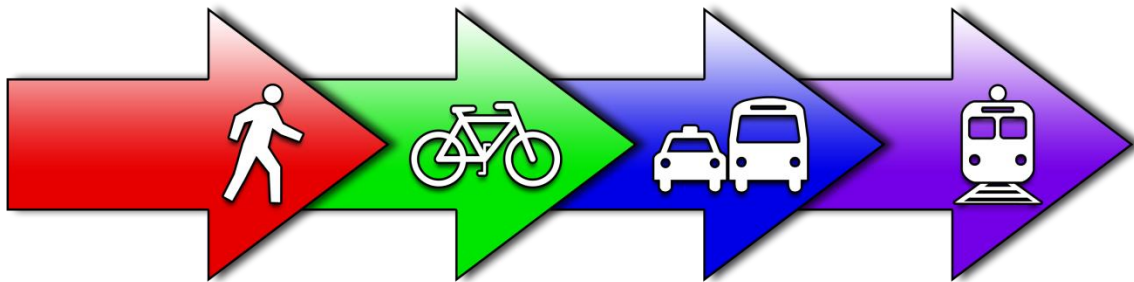


VOYAGE2040

LONG-RANGE TRANSPORTATION PLAN
SAN ANGELO, TX



METROPOLITAN PLANNING ORGANIZATION
S A N A N G E L O



METROPOLITAN PLANNING ORGANIZATION
S A N A N G E L O

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In November 2014, the San Angelo Metropolitan Planning Organization adopted Voyage 2040 – San Angelo’s long-range transportation plan. This plan serves as a guide for the development of San Angelo’s transportation future. Consistent with previous Metropolitan Transportation Plans, Transportation Improvement Plans, and Unified Planning Work Program, this document provides a comprehensive view of current needs, deficiencies, and resources for San Angelo.

Voyage is intended to provide readers with information about the current state of San Angelo’s transportation network and where future improvements are planned. Voyage 2040 is a multi-modal document that contains plans for motorized, non-motorized, public transportation, aviation, and rail through 2040.

Developed with the collaboration of the MPO, transportation stakeholders, public transportation providers and other transportation representatives, Voyage is an example of what can be accomplished when individuals are dedicated and committed to making things better for the community.

Future initiatives of the MPO are to encourage more community engagement through community activities, surveys, blogs, neighborhood meetings, and social media. For the MPO, it is crucial that we involve the community as much as possible so that San Angelo’s transportation system serves the needs of many and not just a few.

The MPO will continue working closely with our planning partners to expand our planning services and re-focus planning efforts so they consider all the modes of the transportation system. In addition to our planning partners, the MPO realizes the importance of building new partnerships and collaborations with other stakeholders such as those in the private sector. It is through these public-private partnerships that we will see significant transportation improvements.

As the population in Texas continues to increase rapidly, and as the energy sector activity increases, it is important that transportation issues such as deteriorating roads, traffic and truck congestion, limited funding resources, providing more transportation options and safety remain a priority. To begin fixing these problems, it will take cooperative partnerships between public and private organizations and building better relationships with the public.



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SA-MPO VISION STATEMENT

Identify a realistic, affordable, and effective transportation management process and a system of transportation improvements providing effective movement of people and goods through a centralized, efficient, and progressive planning program.

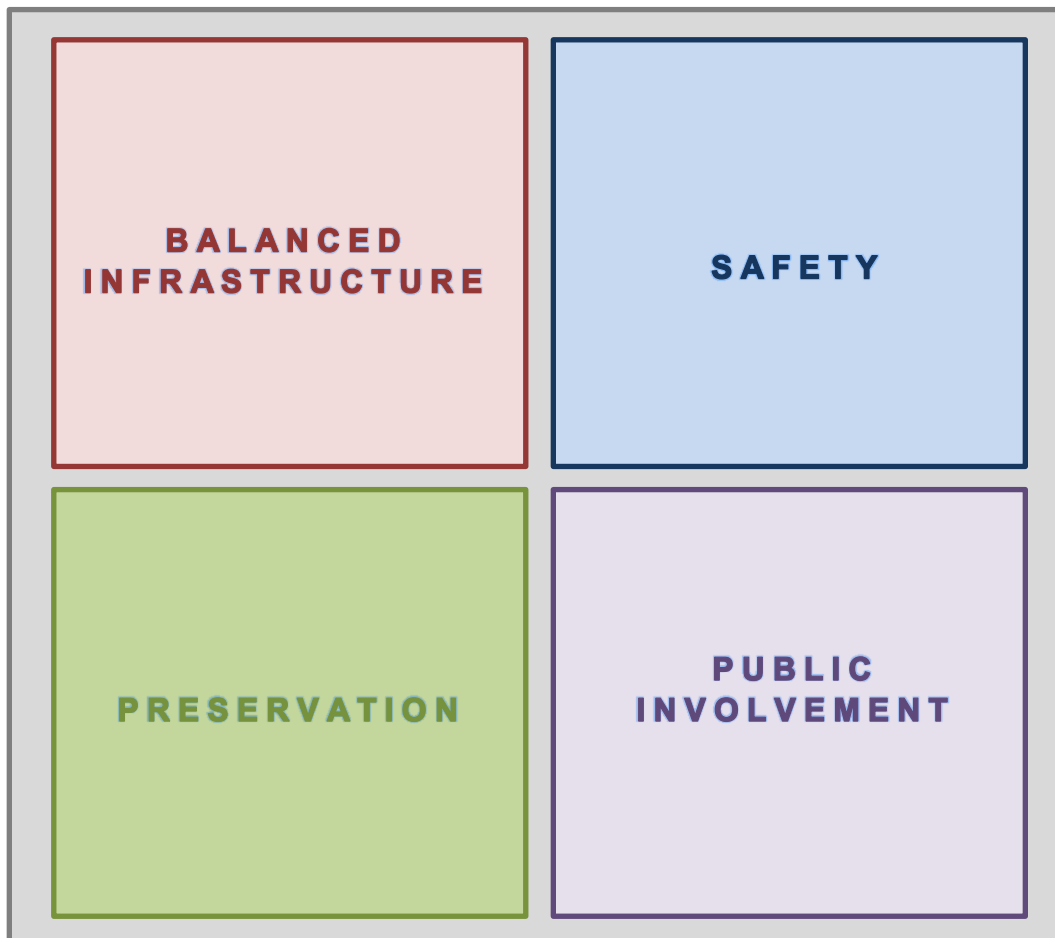
SA-MPO MISSION STATEMENT

Provide and manage a safe, well-maintained comprehensive and integrated transportation network that improves connectivity, equalizes transportation options, and anticipates future demand to ensure all needs are met.

SA-MPO MOTTO

Enhancing ~ Transportation ~ Through ~ Connectivity.

2040 LONG RANGE FOCUS





2040

INTRODUCTION: ARE YOU READY TO LEARN ABOUT TRANSPORTATION?

INTRODUCTION

Transportation planning activities formally began in the San Angelo metropolitan area began in 1964 when the City of San Angelo, Tom Green County, the Texas Highway Department, and the U. S. Department of Commerce initiated a transportation study. This transportation study was completed in 1966 with the formal adoption of a transportation plan. While many revisions have been made, the original scope of the transportation plan remains.

Although it varies in urban and non-urban areas, long-range transportation planning is fundamentally a process that involves setting goals and objectives, projecting transportation needs, identifying solutions and recommending implementation actions.

In 1988, the Governor of Texas designated the City of San Angelo as the Metropolitan Planning Organization (MPO) for transportation planning in the San Angelo urbanized area using the Committee structure established pursuant to Section 134 of Chapter 1 of Title 23 U.S.C. as the group responsible for giving the MPO overall transportation guidance (planning).

As an urbanized area, the San Angelo Metropolitan Planning Organization is required to prepare a comprehensive long-range multi-modal transportation plan that spans 20 years into the future. The plan known as the Metropolitan Transportation Plan (MTP) is developed through cooperative efforts of governments, businesses, and community organizations and includes participation from many different representatives and individuals. Although this document is the product of several types of collaborations, it is the responsibility of the MPO to update and maintain the MTP.

The Metropolitan Transportation Plan is a long-range transportation-planning document that provides a guide for several modes of transportation including bicycle, highways, public transportation, pedestrian, aviation, and rail. Moreover, provides linkages between economic development, land use, environmental conditions, and mobility options to improve the quality of life for citizens, giving them options for transport.

The long-range plan is the ultimate document that guides development of San Angelo's transportation system. This document is in accordance with the Transportation Improvement Plan and the Unified Planning Work Program. The San Angelo Transportation Plan will be reviewed and revised regularly to remain compliant.

The focus of the plan is to identify and guide future transportation decisions and improvements using a comprehensive, continuing, and cooperative planning process. The MTP looks at all forms of movement including vehicles, people, goods and freight. Although each mode of transportation is discussed separately in the plan, the document shows the interrelationships between each mode.

The long-range plan encourages integration and connectivity for the various transportation modes, and shows how each component works together in the transportation system. The multi-modal approach to transportation planning includes not only roadways, but also public transportation, airports, rail, freight, bicycles and pedestrian.

The long-range plan systemizes multi-modal transportation planning for all modes of travel, ensures that plans, programs, and policies are interconnected, and provides transportation coordination among the city, county, state and other jurisdictional boundaries.

As mentioned, this plan is intended to serve several purposes and is used for guiding the development of the transportation system. The MTP is intended to identify transportation system improvements for the San Angelo Metropolitan area that meet the requirements of federal transportation legislation. The plan and project listing included are intended to anticipate future conditions and provide realistic, affordable, and effective solutions for the community. The MTP is intended to address the development and maintenance of the transportation system with full opportunity for and inclusion of, a community that is culturally, economically, and physically diverse.

The Metropolitan Transportation Plan is a federally required document that is updated every five years and provides information on how the urbanized transportation system will develop over the next 25 years. The U.S. Census Bureau delineates the definition of the urbanized area, and it is the responsibility of the metropolitan planning organization to plan for the urbanized area.

The San Angelo Metropolitan Long Range Transportation Plan serves as the blueprint for the development of the San Angelo transportation system for the next twenty-five years. The plan identifies long-range transportation needs, prioritizes programs and projects, and provides a means for regional brainstorming on transportation developments.



TRANSPORTATION LEGISLATION HISTORY

Federal-Aid Highway Act of 1962

Long-range transportation planning began with the passage of the Federal Highway Transportation Act of 1962. This act created a continuing, cooperative and comprehensive (3-C) regional transportation planning process for urban areas. Congress passed legislation, which required urban areas to create, and implement transportation plans in order to receive federal highway funds.

The Federal Surface Transportation Assistance Act of 1973 required the formation of a Metropolitan Planning Organization (MPO) for any urbanized area with a population greater than 50,000 (as identified by the U.S. Bureau of the Census) for conducting the transportation planning process. Federal funds were allocated to MPOs to support the urban transportation planning process. Subsequently, MPOs were designated as the forum for cooperative regional transportation decision making.

In addition to the creation of MPOs, this act initiated a highway interstate system that was intended to unite cities, states, and communities across the country. It allowed each state the option of spending some of its federal transportation funding on bicycling and walking.

Intermodal Surface Transportation Efficiency Act (ISTEA) 1991

With the passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991, a major change in transportation planning was initiated. The act provided for an enhanced multi-modal scope that showed uniformity and interconnectivity, which revolutionized many aspects of transportation. ISTEA focused on more than just highway transportation, it initially emphasized intermodal transportation, which provided linkages between highway, rail, air and water transport.

The bill focused on bicycling and pedestrian infrastructure and public transit, which was intended to encourage states to implement an intermodal transportation system. ISTEA gave state and local governments' greater flexibility in determining transportation solutions. It made money available for new kinds of programs, including projects that mitigate traffic congestion, increase safety, and contribute to the attainment of air quality standards. It opened the transportation planning process to more public involvement than ever before, bringing new players to the table when decisions were being made and increasing collaboration among old players.

Transportation Equity Act for the 21st Century (TEA-21) 1998

Following the expiration of ISTEA, The Transportation Equity Act for the 21st Century was enacted on June 9, 1998. TEA-21 authorized federal surface transportation programs for highways, highway safety, and transit for the 6-year period 1998-2003. The TEA 21 Restoration Act, enacted July 22, 1998, provided technical corrections to the original law.

Expanding on the ISTEA scope, the Transportation Equity Act for the 21st Century further integrated transportation areas and increased funding for highways, highway safety, and transit. TEA-21 continued and improved current programs with new initiatives to meet the challenges of improving safety as traffic continues to increase at record levels, protecting and enhancing communities and the natural environment as we provide transportation, and advancing America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.

Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users

In August of 2005, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) was signed into law by the President. The effects of this Act placed a broader emphasis on integrating transportation planning into all modes of transportation.

SAFETEA-LU stated that the existing and proposed transportation facilities (including major roadways, transit, multimodal, and intermodal facilities, pedestrian walkways and bicycle facilities, and intermodal connectors) should function as an integrated metropolitan transportation system while giving emphasis to those facilities that serve important national and regional transportation functions.

SAFETEA-LU provided funding for project construction, transit programs, and planning activities for the five-year period of 2005 to 2009. SAFETEA-LU required the Metropolitan Planning Organizations provide for consideration of projects and strategies that will serve to advance eight (8) transportation-planning factors.

- 1. Support Economic Vitality of the metropolitan area, especially by enabling global, competitiveness, productivity, and efficiency.**
- 2. Increase safety of the transportation system for motorized and non-motorized users.**

3. Increase security of the transportation system for motorized and non-motorized users.
4. Increase the accessibility and mobility of people and freight.
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns.
6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
7. Promote efficient system management and operation.
8. Emphasize the preservation of the existing transportation system.

SAFETEA-LU, in addition to the eight transportation-planning factors identified above also provided for an expanded Public Participation Plan. SAFETEA-LU required the PPP to reflect as appropriate consultation and coordination activities undertaken in consideration of the safety, security, and environmental planning factors.

Moving Ahead for Progress in the 21st Century Act (MAP-21) 2012

On July 6, 2012, President Barack Obama signed into law a new two-year transportation reauthorization bill known as Moving Ahead for Progress in the 21st Century Act (MAP-21). The bill governs the United States federal surface transportation spending and was passed after several extensions of its predecessor.

“Never doubt that a small group of thoughtful, committed, citizens can change the world. Indeed, it is the only thing that ever has.”

Margaret Mead

Though new and short term, the bill does not significantly alter total funding from the previous authorization. It is estimated that the \$118 billion dollar bill will reduce the federal budget deficit by \$16.3 billion. The bill makes changes to the legal framework that directs federal transportation funding, generally providing more flexibility to states and other recipients. The Metropolitan Planning program under SAFETEA-LU encouraged and promoted the safe and efficient management, operation, and development of surface transportation systems.

Under MAP-21, these planning factors remain unchanged. SAFETEA-LU outlines eight planning factors (for both metro and statewide planning) for metropolitan planning areas, which provide for consideration and strategies. One noteworthy change stated in

the bill is that it requires the establishment of performance measures and targets. It requires MPOs and states to create a performance-based and multimodal program to strengthen the U.S. transportation system. The performance measures are intended to focus on issues such as planning, highway safety, highway conditions, congestion, system performance, and transit performance.

The Moving Ahead for Progress in the 21st Century legislation bill lists seven national goals and performance management measures based on a Performance Management system. The expectation is that these goals will transform the federal-aid highway program and provide a means to the most efficient investment of transportation funds. By refocusing on national transportation goals, increasing accountability and transparency of the Federal-aid highway program and improve project decision-making through performance based planning and programming.

The seven national goals consist of:

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

Another important change that was brought about by MAP-21 is that it consolidated 90 highway and transit programs into about 30 funding programs and gave states the option to shift funds from one account to another. This legislative bill essentially terminated earmarks for specific projects and eliminated discretionary and competitive programs, which allows states the flexibility to spend funds in areas that are priority.

Transportation planning has evolved significantly since the passage of the Transportation Act in 1964. Each new bill has expanded on the preceding legislation and has required transportation planning efforts to focus on preserving and enhancing the transportation system. The funding programs have changed, as have the funding amounts; however, each legislative bill has attempted to provide sufficient transportation funds to keep the transportation infrastructure adequate.



The future of transportation is uncertain and there is even more uncertainty in how transportation will be funded in the future. As the San Angelo Metropolitan Planning Organization continues forward, the organization will, to the best of its ability align goals and objectives with those of the federal and state government so that San Angelo has the safest and most efficient transportation system possible.

FIXING AMERICA’S SURFACE TRANSPORTATION (FAST Act) 2015

The Fixing America’s Surface Transportation Act of 2015, or FAST Act, was signed into law on December 4, 2015. The FAST Act provides for new planning requirements such as providing for the development and integrated management of intermodal facilities that support intercity transportation; encouraging consultation with State agencies that plan for tourism and natural disaster risk reduction; planning for system resiliency and reliability and reducing storm-water impacts of surface transportation; and improving freight mobility.

The FAST Act continues MAP-21's overall performance approach, and ensures that State DOTs and MPOs invest in projects that collectively make progress toward the National Goals that were established by Congress.

The FAST Act also allows MPOs serving a transportation management area to voluntarily develop a Congestion Management Plan that shall include regional goals to reduce vehicle miles traveled during peak commuting hours and improve transportation connections between areas with high job concentration and areas with high concentrations of low-income households.

Performance Measures

Safety

The Texas Department of Transportation has officially established targets based on five-year rolling averages for five Safety performance measures:

Performance Measure	2018 Statewide Target (Expressed as Five-Year 2014-2018 Average)
Total number of traffic related fatalities on all public roads	3,703.8
Rate of traffic related fatalities on all public roads per 100 million VMT	1.432
Total number of traffic related serious injuries on all public roads	17,565.4
Rate of traffic related serious injuries on all public roads per 100 million VMT	6.740
Total number of non-motorized fatalities and serious injuries on all public roads	2,150.6

These targets were developed using a data-driven, collaborative process during the update of Texas' 2017-2022 Strategic Highway Safety Plan. The targets are aligned with the state's Highway Safety Improvement Program and Highway Safety Plan and reflect a 2% reduction from the original trend line projection for 2022. When a trend line is decreasing, the target mirrors that projection.

On February 12, 2018, the San Angelo Metropolitan Planning Organization Transportation Policy Board adopted TxDOT's Safety targets within the Metropolitan Area Boundary.

For STP-MM project selection, safety is one of the criteria where technical points are awarded based on the crash rate. Numerous projects adopted in the FY 2019-2022 Transportation Improvement Program support achieving the targets established for safety. These include: stand-alone safe bicycle and pedestrian projects and Complete Streets projects; added capacity and operational projects that also include safe bicycle and pedestrian facilities; conversion of frontage roads from two-way to one-way; intersection improvements; safety lighting; pavement markings; wrong way driver technologies; improved traffic signals; grade separated overpasses; improved low water crossings; flashing beacons; and Intelligent Transportation Systems projects.

The Transportation Policy Board commits to supporting, planning and programming projects that contribute to the accomplishments of said targets and the MPO will monitor the established targets and report achievements to the Transportation Policy Board in fall 2018.

Transit State of Good Repair

The Concho Valley Transit District has adopted targets for four Transit Asset Management Performance measures for:

1. Equipment State of Good Repair: rehab or replace equipment based on the Concho Valley Transit District Board of Trustees approved capital plan to maintain an overall state of good repair of all vehicles and facilities.
2. Rolling Stock State of Good Repair: by 2022, replace 4 fixed route buses with an age of 5 years or greater and replace 6 demand response busses with an age of 5 years or greater.
3. Infrastructure State of Good Repair: zero, no passenger rail infrastructure.
4. Facilities State of Good Repair: rehab facilities based on the Concho Valley Transit District Board of Trustees approved capital plan to maintain an overall state of good repair. This to include Multi-Modal facilities and bus stop and shelter (operational) facilities as well.

On April 12, 2018, the San Angelo Metropolitan Planning Organization Transportation Policy Board adopted Concho Valley Transit District's performance measurement targets. The Transportation Policy Board commits to supporting, planning and programming projects that contribute to the accomplishments of said targets.

Numerous transit projects adopted in the FY 2019-2022 Transportation Improvement Program support achieving the targets established for transit state of good repair, including: the purchase of revenue vehicles; the purchase of replacement revenue vehicles; new and upgrades to existing passenger facilities; and upgrades to the operational facilities.

Pavement and Bridge Performance (PM 2)

On June 21, 2018 the Texas Department of Transportation adopted six targets for (PM2) Pavement and Bridge Condition Measures as indicated below:

- 1 Percentage of Interstate System pavement in good or better condition
- 2 Percentage of Interstate System pavement in poor condition
- 3 Percentage of Non-Interstate National Highway System pavement in good condition
- 4 Percentage of Non-Interstate National Highway System pavement in poor condition
- 5 Percentage of Bridge Deck on the National Highway System in good condition
- 6 Percentage of Bridge Deck on the National Highway System in poor condition

On December 13, 2018 the San Angelo MPO Policy Board voted to support and adopt the performance measures and targets established by the Texas Department of Transportation as indicated below.

Performance Measure	Statewide Baseline	2020 Target	2022 Target
Pavement on Interstate Highway			
1) % in "Good" condition	n/a	n/a	66.40%
2) % in "Poor" condition	n/a	n/a	0.30%
Pavement on Non-Interstate National Highway System			
3) % in "Good" condition	54.40%	52.00%	52.30%
4) % in "Poor" condition	13.80%	14.30%	14.30%
National Highway System Bridge Deck Condition			
5) % in "Good" condition	50.63%	50.58%	50.42%
6) % in "Poor" condition	0.88%	0.80%	0.80%

Travel Time Reliability (PM 3)

The Texas Department of Transportation has officially established Targets for PM 3 based on all travel time reliability available. In review of the data available the San Angelo MPA has enjoyed an increase in Level of Travel Time Reliability from 2014 through 2016 and is expected to increase to 98% according to trend by 2020 and 2022. The San Angelo MPO Policy Board has agreed to conservative targets for 2022 of 90% and 2022 of 85%. The Transportation Policy Board commits to supporting, planning and programming projects that contribute to the accomplishments of said targets and the MPO will monitor the established targets and report achievements to the Transportation Policy Board in fall 2018. In establishing these targets and committing to the successful accomplishment the San Angelo Metropolitan Planning Organization will be contributing to and fully support the State of Texas in their efforts to meet theirs.

	2014 LOTTR-NI	2015 LOTTR-NI	2016 LOTTR-NI	2017 LOTTR-NI	2020 LOTTR-NI	2022 LOTTR- NI	SAN ANGELO MPO TARGETS	
Region	Reliable Percentage	Reliable Percentage	Reliable Percentage	Reliable Percentage	Reliable Percentage	Reliable Percentage	2020 LOTTR-NI	2022 LOTTR- NI
San Angelo	89.9%	91.4%	90.6%	100%	98%	98%	90%	85%

LONG-RANGE GOAL DEVELOPMENT

The San Angelo Metropolitan Planning Organization is responsible for the development and maintenance of the long-range transportation plan also known as the Metropolitan Transportation Plan. The MTP lists goals, objectives, and strategies for San Angelo's transportation system over a 25-year period. To begin the goal development process the MPO looked at several factors and choose to customize them around four key issues that are important to San Angelo's transportation system. The following are the key factors of the goals:

- Balanced Infrastructure System: San Angelo's predominate infrastructure type is roadways and by focusing, planning and implementing projects for other modes that are generally overlooked and underutilized, the MPO will achieve a more balanced transportation system for all residents.
- Safety: Due to several factors, San Angelo has seen an increase in not only vehicular collisions but also in bicycle, motorcycle, and pedestrian accidents. To make San Angelo a safer community and to give residents a feeling of security, the MPO will focus on ways to improve the roadways in order to reduce accidents.
- Public Involvement: Based on the most recent survey conducted by the MPO, it was revealed that many still do not know what the organization is and does. Moreover, the MPO discovered that many individuals have a desire to be part of the planning process. However many are not sure how to get involved. The MPO will implement more outreach activities and events to increase the organization's presence in the community and encourage participation in transportation decision making.
- Preservation: Funding shortfalls are facing every state and city. It is no secret that future funding will be significantly smaller than amounts in previous years. To maintain a safe and efficient system, it will be the responsibility of each community to implement a process of keeping transportation infrastructure maintained and preserved. While no new major transportation projects are planned, the MPO will work with transportation stakeholders to ensure that infrastructure is kept at a minimum level of acceptability.



LONG-RANGE TRANSPORTATION GOALS

Goal development can sometimes be a very difficult thing. Setting goals that are easily achievable is a pointless exercise and does not help with showing progress.

On the other hand, developing goals that are nearly impossible to achieve will most likely contribute to discouragement. In developing the goals for San Angelo's transportation system, the MPO used several inputs. These included the four factors listed above, goals listed in previous plans, and information obtained from local studies.

GOAL 1

Provide an equalized transportation system that focuses on multiple modes of transportation and offers connections between each mode.

OBJECTIVES	STRATEGIES
<ul style="list-style-type: none"> • Improve access to the multimodal facility for pedestrians and cyclists. • Install infrastructure for underutilized transportation modes. • Collaborate with private transportation providers to provide access to desired locations such as downtown. • Use technology to link the different modes together, which can provide more efficiency. • Establish a dedicated fund for non-roadway transportation. • Provide a dependable connection between the airport and the multimodal terminal. 	<ul style="list-style-type: none"> • Create a map that displays safe places to walk and bike. • Provide information about the various travel options in San Angelo. • Encourage cycling and walking as ways to travel to work, shopping, and entertainment. • Promote the health benefits of using human power instead of motorized. • Provide information that shows the benefits of using alternate modes of travel such as air and rail. • Position the multimodal terminal to be the center of transportation connectivity.

GOAL 2

Develop a transportation system that considers the needs of all residents and offers options for mobility such as bicycling, public transportation, and walking.

OBJECTIVES

- Encourage public participation in underrepresented neighborhoods.
- Develop the MPO transportation plans and programs in accordance with federal and state requirements.
- Adopt policies such as Complete Streets that considers other modes.
- Form a closer relationship with public and private transportation providers.
- Create a map and schedule for public transportation, and highlight transfer options.
- Install bus shelters and bus stops in areas that have high ridership.
- Use community leaders to promote cycling and walking for other purposes besides recreation and health.

STRATEGIES

- Continue to incorporate Title VI (Civil Rights) and Environmental Justice in the planning process.
- Utilize the public transportation system and solicit feedback from users.
- Research grant opportunities for public transportation infrastructure such as shelters and signs. Stay abreast of running and cycling events and activities.
- Have occasional contact with bicycle shops.
- Help with the development of non-motorized projects to ensure adequate access to various modes are considered.
- Conduct smaller scale TNA surveys every two years.

GOAL 3

Create a maintained transportation system that promotes the safety of pedestrians, vehicles, motorcycles, and bicyclists despite the purpose of travel.

OBJECTIVES	STRATEGIES
<ul style="list-style-type: none"> • Collaborate with local information entities to facilitate a system to distribute information efficiently and timely. • Develop a maintenance and implementation plan for infrastructure. • Use data to determine the most problematic areas and develop solutions. • Develop campaigns designed to address common contributing factors. • Create a special group that exclusively focuses on transportation accidents and collisions. • Maintain existing infrastructure and ensure infrastructure is kept up to date. 	<ul style="list-style-type: none"> • Conduct surveys and analyze data to determine origins and destinations. • Install other mode infrastructure on existing projects undergoing upgrades. • Use Travel Demand Modeling to determine which roads are utilized the most. • Analyze TxDOT and police data for various trends and patterns. • Continue community outreach activities such as “Keep Calm and Be Responsible” to discourage bad decision-making. • Offer information and suggestions for safer ways to travel. • Explore funding options that can be used for various transportation modes.

GOAL 4

Encourage more community input and participation in the transportation planning process and establish partnerships for transportation projects.

OBJECTIVES	STRATEGIES
<ul style="list-style-type: none"> • Develop a committee or task force that is responsible for public engagement. • Appoint a representative from each district that is responsible for transportation awareness in their respective area. • Encourage individuals that are traditionally underrepresented to participate in the planning process. • Educate elected officials and community leaders on the importance of involving the citizens in the process. • Develop projects that provide benefits to private businesses. • Utilize social media and the MPO website to provide the public with opportunities to provide feedback. 	<ul style="list-style-type: none"> • Inform citizens of their role in transportation planning. • Continue hosting workshops and public meetings. • Offer incentives for attending or participating in events and activities. • Connect with private businesses and look for ways to fund projects collaboratively. • Encourage more public-private partnerships for purposes other than projects. • Schedule meetings, workshops, etc. on days and at times that are convenient. • Host annual events that citizens look forward to attending and participating in.

METROPOLITAN TRANSPORTATION PLAN DEVELOPMENT

The 2040 San Angelo Metropolitan Transportation Plan development process occurred over a 13-month time period beginning August 2013 and concluding September 2014. Voyage 2040 is the product of several planning partners and stakeholders working together to thoughtfully plan the future of San Angelo's transportation system.

The development of the Metropolitan Transportation Plan was accomplished using five information resources, which included the 2014 Transportation Needs Assessment Survey, project solicitation, MTP public involvement workshops, goals and objectives and information from local plans and studies.

To initiate the development process, demographic and economic data was collected to provide a reference point. The MPO evaluated existing transportation facilities, and analyzed various information such as population statistics, employment figures, economic indicators, housing unit counts, existing and planned land-use and previous traffic volume information. With this data, the MPO projected anticipated growth for San Angelo over the next 25 years.

"There are many types of participation. Once can observe so intensely that one becomes part of the action, but without being an active participant".

Jerzy Kosinski

To obtain citizen input in the development of the plan, the MPO held public meetings and workshops. These assemblies were held at various times and locations to accommodate the public. This included weekends, evenings, and lunchtime. Businesses, community groups, citizens, non-profits, and other interested parties were encouraged to attend. Comments were solicited through surveys, social media and via the MPO discussions.

Public comment forms and the Transportation Needs Assessment survey were made available at several public venues including the public libraries, restaurants, non-profit organizations, fixed route buses and inside the lobby of the multimodal terminal. In addition to social media, advertisements for public comment were made on different local radio stations, advertisements in the newspaper, and with posters at various locations.

The long-range transportation plan purpose is to provide a guide for San Angelo's transportation system. It encompasses each mode of transportation used in the MPO area and provides information about the challenges affecting the transportation system, funding possibilities and projects to be implemented during the life of the document.

Voyage 2040 promotes the safe and efficient movement of people and goods not only throughout San Angelo but also through the region. It advocates for a balanced transportation system that provides mobility choices for residents of the community, for improvements to and maintenance of transportation infrastructure, and improving the relationships between each mode thereby enhancing connectivity.

CHAPTER SUMMARIES

Introduction: Provides brief information on the history of transportation planning, the legislative bills that have evolved the transportation planning process and the purpose and goals of the plan.

Chapter 1 – About SA-MPO: Describes the history of the organization, the purpose, and components of the organization. Details of the planning area are provided and some discussion about the various plans and programs are included.

Chapter 2 – Growth and Development: Provides information about the current conditions of the transportation system and predictions on how the system will develop over the next 25 years.

Chapter 3 – Financial Plan: Contains the financial information and financial analysis of how the MPO will fund future transportation projects and maintain the transportation system.

Chapter 4 – Public Involvement: Summarizes the public involvement initiatives and activities the MPO used to develop the plan. This includes outreach strategies, public meetings, and solicitation efforts.

Chapter 5 – Highways, Roads, and Streets: Provides information about the roadway network and any plans for new roadways. Also describes how the MPO plans to preserve and update the streets.

Chapter 6 – Non-motorized and Active Transportation: Strategies for creating a safe environment for cyclists and pedestrians as well as those choosing to lead a healthy lifestyle are included in this chapter.

Chapter 7 – Transit and Public Transportation: Contains information about the local public transportation provider and other public and private transportation operators. This includes intercity transportation and smaller transportation operators.

Chapter 8 – Rail and Aviation: Provides brief information about the other modes of transportation within the MPO boundary and how they affect the public transportation and highway system.

Chapter 9 – Conclusion: This chapter provides a summary of San Angelo's transportation system and gives recommendations on future initiatives of the MPO.

Appendices: Includes the Transportation Needs Assessment Survey, the TNAS executive summaries, and the San Angelo Public Participation Plan.

TRANSPORTATION NEEDS ASSESSMENT SURVEY

To initiate the MTP development process, the MPO staff began reviewing past transportation plans and special studies. The staff also reviewed previous MTPs. Staff wanted to make sure that the new goals, objectives, and strategies that would be included in the new long-range transportation plan was consistent with past documents. In addition to previous studies, the MPO researched and used other local studies to help with developing the plan. These included land-use plans, parks & recreation plans and transit plans.

To help determine which data sources would be most beneficial in the development of the document, the staff compiled an extensive list of databases. These included databases from previous studies as well as some that have not been available until now. The proposed data collected would include information about existing transportation facilities, populations, demographics, employment figures, economic factors, and land use and safety issues.

The list of databases created was in excess of 40 items and obviously not all of them could be collected, analyzed, and used. In the elimination process, the staff evaluated each database and finally determined which would ultimately be used.

In June 2013, the staff began a general marketing campaign to provide the community with information about the organization. The purpose was to inform the community about the purpose of the MPO, including what it is and what it does. Staff made presentations to various organizations and groups, held meetings and participated in different community events such as the Health and Wellness Fair and a Halloween safety event.

During this same time, the staff began engaging the transportation stakeholders and those interested in helping with the plan. Participants included individuals, agencies, and organizations that had an interest in the San Angelo transportation system.



In conjunction with the general marketing, the staff began soliciting public comment. The intent of the public comment was to provide more insight on what the focus of the plan should be. Feedback from the public comment would be used in the development of the Transportation Needs Assessment Survey, which would be launched in the spring of 2014.

The feedback provided from citizens, community groups, local leaders, businesses, and other interested parties was compiled and generalized into a listing. Topics of frequency included issues with public transportation, airport services, safety, maintenance, and preservation.

In October 2013, the staff collaborated with Angelo State University Community Development Initiatives to develop a Transportation Needs Assessment Survey (TNAS). In the initial meeting, ASU created a survey process that included instrument design, management of sampling, data collection, data analysis, reporting, and presenting findings from the survey.

The survey included modules designed to objectively gather public perception of needs, issues and priorities related to roads and highways, public transportation (transit), bicycle and pedestrian, rail, aviation and freight. The survey would be used to solicit information that provides a foundation for analysis focused on:

- Transportation issues as they affect the safety and wellbeing of the community
- Participation and public involvement in transportation planning
- Financial options for funding transportation projects
- Public perception of alternate transportation modes
- Public views on project priorities and rankings
- Public views on relations between transportation and land-use, economic development and growth

ASU's management of sampling and data collection was expected to produce survey results that represented the attitudes of residents living in the various neighborhoods and within the MPO boundary. The MPO and ASU agreed that in order to reach as many respondents as possible, the survey should be available online and in a written format and would be available in English and Spanish.

To keep the community engaged and to allow everyone an equal opportunity to take the survey, it was decided that the survey would remain open for a minimum of two months. A variety of outreach strategies, including distributing paper copies at public locations, was implemented to gather responses from hard to reach residents such as elderly, disabled persons, low-income households and Spanish-speaking residents.

Transportation Needs Assessment Survey for San Angelo



Public Transportation/Transit Planning • Bike and Pedestrian Planning
Aviation Planning • Highway/Roadway Planning • Freight/Rail Planning



The San Angelo Metropolitan Planning Organization is asking for your input to help plan for the future of San Angelo's transportation system. Please take a moment to fill out the TNA survey and provide any additional comments that you may have.

The survey can be found at www.sanangelompo.org.



METROPOLITAN PLANNING ORGANIZATION
SAN ANGELO



If you have any questions please contact the MPO at 325.482.2800.



LOCAL AND REGIONAL STUDIES REVIEWED

In addition to the four major factors listed above, the San Angelo MPO reviewed past transportation plans, studies, and reports to assist with goal development. While many plans were reviewed, only a few were actually used to develop the document. Below is a summary of each document that was used for developing the goals and plan.

San Angelo Strategic Plan 2009

The purpose of this document is to provide the City of San Angelo with positioning strategies for catalyst projects that deliberately target public initiatives in an effort to attract property investment and reinvestment. This plan is intended to guide future development and improvements decisions for the community in such a way contribute to the tax base while allowing development to succeed in the long term.

Parks, Recreation & Open Space Master Plan 2012

This plan was created to assess park and recreation facilities throughout the city and to establish planning guidelines for the next 10 years. The plan includes a park acreage needs analysis, an analysis of the percent change in growth of population and parks and an analysis comparing the lake park fees with other lake parks across the state. The analysis provides tools to utilize for future planning.

San Angelo Pedestrian-Transit Access Master Plan Update 2012

This plan outlines pedestrian-level improvements along eight key transit corridors and destinations in San Angelo. The PTA master plan addresses pedestrian/transit access and routing issues that negatively affect San Angelo's transit ridership. The PTA masterplan creates a vibrant commercial corridor that is intended to link north San Angelo to the Concho Valley Multimodal Terminal and downtown. Recommended improvements in the document will help provide access to needed transit services and commercial businesses.

Concho Valley Regional Coordination Transportation Plan

This plan provides information about all of the counties within the Concho Valley. This plan inventories the transportation resources within each of the counties and provides demographic information for each county. The CV Regional plan details goals and objectives for Concho Valley regional coordination, identifies possible funding sources for new transportation projects and identifies potential stakeholders to help with implementation.

TRANSPORTATION PLANNING ISSUES

The San Angelo Metropolitan Planning Organization's Transportation Needs Assessment Survey gathered the public's opinion on the current state of the transportation system. The survey asked respondents for their input on new transportation projects and their view on how to solve common transportation problems in the community. Transportation feedback provided by the survey included:

- Fair condition of roadway infrastructure
- Poor condition of sidewalks, bike infrastructure, and rail
- Lack of bus stops/shelters
- Need for more bike-ped infrastructure
- Traffic congestion and safety around schools
- Poor visibility of road markings and signage
- Few air travel choices
- Lack of education for motorists

Traditionally, this type of survey has been conducted in conjunction with the development of a new long-range transportation plan. To help with measuring the performance of the transportation system, the MPO plans to conduct a similar smaller version of this survey every two years to gauge if any progress has been made in addressing these transportation concerns.

In addition to the survey, the MPO will continue to collect and analyze crash and accident data provided by the San Angelo Police Department and the Texas Department of Transportation to determine where to focus other planning efforts to improve safety. Data collected is not limited to only vehicles but also includes bicycles, pedestrians, and motorcycles.

To address the impact of the energy sector developments, the MPO will begin monitoring rail freight and highway freight to help determine the effect the traffic increase is having on the transportation system. While this data is not easy to obtain, staff will work with the major owners and operators to gather this information.

Planning Emphasis Areas (PEAs) are policy, procedural and technical topics that Federal planning fund recipients must consider when preparing work programs for metropolitan and statewide planning and research assistance programs.

“In an age where community involvement and partnerships with civil society are increasingly being recognized as indispensable, there is clearly a growing potential for cooperative development and renewal worldwide”.

Kofi Annan

As required by the Federal Highway Administration and Federal Transit Administration, the SA-MPO has incorporated the Planning Emphasis Areas of MAP-21 Implementation, Models of Regional Planning Cooperation, and Ladders of Opportunity into our planning processes. These three factors are not addressed in one task; however, they have been included throughout the subtasks in the document. It is the intention of the SA-MPO to focus on priority areas and develop plans and programs that address issues within the community.

PERFORMANCE MEASURES

Whether allocating existing funds or making the case for more funding, transportation agencies are facing increasing pressure to demonstrate accountability by measuring and reporting the impact of resource allocation decisions on system performance. Performance-based planning provides a level of transparency and objectivity that is critical for the development of transportation plans. Performance-based planning refers to the application of performance management within the planning and programming processes of transportation agencies to achieve desired performance outcomes for the multimodal transportation system.

It can be used for planning activities, to help with decision-making and used for planning and programming of projects. Performance based planning requires planning, data collection and analysis, programming, implementation, scoring and evaluation. While they are not finalized, some of the performance measures that could be adopted by the San Angelo Metropolitan Planning Organization include:

- Identification and concentration on transportation needs, especially for non-motorized and public transportation
- Collaboratively developing projects for underserved areas of San Angelo

- Providing more connectivity between different modes of transportation and increasing options for mobility
- Improving the equalization between each mode of transportation, ensuring that each mode receives adequate attention, funding and priority
- Preserving and maintaining current transportation infrastructure



SA-MPO understands the importance of identifying opportunities for improving the transportation system and identifying the constraints that could restrict the carrying out of the proposed improvements. Furthermore, it is understood that determining transportation opportunities and constraints is essential to carrying out the goals and objectives of the long-range plan.

Although funding is limited and the future of transportation funds is uncertain, the San Angelo MPO is working to improve the transportation system. While this plan attempts to accomplish several things, common considerations for performance include:

- Making public transportation services more convenient and amenable.
- Improving the efficiency of transportation operations and coordination.
- Upgrading the effectiveness of the movement of goods and freight.
- Improving the safety and availability of bicycle and pedestrian facilities.

The performance measures and the long-range transportation plan are intended to serve as a positive transportation guide for the everyone in the community. The plan consists of goals and objectives and will soon incorporate performance measures that will be used to grade improvements in the transportation system.

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1

WHO IS RESPONSIBLE FOR TRANSPORTATION PLANNING?

ABOUT SA-MPO

History

In 1988, the Governor of Texas designated the City of San Angelo as the Metropolitan Planning Organization (MPO) for transportation planning in the San Angelo urbanized area using the Board structure established pursuant to Section 134 of Chapter 1 of Title 23 U.S.C. as the group responsible for giving the MPO overall transportation guidance.

On December 9, 2010, after much discussion and consideration the San Angelo Metropolitan Planning Organization Policy Board agreed with the proposal to re-designate the San Angelo MPO. The purpose of the re-designation was to provide the MPO with more flexibility and independence with transportation planning decisions and options. To initiate the process, the board made a request to the state transportation commission. At their meeting on January 27, 2011, the Texas Transportation Commission approved the re-designation proposal. The actions of San Angelo City Council, the San Angelo MPO Policy Board, and Texas Transportation Commission resulted in the San Angelo Metropolitan Planning Organization becoming a separate stand-alone entity.

In order to provide for the ongoing phase of the comprehensive, cooperative planning process for keeping San Angelo's transportation plan up-to-date, a continuing planning agreement between the San Angelo MPO Policy Board, the City of San Angelo, and the Texas Department of Transportation is executed every six years. This agreement outlines the procedures and responsibilities for each entity, which helps guarantee successful and supportive transportation planning.

Since 1964, transportation planning studies have been performed by the Metropolitan Planning Organization, originally the City of San Angelo MPO and since 2010 the San Angelo MPO. Although much has changed since the original study took place and transportation planning began in San Angelo, one thing that has remained unchanged is realization that cooperative planning continues to provide a safe and efficient transportation system.

Today the San Angelo MPO continues to work with Texas Department of Transportation, Concho Valley Transit District, the City of San Angelo and other local entities to make sure the planning process is in accordance with federal planning regulations. This requires transportation programs and projects to be based on a comprehensive, cooperative, and continuing planning process also known as (3-C).



Background

The San Angelo Metropolitan Planning Organization (SA-MPO) is a federally mandated, federally funded transportation-planning agency that is responsible for the coordination of transportation activities within the MPO boundary. SA-MPO is an independent governmental body that is comprised of local leaders, specialized professionals, elected officials and citizens of the community that work cooperatively to identify and develop solutions for transportation.

Transportation affects us all, and for that reason, SA-MPO works hard to make sure that everyone has a voice in the transportation planning process. The San Angelo MPO requests input from individuals, groups, businesses, and organizations to help us determine where needs and priorities are greatest. As funding for projects decreases and becomes more competitive, the San Angelo MPO realizes the importance of using funds as efficiently as possible. The MPO collects and analyzes data, prioritizes projects, and uses progressive measures to make sure funds are spent where they are needed most.

Purpose

The San Angelo Metropolitan Planning Organization helps support the economic liveliness of the San Angelo area by developing short- and long-range transportation plans. When developing plans, SA-MPO makes sure our projects incorporate livability, mobility, accessibility, and sustainability. Use of these methods in our operations helps to produce plans and programs that are beneficial not only for the community, but for the region. SA-MPO actively reaches out to the community to solicit input on transportation projects and activities so everyone has an opportunity to have a voice in the transportation planning process.

Funding

Each Metropolitan Planning Organization is funded differently and funding comes in various streams. Some MPOs are funded by federal and state funds exclusively and some are given local funds to supplement the planning activities. The San Angelo Metropolitan Planning Organization is 100% funded by the Federal Highway Administration and Federal Transit Administration. While the funding levels vary from year to year, SA-MPO has been able to maintain adequate funding to carry out transportation planning activities and special studies. To make sure that all funds are managed in accordance with federal and state requirements, the MPO has an agreement with the Texas Department of Transportation and the City of San Angelo.

ORGANIZATIONAL COMPONENTS

Everything that we do is affected by transportation. From getting to work or school, making trips to buy goods or acquire services, traveling to appointments or even enjoying recreation or entertaining, transportation is involved in some form.

Successful transportation systems depend on a number of factors that include various resources and vision. Success depends on people that are dedicated to preserving, maintaining, and improving the transportation network. The San Angelo Metropolitan Planning Organization is made up of four-major components that work together to successfully coordinate the transportation planning process. These are discussed in detail below.

Policy Board

The Policy Board provides direction and guidance for transportation planning in the MPO boundaries. The Board is responsible for ensuring conformance with federal regulations requiring that highways, mass transit, and other transportation facilities and services are properly deployed and developed in relation to the overall plan for urban development.

This includes the responsibility of reviewing and approving the Metropolitan Transportation Plan, the Transportation Improvement Plan, and the Unified Planning Work Program. The following members comprise the policy board (voting and non-voting).

Technical Advisory Committee

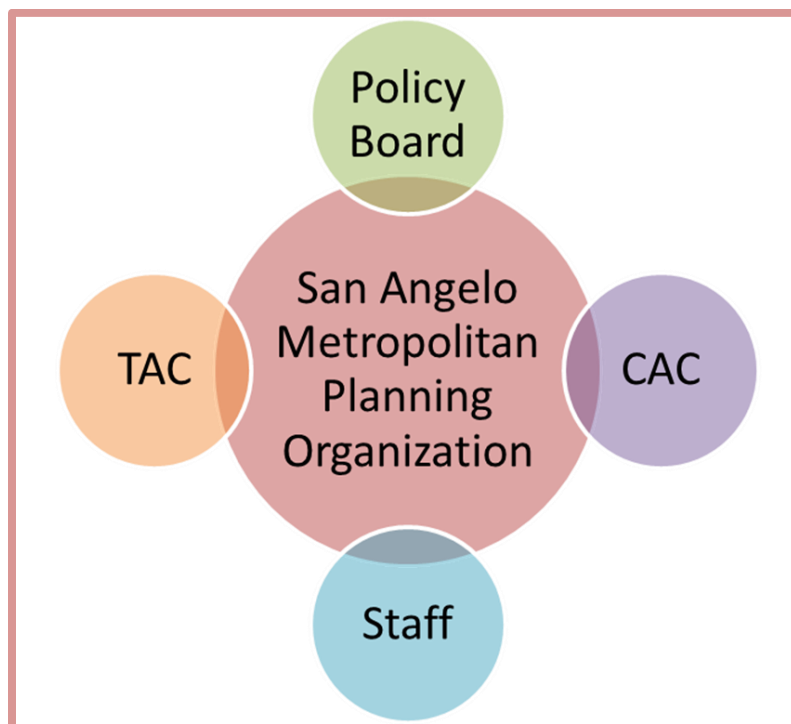
The Technical Advisory Committee (TAC) is made up of representatives appointed by the Policy Board. These individuals serve as representatives for policy board members and are tasked with reviewing specific issues and making recommendations to the board. Each TAC member contributes their knowledge and experience from their respective fields to advance the transportation planning process.

Citizen Advisory Committee and Special Advisory Committee

The Citizen Advisory Committee (CAC) is another component of the MPO and is comprised of individuals selected by either the Policy Board or the Technical Advisory Committee. Members of the committee are usually citizens of the community, transportation stakeholders, or individuals with an interest in transportation. CAC meetings are not held as frequently as policy board or TAC meetings, but meetings are called when their input is needed.

Special Advisory Committee (SAC) are created as needed and are formed to review “special” projects that are related to transportation planning within and if required, outside of the MPO boundary. Members of this committee include MPO staff, Policy Board members, citizens, and others with interest related to the task for which the committee is being created. SAC members are used to provide additional advice on a particular issue.

While the meetings of both the Citizen and Special Advisory Committees are not held regularly, the committee members are kept informed and are invited to attend other MPO meetings. The members always have the option to make a recommendation or provide input on projects, plans, and programs.

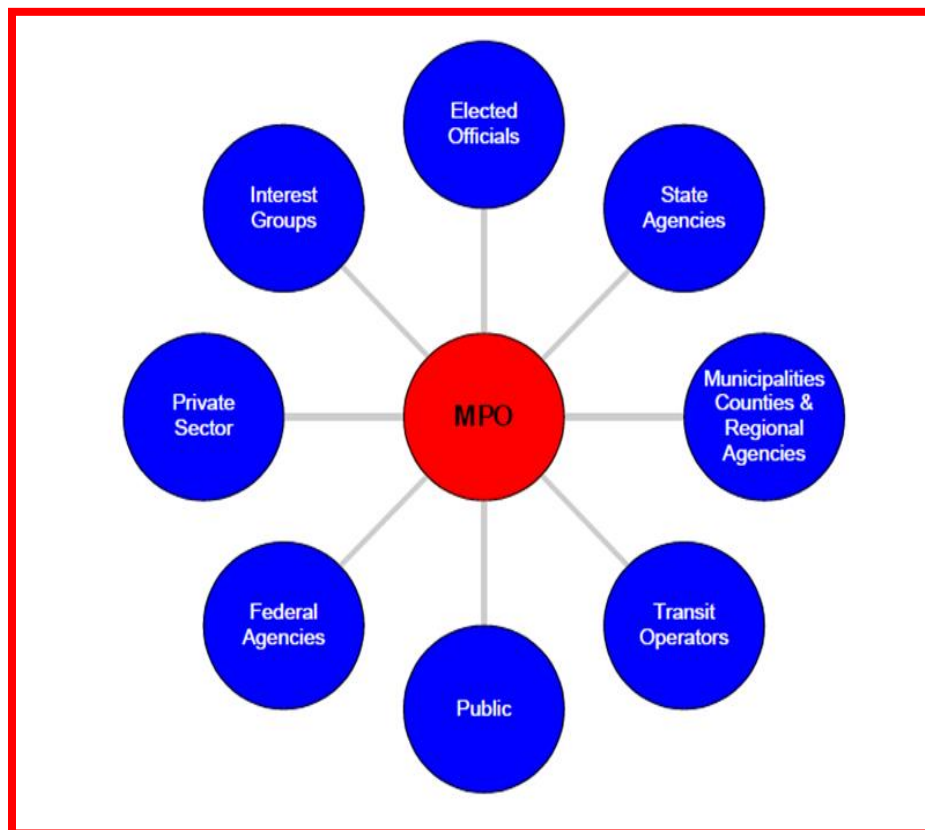


Staff

The MPO staff consists of planning and technical professionals that provide valuable resources for information gathering and assembling of documents that correspond to transportation issues within the MPO boundary. The current staff makeup consists of three full-time professionals:

- Metropolitan Planning Organization Director - responsible for the administration of the organization, ensuring compliance with all applicable regulations and following the direction of the policy board.
- Transportation Technical Planner - responsible for data collection and analysis, providing transportation planning assistance and coordination.
- Transportation Planning Coordinator - responsible for public outreach and public involvement, social media and the MPO website and providing office support.

The MPO staff works closely with the Texas Department of Transportation (TxDOT), the Concho Valley Transit District and the City of San Angelo to organize, implement and evaluate transportation concerns.



TRANSPORTATION PLANS AND PROGRAMS

Transportation planning has several elements and components, and is approached differently in every area. However, the fundamentals of planning are the same. Transportation planning essentially involves collecting and analyzing data, identifying current and future problems, developing solutions to address them and identifying financial resources that will be sufficient to cover the costs of implementing the plans.

Mandated transportation planning began in 1962 when Congress passed legislation that required urban areas to in transportation planning in order to receive federal transportation planning dollars. The best way to state this requirement is that cities that have a population of more than 50,000 cannot spend federal transportation funds on projects unless a transportation plan is in place.

Federal transportation legislation requires metropolitan planning organizations to have a continuing, cooperative, and comprehensive planning process also known as the 3-C planning process. Metropolitan Planning Organizations have many responsibilities but a primary duty of an MPO is to maintain three required products. These products are the Metropolitan Transportation Plan, the Transportation Improvement Program, and the Unified Work Program. These documents will be detailed below.

Metropolitan Transportation Plan - The MTP is a long-range planning document with a 20-year projection period. This document provides details on existing and projected transportation goals, objectives, system capabilities, needs, resources, and recommendations. In summary, the MTP identifies short-term and long-range strategies on how an MPO will address the transportation system. This document is updated every 4 or 5 years.

Transportation Improvement Program - The TIP is the MPO's short-term planning document that consists of highway, transit, and non-motorized transportation projects. The projects listed in the TIP include ones funded by federal, state, and local funds. TIP projects are first included in the long-range transportation plan and when funding becomes available, these projects are then programmed in the TIP according to the year that funding is expected to be received. The TIP is a four-year document that is usually updated every two years.

Unified Planning Work Program – The UPWP is a two-year plan that details all of the planning activities the MPO will pursue and complete during the upcoming fiscal year. The UPWP contains studies, planning tasks and any special planning projects used by the MPO. Essentially, the UPWP is the planning (operating) budget for the organization.

In addition to the three major documents listed above, the San Angelo Metropolitan Planning Organization also develops and maintains other plans, reports and programs that aide with the transportation planning process. These include the Public Participation Plan (discussed later in the MTP), the Limited English Proficiency Plan, San Angelo Bicycle and Pedestrian Plan, Annual Performance and Expenditure Report and the Annual Project Listing.

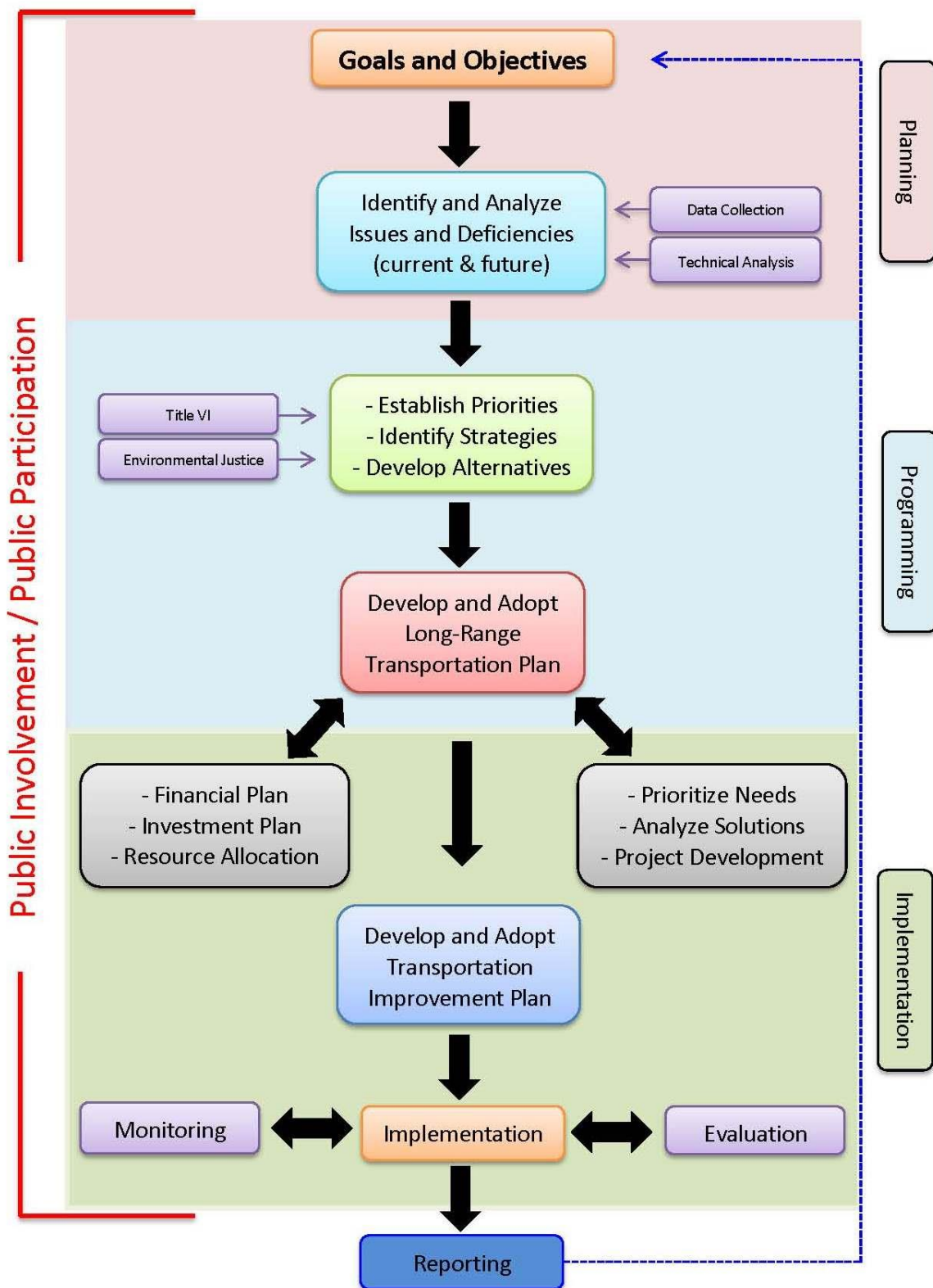
Many of the documents that are maintained by the MPO are required by either federal or state legislation and all documents are made available for public viewing. Some of these documents have required minimum public comment periods and solicitation requirements. The other documents produced by the MPO are generally advertised. Regardless of the requirements, all of the plans, programs, and reports produced by the MPO provide coordinated long and short-term transportation planning guidance for the San Angelo area.

TRANSPORTATION PLANNING PROCESS

SA-MPO is required by law to meet certain requirements and guidelines. Major responsibilities include developing and maintaining the Metropolitan Transportation Plan (MTP), Transportation Improvement Program (TIP), and Unified Planning Work Program (UPWP). Like many, a transportation plan has short- and long-range strategies that are intended to help with the efficient movement of people and goods.

To develop the required plans and to ensure that the planning requirements are met, there must be some type of process in place. This process must consider several things, offer alternatives, and provide a way of measuring progress. Like several other transportation-planning organizations, the San Angelo MPO sets goals, collects data, public input and collaborative decision-making for transportation plans.

SAN ANGELO MPO TRANSPORTATION PLANNING PROCESS



2

HOW MANY PEOPLE WILL LIVE HERE AND WHERE?

INTRODUCTION

Determining how things will change from one year to the next is extremely difficult. It is more difficult to confidently predict how things will change when planning for a twenty-five year period. Examining, evaluating, and forecasting the anticipated growth in San Angelo is necessary in transportation planning because it helps with determining what impact growth (or decline) will have on the transportation system.

As part of developing the Metropolitan Transportation Plan, the MPO collects and analyzes certain types of information that is used for transportation planning forecasting. Factors such as population, age groups, number of households, income levels, employment, economic development, and racial changes are important to determining how the transportation system will evolve. Other statistics such as education, birth (death) rates, marriages, divorces, single-parent households, etc. are equally important and were researched in

To collect and analyze data in this chapter, the MPO used several databases but primarily, the U.S. Census Bureau and Texas State Data Center, were used to help forecast how San Angelo and Tom Green County could change over the next twenty-five years. Information presented in this chapter takes into account the changes in the State of Texas; however, it is primarily focused on changes within the Metropolitan Planning Area Boundary.

DEFINITION OF AREAS

In transportation planning, different entities have different areas that they focus on and collect information. These entities include the federal and state government and the local and county government. Below is a breakdown of areas studied by each entity.

San Angelo MPO Planning Area Boundary

The San Angelo Metropolitan Planning Area is approximately 116 square miles and encompasses the City of San Angelo and portions of Tom Green County. Metropolitan Planning Areas have populations greater than 50,000 and usually encompass the Census Urbanized Area and federal Urban Area Boundary. The San Angelo Metropolitan Area expands when the urbanized area boundary does, which is reviewed on a ten-year cycle. It is possible for the MPO boundary to expand in between the 10 years if growth is expected to occur.

MPOs across the nation have various planning boundaries. Some urbanized planning areas encompass multiple cities and counties; others are much smaller and may have only one city. The San Angelo Metropolitan Planning boundary encompasses approximately 116 square miles of Tom Green County. While there are several small communities within TGC, San Angelo is the only urbanized area within the county.

The San Angelo Metropolitan Planning area consists of the urbanized and contiguous geographic areas likely to become urbanized within the 25-year forecast period. The San Angelo MPO planning area encompasses the entire city limits of San Angelo and a portion outside. Recently, the boundary was expanded to capture newly annexed areas by the city and those areas that are expected to be annexed in the near future. The graphic below shows the existing MPO boundary.

Consistent with the 2010 Census information and according to the 2012 American Community Survey estimates, San Angelo has an estimated population of 95,887. Areas outside of the city within the county have a population of approximately 18,000. By 2040, San Angelo is estimated to have a population of almost 108,000 residents.

**“Never judge someone
By the way he looks Or a
book by the way it's
covered; For inside those
tattered pages, There's a lot
to be discovered”**

Stephen Cosgrove

Census Urbanized Area

The Census Urbanized Area is a statistical geographic entity defined by the Census Bureau, and consists of a central core of adjacent densely settled parcels that contain at least 50,000 people with an overall population density of at least 1,000 people per square mile. The urbanized area boundary is usually smaller than the MPO planning boundary but larger than the city limits.

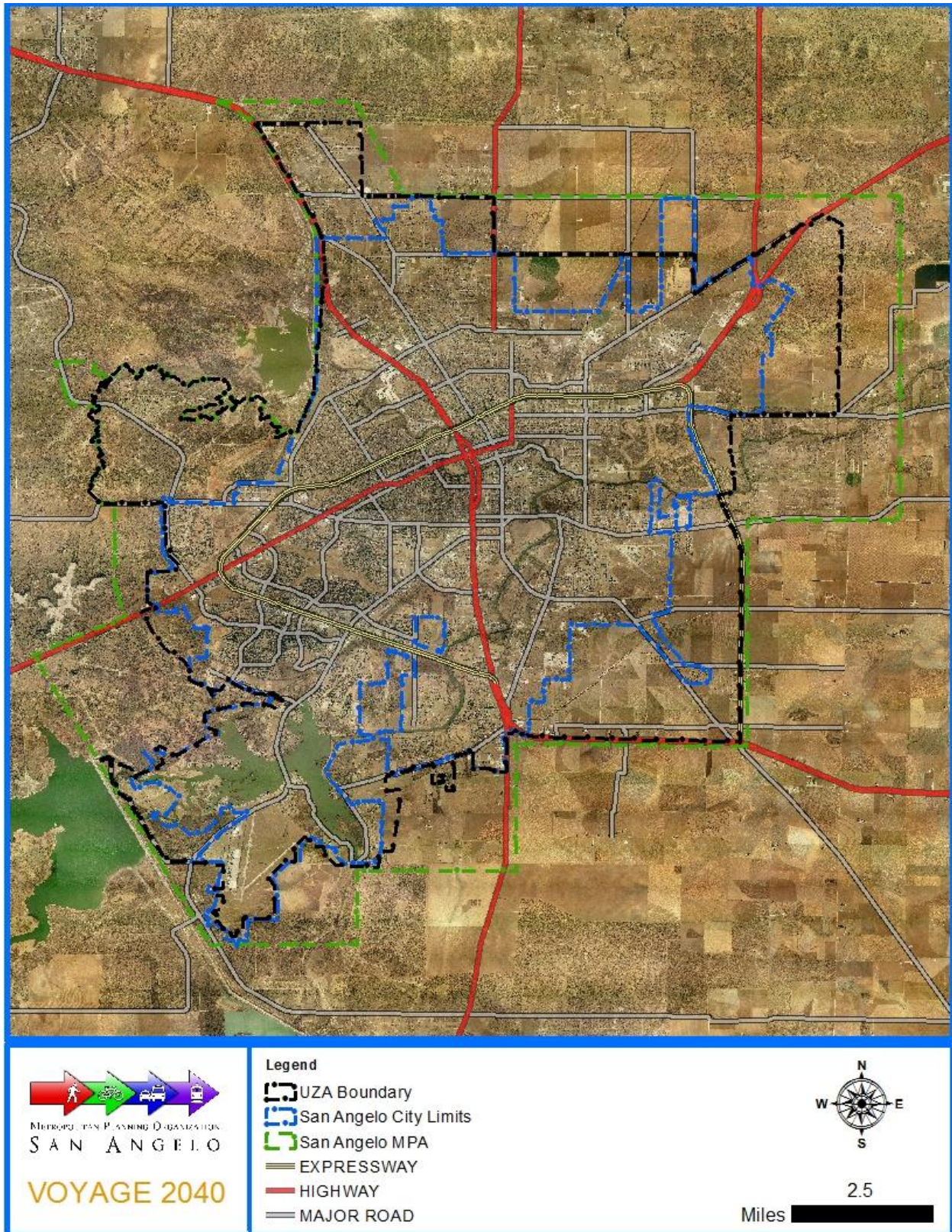
San Angelo Metropolitan Statistical Area

The San Angelo Metropolitan Statistical Area encompasses two counties, Tom Green and Irion. In 2010, the San Angelo MSA had a population of over 110,000 and included nearly 45,000 households. MSA's are generally defined as adjacent areas that comprise one or more entire counties and have a high degree of social and economic integration.

Federal Highway Administration Area Boundary

The FHWA Urban Area Boundary (UAB) typically represents an adjustment or revision to the Census Urban Area Boundary and is fixed by responsible State and local officials in coordination with each other.

Planning Boundaries



Census Urban Area Boundaries are revised to smooth out geographic irregularities, maintain administrative continuity and encompass fringe area having residential, commercial, industrial and/or national defense significance. The FHWA UAB is fixed to determine capital program funding and eligibility.

Tom Green County

The TGC boundary has a total area of 1,541 square miles and is made up of land and water. Tom Green County is located in the Edwards Plateau and is included in the Metropolitan Statistical Area.

DEMOGRAPHICS

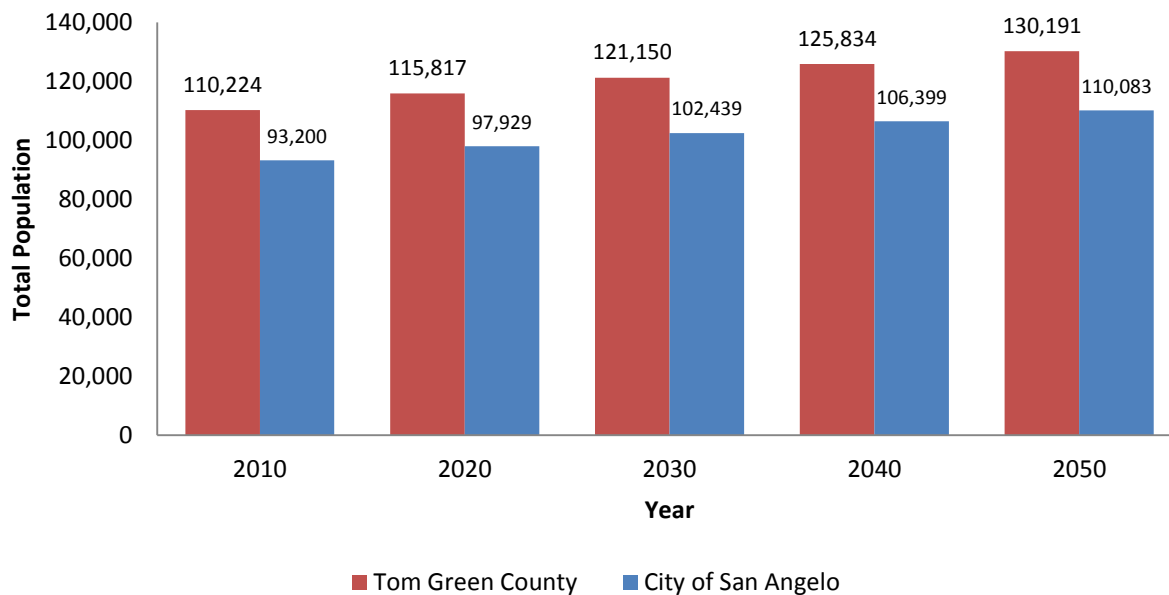
The MPO boundary was recently expanded to capture anticipated development for the next twenty-five years. The MPO worked very closely with the City's Development Services Department to obtain information on anticipated growth and future annexations. Anticipated changes in the population, households, income, and age are important to examine when planning for future transportation demands.

Population

It is a known fact that transportation plays a role in everyone's daily activities. Whether it is getting to work, going to school, taking a vacation, shopping for goods or visiting family, transportation is used. Since everyone utilizes transportation in some form, determining how many people are currently using and will use transportation is extremely important. To get an idea of the number of residents that are using transportation in the metropolitan area, the MPO collected and forecasted population statistics for Tom Green County and San Angelo. Generally, the residents in the City of San Angelo comprise about 85 percent of the total population for Tom Green County.

The information below compares the population changes for Tom Green County and San Angelo from 2010 through 2050. When reviewing the population changes, the MPO chose to start with the latest Census information and forecast beyond the long-range plan year up to 2050. The graphic shows the population for TGC at approximately 110,224 and San Angelo at 93,200. It is important to note that statistics for San Angelo include the City of San Angelo and areas outside the city limits, but are within the MPO planning area boundary. In addition, forecasted population data was calculated using a zero migration rate. The data presented is from the Texas State Data Center.

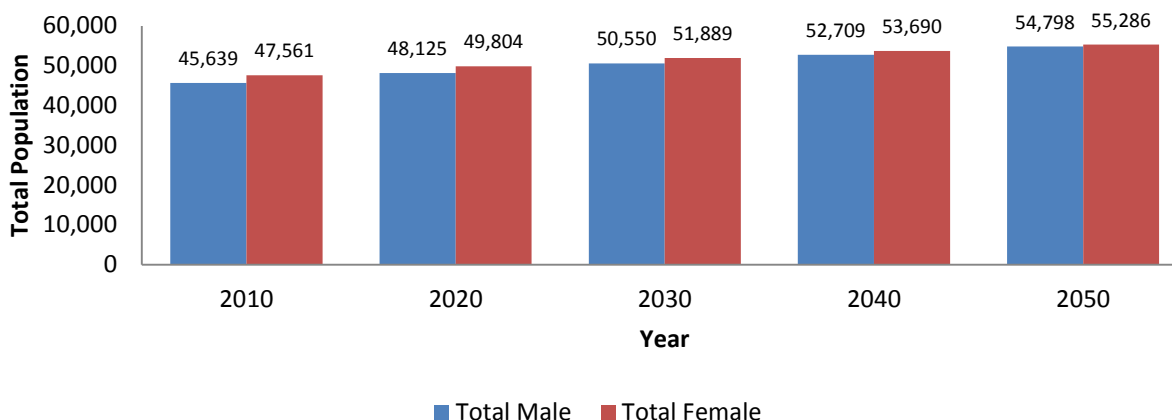
Tom Green County and San Angelo Population Chart



As has been demonstrated with previous population forecast analysis, the percentage in growth from one decade to the next for Tom Green County and San Angelo are relatively close. As the population for TGC increases, so does the population for San Angelo. Previous trends not represented in the chart above have shown that the growth of San Angelo has been gradual for the last 70 years.

Each year the population increases about 3 to 4 percent, as does the county. There have been years where there was an unexpected spike in population due to a special activity. For instance, from 2011 through 2014, the population for both the county and city grew due to the energy sector production. It is still uncertain what affects the energy sector improvements will have on the future population, it is almost safe to assume that San Angelo will not see an increase that large again unless oil activity bounces back.

Population by Gender



Although it does not have a direct correlation to demand on the transportation system, the MPO reviewed the population by gender for 2010 through 2050. The chart below shows that the total female population is slightly larger than the total male population. Generally, females make up about 51% of the population for San Angelo. The chart reveals that as we move closer to 2040 and 2050 the gap between males and females gets smaller.

Racial Make-up

The figures below, collected from the Texas State Data Center, shows the forecasted population by race for San Angelo from 2010 to year 2050. The chart shows that San Angelo is predominately made up of Anglo (White) citizens and Hispanic residents are the second largest race.

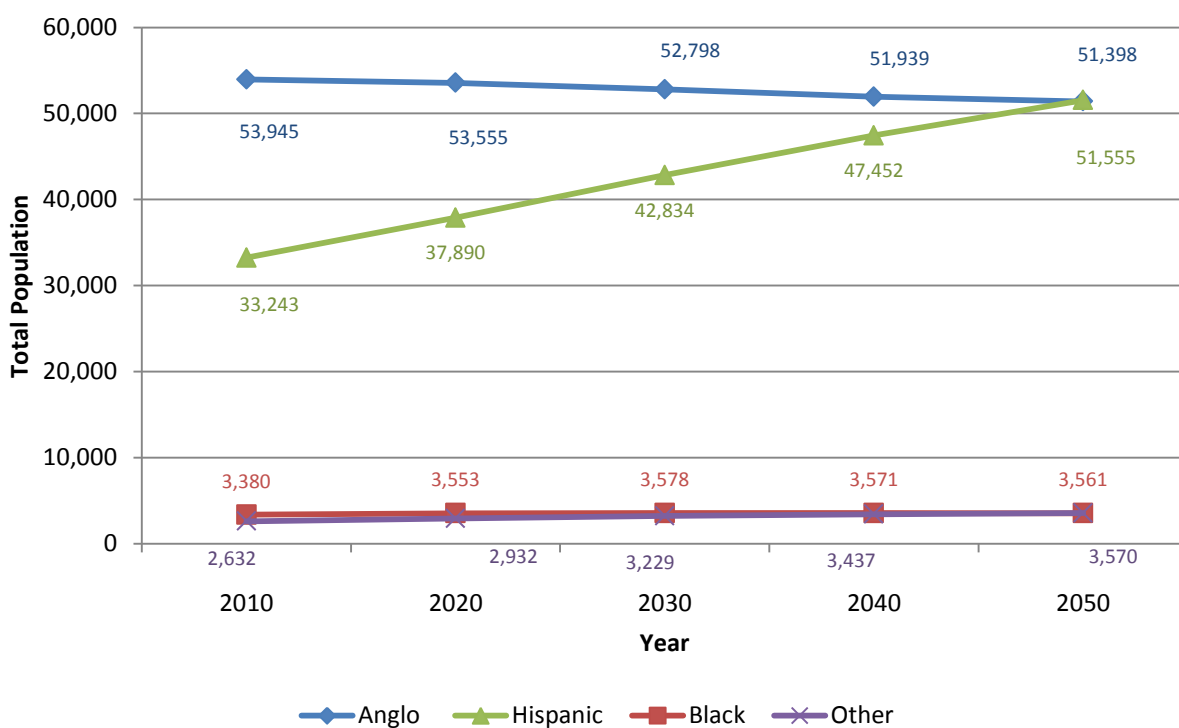
In 2010, the Anglo population was approximately 53,945 or 57% of the population. Hispanics represented about 35 percent of the population and Black and other were far less, representing about 6 percent of the total population. Projections show these two race categories will continue to represent a small percentage of the total population.

The Anglo and Hispanic segments of the population present a different story. In 2010, figures for Anglos were at 53,945, representing 58 percent of the population. Hispanic statistics for 2010 were approximately 33,243 and made up 35% of the population. As the graphic shows, from 2010 through 2050, the Anglo population begins to slightly decline. This decline begins to occur around 2030. Around this same time, the Hispanic population sees the largest increase adding almost 5,000 new residents.

As the trend continues, the gap between the Hispanic and Anglo population begins to get smaller, and ultimately, in 2050 the Hispanic population is projected to be slightly larger than the Anglo population.

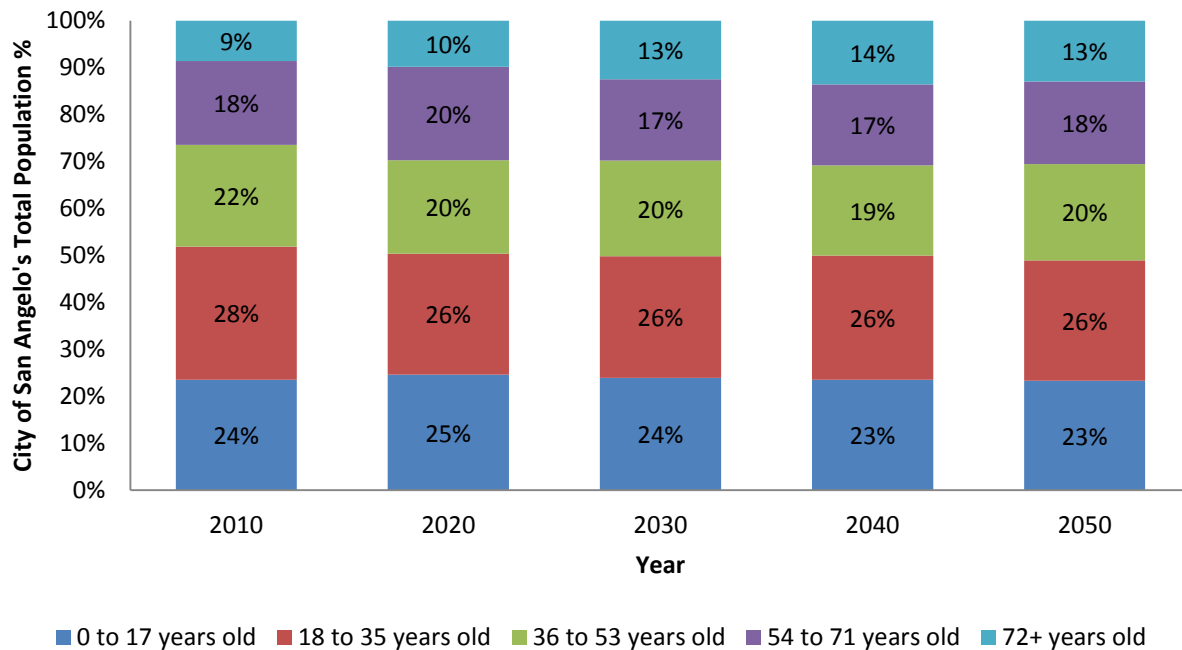
Another take-away from this graphic is that when combined, the minority segment of the population (Hispanic, Black and other) are less than the Anglo population, at least in 2010. The chart shows that in 2010 the Anglo population accounts for about 57% of the population and minorities represent 43%. In 2030, the Anglo population decreases and represents 51 percent of the population and minorities make up 49 percent. Going forward, the minority population becomes the majority.

In making the assumption that minorities typically are considered lower income and rely more heavily on public transportation or non-motorized transportation, for San Angelo's transportation system, this means that over the next few decades, more investments will have to be made in other forms of transportation besides highways.



Population by age

The graphic below shows the San Angelo population from 2010 through 2050 broken into five age groups. Unlike race, the age groups for San Angelo do not change typically over the five observed decades. From 2010 through 2050, each age category increases or decreases by a very small percentage.



Registered Vehicles

Having an idea of how many vehicles will be on the roadways in the future is very important because it provides a glimpse of how many vehicles will occupy the system. The MPO reviewed data pertaining to the number of vehicles registered in Tom Green County. Beginning with 2009, the Texas Department of Motor Vehicles showed there were approximately 105,969 registered vehicles in Tom Green County and 90,074 in San Angelo.

Number of Vehicles Registered in Tom Green County		San Angelo	Difference
2010	108,265	92,025	16,240
2011	109,915	93,428	16,487
2012	112,653	95,755	16,898
2013	114,118	97,453	16,665
2014	117,684	100,299	17,385

Labor Force

According to the Tom Green County Labor Force, the majority of industry employment in Tom Green County and San Angelo has seen an overall slight decrease since year 2000. The chart indicates that there were 45,418 total jobs in 2000 then show 45,313 jobs in 2010, resulting in a decline of 105.

Tom Green County Labor Force Statistics (age 16 and over)					
Industry / Year	2000	2005	2010	Change 2000-2005	Change 2005-2010
Agriculture	1,612	1,669	1,980	57	311
Construction	3,135	2,962	2,594	-173	-368
Manufacturing	3,682	3,681	4,165	-1	484
Wholesale Trade	1,287	1,255	1,098	-32	-157
Retail Trade	6,001	7,090	5,626	1,089	-1,464
Logistics, Transportation	1,460	1,761	976	301	-785
Information	2,554	1,998	996	-556	-1,002
Finance, Insurance, Real Estate	2,405	2,622	1,891	217	-731
Management and Administrative	3,272	3,078	4,252	-194	1,174
Education and Health	10,758	10,830	12,506	72	1,676
Entertainment and Recreational	3,735	3,866	3,867	131	1
Other Services (except Public Administration)	2,760	2,873	2,058	113	-815
Public Administration	2,757	3,168	3,304	411	136
Total	45,418	46,853	45,313	1,435	-1,540

In 2010, some industries experienced an increase such as Agriculture, Education and Health and Public Administration. Other industries such as Retail Trade, Entertainment, Insurance, and Finance saw increases after year 2000 but experienced decreases after 2005. The total change between all industries from 2000 to 2005 was an increase of 1,435 and due to economic hardships, decreased by 1,540 from 2005-2010.

Income

Adjusted Median Family Income and Adjusted Median Household Income are important statistics that help determine how San Angelo's economy will change in the future. The charts show information from 2005 through 2012. Adjusted Median Family Income did not change significantly from year to year. Beginning with \$56,594 in 2005

Adjusted Median Family Income	
Year	San Angelo
2012	\$58,152
2011	\$55,040
2010	\$54,764
2009	\$53,144
2008	\$54,833
2007	\$56,686
2006	\$55,806
2005	\$56,594

Adjusted Median Household Income	
Year	San Angelo
2012	\$44,910
2011	\$44,067
2010	\$40,264
2009	\$43,683
2008	\$46,540
2007	\$45,383
2006	\$40,079
2005	\$44,910

there were positive and negative fluctuations up until 2009 and thereafter there were slight increases.

Adjusted Median Household Income did not change much during the eight-year

period. In fact, as the chart shows, 2005 and 2012 are identical with the annual income of \$44,910. Over the four-year period, the number of registered vehicles increased slightly with the largest increase from 2011 to 2012. To calculate the estimates for San Angelo, the MPO used the 85% method.

School Enrollment

Another indicator used by the MPO to understand the anticipated growth for the area is the School Enrollment in Tom Green County. These figures taken from the American Community Survey provide information on all education levels beginning in nursery school to graduate school from 2000 2010.

School Enrollment in Tom Green County			
Education Level	2010 Estimate	2000 Estimate	Change
Population 3 years and over enrolled in school	28,269	29,720	1,451
Nursery school, preschool	1,515	1,732	-217
Kindergarten	1,354	1,672	-318
Elementary: 1st to 4th grade	5,790	6,241	-451
Elementary: 5th to 8th grade	5,337	6,261	-924
High school: 9th to 12th grade	5,614	6,533	-919
College, undergraduate	7,741	6,773	968
Graduate, professional school	918	508	410

The figures indicate that the most significant change during this 10-year period is for elementary 5th to 8th, high school 9th to 12th and undergraduate students. Elementary and high school show decreases of more than 900 while undergraduate college students show an increase of almost 1,000 students.

ENERGY SECTOR IMPACTS

The oil and gas activity has had an impact on the economy of San Angelo over the last few years. From changes in hotel occupancy to increased vehicular traffic, the area is beginning to grow at a steady rate.

The Permian Basin, located along 39 counties in West and Central Texas includes several counties such as Fisher, Glasscock, Howard, Irion Tom Green and Coke to name a

Energy Sector Impacts			
	2012	2022	Change
Total Gross Output (millions)	\$ 111.5	\$ 148.5	\$ 37.0
Payroll Impacts (millions)	\$ 13.9	\$ 19.1	\$ 5.2
Gross County Product (millions)	\$ 59.3	\$ 78.9	\$ 19.6
Employment Impacts (FTE)	460	665	205

few. This area has a long history of oil and gas activity and in recent years the renewed attention in wells and drilling has brought focus back to these resources. To get an understanding of the anticipated growth of the energy sector, the MPO used a study provided by the West Texas Energy Consortium. The information provided below comes from a study completed by the University of Texas at San Antonio Center for Community and Business Research.

The chart above provides a snapshot of various indicators that the MPO used to help project the impact the energy sector will have on the area. The four indicators compare figures in 2012 forecasted to 2022. From Total Gross Output to Full Time Employees, each indicator shows a significant increase, which means an impact for San Angelo.

“No one does a better, cleaner, or environmental friendlier, than the United States, when it comes to drilling for oil, gas, coal, oil refineries and fish friendly hydroelectric”.

David Pratt



The Moving Ahead for Progress in the 21st Century (MAP-21) legislative bill, as did the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) mandates that agencies receiving federal transportation demonstrate compliance with Title VI of the Civil Rights Act and the Environmental Justice order.

The Title VI requirement of the 1964 Civil Rights Act states, establishes the prohibition of discrimination based on color, race or national origin in any program or activity receiving federal funds. Legislation that is more recent has extended the protections to include gender, disability, age, and income. Additionally, legislation has broadened the application of the protections to all activities of federal-aid recipients, sub-recipients, and contractors regardless of whether a particular activity is receiving federal funds.

The Environmental Justice (EJ) orders require every federal 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 San Angelo Environmental Justice initiatives try to involve potentially affected citizens in the development of transportation projects so they will fit harmoniously within the community without sacrificing safety or mobility.

It is expected that Environmental Justice be applied to all policies, plans, programs, and project development activities, transportation plans such as the Metropolitan Transportation Plan and the Transportation Improvement Program and any planning studies.

ENVIRONMENTAL JUSTICE CORE PRINCIPLES AND MAPS

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

Title VI and Environmental Justice are not new concerns; however, because of the evolution of the planning process, greater emphasis is being placed on understanding and addressing the unique needs of different socioeconomic groups.

By involving the public in transportation decisions in their neighborhoods, the MPO attempts to make sure that every transportation project considers the effect on the human environment and that these projects provide the maximum benefit.



To help meet these requirements, the San Angelo Metropolitan Planning Organization uses data analysis and Geographic Information System (GIS) software to identify neighborhoods and groups of the population that are traditionally underserved. These ordinarily include low-income, individuals with disabilities, non-English, elderly and lower educated residents.

Elderly Population Map

Based on 2010 Census data, this map only represents individuals that are 65 years or older. It calculates the percentage of the elderly population within each block group to the whole population of that block group.

Individuals with Disabilities Map

This map uses the American Community Survey data 2013, 5-year estimates. It considers the “disabled” population between 16 and 64 years of age in each block group. Furthermore, the map shows the percentage of disabled population between 16 and 64 years old within each block group to the whole 16-64 years old population of that block group.

Low Income Map

This map was created using American Community Survey data estimates from 2013. It considers household population in each block group. In addition, it considers “100% poverty line” as the cutoff value to specify low-income households. The map shows the percentage of households below the poverty line within each block group to the whole household population of that block group. There are 2 block groups in the MPO area that don’t have households but group quarters (shown in grey)

Minority Demographic Map

This map was created using “2010 Census Data”. It considers “white non-Hispanic” as non-minority and the rest of the population as the minority. The map shows the percentage of minority population within each block group to the whole population of that specific block group.

Minority Demographic Map 2

This map was created using 2010 Census data. It shows “white non-Hispanic” as non-minority and the rest of the population as the minority. The Metropolitan Planning Area is approximately 42% of the minority population. Therefore, if the percentage of the minority population in the block group is higher than 42%, that block group is considered a “minority block group.”

Unemployed Map

This map was created using American Community Survey data from 2013, 5-year estimates. It considers “unemployed” population older than 16 in each block group. The map shows the percentage of unemployed population older than 16 within each block group to the whole 16 years and older population of that block group. Areas shown in red have the highest unemployed statistics for individuals age 16 and older.

Limited English Speaking: Spanish Map

This map is created using American Community Survey 2013, 5-year estimates. It considers Spanish speaking Limited English Proficient (LEP) household populations in each block group. The map shows the percentage of Spanish speaking LEP household populations within each block group compared to the complete household population of that particular block group. Spanish includes Spanish, Spanish-Creole, and Latino

Limited English Speaking: Asian-Pacific Island Map

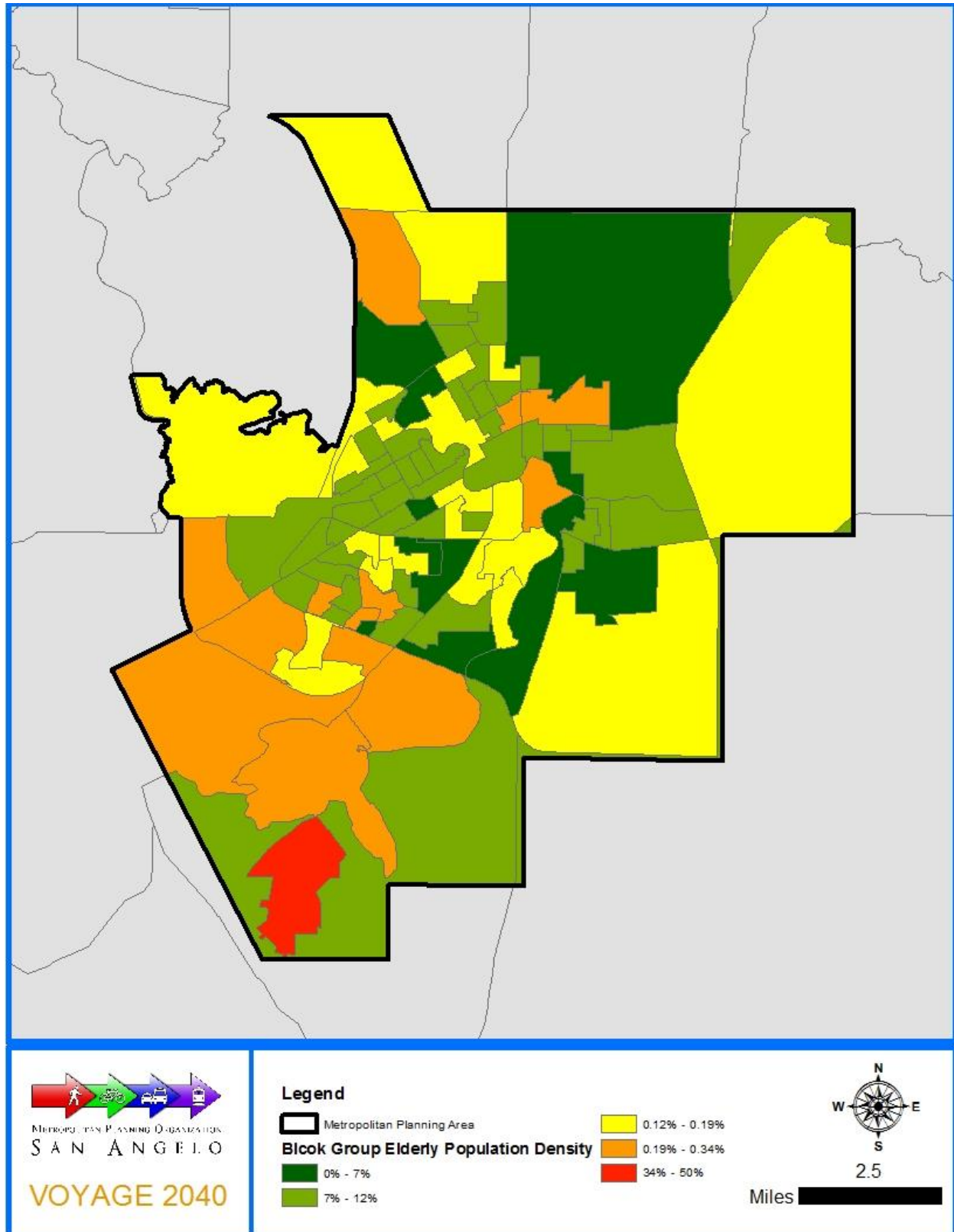
Based on American Community Survey 2013, 5-year data, this map displays Asian and Pacific Island language speaking Limited English Proficient household populations in each block group. The map shows the percentage of Asian and Pacific Island language speaking LEP household population within each block group to the household population of that block group. Asian and Pacific Island languages include Chinese; Korean; Japanese; Vietnamese; Hmong; Khmer; Lao; Thai; Tagalog or Pilipino; the Dravidian languages of India, such as Telugu, Tamil, and Malayalam; and other languages of Asia and the Pacific, including the Philippine, Polynesian, and Micronesian languages.

Limited English Speaking: Indo-European Map

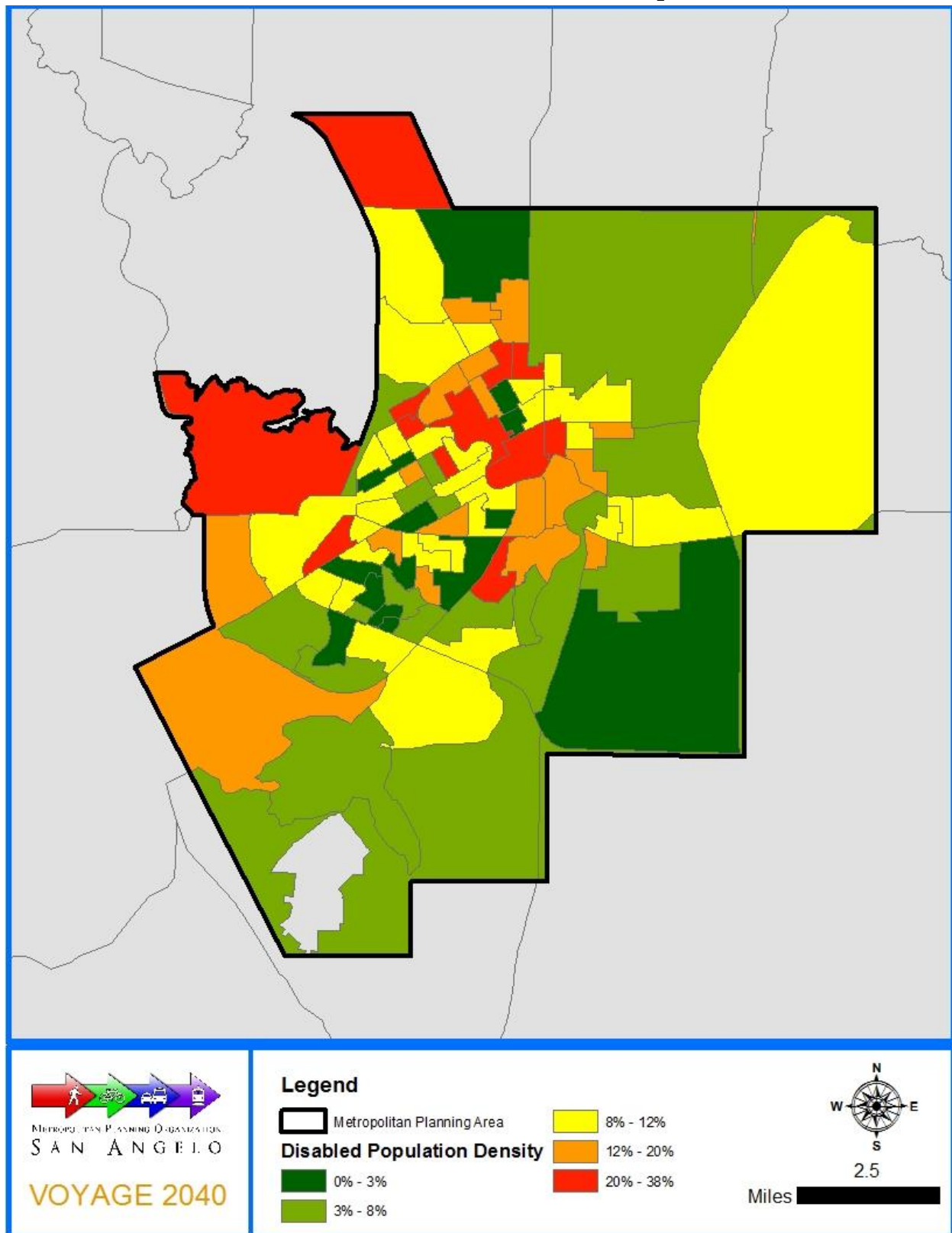
This map is based on American Community Survey data from 2013, 5-year estimates. It considers other Indo-European speaking Limited English Proficient household populations in each block group. The map shows the percentage of other Indo-European speaking LEP household populations within each block group compared to the whole household population of that block group.

Other Indo-European languages include most languages of Europe and the Indic languages of India. These include the Germanic languages, such as German, Yiddish, and Dutch; the Scandinavian languages, such as Swedish and Norwegian; the Romance languages, such as French, Italian, and Portuguese; the Slavic languages, such as Russian, Polish, and Serbo-Croatian; the Indic languages, such as Hindi, Gujarati, Punjabi, and Urdu; Celtic languages; Greek; Baltic languages; and Iranian languages.

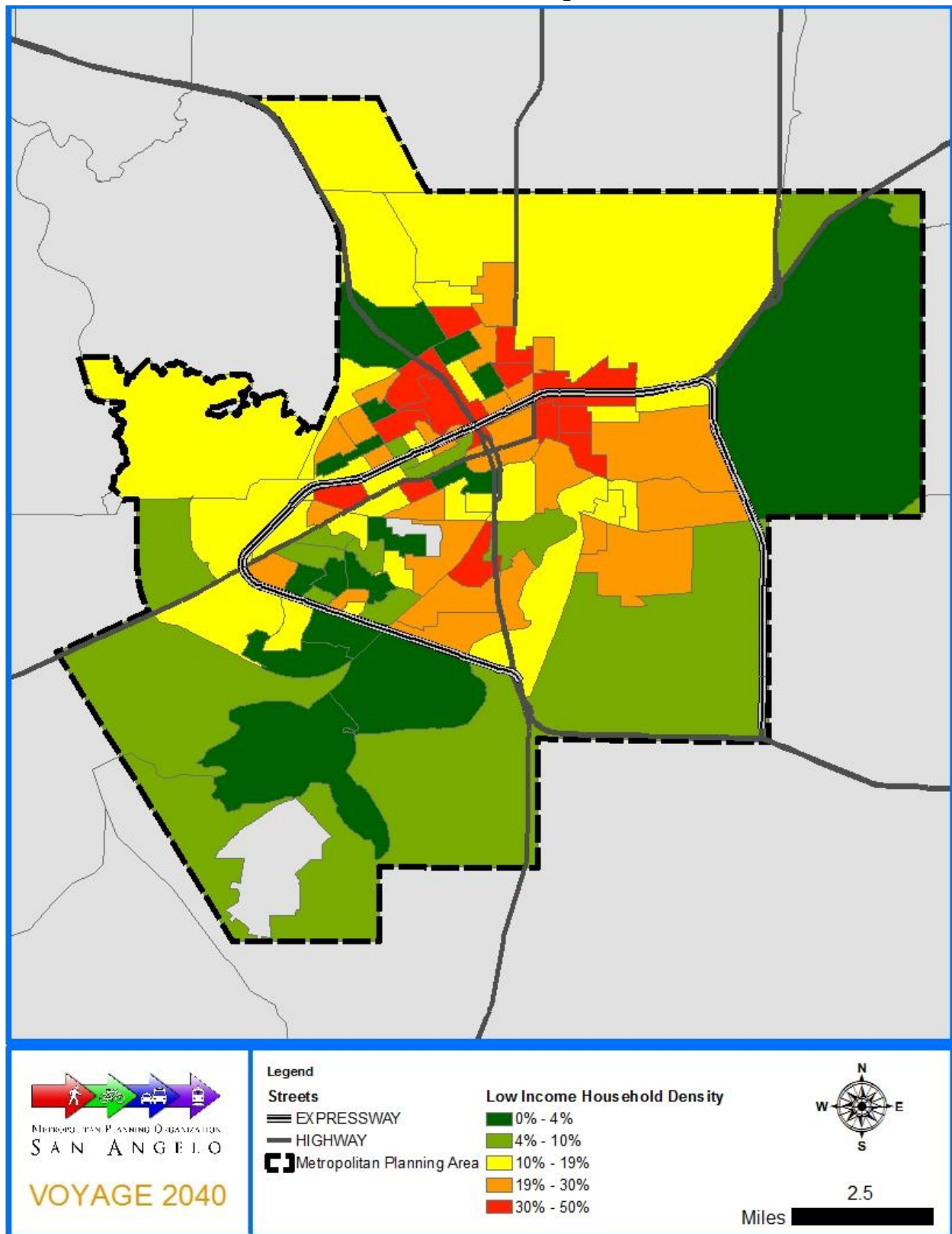
Elderly Population Map



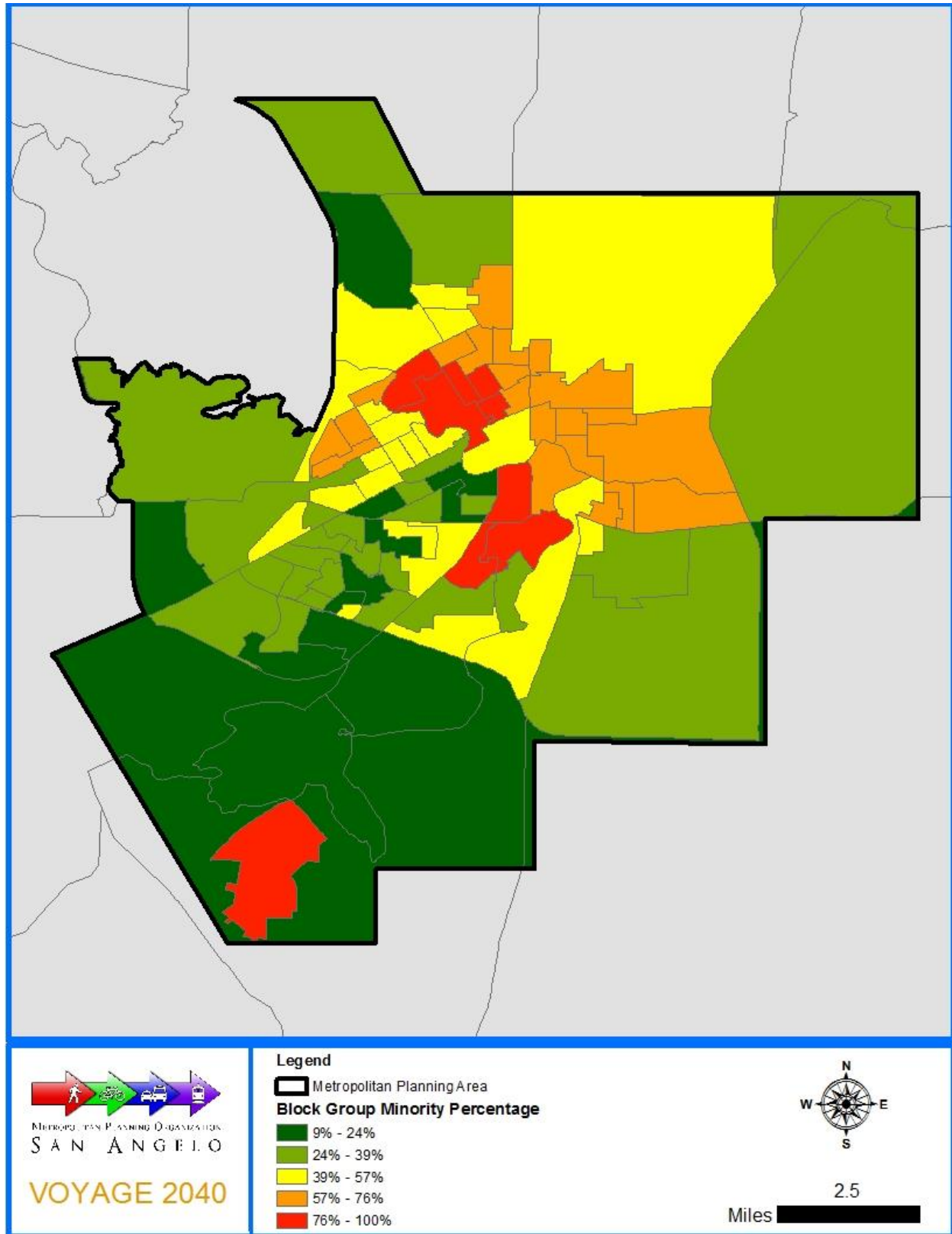
Individuals with Disabilities Map



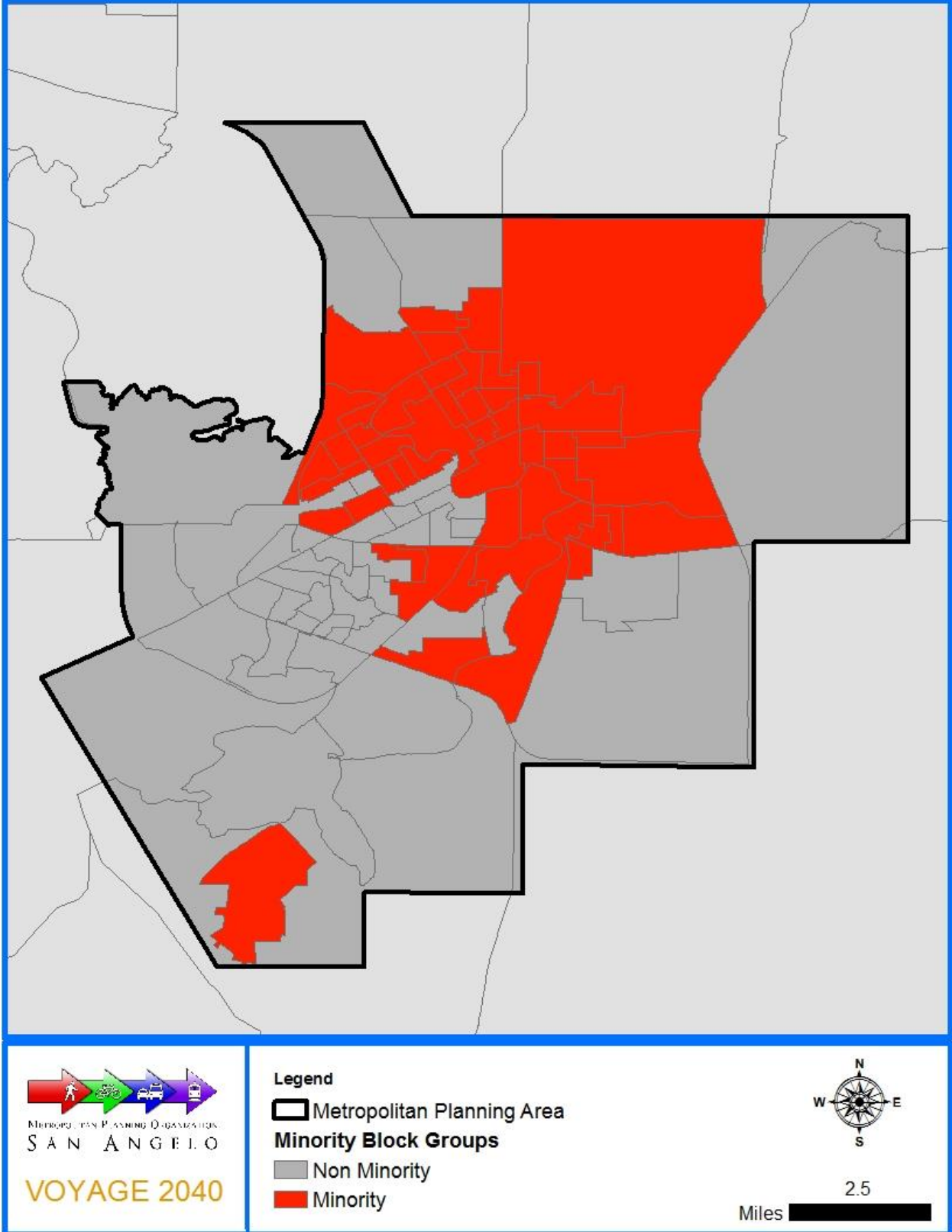
Low Income Map



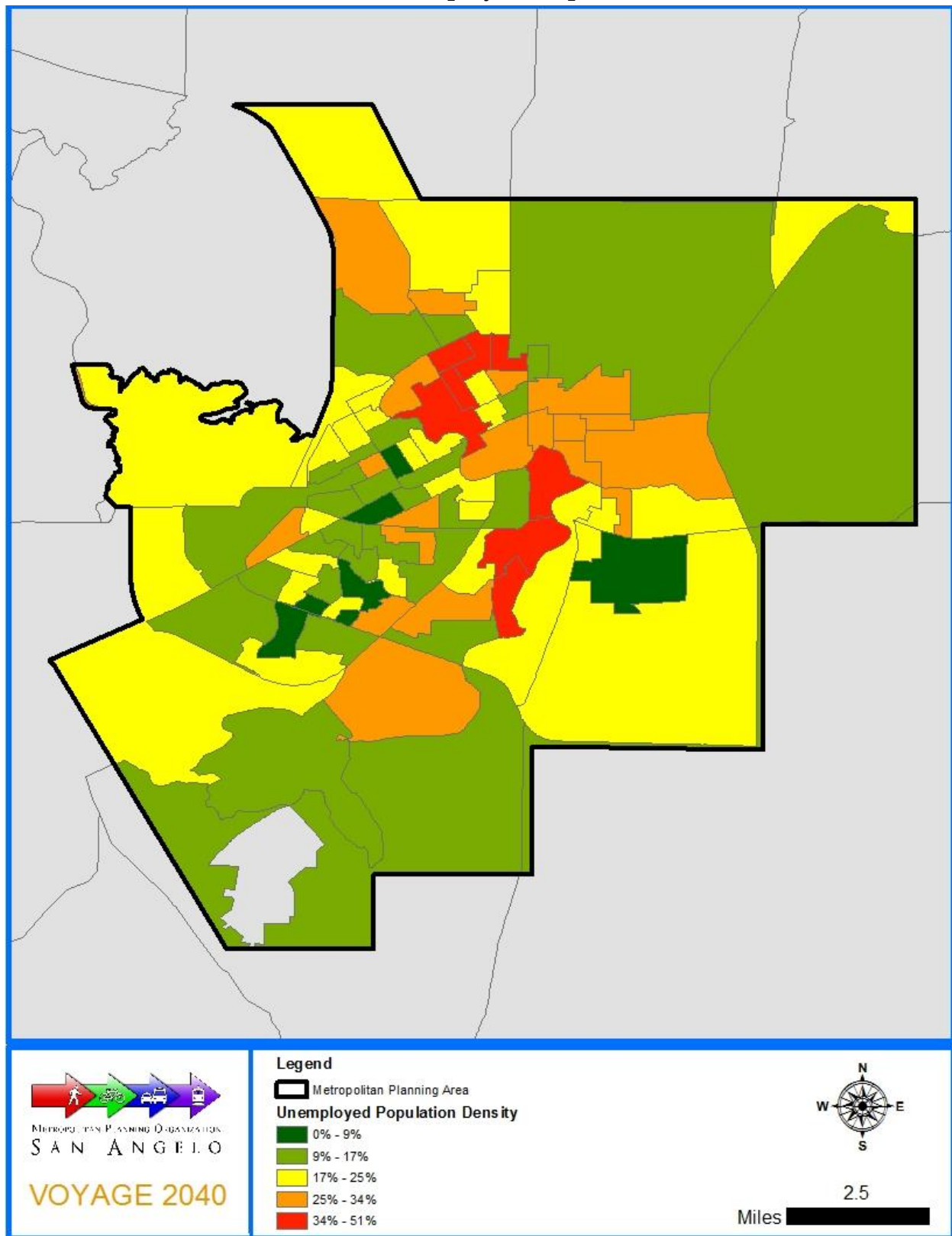
Minority Demographic Map



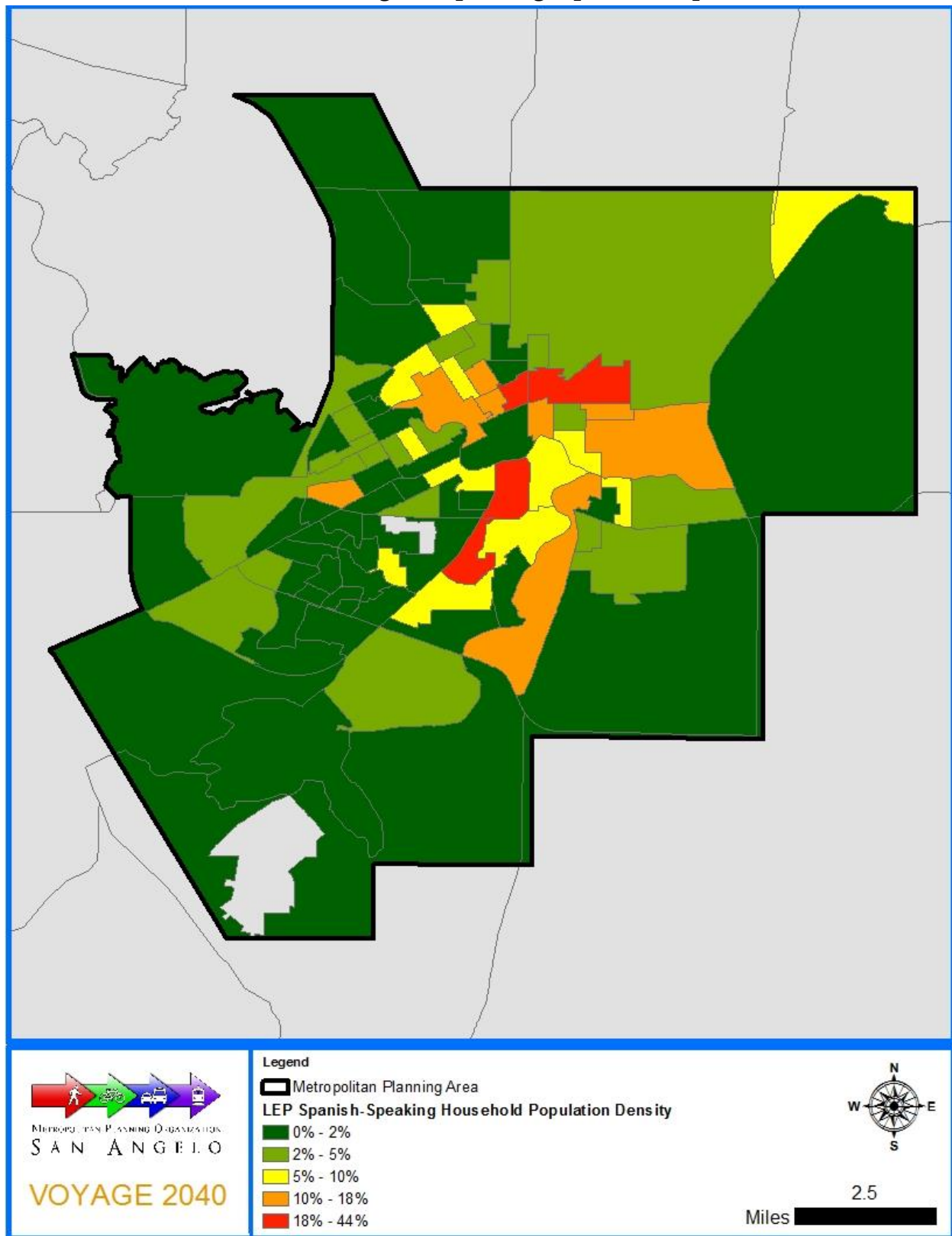
Minority Demographic Map 2



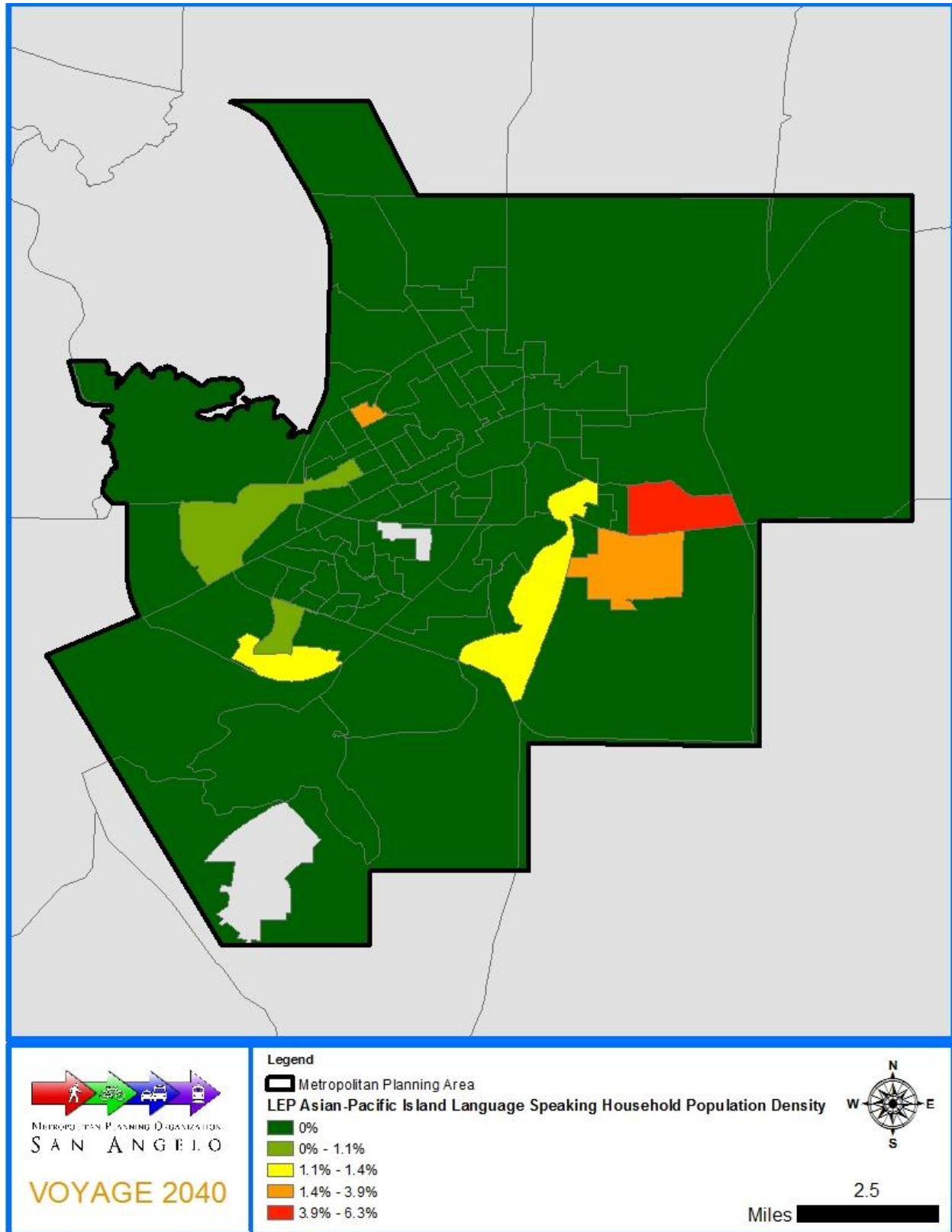
Unemployed Map



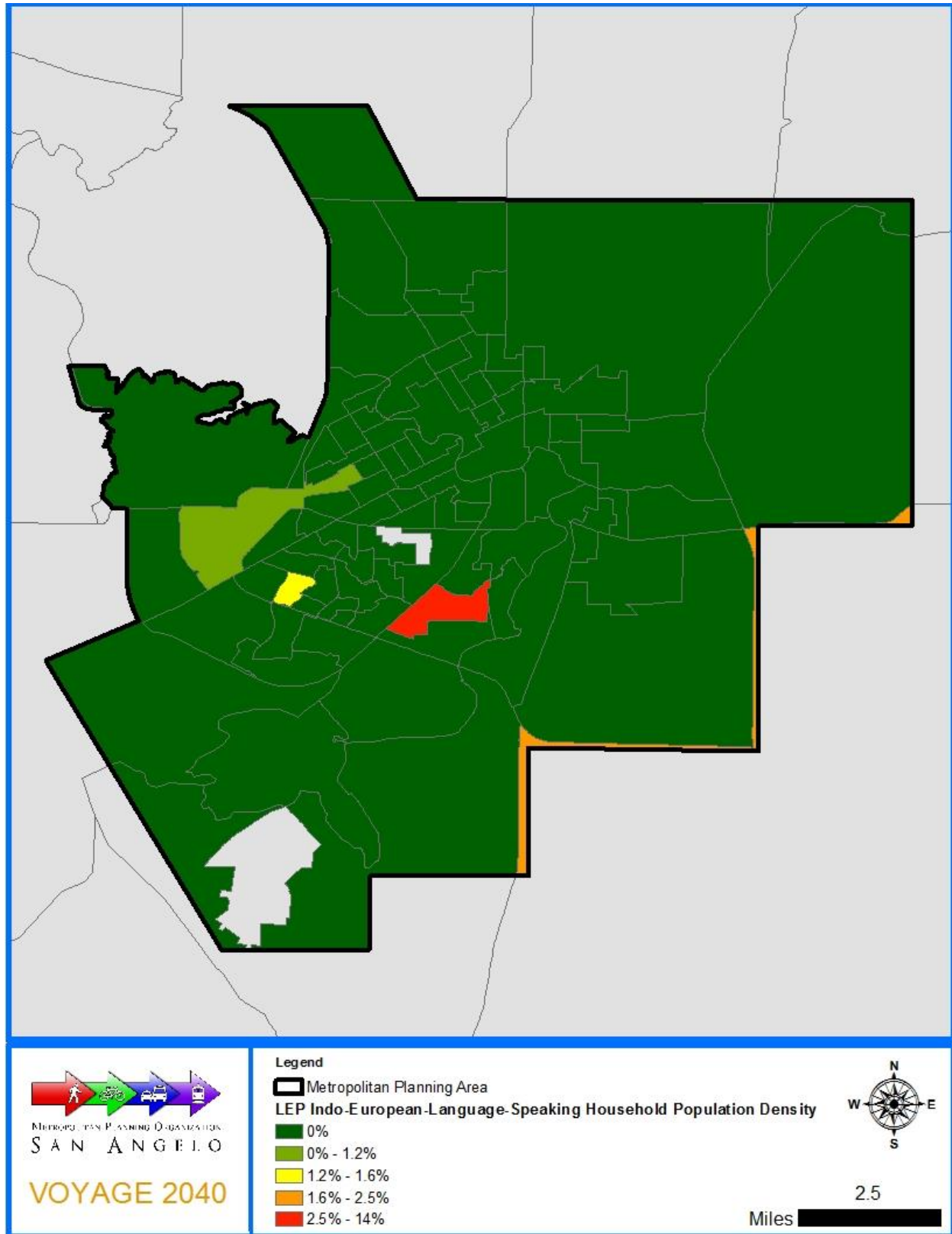
Limited English Speaking: Spanish Map



Limited English Speaking: Asian-Pacific Island Map



Limited English Speaking: Indo-European Map



Title VI and Environmental Justice Considerations Conclusion

The purpose of Environmental justice is to identify and address disproportionate high and adverse effects of proposed decisions on low-income, elderly, and minority populations. Decisions by the MPO should consider equitable conditions for several of the community's population including color, race, national origin, sex, age disability, and persons with limited English Proficiency.



To comply with the requirements of environmental justice, the MPO attempts to have meetings, events, and activities in areas that have higher percentages of low-income or minority populations. In addition to hosting activities in these areas, the MPO understands that many of these residents have limited access to transportation and are not usually available during the day and for that reason, the planning activities occur during evening hours and sometimes on the weekends.

To further our outreach and involvement efforts, the MPO provides several of our reading and informational materials in languages other than English.

ENVIRONMENTAL MITIGATION

The required approach to mitigation, also known as sequencing, involves understanding the affected environment and assessing transportation effects throughout project development. Effective mitigation starts at the beginning of the National Environmental Policy Act (NEPA) process, not at the end. Mitigation must be included as integral part of the alternatives development analysis process.

Mitigation: Avoid > Minimize > Repair or Restore > Reduce over time > Compensate

The Council on Environmental Quality (CEQ) regulations defines mitigation as:

- Avoiding the impact altogether by not taking a certain action or parts of an action.
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- Compensating for the impact by replacing or providing substitute resources or environments.

Agency Consultation

In order to adhere to MAP-21 requirements, the MTP needs to discuss potential environmental mitigation activities to be developed in consultation with federal, state, tribal, wildlife, land management, and regulatory agencies.

The MPO consulted with local resource and environmental agencies, including federal and state, with the development of this document. Although there were no comments, the MPO wanted to get their input to ensure that planning activities do not negatively affect areas that are unique.

In assessing environmental mitigation impacts, areas which are considered environmentally and historically or culturally sensitive should be carefully studied for unique features such as:

- Floodplains
- Wetlands
- Agricultural areas
- Conservation areas
- Natural areas

“Why should we think upon things that are lovely? Because thinking determines life. It is a common habit to blame life upon the environment. Environment modifies life but does not govern life. The soul is stronger than its surroundings”.

William James

- Parks or trails
- Woodlands
- Archeologically significant
- Cemeteries
- Endangered species areas

While many of these areas are not located within the MPO planning boundary some are. As the MPO begins developing projects, consultation with resource and environmental agencies will take place.

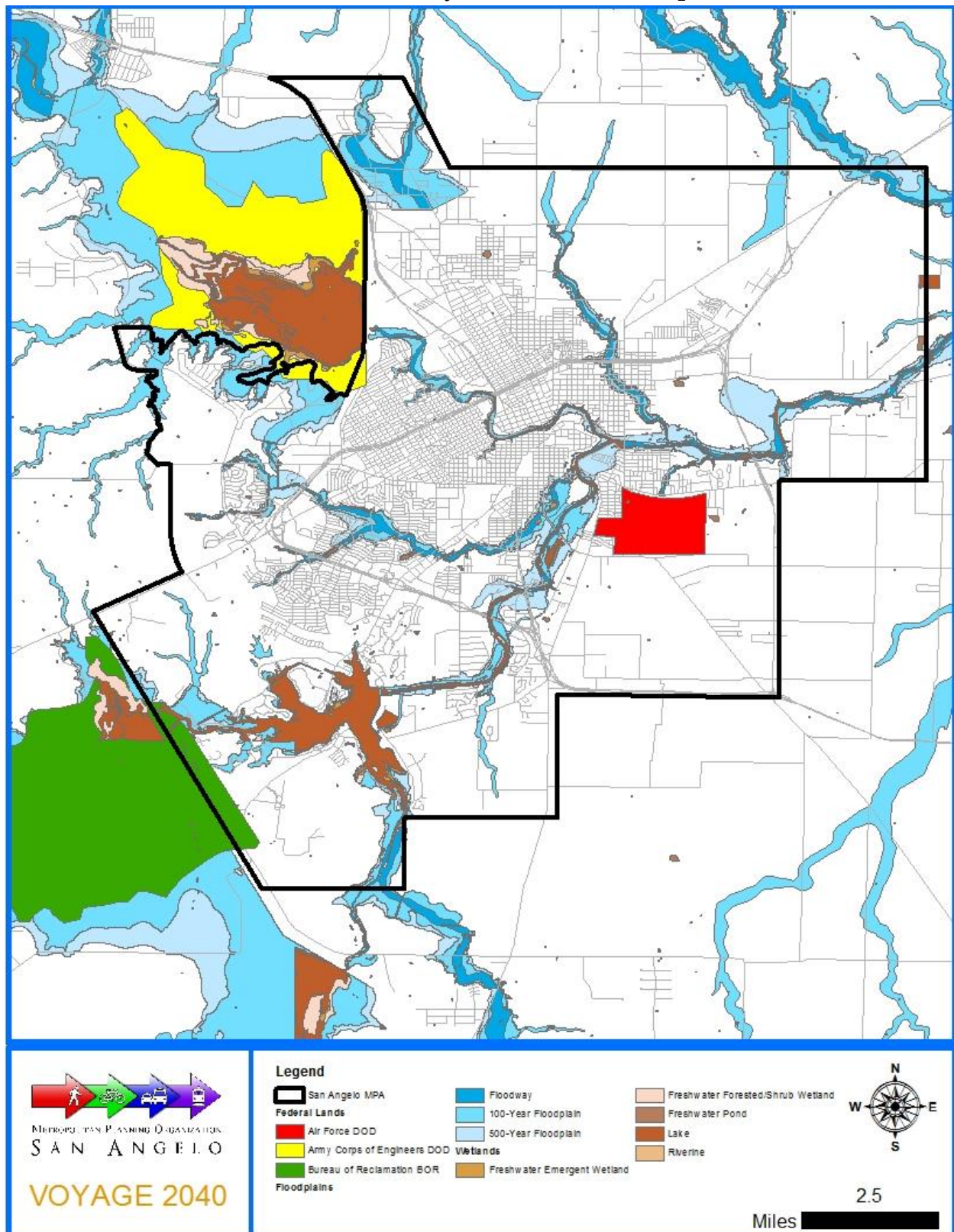
It is the intent of the MPO to maintain a community that is healthy, environmentally responsible and considers the needs of others. Furthermore, the MPO will collaborate with stakeholders to make sure the mitigation of impacts is considered regardless if the impacts are considered significant.

Consulting with environmental agencies and stakeholder organizations during the planning process helps establish communication and collaboration, which helps to avoid potential conflicts in the future.

The Potential Mitigation Strategies chart below describes some potential mitigation resources, legislation, and project activities. The map preceding the chart shows areas within the San Angelo MPO boundary that are considered environmentally significant. The MPO will work with the appropriate federal and state offices in advance of any project development.

Potential Mitigation Strategies			
Resource	Key applicable requirements	Potential mitigation activities for project implementation	Potential mitigation area for project implementation
Neighborhoods and communities, and homes and business	Uniform Relocation Assistance and Real Property Acquisition Policy Act at 42 USC 4601 et seq.	Impact avoidance or minimization; context sensitive solutions for communities (appropriate functional and/or esthetic design features).	Mitigation on-site or in the general community. (Mitigation for homes and businesses is in accordance with 49 CFR 24).
Cultural resources	National Historic Preservation Act at 16 USC 470	Avoidance, minimization; landscaping for historic properties; preservation in place or excavation for archaeological sites; Memoranda of Agreement with the Department of Historic Resources; design exceptions and variances; environmental compliance monitoring.	On-site landscaping of historic properties, on-site mitigation of archeological sites; preservation in-place.
Parks and recreation areas	Section 4(f) of the U.S. Department of Transportation act at 49 USC 303	Avoidance, minimization, mitigation; design exceptions and variances; environmental compliance monitoring.	On-site screening or on-site replacement of facilities; in some cases, replacement of affected property adjacent to existing.
Wetlands and water resources	Clean Water Act at 33 USC 1251-1376; Rivers and Harbors Act at 33 USC 403	Mitigation sequencing requirements involving avoidance, minimization, compensation (Could include preservation, creation, restoration, in lieu fees, riparian buffers); design exceptions and variances; environmental compliance monitoring.	Based on on-site/off-site and in-kind/out-of-kind sequencing requirements; private or publicly operated mitigation banks used in accordance with permit conditions.
Forested and other natural areas	Agricultural and Forest District Act (Code of VA Sections 15.2-4305; 15.2-4307-4309; 15.2-4313); Open Space Land Act (Section 10.1-1700-1705, 1800-1804)	Avoidance, minimization; Replacement property for open space easements to be of equal fair market value and of equivalent usefulness; design exceptions and variances; environmental compliance monitoring.	Landscaping within existing rights of way; replacement property for open space easements to be contiguous with easement; replacement of forestry operation within existing agriculture/forestal district.
Agricultural areas	Farmland Protection Policy Act of 1981 at 7 USC 4201-4209, Agricultural and Forest District Act (Code of VA Sections 15.2-4305; 15.2-4307-4309, 15.2-4313)	Avoidance, minimizations; design exceptions and variances; environmental compliance monitoring.	Replacement of agricultural operation within existing agriculture/forestal district.
Endangered and threatened species	Endangered Species Act at 16 USC 1531-1544	Avoidance, minimization; time of year restrictions; construction sequencing; design exceptions and variances; species research; species fact sheets; Memoranda of Agreements for species management; environmental compliance monitoring.	Relocation of species to suitable habitat adjacent to project limits.
Ambient air quality	Clean Air Act at 42 USC 7401-7671, and Conformity regulations at 40 CFR 93	Transportation control measures, transportation emission reduction measures.	Within air quality non-attainment and maintenance areas.

Environmentally Sensitive Areas map



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3

HOW DO WE PAY FOR TRANSPORTATION?

INTRODUCTION

The Moving Ahead for Progress in the 21st Century Act (MAP-21) requires that Metropolitan Transportation Plans have a financial plan and be fiscally constrained. Fiscally constrained means demonstrating that transportation projects included in the document have reasonable estimates of revenue. Determining funds for projects can be difficult especially when the future of the Highway Trust Fund is uncertain.

Generally, projects listed in the long-range transportation plan are projects that are planned to be implemented during the life of the document. These planned projects contain details such as total project costs, funding sources such as federal or state funding, and an implementation schedule. Other projects that are needed for the transportation system but do not have sufficient funding, called unfunded, are sometimes included if they are significant. The purpose of listing unfunded projects is to show the need project. Generally, these projects will be constructed when funds become available.



Due to a lack of transportation funding, there are always more projects than there is available funding. To include every project that is needed in the Metropolitan Transportation Plan is pointless and does not help with determining needs over wants. For this reason, it is important to identify only projects that are most beneficial for San Angelo's transportation system.

LONG-RANGE TRANSPORTATION PLAN FINANCIAL CONSIDERATIONS

Federal regulations and guidelines require the Transportation Improvement Program be fiscally constrained and have a financial plan. Fiscally constrained applies to projects listed in the MTP and it means demonstrating an assurance that there will be sufficient funds (federal, state, local and private) to implement proposed transportation system improvements. This also includes any maintenance and operation costs.

Legislative regulations allow Metropolitan Transportation Plans to include additional projects that would be included in the adopted transportation plan if reasonable additional resources beyond those identified in the financial plan could be available. These projects are identified as illustrative projects and are located on the Unfunded Project listing.

Developing a financially constraint program requires an open, cooperative process among the state, local and regional stakeholders and the MPO. More than a simple review and comment of each project, the necessity of financial considerations requires constant involvement by all those in the development of the estimated funds and the testing of the reasonableness of the financial projections. During the development phase of the MTP, the MPO coordinates with the Texas Department of Transportation to gather estimates of federal and state funds available. TxDOT works with the various transportation entities to develop the best technical method for projecting state and federal funds for several years ahead.

To demonstrate that there are funds available for a project, estimates are used for anticipated revenues. The MTP shows these estimated funds in the fiscal year in which they will be received. Generally, historic trends are used to determine future costs and the future revenues for a project. These project funds are shown in Year of Expenditure (YOE) dollars. YOE dollars are dollars that are adjusted for inflation from the present time to the expected year of construction. The annual rate of inflation for cost estimates is usually 4% for project costs. Using the YOE dollars produces a more accurate cost estimate for a project, which is used for planning, programming, and implementation.

The MTP is the product of funded and proposed funded projects, which consists of pedestrian, public transportation, highway, and bicycle projects that will be implemented during the life of the document. Projects are initially listed in the MTP and as funding becomes available, these projects are included in the Transportation Improvement Program where a more accurate description of costs, scope, and time are identified. In both documents, funded projects are listed on the financial plan, which is comprehensive document that details costs associated with a project and the revenue structure that will be used to fund the project.

Proper use of the financial constraint rationalizes and democratizes the planning process and the program, which implements the metropolitan area's visionary goals. The region can have a proper sense of purpose and proportion through the financial constraint. By forcing us to live within our means, the MTP with a financial constraint becomes a meaningful transportation priority-setting investment plan.

As you can see, the financial constraint enables the Metropolitan Transportation Plan to be a meaningful document for implementing the transportation planning goals. The MTP becomes useful for community planning purposes, for meeting environmental protection laws, and for projecting economic, transportation access and mobility performance. It provides a reasonable guide for highway and transit transportation spending based on the assessment of projected available resources.

TRANSPORTATION FUNDING

In the San Angelo Metropolitan Planning area, either the federal government or the state funds the majority of new transportation projects, transportation enhancements, or transportation improvements. Over the past decade, the San Angelo MPO has been very fortunate to receive funds for projects through grants and initiatives intended to improve the transportation system. Through partnerships with local and state entities, San Angelo has invested a significant amount of dollars in transportation projects.

The federal government provides the largest source of funding for transportation projects. Through authorizations by legislative bills such as SAFETEA-LU and MAP-21, funds are made available to states and municipalities from the Highway Trust Fund, which was established in 1956. Each time a new highway bill is enacted, funds for transportation are appropriated to states through formulas or discretionary programs.

Each year as the community grows, the need for new infrastructure or upgrading existing infrastructure increases. Over the next twenty-five years, with the population increasing, the energy sector expanding and more vehicles on the roads the need for more improvements are likely to increase significantly. Unfortunately, even though investments and partnerships are expected to continue and funding levels are estimated to remain close to previous revenues, together they will not be enough to meet the anticipated demands on the transportation system.

Texas Department of Transportation Highway Funding Categories

Typically, the Texas Department of Transportation provides funds for transportation projects through grants and discretionary programs. These funds are used for highway and transit projects. According to the Statewide Transportation Improvement Program developed by TxDOT, forecasted and anticipated revenues the department receives are from fuel taxes, vehicle registration fees, bonds, federal reimbursements, local matching funds, and other state and local federal funds. Listed below are the 12 funding categories specified by the Texas Administrative Code that fund highway-related projects.

- Category 1 - Preventive Maintenance and Rehabilitation**
- Category 2 - Metropolitan and Urban Area Corridor Projects**
- Category 3 - Non-Traditionally Funded Transportation Projects**
- Category 4 - Statewide Connectivity Corridor Projects**
- Category 5 - Congestion Mitigation and Air Quality Improvement**
- Category 6 - Structures Replacement and Rehabilitation**
- Category 7 - Metropolitan Mobility and Rehabilitation**
- Category 8 - Safety**
- Category 9 - Transportation Enhancements**
- Category 10 - Supplemental Transportation Projects**
- Category 11 - District Discretionary**
- Category 12 - Strategic Priority**

Category 1 - Preventive Maintenance and Rehabilitation

Provides for the preservation of existing roadways. Examples of preventive maintenance projects funded through this program include asphaltic concrete pavement overlays, seal coats and minor bridge maintenance and repair. Rehabilitation projects include full-depth pavement reconstruction, improvement of roadways necessary to meet current roadside safety standards, major bridge rehabilitation and

replacement not funded through Category 6 (see below), and other work generally not considered to be preventive maintenance in nature. Funding for this program is available for use throughout the 15 counties of TxDOT's San Angelo District. The District selects projects funded through this program.

Category 2 – Metropolitan and Urban Area Corridor Projects

Provides mobility and added capacity projects on major state highway system corridors, which serve the needs of urban area MPOs. Funding for this program is available for use for identified and qualifying projects within the MPO area. Projects require Texas Transportation Commission approval, are selected on a statewide basis, and are scheduled by a consensus of TxDOT districts.

Category 3 – Non-Traditionally Funded Transportation Projects

Non-Traditional funds are used for transportation-related projects that qualify for funding from sources not traditionally part of the State Highway Fund (SHF) including state bond financing under programs such as Proposition 12 or Proposition 14.

Category 4 – Statewide Connectivity Corridors

SCC funds provide for mobility and added capacity projects on major state highway system corridors, which serve the needs of statewide connectivity between urban areas and corridors serving mobility needs throughout the state. All Texas Trunk System projects derive funding from this category. Funding for this program is available for use for identified and qualifying projects across the state. Projects require Texas Transportation Commission approval, are selected on a statewide basis, and are scheduled by a consensus of TxDOT districts.

Category 5 – Congestion Mitigation and Air Quality Improvement

CMAQ funds address attainment of National Ambient Air Quality Standard in non-attainment areas. These funds are used in larger metropolitan areas such as Dallas, Austin, Houston, and El Paso.

Category 6 – Structures Replacement and Rehabilitation

Provides funds for the replacement of structurally deficit bridges and the rehabilitation and widening of other bridges. The Texas Transportation Commission approves projects in this program based on a statewide cost-benefit basis using the Texas Eligible Bridge Selection System (TEBSS).

Category 7 – Metropolitan Mobility & Rehabilitation

These funds are used for state transportation needs within Transportation Management Areas (TMA). MPOs that receive these funds select projects to fund under this category.

Category 8 –Safety

Addresses safety projects on and off the state highway system. Projects are typically evaluated using three years of accident data, and ranked by a safety improvement index. Projects incorporated into this program are nominated, ranked, and selected on a statewide basis.

Category 9 – STP Transportation Enhancements Program

Provides for “non-traditional” improvements, generally non-roadway type work. Eligible work is defined at the Federal level and is currently categorized into 12 categories. Some examples of eligible projects include visitor centers, bicycle and pedestrian facilities, historic preservation projects, landscaping projects, and run-off mitigation projects. Projects are nominated by local sponsors (cities or counties), are reviewed and ranked by committee and ultimately selected by the Texas Transportation Committee.

Category 10 – Supplemental Transportation Projects (State funded program) providing for a number of different needs, including:

- State Park Roads Program
- Railroad Grade Crossings Program
- Railroad Signal Maintenance Program
- Landscape Construction Program
- Landscape Cost Sharing Program
- Landscape Incentive Awards Program
- Green Ribbon Landscape Improvement Program

Category 11 – District Discretionary Program

Funds various projects, primarily on the state highway system, selected at the TxDOT district’s discretion.

Category 12 - Strategic Priority Program

Funds Texas Transportation Commission selected projects, which promote economic development, provide system continuity with adjoining States and into Mexico, increases efficiency of military deployment routes, and other strategic needs as determined by the Commission. The Texas Transportation Commission selects projects for inclusion in this program.

Texas Department of Transportation Transit Funding Categories

Discussion of transit programs ultimately relates to the type of federal financial assistance being used. The “Section” references in this section are linked to specific FTA programs established in Title 49, United States Code, Chapter 53.

Section 5307 – Urbanized Area Formula Grants

This program makes Federal resources available to urbanized areas and to Governors for transit capital and operating assistance in urbanized areas and for transportation related planning. An urbanized area is an incorporated area with a population of 50,000 or more that is designated as such by the U.S. Department of Commerce, Bureau of the Census. TxDOT provides matching funds for this funding category.

Section 5310 – Enhanced Mobility of Seniors & individuals with Disabilities

This program provides formula funding to States for the purpose of assisting private nonprofit groups in meeting the transportation needs of the elderly and persons with disabilities when the transportation service provided is unavailable, insufficient, or inappropriate to meeting these needs. Funds are apportioned based on each State’s share of population for these groups of people. Funds awarded under this category are listed in the TxDOT Statewide Improvement Program.

Section 5311 – Formula Grants for Rural Areas

This program provides formula funding to states for supporting public transportation in areas of less than 50,000 populations. Eighty percent of the statutory formula is based on the non-urbanized population of the States. Twenty percent of the formula is based on land area. No State may receive more than 5 percent of the amount apportioned for land area. Funds may be used for capital, operating and administrative assistance to state agencies, local public bodies, Indian tribes, and nonprofit organizations, and operators of public transportation services.

Section 5337 – State of Good Repair

This program provides capital assistance for replacement and rehabilitation of projects of existing fixed guideway systems and is intended to maintain public transportation systems in a state of good repair. Funding under this category is limited to fixed guideway systems (including rail, bus rapid transit, and passenger ferries) and high intensity bus.

Section 5339 Bus and Bus Facilities Program

Funds under this capital program grant can be used to replace, rehabilitate, and purchase buses and related equipment, and to construct bus-related facilities.



FUNDING FORECAST

The San Angelo Metropolitan Planning Organization is required to include a financial plan in the Metropolitan Transportation Plan (MTP). The financial plan should include projects expected to be constructed during the life of the document. The plan should also include how these projects will be funded. Determining financial forecast is extremely difficult due to the uncertainty of transportation funding. The MPO is required to develop a rational methodology for predicting expected revenues for future projects.

Highway (State/Federal) Funds

State and Federal highway funding levels from the Unified Transportation Plan (UTP) were developed based on the allocation processes contained within MAP-21 and on the taxes that are estimated to be generated from the sale of motor fuels in Texas over the life of the UTP.

The following highway funding projections are based on the breakdown of the TxDOT San Angelo District UTP allocations. As the table below shows, available funding for the TxDOT San Angelo District totals \$114,960,000.00 for fiscal years 2015 – 2024.

San Angelo TxDOT Allocated Funding by Category Year (in Dollars)						
TxDOT Unified Transportation Plan 2015						
Category	2015	2016	2017	2018	2019	Total
1	\$ 17,110,000	\$ 18,830,000	\$ 20,180,000	\$ 18,280,000		\$ 74,400,000
2				\$ 11,490,000		\$ 11,490,000
3				\$ 2,310,000		\$ 2,310,000
4						
5						
6						
7						
8						
8SB						
9						
10						
11	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 12,500,000
12				\$ 1,760,000		\$ 1,760,000
12 CMAQ						
12 STP-MM						
Local						
Total	\$ 19,610,000	\$ 21,330,000	\$ 22,680,000	\$ 36,340,000	\$ 2,500,000	\$ 102,460,000

San Angelo TxDOT Allocated Funding by Category Year (in Dollars)						
TxDOT Unified Transportation Plan 2015						
Category	2020	2021	2022	2023	2024	Total
1						\$ 148,800,001
2						\$ 22,980,002
3						\$ 4,620,003
4						\$ 4
5						\$ 5
6						\$ 6
7						\$ 7
8						\$ 8
8SB						\$ -
9						\$ 9
10						\$ 10
11	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 37,500,011
12						\$ 3,520,012
12 CMAQ						\$ -
12 STP-MM						\$ -
Local						\$ -
Total	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 217,420,078

Funds distributed through Categories 1 and 11 are allocated by formula for use on the 3,200 miles of State maintained and operated roadway in the 15 counties of TxDOT's San Angelo District. As such, TxDOT addresses roadway needs across this system, including the subset of state maintained roadways within the SA-MPO boundary, with these funds.

"Transportation is the center of the world! It is the glue of our daily lives. When it goes well, we don't see it. When it goes wrong, it negatively colors our day, makes us feel angry and impotent, curtails our possibilities".

Robin Chase

TxDOT's obligation of these funds within the MPO area is discussed in partnership with the entities represented on the Policy Board, but is ultimately the responsibility of TxDOT District management and does not represent a dedicated revenue stream for use within SA-MPO boundary.

Local Funds

The City of San Angelo has several revenue sources that contribute to the city's general fund. Some of these include the sales tax, property tax, and other fees. The City's funds are split between new construction and operations and maintenance. Forecasted funding levels for city-funded projects were derived by researching historical expenditure trends, and the expected future funding levels.

Operations and Maintenance

The financial projections include system-level estimates of revenues to adequately operate and maintain the roadway system. Roadway preservation is a top priority for Texas. The integrity of the existing highway system should not be allowed to deteriorate. The operation and maintenance projections are to cover improvements such as signal modernizations, general signal improvements, pavement rehabilitation, seal coating, and overlays.

Metropolitan Transportation Plan - Highway Financial Constraint Summary			
	Federal/State	Local	Total
Construction	\$112,870,000	\$0	\$112,870,000
Operations/Maintenance	\$12,500,000	\$105,000,000	\$117,500,000

Funding Assessment

The revenue projections in this MTP consist of federal, state, and local funding that is reasonably expected to be available for the twenty-five year planning horizon. The allocations shown below are based on analysis of past funding, and knowledge of future planned funding such as the Proposition 1 forecast.

MPO Anticipated Highway Funding Amounts Per Year							
Years	Category 1	Category 2	Category 3	Category 9	Category 12	Proposition 1	Total
2015						\$2,400,000	\$2,400,000
2016				\$1,300,000		\$2,400,000	\$3,700,000
2017						\$2,400,000	\$2,400,000
2018		\$11,500,000	\$2,310,000		\$1,760,000	\$2,400,000	\$17,970,000
2019-2040						\$52,800,000	\$52,800,000
Total	\$0	\$11,500,000	\$2,310,000	\$1,300,000	\$1,760,000	\$62,400,000	\$79,270,000

Metropolitan Transportation Plan - Highway Financial Constraint by Category				
Category	Description	Funding Source	Average	25-year Projected Available
1	Preventative Maintenance & Rehabilitation, (can fund Grouped Projects)	Federal State	\$1,300,000	\$32,500,000
2	Metro & Urban Area Corridor	Federal State	\$460,000	\$11,500,000
3	Non-Traditionally Funded Transportation Projects	Federal State	\$92,400	\$2,310,000
4	Statewide Connectivity Corridor Projects	Federal State	\$0	\$0
9	Transportation Alternatives	Federal State	\$52,000	\$1,300,000
10	Supplemental Transportation	Federal State	\$0	\$0
11	District Discretionary, (can fund Grouped Projects)	Federal State	\$140,000	\$3,500,000
12	Strategic Priority	Federal State	\$70,400	\$1,760,000
Proposition 1	Proposition 1 Funding (can fund Grouped Projects)	State	\$2,400,000	\$60,000,000
Operations & Maintenance	TxDOT	Federal State	\$500,000	\$12,500,000
Local Construction	City of San Angelo	Local Funds	\$0	\$0
Local Operations & Maintenance	City of San Angelo	Local Funds	\$4,200,000	\$105,000,000

Transit Funds

For transit, the MPO assumes that revenue levels will be generally the same as in previous years. However, due to economic changes and inflation costs, the MPO estimates the Year of Expenditure (YOE) funding will increase by 3 percent by each year. The chart below provides an estimate of expected transit funding for fiscal years 2015-2040. Federal, state, and local revenue projections shown in the chart below are based on 2010 estimates.

TRANSIT PROJECT FUNDING PROJECTION					
<u>YEAR</u>	<u>FEDERAL</u>	<u>STATE</u>	<u>LOCAL</u>	<u>OTHER</u>	<u>TOTAL</u>
2015	\$1,377,281	\$268,406	\$627,450	\$0	\$2,273,137
2016	\$1,418,599	\$276,458	\$646,274	\$0	\$2,341,331
2017	\$1,461,157	\$284,752	\$665,662	\$0	\$2,411,571
2018	\$1,504,992	\$293,294	\$685,632	\$0	\$2,483,918
2019	\$1,550,142	\$302,093	\$706,201	\$0	\$2,558,436
2020	\$1,596,646	\$311,156	\$727,387	\$0	\$2,635,189
2021	\$1,596,646	\$311,156	\$727,386	\$0	\$2,635,188
2022	\$1,596,646	\$311,156	\$727,386	\$0	\$2,635,188
2023	\$1,596,646	\$311,156	\$727,386	\$0	\$2,635,188
2024	\$1,596,646	\$311,156	\$727,386	\$0	\$2,635,188
2025	\$1,596,646	\$311,156	\$727,386	\$0	\$2,635,188
2026	\$1,596,646	\$311,156	\$727,386	\$0	\$2,635,188
2027	\$1,596,646	\$311,156	\$727,386	\$0	\$2,635,188
2028	\$1,596,646	\$311,156	\$727,386	\$0	\$2,635,188
2029	\$1,596,646	\$311,156	\$727,386	\$0	\$2,635,188
2030	\$1,596,646	\$311,156	\$727,386	\$0	\$2,635,188
2031	\$1,596,646	\$311,156	\$727,386	\$0	\$2,635,188
2032	\$1,596,646	\$311,156	\$727,386	\$0	\$2,635,188
2033	\$1,596,646	\$311,156	\$727,386	\$0	\$2,635,188
2034	\$1,596,646	\$311,156	\$727,386	\$0	\$2,635,188
2035	\$1,596,646	\$311,156	\$727,386	\$0	\$2,635,188
2036	\$1,596,646	\$311,156	\$727,386	\$0	\$2,635,188
2037	\$1,596,646	\$311,156	\$727,386	\$0	\$2,635,188
2038	\$1,596,646	\$311,156	\$727,386	\$0	\$2,635,188
2039	\$1,596,646	\$311,156	\$727,386	\$0	\$2,635,188
2040	\$1,596,646	\$311,156	\$727,386	\$0	\$2,635,188
	\$40,841,738	\$7,959,280	\$18,606,324	Total	\$67,407,342

One other item to note about the above chart is that figures shown for fiscal years 2015-2018 are consistent with those in the respective Transportation Improvement Program. Total transit funding for these four years is expected to be \$9,509,957.

To provide a more through breakdown of transit funding, the chart below shows expected funds by category. The first chart represents fiscal years 2015-2020. The second chart shows 2021-2040. For fiscal year 2015-2020, the total estimated revenue from the combination of federal, state, and local funds is approximately \$14,703,582.

	2015-2020 Transit Funds					
Fund Source	Section 5307: Operations	Section 5307: ADA Service	Section 5307: Capital Lease	Section 5307: Bus & Facility Security	Section 5339: Bus and Facilities	Total
Federal	\$4,679,125	\$3,512,347	\$620,967	\$96,379	\$374,489	\$9,283,307
State	\$1,736,160	\$0	\$0	\$0	\$0	\$1,736,160
Local	\$3,001,180	\$878,087	\$155,242	\$24,095	\$0	\$4,058,604
Other	\$0	\$0	\$0	\$0	\$24,713	\$24,713
Total	\$9,416,465	\$4,390,434	\$776,209	\$120,474	\$399,202	\$15,102,784



The second chart shows transit funds for fiscal years 2021-2040. Total anticipated revenue for these years is estimated at \$52,703,760. Based on the MPOs YOY of 3%, transit funding should total approximately \$67,407,342 for fiscal years 2015-2040. When new projections for federal and state funds are provided, these figures will be updated.

	2021-2040 Transit Funds				
Fund Source	Section 5307: Operations	Section 5307: ADA Service	Section 5307: Capital Lease	Section 5307: Bus & Facility Security	Total
Federal	\$16,771,940	\$12,589,720	\$2,225,800	\$345,460	\$31,932,920
State	\$6,223,120	\$0	\$0	\$0	\$6,223,120
Local	\$10,757,480	\$3,147,420	\$556,460	\$86,360	\$14,547,720
Other	\$0	\$0	\$0	\$0	
Total	\$33,752,540	\$15,737,140	\$2,782,260	\$431,820	\$52,703,760

TRANSPORTATION PROJECTS

The San Angelo area is growing at a steady pace. News businesses, more vehicles, and individuals re-locating to the city and the surrounding area is having an impact on the entire transportation system. Attempting to keep infrastructure consistent with the demand is nearly impossible due to a shortage in transportation funding.

However, the San Angelo Metropolitan Planning Organization works cooperatively with the Texas Department of Transportation, Concho Valley Transit District, and City of San Angelo to maintain existing transportation infrastructure and implement new transportation projects.

Planning, developing, and implementing news projects are no easy task. Implementing projects takes coordination, collecting and analyzing data, identifying deficiencies and determining where the needs are greatest. To help with understanding where and when projects need to be constructed the Metropolitan Transportation Plan includes a project listing. Projects included in the listing are divided in to two separate funding categories – Funded and Unfunded.

Funded projects are those that have funding or are reasonably expected to have funding at a later date. Unfunded projects are those that are severely needed but a funding source has not been identified. To understand more about the project differences, refer to the Project Selection Process later in this chapter. The Funded and Unfunded project lists show which projects are expected to be developed during the life of this long-range transportation plan.

Estimated costs for highway projects listed in the following charts are not adjusted for inflation, and do not reflect anticipated construction cost increases. Furthermore, they do not anticipate potential changes in Federal and State allocations over the life of this document.

Grouped Projects

Finally, some of the most necessary transportation work in the City may be completed by TxDOT without a specific listing of the project in the MTP. The table shown below is the approved grouped project category descriptions. This table shows the potential projects that would not be required to be listed individually in the MTP. These projects are funded out of the Category 1, 11, and Proposition 1 allocation.

Grouped Project Control Job Numbers (CSJ) by Category

PROPOSED CSJ	GROUPED PROJECT CATEGORY	DEFINITION
5000-00-950	PE - Preliminary Engineering	Preliminary Engineering for any project except added capacity projects in a nonattainment area. Includes activities which do not involve or lead directly to construction, such as planning and research activities; grants for training; engineering to define the elements of a proposed action or alternatives so that social, economic, and environmental effects can be assessed.
5000-00-951	Right of Way Acquisition	Right of Way acquisition for any project except added capacity projects in a nonattainment area. Includes relocation assistance, hardship acquisition and protective buying.
5000-00-952 5000-00-957 5000-00-958	Preventative Maintenance and Rehabilitation	Projects to include pavement repair to preserve existing pavement so that it may achieve its designed loading, includes seal coats, overlays, resurfacing, restoration, and rehabilitation done with existing ROW. Also includes modernization of a highway by reconstruction, adding shoulders or adding auxiliary lanes (e.g., parking, weaving, turning, climbing, non-added capacity) or drainage improvements associated with rehabilitation.
5000-00-954	Railroad Grade Separations	Projects to construct or replace existing highway-railroad grade crossing and to rehabilitate functionally obsolete or structurally deficient bridges.
5800-00-950	Safety	Projects to include the construction or replacement/rehabilitation of guard rails, median barriers, crash cushions, pavement markings, skid treatments, medians, lighting improvements, highway signs, curb ramps, railroad/highway crossing warning devices, fencing intersection improvements (e.g. turn lanes), signalization projects and interchange modifications. Also includes funded via the Federal Hazard Elimination Program, Federal Railroad Signal Safety Program, or Access Managements Projects, except those that result in added capacity.
5000-00-956	Landscaping	Project consisting of typical right-of-way landscape development, establishment, and aesthetic improvements to include any associated erosion control and environmental mitigation activities.
5800-00-915	Intelligent Transportation System Deployment	Highway traffic operation improvement projects including the installation of ramp metering control devices, variable message signs, traffic monitoring equipment and projects in the Federal ITS/VHS programs.
5000-00-916	Bicycle and Pedestrian	Construction or rehabilitation of bicycle and pedestrian lanes, paths and facilities.
5000-00-917	Safety Rest Areas and Truck Weigh Stations	Construction and improvement of rest areas and truck weigh stations.
5000-00-918	Transit Improvements and Programs	Projects include the construction and improvement of small passenger shelters and information kiosks. Also includes the construction and improvement of rail storage/maintenance facilities bus transfer facilities where minor amounts of additional land are required and there is not a substantial increase in the number of users. Also includes transit operating assistance, acquisition of third-party transit services, and transit marketing, and mobility management/coordination.
Note 1: Projects funded with Transportation Alternatives Program (TAP), Transportation Enhancement, and Congestion Mitigation Air Quality funding require a Federal eligibility determination, and are not approved to be grouped.		
Note 2: Projects funded as part of the Recreational Trails Program (RTP) consistent with the revised grouped project category definitions may be grouped. RTP projects that are not consistent with the revised grouped project category definitions must be individually noted in the Transportation Improvement Program (TIP) and State Transportation Improvement Program (STIP).		

Funded Project List

San Angelo MPO Transportation Projects						
Project Name	MPO Project #	Project Type	Location	Description	Project Year	Estimated Cost
Bicycle Pedestrian Improvement Project – Phase 1	100-16-00	Non-motorized	Central/North	Installation of Bicycle lanes (narrows & separated) on S Johnson, Avenue N, Oakes and a sidewalk on MLK	2016	\$1,300,000
Improvement to Grand Canal and US 277 Intersection	HR100-20-02	Highway	Southwest	Intersection Improvement	2020	\$684,806
Tractor Trail Interchange	HR100-18-01	Highway	Northeast	Construct Tractor Trail interchange	2018	\$8,740,000
Paul Ann Boulevard Interchange	HR100-18-02	Highway	Northeast	Construct Paul Ann Boulevard Interchange	2018	\$7,972,290
SL 378 Old Christoval Road	HR100-20-01	Highway	Southeast	Widen, add center turn lane, ACP overlay	2020	\$14,470,000
Sidewalks & SUP Connection	HR100-20-03	Highway	Central	Reconstruct Sidewalks and construct new Concho River Trail	2020	\$2,613,780
N Bryant Interchange w/ 6 & 7 Streets	HR200-19-01	Highway	Central	Installation of delineators, striping, signals, etc.	2019	\$500,000
					Total:	\$36,280,876

Note: Projects listed on the table above are listed in the Transportation Improvement Program.

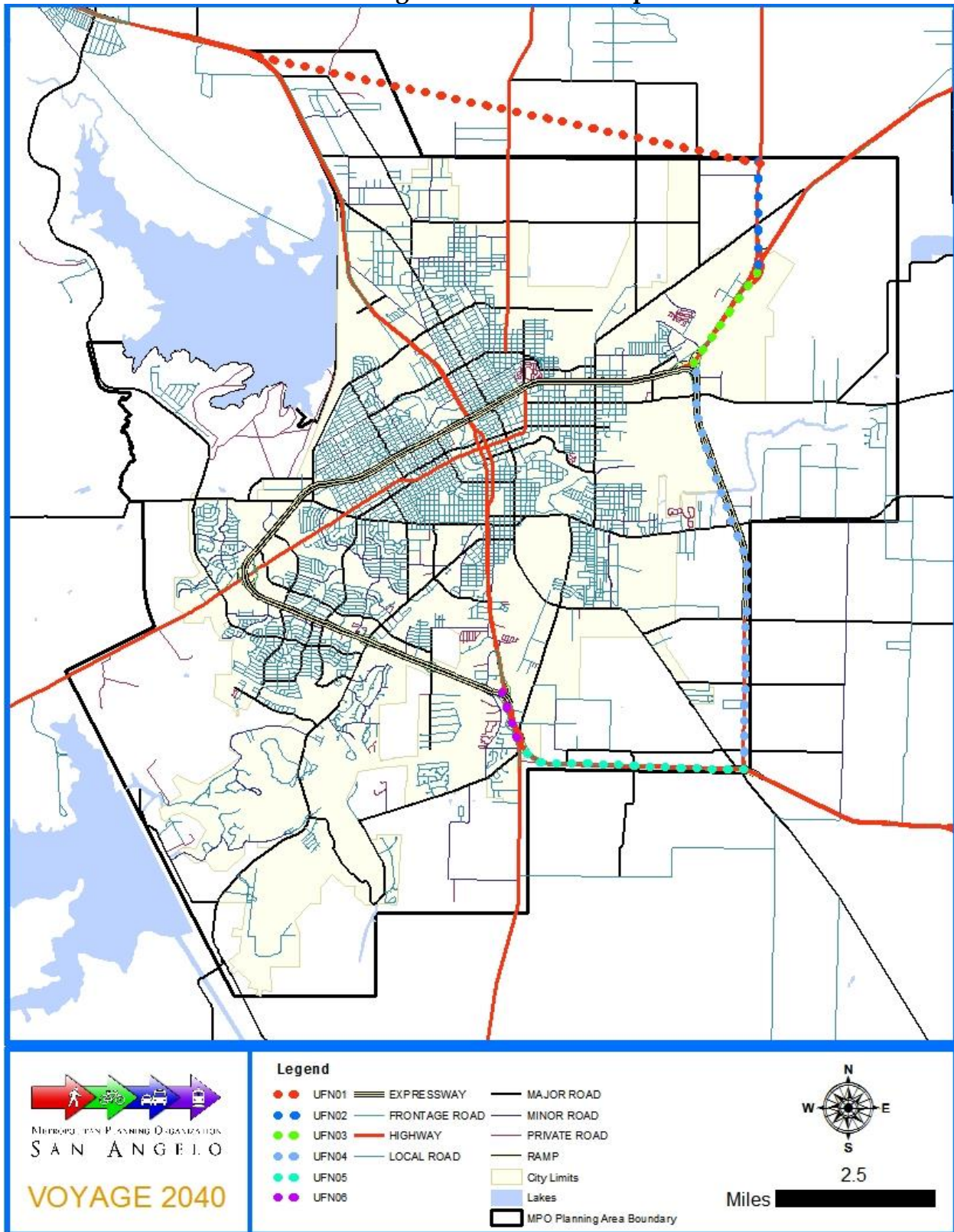
Unfunded Projects

San Angelo Relief Route

San Angelo Relief Route					
Highway	CSJ	Limits From	Limits To	Estimated Cost	Description
New Highway	0907-24-900	US 87	US 277	\$82,350,000	Construct new alignment for freeway. Northern most segment of RR w/ controlled access
US 277	0264-06-900	RR interchange near E FM 2105	N US highway 67 & N US highway 277	\$26,000,000	Construct freeway main lanes, possible frontage roads and rail overpass
US 67	0264-01-900	Loop 306 (N interchange US highways 67 & 277)	E Houston Harte Expwy & Loop 306	\$15,750,000	Upgrade existing 4-lane divided section to freeway with frontage roads
Loop 306	0070-025-902	6.177 miles N of US 87	Interchange of Loop 306 & 87 near FM 1223	\$30,000,000	Construct frontage roads adjacent to existing highway
US 87	0070-02-901	Interchange Loop 306 & US 87	Interchange US 277	\$20,500,000	Upgrade existing 4-lane divided section to freeway with frontage roads
US 87/US 277/ Loop 306 Interchange	0070-02-900	Loop 306 & US 87 Interchange south	Loop 306 & US 277 Interchange near Grand Canal Road	\$60,000,000	Reconfigure interchange and approaches
-				\$234,600,000	Total Cost

The San Angelo Relief Route serves as a reliever route for Texas Trunk System and Ports-to-Plains corridors for both San Angelo and Tom Green County. With limited access, this proposed highway network will provide efficient transportation of goods and services, through the region and potentially internationally.

San Angelo Relief Route Map

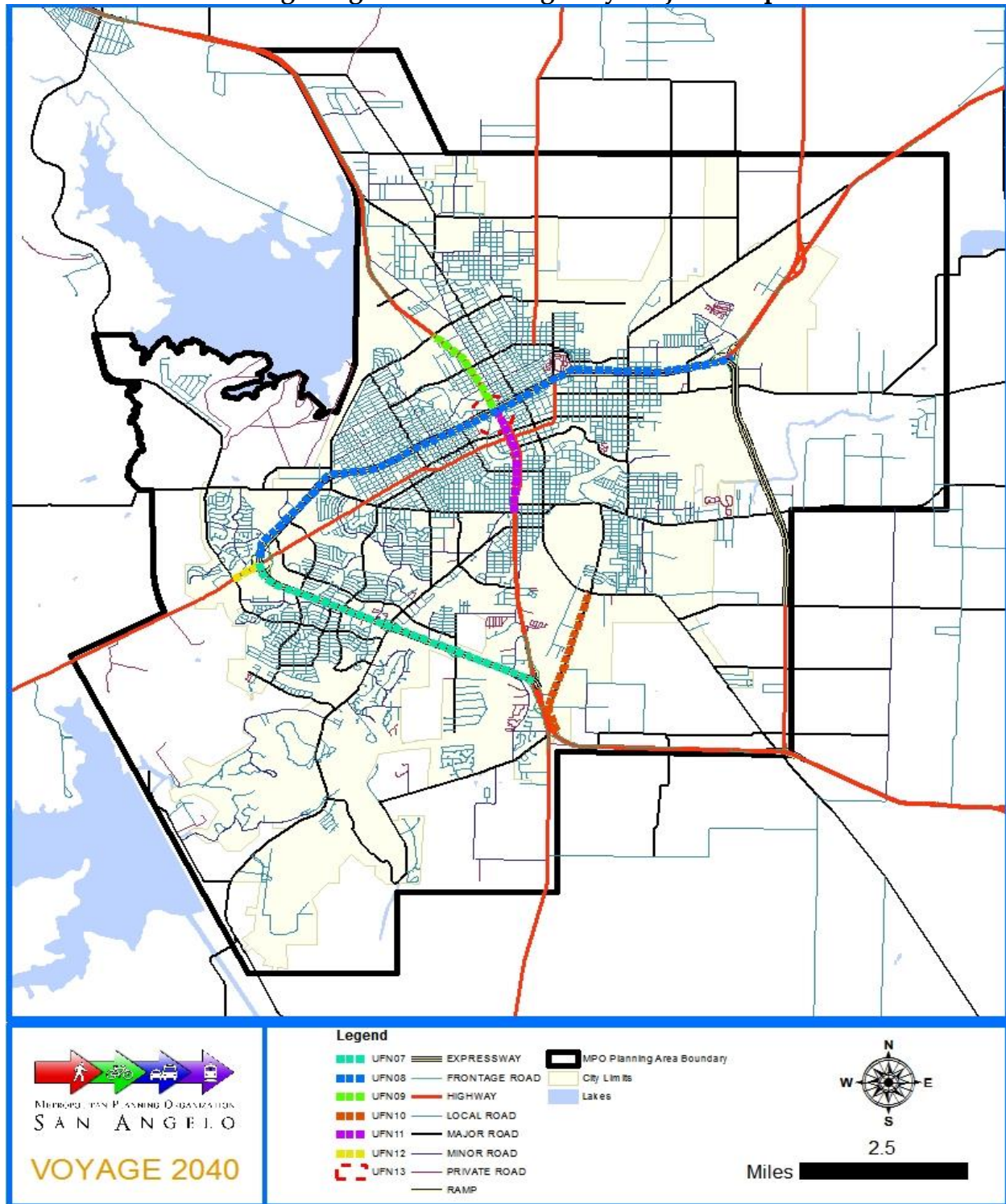


Long Range Unfunded Highway Projects

Capacity Addition Projects					
Highway	CSJ	Limits From	Limits To	Estimated Cost	Description
FM 2288	2141-02-900	4.3 Miles South of US 87	8.1 Miles South of US 87	7,600,000	Widen to Non-Freeway
US 87 North Bryant Blvd.	TBD	US 67 Houston Harte Freeway Interchange	W 29 th Street	\$4,500,000	Widen roadway and replace current median ditch with storm drain system
				\$12,100,000	Total Cost

Safety Enhancement Projects					
Highway	UFN #	Limits From	Limits To	Estimated Cost	Description
Knickerbocker Road Overpass	TBD	Frontage Loop 306	Frontage Loop 306	TBD	TBD

Long Range Unfunded Highway Projects Map





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PROJECT SELECTION PROCESS

The metropolitan transportation planning process is required to provide for the establishment and use of a performance-based approach to transportation decision making. Decisions made by the policy board include establishing policy, approving and implementing projects and supporting actions that improve the transportation system.

When it comes to projects, it is well known that there are always more desired projects than there is available funding. To help with evaluating, ranking, and deciding on projects, it is crucial to have a standard performance-based measurement mechanism. For the San Angelo Metropolitan Planning Organization, our Project Selection Process is that mechanism that is used to dictate how projects are selected and ultimately funded. The Project Selection Process is used with all major projects in the San Angelo area, which includes highway, non-motorized, aviation improvements and rail.

The Project Selection Process fulfills several needs in the metropolitan planning process. First, it defines a process to choose each project or idea and select the project that meets the intended need. Second, the process helps distinguish between a viable project and an idea. While project ideas and participation are encouraged, there must be some way to decide which project to include and that project's priority compared to other current projects.

Since projects can vary greatly, it is important to have a device that helps to compare projects. Often there will be a number of suggested projects but not enough resources, money or time to undertake all of the projects. For this reason, the MPO uses the PSP to help with decision-making.

The San Angelo Project Selection Process has three main steps:

1. Project Submission and Categorization
2. Project Review and Evaluation
3. MPO Policy Board Review and Approval

Project Submission and Categorization

After the call from proposals has been made, project sponsors have the opportunity to submit their ideas to the Metropolitan Planning Organization through the PSP Project Submission Form. On the form, project sponsors include their contact information,

project information, and details for their proposal. Project proposals are grouped into one of eight categories:

1. Bicycle Paths/Bicycle Lanes – projects that address the needs of cyclists, which can include bike lanes, bike paths, safety events, campaigns.
2. Highways/Streets – any improvements made to the highway or roadway infrastructure including stripping, road condition, increase capacity, medians.
3. Public Transportation – ordinarily projects in this category include new busses, bus stop, bus shelters, bus lanes, bus facilities.
4. Sidewalks/Pedestrian – projects that improve the mobility or safety of individuals that walk. Examples are sidewalks, crosswalks, signals.
5. Airport – projects listed in the category would be those that improve access to the airport. Airport facilities are funded by other funds not received by the MPO.
6. Rail – examples of projects in this category include rail line replacement, upgrading railroad crossings, rail signals.
7. System Improvement – any improvements to the transportation system that are not captured in the other categories are listed in this category.
8. Transportation Special Studies – any special studies such as thoroughfare plans, pedestrian/bicycle studies, and access management are classified in this category.

Project Review and Evaluation

When project proposals are submitted, they must then be evaluated. Initially, the MPO staff reviews and evaluates each project using certain criteria. The following requirements help determine which projects, based on a 100-point scoring system, are eligible for possible inclusion in the Funded section of the Metropolitan Transportation Plan, the Unfunded section or not included in the document. The checklist below shows how projects are initially evaluated. To be included in the document, funded or unfunded, projects must meet all of the criteria.

1. The proposed project is consistent with the MPO's long-range goals.
2. The proposed project has an identified funding source.
3. The proposed project has a project implementation timeline and other details necessary to complete the Project Selection Process.
4. The proposed project is consistent with other plans and programs.

On occasion, the MPO will receive project proposals from sponsors wishing to have their nomination included in the Metropolitan Transportation Plan. In some instances, a proposal may not meet the evaluation criteria, which means that it would not qualify for inclusion in the document. Projects not meeting these requirements could be included in the Metropolitan Transportation Plan under the Unfunded section if a determination is made that the project provides an informational benefit.

It is important to keep in mind that not all Unfunded proposals be included in the document. A long listing of unfunded or undervalued projects can be a distraction and take away from the importance of other needed projects. Projects included in the MTP should be limited to those are reasonably expected to be implemented during the life of the document.



**SAN ANGELO METROPOLITAN PLANNING ORGANIZATION
PROJECT SCORING FORM**

Project consistent with MPO's long range plan	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Project has an identified funding source	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Project has implementation timeline	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Consistent with other plans and programs	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Anticipated Project Implementation Date _____

1. Safety and Efficiency Concerns (20 total points)
- Accident History (0-5 points)
 - Traffic Volume (0-5 points)
 - Capacity Issues (0-5 points)
 - Congestion Relief (0-5 points)
 - Support SAFETEA-LU factors (0-5 points)
 - Expands multi-modal options (0-5 points)
 - Improves Connectivity (0-5 points)
 - Pedestrian/Bike Safety (0-5 points)

Total _____

2. Development Benefits (20 total points)
- Economic Development (0-5 points)
 - Health Benefits (0-5 points)
 - Recreational Benefits (0-5 points)
 - Educational Benefits (0-5 points)
 - Environmental/Air Quality Benefits (0-5 points)
 - Economy Benefits (0-5 points)

Total _____

3. System Preservation (30 points total)
- Pavement Conditions (0-10 points)
 - Bridge Conditions (0-10 points)
 - Other Roadway Features (0-10 points)
 - Provide Access Management (0-10 points)

Total _____

4. Regional Development Pattern (30 points total)
- MPO Prioritized Goal (0-10 points)

- Local Prioritized Goal (0-10 points)
- Regional Prioritized Goal (0-10 points)
- Support regional land use goals (0-10 points)
- Regional economic development (0-10 points)

Total _____

Total Score _____

Project Accepted by MPO ☐ Yes ☐ No

MPO Project # _____

Accepted Date: _____

Project Assignment

Type	Project Category	FY	Project Sequence
Highway/Roadway	HR100	16	01
Grouped Highway	GRP100	16	01
Public Transportation	PT200	16	01
Bike/Pedestrian	BP300	16	01
Other	Z400	16	01

Example: Submission date for first highway project for 2016 (HR100-16-01)
 Submission date for second highway project for 2016 (HR100-16-02), etc...

During the public involvement period, the community has the opportunity to provide feedback on the proposal and give comments to either the MPO staff or the TAC. When the public comment period ceases, any comments received are reviewed and if possible resolved. A Project receiving high opposition will likely not move forward in the PSP process and may be rejected. Projects that receive little opposition or are very favorable will be recommend for inclusion in the Metropolitan Transportation Plan.

[illegible]

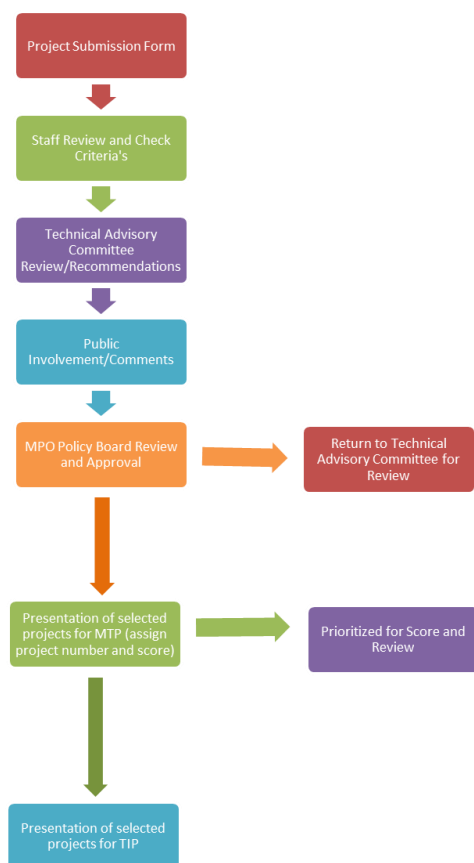
San Angelo Project Selection Process.

Projects that have cycled through the project selection process are then added to one of two lists – Funded projects and Unfunded projects. As the names imply, projects that have funding are included on the Funded project list and subsequently listed in the Transportation Improvement Program by the fiscal year funding is received. These projects are considered fiscally constrained. Projects without funding remain on the Unfunded project list until funds can be found. Due to the unpredictability of transportation funding, it is likely that unfunded projects will remain on the Unfunded list for years or decades.

Project Selection Flow Chart

To help with assessing how new proposals compare to existing proposals, every so often the staff will review each unfunded project and rank it against other proposals

based on priority from highest to lowest. Since transportation priorities change over the years, it may be possible that a proposal moves up or down the list. In some cases, It may even be possible for a proposal to be removed if it is deemed unnecessary.



A proposal on the Unfunded list will remain on the list until funding is found to implement that project. When funding is secured, that project is then included in the Transportation Improvement Program in the appropriate year. Below is a graphics, which illustrates the San Angelo Project Selection Process.

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4

HOW DOES THE PUBLIC INFLUENCE TRANSPORTATION PLANNING?

INTRODUCTION

Public participation is required for any entity that receives Federal Highway Administration or Federal Transit Administration Funds. The San Angelo MPO Public Participation Plan outlines a process for involving the public in the transportation planning process. The MPO understands that a public participation plan helps transportation decision makers identify and understand aspects of the transportation system for the public point of view. Prior to the development of the MTP, the MPO revised the PPP to include social media as a way of contacting citizens of the community.

Public participation has several purposes. The first is to educate the community about transportation planning and their role. Another objective is to improve the quality of transportation policy decision-making through citizen involvement. In order to have citizens involved in the planning process, they must be given an opportunity to participate. Citizen participation is very useful when developing plans, projects, and documents. Good public participation usually happens at the beginning of any initiative and continues throughout implementation and completion.

SAN ANGELO METROPOLITAN PLANNING ORGANIZATION



PUBLIC PARTICIPATION PLAN

NOVEMBER 13, 2014

The Public Participation Plan for the San Angelo Metropolitan Planning Organization provides an opportunity for citizens, groups, agencies, and private providers of transportation to be included in the transportation planning process. Occasionally, the San Angelo MPO creates an ad hoc committee using citizens and transportation stakeholders to discuss specific transportation issues such as non-motorized infrastructure. Over the last few years, the MPO has increased outreach activities to encourage everyone to get involved with transportation planning in some aspect.

HISTORY OF THE PUBLIC PARTICIPATION PLAN

San Angelo MPO developed a Public Involvement Policy (PIP), approved by the Policy Board in March 1994, revised in July 1999, and again in August 2004. The draft amended PIP was out for public review from August 11, 2004 thru September 28, 2004. The final amended PIP was formally adopted at the October 6, 2004 MPO meeting.

With the passage of the SAFETEA-LU transportation bill, San Angelo's PIP was renamed to the Public Participation Plan (PPP) and was updated so that it compliant with the new requirements of the bill. The updated plan was presented in draft version at the December 5, 2007 MPO meeting and notice was placed in the San Angelo Standard Times. The MPO made the document available for several weeks and it was finally adopted on January 24, 2008.

On July 6, 2012, President Barrack Obama signed into law a new two-year transportation reauthorization bill known as Moving Ahead for Progress in the 21st Century Act (MAP-21). The bill governs the United States federal surface transportation spending and was passed after several extensions of its predecessor. Though new and short term, the bill does not significantly alter total funding from the previous authorization. The bill includes changes to the legal framework that directs federal transportation funding, generally providing more flexibility to states and other recipients.

One noteworthy change stated in the bill is that it requires the establishment of performance measures and targets. It requires MPOs and states to create a performance-based and multimodal program to strengthen the U.S. transportation system. The performance measures would focus on issues such as planning, highway safety, highway conditions, congestion, system performance, and transit performance. The Federal Highway Administration identifies 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.**

In October 2013, the MPO revised the Public Participation Plan to include the use of social media, blogs, and electronic newsletters. The plan was again revised in November 2014 to incorporate the San Angelo Limited English Proficiency (LEP) Plan.

The LEP is intended to accommodate those whose proficiency is limited in speaking, reading, writing, or understanding English. The purpose of this is to guarantee access to those in which English is not their first language, so they have the opportunity to be involved with the transportation planning process.

PUBLIC PARTICIPATION OVERVIEW

The Public Participation Plan outlines procedures for public involvement to ensure the public is informed about transportation issues throughout the planning process. It ensures the public has adequate opportunity to express their opinions and concerns pertaining to transportation and it was developed so that transportation plans, policies, and decisions have public input. Essentially, the PPP serves as a guide and is used to inform the public about project solicitation, public notices, document review opportunities, public comments, public meetings, and participation opportunities.

San Angelo's PPP provides details about the various ways the MPO reaches out to the community and encourages involvement. The MPO has several mechanisms that include a website, newsletters, social media, meetings, and mail.



The San Angelo MPO maintains a website, www.sanangelompo.org, to assist with public involvement. Citizens can e-mail MPO staff with comments and questions. The website provides viewable and downloadable versions of all MPO documents, as well as maps of the MPO area and information on transportation planning activities.

Occasionally, the MPO creates and distributes a newsletter to pertinent agencies, organizations, public interest groups, homeowners, and various other interested parties. The newsletters provide information on upcoming issues affecting the MPO area, any revisions or changes to the plans or programs and information on future meetings.

The MPO is utilizing popular social media platforms such as Facebook, Twitter, YouTube and Constant Contact to reach a broader audience and demographic in the community. If possible, the MPO posts pictures and videos of various planning events and meetings for those that want to stay involved but are unable to attend.

Other public involvement activities include attendance at community events, participation in transportation related happenings and mailing postcards and brochures to target segments of the community in an attempt to get them engaged.

The San Angelo MPO is very committed to keeping the public involved. Meetings are held at convenient locations and times; and accommodations are made for those that have special needs. Furthermore, the MPO attempts to make information available in non-English languages and it is disseminated in both print and electronic versions. Efforts are made to accommodate traditionally underserved citizens including low-income, elderly, individuals with disabilities and minorities.

ELEMENTS OF PUBLIC PARTICIPATION

The San Angelo Metropolitan Planning Organization strives to be proactive in reaching out to the community and encouraging input from the residents of San Angelo. The MPO makes every attempt to ensure that the transportation planning process includes feedback from citizens, is easy to understand, and is transparent.

The elements public involvement is intended to allow for orderly public interaction with the MPO organization as a whole, including board members, staff, and committee members. Because transportation decisions have long-term consequences and impact economic development, quality of life and future generations, it is important for the community to clearly understand how they influence transportation. Below are the elements that included in San Angelo's public involvement practices.

- **Visibility** - Raise awareness of the MPO as a leader in transportation planning for San Angelo and Tom Green County.
- **Engagement** - Involve the public in every phase of the transportation planning process.
- **Notification** - Notify the public when key decisions are being made and provide opportunities for comment.
- **Responsiveness** - Ensure that issues raised by the public are explicitly considered and responded to.
- **Communication** - Ensure that all communication media and MPO plans are presented in a format understood by partner agencies and the public.

- **Resourcefulness** - Be creative-optimize and use resources dedicated to public participation effectively.
- **User-Friendliness** - Provide user-friendly collateral materials and communicate in a clear, credible, concise, and consistent manner. Use visualization techniques to describe plans from citizen perspective.
- **Ease** - Reach out to inform and engage populations that have potential to be under-served in transportation decision making.
- **Compliance** - Meet or exceed the spirit, intent and requirements of local, state, and federal regulations.

The San Angelo MPO recognizes the importance of public involvement and encourages anyone that has an interest in transportation planning to get involved with the organization. Through public involvement and interaction, transportation concerns can be addressed and solutions can be developed with the support of the community.

Communicating effective information to the community can sometimes be a difficult task because everyone has their personal preferences on how they choose to receive and get information. Some prefer television and radio, while others rely on the internet and email. In an attempt to solicit public comments and to reach as many stakeholders as possible, the San Angelo MPO uses various mechanisms. These include social media, television, community meetings, and committee meetings. Below are details on the numerous ways the MPO engages the community.

LONG-RANGE PLAN PUBLIC WORKSHOPS AND INVOLVEMENTS

In December of 2013, the MPO began developing outreach strategies to get the public involved with the development of the MTP. The first steps to communicating with the community started with identifying days, times and locations for public workshops. The MPO wanted to make sure that everyone that wanted to provide input on the development of the plan was able to attend a workshop.

For that reason, workshops were scheduled at convenient locations such as elementary schools. San Angelo is fortunate to have several neighborhood schools and the MPO was able to schedule meetings at a few of the schools. In addition to the schools, the MPO held a workshop the Concho Valley Transit District Multimodal terminal in the lobby.

To accommodate those individuals with tight schedules the opportunity to get involved, the MPO held workshops during the lunch hour, in the evenings and on a Saturday. The chart below shows the dates, locations and times of the workshops.

Workshop Date	Location	Time
January 14, 2014	Austin Elementary	6:00 PM-7:00 PM
January 22, 2014	Santa Rita	6:00 PM-7:00 PM
February 5, 2014	Holiman Elementary	5:00 PM-6:00 PM
February 8, 2014	Emmanuel Episcopal Church	10:00 AM-12:00 PM
February 20, 2014	Belaire Elementary	5:00 PM-6:00 PM
February 26, 2014	CVTD	9:00 AM-1:00 PM
February 25, 2014	Howard College	9:00 AM-11:00 AM
March 6, 2014	McNease Convention Center/City Council Evening Meeting	5:30 PM-7:30 PM

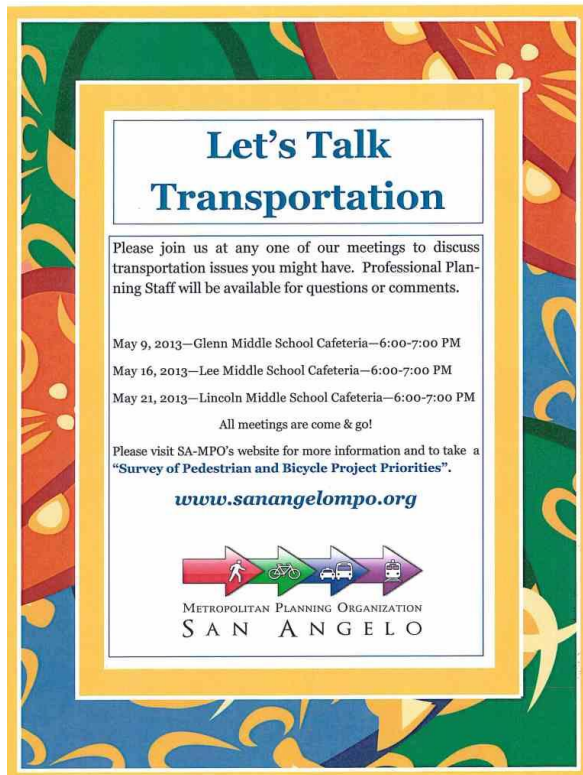
In addition to the workshops, the MPO staff's involvement activities included participation at a local event, hosting a public transportation forum and giving presentations to organizations that were interested in learning about the organization. During these activities, various topics were discussed and information was provided about the Metropolitan Transportation Plan, upcoming activities, and involvement.

Transportation Information Gathering

The San Angelo Metropolitan Planning Organization hosted an annual Transportation Information Gathering community event, which featured speakers from the major transportation organizations in San Angelo.

Attendees at the event were provided with information on several topics including highways, rail public transportation and transportation planning.





Public Involvement Presentations

To gather more input on the development of the Metropolitan Transportation Plan, the MPO staff made presentations to a few local organizations that were interested in learning about the transportation planning process. Presentations were given to community and civic groups including the San Angelo Rotary Club, Lions Clubs, and the Tom Green County Local Emergency Planning Committee.

ASU Health and Wellness Fair

The MPO staff participated in the Angelo State University Health and Wellness Fair in October 2013, to solicit input on transportation issues. Staff members had a table with laptops that had a survey

requesting visitors input on the transportation system. Attendees at the event included ASU students, faculty and staff, and faculty and staff members of the San Angelo Independent School District. Other vendors at this event included local various organizations and businesses in the area. Through this event, the MPO was able to gain valuable input and feedback on topics such as infrastructure and safety.

General Outreach

Another tactic used by the MPO staff to engage residents of the community was making phone calls, mailing out postcards, insert in the water utility bill and making visits to area businesses. Making informal visits to places such as bicycle shops and taxi cab companies, and making contacts with other organizations and agencies helped spread the word about the MPO and the long-range transportation plan.

Additionally, the MPO targeted entities which typically have higher foot traffic such as the realtor's association, assisted living facilities, apartment association and the libraries and sent them emails with a link to the survey, and encouraged them to send the link to their contacts and members of their mailing lists. Paper copies of the survey (in English and Spanish) and postcards were available for those that did not have access to computers or that preferred to take the survey at their convenience.



The MPO maintains a database of those interested in notification of public meetings, hearings, and other MPO planning processes. All organizations/individuals typically remain in the database until they either request to be removed or the mail returns as undeliverable. To boost attendance at long-range planning meetings and workshops, the MPO sent various forms of correspondence to those in the database.

TRANSPORTATION NEEDS ASSESSMENT SURVEY SUMMARY

Survey Development

In October of 2013, the San Angelo Metropolitan Planning Organization collaborated with Angelo State University Community Development Initiatives to develop a Transportation Needs Assessment survey. After a series of meetings with ASU, the draft survey was presented to the MPO Policy Board at their December 12, 2013 meeting. During this meeting, the Policy Board members as well as meeting attendees were given the opportunity to comment on the survey. Input sought from board members included survey duration, length or number of questions, question wording and target locations. It was the intent of everyone involved to develop a survey that provided the citizens of the community with an opportunity to express their views on needs and priorities as it related to long-term transportation planning.

"We are all afraid for our confidence, for the future, for the world. That is the nature of the human imagination. Yet every man, every civilization has gone forward because of its engagement with what it has set itself to do".

Jacob Bronowski

Survey Public Involvement

To make the community aware of the survey, the MPO mailed out more than 800 postcards to random addresses within 200-foot proximity of workshop locations. The Transportation Needs Assessment survey postcards encouraged individuals to go to the MPO website and take the Transportation Needs Assessment survey. Readers were assured that their input from the survey would be included in the MTP.

Be heard! Take the survey

Transportation Needs Assessment Survey

The San Angelo Metropolitan Planning Organization is conducting a survey to help identify transportation needs and improvements. This survey is your opportunity to express your views on San Angelo's transportation system.

www.sanangelompo.org	Mobile	Paper
		

3 ways to take the survey

To further encourage participation in the survey, advertisements were placed in the local newspaper (English and Spanish) press releases were disbursed to local media contacts, staff made appearances on the local television station and on a popular radio station. Another outreach initiative included inserts in water bills. The MPO was provided with an opportunity to place inserts into residents' water bills, which had the potential to reach approximately 15,000 residents. Each customer that receives a water bill was invited to take the survey.

Survey Purpose

To help determine transportation priorities, which ultimately improve the community the MPO launched a Transportation Needs Assessment Survey. The goal of the survey was to provide the community with an opportunity to participate in the transportation. The survey was intended to gather public opinion on transportation infrastructure, issues, and project priorities. These factors were determined to be necessary information by the MPO. General information solicited from those taking the survey included views and opinions on:

- Patterns of use associated with various modes of transportation.
- Public perception of the quality and capacity of transportation infrastructure.
- Public views on the importance of various transportation issues and safety concerns, as well as perceptions of the potential effectiveness of various solutions.
- Citizen assignment of priority ratings to selected types of potential transportation projects.

Survey Initiation

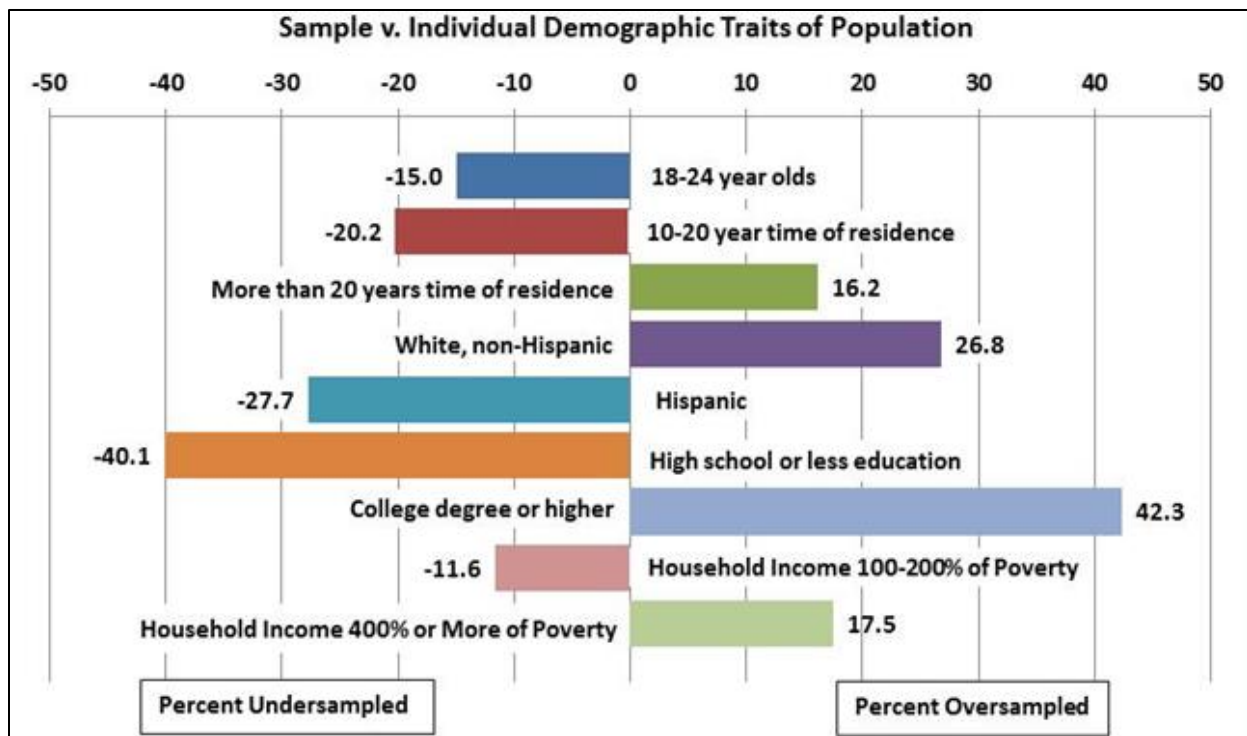
The Transportation Needs Assessment survey was launched and made available on January 15, 2014 and remained continuously accessible to the public until midnight on March 16, 2014. Almost 700 respondents completed the survey across all residential areas of San Angelo. In addition to the public survey, a distinct Goodfellow Air Force Base survey was provided to on-base residents and personnel, which yielded almost 200 responses. The GAFB survey had the same duration as the general survey.

Survey Results Summary

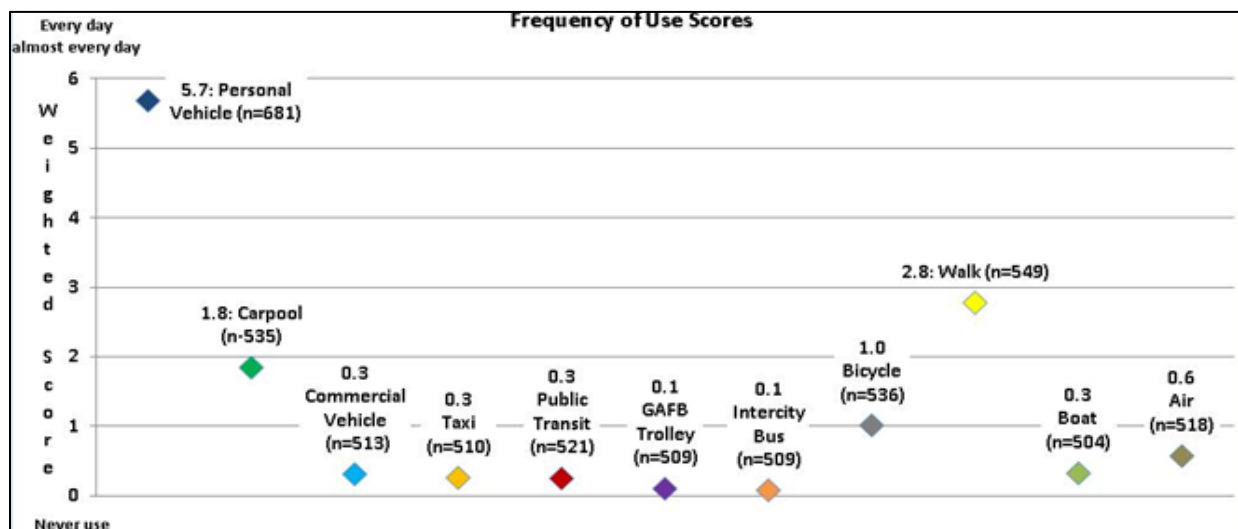
The Transportation Needs Assessment Survey provided the MPO with valuable information on the community's views of the transportation system. The survey returned 690 responses, which was of sufficient size to produce results within a +/- percentage margin of error. The sample is considered a valid representation of the views of adult residents with an interest in transportation needs and issues.

Not all of the feedback provided from the survey could be included in this document; however, included below are some of the more attention-grabbing observations that were provided by survey respondents. The final survey summary is available by request from the MPO and contains the general survey results and the Goodfellow survey results. The following paragraphs will provide a summary of the survey results for the general survey.

To assess the sample as a representation of the city's adult population, a gap analysis compared the individual demographic traits of the respondents to the same features of individuals in the population. Negative bars moving to the left of the zero value on the horizontal axis shown below represent subgroups of the city's adult population that are under-sampled in the TNAS. The negative value attached to the bars estimate the proportion of underrepresentation. Likewise, bars moving to the right of the zero on the horizontal axis estimate the proportion of overrepresentation of over-sampled groups.



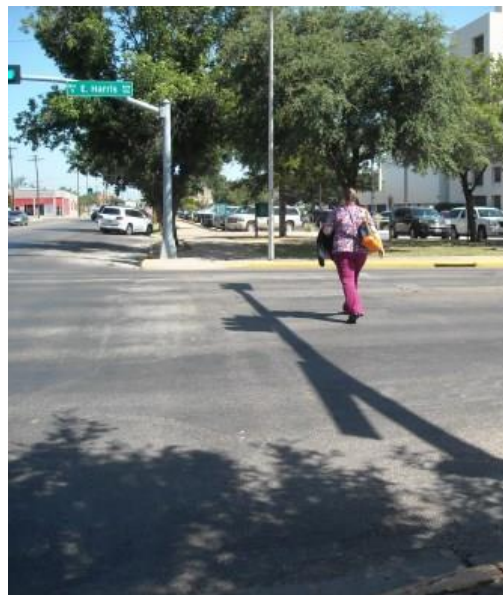
The chart depicts each transportation mode by plotting a weighted score reflecting the prevalence of responses on a range from “never use” to “every day or almost every day.”



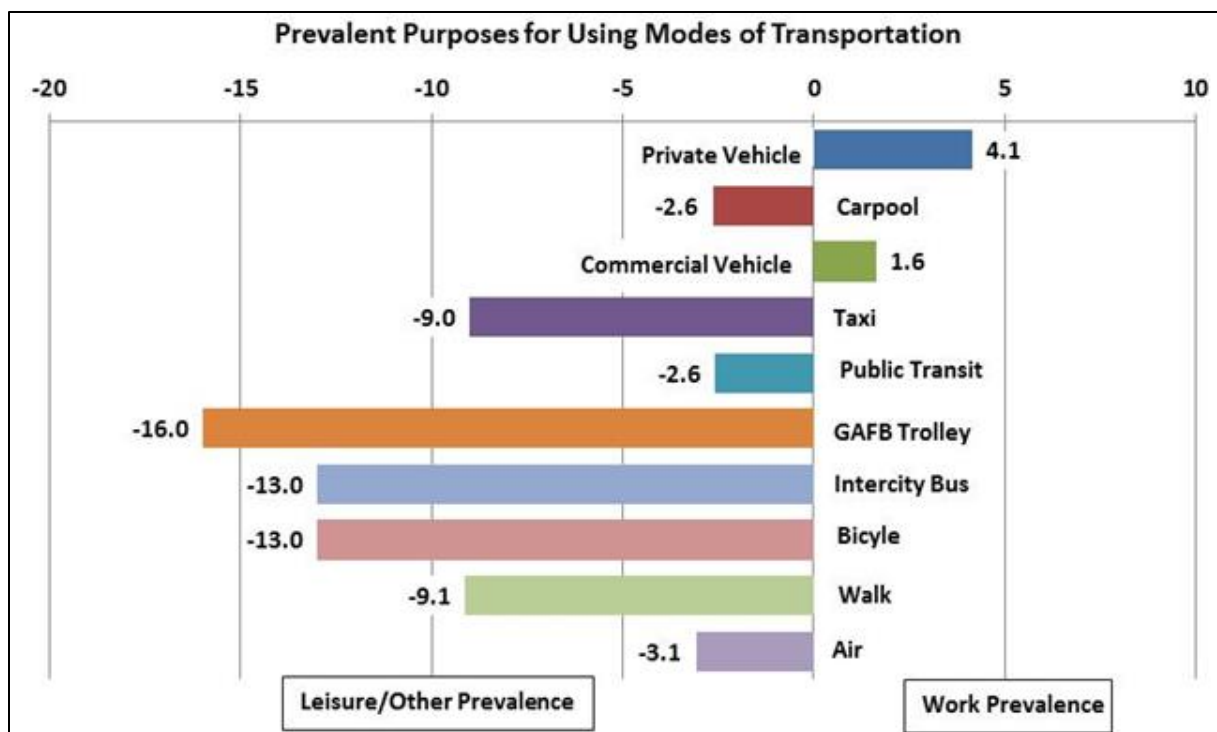
Driving alone in a personal vehicle is the most prevalent mode of transportation with a weighted score of 5.7. Walking (including running), carpooling, and bicycling are used at moderate levels with scores of 2.8, 1.8, and 1.0 respectively. Most transportation modes – including commercial vehicles, taxis (and shuttles), public transit, boats, and airplanes – are only seldom used, if at all, by the majority of TNAS respondents.

Mode	Every day or almost every day	2-3 times per week	Once per week	2-3 times per month	Once per month	Less than once per month	Never	Weighted Score	Total Responses	Figure 3 Name
Drive personal vehicle alone	605	46	0	2	1	1	26	5.7	681	Private Vehicle
Percent	88.8	6.8	0.0	0.3	0.1	0.1	3.8		100.0	
Carpool/Ride Share	39	81	35	28	25	74	253	1.8	535	Carpool
Percent	7.3	15.1	6.5	5.2	4.7	13.8	47.3		100.0	
Commercial Vehicle	13	4	5	4	3	24	460	0.3	513	Commercial Vehicle
Percent	2.5	0.8	1.0	0.8	0.6	4.7	89.7		100.0	
Taxi/Shuttle Service	0	5	5	7	6	55	432	0.3	510	Taxi
Percent	0.0	1.0	1.0	1.4	1.2	10.8	84.7		100.0	
Public Transit/Local Bus System	5	7	3	8	7	16	475	0.3	521	Public Transit
Percent	1.0	1.3	0.6	1.5	1.3	3.1	91.2		100.0	
Goodfellow AFB Trolley	3	2	0	4	3	7	490	0.1	509	GAFB Trolley
Percent	0.6	0.4	0.0	0.8	0.6	1.4	96.3		100.0	
Intercity Bus/Coach Service	1	2	2	1	3	8	492	0.1	509	Intercity Bus
Percent	0.2	0.4	0.4	0.2	0.6	1.6	96.7		100.0	
Bicycle	13	28	24	36	22	78	335	1.0	536	Bicycle
Percent	2.4	5.2	4.5	6.7	4.1	14.6	62.5		100.0	
Walk	100	105	39	48	26	48	183	2.8	549	Walk
Percent	18.2	19.1	7.1	8.7	4.7	8.7	33.3		100.0	
Boat/Watercraft	3	1	6	9	15	60	410	0.3	504	Boat
Percent	0.6	0.2	1.2	1.8	3.0	11.9	81.3		100.0	
Airplane	0	1	0	3	20	243	251	0.6	518	Air
Percent	0.0	0.2	0.0	0.6	3.9	46.9	48.5		100.0	

Some 89 percent of respondents report driving alone by personal vehicle every day. Similar percentages say they never use commercial vehicles, taxis and shuttles, public transit (including the GAFB Trolley), or boats and other watercraft.



Private and commercial vehicle use are the only transportation modes used predominantly for work purposes according to the respondents. All other transportation modes are used prevalently for leisure and other purposes, led by the GAFB Trolley with a gap ratio of 16 to 1. The table below details the reported purposes for using the modes of transportation.



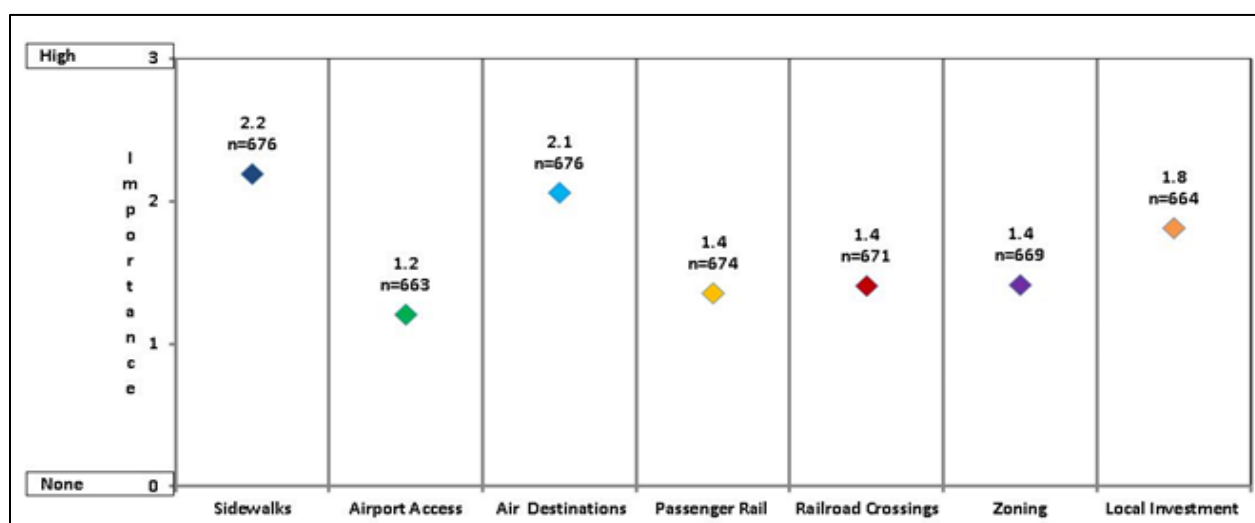
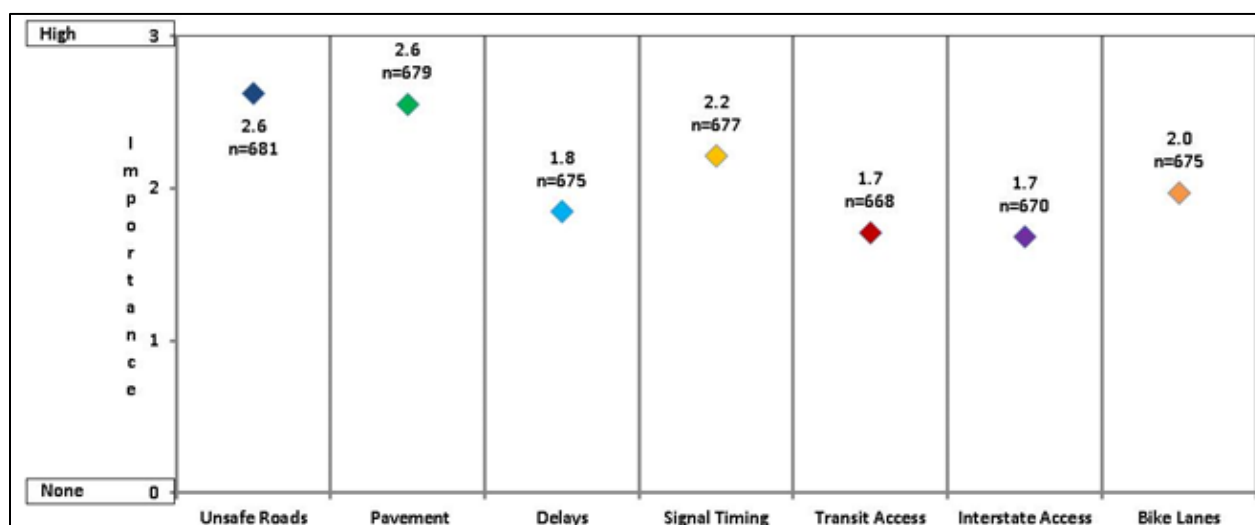
When asked how they would travel if they had to be without a personal vehicle for a month, a plurality of respondents (47.2%) said they would maintain use of a personal vehicle by renting or borrowing. Another 36.5% would join with others for transportation by carpooling and using public transit or taxis and shuttles.

Mode	Frequency	Percent
Rent a vehicle	212	31.0
Carpool	183	26.8
Borrow a vehicle	111	16.2
Ride a bike	60	8.8
Use public transit	58	8.5
Walk	25	3.7
Stay at home	13	1.9
Use taxi/shuttle	8	1.2
No regular access to vehicle	14	2.0
Total	684	100.0



It is not surprising that when respondents were asked to rate various transportation and infrastructure issues, respondents rated six of the 14 issues in the range of moderate to high importance. These include:

- Unsafe roads.
- Roadway and highway pavement conditions.
- Signal timing causing congestion or running red lights.
- Lack of bike lanes.
- Lack of sidewalks.
- Lack of destinations for air travel.



The figure below solicited citizens' opinions on selected safety issues. Ten of the 13 safety issues garnered ratings in the range of moderate to high importance from the respondents. These are:

- Increased congestion/traffic demand.
- Dangerous highway entrances and exits (dangerous connectors).
- Trucks entering and leaving roadways.
- Traffic congestion and safety concerns around schools.
- Drainage, runoff, and weather concerns.
- Hit and run accidents.
- Public knowledge of rules of the road.
- Lighting and security at bus stops.
- Lack of pedestrian facilities (e.g. shelter, seating) at bus stops.
- Responsible road sharing between motorists and bicyclists/pedestrians.

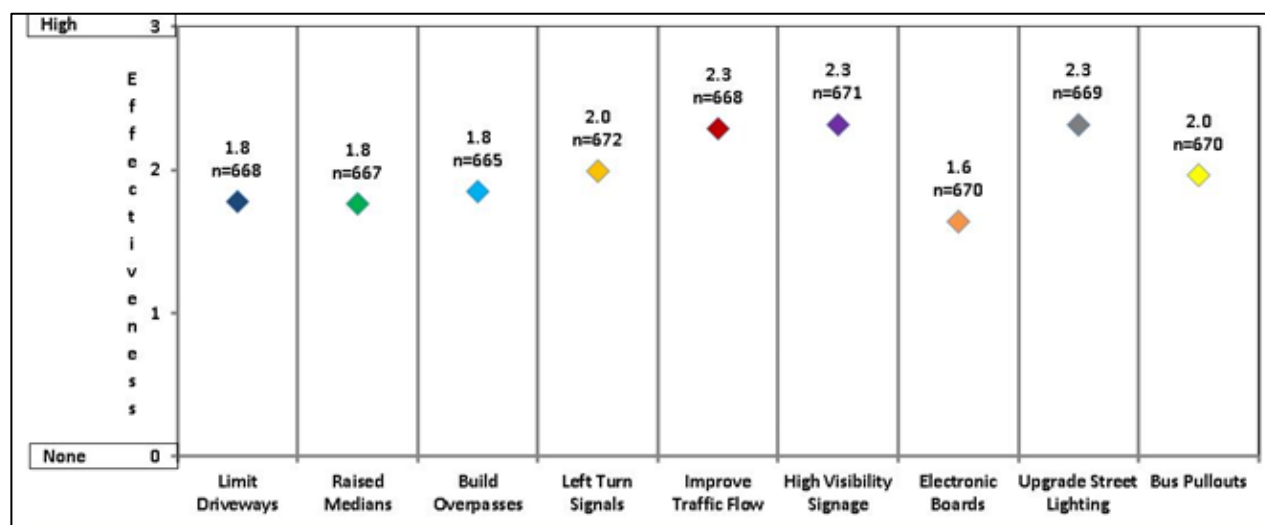
Safety Issue	High	Moderate	Low	Not Important	Average Rating	Total	Figure 8 Name
Increased congestion/traffic demand	380	225	68	11	2.4	684	Congestion
Percent	55.6	32.9	9.9	1.6		100.0	
Dangerous highway entrances and exits	404	187	79	10	2.4	680	Dangerous connectors
Percent	59.4	27.5	11.6	1.5		100.0	
Trucks entering and leaving roadways	357	220	94	7	2.4	678	Trucks on/off
Percent	52.7	32.4	13.9	1.0		100.0	
Traffic congestion and safety concerns around schools	344	221	105	11	2.3	681	Schools
Percent	50.5	32.5	15.4	1.6		100.0	
Drainage, runoff, and weather concerns	252	264	144	20	2.1	680	Runoff
Percent	37.1	38.8	21.2	2.9		100.0	
Hit and run accidents	254	220	185	18	2.0	677	Hit & run
Percent	37.5	32.5	27.3	2.7		100.0	
Public knowledge of rules of the road	348	212	106	14	2.3	680	Knowing road rules
Percent	51.2	31.2	15.6	2.1		100.0	
Lighting and security at bus stops	221	248	152	50	2.0	671	Bus stops
Percent	32.9	37.0	22.7	7.5		100.0	
Lack of pedestrian facilities (e.g. shelter, seating) at bus stops	233	241	151	51	2.0	676	Pedestrian facilities
Percent	34.5	35.7	22.3	7.5		100.0	
Responsible road sharing between motorists and bicyclists/pedestrians	352	210	96	24	2.3	682	Road sharing
Percent	51.6	30.8	14.1	3.5		100.0	
Boating and water safety	113	195	252	114	1.5	674	Water safety
Percent	16.8	28.9	37.4	16.9		100.0	
Unsuitable zoning decisions (based on street networks in the nearby area)	141	219	232	77	1.6	669	Unsuitable zoning
Percent	21.1	32.7	34.7	11.5		100.0	
Improper transportation decisions (based on zoning and land use)	151	229	210	76	1.7	666	Zoning decisions
Percent	22.7	34.4	31.5	11.4		100.0	

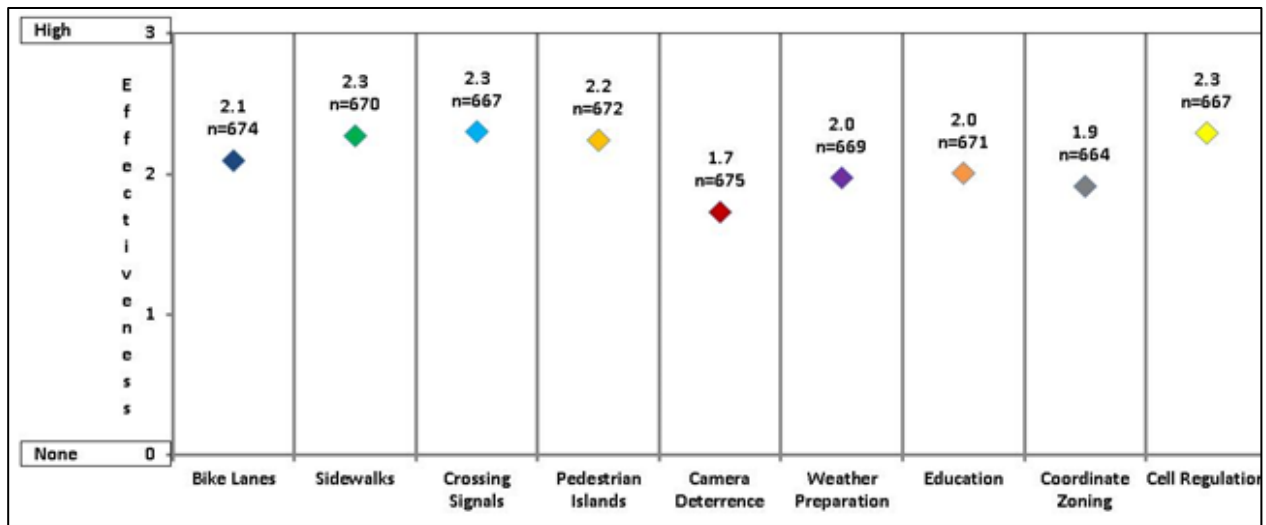
Only three safety issues were seen as low to moderate in importance.

When asked to rate the effectiveness of 18 possible solutions to various safety issues, respondents perceived 12 of the 18 possible solutions as moderately to highly effective (i.e. scoring 2-3 on the vertical axis of Figure 9). These are:

- Restrict left turns on major streets to a traffic signal or designated turn area.
- Improved engineering of traffic flow at congested highway on-ramps and off-ramps.
- High visibility road markings and signage.
- Upgrade street lighting in locations where increased collisions are occurring in hours of darkness.
- Pullout lanes at bus stops.
- Bike lanes on roads.
- Additional sidewalks.
- High visibility crosswalks and pedestrian crossing signals.
- Pedestrian-activated flashing beacons and/or pedestrian refuge islands for multi-lane, higher speed roads with heavy pedestrian demand.
- Improved weather preparation, response, and communication.
- Improved education and public information for motorists, bicyclists, and pedestrians.
- Local regulation for cell phone/texting use while driving.

Respondents rated the remaining six safety solutions in the low to moderate effectiveness range.





One of the incentives for developing the Transportation Needs Assessment Survey was to gain more knowledge about the community's feelings related to infrastructure. The San Angelo Metropolitan Planning Organization wanted to know which projects were priorities to residents of the community.

The TNAS offered respondents the opportunity to prioritize various long-term projects related to local transportation infrastructure. Fourteen projects were rated from "High" priority to "Not a Priority".

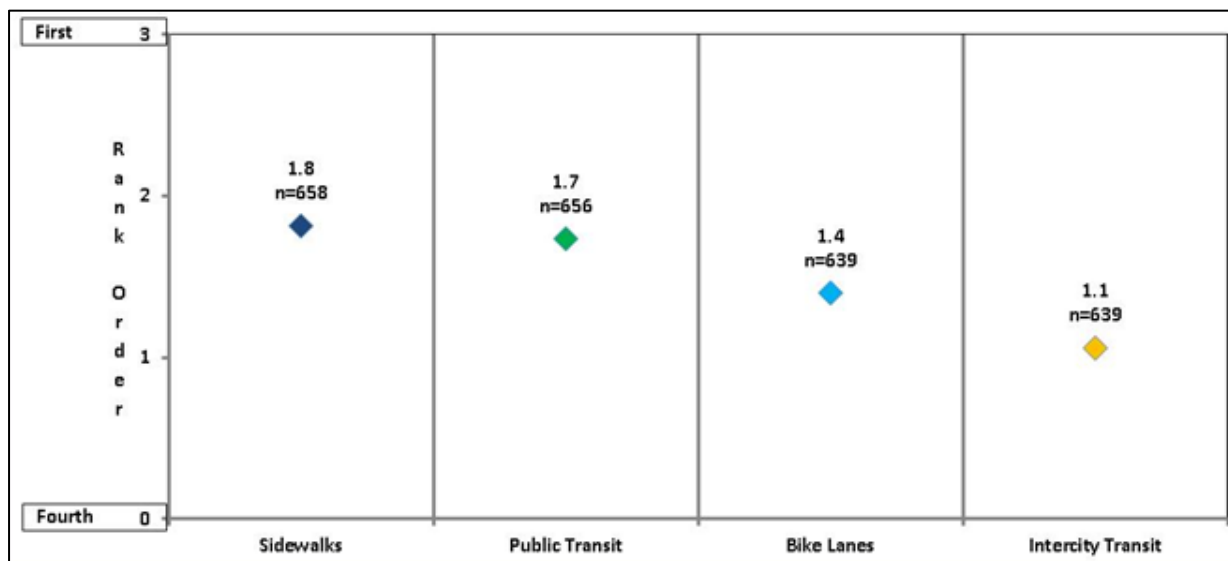
Six of the 14 long-term projects garnered scores of 2 or higher indicating that respondents assign them moderate to high priority. These include:

- Maintaining existing roads.
- Complete Streets projects - planning new streets or reconstruction efforts to accommodate safe access for multi-modal level of service (e.g. motorists, transit users, bicyclists, pedestrians, and people with disabilities).
- Smart Growth projects - coordinating land use and transportation planning to promote consistency between transportation improvements and planned growth and economic development.
- Adding more bike lanes.
- Adding more sidewalks.
- Adding shoulders or additional lanes to 2-lane roads and highways with high traffic.

Projects	High	Moderate	Low	Not a Priority	Weighted Rating	Total	Figure 9 Name
Maintaining existing roads	535	128	11	5	2.8	679	Road Maintenance
Percent	78.8	18.9	1.6	.7		100.0	
Building new roads	169	302	167	35	1.9	673	New Roads
Percent	25.1	44.9	24.8	5.2		100.0	
Providing non-stop (no traffic signals) road way access (i.e. Ports-to-Plains, Texas Trunk System)	161	253	174	70	1.8	658	Non-Stop Roadways
Percent	24.5	38.4	26.4	10.6		100.0	
Expanding the local public transit system	202	230	174	66	1.8	672	Expanding Public Transit
Percent	30.1	34.2	25.9	9.8		100.0	
Providing intercity regional transit services	141	212	226	82	1.6	661	Intercity Transit
Percent	21.3	32.1	34.2	12.4		100.0	
Complete Streets projects	335	230	83	24	2.3	672	Complete Streets
Percent	49.9	34.2	12.4	3.6		100.0	
Smart Growth projects	309	251	83	24	2.3	667	Smart Growth
Percent	46.3	37.6	12.4	3.6		100.0	
Adding more bike lanes	262	203	138	70	2.0	673	Bike Lanes
Percent	38.9	30.2	20.5	10.4		100.0	
Adding more sidewalks	336	177	107	47	2.2	667	Sidewalks
Percent	50.4	26.5	16.0	7.0		100.0	
Adding shoulders or additional lanes to 2-lane roads and highways with high traffic	386	188	72	23	2.4	669	Shoulders & Widening
Percent	57.7	28.1	10.8	3.4		100.0	
Rest stops/designated truck parking areas	172	221	207	67	1.7	667	Rest Stops
Percent	25.8	33.1	31.0	10.0		100.0	
Expanding airport services	254	148	189	74	1.9	665	Expanding Air
Percent	38.2	22.3	28.4	11.1		100.0	
Expanding railroad freight services	85	109	261	204	1.1	659	Expanding Rail Freight
Percent	12.9	16.5	39.6	31.0		100.0	
Developing railroad passenger services	158	198	178	128	1.6	662	Passenger Rail
Percent	23.9	29.9	26.9	19.3		100.0	

The MPO wanted to determine which types of projects were important to the community. In addition, the MPO requested feedback on rank ordering as it applied to four long-term developments projects. Each respondent ask to rank one of four projects as their first priority; one of the remaining three projects as second priority; one of the remaining two to third; leaving the last project to fourth priority. The four projects included in the process were:

- Adding more bike lanes.
- Adding more sidewalks.
- Providing better public transit.
- Providing intercity regional transit services.



It is significant that sidewalks and public transit come in first and second by this method, with additional bike lanes trailing in third and intercity transit last. However, it is also important to note that all four weighted rank order values fall in a narrow range between 1.1 and 1.8 on the 0 to 3 point scale. This indicates that none of the four projects is decisively the first priority of the respondents. The difference in respondent ranking of these projects is indeed narrow, as the range indicates.

METROPOLITAN TRANSPORTATION PLAN AMENDMENT PROCESS

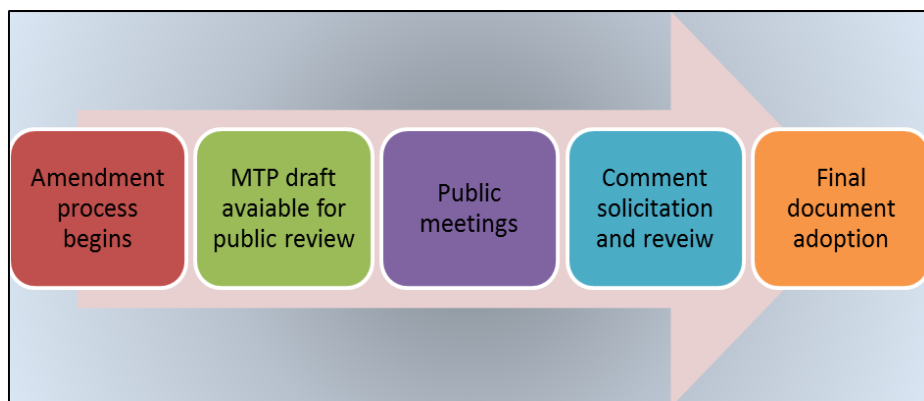
The Metropolitan Transportation Plan is a twenty-five year document, which is updated and adopted every five years. As you can imagine, a lot can happen and change during a five-year period. For that reason, amendments and revisions are necessary to stay up to date with a changing transportation system. The San Angelo Public Participation Plan lists two types of amendments – Major Amendment and Minor Amendment.

Generally, significant changes to the design concept, cost, scope of project, or addition/deletion of a project listing, project phase initiation dates requires a Major amendment, while minor changes in fund sources, description, lead agency, funding years or typographical errors may be processed via administrative amendments. Administrative amendments do not require any formal action or public comment periods.

During the Major amendment process, the MPO solicits input from the public. In order to provide the citizens with an opportunity to review the proposed amendments, a public review period and comment period is initiated. During this time, the MPO makes the amended document available in the office as well as online. The duration of public comment on the document review is dependent on whether the document is being updated and adopted or if a Major Amendment is occurring.

For an updated document, the review and comment period is 30 days before adoption by the MPO Policy Board. For a Major Amendment, a 15-day comment period is required. Comments received during the public comment or review periods are presented to the MPO Policy board and the other organizational components.

The graphic below illustrates the general flow of the amendment process to the Transportation Improvement Program and other MPO documents that require modification.





5

WHAT CONDITION IS OUR ROADWAY NETWORK IN?

INTRODUCTION

Roadways are the foundation for our transportation system. In San Angelo, roadways are probably valuable commodity. Roadways consist of major and minor arterials, collector streets, and neighborhood streets, this infrastructure is constantly used and the demand increases each day.

The development of the interstate system opened up intrastate commerce and as years passed further allowed for international trade. On a local level people traverse City streets and State-maintained roadways to access shopping, educational sites, recreational areas, going to and from their jobs, and visiting family and friends. A roadway network that is maintained and efficient is necessary to further these opportunities.

To understand the roadway system, a basic understanding of the following components is necessary: thoroughfare plan and functional classifications, roadway management network, land use, transportation safety issues, and travel demand modeling.

FUNCTIONAL CLASSIFICATION

Roads and streets are grouped into functional classes according to the type of service they are intended to provide in terms of traffic movement and access. A schematic illustration of a functionally classified roadway network as defined by the San Angelo Comprehensive Plan is shown on the following page.

Functional classification of transportation facilities are designed to describe the hierarchical arrangement and interaction between various roadways. Classification is based on each roadway's functional role in the overall network, including traffic movement and access. This differs somewhat from the Federal functional classification system shown in the existing Thoroughfare graphic. The Federal functional classification system uses four basic categories: principal arterial, minor arterial, collector, and local.

These are further broken down depending on the area type. Several factors may be considered when determining the appropriate functional classification for a given roadway, such as length, traffic volumes, cross-section, and land uses served. Funding for the Federal-aid highway system is still linked to functional classification; thus roadways be properly classified in order to qualify for the proper funding.

ROADWAY IDENTIFICATION

Highways, streets, and roads are grouped into functional classes according to the type of service they provide in regards to traffic movement and access. While the concept remains the same, these street classifications vary depending on federal, state, and local interpretation. The federal functional classification system uses fewer categories than those of a local government.

A functionally classified roadway system helps with transportation planning because it groups roadways by their purpose or function. Below are definitions of the basic street classifications. They also ensure that adjacent land uses and developments are compatible with existing and future transportation needs. The Metropolitan Transportation Plan is primarily focused on larger roadway systems and roads that affect the transportation network.

Principal Arterial

Principal Arterials are intended to carry longer-distance flows of traffic between important centers of activity. Usually thought of as the backbone of the traffic network, these streets are extremely important and are designed to offer the highest level of service. *Examples include Houston Harte Expressway, Bryant Boulevard, Sherwood Way, Knickerbocker Road, and Loop 306.*

Minor Arterial

This roadway classification is in the same class as the Principal Arterial; however, on a smaller scale. Minor Arterials are designed for trips at a lower level and they provide access to areas of the city not served by higher system roadways. *Examples of Minor Arterial roads are West Beauregard Avenue, South College Hills Boulevard, Glenna Street, and North Chadbourne Street.*

Major Collector and Minor Collector Roads

Major Collector and Minor Collector roads connect to Minor Arterial roads and collect traffic from local streets in residential neighborhoods. They provide circulation within the commercial areas, industrial areas and to residential neighborhoods. *Examples include Grape Creek Road, West 14th Street, Foster Road, and Sunset Drive.*

Local Roadways

Local roadways are designed to take traffic to larger capacity street by providing direct access with little or no traffic. Local streets typically support direct access to homes and tend to have slower speeds for movement through neighborhoods. *Examples of local roads are West Avenue L, West Highland Boulevard, West 14th Street and Fairview Road.*

In the fall 2013, the San Angelo Metropolitan Planning Organization updated the thoroughfare roadway classifications in our geographic information system database to match those of the state and local government.

THOROUGHFARE PLAN

Originally adopted in 1994, San Angelo's Thoroughfare Plan serves as a guide to determine future roadway and right-of-way requirements and how to move people, goods, and services efficiently. The Thoroughfare Plan identifies existing and proposed thoroughfare systems of freeways, arterials, collectors, and local streets. In addition, the plan provides guidance for thoroughfare system development, including planned widening and extension of roads, streets, and public highways.

Furthermore, the Thoroughfare plan indicates needed rights-of-way, general alignments, and typical sections for planned new roadways. While not always concrete, the proposed alignments and actual alignments can vary depending on future developments. The thoroughfare plan is useful with new subdivision developments, mainly when creating plats. It is used for right-of-way dedication and construction of major roadways. The thoroughfare plan looks at the transportation network on a larger scale and for this reason; it does not consider local streets or smaller roads.

The Thoroughfare Plan for San Angelo serves as a guide for moving people, goods, and services efficiently. It serves the following purposes:

- Identifies the existing and proposed thoroughfare system of freeways, arterials, collectors and local streets
- Serves as the City's general plan for guiding thoroughfare system development, including planned widening and extension of its roads, streets, and public highways

- Indicates needed rights-of-way, general alignments and typical sections for planned new roadways (*proposed alignments and actual alignments may vary depending on future development*)
- Considered in the platting of subdivisions, right-of-way dedication and construction of major roadways

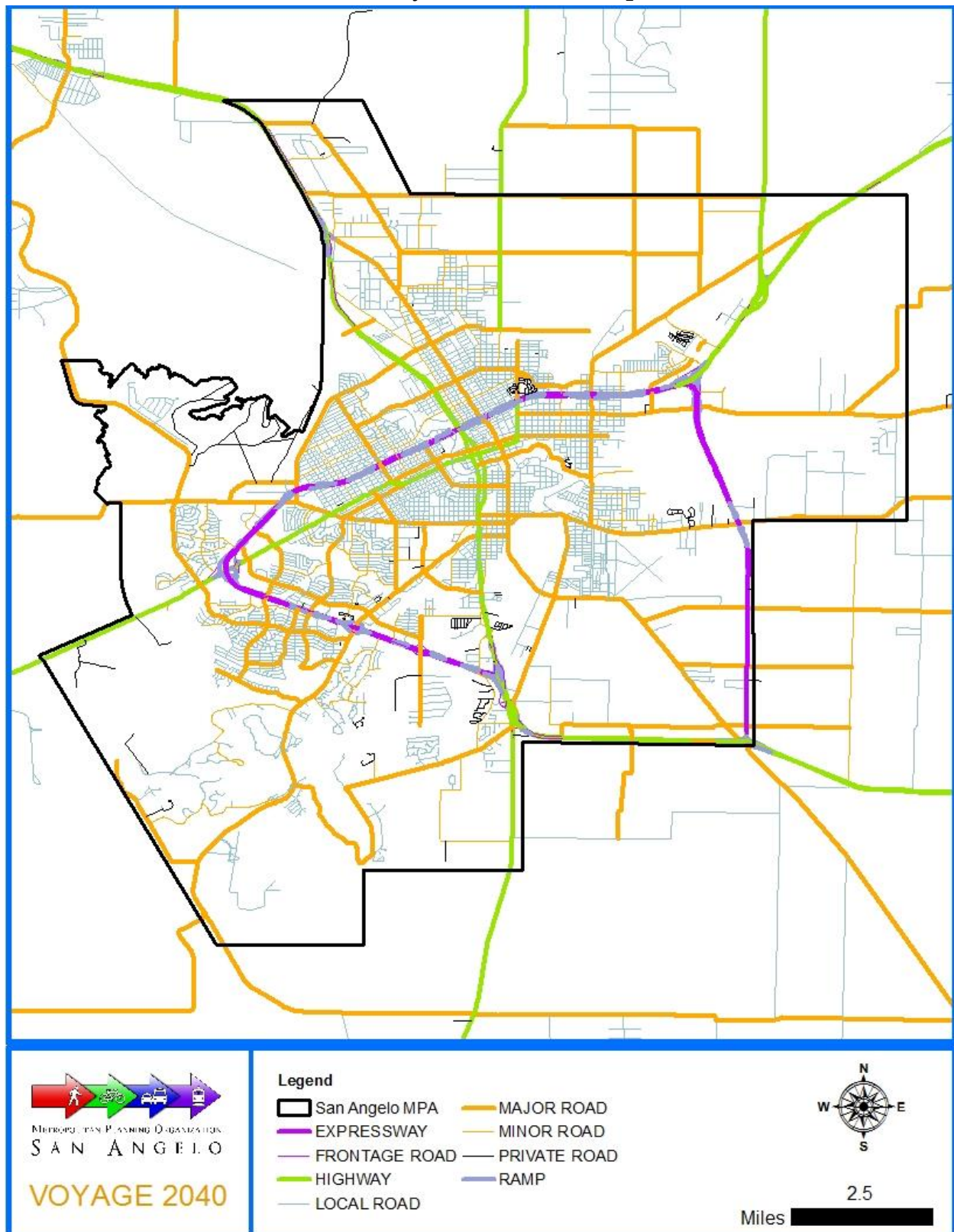
It also includes functional classifications for the transportation network. Periodic reviews of the Thoroughfare Plan incorporate changes in local conditions.

ROADWAY MANAGEMENT NETWORK

Roadway management network encompasses all programs designed to maintain or improve the street network of San Angelo. The system includes all streets in the San Angelo MPO planning area, from expressways to local streets. State and U.S. highways are included as they run through the planning area. City streets are up for sealcoat overlays once every eight years. Below is a listing of planned street reconstruction projects.



Roadway Classification map



2014-2019 CIP Future Street Reconstruction Projects
Infrastructure - Streets Engineering Reconstruction of Edmund Blvd. from Van Buren to Howard St. General Fund 858,200
Infrastructure - Streets Engineering Reconstruction of Jefferson St. from Junius St. to Houston Harte General Fund 3,433,117
Infrastructure - Streets Engineering Reconstruction of 19th St. from Concho River to Lillie St. General Fund 2,045,350
Infrastructure - Streets Engineering Reconstruction of 28th St. from 29th St. to Armstrong St. General Fund 822,017
Infrastructure - Streets Engineering Reconstruction of 37th St. from Bell St. to Pruitt Dr. General Fund 455,983
Infrastructure - Streets Engineering Reconstruction of 41st St. from Coliseum Dr. to Bowie St. General Fund 2,483,017
Infrastructure - Streets Engineering Reconstruction of 42nd St. from Coliseum Dr. to Armstrong St. General Fund 4,656,133
Infrastructure - Streets Engineering Reconstruction of Austin St. from Knickerbocker Rd. to Ave. N General Fund 1,577,800
Infrastructure - Streets Engineering Reconstruction of Avenue N from Bryant Blvd to Saint Marys General Fund 9,056,017
Infrastructure - Streets Engineering Reconstruction of Baze St. from Houston Harte to Culwell St. General Fund 307,683
Infrastructure - Streets Engineering Reconstruction of Beauregard Ave. from Taylor St. to Sherwood Way General Fund 942,875
Infrastructure - Streets Engineering Reconstruction of Bell St. from Railroad Tracks North to 37th St. General Fund 2,910,850
Infrastructure - Streets Engineering Reconstruction of Ben Ficklin Rd. from Becker Ln. to Country Club Rd. General Fund 1,889,250
Infrastructure - Streets Engineering Reconstruction of Ben Ficklin Rd. from Bryant Blvd. to Bryant Blvd. General Fund 1,130,533
Infrastructure - Streets Engineering Reconstruction of Bowie St. from 24th St. to 47th St. General Fund 4,950,233
Infrastructure - Streets Engineering Reconstruction of College Hills Blvd from Beauregard Ave to Sunset Blvd General Fund 11,740,467
Infrastructure - Streets Engineering Reconstruction of College Hills Blvd. from Loop 306 to Valley View General Fund 4,754,583
Infrastructure - Streets Engineering Reconstruction of Cox Ln. from Sunset Blvd. to East Cox Ln. General Fund 854,183
Infrastructure - Streets Engineering Reconstruction of Culwell St. from Poe St. to Buchanan St. General Fund 1,835,900
Infrastructure - Streets Engineering Reconstruction of East 14th St. from Chadbourne St. to Poe St. General Fund 5,021,417
Infrastructure - Streets Engineering Reconstruction of East 19th St. from Bryant Blvd. to Lille St. General Fund 1,514,883
Infrastructure - Streets Engineering Reconstruction of East 25th St. from Main St. to Poe St. General Fund 1,049,783
Infrastructure - Streets Engineering Reconstruction of Edmund Blvd. from Concho River to Bryant Blvd. General Fund 6,958,083
Infrastructure - Streets Engineering Reconstruction of Executive Dr. from Sunset Dr. to Knickerbocker Rd. General Fund 1,153,950
Infrastructure - Streets Engineering Reconstruction of Foster Rd. from Currier Ln. to Jackson St. General Fund 2,292,550
Infrastructure - Streets Engineering Reconstruction of Harris Ave. from Main St. to Bell St. General Fund 2,547,283
Infrastructure - Streets Engineering Reconstruction of Highland Ave. from Bryant Blvd. to Hill St. General Fund 665,467
Infrastructure - Streets Engineering Reconstruction of Howard St. from Pecos to Houston Harte Fwy. General Fund 876,000
Infrastructure - Streets Engineering Reconstruction of Hughes St. from Buchanan St. to Bell St. General Fund 1,583,483
Infrastructure - Streets Engineering Reconstruction of Huntington Ave. from Millbrook Dr. to Sunset Dr. General Fund 1,149,583
Infrastructure - Streets Engineering Reconstruction of Irving St. from Concho River to Washington St. General Fund 1,734,733
Infrastructure - Streets Engineering Reconstruction of Jackson St. from Avenue N to Knickerbocker Rd. General Fund 4,353,733
Infrastructure - Streets Engineering Reconstruction of Marx St. from 29th St. to 24th St. General Fund 1,437,750
Infrastructure - Streets Engineering Reconstruction of Mercedes St. from City Limit Line to Glenna Dr. General Fund 2,279,467
Infrastructure - Streets Engineering Reconstruction of Middle Concho Dr. from Red Bluff Ln. to the West General Fund 1,845,400
Infrastructure - Streets Engineering Reconstruction of Oakes St. from Harris Ave. to 14th St. General Fund 806,767
Infrastructure - Streets Engineering Reconstruction of Old Ballinger Hwy from North Bell St. to Pruitt Dr. General Fund 2,838,050
Infrastructure - Streets Engineering Reconstruction of Pecan St. from 7th St. to 14th St. General Fund 944,450
Infrastructure - Streets Engineering Reconstruction of Pecos St. from Concho River to Howard St. General Fund 3,003,117
Infrastructure - Streets Engineering Reconstruction of Red Bluff Rd. from Knickerbocker Rd. to Middle Concho Dr. General Fund 4,955,000
Infrastructure - Streets Engineering Reconstruction of Rio Concho Dr. from Magdalene St. to Roosevelt St. General Fund 2,329,550
Infrastructure - Streets Engineering Reconstruction of Riverside Golf Club Rd. from 29th St. to Bryant Blvd. General Fund 1,103,150
Infrastructure - Streets Engineering Reconstruction of Smith Blvd. from Pulliam St. to Houston Harte General Fund 1,748,900
Infrastructure - Streets Engineering Reconstruction of South Concho Dr. from Sierra Vista to Knickerbocker Rd. General Fund 4,847,017
Infrastructure - Streets Engineering Reconstruction of Southland Blvd. from Knickerbocker Rd. to Blue Ridge Tr. General Fund 1,478,983
Infrastructure - Streets Engineering Reconstruction of Sunset Dr. from Knickerbocker Rd. south to railroad tracks General Fund 1,163,650
Infrastructure - Streets Engineering Reconstruction of Taylor St. from Beauregard Ave. to Live Oak St. General Fund 791,650
Infrastructure - Streets Engineering Reconstruction of Blumentritt Rd. from FM 1223 General Fund 240,000
Infrastructure - Streets Engineering Rio Concho Drive Widening & Beautification General Fund 500,000

In addition, City Council along with the Operations Division has prioritized local streets for rehabilitation and maintenance work, which are funded through the City's General Revenue Fund. These areas were prioritized through public concerns, roadway condition and transportation priorities.

State maintained roads in San Angelo are displayed on the map to the right. The State currently has a maintenance agreement with the City. These roads are a good example of the coordination and cooperation that exist between the San Angelo MPO, the City of San Angelo, and the local TxDOT office. Signalization, maintenance, and improvements are a cooperative effort among these entities.

Land Use and Vision

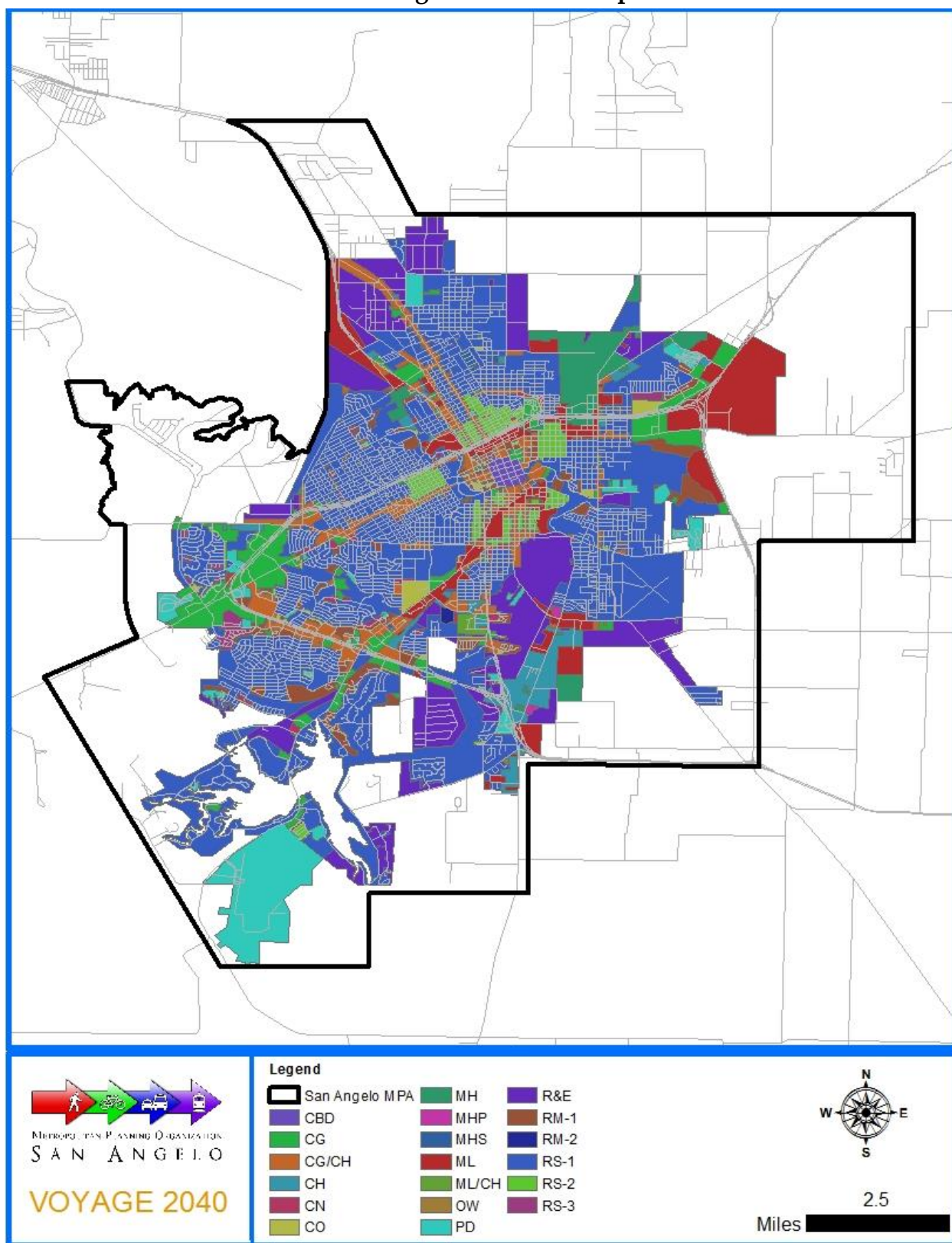
Land Use is an important element in the MPO's transportation system. It addresses the location, type, scale, and density of land uses throughout the City and its extra-territorial jurisdiction. It analyzes the current pattern of land use, pointing out issues and opportunities for transportation planning. The land use plan is intended to generally guide land use decisions. A "living document" may need to be updated or changed as land use conditions within San Angelo change.

Land use affects transportation access and circulation depending on those industries that come into areas adjacent to major thoroughfares and that have the possibility of generating a significant numbers of trips. Since the completion of our loop system (Houston Harte Expressway), San Angelo has seen major development in this area. Local streets have been expanded to connect to this new system and businesses are flourishing in this area. The vision map is a general guide to shape zoning and land use while also considering site-specific and area-specific issues.

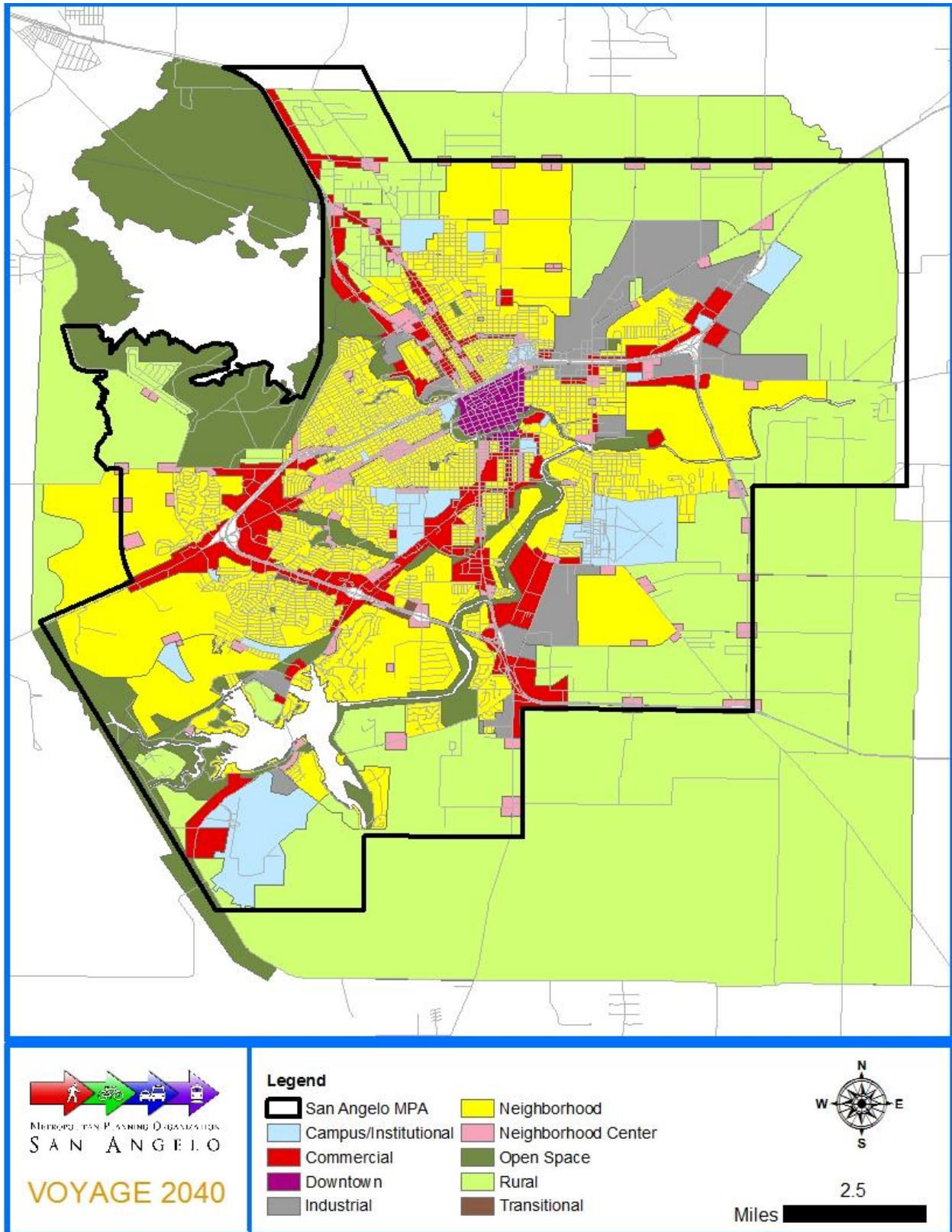
**"Start by doing what's necessary;
then do what's possible; and
suddenly you are doing the
impossible".**

Francis of Assisi

San Angelo Land Use Map



San Angelo Vision Plan Map



TRAVEL DEMAND MODELING

A major function of transportation planning is knowing and understanding the current amount of vehicles on the roadway. It is equally important to anticipate how many vehicles will be on the roads in the future. Cars, trucks, commercial vehicles put a tremendous demand on the roadway networks. Understanding where vehicles are going and how many is basis for travel modeling.

Typically, MPO's take the lead in travel forecasting, but are assisted by other governmental entities. For San Angelo, data and other various forms of information used for travel forecasting come from the Texas Department of Transportation and the City of San Angelo.

Travel demand forecasting produces several benefits for the urban area. It provides information for transportation decision makers, and helps determine how their policies and programs will affect the transportation system. In addition, it provides valuable information such as current and future traffic volumes, public transportation ridership levels, and how new developments will affect the transportation network.

To analyze the demands being placed on the transportation system and to understand if there is a need for more improvements, information such as traffic volumes, large scale transportation projects, new developments and changes to the existing transportation system must be collected. Other information such as population changes, industry statistics, employment figures, and households are also considered. All of this information is used as inputs in the travel model software, which produces future traffic volume projections on the roadways. The projections are used to determine where future deficiencies in the system are likely to occur, meaning more usage on certain roadways or congestion in certain areas.

To help with understanding where traffic is likely to increase, Transportation planners simulate current travel conditions, forecast future travel patterns, and anticipate conditions that are used for travel demand models. Models are essentially "decision-support tools" to assist transportation planners and policy-makers in analyzing the effectiveness and efficiency of various transportation alternatives in terms of mobility, accessibility, environmental and equity impacts.

The Metropolitan Planning Organization is in the process of updating the information used for the travel demand model. In the fall of 2013, TxDOT conducted traffic counts for San Angelo and other parts of the San Angelo District. In addition, TxDOT conducted travel surveys, household surveys, and workplace surveys. TxDOT is also in the process of updating the TransCAD software from version 4.0 To 6.0, which is used for travel demand modeling?

The MPO anticipates receiving the updated software and all of this data in spring 2015. With these updates, a new model will be completed and will be used for updating the Metropolitan Transportation Plan.

Travel Forecasting Process - Revised Virtual Link Method

This method was used in the development of the Texas Urban Mobility Plan (TUMP) and since we did not have an updated regional travel demand models, we have included this process in our MTP to show congestions levels. The following paragraphs are pulled from the TUMP.

Our area was analyzed using a process based on the Highway Performance Monitoring System (HPMS) database compiled by the Texas Department of Transportation and submitted to the Federal Highway Administration. HPMS and associated data include vehicle miles of travel, lane-miles, capacity, percent trucks and percent traffic in the peak hours.

Just as with the congestion estimates from the travel demand model, each link has each of these attributes. The problem with not having a travel demand model, however, is that future travel growth cannot be tied to specific road sections. The virtual link process treats all of the road links with similar characteristics together and analyzes them as a group.

All roads of the same functional class in the same population group have the same traffic growth rate and roads are added to the group to analyze future road network additions. Each group has a distribution of congestion levels based on current congestion ranges. These provide a more realistic variation of conditions – similar but not identical to the travel demand model distribution.

Estimates of future congestion levels are developed by increasing the vehicle-miles of travel according to the growth in population, jobs, and trips. Lane-mile increases are

obtained from projects in the MTP, characterized by area type and functional class. The range of travel and lane-miles in each congestion level in the area type and functional class combination are increased by the same proportion as the overall congestion level change. Congestion and the consequent roadway needs to address congestion area are estimated using the same tools as the planning model analysis.

Limitation of the Virtual Link Analysis Process

The virtual link analytical technique provides a good estimate of area wide congestion levels and roadway needs. At the area wide level of detail, the virtual link process has been calibrated using 10 regional travel demand models from Texas; similar results are obtained using both the virtual link and travel demand model approaches for most regions. Unfortunately, the virtual link process does not estimate the needs to alleviate congestion at locations such as intersections or short sections of freeway. This becomes an issue in the smaller Texas regions where congestion is not a widespread problem.

The Virtual Link method results will show the estimated needs as zero lane-miles. For these areas, additional analyses must be performed to examine the road network for the short congested sections and estimate costs to remedy those problems.

Calculation Steps

The Texas Congestion Index concept of the ratio of peak period travel time to free-flow travel time will be used to measure congestion effects. The Texas Congestion Index is designed to be used at a range of geographic levels. The Index can measure many types of modes and include the effects of all transportation improvements or land use changes.

The Texas Congestion Index calculation component of the metropolitan and urban mobility plans calculates vehicle-miles of travel, vehicle-hours of travel and congestion levels based on the volume-to-capacity ratio calculated for each roadway section.



A similar process can be used for groups of road sections using the data from the Highway Performance Monitoring System database as a substitute for planning model data.

Speed can be estimated using a modified version of the Speed Model that is used at the individual link level of detail. Other inputs and factors, such as capacity, free flow speeds, delay equation parameters for the Speed Model and hourly factors are used to calculate the components of the speed estimate.

The Speed Model has several required components. Exhibits 1, 2 and 3 contain the default factors that will be used if there are no better estimates available for a specific region. These factors are organized according to the Highway Performance Monitoring System database.

The number of lanes is calculated using the Highway Performance Monitoring System or other data and the hourly capacity for each roadway section. It is assumed that 50% of daily volume will be in each direction unless better data are available. Lanes and capacity are estimated using the equations below. The capacity values for each area type and functional class in Exhibit 1 are used.

Lanes = Lane-Miles divided by Centerline Miles

Capacity = Hourly Lane Capacity * Lanes * 50% volume in each direction

Note: Lanes = number of lanes

Lane-Miles = number of lanes times the number of miles for each road section

Centerline Miles = miles of roadway

Capacity = calculated hourly capacity (in vehicles per hour)

Hourly Lane Capacity = hourly capacity per lane from the speed model data.

The hourly vehicle-miles of travel and volume are calculated for the primary direction assuming that 60% of hourly volume in the peak period occurs in the peak direction.

Hourly VMT = Daily VMT * VMT Factor * Hourly Factor * 60% peak direction

Hourly Volume = Hourly VMT divided by Centerline Miles

Note: Hourly VMT = calculated hourly VMT for the primary direction for hour

Daily VMT = VMT for the roadway section

VMT Factor = used to adjust the VMT to the control total

Hourly Factor = hourly travel percentage

Hourly Volume = hourly volume for the roadway section for the primary direction

The program then calculates the volume-to-capacity ratio and directional delay (in minutes per mile) due to congestion for the primary direction. The percent of traffic volume for each hour of the peak period has been estimated for most metropolitan counties as part of either air quality or transportation planning functions. These values are calculated as follows:

V/C = Hourly Volume divided by Capacity

Delay = $\text{Min} [Ae^{B\{V/C - 1\}}, M]$

Note: V/C = calculated volume-to-capacity ratio for the road section

Delay = congestion delay (in minutes/mile) for the primary direction;

A & B = volume-delay equation coefficients; and

M = maximum minutes of delay per mile;

Once the delay has been calculated, the congested speed is then calculated for the primary direction using the following equation: $\text{CSPD} = 60 \text{ divided by } [(60 / \text{FSPD}) + \text{Delay}]$

Note: CSPD = congested speed for the group of roads being analyzed;

FSPD = free flow speed for the road area type from the speed model data.

The process above is for the primary direction. For the secondary direction, the same process is applied except that the hourly VMT is assumed 40 percent of the total section VMT. The basic formula for the Texas Congestion Index is:

Texas Congestion Index = $\frac{\text{Peak Period Travel Time}}{\text{Travel Time at Free-Flow Speeds}}$

The formula can also be written as:

Texas Congestion Index = $\frac{\text{Travel Time at Free-Flow Speeds} + \text{Delay}}{\text{Travel Time at Free-Flow Speeds}}$

Analyzing lane addition projects is relatively simple—adds lanes and recalculate. To

incorporate the effect of operational treatments (ramp metering, incident management, arterial street access management, or traffic signal coordination), demand management, or small-scale roadway improvements, the reduction in delay is estimated using the Texas Congestion Index spreadsheet and a revised set of performance measures are calculated.

The Texas Metropolitan Mobility Plan has developed regional mobility targets; targets could also be developed for the area type and functional class combinations. These might vary from region to region, and might vary from corridor to corridor within a region. Residents and travelers generally expect downtowns to be more congested than rural areas – this expectation could be extended to a target concept that seeks to identify a program that satisfies similar levels of expectations, rather than assuming that free-flow travel for all commuters is the goal for all urban roadways.

Texas Congestion Index for the San Angelo Area

The Texas Congestion Index is used to measure the effectiveness of measures identified by the MPO to reduce congestion within the San Angelo Metropolitan Area.

In 2000, the TCI was calculated at 1.03, which indicates that peak hour travel times were about the same as non-peak hour travel. According to this level of measure if no improvements to the Expressway and Principal Arterial network were made, then by 2030 the TCI value would still be 1.03. This shows that on Arterials and Freeways the 2030 TCI value is unaffected by improvements to the roadway system.

An explanation for this phenomenon is that significant portions of the San Angelo area network are neither arterials nor freeways.

Many collector streets function as the major means of travel for the San Angelo area. As a result, the local government must make most improvements to the network as part of their general sealcoating and future development guidelines. This will be a significant factor in the relief of congestion and when considering methods to offset the identified gap in funding.

Congestion

San Angelo MPO experiences isolated locations of congestion. These areas are being monitored and evaluated for improvements. The criteria for congestion rely on Level of Service (LOS) guidelines as shown on the next page. Level of Service determines congestion by comparing a roadway's maximum capacity to carry traffic safely with current and projected traffic volumes for that roadway.



The MPO monitors collision locations on a quarterly basis. The MPO then works with the City, TxDOT, and local businesses to improve those locations that rank at the top of the collision report. Using data from 2004-2008, the MPO created a collision location map which shows the areas in San Angelo with the top collisions on a yearly

basis. The majority of the accidents were a result of failed to yield right of way, followed too close, or failed to control speed. As evidenced on the following map, the site of the majority of the locations is along our high volume roadways.

UNIFIED TRANSPORTATION PROGRAM

The Metropolitan Transportation Plan is structured in a fiscally constrained manner in that the total anticipated cost of the identified projects do not exceed the amount estimated to become available to San Angelo MPO. That amount is derived primarily from Federal and State highway funds channeled to the San Angelo area through formula associated with the 12 funding categories established in TxDOT's Unified Transportation Program (UTP). The UTP is TxDOT's ten-year plan to guide transportation project development and construction.

2015 UNIFIED TRANSPORTATION PROGRAM

2015-2024
Transportation Planning & Programming
Division



A critical concept for understanding the distribution of funding to individual projects is that of funding categories. The Texas Administrative Code (TAC) specifies twelve funding categories for highway related projects:

Category 1 - Preventive Maintenance and Rehabilitation

Category 2 - Metropolitan and Urban Area Corridor Projects

Category 3 - Non-Traditionally Funded Projects

Category 4 - Statewide Connectivity Corridor Projects

Category 5 - Congestion Mitigation and Air Quality Improvement

Category 6 - Structures Replacement and Rehabilitation

Category 7 - Metropolitan Mobility and Rehabilitation

Category 8 - Safety

Category 9 - Transportation Enhancements

Category 10 - Supplemental Transportation Projects

Category 11 - District Discretionary

Category 12 - Strategic Priority

Since San Angelo is defined by legislation as an urban area (population between 50,000 and 200,000), two UTP categories (Cat. 5 and Cat. 7) geared specifically towards metropolitan areas are not available here. Of these programs, the local TxDOT District receives annual allocations in the following categories:

Category 1 - Preventive Maintenance and Rehabilitation

Category 11 - District Discretionary Program

As “bank balance” programs, the funds assigned to the San Angelo District through annual allocations are available for application on the over 3,200 miles of roadway in its’ 15 counties, including Tom Green and the San Angelo urban area. Roadway needs in the San Angelo urban area are monitored and prioritized by TxDOT’s San Angelo District and the San Angelo MPO.

For the San Angelo District, some of the factors that are typically weighed in the project prioritization process include:

- Pavement condition – measured and quantified by pavement distress scores and maintenance costs
- Accident histories
- Capacity analysis and congestion management
- Other operational considerations – signalization, pavement markings, access management, intersection efficiency, etc.
- Aesthetic considerations
- Public input

The majority of projects identified in the MPO area are funded through one of these three categories, with the exception of corridor mobility projects. Funding availability and project implementation are influenced by the needs across the San Angelo District and are ultimately TxDOT's responsibility to implement.

There are other opportunities to garner funding from the “project-specific” UTP categories that include Categories 4, 6, 8, 9 and 12. Projects that meet the eligibility requirements of these programs and are considered viable candidates for selection are nominated as appropriate. Each of these categories fund projects through a statewide ranking process; therefore, there is no guarantee that an MPO's project will be funded until it is formally adopted into the UTP. A detailed description of these funding categories can be found in the financial section of this document.

PORTS-TO-PLAINS HIGHWAY CORRIDOR

The Ports-to-Plains Trade Corridor covers more than 2,300 miles, spans from Laredo Texas to Alberta, Canada, includes U.S. States, one Canadian province, and into Mexico. The corridor is significant for its direct connection with the Mexico and Canadian border because of the potential to attract and serve both existing and future travel demands associated with North American Free Trade Agreement (NAFTA) trade.

The Ports-to-Plains route is an economic development resource that will promote economic development efforts along the route and provide materials, data, and other support for countless communities.

It coincides with the Texas Trunk System, following US 87 through San Angelo to US 277, where it continues southward to Del Rio, Eagle Pass, and Laredo. The Ports-to-Plains corridor is also significant for its potential to enhance economic development through tapping into the trade conducted along its length. Texas Trunk System development, coupled with the Ports-to-Plains initiative, highlights the need for a San Angelo relief route to fulfill the mobility objectives of both systems.

The San Angelo Metropolitan Planning Organization commissioned a preliminary alignment study to assess the feasibility of potential route locations for such a facility. The findings of this study quantify and tabulate the attributes of four general alternatives, culminating in the identification of one candidate as being most favorable based upon a variety of mobility, cost, environmental and public input measures. This project is the San Angelo Relief Route.

This route will also alleviate some of the congestion on U.S. 87 (Bryant Boulevard), a major urban arterial currently carrying as many as 39,000 vehicles per day. The route through San Angelo is anticipated to be 21.87 miles, contingent upon the eventual alignment determination to be conducted by TxDOT.

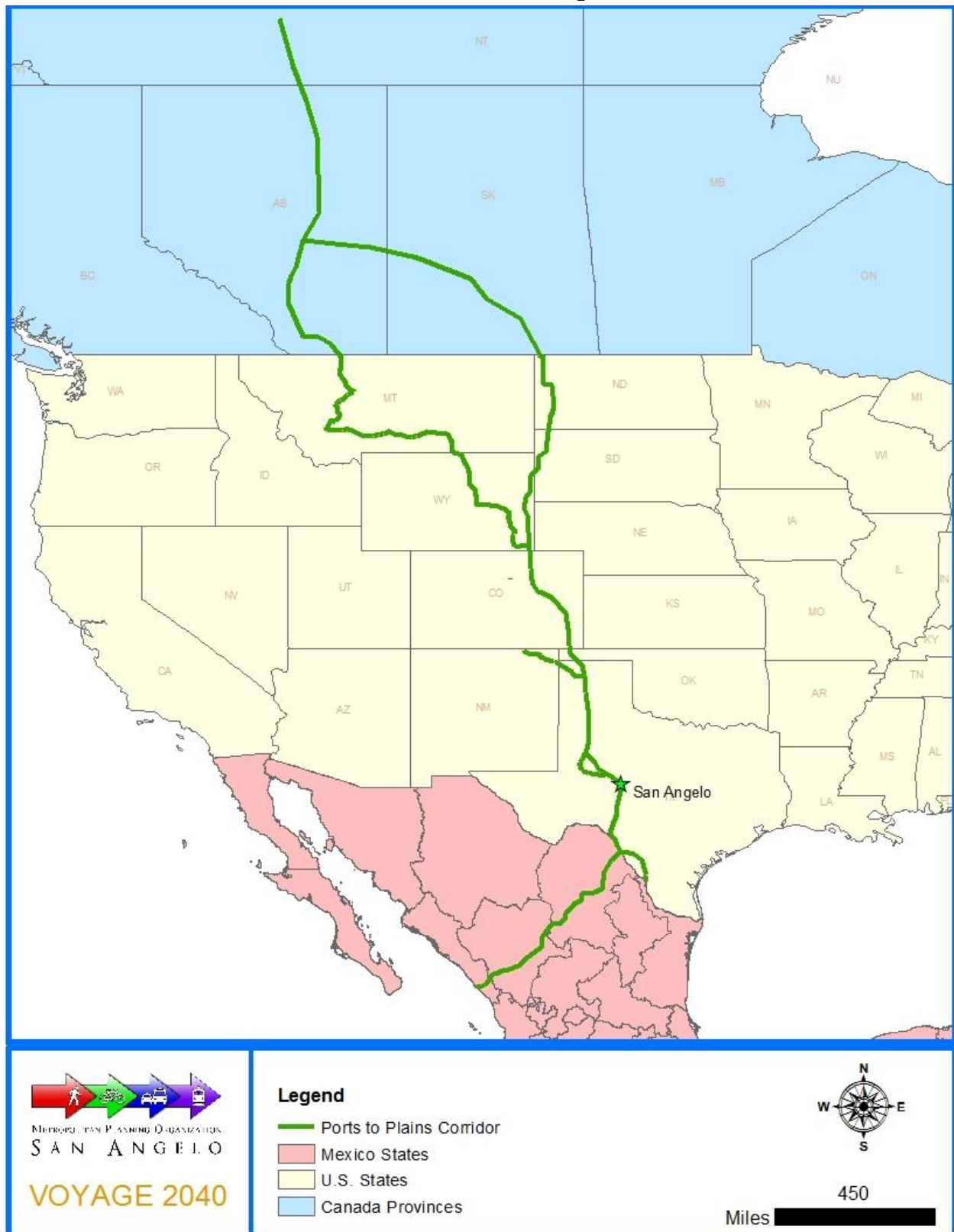
Intelligent Transportation Systems

Intelligent Transportation Systems are essentially the application and integration of advanced technologies, information processing, communications technologies and advanced control strategies for the efficient and effective operation of the transportation system. ITS are intended to improve safety and mobility on roadways, coordinate emergency management procedures, and provide motorists with local and sometimes regional traveler information.

Intelligent Transportation Systems can range from basic to advanced systems including message boards, electronic signs, and surveillance or speed cameras. No matter the type, these smart communication technologies have been successful in many communities providing information and alerts to motorists.

The San Angelo MPO adopted a Regional Intelligent Transportation Plan in November 2004 that included existing architectures and needs from transportation agencies. In the next few years, the MPO will re-assess the current ITS efforts and work with local and regional partners to identify priority areas and needs, along with researching funding possibilities and an implementation schedule.

Ports-to-Plains Map



SHORT RANGE AND LONG RANGE ROADWAY HIGHWAY GOALS

The goals of the MPO include identifying those projects that will meet the criteria such as safety and efficiency, economic development impact, system preservation, and regional development patterns. This could include the following goals/objectives:

- Analyze roadway classifications to make sure they are consistent with the type of service each facility is intended to provide.
- Prioritize both on-system and off-system roadways to establish a system for upgrading substandard streets, deficient bridges, and new roadways needed due to growth and development opportunities.
- Look at current land-use and transportation avenues in comparison to future growth to ensure needs are being met.
- Establish an access management policy to minimize potential traffic conflicts due to driveway locations, proximity to intersections, and street classifications.



The MPO will be looking at ways to implement each of these objectives with the roadway projects. In addition, the MPO will be looking at ways to add to the goals/objectives that will further fulfill the criteria established above.

6

HOW CAN YOU GET AROUND WITHOUT A MOTOR?

INTRODUCTION

Bicycle and pedestrian infrastructure is important to the community of San Angelo. They provide transportation modes for those that do not have access to a vehicle and, to those that choose not to drive. Most people think of non-motorized travel as a recreational activity. However, it is more than that. Travel modes such as bicycle and pedestrian play a much larger role than imagined. These two modes are very essential travel choices that stimulate economic development, influence land-use development, and provide access to shopping, community resources, schools, universities, and work.



The San Angelo Metropolitan Planning Organization recognizes the importance of walking and bicycling. These modes provide mobility options, encourage recreation, and promote healthy lifestyles. With the costs of owning and maintaining a vehicle, it is understandable why these modes are chosen.

Transforming San Angelo into a safe and non-motorized transportation community is important to the MPO. To do this, it will take removing barriers and obstacles, prioritizing and planning for more non-motorized infrastructure, and finding and securing dedicated funding to implement new projects. This chapter discusses the current condition of San Angelo's Bicycle and Pedestrian network and, provides a guide for the future of non-motorized transportation.

Bicycle and Pedestrian Plan Highlights

During the last decade, the San Angelo Metropolitan Planning Organization developed and updated a Bicycle and Pedestrian Plan. The plan was created to provide the community with a strategy for creating an environment where people could choose to bicycle or walk to their destinations. It was also intended to encourage more recreational opportunities for walking and bicycling which could have an impact on healthy and active lifestyles.

Bicycle and Pedestrian Goals

The plan also provides guidance for the development and implementation of an interconnected network of designated non-motorized system. The Bicycle and Pedestrian Plan was created to advance mobility, establish a common vision for non-motorized transportation and to define a set of objectives and desired outcomes. The goals of the B&P plan are:

1. Improve bicycle access, mobility, and safety for transportation, health, and recreational uses.
2. Improve pedestrian access, mobility, and safety for transportation health and recreational uses.
3. Enhance San Angelo for tourism, economic development and as a “healthy” place to live by improving upon and promoting bicycle and pedestrian activities.

BICYCLE AND PEDESTRIAN OBJECTIVES

To achieve the goals of the Bicycle and Pedestrian Plan, objectives were established. These objectives were collectively decided and were intended to help with accomplishing each goal. The objectives for each goal are:

Goal 1

Improve bicycle access, mobility, and safety for both transportation and recreational uses:

- 1.1 Create and adopt bicycle master plan that integrates and institutionalizes bicycling as part of the transportation system.
- 1.2 Create a bicycle recreation network that also serves the bicycle transportation network.
- 1.3 Identify key bike routes and assign priority according to ease of implementation, visibility and potential to serve as a “catalyst” to achieve other objectives.
- 1.4 Provide continuity between these bike routes and connections to key attractors.
- 1.5 Establish and institutionalize collaboration between the City of San Angelo and Tom Green County, the MPO and TxDOT to optimize opportunities to implement bicycle facilities.

- 1.6 Encourage bicycle use through City-and community-sponsored education and promotion programs.
- 1.7 Educate the motoring public about traffic laws pertaining to sharing the road with bicyclist, and safe and courteous driving responding to bicyclists traveling along the roadway.
- 1.8 Research and identify all potential sources of funding for implementing bicycle facilities and programs.
- 1.9 Codify bicycle infrastructure requirements in all private and public development and redevelopment processes.
- 1.10 Strategically and systematically develop the network of on-street and off-street bicycling facilities and support programs.

Goal 2

Improve pedestrian access, mobility, and safety for transportation, health and recreational uses:

- 2.1 Create and adopt pedestrian master plan that integrates and institutionalizes walking as part of the transportation system.
- 2.2 Identify key “pedestrian districts” and inventory sidewalk / trail needs. Examples of potential pedestrian districts include:
 - Central Business District
 - Concho River Trail corridor
 - Red Arroyo Trail corridor
 - Museums, visitor’s center, destination parks
 - Senior Citizens and retirement facilities
 - Disabled citizen’s housing areas if clustered
 - Areas of the city with high transit use
 - Goodfellow Air Force Base
 - Government facilities per the Americans with Disabilities Act
- 2.3 Create intra-and inter-neighborhood connections to key attractors such as parks, retail and transit stops.
- 2.4 Develop safe routes to school plans for each school service area.
- 2.5 Identify and prioritize the most important locations for building sidewalks and improving pedestrian safety.
- 2.6 Develop designs and programs to utilize the Red Arroyo, Concho River, utility easements, creeks, etc. for developing an “interesting” trail network for recreation and exercise walking.

- 2.7 Prepare an inventory of needs and designs to retrofit existing sidewalks with curb ramps and other ADA-required improvements to comply with pending federal ADA rules pertaining to the accessibility of public right-of-way.
- 2.8 Create long-term sidewalk implementation plan (for both new road construction and alterations to existing roadway corridors).
- 2.9 Codify sidewalk requirements in all private and public redevelopment processes.
- 2.10 Educate the motoring public about traffic laws pertaining to pedestrians and safe and courteous driving vis-à-vis pedestrians.
- 2.11 Enforce the traffic laws regarding yielding to pedestrians at crosswalks, slowing through school zones and other critical interfaces with pedestrians.
- 2.12 Research and identify all potential sources of funding for implementing pedestrian facilities and programs.
- 2.13 Strategically and systematically develop the network of sidewalk and trail facilities and support programs.

Goal 3

Enhance San Angelo for tourism, economic development and as a “healthy” place to live by improving upon and promoting bicycle and pedestrian activities:

- 3.1 Create and/or update existing maps of trails, walking routes.
- 3.2 Develop comprehensive wayfinding schemes and signs for the network of hike and bike trails and selected pedestrian districts.
- 3.3 Create a promotion / communication plan within the bicycle and pedestrian master plans.
- 3.4 Educate the public about the connection between bicycling and/or walking and health.
- 3.5 Promote bicycling and walking as viable transportation modes to raise the respect for walkers and bicyclists among the public.
- 3.6 Address the needs of all of San Angelo’s demographic groups in prioritizing projects and programs for bike / ped improvements, e.g., income, age, ethnicity, Goodfellow residents, ASU students, and other socioeconomic groups.

Each of these related objectives is associated with the development of the Bicycle and Pedestrian Plan. These objectives are concise statements providing guidance for achieving the goal of the bicycle and pedestrian plan.



BICYCLE AND PEDESTRIAN FOCUS AREAS

In addition to the goals and objectives established in the plan, there were targeted Focus Area Obstacles that were identified. The targeted focus area obstacles are:

Accessibility

Providing access to multiple areas of the city for all citizens is an important consideration in development of transportation facilities. Access should be provided at the neighborhood area and regional levels to accommodate access for cycling and walking to major employment centers and activity centers; recreational facilities; community facilities such as schools, libraries, community centers, and transit facilities; and other major destinations. Planning for pedestrian access should also incorporate the needs of mobility-impaired persons, including blind, deaf, and wheelchair-bound individuals. The following needed work areas specify the intent of providing access through the development and implementation of the bicycle and pedestrian plan.

Safety

Safety considerations must be an integral part of the development of a bicycle and pedestrian plan. The provision of safe and well-maintained facilities for cyclists and pedestrians is of prime importance. Safety literature and safety programs need to be provided to cyclists, motorists, and pedestrians.

Design Considerations

Proper design of bikeway and walkway facilities will encourage and facilitate bicycling and pedestrian activity. Use of uniform development standards and coordination of existing programs and facilities are critical for successful implementation of the bicycle and pedestrian plan.

Interagency Coordination and Policies

There are numerous governmental jurisdictions and public services entities that have control of public rights-of-way, which may potentially be used to provide bicycle and pedestrian facilities. It is important to coordinate with these agencies and organizations and to understand their internal policy framework and the legislative mandates that they must operate within. Public entities as well as organizations in the private sector can and should become partners in the development and implementation of the bikeway and walkway system.

Education - Education of the citizenry and public agency staff regarding the bicycle and pedestrian plan is important for several reasons. Cyclists must be provided information and guidance concerning proper and safe use of the bikeway system. Pedestrians must know how to properly use and share sidewalks and trails, and should understand the importance of visibility in their efforts to cross roadways.

Motorists must understand and respect the presence of cyclists when traveling along roadways on or off the designated bikeway system. Public agencies must make informed decisions to include consideration of cyclists and pedestrians in transportation and access planning. Developing and disseminating information is a key component to a successful education and safety program.

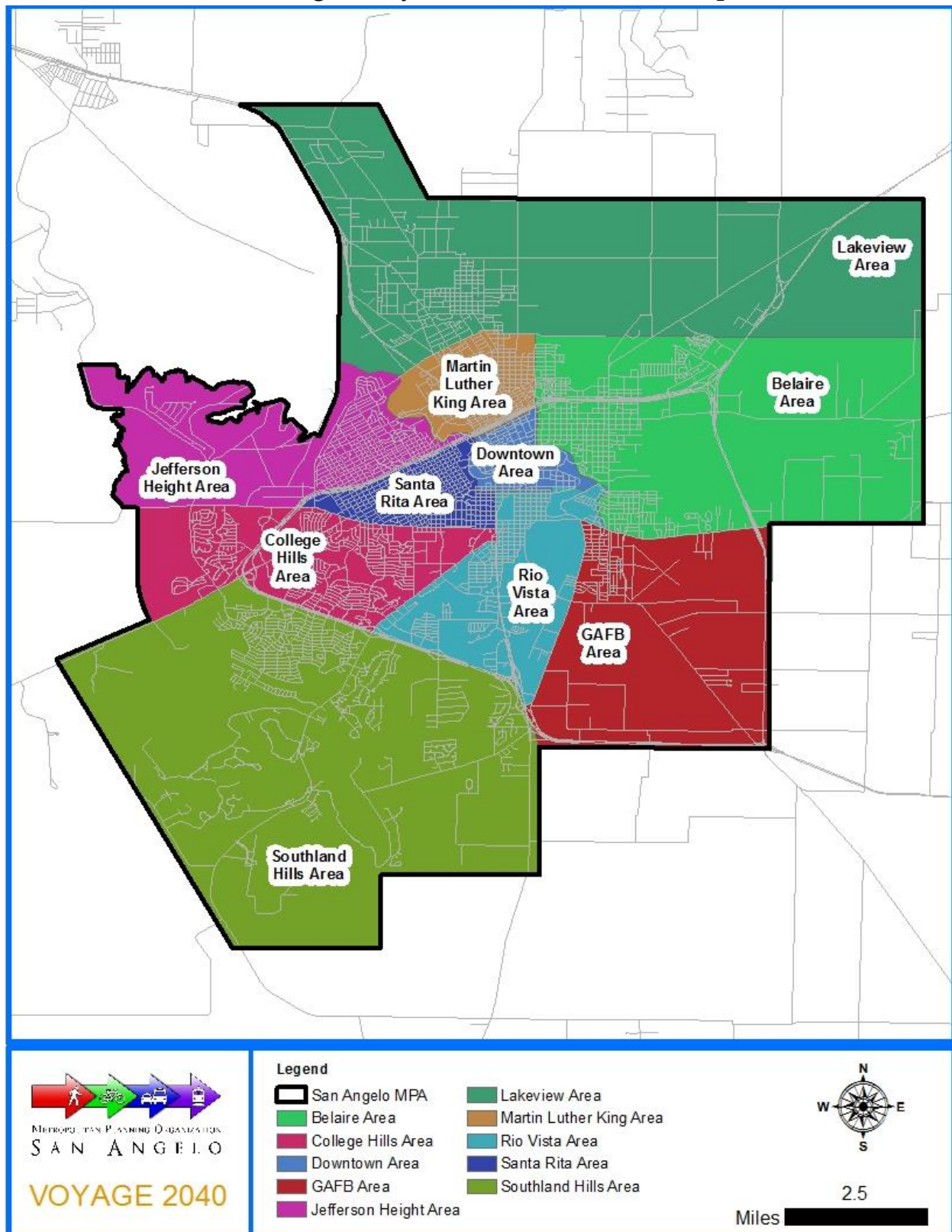
Funding

The ability to fund the implementation of the Plan elements is often the largest obstacle towards creation of a bicycle and pedestrian community. The collective will to plan, encourage, and uphold the precepts of the B&P plan will determine the success of the implementation of the long-range vision. One final component established by the Bicycle and Pedestrian plan was the identification and development of districts. To give focus to the extensive effort of providing sidewalks in the walkable areas of San Angelo, the identification of specific neighborhood areas were formulated.

The B&P Plan Districts encompass most of San Angelo's city limits and are broken down to help with geographic identification, development need, and funding possibilities. The following ten pedestrian districts have been identified as follows:

- Martin Luther King District
- Santa Rita District
- Rio Vista District
- Goodfellow District
- College Hills District
- Lakeview District
- Belaire District
- Jefferson Heights District
- Downtown District
- Southland Hills District
- College Hills District
- Lakeview District
- Belaire District
- Jefferson Heights District
- Southland Hills District
- Downtown District

San Angelo Bicycle-Pedestrian Districts Map



BICYCLE AND PEDESTRIAN PROJECTS

To date, the Bicycle and Pedestrian Plan has been used with the development and implementation of many of San Angelo's non-motorized projects, which were funded using grants such as Safe Routes to School, Transportation Enhancement, and New Freedom. A description of each project is listed below.

Lone Wolf Bridge Project

With funding in the amount of approximately \$1.2 million provided through the American Recover and Reinvestment Act, the Lone Wolf Bridge damaged by vehicular collision, was converted to a bicycle and pedestrian bridge. Improvements included new concrete spans, pedestrian railings, beam repairs, column stabilization, and replacing asphalt.

Northwestern Safe Routes to School Project

In 2007, funding from Safe Routes to School grant provided funds for pedestrian improvements around five schools located in the western part of San Angelo. These schools included Fannin Elementary School, Alta Loma Elementary School, Austin Elementary School, McGill Elementary School, and Lee Middle School. With almost \$800,000 in funds awarded under the program improvements such as bike racks, sidewalks, crosswalks, and lighting were installed around each school.

This project provided infrastructure, which improved safety to and from the schools. The Northwestern SRTS project not only enhanced accesses for students but also enhanced access to neighborhoods around and near each school.

San Angelo Bicycle and Pedestrian Routes

Eastern Safe Routes to School Project

The Safe Routes to School grant in 2009 provided almost \$500,000 for pedestrian improvements for five schools, which included Reagan Elementary, San Jacinto Elementary, Belaire Elementary, Fort Concho Elementary, and Glenmore Elementary. These schools benefitted from infrastructure improvements such as sidewalks, crosswalks, and signals. These improvements provided safer places for children to cross the street and helped to reduce the amount of traffic congestion around each school.

Chadbourne Street Pedestrian Improvement Project

The Chadbourne Street Pedestrian Improvement Project is intended to provide pedestrian streetscape improvements such as ADA ramps, sidewalks, crosswalks, and lighting along Chadbourne Street from the downtown area north to East 30th Street. Located in and near San Angelo's Central Business District, the Chadbourne Street Pedestrian Improvement Project was developed for several purposes including enhancing pedestrian access, improving safety for motorist and non-motorists and most important providing the community with access to the Concho Valley Transit Plaza. Planned in multiple phases and implemented with three funding awards totaling more than \$1.5 million, New Freedom funds have been used to provide pedestrian improvements along North and South Chadbourne Street.

Phase 1

Completed in 2011, Phase 1 of this \$692,000 project is along South Chadbourne and extends from East 5th Street to East Concho Avenue. This portion of the project has provided greater connectivity to the Concho Valley Transit District Multimodal terminal and encourages pedestrians to use the sidewalks and crosswalks in the Central Business District.

Phase 2

This phase of the project, funded under the 2010 New Freedom grant, extends along North Chadbourne from East 7th Street to East 12th Street. The project is cost is approximately \$343,000 and this phase is intended to provide connectivity from the CVTD terminal to areas of North Chadbourne Street.

Phase 3

The third phase of the project further improves on the other two phases, continues along North Chadbourne, and spans six blocks from East 12th Street to East 18th Street. Infrastructure improvements planned with this phase of the project include sidewalks, curbs, ADA rams, crosswalks, and pedestrian lighting. Costs associated with this phase are nearly \$300,000.

Future projects are planned north of the transit terminal. The subsequent phases will continue to provide accessibility and mobility for public transportation users. Installation of more pedestrian infrastructure will improve the quality of life and provide safer access for non-motorized users. The planned installations of bicycle lanes, these projects help relieve congestion and encourage a healthier lifestyle.



Red Arroyo Shared Use Pathway

Located along the commonly known Red Arroyo River, the RSUP a planned multi-phase project that provides bicycle and pedestrian infrastructure throughout San Angelo. This project provides a prime opportunity to expand the transportation system and encourage alternate modes of travel.

Phase 1

The first phase of the Red Arroyo Shared Use Pathway, awarded under the Texas Transportation Enhancement grant, extends from Sherwood Way to Knickerbocker Road with connections to parks, neighborhoods and other desired locations. This phase of the project is more than 4 miles in length and is fourteen feet wide. Improvements include a multiuse pathway, drinking fountains, and benches. Supplemental resources to complete this project include funds from San Angelo Economic Development, City of San Angelo stormwater and private fundraising. This project is scheduled for completion in mid-2016.

Bicycle and Pedestrian Improvement Project

The Bicycle and Pedestrian Improvement Project is a non-motorized proposal intended to provide more amenities to existing bicycle and pedestrian infrastructure. Planned in phases, this project will provide a number of benefits such as bike lanes, sidewalks, and signage throughout San Angelo. The improvements will provide a safer environment for those choosing not to use a vehicle.

Phase 1

Awarded in 2013 under the Texas Transportation Enhancement grant for more than one million dollars, the Bicycle and Pedestrian Improvement project is intended to add 22 blocks (both sides of the street) in and near the central part of San Angelo of bicycle and pedestrian improvements around Angelo State University, the Central Business District and along Martin Luther King Boulevard.

19th Street Sidewalk Improvement Project

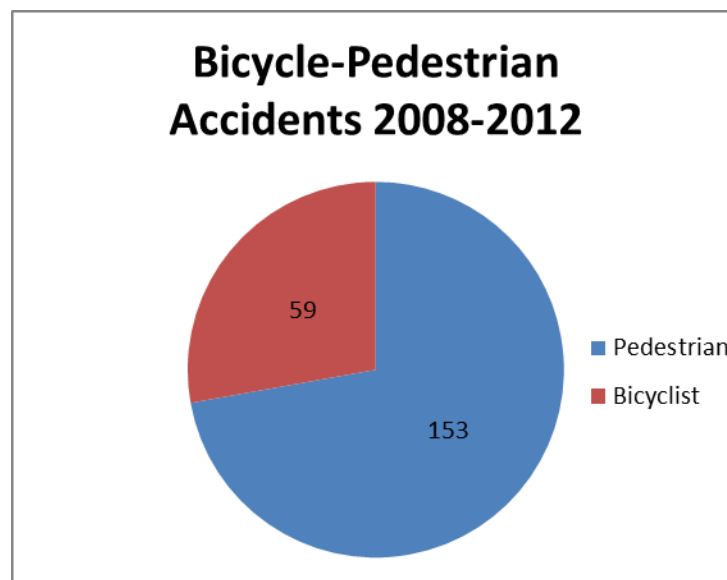
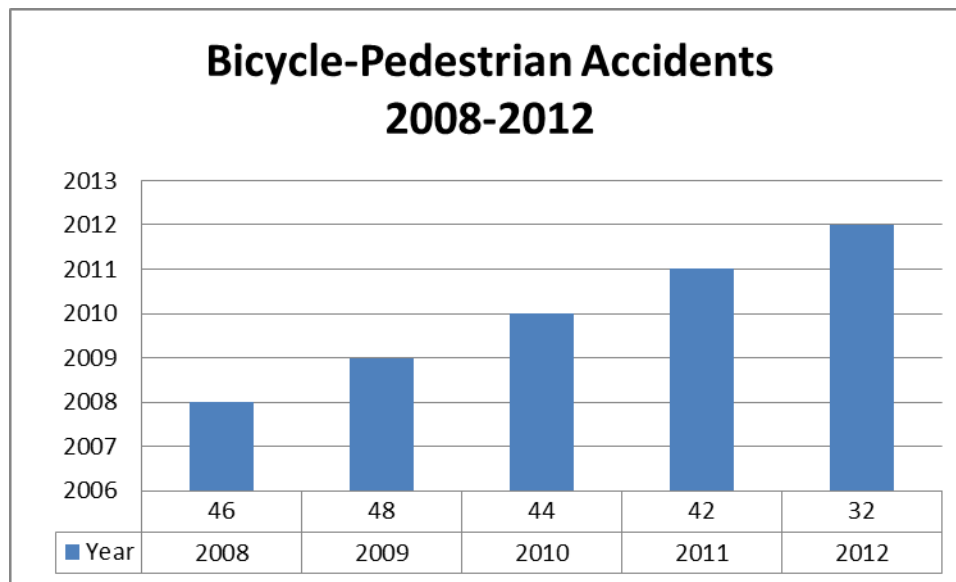
Funded by the City of San Angelo for an estimated cost of \$132,000, this project consists of building a continuous 5' sidewalk from the intersection of North Bryant Boulevard (US 87) to Burlington Northern Santa Fe Corporation (BNSF) rail line tracks. This project includes in the installation of ramps, pavement markings, alteration of residential driveways and fences. Work is scheduled to begin in 2015.

"Riding a bicycle is about getting back to the basics. It's good for the waistline and it's good for the wallet, is what I'm saying".

Phil Keoghan

BICYCLE AND PEDESTRIAN SAFETY

For the past thirteen years, the San Angelo Metropolitan Planning Organization has been studying and analyzing non-motorized accidents. Since 2008, the MPO has noticed an increase in the number of bicycle and pedestrian accidents. However, in 2012 there was a slight decrease. Approximately 212 bicycle and pedestrian related casualties have taken place in San Angelo. Severities for the accidents have ranged from deaths, incapacitating injuries, some not injured, and some unknown.



BICYCLE AND PEDESTRIAN SURVEY SUMMARY

In 2013, the San Angelo Metropolitan Planning Organization contracted with Community Development Initiatives at Angelo State University to conduct a survey of Pedestrian and Bicycle Project Priorities. The survey used existing planning documents to identify proposed bicycle pedestrian infrastructure projects and previously gathered public feedback related to those documents. The procedure garnered a sample of 679 respondents representing all geographical areas of San Angelo. The information provided below provides highlights of the survey. The complete final survey report is available at the MPO offices.

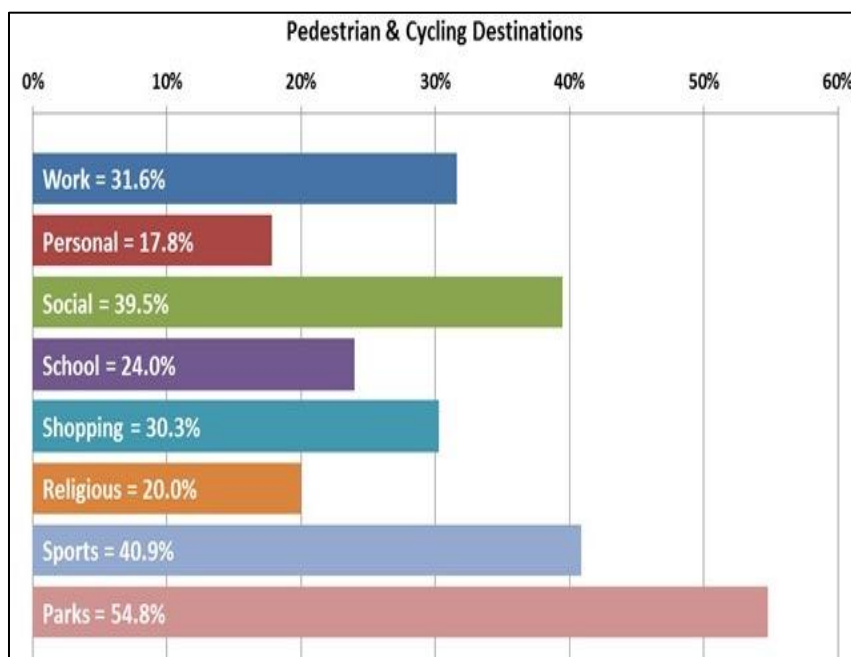
The purpose was to gather key data addressing the following five areas:

1. Bicycle and pedestrian infrastructure user patterns.
2. Public views on bicycle and pedestrian project priorities.
3. Variations and differences by neighborhoods or demographic groups within the city.
4. Public views of City performance on bicycle and pedestrian infrastructure.
5. Public recommendations pertaining to bicycle and pedestrian infrastructure.

A secure online version of the Survey was launched on April 4, 2013 and operated continuously through June 2, 2013. The Spanish version was launched online on April 20, 2013 and operated through June 2, 2013. In addition, paper versions of the survey were available at commonly public outlets such as libraries, government offices, and non-profit organizations.

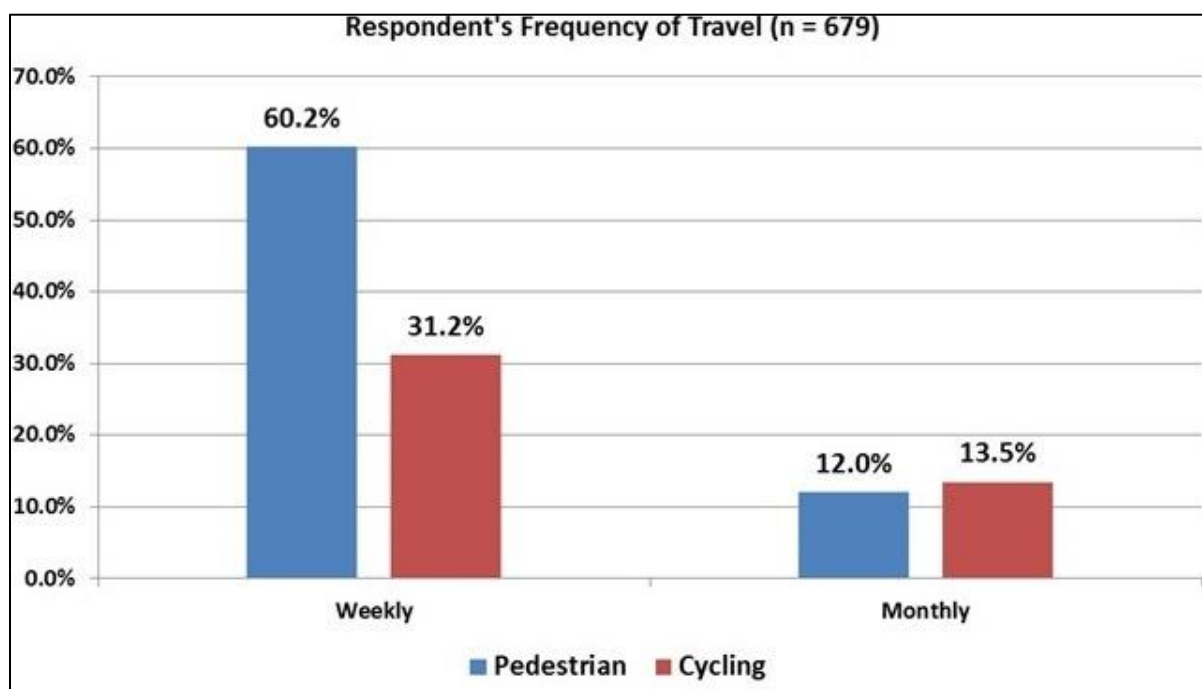
The San Angelo Standard Times and KLST News provided publicity and information for connecting to the Survey. Publicity by both media stressed the importance of participation in the Survey as a means of conveying public views on infrastructure project priorities to City decision-makers. It also stressed the importance of obtaining a balanced response from all social groups and geographical areas of the city.

To determine the most common purposes for bicycle and pedestrian activities, the survey asked respondents if members of their households ever walk, run, or ride bicycles to various types of destinations. The most popular destinations for cycling and pedestrian activities were parks, museums and other community centers.

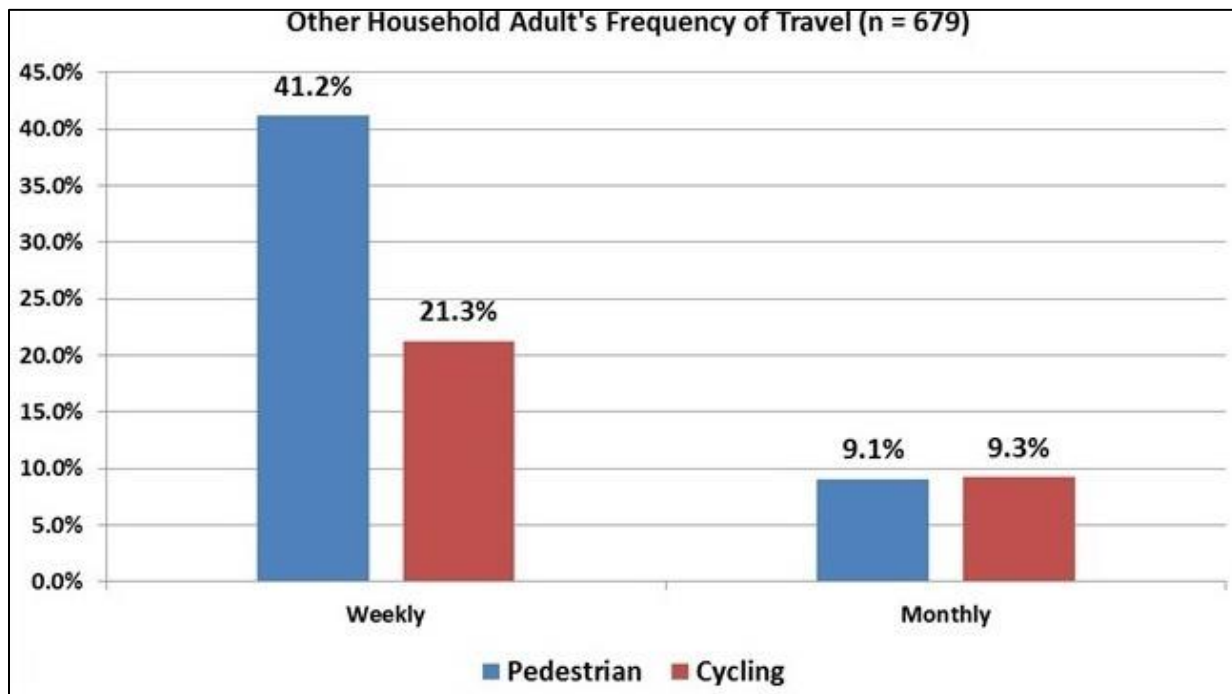


More than 30 percent of respondents identified four other destinations where household members travel by foot or cycle. These include organized sports or recreational activities and events (40.9%), social functions or entertainment activities (39.5%), work (31.6%), and shopping or running errands (30.3%). Using pedestrian or cycle transportation for medical or other personal appointments was the least cited (17.8%) type of destination by respondents.

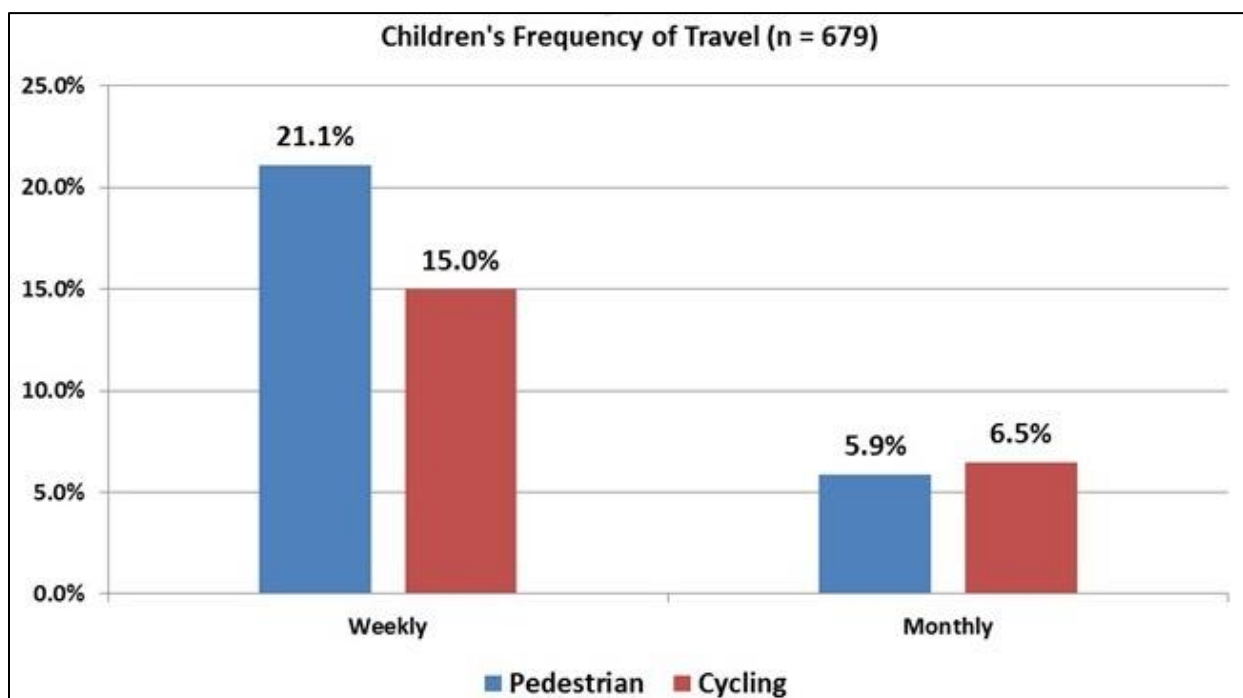
To gather information on how frequently citizens used bicycle and pedestrian modes, the survey asked respondents about the regularity of using pedestrian or cycling for travel by members of their households. Sixty percent of the 679 Survey respondents reported traveling by foot (walking or running) to a destination at least once per week. Another 12 percent used pedestrian means of travel at least once per month.



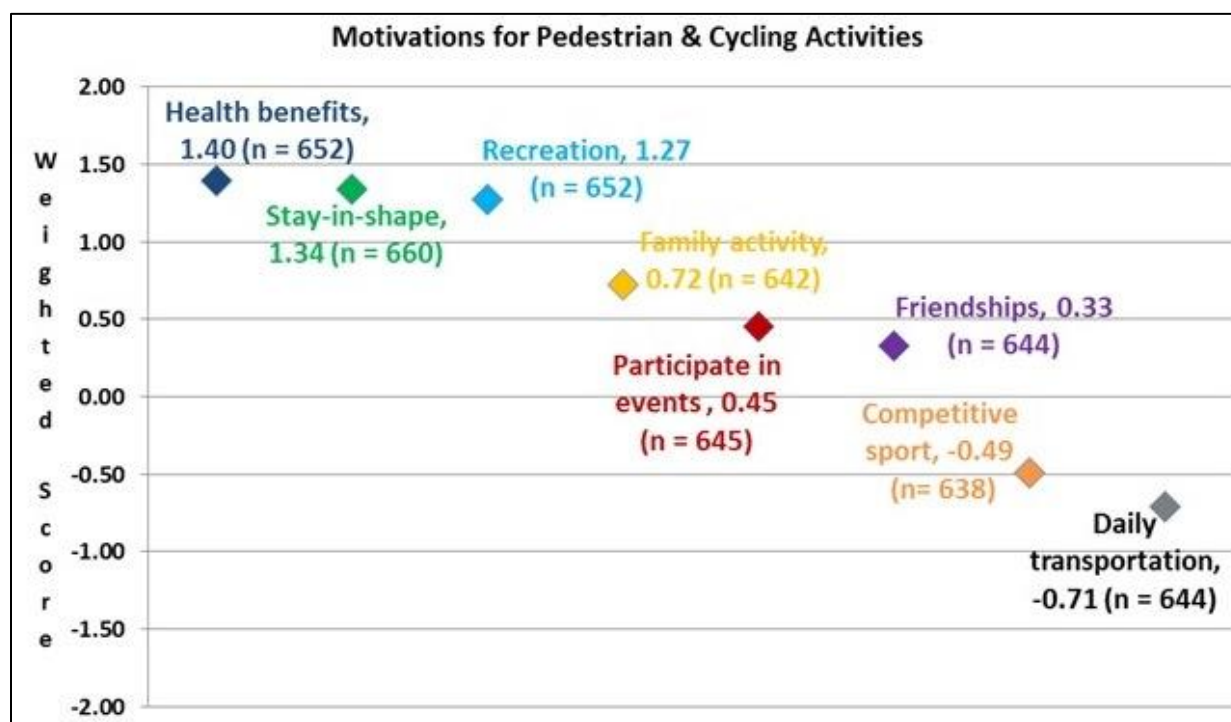
To understand the frequency of non-motorized travel behavior between adults and children, the survey polled respondents on how frequently they walk or bike. Respondents indicated that 41.2 percent of households have other adult members who travel at least weekly to destinations by foot.



Respondents reported that children in the household use pedestrian means of travel on a weekly basis in 21.1 percent of households, and they travel weekly via bicycle in 15 percent of households.



To understand the motivations behind why residents use non-motorized transportation, the survey asked respondents to rate their motivations. The results revealed that respondents did not universally express strong support or opposition for motivation. Motivations such as health, recreation and visiting friends or family ranked higher and unfortunately, transportation was not a favored motivation.



Conclusion

The MPO has been working with transportation stakeholders to develop preventative measures such as education, campaigns and activities designed to make bicycling and walking safer citywide. Due to a shortage of funding for bicycle and pedestrian infrastructure, it will take time to install new non-motorized infrastructure throughout San Angelo.

The MPO will continue to work with the Concho Valley Transit District and the City of San Angelo to make bicycling and walking a priority like other modes of transportation. Feedback provided by the Bicycle and Pedestrian Project Priorities Survey will be used for future non-motorized transportation planning initiatives.

7

WHY AREN'T YOU USING PUBLIC TRANSPORTATION?

CONCHO VALLEY TRANSIT DISTRICT

The Concho Valley Transit District provides public transportation within San Angelo and the Tom Green County region. CVTD transportation service covers over 80 percent of the city and includes 12 counties. Other public transportation providers include inter-city buses that run to and from San Angelo; taxi companies that provide local service; and several other non-profit/public agencies that provide transportation for elderly or disabled passengers.

History of Transit

San Angelo's public transportation dates back to 1905, when local land developers petitioned the City Commission to create a rail system, which would link the city proper with a new subdivision three miles to the north. The first trolleys ran on September 7, 1908, and the San Angelo Street Railroad Company first offered service in 1909. Rail used in the 1910's still lies under city streets in the downtown area. The trolleys used for fixed route service evoke the trolleys from ninety years ago and tie into the city's historic restoration programs.

The City of San Angelo provided public transportation continuously since the 1930s, when control shifted from private investors. Bus fleet sizes have fluctuated due to demand and funding sources. The city's first buses ran in 1932. By 1939, the city owned eight buses that provided over 800,000 passenger trips the following year. Automobile ownership, high passenger fares, and route and schedule changes precipitated declining ridership. During the 1950's a central transfer point to relieve congestion was established. In a 1969 budget session, the City Commission voted to eliminate the transit system but citizen response was so strong that within the week the commission voted to restore service. In the 1970s, the city purchased new buses and received its first federal grants.

In 1992, the city adopted the name "San Angelo Street Railroad Company" for its new trolley bus service. Service was housed out of the Santa Fe Depot. The Depot was built in 1910 to serve as the passenger depot for the Santa Fe Orient Railroad. Local restoration efforts were made possible through FTA and TxDOT enhancement funds. In April 1997, the newly renovated Santa Fe Depot became the connecting depot as well as the home of the transit offices. At this time, the demand response service and fixed route service are consolidated.

Mission Statement

The Mission of Concho Valley Transit District is to expand reasonably priced safe transportation opportunities to more people and continue to increase the level of service to the communities of the Concho Valley”.

Goals and Objectives

The goals and objectives of the Concho Valley Transit District over the next five years are to:

- Steadily increase service, both Urban and Rural by growing inventory and staff slowly to provide quality service that is appropriate and feasible based on client and region needs.
- Comply with the requirements imposed by state and federal government and in accordance with organizational policies and procedures
- Maintain and grown provided transportation services to clients in and around the Concho Valley through innovative efficiencies and innovative direction of assets and customer base.
- Insure that all eligible clients have safe and timely access to transportation services throughout the region
- Reduce the cost of service and maintain the upkeep of capital assets through analysis of data collected and reported while eliminating the potential for fraud, waste, and abuse.
- Increase services within the Concho Valley by gradually increasing the size of the transportation fleet through sensible and cost effective purchases.
- Increase the budget through increased local contributions and sales while exploring new opportunities utilizing uncommon government collaborations.

Transit Services

The CVTD operates various forms of transit services that function within the San Angelo community and the Concho Valley. These services include the Urban Fixed Route service, Demand-Response service, ADA Para-Transit service, and rural transportation services for the counties. Business hours for the transit district are from 8:00 A.M. to 5:00 P.M. Monday through Friday, and 7:30 A.M. to 5:00 P.M. on Saturday.

Transportation Services does not operate on Sundays or on major holidays (New Year’s Day, Memorial Day, 4th of July, Labor Day, Thanksgiving Day and Christmas Day). Major trip generators for the transportation system include Goodfellow Air Force Base,

Angelo State University, Howard College, the movie theatres, Shannon Hospital, Community Hospital, grocery stores, Sunset Mall, shopping centers, dialysis centers, rehabilitation centers, medical clinics, churches, and indigent health care facilities.

Fixed Route Service

Concho Valley Transit District operates five daily urban fixed route services that provide transit options for residents of San Angelo. Buses on these routes provide passengers with access to grocery stores, retail places, religious facilities, and restaurants. The fixed routes run on a circular hourly basis and operation is from 6:30 A.M. to 6:30 P.M. Monday thru Friday and 7:30 A.M. to 6:30 P.M. on Saturday.

Demand Responsive Service

The Demand Responsive service is an advanced, user-oriented form of public transport characterized by flexible routing and scheduling of small/medium vehicles operating in shared-ride mode between pick-up and drop-off locations according to passenger's needs. This service provides public transportation services in rural areas or areas with low passenger demand, where a regular bus service may not be as viable. Individuals with disabilities or elderly passengers are also eligible for this type of service.

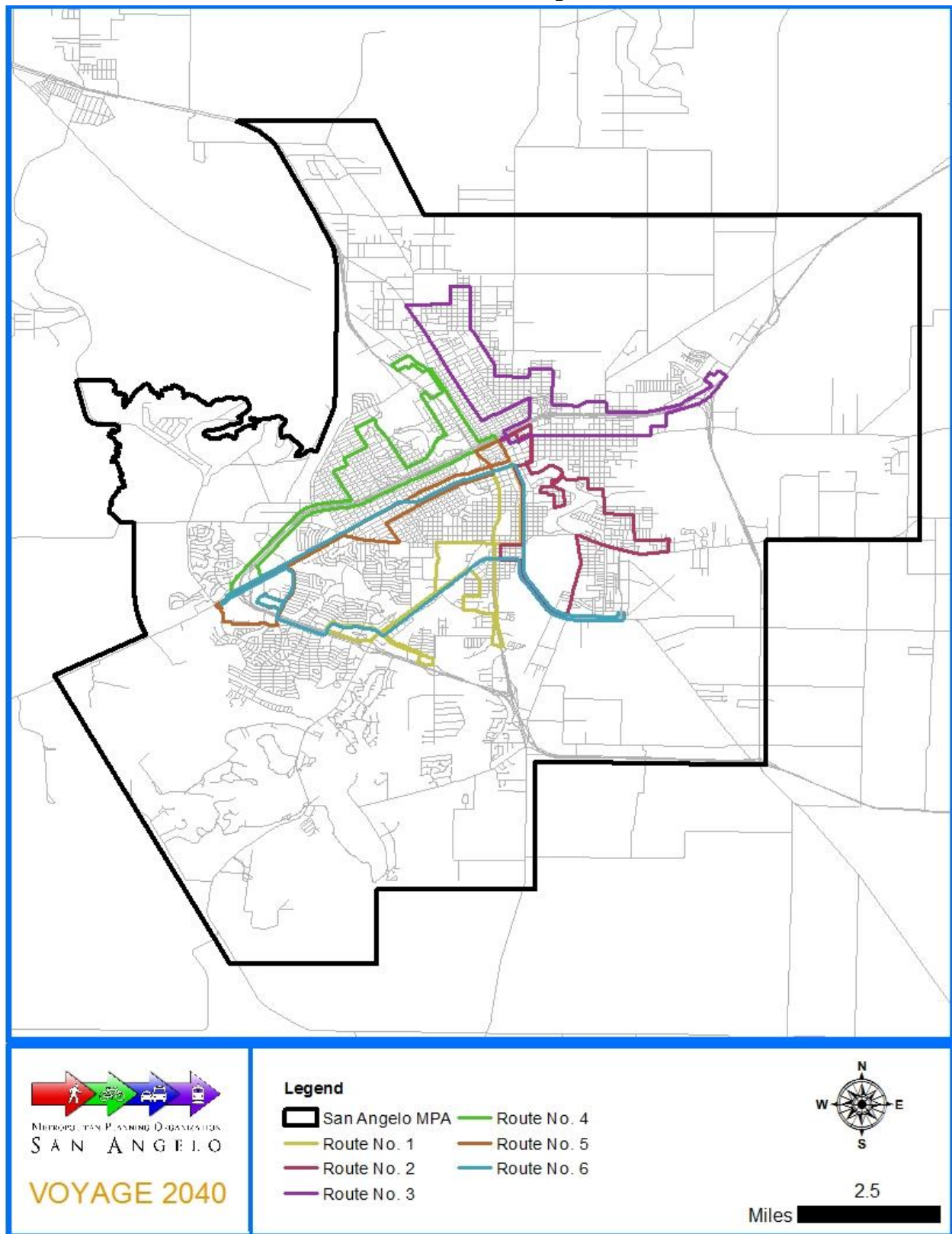
ADA Para-Transit Service

Similar to the urban fixed routes, the Demand Responsive service is an advance reservation, shared-ride, curb-to-curb service within three-quarters of a mile of a fixed-route, during the same days and hours of operation as the fixed route. Wheelchair accessible vehicles are available to assist in transporting individuals with disabilities. Generally, passengers that use this service are unable to use the Fixed Route Service.

Rural Passenger Service

Public transportation services, known as Thunderbird, are offered to the outer counties of the Concho Valley. The rural transportation services provide users with access throughout the county (city), other counties, and San Angelo. The Concho Valley has 13 counties in its jurisdiction however, only 12 counties are served by public transportation. Hours of operation for the counties are from 6:30 A.M. to 6:30 P.M.

Fixed route map



Goodfellow Air Force Base Service

In 2012, CVTD created a new Saturday route, Goodfellow Express, which provides services to those at the local Air Force base. The Goodfellow Express route is similar to the fixed routes in that it operates on an hour interval. The hours of operation for this route are different, operating on Fridays from 6:00 P.M. to 11:30 A.M. and 11:00 A.M. to 1:30 A.M. on Saturday. The Goodfellow route is open to the public and offers access to downtown, entertainment and other attractions.

CONCHO VALLEY TRANSIT DISTRICT FUTURE INITIATIVES

Urban Bus Replacement Project

The Concho Valley Transit District will purchase five medium-to-heavy duty type buses to replace the existing five fixed route busses. CVTD received an award in the amount of \$860,800 under the Federal Transit Administration Section 5337: State of Good Repair to purchase new urban vehicles. It is anticipated that these busses will be operating in winter 2014.

Expansion

The Concho Valley Transit District intends to expand services both Urban and Rural through efficiencies and new design of existing route structures. The CVTD physical inventory of transportation vehicles will increase slightly by approximately four vehicles over the next 5 years. The expansion will be directed at accommodating the elderly, disabled, underemployed and veterans. CVTD will continue to access these specialized groups of residents and make improvements accordingly as the environment changes.

Future Studies

Over the next few years, Concho Valley Transit District is planning to conduct studies to improve public transportation for the residents of San Angelo and the Concho Valley. Proposed studies include:

- Conduct studies on the effect of the influx of people into our region and city brought on by the oil industry and how it can best accommodated.
- Conduct studies on the unfulfilled transportation necessities brought to the veteran community thru deepening unemployment and homelessness.

- Conduct studies along with other agencies involved with the underemployed and unemployed needs and assessment in our region.
- Developing a study to determine the possibility and opportunity of transportation for the independent living establishments in the region.
- Developing a study and resolution to improve electronic communication and dispatch through satellite communication.

Concho Valley Multimodal Terminal

The Concho Valley Council of Governments (CVCOG) in 2004 received funds for an Intermodal Feasibility Study supporting intercity bus transportation with the goal of providing better service to passengers more efficiently. The feasibility study assessed the potential for developing: a) a centralized passenger service center to serve the intercity bus passenger and other transit and transportation clients. b) develop a concept of complimentary of ancillary services c) a centralized vehicle storage for the transit and Para-transit vehicles; d) opportunities for other modes of transportation at the facility including rail, private bus and taxi services including office and dispatch centers, e) office space for transit program administration, separate for each transit operation and f) a maintenance facility to serve tenants at the facility.

“When spirits are low, when the day appears dark, when work becomes monotonous, when hope seems hardly worth having, just mount a bicycle and go out for a good spin down the road, without anything but the ride you are taking”.

Arthur Conan Doyle

The feasibility study included the development of detailed specifications for the facility, a conceptual site plan, and an assessment of potential locations for the facility. This was a joint effort between the CVCOG, Texas Department of Transportation, City of San Angelo, Tom Green County, and numerous other public transportation providers. The study is a vital part of the transportation community. It incorporates the current MPO study of the pedestrian/bicycle transportation network, along with modes of public transportation to facilitate a better transportation network for our area.

In June 2012, the Concho Valley Transit District opened the Concho Valley Multimodal Terminal in historic downtown San Angelo. Housed within the terminal are the operations and some administrative offices of CVTD, the San Angelo Metropolitan Planning Organization, and Concho Coaches. Because of its location, the terminal provides a centralized location for public transportation users to transfer buses, which gives them access to schools, shopping, and entertainment.



INTERCITY BUS TRANSPORTATION

Greyhound

Concho Coaches has an interline partnership to provide service to Greyhound Lines' existing schedules which link to many of the smaller towns in Greyhound Lines' national route system. Greyhound is well known for its regularly scheduled passenger service and has an interline partnership with a number of independent bus lines across the United States.

Echo Transportation

In October of 2014, San Angelo will have an additional intercity bus carrier. Echo Trailways will be housed in the Concho Valley Multimodal facility and will offer passenger service from San Angelo to Dallas/Fort Worth with stops in smaller communities in between the route.



REGIONAL COORDINATION PLANNING

To improve transportation coordination throughout the area, the Concho Valley Transit District, as required by regional coordination legislation, created the Concho Valley Regional Coordination Planning Committee. The intent of the regional coordination legislation was to improve the delivery of transportation services, cooperate, and coordinate among agencies and programs, and requires the development of regional service plans.

The Concho Valley Regional Coordination Planning Committee is a planning work group comprised of diverse professional representatives from several local public and private organizations. The committee discusses and recommends transportation strategies for citizens of the community and for the clients that each representative serves. These clients usually include elderly, low-income, disabled and those with limited mobility options. The committee discusses transportation issues that affect the community and the members work together to address the problems through coordination, partnerships and sharing resources.

The goals of the committee are to develop coordinated transportation plans and programs that achieve improved delivery of services, generate efficiencies in operations, increase level of services, and enhance the customer service and satisfaction of citizens. The mission of the Regional Planning Coordination Committee is to plan for safe, accessible reliable transportation services to the residents of the Concho Valley using existing providers and planning for new, sustainable funded resources.

The committee's vision is to have coordinated, efficient and accessible transportation services in the Concho Valley. In the past, the committee has focused on the following objectives:

- Transportation needs and services in the Concho Valley
- Transportation planning processes for the Concho Valley
- Providing educational workshops and trainings

Shortly after the regional legislation was passed, a regional plan was developed and adopted by the regional committee. In 2012, the Concho Valley Transit District and the Regional Coordination Planning Committee revised the Regional Work Plan for the Concho Valley.

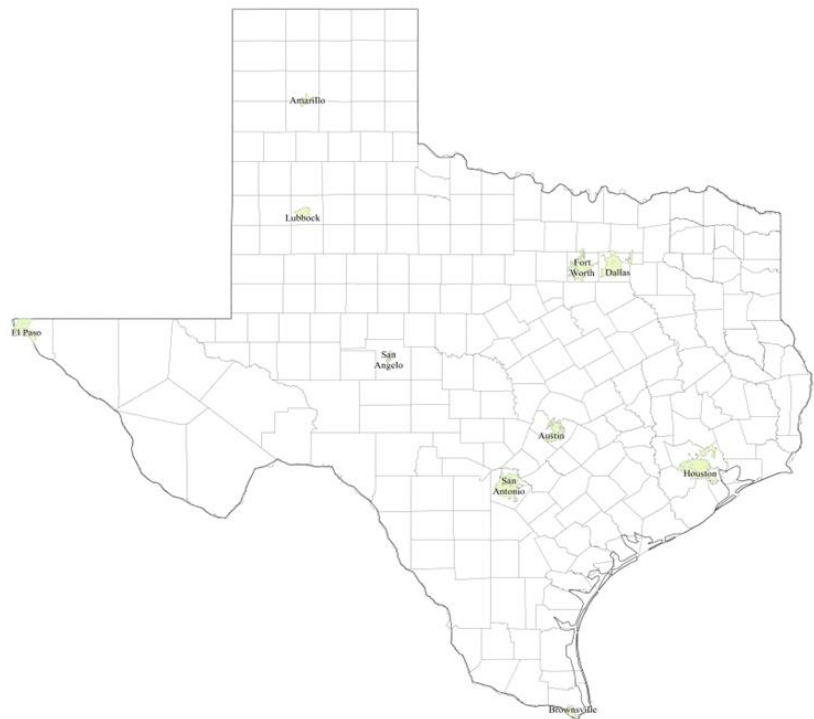
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WHAT ELSE IS LEFT FOR TRANSPORTATION?

INTRODUCTION TO AVIATION

The San Angelo Regional Airport – Mathis Field is the only airport located within the San Angelo Metropolitan Planning area boundary and, it is the only commercial airport that serves the Concho Valley. The airport is able to handle both passenger air and freight services. The City of San Angelo owns and operates the regional airport. Located approximately eight miles from the center of the city, this airport is on Texas Highway 584, also known as Knickerbocker Road and is located very near the border of the city limits and the MPO boundary.

This airport provides direct flights daily to Dallas/Fort Worth International Airport. The regional airport generates about \$1.2 million annually from rental property and other activities on the premises and serves more than 66,000 passengers annually. While the regional airport is one of the smaller airports located in Texas, it offers seven commercial passenger flights per day and almost 100,000 air operations annually.



Today, the San Angelo Regional Airport has 14 employees on staff and there are more than 250 employees at the airport, including those of the airlines, Federal Aviation Administration, the U.S. government federal business officers, car rental companies, and concessions.

History

Mathis Field began as Carr Field and quickly became a military training center. The name of the field changed several times, including Concho Army Air Field, San Angelo Army Air Field and shortly after World War 2, it was designated Mathis Field. Today the airport is known as the San Angelo Regional Airport – Mathis Field. This airport is very important to the functionality of San Angelo’s transportation system, because it is the only airport.

More than forty years ago, the San Angelo City commission passed a resolution to consider offers for the establishment of a city airport. The commission debated on whether the airport should be located in San Angelo, or near the city. The commission agreed and decided to make an agreement with West Texas Utilities to purchase 670 acres of land located on Knickerbocker Road near Lake Nasworthy.

At the time of purchase, the land was covered with mesquite thickets and grass burr. To ready the land for development, the Work Projects Administration began clearing the land. During the planning stages of the airport, the administration received almost \$400,000 to construct a federal airport building. During the fall of 1941, the commission received an additional federal grant for \$38,000 to install lighting facilities for the field.

In June of the following year, the first Municipal airport runway was cleared yielding more than 48 cords of wood. The cleared area was approximately 650 feet wide and nearly 1500 feet long. The airport development project started with a smaller number of workers, and by the time the runway installation was underway, the number of workers had exceeded 300 individuals.

In November of 1941, the San Angelo Standard Times revealed that the new airport, which was known as Carr Field, would be complete in less than a month. At the time of World War 2, City officials converted the field into the Army Air Corps. By March 1942, Senators Tom Connally and W. Lee O’Daniel announced that the Army would establish an Air Corps Training Center on the site.

To facilitate the influx of men and equipment, it was decided that Carr Field would need to be expanded. The expansion included the construction of new buildings at an estimated cost of \$5 million. The entire period of construction took place between 1942 and 1947. By the time the project was completed, it was probable that the federal government had spent more than the original budgeted amount on construction.

Over the course of the construction, four 5500-foot runways with connecting taxiways and a 575' x 3600' concrete airplane-parking ramp were constructed on the airfield. More than 250 buildings and 7 large hangars were added to the city-owned and leased property. Utilities such as water, electric, sewer, and gas served the airfield military personnel of more than 4,000 individuals. Because of the investment, it was evident that the airport provided many benefits to San Angelo, both as a wartime flying center and a training center.

When the airport was renamed from Carr Field to Mathis Field in honor of Lieutenant Jack Mathis, who was posthumously awarded the Congressional Medal of Honor for Valor during the war, a transfer agreement was arranged. The agreement, executed after the war, allowed the City of San Angelo to reclaim the original 675 acres and retain a lease on the 896 acres of Washington County School land. In addition to the land, the War Assets Administration transferred almost all of the government built and owned airport improvements to the City.



Facility

The Federal Aviation Administration as a commercial, primary non-hub airport classifies the San Angelo Regional Airport–Mathis Field. The FAA for Part 139 operations certifies the airport. The FAA contract tower is staffed from 7 a.m. until 9 p.m. and logs more than 100,000 operations per year. More than 150 aircraft are based at Mathis Field.

The San Angelo Regional Airport – Mathis Field encompasses over 1,500 acres of land and lies within a sparsely populated area near the edge of San Angelo’s city limits. The airport is surrounded by unincorporated areas of Tom Green County on the east, west, and south. A major arterial and state maintained roadway Knickerbocker Road serves the airport.

The regional airport usually generates about \$1.2 million annually from rental property and other activities on the premises. The airport serves more than 66,000 passengers each year and provides seven commercial flights per day, which is the equivalent of almost 100,000 air operations annually.

The airport terminal opens daily at 5:00 a.m. and remains open until 30 minutes after the last arriving flight of the day. Airline tickets counters open at least 1½ hours before the time of the first scheduled departure. While many airports charge for parking, Mathis Field parking is free. The parking lot offers more than 350 public parking spaces and is divided into two sections – long-term and short-term parking. In addition to free parking, Mathis Field is home to a Hertz Car Rental, Enterprise.

The Mathis Field industrial aviation park is home to over 25 commercial and civic organizations providing aeronautical goods and services to the entire community. The airfield has over 200 employees and generates an annual payroll of over \$15 million dollars. Mathis Field enjoys the presence of a FAA Automated Flight Service Station (AFSS) and a National Weather Service facility; both located at the airport. A large industrial airpark is available on the airport property. The area offers a level business site for light industrial complexes with immediate access onto the runway or FM 584.

Three crossing runways, 18/36, 3/21, and 9/27 are 8,049 feet, 5,939 feet and 4,402 feet, respectively. There are three passenger gates in the 20,000 square foot terminal space. While the San Angelo Regional Airport does not have international passenger processing facilities, it offers passengers direct flights to DFW International Airport.

Airport Operations

The airport offers three intersecting runways and a full range of instrument approach options. The runways are open for operations 24 hours per day and service commercial, private, and military aviation.

The airport is equipped to accommodate an unexpected international flight if necessary. In the event this occurs, the airport will make available an area (it may be a cordoned-off boarding gate area or even a hangar) for passengers to wait for US Customs Officials in a sterile, secure environment. The airport has the capabilities to securely keep international passengers separate from other passengers until they are able to re-board or until U.S. Customs officials can clear the passengers. The nearest customs office is located on the airport property and is staffed with one full-time employee. The U.S. customs on premises has an emergency plan in place in the event that an international flight has to be diverted to San Angelo.

The San Angelo Regional Airport has two jet bridges and boarding gates for inbound and outbound flights. In an instance that an aircraft is parked on the air carrier ramp, passengers can still access the aircraft because it is within walking distance of the terminal building.

The staff members at the airport have a number of responsibilities including assisting with parking the aircrafts, servicing the aircrafts, helping with loading and unloading, fueling, boarding and deplaning.

Statistics

In air service, the term “enplanements and deplanements are used to identify the number of passengers that board and depart a plane. The San Angelo Regional Airport collects and analyzes this information monthly. The graphics presented below illustrate the number of enplanements and deplanements from 2010 through 2013.

According to the San Angelo Chamber of Commerce Business Barometer, the tables below show the breakdown of the total enplanements and deplanements during the period of 2010-2013. The total number fluctuates during this four-year period with 2013 having the highest total.

Enplanement Figures

The graphics represented below focus on the total number of enplanements during 2010-2013. The first table provides a breakdown by month for each year. The second graphic shows the total number of enplanements for each year. While there is not one specific factor that contributes to the fluctuation in the numbers for each month or year, it is evident that 2013 has seen the most success.

Passenger Enplanements				
Month	2010	2011	2012	2013
Jan	5,600	3,653	4,002	3,860
Feb	3,666	3,765	4,025	4,172
Mar	4,596	4,325	4,501	4,790
Apr	4,996	4,835	4,621	4,895
May	5,217	5,331	5,224	5,279
Jun	4,658	4,674	5,385	5,841
Jul	4,928	4,816	5,238	5,922
Aug	4,552	4,530	4,827	5,859
Sep	4,661	5,038	4,783	5,277
Oct	4,915	4,931	4,833	5,797
Nov	5,192	4,887	4,813	5,137
Dec	5,528	5,344	5,668	5,606
Annual Total	58,509	56,129	57,920	62,435

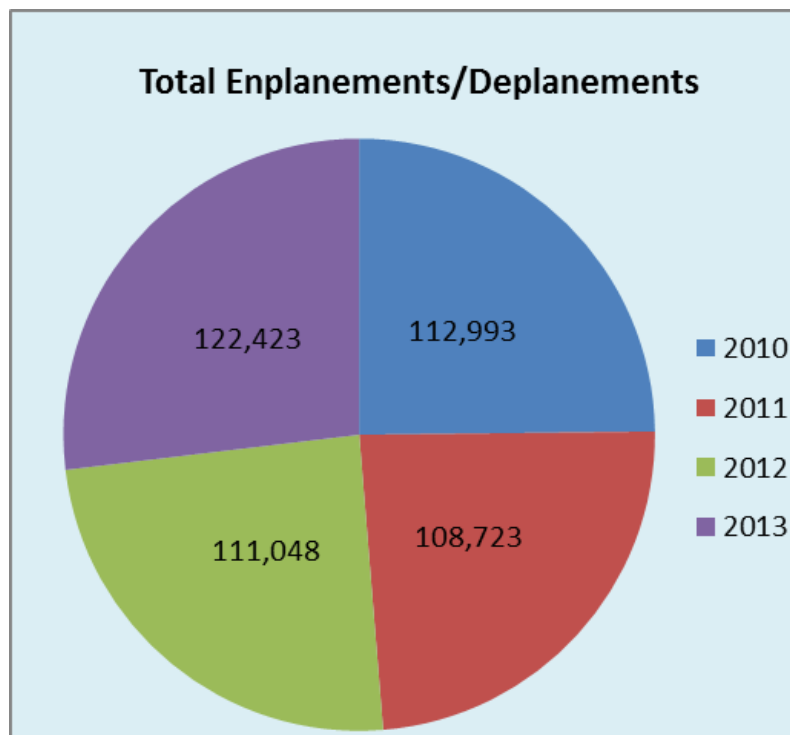
Enplanements in 2010 are represented at 58,509 passengers and then this number decreases for years 2011 and 2012. From 2012 to 2013, there was an increase in the number of enplanements by almost 5,000 passengers, which exceeds any year represented.

“States get to improve transportation infrastructure; that creates economic development, puts people back to work and, most important, enhances safety and improves local communities”.

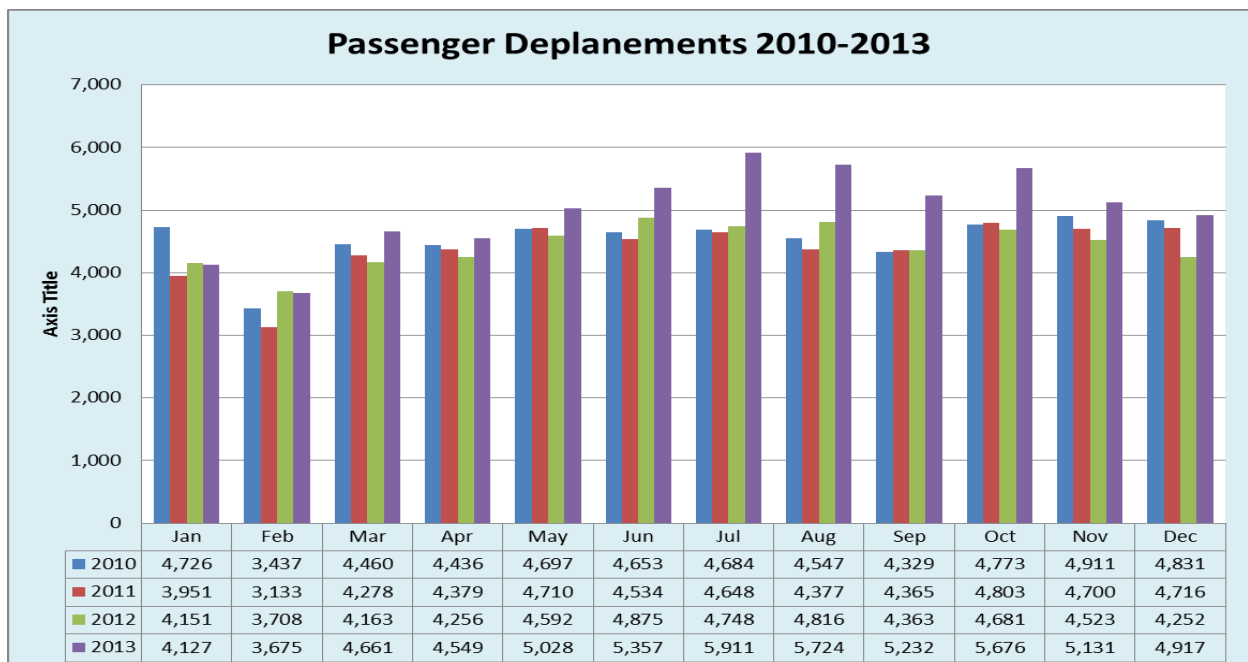
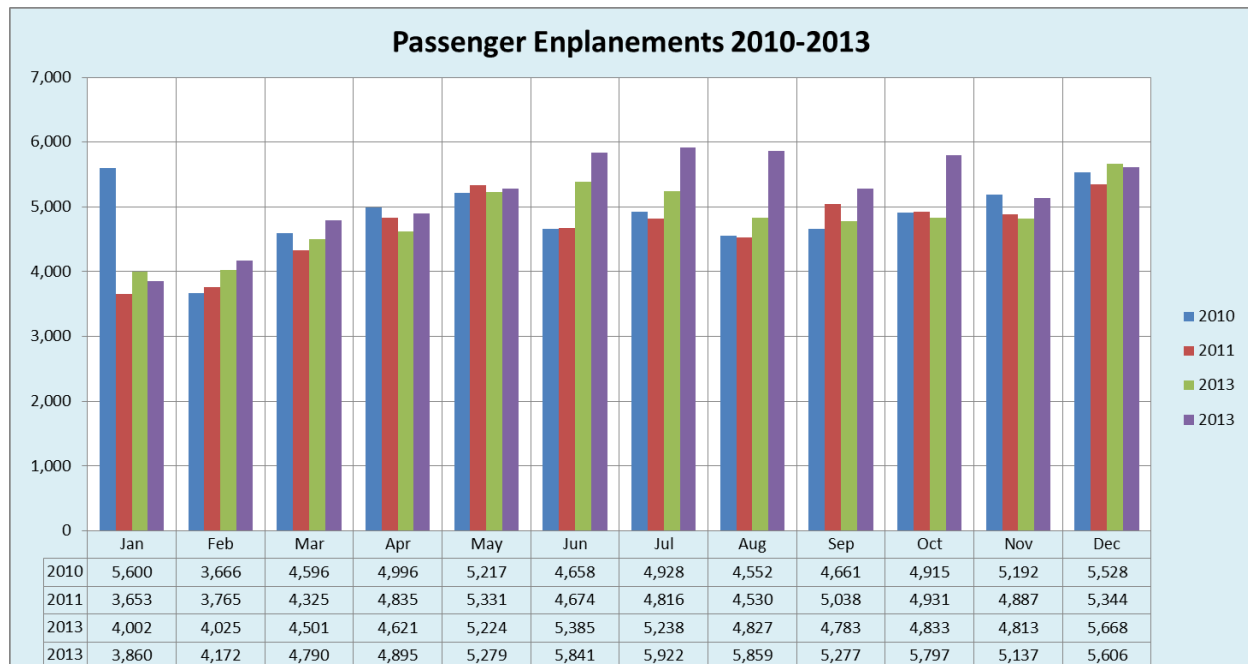
Corrine Brown

Passenger Deplanements				
Month	2010	2011	2012	2013
Jan	4,726	3,951	4,151	4,127
Feb	3,437	3,133	3,708	3,675
Mar	4,460	4,278	4,163	4,661
Apr	4,436	4,379	4,256	4,549
May	4,697	4,710	4,592	5,028
Jun	4,653	4,534	4,875	5,357
Jul	4,684	4,648	4,748	5,911
Aug	4,547	4,377	4,816	5,724
Sep	4,329	4,365	4,363	5,232
Oct	4,773	4,803	4,681	5,676
Nov	4,911	4,700	4,523	5,131
Dec	4,831	4,716	4,252	4,917
Annual Total	54,484	52,594	53,128	59,988

The chart and graph above represents passenger deplanements from 2010 through 2013. From 2010 to 2012, the annual total fluctuated slightly. In 2013, there was an increase of at least 6,800 passengers over 2012 figures. This increase represents a 12% increase.



The graphs below provide more details on the enplanements and deplanements from 2010 through 2013.



Deplanement Figures

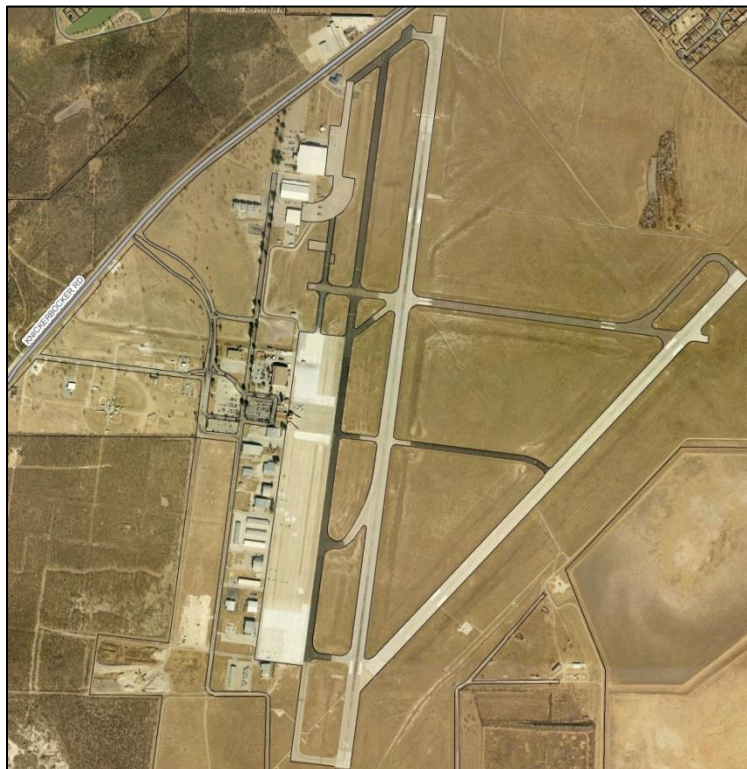
Deplanement refers to the number of passengers that disembark from an aircraft. The graphics show how many passengers flew out from San Angelo Regional Airport on aircrafts during the period of 2010-2013. Deplanement is specifically those individuals that traveled to other destinations by plane. From 2010 to 2012, the annual total fluctuated slightly. In 2013, there was an increase of at least 6,800 passengers over 2012 figures. This growth represents a 12% increase.

Future Development

The San Angelo Regional Airport plays a major role in the economics of San Angelo's transportation system, and for that reason the City Council, the Airport Advisory Board and the San Angelo Metropolitan Planning Organization work cooperatively to improve the infrastructure of the facility.

To monitor the development and operations of the airport, each member of the San Angelo City Council appoints an individual to serve on the Airport Advisory Board. The seven advisory members work with the Airport Director to plan for the future of the airport.

In June of 2005, after more than 18 months of planning, the San Angelo Regional



Airport – Mathis Field broke ground of a new \$3.5 million terminal. The addition of 8,000 square feet to the airport terminal is intended to provide comfortable new waiting areas to more than 120,000 arriving and departing passengers annually. After the improvements are completed at the airport terminal, it is expected that there will be an increase in commercial and passenger activity.

In addition to the many benefits of the enhanced terminal, Mathis Field encompasses a large industrial park on the property, which is suitable for light industrial complexes or businesses that need access to the runway or to the highway.

The San Angelo Regional Airport plays a big role in the economic development of San Angelo and has a positive effect on San Angelo's transportation system. With the new improvements at the airport terminal, it is anticipated that a second airline carrier will call San Angelo home and offer more flights to various destinations. The expanded service will provide even more economic benefits to not only the community but to the region.

INTRODUCTION TO RAIL

Rail is a very important transportation system component and the rail is a huge economic contributor for San Angelo and the surrounding areas. San Angelo encompasses a main rail line and a few rail spurs. A single-short rail line, the South Orient Railroad (SORR), stretches across most of west Texas and serves the City of San Angelo. The SORR is approximately 391 miles in length and extends from San Angelo Junction (in Coleman County, 5 miles southwest of Coleman) through San Angelo to Presidio at the Texas/Mexico border. The line provides an alternate route into Mexico and beyond which helps relieve the rail and truck congestion at the other U.S. border crossings.



The South Orient Rail Line interchanges with Ferromex at Presidio but the Presidio-Ojinaga International Rail Bridge has not been operational since a fire damaged it in early 2008. In addition to the Ferromex connection, the rail line also interchanges with Union Pacific in Alpine, Texas, the BNSF Railway and the Fort Worth and Western rail road in San Angelo Junction.



LONE STAR MOVING

KERSHAW

DIESEL FUEL

HYDRAULIC OIL

TH 601

YR

TIE CRANE

History

In the early 1900s, Kansas City Mexico and Orient Railway (KCMO) constructed the rail line. It was constructed as far as Alpine, Texas. In 1928, the Atchison Topeka Santa Fe Railroad (ATSF) acquired the rail line from the KCMO bankruptcy and completed construction from Alpine to Presidio. The line was moderately successful into the 1970s due to several mining activities including Sulphur and oil in the region. Shipping activities from major industrial companies such as Hirschfeld Steel, contributed to the success of the line. As the sulfur industry began to decline and later fail, so did the traffic on the rail line. Shortly thereafter, ATSF filed for abandonment of the line.

The State of Texas collaborated with the South Orient Railroad Company (SORC) to purchase the line for over five million dollars after the South Orient Railroad Company expressed interest in the line. The Texas Legislature provided \$3.5 million toward the purchase, with SORC providing the additional funds. The South Orient Railroad Company did not realize adequate revenues to investing rehabilitating the line and in 1998 submitted an abandonment application. The following year, the Texas Legislature appropriated an additional six million dollars to TxDOT to purchase SORC's interest in the rail line, which resulted in TxDOT completely purchasing the line and spending \$9.5 million.

As the owner of the South Orient Rail line, TxDOT leased operations on the line to Texas Pacific Transportation Company, Ltd., which is a subsidiary of Grupo Mexico. As the lessee of the rail line, TXPF is required to maintain any section of the line that is rehabilitated by TxDOT at the same or better condition. To secure their interest in the condition of the rail, TXPF obtained a 40-year operating lease with renewal options and invested approximately \$8 million in rehabilitation of the infrastructure.

Railroad Improvements

Since the purchase of the railroad, TxDOT has been making numerous track repairs and improvements, which include replacing ties and ballast, and replacing rails to improve the speed and functionality of the line. Over the last few years, TxDOT and TXPF have been investing funds in the rail line to bring outdated portions up to date and to keep good sections maintained. The improvements to the rail, including replacing the bridge in Ballinger Texas, have created new opportunities to move freight by rail. Through a multi-phased approach to project development and implementation, the SORR will maintain its functionality for years to come.

In addition to the contributions of both entities, the San Angelo Metropolitan Planning Organization assisted with the replacement of rail crossing within the MPO boundary. The MPO conducted an extensive inventory of the railroad crossings and discovered that there were 61 rail crossings that were in poor or worse condition. SA-MPO took into account several factors such as sunken holes, missing timbers and unpleasant travel conditions to determine the condition of the crossings. The location of the rail crossing and traffic volume were also taken into consideration in deciding condition.



After the evaluation of the target crossings was completed, the MPO concluded that there was an urgent need to replace the wooden crossings with concrete. The MPO understood the safety need to upgrade the crossings. Through cooperative partnerships with the state and the local government, many of the rail crossings in San Angelo were upgraded to concrete.

Railroad Economic Development

With the decline of the wind industry and increase in the oil sector production, the utilization of the rail has begun to grow. The improvements made not only helped with the operations of the rail, they also improved the economy in San Angelo.

Years ago, the primary products carried on the rail included grain, agricultural products, steel, paper and sand commodities. The upgraded rail line is able to accommodate other products such as sand, crude oil, grain, and steel. Using the rail helps with relieving congestion on the highway system and it reduces the cost of roadway maintenance.

Overall, there has been significant support from companies and cities to promote rail usage. Feedback received from shippers indicates significant enthusiasm for keeping the rail system updated and maintained. The railroad has proven to be a considerable economic boost for the West Texas Region.

Ports-To-Plains Rail Link

The Ports-to-Plains Trade Corridor Coalition's purpose is to promote the policy, trade and investment priorities of the Ports-to-Plains Trade Corridor. The coalition provides a good opportunity to strengthen the rail element in West Texas and other parts of the country. By working together, the coalition is able to generate awareness of the possibilities of using the Texas Pacifico railroad, discover more ways of tying rail with the ports-to-plains project, and understand how both of these initiatives will affect the various corridor communities. Another benefit of the coalition was providing a comprehensive view of the transportation system and providing a roadmap for the future of the rail transportation system.

Railroad Cooperative

With the creation of the West Texas Railroad Coalition in 2009, cities and counties from San Angelo Junction to Presidio have the opportunity to share information and unite on matters important to the rail line. The cooperative of stakeholders has helped communities that use the rail line improve the economy, create jobs, and improve the quality of life.

Although there have not been many meetings of the cooperative, the purpose of the coalition is to strengthen the dialogue between communities, explore opportunities for collaboration and delivery of services. The rail stakeholders can work together to research economic opportunities, preserve mobility options, improve safety of the railroad and enhance the existing transportation facility to optimize its performance.

Other benefits of the coalition include:

- Providing a strong unified voice
- Offering benefits to all stakeholders
- Establishing regional connections
- Sharing of information and resources
- Identifying transportation issues
- Developing market strategies that enhance the region

As the coalition continues to move forward and evolve, developing short- and long-term recommendations for future rail needs and the developing the corridor will remain priorities.

The Metropolitan Planning Organization plans to continue working with TxDOT and TXPF to ensure the success of the rail and exploring other possibilities for improvement. Future plans for the rail include the determining the feasibility for an intermodal facility in San Angelo. The opportunity is possible due to the Texas Pacifico rail line and the Ports-to-Plains Trade Corridor meeting in San Angelo. The proposed facility would not only benefit rail, but also would benefit air and truck freight.

If it were determined that a facility was advantageous, it would consist of multiple modes of transportation in one location. Freight would be able to move from one mode to another without any handling. Other benefits could include reducing the cargo handling, improving security of freight, reducing damage to cargo and providing shorter movement times.

“Without continual growth and progress, such words as improvement, achievement, and success have no meaning”.

Benjamin Franklin

FREIGHT MOVEMENT

Moving freight safely, in a timely manner and moving it efficiently is not only a major concern for Texas but also for San Angelo. Major modes of transporting freight include air, highway, and rail. While moving freight by water is very important and is practical, this will not be discussed because San Angelo does not have access to a waterway port. Instead, the following subchapters will discuss the other three modes and briefly describe the advantages and disadvantages of each.

Air

Shipping by air is the quickest and most reliable mode of transporting freight but it is also very costly to use this mode. Airfreight commonly consists of goods and products that are highly perishable or valuable. Air transport is a vital component of many international and domestic networks essential to managing and controlling the flow of energy, goods, products and other resources from manufacturing or production plants to the marketplace.

Several larger cities in Texas depend on shipping goods by air and they expect to see an increase in air usage over the next few years. While moving freight by air in San Angelo is not that high, air shipping still plays a role in the transportation planning process.

Truck

Generally, when it comes to moving freight from one area to another, large trucks and trailers come to mind. Freight lines in San Angelo run along major arterials and travel on US Highways 87, 67, and 277, Loop 306, and outlying roads. Commercial vehicles represent a significant percentage of the vehicles traveling into and out of the San Angelo area daily. With improvements to the Texas Trunk System (a network of highways which provide access to all areas of the system and will act as the foundation of the transportation network), and expansion of the Ports-to-Plains initiative to the San Angelo region, freight traffic and other vehicular traffic should have easier passage through and around San Angelo.

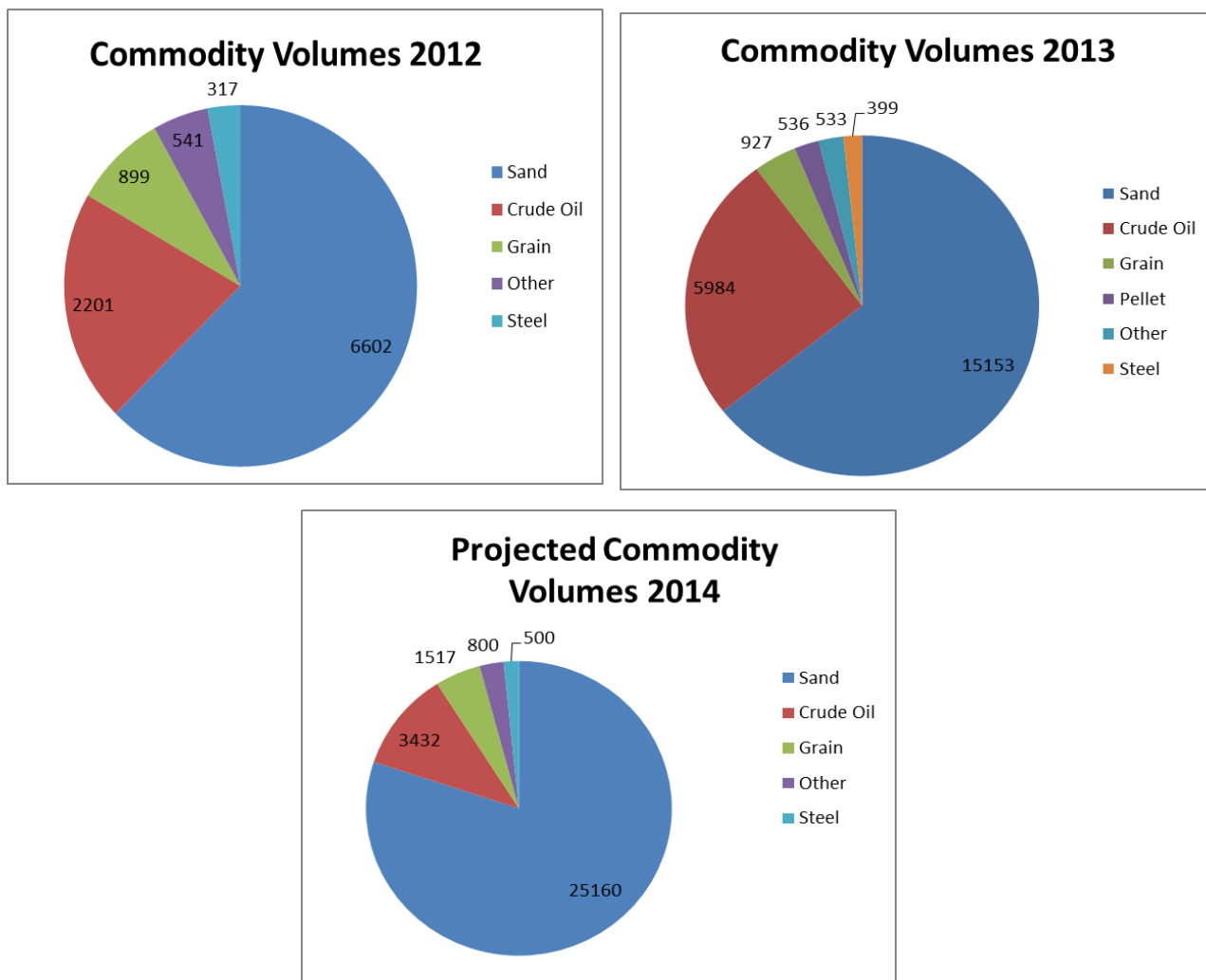
As the energy sector truck traffic increases, it is necessary that issues such as congestion and safety be considered while planning. The San Angelo MPO will work with the Local Emergency Planning Committee and TxDOT to ensure that freight movement through the San Angelo area is conducted safely and efficiently.

Rail

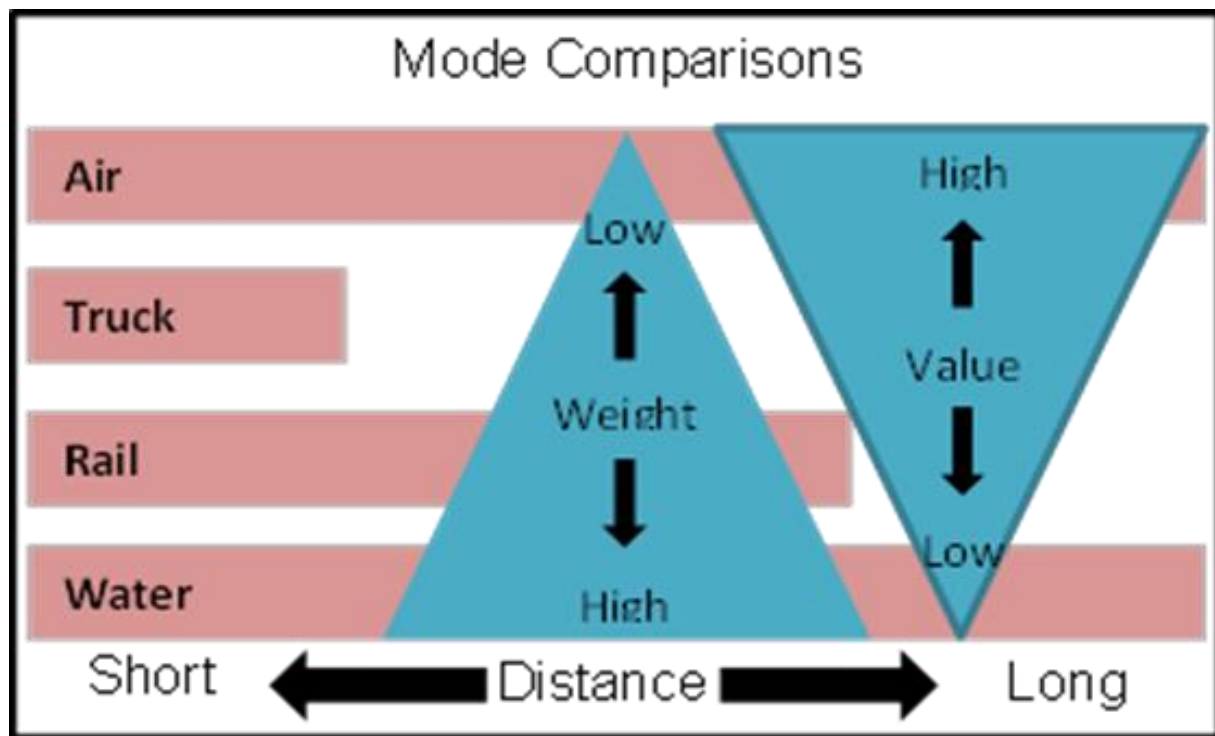
With all of the investments and rehabilitations on the TXPF rail line, it is certain that moving freight by rail is only going to increase. Just like everyone else, Texas Pacifico is uncertain about the energy sector trends and volumes of commodities they expect to move in the coming years.

They are certain that for 2014, they will see a growth of over 50% compared to 2013. It is certain that the Permian Basin will always be a major player in the crude oil markets and for Texas Pacifico, trying to determine when and how long they will be on the bench or be at the batting plate is the key.

The graphs below show rail car load volumes by commodity for 2012 and 2013. The last graphic depicts the projected volumes for 2014



The graphic below depicts the differences between each mode of freight and the advantages and disadvantages of using each.



Freight travel by air is one of the fastest ways to move goods and products, but is also the most expensive way. Shipping freight by rail or water can be more efficient but usually takes longer than by highway. Choosing how to move freight between the various modes depends on two important factors – cost and time.

CHAPTER SUMMARY

In this chapter, the aviation and rail modes were discussed and their roles in the transportation planning process were explained. As the economy grows and more demand is placed on air and rail, it is imperative that proactive planning continues to lessen the impacts that the demands have on the future of the transportation system. Short and long-term goals for rail, air and freight are:

- Continue improving the rail line, crossings, and tracks
- Explore economic development opportunities for rail, freight and air
- Continue building relationships amongst stakeholders of each mode
- Strengthen communication and information sharing through the Railroad Coalition
- Research options for an intermodal facility
- Provide more education and dialogue between communities and freight stakeholders
- Explore opportunities for collaboration and delivery of services
- Improve safety of the railroad and freight

The San Angelo Metropolitan Planning Organization plans to continue working with the San Angelo Regional Airport, Texas Pacifico Transportation Company, The Concho Valley Regional Transportation Committee, and the Texas Department of Transportation to meet the short and long-range goals for transportation in San Angelo and the region.

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APPENDICES

HISTORY OF REVISIONS AND AMENDMENTS

TRANSPORTATION NEEDS ASSESSMENT SURVEY

TRANSPORTATION NEEDS ASSESSMENT SURVEY EXECUTIVE SUMMARY

TRANSPORTATION NEEDS ASSESSMENT SURVEY EXECUTIVE SUMMARY
GOODFELLOW AIR FORCE BASE

HISTORY OF REVISIONS AND AMENDMENTS

Draft Adoption

The draft Voyage 2040 (long-range transportation plan) was presented and approved at the San Angelo MPO Policy Board meeting on October 16, 2014.

Final Adoption

The San Angelo Metropolitan Planning Organization adopted Voyage 2040 (long-range transportation plan) at the MPO Policy Board meeting on November 13, 2014.

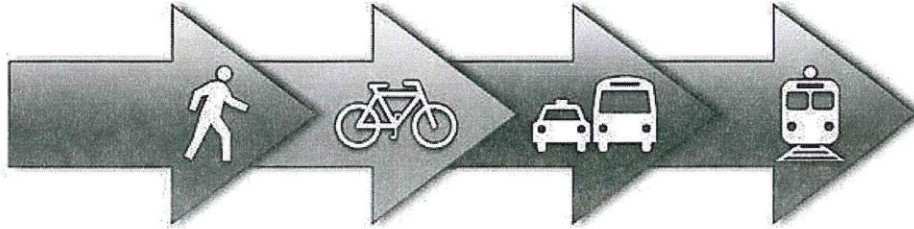
Amendment 1: To revise transportation projects and financial constraint, including financial forecast for highway and transit projects. In addition, to include environmental mitigation language. Draft approved by MPO Policy Board May 14, 2015. Public comment began on May 8 and concluded June 10. No comments were received. Amendments approved by MPO Policy Board on June 11, 2015.

Amendment 2: To modify MPO Project numbers; to add *new* MPO Director; to update Policy Board Members; and to revise transportation projects and financial constraint, including financial forecast for highway projects. Draft approved by MPO Policy Board April 14, 2016. Public comment began on April 14 and concluded June 1, 2016. No comments were received. Amendments approved by MPO Policy Board on June 09, 2016.

Amendment 3: HR100-20-01 SL 378 Old Christoval Road, highway project added to funded projects. HR100-20-03 Sidewalks & SUP Connection, added to funded projects. HR100-19-01 N. Bryant Interchange w/6&7 streets, added to funded projects. Unfunded projects numbers changed from UFN numbers to CSJs for clarity between MTP and TIP. Removal of UFN06, UFN07 and UFN10 projects from the Capacity Addition Projects list. UFN09 SL 378 moved to funded highway project. FM 2288 CSJ 2141-02-900 added to Capacity Addition Projects. UFN11 Sherwood Way project completed and removed. N Bryant Interchange w/6&7 streets moved to funded projects list. Amendments approved by the MPO Policy Board on June 14, 2018.

Amendment 4: Addition of FAST ACT history and compliance with adoption of Performance Measures PM1, PM2, PM3 and State of Transit State of Good Repair measures and targets adopted by Resolution by the Policy Board. Update to Transit Funds Section 5339 Grant Funding for 2015- 2020 Funding chart.





METROPOLITAN PLANNING ORGANIZATION S A N A N G E L O

Transportation Needs Assessment Survey

The San Angelo Metropolitan Planning Organization (SA-MPO) is the transportation planning agency that works cooperatively with the City of San Angelo, the Texas Department of Transportation, and the Concho Valley Transit District to determine transportation needs to improve the community. Enabling community participation by gathering public input on needs and priorities to guide planning and decision-making is a primary responsibility of SA-MPO.

This survey is your opportunity to express views on needs and priorities that you think SA-MPO and its transportation partners should address in long-term planning. The survey should be completed by all residents regardless of the level of involvement with transportation activities.

Although you may choose not to answer any particular item, please remember that your views combined with those of other citizens will enable SA-MPO to work toward developing plans for improvement projects that are most desired and widely supported by residents.

YOUR VIEWS MATTER! Thank you in advance for taking time to complete the Transportation Needs Assessment Survey.

How long have you been a resident of the San Angelo area? (Mark only one.)

- ☐ Less than 1 year
☐ 1-2 Years
☐ 3-5 Years
☐ 6-10 Years
☐ 10-20 Years
☐ More than 20 Years

Which of the following best describes your household? (Mark only one.)

- ☐ I live alone
☐ I live together with one or more adult roommates, but there are no children in the household
☐ I live together with one or more roommates, including adults and children
☐ I live together with my spouse or partner, but there are no children in the household
☐ I am a single parent with one or more children in the household
☐ I live together with my spouse or partner and with one or more children in the household
☐ Other (Mark other and describe in the box below.)

Do you own or rent your home? (Mark only one.)

- ☐ Own ☐ Rent

Which of the following best identifies the area where you live? (Mark only one.)

- | | |
|--|--|
| <input type="checkbox"/> ASU Campus area | <input type="checkbox"/> Goodfellow AFB area |
| <input type="checkbox"/> Belaire area | <input type="checkbox"/> Lake Nasworthy area |
| <input type="checkbox"/> Bentwood area | <input type="checkbox"/> Lake View area |
| <input type="checkbox"/> Bluffs area | <input type="checkbox"/> Martin Luther King, Blackshear & Reagan area |
| <input type="checkbox"/> Bonham & Southland Hills area | <input type="checkbox"/> Paulann area |
| <input type="checkbox"/> College Hills area | <input type="checkbox"/> Rio Vista area |
| <input type="checkbox"/> Country Club area | <input type="checkbox"/> San Jacinto area |
| <input type="checkbox"/> Downtown area | <input type="checkbox"/> Santa Rita area |
| <input type="checkbox"/> Fort Concho area | <input type="checkbox"/> Sunset area |
| <input type="checkbox"/> Jefferson Heights & River Park area | <input type="checkbox"/> Other (Mark other and describe in the box below.) |

Do you live on campus (ASU)?

- ☐ Yes ☐ No

Do you live on base (Goodfellow AFB)?

- ☐ Yes ☐ No

Which best describes how often you use the following modes of transportation? Mark one response for each mode of transportation.

	Every day or almost every day	2-3 times per week	Once per week	2-3 times per month	Once per month	Less than once per month	Never
Drive personal vehicle alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Carpool/Ride Share	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Commercial Vehicle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taxi/Shuttle Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Transit/Local Bus System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Goodfellow AFB Trolley/Weekend Rt 6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intercity Bus/Coach Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bicycle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat/Watercraft	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Airplane	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (Assign frequency here and describe the mode of transportation in the box below.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

For what purpose do you most often use your modes of transportation? Mark one purpose for each mode of transportation you use. You may skip modes you never use.

	Work	Leisure/Recreation	Other Purpose
Drive personal vehicle alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Carpool/Ride Share	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Commercial Vehicle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taxi/Shuttle Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Transit/Local Bus System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Goodfellow AFB Trolley/Weekend Rt 6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intercity Bus/Coach Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bicycle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat/Watercraft	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Airplane	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (Assign purpose here and describe the mode of transportation in the box below.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you had to be without your vehicle for a month, what would you do for your main transportation? *Mark only one response.*

- | | | |
|---|--|---|
| <input type="checkbox"/> Use Transit/Bus System | <input type="checkbox"/> Ride with Someone/Carpool | <input type="checkbox"/> Use a taxi/shuttle service |
| <input type="checkbox"/> Walk | <input type="checkbox"/> Borrow a vehicle | <input type="checkbox"/> Stay at home |
| <input type="checkbox"/> Ride a Bike | <input type="checkbox"/> Rent a vehicle | <input type="checkbox"/> I do not have access to a vehicle to drive regularly |

Comments:

How would you describe the connections and capacity of the following transportation systems? *Mark one response for each system.*

	<u>Excellent</u>	<u>Very Good</u>	<u>Fair</u>	<u>Poor</u>	<u>No Opinion</u>
Road/Highway System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Transit/Bus System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Goodfellow AFB Trolley/Weekend Rt 6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bicycle System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sidewalk/Pedestrian System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Airport System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rail (Train) System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

Would you change your transportation choices if improvements were made to these systems? *Mark one response for each system.*

	<u>Very Likely</u>	<u>Likely</u>	<u>Unlikely</u>	<u>No Change</u>
Road/Highway System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Transit/Bus System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Goodfellow AFB Trolley/Weekend Rt 6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bicycle System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sidewalk/Pedestrian System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Airport System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rail (Train) System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intercity Bus/Coach Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

What level of importance would you give each of the following issues? *Mark one response for each issue.*

	<i>High</i>	<i>Moderate</i>	<i>Low</i>	<i>Not Important</i>
Unsafe Roads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roadway and Highway Pavement Conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accident/Construction Delays	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Signal Timing Causing Congestion or Running Red Lights	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of Access to Public Transit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inadequate Access to the Interstate Highway System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of Bike Lanes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of Sidewalks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Need for Improved Access to the Airport	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of Destinations for Air Travel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of Passenger Rail Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Need for Improvements to Railroad Crossings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conflicts between Zoning for Land Use and Nearby Traffic Patterns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level of Local Financial Investment in the Transportation System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (<i>Assign importance here and describe the problem in the box below.</i>)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How would you rate the importance of these safety concerns? *Mark one response for each concern.*

	<i>High</i>	<i>Moderate</i>	<i>Low</i>	<i>Not Important</i>
Increased congestion/traffic demand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dangerous highway entrances and exits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trucks entering and leaving roadways	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Traffic congestion and safety concerns around schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drainage, runoff, and weather concerns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hit and run accidents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public knowledge of rules of the road	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lighting and security at bus stops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of pedestrian facilities (e.g. shelter, seating) at bus stops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Responsible road sharing between motorists and bicyclists/pedestrians	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boating and water safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unsuitable zoning decisions (based on street networks in the nearby area)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improper transportation decisions (based on zoning and land use)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (<i>Assign importance here and describe the concern in the box below.</i>)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How effective are the following solutions for safety concerns? *Mark one response for each solution.*

	High	Moderate	Low	Not Effective
Limit the number of driveway and parking lot entrances and exits along major streets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Install raised medians along major roadways/streets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Build new vehicle infrastructure (e.g. overpasses for highway and rail crossings)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restrict left turns on major streets to a traffic signal or designated turn area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved engineering of traffic flow at congested highway on-ramps and off-ramps	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
High visibility road markings and signage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electronic message boards along major freeways	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Upgrade street lighting in locations where increased collisions are occurring in hours of darkness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pullout lanes at bus stops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bike lanes on roads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Additional sidewalks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
High visibility crosswalks and pedestrian crossing signals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pedestrian-activated flashing beacons and/or pedestrian refuge islands for multi-lane, higher speed roads with heavy pedestrian demand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use of cameras to deter traffic and safety violations (e.g. red light running, hit and run) and aid in enforcement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved weather preparation, response, and communication	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved education and public information for motorists, bicyclists, and pedestrians	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Better coordination between zoning and transportation decisions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local regulation for cell phone/texting use while driving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (Assign effectiveness here and describe the solution in the box below.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What priority level would you assign to the long-term projects below? Mark one response for each project.

	High	Moderate	Low	Not a Priority
Maintaining existing roads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Building new roads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Providing non-stop (no traffic signals) road way access (i.e. Ports-to-Plains, Texas Trunk System)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expanding the local public transit system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Providing intercity regional transit services (e.g. Greyhound bus type services)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
"Complete Streets" projects - planning new streets or reconstruction efforts to accommodate safe access for multi-modal level of service (e.g. motorists, transit users, bicyclists, pedestrians, and people with disabilities)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
"Smart Growth" projects - coordinating land use and transportation planning to promote consistency between transportation improvements and planned growth and economic development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adding more bike lanes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adding more sidewalks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adding shoulders or additional lanes to 2-lane roads and highways with high traffic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rest stops/designated truck parking areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expanding the airport services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expanding the railroad freight services (transport of goods)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Developing railroad passenger services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (Assign priority here and describe the project in the box below.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Rank the following projects from highest to lowest: *Mark one project for each priority level.*

Highest Priority

- | | | | |
|---|--|--|--|
| <input type="checkbox"/> Adding more bike lanes | <input type="checkbox"/> Providing better public transit | <input type="checkbox"/> Providing intercity regional transit services | <input type="checkbox"/> Adding more sidewalks |
|---|--|--|--|

2nd Priority

- | | | | |
|---|--|--|--|
| <input type="checkbox"/> Adding more bike lanes | <input type="checkbox"/> Providing better public transit | <input type="checkbox"/> Providing intercity regional transit services | <input type="checkbox"/> Adding more sidewalks |
|---|--|--|--|

3rd Priority

- | | | | |
|---|--|--|--|
| <input type="checkbox"/> Adding more bike lanes | <input type="checkbox"/> Providing better public transit | <input type="checkbox"/> Providing intercity regional transit services | <input type="checkbox"/> Adding more sidewalks |
|---|--|--|--|

Lowest Priority

- | | | | |
|---|--|--|--|
| <input type="checkbox"/> Adding more bike lanes | <input type="checkbox"/> Providing better public transit | <input type="checkbox"/> Providing intercity regional transit services | <input type="checkbox"/> Adding more sidewalks |
|---|--|--|--|

Please share additional comments to inform the San Angelo Metropolitan Planning Organization about transportation needs and priorities for planning long-term future transportation improvements over the next 20 years:

In what year were you born?

What is your race or ethnicity? *Mark only one.*

- | | | | | |
|--|---|-----------------------------------|---|--------------------------------|
| <input type="checkbox"/> White, Non-Hispanic | <input type="checkbox"/> African American | <input type="checkbox"/> Hispanic | <input type="checkbox"/> Asian American | <input type="checkbox"/> Other |
|--|---|-----------------------------------|---|--------------------------------|

What is your gender?

- | | |
|-------------------------------|---------------------------------|
| <input type="checkbox"/> Male | <input type="checkbox"/> Female |
|-------------------------------|---------------------------------|

What is the highest level of education you completed?

- | | |
|---|---|
| <input type="checkbox"/> Less than 9th grade | <input type="checkbox"/> Associate degree or vocational/technical certification |
| <input type="checkbox"/> Some high school | <input type="checkbox"/> College degree |
| <input type="checkbox"/> High school diploma or GED | <input type="checkbox"/> Graduate or professional degree |
| <input type="checkbox"/> Some college | |

What is your zip code? Mark only one.

- ☐ 76901
☐ 76903
☐ 76904
☐ 76905

- ☐ 76908
☐ 76909
☐ Other (Mark other and write your zip code in the box below.)

What was your family household income last year? Mark only one.

- ☐ Under \$12,000
☐ \$12,000 to \$23,999

- ☐ \$24,000 to 46,999
☐ \$47,000 to 69,999

- ☐ \$70,000 to 93,999
☐ \$94,000 or more

Please share your comments on what the San Angelo Metropolitan Planning Organization does well and what it does poorly in planning and prioritizing transportation projects:

If you wish to receive information in the future about SA-MPO and its projects, what are the best methods for communication? Mark all that apply.

- ☐ SA-MPO Website (www.sanangelompo.org)
☐ Facebook (www.facebook.com/SanAngeloMPO)
☐ Twitter (@SanAngeloMPO)

- ☐ Mailing List (you can provide your email in the email box below, or sign up on the SA-MPO Website)
☐ Other, please specify in the comments box below.

Email Address:

Comments:

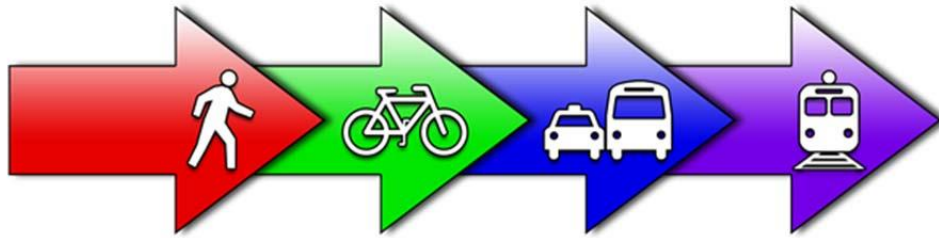
Thanks again for completing the survey.

Please return the survey to SA-MPO or call (325) 481-2800 for additional information.

San Angelo MPO
510 N. Chadbourne
San Angelo, TX 76903

Transportation Needs Assessment Survey: Executive Summary

San Angelo, TX



METROPOLITAN PLANNING ORGANIZATION
S A N A N G E L O

May 8, 2014

Prepared by

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Community Development Initiatives
Angelo State University

Susan McLane, M.P.A. Project Manager,
Community Development Initiatives
Angelo State University



EXECUTIVE SUMMARY

Community Development Initiatives at Angelo State University (ASU) conducted the Transportation Needs Assessment Survey (TNAS) on behalf of the San Angelo Metropolitan Planning Organization. Representatives of relevant City Departments, the Concho Valley Council of Governments, the Texas Department of Transportation and other local stakeholders participated with ASU to develop the project time line, the questionnaire, the sampling process and other aspects of the project plan. The TNAS partners designed the project to provide key needs assessment information for the comprehensive San Angelo Metropolitan Transportation Plan (MTP) for 2015-2040.

The Survey was launched on January 15, 2014 and remained continuously available to the public through March 16, 2014. The procedure garnered a sample of 696 respondents across all residential areas of San Angelo.

A distinct Goodfellow AFB sample of on-base personnel was collected between February 7, 2014 and March 10, 2014. It yielded 195 responses. A supplementary ADDENDUM is attached to this main report.

The main report covers the 696 respondents from the city's civilian residential areas. The supplement ADDENDUM compares responses from the 195 on-base personnel with the city's civilian residential areas.

Both the main TNAS and the ADDENDUM solicited information from respondents related to the following general transportation needs assessment topics: 1) Patterns of use associated with various modes of transportation. 2) Public perceptions of the quality and capacity of transportation infrastructures. 3) Public views on the importance of various transportation issues and safety concerns, as well as perceptions of the potential effectiveness of various solutions. 4) Citizen assignment of priority ratings to selected types of potential transportation projects.

Principal Findings of TNAS Community Sample

The sample of 690 respondents from the civilian residential areas of the city is of sufficient size to produce results within a +/-5 percent margin of error. The sample is a valid representation of the views of adult residents in the city who have interest in transportation needs and issues. Residents with the strongest interest tend to be white, non-Hispanic homeowners in the city's 76904 residential areas, college educated, and between the ages of 45 and 64. The sample underrepresents the viewpoints of residents

in the 76901 and 76903 zip codes, less educated members of the community with household incomes near the poverty line, and Hispanic citizens.

Driving alone in a personal vehicle is the most prevalent mode of transportation while walking (including running), carpooling and bicycling are used at moderate levels. Commercial vehicles, taxis and shuttles, public transit, boats, and airplanes are only seldom used, if at all, by the majority of TNAS respondents.

Private and commercial vehicle use is most often for work purposes. All other transportation modes are used prevalently for leisure and other purposes (e.g. running errands, shopping, meeting appointments, socializing). A large plurality of travelers would maintain personal use of a vehicle by renting or borrowing if they lost access to their own private vehicle.

Local residents perceive transportation infrastructure to be only fair at best in terms of the quality of system connections and capacity. The system of roads and highways was rated highest in quality compared to other infrastructure. Three systems – biking, sidewalks and the rail system – were rated near poor. Despite low opinions on quality, however, respondents indicated only modest, if any, inclination to change transportation choices in the event of improvements made to systems.

Respondents indicated six transportation issues of moderate to high importance including unsafe roads, roadway and highway pavement conditions, signal timing causing congestion or running red lights, lack of bike lanes, lack of sidewalks, and lack of destinations for air travel.

Ten safety issues were also rated moderate to high in importance including increased congestion or traffic demand, dangerous highway entrances and exits, trucks entering and leaving roadways, traffic congestion and safety concerns around schools, drainage - runoff - weather concerns, hit and run accidents, public knowledge of rules of the road, lighting and security at bus stops, lack of pedestrian facilities at bus stops, and responsible road sharing between motorists and bicyclists/pedestrians.

From a list of 18 possible solutions to various safety concerns, respondents perceived 12 to be of moderate to high effectiveness including restricting left turns on major streets, improved engineering of traffic flow at congested highway on-ramps and off-ramps, high visibility road markings and signage, upgraded street lighting, pullout lanes at bus stops, bike lanes on roads, additional sidewalks, high visibility crosswalks and pedestrian crossing signals, pedestrian-activated flashing beacons and pedestrian refuge islands, improved weather communication,

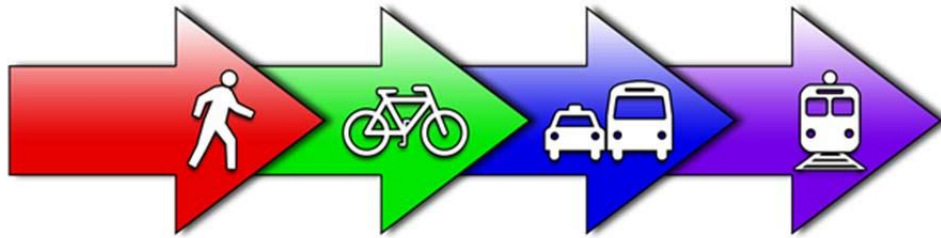
improved public education and information, and local regulation for cell phone/texting while driving.

Respondents assigned moderate to high priority to six long-term projects from a list of 14. These include maintaining existing roads, Complete Streets projects, Smart Growth projects, adding more bike lanes, adding more sidewalks and adding shoulders or additional lanes to high traffic 2-lane roads and highways.

A rank ordering of four projects resulted in first priority being assigned to adding more sidewalks, followed by providing better public transit, adding more bike lanes and providing intercity regional transit services. However, narrow differences between the ranks of each project indicate that none of the four projects is decisively the first priority among respondents.

A total of 248 respondents offered 637 comments. ASU coded and sorted the feedback into six general categories. The majority of comments related to infrastructure and transportation systems. The combination of comments on Roads & Highways and Bike & Pedestrian facilities, Air, Rail & Intercity Bus, and Public Transit accounted for 73 percent (or 465) of all open comments. A complete listing of respondent comments is available in Appendix C of the report.

**Transportation Needs Assessment Survey:
Goodfellow Air Force Base, On-Base Sample**



METROPOLITAN PLANNING ORGANIZATION
S A N A N G E L O

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EXECUTIVE SUMMARY

The purpose of a distinct Goodfellow AFB (GAFB) sample was to provide a foundation for comparing and contrasting the civilian and military communities on patterns of use, perceptions of quality and capacity, views on transportation issues, opinions of various solutions, and potential project priorities. The special sample was collected between February 7, 2014 and March 10, 2014. It yielded 195 responses from On-Base personnel. The goal is to facilitate a comprehensive San Angelo Metropolitan Transportation Plan (MTP) for 2015-2040 that reflects an awareness of unique transportation needs in the local civilian and military communities.

Principal Findings from the TNAS GAFB On-Base Sample

The sample of 195 On-Base respondents differs on several demographic traits from the TNAS respondents representing the residential areas of the city. The On-Base respondents are substantially younger and many have resided in the city for only a short time period. They include more minority group members. A smaller percentage of the On-Base respondents have achieved a college degree or higher-level education. The On-Base group includes fewer high-income respondents and a larger percentage of renters than in the community overall.

The On-Base respondents use transportation systems differently than community members. They use personal vehicles less, but they carpool, use taxi service, public transit, the GAFB trolley and walk more often than community respondents walk. They also use the transit systems for purposes that differ from members of the community. They more often walk or ride bicycles to work, and they use other modes of transportation more frequently for leisure and other purposes.

The On-Base sample gives a slightly lower quality rating to the local highway and road system than community respondents. They give higher ratings to public transit, the bicycling system and the pedestrian and sidewalk infrastructure.

The On-Base group generally indicates less likelihood of changing transportation choices if improvements were made to various systems. The exception is the GAFB trolley. They indicate greater likelihood to change with improvements to the trolley than the community respondents do.

Compared to the community members, the On-Base respondents assign less importance to the gamut of transportation issues and safety concerns. Similarly, they generally assess various solutions to safety issues to be less effective than do members of the community.

The GAFB On-Base respondents generally give less priority to transportation projects compared to the community respondents. In rank ordering selected projects, however, the On-Base group assigned a higher rank than community members did to providing better public transport and intercity bus services. Community respondents, by contrast, gave a high rank-order to more sidewalks and bike lanes.

A total of 33 respondents offered 47 comments. ASU coded and sorted the feedback into five general categories. The majority of comments related to issues and public transportation. The combination of comments on these two categories accounted for 61.7 percent (or 29) of all open comments from On-Base respondents. Several of the issue-related comments focused on use of taxi services by the On-Base group. A complete listing of respondent comments is available in the Comment Listing section of the ADDENDUM to the TNAS main report.



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