



Lubbock Metropolitan Planning Organization

**METROPOLITAN TRANSPORTATION PLAN
2024 - 2050**

Approved by the Transportation Policy Committee:
October 17, 2023



U.S. Department of Transportation
Federal Highway Administration

Required Credit / Disclaimer Statement

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Chapter 1 – Introduction and Background

Mission Statement

In the initial Metropolitan Transportation Plan developed in 1994, a goal was established which still holds true today.

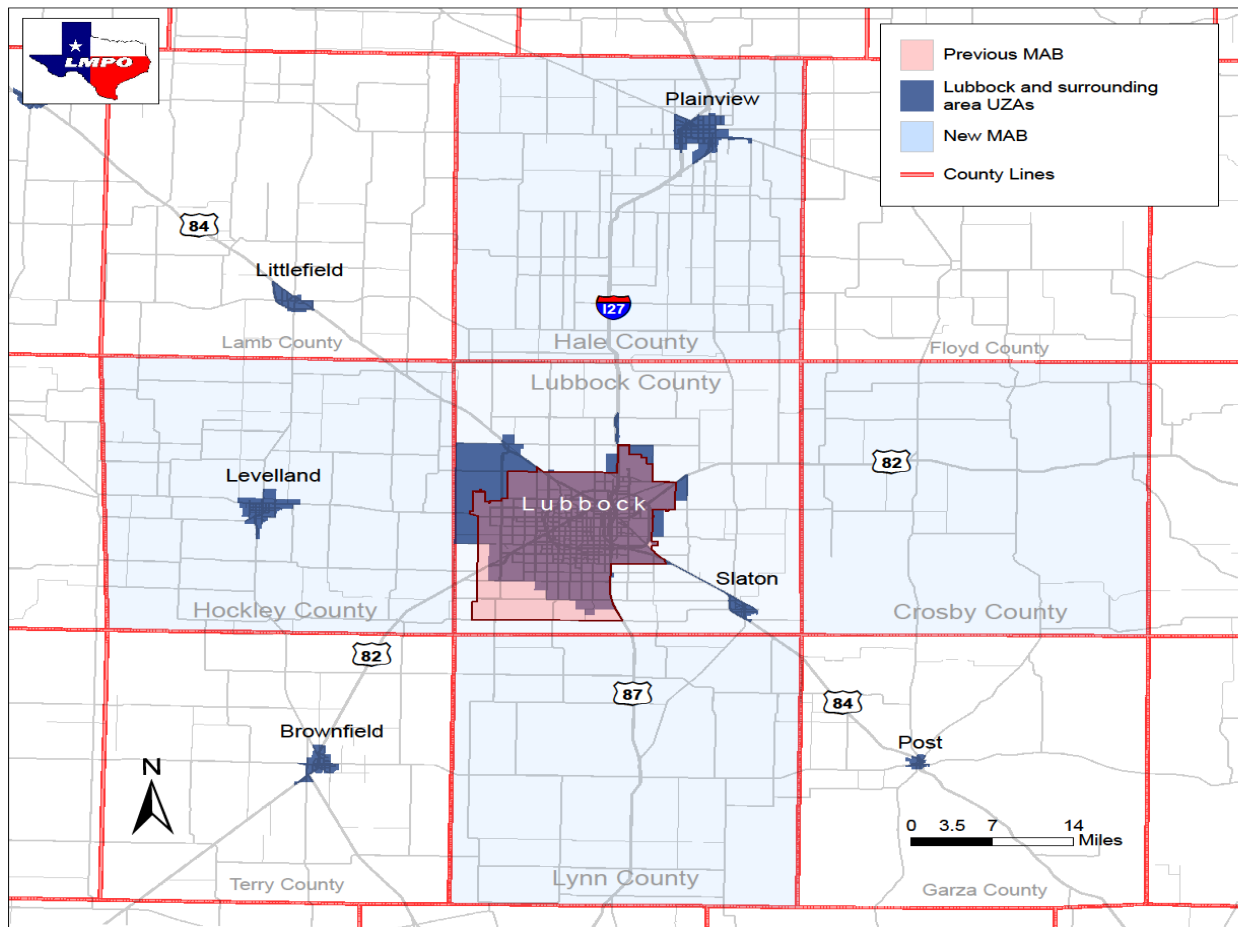
“Create an integrated, multi-modal transportation network to better serve the citizens in the Lubbock Metropolitan Area”

Introduction

The Lubbock Metropolitan Planning Organization's (MPO) 2050 Long Range Transportation Plan (LRTP) serves as the blueprint for the region's transportation planning process over the next 20 years. This plan also supports the transportation goals, elements, and policies of the plan. The transportation planning process is a collaborative effort between the cities of Lubbock and Wolfforth, as well as Lubbock County, the Texas Department of Transportation (TxDOT), Citibus, and other agencies. With extensive public input, the multimodal transportation system was evaluated, and a set of recommendations were made. This LRTP satisfies all federal requirements and addresses the community's goals, objectives, and action steps for the future.

The LRTP update process is required by the federal government every five years for all MPOs and provides numerous benefits. The regular update allows the community to optimize the integration with local Comprehensive Plan, identify potential challenges and opportunities, reexamine values as they relate to urban travel and development patterns, and communicate about how they envision the transportation system in the future. This plan and all LMPO activities allow a public comment period provided to all individuals and interested parties to give input. This plan will be available on the LMPO website for all interested parties to freely view.

In compliance with federal standards, the Lubbock MPO 2050 LRTP addresses transportation system needs and provides a set of methodologies, strategies, and actions for constructing an integrated, fiscally constrained multimodal transportation system that supports the efficient flow of people and products. The Lubbock Metropolitan Planning Area (MPA), which includes Lubbock County, and the Cities of Lubbock and Wolfforth, is covered by the LRTP and includes the transportation networks of the local governments there. By combining its efforts to address the region's roads, transit, cycling, and pedestrian modes, the LRTP takes into account the interconnected character of the multimodal transportation networks in the metropolitan area. While the LRTP covers the entire Lubbock MPA (Map [1.1](#)) it provides more specific transportation planning for regions within the federally defined Urban Area Boundary. The Urban Area Boundary covers an area of 232 square miles.



Map 1.1: Shows the previous Metropolitan Area Boundary (pink) and the new Metropolitan Area Boundary (light blue).

Background

MPO Structure

Lubbock Metropolitan Planning Organization (LMPO) is the official MPO for transportation planning in the Lubbock metropolitan region. The LMPO provides a venue for local governments to collaborate on issues that affect residents on a regional level. Members of the LMPO include the incorporated cities of Lubbock and Wolfforth, as well as Lubbock County and the Texas Department of Transportation (TxDOT).

As the MPO, LMPO is responsible for producing the long-term Regional Transportation Plan (RTP), which is referred to throughout this text as "our plan" and "the plan." A regional transportation plan (RTP) is a document that provides a regional transportation vision. It acts as a long-term blueprint, guiding investments in our transportation system now and in the future. The LMPO also oversees the Transportation Improvement Program (TIP), which ensures that transportation plans, initiatives, and projects comply with federal air quality regulations. A TIP is a more extensive listing of near-term regionally significant projects that, by definition, acts as the first four years of the long-term RTP.

Transportation Policy Committee

The Transportation Policy Committee is the final approval body for LMPO policy decisions. The LMPO Transportation Policy Committee must approve changes to the RTP or funded projects that affect the TIP. The committee is made up of voting and non-voting representatives from local, state, and federal agencies and transit providers. In their decision-making process, the Transportation Policy Committee relies on the LMPO Technical Advisory Committee, as well as staff and active engagement from residents, concerned business representatives, interest groups, and other community voices.



Transportation Policy Committee Structure

The Transportation Policy Committee (TPC) structure is outlined in the 1973 Designation Agreement and its roles reiterated in the 1988 Designation Agreement, Under I. Organization, Section C., which declares, “Use the Committee structure established pursuant to Section 134 of Chapter 1 of Title 23 U.S. C. as the group responsible for giving the Metropolitan Planning Organization overall transportation policy guidance.”

Lubbock Member Agencies

Voting Members

Citibus



**Texas Department
of Transportation;
Lubbock District**



Lubbock County



City of Wolforth



City of Lubbock



Non-voting Members

**Federal Highway
Administration**



**Texas Commision
on Environmental
Quality (TCEQ)**



**Federal Transit
Administration**



State Legislators



**TxDOT
Transportation
Planning and
Programming
Division**



**United States
Congressmen in
an ex-officio
capacity**



The fiscal agent of the Lubbock Metropolitan Planning organization is responsible for maintaining required accounting records for state and federal funds consistent with current state and federal requirements, providing funding to allow the MPO staff to operate the program and establishing fiscal and personnel management agreements with the MPO Policy Committee to identify respective relationships, roles and responsibilities.

Previous Transportation Planning Activities

Long-range transportation planning began with the enactment of the Federal Aid Highway Act of 1962. The transportation plans developed and adopted have been used through the years to best determine the future transportation infrastructure. Following is a list of these plans previously used for transportation planning in the Lubbock area (Figure [1.1](#): Key Historical Milestones). The Lubbock Metropolitan Transportation Plan (MTP) development process involves data collection and analysis, socioeconomic data projection, special studies and citizen input. The MTP serves as framework for project development and guides public entities in selecting projects from the Plan for implementation through the State's Transportation Improvement Program (STIP), the City of Lubbock's Capital Improvement Program (CIP), and other transportation programs. Comprehensive transportation planning has, and will continue to be, an ongoing effort of the local governments encompassed in the Lubbock metropolitan area.



Figure 1.1: Key historical milestones of LMPO planning.

Geographic Information

Map [1.3](#) shows depicts the Lubbock metropolitan planning area (MPA), which covers parts of Lubbock County. According to federal requirements, the boundary must include the existing urbanized region as well as the adjoining area predicted to become urbanized within a 20-year forecast. The current Lubbock MPA boundary was established using data from the 2020 Census and the most recent long-term demographic prediction. The planning area of the LMPO is approximately 10,600 square miles. Map [1.2](#) shows more LMPO region summary statistics.

Serving as the region's primary transportation hub, Lubbock is located in the Texas panhandle, in the heart of a 20-county region known as the "South Plains." The prevailing climate is semi-arid, with temperatures ranging from over 100 degrees in the summer to below freezing in the winter. Agriculture, primarily cotton, is the area's principal economic industry. Ranching, oil production, health care, education, and limited manufacturing are among the other industries.

Components of the Urban and Rural Classifications

The Census Bureau defines "urban" as all territory, population, and dwelling units found in urbanized areas and in locations with 2,500 or more inhabitants outside of UAs. The term "urban" refers to both types of geographic units. The Census Bureau defines the terms "urban," "urbanized area," and "rural," but other federal agencies, state agencies, local officials, and private groups may use them to designate areas based on various criteria.

Urban Places and Territory

An urban place is any incorporated place or census designated place (CDP) with at least 2,500 inhabitants that is not a UA. A CDP is a densely populated area with a name and a sense of community that is not part of any incorporated place.

Rural Places and Territory

The term "rural" refers to non-urban territory, population, and housing units. For example, a rural place is any incorporated place or CDP with fewer than 2,500 residents that is located outside of a UA. Except for those designated as an extended city, a location is either entirely urban or entirely rural.

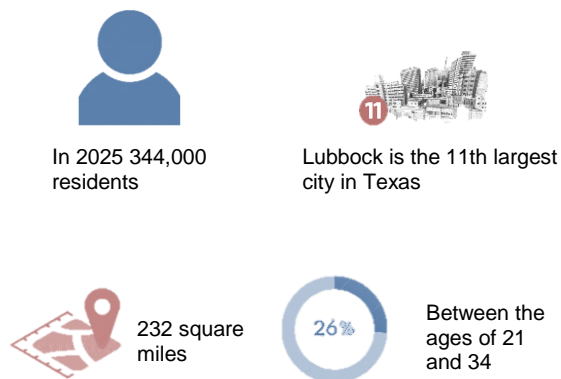


Figure 1.2: LMPO by the Numbers



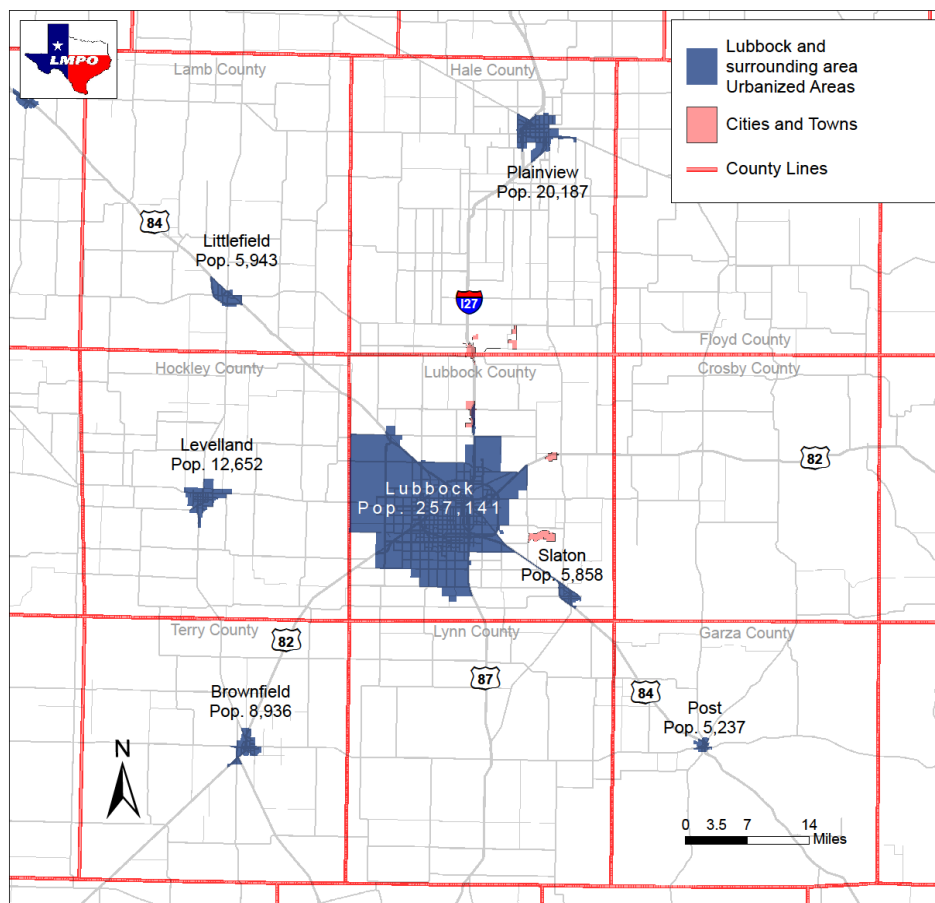
Extended Cities

The extended city is an incorporated entity that covers large swathes of sparsely populated territory for which the Census Bureau provides separate urban and rural population and land area estimates.

The Census Bureau classifies urban areas and enlarged cities only for statistical purposes. The Census Bureau has been in charge of creating and executing standards for defining and delineating UAs and extended cities.

Urbanized Area (UAs)

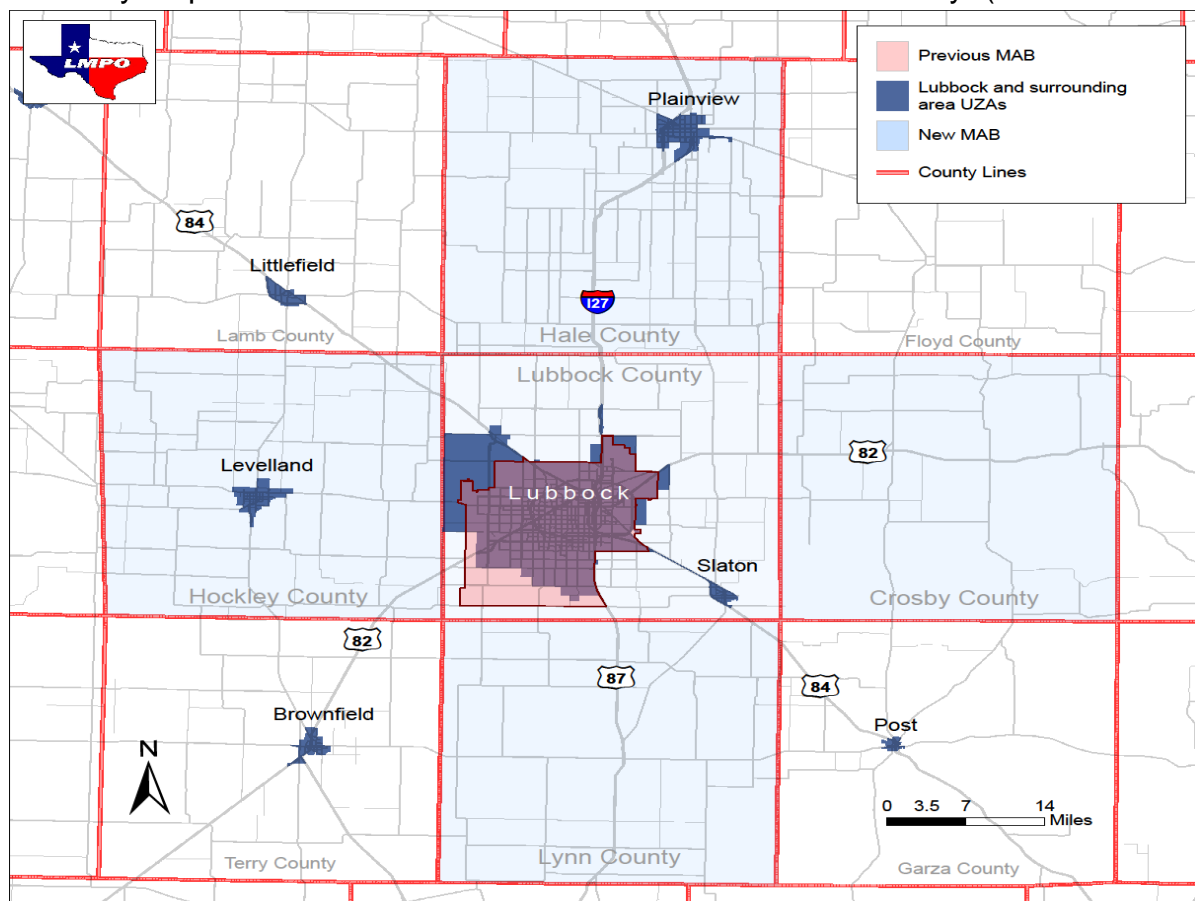
An UA is a continuous built-up region with a population of 50,000 or more. It is made up of one or more places, known as the central place(s), as well as a densely populated surrounding area (urban fringe) made up of other places and non-place land. Areas outside the city limits can be included in the urbanized area if the population density consists of 1,000 persons per square mile and is connected to the city by a road not more than 1 1/2 miles long. Map [1.2](#) shows the urbanized areas of Lubbock county and the surrounding counties.



Map 1.2: Urbanized areas of the surrounding Lubbock counties. Source: Lubbock Metropolitan Planning Organization.

Metropolitan Area Boundary

The Metropolitan Planning Boundary encompasses the Adjusted Urbanized Area as well as the area that is expected to be developed over the next 20 years. The 2020 Census-derived "UZA" boundaries were released in 2022; the Lubbock UZA was expanded to include Shallowater and a new UZA was established to the southeast of Lubbock, forming the new Slaton UZA. Because federal law requires an MPO to cover at least the entire UZA, the MPO boundary was extended and an agreement reached on how to conduct cooperative transportation planning and programming for this area. The Metropolitan Area Boundary comprises the entirety of the expansion to include the entire combined metropolitan statistical area as defined by the United States Office of Management and Budget (OMB). The revisions were recommended to the Transportation Policy Committee in October 2023, and the TPC approved the recommendation on October 17, 2023. The revisions were subsequently presented to the Texas Transportation Commission, which was given authority to approve metropolitan planning area boundary adjustments by Governor Rick Perry on October 4, 2005. It is expected that the MAB will be approved by the Texas Transportation Commission in January 2024. Map 1.3 shows these proposed boundary expansions in addition to the current MPO boundary (Lubbock county).



Map 1.3: Previous and new planning boundaries in addition to the Urbanized Areas. Source: Lubbock Metropolitan Planning Organization

TEXAS TRANSPORTATION COMMISSION

LUBBOCK County

MINUTE ORDER

Page 1 of 1

LUBBOCK District

Pursuant to Title 43, Texas Administrative Code (TAC), §15.3, revisions to metropolitan planning area boundaries must be approved by the governor or the governor's designee. The governor and the Texas Department of Transportation must be provided documentation and the rationale supporting any recommended boundary change.

In accordance with Title 23, CFR §450.308, a metropolitan planning area boundary shall, as a minimum, cover the urbanized area and the contiguous geographic area(s) likely to become urbanized within the 20-year forecast period covered by the metropolitan transportation plan.

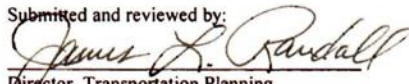
On October 4, 2005, Governor Perry delegated authority to the Texas Transportation Commission (commission) to approve metropolitan planning area boundary changes.

The Lubbock Transportation Policy Committee approved the expansion of the Lubbock Metropolitan Planning Area on October 16, 2007. Lubbock has been experiencing growth in the south and southwest portion of Lubbock County and the Metropolitan Planning Organization (MPO) expects this area to become urbanized within the next 20 years. Revisions include incorporating the southern part of Lubbock as part of the metropolitan area with the new boundary being FM 41 to the south, CR 1140 to the east and US 87 to the west.

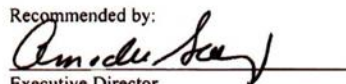
The commission has reviewed and accepted the documentation and rationale supporting the metropolitan planning area boundary changes provided by the Lubbock MPO.

IT IS THEREFORE ORDERED by the commission that the proposed Lubbock MPO metropolitan area boundary change is hereby approved in accordance with Title 23, CFR §450.308, with the adjusted 2007 Metropolitan Area Boundary shown in Exhibit A.

Submitted and reviewed by:


Director, Transportation Planning
and Programming Division

Recommended by:


Executive Director

111213 JAN 31 08

Minute
Number

Date
Passed

Coordination Efforts

The FAST Act mandates each MPO establish a cooperative planning process in collaboration with other agencies, including federal, state, and local agencies; transit and human service providers; and other interested parties. In addition to outreach to the public this LRTP planning process was done in collaboration with the following entities shown in Table 1.1.

Table 1.1: Roles and Responsibilities of the entities that take part in the LRTP planning process

Agency	Role	Responsibilities
LMPO	Designated MPO for the Lubbock metropolitan area	· Coordination of multimodal transportation and planning for air quality.
		· Prepares RTP in collaboration with TPC
		· Establishes project priorities and finances throughout the program's life cycle.
		· The LMPO Transportation Policy Committee approves the RTP and TIP.
TxDOT	State Transportation agency that builds, operates and maintains the state highway system	· Oversees design, engineering, right-of-way acquisition, construction, and maintenance activities of state designated facilities.
State Transportation Board	Entity with statutory authority over the state highway system.	<ul style="list-style-type: none"> · Approves the Texas Department of Transportation's statewide highway construction program. · Responsible for the building and maintenance of roughly 80,000 centerline miles of roads. · Has the authority to issue bonds and other forms of debt. · Establishes the state highway system's priorities.
Citibus	City of Lubbock contracted Citibus to provide public transit services.	· Manages, plans, and provides regional bus and paratransit services.

State and Federal Requirements

The Plan was designed in accordance with state and USDOT metropolitan transportation planning regulations. The Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA) share responsibility for the standards for metropolitan transportation planning processes. These federal regulations ensure that major transportation considerations are taken into account throughout the planning process. While the FAST Act led the two-year development phase for the Plan, the Infrastructure Investment and Jobs Act was signed into law on November 15, 2021, and will shape LMPO's future planning and implementation of surface transportation projects in the region. Figure 1.2 summarizes compliance with state and metropolitan transportation planning regulations.

The Plan employs a federally mandated performance-based planning process. By focusing on performance outcomes that drive towards transportation goals, performance-

based planning and programming promotes accountability and transparency and provides a framework to enable improved decision making.

In terms of mandated transit target setting, the Federal, Statewide, and Metropolitan Planning rules stipulate that an MPO must develop performance targets no later than 180 days after the applicable state and/or provider of public transportation establishes performance targets. Citibus is the sole transit service in the LMPO region that is required to identify performance indicators and targets. Previously, the LMPO policy committees assessed and endorsed Citibus' performance targets. However, moving forward, LMPO will set regional targets in collaboration with transit providers.



Figure 1.2: Regional targets for the LMPO

- **Access to Employment:** Provide for transportation system connections to areas of employment density and key activity centers, with an emphasis on connecting to areas of high poverty rates.
- **Freight Mobility:** Enhance freight corridors and intermodal connections to facilitate goods movement into, within and out of the region.
- **Safety & Security:** Provide for transportation improvements that increase safety and security for system users.
- **System Reliability:** Implement technologies and programs to improve travel times and support the ease of travel throughout the region.
- **Congestion Mitigation:** Support transportation system improvements that address existing and expected future traffic congestion.
- **Environment & Air Quality:** Provide for project alternatives that protect and enhance the region's natural resources.
- **Multimodal Connectivity:** Improve accessibility and interconnectivity of various transportation modes for all systems users.
- **Preservation & Maintenance:** Ensure that existing transportation infrastructure and facilities achieve a constant state of good repair

The Plan establishes the basis for transportation investment and land use priorities from 2022 through 2046. The plan's content and creation process are governed by a number of state and federal statutes and regulations. Furthermore, regional planning efforts have an impact on the plan's objectives. A few noteworthy statutes, rules, and initiatives are listed below. On November 15, 2021, President Biden signed the Surface Transportation Authorization Act (STA), often known as the Infrastructure Investment and Jobs Act (IIJA). The Fixing America's Surface Transportation Act was followed by the IIJA/BIL (FAST Act). The IIJA/BIL, like the FAST Act, preserves the performance-based planning and programming standards established by the Moving Ahead for Progress in the 21st Century Act (P.L. 112-141) (MAP-21), which required the application of a performance-based approach in the scope of the transportation planning process. Title 23 U.S.C. Section 134 and Title 23 Code of Federal Regulations (CFR) Part 450.300 outline MPO's federally mandated obligations. According to 23 CFR 450.306, the scope of the metropolitan planning process is to provide for the consideration and execution of projects, initiatives, and services that will address the following factors:

FAST Act Planning Factors

The Fixing America's Surface Transportation (FAST) Act includes 10 planning factors that are to be applied to all aspects of the metropolitan planning process. These are:

1. Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
2. Increase the **safety** of the transportation system for motorized and nonmotorized users.
3. Increase the **security** of the transportation system for motorized and nonmotorized users.
4. Increase **accessibility** and **mobility** of people and freight.
5. Protect and **enhance the environment**, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.
6. Enhance the **integration** and **connectivity** of the transportation system, across and between modes, for people and freight.
7. Promote efficient **system management** and operation.
8. Emphasize the **preservation** of the existing transportation system.
9. Improve the **resiliency** and **reliability** of the transportation system and reduce or mitigate stormwater impacts of surface transportation.
10. Enhance **travel** and **tourism**.

Figure 1.3: FAST Act Planning factors to be applied to all aspects of the metropolitan planning process. Source:
[Title VI of the Civil Rights Act of 1964](#)

This law prevents receivers of federal funds, such as state and local government entities, from discriminating on the basis of race, color, or national origin. Furthermore, Title VI requires recipients of federal funding to take affirmative action to ensure, among other

things, "that no person is excluded from participation in or denied the benefits of the program or activity on the grounds of race, color, or national origin." These anti-discrimination laws were eventually reinforced by further state and federal acts, such as Presidential Executive Order 12898 on environmental justice (EJ), which compels federal agencies and recipients of federal funding to "identify and address, as appropriate, disproportionately high and adverse human health or environmental outcomes environmental effects of its programs, policies, and activities on minority populations."

The LMPO follows the public transportation plan and Title 6 plan. Please refer back to it for any updates.

[The Federal Congestion Management Process \(CMP\)](#)

Federal law mandates metropolitan regions with populations greater than 200,000, known as Transportation Management Areas (TMAs), to design a congestion management approach as an ongoing process that is completely integrated into the MPO planning process. Chapter 10 further described the LMPO Congestion Management Plan. For more information not provided in this document, please reference the LMPO Congestion Management Plan adopted June 15th of 2021.

Chapter 2 – Current and Future Conditions

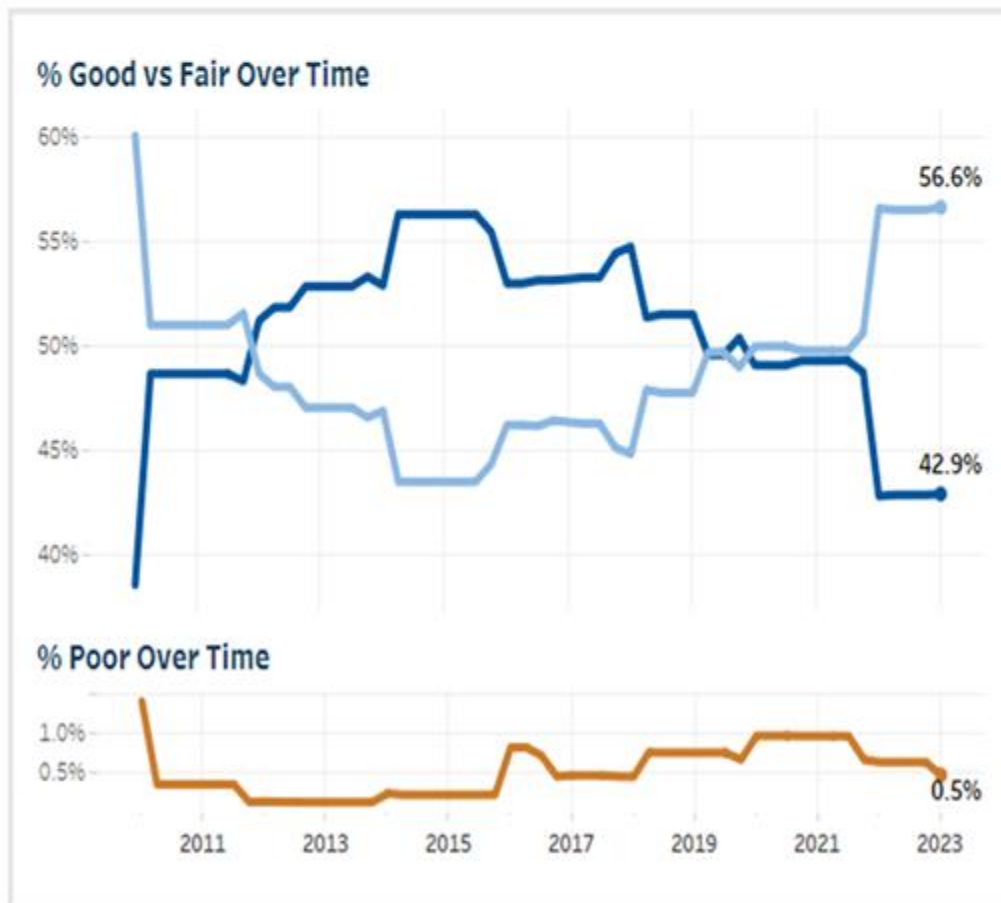
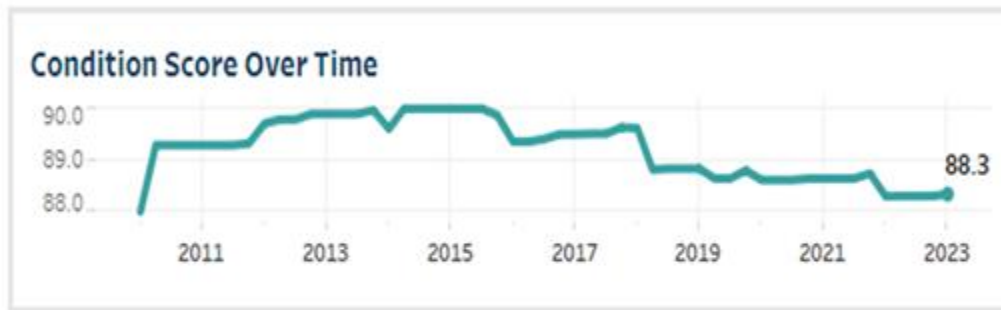
Demographic Data

Our transportation system includes an integrated urban freeway system, a comprehensive arterial grid network, and a transit system. Each element of the regional network is critical to the movement of people and goods throughout the region. Furthermore, the transportation system entails increased expenditures in non-motorized infrastructure for cyclists and pedestrians in order to securely connect people to places via an integrated regional active transportation network. Graph [2.1](#) displays the region's present transportation system conditions.

The freeway network is an extensive network of urban highway corridors and loops that connect the LMPO to population centers in Texas, New Mexico, and Oklahoma. Recently, voters approved Lubbock County's transportation bond, increasing network capacity funding for the construction of numerous arterial segments. LMPO regularly monitors the system's operational performance, including congestion levels, delays, and dependability, in partnership with TxDOT. The LMPO and TxDOT collaborate to reduce crash frequency and severity as well as to manage system asset life cycles, which include maintenance and preservation initiatives for pavement, bridges, and technology installations.

The arterial grid network is a critical component of our transportation system, promoting dependability and the efficient movement of people and products throughout the region. The region's characteristic grid plan acts as the foundation for the remainder of the multi-modal network, providing a comfortable and dependable method of transportation. Similar to the freeway program, the LMPO collaborates with its regional partners to track arterial performance. The LMPO work with its local jurisdictions to take traffic counts; make road safety evaluations to improve the traveler experience. Citibus operates the transit service that provides an alternative mode of transportation, inside Lubbock, to all major retail, medical, educational and employment areas within the city. Greyhound services long-distance regional connections into and out of Lubbock County.

The Lubbock MPO 2050 LRTP was completed during the COVID-19 pandemic. This chapter presents pre-COVID data, which does not account for changes in travel demand and patterns that occurred during the pandemic. As a result of the pandemic, travel patterns have shifted considerably, and the long-term implications are unclear at this time.

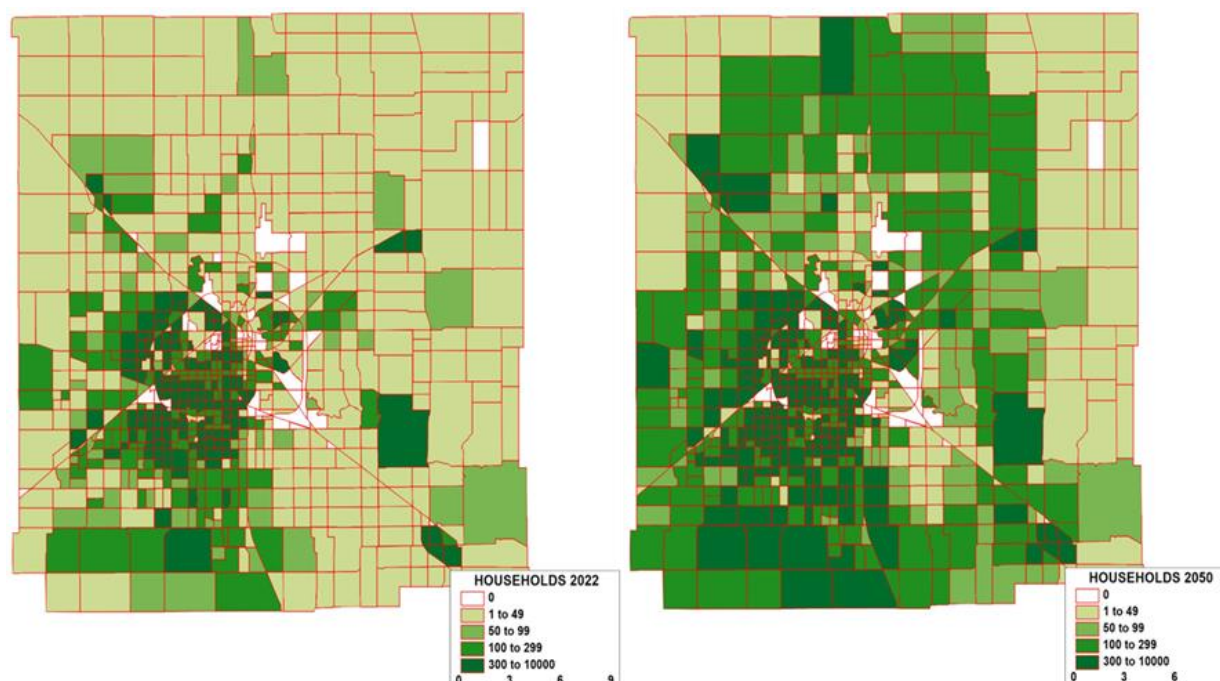


Graph 2.1: 2023 Transportation System Conditions for the district of Lubbock. Source: Lubbock TXDOT Engineering District

2025 Demographics

The LMPO region, and particularly Lubbock City, is experiencing rapid population growth (see Figure 2.1). The demand on our transportation infrastructure will intensify as the 11th largest city in Texas and the second largest west of Interstate 35 is predicted to grow by 7% through 2025. This implies we need new solutions and improvements to maximize the efficiency of our existing infrastructure. At 7% the LMPO region is growing faster than both the Texas and national median growth rate, at 6.6% and 3.27%, respectively.

Map [2.1](#) indicate the projected density of people in our region in 2050. People's and jobs' locations have an impact on how we plan and run our regional transportation network.



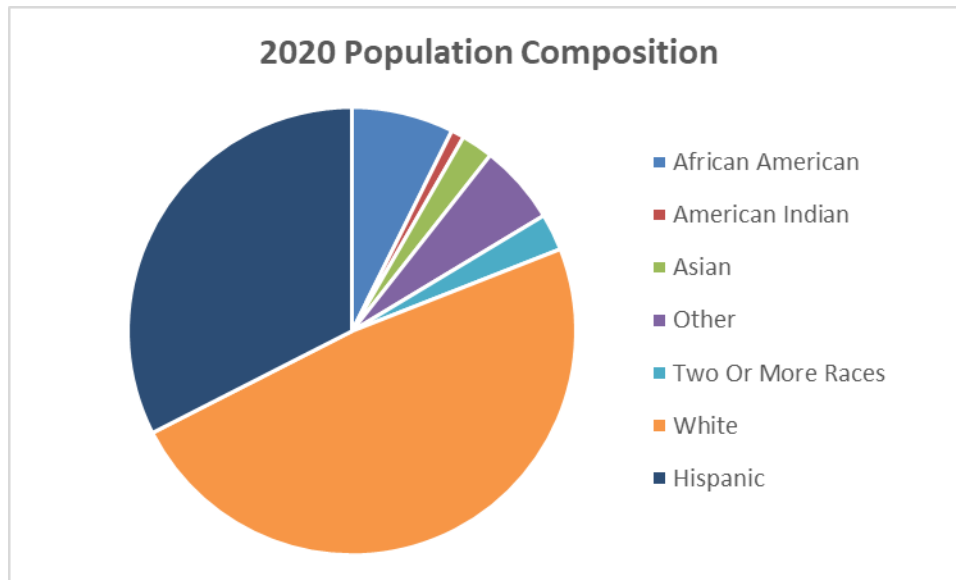
Map 2.1: (Left) Shows 2022 population density data based on households for Lubbock county. (Right) Shows projected population density for 2050 for Lubbock County. Source:

During the strong economic recovery that followed the Great Recession of 2008, the Lubbock MSA and the Texas Tech campus near downtown experienced population growth, as well as significant office and other development that had previously occurred in the suburbs. Factors driving this trend were the university's growth initiative, bringing in younger persons with preferences for urbanized settings with greater entertainment and social options, and the appeal of sites with convenient walking, biking, and transit access.

Unlike many other counties in West Texas, which saw population reductions, the Lubbock MSA profited from these factors. The trend also aided growth in areas with easy access to US 87 and US 82.

At the same time, there were also opposing trends, such as millennials starting families

and looking for suburban homes; and rising housing costs, which moved families away from Lubbock's core and into newer suburban subdivisions.



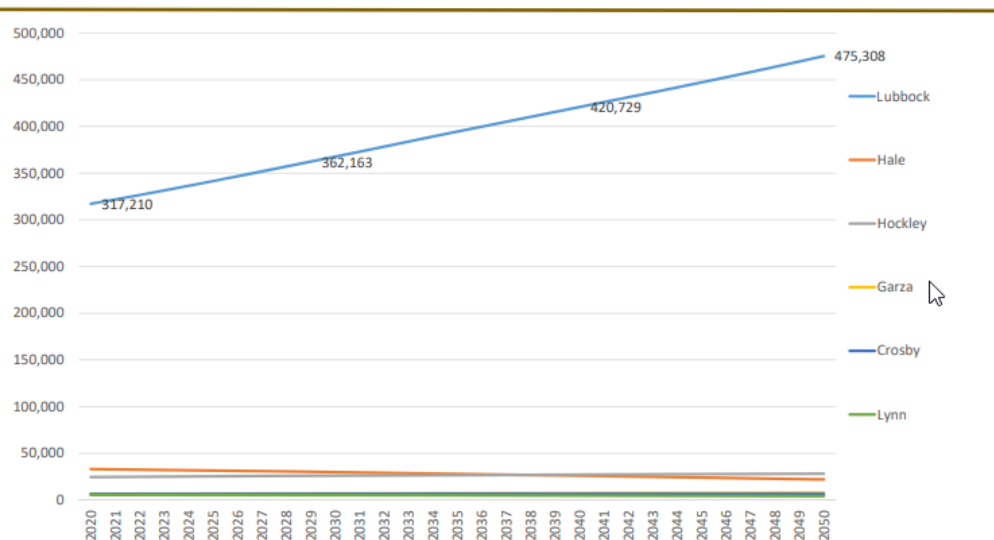
Graph 2.2: 2020 Population composition in the city of Lubbock, Texas

More Diversity: In line with Texas trends, the region's population is becoming more diverse in terms of racial and ethnic minorities. In the Lubbock MSA, minorities constitute approximately 50% of the population (Graph 2.2). Historically, minority groups have had lower earnings and have been concentrated in larger metropolitan areas, although this is changing. These communities also rely more on public transportation for daily movement, generating equity concerns that have been highlighted by the pandemic.

2050 Future Conditions

It is challenging to predict future population and employment growth and necessitates a

Projected Total Population, Lubbock Area Counties, Texas 2020-2050

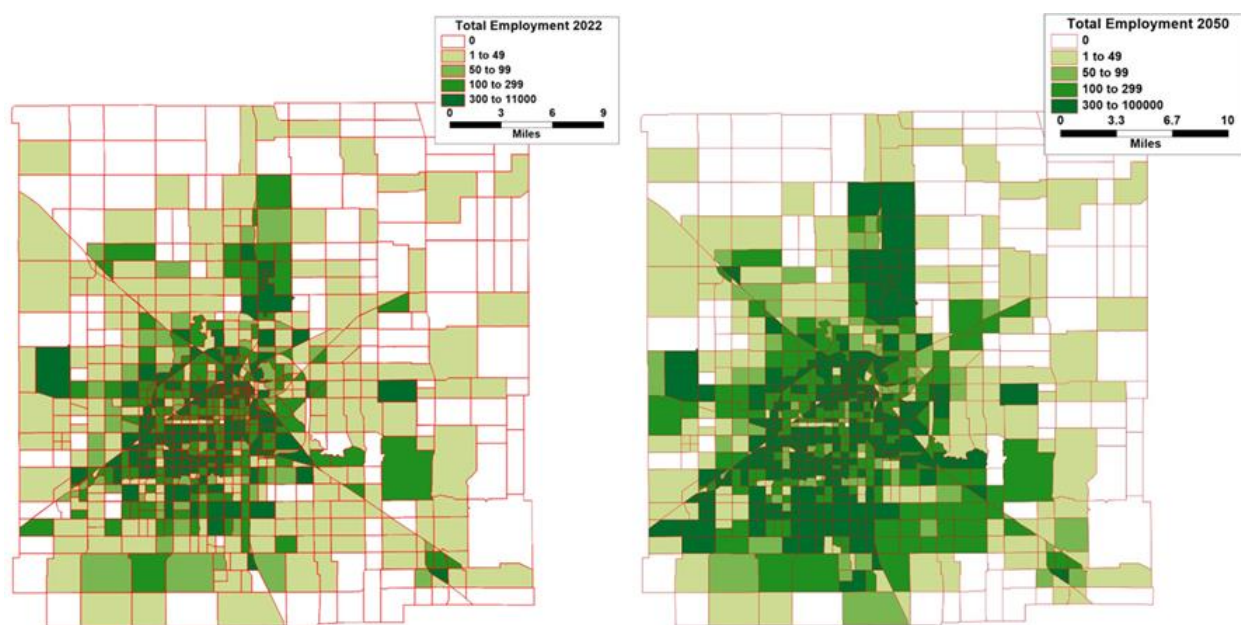


Graph 2.3: Projected population growth from 2020-2050 for Lubbock area counties

plethora of data as well as ongoing adjustments. The LMPO's best projections for population and employment in our region in 2050 are shown in Map 2.1 and 2.2. The maps serve as an important backdrop for regional planning and decision-making processes. The region's population is predicted to reach 459,000 by 2050, an increase of more than 129,000 over 2020. (See Fig. 2.1) This means that around 30% more people will be driving on regional roads, streets, and our transportation system to and from work, errands, and activities. To keep up with this growth, our regional transportation network will require a variety of upgrades to efficiently support our continuing growth.

Employment and Economic Trends

The LMPO region remains a desirable place to live and do business. The region's economy has historically grown in lockstep with population expansion, and current projections indicate that this will continue until 2050. According to forecasts, Lubbock's economy will continue to grow until 2050, with regional job growth of 3.8%. Lubbock City will retain the majority of the area's employment, with Lubbock County and the City of Wollforth expected to significantly increase their share of the region's employment as the Lubbock industrial park and central business district mature.

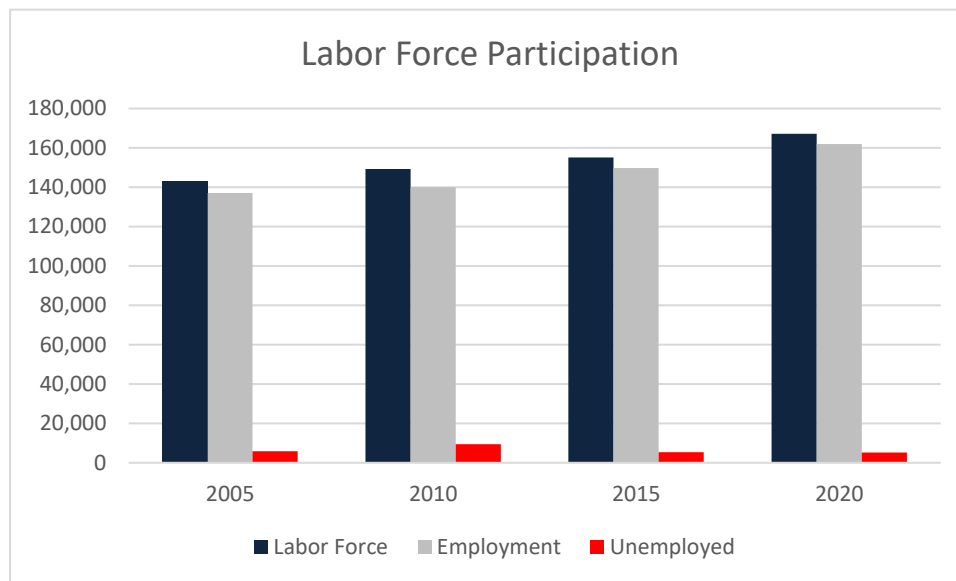


Map 2.2: Lubbock county 2022 employment (left) and the projected employment for 2050 (right)

Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates Lubbock, TX

The Lubbock Metropolitan region employs 158,498 people. Jobs have grown by 9,802 in the last five years and are anticipated to grow by 9,705 over the next five years. The region's population has expanded by 5.6%, or 16,405, since 2014. Between 2020 and 2025, the population is expected to grow by 6% through 2025, adding 19,187 people.

Between 2015 and 2020, the number of jobs in Lubbock County, Texas, increased by 7.5%, from 149,806 to 161,950. As the number of employed people increased between 2015 and 2020, the labor force participation rate increased from 63.1% to 63.7%.

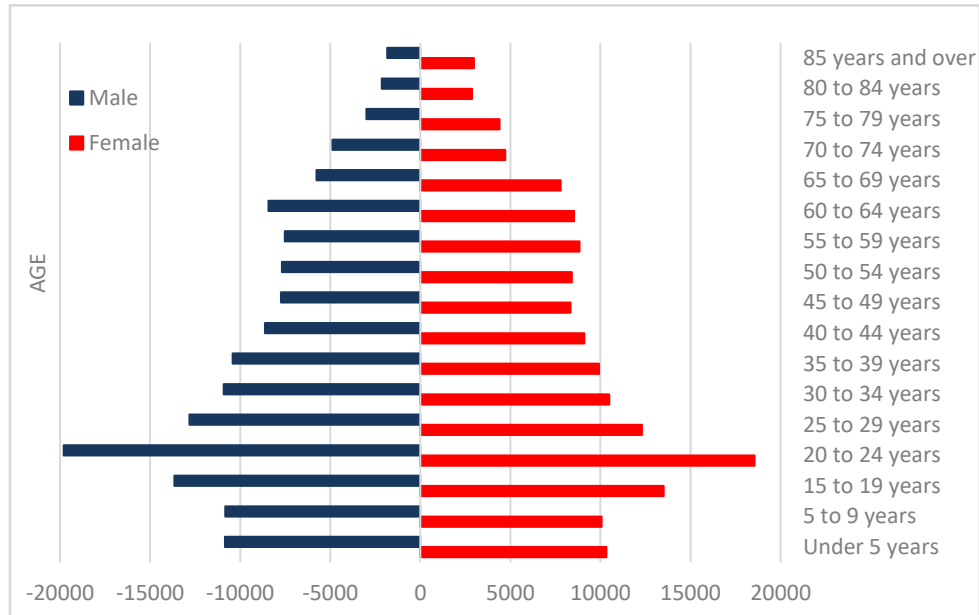


Graph 2.4: Labor force participation in the City of Lubbock

In 2020, the top three industries in Lubbock were restaurants and other eating establishments, education, and hospitals (local government) and hospitals (state government).

One-quarter (25%) of total employment in the Lubbock MSA is provided by two relatively stable economic sectors: health care and education. As previously stated, Lubbock is the principal metropolitan center serving the vast rural stretches of West Texas and Eastern New Mexico. There will probably be a fair amount of demand for the city's services in this regard, including retail establishments, specialized medical care, and professional services.

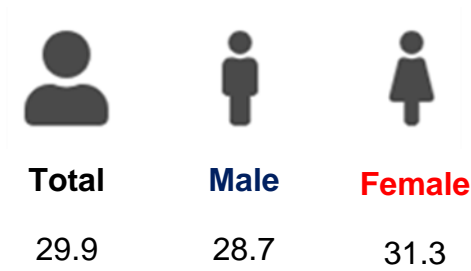
Age Structure



Graph 2.5: Lubbock Metropolitan population pyramid by age and sex.

Lubbock's age structure deviates significantly from national and state averages. This is primarily due to Texas Tech University's large college-age population. Over one-fourth of Lubbock's population (26%) is between the ages of 21 and 34, compared to 19% in the United States and 20% in Texas statewide. It is projected that the median age in Lubbock MSA will increase to 30.1 years by 2050 as the population ages and Lubbock continues to develop as a regional retirement center. See Graph [2.5](#).

Lubbock MSA Median Age



Lubbock Sex Ratio

Female

162,201 50.68%

Male

157,830 49.31%

Female

162,201 50.68%

Male

157,830 49.31%

Lubbock Adults

There are 228,854 adults including 40,378 seniors

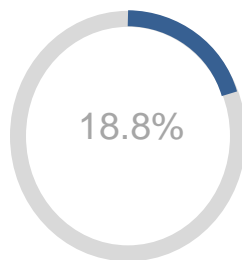
Lubbock Age Dependency

28.5 Old Age Dependency Ratio

8.4 Child Dependency Ratio

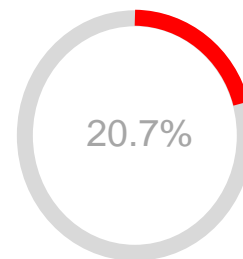
Lubbock Texas Poverty Rates

Poverty Rate Disparity for Male vs Female Residents of Lubbock, Texas



Male

The Poverty Rate for men who live in Lubbock, Texas is 18.8%



Female

The Poverty Rate for women who live in Lubbock, Texas is 20.7%

Poverty Rate Disparity by Race

Poverty Rate in Lubbock, Texas By Race

26.72% of African American residents of Lubbock, Texas live below the poverty line.

The Poverty Rate of African American residents in Lubbock, Texas is about the same as the national average. 5,141 of 24,164 African American Texans live below the poverty line. Approximately 7.36% of the total population of Lubbock, Texas are African American.

26.79% of Asian residents of Lubbock, Texas live below the poverty line.

The Poverty Rate of Asian residents in Lubbock, Texas is dramatically higher than the national average of 11.9%. 1,740 of 7,554 Asian Texans live below the poverty line. Approximately 2.30% of the total population of Lubbock, Texas are Asian.

15.78% of White residents of Lubbock, Texas live below the poverty line.

The Poverty Rate of white residents in Lubbock, Texas is dramatically higher than the national average of 10.3%. 19,846 of 159,119 white Texans live below the poverty line. Approximately 48.47% of the total population of Lubbock, Texas are white.

24.59% of Hispanic residents of Lubbock, Texas live below the poverty line.

The Poverty Rate of Hispanic residents in Lubbock, Texas is the same as than the national average. 22,119 of 106,698 Hispanic Texans live below the poverty line. Approximately 32.50% of the total population of Lubbock, Texas are Hispanic.

Table 2.1: Poverty rate in Lubbock, Texas by race

Race	Population	Poverty Rate	National Poverty Rate	In Poverty	Population Per Total
Asian	7,554	26.79%	11.9%	1,740	2.30%
African American	24,164	26.72%	25.2%	5,141	7.36%
Hispanic	106,698	24.59%	22.20%	22,119	32.50%
Two Or More Races	8,732	22.69%	18.4%	3,504	2.66%
American Indian	3,096	20.23%	26.8%	422	0.94%
Other	18,929	19.00%	23.8%	1,136	5.77%
White	159,119	15.78%	10.3%	19,846	48.47%

Why are so many families struggling?

Despite a pre-COVID unemployment rate of 3%, roughly 40% of Lubbock County's population struggles to satisfy basic needs. Notwithstanding having a larger proportion of high school graduates, Lubbock County has a far higher proportion of adults and children living in poverty than the rest of Texas and the United States.

When households earning more than the Federal Poverty Level but less than the county's basic cost of living are combined with those earning less than the Federal Poverty Level, the true number of households living in poverty is calculated. This exposes the ongoing and widening income and wealth discrepancies between the protected classes and the rest of the population. When 40% of households do not earn enough to cover basic needs, there are structural economic concerns. Wages across the country are just not keeping up with rising cost of living.

Demographics in Lubbock County

As seen across the state and nation, the overall population continues to shift. Texas' Hispanic population is on track to be the largest population group as soon as 2022. This trend is evident across the South Plains and in Lubbock County. The shift in overall population further emphasizes the need for nonprofits and organizations to ensure their leadership matches the demographics they serve.

In addition to this change, the median age in the City of Lubbock is 30.49. This compares to a median age of 35.22 in Texas and 38.65 in the U.S.

Ideally, results of the 2020 census will give the South Plains accurate demographic data to better reflect the community

Land Use

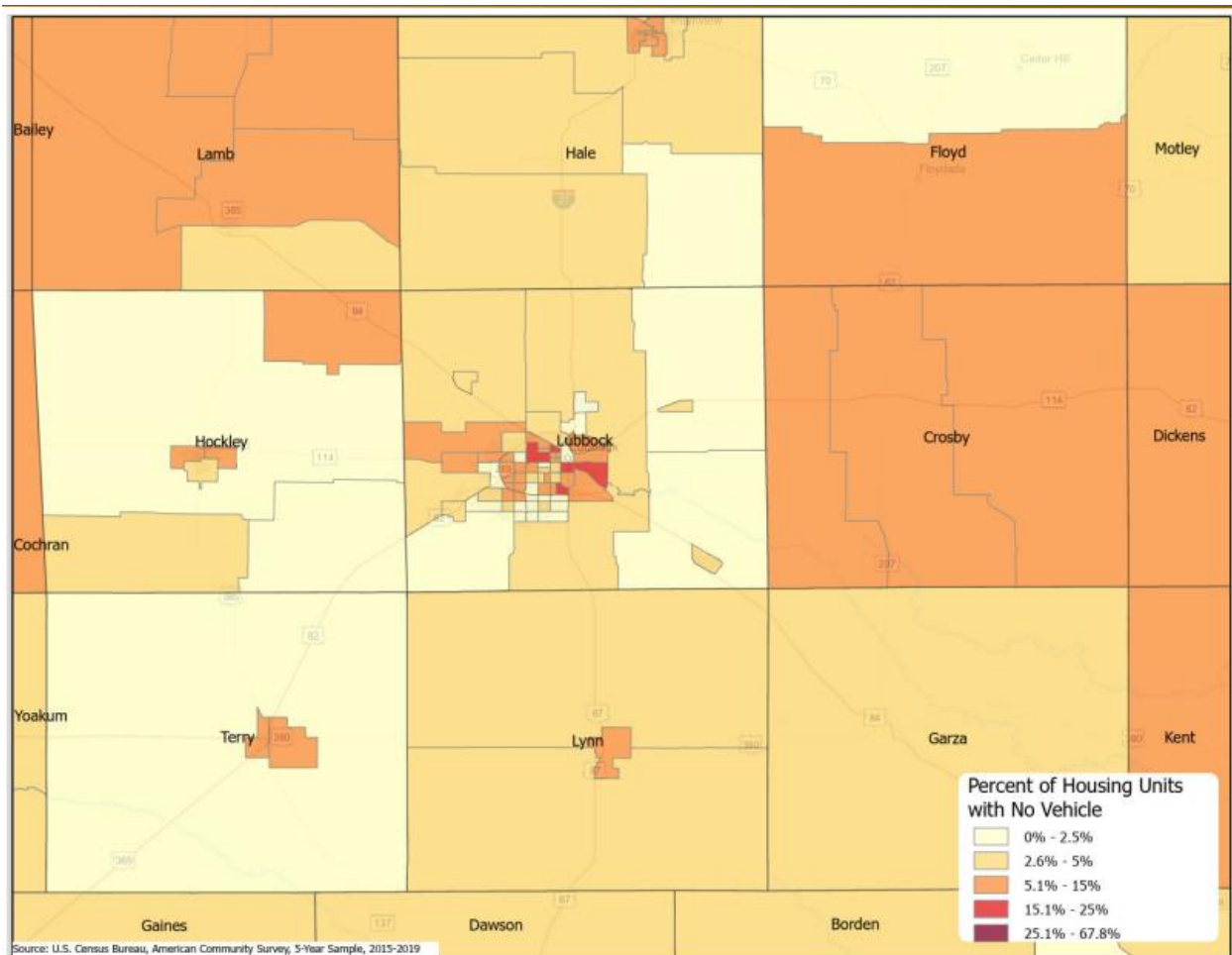
The current City limits span 87,018 acres, equivalent to 136 square miles. Approximately 65 percent of land within the City is developed. Of this developed land, 33 percent is composed of residential, specifically low density. Nonresidential uses compose 17 percent of developed land. Public uses account for 21 percent of Lubbock's developed land. This is projected to increase to 180 square miles by 2050. However, for the latest traffic modeling efforts, there has been a greater emphasis placed upon employment statistics than various land use acreage totals. The City of Lubbock Land Use Data File is continuously updated and can produce reports which detail land uses, housing counts, and business distributions for traffic analysis zones within the Lubbock area.

Lubbock's Reliance on Vehicles

Many municipalities have long encouraged their residents to live a car-free lifestyle to decrease further traffic congestion and pollution, save money, and become more physically active. However, most Americans aren't ready to give up their cars just yet. According to the most recent Census Bureau data, only 8.7 percent of U.S. families reported not having a vehicle in 2016. During the same time period, Lubbock had 6.4 percent of single-car households. Other considerations, such as demographics, fuel costs in Texas, and where people reside come into play when a household decides not to own a car. With the City of Lubbock's continued rapid growth, citizens have found it difficult to move around without a car. Growing suburban areas generally have fewer transportation alternatives or are not conducive to walking. Persons in Lubbock are more reliant on the automobile for transportation than average meaning public transportation and other transportation means such as cycling and walking are not as popular as elsewhere. This is shown in Table 2.1 and Map 2.3. Lubbock, similarly to most cities in the western United States, is not developed with the density that readily supports mass transportation. The automobile is the primary mode of transportation in Lubbock and is projected to remain so in the future.

Table 2.1: Percentages of some Texas cities that do not rely on a vehicle for transportation

City	2009	2010	2015	2016	2015-16 Average
Dallas, Texas	9.60%	9.60%	10.20%	9.10%	9.70%
Waco, Texas	9.70%	8.70%	8.70%	8.80%	8.80%
Brownsville, Texas	10.90%	10.00%	7.60%	9.60%	8.60%
San Antonio, Texas	8.90%	10.00%	8.40%	8.30%	8.30%
Lubbock, Texas	7.50%	4.80%	7.30%	5.60%	6.40%
Austin, Texas	6.10%	7.50%	6.90%	6.00%	6.40%
Amarillo, Texas	5.90%	7.60%	6.10%	4.20%	5.10%
Odessa, Texas	5.40%	6.70%	4.40%	5.20%	4.80%
College Station, Texas	4.90%	5.50%	4.70%	6.30%	5.50%



Map 2.3: U.S. Census, ACS, 5 year sample, 2015-2019

Safety

Since the Highway Safety Act of 1966, which recognized the need for substantial highway safety initiatives to reduce escalating accidents and fatalities that were mainly preventable, safety has been a primary function of transportation planning. Since then, Transportation Safety Planning has grown into a comprehensive, system-wide, multimodal, proactive strategy that better integrates safety into surface transportation decision-making. According to federal law, states and MPOs must set performance measures and ensure that their transportation planning procedures are in line with Strategic Highway Safety Plans (SHSPs) for both motorized and non-motorized users.

Every three years, with the most recent revision occurring in 2022, the regional safety performance measures are revised. In the Lubbock region, the Transportation Advisory Committee reviews high-accident intersections and corridors. Then it evaluates and classifies dangers in the region in order to identify prospective safety improvement projects that can benefit from highway safety funding. This process includes the use of 'Decision Lens' which analyzes goals and objectives that serve as a framework for establishing safety initiatives, projects, and policies. Decision Lens gives a heavier weight

and bonus to projects that increase multimodal capacity. This document reflects the best strategy for reducing fatalities and serious injuries in the area.

The LMPO promotes best practices through the use of FHWA's Proven Safety Countermeasures Initiative (PSCi), a collection of 28 countermeasures and strategies that have been shown to minimize highway fatalities and serious injuries through the use of decisions lens for project selection. Transportation agencies are strongly encouraged to look into widespread adoption of PSCi's in order to accelerate the achievement of local, state, and national safety goals. These tactics are meant for all road users and all types of roads, including rural and urban locations, major highways, two-lane state and county roads, signalized crossings, horizontal curves, and everything in between. Each countermeasure addresses at least one safety priority area, whether it be speed management, intersections, roadway departures, pedestrians, or cyclists. The LMPO is an active member of the Local Emergency Planning Committee as well as the Citizens Traffic Commission, the Lubbock Engineering District's quarterly fatal collision review, as well as other state and local safety planning initiatives. These partnerships bring transportation officials, community planners, health professionals, and other stakeholders together to collaborate, exchange information, find solutions, and raise awareness about transportation safety issues. Some of the subjects on which emphasis is focused are as follows: Motorcycle safety, seatbelt use, teen driving, texting, and alcohol and drug use are all addressed.

Wrong Way Drivers Program

The Lubbock MPO will examine adopting a Wrong Way Driver Program through the present Transportation System Management and Operations (TSMO) in collaboration with the City of Lubbock and the Lubbock Police Department as an addition to the current TxDOT system. A pilot program may use closed-circuit television (CCTV) to watch for wrong-way drivers (WWD). When a wrong-way driver is detected, the Lubbock Police Department would be contacted, and the dynamic message signs would be automatically updated to alert other drivers that a wrong-way driver has been reported in the vicinity, advising them to take extreme caution.

Preservation

Efficient operation of the transportation system has an impact on how we live our lives as it enables us to access employment and services and acquire goods in a timely manner. Infrastructure is vital to the foundation of our road networks, communities, and economy. The physical infrastructure of the region's twentieth-century roadways, bridges, and transportation systems remain critical to our ability to travel throughout the region. These assets are frequently in danger of falling into disrepair.

It is the goal of the LMPO to ensure that infrastructure of our road network is monitored and updated when the need arises. The preservation and resiliency of the current network of highways, bridges, and other transportation facilities is a top priority at all decision-making levels. Because there are so many variables and numerous ways to gauge effectiveness and upkeep, such as mobility and accessibility, system performance can be

difficult to define. The LMPO, in coordination with regional stakeholders, monitors system performance in a data-driven, comprehensive, and integrated manner through traffic network analysis, safety reports, and multi-modal planning to ensure that individual, short-term actions support strategic, long-term goals. The Lubbock region analyzes efficiency and effectiveness primarily using two methods: asset management and the congestion management process (CMP), which are described in this section on system performance.

Chapter 3 – Environmental Issues

Air Quality

The adoption of the Clean Air Act in 1970 permitted the establishment of comprehensive federal and state regulations to regulate emissions from both stationary (industrial) and mobile sources. Four key regulation programs were launched: the National Ambient Air Quality Standards (NAAQS), State Implementation Plans (SIPs), New Source Performance Standards (NSPS), and National Emission Standards for Hazardous Air Pollutants (NESHAPs). The EPA was established on May 2, 1971, to carry out the many duties outlined in the Clean Air Act.

The Clean Air Act requires nonattainment areas to develop plans to meet air quality standards and to set timelines to accomplish those standards. Using this authority, the EPA has established air quality criteria for six air pollutants: sulfur dioxide (SO₂), particulate matter (PM_{2.5} and PM₁₀), nitrogen dioxide (NO₂), carbon monoxide (CO), ozone, and lead. The Act mandates the EPA to conduct a five-year assessment of the scientific data on which the standards are based. If required, the EPA may alter the requirements to provide "an adequate margin of safety" for public health.

The 1990 Clean Air Act Amendments classified nonattainment locations based on the severity of the exceedance and established particular pollutant controls and attainment dates for each classification: attainment, marginal, moderate, serious, severe, and extreme. Areas with more severe air pollution problems have a longer time to satisfy the limits but also face more demanding control requirements. The LMPO currently is classified as an attainment area.

Air Quality Mitigation Efforts

The LMPO Region, like many others in the United States, has benefited greatly from technology breakthroughs and their favorable impact on reducing air pollution (emissions from new vehicles have declined over time as emission controls and fuel efficiency have improved). Even when cleaner vehicles are on the road, reducing vehicle miles traveled (vmt) and vehicle hours traveled (vht) are tried-and-true tactics for reducing emissions and improving air quality. Another major approach of cutting vehicle emissions is to eliminate bottlenecks and thereby reduce engine idling. The TDM has showed that VHT has decreased as the transportation network has been able to maintain a consistent level of service, allowing for higher vehicle speeds. Vehicles capable of traveling at a constant pace with fewer stop-and-go movements emit lower levels of air pollution.

Reductions to VMTs is another way to improve air quality. According to the LMPO travel demand model, VMTs in the region have remained stable but are predicted to climb as the region expands. This has significant implications for reducing emissions from mobile sources. Reducing the growth of vehicle miles traveled requires behavioral changes rather than relying solely on technology developments. The goal is to shorten most trips and find and implement solutions to increase walking, bicycling, and transit use.

EPA: Transformation Conformity Regulations

The LMPO follows all transportation conformity rules provided by the EPA in Coordination with TxDot.

Environmental Mitigation

Lubbock and the surrounding area is located in the 'High Plains' ecoregion of Texas which stretches southeastern Wyoming, western Nebraska, eastern Colorado, western Kansas, through the panhandles of Oklahoma and Texas, and into eastern New Mexico. The High Plains is categorized by it's hot summers, cold winters, and very little rainfall.

Historically, the High Plains region was covered in short and mid-grass prairies. Agriculture and urban sprawl has fragmented and replaced much of our prairie grasslands. Short-grass and mid-grass prairies are critical for black-tailed prairie dogs, pronghorns, swift fox, burrowing owls, mountain plover, lesser prairie-chicken, and migrating and resident grassland birds. Grassland birds are in a steeper decline than other groups of birds. Playa lakes are a common feature of the High Plains ecoregion. Playas are extremely important to wildlife and the continuation of historical habitat in the High Plains and also serve as recharge sites for the Ogallala Aquifer, but do not receive the protection that wetlands do.

Some common species of concern for the High Plains ecoregion of Texas include;

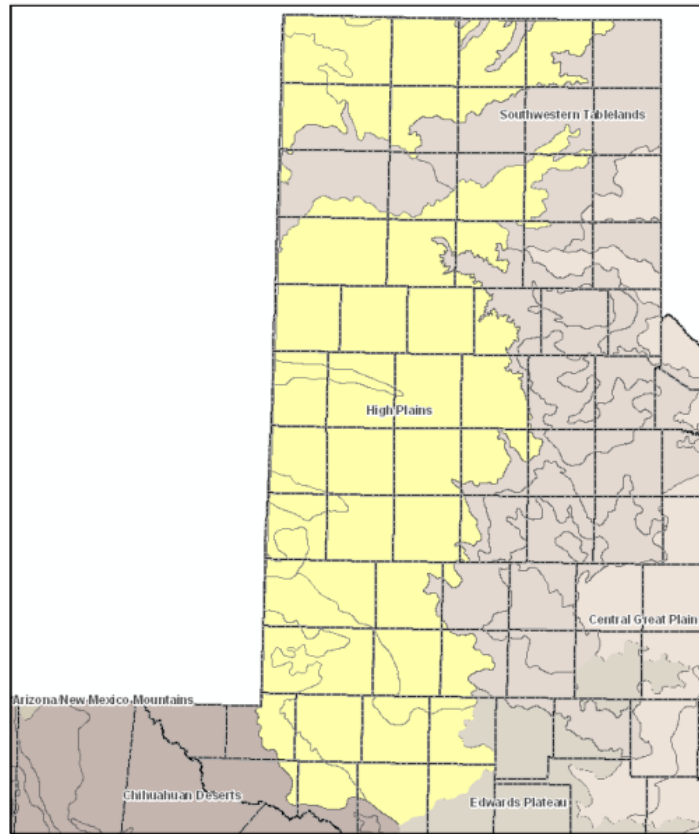
- The Western Burrowing Owl (*Athene cunicularia hypugaea*) is a federal species of concern. This species can be found within the Lubbock city limits, commonly utilizing prairie dog burrows for nesting.
- Lesser Prairie-Chicken (*Tympanuchus pallidicinctus*) is listed as vulnerable with decreasing populations.
- The Whooping Crane (*Grus Americana*) is listed as endangered yet increasing. This species is a migrant across the High Plains, using our wetlands and playas as a stopover.

Some success stories of species in the High Plains ecoregion that were able to recover or are increasing due to cooperation and effort between Federal, State, and Local government include;

- Texas Horned Lizard (*Phrynosoma cornutum*) listed as least concern with stable populations.
- Swift Fox (*Vulpes velox*) listed as least concern with stable populations.



Figure 3.1 Texas Horned Lizard. Source: Animalia.bio



Map 3.1 High Plains Ecoregion with County Boundaries.
Source: Texas Parks and Wildlife

The LMPO is ardent about supporting and finding ways to mitigate human and wildlife conflict through transportation planning strategies. Some ways that the LMPO does this is by supporting the following in future planning efforts;

Prescribed Fire

Fire is a natural part of the high plains ecoregion. Recent fire suppression by humans causes mesquite and juniper encroachment, increased chance of wildfires caused by an increase in fuel, increase in diseases and pests, etc. Prescribed fire can create Healthier ecosystem functioning, increase in native prairie grasses, decreased wildfire risk, decrease in disease and pests.

Wildlife Corridors

Wildlife corridors are passageways built into transportation infrastructure to increase movement and mitigate problems from habitat fragmentation. Wildlife corridors decrease human-wildlife conflict by decreasing traffic collisions caused by wildlife crossing roadways.

Restoration of native plant communities post planning activities

After a wild area is disturbed, it is highly susceptible to invasive species which quickly commandeer habitat. By planting or restoring native plants when a job is completed, invasion can be prevented. Restoration of native plants supports a healthy plant and animal community, improve biodiversity, etc.

Conduct planning activities around wildlife breeding season

Breeding and young-rearing season for wildlife...

Playa conservation

Playas are important for wildlife and humans alike. Playas provide water sources for wildlife, breeding grounds for amphibians, and common wintering grounds for over two million waterfowl. Playas also recharge the Ogallala Aquifer, an aquifer in which many people rely on in West Texas.

Map and prioritize wildlife habitat before urban development

Planning transportation and urban development around wildlife habitat before beginning activities can save money, time, and species.

Sound barriers

Sounds barriers not only decrease noise pollution for humans and wildlife, but also decrease traffic collisions with humans and wildlife. By creating a wall to block noise, planners also block the way across a busy highway for pedestrians seeking a faster route.

Consult with Texas Parks and Wildlife and other related agencies

TPWD has many professionals and experts in wildlife and habitat conservation that can aid the LMPO in planning transportation activities to prevent human/wildlife conflict. Coordination with these local agencies should be a priority for transportation planning. By gaining the insight of experts, human-wildlife conflict can be reduced.

Chapter 4 – Streets and Highways

Transportation System Elements

While the IIJA retains many of the FAST Act's provisions, current guidance includes additional eligibility requirements for projects requesting federal funds. The Bill amends the Highway Safety Improvement Program (HSIP section 11111) and creates a new bridge funding program (Division J). It also offers additional grant options for wildlife crossings (section 11123), "mega-projects" (section 21201), and a local and regional project assistance program (section 21202). The HSIP has been updated to incorporate financing eligibility criteria for safety improvement projects such as railway-highway grade separated projects, traffic control devices for pedestrians and cyclists, and roadway enhancements that separate vehicles from bicycles and pedestrians. The State Department of Transportation must identify the facility through a vulnerable road user safety evaluation to be eligible. Bridges on all federally categorized roadways, arterial and above, are now eligible for federal monies for repair, rehabilitation, preservation, protection, and construction under the new bridge funding program.

To obtain funding for the three grant-funded initiatives described above, a competitive government process is required. To be eligible for funding, wildlife crossing projects must demonstrate increased wildlife habitat connectivity as well as the ability to minimize the number of wildlife-vehicle incidents. The mega-projects grant program, also known as the National Infrastructure Assistance Program, defines eligible projects as those that are on-system (part of the national network) or part of the national freight network for highway/bridge projects; includes intermodal freight and freight rail projects that provide a public benefit; allows chances for projects that eliminate railway-highway at-grade intersections or are designed to be grade-separated; and considers in-kind contributions. Finally, the IIJA has offered local and regional project assistance for projects that have a major local or regional impact via enhancing infrastructure. This grant program supplements the existing RAISE grant program. It has a great deal of potential. Roadway enhancement projects include individual highway or bridge projects, surface transportation elements of an airport, and any other surface transportation projects deemed necessary to further program goals.

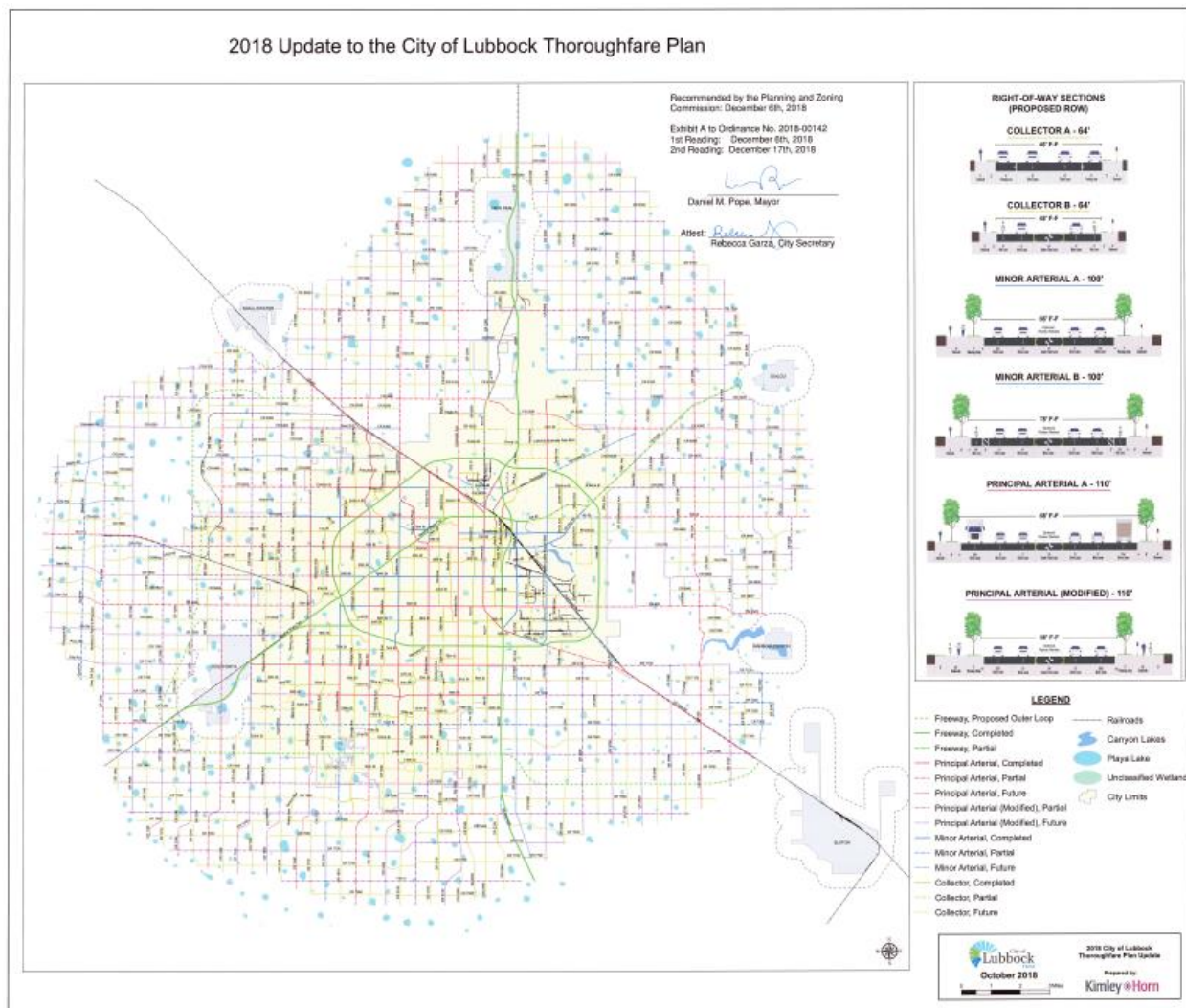
Thoroughfare Plan

As the Lubbock region grows rapidly, roadway improvements will become critical to adapting to the influx of people and providing them with options. A critical component of improving transportation planning is identifying and ensuring that major thoroughfares keep up with regional demand. The area's major thoroughfares are primarily made up of state highway facilities and arterials, which provide the necessary transportation support as well as access to and from local land uses. Because many major highway routes are limited in expanding by acquiring new rights-of-way, much of the additional future demand would almost certainly have to be met by a more connected and efficient arterial street system. Many of the major and minor arterials are expected to be built by

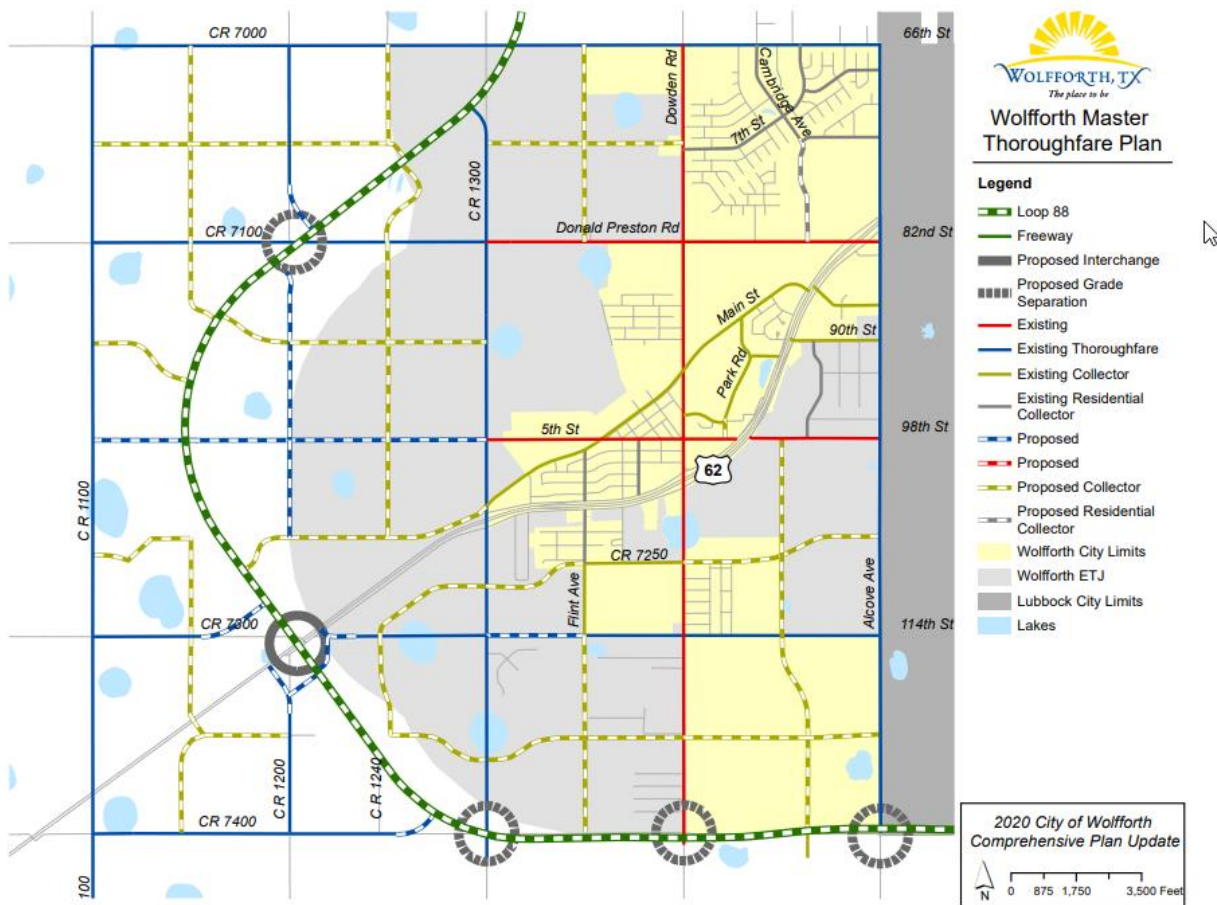
developers looking to expand commercial and residential developments outside of the current city and into the more rural county sections of the MPO region.

The MPO participated in each Thoroughfare Plan Studies to help local partners coordinate and assess regional connections. During the planning process, the LMPO analyzed and commented on differences between regional plans; determined restrictions impacting the constructability of planned thoroughfares; and offered forecast volumes from the TDM used to validate capacity and connectivity in the region.

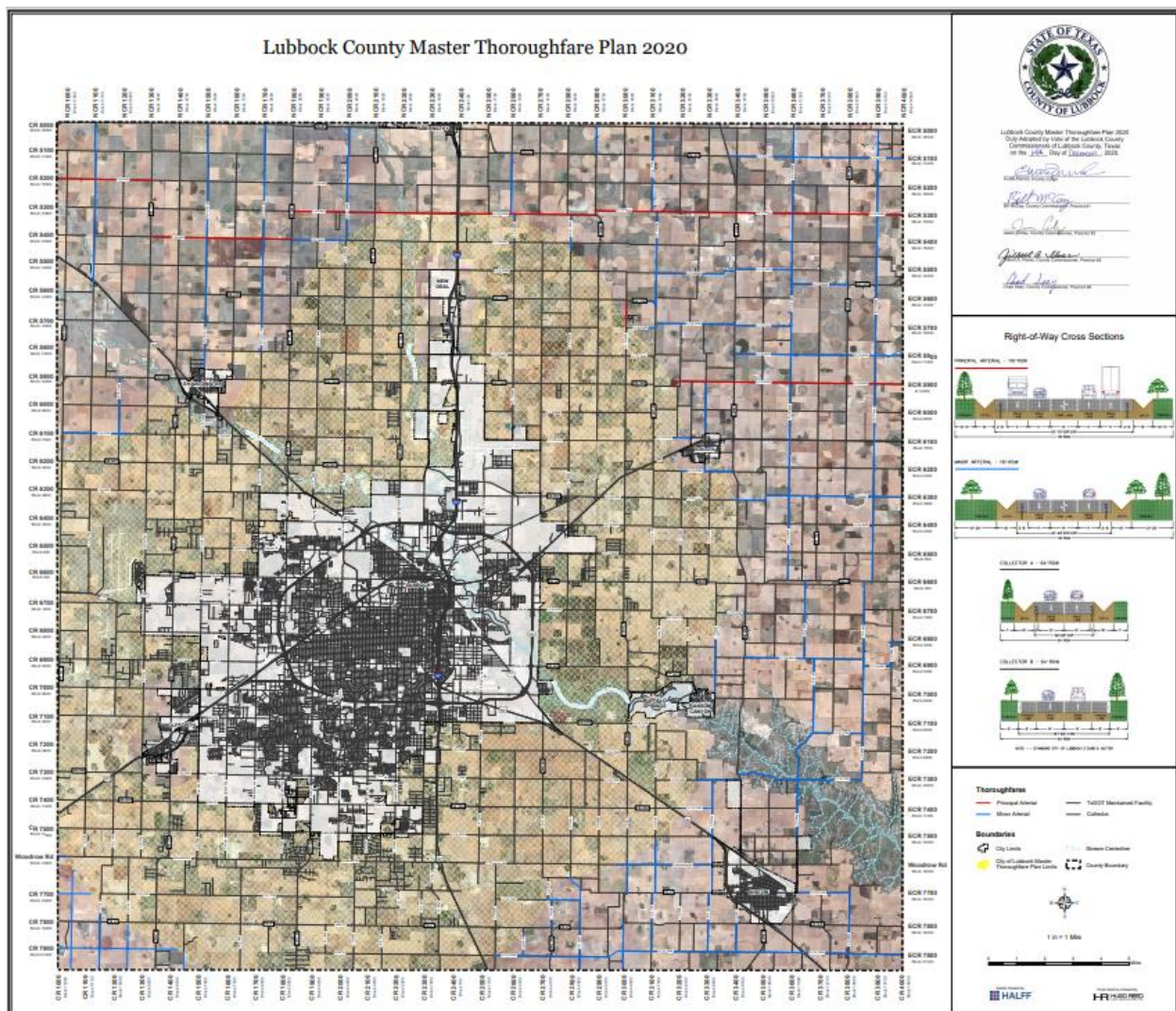
The aforementioned analyses were completed in the City of Lubbock in 2018 and the City of Wolfforth and Lubbock County in 2020. The City of Lubbock Thoroughfare plan is shown in Map 4.1. The Thoroughfare plan of Wolfforth, Texas is shown on Map 4.2. Likewise, the Lubbock County Thoroughfare plan is shown on Map 4.3. The LMPO anticipates conducting a similar process with Citibus, the local transit provider, assisting in the design and determination of needs.



Map 4.1: City of Lubbock Thoroughfare Plan updated in 2018



Map 4.2: The City of Wolfforth Thoroughfare plan



Map 4.3: Lubbock county Master Thoroughfare Plan adopted in 2020

Unified Transportation Program (UTP)

Texas Administrative Code (TAC, Sect. 16.105) requires a 10-year plan to guide transportation development. The UTP document provides a tool to communicate information for the near-term program (years 1 through 4) and the best information available for the interim-term program (years 5 through 10). The UTP is part of a continuing process to advance TxDOT's project development systems to best serve the citizens of Texas. Objectives of the UTP process is shown in Figure 4.1. Map 4.4 shows transportation plans from 2020-2045 that corresponds to the most recent Lubbock UTP.

Lubbock Metropolitan Transportation Plan 2024-2050

The objective of the UTP process is the following:




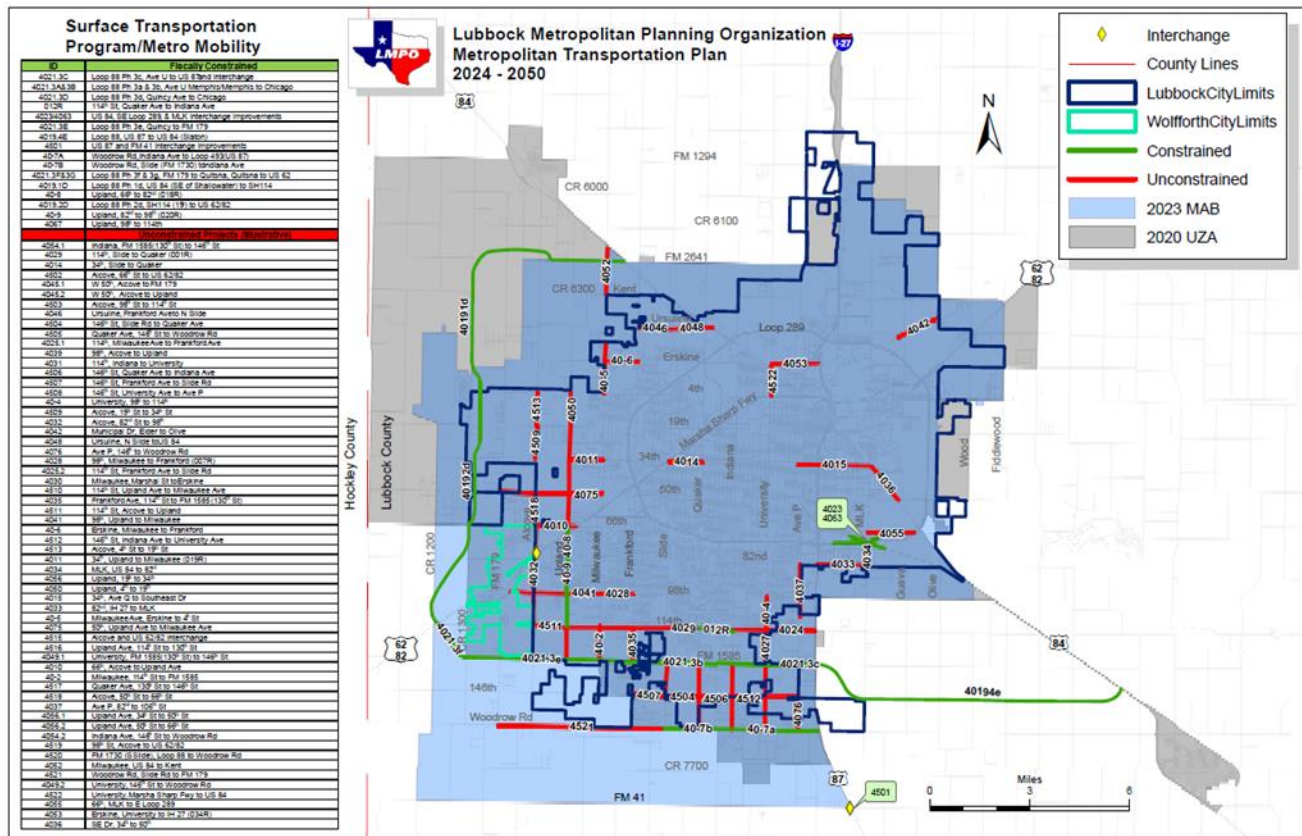
STRATEGIC PLAN GOAL	PERFORMANCE VISION	PERFORMANCE MEASURES	2032 TARGET
PROMOTE SAFETY 	Reduce crashes and fatalities through targeted infrastructure improvements, technology applications, and education	SAFETY: FATALITIES/YR	2,143
		SAFETY: FATALITY RATE	0.70
PRESERVE OUR ASSETS 	Maintain and preserve system/asset conditions through targeted infrastructure rehabilitation, restoration, and replacement	PRESERVATION: PAVEMENT CONDITION	90%
		PRESERVATION: STATEWIDE BRIDGE CONDITION SCORE	90%
OPTIMIZE SYSTEM PERFORMANCE 	Enhance mobility, connectivity, and mitigate congestion through targeted infrastructure and operational improvements	CONGESTION: URBAN CONGESTION	1.20
		INDEX CONNECTIVITY: RURAL RELIABILITY INDEX	1.12

Figure 4.1: Priorities of the Unified Transportation Program. Source: 2023 UTP



Map 4.4: Lubbock MPO Metropolitan Plan 2024-2050. Source: Lubbock Metropolitan Planning Organization

This approved UTP conforms to LMPO's 4-year TIP and the 20-30 year MTP. LMPO staff will utilize this UTP 10-year planning tool that fits in-between LMPO's TIP and MTP as a means of further refining the predictability of local project funding. LMPO staff will work with TxDOT staff in developing and maintaining future UTPs.

Table 4.1 Constrained Financial Summary

2024-2025 Transportation Program									
CSJ	MPO ID	SPONSOR / COSPONSOR	COUNTY	ROADWAY/FACILITY NAME	DESCRIPTION	LIMITS FROM	LIMITS TO	LIMITS AT	LET YEAR
0905-06-095, 0905-06-105	40-8, 50-001	City of Lubbock	Lubbock	Upland	Widen Non-freway 2 lanes to 5 lanes	66th	82nd St	Upland Ave	2024
0905-06-120	4078	City of Lubbock	Lubbock	Various locations	Pedestrian Beacons, Crosswalks, Sidewalks	Various locations	Loop 289		2024
0905-06-096	40-9	City of Lubbock	Lubbock	Upland	Widen Non-freway 2 lanes to 5 lanes	82nd	98th St	Upland Ave	2025
0905-06-097	4067	City of Lubbock	Lubbock	Upland	Widen Non-freway 2 lanes to 5 lanes	98th St	114th St	Upland Ave	2026
0905-06-119	4077	County of Lubbock	Lubbock	Woodrow Rd	Sidewalks and Illumination	FM 1730 (Slide Rd)	Indiana Ave	CR 8082	2026
1502-01-031 0068-01-073	4021.3C	Lubbock District	Lubbock	Loop 88 (PH. 3C)	Freeway Operational Improvements	Avenue U	0.5 mi east of US 87 & Intx (US 87 connector)	114th St	2027
1502-01-032	4021.3D	Lubbock District	Lubbock	Loop 88 (PH. 3D)	Convert Non-Freeway to Freeway	Quincy	Chicago		2028
1502-01-034	4021.3E	Lubbock District	Lubbock	Loop 88 (PH. 3E)	Convert Non-Freeway to Freeway	0.5 mi east of FM 179	Quincy		2029
1502-01-040, 1502-02-001	4021.3F&3G	Lubbock District	Lubbock	Loop 88 (PH. 3F & 3G)	Convert Non-Freeway to Freeway	0.5 mi east of FM 179	US 62		2031

Funding Categories												
CAT1	CAT2	CAT3	CAT4	CAT5	CAT6	CAT7	CAT DDA	CAT9	CAT10	CAT11	CAT12	ANTICIPATED TOTAL COST
						\$ 7,000,000			\$ 1,655,800			\$8,655,800
								\$ 1,000,962				\$1,000,962
						\$ 7,150,000			\$ 1,500,000			\$8,650,000
						\$ 13,440,000			\$ 1,500,000			\$14,940,000
		\$ 121,840						\$ 1,523,000				\$1,644,840
\$ 58,522,000	\$ 59,421,000		\$ 19,500,000					\$ 5,732,000			\$ 47,475,321	\$190,650,321
\$ 27,314,000						\$ 10,000,000	\$ 25,616,350	\$ 2,000,000				\$64,930,350
							\$ 116,774,000					\$116,774,000
							\$ 211,350,000					\$211,350,000

Functional Classification

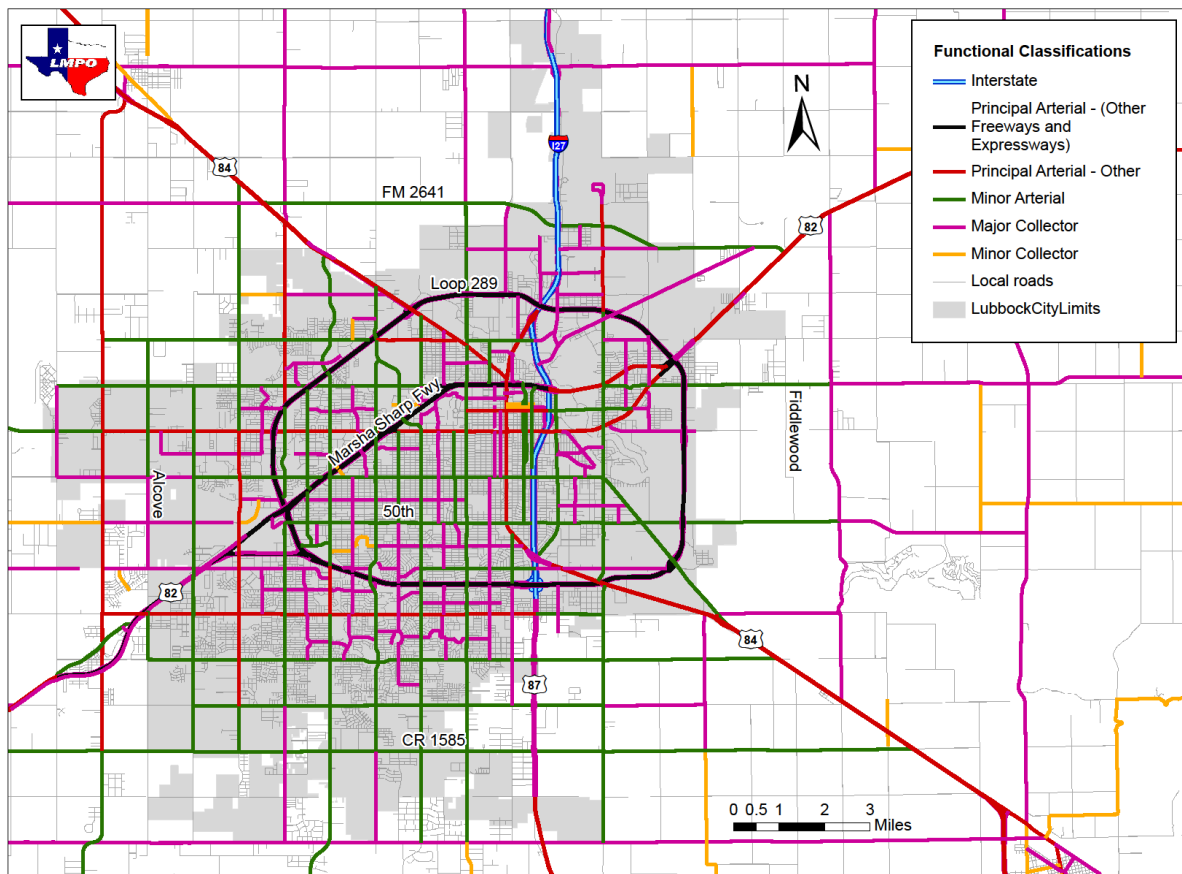
The MTP is primarily concerned with roads that will be constructed or expanded with federal funds. These roads are part of the "functionally classified roadway system," which groups urban routes based on their purpose or function. Urban streets provide three major functions:

1. traffic movement
2. traffic distribution or collection
3. access to terminal destinations

Although freeways provide for maximum automobile circulation, they provide relatively limited access to nearby land use. Arterial streets have reduced vehicle capacity and speed, but they provide direct access to neighboring land uses. As each type of urban street acts as a collection device for the next, collector and residential streets primarily provide access to larger facilities. See the Functional Classification System Description in Map [4.5](#).

Functionally classified roadways represent the many levels of vehicular mobility. The use of functional classes in transportation planning guarantees that general land use and local development are included in the evaluation of both existing and future transportation

demands. The functional classification system can also be used to select which roads should be part of a regional transportation system.



Map 4.5: Functional Classifications within the Lubbock area. Source: Lubbock Metropolitan Planning Organization

Table 4.1: Functional Classifications, descriptions, and examples

Functional Classification	Level of Mobility	System Access	Level of Accessibility	Example
Freeway	Connects all urbanized regions;	To other freeways, principal arterials, and selected arterials; no direct land access.	The emphasis is on mobility for longer trips rather than direct land access at high speed within and through the metro area. Direct land access should be avoided; transit trips should be encouraged.	I-27, Loop 289
	Connects cities and rural areas to major activity centers;			
	Makes linkages to other cities and metropolitan areas.			
Principal Arterial	Connects two or more subregions; Provides secondary connections outside of cities; and supplements freeways in high-traffic corridors.	To freeways, other principal arterials, and high-volume collectors; no direct land access except major traffic generators.	Mobility for longer trips is prioritized over direct land access. There should be little to no direct access to land parcels within the urbanized region. Medium-to-long-distance excursions within cities at high-to-moderate speeds and transit trips.	University, Slide, Dowden Rd (Wolfforth)
Arterial	Connects adjacent subregions and activity centers within subregions	To freeways, principal arterials, other arterials, and collectors; restricted direct land access.	The emphasis is on mobility for longer trips rather than direct land access. Direct land access is limited to activity areas such as regional job facilities, local employment centers, freight terminals, and neighborhoods. At this time, emphasis is placed on medium-to-short trips at moderate-to-low-speed and local transit trips.	CR 7500 (County), Chicago (Lubbock)
Collector	Connects neighborhoods within and between subregions.	To arterial, other collectors, and local streets; direct land access.	Its principal function within the urban service areas is to collect and distribute trips between neighborhoods and employment centers. Major collectors provide low-speed connections to major traffic generators in job and activity centers as well as local transit routes.	Memphis Avenue
Local	Connects blocks within neighborhoods and specific activities within homogeneous land use areas.	To collectors and other local streets; direct land access.	Connect blocks and land parcels within neighborhoods and commercial or industrial developments; short trips at low speeds.	Neighborhood streets across the LMPO region

National Highway System (NHS)

With the interstate system complete, lawmakers authorized, in Section 1006 of the ISTEA, the development of a National Highway System (NHS). The purpose of the NHS is to “provide an interconnected system of principal arterial routes which will serve major population centers, international border crossings, ports, airports, public transportation facilities and other intermodal transportation facilities and other major travel destinations; meet national defense requirements; and serve interstate and interregional travel.”

In the development of the NHS, the LMPO took into account connections to the rural NHS at the Urban Boundary. All of the rural NHS routes connect to Loop 289, which encompasses a large portion of the City of Lubbock. There were continuous connections made through the area on U.S. 62/82 and I.H. 27/U.S. 87 routes. These two through routes provide both North/South and East/West connections across Lubbock. Other NHS routes were selected based on traffic volumes, location, and connectivity to Reese Center and the Lubbock Preston Smith International Airport. Each of the routes selected are functionally classified as principal arterial routes.

Map 4.6: Loop 88 Preferred options map provided by TxDOT Lubbock District

A feasibility study for an outer loop for the Lubbock Area was initiated in 2010. Subsequent steps included a route study, schematic design, and environmental studies. Detailed design and right-of-way acquisition has been completed on the initial phases of the total project. TxDOT has identified funding and construction start dates for phased portions of Loop 88 for Fiscal Years 2020, 2022, 2024, and 2026. Those portions of Loop 88 designated for construction are identified in the UTP Map and the MTP Map contained in this document.

South Loop 289 Ramp Access Study

South Loop 289, which runs from the I-27 interchange to Spur 327, is one of Lubbock's busiest corridors. It traverses the key business center of the city and includes four major interchanges connecting with local arterial streets. The majority of trips made during both peak times of the day are short trips of less than the distance between Slide Road and Interstate 27. Congestion is concentrated in the center of this area and reaches nearly 100,000 vehicles per day.

Due to the heavy traffic, there are additional concerns about safety, peak-hour congestion, and traffic weaving. Because the bridges and interchanges are only a mile apart, traffic control is a crucial concern. Drivers may not have enough sight distance to foresee traffic congestion caused by an accident up ahead due to the bridge grade in sections where this problem occurs. When this occurs, more collisions are likely to occur. Increased traffic loads along South Loop 289 will remain a concern and an issue unless actions are taken to reduce congestion. Design flaws, such as interchange geometry and type, weaving section length, ramp tapers, and unevenly distributed traffic loads on major lanes, all contribute to operational issues. Furthermore, the densely packed urban arterials interacting with the loop system, as well as the extensive commercial growth along the route, contribute to the problem.

Due to level of service concerns, the South Loop 289 Ramp Access Study concluded that it would be advantageous to reverse the ramps from a diamond to an X pattern. This modification, however, would increase traffic along frontage roads and at crossings. The project's second phase determined what could be done to alleviate congestion along frontage roads and at crossings. A schedule for project construction has thus far been postponed due to the project's expense and a lack of funding sources.

Infrastructure Investment and Jobs Act (IIJA)

On November 15, 2021, the Bipartisan Infrastructure Act, also known as the IIJA, was passed. The Act includes provisions to maintain all highway programs funded by the FAST Act as well as new funding opportunities for initiatives and programs that adhere to the established criteria. This section will go over the many kinds of programs and projects that are eligible for financing. The section on financing will include specific funding information pertaining to the Act as well as what is currently known about how it may be dispersed to the Lubbock Region. This Act is a once-in-a-generation infrastructure investment designed to boost the United States' global competitiveness by creating better jobs and making the economy more sustainable, resilient, and equitable.

It will be the greatest investment in public transportation, passenger rail, bridge reconstruction and development, clean drinking water and wastewater infrastructure, electric vehicle (EV) infrastructure, and access to reliable high-speed internet in US history.

The provisions for highway programs to focus on safety, bridges, climate change, resilience, and project delivery are included. It expands funding opportunities for local governments and other non-traditional organizations, such as non-profit organizations. MPO-specific programs include the following:

- Safe Streets and Roads for All
- Promoting Resilient Operations for Transformative, Efficient and Cost Saving (PROTECT)
- Grants
- Charging and Fueling Infrastructure
- Congestion Relief
- Bridge Investment
- Reconnecting Communities
- Nationally Significant Freight and Highway Projects (INFRA)
- National Infrastructure Project Assistance (Mega-projects)
- Local and Regional Project Assistance

LMPO projects are currently funded through the Surface Transportation Block Grant (STBG) and Transportation Alternatives Program (TA) as part of the IIJA provision that extends the FAST Act programs. The IIJA establishes new programs for additional projects such as Safe Streets for All (Road to Zero and Vision Zero initiatives), Wildlife Crossings Pilots, and improving safe and accessible transportation options. Table [4.2](#) shows a list of qualifying projects under the FAST Act and additions under the IIJA.

Table 4.2: FAST Act and IIJA eligible federal funding opportunities

Program	Requirement Highlights
Surface Transportation Block Grant (STBG) – (IIJA Section 11109) Most flexible in terms of project selection criteria	<ul style="list-style-type: none"> • FAST: Preserve and improve condition and performance on any Federal-aid highway, bridge on any public road, pedestrian and bicycle infrastructure, capital transit projects; • IIJA: EV charging infrastructure, protective features to enhance resilience, and wildlife crossing projects; adds low water crossing bridges to eligible bridges
Transportation Alternatives Program (TA) (IIJA Section 11109)	<ul style="list-style-type: none"> • FAST: safe routes to schools • IIJA: vulnerable road user safety assessments
Congestion Mitigation and Air Quality Improvement Program (CMAQ) – (IIJA Section 11115) Limited to areas of nonattainment (Bexar County)	<ul style="list-style-type: none"> • FAST: Designed to reduce traffic congestion and improve air quality. Transit, EV and natural gas infrastructure, and active transportation projects. • IIJA: Shared micromobility (bikeshare, shared scooters) programs, expands diesel vehicle replacement program, purchases of medium//heavy-duty zero emission vehicles and related equipment
Safe Streets and Roads for All Grants (IIJA Section 24112)	<ul style="list-style-type: none"> • IIJA (New) – Initiatives that prevent transportation-related death and serious injury on roads and streets, comprehensive safety action plans and associated implementation of these projects and strategies • Available to local governments
Wildlife Crossings Pilot Grants (IIJA Section 11123)	<ul style="list-style-type: none"> • IIJA (New) – Projects that seek to reduce the number of wildlife-vehicle collisions and improve habitat connectivity Texas Freight Network Technology and Operations Plan

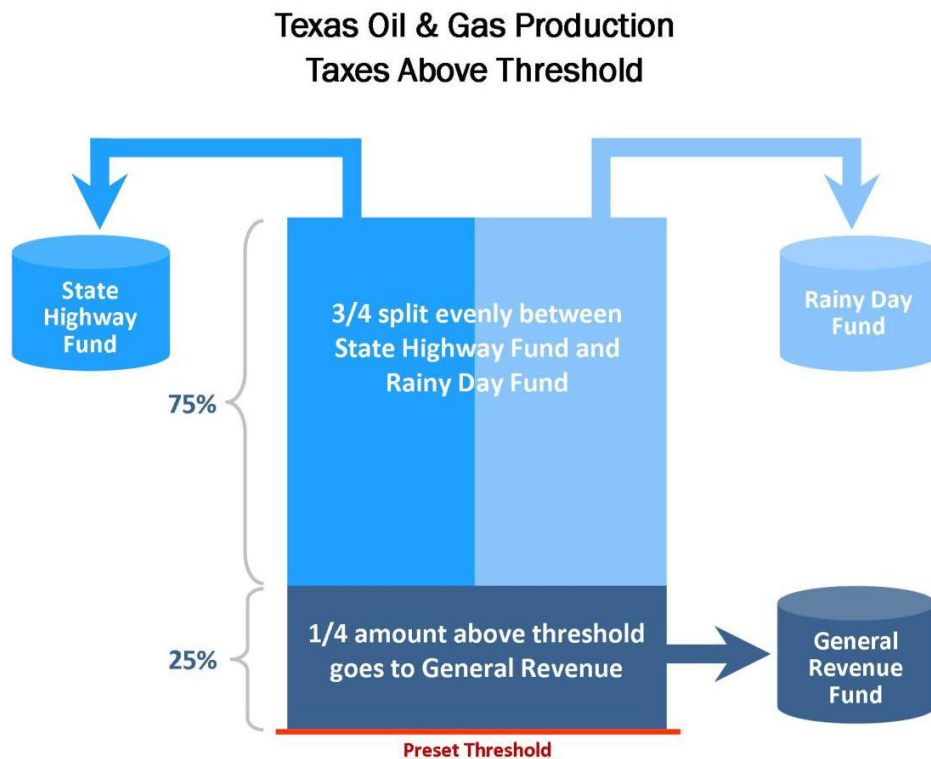
Proposition 1 and 7 Funding

LMPO staff observes that some federal transportation program funds are dwindling or disappearing. The State of Texas is attempting to close gaps in funding via voter initiated propositions. Propositions 1, 7, 12, and 14 each have various levels of transportation funding.

Proposition 1

Proposition 1 (Prop 1), approved by voters on November 4, 2014, permits yearly payouts from the state's oil and gas production tax to be allocated to the State Highway Fund if certain requirements are met. In the month preceding the commencement of each legislative session, the Joint Select Committee to Study the Balance of the Economic Stabilization Fund determines and adopts an adequate balance of the Economic Stabilization Fund (also known as the "Rainy Day Fund") for Prop 1. The first 25% of oil and gas severance tax deposits that exceed the Rainy Day Fund's sufficient balance are put into the state's General Revenue Fund.

The remaining 75% of the severance tax is spread equally between the Rainy Day Fund and the State Highway Fund. The state's oil and gas output unpredictability makes forecasting revenues challenging. The funds can only be used for non-toll public road construction, maintenance, rehabilitation, and right-of-way acquisition.



Note: Actual amounts deposited in the State Highway Fund may vary based on the minimum balance of the Rainy Day Fund set by the Legislature's Joint Select Committee to Study the Balance of the Economic Stabilization Fund.

Figure 4.2: How funding from proposition 1 is allocated

Figure 4.2: How funding from proposition 1 is allocated

Proposition 7

Proposition 7 (Prop 7) was approved by voters on November 3, 2015. Prop 7 allows for \$5.2 billion to be put into the State Highway Fund once a \$28 billion sales and use tax threshold is met in fiscal years 2020 and 2021. Beginning in fiscal year 2020, 35% of the Motor Vehicle Sales and Rental Tax revenue in excess of \$5 billion will be directed to the State Highway Fund.

Proposition 7 passed with the approval of more than 83% of state voters. Proposition 7 was passed one year after Proposition 1. Proposition 7 augments Proposition 1 and demonstrates the State of Texas' commitment to transportation funding.

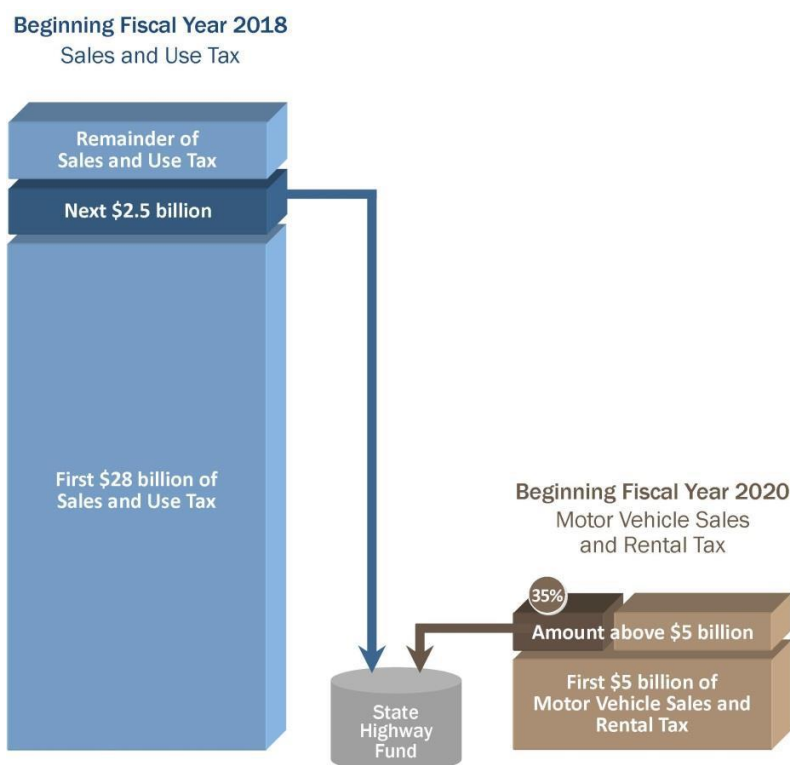


Figure 4.3: How funding from proposition 7 is allocated

Table 4.2: Citibus servicesFigure 4.3: How funding from proposition 7 is allocated

Chapter 5 – Public Transportation

Introduction

A strong stakeholder group requires time and constant work to develop and maintain a strong stakeholder coalition. Regional collaboration facilitates information collection, public outreach, problem solving, and other planning activities more easily when performed through an organized group. Funds and resources can be combined to maximize their effectiveness. And if the public transportation system is coordinated, it has a better chance of lasting and flourishing.

Regional Coordination

Regional coordination planning efforts are formally housed in the South Plains Association of Governments (SPAG), where the LMPO and other stakeholders cooperate to extend transit services to new areas and clients. These and other coordinated activities, in addition to the transit services described below, have contributed to fill unique transportation needs within the Lubbock Engineering District and the MPO region.

Citibus

The City of Lubbock has a contract with RATP Dev USA to provide public transportation services within the City Limits. Citibus provides multi-passenger services and reduces the number of single-occupancy-vehicles which reduces traffic and improves roadway operations. Citibus provides transportation to employment and educational locations, which enhances economic opportunity. In addition, Citibus provides access to medical facilities reducing traffic in congested medical districts. Additionally, Citibus expands transportation options to more Lubbock citizens by having a fully accessible fleet open to all individuals, and provides bike racks on buses for individuals that cycle to/from bus stop locations.

Citibus Fleet

Citibus operates a fleet of 72 buses (which includes two trolleys) and 32 paratransit vans. All revenue vehicles are wheelchair accessible. The agency also operates hybrid public transit vehicles and in 2019 received delivery of two all-electric buses and installed two charging stations for those buses. Additionally, Citibus is a sub-contractor for the Medicaid non-emergency medical transportation program.

Citibus Services

Table 5.1: Citibus services

Service	Description	Rates and Funding
Fixed Route	<ul style="list-style-type: none"> Operates Monday-Saturday from approximately 5:45am to 7:45pm During the week, the routes operate on thirty-minute headways during morning and afternoon peaks, and hourly during mid-day; Saturday service is hourly all day Provides transportation options for citizens Multi-passenger vehicles decreases use of single occupant vehicles Enhances economic opportunity by offering passenger service to job sites Increases modes of transportation for a wider variety of citizens by providing handicapped accessibility and bicycle mounts 	<ul style="list-style-type: none"> The base fare for the fixed route service is \$1.75. An all-day pass, which offers unlimited trips, is \$3.50 Citibus offers discounted fares for children and elderly. Passengers who are ADA-qualified may ride the fixed routes free of charge Weekly, monthly, and semester-long passes for students are offered Two routes that serve areas of greater concentration of entry-level jobs are funded through Jobs Access Reverse Commute funds
CitiAccess	<ul style="list-style-type: none"> Operates the same hours as the fixed route services Separate fare structure for destinations outside of Citibus' service area Passengers are required to meet ADA guidelines and must complete an assessment prior to becoming certified for the service 	<ul style="list-style-type: none"> Base fares are \$3.50 per trip
NiteRide	<ul style="list-style-type: none"> A shared-ride service that utilizes CitiAccess vehicles Provides shared-ride trips from approximately 6:30pm to 10:30pm Decreases night time traffic Provides safe transportation for citizens Additional services include late-night on-demand service that operates until 1:15am 	<ul style="list-style-type: none"> Fares are \$4.50 and trips must be scheduled in advance with a higher fare for same day service Funded through New Freedom funds
Texas Tech University	<ul style="list-style-type: none"> Routes for Texas Tech University both on and off campus and is open to the general public Currently, this Texas Tech service operates three routes on campus and six routes that serve various student housing areas Decreases morning commute traffic by decreasing single occupancy vehicle usage by students living off campus Provides safe transportation options to students 	<ul style="list-style-type: none"> Funded through a dedicated student transportation fee No additional fees are required to ride the service
Texas Tech S Bus	<ul style="list-style-type: none"> The Tech S Bus Safe Ride provides service from various student housing communities and the Depot district and Broadway The S Bus operate Thursday, Friday, and Saturdays from 9:00pm to 3:00am. Tech S Bus Safe Ride decreases risk of pedestrian strikes and drunk driving among students 	<ul style="list-style-type: none"> Funded in same way the Texas Tech University routes are funded
Game-day Shuttles	<ul style="list-style-type: none"> Provides Texas Tech game-day transportation for attendees and important for reducing congestion on game days 	<ul style="list-style-type: none"> Funded in various ways including sponsorships, fares, and by Texas Tech University
Special Services	<ul style="list-style-type: none"> Citibus operates limited charter services Under federal guidelines, the only special services that Citibuss can provide are ones that other private bus companies cannot perform 	<ul style="list-style-type: none"> Depends on service
Greyhound Bus Freight and Ticketing	<ul style="list-style-type: none"> Citibus contracted to become the local passenger, freight, and ticketing agent for Greyhound Lines in 2008 Citibus operates the Downtown Transfer Plaza (DTP) as a shared facility for Greyhound and Citibus operations Provides multi-passenger interstate travel which reduces single-occupancy vehicle travel 	<ul style="list-style-type: none"> Depends on destination and other factors

Citibus Service Characteristics

Citibus' services operate Monday through Saturday, with the exception of Texas Tech services, which operate Monday through Friday when school is in session. Table [5.2](#) shows Citibus service characteristics from 2020 to 2022.

Table 5.4: Citibus service characteristics

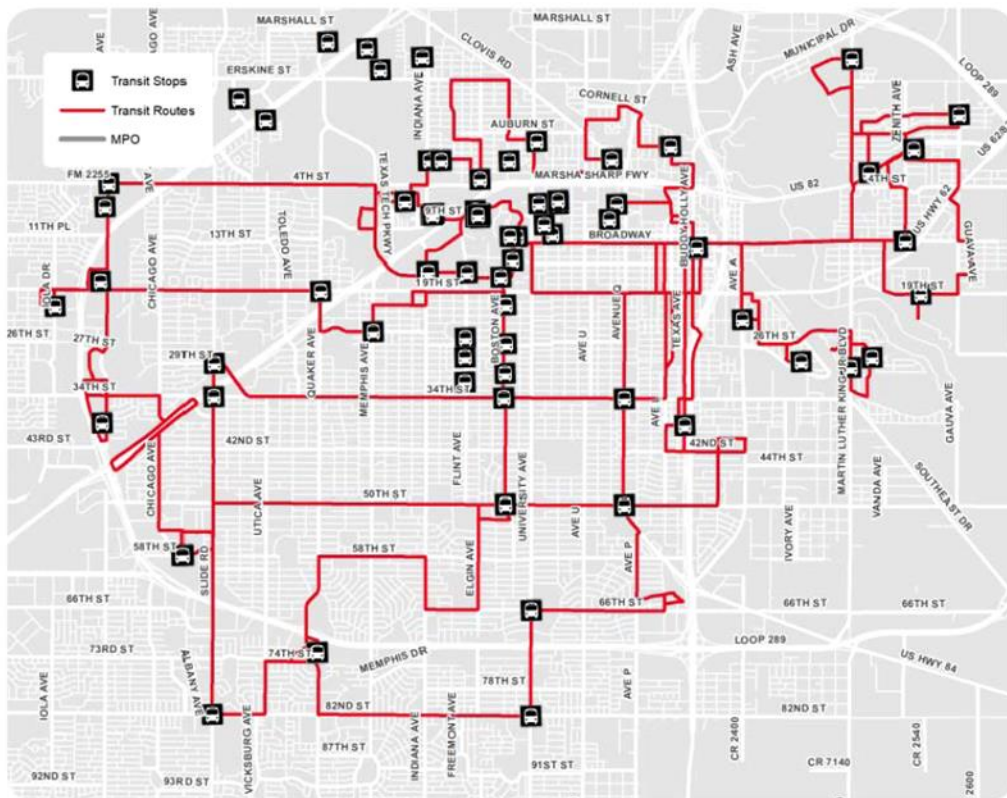
	FY 2020	FY 2021	FY 2022	% Change 20-21	% Change 21-22
Passengers					
Fixed Route	474,705	333,413	397,957	-29.76%	19.36%
CitiAccess	82,686	92,154	119,583	11.45%	29.76%
Texas Tech	1,693,946	626,127	1,336,656	-63.04%	113.48%
Special	76,016	22,709	79,137	-70.13%	248.48%
Total	2,327,353	1,074,403	1,933,333	-53.84%	79.94%
Miles					
Fixed Route	873,854	558,752	666,195	-36.06%	19.23%
CitiAccess	661,342	873,452	1,009,421	32.07%	15.57%
Texas Tech	545,095	715,182	680,606	31.20%	-4.83%
Special	23,047	19,660	30,495	-14.70%	55.11%
Total	2,103,338	2,167,046	2,386,717	3.03%	10.14%
Hours					
Fixed Route	59,174	43,981	45,208	-25.68%	2.79%
CitiAccess	35,821	45,030	54,046	25.71%	20.02%
Texas Tech	48,990	59,132	59,063	20.70%	-0.12%
Special	2,917	2,083	3,713	-28.59%	78.25%
Total	146,902	150,226	162,030	2.26%	7.86%
Passengers/Hour					
Fixed Route	8.0221888	7.58084173	8.8028004	-5.50%	16.12%
CitiAccess	2.3083108	2.04650233	2.2126152	-11.34%	8.12%
Texas Tech	34.577383	10.5886322	22.631021	-69.38%	113.73%
Special	26.05965	10.9020643	21.313493	-58.16%	95.50%

Citibus Facilities

Citibus operates the Downtown Transfer Plaza (DTP) where the majority of transfers to other routes are made. This facility, which occupies an entire block, has spaces for twelve

Lubbock Metropolitan Transportation Plan 2024-2050

buses to park and an indoor facility where passengers can wait, purchase tickets or passes, etc. In 2007, Citibus implemented improved bus stop signage throughout the fixed route system. New shelters have been installed using funding from the Federal Community Development Block Grant program. These improvements included the installation of waterproof time tables at each bus stop. In August 2008, Citibus contracted to become the local passenger and ticketing agent for Greyhound Lines and began operating the DTP as a shared facility, requiring operation approximately 15 hours per day, seven days per week. Enhanced intercity and fixed route connectivity and feeder



Map 5.1: Citibus routes and stops map. Source: Citibus

services increased business volume within the city and the region, which made additional renovations and expansion imperative.

Fixed Route Review

Citibus' planning staff is in the process of performing a comprehensive route evaluation which includes boarding and alighting surveys, service assessments, and other processes designed to gain insight into consumer opinions of the service and ways to improve efficiency and effectiveness. The process will yield a revised route service plan that will correlate to the amount of annual funding available. All fixed route reviews consider environmental justice and Title VI issues to the maximum extent practicable.

Citibus' Public Transportation Agency Safety Plan

Citibus complied with the Public Transportation Agency Safety Plan (PTASP) final rule in December of 21. The safety plan includes the processes and procedures necessary for implementing Safety Management Systems (SMS). To accomplish this the plan includes the designation of a Chief Safety Officer, the documented processes of the agency's SMS, an employee reporting program, performance targets based on the safety performance measures, criteria to address all applicable requirements and standards set forth by the FTA, and a process and timeline for conducting an annual review and update of the safety plan. The PTASP rule requires that that plan and all updates be approved by the agency's Accountable Executive and Board of Directors. The PTASP is updated on an annual basis.

Chapter 6 – Active Transportation

Vision

The LMPO solicited feedback from the public and stakeholders on its active transportation plan. Based on the feedback, the Walk and Bike Lubbock Plan envisions:

*Walk and Bike Lubbock will create a **unified and integrated** regional bicycle and pedestrian system that **connects** people of **all ages and abilities** to desired destinations and encourages them to walk or bike for **transportation or recreational** purposes in a **safe** manner.*

Authority

The Lubbock Metropolitan Area bike and pedestrian policy is based on various sections in the United States Code (U.S.C.) and the Code of Federal Regulations (CFR) in Title 23 – Highways, Title 49 – Transportation, and Title 42 – The Public Health and Welfare. These sections describe how bicyclists and pedestrians of all abilities should be involved throughout the planning process, should not be adversely affected by other transportation projects, and should be able to track annual obligations and expenditures on non-motorized transportation facilities.

Walk and Bike Lubbock Plan

The Walk and Bike Lubbock Plan lays the groundwork for integrating the Lubbock Metropolitan Area's bicycle and pedestrian infrastructure into a cohesive network. This plan expands on the work performed under the Comprehensive Bicycle Master Plan of 1994. Since the creation of that plan, the Lubbock Metropolitan Area has added more than 14 miles of bike lanes, resulting in more than 72 miles of marked bike routes, 12 miles of paved trails, and 15 miles of partially paved trails. Recent pedestrian enhancements include shared side-paths, curb ramps, and improved crossings.



Since the establishment of the 1994 Comprehensive Bicycle Master Plan, bicycle and pedestrian design has expanded and evolved. A concerted effort is being made for separated cycling facilities and an improved pedestrian experience. National standards have been revised since 1994 to reflect these advancements in the design of safer facilities. The goal of the Walk and Bike Lubbock Plan is to create a plan for pedestrian facilities in Lubbock, as well as to re-examine the existing cycling network through the perspective of current best practices in both planning and design.

Walk and Bike Lubbock will create a unified and integrated regional bicycle and pedestrian system that connects people of all ages and abilities to desired destinations and encourages them to walk or bike for transportation or recreational purposes in a safe manner and that connects people from all parts of town to their destinations, including low income areas where residents are less likely to own a motor vehicle.

Existing Conditions

Bicycling

There are many people who would enjoy riding to school and work, but find it prohibitive because of perceived safety problems, lack of bicycle facilities, large distances, and lack of bicycle parking. Typically there are three types of cyclists: advanced, basic and children. The advanced cyclist prefers direct access, the ability to travel at maximum speeds with minimum delays, and is comfortable sharing roadways with motor vehicles if given sufficient operating room. The basic cyclist is the casual cyclist, preferring a separation from motor vehicles.

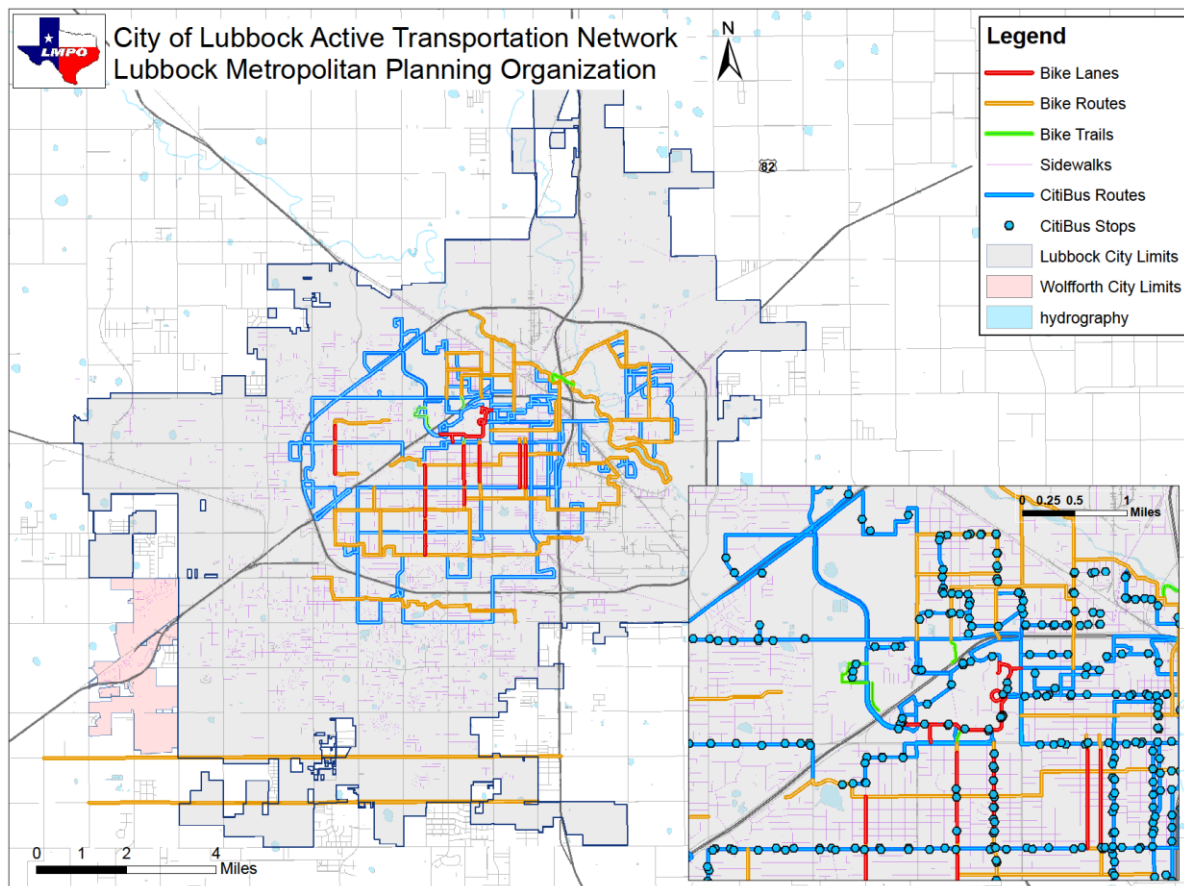


They typically do not reach high speeds and are comfortable with indirect access to their destinations. Often these cyclists are middle school and high school students and touring cyclists. Children, which make up a third type of cyclist, require greater attention of the motor vehicle operator. Children can share streets with low motor vehicle speed limits and volumes, but need defined separation from motor vehicles for safety reasons. Children typically use bicycles to ride to school, local parks, and activities within their neighborhoods.

The West Texas Cycling Association, the region's cycling advocacy group, organizes and arranges rides in Lubbock on a regular basis. These rides range in complexity from simple to fast, and they take place several times a week from various places throughout Lubbock. The weekday rides take place during the spring, summer, and fall seasons, while the weekend rides take place all year.

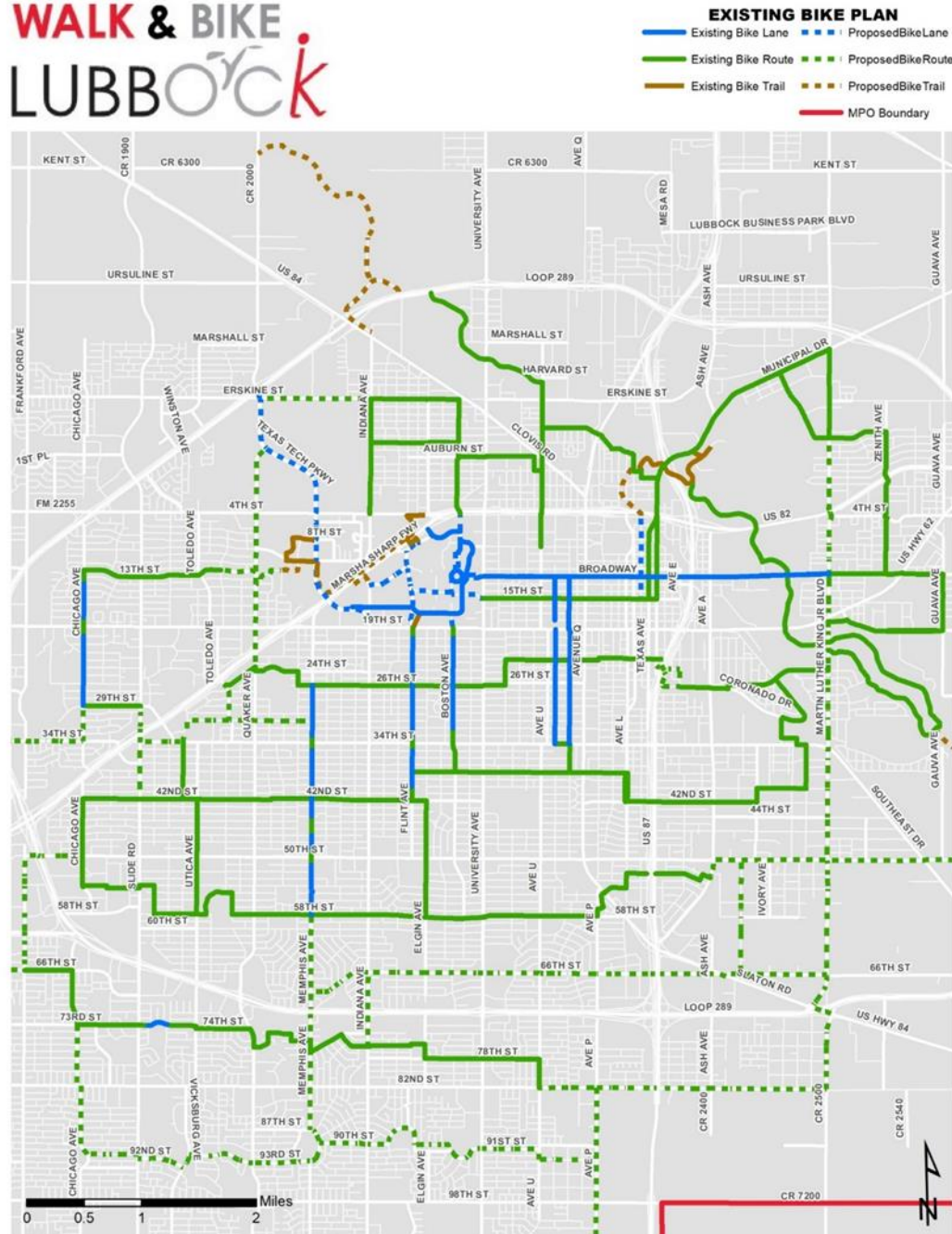
Bicycling is encouraged by Citibus, which operates nine public bus lines across Lubbock. According to their cycling policy, all buses are outfitted with external bicycle racks that can hold two bicycles.

Lubbock Metropolitan Transportation Plan 2024-2050

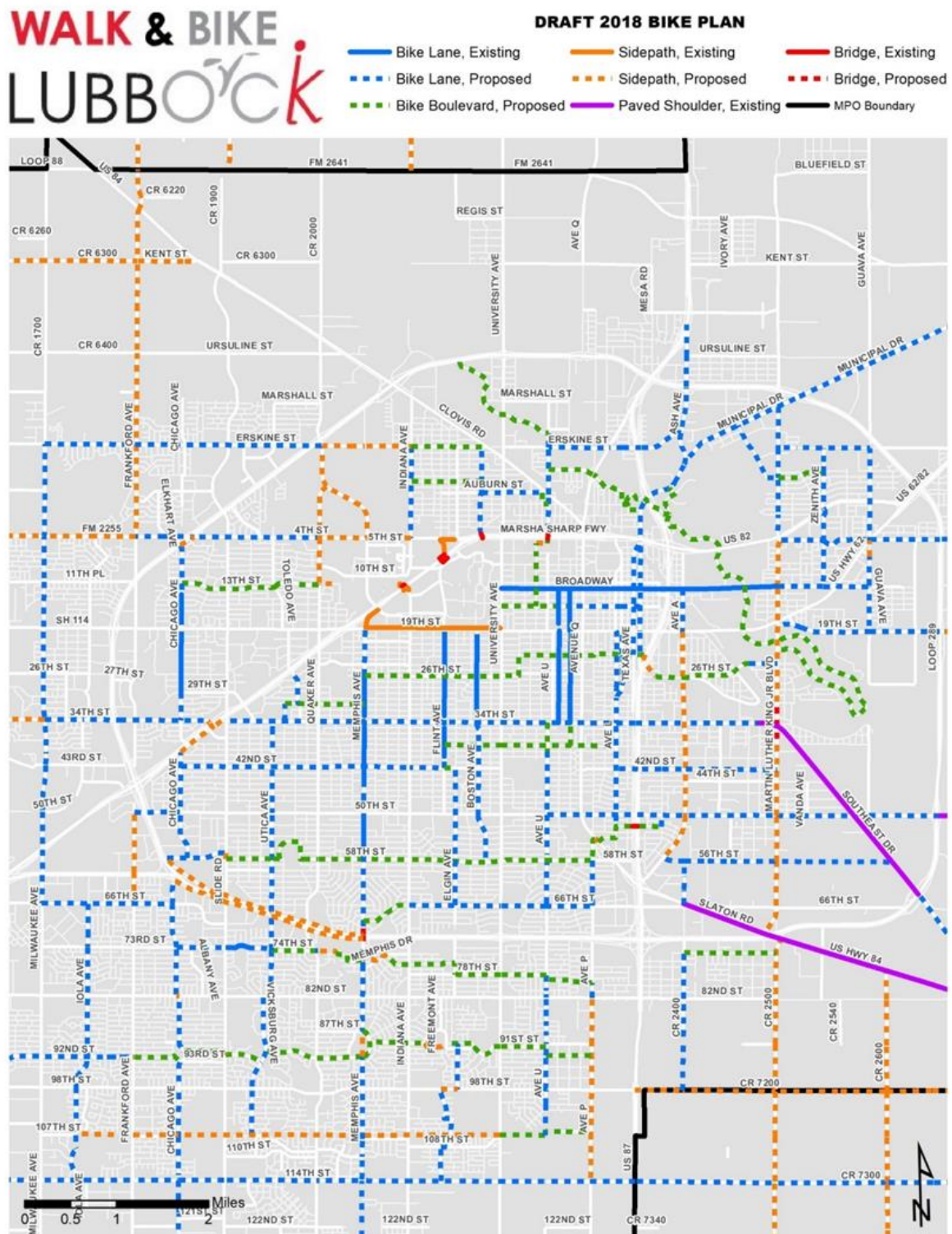


Map 6.1: City of Lubbock Active Transportation Network Map. Source: Lubbock Metropolitan Planning Organization.

WALK & BIKE LUBBOCK



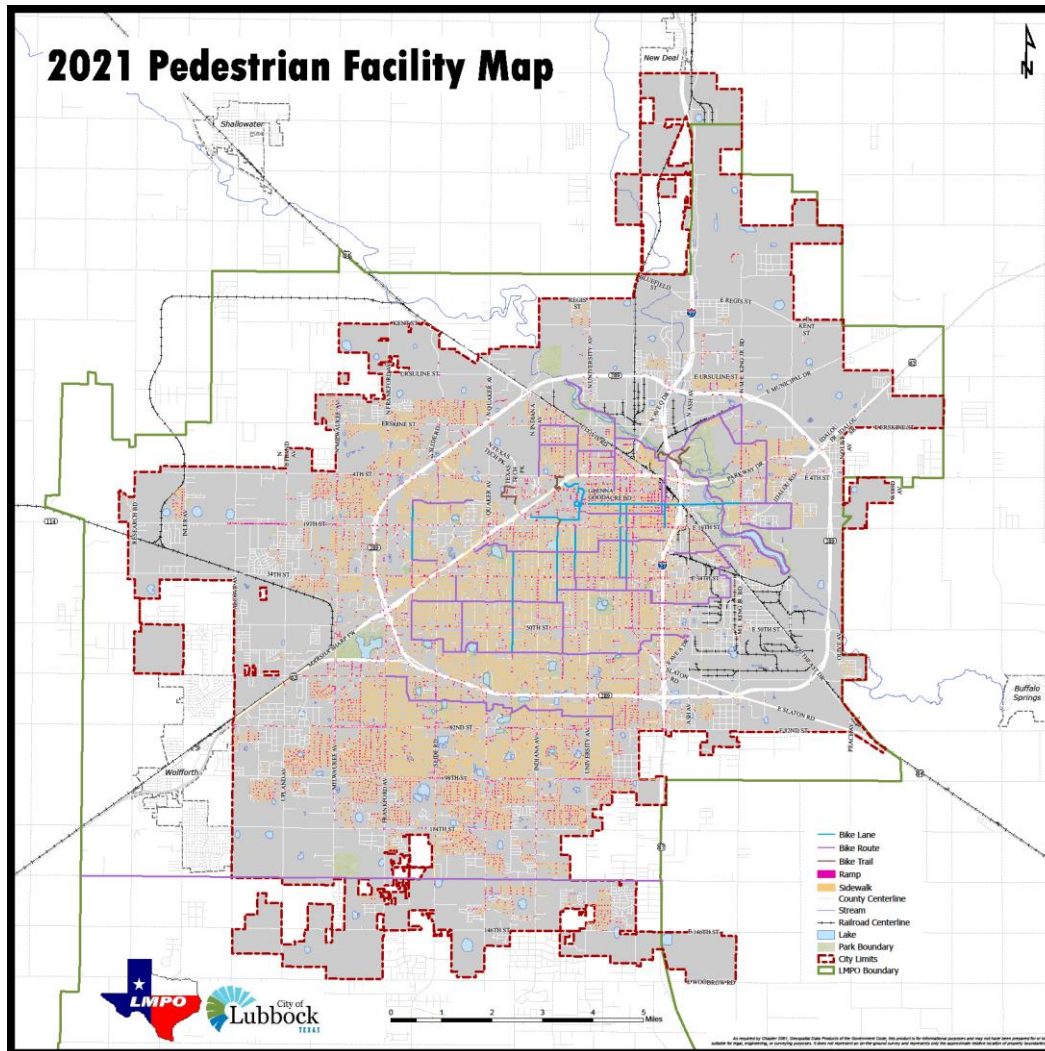
Map 6.2: Walk and Bike Lubbock existing bike plan. Source: Lubbock Metropolitan Planning Organization



Map 6.3: Walk and Bike Lubbock Draft 2018 Bike Plan. Source: Lubbock Metropolitan Planning Organization

Pedestrians

Travelers become pedestrians for at least a portion of every trip. Whether it is walking from the parking lot to the bus stop, going to school, walking to work, walking to a restaurant, or strolling with family members, many Lubbock residents walk on a regular basis. However, the pedestrian network, which includes sidewalks, ramps at crossings, and pedestrian crossing signals, can make the pedestrian experience either pleasant or unpleasant. A pedestrian network that makes walking uncomfortable will influence how confident people feel walking and consequently the likelihood that people will walk.



Map 6.4: City of Lubbock Pedestrian facility locations as of 2021. Source: Lubbock Metropolitan Organization

Pedestrian facilities in the Lubbock Metropolitan Area (LMA) vary from the use of neighborhood sidewalks and recreational trails to pedestrian overpasses that span Interstate 27 at 54th Street and four more along the Marsha Sharp Freeway. The placement of sidewalks along local streets, collectors and arterials provides access for pedestrians traveling in residential and commercial areas. The Americans with Disabilities Act of 1990 requires all sidewalks constructed after the signing of the bill to provide

accessible curb ramps for the disabled. This is also taken into consideration when constructing sidewalks.

LMPO analyzed the amount of pedestrian facilities in the LMA by utilizing existing City of Lubbock Street Department data. According to the data in 2006, the City of Lubbock and Wollforth had approximately 5,603,720 linear feet or 1,061 miles of sidewalk. Based on the data, there were 509 miles of roadway (48%) with less than 50% sidewalk coverage (50% is used because this total represents one side of a city block having a sidewalk while the other side has none). The other 552 miles, or 52%, had greater than 50% sidewalk coverage.

Policies and Programs

The City of Lubbock's subdivision code requires the construction and maintenance of sidewalks. The permit for construction of improvements on a single platted lot or tract requires the installation of sidewalks. Developers are not required to build bicycle facilities under the ordinances.

The City of Lubbock and the City of Wollforth require, by ordinance, that sidewalks be included in all building permits. Ordinance number 9580, as approved by the Lubbock City Council on January 14, 1993, is the latest revision to Subsection 24-48 of the Code of Ordinances requiring sidewalk construction. Subsection 24-48 reads as follows:

“Whenever application is made to the Building Official by any person for a building permit to make any construction, addition or structural alteration on a building or other structure, or to pave a parking lot where a permit is required by this Code or any other Ordinance of the City on property adjacent to or abutting on a public street, where the existing sidewalks, driveways either private or commercial, curbs, curb ramps, street curbs and gutters abutting such property do not conform to the basic standards, specifications, layout, details and designs provided for and established by this article, or in the event when all sidewalks, driveways either private or commercial, curbs, curb ramps, street curbs and gutters, required to be constructed have not been constructed, no permit shall be issued by the Building Official until applicant for such permit shall agree in writing to construct, reconstruct or repair, the curb, curb ramp, gutter, sidewalk or driveway in accordance with this article as a part of and a condition to the issuance of such building permit. No construction, addition or alteration to such buildings or other improvements placed or constructed on the adjacent private property shall be approved by the Building Official, until such times as all the sidewalks, driveways, curbs, curb ramps, street curbs and gutters have been constructed or reconstructed and comply with the provisions of this article.”

Previous Planning Efforts

The LMPO's Walk and Bike plan aims to improve on previous transportation planning work in Lubbock and the surrounding region. The City of Lubbock has yet to have an adopted pedestrian plan. The Lubbock Metropolitan Area Comprehensive Bicycle Plan is the most recent bicycle planning project. The following table summarizes the important results and suggestions of this strategy. Since adoption of the Lubbock Metropolitan Area Comprehensive Bicycle Plan, several projects and milestones have been completed.

1996	Statewide Transportation Enhancement Grant 14 miles of bike lanes; 62.5 miles of signed routes
2008	City of Lubbock built 200 – 300 feet of sidewalk and amenities to link the Arnett Benson and Jackson Mahon neighborhoods
2014	Phase II of North University Gateway ½ mile of sidewalk, pedestrian lighting, and ADA curb ramps 15 bike route signs
2015	Final Stage of Gateway Amherst to US 84 Five Elevated bike/pedestrian crossings along Marsha Sharp in the Texas Tech area Improvements to 19th Street 10 feet of shared path Enhanced crosswalks at Indiana, Boston, Marsha Sharp and Texas Tech Parkway ADA curb ramps
2017	72.6 miles of signed bike routes 14.4 miles of bike lanes 12.2 miles of paved trails 15.6 miles of partially paved trails

Chapter 7 – Lubbock Preston Smith International Airport

Introduction

Lubbock Preston Smith International Airport began as the Lubbock Municipal Airfield in 1929. The airport's first manager was aviation pioneer Clent Breedlove, who had been an army aviator and test pilot. Aviation grew steadily at the airport until World War II when it took a giant leap forward. The U.S. Government's War Department took over the airport in 1942 and created the South Plains Army Airfield. This installation's mission was to train combat glider pilots. These combat gliders were designed to carry soldiers, small jeeps, cannons, or other supplies quickly and quietly into the heat of battle. These "silent wings" were used extensively in the D-Day invasion in Europe and also in many Pacific Theater operations. The South Plains Army Airfield grew to be the largest glider training facility in the world.



After the war, the City of Lubbock operated the airport again. Commercial airline service began on July 1, 1945 and a new terminal was built in 1950. In 1966, Continental Airlines was the first airline to bring jet service to Lubbock followed by Braniff and Texas International. The airport was renamed in 2004 to honor former Texas Governor Preston E. Smith, who is an alumnus of Texas Tech University.

Currently

Lubbock Preston Smith International Airport, located north of the City of Lubbock is the primary airport for commercial, general and cargo aviation services to the region it serves. Lubbock's Airport is an economic driver for a regional economy that serves the city of

Lubbock and a twenty-six county trade area with over 500,000 residents. Over 1,100 people are employed at the various businesses at the Airport.

Three airlines currently serve the airport with an all-jet fleet. American Airlines provides daily non-stop service to Dallas/Ft. Worth. United Airlines provides daily non-stop service to Denver and Houston, and Southwest Airlines provides daily non-stop service to Dallas, Austin and Las Vegas with thru service to fourteen additional destinations. In 2011, the three airlines, along with Delta Air Lines who left the market in April 2012, accommodated a total of 1,038,135 passengers. During the first quarter of 2012, 232,000 passengers traveled through the airport.



Freight

During the Texas Delivers 2050 designation process, TxDOT added the Lubbock Preston Smith International Airport (LBB) to the Texas Multimodal Freight Network (TMFN) based on transported cargo weight. LBB is in the top 10 cargo airports from 2018-2020. In 2020, the Lubbock Preston Smith International Airport moved over 137.6 million pounds of cargo. Since air cargo relies largely on connections to other modes, primarily highways, it is important to have access to major highways and interstates for airports that handle large volumes of air cargo.

There are two cargo companies operating out of Lubbock Preston Smith International Airport. Federal Express has a freight distribution center on the field. United Parcel Service flights are operated by Ameriflight.



Americans with Disabilities Act Features

All four airport terminal entrances have motion sensors and open automatically. The curbs adjacent to these doors have marked wheelchair ramps. All revolving doors are equipped with a button to slow the doors down when exiting the sterile area of the airline terminal building. All water fountains meet ADA standards.

In case of an emergency, individuals can dial 75 on a courtesy phone and appropriate staff will be dispatched to render aid. The terminal is equipped with Automated External Defibrillators (AED) and trained staff are on site 24 hours per day 7 days per week.

Skycap Services are available for special assistance, such as wheel chair assistance or luggage assistance.

Safety and Security

The airport's security operation is a 24 hour, 7 days per week operation made up of a contingent of full-time sworn, state certified police officers. Airport police officers provide

normal police services, perform foot and vehicular patrols and have full arrest powers. They also provide a variety of other services including law enforcement support to the airline passenger security checkpoint, and lost and found services. Airport police officers are dedicated to providing professional and courteous service to the citizens of Lubbock and all passengers using the airport, while maintaining a high level of security.

As law enforcement support to the airline passenger security checkpoint, airport police officers are called upon to react to a variety of security issues. Common prohibited items encountered at the security checkpoint include:

- Box Cutters
- Batons
- Bats
- Clubs
- Firearms and ammunition (including replica guns/ammunition)
- Knives
- Martial Arts Weapons
- Pepper Spray
- Scissors with pointed ends or blades longer than 4 inches
- Lighters

Chapter 8 – Railroads and Trucking

Railroads

Lubbock and Western Railway (LBWR), Lubbock BNSF, Pyco Industries, Iowa Pacific Holdings. Plainsmen Switching Company?

Two railroads currently serve the Lubbock area. The Burlington Northern Santa Fe Railway (BNSF), and WATCO Lubbock and Western Railway (LBWR), operate lines that pass through or terminate in Lubbock. BNSF is considered a Class I railroad as defined by the Interstate Commerce Commission to be a railroad with operating revenues of more than \$259.4 million annually. The BNSF Railway controls four lines which run along U.S. 84 both Northwest and Southeast, along I.H. 27 to the North, and to the Northeast along U.S. 62/82. The Burlington, Santa Fe Railway currently operates 14 trains per day through the Lubbock area. Of the total cargo carried by the railroad company, approximately 30 percent of it is hazardous material.



Plainsman Switching Company (PSC) is a freight and logistics company in Lubbock that ships and receives commodities such as grain, chemicals, cotton seed oil, specialty sands, non-perishable food items, oil field supplies, and lumber. Additionally, PSC provides a convenient location for trans-loading windmill components benefitting wind energy.

Lubbock Rail Port

The Lubbock Rail Port, located on over 526 acres, only a few miles north of the Lubbock Preston Smith International Airport, provides companies with convenient access to the airport and the Burlington Northern Santa Fe (BNSF) rail system. Mexico-based Molinos Anahuac (MACSA) currently has their flour mill and laboratory in the Lubbock Rail Port. With the recently acquired 200 additional acres and the \$1.5 million U.S. Department of Commerce Economic Development Administration Grant to extend additional rail into the Park, the Rail Port is positioned to have more activity. Lubbock Economic Development Alliance (LEDA) strives to attract food processors, light manufacturing, and heavy industrial companies to the Rail Port.

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Map 8.1: Lubbock rail port

Trucking

Railroads and trucking are efficient modes of transportation for freight and bulk cargo and are an integral part of developing economic opportunities. Because of their size and scale, rail, truck, and multimodal freight facilities need planning to minimize conflict with other modes of transportation and to foster safety and efficiency. In the Texas panhandle, US 84, which runs through Lubbock, and US 60 are major corridors for freight movement. Highway connectivity is lowest in rural parts of West Texas, experiencing some of the greatest detour lengths to access major highways. Additionally, West Texas is below average for technology management and would greatly benefit from more extensive data collection and distribution.



Map 8.2: Map of the Lubbock Business Park

The Lubbock Economic Development Alliance (LEDA), in addition to the Lubbock Rail Park, owns and operates the Lubbock Business Park, a 586-acre tract of land located off

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of Interstate 27, approximately one-mile south of Lubbock Preston Smith International Airport. Several businesses have located Distribution Centers in the Park and more are expected to join in the future.



Founded in 1957, **O'Reilly Auto parts** has become one of the nation's largest auto parts retailers. The company operates more than 6,000 stores in 47 states and Mexico.



WesTx Packaging Company is a full line multi-bag manufacturer with a customer base that spreads across a variety of market segments: animal feed, seed, industrial commodities, grain milling, food processing, chemicals and retail packaging.



Standard Sales Company, L.P. distributes beer and other Anheuser-Busch, Inc. products to six counties surrounding Lubbock County. Standard Sales distributes thousands of products daily, and need a facility that could keep up with this demand.



Monsanto works alongside farmers, selling seeds, traits developed through biotechnology, and crop protection chemicals to increase crop yields and reduce resources such as land, water, and energy by one-third per unit produced.



Verizon Wireless intends to provide data and switching services for Verizon Wireless' voice and 5G services across most of West Texas.



Although the Department of Public Safety is not a “trucking-agency” they are security and safety for the trucking industry across the State of Texas. The new regional facility will house an Administrative and Crime Lab building, a Driver License facility, and an Ancillary building.

Chapter 9 – Congestion Management Process

Introduction

A Congestion Management Process (CMP) is required in metropolitan areas where census-designated urbanized area population exceed 200,000, known as Transportation Management Areas (TMAs). This requirement provides for effective management of new and existing transportation facilities through travel demand reduction and operational management strategies.

The CMP is intended to be a continuous process, according to Congestion Management Process: A Guidebook published by the Federal Highway Administration, and will be fully integrated into the metropolitan transportation planning process. Previous law (ISTEA 1991) defined the Congestion Management System (CMS) as a tool to augment and support decision making in the overall metropolitan transportation planning process. The CMP, as opposed to the CMS, provides flexibility to address results of performance measures, community concerns, objectives and goals of local government, and new information on congestion issues.

The Lubbock Metropolitan Area is located between two major east-west interstates. I-27 connects with I-40 120 miles to the north and US87 and US84 connect to I-20 120 miles to the south. Loop 289 and Marsha Sharp Freeway provides access to major locations in the Lubbock metropolitan area. Currently in construction, Loop 88 will augment and enhance connection to the expanding Lubbock Metropolitan Area.

There are 26 truck freight carriers in the area which provide both inter- and intra-state services. Lubbock provides regional warehousing and distribution for truck freight due to convenient location and access to major roadways. The primary service of truck freights in the area is agricultural trucking, especially cotton.

Citibus is a public transportation service that services the Lubbock Metropolitan area. Citibus provides fixed routes to all major retail, medical, educational, and employment areas within the city limits, including the Texas Tech University campus. Additionally, Greyhound Bus provides services for long distance travel.

The Lubbock Metropolitan Planning Organization (LMPO) views congestion management in the context of the overall transportation planning process. There are diverse activities that contribute to Lubbock Metropolitan Area congestion, such as growth in area businesses, population increases due to available jobs, housing development in the southwest portion, and increased student enrollment at Texas Tech University. Based on information provided by Texas Tech University (TTU), more than 63,000 students enrolled in the 21-22 academic year.

For more information not provided here, please reference the LMPO Congestion Management Plan adopted June 15, 2021.

Goals

The Congestion Management Plan includes the 8 action items from FHWA's Congestion Management Process Guidebook and recommendations from the 2020 joint FHWA/FTA TMA Certification Review document.

I. Develop Regional Objectives for Congestion Management

II. Define CMP Network

III. Develop Multimodal Performance Measures

IV. Collect Data and Monitor System Performance

V. Analyze Congestion Problems and Needs

VI. Identify and Assess Strategies

VII. Program and Implement Strategies

VIII. Evaluate Strategy Effectiveness

The LMPO established four primary goals for the CMP that ensures the Lubbock Metropolitan Area adheres to the guidelines set forth in the Federal Fast Act. These goals are to reduce congestion, enhance safety, expand economic opportunity, and Increase the value of transportation assets.

Chapter 10 – Safety and Security

Safety

Since the Highway Safety Act of 1966, which recognized the need for substantial highway safety initiatives to reduce escalating accidents and fatalities that were mainly preventable, safety has been a primary function of transportation planning. Since then, Transportation Safety Planning has grown into a comprehensive, system-wide, multimodal, proactive strategy that better integrates safety into surface transportation decision-making. According to federal law, states and MPOs must set performance measures and ensure that their transportation planning procedures are in line with Strategic Highway Safety Plans (SHSPs) for both motorized and non-motorized users.

Every three years, with the most recent revision occurring in 2022, the regional safety performance measures are revised. In the Lubbock region, the Transportation Advisory Committee reviews high-accident intersections and corridors. Then it evaluates and classifies dangers in the region in order to identify prospective safety improvement projects that can benefit from highway safety funding. This process includes the use of the Decision Lens process, which looks at goals and objectives, which serve as a framework for establishing safety initiatives, projects, and policies. This document reflects the best strategy for reducing fatalities and serious injuries in the area.

The LMPO promotes best practices through the use of FHWA's Proven Safety Countermeasures Initiative (PSCi), a collection of 28 countermeasures and strategies that have been shown to minimize highway fatalities and serious injuries and through the use of decisions lens in it project selection. Transportation agencies are strongly encouraged to look into widespread adoption of PSCis in order to accelerate the achievement of local, state, and national safety goals. These tactics are meant for all road users and all types of roads, including rural and urban locations, major highways, two-lane state and county roads, signalized crossings, horizontal curves, and everything in between. Each countermeasure addresses at least one safety priority area, whether it be speed management, intersections, roadway departures, pedestrians, or cyclists. The LMPO is an active member of the Local Emergency Planning Committee as well as the Citizens Traffic Commission, the Lubbock Engineering District's quarterly fatal collision review, as

Roadway Safety Emphasis Areas

Crash Type and Location

- Run-off Road
- Head-on
- Intersection
- Work Zone
- Railroad Grade Crossing

System Users

- Older Drivers
- Teen Drivers
- Motorcyclists
- Bicyclists
- Pedestrians
- Large Trucks

User Behavior

- Driving Under the Influence (DUI)
- Speeding
- Lack of Restraint
- Aggressive Driving
- Cell Phone Usage

System Administration

- Traffic/Crash Records
- E 911 Reporting Systems
- Public Awareness
- Policy Maker Awareness

* DUI in this context refers to both driving while intoxicated (DWI) and driving under the influence (DUI) offenses

well as other state and local safety planning initiatives. These partnerships bring transportation officials, community planners, health professionals, and other stakeholders together to collaborate, exchange information, find solutions, and raise awareness about transportation safety issues. Some of the subjects on which emphasis is focused are as follows: Motorcycle safety, seatbelt use, teen driving, texting, and alcohol and drug use are all addressed.

Preservation

Efficient operation of the transportation system has an impact on how we live our lives as it enables us to access employment and services and acquire goods in a timely manner. Infrastructure is vital to the foundation of our road networks, communities, and economy. The physical infrastructure of the region's twentieth-century roadways, bridges, and transportation systems remain critical to our ability to travel throughout the region. These assets are frequently in danger of falling into disrepair.

It is the goal of the LMPO to ensure that infrastructure of our road network is monitored and updated when the need arises. The preservation and resiliency of the current network of highways, bridges, and other transportation facilities is a top priority at all decision-making levels. Because there are so many variables and numerous ways to gauge effectiveness and upkeep, such as mobility and accessibility, system performance can be difficult to define. The LMPO, in coordination with regional stakeholders, monitors system performance in a data-driven, comprehensive, and integrated manner through traffic network analysis, safety reports, and multi-modal planning to ensure that individual, short-term actions support strategic, long-term goals. The Lubbock region analyzes efficiency and effectiveness primarily using two methods: asset management and the congestion management process (CMP), which are described in this section on system performance.

Security

City of Lubbock's Office of Emergency Management and Homeland Security

The City of Lubbock's Office of Emergency Management and Homeland Security mission is to minimize loss of life and personal injury, and damage to property and the environment from disasters by maintaining an Emergency Management program that addresses preparedness, mitigation, response and recovery for all hazards, in close coordination with Lubbock County, state and federal agencies. We strive to accomplish this through a continuing program of outreach, coordination, planning, training and exercising, for "all hazards" and for all four phases of emergency management -- preparedness, mitigation, response and recovery.

Goals of the Lubbock Security Plan

- ❖ *Coordinate with all levels of management within the City of Lubbock and Lubbock County to ensure an optimum level of emergency preparedness.*
- ❖ Review and update City/County of Lubbock Emergency Management Plan
- ❖ Prepare annual Emergency Management Performance Grant Application, Statement of Work and Progress Reports
- ❖ Assist Lubbock departments in the review and revision of their Emergency Management Performance annexes and SOGs
- ❖ Participate in emergency management staff development activities
- ❖ Administer contracts and grants related to Emergency Management, Homeland Security and Metropolitan Medical Response System (MMRS).
- ❖ Submit applications, deliverables and reports as required by the grant
- ❖ Coordinate procurement of grant equipment with South Plains Area Council of Governments and State Administrative Agency
- ❖ Provide training and response activities for City, County and the SPAG region.
- ❖ Develop and conduct exercises as outlined in the approved annual work plan
- ❖ Provide and/or coordinate training classes as needed
- ❖ Coordinate planning with community partners and medical centers.
- ❖ Conduct planning meetings with community support volunteer agencies
- ❖ Integrate LMMRS planning with the medical systems
- ❖ Present public awareness programs

Lubbock County Local Emergency Planning Committee (LEPC)

In Addition to the City of Lubbock's Office of Emergency Management, Lubbock County also has an Emergency Management and Homeland Security Office within the Lubbock County Sheriff's Office and holds all meetings for the Lubbock County's Local Emergency Planning Committee (LEPC). The Lubbock County Local Emergency Planning Committee has developed plans for addressing all types of emergencies and security for the personal security of the residents of Lubbock County. These plans include disasters caused by weather or other means. Designated hazardous material routes in Lubbock County were developed and approved by the Texas Department of Public Safety in 1995. A recent update of the Hazardous Materials Commodity Flows for roadways, pipelines, and railways was completed in 2011. Members of the MPO's Transportation Policy Committee serve on the Emergency Planning Committee. These representatives include the Lubbock County Judge and the City of Lubbock City Manager. LMPO staff attends all LEPC meetings.

Lubbock County Mobile Command Unit

The Lubbock County Sheriff's Office is equipped with a Mobile Command Unit ready to provide immediate assistance in emergencies. After the command post is stationary it can be fully operational in thirty minutes. The Unit can be utilized for anything from a natural disaster to a man-made event. A team led by the Lubbock County Emergency Coordinator utilized state and federal grants to give the region a major asset when it comes to disaster response.



Figure 10.1: Lubbock County Emergency Command Vehicle

The vehicle has twenty dedicated phone lines, eight work stations with laptop computers, hostage negotiation equipment and a satellite system that supports constant communication. In the event that an incident occurs, The MOV can almost immediately establish communication allowing dispatchers to continue their jobs without interruption. In a crisis, first responders on board the MOV have the ability to communicate



Figure 10.2: Interior of the Mobile Command Vehicle

with various emergency contacts, including the Coast Guard, helicopters and even airplanes, which is imperative in hurricane events. Regional agencies' radio frequencies are programmed into the vehicle so that once responders pull into a town they can immediately communicate with local police or firefighters. The unit is equipped with a SmartBoard which allows teams to track satellite images of the areas in need, as well as a weather tracking systems to allow tracking of wind conditions in a wildfire situation. A camera is attached to a mast on the top of the vehicle to allow law enforcement agencies to see situations taking place more than one mile away and record what the camera sees.

The mobile command unit has been ranked top in its class by other agencies at state conferences in capability and functionality. The vehicle has been deployed to various locations to help with the wildfires in the state and was utilized during Hurricane Rita.

Citibus (Public Transportation)

After the events of September 11, 2001, the Federal Transit Administration developed 20 security program action items for all transit agencies and grant recipients. One of those items was to develop a security plan for each transit provider. Citibus developed its plan and reviews it annually. The plan includes a description of the transit system; a description of the management of the security plan, including specific roles and responsibilities; threat and vulnerability identifications and assessments; and an annual program of work.



Figure 10.3: Citibus hybrid-electric bus

As a result of that planning, Citibus has installed cameras on the eight hybrid-electric buses and on one new paratransit van. A continuing goal is to install cameras on all revenue vehicles in the fleet. In addition, new policies have been implemented at the Downtown Transfer Plaza to help prevent loitering. The transfer station has also been designated a “SAFE PLACE” by local law enforcement authorities.

Chapter 11 – Performance Management

Federal Legislation

The formation of a performance- and outcome-based program is a significant aspect originating under MAP-21 and carried over into the current Infrastructure and Investment Jobs Act (IIJA). The goal of this performance-and-outcome-based program is for states to invest resources in projects that will collectively move the country closer to achieving the aforementioned national goals. State DOTs must monitor performance, set goals, track progress toward those goals, and report on success. MPOs can now set their own performance measure targets or support the statewide targets set by the State DOT.

The Lubbock MPO Policy Board has elected to follow TxDOT's targets for all performance criteria. The LMPO, TxDOT, and Citibus have signed a Memorandum of Understanding (MOA) defining a framework for achieving the MPO's performance objectives and targets, as well as data gathering for the transit asset management plan. State DOTs and MPOs must adhere to three (3) distinct sets of performance metrics. They are Safety Performance Measures (PM1), Pavement and Bridge Condition Performance Measures (PM2), and System Performance Measures (PM3). Measurement and reporting also include transit asset management targets and agency safety targets.

Performance targets

- Setting of State targets. Within one year of the DOT final rule on performance measures, requires States to set performance targets in support of those measures. States may set different performance targets for urbanized and rural areas. [§1203; 23 USC 150(d)]

To ensure consistency each State must, to the maximum extent practicable –

- coordinate with an MPO when setting performance targets for the area represented by
 - that MPO; and
 - coordinate with public transportation providers when setting performance targets in an
 - urbanized area not represented by an MPO. [§1202; 23 USC 135(d)(2)(B)]
- Setting of MPO targets. Within 180 days of States or providers of public transportation setting performance targets, requires MPOs to set performance targets in relation to the performance measures (where applicable). To ensure consistency, each MPO must, to the maximum extent practicable, coordinate with the relevant State and public transportation providers when setting performance targets. [§1201; 23 USC 134(h)(2)].
- Plans requiring targets. Requires the following plans to include State targets (and/or MPO targets, as appropriate):
 - Metropolitan transportation plans. [§1201; 23 USC 134(i)(2)(B)]
 - Metropolitan Transportation Improvement Program (TIP). [§1201; 23 USC 134(j)(2)(D)]

- Statewide Transportation Improvement Program (STIP). [§1202; 23 USC 135(g)(4)]
- State asset management plans under the National Highway Performance Program (NHPP). [§1106; 23 USC 119(e)]
- State performance plans under the Congestion Mitigation and Air Quality Improvement program. [§1113(b)(6); 23 USC 149(l)]
- Transit Asset Management Plan (TAMP). [49 USC 5326, 5329(b)(1) and 625(5)]
- Public Transportation Agency Safety Plan (PTASP). [49 CFR 673]

Additionally, State and MPO targets should be included in Statewide transportation plans. [§1202; 23 USC 135(f)(7)]

- Reporting on progress. Requires States to report on the condition and performance of the NHS; the effectiveness of the investment strategy document in the State asset management plan for the NHS; progress toward achieving performance targets; and the ways in which the State is addressing congestion at freight bottlenecks. [§1203; 23 USC 150(e)]

Safety Performance Measures (PM1)

Compliance with the PM1 performance-based planning criteria for MPOs commenced on May 27, 2018. Rather than setting its own PM1 targets, the LMPO Policy Committee adopted TxDOT's PM1 targets as reported in TxDOT's Highway Safety Improvement Program Annual Report on June 19, 2018, March 19, 2019, May 19, 2020, and March 16, 2021. Table 2 shows the targets, which are based on five-year rolling averages of the five safety performance measures. These targets were set utilizing a data-driven, collaborative process and are connected with the state's Highway Safety Improvement Program (HSIP) and Highway Safety Plan (HSP). They reflect a 2% reduction from the initial trend line projection.

Table 11.1 TxDOT Safety (PM1) Performance Measure Targets

	Table Statewide Target (Expressed as Five-Year Average)				
Performance Measure	FY 2019	FY 2020	FY 2021	FY 2022	FY 2022
Total Number of traffic related fatalities on all public roads	3,619	3,874	4,486	3,272	3,159
Rate of traffic related fatalities on all public roads per 100 million VMT	1.26	1.49	1.70	1.25	1.20
Total number of traffic related serious injuries on all public roads	15,858	14,659	19,434	17,539	17,819

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Rate of traffic related serious injuries on all public roads per 100 million VMT	5.50	5.63	7.35	6.70	6.77
Total number of non-motorized fatalities and serious injuries on all public roads	2,291	2,206	2,628	2,321	2,340

TxDOT safety investments were identified and scheduled into the HSIP in collaboration with local agencies. The projects chosen for HSIP expenditures are based on crash history, roadway characteristics, and the implementation of infrastructure countermeasures that can address these specific type of crashes. These projects will build effective countermeasures to prevent road fatalities and serious injuries. The LMPO helps the state meet its PM1 targets by analyzing and programming all HSIP projects within its boundaries that are part of TxDOT's Transportation Improvement Program. Many TIP projects contribute to meeting these safety targets. Furthermore, the LMPO assists in the development and programming of initiatives that contribute to the attainment of these targets. The Lubbock MPO, in collaboration with the Lubbock District, supports the Texas Transportation Commission's determination on Page 66 of the 2021 Highway Safety Improvement Program Annual Report that TxDOT met their 2020 performance targets with major and substantial compliance. The 2022 targets were adopted by the TPC on February 15, 2022, Resolution 2023-02.

Pavement and Bridge Condition Performance Measures (PM2).

Compliance with the PM2 performance based planning requirements continues through the "BIL". Targets for PM2, Table [11.2](#), were adopted by TPC on April 18, 2023, Resolution 2023-05.

Table 11.2 Bridge and Pavement Performance Measure Targets

Federal Performance Measure	Baseline	2020 Target	2022 Target	Adjusted 2023 Target
Pavement on IH				
% in "good" condition			66.5%	66.4%
% in "poor" condition			0.2%	0.3%
Pavement on non-IH NHS				
% in "good" condition	54.5%	52.0%	54.1%	52.3%
% in "poor" condition	13.8%	14.3%	14.2%	14.3%

NHS Bridge Deck Condition				
% in “good” condition	50.7%	50.6%	50.4%	50.4%
% in “poor” condition	0.88%	0.80%	1.5%	0.8%

System Performance Measures (PM3).

Similarly, the LMPO's compliance with the PM3 performance-based planning standards continues to follow TxDOT's lead. On April 18, 2023, Resolution 2023-06, the Lubbock MPO Policy Board voted a resolution adopting three system performance measures, which are as follows:

1. The percentage of person-miles traveled on the Interstate System rated “reliable” (TTR-IH);
2. The percentage of person miles traveled on Non-Interstate National Highway System facilities rated “reliable” (TTR-NIH); and
3. The percentage of truck travel time on the Interstate system rated as “reliable” (TTTR).

In general, travel time reliability refers to the consistency or predictability of travel time from day to day and/or across different times of day. The proportion of “reliable” person “miles traveled on the Interstate is more particularly a determinant to assess the unreliability of travel times on vital routes and highways because most users are needed to allot additional time to ensure they arrive on time. This added time lengthens the commute, restricts the movement of commodities, and diminishes overall quality of life and economic efficiency. The Level of Travel Time Reliability (LOTTR) is defined as the ratio of longer travel times (80th percentile) to “normal” travel times (50th percentile). The measure is the percentage of person-miles traveled on the region's Interstate system that meet this definition of reliability. Using person-miles instead of vehicle-miles gives equal weight to all users of the system. When utilized for non-interstate travel, the measurement remains the same.

Travelers, distributors, and corporations are increasingly concerned about truck travel time reliability. Few will argue that traffic congestion is a problem in many cities around the United States. Many change their schedules or allocate more time to accommodate for travel delays in order to gain some certainty. Travel time reliability measures the extent of any unexpected delay. The consistency or dependability of travel time as measured from day to day and/or across different times of the day is referred to as travel time reliability. This technique employs factors from planning time or total travel time calculated as the 95th percentile travel time and the planning time index, or the relationship of the greater total travel time to the ideal, or free-flow travel time calculated as the ration of the 95th percentile to the ideal. It also comprises a buffer time, a buffer index, and the frequency with which congestion exceeds a predefined threshold. These types are shown in Table [11.3](#).

Table 11.3 System Performance Measure Targets

Performance Measures	Statewide Baseline	2020 Target	Adjusted 2023 Target
National Highway System Travel Time Reliability	79.6%	61.2%	70.0%
1) Interstate Highway System Level of Travel Time Reliability	N/A	N/A	70.0%
2) Non-Interstate Level of Travel Time Reliability	N/A	N/A	70.0%
3) Truck Travel Time Reliability	1.50	1.70	1.70

Transit.

The IIJA, or “BIL” currently mandates the Federal Transit Administration (FTA) to produce a rule establishing a comprehensive and methodical procedure for effectively operating, maintaining, and improving public capital assets during their entire life cycle. The fundamental goal of the Transit Asset Management Plan (TAM) is to improve safety, minimize maintenance costs, increase reliability, and improve performance. The FTA devised four performance measures to approximate the State of Good Repair for the four categories of capital assets under the TAM Final Rule. These performance measures will enable Citibus to quantify the state of their assets and permit target setting that supports local funding priority. On February 15, 2022, Resolution 2022-05, the Citibus' Policy Board approved a resolution endorsing Citibus' performance measures. The Policy Board commits to sponsoring, planning, and programming projects that contribute to the achievement of these targets.

Public transportation capital projects that are included in the TIP correlate with Citibus' TAM planning and target setting processes in partnership with the Lubbock MPO. Investments are made in accordance with TAM plans to keep the transit provider's vehicles and facilities in excellent functioning order and to meet transit asset management targets. The TIP's transit financing overview details state and federal funding sources that transit agencies can use for vehicle and facility improvements. Citibus obtains financing and operating expenditures from a variety of sources, depending on company needs.

Transit Asset Management Performance Measures and Targets (TAM).

On December 14, 2022, the Lubbock Transportation Policy Committee (LMPO) adopted the Citibus Transit Asset Management Performance Targets indicated in Table 5 below.

The LMPO and Citibus have also signed an MOU outlining duties and responsibilities under the IIJA, “BIL” act performance-based planning and programming procedures.

Table 11.4 Transit Asset Management Performance Measures and Targets

Fixed Route (Bus) Safety Performance Targets	Baseline	2022 Target
Fatalities	0.0	0.0
Rate of Fatalities	0.0%	0.0%
Injures	3.2	3.1
Rate of Injuries	0.00020%	0.00020%
Safety Events	3.2	3.1
Rate of Safety Events	0.00020%	0.00020%
Mean Distance Between Major Mechanical Failures	49,565	50,000

Demand Response Safety Performance Targets	Baseline	2022 Target
Fatalities	0.0	0.0
Rate of Fatalities	0.0%	0.0%
Injures	2.0	1.9
Rate of Injuries	0.00028%	0.00027%
Safety Events	1.6	1.5
Rate of Safety Events	0.00023%	0.00021%
Mean Distance Between Major Mechanical Failures	46,011	47,000

The LMPO understands the necessity of aligning goals, objectives, and investment priorities to stated performance objectives, and that doing so is vital to meeting national transportation goals as well as statewide and regional performance targets. As a result, the LMPO agrees to adopt projects that will assist Citibus in meeting these stated goals, as well as the capital project program outlined in the 2023-2026 TIP.

The FAST Act included performance standards for transit agencies, particularly through Transit Asset Management (TAM) assessment and planning mandates. Transit asset management performance measures are aimed at keeping the nation's public transportation systems in good working order. The report can assist planning and funding decisions in pursuit of regional and national goals by capturing targets in the Metropolitan Transportation Plan (MTP) and the Transportation Improvement Plan (TIP) and by reporting on the status of each achievement. To achieve this criteria, the Citibus TAM plan was created. Citibus' assets were evaluated using the Federal Transit Administration's (FTA) Transit Economic Requirement Model (TERM), which grades assets on a scale of one to five. The scale is as follows:

- | | |
|----------------|---|
| 1. = Poor | The asset is critically damaged or in need of immediate repair, well past useful life. |
| 2. = Marginal | Defective or deteriorated in need of replacement, exceeded useful life. |
| 3. = Adequate | Moderately deteriorated or defective, has not exceeded useful life. |
| 4. = Good | Good condition, no longer new, may be slightly defective/deteriorated but its functional. |
| 5. = Excellent | No visible defects, new or near new, may still be under warranty if applicable. |

When an asset receives a 3, 4, or 5 on this scale, it is considered to be in good repair. A facility that receives a rating of 1 or 2 is considered to be in poor condition. Citibus looked at revenue, non-revenue, and facility vehicles using this scale. Citibus generated investment priorities based on grades and incorporated these investment priorities into the TAM performance targets adopted by the Transportation Policy Committee on June 21, 2019.

Following the passage of the FAST Act, a direct link between safety targets and TAM plans had to be established through project selection, as shown in the Transportation Improvement Program. TIPs altered or revised on or after May 27, 2018 must comply with the Performance-Based Planning and Programming (PBPP) planning standards for safety performance measures [81 FR 34050]. TIPs revised or updated on or after 10/1/2018 must comply with the FTA's Transit Asset Management Final Rule's PBPP planning criteria. A narrative will explain how projects listed in the LMPO's 2021–2024 TIP help meet TAM plan requirements.

Public Transportation Agency Safety Plan (PTASP).

The PTASP Final Rule, 49 CFR Part 673.11 (a) (3), requires all public transportation providers to produce an Agency Safety Plan (ASP) that includes Safety Performance Targets (SPT) based on the National Safety Plan safety performance measures (NSP). The safety performance measures defined in the NSP were established to ensure that they can be applied to each type of public transportation and are based on data currently

being provided to the NTD. The NSP includes safety performance measures such as fatalities, injuries, safety events, and system reliability (State of Good Repair as developed and tracked in the TAM Plan).

Each ASP shall comprise seven SPTs based on the four performance measures in the NSP. These SPTs are offered in terms of total reported numbers as well as rate per Vehicle Revenue Mile (VRM). Each of the seven must be recorded by mode, as shown in Table [11.5](#).

Table 11.5 NSP Safety Performance Measures

Safety Performance Measure	SPT	SPT
Fatalities	Total Number Reported	Rate Per Total VRM
Injuries	Total Number Reported	Rate Per Total VRM
Safety Events	Total Number Reported	Rate Per Total VRM
System Reliability	Mean distance between major mechanical failure	

Table 7 presents baseline numbers for each of the performance measures. Citibus collected the past five (5) years of reported data to develop the rolling averages listed in the table.

Safety Performance Measures – 673.11(a)(3).

The PTASP Final Rule, 49 CFR Part 673.11 (a) (3), requires all public transportation providers to produce an Agency Safety Plan (ASP) that includes Safety Performance Targets (SPT) based on the National Safety Plan safety performance measures (NSP). The safety performance measures defined in the NSP were established to ensure that they can be applied to each type of public transportation and are based on data currently being provided to the NTD. The NSP includes safety performance measures such as fatalities, injuries, safety events, and system reliability (State of Good Repair as developed and tracked in the TAM Plan).

Each ASP shall comprise seven SPTs based on the four performance measures in the NSP. These SPTs are offered in terms of total reported numbers as well as rate per Vehicle Revenue Mile (VRM). Each of the seven must be recorded by mode, as shown in Table [11.6](#).

Table 11.6 NSP Safety Performance Measures

Safety Measure	Performance	SPT	SPT
Fatalities		Total Number Reported	Rate Per Total VRM
Injuries		Total Number Reported	Rate Per Total VRM
Safety Events		Total Number Reported	Rate Per Total VRM
System Reliability		Mean distance between major mechanical failure	

Table [11.7](#) presents baseline numbers for each of the performance measures. Citibus collected the past five (5) years of reported data to develop the rolling averages listed in the table.

Table 11.7 Baseline 2019 Safety Performance Measures

Fixed –Route (Bus) Safety Performance Targets		
Mode	Baseline	Target
Fatalities	0.0	0.0
Rate of Fatalities*	0.00000%	0.00000%
Injuries	5.2	5.1
Rate of Injuries*	0.00029%	0.00029%
Safety Events	5.2	5.1
Rate of Safety Events*	0.00029%	0.00029%
Mean Distance Between Major Mechanical Failures	42,575	43,000
*total number for the year/total vehicle revenue miles traveled		

Table 11.7 Continued:

Demand Response Safety Performance Targets		
Mode	Baseline	Target
Fatalities	0.0	0.0
Rate of Fatalities*	0.00000%	0.00000%
Injuries	3.2	3.1
Rate of Injuries*	0.00053%	0.00052%
Safety Events	2.6	2.5
Rate of Safety Events*	0.00043%	0.00042%
Mean Distance Between Major Mechanical Failures	42,575	43,000
*total number for the year/total vehicle revenue miles traveled		

While safety has always been a priority for Citibus, the implementation of this ASP will result in adjustments across the board. The SPTs established in Tables 8 and 9 represent a recognition that SMS adoption would generate additional data that will be required to appropriately define relevant SPTs. As we begin the process of completely implementing our SMS and defining our targeted safety enhancements, we will base our targets on the current NTD reported five-year average. Ensuring that we do not fall below our five-year baseline performance.

As part of the annual review of the ASP, Citibus will reevaluate our SPTs and determine whether the SPTs need to be refined. As more data is collected as part of the SRM process discussed later in this plan, Citibus may begin developing safety performance indicators to help inform management on safety related investments.

Safety Performance Target Coordination – 673.15(a)(b).

Citibus will make SPTs available to TxDOT and the Lubbock Metropolitan Planning Organization to aid with their respective regional and long-range planning processes. To the greatest extent possible, Citibus will work with TxDOT and the Lubbock MPO to identify state and MPO SPTs, as outlined in the Interagency Memorandum of Understanding (MOU).

Lubbock Metropolitan Transportation Plan 2024-2050

During the FTA's Certification and Assurances reporting process each year, Citibus will send any revisions to the SPTs to both the Lubbock MPO and TxDOT (unless those agencies specify another time in writing).

To summarize, TAM targets have not been met because there is no dedicated capital replacement financing for the acquisition of new vehicles. The transit program of projects in the 2023-2026 TIP is dependent on how effective transit operators are in obtaining grants for each approved project. Notwithstanding, Citibus has had some success in keeping the van pool under the useful life guideline, but not with the bus fleet.

As for the safety targets, Citibus opted to let TxDOT prepare the Transportation Agency Safety Plan. The plan has been finalized, approved by Citibus and the MPO, and certified by TxDOT. Citibus will continue to work toward the next report opportunity, which is scheduled for June 21, 2021, to demonstrate achievement.

Chapter 12 – Financial Plan

Introduction

With Moving Ahead for Progress in the 21st Century (MAP-21) signed on July 6, 2012, the Lubbock MPO has created the Financial Plan for the 2050 Metropolitan Transportation Plan according to the rules and regulations of SAFETEA-LU.

For the purpose of transportation operations and maintenance, the financial plan shall contain system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain Federal-Aid highways (as defined by 23 U.S.C. 101 (a) (5)) and public transportation (as defined by title 49 U.S.C. Chapter 53). In addition, for illustrative purposes, the financial plan may include additional projects that would be included in the 2050 MTP if reasonable additional resources beyond those identified in the financial plan were to become available.

Since December of 2007, revenue and cost estimates for projects are required to show the “Year of Expenditure” dollars. In the development of the 2050 MTP, the Call for Projects called for the Total Project Cost of each submission, meaning that funding amounts must include all phases of the project including preliminary engineering, final design, right-of-way, utility relocation, and construction or construction phasing.

The LMPO presented a “Constrained Plan” to both the Transportation Advisory Committee and Policy Committee. A Project List was approved with an assigned “Year of Expenditure” (YOE) which includes a four percent inflationary rate per year agreed upon by the Policy Board. This will enable the LMPO to determine what projects will be fiscally constrained for the life of the Plan. Projects that are not able to be fiscally constrained within the Plan will be listed on an Illustrative List in the 2050 MTP. If priorities are adjusted, or further funding is available, those projects on the Illustrative List maybe moved to the constrained list.

Federal Funding Programs for Streets and Highways

The **Statewide Preservation Program** (SPP) includes three program categories:

Category 1 Preventive Maintenance and Rehabilitation

- Funding for preventive maintenance and rehabilitation of the existing state highway system. The rehabilitation funds may be used for rehabilitation of the Interstate Highway System main lanes, frontage roads, structures, signs, pavement markings, striping, etc.

Category 6 Structure Replacement and Rehabilitation

- Funding to replace or rehabilitate eligible bridges on and off the state highway system (functionally obsolete or structurally deficient).

Category 8 Safety

- Funding related projects on and off state highway system. Projects are evaluated using three years of crash data, and ranked by Safety Improvement Index.

The SPP documentation also contains information on two highway maintenance programs as well as waterway and railroad preservation projects. These programs and projects represent preservation efforts to maintain the existing transportation assets.

The **Statewide Mobility Program** (SMP) includes the following construction program categories:

Category 2 – Metropolitan Area (TMA) Corridor Projects: Funding is intended to address the mobility needs in all major metropolitan areas (greater than 200,000 population - Transportation Management Areas) throughout the state. Funds will be used to develop and improve entire corridors of independent utility, whenever possible. Projects in this category must have the concurrence and support of the Metropolitan Planning Organization.

Category 3 – Non-Traditionally Funded Projects: is for transportation projects that qualify for funding from sources not traditionally part of the State highway Fund, including state bond financing (such as Proposition 12 and Proposition 14), the Texas Mobility Fund, pass-through financing, regional revenue and concession funds, and funding provided by local or military entities. Category 3 also contains funding for the development

costs of design-build projects. (Design-build construction costs are covered by other UTP categories).

Category 4 – Statewide Connectivity Corridor Projects: addresses mobility on major state highway system corridors, which provide connectivity between urban areas and other statewide corridors. Projects must be located on the designated highway connectivity network that includes:

- Texas Highway Trunk System
- National Highway System (NHS)
- Connections to major seaports or border crossings
- National Freight Network
- Hurricane evacuation routes

Category 5 – Congestion Mitigation and Air Quality Improvement: addresses attainment of National Ambient Air Quality Standard in non-attainment areas (currently the Dallas-Fort Worth, Houston, San Antonio, and El Paso metro areas). Each project is evaluated to quantify its air quality improvement benefits. Funds cannot be used to add capacity for single-occupancy vehicles.

Category 7 – Metropolitan Mobility and Rehabilitation: addresses transportation needs within the boundaries of MPOs with populations of 200,000 or greater — known as transportation management areas (TMAs). This funding can be used on any roadway with a functional classification greater than a local road or rural minor collector.

Category 9 – Transportation Alternatives: handles the federal Transportation Alternatives (TA) Set-Aside Program. These funds may be awarded for the following activities: Construction of sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic-calming techniques, lighting and other safety-related infrastructure, and transportation projects to achieve compliance with the Americans with Disabilities Act.:

- | | |
|--|--|
| 1. Provision of facilities for pedestrians and bicycles. | 5. Landscaping and other scenic beautification. |
| 2. Provision of safety and educational activities for pedestrians and bicyclists. | 6. Historic preservation. |
| 3. Acquisition of scenic easements and scenic or historic sites (including historic battlefields). | 7. Rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals). |
| 4. Scenic or historic highway programs (including the provision of tourist and welcome center facilities). | 8. Preservation of abandoned railway corridors (including the conversion and use of the corridors for pedestrian or bicycle trails). |

- | | |
|--|---|
| 9. Inventory, control, and removal of outdoor advertising. | runoff; or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity. |
| 10. Archaeological planning and research. | 12. Establishment of transportation museums. |
| 11. Environmental mitigation to address water pollution due to highway | |

In addition, TxDOT distributes federal TA funds through a competitive statewide call for projects. 50% of these funds are designated for statewide flexible use, and the other 50% are distributed by population. TA project eligibility is determined by TxDOT, MPOs, and FHWA. TA Flex funds must go through a competitive call for projects and meet other conditions before they can be flexed to other uses.

Category 10 – Supplemental Transportation Projects: Funding is to address projects that do not qualify for funding in other categories. Most of the programs are state funded; however, federal funds are involved in some programs as noted above. Projects in this category must have the concurrence of the Metropolitan Planning Organization if located within their area of jurisdiction.

Category 10 CR – Carbon Reduction: In accordance with the federal IIJA, a new Carbon Reduction subprogram has been added to Category 10. Carbon Reduction funding is allocated to urbanized areas with populations over 200,000 (TMAs), areas with populations 50,000 to 200,000, and small areas with populations under 50,000.

Category 11 – District Discretionary: This category is used to address projects selected at the district engineer’s discretion. Most projects should be on the state highway system. However, some projects may be selected for construction off the state highway system on roadways with a functional classification greater than a local road or rural minor collector. Funds from this program should not be used for right-of-way acquisition. Projects in this category must have the concurrence and support of the Metropolitan Planning Organization (MPO) having jurisdiction in the particular area.

Category 12 – Strategic Priority: The Commission has determined that money from this category will be used on an “as needed” basis for projects with specific importance to the state. These projects will generally promote economic opportunity, increase efficiency on military deployment routes or to retain military assets in response to the federal military base realignment and closure report, or maintain the ability to respond to both man-made and natural emergencies. In addition, the Commission is also committed to utilize the Category 12 funds to help communities utilize the new financing tools, like pass-through financing agreements, in order to help local communities address their transportation needs.

The SMP documentation also contains information regarding the Aviation Capital Improvement Program and the Public Transportation Program.

Projection of Future Funding

In consultation with TxDOT and interested parties, The MPO selects projects for Category 2 and 7 funding. Category 2 provides for funding mobility and added capacity projects on major state highway system corridors, which serve the mobility needs of a Transportation Management Area (TMA). Category 7 provides for funding mobility projects within the Transportation Management Areas.

In determining the fiscally constrained projects for the 2050 MTP, the following forecast determinations were utilized.

- **Category 1 Funding – Preventive/Rehab** – No funding for the forecast was included for this category
- **Cat 2 - Corridor/Mobility/Capacity** - **\$15,920,426** is listed in 2024. With a decreasing allocation over the next ten years and a total expected allocation of **\$103,501,364** throughout the course of that ten-year period. For an average annual allotment of **\$10.35** million.
- **Cat 3 – Non-Traditionally Funded** - No funding for the forecast was included for this category.
- **Cat 5 – Congestion Mitigation and Air Quality Improvement (CMAQ)** - No funding for the forecast was included for this category as LMPO is currently in Attainment.
- **Cat 7 – Metropolitan Mobility/Rehab** - Estimate of **\$82,628,585** out to 2033 and an additional **\$4.3** million per year out to 2050. For an average annual allotment of **\$8.3** million.
- **Cat 9 – Transportation Alternatives** - Estimate of **\$9,581,058** out to 2033. For an average annual allotment of **\$958,105**.
- **Cat 10 CR – Carbon Reduction**- Estimate of **\$11,803,744** out to 2033. For an average annual allotment of **\$1.2** Million.
- **Cat 11 – District Discretionary** - No funding for the forecast was included for this category.
- **Cat 12 – Strategic Priority** - No funding for the forecast was included for this category.

This Revenue forecast was within an acceptable range as compared to the Trends Model by the Texas Transportation Institute. The key to the fiscal constraint beyond these figures will be the match from the sponsoring agency. The constraint must include all phases of the project including preliminary engineering, final design, right-of-way, and utility relocation, and construction or construction phasing.

Basis of Estimating Construction, Preliminary Engineering, and Right-of-Way Costs

In calculating year of expenditure cost for construction, preliminary engineering, and right-of-way costs the MPO used the current year costs and inflated the costs by 4% per year.

Preliminary engineering and right-of-way costs were inflated assuming costs will be a year before construction. TxDOT and local entities currently control preliminary engineering and right-of-ways funds. The MPO receives no allocation of funds for programming.

Short Range and Priority Projects

The Lubbock MPO revises the short-range transportation improvement program (TIP) every two-years. This short range plan or Transportation Improvement Program (TIP) is a look at every two years at a four-year planning horizon to confirm which projects the MPO wants to advance to construction and to make sure the funding is in place.

Federal Funding Programs for Transit

Federal transit funding is based on an appropriations process from the United States Congress. Each year, the U.S. Department of Transportation's Federal Transit Administration (FTA) distributes the state's annual appropriation to fund a variety of transit-related activities. All grants are awarded on a reimbursement basis and expenses must be incurred before FTA disburses the federal funds.

SECTION 5303 and 5304 Planning Programs: The Section 5303 Metropolitan Planning and Research Program provides planning funds for metropolitan planning organizations (MPOs), which exist in all Texas urbanized areas. MPO planning funds are distributed by formula, and TxDOT provides the required local match in the form of transportation development credits. TxDOT is the recipient of Section 5304 Statewide Planning and Research funds. These funds may be awarded to eligible entities for planning purposes and are also used internally to support TxDOT administration, planning, and development of public transportation programs.

Urbanized Formula Program, Section 5307: For urbanized areas with population of 200,000 or more, the funding may be used only for capital projects. The definition of capital has been revised to include preventive maintenance. Also, for the larger areas, at least one percent of the funding apportioned to each area must be used for transit enhancement activities such as historic preservation, landscaping, public art, pedestrian access, bicycle access, and enhanced access for persons with disabilities. It is the responsibility of the service provider to allocate one percent of these funds to transit enhancement projects.

Capital Investment Program, Section 5309: Section 5309 funds are divided into three different categories:

- Modernization of existing rail systems;
- New and replacement buses and facilities; and
- New fixed guideway systems.

A "fixed guideway" refers to any transit service that uses exclusive or controlled rights-of-way or rails, entirely or in part. The term includes heavy rail, commuter rail, light rail,

monorail, trolleybus, aerial tramway, inclined plane, cable car, automated guideway transit, ferryboats, that portion of motor bus service operated on exclusive or controlled rights-of-way, and high-occupancy-vehicle (HOV) lanes.

Enhanced Mobility Of Seniors And Individuals With Disabilities Program, Section 5310: The U.S. Federal Transit Administration (FTA) makes capital grants available to Texas to help provide services specifically designed to meet the needs of seniors and individuals with disabilities, promoting the availability of cost-effective, efficient, and coordinated passenger transportation services. TxDOT serves as the designated recipient for these grants in urbanized areas with populations less than 200,000 and non-urbanized areas and distributes them to local agencies..

Bus And Bus Facilities, Section 5339: Section 5339 is a formula program for eligible capital projects created by the U.S. Moving Ahead for Progress in the 21st Century Act (MAP-21). The goal of the 5339 program is to improve the readiness of feet, other equipment, and facilities through capital investment. TxDOT serves as the designated recipient for these grants in urbanized areas with populations less than 200,000 and non-urbanized areas and distributes them by formula and competitive grants.

Bicycle and Pedestrian Infrastructure: Bicycle and Pedestrian Program in PTN coordinates across the agency to provide resources, technical guidance, and support for the development of safe and connected bicycle and pedestrian infrastructure as part of TxDOT and LMPO's multimodal transportation system regardless of funding source.

In addition, these projects are eligible for funding under the Transportation Alternatives Set-Aside (TA) Program. The TA Program provides opportunities to expand transportation choices and enhance alternative transportation infrastructure through locally driven projects, including on- and off system pedestrian and bicycle facilities, infrastructure for non-driver access to public transportation, projects that enhance mobility and accessibility, and infrastructure supporting safer routes to schools.

Appendix I

Metropolitan Transportation Plan 2050 Projects

**Metropolitan Transportation Plan 2050
Illustrative Projects**

Appendix III

Metropolitan Transportation Plan 2050 Transit Projects

Appendix IV

Texas Transportation Plan

Public Comments

Appendix V

Title VI/Environmental Justice

Congestion Management Plan

Appendix VII

Transportation Policy Committee Meeting Approval



Lubbock Metropolitan Planning Organization

Working Together



RESOLUTION 2023-19 Regarding the Adoption of the 2024-2050 Metropolitan Transportation Plan

WHEREAS, 23 U.S.C. §134 (c)(1) requires the designated Metropolitan Planning Organization (MPO) to develop a long-range transportation plan and transportation improvement program to accomplish the objectives established in the national interest at sub-section (a); and

WHEREAS, the development of the long-range transportation plan shall be accomplished through a performance-driven, outcome-based approach to planning for all metropolitan areas of the State addressing no less than a 20-year planning horizon; and

WHEREAS, the long-range transportation plan shall provide for the development and integrated management and operation of transportation systems and facilities (including accessible pedestrian walkways, bicycle facilities, and intermodal facilities) that support intercity transportation and that will function as an integral part of the intermodal transportation system for the designated urbanized area, the Metropolitan Planning Area (MPA), the State and the United States; and

WHEREAS, the long-range transportation planning process shall provide for the consideration of all modes of transportation and shall be continuing, cooperative, and comprehensive (3C's) to the degree appropriate, based on the complexity of the transportation problems to be addressed; and

WHEREAS, 23 U.S.C. 134 (i)(1)(B)(ii) requires that a long-range transportation plan be prepared and updated in accordance with the requirements by the MPO every five (5) years from the date it is adopted by the MPO in areas designated as "attainment" as defined in Section 107(d) of the Clean Air Act (42 U.S.C. 7407 (d)).

NOW THEREFORE, BE IT RESOLVED BY THE TRANSPORTATION POLICY COMMITTEE OF THE LUBBOCK METROPOLITAN PLANNING ORGANIZATION:

- Section 1. That, the Transportation Policy Committee of the LMPO authorizes the adoption of the 2024-2050 Metropolitan Transportation Plan including the program of projects and all amendments thereto in its entirety in order to satisfy the requirement at 23 CFR 450.324(f) that stipulates the updated transportation plan shall be based on the latest available estimates and assumptions for population, land use, travel, employment, congestion and economic activity in coordination

with a current Travel Demand Model in order to base a supporting analysis on to validate and implement the various objectives.

Section 2. That, according to 23 CFR 450.324(d) the travel demand model is necessary in order to be able to make the analysis to confirm the transportation plan's validity and consistency with current and forecasted transportation and land use conditions and trends in order to extend the forecast to the 20-year planning horizon.

Section 3. That, the adoption of the 2024-2050 MTP satisfies the requirements of 23 USC 134 and will be forwarded to the Governor, Federal Highway Administration, and the Federal Transit Administration and continue to provide for the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods while addressing the current and future transportation demand (23 CFR 450.324(b) and (d)).

Passed by the Transportation Policy Committee on this 17th day of October, 2023.



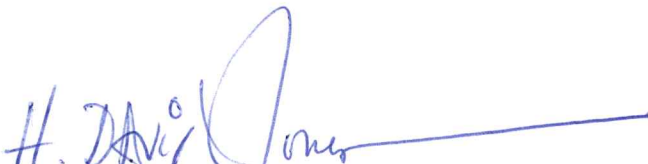
Honorable Mayor Pro-Tem Shelia Patterson-Harris
Chair, Transportation Policy Committee of the
Lubbock Metropolitan Planning Organization

ATTEST:



Tammy Walker, MPO Secretary

APPROVED AS TO CONTENT:



H. David Jones,
Transportation Planning Director

APPROVED AS TO FORM:

A handwritten signature in blue ink, reading "Matthew Wade", is written over a horizontal line.

Matthew Wade
Attorney for the MPO