1 INTRODUCTION

1.1 WHAT IS AN MTP?

The 2045 Metropolitan Transportation Plan (MTP) is the long-range transportation plan for the urbanized region that includes the cities of Aztec, Bloomfield, Farmington, Kirtland, and the surrounding urbanized area of San Juan County. The MTP is used by the staff and member agencies of the Farmington Metropolitan Planning Organization (FMPO) to project the area's transportation needs for the next 20 plus years.

Since the plan is informed by population and employment analysis, it can also provide a broader vision of infrastructure policies and development priorities for the region. To ensure that the MTP accurately addresses regional needs and better serves the transportation system's users, the plan analyzes the current and projected regional transportation system of the region. The plan is updated every five years to include the latest population projections and incorporate recent transportation projects and newly identified priorities.

As funding for transportation is limited, the MTP also considers how to best utilize the federal funding available for the region by prioritizing projects for implementation. Per federal regulations, the MTP must be fiscally constrained, meaning only projects for which there is a reasonable expectation that funding is available may be included in the MTP. For a project to receive federal funding, it must be included in the MTP or be consistent with the plan's recommendations.

Requirements of the MTP

The MTP is part of the 3-Cs approach to long range transportation planning that requires MPOs to engage in a process that is continuous, coordinated, and comprehensive. To fulfill this obligation, the MTP – and ongoing planning efforts of the MPO – must involve member agencies and transit providers and examine all modes of transportation. The MTP is adopted by the FMPO Policy Committee.

The various sections of this MTP discuss the needs of each transportation mode. Requirements for an MTP and the general obligations of an MPO are described in 23 CFR 450. Additional requirements and guidance are provided in recent transportation authorization legislation.

Updates to the MTP Over Time

The initial MTP for the region was adopted by the FMPO in April 2005 (FMPO was created in the early 2000s). Subsequent updates were completed in 2010 and 2015, with amendments to individual chapters added over time. With each update, the planning horizon period has been extended.

1.2 WHY UPDATE THE MTP EVERY FIVE YEARS?

An update to the region's MTP is required on a recurring basis. More importantly, the MTP is an opportunity to consider emerging trends and incorporate new data. The FMPO region has experienced noteworthy changes since the last MTP, beginning with the incorporation of the Town of Kirtland. In addition, new regional priorities have emerged and growth projections have been updated.

Previous long-range transportation planning efforts anticipated high levels of population growth and identified the need for capacity expansion projects (i.e. new roads and additional lanes) as well as increased transportation options to address that expected demand. However, economic conditions changed markedly in the last five to ten years, driven primarily by the decline in oil and gas extraction, resulting in overall population and employment loss in the region. The latter part of the decade appeared to bring a period of recovery and new areas of economic activity before the global outbreak of COVID-19.

Under more recent projections, which were developed before the COVID-19 outbreak and before the decision to close the San Juan Generating Station, the region is expected to regain lost population and experience modest growth into the 2040s. However, the COVID-19 pandemic may have impacts on regional migration patterns and economic activity that will not be fully understood for many years.

The 2045 MTP is an opportunity to evaluate transportation priorities. Long-term funding availability – which is already an issue – is likely to become more challenging. Agencies across the region may choose to focus their resources on maintenance and targeted improvements that address quality of life, including on-street bicycle and pedestrian facilities, trails, and design improvements that address safety. Additional roads and travel lanes may only be needed strategically to support economic development objectives.

Impacts of COVID-19

This MTP was developed in the midst of the COVID-19 pandemic, although all data collection and the majority of public input were collected before the outbreak. The long-term impacts of COVID-19 are unknown; however, early indications point to significant impacts to regional travel patterns. In particular, the region experienced a substantial reduction in vehicle miles traveled and transit ridership during the outbreak as many employees shifted to working from home while other businesses closed temporarily (or permanently). The pandemic appears to be creating a potentially long-term shock to employment with an unknown but likely extended period of recovery. From a transportation perspective, high unemployment and an increased shift to telecommuting among businesses and government agencies may reduce traffic levels during peak periods.

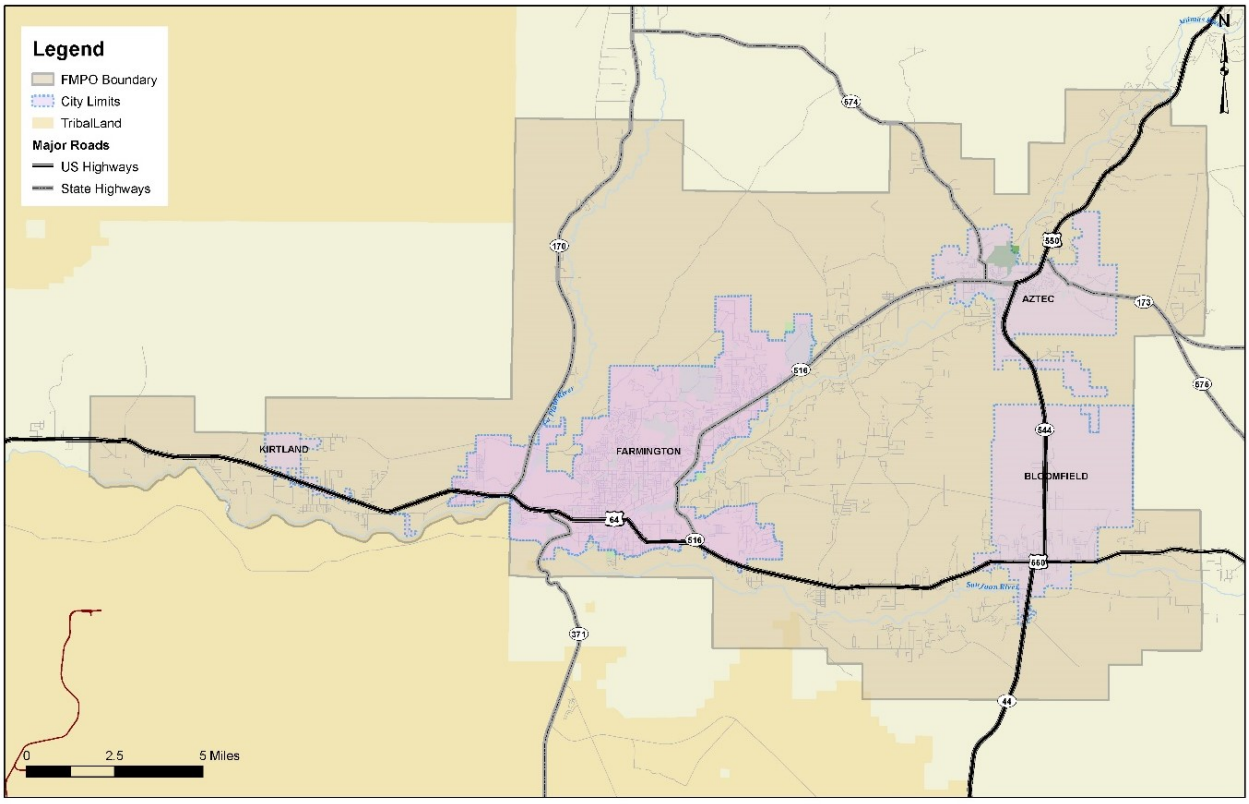
At the same time, the region has made significant progress toward policy priorities identified in the previous long-range plan. The 2040 MTP emphasized Complete Streets and identified a need for transportation projects that meet the needs of a more diverse set of users than just motorists. In the subsequent years, FMPO developed a Complete Streets Design Guide and Bicycle Pedestrian Master Plans, and jurisdictions across the region have pursued a variety of trails projects and road diets to create additional space and accommodations for bicyclists and

pedestrians. The most noteworthy of these efforts is the transformation of Main St in Downtown Farmington. Similar efforts are planned on Main Ave in Downtown Aztec, including a road diet and sidewalk widening. As a result, an emphasis on Complete Streets, safety, expanded trails, bicycle and pedestrian infrastructure and other investments that enhance the quality of life are also emphasized in this plan.

1.3 FARMINGTON METROPOLITAN PLANNING ORGANIZATION

FMPO is the regional planning agency responsible for transportation planning for the Cities of Aztec, Bloomfield, Farmington, the Town of Kirtland, and the urbanized areas of San Juan County (see Figure 1-1: FMPO Planning Area).[1] FMPO carries out federal laws related to coordinated, continuing, and comprehensive transportation planning. The MPO, in cooperation with local jurisdictions, NMDOT, Red Apple Transit, and the general public, develops long- and short-range transportation plans. FMPO is also responsible for determining the best use of federal funds available to the region.

Figure 1-1: FMPO Planning Area



[1] An MPO is required for all urbanized areas, as designated by the US Census Bureau, with more than 50,000 residents

1.4 TRANSPORTATION LEGISLATION

1.4.1 MAP-21 National Goals

The Moving Ahead for Progress in the 21st Century Act (MAP-21), enacted in 2012, funds surface transportation programs and establishes guidelines for MPOs to make surface transportation more streamlined, performance-based, and multimodal. The law also seeks to address challenges facing the U.S. transportation system, including safety improvements, maintaining infrastructure conditions, reducing traffic congestion, improving freight movement, protecting the environment, and reducing delays in project delivery. FMPO works in cooperation with local entities, the NMDOT, and the local transit operator to account for federally mandated planning goals as a part of its planning efforts.

Table 1-1: MAP-21 Goal Areas

MAP-21 Goal Area	National Goal
Safety	To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
Infrastructure condition	To maintain the highway infrastructure asset system in a state of good repair.
Congestion reduction	To achieve a significant reduction in congestion on the National Highway System.
System reliability	To improve the efficiency of the surface transportation system.
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.
Environmental sustainability	To enhance the performance of the transportation system while protecting and enhancing the natural environment.
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.

1.4.2 FAST Act Requirements for MTPs

Passed in 2015, the Fixing America's Surface Transportation Act (FAST Act) builds upon the metropolitan planning requirements that were in effect under MAP-21. Focus areas from the FAST Act are described in Table 1-2: FAST Act Goal Areas.

Table 1-2: FAST Act Goal Areas

FAST Act Focus Area	Description
Support for intercity bus and commuter vanpools	The FAST Act continues to require MTPs and TIPs to provide facilities that enable an intermodal transportation system, including pedestrian and bicycle infrastructure. The FAST Act also requires that the metropolitan long-range plan include identification of public transportation facilities and intercity bus facilities.
Scope of planning process	The FAST Act expands the scope of consideration of the metropolitan planning process to include: • improving transportation system resiliency and reliability • reducing (or mitigating) the stormwater impacts of surface transportation • enhancing travel and tourism
Capital investment and other strategies	The FAST Act continues to require a metropolitan transportation plan to include strategies that meet current and projected transportation infrastructure needs.
Resilience and environmental mitigation activities	The FAST Act expands the focus on the resiliency of the transportation system as well as activities to reduce stormwater runoff from transportation infrastructure. In addition, it now requires strategies to reduce the vulnerability of existing transportation infrastructure to natural disasters.
Transportation and transit enhancement activities	The FAST Act continues to require a metropolitan transportation plan to include transportation and transit enhancement activities. When proposing these activities, the plan must now include: • consideration of the role that intercity buses may play in reducing congestion, pollution, and energy consumption in a cost-effective manner • strategies and investments that preserve and enhance intercity bus systems (including those that are privately owned and operated)
Participation by interested parties in the planning process	The FAST Act adds ports and some private providers of transportation, including intercity bus operators and employer-based commuting programs, to the list of interested parties that an MPO must provide with reasonable opportunity to comment on the transportation plan.
Congestion management	The FAST Act recommends travel demand reduction strategies for congestion management in a transportation management area (TMA). Note: These requirements do not apply to FMPO, which is currently below the threshold for a TMA (i.e. 200,000 residents).

1.5 EMPHASIS ON COMPLETE STREETS IN THE FARMINGTON METROPOLITAN AREA

In 2016, FMPO adopted *Context Sensitive Street Design Guidelines: A Complete Streets Approach*, a guidance document that reflects a region-wide emphasis on safety and economic vitality through enhanced quality of life and complements the recent investments by local agencies in trails and outdoor recreation opportunities. The

The 2045 MTP continues this emphasis and further supports building a culture around active transportation. The section below discusses the benefits of Complete Streets and summarizes the *Context Sensitive Design Guidelines* document. Refer to the Roadways and Bicycle & Pedestrian Travel chapters for discussion of specific Complete Streets-related projects.

1.5.1 Why Complete Streets?

Since the 1960s, the practice of designing places for people has emphasized accommodating the private motor vehicle. Although automobiles hold a valuable place within any overall transportation network, planners and engineers have focused heavily on their importance without considering other modes of travel. Examples include focusing on the construction of travel lanes, adopting policies and regulations leading to immense and underutilized parking lots, and applying a 'one-size-fits-all' approach to the construction of multimodal facilities such as sidewalks, bikeways, and transit facilities. In many cases, these facilities have been left out entirely. Past design practices have placed vulnerable, nonmotorized transportation users next to high-speed, high-volume motor vehicle traffic. This discourages active living and can place a costly burden on cities and communities who endeavor to retrofit streets in rural areas, neighborhoods, commercial corridors, and urban centers.

Complete Streets Core Values

The *Context Sensitive Street Design Guidelines* highlights six core values as regionally important as they relate to Complete Streets:

- Public Health
- Safety
- Economic Vitality
- Aesthetics
- Network Connectivity
- Multimodal Transportation

These core values establish the framework to plan, design, and build active, vibrant streets that contribute to the region's economy. They balance the accommodation of private motor vehicles with active transportation facilities to attract growing families, seniors who can age in place, and a talented labor force. Some of these same values are carried through to the MTP's goals and policies.

1.5.2 What are Complete Streets?

Complete Streets are streets that are designed to provide safe and comfortable access for people of all ages and abilities including those who walk, roll, bike, take transit, and drive. Complete Streets prioritize people-centric activity including crossing the street, accessing businesses, bicycling to work, and accessing transit stops. When transportation networks are comprised of Complete Streets, it is easier for everyone to get around, no matter how they choose to travel.

Complete Streets design features can include buffered sidewalks, bicycle facilities, accessible transit stops, underground utilities, access management, fewer travel lanes, and intersections that prioritize safety. These elements may not be necessary on each street, and a Complete Street in a rural area may look different from a Complete Street in a dense, urban area. In dense urban areas, placemaking and community-building functions may be prioritized over motor vehicle traffic flow. These functions may not be as desirable or applicable in a rural context. However, by making Complete Streets principles paramount in street design, cities and regions can create complete networks that link communities to jobs, services, education, and recreational opportunities and can balance safety and mobility for all travelers.

For these reasons, it is important to prioritize complete networks to allow people to travel with ease and efficiency between destinations while remaining sensitive to the needs and desires of different communities. For example, a city may prioritize transit movement on one street and bicycling on a nearby parallel street instead of trying to fit all of these uses onto one space-constrained roadway. Another community may choose to accommodate people biking and walking on a rural road by means of a shared use path on one side of the street instead of providing bike lanes and sidewalks on both sides of the street where few people would be walking or biking.

1.5.3 Complete Streets as a Guiding Framework

Transforming the region's roadway network into a safe, connected, and equitable system will require that all new construction and retrofit projects are based on a Complete Streets framework. The FMPO document *Context Sensitive Street Design Guidelines: A Complete Streets Approach* serves as a guide for municipalities in the region and outlines the key principles and benefits of Complete Streets, including references to national research and guidance on best practices. FMPO members agencies demonstrated further support for Complete Streets principles through the Bicycle and Pedestrian Master Plan, which was completed in 2019. See Chapter 7: Bicycle & Pedestrian travel for additional information.

Specifically, the Design Guidelines document identifies five street types and five land use context areas as an organizing framework for the selection of appropriate roadway design guidelines (see Figure 1-2) and provides guidance on how streets in these contexts should be designed to accommodate all users, including recommending right-of-way allocation and features for each street type and land use context. These guidelines provide a context-sensitive approach to street design by acknowledging the varying uses, characteristics, and needs of streets as they transition from urban to suburban to rural contexts.

Figure 1-2: Land Use Context Areas and Road Typologies

Land Use Context Areas

Land Use Context Areas (LUCAs) were developed with input from land-use professionals from across the region. They are comprised of a unique combination of different land use types (rural to urban core), which may also have unique architectural types, urban forms, building densities, topography variations, and other natural features. Streets in these different land use contexts can often warrant different designs and features. For example, a rural road may have low vehicle volumes and higher speeds may be more acceptable if there are few people walking or biking, while a Downtown or Urban Area may have streets with higher volumes of people walking, biking, taking transit, and driving, and may need separated spaces for all modes and slower speeds to enhance safety.

Table 1-3: Land Use Context Areas from Context Sensitive Street Design Guidelines

Land Use Context Area	Description
Rural	Predominately low density residential on large lots. Farmland and pastures are common. Large land areas for regional recreation/open space. Small commercial and retail are also found.
Industrial	Primarily industrial parks and other places served by trucks such as coal mines, refineries, and mineral extractions sites. Truck size would be large and volume would be frequent.
Neighborhood	Include subdivisions that have medium density with a mix of uses including churches, schools, and parks with varied grid patterns. Smaller commercial and retail uses within proximity or abutting neighborhoods that provide accessibility for all modes.
Commercial	Commercial and retail that serves the region. Larger sites include mall locations, big box retail, chain restaurants, auto dealers, and strip malls. Smaller scale non-intrusive industrial uses are common, including warehouses, storage yards, mechanic shops, etc.
Downtown/Urban Area	Higher density and mixed-use of residential, commercial, and retail. Highly accessible by all modes. Uniform building aesthetics and setbacks. On-street parking and wide sidewalks.

Road Typology

The road typology is composed of a defined hierarchy of street types that connect the region. Although loosely based on the US Department of Transportation's (USDOT) functional classification system, regional values supersede the definitions used by Federal and State governments. In practice, road typologies do not always fit neatly into the defined context areas, or the boundaries between context areas may be fluid. The planner or designer should use their best judgment in selecting the road typology that most closely matches the existing and proposed land uses based on the descriptions in Table 1-4Table 1-3: Land Use Context Areas from Context *Sensitive Street Design Guidelines*

Table 1-4: Street Types from Context Sensitive Street Design Guidelines

Street Type	Description
Lane	One- or two-lane roads with the lowest travel speeds that serve low density residential and commercial areas. Lower volumes and speeds allow for integrated bike use in the roadway and do not necessarily require separate facilities. Sidewalks are encouraged depending on the surrounding density. They may have flexible transit services and stops. Rural lanes are not always paved.
Street	Two-lane roads with the lowest travel speeds that serve residential and commercial areas within the cities. On-street parking is common but may be restricted in some places. Driveway-Lane access is allowable at moderate levels. Medians may be present but not recommended. Lower volumes and speeds allow for integrated bike use in the roadway and do not necessarily require separate facilities. Sidewalks should be buffered from the street.
Avenues	These will be the most common utilitarian streets in the network. They are characterized by lower volume speeds with 2-4 lanes primarily connecting commercial, retail, and downtown districts. Bike lanes, wide sidewalks, and transit stops are prevalent, multi-modal side-paths in high traffic areas are encouraged. These roads distribute traffic between the higher classifications and local streets. Medians and two-way left turn lanes are common. Shared driveway access is encouraged. Downtown areas include additional streetscape features that promote multi-modal travel.
Boulevards	These meaningful roads are meant to be enjoyed. They steer motorists through/to local amenities such as rivers, urban centers, and neighborhoods. They are 2-4 lanes with moderate volume and speeds and connect travel through a city serving commercial areas. Travel lanes are smaller in width to accommodate the presence of medians, sidewalks & bike lanes and or multimodal side-paths, on-street parking, and transit stops. These streets support the higher road classifications and connect with Lanes and Streets and feed to Parkways. Access management controls should minimize conflicts with bicyclists and pedestrians.
Parkways	Vehicle-oriented, high speeds & volumes, typically 4-6 lanes; land uses include office parks, multi-use centers with parking lots; access management controls; recommends multi-modal side-paths; locate transit stops within adjacent developments

The *Context Sensitive Street Design Guidelines* applies minimum street design dimensions to each street type and land use context area combination. A series of tables in the document outlines minimum widths for:

- Total right-of-way
- Sidewalk zones
- Travel lanes
- Center turn lane/medians
- Buffer zones
- Curbs/gutters
- Parallel parking
- Angled parking
- Transition zones
- Bike zones
- Detached multi-use trails

When designing new roadways or retrofitting old ones, planners and engineers should consult this section of the *Context Sensitive Street Design Guidelines* – as well as the *Bicycle and pedestrian Master Plan* – to guide them in allocating roadway space between users and adhering to Complete Streets design principles.

1.5.4 Main Street in Farmington

Perhaps the best example of a Complete Streets project in the region is the redevelopment of Main St in Downtown Farmington. Using guidance outlined in the *Context Sensitive Street Design Guidelines*, this project will transform Main St with modern urban roundabouts, right-sizing the street from four lanes to two, narrowing the travel lanes from 12 feet to 11 feet, widening the sidewalks to 15 feet, and creating a 6-foot-wide park-assist lane. The park-assist lane will make parallel parking, exiting, and entering motor vehicles easier and safer while allowing traffic to pass. The modern roundabouts will keep traffic moving smoothly while reducing noise pollution as well as air pollution. These benefits eliminate the need for stop-and-go driving, thereby making Historic Downtown Farmington a much more pleasant place to live, work, shop, and recreate. The project is currently under construction and expected to be completed in fall 2020.

Figure 1-3: Concept Design of Main Street in Downtown Farmington

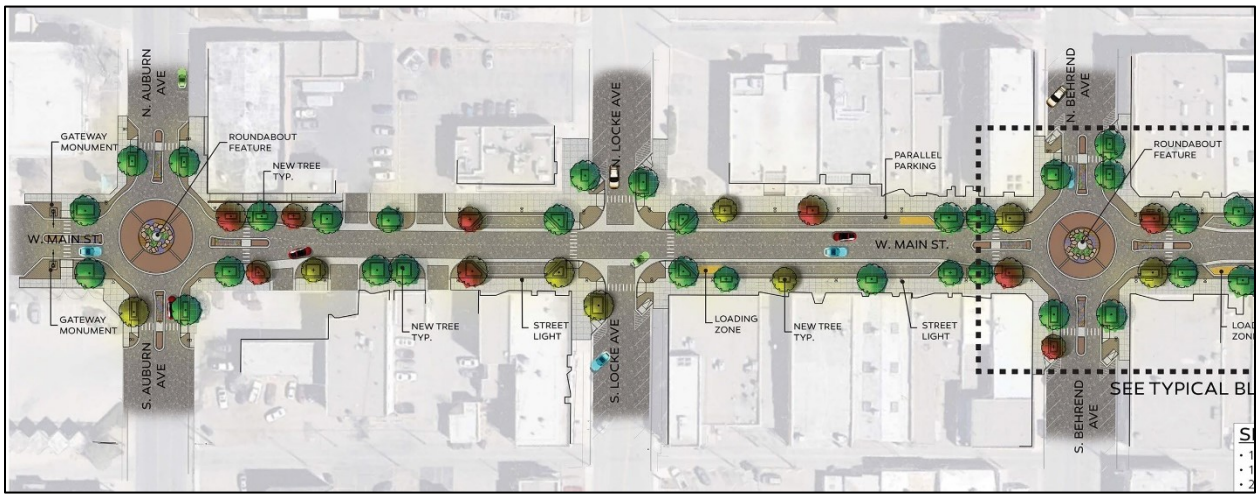


Figure 1-4: Existing Conditions and Conceptual Rendering of Proposed Improvements

The MTP is shaped by the vision and mission statements of the MPO. Approved in 2015, these were developed in response to the planning factors outlined by federal legislation and in cooperation with the MPO Technical Committee, the MPO Policy Committee, NMDOT, and Federal Highway Administration (FHWA).

FMPO Vision

The FMPO vision is for a safe, efficient and reliable multi-modal transportation system that meets the needs of residents and visitors in the region.

FMPO Mission Statement

Provide a forum to develop an effective transportation system to move people and goods safely, economically and efficiently while maintaining a high quality of life.

1.6 FMPO GOALS AND OBJECTIVES

To best serve its constituents, the FMPO has developed its own goals over time, based on the region's own needs, priorities, and vision, and with guidance and a collaborative effort with federal and state transportation agencies. Table 1-5 describes the goals and objectives identified by the MPO that help to support and achieve the Vision and Mission statements.

Table 1-5: FMPO Goals and Objectives

Goal	Objective
I. Enhance Quality of Life	
A. Provide safe and efficient transportation options for all of the region's residents, regardless of age, income, ability or location	1. Increase multi-modal transportation options by creating networks for all modes 2. Ensure connectivity to major destinations and recreational sites by active transportation modes 3. Expand transit routes, service hours, and days of operation particularly for those who are unable to drive or cannot afford to 4. Support continuous implementation of the Complete Streets Design Guidelines by local government entities
B. Provide a transportation system that promotes healthy living	1. Promote access to goods and services for all users, with a focus on populations that do not have access to, the ability to, or the opportunity to drive 2. Maintain existing complete streets and expand complete streets infrastructure to promote a culture of active transportation
C. Reduce VMT to improve air quality and lower emissions	1. Support active transportation modes such as biking and walking to help reduce auto-dependency 2. Pursue regional travel demand management strategies 3. Support infill development to bring housing and destinations closer together 4. Invest in rail to reduce freight VMT and emissions
II. Improve Safety	
A. Reduce crash rates for all transportation modes	1. Improve system safety through improved levels of service and reduced congestion 2. Promote safety design practices for all modes 3. Collaborate with NMDOT to address crashes along state-owned highways and county roads 4. Minimize access to adjacent developments along key arterials to maximize capacity consistent with access management principles

Goal	Objective
B. Reduce severe and injury crashes, particularly for bicycle and pedestrian-involved crashes	1. Consider traffic calming measures where appropriate to reduce speeding and severity of crashes 2. Development of Complete Streets policies, plans, guidelines, and standards
III. Support Economic Development Opportunities	
A. Support the economic vitality of the MPO region by investing strategically in transportation projects and programs that create long-term economic value	1. Invest in and maintain transportation infrastructure serving economic activity centers 2. Support all transportation modes for efficient delivery of goods and services and access to businesses and jobs 3. Enhance public health, safety, and quality of life factors to attract visitors and retain current and new residents 4. Expand transit services, routes, hours, and days of operation to improve access to jobs
B. Increase outdoor recreation tourism opportunities	1. Promote access to trailheads by creating a network of paths, bike lanes, transit lines between population centers, recreational sites, and neighboring cities 2. Create designated trails for different user types 3. Promote trails, Main Street areas, and other bikeable and walkable areas as part of regional outdoor recreation marketing campaigns, including equestrian events
C. Invest in freight transportation infrastructure	1. Maintain priority freight corridors in good conditions 2. Support transportation connections to potential rail freight facility
IV. Preserve and Maintain the Existing System	
A. Operate and maintain the metropolitan transportation system in a financially-sustainable and cost-efficient manner	1. Prioritize projects that preserve and maintain the existing roadway network 2. Ensure adequate funding is available for roadway maintenance, including on-street bicycle and pedestrian facilities 3. Leverage annual resurfacing programs to install bicycle and pedestrian facilities
B. Foster regional coordination on transportation projects and policies	1. Coordinate implementation of Intelligent Transportation Systems (ITS) technologies for improving the safety and security of transportation modes 2. Coordinate transportation system design and operation with emergency response and disaster mitigation efforts
C. Manage congestion by prioritizing projects that enhance the capacity-efficient modes like	1. Maximize use of the current transportation system through Transportation Systems Management Strategies that minimize congestion and delay

Goal	Objective
carpooling, transit, biking, and walking and reduce overall person delay	2. Integrate Intelligent Transportation Systems elements aimed at increasing system efficiency and safety into the regional infrastructure
V. Strengthen Coordination among Agencies and Jurisdictions	
A. Ensure ongoing coordination among with local agencies	1. Include MPO review in local development review process 2. Involve local engineers, planners, and the public in the transportation planning process 3. Maintain collaborative relationships within the region through ongoing public outreach to stakeholders and open public meetings 4. Coordinate on trails projects that transcend jurisdictional boundaries to further expand the regional bicycle network
B. Foster public-private partnerships aimed at reaching regional transportation goals	1. Pursue Travel Demand Management Programs that encourage alternatives commuting by single-occupancy vehicle 2. Integrate schools and businesses into the regional transportation planning process 3. Support infill development through transportation projects that improve conditions for pedestrians and bicyclists and enhance access to destinations
C. Integrate transportation and land use planning and use investments to proactively shape land use patterns rather than react to growth	1. Incorporate regional transportation policies into local plans 2. Incorporate local priorities and investments that emerge from Comp Plans and other local planning efforts into the MTP 3. Coordinate with economic development groups on transportation infrastructure investments that support new industries.