



# **CHAPTER 3: EXISTING PLANNING EFFORTS**

# LITERATURE REVIEW

This chapter condenses key information from various planning documents, projects, and studies relevant to the Waco MPO CSAP. This review aims to align the CSAP's goals, analysis, and recommendations with past and ongoing transportation and non-infrastructure plans within the Waco metropolitan area. The review focuses on relevant efforts from the MPO, McLennan County, member cities, and state policymakers. Plans, documents, and studies reviewed in this chapter are as follows:

### Waco Metropolitan Planning Organization

- Connections 2045: The Waco Metropolitan Transportation Plan (2020)
- The Transportation Improvement Program FY-2023-26 (2022)
- Waco Metropolitan Area Active Transportation Plan (2019)
- US Business 77 Corridor Study (2016)
- Waco MPO Corridors Study: Valley Mills Drive and Hewitt Drive (2013)
- Waco Area Master Thoroughfare Plan and Design Guidelines (2012)
- Future Land Use Study for McLennan County (2007)
- Roadway Safety Performance Targets

### **McLennan County**

• Parks Recreation and Open Space Master Plan 2011-2021 (2010)

# **City of Bellmead**

• Comprehensive Plan (2023)

# **City of Bruceville-Eddy**

• Comprehensive Plan (2011)

# **City of Hewitt**

- Comprehensive Plan 2022 (2003)
- We are Hewitt: Strategic Plan 2022-2027 (2022)

# **City of Lorena**

- Comprehensive Plan (2020)
- Lorena Parks, Recreation, and Open Space Master Plan (2019-2028)
- Lorena Strategic Plan (2021-2022)

# City of McGregor

• Vision 2030 (2018)

# **City of Robinson:**

• Comprehensive Plan: Community Visions 2034 (2014)

## **City of Waco**

- The City Plan: Waco Comprehensive Plan 2040 (2016)
- Capital Improvement Projects FY 2023-2024
- Downtown Implementation Plan (2023)
- Waco City-Wide Trails Master Plan (2023)
- Park Projects (2022-24)
- 25th Street Corridor Project (2023)
- Americans with Disability Act Transition Plan (2019)
- 17th/18th/19th Streets Corridor Study (2017)
- Imagine Waco: A Plan For Greater Downtown (2010)

### City of Woodway

• Comprehensive Plan (2004)

### **TxDOT**

- Unified Transportation Program 2024 (2023)
- Texas Transportation Plan 2050

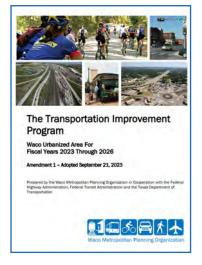
This review guides the identification of needs and adequacy with respect to roadway and intersection safety improvements. All safety projects identified in the CSAP are consistent with local and regional goals and standards. **Appendix B** and **Appendix C** list and summarize relevant goals, policies, objectives, and roadway safety projects from the documents reviewed. The CSAP has also been influenced by ideas and thought processes in safety plans from jurisdictions across the country including the Marin County Travel Safety Plan (2018), City of Livermore Local Roadway Safety Plan (2023), and the City of Cupertino Vision Zero Action Plan and Policy (2024).

# WACO METROPOLITAN PLANNING ORGANIZATION



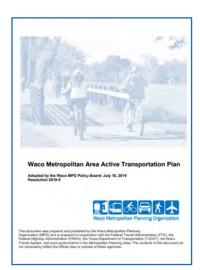
#### **Connections 2045: The Waco Metropolitan Transportation Plan (2020)**

The Metropolitan Transportation Plan (MTP) assesses and outlines the future transportation needs and priority projects for the Waco metropolitan through the year 2045. The plan focuses on regional priorities including maintaining existing transportation facilities and maximizing their use, safety, and security; preserving regional air quality and environmental standards; supporting regional freight movement and economic development efforts; and improving access to economic opportunity and essential services. The MTP includes a detailed analysis of the County's transportation network including the modal inventory, and infrastructure, and a needs and gap analysis including a highway crash analysis that identifies locations with the highest crash rates. The MTP finalizes a priority project list after evaluating projects on a 22-element selection criteria. The MTP is fiscally constrained to only include those projects that can be realistically funded by the year 2045. Projects with crash reduction possibilities and projects at locations with higher numbers of bicycle and pedestrian crashes get priority under the safety and security criteria. The CSAP process will be informed by the safety and security priority and will consider the safety-related projects listed in the MTP.



#### The Transportation Improvement Program | FY-2023-26 (2022)

The Transportation Improvement Program (TIP) lists regionally significant financially constrained projects that will be implemented in the cycle 2023-2026. Projects included in the TIP are selected through the MTP, based on corridors identified in the Metropolitan Thoroughfare Plan. Projects listed in the MTP are included in TIPs after completion of necessary studies, acquisition of right of way, and commitment of funds. The TIP includes detailed list of highway and transit projects. Smaller projects, including pedestrian and bicycle improvements, that are relevant for the CSAP, are included as grouped projects in the TIP. The CSAP will consider safety projects prioritized into the TIP in finalizing the recommended project list.



#### Waco Metropolitan Area Transportation Plan (2019)

The 2019 Active Transportation Plan (ATP) established the comprehensive framework for multimodal and active mobility for McLennan County. It assesses the status of the bicycle and pedestrian network in the region, including regional connectivity, and safety. The plan includes engineering, education, encouragement, enforcement, evaluation, and planning and equity-driven recommendations. The plan proposes several new bikeway and pavement improvement projects that directly contribute to safety. The non-engineering methods recommended in the plan include education and outreach programs, celebrating national bike month and pedestrian events, community rides, walks, bicycle and pedestrian audits, shared mobility, and micro-mobility programs. There are several overlaps with the focus of this plan and the CSAP, especially in terms of engineering and non-engineering projects to improve safety.



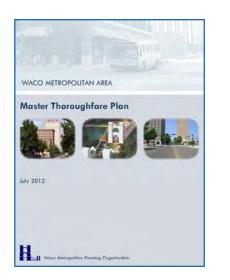
### US Business 77 Corridor Study (2016)

US Business 77 is an ageing corridor running through the County. The study sought to consider the possibility of converting parts of the freeway from I-35 and Elm Mott interchanrge to avvnd Brazos River into a moderate speed arterial. The stakeholder-involved planning process identified key corridor features that needed to be addressed, including boulevard design, need for access control, special use parallel roads for specific local access, bicycle and pedestrian accommodations, roadway network enhancements, and special intersection treatments. Intersection improvements and access management control were among the safety recommendations from the study. The safety improvements identified in the study will inform the current planning efforts.



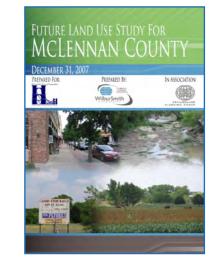
### Waco MPO Corridors Study: Valley Mills Drive and Hewitt Drive (2013)

The 2013 study evaluates safety and conditions along the two regional corridors in Waco – Valley Mills Drive between Waco Drive and I-35, and Hewitt Drive between US-84 and Sun Valley Boulevard. The study looked into safety, traffic conditions and delays, and also examined ways to improve multimodal features of the two corridors. The study found that the crash rates for Valley Mills Drive and some parts of Hewitt Drive were higher than the average for Texas. The study recommends improving safety on both the roads through access management, raised medians, driveway consolidation, and cross access provision. Operational improvements were also recommended in the study including creating turn lanes, improving signal timings, and creating pedestrian, bicycle and transit facilities. Many of the challenges identified in this study continue to date, and the CSAP draws from it to provide recommendations for the two corridors.



#### Waco Area Master Thoroughfare Plan and Roadway Design Guidelines (2012)

The Waco Master Thoroughfare Plan and Roadway Design Guidelines provide guidelines for developing a county-wide roadway network for local, regional, and state transportation planning entities in response to anticipated growth. The guidelines ensure that roadway design is integrated with land use and improves safety and travel experience, enabling coordinated roadway network development. The plan's emphasis goes beyond traditional roadway goals to elements such as multimodal transportation network and urban vitality. The plan defines roadway characteristics for the County and identifies project locations to implement context-sensitive solutions. The Roadway Design Guidelines that are a part of the plan provide an engineering toolkit containing interventions that can be implemented on the county roadways to improve safety. The CSAP will be guided by the context-sensitive project opportunities and design recommendations in this plan.



### Future Land Use Study for McLennan County (2007)

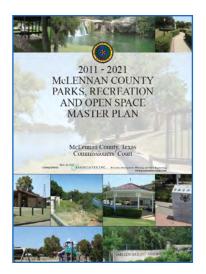
This 2007 study is an active effort by the Waco MPO to bring a synergy between land use trends and mobility needs in the County away from existing sprawl-like patterns towards more efficient growth trends. Current and historic trends and land uses were analyzed to identify 21 existing land use patterns. The scenario planning exercise, which involved the community, compared the trend scenario of low density and sprawl in rural and suburban areas to two preferred growth patterns which improves mobility without significant roadway expansion. The study considers two scenarios – a suburban center scenario and an urban center scenario – both of which support a multimodal development patterns. The CSAP will follow the implementation recommendations from the study that promotes roadway safety for all users and in school areas.



#### **Roadway Safety Performance Targets**

The Roadway Safety Performance Targets have been set to meet the Fixing America's Surface Transportation (FAST) Act requirement to include a performance-based decision-making process in the MTP. The Waco MPO adopted TxDOT's 5-year average target for 2023 and committed to a goal of zero roadway fatalities by 2050. The CSAP will play a foundational role in ensuring that these targets are met.

# **McCLENNAN COUNTY**



#### Parks, Recreation, and Open Space Space Master Plan 2011-2021 (2010)

The 2010 Plan lays a 10-year vision for developing parks, recreational facilities, and open spaces in McLennan County and its cities, with the exception of Waco. The Plan aims to promote fitness, wellness, and safety in developing quality recreational settings within the County. Developed through a community-involved process, the Plan defines and compiles the park, recreational facility, and open space inventory for the County. The priority needs identified in the Plan were planned for implementation between 2011 and 2023. The CSAP supports the Plan in ensuring safety in the multimodal linkages between parks and open spaces.

#### 2024 WACO MPO SAFETY ACTION PLAN

# **CITY OF BELLMEAD**



Bruceville-Eddy Comprehensive Plan

#### **Comprehensive Plan (2023)**

The Bellmead Comprehensive Plan provides a report on the present conditions and future vision for the City based upon the needs and desires of the community. The 2033 vision of the city has the four characteristics, a family-oriented and pedestrian-friendly feel, a local economy that allows residents to meet many of their needs in Bellmead, improved street conditions supported by a well-maintained storm drainage system, and parks and recreation facilities that provide a variety of activities for residents of all ages and abilities. The Plan includes a detailed study of four elements: Storm Drainage System, Thoroughfares, Central Business District, and Recreation and Open Space Study, as well as proposed goals and objectives for each element. The thoroughfare study provides an inventory of current routes and local street networks. It identifies limited connectivity areas, provides street functional classification and speed limits, and information on traffic control devices in use in the city. The pedestrian and bicycle network is also mapped in the Plan. The Plan identifies three challenges facing the City's thoroughfare: gaps in bike and pedestrian networks between activity centers, heavy truck and freight movement along corridors connecting activity centers, development regulations, and standards intended to improve connectivity.

The Plan also provides guidance on context-sensitive design standards and includes recommendations for improvements that considers safety element, including adopting transportation alternatives with safety features like speed bumps, designated truck routes, speed limit signs, and flashing lights. The CSAP will consider the goals and guidelines provided by this Plan to ensure continuity.

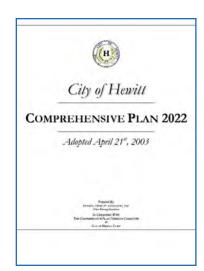
# **CITY OF BRUCEVILLE-EDDY**



The Bruceville-Eddy Comprehensive Plan considers the future growth and vision of the community, driven by the expansion of I-35 upon which it is located. It includes goals and policies for changes and improvements to land use, transportation, economic development, housing, and open space to support its growth. Among the important projects envisaged in the Plan are an expansion of the road network, downtown revitalization, setting up a farmers market, a new park, and improvements to the senior center. The transportation element within the Plan describes the local roadway network and discusses the future expansion for improved connectivity. Relocations and changes prompted by the expansion of I-35 form an important consideration within the Plan. The CSAP will develop priorities that align with the goals and policies in this Plan.

# **CITY OF HEWITT**





2022-2027 Strategic Plan

WE ARE HEWITT

PERSEVERANCE

SERVICE UNITY

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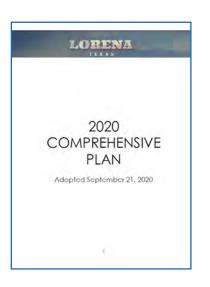
#### Comprehensive Plan 2022 (2003)

The Comprehensive Plan of the City of Hewitt aims to coordinate long-range planning and establish generalized patterns for development. It provides a baseline analysis of physical, demographic, socio-economic characteristics, and existing land use and housing patterns in the City. The City aims to develop a safe, friendly, and family-oriented community, with affordable housing and a vital economy. The Plan identifies multiple safety challenges on the roadway, including a need for signalization at intersections, establishing shared driveways for developments along major roads, increasing traffic and a need for roadway standards. The thoroughfare plan within the document contains the functional classification system and standards for the City. The CSAP priorities and recommendations take into account the anticipated growth patterns in the city and challenges identified on the roadway network.

#### We Are Hewitt: Strategic Plan 2022-2027 (2022)

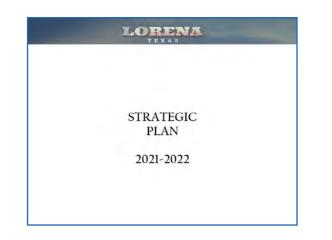
The Strategic Plan is a 5-year plan that combines planning on capital improvement, staffing, service, and funding sources for the City. It includes plans from various city departments with their capital improvement projects and staffing needs listed. The streets department has multiple roadways identified for reclamation and reconstruction. The CSAP will identify opportunities for safety upgrades on these roadways that can be implemented to improve overall road safety in the City.

# **CITY OF LORENA**



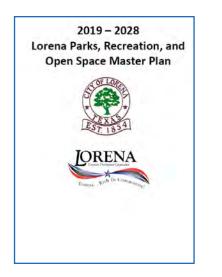
#### **Comprehensive Plan (2020)**

The City of Lorena Comprehensive Plan was adopted in 2020. The citizen-included planning process identified the City's hometown feel, the Old Town historic area, proximity to Waco, its unique location on the I-35 corridor, and excellent schools as key features of the community. The city adopted goals and objectives for eight areas, namely: growth management; existing and future land use; transportation; historic preservation; economic development; housing; parks, recreation and natural resources; and government infrastructure, services, and facilities. The transportation element of the Plan prioritizes mobility, access, safety, and rapid travel. The City envisions adequate roads, bike lanes, and sidewalks. The Plan provides for the functional classification of the roadway network with design guidelines. The Plan emphasizes a context-sensitive approach that considers community objectives, functional classification, thoroughfare type, and adjacent land use in designing its thoroughfare. Street and sidewalk connectivity are among the priorities for the City. The Plan also includes maps of proposed roads and sidewalks. The plan will inform the CSAP.



### Lorena Strategic Plan (2021-2022)

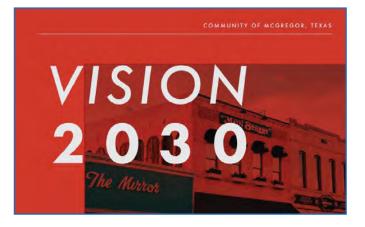
The City of Lorena Strategic Plan outlines the short-term (three-to-five years) development path for coordinating and streamlining operations as per the Comprehensive Plan. The Plan identifies a vision for a thriving Lorena, with a unique 'hometown' feel supported by infrastructure including utilities, roads, bike lanes, and sidewalks. It identifies inclusiveness, livability, excellence, sustainability, and preservation as core values for the Plan period, while adopting specific strategic goals to achieve the City's vision. The City also identifies long-term issues, including the need for enhanced beautification and image through improved lighting, signage, landscaping, and welcome signs. The CSAP will contribute to improving livability and infrastructure quality in Lorena through its focus on safety for all users, including pedestrians, bicyclists, and motorists.



#### Lorena Parks, Recreation, and Open Space Master Plan (2019-2028)

The City of Lorena Parks, Recreation, and Open Space Master Plan provides guidelines for the development and planning of its park and recreation system for a 10-year period. The 2019-2028 Plan describes the current inventories of areas and facilities, conducts a community-based need assessment, and prioritization for future parks. The Master Plan's goals of providing connectivity to the facilities through trails, bike lanes, and pedestrian ways align with the intent of the CSAP.

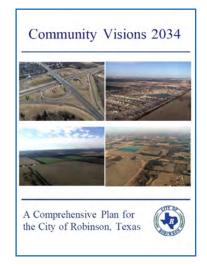
# **CITY OF McGREGOR**



#### Vision 2030 (2018)

Vision 2030 identifies action items and projects in seven areas for the City of McGregor. The action areas include Economic Development and Main Street, a Sense of Community and Quality of life, and as well as essential services including Education, Infrastructure, Public Safety and Code Enforcement, Housing, and Wellness and Recreation. The projects along Main Street offer opportunities to improve safety. The CSAP considers these in developing priorities and countermeasures.

# **CITY OF ROBINSON**



### **Comprehensive Plan: Community Visions 2034 (2014)**

The Community Visions 2034 is the comprehensive plan for the City of Robinson, adopted in 2014. It contains a detailed plan, including maps and masterplans to direct the future growth of the City developed in consultation with stakeholders. The City's visions and goals for nine plan categories- namely, Leadership and Administration, Community Development, Natural Resources, Infrastructure, Historic and Cultural Preservation, Agricultural and Rural Preservation, Business and Economic Development, Transportation, and Emergency Management- were developed through a participatory planning process. The Plan also includes a transportation system plan that provides long-range guidance for the location of arterial, collector, and local streets. It lays basic street classification and design guidelines. The land use plan also provides urban design considerations and recommendations for streetscape design. The future land use plan update of 2018 identifies corridors of future growth in Robinson. Single-family residential developments are anticipated in south, southwest, and south east parts of the City. Higher density housing is anticipated along I-35 on the north side. I-35 and SL-340/SR-6 would see new commercial, industrial, and office developments. The CSAP will develop priorities that align with the goals and policies in this Plan.

# **CITY OF WACO**



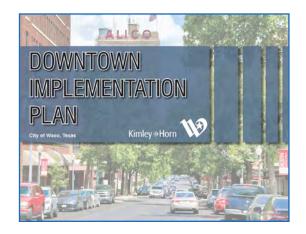
### The City Plan: Waco Comprehensive Plan 2040 (2016)

The Waco Comprehensive Plan 2040 is the fifth comprehensive plan developed for the City of Waco, and includes a focus on promoting sustainable development through strategic development of the physical, economic, and cultural environments in the City. The Plan promotes sustainable development through downtown revitalization and the management of the dispersed rural growth projected for the City. Transportation policies in the Plan promote the sustainable and safe management of the growing travel needs of the City through multimodal expansion, improvements to local street design, and connectivity promoting active mobility. The Plan also seeks to reduce vehicle miles traveled (VMT) though thoughtful land use planning, higher density development, and carpooling. The Plan also recognizes the safety risk facing county and city road systems, which can primarily be attributed to driver behavior. The CSAP will align with the sustainable development and safety-focused vision put forth in the Plan.



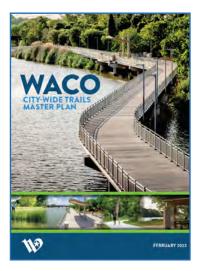
#### Capital Improvement Projects (FY 2023-2024)

The City has 189 capital improvement projects including projects related to facilities, parks and recreation, engineering, streets, traffic, and utilities. These include safety-related projects that are in construction or earlier phases of planning. The CSAP will consider the projects already scheduled to be implemented while drafting its list of recommendation.



### **Downtown Implementation Plan (2023)**

The Downtown Implementation Plan was adopted in early 2023, providing an action-oriented strategy to revitalize downtown Waco. The Plan provides a framework for improvements in parking, pedestrian mobility, and streetscape, along with a toolbox of improvements that can be utilized in the downtown area. It also analyzes the street network and creates a new street classification for the downtown with associated design guidance. These are Arterial/Gateway Streets, Entertainment Streets, Circulation Streets, Green Boulevards, Activated Streets, Pedestrian Only Streets, and Shared Streets. The toolkit in this plan contains action items that enhance safety and hence can be considered for the CSAP.



### Waco City-Wide Trails Master Plan (2023)

The Trail Master Plan was developed by the City of Waco Parks and Recreation Department as a comprehensive manual to guide the maintenance and improvement of the interconnected trail network for recreational and transportation uses in the City. It seeks to develop hiking, biking, and paddling trails that can accommodate all users including walkers, runners, equestrians, in-line skaters and skateboarders, motorized users, paddlers, and people/persons with disabilities. Despite being a City Plan, it also plans for adjacent jurisdictions to ensure connectivity. The Plan defines trail typology and discusses the current condition of trails including features and opportunities for enhancement, needs of trail users and concerns, and planned trail systems. The Master Plan also summarizes design development principles and standards. With respect to the CSAP, the Plan includes safety design elements and guidelines applicable to the trail network.



### Park Projects (2022-2024)

The City of Waco is currently undertaking a series of park improvement and revitalization projects. These projects look to improve access and connectivity to the parks while developing the infrastructure and resources within the park. The following are the projects underway that are of consequence to the CSAP in their focus on improving safety through better sidewalks and connectivity.

- Floyd Casey Development Project (ongoing)
- Lions Park Revitalization Project (2023)
- China Spring Park Project (ongoing)
- Cotton Palace Park Master Plan (2022)



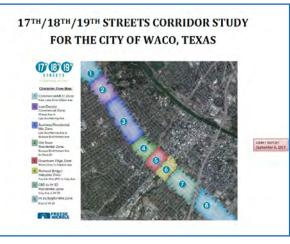
### 25th Street Corridor Project (2023)

The Plan outlines proposed projects which seeks to revitalize 1.5 miles of 25th Street between Franklin Avenue and Maple Avenue to promote the Hispanic heritage of the neighborhood. The project would outline an action-oriented implementation strategy for the corridor. Specific project actions could include walkability improvements through improvements to sidewalks, street lighting, street parking, and traffic calming. The strategy will be developed through October 2023 and April 2024. This project considers several safety-enhancing improvements that are relevant to the CSAP.

# CITY OF WACO Americans with Disabilities Act Transition Plan August 6, 2019 P.O. Box 2570 Waro, Texas 76702

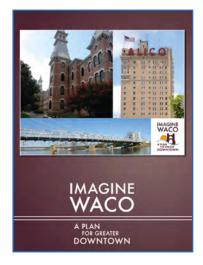
### Americans with Disability Act Transition Plan (2019)

The City of Waco Adopted the Americans with Disability Act (ADA) Transition Plan in 2019. It guides the upgrade of city infrastructure to meet the requirements in ADA Title II. Between 2019 and 2021, street improvements including construction of sidewalks and ramps where followed.



### 17th/18th/19th Streets Corridor Study (2017)

The study examined the combined five-mile corridor surrounding 17th, 18th, and 19th Streets in the City of Waco, from Lake Shore Drive in the northwest to Primrose Drive in the southeast. It identified roadway geometry, maintenance, safety and other issues in consultation residents and business owners along the corridor. Safety concerns were identified along the corridor due to high intersection volume, complexity of the corridor geometry, and unsafe speed. The community-led steering committee identified a five-phase improvement implementation plan that focused on safety and operational improvements, pavement markings upgrade, sidewalk and curb line roadway upgrades, and pedestrian crossing and signal upgrades. The improvements recommended in the study are supportive of the goals of this CSAP. The CSAP will analyze these corridors with respect to safety with updates data and draw from the community-supported changes proposed to improve safety.



04 COMPREHENSIVE PL

JANUARY 2004

### Imagine Waco: A Plan for Greater Downtown (2010)

The 2010 revitalization plan aims to arrest the residential and commercial decline in Waco downtown. The Plan envisages a vibrant downtown development that supports diverse activities throughout the day for residents and businesses, supported by improvements to accessibility, connectivity, walkability, and a multimodal transportation network. The Plan hopes to create a vibrant city center by the river and to ensure connectivity between the east and west sides. The Plan's emphasis on walkability creates an opportunity for improving safety for all users on the road, an objective of the CSAP. As this is a relatively older plan, the CSAP will take into consideration the strategies and project list in the more recent 2023 Implementation Plan.

# **CITY OF WOODWAY**



The City of Woodway Comprehensive Plan is the City's long-range plan that outlines its community development vision. The 1997 Plan lists the functional classification of major thoroughfares in the City, identifies traffic generators, and contains street section guidelines. It identifies deficiencies and recommends changes to the roadway network. The 2004 update to the Plan updates some of these recommendations. The CSAP follows the general direction of the Comprehensive Plan.

# **TxDOT**



### **Unified Transportation Program 2024 (2023)**

The Unified Transportation Program (UTP) guides the 10-year transportation programming that is annually updated. It bridges the long-range transportation planning goals, performance measures, and targets to project level outcomes. The UTP categorizes transportation projects and authorizes the distribution of funding across 12 categories. The UTP actively promotes safety of the transportation network in support of TxDOT's three strategic goals: promoting safety, preserving assets, and optimizing system performance. The CSAP works to reduce crashes and fatalities on local roadways and directly contributes to attaining the goals of the UTP.



## Texas Transportation Plan 2050 (2020)

The Texas Transportation Plan 2050 presents the long-range transportation vision for a 30-year period. Developed with considerable stakeholder input and analysis, the Plan is informed through considerations of high safety risks on roadways, population growth, economic expansion, increasing freight demands, technological advancements, and systemic risks affecting the transportation system. Promoting safety is a central goal of the long-range plan, which will be measured through a reduction in fatalities and severe injuries consistent with national goals and performance measures. The plan promotes a five "E's" – Evaluation, Engineering, Encouragement, Education, and Enforcement – based approach to safety promotion. TxDOT has also adopted a Vision Zero goal to reach zero traffic KSI by 2050.