

## 1.1 About the Permian Basin Metropolitan Planning Organization

### History

The Permian Basin Metropolitan Planning Organization is responsible for long-range transportation planning in a defined area known as the Metropolitan Area Boundary (MAB). The MAB is a geographic area determined by agreement between the local MPO and the Governor of Texas in which the metropolitan transportation planning process is carried out (U.S.C. 23 CFR Part 450). The Permian Basin MPO MAB includes the incorporated land within the City of Midland, City of Odessa, and portions of Ector, Midland, and Martin Counties as shown on Map 1.1. In 2013, the MAB was adjusted to include urbanizing areas on both sides of US 385 in southern Ector County, as well as an area near unincorporated Greenwood in eastern Midland County. In 2014, the MAB was adjusted again to include a portion of western Martin County.

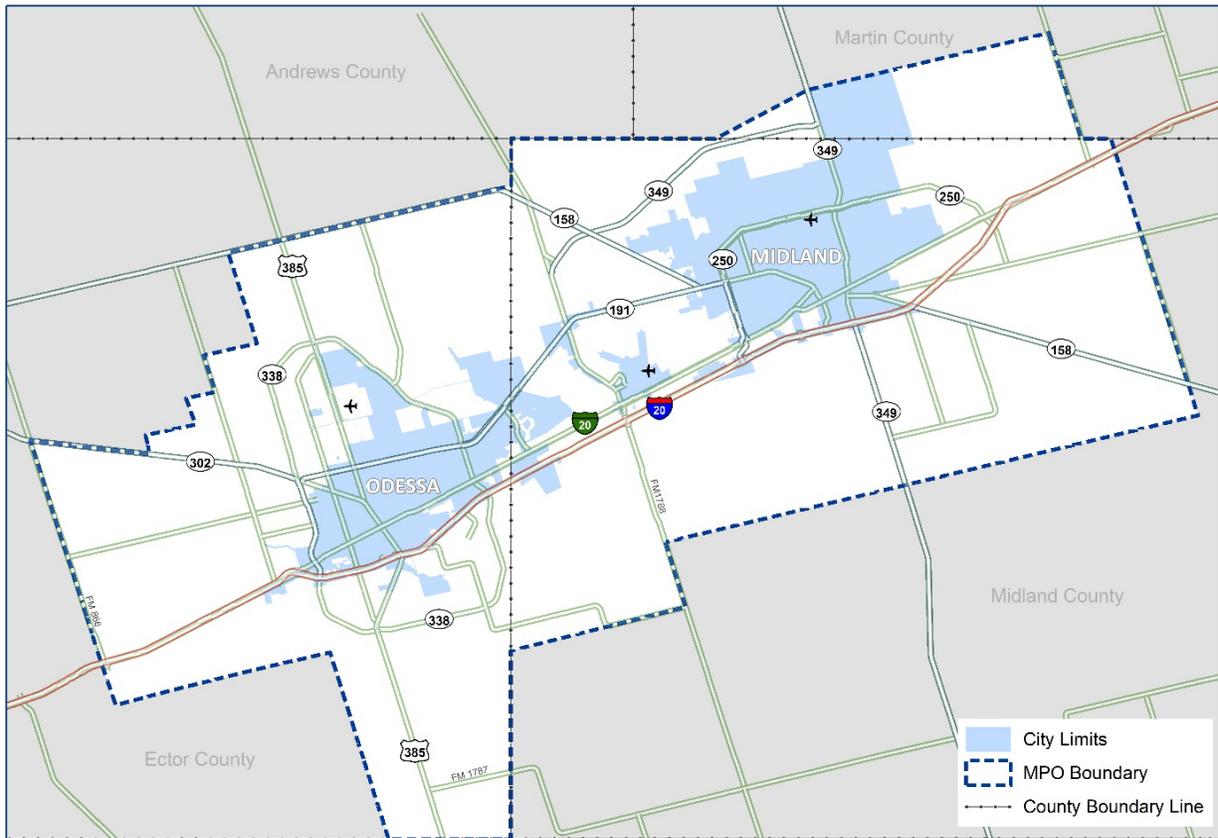
The region's transportation system is a major component of the local Midland and Odessa economies and it has a direct effect on commerce, employment, and the quality of life of citizens living in the area and visitors as well. As a result of the Federal Aid Highway Act of 1962, the Midland-Odessa Regional Transportation Study (MORTS) was initiated in April 1965. This was the first Metropolitan Planning Organization (MPO) in the region. An MPO is a federally mandated, quasi-governmental agency responsible for coordinating transportation planning, establishing planning policies, and programming approved construction funding and corridor studies in urbanized areas with populations over 50,000, all within a defined urban boundary. Guidance and direction of activities in the initial phase was furnished by the Coordinating Committee composed of representatives from the various participating governmental agencies. It was at this time that the cities of Midland and Odessa passed the minimum population threshold of 50,000 to become an MPO; however, rather than establishing two adjacent MPO jurisdictions, the Federal Highway Administration (FHWA) decided to establish a single MPO to represent the Midland-Odessa area.

Although Federal transportation planning laws have been amended numerous times over the decades, it has remained consistent that MPOs must have a continuing, cooperative, and comprehensive planning process with their partner agencies. In 1973, the organizational structure was revised to create a Policy Advisory Committee (PAC) and a Steering Committee. The PAC consisted of one elected official from each member entity plus the TxDOT Odessa District Engineer. The Steering Committee was composed of staff members from participating entities, representatives of State and Federal agencies, key regional stakeholders, and local, state, and federal elected officials until the MPO was reorganized in August 2006. Following reorganization, MORTS became known as the Midland Odessa Transportation Organization (MOTOR) MPO and the PAC and Steering Committee were renamed the Policy Board and the Technical Advisory Committee respectively. In August 2015, the Policy Board voted to rename the organization to Permian Basin MPO. In 2014 and 2015, the Policy Board membership was increased to include the Midland Odessa Urban Transit District (MOUSD) and Martin County following the adjustment to the MPO boundary. It is important to note these historic details early in the process of preparing this 2020-2045 Metropolitan Transportation Plan since the same entities still form the core of the Permian Basin MPO.



Permian Basin MPO has a multi-level structure consisting of a Policy Board, a Technical Advisory Committee (TAC), a Freight Advisory Committee (FAC) and a Bicycle and Pedestrian Advisory Committee (BPAC). The Freight Advisory Committee currently includes members from the public sector, energy industry, chamber and economic development representatives, and others serving on the ongoing 24-county Permian Basin Freight Plan study under TxDOT's guidance. Some of the membership of this large regional committee will serve on the MPO's urban committee beginning in early 2020. The Policy Board serves as the decision-making body. The Policy Board meets on a regular basis and the meetings are open to the public. Public participation is encouraged.

**Map 1.1** Permian Basin MPO Metropolitan Area Boundary



**Permian Basin MPO Metropolitan Area Boundary**



This map was developed by Permian Basin MPO for the purpose of aiding in regional transportation planning decisions and is not warranted for any other use. No warranty is made by Permian Basin MPO regarding its accuracy or completeness.

### 1.1.1 Transportation Management Area

In July 2012, the MPO was designated a federal Transportation Management Area (TMA) by the Secretary of the U.S. Department of Transportation. Several regulations became effective following the TMA designation. Permian Basin MPO is now required to generate and maintain a Congestion Management Process (CMP), add the local transit provider to the Policy Board as mentioned above, and be prepared to complete a federal certification review within four years of becoming a TMA. To date the following TMA related accomplishments have occurred:

- Adopted initial Congestion Management Process and Congestion Monitoring Network in 2014.
- Updated Congestion Monitoring Network 2014.
- Midland Odessa Urban Transit District (MOUSD) voting member added to Policy Board August 2014.
- Bylaws amended to have 2-year leadership terms to improve continuity July 2019.
- Maintained datasets for crash records, system reliability, and road, bridge, and transit fleet condition.
- Achieved a unified regional perspective on projects and corridor planning October 2018.
- Leveraged funding by using TxDOT Category 2, Midland Development Corporation, Odessa Development Corporation, and city funds to attract additional Category 4, Category 11 and Category 12 funds from the Texas Transportation Commission since 2018.
- Regional Freight Advisory Committee formed in 2019; MPO committee in 2020.
- Bicycle and Pedestrian Advisory Committee formed in September 2017.

### 1.1.2 City of Odessa - Permian Basin MPO Relationship

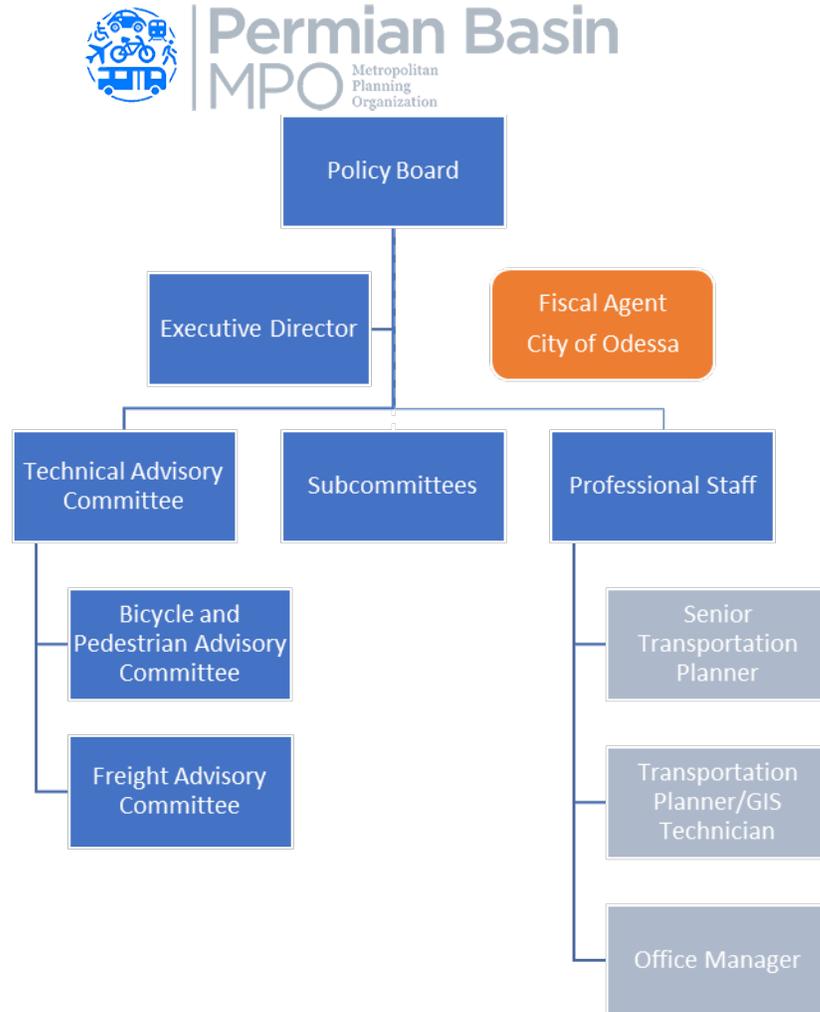
The City of Odessa serves as the administrative and financial agent for the Permian Basin Metropolitan Planning Organization (PBMPPO) under a three-party agreement with the Texas Department of Transportation (TxDOT). Although the Permian Basin MPO is an independent body, its staff receives similar benefits as City of Odessa staff. Permian Basin MPO administers a Unified Planning Work Program (UPWP) in accordance with the requirements of the Fixing America's Surface Transportation (FAST) Act. The UPWP is the MPO's budget and annual work schedule. In September 2018 the MPO renewed its contract with the City of Odessa as fiscal agent and with TxDOT to reestablish agency responsibilities over the next six-year period.



### 1.1.3 Permian Basin MPO Staff

Permian Basin MPO staff consists of four positions – an office manager, a transportation planner/GIS technician, a senior transportation planner and an executive director. All four are full-time funded positions. The following Organizational Chart displays the Permian Basin MPO hierarchy.

Figure 1.1 Organizational Chart



### 1.1.4 Legislative Mandates

Legislative mandates from the Federal and State level direct the MPO planning process and must be followed by the MPO and all its working committees. Under federal legislation, the Permian Basin MPO works with its member agencies to promote and lead transportation planning in the MAB. As of September 2019, the MPO consists of seven member agencies including Midland, Ector, and Martin Counties, the City of Odessa, the City of Midland, the TxDOT Odessa District, and Midland Odessa Urban Transportation District (MOUTD). These entities are all represented on the Policy Board whose duty is to oversee the policy making and decision-making process from general oversight of planning efforts to approval of the funding of specific transportation construction work. An important advisory

Committee of the MPO is known as the Technical Advisory Committee (TAC). This group consists of representatives of each of the member entities plus additional non-voting members with skill specialties that are tied to long range planning such as GIS, economic development and communications. The TAC meets on a monthly basis to review transportation planning needs and to provide recommendations to the Policy Board. The TAC often holds special meetings in addition to the regularly scheduled meetings when key documents are under review. These extra meetings occur during MTP preparation process and any future amendments. Other documents that the MPO is responsible for may also involve special meetings of the TAC for review and comment purposes.

In 2015, the Texas Legislature passed House Bill 20 (HB 20) which requires TxDOT and MPOs to implement a performance-based planning and programming process tied to the state’s ten-year planning horizon. The ten-year planning horizon is the TxDOT Unified Transportation Program. The UTP authorizes projects for construction, development and planning activities and includes projects involving highways along with planning and project selection processes for state funding in modal areas of aviation, rail, public transportation, and state and coastal waterways. MPOs must provide TxDOT with documentation indicating that the region is in alignment with statewide goals and objectives. HB 20 also requires the establishment of a scoring system to prioritize projects shown in Figure 9.1 that would be funded by TxDOT. The scoring methodology and weighting system used by the Permian Basin MPO meets the requirements proscribed under federal and state legislation.

## 1.2 MTP and Other Key Documents

### 1.2.1 Metropolitan Transportation Plan

The FAST Act and previous highway bills require that each MPO and state develop a multimodal transportation plan with at least a 20-year horizon. The plan must be updated at least every five years to keep consistent with existing conditions, re-evaluate proposed plans, programs, and projects, and validate air quality conformity analysis should the region become non-attainment under the Environmental Protection Administration regulations. It also includes an analysis of the existing transportation system for all modes as well as a constrained financial plan for prioritized projects over the life of the plan. The plan shall “include both long-range and short-range program strategies/actions that lead to the development of an integrated intermodal transportation system that facilitates the efficient movement of people and goods.”

In November of 2019, the Policy Board adopted *Forward 45* containing a multimodal needs plan for the entire MPO and a financially constrained project plan. The plan also contains a discussion of regional land use and its effects on the transportation system that continue to build on goals, objectives and the Permian Basin MPO’s Travel Demand Model. Lastly, it utilizes a defined prioritization methodology for technical ranking of potential highway and transit projects that was subject to a comprehensive public outreach effort. The FAST Act includes performance-based planning and system resiliency. These are discussed in Chapter 7.



The purpose of *the Forward 45* is to build upon the findings and initiatives identified in the 2040 MTP and to detail the multimodal transportation improvements and programs to be carried out within the Permian Basin during the plan’s timeframe and demonstrate the financial means within the MPO area by which these improvements and programs will be implemented. This MTP is therefore a key product of the Permian Basin MPO planning process and provides a conceptual basis and specifics for the transportation improvements planned for implementation by the year 2045. For a project to be eligible to receive federal transportation funds within the MPO’s jurisdiction, it must be included in the financially constrained portion of *Forward 45*.

As stated above, the *Forward 45* MTP contains both a needs plan and a financially constrained plan. The needs plan acts as an inventory of all surface transportation needs including highways, bicycle, pedestrian and transit, as identified through public outreach effort and the TAC, but it is not fiscally constrained. Projects considered in the needs plan are illustrative only. The constrained plan is tied to the revenue stream under federal and state rules and allocates funds for the highest priority improvements from forecasted federal, state, and local revenues that are expected to be available over the life of this plan. In the fiscally constrained plan, highway and bicycle and pedestrian improvements are assumed to be part of the design considerations made at the time a project is reviewed.

The adoption of this plan and any future amendments will follow the MPO’s policy for public participation. All plan updates or amendments will be advertised to the public through various media outlets, including publications that target specific interest groups, minorities and Spanish-speaking audiences. A minimum 30-day comment period and public hearings will be held prior to adoption. The Permian Basin MPO Policy Board also encourages comments at regular public meetings. The TAC will make recommendations on the update or amendment to the Policy Board. The Permian Basin MPO Policy Board will then act to approve, reject or defer approval at a public meeting.

### MTP Updates

Although the Permian Basin MPO’s MTP is required to be updated every four years, amendments during the interim years are quite common and ensure the MTP contains relevant information in response to changing conditions. Amendments to the MTP are often the result of project and/or funding allocation changes (such as following the adoption of a new TIP). MTP amendments require public outreach and demonstration of fiscal constraint and must also be approved by the MPO’s Policy Board.

## 1.2.2 Other Key Documents

### Transportation Improvement Program (TIP)

The Transportation Improvement Program (TIP) is a financially constrained list of transportation projects planned for the Permian Basin MPO Region for a four-year period. The TIP is updated at a minimum of every two years and includes on-system projects intended for the Interstate, Primary, Urban and Secondary Highway Systems that are on roadways owned or managed by TxDOT. Projects in the TIP also include those that will improve safety, provide transportation alternatives and public transportation improvements. The TIP may also include funding for feasibility studies, preliminary engineering (PE)



activities and environmental studies, as well as right-of-way and construction activities. Federal law requires that all federally funded transportation projects within an MPO's study area be endorsed by the MPO and included in the TIP and MTP. The total cost of all TIP projects cannot exceed the amount of funding that is reasonably expected to be available during the period covered by the TIP.

### Congestion Management Process (CMP)

Permian Basin MPO is required to develop a Congestion Management Process (CMP). In February 2014, the Policy Board adopted its initial Congestion Management Network. This CMP was developed in accordance with federal regulations, and its guidance supports the Permian Basin MPO planning process through identification of strategies that promote efficient transportation system management and operation by minimalizing the effect of congestion on the on-system corridors. It is anticipated that the MPO will update its CMP by 2021.

### Title VI Environmental Justice

The Title VI Nondiscrimination Plan assures that no person shall on the grounds of race, color or national origin, as provided by Title VI of the Civil Rights Act of 1964 and the Civil Rights Restoration Act of 1987, be excluded from participation in, be denied of benefits of or be otherwise subject to discrimination under any agency-sponsored program or activity. Nor shall sex, age or disability stand in the way of fair treatment of all individuals. The Permian Basin MPO ensures compliance with Title VI by analyzing and documenting the effect of programmed funds on certain population groups including those with limited access to vehicles, families and individuals below poverty, those with limited English-speaking proficiency, and low income.

### Public Participation Plan (PPP)

The purpose of the Public Participation Plan (PPP) is to serve as a guide in the development of public outreach methods in the regional transportation planning process. It is intended to encourage, facilitate and follow through on public comments, concerns, and suggestions by establishing procedures for providing full public access to information and decisions, timely public notices, and early and continuing public involvement in plan development. The MPO is planning to update its PPP in early 2023.

In July 2019, the Permian Basin MPO entered into a contract for professional services to expand public involvement in the planning process and to advance the public awareness of the MPO and its functions and responsibilities. **The contract ended in early 2020 but the MPO will continue to seek additional public involvement assistance on an as needed basis.**

### Metropolitan Transportation Plan 2015 – 2040 (MTP)

The Midland-Odessa 2040 MTP is the previous transportation plan for the Midland-Odessa area. As with most planning documents, it both builds upon and incorporates the ideas, issues, and recommendations of past and current planning efforts.



### Permian Basin Region Intelligent Transportation Systems (ITS) Architecture and Deployment Plan

Developed in March 2005, this plan was part of a series of statewide plans that identified market packages and interfaces tailored to the needs of the region as well as a consensus-based architecture for regional ITS strategies. This topic is further discussed in the Chapter 6. Regional ITS architecture update will be discussed with the TxDOT Odessa District

### Unified Planning Work Program (UPWP)

The Unified Planning Work Program (UPWP) is the MPO's budget and a summary of the work tasks that are anticipated to be completed by the MPO staff and/or member agencies during the fiscal year. Because the UPWP reflects local priorities, the content differs from one metropolitan area to another. The UPWP contains several elements:

- Summary of previous year's completed tasks
- The planning tasks and studies that will be conducted over a one-year period;
- Identification of all federally funded studies as well as all relevant state and local planning activities to be conducted without federal funds;
- Funding sources identified for each project and task;
- A schedule of activities; and
- The agency responsible for each task or study.

This document and others are available on the MPO's website at [www.permianbasinmpo.com](http://www.permianbasinmpo.com).

## 1.3 The Metropolitan Planning Process

### History

Metropolitan transportation planning provides the information, tools and public input needed for improving transportation system performance. Transportation planning should reflect the region's vision for its future. It should also include a comprehensive consideration of possible strategies; an evaluation process that encompasses diverse viewpoints; the collaborative participation of relevant transportation-related agencies and organizations; and an open, timely, and meaningful involvement of the public. Transportation planning requires a comprehensive, holistic look at the future needs of the region and its inhabitants.

Transportation planning in metropolitan areas is a collaborative process, led by the metropolitan planning organization and other key stakeholders in the regional transportation system. The process is designed to foster involvement by all interested parties, such as the business community, local interest groups, environmental organizations and the public, through a proactive public participation process conducted by the MPO in coordination with TxDOT and EZ-Rider. It is essential to extend public participation to include people who have been traditionally underserved by the transportation system and services in the



region. Neglecting public involvement can result in proposed solutions that do not address the region's needs and could create unnecessary delays.

The *Forward 45* plan has been developed to comply with the *Fixing America's Surface Transportation Act (FAST Act)* and the *Infrastructure Investment and Jobs Act of 2021 (IIJA)*. Both transportation bills provide for a streamlined, performance based, and multi-modal program to address the many challenges facing the U.S. transportation system. These challenges include improving safety, maintaining infrastructure condition, reducing traffic congestion, improving efficiency of the system and freight movement, protecting the environment, addressing tourism and reducing delays in project delivery. Existing programs are simplified, substantially consolidating the program structure into a smaller number of broader core programs.

Since the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21st Century of 1998 (TEA-21), Congress showed support for metropolitan and statewide transportation planning by emphasizing seven distinct areas which metropolitan planning organizations and states should consider when developing their plans.

In 2005, the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA- LU), added emphasis in two areas: security and the environment. Transportation security is now a standalone factor, signaling an increase in importance from prior legislation. The factor relating to the environment was expanded, to promote consistency of the long-range transportation plan with planned growth and development.

In 2012, the Moving Ahead for Progress in the 21st Century Act (MAP-21) was signed into law. Major changes to the Metropolitan Planning Program under MAP-21 include the establishment of a performance-based planning process. It requires MPOs and States to establish performance targets that address national performance measures established by the Secretary that are based on the national goals outlined in the legislation.

The Fixing America's Surface Transportation Act (FAST Act) was signed into law in December 2015. The FAST Act continued most of the Metropolitan Planning program from MAP-21 with some changes including an increased emphasis on an intercity bus and commuter vanpools. The FAST Act also expanded the scope of the metropolitan planning process to include improving transportation system resiliency and reliability, reducing stormwater impacts on surface transportation and enhancing tourism.

One key additional point to emphasize is that the FAST Act legislation also required recipients of planning funds to establish performance measures and targets. MPOs must coordinate with the state, member agencies and public transportation providers to establish performance goals, measurement tools and targets that address federal performance measures.



The Infrastructure Investment and Jobs Act of 2021 includes the following highlights:

- extended FY2021 enacted levels through FY2022 for federal-aid highway, transit, and safety programs;
- reauthorizes for FY2023-FY2026 several surface transportation programs, including the federal-aid highway program, transit programs, highway safety, motor carrier safety, and rail programs;
- addresses climate change, including strategies to reduce the climate change impacts of the surface transportation system and a vulnerability assessment to identify opportunities to enhance the resilience of the surface transportation system and ensure the efficient use of federal resources;
- revises Buy America procurement requirements for highways, mass transit, and rail;
- establishes a rebuild rural bridges program to improve the safety and state of good repair of bridges in rural communities;
- implements new safety requirements across all transportation modes; and
- directs DOT to establish a pilot program to demonstrate a national motor vehicle per-mile user fee to restore and maintain the long-term solvency of the Highway Trust Fund and achieve and maintain a state of good repair in the surface transportation system.

Seven national goals were listed in the FAST Act and continued to the IIJA Act:

1. **Congestion Reduction** – To achieve a significant reduction in congestion on the National Highway System
2. **Safety** – To achieve a significant reduction in traffic fatalities and serious injuries on all public roads
3. **Infrastructure Condition** – To maintain the highway infrastructure asset system in a state of good repair
4. **System Reliability** – To improve the efficiency of the surface transportation system
5. **Freight Movement and Economic Vitality** – To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development
6. **Environmental Sustainability** – To enhance the performance of the transportation system while protecting and enhancing the natural environment
7. **Reduced Project Delivery Delays** – To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.



In addition, the metropolitan planning process shall provide for consideration of projects and strategies that will address the following factors:

The ten FAST Act Planning Factors **continued into the IIJA Bill** (23 U.S.C. 450.306) are:

1. *Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency;*

Preparation of the 2045 MTP involved multiple steps and procedures that included a general economic analysis by the Technical Advisory Committee and the Policy Board that ultimately tied directly into the project list shown in Chapter 9. The Policy Board determined that economic vitality is important to the region; 15% of a project's potential score revolved around the anticipated impact on the regional economy.

TxDOT and the MPO are currently working to modernize the I-20 corridor including conversion of the frontage roads to one-way, ramp reconfigurations, U-turns, bridge replacements and new interchanges for approximately 31 miles in the MPO boundary. The Texas Transportation Commission (TTC), the MPO and local economic development corporations have contributed funds to improve the Interstate corridor. The entire length in the boundary is 42 miles, the remaining portions will be improved later. In addition, TxDOT is studying the feasibility of improving Loop 338 to a freeway system. **That work should be completed by early 2023.**

2. *Increase the safety of the transportation system for motorized and non-motorized users;*

Permian Basin MPO Policy Board adopted Resolutions in 2018 and **annually through 2022** to comply with the FAST Act and IIJA Act and State mandates requiring safety to be a key consideration in the process of selecting projects for inclusion into the MTP. Like the economic vitality planning factor, safety considerations in the project selection process were also heavily weighted to indicate their importance to the MPO. The importance of the decision to modernize the I-20 corridor is backed by TTI studies that show vastly improved safety conditions when frontage roads become one directional. Safety was given the top priority for project selection with up to 20 percent of possible grading points.

3. *Increase the security of the transportation system for motorized and non-motorized users;*

Security of people and infrastructure was also considered by the TAC and Policy Board in the project selection criteria. As documented in the MTP, the region is key to national and international economics related to energy provision; oil and gas, and wind energy. Part of the discussion including system security revolved around improving corridors that would likely provide alternative routes of transportation should any threats to security become known. Chapter 8 includes a description of national, state and local initiatives to address security in the region along with disaster preparedness, pipelines, and a siren system used to warn the public of imminent security risk.



On August 31, 2019 a lone gunman killed seven people from a vehicle before he was shot and killed by law enforcement. The incident involved law enforcement shutdowns on key corridors, including I-20 in the region. The shootings occurred in both Midland and Odessa in daylight hours. Ector and Midland County Sheriff’s officers as well as both city police departments were involved.

4. *Increase the accessibility and mobility of people and for freight;*

Anticipated socioeconomic effects including population groups that may be adversely impacted by the projects being considered by the MPO were considered in the development of the MTP. A Title VI/Environmental Justice analysis was completed for each project that was considered for inclusion in the MTP. The analysis documents are contained in Appendix C of the MTP. The purpose of the analysis included accessibility to the transportation system as well as the mentioned possible adverse impacts.

Key transportation investments in the region that are anticipated to have immediate effect on the movement of people and freight are the modernization of I-20, the completion of Loop 250 into a freeway section on the north side of Midland, key interchanges at Yukon Road/SH 191, US 385 at SL 338 N, Yukon Road at SL 338 E. The efficient and reliable movement of freight was a key consideration in the project selection process.

5. *Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;*

Chapter 7 of the MTP describes how the MTP and project selection process involved a review of environmental factors that could impact transportation projects. Considered in the review process were flood zones, parks and school locations as well as draws and playas in the region. In addition, a statement that balancing the goals of economic development along with environmental preservation, quality of life and recreational opportunities are important to the MPO and its planning partners is contained in the chapter. In addition to the affects that these considerations may have on the region’s existing population, any potential impact that a project may have on nearby (not in the MPO boundary) tribal communities would result in consultation with the affected tribal community.

6. *Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;*

Connectivity, modal integration and prioritized projects by transportation mode are described in detail in Chapter 9 of the MTP. These factors are also considered in the project selection process.



*7. Promote efficient system management and operation;*

As stated throughout this section of the MTP covering the FAST Act and IJA Act planning factors, the project selection criteria and score card were used to determine the prioritized project list documented in Chapter 9. Among the considerations were traffic operations and efficiency of travel as indicated by congestion in the region. Additionally, at each Policy Board and TAC meeting there is an opportunity for each member agency to provide an update on maintenance and operational improvements under construction or in the planning phase. Topics such as shoulder widenings, installation of rumble strips, signal timing, striping, bicycle lanes and the anticipated start and finish dates are discussed.

*8. Emphasize the preservation of the existing transportation system;*

Preservation of the system was considered in the planning process. Investments of federal, state and local funds for projects in the plan considered system preservation. The project list in Chapter 9 shows significant funding for projects along the I-20 corridor and along the loops around the two cities. System preservation is important to the MPO. As documented in the plan, bridge strikes along I-20 have occurred in the region to the extent that bridges and lanes have been shut down from hours to months. These occurrences (crashes) have caused significant travel delays and cost to the travelling public and the freight carriers. In addition to the importance of constructing new interchanges and modernizing the I-20 corridor, the MPO and its planning partners realize the importance of system preservation.

*9. Improve the resiliency and reliability of the transportation system and reduce or mitigate Stormwater impacts of surface transportation; and*

Chapter 7 of the MTP discusses the effects of climate change, extreme weather events and extreme events. The ability to recover from system damage from natural events is important and is addressed by the MPO in its project selection process. System resiliency is addressed in the MPO's Congestion Management Process and within the Performance Management (PM3) response to the FAST Act performance-based planning requirements. **The MPO is working with the Texas A&M Transportation Institute to complete a regional resiliency plan.**

*10. Enhance travel and tourism.*

*The MPO has included travel and tourism in its project selection criteria. The staff and TAC generated a list of tourism destination points in the region and allocated points in the selection process to any project located within a half mile radius.*

Each of these factors was included in the MPO's project selection criteria scorecard and project prioritization process. Further discussion on this topic is in Chapter 9, Project Selection & Projects. The *Forward 45* MTP identifies policies, programs, and projects for each mode of transportation that will be necessary to meet the region's transportation needs through year 2045. It is the guide for major transportation improvements and investments in the Midland-Odessa region over the 25-year period. As part of the MTP development process, current and future regional issues as well as existing transportation

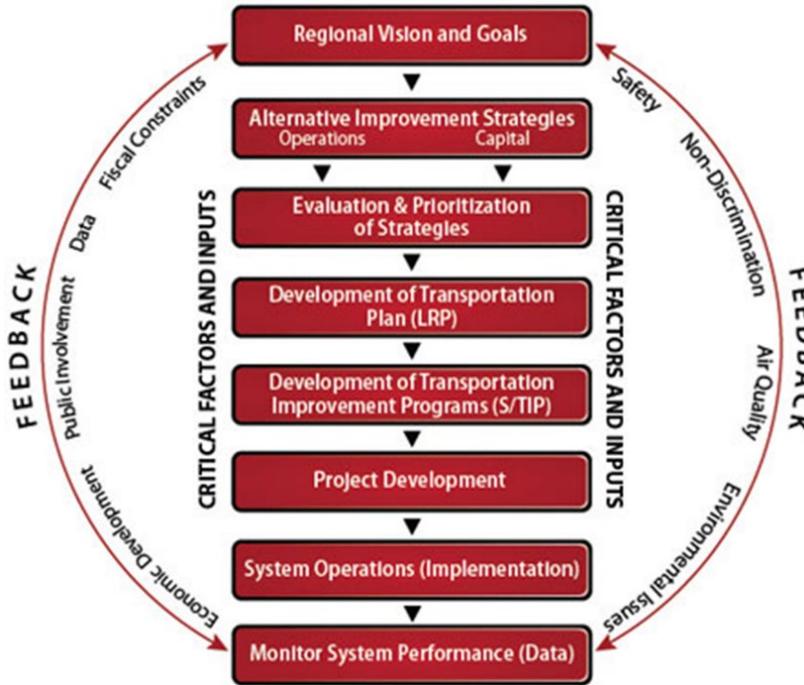
conditions were analyzed to prioritize future transportation programs and projects. Moreover, available financial resources and funds have also been identified to implement the programs and projects in the MTP. The plan must be a fiscally constrained document, meaning that funding for a project must be reasonably assured to be available prior to it being listed as a priority project in the MTP. In addition to identifying a list of fiscally constrained projects, the MTP update will also identify a list of unfunded transportation needs which may become priority projects depending on available funding. Projects in the list are considered illustrative.

The steps in the planning process include:

1. Monitoring existing conditions;
2. Forecasting future population and employment growth;
3. Assessing projected land uses in the region and identifying major growth corridors;
4. Identifying problems and needs and analyzing, through detailed planning studies, various transportation improvements;
5. Developing alternative capital and operating strategies; and
6. Developing a financial plan that covers operating costs, maintenance of the system, system preservation costs and new capital investments.
7. Post project monitoring to determine effectiveness of investment decisions.



Figure 1.2 Metropolitan Transportation Planning Process



### 1.4 Statewide Planning and Programming

TxDOT is responsible for planning, designing, building, operating, and maintaining the state’s transportation system, in cooperation with local and regional entities. TxDOT is governed by the Texas Transportation Commission, which is a five-member commission appointed by the governor with the advice and consent of the Texas Senate. TxDOT’s Odessa District works in cooperation with Permian Basin MPO to carry out transportation planning tasks and activities in the Midland Odessa MAB to ensure compliance with federal and state laws and regulations. In addition, it oversees the implementation of federal and state funded transportation projects in the Midland Odessa regional transportation system. These include project construction letting and inspection, environmental review, preparation of schematics and plans.

### 1.4.1 Texas Transportation Plan 2050 - Metropolitan and Rural Long-Range Planning; Statewide Transportation Improvement Program

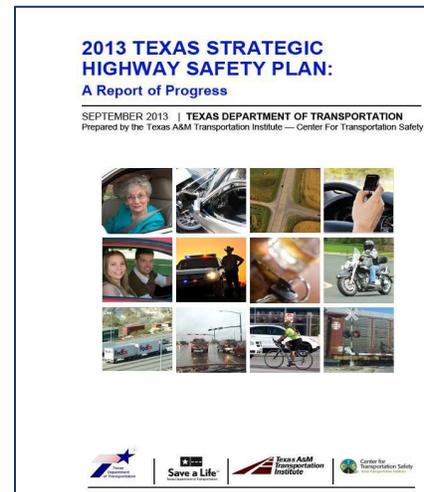
TxDOT is currently updating its long-range multimodal statewide transportation plan. Public meetings began in March 2019 and were continued in the Fall of 2019 and beyond.

The Texas Transportation Plan (TTP 2050) will be the most recent update to the state’s long-range transportation plan. The TTP will set the direction for the future of Texas’ multimodal transportation system by informing investment strategies tailored to make progress towards TxDOT’s performance goals and objectives. TTP 2050 will provide an objective and transparent decision-making framework to prioritize multimodal needs and align resources to achieve the most beneficial performance outcomes to meet long-term goals and objectives in the urban and rural areas.

The FAST Act and the IIJA Act contain several requirements related to both metropolitan and rural planning within the state. The Statewide Transportation Improvement Program (STIP) incorporates metropolitan and rural area Transportation Improvement Programs (TIPs) into the 2019-2022 Statewide Transportation Improvement Program (STIP) as required under Title 23, U.S.C., Section 135 - Statewide Transportation Planning. The Permian Basin Policy Board approves a Transportation Improvement Program (TIP) every two years. Once the Permian Basin MPO TIP is approved, the document becomes part of the STIP to be approved by the Texas Transportation Commission to reflect local and statewide transportation projects in urban settings and rural areas within a four-year time frame. To be included in the TIP, or the STIP, a project must have identified funding and be ready to let in the last two years of the four-year period. TIP amendments may occur during the four-year time frame should additional funding become available for other timing related reasons.

#### Statewide Transportation Improvement Program (STIP)

The Statewide Transportation Improvement Program (STIP) is Texas’s federally required transportation improvement program that identifies transit and highway construction and maintenance projects that are programmed to use federal funding, or for which federal approval will be required. The federal requirement for updating the STIP is four years; however, TxDOT elects to update the STIP every two years. The STIP includes all federally funded and regionally significant transportation projects, multimodal projects (highway, passenger rail, freight, public transit, bicycle, and pedestrian) and projects on roadways in Texas National Parks and National Forests. The STIP must also include all projects in a Metropolitan Planning Organization’s (MPO) Transportation Improvement Plan (TIP) as well as projects in non-MPO areas.



#### Texas Strategic Highway Safety Plan (SHSP)

In 2005, Section 1401 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) required each state to develop and implement a Strategic Highway Safety Plan (SHSP).

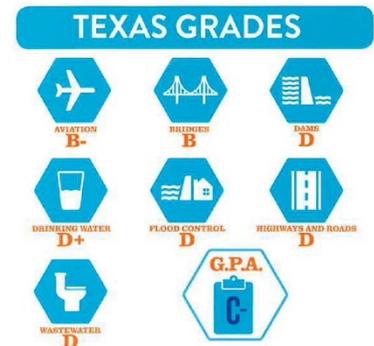
The purpose of the SHSP is to identify key safety needs and guide investment decisions to achieve significant reductions in highway fatalities and serious injuries on all public roads. SAFETEA-LU required that each state have a SHSP signed and in place by October 1, 2007, in order to receive a fully apportioned share of federally allocated Highway Safety Improvement Program (HSIP) funds. This program was continued under Map-21 and the FAST Act.

### Report on Texas Bridges

This report describes Texas publicly owned vehicular bridges and their condition based on information in the TxDOT Bridge Inspection Database.



It describes bridges categorized by location either on or off the state highway system. It also describes the condition of Texas bridges in terms of sufficiency: “sufficient” bridges (bridges in good or better condition), structurally deficient bridges, functionally obsolete bridges, and sub-standard-for-load-only bridges. The report tracks the progress toward TxDOT’s goal to improve Texas bridges by the end of FY 2023.



### Tall City Tomorrow and Envision Odessa Comprehensive Plans

The Tall City Tomorrow and the Envision Odessa Comprehensive Plans are long-term planning tools for the future of both cities as they develop and grow. This vision, created with input from the public, provides community leaders with the tools necessary to make sound decisions based on the aspirations of residents and community leaders. Both were adopted in 2016 by the City Councils.

### 1.4.2 10-Year Plan HB 20

HB 20 was approved by the 84th Texas Legislature in June 2015 and relates to the operations and transportation planning and expenditures by the Texas Department of Transportation and planning organizations, including the Permian Basin MPO. The Texas Transportation Commission, TxDOT and MPOs. Each planning organization must develop a 10-year transportation plan for the use of the funding allocated to the region. TxDOT assists the planning organizations by providing information requested by the MPO. The first four years of the plan are developed to meet the transportation improvement plan requirements of 23 U.S.C., where applicable. In addition to the 10-year planning requirement, HB 20 also requires TxDOT and MPOs to develop and implement a performance-based planning and programming process. The process involves a project scoring and selection exercise that requires the MPO to meet FAST Act and HB 20 requirements. The project selection criteria, scoring and selection are further discussed in Chapter 9.

## 1.5 Stakeholder Plans

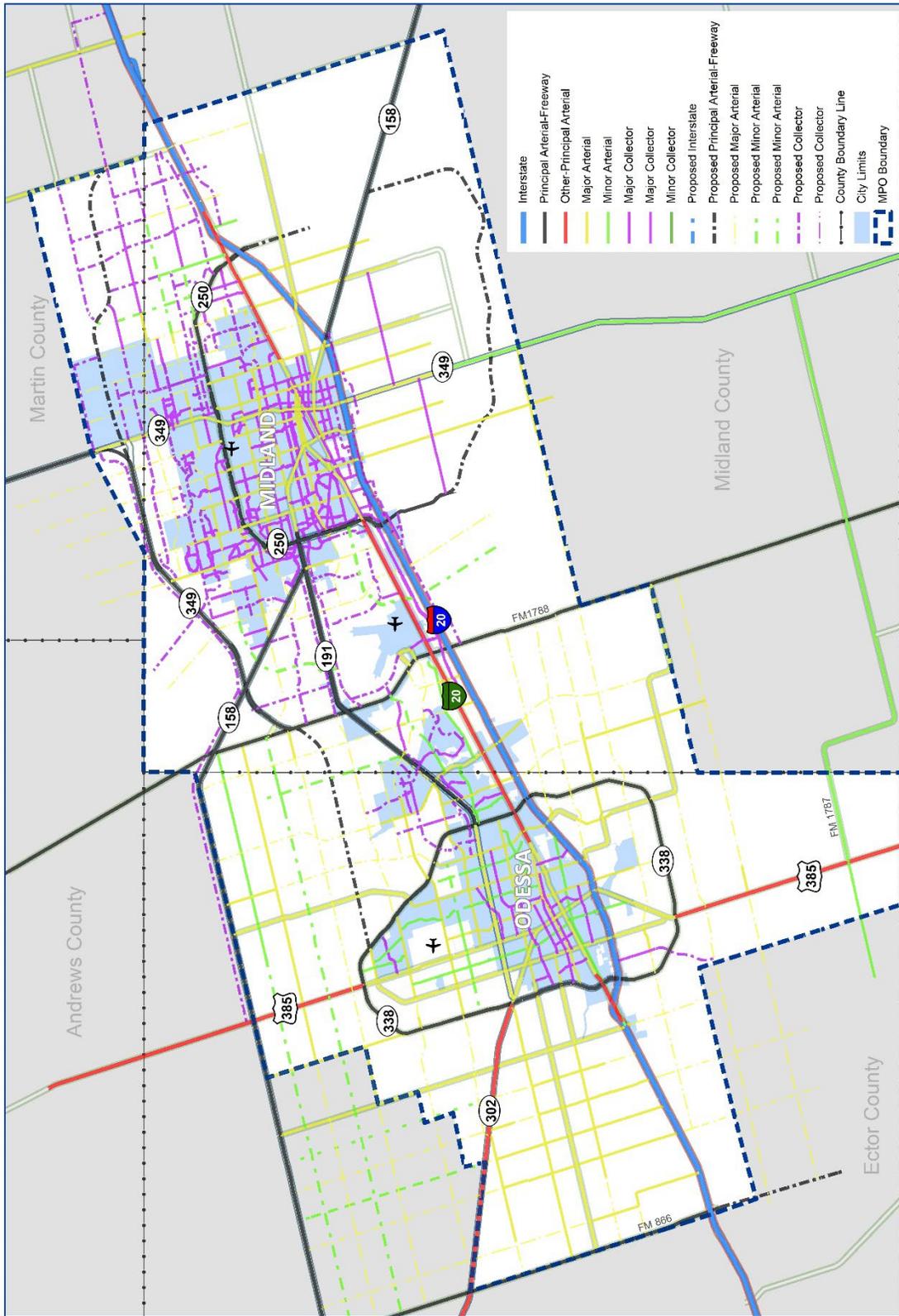
### 1.5.1 Local Governments – City of Midland and Odessa, Midland, Ector and Martin Counties

The Permian Basin MPO staff has a long history of working with local government staff on the Technical Advisory Committee and in other professional meeting settings. MPO staff have been given the opportunity to review local government Comprehensive Plans, bicycle, pedestrian and trail plans, downtown revitalization plans, park plans, as well as large area preliminary plats scheduled for consideration by the city's Planning and Zoning Commissions. In each of these examples, highway and other transportation modal needs are identified and alternative ideas discussed. These highway and transit needs were comprised primarily of efficiency, safety and connectivity in the surface system and access to planned new developments.

Of importance within the region is a three-county thoroughfare plan that the MPO's Policy Board concurred with in October 2018. This document was recommended by the TAC following extensive review of the existing and planned transportation network to provide a working tool for each entity to work toward minimum standards and consistency where arterial streets and other corridors are planned for off-system improvements. It is important for the MPO and its member entities to take steps to preserve right-of-way and promote continuity with road standards and alignments. The three-county thoroughfare plan was a coordinated and cooperative six-month effort between representatives from the three counties, two cities and the Permian Basin MPO. Map 1.2 shows the three-county thoroughfare plan.



Map 1.2 Three-County Thoroughfare Plan



Three County Thoroughfare Plan



This map was developed by Permian Basin MPO for the purpose of aiding in regional transportation planning decisions and is not warranted for any other use. No warranty is made by Permian Basin MPO regarding its accuracy or completeness.

