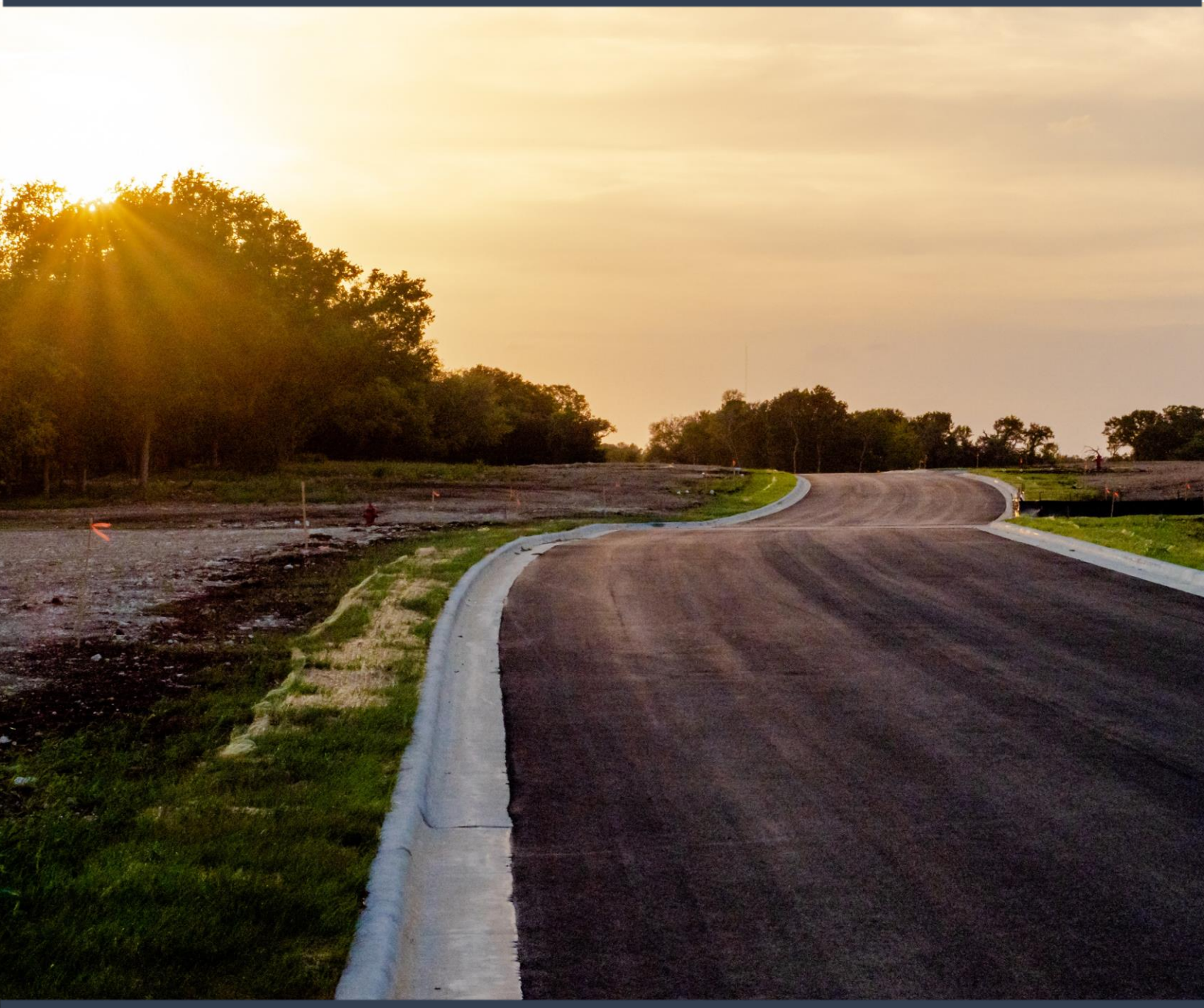
Bell County Thoroughfare Plan 2023



BELL COUNTY

THOROUGHFARE PLAN

Bell County Officials

The Honorable David Blackburn
Bell County Judge

Commissioners
Precinct 1: Russell Schneider
Precinct 2: Bobby Whitson
Precinct 3: Bill Schumann
Precinct 4: Louie Minor

Adopted
July 17, 2023

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Table of Contents

Figures

Tables

Appendices

Appendix A – Bell County Thoroughfare Plan Map
Appendix B – Bell County Master Road Index
Appendix C – KTMPO Multimodal Plan
Appendix D – Regional Arterials Concept Inventory- CAMPO
Appendix E – Williamson County Long-Range Transportation Plan
Appendix F – Waco Metropolitan Area Master Thoroughfare Plan
Appendix G – 2020 Burnet County Transportation Plan
Appendix H – Belton Comprehensive Plan
Appendix I – Copperas Cove Comprehensive Plan
Appendix J – Harker Heights Mobility Plan
Appendix K – Killeen Comprehensive Plan
Appendix L – Nolanville Comprehensive Plan
Appendix M – Salado Comprehensive Plan
Appendix N – Temple Mobility Master Plan

Chapter 1 Introduction

Overview

In early 2022, the Bell County Commissioner's Court asked the Killeen Temple Metropolitan Transportation Organization (KTMPO) to develop a new long-range thoroughfare plan for the County. Bell County's previous thoroughfare plan had not been significantly updated since 2001. Since then, Bell County has experienced significant changes including rapid population and employment growth; both of which are projected to continue. The Bell County Thoroughfare Plan (BCTP) is a transportation framework that provides guidance to the County on preserving right-of-way (ROW) to manage growth and address current and future mobility needs. Bell County is in one of the fastest growing parts of Texas and has many unique challenges that make future transportation planning essential. The County sits at the intersection of two major highways in Central Texas and serves as a key link between major markets to the north and south. In addition, the main entrance to Fort Cavazos, the largest U.S. military installation sits at the western edge of Bell County. These factors have contributed to the County's rapid growth and also show the need to continue planning for a future transportation system.

The Thoroughfare Plan provides a long-range guide for planning future transportation in the County. The purpose of the Plan is to identify future roadway projects and right of way (ROW) so that land can be preserved as the County continues to develop through public and private efforts. Construction of the roadways is dependent on many other factors (available funds, development practices, individual City and County decisions, changing needs, etc.). Creating the BCTP allows the County and its communities to plan for implementation on a regular basis and adjust priorities as necessary. This Plan should be used as a guide for future roadway network planning, and it is not meant to guarantee the construction of any alignments illustrated in the Plan.

A Throughfare Plan:

- Is a long range (25+ years) transportation framework
- Identifies general location and type of transportation corridors
- Preserves right-of-way for future infrastructure
- Establishes consistent county design guidelines
- Organizes future development

A Thoroughfare Plan Does NOT:

- Change ownership or land use
- Require counties/cities to build proposed roadways
- Identify or prioritize roadway projects
- Identify specific roadway alignments
- Include survey, design, cost estimate, or schedule of roadway projects
- Identify funding sources

Purpose and Goals

The purpose of this plan is to guide the development of the county's transportation system to increase the safety of all road users, provide adequate mobility for goods and services, and promote healthy development and redevelopment county-wide. The following set of goals was set to provide guidance for developing the plan and its final recommendations.

Goals:

- Improve roadway safety to reduce and eliminate fatal and serious injury crashes
- Identify maintenance needs and priorities
- Preserve adequate rights-of-way
- Establish county-wide design standards
- Enhance coordination between the county, incorporated cities, and the Texas Department of Transportation (TxDOT) to develop a seamless, regional transportation plan
- Determine mechanisms to meet growing highway demand within regulatory and funding constraints
- Present land use strategies designed to have positive impacts on the county's transportation infrastructure

Plan Organization

The BCTP consists of a thoroughfare map and report documenting the thoroughfare planning process, results, and recommendations. The thoroughfare map shows the alignments of existing and proposed future connections. The report was compiled during the project and is organized to follow the study order. A list of the report chapters and a description of each are shown below.

1. Introduction

Provides an overview of the need for a new thoroughfare plan. Describes the plan's purpose and introduces the specific goals of the plan. Outlines the organization of this document.

2. Review of Existing Conditions

Reviews the existing conditions of Bell County including its population, employment, transportation networks, and safety record. Assesses how these factors will contribute to future conditions in the County and how that will affect the development of the plan.

3. Plan Development

Describes the plan development process, specific analysis methods used, and how public engagement occurred. Also presents a review of the data collected in Chapter 2 and relevant findings from the previous thoroughfare plan.

4. 2025 Thoroughfare Plan

Shows a map of the County that details generally the existing roadway conditions and future recommendations. Describes the roadway classification system implemented in the BCTP.

5. Recommendations

Provides recommendations regarding policy, funding, and implementation of the plan. Describes how the plan will serve as a guide for future thoroughfare development and provide a basis for decision making.

Chapter 2 Review of Existing Conditions

This chapter includes a summary of the existing conditions within Bell County, including its population, employment, transportation, and unique features. To better plan for the future of Bell County, it is important to understand the current conditions affecting the area.

Area Overview

Located in east central Texas, Bell County sits between Austin and Dallas, and is bordered by Coryell, McLennan, Falls, Milam, Williamson, Lampasas, and Burnet counties. Bell County has a total area of 1,088 square miles and is the 63rd largest county in Texas.[1] The County contains two Census designated urbanized areas (UZA); the Killeen UZA and the Temple UZA. Belton is the fourth largest incorporated area in the county and serves as the county seat. Several large bodies of water are present within the county including the Little, Leon, Salado, and Lampasas rivers, Nolan Creek, Stillhouse Hollow Lake, and Belton Lake. The County is also one of seven counties within the service region of the Central Texas Council of Government (CTCOG), and within the jurisdiction serviced by Killeen-Temple Metropolitan Planning Organization (KTMPO).

Figure 1: Location

Forming the backbone of the county's transportation system are IH-35 and US 190, which is also designated as IH-14 between Killeen and Temple. IH-35 is the primary north-south facility in the County passing through the cities of Troy, Temple, Belton, and Salado. IH-35 also serves as a major connector to the Dallas and Austin/San Antonio markets. US 190/IH-14 is the primary east-west facility in the County that connects to Fort Cavazos and links the two UZAs (Temple and Killeen) together.

Over the past two decades, the population of Bell County has skyrocketed. A strong job market, high quality of life, and low cost of living in the county has contributed to this growth. Since the 2001 plan was adopted, several major construction projects within the county have been completed, including the establishment of the IH-14 corridor and the expansion of the IH-35 corridor. IH-14, also known as the 14th Amendment Highway, the Gulf Coast Strategic Highway, and the Central Texas Corridor was established in 2015 as part of the Fixing America's Surface Transportation Act (FAST). There are plans for the expansion of IH-14 from western Texas to Augusta, GA, set in place by the Infrastructure and Investment and Jobs Act (IIJA) which was signed in 2021.

[1] U.S. Census Bureau (data.census.gov)

Population Growth

Since 2000, Bell County's population has increased by over 130,000 individuals, a 56% growth rate. By comparison, the State of Texas population increased by 8 million individuals since 2000, a growth rate of 40%. **Table 1** shows the population changes for each city in Bell County and Texas.

This growth also shows no sign of subsiding anytime soon as Texas continues to grow, and the Austin metropolitan area pushes farther north. **Table 2** shows population projections for Bell County and Texas through 2050.

Table 1. Population of Bell County and Incorporated Areas

Jurisdiction Name	2000	2010	2020	Growth 2000-2020
Texas	20,851,820	24,311,891	29,145,505	40%
Bell County	237,974	310,235	370,647	56%
Bartlett	1,679	1,623	1,633	-3%
Belton	14,713	18,216	23,054	57%
Fort Cavazos	33,595	29,589	28,295	-16%
Harker Heights	17,309	26,700	33,097	91%
Holland	1,100	1,121	1,075	-2%
Killeen	88,822	127,921	153,095	72%
Little River-Academy	1,644	1,961	1,992	21%
Morgan's Point Resort	3,018	4,170	4,636	54%
Nolanville	2,176	4,259	5,917	172%
Rogers	1,117	1,218	1,113	0%
Salado	3,497	2,126*	2,394	-32%
Temple	54,437	66,102	82,073	51%
Troy	1,383	1,645	2,375	72%
Unincorporated Areas	14,601	26,928	31,011	112%

*Source: Census Bureau (*denotes data from Texas Demographic Center)*

Table 2. Population Projection of Bell County and Incorporated Areas

Jurisdiction	2025	2030	2035	2040	2045	2050	Projected % Change 2020-2050
Texas Projection	32,204,920	34,894,452	37,716,495	40,686,496	43,866,965	47,342,105	62%
Bell County Projections	375,151	396,782	418,708	440,967	462,747	483,613	30%

Source: Texas Demographic Center

Vehicle registration in Bell County increased 15% between 2010 and 2020. This increase directly impacts how much the current transportation is used.

Table 3. Vehicle Registration

Year	Registrations
2010	267,823
2011	270,908
2012	280,949
2013	285,313
2014	293,439
2015	297,044
2016	297,588
2017	302,427
2018	305,606
2019	311,971
2020	307,865

Source: Bell County Registration

Impact of Regional Growth Trends

Increased population growth and vehicle registrations result in increased demand for transportation services within the county. The growing number of vehicles on the road impacts traffic congestion, traffic safety, reliability, and maintenance on the infrastructure.

Legislative Mandates

Several pieces of Federal legislation provide the framework for transportation planning at the State, County, and local levels. These policies must be considered when planning and scheduling for future projects. Legislation provides guidance for regional-level measures in areas such as safety, condition, and congestion.

- **MAP-21—**The Moving Ahead for Progress in the 21st Century Act, was enacted in 2012 and created a streamlined and performance-based surface transportation program and builds on many of the highway, transit, bike, and pedestrian programs and policies established in 1991.
- **FAST Act**—The Fixing America's Surface Transportation Act, was passed in 2015. The Act was the first Federal law in over ten years to provide long-term funding certainty for surface transportation (for fiscal years 2016 through 2020; reauthorized for fiscal year 2021). The FAST Act authorized $305 billion for the Department's highway, highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology and statistics programs.
- **IIJA/BIL**—The Infrastructure Investment and Jobs Act also known as the "Bipartisan Infrastructure Law" was passed on November 15, 2021. The largest long-term investment in infrastructure and economy in the nation's history will provide $550 billion over fiscal years 2022-2026 for roads, bridges, and mass transit.

Functional Classification

To ensure adequate facility capacity and function, a hierarchical system that defines the role of each major thoroughfare needs to be established within the County. The County will utilize the DOT functional classification system and TxDOT rural functional classification for classification of the roadway network throughout the County. The resulting functional classification system can then be translated into specific physical design features including thoroughfare cross-sections, pavement standards, and pavement widths.

Thoroughfares serve two, primarily divergent functions: movement of traffic and access to land. Due to the conflicting requirements of these functions, the movement of traffic can be compromised by the necessary provision of access. Effective transportation networks pose various functions for each thoroughfare classification. As a result, no single category will provide both high levels of movement and high levels of access to property.

The U.S. Department of Transportation and the Federal Highway Administration established criteria for the determination of functional classification in its publication *Highway Functional Classification: Concepts. Criteria. and Procedures*. This commonly used functional classification system consists of a hierarchy of streets. This is the classification system that will be used for this thoroughfare plan.

Table 4. Functional Classification System

Classification	Definition
Interstates or Freeways	Connect urban and rural service areas, urban subregions, and urban areas. There is no direct land access and facilities are designed to carry high volumes of traffic at high speeds over long distances.
Major Arterials	Connect two or more subregions and complement interstates and other high-volume facilities. These routes are designed to carry the majority of traffic through the city. Access to land is subordinate to movement.
Minor Arterials	Connect adjacent subregions and activity centers, as well as providing intra-community continuity. Restricted access to major and minor traffic generators in industrial and commercial areas is provided. More emphasis on land access is provided.
Collectors	Connect neighborhoods and land uses with transportation facilities. These facilities have a balanced responsibility for the provision of access and the movement of traffic. Collectors generally carry a moderate amount of traffic during the day, with increased levels often witnessed during the morning and evening commute.
Local Roads and Streets	Serve neighborhoods and connect land uses with higher transportation facilities. Designed for local traffic at slow speeds, the primary purpose of these facilities is the provision of access.

The Texas Department of Transportation (TxDOT) functionally classifies facilities according to whether or not they are located within a designed urban area. Facilities classified within an urban area are placed on the Urban Functional Classification system, while all other facilities are classified on the Rural Functional Classification System.

Of most concern to Bell County, the Rural Functional Classification System consists of facilities located outside of urban areas. TxDOT uses the classification designations shown in **Table 5** for rural areas.

Table 5. Rural Functional Classification System

Rural Principal Arterial System. The rural principal arterial system consists of a connected rural network having the following characteristics:	1. Serve corridor movements having trip length and travel density characteristics indicative of substantial statewide or interstate travel. 2. Serve all, or virtually all, urban areas of 50,000 population and over a large majority of those with a population of 25,000 and over. 3. Provide an integrated network without stub connections except where unusual geographic or traffic flow conditions dictate otherwise.
Rural Minor Arterial System. The rural minor arterial system should, in conjunction with the principle arterial system, form a rural network having the following characteristics:	1. Link cities and larger towns and form an integrated network providing interstate and intercounty service. 2. Be spaced at such intervals so that all developed areas of the county are within a reasonable distance of an arterial highway. 3. Provide service to corridors with trip lengths and travel densities greater than those served by the rural collector system.
Rural Major Collector System. The rural collector system generally serves intercounty travel and constitutes those routes where travel distances are shorter than on arterial routes.	1. Provide service to a county seat not on a principal arterial, to the larger towns, and to other traffic generators of significance including schools, shipping points, county parks, agricultural areas, etc. 2. Link generators with nearby larger towns or routes of higher classification. 3. Serve the more important intercounty travel corridors.
Rural Minor Collector System. The rural collector system generally serves intercounty travel and constitutes those routes where travel distances are shorter than on arterial routes.	1. Serve primarily to provide access to adjacent land. 2. Provide service to travel over relatively short distances as compared to collectors or other higher systems.

Table 6 lists a breakdown of the different functional classifications and how many miles of each type there are in Bell County

Table 6. Percentage of Each Functional Classification System in Bell County

Functional System		Centerline	Percentage
Interstates	Rural (Pop. < 5,000)	17.42	1.93%
	Urbanized (Pop. 50,000 - 99,999)	22.52	
	Large Urbanized (Pop. 200,000+)	17.77	
	Subtotal	57.72	
Other Freeway-Expressway	Urbanized (Pop. 50,000 - 99,999)	4.6	0.15%
Principal Arterial	Rural (Pop. < 5,000)	29.48	4.03%
	Urbanized (Pop. 50,000 - 99,999)	44.74	
	Large Urbanized (Pop. 200,000+)	45.8	
	Subtotal	120.02	
Minor Arterial	Rural (Pop. < 5,000)	37.16	4.32%
	Urbanized (Pop. 50,000 - 99,999)	35.94	
	Large Urbanized (Pop. 200,000+)	55.64	
	Subtotal	128.74	
Major Collector	Rural (Pop. < 5,000)	187.64	15.33%
	Urbanized (Pop. 50,000 - 99,999)	136.05	
	Large Urbanized (Pop. 200,000+)	133.05	
	Subtotal	456.74	
Minor Collector	Rural (Pop. < 5,000)	90.06	3.69%
	Urbanized (Pop. 50,000 - 99,999)	18.92	
	Large Urbanized (Pop. 200,000+)	1.07	
	Subtotal	110.05	
Local	Rural (Pop. < 5,000)	897.15	70.54%
	Urbanized (Pop. 50,000 - 99,999)	506.82	
	Large Urbanized (Pop. 200,000+)	698.44	
	Subtotal	2,102.41	
County Total		2,980.27	100%

Crash Data

Safety is a critical part of transportation planning. According to TxDOT an average of 10 people are killed in crashes every day on Texas roads. In response to this TxDOT committed to the Road to Zero goal and is working to reach zero fatalities on Texas roads by 2050. As part of planning for the future transportation network it is critical that this plan align with the statewide vision for zero deaths on Texas roads.

Crash data plays a vital role in thoroughfare planning by identifying safety concerns, guiding targeted safety improvements, enabling evidence-based decision making, prioritizing resources effectively, and facilitating ongoing monitoring and evaluation. By incorporating crash data into thoroughfare plans, transportation agencies can work towards creating safer and more efficient road networks for all users.

Table 7 shows crash data for the Bell County and Bell County cities between 2012 - 2021. In addition to this data, KTMPO recently completed a project to develop a safety dashboard for the KTMPO region. The KTMPO Safety Dashboard gathers currently available CRIS data and provides a variety of tools for analyzing and visualizing crash data in the region. **Figures 2-6** on the following pages show some snapshots of this data tool and provide insights on areas of the County that need extra attention from the safety perspective.

Table 7: Crash Totals & Fatalities

Jurisdiction	Crashes	# Fatal
Bell County	52,798	397
Bartlett	11	1
Belton	5,732	30
Harker Heights	3,577	14
Holland	49	3
Killeen	19,449	121
Little River-Academy	106	1
Morgan's Point Resort	90	0
Nolanville	651	16
Rogers	99	1
Salado	95	0
Temple	13,260	79
Troy	911	6

Source: TxDOT Crash Record Information System (CRIS)

Figure 2 to the right shows a total number of crashes in the KTMPO region between 2012 and 2021 broken down by crash severity. The non-motorized category includes crashes involving a bicyclist or pedestrian.

Figure 2: Summary of Bell County Crashes

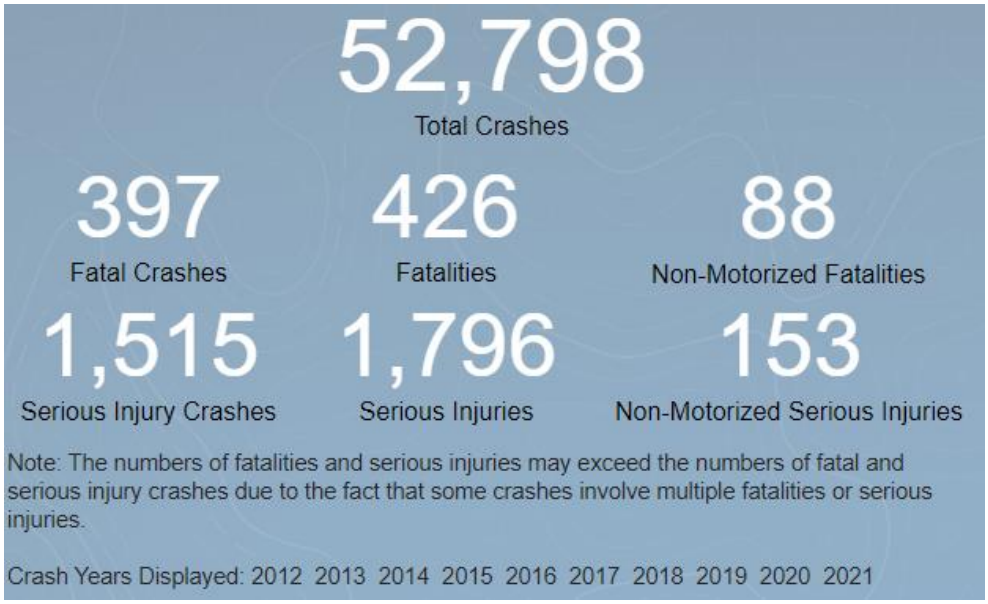


Figure 3 shows a breakdown of crashes by unit type (e.g. car, pedestrian, bicyclist). This data provides important insights into how the Thoroughfare Plan can incorporate safety into future transportation improvements.

Figure 3: Crashes by Unit Type

Unit Type	Count of Crashes
MOTOR VEHICLE	99385
TOWED/PUSHED/TRAILER	3799
PEDESTRIAN	564
NON-CONTACT	341
BICYCLIST	205
OTHER	27
MOTORIZED CONVEYANCE	8
TRAIN	7
Total	**104336**

Figure 4: Bell County Crash Data Heat Map

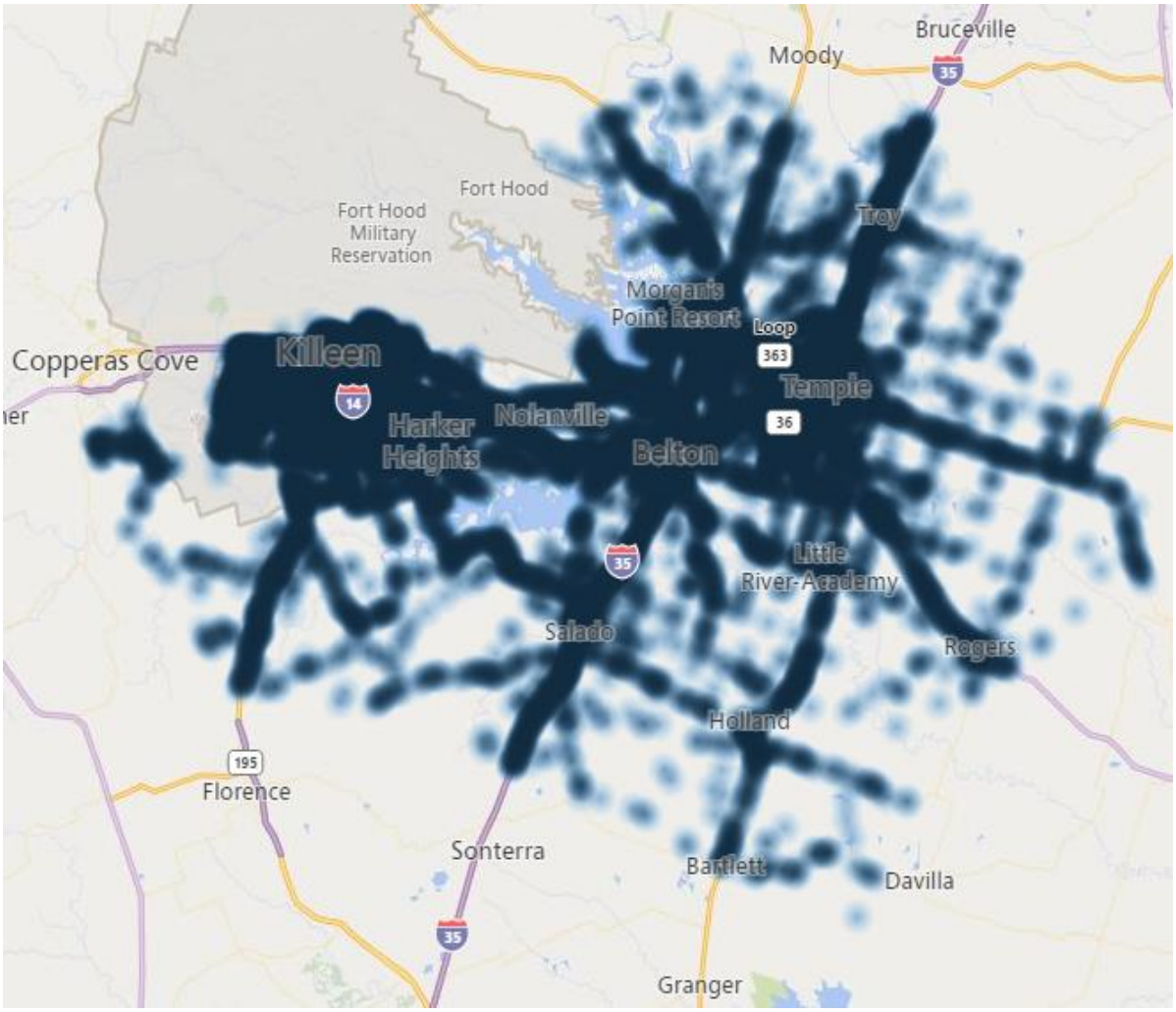


Figure 4 shows a heat map of crashes in Bell County. From this heat map we can tell that most crashes happen in city limits or on major arterial roads and higher functional classification.

Figure 5 shows the breakdown of the primary contributing factors for crashes in the region (speeding, sleeping while driving, followed too closely, etc.). The importance of knowing what the contributing factor in a crash helps identify safety concerns and target safety improvements needed in a thoroughfare plan. This allows the identification of crash trends or emerging safety issues, leading to timely adjustments or modifications in the thoroughfare plan as needed.

Figure 6 shows a breakdown of crash type (rear-end crash, opposite direction crash, head on crash, etc.) and their severity. Analyzing the way in which a crash happens helps create plans that reduce these certain types of crashes.

Figure 5: Crash Totals by Primary Contributing Factor

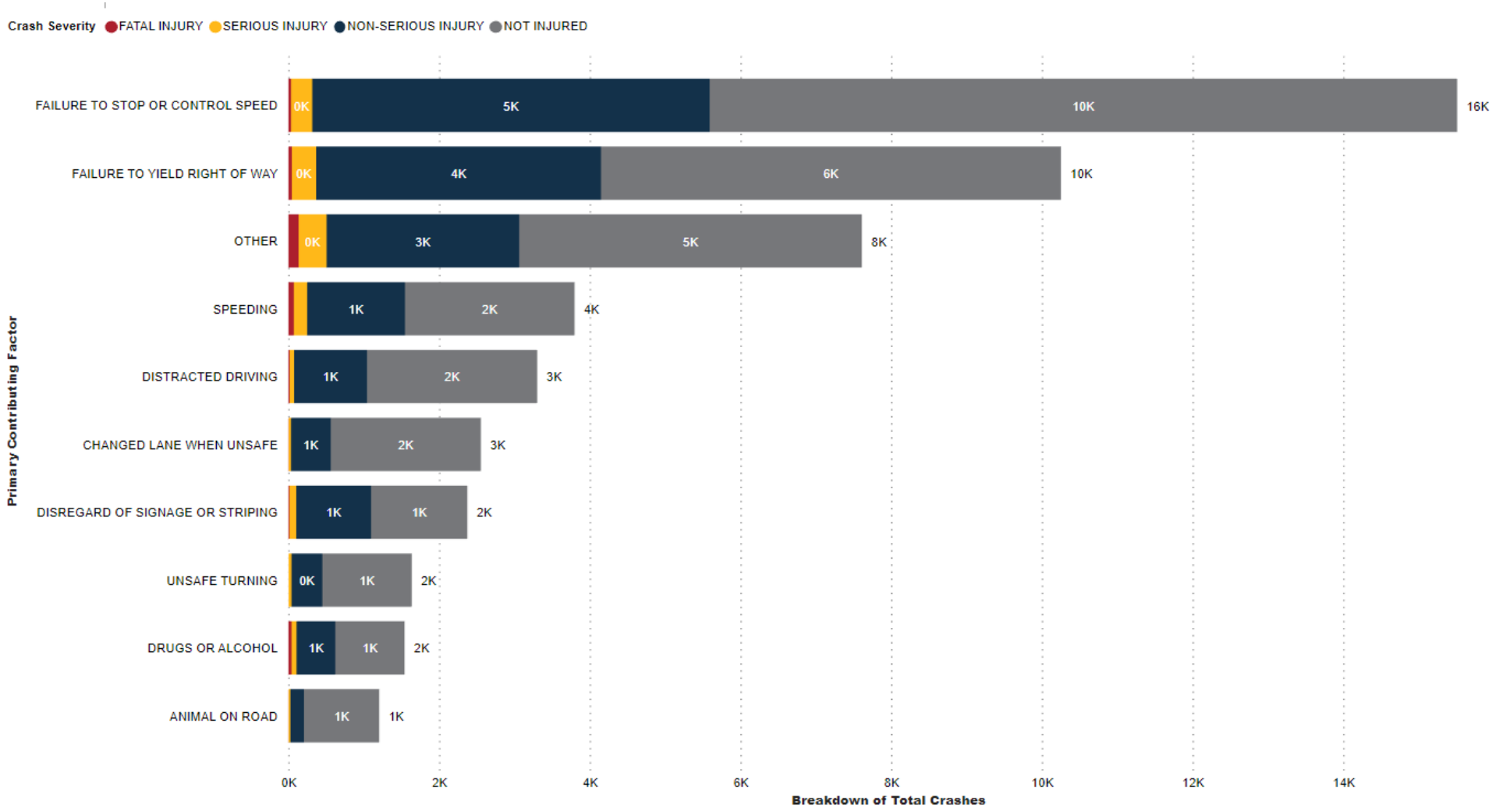
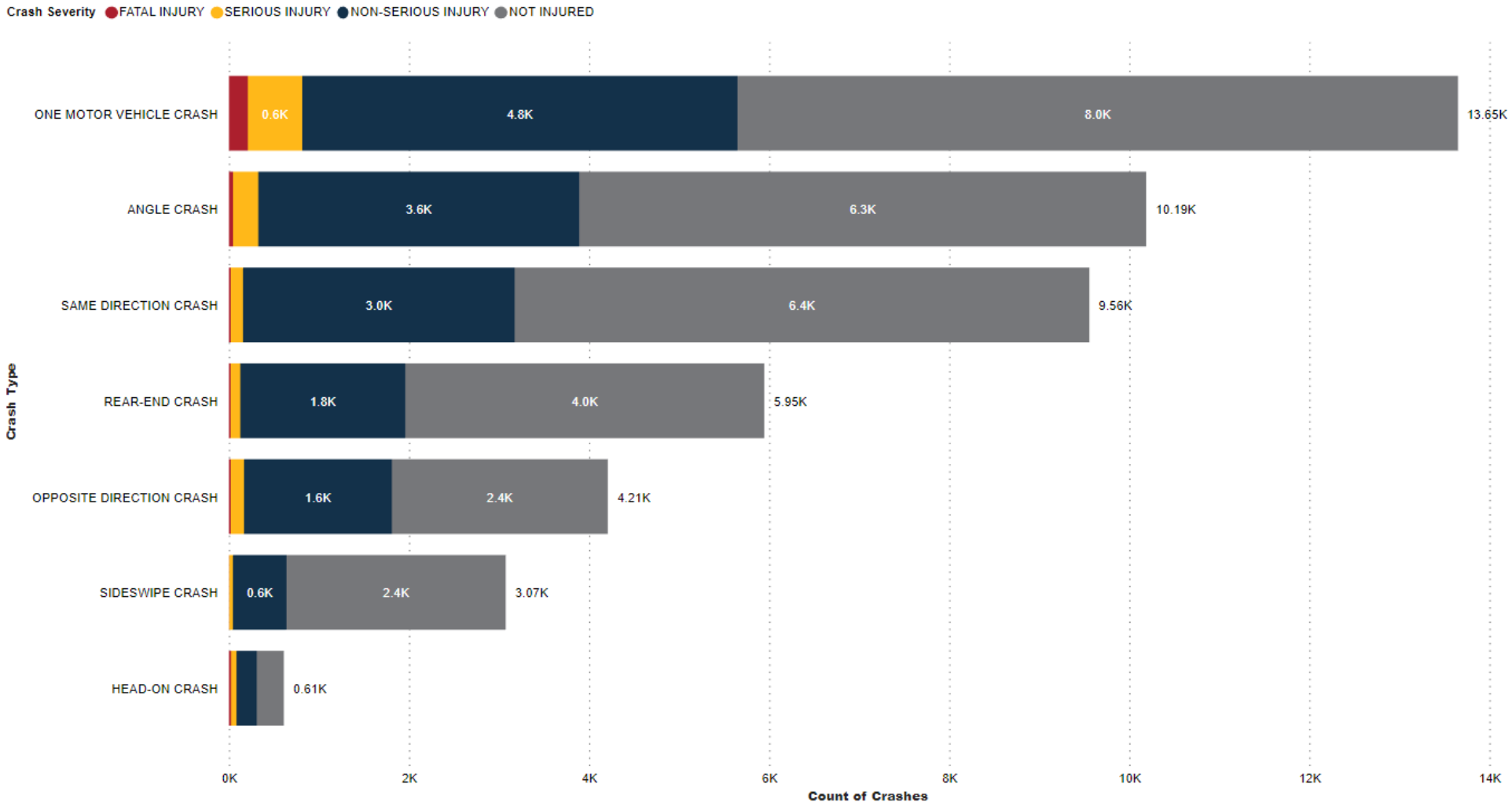


Figure 6: Type of Crash



Chapter 3 Plan Development and Analysis

Review of 2001 Thoroughfare Plan

Following a review of the 2001 Thoroughfare Plan the following information was noted:

The population of the county has increased more than 55%, which has contributed to more trips, congestion, injuries, and fatalities on the roadways throughout the county.

Over the past 25 years, there have been incidents of drought, flooding, tornadoes, heat waves, and winter storms, each having different negative impacts on roadways across Bell County. Winter Storm Uri of 2021 caused damage to roads across Texas due to the ice, snow, and road salt. Droughts can cause additional oil build-up on roads which can impact driver safety. Flooding can cause erosion on roadways and other negative impacts to road quality and driver safety. Tornados have the capacity to destroy roads. Heat waves can melt road surfacing and cause roads to expand and crack. On average, nearly 5,000 people are killed and over 418,000 people are injured in weather-related crashes each year. (Source: Ten-year averages from 2007 to 2016 analyzed by Booz Allen Hamilton, based on NHTSA data).

The 2001 Thoroughfare Plan examined the following issues and provided recommendations to alleviate concerns associated with these:

1. Enhance coordination between the county and incorporated cities to develop a seamless transportation plan for the region.
2. Evaluate future traffic volumes and levels of service on thoroughfares carrying traffic within and through the county. Projected growth for the county and region will be of principle concern to the development of adequate fiscal, land use, and other policy strategies needed to maximize transportation mobility.
3. Determine the mechanisms to meet growing highway demand within regulatory and funding constraints.
4. Identify maintenance needs and priorities.
5. Present land use strategies designed to have positive impacts on the county's transportation infrastructure.

The previous plan also saw an increase in population within Bell County by 83% from 1970 to 2000. At the time, 75% of traffic between Mexico and the United States used the I-35 corridor. The plan predicted that 21% of the average daily traffic would be trucks by 2025.[2]

The plan identified the following deficiencies:

1. Lack of a clearly defined functional classification system.

[2] Executive Summary, IH-35 Trade Corridor Study (Corridor 23), 1999.

2. Lack of clearly designated administrative policies regarding the placement and location of future facilities.
3. Better transportation connections are needed between Bell and McLennan and Falls Counties.
4. A strong desire within the County to carefully balance new development and growth with traditional industries such as agriculture.
5. Lack of access management provisions.

Lastly, when considering implementation of the plan, the 2001 plan outlined mechanisms to set forth. Development controls including the regulation of the subdivision of land within the county are important to preserve transportation facilities. Improvements in close proximity of the city limits should be made in consultation with the respective city.

While the below chart shows the goals outlined in the 2001 Plan, these goals are more like guiding principles.

Goal
Maintain regional mobility, Bell County should work closely with TxDOT, KTMPO, to assure continued improvements are planned and funded for these regional mobility facilities
Provide an efficient network of thoroughfares-make appropriate connections between urban centers with an efficient network of thoroughfares
Preserve existing facilities-plan of preventative maintenance, bring substandard roadways up to adequate levels of maintenance
Coordinate the timing of future facilities with development-need better comprehensive planning authority at the county level
Establish subdivision guidelines that consider aspects such as adequate engineering, drainage, access management, and public safety

Review of Regional and Local Planning Documents

The following plans were reviewed to provide additional information for the Bell County Thoroughfare Plan.

City of Belton (2030 Comprehensive Plan)

The City of Belton's 2030 Comprehensive Plan was developed as a policy guide to assist city leaders in making decisions about how their city should grow and develop. The plan has goals of maintaining and further developing a walkable city, creating enhancements along important corridors throughout the city, and linking development with road networks to enhance both that development and the roads themselves. The plan reviews current and future development, land use, transportation. Based on their survey data, 56.4% of residents work outside of the city limits.

City of Harker Heights (Mobility 2030)

The City of Harker Heights' Mobility 2030 Plan includes a thoroughfare plan, a sidewalk plan, off-street hike and bike trail network plan, on-street striping plan for biking and pedestrians, transit planning,

City of Killeen (2022 Comprehensive Plan)

The City of Killeen's 2022 Comprehensive Plan includes concepts on the economics of land use, Killeen's identity, land use and growth management, mobility and connectivity, along with information on implementation. The plan also noted issues with the lack of sidewalks and other features that make complete streets. According to the plan's data, Killeen has a more affordable housing index but a much lower wealth index than the county and state. Additionally, the city has a diversity index that indicates complete diversity.

City of Temple (Mobility Master Plan 2022)

The City of Temple's 2022 Mobility Master Plan was developed as a guide on how to improve movement through Temple by increasing efficiency and sustainability of the current system. The plan has these goals as its guide: Safety First, Choices, Connections, Prosperity, Community Driven, Mobility, Maintain and Sustain, Quality of Place, and Fund and Implement. This plan evaluated the existing transportation conditions of the area and addresses the transportation needs to come with the growth they are expecting in the future. The data in this report shows Temple's growth at a 10% increase in the last five years. Their employment is also strong at nearly 60,000 jobs in 2018.

Other Plans

Staff also reviewed neighboring regional thoroughfare plans including the CAMPO Regional Arterials Concept Inventory from 2019, the Williamson County Long-Range Transportation Plan, the 2012 Waco MPO Master Thoroughfare Plan, and the 2021 Burnet County Transportation Plans. While these plans do not involve areas within Bell County, their proximity as adjacent regions does impact arterials within the County. For the most part, Bell County does not have too many major facilities that are impacted by the plans from CAMPO, Waco MPO, and bordering counties.

Significant areas of interest where the County interacts with neighboring regions include the IH-35 connection with Falls/McLennan Counties in the north, the IH-35 and SH 195 connections with Williamson County in the south and the FM roads east of IH-35 that connect south into Williamson County. These areas are existing or potential growth spots that will have a direct impact on the Bell County road network and need to be considered when transportation planning. The connection between Bell County/Burnet County is another possible area for future expansion noted in the CAMPO plan.

Identified Deficiencies and Desires

KTMPO staff hosted a Bell County Thoroughfare Plan Stakeholder Meeting on July 26, 2022. Attendees represented several cities, school districts, engineers, and other professionals who work in Bell County to discuss roadway improvements, additions, and possible development in the coming years.

The following changes and updates were recommended by stakeholders:

- Roads and bridges needing improvements
    - Hartrick Bluff Road (east of Temple)
    - FM 2268 (south of Temple)
    - Armstrong Road (south of Temple)
    - Highway 136 (southwest of I-35/I-14 junction)
    - Royal Street and Amity Street (near Salado)
    - North Point Road, FM 2483, Morgan's Point Road, Camp Kachina Road (near Morgan's Point Resort)
    - FM 439 (from Lake Belton to Nolanville)-including an intersection improvement with Highway 93
    - Railroad crossings along Jack Rabbit Road
    - BUS 190 (eastern side of Harker Heights)
    - Bunny Trail, Chaparral Road (near Killeen)
    - Sparta Road from N. Wheat Road to FM 439 and parallel to that Highway 95 needs median improvements (between Belton and Temple)
    - Bridge near Old 81 in Troy

- New roads or extension of roads
    - Armstrong Road needs to be extended south of FM 2268 past Armstrong Loop (south of Temple)
    - FM 2484 needs to be connected to Marie Lane (Salado)
    - A roadway needs to be added across from Lake Belton High School
    - New roadway needed near old Roger's Park (Morgan's Point Resort)
    - S. Main Street needs to be extended along the southern side of I-14 and then extended in a loop fashion north towards I-14 on the western side of the road to make a bigger loop (Nolanville)
    - Chaparral Road needs to be extended east due to KISD developments near Chaparral High School and FM 3481 from eastern Killeen needs to be extended east to Thomas Arnold Road. (Killeen)

- Speed Reductions
    - FM 3219 (Harker Heights)
    - Hwy 195 (Fort Hood Street) between Stagecoach Road and Stan Schlueter Loop (Killeen)

A public meeting was held on October 26th, 2022 at the Bell County Expo to receive similar input from the general public, but no one attended the meeting.

Additional Analysis

Accomplishments and Ongoing Projects in the county since the 2001 Plan, include:

Interstate 35

The portion of the IH-35 expansion and resurfacing through Bell County was completed ahead of schedule in Summer of 2019. This project was completed in four parts: Project 3A1 - Troy, Project 2B - Temple, Project 1C - Belton, and Project 1B – Salado. The completion of IH-35 allows more traffic to flow through the county at a safer level and reducing congestion. The accomplishments of the projects are as follows:

- ✓ Widened approximately 25 miles of IH-35 from four lanes to six lanes (three lanes in each direction).
- ✓ Upgrading on and off ramps.
- ✓ Converted frontage roads to one-way
- ✓ New direct connectors, U-turns and traffic signals
- ✓ New electric message signs
- ✓ Converted Main St./FM935 from an underpass to an overpass

Interstate 14

The expansion and improvement of US 190 to interstate standards and designation as Interstate 14. The first phase of this project and initial designation as IH-14 was completed in January 2017. The current expansion of the corridor between Killeen and Temple is due to be completed in Summer 2023. Future expansion of the Interstate from the IH-14/IH-35 interchange to the eastern edge of the County and beyond is in the early stages of planning and development.

Chapter 4: 2022 Thoroughfare Plan

Throughfare Planning Principles

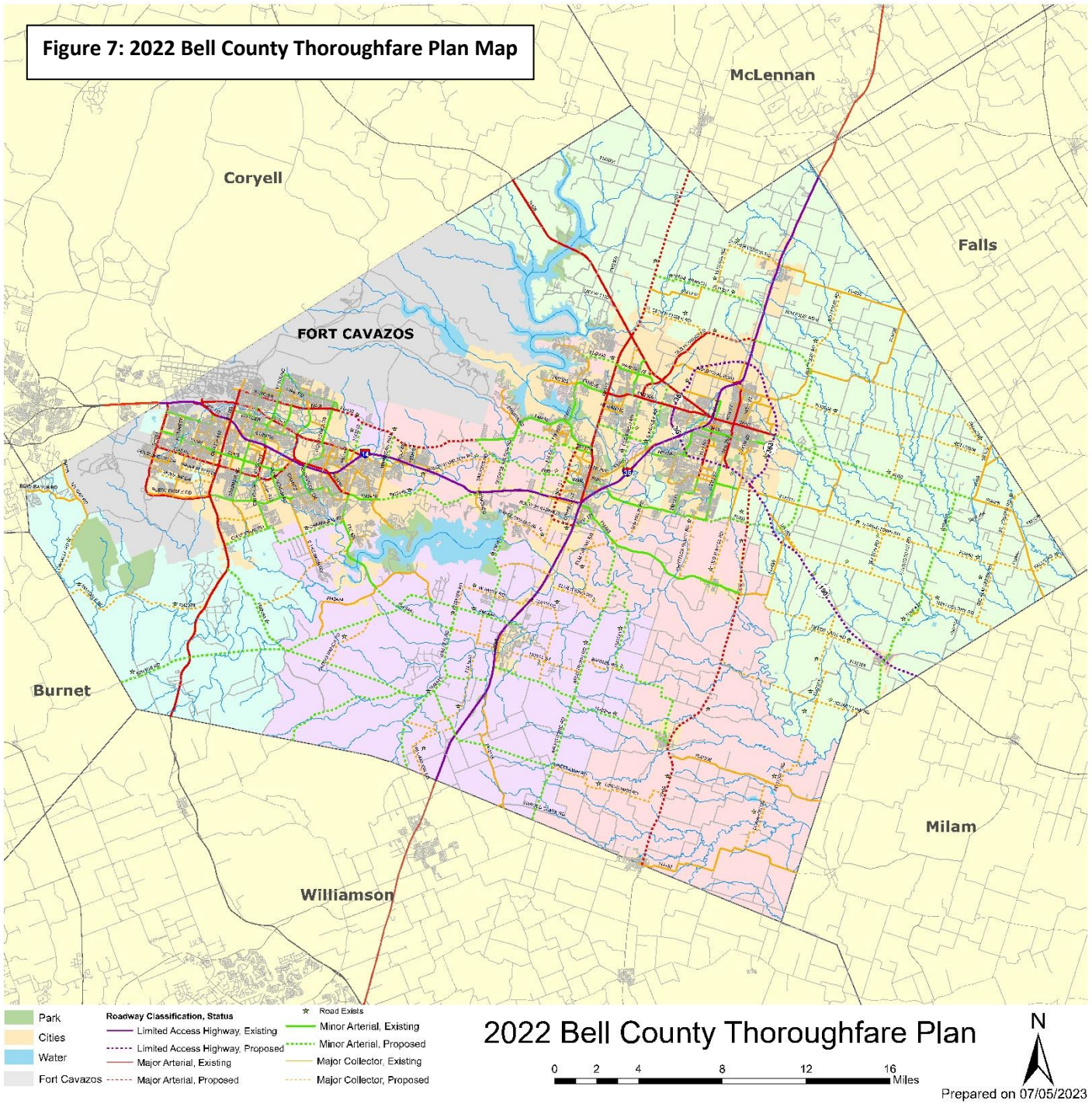
The following principles were identified and are considered vital to the development of policies needed for thoroughfare planning in the future.

Maintain regional mobility, Bell County should work closely with TxDOT, KTMPO, to assure continued improvements are planned and funded for these regional mobility facilities
Provide an efficient network of thoroughfares-make appropriate connections between urban centers with an efficient network of thoroughfares
Preserve existing facilities-plan of preventative maintenance, bring substandard roadways up to adequate levels of maintenance
Coordinate the timing of future facilities with development-need better comprehensive planning authority at the county level
Establish subdivision guidelines that consider aspects such as adequate engineering, drainage, access management, and public safety

Throughfare Plan Map

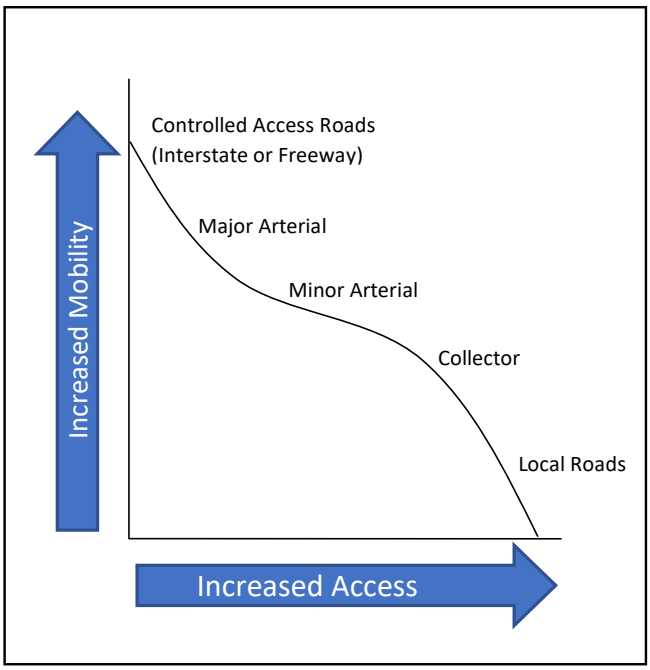
The final Bell County Thoroughfare Plan map is presented in **Figure 7**. A full sized version is provided in Appendix A.

Figure 7: 2022 Bell County Thoroughfare Plan Map



Functional Classification

The fundamental basis of street functional classification is the need to balance the two conflicting but complementary purposes of access and mobility. The Functional Classification system recognizes the hierarchy of purpose among streets that channel traffic flow from the highest level of access (local streets) to facilities collecting these flows (collector streets), then to facilities able to transport these larger flows over longer distances (arterials), and then even larger flows over even longer distances (Interstates and freeways), with the highest level of mobility but least amount of access to land uses.



Interstate and Freeways – *access-controlled, maximizes mobility, provides for long-distance travel.*

Interstates are access-controlled, grade-separated intersections, and are characterized by multi-lane, median divided roadways. General design standards for Interstates call for a minimum right-of-way width of 250' for four lanes, with the desirable standard being six lanes and 500'. Design details are determined by TxDOT. Bicycles and pedestrians are prohibited due to the high speeds of these classes of roads, so the design of supporting bicycle and pedestrian infrastructure (including shared use of wide shoulders) is not applicable.

Roadway Terms to Know:

- *Right-of-Way*: Land, property, or interest acquired for or devoted to a transportation facility.
- *Interstate*: Roadway that provides mobility across states.
- *Freeway*: Roadway that provides mobility between cities.
- *Major Arterial:* Roadway that provides mobility within the city.
- *Minor Arterial*: Roadway that provides moderate length trips.
- *Collector:* Roadway that connects to arterials.
- Local: Roadway that connects to collectors, property access.

Major Arterial – *access-managed, provides mobility, limited access to land use*.

Major Arterial are access-managed roadways, characterized by considerable length roadways that provide continuity throughout the area. general design standards call for a 130' minimum right-of-way for a four-lane facility, with 160' desirable for six lanes. A travel lane width of 12' as specified is common for existing Major Arterials in the KTMPO region, but Complete Streets and Vision Zero guidance calls for narrowing travel lanes to 11' to slow traffic to speeds that are safer for all road users.

Minor Arterial – *access-managed, provides mobility, limited access to land use*.

Minor Arterial are designed for fast, heavy traffic and are generally provided in a grid system. General design standards call for a minimum right-of-way of 80' for three lanes, increasing to 110' for four lanes. The desirable right-of-way is 120', which will accommodate five lanes.

Collector – *limited mobility, more access to land use, connects thoroughfares.*

Collectors provide a greater balance between mobility and land access. With mobility as a less critical attribute, narrower lane widths of 11' are recommended, although widths as narrow as 10' are cited in Complete Streets and Vision Zero guidelines. Shared auto and bicycle outside lanes may be as narrow as 14'. Minimum right-of-way of 60' for two lanes and 70' for three lanes are listed in the guidance. For four lanes, a desirable right-of-way is 80'.

Typical Cross Sections

Urban and rural areas have distinctly different needs based on fundamental differences in type of land uses, street density, and travel patterns. Not only are these systems distinctly classified differently but constructed differently as well.

Typical cross sections are intended to illustrate the maximum right-of-way needed for each street Functional Class. It is recognized that the actual cross section needed for any specific project at a given time depends on several factors, including the physical characteristics of the street, traffic volumes, mix of multimodal traffic, safety considerations, local standards and preferences, and funding. Therefore, the cross sections presented in this plan are meant as guidance for typical conditions and should be refined as needed for each specific project.

Per the roadway classifications defined in the above section, typical cross-sections have been provided in **Figures 8 through 13.** These are provided as a general guide and should be reevaluated at the time of design to determine context-specificity. Elements shown in these cross-sections are suggestions rather than requirements. Individual cross-sections should be developed in collaboration with, and under the review of, Bell County and applicable municipalities. If Federal funding is used to design or construct a roadway, specific design details will need to be adhered to, per the Federal Highway Administration's guidance at time of design and construction.

Figure 8: Six Lane Controlled Access Facility with Frontage Roads

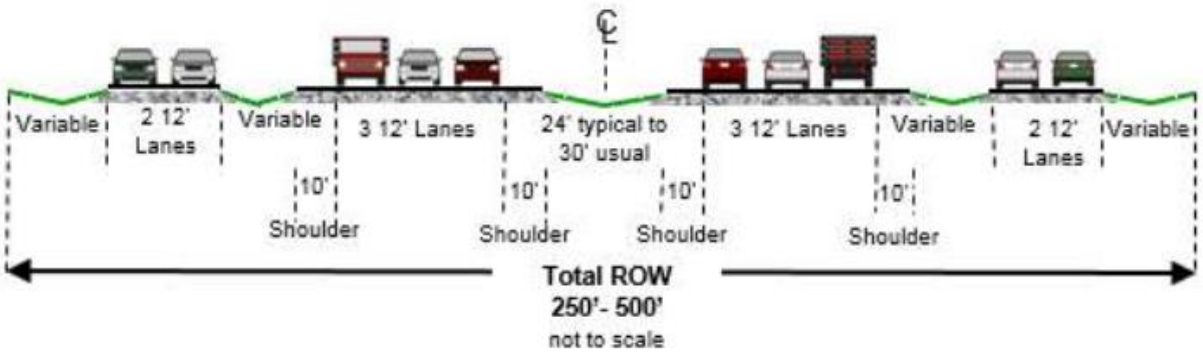


Figure 8 shows a typical cross section for a Controlled Access Facility with six lanes. The figure shows a grassy center median with a typical 24' to 30' width, and smaller median areas buffering between the main lanes and the frontage roads. Safety treatments in the medians or road margins such as guardrails and cable barriers are common to prevent vehicle cross-overs but are not shown in the illustration.

Figure 9: Four Lane Major Arterial

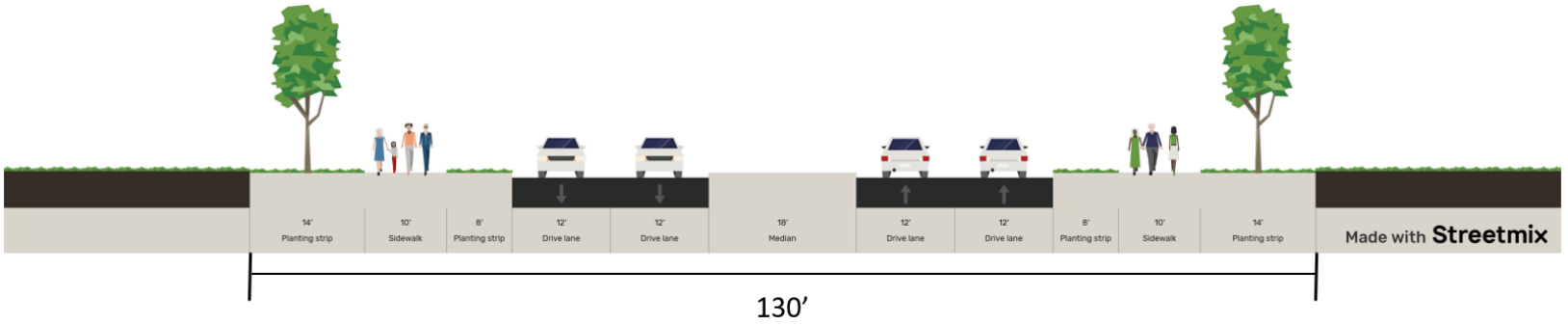


Figure 9 shows a typical cross section for a Major Arterial with four lanes and bicycle and pedestrian accommodations consisting of separated off-street paths or sidewalks and a separated off-street multi-use path. In this instance there are no distinct on-street bicycle facilities, but this does not affect the bicycle's status as a vehicle and their right to the road.

Figure 10: Four Lane Minor Arterial with Continuous Center Turn Lane

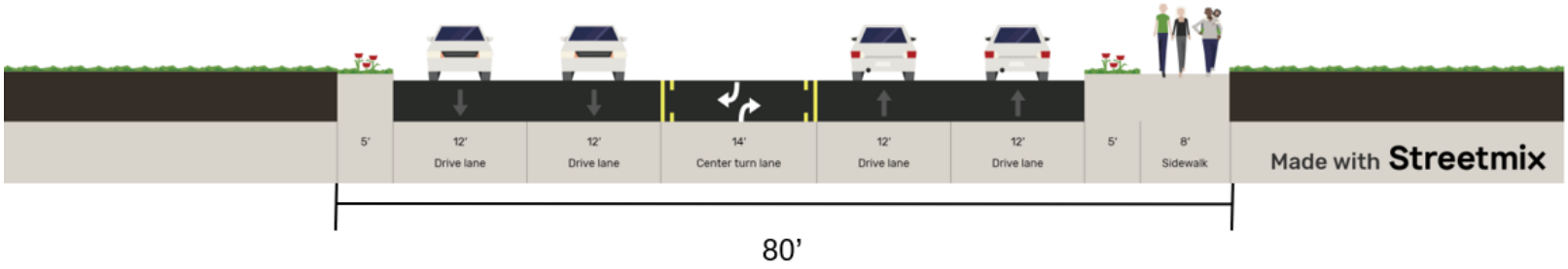


Figure 10 shows a typical cross section for a four lane Minor Arterial with a continuous center turn lane. Minor Arterials may have greater accommodations for bicycles and pedestrians than Major Arterials, as they typically have lower speeds, lower traffic volumes, and a smaller percentage of trucks in the traffic stream. The figure also shows separated off-street paths or sidewalks. Although bikes may share the roadway with other vehicles, no special infrastructure is represented in this cross section.

Figure 11: Major Collector

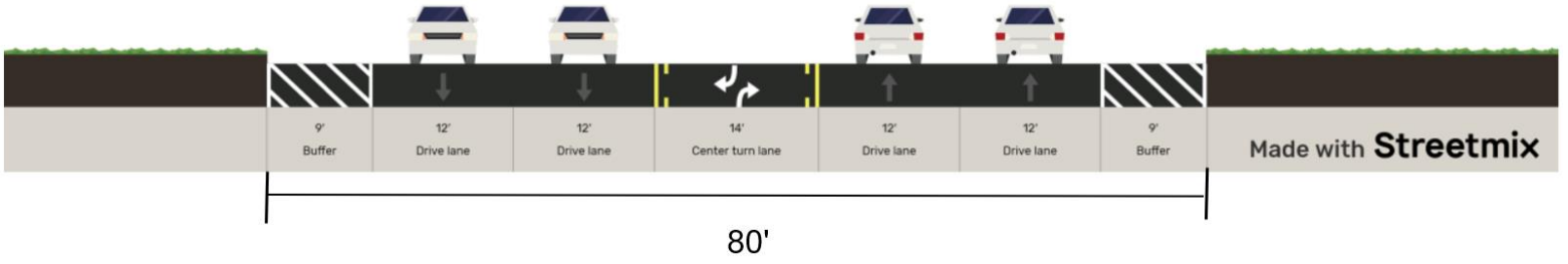


Figure 11 shows a four lane Major Collector with 12' lanes and a continuous center turn lane with a width of 14'. With a 9' buffer zone on each side of the Major Collector that could be used for sidewalks, vegetation, or widen the outside lane to 14' to create a shared outside lane to emphasize bicycle useability.

Figure 12: Minor Collector with Continuous Center Turn Lane

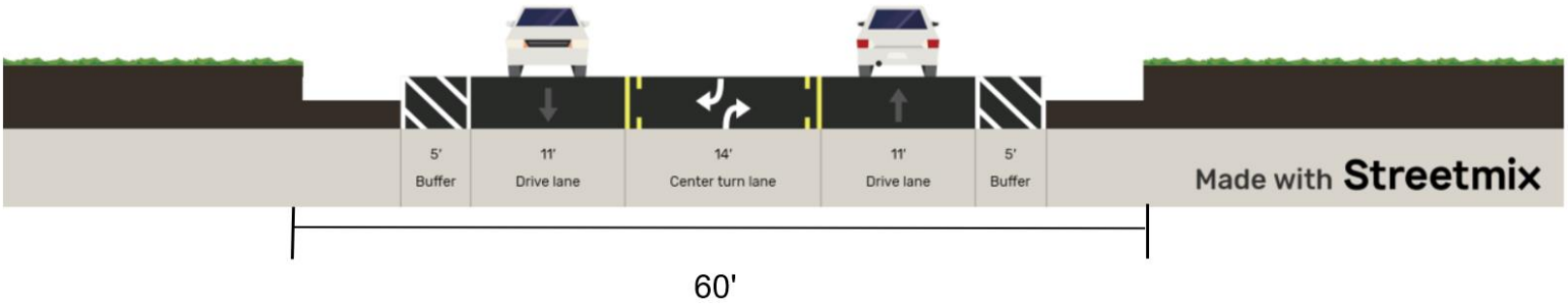


Figure 12 shows a two-lane Collector with 11’ lanes and a continuous center turn lane with a width of 14’. This cross section shows extra space on the outside of the buffer that can be used for vegetation, sidewalk paths, park lanes, passing lanes, or widened to add bicycle lanes.

Figure 13: Local Road

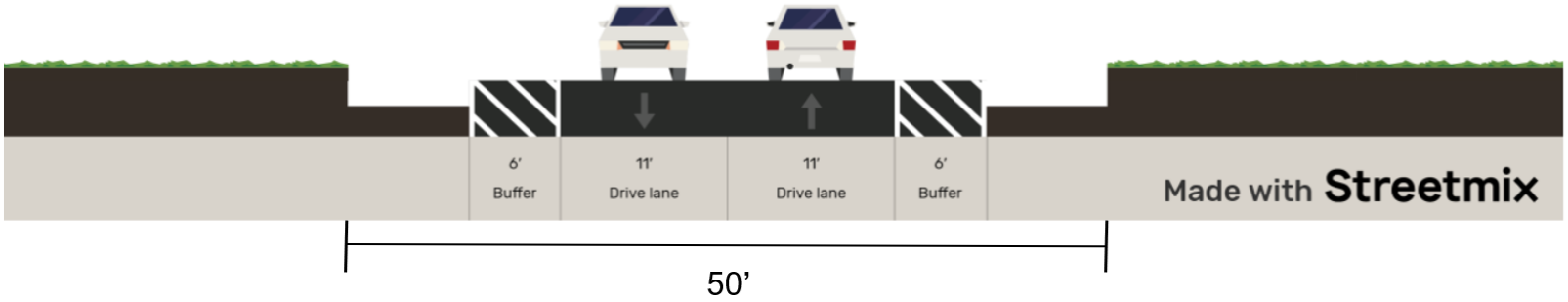


Figure 13 shows a two-lane local road with 11’ lanes. With buffer on the outside to accommodate public works, open ditches, passing lanes, or sidewalks.

Table 8: Summary of ROW Recommendations by Functional Classification

Design Element	Controlled-Access	Major Arterial	Minor Arterial	Major Collector	Minor Collector	Local
Prefered ROW Width	Varies up to 500'	160'	120'	80'	60'	60'
Minimum ROW Width	250'	130'	80'	60'	50'	50'
Auto Lane Width	Minimum 12'	Preferred 12'	Preferred 12'	Minimum 11'	Minimum 11'	Minimum 10.5'
Median Treatment	Rural: minimum 36' Urban: minimum 10'	Preferred 18'	Continuous Center Left Turn Lane Preferred 14' Minimum	Continuous Center Left Turn Lane Preferred 14' Minimum	Continuous Center Left Turn Lane Preferred 14' Minimum	None
Outside Vegetation Utility/Buffer (minimum)	Varies	15'	10'	5'	5'	5'
Notes	Inside Shoulder: Minimum 4' Outside Shoulder Minimum 10' Vertical Clearance Minimum 14'	ROW may be greater with parking, bicycle, and pedestrian facilities, bus stops, and intersection treatments.				

Proposed Functional Classification

The recommended functional classification system for Bell County is presented in **Figure 7**. The system established by the County follows the classification system as prepared by TxDOT. Inventories of facilities designated with the existing functional classification and the proposed functional classification are presented in **Tables 9 through 12**.

Note: This is a conceptual list of roads, for planning purposes. This plan does not require that these roads be built.

Table 9: Interstate and Major Arterials Proposed Functional Classification

Facility	Existing	Proposed	Precinct	Owner
Moores Mill Rd	Local Road	Major Arterial	3	City
SH 317	Minor Arterial	Major Arterial	3	TxDOT
SL 363	Major Arterial	Other Freeway	3	TxDOT
US 190	Major Arterial	Interstate	3	TxDOT
FM 439	Minor Arterial	Major Arterial	1, 2	TxDOT
SH 95	Minor Arterial	Major Arterial	1, 3	TxDOT

Table 10: Minor Arterial Proposed Functional Classification

Facility	Existing	Proposed	Precinct	Owner
FM 2410	Major Collector	Minor Arterial	1	TxDOT
FM 2483	Major Collector	Minor Arterial	1	TxDOT
George Wilson Rd	Minor Collector	Minor Arterial	1	City, County
Sparta Rd	Major Collector	Minor Arterial	1	City
Armstrong Rd	Local Road	Minor Arterial	2	County
Brewer Rd	Local Road	Minor Arterial/ Major Collector	2	County
Crows Ranch Rd	Local Road	Minor Arterial	2	County
FM 2843	Major Collector	Minor Arterial	2	TxDOT
FM 3219	Major Collector	Minor Arterial	2	TxDOT
Schwertner Rd	Local Road	Minor Arterial	2	County
FM 1237	Major Collector	Minor Arterial	3	TxDOT
FM 437	Major Collector	Minor Arterial	3	TxDOT
S Kegley Rd	Major Collector	Minor Arterial	3	City
SH 53	Major Collector	Minor Arterial	3	TxDOT
Shine Branch Rd	Local Road	Minor Arterial	3	County
Briggs Rd	Local Road	Minor Arterial	4	County
FM 1123	Major Collector	Minor Arterial	1, 2	TxDOT
FM 1670	Major Collector	Minor Arterial	1, 2	TxDOT
FM 2268	Major Collector	Minor Arterial	1, 2	TxDOT
FM 93	Major Collector	Minor Arterial	1, 3	TxDOT
Old Waco Rd	Local Road	Minor Arterial	1, 3	City, County
Chaparral Rd	Major Collector	Minor Arterial	2, 4	City, County
FM 2484	Major Collector	Minor Arterial	2, 4	TxDOT

Table 11: Major Collector Proposed Functional Classification

Facility	Existing	Proposed	Precinct	Owner
Donahoe Rd	Local Road	Major Collector	1	County
Elm Grove Rd	Local Road	Major Collector	1	City, County
Hartrick Bluff Spur	Minor Collector	Major Collector	1	City
Levy Crossing Rd	Local Road	Major Collector	1	City, County
Old Hwy 95 Rd	Minor Collector	Major Collector	1	County
Paddy Hamilton Rd	Local Road	Major Collector	1	City, County
Rosanky Rd	Local Road	Major Collector	1	County
Three Creeks Blvd	Local Road	Major Collector	1	County
Witter Ln	Local Road	Major Collector	1	County
Barnes Rd	Local Road	Major Collector	2	County
Blackberry Rd	Local Road	Major Collector	2	County
E Amity Rd	Local Road	Major Collector	2	City, County
Kuykendall Branch Rd	Local Road	Major Collector	2	County
Royal St	Local Road	Major Collector	2	City, County
Salado Heights Dr	Local Road	Major Collector	2	County
Smith Dairy Ln	Local Road	Major Collector	2	County
Smith Dairy Rd	Local Road	Major Collector	2	County
Solana Ranch Rd	Local Road	Major Collector	2	County
Tahuaya Rd	Local Road	Major Collector	2	City, County
Thomas Arnold Rd	Local Road	Major Collector	2	County
W Amity Rd	Local Road	Major Collector	2	City, County
Williamson Rd	Local Road	Major Collector	2	County
Big Elm Creek Rd	Local Road	Major Collector	3	County
Bottoms Rd	Local Road	Major Collector	3	County
Cardon Rd	Local Road	Major Collector	3	County
Cedar Creek Rd	Local Road	Major Collector	3	County
County Line Rd	Local Road	Major Collector	3	County
Edgeworth Rd	Local Road	Major Collector	3	County
Falls Rd	Local Road	Major Collector	3	County
FM 2086	Minor Collector	Major Collector	3	TxDOT
FM 2184	Minor Collector	Major Collector	3	TxDOT
FM 2904	Minor Collector	Major Collector	3	TxDOT
FM 3369	Minor Collector	Major Collector	3	TxDOT
FM 940	Minor Collector	Major Collector	3	TxDOT
Knob Hill Rd	Local Road	Major Collector	3	County
Luther Curtis Rd	Local Road	Major Collector	3	City, County
Mclean Cemetery Rd	Local Road	Major Collector	3	County
N Elm Rd	Local Road	Major Collector	3	County
N Pea Ridge Rd	Local Road	Major Collector	3	County
New Colony Rd	Local Road	Major Collector	3	County
Poison Oak Rd	Local Road	Major Collector	3	City
Reeds Cemetery Rd	Local Road	Major Collector	3	County

Table 11: Continued

Facility	Existing	Proposed	Precinct	Owner
Reeds Lake Rd	Local Road	Major Collector	3	City, County
Seaton Rd	Local Road	Major Collector	3	County
Southerland Rd	Local Road	Major Collector	3	County
St. Joseph Rd	Local Road	Major Collector	3	County
Stringtown Rd	Minor Collector	Major Collector	3	County
Sypert Branch Rd	Local Road	Major Collector	3	County
Vaughn Rd	Local Road	Major Collector	3	County
W Main St	Local Road	Major Collector	3	City
Wedel Cemetery Rd	Local Road	Major Collector	3	County
FM 2670	Minor Collector	Major Collector	4	TxDOT
Live Oak Cemetery Rd	Local Road	Major Collector	4	County
Maxdale Rd	Local Road	Major Collector	4	County
Oakalla Rd	Local Road	Major Collector	4	County
Elmer King Rd	Local Road	Major Collector	1, 2	City, County
Lindemann Rd	Local Road	Major Collector	1, 2	County
Hartrick Bluff Rd	Minor Collector	Major Collector	1, 3	City, County

Table 12: Proposed Future Roads

BCTP Map Proposed New Roads	Limit	Limit	Functional Classification	Precinct	Owner
FM 2271 Extension	Lake Rd	IH 14	Major Collector/Minor Arterial	1	TxDOT
Temple Outer Loop West Phase II	S Pea Ridge Rd	IH-35	Minor Arterial	1	City
Simmons Rd Extension	IH-14	FM93	Major Collector	1	City, County
Shanklin Rd Extension	IH-35	FM 93	Major Collector	1	City, County
Warriors Path Extension	Old Nolanville Rd	FM 439	Minor Arterial	1	City, County
George Wilson Extension	FM 93	FM 439	Minor Arterial	1	County
Three Creeks Blvd Extension	Three Creeks Blvd	Shanklin Rd	Major Collector	1	County
SH 95 to FM 2184 Connector	SH 95 @ Stag Rd	FM 2184 @ Sypert Branch Rd	Major Collector	1, 3	County
Mclean Rd to Rosanky Rd Connector	Mclean Rd	Rosanky Rd	Major Collector	1, 3	County
Poison Oak Rd Realignment	SH 317	S Kegley Rd	Minor Arterial	1, 3	City
FM 2843 to Williamson County Line	FM 2843 @ Patterson Crossing Rd	Williamson County Line	Minor Arterial	2	TxDOT
FM 3481 Extension	FM 2484	Thomas Arnold Rd	Minor Arterial	2	TxDOT
Chaparral Rd New Alignment	Chaparral Rd	FM 3481	Minor Arterial	2	City, County
Brewer Rd Extension	Thomas Arnold Rd	FM 2843 @ Wells Ln	Minor Arterial	2	County
FM 1670 Extension	FM 2484	Kuykendall Branch Rd	Major Collector	2	County
New Connector #1	FM 2843 to Williamson County Line Connector	IH 35	Major Collector	2	County
IH 35 to Armstrong Rd Connector	IH 35 @ Hill Rd	Armstrong Rd @ Lindemann Rd	Minor Arterial	2	County
Armstrong Rd Extension	FM 2268	Williamson County Line	Minor Arterial	2	County
New Connector #2	FM 2484 E of Peak Ln	Crows Ranch Rd W of Monteith Ln	Minor Arterial	2	County
Crows Ranch Rd Connector	Crows Ranch Rd	FM 2484 @ Salado Springs Cir	Minor Arterial	2	County
Smith Dairy Ln Extension	Smith Dairy Rd	FM 1670	Major Collector	2	County
FM 2484 to FM 2843 Connector	FM 2484 @ Stillman Valley Rd	FM 2843 E of Cedar Valley Rd	Minor Arterial	2	County

Table 12: Continued

BCTP Map Proposed New Roads	Limit	Limit	Functional Classification	Precinct	Owner
Live Oak Cemetery Rd Extension	Live Oak Cemetery Rd	FM 3481 N of Stillhouse Hollow Lake bridge	Major Collector	2, 4	County
FM 2484 Extension	IH-35	Rose Ln	Minor Arterial	3	TxDOT
FM 940 Extension	FM 437	Stringtown Rd	Major Collector	3	TxDOT
St Joseph Rd Extension	Cyclone Ranch Rd	Hobby Creek Rd	Major Collector	3	County
Southerland Rd Connector	5th Street	1237 Spur	Major Collector	3	County
Moores Mill Rd Realignment	Brewster Rd	IH 35 @ Hart Rd	Major Arterial	3	City
Temple Outer Loop East	IH 35 @ Berger Rd	US 190 @ FM 93	Minor Arterial	3	City
Briggs Rd Connector	Wolfridge Rd	Briggs Rd	Minor Arterial	4	County
SH 195 to FM 2484 Connector	SH 195 @ Briggs Rd	FM 2484 @ Stillman Valley Rd	Minor Arterial	4	County
Briar Patch Ln Extension	Bunny Trail	SH 195	Major Collector	4	City
Mohawk Dr Connector	Mohawk Dr	Bunny Trail	Major Collector	4	City
Mohawk Dr Extension	Castle Gap Dr	SH 195	Major Collector	4	City
Tower Hill Ln Extension	SH 195	Featherline Rd	Major Collector	4	City
FM 3470 to Mohawk Dr Connector	FM 3470 @ Ledgestone Dr	Mohawk Dr	Major Collector	4	City

Chapter 5 Recommendations

Implementation

The Bell County Thoroughfare Plan provides a long-term template for which the County's transportation system can be developed. This Plan gives the Commissioner's Court, County staff, the Killeen-Temple Metropolitan Planning Organization, and municipal staff an understanding of the long-term transportation needs while making short-term decisions related to roadway funding and new development.

To accomplish the purpose of the thoroughfare plan, a set of recommendations are included in this section. Recommendations on implementation and funding sources.

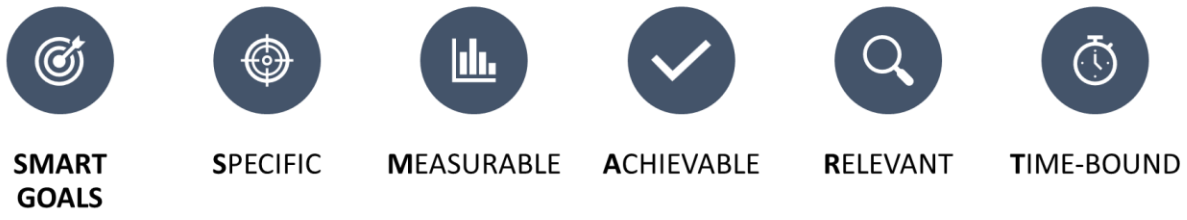
Documentation Updates

Bell County Subdivision Regulations

- Section 301.1: (a) "on major highways and roads" should be defined in terms of roadway functional classification. (b) "public roads other than major highways" should be defined in terms of roadway functional classification.
- Section 302: (1) Perimeter Streets: Add right-of-way requirements to match functional classification.
- Whole Document: Tables in all sections should be clearly labeled.

Goals

The goals outlined below were developed using the SMART goal principles. These criteria help improve the chances of succeeding in accomplishing a goal.



Mobility - Provide a multimodal transportation system that safely takes people where they need/want to go, in a timely manner, with a perceived sense of comfort.

- Consider those of all abilities when creating roads.
- Reduce congestion related delay.

Safety - Achieve a significant reduction in traffic fatalities and serious injuries for all modes on public roads.

- Vision Zero: Achieve zero traffic related fatalities.

Choices - Develop an integrated transportation network that provides improved mobility for all modes including active transportation, transit, and space for emerging technologies.

- Increase bike/ped facility usage.

Connections - Develop a connected multimodal network providing accessible mobility options to service the city across multiple modes that are integrated with the surrounding land use. Provide accessible mobility options through a connected multi-modal network that is integrated into the surrounding land use pattern.

- Close gaps in the sidewalk/bicycle network.

Community Driven - Partner with all community members and elevate the underrepresented voices to provide community-based transportation solutions.

- Increase the number of contacts through the stakeholder engagement and public meeting process.

Maintain and Sustain - Promote stewardship of a sustainable transportation system through asset management and systems preservation.

- Improve roadway Pavement Condition Index (PCI)
- Improve bridges within the County's jurisdiction.
- Increase resiliency.
- Increase redundancy.

Quality of Place - Promote place making through development of context sensitive complete streets design elements.

- Design a context sensitive system that protects cultural resources and historical sites.
- Protect the natural environment (air quality; water quality; wetlands and flood plain).
- Implement design elements and functionality that promote a sense of community and provide amenities such as shelters, trees, and/or shading.

Fund and Implement - Identify short-and long-term action steps while pursuing revenue resources to build, maintain, and operate new and existing transportation infrastructure and services.

- Develop an ongoing project selection and prioritization process that increases County competitiveness across all modes in planning-partner infrastructure funding programs.
- Develop and fund programs to regularly monitor roadways.
- Maintain and update transportation related data sources, and fund design resources in order to improve the county's capability to capture grant funding.
- Strengthen public/private partnership funding opportunities to ensure infrastructure investment sufficient to support growth.

Additional Considerations

Complete Streets

Complete streets are a practice that make sure streets are safe for all users.[3] This planning process happens during the designing, building, operating, and maintenance phases of road work. Usually, this process includes considering pedestrians first, then bicyclists, and lastly automobiles. A complete street may include sidewalks, bike lanes, comfortable and accessible public transportation stops, frequent and safe sidewalks, median islands, roundabouts, and other safety measures. Often times this means reducing the number of lanes for automobiles. Speed is the leading factor in fatalities. Drivers tend to drive at a slower speed when there are less lanes and the roads are narrower. One example of increasing safety at intersections is to not include gently rounded corners because this allows drivers to turn at a higher speed in the crosswalk while pedestrians have to travel further due to the rounded corners. The Complete Streets policy was implemented by TxDOT in 2011.

Vision Zero

The Vision Zero Network created Vision Zero as a strategy to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all. First implemented in Sweden in the 1990s, Vision Zero has proved successful across Europe- and now it is gaining momentum in major American cities.

End the Streak

The Texas Department of Transportation created the #EndTheStreakTX in an effort to raise awareness about the long streak of traffic deaths in Texas and how this is an issue that impacts every Texan. Texas has lost at least one person every day on Texas roads since December 7, 2020.

Funding Sources

The funding programs listed below in **Table 13** are intended as a toolbox to assist in the implementation of the 2022 BCTP. These programs are related to development, redevelopment, and general transportation improvements, including general roadway improvements, overpasses, freight corridors, transit, and trails. The toolbox can be used by Bell County, its partnering local government entities, and KTMPO. The toolbox provides a wide variety of potential funding mechanisms for future improvements. Individual improvements that are identified in the local CIP processes should be analyzed for which toolbox funding items will be applicable.

It is recommended that all entities work in coordination when applying for state and federal funding, to leverage funding more effectively. Bell County should work with all potential funding partners to create a funding plan for the next several years, with the first item being an application to the next KTMPO Call for Projects in 2023.

[3] https://smartgrowthamerica.org/what-are-complete-streets/

Program Type	Program Function	Applicable Jurisdiction	Transportation and Mobility Project Type	Link
Potential Local Funding Sources				
Roadway Impact Fees	Roadway Impact Fees are established by Chapter 395 of the Texas Local Government Code. An impact fee is typically a one-time payment imposed by a local government on a property developer. The fee is meant to offset the financial impact a new development places on public infrastructure.	City or Local Government	The chapter allows impact fees to fund captical costs for locally provided facilities, including roadways.	
County Assistance Disctrict (CAD)	Public Service and Improvement Finance	County	Funds can be used for construction, maintenance or improvement of roads or highways. It can also be used for public benefit: law enforcement, maintenance or improvement of libraries, museums, parks, or recreational facilities, economic development, and tourism and services.	
Tax Incement Reinvestment Zone (TIRZ)	Tax Increment Reimbursement Zones (TIRZ) are special zones created by City Council or County to attract new investment in an area. This allows for a portion of city or county tax revenue increment to be applied to an area or project improvement.	City or County	Public improvement promote new or redevelopment of specifically designated zones or projects; can include transportation and any public improvement a city or county can fund.	https://www.fhwa.dot.gov/ipd/pdfs/value_capture/value_cap_faq_tr_tir_zones.pdf
Potential State Funding Source				
KTMPO Project Calls (TxDOT CAT 2, 7,& 9)	To implement recommended KTMPO projects that leverage TxDOT funding.	KTMPO Jurisdictions	All form of transportation projects including roads, overpasses, underpasses, rail, transit, pedestrian trails, etc.	https://ktmpo.org/call-for-projects/
TxDOT Highway Bridge Program (HBP) Fedderal-aid Program	The Highway Bridge Program (HBP) is a federal-aid program that provides funding to enable states to improve the condition of highway bridges through replacement, rehabilitation and systematic preventive maintenance. The purpose of the program is to increase the safety of highway bridges nationwide	Local Governments, MPOs, Tribes, and other	Funding for bridge replacement, rehabilitation, and systematic preventive maintenance.	https://www.txdot.gov/business/grants-and-funding/highway-bridge-program-hbp-federal-aid.html
Community Development Block Grant (CDBG)	Funds can be used for public improvement for Low and Moderate Income Areas and should be part of the city and county CDBG Program. It can be used to implement roads, paving, water, sewer, parks, and trails.	City or County	Project types include infrastructure, ROW, road improvements, as well as social programs, affordable housing, and economic development programs.	https://www.texasagriculture.gov/Grants-Services/Rural-Economic-Development/Rural-Community-Development-Block-Grant-CDBG
State Infrastructure Bank (SIB) - Transportation Loan Program	The overall goal of the SIB Program is to provide innovative financing methods to communities to assist them in meeting their infrastructure needs.	Any public or private entity authorized to construct, maintain or finance an eligible transportation project	SIB funds can be used on all costs incidental to the construction or reconstruction of eligible projects. These uses typically include: Right of way acquisition, utility relocation, engineering and design, on or off system constnruction or reconstruction, contingency for rising costs or potential overruns, inspection and construction engineering, financial and legal fees incurred during the course of the SIB loan application and loan agreement.	https://www.txdot.gov/business/grants-and-funding/state-infrastructure-bank.html
Potential Federal Funding Source				
Bipartisan Infrastructure Law	Invests $350 billion in highway programs over 5 years. Creates more than a dozen new highway programs. Creates more opportunities for local governments and other entities.	local governments, MPOs, Tribes, and other public authorities	Invest in bridges, climate/resilience, electric vehicles, safety, and equity.	https://www.fhwa.dot.gov/bipartisan-infrastructure-law/
RAISE Grant (formaly BUILD and TIGER)	The Rebuilding American Infrastructure with Sustainability and Equity, or RAISE Discretionary Grant program, provides a unique opportunity for the DOT to invest in road, rail, transit and port projects that promise to achieve national objectives.	City, Local Governments, MPOs, Tribes, and other public authorities	RAISE grants are for planning and capital investments that support roads, bridges, transit, rail, ports, or intermodal transportation.	https://www.transportation.gov/RAISEgrants
Potential Non-Government Funding Sources				
Rail to Trails Conservancy	Rails-to-Trails Conservancy (RTC) emphasizes strategic investments that support significant regional and community trail development goals.		Thse projects help build, maintain, and manage trails for recreation, transportation, and economic vitality.	https://www.railstotrails.org/

Table 13: Funding Sources

Conclusion

The 2022 Bell County Thoroughfare Plan is a long-range plan that identifies the general location and type of transportation corridors, preserves right-of-way for future infrastructure, establishes consistent county design guidelines, and organizes future development. The plan does not change ownership or land use, require the County or its cities to build proposed roadways, identify funding or prioritize roadway projects or alignments, nor include survey, design, cost estimates, or schedule of roadway projects.

The Bell County Thoroughfare Plan promotes a safe, well-connected, and efficient county-wide transportation system that provides adequate mobility for people, goods, and services and promotes growth and redevelopment throughout the County. Close coordination with municipalities will be needed for successful implementation. As the County grows, the BCTP should also be continually updated to ensure that roadway networks are proactive in planning for the Counties future.