Connect to 2050

Texarkana Metropolitan Transportation Plan

September 2024

Covering the cities of Texarkana Arkansas, Texarkana, Texas, Nash, Texas, Wake Village, Texas, and some of the unincorporated parts of Bowie County, Texas and Miller County, Arkansas and the states of Texas and Arkansas.

This plan is produced in cooperation with the following agencies:

- United States Department of Transportation (USDOT)
- Federal Highway Administration (FHWA)
- Federal Transit Administration (FTA)
- Texas Department of Transportation (TxDOT)
- Arkansas Department of Transportation (ARDOT)

This Plan has been funded with federal Metropolitan Planning funds through the Federal Highway Administration and Section 5303 funds through the Federal Transit Administration, and local funding by the State of Arkansas, the State of Texas, and the City of Texarkana, Arkansas.

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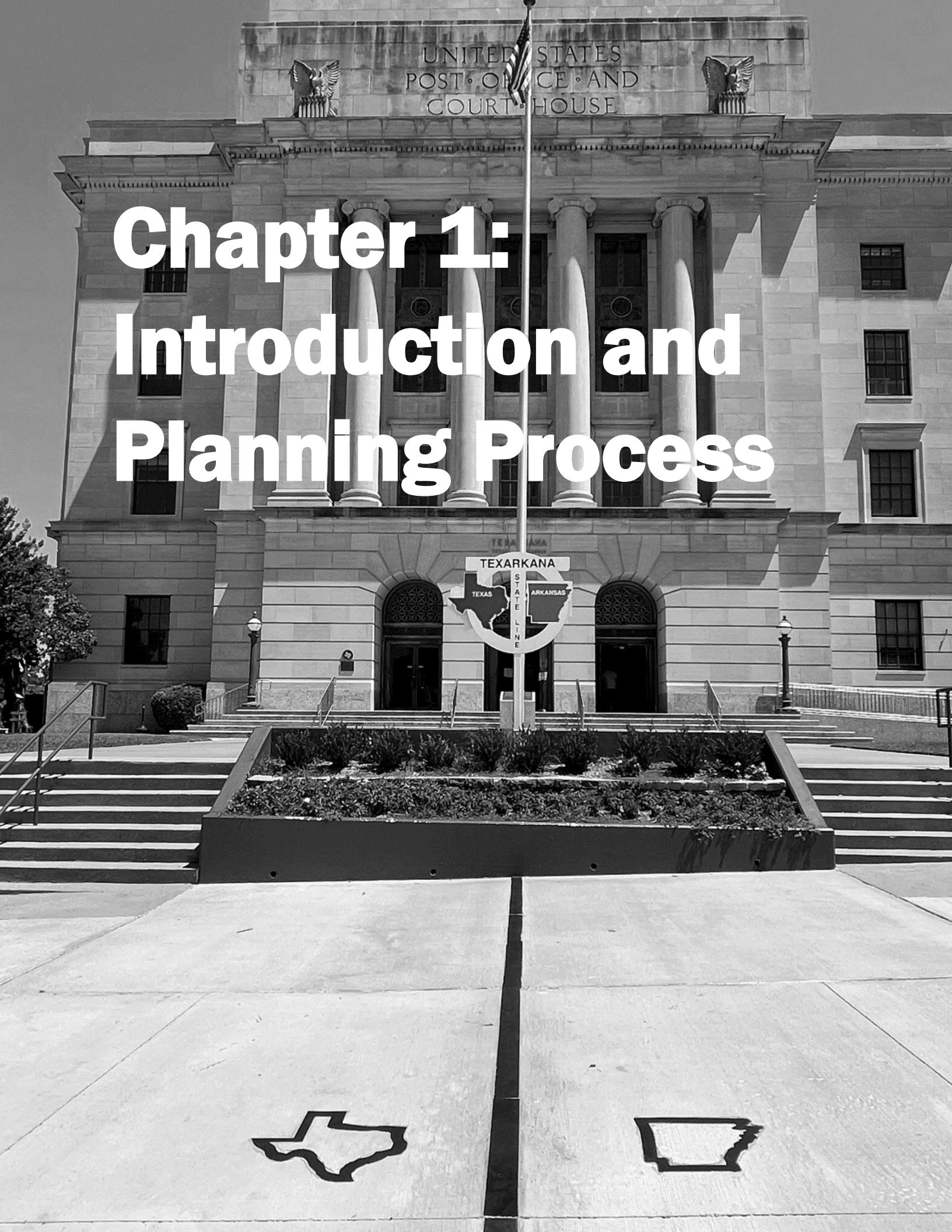


Chapter 1: Introduction and Planning Process

Metropolitan transportation planning is a cooperative, comprehensive, and continuing (3-C) process. This process is conducted by the Texarkana Metropolitan Planning Organization (MPO), in coordination with the Texas Department of Transportation (TxDOT), the Arkansas Department of Transportation (ARDOT), transit operators, stakeholders from throughout the region, and the public to create a vision for the future of transportation in the community.

The 3-C process, which is prescribed by federal regulations, is designed to assist the MPO in prioritizing short- and long-term investments in the regional transportation system over a minimum of 20 years. This occurs through a proactive public participation process that involves all users of the transportation system.

This document is an update to the Texarkana Urban Transportation Study 2045 Metropolitan Transportation Plan (MTP) to cover the 25-year planning horizon from 2025-2050. The Texarkana Metropolitan Planning Organization initiated this update in October 2023. 23 CFR §450.324 mandates that an MPO's MTP must cover a plan horizon of at least 20 years into the future and be updated every five years. Updating this plan confirms its validity and consistency with current and forecasted transportation and land use conditions and trends. Each update to the plan allows the Texarkana MPO a chance to extend the forecast period to maintain at least a 20-year planning horizon.

This MTP was developed over an 11-month period during which multiple rounds of public and stakeholder meetings were conducted, technical data was analyzed, existing plans and studies were compiled and reviewed, and potential projects were evaluated according to community goals and performance-based criteria. The resulting product is a comprehensive blueprint for the future of the transportation system that considers all modes and the needs of all users.

"METROPOLITAN TRANSPORTATION PLANNING IS A COOPERATIVE, COMPREHENSIVE, AND CONTINUING PROCESS."

Texarkana Metropolitan Planning Organization

With the passage of the Federal Highway Act of 1962, all major cities within the United States are required to adopt a Metropolitan Transportation Plan to guide the long-term development of the transportation system. The act established specific rules and regulations for carrying out the long-range transportation planning process and required the formation of MPOs for any urbanized area (UZA) with a population greater than 50,000.

Under these federal regulations, MPOs are responsible for carrying out a continuing, cooperative, and comprehensive (3-C) planning process, in cooperation with the state and local governments, to develop the MTP and determine how best to invest federal transportation funding in the region.

The Texarkana MPO is the administrative agency for the Texarkana Urban Transportation Study (TUTS). As an organization, the Texarkana MPO includes a policy board, a technical advisory committee, and MPO staff.

Policy Board

The Policy Board (PB) for the Texarkana Metropolitan Planning Organization (MPO) is a body comprised of elected and appointed officials, including local, city, state, and federal personnel. The purpose of the Policy Board is to set the MPO's transportation policies as well as approve and adopt all transportation planning activities and programs for the MPO. The Policy Board ordinarily meets quarterly but may meet more frequently if necessary.

The Policy Board for the Texarkana MPO has fifteen members, including a chairman and a vice-chairman. Table 1-1 lists the current Policy Board members, their titles, and their jurisdictions.

Table 1: Current Texarkana MPO Policy Board Membership

Name	Title	Jurisdiction
Mary Beth Rudel	Executive Director	Ark-Tex Council of Governments (ATCOG)
Steven Hollibush	Ward 3 Director / Assistant Mayor	City of Texarkana, Arkansas
Laney Harris	Ward 5 Director	City of Texarkana, Arkansas
Robert Thompson	City Manager	City of Texarkana, Arkansas
Robert Bunch	Mayor	City of Nash, Texas
Bob Bruggeman	Mayor	City of Texarkana, Texas
David Orr	City Manager	City of Texarkana, Texas
Mary Hart	City Council	City of Texarkana, Texas
Sheryl Collum	Mayor	City of Wake Village, Texas
Cathy Harrison	County Judge	Miller County
Tom Whitten	County Commissioner	Bowie County
Sunny Farmahan	Senior Transportation Planner	Arkansas Department of Transportation (ARDOT)
William Cheatham	District 3 Engineer	Arkansas Department of Transportation (ARDOT)
Katie Martin	Planning Director	Texas Department of Transportation (TxDOT)
Rebecca Wells	District Engineer	Texas Department of Transportation (TxDOT)

Technical Committee

The purpose of the Technical Advisory Committee (TAC) is to provide technical assistance to MPO staff. The Committee's primary duties involve assisting the MPO staff with developing and reviewing essential MPO documents such as the Unified Planning Work Program (UPWP), the Metropolitan Transportation Plan (MTP), and the Transportation Improvement Program (TIP), as well as recommending adoption of these documents to the Policy Board.

The Technical Advisory Committee includes local, regional, state, and federal members who have technical and professional knowledge in the transportation field.

The Technical Advisory Committee for the Texarkana MPO has twenty seats with nineteen members (one seat is currently vacant). Table 1-2 lists the current Technical Advisory Committee members, their titles, and their jurisdictions.

Table 2: Current Technical Advisory Committee Membership

Name	Title	Jurisdiction
Vacant		Ark-Tex Council of Governments (ATCOG)
Patrick Cox	Administration and Maintenance Coordinator	Texarkana Urban Transit District (TUTD)
Jamie Finley	City Planner	City of Texarkana, Arkansas
Velvet Cool	Planning Secretary	City of Texarkana, Arkansas
Tyler Richards	Public Works Director	City of Texarkana, Arkansas
Doug Bowers	City Administrator	City of Nash, Texas
Dusty Henslee	Assistant City Manager / Public Works Director	City of Texarkana, Texas
Jonathan Wade	City Engineer	City of Texarkana, Texas
Vashil Fernandez	Planning and Community Development Director	City of Texarkana, Texas
Jim Roberts	City Administrator	City of Wake Village, Texas
Joyce Dennington	Assessor	Miller County
Thomas Whitten	County Commissioner Precinct 2	Bowie County
Anthony Hunter	Transportation Planner Multimodal Planning	Arkansas Department of Transportation (ARDOT)
Daniel Huett	Resident Engineer	Arkansas Department of Transportation (ARDOT)
Adrian Walton	Advance Planning Engineer	Texas Department of Transportation (TxDOT)
Tommy Bruce	Area Engineer	Texas Department of Transportation (TxDOT)
Paul Mehrlich	Executive Director	Texarkana Regional Airport
Truett Smith	Community Planner	Federal Highway Administration – Arkansas
Babatunde Tugbobo	Community Planner (Transportation)	Federal Highway Administration – Texas
Lynn Hayes	Community Planner	Federal Transit Administration – Region VI

Texarkana MPO Staff

Texarkana MPO's staff currently consists of a study director (MPO Director) and a transportation planner. Table 1-3 lists the MPO staff and their titles.

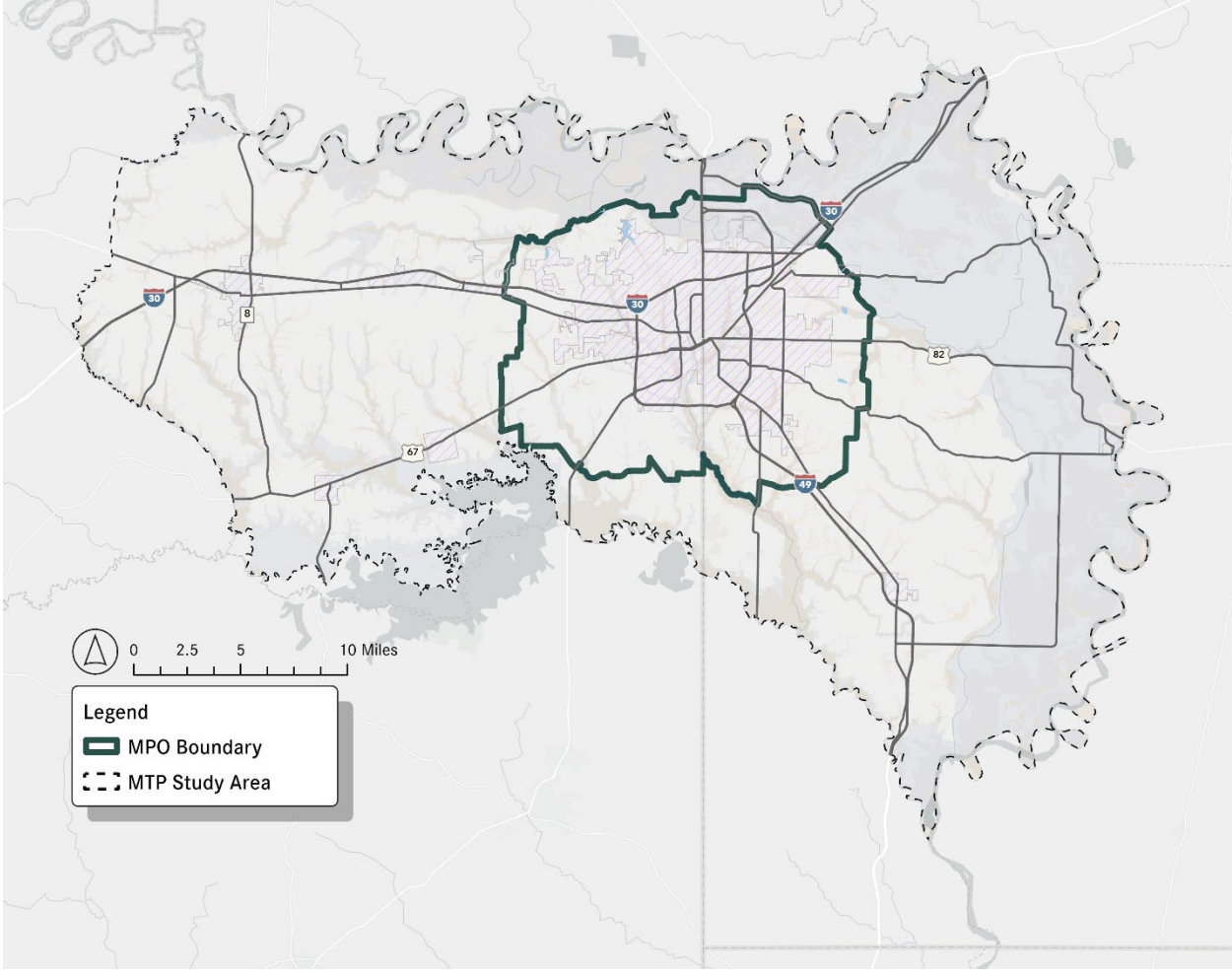
Table 3: Current Texarkana MPO Staff

Name	Title	Jurisdiction
Rea Donna Jones	Director	Texarkana MPO
Jo Anne Gray	Transportation Planner	Texarkana MPO

Texarkana MPO Planning Area

The Texarkana MPO planning area spans approximately 195 square miles in northeast Texas and southwest Arkansas, including the Cities of Texarkana, Nash, Wake Village, and Red Lick in Texas, the City of Texarkana in Arkansas, and some rural portions of Bowie County (TX) and Miller County (AR). Figure 1-1 shows the MPO boundary and MTP study area.

Figure 1-1: Texarkana MTP Study Area



Transportation Planning Process

The planning process used for the creation of the Connect to 2050 MTP update is prescribed by state and federal regulations, but the vision that drives the process is developed locally. Therefore, the visioning process focused on gathering locally generated plans and information, as well as the knowledge and wisdom of the public and local communities, while following state and federal guidelines.

The Texarkana MPO is responsible for programming regional transportation projects for implementation using federal transportation funding. The MTP provides a framework for analyzing the current and future regional travel demand and creating a blueprint for addressing the future transportation needs within the planning area. The following sections outline the process used and steps completed to develop the Connect to 2050 MTP by MPO staff and their planning partners.

Visioning Process

The purpose of the MTP is to identify the transportation needs of the community over the next 20-25 years, establish priorities for funding improvements that address those needs, and chart a course for meeting the community's vision and goals for the region. Establishing a community vision for the future of the transportation system and related goals to assist in the prioritization of transportation improvements is key to ensuring the plan reflects community values. Input from key stakeholders and members of the public was solicited throughout the entirety of the development of this plan.

The process for updating the Texarkana MTP was initiated by a series of meetings with the public, professional planners, and engineers from the MPO and its member agencies, state and local agencies, and other community stakeholders. The purpose of these meetings was to gather data and input on community needs and values to establish a framework for MTP development.

Using this information, the MPO drafted a recommended vision, set of goals, and a list of evaluation criteria to assist in prioritizing transportation improvements for inclusion in the MTP.

Needs Assessment

To develop feasible and beneficial transportation solutions for the Texarkana MPO region, it is imperative to assess the current state of the transportation system, as well as community growth trends. As part of the update to the Texarkana MTP, a needs assessment was conducted, including an inventory of the existing transportation system, a review of local plans, demographic analysis to determine existing transportation demand based on current population levels, projections of future population and employment and associated future travel demand, an assessment of the current transportation system in relation to equity and the environment, and a multi-modal assessment to interpret the extent and condition of existing transportation networks.

Systems-Level Analysis

The systems-level analysis examined how candidate projects may impact community issues that are of system- and region-wide concern. The study team incorporated this planning approach into the development of the MTP, which allowed for prioritization of transportation investments based on broader community issues in accordance with the community's vision.

Coordination with Local Plans & Programs

Ensuring that proposed improvements are consistent with local and statewide programs, plans, and their goals and objectives, as well as supporting local values and preserving existing community resources is of vital importance to the MTP development. Therefore, the project team reviewed local and statewide programs and plans to ensure consistency between the metropolitan transportation planning effort and local community initiatives.

Financial Analysis & Constraint

Fiscal feasibility is a significant priority in determining the final list of transportation improvements included in the MTP. Not only does federal legislation mandate that the MTP be fiscally constrained and only include projects that can be reasonably expected to have adequate funding, but certain projects also require that area communities contribute local matching funds to receive federal funding. The process for establishing both estimated costs and revenues is critical for the creation of a viable MTP.

Revenue Projection

A revenue projection was developed that identified the anticipated revenue stream for local, state, and federal funds. This revenue stream was factored to account for inflation at the anticipated year-of-receipt.

Project Costs

Cost is defined as the total project cost, which includes planning elements (e.g. environmental studies and functional studies), engineering costs (e.g. preliminary engineering and design), preconstruction activities (e.g. schematic and environmental, right-of-way acquisition, and corridor preservation), construction activities, and contingencies. Project costs were provided by the sponsoring agency for any projects submitted through the Connect to 2050 MTP Call for Projects. Any projects that were carried over from existing plans already included project costs.

Fiscal Constraint Analysis

A fiscal constraint analysis was performed that compared the anticipated year-of-expenditure costs to the anticipated year-of-receipt revenues to determine if sufficient and timely financial resources were likely to exist to fund the proposed program of projects.

Selecting a Proposed Program of Projects

Based on the submitted project costs and revenue projections, the program of fiscally constrained projects anticipated to best accomplish community-defined goals and objectives was selected by the Technical Advisory Committee and then submitted to the Policy Board for review and approval. The MPO's Policy Board was then able to review these recommendations and make measured and fiscally constrained choices. The final MTP Project List is shown in Chapter 7.

Adoption Process

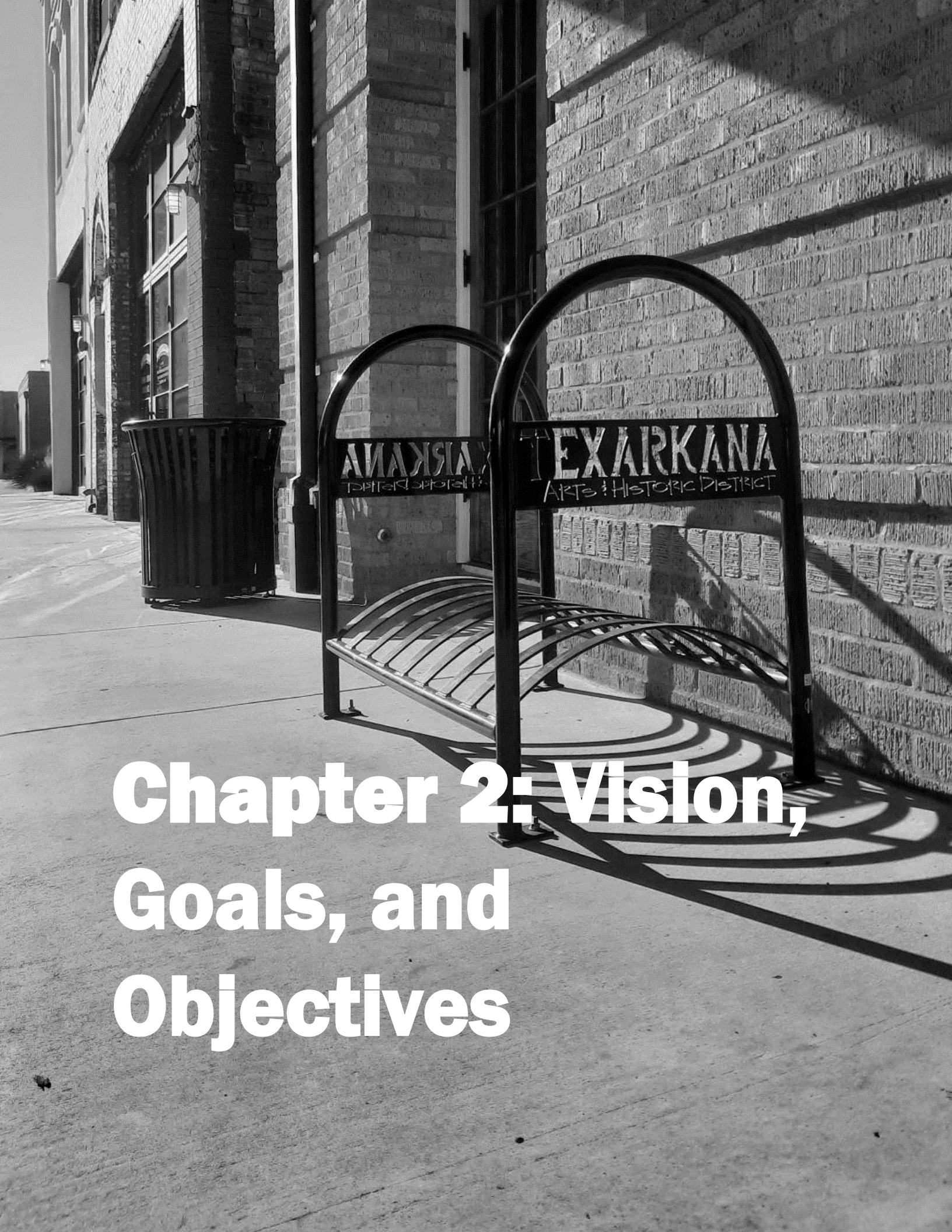
The preliminary program of projects was approved by the Policy Board on August 1, 2024. The preliminary transportation recommendations and associated list of proposed projects resulting from the project selection and fiscal constraint analysis, along with the results of the technical analysis and public input, were included in the draft MTP document.

Public Review of the Draft Connect to 2050 MTP

On August 1, 2024, the draft plan was presented to the public and their feedback was solicited throughout the 30-day public review period online, in written format, and during two public meetings as outlined in the MPO's adopted Public Participation Plan (PPP).

Adoption of the Final Connect to 2050 MTP

The final MTP, which incorporated any comments received during the 30-day public comment period, was presented to the Policy Board for adoption on September 18, 2024. The approved MTP has an effective date of September 18, 2024.



Chapter 2: Vision, Goals, and Objectives

Introduction

The project team reviewed previous planning efforts as well as current initiatives, and performance-based plans, and proposed the vision and goals in this chapter for the Connect to 2050 Texarkana MTP, based on an evaluation of the existing regional plans and required planning factors. In addition, the resulting vision and goals aim to support both local and national priorities in transportation.

Plan Review

2045 Metropolitan Transportation Plan (2019)

The Texarkana 2045 Metropolitan Transportation Plan (MTP) identifies the community's transportation needs over the 25-year planning horizon from 2020 to 2045. The MTP covers a geographic region that includes the city of Texarkana and Miller County, Arkansas, and the cities of Texarkana, Nash, and Wake Village, Texas, along with portions of Bowie County, Texas. Guided by federal planning factors and local community input, the 2045 MTP envisions "a reliable multimodal transportation system which ensures safety for all transportation system users, equitably enhances accessibility and connectivity within the region and beyond, preserves the environment, and promotes a high quality of life and economic wellbeing."[1] Towards this end, the 2045 MTP contains an evaluation of current transportation network conditions, various transportation improvement strategies, and environmental impacts. The plan also outlines a financial analysis and public involvement process which helped to inform the concluding staged improvement plan with individual transportation project details. Importantly, the visioning and public involvement process identified community concerns regarding traffic congestion, safety, freight mobility, transit service, airport access, and infrastructure needs.

2045 MTP Goals[2]

- *Safety*: Improve safety for all who travel in the region.
- *Operations and Maintenance*: Maintain the current transportation system in a state of good repair and maximize functionality.
- *Mobility*: Improve the ability for travelers to reach destinations quickly and efficiently.
- *Accessibility and Travel Choice*: Provide a variety of reliable transportation options that are equitable and context sensitive.
- *Sustainability*: Enhance the performance of the transportation system while protecting and enhancing the natural environment.
- *Economic Vitality*: Expand economic opportunities and strengthen the regional freight network.

[1] Texarkana MPO (2019). 2045 MTP. pg. 2-13.
[2] Ibid. pg. 2-16.

- *Quality of Life*: Implement plans, programs, and projects that contribute to the overall goals and objectives defined in the 2045 MTP to ensure an enhanced quality of life in the Texarkana region.

Specific projects in this report:

- Chapter 8 of the 2045 MTP contains tables and maps of fiscally constrained projects listed with descriptions, type, location, cost, and sponsor information for short to long term implementation stages. Projects from the 2045 MTP that have not yet been implemented will be brought forward into this 2050 MTP update for reevaluation and assessment.

Federal Plans/Legislation

Beyond the federal legislation that mandates specific components of a metropolitan transportation plan, additional federal plans and legislation will impact the 2050 MTP update.

Infrastructure Investment and Jobs Act (2021)

The IIJA, also referred to as the Bipartisan Infrastructure Law (BIL), authorized billions of dollars in spending for transportation and infrastructure projects. The IIJA also provided additional funding for existing programs, created new programs, and established new regulations and requirements for how funding is utilized. Through the IIJA, there have been some changes to the regulations and guidance relevant to MPOs. MPOs now have a requirement to set aside 2.5% of the annual budget for investment in alternative transportation modes. Additionally, MPOs are now required to take state and local housing patterns into consideration during the planning process. Other changes include allowing social media to be used for public participation and requiring MPOs to consider representation of the population of the planning area when initially designating officials for board representation.[3] MPOs are also eligible to apply for numerous IIJA grant programs, such as the sample ones described below. The FHWA and the US DOT have resources that identify all grant programs authorized by the IIJA, with funding amounts, categorization, and applicant information that is useful for MPOs.[4,5] Projects in the 2050 MTP update can be tailored to ensure eligibility for these programs.

PROTECT Grant: The PROTECT Discretionary Grant program is available to MPOs to improve the resilience of surface transportation infrastructure to natural hazards through projects and planning activities. There are three categories of PROTECT Grants: planning, resilience improvements, and evacuation route/community resilience.

Surface Transportation Block Grants (STBG): The IIJA continues the STBG funding opportunities from the FAST Act with a few different features. For instance, the STBG is now required to set aside 10% of funds for alternative transportation projects. Projects that are eligible for the alternative transportation set aside include pedestrian and bicycle facilities, along with trails and environmental mitigation projects. Moreover, multiple new activities are now eligible for funding through the STBG, such as the maintenance and restoration of existing trails or the creation of dedicated bus lanes.

[3] FTA (2021). Fact Sheet: Metropolitan, Statewide & Non-Metropolitan Planning. Accessed July 2023.
[4] FHWA (2023). Bipartisan Infrastructure Law. Competitive Grant Programs. Accessed September 2023.
[5] US DOT (2023). Bipartisan Infrastructure Law Grant Programs. Accessed September 2023.

National Highway Performance Program (NHPP): NHPP funds are continued as a provision of the IIJA, so that the National Highway System can meet the established performance targets. In addition, NHPP funds can also be used to increase the resilience of the National Highway System and mitigate the cost of natural hazards to the system.

National Highway Freight Program: The National Highway Freight Program aims to support the efficient movement of freight on the National Highway network. The IIJA continues this program and adds new eligibility for intermodal freight projects.

Reconnecting Communities Pilot Program: The Reconnecting Communities Pilot discretionary grant program was established by the IIJA and aims to reconnect communities that have been cut off by transportation infrastructure. MPOs are eligible to apply for this program, which can be used for projects that remove or retrofit existing facilities to improve connectivity and economic opportunity.

Charging and Fueling Infrastructure (CFI) Discretionary Grant Program: The IIJA has a significant amount of new funding for electric vehicles and charging infrastructure. One of these programs is the CFI discretionary grant program, which is available to MPOs. Electric vehicle charging infrastructure as well as other alternative refueling infrastructure projects along the Alternative Fuels Network are eligible uses of funding.

Strategic Plan FY 2022-2026 (U.S. DOT): The Strategic Plan from the U.S. DOT is a long-term strategy for actions and goals related to the operation, maintenance, and development of the American transportation network. Goals in this plan include safety, economic strength and competitiveness, equity, climate and sustainability, transformation for the future, and organizational excellence. This plan focuses primarily on agencies at the federal level. However, many of the goals, strategies, and objectives are applicable at the state and regional level, as well. For example, customer service and workforce development, safe designs, and accessibility are important focus areas at all agency levels.

State Plans

The Texarkana MPO is one of the few MPOs nationwide that includes multiple states within its boundaries. For this reason, plans from both Texas and Arkansas were reviewed. In particular, the Texas Department of Transportation (TxDOT) and Arkansas Department of Transportation (ARDOT, previously the Arkansas State Highway Agency) have multiple plans that impact the Texarkana region and were developed through departmental collaboration with state MPOs.

Texas

2024 Unified Transportation Program (TxDOT)

The statewide Unified Transportation Program (UTP) gives an overview of the current and expected transportation projects in the state within 10 years. Texas state law requires that TxDOT publish the UTP annually. As part of the comprehensive planning process, the UTP is aligned with the long-term transportation goals for Texas. These goals are to promote highway safety, preserve existing infrastructure assets, and optimize system performance. In addition, the UTP specifies performance measures for each goal for the target year of 2033. Performance measures to achieve the established goals include assessments of fatalities per year, fatality rates, pavement and statewide bridge condition scores, urban congestion, and use of the rural reliability index.

The UTP projects from the Texarkana MPO, along with each urbanized area in the state, are included in the statewide UTP. Texarkana is located within the Atlanta TxDOT District. The Atlanta District primarily receives funding for projects within categories 4 (statewide connectivity corridor) and 1 (preventative maintenance and rehabilitation). The Atlanta District and the Texarkana MPO work together to manage the regional transportation network within the Texarkana Metropolitan Planning Area.

Specific regional projects in this report include:

- IH 30 Red Lick bridge replacement from FM 3419
- US 82 widening from De Kalb to New Boston
- US 82 widening 0.1 miles west of CR 3403 to 0.1 miles west of US 259
- US 71 State line rehabilitation from 0.2 miles south if IH 30 to US 67 (7th Street)

Projects from the UTP will be reviewed for concurrence to ensure that they are still included in the full list of projects pulled forward from the 2045 MTP. New projects since 2019 will be added to the full list of projects.

Texas Statewide Transportation Improvement Program (STIP) FY 2023-2026

The 2023-2026 STIP for Texas is an extensive document that outlines information for each individual current and near-term transportation project in the state. There are seven strategic goals that guide the STIP: (1) promote safety, (2) deliver the right projects, (3) focus on the customer, (4) foster environmental stewardship, (5) optimize system performance, (6) preserve assets, and (7) value employees. The Texarkana MPO has its own section in the STIP on page 789. This page details two specific projects:

- Widen a portion of FM 989 from a 2-lane highway to a 4-lane divided highway.
- Construction of frontage roads, entrance/exit ramps, and turnarounds on IH-30.

Projects from the STIP will be reviewed for concurrence to ensure that they are still included in the full list of projects pulled forward from the 2045 MTP. Where applicable, new projects since 2019 will be added to the full list of projects.

Texas Guide to Safe Bicycling (TxDOT, 2022)

This guidebook informs cyclists of safety considerations and relevant laws for riding a bicycle in the state. Bicycling is described as a fun and attractive option for transportation and exploration of Texas. Because bicycles are a form of vehicle, riders need to understand how to ride safely and legally. The guide explains the rules of the road, necessary bike equipment, special circumstances, and instructions for after a crash. This guide provides an abundance of generalized information for biking in the state.

Transit Asset Management Plan 2023-2036 (TxDOT)

The Transit Asset Management Plan covers numerous rural public transit providers and other public transportation agencies as a group sponsored plan that complies with 49 CFR 625. TxDOT worked with transit providers to determine the condition of rolling stock, facilities, and equipment. The goal

of this report is to help maintain a state of good repair for transit assets. According to the plan, an estimated $35 million per year will be required to meet the established state of good repair goals. Texarkana Urban Transit District and the Ark-Tex Council of Governments are transit agencies that are included in this report. The Texarkana Urban Transit District, or T-Line, is listed as having four rolling stock assets in need of immediate replacement. Additionally, one asset is listed as needing replacement in year four for the Ark-Tex Council of Governments fleet.

Projects and Capital Expenditures in the TAM Plan will be used in the development of the full-build transportation network and list of projects.

ADA Self-Evaluation and Transition Plan (TxDOT, 2022)

This report examines the accessibility of sidewalks, rest stops, and buildings, that are part of TxDOT transportation infrastructure and services. Federal law requires that TxDOT conduct this self-assessment to inventory and remove all types of barriers for people with disabilities. As part of this assessment, several thousands of signal pushbuttons, curb ramps, etc. were evaluated, along with 157 TxDOT facilities such as safety rest stops. There is a travel information center located in Texarkana, which was evaluated in the report. The facility has an estimated remediation cost of $141,615 planned for 2023. Projects to remedy non-compliant facilities are prioritized by entrance accessibility first, then by access to services, restrooms, and other accommodations. Supplementary material for the plan identifies 11 projects in the Atlanta TxDOT district for sidewalks and shared use paths along roadways.

These projects will be reviewed for concurrence to ensure that they are still included in the full list of projects developed for this 2050 MTP update.

2022 Transportation Asset Management Plan (TxDOT)

The Transportation Asset Management Plan for Texas assesses the conditions of bridges and pavement. Keeping the transportation network in a state of good repair is essential to public safety and long-term structure operation. TxDOT coordinates with MPOs across the state in order to achieve the goals of 90% of bridges and roads in good condition, deliver the right projects, foster stewardship, optimize system performance, and preserve infrastructure assets.

Texas Strategic Highway Safety Plan 2022-2027 (TxDOT)

The goal of the Strategic Highway Safety Plan (SHSP) is to prevent crashes, reduce crash severity, and enhance emergency response. While the SHSP does not specifically mention Texarkana or the Texarkana MPO, it is important in that the vision is a future with zero traffic fatalities and serious injuries. MPOs play an important role in implementation of the Strategic Highway Safety Plan and work to realize Vision Zero within their planning area and within the state. Some examples of safety strategies from the plan are to: keep vehicles from encroaching on the opposite lane, reduce speeding, expand intersection safety practices through planning and design, and increase public education and outreach efforts.

Arkansas

Arkansas Statewide Transportation Improvement Program (STIP) FY 2023-2026

The 2023-2026 STIP for Arkansas addresses the performance of safety, transit, infrastructure condition, and system reliability in the state. Performance measures specified in the STIP include federally mandated performance measures like number of fatalities, fatality rate, serious injury rate, and pavement and bridge conditions, and a Useful Life Benchmark. The STIP also lists all current and near-term transportation projects with estimated costs and details. The Texarkana MPO is one of eight MPOs in Arkansas. There are around 40 individual entries listed for TUTS, or the Texarkana Urban Transportation Study MPO in the STIP. Some of these entries involve specific road and highway projects and some are for other purposes such as planning or maintenance. Projects will be reviewed for concurrence to ensure that relevant projects are included in this 2050 MTP update.

Highway Safety Improvement Program (ARDOT, 2022)

The Safety Improvement Program from ARDOT describes the process by which safety research and efforts are implemented in the state to satisfy federal requirements. The purpose of the program is to achieve a significant reduction in crashes, fatalities, and injuries on public roads. MPOs are part of the steering committee for the program, along with the FHWA, Highway Safety Office, and Arkansas State Police. Coordination among the steering committee helped to develop the performance targets and measurements for highway safety. Performance measures include the number of fatalities and other data about the severity of crashes on highways in the state. Programs administered under the Highway Safety Improvement Program include intersections, median barriers, roadway departure, shoulder improvement, guardrails, crash data, etc.

2022 Asset Management Plan (ARDOT)

The Transportation Asset Management Plan was prepared to comply with federal requirements outlined in 23 CFR Part 515. This plan assesses and inventories the condition of physical assets in the state, such as highways and bridges, and provides strategies to maintain an acceptable state of good repair over asset lifecycles. To anticipate costs and future conditions, the plan predicts conditions for pavement and bridges in 2031. Some wide gaps were identified between the desired state of good repair and the current performance for pavements. However, with available funding expected to increase, the gap will decrease over the next decade and enable repair and maintenance of both bridges and highways.

Arkansas Bicycle and Pedestrian Transportation Plan (ARDOT and partners, 2017)

This plan seeks to help improve the state's ranking in bicycle friendliness and understand the needs of pedestrians and bicyclists. The goals described by the plan are to realize economic benefits, develop a statewide network that supports bicycling and pedestrian access for transportation and recreational purposes, and reduce crashes. The Texarkana MPO was a partner that worked with ARDOT to develop the plan. There are many general recommendations to support active transportation, with an emphasis on collaboration, but specific capital projects were not identified. However, Appendix C contains a list of 23 bikeway study corridors. One corridor is the US Bike Route 82 in the Texarkana area, which would connect Texarkana to the Northeast Texas Rail Trail.

Arkansas Long Range Intermodal Transportation Plan (ARDOT, 2017)

The Arkansas Long Range Transportation Plan has the goals of improving safety and security, economic competitiveness, infrastructure condition, environmental sustainability, and reliability for the multimodal transportation system. Coordination with MPOs played a part in the formation of the plan, along with stakeholder meetings and interviews. The plan is an overview of the statewide transportation needs, funding, actions, and strategies for a 25-year planning horizon.

Bicycle Safety in Arkansas (Arkansas Department of Parks and Tourism)

The Bicycle Safety in Arkansas guidebook provides bicyclists information and advice about how to ride safely and legally in the state. The guidebook was produced by the Arkansas Department of Parks and Tourism, State Highway and Transportation Department, and State Police. There are four basic bicycle safety principles explained in the report: maintaining control of the bicycle, riding with traffic, being visible and alert, and protecting yourself. The guidebook has instructions for riding on all types of bicycle facilities, roadways, and conditions. People have a right to ride on the roads, streets, and highways in Arkansas and need to know how to safely reap the benefits of this mode of transportation.

Regional Plans

MPO

FY 2022 Annual Project Listing (Texarkana MPO)

MPOs are required to publish an Annual Project Listing (APL) that identifies all projects in the region that have obligated federal transportation funds over the year. The 2022 APL for Texarkana lists each project from October 1, 2021, to September 30, 2022, which received funding from the federal government. The Texarkana MPO submits two APL documents, one through TxDOT and one through ARDOT. Some projects may extend beyond the boundaries of the Texarkana MPO planning area.

Specific projects in this report:

- The appendix lists each federally obligated transit, roadway, and sidewalk improvement project. Projects will be reviewed for incorporation into the development of the 2050 MTP update.

Texarkana Stateline Corridor Plan (Texarkana MPO, 2022)

The Stateline Corridor Plan directs improvements for a 2.75-mile-long corridor along Stateline Avenue, which straddles the two Texarkana municipalities in Texas and Arkansas. The plan envisions a corridor that "will function as a complete street for all citizens, providing a safe, efficient, and attractive experience…whether you are driving, walking, enjoying a bike ride, and/or taking the bus."[6] Priorities of this plan are safety, efficiency, and revitalization. Two alternatives for the corridor are presented in the plan: the Boulevard Concept and the Redevelopment Concept. Both alternatives are explored in detail and aim to improve pedestrian safety and access.

Specific project recommendations in this report:

[6] Texarkana MPO (2022). Stateline Corridor Plan. pg. 16.

- Page 71 contains safety improvement projects for the corridor:
    - Boulevard Concept Alternative: raised median
    - Redevelopment Concept Alternative: reduce number of driveways, extend pedestrian facilities from Texas Blvd. To W. 52nd street, and narrow travel lanes
    - Design considerations from both alternatives: shared use paths, mid-block crossing
- Pages 82-83 have corridor specific action items to implement that include projects such as:
    - Lane reconfiguration, shared use path installation, street furniture installation, establish landscape areas, etc.

Texarkana 10 Year Unified Transportation Plan (UTP) FY 25-FY 34 (Texarkana MPO)

As required by HB 20, each MPO in Texas must publish a 10-year UTP that describes the use of Category 2 Urbanized (Non-TMA) Corridor Project funding. Projects in the UTP are recommended based on consideration of: (1) projected improvements to congestion and safety; (2) projected effects on economic development opportunities for residents of the region; (3) available funding; (4) effects on the environment, including air quality; (5) socioeconomic effects, including disproportionately high and adverse health or environmental effects on minority of low-income neighborhoods; and (6) any other factors deemed appropriate by the planning organization. Projects will be reviewed for consistency and incorporated into the 2050 MTP update.

Specific projects in this report:

- IH 30 widening from 4 lanes to 6 lanes 0.6 miles west of FM 989 to Arkansas State Line (project included for informational purposes only)
- IH 30 frontage road construction from FM 3419 TO FM 989
- FM 989 (Kings Hwy) widening from 2 lane to 4 lane divided urban section at IH 30 N Frontage Road to 0.3 miles north of Gibson Lane
- IH 30 bridge replacement at FM 3419
- US 71/Stateline reconstruction of 4 lane divided highway 0.2 miles south of IH 30 to US 67 (7th Street)
- FM 989 (Kings Hwy) widening to 4 lane divided highway with turn lanes at IH 30 South Frontage Road to 0.5 miles south of US 82
- US 67 (Redwater Rd) widening from 2 lane divided highway to 4 lane divided highway 0.2 miles west of FM 989 to FM 2148(S)
- FM 1397 (Summerhill) widening from 2 lane highway to 4 lane divided highway at University Avenue to 0.1 miles north of North Park Road

Texarkana Regional Thoroughfare Plan (Texarkana MPO, 2022)

The Regional Thoroughfare Plan is used to guide development of the multimodal transportation system to enable the city to preserve right-of-way corridors long term. The goals of the plan involve *quality of life, community safety, environmental sustainability, multimodal accessibility, and regionalism*. In order to support the goal of regionalism, this plan covers geographic areas beyond the cities of Texarkana to include all of Bowie County, Texas and Miller County, Arkansas. Topics discussed in the plan are public engagement, zoning and land use, existing and future projections for roadways, demographic and environmental considerations, and proposed projects. Moreover, the plan outlines policies, a multimodal project prioritization tool, complete streets cross sectional design concepts, and contextual considerations for the region during transportation project development. While the plan does not include specific projects, the policies and prioritization tools will be considered in development of the 2050 MTP list of projects.

2019 Freight Mobility Plan (Texarkana MPO)

The purpose of the Freight Mobility Plan is to improve the safety and reliability of Texarkana's multimodal freight transportation system, which will help to support economic opportunities and improve quality of life. The Texarkana freight plan adopts some of the goals of the statewide freight plans from TxDOT and ArDOT. These goals focus primarily on safety, economic competitiveness, infrastructure preservation and maintenance, mobility and reliability. Projects listed address the priority needs of capacity, operations, asset preservation, safety, multimodal and rural connection.

Specific projects in this report:

- Appendix A has a list of all projects within the Freight Mobility Plan with location, cost, and funding source details. Relevant projects will be reviewed and incorporated into the development of the 2050 MTP update.

Texarkana Regional Active Transportation Plan (Texarkana MPO, 2018)

The Texarkana Regional Active Transportation Plan provides a unified comprehensive vision for sidewalks, bike lanes, off-road trails, and other pedestrian or active transportation facilities. The plan assesses the existing conditions of sidewalks, bicycle facilities, and transit connectivity. Additionally, the plan describes design guidelines and elements of various typologies of active transportation facilities and users so that the subsequent public outreach and project identification/prioritization sections are connected to community needs. Around 40 active transportation related projects are listed in the plan with descriptions and details on location, safety, costs, and priority ranking.

Specific projects in this report:

- Chapter 5 identifies around 40 specific projects with a map, priority ranking, description, funding information and more, provided for each. Projects will be reviewed and included in the 2050 MTP update as appropriate.

Sidewalk Inventory and Analysis (Texarkana MPO, 2017)

The Sidewalk Inventory and Analysis, conducted in 2017 through partnership with Data Transfer Solutions, LLC, presents information collected from an evaluation of over 1,000 centerline miles of roadway within the MPO planning area. This analysis provides the MPO detailed information on the presence and condition of sidewalks. The report found a total of 2,645 segments of sidewalk

spanning 121 miles. The average sidewalk segment was reported to be around 241 feet long and 4.20 feet wide. Sidewalk conditions were mostly good, with nearly 87 miles in good condition and the remaining 34 miles in poor or fair condition. The sidewalk network inventory is mapped and helps to direct investment to areas that need improvements or repairs to pedestrian facilities.

2006 Texarkana Regional Mobility Plan (Texarkana MPO)

The Regional Mobility Plan for Texarkana was adopted in 2006. This plan sets a basis for current and ongoing work to improve the Texarkana transportation system. This plan also contributed to the Texas Urban Mobility Plan (TUMP) and Texas Metropolitan Mobility Plan (TMMP) from the early 2000s. The TUMP and TMMP are comprised of regional mobility plans from across the state. The Texarkana Regional Mobility Plan outlines the urbanized area boundary, demographic information, travel forecasting, and strategies to meet the goals of TxDOT. This plan, and the larger TUMP were a first step in addressing transportation improvement and funding needs from 2005-2030. However, the Texarkana plan calls for additional screening methods to consider factors like safety, air quality, and economic opportunity to make more informed decisions about transportation investments.

Ark-Tex Council of Governments

Ark-Tex Council of Governments (ATCOG) Regionally Coordinated Public Transportation Plan (2022)

This plan coordinates 3 public transportation providers across the 9-county region to address transit needs. The counties included in the plan are Bowie, Cass, Delta, Franklin, Hopkins, Lamar, Morris, Red River, and Titus County. The TRAX rural transit district provides on-demand service to the entire region, while Paris Metro provides fixed route service to the City of Paris, and T-line provides fixed route service in Texarkana, Texas and Texarkana, Arkansas. The goal of this plan is to increase mobility for the public, especially for those individuals with disabilities, older adults, low-income individuals, and other historically disenfranchised groups. Lessons learned from the gap analysis and needs assessment in this report are that there is a need for better communication and information sharing between organizations. Cass, Morris, and Delta County each demonstrated a considerable lack of transit service. Moreover, the report identified that there might be an opportunity to work with Arkansas to better serve residents that need to travel across state lines.

Local Plans

Municipal

Texarkana, Arkansas 2040 Comprehensive Plan (2023)

The Texarkana, Arkansas comprehensive plan update was just completed in 2023. The last comprehensive plan was created in the late 1980s. Main goal areas focus on *enduring neighborhoods and places, quality of life and image, infrastructure*, and *fiscal health*. In addition to demographic information, public involvement, and land use sections, a mobility plan is included as part of the comprehensive plan. The mobility plan provides recommendations to improve multimodal transportation facilities and systems. The master street plan depicts existing interstates, arterials, and collectors along with several proposed arterials and collectors, and one proposed interchange. Additionally, a draft active transportation plan presents existing and proposed trails, pedestrian

paths, and bikeways. Major themes of the recommendations include connectivity to downtown for all modes, complete streets throughout older neighborhoods, and safe options for travelers.

With respect to consideration of housing, the plan identifies two areas targeted for infill development: Jefferson Avenue and N. Stateline Infill District and College Hill Infill District. The strategy to encourage infill includes new zoning regulations as well as mobility enhancements that improve walkability and connectivity to public amenities, green spaces, and transit. These areas can be considered to coordinate projects in the 2050 MTP update.

Renew Texarkana, Texas (2018)

The current comprehensive plan for Texarkana, Texas encompasses a range of suggestions with a goal to renew connections and capitalize on opportunities to improve the quality of life in Texarkana.[7] Many of the goals and suggestions for the city revolve around transportation improvements. While the plan includes a section dedicated to current and future transportation systems, each of the remaining sections in the Comprehensive City chapter consider topics like street design, safety, pedestrian facilities, and trails as well. Public involvement is a central component of the plan and revealed that the quality of pedestrian facilities is very important to the community. Some of the proposed elements for the city's future transportation system include multimodal hubs, healthy corridors, and trails for active transportation. The plan explains that a safer, more accessible, and connected transportation network will have a profound impact on the quality of life and economic opportunities in the city, which directly ties into the overall goal of the comprehensive plan.

Like the Texarkana, Arkansas plan, this document encourages strategies that promote walkability and transportation options in "in-town" neighborhoods near downtown to spur infill development. Streetscape improvements are proposed throughout many neighborhoods, including Beverly, Highland Park, and Rose Hill.

University Planned Development District (City of Texarkana, Texas, 2012)

The University Planned Development District (UPDD) outlines design and development standards for properties within the district. More specifically, land use is regulated for the areas in and around the Texas A&M University - Texarkana campus. Some of the goals for the UPDD are to provide compact and integrated land uses with variation in housing types to encourage economic activity and establish district character and vitality. Relevant to transportation, the UPDD calls for pedestrian-oriented businesses, walkability, and designs that accommodate vehicles, pedestrians, and bicycles. The UPDD is a zoning mechanism that is referenced as an example in the 2022 Texarkana Stateline Corridor Plan. The proposed Redevelopment Concept alternative for the Stateline Corridor could be achieved through an Overlay District like that of the UPDD.

Other

Texarkana Regional Airport Master Plan Draft (2024 expected completion)

The Texarkana Regional Airport (TXK) provides the region with general and commercial aviation service. Moreover, TXK plays an important role in connection to the economic market and larger transportation network. The airport master plan is currently being developed through an Airport

[7] City of Texarkana, TX (2018), Renew Texarkana Comprehensive Plan. pg. 76

Improvement Grant from the Federal Aviation Administration, with a final report expected to be delivered in 2024. The goal of the plan is to create a "financially feasible, long-term development program, which will satisfy aviation demand of the region; be compatible with community development, other transportation modes, and the environment; and enhance employment and revenue for the local area."[8] The plan examines current and future needs for facilities like terminals, hangars, and taxiways, as well as access roads and parking. A majority of the plan is focused on land use, inventory, facilities and forecasting relevant within the bounds of the airport. However, some alternatives do consider airport expansion. The chapters for recommended plan concepts and the capital improvement program are not yet available.

Specific projects in this report:

- Chapter 5 will contain recommended project concepts.
- Some expected major project considerations are extending the primary runway and improving the taxiways.

CHRISTUS St. Michael Health System Community Needs Assessment 2020-2022

CHRISTUS St. Michael is a non-profit healthcare delivery system that provides medical care in Texarkana, Texas. The most recent Community Health Needs Assessment, which is required by law, is for the years 2020-2022. Numerous variables, such as demographics, health concerns and conditions, and available resources were analyzed using a mixed methods approach. Interviews were conducted to gather this information and revealed a lack of transportation as a significant barrier to healthcare access within the community. As an example, access to specialty medical services is limited and often requires travel.

Wadley Regional Medical Center

The Wadley Regional Medical Center also provides healthcare services to the Texarkana region. While a Needs Assessment report or plan from Wadley Regional Medical Center is not yet available, there are plans for expansion. A new medical campus is expected to be completed in late 2025 with a full-service hospital and Medical Office Building. The expansion of the Wadley Regional Medical Center will improve access to care for the Texarkana metropolitan area.[9] The impacts of this proposed expansion will be considered in this 2050 MTP update.

Key Findings

The plan review revealed that there are several common themes and goals for the current transportation plans within the Texarkana MPO planning area across various levels of government. Federal directives guide the planning process for transportation projects and establish requirements that must be met to receive federal funding. Texas and Arkansas both have departments of transportation that work together with MPOs to develop, operate, and improve their respective

[8] TXK, (2023). Airport Master Plan. pg. i-3.
[9] Wadley Regional Medical Center (2023). Construction begins on the replacement facility for Wadley Regional Medical Center. Accessed September 2023.

statewide transportation systems. At the local level, transportation is recognized as an essential component of economic development, housing production, and quality of life for residents.

Overall, the plans that were reviewed had common general goals of boosting economic activities and opportunities, fostering environmental stewardship, providing a high quality of life, and improving communication amongst governmental agencies and stakeholders. These general goals apply the purpose and procedures of the multimodal transportation system to a broader context because of the great significance of transportation. Common goals for the improvement of the transportation system itself include improving safety, enhancing the functionality of operations and maintenance, and preserving transportation infrastructure assets. Lastly, there was a common theme throughout many of the plans to improve the mobility, accessibility, connectivity, and reliability of the transportation system.

The vision statement from the Texarkana 2045 MTP was "that the Texarkana MPO planning area will be served by a reliable multimodal transportation system which ensures safety for all transportation system users, equitably enhances accessibility and connectivity within the region and beyond, preserves the environment, and promotes a high quality of life and economic wellbeing."[10] Goals from the 2045 MTP, as mentioned above, include improving safety, operations and maintenance, mobility, accessibility and travel choice, sustainability, economic vitality, and quality of life for residents. To continue the progress and efforts of the previous MTP, the Connect to 2050 Texarkana MTP update will carry forward similar goals for consistency.

Planning Factors

Federal Government Requirements

According to 23 CFR Part 450 Subpart C, MPOs are required to carry out a continuing, cooperative, and comprehensive performance-based multimodal transportation planning process. In addition, the MPO must consider the following factors:

- Economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency
- Strategies to increase the safety of the transportation system for motorized and non-motorized users
- Strategies to increase the security of the transportation system for motorized and non-motorized users
- Strategies to increase accessibility and mobility of people and freight
- Environmental protection, energy conservation, quality of life, and consistency between transportation improvements and State and local planned growth and economic development patterns

[10] Texarkana MPO (2019). 2045 MTP. Pg. 2-13.

- Strategies to enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
- System management and operations
- Preservation of the existing transportation system
- Strategies to enhance travel and tourism
- The scale and complexity of regional/contextual issues, including transportation system development, land use, employment, economic development, human and natural environment (including Section 4(f) properties as defined in 23 CFR 774.17), and housing and community development

As part of the MPO planning process, the 2050 Texarkana MTP goals must address the required planning factors and be consistent with other regional and state goals.

Other Planning Issues to Consider

The Texas Association of MPOs (TEMPO) is an organization with the purpose of exchanging information between MPOs and educating MPO directors. TEMPO outlined the following planning issues as necessary topics of consideration for MPOs:[11]

- Security
- Safety
- Freight and Goods Movement
- Regional Economic Development
- Sustainability and Livability
- Environmental Mitigation
- Environmental Justice
- Tackling the Climate Crisis
- Equity and Justice40 in Transportation Planning
- Complete Streets
- Planning and Environmental Linkages (PEL)
- Data in Transportation Planning
- Mobility
- Transportation Systems Management and Operations

[11] Texas Association of MPOs (2023). MPO 101 Workshop. 2023 Summer Meeting PowerPoint. Pg. 25.

- Asset Management
- Regional Coordination
- Virtual Public Involvement
- STRAHNET/ DOD Coordination
- Federal Land Management Agency Coordination
- Public Participation

These planning issues relate closely to the planning factors that are required by legislation and also helped inform the goals and vision of the Texarkana 2050 MTP.

While there is not an equivalent organization to TEMPO for the state of Arkansas, the strategic goals of ARDOT can be used to inform the development of goals for Texarkana's 2050 MTP. The Full Steam Ahead 2023-2028 strategic plan from ARDOT states that their overarching purpose is to "deliver a modern transportation system to enhance safety and quality of life in Arkansas." Moreover, the strategic plan lists goals and objectives for the system, service, employees, and partners. Goals and objectives from the strategic plan that can be incorporated into the 2050 Texarkana MTP are listed below:[12]

- Provide innovative transportation solutions to improve safety and mobility.
    - Plan, develop, operate, and maintain an efficient, reliable, and resilient highway system
    - Focus on all aspects of safety
    - Continue to emphasize system preservation
    - Excel at project delivery
    - Manage assets in a transparent, data-driven, and cost-effective manner
    - Ensure environmental stewardship
- Collaborate and strengthen partnerships.

There are seven strategic goals from TxDOT, which are similar to those of ARDOT. The goals for TxDOT (besides the goals dealing with customer service and employees) are listed below:

- Optimize system performance
- Deliver the right projects
- Promote safety
- Preserve our assets

[12] ARDOT (n.d.) Full Steam Ahead 2023-2028 Strategic Plan.

- Foster stewardship

Each of the strategic goals from TxDOT tie directly into the vision of "delivering mobility, enabling economic opportunity, and enhancing quality of life for all Texans."[13]

[13] TxDOT (2022). 2023-2027 Strategic Plan.

Vision

The previous vision statement from the 2045 MTP is that "Texarkana MPO planning area will be served by a reliable multimodal transportation system which ensures safety for all transportation system users, equitably enhances accessibility and connectivity within the region and beyond, preserves the environment, and promotes a high quality of life and economic wellbeing."[14] This vision was developed through a series of outreach efforts such as stakeholder interviews and online tools, which are outlined in the MPO's Public Participation Plan.

Based on the past MTP vision, the following preliminary vision statement was offered for input from stakeholders and the public:

"The multimodal transportation system of the Texarkana MPO planning area will equitably and reliably serve the needs of the region so that users can access destinations safely through a well-connected, sustainable, and resilient network that supports economic development and a high quality of life."

No feedback was received on changes to the proposed vision, as such, it was used to guide the remaining analyses and project prioritization processes.

2045 MTP Goals

The goals from the 2045 MTP were developed alongside the vision - through public engagement and consideration of past goals and federal requirements. Residents provided input on priority areas both virtually and in person, which was used to inform the goals and objectives of the MTP. The 2045 MTP goals are listed below:

- **Safety**: Improve safety for all who travel in the region.
- **Operations & Maintenance**: Maintain the current transportation system in a state of good repair and maximize functionality.
- **Mobility**: Improve the ability for travelers to reach destinations quickly and efficiently.
- **Accessibility & Travel Choice**: Provide a variety of reliable transportation options that are equitable and context sensitive.
- **Sustainability**: Enhance the performance of the transportation system while protecting and enhancing the natural environment.
- **Economic Vitality**: Expand economic opportunities and strengthen the regional freight network.
- **Quality of Life**: Implement plans, programs, and projects that contribute to the overall goals and objectives defined in the 2045 MTP to ensure an enhanced quality of life in the Texarkana region.

[14] Texarkana MPO (2019). 2045 MTP. Page 2-13.

Proposed Goals for the 2050 MTP Update

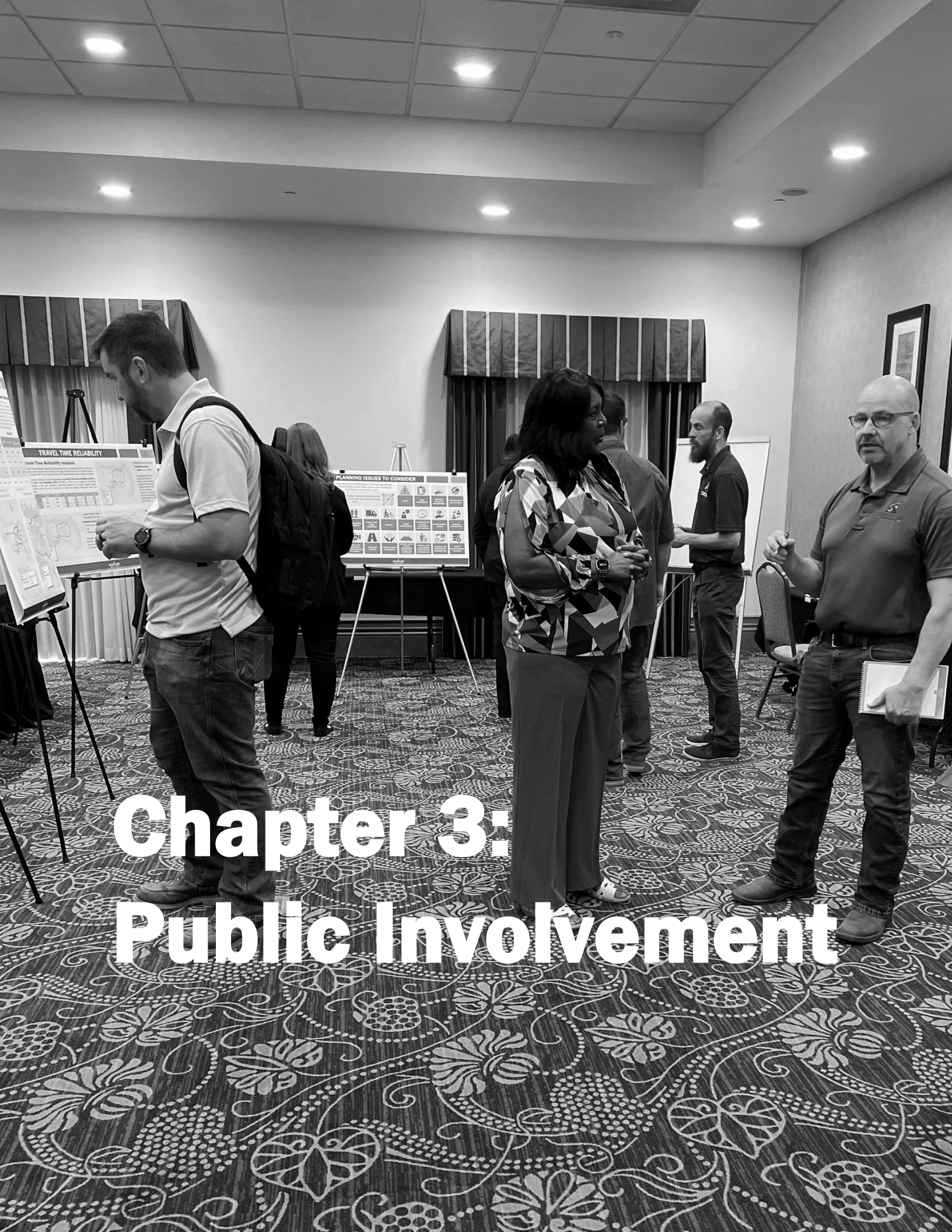
In order to honor the previously established transportation goals and support the preliminary vision, the following goals are proposed:

- **Safety/Security**: Promote and improve safety and security for users of all modes of transportation.
- **Maintenance**: Preserve infrastructure assets and maintain a state of good repair.
- **Operations**: Optimize performance of the transportation system.
- **Regional Coordination**: Coordinate transportation investments with housing strategies and regional development trends for context sensitive transportation projects.
- **Mobility**: Enhance multimodal connectivity to improve accessibility, especially for active transportation and transit options.
- **Economic**: Foster economic development opportunities for freight and for the region.
- **Sustainability:** Protect the natural environment.
- **Resilience**: Increase the resilience of the transportation system from natural hazards.

Figure 2-1 illustrates how the proposed goals for the Connect to 2050 Texarkana MTP update are consistent with federal planning factors, suggestions from TEMPO, and strategic goals or actions from ARDOT and TxDOT.

Figure 2-1: Proposed Connect to 2050 Texarkana MTP Goals Comparison

	Texarkana 2050 MTP	Federal	ARDOT	Texas Association of MPOs	TxDOT
Environment	» Protect the natural environment » Increase the resilience from natural hazards	» Environmental protection, energy conservation, quality of life	» Develop a resilient highway system » Ensure environmental stewardship	» Sustainability and livability » Mitigation and environmental justice	» Foster stewardship
Economy	» Foster economic development opportunities for freight and for the region	» Economic vitality of the metropolitan area » Strategies to enhance travel and tourism	» Partner with industry to improve efficiency	» Freight and goods movement	» Optimize system performance to enable economic growth
O & M	» Optimize performance » Preserve assets and maintain a state of good repair	» Systems management and operations » Preservation of the existing system	» System preservation » Manage assets in a transparent, data driven, and cost effective manner	» Data » Systems management and operations » Asset management	» Preserve our assets
Mobility	» Enhance multimodal connectivity to improve accessibility	» Accessibility/mobility of people and freight » Strategies to enhance connectivity	» Provide innovative transportation solution to improve safety and mobility	» Mobility	» Optimize system performance to provide reliable and accessible mobility
Safety	» Promote and improve safety and security for users of all modes of transportation	» Strategies to increase the safety and security of the transportation system	» Focus on all aspects of safety	» Security » Safety » Complete Streets	» Promote safety
Coordination	» Coordinate investments with housing strategies and regional development trends	» Scale and complexity of regional/contextual issues	» Collaborate and strengthen partnerships	» Equity and Justice40 » Regional coordination » Public participation and virtual involvement	» Coordinate with local transportation entities to ensure efficiency of the system



Chapter 3: Public Involvement

Introduction

Public involvement is the heart and backbone of a well-developed Metropolitan Transportation Plan (MTP). The process for engaging stakeholders and the public and soliciting their input might vary by region, but the collaborative nature of public involvement remains essential and valuable to the planning process.

Texarkana MPO's Public Participation Plan

The Texarkana MPO maintains and implements a Public Participation Plan (3P), which was last updated in June 2021. The purpose of the 3P is to provide guidelines for the tools and timelines that should be used for public involvement during the development of the MPO's planning documents, such as the Metropolitan Transportation Plan (MTP), the Transportation Improvement Plan (TIP), and the Unified Planning Work Program (UPWP). Through the implementation of the 3P, the Texarkana MPO is able to ensure that public participation continues to be a critical component of the MPO's planning processes. This is important because it allows the MPO to consider a diverse array of values and points of view from the communities that it serves. Early and continuous public involvement enables the MPO to make better informed decisions, improves quality through collaborative efforts, and builds mutual understanding and trust between the MPO and the public.

> *"THE PURPOSE OF THE 3P IS TO PROVIDE GUIDELINES FOR THE TOOLS AND TIMELINES USED FOR PUBLIC INVOLVEMENT WHILE CREATING AN MTP."*

The 3P lists a set of outreach tools that can be used to enhance, support, and facilitate public outreach and education during the planning process. These tools include, but are not limited to the following:

- Comment periods
- Board/Committee meetings
- Focus groups
- MPO speakers
- MPO webpage
- Notification list
- Press releases
- Public meetings
- Social media
- Studies and reports
- Surveys
- Services for traditionally under-served populations
- Visualization tools

Summary of Stakeholder and Public Outreach Efforts

Over the course of the 2050 MTP development process, the Texarkana MPO undertook a series of public and stakeholder outreach efforts to better understand the needs, challenges, and opportunities for the existing transportation system, as well as the vision and goals the communities in the region have for the future of the transportation system over the next 25 years. The various outreach efforts are described in the following sections.

Stakeholder Interviews

From November 2023 to March 2024, the MPO conducted a series of interviews with different groups of stakeholders from various backgrounds and localities throughout the region. Based on their backgrounds, the 20 stakeholders were asked questions that they were best suited to answer regarding current conditions of the transportation system in the MPO. Topics and generalized stakeholder concerns about the transportation system discussed during the interviews are listed below.

Key Takeaways

- **Culture of Driving:** Much of the broader Texarkana region is rural, and encroaching development creates conflict in areas where drivers are used to less populated roadways. In order to accommodate this growth in transportation, transit and active transportation infrastructure could be extended, but would require a shift in culture among the population to utilizing transportation alternatives.

- **Problematic Roadways:**

    - **Summerhill Road:** Summerhill Road was identified frequently by stakeholders as a pain point in the transportation system. This is attributed to being a frequently taken route off of I-30 and is especially busy in the mornings and afternoon due to school traffic. Future restaurants being built in the area may increase traffic and associated issues.

    - **Richmond Road:** Richmond Road is identified as another problematic roadway. Many restaurants and retail stores on the road create high demand, and increased development will increase traffic. Stakeholders indicated that the roadway is also not well connected to Highway 59 and is heavily congested. Portions to the west of downtown Texarkana sometimes experience flooding.

    - **I-30:** Interstate 30 is an east/west route through the Texarkana region and is a key opportunity and pain point for the region. Many residents rely on the facility to get to work in downtown Texarkana or in outlying areas, and the roadway is very congested as a result.

    - **US 82:** US Highway 82 is another key route that stakeholders identified. Stakeholders discussed the poor pavement conditions, lack of shoulders, and narrow width of the roadway as a problem. The highway connects to Magnolia, Arkansas, which will be important for lithium mining activity. US 82 closely parallels I-30 in

some spots, meaning that backups on the interstate can cause problems and damage to US 82.

  - **Stateline:** Stateline Avenue was consistently mentioned by stakeholders as an issue. The facility is heavily used by fast moving traffic and may be unwelcoming and unsafe for users trying to access recent redevelopments downtown.

- **Connection of Housing to Jobs:** Stakeholders often expressed difficulties with connecting workforce housing to jobs in the Texarkana region. Almost all stakeholders mentioned that they or someone they represent have to drive a long distance to work in the area. The New Boston to Texarkana corridor was called out specifically as an area that needs better connectivity for all modes of transportation, especially with the Tex-Americas Center in between the two, which is anticipating bringing in more jobs in the coming years. Representatives for the Housing Authorities in New Boston and Texarkana indicated rising interest rates and inflated constructions costs are making it more difficult to create affordable housing.

- **Development:**

  - **Magnolia, Arkansas:** To the east of Texarkana in Magnolia, Arkansas, a planned large lithium mining operation is expected to bring many jobs to the area. Given Texarkana's status as a large urban area in the region, demand for housing and amenities in Texarkana will likely increase as a result.

  - **TexAmericas Center:** The TexAmericas Center is 15 miles east of downtown Texarkana. The land is the site of a former munitions plant and army depot. The site is now a 12,000-acre land area with office, manufacturing, warehouse and storage space. Growing development on the site will drive growth along the I-30/US 82 corridor.

  - **Texarkana Regional Airport:** The Texarkana Regional Airport is adding a new terminal that will be completed in 2024. The new terminal will increase traffic to the airport, and the airport will complete an access reconfiguration to accommodate traffic. Currently, there is minimal connection to the airport for people who arrive. Therefore, there is an opportunity for increasing access via the T-Line or other public transit options.

  - **Other Economic Development:** The Texarkana region is experiencing a growth in industrial development led in part by AR-TX REDI and the Ark-Tex Council of Governments. Increased growth and expansion of the urban core into historically rural areas have benefits to the community and create opportunity but should be accounted for in planning future transportation in the region.

- **Flooding:** Stakeholders expressed some concern about flooding on roads outside of the urban core, which may reduce access to schools and key facilities. Increased urbanization may increase these problems.

- **Active Transportation:** There is increased demand for active transportation infrastructure in the region for both daily and recreational use, and much progress has been made towards adding sidewalks and trails. Local partnerships between businesses, non-profits, and agencies have facilitated the creation/continuation of several trails, and many projects from the MPO's Active Transportation Plan have been completed. There are more opportunities to improve connections to services and fill in gaps on recreational trail networks.
- **Freight:** Texarkana is a midpoint stop between Memphis and Dallas, two key cities for freight movement. Many trucks park in the area, sometimes creating issues along the I-30 corridor. Creating more safe spaces on the Texas side to match a new truck parking facility on the Arkansas side could improve safety and cleanliness, while also bringing more money to the region.
- **Collaboration:** Stakeholders told many stories of collaboration between non-profits, private businesses, and government agencies. Further, collaboration and coordination across the state lines has created projects that serve the whole region. During the stakeholder interviews, further opportunities for coordination were identified and will be included in planning efforts.

Visioning Process

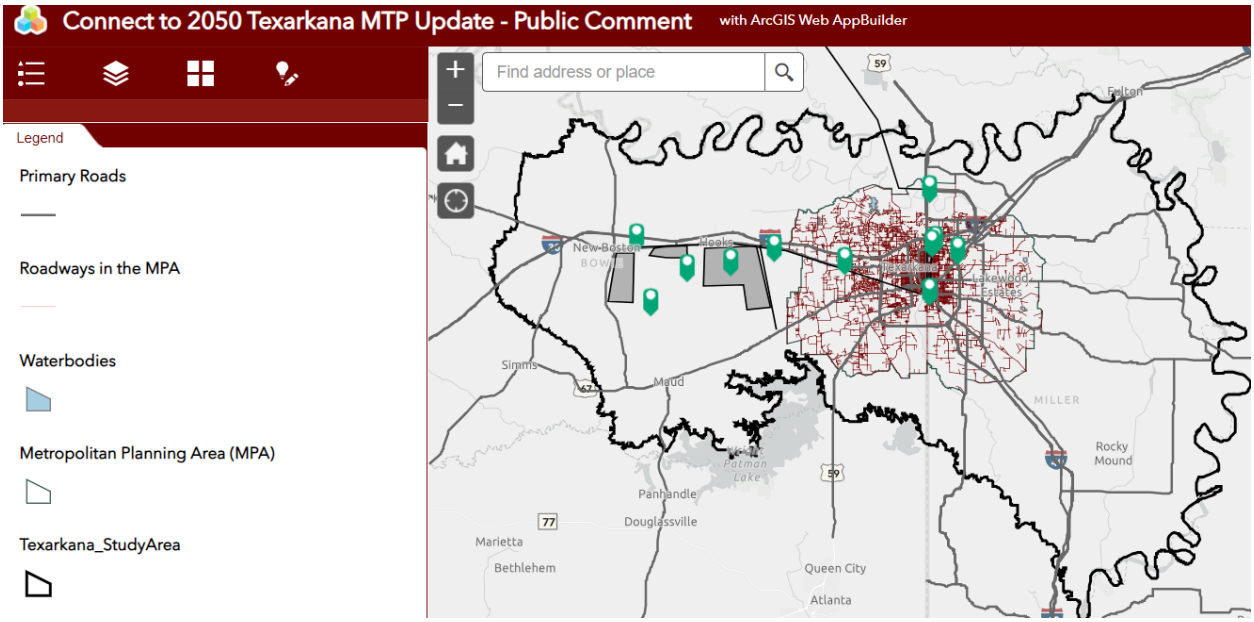
The purpose of the Connect to 2050 Texarkana MTP visioning process was to solicit the public for input regarding their values and priorities for the future of the transportation system in the region. The feedback received helped the MPO define the goals and objectives for the MTP and played a role in shaping the process used to prioritize transportation improvement projects proposed for inclusion in the plan. Public feedback received from the online tool (discussed below) was used to identify priorities for evaluation criteria in the scoring process. The feedback was considered when assigning project scores from the Technical Committee. The project scoring process is discussed in further detail in Chapter 5, which covers transportation strategies for the Texarkana MPO planning area.

THE VISIONING PROCESS ASKED THE PUBLIC FOR INPUT REGARDING THEIR VALUES AND PRIORITIES FOR THE FUTURE OF THE REGIONAL TRANSPORTATION SYSTEM.

The visioning process for the Connect to 2050 Texarkana MTP consisted of an online tool that was custom developed for Texarkana's MTP development process. This tool consisted of modules that both educated the public about the plan development process and requested input about community values and existing conditions in the region. These modules included a survey that gathered basic information about the participants and their transportation usage; an exercise where participants were asked to rank potential guiding values of the plan; and an interactive map of the region where participants could place comments in exact locations regarding specific needs or issues related to transportation at those locations. The online tool was opened in September 2023 and closed in April 2024.

Figure 3-1 is a screenshot of the feedback map module from the online tool. Additional screenshots from the tool, as well as the full set of responses and comments gathered through the tool can be found in

Figure 3-1: Online Comment Map



Public Open Houses

Open House #1

The Texarkana MPO hosted three public open houses during the development of the Connect to 2050 Texarkana MTP. The first was held on April 15, 2024, with the purpose of presenting the work done to-date on the development of the plan, which included educational aspects about what an MTP is and why the MPO needs to develop one, as well as the results of the Multimodal Needs Analysis discussed in Chapter 3. The first public open house consisted of a set of exhibit boards that displayed information about the plan and the analyses using text, graphics, and maps. Figure 3-2 shows an example of one of the boards displayed at the open house.

Figure 3-2: Open House Board Example

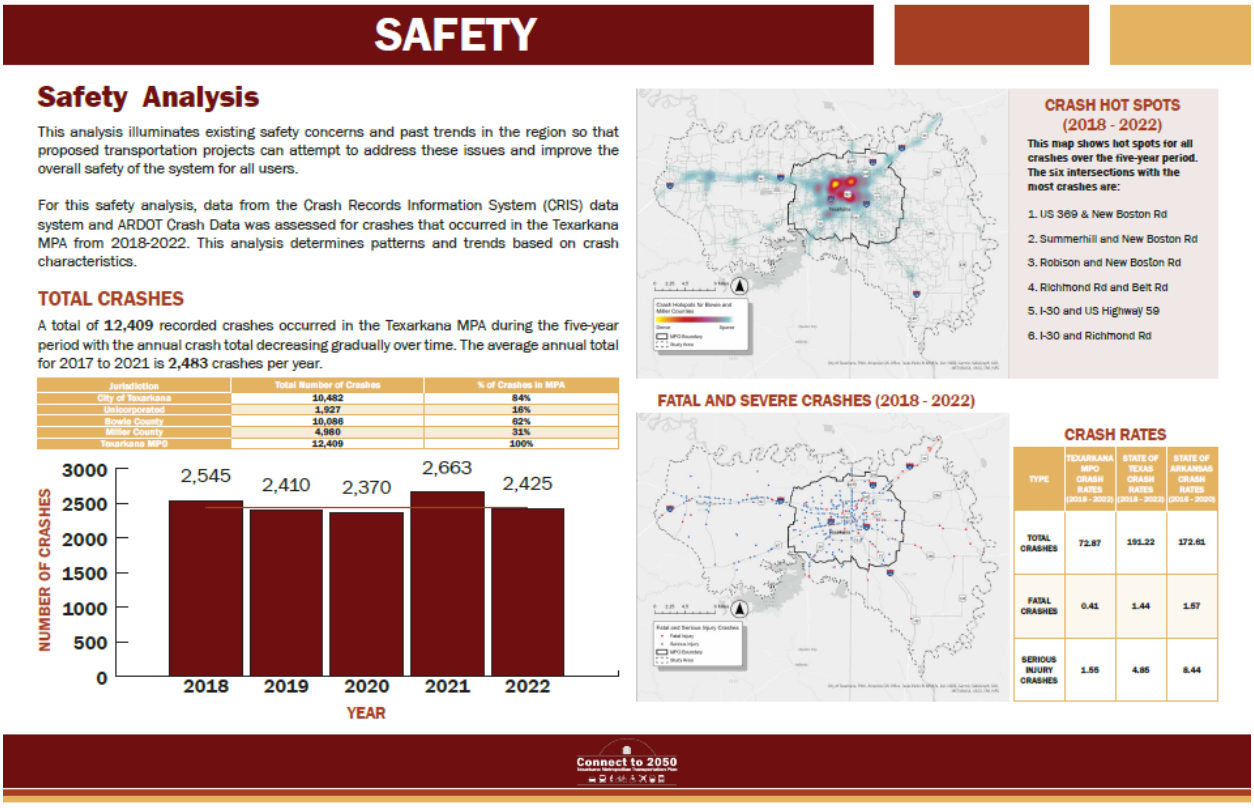


Figure 3-3: Attendees at the First Open House

Key Takeaways

Common areas of concern identified from the public meeting and online survey are as follows:

- **Operations:** Optimizing system performance through operational improvements is a priority for transportation users.
- **Safety:** Recent treatments on regional corridors have improved safety in certain areas, and continued improvements will make regional travel safer.
- **Maintenance:** Preserving and maintaining a state of good repair on roads and bridges maintains traffic flow and reduces costs of major repair projects.
- **Mobility:** An improved multi-modal system would allow residents and guests of Texarkana to more easily navigate the region.
- **Economic Development:** Growth in the bi-state area will impact future transportation and development in the Texarkana region.

- **Regional Coordination:** Collaboration and coordination exist among many agencies that share resources to provide better services. There may be opportunities for more collaboration in the future.
- **Rail:** Increased industry in the region will utilize rail infrastructure for operations.
- **Active Transportation:** The active transportation network is popular with some residents but has an opportunity for better connectivity and increased safety.
- **Advanced Technology:** The rise in popularity of electric vehicles presents difficulties for some emergency response operations.
- **Environmental Conditions:** The Texarkana region experiences some localized flooding that impedes traffic operations.

Open House #2

The second public open house was held on July 17, 2024, in conjunction with the Texarkana MPO Policy Board meeting. The purpose of the second open house was to provide the public with an overview of the draft Connect to 2050 Texarkana MTP, including the proposed program of projects, and solicit public feedback. This open house utilized a slide show presentation to convey information about the draft plan and the proposed projects using text, graphics, and maps.

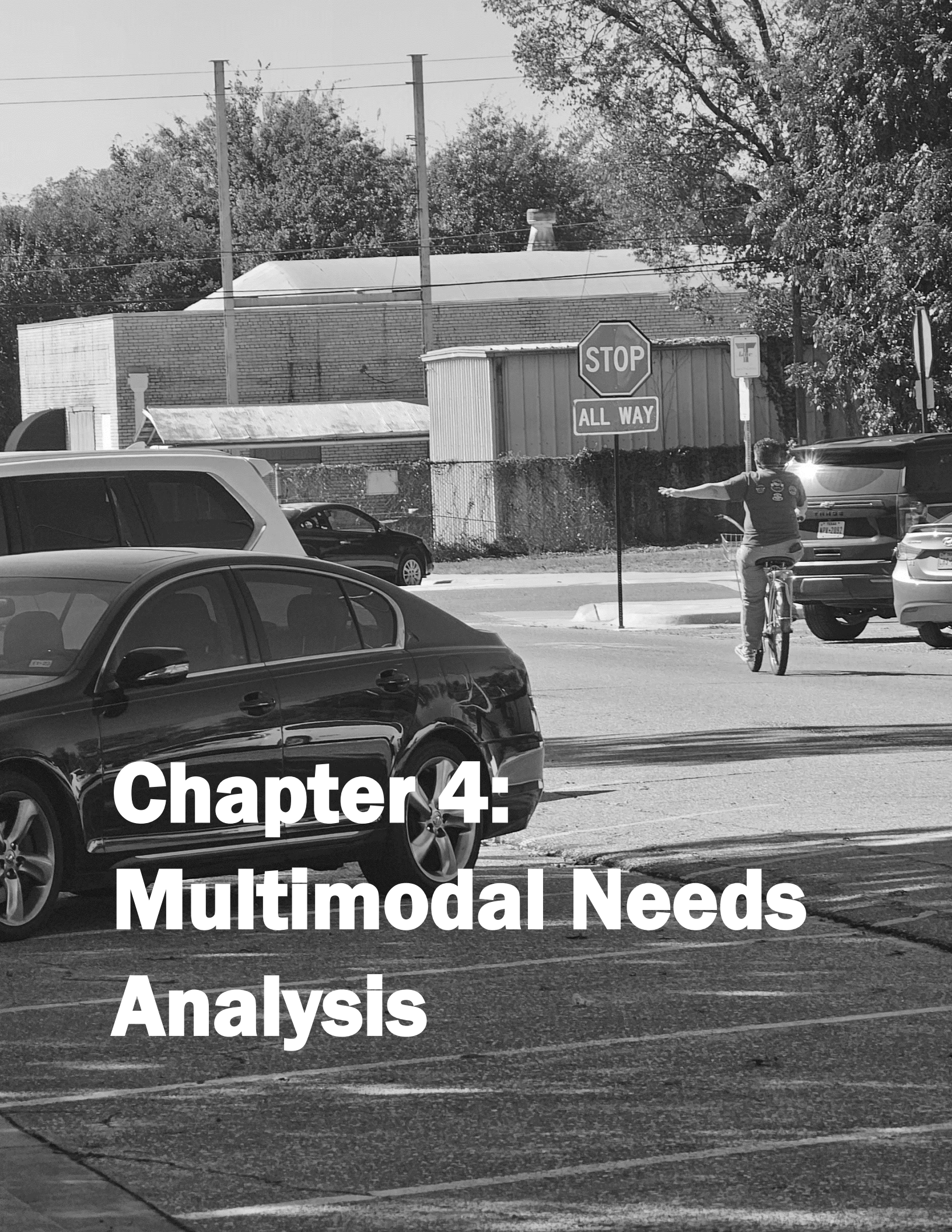
Open House #3

The final open house was held on August 15, 2024. Like the first open house, this open house used boards to convey information about the draft plan and the proposed projects using text, graphics, and maps. The purpose of this open house was to present completed analysis, present the proposed program of projects, and kick off the public comment period.

Comments from all three rounds of the open house were taken into consideration when developing the draft and final MTP.

Summary of Stakeholder and Public Outreach Efforts

The 30-day public comment period for the Draft Connect to 2050 Texarkana MTP began August 1, 2024 and ended September 16, 2024. The plan was adopted by the policy board on September 18, 2024.



Chapter 4: Multimodal Needs Analysis

Introduction

In order to ensure that the transportation investments recommended by the Connect to 2050 Texarkana MTP Update address the needs of the region, the project team performed an exhaustive assessment of current conditions, and where possible, the likely conditions that are anticipated to exist in 2050. Consistent with the vision statement, goals, and objectives of the Connect to 2050 Texarkana MTP, the project team analyzed the following aspects of the transportation network:

- Demographics
- Equity
- Roadway
- Transit
- Active Transportation
- Airport

Demographics

The Texarkana Metropolitan Planning Organization (MPO) planning area boundary consists of five communities in the northeast corner of Texas and southwest corner of Arkansas. Straddling the state line are the twin cities of Texarkana, TX and Texarkana, AR, which make up the urban core of the MPO planning area. Red Lick, Nash, and Wake Village comprise the remaining communities within the MPO planning area. However, the 2050 MTP study area extends past the MPO boundary to include cities and communities such as New Boston, Hooks, and Maud in Bowie County, Texas and Rocky Mound in Miller County, Arkansas.

Current Population and Employment Trends

A major component of identifying transportation needs is creating an in-depth understanding of the current population and employment trends occurring in the region. Land use patterns and demographic trends directly influence which modes of travel people choose to use. In areas where development is spread out and land uses are separated, people will be more likely to use personal automobiles and travel further distances throughout the day. Inversely, areas with dense, mixed-use development typically have shorter trips and higher utilization of alternative modes of transportation, such as transit, cycling, and walking. In order to assess the transportation needs of the Texarkana MPO planning area, the project team first considered where areas of high employment and population totals are located within the region, how they will impact the performance of the transportation system, and how users will interact with the system.

Because travel choice relies heavily on where people live and work, the recently updated Texarkana Regional Travel Demand Model (TDM) developed by TxDOT Transportation Planning and Programming (TPP) on behalf of the MPO, was used to represent existing population and employment conditions. The 2023 conditions will be compared to forecast year projections in future sections to understand growth trends relative to transportation infrastructure in the region.

Population

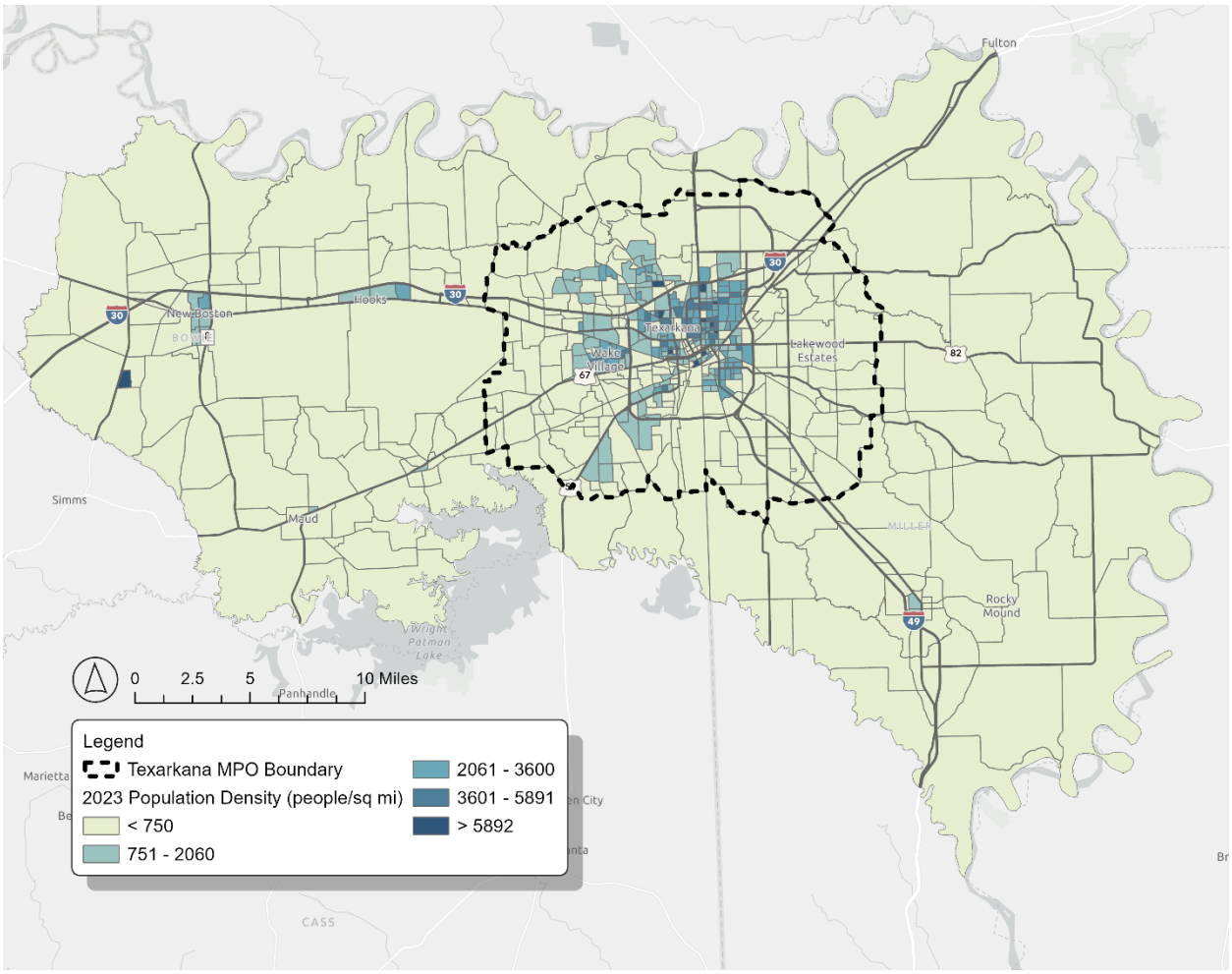
The 2023 Texarkana MPO population, according to the TDM, totals around 128,000 people. Table 4-1 displays the MPO's population breakdown by county, showing the Bowie County portion of the MPO to contain nearly twice the amount of total population of the Miller County portion. Figure 1 displays the existing population density in the region by Traffic Analysis Zones (TAZs). Accordingly, the western portion of the region appears to contain more population; however, TAZs with high population counts are dispersed throughout the region. Notable population clusters occur within the central portion of the study area and along major corridors, such as IH 30 and IH 49.

Table 4-1: Texarkana 2023 MTP Study Area Population

Jurisdiction	Total Population (2023)	Population Percentage
Bowie, TX (Study Area)	83,082	65%
Miller, AR (Study Area)	44,884	35%
Study Area Total	127,966	100%

Source: TDM

Figure 4-1: 2023 Population Density by TAZ



Source: TDM

Employment

The geographic location of employment centers/hubs in the Texarkana region greatly impacts travel choices, congestion, and the distribution of trip origins and destinations.

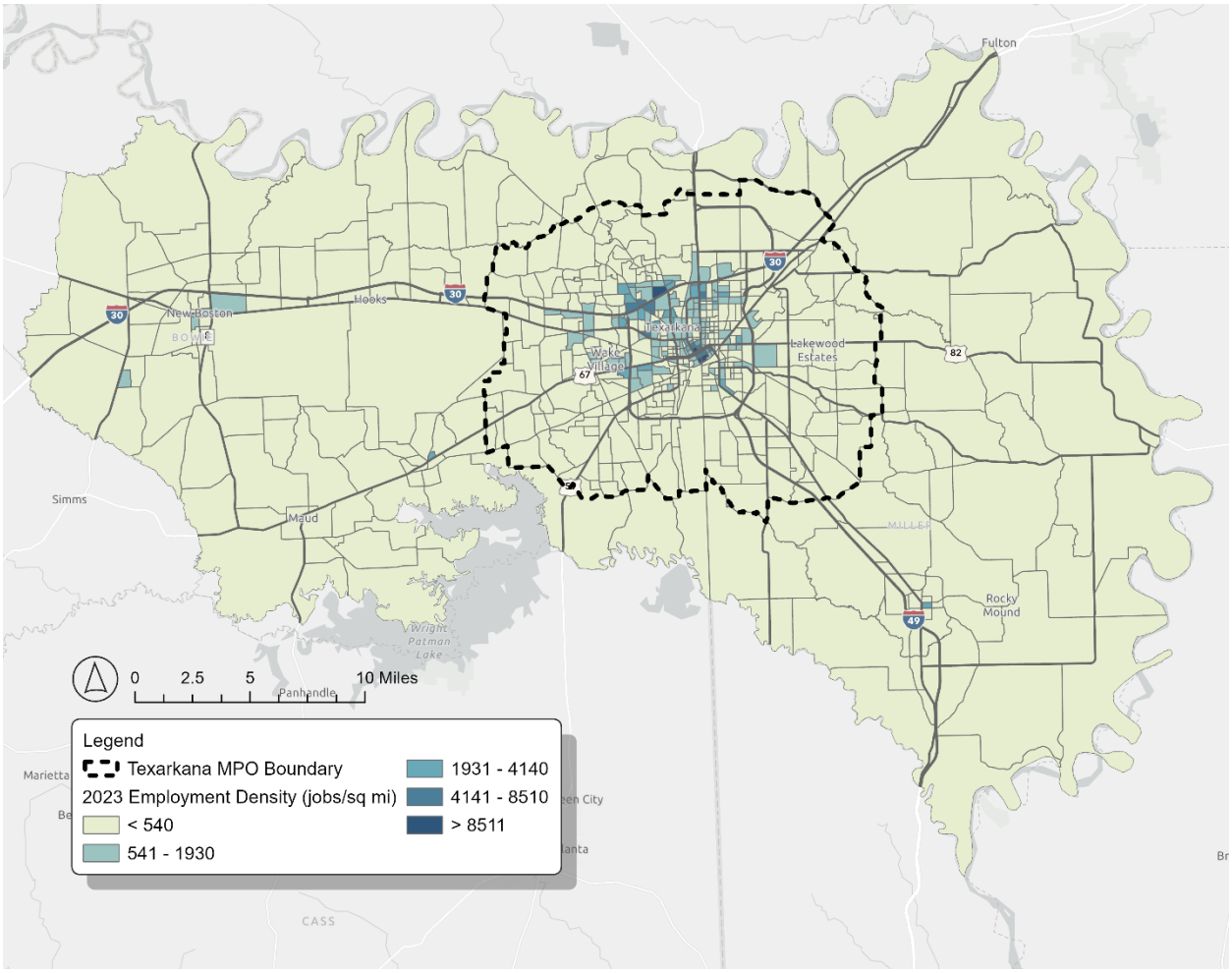
Table 4-2 shows the total employment density in the MTP study area, broken down by county. Bowie County contains 73% of employment. Major employment centers in the area include: Christus St. Michael Hospital, Cooper Tire Manufacturing, Walmart, Wadley Regional Medical Center, and the Federal Correctional Institution. Most of these employment centers are located in the central Texarkana area. However, there are 2 large TAZs that contain military facilities between Texarkana and New Boston, Texas.

Table 4-2: Texarkana 2023 MTP Study Area Employment

Jurisdiction	Total Employment (2021)	Percent
Bowie, TX (Study Area)	35,724	73%
Miller, AR (Study Area)	13,461	27%
Study Area Total	49,185	100%

Source: TDM

Figure 4-2: 2023 Employment Density by TAZ



Source: TDM

Population and Employment Changes from 2023 to 2050

The Travel Demand Model helps to prioritize transportation system improvements based upon population and employment growth in geographic areas known as Traffic Analysis Zones (TAZs). The following is an analysis of the predicted change in population and employment densities based on demographic forecasting done leading up to the development of this 2050 MTP Update.

Table 4-3 and Table 4-4 show the projected change in population and employment from 2023 to 2050.

Table 4-3: Study Area Population Change (2023-2050)

Year	Population
2023	127,966
2050	126,074
% Change	-1.5%

Source: TDM

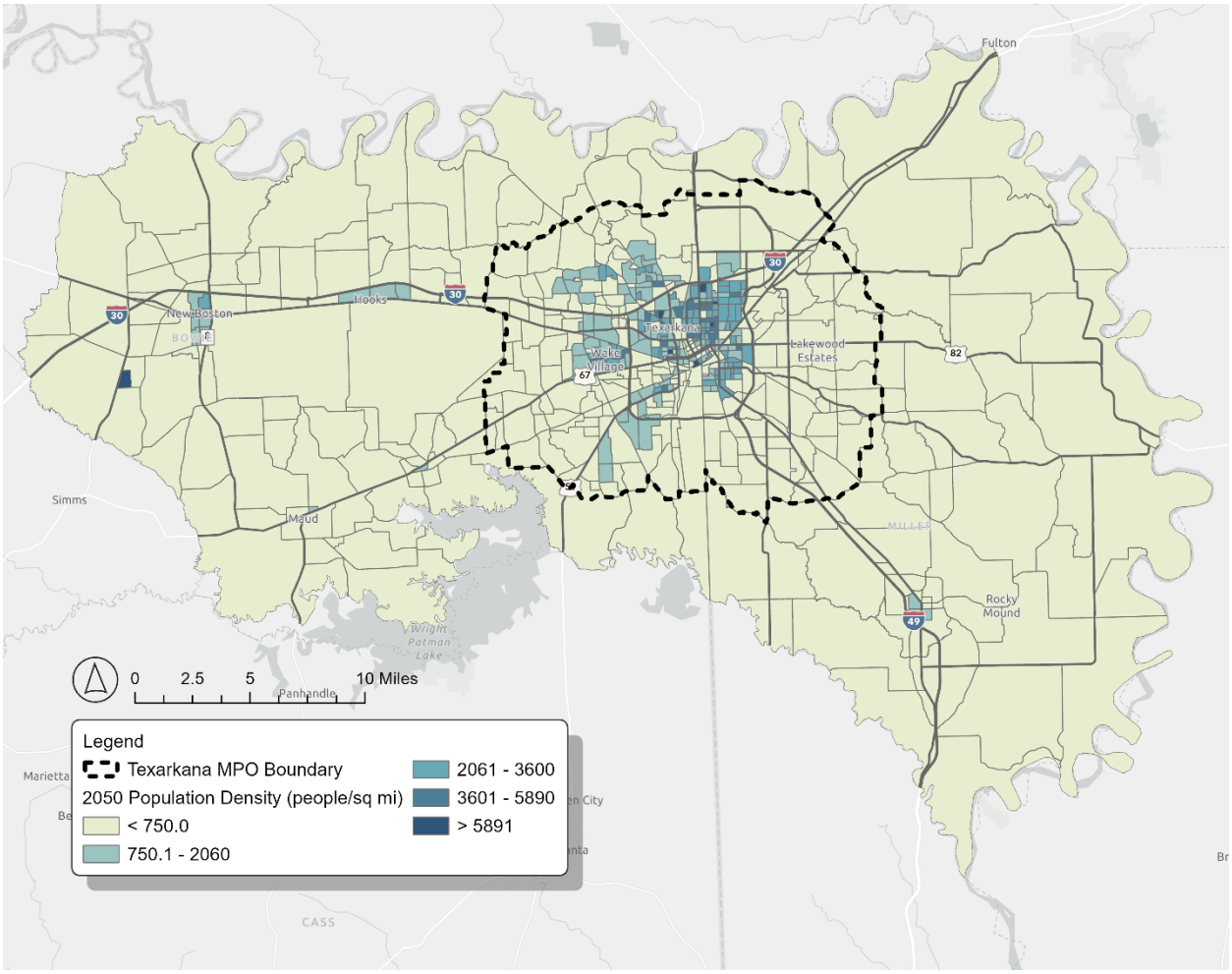
Table 4-4: Study Area Employment Change (2023-2050)

Year	Employment
2023	49,185
2050	53,319
% Change	+8.4%

Source: TDM

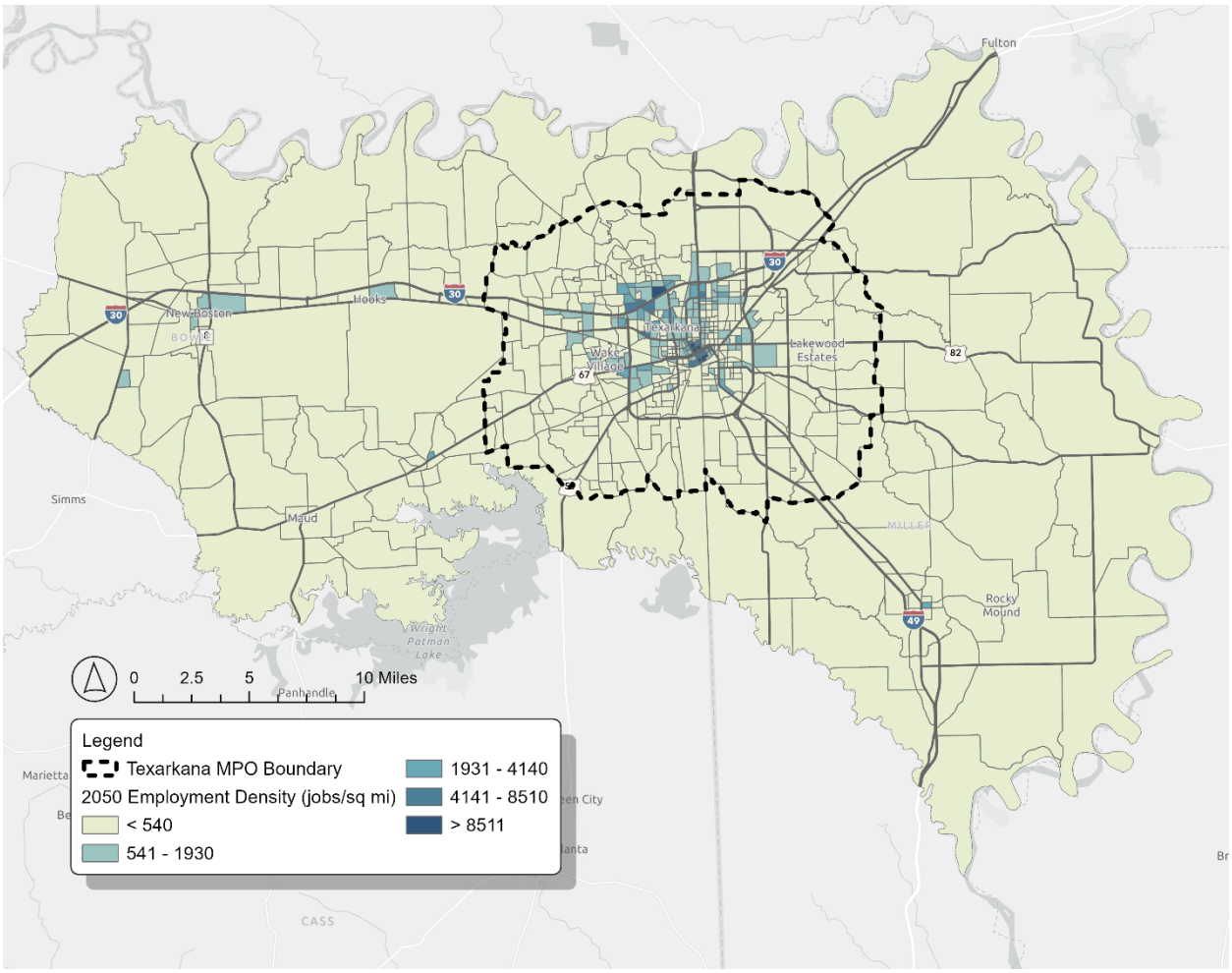
Figure 4-3 and Figure 4-4 show the expected population and employment densities for TAZs in 2050, respectively. When analyzing population and employment distribution, Figure 3 and 4 show economic zones and population to generally be located adjacent to key corridors. The urban core also retains high population and employment counts, and there are several higher population TAZs spread throughout the study area.

Figure 4-3: 2050 Population Density by TAZ



Source: TDM

Figure 4-4: 2050 Employment Density by TAZ



Source: TDM

According to the Travel Demand Model, there is a forecasted decrease in overall population of 1.5% and an overall increase of 8.4% in employment from 2023 to 2050, as shown in Figure 4-5.

Figure 4-5: 2023-2050 Change in Population and Employment

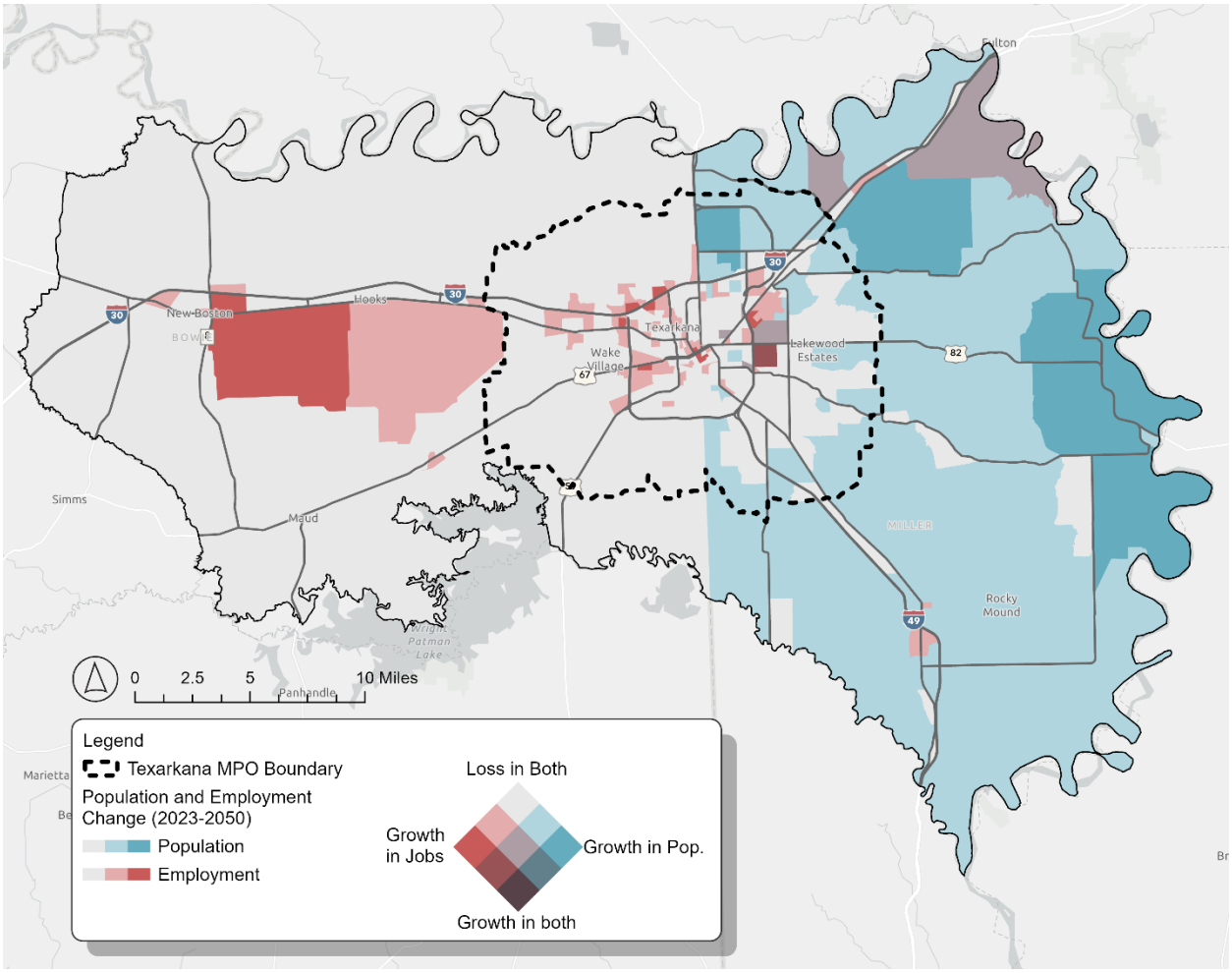
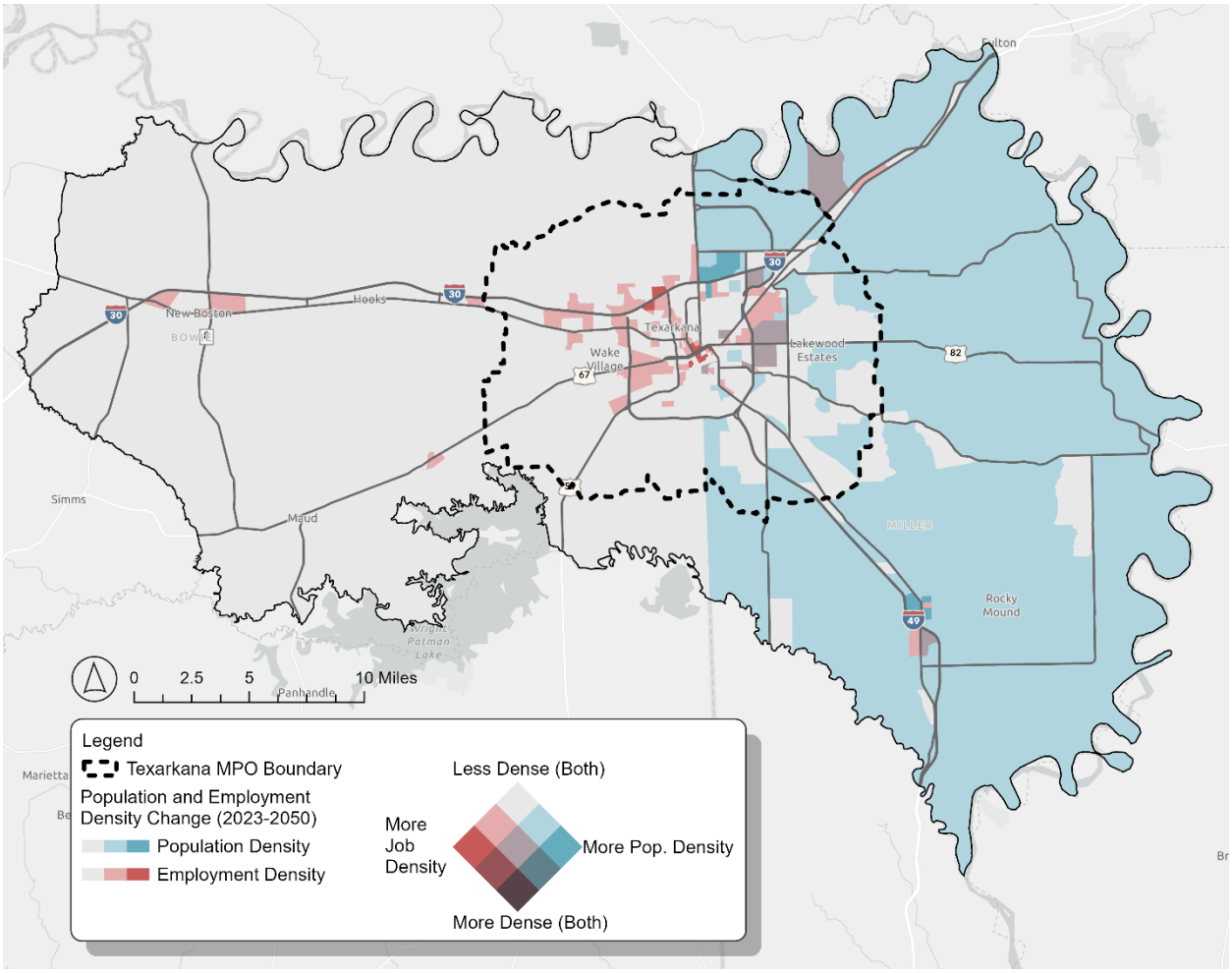


Figure 4-6 shows the changes from 2023 to 2050 in population and employment density that is projected by the model. This map uses the same data as shown in Figure 5 but is normalized by area in square miles. Over the timeframe of the 2050 MTP planning period, the majority of the Texas side of the study area may see a decline in the density of people per square mile. Only a few TAZs on the Texas side of the study area may see a slight increase in job density. On the Arkansas side of the study area, the majority of TAZs may see a slight increase in population density, some may slightly increase in job density, and few may experience an increase in both.

These maps help to provide an understanding of what the study area could look like over the next 25+ years, which can be used to inform and prioritize the need for transportation projects in certain areas. It is important to periodically reevaluate the changes in population and employment density over time to ensure the adequacy of the transportation system. For example, increases in lithium extraction activities in Southwest Arkansas, along with accompanying changes to housing and

employment, will impact the transportation network. Figure 6 highlights the importance of adequate east/west connectors over the next 25+ years to connect people between places of residence and places of employment. Multimodal connections between Texas on the west and Arkansas on the east are imperative to regional mobility and economic development.

Figure 4-6: 2023-2050 Change in Employment and Population Densities



Source: TDM

Commute Patterns

Studying commuting patterns is important for understanding where people are traveling to and from in the Texarkana region, which helps with planning transportation improvements. Table 4-5 and Table 4-6 show commuting patterns for Bowie and Miller Counties from 2016-2020.

Table 4-5: Bowie County Commuting Flow, 2016-2020 Summary

Workers Living in Bowie County			Workers Working in Bowie County		
	County of Work	**Workers**		**County of Residence**	**Workers**
1	Bowie County, Texas	28,885	1	Bowie County, Texas	28,885
2	Miller County, Arkansas	4,465	2	Miller County, Arkansas	8,415
3	Cass County, Texas	610	3	Cass County, Texas	1,685
4	Little River County, Arkansas	380	4	Little River County, Arkansas	1,115
5	Titus County, Texas	225	5	Red River County, Texas	320
6	Hempstead County, Arkansas	170	6	Hempstead County, Arkansas	290
7	Franklin County, Texas	110	7	Sevier County, Arkansas	205
8	Pulaski County, Arkansas	95	8	Morris County, Texas	175
9	Sevier County, Arkansas	85	9	Howard County, Arkansas	125
10	Howard County, Arkansas	80	10	Titus County, Texas	95
11	Dallas County, Texas	65	11	Lafayette County, Arkansas	75
12	La Salle County, Texas	60	12	Camp County, Texas	75
13	Red River County, Texas	50	13	Columbia County, Arkansas	65
14	Wood County, Texas	40	14	Dallas County, Texas	65
15	Galveston County, Texas	35	15	McCurtain County, Oklahoma	60
	Other Arkansas	99		Other Arkansas	119
	Other Texas	204		Other Texas	380
	Other states	317		Other states	301
	Grand Total	**35,975**		**Grand Total**	**42,450**
				Net Flow	**6,475**

Source: CTPP 2012-2016 commuting flow data.
Net flow positive figures represent net import of workers to jobs inside county; negative net flow depicts net export of workers beyond county.
Compiled by Metroplan, 6/3/2024

Table 4-6: Miller County Commuting Flow, 2016-2020 Summary

Workers Living in Miller County		
	County of Work	**Workers**
1	Bowie County, Texas	8,415
2	Miller County, Arkansas	7,905
3	Little River County, Arkansas	450
4	Cass County, Texas	290
5	Hempstead County, Arkansas	265
6	Howard County, Arkansas	115
7	Craighead County, Arkansas	60
8	Harris County, Texas	60
9	Tarrant County, Texas	45
10	Scott County, Arkansas	40
11	Columbia County, Arkansas	35
12	Lafayette County, Arkansas	35
13	Sevier County, Arkansas	25
14	Galveston County, Texas	10
15	Limestone County, Texas	10
	Other Arkansas	0
	Other Texas	8
	Other states	152
	Grand Total	**17,920**

Workers Working in Miller County		
	County of Residence	**Workers**
1	Miller County, Arkansas	7,905
2	Bowie County, Texas	4,465
3	Little River County, Arkansas	480
4	Cass County, Texas	280
5	Hempstead County, Arkansas	165
6	Howard County, Arkansas	120
7	Lafayette County, Arkansas	70
8	Nevada County, Arkansas	65
9	Sevier County, Arkansas	60
10	Harris County, Texas	40
11	Columbia County, Arkansas	15
12	Pike County, Arkansas	10
13	Saline County, Arkansas	10
14	Camp County, Texas	10
15	Hamilton County, Texas	10
	Other Arkansas	36
	Other Texas	10
	Other states	219
	Grand Total	**13,970**
	Net Flow:	**-3,950**

Source: CTPP 2012-2016 commuting flow data.
Net flow positive figures represent net import of workers to jobs inside county; negative net flow depicts net export of workers beyond county.
Compiled by Metroplan, 6/3/2024

Equity Analysis

It is critical to the planning process to establish and ensure fair and equitable transportation policies and funding decisions so that no group of people (by race, ethnicity, or socioeconomic status) receives unfair treatment or bears a disproportionate share of negative consequences because of decisions made by the MPO or other levels of government. There are numerous tools available to analyze variables that relate to equity. This analysis displays the results of the Justice40 Climate and Economic Justice Screening Tool (CEJST), data from the Center for Disease Control and Prevention Social Vulnerability Index (SVI), and impacts from the Climate Vulnerability Index (CVI).

Justice40 Tool

The Justice40 Initiative, through Executive Order 14008, directed the development of the CEJST to identify communities that are disadvantaged, overburdened, and underserved. The tracts that are at or above the threshold of a socioeconomic burden and at least one environmental, climate, or other burden (see Table 4-7 and Table 4-8) are considered to be disadvantaged and in need of special consideration for program benefits and impacts.

Table 4-7: CEJST Census Tract Socioeconomic Burdens

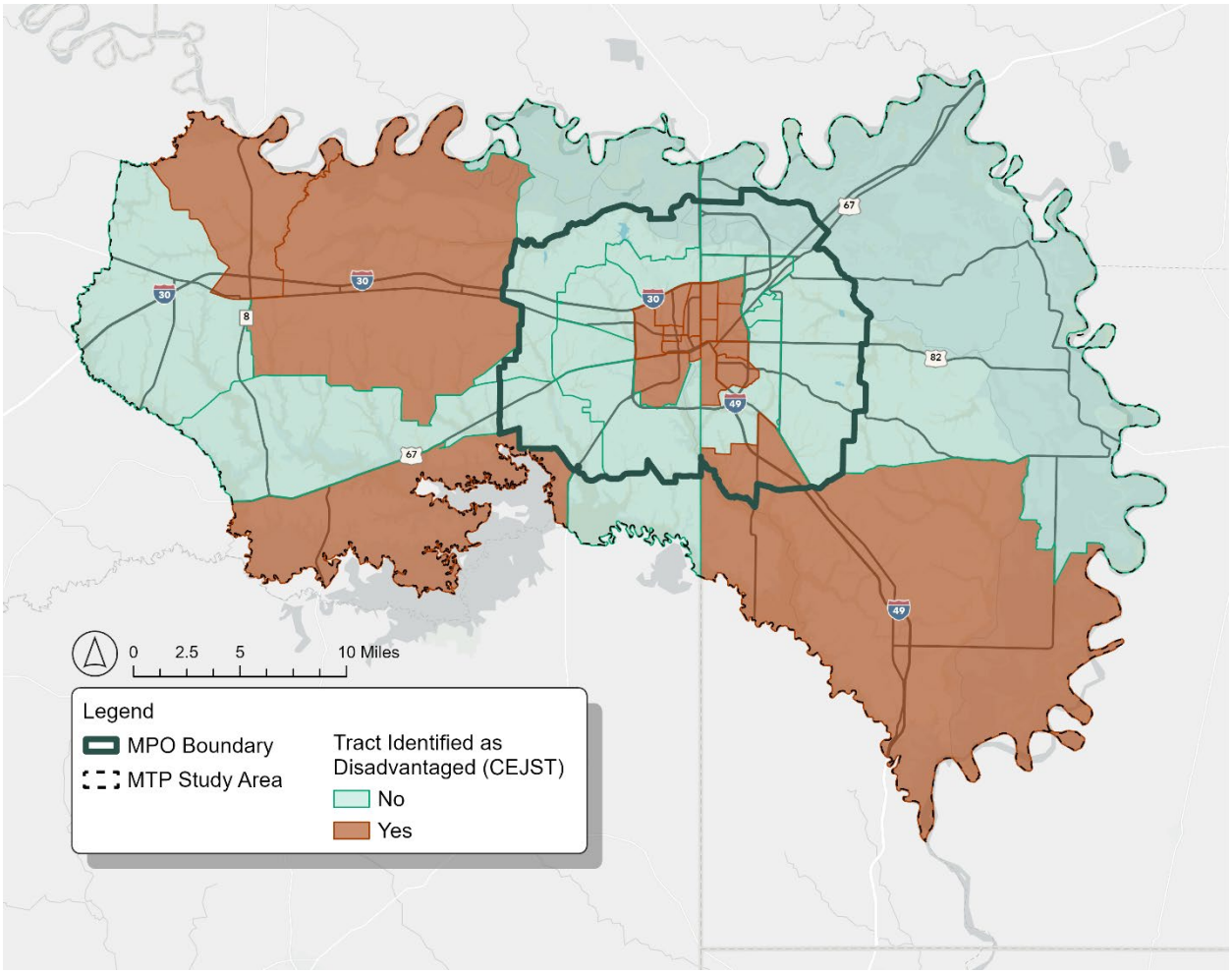
Socioeconomic Burdens
At or above the 65th percentile for low income, based on the tract's percentage of households where income is at or below 200% of the Federal poverty level
More than 10% of people ages 25 years or older whose high school education is less than a high school diploma*
**Only considered for the workforce development burden category*

Table 4-8: CEJST Census Tract Categories of Burdens

Environmental, Climate, and Other Burdens
Climate Change - at or above the 90th percentile for expected agriculture loss rate, expected building loss rate, expected population loss rate, projected flood risk, or projected wildfire risk
Energy - at or above the 90th percentile for energy cost or PM2.5 in the air
Health - at or above the 90th percentile for asthma, diabetes, heart disease, or low life expectancy
Housing - experienced historic underinvestment, or are at or above the 90th percentile for housing cost, lack of green space, lack of indoor plumbing, or lead paint
Legacy Pollution - have at least one abandoned mine land or formerly used defense sites, or are at or above the 90th percentile for proximity to hazardous waste facilities, proximity to Superfund sites (National Priorities List (NPL)), or proximity to Risk Management Plan (RMP) facilities
Transportation - at or above the 90th percentile for diesel particulate matter exposure, transportation barriers, or traffic proximity and volume
Water and Wastewater - at or above the 90th percentile for underground storage tanks and releases or wastewater discharge
Workforce Development - at or above the 90th percentile for linguistic isolation, low median income, poverty, or unemployment

Figure 4-7 shows the disadvantaged census tracts in the study area that are identified by the CEJST.[1] Based on the categories of burdens, the central census tracts within the cities of Texarkana are disadvantaged. In addition, the southern and northwestern portions of the study area contain large census tracts which the CEJST has identified as disadvantaged.

Figure 4-7: Census Tracts Identified as Disadvantaged



Source: CEJST (2022)

[1] The CEJST uses 2010 census tract boundaries.

CDC Social Vulnerability Index (SVI)

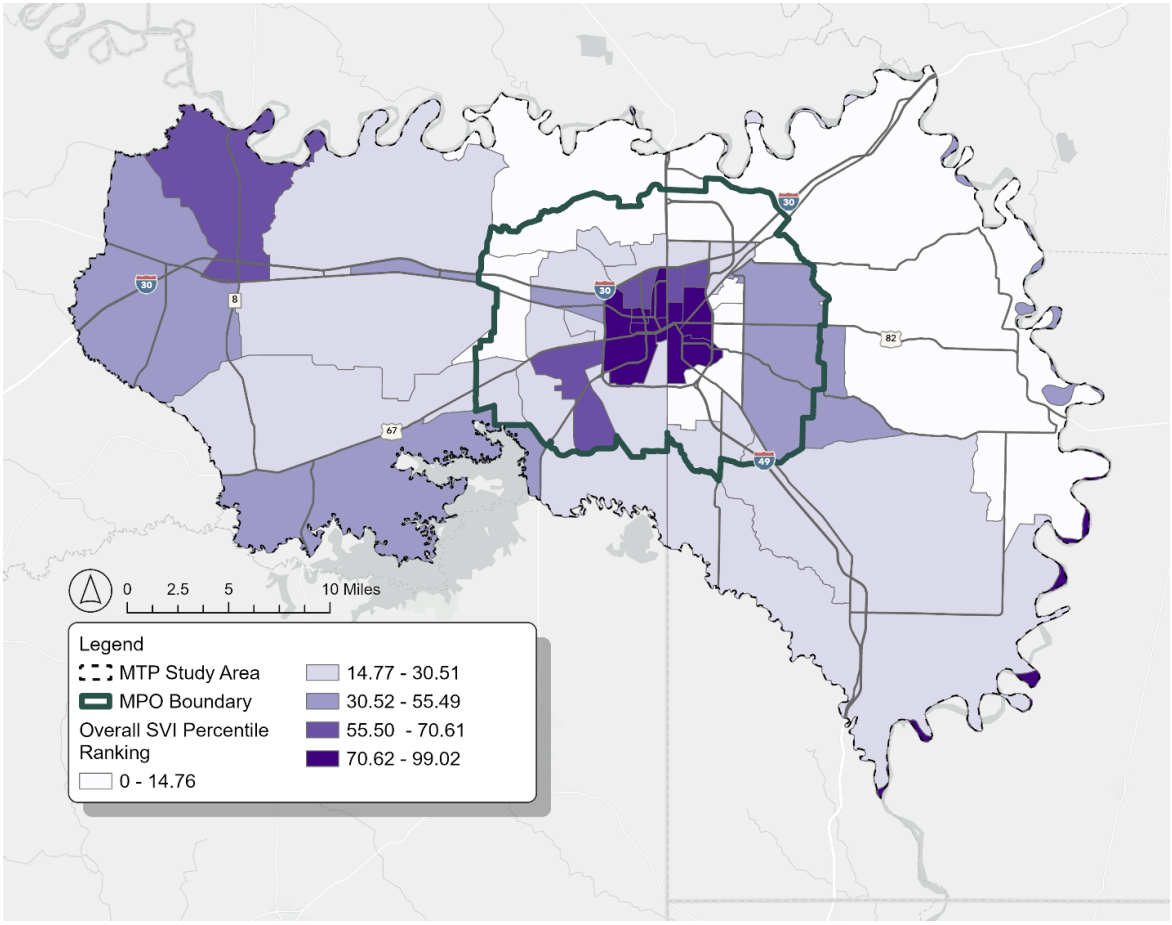
An additional equity tool is the Social Vulnerability Index tool from the Centers for Disease Control and Prevention/ Agency for Toxic Substances and Disease Registry/ Geospatial Research, Analysis, and Services Program (CDC/ATSDR). This tool uses 16 U.S. Census variables to help identify tracts that may be especially vulnerable to external stressors[2]. These variables are analyzed and grouped into four themes: socioeconomic status, household characteristics, racial and ethnic minority status, and housing type and transportation. Figure 4-8 shows the SVI results for the housing and transportation theme, which is created using data on the following variables:

1. Multi-unit housing structures
2. Mobile homes
3. Crowding
4. Group quarters
5. No vehicle

Figure 4-8 shows the overall national percentile ranking for all four categories (socioeconomic status, household characteristics, racial and ethnic minority status, and housing type and transportation). The findings largely concur with the tracts identified as disadvantaged by the CEJST shown in Figure 4-7, with the central areas of the study area being the most vulnerable.

[2] Figure 4-8 uses 2020 SVI data, which is based on 2020 census tract geography.

Figure 4-8: Overall SVI Percentile Ranking

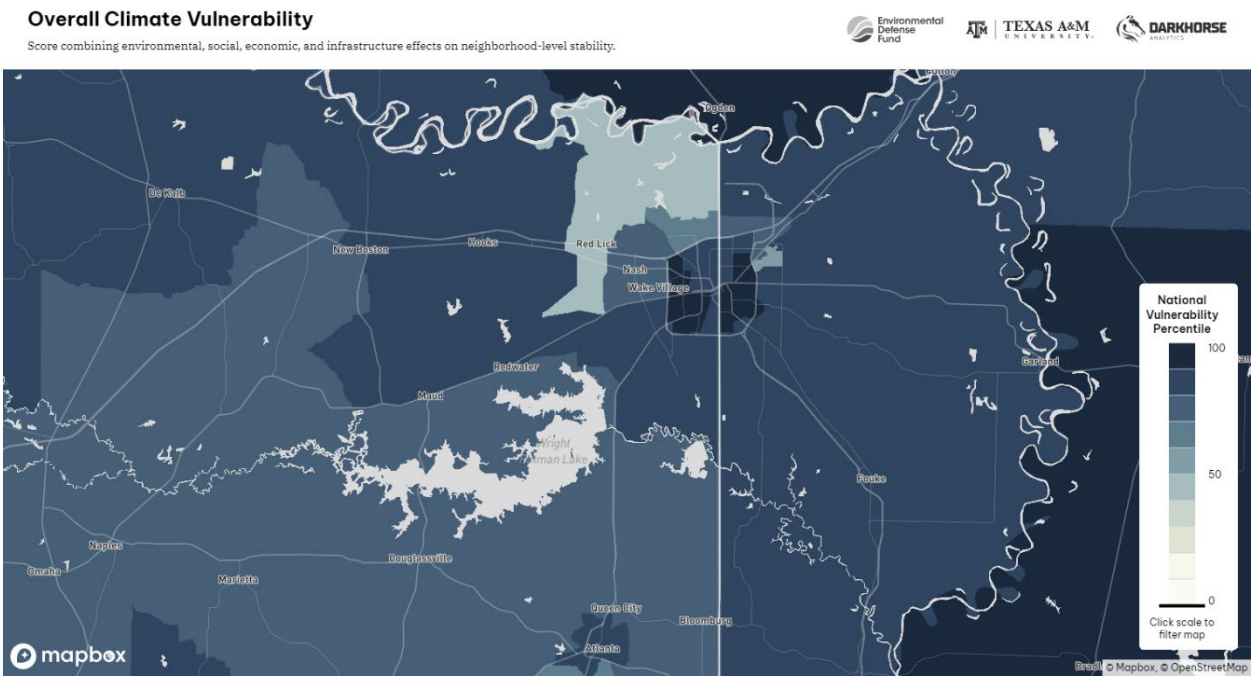


Source: CDC/ATSDR SVI (2020)

Climate Vulnerability Index

The Climate Vulnerability Index (CVI) is a tool that visualizes the impacts of growing climate risks on disadvantage communities in the United States[3]. The CVI considers the cumulative effect of 184 indicators, which are categorized further under environmental, social, economic, and infrastructure impacts.

Figure 4-9: Climate Vulnerability Index Results



Source: Climate Vulnerability Index, 2024

Figure 4-9 shows the results of the CVI in census tracts in the Texarkana Region. One census tract containing the City of Red Lick is in the 47th national vulnerability percentile. All other tracts are in the 50th percentile or higher, with tracts in the urban core considerably higher, the highest being in the 96th percentile on both the Texas and Arkansas side of the region.

This equity analysis will be utilized to ensure historically underserved and vulnerable communities will not be disproportionately affected by negative consequences resulting from transportation projects. In addition, this analysis highlights areas of the Texarkana region that should be of heightened consideration for projects that enhance mobility choice such as new transit, bicycle, and pedestrian network facilities. Such projects can lessen the transportation cost burden on vulnerable communities and facilitate greater access to the region.

[3] https://climatevulnerabilityindex.org/about/

Roadway - Congestion

A region's roadway network is typically the backbone of the area's transportation system. An efficient roadway system can have cascading benefits toward other modes of transportation (i.e., transit, bicycling, etc.), which in turn increases accessibility, mobility, and quality of life. Therefore, it is crucial to create a base understanding of the Texarkana MPO planning area's roadway needs and deficiencies. The following analysis looks at existing and future traffic trends by utilizing statewide model outputs; all analysis involving demographic measures is conducted at the Traffic Analysis Zone (TAZ) level based in the Texarkana MPO Travel Demand Model.

Level of Service

The Connect to Texarkana 2050 MTP Update uses volume/capacity (V/C) Ratio (the ratio of actual daily peak traffic flow to maximum allowable traffic flow on a road segment) as the performance measure to analyze and project travel trends for the region.

Level of Service has ratings of roadway operating conditions that are based on the ratio of volume to capacity. The best level of service is rated as A, while the service conditions are rated as F. A level of service at F has a volume/capacity ratio of 1 or greater, meaning that there are more vehicles using the road than the road can handle.

Level of service rating conditions:

A = Free flowing traffic

B = Reasonably free flowing

C = Stable flow, but drivers are restricted in choosing speeds

D = Approaching unstable flow

E = Unstable flow; may have short stoppages

F = Unacceptable congestion; stop-and-go

LOS 2018-2050

The 2018-2050 roadway networks show congestion primarily originating on major interstate and highway infrastructure as seen in Figure 4-11 and Figure 4-12. Highway 67 displays the most consistent congestion at a service rating of F from 2018-2050. Highway 82 is a concern with an anticipated increase in lane miles at a service rating condition of F from 2018-2045 but is expected to decrease in 2050. Heavy congestion at IH-30 throughout all of Texarkana is expected to increase considerably from 2018-2050 as well. IH-30 is experiencing high congestion at the east and west of Texarkana and at the intersections of IH-369, Richmond Drive, and the Arkansas/Texas state line. Notably, there is also a congestion issue around the intersection of IH 369 and US 59.

Overall, segments of Highway 67, Highway 82, IH-30, IH-369, and US 59 repeatedly have failing roadway conditions between 2018 and 2050, according to the TDM. The previous congestion analysis for the Texarkana 2045 MTP showed heavy congestion in Texarkana's downtown area, which appears to be no longer a major issue. However, the congestion conditions at IH-30 across the region have worsened from the previous analysis.

The number of lane miles for roadways with poor service, with a rating of F and E, are displayed in Table 4-9 and Figure 4-10. The number of lane miles with a service rating of E dipped from 5.3 to 2.8 from 2018 to 2023, but is expected to reach 46 miles in 2045.The number of miles with a service rating of F is at its lowest in 2018, but more than triples from 2023 to 2045 to 36.8 miles, before increasing again to 53.2 miles in 2050.

Table 4-9: Lane Miles of Poor Level of Service

Year	Miles of LOS E	Miles of LOS F
2018	5.3	8.7
2023	2.8	9.8
2028	6.4	10.6
2045	46.0	36.8
2050	18.5	53.2

Figure 4-10: Lane Miles of Poor Level of Service

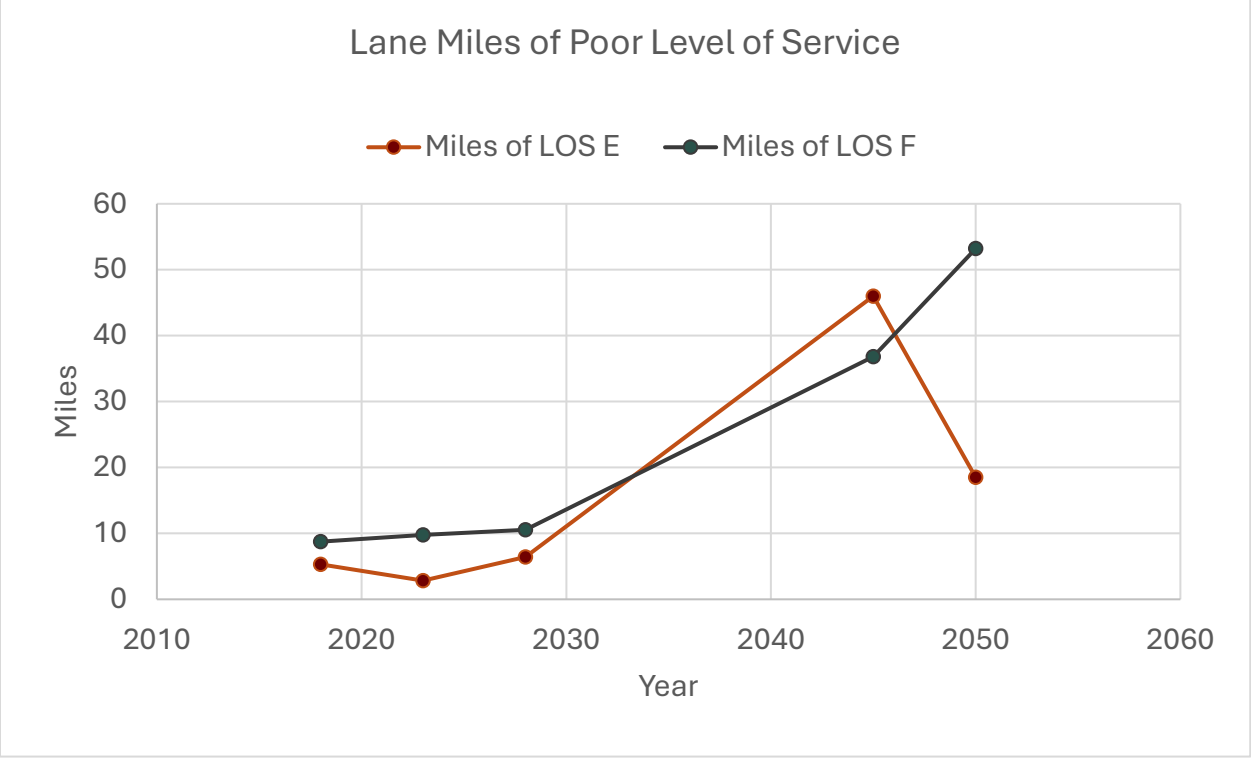


Table 4-10 shows facilities with segments with service ratings of E and F in 2023. Similarly, Highway 67 southwest of downtown Texarkana and large sections of Interstate 30, IH 369, US 67, US 59, and US 82 experienced high levels of congestion. Additionally, increased congestion is shown on Highway 67 northeast of downtown Texarkana and on an extended portion of US 82 and Genoa Road west of downtown. Figure 4-11 displays all levels of service for 2023.

Table 4-10: Congested Facilities, 2023

Facility	Miles of LOS E	Miles of LOS F
HWY 67	0.38	6.07
MALL DR	0.35	-
US 59	0.57	-
IH 30 FRONTAGE	0.11	0.52
US 82	0.90	-
REDWATER RD	0.16	-
ST MICHAEL DR	0.23	6.64
N BISHOP RD	0.05	0.12
N STATE LINE AVE	0.10	-
RICHMOND RD	-	0.29
E 9TH ST	-	5.52
SOWELL LN	-	0.05
WALTON DR	-	0.27
IH 369 RAMP	-	5.20
S BISHOP RD	-	4.92

Figure 4-11: Volume Capacity (V/C) Ratio (2023)

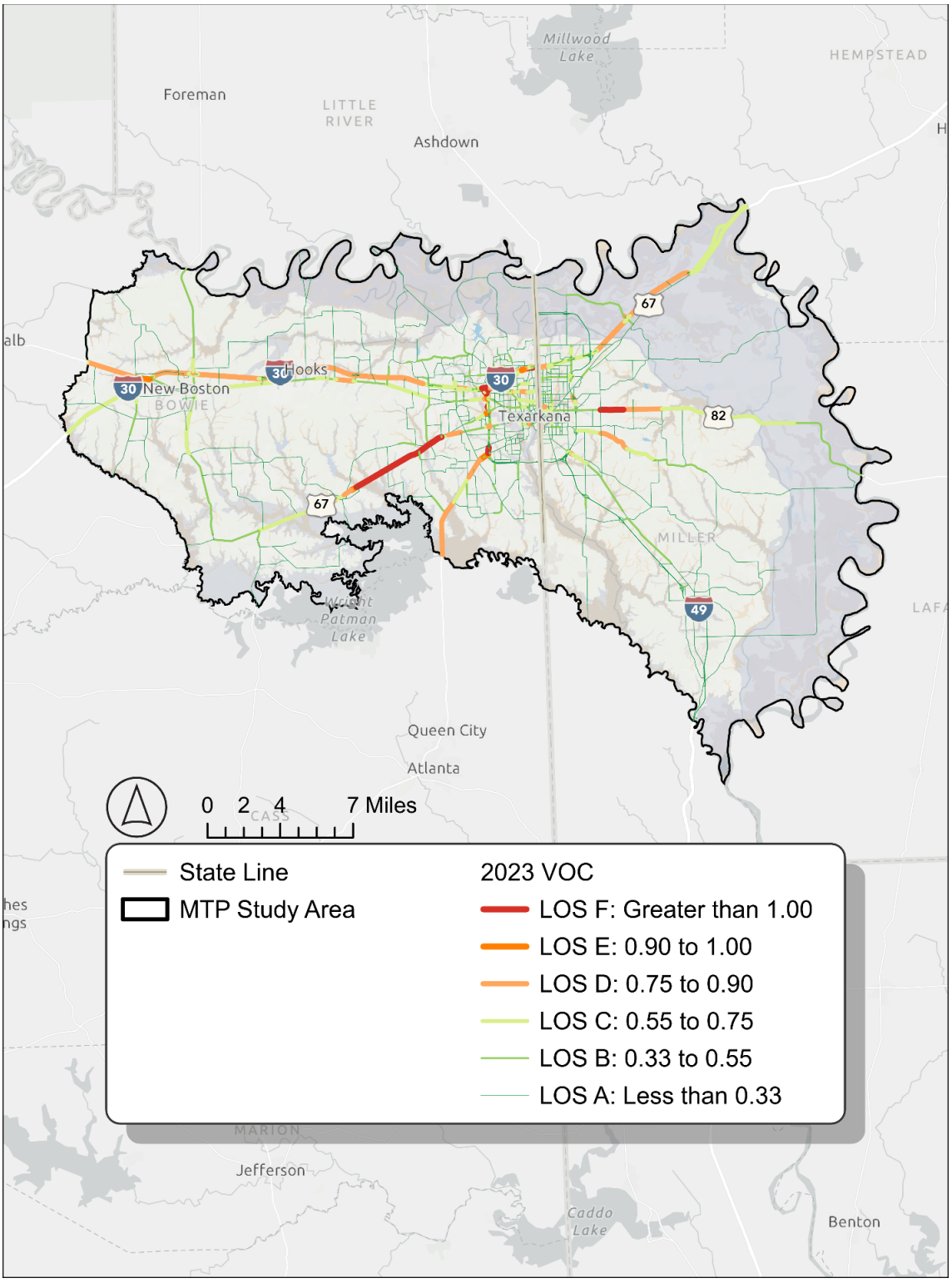
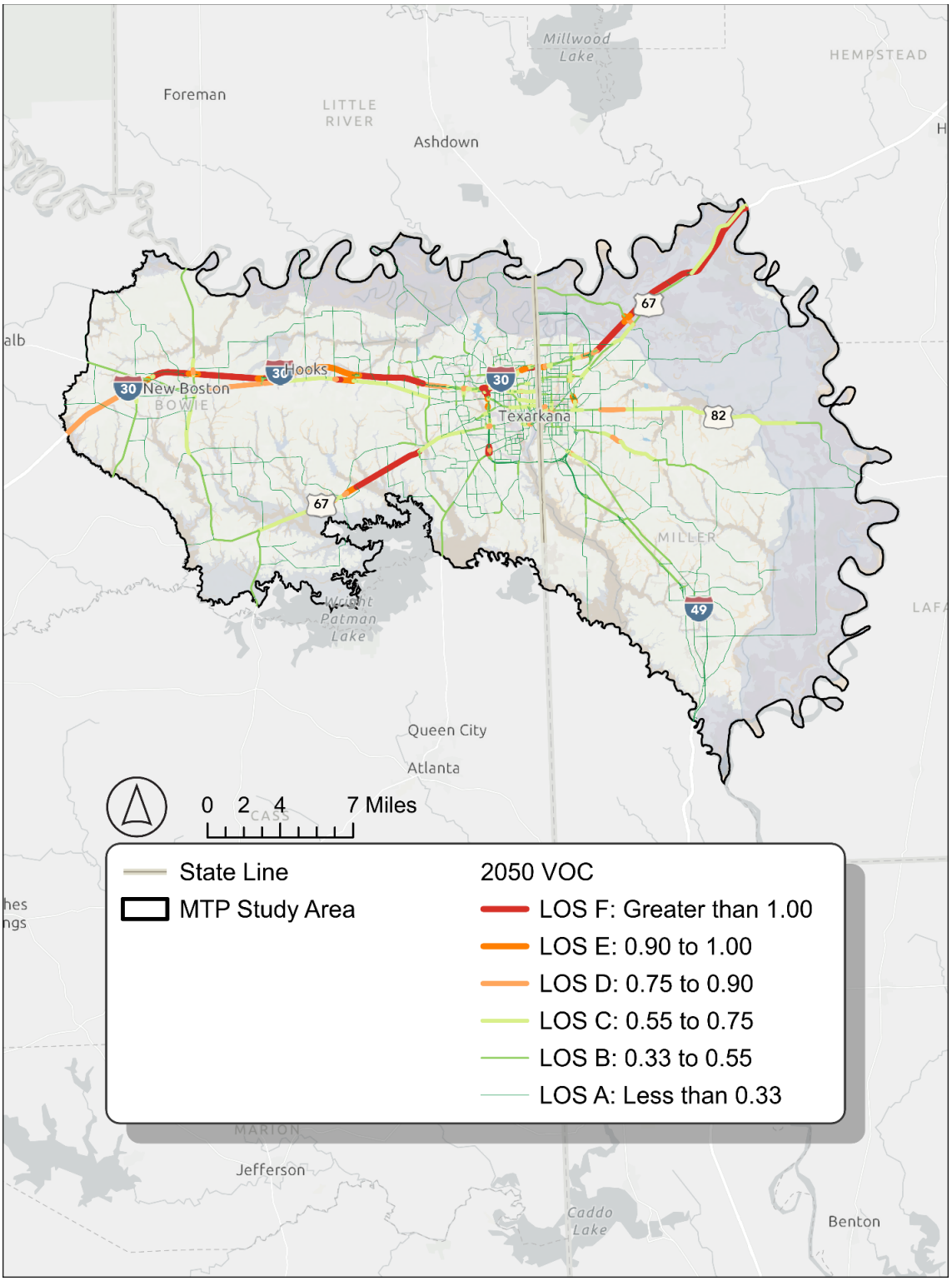


Table 4-11 shows the expected level of service by 2050. Interstate 30 and Highway 67 are expected to have the worst levels of service, with over 50 combined miles of congestion. Figure 4-12 displays all levels of service for 2045.

Table 4-11: Congested Facilities, 2050

Facility	Miles of LOS E	Miles of LOS F
IH 30	14.85	46.36
US 82	0.80	0.24
HWY 67	0.61	4.43
RICHMOND RD	0.19	0.10
MALL DR	0.42	-
N BISHOP RD	0.12	0.05
ST. MICHAEL DR	0.33	0.32
IH 30 FRONTAGE	0.23	0.52
REALTOR AVE	0.12	-
N STATE LINE AVE	0.10	-
L.E. GILLILAND RD	0.34	-
SH 108	0.38	-
IH 369 RAMP	-	0.47
S BISHOP RD	-	0.13
CHELF RD	-	0.04
WALTON DR	-	0.27
SOWELL LN	-	0.26

Figure 4-12: Volume Capacity (V/C) Ratio (2050)



Roadway – Reliability

In support of the development of the Connect to 2050 Texarkana MTP Update, the project team conducted a reliability analysis to better understand the existing conditions of roadway reliability for the Texarkana MPO planning area. This reliability analysis used Level of Travel Time Reliability (LOTTR) and Truck Travel Time Reliability (TTTR) data from 2020, 2021, and 2022 as accessed through the National Performance Research Data Set (NPMRDS). This analysis provides an understanding of the state of Texarkana's planning area roadways. More specifically, this analysis serves to point out roadways where improvements towards improving travel time reliability and freight resilience may have the highest impact as the Texarkana MPO moves forward with the MTP planning process and strategy prioritization. The following section identifies the data sources and describes the various methods and tools used to complete the roadway needs assessment.

National Performance Management Research Data Set Measures (NPMRDS)

In order to ensure a) a complete understanding of existing conditions on the Texarkana MPO roadway network and b) a federally compliant Metropolitan Transportation Plan (MTP), the Connect to 2050 Texarkana MTP Update project team used FHWA's NPMRDS to calculate roadway performance measures for the existing system. These values were aggregated from the NPMRDS and joined to the NPMRDS Arkansas and Texas roadway networks to spatially analyze and target areas of concern. The results of this analysis provide quantitative values for performance measures for use in the evaluation and prioritization of transportation investments. The mobility measures used in the non-freight portion of this analysis include:

- National Performance Management Measures for System Performance
    - Level of Travel Time Reliability (LOTTR)
    - Percent of person-miles traveled on interstate segments that are reliable
    - Percent of person-miles traveled on non-interstate NHS segments that are reliable

The following sections detail findings from analyses based on FHWA's NPMRDS to create a robust understanding of existing and inform prioritizations impacting future roadway conditions.

National Performance Metrics for System Reliability

Travel time reliability is a measure of "the consistency or dependability of travel times from day to day or across different times of day" for a given roadway.[4] While congestion typically focuses on the average roadway conditions in terms of delay, travel time reliability indicates the level to which traffic or roadway conditions can be anticipated for travelers to plan around expected delays. Reliability of the roadway network is important because it allows travelers to reach their destinations at their planned time. This is important for passenger travel and goods movement as well as for transit services as route planning plays an important role in how people manage their day-to-day lives.

[4]Source: FHWA; National Performance Measures for Congestion, Reliability, and Freight, and CMAQ Traffic Congestion – General Guidance and Step-by-Step Metric Calculation Procedures; https://fhwa.dot.gov/tpm/guidance/hif18040.pdf

Level of Travel Time Reliability

Level of Travel Time Reliability (LOTTR) is calculated using a ratio of the 50th and 80th percentile travel time for all vehicles traveling a given roadway segment. Travel time data is provided as part of FHWA's NPMRDS. For the Texarkana Study Area, 2020, 2021, and 2022 travel time data was used for the defined Texarkana MPO NPMRDS roadway network. In this case, unreliable means that travelers of a roadway segment cannot reasonably predict the time it would take to travel the roadway during peak traffic time periods. Multiple years were examined to provide an overview of changes to reliability year over year as well as to identify possible segments with persistent issues with reliability. It is worth noting that decreased roadway volumes during the COVID-19 lockdown may have affected the resulting reliability of the roadway system in 2020.

Per the 2022 NPMRDS, the current system within the MPO boundaries reports 100% of person-miles traveled on interstate segments that are reliable. This achieves the target of greater than or equal to 90% of the system containing a LOTTR less than 1.50. The current system further reports 92.9% percent of person-miles traveled on non-interstate NHS segments that are reliable, which is better than the 90% target. Within the larger MTP study area boundaries, 100% of person-miles traveled on interstate segments are reliable. This achieves the target of greater than or equal to 90% of the system containing a LOTTR less than 1.50. The current system further reports 95% percent of person-miles traveled on non-interstate NHS segments that are reliable, which is better than the 90% target, which will help inform planning decisions moving forward.

Interstate Level of Travel Time Reliability

In comparison to the ARDOT and TxDOT reliability targets that were adopted by the Texarkana MPO in May of 2022, regional performance measures for Interstate reliability within the Metropolitan Planning Area (MPA) and within the MTP study area for 2020 through 2022 are shown to be performing better than or in line with the statewide baselines as of 2022 as well as the 2-year and 4-year targets set by both State DOTs. These comparisons are shown in Table 4-12 and Table 4-13.

Table 4-12: IH LOTTR - MPO to Arkansas Statewide Comparison

Year	MPO Boundary	MTP Study Area	ARDOT Baseline	ARDOT 2-Yr. Target	ARDOT 4-Yr. Target
2020	100%	100%	98.5%	93%	93%
2021	100%	100%			
2022	98%	98%			

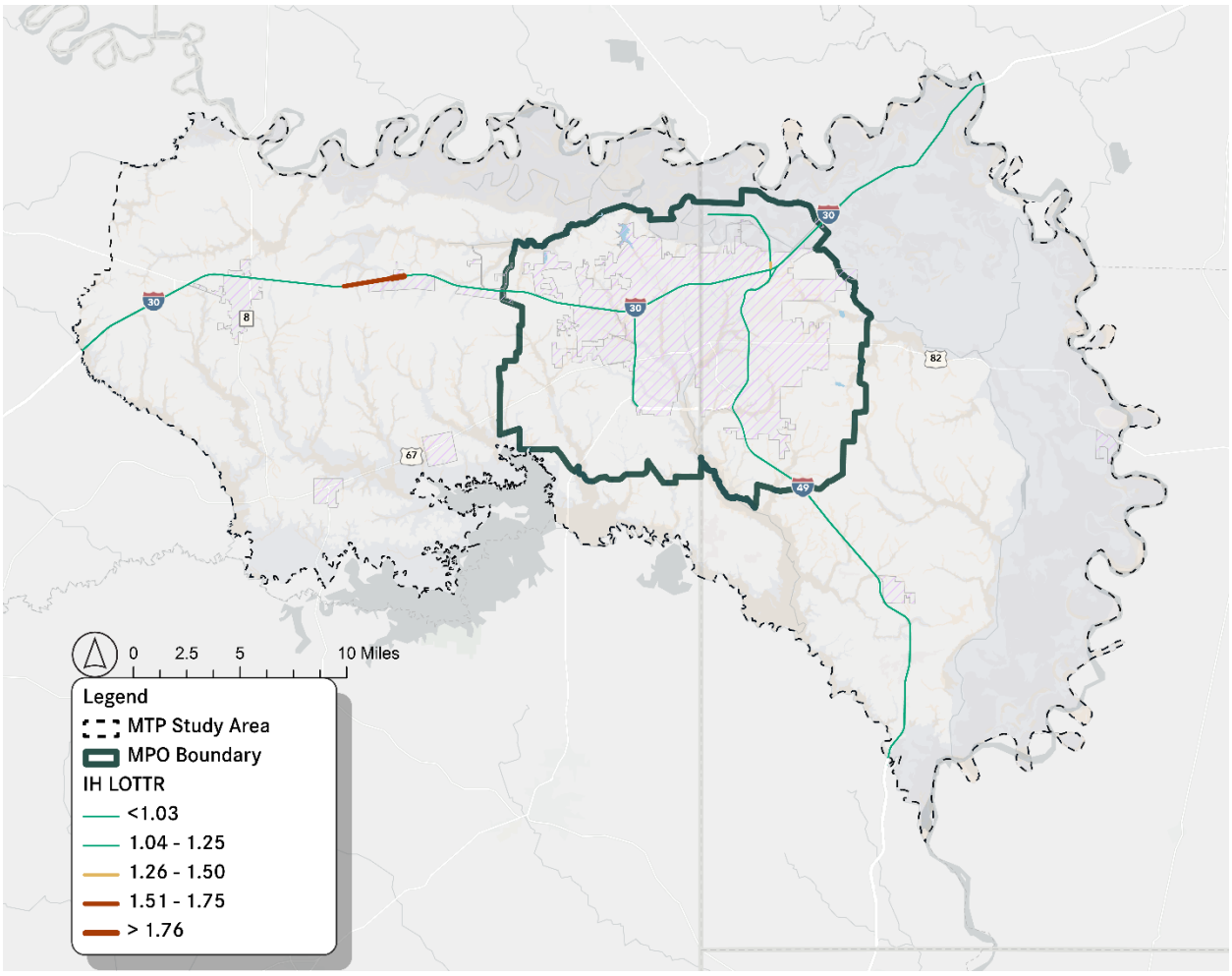
Table 4-13: IH LOTTR - MPO to Texas Statewide Comparison

Year	MPO Boundary	MTP Study Area	TxDOT Baseline	TxDOT 2-Yr. Target	TxDOT 4-Yr. Target
2020	100%	100%	84.6%	70.0%	70.0%
2021	100%	100%			
2022	98%	98%			

The following pages illustrate system reliability in the study area for interstate travel in 2022. The interstate serves as a major connector for cross regional travel and provides critical linkages to the global market. As such the mapped data will help inform further decision making for long term investment strategies and future project prioritization considerations.

Figure 4-13 displays the LOTTR for segments on the Interstate system in 2022. Almost all segments have a LOTTR score below 1.5, showing a very reliable system. One segment, I-30W just west of Hooks, does have a LOTTR score of 1.51, putting it above the >1.5 threshold, qualifying as failing for reliability.

Figure 4-13: 2022 Interstate LOTTR



Non-Interstate NHS Level of Travel Time Reliability

Similarly, performance measures for non-Interstate NHS reliability within the MTP study area for 2020 through 2022 are shown to be performing better than or in line with the statewide baselines as of 2022 as well as the 2-year and 4-year targets set by both State DOTs.

Performance measures for non-Interstate NHS reliability within the MPA are slightly under Arkansas baseline measures, but it is worth noting that much of this is driven by segments on the Texas side of the study area. This is further illustrated through maps as represented in figures on the following pages. Comparisons of regional measures to statewide baselines and targets are shown in Table 4-14 and Table 4-15.

Table 4-14: Non-IH NHS LOTTR - MPO to Arkansas Statewide Comparison

Year	MPO Boundary	MTP Study Area	ARDOT Baseline	ARDOT 2-Yr. Target	ARDOT 4-Yr. Target
2020	92%	96%	95.6%	92%	92%
2021	83.4%	89%			
2022	92.9%	95%			

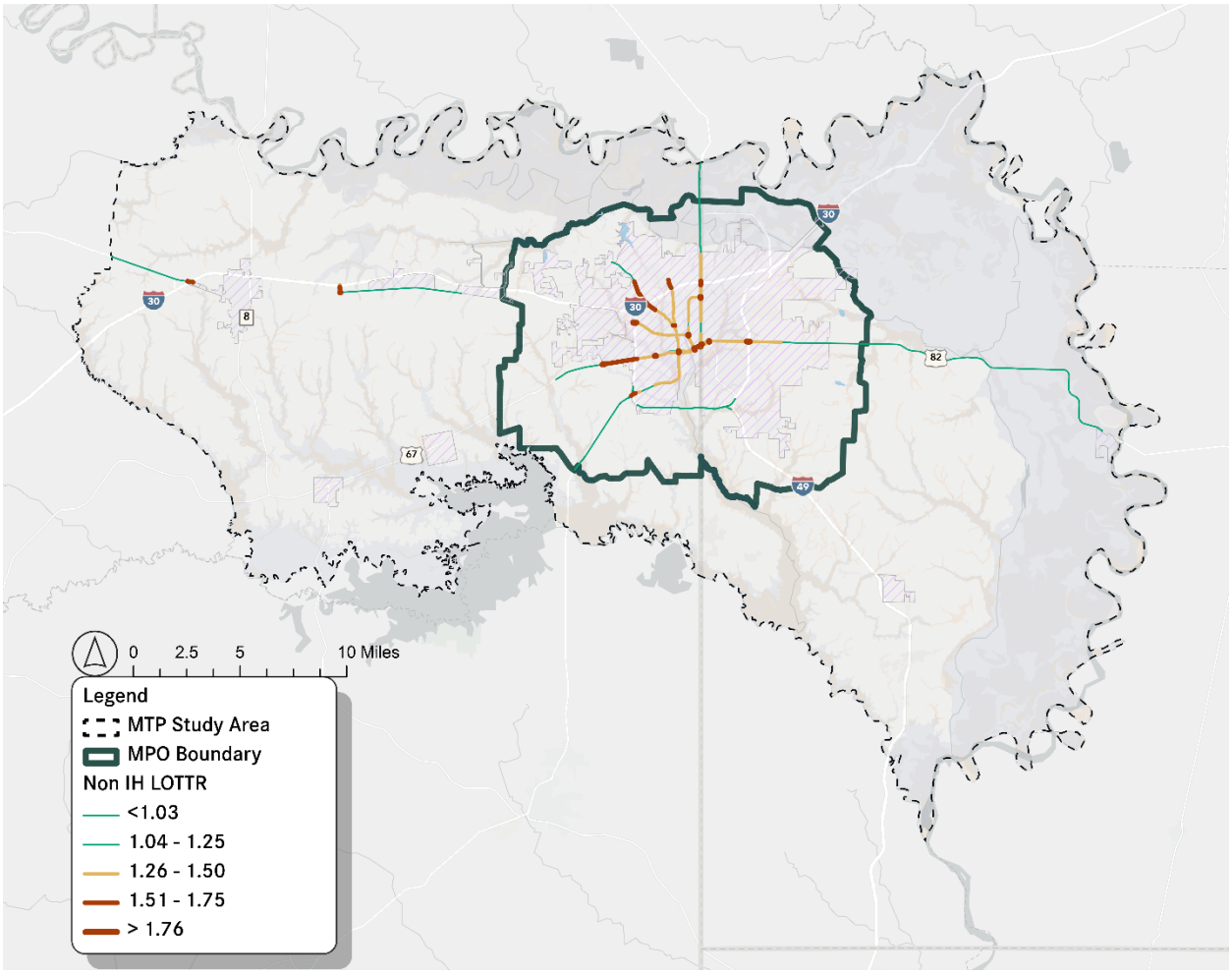
Table 4-15: Non-IH NHS LOTTR - MPO to Texas Statewide Comparison

Year	MPO Boundary	MTP Study Area	TxDOT Baseline	TxDOT 2-Yr. Target	TxDOT 4-Yr. Target
2020	92%	96%	90.3%	70%	55%
2021	83.4%	89%			
2022	92.9%	95%			

The following pages illustrate where system reliability within the study area for non-interstate NHS travel in 2022. As with the interstate, the non-interstate NHS also serves as an important connector for inter-regional travel and likewise provides critical links to the global market. Reliability on the non-interstate NHS also affects quality of life for many residents of the study area and provides the basis for reliable route planning for the movement of goods. As such, the mapped data will help inform further decision making for long term investment strategies and future project prioritization considerations.

Figure 4-14 displays the unreliable non-Interstate NHS segments for the MTP study area in 2022. Several segments within the MTP Study Area contain LOTTR scores of 1.5 or above. Particular segments above the threshold are Highways 67, 71, 14, and 82 in the downtown area. Summerhill and Richmond Roads are also segments with a LOTTR score above 1.5.

Figure 4-14: 2022 Non-Interstate LOTTR



Truck Travel Time Reliability

The roadway network is also critical to the movement of freight within, into, and out of the Texarkana study area. It is critical that the Texarkana MPO's roadways provide safe, efficient, and reliable routes for the movement of goods to support economic resilience and economic competitiveness on regional, national, and even international markets. If supply chains that rely on consistent deliveries are interrupted due to congestion and poor reliability, industries and local businesses may incur additional costs.

Regionally, unreliable roadway segments, congestion, and/or delays on the freight network can make an area unattractive to business development that needs reliable roadways that support safe, efficient freight mobility. Further, poor system performance on the primary freight routes can cause freight spillover to facilities that are not meant for such tonnage, causing strain on roadways, and creating potential safety issues for surrounding communities. The following sections analyze the conditions and performance of the freight roadway network assets previously discussed and review future no-build conditions to create a picture of where future strain may occur on the Texarkana MPO freight network.

The Truck Travel Time Reliability (TTTR) Index is an indicator of unexpected delays or the predictability of travel times specific to freight movement. In addition to being a federally required performance measure, TTTR is an important measure to consider for freight analysis as many businesses rely on predictable, just-in-time freight deliveries as part of their operations. If businesses can anticipate certain levels of congestion, they are able to plan their deliveries and operations around that congestion and avoid missed deliveries and unnecessary delays.

TTTR is a metric that indicates freight reliability and FHWA provides data resources for reporting TTTR values specifically for interstate segments. Using FHWA's 2020, 2021, and 2022 National Performance Management Data Set (NPMRDS) truck travel time data, the metric was calculated as a ratio of the 50th percentile of truck travel time to the 95th percentile truck travel time for a given segment.[5] A value above 1.5 indicates a segment that is unreliable for truck travel, and the higher the value, the more unreliable the segment.

[5] Methodology for calculating TTTR was taken from FHWA guidance calculating national performance measures (https://www.fhwa.dot.gov/tpm/guidance/hif18040.pdf)

Table 4-16: TTTR - MPO to Arkansas Statewide Comparison

Year	MPO Boundary	MTP Study Area	ARDOT Baseline	ARDOT 2-Yr. Target	ARDOT 4-Yr. Target
2020	1.11	1.08	1.24	1.35	1.35
2021	1.13	1.12			
2022	1.13	1.15			

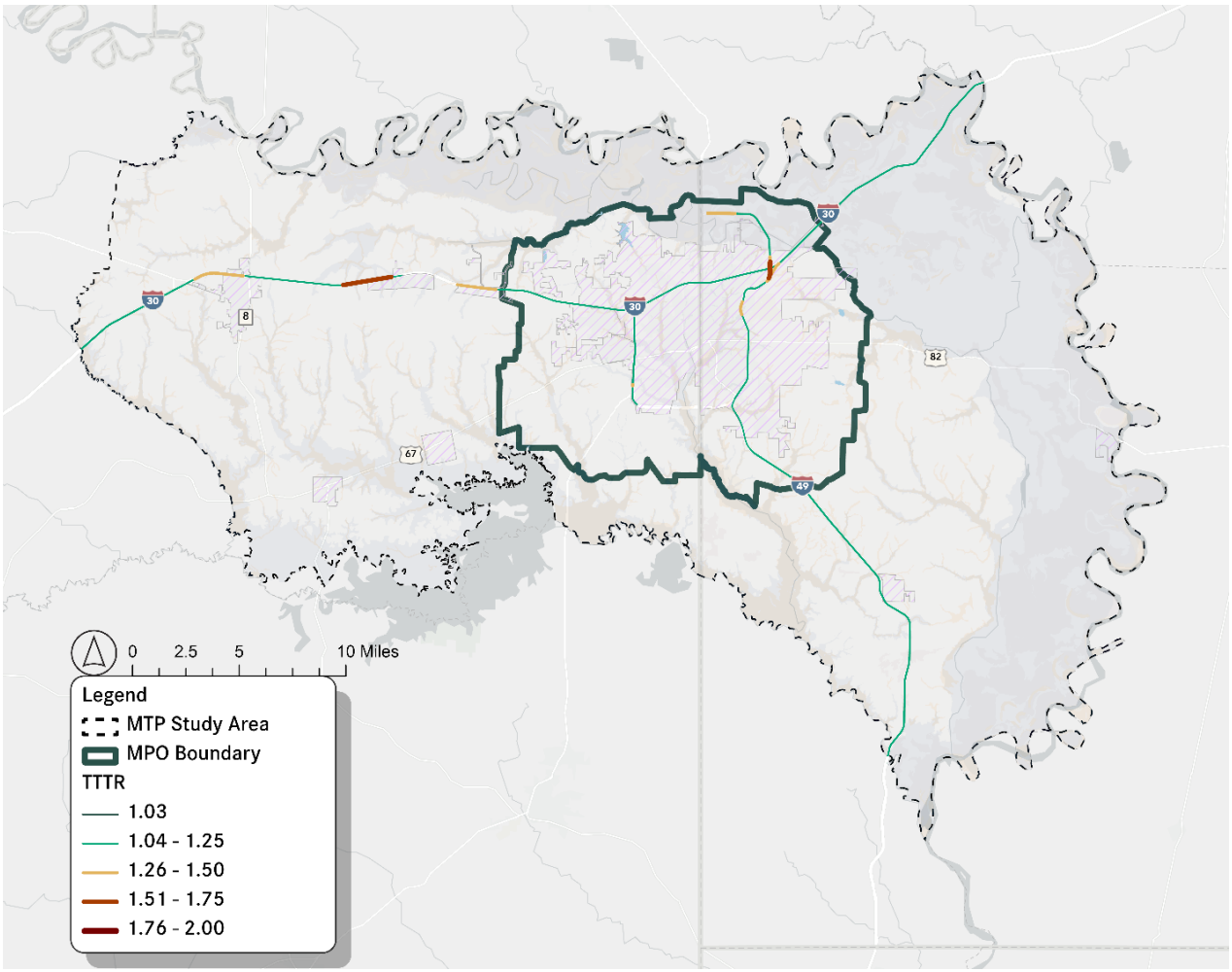
Table 4-17: TTTR - MPO to Texas Statewide Comparison

Year	MPO Boundary	MTP Study Area	TxDOT Baseline	TxDOT 2-Yr. Target	TxDOT 4-Yr. Target
2020	1.11	1.08	1.39	1.55	1.55
2021	1.13	1.12			
2022	1.13	1.15			

The following pages illustrate truck travel time reliability on the interstate system in 2022. As with LOTTR on the interstate, and non-interstate NHS, TTTR serves as an important way to look at interstates as connectors for inter-regional travel, as it provides critical linkages for the Texarkana region to the global market. As such the mapped data will help inform further decision making for long term investment strategies and future project prioritization considerations.

Figure 4-15 displays unreliable roadway segments for freight. Roads in the southern portion of the study area have scored well for reliability; however, the north and west sections of the study area have several unreliable areas. The segments are I-49 on the north side of the study area and I-30W on the west side. The segment of I-30W between Main Street in Hooks and James Carlow Drive has a LOTTR score of 1.67.

Figure 4-15: 2022 TTTR



Roadway Reliability Takeaways

In comparison to statewide metrics for both Arkansas and Texas, the greater Texarkana region has relatively reliable travel times on the NHS, both on and off of the interstate for both passenger travel and freight movement. Segments identified as failing for the data years are identified in the tables below to be used in comparison to project assessment and prioritization processes and are intended to support a data driven decision-making process.

From the vantage point of overall performance management, the next step in the process will be to identify where projects are already planned that may address some of the failing segments and identify project opportunities to address the resulting gaps. Project considerations should include operational improvements such as improved interchange design, intersection configuration, and ITS implementation.

Table 4-18 and Table 4-19 show the specific segments with failing LOTTR for Interstate and non-Interstate segments for the years 2020-2022 and indicate, where applicable, which segments have shown multi-year failing LOTTR with an asterisk (*). In some instances, contiguous segments have been summarized for the purposes of assessing comprehensive segments of roadway. In these instances, an average LOTTR has been provided along with an indication of what the worst LOTTR score is for those roadways. Any score over 2 has been highlighted for additional emphasis.

Table 4-18: Failing Interstate LOTTR, 2020-2022

Roadway	From	To	Avg LOTTR	Worst LOTTR	Direction	CO
I-30	Tx 86	FM 560	2.375	3.24	WB	Bowie

Table 4-19: Failing Non-Interstate NHS LOTTR, 2020-2022

Roadway	From	To	Avg LOTTR	Worst LOTTR	Direction	County
US-82 W	At I-30			1.54	WB	Bowie
TX 86*	I-30	US-82	1.67	1.81	SSB	Bowie
US-59*	At I-369/I-151		1.67	1.67	NB	Bowie
US-67*	S Kings Highway	I-369	1.74	2	EB	Bowie
US-67*	At S Kings Highway		1.91	1.91	WB	Bowie
US-67	Robinson Rd.	Wagner St.		2.25	WB	Bowie
US-67	US-14	Halfway b/w Wood St. and Stateline	1.63	1.63	WB	Bowie
US-82*	At I-369		1.74	1.95	both	Bowie
US-82	I-369	N Robinson Rd.		1.69	WB	Bowie
FM 559 / Richmond Road*	Moores Lane	North side of I-30 interchange	1.585	1.6	NB	Bowie

Roadway	From	To	Avg LOTTR	Worst LOTTR	Direction	County
FM 559 / Richmond Road*	North side of I-30 interchange	South side of I-30 interchange	1.57	1.62	SB	Bowie
FM 559 / Richmond Road*	South side of I-30 interchange	N Robinson Rd.	1.62	1.64	both	Bowie
FM 559 / Richmond Road	N Robinson Rd.	Reading St.		1.52	NB	Bowie
FM 559 / Richmond Road	Reading St.	Summerhill Rd.		1.71	SB	Bowie
FM 1397 / Summerhill Rd.*	Moores Lane	North side of I-30 interchange	1.64	1.7	SB	Bowie
FM 1397 / Summerhill Rd.	At I-30			1.52	NB	Bowie
US-71*	At I-30		1.66	1.75	both	Bowie
TX-14 Loop/Texas BLVD	W 40th St.	US-71		1.65	NB	Bowie
US-71*	At Arkansas BLVD / Texas BLVD		2.28	2.71	both	Bowie
US-71	Arkansas BLVD / Texas BLVD	W 29th St.		1.63	NB	Bowie
TX-14 Loop / Texas BLVD*	At S Que-lane to US-82		1.985	2.18	SB	Bowie
TX-14 Loop / Texas BLVD*	At N/W Que-lane	US-82	1.81	2	WB	Bowie
US-82	FM 1397/Summerhill Rd.	TX-14 Loop/Texas BLVD		1.5	WB	Bowie
FM 1397 / Summerhill Rd.*	US-67 Westbound	US-67 Eastbound	1.82	1.85	SB	Bowie
TX-14 Loop / Texas BLVD*	US-67 Westbound	US-67 Eastbound	1.915	2	both	Bowie
US-71*	US-67 Westbound	US-67 Eastbound	1.98	2.18	NB	Bowie
US-67	At US-71			1.9	EB	Bowie
US-67	US-71	Hazel St.		1.88	WB	Miller

Roadway	From	To	Avg LOTTR	Worst LOTTR	Direction	County
US-71	US-82	US-67 Eastbound		1.78	NB	Miller
US-82*	Price Line	East side of I-49 interchange	1.63	1.71	WB	Miller
US-82	East side of I-49 interchange	N. Rondo Rd.		1.5	WB	Miller
TX 86*	I-30	US-82	1.67	1.81	SB	Bowie

*Indicates segments with failing LOTTR year over year

Table 4-20 shows which segments have failing TTTR and indicates, where applicable, which segments had failing reliability year over year. In some instances, contiguous segments have been summarized for the purposes of assessing comprehensive segments of roadway. In these instances, an average TTTR has been provided along with an indication of what the worst TTTR score is for those roadways.

Table 4-20: Failing Truck Travel Time Reliability, 2020-2022

Roadway	From	To	Avg TTTR	Worst TTTR	Direction	County
I-30*	TX 86	Lone Star Drive	2.23	4.69	WB	Bowie
I-49	At US 71			1.65	NB	Miller
I-49*			1.61	1.63	SB	Miller
US-67	Sugar Hill Rd	AR 108	1.68	1.9	NB	Miller

*Indicates segments with failing LOTTR year over year

Roadway – Bridge Conditions

Since bridges within the Texarkana MPO area provide for the movement of people and goods both regionally and between states, a state of good repair is essential Therefore, the project team conducted an analysis to review the conditions of bridges for the Texarkana MPO service area. This analysis found that there are only 2 bridges within the Texarkana MPO boundary that are considered to be in Poor condition.

Analysis

This analysis used data from the USDOT National Bridge Inventory (NBI) from July 2023. The NBI data includes information about bridge locations and the conditions of the deck, substructure, and superstructure components. A score of 7 or higher is given to bridge components that are considered in Good condition. A score of 5 or 6 is given to bridge components that are considered to be in Fair condition, while a score of 4 or lower represents elements that are in Poor condition. Guidance from the FHWA's Computation Procedure for the Bridge Condition Measures and the Code of Federal Regulations (23 C.F.R 490.409) was used to complete the analysis of NBI data. As part of the analysis, the lowest score of the components of a single bridge was selected to portray the overall condition of the bridge.

A total of 252 bridges were identified within the study area, with 144 of these bridges inside of the MPO boundary. Around 54% of the bridges in the study area are in Good condition, 44% are in Fair condition, and 2% are in Poor condition. Figure 4-16 shows the conditions of all bridges in the study area. There are 116 bridges that are part of the National Highway System (NHS) in the study area. Of the NHS bridges, 67% are in Good condition, 33% are in Fair condition, and none are in Poor condition. Table 4-21 presents the number and percent of bridges in each condition in the study area.

The total area of bridges in the study area is 387,501 square meters, of which 1,971 square meters (0.51%) are in Poor condition. The total area of NHS bridges is 253,518 square meters, which is entirely in either Good or Fair condition. Table 4-21 presents the bridge deck area by condition type for the study area, and Figure 4-17 shows NHS bridge locations.

Table 4-21: Bridge Condition by Area

Condition	Total Area	Percent	NHS Only Area	Percent
Good	216,906	55.98%	141,872	55.96%
Fair	168,624	43.52%	111,646	44.04%
Poor	1,971	0.51%	0	0.00%
Total	387,501	100%	253,518	100%

Figure 4-16: Conditions Map of all Bridges

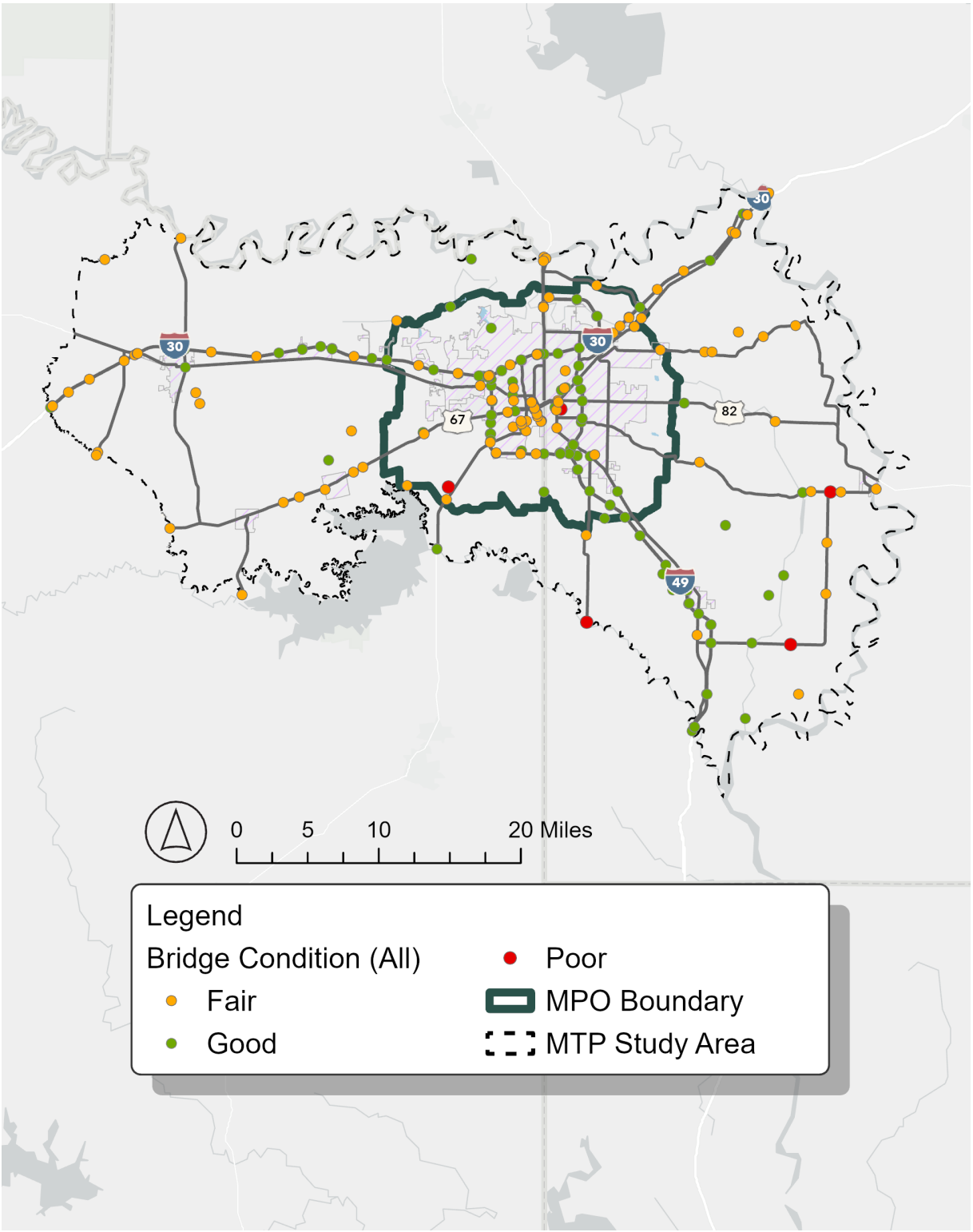
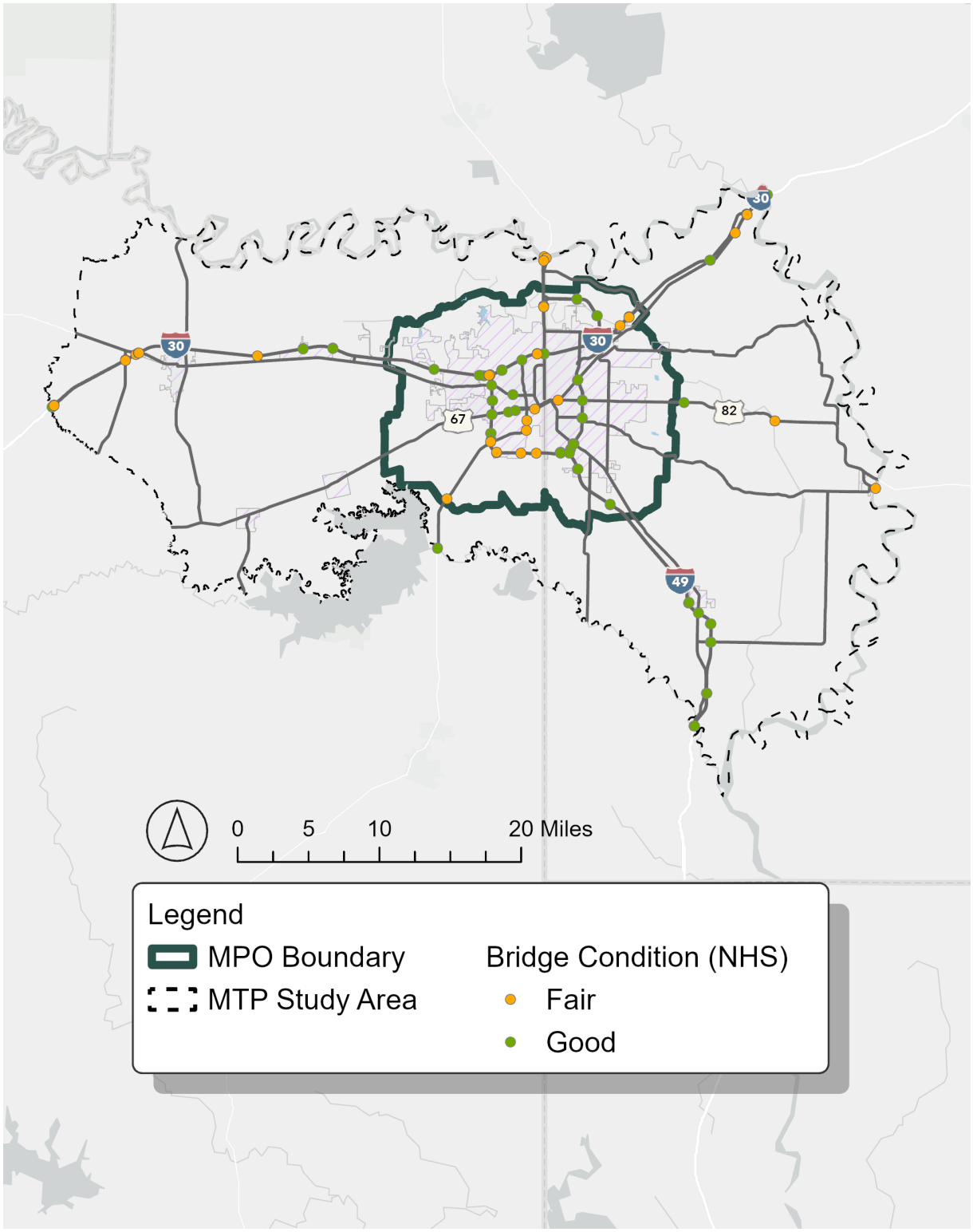


Figure 4-17: Conditions Map of National Highway System Bridges



Roadway – Pavement Condition

The roadway pavement condition analysis for the Texarkana MPO was based on 2022 data from TxDOT and 2024 data from ARDOT. The pavement condition data provides a condition rating based on the International Roughness Index (IRI) for roadways in the Texarkana MPO planning area. This includes roadway segments found on the National Highway System (NHS), as well as various other roadways critical to the movement of people and goods in the region.

Based on guidance from the Code of Federal Regulations (23 C.F.R. 490.313), each roadway segment was categorized by condition according to the following IRI rating scale:

Poor Condition: IRI > 170

Fair Condition: IRI >= 95 and <= 170

Good Condition: IRI <95

Pavement condition data was totaled to represent the number of lane miles for each of the three pavement condition categories, allowing the project team to calculate the percentage of interstate (NHS) and non-interstate NHS lane miles and percentage of lane miles by condition. Table 4-22 presents the pavement condition results which coincide with the national performance measures identified by the FHWA. Table 4-22 below only contains information on the Highway Performance Monitoring System (HPMS) sampled roadways.

Table 4-22: Texarkana MPA – Pavement Condition by IRI Rating

	Total Lane Miles			% Total Lane Miles		
Condition	Interstate	Non-Interstate NHS	Total NHS	Interstate	Non-Interstate NHS	Total NHS
Poor	0.30	5,703.47	5,703.77	0.89%	20.70%	20.68%
Fair	9.72	11,356.90	11,366.62	28.95%	41.22%	41.21%
Good	23.54	10,484.92	10,508.46	70.12%	38.06%	38.10%
Total	33.57	27,548.59	27,582.16	100%	100%	100%

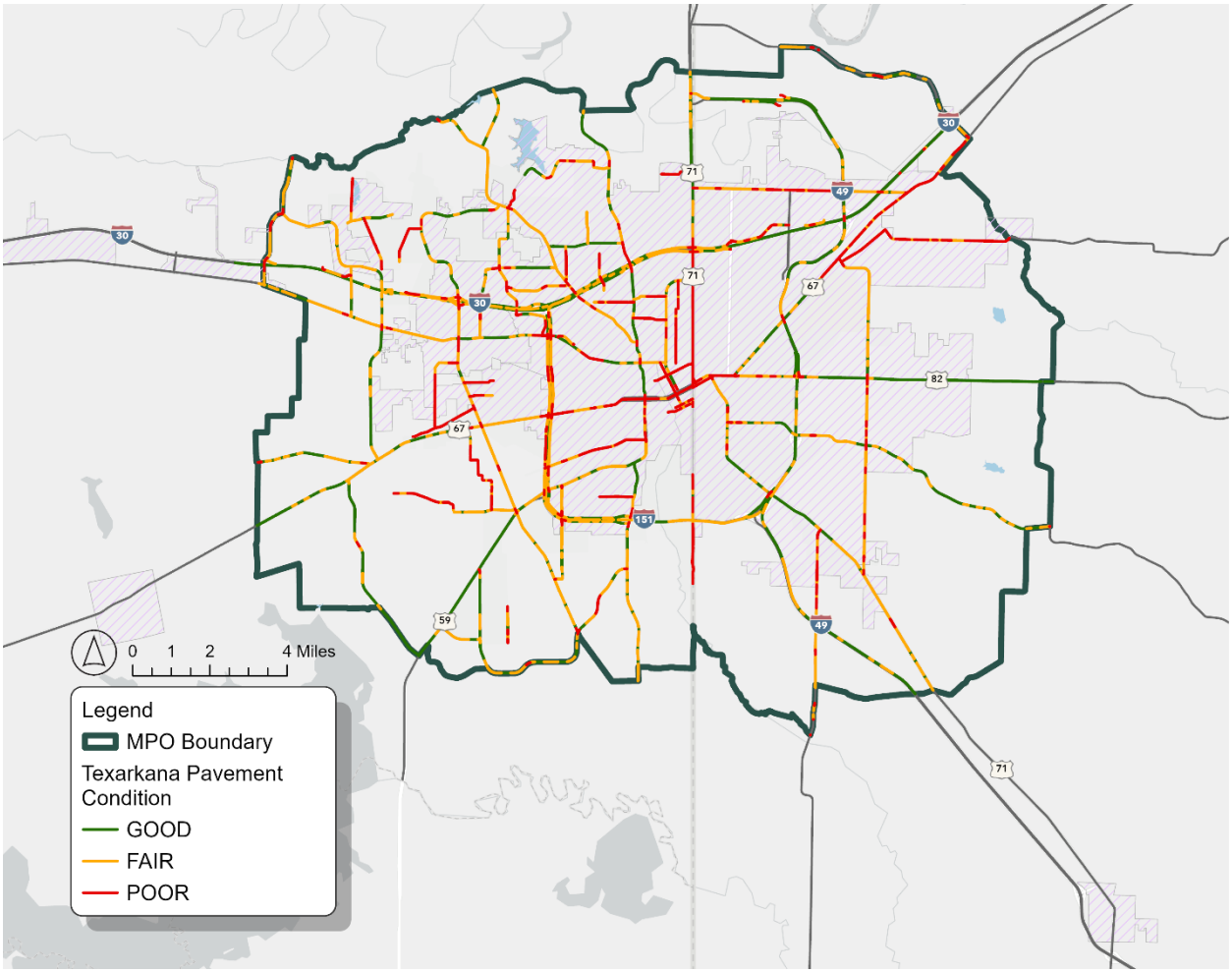
Source: TxDOT (2022), ARDOT (2024)

Out of the 27,582.16 total NHS lane miles with IRI data, 38.10% were found to be in Good condition, while 41.21% were reported as being in Fair condition. This suggests that 79.28% of the NHS roadway pavement conditions are either in a state of good repair or adequate for utilization. Regarding interstate lane miles, 70.12% were rated as being in Good condition, which is above the 66.40% performance measure set forth by the FHWA for 2022. 0.89% of interstate lane miles are in poor condition which is over the limit for interstate lane miles in poor condition for the 2022 FHWA Pavement Performance Targets which is 0.3%.

For non-interstate NHS lane miles 20.70% were rated to be in poor condition, missing the performance measure set forth by the FHWA of 14.3% for 2022. Conversely, the percentage of non-interstate NHS lane miles rated as good condition was 70.12%, well above the FHWA pavement performance target of 52.3%.

Figure 4-18 displays roadway pavement conditions for the NHS (both Interstate and non-Interstate) at the Texarkana MPA level, showing the majority of major interstate and highway infrastructure to be in either Good or Fair condition.

Figure 4-18: Texarkana Pavement Condition by IRI Rating



Transit

Analyzing the population and employment density in a region can be a significant initial measure of transit demand. Transit is most successful when it serves both densely populated communities and areas with high levels of employment. By comparing the population and employment density to the current transit service an agency can identify potential gaps in service to inform future transit investments. This section will highlight the results of the transit density analysis conducted for the Texarkana MPO.

Methods

Data from the 2023 travel demand model (TDM) was used to display the current and future population and employment density within the Texarkana MPO boundary at the traffic analysis zone (TAZ) level. This information was then compared to the T-Line transit routes and analyzed using ATG's Transit Density Benchmarks. ATG's Transit Density Benchmarks are estimated levels of density typically needed to support increasing frequencies of local bus service. They are based on best practices and guidance from the FTA and ITE. Population density benchmarks are measured by the number of people per gross acre, and employment density benchmarks are measured by the number of jobs per gross acre. ATG's Transit Density Benchmarks can be seen in Table 4-23.

Although the study area for the Texarkana Connect to 2050 MTP exceeds the MPO boundary, this analysis will only use data from the areas within the MPO boundary. This is because beyond the MPO boundary, only one TAZ in the study area has a population density above ATG's eight people per acre threshold. This TAZ is the location of the Barry B. Telford Unit prison and would not be necessary to include in an analysis of transit needs. There are also two TAZs outside of the MPO boundary, but within the study area, that meet the employment density threshold of four jobs per acre. These TAZs are the locations of the Fouke School District and the Redwater School District, which are also not included in this analysis because of their distance from existing transit lines and other high density TAZs.

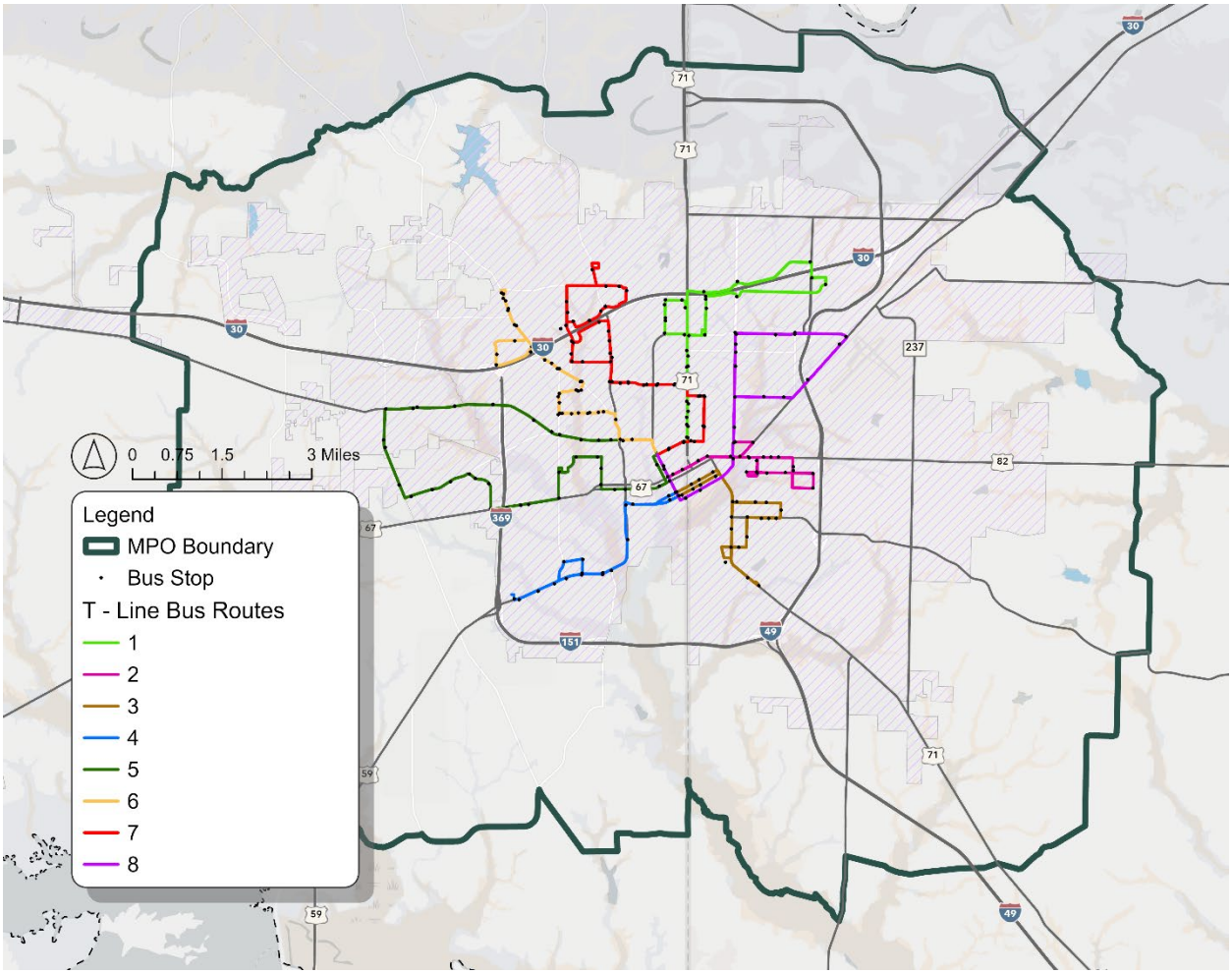
Table 4-23: Transit Density Benchmarks

Population Density (people/acre)	Employment Density (jobs/acre)	Recommended Service Frequency
0 – 8	0 – 4	Flexible Service
8 – 16	4 – 8	60-minute frequency
16 – 26	8 – 16	30-minute frequency
Over 26	Over 16	15-minute frequency

Existing Transit Conditions

The T-Line serves the Texarkana area with eight fixed bus routes that all have a 60-minute recurring service. Figure 4-19 displays eight of the lines that service the cities of Texarkana, Wake Village, and Nash, Texas, as well as Texarkana, Arkansas. The T-Line has adjusted service to include a connection to Texas A&M University – Texarkana, for which map data was not available at the time of analysis. However, the route will be considered when creating project recommendations.

Figure 4-19: T-Line Bus Routes



Transit Density

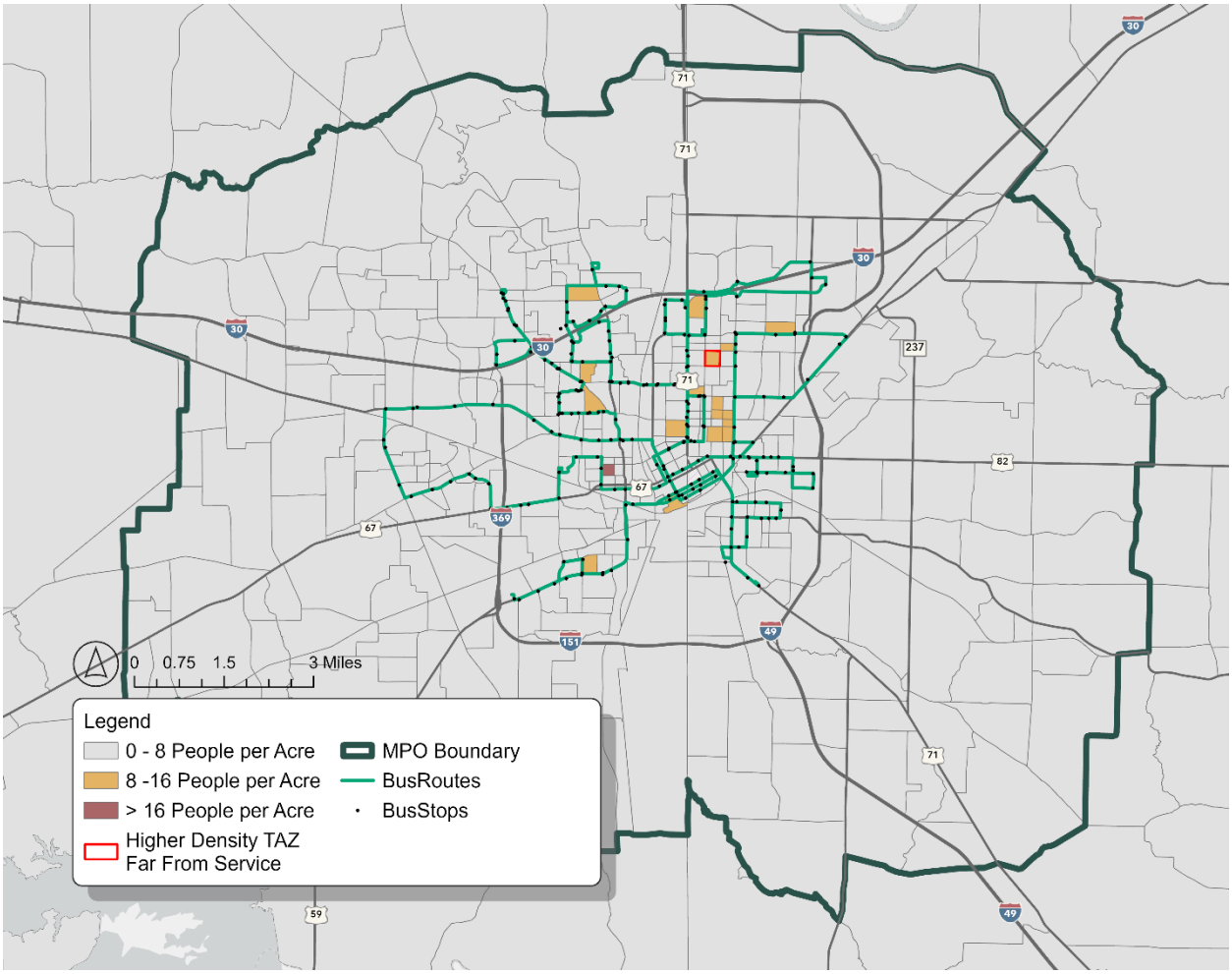
Using the data from the 2023 travel demand model the TAZs were highlighted if they were more than ¼ mile from a bus stop and the population or employment density exceeded the threshold set by ATG.

Transit Density – Population

Figure 4-20 shows the 2023 population density compared to the existing transit lines. There was only one TAZ that was above the threshold of eight people per acre but was not within ¼ mile of a bus stop. This TAZ is adjacent to the Kilpatrick Elementary School and bordered by E 35th St, E 32nd St, Garland Ave, and County Ave.

Additionally, the TAZ containing The Oaks at Rosehill Apartments is currently served by a 60-minute frequency line, when based on the ATG thresholds, the TAZ could support a 30-minute frequency line.

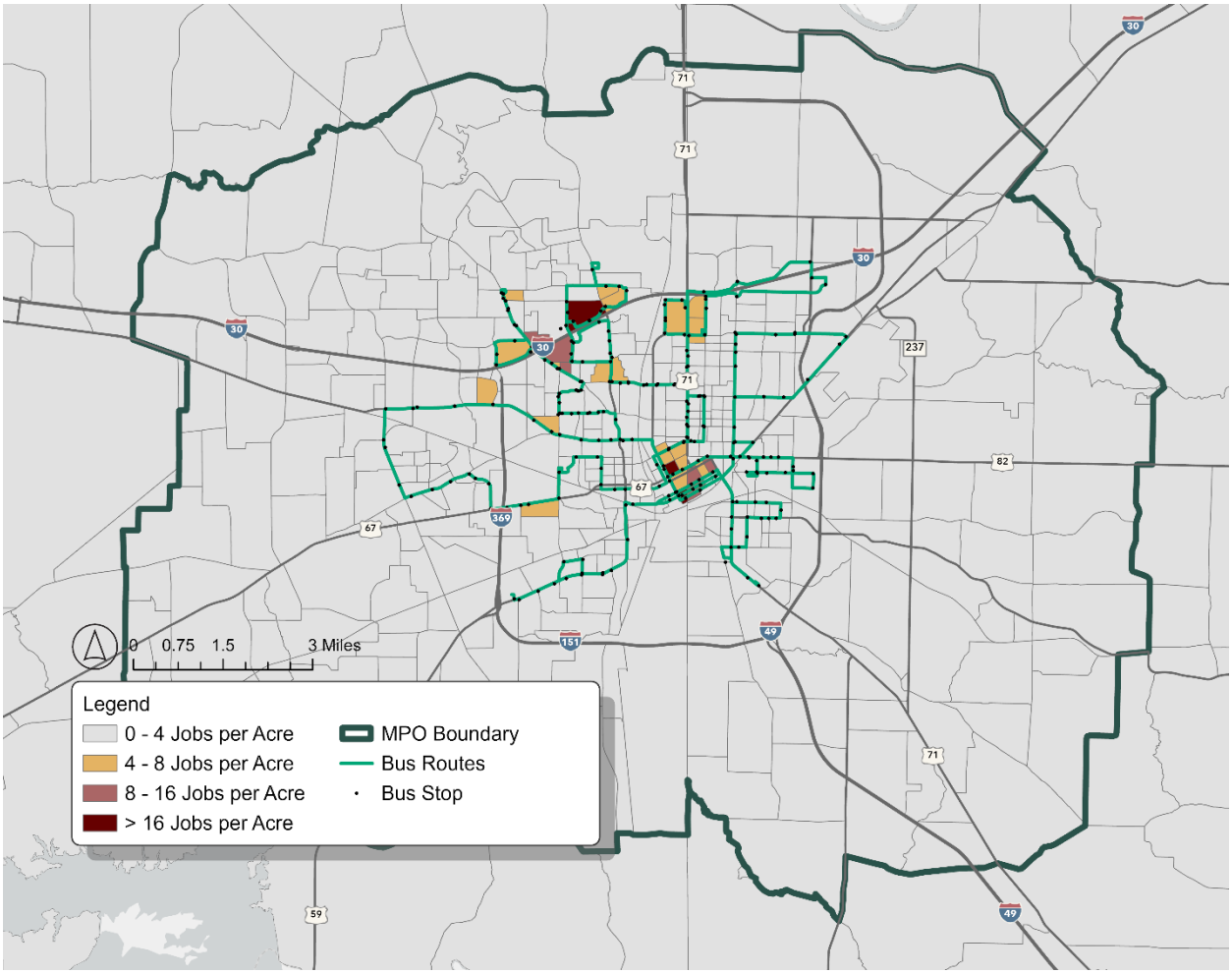
Figure 4-20: Texarkana MPO Population Density and Bus Routes, 2023



Transit Density – Employment

Figure 4-21 shows the 2023 employment density compared to the existing transit lines. Every TAZ that exceeds the four jobs per acre threshold for fixed route service is within ¼ mile of a bus stop. However, several TAZs in the downtown area and in the commercial area at the intersection of Richmond Rd and I-30 have employment densities high enough to support both 30 and 15-minute frequencies.

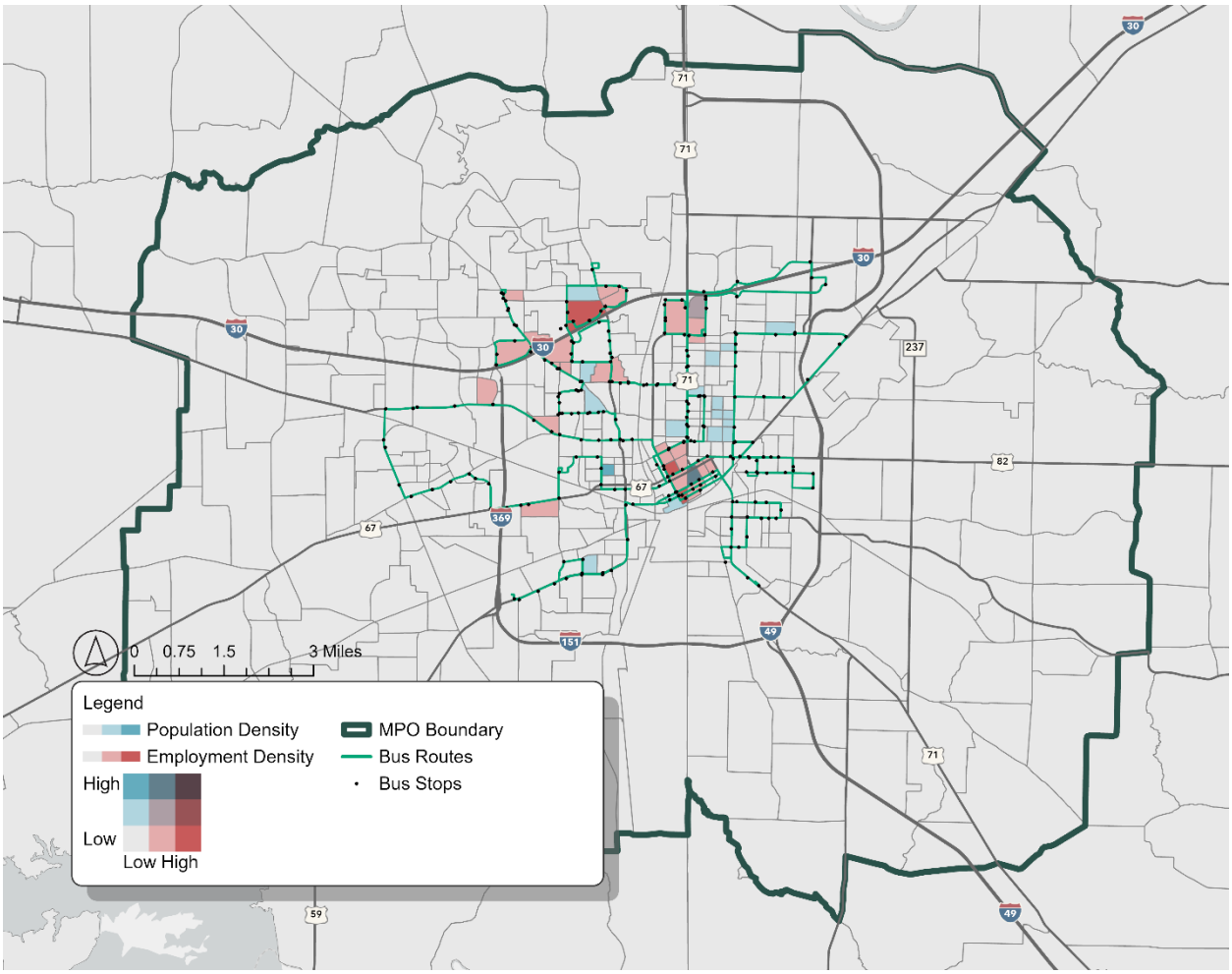
Figure 4-21: Texarkana MPO Employment Density and Bus Routes, 2023



Transit Density – Bivariate

Figure 4-22 shows a bivariate comparison of population and employment density in the Texarkana area. Within the Texarkana area there are few places with high densities of both people and jobs. The only areas with both are downtown Texarkana and a neighborhood located along I-30 between US 71 and County Ave.

Figure 4-22: Texarkana MPO Population and Employment Bivariate Comparison, 2023



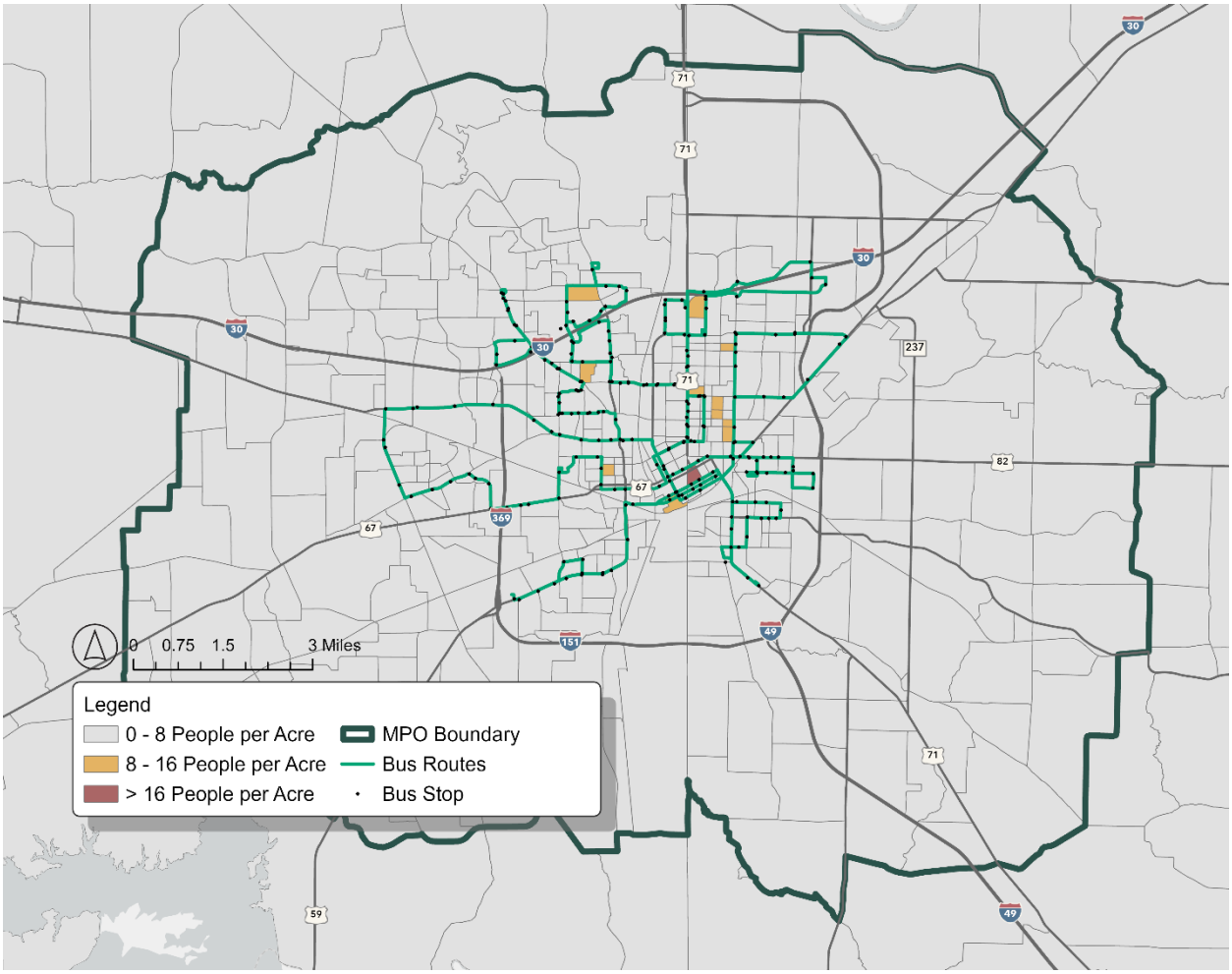
Transit Density Projections (2050)

The 2023 travel demand model was used to conduct the same analysis for the year 2050. The analysis looked for TAZs that were more than ¼ mile from a bus stop and the population or employment density exceeded the threshold set by ATG.

Transit Density – Population

Figure 4-23 shows the population density compared to the existing fixed bus routes. The projections show that the population density will decrease in previously high-density places throughout the city. A part of downtown is expected to increase in density, but the area is the location of the Texarkana Regional Correctional Facility and will likely not affect transit demand. Based on this projection, every TAZ that is above the threshold of eight people per acre for fixed route service will be within ¼ mile from a bus stop.

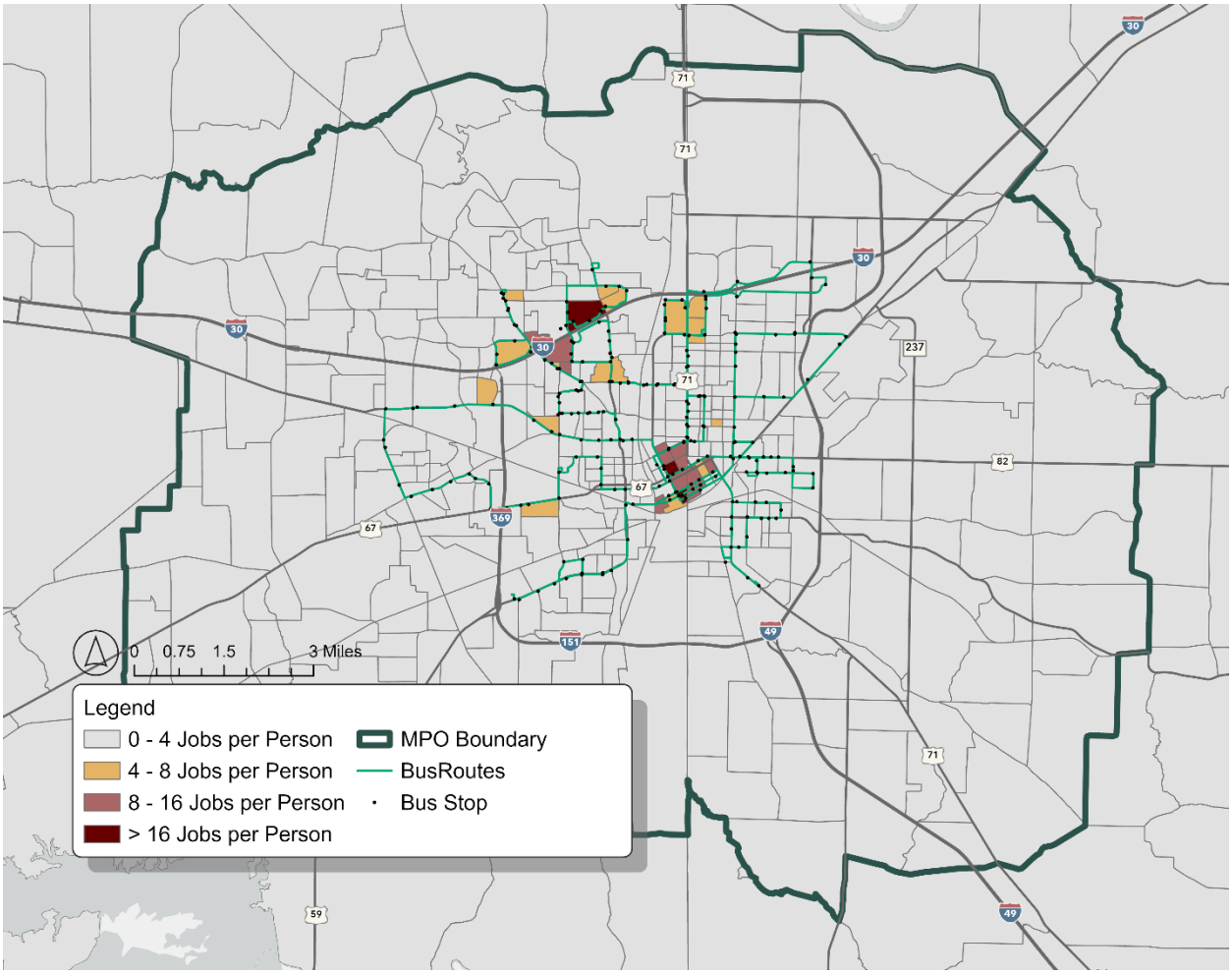
Figure 4-23: Texarkana MPO Population Density and Bus Routes, 2050 Projection



Transit Density – Employment

Figure 4-24 shows the employment density compared to the existing fixed bus routes. By 2050, the employment density is expected to increase in downtown Texarkana and the surrounding areas. Based on these projections, every TAZ above the threshold of four jobs per acre will be within ¼ mile of a bus stop. However, the increase in employment density could potentially support 30 or 15-minute frequencies in downtown opposed to the existing 60-minute frequency.

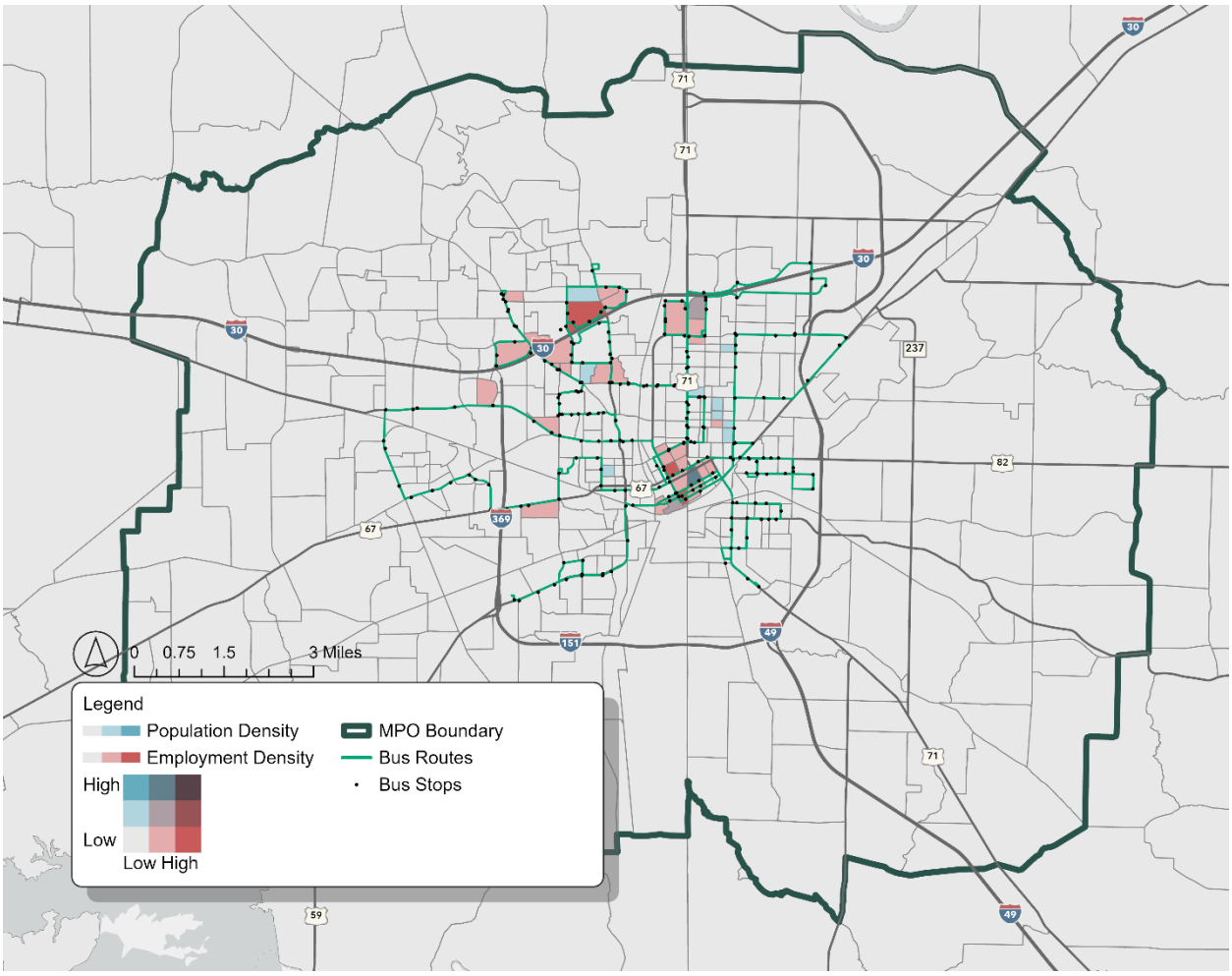
Figure 4-24: Texarkana MPO Employment Density and Bus Routes, 2050 Projection



Transit Density – Bivariate

Figure 4-25 shows a bivariate comparison of the 2050 population and employment density projection in the Texarkana area. Similar to 2023, there are few places with high densities of both people and jobs in the Texarkana area. The only areas with both are downtown Texarkana and a community located along I-30 between US 71 and County Ave.

Figure 4-25: Texarkana MPO Population and Employment Bivariate Comparison, 2050 Projection



Transit Takeaways

In 2023 and 2050, almost every TAZ in the Texarkana area above the minimum population or employment density threshold for fixed route service is within ¼ mile of a bus stop. The only exception is one TAZ that meets the population threshold in 2023 but is projected to be below the threshold in 2050. This means that T-Line routes are extensive enough to reach the areas of the region with the largest populations and most jobs. Where the transit system could be improved is the frequencies of each line.

Currently, every route in the Texarkana area has 60-minute recurring service. Based on the current employment density, several TAZs in the downtown area and in the commercial area at the intersection of Richmond Rd and I-30 have employment densities high enough to support both 30 and 15-minute frequencies. The 2023 Travel Demand Model projects that these areas will continue to increase in employment density, increasing the transit demand. To better serve the area, increasing the frequency of certain bus routes should be considered to meet the travel demands of these areas as employment density continues to increase.

Active Transportation

Introduction

An active transportation network primarily consists of bicycle and pedestrian facilities, including but not limited to sidewalks, on-street bicycle lanes, and off-street multiuse trails, as well as the supporting elements like signage, signalization and bicycle parking. These facilities are critical infrastructure that ensure the Texarkana MPO region's transportation network supports transportation choice, accessibility, and safety for all road users. Encouraging bicycling and walking helps create healthy, lively communities. Benefits of a connected active transportation network also extend to transit users and the transit system as it provides critical "first and last mile" infrastructure to help people access transit stops.

In order to evaluate the pedestrian and bicycle and facilities in the Texarkana region, the project team identified existing and planned facilities and compared them to high need areas. The results of this analysis are discussed in the following sections.

Texarkana Active Transportation Plan

The 2018 Texarkana Active Transportation Active Transportation Master Plan (ATMP) was created as part of a process to provide a unified vision for bicycle and pedestrian investments in the Texarkana MPO study area. The plan focuses on providing connected and accessible regional facilities to potential users of all ages and abilities, particularly those without access to vehicles, young and aging populations who cannot drive, and for individuals and families with limited access to vehicles.

The projects listed in the Active Transportation Plan are shown in Figure 4-26. This network represents existing and planned projects to display the active transportation network upon project completion.

Figure 4-26: Active Transportation Network

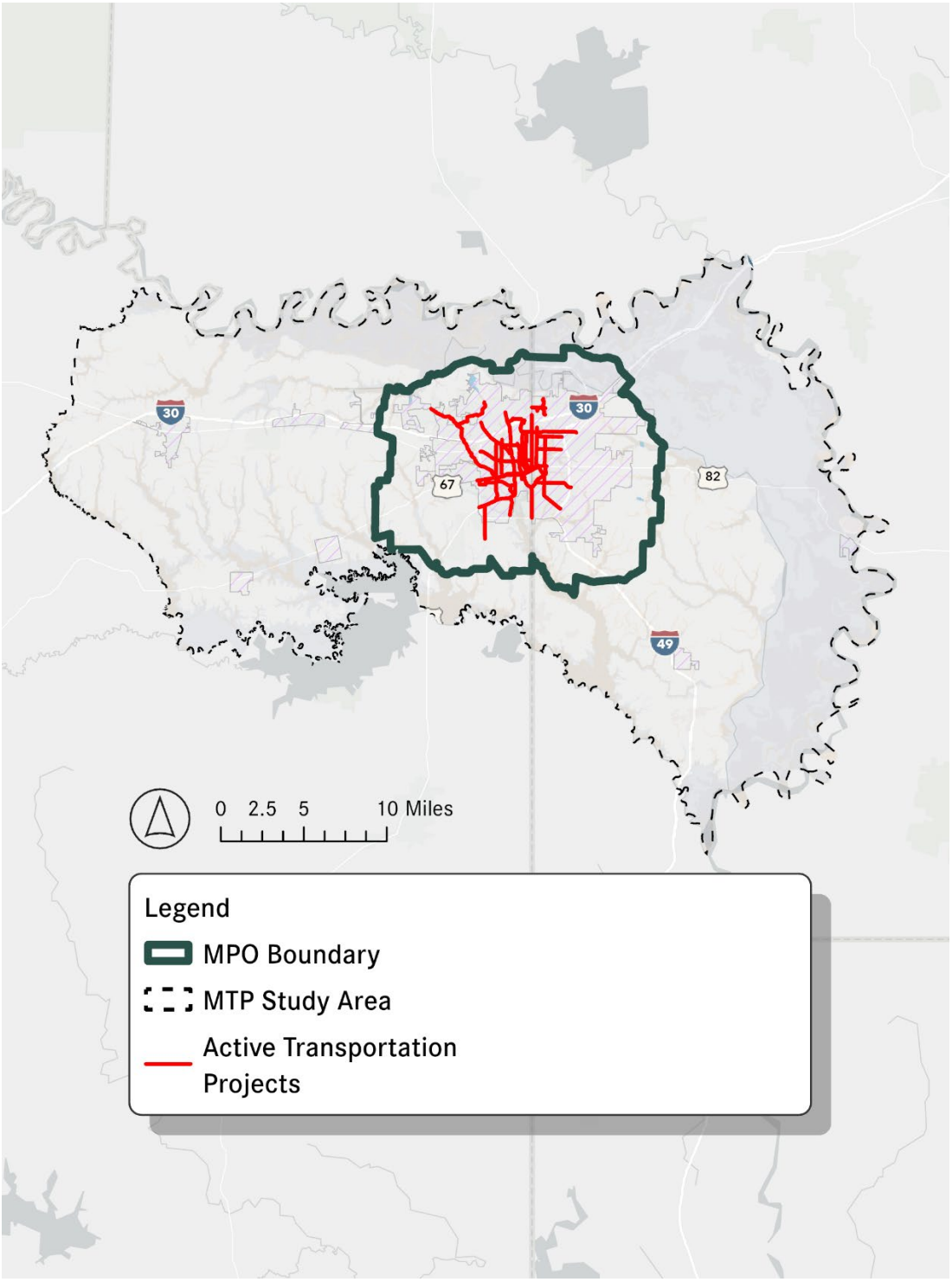


Figure 4-27 shows the active transportation network overlaid with disadvantaged census tracts identified in the previous equity analysis section. Much of the urban core is designated as disadvantaged and is well connected to the planned active transportation projects from the ATMP. Tracts in northern and southern rural Bowie County, Texas and southern Miller County, Arkansas are not connected to the network.

Figure 4-27: Active Transportation Network and Disadvantaged Tracts

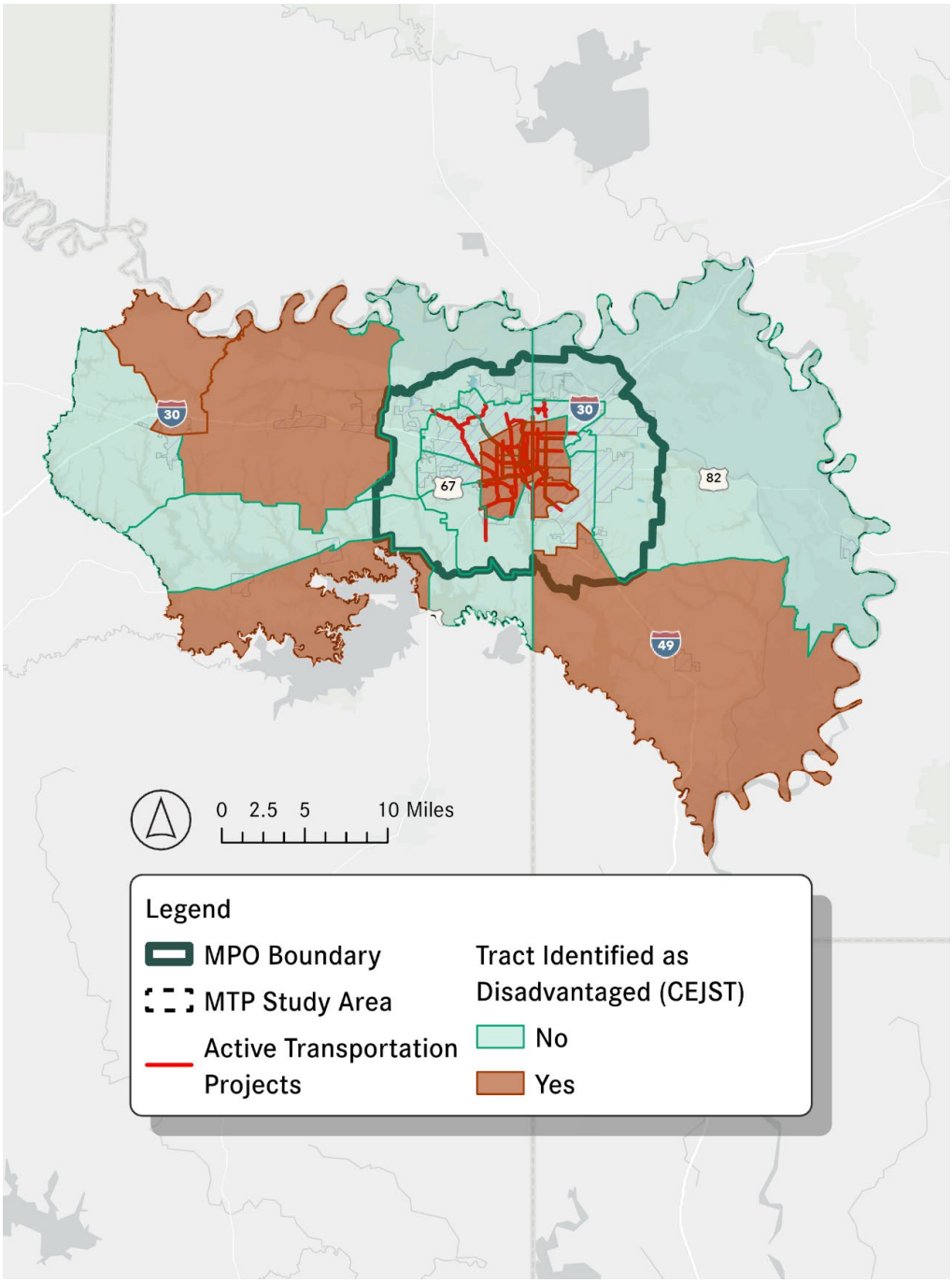


Figure 4-28 shows the results of the Climate Vulnerability Index again, this time with a closer view of the urban core. Similarly to the CJEST results, when compared to the CVI results, much of active transportation network connect vulnerable tracts, with opportunity for connection to disadvantaged tracts on the outskirts of the study area.

Figure 4-28: CVI Results and the Active Transportation Network

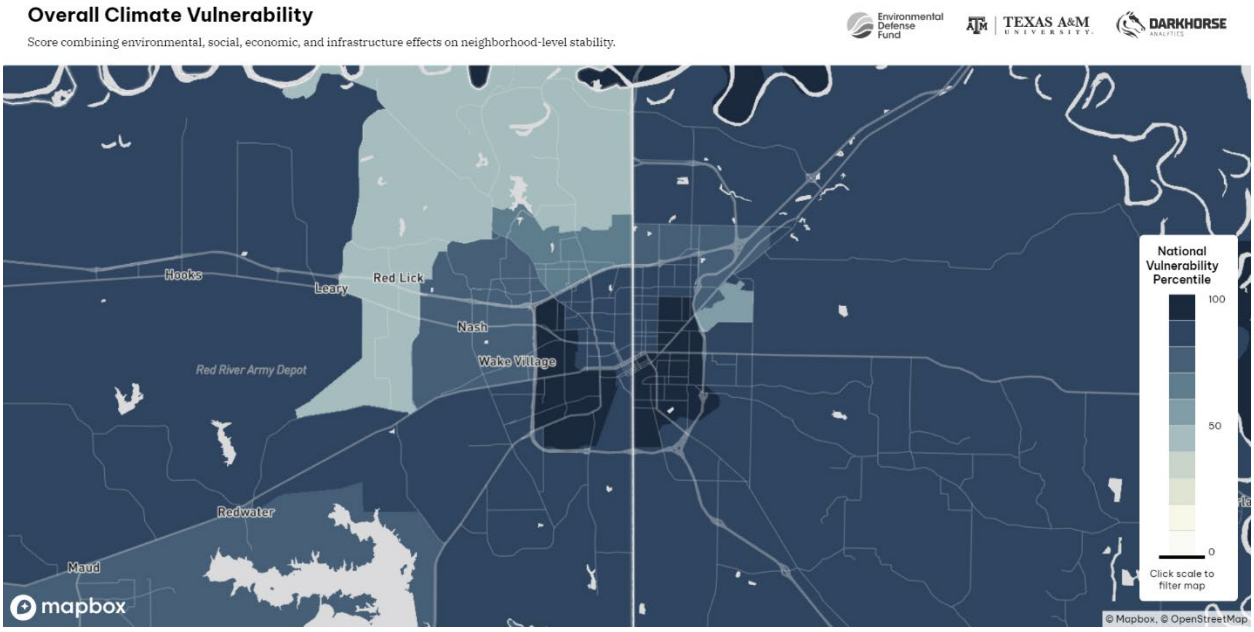
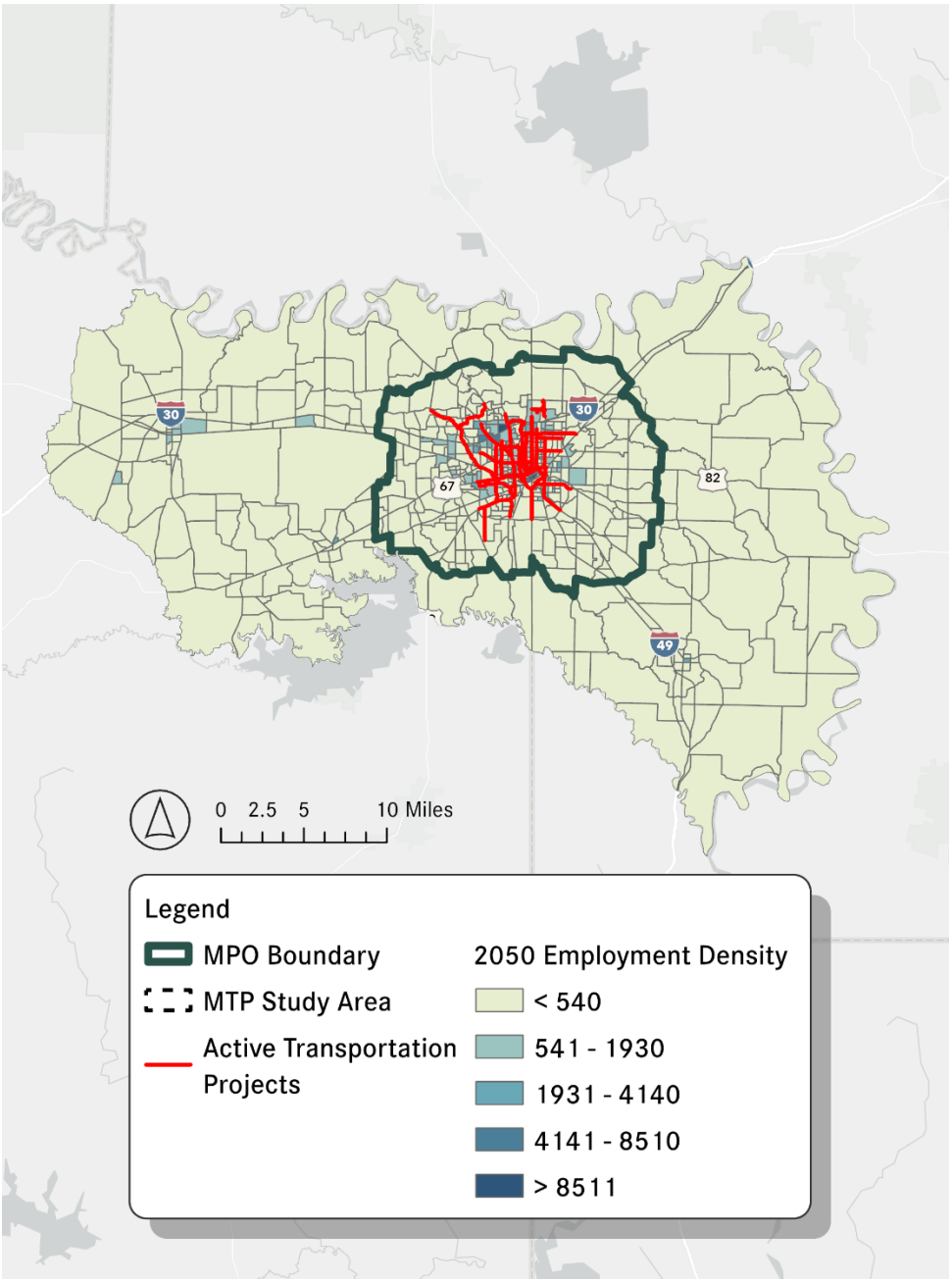


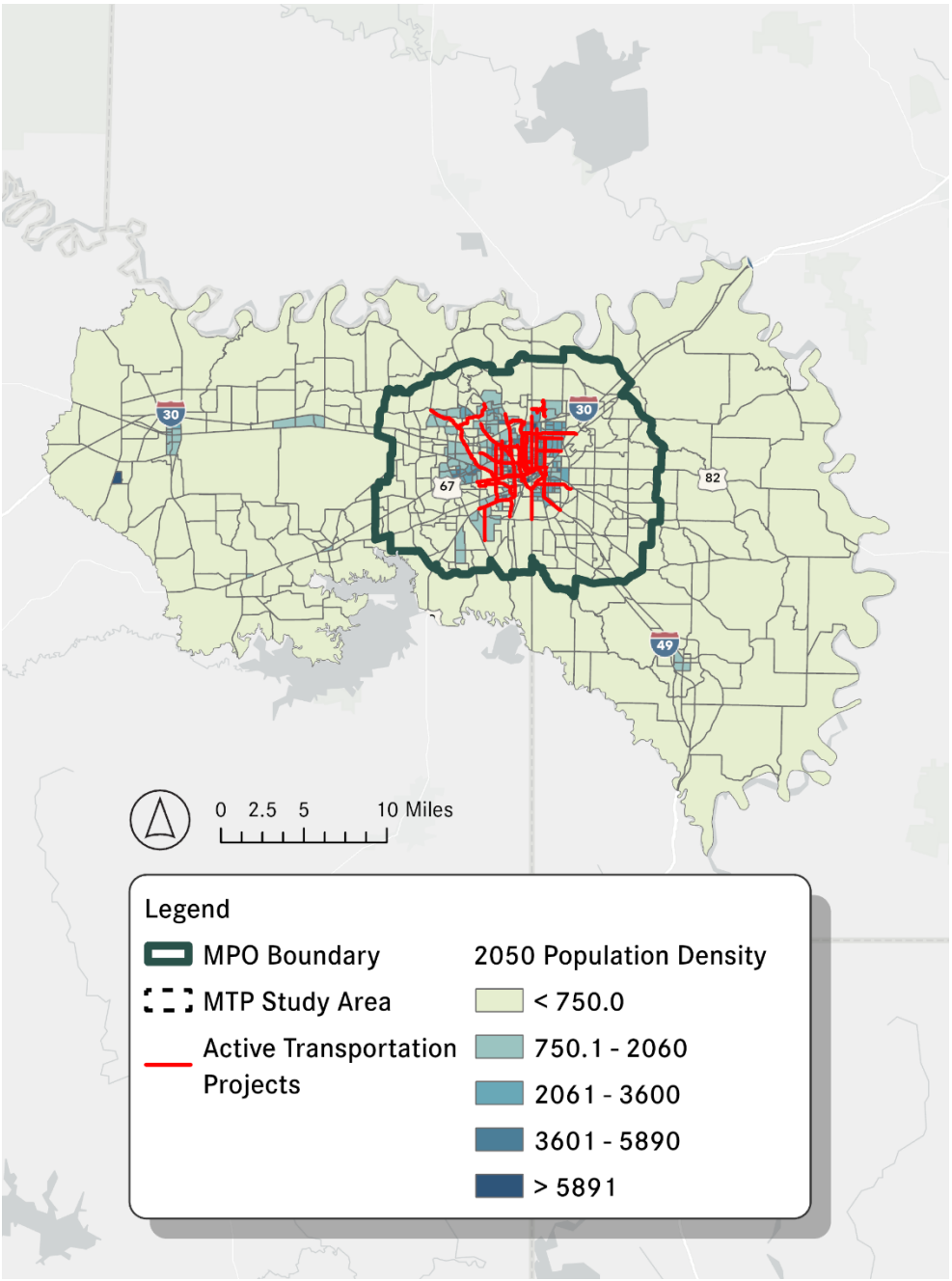
Figure 4-29 shows the active transportation projects compared to projected 2050 employment density in the study area. Similarly to the disadvantaged tracts, much of the employment density is concentrated in the urban core and is well connected to the active transportation network. Some areas outside of the immediate downtown, as well as areas in western Bowie County are off the network, indicating these are areas that might be targeted for future active transportation projects.

Figure 4-29: Active Transportation Network and Employment Density



The active transportation project network as compared to projected 2050 population density is shown in Figure 4-30. Areas west of downtown Texarkana, TX, around New Boston, TX, and Fouke, AR contain areas of higher population density that may benefit from an improved active transportation network. As of 2024, roughly 12% of projects from the Texarkana Regional Active Transportation Plan have been completed.

Figure 4-30: Active Transportation Network and Population Density



Texarkana Regional Thoroughfare Plan

The Texarkana Regional Thoroughfare Plan, created in 2022, identifies locations, classifications, and different infrastructure elements of roadways in defined contexts. Many of the cross sections include 12 to 16 feet of "flex space" that could be used for active transportation projects, an example of which is shown in Figure 4-31. The plan also includes a Greenway cross section to serve people walking and biking composed of two six-foot lanes going in opposite directions, shown in Figure 4-32. The potential greenway map is shown in Figure 4-33. The Thoroughfare Plan also proposes a multimodal transportation network and identifies right-of-way that may be available to the MPO for project implementation.

Figure 4-31: Major Arterial Cross Section

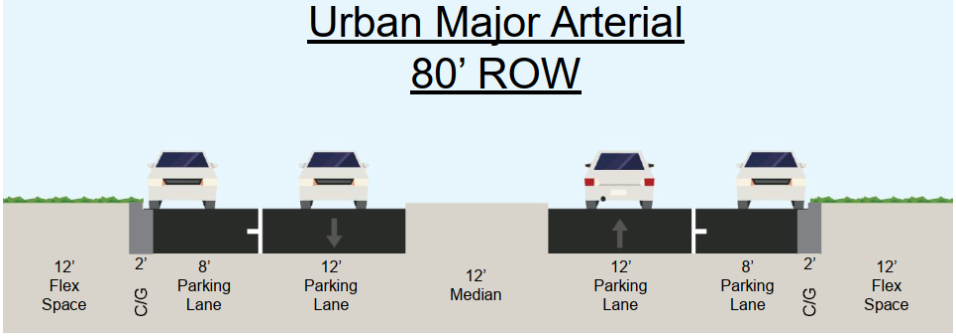


Figure 4-32: Greenway Cross Section

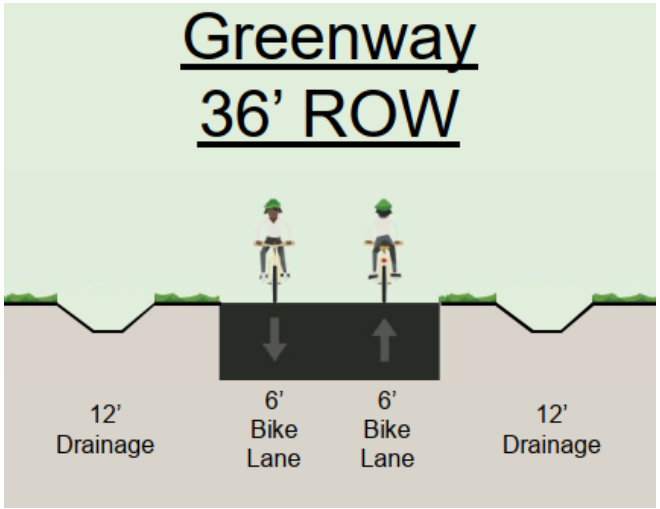
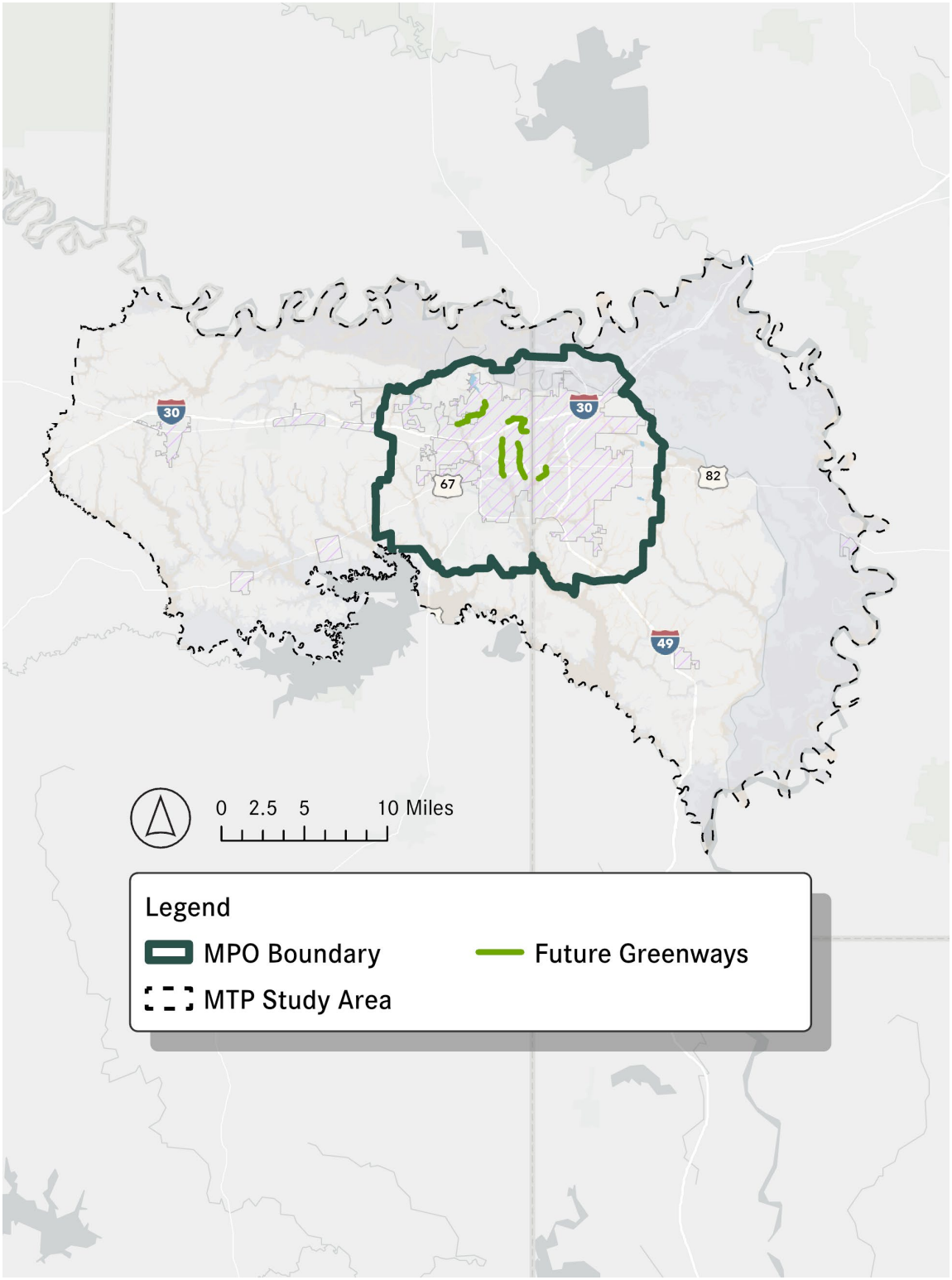


Figure 4-33: Future Greenways from the RTP



Active Transportation Recommendations

Update the Active Transportation Master Plan

As projects in the active transportation plan are completed, the Texarkana MPO should update the ATMP, including updating on-street bicycle network, greenway network, and high priority sidewalk and pedestrian infrastructure at high priority signalized intersections. It should include design standards, policy and programmatic recommendations, and identify potential funding sources for project implementation. The plan should also update the active transportation project list to show progress and expand the active transportation network into additional areas of need as identified in the previous section of this chapter.

Regional Partnerships

Given the Texarkana MPO's location between Texas and Arkansas, regional collaboration is necessary for creating connected networks. Recreational bicycle networks exist on either side of the study area, and connections through the MPO study area will be beneficial for people who walk and bike without regard for jurisdictional changes along their routes.

Utilizing Rail Infrastructure

The study area is crossed by multiple railroad tracks, and downtown Texarkana features a stop for the Texas Eagle, an Amtrak passenger train. Providing more active transportation connections for transportation users to the station, plus utilizing right of way along side railroad tracks as active transportation facilities may be considered as the MPO plans for future active transportation in the region. Further, inactive rail lines might serve as an opportunity for creating rail-to-trail infrastructure.

Texarkana Regional Airport

The Texarkana Regional Airport is located in northeast Texarkana, AR, adjacent to the IH 49 and US 67 junction. The airport provides commercial service and general aviation for the Ark-La-Tex region. Given the airport's impact on the overall transportation network, the airport's recently adopted Master Plan was reviewed by the project team as part of the Connect to 2050 Texarkana MTP update.

Texarkana Regional Airport Master Plan

According to the Texarkana Regional Airport Master Plan, "the primary goal of the master plan is to develop and maintain a financially feasible, long-term development program, which will satisfy aviation demand of the region; be compatible with community development, other transportation modes, and the environment; and enhance employment and revenue for the local area."[6] The plan includes a list of capital improvement projects from short-to-long-term totaling approximately $159.6 million dollars. This includes new airport terminal access and a roundabout at 19th Street.

Increased activity at the airport will have wide-reaching impacts on the Texarkana Region, which will be considered in developing the project list for the MTP.

[6] https://txk.airportstudy.net/master-plan-documents/

Chapter 5: Multimodal Mobility Improvement Strategies

Introduction

Increasing roadway capacity through expanding or building infrastructure is not always the best method to meet mobility needs of the region, since adding more lanes can create more traffic demand. Non-capacity building strategies can be used to meet transportation goals and should be used whenever possible. This chapter will discuss strategies such as Travel Demand Management (TDM) and Transportation System Management and Operations (TSMO), which do not always require the construction of transportation facilities. In addition, this chapter will discuss capital project strategies and the associated project selection process.

Since transportation funding resources are limited, a combination of major capital projects and other strategies can better serve to leverage available funding for greater impacts on regional mobility. This chapter is intended to serve as a toolkit of possible strategies to inform investment in the transportation system.

Transportation Demand Management (TDM)

Transportation Demand Management (TDM) is a set of strategies to maximize travel choices, optimize transportation systems, reduce congestion, and promote sustainable travel options. In short, TDM strategies reduce the number of vehicles on the road in order to reduce traffic congestion. Some TDM strategies discussed below include: improving and incentivizing alternative modes of transportation, managing parking and land use, and other policy and institutional reforms. TDM strategies can be used to achieve the following goals:

- Improve mobility and accessibility by expanding and enhancing the range and quality of available travel choices.
- Reduce congestion and improve system reliability by decreasing the number of vehicles using the roadway, especially at peak times.
- Increase safety by addressing congestion, which is generally related to higher occurrences of traffic incidents.
- Improve air quality by reducing the number of vehicle miles traveled.

Given limited funding, TDM strategies can be cost effective ways to influence travel behavior and achieve transportation goals. Moreover, TDM strategies become more effective at reducing single occupancy vehicle travel when implemented alongside other strategies as part of a targeted program to manage transportation demand.

Improved Alternative Transportation Options

Access to transit and active transportation facilities (for walking and cycling) allows residents and visitors to have options for modes of travel. Alternative transportation facilities should be accessible for all ages and abilities. Utilizing carpool, vanpool, school-pool programs, and Transportation Network Companies (TNCs) such as Uber and Lyft, are another way to increase transportation options and vehicle occupancy. Strategies to improve transportation options include the following:

Transit

- Expand the service area of transit (regional and local) and connect bicycle and pedestrian infrastructure to transit facilities to reach more citizens, increasing connectivity to key destinations within the region.
- Improve the quality of transit service to increase convenience, comfort, ease of access, and affordability to encourage mode switch by providing various levels of service focused on community context.
- Consider utilizing park-and-ride facilities, dedicated bus lanes, and other transit improvements to reduce traffic congestion and increase transit efficiency.

Active Transportation

- Install pedestrian crossings/crosswalks in appropriate locations that tie into existing or proposed sidewalks.
- Improve safety for vulnerable road users by installing street lighting, signage, and reducing speed limits.
- Create hike/bike trails and bicycle paths that are separate from vehicle traffic.
- Educate the public on the availability of various alternative transportation modes and services and provide intuitive and accessible resources to help travelers navigate the region.

The 2018 Texarkana Regional Active Transportation Master Plan provides a comprehensive vision for active transportation facilities in the MPO area. According to the plan, bicycle and pedestrian investments are meant to improve both access and mobility throughout the region for all ages and abilities. The plan has 35 individual active transportation projects. As the MPO Member Entities, such as the state DOTs, cities, and counties, have completed most of these projects, finishing the remaining and updating the project list would continue to contribute to the improvement of alternative transportation options.

Incentives to Use Alternative Modes

Providing adequate cycling facilities, pedestrian infrastructure, and transit service enables people to have a choice in how they get to work, school, or other destinations. The commute to and from work is a significant contributor to traffic congestion along area roadways, particularly during peak travel times. TDM strategies that focus on employer-based tools and incentives can be an effective way to reduce travel by single-occupant vehicles. Through partnering with employers, schools, and other entities, the MPO can support incentives to use alternative modes of transportation and encourage more people to make the switch. Examples of employer-based incentives include the following:

- Transit passes and bike storage to enable other modes of commuting
- Carpool coordination and carpool priority parking
- Remote work or flexible schedules to reduce or shift times of travel

- Locating businesses in developments with a mix of employment, residential, and service uses to shorten the work commute and reduce the need for midday trips
- Providing route information to divert commuters from congested routes

There are existing incentives for alternative transportation in place within the region. For example, the T-Line Works program is an employer-based program that allows employees to purchase bus passes with pre-tax income.

Land Use

Land use factors significantly impact travel behavior. Typical development patterns have generally encouraged a separation of land uses, requiring more trips to be made by automobile due to large distances between origins and destinations. Land use policies that encourage density and mixed uses can be used to facilitate the use of alternative modes of transportation and reduce the number of automobile trips. In addition, automobiles require significant portions of land for parking. Making changes to policies regarding parking can serve to influence travel behavior and disincentivize single occupant vehicle trips. Land use strategies include Smart Growth and Complete Street designs, and parking management strategies include limiting parking availability.

The Texarkana, Texas Comprehensive Plan includes goals to promote compact growth patterns in order to reduce the cost of city services and to use higher density residential types as a land use transition between single family and commercial developments. Similarly, the Texarkana, Arkansas Comprehensive Plan has goals to grow in a smart way by encouraging residential and commercial infill and redevelopment in the city. These land use changes can reduce the number of vehicles on the road if people choose to walk to nearby destinations.

Smart Growth

Mixed use development and increased density in transit corridors can enable alternative modes of transportation and thus reduce the number of vehicles on the road. Smart growth generally refers to the protection and preservation of valuable natural and cultural resources through encouragement of more compact development patterns that optimize use of existing transportation infrastructure. Smart growth development is characterized by higher population and employment densities and a mix of land uses, which increases the viability of public transportation, walking, and biking as transportation modes. Since smart growth principles encourage redevelopment and infill development of existing areas, investment in the transportation system is focused on the maintenance and operation of existing roadway infrastructure and providing safe opportunities to travel by bike or foot, rather than on building costly new roadways in previously undeveloped areas. It is important to note that smart growth does not mean building dense high-rise structures or pitting transit or any other modes against highways. Instead, smart growth is about tailoring choices for individual settings. For example, in a suburban or rural community, smart growth may mean building smaller detached homes on smaller lots within walking distance of schools and other amenities. Smart growth encourages the development of a balanced intermodal transportation system that allows for the efficient and economical movement of people and goods.

Complete Streets

Complete Streets refers to an approach to street infrastructure that enables safe access for all people, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities.[1] Each complete street is unique to its setting and context, but may include features like bike lanes, sidewalks, bus lanes, median islands, pedestrian signals, bus stops, cross walks, curb extensions, or roundabouts, as needed. In some cases, improvements to incorporate complete street elements do not require extensive construction. Road striping, warning signs, streetscape, and landscape, can improve safety for pedestrians and cyclists.

Parking Management

Parking management strategies and incentives encourage the use of alternative modes and can be implemented by both local jurisdictions and employers. These strategies typically rely on disincentivizing travel by single occupant vehicle by passing along more of the cost of parking and/or limiting the availability of parking. In addition, parking enforcement can be used to prevent automobiles from parking in ways that may be harmful to or discourage pedestrian and bicycle travel.

Policy and Institutional Reforms

TDM strategies can be incorporated into policy by requiring TDM strategies to be prioritized over roadway expansions. This means that projects to reduce the number of vehicles on the road would be done first before adding more lanes that would potentially increase demand and worsen traffic.

Other TDM strategies can include institutional reforms to change travel behavior. Marketing and educational campaigns to teach people about the benefits and laws for walking and cycling can help people to become more comfortable using alternative modes of transportation. The public needs to be aware of the availability of various alternative transportation modes and services and have access to -intuitive resources to help effectively navigate the region.

TDM Resources/Tools

The following tools and resources can be used to help evaluate the appropriateness of TDM strategies:

- Mobility Lab Transportation Cost Savings Calculators https://mobilitylab.org/resources/calculators/
- Commute Duration Dashboard Guide: Mapping Commute Travel Times to Evaluate Accessibility (Todd Litman, Hillary Nixon, PHD, and Cameron Simons, 2021) https://transweb.sjsu.edu/research/2064-Commute-Duration-Dashboard-Guide
- Online TDM Encyclopedia (Victoria Transport Policy Institute) https://www.vtpi.org/tdm/

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

Transportation Systems Management and Operations (TSMO)

TSMO is a way to holistically manage the transportation network and optimize existing infrastructure through integrating planning and design with operations and maintenance.[2] TSMO aims to maintain and preserve the capacity of existing roadways before additional capacity is needed. Maintenance, operation, and the use of technology are all components of TSMO strategies.

Maintenance

Infrastructure maintenance is a critical aspect of transportation system management and operations. Most infrastructure management agencies prefer to schedule routine repairs and inspections instead of embarking on ad-hoc patching and repairing. Schedule management for inspection and street repairs will enable city and county personnel to efficiently use limited resources. Regularly scheduled roadway resurfacing is necessary to provide uniform improvements to the existing roadways and to extend their useful life. Older roads, especially those built according to discontinued standards, should be reviewed in order to upgrade deficient sections based on modern design standards.

Transportation infrastructure is no longer limited to concrete pavement and asphalt. Recent improvements in operations and data collection methods have led to digital controls and integrated computer networks that require maintenance and management. Signal maintenance and device testing included as implementation steps identified in the 2021 TxDOT Atlanta District TSMO Program Plan. In addition, older technologies should be systematically replaced with newer options. The District TSMO Program Plan recommends completing an inventory of existing devices to determine their remaining lifespans and expected future maintenance and replacement needs.

ARDOT's Maintenance Division works to preserve the investment in highways. This includes general maintenance services such as pavement markings, pavement profiling (milling), vegetation management, signage, and traffic operations studies.

Technologies

As described above, transportation infrastructure includes digital controls and other devices and technology. Technological advancements in the transportation sector come in several forms, such as vehicle tech, fuels, data collection, driver information services, and infrastructure. The incorporation of technology into transportation management and operations to improve safety, reliability, and efficiency is referred to as Intelligent Transportation Systems, or ITS. For example, roadways and intersections can be remotely surveilled with ITS devices to monitor flood conditions and inform travelers of hazards or to monitor real time traffic conditions to enable adaptive signal control.

Intelligent Transportation Systems (ITS)

The TxDOT Atlanta District identified the following ITS strategies as priorities for the region in the 2021 Atlanta District ITS Master Plan:

[2] https://www.txdot.gov/safety/tsmo.html

- Closed circuit television (CCTV) cameras to monitor roadway conditions
- Dynamic message signs (DMS) to provide real time traffic alerts
- Smart Work Zone (SWZ) systems - ITS devices temporarily installed at construction sites- to warn drivers and provide information through Temporary Queue Detection, Temporary Speed Monitoring, Temporary Construction Equipment Alerts, Temporary Travel Time System, Temporary Incident Detection and Surveillance, and Temporary Over-Height Vehicle Warning.

Cellular modems and fiber optic cable are also important parts of ITS, to enable data collection and communication with traffic signals and ITS devices. Cellular modems are currently used in the region but could be upgraded to fiber optic in the future. Other ITS strategies include Wrong Way Driving Warning System, Wildlife Warning System, Highway Advisory Radio, and Freight Parking Information Management System, among others. However, these other ITS strategies are not currently recommended for the TxDOT Atlanta District.

ARDOT manages statewide ITS devices like dynamic message signs, traffic cameras, and Highway Advisory Radios (HAR). In addition, each ARDOT District will be equipped with two stations to allow for remote monitoring of weather conditions. The Texarkana MPO relies on ARDOT and TxDOT for traffic count data, which is collected via ITS devices.

Operations

Traffic Signal and Intersection Improvements

Roadway users encounter traffic control signage and intersection signals on nearly every route they travel. While the primary function of intersection traffic control is to improve safety at intersections, it is also often a significant source of delay. Improper signage and poor signal timing results in unnecessarily long queues and impacts the reliability of the transportation system. Improving signage, signal timing, and equipment is a cost-effective way to facilitate traffic flow along a corridor. The MPO can work with its planning partners to identify corridors which would benefit from traffic signal improvements and to prioritize projects.

Traffic Signal Optimization

The timing and phasing of signalized intersections should be reviewed periodically, especially in areas of rapid development or increased commercial activity. Most intersections should be reviewed for appropriate timing and phasing every six months, while more heavily traveled intersections could be reviewed more frequently. Whenever possible, the signal heads and controls should be uniform to facilitate ease of coordination and servicing of hardware. In locations of due east or due west travel, back plates and directional signal heads may be advantageous. In locations with significant wind and severe weather concerns, mast arm and pole dimensions should be designed appropriately. Traffic signals can also be coordinated along a corridor or throughout an entire system. As traffic volumes increase, signal coordination can be used to optimize high priority traffic corridors and increase the throughput of critical thoroughfares.

Adaptive signal control, which adjusts the timing of traffic lights based on real-time travel conditions, can also provide significant relief to congested corridors and cut costs associated with traffic signal timing data collection and computation.

Signal Pre-emption

On busy roads with highly used transit routes, transit signal priority or pre-emption can improve the operations of the transit system. Transit signal priority refers to technology that reduces dwell time for transit vehicles at signalized intersections, typically by holding green lights longer or shortening the duration of the red-light cycle. The same kinds of technology can also be employed for emergency vehicles. Equipping all intersections to accommodate signal prioritization can facilitate the deployment of such systems commensurate with demand.

Access Management

Access management refers to the regulation of the number of access points between a development and the adjacent roadway network. Most discussions of access management involve the placement and number of driveway curb cuts, although the application can also include the location, size, and function of interior service roads. Many access management solutions involve installation of roadway medians where feasible to limit turning movements and improve traffic flow and safety.

Targeted Traffic Enforcement

Consistent and reliable enforcement of traffic laws helps address public concerns about traffic issues. In areas with complaints about speeding and reckless or inconsiderate driving, responsive law enforcement staff can do much towards gaining the public's trust and compliance. Focused speed studies (using radar trailers and traffic counters) can be employed to discourage speeding on residential streets.

Traffic Calming

Because there are many instances where the number of aggressive drivers is greater than human resources can address, many cities and counties have implemented various "self-enforcing" speed and volume control devices. Most of these measures are referred to as "traffic calming." These physical devices can assist law enforcement in influencing driver behavior. Traffic calming is often controversial and can be challenging to discuss.

Most traffic calming measures are applied to residential streets, though certain measures can be applied to higher volume roadways as well. Broadly defined, the goals of traffic calming measures are to:

- Slow down the average vehicle speeds for a particular roadway
- Address excessive volumes for a particular roadway
- Remind drivers of or reinforce the residential nature of specific roadways.

Traffic calming measures are designed to slow down or impact all vehicles. In practice, this can lead to reduced access and response times for emergency and law enforcement personnel. Careful consideration must be given to any proposed traffic calming device, especially if the roadway under review provides critical access for emergency personnel.

Traffic Incident Management

Traffic Incident Management (TIM) consists of a planned and coordinated process to detect, respond to, and quickly clear traffic incidents so that traffic flow may be restored as safely and quickly as possible. Effective TIM strategies reduce the duration and impacts of traffic incidents and improve the safety of motorists, crash victims, and emergency responders. Traffic incident management involves coordination among a number of public and private sector partners, including:

- Law Enforcement
- Emergency Management and Preparedness
- Fire and Rescue
- Emergency Medical Services (EMS)
- Towing and recovery
- Transportation departments
- Hazardous materials contractors
- Public safety communications
- Traffic information media

TSM&O Resources/Tools

- TxDOT TSMO Strategic Plan (2021 update) https://ftp.txdot.gov/pub/txdot-info/trf/tsmo/statewide-strategic-plan.pdf
- Atlanta District ITS Master Plan (2021) https://ftp.txdot.gov/pub/txdot-info/trf/tsmo/atlanta-its-master-plan.pdf
- Atlanta District TSMO Program Plan (2021) https://ftp.txdot.gov/pub/txdot-info/trf/tsmo/atlanta-tsmo-program-plan-final.pdf
- ARDOT ITS Management https://www.ardot.gov/divisions/maintenance/intelligent-transportation-systems/
- TxDOT TSMO Evaluation Tool (2021) https://ftp.txdot.gov/pub/txdot-info/trf/tsmo/tsmo-evaluation-tool.pdf
- AASHTO One-Minute Guidance Evaluation http://www.aashtotsmoguidance.org/one_minute_evaluation/

Infrastructure Investment Strategies

Project Identification

Projects were identified by reviewing existing MPO planning documents (such as the Texarkana Regional Active Transportation Master Plan) and ongoing planning efforts (such as the 2025-2028 Transportation Improvement Program). In addition, MPO planning partners and member jurisdictions (such as Texarkana, AR, Nash, TX, Texarkana, TX, Bowie County, Miller County, TxDOT, and ARDOT) submitted projects through the 2045 Call for Projects. All projects submitted were incorporated into a project list that moved on to the project prioritization and selection process.

Prioritization Criteria

MPOs are required to consider strategies and projects that address the ten planning factors outlined in 23 CFR 450.306. Based on these planning factors, a set of project evaluation criteria was developed specific to the Texarkana MPO planning area to ensure each aspect of the factors was taken into consideration in assessing the merits of the proposed projects. The prioritization criteria are consistent from the previous 2045 MTP, but also relate to the 2050 MTP goals for Safety/Security, Maintenance, Operations, Regional Coordination, Mobility, Economy, Sustainability, and Resilience.

The project prioritization criteria are:

Improve Safety

Safety is defined as protection against unintentional harm and relates to both motorized and non-motorized modes of travel. Examples of improved safety could be:

- Improvements or treatments such as lowering speed limits, limiting conflict points, and adding crosswalks at high crash locations;
- Improvements known to reduce the number of crashes involving automobiles and/or non-motorized transportation users, and or severity of potential crashes;
- Inclusion of safety measures like signage, sidewalks, protected turn lanes, or medians; or
- Addition of safety rest areas and/or parking for truckers.

Reduce Congestion

Congestion is defined as a roadway system operating at speeds below that for which it was designed. Examples of ways in which congestion could be reduced are:

- The addition of turning lanes; or
- Improvements to signalization.

Improve Security

Security is defined as protection against intentional harm and relates to both motorized and non-motorized modes of travel. Examples include:

- Improvement in the emergency response capacity after an act of terrorism; or
- Reduction of the risk of individual acts of criminal behavior on a transit line.

Improve Quality of Life

The quality of life of the Texarkana MPO planning area community is a term that the community must define for itself. The transportation system can have both positive and negative impacts on the quality of life in a community. Examples of ways that a transportation system could have a positive impact on the quality of life are:

- A reduction in mobility gaps experienced by low-income/environmental justice communities; or
- A reduction in the time that families spend commuting to school and work.

Examples of ways that the transportation system can have a negative impact on the quality of life in a community are:

- Addition of access points to a neighborhood that encourages through traffic that endangers the community; or
- Widening of roadways to improve port access also encourages truck traffic carrying hazardous materials to travel through residential neighborhoods.

Increase Connections

The connectivity of the MPO transportation network and circulation system is measured through the ease with which people and goods can move to their desired destinations. Connectivity relates not only to the ease of movement of people and goods within the community, but also to external destinations – regional, national, and international. Examples of ways in which connections could be increased are:

- Adding bridges across water barriers;
- Adding bike and pedestrian paths from neighborhoods to schools that do not necessitate crossing a major arterial; or
- Projects that increase system connectivity and reduce travel times.

Support Land Use and Economic Development Goals

Land use and economic development goals are inexorably connected and can be impacted by many factors, one of which is the transportation system. Therefore, transportation investment decisions for the Texarkana MPO must consider the state and local economic and land use goals. Examples of ways in which the land use and economic development goals of the community could be met include:

- Not building new roads in areas prone to flooding;
- Providing pedestrian amenities along a business corridor;

- Expand transportation options to job locations and population centers, particularly low-income communities; or
- Improving freight mobility and addressing deficiencies along the freight system.

Promote Efficient System Management and Operation

Efficiency is promoted by improved system management, the preservation of the existing transportation system, and the reduction in costs. Examples of the promotion of efficiency in the transportation system could be:

- Improvement in the operations and management of the system;
- Roadway preservation treatments, such as overlay, chip seal, bridge deck rehabilitation, etc. to ensure a state of good repair;
- Institution of a regular repair and maintenance program that ensures a state of good repair; or
- Traffic signalization coordination and ITS infrastructure.

Preserve Right-of-Way

Preservation of rights-of-way refers to purchasing land before development occurs in anticipation of future expansion of the transportation system. Examples of ways in which rights-of-way could be preserved are:

- When appropriate, the purchase of enough land to build a four-lane highway even though the current plans only call for the construction of a two-lane facility; or
- The purchase of land at points along an interstate where future entrances are planned but where no development currently exists.

Protect the Environment

Methods for protecting the environment are as unique as the local environments that they serve. Therefore, examples of ways in which a transportation system can impact the environment are myriad. Examples of ways to protect the environment are:

- Not building roads in environmentally sensitive areas; or
- Building projects that reduce idling time for heavy trucks.

Increase Multi-Modal Options and Energy Conservation

The various modes of travel within the community function best when people and goods can easily move from one mode of travel to another. Energy conservation has become a national priority in recent years. The transportation sector uses the largest portion of energy consumed in the US. Therefore, increasing multi-modal options and connectivity between them will lead to conservation of energy. Examples of ways this could be achieved include:

- A reduction in the use of single occupancy vehicles;

- Expansion of the fixed route transit system into previously unserved areas;
- An increase in the number of streets with sidewalks;
- An improvement to the rail system, roadway freight network, or airport; or
- An increase in intermodal freight transfer facilities.

Improve Resiliency and Reliability of the Transportation System and Reduce or Mitigate Storm Water Impacts of Surface Transportation

Impacts to resiliency and reliability of the transportation system can relate to increasing connections, improving system condition, or quality of life issues. Resilience can be defined as the capacity to recover quickly from drastic change. Examples of improvements to system resiliency and reliability, as well as ways to reduce storm water impacts include the following:

- Increasing connections, especially for evacuation and recovery;
- Projects with drainage design extending and incorporating outfall beyond the immediate right-of-way; or
- Leveraging existing drainage infrastructure and discouraging growth into areas necessitating intensive drainage design.

Enhance Travel and Tourism

Projects that positively affect travel and tourism may tie to increasing multi-modal options, improving quality of life, or improving transportation to and around natural, cultural, and historic assets identified as points of interest to tourism. Examples may include:

- Connecting trails to existing tourist destinations;
- Improvements in transit service to areas of interest; or
- Improve system operations during significant events.

Cost Sharing

The STBG Urban Mobility/Rehabilitation funding category requires a mandatory 20% local match. If the project has more than 30% local match, points can be awarded in the scoring process.

Project Readiness

This criterion determines the year in which a project or phase of a project will be programmed in the TIP. The following factors determine the project readiness:

- Design delays;
- Right-of-way (ROW) acquisition;
- Environmental problems; and
- Funding availability.

Project Selection and Prioritization

Once the initial criteria had been established, TxDOT, ARDOT MPO staff, and the Technical Advisory Committee reviewed the preliminary prioritization process results to assess the community benefits of proposed transportation projects while considering project readiness and staging, while incorporating the federal metropolitan planning factors and the community-driven goals and objectives established during the visioning phase. The process combined technical judgement about the project's ability to meet national and state performance measures and local goals with sponsor-provided information about the purpose and need for the project, project readiness, and funding availability.

The members of the Technical Advisory Committee (TAC) for the Texarkana MPO, scored the list of proposed projects for the Texarkana 2050 MTP based on the above set of evaluation criteria. Projects were scored with the potential to earn anywhere from 0 - 5 points based on how much impact the project has on each of the criteria. The range of potential points indicate the following:

- **0 points** = the project has no impact on/does not relate to the criterion
- **3 points** = the project has a moderate impact on/relationship to the criterion
- **5 points** = the project has a significant impact on/relationship to the criterion

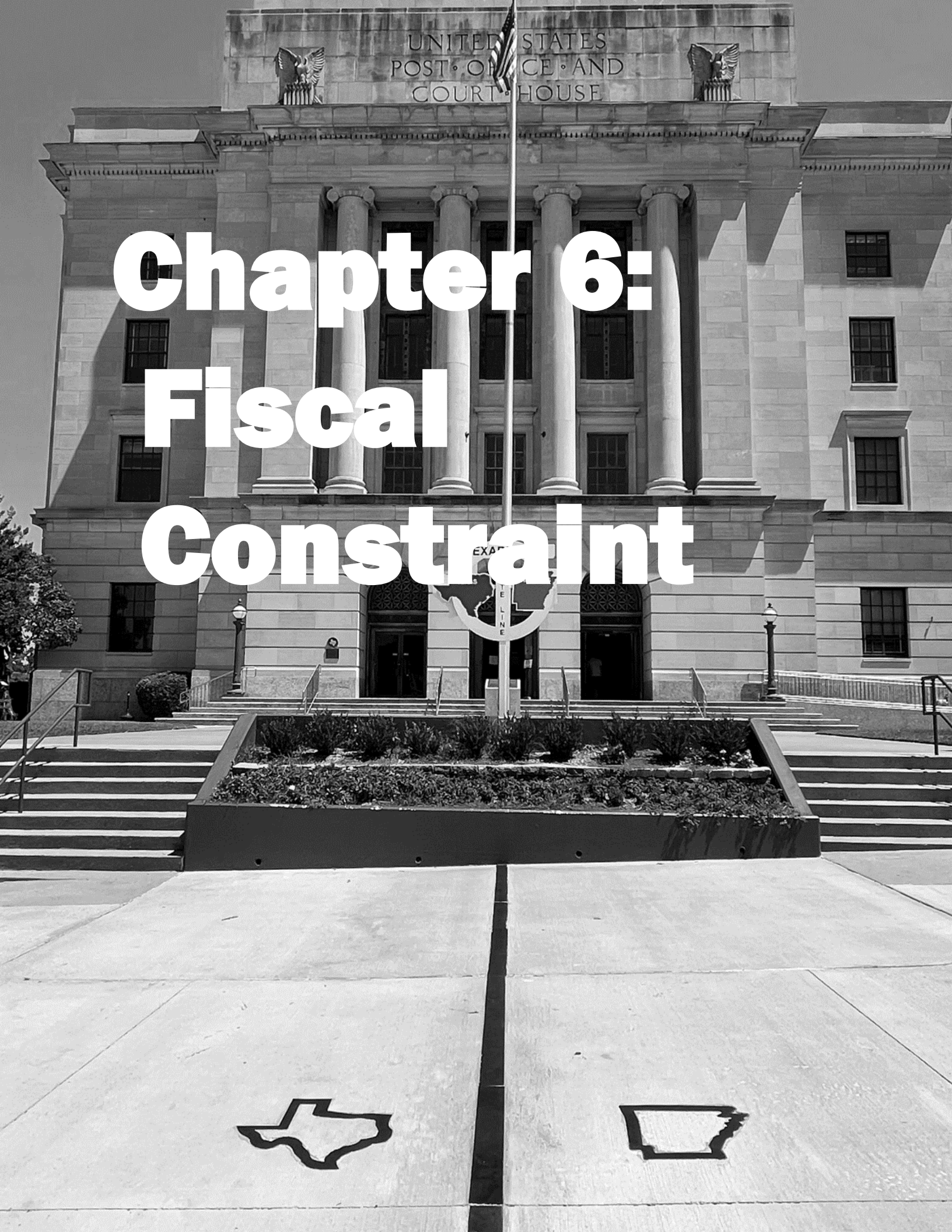
Transportation Policy Board Project List Adoption

Once the Technical Committee completed their project selection process, the draft list of prioritized projects was sent to the Policy Board, which approved the draft list for public review and feedback.

The final list of prioritized and fiscally constrained projects is presented in Chapter 7 of this document, along with the project list by staging period:

- Implementation Stage (2025-2028)
- Short-Term Stage (2029-2034)
- Medium-Term Stage (2035-2045)
- Long-Term Stage (2046-2050)

Chapter 7 also provides corresponding maps to identify projects in each stage of the plan, as well as project tables with detailed project information.



Chapter 6: Fiscal Constraint

The transportation improvement projects included in the final Texarkana Connect to 2050 MTP project list are required by federal regulations to be fiscally constrained. This chapter summarizes available funding sources and compares projected planning level project costs to projected revenue sources.

Funding Sources

The following is a list of programs incorporated into the financial analysis. Programs identified as funding opportunities include federal formula programs, federal discretionary grants, funding programs from the state of Arkansas and Texas, and local funding opportunities for transportation improvements.

Federal Formula Funding

Federal formula funding allocates a set amount of money to each recipient (such as states) to achieve a specified purpose. The laws that approve federal funding for transportation improvements have changed over time. In 2015, the federal government enacted the Fixing America's Surface Transportation Act (FAST Act), which provides funds for surface transportation activities. The FAST Act provided just over $300 billion dollars for surface transportation projects through the fiscal years of 2016 to 2020. The FAST Act builds upon the Moving Ahead for Progress in the 21st Century Act (MAP-21), which was enacted in 2012, by expanding its scope to include improving highway mobility, supporting economic growth by creating jobs, and accelerating project delivery and promoting innovation. MAP-21 set out to make surface transportation projects streamlined, performance based, and multimodal while improving safety, maintaining infrastructure, reducing traffic congestion, improving efficiency, protecting the environment, and expediting project delivery.

In November of 2021, the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL) was enacted. It increased available funding for transportation projects by authorizing over $1 trillion for transportation and infrastructure spending. The IIJA replaced the FAST Act but largely preserved its core programs, and included changes to address sustainability, resiliency, safety, and equity. It also established new programs and new eligibilities for transportation project funding. The IIJA created four new formula programs: the PROTECT Formula Program, Carbon Reduction Program, Bridge Formula Program, and National Electric Vehicle Infrastructure Formula Program. New competitive grant opportunities were also established by the law, some of which will be discussed in further detail later in this section.

Bridge Formula Program

The Bridge Formula Program was created by the IIJA and provides funding to states for bridge rehabilitation, protection, construction, and replacement. The program apportions 75% of the funds for replacement of bridges in poor condition, and 25% for rehabilitation of bridges in fair condition. Projects funded from the Bridge Formula Program are subject to the requirement of accommodation for pedestrians and cyclists.

Carbon Reduction Program

The Carbon Reduction Program was established by the IIJA and provides funds to states to reduce emissions and develop carbon reduction strategies.

States are required to work with MPOs to develop and update a carbon reduction strategy to receive funding. Eligible projects include public transportation, congestion management, alternative fuel infrastructure, and pedestrian and nonmotorized transportation projects.

Congestion Mitigation and Air Quality (CMAQ) Improvement Program

Urban areas that do not meet ambient air quality standards are designated as non-attainment areas by the U.S. Environmental Protection Agency (EPA). CMAQ funds are apportioned to those urban areas for use on projects that contribute to the reduction of mobile source air pollution through reducing vehicle miles traveled, fuel consumption, or other identifiable factors. Both roadway and transit projects are eligible for CMAQ funds. The IIJA continued the CMAQ program, with around $2.6 billion in apportionment each year until 2026. As of the time of publication, the Texarkana metropolitan area is not currently eligible for CMAQ funds, as it does not have nonattainment status for air quality. However, as this document was developed, the Texarkana MPO was in discussion with the EPA and Texas Commission on Environmental Quality (TCEQ) in expectation of being designated as a non-attainment area by 2027. If designated as such, the MPO will review transportation projects in the region that may be eligible for CMAQ funds.

Highway Safety Improvement Program (HSIP)

The purpose of the HSIP is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-state-owned public roads and roads on tribal lands. States are required to allocate HSIP using a safety data system to perform problem identification and countermeasure analysis on all public roads, adopt strategic and performance-based goals, advance data collection, analysis, and integration capabilities, determine priorities for the correction of identified safety problems, and establish evaluation procedures. The IIJA continued and increased HISP program funding.

Metropolitan Planning Program

The program funds the cooperative, continuous, and comprehensive (3C) planning activities of metropolitan planning organizations (MPOs). The IIJA provided an annual average of $456 million for this program. Funds are apportioned to states, which are then made available to MPOs. These funds are available for each MPO to perform planning work in their region and report to the federal government the required targets for their area.

National Electric Vehicle Infrastructure (NEVI) Formula Program

The IIJA also established the NEVI Formula Program, with a total of $5 billion available over five years.[1] The purpose of this program is to deploy a nationwide network of public electric vehicle charging stations along Alternative Fuels Corridors. States are required to create a state plan for electric vehicle infrastructure deployment. Thus, TxDOT and ARDOT determine how NEVI formula funds will be spent. As of time of this document publication, the state DOTs were working on round 2 of the NEVI plan.

[1] Joint Office of Energy & Transportation (2023). NEVI Formula Program Annual Report. Accessed February 2024.

National Highway Freight Program (NHFP)

This program helps states and MPOs to address impediments to the movement of freight. Examples of eligible activities include truck parking facilities, traffic signal optimization, and highway or bridge projects. The IIJA expanded the eligible road mileage under the program and apportioned an annual average of $1.43 billion through FY2026.

National Highway Performance Program (NHPP)

The IIJA allocated over $28 billion for NHPP funding each year from 2022 to 2026.[2] The purpose of the NHPP is to preserve the condition, performance, and resilience of the National Highway System (NHS). NHPP funds can also be used to construct new NHS facilities and ensure that projects are making progress toward performance goals set out in each state's asset management plan. NHPP provides funding for improvements to rural and urban roads that are part of the NHS, including the Interstate System and designated connections to major intermodal terminals. Under certain circumstances, NHS funds may also be used ("flexed") to fund transit improvements in NHS corridors. NHPP funds are distributed under Categories 1, 4, and 12 of TxDOT funding. ArDOT uses the same categories as the federal government: Interstate Maintenance, National Highway System, and Highway Bridge Program.

Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Formula Program

The PROTECT Program, established by the IIJA, provides funding to states for planning activities, transportation resilience improvements, evacuation route activities, and natural infrastructure to protect transportation assets. The goal of the program is to make the transportation system more resilient to natural hazards. From 2022-2026, the total amount of available funding from the PROTECT Formula Program is $7.3 billion.[3]

Railroad Rehabilitation and Improvement Financing (RRIF) Program

The Railroad Rehabilitation and Improvement Financing (RRIF) Program authorizes the Federal Railroad Administration (FRA) Administrator to provide direct loans and loan guarantees for projects that acquire, improve, rehabilitate, or build intermodal or rail equipment or facilities, including track, components of track, bridges, yards, buildings, and shops. Up to $35 billion per year of financing is available, with at least $7 billion reserved for projects not on Class I railroads. Financing can be provided for up to 100% of project costs with repayment periods of up to 35 years. Recipients benefit from interest rates that are equal to the cost of borrowing from the government. The FAST Act also authorized the USDOT to enter into Master Credit Agreements. These agreements include one or more loans to be made in the future on a program of related projects. State and local governments, government-sponsored authorities and corporations, and railroads are all eligible to borrow under RRIF.

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[2] Kalla, H. (2022). FHWA Memorandum: Implementation Guidance for the National Highway Performance Program (NHPP) as Revised by the Bipartisan Infrastructure Law. Pg. 9. Accessed February 2023.

[3] USDOT (2022). Bipartisan Infrastructure Law Fact Sheets. PROTECT Formula Program. Accessed February 2024.

Surface Transportation Block Grant (STBG) Program

The STBG Program is a block grant funding program with subcategories for states and urban areas. These funds can be used for any road, including an NHS roadway. The IIJA continued all STBG requirements, but added the provision that states may use up to 15% of certain categories of STBG funds on roadways classified as local roads or rural minor collectors. The state portion of funding can be used on roads inside or outside an urbanized area, while the urban portion can only be used on roads within an urbanized area. The funding ratio is 80%/20% (federal/local).

For urban areas with a population of greater than 200,000 people, the MPO is the lead agency for funding allocation in consultation with the State. In urban areas with a population of less than 200,000 people, the state is the leading agency for fund allocation in consultation with regional planning organizations.

Transportation Alternatives (TA) Program

The Transportation Alternatives (TA) Program is a set-aside of STBG Program funding to provide funding for a variety of alternative transportation projects. From fiscal years 2022-2026, a total of around $1.4 billion is available for the TA program each year.[4] Eligible TA project activities include:

- Facilities for pedestrians, bicyclists, and other non-motorized forms of transportation
- Safe routes to school
- Conversion and use of abandoned railroad corridors for trails
- Community improvement activities
- Environmental mitigation related to stormwater and habitat connectivity

States and MPOs conduct a competitive application process for use of the sub-allocated funds. Other than a recreational trails set-aside, states are given broad flexibility to use these funds. A 20% local funding match is required for most projects.

Transportation Infrastructure Finance and Innovation Act (TIFIA) Program

The Transportation Infrastructure Finance and Innovation Act (TIFIA) Program provides federal credit assistance in the form of direct loans, loan guarantees, and standby lines of credit to finance surface transportation projects of national and regional significance. TIFIA credit assistance provides improved access to capital markets, flexible repayment terms, and potentially more favorable interest rates than can be found in private capital markets for similar instruments. TIFIA can help advance qualified large-scale projects that otherwise might be delayed or deferred because of size, complexity, or uncertainty over the timing of revenues. Transportation Projects eligible for federal assistance through existing transportation programs are eligible for the TIFIA credit program. Eligible projects must be included in the State Transportation Improvement Program (STIP) and have a capital cost of at least $50 million, except ITS projects which have a $15 million minimum eligibility

[4] US FHWA (2022). Fact Sheets. Transportation Alternatives (TA). Accessed February 2024.

requirement. TIFIA financing should attract public and private investment; result in a project proceeding earlier and/or more efficiently; and reduce use of federal grant assistance to the project.

FTA Funding Programs

Several FTA formula programs could be used to provide funding for public transportation service improvements, facilities, or equipment. These include:

- Section 5307 – Urbanized Area Formula Grants: This grant makes federal resources available to urbanized areas and to governors for transit capital and operating assistance in urbanized areas and for transportation-related planning. An urbanized area is an incorporated area with a population of 50,000 or more.
- Section 5339 – Grants for Buses and Bus Facilities: This formula grant provides funding to states and transit agencies through a statutory formula to replace, rehabilitate and purchase buses and related equipment, and to construct bus-related facilities.
- Section 5310 – Enhanced Mobility of Seniors and Individuals with Disabilities: This program provides formula funding to states for the purpose of meeting transportation needs of the elderly and persons with disabilities. Eligible recipients include private nonprofit groups, states, public transportation operators, and local governments.
- Section 5311 – The Formula Grants for Rural Areas Program: This program provides formula funding to states for the purpose of providing capital, planning, and operating assistance for public transportation providers in rural areas with populations of less than 50,000. Additionally, the program provides funding for training and technical assistance under the Rural Transportation Assistance Program.

The IIJA authorized up to $108 billion in support for federal public transportation programs, which is the largest federal investment for public transportation in the history of the nation. In addition to the major formula funding programs listed above, the FTA has several specialized competitive grant programs such as the Low or No Emission Vehicle Program (5339c) and Capital Investment Grants (5309).

Federal Discretionary Funding

There are many discretionary, or competitive, grant programs available at the federal level. The IIJA allocated funds to continue these programs and implemented new discretionary programs. MPOs are eligible to apply or partner with other agencies to receive grant funding for a wide range of transportation improvement and planning activities. The DOT Discretionary Grants Dashboard is an excellent resource for navigating the many grant programs available along with their eligible activities and applicants.[5]

Advanced Transportation Technologies and Innovative Mobility Deployment (ATTIMD) Program

The Advanced Transportation Technologies and Innovative Mobility Deployment (ATTIMD) program, also known as the Advanced Transportation Technology and Innovation (ATTAIN) program, provides funding to deploy, install, and operate advanced transportation and congestion management technologies. Some examples of these technologies include advanced traveler information systems, public transportation systems, and safety systems.

Airport Improvement Program (AIP)

This grant provides funding to public agencies or some private airports for the planning and capital projects for the development of public-use airports and rural "nonprimary" airports that are included in the National Plan of Integrated Airport Systems (NPIAS). Eligible projects include runways, taxiways, airport signage, airport lighting, and airport marking planning or capital projects.

Airport Terminals Program

The Airport Terminals Program provides grants to airports of all sizes to address aging air infrastructure. These grants will fund safe, sustainable, and accessible airport terminals, on-airport rail access projects, and airport-owned airport traffic control towers. However, projects may also include multimodal development.

Areas of Persistent Poverty Program (AoPP)

This program provides competitive funding from the FTA for planning, engineering, or development of technical or financing plans to improve transit services in areas experiencing long-term economic distress.

Bridge Investment Program (BIP)

This program provides funding for projects to replace, rehabilitate, preserve, and protect bridges. The goal is to reduce the total number of bridges in or at risk of poor condition. There is a rolling Notice of Funding for bridge projects under $100 million, large projects over $100 million, and bridge planning projects.

[5] https://www.transportation.gov/grants/dashboard

Capital Investment Grant (CIG) Program

This program funds fixed guideway investments, including new and expanded rapid rail, commuter rail, light rail, streetcars, bus rapid transit or corridor-based busing, and ferries.

Charging and Fueling Infrastructure Grant Program

The purpose of this program is to strategically deploy publicly accessible electric and alternative (hydrogen/propane/natural gas) fueling infrastructure. This includes funding for corridor charging along the designated Alternative Fuels Corridor and community charging near public roads and facilities. Community charging projects will prioritize rural and low- and moderate-income areas.

Commercial Driver's License Program Implementation (CDLPI)

This program provides funding to state CDL programs to achieve compliance with federal licensing and standards.

Commercial Motor Vehicle (CMV) Operator Safety Training Grant

The purpose of this program is to increase the number of CDL holders possessing enhanced operator safety training. Priority is given to the training of current or former members of the U.S. Armed Forces, including National Guard and Reservists. This program aims to reduce the severity and number of CMV crashes while helping to transition former members of the US Armed Forces into the commercial vehicle industry.

Community Safety Grant (CSG)

This grant is open to nonprofit organizations for the purpose of national outreach and training to assist communities in the preparation for and response to incidents involving the transportation of hazardous materials. There are no funding match requirements for the CSG program.

Diesel Emissions Reduction Act (DERA) National Grants

DERA Grants provide funding for projects that achieve significant reductions in diesel emissions and exposure. Projects should replace many high-emission vehicles with energy efficient transportation and technologies, especially for fleets that operate in areas with poor air quality.

Economic Adjustment Assistance (EAA) Program

The EAA program from the Economic Development Administration provides funding for technical, planning, and public works and infrastructure projects in regions experiencing adverse economic changes. For example, changes may result from a plant closure, changing trade patterns, natural disasters, military base closure, or environmental changes. Eligible projects include the creation and implementation of activities in an applicant's Comprehensive Economic Development Strategy (CEDS).

Economic Impact Initiative Grant Program

The Economic Impact Initiative Grant program provides funding for rural areas that are experiencing extreme unemployment and severe economic depression to develop essential community facilities. These facilities include projects like street or airport improvements, and the purchase of firetrucks. This grant may be combined with other grants or funding sources.

Grants for Buses and Bus Facilities Competitive Program

This program assists in the financing of buses and bus facilities capital projects. Projects which replace, rehabilitate, or modify bus facilities, as well as the purchase of buses, vans, and related equipment are eligible for funding.

Infrastructure For Rebuilding America (INFRA) Grant Program

The U.S. Department of Transportation (USDOT) provides the Infrastructure for Rebuilding America (INFRA) discretionary grant program to fund transportation projects of national and regional significance to improve the safety, efficiency, and reliability of the movement of freight and people. The IIJA allocated approximately $8 billion for INFRA grants for the fiscal years 2022-2026. USDOT seeks projects that apply innovative technology, delivery, or financing methods with proven outcomes to deliver projects in a cost-effective manner. Eligible INFRA project costs may include reconstruction, rehabilitation, acquisition of property (including land related to the project and improvements to the land), environmental mitigation, construction contingencies, equipment acquisition, and operational improvements directly related to system performance.

Innovative Coordinated Access and Mobility (ICAM) Pilot Program

This program finances innovative capital projects for the transportation-disadvantaged. The goal is to improve the coordination of transportation services and non-emergency medical transportation services for underserved groups and build partnerships among health, transportation and other service providers. Eligible applicants include state governments, local governments, federally recognized tribes and affiliated groups.

Low- or No-Emission Grant Program

This program includes the purchasing or leasing of low- or no-emission transit buses and related equipment, as well as the construction, leasing, or rehabilitation of new or existing public transportation facilities for low- or no-emission buses.

National Infrastructure Project Assistance (Mega) Grant Program

The Mega grant program supports large and complex transportation projects that may be difficult to otherwise fund. These projects should generate economic, mobility, or safety benefits at a national or regional level. Administered by USDOT, the Mega grant has a total of $5 billion in available funds for fiscal years 2022-2026. USDOT has combined solicitations for the Mega program, INFRA program, and a rural grant program into one Notice of Funding Opportunity, referred to as the Multimodal Project Discretionary Grant (MPDG) Opportunity.

Pilot Program for Transit-Oriented Development (TOD) Planning

This program provides funding to integrate land use and transportation planning to develop a new fixed guideway or core capacity transit project. Projects should examine the following factors to enable mixed-use development near transit stations: ways to develop affordable housing near transit, economic development, ridership potential, multimodal connectivity and accessibility, transit access for pedestrian and bicycle traffic, etc.

Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) Grant Program

This program provides funding to improve the resilience of surface transportation to natural hazards including climate change, sea level rise, flooding, extreme weather events, and other natural disasters. Funds are awarded in the form of planning grants and competitive resilience improvement grants to support planning activities, resilience improvements, community resilience, evacuation routes, and at-risk coastal infrastructure.

Public Transportation Emergency Relief Program

This program from the FTA provides assistance to public transportation operators after an emergency, such as floods, hurricanes, and tornadoes. Funding pays for protecting, repairing, and/or replacing equipment and facilities that have been damaged. In addition, program funding can be used for operating costs of evacuation, rescue operations, temporary public transportation service, or reestablishing service.

Rail Vehicle Replacement Program

This program provides competitive funding for the replacement of rail vehicles, or rolling stock, that is past its useful life.

Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant Program

The Funding for the Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant program was renewed through the IIJA to continue to build and repair critical portions of the nation's freight and passenger transportation networks. RAISE, formerly known as BUILD and TIGER, has dedicated over $14 billion in grants to projects nationwide since 2009. Projects for RAISE funding are evaluated based on merit criteria that include safety, environmental sustainability, quality of life, economic competitiveness, state of good repair, innovation, and partnership. Within these criteria, USDOT prioritizes projects that can demonstrate significant progress on national objectives. As of 2023, the maximum grant award for RAISE grants was $345 million for a single state. To ensure that the benefits of infrastructure investments benefit communities large and small, the Department will award an equitable amount, not to exceed half of funding, to projects located in urban and rural areas, respectively.

Reconnecting Communities Pilot (RCP) Program

The RCP grant program is a combination of two major discretionary grant programs—the Reconnecting Communities Pilot (RCP) and Neighborhood Access and Equity (NAE) programs. This program provides funds for projects that improve walkability, safety, and transportation access, especially for historically disadvantaged groups. In particular, the program provides funds to remove, retrofit, or mitigate transportation facilities that have created connectivity barriers.

Safe Streets and Roads for All (SS4A) Grant Program

The SS4A grant program was established by the IIJA, with available funding in the amount of $5 billion from 2022-2026. The purpose of the program is to prevent roadway injuries and deaths to

support the USDOT National Roadway Safety Strategy and goal of zero roadway deaths. Eligible applicants for SS4A grant funding includes local governments, special districts, transit agencies, MPOs, and tribal governments. SS4A funding can be used to create a comprehensive safety action plan and implement infrastructure, operational, or behavioral activities from the plan.

Strengthening Mobility and Revolutionizing Transportation (SMART) Grants

The SMART grant program provides funding to conduct demonstration projects focused on advanced smart community technologies and systems. The purpose of the program is to fund purpose-driven innovation and build data and technology capacity in order to improve transportation efficiency and safety.

Thriving Communities Program

This program aims to ensure that historically disadvantaged communities have the technical tools and organizational capacity to compete for federal aid and deliver infrastructure projects. The planning and development of transportation and community revitalization activities will enable these communities to thrive.

Wildlife Crossings Pilot Program

This program seeks to improve habitat connectivity for terrestrial and aquatic species by providing funding for projects that reduce the number of wildlife-vehicle collisions.

State Funding

States receive formula funds from the Federal Aid Highway Program Highway Trust Fund. In addition, states receive transportation funds from taxes and fees such as motor fuels taxes and vehicle registration fees. States typically use funding sources to meet match funding requirements and fund operations. The following section describes state transportation funding sources from Arkansas and Texas.

Arkansas

ARDOT administers the federal formula funds and its own state-level funding categories. Revenues for state funding are generated by motor fuels, special motor fuels, motor vehicle registrations, and other taxes. State-level funding sources are described below.

Connecting Arkansas Program

The Connecting Arkansas Program (CAP) was an amendment, approved by voters in 2012, to implement a 10-year half-cent sales tax to fund transportation system improvements. The projects funded through this program were to improve connections between cities, increase highway capacity, ease congestion, and improve traveler safety. The tax levied for this program funded improvements for around 200 miles of roadway and was set to end in July 2023. In 2020, voters elected to make the half-cent tax permanent, creating a significant source of funding for state highways.

State Funds for Construction

Another potential funding source from the state of Arkansas for transportation projects is the Arkansas Economic Development Commission (AEDC) or the Governor's Quick Action Closing Fund. This funding source is listed in the 2023-2026 STIP from ARDOT as a total available amount of $847.1 million.

State Advance Construction

Advance Construction allows states to begin a transportation project before obtaining sufficient federal funding. This is a management tool that provides flexibility in managing Federal-aid highway funds by being reimbursed with Federal-aid funds at a later date. The 2023-206 STIP identifies $265.2 million in State Advance Construction under the Non-Federal Funding Categories.

Texas

The State of Texas maintains categorized funding programs that coincide with federal funding programs. Traditionally, this funding is used to meet any required match of federal sources and to fund the operations of the state Department of Transportation. The primary funding source for Texas transportation programs includes motor fuel taxes allocations, motor vehicle registration fees, severance taxes allocations, and many other revenue sources and fees, including voter approved constitutional amendments Proposition 1 and Proposition 7, which redirect funding from the general fund to be spent on transportation projects. Categories 1-9 of the Texas Unified Transportation Program (UTP) are federal and state programmatic funding categories, while Categories 10, 11, and 12 are strategic and discretionary funding categories. TxDOT's 2024 UTP provides the following definitions and criteria for each funding category, summarized in Table 6-1.

Table 6-1: TxDOT Funding Categories

Category	Allocation/Distribution	Project Selection Guidelines
Preventative Maintenance and Rehabilitation (1)	Funding is allocated to each district	District wide performance-based prioritization process
Metropolitan and Urban Area Corridor Projects (2)	Funding is allocated to each MPO based on population of under or over 200,000 (TMA)	MPOs select projects with TxDOT district
Non-Traditionally Funded Transportation Projects (3) *Design Build (3DB)**	Determined by Commission approved minute order.	Projects selected by state legislation, minute order, or local government commitments
Statewide Connectivity Corridor Projects (4)	Rural funds are distributed to specific projects, Urban funds are distributed same as category 2	TxDOT districts select projects in consultation with TxDOT's Transportation Planning and Programming Division using a performance-based prioritization process or in consultation with MPOs
Congestion Mitigation and Air Quality Improvement (CMAQ) (5)	Funds are distributed to non-attainment areas.	TxDOT districts oversee selection of MPO projects
Structures Replacement and Rehabilitation (Bridge) (6)	Funding is allocated to TxDOT's Bridge Division.	TxDOT's Bridge Division selects projects using a performance-based prioritization process
Metropolitan Mobility and Rehabilitation (7)	Distribution is based on the population of each TMA.	MPOs use a performance-based prioritization process
Safety (8) *Safety (8 R)**	Funding is allocated to TxDOT's Traffic Safety Division.	Projects are evaluated, prioritized, and selected at the district level
Transportation Alternatives Set-Aside Program (9 TA)	TMA MPOs administer funds and TxDOT distributes funds through a competitive process.	Projects selected competitively by TxDOT's Public Transportation Division or by MPOs

Category	Allocation/Distribution	Project Selection Guidelines
Supplemental Transportation Programs (10) *Carbon Reduction (10 CRBN)** *Ferry Boat Program (10 FB)** *Seaport Connectivity Program (10 SCP)** *Informational Technology System (10 ITS)** *Federal Land Access Program (10 FLA)** *Texas Parks and Wildlife Department (10 TPW)** *Green Ribbon Program (10 GR)** *ADA Pedestrian Program (10 ADA)** *Landscape Incentive Award (10 LIA)** *Railroad Grade Crossing and Replanking Program (10 RR)** *Railroad Signal Maintenance Program (10 RSMP)** *Border State Infrastructure (BSIF)**	Distribution varies by program.	Projects are selected through a variety of processes by TxDOT and TPP.
District Discretionary (11) *Energy Sector (11 EN)** *Safety (11 Safety)** *Cost Overruns/Change Orders (11 CO/CO)**	Distribution varies by program.	TxDOT districts select projects using a performance-based prioritization process that assesses district-wide maintenance, safety or mobility needs.
Strategic Priority (12 SP) Texas Clear Lanes (12 TCL)*	Funding is awarded to specific projects at the discretion of the Texas Transportation Commission.	The Texas Transportation Commission selects projects statewide using a performance-based prioritization process.
Statewide Budget PE	TxDOT budget for Preliminary Engineering (PE).	
Statewide Budget ROW	TxDOT budget for Right-of-Way (ROW) acquisition.	

Source: TxDOT Draft 2025 Unified Transportation Program (page 7)

**This is a subprogram of the primary TxDOT Category. For more information, please reference TxDOT's UTP Funding Categories*[6]

[6] https://ftp.txdot.gov/pub/txdot/get-involved/tpp/utp/061024-utp-funding-categories-descriptions.pdf

Category 1: Preventative Maintenance and Rehabilitation

Category 1 deals with preventative maintenance and rehabilitation of the existing highway system, which includes pavement, signs, traffic signalization, and other assets that can be considered part of the highway infrastructure. Preventative maintenance works to preserve, rather than improve the structural integrity of current pavements and structures. Rehabilitation focuses on repairing (which can also be considered modernizing) existing main lanes, structures, frontage roads, and other infrastructure assets. Projects are selected by TxDOT districts using a performance-based prioritization process that assesses district-wide maintenance and rehabilitation needs. The Texas Transportation Commission allocates funds through a formula allocation program.

Category 2: Metropolitan and Urban Area Corridor Projects

Category 2 addresses mobility and added capacity projects on urban corridors to mitigate traffic congestion, as well as increasing traffic safety and improving roadway maintenance or rehabilitation. Projects must be located on the state highway system. Roadway widening (both freeway and non-freeway), interchange improvements, and roadway operational improvements are common within Category 2. Projects are selected by MPOs in consultation with TxDOT using a performance-based prioritization process that assesses mobility needs within the MPO boundaries. Project funds must be authorized by the Texas Transportation Commission by formula.

Category 3: Non-Traditionally Funded Transportation Projects

This category includes transportation-related projects that qualify for funding from sources not traditionally part of the state highway fund, including state bond financing under programs such as Proposition 12 (General Obligation Bonds), Texas Mobility Fund, pass-through toll financing, unique federal funding, regional toll revenue, and local participation funding. New-location roadways, roadway widening, and interchange improvements are common project types that receive Category 3 funds. Projects are determined by legislation, the Texas Transportation Commission approved Minute Order, or local government commitments. 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

Category 4 funds are used for mobility and added-capacity projects on major state highway system corridors that provide statewide connectivity between urban areas and other statewide corridors, to create a highway connectivity network composed of the Texas Highway Trunk System, NHS, National Freight Network, hurricane evacuation routes, and connections to major ports of entry on international borders and Texas water ports. Corridors are selected by the Texas Transportation Commission based on engineering analyses of three corridor types: mobility, connectivity, and strategic. Funds are allocated by the Commission to TxDOT districts. Districts select projects along approved corridors in consultation with MPO's, the Transportation Planning and Programming Division (TPP), and TxDOT Administration using a performance-based evaluation.

Category 5: Congestion Mitigation and Air Quality Improvement (CMAQ)

Congestion Mitigation and Air Quality improvement projects address attainment of a national ambient air quality standard in non-attainment areas of the state. Projects that reduce pollutant

emissions and help address the non-attainment status may also be eligible for CMAQ funds. Projects are selected by MPOs in consultation with TxDOT. The Texas Transportation Commission allocates funds distributed by population and weighted by air quality severity to non-attainment areas. Nonattainment areas are designated by the EPA. To be eligible for CMAQ funds, projects must meet the following three criteria: be a transportation project; contribute to emission reductions; and be located in or benefit a nonattainment or maintenance area for ozone, carbon monoxide, and particulate matter. The Texarkana area is currently not a non-attainment area.

Category 6: Structures Replacement and Rehabilitation (Bridge)

Category 6 funds are used for replacement and rehabilitation of deficient existing bridges located on public highways, roads, and streets in the state; construction of grade separations at existing highway and railroad grade crossings; and rehabilitation of deficient railroad underpasses on the state highway system. Projects are selected by the Bridge Division (BRG) based on a listing of eligible bridges prioritized first by deficiency categorization (structurally deficient followed by functionally obsolete) and then by sufficiency ratings. Railroad grade separation projects are selected based on a cost-benefit index rating. Projects in the Bridge Management and Improvement Program (BMIP) are selected statewide based on identified bridge maintenance and improvement needs to aid in ensuring the management and safety of the state's bridge assets. The Texas Transportation Commission allocates funds through the Statewide Allocation Program.

Category 7: Metropolitan Mobility and Rehabilitation

Category 7 funds are available to projects that address transportation needs within the boundaries of designated metropolitan planning areas of metropolitan planning organizations located in a transportation management area (areas with populations of 200,000 or more). Projects are selected by MPOs, operating in transportation management areas, in consultation with TxDOT. The MPOs use a performance-based prioritization process that assesses mobility needs within the MPO boundaries. At present, due to the population size, the Texarkana planning area is not a transportation management area.

Category 8: Safety Projects

Projects eligible for Category 8 funding include safety-related projects both on and off the state highway system including the federal Highway Safety Improvement Program, Safety Bond Program, Systemic Widening Program, Federal Railway Set-Aside, and Road to Zero (RTZ). Projects are selected statewide by federally mandated safety indices and a prioritized listing. Projects selected in each program are evaluated by relevant safety factors and indices. Common project types for Category 8 funding include turn lanes, intersections, traffic signals, and rumble strips. The TxDOT Traffic Safety Division selects projects and allocates Category 8 funding. TxDOT initiated the Road to Zero program to work toward the goal of reducing the number of deaths on Texas roadways by half by the year 2035 and to zero by the year 2050. Category 8 funding also includes the Rail-Highway Crossing Set-Aside Program to elimination hazards at public railway-highway crossings.

Category 9: Transportation Alternatives (TA) Set-Aside Program

Category 9 is designed to provide funding for transportation-related activities that promote the use of modes other than the automobile such as on- and off-road pedestrian and bicycle facilities, and

infrastructure projects for improving access to public transportation. For urbanized areas with populations over 200,000, the MPO selects TA projects through a competitive process in consultation with TxDOT. All projects are selected using a performance-based prioritization process that assesses local transportation needs, including bicycle and pedestrian access.

Category 10: Supplemental Transportation Programs

Category 10 can fund transportation-related projects that do not qualify for funding in other categories, including landscape and aesthetic improvement, erosion control and environmental mitigation, construction and rehabilitation of roadways within or adjacent to state parks, fish hatcheries, and similar facilities, replacement of railroad crossing surfaces, maintenance of railroad signals, construction or replacement of curb ramps for accessibility to pedestrians with disabilities, and miscellaneous federal programs. Category 10 funds transportation improvements through the subprograms identified in Table 6-1.

Category 11: District Discretionary

Category 11 includes projects eligible for federal or state funding selected at the TXDOT District Engineer's discretion through several subprograms. Category 11 addresses transportation needs that may impact the Energy Sector and Border Infrastructure (Rider 11(b)). Projects are selected by districts. The Texas Transportation Commission allocates funds through a formula allocation program. A minimum $2.5 million allocation goes to each district per legislative mandate. The Commission may supplement the funds allocated to individual districts on a case-by-case basis to cover project cost overruns, as well as energy sector initiatives. Rider 11 (b) projects are also selected by the Commission dependent on the number of land border ports of entry, incoming commercial freight traffic, incoming personal motor vehicles and buses, and the weight of incoming cargo by commercial trucks. District Safety projects are based on percentages related to VMT and crash rates. Construction cost overruns and change orders may also be funded through this category.

Category 12: Strategic Priority

Category 12 is intended to fund projects with specific importance to the state, including those that generally improve congestion and connectivity, energy sector access, and border and port connectivity, promote economic opportunity, increase efficiency on military deployment routes or retain military assets in response to the federal military base realignment and closure reports, and maintain the ability to respond to both manmade and natural emergencies. The Texas Clear Lanes Subset of Category 12 funding is for projects within the five largest metro areas in the state (Austin, Dallas, Fort Worth, Houston, and San Antonio) to address the top 100 most-congested road segments. The Texas Transportation Commission selects projects statewide using a performance-based prioritization process and may make discretionary funding decisions for no more than 10% of TxDOT's biennial budget.

Local Funding

It is typically the responsibility of the local government jurisdictions (cities and counties) to cover any costs not covered by state and federal programs. Local funding can come from a variety of sources including property taxes, sales taxes, user fees, special assessments, and impact fees. Match

requirements make local funds critical to maintain eligibility for several federal and state funding sources, which is typically around 20% of total project costs for federal funding sources.

Advanced Transportation District

Legislation authorizing the creation of Advanced Transportation Districts and authorization of a local sales tax for advanced transportation was enacted by the Texas Legislature during the 76th session in 1999.

Advanced transportation as defined in the legislation includes light rail, commuter rail, fixed guideways, traffic management systems, busways, bus lanes, technologically advanced bus transit vehicles and systems, bus rapid transit systems, transit centers, stations, electronic transit-related information, fare, and operating systems, high occupancy vehicle lanes, traffic signal prioritization and coordination systems, monitoring systems, and other services in connection with such facilities, equipment, operations, systems, and services.

Bond Issues

Property tax and sales tax funds can be used on a pay-as-you-go basis, or the revenues from these taxes can be used to repay general obligation or revenue bonds. These bonds are issued by local governments upon approval of the voting public.

Economic Development Corporation

In Texas, the Development Corporation Act of 1979 gives cities the ability to finance new and expanded business enterprises in their local communities through economic development corporations (EDCs). Chapters 501, 504, and 505 of the Local Government Code outline the authorization of certain EDCs to implement sales taxes to fund streets, roads, and other infrastructure improvements.

General Sales Taxes

The general sales and use taxes are also an important funding source for local governments. The most commonly known form of the general sales tax is the retail sales tax. The retail sales tax is imposed on a wide range of commodities, and the rate is usually a uniform percentage of the selling price.

Property Taxes

Property taxation has historically been the primary source of funding for local governments in the United States. Property taxes account for more than 80% of all local tax revenues. Property is not subject to federal government taxation and is a significant generator of tax revenue within the state of Texas given the lack of state and local-option income taxes.

Public-Private Partnerships

A Public-Private Partnership (P3) is a contractual agreement between a public agency (federal, state, or local) and a private entity for a long-term, performance-based approach to procuring public infrastructure. The private entity assumes the major share of the risk in terms of financing,

constructing, and the performance of the project in return for the right to collect revenue from the project over a set period of time.

Special Assessments

Special assessment is a method of generating funds for public improvements, whereby the cost of a public improvement is collected from those who directly benefit from the improvement. Areas in which this scenario occurs are often called “Special Assessment Districts.” Within these districts, property owners—typically business owners—will vote to dedicate a portion of their sales tax or property tax to fund some improvement or service that benefits the district.

In many instances, new streets are financed by special assessment. The owners of property located adjacent to the new streets are assessed a portion of the cost of the new streets based on the amount of frontage they own along the new streets.

Tax Increment Reinvestment Zone or District

One of the tools many states use to obtain funds not provided by federal and state funding is through Tax Increment Financing (TIF), which is a public financing method used for redevelopment and community improvement projects. A tax increment reinvestment zone (TIRZ) is a political subdivision of a municipality or county created to implement tax increment financing, which may be initiated by the city or county. The assessed values of properties within the new TIRZ are frozen for a period of time. As property values increase over the lifetime of the TIRZ, the property taxes collected through this increase (the "increment") are used to pay for the improvement project. A TIRZ may not be created without justification. In its current state, the area must have a deleterious effect on the economic future of the creating body. To be eligible for funding, the project sponsor must be able to show that the project offsets the deleterious effect.

Two TIRZ currently existing in Texarkana, TX and the revenues generated help fund specific infrastructure improvements.

Traffic Or Development Impact Fees

Traffic or Development Impact Fees have been generally well received in other states and municipalities in the United States and have gained popularity in recent years. New developments create increased traffic volume on the streets around them, and development impact fees are a way of attempting to place a portion of the burden of funding improvements on developers who are creating or adding to the need for improvements.

User Fees

User fees are fees collected from those who use a service or facility. The fees are collected to pay for the cost of a facility, finance the cost of operations, and/or generate revenue for other uses. User fees are commonly charged for public parks, water and sewer services, transit systems, toll roads, express lanes, and solid waste facilities. The theory behind the user fee is that those who directly benefit from these public services pay for the costs.

Projected Revenues

Revenue forecasting for the purposes of this MTP Update, reviews formula grant programs as the primary source of expected revenues and does not incorporate competitive grant funding opportunities. As such, the fiscal constraint is limited to what is derivable by formula fund and more projects might be completed should discretionary or competitive grant dollars become available.

To determine the revenues to be applied to the proposed program of projects in the MTP, an analysis of historically programmed funding was conducted. The project team coordinated with TxDOT and ARDOT for historical funding spent by funding category in order to determine projected funding and acceptable inflation rates for planned projects. Through this coordination an agreed-upon compounded inflation rate of 2% was used to project revenue through the life of the MTP. At the time of writing this document, the revenue projections do not include CMAQ funds, but CMAQ funding is anticipated to become available if the region is designated as non-attainment in the near future.

Table 6-2 and Table 6-3 show the total roadway revenue estimated to be available for each stage of the 2050 MTP's plan horizon for the Texas side of the MPO and the Arkansas side of the MPO, respectively. The total amount of roadway revenue estimated to be available for the entire Texarkana MPO area is approximately $1 billion. Table 6-4 shows estimated transit funding for the whole area. This represents an increase in funding from the Bipartisan Infrastructure Law (BIL) across a number of topic areas such as resilience, preservation, safety, and carbon reduction programs.

Table 6-2: Projected ARDOT UTP Roadway Funding for MTP (2025-2050) in $ Thousands

Category		Implementation Stage (2025 - 2028)	Short-Term Stage (2029 - 2034)	Medium-Term Stage (2035 - 2045)	Long Term Stage (2046 - 2050)	Totals
National Highway Performance Program (NHPP)[1]	Pavement Preservation[2]	$31,446	$52,096	$101,837	$71,516	**$256,896**
	Bridge[3]	$5,150	$8,532	$16,678	$11,712	**$42,072**
	System Reliability[4]	$5,957	$9,869	$19,292	$13,548	**$48,666**
Surface Transportation Block Grant (STBG)	Urbanized > 200K	$0	$0	$0	$0	**$0**
	STBG Flex, City, Town and CMAQ Flex [5,6,7]	$8,404	$13,922	$27,216	$19,112	**$68,654**
	Off-System Bridge[8]	$916	$1,518	$2,968	$2,084	**$7,487**
Surface Transportation Block Grant Transportation Alternatives (STBG-TA)	Urbanized > 200K	$0	$0	$0	$0	**$0**
	STBG Flex, City and Town [9,10]	$824	$1,365	$2,668	$6,731	**$6,731**
	Recreational Trails[11]	$88	$146	$286	$721	**$721**
Highway Safety Improvement Plan (HSIP)[12]		$2,766	$4,583	$8,958	$6,291	**$22,599**
Congestion Mitigation and Air Quality (CMAQ) - Non-Attainment			$0	$0	$0	**$0**

Category		Implementation Stage (2025 - 2028)	Short-Term Stage (2029 - 2034)	Medium-Term Stage (2035 - 2045)	Long Term Stage (2046 - 2050)	Totals
National Highway Freight Program (NFP)[13]		$2,295	$3,803	$7,434	$5,220	**$18,752**
Bridge Formula Program	Federal-Aid System Bridge[13]	$6,243	$10,343	$20,218	$14,198	**$51,001**
	Off-System Bridge[7]	$589	$975	$1,906	$1,339	**$4,808**
Carbon Reduction Program	Base Apportionment	$416	$690	$1,348	$947	**$3,400**
	CRP Flex, City \and Town [14,15]	$786	$1,302	$2,546	$1,788	**$6,422**
PROTECT Program [16]		$1,724	$2,856	$5,582	$3,920	**$14,081**
	Totals	**$67,605**	**$111,999**	**$218,936**	**$153,751**	**$552,291**

Source: ARDOT TIP Data, "FUNDMARKS", and ATG Revenue Projections

Note on ARDOT Revenue Projections and initial provided estimated funding information, i.e. "fundmarks:" The above estimates are neither limits nor guarantees. Revenue estimates are provided for 2023 and were inflated at 2% per year per ARDOT guidance. All amounts are shown in millions of dollars and are for Federal funds only. Matching funds are assumed to be provided by the State for most State Highway projects. Refer to relevant Federal-aid program fact sheets for eligible activities and typical matching ratios. Construction costs should be inflated at an average annual rate of 3% to develop year-of-expenditure estimates.

[1] *NHPP Funds were split 76% to 24% between Preservation (including Pavement and Bridge) and System Reliability, respectively, consistent with the direction of the Arkansas State Highway Commission for STIP development purposes.*

[2] *NHPP Pavement Preservation fundmarks were calculated based on the percentage of NHS lane miles within MPO-occupied counties relative to the state total of NHS lane miles.*

[3] *NHPP Bridge fundmarks were calculated based on the percentage of NHS bridge deck area within MPO-occupied counties relative to the state total of NHS bridge deck area.*

[4] *NHPP System Reliability fundmarks were calculated based on the percentage of Census-defined urban area population within MPO-occupied counties relative to the state total of Census-defined urban area population.*

[5] *STBGP Flex and CMAQ Flex partial fundmarks were calculated based on the percentage of Census-defined urban area population within MPO-occupied counties relative to the state total of Census-defined urban area population.*

[6] *STBGP City and Town partial fundmarks were calculated based on the percentage of Census place populations within MPO-occupied counties relative to state totals within each population category.*

[7] *STBGP Off-System Bridge fundmarks were calculated based on the percentage of off-system bridge deck area within MPO-occupied counties relative to the state total of off-system bridge deck area.*

[8] *STBGP-TA Flex partial fundmarks were calculated based on the percentage of population within MPO-occupied counties relative to the state total population.*

[9] *STBGP-TA City and Town partial fundmarks were calculated based on the percentage of Census place populations within MPO-occupied counties relative to state totals within each population category.*

[10] *Recreational Trails fundmarks were calculated based on the percentage of population within MPO-occupied counties relative to the state total population.*

[11] HSIP fundmarks were calculated based on percentage of 2017-2021 KA crashes occurring on the SHS within MPO-occupied counties relative to the state total of KA crashes on the SHS.

[12] NHFP fundmarks were calculated based on the percentage of Tier 1 and Tier 2 Arkansas Highway Freight Network centerline miles within MPO-occupied counties relative to the statewide total of Tier 1 and Tier 2 miles.

[13] BFP partial fundmarks were calculated based on the percentage of SHS bridge deck area within MPO-occupied counties relative to the state total of SHS bridge deck area.

[14] CRP Flex partial fundmarks were calculated based on the percentage of population with MPO-occupied counties relative to the state total population.

[15] CRP City and Town partial fundmarks were calculated based on the percentage of Census place populations within MPO-occupied counties relative to state totals within each population category.

[16] PROTECT fundmarks were calculated based on percentage of APHN centerline miles within MPO-occupied counties relative to the state total of APHN centerline miles.

[17] TOTAL does not include $11,527,704 (FFY 2023) in National Electric Vehicle Formula Program (NEVFP) funds that may be reflected as a statewide apportionment for MTP development purposes.

Table 6-3: Projected TxDOT UTP Roadway Funding for MTP (2025-2050) in $ Thousands

Category	Implementation Stage (2025 - 2028)	Short-Term Stage (2029 - 2034)	Medium-Term Stage (2035 - 2045)	Long Term Stage (2046 - 2050)	Totals
1 - Preventive Maintenance and Rehabilitation	$134,087	$144,632	$283,368	$198,998	$761,086
2M or 2U - Urban Area (Non- TMA) Metropolitan Corridor Projects	$23,186	$19,988	$53,827	$37,801	$134,801
3 - Non-Traditionally Funded Transportation Projects	$9,299	$8,784	$16,242	$11,406	$45,731
4 - Statewide Connectivity Corridor Projects**	$0	$0	$0	$0	$0
5 - CMAQ	$0	$0	$0	$0	$0
6 - Structures	$0	$0	$0	$0	$0
7 - STP - Metro Mobility & Rehabilitation	$0	$0	$0	$0	$0
8 - Safety - HSIP	$0	$0	$0	$0	$0
9 - Transportation Enhancements	$0	$0	$0	$0	$0
10 - Supplemental Transportation - 9 components	$774	$1,171	$2,180	$1,531	$5,657
11 - District Discretionary	$9,813	$12,964	$23,971	$16,834	$63,583
11 - Safety	$12,871	$12,769	$23,334	$16,387	$65,361

Category	Implementation Stage (2025 - 2028)	Short-Term Stage (2029 - 2034)	Medium-Term Stage (2035 - 2045)	Long Term Stage (2046 - 2050)	Totals
12 - Strategic Priority	$0	$0	$0	$0	$0
Totals	**$190,030**	**$200,309**	**$402,923**	**$282,957**	**$1,076,219**

Source: TxDOT UTP Planning targets and ATG revenue projections

Table 6-4: Total Estimated MTP Transit Funding 2024-2050 in $ Thousands

Description	Implementation Stage (2025 - 2028)	Short-Term Stage (2029 - 2034)	Medium-Term Stage (2035 - 2045)	Long Term Stage (2046 - 2050)	Totals
Operating Assistance	$1,622	$2,660	$5,200	$3,652	**$13,134**
Capital- Preventative Maintenance	$516	$846	$1,985	$1,161	**$4,508**
Capital- Paratransit	$469	$775	$1,820	$1,064	**$4,128**
Capital- Planning	$428	$695	$1,631	$954	**$3,708**
Capital- Rolling Stock/Support Equipment	$215	$345	$810	$474	**$1,844**
Total	**$3,251**	**$5,321**	**$11,446**	**$7,305**	**$27,322**

Source: TxDOT funding estimates, ARDOT funding estimates, NTD Funding Time Series

Estimated Project Costs and Fiscal Constraint

Project cost estimates were provided by project sponsors in the call for projects process or were pulled forward from the 2045 MTP project costs. Project score, rank, project readiness, and cost estimates determined the stage (implementation-, short-, medium-, or long-term stage). Table 6-5 shows the estimated roadway project costs for all sponsors on the Texas and Arkansas sides of the study area by stage. Table 6-6 shows estimated transit costs and funding.

Table 6-5: Total MTP Constrained Roadway Project Costs by Stage in $ Thousands

Stage	Arkansas	Texas	Totals
Implementation (2025-2028)*	$64,969	$7,435	**$72,404**
Short Term (2029-2034)	$111,084	$196,924	**$308,008**
Medium Term (2035-2045)	$46,747	$397,882	**$444,629**
Long Term (2046-2050)	$18,617	$250,661	**$269,277**
Total	**$241,417**	**$852,902**	**$1,094,318**

*Fiscally constrained grouped projects in current TxDOT TIP not reflected in total for Implementation Stage

Table 6-6: 2025-2050 MTP Constrained Transit Funding Fiscal Summary in $ Thousands

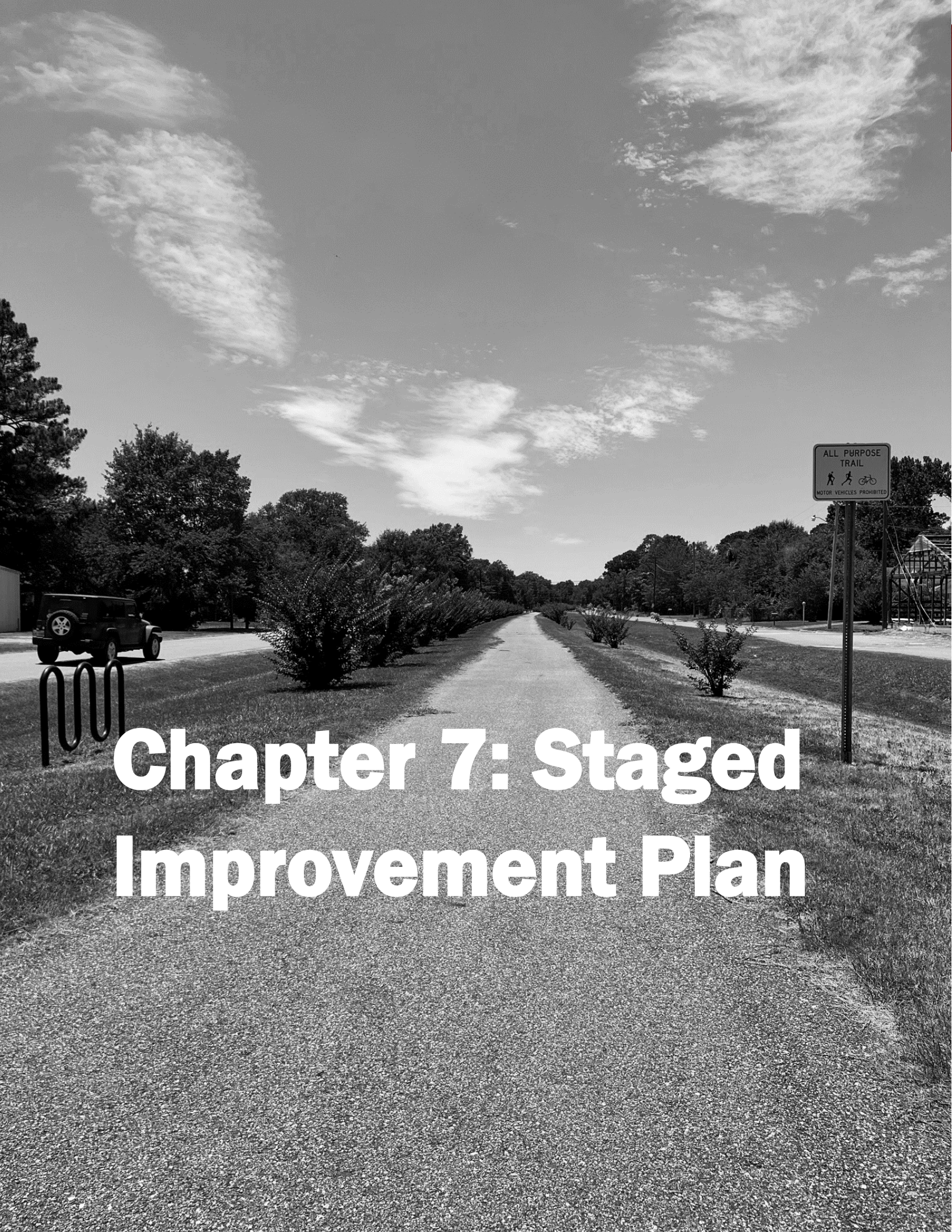
	Arkansas		Texas	
	Funding	Costs	Funding	Costs
Transit	$15,670	$15,670	$8,531	$8,531

Table 6-7 shows a summary of total estimated costs in comparison with the estimated funding available from 2025 to 2050 for each state, demonstrating fiscal constraint.

Table 6-7: 2025-2050 MTP Constrained Roadway Fiscal Summary in $ Thousands

Stage	Arkansas		Texas	
	Projected Revenues	Estimated Costs	Projected Revenues	Estimated Costs
Implementation (2025-2028)	$67,605	$64,969	$190,030	$7,435*
Short Term (2029-2034)	$111,999	$111,084	$200,309	$196,924
Medium Term (2035-2045)	$218,936	$46,747	$402,923	$397,882
Long Term (2046-2050)	$153,751	$18,617	$282,957	$250,661
Total	**$552,291**	**$241,417**	**$1,076,219**	**$852,902**

*TxDOT grouped projects may use implementation-stage projected revenues but may not be reflected in costs above.



Chapter 7: Staged Improvement Plan

This chapter includes tables and maps that illustrate the program of projects in the Texarkana Connect to 2050 MTP. Projects have been grouped into four distinct plan stages, including:

- 2025-2028 Implementation Stage
- 2029-2034 Short-Term Stage
- 2035-2045 Medium-Term Stage
- 2046-2050 Long-Term Stage

In addition to the fiscally constrained project list, this chapter includes a breakdown of statewide grouped projects and locally funded, unfunded, or illustrative projects identified and/or submitted as part of the MTP development process. CSJ identification numbers are provided, if applicable, in the sponsor column.

Fiscally Constrained Roadway Program of Projects

Implementation Stage

The following tables illustrate the roadway fiscally constrained projects for the various MTP stages. Table 7-1 through Table 7-3 and Figure 7-1 show the Implementation Stage projects categorized by project sponsors.

Table 7-1: ARDOT Implementation Stage Project List (2025-2028)

ID	Roadway/Facility	From	To	Project Type	Sponsor (and CSJ)	Cost
166	US-82/E 9th St	IH-49	N Rondo Rd	Freight, Roadway	ARDOT	$5,000,000
171	US-71	US-67	Arkansas Blvd	Preservation, Roadway	ARDOT	$9,900,000
227	US-72	Arkansas Blvd	IH 30	Preservation, Roadway	ARDOT	$2,100,000
111	IH 30	Texas State Line	IH 49	Widening	ARDOT	$30,800,000
218	FM 196	0.2 Mi W of PR 1220	0.5 Mi E of MC 422	Resurfacing	ARDOT	$3,000,000
223	US 71	0.5 Mi N of Sugar Hill Rd	0.1 South of Birdie Ln	Resurfacing	ARDOT	$3,000,000
222	US 71	Nix Creek St	-	Safety Improvements	ARDOT	$3,700,000
221	IH 30	Arkansas Welcome Center	-	Safety Improvements	ARDOT	$3,000,000
226	FM 196	0.2 Mi W of Hastings Crossing Rd	0.2 E of PR 1220	Resurfacing	ARDOT	$1,000,000
225	151	Texas State Line	East (S)	Resurfacing	ARDOT	$468,700

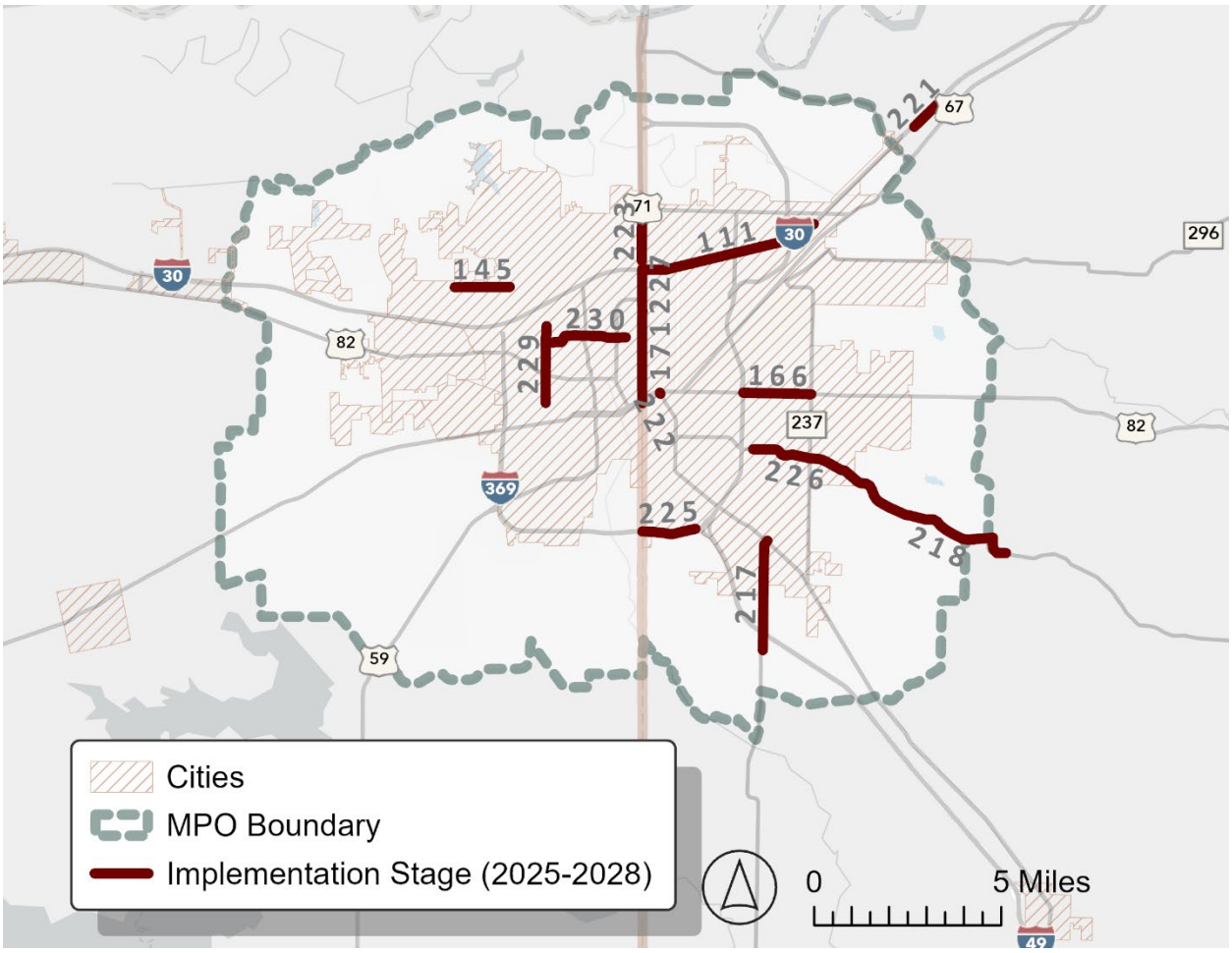
Table 7-2: TxDOT Implementation Stage Project List (2025-2028)

ID	Roadway/Facility	From	To	Project Type	Sponsor (and CSJ)	Cost
145	FM 1297 (McKnight Rd)	FM 559 (Richmond Rd)	FM 2878 (Pleasant Grove Rd)	Active Transport, Safety	TxDOT (2879-01-011)	$2,306,894
229	Robison Rd	Bright Street	Richmond Road	Active Transportation	TxDOT (0919-19-085)	$2,520,250
230	College Dr	Robison Rd along College Dr	US 71 (Stateline Avenue)	Active Transportation	TxDOT (0919-19-084)	$2,608,013

Table 7-3: Local Government Implementation Stage Project List (2025-2028)

ID	Roadway/Facility	From	To	Project Type	Sponsor (and CSJ)	Cost	State
217	FM 237	East St	MC 423	Resurfacing	-	$3,000,000	AR

Figure 7-1: Implementation Stage Project Map



Short-Term Stage

Table 7-4 through Table 7-6 and Figure 7-2 below show the short-term stage projects for the study area, to be programmed for 2029-2034.

Table 7-4: ARDOT Short-Term Stage Project List (2029-2034)

ID	Roadway/Facility	From	To	Project Type	Sponsor (and CSJ)	Cost
245	Interstate 30	IH-49	Highway 108	Preservation, Roadway	ARDOT	$47,000,000
112	Hwy 82	Hwy 237	MPO Boundary	Capacity - Widening, Roadway	ARDOT	$20,000,000
104	Highway 108	IH-30 Overpass	--	Preservation, Roadway, Safety, Resilience, Bridge	ARDOT	$5,300,000
219	SH 196 (Division St)	US-71 (East Street)	I-49	Preservation, Roadway	ARDOT	$5,375,400
224	Highway 67	Nix Creek	--	Preservation, Roadway, Safety, Resilience, Bridge	ARDOT	$1,460,000

Table 7-5: TxDOT Short-Term Stage Project List (2029-2034)

ID	Roadway/Facility	From	To	Project Type	Sponsor (and CSJ)	Cost
60[1]	US 71	0.2 Mi S of IH 30	US 67 (7th St)	Restoration	TxDOT (0217-02-037)	$20,183,928
7	US 82	0.9 Mi W of FM 989	0.7 Mi W of FM 989 in Nash	Capacity - Widening, Roadway, Safety	TxDOT (0046-06-040)	$56,803,381
38	FM 989	IH 30 S Frontage Rd	0.1 Mi N of US 82	Widen Non-Freeway	TxDOT (1231-01-052)	$13,005,662
141	Kennedy Lane	On Kennedy Lane from SH 93	Robison Road	Pedestrian, Sidewalks and Curb Ramps	TXDOT & Texarkana, TX (0919-19-088)	$1,840,628
55A	IH 30	FM 3419	--	Bridge Replacement	TxDOT (0610-07-115)	$14,583,747
12	US 67	0.2 Mi W of FM 989	FM 2148(S)	Widen Non-Freeway	TxDOT (0010-13-056)	$81,390,400
211	FM 560	IH 30	US 82	Widen Non-Freeway	TxDOT (1021-01-021)	$6,897,960

[1] Coordination with ARDOT on splitting project into phases is being discussed at the time of writing.

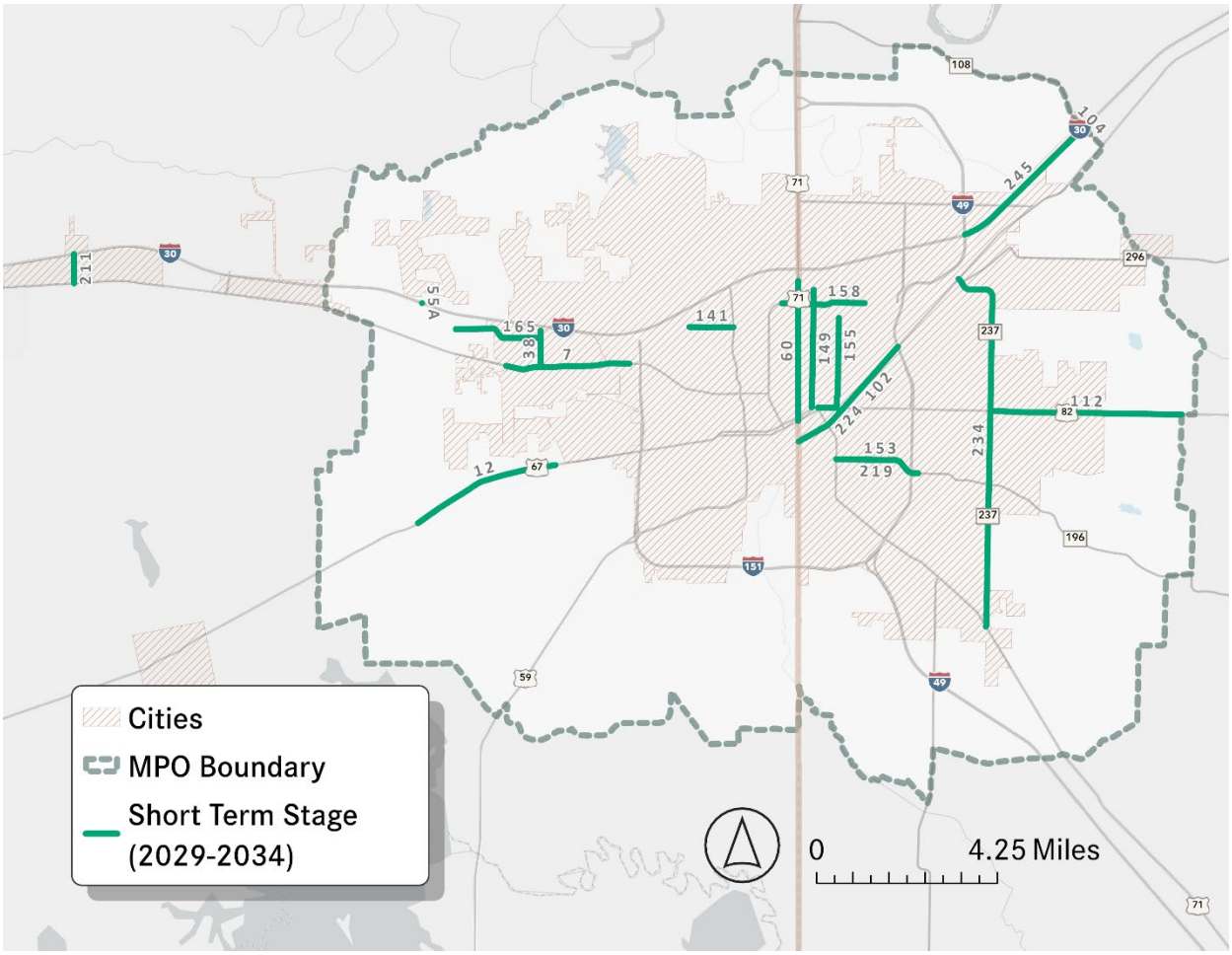
ID	Roadway/Facility	From	To	Project Type	Sponsor (and CSJ)	Cost

Table 7-6: Local Government Short-Term Stage Project List (2029-2034)

ID	Roadway/Facility	From	To	Project Type	Sponsor (and CSJ)	Cost	State
155	Jefferson Ave, E 9th St	E 35th St	Hickory St	Active Transportation, Safety	Texarkana, AR	$673,900	AR
149	County Ave	E 42nd St	E 9th St	Active Transportation, Safety	Texarkana, AR	$139,700	AR
158	Texas Blvd, Arkansas Blvd	Olive St	Pinson Dr	Active Transportation, Safety	Texarkana TX/AR	$637,900*	AR/TX
102	Highway 151	State Line	IH-49	Preservation, Roadway	--	$11,300,000	AR
153	Division St	East St	Genoa Rd / IH-49 NB entrance ramp	Active Transportation, Safety	Texarkana, AR	$96,100	AR
234	SH 237 (Rondo Road)	US-71	US-67	Capacity - New Road, Roadway	--	$19,420,800	AR
165	Alumax Dr	FM 989	FM 2148	Roadway Preservation	Nash, TX	$1,900,000	TX

**For joint projects, estimated project costs are split evenly between project sponsors.*

Figure 7-2: Short-Term Stage Project Map



Medium-Term Stage

Table 7-7 through Table 7-9 and Figure 7-3 below show the medium-term stage projects for the study area, to be programmed for 2035-2034.

Table 7-7: ARDOT Medium-Term Stage Projects (2035-2045)

ID	Roadway/Facility	From	To	Project Type	Sponsor (and CSJ)	Cost
103	Interstate 49	Highway 151	Highway 82	Preservation, Roadway	ARDOT	$28,200,000
216	SH 296 (Sugar Hill Road)	IH-30 Overpass	--	Preservation, Roadway, Safety, Resilience, Bridge	ARDOT	$4,500,000

Table 7-8: TxDOT Medium-Term Stage Projects (2035-2045)

ID	Roadway/Facility	From	To	Project Type	Sponsor (and CSJ)	Cost
143	N Kings Hwy	IH-30	Redwater Rd	Active Transportation, Safety	TxDOT and Local	$616,200
2	IH 30	At FM 2878	--	Capacity - New Road, Roadway, Safety, Bridge	TxDOT (0610-07-084)	$10,000,000
25	FM 2878	IH 30	US 82 in Nash	Capacity - New Road, Roadway	TxDOT (2878-01-009)	$3,058,000
109	US 59	SL 151	FM 2148	Upgrade 4-lane divided highway to interstate standards (Future IH 369)	TxDOT (0218-01-097)	$379,956,880

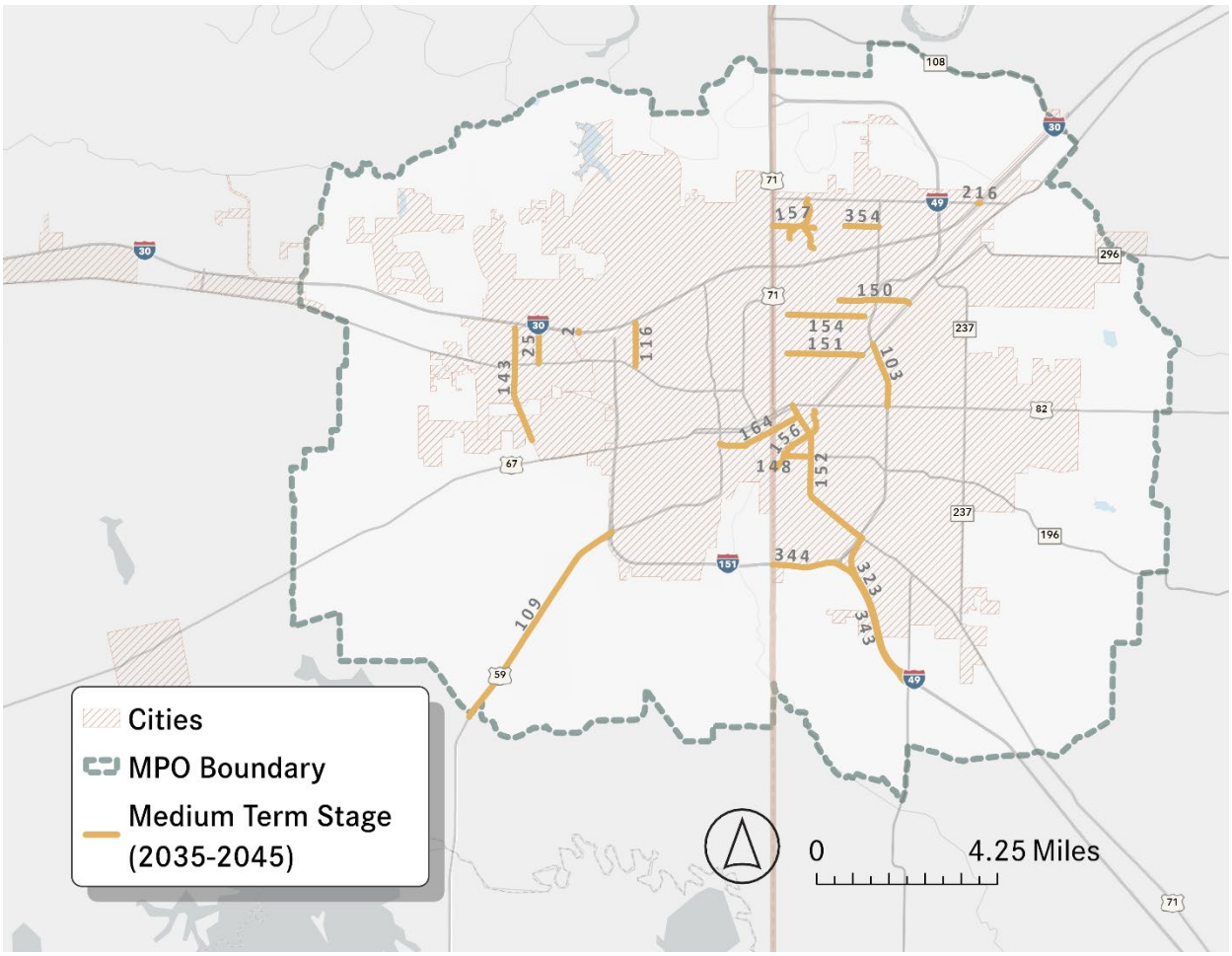
Table 7-9: Local Government Medium-Term Stage Projects (2035-2045)

ID	Roadway/Facility	From	To	Project Type	Sponsor (and CSJ)	Cost	State
343	IH-49 Frontage Rd	SH-237 (Blackman Ferry Road)	Line Ferry Road	Capacity - New Road, Roadway, Safety	--	$1,887,707	AR
323	IH-49 Frontage Rd	US-71 (East Street)	SH-237 (Blackman Ferry Road)	Capacity - New Road, Roadway, Safety	--	$1,648,796	AR
150	Arkansas Blvd	Pinson St	E Broad St	Active Transport, Safety	Texarkana, AR	$78,400	AR

ID	Roadway/Facility	From	To	Project Type	Sponsor (and CSJ)	Cost	State
344	SH 245 (Four States Fair Pkwy) Front. Rd	South State Line Avenue	Line Ferry Road	Capacity - New Road, Roadway, Safety	--	$6,174,754	AR
156	Southeast Connector Trail - New Alignment	Just E of S State Line Ave between Division St and Ida St	E Broad St	Active Transport, Safety	Texarkana, AR	$621,200	AR
154	E 35th St	County Ave	Sanderson Ln	Active Transport, Safety	Texarkana, AR	$482,000	AR
354	McDonald Lane	Forest Bend Lane	SH-245 (Four States Fair Pkwy)	Capacity - New Road, Roadway	--	$752,161	AR
157	Trinity Bike/Ped Trail - New Trail Alignment	Between State Line Ave, Jefferson Ave, IH-30, and Sugar Hill Rd	--	Active Transport, Safety	Texarkana, AR	$1,320,800	AR
148	Division St	Roberts St	East St	Active Transport, Safety	Texarkana, AR	$145,900	AR
152	Hickory St, East St	E 9th St	IH-49	Active Transport, Safety	Texarkana, AR	$169,000	AR
151	E 24th St	E Broad St	Jefferson Ave	Active Transport, Safety	Texarkana, AR	$558,500	AR
164	W 4th St	S Lake Dr	Hickory St	Active Transportation, Safety	Texarkana TX/AR	$416,300*	TX
116	Kenwood Rd	Orr Auto Complex	Old Boston Rd	Capacity - Widening, Active Transportation, Roadway, Safety, Resilience	Texarkana, TX	$4,000,000	TX

For joint projects, estimated project costs are split evenly between project sponsors.

Figure 7-3: Medium-Term Stage Project Map



Long-Term Stage

Table 7-10 through Table 7-11 and Figure 7-4: Long-Term Stage Project Map below show the long-term stage projects for the study area to be programmed for 2029-2034. The list below currently only contains long-term stage projects for the Texas side of the study area. However, projected funding is available on the Arkansas side for long-term projects to be programmed if the city or county plan for additional projects.

Table 7-10: TxDOT Long-Term Stage Projects (2046-2050)

ID	Roadway/ Facility	From	To	Project Type	Sponsor	Cost
24	IH 369	IH 30	SH 93	Capacity - Widening, Roadway	TxDOT	$40,000,000
110	FM 989	Gibson Lane	FM 559	Capacity - Widening, Roadway	TxDOT	$27,000,000
44	FM 989	0.5 Mi S of US 82	0.1 Mi S of US 59	Capacity - Widening, Roadway	TxDOT	$30,000,000
214	US 82	FM 1398 W	0.9 mi W of FM 989	Widen Non-Freeway	TxDOT (0046-06-092	$75,544,000
13	FM 1397	University Avenue	0.1 Mi N of North Park Road	Widen Non-Freeway	TxDOT (0945-01-040)	$26,978,708

Table 7-11: Local Government Long-Term Stage Projects (2046-2050

ID	Roadway/ Facility	From	To	Project Type	Sponsor	Cost	State
228	Siebert St	At UP Rail Crossing	--	Construct Underpass with Pedestrian Access	Texarkana, AR	$10,000,000	AR
318	S Stateline	Euclid Street	TWU Sewer Treatment Plant	Capacity - Widening, Roadway	--	$2,507,203	AR
163	S Stateline	W 4th St	Euclid St	Active Transportation	Texarkana, TX/AR	$468,700*	AR/TX
129	Summerhill Rd	IH-30	University Ave / Shilling Rd	Active Transportation, Safety	Texarkana, TX	$1,171,700	TX
142	Gibson Ln	Richmond Rd	N Kings Hwy	Active Transportation, Safety	Texarkana, TX	$1,169,500	TX
121	College Dr	Olive St	Richmond Rd	Active Transportation, Safety	Texarkana, TX	$703,400	TX
162	N State Line Ave	Holcombe	W 7th St	Active Transportation, Safety	Texarkana, TX/AR	$1,278,900*	TX/AR
61	South Stateline	Viaduct	SL 151	Preservation, Roadway, Safety	--	$11,842,000	TX

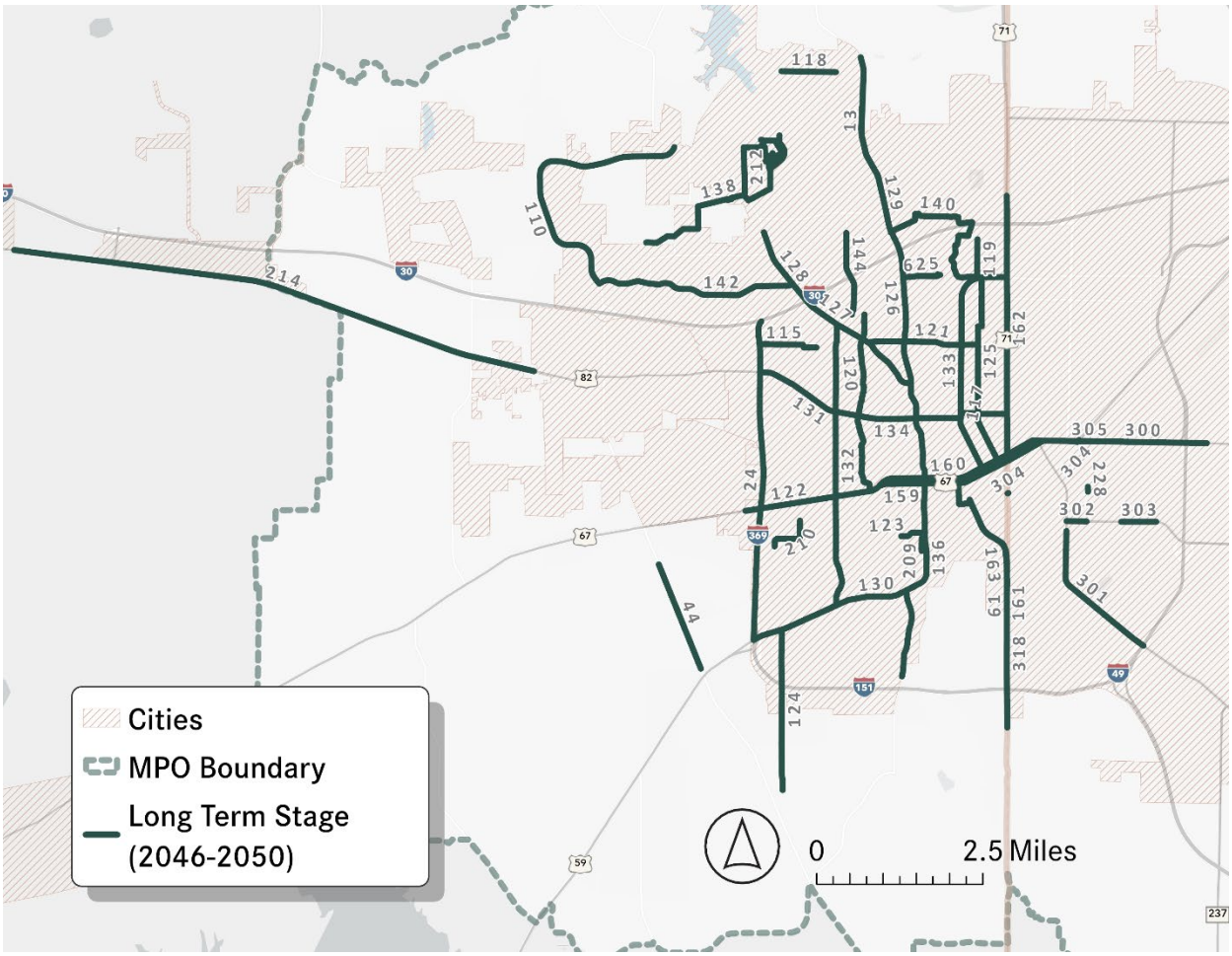
ID	Roadway/ Facility	From	To	Project Type	Sponsor	Cost	State
115	Wade Ln	Sowell Ln	Belt Rd	Capacity - Widening, Active Transportation, Roadway, Safety, Resilience	Texarkana, TX	$3,000,000	TX
119	Elizabeth St	Hidden Acres Dr	Texas Blvd	Capacity - Widening, Active Transportation, Roadway, Safety, Resilience	Texarkana, TX	$2,500,000	TX
127	Richmond Rd	Summerhill Rd	IH-30	Active Transportation, Safety	Texarkana, TX	$864,700	TX
120	Cowhorn Creek Trail - New Trail Alignment	Kennedy Ln	Proposed US Bike Route 84	Active Transportation, Safety	Texarkana, TX	$1,367,400	TX
125	Olive St	Texas Blvd	W Dr MLK Jr Blvd	Active Transportation, Safety	Texarkana, TX	$20,100	TX
118	Shilling Ln	W University Ave	E University Ave	Capacity - Widening, Active Transportation, Roadway, Safety, Resilience	Texarkana, TX	$5,000,000	TX
117	New Boston Rd	At Texas Blvd	--	Capacity - New Road, Roadway, Safety	Texarkana, TX	$1,000,000	TX
209	Capp Street	Findley St	--	Replacement	--	$898,917	TX
625	South Park Rd	In Spring Lake Park at McDougal Trail	In Spring Lake Park at Summerhill Road	Active Transportation, Safety	--	$75,000	TX
161	Lelia St, W 4th St, S State Line Ave	W 7th St	Jarvis Pkwy	Active Transportation, Safety	Texarkana, TX/AR	$130,300*	TX/AR
130	S Lake Dr	Jarvis Pkwy	W Dr MLK Jr Blvd	Active Transportation, Safety	Texarkana, TX	$125,800	TX
124	Leopard Dr	S Lake Dr	Stipp Rd	Active Transportation, Safety	Texarkana, TX	$191,300	TX

ID	Roadway/ Facility	From	To	Project Type	Sponsor	Cost	State
144	Cowhorn Creek Rd	Kennedy Ln	Galleria Oaks Dr	Active Transportation, Safety	Texarkana, TX	$304,100	TX
126	N Lake Dr, Summerhill Rd	W Dr Martin Luther King Jr Blvd	IH-30	Active Transportation, Safety	Texarkana, TX	$1,415,900	TX
140	North Connector Trail - New Trail Segments	Morris Ln	Texas Blvd	Active Transportation, Safety	Texarkana, TX	$721,700	TX
136	Old Buchanan Rd, S Lake Dr	Corral Creek	W Dr MLK Jr Blvd	Active Transportation, Safety	Texarkana, TX	$1,204,900	TX
122	W 7th St / US Hwy 67	Wake Village Rd	Robison Rd	Active Transportation, Safety	Texarkana, TX	$1,058,100	TX
134	New Boston Rd, Texas Blvd, W 20th St	N Robison Rd	N State Line Ave	Active Transportation, Safety	Texarkana, TX	$1,117,100	TX
128	Richmond Rd	IH-30	Galleria Oaks Dr	Active Transportation, Safety	Texarkana, TX	$38,800	TX
132	Robison Rd	Richmond Rd	S Lake Dr	Active Transportation, Safety	Texarkana, TX	$1,605,600	TX
123	North St	Wagner Creek Trail	S Lake Dr	Active Transportation, Safety	Texarkana, TX	$161,300	TX
133	Texas Blvd	N State Line Ave	W Dr MLK Jr Blvd	Active Transportation, Safety	Texarkana, TX	$1,328,700	TX
160	W Dr MLK Jr Blvd, 9th St	W 7th St	Locust St	Active Transportation, Safety	Texarkana, TX/AR	$100,900*	TX/AR
159	7th St, 9th St	E Loop Dr	E Broad St	Active Transportation, Safety	Texarkana, TX/AR	$191,000*	TX/AR
138	Northwest Connector Trail - New Trail Alignment	Bringle Lake Trail	Wagner Creek Trail	Active Transportation, Safety	Texarkana, TX	$1,624,700	TX
212	North Fork	Airline - all concrete section, Springwood	Brookhollow Circle - entire street	Replacement	--	$6,465,399	TX

ID	Roadway/ Facility	From	To	Project Type	Sponsor	Cost	State
131	New Boston Rd	IH-369 / US-59	Summerhill Rd	Active Transportation, Safety	Texarkana, TX	$76,800	TX
210	Falvey St	Terry	Waco	Replacement	--	$3,000,000	TX
300	US 82 (E 9th St)	Cooper Tire Rd	US 67 (Broad Street	Active Transportation - Sidewalk	Texarkana, AR	$375,000	AR
301	US 71 (East St)	Hay St	Interstate 49	Active Transportation - Sidewalk	Texarkana, AR	$350,000	AR
302	Genoa Rd / Division St	Ferguson St	East St	Active Transportation - Sidewalk	Texarkana, AR	$150,000	AR
303	Genoa Rd / Division St	Artesian St	Lockhart	Active Transportation - Sidewalk	Texarkana, AR	$150,000	AR
304	US 67 (E 9th) and US 71 (Broad St)	--	--	Drainage Improvements	Texarkana, AR	$2,500,000	AR
305	US 82 (E 9th St)	Pinehurst St	Broad St	Drainage Improvements	Texarkana, AR	$1,500,000	AR

**For joint projects, estimated project costs are split evenly between project sponsors.*

Figure 7-4: Long-Term Stage Project Map



Illustrative Projects

Projects listed in Table 7-12 and Table 7-13 fall outside of fiscal constraint for the Texarkana Connect to 2050 MTP. These are considered to be illustrative projects, that can be considered for implementation should there be additional funding available. Figure 7-5 shows these projects on the map.

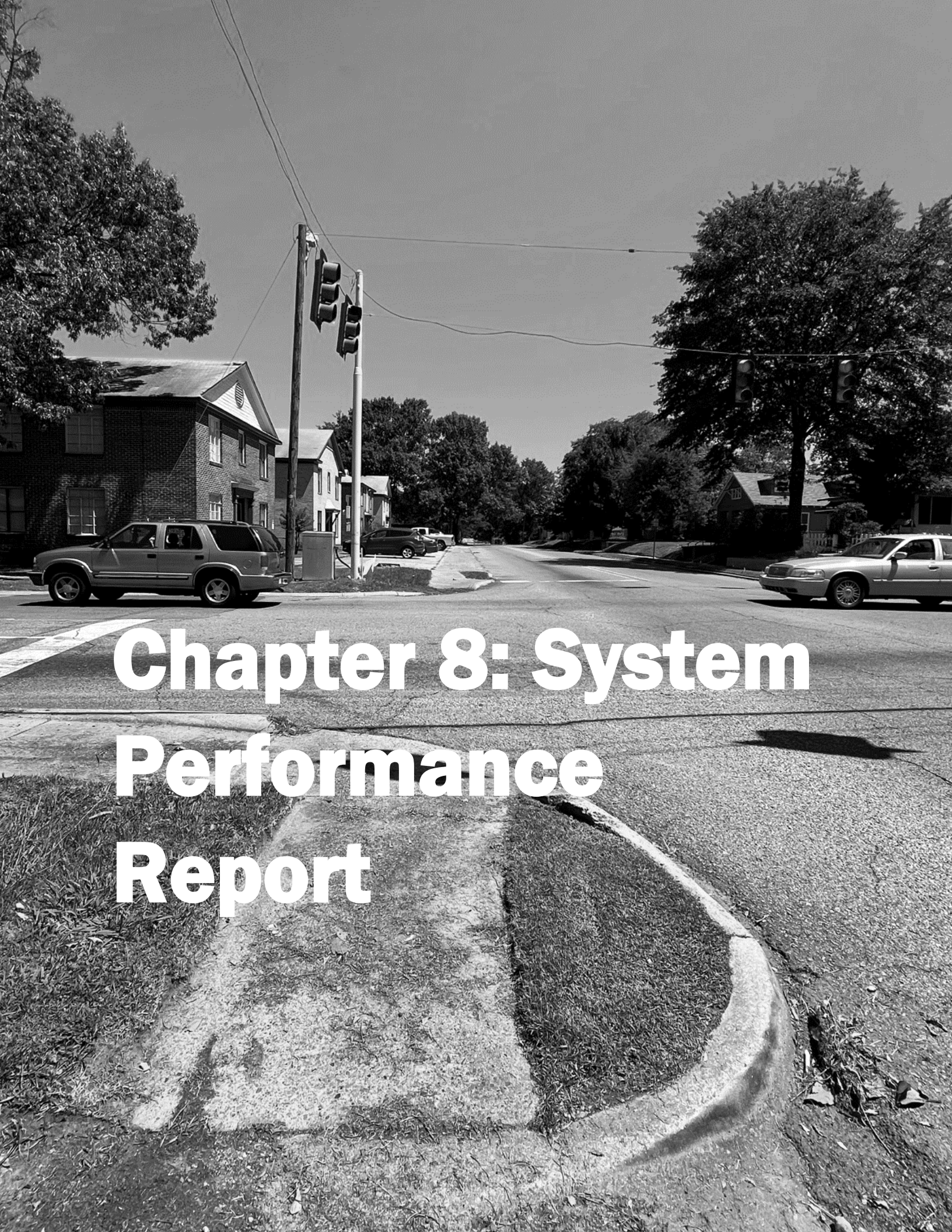
Table 7-12: TxDOT Unfunded Illustrative Projects

ID	Roadway/Facility	From	To	Project Type	Sponsor	Cost
43	North Loop	IH 49	IH 30	Study	TxDOT	$1,000,000

Table 7-13: Local Government Unfunded Illustrative Projects

ID	Roadway/Facility	From	To	Project Type	Sponsor	Cost	State
139	Swampoodle Creek Trail - New Trail Alignment	Potomac Ave north of College Dr	W 4th St	Active Transport, Safety	Texarkana, TX	$1,279,900	TX
135	US Hwy 67 (W Dr MLK Jr Blvd, W 7th St)	N Robison Rd	Texas Blvd	Active Transport, Safety	Texarkana, TX	$891,700	TX
208		Orr Property	Old Boston Rd	Reconstruction	--	$5,726,569	TX
213	Shilling Ln	Bringle Rd	T Intersection	Reconstruction	--	$8,068,921	TX

Figure 7-5: Unfunded Project Map



Chapter 8: System Performance Report

Introduction

This chapter summarizes the system evaluation analysis completed in earlier chapters to provide the MTP Transportation Systems Performance Report. It examines the potential impacts of planned projects and considers mitigation strategies. In addition, this chapter compares the Texarkana MPO system performance to state performance targets and describes additional locally defined measures and strategies. Finally, this chapter discusses how these performance measures and targets are used in assessing the performance of the transportation system resulting from the Connect to 2050 Texarkana MTP update.

System Level Analysis

The primary goal of the system level analysis is to evaluate whether potential transportation improvements will impact environmental features or have negative impacts on historically disenfranchised populations. It is intended to serve as an evaluation guide for agencies and elected officials as projects progress through the development process, and in turn allow the Texarkana MPO to prioritize projects with lessened environmental and cultural impacts.

Once a project moves from the planning stage to the programming stage, more detailed analysis of the specific impacts associated with capacity projects is performed using processes that meet the requirements of the National Environmental Protection Act (NEPA). The analysis in this chapter does not take the place of the NEPA assessment but does provide the Texarkana MPO with an initial understanding of potential project impacts on the region.

Identifying potential impacts caused by these new transportation projects involves a three-step process that includes:

- Developing an inventory of environmental resources, cultural resources, and environmental justice populations (e.g., minority populations and low-income populations) within the Texarkana Metropolitan Planning Area (MPA) and the larger study area.
- Assessing the potential impacts, both positive and negative, of proposed transportation improvements through technical and spatial analysis.
- Addressing possible system wide mitigation activities.

The following sections describe the methods, approach, and outcomes of the system level analysis.

Environmental & Cultural Analysis

One element of the environmental and equity assessment involved conducting an analysis on the environmental features, environmental hazards, and cultural assets that exist in the study area.

This analysis identified the types of features, hazards, and assets that are present in the region and considered their distribution and concentration. This information not only provides a more holistic picture of the current state of the planning region – it also informed the project prioritization process

where proposed transportation projects were ranked based on various evaluation criteria, including whether each project would have a positive impact on the environment, conserve energy, and improve environmental resiliency.

Environmental Features & Project Sites

Within the Texarkana MPO region is a total of 281 sq. miles of waterbodies, such as lakes, large ponds, creeks, streams, and rivers, 143 sq. miles of wetlands, and 435.86 sq. miles of floodplains. Wetlands and floodplains are environmentally sensitive features that could be negatively impacted by transportation projects, and proximity to these features will have implications for project scoring. As seen in Figure 8-1 and Figure 8-2, there are many MTP projects that intersect with a floodplain, with significant overlap on projects along IH-30, IH-49, US-82, and US 59. They also show significant overlap between projects and wetland areas.

Figure 8-1: Water Features and MTP Projects in MTP Study Area

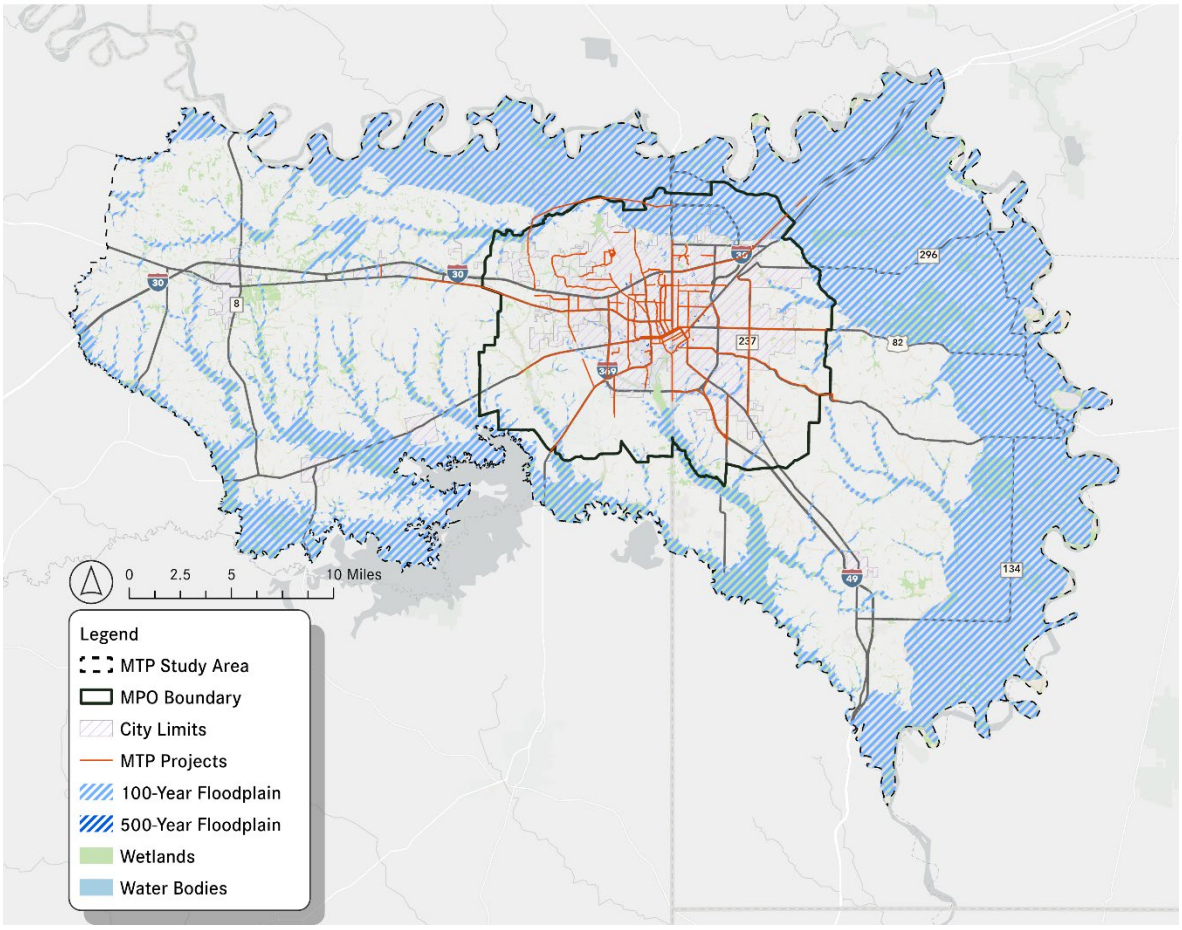
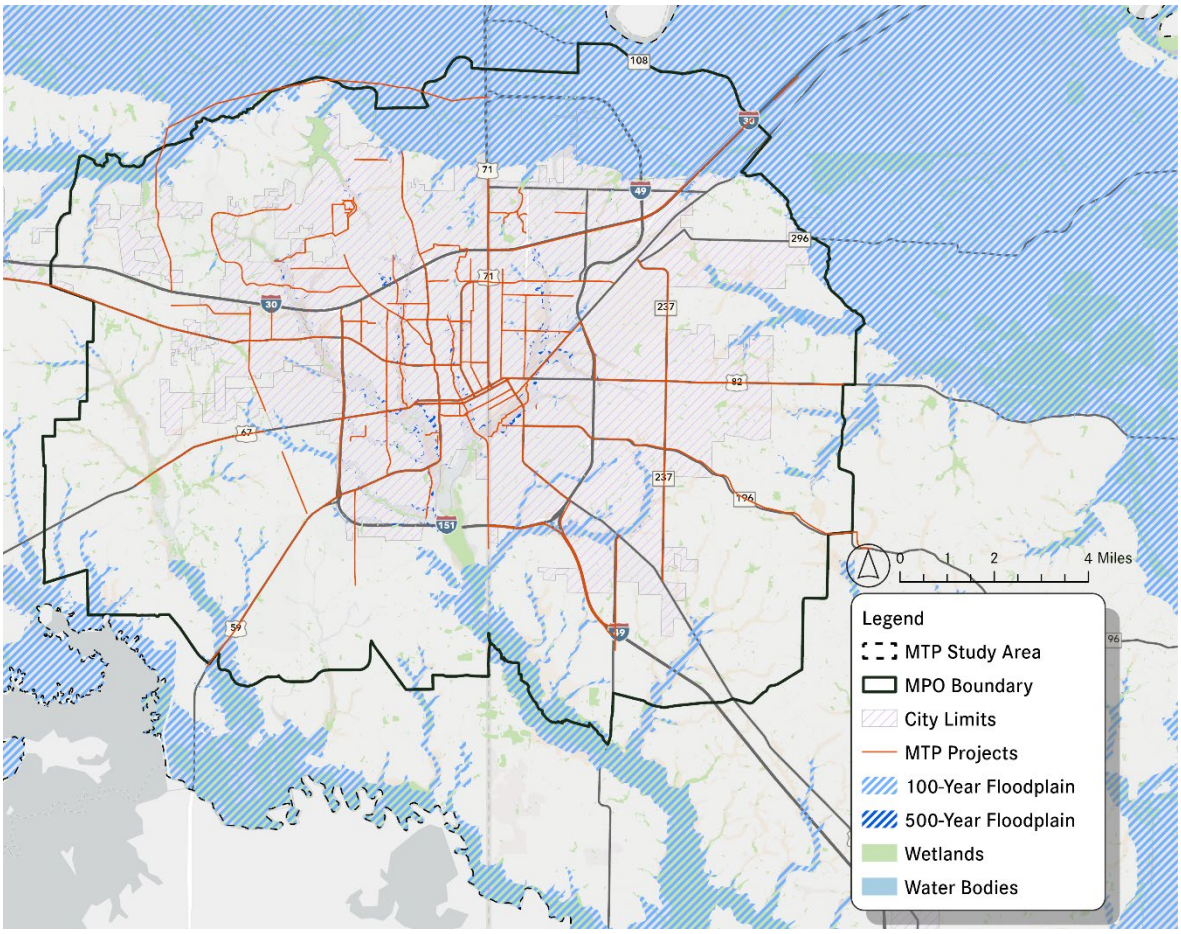


Figure 8-2: Water Features and MTP Projects in the MPA



Cultural/Historical Features & Project Sites

The purpose of identifying cultural and historical assets is to ensure that the future transportation system provides the community with adequate access to these assets and does not negatively impact them. Data was collected for the following features in the Texarkana region:

- Historic Markers
- National Register of Historic Places
- Cemeteries
- Courthouses and City Halls
- Museums
- Parks
- Post Offices
- Schools

Buffer Analysis

Following data collection, a GIS buffer analysis was conducted to determine how the 2050 MTP programmed projects might affect the inventoried resources. Buffer distances were scaled based on the environmental/cultural resource and the potential area of potential impact to that resource by a project. For example, cultural features may only be affected by a project directly adjacent to the resource while water features may be impacted by projects a greater distance away. Table 8-1 presents the buffer sizes selected in relation to each resource. Figure 8-3 and Figure 8-4 show environmental and cultural features with buffers around the MTP project sites.

Table 8-1. Buffer Distances from Projects

Feature	Buffer Distance
Historical Markers	250 feet
National Register	250 feet
Courthouses and City Halls	250 feet
Museums	250 feet
Parks	250 feet
Post Offices	250 feet
Schools	250 feet
Cemeteries	0.25 miles (1320 feet)
Water Features	0.25 miles (1320 feet)

Figure 8-3: Environmental, Historical, and Cultural Features in the MTP Study Area

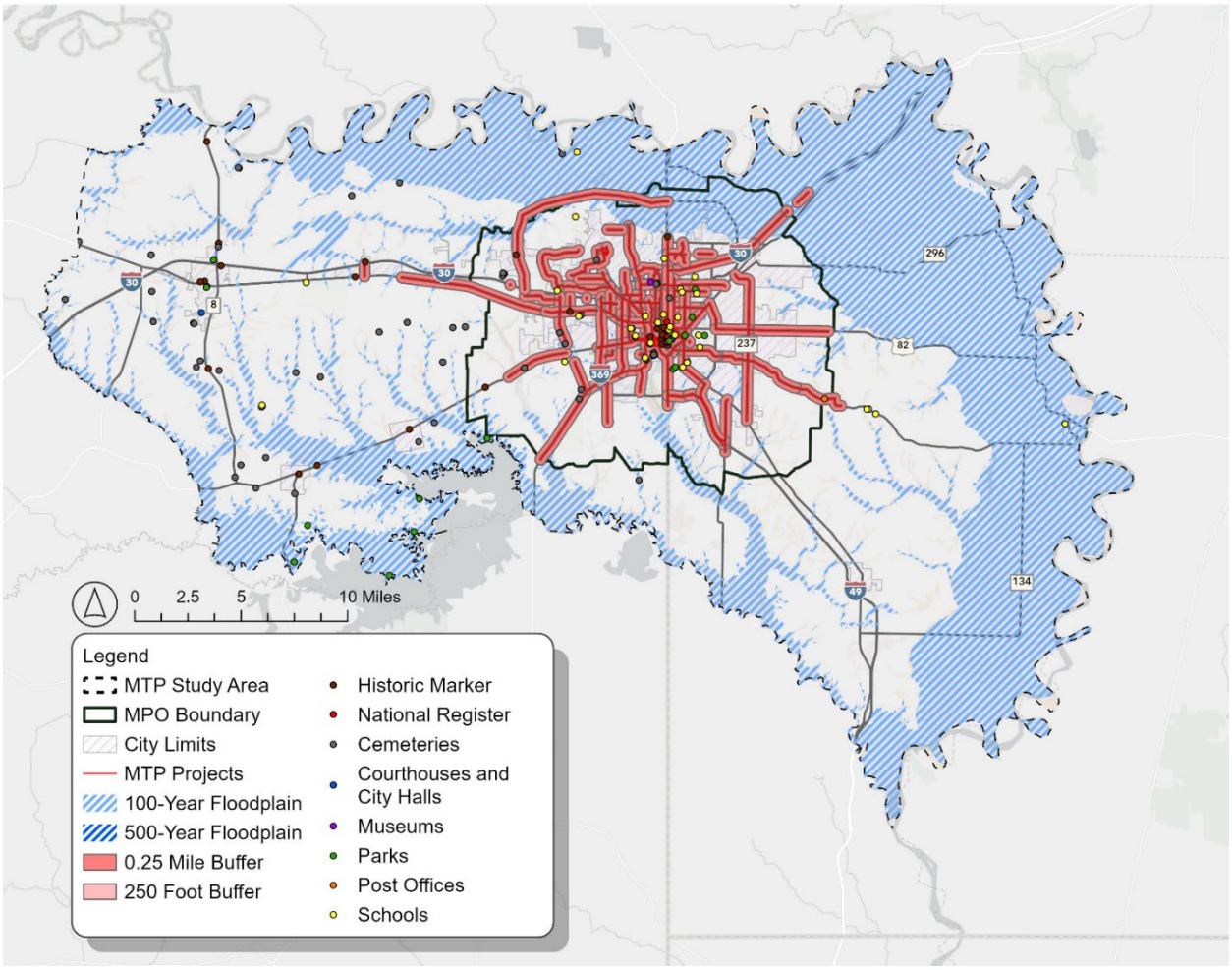
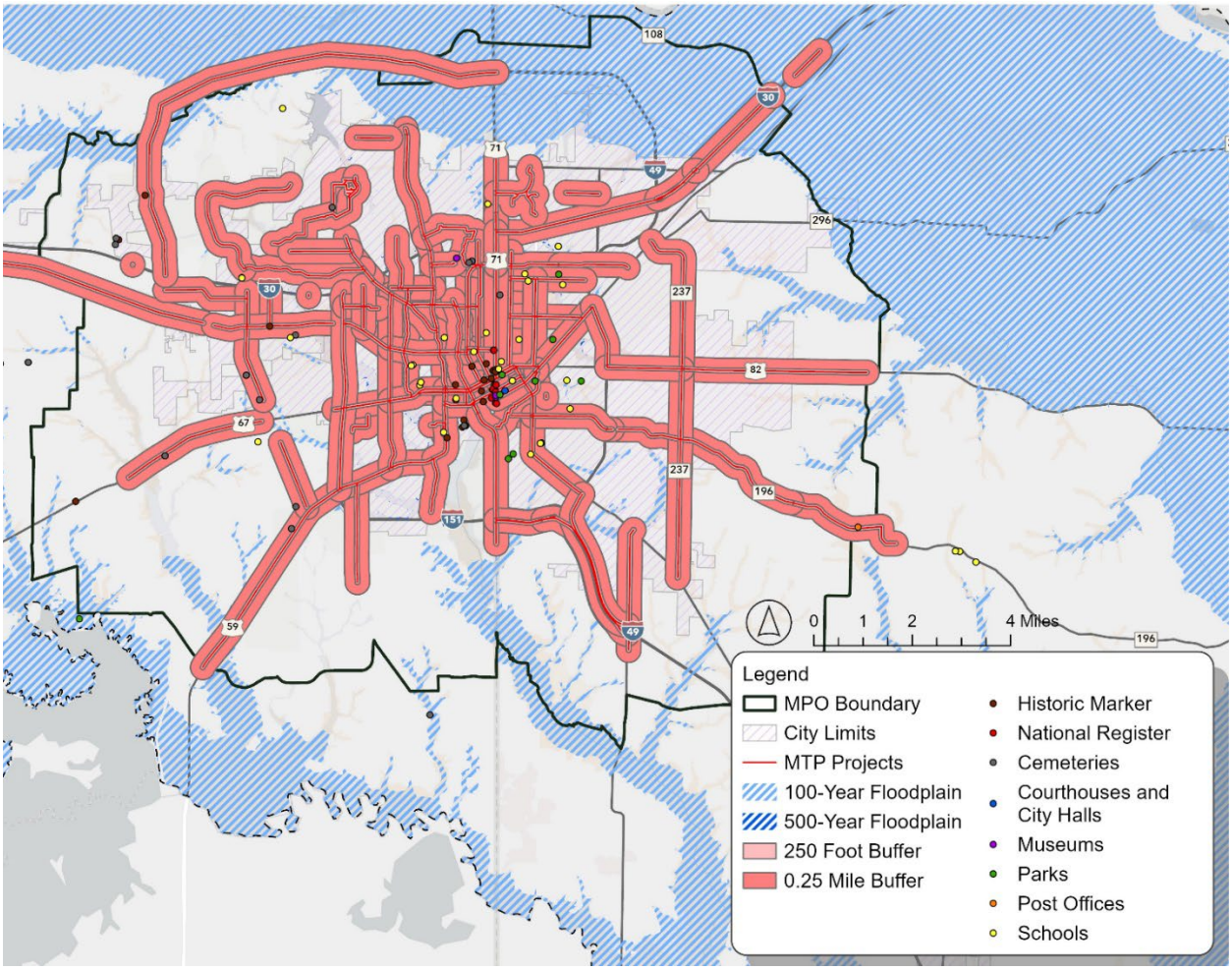


Figure 8-4: Environmental, Historical, and Cultural Features in the MPA



Assigned buffers and inventoried resources were then used to conduct a GIS intersect analysis to identify areas of overlap. Overlapping areas suggest potential impact between planned projects and environmental and/or cultural resources.

Table 8-2. Buffer Analysis Results

	Feature	Intersection Count	Area Covered (mi)
Cultural Resources	Historical Markers	9	-
	National Register	2	-
	Courthouses and City Halls	0	-
	Museums	2	-
	Parks	3	-
	Post Offices	1	-
	Schools	3	-
	Cemeteries	10	-
Water Resources	Water Features	195	89.8
	Wetlands	1402	5.22
	100-year floodplain	52	367.3
	500-year floodplain	179	0.84

Overall, the buffer analysis shown in Table 8-2 suggests that the planned projects could pose substantial negative impacts to regional environmental and cultural resources. Projects that intersect environmental features should be examined at a project level further along the project planning process to mitigate any potential negative impacts from occurring during implementation. These impacted sites include multiple historical and cultural features near downtown Texarkana and many square miles of water, wetlands, 100-year floodplains, and 500-year floodplains.

Air Quality

Improving regional air quality and maintaining compliance with federal air quality standards is a fundamental consideration in the MTP process. The construction of new transportation infrastructure increases the capacity for vehicles on regional roadways, which has the potential to increase traffic-related air pollutants in the Texarkana MPA. In 1963, in response to increasing air pollution, the U.S. Congress passed the original Clean Air Act which established a federal program for researching techniques to monitor and control air pollution. The Clean Air Act of 1970 increased federal enforcement authority and authorized the development of national air quality standards to limit common and widespread pollutants.

These standards, known as the National Ambient Air Quality Standards (NAAQS), define the allowable concentration of pollution in the air for six "criteria" pollutants, including carbon monoxide, lead, nitrogen dioxide, particulate matter, ozone, and sulfur dioxide. The existing standards for each of the six criteria pollutants are listed in Table 8-3.

Table 8-3. National Ambient Air Quality Standards (NAAQS)

Pollutant	Primary/Secondary	Averaging Time	Level	Form
Carbon Monoxide (CO)	Primary	8 hours	9 ppm	Not to be exceeded more than once annually
		1 hour	35 ppm	
Lead (Pb)	Primary/Secondary	3 month rolling average	0.15 μ/m^3	Not to be exceeded
Nitrogen Dioxide (NO_2)	Primary	1 hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
	Primary/Secondary	1 year	53 ppb	Annual Mean
Ozone (O_3)	Primary/Secondary	8 hours	0.070 ppm	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
Particle Pollution ($PM_{2.5}$)	Primary	1 year	9.0 μ/m^3	Annual mean, averaged over 3 years
	Secondary	1 year	15.0 μ/m^3	
	Primary/Secondary	24 hours	35.0 μ/m^3	98th percentile, averaged over 3 years
Particle Pollution (PM_{10})	Primary/Secondary	24 hours	150 μ/m^3	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide (SO_2)	Primary	1 hour	75 ppb	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
	Secondary	3 hours	0.5 ppm	Not to be exceeded more than once annually

Source: United States Environmental Protection Agency

Regions are designated by the EPA as either in attainment or nonattainment of the NAAQS. Attainment means the concentration of each pollutant successfully meets the NAAQS. The Texarkana MPA is designated as being in attainment of NAAQS standards. Non-attainment means the concentration of at least one pollutant exceeds the maximum defined threshold. As of the publication of this document, the Texarkana region was being considered for non-attainment status by 2027.

If an area is designated as non-attainment, the State must develop and submit a State Implementation Plan (SIP). Areas of nonattainment can apply for Congestion Mitigation Air Quality (CMAQ) funds which can be used to help develop the SIP and use the funding to implement the mitigation activities. The SIP addresses each pollutant that exceeds NAAQS and establishes an overall regional plan to reduce air pollution emission levels and maintain attainment status.

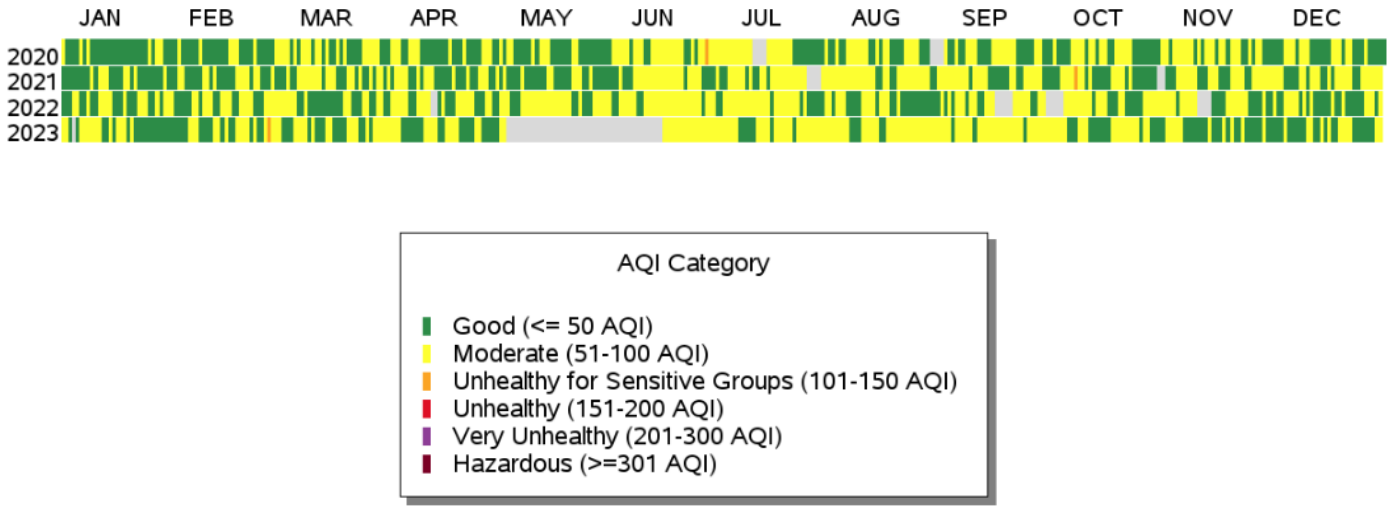
Once a nonattainment area meets the standards, EPA will designate the area to attainment as a "maintenance area." Maintenance areas are required to have a maintenance plan in place to ensure continued attainment of the respective air quality standard. The Clean Air Act defines specific

timetables to attain air quality standards and requires nonattainment areas to demonstrate reasonable progress in reducing air pollutants until the area achieves attainment.

Texarkana MPO Air Quality

Existing air quality within the Texarkana MPA has generally been rated as moderate to good per the EPA's Outdoor Air Quality Data. Figure 8-5 represents the EPA's daily Air Quality Index (AQI) values from 2020 – 2023 for all relevant AQI pollutants (Ozone, SO2, PM2.5, PM10) in the Texarkana MPA. As of the time of publication, the Texarkana metropolitan area does not have nonattainment status for air quality. However, as this document was developed, the Texarkana MPO was in discussion with the EPA and Texas Commission on Environmental Quality (TCEQ) in expectation of being designated as a non-attainment area by 2027.

Figure 8-5. Texarkana Daily AQI Values, 2020-2023



Source: United States Environmental Protection Agency

The days that were rated unhealthy varied across the years, without a set pattern. However, moderate days were most common in the summer months, which is a typical pattern for most metropolitan areas. Although there is always room for improvement, these results show that the region's air quality successfully meets the needs of the general public and compares favorably to similar metropolitan areas.

Potential Mitigation Activities

Federal regulations require the MTP process to include a discussion about potential mitigation activities that can revive and maintain the environmental resources of an area. These mitigation strategies apply to areas for air quality and Environmental Justice concerns. FHWA recommends an ordered approach to mitigation known as "sequencing" that involves understanding the affected environment and assessing transportation effects through project development. This ordered approach involves:

- Avoiding the impact altogether (this should be the priority), minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifying the impact by repairing, rehabilitating, or restoring the affected area.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- Compensating for the impact by replacing or providing substitute resources.

The type and level of mitigation activities will vary depending on the scope of the project. Several mitigation measures and general areas where these activities can be implemented are presented in Table 8-4 on the following page and are intended to be regional in scope and may not necessarily address potential project-level impacts. As proposed projects progress through the project development process, mitigation is an integral part of alternatives development and the analysis process to maximize the effectiveness of mitigation strategies.

In many instances an assessment of the effectiveness of potential mitigation activities is developed in consultation with applicable federal, state, and tribal land management, wildlife, and regulatory agencies to eliminate or mitigate any potential negative impacts to the natural environment or cultural and historic resources. The timeframes for performing these consultations are scalable depending on the size of the project and the possible extent of the impact. As projects phase from planning to programming, planning partners have an opportunity to assess the extent and timeframe for performing the mitigation consultation process. Some of the outside agencies involved in consultation, where applicable include some of the following types of agencies:

- Land use management
- Natural resources
- Environmental protection
- Conservation
- Historic preservation

Some levels of this consultation also include a comparison of regional and local transportation plans with statewide conservation, flood mitigation, and resiliency plans or maps.

Table 8-4. Mitigation Measures by Resource

Resource	Mitigation Measures
Wetlands/Water Resources	• Avoidance, Minimization or Compensation • Preservation • Creation • Restoration • In-lieu Fees • Riparian Buffers • Design Exceptions and Variances • Environmental Compliance Monitoring
Cultural Resources	• Avoidance Minimization • Landscaping for Historic Properties • Preservation in Place or Excavation for Archaeological Sites • Design Exceptions and Variances • Environmental Compliance Monitoring
Parks/Recreation Areas	• Avoidance, Minimization, Mitigation • Design Exceptions and Variances • Environmental Compliance Monitoring
Ambient Air Quality	• Transportation Control Measures • Transportation Emission Reduction Measures
Forested or other Natural Areas	• Avoidance, Minimization • Replacement Property for Open Space Easements to be of Equal Fair Market Value and of Equivalent Usefulness • Design Exceptions and Variances • Environmental Compliance Monitoring
Agricultural Assets	• Avoidance, Minimization • Design Exceptions and Variances • Environmental Compliance Monitoring
Endangered or Threatened Species	• Avoidance, Minimization • Time of Year Restrictions • Construction Sequencing • Design Exceptions and Variances • Species Research/Fact Sheets • Memoranda of Agreements for Species Management • Environmental Compliance Monitoring

Environmental Justice Analysis

Environmental justice is the fair treatment and involvement of all people regardless of race, color, national origin, educational level, or income with respect to the development, implementation, and enforcement of environmental laws. Environmental justice works to provide access to public information for health, environmental planning, regulations, and enforcement for minority and low-income populations. It ensures that no populations are forced to shoulder a disproportionate burden of the negative human health or environmental impacts of pollution or other environmental hazards caused by a federally funded project.

Environmental Justice Zones

Using the guidance in the metropolitan planning regulations, the study team incorporated environmental justice considerations into the development of the Texarkana 2050 MTP. The study team identified and mapped low-income and minority populations (i.e., Environmental Justice Zones (EJZs)), shown in Figure 8-6, and performed a GIS-based analysis of the proximity of proposed transportation projects to these communities.

Minority EJZs are represented by block groups containing at least 40% of the total population identified as minority population. Minority EJZs are concentrated in the downtown Texarkana

Low-income EJZs are represented by block groups containing more than 20% of the total block group population identified as living at or below the poverty line. Low-income EJZs take up the majority of the study area, excluding one block group in northwest Texarkana.

Figure 8-6: Environmental Justice Zones and Proposed Projects

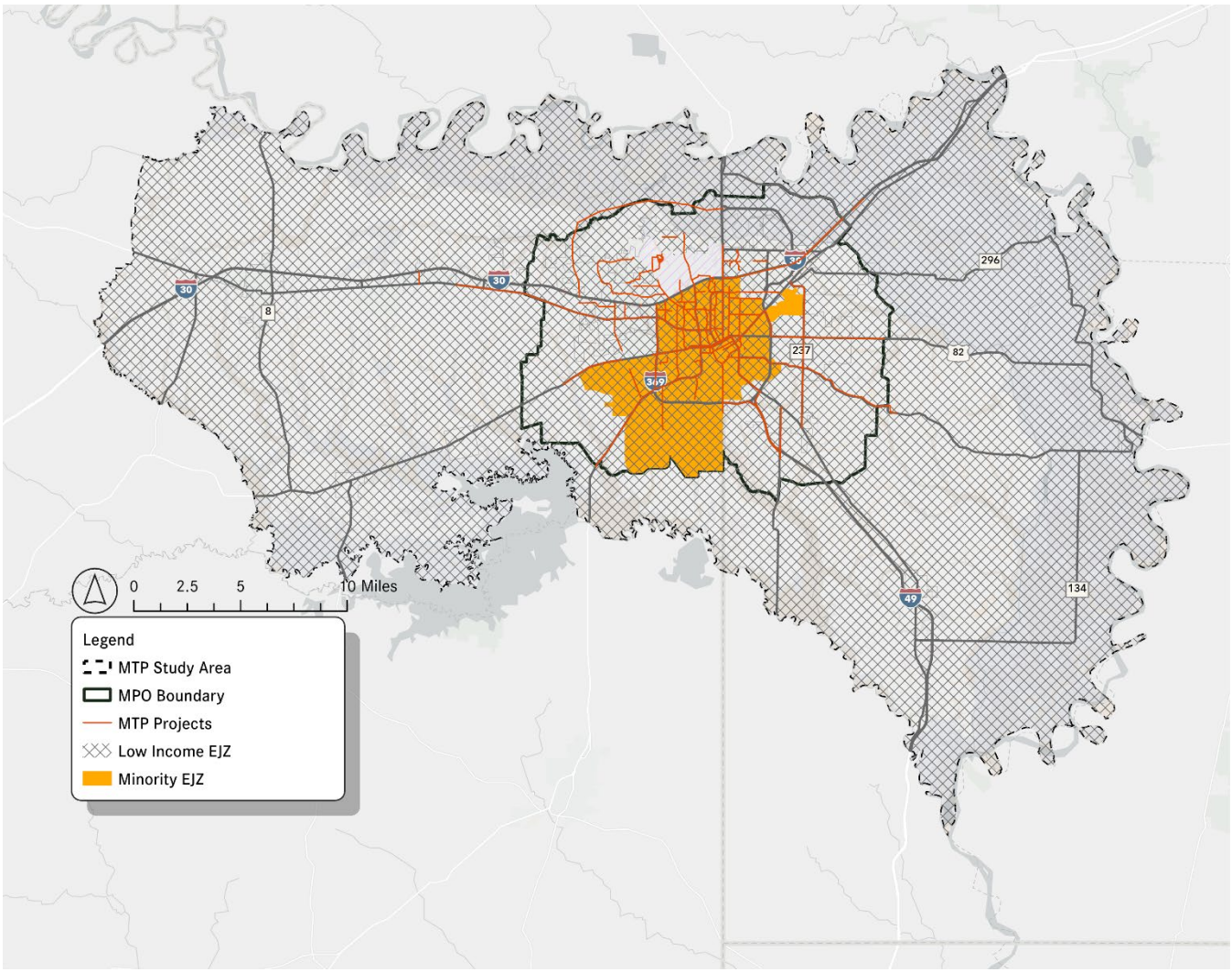


Table 8-5 displays EJZ locations within the Texarkana MTP study area in relation to the programmed projects. Approximately 62.2% of minority EJZs and 98.2% of low-income EJZs are intersected by proposed projects. Using the findings from the environmental justice analysis, a more detailed, project-level analysis will be performed where applicable to better understand potential impacts of transportation improvements on minority and low-income populations in coordination with partner agencies once projects move from planning to programming. The proximity of projects to these identified populations may have both positive and negative impacts.

Table 8-5. Projects Affecting EJZs

	Total Projects Affecting EJZ	Percentage of Projects Intersecting EJZ
Minority EJZs	69	62.2%
Low-income EJZs	109	98.2%

For example, it is assumed that the mobility, access, and safety benefits of most projects accrue most strongly to those areas near the project. Therefore, if the project objectives are consistent with the travel market needs of adjacent communities, the project is viewed as having a positive impact. On the other hand, the physical impacts of project construction and footprint also have the greatest negative impacts on adjacent communities. Large infrastructure projects whose objectives are not consistent with community needs represent potential negative impacts.

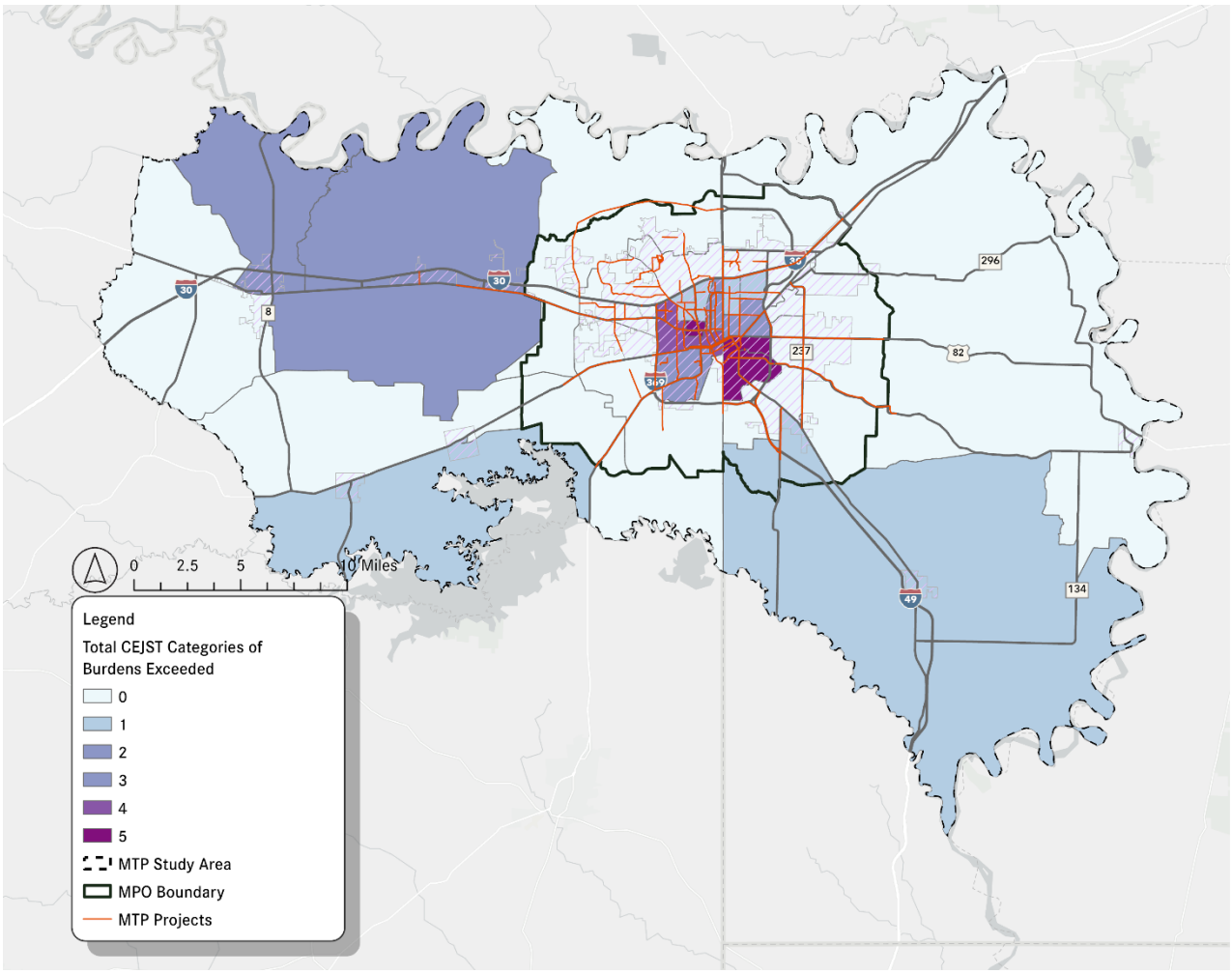
Section 223 of Executive Order 14008, Tackling the Climate Crisis at Home and Abroad, established the Justice40 Initiative, which directs 40% of the overall benefits of certain Federal investments – including investments in clean energy and energy efficiency; clean transit; affordable and sustainable housing; training and workforce development; the remediation and reduction of legacy pollution; and the development of clean water infrastructure – to flow to disadvantaged communities (DACs).

Climate and Economic Justice Screening Tool (CEJST)

The Climate and Economic Justice Screening Tool (CEJST) is an interactive mapping tool to identify disadvantaged communities that are marginalized by underinvestment and overburdened by pollution. Federal agencies are using the CEJST as their primary tool for identifying disadvantaged communities that are geographically defined for any covered programs under the Justice40 Initiative and for programs where a statute directs resources to disadvantaged communities, to the maximum extent possible and permitted by law.

Figure 8-7 shows the total CEJST categories of burdens exceeded as it relates to MTP projects. The areas with the most burdens are located in the City of Texarkana, most notably the southeast, with a significant amount in the northwest of study area as well.

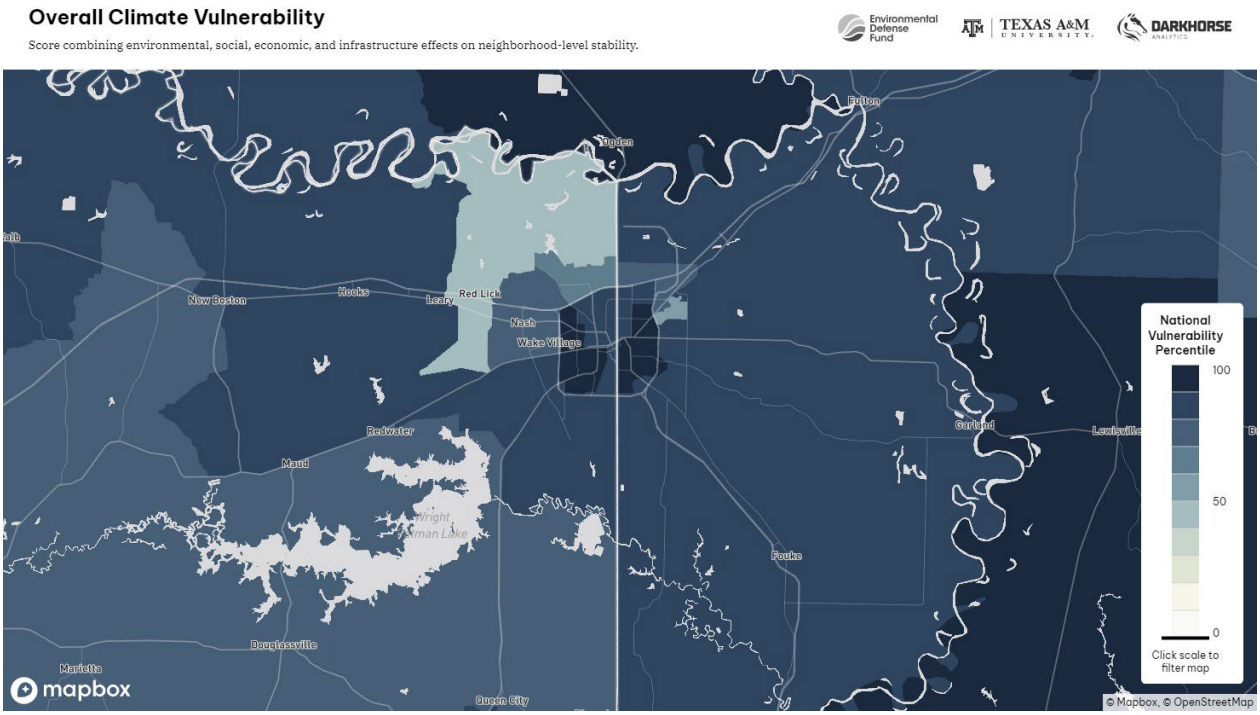
Figure 8-7:Total CEJST Categories of Burdens Exceeded



Climate Vulnerability Index (CVI)

The Climate Vulnerability Index (CVI) is a tool that visualizes the impacts of growing climate risks on disadvantage communities in the United States. The CVI considers the cumulative effect of 184 indicators, which are categorized further under environmental, social, economic, and infrastructure impacts. Figure 8-8 shows the CVI for census tracts in the Texarkana region. The urban core has the highest vulnerability, the highest being in the 96th percentile on both the Texas and Arkansas side of the region. Most MTP projects are located in this area, which could bring both negative and positive impacts to the population as discussed in previous sections.

Figure 8-8: Climate Vulnerability



Source: Climate Vulnerability Index, 2024

Although there is concern about the potential negative impacts of MTP projects, there is also the potential for positive impacts on sensitive areas. Approximately 25% of projects (28 total) are related to active transportation, concentrated mostly within the loop surrounding the urban core. This correlates with many of the areas with high burden and high climate vulnerability, which will give greater options of travel through connections to public transportation and direct travel to destinations by walking or biking.

System Level Consideration

The key consideration in determining unintended consequences or disparate impacts to environmental justice populations is how the project objectives match the community's transportation needs. The Texarkana MPO is committed to working with project sponsors to mitigate

negative impacts on environmental justice communities using measures such as impact minimization and context sensitive solutions (appropriate functional and/or aesthetic design features).

Performance Report

The Texarkana MPO has a responsibility to follow the Transportation Performance Management (TPM) guidelines provided by the Fixing America's Transportation (FAST) Act, which continues Moving Ahead for Progress in the 21st Century (MAP-21) Act TPM objectives. The Federal Highway Administration (FHWA) defines TPM as "a strategic approach that uses system information to make investment and policy decisions to achieve national performance goals."

The implementation of TPM provides the following general benefits:

- Enhanced investment decisions
    - Goals, measures, and data allow for organizations to make better informed decisions about how to invest in transportation funding at a multimodal level
    - Allows organizations to use taxpayer dollars as efficiently as possible
- Creates a better performing transportation system
    - Target setting, planning, and reporting TPM results ensures accountability for system performance
    - Identifies system strengths and deficiencies, highlighting areas in need of improvement and/or maintenance
- Produces safe, connected, and productive communities
    - Focuses on the safe and efficient delivery of people and goods
    - Emphasizes reliable commutes to work, school, recreation, and community activities

The Texarkana MPO strives to achieve targets set by the Texas Department of Transportation (TxDOT) and the Arkansas Department of Transportation (ARDOT) compliant with FHWA rules, and continuously reports on progress towards these targets to align with federal and state regulations. Texarkana MPO performance reporting is accomplished primarily through the Metropolitan Transportation Plan (MTP) planning process, which performs detailed systems analyses to produce necessary TPM measures.

Texarkana MPO Performance Based Planning

The following sections represent federal performance measures for the current Connect to Texarkana 2050 MTP update. The Connect to 2050 Texarkana MTP update fulfills its TPM responsibility using Federal performance goals and measures, as well as compliance with TxDOT performance measure targets to align with guidelines created by MAP-21 and continued by the FAST Act. The transportation system needs assessment provides existing target measures, which create a base to understand the state of the current Texarkana regional transportation system in comparison to assigned TxDOT and ARDOT targets. Additionally, this section describes the Texarkana MPO's approach to performance-based decision making to support the national goals described in 23 U.S.C. 150(b), previously discussed in Chapter 2 of this MTP.

To ensure progress towards goals being met, federal performance measures are continuously tracked in coordination with TxDOT's and ARDOT's TPM targets. Due to Texarkana's current air quality attainment status, the organization currently only reports performance measures for 15 of the 18 federal performance measures, excluding those relating to air quality attainment. These measures focus on the following:

- safety of the Texarkana regional transportation network,
- condition and reliability of interstate and remaining National Highway System (NHS) infrastructure,
- and reliability of freight movement throughout the region.

The data influencing these measures derive from TxDOT's Crash Record Information System (CRIS), the Arkansas Crash Analytics Tool (ACAT), FHWA's National Performance Management Research Data Set (NPMRDS), and through coordination with regional FTA funded transit agencies.

Table 8-6 lists performance measures and the federal goal areas to which those measures relate.

Table 8-6: Federal Performance Measures

Goal Area	Measure
FHWA PM 1 (Safety)	Number of fatalities
	Rate of fatalities per 100 million Vehicle Miles Traveled (VMT)
	Number of serious injuries
	Number of non-motorized fatalities
	Number of non-motorized serious injuries
FHWA PM 2 (Infrastructure Condition)	Percentage of pavements of the Interstate System in Good condition
	Percentage of pavements of the Interstate System in Poor condition
	Percentage of pavements of the non-Interstate NHS in Good condition
	Percentage of pavements of the non-Interstate NHS in Poor condition
	Percentage of NHS bridges classified as in Good condition
	Percentage of NHS bridges classified as in Poor Condition
FHWA PM 3 (System Performance/Freight/CMAQ)	System Performance: Percentage of person-miles traveled on the Interstate that are reliable (LOTTR)
	System Performance: Percentage of person-miles traveled on the non-Interstate NHS that are reliable
	Freight Movement: Percentage of Interstate system mileage providing for reliable truck travel time (TTTR)
	CMAQ*: Annual Total Tailpipe CO2 Emission on NHS
	CMAQ*: Annual Hours of Peak Hour Excessive Dellay (PHED) per capita
	CMAQ*: Percent of Non-SOV Travel on network
	Percent change in tailpipe CO2 emissions on the NHS, compared to the reference year (CY 2022)
FTA Transit Asset Management (TAM)	Percentage of revenue vehicles (by type) that exceed useful like benchmark (ULB)
	Percentage of non-revenue service vehicles (by type) that exceed ULB
	Percentage of facilities (by group) rated less than 3.0 on the Transit Economic Requirements Model (TERM) scale
FTA Public Transportation Agency Safety Plan (PTASP)	Total number of reportable fatalities
	Rate of reportable fatalities per total vehicle revenue miles by mode
	Total number of reportable injuries
	Rate of reportable injuries per total vehicle revenue miles by mode
	Total number of reportable events
	Rate of reportable events per total vehicle revenue miles by mode
	Mean distance between major mechanical failures by mode

*Applies to areas designated as nonattainment or maintenance for ozone, carbon monoxide, or particulate matter.

Connect to 2050 Texarkana MTP Update Performance Reporting

For each federal performance goal area relevant to the Texarkana MPO, the current performance measures are compared to previous performance and TxDOT targets, providing the status of the MPO's progress towards meeting the established targets. All recorded performance measures derive from the most up-to-date and readily available data. It is important to note that the Connect to 2050 Texarkana MTP update included an expanded study incorporating much of Bowie and Miller Counties, which may account for higher numbers during the 2018-2022 period. Comparisons between the two periods should be reviewed with this consideration in mind.

PM1 Safety Performance

Table 8-7: Safety Performance Measures

Measure	TXKMPO *2013-2017*	TXKMPO *2018-2022*	Texas *2018-2022*	Arkansas *2018-2022*
Number of Fatalities	56	69	18,267	2,791
Rate of fatalities per 100 million Vehicle Miles Traveled (VMT)	-*	.41	1.44	1.57
Number of serious injuries	257	264	96,932	10,290
Number of non-motorized fatalities	15	25	4,058	375
Number of non-motorized serious injuries	22	36	7,874	789

**Data unavailable during the 2045 MTP update process.*

PM2 Infrastructure Condition

Table 8-8: Infrastructure Performance Measures

Measure	2018	2023	Texas 2022	Arkansas 2022
Percentage of pavements of the Interstate System in Good condition	72%	70.12%	65.8%	63%
Percentage of pavements of the Interstate System in Poor condition	1%	0.89%	0.2%	1%
Percentage of pavement on the non-Interstate NHS in Good condition*	46%	38.06%	48.5%	35%
Percentage of pavement on the non-Interstate NHS in Poor condition*	22%	20.70%	1.3%	3%

Measure	2018	2023	Texas 2022	Arkansas 2022
Percentage of NHS bridges classified as in Good condition**	0%	79%	49%	44%
Percentage of NHS bridges classified as in Poor Condition**	0%	0%	1%	4%

**Pavement condition scores for both years were only available for the MPO urbanized area.*

***Represents bridge count, not bridge deck area.*

PM3 System Performance/Freight/CMAQ

Table 8-9: System Performance Measures

Measure	2018	2022	Texas	Arkansas
Percentage of person-miles traveled on the Interstate that are reliable (LOTTR)	100%	98%	84.6%	98.5%
Percentage of person-miles traveled on the non-Interstate NHS that are reliable	93%	95%	90.3%	95.6%
Percentage of Interstate system mileage providing for reliable truck travel time (TTTR)	1.14	1.15	1.39	1.24
Percent change in tailpipe CO2 emissions on the NHS, compared to the reference year (CY 2022)	N/A	N/A	N/A	N/A

Transit Performance Measures

Moving Ahead for Progress in the 21st Century (MAP-21) granted the Federal Transit Administration (FTA) the authority to establish and enforce a comprehensive framework to oversee the safety of public transportation throughout the United States. MAP-21 expanded the regulatory authority of the FTA to oversee safety, providing an opportunity to assist transit agencies in moving towards a more holistic, performance-based approach to Safety Management Systems (SMS). This authority was continued through the Fixing America's Surface Transportation Act (FAST Act).

In compliance with MAP-21 and the FAST Act, the FTA promulgated a Public Transportation Safety Program on August 11, 2016, that adopted SMS as the foundation for developing and implementing a safety program. The FTA is committed to developing, implementing, and consistently improving strategies and processes to ensure that transit achieves the highest practicable level of safety. SMS helps organizations improve upon their safety performance by supporting the institutionalization of beliefs, practices, and procedures for identifying, mitigating, and monitoring safety risks.

There are several components of the national safety program, including the National Public Transportation Safety Plan (NSP), published by the FTA to provide guidance on managing safety risks and hazards. One element of the NSP is the Transit Asset Management (TAM) Plan. Public transportation agencies implemented TAM plans across the industry in 2018. The subsequent final ruling by FTA to implement the NSP is the Public Transportation Agency Safety Plan (PTASP) rule, 49 CFR Part 673, and guidance provided by FTA.

PTASP Performance Measures

Safety is a core business function of all public transportation providers and should be systematically applied to every aspect of service delivery. For transit agencies located within the Texarkana region, all levels of management, administration and operations are dedicated to and responsible for the safety of their clientele and themselves.

In accordance with FTA guidance, both transit agencies operating in the Texarkana Region, T-Line and TRAX, published Public Transit Agency Safety Plans that set safety performance targets and outlined a comprehensive, collaborative, and systematic approach to managing safety. PTASPs were required to be adopted starting in 2020, with safety performance targets being reported to the National Transit Database (NTD) on a yearly basis.

Table 8-10: PTASP Performance Measures

Mode	2019 Baseline (5-year average)	2020	2021	2022	2023	2024 (target)
Fixed Route (Bus)						
Fatalities	0	0	0	0	0	0
Rate of Fatalities*	0	0	0	0	0	0
Injuries	0	0	0	0	0	0
Rate of Injuries*	0	0	0	0	0	0
Safety Events	0	0	0	0	0	0
Rate of Safety Events*	0	0	0	0	0	0
System Reliability**	350,000	350,000	350,000	350,000	350,000	350,000
Demand Response						
Fatalities	0	0	0	0	0	0
Rate of Fatalities*	0	0	0	0	0	0
Injuries	0	0	0	0	0	0
Rate of Injuries*	0	0	0	0	0	0
Safety Events	0	0	0	0	0	0
Rate of Safety Events*	0	0	0	0	0	0
System Reliability**	21,000	21,000	21,000	21,000	21,000	21,000

**Rate = total number for the year/total revenue vehicle miles traveled*
***Mean distance between major mechanical failure*

Transit Asset Management Performance Measures

The Transit Asset Management Plan (TAM) is mandated by the FTA for all transit agencies that own, operate, or manage capital assets used to provide public transportation services and receive funds from the FTA. The plan must be updated every four years, and though it does not need to be submitted to the FTA, each agency completing a TAM plan must submit data to the National Transit

Database (NTD). The TAM plan is a systematic tool that helps manage maintenance, inspection, replacement, and deterioration of assets. It is the basis for moving the transit system towards a state of good repair. The local transit agency works in coordination with the MPO and State government to set performance targets to ensure consistent, safe, and fiscally responsible actions are taken to move towards a state of good repair.

Both TRAX and T-Line participate in the TxDOT sponsored statewide group plan. Performance measures and targets are developed in coordination with the state.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Appendix

Comments Received during Comment Period

The following comments were submitted during the draft plan comment period.

Comment(s)	How Comments have Been Addressed if Applicable
Attach[ed] is document to be added for the MTP 20-50 Plan, they mostly include drainage issues and sidewalk[s] for safe street concern. -submitted by Laney Harris, City Director Ward 2	As there was expected fiscal capacity in the Long-Term stage of the MTP in the Arkansas side of the study area, the full list of projects submitted by Mr. Laney Harris has been included, being: • Highway 82, East 9th Street Side walk: Cooper Tire Road to 67 Highway Broad Street 375,000 • Highway 71, East Street Sidewalk: Hay Street to I 49 350,000 • Genoa Road Division Street Sidewalk : Ferguson Street to East Street 150, 000 • Genoa Road Division Street Sidewalk: Artesian Street to Lockett Street 150, 000 • Highway 67/ East 9th & 71/ Board Street Flooding/Drainage issues 2.5 million • Highway 82/ East 9th Street: Pinehurst Street to Broad Street Drainage issues 1.5 Million
"Shouldn't this be FY 25-2035" regarding page 2-8 UTP reference	UTP Reference has been corrected to current UTP
"These limits aren't possible for US71/Stat[e]line highway" regarding page 2-8 UTP Project	Corrected limits have been provided
"Needs reference" regarding pages 4-7, 4-9, and 4-35, broken in-text cross reference to Table or Figure Caption	Word formatting error has been corrected with un-broken in text references for affected Table and Figure Captions


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Resolution

Adoption on September 18, 2024

2050 METROPOLITAN TRANSPORTATION PLAN

Texarkana MPO Resolution #14-2024

TEXARKANA URBAN TRANSPORTATION STUDY

RESOLUTION # 14-2024

RESOLUTION ADOPTING THE 2050 Metropolitan Transportation Plan (MTP) as presented to the Policy Board of the Texarkana Metropolitan Planning Organization on September 18, 2024, and authorizing its submission to the Arkansas Department of Transportation (ARDOT) and the Texas Department of Transportation (TXDOT).

WHEREAS, the Texarkana Metropolitan Planning Organization (MPO) for the Texarkana Metropolitan Planning Area (MPA), is responsible for preforming transportation planning activities within the Texarkana MPO metropolitan boundary area; and

WHEREAS, pursuant to 23 CFR 450.322, the Texarkana MPO is responsible for development of a 2050 Metropolitan Transportation Plan (MTP) for the region; and

WHEREAS, the Texarkana MPO Technical Committee has endorsed and recommended the Texarkana MPO 2050 Metropolitan Transportation Plan which is designed to address the transportation needs of the region through the year 2050 to the Policy Board for approval; and

WHEREAS, public comment on the proposed 2050 MTP was sought, and comments were recorded within the MTP that were received during the 30-day comment period from August 1, 2024, through August 31, 2024.

NOW, THEREFORE, BE IT RESOLVED by the Policy Board of the Texarkana MPO:

SECTION 1: The Texarkana MPO 2050 Metropolitan Transportation Plan for the Texarkana Metropolitan Area is hereby adopted and will be considered as a final adopted document with the submission to ARDOT and TXDOT.

SECTION 2: The Director of the Texarkana Metropolitan Planning Organization is hereby authorized to publish and submit the Texarkana MPO 2050 Metropolitan Transportation Plan for the Texarkana Metropolitan Study Area.

SECTION 3: That the adopted document shall be forwarded to all relevant public officials and government agencies and shall be available for public inspection during regular business hours at the Texarkana MPO office located at the City of Texarkana, Tex City hall building located at 220 Texas Blvd. Texarkana, Texas and on the MPO website.

ADOPTED in Regular Session on the 18th day of September 2024.

Bob Bruggeman, Mayor, City of Texarkana, Texas
Policy Board Chairman
Texarkana MPO

I hereby certify the above is a true copy of Resolution #14-2024: 2024 Metropolitan Transportation Plan (MTP).
This resolution was:
Motioned by:
Seconded by:
Resolution #14 passed unanimously in regular session on September 18, 2024.

Rea Donna Jones
Director
Texarkana MPO