

PLAN VISION GOALS



Santa Fe MPO Metropolitan Transportation Plan 2015-2040

J U L Y 2 0 1 5
P U B L I C R E V I E W D R A F T





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List of Acronyms and Abbreviations

AAB	Airport Advisory Board
AT&SF	Atchison, Topeka and Santa Fe Railway
BMP	Bicycle Master Plan
BRT	bus rapid transit
CCD	Community College District
CFR	Code of Federal Regulations
CIP	Capital Improvements Program
CNG	compressed natural gas
CNT	Center for Neighborhood Technology
CSS	Context Sensitive Solutions
EA	environmental assessment
EIS	environmental impact statement
EPA	United States Environmental Protection Agency
GHG	greenhouse gas
GI	Green Infrastructure
HAWK	High-intensity Activated crossWalk
HHP	High Priority Projects
HPMS	Highway Performance Monitoring System
HSIP	Highway Safety Improvement Program
IMBA	International Mountain Bicycling Association
ITE	Institute of Transportation Engineers
ITS	Intelligent Transportation Systems
LAB	League of American Bicyclists
LID	Low-impact development
LOS	level of service
MAP-21	Moving Ahead for Progress in the 21 st Century Act
MPAC	Master Plan Advisory Committee
MPO	Metropolitan Planning Organization
MRCOG	Mid-Region Council of Governments
MRMPO	Mid-Region Metropolitan Planning Organization
MUTCD	Manual on Uniform Traffic Control Devices
MTP	Metropolitan Transportation Plan
NACTO	National Association of City Transportation Officials

NCHRP	National Cooperation Highway Research Program
NCRTD	North Central Regional Transit District
NHCCI	National Highway Construction Cost Index
NHS	National Highway System
NHTSA	National Highway Traffic Safety Administration
NMDOT	New Mexico Department of Transportation
NMRX	New Mexico Rail Runner Express
NMTP	New Mexico Transportation Plan
NPRPO	Northern Pueblos Regional Planning Organization
PMP	Pedestrian Master Plan
PTMP	Public Transit Master Plan
RPA	Regional Planning Authority
SAF	Santa Fe Municipal Airport
SFMPA	Santa Fe Metropolitan Planning Area
SGMP	Sustainable Growth Management Plan
SLDP	Sustainable Land Development Plan
STAHNET	Strategic Highway Network
STP	Surface Transportation Program
TAP	Transportation Alternatives Program
TCC	Technical Coordinating Council
TDM	Transportation Demand Management
TIP	Transportation Improvement Program
TSM	Transportation System Management
TWLTL	two-way left-turn lane
UPWP	Unified Planning Work Program
USDOT	United States Department of Transportation
V2V	Vehicle to Vehicle
VMT	vehicle miles traveled
WIPP	Waste Isolation Pilot Program



Chapter 1: It Matters

Chapter 1: It Matters

Value of Transportation



Transportation is a basic human need that affects our quality of life every day. Santa Fe metro residents use transportation for all of life's necessities and pleasures.

Nearly every life decision is impacted by our transportation options; from small decisions like “How will I get to the coffee shop this morning?” to major decisions like “How far away from my job do I want to live?” Our residents use transportation to get to work, school, medical facilities, recreational amenities, shopping, and other community and social activities.

PERSONAL MOBILITY

"Getting to jobs, getting to school, getting to the doctor...and connecting us to one another —we can't do any of it without good, affordable, safe transportation options."

-- Center for Social Inclusion

The Santa Fe Metropolitan Planning Organization (MPO) 2015–2040 Metropolitan Transportation Plan (MTP) integrates mode-specific master plans and three recent major corridor studies and addresses **pedestrian, bicycle, transit, rail, and road needs**.



The MTP is important because it guides investment of federal, state, and local transportation funds. It reflects **our community's vision** for the future transportation system, and it includes strategies, projects, and funding options to realize

A well-connected and efficient transportation network allows access to higher paying and varying job types, a wider selection of housing options, and more convenient health and human services. An integrated multimodal transportation system allows residents and visitors of our region the freedom of personal mobility and choice of how to travel—whether it's walking, biking, driving, carpooling, or riding public transportation.



An often overlooked but important aspect of transportation is the ability to transport goods. Infrastructure is essential to transport finished products

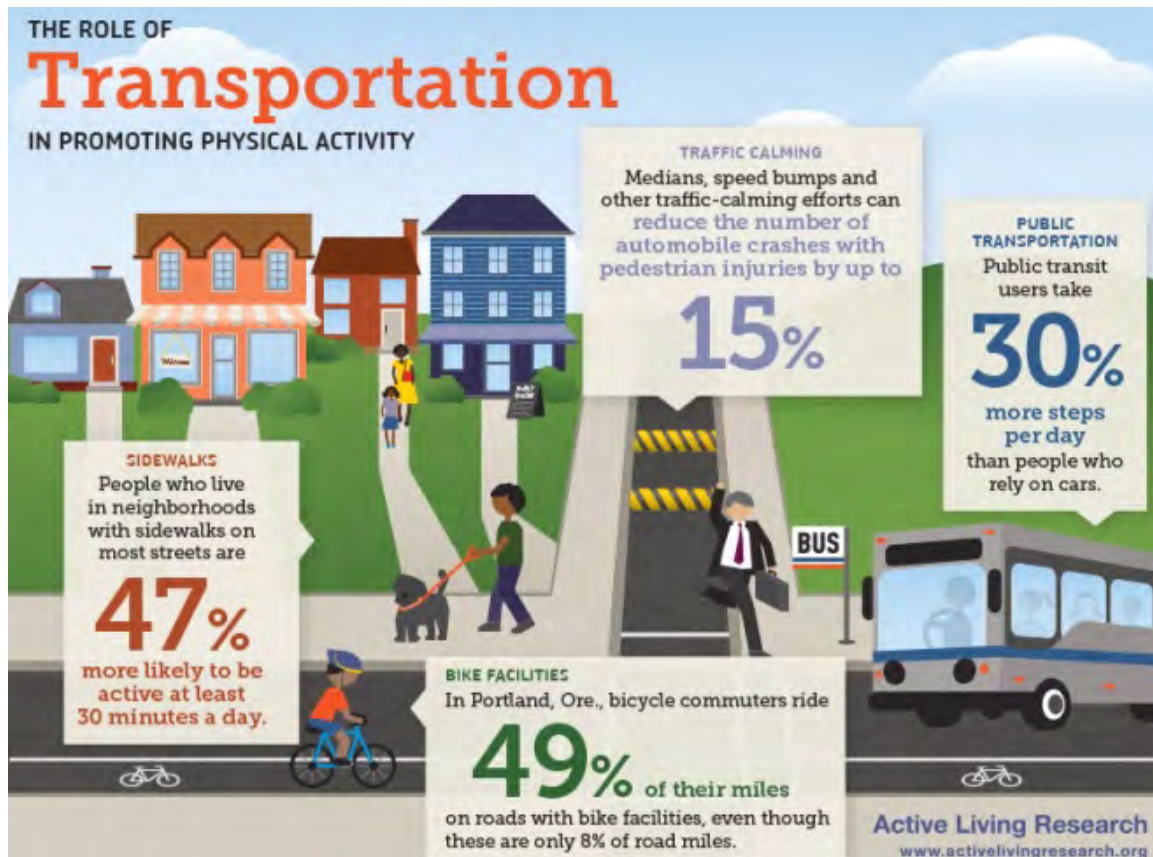
produced in the Santa Fe metro area like art, textiles, beer, and bicycle components and accessories to other markets; to bring goods into the region; and to transport local products to market. Distribution of goods impacts the local, regional, and national economy, and an efficient transportation network benefits the supply chain. In addition to finished products, raw materials must be transported and waste materials removed from where we live, work, and play. I-25, a major international freight route, passes through the region. NM 599 is a unique freight route funded and built specifically to haul hazardous waste to bypass the urbanized area.



There is a growing awareness across the United States, including Santa Fe metro, that transportation systems also impact quality of life and health. Over the last 60 years,

with the boom of the automobile and the growth of outlying suburbs, physical activity levels have declined. The decline in physical activity is a major contributor to the steady rise in rates of obesity, diabetes, heart disease, stroke, and other chronic health conditions in the U.S.¹ In 2012, more than 14 percent of kindergartners and about 21 percent of third graders in New Mexico were obese.²

Equally challenging, nearly 10 percent of low income families within the metro area live a mile or more from the nearest grocery store. Limited access to fresh, affordable foods contributes to the growing rate of obesity.³



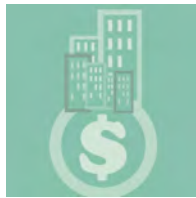
Source: U.S. Department of Transportation

¹ U.S. Centers for Disease Control, <http://www.cdc.gov/transportation/default.htm>.

² New Mexico Department of Health. "The Weight of Our Children," 2012.

³ Planning for Santa Fe's Food Future: Querencia – A Story of Food, Farming and Friends, Santa Fe Food Policy Council, October 2014.

Walkable, bikeable, transit-oriented communities are likely to have populations that are more physically active and have lower body weights; lower rates of traffic injuries; less air pollution; greater access to high-quality retail food sources; and improved mobility for non-drivers. A commitment to the availability and safety of alternative transportation modes will be critical to the future health of Santa Fe residents.



Increasingly, metropolitan areas that thrive economically have an extensive and expanding transportation network that includes integrated transit, biking, and walking facilities in addition to efficiently operated and maintained roads. Transportation infrastructure creates the opportunity for economic development because it can enhance

mobility and allow easier access to jobs, goods, and services.

THE RAILYARD

Santa Fe's Railyard is a premier example of investment in the transportation system (the New Mexico Rail Runner Express and Railyard Station) spurring economic development and a thriving commercial, tourist, and community activity center.



Promoting and safely accommodating bicycling and walking can lead to economic benefits; new facilities can lead to increases in recreational tourism; and the choice to bike or walk to work or for other utilitarian trips can result in decreased auto-related expense. Bicycle infrastructure, in particular, tends to attract a creative and highly educated

working class, which aligns well with Santa Fe's successful efforts to attract start-up and small businesses. Concurrently, strategically investing in bicycle, pedestrian, and public transit infrastructure throughout the transportation network provides affordable mobility options and enhances the socioeconomic resilience and safety of the metro area.



Santa Fe metro residents pay approximately 52 percent of their household income to cover the cost of their housing and transportation.⁴

This is about \$3,500 annually

more than what the Center for Neighborhood Technology (CNT) has identified as affordable. CNT's research indicates that these costs should remain below 45 percent of the household income to be affordable. The affordability index takes into account the cost of housing and the cost of transportation, the two largest expenses in most households.

GUADALUPE STREET

The planned extension of the successful Guadalupe Street road diet is an example of providing easier connections between land uses. It will enable people to more readily walk and bike safely along and across a high volume corridor on the edge of downtown Santa Fe to access homes and businesses and could result in reduced transportation costs for area residents.

Household transportation costs are highly correlated with urban environment characteristics. Housing that is not as readily accessible to employment, medical facilities and other activity centers increases household transportation costs. Considering both housing and transportation costs together is pushing planners, elected officials, and citizens to think more expansively about the impacts of land use and transportation planning on household affordability.

⁴ Center for Neighborhood Technology;
<http://www.cnt.org>

Emerging Trends

A number of emerging trends and technologies are beginning to affect transportation in the Santa Fe metro area and throughout the country. These trends can influence the demand for travel, travel patterns, mode choice, and route selection. Our region is committed to understanding these trends and staying abreast of how our transportation decisions and investments can adapt.



Over the last two decades, there has been a considerable shift in the perception of biking and walking as a safe and efficient mode of transportation.

Biking and walking continue to see an increase in mode share in the Santa Fe metro area, likely as a result of expanded infrastructure, increased awareness and concern about climate change, the positive health and wellness impacts of active transportation, and the potential time and money savings associated with the use of alternative modes.



Source: "Where we Ride – Analysis of bicycle commuting in American cities, Report on 2013 American Community Survey Data by the League of American Bicyclists," 2014.

Biking or walking to school in the metro area is a challenge because of safety concerns and the shift away from neighborhood elementary schools. Community schools like El Camino Real and Nina Otero are on the edge of the urban area and draw students from a broad geographic area—walking or biking to school is difficult because of longer distances from home

and the actual or perceived lack of safe routes to travel.

GONZALES COMMUNITY SCHOOL

The City of Santa Fe implemented a mid-block crossing of Alameda Street that has successfully encouraged students to safely bike and walk to Gonzales Community School. A new trail section is planned to link neighborhoods to the north to the school.

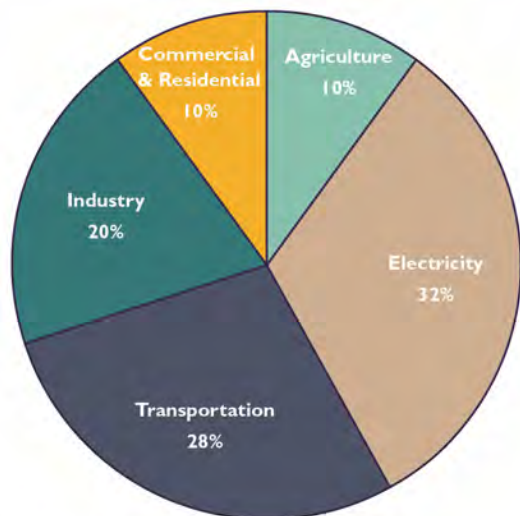
The U.S. Department of Transportation (USDOT) recently announced a new initiative to enhance pedestrian and bicycle safety. The Action Plan⁵ intends to make biking and walking a safe travel choice for Americans of all ages, income levels, and abilities. This national trend and support from the USDOT can be a catalyst for the Santa Fe metro area to improve biking and walking conditions. Encouraging active transportation at a young age creates a generation that embraces biking and walking as a form of transportation in years to come.



Almost all human activity has an impact on the environment, and transportation is no exception. After the electricity sector, transportation is the largest source of greenhouse gases (GHGs), as shown in **Figure 1-1**. Climate change is projected to increase the frequency and intensity of extreme weather events, which will likely impact roadways, vehicles, and railways, increasing the risk of damage, disruptions, and delays to the transportation system.

⁵ Safer People, Safer Streets: Summary of U.S. Department of Transportation Action Plan to Increase Walking and Biking and Reduce Pedestrian and Bicyclist Fatalities, September 2014.

Figure 1-1. 2012 Greenhouse Gas Emissions by Industry Sector



Source: United States Environmental Protection Agency

Climate change will continue to influence how communities plan for the future and will require that the transportation industry capitalize on existing GHG reduction strategies, such as increasing the availability and reliability of alternative modes, building the infrastructure necessary to make communities more bikeable and walkable, and zoning for mixed use areas so that jobs, housing, and amenities are closer to one another.

GHG EMISSIONS

U.S. public transit riders alone save over 7 million tons of CO₂ each year. Source: Center for Neighborhood Technology



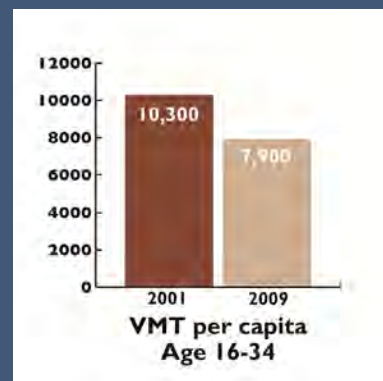
New Mexico's vehicle miles traveled (VMT) per capita decreased between 2007 and 2010 by about 3 percent annually but saw a slight increase in 2011. Similarly, VMT per capita in the United States has been consistently dropping since its peak in 2004 at just over 10,000 miles.⁶ These decreases have

⁶ FHWA Office of Highway Policy Information, <http://www.fhwa.dot.gov/policyinformation/quickfinddata/qftravel.cfm>

been, in part, attributed to the decrease in VMT and lower auto ownership rates by the Millennial generation and the increase in their preferred travel modes of walking, biking, and riding transit.

VMT PER CAPITA

Transportation planning must now consider the impact that the Millennials' preferences will have on the use of the existing transportation network and their demand for transit services and walkable communities.

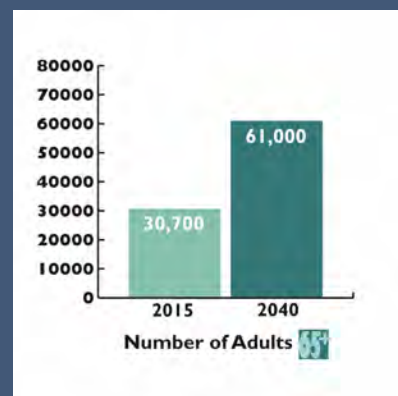


The number of older adults (age 65 and older) in the Santa Fe Metropolitan Statistical Area is expected to increase from 20 percent of

the population in 2015 to 33 percent of the population in 2040.⁷ Across the United States, older adults (age 65 and older) are putting more emphasis on how and where they choose to age. While many older adults want to "age in place," many are also now making purposeful decisions about where they want to spend their retirement years based on the availability of public

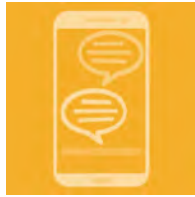
AGING POPULATION

The Santa Fe region needs to be ready for the impact the aging baby boomers will have on the larger transportation system and the shift in how and where this population is choosing to age.⁷



⁷ Geospatial and Population Studies, University of New Mexico, January 2015.

transportation and access to goods and services. When older adults are able to easily and safely access public transportation, they are able to continue to meet their basic needs such as medical appointments, shopping, and recreation without having to drive or rely on others.



Mobile technology continues to evolve at a rapid pace and has changed the way that people live, work, travel, and socialize. Since the first iPhone came out in 2008, the

iTunes app store has grown from a mere 800 apps to a staggering 1.3 million apps. Many of these apps allow tasks to be completed remotely, such as making bank deposits, ordering groceries, etc., which can reduce trip making. Many apps also focus on the way that

people move and travel such as to identify when the next bus/train will arrive (like the Santa Fe Trails app), the ability to schedule a ride share on Uber or Lyft, or the ability to reserve a bike through a bike share program.



In 2013, a Pew Research Survey found that 91 percent of American adults own a cell phone and 56 percent of adults own a smartphone. The availability of mobile data to all populations will be increasingly important as transportation strategies and options evolve. The surge in mobile technology use has created what is called a “Generation C,” a demographic that is “always clicking.” The Santa Fe MPO will need to consider the impacts of our ever mobile society and how the needs and desires of Generation C play into the development of the transportation system.



Vehicle to Vehicle (V2V) communication technology allows vehicles to “talk” to one another, uses data such as speed and location from nearby vehicles to assess risk

potential, and uses warning signals to avoid common crashes. This technology has the

potential to vastly improve the safety and capacity of our roadway system in years to come. The National Highway Traffic Safety Administration (NHTSA) is currently researching this technology. Their next steps include working on a regulatory proposal that would require V2V devices in vehicles. NHTSA believes that, in addition to making roadways safer, V2V could help drivers save fuel and time.



V2V technology may help New Mexico Department of Transportation (NMDOT) achieve its goal to reduce the number of traffic-related crashes, fatalities, and serious injuries. This technology also supports the USDOT’s goal to reduce traffic fatalities and serious injuries on all public roads.

Financial Outlook



The Santa Fe MPO is committed to investing in a transportation system that enhances the livability of our region and adds value for our residents and visitors. The

MPO will continue to look for new and innovative funding sources through partnerships with other agencies, non-profit organizations, and businesses to fund mutually beneficial transportation projects. Examples of alternative funding mechanisms include public-private partnerships, tax-increment financing, and grant programs through health and environmental organizations.



Making improvements to transportation infrastructure and services represents an investment in our community. Major interstate and state highway

infrastructure projects are expensive and depend heavily on federal funding. Federal transportation funds for roads, bridges, transit/rail, and bikeways come from the Highway Trust Fund. Our region also funds transportation projects and services through development impact fees, gross receipts taxes, revenue bonds, and special assessment districts.

The cost to realize our region's transportation needs over the next 25 years exceeds \$270 million; however, the estimated available funding over that time period is \$232 million, as shown in **Table 1-1**. This shortfall in transportation funding requires our region to make strategic policy and project selection decisions to maximize our investments.

Table 1-1. Reasonably Expected Revenue Projections

Time Period	Reasonably Expected Revenue Projections
2016 – 2020	\$39.0 million
2021 – 2025	\$41.4 million
2026 – 2030	\$45.7 million
2031 – 2035	\$50.5 million
2036 – 2040	\$55.7 million
Total	\$232.3 million



The federal gasoline tax is the primary source of funding for the country's Highway Trust Fund. The federal gasoline tax of 18.4 cents per gallon has been at the same level since

1993. Likewise, New Mexico's 18.9 cents per gallon gas tax has been stagnant for over 20 years and is the seventh lowest in the country.⁸ Because gas taxes are not indexed to inflation, the result is a decline in the purchasing power of the gas tax, which now has only about one-third of the buying power it had in the early 1990s. More fuel efficient vehicles are contributing to the erosion of the gas tax because the tax is calculated based on gallons of gasoline purchased. While fuel efficient vehicles are better for the environment and owner operating costs are lower, these vehicles create the same wear and tear on the road system while generating considerably less in gas taxes. With limited appetite for gas tax increases at the state and federal levels and growing competition for federal funds, our region must continue to diligently pursue supplemental resources to fund transportation maintenance and infrastructure projects.

⁸ 24/7 Wall Street, States with the Highest (and Lowest) Gas Taxes, Alexander EM Hess and Thomas C. Frohlich, <http://247wallst.com/special-report/2015/01/20/states-with-the-highest-and-lowest-gas-taxes/3/> January 15, 2015.

Performance-Based Planning



Performance-based planning is a strategic approach to transportation planning that analyzes data to determine how effectively transportation investments

are working toward achieving the identified transportation goals. Moving Ahead for Progress in the 21st Century Act (MAP-21) is the current federal transportation funding and

policy bill. It emphasizes performance-based planning, establishes performance measures and targets, and identifies seven national goals that states and MPOs are to work toward. Agencies seeking federal funds will

demonstrate their progress toward achieving local goals and the national goals included in MAP-21. States and MPOs that don't demonstrate adequate progress toward achieving the goals will be required to take corrective action.



Santa Fe metro area's transportation system brings value to many aspects of our personal lives and community including personal mobility, movement of goods, public

health, economic vitality, and preservation of our environment. But funding to maintain and upgrade our system is limited. Performance-based planning affords a structure for this MTP to ensure that scarce resources are used effectively and equitably. The community values of transportation are woven into the goals, objectives, performance measures, and ultimately, evaluation criteria used to identify high priority transportation projects.

Emerging trends that affect the way we travel have been considered in developing this MTP. Many of the trends signify an increased

emphasis on alternative travel modes, such as bicycling, walking, and transit. Performance-based planning is a new approach for our region that helps evaluate our system and prioritize our investments. This MTP includes a range of performance measures that reflect the expressed community values of our region, while honoring national and state standards. The vision of this plan is to move the Santa Fe Region forward with a sustainable, interconnected multimodal network that aims to provide safe and secure access for all users.

MAP-21 requires that the MPO establish a cooperative planning process in consultation with other agencies including state and local agencies, tribal governments, transit and human service providers, and other interested parties. In addition to outreach to the general public (as described in **Chapter 2**), this MTP planning process has been completed in coordination with the following entities:

- New Mexico Department of Transportation
- City of Santa Fe
- Santa Fe County
- Santa Fe Regional Planning Authority (RPA)
- Northern Pueblos Regional Planning Organization (NPRPO)
- North Central Regional Transit District
- Northern Rio Grande National Heritage Area



Chapter 2: Our Vision

Chapter 2: Our Vision

Community outreach efforts for this plan were broad based, inclusive, and encouraged active participation in identifying the vision, goals, and needs of the region. To create a vision that reflects the needs and desires of the residents of the Santa Fe metro area, Santa Fe MPO reached out to thousands of stakeholders across the region through internet surveys, open houses, focus groups, stakeholder meetings and many other means. Santa Fe County, the City of Santa Fe, Tesuque Pueblo, and the Agua Fria Traditional Village all participated in the development of this plan, as did local and regional transit agencies, NMDOT, state and national parks and trails, and many community-based organizations and advocacy groups representing the diverse interests of the Santa Fe region.

Public Engagement

Considering the needs and desires of all populations is critical to the development of a transportation plan that creates access to opportunity for people of all ages, incomes, and abilities. Public engagement lays the foundation for the development and implementation of an integrated multimodal transportation system



that supports community development and furthers the region's cultural, environmental, and social goals.

Equity

Santa Fe MPO made a concerted effort in this planning process to consider the impacts and benefits of the transportation plan on often-times underserved populations, such as the socioeconomically disadvantaged, people with disabilities, and racial and ethnic minorities.

Equity is a theme throughout this plan; from setting performance measures that consider the impacts of the transportation system on vulnerable populations to considering the need of the transportation system to provide mobility options that allow access to affordable housing, healthy food, jobs, recreation, and social opportunities.

SURVEY RESONSES

Several public surveys were conducted to help inform decisions; the response was strong:

- **240** Bike-to-Work Week Santa Fe surveys completed
- **878** Pedestrian Plan online surveys completed
- **740** Transit Plan online surveys completed
- **300** MTP online surveys completed

Voices Heard

The public's input helps guide and direct our vision for the future, and brings to life what makes our region unique and the necessity of an effective transportation system to realize that vision.

Community outreach activities were held for each modal plan, including the Bicycle Master Plan (2012), Pedestrian Master Plan (2015), and the Public Transit Master Plan (2015). The development of each of these plans had independent public outreach efforts to maximize feedback and participation and to obtain input from a broad cross section of the public. In addition to the outreach for each modal plan, a public outreach effort was conducted specifically to obtain input for this plan.

Input and public opinion from the development of the City of Santa Fe's City Plan and the update of the NMDOT State Long-Range Transportation Plan were also closely coordinated to ensure continuity of vision of goals throughout the region.

Table 2-1 summarizes the various public involvement strategies used during each modal planning effort and the development of this MTP.

Table 2-1. Public Engagement Activities

Outreach Activity	Bicycle Master Plan (2012)	Pedestrian Master Plan (2015)	Public Transit Master Plan (2015)	Metropolitan Transportation Plan (2015)
Email Notices	✓	✓	✓	✓
Electronic Newsletters	✓	✓	✓	✓
Internet Surveys		✓	✓	✓
Webpage	✓	✓	✓	✓
Focus Groups	✓	✓	✓	
Open Houses/Public Meetings	✓	✓	✓	✓
Stakeholder Meetings	✓	✓	✓	✓
Print Media	✓	✓		✓
Social Media				✓
Passenger Surveys			✓	
Educational Rides	✓			

MTP Public Engagement Efforts

The MTP planning process included an array of public involvement strategies to help craft the vision for our future transportation system. The public involvement process extended from March 2014 through June 2015.

The following public engagement strategies were used to garner input:

- Posted information on the Santa Fe MPO website
- Conducted online survey – conducted in English and Spanish (in accordance with Title VI requirements)
300 responses, 100 via La Familia Medical Center
- Included articles and/or announcements for upcoming events in the January, February, April, May, June, July, September, November, and December 2014 Santa Fe MPO Monthly newsletters (posted on the Santa Fe MPO website and sent to those on the List of Interested Parties)

- Posted updates on Facebook and Twitter
- Used print media ads to invite the public to participate in the online survey

PRINT MEDIA

Local and regional newspapers were used to advertise public meetings and encourage participation in the online survey:

- *Santa Fe Reporter* (3/15/14)
- *Albuquerque North Journal* (3/7/14)
- *The Green Fire Times* (March 2014)
- *Santa Fe New Mexican* (3/2/14)
- *After Hours Alliance, Inc.* (September 2014)

- Held monthly meetings with the Technical Coordinating Council (TCC), which are open to the public
- Held monthly meetings with the Transportation Policy Board, which are also open to the public
- Held an open house – all day event at the Railyard offices on June 18, 2014, from 10:00 AM to 6:00 PM (25 attendees)



- Three public meetings to be held during the 30-day public review period on August 4th, 6th, 11th, 2015.

Modal Planning Efforts

Public comments and detailed information about the public outreach strategies used to collect input during the development of the other modal plans for the Santa Fe region can be found here:



[Bicycle Master Plan](#)



[Pedestrian Master Plan](#)



[Public Transit Master Plan](#)

What the People Said

Public outreach helps the Santa Fe MPO establish priorities, policies, and ultimately investment strategies that meet the vision and needs of the people. Information gathered throughout the public involvement processes for each modal plan resulted in several recurring themes as listed below.

1. Increase network capacity for all modes.

- Support better network connectivity in the Community College District
- Commit to completing projects, including the northeast/southeast connectors
- Connect Rabbit Road with Richards Avenue

- Look critically at adding a Richards Avenue and I-25 interchange
- Address better network connectivity and equitable approaches to investments within the south side of Santa Fe (Airport Road Area)

2. Balance modal investments.

- Focus investments in a manner that balances our levels of investment across modes to address traffic congestion, roadway maintenance, road network connectivity, traffic safety, transit services, train services, bike lanes/shoulders, trails, and sidewalks

3. Increase frequency and expand evening and weekend transit services.

4. Increase the frequency and improve the service options for the Rail Runner.

5. Enhance education and enforcement across all modes of transportation.

- Implement programs, policies, and enforcement campaigns that raise awareness of transportation laws
- Enforce transportation laws that are currently in place.

6. Enhance walkability in the region.

- Improve sidewalks to increase safety and access to destinations
- Improve the connectivity between modes to entice people to use walking as a preferred mode

The MTP online survey received nearly 300 responses. **Figure 2-1** and **Figure 2-2** summarize the responses from two of the survey questions. While the automobile is currently the predominant mode of transportation for survey responders, the survey responses convey the need for a balanced approach to investing in our future transportation system.

Figure 2-1. Survey Response: Use of Different Travel Modes

Question: The Santa Fe Metropolitan Transportation Plan considers different types of travel; how often do you use the following to get to work, play or shopping?

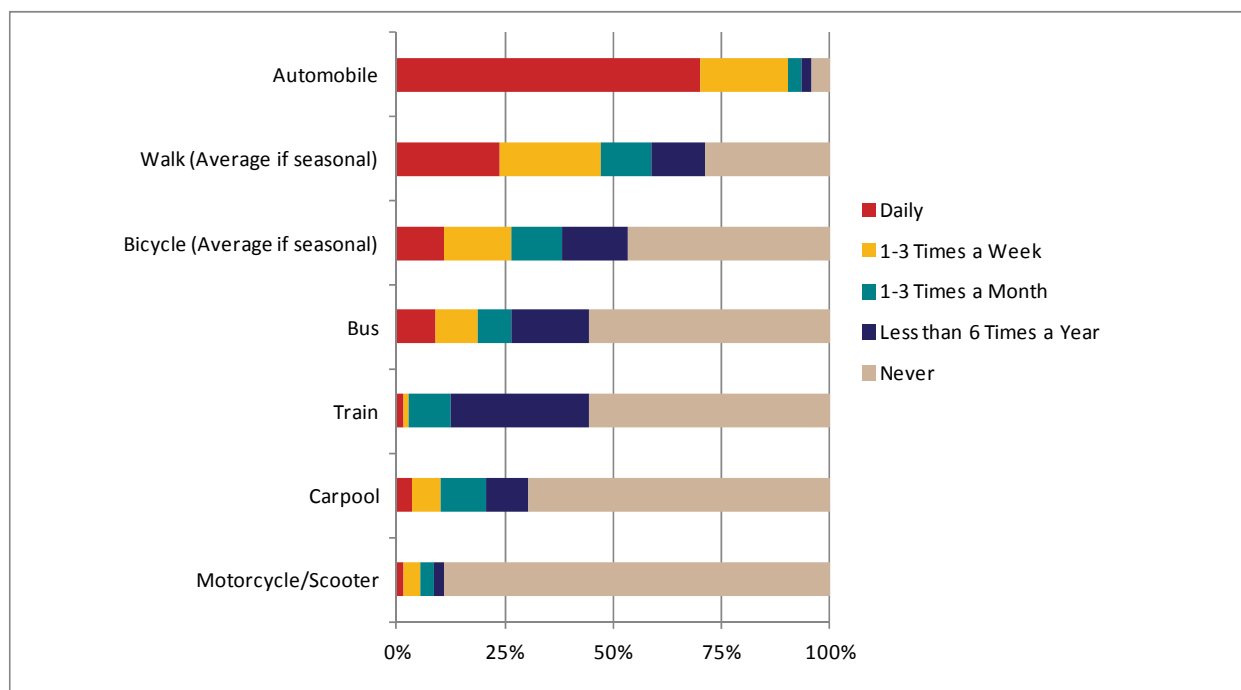
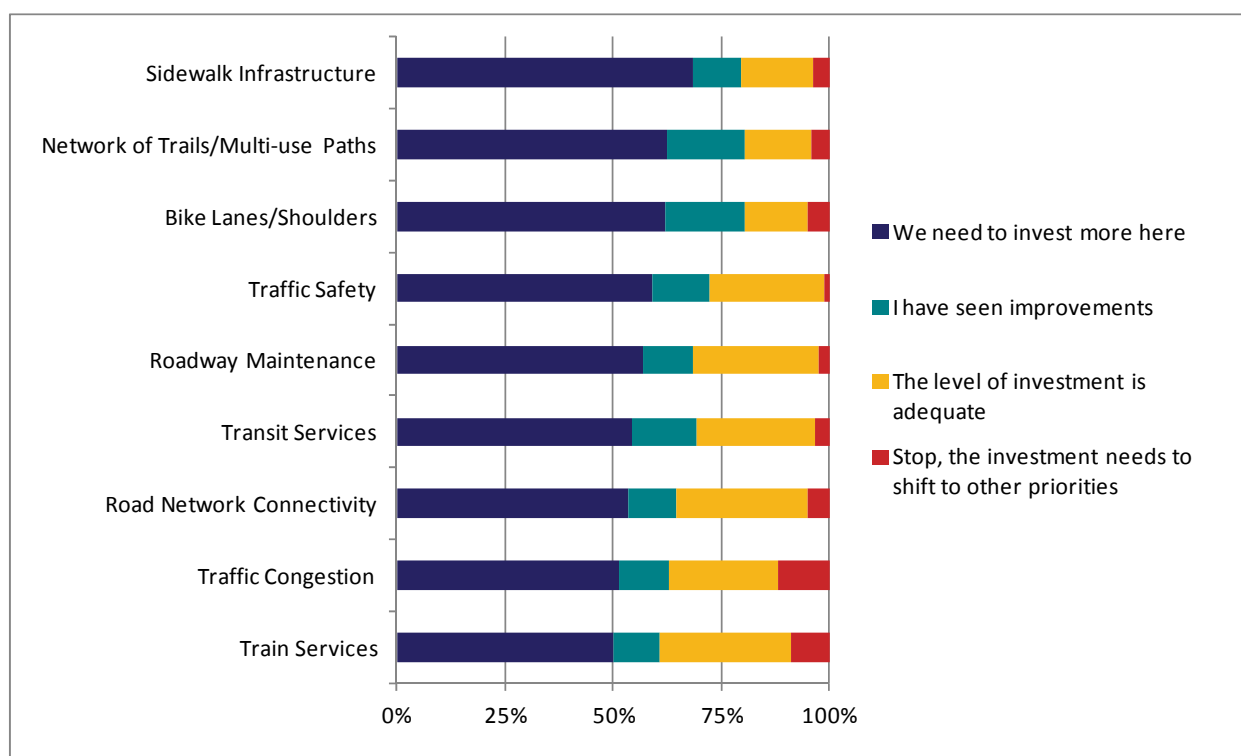


Figure 2-2. Survey Response: Worthwhile Investments

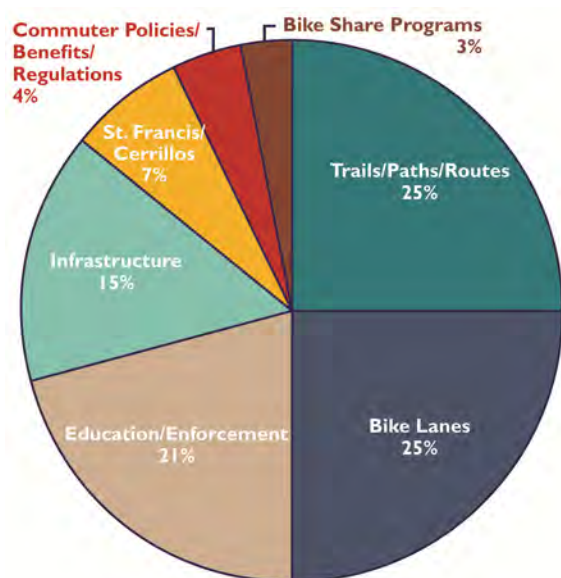
Question: What do you believe are worthwhile investments in our transportation facilities that the MPO should continue to support?



MPO staff participated in planning and organizing Santa Fe's 2014 Bike to Work Week events. Several months before the event, the MPO developed an online survey asking bicyclists "What do you believe is the one thing the community needs most to increase bicycle commuting and riding?" Survey participants who responded before and during the annual event were entered into a contest to win an urban single speed bicycle. As a result, over 240 individuals provided informative feedback to the question.

Figure 2-3 summarizes the improvements that survey respondents felt were the most critical to improving bicycle commuting in the region.

Figure 2-3. Preferred Bicycle Improvement Areas



Insert overview of public comments during August 2015 public meetings and public comment period.

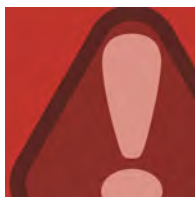
Appendix A includes a full list of all comments received during the MTP planning process.



Mariah Rivera – Winner of the Bike to Work Week 2014 Cinelli drawing

Goals

The creation of a performance framework for the transportation plan allows us to better understand how different projects and policies might affect our region's future. The goals listed below were formulated to represent our community's vision and the desired state for our region's transportation system. These seven goals are the foundation for performance measures, performance targets, recommended policy, and project implementation actions described in later chapters of this MTP.



Safety – A safe and secure transportation system for motorized and non-motorized users.



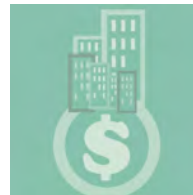
System Preservation – A well-maintained transportation system.



Multimodal Mobility and Accessibility – An accessible, connected, and integrated transportation system.



Congestion Relief and System Operations – An efficient and reliable transportation system.



Economic and Community Vitality – A transportation system that supports economic and community vitality.



Environmental Stewardship – A transportation system that protects and enhances the natural, cultural, and built environment.



Partnership and Funding – Regional collaboration in transportation planning, funding, and implementation.

New Mexico 2040 Transportation Plan (NMTP)

Concurrent with the development of this MTP the NMDOT began the development of the update to the State Transportation Long Range Plan. As of the writing of this plan the NMTP is under public review. The NMTP is a state transportation plan and was developed in cooperation with seven regional transportation planning organizations including the Santa Fe MPO. The plan provides a strategic framework to guide NMDOT's transportation decision-making in the years to come.



NMTP Vision: A safe and sustainable multimodal transportation system that supports a robust economy, fosters healthy communities, and protects New Mexico's environment and unique cultural heritage.

Goal 1. Operate with Transparency and Accountability

Goal 2. Improve Safety for All System Users

Goal 3. Preserve and Maintain Our Transportation Assets for the Long Term

Goal 4. Provide Multimodal Access and Connectivity for Community Prosperity

Goal 5. Respect New Mexico's Cultures, Environment, History, and Quality of Life

The NMTP will incorporate, by reference, the Metropolitan Transportation Plans (MTP) of every MPO in the state, including this update. The MTP was coordinated with the NMTP by having consistent population and revenue forecasts, and mutually reinforcing performance measures and targets where applicable.



Chapter 3: Santa Fe Metro Evolves

Chapter 3: Santa Fe Metro Evolves

Why Demographics Matter

Demographics are a key component of understanding our transportation system and anticipating where new or improved facilities may be located. Population, housing, and employment are the three main demographic categories used in forecasting travel demand.

Not only does the sheer number of people living and working in our region affect our transportation needs, but *where* we choose to live and work greatly influences the demand for transportation infrastructure and services. Understanding our region's existing and future housing and employment trends can help to inform and guide our transportation investment decisions. Today's decisions must consider the changing needs of our population and align with future transportation needs.

Metropolitan Planning Area

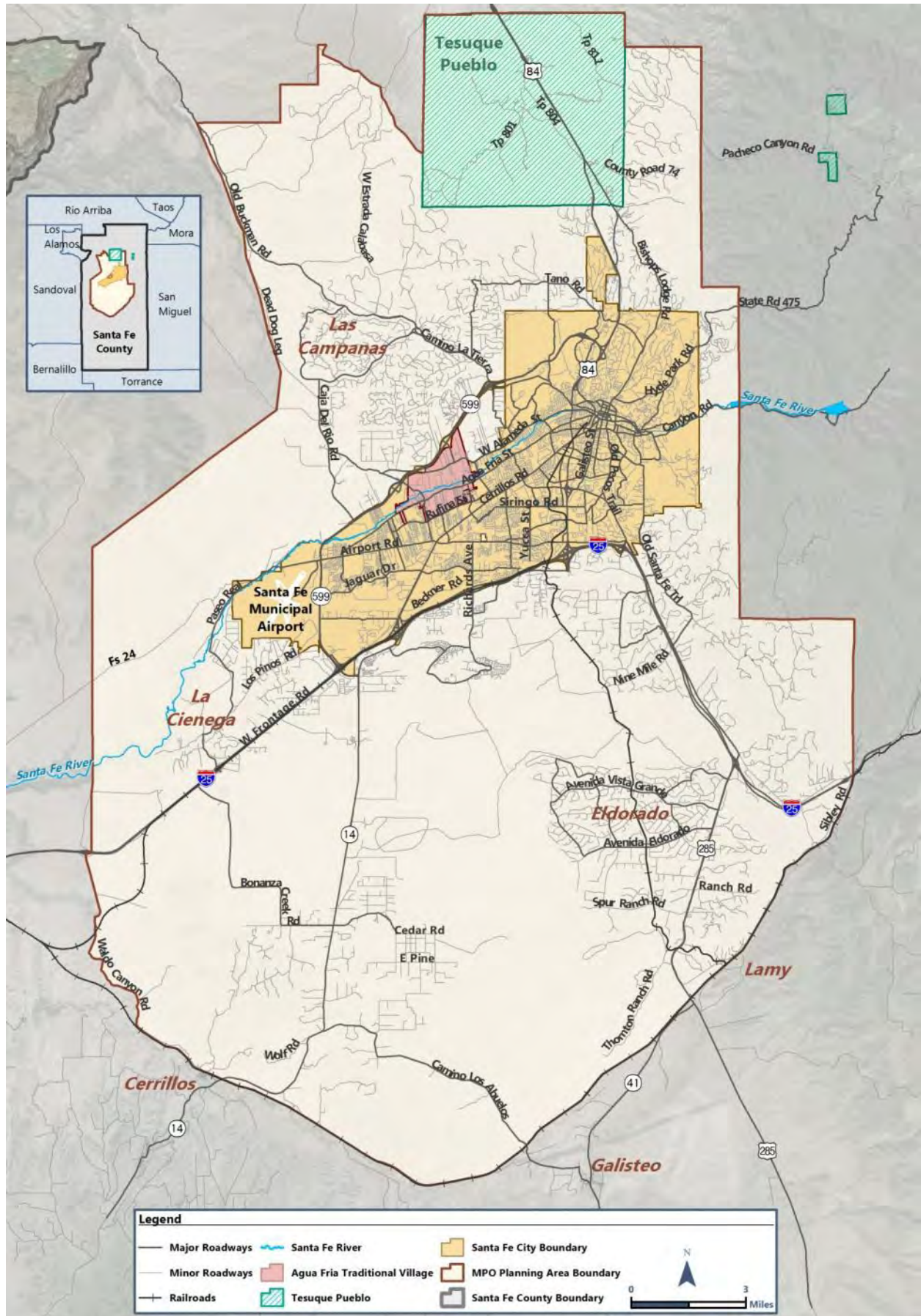
The Santa Fe Metropolitan Planning Area (SFMPA) includes portions of Santa Fe County, the Tesuque Pueblo, the Agua Fria Traditional Village, and the entire city of Santa Fe

(**Figure 3-1**). The SFMPA was designated as a MPO in 1982, when the 1980 U.S. Census exceeded 50,000. Today the Planning Area is home to nearly 120,000 people, with annual tourist visitations recorded at more than 1 million per year.



Photo credit: Andrey Bayda

Figure 3-1. Santa Fe Metropolitan Planning Area



Households and Population

Current Conditions

The Santa Fe metro area has an estimated population of 116,000, with over 56,000 households. The 2010 U.S. Census revealed a continuing trend of population loss in and around the downtown area and an increase in population in the areas to the south and west of downtown. **Figure 3-2** shows the median age for different areas of our region.¹ There is a striking distinction in our region between where younger and older citizens live. This trend is anticipated to continue for the near future.

The downtown area is characterized by an older population, higher real estate values, low housing growth, and higher median household income

The south side of Santa Fe is characterized by:

- Younger population, including the majority of children
- Lower real estate values
- Increased rate of housing starts
- Lower median household income
- Hispanic majority of future growth

Compounding this trend with the establishment of regional schools on the urban edge (with cars the predominant means of transportation for children to and from school) has resulted in increased peak hour automobile trips and congestion.

New Mexico is known for its three cultures: Native America, Spanish (i.e., Hispanic or Latino) and Anglo. Santa Fe County's overall population is 51 percent Hispanic or Latino and 49 percent are not Hispanic or Latino. Of these totals, just under one percent are American Indian/Alaska Native and are Hispanic/Latino. Just over two percent of the population are American Indian/Alaska Native but are Not Hispanic/Latino.²

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

¹ U.S. Census Bureau, 2010, and American Community Survey, 2008-2012.

² U.S. Census Bureau, 2010.

Demographic information and forecasts that serve to inform all elements of the 2015–2040 MTP Update include:

- *Population Estimates and Forecasts for Growth Management Areas, Sustainable Development Areas, and the Water/Wastewater Service Area County of Santa Fe, 1990–2030*, Geospatial and Population Studies, UNM/BBER, October 28, 2014.
- *Employment Forecast for Santa Fe County and Santa Fe County Service Areas: 2013 to 2030, Part 2: Santa Fe County Employment Forecasts*, UNM/BBER, September 12, 2014.
- *Technical Memorandum No. 2: Review of Future Growth, Demographics and Land Use*, KFH Group, LLC, September 2014.

The adoption of this plan shall formally accept this MTP as the “official 2040 forecasts” for the Santa Fe MPO until this plan is either amended or updated.

other places and some who live in Santa Fe only part time. The area is also home to 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.

ENVIRONMENTAL JUSTICE

Title VI of the 1964 Civil Rights Act (42 U.S.C. 2000d-1) states that “each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.”

Title VI Nondiscrimination Statement of Policy

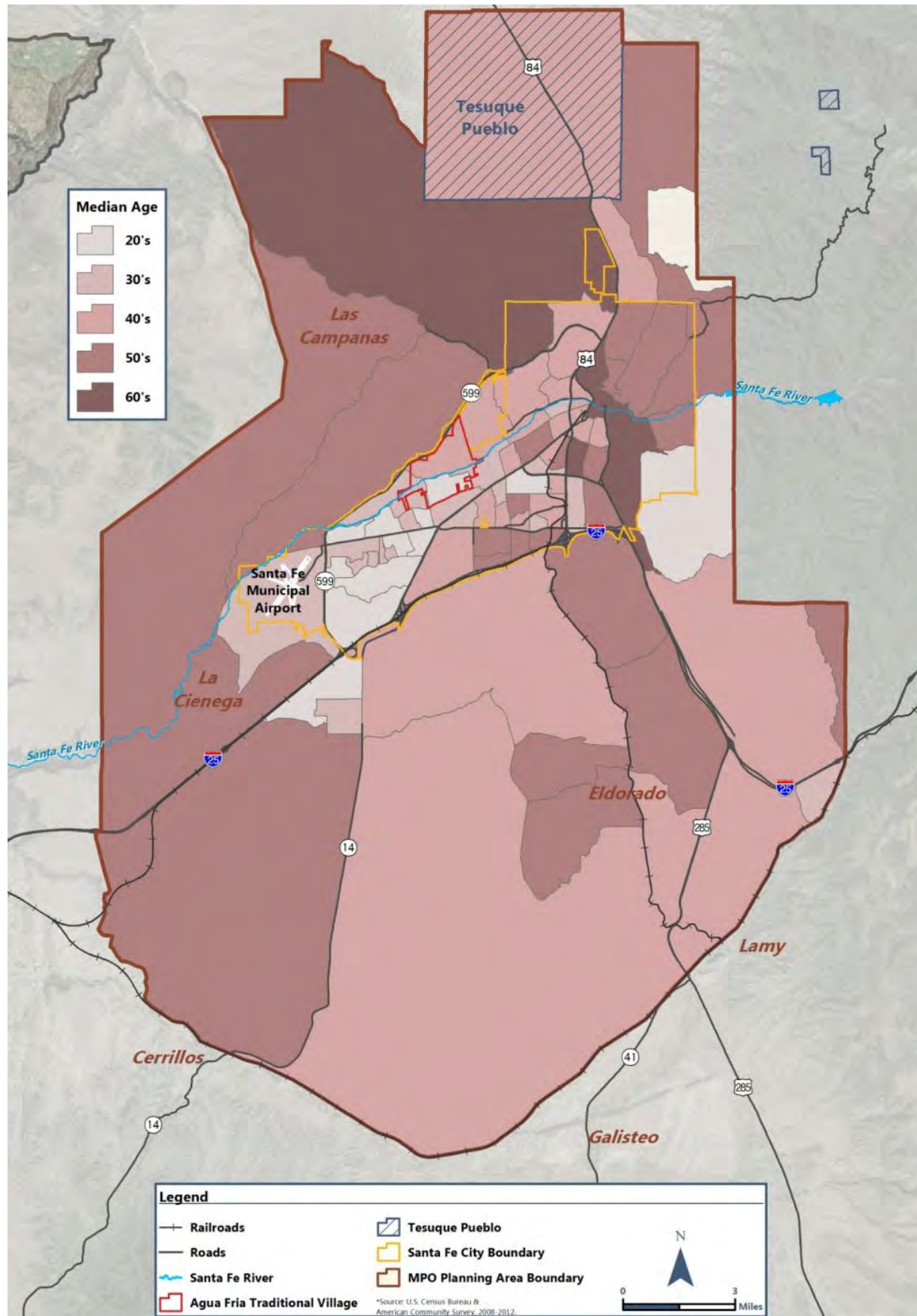
The Santa Fe Metropolitan Planning Organization (SFMPPO) is committed to compliance with Title VI of the Civil Rights Act of 1964, 49 CFR, part 2, and all related regulations and directives. The SFMPPO Title VI Plan may be downloaded at www.santafemppo.org. SFMPPO assures that no person shall on the grounds of race, color, national origin, gender, age, or disability be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity under any SFMPPO program, activity or service.

An individual, group of individuals or entity may file a formal Title VI complaint. If you believe that you have received discriminatory treatment by the SFMPPO on the basis of your race, color or national origin, you have the right to file a complaint with the City of Santa Fe EOCC Compliance Officer. The complaint must be filed no later than 180 calendar days of the alleged discriminatory incident.

The preferred method is to file your complaint in writing using the Title VI Complaint Form and to send it to: EOCC Compliance Officer, Human Resources Department, PO Box 909, Santa Fe, NM 87504.

Verbal complaints will be accepted and transcribed by the Human Resources Department. To make a verbal complaint, call (505) 955-6591 and ask for the EEOC Compliance Officer.

Figure 3-2. Median Age (2010 Census)



Population Forecasts and Trends

The MPO planning area is expected to experience just over 17 percent population growth during the 25 year period between 2015 and 2040; or an average annual rate of 0.64 percent. During this period, the MPO area is expected to grow from 119,800 people to 140,600 people, which results in an estimated 20,800 additional people living in our region.

Table 3-1 and **Figure 3-3** show the population forecasts over time for the city of Santa Fe, Santa Fe MPO, and Santa Fe County.

Table 3-1. Population Forecasts³

	City of Santa Fe	MPO Planning Area	Santa Fe County
2015	83,500	119,800	148,400
2020	85,300	123,300	151,900
2025	87,100	129,800	159,300
2030	88,900	135,500	165,300
2035	90,600	138,000	168,400
2040	92,300	140,600	171,500

Figure 3-3. Population Growth

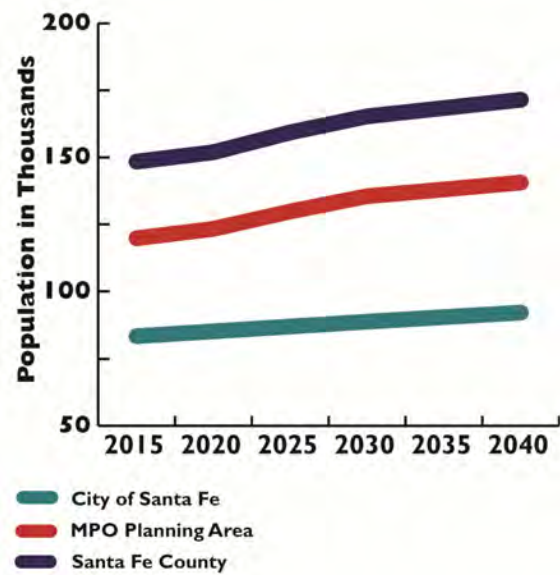


Figure 3-4 shows the forecasted distribution of household growth throughout the region. Some parts of the region are expected to be stable (no or minimal residential growth), other parts will have some infill residential development, and other areas are expected to have substantial new residential development. The highest concentrations of household growth are in southwest Santa Fe.

The number of older adults (age 65 and older) in the Santa Fe Metropolitan Statistical Area is expected to increase from 20 percent of the population in 2015 to 33 percent of the population in 2040. **Figure 3-5** shows the estimated percentage of different age cohorts living within the MPO planning area in 2015 and 2040 and highlights the dramatic increase of age 65 and older population.

³ U.S. Census Bureau, UNM Population and Employment Projections.

Figure 3-4. Household Growth (2010 to 2040)

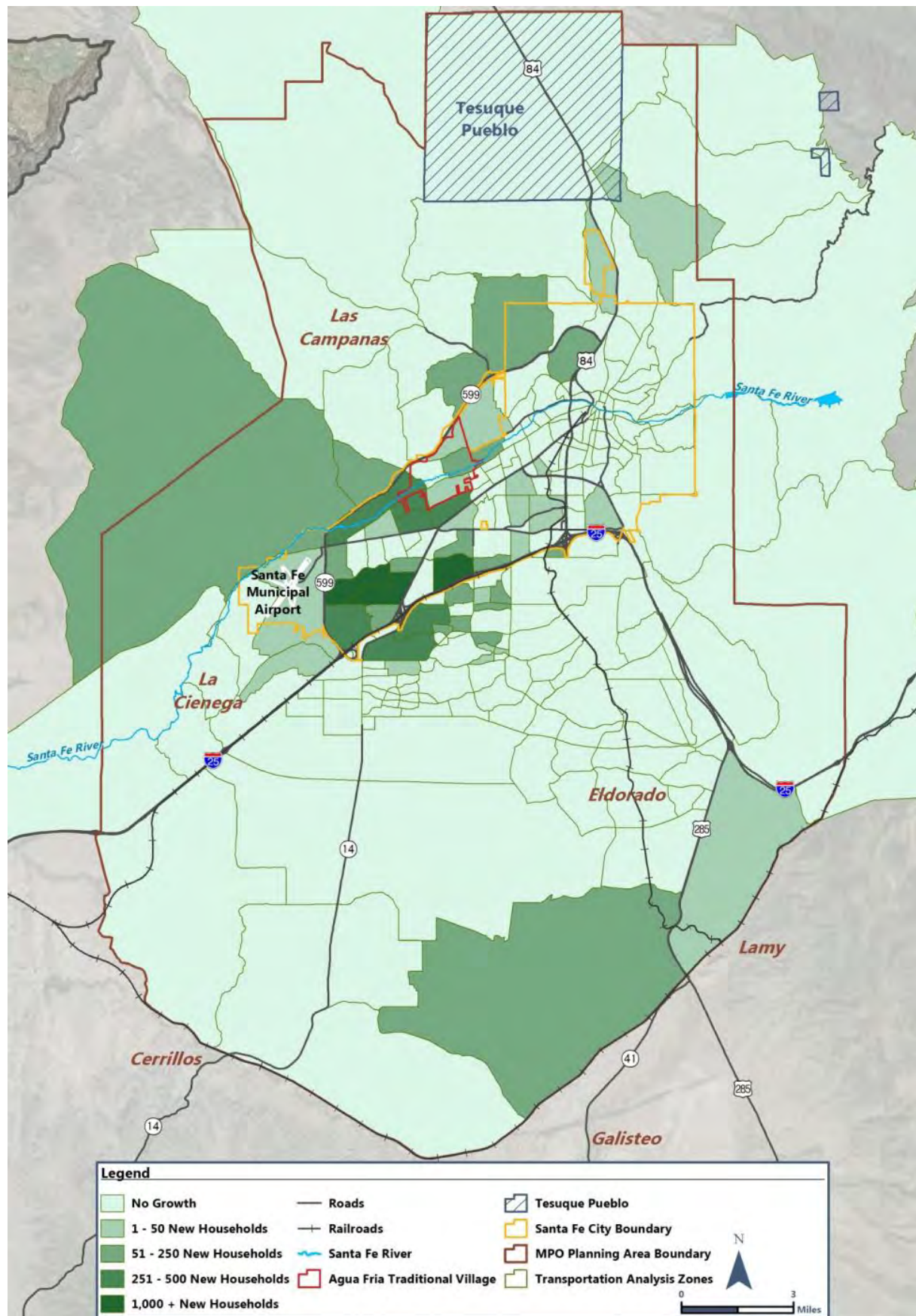
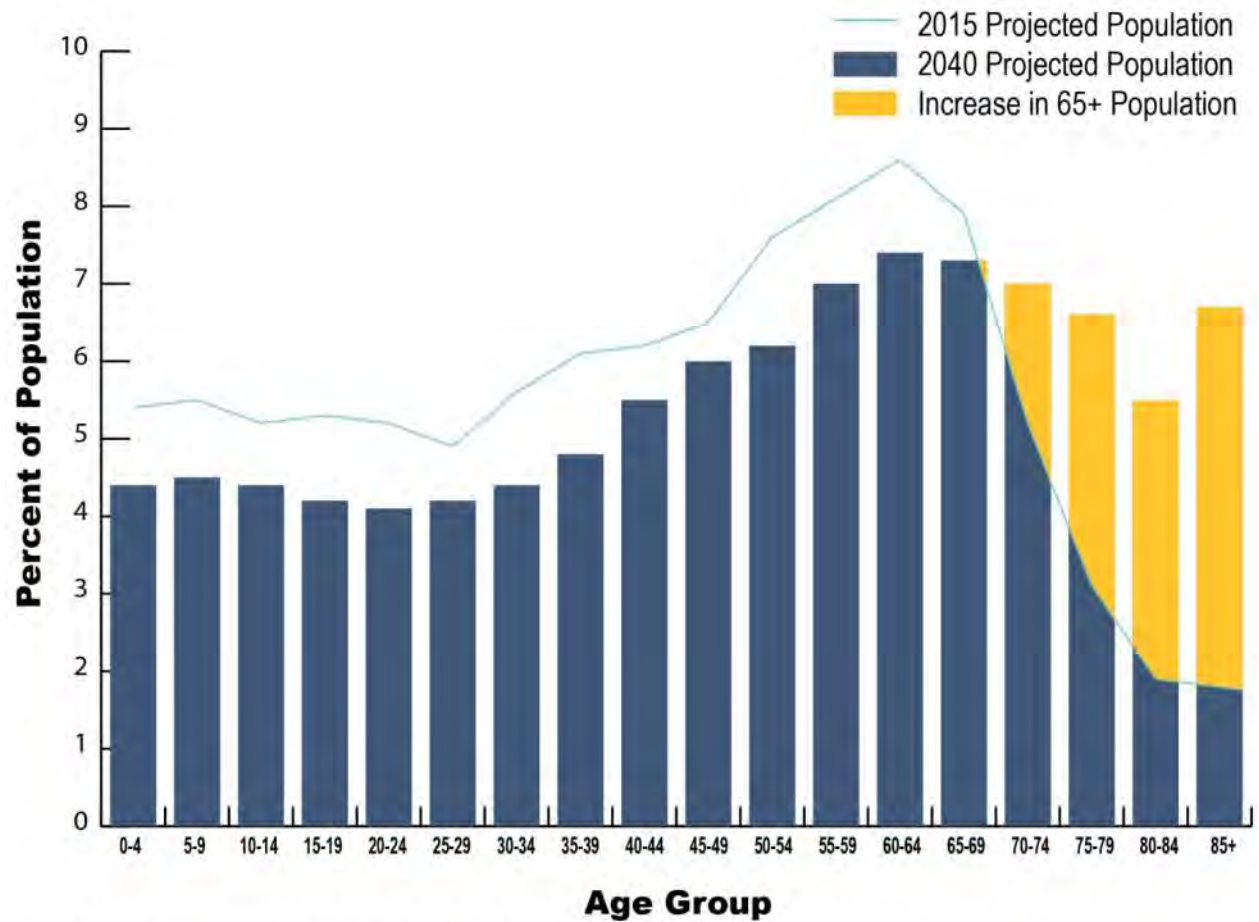


Figure 3-5. Aging Population



Source: Geospatial and Population Studies, University of New Mexico, January 2015

Employment

Current Conditions

Our region currently employs over 60,000 people in a range of industries. **Figure 3-6** shows the distribution of people commuting into and out of Santa Fe for work. The percentage of people commuting to Santa Fe for work increased between 2002 and 2011 by approximately 9 percent. Likewise, the percent of people leaving the city for work increased (by approximately 4 percent). But the percent of people who live and work in Santa Fe decreased by approximately 13 percent. This trend demonstrates an increasing demand for longer distance commuting into and out of the City.

Employment Forecasts

According to the New Mexico Department of Workforce Solutions, public administration is the largest employing industry in Santa Fe, followed by retail trade, health care, and social services. Employment in health care and social assistance is projected to grow the most and at the fastest rate of all major industries over the next several years. Other industries anticipated to experience heavy growth rates are accommodation and food services, retail trade, education services, and government.⁴ Employment is forecasted to generate approximately 9,000 new jobs by the year 2040, as shown in **Table 3-2**.

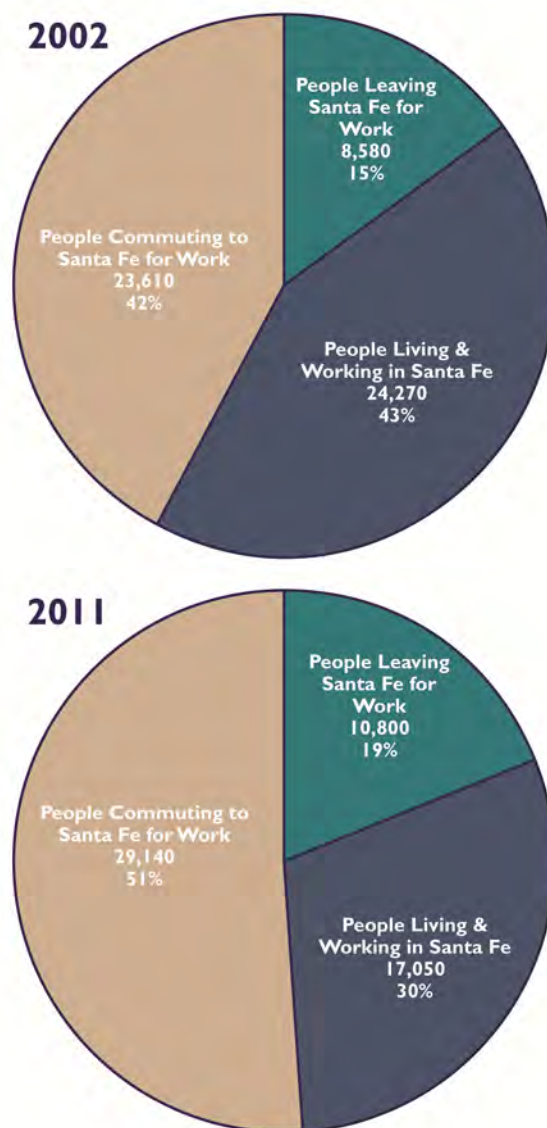
Table 3-2. Employment Forecasts

	Santa Fe MPO
2010	60,159
2040	69,242
% Growth	15%
Annual % Growth	0.5%

Due to the topographical constraints to the north and east, the MPO area has experienced much of its recent development in the southwest portion of the City and near the I-25 Interstate and NM 599 Corridor. Santa Fe County anticipates that future growth will occur

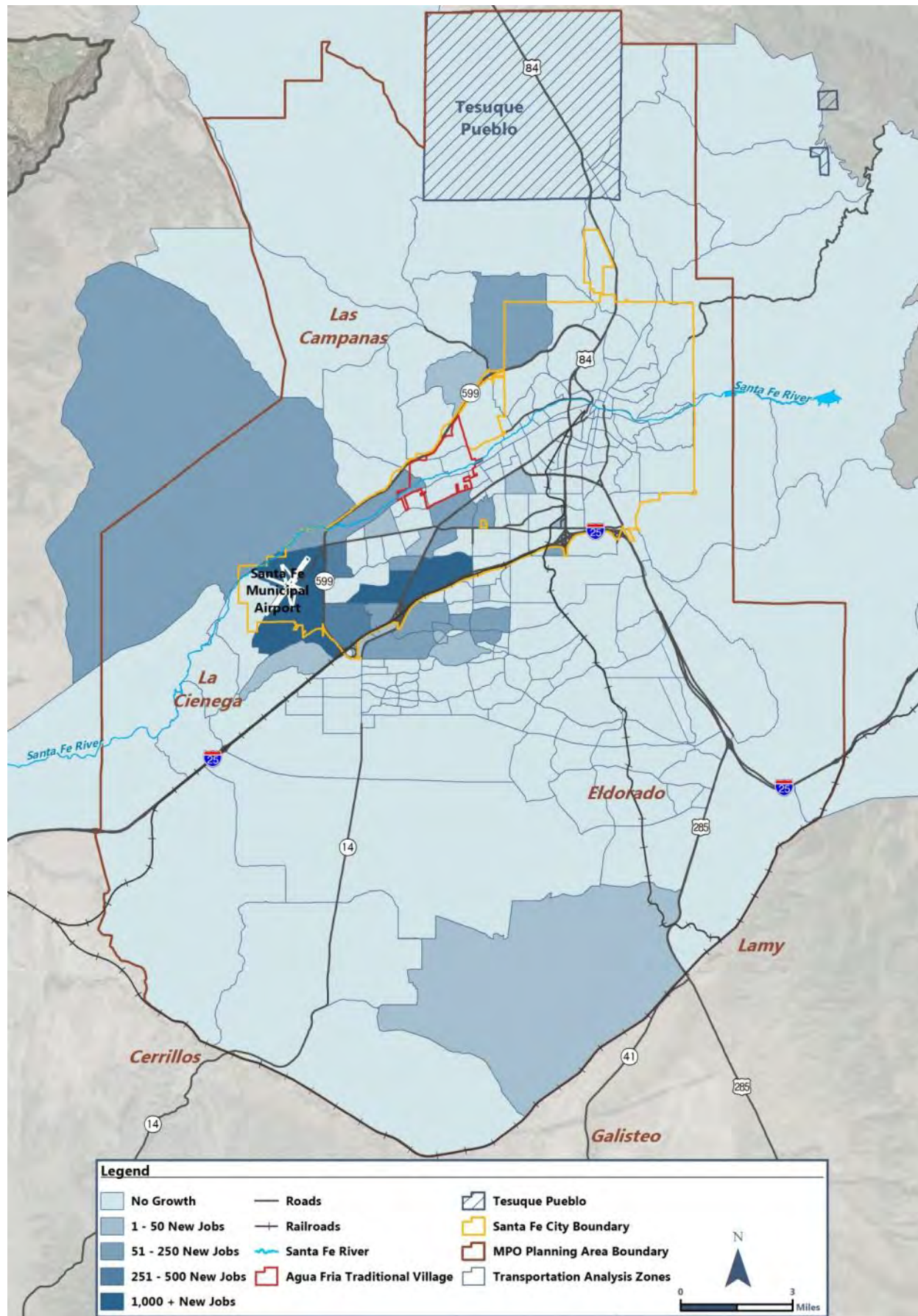
in two primary areas: the Community College District south of I-25 and areas to the north of the Santa Fe Airport and the NM 599 Corridor. **Figure 3-7** shows stable, infill and developing employment areas of the region. The highest growth in employment is expected in southwest Santa Fe in proximity to the airport.

Figure 3-6. Commuting & Worker Inflows/Outflows⁵



⁵ Economic & Industry Snapshot, Santa Fe MSA/County New Mexico, New Mexico Department of Workforce Solutions, Economic Research and Analysis Bureau, June 2014.

Figure 3-7. Employment Growth (2010 to 2040)



Natural Environment

The natural environment of the Santa Fe metro area is exemplified by the distinctive foothills of the Sangre de Cristos that define Santa Fe's eastern skyline, the Rio Grande watershed that cuts north and south to the west, and the Galisteo Basin and watershed that encompasses the territory to the south. With abundant annual sunshine, moderate annual temperatures, and access to public lands, the area attracts visitors and retirees from around the globe.



Air Quality

According to the American Lung Association's annual reporting, which looks at levels of ozone and particulates, the Santa Fe metro area consistently enjoys clean air and is often ranked in the top ranking of cities in the United States. At this time there are no indications that Santa Fe will reach any of the Environmental Protection Agency's (EPA) thresholds for pollutants and, therefore, be classified as a non-attainment area. However, member agencies clearly recognize that the transportation sector as a whole contributes greatly to GHG emissions influencing climate change. This MTP strives to maintain or improve the region's air quality through strategic transportation investments to reduce idling and VMT through congestion reduction measures and facilitation of alternative travel modes like transit, bicycling, and walking that are less polluting than single occupant vehicles.



Cultural Environment

The Santa Fe area enjoys a rich and vibrant cultural history punctuated by the convergence of Native Americans, Spanish, Anglo, and South American peoples. Each brings important traditional, familial, and contemporary values that impact the area's transportation system. The importance of these values cannot be underscored as we contemplate transportation decision-making today and in the future. Following are examples of how the cultural environment has shaped the mobility of cultures and ultimately the evolution of the built environment.

LINKING PLANNING AND THE ENVIRONMENT

Consideration of natural resources early in the transportation planning process yields many benefits to both the natural environment and future improvement projects. The natural environment benefits by designing roads and facilities in a way that matches the context and continuity of natural systems. Planning and designing to the context of the natural environment can allow connections of habitats that have the ability to sustain plant and animal life. Without this consideration, habitat fragmentation occurs, and the ecosystem that relies on such habitat diminishes. Future transportation projects benefit from considering the natural environment early on by identifying measures to avoid and minimize impacts before significant design and environmental permitting processes have begun.



Photo credit: meunierd

Pueblo of Tesuque

Within the SFMPA and an official member of the MPO is the Pueblo of Tesuque. The name Tesuque is a Spanish variation of the Tewa name, Te Tesugeh Oweengeh, meaning the “village of the narrow place of the cottonwood trees.” Though the pueblo is one of the state’s smallest, with a population of about 500, it is characterized as being one of the most traditional of all of the Tewa speaking Pueblos, despite having been in contact with outside cultures throughout much of its history. The reservation encompasses more than 17,000 acres, including Aspen Ranch and the Vigil Land Grant high in the Santa Fe National Forest.

National Trail System

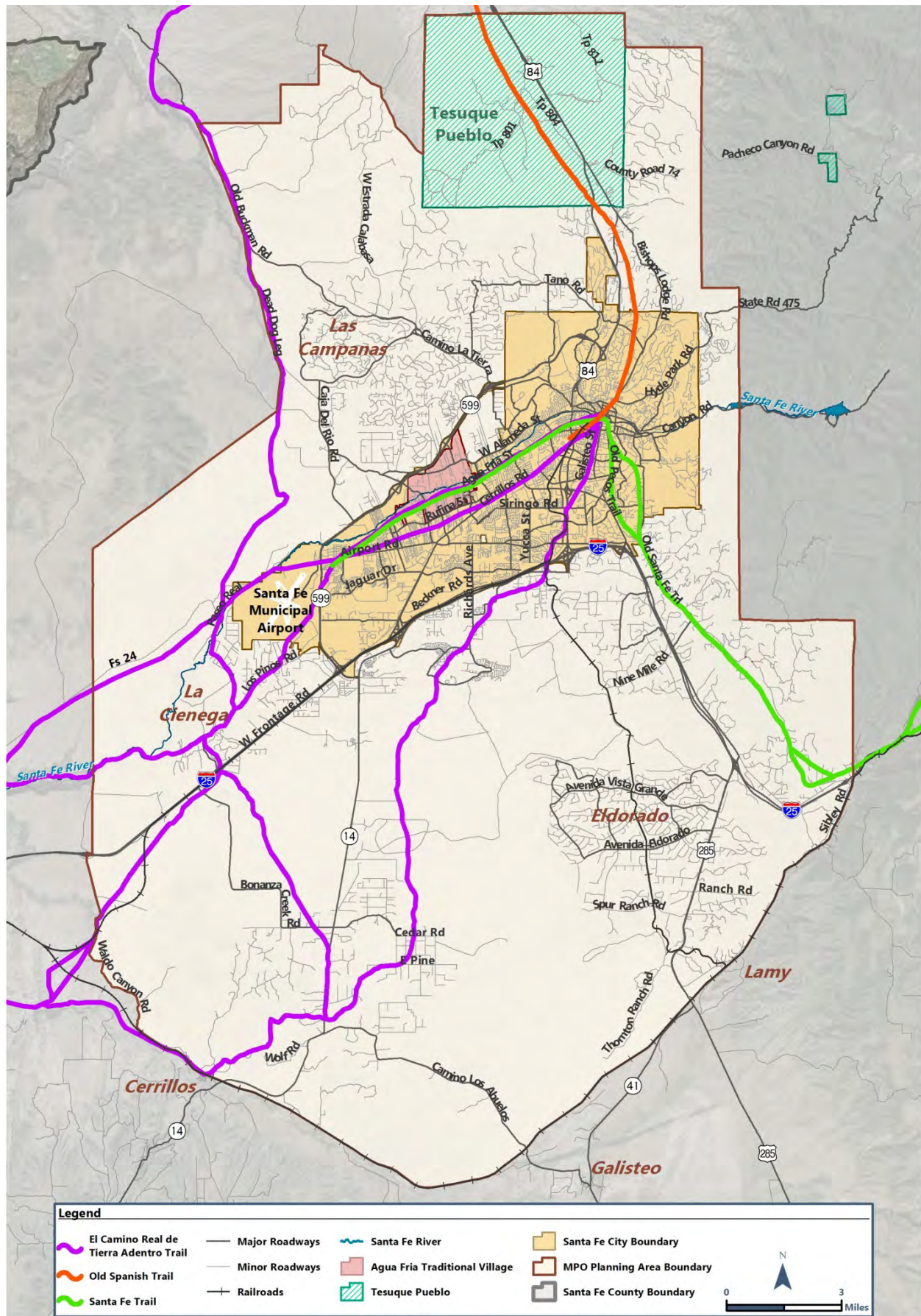
Santa Fe enjoys a unique heritage that is linked and characterized by three National Historic trails. These trails in large part are the basis of New Mexico’s original transportation system and represent a critical link to the state’s history and heritage as well as that of the nation. National Historic Trails are designated by Congress under the authorities of the National Trails System Act and have direct relevance to transportation planning at a statewide level associated with the motorized and non-motorized system of transportation.

The three National Historic Trails that pass through New Mexico and the Santa Fe Metropolitan Planning Area are shown on **Figure 3-8** and are described below:

- **El Camino Real de Tierra Adentro Trail** – During the colonial years, New Mexico was tied to the outside world by a single thoroughfare that descended the Rio Grande Valley from north of Santa Fe, dropped through the natural gate at El Paso, and continued to Mexico City. Some of El Camino had its earliest beginnings as Indian trails. Also, 6.6 miles of Agua Fria Road retraces the original El Camino into downtown Santa Fe (www.nps.gov/elca/).



Figure 3-8. National Historic Trails



- **The Santa Fe Trail** – Between 1821 and 1880, the Santa Fe Trail was primarily a commercial highway connecting Missouri and Santa Fe. From 1821 until 1846, it was an international commercial highway used by Mexican and American Traders (www.nps.gov/safe).
- **Old Spanish Trail** – Antonio Armijo was the first to lead a commercial caravan from Abiquiu, New Mexico, to Los Angeles in 1829. Over the next 20 years, Mexican and American traders continued to ply variants of the route that Armijo pioneered, frequently trading with Indian tribes along the way (www.nps.gov/olsp).

Agua Fria Traditional Village

Agua Fria Traditional Village is located in the heart of the Santa Fe metro area. Archaeological digs indicate that settlements in this area may date back to 3,000 B.C. Agua Fria Village became a place of modern recorded settlement in New Mexico when Captain Roque Madrid was given a land grant on the Santa Fe River from Ojito Fresco to Pueblo Quemado in 1693 by General Don Diego de Vargas for his service in the 1692 “Reconquest” of New Mexico by the Spanish Crown. The individual grants of Agua Fria Village residents went from the Arroyo de los Chamisos (near the present day Santa Fe Place Mall) to the Arroyo de los Frijoles or the southern-most boundary of the San Ildefonso Pueblo Grant; a distance of some 5 to 7 miles in length. Lots were narrower in width and may have been only 600 to 900 feet wide. With a rich family and farming history, the Traditional Village was and is a defining area of significance within the SFMPA.

Atchison, Topeka and Santa Fe Railway

In 1878, the AT&SF Railway became the first railroad to enter New Mexico. AT&SF became the first industry to exploit the Southwest’s captivating history and alluring attractions and to advertise Santa Fe as the essence of the Southwest (Dilworth, Leah, *Imagining Indians in the Southwest: Persistent Visions of a Primitive*

Past, Washington D.C., Smithsonian Press, 1996). From selling health, developing the iconic Santa Fe image, and promoting the real estate, the railroad spurred unprecedented growth in Santa Fe for years to come.



Route 66: 1926 to 1938

Route 66 followed the Old Pecos Trail from Santa Rosa through Dilia, Romeroville, and Pecos to Santa Fe. Only lasting 12 short years with a dramatic tale of how Santa Fe was eventually by-passed, Route 66 helped put Santa Fe on the map of the burgeoning automobile growth and destination trend.





Chapter 4: Getting Around



Santa Fe MPO Metropolitan Transportation Plan 2015-2040

Chapter 4: Getting Around

Mobility has a significant impact on quality of life in the Santa Fe metro area. Our transportation system consists of a historically significant and complex network of state and federal highways, local streets and roadways, transit services, a series of bicycle and pedestrian multi-use paths, a railway line, and the Santa Fe Airport. It is of utmost importance that the transportation system satisfies mobility needs and provides convenient, safe, and efficient transportation choices.

Roadway System



The MPO is primarily concerned with roadways of “Regional Significance”—those roadways eligible to receive federal funding. The MPO 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 in the Code of Federal Regulations (CFR) require that public roadways be classified based on the characteristics of the service (mobility and access) they provide. Functional Classification is an analytic tool that

the MPO uses to plan roads and highways and to determine 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 motor vehicle mobility required of a facility, the higher its Functional Classification.

A **regionally significant project** (23 CFR Sec. 450.104) is a transportation project that is on a facility that serves regional transportation needs (such as access to and from the area outside the region; major activity centers in the region; and major planned developments) and would normally be included in the modeling of the metropolitan area’s transportation network. At a minimum, this includes all principal arterial highways and all fixed guideway transit facilities that offer a significant alternative to regional highway travel.

Figure 4-1 shows Functional Classifications defined by the level of mobility versus access that the roads provide, as follows:

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

Functional Classifications recognize the need to accommodate vehicular traffic in a manner that reduces congestion and increases connectivity to regional and urban destinations. They also assist in defining eligibility for federal funding sources. An inverse relationship exists between high mobility for vehicular traffic and mobility for pedestrian, bicycle, and, in many cases, transit usage. The MPO recognizes this relationship and is committed to planning for and implementing a balanced transportation network that effectively accommodates vehicles, pedestrians, bicyclists, and transit riders.

REGIONALLY SIGNIFICANT

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.”

Santa Fe metro area’s key transportation and land use corridors, such as Cerrillos, St. Francis, St. Michaels, and I-25, are typical roadways that provide not only mobility and accessibility options for those traveling through the region, but contemporary urban and roadway design challenges that the MTP is meant to address.

Transportation Corridors

The USDOT, in cooperation with the states, local officials, and MPOs, developed the National Highway System (NHS) with the purpose of identifying the core road network that was considered critical to the nation’s economy, defense, and mobility. The U.S. Congress approved the NHS in 1995, with the

intent that the United States would prioritize federal-aid funds appropriately to ensure that the NHS was adequately maintained.



The Statewide Multimodal Transportation Plan identifies a number of “Strategic Multimodal Transportation Corridors” with significant regional, statewide, national, and transnational importance. These corridors are where multimodal opportunities and needs are the greatest and will be the NMDOT’s highest priorities for state transportation funding investment. Projects falling outside these strategic corridors will be lower in priority. These corridors include the Interstate and National Highway Systems, the Strategic Highway Network (STAHNET) system (a partnership between the Federal Highway Administration and the Department of Defense identifying the system of public highways that provide access, continuity and emergency transportation of personnel and equipment in times of peace and war), and principal freight and intercity transportation corridors.

Figure 4-2 shows the NHS routes in our region.

Figure 4-1. Roadway Functional Classifications

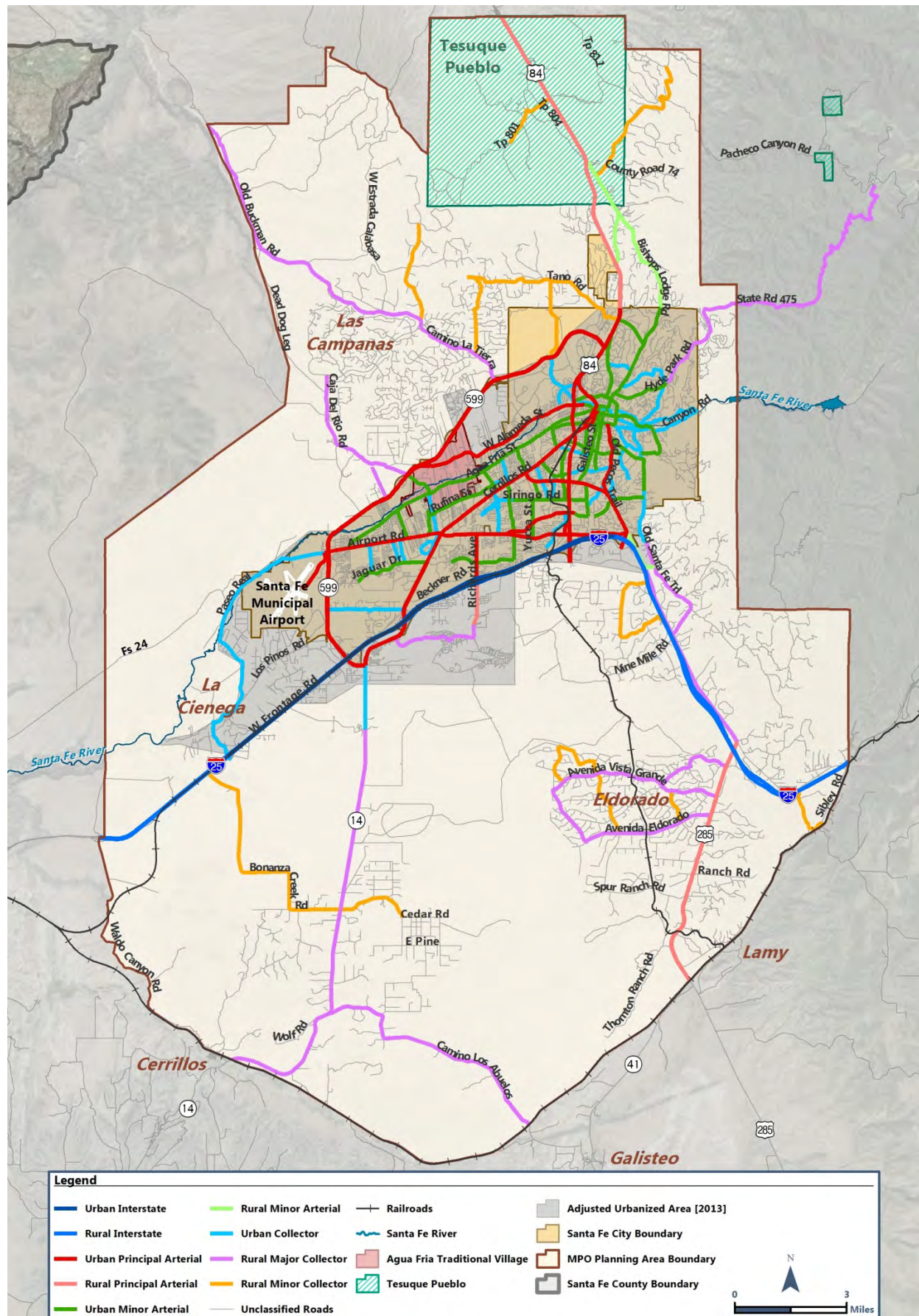
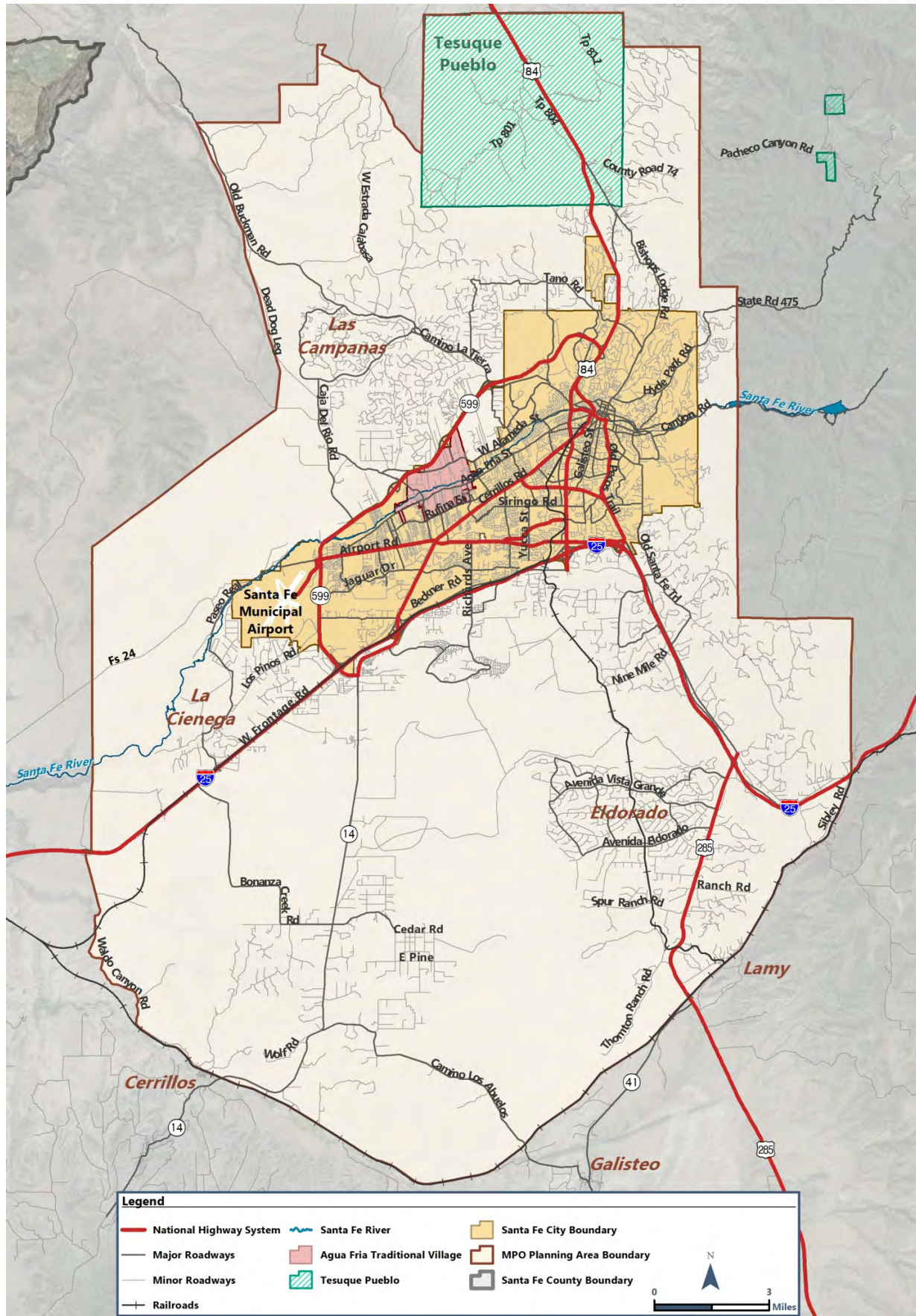


Figure 4-2. National Highway System (NHS)



Current Traffic Volumes and Congestion

The MPO maintains a traffic count program that primarily consists of conducting counts at locations to assist the NMDOT in meeting 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. However, the program has been temporarily suspended since 2011 due to the need to clearly identify the most appropriate locations for NMDOT to meet their requirements. It is anticipated that by the end of 2015 the program will be continued in a manner that will maximize the MPO and NMDOT's understanding of traffic flow, volumes, and delays for future planning efforts.

The most current data were collected using temporary traffic count recorders that collected traffic volumes over a 48-hour period during the weekdays. These counts provide a snapshot of traffic volumes and characteristics on the roadways within Santa Fe. **Figure 4-3** shows that average weekday traffic volumes on the area roadways vary from almost 44,000 vehicles per day recorded on St. Francis Drive to less than 100 vehicles per day on many local residential streets. Interstate 25, St. Francis Drive, Cerrillos Road, Airport Road and St. Michaels Drive are the most traveled roadways in the SFMPA carrying between 23,000 and 44,000 vehicles per day.

In addition to the temporary counts conducted by the MPO, the NMDOT operates 17 permanent count stations within the SFMPA and collect traffic volume data 24 hours per day, 365 days per year. The collected data provide the basis to develop growth trends. **Figure 4-4** shows the traffic volumes collected at these permanent count stations over the past 15 years. The corresponding growth percentages in five year increments are shown on **Table 4-1**. While there have been some fluctuations in traffic over the years, the overall trend in traffic growth has been relatively flat.

Table 4-1 shows that during the five-year period between 2005 and 2009, traffic volumes at the

permanent count stations decreased overall by approximately one percent per year, while in the five-year period between 2010 and 2014, overall traffic volumes decreased by approximately 1.2 percent per year. The result is an overall one percent annual average decrease over the ten-year period (2005–2014). Contributing to the decline in traffic volumes during this time period were higher gas prices beginning in 2006 through fall 2014 and the worldwide economic recession that hit began in 2008 and continues today. Many of these corridors saw increases before 2006 and will likely be the corridors that experience traffic increases between now and 2040.

During the first half of the 2000's NM 599 saw the highest traffic growth with an average of over 10 percent 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 percent per year. This was likely a result of the capacity improvements made when this section of St. Francis was expanded from four lanes to six lanes.

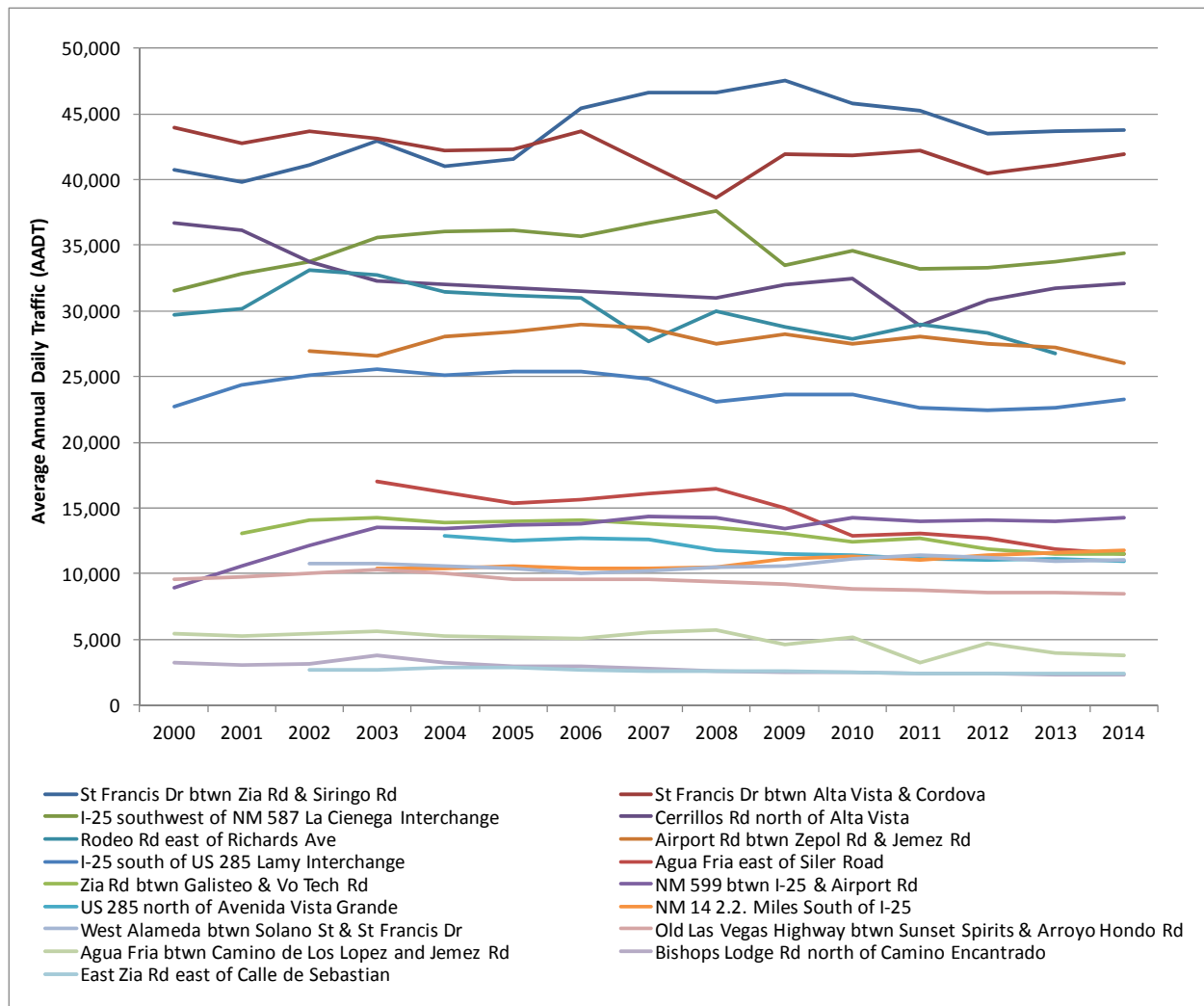


The congestion experienced on Santa Fe's roadways is minimal compared to that experienced in larger metropolitan areas, such as Los Angeles, California; El Paso, Texas; or even Albuquerque, New Mexico, where congested peak periods last for at least a couple of hours.

4-6



Figure 4-4. Historic Traffic Growth at Permanent Count Stations



The peak periods where congestion is most noticeable in Santa Fe are relatively short, approximately 30 minute ranges starting around 7:30 AM and 5:00 PM. The St. Francis Drive Corridor Study found that during 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 Street to Paseo de Peralta.

Similar conditions were found in the NM 599 Interchange Priority Study along NM 599 at the signalized intersections. The I-25 Corridor Study found that traffic flow along the interstate was congestion free, but many of the exit ramps experience congestion, primarily due to the outdated interchange configurations.



Table 4-1. Historic Traffic Growth at Permanent Count Stations

Count Location	2005 AADT	2006 AADT	2007 AADT	2008 AADT	2009 AADT	2010 AADT	2011 AADT	2012 AADT	2013 AADT	2014 AADT	5-Year Average Annual Growth 2005 -2009	5-Year Average Annual Growth 2010 -2014	10-Year Average Annual Growth 2005 - 2014
St Francis Dr btwn Zia Rd & Siringo Rd	41,572	45,430	46,604	46,632	47,488	45,784	45,212	43,507	43,714	43,799	3.38%	-1.10%	0.58%
St Francis Dr btwn Alta Vista & Cordova	42,288	43,633	NA	38,630	41,934	41,833	42,162	40,415	41,085	41,939	-0.21%	0.06%	-0.09%
I-25 southwest of NM 587 La Cienega Interchange	36,116	35,693	36,650	37,612	33,448	34,533	33,187	33,315	33,761	34,342	-1.90%	-0.14%	-0.56%
Cerrillos Rd north of Alta Vista	NA	NA	NA	31,019	31,975	32,489	28,903	30,819	31,760	32,053	NA	-0.34%	0.55%*
Rodeo Rd east of Richards Ave	31,175	30,976	27,681	29,984	28,748	27,898	29,004	28,306	26,752	NA	-2.01%	NA	-1.89%*
Airport Rd btwn Zepol Rd & Jemez Rd	28,369	28,927	28,646	27,476	28,238	27,451	28,012	27,520	27,192	25,989	-0.12%	-1.36%	-0.97%
I-25 south of US 285 Lamy Interchange	25,337	25,388	24,784	23,065	23,637	23,589	22,604	22,401	22,628	23,262	-1.72%	-0.35%	-0.94%
Agua Fria east of Siler Road	15,393	15,660	16,064	16,477	15,009	12,849	13,033	12,724	11,843	11,492	-0.63%	-2.75%	-3.20%
Zia Rd btwn Galisteo & Vo Tech Rd	13,971	14,032	13,828	13,498	13,027	12,436	12,709	11,907	11,513	11,482	-1.73%	-1.98%	-2.16%
NM 599 btwn I-25 & Airport Rd	13,714	13,775	14,372	14,236	13,389	14,299	13,988	14,055	13,978	14,294	-0.60%	-0.01%	0.46%
US 285 north of Avenida Vista Grande	12,536	12,690	12,648	11,772	11,506	11,426	11,156	11,062	11,135	10,983	-2.12%	-0.98%	-1.46%
NM 14 2.2. Miles south of I-25	10,563	10,384	10,414	10,525	11,099	11,342	11,037	11,405	11,568	11,766	1.25%	0.92%	1.21%
West Alameda btwn Solano St & St Francis Dr	10,402	10,007	10,259	10,512	10,564	11,095	11,404	11,183	10,941	11,013	0.39%	-0.19%	0.64%
Old Las Vegas Highway btwn Sunset Spirits & Arroyo Hondo Rd	9,606	9,529	9,534	9,416	9,233	8,864	8,772	8,588	8,593	8,465	-0.99%	-1.14%	-1.40%
Agua Fria btwn Camino de Los Lopez and Jemez Rd	5,164	5,085	5,554	5,678	4,608	5,191	3,257	4,711	3,961	3,781	-2.81%	-7.62%	-3.40%
Bishops Lodge Rd north of Camino Encantado	2,959	2,960	2,799	2,618	2,483	2,517	2,439	2,391	2,272	2,314	-4.29%	-2.08%	-2.69%
East Zia Rd east of Calle de Sebastian	2,841	2,690	2,603	2,591	2,590	2,507	2,430	2,441	2,384	2,449	-2.29%	-0.58%	-1.64%
Overall Annual Average Growth											-1.02%	-1.23%	-1.00%

* Cerrillos Road Annual Average Growth is based on 2008–2014; Rodeo Road Annual Average Growth is based on 2005–2013.

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 generally considered substandard from the perspective of vehicular delay; however, a new school of thought is beginning to surround the application of LOS because multiple modes of travel share roadway rights-of-ways. As the Santa Fe MPO advances its planning efforts for all transportation modes, it is recommended that a more comprehensive analysis of roadway service become institutionalized.

CONSIDERATION OF ALL MODES

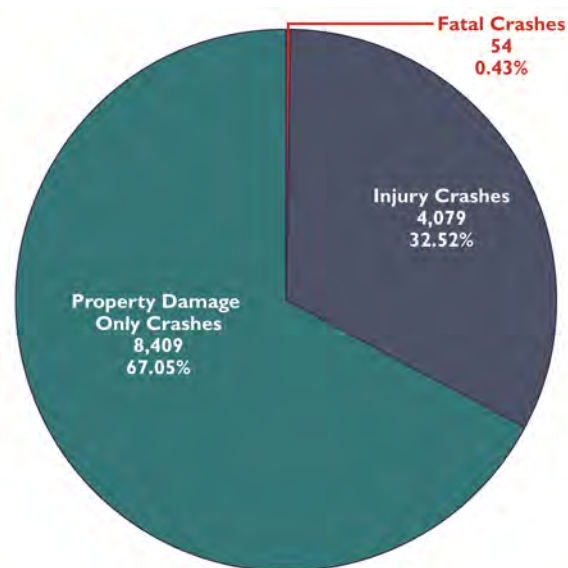
The introduction to the 2008/2009 *Multimodal Level of Service Analysis for Urban Streets: Users Guide*, National Cooperation Highway Research Program (NCHRP) Document 128, states: "To adequately evaluate the quality of service provided by the facility, one must consider the implications of facility design and operation on the auto driver, the bus passenger, the bicyclist and the pedestrian."

Crash History

Safety is a top priority not only for the Santa Fe metropolitan area, but also at the State and Federal levels. To identify how we can make our transportation system safer, we must understand the crash patterns that have occurred over time. Crash data collected over the six-year time period between 2006 and 2011 show that there were over 12,500 crashes, an average of nearly 2,100 crashes per year.

Figure 4-5 shows the severity of crashes in our region. Over the six-year period, there were 54 fatal crashes and over 4,000 crashes resulting in injury.

Figure 4-5. Crash Severity

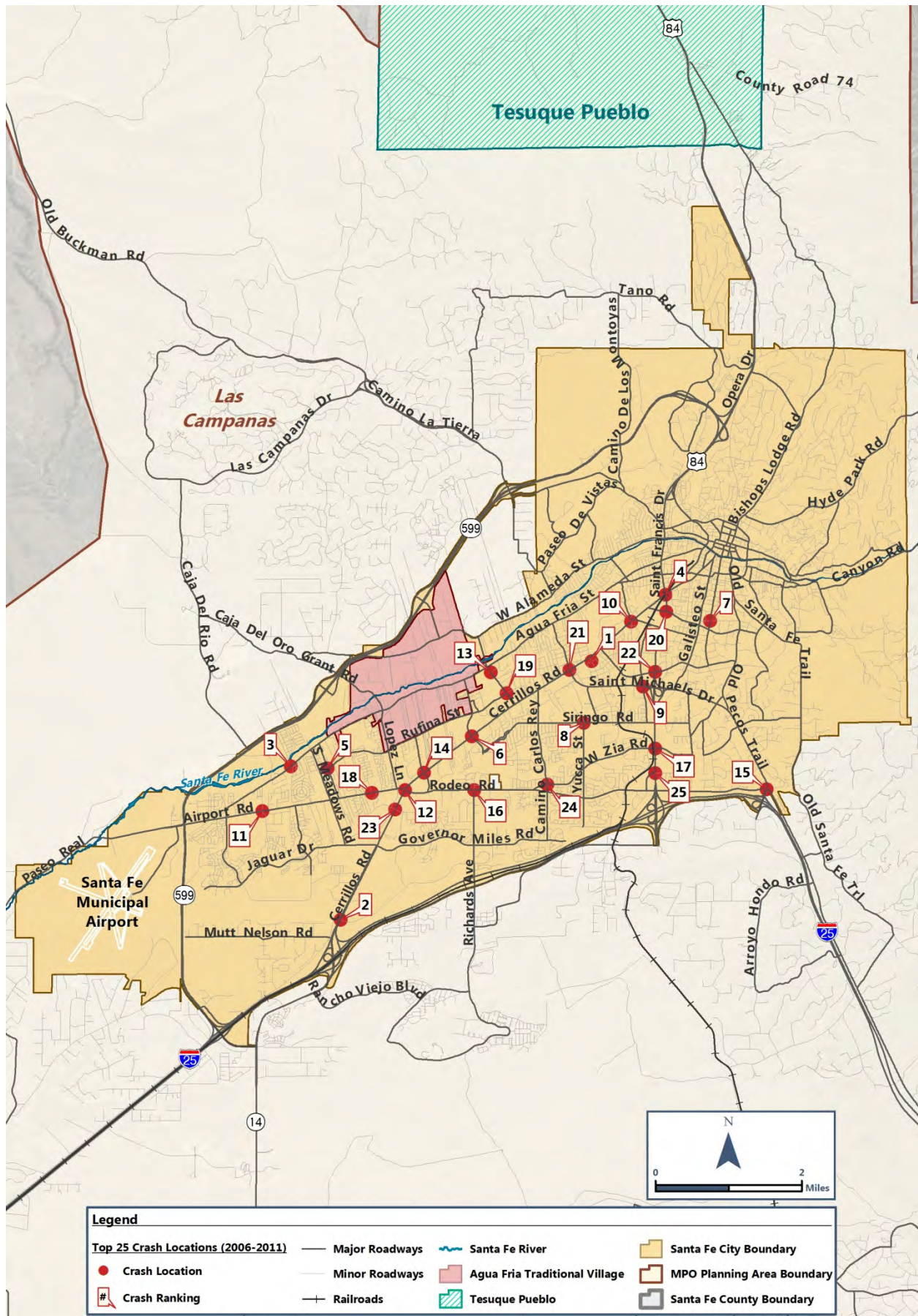


To identify the most hazardous locations, the crashes were sorted by intersections, which were then ranked according to the highest number of crashes. However, heavily-traveled intersections are expected to have more crashes than those with lower traffic activity. To account for this, the intersections were normalized by traffic volume to establish a crash rate. Likewise, the crash severity was considered in identifying the most hazardous intersections. Crashes involving a fatality were given the highest weight, followed by injury crashes and finally property damage only crashes. **Figure 4-6** shows the resulting list of the top 25 most hazardous intersections. These intersections represent high priorities for safety improvements.



The intersection of Cottonwood Drive and Aqua Fria Road is the number three most hazardous intersection in our region and was recently awarded Highway Safety Improvement Program (HSIP) funding to construct a roundabout aimed at improving the safety of the intersection.

Figure 4-6. High Crash Locations (Top 25 Intersections)



Regional Transit and Rail System



The Santa Fe metro area has seen unprecedented growth in regional transit services over the past 10 years. Five public agencies now service the area, each providing service in a manner that strives to meet the needs of all metro area commuters, visitors, and residents.

Current Transit Routes and Service

Santa Fe Trails, launched in January 1993, is the city of Santa Fe's small urban transit system and provides the greatest level of fixed service to the area. Santa Fe Trails was the nation's first transit system to operate its entire fleet with cleaner burning compressed natural gas (CNG).



Twenty-three years later Santa Fe Trail's mission is to "provide transit service in the city of Santa Fe (and parts of Santa Fe County) to get area residents and visitors wherever life takes them" and boasts an annual ridership level of over 1 million, an over 50 percent increase in the past 10 years. Santa Fe Trails is serviced by a fleet of 35 state-of-the-art buses and hosts 11 distinct routes, including the downtown's Santa Fe Pick-Up and the Santa Fe Ride, and an ADA Paratransit service. **Figure 4-7** shows the Santa Fe Trails bus routes.

North Central Regional Transit District

(NCRTD), the region's iconic "Blue Bus," provides free transit service to a four-county area, including Santa Fe County. After much collaboration, including the New Mexico Legislature passing New Mexico's Regional Transit District Act in 2003 and the passage of a 1/8 cent gross receipts tax by the representative counties, a consolidated NCRTD began servicing the region in 2007 with 22 fixed and demand-response routes, 6 of which service the metro area, as shown on **Figure 4-8**.



The Blue Bus provides service for students, commuters traveling from the north or greater Espanola and Los Alamos area to the Town of Edgewood at the County's southernmost boarder, and residents needing regional access to social and medical services.

As of January 1, 2015, the NCRTD assumed operation of the **Taos Express**, previously operated by the Taos Chili Line. The Taos Express provides residents and visitors with weekend bus transit between Taos and Santa Fe and is a connecting service with the New Mexico Rail Runner (NMRX).

Figure 4-7. Santa Fe Trails Bus Routes

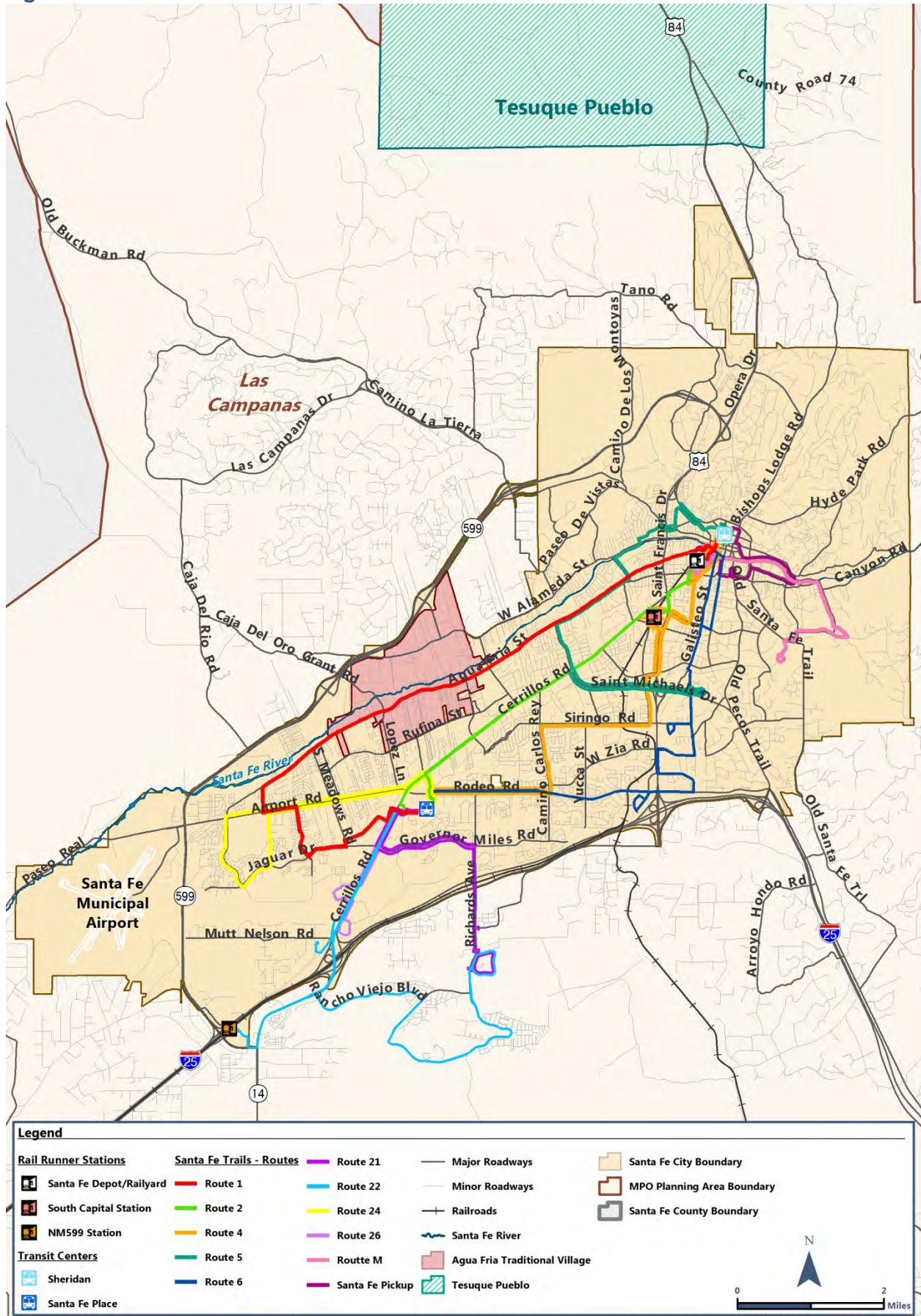
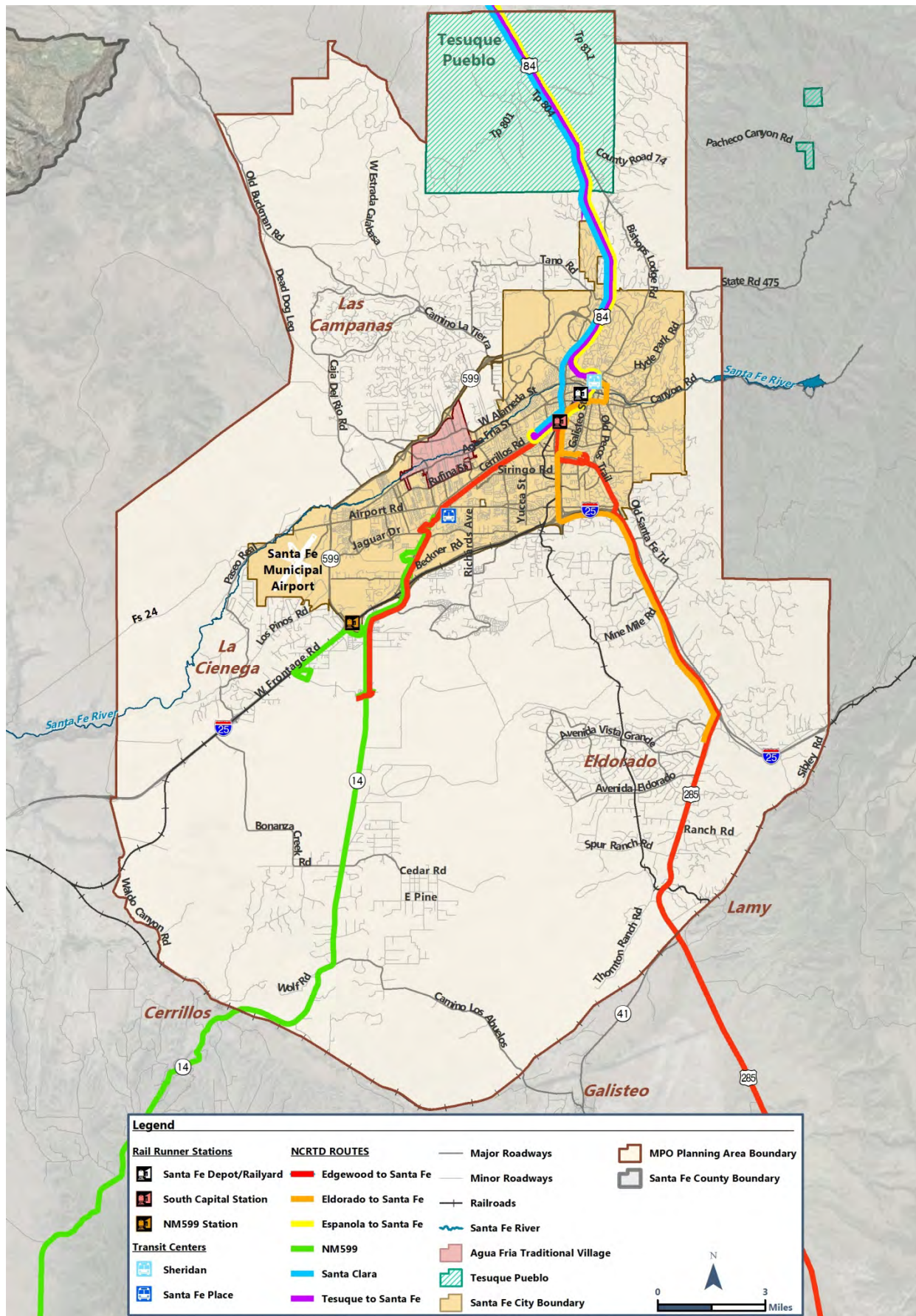


Figure 4-8. NCRTD Bus Routes



Starting with nine buses and three routes, the **New Mexico Park and Ride** began service in 2003. The NMDOT operates the Park and Ride Shuttles with three routes servicing the metro area as a primary means of access to the NMRX stations and services for commuters from Los Alamos, Espanola, Albuquerque, and Las Vegas, New Mexico (routes are shown on **Figure 4-9**). In State Fiscal Year 2013, statewide the Park and Ride¹:

- Removed 10.4 million vehicle miles during the busiest commute hours;
- Reduced carbon emissions by 5,026 tons; and
- Served an Average Daily Ridership of 1,249.3 passengers.

The **New Mexico Rail Runner Express** (NMRX) is New Mexico's first commuter rail service. Inaugurated in 2006, it now provides service seven days a week to 14 stations along a 96.5-mile corridor that runs through Valencia, Bernalillo, Sandoval, and Santa Fe counties. Opened to Santa Fe in 2008, the NMRX provides commuters access via three stations, Railyard Depot, South Capital and 599 with a fourth, Zia Station to be considered for opening in 2015. In 2012 the NMRX carried more than 1.1 million riders, averaging approximately 3,800 passengers per week.



The Rio Metro Regional Transit District administers and operates the NMRX, and the vehicles and tracks are property of the state of

New Mexico. The Rio Metro Regional Transit District is governed by the Mid-Region Council of Governments (MRCOG). The MRCOG also serves as the agent for the NMDOT to implement the NMRX commuter train between Belen and Santa Fe. Oversight of activities include:

- Procurement of equipment
- Environmental, engineering, design, and construction of facilities
- Marketing and operation of the commuter rail service

Amtrak's Southwest Chief makes a stop at Lamy, New Mexico, outside the southeastern most edge of the SFMPA. Amtrak contracts with Lamy Shuttle and Tours, a private entity to provide access to downtown Santa Fe and transit connections. Currently, a section of Amtrak's route through Colorado and New Mexico is potentially slated for decommissioning in 2016. The NMDOT's Transit and Rail Division was tasked with studying the impacts of the closure and the New Mexico State Legislature will be debating the pros and cons of financially supporting the route in 2015.

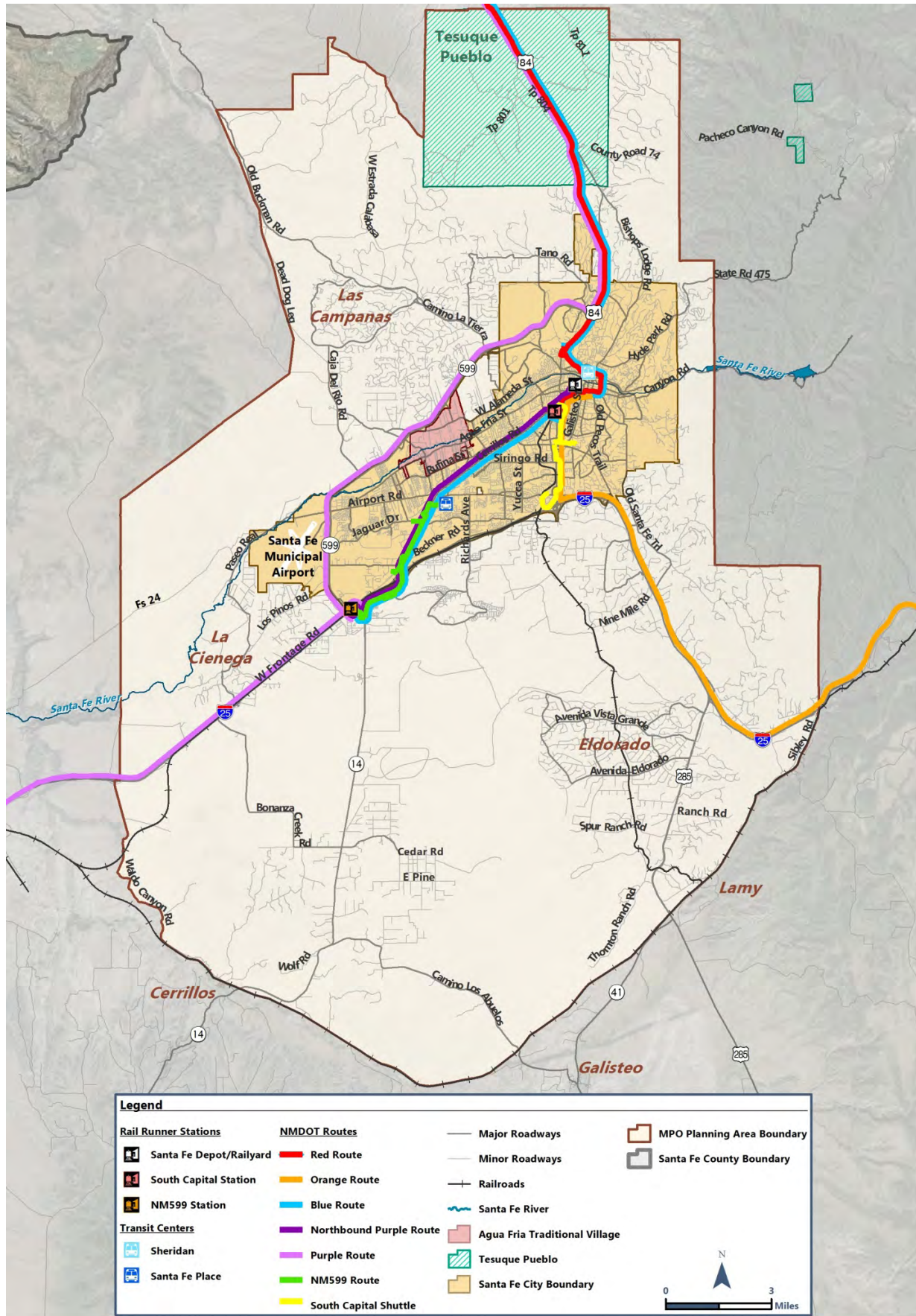
Further details about commuter rail service impacting the Santa Fe metro area can be found in NMDOT's State Rail Plan adopted March 2014.

Transit Ridership

Each transit service provider has seen moderate ridership growth since the inception of their service and anticipates that growth to continue. The advent of the NMRX and its stations provided key commuter links for the metro region, and regional collaboration was necessary to synchronize route stops and key destinations. Between fixed routes and paratransit services, a significant portion of metro area residents and visitors has access to a source of transportation.

¹ New Mexico Department of Transportation Park and Ride History and Facts through FY 2013.

Figure 4-9. New Mexico Park and Ride Bus Routes



The SFMPA has a very high level of transit service within and into the city. Our ridership far exceeds the vast majority of peer systems. For a community of about 120,000 persons, over 2 million one-way trips (unlinked) were taken within the Santa Fe metro area, comparing very favorably to similar sized communities. **Table 4-2** shows ridership on the various major transit services in the region.

Table 4-2. Transit Ridership

Service Provider	Annual Ridership (FY14)
Santa Fe Trails	1,066,000
Santa Fe Pick-Up	83,000
NCRTD*	72,000
NM Park and Ride*	186,000
Rail Runner Express*	720,000

**Fixed routes serving Santa Fe*

The NCRTD Blue Bus has steadily expanded service to the metro area and will be expanding service to the La Cienega community south and west of Santa Fe. The NCRTD has invested in advanced technology that will provide real-time data, and they will be testing both CNG and propane buses along Santa Fe routes in 2015 as possible replacement fuels for their fleet to reduce GHC emissions.

Identified Problems and Challenges

Room for improvement is clearly identified in the Santa Fe MPO Public Transit Master Plan. The following are included as challenges:

- Lack of coordinated investments among all transit providers in technology, including websites, real-time GPS tracking, trip planners, and google transit.
- Disparate agency marketing, including individual website access, marketing materials and strategies, route maps, signage, and more.
- Poor weekend and evening service across most fixed routes.
- Undesirable feelings of safety and security, hindering ridership especially

along Santa Fe Trails' Cerrillos Road, Route 2, where public drunkenness and disorderly conduct were cited multiple times.

- Confusion with existing marketing and branding of the Santa Fe Pick-Up servicing downtown Santa Fe NMRX commuters and tourists.
- Poor mobility and access options for "the last mile" or how and where transit riders get to their final destinations and transit stops.
- Logistical and infrastructure challenges with the NMRX that limit the frequency and speed of the route, along with many riders wanting a stop near the "Sunport," Albuquerque's Airport.

Active Transportation

Active transportation (bicycle and pedestrian) elements are now integral standalone components of this 2015–2040 MTP. As a result of specific needs identified in the 2010 MTP, the MPO has adopted Bicycle and Pedestrian Master Plans. Active transportation offers several options to improve our existing transportation system efficiently and cost effectively through a variety of systematic enhancements while simultaneously providing benefits, including safety to all roadway users.



development of the Bikeways Mapping Project and as a deliverable the Santa Fe Bikeways & Trails Map. The map was created through public input to show the perceived suitability of on-street facilities for bicycling. The MPO produced 20,000 copies of the map in 2012. The map will be updated and reprinted in 2015. The map is well distributed and snapped up by both locals and visitors, and are prized giveaways during any of the multiple national and international events hosted annually in the region.

Bikeways System



The Santa Fe MPO adopted the Metropolitan Bicycle Master Plan in 2012 following a recommendation in the 2010 MTP to develop the Plan. The Plan's purpose is to

coordinate transportation planning and other bicycle-related planning among MPO partner agencies to maximize the benefits of the use of bicycles for transportation. Benefits include economic development, reduced traffic congestion and demand for motor vehicle parking, reduced GHG emissions, healthier residents and neighborhoods, improved urban and suburban environments, quality of life, accessibility, and an affordable transportation option.

The vision of the plan is that residents and visitors enjoy safe and convenient bicycle and pedestrian access along a comprehensive network of multi-use trails and complete streets, connecting residential neighborhoods with all areas of the community.

Since the inception of the 2012 Metropolitan Bicycle Master Plan, the development of on and off road bicycle facilities has been tremendously successful with an understanding that our region's needs and opportunities are expansive. A definitive success of the Plan includes the

In 2013, the Santa Fe MPO invested in six passive infrared ped/bike counters. The MPO maintains a system of semi-permanent (may be moved as needed) automatic counters to monitor bicycle and pedestrian volumes 24 hours a day at selected locations. Collecting better data on usage and demand is essential to building long-term support for walking and cycling, and to improving conditions for those who choose to walk and ride bikes.

Existing Bikeway System

Santa Fe's bikeway system is a combination of on-road facilities, including designated bike lanes, striped shoulders, and lanes shared with motor vehicle traffic; and off-road facilities, including paved multi-use trails and formal or informal soft-surface paths. In some cases, facilities are designated and linked through "Bike Route" or other guidance signage.

Figure 4-10 provides a map of the major bikeway system.

Figure 4-10. Major Bikeway and Trail Network

Santa Fe's Major Urban Trails & Selected On-Road Connections, 2012



Santa Fe's four major multi-use trails are the River Trail, the Acequia Trail, the Rail Trail, and the Arroyo de los Chamisos Trail. Other lesser-known multi-use trails include the Cañada Rincón Trail (also known as the North Spine Trail); the Arroyo de los Chamisos Trail (north fork) in Tierra Contenta; the District Trail (NM Central RR) in Rancho Viejo; and some trails in city parks including Frenchy's Field and Ashbaugh Park.

These multi-use trails can be thought of as core pieces of the region's "arterial bikeways." They typically follow alignments that are independent of roadways, such as waterways, arroyos, and active or abandoned rail lines. This serves to minimize conflicts with motor vehicles, increase recreational value, and maximize the extent to which the transportation alignment complements the existing road system. Together with

complementary road connections, Santa Fe's major multi-use trails can function as an integrated network of comfortable and reasonably convenient alignments that a wide variety of bicyclists can use to get to most parts of the MPO area.

As shown in **Table 4-3**, the Santa Fe metro area includes nearly 19 miles of paved "arterial" trails and 17 miles of unpaved "arterial" trails. These figures include major trail alignments only. Many more miles of minor paved trails within subdivisions and parks, including internal connections and side paths along roadways, are not included, nor are other soft-surface recreational trails.

Table 4-3. Mileage of Trails

	Paved	Unpaved	Total
Acequia Trail	1.1	0.5	1.6
Arroyo de los Chamisos*	4.4	0.2	4.6
Arroyo Hondo Trail	0.0	0.8	0.8
Ashbaugh Park Trail	0.2	0.0	0.2
Chili Line	0.0	0.2	0.2
Frenchy's Field Trails	0.8	0.0	0.8
NM Mexico Central RR**	1.6	0.0	1.6
Rail Trail	4.4	11.6	16.0
River Trail	3.3	0.6	3.9
Spur Trail	0.0	3.0	3.0
St. Francis Dr. Trail	0.9	0.0	0.9
Tierra Contenta Trail***	2.1	0.0	2.1
Total	18.8	16.9	35.7

**Includes Gail Ryba Trail (with Gail Ryba Trail underpass and Zia Trail)*

***Includes Rancho Viejo "District Trail" and part of STCC Loop.*

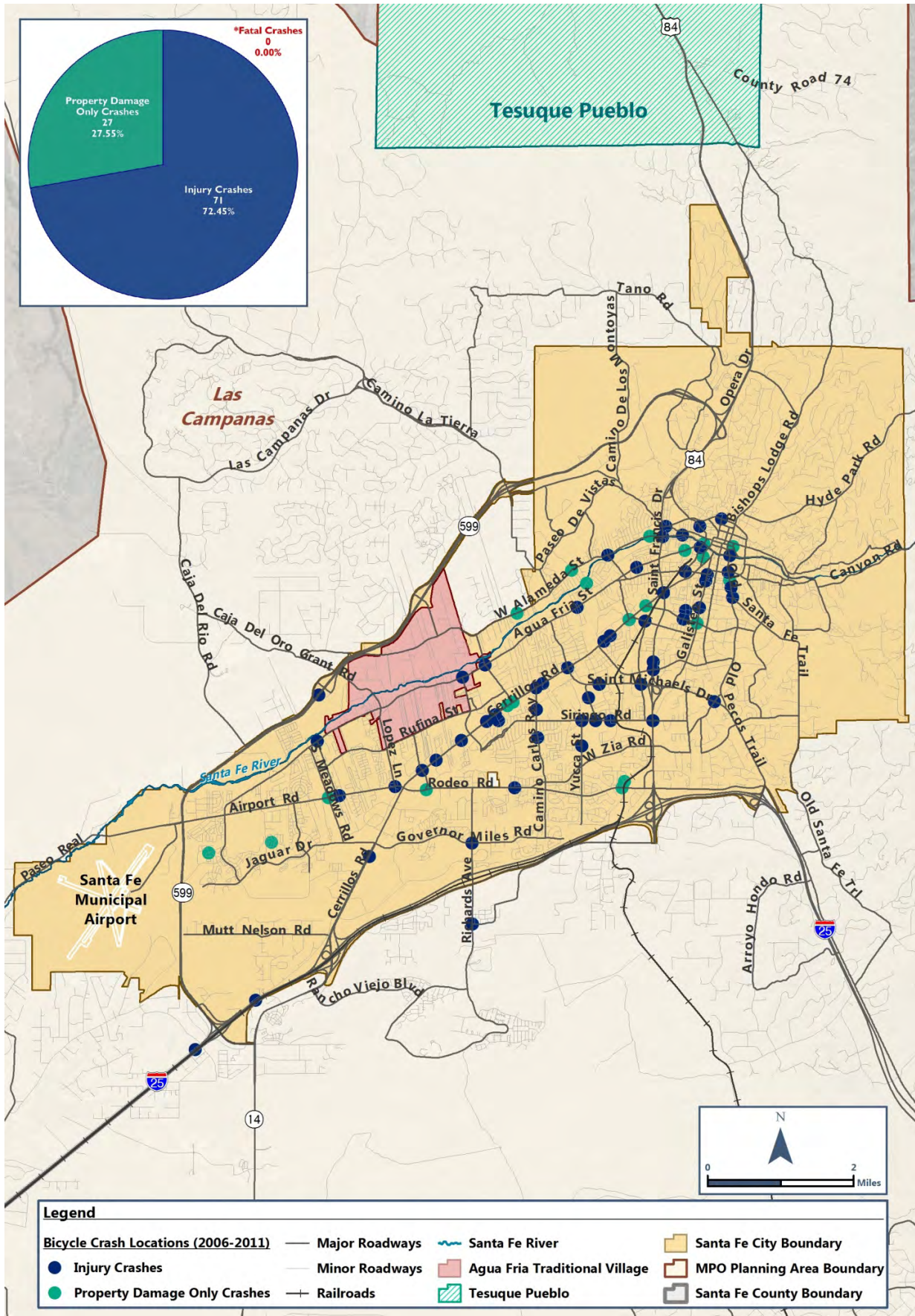
****Counted separately from the rest of Arroyo de los Chamisos Trail.*

Crash History

Safety is a key element of a successful bicycle network. Bicyclists may choose to ride only if they feel safe and comfortable on our bikeway system.

The Santa Fe MPO completed a road safety improvement study. The study collected crash data from 2006–2011. The data were analyzed to identify bicycle-related crashes and severity over the six-year time period. As shown in **Figure 4-11**, there were 99 vehicle-bicycle crashes, an average of approximately 16 bicycle-related crashes per year. Fortunately, there were no fatal bicycle crashes during that time period, but nearly three-quarters of the bicycle crashes resulted in injury. **Figure 4-11** shows the locations of the bicycle crashes by severity.

Figure 4-11. Bicycle Crash Locations and Severity



Pedestrian System



The 2010 MTP update included a recommendation for the development of a standalone Pedestrian Master Plan. That plan began in late 2013 and is now a major component of this 2015 MTP update.

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.

It is fair to state that member agencies through the development of roadway projects and requisite pedestrian facilities for new developments have resulted in better pedestrian facilities overall in the past five years, but as the Pedestrian Master Plan reveals, the gaps and needs in the metro area are enormous.

The Pedestrian Master Plan recognizes that pedestrian facilities were a result of disaggregated and incremental decision making. A primary focus of the plan is to develop an inventory and condition status of existing facilities. The Plan establishes a 25-year framework to improve the pedestrian environment and increase opportunities for walking as an active mode of transportation and recreation that is convenient, comfortable, safe and inclusive, and accessible by all.

The MPO desires that the development of the Pedestrian Master Plan will facilitate further data collection and data collection protocols that will assist with a comprehensive inventory and procurement of useful information about the pedestrian system. Furthermore, the MPO also desires that the benefits of investing in and improving all areas of the pedestrian system become quantifiable in a transparent manner that supports all users of the system and shifts

the point of decision making on improvements to a more balanced level.

Existing Pedestrian System

The sidewalk inventory provides a database of the existing pedestrian network. The inventory documents existing sidewalks on both sides of the street, one side of the street, and missing sidewalks. The inventory also includes existing off-road paved urban trail segments, as summarized in **Table 4-4** and shown on **Error! Reference source not found.** The sidewalk inventory mapping reveals where there are gaps within the network that impair connectivity and may impact the public's

SIDEWALKS

The Pedestrian Master Plan defines a sidewalk as a paved path that is within the road right-of-way. A sidewalk is not a beaten dirt path, gravel path, roadway shoulder, or a path outside the right-of-way.

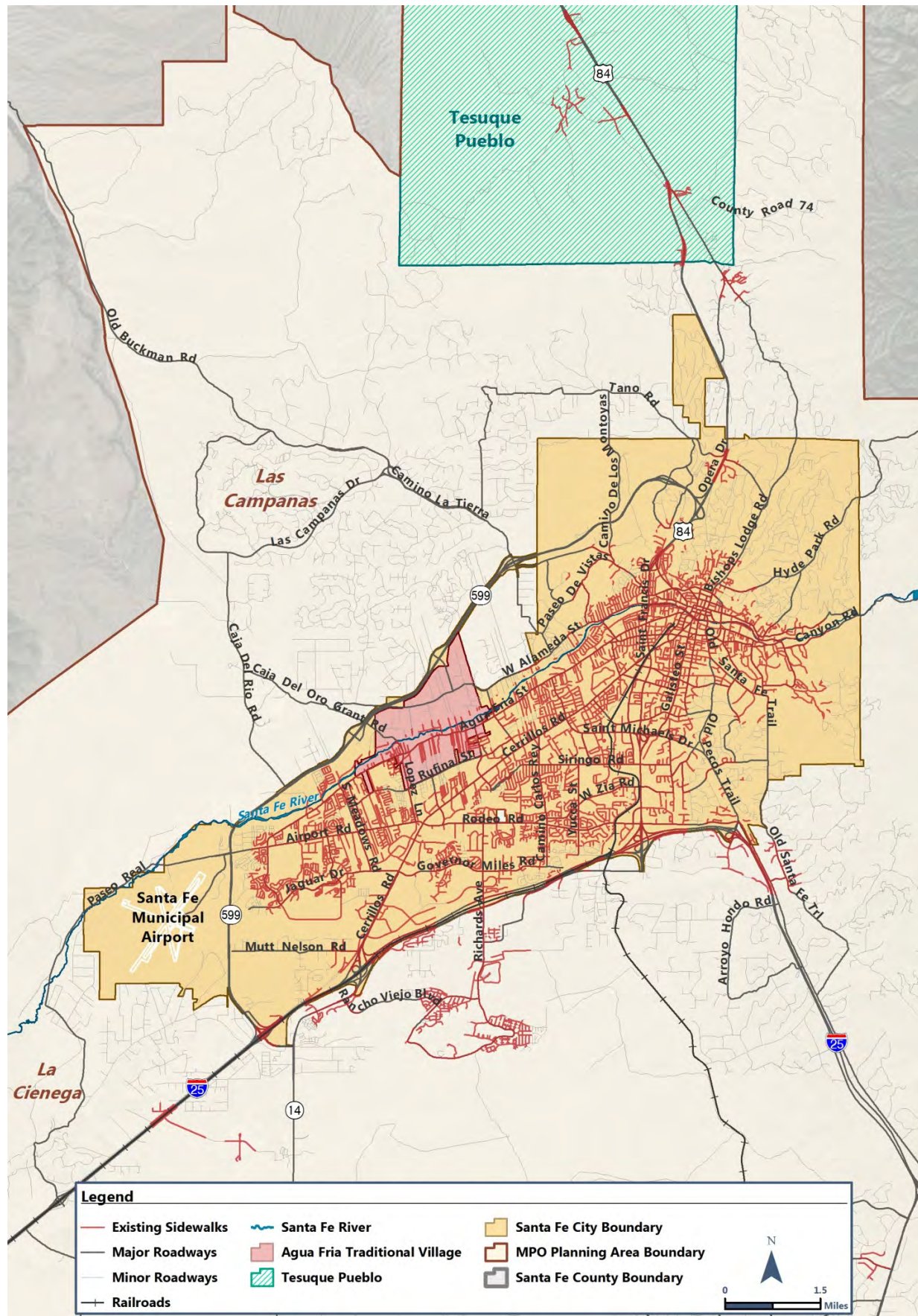
willingness to walk.

Santa Fe has an extensive and growing urban trail network that creates a secondary option that separates pedestrians from vehicular traffic. This network includes major and minor paved trails. The major trails are corridors that connect the city, running along the river, arroyos, and rail line. The minor trails are neighborhood loops, park paths, and small spokes off the major trails.

Table 4-4. Sidewalk Inventory

	Miles
Sidewalks on Both Sides	1,597.5
Sidewalks on One Side	4,018.8
Major Urban Trails	21.0
Minor Urban Trails	44.8
Total	5,682.1

Figure 4-12. Sidewalk Inventory

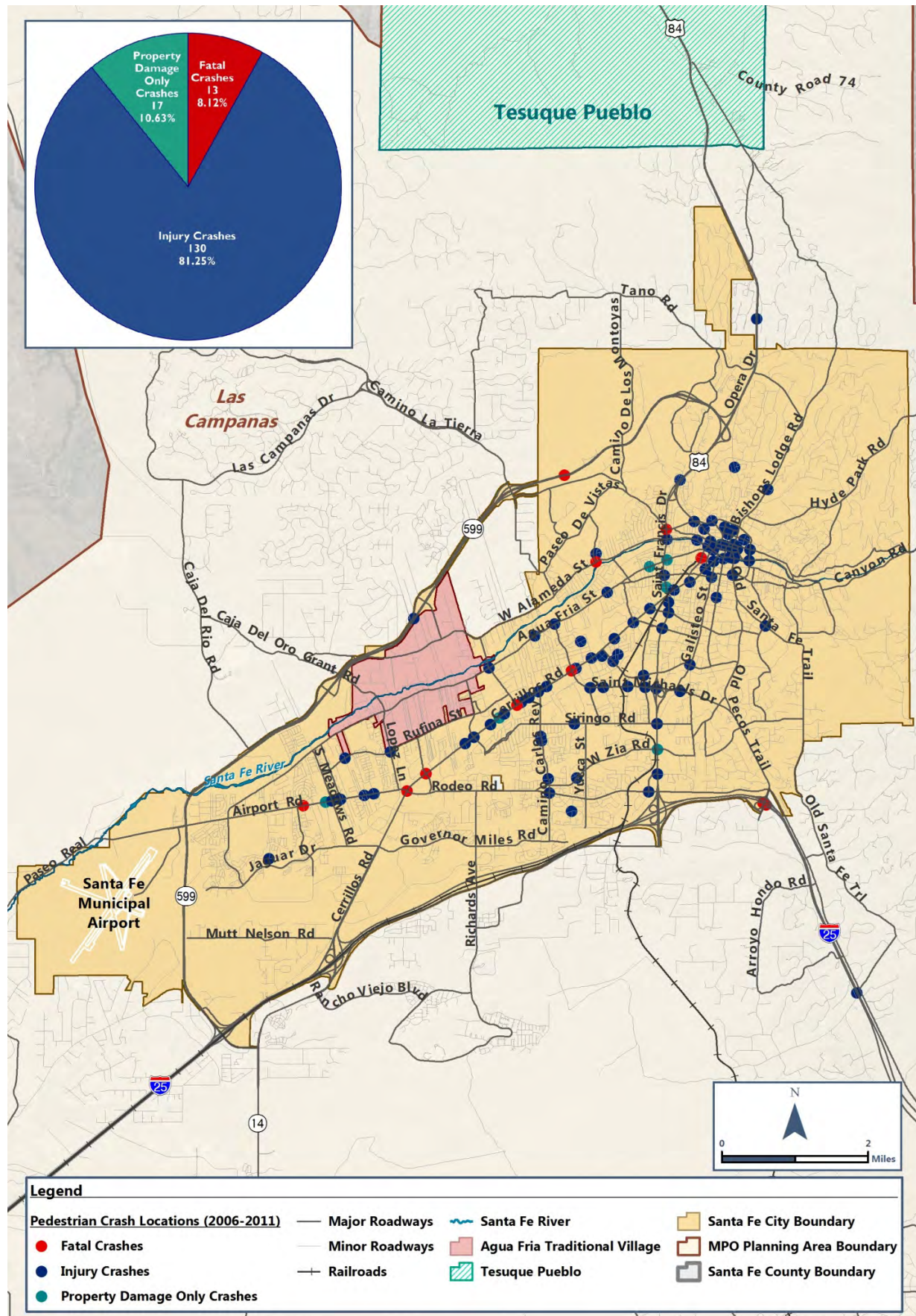


Gaps in the Santa Fe sidewalk network exist for several reasons. Historic building styles left buildings and walls on the edge of the dirt street, which was used for walking and pulling carts. When the city upgraded the roadways to paved streets, there may not have been enough room to include a sidewalk. Properties that were built within the county but later annexed into the city were not required to include a sidewalk at the time of build. Nearly 170 miles of gaps in the sidewalk and urban trail network have been identified.

Crash History

The crash data collected by the Santa Fe MPO from 2006–2011 provide an understanding of the severity of vehicle-pedestrian crashes in our region. As shown in **Figure 4-13**, there were 160 vehicle-pedestrian crashes, an average of approximately 22 pedestrian-related crashes per year. Nearly 90 percent of these crashes resulted in injury or fatality; there were 13 fatal pedestrian crashes over the six-year period and 130 pedestrian injuries. **Figure 4-13** depicts the locations of the pedestrian crashes by severity.

Figure 4-13. Pedestrian Crash Locations



Freight

Regional: Freight is vital to the Santa Fe MPO's economy, as well as the New Mexico economy. Most raw and furnished goods and major parcel deliveries are moved via interstate motor freight carriers and a variety of freight class vehicles. Shipped packages may fall under 18 classes, with class 50 being the least expensive, and class 500 as the most expensive. Efficient freight mobility is crucial to the economic resilience of the area.

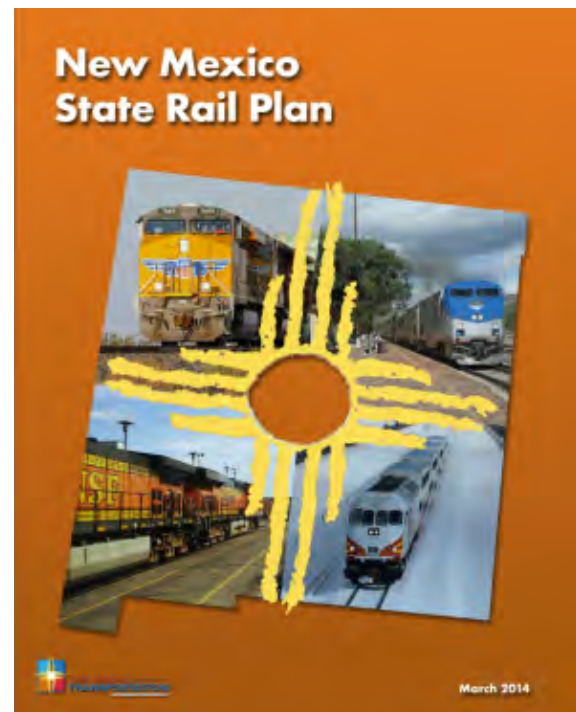
The movement of freight and goods within the Santa Fe metro area is almost exclusively provided via trucks. Trucks tend to represent 8 to 10 percent of the total number of vehicles on major highways. I-25, which traverses the Santa Fe metro area, is the major north/south freight route through the state carrying between 3,000 and 6,000 trucks per day.

Much of the truck traffic generated in the SFMPA is related to the delivery of construction materials, farm supplies, and retail or wholesale supplies. Although it is desirable to divert much of the through truck traffic to NM 599, St. Francis Drive still remains the shortest route through the area. NM 599 was constructed as a relief route around Santa Fe specifically for the transportation of low level nuclear waste from Los Alamos to the Waste Isolation Pilot Project (WIPP) near Carlsbad.

Statewide: According to the NMDOT Research Bureau report: *Innovation in Transportation, Establishing Freight Corridors*, approximately 75 percent of the freight transported within New Mexico is "through" freight, which is freight that is transported entirely through the state. Approximately 25 percent is transported by rail. Air cargo is responsible for less than one percent of the state's freight movement.

Through traffic—trains passing through New Mexico—represents 88 percent of all rail traffic by weight and 95 percent of all rail traffic by value on New Mexico's rail network (New Mexico State Rail Plan). The preponderance of rail freight impacting New Mexico is from the mining and utility sectors. Freight delivered by rail does not directly impact the Santa Fe metro area.

In March 2014, the NMDOT adopted the New Mexico State Rail Plan, where more details can be found regarding rail freight.



Aviation

The Santa Fe Municipal Airport (SAF) is a small non-hub commercial service and general aviation airport that has seen substantive annual increases in commercial activity since the last MTP update in 2010.

In 2015, two commercial airlines service SAF: (1) American Eagle, with destinations to Dallas/Fort Worth and Los Angeles and (2) United Express, with service to Denver. According to a study conducted by the Massachusetts Institute of Technology's International Center for Air Transportation, in 2013, the airport had 2,724 departures, up from 1,484 in 2012 for an 83.6 percent change. Available seats went up 60.8 percent from 66,372 in 2012 to 106,722 in 2013. Passenger enplanements and deplanements on commercial flights jumped from 19,653 in 2009 to 137,927 in 2013.

Additionally, SAF is home to nearly 200 general aviation aircraft and 11 military fixed and rotor-wing aircraft (NM Air National Guard). The majority of the based aircraft is single engine, and includes jet and multi-engine planes.



The Terminal Building, built in 1941, offers a variety of services for the traveling public. Amenities include a full-service restaurant, airline ticket counters, airline self-serve kiosks, parking pre-pay envelopes and drop box, baggage claim, rental car counters, restrooms, vending machines, information displays and flyers, and the airport management offices. As part of a master planning effort in 2014 and 2015, the Terminal Building is slated for expansion to accommodate the recent and projected growth.

Ground transportation includes rental car services, private shuttle services, taxis, and limos. The airport is currently not served by a public transportation system; however, the Santa Fe MPO Public Transit Master Plan recommends that Santa Fe Trails explore a route modification for service to the airport.

Maintenance

Santa Fe County: Santa Fe County has maintenance responsibilities for approximately 574 miles of road, approximately 1/3 of which are within the SFMPA.

The Santa Fe County Road Maintenance Division includes 39 staff members rotating 8-hr. shifts with snow removal operations lasting as long as necessary. The snow removal begins with the priority one roads, the high-volume traffic roads, and then filters down to priority two and local roads.

Santa Fe County established a Transportation Advisory Committee for the purpose of reviewing and recommending road improvements to the Board of County Commissioners. The Committee also reviews and monitors road improvement projects and researches funding sources to establish long-range planning for road improvements.

NMDOT: The SFMPA is serviced by NMDOT'S District 5. The District 5 Engineer is responsible for roadway construction, roadway

maintenance, engineering support, technical support, traffic operations, bridge maintenance, safety operations, equipment management, administration operations, quality management, and public relations.

The maintenance section is responsible for maintaining all roadways within the District. Responsibilities include roadway rehabilitation, safety upgrades, fencing, vegetation/herbicide operations, signage, and snow removal.

NMDOT District 5 maintains an active maintenance agreement with the City of Santa Fe to provide routine maintenance along segments within the city of Santa Fe. The NMDOT maintains the following roadways:

- Cerrillos Road – St. Francis west to city limits
- St. Michael's Drive – Cerrillos Road to Old Pecos Trail
- St. Francis Drive – I-25 to US 285
- Paseo De Peralta – St. Francis Drive to Bishops Lodge
- Old Pecos Trail – St. Michaels Drive to Rodeo Road
- Hyde Park Road – Bishops Lodge to city limits
- Bishops Lodge (Washington Avenue) – Paseo De Peralta to Hyde Park Road
- North Guadalupe – Paseo De Peralta to US 285

The City of Santa Fe provides road maintenance via the City Streets and Drainage Maintenance Division. The City has approximately 1,100 designated roadways with approximately 755 lane miles and 41 miles of unpaved roads.

The Streets and Drainage Maintenance Division is responsible for maintaining the streets and drainage infrastructure. Tasks include snow removal, concrete construction, grading, sweeping, pavement maintenance, engineering/inspection, drainage maintenance, and administration.

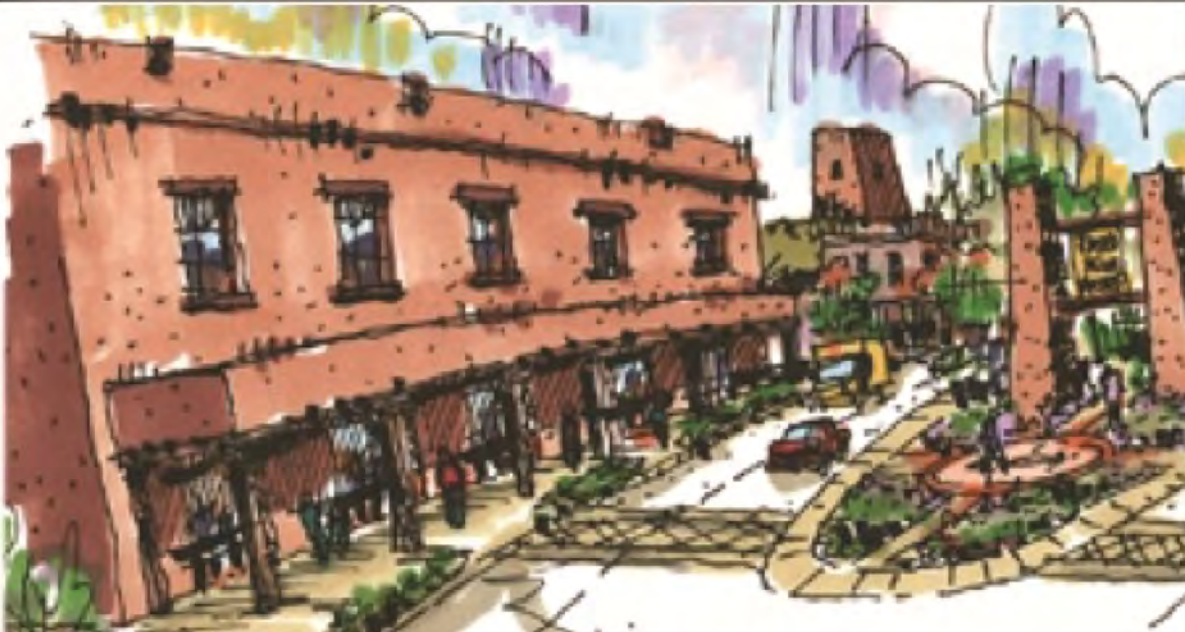
NMDOT is currently developing an Asset Management Plan, which will include an inventory of the pavement and bridge conditions in the SFMPA.



ST. MICHAEL'S DRIVE

SANTA FE, NEW MEXICO

NEW URBAN BOULEVARD/ MIXED USE DISTRICT



Chapter 5: Our Future Imagined

Chapter 5: Our Future Imagined

A combination of national trends, market forces, socioeconomic preferences, innovative transportation designs and plans being implemented are shedding light on what the SFMPA may look like in 2040. The development and approval of the Bicycle, Pedestrian, and Transit Master Plans are excellent indicators that, if implemented, will go further to enhance the resiliency, safety, economic diversity and, ultimately, the livability of the area.

This chapter highlights systemic and incremental changes, opportunities, and choices that the community will be faced with to honor the goals set forth in this plan. If each goal is fulfilled within a comprehensive systemwide approach, our future imagined begins to look good. The goals, as developed through the public input process and listed in Chapter 2, include:

1. **Safety** – A safe and secure transportation system for motorized and non-motorized users.
2. **System Preservation** – A well-maintained transportation system.
3. **Multimodal Mobility and Accessibility** – An accessible, a connected, and an integrated transportation system.
4. **Congestion Relief and System Operations** – An efficient and reliable transportation system.
5. **Economic and Community Vitality** – A transportation system that supports economic and community vitality.
6. **Environmental Stewardship** – A transportation system that protects and enhances the natural, cultural, and built environment.
7. **Partnership and Funding** – Regional collaboration in transportation planning, funding, and implementation.

Transportation Demand Management

Each year, the region spends millions of dollars on the supply side of mobility; that is, building and maintaining roads, buying and operating buses, and building sidewalks and bicycle facilities. Some of the most cost-effective mobility investments we can make are on the demand side, including:

- Encouraging commuters to use our transportation facilities as efficiently as possible by walking, bicycling, taking transit, carpooling, or vanpooling; and
- Encouraging commuters to shift auto trips out of peak periods.

Strategic marketing and outreach efforts targeted to shifting commuter behavior by connecting with commuters and the employers they work for are called Transportation Demand Management (TDM) strategies.

To successfully implement TDM strategies, specific areas are targeted, such as concentrated employment centers, including sites where transit service is available and/or parking is costly or inconvenient, like the South Capital Station neighborhoods; city, county, and state government campuses; and local college and university campuses.

Recommended TDM strategies include:

- Developing a comprehensive Metropolitan Mobility Plan that details TDM strategies and supports the implementation of each Metropolitan Master Plan.
- Identifying potential aggregated funding opportunities, including state, federal, and local funding.
- Working with targeted employers on multiple strategies they may execute on behalf of their workforce.
- Looking critically at the parking supply. When free or inexpensive parking is offered, it leads to overuse. Parking management is integral to any TDM program.

- Using the best technologies and promotional tactics to improve and distribute transit and any regional rideshare information. Developing and marketing web-based and mobile phone based applications for transit riders is an example of TDM at work.
- Outlining the costs and benefits of universal transit passes for businesses, educational institutions, and governmental institutions.
- Using social marketing and incentive programs to reach out to the general public and visitors.

TDM strategies can be a crucial component of the overall transportation system, prompting employers to encourage commuters to use alternatives to driving alone to assist commuters in understanding and using these alternatives.

The Land Use and Transportation Connection

Land use patterns and transportation systems influence the overall quality of place in any community. The shape of a city plays a critical role in how much and how often residents and visitors travel. Although the metropolitan area may be classified as car-dependent, with approximately 90 percent of trips made with an automobile, the region has made significant strides in the past 20 years through its investments in public transit, including the Rail Runner Express, on- and off road bicycle facilities, and multi-use paths. Unfortunately, a separate set of rules, codes, and plans often drives the link between land use and transportation policy, including affordable housing.

Developing the greater Santa Fe metropolitan area in a more transportation-efficient pattern requires significant strides in policy changes, including the region's land use policies. Transportation-efficient development is characterized by higher density and mixed uses with easy access to frequent transit service and safe and comfortable bicycle and pedestrian infrastructure. Land use policy impacts transportation, affordable living, sustainability,

and public health because a properly designed community encourages walking and biking while reducing the need to drive for daily needs.

Sustainability

More and more cities in the United States are recognizing that incremental affordable living policies such as affordable housing, though important, do not capture or address the true costs of living.

AFFORDABLE LIVING

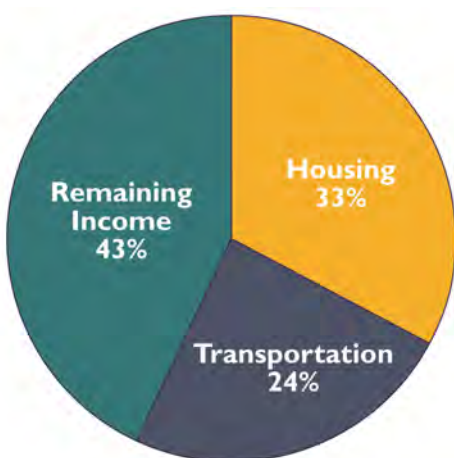
"Traditional measures of housing affordability ignore transportation costs. Typically a household's second-largest expenditure, transportation costs are largely a function of the characteristics of the neighborhood in which a household chooses to live. Location Matters! Compact and dynamic neighborhoods with walkable streets and high access to jobs, transit and a wide variety of businesses are more efficient, affordable and sustainable."

-- Center for Neighborhood Technology

Transportation Costs

Figure 5-1 shows the True Affordability and Location Efficiency metrics provided by the Center for Neighborhood Technology for Santa Fe; housing and transportation costs account for 57 percent of total income.

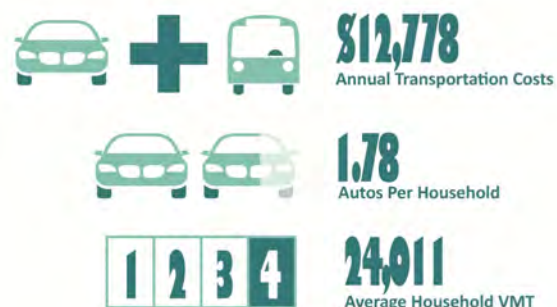
Figure 5-1. Housing and Transportation Costs in Santa Fe¹



¹ Center for Neighborhood Technology's Housing and Transportation (H+T®) Affordability Index (HTAindex.cnt.org)

People in dispersed areas not only need to own more vehicles but rely on driving those vehicles farther distances, thereby driving up the cost of living.

Figure 5-2. Transportation Costs in Santa Fe²



Transportation costs represent the average total cost of household transportation. Transportation costs are defined as the sum of auto ownership costs, auto use costs, and public transit costs, as modeled for the typical household.

Why is this important? First, reducing the costs of living across the board allows greater disposable income to circulate through the community. Second, the numbers tell a story worth listening to if we collectively want to enhance community vitality and resiliency. Examples of this story are imbedded within multiple plans from our member agencies.

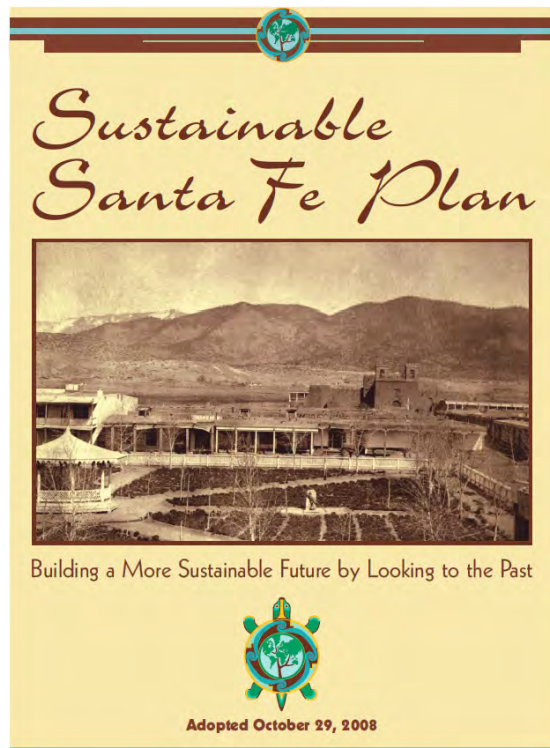
Sustainable Santa Fe Plan

Adopted by the City of Santa Fe in 2008, the *Sustainable Santa Fe Plan* references and builds on Resolution 2006-54 endorsing the U.S. Conference of Mayor's Climate Protection Agreement, which specifically calls out: "Adopt and enforce land-use policies that reduce sprawl, preserve open space, and create compact, walkable urban communities; Promote transportation options such as bicycle trails, commute trip reduction programs, incentives for carpooling and public transit."

² Center for Neighborhood Technology's Housing and Transportation (H+T®) Affordability Index (HTAindex.cnt.org)

The plan also prioritizes the following:

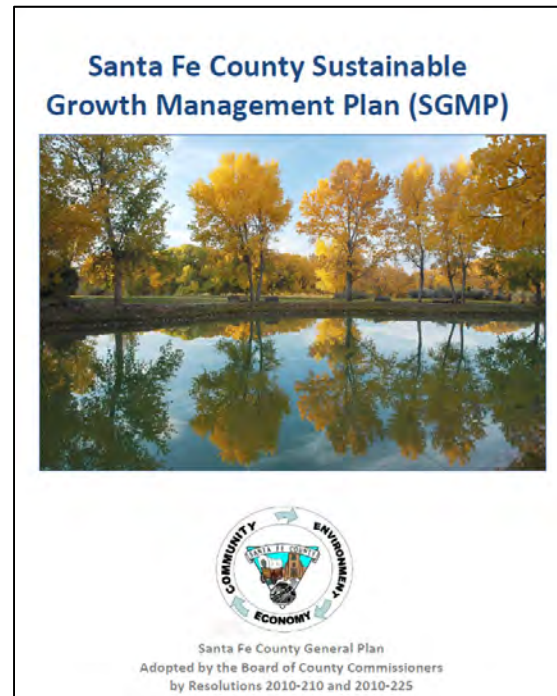
- Adopt and enforce land use codes and policies that promote sustainable, energy-efficient, carbon neutral development; and provide for alternatives for the automobile.
- Amend the zoning code to incorporate some aspects of performance zoning to allow a greater variety of compatible uses, thereby reducing the number and length of vehicle trips.
- Amend the Development Code to require large development projects and subdivisions to provide safe bicycle and pedestrian infrastructure.



The 2008 *Sustainable Santa Fe Plan* has gone largely unimplemented, as evidenced by the implementation table in the document. Without a commitment to tackle these challenges, the land use pattern of the greater metropolitan area will continue in a dispersed pattern and transportation investments will largely be derived from meeting the demand of this inefficient pattern.

Santa Fe County Sustainable Growth Management Plan

Santa Fe County adopted the *Santa Fe County Sustainable Growth Management Plan* (SGMP) in 2010.



Chapter 2: Land Use Element of the SGMP strives to recognize and then tackle the realities of unregulated and dispersed development patterns by focusing on growth areas.

“Unsustainable development patterns negatively impact the environment. Large lot, low-density residential development is often resource intensive, expensive to serve, overly consumptive of land, and often results in excessive vehicle miles traveled. These impacts are exacerbated by overly consumptive land development that consumes forests, water resources, wildlife, open spaces and agricultural and ranching lands.” The SGMP details the challenges of dispersed patterns and potential policy solutions, yet patterns remain largely the same as evidenced by new development populating the greater metropolitan area. The Santa Fe MPO does not subscribe to compel local government to change policy, but only to highlight existing policy and better understand how the desired outcomes of said policies are or are not realized. By adding data and information about the inefficiency of

transportation costs as a result of dispersed development patterns, as well as the economic gains of more efficient patterns, the Santa Fe MPO may assist with the implementation of these policies.

It is recommended that the Santa Fe MPO broker annual land use/transportation policy forums over the next five years that highlight existing land use regulations and policies that may or may not support an efficient transportation system. The MPO would specifically invite members of the City's Planning Commission and Santa Fe County Community Development Review Committee as well as respective staff and other appropriate leaders in the metropolitan area. Discussions would be for the purpose of understanding the practical, political, and operational potential and the impact on transportation efficiencies for moving existing and potential new policies and modified regulations forward.

PUBLIC HEALTH CONNECTION

"The benefits of physical activity are well known: Exercise, including 'active transportation' activities like walking and bicycling, can prevent weight gain and lower risks of obesity, diabetes, and heart disease. Transportation also is a source of pollution, generating air, soil, water, and noise pollutants, including particulate matter, carbon monoxide, nitrogen oxide, and carcinogens. Reports by the American Public Health Association and others have linked air pollution to negative health outcomes, including asthma, respiratory illness, heart disease, poor birth outcomes, cancer, and premature death.

"To overcome these challenges, many in the transportation field are collaborating with colleagues in public health to research topics such as air pollution, safety, physical activity, and access to goods and services that support healthful living. This spotlight on public health and transportation complements other trends across the country, such as greater interest in alternative modes of transportation, livable communities, and resource conservation.

"Complete streets and land use strategies that consider health can help increase physical activity, improve accessibility and safety, and ease congestion and air pollution. 'As the use of these strategies increases,' says Andrew Dannenberg, an affiliate professor at the University of Washington's School of Public Health, 'there is tremendous potential for studying how health outcomes may be improved via transportation.'"

-- Federal Highway Administration

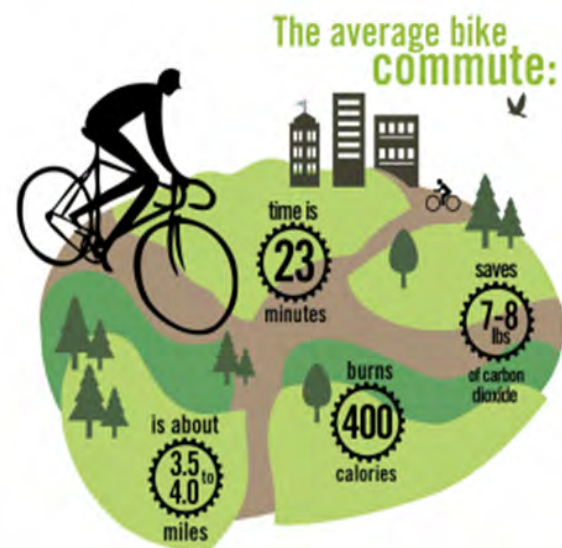
How Does Transportation Affect Public Health?

FHWA-HRT-13-004, Eloisa Raynault and Ed Christopher,
May/June 2013, Vol. 76

The Public Health Connection

The connection between the shape of our communities and the shape of our bodies is becoming more and more indisputable and self-evident. Social determinants of health include direct and indirect impacts surrounding decisions about land-use and transportation planning. Factors influencing public health include environmental, physical, financial, and social.

According to the World Health Organization, "Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." By partnering with local and state public health organizations the Santa Fe MPO can support the tenants of both public health and multimodal transportation benefits. Where public health is the art and science of preventing disease and injury, as well as promoting health and the efficiency of populations through organized community effort, public transportation is the art and science of providing mobility and accessibility choices that strive for safety and efficiency through organized community effort.



Source: The Intertwine Alliance, Portland, OR
www.theintertwin.org



SOURCE: PEW RESEARCH, MEASURING THE HEALTH EFFECTS OF SPRAWL: A NATIONAL ANALYSIS

The Santa Fe MPO embraces the “**Ten Principles for Building Healthy Places**,” detailed in a report by the Urban Land Institute’s Building Healthy Places Initiative.

5 Make Healthy Choices Easy

Communities should make the healthy choice the one that is SAFE—safe, accessible, fun, and easy.

Continuing to invest in a network of multi-use trails throughout the metropolitan area is an excellent example of making healthy choices easier and easier.

6 Ensure Equitable Access

Many segments of the population would benefit from better access to services, amenities, and opportunities.

All members of the Santa Fe MPO strive to honor investments that capitalize on access for all members of the community.

7 Mix It Up

A variety of land uses, building types, and public spaces can be used to improve physical and social activity.

The Santa Fe metropolitan area has some great examples of mixed uses, including downtown and the Railyard; however, they tend to be the *exception to the rule*.

8 Embrace Unique Character

Places that are different, unusual, or unique can be helpful in promoting physical activity.

The City of Santa Fe is known as the “City Different.” Around every corner exists the opportunity to build on this foundation and, at the same time, to honor vibrant walkable and livable spaces.

9 Promote Access to Healthy Food

Because diet affects human health, access to healthy food should be a considered as part of any development proposal.

The Santa Fe Food Policy Council is an excellent resource with opportunities to partner to assist with access to local markets and food resources.

10 Make It Active

Urban design can be employed to create an active community.

1 Put People First

Individuals are more likely to be active in a community designed around their needs.

Transportation planning can easily be construed as infrastructure-centric; however, behind the projects and policies is the public who help guide the decision making for the MPO.

2 Recognize the Economic Value

Healthy places can create enhanced economic value for both the private and public sectors.

Multimodal infrastructure adds value to our local economy. By supporting the economy, we help build resiliency and an attractive place to entice others to invest here.

3 Empower Champions for Health

Every movement needs its champions.

Champions in Santa Fe come in many sizes. Building trails that connect public places and safe on-road facilities provides champions like this young Bike-To-Schooler a chance to shine.



4 Energize Shared Spaces

Public gathering places have a direct, positive impact on human health.



Strategic Plan

Fiscal Year 2014 - 2016

FY 2016 Interim Strategic Plan



State of New Mexico
Susana Martinez, Governor

New Mexico Department of Health
Retta Ward, Cabinet Secretary

The New Mexico Department of Health's [Strategic Plan](#) is an excellent example of how policies strategically align, support, and help legitimize the MPO's core principles and goals.

Specifically, one of the plan's objectives is to "Encourage physical activity and healthy eating in elementary school students," where approximately 21.4 percent of elementary students are obese. The performance measure is the percent of elementary school students in community transformation communities participating in walk and roll to school. The plan promotes the strategy of "Build walking and biking trails that connect neighborhoods to schools and promote community use, and increase number of safe walking and biking routes and encourage schools to adopt components of Safe Routes to School."

In addition, goals to reduce diabetes, increase access to health care services, and improve overall health conditions can be directly correlated with the physical layout of the community to which they live. By partnering with and developing opportunities to collaborate with all levels of public health

allows an objective and quantifiable support network for the projects and policies found throughout the *Strategic Plan*.

The following organizations are committed to advancing public health in the SFMP:

- New Mexico Department of Public Health (www.nmhealth.org)
- Indian Health Service: Santa Fe Service Unit (www.ihs.gov)
- Santa Fe County DWI Program
http://www.santafecountynm.gov/community_services/dwi_program
- Santa Fe County Health and Human Services Division
(http://www.santafecountynm.gov/community_services/hhsd)
- City of Santa Fe Community Services
(http://www.santafenm.gov/community_services)
- La Familia Medical Center
(www.lafamiliasf.org)
- New Mexico Human Services Department
(http://www.hsd.state.nm.us/Behavioral_Health_Services_Division.aspx)

Recommendations that advance transportation and public health planning include:

- Continue to develop partnerships with local public health organizations.
- Participate with local public health events and planning initiatives to help showcase how the MPO is supporting and may contribute to public health goals.
- Conduct Metro Area Community Impact Analysis.
- Encourage Safe Routes to School programs.
- Prioritize infrastructure improvements near public transit facilities.
- Continue to promote active transportation with events like Bike-to-Work Week.

- Encourage bicycle parking at workplaces and public spaces.
- Develop a public health, transportation, and community development benefits curriculum and host annual workshops for fellow professionals and the general public.
- Continue to support the development of a diverse transportation network designed to accommodate all users and all levels.

Roadway and Streets System



The SFMPA is host to a wide variety of streets and roadways. Like any growing metropolitan area, there is a “demand for streets and roadways that serve not only

as corridors for the conveyance of people, goods, and services, but as front yards, parks, playgrounds, and public spaces.”³

Complete Streets

In 2007, the Santa Fe MPO supported the national movement called “Complete Streets” via Resolution 2007-1, “A Resolution Advancing Complete Streets for the Santa Fe Metropolitan Planning Area.” Complete Streets are roadways designed to accommodate safe access for all users. Pedestrians, bicyclists, motorists, and transit riders of all ages and abilities can safely move along and across Complete Streets. Since



³ Urban Street Design Guide, NACTO, Island Press, 2013.

2007, our member agencies have made significant strides in enhancing the roadway network in ways that accommodate all users.



The National Association of City Transportation Officials (NACTO) updates its Urban Street Design Guide regularly. The most recent update in 2013 encourages communities to support innovative and flexible design to accommodate the diversified and growing demand for the use of our roadways. Relevant examples of the principles embraced from the guide include:

- **Streets Are Public Spaces** – In addition to providing space for public travel, streets play a big role in the public life of cities and communities and should be designed as public spaces and channels for movement. Street design should respond to and influence the desired character of the public realm.
- **Great Streets are Great for Business** – Cities have realized that streets are an economic asset as much as a functional element. Well-designed streets generate higher revenues for businesses and higher values for homeowners. From an economic standpoint, road diets often rank favorably with business owners and have a positive impact on local business activity.
- **Streets Can Be Changed** – Transportation engineers can work flexibly within the building envelope of a street. This includes moving curbs,

changing alignments, daylighting corners, and redirecting traffic where necessary. Many city streets were built or altered in a different era and need to be reconfigured to meet new needs.

- **Design for Safety** – In 2012 in the U.S., more than 34,000 people were killed in traffic crashes, which were also the leading cause of death among children age 5 to 14. These deaths and hundreds of thousands of injuries are avoidable. Traffic engineers can and should do better by designing streets where people walking, parking, shopping, bicycling, working, and driving can safely cross paths. Converting underused travel lanes to other uses can eliminate potential conflicts within the roadway and improve traffic operations.
- **Streets Are Ecosystems** – Streets should be designed as ecosystems where man-made systems interface with natural systems. From pervious pavements and bioswales that manage stormwater run-off to street trees that provide shade and are critical to the health of cities, ecology has the potential to act as a driver for long-term sustainable design.



In May 2014, the Santa Fe MPO contracted with the Walkable and Livable Communities Institute and hosted Dan Burden (in photo to the left), Kelly Morphy, and Robert Ping, experts in the field of walkability and designing roadways that accommodate all users by incorporating innovative and flexible design considerations. The three spent the

better part of a week visiting corridors, presenting to the public, and conducting walking audits. Their visit provided key

recommendations that not only supported the Pedestrian Master Plan but are relevant when considering roadway improvements:

- **Narrower Vehicle Lanes** – The wider a roadway, the faster cars tend to travel, decreasing safety for all users. Wide travel lanes make for wide crossings, increasing the amount of time a pedestrian is exposed to the threat of being hit by a car and the amount of time drivers have to wait for each pedestrian to complete the crossing. A large proportion of pedestrian fatalities occur on overly wide suburban five-or-more-lane roadways. Throughout most communities, there are opportunities on non-highway streets to reduce the width of vehicle lanes to 10 feet, which should be the default lane width, including on many suburban regional trunk roads. If necessary, such as when there are especially high numbers of large trucks or buses on the road or significant curves, cities can permit the construction of wider lanes, but the narrower lane should be the default. In addition to lowering vehicle speeds, it saves on materials, reduces environmental impacts, and provides space for wider sidewalks, bike lanes, or wider buffers between sidewalks and passing vehicles. In many cases, narrower lanes also make intersections more compact and efficient. Narrow lanes can be as safe as wider lanes, and they add to motorist vigilance. When it comes to the width of vehicle lanes, less can be more.
- **Lower Vehicle Speeds** – Posted speeds and “design” speeds should be reduced; instead of speeds being determined based on the comfort of drivers, they should be based on the safety and comfort of all users, setting an appropriate “target” speed. Destinations—places where people wish to gather or live—require low, safe vehicle speeds. Like many other places across the country, vehicle speeds in Santa Fe have crept up over time. This

has been the result of focusing public investments and built environment design on vehicle flow and driver efficiency, to the exclusion of people walking, biking, living in place, or using other active modes of transportation. With excessive vehicle speeds, walking and biking become uncomfortable and may seem dangerous in some places. High speeds dampen quality of life and public safety.

- **Improve Crosswalks to Make Them more Visible** – Santa Fe makes good use of signs to draw motorists' attention to crosswalks, but many of its crosswalks are poorly marked or fading and difficult for motorists to see. Santa Fe should consider “double signing” those locations where only one sign appears (using the back sides of signs) and prioritizing crosswalks for restriping.
- **Reduce the Speed and Use of Channelized Turn Lanes** – Channelized right-turn lanes throughout Santa Fe are very high speed, which is unnecessary and dangerous to both drivers and pedestrians. Eliminating double right turn lanes is especially unsafe because it creates the “multiple threat” scenario, where one vehicle is stopped and a pedestrian then crosses into the path of another (potentially) moving vehicle.
- **Put Airport Road on a Road Diet** – Lanes are unnecessarily wide, traffic is moving too fast, some turning radii are too wide, and crossings are inadequate for the conditions. A comprehensive engineering analysis is recommended.
- **Identify Opportunities for Roundabouts** – Modern roundabouts are four to ten times safer than four-way signalized intersections, substantially reducing crashes and helping to calm traffic. They contribute to reduced traffic speeds through a corridor and move 30 percent more traffic without signal and stop control

delays. Roundabouts not only improve pedestrian connectivity but also provide opportunities to create a gateway and improve the retail and social life of streets. When installing roundabouts, be strategic, but be bold, and maximize the opportunity to help people become more comfortable with roundabouts and the benefits they offer. It is important to design for low speed in and low speed out on each leg of a roundabout.

There are several regional examples of how each member agency in our region is applying Complete Streets design to accommodate all users throughout our transportation network.

On South Meadows Road between Airport and Agua Fria, the lane narrowed width with 5-foot shoulders and buffered sidewalk provides safe, comfortable, and attractive passage for all users.

Santa Fe County worked with the Santa Fe Public Schools when the Amy Biehl Community School was developed to accommodate safe bicycle passage, buffered sidewalks, and narrowed driving lanes for safe passage and access to the school.

The City of Santa Fe, in coordination with the NMDOT and FHWA, continues to improve Cerrillos Road with the following design elements:

- Storm drains
- New roadway pavement

COMPLETE STREETS DESIGN EXAMPLES

South Meadows Road Between Airport and Agua Fria



Amy Biehl Community School



Cerrillos Road Improvements



- 6-foot buffered sidewalks
- 5-foot bike lanes
- Bus landings and right-turn auxiliary lanes
- Median modifications
- Landscaping
- Bus stops

On July 20, 2013, Governor Susana Martinez and elected dignitaries joined the NMDOT at the ribbon cutting ceremony to recognize the completion of the Bridge at Highway 599/County Road 62 Interchange Project. The new bridge includes ascending and descending ramps, along with two separate roundabouts at each end of the intersection. The intersection provides motorists, bicyclists, and pedestrians a safer way to access NM 599 and adjacent neighborhoods.



Multimodal Level of Service: Accommodating All Modes in Constrained Right-of-Way

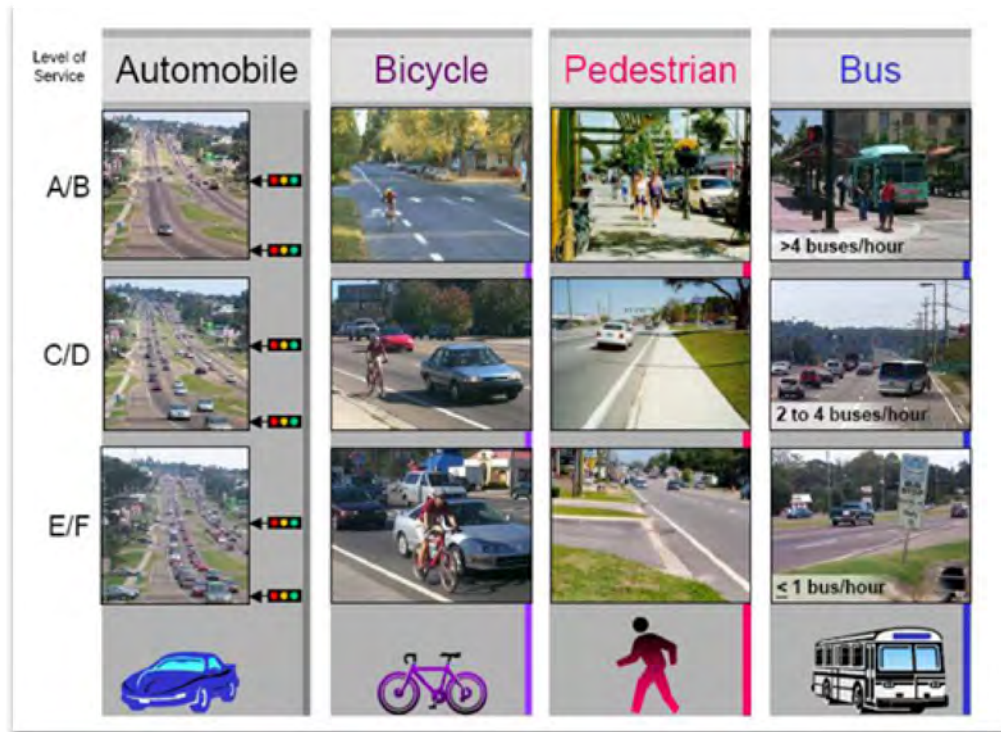
As the MPO gains more knowledge about the desired LOS for multiple transportation modes

through investments in master plans, it is important to highlight emerging trends in how agencies are analyzing LOS.

Roadways are typically analyzed based on the capacity to accommodate traffic flow provided certain conditions such as new adjacent commercial development. LOS is a qualitative measure used to relate the quality of traffic service. However, as evidenced by the regional interest to design streets to accommodate all users, designs often require tradeoffs.

For example, there are many ways to evaluate or measure the performance of a transportation facility. Depending on the point of view of those impacted by the facility, the desired LOS may vary significantly. Where drivers, passengers, and bus riders may have a perspective of moving through a corridor as seamlessly as possible, bicyclists and pedestrians may want a slower, safer, and comfortable experience. Depending on adjacent land uses, residents and business owners who rely on the system may have a different set of expectations about how a roadway is designed.

Research continues nationally, specifically for updates to the *Highway Capacity Manual*, to develop new methods and tools that fill the gaps in the existing knowledge of LOS. Concurrently, developments to date allow the automobile, pedestrian, bicycle, and transit bus to be analyzed independently, enabling decision makers to balance the costs and benefits associated with maximizing LOS for each.



Source: Florida DOT Quality/Level of Service Handbook

The Santa Fe MPO, through the MTP, would like to acknowledge how LOS is evolving in accordance to the changing demands of how roadways are designed, operated, and used. It is recommended that, in accordance with acceptable applications and methods supported by the FHWA, the MPO and its member agencies consider the following recommendations:

- Develop a multimodal LOS analysis for existing traffic conditions along strategic corridors and within specific districts throughout the network.
- Adopt a policy that requires roadway improvements to use a multimodal LOS analysis when necessary.
- Revise development codes to require new development proposals to expand current LOS requirements for traffic impacts to include impacts to pedestrian, bicycle, and transit bus facilities where applicable.

Corridor Studies and Future Roadway Needs

Projects considered for the development of the Regional Roadway System represent a

compilation of “Regionally Significant” improvements and additions to the road network that will be needed over the next 25 years. This list is a culmination of past subarea and corridor studies, as well as the accompanying public participation processes.

The NMDOT contracted studies on the three major corridors through the SFMPA. All three were designed to address issues specific to each corridor and to identify issues interrelated with the larger transportation network. MPO staff participated in project management team meetings and public presentations for all three corridor studies. Consultants formally presented study recommendations to the MPO Technical Coordinating Committee and Transportation Policy Board.

The three corridors studied were:

- St. Francis Drive (US 84/285) – Rabbit Road to NM 599
- Interstate-25 – NM 599 Interchange to NM 466 (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 I-25, resurfaced St. Francis Drive and restriped the roadway with six driving lanes south of San Mateo Road, which previously had four driving lanes. This restriping successfully relieved congestion and queuing and thereby improved safety for motor vehicles in the area of I-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 study of the whole corridor from Rabbit Road, south of I-25, to the NM 599 interchange north of the city.

The study found that alternatives to accommodate future traffic growth were severely constrained due to the limited right-of-way, particularly through the central section of the corridor (San Mateo to Paseo de Peralta). The study identified roadway capacity improvements at some intersections but emphasized 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 that a comprehensive regional transit/rail study be conducted to investigate the types of services necessary to encourage drivers to shift to other modes. It should be noted several 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), which will accommodate growth and enhance the regional transportation network in the surrounding area. A combination of factors, including safety, poor system connectivity, insufficient access, and congestion, drives the

need for improvements to the I-25 corridor. 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 (CCD).

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.

The study did not recommend system connectivity improvements that would extend Governor Miles Road and crossings of the Interstate at Camino Carlos Rey and the future Rail Runner Loop because these improvements were not believed to provide sufficient benefit for the costs that would be incurred.

NM 599 Interchange Priority Plan

NM 599 serves as a north-south bypass for vehicles traveling through Santa Fe and a route for low-level nuclear waste traveling to the WIPP near Carlsbad. As a limited access roadway, NM 599 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 been built at only four of those access points. Interim at-grade intersections were constructed at six of the access points, although right-of-way for future interchanges has been 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 evaluated in detail interchanges for the remaining eight access points and investigated the need for frontage roads alongside the corridor. The study recommended that interchanges eventually be built at all the access points, plus frontage roads be added 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 a frontage road unless necessitated by future development, in which case they should be privately funded.

Santa Fe County Sustainable Land Development Plan

In 2012 the County adopted the Sustainable Growth Management Plan (SGMP); Chapter 10 is the transportation element of that plan including recommended future road network and projects. The MPO future road network includes the SGMP future county road network that is within the MPO planning area.

The Santa Fe Community College District (CCD) Plan, adopted in 2000, has recommendations and guidelines for transit, trails, and roads as integrated components in the College District's transportation network.

MPO staff worked closely with Santa Fe County staff to develop the Transportation Element of their Sustainable Land Development Plan (SLDP). The SLDP (still in draft at the time of this 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 and projected future growth within the CCD and its impact on traffic conditions in this urbanizing area. The plan identifies improvements to existing roads and a number of new roads that will satisfy unmet existing travel demand and substantially increase the capacity for the priority growth areas within the CCD 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).

White Paper on Possible Richards Avenue Extension

The NMDOT completed a white paper on a possible Richards Avenue following a legislative request. The study used the travel demand model to determine the possible effects of extending Richards Avenue from Rodeo Road to Cerrillos Road and from Agua Fria to NM 599. The study found that adding the Richards Avenue Extension 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 Road and Cerrillos Road had merit, while it was felt that the extension from Agua Fria to NM 599 needed further 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).

During the public review and deliberation period during the 2010 update, multiple members of the neighborhood that may be impacted by the then proposed extension of Richards Avenue expressed their concerns and discontent with the extension. Subsequently, the MPO Policy Board agreed to remove elements of Richards Avenue as a possible future project from the plan.

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 CCD, most notably from Rancho Viejo and Oshara Village. Major traffic attractors in the area include the Santa Fe Community College, which is experiencing ongoing 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 9,000 jobs with only about 5 percent of those anticipated to use the Rail Runner Express service. Even with mixed-use development (combining residential and commercial land uses) and promotion of rail, transit, and bicycle use, the CCD road 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 before bringing a new interchange on-line. It should be noted that FHWA approval for a new interchange is required and would most likely require that these other system improvements be completed before approving a new interchange.

- Complete the North-East Connector linking Rabbit Road to Dinosaur Trail and upgrading the entire length to frontage road specifications from St. Francis Drive to Richards Avenue. This is a joint project between Santa Fe County and the NMDOT, and the NMDOT has placed the North-East Connector on the STIP to be constructed in late 2018.
- Build the South-East Connector, from the North-East Connector (Rabbit Road) to a point east of Windmill Ridge in Rancho Viejo and the extension of Avenida Del Sur east from Richards Avenue to connect to the South-East Connector. This new principal arterial will pull traffic from Richards Avenue, which currently carries all trips to the College and Rancho Viejo. Project completion is scheduled for late 2018.
- Widen Richards Avenue to four 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 Road to provide a much needed north-south network connection and to alleviate 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 Road and St. Francis Drive will be required to accommodate projected traffic volumes. It is expected that these auxiliary lanes would likely need to be in place before opening a new interchange at Richards Avenue, as it is expected that this interchange would attract most 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 4 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 and freight (trucks). Based on this future year analysis, the corridors and locations show the need for mobility and/or safety improvements to accommodate year 2035 traffic congestion levels and to 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, Cerrillos Road, and St. Francis Drive.

The NM 599/Veterans Memorial Highway corridor and locational improvements at the intersections with CR 62, CR 70 Connector, and Camino de los Montoyas are all projected to operate near or over capacity. In addition, the *NM 599 Corridor Prioritization Plan* indicates that the southbound NM 599 “weave” section between US 84/285 and Ridgeway Road will be approaching capacity by 2035.

- St. Francis corridor throughout the city of Santa Fe
- Cerrillos 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 Drive to Cerrillos Road
- Old Pecos Trail from I-25 to downtown Santa Fe
- Cerrillos Road/NM 14 south of I-25
- Richards Avenue south of I-25
- St. Francis Drive south of I-25 (depending on how development and street extensions are connected to the regional system)



St. Michaels Drive (Re-Mike)

St. Michaels Drive is and has been the focus of much discussion, analysis, and re-visioning over the past decade. In 2013, the Re-Mike initiative was established.

RE:MIKE IS...*A public/private partnership which includes the City of Santa Fe, local businesses, educational institutions and community organizations. Extensive data collection and an urban prototyping festival conducted in 2012 have set the groundwork for exploring opportunities to transform the St. Michael's Drive Corridor.* (<http://remikeable.com/remike-is/>)

Currently, the City is in negotiations with the NMDOT to potentially take ownership over a significant segment of St. Michaels Drive and further consider alternative design options that may assist with an entirely new vision of the corridor. Concurrently, the City invested in a preliminary traffic study to determine the feasibility of reducing the six-lane corridor to four lanes. Results are pending.

Regardless of the current status of potential changes to St. Michaels Drive, the Santa Fe MPO recognizes the potential for redevelopment initiatives, safety improvements, and enhancements. The Santa Fe MPO will continue to monitor and support progress on the corridor where appropriate.

Roadway Project Needs

The Future Road Network Map (**Figure 5-3**) is a compilation of “Regionally Significant” improvements and additions to the road network that 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 proposed road network improvements have been organized into four general categories:

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

- **Study (Blue)** – These projects 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, a public agency will lead these studies, and in others, the study will be completed as part of a development proposal.

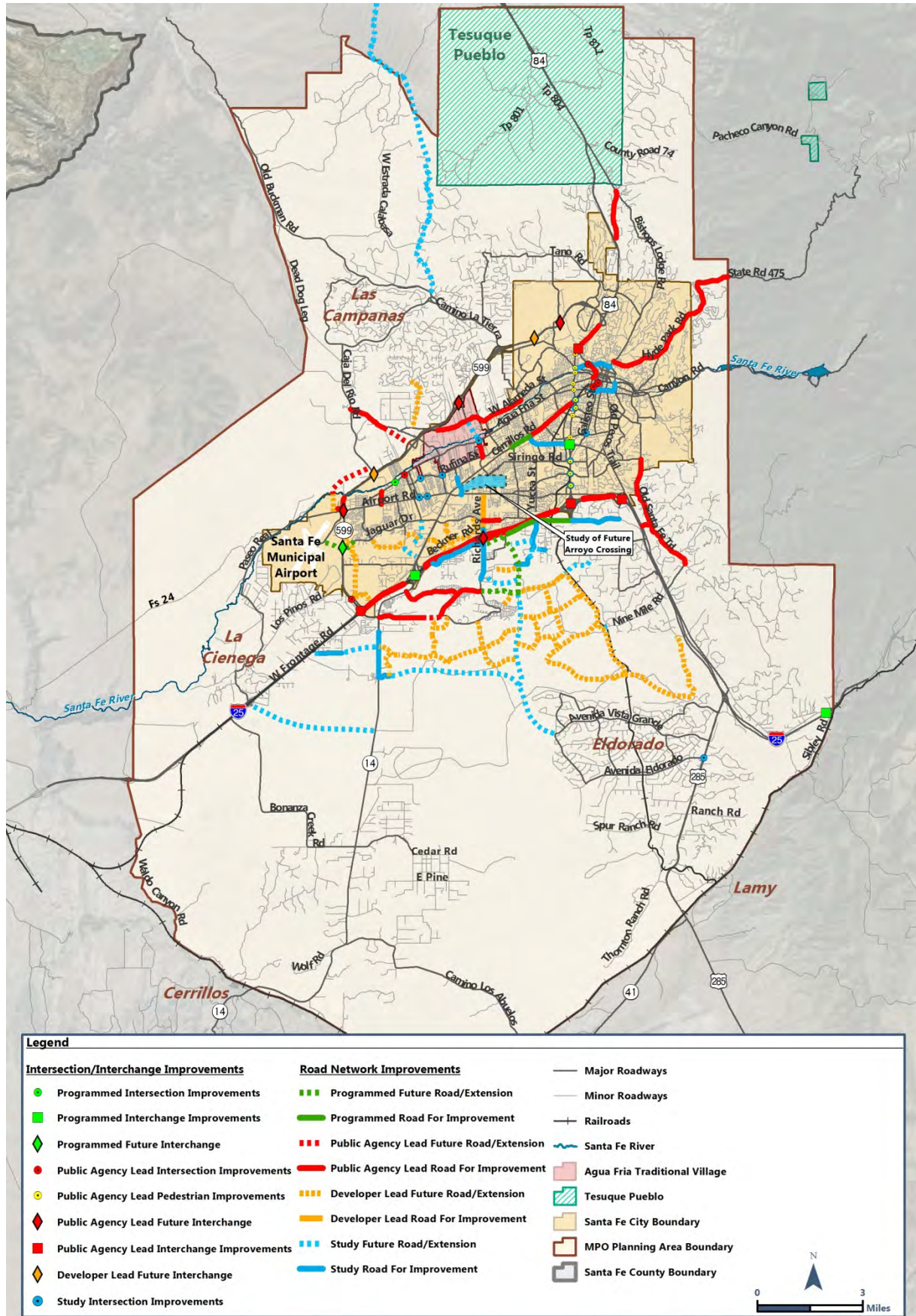
The map is intended to be used to inform the public and illustrate proposed projects for future placement on the MPO Transportation Improvement Program (TIP). Additionally, the map will be used as a guide for both City and County development review processes for future arterial and collector roads.

By specifying the location, priority, and roadway design principles, the MTP 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.

Figure 5-3 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 before approval by the MPO Transportation Policy Board. The full list of regional roadway projects under consideration is included in **Appendix B**.

Figure 5-3. Future Road Network



Regional Transit and Rail System



The MPO promotes public investment in and public use of public transportation services and facilities. We recognize that our transit network is largely

determined by the way the SFMPA is laid out and continues to develop physically. However, as detailed in the newly adopted *Metropolitan Public Transit Master Plan*, the backbone of the now interconnected transit network may begin to help people make smarter decisions about where to locate their homes and businesses depending on their mobility needs.

When the transportation system is viewed as an interconnected network, we can begin to target investments and planning in a manner where transit begins to play a much broader role than simply moving riders from origin to destination. A primary component of the plan emphasizes the fact that transit ridership depends heavily on the quality of the pedestrian and bicycle facilities available where transit stops. In other words transit plays a key role in the collaboration of all transportation modes and, ultimately, in the quality of the multimodal system.

Taken from a rider's perspective, the promotion of public transportation falls into two categories of significance:

1. Mobility – service availability when and where passengers wish to travel; and
2. Access – the ease at which travelers can reach desired goods, services, activities, and destinations (shopping, work, dentist appointment, etc.)

Each service provider strives to maximize public mobility within the context of today's desired destinations or access points.

Balancing the reality of the metro area we have and the metro area we want is the challenge facing entities making investment choices from all areas of the community when it collectively strives for sustainable, livable, compact mixed-uses neighborhoods and higher LOS for those who need it most.

Santa Fe MPO's *Public Transit Master Plan* identifies the following recommendations:

- Investments in technology, including websites, real-time GPS tracking, trip planners, google transit, are occurring but not in a coordinated manner. The need for regionally coordinated efforts for the investment of technology in a manner that allows the rider to enjoy well connected user-friendly service is identified.
- Each service provider provides detailed but individual website access, marketing materials and strategies, route maps, signage and more. Each provider recognizes the benefit of having a coordinated information clearinghouse that includes a website that steers riders to access their destination without having to negotiate multiple sites.
- Several fixed routes are being recommended for modification, but for the most part, stakeholder and public input clearly emphasized a desire for increased evening and weekend services throughout the metro area. Additional access needs have been identified to include human services, medical facilities, advanced educational institutions, and general access around the south side of Santa Fe.
- Safety and security were identified as hindering ridership, especially along Santa Fe Trails' Cerrillos Road, Route 2, where public drunkenness and disorderly conduct were cited multiple times. This situation generally impacts Santa Fe Trail and NCRTD, and strategies to mitigate these impacts will be explored.
- Originally operated by the Santa Fe Parking Division, the Santa Fe Pick-Up was developed to assist Rail Runner commuters in achieving their last mile downtown and to provide tourists downtown loop service, including Canyon Road and Museum Hill. There is strong agreement that the rebranding

and repurposing of the Santa Fe Pick-Up could better service both commuters and tourists with some significant modifications and investments.

- The often repeated phrase that every transit rider is a pedestrian rings true in the Santa Fe metro area, including bicyclists. Access to stops, better facilities at each stop, and a critical look at the public linkages between stops need to be considered.

The Rail Runner Express has logistical and infrastructure challenges that limit the frequency and speed of the route.

Bikeways System



Under the goal of “More Bicycle Facilities and Better Bicycle Facilities, within an Integrated and Effective Bikeway System,” the *Metropolitan Bicycle Master*

Plan presents 12 general recommendations for improving bicycle education, encouragement, and enforcement. The Plan concludes with a road map for implementation detailing strategies to disseminate recommendations, agency responsibilities, prospective funding sources, and specific proposed projects listed in three phases of development.



2015 Bike to Work Santa Fe Participants

The citizens of the metropolitan area gave implementation of the Plan a boost with support of \$6 million in City bond funding for implementation of Phase A recommendations. The Plan called for the metropolitan area to



achieve “Silver” status by the League of American Bicyclists (LAB) as a Bicycle-Friendly Community within five years. Santa Fe achieved

“Silver” status in 2014 and also achieved “Silver” status by the International Mountain Bicycling Association (IMBA) in 2014.

Since the inception of the *2012 Metropolitan Bicycle Master Plan*, the development of on- and off-street bicycle facilities has been tremendously successful with an understanding that the area’s needs and opportunities are expansive. It is recommended that the *Bicycle Master Plan* be updated in 2016 and completed by 2017 to include an inventory of the projects completed to date with a slate of new project and policy recommendations.

On-Street Improvements

Future construction or reconstruction of MPO-area roads classified at the collector or arterial level should include appropriately paved shoulders or bicycle lanes where feasible. Many MPO-area roads classified 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 restriping or repaving the roadway. **Figure 5-4** depicts the bikeway vision plan.

In most cases, a “retrofit” to create sufficient space for bicyclists would require widening the roadway. In spring 2015, the City of Santa Fe passed a resolution calling for City and MPO staff to work with the Bicycle Trails Advisory Committee to study the costs and benefits of a pilot project for “green-colored pavement markings” at high-risk intersections and to report back to the governing body. The City is considering selecting the Camino Carlos Rey roadway corridor for the pilot project. If successful, the project may develop into future

road surface treatments that increase the safety and mobility of bicyclists in Santa Fe.

The City is also experimenting with on-street bicycle parking facilities known as Bicycle Corrals. A pilot project beginning in June 2015 will include the placement of a bicycle corral within an existing on-street parking space within the Guadalupe Street business district. The MPO will monitor the corral over a year and will make recommendations to the City of Santa Fe regarding the possible expansion of these facilities.



GUADALUPE STREET BIKE CORRAL

On the launch of Santa Fe and New Mexico's first ever Bicycle Corral, Mayor Javier M. Gonzales said, "This is big. First, it's a meaningful part of our ongoing commitment to lower greenhouse gas emissions by encouraging Santa Feans to hop on a bike before they reach for their car keys. But it also promotes an active, outdoor economy that embraces and supports small, local businesses."

Other Treatments

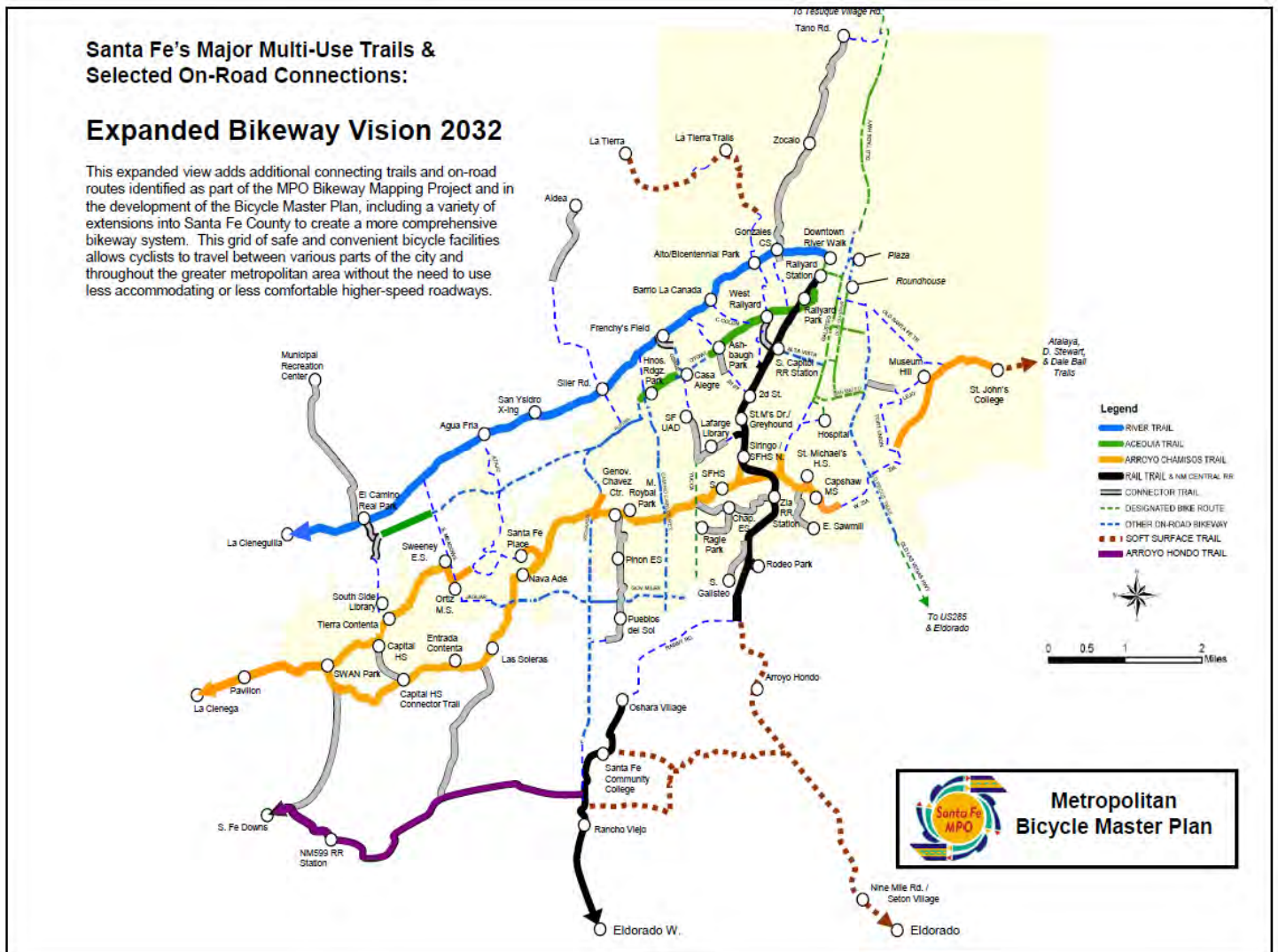
The MPO also supports other engineering measures for bicycle and general trail traffic including specific crosswalk improvements, intersection improvements (including bike lanes and signal actuation mechanisms), sharrows for shared lane arrows (sharrows), and calming or diversion of motor vehicle traffic 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 and potential locations for grade-separated crossings.

Education and Encouragement

In coordination with local jurisdictions, the MPO should emphasize education of bicyclists, education of motorists, and encouragement by events (Bike-to-Work Week) and guidance (Bikeways and Trail Map, Bike Route Signage).



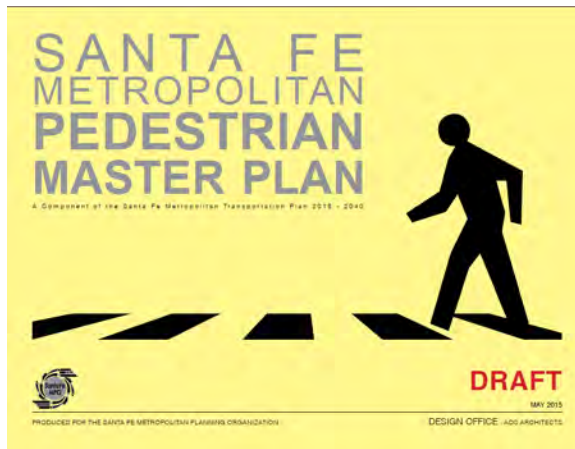
Figure 5-4. Bikeway Vision Plan



Pedestrian System



The *Metropolitan Pedestrian Master Plan* is the first stand-alone plan for the SFMPA and the first of its kind in New Mexico.



The residents of Santa Fe envision a community that invites people of all ages and abilities to walk for enjoyment, exercise, and daily transportation by providing a safe, a convenient, and an attractive pedestrian environment.

The plan identifies “Areas of Critical Concern” and other areas of focus outlined below:

- **Areas of Critical Concern** – Roughly 25 percent of the identified improvement locations fall within 10 designated zones, or “Areas of Critical Concern” that call for a multidisciplinary planning effort to address issues for multiple modes of transportation, including pedestrian.
- **Rural Projects** – Rural pedestrian improvement projects are located outside the “Urban Planning Area” boundary.
- **School Area Improvements** – With high concentrations of pedestrian-oriented populations, areas within walking distance of schools need well-designed, safe walking paths.
- **Other Improvement Locations** – Improvement needs that do not fall in

the previous categories are identified by type. These have been rated according to their ability to address local pedestrian issues such as connectivity and safety.

The *Metropolitan Pedestrian Master Plan* presents a set of goals and strategies, as well as a framework for improving the pedestrian environment, and serves to accomplish the following:

- Detail existing sidewalk system conditions, review policies for sidewalk maintenance and reconstruction, assess current design guidelines and policies that serve to enhance and promote Santa Fe’s walkability.
- Provide clear project and policy recommendations that advance the ability of all citizens and visitors to walk throughout the community in a safe, convenient, fun, and healthy manner.



Freight and Commerce

Most land uses within the SFMPA generate demand for freight, and the primary mode for freight movement in New Mexico is by truck on the road network. That is no different in the SFMPA. According to the planning guide, 80 percent of freight deliveries occur with small trucks and delivery vans. To date, the Santa Fe MPO, through its planning initiatives and public input processes, is not aware of any specific freight-related problems or externalities that would invite mitigation measures. The 2008 *NMDOT Multimodal Freight Study* expected the I-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. Currently, the NMDOT is developing a Statewide Freight Plan that may highlight specific initiatives the MPOs may desire to undertake.

FREIGHT AND COMMERCE

"America's freight transportation system makes critical contributions to the nation's economy, security, and quality of life. The freight transportation system in the United States is a complex, decentralized, and dynamic network of private and public entities, involving all modes of transportation—trucking, rail, waterways, air, and pipelines.

"In recent years, the demand for freight transportation service has been increasing fueled by growth in international trade; however, bottlenecks or congestion points in the system are exposing the inadequacies of current infrastructure and operations to meet the growing demand for freight. Strategic operational and investment decisions by governments at all levels will be necessary to maintain freight system performance, and will in turn require sound technical guidance based on research."

-- The National Cooperative Freight Research Program
Improving Freight System Performance in Metropolitan Areas: A
Planning Guide
NCFRP Report 33, 2015

The following recommendations are detailed so that the Santa Fe MPO may better understand the condition of freight mobility and access within the SFMPA:

- Develop an electronic survey instrument for local freight service providers that seeks to reveal local conditions, constraints, and opportunities for freight services to operate efficiently. The Planning Guide outlines such planning considerations.
- Based on survey responses, work with the NMDOT on appropriate alternatives for how the MPO may assist with identified constraints and opportunities.
- Amend the 2015 MTP with any potential strategies, objects, and/or projects that may be derived from the above analysis.

Aviation

The SAF is supported by the Santa Fe Municipal Airport Advisory Board (AAB), a seven-member citizen board that informs and makes recommendations to the governing body of the City of Santa Fe on the development of the airport for short-and long-term planning goals.

The AAB and the City are undertaking an expansion project specifically for the airport terminal and concurrently an Airport Master Plan. The AAB set up a Master Plan Advisory Committee (MPAC) in 2014 to guide the master planning process that will take place during 2015. The role of the MPAC is to provide input to the City of Santa Fe and the consultant regarding the current and future use of SAF. The MPAC will review elements of the Airport Master Plan while they are in draft form and comment on the accuracy of the assumptions and relevance of the information used to develop the report.

The *Airport Master Plan* is intended to outline recommendations for improvements to airport facilities, including the general layout, rebranding efforts and how visitors access and experience the facilities.

It is recommended that the Santa Fe MPO periodically review the master planning documents for impacts to the regional transportation system.

Sustainable Transportation Design Toolbox

The Sustainable Transportation Design Toolbox provided a high-level assessment of best management practices focused on providing a high-quality transportation network while honoring environmental, cultural, and quality assurances with cost-effective treatments.



Graphic: Deepgreenmachine.com

Sustainable transportation refers to any means of transport with low impact on the environment and includes green streets, walking and cycling, TOD, bike-share, green vehicles, car-sharing, and building or protecting urban transport systems that are fuel-efficient, space-saving, and promote healthy lifestyles.

Sustainable transport systems positively contribute to the environmental, social, and economic sustainability and resiliency 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, GHG (carbon dioxide) emissions, and 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), TDM, land use/smart growth, social programs, and education, as well as establishing more sustainable construction methods and materials use and disposal.

Cost-effective and sustainable transportation options help advance local, state, and federal policies and initiatives with regard to developing a balanced, sustainable, and interconnected multimodal transportation system. An overview of the tools is provided in **Table 5-1**, followed by more detailed information and best practices pertaining to each tool.

Table 5-1. Sustainable Transportation Design Tools

Sustainable Design Tool	Definition/Purpose
 Complete Streets	An approach to planning and designing streets to enable safe, convenient, and comfortable travel for people of all ages and abilities regardless of their travel mode.
 Context Sensitive Solutions	A collaborative and interdisciplinary approach to developing transportation projects that involves all stakeholders in developing a solution that best fits the setting.
 Roundabouts	An alternative configuration to a traditional intersection that can significantly reduce crash rates and enhance the aesthetics of the area.
 Pedestrian Crossings	Street crossings often present unsafe conditions for pedestrians; enhanced pedestrian crossing treatments in road design projects can considerably improve pedestrian visibility and safety.
 Parking and Transit Stops	Providing bicycle parking and transit stop amenities can enhance the quality of a complete street. On- and off-street parking provisions have implications on other travel modes that should be considered.
 Land Use Strategies/Transit Oriented Development	Mixed-use developments with a range of housing choices, retail establishments, employment opportunities, and higher densities can support transit and create walkable and bicycle-friendly environments.
 Transportation System Management	Optimizing the performance of the existing infrastructure through low-cost strategies such as signal improvements, corridor signal timing optimization, turn lane improvements, and special event traffic management.
 Access Management	The process of ensuring that the major street system operates safely and efficiently while ensuring adequate access needs for adjacent land uses are provided.
 Intelligent Transportation Systems (ITS)	The application of advanced information.
 Green Streets and Sustainable Construction Methods	The carbon footprint of transportation projects can be reduced by using recycled or sustainably-produced construction materials, low-impact development (LID) techniques to reduce runoff, alternative street designs, and permeable pavement.

Complete Streets and Context Sensitive Solutions

The basic tenants behind the Complete Streets movement are described earlier in this Chapter. This toolbox reemphasizes those tenants because of the importance of incorporating a Complete Streets design ethic into all applicable future projects. The Santa Fe MPO supports the New Mexico Complete Streets Coalition. Under the initiative and leadership of the New Mexico Healthier Weight Council, a Complete Streets Leadership Team was formed in 2011. Complete Streets are designed and operated to enable safe access for all modes of travel.

The mission of the Complete Streets Leadership Team is to improve the health and safety of New Mexicans by increasing active transportation options via Complete Streets policies and practices by state, local, and tribal governments.

The Complete Streets Leadership Team is currently working to support the adoption and implementation of Complete Streets policies and design standards and guidelines throughout the state.



Americans want choices

66% of Americans want more transportation options so they have the freedom to choose how to get where they need to go.

73% currently feel they have no choice but to drive as much as they do.

57% would like to spend less time in the car.

Future of Transportation National Survey (2010)



Guiding Principles

Complete Streets and Context Sensitive Solutions (CSS) use the following principles:

- Humanize the street: make it a vehicle and person carrier as well as transform 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
- Provide a comprehensive understanding of contexts
- Apply flexibility and aesthetics in design standards
- Preserve and enhance community and natural environments
- Design multimodal streets for motorists, pedestrians, bicyclists, and transit users
- Be safe, accessible, livable, convenient, comfortable; and
- 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, 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 options 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, including residents, businesses, and local institutions that will be affected by an intervention or a failure to address the transportation implications of development such as congestion. Rather than approaching these stakeholders at the end of the design process in an attempt to gain approval, CSS emphasizes the need to incorporate their feedback from the outset of the planning and design development processes and during all subsequent stages of construction, operations, and maintenance.

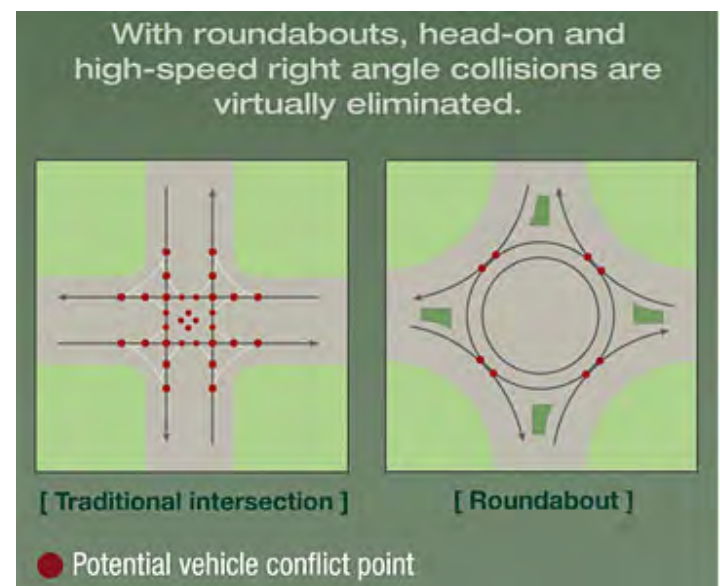
Benefits to planning, designing, and implementing contextually Complete Streets include:

- Gaining public acceptance
- Humanizing the street
- Transforming to a destination
- Safety
- Revitalization
- Pedestrian activity
- Multimodal transportation options; and
- Reducing GHG emissions



Roundabouts

Roundabouts have been used for intersection control around the world for decades, but the first modern roundabout in the United States was not constructed until 1990 in Las Vegas, Nevada. Since then, roundabouts have slowly gained popularity and are now being chosen as the preferred alternative for intersection control in many states. Roundabouts have a proven safety track record with studies showing a 90 percent reduction in fatalities, 76 percent reduction in injuries, and a more than 39 percent reduction in crashes at locations where roundabouts replaced traffic signal or stop sign control at intersections.⁴



⁴ <http://safety.fhwa.dot.gov/intersection/roundabouts/fhwas08006/>

The SFMPA currently contains 10 roundabouts, all single lane, with the most recently constructed as part of the new 599/CR 62/South Meadows Road Interchange.



T Pedestrian Crossings

FHWA, NHTSA, and other partner agencies encourage improved crosswalk provisions for safety and convenience of pedestrians and trail users, including at mid-block and uncontrolled locations. The FHWA study, “The Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations,” urges state and local agencies to re-examine their crosswalk policies and consider marking crosswalks at otherwise uncontrolled locations with high pedestrian demand, such as busy shopping corridors or trail crossings, to facilitate safe and convenient non-motorized travel across roadways. Local agencies are also encouraged to use other measures to improve crosswalk safety.



Several pedestrian crossing safety innovations have been developed and implemented over the past 10 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:

- **High-intensity Activated crossWalk (HAWK)** – 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.

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



Parking and Transit Stops

Because Complete Streets emphasize the balance of access, mobility, and safety, a Complete Streets 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 TOD guidelines, would tend to be located on the sides of buildings opposite the street.

- **Provisions for Pedestrians and Bicyclists** – Retrofits to existing roadways may be able to improve provisions for non-motorized traffic by eliminating motor vehicle parking on one or both sides of a street. Designated bike lanes can be created simply by restriping the roadway after a pavement overlay; new or improved sidewalks, medians, and buffers between the roadway and sidewalks may also be attainable through minor reconstruction.
- **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 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 and for security.



Land Use Strategies/Transit Oriented Development

Smart growth is an urban planning and transportation theory that not only concentrates growth in the center of a city to avoid urban sprawl but also advocates compact, TOD, walkable, bicycle-friendly land use,

including neighborhood schools, Complete Streets, and mixed-use development with a range of housing choices.

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 such as Las Soleras are intended to be TOD type developments once built out 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 on land surrounding the South Capitol Station and developers of land adjacent to Zia Station have the opportunity to propose similar types of TOD developments.



Transportation Systems Management

TSM strategies provide 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 for 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. TSM strategies include:

- Intersection improvements, including turning lanes and channelization
- Signal improvements, including modernizing traffic signal controllers, using vehicle detectors (including bikes and transit vehicles), and improving 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; and
- 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 (ITE) 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.”

Managing access can be realized through specific access management projects, design components of corridor improvement projects, or 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 by 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** – Connections between adjacent parking lots provide off-corridor circulation between adjacent uses.

- **Street circulation** – Using a public project or a shared public/private project to develop a connecting set of side streets enables 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 conflicting traffic movements.
- **Access management standards or plans** – For new facilities, establishing an access plan for the new corridor or through local development regulations.

When designed and implemented properly, the benefits of access management include improved vehicle flow along a corridor, reduction in collisions, and fewer vehicle conflicts. Similar benefits are seen for bicycle and pedestrian users. 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

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 productivity.”

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.

Examples of ITS include:

- Variable (or Changeable) Message Signs placed along highways give travelers real-time information on road conditions, incidents or accidents, lane closures, construction, etc.
- Wayfinding provides information to help travelers find and reach their destinations. This includes 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 number of vehicles circulating and searching for parking, and, more recently, Global Positioning Systems.
- Internet-based media can 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 include the use of transponders and placards to enable vehicles to pass by or enter transportation facilities with minimal delay. Applications include toll roads, truck entrances to intermodal facilities for freight processing, etc.
- Dynamic traffic response includes 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 uses “advanced communications technologies and data collection techniques to improve transportation safety and mobility and enhance productivity of our transportation infrastructure” (NMDOT ITS Section).

Incident management is a coordinated, inter-agency response to actions intended to identify incidents that occur on the transportation

system (all modes) earlier, inform travelers as to the nature of the 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; dispatching emergency responders; strategically locating tow trucks around the system to quickly clear a blockage, putting out information alerts to system users, and even creating detours or alternative routes. The FHWA *Traffic and Incident Management Handbook* is an excellent resource for more information.



Green Streets and 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 LID techniques, these sustainable design and construction methods are gaining in popularity because of their ability to reduce runoff, improve stormwater quality, preserve or create valuable habitat, contribute to more livable and walkable communities, and be eligible for LEED accreditation by the US Green Buildings Council.

Approaches for developing green streets include:

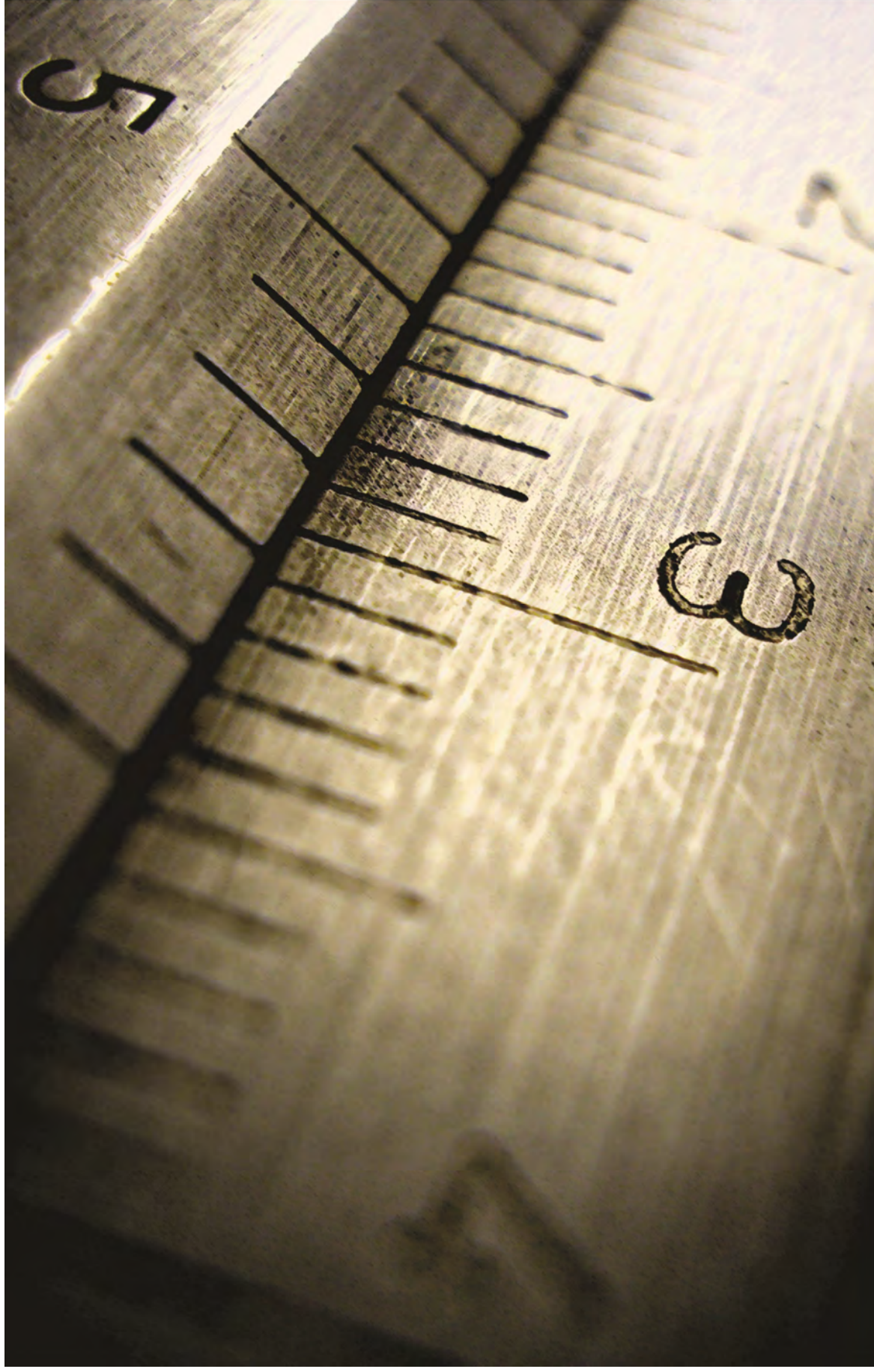
- **Alternative Street Designs (Narrower Street Widths)** – Respect existing hydrological functions of the land and minimize the impervious area.
- **Bioretention Curb Extensions and Sidewalk Planters** – Bioretention features can be tree boxes taking runoff from the street, indistinguishable from conventional tree boxes.
- **Permeable Pavement** – Permeable pavement comes in four forms: permeable concrete, permeable asphalt, permeable interlocking

concrete pavers, and grid pavers. All of the permeable pavement systems have an aggregate base in common that provides structural support, runoff storage, and pollutant removal through filtering and adsorption.

- **Sidewalk Trees and Tree Boxes** – In the arid Southwest, water availability and wise use must be taken into consideration. Low water indigenous trees and shrubs should be considered. The soil around street trees often becomes compacted during the construction of paved surfaces and minimized as underground utilities encroach on root space. By providing adequate soil volume and a good soil mixture, the benefits obtained from street trees multiply.⁵

Additional examples of arid-climate GI and 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 use of more fuel efficient construction vehicles.

⁵<http://www.lowimpactdevelopment.org/greenstreets/practices.htm>



Chapter 6: Measuring Success

Chapter 6: Measuring Success

The Santa Fe Metropolitan Transportation Plan has detailed a set of goals intended to implement the vision and support the mobility and accessibility needs of our residents. The goals are in alignment with the USDOT goals outlined in MAP-21. This includes building a performance-based and multimodal program to strengthen the U.S. transportation system.

Federal MAP-21 Requirements



As of the drafting of this plan, the USDOT is working toward implementing MAP-21 performance requirements through a number of rulemakings to be

released in several phases. In anticipation of the new rulemakings, this MTP recognizes the national goals in MAP-21 as shown in **Table 6-1**.

To assess the progress of each goal, as defined in **Table 6-1**, the USDOT will be required to establish performance measures in the following areas:

- Pavement condition on the Interstate System and on the remainder of the NHS
- Performance on the Interstate System and the remainder of the NHS
- Bridge condition on the NHS
- Fatalities and serious injuries – both number and rate per VMT on all public roads
- Traffic congestion
- On-road mobile source emissions
- Freight movement on the Interstate System

Table 6-1. Federal MAP-21 Goals

Category	Goal
Safety	To achieve a significant reduction in traffic fatalities and serious injuries on all public roads
Infrastructure Condition	To maintain the highway infrastructure asset system in a state of good repair
Congestion Reduction	To achieve a significant reduction in congestion on the National Highway System
System Reliability	To improve the efficiency of the surface transportation system
Freight Movement and Economic Vitality	To improve the national freight network and support regional economic development
Environmental Sustainability	To enhance the performance of the transportation system while protecting and enhancing the natural environment
Reduce Project Delays	To reduce project costs, accelerate project completion, eliminate delays in project development, and reduce regulatory burdens

Santa Fe MTP Vision and Goals

The performance-based approach to developing the goals and objectives of the Santa Fe MTP highlights and acknowledges objectives, strategies, and performance measures that align with MAP-21 goals.

2040 MTP VISION

Create and maintain a safe, efficient, and reliable transportation system with viable transportation options accessible for all users.

The Santa Fe MPO will be implementing a performance management approach with the approval of this MTP. The MPO will use this approach as a way to realize stated goals by isolating specific system elements and broadly assessing system-level outcomes. **Figure 6-1** identifies how the goals established by the MPO align with established state and federal goals.

Performance Measurements

The Santa Fe MPO performance measures will inform the MPO investment decision-making process and will help in both short- and long-term measurement of the performance and quality of our region's multimodal system.

MTP Performance Measures

The following is a broad overview of the 13 performance measures established by the MPO that will be used to monitor and assess system performance.

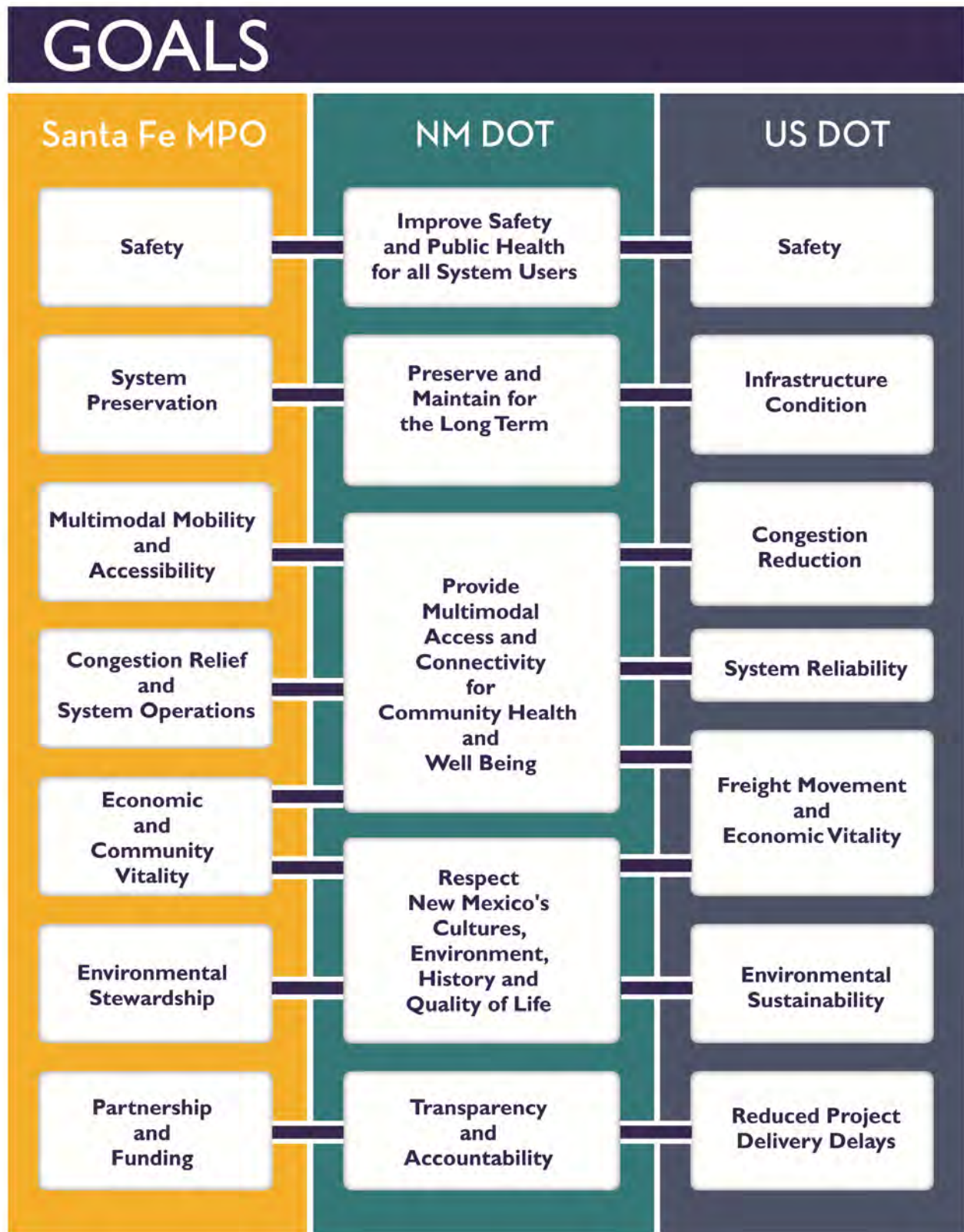
Overall System Assessment Measures

- Mode split
- Housing and Transportation Affordability Index

Specific System Element Measures

- Annual transit ridership
- Total crashes per VMT
- Bicycle crashes per 10K daily commuting bicyclists
- Pedestrian crashes per 10K daily commuting pedestrians
- Total number of fatalities and serious injuries
- Percent of road, bike, pedestrian, and transit facilities in good or fair condition
- Number of miles of sidewalks, multi-use paths, and on-road bicycle facilities
- Vehicle delay per capita
- Annual tons of mobile source GHG emissions
- Number of projects that incorporate sustainable design
- Total transportation funding by mode

Figure 6-1. MTP Goal Alignment with Federal and State Goals



Data Collection

The Santa Fe MPO has the capacity to collect and manage the data for the following performance measures:

- Mode split
- Housing and Transportation Affordability Index
- Annual transit ridership
- Total crashes per VMT
- Bicycle crashes per 10K daily commuting bicyclists
- Pedestrian crashes per 10K daily commuting pedestrians
- Total number of fatalities and serious injuries
- Annual tons of mobile source GHG emissions

Additional investment in resources will be required for the Santa Fe MPO to collect and manage the following data elements:

- Percent of road, bike, pedestrian, and transit facilities in good or fair condition
- Total number of miles of sidewalks, multi-use paths, and on-road bicycle facilities
- Vehicle delay per capita
- Number of projects that incorporate sustainable design
- Total transportation funding by mode

Performance Targets

The Santa Fe MPO developed targets for the established performance measures within each of the seven categories to define progress and success.

The Santa Fe MPO will monitor, evaluate, and report on performance measures by the end of each quarter beginning in 2016. The work product will be a brief electronic report that will be placed on the Santa Fe MPO website where data sources are hyperlinked for increased access of information and for public transparency. MPO staff, in coordination with NMDOT's Planning Division, will compile the data.

Performance Strategies

The MTP's performance approach is broken down into two distinct strategy areas: those that are specific to the MPO and those that are for MPO members and the larger community. Additionally, each strategy area identifies who holds primary responsibility for strategy implementation and what entity holds the support role.

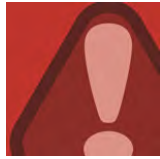
Table 6-2 details the two-tiered approach to implementing the performance strategies.

Table 6-2. Performance Strategy Approach

Entity	Description	Outcome
MPO Staff Strategies	Strategies where MPO staff may plan for the capacity, resources, and authority to work toward stated goals	The Santa Fe MPO is required to develop and adopt a Unified Planning Work Program (UPWP) for the purpose of identifying activities with specific objectives tied to a budget for federal fiscal year funding. The UPWP is amended annually to reflect any modifications to the activities. Strategies in this section will inform the UPWP where MPO staff may have the capacity and resources to accomplish them.
MPO Member and Community Strategies	Strategies where MPO member agencies or other community initiatives are positioned to implement project through various means to work toward stated goals	The MPO strives to enhance the metropolitan transportation system for motorized and non-motorized uses. The MPO recognizes that there may be a variety of approaches and resources found within the jurisdiction of its fellow agencies but outside the capacity or authority of the MPO. Strategies in this section are thoughtfully considered in a manner where the MPO may support member agencies and other community initiatives that serve to meet the MTP's goals.

Performance Measures

The following section includes information about the seven performance categories to be monitored by the MPO. Each performance category includes the associated goal, objectives, performance measures, baseline data, desired trends, and identified regional strategies for both the MPO and community agencies.



Safety

GOAL:

A safe and secure transportation system for motorized and non-motorized users.

The safety and security of our transportation system for both motorized and non-motorized users are of critical importance to the Santa Fe MPO and its member agencies. The MPO supports safety improvements and engineering solutions that will reduce crash rates for vehicles, bicyclists, pedestrians, and transit riders in our region.

Objective 1: Reduce fatal, injury, and total crash rates for vehicles, bicyclists, pedestrians, and transit riders.

PERFORMANCE MEASURE 1A

Total vehicle crashes per VMT

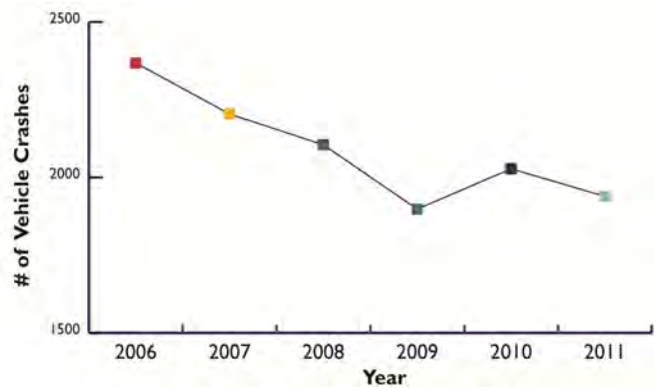


Desired Trend

Target

2% annual reduction in total crashes

Baseline Data



Note: The Santa Fe MPO will collect annual VMT to normalize this data by 2017 or earlier.

PERFORMANCE MEASURE 1B

Total number of annual fatalities and serious injuries

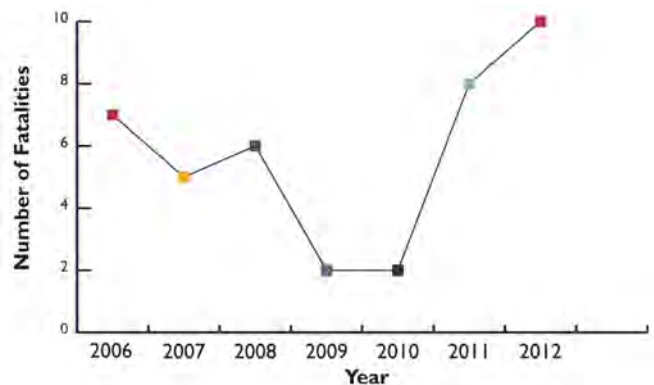


Desired Trend

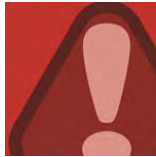
Target

Zero fatalities

Baseline Data



Note: The Santa Fe MPO will add serious injuries to this performance measures by 2017.



Safety (Continued)

PERFORMANCE MEASURE 1C <i>Bicycle crashes per 10K daily commuting bicyclists</i> Desired Trend  Target <i>To be determined</i>	Baseline Data <i>Baseline data not available at this time. Santa Fe MPO will collect information relevant to road, bicycle, pedestrian, and transit facility condition and document this data by 2017 or earlier.</i>
PERFORMANCE MEASURE 1D <i>Pedestrian crashes per 10K daily commuting pedestrians</i> Desired Trend  Target <i>To be determined</i>	Baseline Data <i>Baseline data not available at this time. Santa Fe MPO will collect information relevant to road, bicycle, pedestrian, and transit facility condition and document this data by 2017 or earlier.</i>

Safety Strategies



Identify high crash locations in the MPO planning area and assist member agencies in planning improvements and identify funding for implementation



Consider FHWA's nine safety countermeasures (including roundabouts, access management, and road diets) to reduce crash severity¹



Promote the creation of a low-stress network for bicyclists



Encourage public education and awareness of safety and sharing the road with others



Design and implement protected bike lanes to increase safety and encourage bicycle use



Develop and implement Safe Routes to Schools programs



Regularly identify intersections with the highest pedestrian crash frequencies and assess possible crossing improvements



Support the design and implementation of pleasant pedestrian environments with landscaping, shade, detached/wide sidewalks

KEY

 **Primary Responsibility**
 **Support Role**

 **MPO**

 **MPO Member and Community Agencies**

¹ <http://safety.fhwa.dot.gov/provencountermeasures/>



System Preservation

GOAL:
A well-maintained transportation system.

Tracking the percent of transportation facilities in our region that are in good or fair condition helps assess how the region is doing in terms of maintaining our existing transportation system. Developing asset management plans, properly allocating resources, and performing ongoing maintenance will extend the useful life of our region's important transportation facilities.

Objective 1: Maintain a high-quality transportation system.

PERFORMANCE MEASURE 1A <i>Percent of road, bicycle, and pedestrian facilities, and transit assets (stations, stops, and rolling stock) in good or fair condition.</i> Desired Trend  Target <i>To be determined</i>	Baseline Data <i>Baseline data not available at this time. Santa Fe MPO will collect information relevant to road, bicycle, pedestrian, and transit facility condition and document this data by 2017 or earlier.</i>
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System Preservation Strategies



Include system preservation and maintenance in the budgeting process.



Develop asset management plans to extend the life of fleet and facilities.

KEY



Primary Responsibility
Support Role



MPO



MPO Member and Community Agencies



Multimodal Mobility and Accessibility

GOAL:

An accessible, connected, and integrated transportation system.

The availability of a wide variety of mobility options, such as walking, biking, transit, and driving, is critical to improving the quality of life for residents, visitors, and employees of the Santa Fe region. The Santa Fe MPO is committed to tracking the change in mode split and the percent change in the use of transit in our region to ensure that we are reaching our goal of providing an accessible, a connected, and an integrated transportation system.

Objective 1: Improve quality of transportation options.

PERFORMANCE MEASURE 1A

Mode split

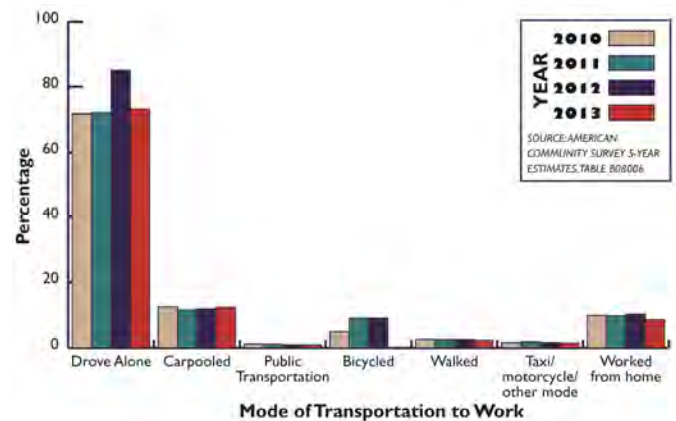
Desired Trend



Target

Disperse mode split 5% by 2020, 7% by 2030, and 9% by 2040

Baseline Data



PERFORMANCE MEASURE 1B

Annual transit ridership

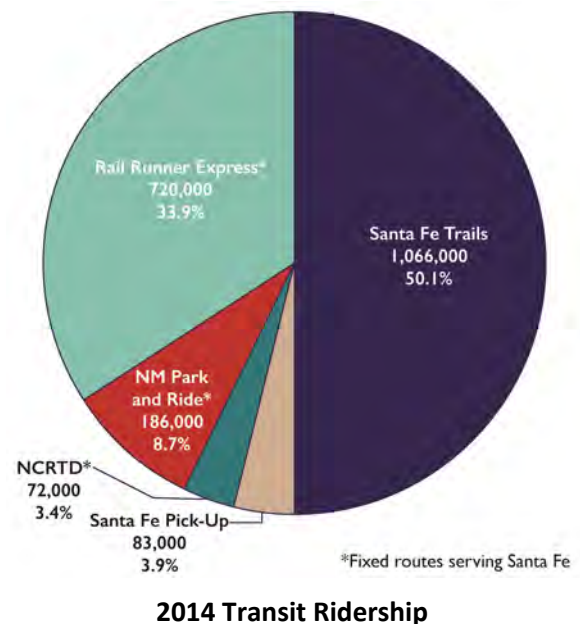
Desired Trend



Target

Increase transit ridership 2% annually

Baseline Data





Multimodal Mobility and Accessibility (Continued)

PERFORMANCE MEASURE 1C <i>Miles of sidewalks, multi-use paths, and on-road bicycle facilities</i> Desired Trend  Target <i>To be determined</i>	Baseline Data <i>Baseline data not available at this time. Santa Fe MPO will collect information on miles of sidewalks, multi-use paths, and on-road bicycle facilities and document the data by 2017 or earlier.</i>
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Multimodal Mobility and Accessibility Strategies



Review all roadway projects to ensure that they meet the intentions of the MPO's Complete Streets policy



Evaluate opportunities for development of intermodal facilities to enhance transfers between modes



Increase transit availability, frequency, and span of service



Feature bicycle and pedestrian designs, rather than just accommodating these modes



Identify multimodal network gaps and prioritize improvements



Enhance bike network and walkability through improved wayfinding, streetscape, increased bike parking, and traffic control projects



Update development standards to require a connected street network

KEY



Primary Responsibility



Support Role



MPO



MPO Member and Community Agencies



Congestion Relief and System Operations

GOAL:
An efficient and reliable transportation system.

Technology continues to advance at a rapid pace, and the Santa Fe MPO is committed to exploring and using new technology to increase the efficiency of our region's transportation system. Technology can aid in providing real-time next bus/train information, maximizing the efficiency of the system, improving signal timing, and needed fiber optics to support transportation infrastructure projects. The Santa Fe MPO is committed to tracking vehicle delay in the region to ensure the transportation system is operating at peak efficiency.

Objective 1: Improve travel time reliability and increase the use of Intelligent (and Integrated) Transportation System (ITS) technologies to improve efficiencies of the system.

PERFORMANCE MEASURE 1A <i>Vehicle delay per capita</i> Desired Trend Target <i>To be determined</i>	Baseline Data <i>Baseline data not available. The Santa Fe MPO will collect the necessary data to document vehicle delay in the region by 2017 or earlier.</i>
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Congestion Relief and System Operations Strategies



Ensure that appropriate fiber optics are installed for all transportation projects



Improve coordination of signal timing



Implement and/or improve mobile technology that provides next bus/train information



Implement commuter TDM strategies

KEY



Primary Responsibility
Support Role



MPO



MPO Member and Community Agencies



Economic and Community Vitality

GOAL:

A transportation system that supports economic and community vitality.

Transportation infrastructure is a key component of a thriving community as it provides access to housing, jobs, recreation, and much more. The Santa Fe MPO will support the appropriate locating of new development to ensure that the community has access to regional amenities and that housing and transportation costs remain affordable to those who want to call the Santa Fe region home.

Objective 1: Integrate infrastructure in a manner that supports economic development and increases equitable transportation access.

PERFORMANCE MEASURE 1A

Housing and Transportation Affordability Index (H+T Index)

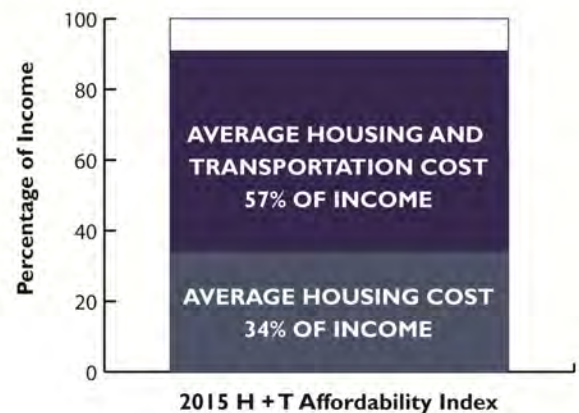


Desired Trend

Target

Decrease in average housing and transportation costs by 2% by 2020

Baseline Data



Economic and Community Vitality Strategies



Ensure that new development is adequately connected to the transportation system



Support mixed-use development and population and employment density that supports alternative modes of transportation



Ensure that new development has adequate access to healthy food



Improve and/or expand transportation facilities to support job access



Identify transit stops requiring improvements to increase safety and accessibility



Improve and/or expand bicycle, transit, and pedestrian infrastructure to allow easy access to commercial centers, recreation areas, and public spaces



Support development and improvement of intermodal transportation facilities at transit stations

KEY



Primary Responsibility



Support Role



MPO



MPO Member and Community Agencies



Environmental Stewardship

GOAL:

A transportation system that protects the natural, cultural, and built environment.

Development that thoughtfully considers the transportation network will be important in reducing mobile greenhouse gas emissions in the region in the years to come. Environmental stewardship of the natural environment and the cultural and built environment is a priority for the Santa Fe MPO and its member agencies.

Objective 1: Minimize impact on climate change.

<u>PERFORMANCE MEASURE 1A</u> <i>Annual tons of mobile source greenhouse gas emissions</i> Desired Trend  Target <i>To be determined</i>	Baseline Data <i>Baseline GHG emissions data are based on the Center for Neighborhood Technology's Housing and Transportation (H+T) data. The 2015 H+T GHG is calculated per household based on auto source emissions only in the Santa Fe MPO region.</i> 2015 Auto Source GHG Emissions 9.35 tons/household
<u>PERFORMANCE MEASURE 1B</u> <i>Number of projects that incorporate sustainable design elements</i> Desired Trend  Target <i>To be determined</i>	Baseline Data <i>Baseline data not available. The Santa Fe MPO will begin tracking and documenting sustainable design project data by 2017 or earlier.</i>



Environmental Stewardship (Continued)

Environmental Stewardship Strategies



Ensure that new development is adequately connected to the transportation system



Encourage mixed-use development and population densities that support alternative modes of transportation



Improve and/or expand bicycle and pedestrian infrastructure



Transition to low emission vehicle fleets



Implement commuter TDM strategies



Support projects that use recycled or reusable materials, reduce the amount of construction waste and disposal needs, and increase the use of renewable energy



Integrate sustainable design into transportation projects through the use of low-impact development (LID) techniques to reduce runoff, alternative street designs, and permeable pavement



Support development of green buildings/facilities



Support programs and projects that adapt to climate change scenarios including severe weather occurrences



Support a long-range vision and master planned land-uses that realize sustainable and vital mixed use neighborhoods not incremental and desperate sprawling development

KEY



**Primary
Responsibility**
Support Role



MPO



**MPO Member and
Community Agencies**

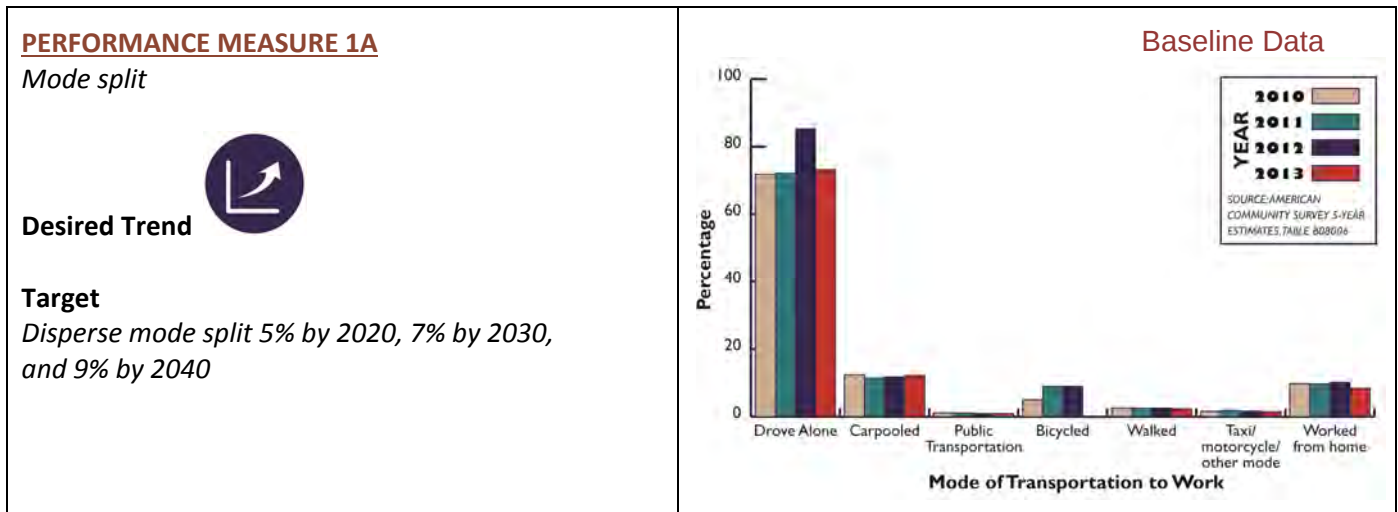


Partnerships and Funding

GOAL:
Regional collaboration in transportation planning, funding, and implementation.

A successful transportation network comes from public, private, and nonprofit entities working together to achieve mutually beneficial goals. The Santa Fe MPO seeks to increase regional cooperation with integrated transportation projects, and the development of creative funding options to increase the use of alternative modes in the region.

Objective 1: *Increase regional cooperation in developing a multimodal regional transportation system to reduce SOV transportation demand.*



Partnership and Funding Strategies (Objective 1)



Coordinate with local agencies to ensure land use planning requirements are conducive to pedestrian and bicycle travel



Implement commuter TDM strategies

KEY



Primary Responsibility



Support Role



MPO



MPO Member and Community Agencies



Partnerships and Funding (Continued)

GOAL:
*Regional collaboration in
transportation planning,
funding, and
implementation.*

Objective 2: *Improved coordination and funding of project delivery.*

PERFORMANCE MEASURE 2A <i>Total transportation funding by mode</i>  Desired Trend Target <i>To be determined</i>	Baseline Data <i>Baseline data not available. The Santa Fe MPO will collect and document transportation funding by mode by 2017 or earlier.</i>
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Partnership and Funding Strategies (Objective 2)



Research and consider creative alternative funding sources, such as public-private partnerships



Support and advocate for any needed regulatory changes to improve agency work practices and timeliness of project delivery



Study gross receipt tax increases to support transit improvements in the region

KEY

 **Primary Responsibility**
 **Support Role**

 **MPO**

 **MPO Member and Community Agencies**

Further Considerations

The strategies identified in this chapter were selected based on the feasibility of implementation within the MTP's 20-year planning horizon. Several other strategies were identified that the MPO and member agencies may use to support our metro area goals that did not fit into the current performance framework. The MTP is a dynamic planning tool, and the MPO encourages the public and decision makers to suggest additional strategies that may positively effect change in our planning area. New strategies can be added to the performance framework with a simple amendment to the appropriate performance category.

Additional Strategies

The following additional strategies have been considered in the development of the MTP, grouped by performance category (not all categories had additional strategies).

Safety

- Implement engineering solutions that improve bridge and roadway security
- Identify existing emergency transportation plans for the region and areas where the MPO can provide support
- Support development of evacuation plans and emergency response protocols, including supportive ITS architecture
- Support technology improvements that minimize cyber attacks on transportation control systems
- Identify and assess all roadways that may be eligible for a "Road Diet". "Road Diets" are a safety-focused alternative to a four-lane, undivided roadway. The most common type of Road Diet involves converting an existing four-lane, undivided roadway segment that serves both through and turning traffic into a three-lane segment with two through lanes and a center, two-way left-turn lane (TWLTL). The reclaimed space can be allocated for other uses such as bike lanes, pedestrian refuge

islands, bus lanes and parking.

<http://www.fhwa.dot.gov/everydaycounts/edc-3/reconfiguration.cfm>

- Adopt "Vision Zero" policies – Transportation systems traditionally place responsibility for safety on road users. The Vision Zero Initiative puts this responsibility on system design (www.visionzeroinitiative.com)

Multimodal Mobility and Accessibility

- Establish ongoing quarterly transit planning team meetings

Congestion Relief and System Operations

- Hire a full-time mobility manager
- Continue Technical Coordinating Committee

Economic and Community Vitality

- Encourage hosting of cultural, recreational, and professional events
- Support management and pricing strategies that increase tourism spending
- Encourage consideration of the transportation system in economic development planning
- Encourage mixed-use development that includes multimodal transportation options to meet the needs of younger populations and entrepreneurs
- Host annual workshops with local planning commissions and development review committees, staff and elected leaders for the following purposes:
 - Education regarding the land use and transportation connection
 - Develop solid professional relationships to enhance communication
 - Strive to modify, amend and update land use and transportation policies and regulations that may better serve a more efficient and sustainable community.



Chapter 7: Making Choices

Chapter 7: Making Choices

Transportation needs and opportunities in our region are great. **Chapter 5** presented a compilation of current and future needs to improve our region’s transportation system. This needs-based plan will be implemented over a long period of time; in truth, current funding realities indicate that not all desired projects will be built within this plan’s 25-year time horizon. This chapter forms the basis for making difficult choices about how best to prioritize and phase transportation improvement projects.

Scenario Planning

Transportation scenario planning is a process for better understanding the long-term impacts of policy and investment decisions across various aspects of metropolitan life such as health, land use, the economy, the environment, and livability. Scenario planning provides a framework for making informed decisions that are more holistic than those from a traditional transportation planning process. The process evaluates the likely outcomes of existing plans and offers the opportunity to explore the possible benefits and costs of alternative futures. By considering the intrinsic

relationship between transportation and land use, for example, scenario planning can help to maximize positive outcomes.

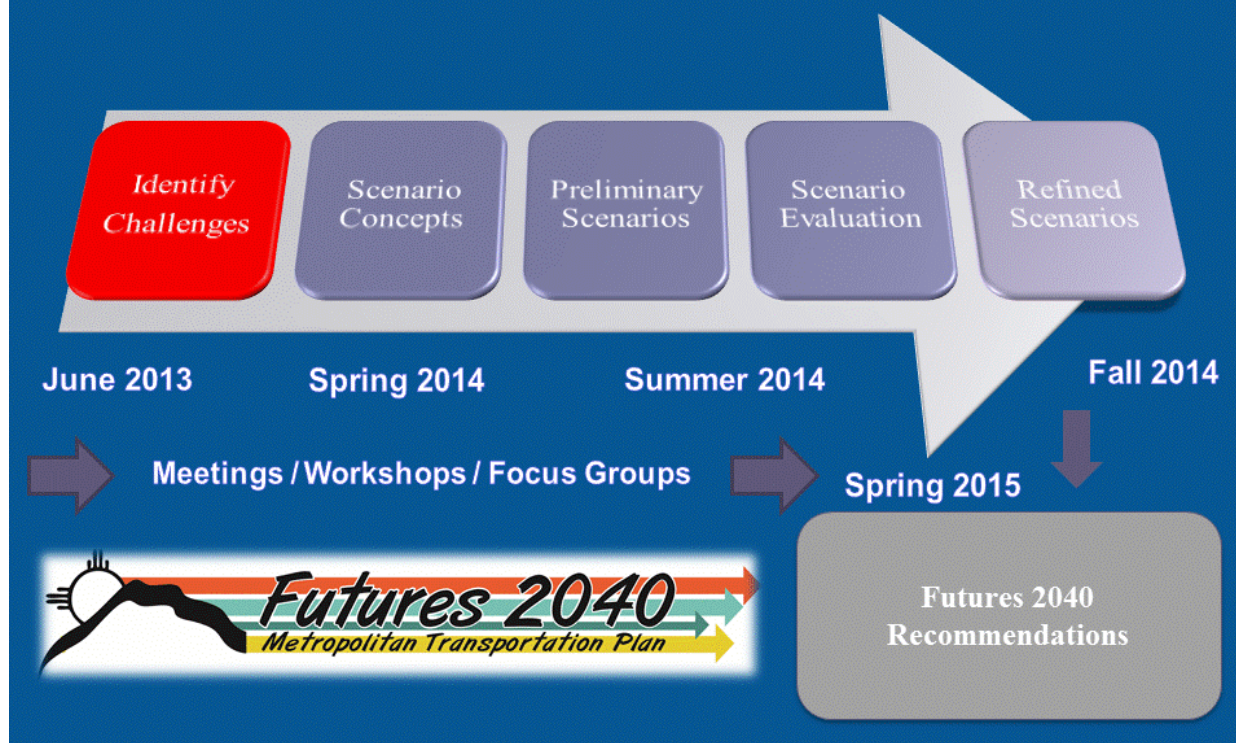


Scenario planning is highly recommended, though not required, in MAP-21. Beginning in 2013, the Mid-Region Metropolitan Planning Organization (MRMPO) began developing a comprehensive two-year effort that detailed multiple future scenarios for the greater Albuquerque metropolitan area. A few significant findings that may easily translate into the SFMPA include:

- “Land use decisions have a noticeable impact on transportation patterns;
- Transit-supported land uses reduce congestion system-wide; and
- Increased traffic volumes in core areas can be adequately served by existing roads.”

The resulting work products may be viewed at: www.mrcog-nm.gov/transportation/metro-planning/long-range-mtp.

Scenario Development Process



The Santa Fe MPO is not in a position to conduct scenario planning at this time; however, the Santa Fe MPO recognizes the value of scenario planning and may work toward conducting such a process in advance of or as part of the 2020–2045 MTP. This plan represents the region’s first performance-based transportation plan, which provides the structure for successful scenario planning in the future. The goals, objectives, and performance measures established in **Chapter 6** represent the categories for measuring benefits and costs of alternative future scenarios.

Examples of future scenarios that may be considered include:

- Alternative land use scenarios (e.g., focus on in-fill development rather than fringe greenfield development, higher density mixed-used development)
- Policy changes that may affect travel behavior or mode choice (e.g., higher tolerance for traffic congestion, limitations on free parking)
- Variations on resource allocation (e.g., focus on alternative travel modes, limitations on roadway capacity enhancements)

Prioritization Framework

With limited funding available across all transportation modes, and an active community desiring context sensitive and complete transportation improvements, the process of prioritizing projects must be comprehensive and strive to identify those projects that will most effectively move our region's transportation system toward fulfilling our vision and achieving our goals. As such, the prioritization process for each transportation mode is linked to the goals, objectives, and performance measures, as presented in **Chapter 6**.

Roadway Project Evaluation

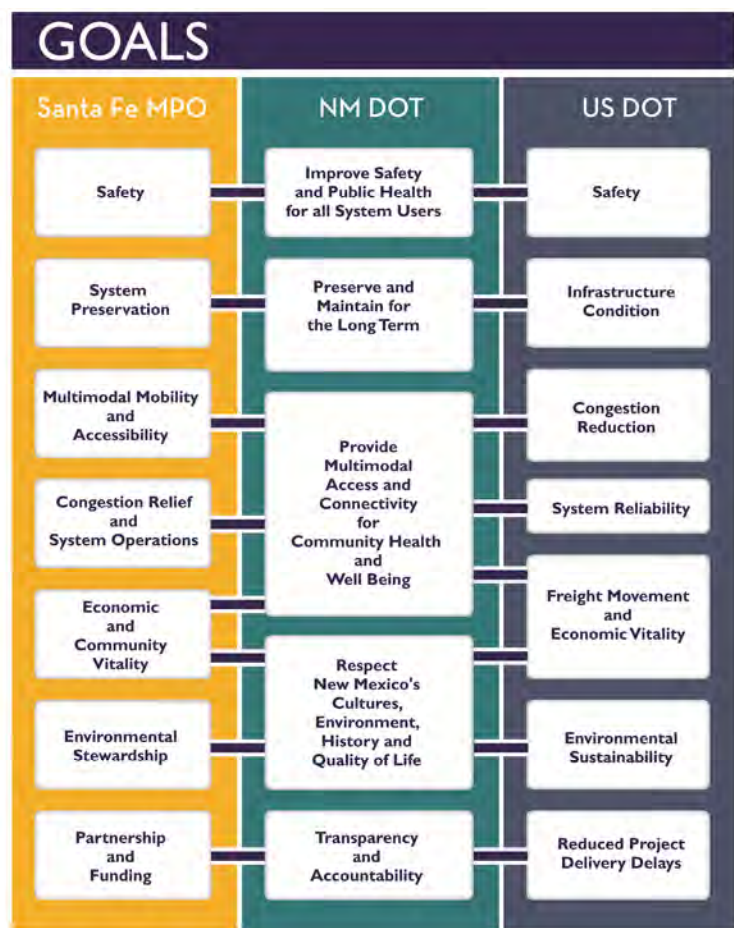


The Regional Roadway system projects identified in **Chapter 5** represent the region's needs over the next 25 years. Each project has been evaluated based on criteria that stem from the seven MPO goals in the performance categories of:

- Safety
- System Preservation
- Multimodal Mobility and Accessibility
- Congestion Relief and System Operations
- Economic and Community Vitality
- Environmental Stewardship
- Partnership and Funding

The intent of the roadway prioritization process is to prioritize those projects that are expected to contribute the greatest toward meeting the overall system performance targets and trends identified in **Chapter 6**, which, in turn, will contribute to reaching the MPO, state, and federal goals—all of which are aligned, as represented in **Figure 6-1**.

The evaluation criteria are grouped by the seven performance categories; the rating system used for each category is described in the following subsections. In some cases, a performance category contains more than one evaluation criterion. The evaluation results in each project having considered elements of the goals from each regional, state, and federal transportation agency as outlined in the figure below from **Chapter 6**.



Evaluation Criteria



Safety

Goal: A safe and secure transportation system for motorized and non-motorized users.

Evaluation: How well does the project improve safety for all users? Does it alleviate a known issue?

The safety of the roadway system is of critical importance for all users, including pedestrians, bicyclists, transit users, and motorists, as it reduces the risk of people being seriously injured or killed in crashes. Safety improvements can range from modifying signal phasing at an intersection to eliminating conflict by providing grade separation.

Highest Score Example: A roadway project involving a new grade separated crossing at a location with a crash history showing a high occurrence of severe (injury or fatal) crashes. The project would eliminate the safety problem.

- ☒ Project will resolve a major identified safety issue
- ☒ Project will resolve an identified safety issue
- ☒ Project has no identified safety issue
- ☐ Project will have a negative impact on safety
- ☐ Project will have a major negative impact on safety



System Preservation

Goal: A well-maintained transportation system.

Evaluation: How well does the project improve the condition of the existing transportation system?

Timely preventive maintenance and preservation are necessary to ensure proper operational performance and safety of the roadways and bridges in our region. By extending the service life of existing infrastructure, the region can better manage resources required for long-term improvements, such as reconstruction and expansion of the network.

Highest Score Example: An interchange reconstruction project that includes replacement of a bridge that is in poor condition.

- ☒ Project will reconstruct infrastructure that is in poor condition
- ☒ Project will repair infrastructure that is in poor condition
- ☒ Project will reconstruct infrastructure that is in fair condition
- ☐ Project will repair infrastructure that is in fair condition or will provide relief to infrastructure in poor condition
- ☐ Project will have no impact on the condition of the existing system



Multimodal Mobility & Accessibility

Goal: An accessible, connected, and integrated transportation system.

Evaluation: Does the proposed project allow accommodation and/or availability of transportation options using different modes?

Integrating and enhancing walking, bicycling, and transit into the transportation network provide healthy and sustainable travel choices for residents, workers, and visitors of our region. Providing transportation alternatives helps reduce VMT, thereby reducing congestion and mobile source GHG emissions in our region.

Highest Score Example: A corridor improvement and streetscape project that includes access control improvements, new sidewalks, bike lanes, and bus stop amenities.

- ☒ Project will greatly increase or improve the accommodation and/or availability of two or more travel modes (car/freight, transit/rail, pedestrian, bicycle)
- ☐ Project will increase or improve the accommodation and/or availability of two or more travel modes
- ☐ Project will not change or improve the accommodation or availability of any travel modes other than car/freight
- ☐ Project will reduce the accommodation and/or availability of one or more travel modes
- ☐ Project will greatly reduce the accommodation and/or availability of one or more travel modes



Congestion Relief & System Operations

Goal: An efficient and reliable transportation system.

Evaluation: How does the proposed project impact current or projected congestion or the mobility of the targeted mode(s)?

The cost of roadway congestion comes in the form of both time and money and affects the travel of residents, visitors, and businesses alike. By prioritizing the system's operational efficiency, the region can work to reduce congestion and improve travel time reliability for both motorized and non-motorized users.

Highest Score Example: A roadway widening project that will provide relief to a congested corridor and improved travel reliability.

- ☒ Project will resolve a major congestion or mobility issue
- ☐ Project will resolve a congestion or mobility issue
- ☐ Project will have no impact on congestion or mobility
- ☐ Project will have a negative impact on congestion or mobility
- ☐ Project will have a major negative impact on congestion or mobility



Economic & Community Vitality

Goal: A transportation system that supports economic and community vitality.

Evaluation – Part 1 (Freight and Commerce): How well will the proposed project improve the mobility of freight and access to commerce?

An efficient transportation network provides reduced transit times and reliability of the movement of goods locally, regionally, and nationally. Freight-specific investments into the National Highway System provide for less costly freight transportation and can contribute to productivity and the economic growth of our region.

Highest Score Example: A new facility on the National Highway System that will provide more direct routing for freight.

- ☒ Project will make improvements to a freight carrying facility of statewide significance (Interstate or NHS roadway)
- ☐ Project will make improvements to a regional freight carrying facility (non-NHS roadway)
- ☐ Project will have little or no benefit to a freight carrying facility
- ☐ Project will have a negative impact on a freight carrying facility
- ☐ Project will have a major negative impact on a freight carrying facility

Evaluation – Part 2 (Community and Commercial Vitality): Would the proposed project add value to any surrounding commercial uses? Would the proposed project support a more attractive, safe, healthy, and walkable transportation experience for all users?

By using context sensitive solutions in planning our future transportation system, we will support the economy of the Santa Fe metropolitan area, enhance the social activity of residents and visitors, improve public health, and preserve natural and cultural resources, all of which enhance the greater community and commercial vitality of our region.

Highest Score Example: A corridor improvement project along an established commercial corridor that includes access control and urban design improvements (such as raised, landscaped medians), widened sidewalks, streetscape improvements, and bus stop amenities that are fitting with the context of the historic and current land uses.

- ☒ Project significantly adds value to surrounding commercial uses and supports a more attractive, safe, healthy and walkable transportation experience for all users
- ☐ Project moderately adds value to surrounding commercial uses and supports a more attractive, safe, healthy, and walkable transportation experience for all users
- ☐ Project does not enhance or detract from the existing commercial uses or the transportation experience by any users
- ☐ Project moderately reduces the value of surrounding commercial uses and the existing transportation experience (attractive, safe, healthy, and walkable) for all users
- ☐ Project significantly reduces the value of surrounding commercial uses and the existing transportation experience (attractive, safe, healthy, and walkable) for all users.



Environmental Stewardship

Goal: A transportation system that protects and enhances the natural, cultural, and built environment.

Evaluation – Part 1 (Greenhouse Gas Reduction): What is the project’s potential for reducing mobile source GHG emissions?

Environmental stewardship is an important consideration in developing our transportation network as the two primary contributors to mobile source GHG emissions are running emissions and idling emissions. These GHG emissions can be reduced by lowering VMT and by decreasing stopped delay in our region.

Highest Score Example: An intersection reconstruction project that would significantly reduce congestion and idling time; or a new roadway connection that would eliminate out-of-direction travel resulting in a significant reduction in VMT.

- ☒ Project will result in a significant reduction in VMT or idling time
- ☐ Project will result in some reduction in VMT or idling time
- ☐ Project will have no net impact on VMT and idling time
- ☐ Project will result in some increase in VMT or idling time
- ☐ Project will result in a significant increase in VMT or idling time

Evaluation – Part 2 (Environmental Documentation): What level of environmental documentation is required for the project and how far along is the documentation process?

The purpose of this criterion is to encourage the selection of projects that would have the least detrimental impact on the environment. For this purpose, the level of environmental clearance that the federal government requires is anticipated and then used as an indicator of the likely magnitude of environmental impact. Also, projects whose environmental impact analyses are underway or complete are given higher scores as an indication of either reduced uncertainty or the likelihood of substantial mitigation, or both.

Highest Score Example: A corridor improvement and streetscape project that has a completed Categorical Exclusion.

- ☒ Project requires a Categorical Exclusion, which is in progress or complete
- ☐ Project requires a Categorical Exclusion, which is not yet started
- ☐ Project has a completed Environmental Assessment (EA) or Environmental Impact Statement (EIS)
- ☐ Project requires an EA or EIS, which is in progress
- ☐ Project requires an EA or EIA, which is not yet started



Partnership & Funding

Goal: Regional collaboration in transportation planning, funding, and implementation.

Evaluation: Does the project have strong support from partner agencies and present opportunities for collaborative and/or unique funding approaches? Is the project well positioned to be implemented (has the project undergone a planning study and preliminary design)?

It is anticipated that there will continue to be a funding shortfall between revenues and projected transportation needs in our region in the years to come. Coordinating and streamlining planning efforts and financial resources and considering creative funding solutions such as public-private partnerships, will be required for us to maximize resources and meet the transportation infrastructure needs of our region.

Highest Score Example: A new interchange that has strong support from the City of Santa Fe, Santa Fe County, and NMDOT; the project is expected to receive funding contributions from a nearby developer, and a planning study and preliminary design have been completed for the interchange.

- ☒ Project has strong support from partner agencies or strong potential for collaborative and/or unique funding approaches, or has undergone a planning study and preliminary design
- ☐ Project has some support from partner agencies or some potential for collaborative and/or unique funding approaches, or has undergone a planning study
- ☐ Project has neither strong support nor opposition from partner agencies
- ☐ Project has some opposition from partner agencies
- ☐ Project has strong opposition from partner agencies

Evaluation Results

Table 7-1 identifies the list of prioritized publically-funded Regional Roadway projects. The alignments for the “Future Roads and Extensions” are approximations. All projects listed in **Table 7-1** require further public review and input before moving toward construction.

The Regional Roadway Priorities List 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 MTP 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; and
- Safety and accessibility for all users.

In addition to providing the evaluation results for each project, **Table 7-1** lists the lead agency, project cost, time frame, and an indication of the multimodal elements (pedestrian, bike, and transit) included in each project.

The Regional Roadway 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 before the MPO Transportation Policy Board adopts them.

Table 7-1. Regional Roadway Priorities

Project Name and Description	Multimodal Elements	Lead Agency	Cost (2015 Dollars)	Evaluation Criteria									Time Frame/ Need
				Safety & Security	System Preservation	Multimodal Mobility & Accessibility	Congestion Relief & System Operations	Freight & Commerce	Commercial & Community Vitality	Greenhouse Gas Reduction	Environmental Documentation	Partnership & Funding	
Sandoval/Montezuma Intersection Improvements: Pedestrian improvements, striping, signage, median reconfiguration		City of Santa Fe	\$550,000										Short
I-25 Interim Safety Improvements: Various interim improvements to interchanges plus installation of emergency safety gates at median crossings, addition of lighting		NMDOT	\$2,400,000										Short
Guadalupe Street Road Diet: Reduce the Roadway from 4 to 3 lanes, add bike lanes, widen sidewalks, and add additional pedestrian crossing from Paseo de Peralta (North) to Agua Fria Street		City of Santa Fe	\$2,000,000										Short
Paseo de Peralta/Guadalupe Street Intersection Improvements: Reconfigure intersection to improve pedestrian crossings and upgrade traffic signals		City of Santa Fe	\$750,000										Short
St Francis Drive: Pedestrian Intersection Improvements: Pedestrian improvements at all the intersections along St Francis Drive		NMDOT/ City of Santa Fe	\$600,000										Short
NM599/Via Vetranos (CR70) Interchange: Construction of a new interchange		NMDOT	\$8,000,000										Short
West Alameda Widening and Drainage Improvements(Via Abajo to La Joya Street): Widen road, significant drainage improvements, striping		City of Santa Fe	\$7,000,000										Short
Agua Fria/South Meadows Intersection Improvements: Reconfigure intersection to include left turn bays on Agua Fria and to improve pedestrian crossings and upgrade traffic signals		City of Santa Fe	\$1,400,000										Short

Project Name and Description	Multimodal Elements	Lead Agency	Cost (2015 Dollars)	Evaluation Criteria									Time Frame/ Need
				Safety & Security	System Preservation	Multimodal Mobility & Accessibility	Congestion Relief & System Operations	Freight & Commerce	Commercial & Community Vitality	Greenhouse Gas Reduction	Environmental Documentation	Partnership & Funding	
Rehabilitation or Replacement of 3 Downtown Bridges over the Santa Fe River: Galisteo, Don Gaspar, Delgado St.		City of Santa Fe	\$3,000,000										Short
Old Santa Fe Trail Bike Lanes (City): Widen from Zia Road to Mountain Cloud Zen Road to add Bike Lanes		City of Santa Fe	\$1,000,000										Short
Old Santa Fe Trail Bike Lanes (County): Widen from Zen Cloud Road to El Ganchito Way/Old Las Vegas Highway (Designed and Funded with County Bond Funds)		Santa Fe County	\$2,000,000										Short
Cerrillos/Sandoval Intersection Improvements: Pedestrian improvements, striping, signage, reconfigure medians		City of Santa Fe	\$1,250,000										Short/ 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	\$6,000,000										Short/ Medium
Cerrillos Rd Reconstruction (St Michaels Drive to St Francis Drive): Reconstruction to add medians, drainage, bike lanes, sidewalks and transit facilities		City of Santa Fe	\$12,000,000										Short/ Medium
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	\$4,300,000										Short/ 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	\$2,500,000										Short/ Medium
Governor Miles Road Bike Lanes: Widen from Richards Avenue to Pueblos del sol to add bike lanes		City of Santa Fe	\$275,000										Short/ Medium
San Felipe Road Bike Lanes: Widen from Airport Road to Agua Fria Street to add bike lanes		City of Santa Fe	\$165,000										Short/ Medium

Project Name and Description	Multimodal Elements	Lead Agency	Cost (2015 Dollars)	Evaluation Criteria									Time Frame/ Need
				Safety & Security	System Preservation	Multimodal Mobility & Accessibility	Congestion Relief & System Operations	Freight & Commerce	Commercial & Community Vitality	Greenhouse Gas Reduction	Environmental Documentation	Partnership & Funding	
West Alameda Street Bike Lanes (City): Widen from Calle Nopal to Siler Road. Improve drainage		City of Santa Fe	\$5,000,000										Short/ Medium
West Alameda Street Bike Lanes (County): Widen from Chicoma Vista to Frontage Road to add bike lanes		Santa Fe County	\$210,000										Short/ Medium
Henry Lynch Road Bike Lanes: Widen from Agua Fria to Rufina Street to add bike lanes		City of Santa Fe	\$275,000										Short/ Medium
Tesuque Village Road Bike Lanes: From US 84/285 interchange to Tesuque Village to add bike lanes		Santa Fe County	\$825,000										Short/ Medium
Hyde Park Road (NM475) Bike Lanes: Widen from Artist Road to Little Tesuque Creek to add bike lanes		NMDOT	\$1,925,000										Short/ Medium
Avenida Del Sur Bike Lanes: Widen from NM14 to Avenida del Sur to add bike lanes		Santa Fe County	\$1,000,000										Short/ Medium
Rufina Street Connection: New roadway connection between Harrison Road and Camino Carlos Rey		City of Santa Fe	\$450,000										Short/ Medium
NM599/Airport Road Interchange: Construction of a new interchange		NMDOT	\$11,000,000										Medium
Calle Po Ae Pi Extension: Pave dirt section include sidewalks		City of Santa Fe	\$850,000										Medium
NM599/Camino de los Montoyas Interchange w/ Frontage Road: Construction of a new interchange		NMDOT	\$11,050,000										Medium
I-25/NM599: Interchange Ramp Improvements: Lengthening of on and off ramps		NMDOT	\$2,500,000										Medium

Project Name and Description	Multimodal Elements	Lead Agency	Cost (2015 Dollars)	Evaluation Criteria									Time Frame/ Need
				Safety & Security	System Preservation	Multimodal Mobility & Accessibility	Congestion Relief & System Operations	Freight & Commerce	Commercial & Community Vitality	Greenhouse Gas Reduction	Environmental Documentation	Partnership & Funding	
St Francis Drive US 84/285 Auxiliary Lane NM599 to Guadalupe: Construction of a SB auxiliary lane from NM599 to Guadalupe Exit		NMDOT	\$1,000,000										Medium
St Francis Drive (US 84/285)/Guadalupe Interchange Improvements: Reconstruction of existing Interchange to replace existing bridge on Guadalupe and possibly convert from a left hand exit to a right hand exit		NMDOT	\$17,000,000										Medium
Old Santa Fe Trail Bike Lanes (County): Widen from Mountain Cloud Zen Road to El Gancho Way/Old Las Vegas Highway		Santa Fe County	\$1,000,000										Medium
Rancho Viejo Blvd Bike Lanes (Shoulders): Widen from NM14 to Avenida del Sur to add bike lanes		Santa Fe County	\$1,000,000										Medium
I-25/NM466: Interchange Improvements: Reconfiguration of interchange and ramp lengthening		NMDOT	\$7,200,000										Medium/ Long
I-25/St Francis Drive: Interchange Improvements: Reconfiguration of interchange and ramp lengthening		NMDOT	\$8,300,000										Medium/ Long
I-25 Auxiliary Lanes: NM599 to Cerrillos: Construction of third lane in each direction between interchanges		NMDOT	\$4,000,000										Long
I-25 Auxiliary Lanes: St Francis to NM466: Construction of third lane in each direction between interchanges		NMDOT	\$2,000,000										Long
County Road 62 Realignment and Improvements: NM599 to Caja del Rio		Santa Fe County	\$3,000,000										Long

Project Name and Description	Multimodal Elements	Lead Agency	Cost (2015 Dollars)	Evaluation Criteria									Time Frame/ Need
				Safety & Security	System Preservation	Multimodal Mobility & Accessibility	Congestion Relief & System Operations	Freight & Commerce	Commercial & Community Vitality	Greenhouse Gas Reduction	Environmental Documentation	Partnership & Funding	
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	\$3,000,000										Long
I-25 Auxiliary Lanes: Cerrillos to St Francis: Construction of third lane in each direction between interchanges		NMDOT	\$17,000,000										Long
I-25/Richards Avenue Interchange: Construction of a new interchange		NMDOT	\$35,000,000										Long

Regional Transit and Rail System



The Santa Fe Metropolitan Public Transit Master Plan (PTMP) includes strategies designed for the short term, mid term, and long term (20 years). The strategies are

based on transit needs identified through the planning process to address planning, marketing, operational, infrastructure, and other needs designed to ensure sustainability

and growth in transit ridership. **Table-7-2** summarizes the recommended timeline to implement these activities. Many of these activities and tasks are cost/revenue neutral, while others require additional funding. The activity timeline focuses on when the service should be implemented based on anticipated demand and aging infrastructure. The short-term plan provides more specificity, with an opportunity to expand the list of activities in the out years in subsequent updates to the PTMP.

Table-7-2. Prioritized Transit Activities

Timeline	No.	Project	Category
Years 1–5	1	Continue Transit Service Provider quarterly meetings and support NCRTD Region planning initiatives	Planning
	2	Prepare New Southside Center	Operations
	3	Conduct bus stop assessment	Planning
	4	Conduct Origin-Destination Study and Short Range Plan	Planning
	5	Rebrand services	Marketing
	6	Routing revisions	Operations
	7	Revise service hours	Operations
	8	Manage mobility	Planning
	9	Zia Station Service	Operations
	10	Dial a Ride – Local	Operations
	11	Determine the potential for new routes	Planning
	12	Initiate late night daily service	Operations
	13	Coordinate with seniors	Planning
	14	Secure funds for Sheridan Avenue facility	Infrastructure
	15	Build new transfer facility	Infrastructure
Years 6–10	1	Revisit Transit Master Plan and growth	Planning
	2	Evaluate Bus Rapid Transit (BRT) options	Planning
	3	Implement changes	Operations
	4	Continue to improve bus stops	Infrastructure
	5	Implement strategies that increase customers' ability to negotiate seamlessly among transit systems	Operations/ Marketing/ Infrastructure

Timeline	No.	Project	Category
Years 11–20	1	Revisit Transit Master Plan and growth	Planning
	2	Implement BRT – Cerrillos Road	Operations/ Infrastructure
	3	Implement changes	Operations
	4	Continue to improve bus stops	Infrastructure

Alignment with MTP Goals

Although the PTMP does not include a rating system for prioritizing transit needs, the activities described in the previous section have been phased in a manner that is compatible with the MTP goals and performance measures described in **Chapter 6**. The transit system improvement activities will most notably address the MTP goals related to Multimodal Mobility and Accessibility (through service improvements), Environmental Stewardship (enhanced opportunity for mode shift to transit), Congestion Relief and System Operations (through major infrastructure and service expansion such as BRT), Community Vitality (through the provision of travel choices), and Partnership and Funding (through Mobility Management and coordination among transit providers in the region).

Bikeways System



The Santa Fe Metropolitan Bicycle Master Plan (BMP) emphasizes that bikeway planning and development focus on continuing to develop “arterial” trail

alignments and on-street and off-street connections to those alignments. The Expanded Bikeway System map (included in **Chapter 5**) is a vision of our region’s bikeway network.

Prioritization of Improvements

Specific prioritized recommendations for facility improvements to achieve this vision were identified based on local planning and metro-area wide analysis emphasizing transportation considerations. For on-street bicycle facilities, the BMP prioritizes the provision of bike lanes or shoulder space to specific roadway through

restriping, resurfacing, or widening. The BMP recommends that each MPO member agency develop a program to study, and where found to be feasible, implement road retrofits to create bike lanes or shoulder space.

This BMP identifies multi-use trail segments that can effectively function as direct, convenient, and reasonably safe transportation facilities. Planned and proposed trail improvements in the MPO area were assessed and prioritized with respect to:

- **Prospective local demand** – based on land use and presence of specific traffic generators such as schools, parks, and transit centers
- **Connectivity** – both as a multi-use trail and as a bikeway (including consideration of road connections)
- **Feasibility** – including land ownership and status, topography, need for and feasibility of structures and/or crossing treatments
- **Safety** – specific safety considerations

Alignment with MTP Goals

The prioritization of on-street bikeway improvements aligns strongly with the MTP Safety, Multimodal Mobility and Accessibility, Environmental Stewardship, and Partnership and Funding. The primary focus of the on-street bikeway projects is to improve safety, multimodal mobility, and community vitality in our region. The prioritization focuses on road retrofits over widening and on creating opportunities for mode shift to bicycling, both of which support the Environmental Stewardship goal. The recommendation that member agencies study the feasibility of the

proposed on-street bikeway projects supports the partnership goal.

The rating system used to prioritize multi-use trail segments also aligns with the MTP goals and performance measures presented in **Chapter 6**. The rating system directly addresses the MTP goals related to Safety (SAFETY), Multimodal Mobility and Accessibility (CONNECTIVITY), and Partnership and Funding (FEASIBILITY).

Pedestrian System



The Santa Fe Metropolitan Pedestrian Master Plan (PMP) identifies more than 250 locations for pedestrian improvements through public input and data analysis. The

improvement needs are grouped in four categories:

- Areas of Critical Concern
- Rural Projects
- School Area Improvements
- Other Improvement Locations

The primary focus of the pedestrian improvements is to create safe, walkable environments and encourage residents to integrate walking into their daily activities. The PMP includes a Design Toolbox to be used in identifying appropriate solutions for the recommended project areas.

Rating System

Criteria to evaluate and rate improvement locations were generated with input from City and County Staff and the PMP Working Group. Five key factors highlight the need for pedestrian improvements:

- **Safety** – improvements that reduce pedestrian/vehicle crashes or address

known issues or the perception of safety problems

- **Connectivity** – improvements to sidewalk system gaps or crossings
- **Demand** – How the proposed project increases access for pedestrians
- **Improvement Need** – areas of high pedestrian demand and low walkability
- **Feasibility** – level of project complexity with regard to land ownership and jurisdictional oversight

Each location under consideration received a score for each of the five factors according to its potential for improving the pedestrian environment. The final score is the sum of the scores for each factor. **Figure 7-1** presents the rating system.

Alignment with MTP Goals

The rating system used to prioritize pedestrian improvement locations aligns with the MTP goals and performance measures presented in **Chapter 6**. The rating system directly addresses the MTP goals related to Safety (SAFETY), Multimodal Mobility and Accessibility (CONNECTIVITY), and Partnership and Funding (FEASIBILITY). The IMPROVEMENT NEED rating indirectly addresses the MTP goals related to System Preservation, Congestion Relief and System Operations, Economic and Community Vitality, and Environmental Stewardship.

The pedestrian improvement location ratings are intended to show the advantages and disadvantages of funding pedestrian improvements relative to each other. Higher rated locations are typically located in areas with a high improvement need, address a major identified safety issue, and create a new connection. Lower rated locations will upgrade existing infrastructure and enhance the existing pedestrian environment.

Figure 7-1. Pedestrian Improvement Rating System

SAFETY How will the proposed project increase safety for all users? Does it alleviate a known issue?																
4	Will resolve major identified safety issue (4+ crashes)															
3	Will resolve a documented safety issue (1-3 crashes)															
2	Will resolve an identified safety issue (3+ public comments)															
1	Will resolve an undocumented safety issue (2 or fewer public comments)															
SAFETY How will the proposed project increase safety along or across an existing roadway?																
4	Will address a safety issue along or crossing a higher speed (40-45 mph) / high volume roadway (15,000 - 40,000 ADT)															
3	Will address a safety issue along or crossing a medium speed (25-40 mph) / high volume roadway (15,000 - 40,000 ADT)															
2	Will address a safety issue along or crossing a medium speed (25-40 mph) / medium volume roadway (5,000 - 15,000 ADT)															
1	Will address a safety issue along or crossing a low speed (<25 mph) / medium volume roadway (5,000 - 15,000 ADT)															
0	Will address a safety issue along or crossing a low speed (<25 mph) / low volume roadway (less than 5,000 ADT)															
CONNECTIVITY How well will the proposed project improve the connectivity of the pedestrian network?																
<table border="0"> <thead> <tr> <th></th> <th>Sidewalk Connection</th> <th>Crossing / Intersection</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>Fills a major gap or creates a more convenient connection (missing connection along a collector roadway or higher classification)</td> <td>Creates a new crossing at a major roadway</td> </tr> <tr> <td>3</td> <td>Creates a new connection or fills a minor gap (missing connection along a neighborhood / residential street)</td> <td>Creates a new crossing at a minor roadway</td> </tr> <tr> <td>2</td> <td>Upgrades an existing sidewalk / path or introduces sidewalk to a new residential area (maintenance improvement, widens sidewalk, restripes crossing, etc.)</td> <td>Upgrades an existing crossing (restriping, new pedestrian activated signal, etc.)</td> </tr> <tr> <td>1</td> <td>Will have minimal impact on network connectivity</td> <td>Has minimal impact on network connectivity</td> </tr> </tbody> </table>			Sidewalk Connection	Crossing / Intersection	4	Fills a major gap or creates a more convenient connection (missing connection along a collector roadway or higher classification)	Creates a new crossing at a major roadway	3	Creates a new connection or fills a minor gap (missing connection along a neighborhood / residential street)	Creates a new crossing at a minor roadway	2	Upgrades an existing sidewalk / path or introduces sidewalk to a new residential area (maintenance improvement, widens sidewalk, restripes crossing, etc.)	Upgrades an existing crossing (restriping, new pedestrian activated signal, etc.)	1	Will have minimal impact on network connectivity	Has minimal impact on network connectivity
	Sidewalk Connection	Crossing / Intersection														
4	Fills a major gap or creates a more convenient connection (missing connection along a collector roadway or higher classification)	Creates a new crossing at a major roadway														
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1	Will have minimal impact on network connectivity	Has minimal impact on network connectivity														
DEMAND How will the proposed project increase access in a pedestrian use area? *																
4	Will improve access within an area of high pedestrian use															
3	Will improve access within an area of medium pedestrian use															
2	Will improve access within an area of low pedestrian use															
1	Will minimally change or improve pedestrian access															
IMPROVEMENT NEED Does the proposed project fall within a designated Area of Critical Concern?																
5	Falls within a designated Area of Critical Concern															
4	Has composite score of 4000 - 4480 (High)															
3	Has composite score of 3500 - 4000 (Medium High)															
2	Has composite score of 3000 - 3500 (Medium)															
1	Has composite score of < 3000 (Low)															
FEASIBILITY Is the project in an area that can easily be developed by the City / County / State?																
4	Land is owned by the City / County / State / publicly owned or within the Right-of-Way															
3	Land has jurisdictional conditions (i.e. County land within FEMA flood plain or Federal Funding is used)															
2	Land is privately owned															
1	Land is privately owned and has jurisdictional conditions															
* Currently data is lacking on pedestrian counts within improvement locations relative to area destinations. For the purposes of rating improvement locations, a relative observation and sense of potential counts was utilized. A recommendation of this plan includes obtaining pedestrian count data within the MPO area (see Chapter 6: Implementation).																



Chapter 8: Moving Forward

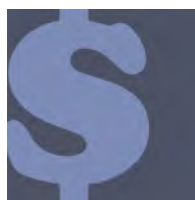
Chapter 8: Moving Forward

The Santa Fe MPO is committed to assisting its member agencies in moving forward with the implementation of this plan's goals and in helping to build as many projects as identified in the plan.

The Financial Summary and Outlook provides the necessary financial details such as anticipated federal, state, and local revenues; cost inflation factors; Year-of-Expenditure dollars; and planning level cost estimates that support a highly transparent and principled approach to project implementation. The Fiscally Constrained plan identifies those regional roadway projects that are expected to be funded in the next 25 years, along with the priorities for transit, bicycle, and pedestrian travel modes.

The Action Plan provides a series of strategies and objectives that will guide the MPO's implementation of this MTP over the next five years.

Financial Summary and Outlook



Title 23 (Highways) of the Code of Federal Regulations (CFR), Part 450 (Planning Assistance and Standards), Sub-Part C (Metropolitan Transportation Planning and Programming), Article 322 (Development and Content of the Metropolitan Transportation Plan), f) – “Contents of the metropolitan transportation plan” states that:

- The Metropolitan Transportation Plan (MTP) must have a financial plan that demonstrates how the adopted transportation plan can be implemented.
- The financial plan shall contain system level estimates of costs and revenue sources that are reasonably expected to be available to operate and maintain highways and public transportation.
- The Metropolitan Planning Organization (MPO), public transportation operators, and the state shall cooperatively develop estimates of funds that will be

available to support the MTP implementation.

- The financial plan shall include recommendations on any additional financing strategies to fund projects and programs included in the MTP.
- Starting December 11, 2007, revenue and cost estimates that support the MTP must use an inflation rate to reflect “year of expenditure dollars” based on reasonable financial principles and information developed cooperatively by the MPO, state, and public transportation operators. For the outer years of the MTP, the financial plan may reflect aggregate cost ranges or cost bands as long as the future funding sources are reasonably expected to be available.
- For illustrative purposes, the financial plan may include additional projects that would be included in the adopted transportation plan if additional resources were to become available.

Transportation Projects Considered for the MTP Update

Transportation projects are one of the most essential outcomes of developing and updating the MTP. In meeting federal requirements and the transportation system challenges, the MPO has developed the MTP, including the associated metropolitan master plans through a planning process guided by federal planning factors, “livability” principles and community-based goals. It is consistent with the City of Santa Fe *General Plan*, the Santa Fe County *Sustainable Growth Management Plan*, and the NMDOT’s *State Transportation Plan*.

Federal Transportation Planning Factors

The metropolitan planning process encourages all local governments of an urban area to work together in a cooperative, comprehensive, and continuing manner to meet the transportation needs of the community.

For the MTP list of projects to be Fiscally Constrained, 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 (see **Table-8-5**) and make up the region’s funding shortfall.

In formulating the Fiscally Constrained MTP project list (see **Table 8-3**), it should be noted that project priorities shown here are regional transportation improvement priorities, as selected and scored using the criteria outlined in **Chapter 7**. Projects reflect the metropolitan area’s top priorities to be implemented as part of the regional transportation system over the next 25 years. Projects on the Fiscally Constrained MTP project list are implemented based on need and funding availability; the ratings are provided to demonstrate that these projects meet MTP objectives, but are not intended to dictate the order in which projects are undertaken.

Ranking and selecting projects for funding purposes is part of the **Transportation Improvement Program (TIP)**, a 4-year “budget” for implementing the highest priority MTP projects. A priority must be given to maintenance and preservation of existing facilities. For this MTP, the financial analysis deducts operations, maintenance, and administration “off the top.” This chapter shows funding that is reasonably expected to be available for transportation improvements, including mobility, safety, and major rehabilitation.

In projecting transportation improvement revenue, it is assumed that the projects and funding shown in the current 2014–2017 TIP would reflect what the region reasonably expects to spend on transportation for the first four years of the MTP. Based on expected revenues from 2014 through 2020, a modest 1.0 percent annual revenue growth is assumed, and from 2020 through 2040, an increase of 2.0 percent annual revenue is assumed.

The MTP plans 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 based on a specific baseline year, such as 2010 for the 2010–2035 MTP.

For transportation costs, FHWA’s National Highway Construction Cost Index (NHCCI) 2003–2010 was used. The NHCCI measures the average change over time in the prices paid by state transportation departments for roadway construction materials and services. If the average change over time increases, it is called “inflation”; if the average price over time decreases, it is called “deflation.”

As shown in **Figure 8-1**, the construction cost index increased from 100 in 2003 to 125 in 2008, a 25 percent increase or approximately a 5 percent per year increase in construction costs but then dropped to approximately 106 in 2010. Between 2008 and 2010, construction costs generally declined because of the economic downturn resulting in extremely favorable construction bids. Using the 2003–2010 trends and allowing for continuing increases in the use of recycled or waste material in construction components, a conservative 2.5 percent per year escalation in construction cost estimates is assumed beginning in 2016.

Figure 8-1. Construction Cost Indices¹



¹http://www.fhwa.dot.gov/policyinformation/pubs/pl10023/fig6_7.cfm.

In preparing the Financial Plan, an approximate year-of-expenditure was estimated based on the priority rankings, and the expected revenue stream. As shown in the Fiscally Constrained Project List.

For the purposes of this Financial Plan, the funding needs and priorities have been split into major modal categories: Roadway System, Transit (including local, regional, and intercity), Bicycle and Pedestrian, and Freight/Intermodal. Funding sources include those available through federal, state, and local programs and taxing authority. Even before the national economic collapse of 2008–2009 and the 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 and fallen substantially.

Transportation network infrastructure improvements are expensive and depend heavily on federal funding. The Highway Trust Fund is the source of federal transportation funds for roads, bridges, transit/rail, and bikeways.

Fiscally Constrained Plan

Major Roadway System

Funding for MPO major infrastructure improvements, enhanced system operations, and ongoing maintenance programs largely depends on federal funding and NMDOT districts’ allocations.

There is a reasonable expectation of about \$232.3 million over the 25 year period for Surface Transportation Program projects within the SFMPA. A portion of this amount 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-led 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-led and built on a time line determined by market conditions; others will be public-led but may need contributing partners to ensure timely construction of roads.

Funding Sources

Pending Surface Transportation Act Reauthorization, the main federal funding sources available in the Santa Fe MPO Planning Area for construction and maintenance of Federal-Aid roadways are:

- **National Highway System (NHS)** – Funds used to construct and maintain urban and rural roads designated as part of the NHS, such as I-25 and US 84/285.
- **Surface Transportation Program (STP)** – Funds that can be used to construct and maintain 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 Alternatives Program (TAP)** – Used to construct 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 MAP-21.

Local funding sources include the following:

- **Capital Improvements Program (CIP) Bonds** – The City sells revenue bonds pledged with local gross receipts taxes. From these, approximately \$18 million is generated every 2 years. The CIP 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. City code regulates impact fees, which can be used for new-growth related transportation infrastructure and or traffic improvements. The 10-year total collected from 2005 through 2014 was \$14.1 million.
- **Special Assessment Districts** – Assessment districts can be used to generate 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 the 2010 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.

Appropriations to each state will be determined through negotiations and enactment of MAP-21 and its subsequent and pending reauthorizations. 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 depend 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 fuel taxes and heavy vehicle fees and taxes.

Since 2005, the taxes on fuel have been 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 states for road network improvement and transit support. Many 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 because it depends on gross receipts taxes generated from sales volumes. Investing in the improvement and maintenance of the alternative transportation facilities is especially important during 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 percent 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 percent of all financial resources planned for the Santa Fe MPO transportation network during the next 5 years.

Revenue Projections

Over the past 5 years, an average of just under \$16 million per year has been programmed in the SFMPO. Not all of this funding has been

used for new infrastructure, but rather for maintenance activities such as bridge rehabilitations or repaving activities. Those projects that were wholly or partially for maintenance activities were identified and the associated programmed funds recorded.

Table-8-1 shows the average amount of programmed funds used for maintenance activities by funding source and the calculation of the balance that were used to determine the Reasonably Expected Revenue Projection.

Based on this analysis approximately 50 percent of the funding programmed in the TIP was used for maintenance activities. Because the MTP does not typically call out maintenance projects, this funding amount has been subtracted from the total programmed amount to give a Reasonably Expected Revenue Projection of \$7,872,850 per year. An estimated **\$7.9 million** per year has been used to calculate the expected funding to be applied to the MTP. Based on the funding projections in the New Mexico Transportation Plan (NMTP), funding is expected to remain static for the next five years (2016–2020) and then grow at 2 percent per year through 2040. **Table-8-2** shows the Reasonably Expected Revenue Projections in 5-year increments for the life of the plan. These funding amounts are used to fiscally constrain the Santa Fe MPO MTP.

Table-8-1. Calculation of the Base Revenue Projection

5-Year Annual Average (2011 – 2015)	Federal	State	Local	Total
Total Programmed Funding	\$11,346,843	\$3,171,164	\$1,380,734	\$15,898,842
Maintenance Activities	\$5,828,116	\$2,149,001	\$48,874	\$8,025,991
% Maintenance	51%	68%	4%	50%
Base Revenue Projection	\$5,518,727	\$1,022,163	\$1,331,960	\$7,872,850

Table-8-2. Reasonably Expected Revenue Projections

Time Period	Reasonably Expected Revenue Projections
2016 – 2020	\$39.0 million
2021 – 2025	\$41.4 million
2026 – 2030	\$45.7 million
2031 – 2035	\$50.5 million
2036 – 2040	\$55.7 million
Total	\$232.3 million

The total cost of the regional roadway projects included in Chapter 7 (Table 7-1) is approximately \$189 million in 2015 Dollars. However, the cost to construct projects will continue to increase over time. The prioritized project list and associated project costs have been paired with the annual revenue projects to estimate the Year of Expenditure (YOE) for each project. An annual construct cost increase of 2.5 percent was used to inflate project costs and calculate the corresponding YOE cost for each project. Based on the YOE project costs, the total cost for the regional roadway projects exceeds \$270 million. With estimated revenues of \$232.3 million, the region faces a shortfall of approximately \$40 million over the 25 years of the MTP. The results of the YOE analysis were used to establish the Fiscally Constrained Plan, as shown in **Table 8-3**. All but two projects are included in the Fiscally Constrained Plan.

Table 8-3. Fiscally Constrained Regional Roadway Projects

Project Name and Description	Lead Agency	Cost (2015 Dollars)	Time Frame/ Need	Priority	Year of Expenditure (YOE)		
					Year	YOE Cost	Cumulative Cost (YOE)
Sandoval/Montezuma Intersection Improvements: Pedestrian improvements, striping, signage, median reconfiguration	City of Santa Fe	\$550,000	Short	1	2016	\$550,000	\$550,000
I-25 Interim Safety Improvements: Various interim improvements to interchanges plus installation of emergency safety gates at median crossings, addition of lighting	NMDOT	\$2,400,000	Short	2	2016	\$2,400,000	\$2,950,000
Guadalupe Street Road Diet: Reduce the roadway from 4 to 3 lanes, add bike lanes, widen sidewalks, and add additional pedestrian crossing from Paseo de Peralta (North) to Agua Fria Street	City of Santa Fe	\$2,000,000	Short	2	2016	\$2,000,000	\$4,950,000
Paseo de Peralta/Guadalupe Street Intersection Improvements: Reconfigure intersection to improve pedestrian crossings and upgrade traffic signals	City of Santa Fe	\$750,000	Short	2	2016	\$750,000	\$5,700,000
St Francis Drive: Pedestrian Intersection Improvements: Pedestrian improvements at all the intersections along St Francis Drive	NMDOT/ City of Santa Fe	\$600,000	Short	5	2016	\$600,000	\$6,300,000
NM 599/Via Vetranos (CR70) Interchange: Construction of a new interchange	NMDOT	\$8,000,000	Short	6	2017	\$8,200,000	\$14,500,000
West Alameda Widening and Drainage Improvements(Via Abajo to La Joya Street): Widen road, significant drainage improvements, striping	City of Santa Fe	\$7,000,000	Short	7	2018	\$7,400,000	\$21,900,000
Agua Fria/South Meadows Intersection Improvements: Reconfigure intersection to include left turn bays on Agua Fria and to improve pedestrian crossings and upgrade traffic signals	City of Santa Fe	\$1,400,000	Short	7	2018	\$1,500,000	\$23,400,000
Rehabilitation or Replacement of 3 Downtown Bridges over the Santa Fe River: Galisteo, Don Gaspar, Delgado Street	City of Santa Fe	\$3,000,000	Short	9	2019	\$3,200,000	\$26,600,000
Old Santa Fe Trail Bike Lanes (City): Widen from Zia Road to Mountain Cloud Zen Road to add bike lanes	City of Santa Fe	\$1,000,000	Short	10	2019	\$1,100,000	\$27,700,000

Project Name and Description	Lead Agency	Cost (2015 Dollars)	Time Frame/ Need	Priority	Year of Expenditure (YOE)		
					Year	YOE Cost	Cumulative Cost (YOE)
Old Santa Fe Trail Bike Lanes (County): Widen from Zen Cloud Road to El Gancho Way/Old Las Vegas Highway (Designed and Funded with County Bond Funds)	Santa Fe County	\$2,000,000	Short	10	2019	\$2,200,000	\$29,900,000
Cerrillos/Sandoval Intersection Improvements: Pedestrian improvements, striping, signage, reconfigure medians	City of Santa Fe	\$1,250,000	Short/ Medium	12	2019	\$1,300,000	\$31,200,000
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	\$6,000,000	Short/ Medium	13	2020	\$6,600,000	\$37,800,000
Cerrillos Road Reconstruction (St Michaels Drive to St Francis Drive): Reconstruction to add medians, drainage, bike lanes, sidewalks, and transit facilities	City of Santa Fe	\$12,000,000	Short/ Medium	13	2022	\$13,900,000	\$51,700,000
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	\$4,300,000	Short/ Medium	15	2023	\$5,100,000	\$56,800,000
Avenida Del Sur Extension: Construction of a new road and an upgrade of existing roadway from NM14 to A Van Nu Po	Santa Fe County	\$2,500,000	Short/ Medium	16	2023	\$3,000,000	\$59,800,000
Governor Miles Road Bike Lanes: Widen from Richards Avenue to Pueblos del sol to add bike lanes	City of Santa Fe	\$275,000	Short/ Medium	17	2023	\$300,000	\$60,100,000
San Felipe Road Bike Lanes: Widen from Airport Road to Agua Fria Street to add bike lanes	City of Santa Fe	\$165,000	Short/ Medium	17	2023	\$200,000	\$60,300,000
West Alameda Street Bike Lanes (City): Widen from Calle Nopal to Siler Road and improve drainage	City of Santa Fe	\$5,000,000	Short/ Medium	17	2024	\$6,100,000	\$66,400,000
West Alameda Street Bike Lanes (County): Widen from Chicoma Vista to Frontage Road to add bike lanes	Santa Fe County	\$210,000	Short/ Medium	17	2024	\$260,000	\$66,660,000
Henry Lynch Road Bike Lanes: Widen from Agua Fria to Rufina Street to add bike lanes	City of Santa Fe	\$275,000	Short/ Medium	17	2024	\$340,000	\$67,000,000
Tesuque Village Road Bike Lanes: From US84/285 Interchange to Tesuque Village to add bike lanes	Santa Fe County	\$825,000	Short/ Medium	17	2024	\$1,000,000	\$68,000,000

Project Name and Description	Lead Agency	Cost (2015 Dollars)	Time Frame/ Need	Priority	Year of Expenditure (YOE)		
					Year	YOE Cost	Cumulative Cost (YOE)
Hyde Park Road (NM475) Bike Lanes: Widen from Artist Road to Little Tesuque Creek to add bike lanes	NMDOT	\$1,925,000	Short/ Medium	17	2024	\$2,300,000	\$70,300,000
Avenida Del Sur Bike Lanes: Widen from NM14 to Avenida del Sur to add bike lanes	Santa Fe County	\$1,000,000	Short/ Medium	17	2024	\$1,200,000	\$71,500,000
Rufina Street Connection: New roadway connection between Harrison Road and Camino Carlos Rey	City of Santa Fe	\$450,000	Short/ Medium	25	2025	\$600,000	\$72,100,000
NM599/Airport Road Interchange: Construction of a new interchange	NMDOT	\$11,000,000	Medium	26	2026	\$14,100,000	\$86,200,000
Calle Po Ae Pi Extension: Pave dirt section and include sidewalks	City of Santa Fe	\$850,000	Medium	27	2026	\$1,100,000	\$87,300,000
NM599/Camino de los Montoyas Interchange w/ Frontage Road: Construction of a new interchange	NMDOT	\$11,050,000	Medium	28	2028	\$14,900,000	\$102,200,000
I-25/NM599: Interchange Ramp Improvements: Lengthening of on and off ramps	NMDOT	\$2,500,000	Medium	29	2028	\$3,400,000	\$105,600,000
St Francis Drive US 84/285 Auxiliary Lane NM599 to Guadalupe: Construction of a SB auxiliary lane from NM599 to Guadalupe Exit	NMDOT	\$1,000,000	Medium	30	2028	\$1,300,000	\$106,900,000
St Francis Drive (US 84/285)/Guadalupe Interchange Improvements: Reconstruction of existing interchange to replace existing bridge on Guadalupe and possibly convert from a left hand exit to a right hand exit	NMDOT	\$17,000,000	Medium	30	2031	\$24,600,000	\$131,500,000
Old Santa Fe Trail Bike Lanes (County): Widen from Mountain Cloud Zen Road to El Gancho Way/Old Las Vegas Highway	Santa Fe County	\$1,000,000	Medium	32	2031	\$1,400,000	\$132,900,000
Rancho Viejo Blvd Bike Lanes (Shoulders): Widen from NM14 to Avenida del Sur to add bike lanes	Santa Fe County	\$1,000,000	Medium	32	2031	\$1,400,000	\$134,300,000
I-25/NM466: Interchange Improvements: Reconfiguration of interchange and ramp lengthening	NMDOT	\$7,200,000	Medium/ Long	34	2032	\$10,700,000	\$145,000,000
I-25/St Francis Drive: Interchange Improvements: Reconfiguration of interchange and ramp lengthening	NMDOT	\$8,300,000	Medium/ Long	35	2034	\$12,900,000	\$157,900,000

Project Name and Description	Lead Agency	Cost (2015 Dollars)	Time Frame/ Need	Priority	Year of Expenditure (YOE)		
					Year	YOE Cost	Cumulative Cost (YOE)
I-25 Auxiliary Lanes: NM599 to Cerrillos: Construction of third lane in each direction between interchanges	NMDOT	\$4,000,000	Long	36	2034	\$6,200,000	\$164,100,000
I-25 Auxiliary Lanes: St Francis to NM466: Construction of third lane in each direction between interchanges	NMDOT	\$2,000,000	Long	36	2035	\$3,200,000	\$167,300,000
County Road 62 Realignment and Improvements: NM599 to Caja del Rio	Santa Fe County	\$3,000,000	Long	38	2035	\$4,800,000	\$172,100,000
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	\$3,000,000	Long	39	2036	\$4,900,000	\$177,000,000

Transit Plan Priorities



The Santa Fe Metropolitan Public Transit Master Plan (PTMP) includes short-term strategies to address planning, marketing, operational, infrastructure, and other needs designed to ensure sustainability and growth in transit ridership. **Table 8-4** summarizes the recommended timeline to implement these activities. Many of these activities and tasks are cost/revenue neutral, while others require additional funding. The activity timeline focuses on when the service should be implemented based on anticipated demand and aging infrastructure. The short-term plan provides more specificity, with an opportunity to expand the list of activities in the out years in subsequent updates to the PTMP.

Pedestrian Plan Priorities



The Pedestrian Master Plan revealed 10 areas of concern and recommends these areas be studied in a comprehensive manner to improve safety and mobility for all users. The methodology for identifying the areas of critical concern uses two indices to measure these elements:

- A pedestrian potential index measuring those factors that favor walking; and
- An infrastructure deficiency index measuring the absence of deficiency of pedestrian facilities.

Areas of Critical Concern or proposed study areas include:

1. Lower Cerrillos Corridor
(Zafarano Drive: Rodeo – San Ignacio Road)
(Cerrillos Road: Rodeo – Vegas Verde Drive)
2. South Capital Complex

Table 8-4. Prioritized Transit Activities

Timeline	No.	Project	Category
Years 1–5	1	Continue Transit Service Provider quarterly meetings and support NCRTD Region planning initiatives	Planning
	2	Prepare New Southside Center	Operations
	3	Conduct bus stop assessment	Planning
	4	Conduct Origin-Destination Study and Short Range Plan	Planning
	5	Rebrand services	Marketing
	6	Routing revisions	Operations
	7	Revise service hours	Operations
	8	Manage mobility	Planning
	9	Zia Station Service	Operations
	10	Dial a Ride – Local	Operations
	11	Determine the potential for new routes	Planning
	12	Initiate late night daily service	Operations
	13	Coordinate with seniors	Planning
	14	Secure funds for Sheridan Avenue facility	Infrastructure
	15	Build new transfer facility	Infrastructure

3. Mid-Cerrillos Corridor
(Llano Street – Baca Street)
4. St. Francis/Guadalupe Neighborhood
(Cerrillos Road – Paseo de Peralta/Crucitas)
5. St. Michaels Drive Corridor
(Cerrillos Road – Hospital Drive)
6. Airport Road Corridor
(Calle Atajo – Paseo del Sol)
7. Upper Cerrillos Corridor
(St. Francis Drive – West Manhattan Drive)
8. Lower Agua Fria Street Corridor
(South Meadows Road – Airport Road)
9. St. Francis Drive/Guadalupe Intersection
(Alamo Street)

The SFMPO intends to use the Pedestrian Master Plan to leverage funding for both future studies and specific pedestrian infrastructure improvements that may be derived from the data, information, and analysis found within the plan.

Bicycle Plan Priorities



The priorities for new bicycle infrastructure include the extension of seamless multi-use trail and bikeway alignments from the downtown Plaza and Railyard areas to the southern,

western, and northern extremes of the metropolitan area, and improved local bikeway connections and road crossings along these alignments. These projects that are both in the City of Santa Fe and Santa Fe County include:

- The River Trail
- The Acequia Trail
- The Arroyo Chamisos Trail
- The Arroyo Hondo Trail
- The Rail Trail
- Connector Trails

An example of “on-street” priorities includes proposed “road diets” for:

- Siler Road (four lanes to three), south of Agua Fria Street
- Paseo de Peralta (four lanes to three): Canyon Road to Old Santa Fe Trail

- Old Las Vegas Highway (Frontage Road 2108); consider the feasibility of eliminating the third lane west of the junction of Ojo de la Vaca Road to Paseo de la Luz (0.6 miles) (three lanes to two); restore shoulders west of Paseo de la Luz to the junction of US 285 (1.6 miles); and sign as Bike Route 66
- St. Michaels Drive between Cerrillos Road and St. Francis Drive (six lanes to four), with left-turn bays, as proposed in City long-range planning studies), once the City has assumed responsibility for this facility; meanwhile, consider bike lane retrofit through lane width reduction when resurfacing occurs
- Paseo de Peralta (four or five lanes to three): Old Santa Fe Trail to Guadalupe
- Paseo de Peralta / NM 475 (five lanes to three, or through reduction of lane widths): St. Francis Drive to Washington Avenue; and
- Long-term consideration of other multi-lane roadways, including other segments of Cerrillos Road (east of St. Francis Drive), St. Francis Drive, Guadalupe Street, and Paseo de Peralta (St. Francis Drive to Old Santa Fe Trail).

Additional, on-street proposed improvements may be found in the Bicycle Master Plan, Section IV. Recommendations to Improve Bicycle Infrastructure, pages 61–66.

Illustrative Plan Funding Options

The Illustrative Project List is shown in **Table-8-5**; the two projects listed in this table are not expected to be funded within the 25 year time period. The MPO will continue to look for new and innovative funding sources that can be used to fund projects on this list. We will continue to track the federal transportation reauthorization and pursue federal funding sources as they arise. Likewise, innovative funding options should be considered to expedite the implementation of projects included in the Fiscally Constrained Plan

The following innovative funding and financing discussion will be included:

- **Public/private partnerships, or PPP –** Contractual agreements formed between a public agency and a private sector entity for transportation improvements that benefit both parties. PPPs encourage and allow greater private sector participation in transportation financing and project delivery and, at times, influence 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.

- **Tax-increment financing, or “value capture” –** A mechanism that finances improvements through 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 through 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. New Mexico does allow tax increment financing.

Table-8-5. Illustrative Plan Regional Roadway Projects

Project Name and Description	Lead Agency	Cost (2015 Dollars)	Time Frame/ Need	Priority	Year of Expenditure (YOE)		
					Year	YOE Cost	Cumulative Cost (YOE)
I-25 Auxiliary Lanes: Cerrillos to St Francis: Construction of third lane in each direction between interchanges	NMDOT	\$17,000,000	Long	40	2040+	\$30,700,000	\$30,700,000
I-25/Richards Avenue Interchange: Construction of a new interchange	NMDOT	\$35,000,000	Long	41	2040+	\$63,300,000	\$94,000,000



Action 2020: Strategies and Objectives

Action 2020 picks up where efforts from the 2010 MTP left off by highlighting strategies and objectives over the next five years intended to implement the 2040 goals and vision.

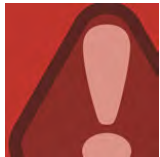
The 2010 MTP update called for the development of bicycle, pedestrian, and public transit master plans. Each of these master plans hosts a number of strategies and recommendations. This Action Plan references

the need to update the plans but does not include all recommendations. More detailed references can be found in each master plan at www.santafemppo.org.

Strategies

Table 8-6 includes goals and strategies detailed in **Chapter 6** to reemphasize their importance and to provide an easily accessible comprehensive list of recommended strategies and policy initiatives. **Table 8-6** also documents the strategies for achieving each goal, along with the new data collection efforts required to document the system performance and determine appropriate performance targets. The strategies will require both MPO staff and member agency involvement, as detailed in **Chapter 6**.

Table 8-6. Performance Based Strategies and Data Collection

Goal	ID#	Action Plan
 Safety: A safe and secure transportation system for motorized and non-motorized users.	Safety Strategies	
	1	Identify high crash locations in the MPO planning area and assist member agencies in planning improvements and identify funding for implementation.
	2	Consider FHWA's nine safety countermeasures (including roundabouts, access management, and road diets) to reduce crash severity ² .
	3	Promote the creation of a low-stress network for bicyclists.
	4	Encourage public education and awareness of safety and sharing the road with others.
	5	Design and implement protected bike lanes to increase safety and encourage bicycle use.
	6	Develop and implement Safe Routes to Schools programs.
	7	Regularly identify intersections with the highest pedestrian crash frequencies and assess possible crossing improvements.
	8	Support the design and implementation of pleasant pedestrian environments with landscaping, shade, detached/wide sidewalks.
	9	Implement engineering solutions that improve bridge and roadway security.
	10	Identify existing emergency transportation plans for the region and areas where the MPO can provide support.
	11	Support development of evacuation plans and emergency response protocols, including supportive ITS architecture.
	12	Support technology improvements that minimize cyber attacks on transportation control systems.
	13	Identify and assess all roadways that may be eligible for a "Road Diet."
	14	Adopt "Vision Zero" policies – Transportation systems traditionally place responsibility for safety on road users. The Vision Zero Initiative puts this responsibility on system design.

² <http://safety.fhwa.dot.gov/provencountermeasures/>

Goal	ID#	Action Plan
	Safety Data Collection	
	15	Develop a methodology to estimate annual VMT in the region to normalize crash data (crashes per VMT).
	16	Stratify injury crash data to identify serious injury crashes.
	17	Track annual bicycle crashes per 10,000 daily commuting bicyclists.
	18	Track annual pedestrian crashes per 10,000 daily commuting pedestrians.
 System Preservation: <i>A well maintained transportation system.</i>	System Preservation Strategies	
	19	Include system preservation and maintenance in the budgeting process.
	20	Develop asset management plans to extend the life of fleet and facilities.
	System Preservation Data Collection	
	21	Develop an approach to track the percent of road, bicycle, and pedestrian facilities, and transit assets (stations, stops, and rolling stock) in good or fair condition.
 Multimodal Mobility and Accessibility: <i>An accessible, connected, and integrated transportation system.</i>	Multimodal Mobility and Accessibility Strategies	
	22	Review all roadway projects to ensure that they meet the intentions of the MPO's Complete Streets policy.
	23	Evaluate opportunities for developing intermodal facilities to enhance transfers between modes.
	24	Increase transit availability, frequency, and span of service.
	25	Feature bicycle and pedestrian designs, rather than just accommodating these modes.
	26	Identify multimodal network gaps and prioritize improvements.
	27	Enhance bike network and walkability through improved wayfinding, streetscape, increased bike parking, and traffic control projects.
	28	Update development standards to require a connected street network.
	29	Establish ongoing quarterly transit planning team meetings.
	Multimodal Mobility and Accessibility Data Collection	
	30	Develop an approach to track miles of sidewalks, multi-use paths, and on-road bicycle facilities.
 Congestion Relief and System Operations: <i>An efficient and reliable transportation system.</i>	Congestion Relief and System Operations Strategies	
	31	Ensure that appropriate fiber optics are installed for all transportation projects.
	32	Improve coordination of signal timing.
	33	Implement and/or improve mobile technology that provides next bus/train information.
	34	Implement commuter TDM strategies.
	35	Hire a full-time mobility manager.
	36	Continue Technical Coordinating Committee.
	Congestion Relief and System Operations Data Collection	
	37	Develop a methodology to track average vehicle delay per capita, or another measure that would effectively track congestion levels and travel reliability.

Goal	ID#	Action Plan
 <i>A transportation system that supports economic and community vitality.</i>	Economic and Community Vitality Strategies	
	38	Ensure that new development is adequately connected to the transportation system.
	39	Support mixed-use development and population and employment density that supports alternative modes of transportation.
	40	Ensure that new development has adequate access to healthy food.
	41	Improve and/or expand transportation facilities to support job access.
	42	Identify transit stops requiring improvements to increase safety and accessibility.
	43	Improve and/or expand bicycle, transit, and pedestrian infrastructure to allow easy access to commercial centers, recreation areas, and public spaces.
	44	Support development and improvement of intermodal transportation facilities at transit stations.
	45	Encourage hosting of cultural, recreational, and professional events.
	46	Support management and pricing strategies that increase tourism spending.
	47	Encourage consideration of the transportation system in economic development planning.
	48	Encourage mixed-use development that includes multimodal transportation options to meet the needs of younger populations and entrepreneurs.
	49	Host annual workshops with local planning commissions and development review committees, staff and elected leaders.
 Environmental Stewardship: <i>A transportation system that protects the natural, cultural, and built environment.</i>	Environmental Stewardship Strategies	
	50	Ensure that new development is adequately connected to the transportation system.
	51	Encourage mixed-use development and population densities that support alternative modes of transportation.
	52	Improve and/or expand bicycle and pedestrian infrastructure.
	53	Transition to low emission vehicle fleets.
	54	Implement commuter TDM strategies.
	55	Support projects that use recycled or reusable materials, reduce the amount of construction waste and disposal needs, and increase the use of renewable energy.
	56	Integrate sustainable design into transportation projects through the use of low-impact development (LID) techniques to reduce runoff, alternative street designs, and permeable pavement.
	57	Support development of green buildings/facilities.
	58	Support programs and projects that adapt to climate change scenarios, including severe weather occurrences.
	59	Support a long-range vision and master planned land-uses that realize sustainable and vital mixed use neighborhoods not incremental and desperate sprawling development.
	Environmental Stewardship Data Collection	
	60	Develop an approach to tracking the number of projects constructed using sustainable design practices.

Goal	ID#	Action Plan
 Partnerships and Funding: <i>Regional collaboration in transportation planning, funding, and implementation.</i>	Partnerships and Funding Strategies	
	61	Coordinate with local agencies to ensure land use planning requirements are conducive to pedestrian and bicycle travel.
	62	Implement commuter TDM strategies.
	63	Research and consider creative alternative funding sources, such as public-private partnerships.
	64	Support and advocate for any needed regulatory changes to improve agency work practices and timeliness of project delivery.
	65	Study gross receipt tax increases to support transit improvements in the region.
	Partnerships and Funding Data Collection	
	66	Develop an approach to track annual transportation funding by mode.

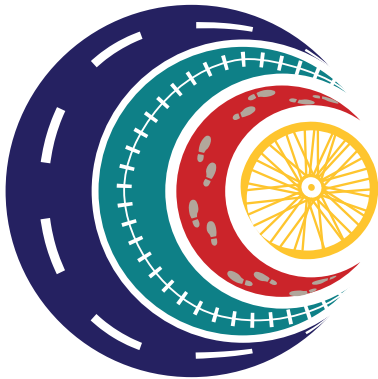
Objectives

The Santa Fe MPO will implement a series of actions over the next five years in support of our region's transportation vision. The actions listed in **Table 8-7** are categorized by major topic, and a timeframe is provided for each action.

Table 8-7. Santa Fe MPO Objectives

Objective	ID #	Specific Actions	Timeline
Update the 2012 Bicycle Master Plan	67	Update project lists and any outdated material in the plan.	By 2018
	68	Develop a bicycle facility inventory and user profile.	By 2018
	69	Update the 2015 Bikeways and Trails Plan.	By 2019
	70	Continue to support the community's efforts to gain "Gold" status with both the League of American Bicyclists and International Mountain Bicycling Association's standards.	By 2023
Update the 2015 Public Transit Master Plan	71	Conduct Bus Stop Inventory and Connectivity Assessment.	By December 2015
	72	Update implementation matrix and all pertinent data.	By September 2019
Update the 2015 Pedestrian Master Plan	73	Update areas of critical concern and all pertinent data by September 2019.	By September 2019
	74	Formalize Pedestrian Advocacy Committee by 2017.	By 2017

Objective	ID #	Specific Actions	Timeline
Begin developing a comprehensive Transportation Demand Management program	75	Develop a comprehensive Metropolitan Mobility Plan that details TDM strategies and supports the implementation of each Metropolitan Master Plan.	By 2017
	76	Identify potential aggregated funding opportunities, including state, federal, and local funding.	By 2017
	77	Work with targeted employers on multiple strategies they may execute on behalf of their workforce.	By 2020
	78	Look critically at the parking supply; when free or inexpensive parking is offered, it leads to overuse. Parking management is integral to any TDM program.	2019
	79	Use the best technologies and promotional tactics to improve and distribute transit and any regional rideshare information.	Ongoing
	80	Develop and market web-based and mobile phone based applications for transit riders.	On-going
	81	Outline costs and benefits of universal transit passes for businesses, educational institutions, and governmental institutions.	By 2020
	82	Use social marketing and incentive programs to reach out to the general public and visitors.	Ongoing
Advance transportation and public health planning	83	Continued development of partnerships with local public health organizations	Ongoing
	84	Participate with local public health events and planning initiatives to help showcase how the MPO is supporting and may contribute to public health goals.	Ongoing
	85	Conduct Metro Area Community Health Impact Analysis.	By 2018
	86	Encourage Safe Routes to School programs.	On-going
	87	Prioritize infrastructure improvements near public transit facilities.	Ongoing
	88	Continued promotion of active transportation with events like Bike-to-Work Week.	Ongoing
	89	Encourage bicycle parking at workplaces and public spaces.	Ongoing
	90	Develop a public health, transportation, and community development benefits curriculum and host annual workshops for fellow professionals and the general public.	By 2020
	91	Continued support of the development of a diverse transportation network designed to accommodate all users and all levels.	Ongoing
Multimodal Level of Service	92	Pursue options such as workshops, webinars and presentations that highlight the benefit of adopting level of service standards that incorporate all modes of traffic.	Ongoing
Freight and Commerce	93	Pursue a baseline inventory of existing freight services businesses within the Metropolitan Area as well as freight services that pass through and provide delivery services.	By 2017
	94	Conduct survey in coordination with the NMDOT regarding existing freight services, needs and expected demand.	By 2018
Performance Measures	95	Pursue baseline data and establish performance targets for the approved performance measures.	By 2018



Santa Fe MPO Metropolitan Transportation Plan 2015-2040

