

*Moving the Santa Fe Region forward with a sustainable, interconnected Complete Streets network that aims to provide safe and secure access for all users.*



# Santa Fe Metropolitan Transportation Plan 2010-2035

## DRAFT

AUGUST 2010



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## Executive Summary

The theme of the Santa Fe Metropolitan Transportation Plan 2010-2035 (MTP) is ***Moving the Santa Fe Region forward with a sustainable, interconnected Complete Streets network that aims to provide safe and secure access for all users.*** The region's transportation system has been enhanced by a \$400 million investment of state and federal funds for a new passenger rail system connecting the governmental center for the state in Santa Fe with its commercial and business center in Albuquerque. However, it is now challenged due to the worldwide economic downturn with severely constrained agency budgets, as well as a lack of affordable housing in the region, and continued escalation in the cost of transportation projects. The region simply cannot afford to meet its long-term needs to build new or improved transportation infrastructure, or expand public transportation services, under current financial resources. We must face up to the challenge to be fiscally responsible in creating a sustainable, interconnected and multimodal transportation system.

How do we do this? This MTP is a departure from the previous MTP in a number of ways:

- The “sustainable” part of our theme reflects the balance of the desire to reduce transportation's contribution to Greenhouse gas emissions and its impact on the environment, while also recognizing that funding for transportation projects will be scarce and highly competitive for the foreseeable future.
- By emphasizing accessible, interconnected complete streets, the MTP's project priorities and emphasis areas relate to local, state and federal planning and livability principles.
- Providing safe and secure access for all users not only develops a transportation system at a human scale, rather than a vehicular one, but it brings back the sense of community and encourages a balanced choice of transportation modes on the interconnected system.

Additionally, this MTP considers a number of new factors in prioritizing projects on our regional roadway system, and you will find that these evaluation criteria reflect the MTP's overarching theme as well as the planning and livability principles which now prevail in our decision-making. Roadway projects have been identified through corridors studies along I-25, St. Francis Drive, and NM 599 as well as established City and County priorities. Projects are rated according to their effect on prioritization factors including Safety, Mobility /Congestion Relief, Multi-modal Enhancement, and System Interconnectivity.

Along with these new prioritization factors, the MTP directs the Santa Fe MPO to take on a number of initiatives to advance how the transportation system will become an accessible, interconnected, sustainable and multimodal system, including:

- Undertaking a Regional Transit and Rail Study to continue toward establishing a long-range transit development plan for the region
- Working with the bicycle and pedestrian community to develop a Regional Bikeways Master Plan and a Regional Pedestrian Facilities Plan;

- Continuing efforts to develop a congestion management system to include understanding local and statewide freight mobility needs.
- Incorporating the 2010 Census information into short- and long-range planning, including recalibration of the travel forecasting model for the region and a program to collect updated traffic counts.

The process to develop this MTP emphasized transparency and community inclusion. Transportation stakeholders in the region were invited to provide their transportation needs and concerns, as well as their input on the draft plan and its project priorities.

The MTP 2010-2035, as well as the Santa Fe MPO Transportation Improvement Program (TIP) and other documents related to the MPO can be viewed on-line at [www.santafenm.gov](http://www.santafenm.gov).

For comments or questions please contact us, the MPO staff.

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## 1.0 Introduction

As its 400th anniversary is being celebrated, the City of Santa Fe, its Downtown, nearby employment centers, cultural attractions and clean air continue to be major destinations for local and regional commuters, residents, and tourists. The existing road network, with capacity constraints and lacking adequate connectivity, is now beginning to show evidence of level of service failures. “Peak Period” congestion and delay, although relatively short in duration compared to larger urban areas, is most evident at intersections along our region’s principal arterials: St. Francis Drive, Cerrillos Road, Rodeo/Airport Roads, and Old Pecos Trail.

Santa Fe County continues to experience most of its growth in the south and southwest sectors of the current urban area, and within the Community College District south of I-25. This outward expansion brings increasing traffic congestion to transportation facilities which were built to handle rural traffic conditions. With outward expansion also comes reduced population and employment densities, which are more difficult to efficiently serve with transit and non-vehicular modes such as bicycle and pedestrian facilities. These growth sectors will continue to be stimulated through the build out of approved subdivisions and mixed use commercial development as well as through city and county initiatives to boost the local economy by providing and promoting affordable housing, educational opportunities, and jobs creation. With many Santa Fe region job-holders commuting from the more affordable housing markets in Albuquerque and Rio Rancho the I-25 corridor becomes more important as a primary commute corridor for the region. The continued availability of intercity transit, such as Rail Runner and intercity bus service, to serve this commute will be critical to the region’s economic future.

As with many areas, the economy of the Santa Fe region has been hard-hit by the “Great Recession” of 2008-2010. Capital budgets at all levels of government have been scaled back, resulting in increased competition for limited available funding. Along with reduced revenues comes the continued escalation of the cost of project implementation. The construction cost of a project is no longer the single largest component of the “cost of doing transportation business”. The demand for enhanced and increasingly-inclusive community involvement, right-of-way acquisition that at many times impacts residents and businesses, increasing environmental impact mitigation requirements, and inflation in the cost of construction materials has resulted in over a 30 percent increase in the cost of implementing projects since the last MTP update in 2005.

***The challenge facing this MTP, and our transportation system in general, is to establish a financially-responsible, sustainable, interconnected multimodal transportation system.***

To meet this challenge, there are 'areas of emphasis' highlighted throughout the MTP that describe strategies to help facilitate implementation of the plan.

This Santa Fe Metropolitan Transportation Plan 2035 is an update of the previous MTP 2030 that was adopted in 2005. At that time, Santa Fe was experiencing steady growth in residential and commercial development that was supported by a strong economy both locally and nationally. Federal and State investment in transportation infrastructure for Santa Fe was notable with \$400 million spent to extend the Rail Runner commuter train service to Santa Fe. There was great

expectation of the positive impact it would have on reducing the number commuter trips by single occupant vehicles between here and Albuquerque. Rail Runner station locations were identified, designed, and built with the vision of transit oriented development soon to follow.

When the economy faltered and stalled in 2008, developers scaled back and the realization of that vision slowed. As layoffs continue, people spend less, which impacts the availability of public financing. A continuing drop in gross receipt taxes has now lessened the ability of Santa Fe MPO member governments to meet matching funds requirements for major transportation infrastructure improvements. Likewise, there is a reluctance to issue local bonds to finance capital improvement projects and transportation infrastructure with projected declining tax revenues as the source of their payoff.

Given the absence of a new federal transportation funding act and the prospect of continuing resolutions of limited federal funding to states for transit and highway improvements and the fact that priority will be given to the needs of larger urban centers, interstates and national highway system projects, innovative funding mechanisms and cost sharing will likely be required for municipal and county led projects. Fiscal constraint and reasonably expected revenues have put a reality check on previous MTP “wish lists” of major projects to focus rather on those that provide interim fixes in order to delay the need for more expensive long term solutions. Many of the projects identified in this MTP, in addition to those constrained to a prioritized list, have met criteria that reflect the goals and objectives of the MTP as well as the federal planning factors and livability principles that help guide development of a sustainable transportation system.

Following the federal guidance for emphasis on merging affordable housing and effective transit oriented development with low environmental impact requires a compact urban design of mixed land use and an efficient and accessible public transportation system. A well connected and safe system of bikeways and pedestrian pathways compliments this type of development and promotes usage of these facilities. Strategic planning for improving bikeways connectivity and safer pedestrian facilities as well as promoting multi-modal travel options are areas of emphasis in the MTP.

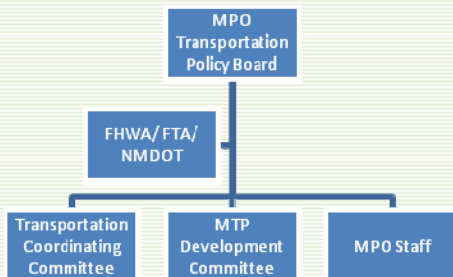
The demographic trends noted in the Community Structure section of the MTP highlight a need to focus transportation planning on accommodating the needs of an aging population in Santa Fe. Likewise, with economic constraints and rising costs to operate and maintain private vehicles, as well as those seeking healthier lifestyles, more people will be out of their cars and populating the streets.

Employing “Context Sensitive Solutions” and “Complete Streets” design standards will help make these local transportation corridors safer and more attractive to all users. Redefining level of service to include levels of comfort, quality and convenience for non-motorized usage instead of only for vehicle speed and efficiency will need a negotiated balance of public input and reasonable judgment from transportation professionals.

## 1.1 What is the Santa Fe MPO Metropolitan Transportation Plan?

The Metropolitan Transportation Plan (MTP) will serve as an important framework in addressing the transportation needs of the Santa Fe MPO over a 25 year horizon. This document is a federally required five-year update of the previous MTP 2005-2030. Long-range transportation plans for the metropolitan area have traditionally been included as an element in the comprehensive plans of the city and county. While these separate city and county plans continue to contain transportation elements, it is intended that this plan and other local government plans be consistent.

*While the Transportation Policy Board is the decision-making body for the Santa Fe MPO, metropolitan planning includes input from a number of other committees and agencies.*



Federal guidance of MPO planning activities is found in Title 49, Section 5303 of the current federal transportation act, the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU), which has identified eight planning factors that the metropolitan planning process in general, and specifically the MTP, must consider. These factors are:

1. *Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency;*
2. *Increase the safety of the transportation system for motorized and non-motorized users;*
3. *Increase the security of the transportation system for motorized and non-motorized users;*
4. *Increase the accessibility and mobility options available to people and for freight;*
5. *Protect and enhance the environment, promote energy conservation, and improve quality of life;*
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; and*
8. *Emphasize the preservation of the existing transportation system.*

In 2009, U.S. Secretary of Transportation, Ray La Hood announced the establishment of the following six “Livability Principles” to guide federal policy and coordinate programs in agencies including: federal transportation, environmental protection, and housing investments. The Six “Livability Principles” are:

- *Expanding access to affordable housing, particularly located close to transit;*
- *Providing more transportation choices;*
- *Enhancing economic competitiveness—giving people access to jobs, education, and services as well as giving businesses access to markets;*
- *Targeting federal funds towards existing communities to spur revitalization and protect rural landscapes;*

- *Increasing collaboration among federal, state, and local governments to better target investments and improve accountability;*
- *Valuing the unique qualities of all communities—whether urban, suburban, or rural.*

The content of this plan is "multi-modal" in nature. It covers all of the different modes or forms of surface transportation including pedestrian and bicycle facilities, public transportation, and roadways. It is also "inter-modal" in that it examines facilities where people, or goods, can transfer from one form of transportation to another. Development of the plan follows a public involvement process for input, review and comment that is contained in the MPO Public Participation Plan, which is available online at [www.santafempo.org](http://www.santafempo.org) and at the MPO office.

The population and employment projections, as well as the travel demand projections, for the MTP Update are considered as an "Interim Year 2035 projections". The 2010 Census statistics are expected to be released in 2012, and at that time the MPO will incorporate this data into the regional travel demand model and complete a recalibration effort. Following past undertakings, it is anticipated that the Census data will result in a modification of future growth projections and patterns, and the model recalibration effort will provide an updated way to project multimodal transportation demand. The outcome of these efforts will coincide with the next regular update of the Santa Fe MPO MTP 2010-2035 which will be conducted in 2015, although amendments may be made to this plan prior to that time. This Plan draws from the following planning efforts: the City of Santa Fe General Plan, the Arterial Roads Task Force Future Roads Plan, the Santa Fe County Growth Management Plan and Sustainable Land Development Plan, three major corridor studies along I-25, NM 599

and St. Francis Drive, transit/rail reports and station location studies, and a series of transit-oriented development studies.

The intent of this document is to lay the groundwork for a future transportation system. Many of the factors that will influence this system will continue to be refined in subsequent planning efforts. For example, the recommendations for improving the roads network were developed in conjunction with detailed land use and growth projections provided by city and county planning staffs. MPO staff will continue to monitor actual land development patterns and will work closely in other planning efforts in the metropolitan area to assure that the plans are coordinated. Modal priorities plans for the transit system, and bikeways and pedestrian master plans, will be developed in the next two years and incorporated into an update to this MTP.

The Metropolitan Transportation Plan is not intended solely as a budget document or a project list. It will be used, however, as the basis to develop the projects that are programmed and budgeted in the Transportation Improvement Program (TIP). The TIP sets short-term (4-year) project priorities, and is reviewed and approved by the Transportation Policy Board. The minimum requirement is that any project that will use federal funding must be referenced in the MTP and included in the TIP.

## **1.2 Accomplishments from 2005-2030 MTP**

The 2005-2030 MTP recommended three high-priority corridor studies and plans, along with several priority transportation improvements. A number of these efforts are now underway, or were completed between 2005 and 2010. These are summarized below.

The corridor studies, contracted by the New Mexico Department of Transportation (NMDOT) and supported by the Santa Fe

Metropolitan Planning Organization (MPO) were initiated to address congestion and safety issues along I-25, St. Francis Drive, and NM 599. Recommendations from these studies comprise many of the identified and prioritized State and National Highway System projects to be designed, funded, and constructed over the next 25 years and beyond and are listed in Chapter 5 of the MTP. The MPO has also identified and prioritized 'regionally significant' local agency led projects from City and County recommendations that will improve safety, network connectivity, and multi-modal options. These are also located in Chapter 5.

### **Improvements Contained in Current MPO TIP or completed since 2005**

In the MTP 2005-2030 a number of road network projects were identified as priorities to be completed between 2005 and 2010. The following list identifies the projects that have been completed since 2005:

- Cerrillos Road Reconstruction - Camino Consuelo to Cielo Court
- Rodeo Road Safety Improvements - Galisteo to Zia Road
- Rodeo Road/Richards Avenue Intersection Improvements
- Siler Road Bridge and Road Extension - Agua Fria Street to West Alameda Street
- NMDOT Corridor Studies - Interstate-25, NM 599, and St. Francis Drive
- South Meadows Road - Airport Road to Agua Fria Road
- NorthEast Connector - Rabbit Road to Oshara Village
- Airport Road Safety Improvements - NM599 to Country Club Road

A number of other recommendations are either currently under construction or will be under construction within the next year. The following list identifies these projects:

- Agua Fria Street Reconstruction - Henry Lynch to San Ysidro Crossing
- South Meadows Road - Agua Fria Street to NM599
- Airport Road Safety Improvements - Country Club Road to Lopez Lane
- Cerrillos Road Reconstruction - Cielo Court to Camino Carlos Rey
- Caja Del Rio widening and resurfacing - Frontage Road to Las Campanas
- NM 599/Jaguar Drive Interchange (Privately funded)

In addition to the proposed roadway network improvements, the MPO promotes multi-modal facility improvements that encourage usage by making "car alternative" options attractive, affordable, and viable.

The transit/rail option was given a huge boost in 2008 with the arrival of the Rail Runner Express and the transit interconnections available at each of the stations in Santa Fe.

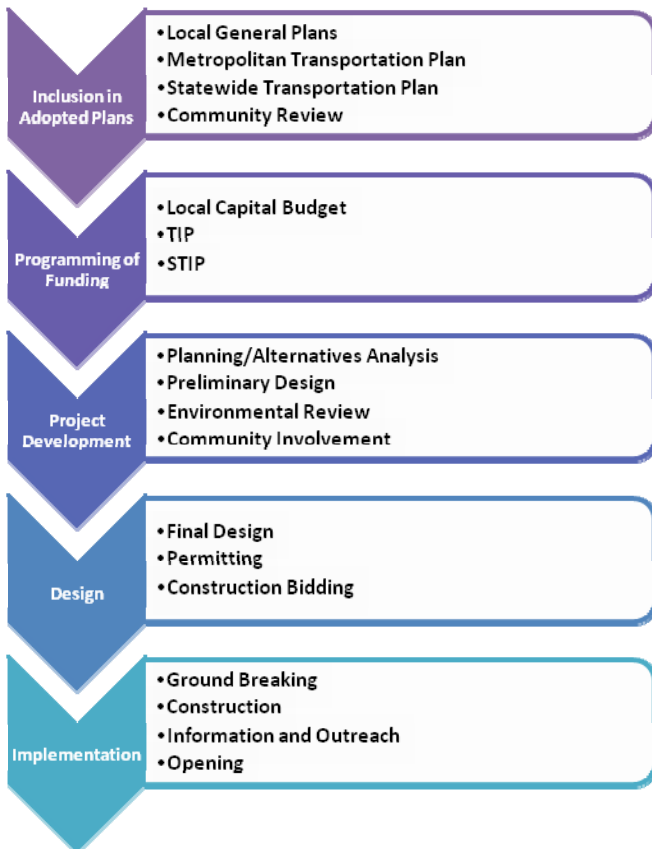
Continued expansion of Santa Fe's arterial bikeways trails system includes:

- Rail Trail extension south to Rabbit Road
- Arroyo Chamiso Trail under Rodeo Road to Nava Ade
- River Trail extension west of Alire
- Acequia Trail south to Baca

In addition, the MPO initiated and coordinated production of the Santa Fe Bikeways and Trails map (2008 and updated in 2009). This route finding guide as well as events such as the Bike to Work Week have encouraged more people to choose their bicycle over their car for some of their trips.

### 1.3 Why Do We Need a Metropolitan Transportation Plan?

The MTP identifies current and future transportation needs, and provides a coordinated and consistent “road map” for investment in the regional transportation system for the next 25 years. The MTP fulfills both State of New Mexico and federal requirements for the Santa Fe metropolitan area, which enables it to continue to receive state and federal transportation funding. By having an MTP, the region can comprehensively plan for population and economic growth for our long-term future. It also provides for a true transportation system of interconnected highways, transit facilities, bikeways and pedestrian facilities, intercity passenger rail, and airports.



Federal funding which flows into the region for transportation improvements must be contained in the Transportation Improvement Program (TIP) for each metropolitan area, and all federal-aid projects programmed in

the State of New Mexico must be included in the Statewide Transportation Improvement Program (STIP).

Inclusion of a planned improvement is only the first step in the process which will eventually lead to implementing a project. Local, state and federal regulations require that the community must be involved in each succeeding stage, including project planning and development, environmental clearances and documentation, design, and construction.

From inclusion of a project into the MTP to completion and opening of a project could take 10 years or more. The chart to the left shows the general project development process. A more detailed discussion of the MTP through project implementation process is included in the Financial Plan chapter.

### Unified Planning Work Program

The purpose of the Unified Planning Work Program (UPWP) is to outline multimodal transportation planning activities within a financially constrained budget to be conducted in the Santa Fe MPO planning area for a one or two year period. Federal definition of a Unified Planning Work Program (UPWP) is “a statement of work identifying the planning priorities and activities to be carried out within a metropolitan planning area. At a minimum, a UPWP includes a description of the planning work and resulting products, who will perform the work, time frames for completing the work, the cost of the work, and the source(s) of funds” (23CFR450.104).

The objective of the UPWP is to ensure that metropolitan planning efforts are coordinated between the regional transportation entities, including local and state agencies and transit agencies. This MTP update was conducted as one of the UPWP efforts. Chapter 6 of the MTP includes “MPO Emphasis Areas” for each mode, which the Santa Fe MPO will be emphasizing to ensure that the MTP policies

are being implemented in regional project planning and development. A number of these Emphasis Areas will be incorporated into future UPWPs as part of the MTP implementation process.

#### 1.4 Relationship to Other Plans and Agencies

Metropolitan planning requirements administered jointly by Federal Highways Administration (FHWA) and Federal Transit Administration (FTA) require that MPOs establish a "continuing, cooperative, and comprehensive transportation planning process". The process should result in transportation plans and programs that are consistent with the comprehensive land use plans of all jurisdictions within the region, and is also required to be consistent with the statewide transportation plan.

The following summarizes how the MTP relates to other local, regional and statewide plans both in the MPO area as well as in adjacent areas with which the Santa Fe MPO coordinates.

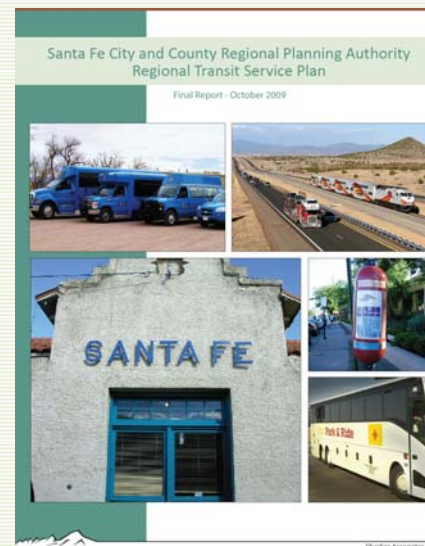
#### Other Regional Planning Entities

There are two other entities which provide regional planning functions in coordination with the Santa Fe MPO. The Santa Fe Regional Planning Authority (RPA) is comprised of four Santa Fe City Councilors and four County Commissioners. The RPA was set up to provide a forum for deliberation on matters of joint interest to the City and County. The RPA studies and makes policy on such matters including, but not limited to implementation of the RPA Land Use Plan and Map, mutually agreed upon zoning issues, coordination of City and County and RPA Capital Improvement Plans, integrated transportation and transit plans and infrastructure financing. The City and County

have agreed to plan and implement and provide oversight for expanded transit services in Santa Fe City and County, and have designated the RPA to oversee the creation, planning, and implementation of regional networks for public transit services.

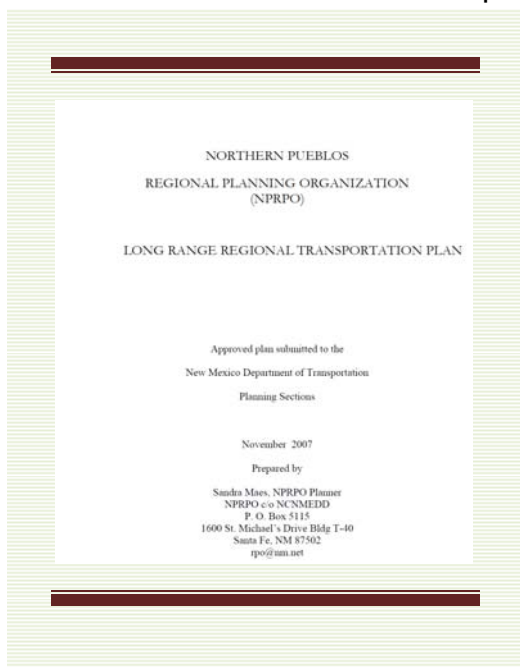
The RPA adopted a Regional Transit Service Plan in October 2009. This plan was the result of extensive coordination between RPA, Santa Fe County, City of Santa Fe/Santa Fe Trails, North Central Regional Transit District, Santa Fe Metropolitan Planning Organization, Northern Pueblos

*The 2009 Santa Fe City and County Regional Planning Authority Regional Transit Service Plan was the region's first attempt at a regional transit system plan.*



Regional Planning Organization, and the New Mexico Department of Transportation. The Plan adopted was a 2010-2011 service plan for short-term transit improvements and also called for a concerted effort to establish a longer-term service plan.

The Northern Pueblos Regional Planning Organization (NPRPO) is a transportation planning organization for Rio Arriba County, Taos County, Los Alamos County and Santa Fe County. The NPRPO membership includes staff from cities and the four counties, the pueblos of Tesuque, Picuris, Santa Clara, San Ildefonso, Nambe, Pojoaque, Taos, Ohkay Owingeh, the Jicarilla Apache Nation, and the NMDOT. The NPRPO elicits projects for multi-modal transportation and enhancement improvements from its members and recommends them for inclusion into the 4-year Statewide Transportation Improvement Program (STIP). The North Central New Mexico Economic Development District (NCNMEDD) is the fiscal agent for the NPRPO. The MPO and RPO will have direct communication to coordinate transportation



planning activities on projects that impact both organizations.

SAFETEA-LU places the obligation on states to determine transportation needs in non-metropolitan areas in consultation with local elected officials. As with MPOs, this process must be a “continuing, cooperative and comprehensive” planning process. Outside of metropolitan areas, the State of New Mexico

has established Regional Planning Organizations to provide forums for all affected local governments, tribal entities, state transportation agencies, federal transportation agencies and other stakeholders to provide a consistent and coordinated transportation planning process.

The NPRPO provides a “forum for promoting highway safety, protecting environmental quality, preserving cultural resources and assessing residential and commercial development impacts on the regional transportation infrastructure”<sup>1</sup>. The NPRPO’s planning area includes Tesuque Pueblo, which is also in the Santa Fe MPO planning area. The Long Range Regional Transportation Plan (November 2007) does not have a planning horizon year expressly stated; however, it does provide a set of long-range transportation priorities, including corridor plans, safety improvements, and transit and highway capacity improvements on I-25, US-285, NM-14, NM-599, and US-84/US-285.

### Transit Plans

Long range transit planning involves both the MPO Area and consideration of the larger region. The provision of public transit serving Santa Fe and Santa Fe County is complicated, involving several operators and providers:

- Santa Fe Trails, operated by the City of Santa Fe, provides local bus service primarily within the city, with two routes serving unincorporated areas adjacent to the city’s south side with one providing connection to the Rail Runner station at NM599 also.
- The City’s Parking Division operates the Santa Fe Pick Up, a downtown circulator connecting the Santa Fe Depot Rail Runner station (the north end the commuter rail line running to

<sup>1</sup> NPRPO website, <http://nprpo.com/>.

Albuquerque) with major destinations downtown.

- The North Central Regional Transit District (NCRTD) is a state-authorized, multi-county transit provider established in 2004 to finance, construct, operate, and maintain new, regional mobility options and access to critical services. The mission of the North Central Regional Transit District is to *“provide safe, secure and effective public transportation within North Central New Mexico in order to enhance the quality of life of our citizens by providing mobility options and spur economic development throughout the region”*<sup>2</sup>.
- The New Mexico Department of Transportation (NMDOT), through various contractual and administrative arrangements, manages Rail Runner, several employee shuttles connecting to Rail Runner stations, and a statewide park - and - ride system.
- Other transit providers operating within Santa Fe County include the Taos Express, private entities, and others.
- In November 2008, Santa Fe County voters, along with those in several other north - central New Mexico counties, passed a one - eighth cent transit gross receipts tax (TGRT) which is dedicated to funding the ongoing operation of, and transit connections to, Rail Runner, the region’s commuter rail service connecting Santa Fe and metropolitan Albuquerque. The Santa Fe City and County Regional Planning Authority (RPA) is responsible for allocating a portion of TGRT revenues within Santa Fe and Santa Fe County.

The NCRTD adopted a 2008-2013 Service Plan. To date, the NCRTD provides minimal transit service within the Santa Fe MPO area; Santa Fe Trails and other transit entities within the MPO area have not joined

NCRTD and serve as separate transit providers. The 2008-2013 Service Plan does not include consolidation of the Santa Fe region’s transit operators, but does call out a number of transit service improvements, by each operator, which will receive some funding from NCTRD (excerpted from the 2008-2013 NCTRD Service Plan):

- With the agreement of the County and City of Santa Fe, the planning for new services will be carried out by staff from those agencies. NCRTD will provide a fixed financial contribution to the County for these services. In 2009-2010 \$2.4 million is budgeted to fund the local service portion of the Regional Rail Service.
- The Rail Runner is being managed by a partnership between the Mid Region Council of Governments and the New Mexico Department of Transportation. Santa Fe County is responsible for providing a share of the operating costs. Resolution 2008-11 established a distribution process between the NCRTD and Santa Fe County that provides funds for the suggested improvements listed in this update.
- Expansion of service in the following areas: Greater El Dorado, Santa Fe County NM 14 Route, Community College District Route, Pojoaque Corridor (add Rio Arriba service from Espanola to Pojoaque, and Santa Fe County service from Pojoaque to Santa Fe), Espanola-Chimayo-Pojoaque (new service)
- Per service recommendations of Santa Fe Trails, the following lines will increase service: Route 6 service to Southside and Eastside residents, the hospital, and the anticipated Rail Runner station at Zia Road, Route 4 service expansion to Southside and Mid-city residents, state offices, and the anticipated Rail Runner station at the NMDOT General Office, Route 2

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<sup>2</sup> North Central Regional Transit District website, <http://www.ncrtd.org>.

Service expansion to provide new service along Cerrillos Road south of Rodeo Road to serve the state offices, growing retail establishments, and the Rail Runner station at NM 599.

### Statewide Multimodal Transportation Plan

The New Mexico 2030: Statewide Multimodal Transportation Plan (SMPT: December 2009) serves as the statewide long-range transportation plan required by federal statute. The SMPT defines NMDOT standards, policies, protocols, and decision-making processes for the statewide transportation system, and establishes strategy and priorities for the projects to be included in the Statewide Transportation Improvement Program (STIP).

*“The 2030 Plan’s Goals and Objectives add up to a subtle shift in direction for the NMDOT, one that builds upon prior initiatives, plans and policies while giving even greater emphasis to multi-modalism (including nontraditional, non-motorized modes of travel) and Travel Demand Management (TDM), environmental and cultural resource conservation, and partnering with other agencies and local entities to promote sustainable economic development and jobs creation, and to facilitate livability in terms of residents enjoying a broad range of transportation choices.”*

The SMPT anticipates population for the Santa Fe Metropolitan Area (including the MPO planning area and Santa Fe County as a whole) to increase from a 2000 population of 129,292 to reach 212,085 in 2025. The 2030 SMPT has incorporated the 2005-2030 Santa Fe MTP by reference; future updates to the SMPT will reference the updated 2010-2035 MTP.

Components of the SMPT for which the MTP must coordinate, and be consistent, include:

- **Statewide Highway and Transit System Planning:** the SMPT contains policies, priorities, strategies and project priorities for the state highway system, state freight rail system, and intercity passenger rail system.

The purpose of the 2030 SMPT is to: **“Facilitate the safe and efficient management, operation, and development of surface transportation systems serving the mobility needs of people and freight (including accessible pedestrian walkways and bicycle transportation facilities); and foster economic growth and development, while minimizing transportation-related fuel consumption and air pollution.”**



- **Intra-State High-Speed Rail Corridor Initiative:** New Mexico, along with Colorado and Texas, have formed a partnership to study and plan for developing a high-speed rail corridor between El Paso and Denver, which would run through New Mexico. This three-state partnership is seeking the designation to be the nation’s eleventh high speed rail corridor. If the corridor

becomes reality, it would likely include a station in Santa Fe.

- **Rail Runner:** In 2005 the State of New Mexico purchased approximately 270 miles of BNSF railroad right of way between Belen and Raton and now provides intercity passenger rail operations between the cities of Belen and Santa Fe with anticipated service along the entire corridor in the future. This service is administered by NMDOT. MPOs along the corridor continue to be involved in the Rail Runner and high speed rail planning process.
- **Transportation and Tourism:** the Northern Rio Grande National Heritage Area was established by the U.S. Congress in October, 2006 to honor the heritage, culture and traditions of several counties in New Mexico, including Santa Fe County. The NRGNHA is managed by a non-profit organization which serves as a liaison with federal, State, and local governments, including the Santa Fe MPO. The NRGNHA encompasses a number of scenic drives, including: the Enchanted Circle Scenic Byway; Puyé Scenic Byway; El Camino Real National Scenic Byway; Route 66 National Scenic Byway; Santa Fe National Forest Scenic Byway; Santa Fe Trail National Scenic Byway; Wild Rivers Backcountry Byway; and the High Road to Taos.

### Local Plans

The Santa Fe General Plan (1999) envisions a compact urban area where a multi-modal transportation system is encouraged and implemented via the regional transit system, commuter rail, and regional bikeways and pedestrian system. The General Plan includes policies which encourage alternatives to automobile trips, minimizing trip lengths by mixing of land uses and focusing growth along transit corridors, and an interconnected street network.

Santa Fe County's Growth Management Plan calls for "Transportation Actions" which "promote a variety of transportation systems in the County, including mass transit, bicycles, pedestrians, equestrian uses and vehicles.

The County's Sustainable Land Development Plan (2010) transportation element "aims to create the road map for providing safe access and mobility to a full range of services including employment, educational opportunities and goods and services throughout the County as well as to other service areas outside of Santa Fe County". Included in the SLDP are "Binding Principles and Critical Findings to the County's transportation system" which focus on developing a sustainable transportation system via multimodal projects, Transit Oriented Development, and a context sensitive "complete streets" approach.

### 1.5 Metropolitan Transportation Organization Structure

Santa Fe was designated a Metropolitan Planning Organization (MPO) in 1982 by the federal government when the population of the metropolitan area reached 50,000. The purpose of the MPO is to create a forum for transportation decision making in the metropolitan planning area.

The Transportation Policy Board (TPB) is recognized as the official decision-making body of the MPO by the FHWA and FTA, and its approval is required for policy decisions and published documents. The TPB is comprised of appointed representatives from member governing bodies and agencies. The City of Santa Fe is represented by the Mayor and two City Councilors, Santa Fe County by three County Commissioners, Tesuque Pueblo by the Governor or their designee and NMDOT by a Cabinet Secretary or their designee. The MPO Transportation Policy Board ("TPB") meetings are held monthly to disseminate transportation related

information and provide opportunity for public input and discussion.

A Transportation Coordinating Committee (TCC) was created to discuss current transportation issues; review documents and projects; and, provide recommendations to the Transportation Policy Board on technical matters. The Technical Coordinating Committee (TCC) meetings are held monthly. It is comprised of MPO member planning, public works and development review staff along with transit service providers that operate within the MPO Planning Area, including Santa Fe Trails and North Central Regional Transit District.

The Santa Fe MPO Planning Area includes the Santa Fe urbanized area and portions of the central core region of Santa Fe County including those areas expected to urbanize over the next twenty years. The MPO staff works within a geographic area (called transportation analysis zones) for travel demand analysis and modeling that includes Eldorado, Las Campanas, La Cienega, Tesuque, and other land that more nearly defines a Santa Fe Metropolitan transportation planning area. According to federal transportation planning regulations, MPO boundaries may be changed based on the approval of the Transportation Policy Board of the MPO and the Governor of the State.

A change in the MPO Planning Area Boundary does not require approval of either the Federal Highway Administration or the Federal Transit Administration of the U.S. Department of Transportation, but those agencies are to be notified of any boundary changes.

Federal Regulations (U.S., 23 CFR, Part 450.308, 1993) state:

*“...Where appropriate, adjustments should be made to reflect the most comprehensive boundary to foster an effective planning process that ensures connectivity between*

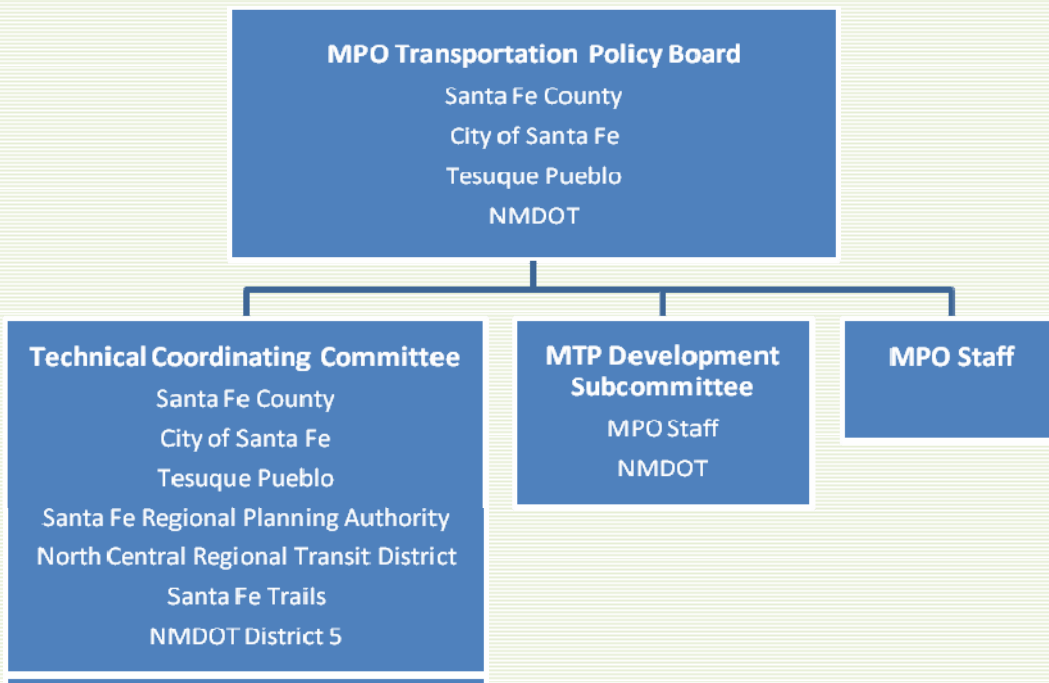
*modes, reduces access disadvantages experienced by modal systems, and promotes efficient overall transportation investment strategies.”*

In 2009, the SFMPO planning area boundary was expanded to include Tesuque Pueblo lands to the north and the area to south bounded by the AMTRAK rail line. This was done to include Tesuque Pueblo in the MPO, improve coordination of transit service planning in the region and coincide with the boundary of Transportation Analysis Zones used for travel demand modeling.

MPO staff facilitates the transportation planning process, and is responsible for the development and preparation of all plans and associated documents required of an MPO. Staff also performs data analysis and carries out studies or planning activities as specified in the Unified Planning Work Program and at the direction of the Policy Board. Staff is comprised of the MPO Director and MPO Senior Planner.

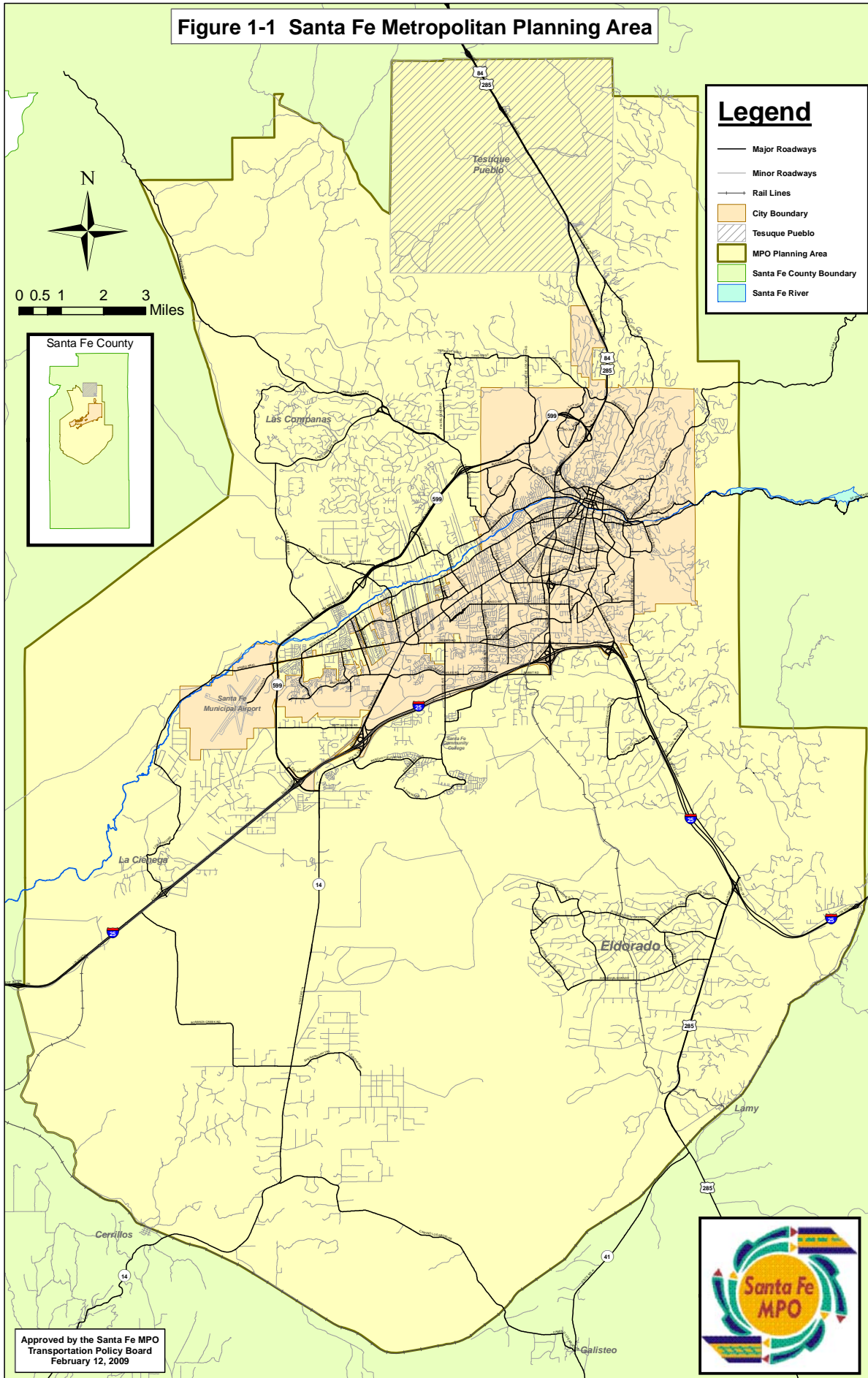
## Metropolitan Planning Organization Structure

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The following map (Figure 1-1) shows the current MPO planning area.

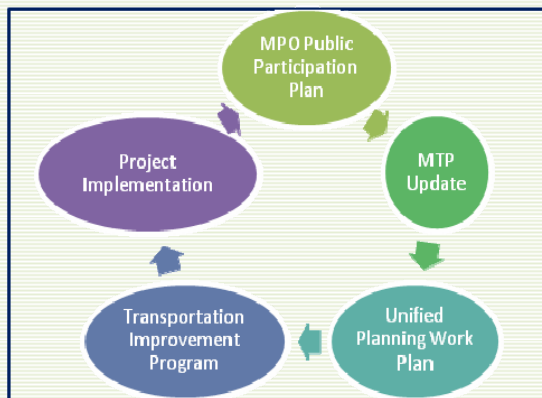
Figure 1-1 Santa Fe Metropolitan Planning Area



## 1.6 Public Participation Plan

The Public Participation Plan (PPP) guides public participation activities conducted by the Santa Fe Metropolitan Planning Organization (the “MPO”). According to Federal law, a metropolitan planning organization must be designated for each urbanized area with a population of 50,000 or more. The MPO serves as a forum for a continuing, cooperative, and comprehensive transportation planning process and its Transportation Policy Board (the “Policy Board”) is the authority in approving how Federal transportation dollars are spent in the region. The Santa Fe MPO adopted its PPP in April 2007.

*The public is invited to participate and provide input at all levels of transportation project development, from initial planning through design and construction.*



The process outlined in the Public Participation Plan is the basis for the development of the twenty-five year Metropolitan Transportation Plan and its amendments. The process results in a comprehensive community involvement in plans and programs that consider all transportation modes and supports metropolitan community development and

social goals. The community and agency involvement process for the 2010-2035 MTP update provides an opportunity for Santa Fe’s transportation stakeholders to provide input into the transportation issues and improvement opportunities, as well as to provide comments on the draft MTP.

The process included a request sent to community neighborhood and business leaders and agency representatives to identify transportation issues and potential projects for consideration in the MTP. After a thorough project evaluation and financial assessment, the draft MTP was made available for community review with a 30-day comment period. Within this comment period, a series of community open houses were held, along with a special open house for stakeholder local, state and federal agencies, inviting attendees to present their comments and questions on the draft MTP. Progress on the MTP and the final Plan was presented at various steps of the way to the Transportation Policy Board prior to the TPB taking action to adopt the MTP update.

## 1.7 Glossary of Terms

A list of acronyms and their definition is contained in the Appendix.

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## 2.0 Community Structure: Characteristics of the Santa Fe Region

While quantifying the linkage between land use and transportation may at times be a complex issue, describing the relationship is simple: Transportation and land development are inextricably linked. Where and how land use development occurs generates trips to and from those uses, the type of use and its intensity dictate how many trips are made and when, and the type of transportation system available affects how those trips are made.

The On-Line Transportation Demand Management Encyclopedia includes a table which shows the factors that affect transportation demand, which is shown in Table 2-1:

**Table 2-1  
Factors Affecting Transportation Demand<sup>3</sup>**

| Demographics  | Economics         | Prices                 | Transport Options | Service Quality          | Land Use                  |
|---|-------------------|------------------------|-------------------|--------------------------|---------------------------|
| Number of people (residents, employees and visitors). | Number of Jobs    | Fuel prices and taxes  | Walking           | Relative speed and delay | Density                   |
| Income  | Incomes           | Vehicle taxes and fees | Cycling           | Reliability              | Mix                       |
| Age/lifecycle   | Business activity | Road tolls             | Public transport  | Comfort                  | Walkability               |
| Lifestyle   | Freight transport | Parking fees           | Ridesharing       | Safety and security      | Connectivity              |
| Preferences   | Tourist activity  | Vehicle insurance      | Automobile        | Waiting conditions       | Transit service proximity |
|   |                   | Public transport fares | Taxi services     | User                     | Roadway design            |
|   |                   |                        | Telework          | Parking conditions       |                           |
|   |                   |                        | Delivery services | User information         |                           |

As this table notes, a community's demographic, land use and economic structure is a significant factor in transportation demand, as are the transportation system options and policies themselves. Therefore, it is important in developing an MTP that not only are total population and employment growth forecast numbers needed, but the demographic makeup of the population, where and how the growth occurs, what types of uses are planned, and where employment centers (and type of employment) and their location are all important factors.

The best tool available to the community to help understand the transportation and land use connection is called a "travel demand model". This computerized representation of land use, demographics, employment by type, geography, and the transportation system is used to estimate the transportation demand on the system, by geography and time of day, and helps us understand where the future transportation congestion areas will be, and as well helps

<sup>3</sup> On-Line TDM Encyclopedia, Victoria Policy Institute, <http://www.vtpi.org/tdm/tdm132.htm>.

assess potential types of projects to address these issues. 2010 is a Census year and with the release of the updated population numbers the MPO will update the demographics in its Travel Demand Model and develop new forecast projection, including interim years. Travel forecast modeling will be described in more detail in Chapter 4 of the MTP.

## 2.1 Demographics: Overall Makeup of the Region

Santa Fe is located at the base of the Sangre de Cristo Mountains, the southern tip of the Rocky Mountain chain. Santa Fe is New Mexico’s capital and located 60 miles northeast of Albuquerque, the state’s largest city. The Santa Fe MPO Planning Area includes all of the City of Santa Fe, a portion of Santa Fe County and all of Tesuque Pueblo, a sovereign government.

*The County and MPO region’s population is projected to increase by 17 percent between today and 2035, while the number of jobs is projected to grow by 16 percent.*

According to the 2000 Census, the MPO Planning Area had a population of approximately 104,000. Based on estimates of existing population by Santa Fe County, the current MPO area population (2010) is estimated to be approximately 120,900. Based on the county’s projections, the population will increase to 142,000 in the MPO area by 2035, and almost 204,000 by build-out of the area. Table 2-2 indicates that while the MPO Planning Area represents less than 25% of Santa Fe County’s land area, it accounts for 80% of the county’s population and at least 90% of the county’s employment.

In addition to its full time residents, Santa Fe attracts 1 to 2 million visitors each year. Additionally, approximately 16% of the area’s houses are classified as second homes; occupants will not show up in population statistics but they do generate trips when these second homes are occupied.

**Table 2-2 Santa Fe MPO/Santa Fe County Population and Employment, 2010 - 2035**

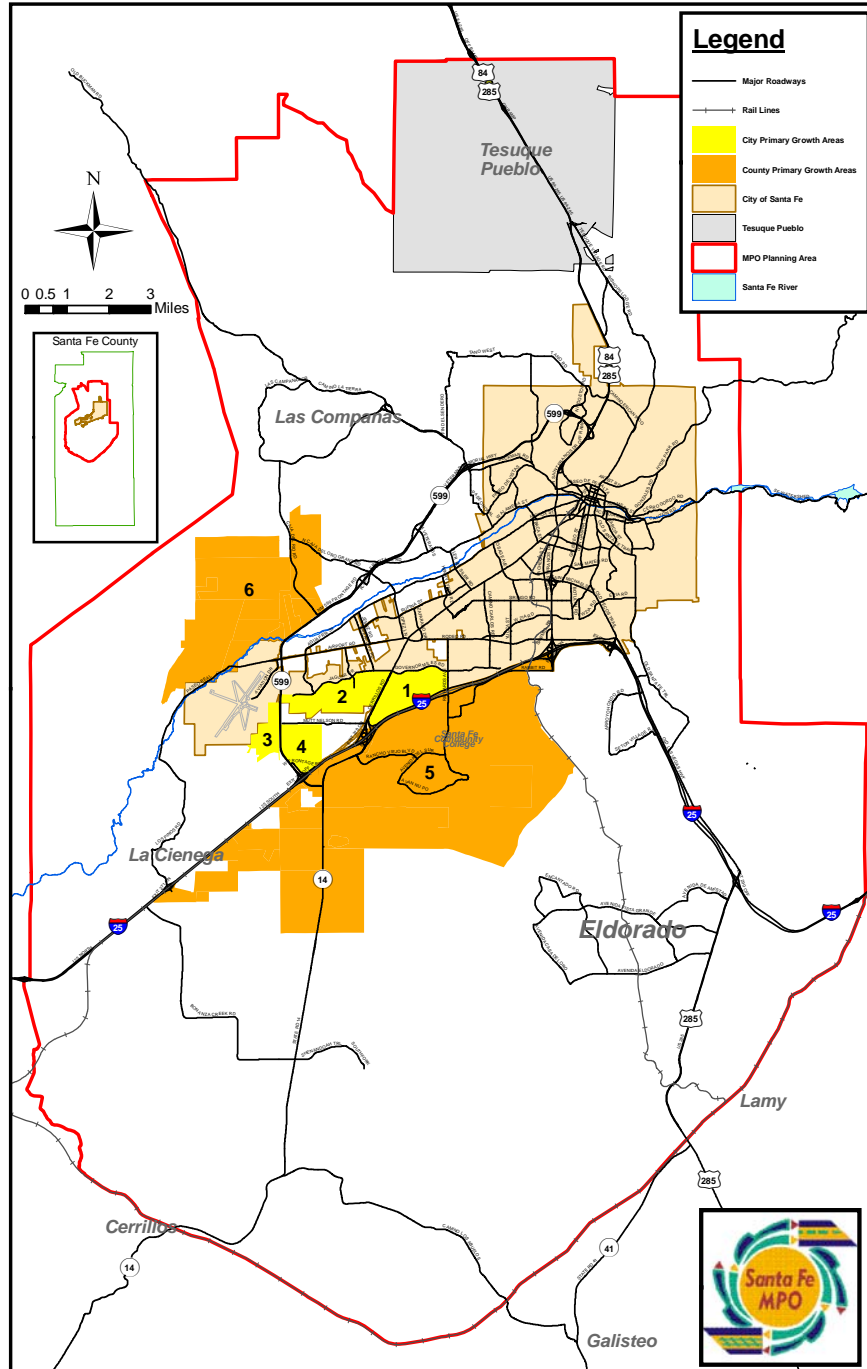
|                   | <b>Population<br/>2010<br/>2035</b> | <b>Employment<br/>2010<br/>2035</b> | <b>Land Area</b> |
|-------------------|-------------------------------------|-------------------------------------|------------------|
| MPO Planning Area | 120,900<br>142,000                  | 55,000<br>64,000                    | 427 sq. miles    |
| Santa Fe County   | 151,510<br>176,612                  | 61,000<br>71,000                    | 1,909 sq. miles  |

Source: UNM–BBER; New Mexico Workforce Solutions; Santa Fe Trends, 2010; Santa Fe MPO TAZ Data.

### Location of Growth

Figure 2-1 shows the location and concentration of future growth areas near the I-25 corridor, in the MPO Planning Area. The City growth areas (in yellow on the map) include Las Soleras (1), Tierra Contenta (2), The Pavilion Business Park (3) and the Komis Tract (4). The County growth areas (in orange on the map) include the Community College District (5) and the Airport Development District (6). Growth Areas 1, 2, 4, 5 and 6 will all contain a combination of residential and employment land uses. Area 3, the Pavilion Business Park, is exclusively employment based and includes plans for a 100 room hotel. All of these areas shown will absorb most of the growth in the MPO Planning Area over the next 25 years.

**Figure 2-1. Primary Growth Areas in the MPO Planning Area**



## 2.2 Population Trends and Forecasts

The total population of the Santa Fe MPO Planning Area in 2010 is estimated to be 120,900.<sup>4</sup> By 2035, an estimated 142,000 of the County's estimated 176,612 residents will live in the MPO Planning Area. The University of New Mexico's Bureau of Business and Economic Research (UNM-BBER) projects that the population growth rates experienced in the 1990s and 2000s will decrease to a moderate growth rate from 2010 through 2035; nevertheless, by 2035 the MPO area is still projected to add over 21,000 people and the County as a whole is expected to add over 25,000, a growth of over 16 percent over current conditions.

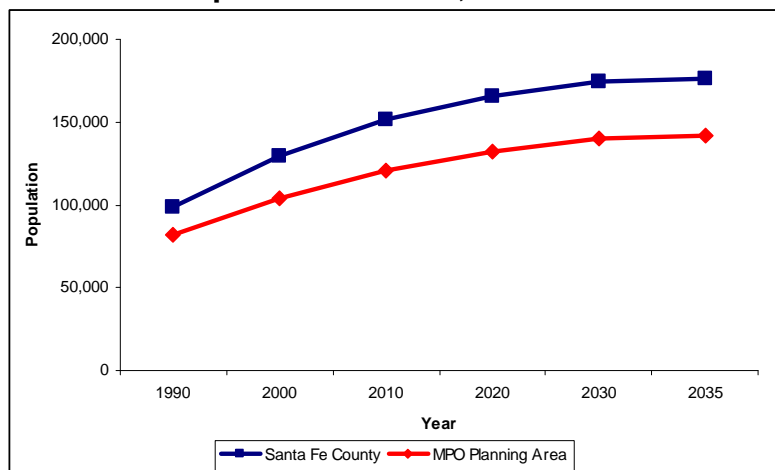
Figure 2-2 illustrates the slowing of the growth rate expected in both Santa Fe County and the MPO Planning Area in the future compared to the high growth rates experienced in the 1980s and 1990s. Population growth from 1990 through 2035 indicates a slightly higher growth in Santa Fe County than within the MPO Planning Area.

If these projections are accurate, then it seems clear that the demographics of the area will affect transportation demand, and transportation system planning, in the following ways:

- aging of the population,
- the continued concentration of growth in the center of the MPO Planning Area, outward from central Santa Fe, near the I-25 corridor
- growth occurring outside the region that travels to or through the region (especially in freight traffic which is expected to double), and
- continued influx of visitors and "second home" part-time residents.

Although some infill development continues within the existing classified urbanized area (census designation based on population density) the majority of the future growth will occur to the south and southwest of the current urbanized area. Growth in population and housing stock has been very aggressive over the last couple of decades, but the recent economic conditions have slowed that rate of growth considerably.

**Figure 2-2**  
**Santa Fe County & MPO Planning Area**  
**Population Growth, 1990-2035**



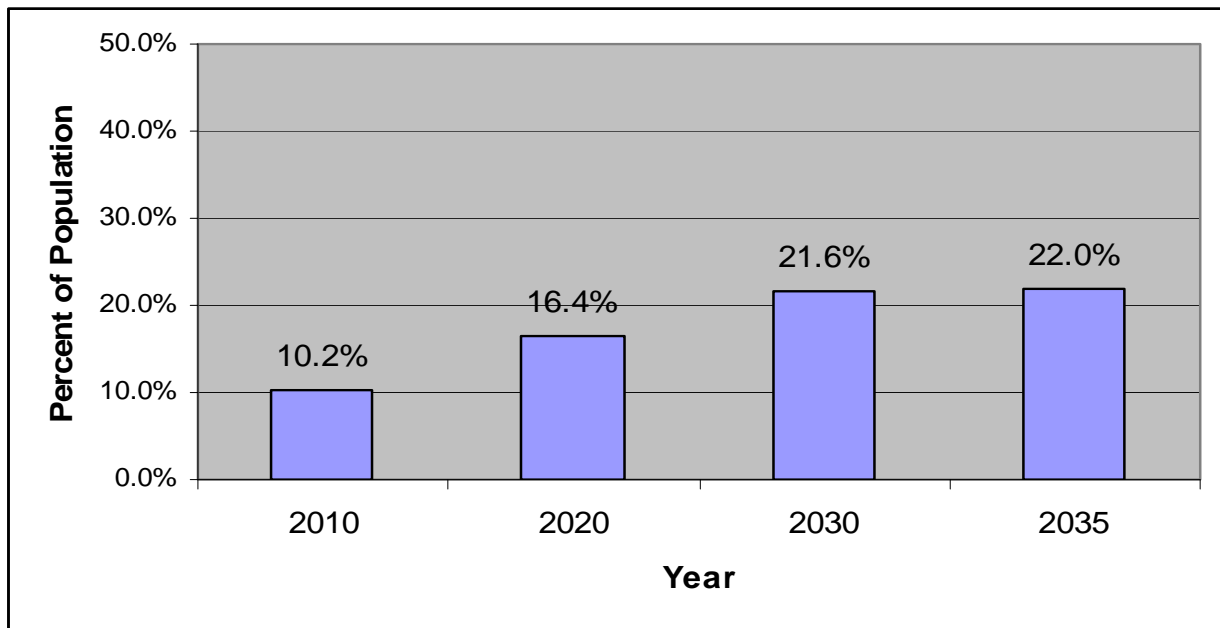
Source: UNM-BBER; City of Santa Fe Long Range Planning Division.

<sup>4</sup> City of Santa Fe Long Range Planning Division.

## Implications of an Aging Population

Figure 2-3 illustrates that by 2035, more than 1 in 5 residents in Santa Fe County will be aged 65 or older. In real numbers, this means that the population aged 65 and older will more than double between 2010 and 2035, increasing from approximately 15,000 to 35,000<sup>5</sup>. There are two primary reasons why this age group will increase so dramatically during the next 25 years: the large population known as “baby boomers” (those born between 1945 and 1964) reaching age 65 and older; and, the ability of that generation to live longer due to advances in medicine and greater knowledge of risks and benefits of certain lifestyle decisions.

**Figure 2-3**  
**Santa Fe County**  
**Percent of Population Age 65 and Older, 2010–2035**



Source: UNM-BBER

An aging population raises questions with regard to mobility and the potential need for increased transit service, as well as land use decisions and development patterns that provide nearby services. To maintain mobility for an aging population, a higher level of paratransit and transit service will be needed, as will “walkable community” land use policies which encourage mixed use and Transit Oriented Development. While increased availability of buses and other transit services will be important, the efficiency of transit service and its operational costs are often a function of residential densities and their proximity to major transit routes.

The paradox of low density development is that it simultaneously requires a greater reliance on the automobile, while discouraging any transit service due to greater distances traveled for fewer passengers. This identifies the need for greater densities and mixed use development in the previously identified growth areas of both the city and county. It seems clear that land use policies of the city and county governments will need to be focused on creating clustered,

<sup>5</sup> Extrapolated from UNM-BBER population projections for age 65 and older.

higher density, mixed-use development in growth areas to make transit more efficient and thereby reduce the need for automobile use by an increasingly older population.

An aging population also has implications with regard to Complete Streets design and traffic operations. Traffic signs will likely need to be replaced with those having larger font size, which will factor into maintenance costs in the future. Longer pedestrian crossing times will be needed at traffic signal locations in areas with a high density of elderly population, due to reduced mobility, which in turn may increase congestion and delay at these locations. Additionally, higher scale pedestrian crossings at unsignalized locations will need to replace the traditional crosswalk treatment, again recognizing reduced mobility. A number of potential treatments are listed in the Transportation Toolbox section later in the MTP. These crossing upgrades are generally much more expensive than traditional crosswalk treatments, but also have a better safety record.

### **Average Household Size**

Average household size in Santa Fe County is currently 2.42<sup>6</sup>. This has been steadily decreasing over time and is expected to continue to decrease between now and 2035, especially as the population over 65 increases. The paradox of declining average household size and low density development is that it simultaneously requires a greater reliance on the automobile (many shared-ride trips are family-oriented), while discouraging any transit service due to greater distances traveled for fewer passengers. This identifies the need for greater densities and mixed use development in the previously identified growth areas of both the city and county. It seems clear that land use policies of the city and county governments will need to be focused on creating clustered, higher density, mixed-use development in growth areas to make transit more efficient and thereby reduce the need for automobile use by an increasingly older population.

### **Affordable Housing**

Santa Fe County continues to experience most of its growth in the south and southwest sectors of the current urban area, and within the Community College District south of I-25. These growth sectors will continue to be stimulated through the build out of approved subdivisions and mixed use commercial development as well as through city and county initiatives to boost the local economy by providing and promoting affordable housing, educational opportunities, and jobs creation. In competition for residential growth, the housing market in Albuquerque and Rio Rancho offers a large inventory of lower-priced homes with a price to value offering that is difficult for Santa Fe to match. Many previous residents as well as those new to Santa Fe end up living in more affordable places while employed in Santa Fe. If projected traffic patterns and volumes are realized, without improvements to the existing roadway infrastructure and to the availability of alternative modes, traffic congestion is expected to increase especially for those using the three I-25 interchanges at Cerrillos, St. Francis Drive, and Old Pecos Trail that provide access to the City.

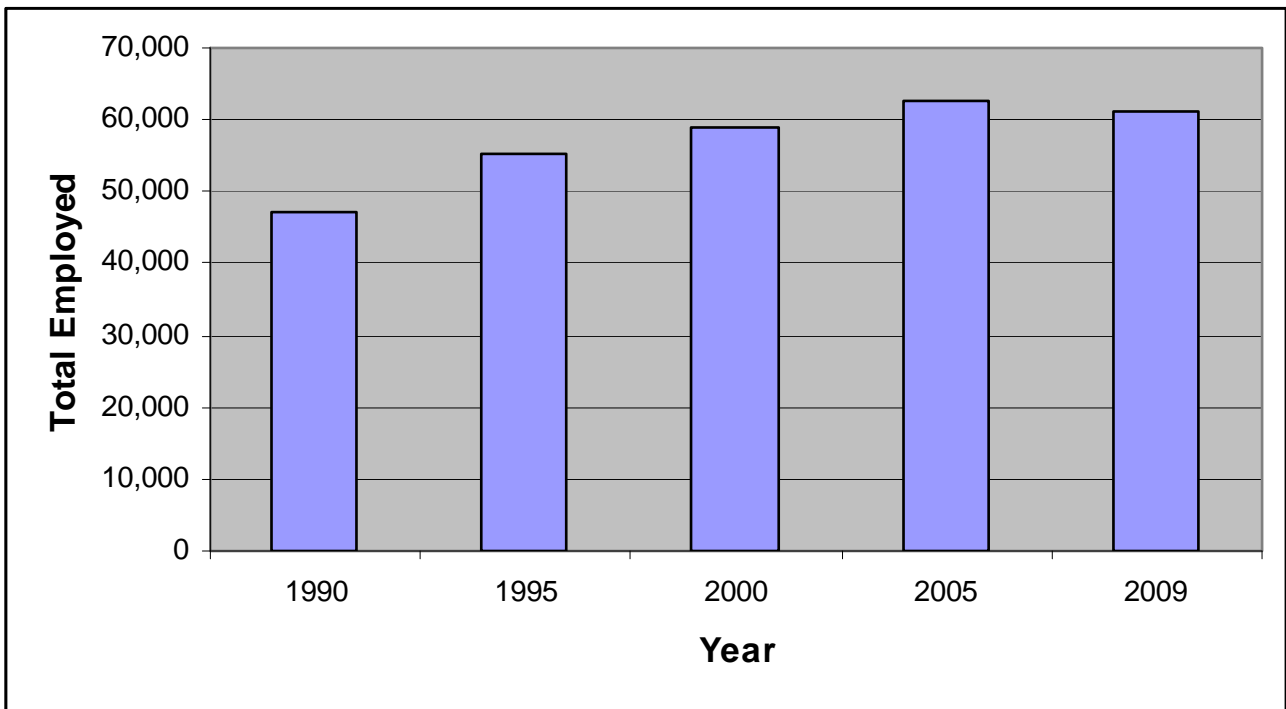
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<sup>6</sup> United States Census Bureau, 2000 Census for New Mexico, <http://www.census.gov/prod/cen2000/phc-1-33.pdf>.

### 2.3 Employment Characteristics and Growth

Santa Fe's economy is based on government employment and tourism-related retail. The Health Care and the Construction industries are also among the top 5 industries in employment in the Santa Fe area. Figure 2-4 shows the history of employment trends in Santa Fe County from 1990 through 2009, using non-farm, wage and salary employment data. Steady employment growth was experienced from 1990 through 2005. As of 2009, employment actually declined for the first time in decades due to the national and global recession. Current non-farm wage and salary employment hovers near 61,000 in Santa Fe County.

**Figure 2-4**  
**Santa Fe County**  
**Total Non-Farm Employment, 1990-2009**

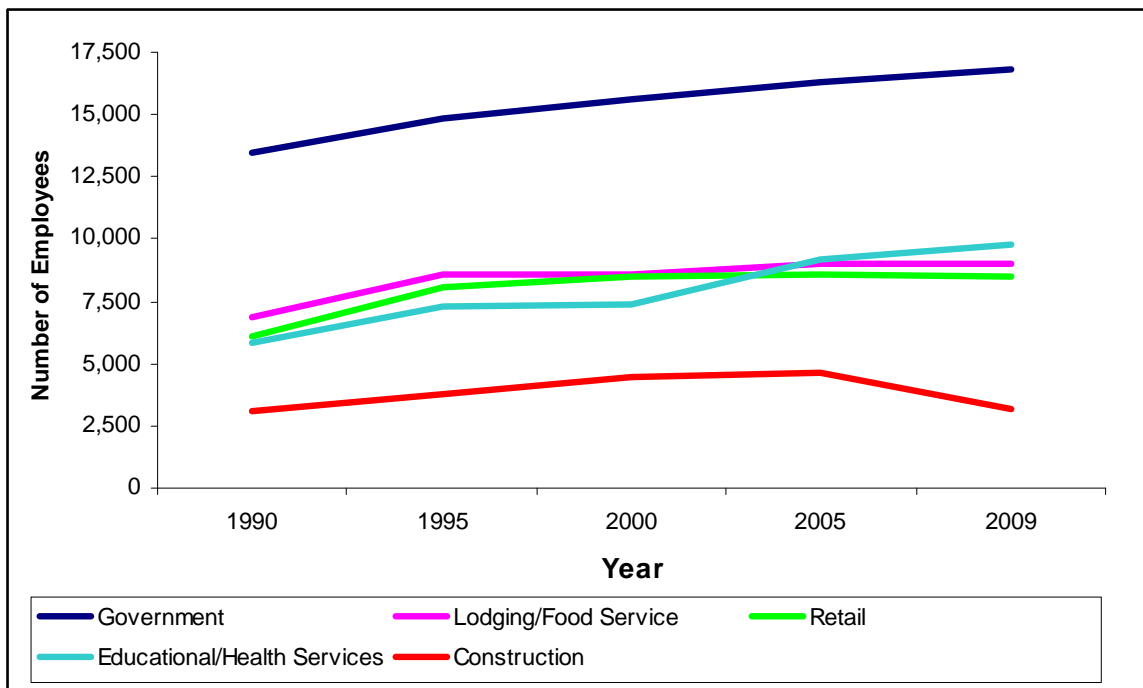


Source: New Mexico Department of Labor / Workforce Solutions

Figure 2-5 shows employment by major sector in Santa Fe County since 1990. Government has provided the most jobs in Santa Fe County for decades. Since 1990, the county has experienced steady growth in government employment, which includes federal, state and local government, increasing from nearly 13,000 jobs to approximately 17,000 jobs, a 30% increase.

The Educational/Health Services sector has experienced employment gains during the recession; The Lodging/Food Service and Retail industries have flattened, while the Construction industry employment numbers have dropped in recent years.

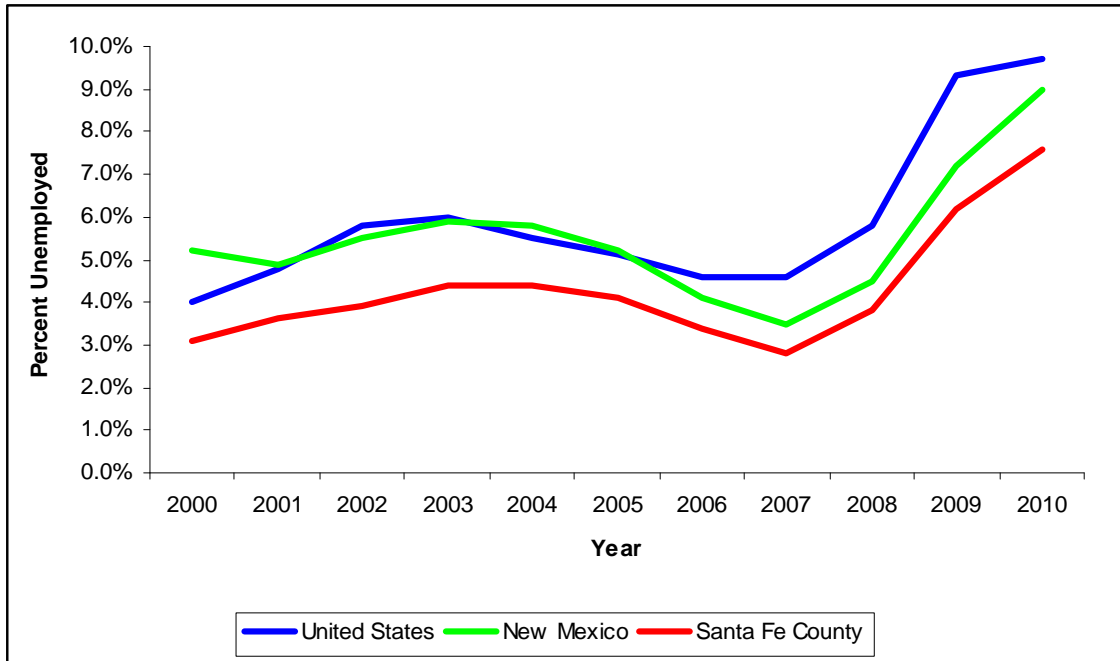
**Figure 2-5  
Santa Fe County Employment by Sector, 1990–2009**



Source: New Mexico Department of Labor / Workforce Solutions (UNM-BBER Web Site).

Historically, Santa Fe and New Mexico have had lower unemployment rates than the nation as a whole. However, the current recession has increased unemployment rates nationwide and neither Santa Fe, nor New Mexico, has been spared. These high unemployment rates combined with the economic downturn have resulted in declines in daily traffic volumes compared to the 2003 volumes listed in the 2005-2030 MTP. Figure 2-6 illustrates unemployment rates since 2000 and shows the rapid rise of unemployment in the nation, state and county since 2007.

**Figure 2-6  
Unemployment Rates 2000–2010<sup>7</sup>**



Source: US Department of Labor; New Mexico Department of Labor/Workforce Solutions

### Employment Projections, 2010-2035

To assist with employment forecasting through 2035, a comparison or ratio was created to estimate the number of new non-farm wage and salary jobs that may be created in Santa Fe County based on existing population and employment figures. Using a simple population-to-employment ratio for Santa Fe County means that 151,000 residents are supported by 61,000 jobs (table 2-1), or approximately a 2.5 ratio of residents to jobs. This means that for every 25 new residents, 10 jobs can be expected to be added in Santa Fe County. The MPO Planning Area’s ratio is approximately 2.2 based on an estimated 2010 population of 120,900 and an estimated 55,000 non-farm, wage and salary jobs (Table 2-1).

Figure 2-3 indicates that the Santa Fe region’s population base is aging, and the percentage of the population over 65 years of age continues to increase. As the population ages, a higher percentage of the population base will reach retirement age, which typically would indicate that

<sup>7</sup> U.S. unemployment rate May 2010; New Mexico & Santa Fe County March, 2010

the population/employment ratio would increase which in turn would logically reduce the employment growth forecast through 2035. However, there are a number of factors to consider, which in essence results in the forecast residents-to-jobs ratio remaining basically the same through 2035 and indicating that the Year 2035 employment forecasts are reasonable:

- The Social Security retirement age in 2010 increased from age 65 to age 67 for those born in 1959 or later<sup>8</sup>, and will likely continue to increase over time as US (and New Mexico) life expectancy continues to increase. This would indicate that even though the percentage of population aged 65 or older will increase over time, the population reaching *retirement age* will likely remain at a constant level through 2035.
- As noted in the Affordable Housing section above, the percentage of Santa Fe County employees who live outside of the region is expected to continue to moderately increase over time, resulting in an overall increase in the number of out-of-county residents filling in-county jobs.

Based on the population projections that Santa Fe County will add 25,000 residents during the next 25 years and that the MPO Planning Area will add approximately 20,000 residents, we can project that employment will increase by roughly 10,000 jobs county-wide by 2035, with approximately 9,000 of those jobs locating within the current MPO Planning Area. Or, the increase in employment will be by the same percentage as the increase in population...16.5% for Santa Fe County through 2035, and 17.4 % for the MPO Planning Area.

## **2.4 Natural Environment and Land Development**

The Santa Fe MPO Planning Area is characterized by mountainous terrain in the northeast with land sloping to the southwest and contains a range of land elevations from 6,800'–7,200' above sea level. Drainage areas (i.e. arroyos) flow out of the mountains from the east/northeast toward the west/southwest. The Santa Fe River flows from the Sangre de Cristo Mountains westerly through downtown Santa Fe, then turns southwesterly, where it flows into the Rio Grande beyond the MPO Planning Area. (In 2009, the City of Santa Fe constructed the Siler Road river crossing, the first newly-located arterial bridge to cross the Santa Fe River in over 50 years.)

As the land slopes to the southwest away from the mountains and foothills, it flattens out and is characterized by a gently rolling terrain with a system of major and minor arroyos. This allows greater land development potential to the south and southwest within the MPO Planning Area. As a result, existing land development densities are lower on the eastern and northern sides of Santa Fe and increase to the southwest. Within the Santa Fe Urban Area (pop. 87,000), only 25% of the resident population occupies the lands east of St. Francis Drive and north of the Santa Fe River, while approximately 75% of the population lives west of St. Francis Drive and south of the river. This has obvious implications for the Urban Area's transportation system. And, future growth will be even more pronounced toward the southwest portions of the Urban Area. For nearly 50 years, 80% of Santa Fe's urban growth has been toward the southwest; an area that provides flatter land and allows for gravity-flow sewer.

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<sup>8</sup> <http://www.socialsecurity.gov/pubs/ageincrease.htm>.

Outside the Urban Area, the land is also characterized by gently rolling terrain with arroyos to the south and southwest toward the planned future growth areas. The Community College District located south of I-25, includes the Rancho Viejo development that is contained approximately 1,200 housing units in 2010. Rancho Viejo is built in a series of clustered “villages” located on higher, flat land dotted with Piñon and Juniper trees surrounded by larger drainages and arroyos running through the area.

Growth and economic development also require water supply. The Santa Fe Sustainable Land Development Plan (SLDP) recognizes that the region has a finite supply of water, unless outside sources can be found. Commensurate with growth, the SLDP is recommending sustainable water solutions such as use of xeriscape (low water landscaping), self-contained developments which recycle their wastewater, low impact development guidelines, and use of low-flow toilets and other water-dependent uses.

## **2.5 Air Quality**

The Santa Fe MPO Planning Area is in attainment for all Federally-regulated pollutants referred to as criteria pollutants, which are carbon monoxide (CO), ozone (O<sub>3</sub>), sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), coarse particulate matter (PM<sub>10</sub>), fine particulate matter (PM<sub>2.5</sub>) and lead (Pb). At this time there are no indications that Santa Fe will reach any of the thresholds for pollutants in the near future and therefore, is not in danger of becoming a non attainment area. A non attainment designation would result in more stringent requirement on the MPO. Regardless, of this attainment status the MPO will continue in its planning efforts to minimize pollution from transportation sources through reductions in congestion and encouragement of use of alternative forms of transportation.

At this time, no local or state standards or “budget” regarding greenhouse gas emissions have been established.

## **2.6 Cultural Environment**

The Santa Fe area and the City of Santa Fe in particular, have a special place in the history of European settlement within the United States. Santa Fe is the oldest capital city in the United States and one of the oldest European settlements in the U.S. Officially established in 1610, Spanish explorers founded the settlement while moving northward along the Rio Grande.

Santa Fe’s earliest road network was comprised of the Camino Real (or “Royal Road”) which started in Mexico City, moving north and hugging the Rio Grande until it turned toward the base of the Sangre de Cristo Mountains, where the road moved along the Santa Fe River (modern-day Agua Fria Road). Trails from Galisteo northward were also present early on. As trade with the United States began, the famed Santa Fe Trail heading southeast out of Santa Fe ultimately connected to Independence, Missouri.

New Mexico is known for its three cultures: Native American, Spanish (i.e. Hispanic or Latino) and Anglo. Santa Fe County’s population has the following composition<sup>9</sup>: Hispanic (Latino) 49%, Anglo 45%, Native American 2.5%, others 3.5%. The Santa Fe Area is characterized by considerable variation in family and individual income and wealth. The area is home to very wealthy individuals, many who have come from other places and some who live in Santa Fe

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<sup>9</sup> Census 2000; Summary File 1, Table P-8, Hispanic or Latino by Race; Table P-11, Hispanic or Latino.

only part-time, and very poor individuals, including some of Mexican nationality, many of whom are engaged in some aspect of the construction industry and also provide temporary day-labor.

## **2.7 Travel Demand Forecasting Process**

Santa Fe MPO uses VISUM traffic demand modeling software to estimate future traffic demand. This TMODEL2 related software that will enable MPO planning staff to perform sub-area analyses as well as prepare presentations using ARCVIEW graphics. This land use based model estimates traffic volumes by adding projected growth in the number of housing units and employment in the study area to existing levels of development. Since traffic comes from the entire region, the model study area extends from north of Tesuque and includes the Eldorado area to the southeast and the La Cienega area to the southwest. Estimates of traffic that come from outside the region are also included.

Future traffic projections for the recently adopted City General Plan and the Transportation Policy Board approved MPO Future Roads Plan will also be run with the VISUM software. Estimates of the number and severity of congested roadways were obtained by examining the number of vehicles compared to the capacity of each roadway.

### 3.0 Existing Multimodal System and Future Demand

The motto of the Santa Fe MPO is “Promoting Interconnected Transportation Options.” The main Theme and Goal of the Santa Fe Metropolitan Transportation Plan is to “Develop a safe, efficient, and reliable transportation system with viable transportation options accessible for all users”. The emphasis of this section is on developing multi-modal travel options as well as an interconnected network that provides route options. In the present environment of uncertain and limited funding, it is critical for project prioritization to reflect a comprehensive approach toward achieving transportation network facilities that are safe, reliable, interconnected, and accessible for all users.

What follows is an assessment of the condition of the region’s transportation

*“Transportation network facilities (including major roadways, transit, multimodal and intermodal facilities, and intermodal connectors) should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions” (U.S. Code Title 49 III 53).*

network facilities including roads, transit, rail and airport facilities, bikeways, and pedestrian facilities. The system is assessed on current and the outlook for future travel demand. The transportation network facilities are addressed separately by major roadway network; public transportation/multi-modal facilities, which include: transit, rail,

and airport; bikeways; and pedestrian facilities.

Information on existing conditions has been gleaned from traffic counts, input from the corridor studies, NMDOT accident data, and a review of a number of recent regional and statewide transportation studies.

#### 3.1 Roadway System

##### Highway Network and Function

The National Highway System (NHS) was developed by the US Department of Transportation in cooperation with the states, local official and Metropolitan Planning Organizations with the purpose of identifying the core road network that was considered critical to the nation’s economy, defense and mobility. The US Congress approved the NHS in 1995 with the intent that the States would prioritize federal-aid funds appropriately to ensure that the NHS was adequately maintained.

The following roads are NHS Roadways within the MPO Planning Area:

- Interstate 25
- US 285 - south of Interstate 25 Exit 290,
- St Francis Drive (US84/285) - north of Interstate 25 Exit 282,
- Cerrillos Road (NM14) - north of Interstate 25 Exit 278 to St Francis Drive
- NM 599 - between Interstate 25 and US 285/84.

The MPO is primarily concerned with roadways of “Regional Significance”, which are defined as those roadways eligible to receive federal funding, but is also interested in the connectivity and functionality of the network as a whole and how that may impact the “Regionally Significant” roadway network. Federal statutes require that public roadways

be classified based on the characteristics of the service (mobility and access) they provide. Functional Classification is an analytical tool used by the MPO in the planning of roads and highways and determining the needs and priorities for transportation funds. Functional classification affects some design and access features, the rules regulating a roadway's use and in some cases the land use adjacent to it. The higher the level of mobility required of a facility the higher its Functional Classification.

The Functional Classifications are defined as follows:

- Interstate: Highest mobility
- Arterials (Principal and Minor): High mobility
- Collectors (Urban, Rural Major, Rural Minor): Lower mobility/higher access
- Local: Lowest mobility/highest access

With the exception of Local and Rural Minor Collectors all other Functionally Classified roadways are eligible to receive federal funds and are deemed as "Regionally Significant". The current functional classification was completed in 2004 and is shown in Figure 3-1. The MPO plans to conduct a review of the functional classification over the next two years to coincide with the release of new urban boundaries defined from the 2010 Census data.

**Strategic Transportation Corridors:** The Statewide Multimodal Transportation Plan identifies a number of "Strategic Multimodal Transportation Corridors" with significant regional, statewide, national and trans-national importance. These corridors are where multimodal opportunities and needs are greatest and will be the NMDOT's highest priorities for state transportation funding investment. Projects falling outside of these strategic corridors will be a lower priority. These corridors include the Interstate and National Highway Systems, the Strategic Highway Network (STRAHNET) system ( a partnership between the Federal

Highway Administration and the Department of Defense identifying the system of public highways that provides access, continuity and emergency transportation of personnel and equipment in times of peace and war), and principal freight and intercity transportation corridors. In the Santa Fe region, these include I-25, US-84, US-285, NM-14, and NM-599.

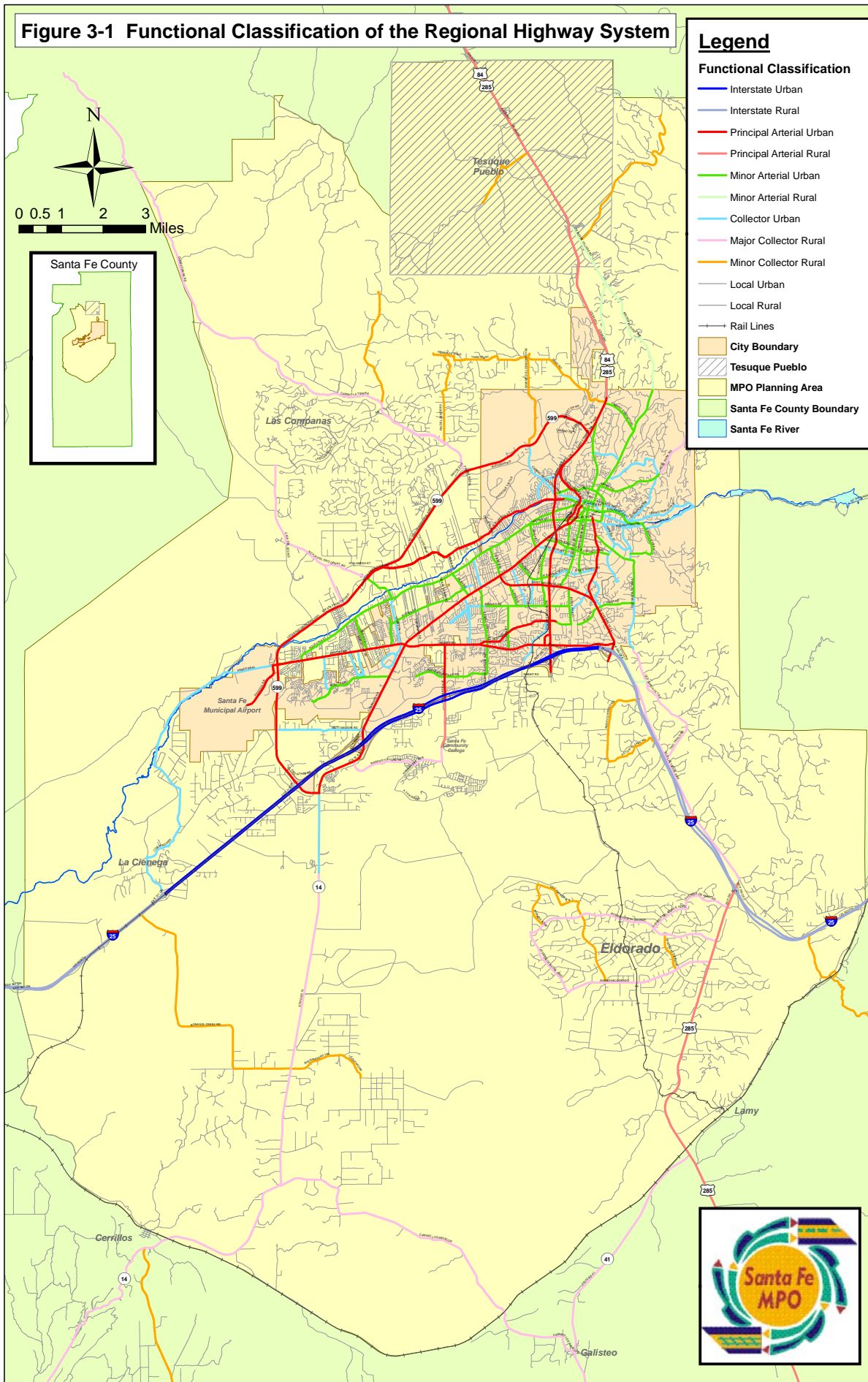
### Scenic Byways

The Scenic Byways program was originally established in 1991 by the Intermodal Surface Transportation Efficiency Act (ISTEA). It recognizes roads and corridors having outstanding scenic, historic, cultural, natural, recreational, and/or archaeological qualities. Designation as a scenic byway, according to the NMDOT Statewide Multimodal Plan, "serves both to protect the intangible assets of New Mexico's roadways but also to promote activities that have direct financial impact on the state and its special regions and communities. Scenic Byways are logical locations for co-planning and construction of pedestrian, bicycle and equestrian facilities". Corridors designated as scenic byways in the MPO planning area include (note: the map and descriptions included in the SMTP have some errors; the listing below attempts to resolve the inconsistencies noted using the New Mexico Tourism website map):

- El Camino Real: Santa Fe to Texas border (276 miles in NM), which includes sections of US 285 and I-25
- Dry Cimarron Scenic Byway (215 miles in NM): includes I-25 north and east of Santa Fe
- Santa Fe National Historic Trail and Scenic Byway (parallels I-25 north and east of Santa Fe)
- Santa Fe National Forest Scenic Byway (NM 475, north of the MPO area)
- Route 66 Scenic Byway (includes I-25 through the MPO area).

Figure 3-1 shows the existing Regional Highway System.

**Figure 3-1 Functional Classification of the Regional Highway System**



## Current Traffic Volumes and Congestion

The MPO maintains a traffic count program which consists of primarily conducting counts at locations to assist the NMDOT meet their requirements for the Highway Performance Monitoring System (HPMS). To date this program has been limited to collecting data primarily on roadways within the Santa Fe City limits, with locations typically counted at least every three years. The counts for this program are collected using temporary traffic count recorders which collect traffic volumes over a 48 hour period during weekdays. These counts provide a snapshot of traffic volumes and characteristics on the roadways within Santa Fe. Figure 3-2 shows average weekday traffic volumes on the regional transportation system. Traffic volumes on the area roadways vary from almost 54,000 vehicles per day recorded on St Francis Dr to less than 100 vehicles per day on many of local residential streets. Interstate 25, St Francis Drive, Cerrillos Road, Airport Road and St Michaels Drive are the most traveled roadways in the Planning Area carrying between 30,000 and 55,000 vehicles per day.

In addition to the temporary counts conducted by the MPO, the New Mexico DOT operates 17 Permanent Count Stations within the MPO Planning Area. These permanent count stations are located on a variety of roadways throughout the MPO Planning Area and collect traffic volume data 24 hours per day, 365 days per year. Therefore, the collected data provides a good basis to develop growth trends. Table 3-1 shows the traffic volumes collected at these permanent count stations over the past decade.

The table shows that during the first half of the decade (2000 – 2004), traffic volumes on average grew by almost 2% per year, while in the second half of the decade (2005-2009) traffic volumes on average

decreased by 1%. Overall, by the end of the decade traffic volumes had on average declined back to or below levels recorded at the start of the decade. The declines in traffic volumes during the second half of the decade was likely the result of high gas prices in 2006 and 2007 and then the worldwide economic recession which hit starting in 2008 and continues today. Many of these corridors saw increases prior to 2006 and will likely be the corridors which experience traffic increases between now and 2035.

During the first half of the decade NM599 saw the highest traffic growth with an average of over 10% per year. The second half of the decade saw volume decline back to 2004 levels. The only location to show significant growth during the second half of the decade was on St Francis Drive between Zia Road and Siringo which saw an average growth rate of over 3% per year. This was likely a result of the capacity improvements made when this section of St Francis was expanded from 4 lanes to 6 lanes.

**Table 3-1  
Traffic Volumes on the Highest Traveled Corridors**

| Roadway                           | Location                                   | 2000<br>ADDT | 2004<br>ADDT | 2005<br>AADT | 2009<br>AADT | Growth<br>00-04 | Growth<br>05-09 | Growth<br>00-09 |
|-----------------------------------|--|--------------|--------------|--------------|--------------|-----------------|-----------------|-----------------|
| Agua Fria                         | Btwn Camino de Los Lopez and Jemez Rd      | 5,417        | 5,276        | 5,164        | 4,608        | -0.91%          | -2.81%          | -1.89%          |
| Agua Fria                         | East of Siler Road                         | -            | 16,203       | 15,393       | 15,009       | -               | -0.63%          | -               |
| Airport Rd                        | Btwn Zepol Rd & Jemez Rd                   | -            | 28,026       | 28,369       | 28,238       | -               | -0.12%          | -               |
| Bishops Lodge Rd                  | North of Camino Encantrado                 | 3,231        | 3,203        | 2,959        | 2,483        | -0.22%          | -4.29%          | -2.88%          |
| Cerrillos Rd                      | North of Alta Vista                        | 36,728       | -            | -            | 31,975       | -               | -               | -1.53%          |
| East Zia Rd                       | East of Calle de Sebastian                 | -            | 2,844        | 2,841        | 2,590        | -               | -2.29%          | -               |
| Interstate 25                     | South of US 285 Lamy Interchange           | 22,724       | 25,075       | 25,337       | 23,637       | 2.49%           | -1.72%          | 0.44%           |
| Interstate 25                     | Southwest of NM 587 La Cienega Interchange | 31,519       | 36,061       | 36,116       | 33,448       | 3.42%           | -1.90%          | 0.66%           |
| NM 14                             | 2.2. Miles South of I-25                   | -            | 10,423       | 10,563       | 11,099       | -               | 1.25%           | -               |
| NM 599                            | Btwn I-25 & Airport Rd                     | 8,926        | 13,401       | 13,714       | 13,389       | 10.69%          | -0.69%          | 4.61%           |
| Old Las Vagas Highway             | Btwn Sunset Spirits & Arroyo Hondo Rd      | 9,551        | 10,052       | 9,606        | 9,233        | 1.29%           | -0.99%          | -0.38%          |
| Rodeo Rd                          | East of Richards Ave                       | 29,692       | 31,446       | 31,175       | 28,748       | 1.45%           | -2.01%          | -0.36%          |
| St Francis Dr                     | Btwn Zia Rd & Siringo Rd                   | 40,729       | 10,973       | 41,572       | 47,488       | 0.15%           | 3.38%           | 1.72%           |
| St Francis Dr                     | Btwn Alta Vista & Cordova                  | 43,916       | 42,228       | 42,288       | 41,934       | -0.98%          | -0.21%          | -0.51%          |
| US 285                            | North of Avenida Vista Grande              | -            | 12,876       | 12,536       | 11,506       | -               | -2.12%          | -               |
| West Alameda                      | Btwn Solano St & St Francis Dr             | -            | 10,615       | 10,402       | 10,564       | -               | 0.39%           | -               |
| Zia Rd                            | Btwn Galisteo & Vo Tech Rd                 | -            | 13,882       | 13,971       | 13,027       | -               | -1.73%          | -               |
| <b>Average Annual Growth Rate</b> |  |              |              |              |              | <b>1.95%</b>    | <b>-1.02%</b>   | <b>-0.19%</b>   |

**AWT = Average Weekday Traffic Volume**

The congestion experienced on Santa Fe's roadways is minimal compared to that experienced in larger Metropolitan areas, such as Los Angeles, CA, El Paso, TX or even Albuquerque, NM where congested peak periods last for at least a couple of hours. With New Mexico being such a rural state, drivers' tolerance for dealing with delay in urbanized areas is lower and hence they get frustrated more easily. Level of Service (LOS) is a scale that measures vehicular congestion based on time delay either at individual intersections or along corridors. It ranges from LOS A, which reflects free flowing conditions with minimal delay, to LOS D, which is generally the ability to travel along a corridor with moderate delay, typically making it through signalized intersections without having to wait for the next cycle, to LOS F which reflects complete gridlock. LOS E/F are considered substandard from the perspective of roadway LOS.

The peak periods where congestion is most noticeable in Santa Fe are relatively short, probably in the 30 minute ranges starting around 7:30 in the mornings and 5:00PM in the evenings. The St Francis Drive Corridor Study found that during the peak periods much of the corridor is operating with at or over-capacity (LOS E/F) conditions: Sawmill Road to West Zia Road, and the central and north half of the corridor from Alta Vista St. to Paseo de Peralta.

Similar conditions were found in the NM599 Interchange Priority Study along NM599 at the unsignalized intersections. The I-25 Corridor Study found that traffic flow along the Interstate was congestion free, but pretty much all of the exits experienced congestion, primarily due to the outdated configurations of the interchanges.

### **Future Demand on the Highway System**

Future demand on the region's highway system will likely continue to increase faster

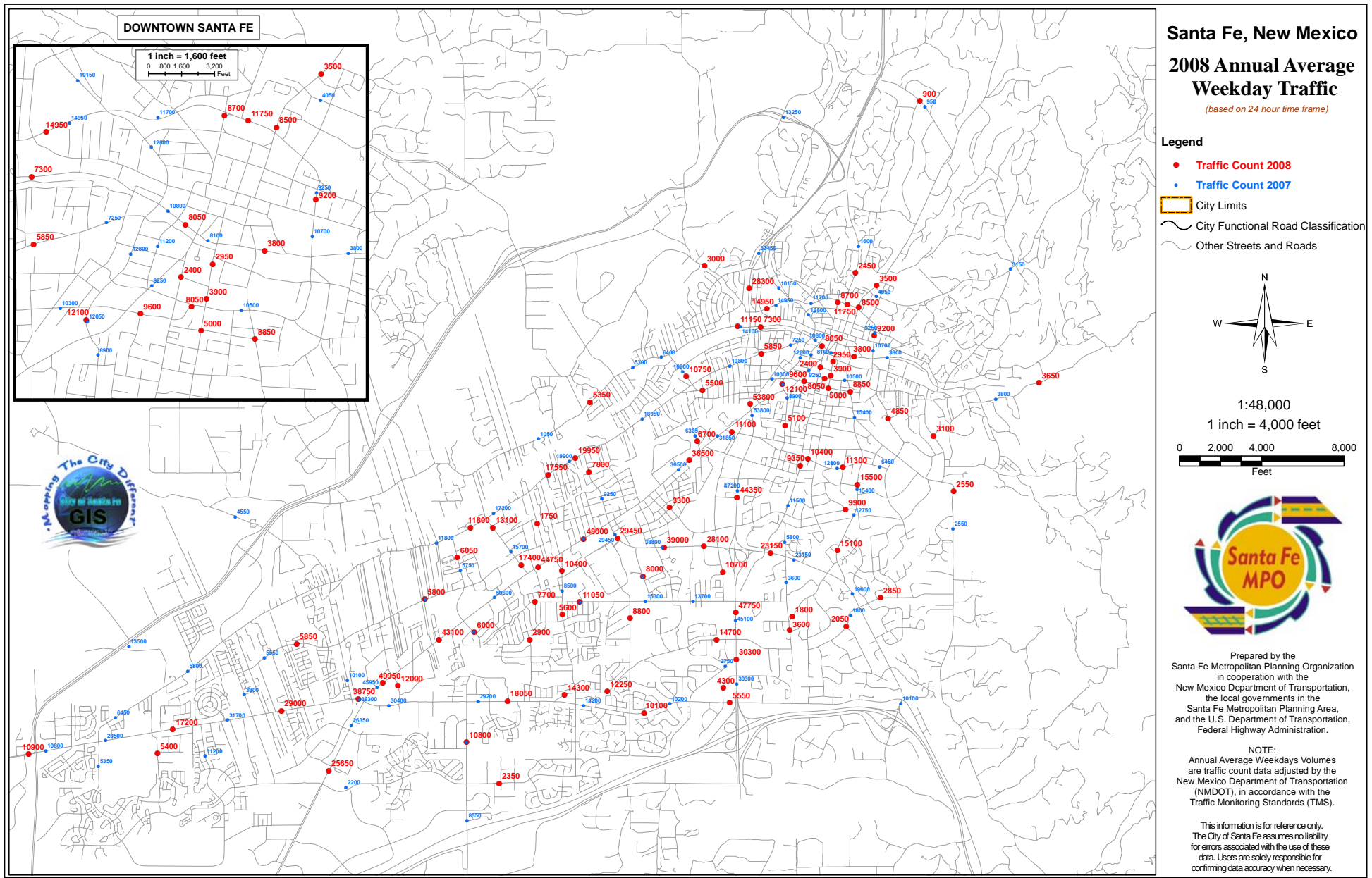
than capacity. Year 2035 travel demand modeling, as well as input from the recently-completed subarea and corridor studies, indicates that the following corridors and locations will show congestion levels approaching or exceeding capacity:

- I-25 throughout the central Santa Fe area, on the mainline between NM 599 and NM 466, and including interchanges at NM 599, Cerillos and St. Francis Drive
- While the NM 599/Veterans Memorial Highway corridor in general is projected to continue to operate at an acceptable level-of-service, the intersections at Airport Road, CR 62, CR 70 Connector, and at Camino de los Montoyas are all projected to operate near or over capacity. In addition, the NM 599 Corridor Prioritization Plan report indicates that the southbound NM 599 "weave" section between US-84/285 and Ridgetop Road will be approaching capacity by 2035.
- St. Francis corridor throughout the City of Santa Fe
- Cerillos Road from I-25 to downtown Santa Fe
- Agua Fria Street from Grant Road/Lopez Lane to downtown Santa Fe
- Richards Avenue from Rodeo Road to the I-25 overcrossing
- Rodeo Road from St. Francis Road to Cerillos Road, and
- Old Pecos Trail from I-25 to downtown Santa Fe.

Anticipated growth west and south of Santa Fe will contribute toward the congestion on several corridors listed above. Additionally, growth south of I-25 in the region will likely result in the following corridors being close to or over capacity by 2035:

- Cerillos Road/NM 14 south of I-25
- Richards Avenue south of I-25
- St. Francis Road south of I-25 (depending on how development and street extensions are connected to the regional system).

**Figure 3-2. Existing (2008) Average Weekday Traffic Volumes**



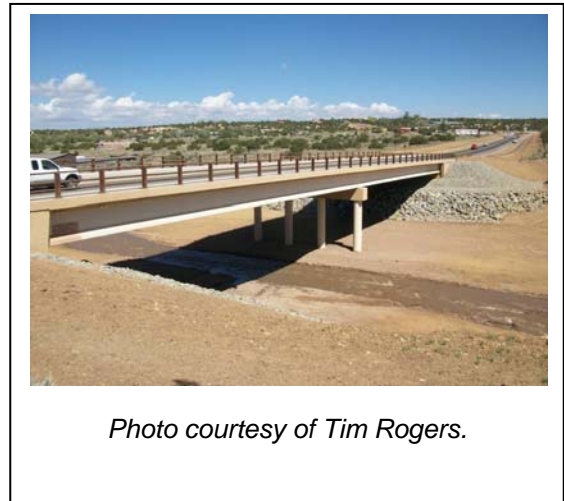
## Bridge Conditions

Bridges are a critical component of the roadway network. For that reason all bridges are regularly inspected at least every two years by the NMDOT and rated according to standards established by the American Association of State Highway and Transportation Officials (AASHTO). The purpose of the AASHTO rating is to provide a standard to compare the status of bridges in the region and across the country. Many factors are considered when developing the rating of a bridge, such as its structural integrity, the road's functional classification, the designed purpose of the bridge, etc. In general, for a bridge to be eligible for reconstruction it must have an AASHTO rating of less than 80; and for a bridge to be eligible for replacement it must have an AASHTO Rating of less than 50.

Bridges may be further classified as "Structurally Deficient" or "Functionally Obsolete", classifications that can raise a bridge's position in the priority list for repair/replacement. Bridges are determined to be "Structurally Deficient" if they fall below specific thresholds. "Structurally Deficient" bridges may indicate that a vital, but relatively minor, repair is needed or that a bridge is in need of more serious rehabilitation. Obviously safety concerns are paramount. If a bridge is in need of significant repair work in order to continue to safely carrying the volume and weight of vehicles using it, the bridge with a "Structurally Deficient" designation should be high on the priority list.

Bridges are categorized as "Functionally Obsolete" if they are deemed inadequate to fulfill their current function, such as a four-lane road leading to a two-lane bridge. The bridge itself may be structurally sound; however, its use is limited in some capacity. Therefore, a determination of "Functionally Obsolete" is important in that it identifies areas where mobility may be restricted and congestion may be growing. Similarly,

information regarding whether a bridge is "posted" with a particular weight limit, is important in assessing a region's deteriorating condition or may simply be a reflection of its original use. For example, a bridge constructed fifty years ago may be in good condition but simply was not designed with the expectation to carry the heavy freight loads of today. Weight restrictions are important determinants affecting freight routes and should be addressed to improve a region's accessibility to goods, people and economic opportunities. In addition to the AASHTO rating, the "Structural Deficiency", "Functionally Obsolete" and "Posted" designation are important factors to be considered when prioritizing projects.



The NMDOT maintains a listing of all bridges that meet the National Bridge Inventory (NBI) criteria set by FHWA. This criterion identifies bridges as publicly owned roadway bridges with a span of at least 20 feet located on public roads. Railroad and pedestrian bridges are not included in the NBI, nor are bridges that have been closed for more than 10 years. Bridges that are not listed in the NBI are not eligible to receive Federal bridge replacement funding.

Typically, the agency who owns the roadway on which a bridge is located is responsible for the maintenance of that

bridge. Therefore, NMDOT is responsible for bridges on its road network and the City and County are responsible for the bridges on their network.

Figure 3-3 shows the location of the bridges within the MPO Planning Area, the agency responsible for them and if they have a “Structurally Deficient” or “Functionally Obsolete” designation or has a weight restriction posted.

NMDOT is responsible for the maintenance of 85 bridges in Santa Fe County. Of those bridges 8 have been designated as “Structurally Deficient” and 10 have been designated “Functionally Obsolete”. No weight restrictions are posted on NMDOT maintained bridges. Santa Fe County is responsible for 13 bridges. Of these bridges 1 has been designated as “Structurally Deficient” and 5 have been designated as “Functionally Obsolete”. One bridge has a weight restriction posted. The City of Santa Fe is responsible for maintenance of 20 bridges. Of those bridges 4 have been designated as “Structurally Deficient” and 6 have been designated as “Functionally Obsolete”. Four bridges have weight restrictions posted.

The NMDOT and City of Santa Fe have identified a number of bridges as priorities for replacement or rehabilitation. Table 3-2 provides information on each of the prioritized bridges. The Interstate 25 bridges at the St Francis Drive and Cerrillos Road interchanges have been programmed in the Santa Fe MPO TIP and Statewide TIP to receive funding in FY 2011 and FY 2012. The City bridges are currently listed in the outer years of the TIP. It should be noted that bridge replacement and rehabilitation projects compete statewide for Federal Bridge Replacement and Rehabilitation funds apportioned to New Mexico.

### **Figure 3-3 Bridge Conditions**

(Map under development)

**Table 3-2**

**Prioritized Bridges for Rehabilitation or Replacement**

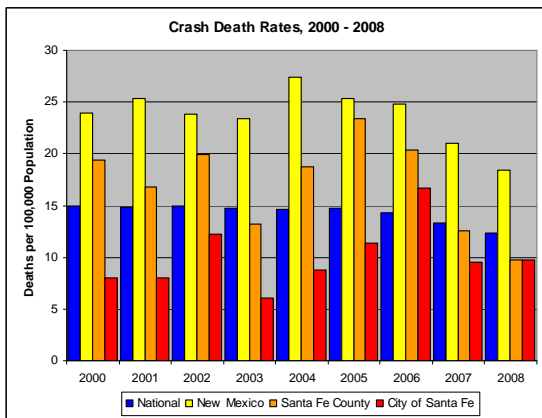
| Bridge ID | Bridge Location                          | Over                                     | Owner | AASHTO Rating | NBI Rating |
|-----------|--|--|-------|---------------|------------|
| 7467      | I-25 Northbound Lanes                    | NM14                                     | NMDOT | 86.0          |            |
| 7468      | I-25 Southbound Lanes                    | NM14                                     | NMDOT | 87.0          |            |
| 7469      | I-25 Northbound Lanes                    | Northbound Exit Ramp to NM14             | NMDOT | 70.0          | SD         |
| 7470      | I-25 Southbound Lanes                    | Northbound Exit Ramp to NM14             | NMDOT | 71.0          | SD         |
| 7475      | Northbound Exit Ramp to NM14             | NM14                                     | NMDOT | 84.5          | SD         |
| 7503      | I-25 Northbound Lanes                    | St Francis Drive                         | NMDOT | 93.7          |            |
| 7504      | I-25 Southbound Lanes                    | St Francis Drive                         | NMDOT | 83.3          |            |
| 7505      | Northbound Exit Ramp to St Francis Drive | St Francis Drive                         | NMDOT | 80.5          |            |
| 7506      | I-25 Northbound Lanes                    | Northbound Exit Ramp to St Francis Drive | NMDOT | 93.5          |            |
| 7507      | I-25 Southbound Lanes                    | Northbound Exit Ramp to St Francis Drive | NMDOT | 95.6          |            |
| 6487      | Guadalupe Street                         | St Francis Dr (US 84/285)                | NMDOT | 61.3          | FO         |
| 6944      | Guadalupe Street                         | Santa Fe River                           | City  | 64.9          | SD         |
| 3023      | Don Gaspar                               | Santa Fe River                           | City  | 74.5          | SD & P     |
| 6931      | Paseo de Peralta                         | Santa Fe River                           | City  | 66.5          | SD         |
| 7123      | Delgado Street                           | Santa Fe River                           | City  | 47.5          | FO & P     |
| 4063      | Defouri Street                           | Santa Fe River                           | City  | 35.7          | SD & P     |

NBI Rating: SD – Structurally Deficient, FO – Functionally Obsolete, P – Weight Restriction Posted

## Roadway Safety and Security

Motor vehicle travel is the primary mode of transportation used in the United States, providing an unprecedented degree of mobility. Yet for all its advantages, deaths and injuries resulting from motor vehicle crashes are the leading cause of death for people of every age group from 3 to 34. Traffic fatalities nationwide account for nearly 95% of transportation-related fatalities. The SAFETA-LU legislation raised the consciousness of safety planning to reduce deaths, injuries and economic losses from vehicle crashes. The following discussion of the data over the past decade indicates that the strategies introduced with SAFETEA-LU are having an impact both nationally and locally.

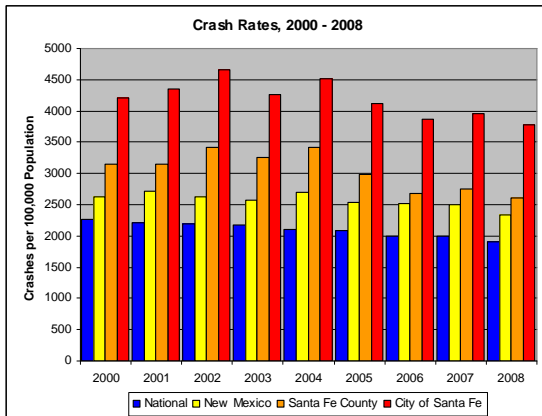
**Figure 3-4**



In 2008, 37,281 people were killed on the Nations roadways. In New Mexico and Santa Fe County, 366 and 14 people respectively were killed that year. Two common measures of fatality rates are by 100,000 population and 100 million vehicle miles traveled. Based on population New Mexico is ranked 10<sup>th</sup> in the nation and 18<sup>th</sup> based on vehicle miles traveled for fatalities. Figure 3-4 compares the fatality rate per 100,000 population for the Nation, New Mexico, Santa Fe County and the City of Santa Fe. The figure shows that the fatality rate for New Mexico, the County and the City has been declining since 2005. With the exception of 2006, the City has had a fatality rate less than the national average, while Santa Fe County has been below the national average since 2007. It should be noted that crashes resulting in fatalities account for less than 1% of the crashes on the roadways.

With the exception of 2006, the City has had a fatality rate less than the national average, while Santa Fe County has been below the national average since 2007. It should be noted that crashes resulting in fatalities account for less than 1% of the crashes on the roadways.

**Figure 3-5**

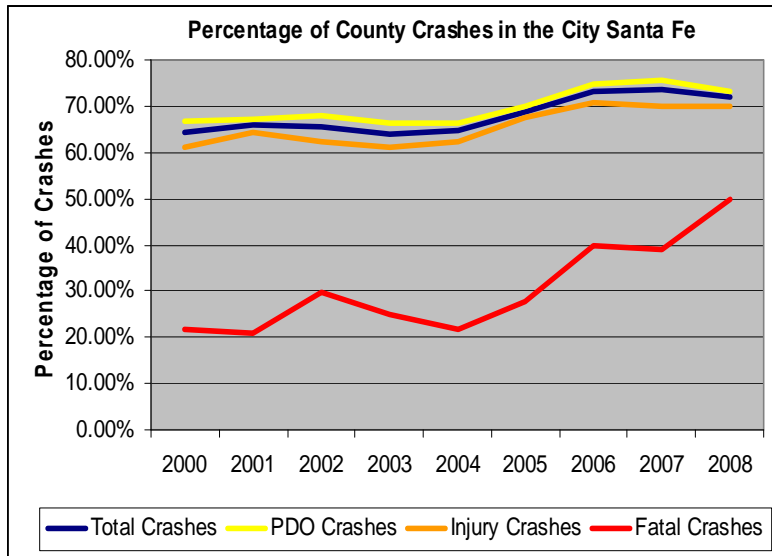


When looking at crashes overall (including fatal, injury and property damage) a different picture appears. Figure 3-5 compares the crash rate per 100,000 population for the Nation, New Mexico, Santa Fe County and the City of Santa Fe. This figure shows that the City of Santa Fe has a crash rate considerably higher based on population than the County, New Mexico and the Nation. The City of Santa Fe has around 1 to 2 million visitors per year essentially increasing its true population and skewing the crash rate. A better measure for crash rates is by vehicle miles traveled, unfortunately at this time we do not have this data for the City geographic area. Based on the population figures used in the development of the

crash rates, approximately 50% of the County's population lives in the City of Santa Fe. Figure ?? shows the percentage of crashes in the County by type that occurred in the City. Since 2000 between 60% and 75% of the crashes in the County have occurred in the City with a similar distribution of Injury and Property Damage Crashes. As the number of fatal crashes in the County (14 in 2008) has declined the number of fatalities occurring in the City (7 in 2008)

has remained constant increasing the proportion of fatal crashes occurring in the City to 50% in 2008.

**Figure 3-6**

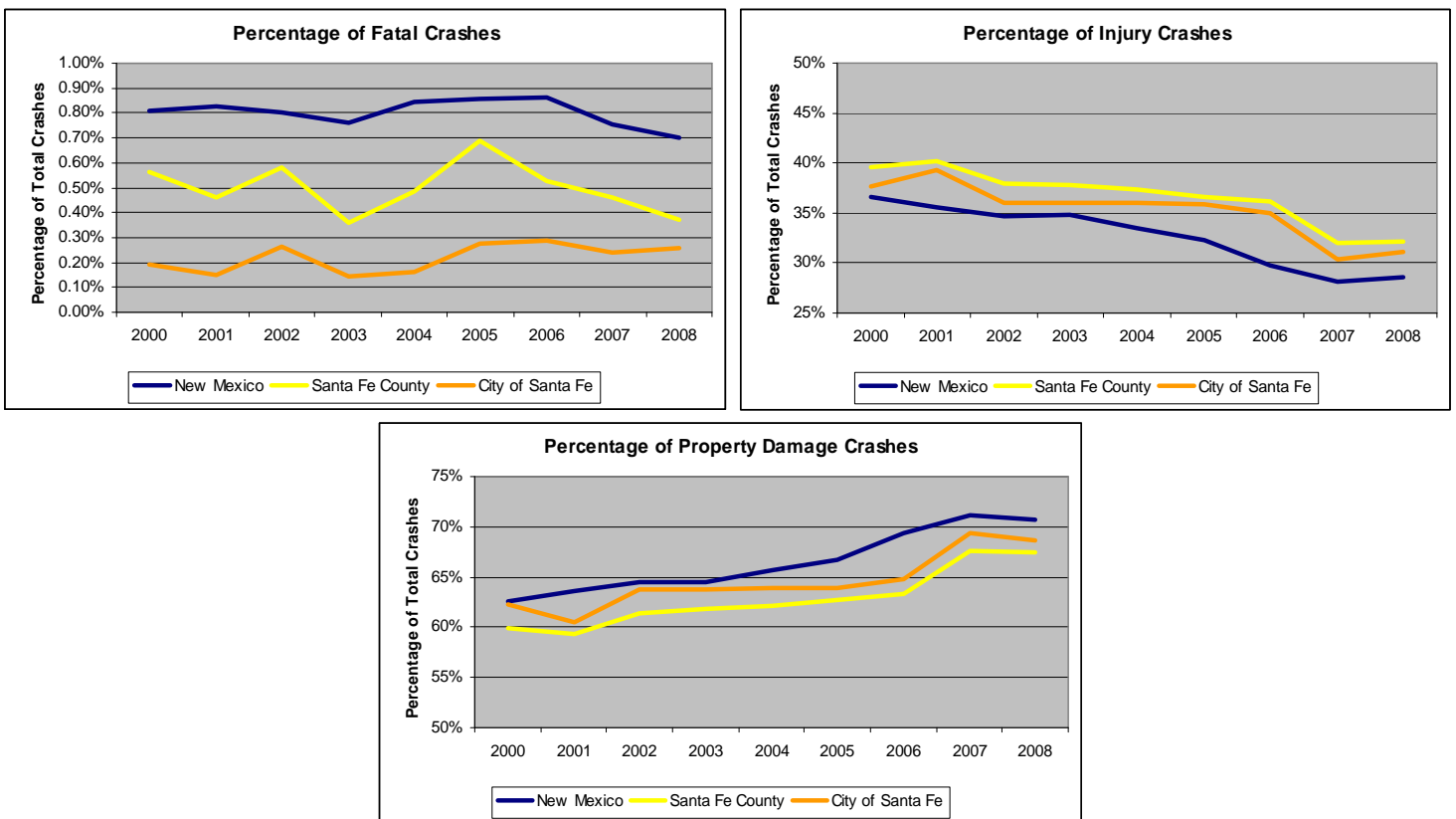


The total number of crashes occurring each year has remained relatively static over the past decade, but as mentioned earlier as population has increased the crash rates have reduced. It appears from the data that even though the number of crashes has remained constant, the severity of the crashes is reducing.

Figure 3-7 shows the percentages of Fatal, Injury and Property Damage crashes over the decade. It can be seen that at the State and County level the percentage of fatal crashes has been declining in recent years, while in the City it has remained around 0.2%. Injury crashes have

declined while property damage crashes have increased. The decrease in the severity of crashes can likely be attributed to improvements in vehicle safety features, increases in seat belt use, increases in law enforcement activities and investments in safety improvements to the roadway infrastructure.

**Figure 3-7**



The NMDOT “FY2008 Five Percent Most Severe Safety Needs Report” identified sections of NM599 and Interstate-25 as “High Severe Crash Locations” based on crash data for the five year period 2003 through 2007. Additionally, it identified the intersection of St Francis Drive and Siringo Road in the top 5 percent of urban intersections categorized as “High Severe Crash Locations” statewide for that same period. Additionally, County Road 56 in Las Cienega was identified as a “High Severe Crash Location” for Rural roadways. Table 3-3 shows the top seven crash locations in the City of Santa Fe based on total crashes. Six of these seven intersections are located along Cerrillos Road. It should be noted that list is based on total crashes and does not reflect the exposure for crashes based on the traffic volumes that travel through each of the intersections.

**Table 3-3 Intersections with the most crashes in Santa Fe, 2008**

| Intersection                     | Crashes |       |        |
|----------------------------------|---------|-------|--------|
|                                  | Total   | Fatal | Injury |
| Cerrillos Rd @ Airport Road      | 48      | 0     | 16     |
| Cerrillos Rd @ Camino Carlos Rey | 32      | 1     | 12     |
| Cerrillos Rd @ Richards Ave      | 41      | 0     | 14     |
| Cerrillos Rd @ St Francis Drive  | 44      | 0     | 10     |
| Cerrillos Rd @ St Michaels Drive | 36      | 0     | 15     |
| Cerrillos Rd @ Zafarano Drive    | 45      | 0     | 12     |
| St. Francis Dr @ San Mateo Rd    | 32      | 0     | 14     |

Source: Division of Government Research, Santa Fe Community Report, 2008

Table 3-4 shows the top contributing factor for crashes in Santa Fe County in 2008. These statistics are very similar for the City. It can be seen that “Following too close” and “Driver inattention” were the top contributing factor in 44% of all crashes, followed by “Failing to yield” at 16%. “Alcohol involvement” and “Excessive speed” was only the top contributing factor in 18% of all crashes, but were the top factor in almost 80% of the fatal crashes.

**Table 3-4 Top Contributing Factors for Crashes in Santa Fe County, 2008**

| Contributing Factor    | Crashes      |            |           |            |              |             |
|------------------------|--------------|------------|-----------|------------|--------------|-------------|
|                        | Total        | % of Total | Fatal     | % of Fatal | Injury       | % of Injury |
| Following too Close    | 911          | 24%        | 0         | 0%         | 323          | 27%         |
| Driver inattention     | 770          | 20%        | 2         | 14%        | 210          | 17%         |
| Failing to yield       | 591          | 16%        | 1         | 7%         | 200          | 16%         |
| Excessive Speed        | 415          | 11%        | 5         | 36%        | 141          | 12%         |
| Other                  | 368          | 10%        | 0         | 0%         | 79           | 7%          |
| Alcohol Involvement    | 253          | 7%         | 6         | 43%        | 106          | 9%          |
| Red Light Running      | 157          | 4%         | 0         | 0%         | 64           | 5%          |
| Improper Turning       | 109          | 3%         | 0         | 0%         | 24           | 2%          |
| Improper Driving       | 59           | 2%         | 0         | 0%         | 20           | 2%          |
| Improper overtaking    | 45           | 1%         | 0         | 0%         | 10           | 1%          |
| Driving left of Center | 44           | 1%         | 0         | 0%         | 15           | 1%          |
| Mechanical Defect      | 38           | 1%         | 0         | 0%         | 17           | 1%          |
| Inop. traffic control  | 3            | 0%         | 0         | 0%         | 1            | 0%          |
| <b>TOTAL</b>           | <b>3,763</b> |            | <b>14</b> |            | <b>1,210</b> |             |

Source: Division of Government Research, Community Reports 2008

Great efforts have been made over the last several years in New Mexico to reduce the level of Driving While Intoxicated (DWI) and alcohol related crashes. Strategic and aggressive programs and policies in tandem with effective law enforcement, public awareness campaigns, liquor control measure, educational programs and treatment initiatives have led to a 35% reduction of alcohol-involved fatalities from 2003 -2008. This effort has moved New Mexico out of the National Highway Traffic Safety Administration’s top ten list for alcohol-related deaths. That being said alcohol continues to be the primary factor in around 40% of all fatal crashes in the State, County and City, while alcohol related injury crashes accounts for around 8% of all injury crashes.

**Table 3-5 Alcohol-involved Crashes 2008**

| Location                | Alcohol Fatal Crashes | % of All Fatal Crashes | Alcohol Injury Crashes | % of all Injury Crashes |
|-------------------------|-----------------------|------------------------|------------------------|-------------------------|
| <b>New Mexico</b>       | 127                   | 39%                    | 1,106                  | 8%                      |
| <b>Santa Fe County</b>  | 6                     | 43%                    | 99                     | 8%                      |
| <b>City of Santa Fe</b> | 3                     | 43%                    | 59                     | 7%                      |

Source: Driving While Impaired New Mexico 2008 – NMDOT

### 3.2 Regional Transit and Rail System

#### Existing Transit Service

There a number of different entities providing public transit services in the MPO Planning area making it complicated to coordinate these services at times. Santa Fe Trails, North Central Regional Transit District (NCRTD), NMDOT and Santa Fe Parking Division all provide transit services of varying degrees. The Santa Fe City and County Regional Planning Authority is responsible for allocating a portion of TGRT revenues within Santa Fe and Santa Fe County for transit service improvements.



**Santa Fe Trails:** Santa Fe Trails, a division within the Public Works Department, is the City run transit service which began in 1993. Santa Fe Trails

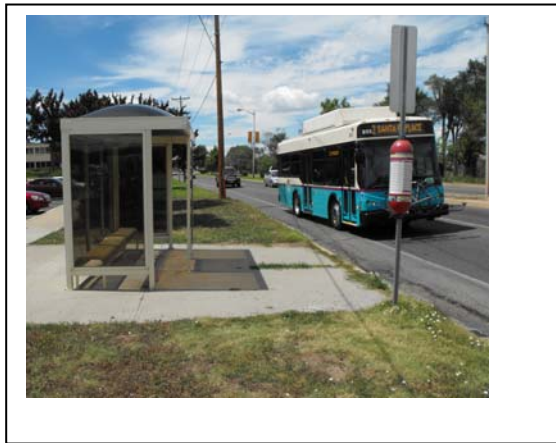
primarily runs local fixed route service within the City limits, although they do run two routes into the County to the Community College and the NM599 Rail Runner Station on the south side.

Currently, the Santa Fe Trails operates 30 compressed natural gas (CNG) powered buses on nine fixed routes. Service is provided seven days a week; Monday – Sunday, 362 days per year. Currently, City employees and passengers 18 years old and under travel for free. Total ridership on Santa Fe Trails buses has grown substantially since 2005, rising from 572,000 in 2005 to 825,000 in 2009. Between 2008 and 2009 there was a 12% increase most likely attributed to the start of Rail Runner Service to which Santa Fe Trails provides connections. Whether it is the impacts of the economy or Rail Runner, transit ridership appears to be continuing to grow as first quarter ridership numbers for 2010 exceed same period in 2009. Routes 2 and 4 make stops at the Rail Runner stations to meet trains at the Santa Fe Depot and South Capitol.

**Table 3-6 Santa Fe Trails Ridership Change, 2005-2009.**

| Year | Annual Totals |
|------|---------------|
| 2005 | 571,564       |
| 2006 | 612,059       |
| 2007 | 654,949       |
| 2008 | 735,496       |
| 2009 | 824,733       |

Santa Fe Trails provides critical transportation to individuals who depend on the bus system as their primary form of transportation. The nine routes provide



varying levels of service and therefore carry varying numbers of passengers. Route 2 which runs on 15 minute headways (time between buses) along Cerrillos Road accounts for almost 60% of the ridership of the whole system. Route M which runs on 60 minute headways carries the lowest. Ridership levels are often a function of the density and types of land use along a route, but short headways are critical for attracting passengers from their reliance on single occupancy vehicles. More information on the routes, schedules and fares can be found on the City website.



**North Central Regional Transit District:** In 2003 Governor Richardson signed into law Senate Bill 34, the “Regional Transit District Act”. This legislation

allowed for the creation of Regional Transit Districts in New Mexico. The North Central Regional Transit District (NCRTD) was the

first RTD in the State to be established and the first in the country to bring together local and tribal governments. The NCRTD service area includes the counties of Santa Fe, Los Alamos, Taos and Rio Arriba; the cities of Santa Fe and Espanola, and the pueblos of Tesuque, Pojoaque, San Ildefonso, Santa Clara and Ohkay Owingeh.

The NCRTD operates three fixed routes through the MPO Planning Area. One between Espanola and Downtown Santa Fe, a second from Downtown Santa Fe to Eldorado , and the third from the Indian Hospital in Santa Fe to Tesuque Pueblo.

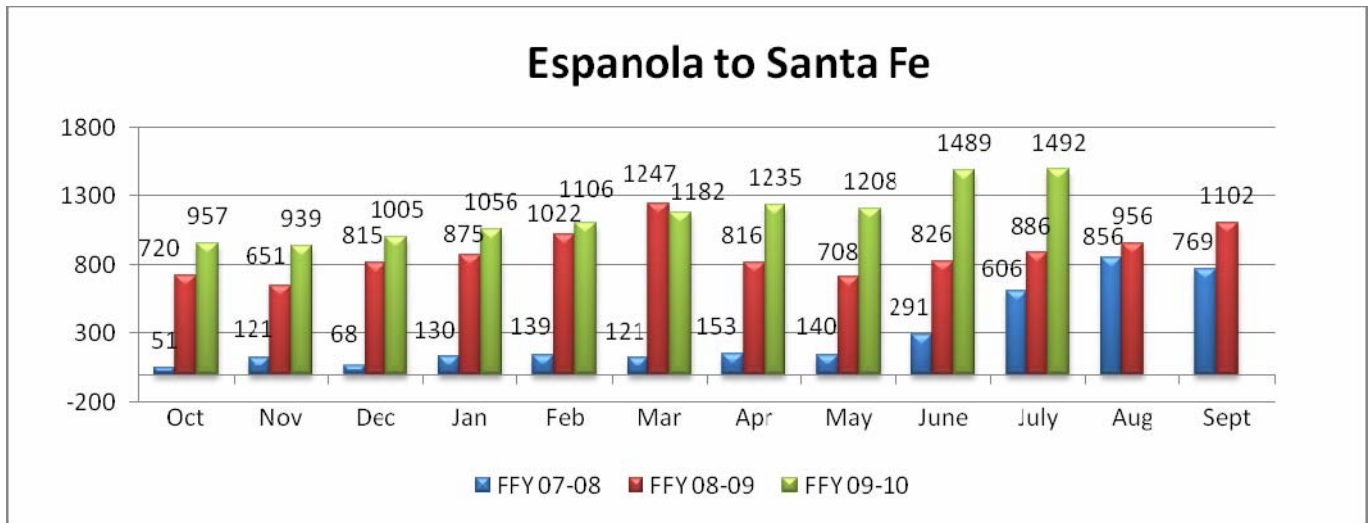
Each of these services make stops at the Rail Runner Stations at South Capitol. It is free to ride all the routes on the NCRTD system. More information on the routes and schedules can be found on the NCRTD website. ([www.ncrtd.org](http://www.ncrtd.org)).

The charts on the next page show ridership for the NCRTD routes that serve the City of Santa Fe and Santa Fe County.

The NCRTD service plan goes to 2013. Because the NCRTD is funded by grants and Gross Receipts Tax, they are limited on the ability to do longer-term planning. Expanded service and expansion to weekends will be dependent upon the economic trends of the future. Sustainability of the 21 existing routes is their primary objective and NCRTD staff believes they should be able to meet that objective, at least through 2013.

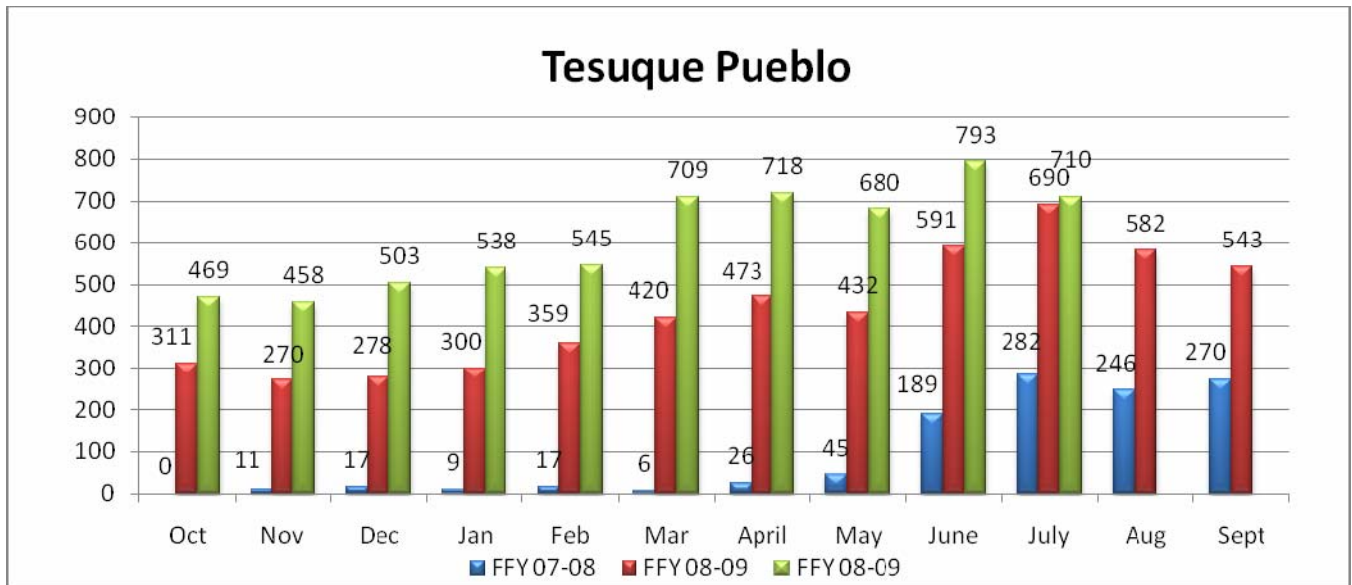
A very important project for the NCRTD in the immediate future is the completion of the Jim West Transit Center in Espanola. This center will not only house NCRTD staff and operations, but will be the centralized hub of the NCRTD. This facility is funded primarily through AARA funds and some discretionary funds. Completion is anticipated by December 2010.

Espanola to Santa Fe:



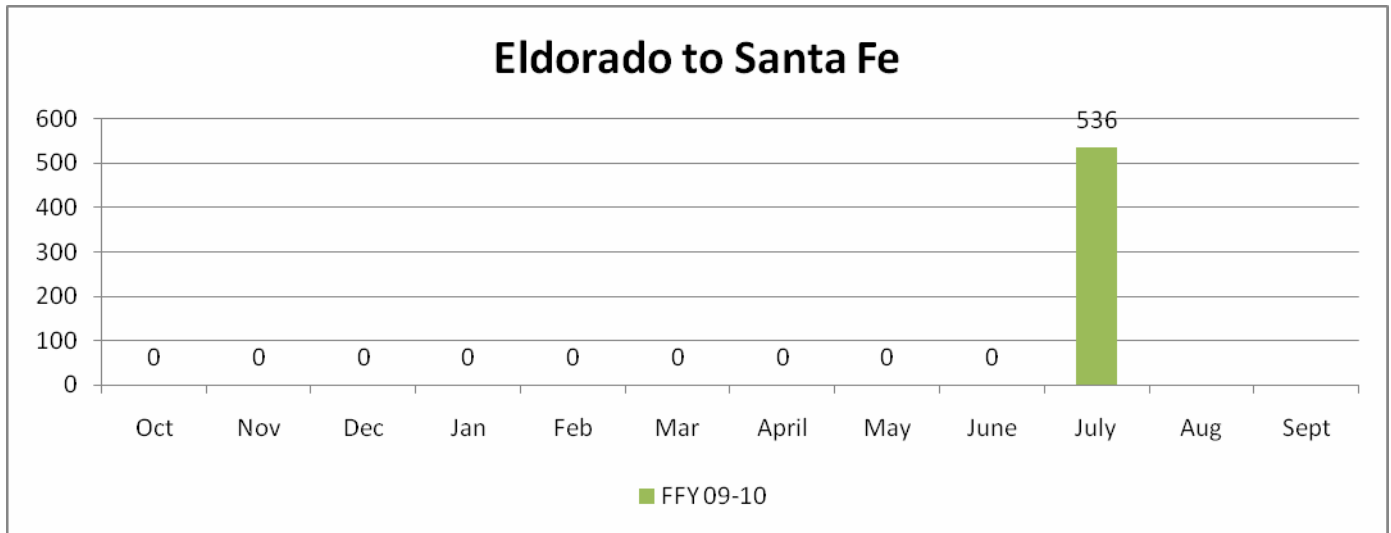
This route began October 2007 and has grown to not only provide service to the City of Santa Fe, but to the Rail Runner station at the South Capital Complex.

Tesuque to Santa Fe Route:



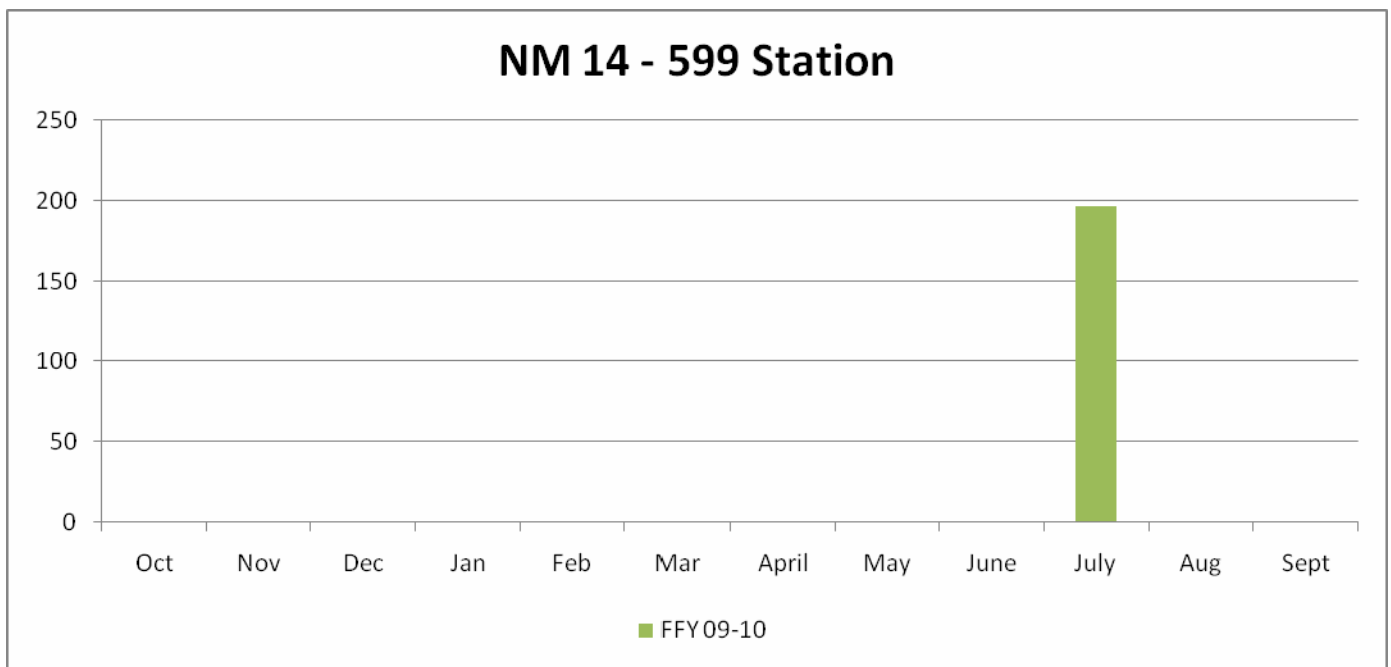
This route began November 2007 and provides service to the Pueblo of Tesuque into the City of Santa Fe to Sheridan Street, the South Complex Rail Runner Station, the Santa Fe Indian School and Santa Fe Indian Hospital.

Eldorado to Santa Fe:



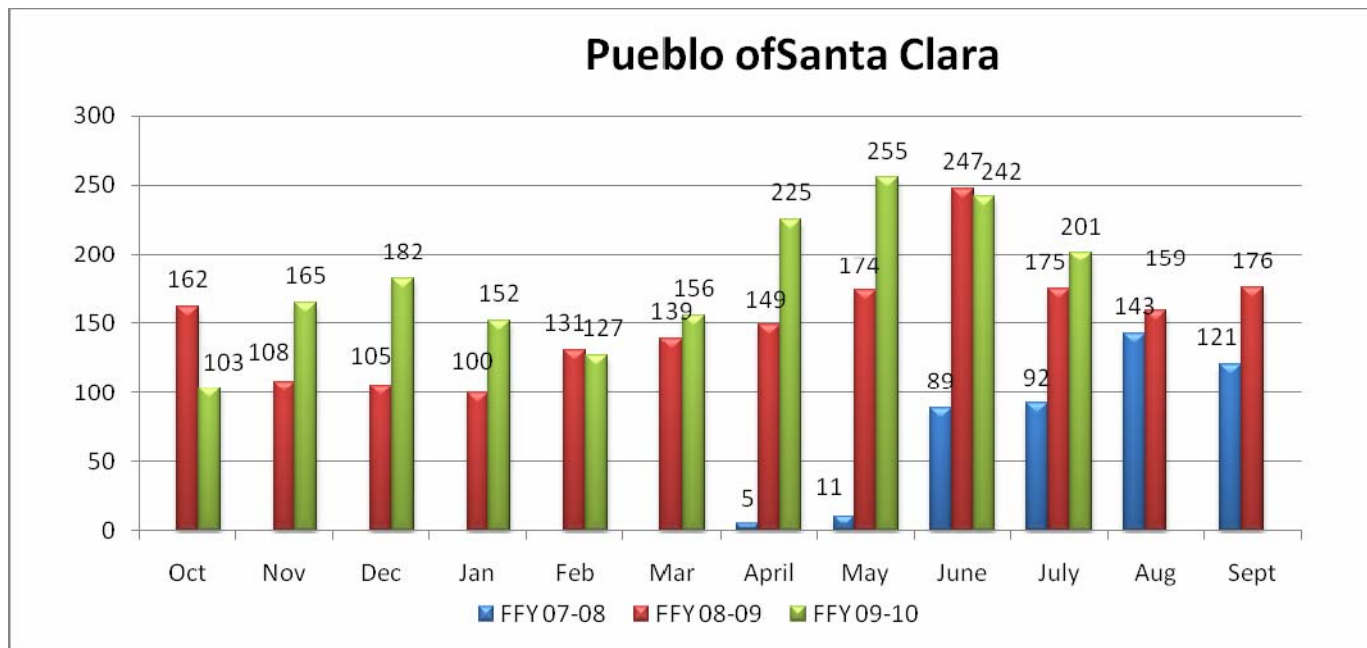
This newly designed route from Eldorado to Santa Fe began in July 2010. It is the northern run of the original Greater Eldorado Express (GEE Line). Due to low ridership on the portion from Moriarty to Eldorado, in a cost effective measure the RPA recommended shortening the route to serve the higher concentration of ridership from Eldorado to Santa Fe, and provide mid day service,

NM 14 – 599 Station:



This route also began in July of 2010. It serves the Rail Runner Station at NM 599 and employees of the area. It transports employees of the Onate Military Complex, the NM Department of Corrections and the Santa Fe County Detention Center.

Pueblo of Santa Clara to Santa Fe:



The Pueblo of Santa Clara Route began in April of 2008 as an internal service connecting into Espanola. In July of 2010 the route expanded to include service into the City of Santa Fe to the Santa Fe Indian Hospital and Santa Fe Indian School.



**New Mexico Department of Transportation:** the NMDOT operates a Park and Ride bus service on seven routes statewide, four of which service Santa Fe.

The Orange Route with an average of 62 passenger trips per day operates between Las Vegas and Santa Fe. The Red Route, with an average of 57 passenger trips per day operates between Espanola, Pojoaque and Santa Fe. The Blue Route, with an average of 185 passenger trips per day operates between Santa Fe, Pojoaque and Los Alamos. The Purple Route, with an average of 439 passenger trips per day operates from the NM599 Rail Runner Station to Los Alamos.

In addition to the Park and Ride Service the NMDOT operates two Shuttles within Santa Fe connecting the Rail Runner and Park and Ride to State Buildings and other major employment centers. One shuttle starts at the South Capitol Station and the second at the NM599 Station. (refer to the Santa Fe Connections Brochure under Intermodal Facilities)

More information on the Park and Ride and Shuttle services can be found on the NMDOT website.

(<http://www.nmshtd.state.nm.us/main.asp?scid=14635>).



**Santa Fe Pick-Up:** The City's Parking Division operates the Santa Fe Pick-Up service which runs a circular route from the Santa Fe Depot to the

major destinations downtown and back. The service runs Monday through Saturday and is coordinated with the Rail Runner schedule. Rail Runner passengers ride the Pick-Up for free. This service was initially funded through the City's Parking Enterprise Fund, but is now funded from Transit GRT. More Information on this service can be found on the City website.

(<http://www.santafenm.gov/index.aspx?NID=1781>)



**Taos Express:** The Town of Taos operates a transit service between Taos and Santa Fe on a Friday Evening, Saturday and Sunday coordinating with

the Rail Runner Service at the South Capitol and Santa Fe Depot Stations. It also meets the late morning flight in from Dallas at the Santa Fe Municipal Airport on Saturday and Sundays. The 90 minute travel time is competitive with driving and it costs \$10. More information on this service can be found on the Taos Express website ([www.taosexpress.com](http://www.taosexpress.com)).

### Paratransit

The Americans with Disabilities Act of 1990 (ADA) requires that all public transportation programs that receive federal funding be accessible to the disabled community. This includes buses that serve fixed routes as well as complimentary paratransit services made available to those unable to use fixed route service. Santa Fe Ride provides paratransit service for all areas covered by the bus system, using taxis and vans, including some areas in Santa Fe County. The program provides "demand response" service for disabled and senior citizens. Federal regulations require paratransit service to all locations within  $\frac{3}{4}$  of a mile from a fixed-route bus line. (<http://www.santafenm.gov/index.aspx?NID=1236>).

### Carpools/Vanpools Programs

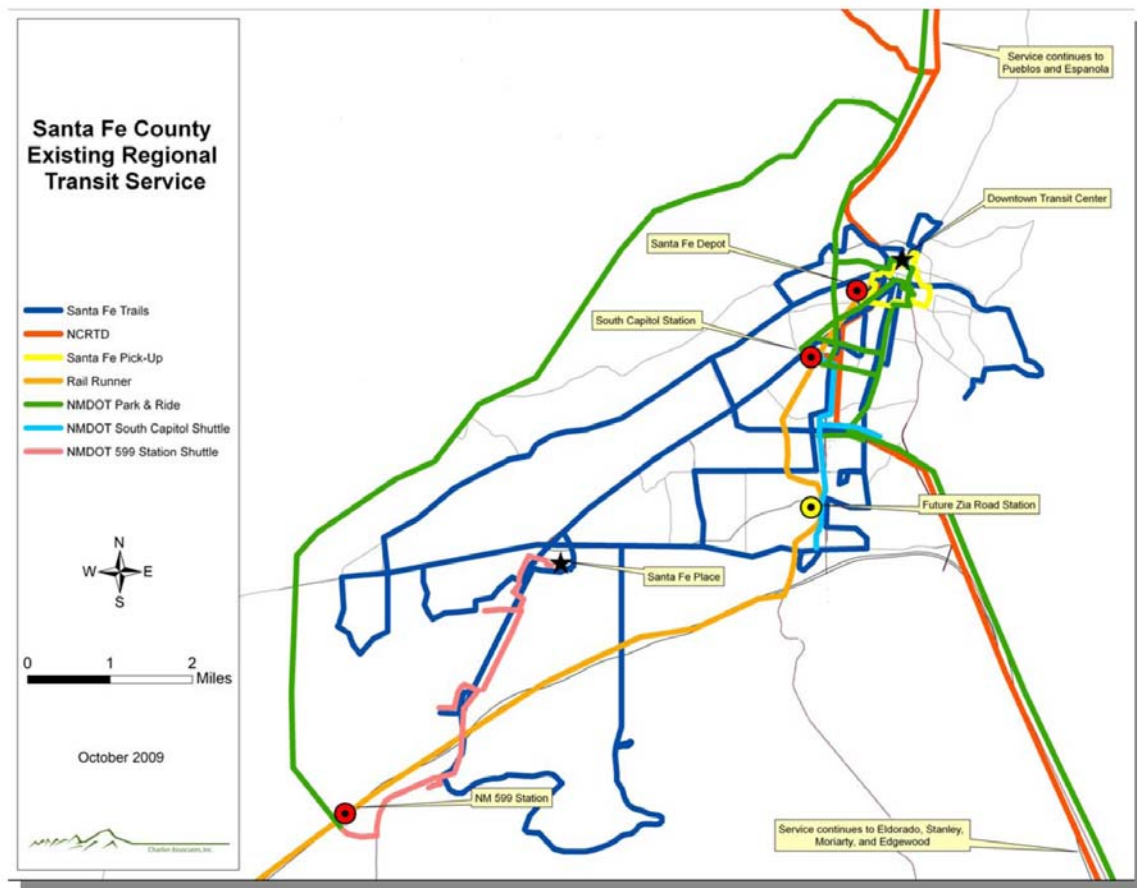
Vanpooling is a voluntary commuter ridesharing arrangement between groups of people traveling directly from their homes or a pre arranged meeting point to a place of employment. The group pays for vans or small buses for transport provided and coordinated by a private operator. The Safe Economical Commuting Alternatives (SECA) provides vehicles to a number of

van pools serving Santa Fe. More information on van pools can be found on the SECA website. ([www.seca-vanpools.org](http://www.seca-vanpools.org)).

Carpooling is an arrangement by which two or more people share the use and cost of a privately owned vehicle to travel between a pre arranged origin and destination. Carpool and ride matching services in

Santa Fe can be obtained through the Santa Fe Trail Ridefinders which provides a computerized carpool-matching service. More information on this service can be found on the City's website. (<http://www.santafenm.gov/index.aspx?NID=1235>).

**Figure 3-8 Existing Regional Transit System**



**Intercity Rail Passenger Transport**



**Rail Runner Express:** In August 2003, Governor Richardson announced he would pursue implementation of commuter rail to serve the Central New Mexico corridor. Later that year the legislator passed the Governor

Richardson Investment Program (GRIP) which included funding for the Rail Service. The NMDOT purchased the BNSF line from Albuquerque to the Colorado border to allow them to prioritize passenger service over freight service. Phase I of the service opened in July of 2006 and ran between Belen and Bernalillo using the existing BNSF rail line. Phase II between Bernalillo

and Santa Fe took more planning as utilizing the existing BNSF line all the way to Santa Fe was not practical. The MPO Transportation Policy Board approved the alignment of the rail line up the median of Interstate 25.

Service opened between Albuquerque and Santa Fe on December 17, 2008. The Diesel Electric powered trains can travel up to 79 miles per hour and the travel time between Albuquerque and Santa Fe is approximately 90 minutes.



The MPO TPB has approved a total of five stations to serve rail passengers within the Planning Area. Four of these stations have been built, however, only three are in operation at this time: Santa Fe Depot, South Capitol, and Santa Fe County/NM599. The Zia Station is built but is not yet open for service although the MPO is working with the City of Santa Fe to get the station open as soon as feasible. The fifth station, at Las Soleras, was conditionally approved by the MPO TPB in December 2008 and is currently going through the regulatory process for a location in the interstate median.

Rail Runner Express runs seven days per week between Albuquerque and Santa Fe. On weekdays a total of 16 trips (8

northbound and 8 southbound) are currently made. Ridership varies between 2,100 and 3,000 riders per weekday depending on the time of year. During the summer months ridership increases due to tourists utilizing the service.

During the AM peak commute times, seven times as many commuters originate in Albuquerque as do in Santa Fe and vice-versa during the PM peak period. Saturday service was recently cut due to budget constraints from 13 trips to 8. Sunday service started in September 2009 and has 4 trips per day. Details of the exact schedules can be found on the Rail Runner website ([www.nmrailrunner.com](http://www.nmrailrunner.com)). Overall, about a third of the 1.3 million passengers who rode the entire Rail Runner system in 2009, traveled between Albuquerque and Santa Fe.

The MPO staff has explored the feasibility of utilizing rolling stock that parks in Santa Fe during the day for local rail service between the NM599 station and the Santa Fe Depot. Even though the train and crew are available, the fuel costs to run such a service cannot be justified without a more detailed study of potential ridership. Santa Fe County continues to advocate for similar local service to Eldorado and possibly Lamy to intersect with Amtrak. The MPO will continue to evaluate these options.



**AMTRAK:** Amtrak provides a train service from Chicago to Los Angeles through Kansas City and Albuquerque. The route is called the Southwest Chief. In addition to Albuquerque the Amtrak Train stops in New Mexico at Raton, Las Vegas, Lamy, and Gallup. Lamy is located on the southern border of the MPO Planning Area and is about a 30 minute drive from downtown Santa Fe. One train in each direction stops each day in Lamy between 1:30 and 2:30PM. Chicago is approximately 24 hours

from Lamy and Los Angeles is approximately 18 hours on Amtrak by the train. These travel times cannot compete with air travel for business travelers, but provides an alternative means of transport to those who do not like to fly. The Amtrak website advertises a shuttle that meets the trains and transports passengers to various hotels in Santa Fe.























**Santa Fe Southern Railway:** The Santa Fe Southern Railway operates a tourist excursion service using a rail spur between Lamy and Santa Fe built in 1880, the Santa Fe Southern Railway has been in operation since 1992. The Santa Fe Southern

Railway primarily provides tourist excursions between Santa Fe and Lamy, but also does transport a limited amount of freight.

### Intermodal Facilities

There are a number of intermodal facilities within the MPO Planning Area. These are hubs where people can transfer from one mode of transportation to another. Table 3-4 lists the existing inter-modal centers and summarizes the providers that service them.

**Table 3-7 – Intermodal Facilities and Services**

| SERVICE HUB                   | Rail Runner Express   | NMDOT Shuttle   | NMDOT Park and Ride   | NCRTD   | Santa Fe Trails   | Taos Express  | Santa Fe Pick-Up  |
|-------------------------------|---|---|---|---|---|---|---|
| Santa Fe Depot/Railyard       |  |   |   |   |  |   |  |
| South Capitol Station         |  |  |  |  |  |  |   |
| NM 599 Station                |  |  |  |  |  |   |   |
| Sheridan Transit Center       |   |   |  |  |  |   |  |
| Santa Fe Place Transit Center |   |  |   |   |  |   |   |
| Calle Mejia Park & Ride Lot   |   |   |  |   |   |   |   |

The Santa Fe MPO has provided the funding through its FTA planning funds to produce a ‘Santa Fe Connections’ brochure (See Figure 3-4) to assist transit and rail passengers in locating bus and rail connections.

Figure 3-9 Santa Fe Connections Brochure



The following Rail Runner stations are currently in operation and provide inter-modal connections for passengers:



**Santa Fe Depot/Railyard:**

Original rail terminus in Santa Fe; walkable to downtown and accessible to the Rail Trail multi-use path. Transit connections are provided by Santa Fe Trails, Taos Express, and the Santa Fe Pick-Up. The City of Santa Fe has developed a conceptual plan to develop a full intermodal facility at the Santa Fe Depot and is actively seeking funding for the estimated \$5.5 million cost to make improvements to the existing train platform and bring transit service adjacent to the platform. An underground parking garage is located within the rail yard development; there is a charge for parking.



**South Capitol Station:**

Main inter-modal station; walkable to state government buildings; located along the Rail Trail. Transit connections are provided by: NMDOT Station Shuttle, NM Park and Ride, NCRTD, Santa Fe Trails, Taos Express, and private shuttle vans. Free parking is available at this location.



**NM 599 Station:**

Opened in August 2009; built as a regional Park and Ride station serving northern and southern Santa Fe County. Transit connections are provided by NMDOT Station Shuttle, NM Park and Ride Santa Fe Trails and NCRTD. Free parking is available at this location.

The following stations have been approved by the MPO but are not yet in operation:

- **Zia Station:** Built in 2009, Zia Station was always intended as a Neighborhood station primarily serving those walking, biking, taking transit or being dropped off. It was never intended to be a Park and Ride facility and is unlikely to attract

that type of user. Although the Zia Station platform has been constructed land ownership issues remained unresolved until recently. A Transit Oriented Development (TOD) is in the planning stages for the private property adjacent to the Zia Station platform. The opening of the station is not tied to the approval or construction of the TOD development and the MPO is working with the City to develop an interim access plan for the station, which would primarily provide sidewalk connections along Zia Road. A permanent entrance and passenger drop-off area will be provided as part of the proposed TOD.

- **Las Soleras Station:** The fifth and final Rail Runner station identified for Santa Fe is proposed to be located within the median of I-25 between Cerrillos Road and Richards Avenue. The Station is linked to a TOD development at Las Soleras. This mixed-use development is expected at buildout to have 9,300 employees, and 5,000 residents. Approvals for the station location in the median of I-25 are currently being sought from FHWA. If approved, the design and construction of the station and access will be paid for by the developer. This station could be operational within the next 18 to 24 months.



South Capitol Station

The following locations are transit hubs.

- **Sheridan Transit Center:** This is the main downtown transit hub serviced by a number of transit providers. It provides a covered waiting area shared with the sidewalk. The City is pursuing plans to reconfigure the street as a more formalized intermodal transit facility. No parking is provided at this site, although ample paid public parking close to the facility is provided on street, in lots, and the Convention Center parking garage.
- **Santa Fe Place Transit Center:** This is the main transit hub on the southside of City and is serviced by Santa Fe Trails and the NMDOT NM599 Station Shuttle. This hub is located in the parking lot behind the Santa Fe Place Mall. Parking is free.
- **Calle Mejia Park & Ride Lot:** This lot is located on the north side of the City off of St Francis Drive (US 84/285) and is currently an unpaved lot with paved ADA parking spaces. The NMDOT has plans to pave the lot. This lot is serviced by the NMDOT Park & Ride Red and Blue routes. Parking is free.

### Future Transit Demand

Future travel demand growth locations that would likely need transit service includes:

- Developing subareas west and south of the current urbanized area of Santa Fe
- Residential growth outside of the MPO area (primarily Albuquerque and Rio Rancho) supported by employment growth in the City and County (known as “external-internal” trips)
- Continued infill along the region’s principal and minor arterial system.

- TOD developments at Zia Station and Las Soleras will require new or rerouted transit services.

While much of the City and close-in outlying areas have transit access, the outlying areas suffer from infrequent transit *service*. This service tends to include hourly peak service and less frequent non-peak service. The lack of transit access and service discourages its use as an alternative to driving.

Commuters to jobs within the MPO area that live outside the area will continue to add to demand on I-25 west of Santa Fe and NM 599 north of Santa Fe. In each case, these trips are longer commute trips which are best served by limited stop, frequent longer-distance service including Rail Runner and regional express service.



### 3.3 Bikeways System

The policies and projects specified in the City's 1993 Bikeways Master Plan, bikeway planning since 2003 by the City's Bicycle and Trails Advisory Committee (BTAC), bikeway planning under the County's Sustainable Land Development Plan (SLDP), and facilities planned through private development in the MPO area all contribute to the bikeways component of the Metropolitan Transportation Plan. Since 2007, the MPO has convened a Bicycle/Pedestrian Study Group to examine bicycle facility planning and identify other opportunities to improve transportation by bicycle in the Santa Fe area. The work of this group led to the creation of the Santa Fe Bikeways and Trail Map, which was first published in 2008, in order to provide guidance to cyclists seeking to identify safe and convenient routes through the metropolitan area.



*Photo Courtesy of Tim Rogers*

Building off of this product, since 2009, the MPO has undertaken a Bikeways Mapping Project seeking to better identify existing and planned or desirable facilities and to prioritize the design and construction of significant gaps throughout the MPO area.

The Bikeways Mapping Project is identifying a system of major multi-use paths and significant roadways that may comprise "arterial bikeways" in the MPO area, as illustrated in Figure 3-5. Possible improvements to these bikeways, and the connections to them and between them, are being analyzed and prioritized with respect

to each segment's contribution toward system connectivity, anticipated local demand based on land use, specific safety advantages, and feasibility. This process has led to a draft list of priorities for trail and road improvements identified below and will be finalized during the development of a Bikeways Master Plan for the MPO area.

#### Multi-Use Trails

According to AASHTO, "Shared use paths should be thought of as a complementary system of off-road transportation routes for bicyclists and others that serves as a necessary extension to the roadway network. Shared use paths should not be used to preclude on-road bicycle facilities, but rather to supplement a system of on-road bike lanes, wide outside lanes, paved shoulders and bike routes."<sup>10</sup>

For a wide variety of bicyclists and other non-motorized users, a system of multi-use paths on alignments distinct from the road network can create enhanced opportunities both for transportation as well as recreation purposes. Multi-use paths that are intended to address transportation needs should follow accepted engineering guidelines with respect to width (generally 10 ft. minimum), surface (ADA compliant), acceptable horizontal and vertical curvature, sight distance needs, clear zone, and other safety and convenience factors discussed in the AASHTO Guide for the Development of Bicycle Facilities.

According to AASHTO, "Shared use paths are facilities on exclusive right-of-way and with minimal cross flow by motor vehicles."<sup>11</sup> Paths along roadways, known as "side-paths," are generally to be avoided as a solution for bicycle travel unless there are minimal conflicts created, as along a limited access roadway, and the side-path serves a specific function within the greater network of multi-use paths and bikeways.

<sup>10</sup> AASHTO 1999, p. 33.

<sup>11</sup> AASHTO 1999, p. 33.

The following are major multi-use trails (bicycle, pedestrian and possibly equestrian) already developed in the Santa Fe region:

- Rail Trail: Paved multi-use path extended from Zia Road to I-25, from Siringo to Alta Vista, and from Alarid to the Downtown/Railyard Rail Station through efforts by NMDOT (NM Rail Runner Project) and the City. An extension of the Rail Trail by the County from I-25 to Rabbit Road was completed May 2010 using ARRA funding.
- River Trail: Paved multi-use path extended by City from Alto Park to Don Jose St. in 2009-2010, with plans to extend to Frenchy's Field by 2011. Wide soft-surface segment built by County from San Ysidro Crossing to Caja del Rio Road.
- Acequia Trail: Built by City from St. Francis Dr. to Potencia St., near Baca St., with connector to Flagman Way. Designs under way for extensions east to Railyard Park and west to Otowi Rd., with connector through Ashbaugh Park.
- Arroyo Chamiso Trail: Extended under Rodeo Rd. to existing trail in Nava Ade, with connection to Santa Fe Place. Designs underway to connect under St. Francis to existing section to Zia Rd.
- N. Arroyo Chamiso Trail (Tierra Contenta): Built by developers from w. of Buffalo Grass Rd. to Arroyo Chamiso (near NM599).
- Parks Implementation Bond: This \$30 million bond passed in 2009 included substantial support (\$7 million) for construction of trails.

## **Bikeways as Part of Complete Streets**

The MPO Transportation Policy Board unanimously passed a resolution in 2007 urging both the City and the County of Santa Fe to require the design and construction of "complete streets" catering to the needs of pedestrians, bicyclists, and transit throughout the MPO Planning Area. In order to accommodate bicyclists, designated bicycle lanes, paved shoulders or wide curb lanes meeting specifications in the AASHTO Guidelines for the Development of Bicycle Facilities should be included in the design and construction of roadways with higher motor vehicle traffic speeds and volumes, typically including those classified as arterials or collectors.

The City's current Chapter 14 Roadway Sections meet the intent of the complete streets approach with respect to bicyclists' needs, contributing to successes outlined above. County standards, and particularly those outlined in the Community College District Plan, continue to allow the construction of major collectors and arterials without on-road bicycle lanes.

The MPO has worked with the County to ensure that future planning, starting with the Sustainable Land Development Plan (SLDP), emphasize routine provision of on-road facilities for bicyclists where appropriate.

Building and maintaining complete streets includes providing a smooth surface for use by bicyclists and keeping that surface reasonably free of snow, sand, and other debris. The MPO will work with local and state agencies to optimize maintenance procedures to best serve the needs of bicyclists and to identify and prioritize where specific maintenance of shoulders and bike lanes should occur.

Both the City and the County of Santa Fe have passed resolutions (City 2009-10, County 2009-135) specifically prohibiting the practice of leaving longitudinal

pavement joints within the shoulder or along the edge of the travel lane, creating a significant hazard for bicyclists (see AASHTO Guidelines for the Development of Bicycle Facilities, p. 18). The MPO is working with FHWA, NMDOT District 5, and local governments to ensure that this practice is discontinued, particularly on state highways in the MPO area.

Where existing roads do not have sufficient paved shoulders, retrofits – the addition of adequate paved shoulder space through road widening, restriping, and/or resurfacing – to these roads can be prioritized through additional considerations. For many streets, including low-speed local roads, rural routes with minimal motor vehicle traffic, and unpaved roadways, “shared lanes” are a sufficient accommodation for bicyclists. The decision to include paved shoulders, shared lanes, or off-road facilities for non-motorized users should also reflect consideration of the projected needs of other non-motorized users such as pedestrians or equestrians.

While not constructed under the auspices of a Complete Streets program, the following are existing locations where roadway corridors have been retrofitted to add shoulders or other design components that serve as bikeways:

- State highways with new shoulders: Old Las Vegas Highway (NM300) from St. Michael’s Dr. to US285, NM14 from Lone Butte to Madrid, US84/285 frontage road to Tesuque Village Rd., I-25 frontage road at NM Rail Runner underpass.
- Local roads with new shoulders: Siler Rd. extension (Agua Fria to W. Alameda), W. Alameda west of Siler.
- Shoulder added as retrofit through restriping: Cordova Rd. from Old Pecos Trail to Don Diego (“road diet”), Rufina from Siler Rd. to Richards Ave.
- Designated Bike Lanes added as part of new construction/reconstruction:

Cerrillos Rd. from Cielo Ct. to Airport Rd., Gov. Miles Rd. west of Richards Ave., Rabbit Rd. extension (with sharrows on narrow “village” streets).

- Designated Bike Lanes added as “retrofit” through restriping: St. Michael’s Dr. (NM466) west of Galisteo, Don Gaspar from Paseo de Peralta to Coronado.
- New corridor: Siler Rd. extension (completion expected in 2010).

### Bikeway System Safety

In 2008, New Mexico had the third highest bicycle fatality rates in the nation at 3.53 bicycle fatalities per million population, compared to a national average of 2.35<sup>12</sup>. Only Delaware and Florida had worse rates. Statewide a total of 7 bicyclists were killed in 2008. No bicycle fatalities occurred in Santa Fe County in 2008 and since 2004 only 1 bicycle fatality has occurred in Santa Fe County and that was in 2005. Approximately 2% of the injury crashes in the state, County and City involved bicyclists.

**Table 3-8 Bicycle-involved Crashes 2008**

|                        | New Mexico | Santa Fe County | City of Santa Fe |
|------------------------|------------|-----------------|------------------|
| Total Bicycle Crashes  | 380        | 29              | <b>26</b>        |
| % of All Crashes       | <1%        | <1%             | <b>1%</b>        |
| Fatal Bicycle Crashes  | 7          | 0               | <b>0</b>         |
| % of Fatal Crashes     | 2%         | 0%              | <b>0%</b>        |
| Injury Bicycle Crashes | 297        | 24              | <b>21</b>        |
| % of Injury Crashes    | 2%         | 2%              | <b>2%</b>        |

Source: Division of Government Research, Community Report 2008

<sup>12</sup> Traffic Safety Fact 2008 – Bicyclist and Other Cyclists, NHTSA

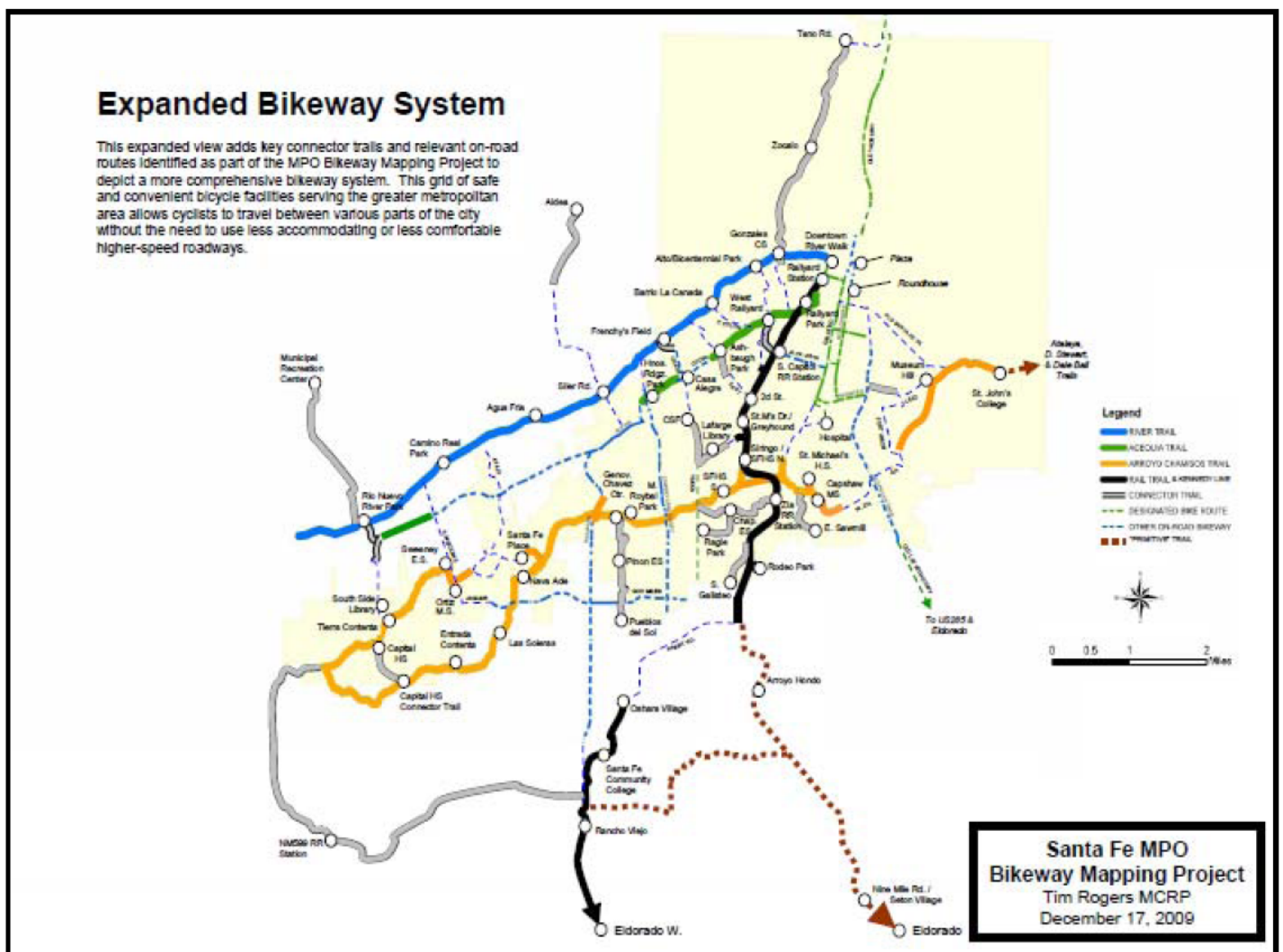
## Future Bikeways Demand Patterns

Bicycle and pedestrian demand is expected to increase slightly faster than the population growth as a whole. This is due to several factors:

- Aging of the population, resulting in less automobile use and more travel by pedestrians, bicycles, and on transit

- Completion of bicycle and pedestrian projects and extension of the existing system will encourage more trips by pedestrians and bicycles.
- Development of corridor projects as Complete Streets will encourage more bicycle and pedestrian usage of the system.

Figure 3-10. Existing Arterial Bikeway System



### **3.4 Pedestrian System**

Increasing public investment in pedestrian facilities is reinforced by recent policy from Secretary of Transportation Ray LaHood, which directs the U.S. DOT and FHWA and encourages state and local government agencies to consider "walking and bicycling as equals with other transportation modes". Pedestrians in the Santa Fe MPO Planning Area, like pedestrians everywhere, need safe, convenient, and ADA-accessible routes within and between residential areas, commercial areas, employment centers, public services, and transit routes. Pedestrianism should be recognized as a legitimate and significant mode of transportation, not relegated to a second-class mode whose needs are subservient to motorized traffic. The vulnerability of pedestrians and the impact that motor vehicles in particular have on pedestrians' safety and comfort need to be recognized as significant reasons to encourage site, development, and street designs that emphasize pedestrians' needs at least at par with efforts to accommodate motor vehicles.

The network of pedestrian facilities in Santa Fe includes a mix of sidewalks, crosswalks, formal and informal pathways, and streets without sidewalks. Having been developed over the years by a combination of site-specific improvements by individual landowners and developers and somewhat more comprehensive improvements through public roadway projects, the only consistent aspect of the pedestrian circulation system throughout the area is its inconsistency.

Over the past few years a number of initiatives and studies have been undertaken related to pedestrian issues including:

#### **Santa Fe Walks**

Under a City Council Resolution passed in 2006 an initiative was launched to promote a healthier lifestyle through walking. A task force was set up to identify strategies to inform and encourage the public to make walking part of their daily activities.

#### **ADA Transition Plan:**

The City of Santa Fe has begun to implement a transition plan to bring pedestrian facilities into compliance with the Americans with Disabilities Act (ADA). The focus of this activity has been the reconstruction of street corners in selected neighborhoods in order to install ADA-accessible ramps, landings, and signal buttons.

#### **AARP Summary Pedestrian Survey**

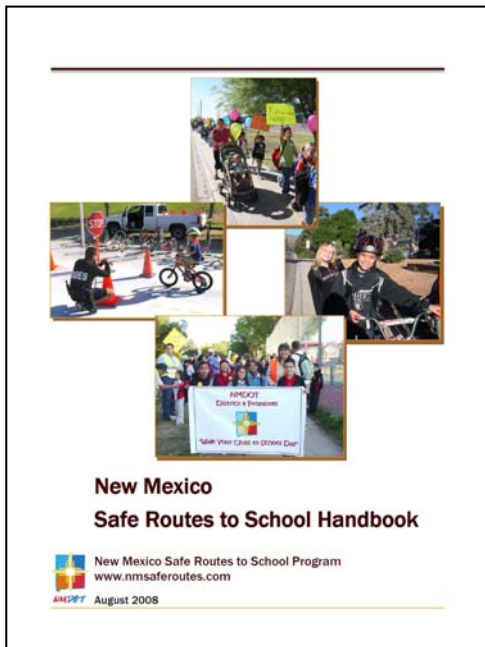
AARP conducted surveys at identified hazardous intersections to determine safety issues to pedestrians. The results were provided to the NMDOT and the City of Santa Fe.

#### **NMDOT Pedestrian Road Safety Assessment**

In 2009, the NMDOT conducted a Pedestrian Road Safety Assessment of the roadways around their main building on Cerrillos Road. The assessment looked at pedestrian and bicycle pedestrian safety concerns on Cerrillos Road, Alta Vista Street, Luisa Street and Cordova Road. Recommendations from the assessment included filling in gaps on the pedestrian network, geometric improvements at intersections, maintenance of crosswalk markings and a review of the pedestrian crossing times at the signalized intersections.

## Safe Routes to Schools (SRTS)

The Chapparel Elementary School is in the process of developing a SRTS program for their school, but no formal SRTS program has been established for the District as a whole. The City Council passed a resolution (2009-11) supporting SRTS program by working with the Santa Fe Public School District to identify and provide necessary safety improvements to access public schools.



## Pedestrian Connections to Transit

The City Council passed a resolution (2007-44) directing transit division staff to work with other public Works Department Staff to develop and execute a pedestrian safety awareness campaign and to examine pedestrian routes to bus stops, identify where capital improvements are required to facilitate safe access to such stops, prioritize needed improvements in consultation with the Transit Advisory Board and make recommendations for implementation of such improvements to the governing body. Unfortunately there were not sufficient staff resources to execute this resolution.

## Prescription Trails

The New Mexico Department of Health collaborated with the City of Santa Fe to launch Prescription Trail Program in 2009. The program is designed to increase walking on suggested routes to lower peoples risks of heart disease, diabetes and high blood pressure.

The program developed a walking guide that lists 26 parks and open trails by zip code to make it easy for physicians and individuals to find walking options in the city. The MPO plans to collaborate with the City and the New Mexico Department of Health to expand on this program to identify improvements to the pedestrian system to allow people to make walking part of their daily transportation mode.

## “How to Develop a Pedestrian Safety Action Plan” Workshop

The MPO helped organize a workshop on developing a pedestrian action plan which was well attended by City, County and NMDOT staff.

As shown above a number of pedestrian initiatives have been conducted but no comprehensive or coordinated pedestrian planning efforts have been undertaken. The MPO will conduct a comprehensive review of pedestrian issues to identify future projects whether they are new sections of sidewalk or improvements to the existing network. The MPO will also work the Santa Fe School District, NMDOT, the City and County to develop a formalized Safe Routes to School program. Additionally the MPO will work with the Department of Health to expand its Prescription Trails Program. Ultimately this effort will result in the production of a Pedestrian Master Plan.

## Pedestrian Safety and Security

**Safe Routes to Schools:** The Safe Routes to School (SRTS) Program was initiated by SAFETEA-LU and provides federal-aid

highway funds to the State, approximately \$1 million per year, with no matching funding requirements. The SRTS program encourages educational and promotional projects that encourage safe walking and bicycling education and project options for students in kindergarten through eighth grades. Espanola currently participates in the SRTS program.

**Collisions and Safety:** New Mexico has one of the highest pedestrian injury and fatality rates in the nation. Based on 2007 data New Mexico had a pedestrian fatality rate of 3.27 per 100,000 residents, more than double the national average of 1.60. In 2008, 1% of the crashes in New Mexico involved a pedestrian, but accounted for 12% of fatal crashes and 3% of injury crashes. A similar trend is seen when looking at Santa Fe County as a whole. In the City of Santa Fe, 2 of the 7 fatalities (29%) in 2008 involved pedestrians.

**Table 3-9  
Pedestrian-involved Crashes 2008**

|                           | New Mexico | Santa Fe County | City of Santa Fe |
|---------------------------|------------|-----------------|------------------|
| Total Pedestrian Crashes  | 474        | 43              | <b>37</b>        |
| % of All Crashes          | 1%         | 1%              | <b>1%</b>        |
| Fatal Pedestrian Crashes  | 38         | 2               | <b>2</b>         |
| % of Fatal Crashes        | 12%        | 14%             | <b>29%</b>       |
| Injury Pedestrian Crashes | 374        | 37              | <b>33</b>        |
| % of Injury Crashes       | 3%         | 3%              | <b>4%</b>        |

Source: Division of Government Research, Community Reports 2008

**Safety Research and Education:** The NMDOT recently was awarded a “Pedestrian Safety Education and Enforcement” grant from the National Highway Traffic Safety Administration

(NHTSA). Part of this grant is being used to analyze pedestrian crash data in focus areas of high concentrations of pedestrian crashes. The City of Santa Fe is one of these focus areas. Between 2004 and 2008 a total of 167 pedestrian crashes were identified. Alcohol was deemed to have been involved in about a third of these crashes and there were 14 pedestrians killed in that period. Initial analysis found concentrations of crashes in and around the tourist-oriented historic downtown, which led to initial speculation that tourists may be a cause and victim of these crashes. More detailed analysis of the actual crash reports is currently being undertaken, and early indications from this analysis is showing that in fact the majority of pedestrian crashes are involving drivers and pedestrians from Santa Fe and a possibility that homeless people are over represented as the pedestrians. The MPO will continue to cooperate with the NMDOT with this analysis and development of mitigation and educational materials to help reduce pedestrian involved crashes.

**Future Pedestrian Demand Patterns**

Pedestrian trips tend to be shorter in nature than trips made by vehicles or on bicycles. Many pedestrian trips are connections to and from transit, while others are short trips for meetings, shopping, or recreation.

Regional pedestrian demand will be affected by:

- Aging of the population, resulting in less automobile use and more travel by pedestrians, bicycles, and on transit
- Completion of bicycle and pedestrian projects and extension of the existing system will encourage more trips by pedestrians and bicycles.
- Development of corridor projects as Complete Streets will encourage more bicycle and pedestrian usage of the system.

### 3.5 Freight and Commerce

The movement of freight and goods within New Mexico is almost exclusively done by truck. Interstates 10 and 40 (outside the MPO Planning Area) are the major carriers of freight in the State, with between 11,000 and 25,000 trucks per day respectively.

According to the NMDOT Research Bureau report: Innovation in Transportation, Establishing Freight Corridors<sup>13</sup>, approximately 75 percent of the freight transported within New Mexico is “through” freight, which is freight that is transported entirely through the state, on state highways, without stopping for pickup or delivery within New Mexico. Most of this through freight is on trucks (approximately 75-80 percent), while approximately 24-29 percent is transported by rail. Air cargo is responsible for less than one percent of the state’s freight movement in terms of weight.

Between now and 2035, the number of trucks on the state’s highways is expected to double<sup>14</sup>; this will be the case of all distribution patterns (internal to the state as well as through traffic). For the Santa Fe region, much of the freight movement through the region uses I-25, which both NMDOT and FHWA project will be at or approaching capacity between Santa Fe and Albuquerque by 2020. I-25 is the major north/south freight route through the State carrying between 3,000 and 6,000 trucks per day. Trucks tend to comprise 8 to 10 percent of the total number of vehicles on major highways; their peak travel times tend to be earlier than the “system” peak: early morning prior to the AM peak period, and mid-afternoon prior to the PM peak period.

Interstate 25, US 285 and St Francis Drive (US 84/285) are federally-designated Truck Routes (Interstate and National Highway System) and NM599 is a State designated Truck Route. Much of the truck traffic generated in the MPO Planning Area is related to the delivery of construction materials and retail or wholesale supplies. Although not a large volume, the most visible type of freight carried by truck through the urbanized area along St Francis Drive is trucks carrying hay from Colorado down to Texas. Although it is desirable to divert much of the through truck traffic to NM599, St Francis Drive still remains the shortest route through the area, especially for those trips utilizing US 285 from and to the south. NM599 was constructed as a relief route around Santa Fe and to provide a route that avoids the urbanized core of Santa Fe for the transportation of low level nuclear waste from Los Alamos to the Waste Isolation Pilot Project (WIPP) near Carlsbad. These shipments of the materials generally occur in special convoys and during times when traffic on the route is light.

Freight carried by rail is expected to double on a statewide basis between 2000 and 2020. Recent trends have indicated that as fuel prices escalate, some of the longer-distance freight is being placed on rail instead of truck, due to the lower cost per ton-mile of delivery<sup>15</sup>. Freight rail in New Mexico primarily carries farm products and coal.

Air cargo tends to consist of small, “overnight” packages, goods that require quick transport and delivery, and high value goods. While air cargo service is available at the Santa Fe Municipal Airport, most packages and larger air cargo consist of

<sup>13</sup> ATR Institute, University of New Mexico Albuquerque, for the New Mexico Department of Transportation Research Bureau (June 2007).

<sup>14</sup> Multimodal Freight Study (Phase I and II), Cambridge Systematics for NMDOT, 2009.

<sup>15</sup> Center for Ports and Waterways & Texas Transportation Institute, “A Modal Comparison of Domestic Freight Transportation Effects on the General Public,” November 2007, Pages 36-38. <http://www.nationalwaterwaysfoundation.org/study/public%20study.pdf>

ground shipments between Santa Fe and the Albuquerque International Airport, where that airport's air cargo facilities are used for transport.

### Future Freight and Commerce Demand Patterns

Regional and interstate freight has been projected by NMDOT to double between now and 2035. This will contribute toward impacts on all state highways in the Santa Fe region, but primarily to through trips on I-25. While some of this could be shifted onto freight rail, trip origins and destinations will tend to dictate that companies will continue to ship via truck.

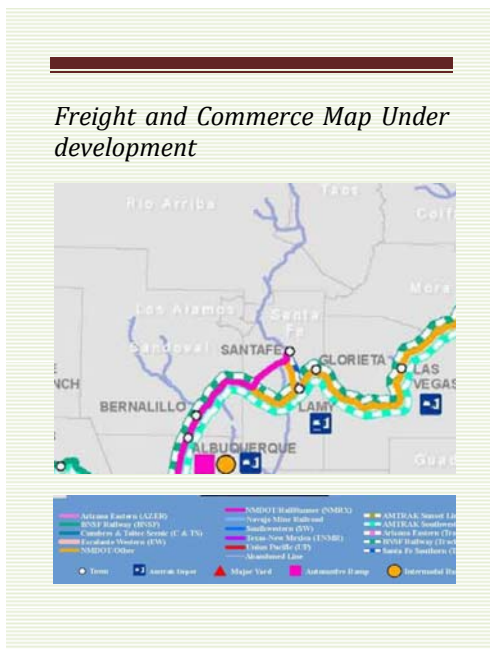
Within the Santa Fe region, it is expected that local and sub-regional freight deliveries will increase commensurate with the increase in people and jobs, on the order of 15-20 percent between now and 2035. Increased truck traffic will tend to result in moderate level-of-service impacts to the principal and minor arterial system throughout the region, but primarily on corridors leading into downtown Santa Fe, as well as distribution centers near the Santa Fe Airport.

### 3.6 Aviation

The Santa Fe Airport lies about nine miles from downtown and is managed through the Public Works Department of the City of Santa Fe. It is classified as a non-hub commercial aviation airport and handles over 100,000 take-offs and landings annually. The main runway is 8,323 feet long and is equipped with an instrument landing system. The secondary runway is 6,304 feet long. The runways can accommodate medium-sized aircraft such as DC-9s and Boeing 727s.

In June 2009 American Eagle Airlines started a commercial service between Dallas-Fort Worth (DFW) and Santa Fe. Initially they started with two flights each day, but due to the popularity of the service they increased the service to three flights per day in February 2010. Around the same time period American Eagle Airlines started a daily flight between Santa Fe and Los Angeles (LAX). The airport continues to discuss with airlines the possibility of reestablishing a service from Santa Fe to Denver. Air Charters are available from the airport and limited flights carrying freight also utilize the airport.

The airport is not currently serviced by the fixed route transit service, with the exception of the Taos Express, which does connect with one flight on a Saturday and Sunday. A private shuttle service does provide transportation to and from the airport to various area Santa Fe Hotels. Capital City Cab Company also provides taxi services between the airport and the City for individuals. Two car rental companies also service the airport.



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## 4.0 Sustainable Transportation Toolbox

In assessing the current and future challenges of the Santa Fe region's transportation system, it is clear that we cannot simply "build our way out of congestion" and call it good. The reduced funding available, public and political initiatives to reduce transportation's carbon footprint, and the community's continually-stated desire to improve livability all combine to demonstrate that we need to "think outside of the box".

In the context of cost-efficiency, climate change, and reducing over impacts of transportation on the built and natural environment, a new initiative called "Sustainable Transportation" (or green transportation) is receiving serious consideration across the country. Sustainable transportation refers to any means of transport with low impact on the environment, and includes walking and cycling, transit oriented development, green vehicles, Car-Sharing, and building or protecting urban transport systems that are fuel-efficient, space-saving and promote healthy lifestyles.

The intent of sustainable transport systems is to make a positive contribution to the environmental, social and economic sustainability of the communities they serve, while increasing overall access to the system and mobility for all users. The desired outcome is to reduce fossil fuel consumption, greenhouse gas (carbon dioxide) emissions, as well as the "carbon footprint" of transportation on the environment and on society. Sustainable transportation strategies under consideration include a combination of multimodal improvements, Transportation System Management (TSM), Travel Demand Management (TDM), land use/smart growth, social programs, and education as well as establishing more

sustainable construction methods and materials use (and disposal).

This chapter discusses strategies which provide for cost-effective and sustainable transportation options that help advance local, state, and federal policies and initiatives with regard to developing a balanced, sustainable and interconnected multimodal transportation system.

### 4.1 Complete Streets and Context Sensitive Solutions<sup>16</sup>

Complete Streets consist of *"a multi-modal complete street reflecting the principles of context sensitivity and sustainability. In a Contextually Complete Street, the stakeholders and context define what is meant by "complete".*

#### Description

In a sense, Complete Streets are Context Sensitive designs or solutions. Context Sensitive Solutions (CSS), as defined by the Institute of Transportation Engineers, are "the result of developing transportation projects that serve all users and are compatible with the surroundings through which they pass—the community and environment. Successful CSS results from a collaborative, multidisciplinary and holistic approach to transportation planning and project development."

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<sup>16</sup> Based on input provided by Parsons Brinckerhoff's [Complete Streets and Sustainability Toolkit](#); Institute of Transportation Engineers [Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities](#) (2006); and Principles from the Minnesota Department of Transportation as published on the University of Minnesota's Center for Transportation Studies Web site [www.cts.umn.edu/education/csd/index.html](http://www.cts.umn.edu/education/csd/index.html)

## Guiding Principles

Complete Street and Context Sensitive design uses the following principles:

- Humanize the street: make it a transportation carrier as well as transforming it into a destination;
- Provide flexibility and creativity in balancing access, safety, mobility, community and environmental goals;
- Involve interdisciplinary planning and design teams, the public and stakeholders early and continuously throughout the planning and project development process;
- Comprehensive understanding of contexts;
- Apply flexibility and aesthetics in design standards;
- Preserve and enhance community and natural environments
- Designing multi-modal streets for motorists, pedestrians, bicyclists, and transit users
- Safe, accessible, livable, convenient, comfortable
- Every project is unique; each requires a unique solution.

In this era of constrained funding, environmental sensitivity, and a strong community desire for a sustainable transportation system, the challenge of developing multimodal projects that include access for all transportation users, for as many modes as practical, while fitting within the community and environmental context of the surrounding area is rewarded by projects that the community can be proud of, and cost-effectively provide transportation capacity for multiple modes.

When Complete Street and CSS principles are applied to transportation projects, the process involves a much broader range of disciplines than traditional transportation design methods, which rely exclusively on the judgment of traffic engineers. The project development process is a

collaborative, interdisciplinary approach that involves everyone with a significant stake in the project, such as the residents, businesses and local institutions that will be

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### *Various Context Sensitive design treatments:*

*Roundabouts (Russelstreet.org)*



*HAWK Pedestrian Signal (Saferoutesinfo.org)*



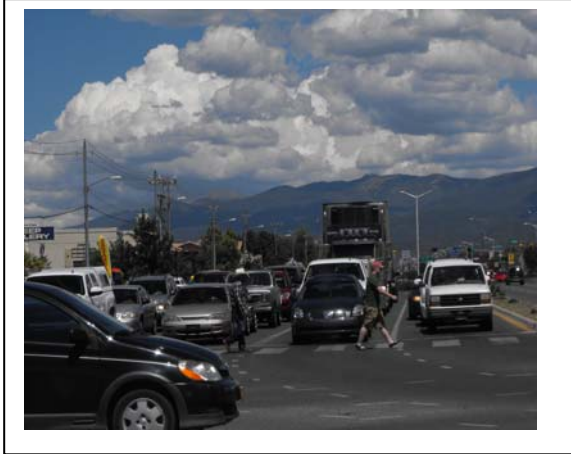
*Bike Signage in Portland, OR (FHWA)*



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affected by an intervention or a failure to address the transportation implications of development such as congestion. Rather than approaching these stakeholders at the tail end of the design process in an attempt

to gain approval, CSS emphasizes the need to incorporate their feedback from the very outset of the planning and design development processes and during all subsequent stages of construction, operations and maintenance.



There are several benefits to planning, designing and implementing Contextually Complete Streets. These benefits include:

- Public acceptance
- Humanizing the street
- Transforming to a destination
- Safety
- Revitalization
- Pedestrian activity
- Multi-modal transportation options
- Reducing greenhouse gas emissions.

### Roundabouts

A roundabout is generally a circular shaped intersection where traffic travels in a counterclockwise direction around a center island. Vehicles entering the circulating roadway must yield to vehicles already circulating. Roundabouts have specific design elements that require vehicles to approach and proceed through the intersection at slow speeds, increasing safety and efficiency. Roundabouts have been used for intersection control around the world for decades, but the first roundabout in the USA was not constructed until 1990 in Las Vegas, Nevada. Since

then, roundabouts have slowly gained popularity and now in many States are being chosen as the preferred alternative for intersection control. Roundabouts have a proven safety track record with studies showing a 90% reduction in fatalities, 76% reduction in injuries and an over 39% reduction in crashes at locations where roundabouts replaced traffic signal or stop sign control at intersections. Roundabouts are not initially popular with the public, but typically once they are constructed and people have an opportunity to drive them their attitudes towards them change. In the MPO Planning area there are currently 8 roundabouts, all single lane, with the most recently constructed at the intersection of Siler Road extension and West Alameda

### Pedestrian Crossings

A number of pedestrian crossing safety innovations have been developed and implemented over the past ten years. A number of these are now incorporated into the national traffic control standards called the Manual on Uniform Traffic Control Devices (MUTCD). Local agencies are encouraged to consider these treatments in their project design to help improve pedestrian safety and visibility, especially as part of Complete Streets design. Some recent innovations include:

- HAWK (High-intensity Activated crossWalk), initially developed by the City of Tucson, Arizona for pedestrian safety at school crossings. The HAWK uses traditional traffic and pedestrian signals but in a different configuration, and when not activated by a pedestrian, is blanked out. It includes signs instructing motorists to “stop (here) on red” along with a “pedestrians” overhead sign, and a sign informing pedestrians on how to cross the street safely.
- Other crosswalk treatments at unsignalized locations: examples include in-pavement flashing or strobe

lights, overhead flashing or strobe lights, crossings with median pedestrian refuges with pedestrian crossing signs in the median, curb extensions, etc. Good resources include Institute of Transportation Engineers (a number of best practice and case study research), Walkinginfo.org, FHWA's website, and Saferoutesinfo.org.

It should be noted that these are suggested solutions for some pedestrian crossing situations. An engineering evaluation must be completed to determine the most appropriate solution for a pedestrian crossing.

## Parking

Because Complete Streets emphasize the balance of access, mobility and safety, a Complete Street project should be prepared to address the issue of parking and stopping, in the following ways:

- Vehicle parking: for office building tenants and visitors, shoppers, and workers. The project designers can choose to have on-street parking and use it as traffic calming tool (parking maneuvers tend to slow traffic, which helps create a more human-scale corridor), or off-street parking which, under Transit Oriented Development guidelines, would tend to be located on the sides of buildings opposite the street.
- Transit stops and staging: transit vehicles will require locations where they can safely stop and drop off or pick up passengers. Design studies should determine whether these stops should be *in traffic*, where the vehicle stops in the traffic lane (requiring passenger vehicles behind it to stop and wait for the transit vehicle to depart), or using a *pullout*, where the vehicle stops outside of the traffic lane (some states have

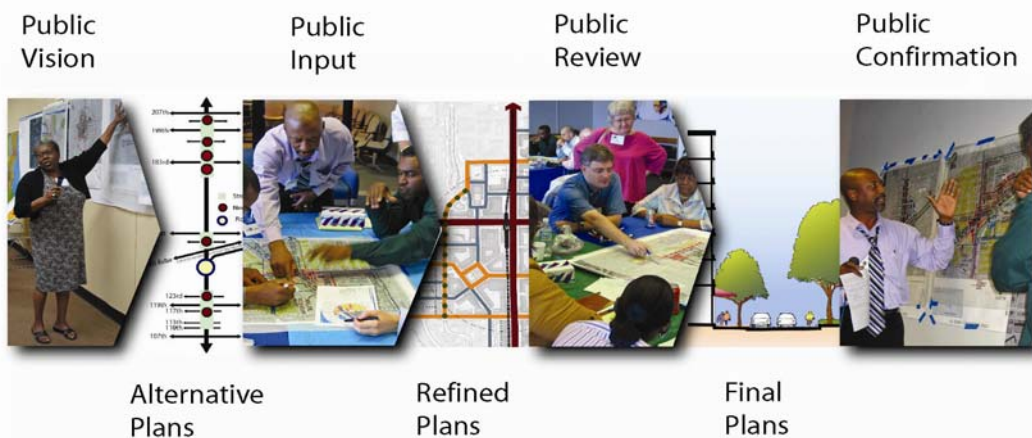
established regulations requiring private vehicles to yield to transit vehicles pulling back into traffic from pullouts). Transit stops should be designed so that transit passengers can use the route in both directions, with a safe place to cross the corridor.

- Bicycle parking: bike racks or lockers should be provided for those who bike to transit, as well as those who bike to the corridor as a destination for their trip. These should be strategically located for ease of access as well as security.

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From ITE's *Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities*:

Some communities have adopted "complete streets" laws and policies, including the states of Oregon, California, South Carolina, Virginia; MPOs in Central Ohio and the California Bay Area; and by local governments including Charlotte, NC, Sacramento, CA, and Boulder, CO. These policies are intended to ensure that their roads and streets are routinely designed and operated to provide safe access for all users, including motorists, bicyclists, pedestrians and transit riders. In communities with complete streets policies, pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across an urban street. (Graphic source: Parsons Brinckerhoff).



For more information on complete streets, visit [www.completestreets.org](http://www.completestreets.org).

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## Policy Support

The MPO Transportation Policy Board unanimously passed a resolution in 2007 urging both the City and the County of Santa Fe that: *bicycle, pedestrian, equestrian and transit needs should be given full consideration in the planning and development of transportation facilities in the Santa Fe metropolitan planning area. Bicycle, pedestrian, equestrian, and transit facilities should be established by ordinance in conjunction with the construction, reconstruction, or other change of any transportation facility in accordance with Complete Streets principles. The Santa Fe MPO staff will work with City and County land use and public works departments, Regional*

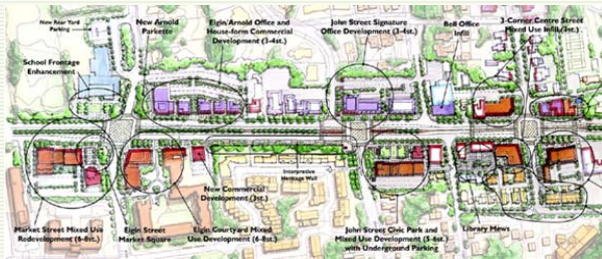
*Planning Authority staff, and related advisory committees to collaboratively designate common Complete Streets specifications that are consistent across jurisdictions for regionally significant roadways. In order to accommodate bicyclists, designated bicycle lanes, paved shoulders or wide curb lanes meeting specifications in the AASHTO Guidelines for the Development of Bicycle Facilities should be included in the design and construction of roadways with higher motor vehicle traffic speeds and volumes, typically including those classified as arterials or collectors. **The MTP strongly encourages the development of the regional transportation system by Complete Streets and Context Sensitive Solutions.***

## 4.2 Land Use Strategies/Transit Oriented Development

Smart growth is an urban planning and transportation theory that concentrates growth in the center of a city to avoid urban sprawl; and advocates compact, transit-oriented, walkable, bicycle-friendly land use, including neighborhood schools, complete streets, and mixed-use development with a range of housing choices.

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*Transit Oriented Development establishes a walkable, transit-friendly area or community via land use types and mix, design treatments, and providing transit service.*



Source: [Urbanstrategies.com](http://Urbanstrategies.com)

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Smart growth values long-range, regional considerations of sustainability over a short-term focus. Its goals are to achieve a unique sense of community and place; expand the range of transportation, employment, and housing choices; equitably distribute the costs and benefits of development; preserve and enhance natural and cultural resources; and promote public health.

Developments at Zia Station and the proposed Las Soleras Station are being proposed and promoted as TOD type developments with mixed uses, residential, employment and retail in densities and proximities that will promote and support the use of rail, transit, bicycle and pedestrian modes of transportation. The

State government has the opportunity to create a similar type of development on land it owns surrounding the South Capitol Station.

## 4.3 Transportation System Management

Transportation Systems Management (TSM) strategies provide for congestion mitigation by enhancing existing capacity or roadway operations, without substantial investment in new capacity (lanes or facilities). These strategies are especially effective at improving traffic operations for constrained corridors, and improving safety, especially during peak periods. TSM projects can be developed as “stand-alone” projects or incorporated into larger corridor improvement projects.

TSM strategies are relatively low-cost but effective in nature; examples of TSM strategies include:

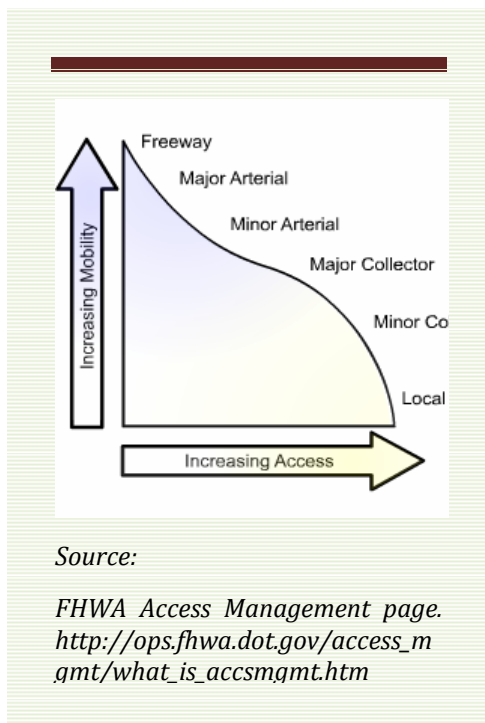
- Intersection improvements, including turning lanes and channelization
- Signal improvements, including modernization of traffic signal controllers, vehicle detectors (including bikes and transit vehicles) and improved corridor traffic signal timing optimization and coordination
- Corridor bottleneck removal programs
- Improved and coordinated data collection efforts to monitor system performance and enhanced traveler information to inform them about closures, hazards and detours
- Special events traffic and congestion management strategies.

The MTP strongly encourages that each regional project undertaken using state and/or federal funding in the Santa Fe region include TSM elements.

## Access Management

The Institute of Transportation Engineers defines Access Management as “the process or development of a program intended to ensure that the major arterials, intersections and freeway systems serving a community or region will operate safely and efficiently while adequately meeting the access needs of the abutting land uses along the roadway. The use of access management techniques is designed to increase roadway capacity, manage congestion and reduce crashes.”<sup>17</sup> FHWA, on their Access Management page, defines Access Management as:

*“A set of techniques that state and local governments can use to control access to highways, major arterials, and other roadways. Access management includes several techniques that are designed to increase the capacity of these roads, manage congestion, and reduce crashes.”<sup>18</sup>*



Managing access can be realized through specific access management projects, design components of corridor improvement projects, or through development or redevelopment by applying adopted local access standards. Types of access management include:

- Driveway or land access changes: the goal is to reduce the number of access points along a corridor. This can be accomplished through combining access into a single point onto a highway, relocating access onto side streets, closing access points altogether and working with adjacent landowners to reroute access to other existing access points, or converting full access to eliminate one or more turning movements.
- Parking lot consolidation: providing connections between adjacent parking lots to provide off-corridor circulation between adjacent uses. This often will require development of shared-access easements between the adjacent property owners.
- Street circulation: a public project, or shared public/private project, to develop a connecting set of side streets to enable local traffic, bicycle and pedestrian circulation without having to access the main arterial.
- Center medians or channelization: these treatments generally are aimed at removing left turn movements to reduce the amount of conflicting traffic movements
- Access management standards or plans: for new facilities, establishing an access plan for the new corridor or through local development regulations.

<sup>17</sup>

<http://www.ite.org/technical/IntersectionSafety/access.pdf>

<sup>18</sup>

[http://ops.fhwa.dot.gov/access\\_mgmt/what\\_is\\_accsmgmt.htm](http://ops.fhwa.dot.gov/access_mgmt/what_is_accsmgmt.htm)

When designed and implemented properly, the benefits of access management include improved vehicle flow along a corridor, reduction in collisions, and fewer vehicle

conflicts. Before and after studies have shown access management strategies can reduce collisions and improve traffic capacity by 10 percent or more on a corridor.

## Intelligent Transportation Systems

Intelligent transportation systems (ITS), as defined by FHWA's Research and Innovative Technologies Administration:

*“encompass a broad range of wireless and wire line communications-based information and electronics technologies. When integrated into the transportation system's infrastructure, and in vehicles themselves, these technologies relieve congestion, improve safety and enhance American productivity. ITS is made up of 16 types of technology based systems. These systems are divided into intelligent infrastructure systems and intelligent vehicle systems.”*

The Santa Fe MPO is leading the development of the Regional ITS Architecture, which is a roadmap for transportation systems integration for the City of Santa Fe and surrounding area over the next 15 years. The Santa Fe Regional ITS Architecture has been developed through a cooperative effort by the region's transportation agencies, covering all surface transportation modes and all roads in the region<sup>19</sup>.

Some examples of ITS include:

- Variable (or Changeable) Message Signs placed along highways, to give travelers real-time information on road conditions, incidents or accidents, lane closures, construction, etc.

- Wayfinding: information to help travelers find and reach their destination. These include identifying key destinations for bikeways and pedestrian routes, locating parking lots and garages (and, in some applications, providing real-time information on parking availability) to minimize the amount of vehicles circulating and searching for parking, and, more recently, Global Positioning Systems.
- Advisory Media: use of broadcast or internet-based media to disseminate real-time information on travel conditions, closures or detours, incidents or accidents, travel speeds and delays, etc. Applications include Highway Advisory Radio, transportation agency websites, “511” call-in updates, etc.
- Electronic vehicle recognition: use of transponders and placards to enable vehicles to pass by or enter transportation facilities with minimal delay. Applications include: toll roads, truck entrance to intermodal facilities for freight processing, etc.
- Dynamic traffic response: traffic control systems that vary traffic signal timing and operations by traffic conditions in a real-time manner, and accommodate preemption for emergency or transit vehicles, etc.
- Incident Management (ITS): ITS is “the use of advanced communications technologies and data collection techniques to improve transportation safety and mobility and enhance productivity of our transportation infrastructure” (NMDOT ITS Section). ITS is a coordinated, inter-agency response to actions intended to early identification of incidents that occur on the transportation system (all modes), inform travelers as to the nature of the

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<sup>19</sup>

[http://www.consystem.com/santafe/web/\\_regionhome.htm](http://www.consystem.com/santafe/web/_regionhome.htm).

hazard, develop and implement a response to the hazard, and then work to clear and correct it. These can involve vehicle fires, accidents, train derailments, vehicle breakdowns, etc. Incident management can include operating incident response vehicles that are the “first responders” to incidents, for traffic control and assistance; dispatch of emergency responders; strategically locating tow trucks around the system to quickly clear a blockage, putting out information alerts to users of the system, and even creating detour or alternative routes. The FHWA Traffic and Incident Management Handbook is an excellent resource for more information.<sup>20</sup>

#### 4.4 Transportation Demand Management

Transportation or travel demand management or travel demand management (TDM) is the application of strategies and policies intended to maximize the person-trip capacity of the transportation system by reducing, redistributing or changing the travel time of peak period travel demand (specifically that of single-occupancy private vehicles).<sup>21</sup> TDM is at times used interchangeably with TSM; however, TDM works with transportation *demand* while TSM works with transportation *supply*. Where used appropriately, demand management can be a cost-effective alternative to increasing capacity while helping reduce the carbon footprint and improve environmental quality of a region, and is an accepted component of sustainable transportation system initiatives.

The travel demand management strategy includes carpools and vanpools supported

by the Rideshare program, parking incentive programs and promotion of non-motorized travel options including bicycling and walking. All of these forms of transportation serve as alternatives to single occupant vehicles and function to reduce the growth in traffic congestion being experienced on the roadways.

To accomplish changes in travel behavior and demand, TDM programs rely on incentives or disincentives to make the shifts in behavior attractive. TDM strategies applicable in the Santa Fe region can include:

- Land use strategies, such as Pedestrian-oriented or transit-oriented design, where using transit, walking and bicycling is made attractive at the work, non-work and home end of trips. Since the state government is the largest employer in the Santa Fe region, potential land use strategies under TDM would be to site state offices closer to transit routes, for access both by state employees as well as its customers. Additionally, siting transit oriented land uses adjacent to major transit routes is typically more cost effective than locating developments remotely and away from transit corridors and serving them with shuttle service.
- Design strategies to improve bicycle and pedestrian comfort and safety, including or improving pedestrian-oriented design elements, such as short pedestrian crossings, wide sidewalks and street trees, bicycle-friendly facilities and environments, including secure bike storage areas and showers. See Bicycle transportation engineering
- Including and improving public transportation infrastructure, such as increased bus service both during peak and non-peak times, providing service for “reverse commute” jobs, pedestrian-friendly bus stops and routes.

<sup>20</sup>

[http://www.ops.fhwa.dot.gov/eto\\_tim\\_pse/publications/timhandbook/tim\\_handbook.pdf](http://www.ops.fhwa.dot.gov/eto_tim_pse/publications/timhandbook/tim_handbook.pdf).

<sup>21</sup> Definition courtesy of the FHWA Travel Demand Management site as well as North Carolina DOT.

- Making the cost of a transit pass more affordable by allowing for weekly or monthly payment structures rather than a yearly fee. For example, the cost of an annual Rail Runner pass between Albuquerque and Santa Fe (4-zones) is \$950 in a one-time payment (slightly less for on-line purchases), an amount that for many is difficult to afford all at once. At this time, Rail Runner does not have reduced fares for low-income families.
- Transportation Management Associations: leverage public and private funds to increase the use of ridesharing and other commuting options that reduce traffic congestion and improve air quality.
- Requiring users of parking to pay the costs directly, as opposed to sharing the costs indirectly with others through increased rents and tax subsidies.
- Employer programs, such as subsidizing transit costs for employees or residents, alternative or “flex-time” work schedules with employers to reduce congestion at peak times. For example, the City of Santa Fe provides free Santa Fe Trails passes to its employees to encourage transit use to city offices. Another example are employers who offer “transit check” programs, whereby the employer will deduct the cost of monthly transit passes out of “pre-tax” income for the employee, which in turn reduces the employee’s taxable wages (and taxes).
- Pricing, such as road or corridor pricing, to manage peak congestion levels (and possibly provide revenue for certain improvements).

however, require changes in travel behavior. Simply providing alternative transportation options may not lead to the desired changes.

Travel demand management techniques are an important component in the effort to achieve an effective and efficient transportation system. The techniques,

## 4.5 Sustainable Construction Methods

There is a huge opportunity for projects to significantly reduce their carbon footprint, and in many cases overall costs, simply by using construction materials that are locally sourced, recycled, and sustainably produced. Known as Green Infrastructure (GI) and Low - Impact Development (LID) techniques, these sustainable design and construction methods are gaining in popularity because of their ability to reduce runoff, improve storm water quality, preserve or create valuable habitat, contribute to more livable and walkable communities, be eligible for LEED accreditation by the US Green Buildings Council.

While many agencies are also currently investigating and implementing innovative construction methods to reduce a project's overall carbon footprint, the GI/LID field continues to evolve. The arid climate in the desert Southwest provides a number of challenges toward implementing sustainable construction methods. Examples of arid-climate GI/LID strategies include rain gardens, porous or pervious pavement, and green streets.

Green construction methods include rapid construction techniques to reduce overall congestion and pollutant emissions from transportation system delays caused by construction and by use of more fuel efficient construction vehicles. Most states have now enacted requirements for recycled or reused content in a number of construction elements, including pavement and structures.

There are a number of agencies that already reuse or recycle discarded materials in construction; a few agencies also set goals as to the maximum allowable "waste" from a project's construction materials. For example, a number of municipalities and DOTs will reuse traffic

signs, or will replace signs and send the old sign to either an internal recycling shop or to a recycler. The same is true for roadway delineators. Most agencies now have policies or specifications in place for asphalt recycling or reclaiming of asphalt pavement, either directly as part of a paving project, or through transfer to another project.

*EPA has released guidance for adapting innovative stormwater management techniques to the arid Southwest. See [http://www.epa.gov/npdes/pubs/arid\\_climates\\_casestudy.pdf](http://www.epa.gov/npdes/pubs/arid_climates_casestudy.pdf) for more information.*

The graphic features the EPA logo and the text "EPA Green Infrastructure". Below this is the title "Green Infrastructure in Arid and Semi-Arid Climates" in a blue box. Two images are shown: a desert landscape with saguaros and a residential development with green infrastructure. Text boxes provide details on water management in arid regions and the benefits of green infrastructure.

**Green Infrastructure in Arid and Semi-Arid Climates**

Adapting innovative stormwater management techniques to the water-limited West.

Forward-thinking communities in water-limited regions are increasingly recognizing green infrastructure as a cost-effective approach to stormwater management that conserves water.

**In arid and semi-arid regions, using green infrastructure practices may not be "green" at all.**

When rain falls on natural landscapes, much of it either soaks into the ground or is returned to the atmosphere by plants or evaporation. Rain that is not absorbed into the soil flows into nearby washes, arroyos, creeks, or streams. By altering landscapes with parking lots, roads, and rooftops, we dramatically change this water balance. Much less precipitation is absorbed into the soil, and much more flows across the land, gathering oils, pesticides, animal waste, and trash along the way. Gray stormwater infrastructure relies on storm sewers to drain this water and its pollutants to the nearest body of water—increasing flooding, pollutant loads, and erosion, and degrading water quality and habitat.

Green infrastructure refers to a set of practices that mimic natural processes to retain and use stormwater. By promoting infiltration, evapotranspiration, and harvesting throughout the landscape, green infrastructure preserves and restores the natural water balance. Though many green infrastructure practices were first developed and applied in temperate regions, green infrastructure is perhaps

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## 5.0 Transportation Projects Considered for the MTP Update

In meeting federal requirements and the transportation system challenges, the MPO has developed the Metropolitan Transportation Plan 2010-2035 (MTP) through a planning process that has been guided by federal planning factors and 'livability' principles. It is consistent with the City of Santa Fe General Plan and the Santa Fe County Sustainable Land Development Plan. The MPO's goal or vision is:

***“A safe, efficient, and reliable transportation system with viable transportation options accessible for all users.”***

The prime objective for reaching this goal is:

***“to develop a metropolitan transportation plan and transportation improvement program through a comprehensive, cooperative, and continuous planning process that results in an efficient and reliable transportation system that provides and promotes:***

- ***Safety for all users;***
- ***System connectivity;***
- ***Multi-modal facilities and usage;***
- ***Integrated, efficient, and affordable transit/rail services;***
- ***“Complete Streets”;*** and
- ***Quality built and well maintained transportation facilities.***

### 5.1 MTP Goals and Objectives

The MTP 2010-2035 promotes more livable and sustainable communities through coordinated transportation, environmental, and land use planning. The MTP 2010-

2035 supports Transit Oriented Development efforts and rail/ transit use in general. Proposed Transit Oriented Development (TOD) projects along the Rail Runner service line at Las Soleras, and the Zia Station will be mixed use, (residential, office, and commercial) creating a more compact urban environment. At build out, these projects and others within the MPO Planning Area will help to encourage use of alternative modes of transportation for all trips.

Another objective of the MTP is to promote 'Complete Streets' and encourage MPO members' cooperation in developing a regional transportation system that is multi-modal. To help promote greater transit usage, the MPO will develop a request for proposals for a regional transit service plan to study options for coordinating or restructuring regional and local transit services with the Rail Runner Express and potential future local train service.

The objective of 'improving system connectivity' is aimed at developing an interconnected transportation system that gives people safe and reliable travel options whether by transit, bicycle, or on foot; using a connected transportation network that facilitates access to jobs, schools, shopping, and recreation opportunities. Many of the factors that will influence building and improving this system will continue to be refined in subsequent planning efforts. For example, the recommendations for improving the roads network were developed in conjunction with detailed land use and growth projections provided by city and county planning staffs. MPO staff will continue to monitor development projects and will work closely in other planning efforts in the metropolitan area to help facilitate coordination.

Other MPO initiatives aimed at improving “livability” include development of a Santa Fe Metropolitan Bikeways Master Plan that will be a planning guide to develop a more robust bikeway system. A “Pedestrian Plan” will include safer pedestrian crossings at intersections and mid-block trail crossings, sidewalk improvements and connectivity, and coordinating Safe Routes to Schools efforts.

In 2009, the MPO expanded its planning area boundary to include urbanizing areas as well as urban growth boundaries and defined conservation areas. Tesuque Pueblo and Santa Fe County have designated areas to be kept free of roads and development sprawl and look to the MPO to help protect these environmentally fragile and culturally sensitive areas through monitoring alignments of future roads.

### **Federal Transportation Planning Factors**

The Metropolitan Planning process is set up to encourage all of the local governments of an urban area to work together in a cooperative, comprehensive and continuing manner to provide for the transportation needs of the community. The Metropolitan Planning guidelines under the federal SAFETEA-LU legislation call for the development of a transportation plan addressing at least a twenty-year planning horizon that includes both long-range and short-range strategies/actions.

The MTP should lead to the development of an integrated inter-modal transportation system that facilitates the efficient movement of people and goods. The MPO, through this MTP and its subsequent updates, will continue to work towards this goal by focusing on implementing federal principles incorporated into SAFETEA-LU’s planning factors as well as the US DOT/HUD/EPA Livability Principles.

Eight planning factors are identified in the Safe Accountable Flexible Efficient

Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which must be considered as part of the transportation planning process for all metropolitan areas. The following paragraphs summarize each factor and describe how they are addressed in the transportation plan for the Santa Fe Metropolitan area.

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

#### *MTP Objectives:*

- ✓ *Encourage the coordination of land use and transportation planning to ensure that developments are adequately connected by the region’s transportation system, appropriately located and of a density to support alternative modes of transportation.*
- ✓ *Ensure that transportation infrastructure meets the needs and demand for economic development.*
- ✓ *Encourage access to employment markets via a safe, efficient, reliable, well-connected and managed transportation system.*

A primary purpose of the plan is to provide a multi-modal transportation system that allows for the efficient movement of people and goods. The plan provides ample opportunity for economic growth and expansion in the metropolitan area by providing the transportation infrastructure required for such activity to occur. Santa Fe is an important part of New Mexico’s economy, especially the tourism sector. An efficient, well-maintained transportation system is necessary to support the tourism and service sectors within Santa Fe. Current focus areas include improvements to the I-25, NM599 and St Francis Drive corridors, completion of the reconstruction along the Cerrillos Road, the development of an intermodal transportation facility at the downtown rail yard and support for TOD

developments surrounding existing and future rail stations..

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

*MTP Objectives:*

- ✓ *Identify safety improvements on all network facilities to reduce fatal and serious crashes and work towards programming projects in a timely manner.*
- ✓ *Ensure that all projects meet the "Complete Streets" intentions.*
- ✓ *Encourage the consideration of roundabouts for all regional roadway intersections.*
- ✓ *Encourage public education and awareness of safety and sharing the roads with others.*

Users of the transportation system must feel safe and secure. Whether being able to safely travel the areas roadway system, walk or bicycle along or crossing a corridor, or securely travel to and from transit, ensuring transportation safety and security is a priority for this MTP. The MPO will undertake a process to identify high crash locations with the MPO planning area and assist member agencies develop improvements and identify funding for implementation. Measures in the MTP's Transportation Toolbox include design treatments, programs, and project considerations to increase safety and security of the transportation system.

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

*MTP Objectives:*

- ✓ *Support development of evacuation plans, and emergency response protocols through updated ITS architecture and collaborative transportation planning efforts*

*between government agencies and emergency first responders.*

In the event of an emergency, the transportation system must be able to accommodate the needs of the people. The plan identifies existing emergency plans for the region and areas where the MPO can provide support.



**4. Increase the accessibility and mobility options available to people and for freight.**

*MTP Objectives:*

- ✓ *Ensure the connectivity of the transportation network.*
- ✓ *Identify and implement congestion mitigation measures where necessary.*
- ✓ *Develop a regional transit/rail plan to identify projects to provide efficient and reliable transportation alternatives.*
- ✓ *Develop Pedestrian and Bicycle Master Plans to identify and prioritize improvements to the existing infrastructure to make these modes more efficient and attractive*
- ✓ *Identify and implement strategies to improve freight transportation.*
- ✓ *Facilitate the safe and efficient transport of freight and mobility of people through and within the transportation network.*

Efficient movement of people and freight throughout the community is the main function of the transportation system. The plan enhances freight movement by identifying programs and projects designed to enhance the overall efficiency and effectiveness of the transportation system. It specifically looks at congestion within the system and identifies means by which to address the issue. Increasing the availability of alternative transportation options is also important to improve the accessibility and mobility of all users of the transportation system. The comprehensive nature of the plan encompasses the movement of people and goods and aims to create and maintain a comprehensive transportation system.



**5. Protect and enhance the environment, promote energy conservation, and improve quality of life.**

*MTP Objectives:*

- ✓ *Develop transit/rail, bicycle, and pedestrian plans to expand transportation options.*
- ✓ *Promote the coordination of land use, environmental protection, and transportation that improves access to jobs and encourages local and regional sustainable economic development*
- ✓ *Promote sustainable construction practices and delivery methods which encourage the use of recycled or reusable materials, reduce the amount of construction waste and*

*disposal needs, and increase the use of renewable energy.*

The inter-modal character of the transportation plan incorporates several programs and facilities that are in accord with the goals of applicable energy conservation programs. The transit, bikeways, and pedestrian components of the plan all focus attention on transportation facilities that support energy conservation and are consistent with the goals of energy conservation programs. Santa Fe Trails bus system, for example, was the first all compressed natural gas (CNG) fleet in the nation. In addition, new roadway design requirements include enhancements such as wider sidewalks and lanes for pedestrians and bicycles as well as landscaping and medians (where appropriate) for all urban street reconstruction projects. Encouraging more dense and mixed use development means that new developments can be concentrated on smaller areas, have densities that can sustain alternative modes of transportation, minimize disturbance of land and the creation of sprawl, and reduce the reliance on the use of the single occupancy vehicle for most trips.

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

*MTP Objectives:*

- ✓ *Promote infrastructure connectivity throughout the transportation network including: roads, rail, transit, multi-use trails, and sidewalks by:*
  - *Closing the physical gaps, improving the accessibility and efficiency of the network; and*
  - *Increasing the frequency of transit and rail service through coordination of transit*

*operations in order to encourage more public usage.*

The inter-modal centers identified in the Metropolitan Transportation Plan are designated to enhance the transfer between various transportation modes. This plan also connects various modes of transportation linking hike/bike trails, roads, and bus routes with business/service areas, public schools and recreation centers.

### **7. Promote efficient system management and operation.**

*MTP Objectives:*

- ✓ *Identify and implement congestion mitigation measures where necessary.*
- ✓ *Incorporate Intelligent (and Integrated )Transportation System (ITS) technologies to improve efficiencies of system operation and management.*

Several recommendations are presented in the plan that promote efficient system management by addressing existing congestion levels and additional congestion expected to occur in the future. The recommendations include the improvement or expansion of existing transportation facilities in some instances, and the addition of new facilities and services in others. Travel Demand Management (TDM) techniques are also included in the plan as a means of reducing congestion. These techniques include the development of parking policies that create incentives for carpooling and vanpooling, the development of a “Park and Ride” system, and the development of employer based programs which provide incentives aimed at the reduction of trips to and from the workplace. The emphasis of the plan on providing facilities for alternative modes of transportation such as transit, walking, and bicycling also serves to manage travel demand on the transportation system

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

*MTP Objectives:*

- ✓ *Promote efficient maintenance programs to extend service life of transportation network facilities.*

A major emphasis of SAFETEA-LU is on the preservation of existing infrastructure. This emphasis is reflected in the funding allocations of the transportation plan that include the maintenance of existing facilities over the life of the plan. Several major reconstruction projects are included in the estimates along with routine maintenance services to keep the existing transportation system operating on a daily basis. In terms of improving the efficiency of the existing system, the plan includes continued efforts at optimizing traffic signal timing to maintain an efficient flow of traffic. It also includes funding for transportation programs that offer alternatives to driving alone, including the Santa Fe Trails bus system, Northern New Mexico Park & Ride Transportation Improvement/Initiatives , and the Rideshare Program, which improve the efficiency of the existing roadway system by reducing the growth in traffic congestion.

### **Livability Principles**

As defined by FHWA Administrator Victor Mendez,

*“Livability is about tying the quality and location of transportation facilities to broader opportunities such as access to good jobs, affordable housing, quality schools, and safe streets. This includes addressing safety and capacity issues on all roads through better planning and design, maximizing and expanding new technologies such as ITS and the use of quiet pavements, using Travel Demand Management approaches to system planning and operations, etc.”*

In June 2009, U.S. Secretary of Transportation Ray La Hood, along with Housing and Urban Development Secretary

Shaun Donovan and EPA Administrator Lisa Jackson, as part of the Interagency Partnership for Sustainable Communities, announced the establishment of six “Livability Principles” that will guide federal investment policy and coordinate programs in agencies including federal transportation, environmental protection, and housing. By incorporating these Livability Principles, the MTP 2010-2035 promotes more livable and sustainable communities through coordinated transportation, environmental, and land use planning.

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*Sustainable Transportation means providing exceptional mobility and access in a manner that meets development needs without compromising the quality of life of future generations. A sustainable transportation system is safe, healthy, affordable, renewable, operates fairly and limits emissions and the use of new and nonrenewable resources. The six Livability Principles from Transportation Secretary Ray La Hood are:*

- 1. Provide more transportation choices.*
  - 2. Promote equitable, affordable housing.*
  - 3. Enhance economic competitiveness.*
  - 4. Support existing communities.*
  - 5. Coordinate policies and leverage investment.*
  - 6. Value communities and neighborhoods.*
- 

The MTP 2010-2035 supports Transit Oriented Development efforts and rail/transit use in general. Proposed Transit Oriented Development (TOD) projects

along the Rail Runner service line at Las Soleras, and the Zia Station will be mixed use, (residential, office, and commercial) creating a more compact urban environment. At build out, these projects and others within the MPO Planning Area will help to encourage use of alternative modes of transportation for all trips.

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### City General Plan

The City of Santa Fe General Plan, adopted in April 1999, contains a number of “Guiding Policies” for Streets in the Urban Area. Themes of the General Plan’s transportation policies include reducing automobile dependence and dominance, prioritizing people over cars, reducing the footprint of the street system, and promoting network connectivity and equitable access for all users, and neighborhood livability via traffic calming and measures to minimize the need for multi-lane arterials. The goals and objectives of this MTP are consistent with the City’s General Plan policies.

### New Mexico Department of Transportation Guiding Principles

The New Mexico Department of Transportation (NMDOT) has developed guiding principles that should be included in developing the MPO Metropolitan Transportation Plan. The MTP is consistent with the following Guiding Principles as included in NMDOT Statewide Multimodal Transportation Plan:

1. *Multimodal Transportation – We are committed to the principle of a multimodal transportation system. We are committed to developing accessible, connected and*

*sustainable multimodal opportunities for all citizens, which allow travel choices making the most efficient use of the State’s transportation infrastructure.*

2. *Partnership with Tribal Governments - We are committed to the principle of partnership with tribal governments. Our Department recognizes respects and supports the unique sovereign status of the tribes and pueblos in New Mexico.*
3. *Environment Responsibility - We are committed to the principle of an environmentally responsible transportation system. Our Department prepared the “Commitment to Environment and Energy Action” to support thoughtful stewardship of the environment and development of alternative energy sources for this and future generations.*
4. *Partnership with Local Governments - We are committed to the principle of partnership with local governments. Our Department appreciates the vital role of local government decision-making and delivery of transportation services in our cities, counties and throughout New Mexico.*

### 5.2 Multimodal Level-of-Service Objectives

Traditionally, level-of-service (LOS) has been defined by intersection or roadway corridor congestion and delay definitions set by the Highway Capacity Manual. Later planning efforts have broadened the highway-focused LOS to include transit, pedestrian, and bicycle facility LOS. The Santa Fe Region MTP is focused on establishing a multimodal, Complete Streets definition of LOS.

The Highway Capacity Manual (HCM) 2010 will provide a set of methods and procedures for evaluating multimodal

performance of highway and street facilities in terms of operational measures and LOS indicators. The HCM 2010 adds a new Multimodal Urban Streets chapter to analyze performance for complete streets called the multi-modal level of service (MMLOS). This complete streets analysis provides methodology for LOS determinations for autos, transit (rider), bicycles and pedestrians. The MMLOS measures the degree to which the urban street design and operations meets the needs of each mode's users. The interaction among individual modes are evaluated and LOS determined by traveler perception.

Four levels-of-service for Complete Streets are calculated:

- Auto/vehicular LOS
- Transit LOS
- Bicycle LOS
- Pedestrian LOS.

The new MMLOS will facilitate the evaluation of Complete Streets and will provide:

- Evaluation of different improvement alternatives and future demand scenarios
- Procedures to analyze each mode's performance
- Allowance for testing of various multi-modal goals and strategies identified for specific corridors
- A toolbox of options for all modal improvements for evaluation (not just auto-oriented)
- Agencies with a method to quantify the trade-offs of street cross-sections and designs.

HCM 2010 is set for release by the Transportation Research Board later in 2010. Once HCM 2010 is released, the MPO should work with its member agencies to identify best practices for use of HCM

2010's LOS objectives in project planning and development.

### 5.3 Regional Roadway System

Projects considered for the development of the Regional Roadway System are a compilation of "Regionally Significant" improvements and additions to the road network that have been determined will be needed over the next 25 years. This list is a culmination of recent subarea and corridor studies, as well as the public participation process.

The NMDOT contracted three corridor studies on the three major corridors through the Santa Fe MPO Planning Area. All three were designed to address issues specific to each corridor as well as identify issues that were interrelated with the larger transportation network. MPO staff participated in project management team meetings and public presentations for all three corridor studies and the MPO Technical Coordinating Committee and Transportation Policy Board heard formal presentations of study recommendations from the consultants.

The three corridors studied were:

- St. Francis Drive (US 84/285) - Rabbit Road to NM599.
- Interstate-25 - NM 599 Interchange to NM466 (Old Pecos Trail) Interchange;
- NM 599 - I-25 Interchange to US 84/285 Interchange.

#### St. Francis Drive Corridor Study

In 2005 the NMDOT in an effort to relieve congestion and queuing traffic on Interstate 25 resurfaced St Francis Drive and re-striped the roadway with 6 driving lanes south of San Mateo Road which had previously had 4 driving lanes. This re-striping was successful in relieving the congestion and queuing and thus improved safety for motor vehicles in the area of

interstate 25. However, the change reduced the shoulder along St Francis Drive which had been used as a de-facto bike lane and eliminated an auxiliary lane used by merging traffic at the St Michaels Drive Interchange. The NMDOT committed to conduct a Corridor Study of the whole corridor from Rabbit Road, south of Interstate 25 to the NM599 Interchange north of the City. The study found alternatives to accommodate future traffic growth were severely constrained due to the limited right-of-way particularly through the central section of corridor (San Mateo to Paseo de Peralta). The study did identify some roadway capacity improvements at some of the intersections, but gave emphasis on recommendations to either manage the traffic through Intelligent Transportation Systems (ITS) and access control, or provide alternatives for commuters through improvements to pedestrian accommodations at the intersections and bikeway connectivity. Also a major recommendation was for a comprehensive regional transit/rail study to be conducted to investigate the types of services necessary to encourage drivers to shift to other modes. It should be noted that a number of the capacity improvements were not fully evaluated in this study and still require further investigation before moving forward to the Phase C stage.

### **Interstate 25 Long Range Corridor Plan and Prioritization Study**

The purpose of the I-25 Corridor Study was to develop a prioritized list of projects within the I-25 corridor, from NM 599/Veterans Memorial Highway to NM 466/Old Pecos Trail (NM 466) that will accommodate growth and enhance the regional transportation network in the surrounding area. The need for improvements to the I-25 corridor is driven by a combination of factors including safety, poor system connectivity, insufficient access, and congestion. Safety concerns in the corridor include a higher proportion of crashes and

fatalities. The interstate hampers local system connectivity, and is an obstacle to north-south travel for personal, commercial, and emergency vehicles, as well as for transit, cyclists, and pedestrians—a growing concern with development of the Santa Fe Community College District. The expanding development is also driving the need for greater access to I-25, and the need to mitigate congestion and accommodate travel demand. The study recommended interim and permanent improvement concepts to the existing interchanges, the addition of auxiliary lanes to the Interstate and a future interchange at Richards Avenue.

Improvements to system connectivity by extending Governor Miles Road, and crossings of the Interstate at Camino Carlos Rey and the future Rail Runner Loop were not recommended as they were not believed to provide sufficient benefit for the costs that would be incurred.

### **NM 599 Interchange Priority Plan**

NM599 serves as a North/South by-pass for vehicles traveling through Santa Fe and a WIPP route for low level nuclear waste traveling to the Waste Isolation Pilot Project (WIPP) near Carlsbad. As a limited access roadway, NM599 provides regional and local Santa Fe traffic an alternative North/South corridor to avoid congestion along Cerrillos Road and St Francis Drive. When designed as a limited access facility, 12 access points were designated, with all 12 meant to eventually be grade separated interchanges. To date interchanges have only been built at 4 of those access points. Interim at-grade intersections were constructed at 6 of the access points although right-of-way for future interchanges was preserved. No intersections or interchanges were constructed at two of the access points. Safety concerns at the at-grade intersections, both signalized, and unsignalized, as well as perceived weaving

issues at ramps between US 84/285 and Ridgetop Road Interchange initiated this study. The study undertook a detailed evaluation of interchanges for the remaining 8 access points, plus investigated the need for frontage roads alongside the corridor. The study recommended interchanges eventually be built at all the access points, plus the addition of frontage roads in two locations. These recommendations were prioritized for public funding based on their ability to satisfy the study purpose and need to improve safety and traffic flow, public input and cost. The study noted that the projects with the least priority do not require an interchange or frontage road unless necessitated by future development in which case they should be privately funded.

### **Santa Fe County Sustainable Land Development Plan (SLDP)**

MPO Staff worked closely with the Santa Fe County staff on the development of the Transportation Element of their Sustainable Land Development Plan (SLDP). The SLDP (still in draft at time of writing) is a comprehensive revision and update of the Santa Fe County Growth Management Plan adopted in 1999. The Transportation Element of the SLDP conducted a detailed study of the County's existing road network capacity as well as projecting future growth within the Community College District and its impact on traffic conditions in this urbanizing area. The plan identifies improvements to existing roads as well as a number of new roads that will satisfy unmet existing travel demand and substantially increase the capacity for the priority growth areas within the Community College District by providing a network of roadways that are interconnected to disperse traffic over multiple routes. The full plan can be found on the Santa Fe County website ([www.santafecounty.org](http://www.santafecounty.org)).

### **White Paper on Possible Richards Avenue Extension**

This white paper was completed following a legislative request to the NMDOT. The study utilized the travel demand model to determine the possible effects of extending Richards Avenue from Rodeo Road to Cerrillos Road and from Agua Fria to NM599. The study found that adding in the extension of Richards Avenue would have the largest impact on local travel patterns, reducing traffic volumes on adjacent residential streets such as Avenida de las Companas and Camino Carlos Rey, and would have limited impact on the main arterials in the Region.

Based on these findings the project management team reviewing the white paper made up of City, County, MPO and NMDOT staff concluded that the pursuit of the extension between Rodeo and Cerrillos had merit, while it was felt that the extension from Agua Fria to NM599 needed more study and monitoring of the impacts from the newly opened Siler Bridge and road extension. The white paper can be found on the MPO website ([www.santafemopo.org](http://www.santafemopo.org)).

### **What About a Richards Avenue Interchange on I-25?**

Construction of an interchange on I-25 at Richards Avenue has been a controversial issue in Santa Fe for many years. The benefits have centered on easier and direct access to the high growth development within the Community College District (CCD) most notably from Rancho Viejo and Oshara Village. Major traffic attractors in the area include the Santa Fe Community College, which is experiencing on-going expansion of facilities to meet a significant rise in student enrollment, Santa Maria de la Paz Church, and the Santo Nino Regional Catholic School. A proposed major development at Las Soleras is planned to generate over 9000 jobs with

only about 5% of those anticipated to utilize the Rail Runner Express service. Even with mixed-use development (combining residential and commercial land use) and promotion of rail, transit, and bicycle use, the CCD local roads network is inadequate to efficiently disperse existing (at times) and projected traffic volumes.

The following improvements are considered necessary for connectivity and efficiency to the adjacent road network prior to bringing a new interchange on-line. It should be noted that Federal Highway Administration approval for a new interchange is required and would most likely require these other system improvements be completed prior to approving a new interchange.

- Complete the North-East Connector (Rabbit Road) directly to Richards Ave at Dinosaur Trail and upgrade the entire length to frontage road specifications from St. Francis Drive to Richards Avenue. Based on a Memorandum of Agreement (MOA) between the NMDOT and Santa Fe County this roadway is supposed to be completed by June 2012. A subsequent MOA between Santa Fe County and Oshara Village indicates that Oshara Village assumed the County's responsibilities for construction of this roadway.
- Build the SouthEast Connector, from the North East Connector (Rabbit Road) to a point east of Windmill Ridge in Rancho Viejo. This new principal arterial will pull traffic from Richards, which currently carries all trips to the College and Rancho Viejo.
- Widen Richards Avenue to 4 lanes from the new Beckner Road north to Rodeo Road. This improvement was a condition of the approval for the Las Soleras Development and will be constructed by them once the level

of development meets a certain threshold.

- Extend Richards Avenue north from Rodeo Road to Cerrillos to provide a much needed north-south network connection as well as alleviating pass-through traffic in the adjacent neighborhoods.
- Make improvements to Richards Avenue south of Beckner Road to Avenida del Sur. What these improvements would entail needs further study.

According to the 2010 I-25 Corridor Study, auxiliary lanes on I-25 between the interchanges at Cerrillos and St. Francis will be required to accommodate projected traffic volumes. It is expected that these auxiliary lanes would likely be needed to be in place prior to the opening of a new interchange at Richards, as it is expected that this interchange would attract a majority of the trips between St. Francis Drive and Richards Avenue currently using the adjacent road network.

Based on current projections an interchange at Richards Avenue is not considered urgently needed to relieve congestion or resolve a safety concern. However, reassessing the timing of a new interchange will be monitored given the uncertainty of predicting growth rates from surrounding developments, including the Santa Fe Community College, Rancho Viejo and Las Soleras.

### **Roadway Congestion Emphasis Areas**

As mentioned throughout Chapter 3 of this MTP, future demand on the region's highway system will likely continue to increase faster than capacity, and will include demand for both passenger vehicles as well as freight (trucks). Based on this future-year analysis, the corridors and locations show need for mobility and/or

safety improvements to accommodate year 2035 traffic congestion levels as well as ensure mobility for non-vehicular travel and for freight/commerce:

- I-25 throughout the central Santa Fe area, on the mainline between NM 599 and NM 466, and including interchanges at NM 599, Cerillos and St. Francis Drive
- NM 599/Veterans Memorial Highway corridor, locational improvements at the intersections with CR 62, CR 70 Connector, and at Camino de los Montoyas are all projected to operate near or over capacity. In addition, the NM 599 Corridor Prioritization Plan report indicates that the southbound NM 599 “weave” section between US-84/285 and Ridgetop Road will be approaching capacity by 2035.
- St. Francis corridor throughout the City of Santa Fe
- Cerillos Road from I-25 to downtown Santa Fe
- Agua Fria Street from Grant Road/Lopez Lane to downtown Santa Fe
- Richards Avenue from Rodeo Road to the I-25 overcrossing
- Rodeo Road from St. Francis Road to Cerillos Road, and
- Old Pecos Trail from I-25 to downtown Santa Fe.
- Cerillos Road/NM 14 south of I-25
- Richards Avenue south of I-25
- St. Francis Road south of I-25 (depending on how development and street extensions are connected to the regional system).

The Future Road Network Map (Figure 5-1) is a compilation of “Regionally Significant” improvements and additions to the road network that have been determined will likely be needed over the next 25 years to maintain a functional roadway network. It should be noted that the alignments for the “Future Roads and Extensions” are

approximations. Additionally, it should be noted that all projects shown on the map, with the exception of those categorized as “Programmed” still have to go through further levels of public review and input before moving forward to construction.



All the proposed road network improvements have been organized into four general categories:

- **Programmed (Green):** These are projects currently listed in the MPO 2010–2013 Transportation Improvement Program, or have been programmed through the City or County.
- **Public Agency Led (Red):** These are projects where a public agency is expected to take the lead. The design and construction is expected to be funded with public funds (federal, state or local). It should be noted that this designation does not preclude the use of private funds to partially or fully fund these projects.
- **Developer Lead (Orange):** These are projects where a developer is expected to take the lead. These projects have been identified as part of a proposed development application or part of a study (Corridor Studies, SLDP, etc.). The design and construction is expected

to be funded with private funds and the timing of the construction will occur as a development moves forward. It should be noted that this designation does not preclude the use of public funds to partially or fully fund these projects.

- **Study (Blue)**: These are projects that have been identified as potentially beneficial to the transportation network, but have not been fully defined and must go through further study to determine what needs to be pursued. In some cases these studies will be lead by a public agency, in others the study will be completed as part of a development proposal.

The map is intended to be used to inform the public and illustrate proposed projects for future placement on the MPO Transportation Improvement Program (TIP). Additionally, it will be used as a guide for both City and County development review processes for future arterial and collector roads.

By specifying the location, priority, and roadway design principles, the Metropolitan Transportation Plan will help guide network improvements to ensure:

- continuity of road design characteristics consistent with “Complete Streets” across jurisdictions;
- network connectivity to ensure an efficient and reliable system;
- safety and accessibility for all users.

The map may be amended periodically to reflect completed projects or changing status of proposed improvements. All amendments are reviewed by the MPO Technical Coordinating Committee and presented for public comment prior to approval by the MPO Transportation Policy Board.

Figure 5-1 MTP 2010-2035 Future Regional Roadway Network Map

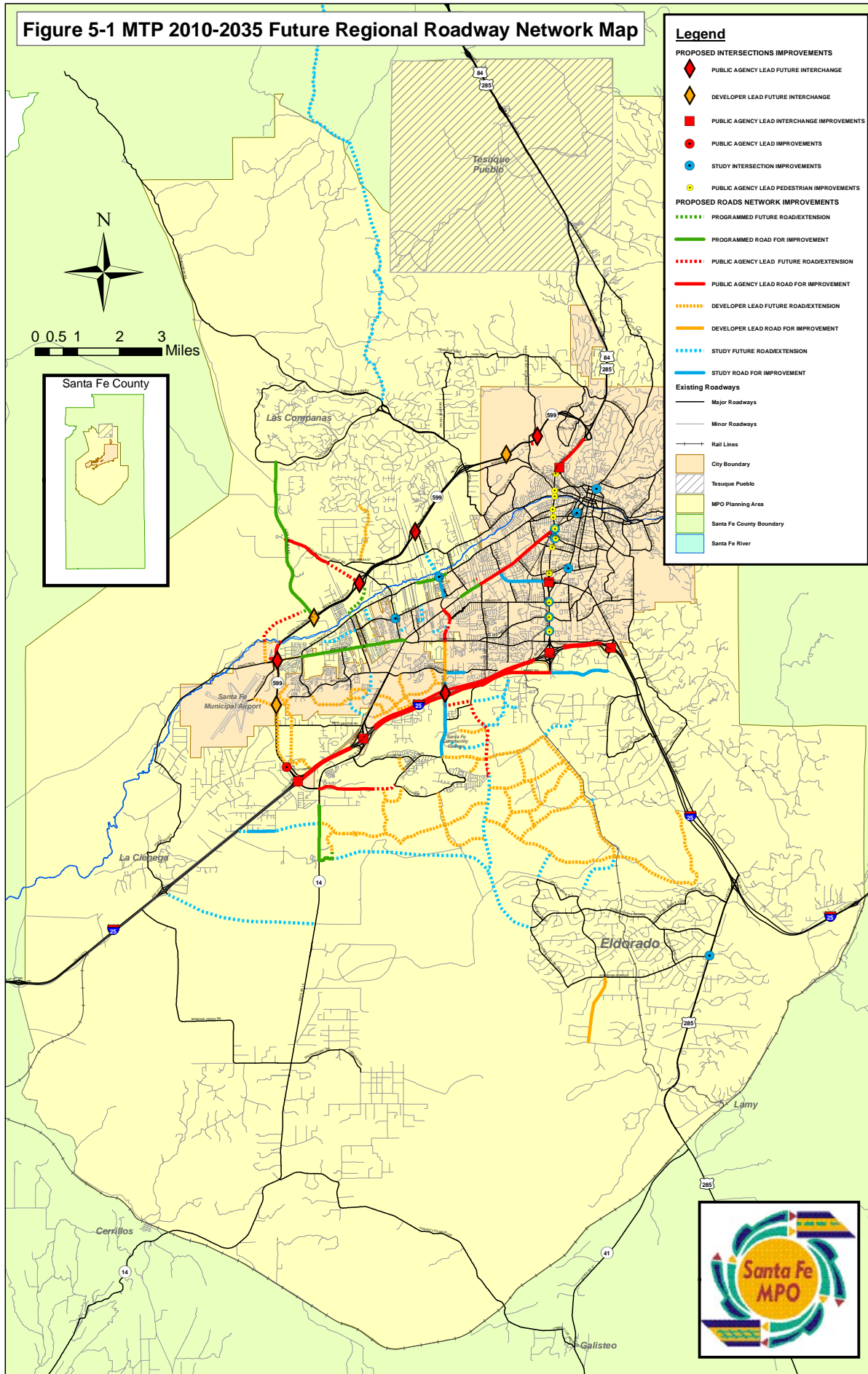


Table 5-1 shows the list of regional Roadway projects being considered for this MTP.

**Table 5-1. Publicly-Funded Regional Roadway System Projects (Unprioritized)**

| <b>Project</b>   | <b>Description</b>  | <b>Lead and Partner Agencies</b> | <b>Estimated Cost</b>       | <b>Source of Project</b>                 | <b>MTP Goals Being Met</b>  |
|--|---|----------------------------------|-----------------------------|--|---|
| <b>St Francis Drive (US 84/285) SB Auxiliary Lane</b>                          | Construction of a southbound Auxiliary lane from NM599 to Guadalupe Exit  | NMDOT                            | \$1,000,000                 | St Francis Drive Corridor Study (Short)  | Mobility and Congestion, Safety, Freight and Commerce             |
| <b>St Francis Drive (Us 84/285)/Guadalupe Interchange Improvements</b>         | Reconstruction of existing Interchange to replace existing bridge on Guadalupe and possibly convert from a left had exit to a right hand exit   | NMDOT                            | \$5,500,000 to \$17,000,000 | St Francis Drive Corridor Study (Short)  | Mobility and Congestion, Safety, Freight and Commerce             |
| <b>St Francis Drive (Us 84/285) Pedestrian Intersection Improvements</b>       | Pedestrian Improvements at all the intersections along St Francis Drive   | NMDOT/City of Santa Fe           | \$600,000                   | St Francis Drive Corridor Study (Short)  | Multimodal, Safety  |
| <b>St Francis Drive (Us 84/285)/St Michaels Drive Interchange Improvements</b> | Reconfiguration of the Interchange and improvements to pedestrian and bicycle facilities  | NMDOT                            | \$3,000,000                 | St Francis Drive Corridor Study (Medium) | Multimodal, Mobility and Congestion, Safety, Freight and Commerce |
| <b>I-25 Interim Safety Improvements</b>  | Various interim Improvements to Interchanges plus installation of emergency safety gates at median crossings, addition of lighting and reconfiguration of Cerrillos Rd/Beckner Intersection | NMDOT                            | \$2,400,000                 | I-25 Corridor Study (Interim)            | Mobility and Congestion Safety, Freight and Commerce              |

| <b>Project</b>  | <b>Description</b>  | <b>Lead and Partner Agencies</b> | <b>Estimated Cost</b> | <b>Source of Project</b>           | <b>MTP Goals Being Met</b>                            |
|---|---|----------------------------------|-----------------------|------------------------------------|---|
| <b>I-25/Cerillos Rd Interchange Improvements</b>        | Reconfiguration of Interchange and Ramp lengthening               | NMDOT                            | \$17,500,000          | I-25 Corridor Study (Short-Medium) | Mobility and Congestion, Safety, freight and Commerce |
| <b>I-25/St Francis Dr: Interchange Improvements</b>     | Reconfiguration of Interchange and Ramp lengthening               | NMDOT                            | \$8,300,000           | I-25 Corridor Study (Medium)       | Mobility and Congestion, Safety, Freight and Commerce |
| <b>I-25/NM466: Interchange Improvements</b>             | Reconfiguration of Interchange and Ramp lengthening               | NMDOT                            | \$7,200,000           | I-25 Corridor Study (Medium)       | Mobility and Congestion, Safety, Freight and Commerce |
| <b>I-25/NM599: Interchange Ramp Improvements</b>        | Lengthening of On and Off Ramps                                   | NMDOT                            | \$2,500,000           | I-25 Corridor Study (Long)         | Safety, Freight and Commerce                          |
| <b>I-25 Auxiliary Lanes: NM599 to Cerrillos Rd</b>      | Construction of third lane in each direction between interchanges | NMDOT                            | \$4,000,000           | I-25 Corridor Study (Long)         | Mobility and Congestion, Freight and Commerce         |
| <b>I-25 Auxiliary Lanes: Cerrillos Rd to St Francis</b> | Construction of third lane in each direction between interchanges | NMDOT                            | \$17,000,000          | I-25 Corridor Study (Long)         | Mobility and Congestion, Freight and Commerce         |
| <b>I-25 Auxiliary Lanes: St Francis to NM466</b>        | Construction of third lane in each direction between interchanges | NMDOT                            | \$2,000,000           | I-25 Corridor Study (Long)         | Mobility and Congestion, Freight and Commerce         |

| <b>Project</b>   | <b>Description</b>   | <b>Lead and Partner Agencies</b> | <b>Estimated Cost</b>        | <b>Source of Project</b>   | <b>MTP Goals Being Met</b>  |
|--|--|----------------------------------|------------------------------|----------------------------|---|
| <b>I-25/Richards Ave Interchange</b>                       | Construction of a New Interchange at Richards Avenue   | NMDOT                            | \$15,000,000 to \$35,000,000 | I-25 Corridor Study (Long) | Mobility and Congestion, Connectivity, Freight and Commerce         |
| <b>NM599/County Road 62 Interchange</b>                    | Reconstruct the existing at-grade intersection to an interchange.  | NMDOT                            | \$6,500,000                  | NM599 Study (Rank = 1)     | Mobility and Congestion, Safety, Connectivity, Freight and Commerce |
| <b>NM599/County Road 70 Interchange</b>                    | Reconstruct the existing at-grade intersection to an interchange.  | NMDOT                            | \$8,000,000                  | NM599 Study (Rank = 2)     | Mobility and Congestion, Safety, Connectivity, Freight and Commerce |
| <b>NM599/Airport Road Interchange</b>                      | Reconstruct the existing at-grade intersection to an interchange   | NMDOT                            | \$11,000,000                 | NM599 Study (Rank = 3)     | Mobility and Congestion, Safety, Connectivity, Freight and Commerce |
| <b>NM599/I-25 Frontage Road Overpass</b>                   | Construction of an overpass to carry the North Frontage Road over NM599. Reconfigure existing Frontage Road at grade intersection with NM599 to right in/right out only. | NMDOT                            | \$6,000,000                  | NM599 Study (Rank = 4)     | Mobility and Congestion, Safety, Connectivity, Freight and Commerce |
| <b>Extension of NM599 Frontage Road across SF River</b>    | Construct a bridge over Santa Fe River and upgrade roadway on south side to Airport Road   | NMDOT                            | \$4,300,000                  | NM599 Study (Rank = 5)     | Connectivity  |
| <b>Camino de los Montoyas Interchange w/ Frontage Road</b> | Reconstruct the existing at-grade intersection to an interchange plus connecting frontage roads  | NMDOT                            | \$11,050,000                 | NM599 Study (Rank = 6)     | Safety, Connectivity, Freight and Commerce                          |

| <b>Project</b>   | <b>Description</b>  | <b>Lead and Partner Agencies</b> | <b>Estimated Cost</b> | <b>Source of Project</b>              | <b>MTP Goals Being Met</b>                      |
|--|---|----------------------------------|-----------------------|---------------------------------------|---|
| <b>North-East Connector (Rabbit Road)</b>  | Upgrade of existing roadway from St Francis Drive to Oashara Village and construction of a new connection to Richards Avenue at Dinosaur Trail. | Santa Fe County                  | \$5,000,000           | County SLDP                           | Congestion, Connectivity                        |
| <b>South-East Connector</b>  | Construction of a new road between North-east Connector (Rabbit Road) and Windmill Ridge  | Santa Fe County                  | \$5,000,000           | County SLDP                           | Congestion, Connectivity                        |
| <b>Avenida Del Sur Extension</b>   | Construction of a new road and upgrade of existing roadway from NM14 to A Van Nu Po   | Santa Fe County                  | \$2,500,000           | County SLDP                           | Connectivity, Multimodal                        |
| <b>Richards Avenue Extension (Rodeo to Cerrillos)</b>                              | Construction of a new section of roadway from Rodeo Road to Cerrillos Road  | City of Santa Fe                 | \$2,750,000           | Richards Avenue Extension White Paper | Multimodal, Congestion & Mobility, Connectivity |
| <b>Cerrillos Rd Reconstruction (Camino Carlos Rey to St Michaels Dr)</b>           | Reconstruction to add medians, drainage, bike lanes, sidewalks and transit facilities   | City of Santa Fe                 | \$11,500,000          | 2005-2010 MTP                         | Multimodal, Freight and Commerce                |
| <b>Cerrillos Rd Reconstruction (St Michaels Drive to St Francis Dr.)</b>           | Reconstruction to add medians, drainage, bike lanes, sidewalks and transit facilities   | City of Santa Fe                 | \$12,000,000          | 2005-2010 MTP                         | Multimodal, Freight and Commerce                |
| <b>Rehabilitation or Replacement of 5 Downtown Bridges over the Santa Fe River</b> | Defouri St, Guadalupe St, Galisteo, Don Gaspar, Delgado St.   | City of Santa Fe                 | \$5,000,000           | 2010-2013 TIP Outer Years             | Connectivity                                    |

| <b>Project</b>  | <b>Description</b>  | <b>Lead and Partner Agencies</b> | <b>Estimated Cost</b> | <b>Source of Project</b>  | <b>MTP Goals Being Met</b> |
|---|---|----------------------------------|-----------------------|---------------------------|----------------------------|
| <b>County Road 62 Realignment and Improvements</b>      | From NM599 Frontage Road to Caja del Rio  | Santa Fe County                  | \$3,000,000           | Arterial Roads Task Force | Connectivity               |
| <b>Connection between Caja del Rio and Airport Road</b> | Construction of a new roadway between Caja del Rio to the Santa Fe River, including the construction of a low water crossing. Private developer to complete roadway to Airport Road | Santa Fe County                  | \$3,000,000           | Arterial Roads Task Force | Connectivity               |

## 5.4 Regional Transit and Rail Systems

Coordination of the transit and rail services has been remarkable given the limited resources available. The majority of public transportation services rely on funding linked to gross receipts taxes, which are sensitive to the economic conditions. The anticipated proceeds from the Transit GRT has been less than expected and is primarily going to maintain existing operations, rather than expanding services. As economic conditions continue to decline, service cuts appear to be inevitable. Federal funds are primarily for capital improvements, with operational funds typically tied to a specific program. It is hoped that a larger proportion of federal funds can be made available for operations in the next Surface Transportation Act reauthorization. Currently, no State funds are available to support public transportation operations. While much of the City and close-in outlying areas have transit access, the outlying areas suffer from infrequent transit *service*. This service tends to include hourly peak service and less frequent non-peak service. The lack of transit access and service discourages its use as an alternative to driving.

Looking ahead toward 2035, Chapter 3 indicates that future travel demand growth locations that would likely need new or expanded transit service includes:

- Developing subareas west and south of Santa Fe
- Residential growth outside of the MPO area supported by employment growth in the City and County (known as “external-internal” trips)
- Continued infill along the region’s principal and minor arterial system.
- Commuters to jobs within the MPO area that live outside the area will continue to add to demand on I-25 west of Santa Fe and NM 599 north of Santa Fe. In each case, these trips are longer commute trips which

are best served by limited stop, frequent longer-distance service including Rail Runner and regional express service.

Multi-modal usage still falls short of having a significant impact on traffic congestion primarily attributed to the dominant travel mode: the single occupant vehicle.

### MPO Initiatives

The MPO plans to address these concerns as well as identifying strategies to increase ridership through a set of regional and intercity transit initiatives. These include:

- Conduct a comprehensive regional transit/rail study in cooperation with all operators within the Planning Area. This study will identify strategies to integrate and enhance delivery of local and regional transit/rail service as well as to identify potential funding sources that are more reliable and secure to maintain quality and continuity of service. The study would also include exploring potential local rail service options and connections to a possible future regional high speed rail service.
- The region should also continue to be involved in efforts to study the feasibility of providing High Speed Rail service between El Paso, Texas through New Mexico to the State of Colorado.

### Regional Planning Agency Transit Plan

The following is an excerpt from the 2010-2011 Plan:

*After extensive consideration and discussion, the RPA voted in two separate motions at its September 28, 2009 meeting to allocate TGRT funding to all existing service operating within and between Santa Fe County for FY 2010 (October 1, 2009 through June 30, 2010). The first motion*

funded existing service in the city: Routes 2 and 4 Rail Runner service enhancements, Route 22, the Santa Fe Pick Up, imminent service reductions to other Santa Fe Trails routes, and NCRTD's Greater Eldorado Express. The second motion funded these existing NCRTD services: Espanola to Santa Fe, Chimayo Fixed Route, Los Alamos to Pojoaque, and Pojoaque school students. The RPA then directed staff to recommend additional service funding with any remaining TGRT revenues in FY 2010. The RPA did not provide explicit direction for subsequent fiscal years. Regarding this final point: This plan was initially envisioned as a five year service plan, and cost and revenue analyses were conducted for the period 2010 through 2014.

However, this plan ultimately provides detail only for FY 2010 and 2011 for the following reasons:

- TGRT revenue estimates will change dramatically over the next five years, likely downward. Given current economic conditions, tax and other revenue forecasts across the country are very unstable, especially in the short term.
- While the RPA did not take explicit action on TGRT funding for FY 2011-2014, it did endorse the concept of prioritizing funding for existing service before initiating new service. With TGRT revenues likely struggling to fully fund even existing service over time, future year forecasts are of limited value at this time, particularly with annual refinement and update to this plan.
- As the RPA's first-ever regional transit service plan, the technical and policy process to reach even this point was complex. As noted below, the value of this effort is to provide a solid foundation and framework for ongoing decision-making and plan refinements over time.
- Finally, difficult decisions will need to be made in the future about service eligibility, cost-effectiveness, and

funding priority that will significantly impact future year planning efforts.

For all of these reasons, this service plan provides detail for FY 2010 and FY 2011. The plan also includes a recommended process and tools to update the plan in the future regarding ongoing assessment of existing service, evaluating the feasibility of proposed new service, and the timing and process to coordinate with NCRTD and other partners in updating TGRT funding allocation recommendations.

### **New or Improvements to Existing Intermodal Facilities**

**Rail Runner Stations:** From prior efforts and approvals, the following Rail Runner stations have been approved by the MPO but are not yet in operation, and are thus included in this MTP:

- **Zia Station:** Built in 2009, Zia Station was always intended as a Neighborhood station primarily serving those walking, biking, taking transit or drop-offs, instead of being a Park and Ride, and is unlikely to attract that type of user. Although the Zia Station platform has been constructed land ownership issues remained unresolved until recently. A Transit Oriented Development (TOD) is in the planning stages for the private property adjacent to the Zia Station platform. The opening of the station is not tied to the approval or construction of the TOD development and the MPO is working with the City to develop an interim access plan for the station, which would primarily provide sidewalk connections along Zia Road. A permanent entrance and passenger drop-off area will be provided as part of the proposed TOD. It is anticipated that transit service will be provided to the Zia Station once open by Santa Fe Trails.

- Las Soleras Station:** The fifth and final Rail Runner station identified for Santa Fe is proposed to be located within the median of I-25 between Cerrillos Road and Richards Avenue. The Station is linked to a TOD development at Las Soleras. This mixed-use development is expected at buildout to have 9,300 employees, and 5,000 residents. Approvals for the station location in the median of I-25 are currently being sought from FHWA. If approved, the design and construction of the station and access will be paid for by the developer. This station could be operational within the next 18 to 24 months. It is anticipated that transit service will be provided to the Las Soleras Station. Exact service providers and schedules still need to be worked out once approval for the station has been given by FHWA.
- Santa Fe Depot Station:** This is the original rail terminus in Santa Fe; walkable to downtown and accessible to the Rail Trail multi-use path. This facility was never upgraded when Rail Runner Service started in 2008. The City of Santa Fe has developed a conceptual plan to develop a full intermodal facility at the Santa Fe Depot and is actively seeking funding for the estimated \$5.5 million cost to make improvements to the existing train platform and bring transit service adjacent to the platform. The Santa Fe Trails is working in cooperation with Railyard Community Corporation, the Mid Region Council of Government and the Governor's Office to plan, design and ultimately construct a multi-modal facility in this area.

### Transit Hubs

The following locations are transit hubs, which are transit interconnections of multiple transit lines, enabling the user to transfer between routes (and transit companies) to continue their trip. Parking

may be provided for service as a park-and-ride facility.

**Sheridan Street Transit Center:** This is the main downtown transit hub serviced by a number of transit providers. It provides a covered waiting area shared with the sidewalk. The City is pursuing plans and funding to reconfigure the street to enhance pedestrian access and safety and to provide an enhanced "front door" to downtown Santa Fe for Transit passengers.

**Santa Fe Place Transit Center:** This is the main transit hub on the south side of City and is serviced by Santa Fe Trails and the NMDOT NM599 Station Shuttle. This hub is located in the parking lot behind the Santa Fe Place Mall. Parking is free. No major upgrades to this facility are currently being planned.

### State Rail Plan and High Speed Rail

NMDOT has begun efforts to develop a statewide Rail Plan. This plan will examine current and future intercity passenger rail demand, how increased passenger rail service (including high speed rail) may impact the rail system (including freight rail service), and identify capital infrastructure and operating needs, and is expected to be completed in 2011.

A collaboration between Texas, New Mexico and Colorado for a high speed rail corridor between El Paso, Albuquerque and Denver was vying to become the eleventh (and final) designated high speed rail corridor in the United States. The first application to receive federal funds to conduct a feasibility study was not funded, but the three States plan to continue to apply for future federal funding as they become available. A major part of the feasibility study would be to determine the best route for the high speed line and station locations.

The MPO will continue to coordinate on these efforts.

**Table 5-2. Regional Transit System Projects (Unprioritized)**

| <b>Project</b>   | <b>Description</b>  | <b>Lead and Partner Agencies</b> | <b>Estimated Cost</b> | <b>Source of Project</b>                                   | <b>MTP Goals Being Met</b>                |
|--|---|----------------------------------|-----------------------|--|---|
| <b>Comprehensive Transit and Rail Study</b>                        | A study to identify transit and rail strategies to increase ridership and divert a portion of the regions vehicle traffic to use Public Transportation  | Santa Fe MPO                     | \$250,000             | St Francis Drive Corridor Study                            | Multimodal                                |
| <b>Construction of a Intermodal facility at the Santa Fe Depot</b> |   | Santa Fe Trails/MRCOG            | \$5,500,000           | City of Santa Fe Comprehensive Parking and Transit Program | Multimodal, interconnected transit system |
| <b>Reconstruction of the Sheridan Street Transit Facility</b>      | Enhance Pedestrian access and safety and provide an enhanced “front door” to downtown Santa Fe  | Santa Fe Trails                  | \$ TBD                | City of Santa Fe Comprehensive Parking and Transit Program | Multimodal, improve access for all users  |
| <b>Installation of “Next Bus” Hardware</b>                         | Allow for the dissemination of bus locations via Kiosks at Transit hubs, website and or real time telephone calls.                                      | Santa Fe Trails                  | \$ TBD                |  | Transportation system management          |
| <b>Santa Fe pickup fleet expansion</b>                             | Purchase of 3 ADA equipped Shuttle Vans   | City Parking Division            | \$ TBD                | City of Santa Fe Comprehensive Parking and Transit Program | Multimodal, improve access for all users  |
| <b>Santa Fe Trails fleet expansion</b>                             | Purchase of new capital equipment to provide expanded to provide expanded service to new Rail Runner operations as new stations are opened.             | Santa Fe Trails                  | \$ TBD                | City of Santa Fe Comprehensive Parking and Transit Program | Multimodal, interconnected transit system |
| <b>Signal pre-emption on Cerrillos Road</b>                        | Signal pre-emption would allow buses to maintain more reliable adherence to the published schedule and shorten travel time along heavily used corridors | Santa Fe Trails                  | \$ TBD                | City of Santa Fe Comprehensive Parking and Transit Program | Transportation systems management         |

## 5.5 Regional Bikeway System

In the last five years, Santa Fe has seen substantial improvements on its four major “arterial” trails, the River Trail, Rail Trail, Acequia Trail, and Arroyo Chamiso Trail, and many more new segments of these trails are currently under construction or design. The MPO’s priorities are to continue the development of these key trails as well as the connections between them and to other significant on-road and off-road bikeways in order to maximize progress toward a complete bicycle transportation system. The MPO’s prioritization of new trail segments will be more fully developed and presented within a Bikeways Master Plan.

### Multi-Use Paths

The current priorities for trail improvements under the Bikeways Mapping Project, based on impact and feasibility of each segment, are:

1. Rail Trail: St. Francis Dr. to Alta Vista St., in order to complete alignment from Railyard Station to Rabbit Rd. (south of I-25).
2. River Trail: Various Connectors (Closson St., La Madera St., Camino de la Conquistadora, Frenchy’s Field/Camino de Chelly).
3. Acequia Trail: Bridges to Onate and Kathryn.
4. NM Central Rail Trail: Santa Fe Community College Loop Trail to Rancho Viejo District Trail.
5. N. Arroyo Chamiso Trail (Tierra Contenta): Buffalo Grass Rd. to S. Meadows.
6. Tie between: College of Santa Fe: Trail along east-side ditch; Arroyo Chaparral Trail: Ragel Park to Zia RR Station; Arroyo Hondo Trail, NM599 Station to Fireplace Rd; and NM Central Rail Trail, from Piñon Elementary School to Pueblos del Sol Trail.
7. Tie between: Acequia Trail: Otowi to Harrison; Arroyo en Medio Trail: Zia to E. Sawmill and Rail Trail: Connections to Monterrey, Sombra, Rodeo Park E.

### On-Road Improvements

Future construction, or reconstruction, of MPO-area roads that are classified at the collector or arterial level should include appropriate paved shoulders or bicycle lanes where feasible. Many MPO-area roads that classify as arterials or major collectors have no paved shoulder or have narrow shoulders that do not meet AASHTO minimums as bicycle facilities. In limited cases, a retrofit is possible simply through re-striping or repaving the roadway.

Priorities identified by the MPO for retrofits through restriping are shown below. Safety analysis is recommended as part of the project development and design efforts:

- Tesuque Village Rd. (County Road 73), Tesuque Village south to US84/285 (State Bike Route 9) (possible “road diet”)
- Siler Rd., Agua Fria to Rufina St., Cerrillos Rd. (possible “road diet”)
- Galisteo St. from San Mateo to St. Michael’s (stripe bike lanes).

In most cases, a “retrofit” to create sufficient space for bicyclists would require widening the roadway. Top priorities identified by the MPO where adding shoulders or bike lanes may be feasible include:

- Old Santa Fe Trail, to El Gancho Rd.
- El Gancho Rd. (particularly northbound (uphill))
- Tesuque Village Rd., Tesuque Village north to US84/285
- Avenida del Sur
- Rancho Viejo Blvd.
- West Alameda, Nopal to Siler, West of Siler to NM599
- Rodeo Rd. east of Sawmill

- Gov. Miles: Richards to Pueblos del Sol
- Wagon Rd.
- Hyde Park Rd.
- Cerrillos Rd., Cielo Ct. to St. Michael's Dr.\*
- Old Pecos Trail, Cordova to Old Santa Fe Trail\*

(\*programmed road reconstruction)

### Other Treatments

The MPO also supports other engineering measures for bicycle and general trail traffic including specific crosswalk improvements, intersection improvements (including bike lanes and signal actuation mechanisms), sharrows for shared lane arrows (sharrows), and calming or diversion of motor vehicle traffic in order to create more bicycle- and pedestrian-friendly street environments, as found along “bike boulevards” that have been established in some communities. The MPO will continue to examine trail-road crossings to help local governments prioritize improvements to at-grade crossings as well as potential locations for grade-separated crossings.

### Education and Encouragement

Emphasis areas for the MPO, in coordination with local jurisdictions, includes education of bicyclists, education of motorists, and encouragement by events (Bike-to-Work Day or Week) and guidance (Bikeways and Trail Map, Bike Route Signage).

### 5.6 Regional Pedestrian System

The MPO proposes to assist local entities with the design and implementation of processes to take an inventory of existing sidewalks and crosswalks using GIS, to assess needs to upgrade and/or repair existing facilities, to identify critical gaps and other needs for safe and convenient pedestrian connections, and to develop strategies to work with NMDOT, the City

and the County to address current and future pedestrian needs.

One method to prioritize sidewalk and other pedestrian improvements emphasized in the FHWA’s “How to Develop a Pedestrian Safety Action Plan” is to identify specific areas where mixed, dense land use is combined with the presence of significant generators or attractors of pedestrian activity, such as schools, transit facilities, and centers of shopping, dining, and other urban activity. Accordingly, the MPO proposes to use geographic information systems to identify where pedestrian improvements most deserve to be considered.

Trails and pedestrians: Some pedestrian needs will be addressed through trail improvements that are a major focus of the bikeways planning in the MPO area. The MPO’s processes to identify and prioritize improvements for multi-use paths, discussed in more detail here under “bikeways,” include the consideration of pedestrian needs that such paths.

Two population groups for whom pedestrian activity may comprise a disproportionately high mode share, and for whom walking is a particularly desirable, healthy mode of transportation, include children and seniors. The MPO will seek to focus on fostering pedestrian access to schools, parks, and recreation centers within the MPO area. One strategy is to establish an area-wide Safe Routes to Schools (SRTS) approach supporting policies and projects that favor the creation of safe and convenient neighborhood pedestrian connections to schools. Specific activities in this area may be supported through federal SRTS funds administered by the NMSRTS program within the NMDOT. The MPO will work with Santa Fe Public Schools, other educational entities, and NMDOT to develop a formalized Safe Routes to School Program for the Santa Fe MPO Area and to plan and pursue specific improvements in

engineering, education, enforcement, and encouragement of safe walking and bicycling to school.

The MPO will also work with the New Mexico Department of Health to expand their Prescription Trails Program in the Santa Fe area, and with other public health groups promoting active transportation. The MPO will work to see that recreational facilities for pedestrians and bicyclists are integrated into the transportation system so that active transportation can be routine and enjoyable for as much as the population as possible.

The MPO will also work with transit agencies, including Santa Fe Trails, the NM Rail Runner, and the North Central Regional Transit District, to ensure that their vehicles and facilities are as pedestrian-friendly and bicycle-friendly as possible and that bus stops and train stations are fully, safely, and conveniently integrated into the pedestrian circulation system. The MPO will include in its recommendations specific connections to bus stops and train stations so that transit can play a more significant role within the transportation system, in direct support of healthy, active transportation by foot or by bicycle. The MPO will assist local entities in the creation of standards and practices for “Transit-Oriented Development” whereby pedestrianism is facilitated and encouraged through pedestrian-friendly site and street design in the vicinity of rail stations and other major transit centers.

### **5.7 Freight and Intermodal System**

The primary mode for freight movement in New Mexico is by truck on the road network and that is no different in the Santa Fe MPO Planning Area. The 2008 NMDOT Multimodal Freight Study expected the Interstate 25 corridor between Albuquerque and Santa Fe to see “significant” truck volume growth by 2035. It also identified concerns about the levels of truck traffic on Cerrillos Road and St Francis Drive through

the urban core. The MPO plans to collect and monitor truck traffic volumes and to explore ways to divert through truck traffic from the urban core to the NM599 Relief Route. Additionally, the MPO wishes to explore the feasibility of expanding the use of rail and the airport as ways to move freight in and out of the Santa Fe area.

### **State Rail Plan**

NMDOT has begun efforts to develop a statewide Rail Plan. This plan will examine current and future demand for freight rail and intercity passenger service (including high speed rail), and how increased passenger and freight service may impact the rail system. It will identify capital infrastructure and operating needs, and is expected to be completed in 2011.

The MPO will coordinate and participate in the State Rail Plan efforts.

### **5.8 Transportation Safety and Security**

Safety is one of the key elements of transportation planning under the SAFETEA-LU legislation. To date the MPO has not undertaken any direct planning activities related to safety, but has participated in the development of the Statewide Transportation Safety Plan by NMDOT and a variety of other statewide initiatives. The MPO plans to become more involved in safety planning at the local level and plans to work to identify hazardous intersections and sections of roadways within the MPO Planning Area and use that information to assist NMDOT, City of Santa Fe, County of Santa Fe and Tesuque Pueblo in identifying mitigation measures and funding to resolve the safety issues. Additionally, within the Bikeways and Pedestrian Master Plans, best practices for safety will be identified.

Security of the traveling public and the transportation system needs to be considered in the MTP. This type of

planning is commonly undertaken by Local Emergency Planning Committees (LEPC) or at the State level. These plans typically contain outline procedures and lines of command for a variety of emergency situations such as natural disasters, terrorist attacks and evacuations, both localized and on mass for a variety of reasons. The New Mexico Department of Homeland Security and Emergency Management has developed the New Mexico All-Hazard Emergency Operations Plan, the purpose of which is to establish the New Mexico Emergency Operations System which will organize the state's response to emergencies and disasters while providing for the safety and welfare of its citizens. It sets forth lines of authority, responsibilities and organizational relationships, and shows how all actions will be coordinated among the state and local governments. The Santa Fe Municipal Airport maintains an Emergency Response Plan to provide guidance to outline procedures and lines of authority and communications during emergencies at the Airport. The City of Santa Fe has a Draft Emergency Operations Plan which is going through the review process at this time. The County has a similar Emergency Response Plans in place. The MPO has not been directly involved in the development of these plans, but will take the opportunity where necessary to review the plans and provide input to ensure the safety and security of the transportation system.

## 5.9 Aviation

The master plan for Santa Fe Municipal Airport provides for the orderly use of existing airport facilities to enhance the safety of aircraft operations, maintain existing airfield and passenger terminal facilities, and support future aviation demand (should new levels of demand be experienced). The master plan includes provisions to ensure the long term viability and self-sufficiency of the airport by

maximizing available areas at the airport for both aviation-related and commercial opportunities.



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## 6.0 The MTP: Regional Transportation Priorities

In meeting federal requirements and the transportation system challenges, the MPO has developed the Metropolitan Transportation Plan 2010-2035 (MTP) through an extensive planning process that has been guided by federal planning factors and ‘livability’ principles. The prioritization process included a number of criteria that considered multimodal benefits, Complete Streets potential, current and future demand and congestion, safety and access. Each mode was then prioritized within the expected funding between now and 2035 (see Chapter 7, Financial Plan) for that mode. Federal planning factors as well as MTP policies were used to assist with the selection of projects for the MTP financially constrained modal plans. For projects on the Regional Roadway System, multimodal, “Complete Streets” projects ranked more highly for regional projects compared to those which were more single-mode in nature except for safety improvements.

### 6.1 Prioritization Framework

With limited funding available across all modes, and an active community desiring that transportation improvements be context sensitive and complete, the prioritization process must be comprehensive and take into consideration goals, policies, and emphasis areas of this MTP and the MPO (which will be covered in more detail in Chapter 6). The difficulty with any multimodal prioritization effort is comparing projects of various shapes and sizes, which can result in the old adage “comparing apples and oranges”.

Recognizing that a smaller pedestrian project may be in some ways as critical to pedestrians as a major freeway corridor improvement may be to regional travel patterns, this MTP will take a holistic approach to assessing regional

transportation corridor improvements, while ranking smaller projects within each of their primary modal categories.

For Regional Roadway projects, the emphasis of this MTP will be:

- Projects should be cost-effective and multimodal
- Project sponsors should implement Complete Streets principles in roadway project design.
- Roadway projects should maintain or enhance connectivity of the overall network.
- Projects shall be safe and accessible for all users.

These will become the MTP’s Regional Roadway System policies.

Transit projects will be evaluated based on their leading toward an interconnected system of transit routes that provide safe access for all users.

The MPO proposes to assist local entities with the design and implementation of processes to take an inventory of existing sidewalks and crosswalks using GIS, to assess needs to upgrade and/or repair existing facilities, to identify critical gaps and other needs for safe and convenient pedestrian connections, and to develop strategies to work with NMDOT, the City and the County to address current and future pedestrian needs.

One method to prioritize sidewalk and other pedestrian improvements emphasized in the FHWA’s “How to Develop a Pedestrian Safety Action Plan” is to identify specific areas where mixed, dense land use is combined with the presence of significant generators or attractors of pedestrian activity, such as schools, transit facilities, and centers of shopping, dining, and other urban activity. Accordingly, the MPO

proposes to use geographic information systems to identify where pedestrian improvements most deserve to be considered.

Trails and pedestrians: Some pedestrian needs will be addressed through trail improvements that are a major focus of the bikeways planning in the MPO area. The MPO's processes to identify and prioritize improvements for multi-use paths, discussed in more detail here under "bikeways," include the consideration of pedestrian needs that such paths may address, and, where paths link to on-road bikeways, specific sidewalk needs along roadways that relate to the multi-use path system.

## **6.2 Public Process**

### **Corridor Studies: Public Involvement Meetings**

Originally started in 2006, corridor studies along St. Francis Drive, I-25 and NM 599 were contracted by the NMDOT after being identified in the MTP 2005-2030. In 2010, the studies were completed after several public meetings and review through the MPO process. Meeting dates, recorded public comments, and recommendations from the three corridor studies are available via links from the MPO website: [www.santafemopo.org](http://www.santafemopo.org).

Recommendations from these studies have identified several projects for the MPO to consider in developing the MTP 2010-2035. These proposed projects will all require further design and technical review that will provide additional opportunities for public review and comments before any are funded and constructed.

### **MPO Public Involvement Meetings**

In February 2010, the Santa Fe MPO initiated a series of public input meetings to inform participants of current conditions and improvements to the transportation network since the last Metropolitan Transportation

Plan update in 2005 and to gather comments on what improvements are necessary to meet the current and future travel demands and impacts on the transportation system.

The meetings were held at the Santa Fe Community College (2/2/10), the Main Public Library (2/5/10), and at the Genoveva Chavez Community Center (2/16/10). Maps were displayed showing approved future county roads, recommended corridor safety and capacity improvements, and studies for road extensions or improvement designs. Other maps gave an updated view of bikeways and trail corridor connections and proposed extensions. Santa Fe Bikeways and Trails maps as well brochures on transit routes and transit/rail connections were also available. An 'open house' format gave participants time to speak directly with MPO staff.

An initial draft of the MTP 2010-2035 was presented to the MPO Technical Coordinating Committee (TCC) Meeting on August 2nd, 2010 and the MPO Transportation Policy Board (TPB) at their September 2010 meeting. This allowed members of these committees to provide initial feedback on the draft plan and correct any misinformation or inaccuracies that may have inadvertently been included in the document. The document will be released for a minimum 30 day Public Review Period on August 30, 2010.

Three open houses were held to allow the community an opportunity to review and comment on the draft MTP:

- September 14: Main Library Downtown Santa Fe- Washington
- September 15: Nancy Rodriguez Community Center- Lopez Lane- 3-6 pm
- September 16: Santa Fe Community College- Jemez Room- 4-7 pm

Also, the draft MTP was presented to the Policy Board at a public meeting on September 9.

The recorded public input and final document will be reviewed by the TCC at a meeting in early October where they will make a recommendation to the TPB.

The TPB will hold a Public Hearing on October 14th to adopt the MTP.

### 6.3 Roadway System Priorities Plan

The Regional Roadway System Priorities table and map are a compilation of “Regionally Significant” improvements and additions to the road network that have been determined will be needed over the next 25 years. Projects were evaluated based on MTP objectives including mobility and congestion, safety, multimodal access for all users, interconnections of the system, freight and commerce, and whether the project costs can reasonably be funded with available federal and matching funds.

The rating criteria give higher ratings to projects which meet MTP objectives, and also serve to screen out projects that result in creating additional needs, do not meet MTP objectives, or have negative impacts.

Approximate project timelines are based on the level of need: whether the project addresses existing safety or congestion issues, or whether these issues are anticipated to occur further into the future.

It should be noted that the alignments for the “Future Roads and Extensions” are approximations. Additionally, it should be noted that all projects shown on the map, with the exception of those categorized as “Programmed” still have to go through further levels of public review and input before moving forward to construction.

The Regional Roadway Priorities Plan is intended to be used to inform the public and illustrate proposed projects for future placement on the MPO Transportation

Improvement Program (TIP). Additionally, it will be used as a guide for both City and County development review processes for future arterial and collector roads. By specifying the location, priority, and roadway design principles, the Metropolitan Transportation Plan will help guide network improvements to ensure:

- continuity of road design characteristics consistent with “Complete Streets” across jurisdictions;
- network connectivity to ensure an efficient and reliable system;
- safety and accessibility for all users.

#### *MTP Roadway System Policies:*

- *Projects should be cost-effective and multimodal*
- *Project sponsors should implement Complete Streets principles in roadway project design.*
- *Roadway projects should maintain or enhance connectivity of the overall network.*
- *Projects shall be safe and accessible for all users.*
- *No new at-grade intersections shall be added to NM599 and all existing at-grade intersections will be converted to interchanges as funding becomes available.*
- *Roundabouts should be considered as an option for all new or reconstructed intersections.*

The Regional Roadways Plan may be amended periodically to reflect completed projects or changing status of proposed improvements. All amendments are reviewed by the MPO Technical Coordinating Committee and presented for public comment prior to approval by the MPO Transportation Policy Board.






























*MPO Regional Roadways Emphasis Areas include:*

- **Coordinate the programming of identified roadway improvement projects into the MPO Transportation Improvement Program.**
- **Assist agencies in identifying alternate funding sources for roadway projects, including those that leverage private investment in the system.**
- **Review and update the Functional Classification system for the road network.**
- **Review and update the MPO Traffic Count Program to monitor traffic growth and patterns.**
- **Develop a system to identify, track and mitigate congested locations and corridors.**
- **Develop a system to identify, track and mitigate hazardous locations and corridors.**
- **Continue deployment of the region's Intelligent Transportation System infrastructure.**

Publicly-Funded Regional Roadway System projects were prioritized based on the criteria and measures shown in Figure 6-1 on the next page.

Table 6-1 on page 111 is the prioritized list of Publicly-Funded Regional Roadway projects for this MTP. Figure 6-2 is the Future Regional Road System Priorities Plan map.

## Figure 6-1. Regional Roadway System Rating Criteria

|   |   |
|---|---|
| <b><u>Time Frame/Need</u></b> –   | <i>Based on identified mobility, safety and multimodal needs, when does the project need to be implemented?</i>                                       |
| Short   | Within 5 years  |
| Short/Medium  | Within 5 to 10 years  |
| Medium  | Within 10 to 15 years   |
| Medium/Long   | Within 15 to 20 years   |
| Long  | More than 20 years  |
| <b><u>Multimodal</u></b> –  | <i>How does the proposed project allow for the accommodation and/or availability of transportation options using different modes?</i>                 |
|    | Will greatly increase or improve the accommodation and/or availability of 3 or more modes (car, freight, transit and/or rail, pedestrian and bicycle) |
|    | Will increase or improve the accommodation and/or availability of two or more modes.  |
|    | Will not change or improve the accommodation or availability of modes   |
|    | Will reduce the accommodation and/or availability of some modes   |
|    | Will greatly reduce the accommodation and/or availability of modes  |
| <b><u>Mobility and Congestion</u></b> –   | <i>How does the proposed project impact current or projected congestion or the mobility of the targeted mode(s)?</i>                                  |
|    | Will resolve a major congestion or mobility issue   |
|    | Will resolve a congestion or mobility issue   |
|    | Will have no impact on congestion or mobility   |
|    | Will have a negative impact on congestion or mobility   |
|   | Will have a major negative impact on congestion or mobility   |
| <b><u>Safety</u></b> –  | <i>How well does the project improve Safety for all users? Does it alleviate a known issue?</i>   |
|  | Will resolve a major identified safety issue  |
|  | Will resolve an identified safety issue   |
|  | Will have no impact on safety   |
|  | Will have a negative impact on safety   |
|  | Will have a major negative impact on safety   |
| <b><u>Interconnected Network and Security</u></b> –                                 | <i>How well will the proposed project improve the connectivity and security of the transportation network?</i>  |
|  | Will greatly improve the Connectivity and/or Security of the network  |
|  | Will improve the connectivity and/or security of the network  |
|  | Will have no impact on the connectivity and/or security of the network  |
|  | Will reduce the connectivity and/or security of the network   |
|  | Will greatly reduce the connectivity and/or security of the network   |
| <b><u>Freight and Commerce</u></b> –  | <i>How well will the proposed project improve the mobility of freight and access to commerce?</i>   |
|  | Will make improvements to a freight carrying facility of statewide significance (i.e Interstate or NHS Roadway)                                       |
|  | Will make improvements to a regional freight carrying facility (Non NHS Roadway)  |
|  | Will have little or no benefit to freight carrying facilities   |
|  | Will have a negative impact on a freight carrying facility  |
|  | Will have a negative impact on a major freight carrying facility  |
| <b><u>Cost</u></b> –  | <i>How well does the project cost fit into the projected allocation of Federal Funding of \$7.1million per year?</i>                                  |
|  | Project Cost is estimated to be \$3.5million or less  |
|  | Project Cost is estimated to be between \$3.5million and \$7.1million   |
|  | Project Cost is estimated to be between \$7.1million and \$15million  |
|  | Project Cost is estimated to be between \$15million and \$25million   |
|  | Project Cost is estimated to be greater than \$25million  |

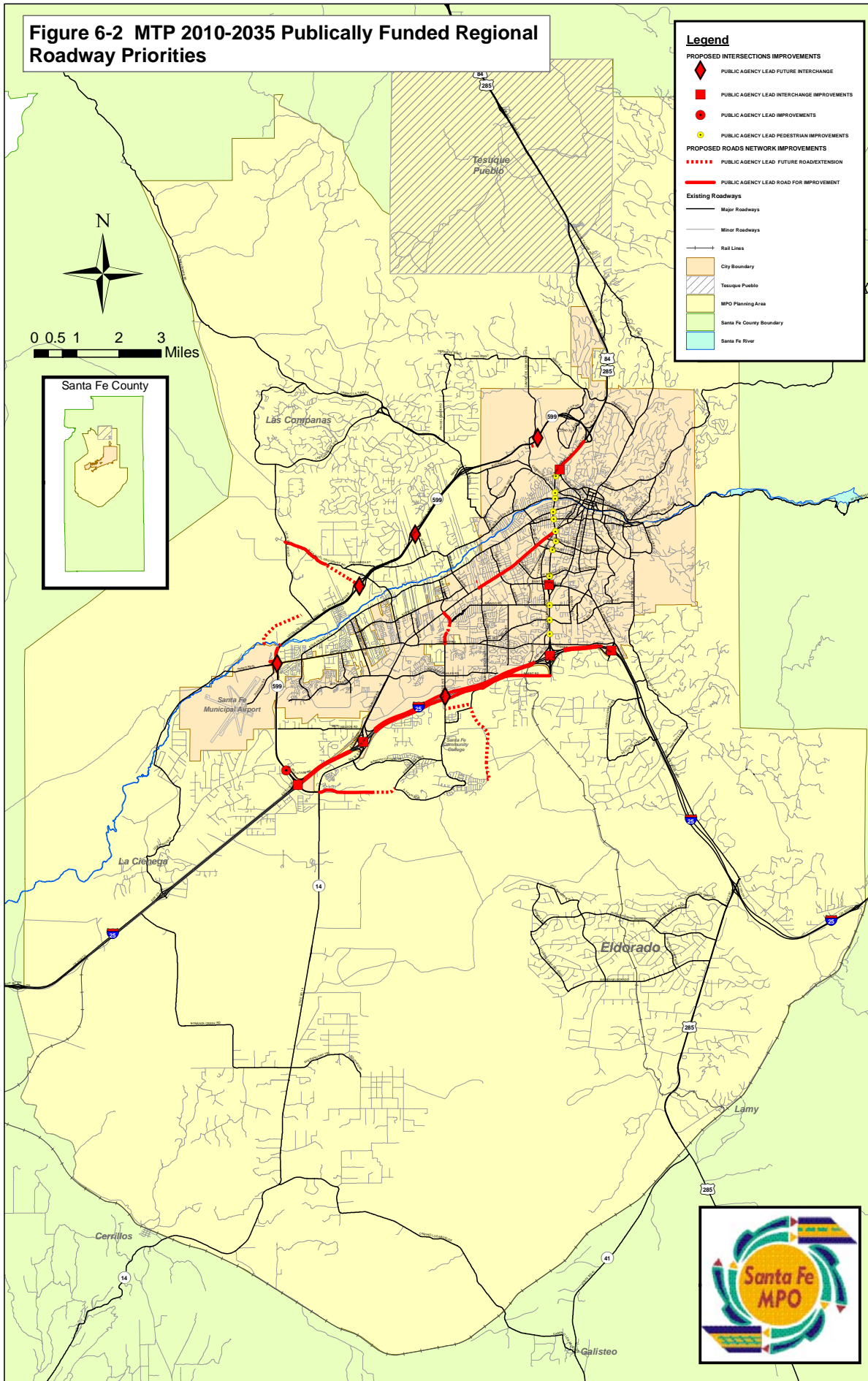
**Table 6-1. Publicly-Funded Regional Roadway System Project Rating**

| Project Name  | Project Description   | Lead Agency                | Time Frame/Need | Multimodal | Mobility and Congestion | Safety | Interconnected Network and Security | Freight and Commerce | Cost |
|---|---|----------------------------|-----------------|------------|-------------------------|--------|-------------------------------------|----------------------|------|
| St Francis Dr./St Michaels Dr. Interchange Improvements                     | Reconfiguration of Interchange and improve pedestrian and bicycle facilities  | NMDOT/<br>City of Santa Fe | Short           | ●          | ●                       | ●      | ◐                                   | ●                    | ●    |
| I-25 Interim Safety Improvements  | Various interim Improvements to Interchanges plus installation of emergency safety gates at median crossings, addition of lighting and reconfiguration of Cerrillos Rd/Beckner Intersection | NMDOT                      | Short           | ◐          | ●                       | ●      | ◐                                   | ●                    | ●    |
| NM599/County Road 62 Interchange  | Construction of a New Interchange   | NMDOT                      | Short           | ◐          | ●                       | ●      | ◐                                   | ●                    | ◐    |
| St Francis Drive US 84/285 Auxiliary Lane NM599 to Guadalupe                | Construction of a SB Auxiliary lane from NM599 to Guadalupe Exit  | NMDOT                      | Short           | ◐          | ●                       | ◐      | ◐                                   | ●                    | ●    |
| Cerrillos Rd Reconstruction (Camino Carlos Rey to St Michaels Dr)           | Reconstruction to add medians, drainage, bike lanes, sidewalks and transit facilities   | City of Santa Fe           | Short           | ●          | ◐                       | ◐      | ◐                                   | ●                    | ◐    |
| St Francis Dr: Pedestrian Intersection Improvements                         | Pedestrian improvements at all the intersections along St Francis Drive   | NMDOT/City of Santa Fe     | Short           | ◐          | ◐                       | ●      | ◐                                   | ◐                    | ●    |
| Extension of NM599 Frontage Road across SF River                            | Construct a bridge over Santa Fe River and upgrade roadway on south side to Airport Road  | NMDOT                      | Short           | ◐          | ◐                       | ◐      | ●                                   | ◐                    | ◐    |
| North-East Connector  | Upgrade of existing roadway from St Francis Drive to Oshara and Construction of a new connection to Richards Avenue   | Santa Fe County            | Short           | ◐          | ◐                       | ◐      | ◐                                   | ◐                    | ◐    |
| Rehabilitation or Replacement of 5 Downtown Bridges over the Santa Fe River | Defouri St, Guadalupe St, Galisteo , Don Gaspar, Delgado St.  | City of Santa Fe           | Short           | ◐          | ◐                       | ◐      | ◐                                   | ◐                    | ◐    |

| Project Name  | Project Description  | Lead Agency            | Time Frame/Need  | Multimodal | Mobility and Congestion | Safety | Interconnected Network and Security | Freight and Commerce | Cost |
|---|--|------------------------|------------------|------------|-------------------------|--------|-------------------------------------|----------------------|------|
| Richards Avenue Extension (Rodeo to Cerrillos)                    | Construction of a new section of roadway from Rodeo Road to Cerrillos Road   | City of Santa Fe       | Short/<br>Medium | ●          | ●                       | ◐      | ●                                   | ◐                    | ●    |
| NM599/I-25 Frontage Road Overpass                                 | Construction of an overpass to carry the North Frontage Road over NM599. Reconfigure existing Frontage Road at grade intersection with NM599 to right in/right out only. | NMDOT                  | Short/<br>Medium | ◐          | ◐                       | ●      | ◐                                   | ●                    | ◐    |
| Avenida Del Sur Extension   | Construction of a new road and upgrade of existing roadway from NM14 to A Van Nu Po  | Santa Fe County        | Short/<br>Medium | ●          | ◐                       | ◐      | ●                                   | ◐                    | ●    |
| Cerrillos Rd Reconstruction (St Michaels Drive to St Francis Dr.) | Reconstruction to add medians, drainage, bike lanes, sidewalks and transit facilities  | City of Santa Fe       | Short/<br>Medium | ●          | ◐                       | ◐      | ◐                                   | ●                    | ◐    |
| St Francis Dr./Guadalupe Interchange Improvements                 | Reconstruction of the existing interchange and bridge to either keep existing left hand exit or construct new right hand exit.   | NMDOT/City of Santa Fe | Short/<br>Medium | ◐          | ●                       | ●      | ◐                                   | ●                    | ◐    |
| NM599/County Road 70 Interchange                                  | Construction of a New Interchange  | NMDOT                  | Short/<br>Medium | ◐          | ◐                       | ◐      | ◐                                   | ●                    | ◐    |
| South-East Connector  | Construction of a new road between NE Connector (Rabbit Road) and Windmill Ridge   | Santa Fe County        | Short/<br>Medium | ◐          | ◐                       | ◐      | ●                                   | ◐                    | ◐    |
| NM599/Airport Road Interchange                                    | Construction of a New Interchange  | NMDOT                  | Medium           | ◐          | ◐                       | ●      | ◐                                   | ●                    | ◐    |
| I-25/NM466: Interchange Improvements                              | Reconfiguration of Interchange and Ramp lengthening  | NMDOT                  | Medium           | ◐          | ●                       | ●      | ◐                                   | ●                    | ◐    |
| I-25/St Francis Dr: Interchange Improvements                      | Reconfiguration of Interchange and Ramp lengthening  | NMDOT                  | Medium           | ◐          | ●                       | ●      | ◐                                   | ●                    | ◐    |

| Project Name  | Project Description   | Lead Agency     | Time Frame/Need | Multimodal | Mobility and Congestion | Safety | Interconnected Network and Security | Freight and Commerce | Cost |
|---|---|-----------------|-----------------|------------|-------------------------|--------|-------------------------------------|----------------------|------|
| I-25 Auxiliary Lanes: NM599 to Cerrillos            | Construction of third lane in each direction between interchanges   | NMDOT           | Medium          |            |                         |        |                                     |                      |      |
| Camino de los Montoyas Interchange w/ Frontage Road | Construction of a New Interchange   | NMDOT           | Medium          |            |                         |        |                                     |                      |      |
| I-25/NM599: Interchange Ramp Improvements           | Lengthening of On and Off Ramps   | NMDOT           | Medium          |            |                         |        |                                     |                      |      |
| I-25/Cerillos Rd Interchange Improvements           | Reconfiguration of Interchange and Ramp lengthening   | NMDOT           | Medium          |            |                         |        |                                     |                      |      |
| I-25 Auxiliary Lanes: St Francis to NM466           | Construction of third lane in each direction between interchanges   | NMDOT           | Medium/Long     |            |                         |        |                                     |                      |      |
| I-25/Richards Ave Interchange                       | Construction of a New Interchange   | NMDOT           | Medium/Long     |            |                         |        |                                     |                      |      |
| I-25 Auxiliary Lanes: Cerrillos to St Francis       | Construction of third lane in each direction between interchanges   | NMDOT           | Medium/Long     |            |                         |        |                                     |                      |      |
| County Road 62 Realignment and Improvements         | NM599 to Caja del Rio   | Santa Fe County | Long            |            |                         |        |                                     |                      |      |
| Connection between Caja del Rio and Airport Road    | Construction of a new roadway between Caja del Rio to the Santa Fe River, including the construction of a low water crossing. Private developer to complete roadway to Airport Road | Santa Fe County | Long            |            |                         |        |                                     |                      |      |

**Figure 6-2 MTP 2010-2035 Publically Funded Regional Roadway Priorities**



## 6.4 Transit Priorities Plan

The MPO promotes public investment in and public use of public transportation services and facilities. The MPO agrees with the USDOT that “a multi-modal transportation system increases choice, provides easy access to employment opportunities and other destinations and promotes positive effects on the surrounding community.” Choosing public transportation as a viable travel option becomes easier as service becomes more accessible, reliable, and affordable.

Public transportation services available within the MPO Planning Area include:

- Regional and local Transit
- Commuter and Intercity Passenger Rail
- Regional Air

These services are integrated into the transportation system through inter-modal facilities, such as transit centers, rail stations, and airports.

Figure 6-3 is the transit priorities system map.

### *MTP Transit Policies:*

- *Continue to improve and increase coordination between local and regional transit providers*
- *Increase access to transit for existing and new land uses.*
- *Incorporate transit-oriented development strategies into new development and redevelopment.*
- *Support the development and improvement of Intermodal Passenger Facilities in the Santa Fe Planning Area.*
- *Provide for bicycle and pedestrian access and facilities at transit hubs and intermodal centers*
- *Expand the bike-on-bus and wheelchair accessible bus fleet.*

*MPO Transit Emphasis Areas include:*

- Identifying strategies to increase ridership through a comprehensive regional transit/rail study in cooperation with all operators within the Planning Area.
- Explore the potential for local rail service between the Santa Fe Depot/Railyard and NM599 and between the Santa Fe Depot/Railyard and Eldorado/Lamy.
- Coordinate with the City of Santa Fe and NMDOT to open the Zia Station.
- Monitor development of the Las Soleras Station to ensure MPO conditions are met.
- Participate in future planning for the Regional High Speed Rail Service.
- Support the development and improvement of Intermodal Transit Facilities in the Santa Fe Planning Area.
- Improve the Transit and Rail components of the Travel Demand Model.
- Continue coordination with all transit operators and funding entities.

**Table 6-2. Regional Transit Priority Projects (Prioritized)**

| Priority   | Project | Description | Improved<br>Transit<br>Connections | Increased<br>Access to<br>Transit | Service along<br>Regional<br>Corridors | Support for<br>Transit<br>Oriented<br>Development | Reduces<br>Roadway<br>Congestion | Access for All<br>Users | Community<br>Support |
|--|---------|-------------|------------------------------------|-----------------------------------|--|---|----------------------------------|-------------------------|----------------------|
| <p><b>Regional Transit Priorities will be established after completion of the Regional Transit System Priorities Plan included in the MPO's Unified Planning Work Program. After the Transit Priorities Plan is completed, it will be incorporated into the MTP through an amendment. This table shows an example of the evaluation criteria used to establish transit priorities.</b></p> |         |             |                                    |                                   |  |   |                                  |                         |                      |

## 6.5 Bikeway Priorities Plan

Increasing public investment in bikeways is reinforced by recent policy from Secretary of Transportation Ray LaHood, which directs the USDOT and FHWA and encourages state and local government agencies to consider “walking and bicycling as equals with other transportation modes”.

In order to support and promote the safe and efficient use of bicycles with the transportation system, the MPO supports:

- bicycling as a legitimate form of transportation,
- investment in a complementary network of on and off-road facilities,
- the construction and maintenance of “complete streets”,
- policies and programs intended to
  - educate motorists and bicyclists about bicycle safety,
  - enforce laws that are intended to protect the safe use of the transportation system by cyclists, and
  - encourage the use of bicycling and other transportation modes other than the private motor vehicle.

Santa Fe has four off road multi use paths which act as “Arterial” routes for bicyclists. These are the Rail Trail, Arroyo Chamiso Trail, Acequia Trail and the River Trail. All have substantial sections completed or close to construction. Additional planning, design and funding is required to complete each arterial bikeway. In 2008 the MPO completed a Bikeways Route Map to assist bicyclists in route planning utilizing the existing multi use trails and appropriate roadways. This map was updated in 2009 to reflect the additions to the bikeway network. Hard copies of the maps were distributed to the local bike shops, libraries and businesses. An electronic version is

available on the MPO website. ([www.santafemopo.org](http://www.santafemopo.org))

The MPO is currently undertaking a comprehensive study to improve the bikeways network. The study is identifying opportunities to fill gaps in the arterial bikeways and create connections to provide a complete network. This is being done in coordination with the City and County and will result in a Bikeways Master Plan for the MPO Planning Area. This document will be the guide for future investment and ensure that all future plans are integrated into the network.

### *MTP Regional Bikeways Policies:*

- *Continue the development of a regional bikeway system.*
- *Include bicycle- and pedestrian-friendly street environments as part of “Complete Streets”.*
- *Promote continuing awareness and safety education of bicyclists and motorists.*
- *Retrofit existing roadways where practical to include bicycle-friendly enhancements*
- *Continue to coordinate bikeways planning and project funding between the City and County*
- *Ensure that all new bikeway facilities are constructed to AASHTO standards.*
- *Promote activities that encourage bicycling as a transportation option.*

In addition to the projects detailed on the map and the policies included in the plan, an emphasis on coordination of bikeways planning between the city and the county is an important aspect of the bikeways element. The alignments of the Santa Fe

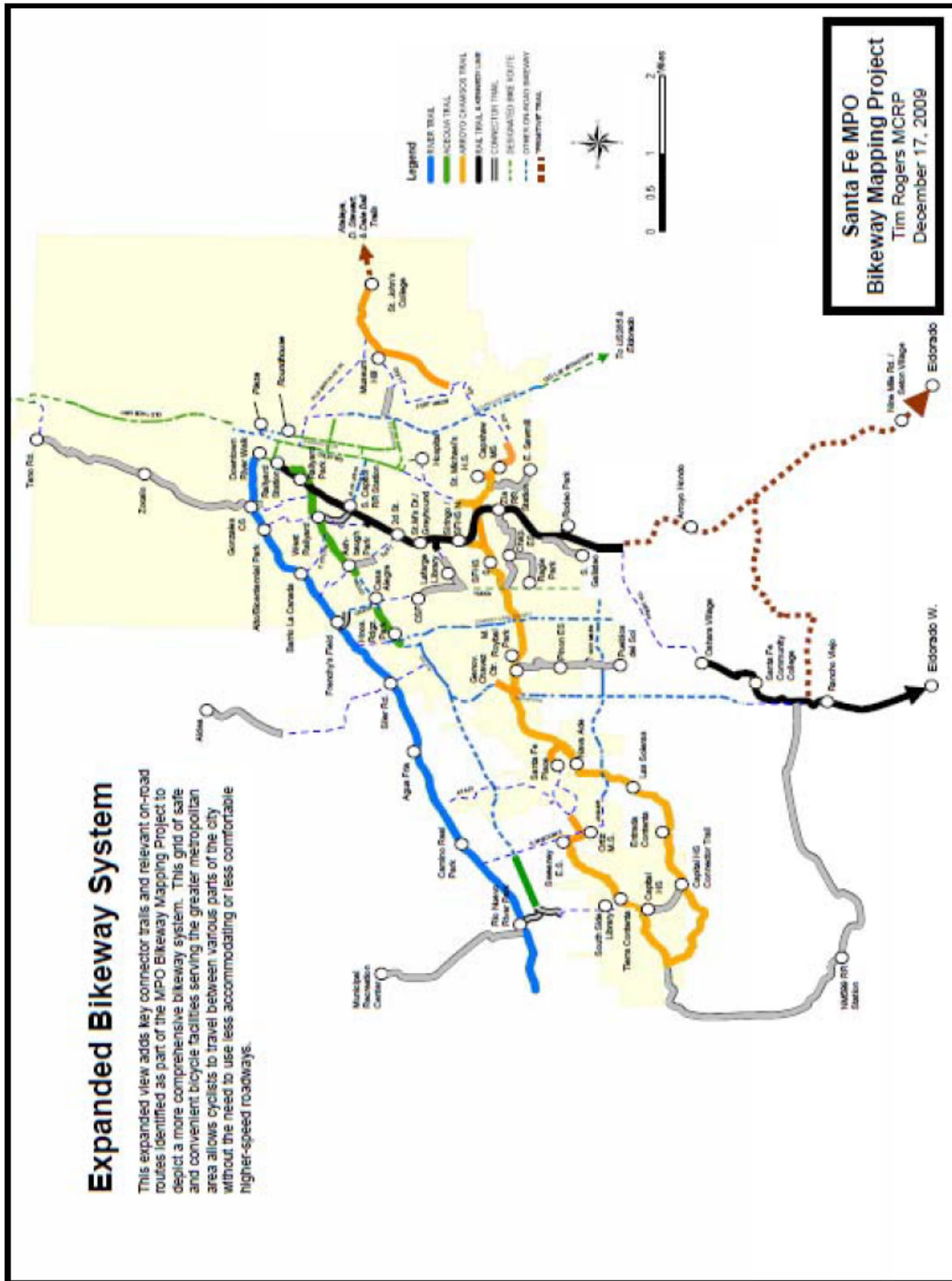
River Trail, the Santa Fe Rail Trail, and the Arroyo Chamisos Trail, for example, extend into Santa Fe County. Planning these facilities across jurisdictional boundaries enhances the utility of the bikeways and necessitates close inter-governmental coordination.

This Bikeways section provides summary updates of accomplishments, ongoing projects, and a status on the proposed improvements. More detailed information and specific recommendations will be included in the development of a Master Bikeways Plan.

*MPO Bikeways Emphasis Areas include:*

- **Develop a Santa Fe Bikeways Master Plan in collaboration with the City and County.**
- **Develop a Complete Streets level-of-service standard that includes bicycle considerations.**
- **Continue the development the major arterial trails: the River Trail, Rail Trail, Acequia Trail, and Arroyo Chamiso Trail and the connections between and to them.**
- **Promote activities that encourage bicycling as a transportation option.**
- **Continue to coordinate bikeways planning between the city and the county, and within their respective departments.**
- **Traffic counts and analysis of crash data, participation in the National Bicycle and Pedestrian Documentation Project starting in 2010.**
- **Identify available funding sources to be applied to improving bikeways infrastructure.**

Figure 6-3. Future Regional Bikeways System Map



**Table 6-3. Regional Bikeway System Priority Projects (Prioritized)**

| Priority  | Project | Description | Regional Bikeway System | Access for Bicycle and Pedestrian Users | Access to Transit | Safety for Bicyclists | Reduces Roadway Congestion | Community Support |
|---|---------|-------------|-------------------------|---|-------------------|-----------------------|----------------------------|-------------------|
| <p><b>Regional Bikeways Priorities will be established after completion of the Regional Bikeway System Master Plan included in the MPO’s Unified Planning Work Program. After the Bikeways Master Plan is completed, it will be incorporated into the MTP through an amendment. This table shows an example of the evaluation criteria used to establish bikeways priorities.</b></p> |         |             |                         |   |                   |                       |                            |                   |

## 6.6 Pedestrian Priorities Plan

The oldest form of transportation is the pedestrian mode. It continues today to be an effective form of transportation for some trip purposes. This plan encourages walking as a means of transportation and suggests enhancements to the pedestrian system infrastructure. Increasing public investment in pedestrian facilities is reinforced by recent policy from Secretary of Transportation Ray LaHood, which directs the U.S. DOT and FHWA and encourages state and local government agencies to consider "walking and bicycling as equals with other transportation modes".

Pedestrians in the Santa Fe MPO Planning Area, like pedestrians everywhere, need safe, convenient, and ADA-accessible routes within and between residential areas, commercial areas, employment centers, public services, and transit routes. Pedestrianism should be recognized as a legitimate and significant mode of transportation, not relegated to a second-class mode whose needs are subservient to motorized traffic. The vulnerability of pedestrians and the impact that motor vehicles in particular have on pedestrians' safety and comfort need to be recognized as significant reasons to encourage site, development, and street designs that emphasize pedestrians' needs at least at par with efforts to accommodate motor vehicles.

This Pedestrian section provides summary updates of accomplishments, studies, ongoing projects, and proposed improvements toward a more integrated and accessible multi-modal transportation network. More detailed information and specific recommendations will be included in the development of a comprehensive Pedestrian Plan, a task identified in the MPO 2010-12 Unified Planning Work Program.

## Pedestrian Priorities

The City, the County, and NMDOT are aware of general needs to improve facilities for pedestrians, including sidewalks, crosswalks, and trails. Specific input on pedestrian needs has come from the general public, from corridor studies, particularly the St. Francis Corridor Study, through focused activities such as "Santa Fe Walks," and through more general planning activities such as the County's Sustainable Land Development Plan (SLDP).

### Site Design

The City and County of Santa Fe should strive to make all private and public development as pedestrian-friendly as possible by requiring the construction of safe, convenient and accessible walking routes to and from the network of sidewalks, crosswalks, trails, and calm streets that comprises the greater pedestrian circulation system. Efforts by local entities to support the creation of "pedestrian-scale" development should emphasize street-fronts that favor ingress by foot, and by extension, by transit. Parking lots and driveways need not stand between the roadway sidewalk and the development, as is typical everywhere in Santa Fe but downtown. Facilities for motor-vehicle access may be more desirably located behind buildings or addressed through other means - - - this approach need not be limited to Transit-Oriented Development.

Public services in particular, including schools, parks, libraries, community centers, transit facilities, and social services, must include accessible routes in order to comply with the Americans with Disabilities Act. These routes should not be limited to connections between an accessible parking space and a building entrance but rather should address more general needs for site ingress and egress

by foot. Site design for these facilities should likewise favor safe and convenient access by foot from as many directions as possible – pedestrians should not be limited to the use of alignments through driveways and parking lots that are primarily designed to serve the needs of motorists.

## **Street Design**

In the past, concerns about pedestrian safety have sometimes led to non-accommodation of pedestrians' needs along or across roadways. Pedestrian facilities should only be excluded from roadway projects if an engineering decision against accommodation is fully supported by guidelines developed by AASHTO and other relevant organizations.

Sidewalks are already required along most new road construction in the Santa Fe area. The “complete streets” approach that has been embraced by the MPO will help the City, County, and NMDOT to continue to emphasize the need to provide for pedestrians along and across all roadways, as appropriate, in the Santa Fe area.

The MTP strongly encourages improved standards of accommodation of pedestrians in the transportation system by establishing and implementing best practices in:

- Sidewalk design. Provide buffer/ “furniture zone” rather than standard back-of-curb sidewalk.
- Pedestrian crossing treatments. Implement innovative pedestrian crossing treatments (see the Toolbox in Chapter 4) in order to facilitate pedestrian movement. Seek opportunities to create median refuges at crossings
- Reducing pedestrian exposure to excessive speeding by motorists, including traffic calming treatments such as curb radii at street corners, medians and bulb-outs to calm traffic and reduce crossing distance, raised crosswalks, and other traffic calming.

- Educate motorists regarding their legal requirement to yield to pedestrians in crosswalks and deploy in-street signage to help with this education.

## **Developing Data**

The MPO proposes to identify specific areas of priority for pedestrian safety improvements based on crash data and other relevant information from NMDOT/Traffic Safety Bureau, UNM Division of Government Research, and local law enforcement. The MPO proposes to develop systems to analyze this data to inform local transportation planning. The MPO also proposes to initiate traffic volume counts of pedestrians and bicyclists in order to establish baseline levels of use of key facilities and changes in those levels over time.

## **Special Population Groups**

Three population groups for whom pedestrian activity may comprise a disproportionately high mode share, for whom walking is a particularly desirable, healthy mode of transportation, or for whom special design accommodations must be made include children, seniors, and the disabled.

The MPO will seek to focus on fostering pedestrian access to schools, parks, and recreation centers within the MPO area. One strategy is to establish an area-wide Safe Routes to Schools (SRTS) approach supporting policies and projects that favor the creation of safe and convenient neighborhood pedestrian connections to schools. Specific activities in this area may be supported through federal SRTS funds administered by the NMSRTS program within the NMDOT. The MPO will work with Santa Fe Public Schools, other educational entities, and NMDOT to develop a formalized Safe Routes to School Program for the Santa Fe MPO Area and to plan and

pursue specific improvements in engineering, education, enforcement, and encouragement of safe walking and bicycling to school.

The MPO will also work with the New Mexico Department of Health to expand their Prescription Trails Program in the Santa Fe area, and with other public health groups promoting active transportation. The MPO will work to see that recreational facilities for pedestrians and bicyclists are integrated into the transportation system so that active transportation can be routine and enjoyable for as much as the population as possible.

### **Transit Access**

The MPO will also work with transit agencies, including Santa Fe Trails, the NM Rail Runner, and the North Central Regional Transit District, to ensure that their vehicles and facilities are as pedestrian-friendly and bicycle-friendly as possible and that bus stops and train stations are fully, safely, and conveniently integrated into the pedestrian circulation system. The MPO will include in its recommendations specific connections to bus stops and train stations so that transit can play a more significant role within the transportation system, in direct support of healthy, active transportation by foot or by bicycle. The MPO will assist local entities in the creation of standards and practices for “Transit-Oriented Development” whereby pedestrianism is facilitated and encouraged through pedestrian-friendly site and street design in the vicinity of rail stations and other major transit centers.

### *MPO Pedestrian Priorities Emphasis Areas include:*

- **Create a Pedestrian Master Plan.**
- **Develop a Complete Streets level-of-service standard that includes pedestrians.**
- **Complete a comprehensive review of existing Pedestrian Plans, Resolutions, Ordinances, or related documents to identify current planning and policies related to pedestrians.**
- **Improve standards of accommodation of pedestrians in the transportation system.**
- **Encourage the creation of “pedestrian-scale” developments that emphasize street-fronts that favor ingress by foot, and by extension, by transit. Parking lots and driveways need not stand between the roadway sidewalk and the development, as is typical everywhere in Santa Fe but downtown.**
- **Promote pedestrian access to schools, parks, recreation centers, and transit/rail services within the MPO area.**
- **Establish an area-wide Safe Routes to Schools (SRTS) program in coordination with the Santa Fe Public Schools, NMDOT, the City and County.**

**Table 6-4. Regional Pedestrian System Priority Projects (Prioritized)**

| Priority   | Project | Description | Regional Pedestrian System | Access for Bicycle and Pedestrian Users | Access to Transit | Safety for Pedestrians | Reduces Roadway Congestion | Community Support |
|--|---------|-------------|----------------------------|---|-------------------|------------------------|----------------------------|-------------------|
| <p><b>Regional Pedestrian Priorities will be established after completion of the Regional Pedestrian System Master Plan included in the MPO’s Unified Planning Work Program. After the Pedestrian Master Plan is completed, it will be incorporated into the MTP through an amendment. This table shows an example of the evaluation criteria used to establish pedestrian project priorities.</b></p> |         |             |                            |   |                   |                        |                            |                   |

## **6.7 Freight and Commerce System**

Other than “through” freight which travels on the area’s National Highway System routes, most of the regional freight movement is local deliveries in nature.

There are freight distribution centers being developed near the Santa Fe Airport. As such, it is important to recognize and preserve Airport Road as an important truck route.

The MPO will continue to coordinate with NMDOT, the trucking community, BNSF, and shortline railroads including Santa Fe Southern for intercity freight. An upcoming UPWP project is expected to include a study of the regional freight mobility system.

## **6.8 Aviation**

The master plan for Santa Fe Municipal Airport provides for the orderly use of existing airport facilities to enhance the safety of aircraft operations, maintain existing airfield and passenger terminal facilities, and support future aviation demand (should new levels of demand be experienced). The master plan includes provisions to ensure the long term viability and self-sufficiency of the airport by maximizing available areas at the airport for both aviation-related and commercial opportunities.

## **6.9 Financially Constrained MTP Project List**

Projects listed in the financial plan must be “fiscally constrained” or, based on a calculation of the amount of funding that can be “reasonably expected” during the time frame of the plan. According to 23 U.S.C. 450.104, financially constrained or fiscal constraint “means that the metropolitan transportation plan, TIP, and STIP includes sufficient financial information for demonstrating that projects in the metropolitan transportation plan, TIP, and STIP can be implemented using

committed, available, or reasonably available revenue sources, with reasonable assurance that the federally supported transportation system is being adequately operated and maintained.”

The financially constrained MTP project list and funding outlook are shown in Chapter 7, Financial Plan.

## **6.10 Recommended Next Steps**

Multi-modal usage still falls short of having a significant impact on traffic congestion primarily attributed to the dominant travel mode: the single occupant vehicle. With the expectation for reduced local, state and federal funding for the foreseeable future, it is important that the MPO follow up this MTP with planning efforts that lead to implementing Complete Streets and other initiatives discussed in this MTP.

In 2010, a redistribution of statewide planning funds has increased the share for Santa Fe and has given the MPO the opportunity to develop a work program for 2010-2012 that will focus on developing strategies to expand multi-modal usage, develop best practices for Complete Streets, and for master planned development for a safer and more accessible network for all users. Follow-up efforts after adoption of this MTP are discussed below.

## **Enhanced Regional Transit and Rail Study**

To follow up from recent regional transit planning efforts, an enhanced regional transit/rail study will be conducted which will identify strategies to integrate and enhance delivery of local and regional transit/rail service as well as to identify potential funding sources that are more reliable and secure to maintain quality and continuity of service.

Typically, federal transit funds are limited to specific programs or for capital investment or bus acquisition. Operations funding continues to be dependent on variable and uncertain gross receipts tax revenues.

### **Bikeways and Pedestrian Master Plans**

A Bikeways Master Plan to be developed in collaboration with the City and County is included in the MPO Unified Planning Work Program. The goal of the plan is to identify priorities for the development of a comprehensive bikeways network.

Likewise, a Pedestrian Master Plan is anticipated to incorporate previous plans and ongoing efforts to identify and mitigate hazards to pedestrian safety as well as promote walking as a healthy transportation option, specifically in coordination with the Santa Fe Prescription Trails program and in development of a local Safe Routes to Schools program.

### **Freight Mobility Study**

In conjunction with the Statewide Freight planning and State Rail Plan efforts, the MPO will continue to coordinate with NMDOT, the trucking community, BNSF, and shortline railroads including Santa Fe Southern for intercity freight. While these efforts are developing a comprehensive understanding of statewide highway and rail freight mobility, there is a need to develop a similar understanding of local and regional freight mobility and freight needs. A future UPWP project is expected to include a study of the regional freight mobility system.

### **Mapping and 2010 Census Data**

Developing and employing congestion management strategies, using ITS technologies, and mapping hazardous corridors and intersections are some of the mitigation activities planned to address and develop safety and security protocols to improve system operations and management.

The MPO also will be revising its Traffic Count Program and improving demographic data gathered from the 2010 Census. These data will be used to update and recalibrate the Santa Fe Travel Demand Model which should result in more accurate traffic pattern forecasts. Developing and employing congestion management strategies, using ITS technologies, and mapping hazardous corridors and intersections are some of the mitigation activities planned to address and develop safety and security protocols to improve system operations and management.

## 7.0 Financial Plan

Federal legislation requires that the MTP be “financially constrained”; in other words, the cost of building or implementing regional project priorities should be within what is reasonably expected to be available over a 25-year period. Regional project priorities for which funding has not been identified are included in the “Illustrative Project List” and make up the region’s funding shortfall.

In formulating the Financially-Constrained MTP project list, it should be noted that project priorities shown here are **regional transportation improvement priorities**, reflecting the metropolitan area’s top priorities to be implemented as part of the regional transportation system over the next 25 years. Projects on the financially constrained project list are implemented based on need and funding availability; the ratings shown in Chapter 6 are provided to demonstrate these projects meet MTP objectives, but are not intended to dictate the order in which projects are undertaken. Ranking and selection of projects for funding purposes is part of the **Transportation Improvement Program**, which is a 4-year “budget” for implementing the highest priority MTP projects.

Another requirement is that there is a priority given to maintenance and preservation of existing facilities. For this MTP, the financial analysis deducts operations, maintenance and administration “off the top”. What is shown in this chapter will be funding that is reasonably expected to be available for transportation improvements, including mobility, safety, and major rehabilitation.

For the first time, the MTP is planning for “year of expenditure” costs and revenues. In the past, both revenue and costs were held at current-year dollars; in other words, how much a project would cost, and how much revenue was expected, were all based

on a specific baseline year, such as 2005 for the 2005-2030 MTP. While useful as a planning tool to compare and balance transportation revenues and costs for the region’s priorities, this analysis fails to consider that transportation improvement costs have been increasing faster than revenue. Indeed, between 2005 and 2010, the construction cost index increased almost 25 percent, while “traditional” transportation revenues were flat.

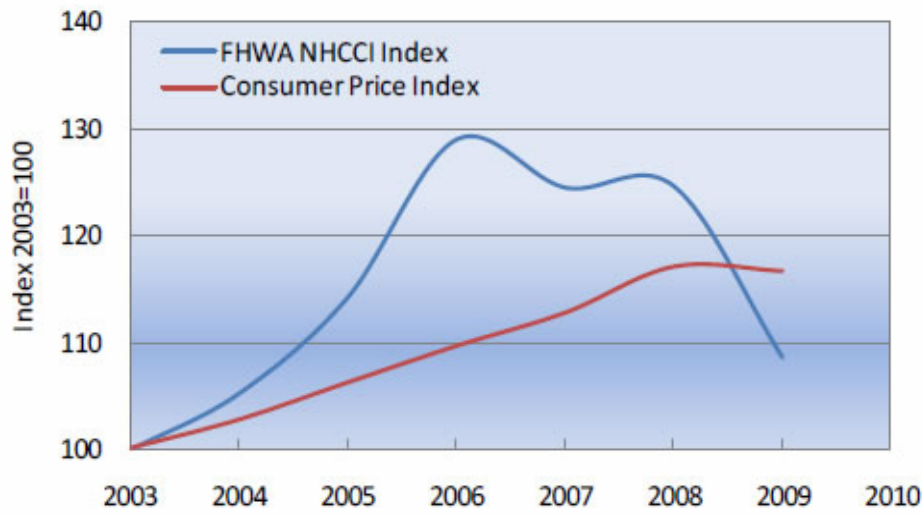
In projecting transportation improvement revenue, it was assumed that the projects and funding shown in the current 2010-2013 Transportation Improvement Program would reflect what the region reasonably expects to spend on transportation for the first four years of the MTP. From 2014 through 2035, a modest 1.5 percent annual revenue growth is assumed.

For transportation costs, FHWA’s “Highway Construction Price Trends and Consumer Price Index: 2003-2008” was used.<sup>22</sup> As shown in Figure 7-1 below, the construction cost index increased from 100 in 2003 to 125 in 2008, a 25 percent increase or approximately 5 percent per year increase in construction costs. Between 2008 and 2010, construction costs have generally declined due to the economic downturn resulting in extremely favorable construction bids. This trend is not expected to continue, and it is expected is that construction costs will increase again starting in 2011. Using the 2003-2008 trend, and allowing for continuing increases in the use of recycled or waste material in construction components, a conservative 4 percent per year escalation in construction cost estimates is assumed beginning in 2011.

<sup>22</sup>

[http://www.fhwa.dot.gov/policyinformation/pubs/pl10023/fig6\\_7.cfm](http://www.fhwa.dot.gov/policyinformation/pubs/pl10023/fig6_7.cfm).

**Figure 7-1. Construction Cost Index (FHWA)**



In preparing the Financial Plan, an approximate year-of-expenditure was estimated based on the priority rankings shown in Chapter 6, as well as the expected revenue stream. This will be shown in the Financially Constrained Project List in Table 7-2 below.

## 7.1 Financial Summary and Outlook

Projects listed in the financial plan must be “fiscally constrained” or, based on a calculation of the amount of funding that can be “reasonably expected” during the time frame of the plan. According to 23 U.S.C. 450.104, financially constrained or fiscal constraint “means that the metropolitan transportation plan, TIP, and STIP includes sufficient financial information for demonstrating that projects in the metropolitan transportation plan, TIP, and STIP can be implemented using committed, available, or reasonably available revenue sources, with reasonable assurance that the federally supported transportation system is being adequately operated and maintained.”

For the purposes of this financial plan the funding needs and priorities have been split into the major modal categories: Roadway System, transit (including local, regional and intercity), Bicycle and Pedestrian, and Freight/Intermodal. The funding sources

include those available through federal, state and local programs and taxing authority. Even before the national economic collapse of 2008-9 and subsequent state and local financial repercussions, the amount of available funding (federal, state and local) for the maintenance and improvement of the transportation system was struggling to keep up with the rate of inflation. At the same time, construction costs have risen substantially. Improvements to transportation network infrastructure are expensive and depend heavily on federal funding. The source of these federal transportation funds for roads, bridges, transit/rail, and bikeways comes from the Highway Trust Fund. Appropriations to each state will be determined through negotiations and enactment of a new transportation funding bill that will replace SAFETEA-LU. Until then, funding is being approved by continuing resolutions that create uncertainty in what is a reasonable expectation of future funding. That

uncertainty is compounded by the fact that transportation funding sources are so dependent on current economic conditions and motor fuel supply.

As vehicles have become more fuel efficient and people have cut back on their driving, primarily due to the rises in fuel prices, revenues generated from this source have declined. The federal Highway Trust Fund comes from taxes on fuel and heavy vehicle fees and taxes. Since 2005, the taxes on fuel are based on a fixed 18.4 cents for gasoline and 24.4 cents for diesel. With the decline in federal tax revenues, less funding is available to the states for road network improvement and transit support when adjusted for inflation. This MTP makes some conservative assumptions for small increases in federal funding achieved through future Surface Transportation Reauthorization acts.

Many of those people who cut back on driving turn to alternative transportation modes such as ride-sharing, biking, and transit. The reality is that transit is vulnerable to service cuts due to being revenue-dependent on gross receipts taxes that are generated from sales volumes. Investing in the improvement and maintenance the alternative transportation facilities is especially important during those times of high fuel prices when demand for transportation options rises.

State funding sources primarily come from gasoline taxes, vehicle registration fees, and other transport related fees. These funds are apportioned through the state legislative process and are not dedicated exclusively to state transportation needs.

### **Major Roadway System**

Funding for MPO major infrastructure improvements, enhanced system operations, as well as ongoing maintenance programs is largely dependent on federal

funding and NMDOT districts' allocations. There is a reasonable expectation of about \$7.5 million per year for Surface Transportation Program projects within the MPO Planning Area according to NMDOT District 5. Of this amount about \$400,000 would be available for Transportation Enhancement projects such as bikeways and pedestrian facilities. Projects related to improvements on the National and State Highway Systems generally take precedence over local agency-lead projects. Those projects will most likely require some or all funding from other sources such as impact fees, capital improvement programs, and general obligation bonds. Many of the roads shown on the MPO Future Roadway System map will be developer-lead and built on a time line determined by market conditions, others will be public-lead but may need contributing partners to ensure timely construction of roads.

The main federal funding sources available in the Santa Fe MPO Planning Area for construction and maintenance of federal aid roadways are (pending Surface Transportation Act Reauthorization):

- National Highway System (NHS) – Funds used to construct and maintain urban and rural roads designated as part of the National Highway System. (I-25 and US 84/285)
- Surface Transportation Program (STP) – Funds that can be utilized for the construction and maintenance of all Federal-Aid roadways, NHS roadways and bridge projects. This is the most flexible of the federal funding sources.
- Highway Bridge Program – funding to replace or rehabilitate deficient highway bridges and to perform preventative maintenance
- Transportation Enhancements (TPE) - Used for construction of bicycle and pedestrian facilities and safety improvements. Other eligible projects include environmental impact

remediation to preserve roadways; rail to trail development; and restoration of historic railroad facilities.

- Highway Safety Improvement Program (HSIP) – Funds used for safety improvements on roadways and at intersections; to mitigate hazardous locations for motorists, bicyclists, and pedestrians.
- High Priority Projects Program (HPP) – Designated funding through each state’s Congressional Delegation for specific projects identified in SAFETEA-LU.

The local funding sources include the following:

- Capital Improvements Program (C.I.P.) Bonds - The City sells revenue bonds pledged with local Gross Receipts Taxes. From these, approximately \$18 million is generated every 2 years. The C.I.P. bonds are used to undertake projects such as building roads, parks, and other necessary improvements to the City.
- City of Santa Fe Impact Fees: Development impact fees are assessed when building permits are obtained for residential, commercial and industrial developments. Impact Fees are regulated by city code and can be used for transportation infrastructure and or traffic improvements. The 6-year total collected from 2004 through 2009 was about \$7.5 million.
- Gross Receipts Tax Capital Outlay For Joint Regional Projects –The City/County Joint Powers Agreement calls for the adoption of a five-year Capital Improvements Program, which includes regional road projects that the City and County expect to jointly undertake over the next five years. a ¼ of one percent County capital outlay gross receipts tax for

the expressed purpose of creating a sustainable water supply, improving the safety of roads, and preserving and protecting open space. Originally at 5% the amount available was cut to 2% in 2007.

- Special Assessment Districts: Assessment districts can be used for generating revenue for transportation improvements. The property owners within the designated district will pay a fee to be used on a specific type of improvement that serves the district.

During the development of this MTP, input from state and local agencies indicates that, based on the current and short-term funding outlook, agencies will not be able to provide more than the required minimum matching funds to federally-funded projects.

### **Transit**

Transit systems have both capital costs (i.e. new buses, bus shelters, transit center, etc.) and operating costs (i.e. employee salaries, fuel costs, etc.). The federal government has traditionally provided much of the funding for capital costs (approximately 80%), while local governments have been responsible for most operating costs (approaching 90%).

Santa Fe Trails will spend about \$8.15 million in FY 2011 to operate both fixed route and para-transit services. Capital expenditures vary greatly from year to year depending on capital needs. The \$8.15 million in revenue for operating expenditures will include nearly \$5.5 million (67%) from the City, mostly from a ¼% ‘quality of life’ tax increment on the GRT. The federal government will contribute nearly \$1.64 million (20%). Passenger fares accounted for \$543,000 or about 7% of the total revenue. The 1/8% Gross Receipts ‘transit’ tax share to the City of Santa Fe in 2009 was about \$1 million. (see NCRTD below).

Santa Fe Ride currently operates on a budget of approximately \$1,000,000 annually. The service is contracted with

private transportation providers and one-way charges are \$2 for ADA eligible riders and \$5 for seniors. It is anticipated that operating costs will continue to increase by as much as 5% annually. However, capital costs will increase much more rapidly in the next few years, as the need to buy or lease new buses and retire current buses becomes a necessity.

**New Mexico DOT Park and Ride:** The NMDOT operates the statewide Park and Ride program with an annual budget of \$6.5 million. Federal revenue source from the FTA Section 5311 will be \$267,000 (in FY2009 it was \$550,000). The rest of the operating funds come from the state road fund, fare box recovery, and from advertising revenue.

**North Central Regional Transit District:** Funding comes primarily from a 1/8% Gross Receipts 'transit' tax passed in 2008 and collected from the 4 counties within the District which totaled about \$8.5 million. The operating budget for 2009-2010 included \$1.4 million in federal grants. GRT collected in Santa Fe County amounted to \$4.6 million of which 50% went to fund Rail Runner Express operations and 86% of the remaining 50% went to the City of Santa Fe and Santa Fe County for transit services and Rail Runner connections. The 14% remainder (\$320,816) went to the NCRTD for administration and operations.

**Rail Runner Express:** There is a total length of 96.8 miles of Rail Runner track in operation with 14.8 miles located within the MPO Planning Area. This amounts to a 15.34% share of total operations cost of the Rail Runner Express service.

The table below represents the revenue sources and amounts for FY 2011. Preliminary numbers for FY12 show a 2% growth in expenses. It is important to note that FY11 is the last year CMAQ funds are available unless there is an extension from Congress. This anticipated loss of \$6.8

million from CMAQ funds will be difficult to replace and planning for alternate funding is currently a priority for the NMDOT.

## **Bikeways and Pedestrian System**

Bikeway priorities will be set during the development of the Bikeways Master Plan. In the past, trail and on-road improvements in Santa Fe have been primarily facilitated by specific capital outlays and bonds or as part of larger road or rail projects. NMDOT's District 5 has stated that the MPO can reasonably expect to receive \$400,000 per year in federal Transportation Enhancements (TE) funds for the life of the plan, starting in 2014. These funds can be used for bicycle-pedestrian facilities in general, for rail trails in particular, and for bicycle and pedestrian safety education, among other qualifying activities. (A 25% local match is required by NMDOT.) The City has already allocated its Parks Bond funding and currently does not have a defined source of future trail funding in place. The MPO will work with local partners to identify new funding sources, and particularly recurring funding sources, to support the continued construction and maintenance of bikeways in the MPO area.

Table 7-1 shows the overall expected transportation project revenues expected between 2010 and 2035.

## 7.2 Fiscally Constrained Plan Projects

For the purposes of this financial plan the funding needs and priorities have been split into modal categories; Regional Roadway System; Transit (including bus and intercity passenger rail); and Bicycle/Pedestrian.

At this time, only the Regional Roadway project financially constrained list has been extended for the duration of the 25-year plan. Transit, bikeways and pedestrian priorities lists, other than for projects already included in the 2010-2013 Transportation Improvement Program, will be developed as a result of modal plans which will be undertaken in the next two years via the Unified Planning Work Program. Upon completion, priority project lists will be incorporated via amendments to the MTP.

The funding sources include those available through federal, state and local programs and taxing authority. Even before the national economic collapse of 2008-9 and subsequent state and local financial repercussions, the amount of available funding (federal, state and local) for the maintenance and improvement of the transportation system was struggling to keep up with the rate of inflation. At the same time, construction costs have risen substantially.

Improvements to transportation network infrastructure are expensive and depend heavily on federal funding. The source of these federal transportation funds for roads, bridges, transit/rail, and bikeways comes from the Highway Trust Fund. Appropriations to each state will be determined through negotiations and enactment of a new transportation funding bill that will replace SAFETEA-LU. Until then, funding is being approved by continuing resolutions that create uncertainty in what is a reasonable expectation of future funding. That uncertainty is compounded by the fact that transportation funding sources are so dependent on current economic conditions

and motor fuel supply. As vehicles have become more fuel efficient and people have cut back on their driving, primarily due to the rises in fuel prices, revenues generated from this source have declined. The federal Highway Trust Fund comes from taxes on fuel and heavy vehicle fees and taxes.

Since 2005, the taxes on fuel are based on a fixed 18.4 cents for gasoline and 24.4 cents for diesel. With the decline in federal tax revenues, less funding is available to the states for road network improvement and transit support. Many of those people who cut back on driving turn to alternative transportation modes such as ride-sharing, biking, and transit. The reality is that transit is vulnerable to service cuts due to being revenue-dependent on gross receipts taxes that are generated from sales volumes. Investing in the improvement and maintenance the alternative transportation facilities is especially important during those times of high fuel prices when demand for transportation options rises.

The estimated local share of total project cost depends on the type of each project. For example, no local match is required for interchange construction; whereas a 14.56% local match is required for off-State system road reconstruction. The portion of financial resources for road construction and other road improvement projects represents 33% of all financial resources planned for the Santa Fe MPO transportation network during the next 5 years.

The list of regional project priorities exceeds the funding available between 2010 and 2035. If funding were available, these projects would be included in the financially constrained MTP project list. This list of priorities, called the Illustrative Plan, indicates the region faces a shortfall exceeding \$163 million shortfall over the 25 years of the MTP. The Illustrative Project List is shown in Table 7-3.

**Table 7-1. Capital Funding Projections (\$Millions)**

| Source                                       | 2010-2013<br>(TIP) | 2014-2020     | 2021-2035      | Total          |
|--|--------------------|---------------|----------------|----------------|
| <b>Regional Roadways</b>                     |                    |               |                |                |
| Federal STP                                  | \$ 8.7             | \$52.0        | \$121.7        | \$182.4        |
| Federal Bridge Replacement                   | \$ 6.0             | \$ 3.7        | \$ 8.6         | \$ 18.3        |
| State/City/County Match                      | \$ 5.7             | \$ 9.2        | \$ 21.5        | \$ 36.4        |
| TIP Local/Other                              | \$19.9             | \$ 0.0        | \$ 0.0         | \$ 19.9        |
| <b>TOTAL REGIONAL ROADWAYS</b>               | <b>\$40.3</b>      | <b>\$64.9</b> | <b>\$151.8</b> | <b>\$257.0</b> |
| <b>Transit and Rail</b>                      |                    |               |                |                |
| Federal                                      | \$21.6             | \$0.5         | \$1.2          | \$23.3         |
| State  | \$13.2             | \$1.0         | \$2.4          | \$16.6         |
| Local  | \$25.1             | \$2.9         | \$6.9          | \$34.9         |
| <b>TOTAL TRANSIT</b>                         | <b>\$59.9</b>      | <b>\$3.4</b>  | <b>\$8.1</b>   | <b>\$71.4</b>  |
| <b>Bikeways and Pedestrian Facilities</b>    |                    |               |                |                |
| Federal (Enhancement)                        | \$0.5              | \$2.9         | \$6.9          | \$10.3         |
| Local/State                                  | \$0.1              | \$0.7         | \$1.7          | \$ 2.5         |
| <b>TOTAL BIKEWAYS/ PEDESTRIAN FACILITIES</b> | <b>\$0.6</b>       | <b>\$3.6</b>  | <b>\$8.6</b>   | <b>\$12.8</b>  |

**Table 7-2. Future MTP Financially Constrained Plan – By Mode**

\*Denotes project which is in progress as of publication of this MTP

| Priority                 | Project  | Description   | Agency                 | Estimated Cost (YOE) | Approximate MTP Timeline |
|--------------------------|--|---|------------------------|----------------------|--------------------------|
| <b>Regional Roadways</b> |  |   |                        |                      |                          |
| TIP                      | NM14, Cerrillos Road*                                      | Reconstruction Phase IIB  | City of Santa Fe       | \$6,500,000          | 2010-2013 TIP            |
| TIP                      | Agua Fria Street Reconstruction*                           | Reconstruction  | Santa Fe County        | \$1,500,000          | 2010-2013 TIP            |
| TIP                      | Siler Rd. Extension*                                       | New construction & bridge construction  | City/County            | \$ 5,625,077         | 2010-2013 TIP            |
| TIP                      | NM599/Jaguar Drive Interchange and Extension of Jaguar Dr. | East to Tierra Contenta and West to Aviation Drive  | City of Santa Fe       | \$ 9,593,000         | 2010-2013 TIP            |
| TIP                      | Airport Road Safety Improvements                           | Hazard Elimination: Installation of Median Curb   | City of Santa Fe       | \$750,000            | 2010-2013 TIP            |
| TIP                      | Airport Road Safety Improvements*                          | Pedestrian Safety   | City of Santa Fe       | \$120,500            | 2010-2013 TIP            |
| TIP                      | I-25 at St Francis & Cerrillos Interchanges                | Interchange Imprvmt: Bridge Replacement/ Rehabilitation   | NMDOT                  | \$ 7,500,000         | 2010-2013 TIP            |
| TIP                      | South Meadows Road Construction*                           | Acquire land, Plan, Construct Bridge, Paving and utilities  | Santa Fe County        | \$ 4 ,500,000        | 2010-2013 TIP            |
| TIP                      | Acequia Trail/Railyard Pedestrian Bridge                   | New Construction  |                        | \$ 2,750,000         | 2010-2013 TIP            |
| Short Term               | St Francis Dr/St Michaels Dr Interchange Improvements      | Reconfiguration of Interchange and improve pedestrian and bicycle facilities  | NMDOT/City of Santa Fe | \$3,796,000          | 2014-2020                |
| Short Term               | I-25: Interim Safety Improvements                          | Various interim Improvements to Interchanges plus installation of emergency safety gates at median crossings, addition of lighting and reconfiguration of Cerrillos Rd/Beckner Intersection | NMDOT                  | \$3,036,800          | 2014-2020                |

| Priority          | Project   | Description  | Agency                 | Estimated Cost (YOE) | Approximate MTP Timeline |
|-------------------|---|--|------------------------|----------------------|--------------------------|
| Short Term        | NM599: County Road 62 Interchange   | Construction of a New Interchange  | NMDOT                  | \$8,224,600          | 2014-2020                |
| Short Term        | St Francis Dr: Guadalupe Interchange Improvements/ Auxiliary Lane           | Construction of a SB Auxiliary lane from NM599 to Guadalupe Exit.  | NMDOT/City of Santa Fe | \$1,518,400          | 2014-2020                |
| Short Term        | Cerrillos Rd: Reconstruction (Camino Carlos Rey to St Michaels Dr)          | Reconstruction to add medians, drainage, bike lanes, sidewalks and transit facilities  | City of Santa Fe       | \$14,551,200         | 2014-2020                |
| Short Term        | St Francis Dr: Pedestrian Intersection Improvements                         | Pedestrian improvements at all the intersections along St Francis Drive  | NMDOT/City of Santa Fe | \$759,200            | 2014-2020                |
| Short Term        | NM599 Frontage Road: extension and bridge across SF River                   | Construct a bridge over Santa Fe River and upgrade roadway on south side to Airport Road   | NMDOT                  | \$5,544,900          | 2014-2020                |
| Short Term        | North-East Connector  | Upgrade of Rabbit Rd between St. Francis and Oshara; Construction of new road connection to Richards @Dinosaur Tr.   | Santa Fe County        | \$6,326,600          | 2014-2020                |
| Short Term        | Downtown Santa Fe River Bridges: Rehabilitation or Replacement of 5 bridges | Defouri St, Guadalupe St, Galisteo , Don Gaspar, Old Santa Fe Tr, Paseo de Peralta   | City of Santa Fe       | \$7,591,900          | 2014-2020                |
| Short/Medium Term | Richards Avenue: Extension (Rodeo to Cerrillos)                             | Construction of a new section of roadway from Rodeo Road to Cerrillos Road   | City of Santa Fe       | \$4,402,800          | 2021-2025                |
| Short/Medium Term | NM599: I-25 Frontage Road Overpass  | Construction of an overpass to carry the North Frontage Road over NM599. Reconfigure existing Frontage Road at grade intersection with NM599 to right in/right out only. | NMDOT                  | \$9,606,200          | 2021-2025                |

| Priority                      | Project   | Description   | Agency                    | Estimated Cost (YOE) | Approximate MTP Timeline |
|-------------------------------|---|---|---------------------------|----------------------|--------------------------|
| Short/<br>Medium<br>Term      | Avenida Del Sur:<br>Extension   | Construction of a new road and upgrade of existing roadway from NM14 to A Van Nu Po   | Santa Fe<br>County        | \$4,002,600          | 2021-2025                |
| Short/<br>Medium<br>Term      | Cerrillos Rd:<br>Reconstruction (St<br>Michaels Drive to St<br>Francis Dr.) | Reconstruction to add medians, drainage, bike lanes, sidewalks and transit facilities   | City of Santa Fe          | \$19,212,400         | 2021-2025                |
| Short/<br>Medium<br>Term      | St Francis Dr:<br>Guadalupe Interchange<br>Improvements/<br>Auxiliary Lane  | Reconstruction of the interchange and bridge to either keep existing left hand exit or construct new right hand exit. Construction of a SB Auxiliary lane from NM599 to Guadalupe Exit. | NMDOT/City of<br>Santa Fe | \$16,834,900         | 2021-2025                |
| Short/<br>Medium<br>Term      | NM599: County Road 70<br>Interchange  | Construction of a New Interchange   | NMDOT                     | \$12,808,300         | 2021-2025                |
| Short/<br>Medium<br>Term      | South-East Connector  | Construction of a new road between NE Connector (Rabbit Road) and Windmill Ridge  | Santa Fe<br>County        | \$8,005,200          | 2021-2025                |
| Medium<br>Term                | NM599: Airport Road<br>Interchange  | Construction of a New Interchange   | NMDOT                     | \$19,810,400         | 2025-2035                |
| Medium<br>Term                | I-25: NM466 Interchange<br>Improvements                                     | Reconfiguration of Interchange and Ramp lengthening   | NMDOT                     | \$12,966,800         | 2025-2035                |
| Medium<br>Term                | I-25: St Francis Dr:<br>Interchange<br>Improvements                         | Reconfiguration of Interchange and Ramp lengthening   | NMDOT                     | \$14,947,800         | 2025-2035                |
| Medium<br>Term                | I-25: NM599 Interchange<br>Ramp Improvements                                | Lengthening of On and Off Ramps   | NMDOT                     | \$4,502,400          | 2030-2035                |
| <b>ROADWAY PROJECTS TOTAL</b> |   |   |                           | <b>\$258,000,000</b> |                          |

| Priority   | Project                                       | Description  | Agency                            | Estimated Cost (YOE) | Approximate MTP Timeline |
|--|---|--|-----------------------------------|----------------------|--------------------------|
| <b>Transit Projects</b>  |   |  |                                   |                      |                          |
| TIP  | Rail Runner Station Development               | Environmental Study; Preliminary Design  | NMDOT and MRCOG                   | \$ 500,000           | 2010-2013 TIP            |
| TIP  | Santa Fe Ridefinders                          | Regional Ridesharing Program   | City of Santa Fe/ Santa Fe Trails | \$ 479,300           | 2010-2013 TIP            |
| TIP  | Santa Fe Rail Yard Multi-Modal Transit Center | Build intermodal passenger facility  |                                   | \$ 2,500,000         | 2010-2013 TIP            |
| <b>The remainder of Transit Improvement Projects will be included in an MTP Amendment upon completion of Regional Transit Priorities Study (UPWP Effort)</b>                             |   |  |                                   |                      |                          |
| <b>Bikeways, Pedestrian and Enhancement Projects</b>   |   |  |                                   |                      |                          |
| TIP  | Museum Hill Historic Preservation             | Preservation of historic site  | NMDOT                             | \$ 323,000           | 2010-2013 TIP            |
| TIP  | Santa Fe Rail Trail                           | Construct Multi-Use Trail and Trail Facilities, Rabbit Rd. south to access Community College or Eldorado |                                   | \$ 201,000           | 2010-2013 TIP            |
| TIP  | NM Central Railroad Trail                     | I-25 to Avenida Eldorado Multi-use trail   | Santa Fe County                   | \$ 100,000           | 2010-2013 TIP            |
| <b>The remainder of Bikeways and Pedestrian Improvement Projects will be included in an MTP Amendment upon completion of Regional Bikeways and Pedestrian Master Plans (UPWP Effort)</b> |   |  |                                   |                      |                          |

**Table 7-3. Illustrative Project Needs List**

| <b>Project</b>  | <b>Description</b>  | <b>Agency</b>   | <b>Estimated Cost (YOE &gt;2035)</b> | <b>Modal Category</b>   |
|---|---|-----------------|--------------------------------------|-------------------------|
| <b>I-25: Auxiliary Lanes: St Francis to NM466</b>                       | Construction of third lane in each direction between interchanges   | NMDOT           | \$4,051,600                          | Regional Roadway System |
| <b>I-25: Auxiliary Lanes: NM599 to Cerrillos</b>                        | Construction of third lane in each direction between interchanges   | NMDOT           | \$7,203,800                          | Regional Roadway System |
| <b>NM 599: Camino de los Montoyas Interchange w/ Frontage Road</b>      | Construction of a New Interchange   | NMDOT           | \$19,900,400                         | Regional Roadway System |
| <b>I-25: Cerillos Rd Interchange Improvements</b>                       | Reconfiguration of Interchange and Ramp lengthening   | NMDOT           | \$31,516,500                         | Regional Roadway System |
| <b>I-25/Richards Ave Interchange</b>                                    | Construction of a New Interchange   | NMDOT           | \$50,645,400                         | Regional Roadway System |
| <b>I-25 Auxiliary Lanes: Cerrillos to St Francis</b>                    | Construction of third lane in each direction between interchanges   | NMDOT           | \$34,438,900                         | Regional Roadway System |
| <b>County Road 62: Realignment and Improvements</b>                     | NM599 to Caja del Rio   | Santa Fe County | \$7,394,100                          | Regional Roadway System |
| <b>New County Road Connection: between Caja de Rio and Airport Road</b> | Construction of a new roadway from Caja del Rio to Santa Fe River, including low water crossing. Private Developer to complete road to Airport Rd | Santa Fe County | \$7,394,100                          | Regional Roadway System |
| <b>TOTAL</b>  |   |                 | <b>\$163,544,800</b>                 |                         |

### 7.3 Illustrative Plan Funding Options

The MPO will continue to look for new and innovative funding sources that could be used to fund projects on this list. We will continue to track the federal Transportation Reauthorization and also will pursue stimulus or TIGER grant opportunities when they arise.

The region will continue to track the federal Transportation Reauthorization and also will pursue stimulus or TIGER grant opportunities when they arise.

Some innovative funding and financing discussion will be included here including:

**Public/private partnerships**, or PPP, are contractual agreements formed between a public agency and a private sector entity for transportation improvements that benefit both parties. PPPs encourage and allow for greater private sector participation in transportation financing and project delivery, and at times influences a public agency's decision on project priorities due to the ability to leverage private investment. An example includes corridors where development has set aside funds for their share of required improvements (known as frontage improvements), and the public agency matches these funds with their own to complete improvements along the corridor<sup>23</sup>.

**Tax-increment financing**, or "value capture", is a mechanism which finances improvements via bonds sold by a special taxing district, based on the cost of infrastructure being paid for by properties that are deemed to benefit from the infrastructure. By benefiting properties via transportation improvements, the idea behind tax increment financing is that the improvement bonds are repaid with dedicated revenues from the incremental increase in property taxes as a result of such improvements (and increase in

property value due to the improvements). New Mexico does allow for tax increment financing.

**FREIGHT Act of 2010.** Introduced in July 2010 by Senators Frank R. Lautenberg (D-NJ), Patty Murray (D-WA), and Maria Cantwell (D-WA), this legislation would establish a freight transportation policy for the nation's transportation system, similar to efforts now underway to establish a National Rail Plan. The legislation directs the US DOT to develop and implement a strategic plan to improve the nation's freight transportation system and provide investment in freight transportation projects. Goals of the Act include "reducing congestion and delays, increasing the timely delivery of goods and services, reducing freight-related transportation fatalities, and making freight transportation more efficient and better for the environment<sup>24</sup>". If enacted, it is anticipated that a new freight funding category would be established which could provide some funding for major freight corridor projects including I-25 in the Santa Fe area.

**Federal:** there are several federal loan and credit programs available. The Transportation Infrastructure Finance and Innovation Act (TIFIA) program, according to FHWA<sup>25</sup>, provides Federal credit assistance financing for surface transportation projects in the form of direct loans, loan guarantees, and standby lines of credit. Projects must be of national and regional significance (in other words, included on the Metropolitan Transportation system map). TIFIA financing is generally at more favorable interest rates than can be found in private capital markets, and highway, transit, railroad, intermodal freight, and port access projects are eligible for assistance. Each dollar of Federal funds can provide up to \$10 in TIFIA credit

<sup>23</sup> <http://www.fhwa.dot.gov/ipd/index.htm>

<sup>24</sup> <http://lautenberg.senate.gov/assets/FREIGHT.pdf>

<sup>25</sup> <http://www.fhwa.dot.gov/ipd/tifia/>

assistance - and leverage \$30 in transportation infrastructure investment.

For improvements on the freight rail system (which may in turn benefit the state's and region's passenger rail system), the Railroad Rehabilitation & Improvement Financing (RRIF) Program, initially established under TEA-21 and continued under SAFETEA-LU, provides direct federal loans and loan guarantees to finance development of railroad infrastructure<sup>26</sup>. Under this program the FRA Administrator is authorized to provide direct loans and loan guarantees up to \$35 billion, up to \$7 billion of which is reserved for projects benefiting freight railroads other than Class I carriers (regional and shortline railroads would be eligible). Funding can be applied to track and equipment, intermodal facilities, bridges, buildings and shops, and rail yards.

A number of other innovative federal financing programs are available but may require state authorization and approval.

**House Memorial 35** is an initiative to increase funding for state transportation infrastructure needs; so far without success. Recommendations from the HM35 process included short and long term funding options, public awareness, forging partnerships, and finding new transportation revenues for projects. The findings of the study, known as HM 35 generally found that revenues from transportation sources are being redirected away from transportation investment. The study estimates that if all transportation sector revenues were available to the transportation system that an additional \$169 million would be available statewide. This initiative, however, is so far without success.

New Mexico does allow for local option sales taxes to be initiated, via referendum, which could be used to finance transportation improvements.

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<sup>26</sup> <http://www.fra.dot.gov/Pages/177.shtml>

## 8.0 Certifications

This Chapter is a summary of an overall environmental review of the MTP as well as a certification statement indicating compliance with state and federal planning factors and principles, consistency with local and state plans.

### 8.1 Environmental Review

The Santa Fe MPO Planning Area is in attainment for all Federally-regulated pollutants referred to as criteria pollutants, which are carbon monoxide (CO), ozone (O3), sulfur dioxide (SO2), nitrogen dioxide (NO2), coarse particulate matter (PM10), fine particulate matter (PM2.5) and lead (Pb). At this time there are no indications that Santa Fe will reach any of the thresholds for pollutants in the near future and therefore, is not in danger of becoming a non attainment area. A non attainment designation would result in more stringent requirement on the MPO. Regardless, of this attainment status the MPO will continue in its planning efforts to minimize pollution from transportation sources through reductions in congestion and encouragement of use of alternative forms of transportation.

As the MTP projects are planned, designed and implemented, the MPO will work with project sponsors to ensure that Sustainable Transportation elements are incorporated into each regional project. The objective is to reduce the regional transportation system's contribution to Greenhouse gases by reducing the reliance on the single-occupant vehicle, decreasing per-capita vehicle miles traveled, and reducing energy consumption.

### 8.2 Consistency with Other Plans and Programs

This MTP is consistent with the NMDOT Multimodal Transportation Plan, as well as

City of Santa Fe and Santa Fe County Plans.

As the basis of the upcoming Transit Priorities Plan effort will be to utilize transit operating plans from Santa Fe Trails, NCRTD, and RPA as input, the expectation is that the resultant Transit Priorities Plan, and future amendment to this MTP, will be consistent with the individual transit plans.

### 8.3 Summary of Compliance with Planning Provisions

As mentioned in Chapter 5, the federal requirement for the Santa Fe MPO is to develop a metropolitan transportation plan through a comprehensive, cooperative, and continuous planning process that results in an efficient and reliable transportation system that provides and promotes:

- Safety for all users;
- System connectivity;
- Multi-modal facilities and usage;
- Integrated, efficient, and affordable transit/rail services;
- “Complete Streets”; and
- Quality built and well maintained transportation facilities.

Regional Roadway System priority projects were rated using criteria that support these objectives, and it is expected that Transit, Bikeway and Pedestrian project priorities which evolve from the upcoming planning efforts will be rated using similar criteria.

The MTP 2010-2035 Update has been developed through a cooperative process between the MPO and NMDOT, the City of

Santa Fe, Santa Fe County, and its transit operators. The public was invited to offer up project needs as well as comments on the draft MTP before its adoption.

As noted in the Chapter 4 (Sustainable Transportation Toolkit) and MTP Emphasis Areas and project priorities contained in Chapters 5 and 6, this MTP stresses using sustainable construction and operation techniques to build an interconnected and multimodal Complete Streets transportation system. It also encourages land development and redevelopment patterns that encourage walking, bicycling, and transit use.

In summary, this MTP is consistent with federal and state planning factors and livability principles.

## Acronyms and Glossary of Terms

- AASHTO American Association of State Highway and Transportation Officials
- ATAC Anti-Terrorism Advisory Council
- BBER Bureau of Business and Economic Research
- BPE Bicycle, Pedestrian and Equestrian
- CFR Code of Federal Regulations
- COG Council of Governments
- CSS Context Sensitive Solutions
- CTP Community Transportation Plans
- DOD Department of Defense
- DOT Department of Transportation
- EDD Economic Development District
- FAA Federal Aviation Administration
- FHWA Federal Highway Administration
- FTA Federal Transit Administration
- GIS Geographic Information System
- GRIP Governor Richardson's Investment Partnership
- GRT Gross Receipts Tax
- HM House Memorial
- HUD Housing and Urban Development
- ITS Intelligent Transportation System
- MPO Metropolitan Planning Organization
- MTMCTEA Military Traffic management Command Transportation Engineering Agency
- MTP Metropolitan Transportation Plan
- NHS National Highway System
- NMDOT New Mexico Department of Transportation
- NPRPO Northern Pueblos Regional Planning Organization
- NRGSHA Northern Rio Grande National Heritage Area
- PEL Planning/Environmental Linkage
- RPO Regional Planning Organization

- RTD Regional Transit District
- RTIPR Regional Transportation Improvement Recommendations
- SAFETEA-LU Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users
- SFMPO Santa Fe Metropolitan Planning Organization
- SRTS Safe Routes to School
- STIP Statewide Transportation Improvement Program
- STRAHNET Strategic Highway Network
- TDM Transportation Demand Management
- TIMS Transportation Information Management System
- TIP Transportation Improvement Program
- TOD Transit Oriented Design
- VMT Vehicle Miles Traveled
- US DOT United States Department of Transportation

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