amarillo

metropolitan transportation plan

2020-2045

AMARILLO METROPOLITAN

TRANSPORTATION PLAN

2020-2045

AMARILLO URBAN
TRANSPORTATION STUDY

AMARILLO METROPOLITAN TRANSPORTATION PLAN

2020-2045

Prepared By:

AMARILLO METROPOLITAN PLANNING ORGANIZATION

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CITY OF AMARILLO
TEXAS DEPARTMENT OF TRANSPORTATION
POTTER COUNTY
RANDALL COUNTY
CITY OF CANYON

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AMARILLO METROPOLITAN PLANNING ORGANIZATION

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF MAPS

REVISIONS

SECTION 1.0
INTRODUCTION

Back to Table of Contents

1.0 INTRODUCTION

The Metropolitan Transportation Plan (MTP) is a document that covers a 25 year planning horizon. The plan provides a multi-modal approach to the future transportation needs, of not only the City of Amarillo, but for the entire metropolitan area. The purpose of the plan is to make certain that adequate transportation facilities are planned for the future growth of the metropolitan area. Transportation decisions need to be made using a comprehensive planning process that includes the public and considers land use, development, safety, and security. The plan looks at roadway, transit, bicycle, pedestrian, air, and rail facilities. It also addresses freight movement and congestion management strategies.

The MTP is a federally required document that has been prepared by the Amarillo Metropolitan Planning Organization in accordance with the requirements specified in the **Fixing America's Surface Transportation Act** (FAST Act) of 2015. The plan is designed to be a flexible guide in directing the local transportation needs. As required by Federal Law, the MTP will be updated a minimum of every five years to insure the goals and objectives of the plan are still applicable to the transportation needs of the study area.

BACKGROUND

Legal Basis for Transportation Planning

In 1962, Congress passed the Federal Highway Act that addressed the need for transportation planning in urbanized areas. The Federal Highway Act states that after July 1, 1965, federal funds cannot be used for highway construction in any city with a population over 50,000 unless the expenditures are in accordance with the findings of a comprehensive, cooperative and continuing transportation study. In an effort to comply with this, the Amarillo Urban Transportation Study (AUTS) area was formed. The founding members of this study included the City of Amarillo, both Potter and Randall Counties, and the former Texas Highway Department. Today, the AUTS, now better known as the Amarillo Metropolitan Planning Area (Planning Area) includes City of Amarillo, City of Canyon, the Village of Lake Tanglewood, the Village of Timbercreek Canyon, the Village of Palisades and unincorporated portions of Potter and Randall Counties.

Since the Federal Highway Act of 1962, the federal government has enacted several subsequent actions. All of these actions have been in an effort to increase the effectiveness of the transportation planning process. Some of the most significant actions that address the local level planning were included in the 1975 Joint Regulations on Urban Transportation Planning. This joint act between the Federal Highway Administration (FHWA) and the Urban Mass Transit Authority (UMTA) required, as a

condition for receiving federal assistance, the designation of a Metropolitan Planning Organization (MPO) in each urban area by the Governor of the State. This designation requires the MPO to carry out transportation functions in conjunction with other governmental bodies in a prescribed planning area.

History of Transportation Planning in Amarillo

The Governor of the State of Texas has designated the City of Amarillo as the fiscal agent for the Amarillo Metropolitan Planning Organization (MPO). Acting through its Transportation Policy Committee, the MPO, in cooperation with the Texas Department of Transportation (TxDOT), the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), the Panhandle Regional Planning Commission, Potter and Randall Counties, the City of Canyon and the City of Amarillo, administers the transportation planning process in the Amarillo urbanized area. This designation was renewed by contract with TxDOT in September 2018. The contract reflects changes in the planning process brought about by the **FAST Act** and previous federal transportation legislation, such as ISTEA, TEA-21, SAFETEA-LU, and MAP-21.

The Amarillo FY 2020–2045 Metropolitan Transportation Plan was developed in accordance with regulations set forth in the FAST Act, adopted December 4, 2015. The MPO is responsible, along with the State of Texas, for carrying out the provisions of the FAST Act under Section 1101; MAP–21 under Sections 1101 and 1105; SAFETEA-LU under Sections 1107 and 6001; ISTEA & TEA-21, under Title 23, United States Code, Section 134 (The Urban Transportation Planning Process), and further regulated by Title 23 Code of Federal Regulations 420 and 450.

The Planning Area

The transportation planning process in the Planning Area is limited to the boundaries illustrated by Map 1.1. The boundary includes the City of Amarillo, City of Canyon, the Village of Lake Tanglewood, the Village of Timbercreek Canyon, the Village of Palisades and unincorporated portions of Potter and Randall Counties. It corresponds to that area of the region that is likely to become urbanized in the next 20 years. These boundaries also correspond to limits shown in the Travel Demand Model prepared by the TxDOT.

Transportation Planning Process

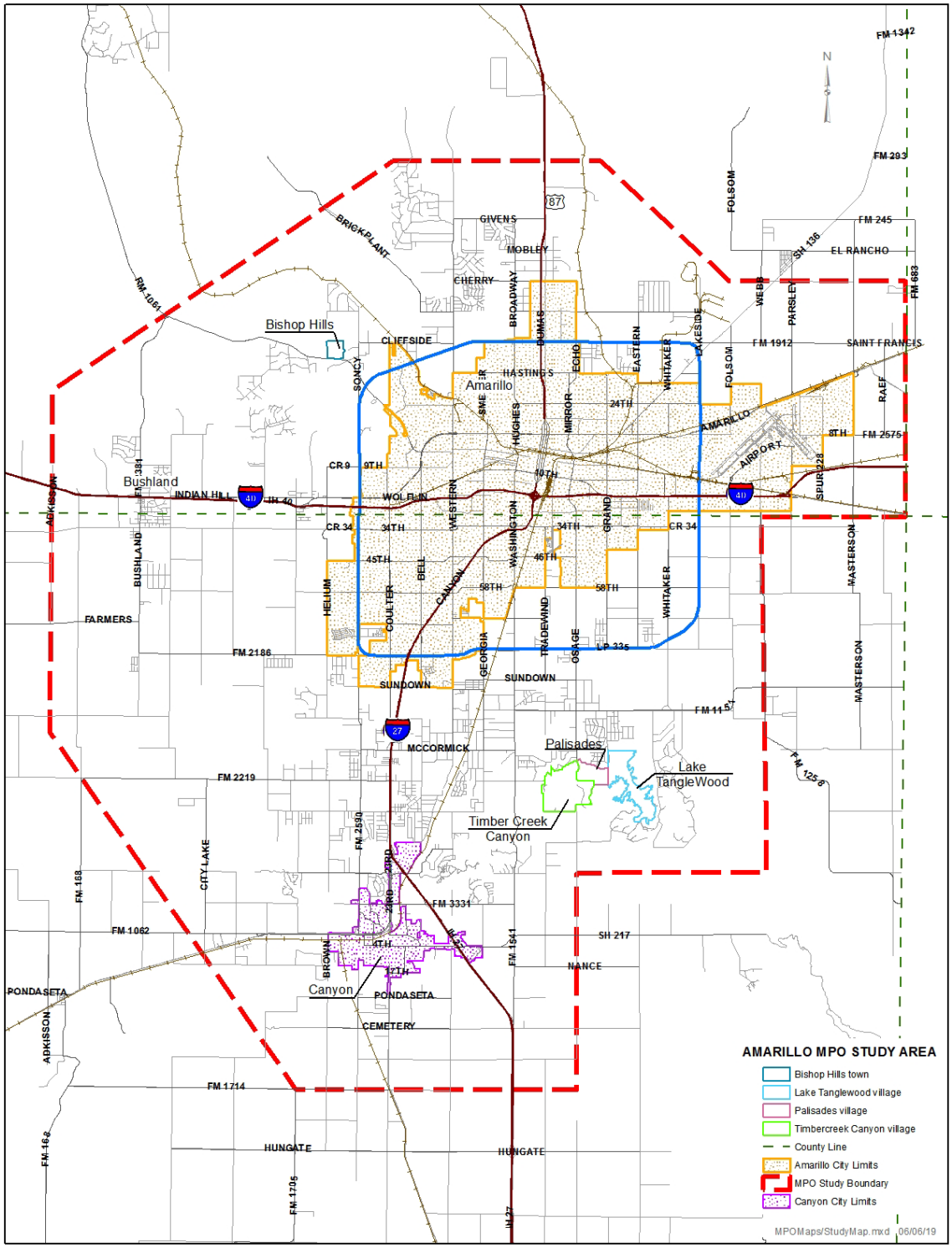
Transportation planning is a multi-disciplinary process that involves developing and evaluating transportation plans and improvement programs. Transportation plans are created to provide for the anticipated needs of the community. In order to meet those needs the planning process must be flexible and continuously monitored to accommodate the changes that may occur in land use, economic conditions or other factors that may influence travel patterns.

As part of the transportation planning process, the MPO is responsible for preparing the Transportation Improvement Program (TIP). The TIP is a program of projects that are financially constrained by several different categories of funding sources. The TIP is based on a four-year timetable and is updated every two years. Projects included in the TIP are programmed to begin construction during a prescribed year. The criteria used

to evaluate projects included in the TIP depend on the type of project and how far the project goes toward meeting the goals of the MPO. The items below include the major elements that are considered in selecting projects:

- Safety
- Preservation of the Capital Investment
- Congestion Relief
- Environmental Protection and Enhancement
- Economic Development
- Aesthetics
- Resiliency

Map 1.1
Amarillo MPO Planning Area



SECTION 2.0
PLANNING ELEMENTS

Back to Table of Contents

2.0 PLANNING ELEMENTS

Introduction

Federal regulation requires that long-range transportation plans of metropolitan areas be based on a twenty-year time horizon. The plans are required to identify short- and long-range strategies and actions for implementation of the objectives. Near term transportation demand and congestion management techniques must also be addressed. The plan is required to address different modes of transportation and must be financially constrained. A financial plan must be included to provide a reasonable estimation of funding sources for the life of the plan. Previous federal law known as MAP-21 required 8 planning factors to be addressed in planning documents. The latest federal act known as the FAST Act added two additional planning factors to be addressed. The planning factors are as follows:

Key Factors of MAP – 21:

- **Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency:** The short- and long-range planning process and projects work to support the economic vitality of the MPO area by improving transportation infrastructure. Transportation projects within the area will enhance accessibility and safety to ensure efficient movement of people and goods.
- **Increase the safety of the transportation system for all motorized and non-motorized users:** The MPO planning process is consistent with TxDOT's Strategic Highway Safety Plan (SHSP) and uses the Texas highway safety planning process as a foundation upon which to identify the goals, strategies, performance measures, and objectives for the MTP planning process.
- **Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users:** The Potter & Randall County Local Emergency Planning Committee has developed plans for addressing all types of emergencies and security for the personal security of the residents of Potter and Randall Counties. These plans include disasters caused by weather or other events. Designated hazardous material routes were developed and approved by the State of Texas and are a part of this plan. The Randall County Judge, a MPO Transportation Policy Committee member, serves on the Potter & Randall County Local Emergency Planning Committee.
    - Amarillo City Transit has had an adopted Safety, Security, and Emergency Preparedness Plan since 2005. The plan includes a description of the transit system; a description of the management of the security plan, including specific roles and responsibilities; threat and vulnerability identifications and assessments; and an

annual program of work. The plan is updated every three years, during FTA's Triennial Review of Amarillo City Transit. The most recent update was in 2017; the next update will be in 2020. This review process allows the Emergency Preparedness Plan to address all federal requirements.

- **Increase accessibility and mobility of people and freight:** The MPO has a schedule for conducting traffic counts to monitor the traffic patterns in the area. Using the results, the congested hot spots and problem areas are identified and recommendations are presented for transportation improvements. The City of Amarillo has synchronized signals at over 70% of the signalized intersections to improve the free flow of traffic. TxDOT and the City cooperate to combine both highway management and arterial traffic signal timing for response to incidents and congestion. A Traffic Management Center operated by TxDOT allows faster response to congestion, collision, or weather related incidents. The MPO continues to explore Access Management Improvements to minimize congestion.
    - The roads and streets in Potter and Randall Counties and the City of Amarillo are laid out on a grid system and continue to develop in square mile sections. This type of development has provided a smooth transition from the rural county roads to urban city streets. As development occurs along the perimeter of the City, the City of Amarillo Paving Policy, adopted by resolution on March 27, 1984, requires the developer to construct paving improvements located adjacent to or within the new subdivision. These thoroughfares continue to provide continuous links between the urban and rural areas.
    - The MPO is aware that some transit needs in the city have not been met as desired. Amarillo City Transit has been forced to limit service due to limited funding for operations. This has caused the City of Amarillo to look at alternatives. Amarillo City Transit has recently made changes to their routes to address some of these limitations. These changes are based on a study that was conducted in 2017. Alternative measures will be implemented as funding resources are identified. Solutions will be developed to allow local transit services to expand or decrease headway times as the city continues to grow. Development will be ongoing as funds become available.
    - Freight mobility is also important for the MPO area. ITS projects to promote signalized intersections to eliminate congestion and improve truck freight mobility are part of planned MTP projects.
- **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:** An effective transportation system provides the basis for activities in parks, recreation areas, and

historic sites. The MPO has always promoted accessibility to these areas and will continue to look at addressing these needs through the identification of projects that will best serve these facilities. The MPO has identified and contacted the various environmental resource agencies and will provide information as necessary to include them in the planning process. The MPO is presently in attainment for all air quality categories. If any of the MPO area is classified as non-attainment in the future, the MTP will be revised to include projects that will reduce vehicle emissions. The MPO uses GIS tools, including those developed by the Environmental Protection Agency Region 6 and other agencies. Tools, such as GIS-ST and NEPAssist, are used to evaluate environmental mitigation activities within the MPO planning boundary.

- **Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight:** The MPO supports the improvement of transportation services for the elderly, people with disabilities and others having no access to personal private transportation or who are otherwise unable to drive. Projects included in this MTP also incorporate bicycle and pedestrian facilities into the design of roadways as appropriate and seek to meet or exceed minimum standards of accessibility. The projects contained within the MTP consider innovative land development patterns and site designs to prevent additional congestion and improve accessibility. Projects that protect and enhance the environment, promote energy conservation, improve the quality of life are paramount. This plan seeks to ensure that appropriate types, connections, and levels of freight transportation service are provided to the entire region. Those that promote consistency between transportation improvements and planned growth and economic development patterns are considered vital.
- **Promote efficient system management and operation:** There are many projects that have taken place and will continue to take place in order to reduce the number and length of stop delays associated with vehicular traffic. Traffic light synchronization systems are in place to reduce vehicle stops and delays leading to savings in fuel consumption and lost time. The MPO will implement a Congestion Management Process upon becoming a TMA. The implementation of a Congestion Management System aids in energy conservation. The Comprehensive Land Use Plan and policy decisions made by the City of Amarillo, affects short- and long-range transportation plans. The ideal preservation of rights-of-way for the local governing agencies is securing the right-of-way through dedication. The City of Amarillo, through the City's Code of Ordinances, requires the dedication of land at the time of platting. This aids the determination of rights-of-way necessary for future transportation corridors. Potter and Randall Counties also receive right-of-way through dedication of land. In addition to the traffic volume data collected by TxDOT and the City of Amarillo, the City collects traffic volume data on

approximately 180 intersections and 350 “1/2 mile” counts in the metropolitan area. The Amarillo MPO and the City Of Amarillo are regional stakeholders along with TxDOT in the Amarillo Regional ITS Architecture and Deployment Plan. This system provides transportation and emergency management services through the use of resources to maximize safety and mobility to the public consists of being able to observe ‘real time’ traffic and includes a highway management system. Amarillo Regional ITS has changeable dynamic message signing and incident management cameras.

- **Emphasize the preservation of the existing transportation system:** Improvement projects to rehabilitate the existing transportation system are one of the MPO’s top priorities. The existing transportation infrastructure is of utmost importance in order to continue providing a safe and reliable system. One of the MPO objectives is to secure funding to continue the maintenance and operational enhancements to the existing street network. Another goal is operational improvements that will increase traffic flow and capacities.

Key Factors of the FAST Act:

- **Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation:** The MPO has GIS mapping capabilities. This helps identify flood plains and playa lakes in the vicinity of future projects. TxDOT handles the storm-water runoff on the on-system roads. All projects are compliant with the TxDOT design manual or the local public agency design guides.
- **Enhance travel and tourism:** The MPO will add links to our website to include upcoming tourist events and also other relevant maps. We will reach out to colleges and universities for events that they may be conducting to aid in the movement of traffic. The MPO is also working with Amarillo City Transit on having links to their website as they roll out changes to their fixed route service.

Environmental Mitigation and Consultation

The requirements of MAP–21 were written to provide a more consistent consideration of environmental issues for transportation projects, from planning initiatives through project development. The provisions in the FAST Act look to incorporate the changes aimed at project delivery and promote innovation. These changes will improve innovation and efficiency in the development of projects, through the planning and environmental review process, to project delivery. Typically, an MTP or other regional long-range plans do not involve specific federal approvals or actions that are likely to cause a significant environmental impact. As such, an MTP doesn’t need a NEPA Environmental Impact Statement (EIS) to meet these requirements. The FAST Act does, however build on MAP-21, which required Metropolitan Transportation Plans, to discuss potential environmental mitigation activities, to be developed in consultation

with federal, state, and tribal, wildlife, land management, and regulatory agencies (resource agencies). Those activities include those aspects of 23 CFR 450.104, which states, in part:

- Serve to avoid, minimize, or compensate for impacts associated with implementation of the transportation plan;
- Consider neighborhoods, homes, businesses, cultural resources, parks, recreation areas, wetlands, water sources, forests, agriculture, etc.;
- Regional scope may not necessarily address individual projects.

To assist in the NEPA process, Region 6 EPA has an assessment tool to systematically consider single and cumulative environmental impacts. The Region 6 EPA GIS Screening Tools, such as NEPAssist are designed to facilitate a better understanding of environmental effects and to allow the EPA to share technical and regulatory data with industry, the public, and other stakeholders. As required by TEA-21, E.O. 13274, and Section 6001 of MAP–21 related to linking planning and NEPA, TxDOT is using NEPAssist as an environmental streamlining tool on transportation projects.

The Amarillo MPO continues to seek opportunities to join in these discussions and make use of the NEPAssist tools in an effort to determine the potential impact that activities outlined in the MTP may have on other regional planning efforts. While consultation with our resource agencies occurs as part of the outreach process, the discussion has been enhanced. In compliance with 23 CFR 450.324 paragraphs (f) (7) and (g), the Amarillo MPO and its member entities support a proactive approach toward land use management, environmental protection, and historic preservation. The Amarillo MPO continues to cooperate and consult with participating entities and TxDOT to achieve a responsible long range transportation plan that addresses land use management, natural resources, environmental protection, conservation, and historic preservation. Resource agencies include the City of Amarillo, the EPA & TCEQ, the Texas State Historical Commission, and Texas Parks & Wildlife, among others. This MTP fully supports the Texas Transportation Plan 2050 initiatives and has been developed in partnership with the State of Texas.

The collaboration and consultation with existing groups and resource agencies throughout the planning process, along with the study of potential impacts of the MTP, will allow environmentally important regional planning efforts to be addressed.

Endangered Species

One of the environmental concerns when dealing with transportation projects is the wildlife encountered. Wildlife can be affected in a variety of ways including construction, increased traffic or increased stormwater runoff from paved surfaces. The United States Department of the Interior, United States Fish and Wildlife Services (USFWS), and the Texas Parks and Wildlife Department (TPWD) maintains records indicating the species of wildlife endangered or threatened in Potter and Randall Counties. These lists are found below in Table 2.1.

TABLE 2.1
Endangered and Threatened Species

Group	Common Name	Scientific Name	Federal List	State List
Birds	Piping Plover	Charadrius melodus	Threatened	

Piping plovers use wide, flat, open, sandy beaches with very little grass or other vegetation. Nesting territories often include small creeks or wetlands.

Group	Common Name	Scientific Name	Federal List	State List
Birds	Interior Least tern	Sterna antillarum	Endangered	Endangered

The subspecies is listed only when inland (more than 50 miles from a coastline); nests along sand and gravel bars within braided streams, rivers; also know to nest on man-made structures (inland beaches, wastewater treatment plants, gravel

Group	Common Name	Scientific Name	Federal List	State List
Birds	Red knot	Calidris canutus rufa	Threatened	

Red knots migrate long distances in flocks northward through the contiguous United States mainly April-June, southward July-October. A small plump-bodied, short-necked shorebird that in breeding plumage, typically held from May through August, is a distinctive and unique pottery orange color. Its bill is dark, straight and, relative to other shorebirds, short-to-medium in length. After molting in late summer, this species is in a drab gray-and-white non-breeding plumage, typically held from September through April. In the non-breeding plumage, the knot might be confused with the omnipresent Sanderling. During this plumage, look for the knot's prominent pale eyebrow and whitish flanks with dark barring. The Red Knot prefers the shoreline of coast and bays and also uses mudflats during rare inland encounters. Primary prey items include coquina clam (Donax spp.) on beaches and dwarf surf clam (Mulinia lateralis) in bays, at least in the Laguna Madre. Wintering Range includes- Aransas, Brazoria, Calhoun, Cameron, Chambers, Galveston, Jefferson, Kennedy, Kleberg, Matagorda, Nueces, San Patricio, and Willacy. Habitat: Primarily seacoasts on tidal flats and beaches, herbaceous wetland, and Tidal flat/shore.

Group	Common Name	Scientific Name	Federal List	State List
Birds	American Peregrine Falcon	Falco peregrines anatum		Threatened

year-round resident and local breeder in west Texas, nests in tall cliff eyries; also, migrant across state from more northern breeding areas in US and Canada, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.

Group	Common Name	Scientific Name	Federal List	State List
Birds	Bald Eagle	Haliaeetus leucocephalus		Threatened

found primarily near rivers and large lakes; nests in tall trees or on cliffs near water; communally roosts, especially in winter; hunts live prey, scavenges, and pirates food from other birds

Group	Common Name	Scientific Name	Federal List	State List
Birds	Peregrine Falcon	Flaco peregrinus		Threatened

both subspecies migrate across the state from more northern breeding areas in US and Canada to winter along coast and farther south; subspecies (F. p. anatum) is also a resident breeder in west Texas; the two subspecies' listing statuses differ, F.p. tundrius is no longer listed in Texas; but because the subspecies are not easily distinguishable at a distance, reference is generally made only to the species level; see subspecies for habitat.

Group	Common Name	Scientific Name	Federal List	State List
Birds	Whooping Crane	Grus americana	Endangered	Endangered

potential migrant via plains throughout most of state to coast; winters in coastal marshes of Aransas,Calhoun, and Refugio counties

Group	Common Name	Scientific Name	Federal List	State List
Mammals	Black Bear	Ursus americanus		Threatened

bottomland hardwoods and large tracts of inaccessible forested areas

Group	Common Name	Scientific Name	Federal List	State List
Mammals	Black-footed ferret	Mustela nigripes	Threatened	

extirpated; inhabited prairie dog towns in the general area

Group	Common Name	Scientific Name	Federal List	State List
Mammals	Grey Wolf	Canis Lupus	Threatened	Threatened

extirpated; formerly known throughout the western two-thirds of the state in forests, brushlands, or grasslands

Group	Common Name	Scientific Name	Federal List	State List
Mammals	Palo Duro mouse	Peromyscus truei comcanche		Threatened

rocky, juniper-mesquite-covered slopes of steep-walled canyons of the eastern edge of the Llano Estacado; juniper woodlands in canyon country of the panhandle; primarily nocturnal

Group	Common Name	Scientific Name	Federal List	State List
Reptiles	Texas Horned lizard	Phrynosoma cornutum		Threatened
open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive; breeds March-September				

Group	Common Name	Scientific Name	Federal List	State List
Fish	Arkansas River shiner	Notropis girardi	Threatened	Threatened
typically in turbid waters of broad shallow channels of main streams, over mostly silt and shifting sand bottom				

Some of the potential impacts to wildlife are removal or fragmentation of endangered species habitat, disturbance of endangered species nesting regimes, and disturbance of habitats nests for wildlife and migratory birds. Some of the potential mitigation activities would be to use selective cutting and clearing, bridge sensitive areas, replace or restore natural areas using native species to the individual regions, avoid nesting season, compensate for impacts through on– and off-site mitigation such as a habitat conservation plan or wildlife bridges/crossings/tunnels or creating habitat corridors.

Planning and Environmental Linkages (PEL)

The "Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users" (SAFETEA-LU) opened the door to Federal regulations on linking of statewide and metropolitan transportation planning, and the NEPA processes. The FAST Act furthered this connection with reducing requirements to encourage greater use of the collaborative Planning and Environmental Linkages (PEL) process. PEL seeks to streamline the project development and environmental review processes by improving coordination among stakeholders. PEL encourages agencies to adopt an integrated approach, which addresses transportation and environmental goals while considering quality of life.

PEL emphasizes the linking of planning and NEPA activities — specifically, solidifying the connection between systems-level planning and project-level decision making. The purpose of PEL is to coordinate planning with the NEPA process in an attempt to streamline project delivery and improve planning- and project-level decision making.

PEL enables agencies to better communicate and coordinate earlier in the decision making process. The approach provides a broader perspective that reaches beyond NEPA requirements to include consultation with resource agencies and others concerning mitigation, conservation plans, regional habitat mapping, and more.

PEL's most pointed goal is to complete certain activities in the planning process by encouraging planning and environmental staff at transportation and resource agencies

to share tools and improve coordination. The approach minimizes duplication of efforts and reduces delays in transportation improvements, and can make the entire life cycle of a transportation project more seamless and sensitive to environmental resources.

The PEL project development process is documented through preparation of EISs or environmental assessments. Analytical tools such as checklists, databases, and GIS can provide planners, environmentalists, and engineers with more detailed information about proposed projects and their surrounding areas. These tools can facilitate data sharing within organizations and among agencies, enhance understanding of projects, minimize miscommunication between partners, and support more informed decision making. The best tools support access by multiple agencies and their departments so all stakeholders have common and current information.

Title VI and Environmental Justice

A 1994 Presidential Executive Order 12898 directed every federally funded agency to make environmental justice part of its mission by identifying and addressing the effects of all programs, policies, and activities on "minority populations and low-income populations." The MPO's environmental justice initiatives accomplish this goal by involving the potentially effected public in developing transportation projects that fit within the community without sacrificing safety or mobility. In an effort to reaffirm its commitment to environmental justice principles and integrating them into its programs, the U.S. Department of Transportation (USDOT) revised its environmental justice strategy in 2012 through a memorandum of understanding on Environmental Justice. There are three fundamental environmental justice principles:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

The MPO serves as the primary forum where the public, local agencies, and TxDOT develop local transportation plans and programs that address the urban area's needs. The MPO helps local public officials understand how Title VI and environmental justice requirements improve planning and decision-making. The MPO continues to:

- enhance our capabilities to ensure that the short- and long-range transportation plans comply with Title VI.
- identify residential, employment, and transportation patterns of low-income and minority populations so that their needs can be identified and addressed and that the benefits and burdens of transportation investments are fairly distributed.
- evaluate and improve the public participation process to eliminate participation barriers and engage minority and low-income populations in transportation planning initiatives.

During the creation of this plan, consideration was taken to mindfully include interactions and communications with EJ areas. In an attempt to maximize participation, public meetings were scheduled at times and locations that worked best for the communities, with certain meetings being strategically located in close proximity to EJ neighborhoods for accessibility. The City of Amarillo follows a road overlay plan that focuses on overlaying a quarter section of the city each year for a four year full city rotation. This helps establish a unbiased plan for road rehab of the city.

Travel and Tourism

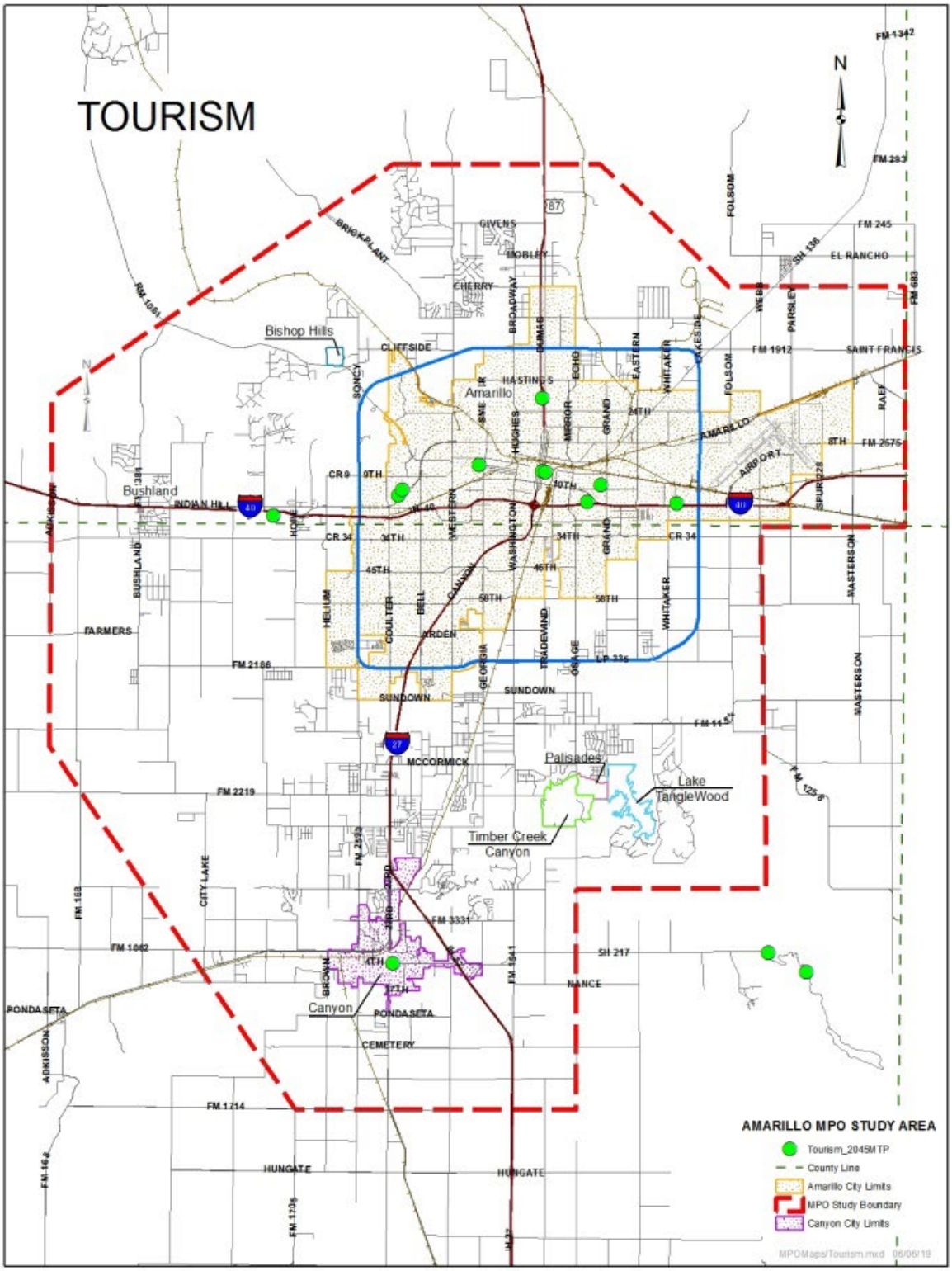
Amarillo has a strategic position in that it is at the intersection of the I-40 corridor and the Ports to Plains corridor. According to the Amarillo Chamber of Commerce, travel and tourism is one of the city's largest industries, serving nearly 2 million overnight visitors last year. The travel industry annually generates more than $700 million in direct spending to the local economy through hotels, meals, shopping and various other attractions. Links to external agencies can be found at the MPO's Link Page.

Some of the most popular tourist destinations in the Amarillo area are:

- Amarillo Botanical Gardens
- American Quarter Horse Museum
- Amarillo Civic Center
- Big Texan Restaurant
- Cadillac Ranch
- Don Harrington Discovery Center
- Globe-News Performing Arts Center
- Palo Duro Canyon State Park
- Panhandle Plains Historical Museum
- Route 66 Historic District
- "TEXAS" – musical outdoor drama
- Tri-State Fairgrounds
- Wonderland Amusement Park

Tourists visiting the Amarillo area will have limited options when it comes to travel in the area. The most common means of travel is by personal vehicle. However, there are some other ways to travel around the area such as Greyhound Bus Lines, Limousine services, Taxi service, Public Transit, Uber and walking.

Map 2.1
Travel and Tourism



Capital Investment

Federal statutes and regulations dictate that Metropolitan Transportation Plans focus on capital investments and other strategies to reduce the vulnerability of existing transportation infrastructure to natural disasters. Some common local disasters are listed below:

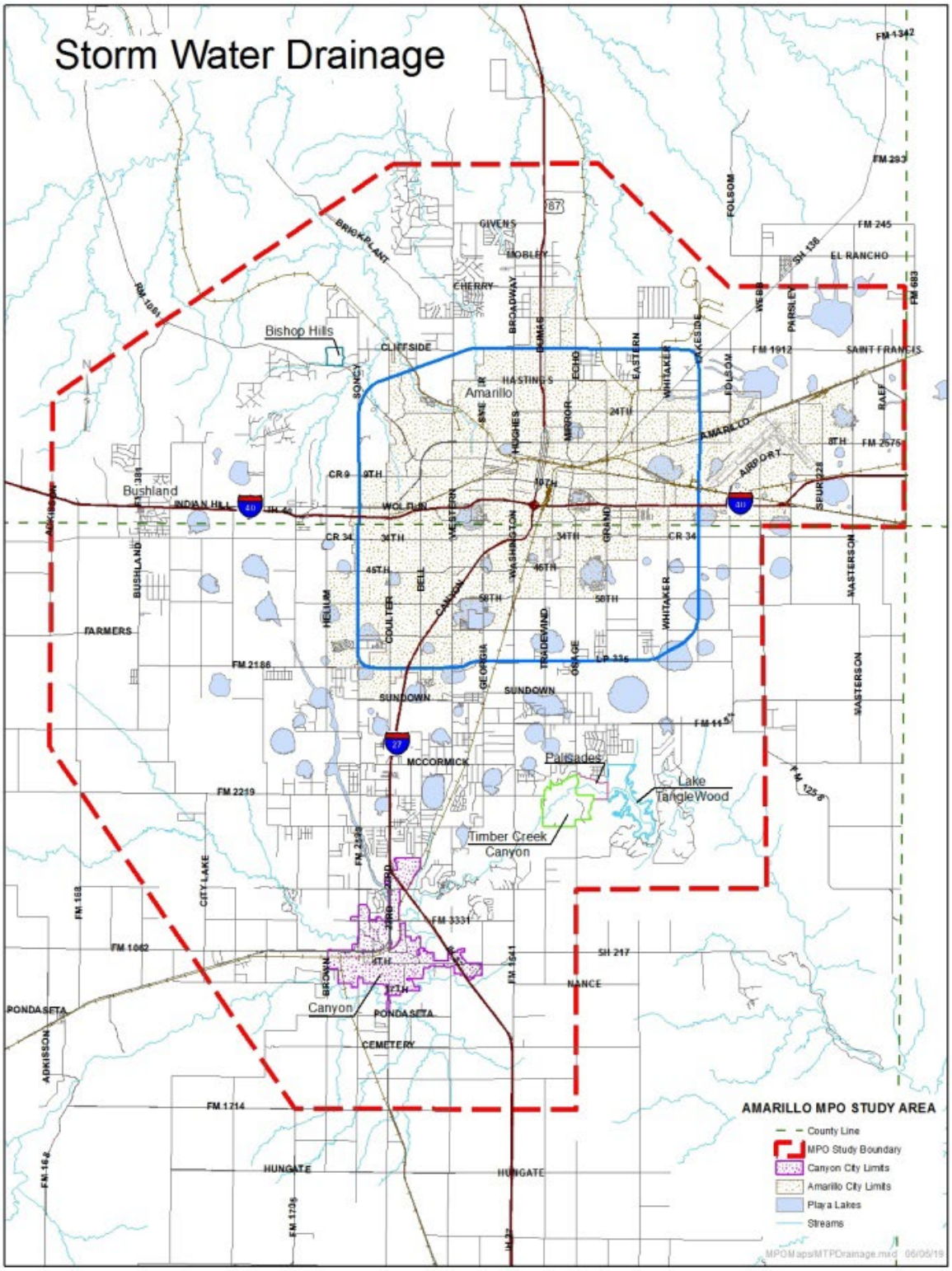
- Floods
- Extreme Heat
- Frozen Precipitation (Snow, Sleet, Rain)
- Hail
- Droughts
- Wildfires
- Tornados

The MPO must also consider projects and strategies to improve the resiliency and reliability of the transportation system as well as activities to reduce or mitigate stormwater runoff from transportation infrastructure.

Stormwater Drainage

The City of Amarillo is located in an area that has two different geographic features. The area mainly north of I-40 contains draws, creeks, and canyons. The area mainly south of I-40 contains many natural depressions. When these depressions fill with water they are referred to as playa lakes. Many of these lakes only contain water after it rains. This gives Amarillo two different types of drainage systems. The north area drains through the local streets and storm sewer systems into the creeks, which then ultimately drain to the Canadian River. The south area drainage runs primarily through the local streets and storm sewer systems into the playa lakes. The playa lakes then hold water until it evaporates or is pumped out. The city operates pumps in some of these lakes in order to manage the storm water storage. The pumps are used to move the water to other lakes where it is then allowed to evaporate or discharge into the local creeks. Projects in Amarillo are built to specifications found in the City of Amarillo's Stormwater Criteria Manual, and their Development Policy Manual. Projects built on TxDOT right-of-way must adhere to their Roadway Design Manual.

Map 2.2
Stormwater Drainage



Public Participation

Effective transportation planning must be responsive to the needs of the community and therefore effective public input is essential. The FAST Act requires the MPO to provide citizens, affected public agencies, freight transportation services, private providers of transportation, representatives of users of public transportation, the disabled community, users of pedestrian and bicycle facilities, and other interested parties with a reasonable opportunity to comment on the MTP, the TIP and other documents prepared by the MPO. FAST Act also requires the MPO to consult, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation concerning the development of long- and short- range transportation plans. The MPO maintains a website www.amarillompo.org that includes this MTP, the TIP, and other documents that the MPO produces.

The MPO Policy Committee adopted a FAST Act compliant Public Participation Plan on October 19, 2017, which encourages early and continuous public participation in the planning process. The Public Participation Plan can be found at: http://www.amarillompo.org. Communication is encouraged through the publication of public notices, agendas, and news releases. The MPO staff also seeks invitations from civic, social, educational, and business organizations to present information about the MPO planning process. The MPO has prepared literature to educate citizens and officials. Materials are available that discuss aspects of short- and long-range transportation planning, public participation, as well as information about local transportation initiatives.

As part of the public participation and interagency consultation efforts, the draft MTP was made available for review and comment to citizens, bicycle and pedestrian representatives, disabled representatives, federal, state, and local resource agencies, land use management, natural resource, environmental protection, and conservation, historic preservation agencies, in addition to transportation stakeholders with interest in the MPO planning area. The members of the MPO Technical Advisory Committee and the Policy Committee also reviewed the draft and public notices were released about the draft being placed on the MPO web page, in local libraries, and at the offices of the member agencies.

The MPO meets the requirements of the "adequate public notice of public involvement," by placing notices, calendar information, and press releases in the Amarillo Globe-News, the region's largest daily newspaper publication.

Public comments

Appendix C contains comments received during the public comment periods and public forums or hearings. Additionally copies of the notices of those public forums and hearing are included. Public meetings were held across the area. This includes Environmental Justice areas and the City of Canyon, which just recently was included in the planning boundary.

SECTION 3.0
TRENDS IN THE AMARILLO URBAN AREA

Back to Table of Contents

3.0 TRENDS IN THE AMARILLO URBAN AREA

Introduction

Planning for future transportation facilities requires evaluating many factors. Demographic, economic and travel trend data are valuable tools for forecasting transportation needs that may exist in the future. Evaluating historic trends and future projections can be helpful in planning the transportation system of the future. A growing population and economy indicates that there will be an increased demand on the transportation system. The following is an evaluation of the population, work force, and travel trends in the Amarillo Metropolitan Area.

Population Trends

The City of Amarillo has experienced varying growth rates over the past 100 years. Population growth has been recorded for all entities in the Amarillo area, except for Potter County. From 1960 to 1970 Potter County showed a marked population decline. This occurred primarily because of the closing of a local military base in 1968. Since that time, 2010 Census data shows Potter County to have a population of 121,073, which translates into a 34% increase since 1970. Potter County in 2017 had a population of 121,230. Randall County has continued to grow without impediment. Randall County's growth rate, 16% between 1990 and 2000 as well as 16% between 2000 and 2010, 8% between 2010 and 2017, has fallen short of the State of Texas' growth rate (21%).

The Planning Area, with an estimated 2020 population of 246,676 increased in size 12% between 2010 and 2020. The City of Amarillo, with a 2010 population of 190,695 grew 10% since 2000. Amarillo now ranks fourteenth in comparison with other Texas cities in total population. The 2010 recorded population for Potter County was 121,073, a 6.6% increase from 2000. Randall County's recorded population for 2010 was 120,725, a 15.7% increase from 2000. Randall County's 2017 population is 130,552.

Growth in the Planning Area has continued to move to the northwest and southwest portions of the City over the past decade, as is indicated by the rising population of Randall County which is located in the southern portion of the Planning Area. Other areas within the planning boundary have experienced population decreases due to declining birth rates, out migration, and housing stock reductions. These areas are primarily located in the central, north, and east portions of the City.

Population Projections

Population characteristics–past, present, and future–are key indices of an area's ability to adapt and adjust to changes in technical and economic trends; therefore, they are a key element of this plan.

The population projections shown in Table 3.1 reflect estimates prepared by the City of Amarillo as well as the Texas Demographic Center. The City's Planning Department prepared the projections for the City of Amarillo and the Planning Area geographic levels using a linear extrapolation model. The linear extrapolation model assumes that trends of the past are an accurate reflection of future growth trends. The percentage of change prior to year 2010 is applied at ten-year intervals to produce the future population estimates. State Data Center population estimates are used for all other geographic levels. State Data Center estimates are based on a cohort component with net migration model. This particular model assumes those trends in specific groups, or cohorts, such as, age, sex, and race/ethnicity of moderate net migration rates will characterize those of the future.

Table 3.1
Population Projections 2020-2050

Year	Planning Area	City of Amarillo	Amarillo MSA	Randall County	Potter County
2020	246,676	210,242	278,000	133,494	134,041
2030	276,277	231,266	306,787	148,264	147,734
2040	309,430	254,392	335,200	162,786	161,602
2050	346,562	279,831	363,218	177,431	175,083

Labor Force and Economic Trends

The labor force and economic trends provide a good indication of the economic strength of an area. Over the last twenty years the Amarillo economy has been in a transition. The crash of the oil industry in the 1980's forced the City from an oil and gas based economy to a more diversified service based economy. Over the last twenty years, employment in the agriculture, transportation, communications, and wholesale trade economic sector has slightly decreased. This decrease has been countered by a small increase in the number of persons working in finance, personal services, and entertainment. Within the last ten years, the largest growth of jobs has occurred in the arts, entertainment, and food service industries.

In 2010, the Amarillo Metropolitan Statistical Area (MSA) had 187,546 residents over the age of 16. Of this number, 126,871 were in the labor force. Ninety-five percent of the persons in the labor force were employed, which accounted for 120,151 workers. Since 2000, the labor force in the MSA has increased by approximately 12%. The labor force in the City reached 97,515 in 2010, which is up 7.6% from 90,662 in 2000.

Economic Projections

Employment growth for the Amarillo area for upcoming years is expected to be somewhat lower than that of the State. Growth is expected to occur in the services,

government, and trade areas. Service related jobs, particularly those in health care and business, are expected to be the fastest growing sector of the economy. Manufacturing related jobs are anticipated to also increase. Agriculture, oil, and gas production, which have been the mainstay of the local economy, should experience continued growth in the future. Labor force projections were derived by extrapolation methods of historical data and are listed in Table 3.2. According to the Texas Workforce Commission, employment by industry for the Amarillo Panhandle area (from 2016 to 2026) is projected to increase 4.7%. Employment by occupation is projected to increase at the same rate. Both are lower than the statewide projection of 16.6%.

Table 3.2
Labor Force Projections

Year	Planning Area	City of Amarillo	Amarillo MSA
2020	115,859	112,586	146,479
2030	121,304	117,878	153,364
2040	127,005	123,417	160,572
2050	132,975	129,218	168,118

Travel Trends

The majority of Amarillo employees work very close to home. Eighty-three percent of the workers over the age of 16 work within the city limits while the remaining 17% work elsewhere. Of the persons who live in the Amarillo MSA, 97% work within the MSA while 3% work outside of it. Of significance is the fact that the City of Amarillo is located in two counties. Because of this, 58.2% of all workers work in their own county of residence, while 41.1% work outside of it and 0.7% work out of state.

Means of Transportation

Upon examining the means of transportation that Amarillo residents take to work, it becomes apparent that many of the conservation gains made during the 1970's and 1980’s were lost during the last several decades. The number of Amarillo residents who drove cars, trucks, or vans to work increased significantly over the thirty years. These gains reduced the percentage of those who car-pooled to work. In 1980, 20% of Amarillo's workers car-pooled to work. By 2017, this had decreased to 13%. In 2017, nearly 82% of the City's workers continued to drive to work alone.

Travel Time

Travel time to work refers to the total number of minutes that it usually takes a person to get from home to work during the week. Because Amarillo has good access both north

to south and east to west, distance to work is more accurately measured in minutes rather than in miles. In 2017, approximately 86% of Amarillo's workers travel between 5 and 29 minutes to their jobs. The majority of the workforce travels between 15 and 19 minutes. Relatively few workers travel more than 30 minutes. This trend has remained relatively stable over the past decade as is shown in Table 3.3.

Although transportation funds grow less each day, the public recognizes the need for the roadway construction projects. Travel time to and from work has been temporarily increased due to some roadway construction projects. In all likelihood, the travel times will continue to fluctuate over the next few years as new roadway construction projects continue and funding resources rise and fall. The MPO will continue to evaluate new data as it becomes available.

Table 3.3
Travel Time To Work

TIME	2000 CITY OF AMARILLO PERCENTAGES	2010 CITY OF AMARILLO PERCENTAGES	2017 CITY OF AMARILLO PERCENTAGES
Less Than 10Minutes	18%	20%	17.6%
10-14 Minutes	27%	26%	24.5%
15-19 Minutes	25%	24%	27.3%
20-29 Minutes	16%	18%	16.9%
30-44 Minutes	7%	7%	7.9%
45-59 Minutes	2%	2%	2.1%
60 or More Minutes	3%	3%	3.7%
Worked at Home	2%	2%	2%

Vehicles Available

Vehicles available relates to the specified number of passenger cars, vans, and pickup or panel trucks of one-ton capacity or less that are kept at home and available for use by a family member. Vehicles rented or leased for one month or more, company vehicles, and police and government vehicles are included if they are kept at home and used for non-business purposes. Dismantled or immobile vehicles are excluded, as are vehicles kept at home but used only for business purposes. Within the City of Amarillo, 1.9% of the 94,887 workers in households do not own an automobile. The majority of the households within the City (44.9%) have two vehicles available for their use. Table 3.4, Vehicles Available 2017, details the number of workers in households and number of vehicles at their disposal. When compared to 2000 figures, the number of workers in the City of Amarillo with one and two vehicles available has increased by 4.29%.

Table 3.4
Vehicles Available 2017

	NONE	ONE	TWO	THREE OR MORE
City of Amarillo	1,803	21,634	42,604	28,846
Potter County	1,459	13,235	21,521	15,893
Randall County	937	11,244	30,786	24,027

Conclusions

The expected growth in the population and labor force for the Amarillo area coupled with the rise of single occupant vehicles trips indicates the transportation demand on the existing system will continue to grow. Public consensus shows that current facilities are providing for citizens' transportation needs. However, citizens feel that improved facilities are necessary and desirable. While some trips are made via public transportation, bicycle, or pedestrian foot traffic, the automobile is the primary mode of transportation. It is unlikely this will change in the near future. In light of this, the bulk of the improvements included in this plan will be geared towards meeting the needs of automobile traffic.

SECTION 4.0
MISSION, OPPORTUNITIES LIMITATIONS AND STRATEGIES

Back to Table of Contents

4.0 MISSION, OPPORTUNITIES, LIMITATIONS AND STRATEGIES

Mission

This MTP has been prepared in an effort to work in conjunction with the local comprehensive plans so that it complements the goals of the communities to promote and improve the quality of life in the metropolitan area.

> *The mission of the Amarillo Metropolitan Transportation Plan is to provide a Long Range Plan that will promote mobility and accessibility through an effective transportation system for the movement of people and goods. The Plan will seek to provide the citizens of the Amarillo area with a multi-modal transportation network that will encourage safety and efficiency with minimal impact on the cultural, economic, and environmental resources of the metropolitan area, with emphasis on alternate modes of transportation. The Plan will, to the extent possible, provide accurate anticipated transportation needs and strive to maintain existing facilities.*

Goals

The broad based mission of the Amarillo MTP provides an overall vision of the transportation needs for the citizens in the Amarillo Planning Area. The following goals are more specific aspects of the plan that will lead to its implementation.

- Enhance the integration and connectivity of the transportation system, across and between multiple modes throughout the MPO, including people and freight
- Promote safety initiatives of the transportation system for motorized and non-motorized users
- Establish and implement national performance goals
- Include short- and long-range planning elements
- Recognize community needs and provide flexibility
- Work in conjunction with local comprehensive plans
- Promote economic growth and land use compatibility
- Identify reasonable funding sources for the implementation of the plan
- Create a more resilient and reliable transportation system by mitigating storm water impacts and preserving the assets of our existing system

Opportunities And Limitations

One of the most important aspects of the MTP is to ensure that the elements contained within the plan are based on a realistic estimation of resources and needs of the citizens in Amarillo. Realizing these factors, it is necessary to identify opportunities and

limitations that are present within the Planning Area and are unique to the City of Amarillo. This information will be useful in developing strategies and implementing the elements included in this plan.

Mobility in the Planning Area is currently very good. A few areas of the City are experiencing intermittent congestion and travel delay. To date, these problems are limited to peak hour times at major intersections. Since, traffic congestion and delay problems have not yet reached severe levels; citizens have not sought alternative modes of transportation. Currently, with minimal traffic problems, some of the biggest limitations in developing a multimodal transportation system that citizens will use include:

- Vehicle dependence
- Single occupant trips
- Low cost of vehicle operation
- Low travel times within planning area
- Trip Chaining

Obviously, the current level of mobility will not remain static. This provides the opportunity to plan for increased travel demand. Building our way out of traffic problems is not a viable option. Limited resources force us to look at alternative modes for moving people and goods. The long-range plan provides an opportunity to focus on future needs and identify ways to curb problem areas before they occur. The major opportunities that exist for the transportation system in the Planning Area include:

- Maintaining, upgrading and expanding the existing roadway system
- Managing and reducing existing congestion
- Improving mobility via preservation and expansion of existing highway corridors
- Providing improved public transportation services
- Creating a safe and efficient bicycle network
- Providing improved pedestrian facilities

Climate Change

Development of the 2020-2045 Metropolitan Transportation Plan has permitted the Amarillo MPO to further consider the effects climate change and the impact of greenhouse gas emissions upon the region. This area, with its level terrain, strong prevailing winds, modest population, and lack of traffic congestion, is currently an attainment area. Throughout this Plan strategies have been considered that will aid in the reduction of vehicle miles traveled, decrease congestion, and promote alternative modes of transportation. The MPO fully endorses the use of public transit and alternative modes of transportation, such as bicycling. The goals set out in this plan will allow the Planning Area to keep its attainment status.

As opportunities for participation with other agencies, such as USDOT or TxDOT, present themselves, the Amarillo MPO will participate with a desire to maintain an acceptable level of mobility and promote the adaptation of strategies appropriate for reducing greenhouse gases in the area.

Strategies

The opportunities and limitations listed above are a few of the major issues facing the citizens of the Planning Area. Maintaining an acceptable level of mobility and providing a safe and efficient transportation system is ultimately the responsibility of all the users of the system. The physical network can be provided to promote safety and efficiency, but the users of the system also affect how the system functions. There are strategies that not only the local governmental authorities can take, but also the citizens and local businesses. The strategies listed below are recommendations that can lead to an improved transportation system. The strategies are divided into two categories, local government and local community.

Local Government

- Improve existing facilities
  - Signal timing
  - Geometric design
  - Striping changes
  - Turn lane additions
- Construct new roadway facilities
- Provide pedestrian facilities
  - Identify gaps in pedestrian facilities
  - Continue to require sidewalk installation with new construction and major renovation
- Improve the public transportation system
  - Expand service area
  - Improve marketing
  - Expand service times
- Provide bicycle facilities
  - Improve safety programs
  - Incorporate bike facilities on new roadways, where possible
  - Provide bike facilities on arterial and collector streets, where possible
  - Promote use of bicycles through marketing
  - Improve the Bicycle Network
- Prevent urban sprawl
  - Promote infill development
  - Promote zoning and subdivision regulations that provide for mixed use development

Local Community

- Ridesharing
- Use of alternative transportation modes
- Flexible work schedule with staggered hours
- Telecommuting
- Reduce single occupant vehicle trips

SECTION 5.0
PLAN ELEMENTS

Back to Table of Contents

5.0 PLAN ELEMENTS

Introduction

The growing population and its dependence on the motor vehicle continue to place demands on the existing transportation network. Increasing congestion and increased travel times will occur as the population and travel needs increase. This section of the plan is aimed at identifying methods to offset those growing demands. The section will focus on developing an integrated system that will include multiple modes of transportation. The following section includes plans for roadway, bicycle, pedestrian, and transit improvements. Existing facilities for each of these elements will be discussed along with opportunities, limitations and proposed improvements. Congestion management strategies will also be identified.

Projects identified in the plan have been assigned an identification number so that the projects can be tracked when they are included in the TIP/STIP. This insures that the projects selected for the TIP/STIP have been given consideration in the MTP and meet the long-range goals of the Planning Area.

ROADWAY PLAN

Introduction

The projects included in this section are designed to meet the projected future transportation demand for the Planning Area. Projects in this plan were selected based on the demand identified by transportation planners, population projections, and public input and use projections and system deficiencies. The projects selected for the roadway plan are designed to improve mobility in the Planning Area and expand the existing network. A well-planned highway and arterial street system is vital to the Planning Area. The pattern of vehicular movement provides the framework upon which the Amarillo area develops and is of great significance to the future growth of the region. Just as transportation improvements made in the past impact the present, our future facilities will provide the framework upon which Amarillo will continue to expand.

Project Selection Process

The members of the MPO Technical Advisory Committee collaborated in the selection of transportation projects included in this plan. The committee membership consists of members from the TxDOT–Amarillo District and City of Amarillo, Potter and Randall County Road and Bridge Superintendents, City of Canyon, and MPO staff. Public involvement was solicited and encouraged at every level of the development process. An adopted project selection process was used to determine the projects included in the plan. The Project Prioritization Methodology shown in Appendix B as well as TxDOT's Performance Based Planning Software (Decision Lens) was used in the selection process.

Existing Facilities

Amarillo is well served by its existing facilities. Freeways and expressways run east to west and north to south through the center of the city. They provide the quickest way possible to get from one side of the city to the other. The arterial system follows this same pattern every mile along established survey section lines. This interconnectivity allows for very effective movement of traffic.

Freeways and Expressways

Three major freeways serve the Planning Area. Interstate Highway 40 crosses the City from East to West, Interstate Highway 27 extends south from the Central Business District to Lubbock and US 87/287 extends north from the CBD through the Planning Area. A minimum right-of-way of at least 300 feet and four to six lanes of traffic represent the design standards for these roadways. All intersections on these facilities are grade separated and access (both ingress and egress) is limited. The facilities are designed to accommodate the highest allowable speed limit.

Expressways have characteristics similar to freeways except the majority of intersections are at grade. Usually only railroad crossings and those intersections with high volume traffic are grade separated. An expressway may be improved with or without frontage roads, but where access to adjacent property is important, frontage roads should be provided. A right-of-way width of up to 300 feet may be required for an expressway-type section; however, it is possible to build a six-lane, urban section expressway within approximately 150 feet of right-of-way. Loop 335 is a typical example of an expressway section in Amarillo. Future expansion of Loop 335 will include additional lanes for more capacity and grade-separated facilities. Reconstruction and maintenance of existing facilities will be necessary as these facilities age.

Section Line or Major Arterial Streets

Major arterials are characterized by 120 feet of right-of-way having four to six moving traffic lanes and a continuous center left turn lane. Parking is prohibited on this type of thoroughfare and it should be capable of carrying 25,000 to 40,000 vehicles per day. Access should be limited along arterials by subdivision design in order to protect capacity and speed limits ranging from 35 to 50 MPH. Bell Street, Grand Street, 24th and 45th Avenues are examples of arterial streets. The provision of future, properly located section line thoroughfares having the necessary right-of-way widths is essential to continued viable and effective development of the City. It is realized that certain physical constraints may preclude old section line roadways from consisting of the required 120 feet right-of-way width. In circumstances such as these, careful planning consideration must be made to ensure that these substandard thoroughfare widths do not create inefficient or marginal developments.

Minor Arterial Streets

Minor arterial streets have between 80 and 120 feet of right-of-way and are of less prominence, carrying lower volumes of traffic than major arterials. Minor arterials are roadways where existing development or physical constraints have prohibited obtaining 120 feet of right-of-way. Minor arterial streets typically have four traffic lanes with or without a continuous center left turn lane or, in some instances, four

traffic lanes with two parallel parking lanes adjacent to the curb. Average twenty-four hour traffic volumes range from 10,000 to 25,000 vehicles per day. Access onto a minor arterial is limited by subdivision design and speed limits should range from 35 to 50 MPH. All streets within industrially zoned or developing areas should meet the minor arterial standards.

Collector Streets

Collector streets range from 50 to 80 feet of right-of-way width with the average width being 70 feet. This type of thoroughfare requires two traffic lanes and two parallel parking lanes adjacent to the curb. Traffic volumes range from 2,000 to 6,000 vehicles per day and direct access from residential lots should be limited by appropriate subdivision design requiring lots to side onto a collector. Speed limits should range from 30 to 35 MPH.

Local Streets

Typically, local streets in Amarillo have 50 to 70 feet of right-of-way allowing 37 feet of paving in low-density residential areas. However, 45 feet of paving is common adjacent to schools, multiple-family, commercial, and institutional areas. In well-planned residential developments, where proper design discourages thru traffic, and where travel distances from residences to collector streets are minimal, lesser pavement widths may be considered. Reductions in the required 60 feet right-of-way width should be considered bearing in mind the need for street paving, sidewalks, utility placement, and adequate open space and clearance beyond the curb. Two traffic lanes with two parallel parking lanes adjacent to the curb are necessary. Traffic volumes should be less than 2,000 vehicles per day and speed limits should not exceed 30 MPH.

The City of Canyon has two major highway corridors leading to and around Canyon. I27 provides access south toward Lubbock and north toward Amarillo, and US-60 provides access west and merges with US-87 providing access east connecting the city with I27. Also, within the city's roadway network, 23rd Street and Soncy Road provide major north-south connections, and Hunsley Road and SH217/4th Avenue provide major east-west connections. Like Amarillo, Canyon also has many historic brick streets within its roadway network. The City of Canyon's comprehensive plan, Our Canyon: A Comprehensive Plan, identifies the characteristics, hierarchy, and function utilizing the same Functional Classification system as TxDOT.

Opportunities and Limitations

With the roadway network in place, the area has an established system to build upon. Amid recent growth, the City of Amarillo has been updating many of its plans to ensure they can keep pace with development. In recent years, the City has updated its comprehensive plan, identifying areas of future opportunity. The City is updating the Parks Master Plan and is considering updating the Thoroughfare Plan and Bicycle/Pedestrian Plan. Accordingly, new links will be added to the ADT count maps. These actions will assist observation of new and changing development.

Another fundamental part of the network under analysis is State Loop 335 (SL 335). This multi-use roadway encircles the City with two to six lanes depending upon location. SL 335 carries local and regional traffic, as well as through freight traffic. It serves as a local arterial and as a local relief route. SL 335 has been the subject of multiple studies addressing various aspects of the roadway corridor since its beginning. The Loop 335 Corridor is addressed in the Corridor Studies element of this plan.

The projects selected in this plan are designed to improve and expand upon the existing facilities. New projects will be incorporated with efforts to improve the efficiency of the existing network. Additionally, operational improvements such as signing, signalization, and striping are employed to improve mobility.

One of the biggest limitations in improving the roadway system will be the limited amount of available resources to fund projects. With funding limitations, projects selected for implementation will have to be carefully identified to maximize the benefit for the public. The problems that stem from the scarcity of funding options emphasize the importance of utilizing the existing system to its maximum potential. Narrow right-of-way and shallow setbacks in existing neighborhoods will also limit expansion of the transportation network. Any improvements to the street system in older areas of the City would impact the existing development patterns. Transportation demand in these areas will have to be offset by measures other than capacity increases.

Policy Considerations

To improve the mobility on Amarillo's network, the following policies should be considered:

- Minimize negative impacts on the social, cultural, economic, and environmental resources of the community
- Include alternative modes of transportation in all new roadway design to promote a multi-modal system
- Utilize, whenever possible, operational improvements as an alternative to capacity increase
- Limit or avoid capacity increases in existing neighborhoods
- Maximize signal synchronization to promote efficiency
- Continue maintenance programs to preserve the existing roadway system

Corridor Studies

These studies can be financed through planning and capital funds. The following are projects that warrant study in the future.

- **Freight Corridor**

  Highway:
  Amarillo is an integral part of the nation’s freight movement. The city is located at the crossroads of Interstate Highways 40 and 27. Interstate Highway 40 (IH-40) is a major corridor for freight distribution nationwide. It runs from Wilmington, NC to Barstow, CA. IH-40 intersects with eight of the ten primary north–south interstates (all except IH-5 and IH-45) and also with IH-24, IH-30, IH-44, IH-77, and IH-81.

Interstate Highway 27 connects Lubbock, Texas with Amarillo. This intrastate highway parallels the Burlington Northern Santa Fe Railway's Plainview Subdivision and US Highway 87. IH-27 is an essential part of another high priority freight route, the Ports to Plains Trade Corridor.

Amarillo is on the National Highway System and Texas Trunk System of roadways. The proximity to the Interstate Highway connections highlighted above and its location on US Highways 60, 87, & 287 and Texas Highways 136, 591 & State Loop 335 provide Amarillo a strategic position on the Texas Freight Highway Network.

Rail:

The arrival of the railroad led to Amarillo's establishment, and the city is still a major rail crossroad. Two mainlines of the BNSF Railway intersect at Amarillo. They provide direct service to Chicago, Los Angeles, Denver, Phoenix, Kansas City, Dallas, Seattle, Vancouver, Memphis, St. Louis and Pensacola. These mainlines also terminate at the ports of Houston, San Diego and Galveston.

The BNSF Southern Transcon railroad passes through Amarillo. The Southern Transcon is the primary route for BNSF's intermodal franchise. Intermodal traffic ships in containers or trailers. Each intermodal train carries as much freight as 280 trucks.

The rail line operates a large intermodal facility in Amarillo that handles about 30,000 containers and trailers each year. The Union Pacific-Southern Pacific railroad also has rights to use BNSF tracks in the Amarillo area.

Air:

Amarillo is served by Rick Husband International Airport (AMA), which is located in close proximity to the interstate highway and rail systems. A major terminal renovation was recently completed in 2012. This public airport has two concrete runways, one 13,500 feet in length and the other is 7,900 feet long. TAC Air, the fixed base operator (FBO) at AMA, has provided all ground handling services and aircraft fuel sales to general aviation and military traffic since 1993.

Amarillo is served by three separate airlines. There are over 50 passenger flights provided daily by American, Southwest, and United Airlines to Dallas, Houston, Phoenix, and Denver. Many other destinations are just one stop away including San Antonio, Austin, and Los Angeles. In 2015, there were 339,000 passenger boardings. The number of travelers has declined since the peak in 2007. A large factor in this decline was the repeal of the Wright Amendment, a federal law that prohibited full-size carrier operations out of Dallas Love Field to destinations beyond Texas and its four bordering states. AMA is projecting a total of 441,100 passengers by year 2035. Travelers to foreign destinations can also connect to direct international flights from a number of hub airports. US Customs and Border Protection handles operations at the Port of Amarillo. The air cargo in AMA has also been declining since 1999. In 2015, there was a total of 407,000 pounds of cargo handled through the airport. Amarillo airport is also

home to other facilities. The airport is used by the Texas A&M Forrest Service when fighting wildfires in the area and Bell Helicopter is located adjacent to one of the taxiways. The Bell facility is an assembly center for planes such as the V-280 Valor and V-22 Osprey tilt-rotor, as well as the OH-58, UH-1Y, and AH-1Z military helicopters.

Freight has moved to the forefront of many transportation plans in recent years. Amarillo area stakeholders increasingly express concern that improvements to the freight transportation system are not enough. Efforts to establish and coordinate development of infrastructure without affecting safety and degrading the environment are difficult because freight traffic and the benefits of serving that traffic rarely stay within a single political jurisdiction.

These connections to external freight generators and gateways are served by at least three other freight corridors. While Amarillo is in a unique location, located on a major east-west national freight corridor, it also is located on a developing north-south international trade corridor. This placement gives Amarillo a prime location on the Texas Freight Highway Network.

- **Ports to Plains Corridor**

  This corridor runs from the Mexican border to Denver, Colorado via IH-27. This corridor is listed on the Congressional High Priority Corridors on the National Highway System and it is currently under development. The Ports to Plains corridor was first listed as a Congressional High Priority Corridor in ISTEA. The MPO cooperates with the Ports to Plains coalition and TxDOT to aid development of transportation projects along the corridor within the MPO Planning Area.

  Four Congressional High Priority Corridors on the National Highway System: Ports-to-Plains, Heartland Expressway, Theodore Roosevelt Expressway, and Camino Real, create the backbone of the developing four-lane divided highway connecting growing North American markets between Mexico and Canada.

This corridor connects west Texas to Mexico markets, those domestic markets north through Colorado, and ultimately to markets in Alberta and Saskatchewan, Canada. The Corridor Development and Management Plan (CDMP) for the Texas portion of the corridor indicate a benefit cost ratio of more than three to one. The continued development of the planned four-lane divided highway is projected to shift traffic from congested interstates including I-35 and I-25.

The CDMP, completed in 2004, projected the creation of over 23,000 distribution and manufacturing jobs in Texas. The effort focuses on transportation improvements, but it also addresses the relationship between the transportation system and economic drivers including energy, agriculture, manufacturing and distribution. Another benefit associated with improved transportation infrastructure in the Texas portion of the project corridor is a reduction in the total number of crashes.

In 2011, the Texas Transportation Commission approved funding for highway expansion and reliever routes with Proposition 12. Currently, the four-lane highway is complete from San Angelo through Lubbock and all the way to Interstate 25 in Raton, NM except for 20 miles. In 2019 the Texas Transportation Commission approved funding to improve this 20 mile segment to a divided four lane highway. In 2019 the Texas legislature also passed House Bill 1079, which directs TxDOT to conduct a comprehensive study of the Ports to Plains corridor and evaluate the feasibility of the cost and logistics matters associated with the improvements that create a continuous flow, four lane divided highway that meets interstate highway standards. The passage of future transportation legislation could bring new opportunities as the entire corridor meets the criteria to become a Critical Rural Freight Corridor due to its role in connecting the energy resources between Texas and Alberta, Canada.

Map 5.1

Ports-to-Plains Corridor

- **IH 27 Corridor**

  A major highway corridor inside the Planning Area is Interstate Highway 27. Completed in 1992, this intrastate highway connects Amarillo and Lubbock by means of a high speed, controlled access corridor.

  Inside the Planning Area, IH-27 serves as a major commuter route for Amarillo and Canyon residents as well as an element of the Ports to Plains Corridor.

  Several years ago, TxDOT contracted with a consultant to conduct a feasibility study to expand IH 27 from four to six lanes in that segment of IH 27 not already six lanes between Amarillo and Canyon. The projects resulting from this study are included in this plan.

  In 2006, TxDOT also employed a consultant to provide preliminary engineering services to upgrade a segment of IH 27 from the IH 40 / IH 27 interchange to SW 45th Avenue in Amarillo. No consensus was reached as this value engineering study concluded.

  In 2017, this corridor is listed in the TxDOT 2017 Freight Mobility Plan. TxDOT identified the extension of I-27 from Lubbock to Laredo as one of two strategic freight projects in Texas. This corridor also intersects with three major east-west corridors in Texas, I-10, I-20 and I-40. This corridor is such an important part of the network in Amarillo, that the MPO has offered letters of support for the expansion of I-27.

- **State Loop 335 Corridor**

  Earlier long-range planning documents by the Amarillo MPO have presented information regarding corridor studies on and along State Loop 335 (SL 335) (source: 1995-2015 MTP, 2000-25 MTP, & 2005-30 MTP). In the 2010-35 MTP, corridor studies within the Planning Area were focused upon Interstate Highway 27 and the Ports-to-Plains Corridor. Although SL 335 was not specifically mentioned in the 2010-35 MTP, the IH-27 and Ports-to-Plains Studies were included as a reflection of State DOT policy changes issued during previous MTP documents. As such, SL 335 dialogue was included as an integral part of the Ports-to-Plains Corridor inside the Planning Area.

  State Loop 335 was created by Texas Highway Department Minute Order Number 047138, dated 01/18/1960. During the next forty years, improvements along the Corridor were made, which resulted in the circumferential roadway we know today as the State Loop 335 Corridor. In August 1999, the Texas Transportation Commission met in Amarillo for a ribbon cutting as the roadway was connected completely. Although it was a complete circle, the roadway was just a series of two- and multi-lane sections with few grade separations at intersecting roadways.

  During recent years there has been a considerable amount of work accomplished toward the future development of SL 335. A brief history of the continuous work done along the SL 335 Corridor in Amarillo during the last 20 years follows.

- In June 1998, TxDOT conducted an engineering study titled “Loop 335 Enhanced Mobility Study” for the purpose of future development along the Loop Corridor. This study is referenced in the Amarillo MPO 2005-2030 MTP document.
- In January 2001, a study was conducted titled “Loop 335, from Georgia Street to 9th Street, Recommendation of Technically Preferred Alternative.” The purpose of this document was to explore the development of an alternate route for the southwest quadrant of SL 335. Public meetings were held for this study. Further action and development for the study was delayed and postponed as a result of design and policy constraints put in place at the time of the study.
- In January 2007, TxDOT and local stakeholders once again began discussion of the suspended 2001 study. During the next few years, several smaller projects along the SL 335 Corridor were advanced to construction. Some of these projects received American Recovery and Reinvestment Act funds; others received Category 2U or Category 3 funds.
- Another study was conducted in 2011 for the purpose of evaluating the entire loop corridor and converting it from an existing non-freeway design to a freeway design. The intent of this study and the resulting public meetings was to gather input from citizens and stakeholders seeking support and comment for a future freeway style Loop. From stakeholder support, the first project of this nature was begun on a section of SL 335 east of IH-27 to the BNSF RR overpass just west of FM 1541. The project was approved, funded, and let for construction in December 2013. This segment’s typical section may be used as a standard for the remaining sections along the SL 335 corridor.
- In January 2013, the Amarillo MPO Policy Committee formally approved the creation of a long-range planning document for the preservation and future improvement of the entire SL 335 corridor from a non-freeway to a freeway.
- In November 2013, TxDOT signed a feasibility study work authorization for this long-range planning document. The report for this document was finalized in August 2014. In the document is the recommendation that the southwest segment of the loop be realigned to the Helium Rd corridor. The projects that are identified in the document are included in this plan.

TxDOT, in consultation with the Amarillo MPO and regional stakeholders, has initiated action to begin the realignment of the southwest portion of SL 335 to the Helium Road corridor. This is a multiphase project. The first phase started construction in the spring of 2019. The identified segment of SL 335 will incorporate MPO construction funds in the project as well as additional funds

allocated by the Texas Transportation Commission. The completion of SL 335 around the west side of the city will establish a hazardous cargo route that goes around the city instead of the current path through downtown and some EJ neighborhoods. This route around the city should create shorter travel times and preferred alternate route for north/south through traffic.

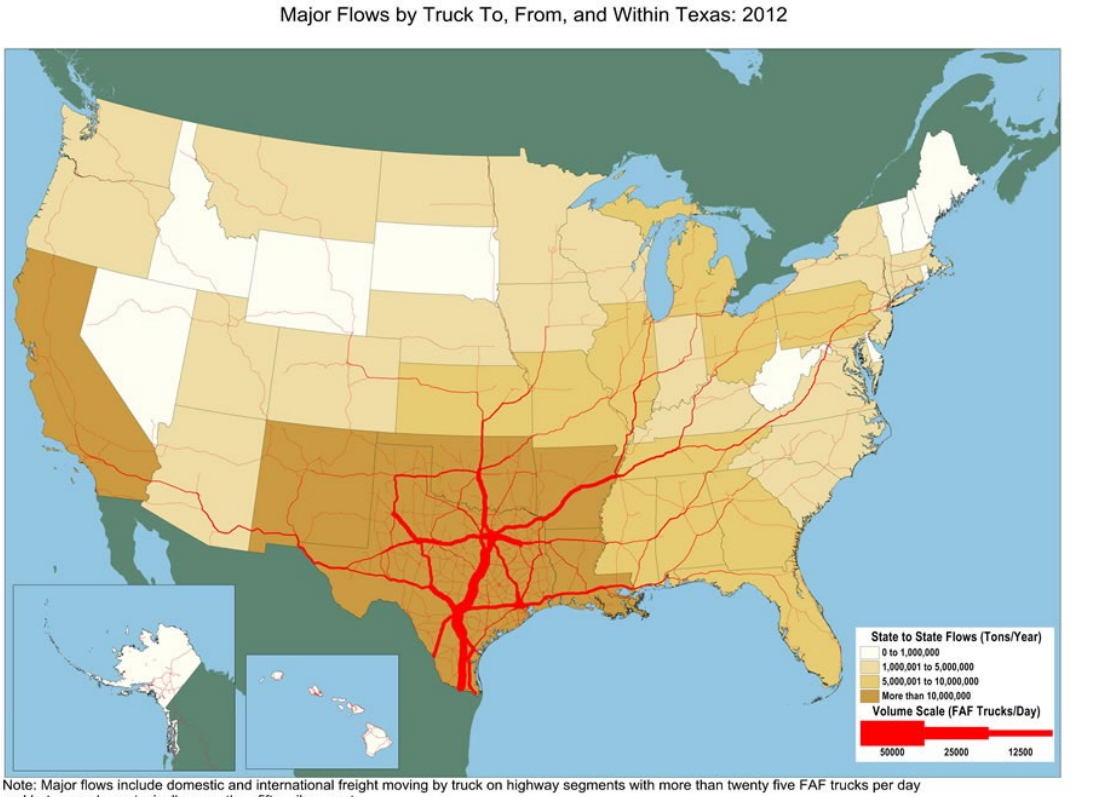
TxDOT has obtained the services of a consultant to conduct the environmental review and schematic for the remainder of the loop. The review will take place over the next several years. This action will ultimately provide development for the long-range planning document for the preservation and future improvements of the SL 335 corridor that include, but are not limited to, the regional improvement of mobility, freight mobility, land access, connectivity, and safety.

The Amarillo MPO recognizes there are many freight issues each area must face. Freight movement challenges transportation facilities in ways very different from that of urban commuting and other passenger travel in several ways:

- Freight moves long distances through localities and responds to distant economic demands while the majority of passenger travel occurs between local origins and destinations. Freight movement can create local problems without local benefits.
- Freight accounts for a growing share of the transportation system. Improvements targeted at general traffic or passenger travel are not likely to aid the flow of freight.
- Freight movement fluctuates more quickly and in greater relative amounts than passenger travel. Freight responds more quickly than passenger travel to short-term economic disparities. Fluctuations can be national or local. The addition or loss of just one major business can dramatically change the level of freight activity in a locality.
- Freight movement is extremely diverse compared to passenger travel. Patterns of passenger travel tend to be very similar across metropolitan areas and among large economic and social strata. The freight transportation demands of farms, steel mills, and clothing boutiques differ radically from one another. Solutions aimed at average conditions are less likely to work because the freight demands of economic sectors vary widely.

Other issues also exist. The growing needs of freight transportation bring conflict between interstate and local interests. Many communities do not want the noise and other aspects of trucks and trains that pass through with little benefit locally, but those shipments can have a huge impact on national freight movement and regional economies. In addition, freight shipments place a heavy burden on infrastructure. Roads and bridges, along the major freight corridors, require constant maintenance and repair. This creates even greater demands on today's diminished transportation funds and severely compromised revenue sources.

Map 5.2
2012 Truck Flow To, From, & Within Texas



Note: Major flows include domestic and international freight moving by truck on highway segments with more than twenty five FAF trucks per day and between places typically more than fifty miles apart.
Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, version 4.3, 2017.

Over the past 25 years, freight transportation has become cheaper for a given level of service, contributing significantly to enhanced productivity and economic growth. However, market forces, environmental concerns, rising fuel prices, and other factors will increase the cost of moving all goods in the years ahead. In addition, congestion and other issues will affect the long and often vulnerable supply chains of high-value, time-sensitive commodities. If these forces are not mitigated, then the increased cost of moving freight will be felt throughout the economy, affecting businesses and households alike.

Congestion costs are compounded by continuing increases in operating costs per mile and per hour. Beyond fuel and labor, truck operating costs are affected by needed repairs to damaged equipment caused by deteriorating roads, taxes and tolls to pay for repair of infrastructure, and insurance and additional equipment required to meet security, safety, and environmental requirements.

Opportunities for operational improvements are still available and need to be utilized. New physical capacity is limited by available financing, competition with other needs and uses, and environmental concerns. In addition, traditional strategies aimed at passenger travel may not apply.

Operations and Maintenance

Member agencies of the MPO are responsible for the maintenance and efficient operation of all existing infrastructure components that make up the Planning Area transportation network.

Table 5.1
Operations and Maintenance Costs

O & M ANNUAL COSTS (Non-Transit)
(Interstate, Freeway, Arterial, and Major Collectors)

Jurisdiction	Lane Miles* Maintained	O & M Expenses	Cost Per Lane Mile
TxDOT			
Section 01	259	$ 1,388,884	$ 5,362
Section 02	592	$ 5,074,059	$ 8,574
Section 05	302	$ 709,096	$ 2,348
City of Amarillo	555	$ 2,939,200	$ 5,296
Potter County	n/a	n/a	n/a
Randall County	n/a	n/a	n/a
Total MPO Area Lane Miles	**1,708**		
Total MPO Area Costs		**$ 10,111,239**	

* A lane mile is a length of road multiplied by its number of lanes.

Note: All County maintained roads within the MPO area are classified below major collector status and therefore are not applicable to this analysis.

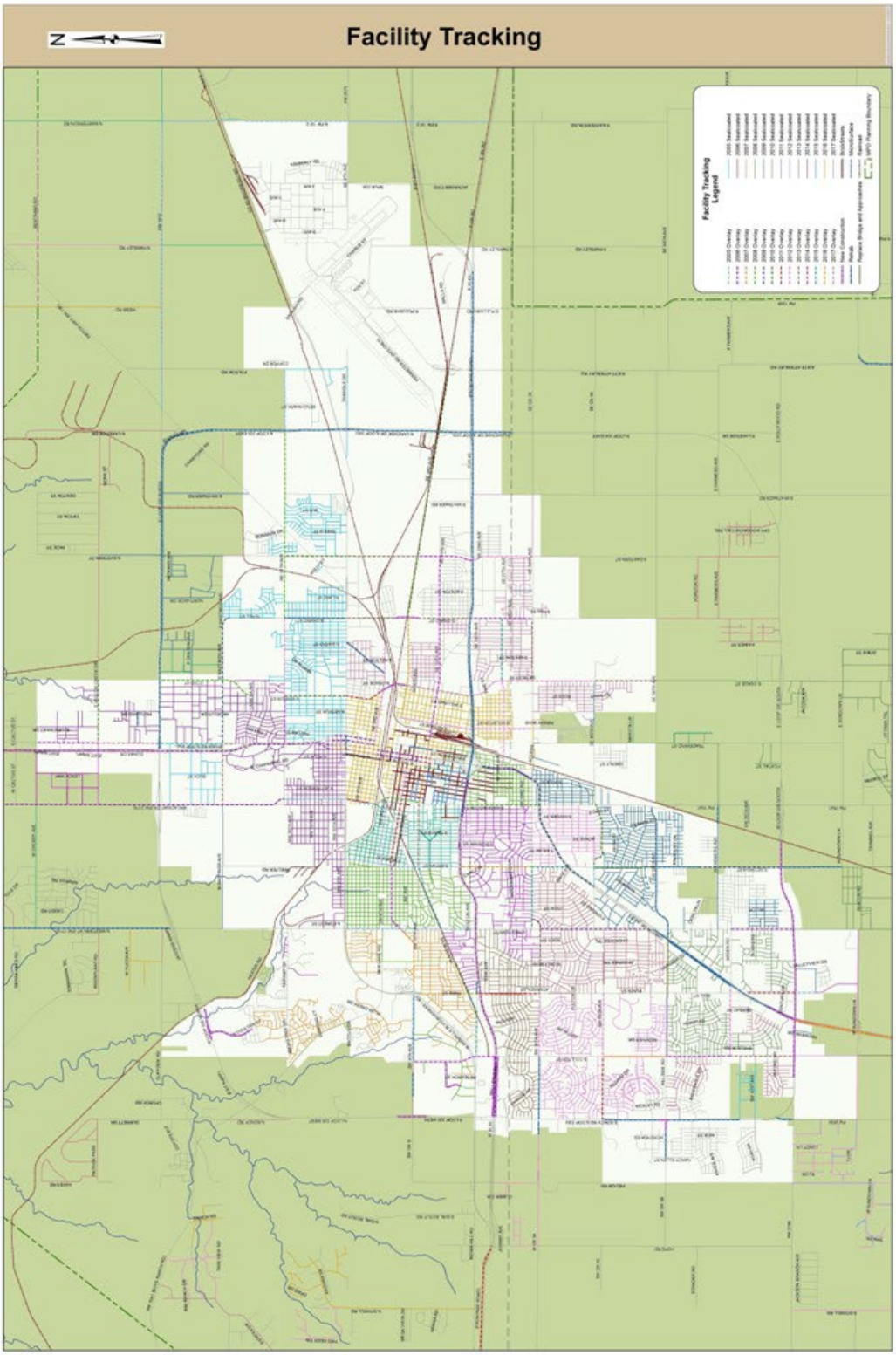
Categories of operation and maintenance (O&M) include: paving or repaving, signs & painting, ROW maintenance, traffic signal & roadway lighting maintenance, surveillance & inspection, or other, which may include minor sidewalk improvements, intersection improvements, etc. Maintenance activities are those that occur primarily in reaction to situations that have an immediate or imminent adverse impact on the safety or availability of transportation facilities, such as pavement resurfacing and markings, bridge repair, guardrail and sign replacement and traffic signal maintenance. Accordingly, operations may include more routine items such as painting and right of way maintenance. While these activities are not scheduled in the MTP, they are included here for informational purposes.

The MPO meets frequently with the urban public transportation provider, Amarillo City Transit (ACT), to address strategies for operations and maintenance of the current and future public transportation system within the Amarillo urban boundary. ACT considers O&M costs as a routine part of the transit system's operations. As such, ACT does not break out expenses for vehicle maintenance or repair of transit related facilities. Fixed-route and para-transit system O&M needs are reflected in the tables using year of expenditure (YOE) total project costs. These costs are included in the tables with YOE

total project costs projected at the four percent annual average inflation rate, as recommended by FTA and TxDOT PTN.

The varied and complex systems used to maintain the efficiency of the MPO area transportation system are difficult to quantify and present. Each jurisdiction and agency has unique methods of accounting for these activities. They may also have varying goals and priorities they are seeking to achieve. As the jurisdictions involved in the MPO process provide information on their existing system's operations and maintenance costs, the MPO will report these activities in the MTP and other documents to provide the public with a clearer picture of the efforts undertaken. These are shown in Map 5.3.

Map 5.3
Facility Tracking Safety

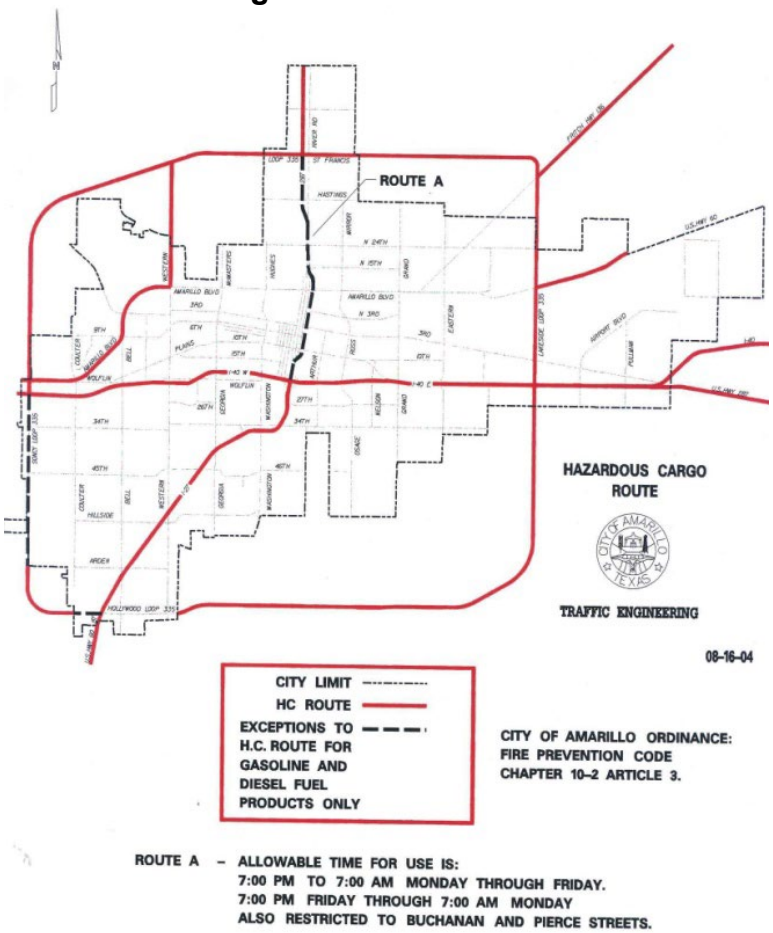


As per 23 CFR 450.324(h), the MPO supports emergency relief and disaster preparedness plans and strategies and policies developed to support homeland security and that safeguard the personal security of all motorized and non-motorized users.

The Amarillo MPO supports in its planning efforts all work to promote and develop safer transportation facilities in the region. It also supports the goals and objectives established in The Texas Strategic Highway Safety Plan, and key emphasis areas in consultation with federal, state, local, and private sector safety stakeholders. In addition to satisfying federal requirements for highway safety planning, it serves to identify key safety needs and to guide investment decisions intended to lead to significant reductions in highway fatalities and serious injuries on all public roads.

The Amarillo MPO seeks to change the current driving culture in the Amarillo Metropolitan Planning Area to one that emphasizes safety, economy, and civility. Studies of collision data, roadway congestion, grade separation, traffic control devices, and driver inattention/behavior are among the underlying components necessary to understanding how to better achieve a safe driving environment.

Map 5.4
Hazardous Cargo Routes



Total Project Costs

FHWA and FTA both require that long-range transportation plans show financial constraint. Under the rules, financial constraint of the plan must be demonstrated in YOE dollars. The rationale for this rule is that long-range estimates of transportation costs have understated the deficit between costs and revenues. Therefore, converting all costs and revenues to YOE dollars would theoretically present a more accurate picture of costs, revenues, and deficits associated with a long-range transportation plan.

FHWA and TxDOT also recommend detailed financial information be provided about all the costs associated with a project. The numerous, unseen costs associated with roadway planning and design, such as preliminary engineering, construction engineering, rights-of-way, utilities, bond financing, contingencies, or indirect costs makeup part of the "total project costs". A "total project cost" format, that includes construction, as well as the supporting costs associated with each project, is developed to meet this objective. Data obtained from TxDOT's Design and Construction Information System (DCIS) facilitates the development of total project costs. TxDOT PTN examined development of total project costs for transit endeavors and recommends that routine vehicle replacement and capital items associated with operations do not need an aggregated total project cost since these are on-going expenses and do not have a finite end date. FTA concurs with this assessment. It is our hope that through the use of these more detailed cost analyses, transportation officials, planners, programmers, and stakeholders will be able to track actual use of finances and expenditures for project development, both present and future. In addition, this will allow better use of our area's future, financial allocations.

Year-Of-Expenditure

In the past, Federal funding was assumed to increase each year during the term of the MTP. Funding levels from ISTEA through SAFETEA-LU increased at a greater pace than anticipated. Total federal transportation funding grew nearly 32 percent between TEA-21 and SAFETEA-LU.

In recent years, however, most areas have experienced reductions of federal transportation funds for project development and construction. With rising inflationary costs of steel, concrete, fuel, and labor, States, along with cities and participating agencies, continue to endure funding shortfalls for transportation needs.

Examination of the funding forecast and cost estimates is necessary to properly analyze potential shortfalls (gaps) between funds and costs over the 25-year period of this plan. Recent legislation provides for many alternative methods for funding transportation in the region. A variety of these sources of funding were considered as this MTP was developed.

Inflation was over three percent annually in the Bureau of Labor Statistics Consumer Price Index (CPI) in the twenty-year period from 1990 to 2010. In the final analysis, we used the four percent annual average inflation rate, recommended by FHWA and TxDOT, as the basis for placing roadway and transit project estimates into a YOE cost

format. Thus, the cost for each project was increased to include inflation for the time period in which the project is to be implemented.

YOE dollars have been used for project revenues and costs for several years. In the development of the 2020-2045 MTP, project submission called for a total project cost. As stated earlier, “total project cost” means that funding amounts must include all phases of the project including preliminary engineering, final design, right-of-way, utility relocation, and construction or construction phasing.

A project list was approved with an assigned YOE which includes a four percent inflationary rate per year. This will enable the Amarillo MPO to determine what projects are fiscally constrained for the life of the plan. Projects that are not able to be fiscally constrained within the plan will be listed on an Illustrative List in the 2020-45 MTP. Should priorities be adjusted, or other funding becomes available, those projects on the Illustrative List may be moved to the constrained list.

Illustrative Project List

Addressing the financial situation was an overriding issue throughout the assessment of the Amarillo Metropolitan Transportation Plan 2020-2045. The use of ‘year of expenditure’ and ‘total project cost’ estimates in the MTP is a challenge. The additional project costs and future values of the dollar have pushed many cost estimates beyond a point of affordability. As such, adequate resources are not available to implement all the projects identified in the MTP.

A review of the projects shows there are many that remain important to the MPO’s comprehensive transportation structure. Yet, future available revenue sources will not provide sufficient funding for the development or construction of these projects. Projects that would be included in the MTP, if reasonable additional resources beyond those identified in the financial plan were available, are termed "illustrative". FHWA allows this designated list of additional projects to enable accurate financial constraint and determinations. The illustrative projects must be clearly documented as separate and distinct from the MTP project list. These projects are shown in Table 5.3, labeled the “Illustrative List”. These projects will be considered for funding when additional or alternative financial support becomes available. The Amarillo MPO will continue to review, promote, and support these projects.

Table 5.2
Fiscally Constrained Project List – Amarillo Metropolitan Transportation Plan 2020-2045

MPO ID	Facility	From/At	To	Description	Status	Timing	YOE Total Project Cost x $1000
A20001	SL 335	IH 40	SW 9th Ave	B-2 Phase II: Construct Frontage Roads			$26,400
Notes:	This is a multi-phase project						
Phase I	SL 335	IH 40	FM 2590 North	Construct Frontage Roads	Short*	2020	
Phase II	SL 335	FM 2590 North	SW 9th Ave	Construct Frontage Roads *Ancestor : A15169*	Short	2020	
A20002	SL 335	FM 2590	West of Coulter	B-1 Phase II: Construct Main Lanes and Frontage Roads *Ancestor : A15159*	Short	2021	$32,200
A20003	SL 335	SW 9th Ave	FM 1219 (Western)	C-1 Phase I: Upgrade to 4-Lane Divided From SW 9th to RM 1061, Upgrade to Freeway From RM 1061 to FM 1719 *Ancestor : A15135*	Short	2023	$82,500
A20004	SL 335	.2 M N of 34th Ave	.4 M NE BI 40-D	B-2 Phase III: Construct SL 335 3rd Level Mainlane Bridge at IH 40, 4 New Mainlanes, Ramps, and BI 40-D Grade Separation			$44,900
Notes:	This is a multi-phase project						
Phase I	SL 335	Randall County Line	.4 M NE BI 40-D	B-2 Phase III: Construct SL 335 3rd Level Mainlane Bridge at IH 40, 4 New Mainlanes, Ramps, and BI 40-D Grade Separation	Short	2024	
Phase II	SL 335	.2 M N of 34th Ave	Potter County Line	*Ancestor : A15171*	Short	2024	
A20020	IH 27	45th Ave	IH 40	On/Off Ramp Improvements, Construct Aux Lanes, Reconstruct Bridges, Intersection Improvements, Improve ADA		2021	$23,700
Notes:	This is a multi-phase project						
Phase I	IH 27	45th Ave	IH 40	Upgrade Standards, On/Off Ramp Improvements, Construct Aux Lanes, Overlay	Short	2021	$23,700
Phase II	IH 27	45th Ave	IH 40	On/Off Ramp Improvements, Construct Aux Lanes, Reconstruct Bridges, Intersection Improvements, Improve ADA	Illustrative		

*Short refers to years 1-10 in the plan

MPO ID	Facility	From/At	To	Description	Status	Timing	YOE Total Project Cost x $1000
A20021	IH 27	S of Sundown	S of US 60 Split	IH27: Widen Freeway from 4-lanes to 6-lanes, Reconstruct US60 / IH27 interchange		2024	$117,100
Notes:	This is a multi-phase project						
Phase I	IH 27	S of Sundown	US 60 Split	Widen Freeway from 4-lanes to 6-lanes	Short	2024	$112,100
Phase II	IH 27	45th Ave	IH 40	Reconstruct US60 / IH27 Interchange *Ancestor: A15003*	Short	2024	$5,000
A20040	IH 40	BI H-40-D	Soncy Rd	B-2 Phase II: Reconstruct IH 40 2nd Level Mainlane Bridge at SL 335 and Frontage Road Box *Ancestor : A15168*	Short	2020	$27,600
A20080	SW 34th Ave	Helium Rd	Soncy Rd	Upgrade to Urban 4 Lane Arterial with Center Left Turn Lane *Ancestor : A15016*	Short	2023	$2,000
A20081	Arden Rd	Helium Rd	Soncy Rd	Upgrade to Urban 4 Lane Arterial with Center Left Turn Lane *Ancestor : A15025*	Short	2020	$3,000
A20082	Coulter St	SL 335	Sundown Ln	Upgrade to Urban 4 Lane Arterial with Center Left Turn Lane *Ancestor : A15035*	Short	2024	$2,500
A20083	Western St	SL 335	Sundown Ln	Upgrade to Urban 4 Lane Arterial with Center Left Turn Lane *Ancestor : A15121*	Short	2026	$3,000
A20084	SW 46th Ave	BNSF RR	Tradewinds Rd	Upgrade to Urban 4 Lane Arterial with Center Left Turn Lane *Ancestor : A15020*	Short	2030	$3,000
A20500	Various	Federal / State		Rehab and Maintenance *Ancestor : A15500*	Short		$61,700
A20501	Various	City of Amarillo		Rehab and Maintenance *Ancestor : A15501*	Short		$29,400
A20502	Various	City of Canyon		Rehab and Maintenance	Short		$10,000
A20503	Various	Potter County		Rehab and Maintenance *Ancestor : A15502*	Short		$33,800
A20504	Various	Randall County		Rehab and Maintenance *Ancestor : A15503*	Short		$33,900

MPO ID	Facility	From/At	To	Description	Status	Timing	YOE Total Project Cost x $1000
A20505	Various	Federal / State		Rehab Bridges & Approaches *Ancestor : A15504*	Short		$20,000
A20506	Various	Federal / State		Intersection Improvements *Ancestor : A15505*	Short		$7,000
A20507	Various	City of Amarillo		Intersection Improvements *Ancestor : A15506*	Short		$6,500
A20508	Various	Federal / State		Safety Improvements *Ancestor : A15507*	Short		$0
A20509	Various	Federal / State		Ramps Upgrades *Ancestor : A15508*	Short		$5,000
A20510	Various	Federal / State		ITS Improvements *Ancestor : A15509*	Short		$6,000
						TOTAL	**$581,200**

Map 5.5
Fiscally Constrained Projects Map 2020-2045

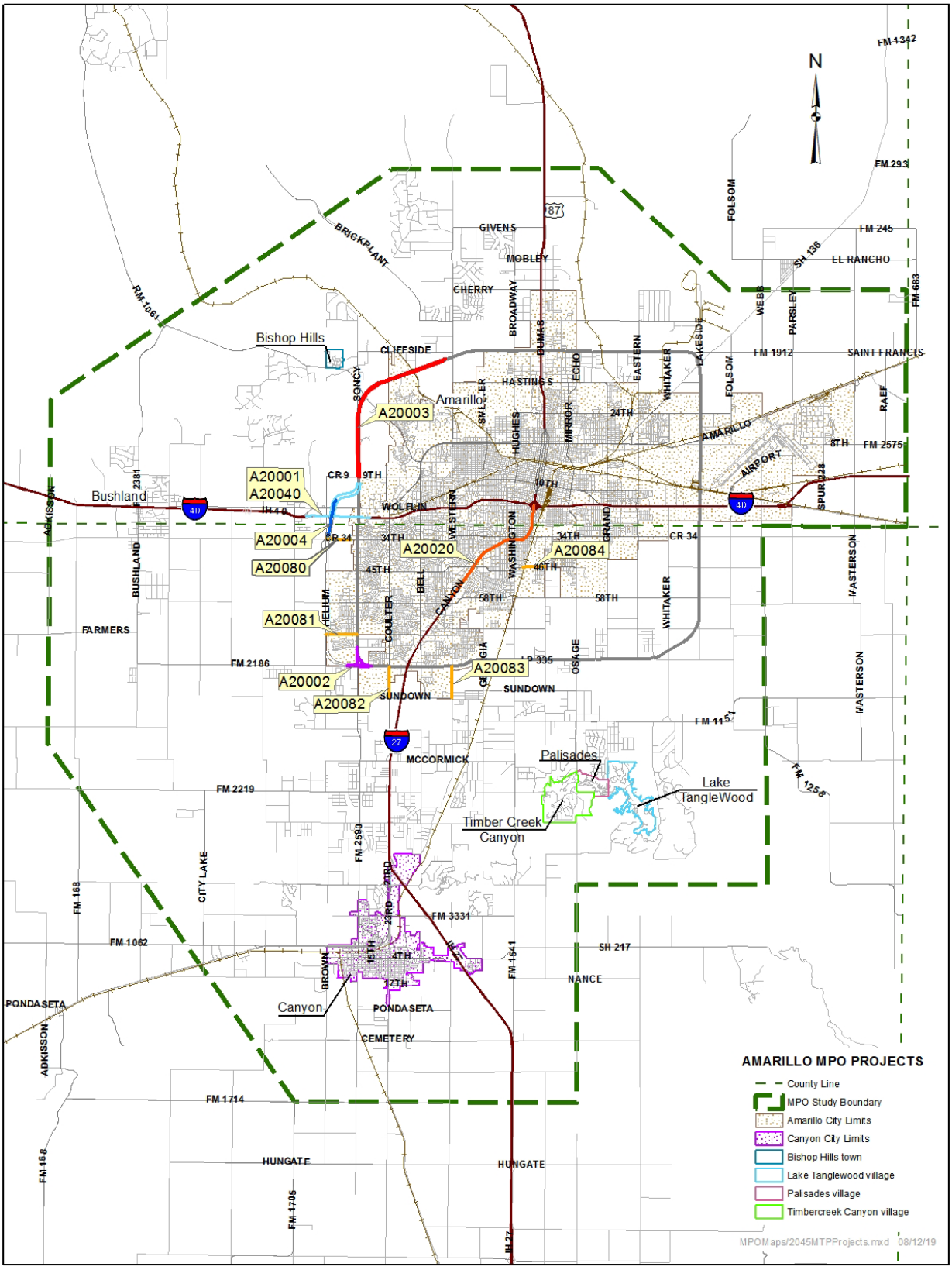


Table 5.3
ILLUSTRATIVE LIST – Amarillo Metropolitan Transportation Plan 2020-2045

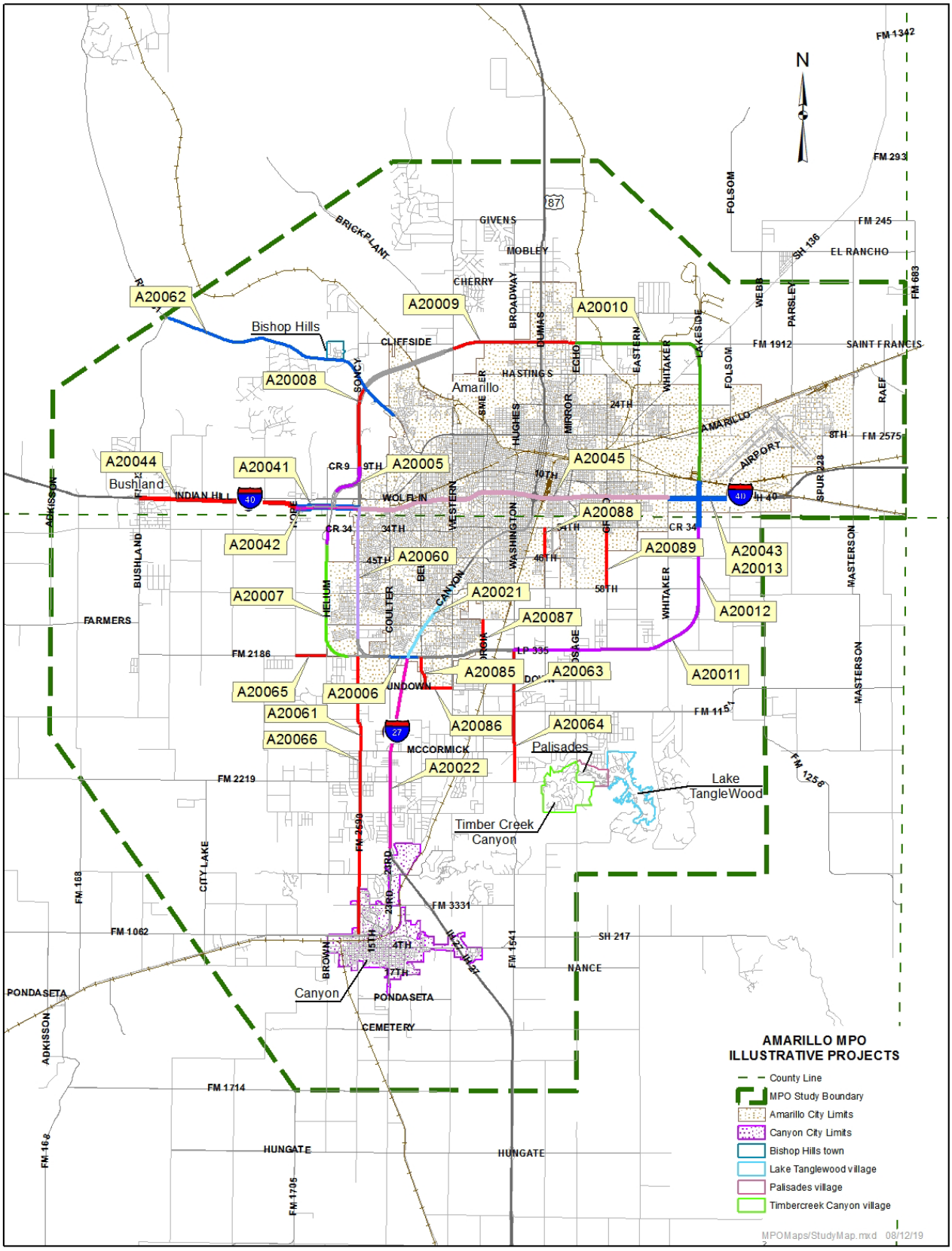
MPO ID	Facility	From/At	To	Description	Status	Timing	YOE Total Project Cost x $1000
A20005	SL335	.8 M S of 34th Ave	SW 9th Ave	B-2 Phase IV: Construct 4 New Mainlanes, Ramps, and Grade Separations at 34th, FM 2590, & 9th	Illustrative	2020	$56,600
Notes:	This is a multi-phase project						
Phase I	SL335	.8 M S of 34th Ave	.2 M N of 34th Ave	B-2 Phase IV: Construct 4 New Mainlanes, Ramps, and 34th Grade Separation	Illustrative		
Phase II	SL335	.4 M NE of BI40-D	FM 2590 North	B-2 Phase IV: Construct 4 New Mainlanes, Ramps, and FM 2590 North Grade Separation	Illustrative		
Phase III	SL335	FM 2590 North	SW 9th Ave	B-2 Phase IV: Construct 4 New Mainlanes, Ramps, and 9th Grade Separation	Illustrative		
				Ancestor : A15172			
A20006	SL 335	IH 27	Bell St	B-1 Phase III: Construct SL 335 3rd Level Mainlane Bridge at IH 27	Illustrative	2020	$20,400
				Ancestor : A15160 & A15166			
A20007	SL 335	W of FM 2590 S	S of 34th Ave	B-2 Phase V: Construct 4 New Mainlanes, Ramps, and FM 2186 Grade Separation			$60,000
Notes:	This is a multi-phase project						
Phase I		W of FM 2590 S	FM 2186	B-2 Phase V: Construct 4 New Mainlanes, Ramps, and FM 2186 Grade Separation	Illustrative	2020	
Phase II		FM 2186	N of FM 2186	B-2 Phase V: Construct 4 New Mainlanes, Ramps, and FM 2186 Grade Separation	Illustrative	2020	
Phase III		N of FM 2186	N of Arden Rd	B-2 Phase V: Construct 4 New Mainlanes, Ramps, and Arden Grade Separation	Illustrative	2020	
Phase IV		N of Arden Rd	N of Hillside	B-2 Phase V: Construct 4 New Mainlanes, Ramps, and Hillside Grade Separation	Illustrative	2020	
Phase V		N of Hillside	S of 34th Ave	B-2 Phase V: Construct 4 New Mainlanes in 45th area	Illustrative	2020	
				Ancestor : A15005			
A20008	SL 335	SW 9th Ave	RM 1061	C-1 Phase II: Convert 4-Lane to 4-Lane Freeway	Illustrative	2020	$58,500
				Ancestor : A15167 & A15101 & A15102			

MPO ID	Facility	From/At	To	Description	Status	Timing	YOE Total Project Cost x $1000
A20009	SL 335	FM 1719	Echo St	C-2: Convert 4-Lane to 4-Lane Freeway, US 87 3rd Level Interchange, Frontage Roads, and Ramps			$128,400
Notes:	This is a multi-phase project						
Phase I	SL 335	FM 1719	US 87	C-2: Convert 4-Lane to 4-Lane Freeway, US 87 3rd Level Interchange, Frontage Roads, and Ramps	Illustrative	2020	
Phase II	SL 335	US 87	Echo St	C-2: Convert 4-Lane to 4-Lane Freeway, US 87 3rd Level Interchange, Frontage Roads, and Ramps *Ancestor : A15100*	Illustrative	2020	
A20010	SL 335	Echo St	SE 3rd Ave	D: Convert 4-Lane to 4-Lane Freeway, Frontage Roads, Ramps, and Grade Separations *Ancestor : A15099*	Illustrative	2020	$209,500
A20011	SL 335	FM 1541 (Washington)	34th Ave	A-3: Convert 2-Lane to 4-Lane Freeway, Frontage Roads, Ramps, and Grade Separations *Ancestor : A15095 & A15096*	Illustrative	2020	$196,000
A20012	SL 335	FM 1541 (Washington)	34th Ave	A-3: Operational Improvements (Such As: Intersection Improvements, Super-2, Turn Lanes)	Illustrative	2020	$18,000
A20013	SL 335	34th Ave	SE 3rd Ave	A-4: Convert 4-Lane to 4-Lane Freeway, Frontage Roads, Ramps, and Grade Separations			$59,180
Notes:	This is a multi-phase project						
Phase I	SL 335	34th Ave	Potter Co. Line	A-4: Convert 4-Lane to 4-Lane Freeway, Frontage Roads, Ramps, and Grade Separations	Illustrative	2020	$22,320
Phase II	SL 335	Randall Co. Line	SE 3rd Ave	A-4: Convert 4-Lane to 4-Lane Freeway, Frontage Roads, Ramps, and Grade Separations *Ancestor : A15147 & A15148*	Illustrative	2020	$36,860
A20020	IH 27	45th Ave	IH 40	On/Off Ramp Improvements, Construct Aux Lanes, Reconstruct Bridges, Intersection Improvements, Improve ADA		2020	$135,000
Notes:	This is a multi-phase project						
Phase I	IH 27	45th Ave	IH 40	Upgrade Standards, On/Off Ramp Improvements, Construct Aux Lanes, Overlay	Short		
Phase II	IH 27	45th Ave	IH 40	On/Off Ramp Improvements, Construct Aux Lanes, Reconstruct Bridges, Intersection Improvements, Improve ADA	Illustrative	2020	$135,000
A20022	IH 27	Western St	S of Sundown	IH:27 Widen Freeway From 4-Lanes to 6-Lanes *Ancestor : A15003*	Illustrative	2020	$100,100

MPO ID	Facility	From/At	To	Description	Status	Timing	YOE Total Project Cost x $1000
A20041	IH 40	Hope Rd	Soncy Rd	IH 40: Convert Frontage Roads to Urban Section			$19,700
Notes:	This is a multi-phase project						
Phase I		Hope Rd	BI 40-D	IH 40: Convert Frontage Roads to Urban Section	Illustrative	2020	
Phase II		BI H-40-D	Soncy Rd	IH 40: Convert Frontage Roads to Urban Section *Ancestor : A15082*			
A20042	IH 40	.5M W of Hope Rd	Soncy Rd	IH 40: Widen Freeway from 4-Lanes to 6-Lanes			$58,400
Notes:	This is a multi-phase project						
Phase I		.5M W of Hope Rd	BI 40-D	IH 40: Widen Freeway from 4-Lanes to 6-Lanes	Illustrative	2020	
Phase II		BI H-40-D	Soncy Rd	IH 40: Widen Freeway from 4-Lanes to 6-Lanes *Ancestor : A15071*			
A20043	IH 40	Whitaker Rd	SS 468 (Airport)	A-4: Reconstruct IH 40 Frontage Roads and Construct SL 335 Frontage Road Box *Ancestor : A15151*	Illustrative	2020	$3,440
A20044	IH 40 FR	Hope Rd	RM 2381	Convert 2-Way Frontage Roads to 1-Way *Ancestor :*	Illustrative	2020	$5,000
A20045	IH 40	SL 335 West	SL 335 East	Operational Improvements (Such As: Ramp Reversals, Ramp Improvements) *Ancestor :*	Illustrative	2020	$45,000
A20060	FM 2590	IH 40 Potter Co. Line	Randall Co. Line 81st Ave	Operational Improvements (Access Control, Traffic Signals, Turn Lanes) *Ancestor :*	Illustrative	2020	$6,250
A20061	FM 2590	SL 335	US 60 (Canyon)	Operational Improvements (Such As: Intersection Improvements, Turn Lanes) *Ancestor :*	Illustrative	2020	$9,600
A20062	RM 1061	RM 2381	Coulter St	Widen Shoulders; Add Super-2 Passing Lanes; Intersection Improvements *Ancestor : A15007*	Illustrative	2020	$7,300
A20063	FM 1541	SL 335	FM 1151	Operational Improvements (Such As: Intersection Improvements, Turn Lanes) *Ancestor : A15045*	Illustrative	2020	$3,000

MPO ID	Facility	From/At	To	Description	Status	Timing	YOE Total Project Cost x $1000
A20064	FM 1541	FM 1151 South	McAfee Ln	Operational Improvements (Such As: Intersection Improvements, Turn Lanes) *Ancestor : A15045*	Illustrative	2020	$3,000
A20065	FM 2186	Hope Rd	SL 335 (Helium)	Operational Improvements (Such As: Intersection Improvements, Turn Lanes) *Ancestor : A15*	Illustrative	2020	$2,000
A20066	FM 2590	SL 335	US 60 (Canyon)	Upgrade to 5-Lane, Urban Sec. (Curb & Gutter, ADA) *Ancestor : A15047*	Illustrative	2020	$43,500
A20085	Bell St	SL 335	Sundown Ln	Upgrade to Urban 4 Lane Arterial with Center Left Turn Lane (City of Amarillo project) *Ancestor : A15027*	Illustrative	2020	$4,000
A20086	Sundown Ln	Bell St	Western St	Upgrade to Urban 4 Lane Arterial with Center Left Turn Lane (City of Amarillo project) *Ancestor : A15118*	Illustrative	2020	$4,000
A20087	S Georgia St	City Limits	SL 335	Upgrade to Urban 4 Lane Arterial with Center Left Turn Lane (City of Amarillo project) *Ancestor : A15050*	Illustrative	2021	$5,000
A20088	Tradewind St	SE 34th Ave	SE 46th Ave	Upgrade to Urban 4 Lane Arterial with Center Left Turn Lane (City of Amarillo project) *Ancestor :*	Illustrative	2020	$1,200
A20089	Grand St	SE 34th Ave	SE 58th Ave	Upgrade to Urban 4 Lane Arterial with Center Left Turn Lane (City of Amarillo project) *Ancestor : A15053 A15052*	Illustrative	2020	$3,600
						TOTAL	**$1,265,670**

Map 5.6
Illustrative Projects Map 2020-2045



BICYCLE AND PEDESTRIAN PLAN

Introduction

Thirty years ago, bicycle and pedestrian facilities were not included in the transportation planning process. Thus, facilities to accommodate these transportation modes did not always receive a high priority. The federal legislation in the early 1990s changed the way bicycle and pedestrian facilities were considered. ISTEA required MPOs to include these facilities in the overall transportation system.

The Americans with Disabilities Act (ADA) has also directed the improvement of facilities for the disabled. While this act is not specifically geared toward improving pedestrian facilities, many of the requirements do provide a secondary effect on pedestrians.

Existing Facilities

In the Planning Area, the first attempt at a designated bike facility was during the early 1970s. The City of Amarillo developed a designated bicycle route that provided a loop around the city. The signage for that facility was later removed and any striping that was present has been removed by seal coat or overlay projects.

In 2003, Amarillo adopted the Amarillo Hike and Bike Plan, Map 5.4. A primary objective of the bicycle and pedestrian plan was to carefully integrate bicycle and pedestrian transportation modes with vehicular transportation in order to achieve a balanced multi-modal transportation system. In 2010, Amarillo updated its Comprehensive Plan, which has elements that specifically address the Amarillo Hike and Bike Plan. The City's Parks and Recreation Department is currently updating their Parks Master Plan which contains elements for bike and pedestrian facilities. Continued updates will help to further incorporate the use of bike and pedestrian facilities into our transportation system.

Sidewalk facilities have been provided throughout Amarillo on most developed lots within the city. Amarillo requires, by ordinance, all new developments to install sidewalks and ramps, where applicable, along the property frontage. While this does not always provide for a continuous sidewalk system, it does insure that pedestrian facilities are provided along newly developed land. Although this does address future development it does little for existing neighborhoods. Amarillo has completed a number of related projects that added several million dollars worth of ADA ramps throughout the city. New ramps are added when and where significant street repair or modification occurs. Pedestrian signal facilities are provided at most signal locations.

Opportunities and Limitations

Walking or bicycling as a transportation choice does not provide a significant number of trips in Amarillo. These alternative modes of transportation have been limited by a lack of adequate facilities and lack of citizen demand for these amenities. Until changes in

the attitude of the public are made, bicycling and walking are not likely to become major forms of transportation.

Accommodating commuting bicyclists not only requires on-street facilities and trails, but also parking and support facilities, such as showers and lockers. A lack of these services has diminished the opportunity for citizens to consider bicycling as an alternative form of transportation. The majority of people who do bike usually do so for recreation. Only when adequate facilities are provided will citizens seek bicycling and walking as alternative sources of transportation.

Amarillo acquired abandoned railroad right of way and was fortunate to have a rails-to-trails transportation enhancement project selected by the Texas Transportation Commission. A project, named the Rock Island Rail Trail, ties bicycle and pedestrian trails and the transit transfer station, located in the Central Business District (CBD), to the existing trails of the regional hospital district on the western edge of the city. A local bicycle-pedestrian plan coupled with the construction of the rails-to-trails project affords an opportunity to provide citizens with bicycle and pedestrian facilities, which is used for recreation and commuting purposes. The MPO supports these efforts to provide new choices in transportation modes to citizens of the area.

The MPO will continue to encourage and support projects that allow for development of alternative modes of transportation and related facilities. With efforts such as the Rock Island Rail Trail, the promotion of bicycling or walking as alternative modes of transportation will be limited by citizen's desires for these types of facilities. The MPO is seeking to develop a multimodal transportation plan to aid in the thoroughfare, transit, bike, and pedestrian as well as freight movement for the entire Planning Area.

Safe Routes to School

The Safe Routes to Schools (SRTS) program enable and encourage children, including those with disabilities, to walk and bicycle to school. The program can make walking and biking to school less hazardous and more appealing by identifying routes which provide the least potential for vehicular conflict. SRTS projects and activities improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of primary and middle schools. Communities are able to use the funds to address hazards and slow traffic on roads that serve schools, as well as to build pathways, bike lanes, and sidewalks near schools.

Under the FAST Act, SRTS activities are now a set-aside of the Surface Transportation Block Grant (STBG) program funds for Transportation Alternatives (*see page 67 for related information*). SRTS actions are eligible to compete for funding alongside other programs, including the Transportation Enhancements Program and Recreational Trails Program. Eligible applicants include state, local, and regional agencies, nonprofits, and public schools. Primary beneficiaries must be students, kindergarten through grade 8. The competitive application process is administered by TxDOT. The approved projects are eighty percent federally funded with a twenty percent match. Award recipients must comply with federal and state funding requirements. Infrastructure projects must be

within two miles of a school and on public property or private land with legal public-access easements.

SRTS Objectives:

- to enable and encourage children in grades K-8, including those with disabilities, to walk and bicycle to school
- to make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age
- to facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools

SRTS Benefits:

- Increased bicycle, pedestrian, and traffic safety
- More children walking and bicycling to and from schools
- Decreased traffic congestion
- Improved childhood health
- Reduced childhood obesity
- Encouragement of healthy and active lifestyles
- Improved air quality
- Improved community safety
- Reduced fuel consumption
- Enhanced community accessibility
- Increased community involvement
- Improvements to the physical environment that increase the ability to walk and bicycle to and from schools
- Increased interest in bicycle and pedestrian accommodations throughout a community
- Improved partnerships among schools, local municipalities, parents, and other community groups, including non-profit organizations

SRTS Elements:

The SRTS program is intended to be comprehensive, utilizing infrastructure enhancements to improve bicycle and pedestrian mobility and safety, as well as non-infrastructure approaches including bicycle and pedestrian safety education, awareness of the opportunities to safely bike and walk to school, and by addressing safety concerns through law enforcement activities. The program is divided into five elements, which include both infrastructure and non-infrastructure components, referred to as the "5 E's". A general description of each element is provided below.

- Engineering – Creating operational and physical improvements to the infrastructure surrounding schools that reduce speeds or potential conflicts with motor vehicle traffic, and establish safer and fully accessible crossings, walkways, trails, and bikeways.
- Education – Teaching children about the broad range of transportation choices, instructing them in important lifelong bicycling and walking safety skills, and launching driver safety campaigns in the vicinity of schools.
- Enforcement – Partnering with local law enforcement to ensure traffic laws are obeyed in the vicinity of schools (this includes enforcement of speeds, yielding to pedestrians in crossings, and proper walking and bicycling

behaviors), and initiating community enforcement such as crossing-guard programs.

- Encouragement – Using events and activities to promote walking and bicycling.
- Evaluation – Monitoring and documenting outcomes and trends through the collection of data, including the collection of data before and after the interventions.

SRTS Potential Projects:

The Amarillo MPO plans to compete for SRTS funds. Plans under consideration and a category for potential development are shown in the following table.

Table 5.4
Safe Routes to School Projects

Project ID	Description	Cost x1000
A20-TA-03-SR01	Sidewalk Project – NE 15th Ave (north side) From US 87/287 To N. Mirror St	325
A20-TA-03-SR02	Sidewalk Project – NE 24th Ave (north side) From US 87/287 To N Roosevelt St	450
A20-TA-03-SR03	Sidewalk Project – N Coulter St (east side) From Foothill Dr To Fairway Dr	200

Policy Considerations

To improve the bicycle and pedestrian facilities within the Planning Area the following policies will be considered:

- Adopt and maintain the City's comprehensive bicycle plan for the Planning Area
- Develop a sidewalk inventory for all streets classified as a collector or above
- Identify areas of deficiency and gaps that need to be completed to provide for a continuous pedestrian system
- Revise arterial and collector street striping standards to accommodate bicyclists, where possible
- Review all seal coat and overlay projects to evaluate the incorporation of bicycle and pedestrian facilities
- Incorporate bicycle and pedestrian facilities into new roadway projects
- Promote bicycle safety training
- Incorporate methods to accommodate intermodal use of bicycle and transit facilities
- Promote development regulations and ordinances that provide for sidewalks and access ramps
- Improve pedestrian access at intersections and across medians

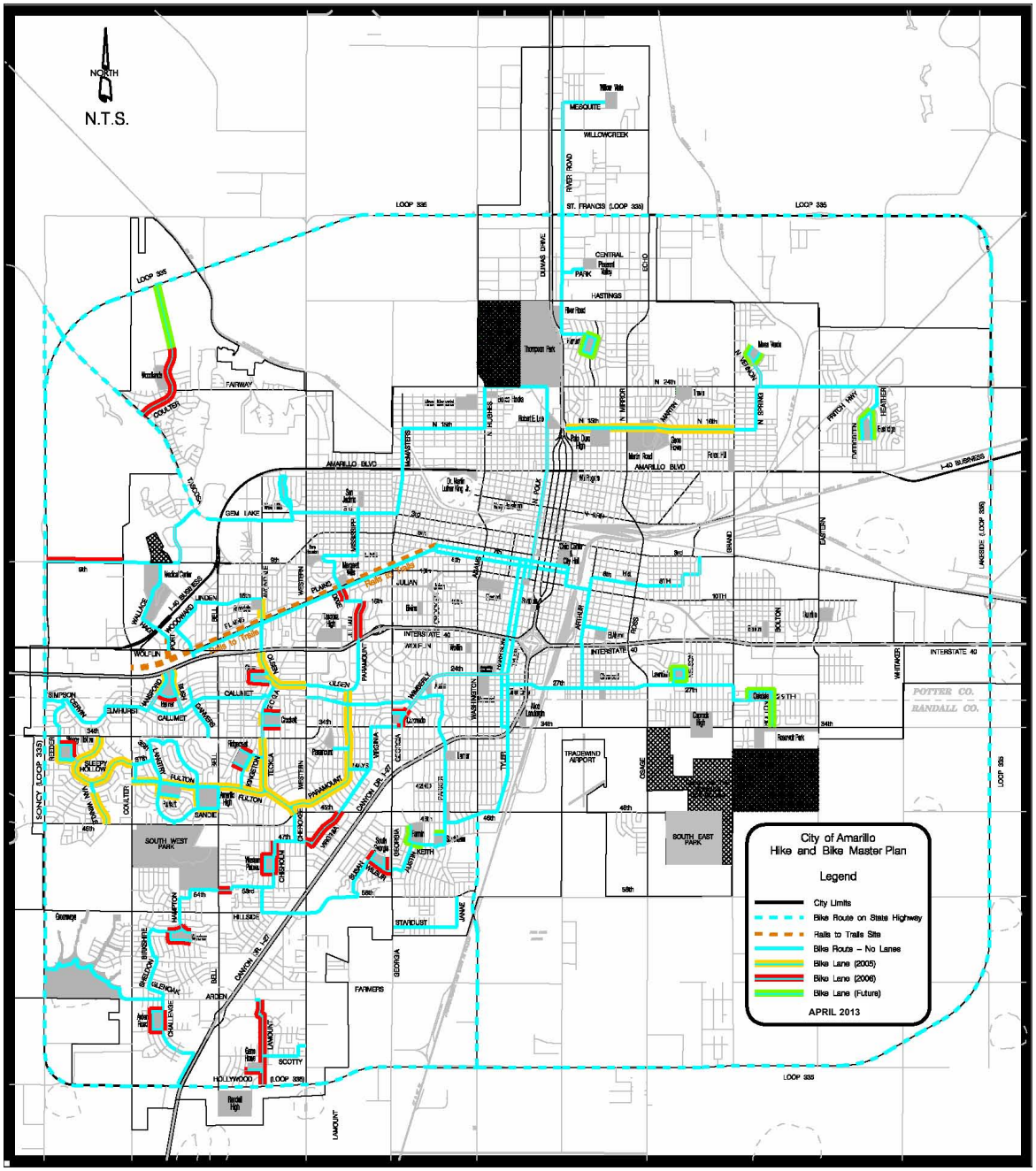
Plan Elements

The elements selected to improve the bicycle and pedestrian systems include:

- sidewalk improvements
- on street bike facilities
- intersection improvements
- safety improvements
- ADA improvements

These improvements will be refined as the MPO develops information on deficiencies in the system.

Map 5.7 City of Amarillo Hike and Bike Master Plan



TRANSIT PLAN

Introduction

The City of Amarillo provides public transportation services, operated by Amarillo City Transit (ACT). Services include a fixed-route system and a demand response para-transit system. Local transit services for the City of Amarillo have been in operation since 1925. The City of Amarillo began operating the local fixed-route system in 1966. Prior to that time, the system was privately owned. Para-transit service, designated as "Spec-Trans", is designed for persons with a disability that prevents their travel on an accessible fixed-route bus. The Spec-Trans service was initiated in July of 1989.

The existing transit system provides a transportation alternative to the citizens of Amarillo. Unfortunately, long trip lengths and dependence on the automobile, combined with ease of mobility within the City, has discouraged most citizens from using public transportation as an alternative to driving.

The Transit Department anticipates that future passenger growth will come from Spec-Trans passengers and persons with disabilities who are incapable of utilizing a fixed-route bus. Another source of passenger growth is attributed to 'client dumping' from other agencies because of budget cuts related to transportation.

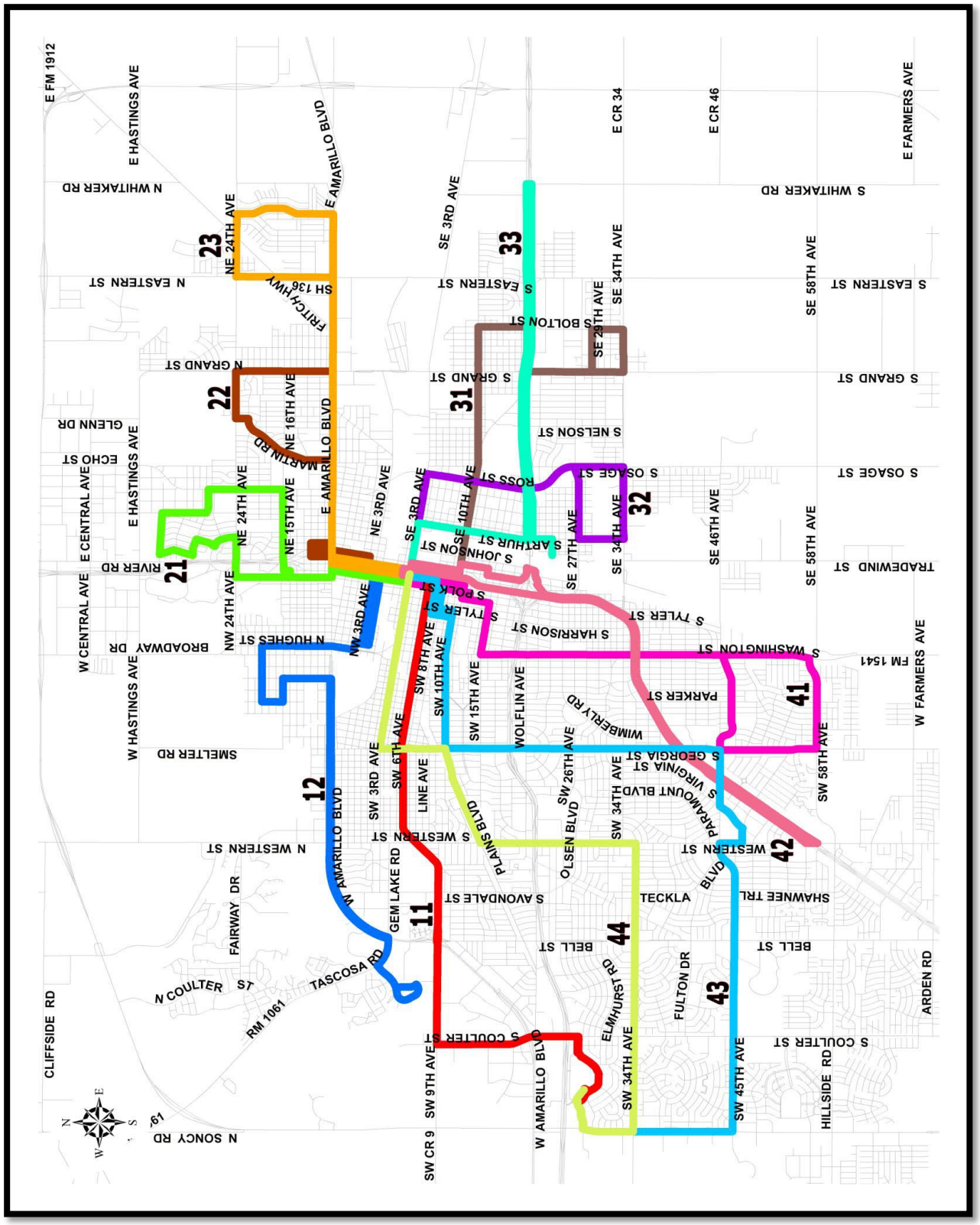
In planning for future transportation needs, ridership trends must be considered to provide the best possible service for those who use it. Local trends indicate that the majority of passengers who utilize the transit system do so as a primary means of transportation. Opportunities to upgrade the transit system and boost ridership are limited by several factors, such as the availability of funding, limited farebox revenues, continued dependence on private vehicles, and a shrinking passenger base.

ACT has gone to great lengths to make the fixed-route system accessible to persons with disabilities. The fixed-route system carries many persons who are mobility impaired. ACT plans to acquire low floor vehicles in future bus procurements to encourage mobility impaired individuals to use the fixed-route system. ACT has implemented trip-by-trip eligibility, fixed-route travel training, and fixed route deviations. In the future, the Transit Department may consider other options such as reducing the para-transit service area to ¾ of a mile on each side of the fixed-route or the use of auxiliary routes to integrate persons with disabilities into the fixed-route system.

Fixed-Route System

In 2016, ACT began a feasibility study, in which 13 new routes were recommended. With only a few modifications, these are the routes that ACT chose to implement. This system requires coordinated route schedules that provide for arrival at the downtown transfer location on alternating 45 to 60 minute intervals so that riders may easily transfer. One route is an on-call service (deviated service) that services the hospital district and has designated time points that meets with two fixed routes.

Map 5.8
Amarillo City Transit Fixed Route Service



Service Area:
The Amarillo city limits include over 102 square miles. The ACT service area is defined as that portion of the city west of Lakeside Drive. This area covers approximately 86 square miles. The area realistically served by a bus route is generally considered the area contained by a strip one-quarter mile on either side of that route. One-quarter mile is the industry standard for the maximum distance a rider might walk to use a fixed-route bus. According to this standard, the area served by ACT Fixed-Route System is about 36.4 square miles. Spec-Trans services encompass the entire 86 square mile service area also.

Vehicle Fleet:
The ACT fixed-route fleet is comprised of 30 mid-sized transit buses. All of the buses are equipped with a wheelchair lift, forward facing wheelchair securement areas and a bus stop announcing system that allows persons with visual and hearing impairments the opportunity to orient themselves while the vehicle is in motion. ACT is currently waiting on delivery of 6 new low floor buses.

Days and Hours of Service:
ACT provides service Monday through Saturday from 6:00 a.m. to 7:00 p.m., but the hours of operation vary by route. Service is not provided on the following holidays: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving, and Christmas Day. ACT operates on a Saturday schedule on the following City holidays: Martin Luther King Jr. Day, Veteran's Day, and Christmas Eve.

Fare Structure:
ACT does not issue any type of a prepaid transit pass. Prepaid regular fare tickets are available for purchase at the Transit Department and at City Hall. Prepaid tickets have no expiration date and can be used to board any fixed-route bus. The fare structure for the system is listed below.

ACT Fixed-Route Passenger Fares

- Adult .75
- Children (6-12) .60
- Children under 6 Free when accompanied by an adult
- Student .60
- Senior Citizen .35
- Person with a Disability .35

Transfer Facility:
All ACT routes radiate from a transfer facility located at 219 S Fillmore Street. This location is at the corner of SE 3rd Avenue and Fillmore Street, across from the Amarillo Police Department. The transfer station is well located from a regional perspective. It is located within the downtown business district with pedestrian access to retail, commercial office facilities, and employment locations within the central business district.

The downtown transfer facility is a strategic resource for transit passengers. The building was completed in 2003. It features a climate-controlled waiting room, lobby

area with seating and public restrooms. These passenger amenities allow transit patrons a familiar place to wait for their bus with convenience and safety. Security lighting and protection from the elements are available to waiting passengers during all hours of operation. Passengers may board and alight transit vehicles away from the street and out of the elements. Due to the fact ACT has outgrown their transfer facility and the facility's current poor condition; ACT has planned to undergo a planning study for a new facility and location.

Spec-Trans Service

Spec-Trans service is complementary para-transit service providing transportation for certified mobility impaired residents of Amarillo who cannot physically use an accessible fixed-route bus. Spec-Trans provides curb-to-curb service with a lift-equipped bus for any trip purpose within the ACT service area. In addition, for those in need ACT provides origin-to-destination service. Persons may apply directly to ACT for certification.

Spec-Trans service is provided on a space-available (first-come-first served) basis. Trip reservations may be scheduled from 8:00 a.m. until 5:00 p.m. Monday through Saturday. Reservations may be made on Sundays and after 5:00 p.m. by leaving a message on the answering machine.

A subscription service is available for riders who make the same trip at least three times per week. Subscription trips are available for up to 50% of Spec-Trans capacity at any given time of the day.

Eligibility:

Spec-Trans eligibility is not simply a matter of whether or not a person has a disability. Eligibility is a functional determination of a person's ability to use the fixed-route system. To determine ADA eligibility, persons must complete an application and be interviewed in-person. Persons who wish to apply may obtain an application from the ACT Transit office or by going online to ACT's website to obtain a copy. Once the application is complete, applicants must call the office (806) 378-3055 to schedule an interview.

The interview includes questions regarding the person's abilities, a description of Spec-Trans service, and an opportunity for the applicant to ask questions regarding the service. Applicants are notified during the interview of the approval or disapproval of their applications. Out of town visitors may use Spec-Trans by calling for reservations and showing proof of para-transit eligibility from their place of residence.

Days and Hours of Service:

Spec-Trans service operates Monday through Saturday, between 6:00 a.m. and 7:00 p.m. Service is not provided on the following holidays: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving, and Christmas Day. ACT operates on the following City holidays: Martin Luther King Jr. Day, Veteran's Day, and Christmas Eve.

Fare Structure:

ACT does not issue any type of a Spec-Trans pass, but prepaid tickets are available for purchase at the Transit Department and at City Hall. Prepaid tickets have no expiration date and can be used to board any Spec-Trans vehicle.

Prepaid tickets are available by purchasing a booklet of twenty tickets for $30.00 at the ACT office and at the Utilities Department at City Hall. Tickets are non-refundable. Other passengers, excluding a personal care attendant accompanying an eligible rider, are accepted on a space available basis. The fare structure for the system is listed below.

ACT Spec-Trans Passenger Fares

- Adult 1.50
- Children (6-12) 1.50
- Children under 6 Free when accompanied by an adult
- Student 1.50
- Senior Citizen 1.50
- Passenger Care Attendants Free

No Show Policy:

A no-show occurs when you fail to board the bus within five (5) minutes of the arrival time of the bus. ACT operators will not wait any longer than five (5) minutes from the arrival time for passengers to board the bus. If the bus arrives within the twenty five (25) minute window the passenger must board within five (5) minutes of arrival. Passengers who take eight (8) trips or more per month will be subject to the no-show policy. If a passenger has eight (8) or more trips in a month and no-shows twenty five (25) percent of those trips, then no-show penalties will apply. For example, if a passenger books 16 trips in one month and no-shows 4 of those trips without a valid reason, then penalties will apply.

Para-transit Fleet:

The ACT para-transit fleet is comprised of 10 lift-equipped vans. Eight operate with two retained as spares. Each van has a seating capacity of 17-seated passengers and is equipped with a wheel chair lift and two forward facing wheel chair securement areas.

Americans with Disabilities Act:

ACT has over 400 designated accessible bus stops. This means that at each stop a curb cut, ramp, and loading pad are available to accommodate any person that desires to board a bus at that location. In the past, the City of Amarillo has completed 4 construction projects that improve accessibility of fixed-route buses. The last project resulted in 175 new benches and 8 new shelters. This included 85,710 square feet of new sidewalk and bus pads, as well as 2,195 linear feet of new curb and gutter. There was also 475 square feet of ADA pavers installed. In 2018, ACT began a bus shelter revitalization project, for better placement and utilization of bus shelters for passengers.

Other improvements continue to be made for passenger convenience and ADA compliance. ACT has invested in lift-equipped vehicles with forward facing securement areas and an automated programmable bus stop announcing system. The fixed-route system is designed with color-coded and numeric designations that assist passengers who are unable to read.

An increased use of audible pedestrian signals at traffic signal locations along the fixed-route bus corridors is among these improvements. Funding drawn over several grant

years was utilized to provide new security measures inside the transit vehicles. Video cameras installed on each vehicle provide a more secure passenger environment and allows a more thorough review of accidents, complaints, and vandalism.

Inventory of Physical Assets
The Transit Department owns 30 buses. For fixed route, sixteen buses are needed for service and 4 are retained as spares. For para-transit vans, eight buses are used for service and 2 are retained as spares. In addition, eight service vehicles are used to maintain service but are not used in generating revenue.

Revenue
From fiscal year 2015-2016 to 2016-2017, fixed-route fare box revenue declined slightly, but Spec-Trans revenue increased slightly. According to fiscal year 2016-2017 statistics, the average one-way trip on a fixed-route bus cost $9.49 and the average one-way trip on Spec-Trans cost $35.67. In comparison to 2015-2016, the average one-way trip cost for both services declined. In 2018, ACT conducted a fare study which presented three scenarios. The incorporation of any of these three scenarios or a mixture of them is projected to increase the overall system's revenue.

Opportunities And Limitations
After the new route changes made in 2018, the transit system provides more direct service to the citizens of Amarillo. Unfortunately, dependence on the automobile, a lack of congestion, and the ease of mobility in the city have not encouraged citizens to use transit as an alternative to driving.

In planning for future transit facilities, the ridership trends must be considered to provide the best possible service for those who use it. Local trends indicate that the majority of passengers utilizing the transit system do so as a primary means of transportation. In 2018, there was a fare study of ACT fare structure, in which three fare scenarios were proposed for future implementation. As part of the study, a rider survey was conducted gauging the payment method, fare type, frequency of use, transfer activity, and Amarillo College student use. The results of this survey are as follows:

- *Payment Method:* 70.5 percent of riders pay with cash versus 29.5 percent with tickets.
- *Fare Type:* 42.3 percent of riders pay the full fare, 3.8 percent the student fare, and 53.6 percent the half fare.
- *Frequency of Transit Use:* 1.3 percent of passengers ride the bus less than once per week, 19.2 percent ride one to two days per week, 29.5 percent ride three to four days per week, and 50 percent ride five or more days per week.
- *Transfer Activity:* 79.5 percent of trips require a transfer versus 20.5 percent that do not.
- *Amarillo College Student Use:* 11.5 percent of riders are currently Amarillo College students.

To meet the needs of the transit ridership, several improvements could be made to the existing system. They include: increasing the frequency, providing extended hours of service, improving the transfer facility, providing improved accessibility and improving the image.

ACT is currently in the process of purchasing several traditional low floor 35' buses. The opportunities to upgrade the transit system and increase ridership will be limited by several factors. The major factor will be the availability of funding. Other factors limiting transit growth include: vehicular dependence and ADA requirements.

Policy Considerations

Improvements to the transit system will consider the following policy considerations:

- Continue to develop new designated bus stops on all routes to meet ADA requirements of accessibility
- Continue to develop improved communications, which would include large print maps, Braille, audio and video materials about the system
- Develop improved marketing strategies to reach potential riders
- Identify and monitor areas of possible route expansion
- Improve training efforts on the use of the fixed-route system
- Increase fares

Plan Elements
The projects identified in the short- and long-range plan include operating expenses, preventative maintenance, buses, vans, and various equipment and passenger amenities.

Table 5.5
Short Range Plan 2020-2030

Project ID	Description	Cost x $1000
A20T01S	Operating Expense	44,451
A20T02S	Replace Bus Vehicles	4,122
A20T03S	Replace Para-transit Vehicles	1,375
A20T04S	Equipment (various)	297
A20T05S	Passenger Amenities	1,800
A20T06S	Preventative Maintenance	9,860
A20T07S	Training	225
A20T08S	ADA ParaTransit Service	20,264
A20T09S	Transfer Facility Replacement	9,754
TOTAL		87,194

Table 5.6
Long Range Plan 2031-2045

Project ID	Description	Cost x $1000
A20T01L	Operating Expense	77,309
A20T02L	Replace Bus Vehicles	8,920
A20T03L	Replace Para-transit Vehicles	5,946
A20T04L	Equipment (various)	235
A20T05L	Passenger Amenities	2,100
A20T06L	Preventative Maintenance	15,890
A20T07L	Training	252
A20T08L	ADA ParaTransit Service	37,613
TOTAL		148,265

Section 5310 Transit Services
Under current law, Section 5310 now contains the previous Section 5317 – New Freedom Program. Section 5310 funds create a variety of opportunities for transportation services meeting the special needs of seniors and individuals with disabilities.

The goal in administering the Section 5310 program is to promote the availability of cost effective, efficient and coordinated passenger transportation services planned, designed and carried out to meet the special needs of seniors and individuals with disabilities when public transportation is insufficient, inappropriate or unavailable, using the most efficient combination of financial and other resources.

Elderly and disabled transportation within the MPO boundary using Section 5310 funds has been ongoing since approximately 1978. At one time, these transportation services were provided by the Amarillo Multi-service Center for the Aging, which received federal assistance through the Section 5310 program.

Section 5311 Transit Services
Panhandle Community Services provides rural transportation services in the 26 county area of the Panhandle under the section 5311 program. This service, called Panhandle Transit, operates approximately 85 vehicles within the Amarillo TxDOT District. The transit service has been ongoing since 1984. The FTA provides the major funding for the rural service, with matching funds provided by State and local sources. Transportation is provided from rural locations into the metropolitan area on a closed-door basis. Panhandle Transit is also the Medicare provider for the Amarillo area.

Greyhound
Greyhound has two locations in Amarillo. The first location is the main terminal at 700 S. Tyler St. The second location is a maintenance facility at 4th Ave and Monroe. Both of these facilities are in need of expansion. Greyhound is currently looking into the possibility of a joint terminal with ACT, the local public transportation provider. This is part of the study being conducted by Amarillo City Transit.

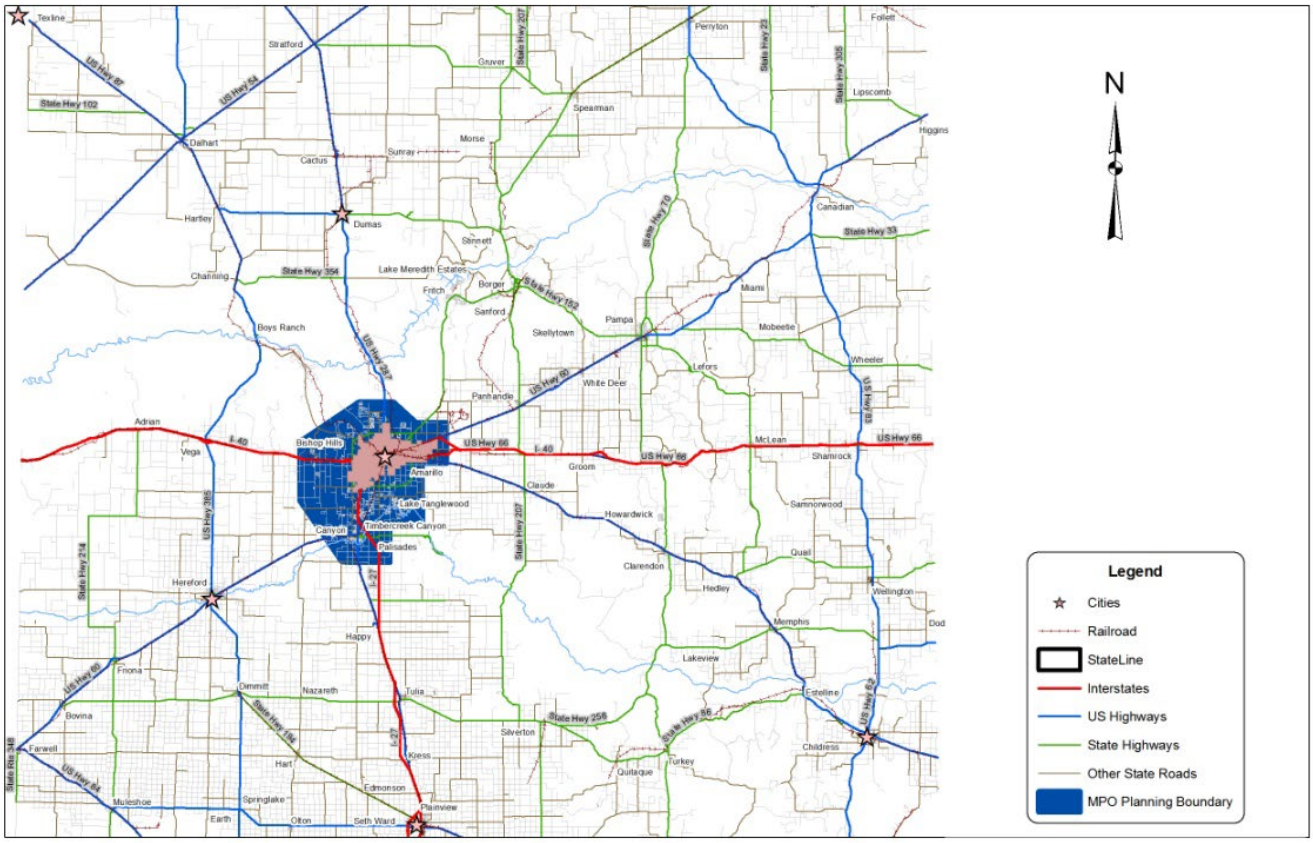
While Greyhound has 6,000 employees companywide, 24 of these employees are found in Amarillo. They hope to expand this to 28 employees in the near future. The Amarillo terminal receives 14 coaches per day, and they are open 365 days a year. Each coach carries 50 passengers. This relates to 700 passengers per day and over 250,000 passengers per year.

One of the challenges Greyhound has to contend with is when they have 700 passengers a day going through the terminal and severe weather closes down routes there is no room to house all the stranded passengers. Another challenge Amarillo terminal has to deal with is it is a hub for Greyhound. This makes it difficult to keep buses on time, due to the fact when they arrive late then they will leave late.
Greyhound is also a source for some regional movement across the Panhandle. They have routes that run through Dumas TX, Clayton NM, Hereford TX, Clovis NM, and

Plainview TX. As well as traveling to larger destinations such as Lubbock, Dallas, and Denver. By traveling through these more rural areas of the Panhandle, it provides a means of effective connectivity between rural areas and the more urban areas. This also helps reduce the dependence on single occupancy trips.

Greyhound is updating their coaches, by either refurbishing the existing fleet or adding new coaches to the fleet. Some of the amenities found on the buses are Wi-Fi, reclining seats, and personal power outlets. Many of the buses are powered by clean diesel, with low emissions to help reduce pollution. Greyhound also offers a bus tracker program through their website to keep tabs on buses. An often overlooked service of Greyhound is package delivery. This service is another good way to help reduce both congestion on roadways and pollution. Traveling on a bus is actually one of the smallest carbon footprints of any mode of transport excluding bike and walking. According to the Greyhound website, If you took a greyhound bus instead of your car, you would reduce your carbon dioxide emissions by around 85%.

Map 5.9
Greyhound Transit Service



TRANSPORTATION ALTERNATIVE PROJECTS

Introduction

In 2015, the FAST Act established the Transportation Alternatives (TA) Set-Aside to replace the former Transportation Alternatives Program (TAP). This TA Set-Aside utilizes funding from the Surface Transportation Block Grant (STBG) Program and includes all activities and projects that were previously eligible under TAP which encompasses small scale transportation improvements such as pedestrian and bicycle facilities, Safe Routes to School projects, recreational trails, community improvements, and environmental mitigation. The set-aside funding amount are shown below with each state's amount based on their proportionate share of FY 2009 Transportation Enhancements funding.

Table 5.7
Transportation Alternatives Funds

Fiscal Year	Transportation Alternatives Funds (23 U.S.C. 133(h))
FY 2016	$835,000,000
FY 2017	$835,000,000
FY 2018	$850,000,000
FY 2019	$850,000,000
FY 2020	$850,000,000

A sub-allocation of this funding equal to the amount of funds apportioned to the State for Fiscal Year 2009 for recreational trails related projects is established for use under the Recreational Trails Program (RTP), which is administered through the Texas Parks and Wildlife Department. This portion of funding is used by state parks "to create and maintain recreational trails for motorized and non-motorized trail uses, including hiking, bicycling, in-line skating, equestrian use, cross-country skiing, snowmobiling, off-road motorcycling, all-terrain vehicle riding, four-wheel driving, or using other off-road motorized vehicles" (NPS, TA-RTP Fact Sheet).

Fifty percent of the remaining TA funds, after deducting the set-aside for the RTP, is distributed to areas based on their relative share of Census population (sub allocated), similar to the Surface Transportation Program. The other remaining Fifty percent is for use in "any area" of the state. Projects submitted for the sub allocated funding in urbanized areas with population of 200,000 or less as well as any projects submitted for "any area" funds are reviewed through the state competitive process for project selection, administered by a TxDOT committee then recommended to the Texas Transportation Commission for final selection.[1]

Submitted TA projects must also meet planning requirements to coordinate with regional and metropolitan planning organizations for consideration. Transportation

[1] 23 U.S.C. 133 (h)(5)

enhancement projects are presented to the MPO Policy Committee for review and endorsement. The MPO offers guidance and encouragement for each new and varied project developed by the regional community. To receive funding, projects must be identified in the TIP/STIP and be consistent with the Long-Range Statewide Transportation Plan and the MTP. While the MPO plays a role in the evolution of these projects, the Texas Transportation Commission will ultimately review and select any transportation alternatives projects.

Eligible applicants include tribal governments, local governments, transit agencies, natural resource or public land agencies, regional transportation authorities, nonprofit entities responsible for the administration of local transportation safety programs, and school districts or education agencies. TA Set-Aside projects must benefit the general public.

The funds provided by this program are on a cost reimbursement basis, not a grant. Most projects undertaken with enhancement funds are eligible for reimbursement of up to 80% of allowable costs. The governmental entity nominating a project is responsible for the remaining cost share, including all cost overruns.

Eligible activities include:

- Pedestrian & Bicycle Facilities: Sidewalks, walkways or curb ramps; bike lane striping, wide paved shoulders, bike parking and bus racks; traffic calming; off-road trails; bike and pedestrian bridges and underpasses; ADA compliance.
- Safe Routes for Non-Drivers: Access and accommodation for children, older adults, and individuals with disabilities.
- Conversion of Abandoned Railway Corridors to Trails: Acquisition of railroad rights-of-way; planning, design and construction of multiuse trails and rail-with-trail projects.
- Scenic Turnouts and Overlooks: Construction of scenic turnouts, overlooks, and viewing areas.
- Outdoor Advertising Management: Billboard inventories and removal of illegal and nonconforming billboards. Inventory control may include, but not be limited to, data collection, acquisition and maintenance of digital aerial photography, video logging, scanning and imaging of data, developing and maintaining an inventory and control database, and hiring of outside legal counsel.
- Historic Preservation & Rehab of Historic Transportation Facilities: Preservation of buildings and facades in historic districts; restoration of historic buildings for transportation-related purposes; access improvements to historic sites. Restoration of railroad depots, bus stations and lighthouses; rehabilitation of rail trestles, tunnels, bridges and canals.
- Vegetation Management: Improvement of roadway safety; prevention of invasive species; providing erosion control.
- Archaeological Activities: Projects related to impacts from implementation of highway construction projects.

- Stormwater Mitigation: Pollution prevention and abatement activities to address storm water management; water pollution prevention related to highway construction or due to highway runoff.
- Wildlife Management: Reduction of vehicle-caused wildlife mortality; restoration and maintenance of connectivity among terrestrial or aquatic habitats.

Potential Projects

The Amarillo MPO supports competition for TA Set-Aside Funding. Plans under consideration and a category for potential development are shown in the following table.

Table 5.8
Transportation Alternatives Projects

Project ID	Description	Cost x1000
A20-TA-01	Rails To Trails – Phase 2	$4,000
A20-TA-02	CBD Streetscape – Phase 2	$4,000
A20-TA-03	Safe Routes to Schools	$975

CONGESTION/DEMAND MANAGEMENT STRATEGIES

Introduction

The purpose of the Congestion/Demand Management Strategy is to improve mobility on the existing transportation network by identifying areas of congestion and employing operational improvements to reduce those problems. In the mid 1990s, the Amarillo MPO developed a CMS designed for compliance with federal regulations and the ISTEA legislation. The strategy that was developed provided a systematic process to provide information on existing and future transportation system performance.

Federal legislation requires all Transportation Management Areas (TMAs) to include a Congestion Management Process (CMP) in the planning process. A TMA, as defined by the Federal Government, includes all MPOs having a population of at least 200,000. Since the Amarillo urbanized area has not been identified as reaching that threshold currently, the MPO is not required to implement such a process; however, since the 2020 Census is anticipated to identify the Amarillo urbanized area as having a population greater than 200,000, the MPO is looking into the scheduling and method for creating a CMP.

In anticipation of reaching TMA status, the MPO is continuing development of a CMP. Such a system will allow the MPO to have a strategy in place, once the population exceeds 200,000. In the mean time, the process will provide valuable information that will be used to improve mobility within the Planning Area.

Elements contained within the CMP include:

- Identify critically congested areas
- Establish performance measures to monitor congestion
- Identify possible congestion mitigation measures
- Evaluate the effectiveness of implemented actions

Data Collection and Monitoring

The Amarillo MPO relies on traffic counts from Amarillo and TxDOT to identify and monitor congested areas within the planning boundary. The baseline link counts for the CMS are based on traffic counts taken inside the City of Amarillo. 1985 was the first year that all links were counted within Amarillo and a program established to assure that each link is counted at least once every two years. The Amarillo traffic count program is divided into approximately 350 links, which are designated as the Amarillo Congestion Network. The network includes all of the arterial and collector roadways within the planning boundary. The TxDOT Amarillo District provides additional traffic count information, including the interstate highway traffic volumes, which are not collected by the MPO.

Performance Standards

In the interest of trying to maintain a uniform statewide performance standard, the MPO will utilize a Level of Service Standard (LOSS) for the CMS work plan. The LOSS has established various categories of service based on average daily traffic volumes for different types of roadways. A roadway in the Amarillo Congestion Network will be classified as congested if the Average Daily Traffic (ADT) exceeds the "tolerable flow LOSS C-D" standard.

In addition to the LOSS standard, the MPO will also utilize travel rate studies to identify and monitor congestion. All roadways, which have been determined to be at or near capacity, will be evaluated by using the floating car method.

Identification of Congested Areas

To determine areas of congestion, the Amarillo MPO uses two different techniques. First, the MPO conducts a survey. This survey asks the public to identify the areas they believe to be congested. The survey addresses both current and future congestion problems. The survey results are then analyzed and compared to average daily counts provided by the City of Amarillo and TxDOT. Based on these two sources of information the roadways exceeding the suggested levels of service standards are identified.

To determine which facilities may have the potential to develop congestion problems, the Amarillo MPO utilizes traffic models supplied by TxDOT and citizen complaints. Areas identified as congested in the model are monitored. Average daily counts will be conducted to determine if a facility is nearing a congested state. Observed counts will be compared to the recommended maximum ADT volumes by facility provided by a LOSS table.

Identification of Strategies
Once a roadway has been categorized as congested, the MPO identifies strategies to mitigate the congestion. Each area is considered on a case-by-case basis. Individual evaluations of congested areas are conducted to determine what special actions could be implemented to alleviate the congestion. Possible strategies may include:

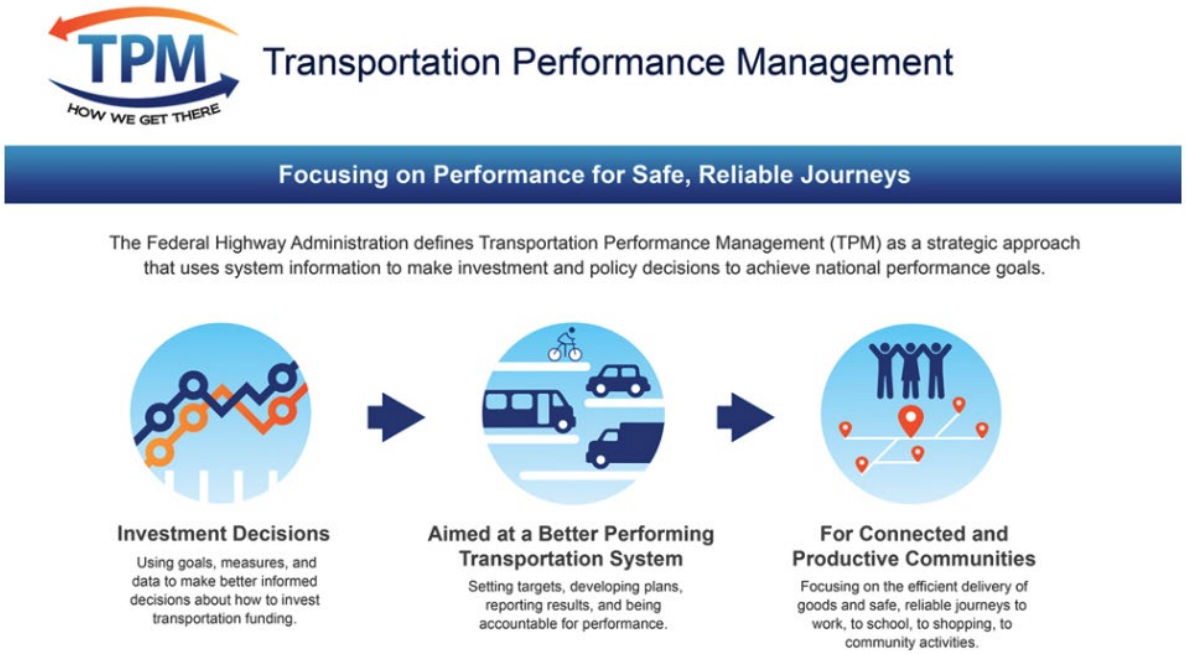
- Traffic operational improvements
- Intersection alterations
- Signing
- Striping
- Signal synchronization
- Transit improvements

Implementation of Strategies
When a Congestion Mitigation Strategy has been developed for a particular area, the MPO will determine the responsibilities of implementation. Any possible funding questions will be addressed at that time. As strategies are implemented, evaluations of the improvements will be established. The area in question will be monitored in appropriate intervals to establish the success or failure of the implemented action.

PERFORMANCE MEASURES

The MPO, in cooperation and collaboration with TxDOT–Amarillo District, will use available data to establish performance target areas and report progress toward these targets as part of the requirements of MAP-21, signed into law in 2012, and continued by the FAST Act, signed into law in 2015, to move toward performance based planning and project selection in effort to support the Transportation Performance Management (TPM) program established by FHWA.

According to FHWA, TPM is defined as a “strategic approach that uses system information to make investment and policy decisions to achieve national performance goals”. This program is to be a systematically applied ongoing process to improve communications between decision makers, stakeholders, and the traveling public and provide decision makers with key information to allow them to understand consequences of transportation asset investment decisions. Below is a reference image from FHWA on the TPM.



Source: FHWA

These performance target areas will address topics including:

- Safety; PM1 (performance targets adopted by TxDOT and MPO) MPO's newest targets adopted on January 17th 2019. Appendix D
  Effective April 14, 2016, FHWA established the highway safety performance measures[2] to carry out the Highway Safety Improvement Program (HSIP).
  - Number of fatalities (The total number of persons suffering fatal injuries in a motor vehicle crash during a calendar year).
  - Rate of fatalities per 100 million vehicle miles traveled (VMT) (The ratio of total number of fatalities to the number of vehicle miles traveled (VMT expressed in 100 Million VMT) in a calendar year).
  - Number of serious injuries (The total number of persons suffering at least one serious injury in a motor vehicle crash during a calendar year).
  - Rate of serious injuries per 100 million VMT (The ratio of total number of serious injuries to the number of VMT (VMT expressed in 100 Million VMT) in a calendar year).
  - Number of non-motorized fatalities and number of non-motorized serious injuries combined (The combined total number of non-motorized fatalities and non-motorized serious injuries involving a motor vehicle during a calendar year).

- Infrastructure Condition; PM2 (performance targets adopted by TxDOT and MPO) MPO targets adopted on October 18th 2018. Appendix D
  - Pavement; Percentage of Interstate pavements in Good condition
  - Pavement; Percentage of Interstate pavements in Poor condition

[2] 23 CFR Part 490, Subpart B

- Pavement; Percentage of Non-Interstate NHS pavements in Good condition
- Pavement; Percentage of Non-Interstate NHS pavements in Poor condition
- Bridge; Percentage of bridges by deck area classified as in Good condition
- Bridge; Percentage of bridges by deck area classified as in Poor condition

- System Reliability; PM3 (performance targets adopted by TxDOT and MPO) MPO adopted targets on December 13th 2018. Appendix D
  - Interstate Highway System Level of Travel Time Reliability (Percentage of person-miles traveled on the Interstate system rated "reliable").
  - Non-Interstate Level of Travel Time Reliability (Percentage of person-miles traveled on Non-Interstate National Highway System facilities rated "reliable").
  - Truck Travel Time Reliability (Percentage of truck travel time on the Interstate system rated as "reliable").

- Transit Asset Management Performance Targets (performance targets adopted by TxDOT and MPO) Targets adopted by MPO on January 17th 2019. Appendix D
  - Rolling Stock (The percentage of revenue vehicles that exceed the Useful Life Benchmark (ULB)).
  - Equipment (The percentage of non-revenue service vehicles that exceed the ULB).
  - Facilities (The percentage of facilities that are rated less than 3.0 on the Transit Economic Requirements Model (TERM) Scale).

The MPO will continue evaluating its readiness for national transportation performance reporting, working collaboratively to use the performance-based processes in project selection, and analyzing project affects to better meet performance targets.

PERFORMANCE MEASURES EVALUATION REPORT

Table 5.9
PM1 Evaluation

PM1: Safety Measure Targets and Baseline					
	Number of Fatalities	Rate of Fatalities per 100M Vehicle Miles Traveled (VMT)	Number of Serious Injuries	Rate of Serious Injuries per 100M VMT	Number of Non-motorized Fatalities and Serious Injuries
TxDOT & Amarillo MPO Target 2022	4,241	1.5	19,065	6.47	2,642
2022 TxDOT Projection	4,327	1.53	19,454	6.47	2,696
Decrease in Rate of Increase	2%	2%	2%	0% (projected trend was decreasing)	2%

Safety performance measures (PM1) utilized a 5-year average of data to trend and project stats for year 2022 for the state of Texas. The data shows an increasing trend for number of fatalities, rate of fatalities per 100 million vehicle miles traveled (VMT), number of serious injuries, and number of non-motorized fatalities and serious injuries; and a decreasing trend for rate of serious injuries per 100 million VMT.

The state decided that a good achievable goal will be to reduce the rates of the increasing trends by 2% by year 2022. This 2% if further distributed over the following years: 2018 (0.4%), 2019 (0.8%), 2020 (1.2%), 2021 (1.6%), and 2022 (2.0%). The Amarillo MPO recognizes the importance of setting goals and linking them to objectives and priorities to meet national, state, and local performance objectives; therefore, the Amarillo MPO has adopted a resolution to support these state targets. Safety aspects of proposed projects are considered in the project prioritization process that the MPO utilizes to rank projects on a performance basis, which will help achieve these safety target goals for the state.

Table 5.10
PM2 Evaluation

PM2: Infrastructure Condition Targets and Baseline						
	% of Interstate Pavement in Good Condition	% of Interstate Pavement in Poor Condition	% of Non-Interstate NHS Pavement in Good Condition	% of Non-Interstate NHS Pavement in Poor Condition	% of NHS Bridges by Deck Area Classified as in Good Condition	% of NHS Bridges by Deck Area Classified as in Poor Condition
TxDOT Target 2020	n/a	n/a	52.00%	14.30%	50.58%	0.80%
TxDOT & Amarillo MPO Target 2022	66.40%	0.30%	52.30%	14.30%	50.42%	0.80%
Amarillo MPO Baseline 2018	n/a	n/a	n/a	n/a	24.60%	5.70%
Statewide Baseline	66.80%	0.30%	54.40%	13.80%	50.63%	0.88%

Implementation of PM2 performance targets requires State DOTs to establish 2- and 4-year targets for non-Interstate pavement conditions and bridge deck area conditions, and only a 4-year target for Interstate National Highway System pavement conditions. In an effort to allow State DOTs to accrue and consider more complete data, there was no requirement for states to report 2-year targets on Interstate NHS infrastructure before the mid performance period progress report. Targets in this performance group are to be adopted every 4-years with the ability to make amendments to these targets at the 2-year mid performance period progress report. Area MPOs were given the option of supporting the State's adopted 4-year targets or establishing their own; establishment of 2-year targets was not required of the MPOs. The Amarillo MPO has adopted a resolution to support the TxDOT established 4-year performance targets.

Due to some lack of data, the MPO was unable to establish a year 2018 baseline for Interstate and non-Interstate NHS pavement conditions.

Table 5.11
PM2: Bridge Condition

Row Labels	Good		Fair		Poor		Total Number of Bridges	Total Deck Area
	Number of Bridges	Deck Area	Number of Bridges	Deck Area	Number of Bridges	Deck Area		
2018	30	476,647	86	1,350,291	10	109,517	126	1,936,456
2016	38	598,147	82	1,364,829	10	109,337	130	2,072,313
2014	42	708,583	82	1,316,391	2	24,247	126	2,049,221
2012	32	673,678	72	986,863	2	24,247	106	1,684,788

The above Table 5.11 indicates the number of bridges and bridge deck area within each of the three categories of bridge condition; good, fair, and poor. The 10 bridges listed in poor condition for year 2018 are all under construction or let for construction. Once completed, this should move the percentage of poor condition bridges to 0%, meeting the target for this adopted performance measure. Addition of new bridges and construction and maintenance of "fair" condition bridges will help to move them into the "good" category which should help increase the percentage of good condition bridges closer to its defined target for 2020 and 2022.

Table 5.12
PM3 Evaluation

PM3: System Reliability Targets and Baseline			
	Interstate Highway System Level of Travel Time Reliability (%)	Non-Interstate Level of Travel Time Reliability (%)	Truck Travel Time Reliability
TxDOT/ Amarillo MPO Target 2020	61.2	n/a	1.7
TxDOT/ Amarillo MPO Target 2022	56.6	55.4	1.79
Statewide Baseline	79.6	n/a	1.5
Amarillo MPO Baseline 2018	100	94.8	1.23

Two of the three targets for System reliability performance measures (PM3) are measured by percentages of interstate and non-interstate that meet a Level of Travel Time Reliability Ratio (LOTTR) of below 1.50 for different time segments of the day. (Monday-Friday time segments: 6am-10am, 10am-4pm, 4pm-8pm; Weekend time segment: 6am-8pm) This ration is calculated with the following equation:

$$\frac{Longer\ Travel\ Time\ (80th)}{Normal\ Travel\ Time\ (50th)} = \frac{\#\ seconds}{\#\ seconds} = Level\ of\ Travel\ Time\ Reliability$$

With: Longer Travel Time (80th) being the 80th percentile of travel times along a defined road segment.

Normal Travel Time (50th) being the 50th percentile of the travel times along the same road segment

The road segment is considered reliable if the ratio is below 1.50. The percentage of reliability on the Interstate Highway System for the Amarillo MPO was calculated to be 100% and on the Non-Interstate National Highway System to be 94.8% for year 2018 based on data from the National Performance Management Research Data Set (NPMRDS).

The Truck Travel Time Reliability (TTTR) performance target of PM3 is measured as an index which is calculated using the following equation:

$$TTTR\ Index = \frac{\sum All\ segment\ length\ weighted\ TTTR}{\sum All\ segment\ lengths}$$

With: $\sum All\ segment\ length\ weighted\ TTTR = (L_1 \times R_1) + (L_2 \times R_2) + (L_3 \times R_3) + \cdots$

L_x being the length of segment x in miles
R_x being the reliability ratio metric of the 95th percentile to the 50th percentile

The adopted TTTR index target for year 2022 for TxDOT and Amarillo MPO is 1.79. For baseline year 2018, the TTTR index was calculated to be 1.23 for the Amarillo MPO area using data from the NPMRDS. The Amarillo MPO exceeds the adopted PM3 targets for system reliability and will continue to prioritize projects to maintain its high level of reliability.

Table 5.13
TAM Target Evaluation

Transit Asset Management Targets and Baseline			
	Percentage of Rolling Stock that Exceeds Useful Life Benchmark (ULB)	Percentage of Equipment that Exceeds Useful Life Benchmark (ULB)	Percentage of Facilities that are Rated Less than 3.0 of the Transit Economic Requirements Model (TERM) Scale
TxDOT Target	<15%	<15%	<15%
Amarillo MPO Target	0%	22%	0%
Amarillo MPO Baseline	10%	43%	33%

Transit Asset Management (TAM) is a business model that uses the condition of assets to prioritize funding. Amarillo City Transit (ACT), in order to keep the transit network in a State of Good Repair (SGR) has adopted TAM to comply with Federal Regulation and because it is effective practice. SGR is defined by FTA as “the condition at which a capital asset is able to operate at a ‘full level of performance’—that is, the asset can perform its designed function and does not pose an unacceptable safety risk to users.”

The ACT TAM baseline was determined by calculating the performance measures of current assets by category in relation to the useful life benchmark (ULB) and transit economic requirements model (TERM) scale. Currently, 10% of ACT rolling stock has exceeded the ULB, 43% of equipment has exceeded the ULB, and 33% of equipment has a TERM rating below 3.0.

ACT uses set targets to track progress towards achieving a state of good-repair of capital assets. ACT targets connect to ACT's strategic objectives as the means to reach the goals. The TAM targets are as follows: 0% of all rolling stock to exceed ULB, 22% of all equipment to exceed ULB, and 0% of facilities to have a TERM rating of less than 3.0. These can be achieved by the end of the fiscal year due to current opportunities, projects, and availability of funds. To reach the target of 0% for rolling stock, ACT seeks to purchase at least six additional buses to replace three buses that have surpassed the ULB, and add at least three additional buses to their fleet. To reach the target of 22% for equipment, ACT plans to replace one maintenance truck and purchase two additional support vehicles. To reach the target of 0% for facilities, ACT will renovate their bus wash facility.

Table 5.14
Project Matrix for Performance Measures

Project Matrix for Benefits to Performance Measure				
	PM1: Safety Targets	PM2: Infrastructure Condition Targets	PM3: System Reliability Targets	TAM Targets
A20001	✓	✓	✓	
A20002	✓	✓	✓	
A20003	✓	✓	✓	
A20004	✓	✓	✓	
A20020	✓	✓	✓	
A20021	✓	✓	✓	
A20040	✓	✓	✓	
A20T01				
A20T02				✓
A20T03				✓
A20T04				✓
A20T05				
A20T06				✓
A20T07				
A20T08				
A20T09				✓

SECTION 6.0
FINANCIAL PLAN

Back to Table of Contents

6.0 FINANCIAL PLAN

Introduction

Financial planning for the Amarillo Planning Area 2020-2045 MTP considers both new and old funding resources. The increasing demands of a growing population, highways crowded with traffic, higher numbers of roadway fatalities, and limited state and federal funding sources require new innovative thinking to improve our transportation system. Legislation allows the state, local governments, and private business to cultivate partnerships for development and improvement of the region's transportation infrastructure.

These resources demand more participation and control by local communities. By delegating power to local authorities, innovative funding can be maximized and project development and construction can become more flexible. This will allow transportation improvements to be started and completed more quickly. In turn, the regional community reaps the benefits at a much lower cost.

Project costs are itemized in the tables found in this document. The financial plan summary condenses the costs and projected funds for projects in the twenty-five year period. The financial plan summary compares costs by category, and shows that projected funds will be available for future needs based on the stated assumptions.

The purpose of the financial plan is to evaluate the community resources available to build and maintain transportation facilities. It is based on an analysis of past funding, expected funding from federal, state and local sources and projected needs. The FAST Act is the congressional transportation bill that requires the financial plan demonstrate a consistency of proposed transportation investments with the available and projected sources of revenue in relation to cost and revenue projections based on existing situations and historical trends. Thus, the long-range transportation plan must be "financially constrained" which confirms projected revenue will be available to fund the projects in the long-term transportation plan.

The expenditures for the MTP are financially constrained by the YOE requirements of the FAST Act. This financial constraint is based on an analysis of past funding, expected funding and expected needs.

Total Project Costs and Year of Expenditure

In accordance with the FAST Act, the MTP contains the Total Project Costs and YOE dollars for each project. The revenues and expenditures are financially constrained by the YOE requirements of the FAST Act. Total Project Costs are provided to detail the aspects of each project, such as: preliminary engineering, right of way, utility relocation and, in the case of transit projects: operating, planning, maintenance and capital. The YOE, or the year in which a construction project or transit project is anticipated and their associated inflated costs, have been identified for all projects. An annual inflation rate of 4% was applied to all projects. The revenues and expenditures address the construction or implementation of highway and public transportation projects, as well as

address the operation and maintenance needs of the existing transportation system and public transportation systems.

The tables, shown in this MTP, identify Total Project Costs and YOE dollars for projects included in this MTP. In the case of the public transportation program, the year in which major capital purchases or construction, such as buildings and facilities, has been identified. The MTP must account for cost escalation as part of the fiscal constraint determination. It is understood that future revenues may not grow at the same rate as construction expenses. Costs are subject to inflation over the twenty-five year window; therefore, changes to the scope of a project may be needed, over time. While reviewing the MTP for financial constraint, the Amarillo Metropolitan Planning Organization found it challenging to address the mobility and maintenance needs of the area.

Continued cooperative regional transportation planning will be required to explore and implement ways to address the increasing transportation needs of the area. New or additional funding sources will be considered to assist with the traditional streams of funding. Public and private partnerships will be explored to address the transportation needs of the area. Comprehensive development agreements and other innovative funding will be considered to make up the funding shortfall.

Funding

State and Federal Funding[3]

No discussion of highway funding would be complete without an explanation of the many factors that drain funding for transportation initiatives. These factors severely affect the ability for the region to receive state and federal mobility funding for highways. With gas tax revenues declining and construction cost fluctuations, it is difficult to pay for any new highway construction.

- Declining gas tax revenues. Over the next two decades, fuel consumption will likely decrease because of the impact of increased fuel efficient vehicles, even considering an increase in the driving population. More fuel efficient vehicles are good because they improve the quality of our air and motorists save money at the pump. Higher pump prices for fuel and other budgetary constraints result in Americans driving less. As fuel consumption decreases, so do fuel tax revenues. The federal gasoline tax is currently 18.4 cents per gallon. The last increase in the federal gas tax was in 1993.
- The uncertainty of federal funds. The National Highway Trust Fund experienced a zero balance in 2008. The fund continues to be depleted because funding expenditures exceed revenues. Congress has been unable to remedy the highway funding problem. The Congressional Budget Office has estimated the Highway Trust Fund may be insolvent as soon as 2021. Another issue affecting transportation funding is federal rescissions, in which previously allocated transportation funding is retracted. Over the past years, these rescissions have

[3] June/July 2019 Fiscal Notes Texas Comptroller of public accounts

been the result of other federal needs, such as overseas military action, Homeland Security, and natural disaster relief.

- Over time, diversions in the state gas tax have been moved from the State Highway Fund to pay for other priorities such as education and TxDOT. In Texas, of the 20 cents per gallon gas tax, transportation receives only 15 cents per gallon. Education receives 5 cents. The last increase in the state gas tax was in 1991. At present, the purchasing power of the gas tax is approximately 67% of what it was twenty years ago.[4]
- The impact of inflation. During recent years, inflation has rapidly driven construction costs at an unprecedented rate. The recent economic stability has slowed this inflationary trend. The volatility of inflation creates a level of uncertainty. As a result, the years in which future projects are constructed or implemented could change. This creates yet another problem: the longer projects are postponed, the higher the project cost becomes.
- The need to increase funding for maintenance. Texas highways are showing the wear and tear of more traffic. Some of the highway mobility funding was redirected toward pavement maintenance to meet the increased need throughout the state due, in part, to oilfield expansion and the ongoing drought conditions. It is important to preserve and maintain the existing transportation system without compromising it.

Local funding

City of Amarillo – The revenue sources that contribute to the city's general fund are: sales tax, property tax, and other fees. Street reconstruction augments the street maintenance program, extending the life expectancy of city streets. This includes seal coat, rehabilitation, crack seal, asphalt overlay, and repair of base failure. In recent years, the City of Amarillo approved certificates of obligation for street and pedestrian improvements along with other local needs.

Basic and preventive maintenance, including the overlays, seal coats, patching, and other maintenance activities, are funded through the City's General Fund. Forecasted funding levels for city-funded projects were derived by researching historical expenditure trends and the expected future funding levels.

Potter and Randall Counties – The Commissioners Court of each county must approve transportation improvement projects and funding for projects within the jurisdiction of Potter or Randall County. Local general funds as well as dedicated road-building funds are used to complete regional transportation improvements. These funds rely on revenues from various sources including property taxes, fees, fines, bond levies, and private sector contributions including right-of-way dedication. The Road and Bridge Department of each county has primary responsibility for administering the transportation improvements.

[4] TTI Gas Tax Facts

Most of the road and bridge funding for Potter and Randall Counties is spent outside the Planning Area. No historical information on county funds spent solely within the Planning Area is available. Funds for road and bridge expenditures for Potter and Randall Counties are derived from general tax revenue.

Roadway Plan

Federal and State Funding – The revenue projections in this MTP consist of funding amounts which are reasonably expected to be available for the twenty-five year planning horizon. For projects shown in the roadway plan, funding for the upcoming twenty-five years of state and federal mobility projects is shown in Table 6.1. Projections are based upon developments that have lead to the uncertainty of federal funding. The amounts shown considered the funding forecast from the Texas Unified Transportation Program, other categories of anticipated funding, such as funding from Category 3 – Non-Traditionally Funded Transportation Projects, and District & Commission Discretionary funds.

For categories that are non-bank balanced programs, in which projects are selected upon a score or index, an average per year value was obtained and multiplied by twenty-five to derive forecasted funding. Federal funding is subject to specific types of allocations and sub-allocations.

Local funding - Forecasted funding levels for city-funded projects were derived by researching historical expenditure trends and expected future funding levels. The illustrative list of projects contains a list of unfunded projects; which are projects identified as needs, but are not expected to be funded within the twenty-five year planning horizon. With high demands for funding, it is becoming more difficult to pay for new highway construction. Other funding, such as innovative financing will be explored.

Public Transportation Plan

The projected expenses for Amarillo City Transit fixed route and demand response operations, preventative maintenance, and capital projects were derived from historic funding data. The operating, preventative maintenance, and capital expense funding was then determined for the twenty-five year term of the plan. An inflation factor of four percent per year was then applied to those amounts. Total project costs were calculated for major capital purchases, such as fleet expansion, passenger amenities, and shop equipment and facilities. Total project cost is not required for the types of expenses such as operating, planning and minor capital purchases.

Considering inflation and the uncertainty of future federal funding, it is likely a funding gap will develop between the expenditures and revenues during the twenty-five year term of this plan. Current apportionments, which have stayed relatively the same during the previous five years, are not increasing enough to cover the ever increasing rate of inflation. Strategies to address the funding gaps could include reduced service hours and routes, reduced vehicle replacement rates, or explore other revenue generation methods, or increase local funding to the transit program.

Traffic Operations, Bicycle, Pedestrian and Maintenance Plans

A twenty-five year projection of federal and state revenue funding was calculated based upon a combination of historical funding, future projects from the current four-year TIP, the ten year Unified Transportation Program (UTP) and expected future district allocations.

Operations and Maintenance

The financial plan includes systems-level estimates of costs and revenue sources for adequately operating and maintaining the facilities. The operations and maintenance costs can be found in the section on Operations & Maintenance. Highway preservation is a top priority for Texas. The integrity of the existing highway system should not be allowed to deteriorate. Maintaining the public transportation transit system buses, building and program is important as well. The revenues and expenditures address the construction or implementation of transportation projects, as well as address the operation and maintenance needs of the existing transportation system and public transportation systems.

The maintenance revenue projections for future state and federal funding are based upon historical data for these types of improvements: signal modernizations, general signal improvements, pavement rehabilitation, pavement seal-coating and overlays, replacement of bridges, replacement of bridge approaches and upgrading to standards.

Inflation rate

In calculating year of expenditure cost for construction, preliminary engineering, and right-of-way costs, the MPO used the projected current year costs and inflated these costs by 4% per year. Preliminary engineering and right-of-way costs were inflated assuming costs will occur a year before construction. TxDOT and local entities currently control preliminary engineering and right-of-ways funds. The MPO receives no allocation of funds for programming these funds.

Gap Funding

The preservation of the existing transportation system as well as addressing future transportation needs in the Planning Area will require innovative financing techniques that increase the funding amount that the area currently receives from traditional funding sources. To implement these measures, we must explore various funding strategies, including:

- Public/Private Partnerships – Public/private partnerships may be used to finance transportation facilities. These ventures could include roadways, bridges, right-of-way, pedestrian facilities, auxiliary lanes, and signalization. Public/private partnerships could be used for parking facilities, bicycle facilities, transit improvements (including shelters), operational

improvements, providing matching funds for transportation improvement projects (including transportation alternative projects), toll facilities, and other situations, which may help leverage available financing for transportation improvements.

- Reduced Project Costs – participating agencies must evaluate projects in order to eliminate, postpone, or reduce the scope of certain planned transportation projects.
- Borrow Money – this option allows regional stakeholders the opportunity to build a project sooner, with the understanding that the borrowed money will need to be repaid out of future revenue streams. This could be accomplished through the issuance of certificates of obligation, bonding, through programs such as State Infrastructure Bank (SIB) Loans, or through other funding sources, which could act as a revolving account that can be used to leverage bonds.
- Pay-As-You Go Systems – today, the traveling public understands that the need for roadway improvements comes at a heavy cost. Motorists know that alternatives must be implemented in order to aid in congestion relief and improve the reliability of the transportation system. Options exist to charge users fees through non-traditional methods, including:
  - Tolling added roadway capacity
  - Applying congestion pricing to new toll facilities
  - Assessing traffic impact fees/systems development charges for new development (based on expected trips that will be generated by the development)
- Raise or Redistribute Existing Taxes and Fees
  - Develop Local Improvement Districts, Business Improvement Districts, Tax Increment Financing Districts, and other special taxing districts
  - Raise the state gas tax or impose a regional gas tax
  - Develop new local revenue sources, such as a local gas tax or fees for a special transportation district
  - Increase vehicle registration fees
  - Implement parking fees/fines that pay for transportation improvements
- Capture a Larger Portion of State and Federal Transportation Spending
  - Pursue additional federal discretionary funding including FTA 5309 monies and Congressional earmarks
  - Work with the Texas Transportation Commission to look beyond traditional resources and find new solutions to meet transportation needs in the Planning Area

Funding Assessment 2020-2045

The funding projections in the 2020-2045 MTP have been based on a flat line basis with no adjustments for inflation during the period covered by the plan. With the viability of the Highway Trust Fund in question, the historic rescissions of federal funds, and the federal highway & transit authorization bill up for renewal during the plan timeframe, this course of action seems the most prudent. Using a no inflation revenue projection method, Table 6.1 is an estimate of available funding during the planning period. A large portion of the funding shown in Table 6.1 is from legislative action regarding the State of Texas Economic Stabilization Fund.

Table 6.1
Financial Summary

Metropolitan Transportation Plan – Financial Constraint by Category				
Category	**Description**	**Funding Source**	**Average**	**25-year Projected Available**
1	Preventative Maintenance & Rehabilitation	Federal State	$ 5,000,000	$ 125,000,000
2	Metro & Urban Area Corridor	Federal State	$ 11,000,000	$ 275,000,000
3	Non-Traditionally Funded Transportation Projects	Federal State	$ 0	$ 0
4	Statewide Connectivity Corridor Projects	Federal State	$ 0	$ 51,470,000
6	Structures	Federal State	$ 2,000,000	$ 50,000,000
8	Safety	Federal State	$ 200,000	$ 5,000,000
9	Transportation Alternatives	Federal State	$ 0	$ 0
10	Supplemental Transportation	Federal State	$ 0	$ 0
11	District Discretionary	Federal State	$ 0	$ 0
12	Strategic Priority	Federal State	$ 0	$ 166,620,000
Operations and Maintenance	TxDOT	Federal State	$ 5,100,000	$ 127,500,000
Local Construction	City of Amarillo Potter & Randall Counties	Local Funds	$ 2,200,000	$ 55,000,000
Local Operations and Maintenance	City of Amarillo	Local Funds	$ 2,939,200	$ 73,480,000
Transit	Section 5307	Federal State & Local	$ 6,956,243	$ 173,906,075

Metropolitan Transportation Plan – Financial Constraint Summary			
	Federal / State	**Local**	**Total**
Construction	$673,900,000	$ 55,000,000	$ 728,090,000
Operations/Maintenance	$ 127,500,000	$ 73,480,000	$ 200,980,000
Transit	$96,262,452	$ 77,643,623	$ 173,906,075

SECTION 7.0
APPENDIX

Back to Table of Contents

APPENDIX A- GLOSSARY OF TERMS

3C: "CONTINUING, COMPREHENSIVE, COOPERATIVE" Refers to the requirement set forth in the Federal Highway Act of 1962 that transportation projects in urbanized areas be based on a "continuing, comprehensive transportation planning process carried out cooperatively by states and local communities."

AMARILLO METROPOLITAN PLANNING ORGANIZATION: Designated MPO for the Amarillo MSA; the official name of the MPO.

AMARILLO METROPOLITAN PLANNING AREA (Planning Area): Current name for the Amarillo Urban Transportation Study Area.

AMARILLO URBAN TRANSPORTATION STUDY (AUTS) AREA: That area of Potter and Randall Counties, surrounding the City of Amarillo, that is likely to become urbanized in the next 25 years.

THE AMERICANS WITH DISABILITIES ACT OF 1990 (ADA): A federal law mandating sweeping changes in building codes, transportation, and hiring practices to prevent discrimination against persons with disabilities, not just in projects involving federal dollars, but all new public places, conveyances, and employers. The significance of ADA in transportation is mainly felt in transit operations, capital improvements, and hiring.

ARTERIAL: A street classification for roadways serving major traffic volumes other than highways.

ATTAINMENT AREA: An area considered having air quality as good as or better than the U.S. Environmental Protection Agency (EPA) health standards used in the Clean Air Act. An area may be an Attainment Area for one pollutant and a Non-Attainment Area for others.

AVERAGE DAILY TRAFFIC (ADT): The average number of vehicles passing a fixed point in a 24-hour period; a convention for measuring traffic volume.

BASE YEAR: An analysis or study's baseline or lead off year; the year to which other years are compared.

BIKEWAY: A facility intended to accommodate bicycle travel for recreational or commuting purposes. Bikeways are not necessarily separated facilities; they may be designed, operated, and shared with other travel modes.

CENSUS TRACT: Census tracts are small, relatively permanent subdivisions of a county that local census statistical area committees delineate for all metropolitan areas and other densely populated counties following Census Bureau guidelines.

CENTRAL BUSINESS DISTRICT (CBD): The most intensely commercial sectors of a city.

THE CLEAN AIR ACT AMENDMENTS OF 1990 (CAAA): Amendments that identify "mobile sources" (vehicles) as primary sources of pollution and call for stringent new requirements in metropolitan areas and states where attainment of National Ambient Air Quality Standards (NAAQS) is or could be a problem.

COLLECTOR/DISTRIBUTOR STREET: A road generally parallel to an expressway that collects and distributes traffic at access points to the expressway involving through lanes.

THE CONGESTION MITIGATION AND AIR QUALITY PROGRAM (CMAQ): A funding program which originated with Title I of ISTEA that provides funds for projects and activities that reduce congestion and improve air quality in non-attainment areas.

DEMAND-RESPONSIVE: A descriptive term for a service type, usually considered para-transit, in which a user can access transportation services that can be variably routed and timed to meet changing needs regularly. Frequently used to serve elderly and disabled persons. Compare with Fixed-Route.

DEMOGRAPHY: Characteristics of a total population. Characteristics can include, but are not restricted to: ethnic makeup, age distribution, education levels, and occupation patterns.

DEPARTMENT OF TRANSPORTATION (DOT): Can refer to U.S. DOT or to a state DOT.

EMPLOYER TRIP REDUCTION (ETR) PROGRAM: An employer-designed program that reduces employee-commuting levels. These programs are federally required in non-attainment areas.

EMPLOYMENT DENSITY: The number of jobs within a defined geographical area.

ENHANCEMENT ACTIVITIES: Refers to activities conducted in relationship to a particular transportation project, which "enhance" the existing or proposed project. Examples of such activities include provision of facilities for pedestrians or cyclists, landscaping or other scenic beautification projects, historic preservation, control and removal of outdoor advertising, archeological planning and research, and mitigation of water pollution due to highway runoff.

ENVIRONMENTAL IMPACT STATEMENT (EIS): Report which details any adverse economic, social, and environmental effects of a proposed transportation project for which federal funding is being sought. Adverse effects could include air, water, or noise pollution; destruction or disruption of natural resources; adverse employment effects; injurious displacement of people or businesses; or disruption of desirable community or regional growth.

ENVIRONMENTAL PROTECTION AGENCY (EPA): EPA is the source agency of air quality control regulations affecting transportation.

EXPRESSWAY: A divided arterial highway for through traffic with controlled access, the intersections of which are usually separated from other roadways by differing grades.

FEDERAL FUNCTIONAL CLASS: Federal classification of streets and highways into functional operating characteristics. Categories are:

- Interstate
- Freeway and Expressway
- Arterial – Principal & Minor
- Collector – Major & Minor
- Local Street and Road

FEDERAL FUNDING PROGRAM CATEGORY: Major categories of Federal Funding as established by MAP-21. Categories are:

- NHPP: National Highway Performance Program
- STP: Surface Transportation Program
- Bridge: On/Off System Bridge Rehabilitation
- HSIP: Highway Safety Improvement Program
- CMAQ: Congestion & Mitigation Air Quality Funds
- TAP: Transportation Alternatives Program
- FTA: Federal Transit Administration Funding

FEDERAL HIGHWAY ADMINISTRATION (FHWA): The agency of U.S. DOT with jurisdiction over highways.

FEDERAL TRANSIT ADMINISTRATION (FTA): The agency of U.S. DOT with jurisdiction over public transportation.

FIXED ROUTE: A term applied to regularly scheduled transit service, operating over a set route.

HIGHWAY: The term applies to roads, streets, and parkways. Also, includes rights-of-way, bridges, railroad crossings, drainage tunnels, drainage structures, signs, guardrails, and protective structures concerning highways.

HOME-BASED WORK TRIP: A trip for one's employment, with the trip end being one's home.

HOUSEHOLD DENSITY: The number of households within a defined geographical area.

INCENTIVE ZONING: Flexible zoning techniques that give the municipality more control, through allocation of incentives such as tax breaks, over the details of land development than zoning regulations usually allow.

INFILL DEVELOPMENT: The process of building homes, businesses, and public facilities on unused and underutilized land within existing urban areas. Infill development keeps resources where people already live and allows rebuilding to occur.

INFRASTRUCTURE: A term connoting the physical underpinnings of society, including, but not limited to, roads, bridges, transit, waste system, public housing, sidewalks, utility installations, parks, public buildings, and communication networks.

INTERMODAL: Refers to the connections between transportation modes.

INTERSTATE SYSTEM: The system of highways that connects the principal metropolitan areas, cities, and industrial centers of the United States. The interstate system also connects at suitable border points with routes important in Canada and Mexico. Joint action by the highway departments of each state and adjoining states, subject to approval by the U.S. Secretary of Transportation, selected the routes of the interstate system.

JOB-HOUSING BALANCE: The development of a land use pattern offering a balance of jobs to housing opportunities.

LAND USE: The way in which specific portions of land or structures on them are used, i.e., commercial, residential, retail, industrial, and so on.

LOCAL STREET: A street intended solely for access to adjacent properties.

LONG-RANGE: Refers in transportation planning to a time span of more than five years. The Transportation Improvement Program (TIP) is typically regarded as a short-range program.

MAJOR INVESTMENT STUDIES: Planning tools to provide the regional multi-modal planning effort with more in-depth technical analysis of various sub area or corridor options.

METROPOLITAN PLANNING ORGANIZATION (MPO): The agency designated by the Governor (or Governors in multi-state areas) to administer the federally required transportation planning process in the metropolitan area. An MPO is required for every urbanized area more than 50,000 population. The MPO is responsible for the 25-year long-range plan and the transportation improvement program. The official name for an MPO may also be Council of Governments, Planning Association, Planning Association, Planning Authority, Regional or Area Planning Council, Regional or Area Planning Commission.

METROPOLITAN STATISTICAL AREA (MSA & CMSA): The Census classifications for areas having a population more than 50,000. The MSA may contain several urbanized areas, but

contains one or more central city or cities. When the commuting patterns of two MSA's have caused them to merge, the result is a Consolidated Metropolitan Statistical Area (CMSA).

METROPOLITAN TRANSPORTATION PLAN: A document that identifies existing and future transportation deficiencies and needs, as well as network improvements needed to meet mobility requirements over at least a twenty five-year period. To receive federal funding, a transportation project must be included in the MTP and the TIP.

MOBILITY: The ease with which desired destinations can be reached.

MODEL: A mathematical and geometric projection of activity and the interactions in the transportation system in an area. This projection must be able to be evaluated according to a given set of criteria, which typically include criteria pertaining to land use, economics, social values, and travel patterns.

MOVING AHEAD FOR PROGRESS IN THE 21ST CENTURY ACT (MAP–21): A federal mandate signed into law July 6, 2012, MAP–21 governs United States federal surface transportation spending. The bill addresses the many challenges facing our transportation system today – challenges such as improving safety, reducing traffic congestion, improving efficiency in freight movement, increasing intermodal connectivity, and protecting the environment.

MULTIMODAL: Refers to the diversity of options for the same trip; an approach to transportation planning or programming which acknowledges the existence of or need for transportation options.

NATIONAL AMBIENT AIR QUALITY STANDARD (NAAQS): Federally mandated maximum levels (i.e., federal health standards) for air pollutants such as ozone, carbon dioxide, particulate matter, sulfur dioxide, nitrous oxide, and lead.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): Federal act requiring a study of any environmental impact that a federally funded or permitted project might cause.

NEO-TRADITIONAL NEIGHBORHOOD DESIGN (NTND): Neighborhoods characterized by an interconnecting street network, mixture of land uses, bike and pedestrian paths, a grid pattern of land use, and resemblance to those areas developed in America before World War II.

NATIONAL HIGHWAY SYSTEM (NHS): A classification of roads authorized by ISTEA that comprise Interstate Highways and roads designated as important for interstate travel, national defense, intermodal connections, and intermodal commerce. Federal funds are designated for projects on the NHS system.

NETWORK: A graphic and/or mathematical representation of multimodal paths in a transportation system.

NITROGEN OXIDES (Nox): A pollutant produced during fossil fuel combustion that contributes to ground-level ozone.

NON-ATTAINMENT AREA: A designation by the Environmental Protection Agency of any place in the United States failing to meet national air quality standards (NAAQS).

ORIGIN: The point or locale where a trip begins.

ORIGIN-DESTINATION SURVEY (O-D Survey): A survey of travelers (motorists or transit passengers) typically undertaken to identify travel patterns, habits, and needs.

OZONE: A gas that in excess quantities at ground level is a pollutant and irritant. Ozone is created when nitrogen oxides (Nox) react with volatile organic compounds (VOC's) in sunlight, also known as smog.

PARA-TRANSIT: Alternatively known as special transportation when applied to social services systems. Applies to a variety of smaller, often flexibly scheduled and routed nonprofit oriented transportation services using low capacity vehicles to operate within normal urban transit corridors or rural areas. These services usually serve the needs of persons whom standard mass transit services would serve with difficulty or not at all. Common patrons are the elderly and persons with disabilities.

PARA-TRANSIT VAN: A van specially modified to carry passengers with disabilities.

PEAK HOUR: The sixty-minute period in the a.m. or p.m. in which the largest volume of travel is experienced.

PEDESTRIAN-ORIENTED DEVELOPMENT (POD): Similar to a Neo-Traditional Neighborhood Design, except that it often incorporates higher densities and is designed to encourage the walk-ability of the surrounding neighborhood.

PERSON-TRIP: A trip made by one person from one origin to one destination.

PHASE: Project Phase for Federal Funding (E = Preliminary Engineering, R = Right of Way Acquisition, and C = Construction).

PLANNER: In the transportation field, personnel concerned with the management and analysis of data that directly supports qualitatively oriented, strategic, or macro decision-making.

PRIVATIZATION: Notion concerning for-profit business supplying goods and services for government, public programs or systems, with intent of enhancing cost efficiency.

PROJECT IDENTIFICATION (Project ID): A code, assigned by the MPO for local tracking and identification, used to relate projects to the MTP.

PROVIDER: An agency that causes clients to be transported, as opposed to an agency whose role is limited to funding programs.

PUBLIC INVOLVEMENT: The active involvement of the public in the development of transportation plans and improvement programs. SAFETEA-LU requires state departments of transportation and MPO’s "shall provide citizens, affected public agencies, representatives of transportation agency employees, private providers of transportation agency employees, private providers of transportation, and other interested parties with a reasonable opportunity to comment on the development of the long-range plan and the TIP.”

PUBLIC ROAD: Any road or street under jurisdiction of and maintained by a public authority, open to public traffic.

REVERSE COMMUTE: Travel from home to work or from work to home against the main directions of traffic.

RIGHT OF WAY (ROW): Priority paths for the construction and operation of highways, light and heavy rail, railroads, etc.

SURFACE TRANSPORTATION PROGRAM (STP): One of the key capital programs in Title I of MAP–21. It provides flexibility in expenditures of "roads" funds for non-motorized and transit modes and for a category of activities known as transportation enhancements, which broaden the definition of eligible transportation activities to include bicycle and pedestrian facilities and enhance community and environmental quality through ten categories of activity.

TELECOMMUTING: Using a home computer or a neighborhood work center for work, effectively eliminating the need to travel to a conventional workplace.

TELECONFERENCING: Using audio, video, and/or computer connections among sites for meetings eliminating any need to travel to the meeting site.

TEXAS DEPARTMENT OF TRANSPORTATION (TxDOT): State agency responsible for construction and maintenance of all Interstate, U.S., and State Highways, and Farm-to-Market (FM) Roads within the state.

TRAFFIC DISTRICT: A geographic unit consisting of several serial zones that may be used for the same purposes as traffic serial zones.

TRAFFIC SERIAL ZONE: The smallest geographically designated area for analysis of transportation activity such as data collection and travel movements within, into, and out of the urban area. A zone can be one to 10 square miles in area.

TRANSIT: Transportation mode that moves larger numbers of people than does a single automobile. Generally renders passenger service provided to the public along established routes with fixed or variable schedules at published fares.

TRANSIT-ORIENTED DEVELOPMENT (TOD): Similar to a Neo-Traditional Neighborhood Design, except that it incorporates higher densities and possesses a distinct focus toward transit.

TRANSIT DEPENDENT: Persons who must rely on public transit or para-transit services for most of their transportation. Typically refers to individuals without access to personal vehicles.

TRANSPORTATION: The act of getting persons or things from here to there, through personal or communal means.

TRANSPORTATION CONTROL MEASURE (TCM): Any measure designed to reduce congestion, emissions, and other traffic problems.

TRANSPORTATION DEMAND MANAGEMENT (TDM): Strategies for easing or reducing transportation demand, specifically aimed at diverting people from driving alone. Programs used to improve air quality and congestion by decreasing vehicle miles traveled and vehicle trips.

TRANSPORTATION IMPROVEMENT PROGRAM (TIP): A three-year transportation investment strategy, required at the metropolitan level, and a two-year program at the state level, which addresses the goals of the long-range plans and lists priority projects and activities for the region.

TRANSPORTATION MANAGEMENT AREAS (TMA): Areas subject to special requirements under ISTEA and sometimes benefiting from preferential treatment regarding air quality needs, and local authority to select transportation projects. Any area more than 200,000 population is automatically a transportation management area, which subjects it to additional planning requirements, but also entitles it to earmarked funds for large urbanized areas under the Surface Transportation Program. Additional areas may be designated TMA's if the Governor and the MPO or affected local officials request designation. Such a designation would entitle them to greater local project selection authority through their MPO's, but would not, according to interim guidance issued by U.S. DOT, entitle them to the earmarked STP funds for large urban areas.

TRANSPORTATION SYSTEM MANAGEMENT (TSM): That element of the TIP that proposes non-capital-intensive steps toward the improvement of a transportation system, such as refinement of system and traffic management, the use of bus priority or reserved lanes, and parking strategies. It includes actions to reduce vehicle use, ease traffic flow, and improve internal transit management.

TRAVEL TIME: Customarily calculated as the time it takes to travel from "door-to-door." For transit service measures of travel time include time spent accessing, waiting, transferring between vehicles, and that time spent on board.

TRIP: A one-direction movement from an origin to destination.

TRIP END: Origin or destination of a trip.

TRIP PURPOSE: Reason for a trip.

UNIFIED PLANNING WORK PROGRAM (UPWP): Annual report or budget document prepared by the AMPO describing transportation planning activities that will take place within the Planning Area.

UNITED STATES DEPARTMENT OF TRANSPORTATION (USDOT): Principal federal funding and regulating agency for transportation facilities. FHWA and FTA are agencies within USDOT.

URBANIZED AREA (UZA): A census classification for area having a population of 50,000 or more that meet certain population density requirements.

VEHICLE MILES TRAVELED (VMT): Term used for describing the total number of miles traveled by a vehicle in a given time. Most conventional VMT calculation is to multiply average length of the trip by the total number of trips.

APPENDIX B – PROJECT PRIORITIZATION

Amarillo MPO Project Prioritization Methodology

Introduction:
MPOs are required to have transportation projects listed in a Metropolitan Transportation Plan (MTP), a long-range, twenty-five year plan. There can be a vast number of projects listed as future needs in the MTP. The Transportation Improvement Program (TIP) is a listing of projects selected for construction during the next four years. Projects are advanced from the MTP to the TIP through various planning efforts. Once a project moves from the MTP into the TIP public expectations are raised. The citizens expect to start seeing progress of the project. The Moving Ahead for Progress in the 21st Century Act (MAP-21), furthered by the Fixing America's Surface Transportation (FAST) Act, requires the MTP and the TIP be fiscally constrained; therefore only projects that have a reasonable expectancy of being funded should be included. As such, there is a greater need to prioritize the projects to be advanced from the MTP into the TIP.

Participation of all transportation stakeholders is paramount to this process. The MPO holds public meetings to inform stakeholders about project listings considered for the long- and short-range planning documents. Projects in the TIP need to support the goals of the long-range plan. Additionally, there can be projects that have a lot of public support but do not qualify for the TIP because of other reasons. Since funding is limited and many projects have to compete for funds, it is very important to have a means to evaluate each project and compare them.

The MPO uses a Project Prioritization Methodology (PPM) Matrix and the current TxDOT Performance Based Planning Software to rank each project based on the project's own merits on an annual basis. These are both to be used as decision making tools, and once projects are ranked, the Technical Advisory Committee and the Policy Committee have a way to compare projects; however, the Policy Committee is not bound to use the rankings from these tools as the sole reason for making a decision.

The key factors, used to evaluate projects based on MAP-21 and FAST Act, include:

- Support the economic vitality of the metropolitan area
- Increase the safety of the transportation system for all motorized and non-motorized users
- Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users
- Increase accessibility and mobility of people and freight
- 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
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
- Promote efficient system management and operation
- Emphasize the preservation of the existing transportation system
- Environmental Mitigation and Consultation
- Title VI and Environmental Justice
- Public Participation

- Improve resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts on surface transportation; and
- Enhance travel and tourism

Project Selection Process

The Project Selection Process consists of three steps:

- Project submission
- Project review and evaluation by Technical Advisory Committee to develop recommendation to MPO Policy Committee
- MPO Policy Committee review and approval

Project Submission

A call for proposals will be sent to citizens and transportation stakeholders within the Amarillo MPO area. In addition, during the revision of the MTP process a call for projects will be hosted in conjunction with the MPO Policy Committee meeting. Stakeholders wishing to submit a proposal will present a completed Project Selection Form to the MPO.

Project Review and Evaluation

In addition to the following PPM Matrix ranking, the current TxDOT Performance Based Planning Software can be used as a common platform across the state to help view how projects might rank compared with others from around the state.

The following requirements will determine which projects, based on a 100 point scoring system, are eligible for possible inclusion in the financially constrained component of the MTP:

- Proposed projects will be consistent with the MPO's long-range goals.
- Proposed projects will have an identified funding source.
- Proposed projects will have a project implementation timeline and other details necessary to complete the Project Selection Process.

Projects not meeting these requirements may be included in the MTP under an unconstrained needs component. These projects will be advanced in the adopted MTP, should additional funds become available. As the MTP planning forecast is revised or when new information is available on projected funding levels, a re-evaluation of MTP projects will be deemed necessary.

Projects complying with the previous requirements will be evaluated based on the following criteria:

1. Planning & Mobility Concerns (32 total points)
   Does the project support established prioritized goals and improve the local and regional transportation network; improve capacity, connectivity, or provide congestion relief; is the project part of a planned corridor?
   - Support MPO & regional prioritized goals
   - Support MAP -21 and FAST Act planning factors
   - Support economic development
   - Improve connectivity
   - Address roadway capacity Issues
   - Address congestion relief
2. Traffic & Safety Factors (28 total points)
   Does the project address issues such as safety, traffic flow, freight movement, accessibility, and multi-modal operations?

- Traffic volumes & percent of trucks
- Access management improvements
- Intersection/interchange improved
- Expand multi-modal options

3. Cost Effectiveness & Affordability (15 total points)
   This is intended to be an indicator of the economic viability of the project; calculated as cost per vehicle mile.
   - Construction costs
   - Rights of way costs
   - Project length
   - Traffic volumes

4. Other Factors (25 total points)
   Have sufficient measures been addressed to ensure the timely development of the project; is it well supported by the participating entities?
   - R-O-W & engineering schedules
   - Environmental & utilities schedules
   - Multiple local entity support
   - Third party funds availability

The Technical Advisory Committee will utilize the PPM Matrix ranking and the current TxDOT Performance Based Planning Software to review the submitted projects and produce a ranked list of projects to be recommended to the MPO Policy Committee.

MPO Policy Committee Review and Approval

Once projects are recommended by the Technical Advisory Committee, the MPO Policy Committee will consider these projects for inclusion in the MTP. Public involvement and comments will be solicited in compliance with the Amarillo MPO's Public Participation Plan. This process of project selection and moving a project forward to the TIP is a cooperative effort within the Amarillo MPO.

Using the Amarillo MPO Project Prioritization Methodology Matrix

Prioritization Process:
To be considered eligible a project must be:

- In the Metropolitan Transportation Plan (MTP) project listing or recommended for such listing by the Technical Advisory Committee.
- Roadway projects must be functionally classified by the Federal Highway Administration as a collector roadway or better.
- Eligible for TxDOT Category 2, 3, 4, 9, 10, 11, 12, or other MPO $^{and}/_{or}$ Public Transportation funding, as awarded by TxDOT or USDOT.

Project Name/Location:
Use a major roadway name to identify a proposed street or highway project. For example:

IH-27	State Loop 434	RM 1061	SW 45th Ave
US Highway 60	FM 2590	County Rd 34	Georgia St

Limits From/To:
Measured lengths are preferred, e.g. 0.3 mile or 5 miles. Otherwise, use general terms, *Street A to Street B* or *Intersection of Road A & Street B*, to describe the project limits.

Description of Work:
Describe what the project will entail in as much detail as possible. For example: *Rehab Existing Roadway*, *New 4-Lane Arterial*, *Upgrade Traffic Signals*, *Upgrade Ramps to Current Design Standards*, *Add Two Lanes with Curb & Gutter*.

Scope Consistent with MPO Prioritized Goals (Determined by TAC)**:**
The MPO Goals based on MAP-21 and FAST Act, including:

- The ten key planning factors of the federal transportation bills, MAP-21 and FAST Act.
- The planning factors are listed in most Amarillo MPO planning documents, including this one.

Examples:

- Support the economic vitality of the metropolitan area
- Increase the safety of the transportation system
- Increase accessibility and mobility of people and freight

Scope Supports Achievement of Regional Prioritized Goals (Determined by TAC)**:**

- Maintain a safe system
- Address Congestion
- Connect Texas Communities
- Enhance the trunk network throughout the MPO boundary
  Throughout the Amarillo District? Beyond?

Improves Connectivity with Areas within the MPO Boundary (Determined by TAC)**:**
Does the project foster partnerships and connections for the purpose of supporting and promoting a vital and sustainable MPO Study Area for existing and future residents and visitors? Does the project support connectivity of the thoroughfare system within the Amarillo Urban Transportation Study Area? Does the project acknowledge and consider connections to the regional transportation network to support county and regional economic sustainability?

Project is Part of a Planned Corridor (Entered by MPO Staff)**:**
Multi-modal corridor planning on existing roadways can have a broad focus, incorporating improvements to management and operations, transit, bicycle/pedestrian movement, access management, freight movement, and development of a connected network of

streets for local travel. It can also incorporate planning for land use, mixed-use development, transit oriented development, parking management, and other strategies to improve mobility and accessibility while reducing environmental impacts.

The general travel corridor is not the specific alignment, but does direct future study of the corridor into one general area. A recommendation of the general mode(s) to be used as the transportation solution focuses on what modes can meet the goals and objectives identified for the area or corridor. For example, a corridor study may conclude that transit or a combination of highways and transit are the only modes that will meet the future needs of that corridor.

Does the project support or recognize with a planned or existing transportation corridor?

Added Capacity (Entered by MPO Staff)**:**
The project has an element of added capacity that is consistent with the intent of the requirements for allocating Category 2 federal funds.

Current Year ADT (Entered by MPO Staff)**:**
AADT – Annual Average Daily Traffic ADT – Average Daily Traffic
Use the most recent AADT or ADT counts from MPO traffic counts or TxDOT planning map.

Percent Trucks in ADT (Entered by MPO Staff)**:**
Use the most recent truck percentage counts from either MPO traffic counts or TxDOT planning map.

Improves Access Management (Determined by TAC)**:**
Access management provides a balance between the mobility purpose a roadway serves and the need of access to adjacent property. The two most important factors addressed by access management are improved safety and improved mobility. Access management techniques should be tailored to specific project characteristics; however basic access management techniques include the following:

- Access control at entrance/exit ramps
- Frontage roads
- Median alternatives – raised medians, depressed medians, etc.
- Auxiliary lanes
- Alternative left turn treatments
- Traffic signal spacing criteria
- Unsignalized intersection spacing criteria - includes adequate driveway spacing

Number of Intersections and/or Interchanges Improved (Entered by MPO Staff)**:**
Does the project include improvements to intersections within the project limits? Improvement examples include:

- Improved intersection geometry
- Improved intersection design
- Addition of dedicated turn lanes
- Traffic signal coordination and pedestrian signals

Multi-modal aspects (Entered by MPO Staff)**:**
Does the project include improvements to multi-modal transportation? Examples include:

- Pedestrian
- Bicycle
- Public Transportation

Cost Effectiveness & Affordability (Calculated by MPO Staff)**:**
This ranking criterion is intended to be an indicator of the economic feasibility of the project. This criterion is calculated as dollars per vehicle mile which is derived from the following factors:

- Estimated Construction Cost: the estimated cost to build the project
- Estimated ROW Cost: the estimated cost to acquire necessary right-of-way for the project
- Project Length: the length of the project (in miles)
- AADT: Annual Average Daily Traffic as shown on the most recent counts by either the MPO or TxDOT planning map. {Average Daily Traffic (ADT) counts will be accepted as valid also.}
- Cost / (Vehicle x Lane Mile):

$$\text{Cost / (Vehicle x Mile)} = \frac{\text{Estimated Construction Cost + Estimated ROW Cost}}{\text{AADT (or ADT) x Project Length (in miles) x \# of Lanes}}$$

Preliminary Engineering – Meeting Scheduled Letting (Entered by MPO Staff)**:**
Are the preliminary engineering and plans complete? If not, will all be completed before the scheduled letting date?

ROW and Utility – Meeting Scheduled Letting (Entered by MPO Staff)**:**
Is the necessary right-of-way for the project already acquired? If not, will it be acquired before the scheduled letting date?
Have all utilities in conflict with the project already been relocated? If not, will relocation occur prior to the scheduled letting date?

Environmental Clearance – Meeting Scheduled Letting (Entered by MPO Staff)**:**
Has the project received environmental clearance? If not, is environmental clearance possible and anticipated prior to the scheduled letting date?

Supported by Multiple Local Entities:
Do all the stakeholders as well as the local community support the project? Is the project supported by local jurisdictions such as the City of Amarillo, Potter County, or Randall County? Is the project supported by TxDOT?

Third Party Funds (Entered by MPO Staff)**:**
Typically, projects funded with Category 2U (MPO) funds consist of either

80% Federal / 20% State or 80% Federal / 20% Local

Does the project have other funds in addition to the matching funds required of the state or local government? If so, what additional percentage of the estimated project cost is covered by the additional third party funds?

Amarillo MPO Candidate Project Submission Form

SPONSOR INFORMATION

Project Sponsor Information	
Project Sponsor	
Contact Person	
Address	
City / Zip Code	
Phone Number	
Fax Number	
E-Mail Address	

PROJECT INFORMATION

Project Description				
Street Name				
Location	From			
	To			
Description				
Length In Miles				
Existing Total Lanes		Future Total Lanes		
Traffic Volumes $^{ADT}/_{AADT}$		Percent Truck Traffic		

Project Cost / Funding				
Estimated Total Cost				
State / Federal Share				
Local Source				
Is there a dedicated local funding source (bond issue, etc.)	Yes		No	
Other Participating Funds	Source:		Amount:	

Project Readiness				
Project Status – Phase	Environmental	Pre Engineering	Right Of Way	Utility Relocation
Work Started (Yes Or No)				
Percent Completed				

Project contribution to the AUTS Metropolitan Transportation Plan goals (use additional sheets as needed).

Amarillo MPO Project Prioritization Methodology Matrix

Project Name	
Limits from	
Limits to	
Description of work	

Planning & Mobility		
Criteria	*Score Range*	*Criteria Score*
Scope Consistent with MPO Prioritized Goals	Significantly = 7 pts Yes = 3 pts No Affect = 0 pts	
Scope Supports Achievement of Regional Prioritized Goals	Significantly = 8 pts Yes = 3 pts No Affect = 0 pts	
Improves Connectivity with Areas Within the MPO Boundary	Significantly = 7 pts Yes = 3 pts No Affect = 0 pts	
Project is a Part of a Planned Corridor	Yes = 5 pts No = 0 pts	
Added Capacity	Yes = 5 pts No = 0 pts	
	Mobility Total:	

Traffic & Safety		
Criteria	*Score Range*	*Criteria Score*
Current Year ADT	> 10,000 = 6 pts 5,000 to 10,000 = 3pts < 5,000 = 0 pts	
% Trucks in ADT	> 25% = 6 pts 10% to 25% = 3 pts <10% = 0 pts	
Improve Access Management	Significantly = 6 pts Yes = 3 pts No Affect = 0 pts	
Number of Intersections &/or Interchanges Improved	3 or more = 6 pts 1 to 2 = 3 pts None = 0 pts	
Multi-modal aspects: Pedestrian / Bicycle Public Transportation	Yes = 4 pts No = 0 pts	
	Traffic & Safety Total:	

Cost Effectivness& Affordabliity		
Criteria	*Score Range*	*Criteria Score*
Estimated Construction Cost	$ _____	Cost / (Vehicle x Mile) = (Estimated Construction Cost + Estimated ROW Cost) / (AADT (or ADT) x Project Length (in miles) x # of Lanes)
Estimated ROW Cost	$ _____	
Project Length	_____ mile(s)	
AADT or ADT		
Cost/(Vehicle x Lane Mile) $ _____	< 250 ($/Veh Mile) = 15 pts 250 to 500 ($/Veh Mile) = 10 pts 500 to 750 ($/Veh Mile) = 5 pts > 750 ($/Veh Mile) = 0 pts	
	Cost Effectiveness Total:	

#VALUE! Total Lanes =

Project Readiness and Local Support		
Criteria	*Score Range*	*Criteria Score*
Preliminary Engineering - Meeting Scheduled, Letting	Definitely = 3 pts Maybe = 1 pts Unlikely = 0 pts	
ROW / Utilites - Meeting Scheduled, Letting	Definitely = 3 pts Maybe = 1 pts Unlikely = 0 pts	
Environmental Clearance - Meeting Scheduled, Letting	Definitely = 3 pts Maybe = 1 pts Unlikely = 0 pts	
Supported by Multiple Local Entities (County, City, State)	Likely Support of: 3 or More = 10 pts 2 or More = 5 pts 1 or Less = 0 pts	
Third Party Funds (Funds In Addition to Local Government Match)	> 30% of Project = 6 pts 10% to 30% = 3 pts < 10% = 0 pts	
	Other Factors Total:	

Comments:	**Total Project Score** 100 Points Possible	
	Date of Review	

rev. 01162019

APPENDIX C – PUBLIC COMMENT

The Amarillo Metropolitan Planning Organization (AMPO) sought public participation and comment throughout the development of the Amarillo Metropolitan Transportation Plan 2020-2045. Meetings with public agencies were held as shown in the table below. The draft plan underwent a 30-day review and comment period from August 5, 2019 to September 5, 2019. A copy of the draft plan was made available to the public through placement at area libraries and the MPO offices. A public meeting was held on August 13, 20 and 22 to present the plan and solicit comments from the public and interested parties. All meetings were successful. Public participation was light, but comments were favorable and the plan was well received.

Table 7.1
Public Involvement Meetings

Date	Location / Function	Address	Audience	Attendance	Comments	Surveys
2018						
Thurs, May 10	MTP Public Meeting	SW Branch Library 6801 W 45th Ave	General Public	12	8	2
Mon, May 21	MTP Public Meeting	East Branch Library 2232 SE 27th Ave	General Public	5	2	
Thurs, May 24	MTP Public Meeting	Canyon Cole Community Center	General Public	11	0	
Mon, June 4	MTP Public Meeting	North Branch library 1500 NE 24th Ave	General Public	4	0	
Mon, June 11	MTP Public Meeting	NW Branch Library 6100 W 9th Ave	General Public	7	1	
May 21-June 22	Public Comment Period			n/a	4	
Thurs, July 12	First Five Meeting	Region 16 Head Start Bldg 1601 S Cleveland St	Agencies that serve children 5yrs and under	23	11	2
Thurs, July 19	AMPO Policy Advisory Committee	Simms Bldg Rm 275, 808 S Buchanan St	General Public	17	0	
Thurs, Oct 18	AMPO Policy Advisory Committee	Simms Bldg Rm 275, 808 S Buchanan St	General Public	24	0	
Thurs, Dec 13	AMPO Policy Advisory Committee	Simms Bldg Rm 275, 808 S Buchanan St	General Public	17	0	
2019						
Thurs, Jan 17	AMPO Policy Advisory Committee	Simms Bldg Rm 275, 808 S Buchanan St	General Public	20	0	
Thurs, Apr 18	AMPO Policy Advisory Committee	Simms Bldg Rm 275, 808 S Buchanan St	General Public	3	0	
Tues, May 7	MTP Public Meeting	Canyon Cole Community Center	General Public	5	0	
Thurs, May 9	MTP Public Meeting	Central Branch library, 413 E 4th Ave	General Public	4	0	
Thurs, May 16	MTP Public Meeting	SW Branch Library 6801 W 45th Ave	General Public	13	2	

Date	Location / Function	Address	Audience	Attendance	Comments	Surveys
May 7-June 7	Public Comment Period			n/a	0	
Tues, Aug 13	MTP Public Meeting	Central Branch library, 413 E 4th Ave	General Public	3	0	
Tues, Aug 20	MTP Public Meeting	SW Branch Library 6801 W 45th Ave	General Public	4	0	
Thurs, Aug 22	MTP Public Meeting	Canyon Cole Community Center	General Public	3	0	
Aug 5- Sept 5	Public Comment Period			n/a	0	

Comment Summary					
	Comment	1	2	3	4
1.	Do you utilize bicycles more for travel, for recreation, or for both?				
	Recreation	X			
2.	If you don't already travel by bicycle or use one for recreation, what would make you more likely to bicycle in Amarillo?				
	More Bike lanes	X			
	Better designated lanes	X			
3.	What is your most frequented destination that you travel to by walking?				
	Walmart @ 45th and Coulter	X			
4.	Where do you observe gaps that interrupt the sidewalk network?				
	Lack of sidewalks in older parts of town	X			
	43rd & Crockett	X			
5.	Do you utilize walking more for travel, for recreation, or both?				
	Recreation		X		
6.	What do you observe to be the biggest causes of crashes?				
	Traffic Speed	X			
	Unsafe lane Changes	X			
	Driver Behavior	X			
	Vehicles crossing traffic when turning out of busy parking lots	X			
	Failure to yield right of way	X			
7.	What are the safety issues that you observe when sharing the road between multiple modes of transportation?				
	Motorcyclist not in proper lane	X			
	Pedestrians not using crosswalks			X	
	Sidewalk Condition	X			
	Drivers going through red lights	X			
8.	Bike paths don't connect homes to designations	X			
9.	Need to finish construction	X			
10.	Congestion equals over crowing of traffic	X			
11.	Congestion makes them change their route		X		
12.	Smoother and more time over all	X			
13.	Improve Transit for Low income Communities to access basic needs and services	X			
14.	Expand hours of operation for transit	X			
15.	Improve Bus Shelters for transit	X			
16.	Expand Opportunities for public comment	X			
	No continuous sidewalks on 45th from Library to Washington St	X			
	Streets flood at Georgia and 45th and at Paramount	X			

Bike / Pedestrian Survey Summary					
	Questions	1	2	3	4
1	What is your primary affiliation to Amarillo, Tx?				
	I live here				X
2	What is your age group?				
	30-49 years		X		
	50-64 years	X			
	65-79 years	X			
3	Do you own a motor vehicle?				
	Yes				X
4	Describe in three words or fewer your vision for a Walk and Bike plan?				
	Efficient, well-connected, Safe	X			
	Comprehensive Thoroughfare plan	X			
	Designated areas clearly marked roads	X			
5	I bicycle to get places such as to the store or to work				
	Sometimes		X		
	Never		X		
6	I bicycle for recreational purposes?				
	Sometimes			X	
	Never	X			
7	I bicycle for exercise?				
	Sometimes			X	
	Never	X			
8	I bicycle to run errands?				
	Sometimes	X			
	Never			X	
9	I bicycle to save money on gas?				
	Sometimes	X			
	Never			X	
10	What destinations would you most like to ride to on a bicycle?				
	Amarillo College/ WTA&M	X			
	Downtown		X		
	Gym	X			
	Shopping Center	X			
	Park/Trail - 1 Palo Duro Park , 1 Parks		X		
	Education support center	X			
11	Do you have any general comments about bicycling in Amarillo?		X		
12	I walk to get places such as to the store or to work?				
	Sometimes			X	
13	I walk for recreational purposes?				
	Sometimes			X	
14	I walk for exercise?				
	Sometimes			X	
15	I walk to run errands?				
	Sometimes		X		
	Never	X			
16	I walk to save money on gas?				
	Never			X	

	Questions	1	2	3	4
17	What destinations would you most like to walk to?				
	Amarillo College/WTA&M	X			
	Downtown		X		
	Gym	X			
	Shopping Center	X			
	Park/Trail – 1 parks, 1 for Palo Duro Park, Caprock Canyon, & Girl Scout Trail		X		
	Library	X			
18	Do you have any general comments about walking in Amarillo?				

APPENDIX D – Performance Measure Resolutions

RESOLUTION NO. 17-1-2019-2

A RESOLUTION ADOPTING THE TRANSIT ASSET MANAGEMENT PERFORMANCE TARGETS ESTABLISHED BY AMARILLO CITY TRANSIT

WHEREAS, Moving Ahead for Progress in the 21st Century Act and subsequent Fixing America's Surface Transportation Act require the implementation of Performance Measures to assist in the transportation planning process; and

WHEREAS, Amarillo City Transit has established targets for three Transit Asset Management Performance Measures:

1. Rolling Stock,
2. Equipment, and
3. Facilities

WHEREAS, the Amarillo City Transit has officially established Transit Asset Management targets dated May 16, 2018, and as shown in APPENDIX A, attached hereto.

NOW, THEREFORE, BE IT RESOLVED, BY THE AMARILLO MPO THAT:

The Policy Committee hereby adopts the City of Amarillo's Transit Asset Management Performance Targets within the Metropolitan Area Boundary, this the 17th day of January 2019.

BE IT FURTHER RESOLVED, that the Policy Committee will plan and program projects that contribute to the accomplishments of said targets.

Ginger Nelson

Ginger Nelson, Policy Committee Chair
Mayor, City of Amarillo

APPENDIX A

Amarillo City Transit FY 2019
Transit Asset Management Performance Targets

	Performance Measure	Target
Rolling Stock	10%	0%
Equipment	43%	22%
Facilities	33%	0%

RESOLUTION NO. 17-1-2019-1

A RESOLUTION ADOPTING THE SAFETY PERFORMANCE TARGETS ESTABLISHED BY THE TEXAS DEPARTMENT OF TRANSPORTATION

WHEREAS, Moving Ahead for Progress in the 21st Century Act and subsequent Fixing America's Surface Transportation Act require the implementation of Performance Measures to assist in the transportation planning process; and

WHEREAS, the Texas Department of Transportation has adopted its Strategic Highway Safety Plan, a data-driven statewide-coordinated safety plan to help reduce fatalities and serious injuries on all public roads; and

WHEREAS, the Texas Department of Transportation has established targets for five Safety Performance Measures based on five-year rolling averages for:

1. Number of Fatalities,
2. Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT),
3. Number of Serious Injuries,
4. Rate of Serious Injuries per 100 million VMT, and
5. Number of Non- Motorized Fatalities and Non-Motorized Serious Injuries

WHEREAS, the Texas Department of Transportation has officially established safety targets in the Highway Safety Improvement Program annual report dated August 31, 2018, and has adopted identical safety targets for number of fatalities, rate of fatalities, and number of serious injuries as set forth in the Strategic Highway Safety Plan, and as shown in APPENDIX A, attached hereto.

NOW, THEREFORE, BE IT RESOLVED, BY THE AMARILLO MPO THAT:

The Policy Committee hereby adopts the Texas Department of Transportation's 2019 Safety Performance Targets within the Metropolitan Area Boundary, this the 17th day of January 2019.

BE IT FURTHER RESOLVED, that the Policy Committee will plan and program projects that contribute to the accomplishments of said targets.

Ginger Nelson, Policy Committee Chair
Mayor, City of Amarillo

APPENDIX A

TxDOT FY 2019 Safety Performance Targets

Target: Total number of traffic fatalities (C-1)

2019 Target: To decrease the expected rise of fatalities to not more than a five-year average of 3,791.0 fatalities in 2019

The 2019 Target expressed as a 5-year average would be as follows:

Year	Target or Actual Data	Source
2015	3,582	FARS
2016	3,776	ARF
2017	3,726	CRIS
2018	3,891	Target
2019	3,980	Target
2019 Target expressed as 5-year average		3,791.0

As noted in the table above, the calendar year target for 2019 would be 3,980 fatalities.

2021 Target: To decrease the expected rise of fatalities from the projected 4,012 in 2019 to not more than 4,155 fatalities in 2021

Target: Total number of serious injuries (C-2)

2019 Target: To decrease the expected rise of serious injuries to not more than a five year average of 17,751.0 serious injuries in 2019

The 2019 Target expressed as a 5-year average would be as follows:

Year	Target or Actual Data	Source
2015	17,110	CRIS
2016	17,602	CRIS
2017	17,546	CRIS
2018	18,130	Target
2019	18,367	Target
2019 Target expressed as 5-year average		17,751.0

As noted in the table above, the calendar year target for 2019 would be 18,367 serious injuries.

2021 Target: To decrease the expected rise of serious injuries from the projected 18,516 serious injuries in 2019 to not more than 18,835 serious injuries in 2021

Target: Fatalities per 100 million vehicle miles traveled (C-3)

2019 Target: To decrease the expected rise of fatalities per 100 MVMT to not more than a five year average of 1.414 fatalities per 100 MVMT in 2019

The 2019 Target expressed as a 5-year average would be as follows:

Year	Target or Actual Data	Source
2015	1.39	FARS
2016	1.39	ARF
2017	1.36	CRIS
2018	1.46	Target
2019	1.47	Target
2019 Target expressed as 5-year average		1.414

As noted in the table above, the calendar year target for 2019 would be 1.47 fatalities per 100 MVMT.

2021 Target: To decrease the expected rise of fatalities per 100 MVMT from the projected 1.48 fatalities per 100 MVMT in 2019 to not more than 1.49 fatalities per 100 MVMT in 2021

Target: Serious Injuries per 100 million vehicle miles traveled

2019 Target: To decrease the serious injuries per 100 MVMT to not more than a five year average of 6.550 serious injuries per 100 MVMT in 2019

The 2019 Target expressed as a 5-year average would be as follows:

Year	Target or Actual Data	Source
2015	6.63	CRIS
2016	6.49	CRIS
2017	6.39	CRIS
2018	6.64	Target
2019	6.60	Target
2019 Target expressed as 5-year average		6.550

As noted in the table above, the calendar year target for 2019 would be 6.60 serious injuries per 100 MVMT.

2021 Target: To decrease the rate of serious injuries per 100 MVMT from 6.60 serious injuries per 100 MVMT in 2019 to 6.51 serious injuries per 100 MVMT in 2021

Target: Total number of non-motorized fatalities and serious injuries

2019 Target: To decrease the expected rise of non-motorized fatalities and serious injuries to not more than a five year average of 2,237.6 non-motorized fatalities and serious injuries in 2019

The 2019 Target expressed as a 5-year average would be as follows:

Year	Target or Actual Data	Source
2015	2,036	FARS-CRIS
2016	2,301	ARF-CRIS
2017	2,148	CRIS
2018	2,309	Target
2019	2,394	Target
2019 Target expressed as 5-year average		2,237.6

As noted in the table above, the calendar year target for 2019 would be 2,394 non-motorized fatalities and serious injuries.

2021 Target: To decrease the expected rise of non-motorized fatalities and serious injuries from the projected 2,413 serious injuries in 2019 to not more than 2,560 non-motorized fatalities and serious injuries in 2021

RESOLUTION NO. 18-10-2018-2

A RESOLUTION ADOPTING THE PAVEMENT AND BRIDGE CONDITION PERFORMANCE TARGETS ESTABLISHED BY TEXAS DEPARTMENT OF TRANSPORTATION

WHEREAS, Moving Ahead for Progress in the 21st Century Act and subsequent Fixing America's Surface Transportation Act require the implementation of Performance Measures to assist in the transportation planning process; and

WHEREAS, Texas Department of Transportation has established targets for four pavement conditions and two bridge conditions Performance Measures:

Pavement Conditions:

1. Percentage of Interstate pavements in Good condition,
2. Percentage of Interstate pavements in Poor condition,
3. Percentage of non-Interstate NHS pavements in Good condition,
4. Percentage of non-Interstate NHS pavements in Poor condition,

Bridge Conditions:

1. Percentage of bridges by deck area classified as in Good condition, and
2. Percentage of bridges by deck area classified as in Poor condition,

WHEREAS, the Texas Department of Transportation has officially established pavement and bridge condition targets dated June 21, 2018, and as shown in APPENDIX A, attached hereto and incorporated herein.

NOW, THEREFORE, BE IT RESOLVED, BY THE AMARILLO METROPOLITAN ORGANIZATION THAT:

The Policy Committee hereby adopts the Texas Department of Transportation Pavement Condition and Bridge Condition Performance Targets within the Metropolitan Area Boundary, attached hereto and incorporated herein, this the 18th day of October 2018.

BE IT FURTHER RESOLVED, that the Policy Committee will plan and program projects that contribute to the accomplishments of said targets.

Ginger Nelson, Policy Board Chair
Mayor, City of Amarillo

APPENDIX A

Texas Department of Transportation
Pavement and Bridge Condition Performance Targets

Performance Measure	Baseline	2020 Target	2022 Target
Pavement on IH			
% in "good" Condition			66.40%
% in "poor" Condition			0.30%
Pavement on non-IH NHS			
% in "good" Condition	54.40%	52.00%	52.30%
% in "poor" Condition	13.80%	14.30%	14.30%

Performance Measure	Baseline	2020 Target	2022 Target
NHS Bridge Deck Condition			
% in "poor" Condition	0.88%	0.80%	0.80%
% in "good" Condition	50.63%	50.58%	50.42%

RESOLUTION NO. 13-12-2018-1

A RESOLUTION ADOPTING THE TARGETS FOR SYSTEM PERFORMANCE MEASURES (PM3) AS ESTABLISHED BY TEXAS DEPARTMENT OF TRANSPORTATION

WHEREAS, Moving Ahead for Progress in the 21st Century Act (MAP21) and subsequent Fixing America's Surface Transportation (FAST) Act require the implementation of Performance Measures to assist in the transportation planning process; and

WHEREAS, Texas Department of Transportation has established three targets for (PM3) System Performance Measures:

System Performance Measures (PM3):

1. Percentage of person-miles traveled on the Interstate system rated "reliable" (TTR-IH),
2. Percentage of person-miles traveled on Non-Interstate National Highway System facilities rated "reliable" (TTR Non-IH),
3. Percentage of truck travel time on the Interstate system rated as "reliable"(TTTR),

WHEREAS, the Texas Department of Transportation has officially established system performance targets dated June 21, 2018, and as shown in APPENDIX A, attached hereto and incorporated herein.

NOW, THEREFORE, BE IT RESOLVED, BY THE AMARILLO METROPOLITAN ORGANIZATION THAT:

The Policy Committee hereby supports and adopts the Texas Department of Transportation System Performance Measure Targets within the Metropolitan Area Boundary, attached hereto and incorporated herein, this the 13th day of December 2018.

BE IT FURTHER RESOLVED, that the Policy Committee will plan and program projects that contribute to the accomplishments of said targets.

Ginger Nelson, Policy Board Chair
Mayor, City of Amarillo

APPENDIX A

Texas Department of Transportation
System Performance Measure Targets (PM3)
June 21, 2018

Performance Measure	Statewide Baseline	2020 Target	2022 Target
National Highway System Travel Time Reliability			
Interstate Highway System Level of Travel Time Reliability	79.6%	61.2%	56.6%
Non-Interstate Level of Travel Time Reliability	n/a	n/a	55.4%
Truck Travel Time Reliability	1.50	1.70	1.79

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REVISIONS:

Amarillo MPO
August 2020 Revision
2020-45 Metropolitan Transportation Plan
June 18, 2020

AMARILLO METROPOLITAN PLANNING ORGANIZATION
POLICY COMMITTEE MEETING

June 18, 2020

AMARILLO 2020-2045 METROPOLITAN TRANSPORTATION PLAN August 2020 REVISION		
MPO ID Number	Location/Description	Revision
Roadway Projects		
A20002	SL 335 Fr: West of FM 2590 South to SW 9th Ave; B-2: Construct 4 new Mainlanes, Ramps and Grade Separations and 2 lane Frontage Rds	Update info
A20003	SL 335 Fr: SW 9th Ave to FM 1719 (Western); C-1 Phase I: Upgrade to 4-lane divided from SW 9th Ave to RM 1061, Upgrade to freeway From RM 1061 to FM 1719	Update info
A20021	IH 27 Fr: North of US 60/87 interchange to South of US 60/87 Interchange; Reconstruct US 60/IH 27 interchange	Update info
A20004	SL 335 Fr: .2 M North of 34th Ave to .4 M NE BI 40D; B-2 Phase III: Construct SL 335 3rd level mainlane bridge at IH 40, 4 new mainlanes ramps, and BI 40-D grade separation	Update info

Amarillo Metropolitan Transportation Plan 2015-2040 (MTP)
August 2020 Revision

June 18, 2020

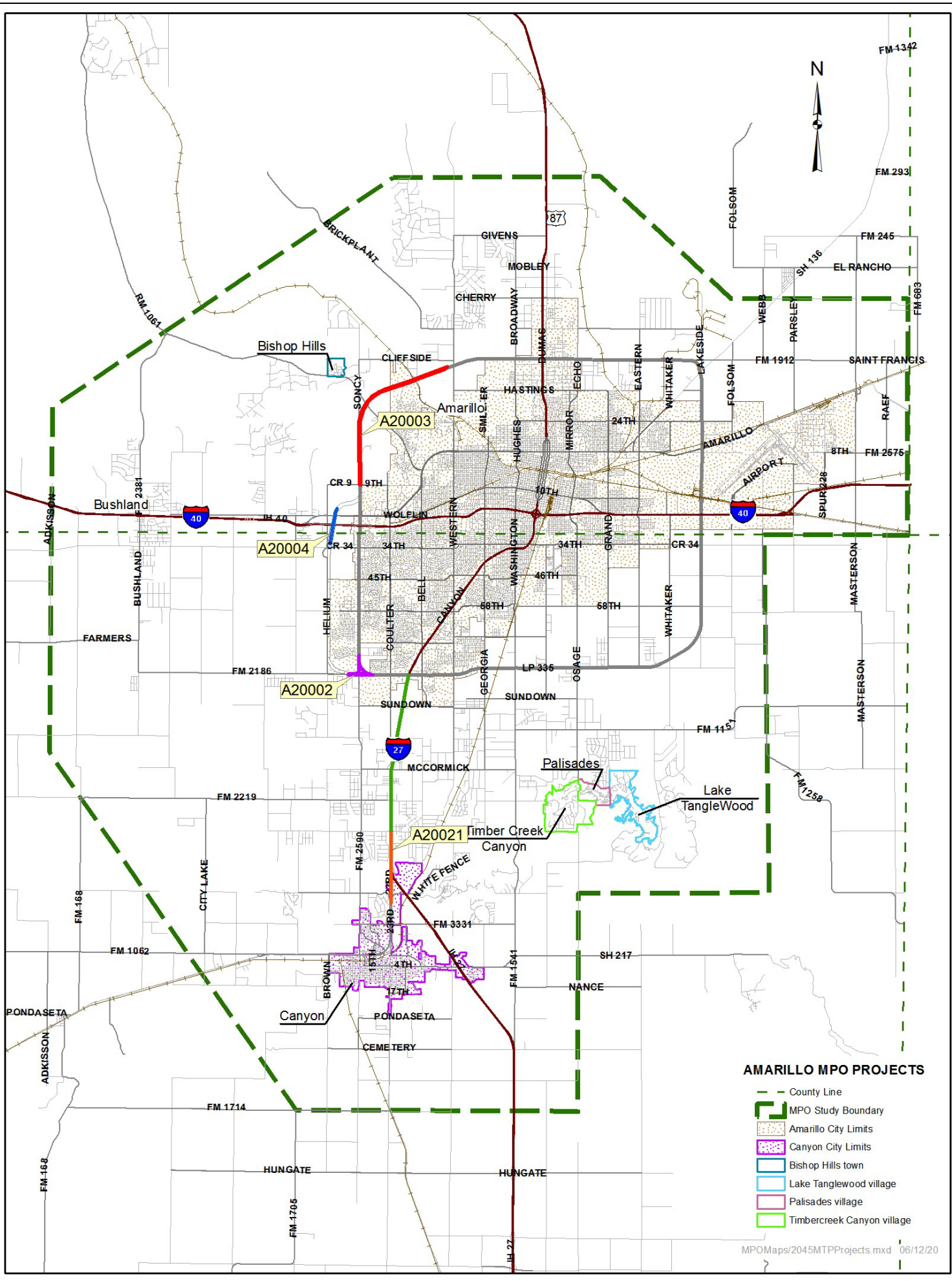
MPO ID	Facility	From Limit	To Limit	Project Description	Status	Timing	YOE Total Project Cost X 1000 Illustrative	
A20002	SL 335	FM 2590	West of Coulter	B-1 Phase II : Construct 4 Mainlanes, and 2 lane frontage roads	Short	2021		$32,200
A20003	SL 335	SW 9th Ave	FM 1719	C-1 Phase I: Upgrade to 4- lane divided from SW 9th to RM 1061, Upgrade to Freeway from RM 1061 to FM 1719	Short	2023		$82,500
A20021	IH 27	S of Sundown	S of US 60 Split	IH 27: Widen Freeway from 4-lanes to 6-Lanes, Reconstruct US60/IH27 interchange				$159,200
Notes:	This is a Multi-phase project							
Phase I:	IH 27	S of Sundown	US 60 Split	Widen Freeway from 4-lanes to 6-lanes	Short	2024	$152,400	
Phase II:	IH 27	North of US 60/87 interchange	South of US 60/87 Interchange	Reconstruct US 60/IH 27 interchange	Short	2024	$6,800	
A20004	SL 335	.2 M North of 34th Ave	.4 M NE BI 40D	B-2 Phase III: Construct SL335 3rd Level Mainlane Bridge at IH 40, 4 New Mainlanes, Ramps, and BI 40-D Grade Seperation	Short	2024		$58,800
Notes:	This is a Multi-phase project							
Phase I:	SL 335	Randall County Line	.4 M NE BI 40-D	B-2 Phase III: Construct SL335 3rd Level Mainlane Bridge at IH 40, 4 New Mainlanes, Ramps, and BI 40-D Grade Seperation	Short	2024	$57,000	
Phase II:	SL 335	.2 M North of 34th Ave	Potter County Line		Short	2024	$1,800	

Year of Expenditure (YOE) costs – Converting all costs and revenues to YOE dollars presents a more accurate picture of costs over the term of the MTP.
Total project costs (TPC) – The estimated costs of all project phases, including: Construction, PE, ROW, Bond Finance, CE, Contingencies, & Indirect costs.

Table 6.1
Financial Summary

Metropolitan Transportation Plan – Financial Constraint by Category				
Category	**Description**	**Funding Source**	**Average**	**25-year Projected Available**
1	Preventative Maintenance & Rehabilitation	Federal State	$ 5,000,000	$ 125,000,000
2	Metro & Urban Area Corridor	Federal State	$ 11,000,000	$ 275,000,000
3	Non-Traditionally Funded Transportation Projects	Federal State	$ 0	$ 0
4	Statewide Connectivity Corridor Projects	Federal State	$ 0	$ 51,470,000
6	Structures	Federal State	$ 2,000,000	$ 50,000,000
8	Safety	Federal State	$ 200,000	$ 5,000,000
9	Transportation Alternatives	Federal State	$ 0	$ 0
10	Supplemental Transportation	Federal State	$ 0	$ 0
11	District Discretionary	Federal State	$ 0	$ 0
12	Strategic Priority	Federal State	$ 0	$ 166,620,000
Operations and Maintenance	TxDOT	Federal State	$ 5,100,000	$ 127,500,000
Local Construction	City of Amarillo Potter & Randall Counties	Local Funds	$ 2,200,000	$ 55,000,000
Local Operations and Maintenance	City of Amarillo	Local Funds	$ 2,939,200	$ 73,480,000
Transit	Section 5307	Federal State & Local	$ 6,956,243	$ 173,906,075

Metropolitan Transportation Plan – Financial Constraint Summary			
	Federal / State	**Local**	**Total**
Construction	$673,900,000	$ 55,000,000	$ 728,090,000
Operations/Maintenance	$ 127,500,000	$ 73,480,000	$ 200,980,000
Transit	$96,262,452	$ 77,643,623	$ 173,906,075


N
A20003
A20004
A20002
A20021
Bishop Hills
Amarillo
Bushland
Canyon
Palisades
Lake TangleWood
Timber Creek Canyon
AMARILLO MPO PROJECTS
County Line
MPO Study Boundary
Amarillo City Limits
Canyon City Limits
Bishop Hills town
Lake Tanglewood village
Palisades village
Timbercreek Canyon village
MPOMaps/2045MTPProjects.mxd 06/12/20

Amarillo MPO
October 2021 Revision
2020-45 Metropolitan Transportation Plan
October 21, 2021

AMARILLO METROPOLITAN PLANNING ORGANIZATION
POLICY COMMITTEE MEETING

October 21, 2021

AMARILLO 2020-2045 METROPOLITAN TRANSPORTATION PLAN November 2021 REVISION		
MPO ID Number	Location/Description	Revision
Roadway Projects		
A20004	SL 335 Fr: .2 M North of 34th Ave to .4 M NE BI 40D; B-2 Phase III: Construct SL 335 3rd level mainlane bridge at IH 40, 4 new mainlanes ramps, and BI 40-D grade separation	Remove funding Move to Illustrative list
A20014	SL 335 At I-27 Interchange; SL 335 / I27 South Interchange Phase II: Construct Two Direct Connector Ramps (NB to WB) (EB to SB)	Add Project to illustrative list
A20015	SL 335 Fr: East of Coulter to I-27; SL 335 / I27 South Interchange Phase II: Construct SL 335 3rd Level 4 lane Mainlane Bridge at IH 27	Add Project
A20016	SL 335 Fr. Sundown Ln to SL 335; I-27 2 lane Frontage Road Tie In	Add Project
A20006	SL 335 Fr: I-27 to Bell St; SL 335 / I27 South Interchange Phase II: Construct SL 335 3rd Level 4 lane Mainlane Bridge at IH 27	Update info

Amarillo Metropolitan Transportation Plan 2015-2040 (MTP)
November 2021 Revision

June 18, 2020

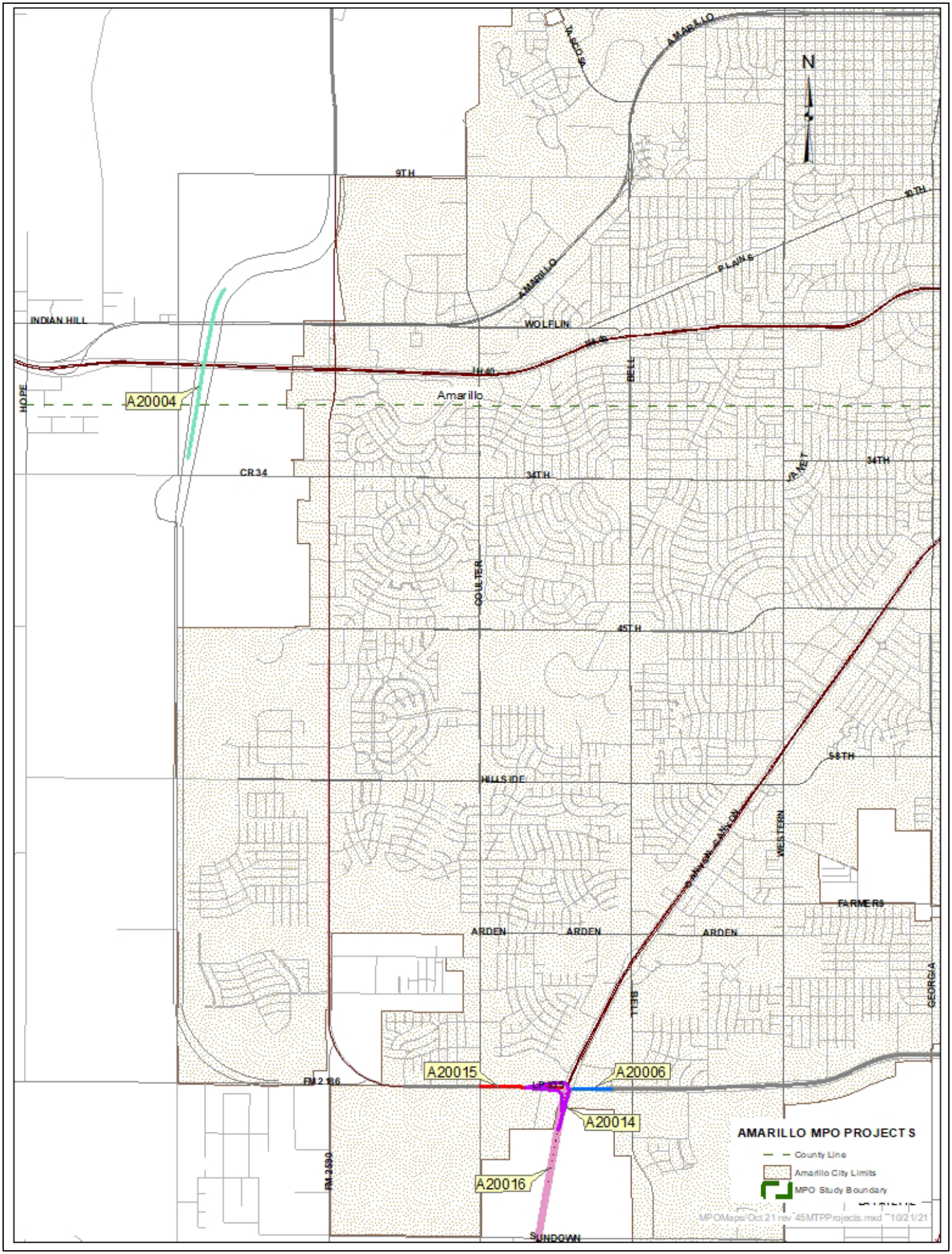
MPO ID	Facility	From Limit	To Limit	Project Description	Status	Timing	YOE Total Project Cost X 1000		
							Illustrative	Funded	Total
A20004	SL 335	.2 M North of 34th Ave	.4 M NE BI 40D	B-2 Phase III: Construct SL335 3rd Level Mainlane Bridge at IH 40, 4 New Mainlanes, Ramps, and BI 40-D Grade Seperation	Illustrative				$0,000
Notes: This is a Multi-phase project									
Phase I:	SL 335	Randall County Line	.4 M NE BI 40-D	B-2 Phase III: Construct SL335 3rd Level Mainlane Bridge at IH 40, 4 New Mainlanes, Ramps, and BI 40-D Grade Seperation	Illustrative			$0,000	
Phase II	SL 335	.2 M North of 34th Ave	Potter County Line	B-2 Phase III: Construct SL335 3rd Level Mainlane Bridge at IH 40, 4 New Mainlanes, Ramps, and BI 40-D Grade Seperation	Illustrative			$0,000	
A20014	SL 335	IH 27	Coulter	SL 335 / I-27 Interchange Phase II: Construct Two Direct Connector Ramps (NB to WB) (EB to SB)	Illustrative		$44,454	$33,426	$88,360
A20006	SL 335	I-27	Bell St	SL 335 / I-27 Interchange Phase II: Construct SL 335 3rd Level Bridge at IH 27, 4 New Mainlanes, and Ramps	Short	2026			$12,056
A20015	SL 335	East of Coulter	IH 27	SL 335 / I-27 Interchange Phase II: Construct SL 335 3rd Level Bridge at IH 27, 4 New Mainlanes,and Ramps	Short	2026			$12,056
A20016	SL 335	Sundown	SL 335	SL 335/ I-27 Interchange Ph II; IH 27 2 lane Frontage Road Rehab	Short	2026			$7,392

Year of Expenditure (YOE) costs – Converting all costs and revenues to YOE dollars presents a more accurate picture of costs over the term of the MTP.
Total project costs (TPC) – The estimated costs of all project phases, including: Construction, PE, ROW, Bond Finance, CE, Contingencies, & Indirect costs.

Table 6.1
Financial Summary

Metropolitan Transportation Plan – Financial Constraint by Category				
Category	**Description**	**Funding Source**	**Average**	**25-year Projected Available**
1	Preventative Maintenance & Rehabilitation	Federal State	$ 5,000,000	$ 125,000,000
2	Metro & Urban Area Corridor	Federal State	$ 11,000,000	$ 275,000,000
3	Non-Traditionally Funded Transportation Projects	Federal State	$ 0	$ 0
4	Statewide Connectivity Corridor Projects	Federal State	$ 0	$ 51,470,000
6	Structures	Federal State	$ 2,000,000	$ 50,000,000
8	Safety	Federal State	$ 200,000	$ 5,000,000
9	Transportation Alternatives	Federal State	$ 0	$ 0
10	Supplemental Transportation	Federal State	$ 0	$ 0
11	District Discretionary	Federal State	$ 0	$ 0
12	Strategic Priority	Federal State	$ 0	$ 166,620,000
Operations and Maintenance	TxDOT	Federal State	$ 5,100,000	$ 127,500,000
Local Construction	City of Amarillo Potter & Randall Counties	Local Funds	$ 2,200,000	$ 55,000,000
Local Operations and Maintenance	City of Amarillo	Local Funds	$ 2,939,200	$ 73,480,000
Transit	Section 5307	Federal State & Local	$ 6,956,243	$ 173,906,075

Metropolitan Transportation Plan – Financial Constraint Summary			
	Federal / State	**Local**	**Total**
Construction	$673,900,000	$ 55,000,000	$ 728,090,000
Operations/Maintenance	$ 127,500,000	$ 73,480,000	$ 200,980,000
Transit	$96,262,452	$ 77,643,623	$ 173,906,075


N
AMARILLO
9TH
10TH
PLAINS
INDIAN HILL
WOLFLIN
I-40
BELL
HOPE
A20004
Amarillo
CR34
34TH
COULTER
45TH
58TH
HILLSIDE
WESTERN
FARMERS
ARDEN
ARDEN
ARDEN
GEORGIA
A20015
FM 2186
LP 335
A20006
A20014
A20016
FM 2590
SUNDOWN
AMARILLO MPO PROJECTS
County Line
Amarillo City Limits
MPO Study Boundary
MPOMaps\Oct 21 rev 4\5MTPProjects.mxd 10/21/21

Amarillo MPO
February 2022 Revision
2020-45 Metropolitan Transportation Plan
January 20, 2022

AMARILLO METROPOLITAN PLANNING ORGANIZATION
POLICY COMMITTEE MEETING
January 20, 2022

AMARILLO 2020-2045 METROPOLITAN TRANSPORTATION PLAN February 2021 REVISION		
MPO ID Number	Location/Description	Revision
Transit Projects		
A20T010S	Ride Share Voucher Program	Add Project
Transportation Alternative Projects		
A20-TA-04	Barrio Neighborhood SE 10TH Ave Improvement	Add Project

Transit Short Range Plan 2020-2030

Project ID	Description	Cost x $1000
A20T01S	Operating Expense	44,451
A20T02S	Replace Bus Vehicles	4,122
A20T03S	Replace Para-transit Vehicles	1,375
A20T04S	Equipment (various)	297
A20T05S	Passenger Amenities	1,800
A20T06S	Preventative Maintenance	9,860
A20T07S	Training	225
A20T08S	ADA ParaTransit Service	20,264
A20T09S	Transfer Facility Replacement	9,754
A20T10S	Ride Share Voucher Program	200
TOTAL		87,394

Transportation Alternatives Projects

Project ID	Description	Cost x1000
A20-TA-01	Rails To Trails – Phase 2	$4,000
A20-TA-02	CBD Streetscape – Phase 2	$4,000
A20-TA-03	Safe Routes to Schools	$975
A20-TA-04	Barrio Neighborhood SE 10TH Ave Improvement	$2,000

Table 6.1
Financial Summary

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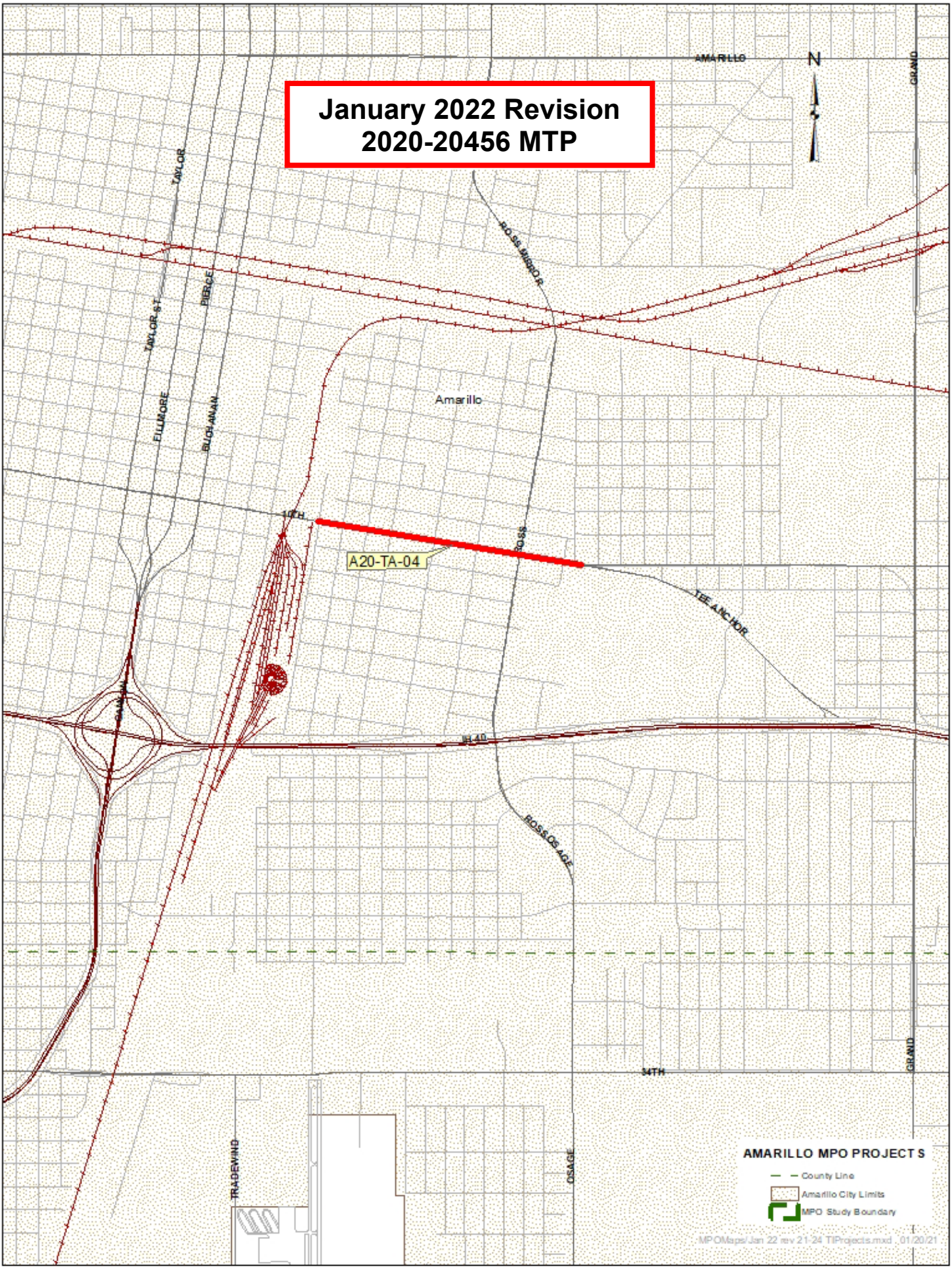
3	Non-Traditionally Funded Transportation Projects	Federal State	$ 0	$ 0
4	Statewide Connectivity Corridor Projects	Federal State	$ 0	$ 51,470,000
6	Structures	Federal State	$ 2,000,000	$ 50,000,000
8	Safety	Federal State	$ 200,000	$ 5,000,000
9	Transportation Alternatives	Federal State	$ 0	$2,000,000
10	Supplemental Transportation	Federal State	$ 0	$ 0
11	District Discretionary	Federal State	$ 0	$ 0
12	Strategic Priority	Federal State	$ 0	$ 166,620,000
Operations and Maintenance	TxDOT	Federal State	$ 5,100,000	$ 127,500,000
Local Construction	City of Amarillo Potter & Randall Counties	Local Funds	$ 2,200,000	$ 55,000,000
Local Operations and Maintenance	City of Amarillo	Local Funds	$ 2,939,200	$ 73,480,000
Transit	Section 5307	Federal State & Local	$ 6,956,243	$ 173,906,075

Metropolitan Transportation Plan – Financial Constraint Summary			
	Federal / State	**Local**	**Total**
Construction	$675,090,000	$ 55,000,000	$ 730,090,000
Operations/Maintenance	$ 127,500,000	$ 73,480,000	$ 200,980,000
Transit	$96,262,452	$ 77,643,623	$ 173,906,075


January 2022 Revision
2020-20456 MTP
AMARILLO
N
GRAND
TAYLOR
TAYLOR ST
PIERCE
FILLMORE
BUCHANAN
ROSS
Amarillo
10TH
A20-TA-04
ROSS
TEE ANCHOR
I-40
ROSS OSAGE
34TH
GRAND
TRADEWIND
OSAGE
AMARILLO MPO PROJECTS
County Line
Amarillo City Limits
MPO Study Boundary
MPOMaps\Jan 22 rev 21-24 TIProjects.mxd - 01/20/21

Amarillo MPO
May 2022 Revision
2020-45 Metropolitan Transportation Plan
April 21, 2022

AMARILLO METROPOLITAN PLANNING ORGANIZATION
POLICY COMMITTEE MEETING

April 22, 2022

AMARILLO 2020-2045 METROPOLITAN TRANSPORTATION PLAN May 2022 REVISION		
MPO ID Number	Location/Description	Revision
Roadway Projects		
A20003	SL 335 From SW 9th Ave to FM 1719; C-1 Phase I: upgrade to 4-lane divided from 9th to RM 1061, Upgrade to freeway from Rm 1061 to FM 1719	Update info

Amarillo Metropolitan Transportation Plan 2015-2040 (MTP)
May 2022 Revision

April 24,2022

MPO ID	Facility	From Limit	To Limit	Project Description	Status	Timing	Total Project Cost X 1000		
							Illustrative	Funded	Total
A20003	SL 335	SW 9th Ave	FM 1719	C-1 Phase I: upgrade to 4-lane divided from 9th to RM 1061, Upgrade to freeway from Rm 1061 to FM 1719	Short				$104,330

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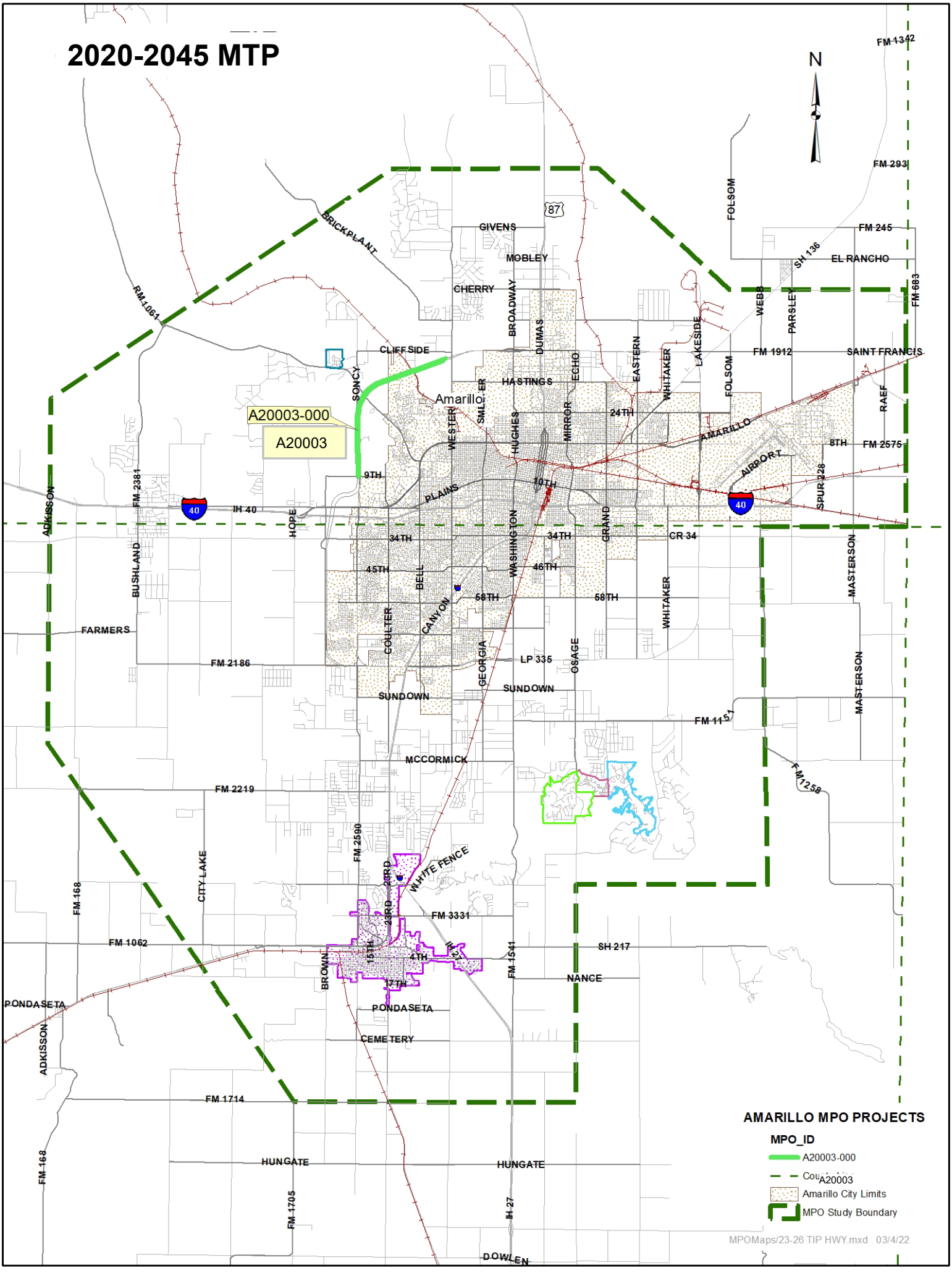
3	Non-Traditionally Funded Transportation Projects	Federal State	$ 0	$ 0
4	Statewide Connectivity Corridor Projects	Federal State	$ 0	$ 51,470,000
6	Structures	Federal State	$ 2,000,000	$ 50,000,000
8	Safety	Federal State	$ 200,000	$ 5,000,000
9	Transportation Alternatives	Federal State	$ 0	$ 2,000,000
10	Supplemental Transportation	Federal State	$ 0	$ 0
11	District Discretionary	Federal State	$ 0	$ 0
12	Strategic Priority	Federal State	$ 0	$ 168,359,063
Operations and Maintenance	TxDOT	Federal State	$ 5,100,000	$ 127,500,000
Local Construction	City of Amarillo Potter & Randall Counties	Local Funds	$ 2,200,000	$ 55,000,000
Local Operations and Maintenance	City of Amarillo	Local Funds	$ 2,939,200	$ 73,480,000
Transit	Section 5307	Federal State & Local	$ 6,956,243	$ 173,906,075

Metropolitan Transportation Plan – Financial Constraint Summary			
	Federal / State	**Local**	**Total**
Construction	$676,829,063	$ 55,000,000	$ 731,829,063
Operations/Maintenance	$ 127,500,000	$ 73,480,000	$ 200,980,000
Transit	$96,262,452	$ 77,643,623	$ 173,906,075


2020-2045 MTP
N
A20003-000
A20003
Amarillo
CLIFFSIDE
HASTINGS
GIVENS
MOBLEY
CHERRY
FM 1342
FM 293
FM 245
EL RANCHO
SH 136
FM 683
FM 1912
SAINT FRANCIS
FOLSOM
WEBB
PARSLEY
LAKESIDE
EASTERN
WHITAKER
ECHO
MIRROR
HUGHES
WESTER
SMILEY
BROADWAY
DUMAS
SONCY
BRICKPLANT
RM 1061
FM 2381
ADKISSON
IH 40
HOPE
BUSHLAND
FARMERS
FM 2186
SUNDOWN
MCCORMICK
FM 2219
FM 2590
CITY LAKE
FM 168
FM 1062
PONDASETA
CEMETERY
FM 1714
HUNGATE
FM 1705
DOWLEN
IH 27
FM 1541
SH 217
NANCE
FM 3331
WHITE FENCE
BROWN
COULTER
CANYON
BELL
GEORGIA
OSAGE
WASHINGTON
GRAND
MASTERSON
FM 1151
FM 1258
LP 335
CR 34
AIRPORT
AMARILLO
SPUR 228
RAEF
PLAINS
9TH
10TH
8TH
24TH
34TH
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46TH
58TH
23RD
15TH
4TH
17TH
AMARILLO MPO PROJECTS
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MPOMaps/23-26 TIP HWY.mxd 03/4/22