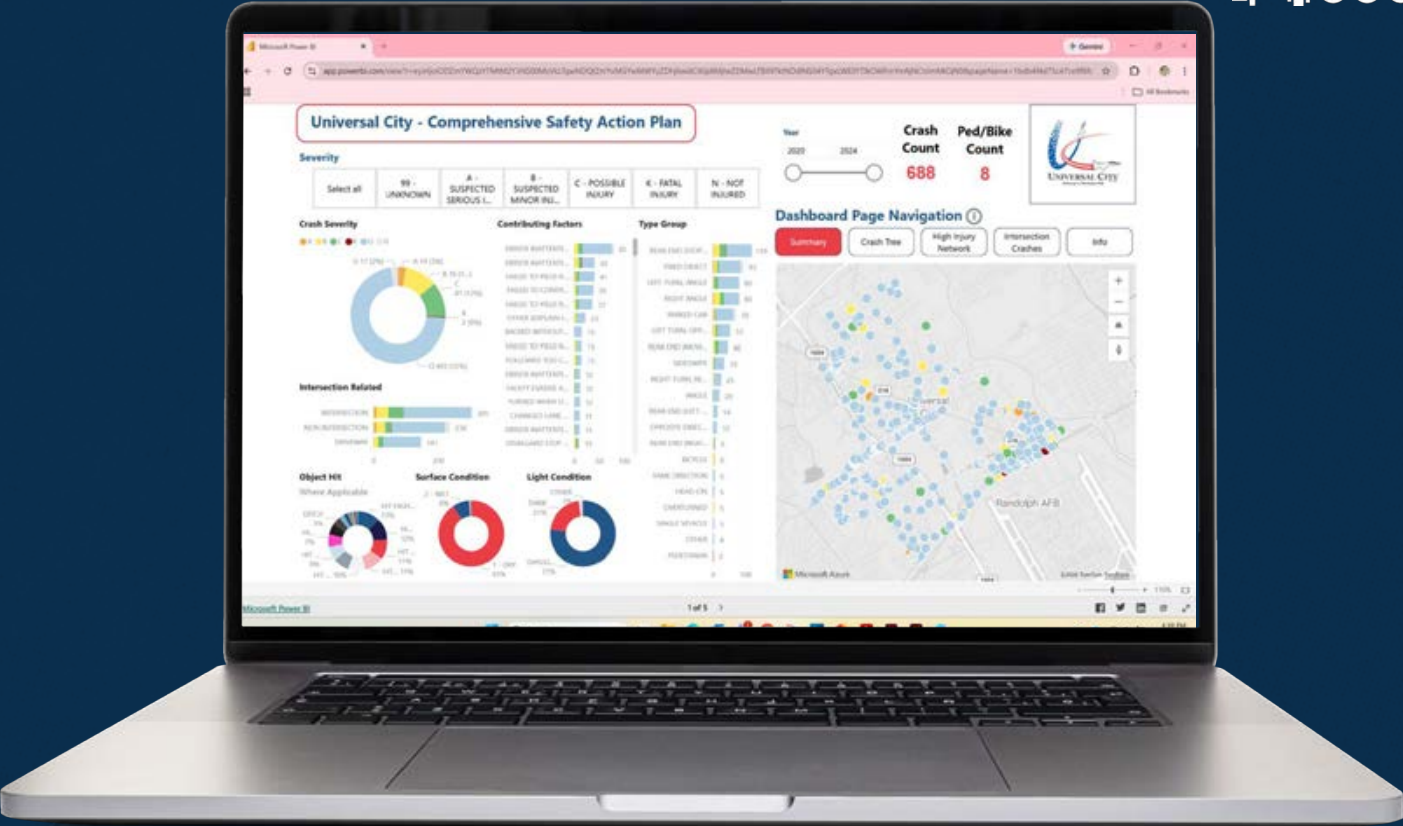
The goal statements and corresponding actions are compiled into a comprehensive implementation program that serves as a roadmap for Universal City and its partners on the path toward zero roadway deaths and serious injuries. This program identifies priority projects, responsible parties, potential funding sources, and performance measures to track progress over time. By linking the vision and goals directly to implementation, the CSAP ensures that safety commitments translate into tangible improvements and sustained accountability.

## Chapter 3. Safety Analysis

Historical crash data for the last five years (2020-2024) from TXDOT’s Crash Record Information System (CRIS) was used to document the crash history analysis and create the High-Injury Network (HIN) for Universal City.

### Crash Trends

Historic crash data was queried from CRIS for crashes within the City. A crash history dashboard which dynamically filters crash data using user-friendly buttons was published on the project website.



Between 2020 and 2024 more than 650 crashes occurred in the City. In the year 2020, there was a significantly lower number of crashes occurring in the City (111 crashes) which is attributed to the COVID-19 pandemic. The following year in 2021, crashes spiked (147 crashes) to potentially pre-pandemic numbers with a steady increase in crashes.

**While the average number of fatal and serious injury crashes is decreasing, the total number of crashes is on the rise.**

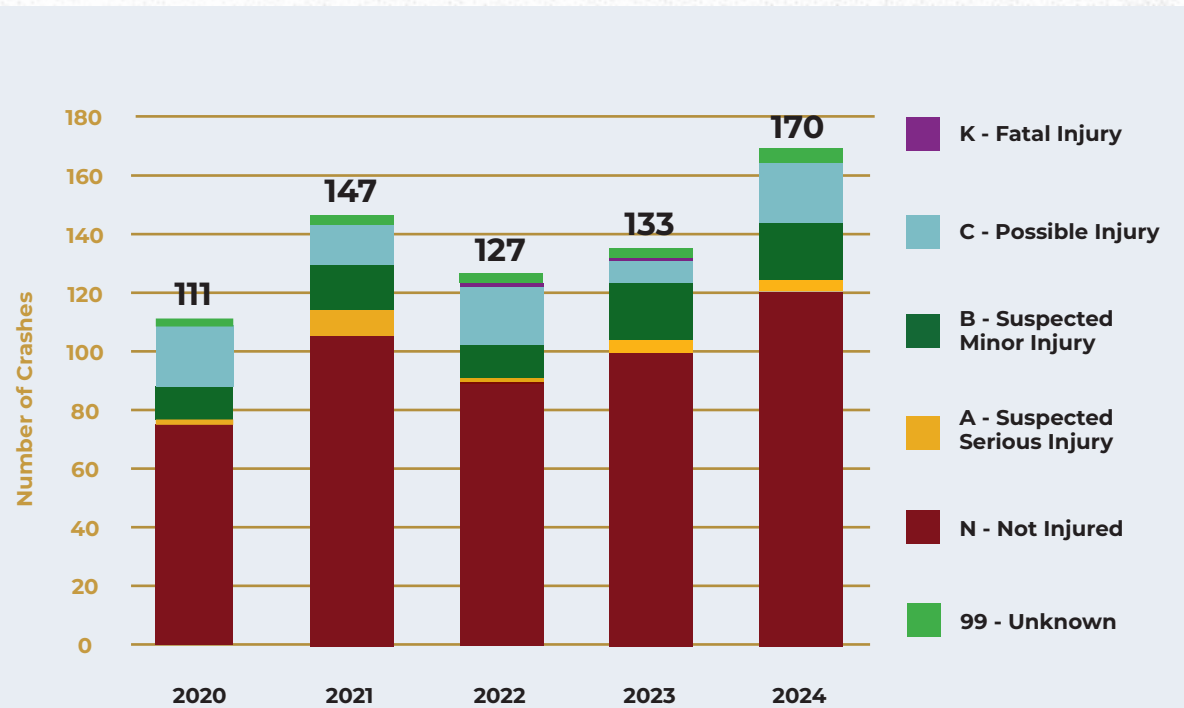
Crash data analysis indicates that certain crash types and user groups are disproportionately represented in fatal and serious injury outcomes. Although bicyclists and pedestrians, identified by the Federal Highway Administration (FHWA) as “Vulnerable Road Users”, account for less than 1% of total crashes in Universal City, they are involved in approximately 50% of fatal crashes. **This overrepresentation highlights a significant safety risk for non-motorized users and underscores the need for targeted countermeasures.** In addition, intersection-related crashes account for 44% of all reported crashes, represent 37% of angle-related crashes, and account for 29% of serious and minor injury crashes. Together, these findings demonstrate a clear concentration of severe crash outcomes by crash type and location, providing a data-driven baseline for prioritizing intersection safety improvements and vulnerable road user protections.

Table 2. Universal City 2020-2024 Crash History

| Year | K-Fatal Injury |     | A-Suspected Serious Injury |       | B-Suspected Minor Injury |       | C-Possible Injury |       | N-Not Injured |       | 99-Unknown |       |
|------|----------------|-----|----------------------------|-------|--------------------------|-------|-------------------|-------|---------------|-------|------------|-------|
| 2020 | 0              | 0%  | 1                          | 5.3%  | 9                        | 11.8% | 23                | 28.4% | 76            | 15.4% | 2          | 11.8% |
| 2021 | 0              | 0%  | 7                          | 36.8% | 15                       | 19.7% | 13                | 16.0% | 108           | 21.9% | 4          | 23.5% |
| 2022 | 1              | 50% | 2                          | 10.5% | 13                       | 17.1% | 18                | 22.2% | 89            | 18.1% | 4          | 23.5% |
| 2023 | 1              | 50% | 5                          | 26.3% | 18                       | 23.7% | 7                 | 8.6%  | 100           | 20.3% | 2          | 11.8% |
| 2024 | 0              | 0%  | 4                          | 21.1% | 21                       | 27.6% | 20                | 24.7% | 120           | 24.3% | 5          | 29.4% |

Shade = Indicates the two highest years by percentage

Figure 2. Universal City 2020-2024 Crash History



From 2020 to 2024, the top contributing factors in Universal City were caused by driver inattention (257 crashes) and failure to yield right-of-way (168 crashes), accounting for the majority of reported crashes. Failure to control speed (75 crashes) followed at a much lower level, while other factors (49 crashes) and disregard of traffic control (29 crashes) occurred less frequently.

Table 3: Top Contributing Factors (2020-2024)

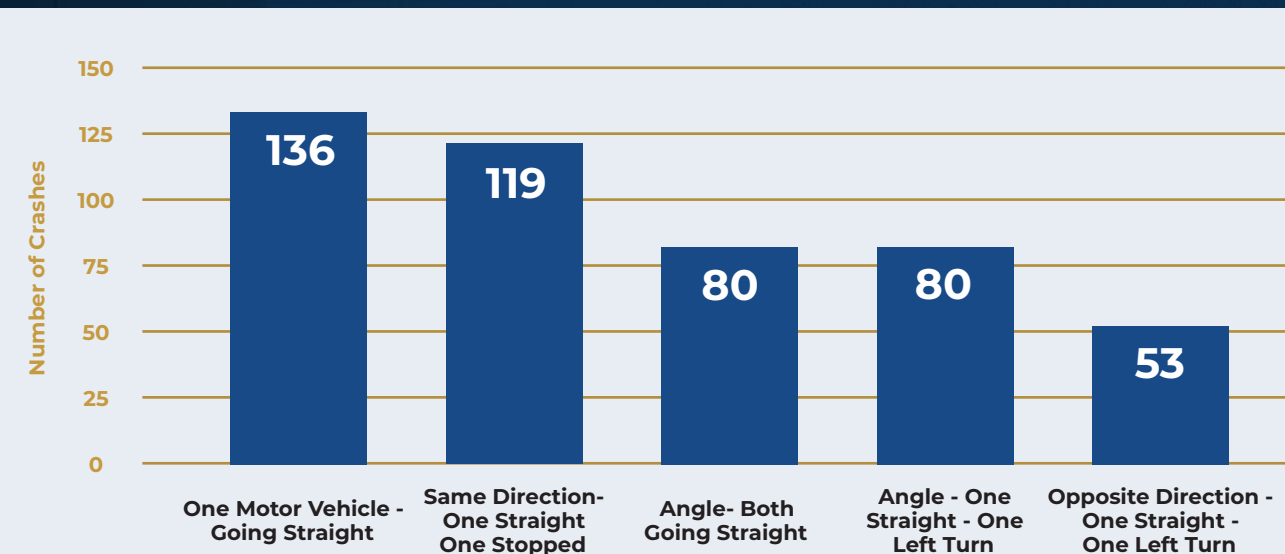


Table 4: Top Manner of Collisions (2020-2024)

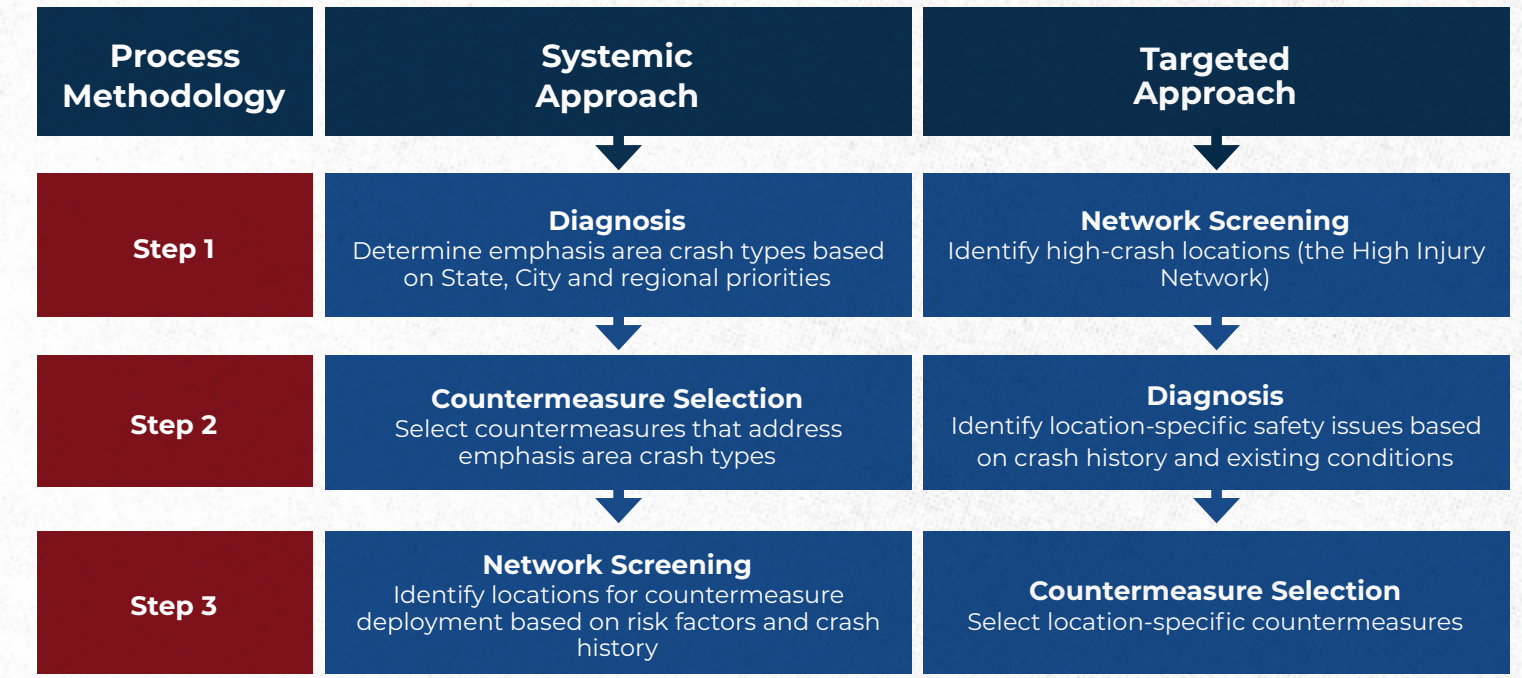
A crash heat map was created to highlight areas with higher crash frequency in Universal City from 2020 to 2024 as shown in **Figure 3**. This map is a visual representation of the density of crash counts at various locations in Universal City.

Notable crash hotspots can be observed at intersections particularly along Kitty Hawk, Pat Booker Rd, and FM 78 near schools, Randolph Airforce Base, and high traffic generator developments.

Figure 3. Crash Heat Map



Figure 4. Safe System Objective



## Methodology

To comprehensively identify and prioritize potential safety projects, two data-driven methodologies were employed, as illustrated in **Figure 4**: a targeted approach and a systemic approach. Together, these methods support the Safe System objective of reducing fatal and serious injury crashes by addressing both known high-risk locations and widespread risk factors present across the transportation network.

## Systemic Safety Analysis

TxDOT's Strategic Highway Safety Plan (SHSP) identifies emphasis areas (categories) of crashes and countermeasures which have the greatest potential for crash reduction. Within each emphasis area, the Citywide percent of fatal and serious injury crashes was compared to the statewide average. In addition to SHSP emphasis areas. A summary of fatal & serious injury crashes by emphasis area is provided as **Table 5**.

Table 5. Fatal and Serious Injury Crashes by Emphasis Area

| Emphasis Area              | Statewide <sup>1</sup> | Universal City <sup>2</sup> |             |
|----------------------------|------------------------|-----------------------------|-------------|
|                            |                        | KA Crashes                  | All Crashes |
| Speed Related              | 33%                    | 3%                          | 11%         |
| Intersection Safety        | 32%                    | 48%                         | 44%         |
| Distracted Driving         | 15%                    | 4%                          | 37%         |
| Vulnerable Road Users      | 12%                    | 10%                         | 1%          |
| Roadway and Lane Departure | 34%                    | 24%                         | 31%         |

<sup>1</sup>Statewide represents 2022 KA crash totals per Texas SHSP, Figure 6.1.3

<sup>2</sup>Universal City 2020-2024 totals per TxDOT CRIS

## Countermeasure Selection

The systemic approach selects low-cost countermeasures to deploy systemwide based on emphasis area crash types. Specific countermeasures were selected based on emphasis area crash types, input from the Safety Task Force and the public, and industry guidance (TxDOT’s Highway Safety Improvement Program (HSIP) and FHWA’s Proven Safety Countermeasures (PSC). Systemic countermeasures were chosen to correspond with TxDOT’s HSIP and FHWA crash modification factors (CMF), which defines various safety countermeasures numerically organized as “work codes”. Detailed countermeasure profiles, including project descriptions, crash statistics, and potential deployment locations, are provided in the Action Plan Summary.

| Systemic Countermeasures (HSIP Work Code, FHWA CMF)  | Crash Type, Safety Concern Addressed                                       |
|------------------------------------------------------|----------------------------------------------------------------------------|
| Dedicated Left and Right Turn Lanes at Intersections | Left Turn and Angle Crashes                                                |
| Enhanced Delineation for Horizontal Curves           | Chevrons to Address Lane and Roadway Departure                             |
| Rectangular Rapid Flashing Beacons (RRFB)            | Vulnerable User Crashes; Driver Awareness                                  |
| School Zone Flashers                                 | Pedestrian and Bicycle Crashes; Speed and Driver Awareness in School Zones |
| Emergency Vehicle Preemption                         | Secondary Crashes; Improve Emergency Response Times                        |

## Targeted Safety Analysis

The targeted approach is more traditionally employed and aimed at improving safety by identifying site specific countermeasures at the highest crash locations (focus locations). The targeted safety analysis is built upon a high-injury network and is based on AASHTO HSM procedures. Specifically, it includes the first three steps of the Roadway Safety Management Process: (1) network screening, (2) diagnosis, and (3) countermeasure selection.

**Figure 5** represents the targeted safety analysis built on the HIN and based on the Highway Safety Manual Roadway Safety Management Process but excludes engineering and design.

Figure 5: Targeted Safety Analysis



## High Injury Network

A network screening was conducted that includes all roadways within the City to develop a High-Injury Network (HIN). A HIN is a geospatially defined subset of roadways which account for a large percentage of crashes. Data sourced from TxDOT CRIS, TxDOT roadway inventory, local thoroughfare plans, TIGER, and Open Street Map were used for network screening. CRIS crash records include all severity crashes from the years 2020-2024.

Crashes were attributed (spatially joined) to individual roadway segments. Freeway main lanes and associated crashes were excluded from the analysis. Sensitivity testing was performed to define criteria (crash history thresholds) which function like filters, to reveal high-crash segments. Equivalent Property Damage Only crashes (EPDO) was chosen as a focus metric because it functions as a relative severity index – as locations with a high EPDO either have high severity crashes, a large number of crashes, or some combination. The criteria of EPDO per centerline mile (CL mile) of greater than 200 was chosen as the metric to define the HIN. Statistics for the HIN are provided as **Table 6**. This HIN represents 16% of non-freeway centerline miles in the City on which 100% of non-freeway fatalities, 78% of non-freeway serious injury crashes and 65% of non-freeway total crashes occur. A HIN map is provided as **Figure 6**.

Table 6: High-Injury Network Statistics

|                                         | Length (Miles) | Injury Crash Count |      |      |     | Total Crash Count |
|-----------------------------------------|----------------|--------------------|------|------|-----|-------------------|
|                                         |                | KAB                | K    | A    | B   |                   |
| Within City Limits Network              | 74             | 97                 | 2    | 19   | 76  | 688               |
| High-Injury Network                     | 12             | 80                 | 2    | 19   | 59  | 452               |
| High-Injury Network Percentage of Total | 16%            | 82%                | 100% | 100% | 78% | 65%               |

Figure 6: High-Injury Network Map



## Focus Locations and Prioritization

To identify locations for targeted safety analysis in Universal City, the Safety Task Force reviewed a preliminary list of the 17 highest-crash corridors and 7 highest-crash intersections on the City's HIN. Locations were evaluated based on crash history, contributing factors, and the number of fatal and serious-injury crashes, with particular emphasis on corridors and intersections serving vulnerable roadway users, including pedestrians and bicyclists.

In addition to the HIN corridors and intersections, the Safety Task Force identified isolated intersections with a high potential for crash reduction, especially those located near schools, parks, City civic centers, and other vulnerable user areas. Through this process, the project team ultimately identified seven corridors and four intersections for further evaluation. These focus locations represent areas with the greatest opportunity to reduce fatal, serious-injury and minor injury crashes while improving safety for vulnerable users.

The focus locations are not listed in priority order and should be considered for implementation alongside other safety initiatives to support Universal City's goal of eliminating roadway fatalities and serious injuries. A summary of crash history for the focus corridors and intersections is provided in **Table 7** and **Table 8**, respectively.

The countermeasures presented were developed from a planning-level perspective. Universal City and partner agencies are encouraged to review field conditions, validate observations, and refine improvements prior to implementation. Infrastructure improvements should not be limited to the countermeasures identified and may include additional treatments that align with the Safe System Approach and the CSAP goals.



Aviation Blvd & Pat Booker

Table 7: Focus Corridors

| ID | Roadway             | From              | To                  | Length (Miles) | Crash Count | K | A | B  | Sum of K, A, B |          |
|----|---------------------|-------------------|---------------------|----------------|-------------|---|---|----|----------------|----------|
|    |                     |                   |                     |                |             |   |   |    | Total          | Per Mile |
| 1  | Athenian            | SH 218            | Universal City Blvd | 0.87           | 21          | 0 | 0 | 1  | 1              | 1.1      |
| 2  | Aviation East       | SH 218            | FM 78               | 1.01           | 44          | 1 | 2 | 5  | 8              | 7.9      |
| 3  | Balboa Dr           | Amistad Blvd      | Universal City Blvd | 0.75           | 6           | 0 | 1 | 0  | 1              | 1.3      |
| 4  | Centerbrook         | City Limits       | End of Road         | 0.3            | 9           | 0 | 0 | 1  | 1              | 3.3      |
| 5  | W Byrd Blvd         | Parkview Dr       | SH 218              | 0.3            | 3           | 0 | 1 | 1  | 2              | 6.7      |
| 6  | FM 1976             | City Limits       | SL 1604 Frontage Rd | 0.59           | 26          | 0 | 1 | 3  | 4              | 6.8      |
| 7  | Old Cimarron Trl    | Kitty Hawk Rd     | Guilford Cove       | 0.59           | 24          | 0 | 1 | 5  | 6              | 10.2     |
| 8  | Old Cimarron Trl    | Anton Schumann Dr | City Limits         | 0.77           | 15          | 0 | 2 | 1  | 3              | 3.9      |
| 9  | Kitty Hawk Rd       | City Limits       | SL 1604             | 1.05           | 86          | 0 | 2 | 8  | 10             | 9.5      |
| 10 | Kitty Hawk Rd       | SL 1604           | SH 218              | 0.77           | 60          | 0 | 2 | 7  | 9              | 11.7     |
| 11 | North Blvd          | Kitty Hawk Rd     | National Blvd       | 1.53           | 8           | 0 | 2 | 2  | 4              | 2.6      |
| 12 | Universal City Blvd | SH 218            | Kitty Hawk Rd       | 0.26           | 45          | 0 | 0 | 8  | 8              | 30.8     |
| 13 | Winn Ave            | Crystal Canyon    | National Blvd       | 0.61           | 1           | 0 | 1 | 0  | 1              | 1.6      |
| 14 | FM 78               | City Limits       | Kelly Ave           | 0.15           | 30          | 0 | 1 | 3  | 4              | 26.7     |
| 15 | FM 78               | Universal Dr      | City Limits         | 0.89           | 80          | 2 | 3 | 14 | 19             | 21.3     |
| 16 | Shadow Ter          | Colonial Blf      | Carlito Cove        | 0.24           | 4           | 0 | 0 | 1  | 1              | 4.2      |
| 17 | E Wright Blvd       | SH 218            | E Langley Blvd      | 0.47           | 5           | 0 | 1 | 0  | 1              | 2.1      |

Crashes from TxDOT's CRIS for 2020-2024  
K = Fatal Crash | A = Suspected Serious Injury Crash | B = Suspected Minor Injury Crash



Universal City Blvd. & Pat Booker

Table 8: Focus Intersections

| ID | Intersection                        | Control Type | Crash Count | K | A | B | Sum of K, A, B |
|----|-------------------------------------|--------------|-------------|---|---|---|----------------|
| 1  | Universal City Blvd & Kitty Hawk Rd | SIGNAL       | 26          | 0 | 0 | 3 | 3              |
| 2  | Randolph Gate West & FM 78          | SIGNAL       | 15          | 1 | 1 | 6 | 8              |
| 3  | FM 1976 & Old Cimmaron              | SIGNAL       | 18          | 0 | 2 | 1 | 3              |
| 4  | Old Cimmaron Trl & Kitty Hawk Rd    | SIGNAL       | 23          | 0 | 1 | 5 | 6              |
| 5  | FM 78 & 218                         | SIGNAL       | 23          | 0 | 2 | 3 | 5              |
| 6  | Universal City Blvd & SH 218        | SIGNAL       | 7           | 0 | 0 | 2 | 2              |
| 7  | Springwood Sq & FM 1976             | STOP         | 4           | 0 | 0 | 1 | 1              |

Crashes from TxDOT's CRIS for 2020-2024  
K = Fatal Crash | A = Suspected Serious Injury Crash | B = Suspected Minor Injury Crash

# Chapter 4. Safety Outcomes for All Road Users

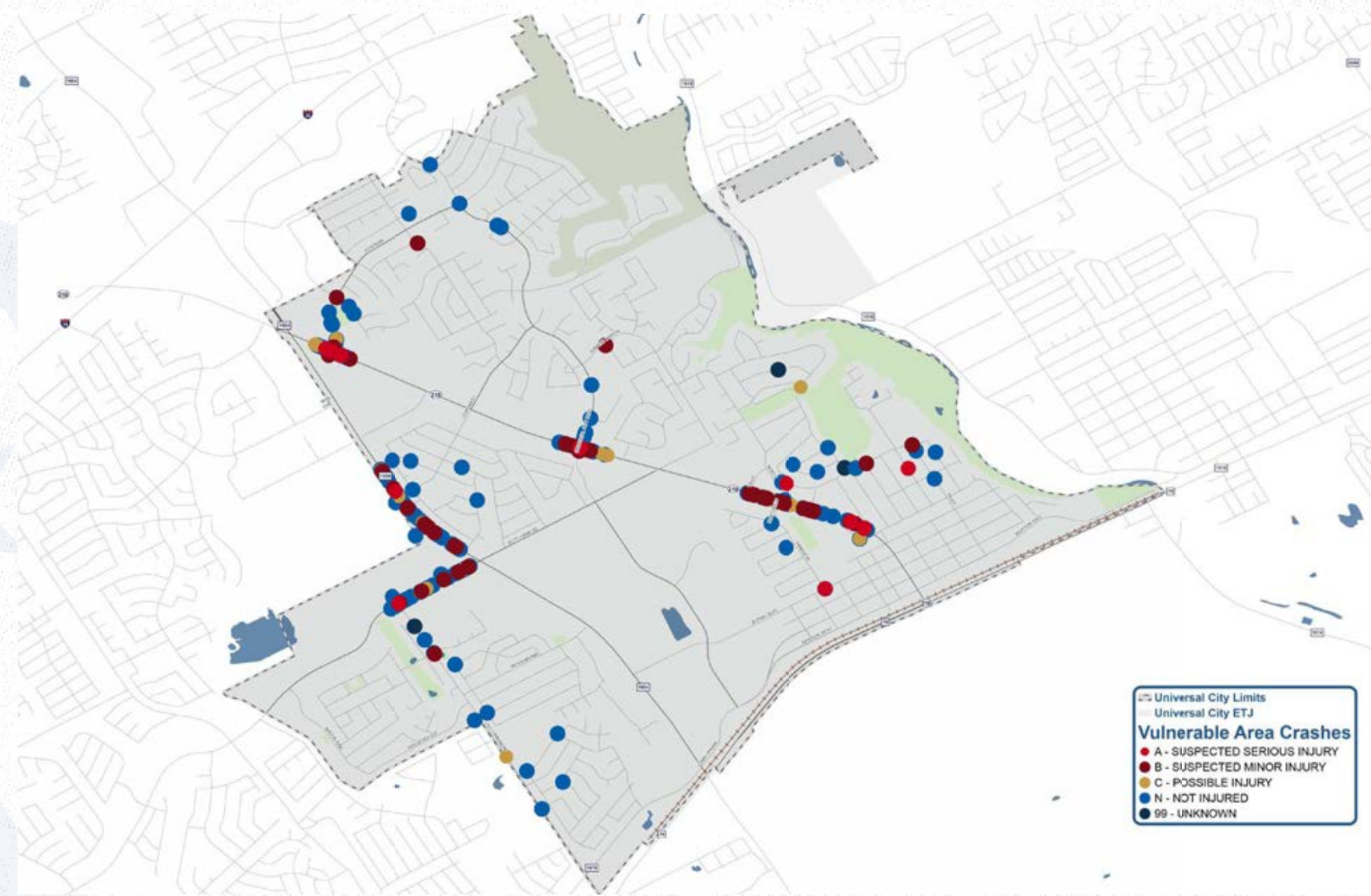
## Communities Concerns

Although the community is not located within census tracts designated as Underserved by USDOT, this study applies a Safe System approach Safety Task Force defined underserved populations based on locally observed safety outcomes, with a focus on vulnerable roadway users, particularly pedestrians, bicyclists, older adults, and people with disabilities. As these users are typically overrepresented in serious injury and fatal crashes. Analysis of local crash trends indicates that fatal and serious injury crashes are concentrated on higher-speed corridors, at complex intersections, and in areas with limited pedestrian and bicycle infrastructure, reflecting elevated exposure and risk for vulnerable users. Consistent with the Safe System emphasis on proactive, data-driven safety analysis, crash history, roadway characteristics, traffic speeds and volumes, were used to identify priority areas for intervention. While these locations are not federally defined as Underserved Communities, **crash trends demonstrate disproportionate safety risk, supporting targeted strategies and investments to prevent roadway fatalities and serious injuries.**



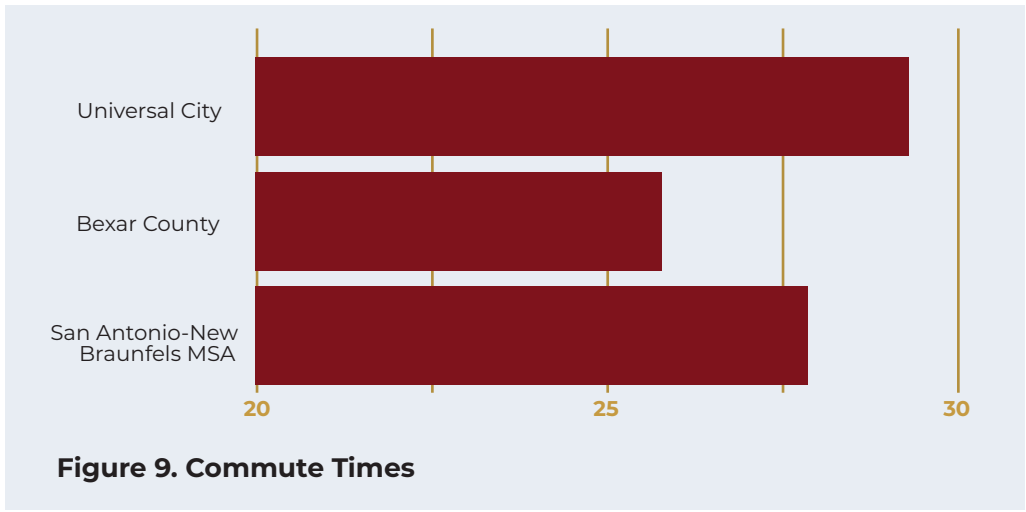
Kitty Hawk Rd. & Pat Booker

Figure 8: Vulnerable Area Crash Map

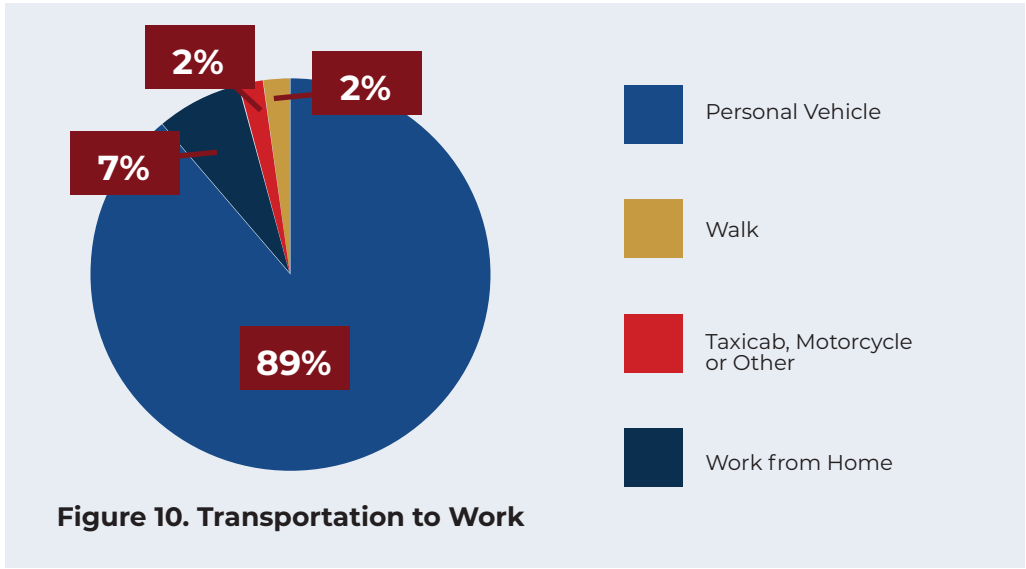


# Local Demographics and Community Context

Universal City’s demographic and travel characteristics reflect its close relationship with Randolph Air Force Base and close proximity to the City of San Antonio and New Braunfels, which significantly influences local commuting patterns and transportation demand. A substantial portion of residents commute daily to Randolph Air Force Base and other employment centers within the San Antonio–New Braunfels Metropolitan Statistical Area, resulting in pronounced peak-hour traffic volumes on a limited network of arterial roadways and regional connectors. Compared to Bexar County and the broader MSA, this commuter-oriented context concentrates higher-speed traffic within and through residential areas, increasing exposure to safety risks for pedestrians, bicyclists, older adults, and residents. Consistent with the Safe System and Vision Zero emphasis on identifying risk through local context, travel behavior, and safety outcomes, these demographic and commuting patterns informed Safety Task Force’s identification of locally underserved areas and the prioritization of safety strategies. **Figure 9** summarizes average commute times and the distribution of transportation modes in Universal City compared to Bexar County and the broader MSA.



The median commute time to work for Universal City residents is **27.5 minutes**. In comparison to Bexar County, residents commute about **26.4 minutes**, and in comparison with the San Antonio-New Braunfels MSA, Universal City residents commute is similar.



# Chapter 5. Engagement and Collaboration

Public engagement for the CSAP included a range of opportunities designed to reach community members where they are both online and in-person. Engagement methods followed *USDOT’s Promising Practices for Meaningful Public Involvement in Transportation Decision-Making* to ensure the plan reflected the safety needs of all road users, including residents, community leaders, and other key stakeholders.

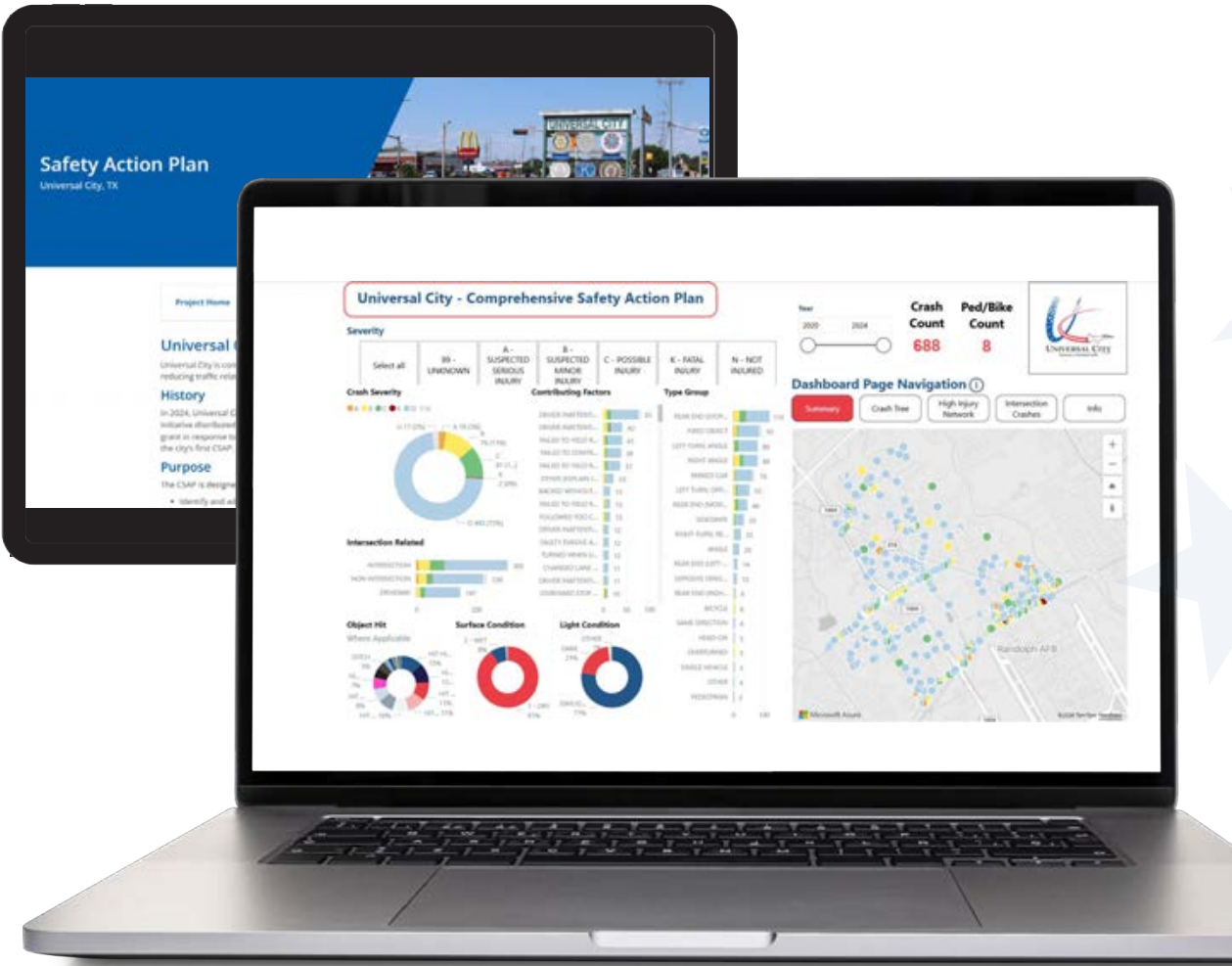
“Pop-Up” events at community gatherings provided direct, in-person interaction with project team members, allowing the public to learn about the project and participate in related activities. Feedback collected through these events, along with online engagement tools, informed the development of the CSAP by helping to identify focus locations, highlight potential systemic improvements, validate the high-injury network, and guide prioritization within the implementation plan.



# Online Engagement

Online engagement played a key role in the development of the CSAP, providing accessible opportunities for residents to learn about the project and share their input. Social Pinpoint served as the central online hub throughout the planning process, offering a single location for updates on upcoming events, links to surveys, and access to project materials, including the full CSAP. The platform also housed the Interactive Crash Dashboard, which visualized community crash trends and mapped crashes occurring along the High-Injury Network. This tool enabled residents to better understand local safety challenges and see how their feedback connected to real-world data.

The CSAP website and its engagement features were promoted through Universal City’s Facebook posts, outreach at pop-up events, and strategically placed QR codes that linked directly to online resources. Through the online safety survey, residents were invited to share their experiences, concerns, and priorities related to transportation safety. This digital feedback was essential in shaping the plan, ensuring that community perspectives were incorporated alongside technical analysis.

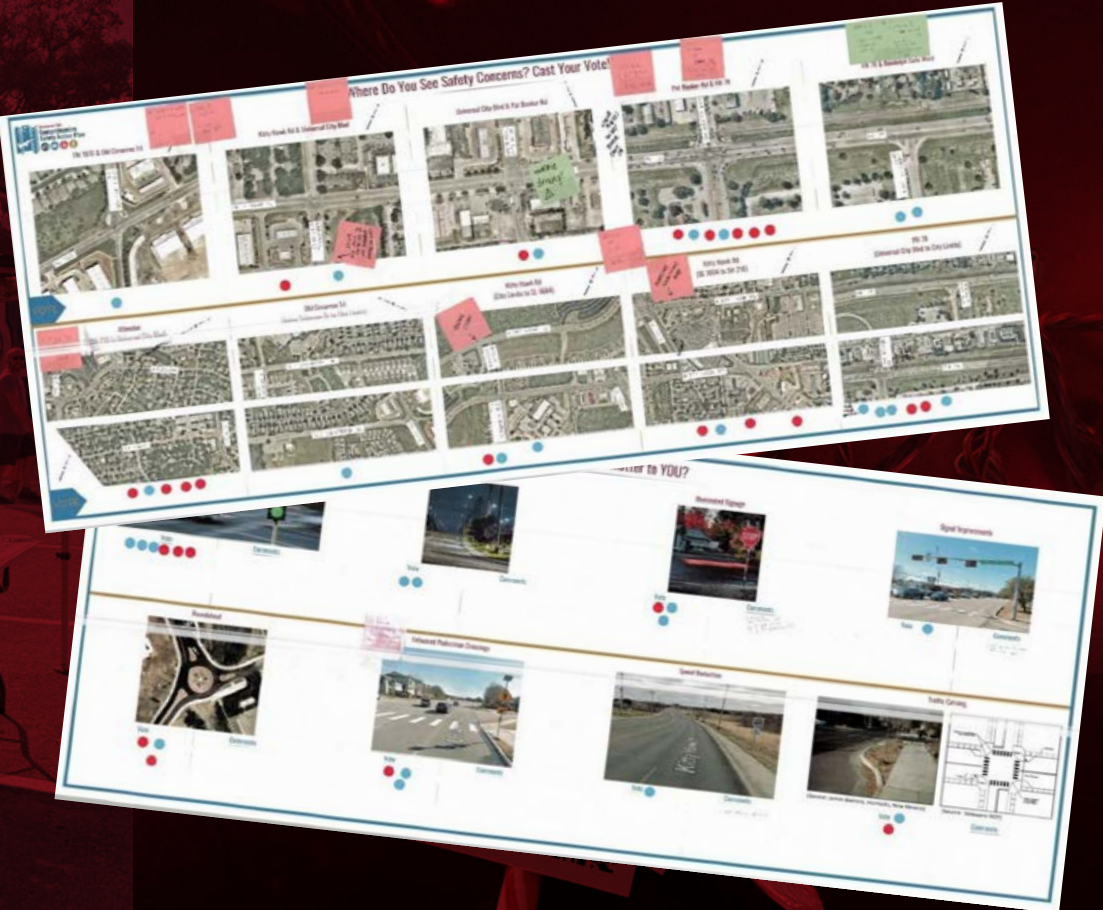


# In-Person Engagement

In-person “pop-up” events were a central component of the public engagement strategy, offering opportunities for residents to interact directly with the project team and learn how transportation safety improvements could benefit their community. These events were intentionally located in well-attended public settings to increase visibility, encourage participation, and gather meaningful input to guide the development of the CSAP.

The first pop-up event was held on October 4, 2025, at the Universal City Pumpkin Patch during the City’s annual Heroes Day celebration, a community-focused event highlighting local first responders. This setting provided a natural opportunity for discussions about roadway safety and emergency response needs. Throughout the event, the project team engaged residents in valuable conversations about their top safety concerns, preferred countermeasures, and locations they felt warranted attention. Large roll plots displaying potential safety treatments and hot-spot crash locations allowed attendees to visually review existing conditions and cast votes on options they believed would be most effective. To encourage participation from all ages, reflective wristbands and stickers were distributed, reinforcing the theme of visibility and safe travel.

The second pop-up event took place on December 2, 2025, at City Hall during Universal City’s annual Tree Lighting celebration. The project team designed a hands-on budgeting activity to help residents think through how safety investments should be prioritized. Six buckets, each representing a type of recommended infrastructure project (systemic projects, corridor projects, intersections) or non-infrastructure project (design guidance, operating procedures, safety planning) were displayed, and participants were given five ornament “dollars” to allocate to the improvements they believed should receive the most funding. This interactive exercise created an engaging and accessible way for individuals of all ages to express their preferences and understand the tradeoffs involved in safety planning.



## Results

The Universal City CSAP Safety Survey consisted of 18 questions, including four interactive mapping questions that allowed participants to identify specific locations where they experience safety concerns. Engagement activities included an online safety survey and two pop-up events, reaching approximately 155 participants. The survey was available on the project website, with QR codes distributed at in-person events to improve accessibility and participation.

A total of 41 responses were received through the online survey, with 93% of respondents indicating they reside within the city limits of Universal City. Results indicated that personal vehicles were the primary mode of transportation, with 75.61% of respondents commuting daily. This travel behavior reflects the City’s regional context and proximity to San Antonio and surrounding employment areas. When asked to identify primary roadway safety concerns, respondents most frequently cited dangerous driving behaviors (e.g., distracted, erratic, or aggressive driving) at 48.78%, followed by limited visibility (41.46%) and speeding (39.02%). This approach reflects broader safety priorities to address systemic risk factors associated with serious injuries.

## Transportation Priorities

As part of the second pop-up event, participants were asked to identify their top transportation priorities related to safety, operations, and multimodal accessibility. Intersection improvements at key focus locations emerged as the highest priority, followed closely by operational strategies such as enhanced engagement, education, enforcement, emergency response, and speed management. This reinforces the importance of directing resources toward high-risk locations and corridors, as well as supporting operational practices to reduce serious injuries throughout the City.

|                             |                       | Votes |     | % of Total | % of Sec. |
|-----------------------------|-----------------------|-------|-----|------------|-----------|
| Non-Infrastructure Projects | Design Guidance       | 36    | 186 | 10%        | 19%       |
|                             | Operating Procedures  | 89    |     | 24%        | 48%       |
|                             | Safety Planning       | 61    |     | 16%        | 33%       |
| Infrastructure Projects     | Systemic Projects     | 50    | 185 | 13%        | 27%       |
|                             | Corridor Projects     | 45    |     | 12%        | 24%       |
|                             | Intersection Projects | 90    |     | 24%        | 49%       |
| Total Votes                 |                       |       |     |            | 371       |
| Estimated Participants      |                       |       |     |            | 93        |

Table 9. Pop-Up #2 Event Results

## Focus Location Feedback

To further identify locations of concern, participants at the pop-up events were presented with five preliminary focus corridors and five focus intersections and asked to select areas where safety improvements are most needed. The results of this activity are shown in the **Table 10** and reflect locations where users experienced elevated safety risks. Of these locations, 100% of the intersections and corridors are identified on the HIN.

## Systemic Countermeasures

The public was asked to participate in a survey about common traffic safety countermeasures at pop-up events and online. At the pop-up event #1 a total of 21 votes were cast in the activity, at pop-up event #2 approximately 74 votes were cast for non-infrastructure and infrastructure projects, and approximately 41 people participated in the activity online. Pop-up event #1 results are shown in **Table 11** and online results are shown in **Table 12**.

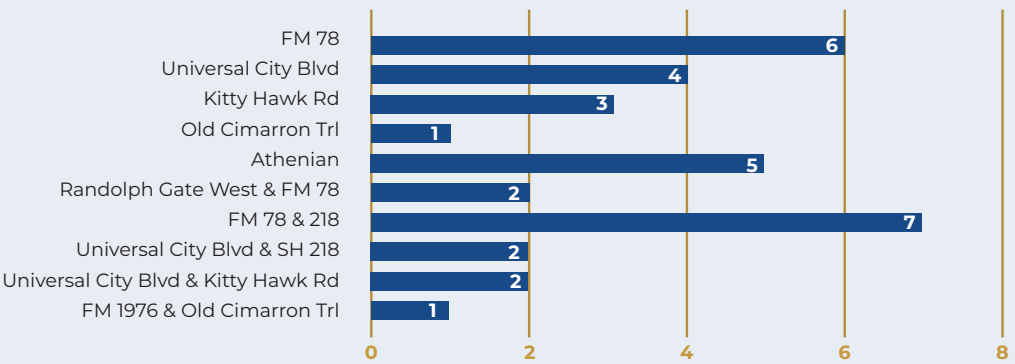


Table 10. Pop-Up Event #1 Safety Concern Locations

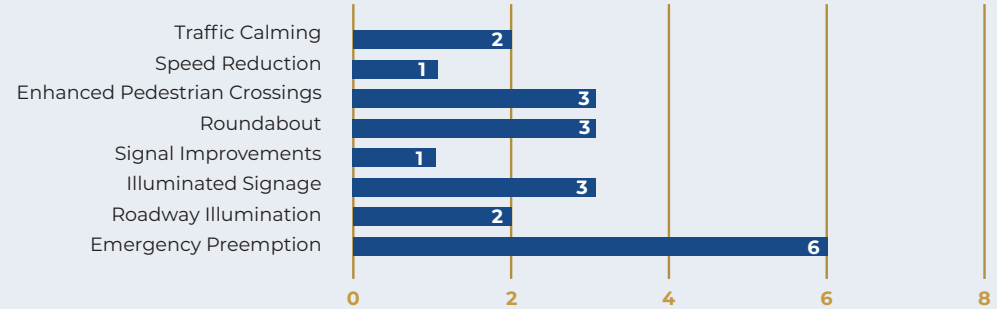


Table 11. Pop-Up Event #1 Systemic Improvements Results

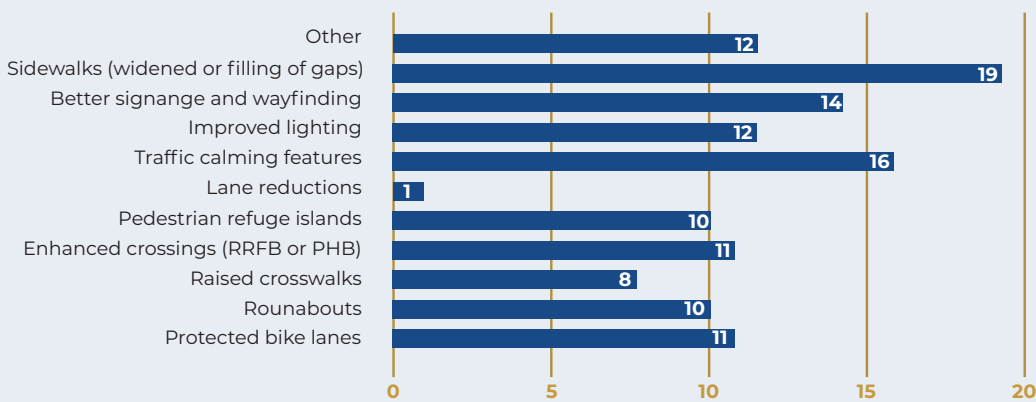


Table 12. Online Survey Countermeasure Priorities

## Chapter 6. Strategy and Project Selections

The CSAP framework (Strategy and Project Selections, Policy and Process Changes, and Progress and Transparency) organizes the components of the plan. All projects and activities build on Safe System Approach principles and draw from the Vision Zero Toolkit (FHWA-SA-23-026) and other USDOT guidance.

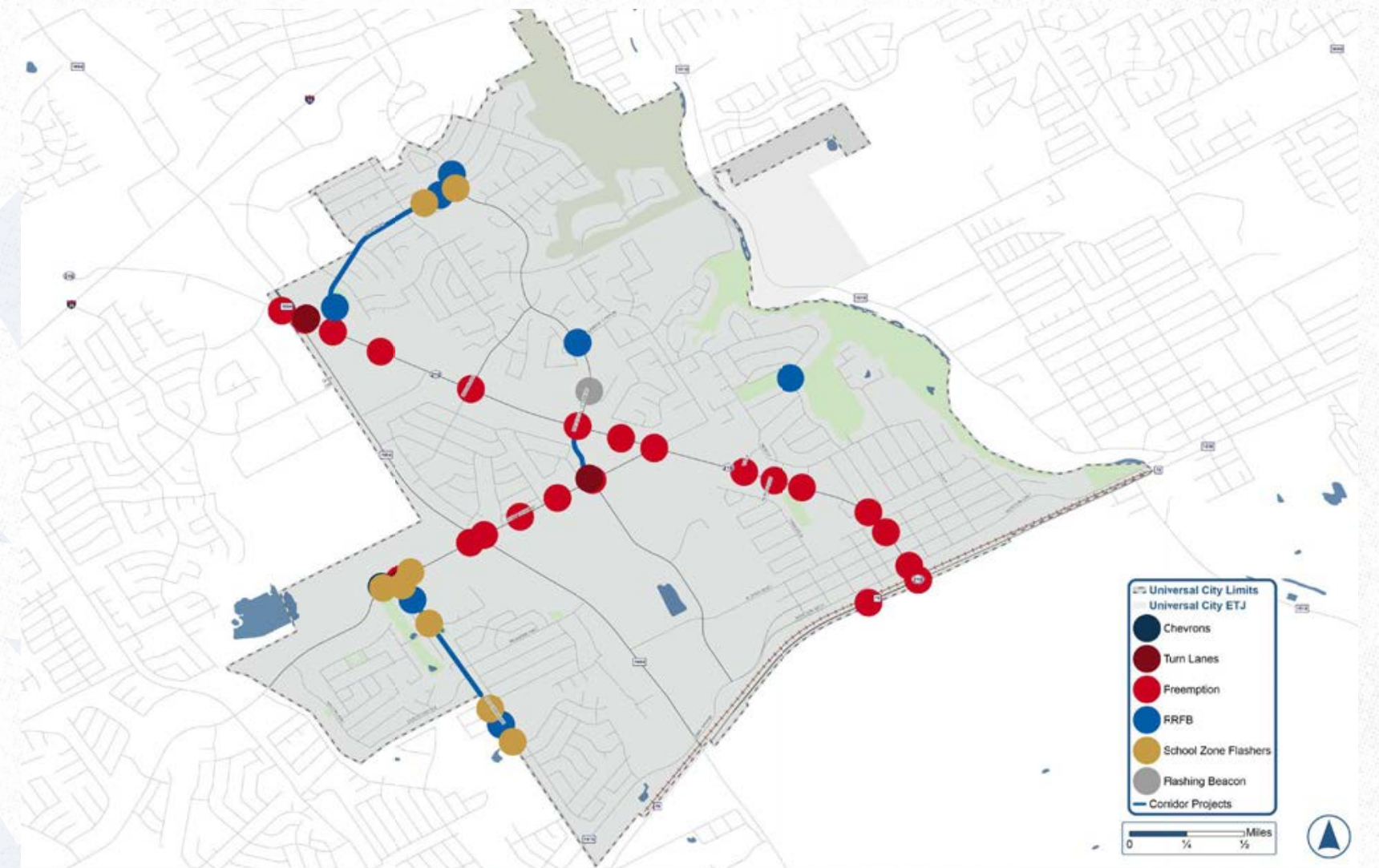
To identify short, medium, and long-term actions, the Safety Task Force participated in an action planning workshop focused on selecting strategies, projects, policies, and activities. During the workshop, Safety Task Force members reviewed detailed concepts for potential safety improvements along priority corridors and intersections. This allowed participants to identify specific safety needs and opportunities within these high-crash locations. The Safety Task Force then evaluated and discussed each option to develop a prioritized list of improvements for inclusion in the action plan.

**Projects were primarily prioritized based on the following criteria:**

- 1** Does the project improve safety?
- 2** Does the project incorporate design elements that safely and effectively accommodate all road users?
- 3** Does the project have strong potential for near-term implementation?



Figure 11: Infrastructure Project Locations

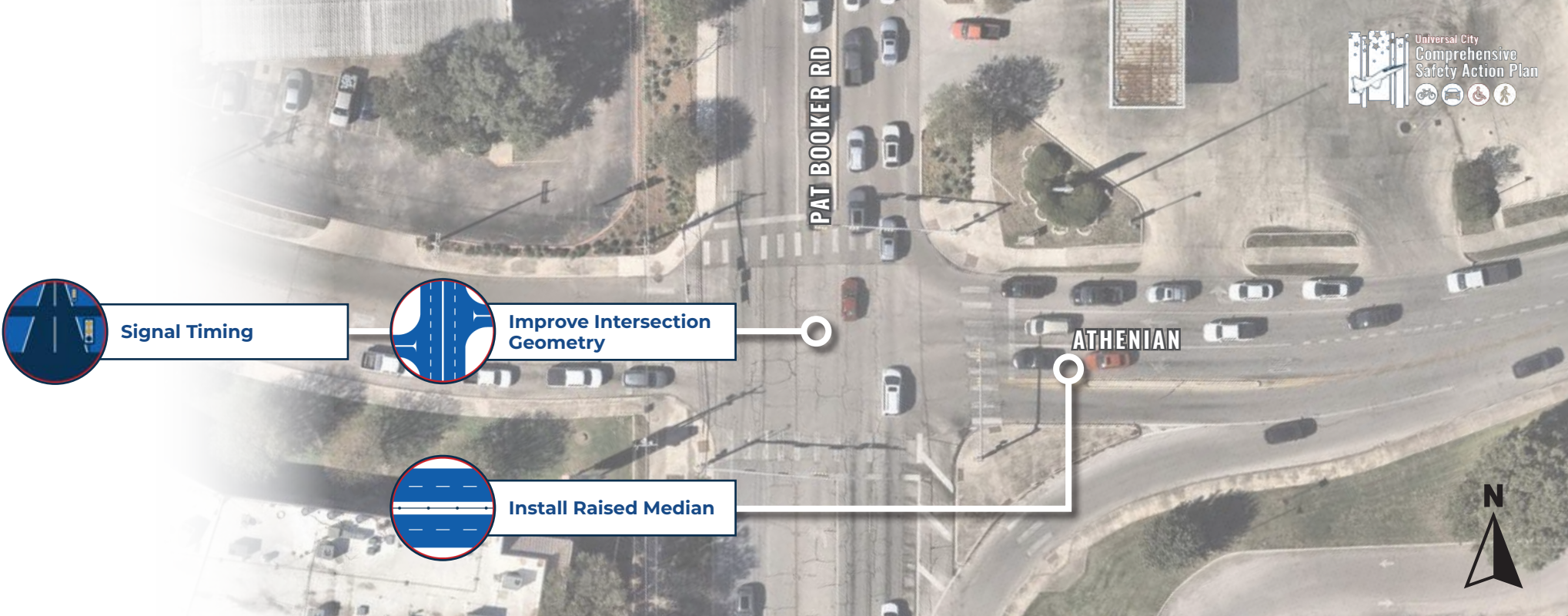


Intersection Projects

| Location                            | Description                                                                                                                                           | Benefits                                                                                         |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Pat Booker Rd & Loop 1604           | Install a turn-lane and move bikes to a shared use path.                                                                                              | Channelizes traffic flow, improves mobility, and removes conflict points.                        |
| Athenian & Pat Booker Rd            | Improve intersection geometry to restrict left-turn movements and improve the operation and safety of pedestrian for the channelized right-turn lane. | Removes turning conflicts, channelizes traffic flow and improves mobility and pedestrian safety. |
| Athenian & Centerbrook              | Install a raised right-turn channelized island, directionalize pedestrian ramps and improve intersection geometry.                                    | Improves pedestrian safety.                                                                      |
| Kitty Hawk Rd & Universal City Blvd | Install a southbound right-turn deceleration lane.                                                                                                    | Channelizes traffic flow, improves mobility, and removes conflict points.                        |
| Kitty Hawk Rd & Old Cimarron Trl    | Restripe crosswalk and directionalize pedestrian ramps to shorten pedestrian crossing lengths.                                                        | Improves pedestrian safety and channelizes traffic flow.                                         |

Corridor Projects

| Location                                              | Description                                                                                                                                                                                                       | Benefits                                                          |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| Athenian<br>(Pat Booker Rd to Universal City Blvd)    | Restripe Athenian to a 4-lane cross-section to include 2-lanes in the southbound direction, a center two-way left-turn lane, and 1 lane in the northbound direction.                                              | Improves mobility and removes conflict points.                    |
| Universal City Blvd<br>(Kitty Hawk to Pat Booker Rd)  | Improvements at Robin Dr and install sidewalk on both sides of Universal City Blvd. Restripe pavement markings to a 3-lane cross-section to include 1-lane in each direction and a center two-way left-turn lane. | Removes conflict points, improves mobility and pedestrian safety. |
| Old Cimarron Trl<br>(Kitty Hawk to Adolph Scheel Way) | Install a shared use path along Old Cimarron Trl and enhance pavement markings.                                                                                                                                   | Improves pedestrian safety near school.                           |



Intersection 1: Athenian & Pat Booker Rd

Project Information:

**Description:** Improve intersection geometry to restrict left-turn movements and improve the operation and safety of pedestrian for the channelized right-turn lane.

**Recommended Treatments:** Install a median along Athenian geometry of the restrict left-turn movements and improve the westbound channelized right-turn lane

**Located on HIN** ✓

**Estimated Construction Cost:** \$300,000

Safety Impact:

Contributing Factors:

- Vehicles failed to yield right-of-way
- Turned when unsafe
- Driver inattention

**Benefits:** Removes turning conflicts, channelizes traffic flow and improves mobility.

**Expected Crash Reduction:** 55%

**Combined Crash Modification Factor (CMF):** 0.45

**Benefit-Cost Ratio:** 26.45

Project Readiness:

- Does Not Require Utility Relocation
- Does Not Require ROW Acquisition
- No Environmental Impacts
- Project Development – Conceptual Designs

| Intersection             | Crash Count | ADT    | Crash Rate MVMT | K | A | B |
|--------------------------|-------------|--------|-----------------|---|---|---|
| Athenian & Pat Booker Rd | 16          | 23,434 | 0.37            | 0 | 0 | 2 |

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

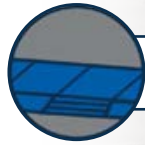
K - Fatal Injury | A - Suspected Serious Injury | B - Suspected Minor Injury  
MVMT – million vehicle miles traveled



Turn Lanes



Improve Intersection  
Geometry



Directionalize  
Pedestrian Ramps



Concrete Island

ATHENIAN

CENTERBROOK



## Intersection 2: Athenian & Centerbrook

### Project Information:

Located on HIN ✓

**Description:** Install a raised right-turn channelized island, directionalize pedestrian ramps and improve intersection geometry.

**Estimated Construction Cost:**  
\$300,000

### Recommended Treatments:

- Install a concrete channelized island.
- Install and directionalize pedestrian curb-ramps and crosswalk

### Safety Impact:

#### Contributing Factors:

- Disregard traffic control
- Driver inattention
- Distraction in vehicle

**Benefits:** Improves safety and intersection efficiency by reducing conflict points, simplifying vehicle movements, enhancing pedestrian visibility and accessibility and helping limit cut-through traffic

**Expected Crash Reduction:** 19%

**Combined Crash Modification Factor (CMF):** 0.81

**Benefit-Cost Ratio:** 84.23

### Project Readiness:

Does Not Require Utility Relocation

May Require ROW Acquisition

No Environmental Impacts

Project Development – Conceptual Design

| Intersection           | Crash Count | ADT   | Crash Rate MVMT | K | A | B |
|------------------------|-------------|-------|-----------------|---|---|---|
| Athenian & Centerbrook | 7           | 4,400 | 0.87            | 0 | 0 | 1 |

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

K - Fatal Injury | A - Suspected Serious Injury | B - Suspected Minor Injury  
MVMT – million vehicle miles traveled



## Intersection 3: Kitty Hawk Rd & Universal City Blvd

### Project Information:

**Description:** Install a southbound right-turn deceleration lane.

### Recommended Treatments:

- Install a southbound right-turn deceleration lane

Located on HIN ✓

**Estimated Construction Cost:** \$350,000

### Safety Impact:

#### Contributing Factors:

- Failed to yield right-of-way
- Disregard traffic control

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

**Expected Crash Reduction:** 4%

**Combined Crash Modification Factor (CMF):**  
0.96

**Benefit-Cost Ratio:** 2.59

### Project Readiness:

Does Not Require Utility Relocation

May Require ROW Acquisition

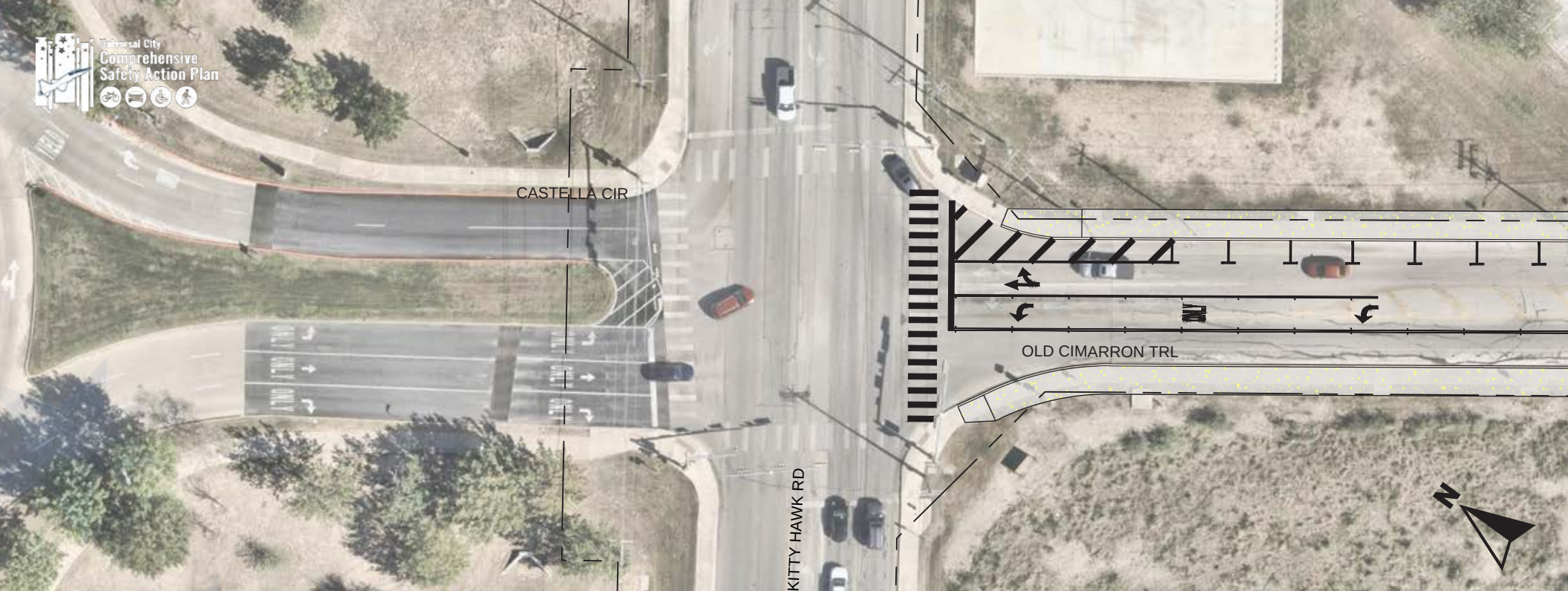
No Environmental Impacts

Project Development – Conceptual Design

| Intersection                        | Crash Count | ADT    | Crash Rate MVMT | K | A | B |
|-------------------------------------|-------------|--------|-----------------|---|---|---|
| Kitty Hawk Rd & Universal City Blvd | 26          | 17,419 | 0.82            | 0 | 0 | 3 |

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

K - Fatal Injury | A - Suspected Serious Injury | B - Suspected Minor Injury  
MVMT – million vehicle miles traveled



## Intersection 4: Kitty Hawk Rd & Old Cimarron Trl

### Project Information:

**Description:** Restripe crosswalk and directionalize pedestrian ramps to shorten pedestrian crossing lengths.

#### Recommended Treatments:

- Pavement marking improvements
- Shared-use path

Located on HIN ✓

#### Estimated Construction Cost:

\$140,000

### Safety Impact:

#### Contributing Factors:

- Disregard traffic control
- Driver inattention
- Distraction in vehicle

**Benefits:** Improves pedestrian safety and channelizes traffic flow.

**Expected Crash Reduction:** 19%

**Combined Crash Modification Factor (CMF):** 0.81

**Benefit-Cost Ratio:** 24.44

### Project Readiness:

Does Not Require Utility Relocation  
Does Not Require ROW Acquisition  
No Environmental Impacts  
Project Development – Conceptual Design

| Intersection                     | Crash Count | ADT    | Crash Rate MVMT | K | A | B |
|----------------------------------|-------------|--------|-----------------|---|---|---|
| Kitty Hawk Rd & Old Cimarron Trl | 23          | 26,122 | 0.48            | 0 | 1 | 5 |

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

K - Fatal Injury | A - Suspected Serious Injury | B - Suspected Minor Injury  
MVMT – million vehicle miles traveled



## Intersection 5: Pat Booker Rd & Loop 1604

### Project Information:

**Description:** Install a westbound right turn-lane and move bikes to a shared use path

**Recommended Treatments:** Install a westbound right-turn deceleration lane and install a shared-use path

NOT located on HIN ✗

#### Estimated Construction Cost:

\$1,000,000

### Safety Impact:

#### Contributing Factors:

- Disregard traffic control
- Driver inattention
- Distraction in vehicle

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

**Expected Crash Reduction:** 4%

**Combined Crash Modification Factor (CMF):** 0.96

**Benefit-Cost Ratio:** 23.70

### Project Readiness:

May Require Utility Relocation  
May Require ROW Acquisition  
Project Development – Conceptual Design

| Intersection              | Crash Count | ADT    | Crash Rate MVMT | K | A | B |
|---------------------------|-------------|--------|-----------------|---|---|---|
| Pat Booker Rd & Loop 1604 | 65          | 20,729 | 1.72            | 0 | 4 | 9 |

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

K - Fatal Injury | A - Suspected Serious Injury | B - Suspected Minor Injury  
MVMT – million vehicle miles traveled



## Corridor 1: Athenian – Pat Booker Road to Centerbrook

### Project Information:

**Description:** Restripe Athenian to a 4-lane cross-section to include 2-lanes in the southbound direction, a center two-way left-turn lane, and 1 lane in the northbound direction.

### Recommended Treatments:

Stripe the roadway as a 4-lane facility with 2-lanes in the southbound direction, a center two-way left-turn lane and 2-lane in the northbound direction.

Located on HIN ✓

**Project Limits:** Pat Booker Rd to Centerbrook

### Estimated Construction Cost:

\$125,000

**Corridor Length:** 0.25 miles

**Pavement Width:** 44 feet

**Speed Limit:** 30 mph

### Safety Impact:

#### Contributing Factors:

- Failed to yield right-of-way
- Failed to drive in single lane
- Turned when unsafe

**Benefits:** Removes conflict points and improves mobility.

**Crash Modification Factor (CMF):** 0.92

**Expected Crash Reduction:** 8%

**Benefit-Cost Ratio:** 12.43

### Project Readiness:

Does Not Require Utility Relocation

Does Not Require ROW Acquisition

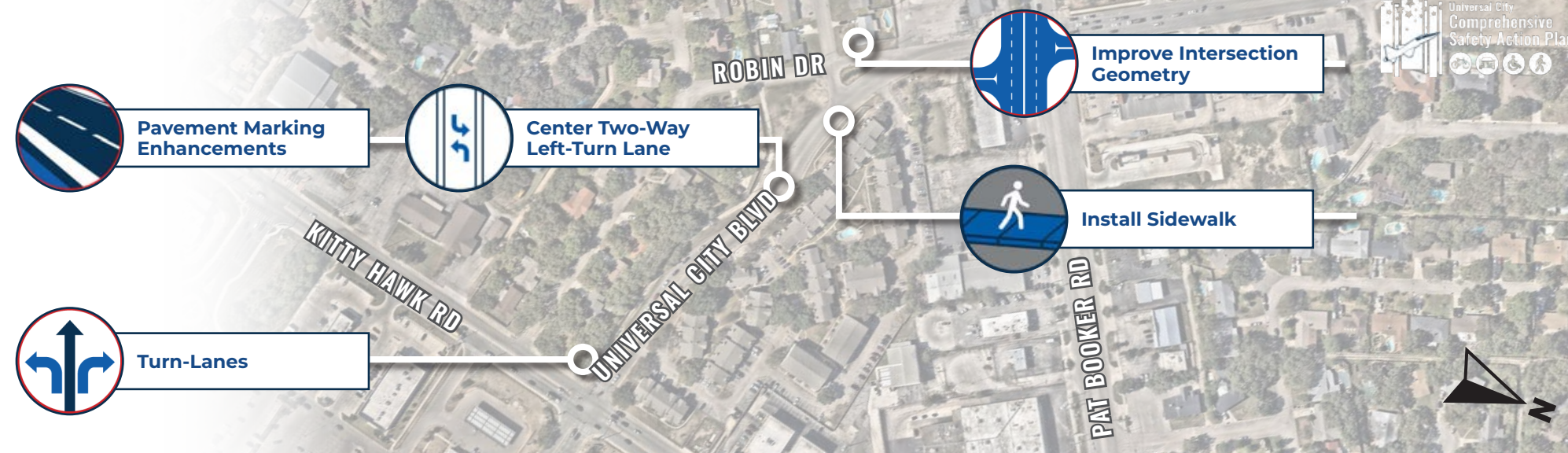
No Environmental Impacts

Project Development – Conceptual Design

| Intersection | From       | To          | Classification  | Crash Count | ADT   | Crash Rate MVMT | K | A | B |
|--------------|------------|-------------|-----------------|-------------|-------|-----------------|---|---|---|
| Athenian     | Pat Booker | Centerbrook | Major Collector | 26          | 4,400 | 13.16           | 0 | 0 | 2 |

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

K - Fatal Injury | A - Suspected Serious Injury | B - Suspected Minor Injury  
MVMT – million vehicle miles traveled



## Corridor 2: Universal City Blvd – Kitty Hawk to Pat Booker Road

### Project Information:

**Description:** Improvements at Robin Dr and install sidewalk on both sides of Universal City Blvd. Restripe pavement markings to a 3-lane cross-section to include 1-lane in each direction and a center two-way left-turn lane.

### Recommended Treatments:

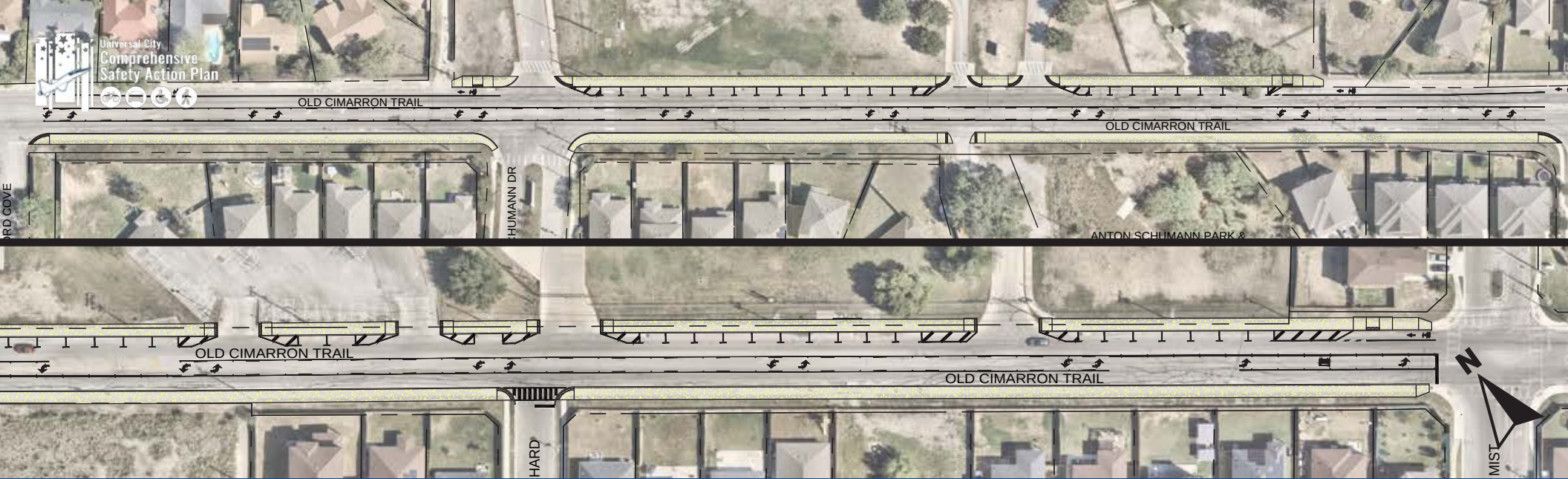
- Install sidewalk and curb ramps
- Stripe to include 1-lane in each direction and a center two-way left-turn lane
- Improve roadway geometry at Universal City Blvd & Robin Dr

Located on HIN ✓

| Intersection        | From          | To         | Classification | Crash Count | ADT   | Crash Rate MVMT | K | A | B |
|---------------------|---------------|------------|----------------|-------------|-------|-----------------|---|---|---|
| Universal City Blvd | Kitty Hawk Rd | Pat Booker | Minor Arterial | 11          | 5,420 | 17.50           | 0 | 0 | 2 |

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

K - Fatal Injury | A - Suspected Serious Injury | B - Suspected Minor Injury  
MVMT – million vehicle miles traveled



Corridor 3: Old Cimarron Trl – Kitty Hawk to Adolph Scheel Wy

**Project Information:**

**Description:** Install a shared use path along Old Cimarron Trl and enhance pavement markings.

**Recommended Treatments:**

- Stripe the roadway 3-lane cross-section with one-lane in each direction and a center two-way left-turn lane
- Install a shared use path
- Re-stripe to delineate on-street parking and a bike-lane

**Located on HIN** ✓

**Estimated Construction Cost:** \$1,725,000

**Corridor Length:** 0.88 miles

**Pavement Width:** 44 feet

**Speed Limit:** 35 mph (School Zone Present)

**Safety Impact:**

**Contributing Factors:**

- Failed to yield right-of-way
- Failed to drive in single lane
- Turned when unsafe

**Benefits:** Improves pedestrian safety near schools.

**Crash Modification Factor (CMF):** 0.903

**Expected Crash Reduction:** 10%

**Benefit-Cost Ratio:** 3.62

**Project Readiness:**

May Require Utility Relocation

May Require ROW Acquisition

No Environmental Impacts

Project Development – Conceptual Design

| Intersection     | From          | To               | Classification  | Crash Count | ADT   | Crash Rate MVMT | K | A | B |
|------------------|---------------|------------------|-----------------|-------------|-------|-----------------|---|---|---|
| Old Cimarron Trl | Kitty Hawk Rd | Adolph Scheel Wy | Major Collector | 12          | 3,135 | 0.88            | 0 | 3 | 6 |

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

K - Fatal Injury | A - Suspected Serious Injury | B - Suspected Minor Injury  
MVMT – million vehicle miles traveled

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 that are consistently associated with severe crashes and provide the opportunity for wider safety benefits with faster implementation. In Universal City, systemic countermeasures are intended to complement targeted corridor and intersection specific projects by improving baseline safety conditions citywide, with emphasis on roadways within the High-Injury Network (HIN) to maximize crash-reduction potential and improve safety outcomes for all road users. **Table 13** summarizes the systemic countermeasures proposed city-wide.

| ID | Location         | Description                              | Benefits                                                                                              |
|----|------------------|------------------------------------------|-------------------------------------------------------------------------------------------------------|
| 1  | 7 Locations      | Rectangular Rapid Flashing Beacon (RRFB) | Improves pedestrian safety and increases driver awareness.                                            |
| 2  | 3 School Zones   | School Zone Flashers                     | Improves pedestrian safety near schools and increases driver awareness.                               |
| 3  | 21 Intersections | Emergency Vehicle Preemption             | Improves emergency response time, improves emergency vehicle mobility and increases driver awareness. |
| 4  | 1 Curve          | Chevrons                                 | Increases driver awareness and reduces vehicle speeds.                                                |
| 5  | 3 Intersections  | Turn Lanes                               | Removes conflict points, channelizes traffic flow and improves mobility.                              |

Table 13. Systemic Countermeasure Summary

## Systemic Improvement #1 – Rectangular Rapid Flashing Beacons (RRFB)

### Project Information:

**Description:** Install Rectangular Rapid Flashing Beacons (RRFB), improve pedestrian ramps, and high visibility pedestrian crosswalk markings

**Potential Locations:** 7 crossing locations

**Estimated Average Unit Cost:** \$40,000 per crossing location

**Estimated Construction Cost:** \$280,000

### Safety Impact:

**Safe System Approach Element:** Safer Roads

**Benefits:** Improves pedestrian safety at mid-block or unsignalized crossing locations near schools, parks, and other pedestrian destinations.

**CMF:** 0.31

**Expected crash Reduction:** 69%

### Project Readiness:

Does Not Require Utility Relocation

Does Not Require ROW Acquisition



## Systemic Improvement #2 – School Zone Flashers

### Project Information:

**Description:** Install School Zone Flashers.

**Potential Locations:** 3 School Zones

**Estimated Average Unit Cost:** \$17,500/ea

**Estimated Construction Cost:** \$140,000

### Safety Impact:

**Benefits:** This systemic improvement enhances safety by increasing driver awareness and compliance with posted school-zone speed limits, clearly defining school-zone boundaries, and improving the visibility of pedestrian crossings. Flashing beacons serve as a high-visibility cue that reinforces appropriate driver behavior during school travel periods and supports safer operating speeds. By improving recognition of school environments and prioritizing pedestrian movements, this countermeasure reduces exposure to speed related crashes and creates a safer, and more accessible walking environment for vulnerable users traveling to and from school.

### Project Readiness:

Does Not Require Utility Relocation

Does Not Require ROW Acquisition



### Systemic Improvement #3 – Emergency Vehicle Preemption

#### Project Information:

**Description:** Install Emergency Vehicle Preemption to provide a clear path for emergency vehicles who are in-route to a call.

**Potential Locations:** 21 Intersections

**Estimated Average Unit Cost:** \$20,000 per crossing location

**Estimated Construction Cost:** \$440,000

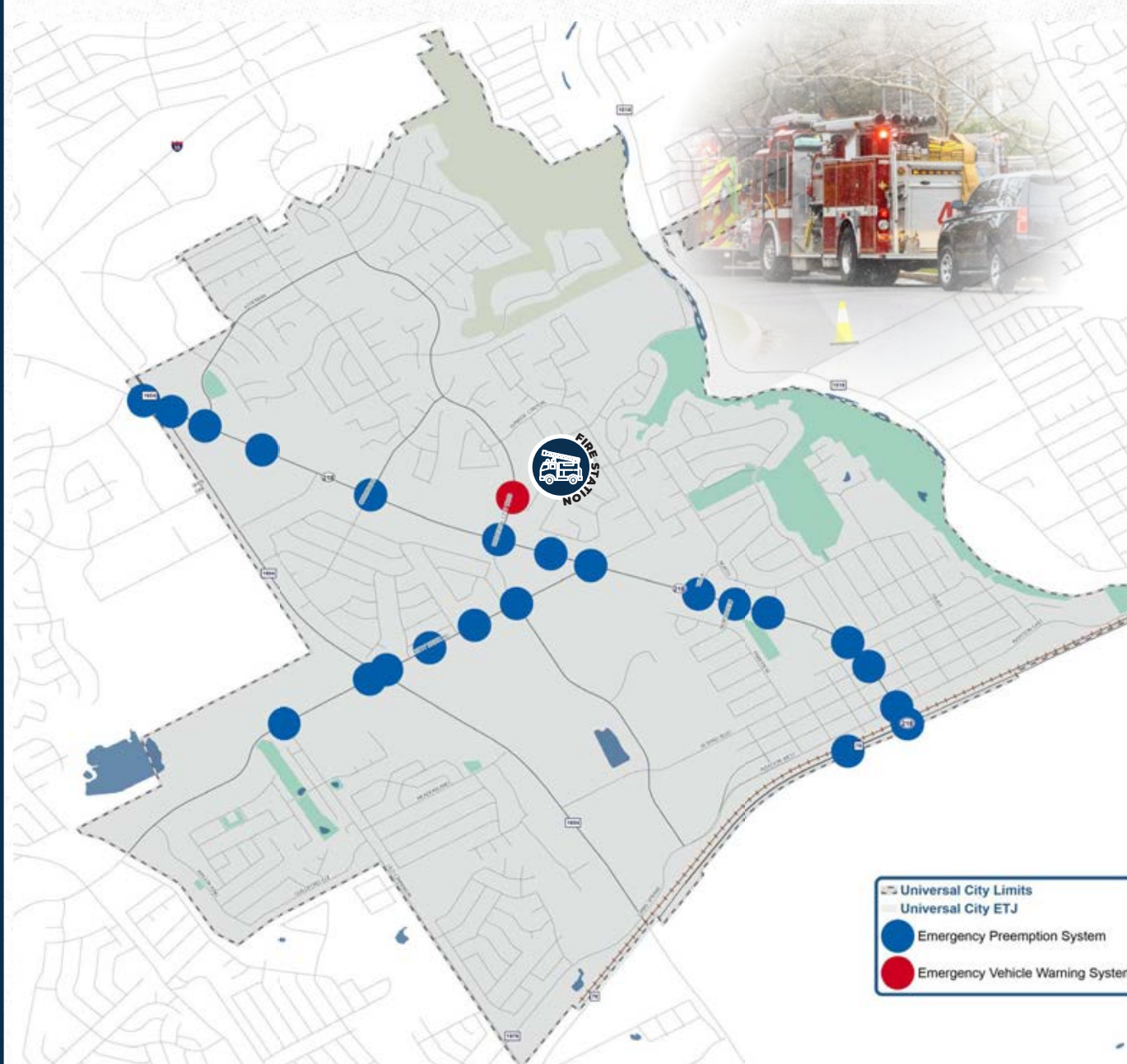
#### Safety Impact:

**Benefits:** Emergency vehicle preemption detection improves post-crash outcomes by reducing response times and minimizing conflicts for emergency vehicles at signalized intersections. By providing a clear and predictable path of travel, this improvement enhances safety for first responders and the traveling public while supporting faster, safer incident response.

#### Project Readiness:

Does Not Require Utility Relocation

Does Not Require ROW Acquisition



### Systemic Improvement #4 - LED Flashing Chevrons

#### Project Information:

**Description:** Install LED Flashing Chevrons to warn and guides motorists through a curved road.

**Potential Locations:** 1 curve

**Estimated Unit Cost:** \$3,000/ea.

**Estimated Construction Cost:** \$18,000

#### Safety Impact:

**Benefits:** Provide a clear, highly visible indication that alerts drivers to slow down for upcoming curves, reduce run-off-the-road crashes, and decrease crash severity.

**CMF:** 0.75

**Expected Crash Reduction:** 25%

#### Project Readiness:

Does NOT require Utility Relocation

Does NOT require ROW Acquisition



## Systemic Improvement #5 – Turn Lanes

### Project Information:

**Description:** Install turn lanes at intersections.

**Potential Locations:** 3 Intersections.

**Estimated Average Unit Cost:** \$1,000,000 per crossing location

**Estimated Construction Cost:** \$3,000,000

### Safety Impact:

**Benefits:** Removes conflict points, channelizes traffic flow and improves mobility, creating a roadway environment that reduces the likelihood of human mistakes, lessens the severity of potential crashes, and supports safer travel for all users.

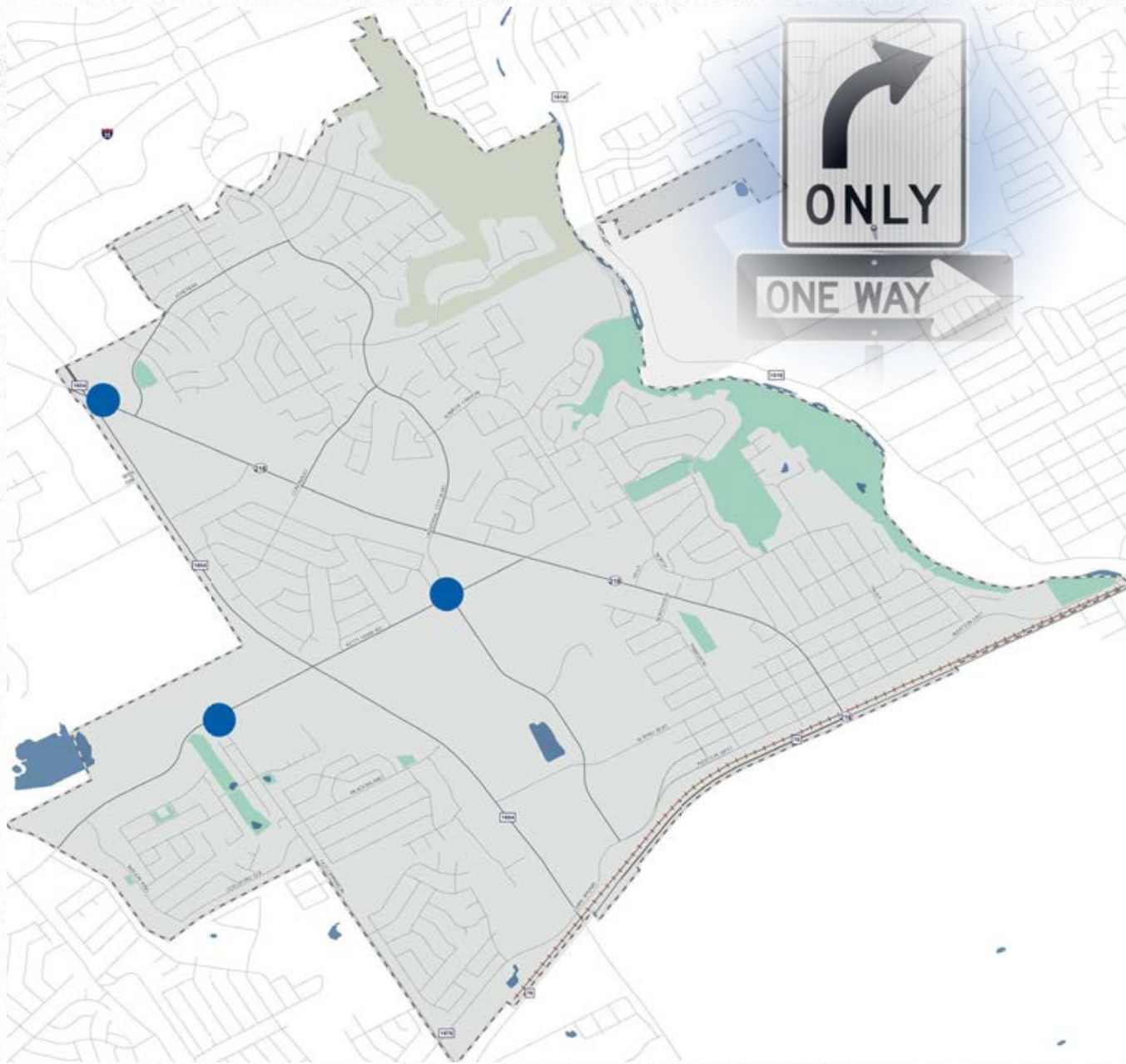
**CMF:** 0.96

**Expected Crash Reduction:** 4%

### Project Readiness:

May Require Utility Relocation

May Require ROW Acquisition



## 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 Universal City include:**

- Safe Routes to School (SRTS) planning throughout Universal City
- Development of a formal Americans with Disabilities Act (ADA) Transition Plan
- Perform an Intersection Control Evaluation – FM 78 & Pat Booker Road

### Safe Routes to School Plan (SRTS)

The Safety Task Force identified improving school traffic operations and creating safe walking and bicycling routes to schools as a key objective. While the documented crash history does not indicate a concentrated safety concern within active school zones, a SRTS would provide a proactive framework to evaluate conditions and recommend safety and operational improvements around school campuses.

**Development of an SRTS Plan would help Universal City:**

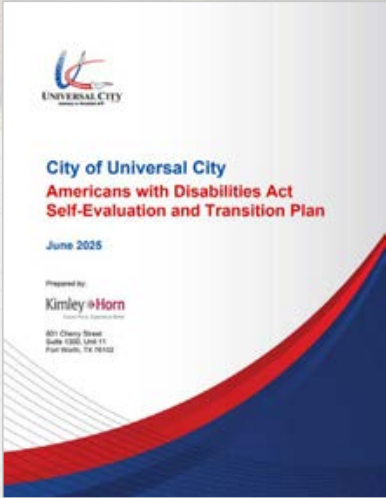
- Identify how students currently walk and bicycle to school and where barriers exist
- Recommend improvements such as sidewalks, enhanced crossings, traffic calming, and school-zone signage
- Support school and community led initiatives, including walking and biking groups, crossing guard programs, and safety education
- Establish a process to prioritize and fund pedestrian and bicycle infrastructure improvements near schools

### ADA Transition Plan

A formal ADA Transition Plan would provide a systematic approach to identifying, prioritizing, and addressing accessibility barriers within the public right-of-way. This plan would support equitable access to sidewalks, and crossings, while improving safety and mobility for people of all abilities.

### Intersection Control Evaluation (ICE)

Perform an ICE Evaluation for the intersection of FM 78 & Pat Booker Road, a key intersection with a history of intersection related crashes. The ICE evaluation will systematically assess existing and alternative intersection control concepts to identify configurations that improve safety, reduce crash risk, and support efficient operations for all roadway users. The evaluation will consider crash patterns, traffic operations, multimodal needs, and alignment with the Safe System Approach to inform future implementation decisions.



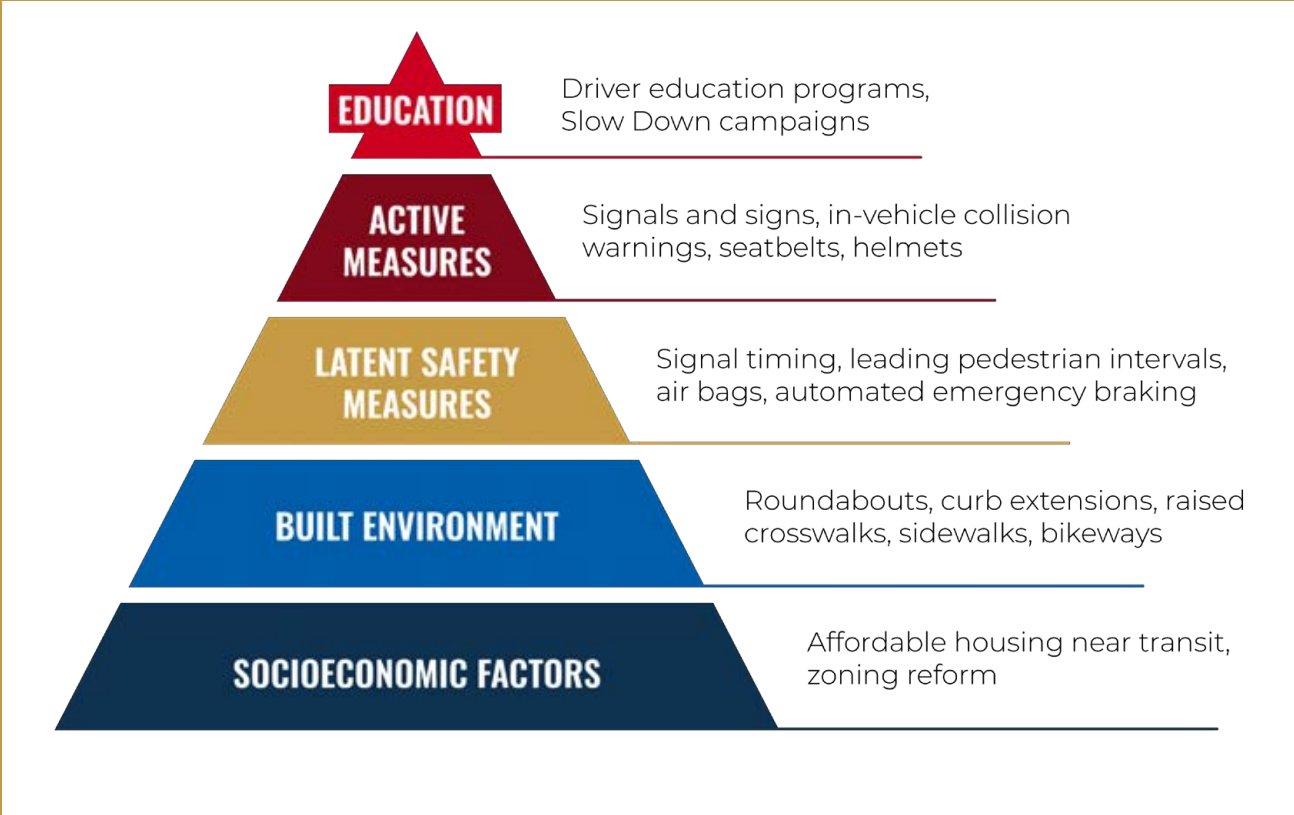
# Chapter 7. Policy and Procedures

Key policies and procedural changes are recommended to support Universal City’s vision of eliminating fatalities and serious injuries on its roadway network. These updates are intended to institutionalize safety-focused practices, integrate Vision Zero principles, and provide consistent frameworks for development review, capital planning, and operational decision-making. The recommendations reflect gaps identified during safety analysis, internal workflow assessments, and Safety Task Force discussions, and they represent next steps towards a proactive safety culture.

## The Safe Systems Pyramid

The Safe System Approach Pyramid, a framework increasingly adopted by Vision Zero cities to prioritizes the strategies shown to have the greatest impact on reducing fatalities and severe crashes. Originally adapted from established prevention models, the Pyramid helps communities shift from relying on individual behavior to emphasizing system-level changes to reflect Vision Zero’s core principle that traffic deaths and serious injuries are preventable, not inevitable.

As part of this review, each policy was evaluated against the tiers of the Pyramid, beginning with educational initiatives and extending through built-environment strategies and policy-level interventions. This evaluation showed that refinements are needed to establish a more proactive, system-wide safety foundation and strengthen long-term outcomes.



Source: Adapted from Ederer, D. J., Panik, R. T., Botchwey, N., & Watkins, K. (2023). *The Safe Systems Pyramid: A new framework for traffic safety. Transportation Research Interdisciplinary Perspectives*, 21.

## Policy and Procedures Review

Universal City’s Unified Development Code, Comprehensive Vision35 Plan, and zoning and subdivision codes were reviewed to identify opportunities to improve existing policies. Overall, the recommended updates strengthen the City’s transportation safety framework by improving intersection safety, accessibility, and inter-departmental coordination. These policy and procedure recommendations reflect Safe System and Vision Zero principles, as well as priorities outlined in TxDOT’s Strategic Highway Safety Plan, while emphasizing the importance of tailoring strategies to Universal City’s specific infrastructure, conditions, and community needs. Recommendations, organized by TxDOT’s emphasis areas, are provided in **Table 14**.

| Safety Emphasis Area | Countermeasure                  | Policy, Procedure, Process                                                                                            | Recommendation                                                                                                                                                                                                                                                                                    |
|----------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Intersection Safety  | Traffic Impact Analysis (TIA)   | No existing policy                                                                                                    | Establish comprehensive TIA guidelines for proposed developments as part of the development approval process for driveways and other roadway access requiring safety analysis for specific HIN locations.                                                                                         |
|                      | Safety Task Force               | No existing process                                                                                                   | Establish a Transportation Safety Task Force as a formal policy body responsible for advancing Vision Zero and Safe System principles and implement procedures to regularly review safety data, engage the community, and provide ongoing recommendations for systemwide crash-reduction actions. |
|                      | Street Design Standards         | Universal City Vision35 Comprehensive Plan – Chapter 3 Transportation and Mobility, Functional Street Classifications | Establish street design standards to include in the unified development code that identifies multimodal street design requirements and safety criteria such as minimum sidewalk widths, cross-sections, bike facilities, right-of-way requirements, etc.                                          |
|                      | Access Management               | No existing policy                                                                                                    | Develop access management criteria to be included within zoning and subdivision ordinances to identify driveway location/spacing, driveway design and turn-lane requirements with a focus on pedestrians and bicycles.                                                                            |
| Post Crash Care      | Traffic Signal Design Standards | No existing procedure                                                                                                 | Integrate emergency vehicle preemption systems into traffic signal standards to support post-crash care and reduce conflicts at signalized intersections.                                                                                                                                         |
| Speed Related        | Traffic Calming Policy          | No existing policy                                                                                                    | Establish a traffic calming policy to be included as part of zoning and subdivision standards to emphasize designing streets for safe speeds.                                                                                                                                                     |
| Vulnerable Road User | Crosswalk Policy                | No existing policy                                                                                                    | Evaluate and implement crosswalk standards to standardize use of high-visibility markings at all uncontrolled crossings to enhance visibility and driver expectations.                                                                                                                            |

Table 14. Policy, Procedure and Process Recommendations

# Chapter 8. Progress and Transparency

## Monitoring Progress

Ongoing collaboration with regional partners, particularly the Alamo Area MPO (AAMPO) and TxDOT, will further support effective monitoring and implementation. Many safety initiatives, data sources, and funding programs overlap at the local and regional levels, and AAMPO’s continued efforts related to regional safety data monitoring, project programming, and Vision Zero aligned initiatives provide opportunities for coordinate reporting, technical support, and funding alignment.

Maintaining transparency during implementation is essential to sustaining public trust and support. Building on the strong community engagement conducted during development of the CSAP, Universal City should publish an Annual Safety Progress Report summarizing progress on CSAP strategies, highlighting key safety accomplishments, and providing updates on funded and completed projects. This report should be prepared by the Public Works Department and presented to City Council to formally document progress and reinforce leadership accountability.

To further formalize long-term oversight and sustain momentum beyond plan adoption, Universal City may expand the existing Safety Task Force into a standing, public-facing Transportation Safety Committee. This committee would continue the collaborative, data-driven role established during CSAP development while broadening participation to include community members alongside City staff, elected officials, and public safety representatives. By providing a consistent forum for coordination, public input, and progress reporting, the Transportation Safety Committee would help ensure that the CSAP remains a living document and that safety remains a sustained City priority over time.

Maintaining the crash, can further support progress monitoring and transparency by tracking crash trends alongside key behavioral, environmental, and infrastructure characteristics. As new data becomes available, the dashboard can illustrate year-to-year changes, measure progress toward the City’s Vision Zero and safety goals, and allow City staff, leadership, and the Transportation Safety Committee to evaluate the effectiveness of implemented strategies.



# Chapter 9. Action Plan

## Implementation Schedule

For each strategy, the Action Plan identifies an estimated timeframe for implementation to support informed decision-making and the effective allocation of resources. These timeframes help Universal City prioritize actions that can advance Vision Zero goals while balancing near-term feasibility with long-term impact. **Implementation timeframes are categorized as the following:**

### Short < 2 Years

This action is a top priority and can be a “quick win” for Vision Zero.

### Medium 2- 5 Years

This action may take more time but can be accomplished before the next CSAP update.

### Long > 5 Years

This action will require many years but will have significant impact when complete.

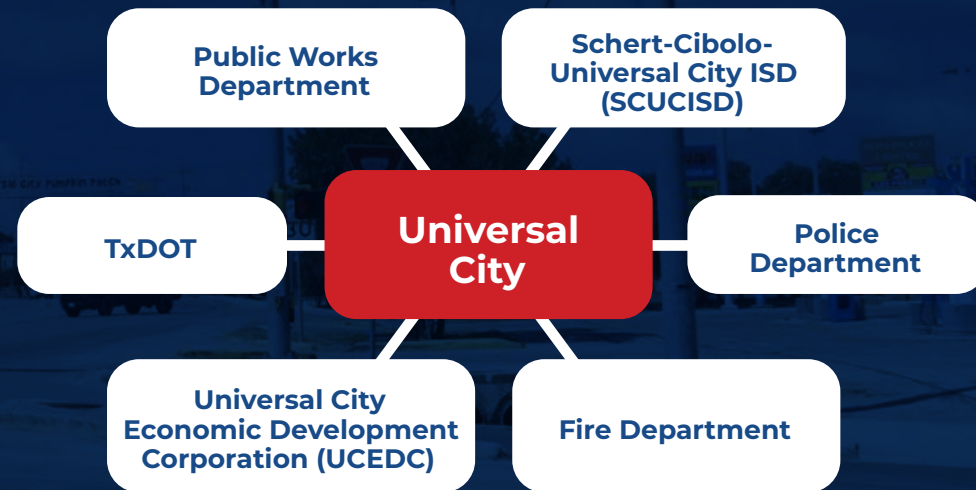
### Ongoing

This action does not have a specified timeframe and should be executed on a continuous basis.

While short-term actions may begin shortly after plan adoption, the time required to complete implementation will vary by project type, including infrastructure improvements, safety planning, design guidance, and policy updates. Advancing a coordinated mix of project types can create synergy and maximize the effectiveness of individual actions by reinforcing Safe System principles across multiple efforts.

## Partners

Coordination among local, regional, and institutional partners is key to ensuring effective implementation of the CSAP. Key partners include City departments such as Public Works, Police, Fire, and Community Development, along with regional and state transportation agencies. Given Universal City's proximity to Randolph Air Force Base, coordination with military leadership and adjacent jurisdictions is important to address shared corridors and safety conditions affecting residents and visitors. Collaboration with local school districts and nearby municipalities will further support safety improvements near schools and along shared roadways. Together, these partnerships will support data sharing, project delivery, funding alignment, and public engagement to advance the City's Vision Zero goals.



## 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 CSAP 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 and municipal roadways. TxDOT reserves 10% of the funding for use on off-system roadway improvement projects that include countermeasures preapproved by TxDOT

### TxDOT Transportation Alternatives Set-Aside (TA)

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

## Action Plan Summary

A summary of implementation actions, associated timeframes, and potential funding sources is provided in **Table 15**. Additional implementation efforts beyond the actions listed are described in earlier sections and should be advanced by local agencies to support a comprehensive Safe System approach.

Table 15. Action Plan Summary

| Action        |                                                                                           | Timeframe | Partner        | Potential Funding Source             |
|---------------|-------------------------------------------------------------------------------------------|-----------|----------------|--------------------------------------|
| Intersections | <b>Athenian &amp; Pat Booker Rd</b><br>Intersection and turn-lane improvements            | Medium    | TxDOT          | TxDOT HSIP<br>SS4A<br>Implementation |
|               | <b>Athenian &amp; Centerbrook</b><br>Intersection and turn-lane improvements              | Medium    | Universal City |                                      |
|               | <b>Kitty Hawk Rd &amp; Universal City Blvd</b><br>Intersection and turn-lane improvements | Medium    | Universal City |                                      |
|               | <b>Kitty Hawk Rd &amp; Old Cimarron Trl</b><br>Intersection and turn-lane improvements    | Short     | Universal City |                                      |
|               | <b>Pat Booker Rd &amp; Loop 1604</b><br>Turn-lane and shared-use path improvements        | Medium    | TxDOT          |                                      |

Table 15. Action Plan Summary

| Action    |                                                                                                                                                                                                                                                                              | Timeframe | Partner                            | Potential Funding Source          |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------------------------|-----------------------------------|
| Corridors | <b>Athenian (Pat Booker Rd to Universal City Blvd)</b><br>Restripe Athenian to a 4-lane cross-section to include 2-lanes in the southbound direction, a center two-way left-turn lane, and 1 lane in the northbound direction.                                               | Short     | Universal City                     | SS4A Implementation               |
|           | <b>Universal City Blvd (Kitty Hawk to Pat Booker Rd)</b><br>Improvements at Robin Dr and install sidewalk on both sides of Universal City Blvd. Restripe pavement markings to a 3-lane cross-section to include 1-lane in each direction and a center two-way left-turn lane | Medium    | Universal City                     |                                   |
|           | <b>Old Cimarron Trl (Kitty Hawk to Granite Mist)</b><br>Install a shared use path on the west side of Old Cimarron Trl and update pavement markings on the east side of Old Cimarron Trl                                                                                     | Medium    | Universal City<br>SCUCISD          |                                   |
|           | <b>Old Cimarron Trl (Guilford Cove to Adolph Scheel Way)</b><br>Install a shared use path on the west side of Old Cimarron Trl and update pavement markings on the east side of Old Cimarron Trl                                                                             | Medium    | Universal City<br>SCUCISD          |                                   |
| Systemic  | Rectangular Rapid Flashing Beacon (RRFB)                                                                                                                                                                                                                                     | Short     | TxDOT<br>Universal City<br>SCUCISD | SS4A Implementation<br>TxDOT HSIP |
|           | School Zone Flashers                                                                                                                                                                                                                                                         |           |                                    |                                   |
|           | Emergency Vehicle Preemption                                                                                                                                                                                                                                                 |           |                                    |                                   |
|           | Chevrons                                                                                                                                                                                                                                                                     |           |                                    |                                   |
|           | Turn Lanes                                                                                                                                                                                                                                                                   |           |                                    |                                   |

Table 15. Action Plan Summary

| Action                |                                                                                                                                                                                                                                                                            | Timeframe | Partner                                                                                    | Potential Funding Source                     |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------------------------------------------------------------------------------------------|----------------------------------------------|
| Non-Infrastructure    | <b>FM 78 &amp; Pat Booker Road</b><br>Perform an Intersection Control Evaluation (ICE) to assess existing and alternative intersection concepts to identify configurations that improve safety, reduce crash risk, and support efficient operations for all roadway users. | Long      | TxDOT<br>Universal City Economic Development Corporation (UEDC)<br>Randolph Air Force Base | TxDOT HSIP SS4A Implementation               |
|                       | <b>Safe Routes to School Plan</b>                                                                                                                                                                                                                                          | Short     | SCUCISD/ Judson ISD                                                                        | SS4A Supplemental Planning and Demonstration |
|                       | <b>ADA Transition Plan</b>                                                                                                                                                                                                                                                 | Short     | TxDOT<br>Universal City                                                                    |                                              |
| Policy and Procedures | Establish a public facing Transportation Safety Task Force to advance Vision Zero and Safe System principles and implement policies and procedures                                                                                                                         | On-Going  | Universal City                                                                             | None                                         |
|                       | Establish comprehensive TIA guidelines                                                                                                                                                                                                                                     |           |                                                                                            | None                                         |
|                       | Establish street design standards                                                                                                                                                                                                                                          |           |                                                                                            |                                              |
|                       | Develop access management criteria                                                                                                                                                                                                                                         |           |                                                                                            |                                              |
|                       | Develop traffic signal design standards                                                                                                                                                                                                                                    |           |                                                                                            |                                              |
|                       | Establish a traffic calming policy to be included as part of zoning and subdivision standards                                                                                                                                                                              |           |                                                                                            |                                              |
|                       | Standardize crosswalk guidance citywide                                                                                                                                                                                                                                    |           |                                                                                            |                                              |

# Abbreviations and Definitions

|        |                                                                                                             |
|--------|-------------------------------------------------------------------------------------------------------------|
| 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                                                                                       |
| CIP    | Capital Improvement Program                                                                                 |
| CMF    | Crash Modification Factor                                                                                   |
| CRIS   | Crash Records Information System                                                                            |
| CSAP   | Comprehensive Safety Action Plan                                                                            |
| EPDO   | Equivalent Property Damage 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 |
| KAB    | The sum of KAB (fatal, serious and minor injury) crashes                                                    |

# Abbreviations and Definitions

|       |                                                                                                                                                                                                                    |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| KABCO | "Injury Severity Scale<br>K - Fatal Injury<br>A - Serious (Incapacitating) Injury<br>B - Minor (Non-Incapacitating) Injury<br>C - Possible Injury<br>O - Non Injury, Property Damage Only<br>U - Unknown Severity" |
| LPI   | Leading Pedestrian Interval                                                                                                                                                                                        |
| 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                                                                                                                                                                                                  |
| 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                                                                                                                                                                                               |