

Santa Fe MPO
Metropolitan
Transportation
Plan 2020-2045

SANTA FE 2020-2045 METROPOLITAN TRANSPORTATION PLAN

MAY 2020



Santa Fe MPO 2020–2045 Metropolitan Transportation Plan

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Santa Fe Metropolitan Planning Organization

"Promoting Interconnected Transportation Options"



Citizens of the Santa Fe Metropolitan Area,

It saddens us that the past year's work and the adoption of the Metropolitan Transportation Plan (MTP) have been eclipsed by impacts of COVID-19, which, as I write this, has confined us to our homes with the tragic reality of many current and pending fatalities in the United States, as well as worldwide. Our federal leaders have authorized the spending of multiple trillions of dollars to assist impacted sectors of the country. Unprecedented numbers of people have already lost their jobs, following governmental orders to "Stay-at-Home." Supply chains have been disrupted, with uncertain consequences ahead. These events are resulting in sudden shifts in revenue projections and could require a shift in our community strategy. We expect that this MTP may be amended in the coming months and years to address such shifts in funding, programming, and/or priorities from the federal government, down to state and local agencies.

Regardless, the MPO believes that the ideas held in the MTP are timeless and remain valid even after COVID-19 becomes historical. They represent the core values of American people to move independently through public spaces, even while they try to remain 6 feet apart. People have the rights to equal access to their city infrastructure, equal safety in their movements, and equal choice about their use of the transportation network to facilitate their lives. This transportation plan puts the needs and health of the people who live, work, and visit Santa Fe first.

Before COVID-19 became an imminent danger, people in New Mexico already were and continue to be impacted by roadway fatalities and injuries at higher rates than other parts of our country. New Mexico has the highest per-capita pedestrian death rate in the United States; our citizens are unable to walk along, ride a bicycle on, and even cross many of our streets safely. Crash analysis shows that Santa Fe contributes to New Mexico's tragic statistic in similar, overly high rates. Meanwhile, our communities are experiencing high rates of obesity, heart disease, lung disease, and mental illnesses that can be mitigated through access to fresh air and exercise. These potentially impacted people are more vulnerable and at higher risk for complications from COVID-19, exasperating this crisis. Throughout these times and especially now, walking, cycling, having access to fresh air and open space are vital activities. This will remain true even as our economy falters and tests our resiliency in the face of profound changes.

Simultaneously, many of us recognize that our public transit system must not fail as it becomes the only affordable option to people who lose their jobs yet must get food at markets or work in their aisles. It must not fail for the people who cannot drive, yet still are needed at work, or who themselves need services. Before the crisis, there were over 800,000 annual trips on Santa Fe public transit, each reducing traffic while serving members of our community and benefiting everyone through an invisible web of interconnectedness, a web that has become clear as COVID-19 spreads.



Santa Fe Metropolitan Planning Organization

"Promoting Interconnected Transportation Options"



In November 2019, the SFMPO and numerous stakeholders representing community interests considered multiple economic scenarios to recognize the area's transportation priorities given an uncertain future. We heard an overwhelming response that

- 1) Health and safety are priorities during good times and bad.
- 2) Choice remains a top value.
- 3) Land use and the zoning code are critical components that drive travel demand and traveler decisions.
- 4) Adaptability is essential as new technologies come on board.

These sentiments were echoed in our public outreach, which highlighted an additional priority:

- 5) Climate change concerns Santa Feans, and they feel it is the responsibility of their government to address this existential crisis.

Climate change will remain an over-arching challenge even after we can assess the impact of COVID-19, even despite a temporary drop in CO2 admissions due to this sudden worldwide drop in travel. This issue has motivated youth participation never seen before. Multiple climate strikes mobilized millions of people globally with participation by Santa Fe students. These are exemplified by the youth strikes of March 15 and September 19, 2019. Youth demanded that their government address ongoing and worsening environmental degradation.

Our futures are altered, and these plans for street improvements will be carefully considered in the wake of a new reality. It is with respect and solemn acknowledgement that we present an MTP that encompasses so many other plans and contains blueprints that can evolve and adapt to many scenarios, even though we had not anticipated this global pandemic.

The Santa Fe MPO recognizes the unprecedented high level of uncertainty regarding both near- and long-term impacts of COVID-19. Still, improvements to our transportation system must continue in the wake of COVID-19. This MTP is written to honor the community's core values, principles and goals detailed within its pages, while enabling adaptability and flexibility to respond to our region's evolving fiscal situation. Though we are presenting this plan with heavy hearts, we remain optimistic that this MTP can guide the Santa Fe Metropolitan Area to a better quality of life, contributing to our recovery from this trauma.

On Behalf of the SFMPO,

Hannah A. Burnham



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The Santa Fe Metropolitan Planning Organization would like to acknowledge the following who provided input in the development of the Metropolitan Transportation Plan 2020–2045.

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LIST OF ACRONYMS AND ABBREVIATIONS

AAB	Airport Advisory Board
AADT	Annual Average Daily Traffic
ADA	Americans with Disabilities Act
APTA	American Public Transportation Association
BMP	Bicycle Master Plan
CDC	Centers for Disease Control and Prevention
CFR	Code of Federal Regulations
CIP	Capital Improvements Program
CNG	compressed natural gas
CNT	Center for Neighborhood Technology
CSS	Context Sensitive Solutions
EIR	Environmental Impact Report
FAST	Fixing America’s Surface Transportation Act of 2015
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GDP	Gross Domestic Product
GHG	greenhouse gas
GPS	Geospatial and Population Studies
GSFRP	Greater Santa Fe Recreation Partnership
HSIP	Highway Safety Improvement Program
IBA	Infrastructure Buildout Analysis
ICIP	Infrastructure Capital Improvement Plan
ITS	Intelligent Transportation Systems
LID	Low-impact development
MaaS	Mobility-as-a-service
MAP-21	Moving Ahead for Progress in the 21 st Century Act
MDS	Mobility Data Specification
MPO	Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer Systems
MTP	Metropolitan Transportation Plan
MYAB	Mayor’s Youth Advisory Board
NACTO	National Association of City Transportation Officials
NCRTD	North Central Regional Transit District

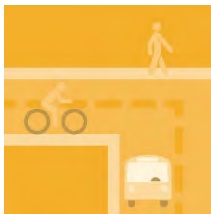
NEPA	National Environmental Policy Act
NHS	National Highway System
NMDOT	New Mexico Department of Transportation
NMRX	New Mexico Rail Runner Express
NPDES	National Pollutant Discharge Elimination System
NPRTPO	Northern Pueblos Regional Transportation Planning Organization
PER	Preliminary Engineering Report
PPP	Public/Private Partnerships
PTASP	Public Transportation Agency Safety Plan
PTMP	Public Transit Master Plan
RSA	Road Safety Audit
SAF	Santa Fe Regional Airport
SFCCD	Santa Fe Community College District
SFMPA	Santa Fe Metropolitan Planning Area
SFMPO	Santa Fe Metropolitan Planning Organization
SGMP	Sustainable Growth Management Plan
SRTS	Safe Routes to School
STAHNET	Strategic Highway Network
STP	Surface Transportation Program
TAM	Transit Asset Management
TAP	Transportation Alternatives Program
TCC	Technical Coordinating Committee
TDM	Transportation Demand Management
TIP	Transportation Improvement Program
TMDL	Total Maximum Daily Load
TOD	Transit Oriented Development
TPM	Transportation Performance Management
TSM	Transportation System Management
TTTR	Truck Travel Time Reliability
USDOT	United States Department of Transportation
VMT	vehicle miles traveled
YOE	Year of Expenditure
YUCCA	Youth United for Climate Change Action



CHAPTER 1: WHY IT MATTERS



This chapter describes the importance of a well-connected and safe multimodal transportation system for our region and describes how this performance-based MTP is vital in realizing our region's goals.



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.

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.

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



PUBLIC HEALTH

The design and structure of our transportation systems influence the health and quality of life of Santa Fe citizens every day. The available transportation options can affect our levels of physical activity, stress, air quality exposure, safety, and access to grocery stores, healthcare, and other services.

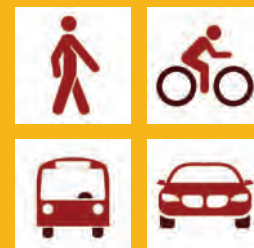
Over the last 70 years, with the boom of the automobile and the growth of outlying suburbs, physical activity levels have declined. The decline in physical activity is a major contributor to the steady rise in prevalence of obesity, diabetes, heart disease, stroke, and other chronic health conditions in the U.S.¹ In 2017, more than 58 percent of Santa Fe County adults were overweight or obese and approximately 1 in 7 high school students were obese.^{2 3}

Recent studies have indicated transportation can have a wide range of positive and negative effects on mental health, including increased wellbeing associated with transit, walking, and biking,⁴ community cohesion improved by transit,⁵ increases in traffic associated stress, or even loss of self-worth from a transportation system not addressing specific needs.⁶



Transportation networks and systems have a large influence on individuals' equal opportunities to access education, jobs, goods, and services. The 2017-2019 Christus St. Vincent Community Health Needs Assessment identifies transportation as a key barrier to accessing healthcare and health services for the low-income and disabled populations in Santa Fe.⁷ Disabled adults, in particular, are twice as likely to have inadequate transportation as non-disabled adults.⁸ Lack of adequate transportation for disabled adults and those

The Santa Fe Metropolitan Planning Organization (MPO) 2020–2045 Metropolitan Transportation Plan (MTP) integrates mode-specific master plans and three major corridor studies and addresses **pedestrian, bicycle, transit, rail, and street 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 that vision.

¹ <https://www.cdc.gov/physicalactivity/about-physical-activity/why-it-matters.html>

² New Mexico Behavioral Risk Factor Surveillance System, Injury and Behavioral Epidemiology Bureau, New Mexico Department of Health. Citation: Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Center for Disease Control and Prevention, with New Mexico Department of Health.

³ New Mexico Youth Risk and Resiliency Survey, New Mexico Department of Health and Public Education Department.; U.S. Centers for Disease Control and Prevention (CDC) High School Youth Risk Behavior Survey Data.

⁴ <https://www.sciencedirect.com/science/article/pii/S0091743514003144>

⁵ https://www.apa.org/images/mental-health-climate_tcm7-215704.pdf p18.

⁶ <https://transportfutures.co/mental-health-and-why-it-should-matter-to-transport-planners-1903d1643c8f>

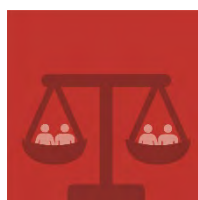
⁷ <https://www.christushealth.org/-/media/files/homepage/giving-back/chna/2017--2019-chna-christus-st-vincent-approved.ashx?la=en> p32.

⁸ <http://www.civilrightsdocs.info/pdf/transportation/final-transportation-equity-disability.pdf>

without a car may also limit their ability to access healthy food sources such as grocery stores or farmers' markets.⁹ Limited access to fresh, affordable foods contributes to the growing rate of obesity.

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

walkable, bikeable, transit-oriented communities are associated with healthier populations that have:



SOCIAL EQUITY

The MTP planning process and development of proposed improvements involves making tradeoffs between multiple objectives. An example may be concerted efforts to reduce congestion and traffic delay at the same time attempting to reduce automobile emissions and increase the accessibility of the roadway. *Equity or Environmental Justice* refers to the fairness with which impacts (benefits and costs) are distributed. Transportation planning decisions and investments in the Santa Fe metropolitan area may have significant equity impacts, such as:

- Quality of transportation choices available impacts people's economic and social opportunities.
- Transportation facilities, activities, and services impose various indirect and external costs, such as congestion delay and accident risk imposed on other road users, infrastructure costs not funded through user fees, pollution, and undesirable land use impacts.
- Transportation expenditures represent a major share of most household, business, and government expenditures.
- Transportation facilities require significant public resources (tax funding and road rights-of-way), the allocation of which needs to consider who benefits.
- Transportation planning decisions can impact development location and type, and therefore accessibility, land values, and the local economy.
- Transportation planning decisions can affect employment and economic development, which have distributional impacts.¹⁰

OUR COMMITMENT

The Santa Fe MPO 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 Santa Fe MPO program, activity or service.

⁹ <https://www.cdc.gov/healthyplaces/healthtopics/healthyfood/transportation.htm>

¹⁰ "Evaluating Transportation Equity" Victoria Transport Policy Institute, 2019.

The planning process for public investments in the Santa Fe metro area strives to support universal design (also called accessible and inclusive design) or facilities and services that accommodate all users, including those with special needs. The MTP process considers impacts to both the accessibility elements of the transportation network and mobility elements. Accessibility refers to a person's ability to reach desired activities, while mobility refers to the type of travel (mode) used to provide access.

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."

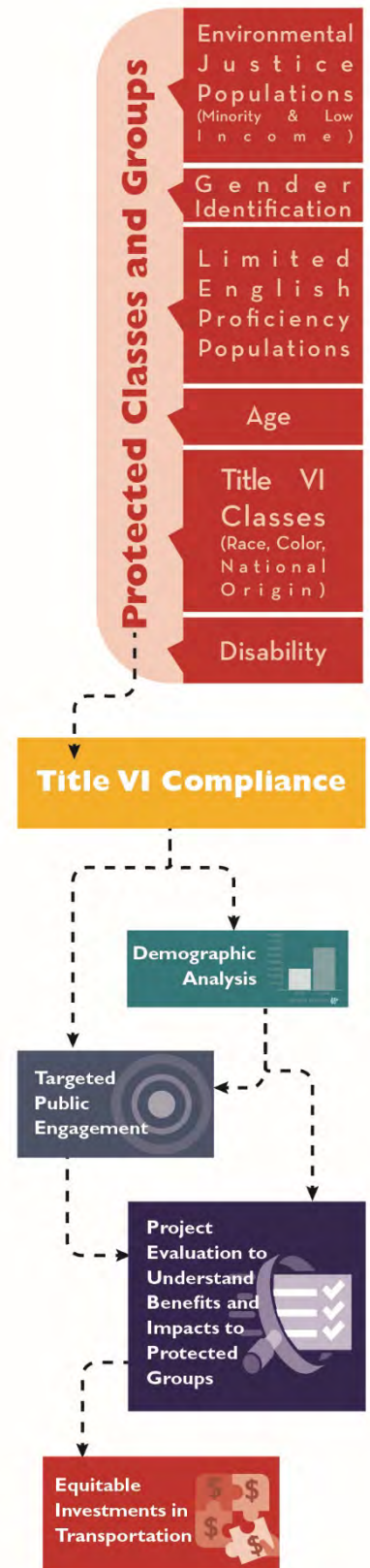
Title VI Nondiscrimination Statement of Policy

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.





CLIMATE CHANGE

On March 15, 2019, thousands of students from around the world marched in support of stronger governmental action against climate change.¹¹ In Santa Fe, at least 500 students participated in a demonstration at the Round House simultaneous to the 2,000 other communities in the United States holding similar protests.¹² Another weeklong global protest event held from September 20-27, 2019 drew millions worldwide, and hundreds of youth to the Santa Fe roundhouse, to continue demanding stronger government actions regarding climate change.

In both the Santa Fe Metropolitan Planning Area and the United States, transportation is the economic sector responsible for the majority of carbon dioxide emissions, as shown on Figure 1-1.¹³ The transportation industry must capitalize on existing greenhouse gas 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.

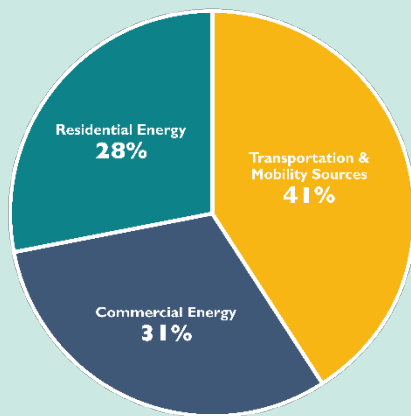


FIGURE 1-1. SANTA FE CARBON DIOXIDE EMISSIONS BY SECTOR (2017)

Climate change is projected to increase the frequency of extreme weather events, which will likely impact roadways, vehicles, and railways, increasing the risk of damage, disruption and delays to the transportation system. In the southwest, communities are planning for expected increases in heat, drought, and insect outbreaks, and, subsequently, wildfires becoming more frequent and/or severe. For New Mexico, climate changes will likely be associated with declining water supplies, reduced agricultural yields, and heat-related health impacts.¹⁴



Youth United for Climate Change Action (YUCCA) Climate Strike New Mexico – September 2019

¹¹ <https://www.theatlantic.com/photo/2019/04/photos-climate-change-protests-around-world/588016/>

¹² https://www.santafenewmexican.com/news/local_news/kids-lead-protest-in-santa-fe-against-climate-change/article_c1801f97-97d8-52fc-b0e6-21cb743ac898.html

¹³ City of Santa Fe Environmental Services Division

¹⁴ <https://climate.nasa.gov/effects/>



OTHER ENVIRONMENTAL IMPACTS

Although addressing climate change is the most urgent environmental impact of our current transportation system, our road network and mobility choices impact the environment in many other ways.

AUTOMOBILE EXHAUST contains fine particulate matter that negatively affects air quality.

- A 2012 study of the United States transportation system estimated that the benefits of improved air quality and increased exercise would exceed \$8 billion/year if short trips were made using an active mode of transportation.¹⁵
- Some of these particulates eventually decrease water quality. Nitrogen oxides, for example, contribute to acid rain, ocean acidification, and increases in water nutrients that contribute to dead zones in waterways.

IMPERVIOUS SURFACES, including roadways and sidewalks, affect rivers and reduce aquifer recharge. Some of the negative impacts may be mitigated through design.¹⁶

NOISE POLLUTION from automobiles is associated with negative health outcomes and can change animal behaviors. Noise pollution is regulated by the EPA. Urban noise pollution impacts cognitive performance, negatively influences childhood behavior, and disproportionately affects those with lower socioeconomic status.^{17 18}

LIGHT POLLUTION changes our ability to see the stars and can change animal behaviors. New Mexico enacted the Night Sky Protection Act in 1999, one of the first acts in the United States that regulates the emission of lighting to protect our night skies.¹⁹

HABITAT FRAGMENTATION can be deleterious to native plant and animal populations. Roads contribute directly to habitat loss, mortality increases, and isolation of wildlife populations.²⁰

THE EXTRACTION OF CRUDE OIL necessary for petroleum gas is associated with many additional environmental impacts not included here. Transportation is the leading consumer of petroleum in the United States, consuming 70 percent of our supply.²¹

SHORT TRIPS

In the United States, 41 percent of vehicle trips are less than 3 miles; 17 percent of vehicle trips are less than 1 mile. These are candidate trips for biking and walking.

Source: <https://nhts.ornl.gov/vehicle-trips>

¹⁵ <https://doi.org/10.1289/ehp.1103440>

¹⁶ https://www.santafenm.gov/media/archive_center/Santa_Fe_Green_Infrastructure_Guide_DRAFT_092418.pdf

¹⁷ Casey, Joan A., Morello-Frosch, Rache, Mennit, Daniel J., Frstrup, Kurt, Ogburn, Elizabeth L., and Peter James. 2017. Race/Ethnicity, Socioeconomic Status, Residential Segregation, and Spatial Variation in Noise Exposure in the Contiguous United States. *Environmental Health Perspective*, Vol, 125, No. 7. <https://doi.org/10.1289/EHP898>

¹⁸ <https://www.epa.gov/clean-air-act-overview/clean-air-act-title-iv-noise-pollution>

¹⁹ <https://sfct.org/dark-skies/>

²⁰ <http://www.wildlife.state.nm.us/download/conservation/habitat-handbook/project-guidelines/Effects-of-Roads-on-Wildlife-and-Habitats.pdf>

²¹ https://www.eia.gov/totalenergy/data/monthly/pdf/flow/css_2018_energy.pdf



AGING POPULATION

As older adults (age 65 and older) in the United States increasingly seek to maintain active lives and are working past typical retirement age, their transportation needs and desires are evolving. The availability and quality of mobility options are important factors to many in deciding where to spend their senior years—while many prefer the freedom of driving their own vehicle, the ability to do so inevitably diminishes over time. The aging population is growing, with older adults expected to account for approximately 1 in every 4 residents of the Santa Fe Metropolitan Statistical Area by 2040.²² Given both the growing interest in active and independent living among older adults and their growing numbers, a focus on providing accessible transportation services that enable them to live their lives is critical. Safe, convenient, and affordable public transportation allows older adults to both meet their basic needs and remain socially engaged without having to drive or rely on others for mobility assistance.



ECONOMIC VITALITY

Metropolitan areas that thrive economically have an extensive and expanding multimodal transportation network that integrates high-quality transit, bicycle, and pedestrian facilities into an efficiently operated and maintained road system. High-quality transportation infrastructure creates the opportunity for economic development because it can enhance mobility and allow easier access to jobs, goods, and services.

As more local governments increase their investments in biking, walking, and transit, the economic benefits of doing so, from tourist revenue to decreased personal auto expenses, become more readily apparent. The growing industry of bicycle tourism contributed nearly \$100 billion to the U.S. economy in 2017; Santa Fe, with an arid climate and abundant outdoor recreation opportunities, is a prime location to attract this. In addition to drawing in tourists, better bicycle and pedestrian infrastructure has been linked to higher property values throughout the United States.²³ Specific to transit, a report from the American Public Transportation Association found that every \$1 invested in public transportation has the potential to generate nearly \$4 in economic returns.²⁴ Using either transit or active modes for utilitarian purposes can also reduce how much an individual spends on transportation, an average of over \$11,700 per year in Santa Fe.²⁵ With these and more demonstrated economic benefits, strategic investment in bicycle, pedestrian, and transit infrastructure is a proven strategy for enhancing community mobility, socioeconomic resilience and safety throughout the metro area.



BICYCLE ROUTE 66

The Adventure Cycling Association's Bicycle Route 66 passes through Santa Fe and is a prime example of bike tourism that supports economic vitality in the region.

Photo Credit: Michael Clark

²² UNM Geospatial & Population Studies.

²³ Urban Land Institute, Active Transportation and Real Estate; uli.org/wp-content/uploads/ULI-Documents/Active-Transportation-and-Real-Estate-The-Next-Frontier.pdf

²⁴ American Public Transportation Association; apta.com/news-publications/public-transportation-facts/

²⁵ Center For Neighborhood Transportation Housing + Transportation Affordability Index.



Each year the Santa Fe MPO gives away thousands of Bikeways and Trails Maps via bike shops, tourist centers, libraries, schools and as requested. The demand provides both quantitative measure of the interest and use of our trail networks as well as support for continued strategies and investments to build the active transportation network. Santa Fe's Bikeways and Trails Map is available at santafempo.org/resources/bikeways-map/



HOUSEHOLD TRAVEL COSTS

Santa Fe MPO residents pay approximately 54 percent of their household income to cover the cost of their housing and transportation.²⁶ This is nearly \$4,900 more, annually, than what the Center for Neighborhood Technology (CNT) has identified as affordable for the regional typical household. CNT's research indicates that these costs should remain below 45 percent of the household income to be affordable.²⁷

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. High rental prices and occupancy within City of Santa Fe encourage renters to find housing farther from the city center and outside city limits, away from major employers and services.



TRAVEL CHOICE

Providing an array of mobility options is not only a basic component of any transportation network but a necessity to address critical issues in the community, including environmental justice, climate change, healthy lifestyles, and a vibrant economy. Greater investment in and support for active modes and public transportation provides safe, comfortable, and convenient alternatives to personal vehicles and has resulted in a noticeable shift in mode choice in metropolitan areas nationwide. This region has an opportunity and a responsibility to its citizens to capitalize on this opportunity to improve mobility options and greatly enhance its multimodal reputation.

HOUSING SHORTAGE

An estimated 53 percent of Santa Fe's workforce commutes from outside the city limits, with 20 percent of these people traveling 50 miles or more. People spend more of their money where they live instead of where they work representing an estimated loss to Santa Fe's economy that exceeds \$301.6 million per year; 72 percent of these commuters stated that the high cost of housing in Santa Fe is the reason that they prefer to commute. One of the suggested strategies for addressing this problem is to increase the availability and affordability of housing by encouraging more housing developments, higher density, and allowing for mixed-use zoning. These strategies may reduce traffic volumes and delays, parking space demand, and increase the necessity for accessible sidewalks, bike lanes, transit, and trails.

Source: <https://santafehousingaction.org/wp-content/uploads/2018/11/AAHLN-Advisory-Group->

²⁶ <https://htaindex.cnt.org/fact-sheets/?focus=mpo&gid=35>

²⁷ <https://www.cnt.org/tools/housing-and-transportation-affordability-index>

COMMUTER BIKING AND WALKING

Approximately 1 percent of Santa Fe residents bike to work, and 2.9 percent walk to work. (Currently seems misleading...)

Source: U.S. Census, American Community Survey 2013-2017.

The prevalence of bicycle commuting in particular has seen a substantial increase since the turn of the century, growing over 40 percent between 2000 and 2017. The growth in bicycling has been even more pronounced in cities that have shown a commitment to supporting active transportation—“Bicycle Friendly Communities,” as designated by the League of American Bicyclists, saw commuting rates more than double from 2000 to 2013. In Santa Fe, the increases in both

biking and walking mode share have been less apparent. Given the wealth of research in recent years documenting the economic, safety, and quality-of-life benefits of biking and walking, the region stands to see more substantive increases with a more concerted effort to improve conditions for active travel.

School travel has historically been among the most common purposes for active modes, but the rate of children walking or biking to school has been declining for decades. According to Safe Routes to School, the percentage of elementary and middle school students walking or biking to school dropped from 48 percent in 1969 to 13 percent in 2009 (SRTS). The most commonly cited reasons among parents for choosing to drive their children to school include traffic safety concerns and distance. Both of these resonate well in the Santa Fe region, as a lack of safe routes and a shift away from neighborhood elementary schools mean



many students at community schools like El Camino Real and Nina Otero have to travel a long way with few safe and comfortable active facilities. Numerous studies have shown that participation in Safe Routes to School or a similar program can substantially increase rates of active school commuting.

Public transportation has a significant role to play in providing mobility options for everyone and in lessening the environmental impact of commuting. Individuals with

Individuals with

mobility challenges and low-income individuals often rely on transit service for meeting their transportation needs. As such, convenience, reliability, accessibility, and affordability are all key characteristics of an effective transit network. When operated well, the benefits of public transportation are plentiful: using transit instead of owning and maintaining a personal vehicle can save over \$10,000 per year (FHWA), transit vehicles produce significantly less air pollution per passenger mile than a single-occupancy vehicle (Dallas Area Rapid Transit), and it can mitigate traffic congestion by taking vehicles off the road.

“I RECENTLY STARTED USING MY BIKE AS A NEW MEANS OF TRANSPORTATION. IT OPENED MY EYES TO A NEW PERSPECTIVE OF HOW I MOVE THROUGH MY DESTINATIONS AND GAVE ME NEW PERSPECTIVE TO ROAD SHARING AND THE IMPORTANCE OF BIKING.”

STREET STORY

NCRTD

The North Central Regional Transit District (NCRTD) serving north central New Mexico saw a 2 percent increase in ridership in 2018 while nationwide the trend has seen declining ridership, demonstrating a demand in the region for transit service.





FREIGHT

The Santa Fe metropolitan area and its transportation network support a variety of freight services. The freight transportation-dependent industries make up 24 percent of total jobs in the region, and freight and warehousing services contribute \$47 million annually to Santa Fe's Gross Domestic Product (GDP).²⁸ The overall freight tonnage will grow to 20.6 billion tons in 2030, up 25.6 percent from 2019's projection of 16.4 billion tons.²⁹ Santa Fe will share a portion of this growth, and our roadway infrastructure is essential to transport finished products produced in the Santa Fe metro area. E-commerce has expanded dramatically in the past several years and is changing the way people shop, reshaping the U.S. economy in the process, and it is estimated that online shopping will be a major contributor to the total tons shipped every year. Distribution of goods impacts the local, regional, and national economy, and an efficient transportation network benefits the supply chain. 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. US-285/84 is a major freight corridor that bisects the city of Santa Fe and is projected to increase in use by freight.³⁰

EMERGING TECHNOLOGIES

The pace of technological innovation in the transportation industry has accelerated dramatically in recent years. From autonomous vehicles to smart traffic signals to micro-mobility services, an endlessly diverse array of technologies touching all parts of the transportation system are being developed, implemented, and evaluated constantly. The Santa Fe metropolitan area is committed to understanding these technologies and staying abreast of how they can best be implemented in the region to the community's benefit. The Santa Fe Regional ITS Architecture is a tool for Intelligent Transportation Systems (ITS) project planning and development for the city of Santa Fe and surrounding area over the next 15 years.³¹

ELECTRIC VEHICLES More robust adoption of electric vehicles would fit well into New Mexico's reputation as a national leader in clean energy. According to the U.S. Department of Energy, an all-electric vehicle operated in New Mexico produces approximately half the annual emissions as a gasoline-powered vehicle based on the state's current distribution of electricity sources. In 2018, New Mexico was ranked 36th out of the 50 states in terms of total electric vehicles sold, though this did represent an more than 90 percent increase from 2017.

- A lack of widespread public charging stations—there are currently 83 throughout the state³²—has likely been a deterrent in the past from EV purchases, but the State of New Mexico is planning to install over 20 public charging stations in Santa Fe by 2022.



²⁸ New Mexico Freight Plan, NMDOT

²⁹ American Trucking Associations "Freight Transportation Forecast: 2019 to 2030."

³⁰ https://dot.state.nm.us/content/dam/nmdot/planning/NM_2040_Plan-Freight_Plan.pdf

³¹ consystec.com/santafe/web/

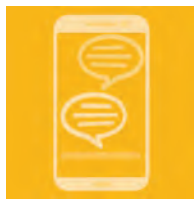
³² <https://afdc.energy.gov/stations#/analyze?region=US-NM&fuel=ELEC>

- Surveys conducted by Consumer Reports and the Union of Concerned Scientists found that 63 percent of prospective car buyers in the United States are considering electric vehicles among their options. Sales of these vehicles continue to increase. All of the vehicles are significantly less expensive to run than traditional vehicles, costing half as much to operate when running on electricity and tend to have fewer maintenance costs as well.³³



AUTONOMOUS VEHICLES are not as far along in their development and adoption as electric vehicles but have potentially much greater ramifications for the future of transportation. Through the use of sophisticated technology, AVs can partially or entirely replace human drivers in the operation and navigation of a vehicle and offer the potential for substantial safety, efficiency, and mobility benefits. Most major automakers, as well as Google and Tesla, are developing and testing AV models; some that are not fully autonomous are available on the market today. Many states are preemptively adopting legislation to authorize, regulate, and address the potential impacts of them, though New Mexico does not yet have specific bills or policies specific in place.³⁴

ELECTRIC BICYCLES Globally, electric bicycles are growing in popularity. The Asia-Pacific region is leading the boom, with twice as many people in China owning e-bikes as cars. In the United States, sales are also increasing.³⁵ Early research suggests that the acquisition of an e-bike increases bicycling rates and can affect route selection. The predominant motivation for the acquisition of one is to replace some car trips, as cited in a 2013 survey of e-bicycles.³⁶



RIDE-HAILING SERVICES Significant new trends helping to increase mobility options and spur a shift away from personal vehicle dominance, particularly in urban areas, have also taken hold in recent years through the continued growth in ride-hailing services and the explosion in popularity of shared micro-mobility programs. The ride-hailing industry, which offers app-based door-to-door transportation services, has grown rapidly in the past decade—in just 10 years, Uber has gone from being a brand new company to having a valuation of over \$60 billion.³⁷ Over one-third of U.S. adults used a ride-hailing service in 2018, up from just 15 percent in 2015.³⁸

MICRO-MOBILITY Shared micro-mobility is an even more recent newcomer to the transportation world. Popular electric scooter and bike-sharing programs have been implemented in dozens of cities throughout the world, including Albuquerque. Nearly \$6 billion has been invested in micro-mobility startups just since 2015³⁹ and more than 84 million shared micro-mobility trips were taken in the United States in 2018, over twice as many as in 2017.⁴⁰ These programs offer a promising solution for the “first and last mile” problem of closing the gap between a transit stop and a person’s origin and/or destination. Appendix A documents best practices and recommendations for shared e-scooters in Santa Fe.



³³ <https://www.consumerreports.org/hybrids-evs/electric-cars-101-the-answers-to-all-your-ev-questions/>

³⁴ National Conference of State Legislatures; <https://www.ncsl.org>

³⁵ Fishman and Cherry 2015 citing Ji et al. 2012.

³⁶ MacArthur et al. 2014.

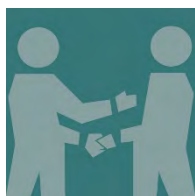
³⁷ Henao, Alejandro; Impacts of Ride Sourcing – Lyft and Uber – on Transportation, 2017; http://digital.auraria.edu/content/AA/00/00/60/55/00001/Henao_ucdenver_0765D_10823.pdf

³⁸ Pew Research Center; <https://www.pewresearch.org/fact-tank/2019/01/04/more-americans-are-using-ride-hailing-apps/>

³⁹ McKinsey & Company; <https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/micromobilitys-15000-mile-checkup>

⁴⁰ NACTO; <https://nacto.org/shared-micromobility-2018/>

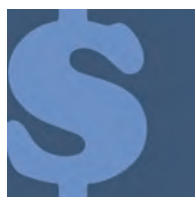
FINANCIAL OUTLOOK



PARTNERSHIPS

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.



FUNDING

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 \$280 million; however, the estimated available funding over that time period is nearly \$211 million, as shown in Table 1-1. Reasonably Expected Revenue Projections. 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
2021 – 2025	\$62,268,620
2026 – 2030	\$31,848,726
2031 – 2035	\$35,163,567
2036 – 2040	\$38,823,419
2041 – 2045	\$42,864,192
Total	\$210,968,523

MYTH: Transit, bike lanes, and sidewalks are subsidized by taxpayers, but roads and highways are paid for by users.

FACT: Transit, bike lanes, sidewalks, roads, and highways are all subsidized. General taxes (income, sales, etc.) cover nearly as much of the cost of building and maintaining highways as the gas tax and other fees paid by drivers; general taxes accounted for \$69 billion of highway spending in 2012. Governments spend more non-user tax dollars on highways than on transit, bicycling, walking, and passenger rail travel combined.

Bicyclists and pedestrians pay their fair share for use of the transportation system as most bike/ped infrastructure is found on local streets and roads that are paid for through property taxes and other general local taxes. Furthermore, these users inflict minimal wear and tear on the infrastructure and occupy a small percentage of the road space. These users are more likely to pay far more in general taxes to facilitate the use of local roads by vehicles than the benefits they receive from state and federal infrastructure investment paid for through the gas tax.

While it may cost money to maintain and operate public transit, a study by the APTA shows that it also benefits the local economy, generating an average of 36,000 jobs for every \$1 billion invested, with every dollar a community invests in public transportation generating approximately \$4 in economic returns.



GAS TAX

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 17 cents per gallon gas tax has not been raised for over 25 years, but has been reduced twice, and is the fourth lowest in the country.^{41 42}

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.

PERFORMANCE-BASED PLANNING

FAST ACT

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. The 2015 Fixing America's Surface Transportation (FAST) Act, built on 2012's Moving Ahead for Progress in the 21st Century Act (MAP-21), is the current federal transportation funding and policy bill. They emphasize performance-based planning, establish performance measures and targets, and identify 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 and FAST Act. States and MPOs that don't demonstrate adequate progress toward achieving the goals will be required to take corrective action.

CITY GAS TAX INITIATIVE

In 2015, a 2-cent-per-gallon gas tax increase in Santa Fe was considered to boost infrastructure funding before City Council ultimately decided against bringing the proposal to voters. The tax was projected to bring in approximately \$950,000 annually; all revenue would have been dedicated to roadway and bridge infrastructure projects. Since the rejection of that proposal, the City's transportation funding gap has continued to subsist and the need for new funding sources has grown in urgency.

MAP-21

Seven national goal areas:

- Safety
- Infrastructure condition
- Congestion reduction
- System reliability
- Freight movement and Economic vitality
- Environmental sustainability
- Project delivery delays

FAST ACT ADDS

Planning process must consider:

- Resiliency and reliability of the transportation system
- Stormwater mitigation
- Travel and tourism

⁴¹ How Much Gas Tax Adds to Cost of Filling Up Your Car in Every State, <https://www.usatoday.com/story/money/2019/02/05/gas-tax-state-what-costs-fill-up-your-car-across-country/38908491/> February 5, 2019.

⁴² <http://www.tax.newmexico.gov/all-nm-taxes.aspx?9674a2e28c1442ce8b25e81c6d015418blogPostId=3c68e8c324d2447b8692a5054b988666;>
<https://nmlegis.gov/Sessions/20%20Regular/firs/HB0173.PDF>



BRINGING IT ALL TOGETHER

Santa Fe metropolitan 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's values 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 an approach 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 meeting national and state standards.

The goal 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.

"PULLING MY TWO DAUGHTERS VIA CLASSIC RED WAGON FROM THE RAILYARD TO THE PLAZA FOR THE ANNUAL PET PARADE AND PANCAKES ON THE PLAZA AND WATCHING THE STREETS TRANSFORM FROM CARS TO PEOPLE, PETS, AND VIBRANCY."

STREET STORY

The FAST ACT 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
- Northern Pueblos Regional Transportation Planning Organization (NPRTPO)
- North Central Regional Transit District



CHAPTER 2: OUR VISION



This chapter describes the community outreach efforts for this plan, which were broad based, inclusive, and encouraged active participation in identifying the vision, goals, and needs of the region.

Community outreach efforts for this plan were broad-based, inclusive, and encouraged active participation in identifying the transportation needs and desires of the region. The Santa Fe MPO reached out to thousands of stakeholders across the region through an internet survey, stakeholder meetings, open houses, community tabling, and many other means as detailed in this chapter. Santa Fe County, the City of Santa Fe, the Pueblo of Tesuque, 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 historically underserved populations, such as the socioeconomically disadvantaged, people with disabilities, and racial and ethnic minorities.

Equity is a theme throughout this plan; from identifying strategies 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, healthcare, recreation, and social opportunities.

VOICES HEARD

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

The MTP planning process included an array of public engagement strategies to help craft the vision for our future transportation system. The public involvement process extended from September 2019 through April 2020. The following public engagement strategies were used to garner input:

- Posted information on the Santa Fe MPO website
- Posted updates on social media, including Facebook, Instagram, Twitter, LinkedIn, and Nextdoor
- Conducted online survey – available in English and Spanish and as a hardcopy (661 responses)
- Collected public input on an online interactive map: <https://publicinput.santafemipo.org/>
- Emailed 90+ stakeholders from the public, private, education, healthcare, and non-profit sectors, and neighborhood associations requesting they share the survey link and public meeting information with their networks
- Used print media ads, bus and train posters, and ¼ page flyers with stakeholders and at public spaces to invite the public to participate in the online survey and open house
- Set up a table to advertise the public open house and survey at the Southside Farmer's Market, Villa Therese free clinic, Southside Library, and South Capital Rail Runner Station
- Held an open house on October 24, 2019, at Presbyterian Medical Center, from 5:30 PM to 7:30 PM (14 attendees)

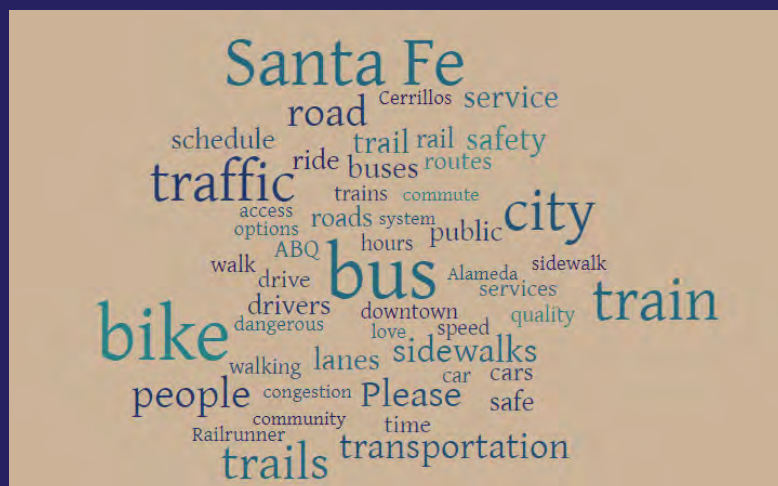
TARGETED OUTREACH

Extra effort was taken to promote public engagement on the south side of Santa Fe, particularly City District 3, given traditionally low participation and lower average socioeconomic status, including:

- Nextdoor post to just District 3
- Outreach to District 3 City Councilors
- Flyer distribution to the Southside and La Farge Libraries, WIC Clinic, Sirius Cycles, San Isidro Church, La Familia Medical Center, Genoveva Chavez Center, and four District 3 elementary schools and Capital High School

COMMENT THEMES

Santa Feans have a lot to say! Word cloud generated from over 450 open-ended survey responses; larger words were mentioned more frequently.

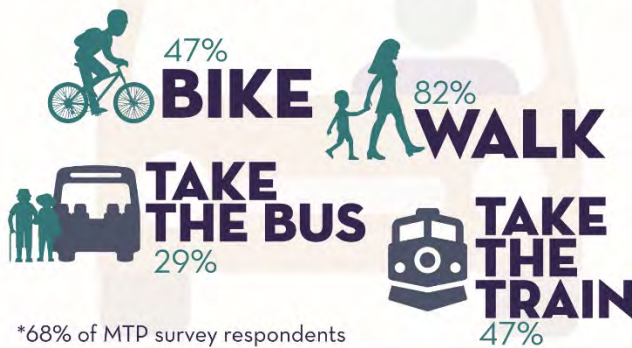


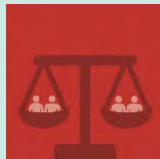
- Held 13 meetings with 30 stakeholders, including 10 one-on-one meetings and 3 group meetings
- Used social media, print media, and two open houses as outreach tools during the 30-day public review period, including:
 - March 4th – 4:00 PM to 7:00 PM at the Santa Fe MPO Offices, 500 Market Street
 - One additional public open house was planned for the southside but cancelled due to the COVID-19 pandemic.
- Held monthly meetings with the Technical Coordinating Committee (TCC), which are open to the public
- Held regular meetings with the Transportation Policy Board, which are also open to the public

WHAT WE HEARD

All public engagement efforts highlighted our need for increased transportation options, including expanded bus and train service, a better connected and safe bicycle network, and improved sidewalks. As shown in the numbers below, many Santa Feans who drive are already occasionally multimodal by choice. This indicates an opportunity to shift daily transportation habits toward multimodalism given improved pedestrian, bicycle, and transit options.

449* daily car drivers also...





TRANSPORTATION EQUITY

Spotlight on People who Suffer from Car-Dominated Transportation System

In a system designed for transportation by personal vehicle, whose needs are not addressed? Federal, state, and local transportation funding skew toward funding road projects for vehicles. As a result, navigation around Santa Fe by personal vehicle is convenient; approximately 90 percent of survey respondents reported the transportation system met their needs very well or fairly well when getting

“PEOPLE CHOOSE HAVING A CAR OVER HAVING A HOUSE.”

– Stakeholder

around by a personal vehicle. This sets up an inequitable system that meets the needs of the portion of the population that has access to a car but often struggles to provide adequate service to those that do not. The quotes included in this section are from stakeholders and community members who responded to the survey and showcase how transportation inequity negatively impacts quality of life.

OUR COMMUNITY There are community members in our region who do not drive or have access to a vehicle for a variety of reasons:

- **CHILDREN** under the age of 16 and those who choose to defer getting a driver’s license at age 16 (a growing trend among teenagers)¹
- **SENIORS** whose mental or physical ailments prevent them from being able to drive safely
- **PEOPLE WITH DISABILITIES** including people born with physical disabilities, those who have sustained permanent injury, and those with temporary injuries such as someone recovering from surgery
- **ZERO VEHICLE AND SINGLE VEHICLE HOUSEHOLD**, which may be income-related or by choice, often to minimize personal expenses and/or environmental impacts
- **HOMELESS PEOPLE**; everyday, between 200 and 500 homeless people stay at shelters or sleep on the streets in Santa Fe County²
- **DUI AND DWI VIOLATORS** who have lost their driver’s licenses temporarily or permanently

“[IT] IS HORRIBLE THAT ELDER PEOPLE HAVE TO USE THE CAR TILL THEY DIE OR THEY LIVE UNFREE.” – Survey Respondent

If our community is great for an 8 year old and an 80 year old, then it will be great for all people.



¹ <https://www.wsj.com/articles/driving-the-kids-are-so-over-it-11555732810>

² <https://www.sfreporter.com/news/2019/02/28/the-changing-face-of-homelessness/>

“I HAVE TWO DISABLED SONS UNABLE TO WORK DUE TO LACK OF TRANSPORTATION OPTIONS.”

— Survey Respondent

TRANSPORTATION EQUITY STAKEHOLDERS The stakeholders who contributed to the discussion about transportation equity represent a wide variety of community members, underscoring the prevalence of equitable transportation option needs across our community.

- Chainbreaker Collective
- Christus St. Vincent Community Health
- St. Elizabeth’s Shelter
- Villa Therese Catholic Clinic
- Santa Fe County Community Services Department
- Santa Fe County DWI Program
- Santa Fe WIC Program
- Marco Maez, SFCC and Transportation Advisory Board member via Santa Fe New Mexican Op Ed
- Santa Fe Prevention Alliance

“I AM HARD OF HEARING SO SAFE BIKE TRAILS AND SIDEWALKS MAKE THE CITY ACCESSIBLE FOR ME. I DON’T FEEL SAFE RIDING ON NARROW ROADS BECAUSE I CAN’T HEAR VEHICLES COMING UP BEHIND ME.” — Survey

Respondent

SOLUTIONS TO IMPROVING TRANSPORTATION EQUITY





CLIMATE CHANGE

Santa Fe residents voiced many concerns about climate change.

“CLIMATE CRISIS ACTION SHOULD BE FIRST!”

— Survey Respondent

FIGURE 2-1. CLIMATE CHANGE CONCERNS

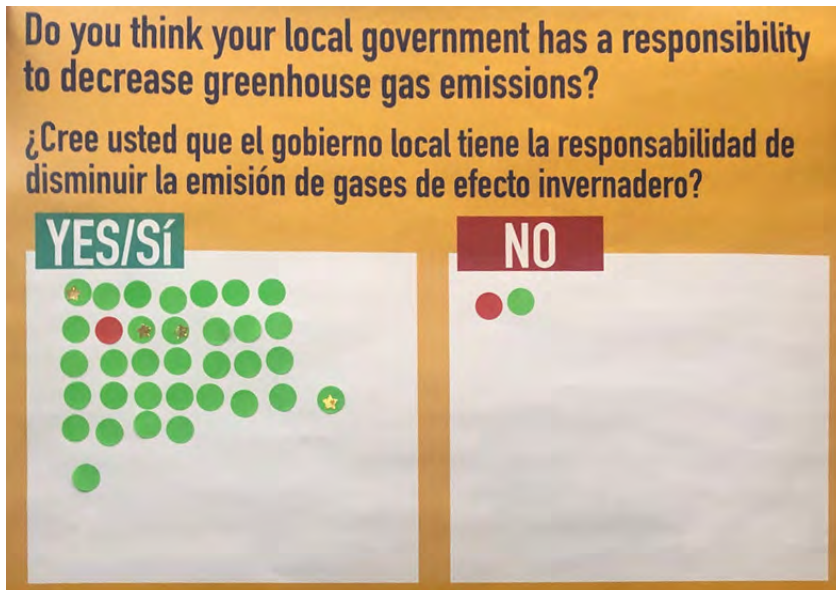
Survey question: Transportation is one of the leading contributors to greenhouse gases and climate change. How concerned are you about climate change and the transportation choices available to you?



“PLEASE, PLEASE CONSIDER THE IMPACT OF CLIMATE CHANGE IN YOUR DECISION-MAKING PROCESS. NM MAY BE ONE OF THE MOST IMPACTED STATES AND OUR LIVES HERE COULD CHANGE RADICALLY IN JUST A FEW DECADES.” — Survey Respondent

FIGURE 2-2. GOVERNMENT’S ROLE IN GREENHOUSE GAS EMISSIONS

Poster response from the Public Open House and City of Santa Fe Parking Customer Service Desk. Yes: 34; No: 2



“FOR A CITY THAT IS SO CLIMATE AWARE, WE HAVE A BUILT ENVIRONMENT THAT ALMOST DEMANDS CARS AND DISCOURAGES WALKING.” — Survey Respondent

STAKEHOLDER INPUT

The Santa Fe MPO relied on multiple community stakeholders to elevate the concerns of traditionally underserved and underrepresented populations.

13 STAKEHOLDER MEETINGS; **30** STAKEHOLDERS

Sectors represented: housing and transportation equity, restaurant/lodging industry, sustainability, healthcare, transit, homeless services, and community services

The primary concern gathered from stakeholder meetings focused on public transit. Many stakeholders voiced challenges from the community about using public transit to get to where they need to go, when they need to go. For example, shift workers at restaurants and hotels don't have an option to use public transit when they get off late at night. Additional challenges included access to healthcare facilities and public court appointments.

Stakeholders also voiced concern and interest in strengthening a multimodal system with improved safety for people walking and biking, including redesigning large corridors such as St. Michaels Drive.

SURVEY INPUT

In collecting public input for the MTP, a concerted effort was made to inform a broad spectrum of residents about the public survey. Six hundred sixty-one survey respondents answered a range of questions about their transportation habits, barriers, and experiences, and provided general demographic information. Appendix B includes complete survey results.

As shown on Figure 2-3, on a weekly basis, many Santa Fe area residents are multimodal. However, none of the modes were reported to meet respondents' needs as well as the automobile does (Figure 2-4).

FIGURE 2-3. VENN DIAGRAM OF THE MODES OF TRANSPORTATION SURVEY PARTICIPANTS USE AT LEAST WEEKLY

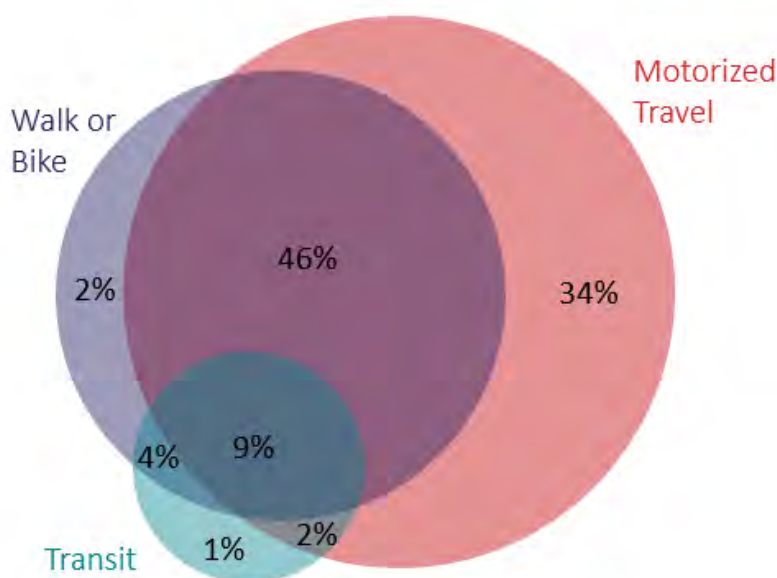
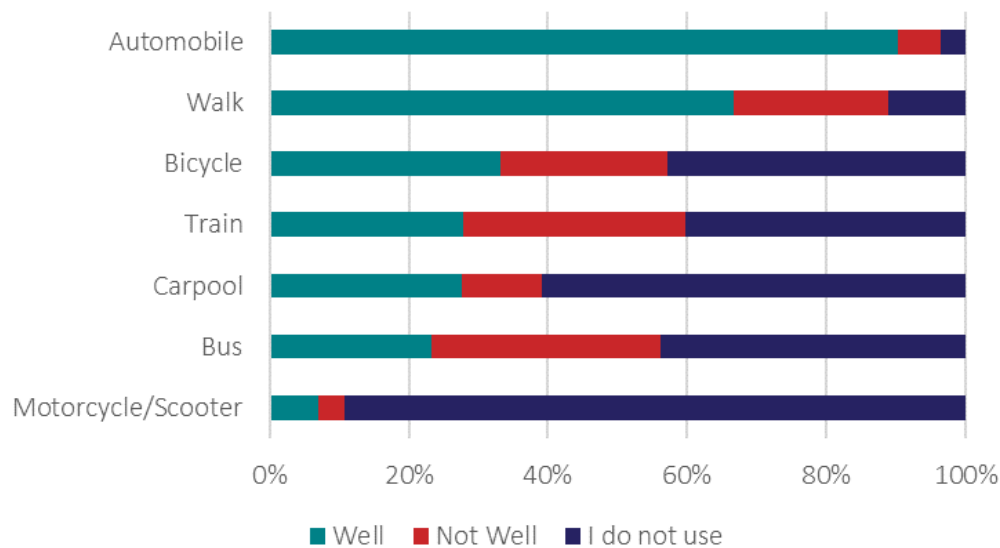


FIGURE 2-4. SURVEY RESPONSE: TRANSPORTATION SYSTEM FUNCTION

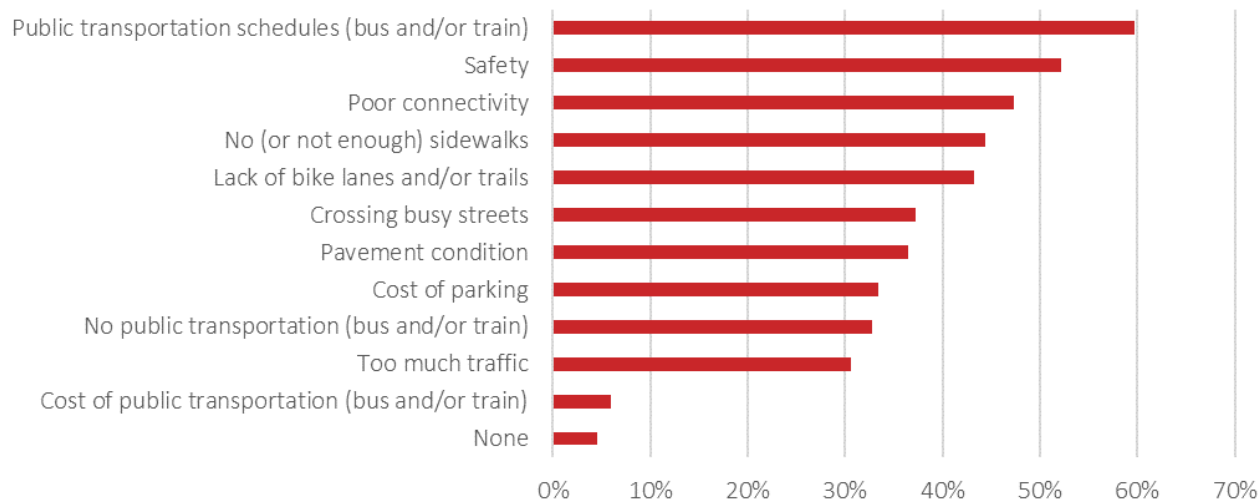
Survey Question: How well does the current transportation system meet your needs?



Santa Feans identified many barriers influencing their transportation decisions (Figure 2-5). Given that most survey respondents reported driving as their most frequent mode of transportation, the figure can largely be interpreted as barriers to choosing a different mode instead of driving. As identified by stakeholders as well, the primary obstacle to choosing public transportation is the available schedules. Chief barriers to choosing walking or biking entail lack of adequate infrastructure and safety concerns.

FIGURE 2-5. SURVEY RESPONSE: TRANSPORTATION BARRIERS

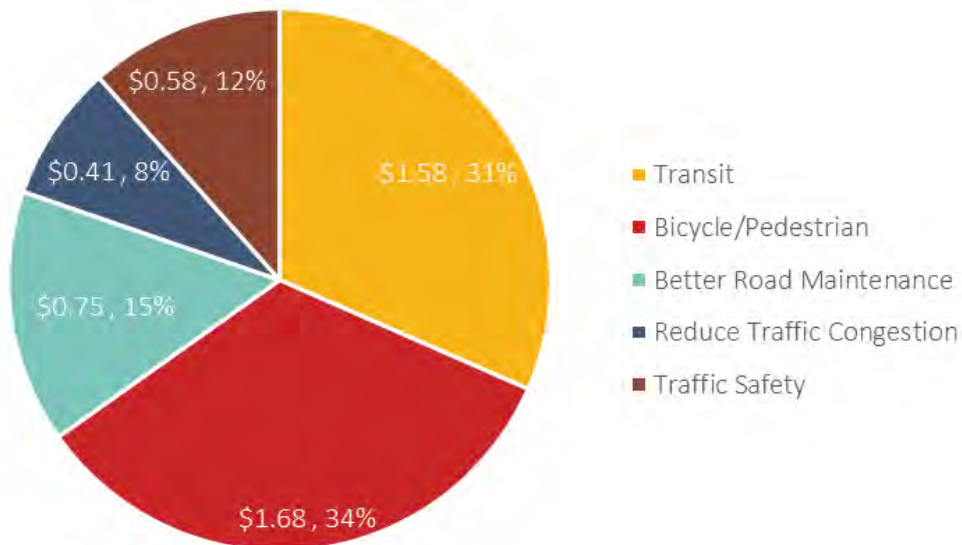
Survey Question: Which of the following barriers influence you the most when considering transportation options?



Despite the high use of personal automobiles among survey respondents, there was a clearly expressed desire to use a majority of transportation dollars to fund transit and bicycle/pedestrian projects (Figure 2-6).

FIGURE 2-6. SURVEY RESPONSE: TRANSPORTATION FUNDING

Survey Question: If you had \$5 million available to spend on the transportation network, where would you spend it? (Displayed below in millions of dollars)



PUBLIC INPUT FROM OTHER PLANNING EFFORTS

Over the past decade, a number of diverse regional plans have collected public input regarding transportation. Detailed information about the public input collected for the development of these plans can be found here:

- Metropolitan Transportation Plan 2015-2040
<https://santafempo.org/plans/metropolitan-transportation-plan/metropolitan-transportation-plan-2015-2040/>
- Transit Master Plan (MPO) 2015
<https://santafempo.org/plans/public-transit-master-plan/>
- Pedestrian Master Plan (MPO) 2015
<https://santafempo.org/plans/pedestrian-master-plan/>
- Santa Fe Pre-teen and Teen Independent Transit and Mobility Plan (MPO) 2017
<https://santafempo.org/plans/teen-mobility-plan/>
- Bicycle Master Plan (MPO) 2019
<https://santafempo.org/plans/bicycle-master-plan/>
- City Sustainability Plan 2018
https://www.santafenm.gov/media/files/Sustainable_SF_Commission/Sustainable%20Santa%20Fe_October_Printsm.pdf
- Christus St. Vincent Hospital Community Health Needs Assessment 2017-2019
<https://www.christushealth.org/-/media/files/homepage/giving-back/chna/2017--2019-chna-christus-st-vincent-approved.ashx?la=en>
- Santa Fe County Community Services Department – Health Services Gap Analysis, 2017
<https://www.santafecountynm.gov/media/files/FinalReportGapAnalysis.pdf>

THE PUBLIC RECOGNIZES THE LINK BETWEEN TRANSPORTATION AND OTHER VITAL SYSTEMS, INCLUDING OUR WATER SUPPLY

In 2013, the United States Bureau of Reclamation held a single day public workshop addressing the vulnerabilities in Santa Fe's public water supply facing climate change. Attended by more than 100 people, a highlighted theme was the inter-relatedness of the physical, biological, and socioeconomic systems within the Santa Fe watershed, including Santa Fe's transportation system. Singular actions impact associated systems, building a road, for example, can change the economic possibilities of the road corridor. Decisions affecting our transportation network affect other parts of our lives: our health and our wallets, drainage to our arroyos, and the quality our water. It is for these reasons that the MTP strives to approach transportation holistically.

<https://www.usbr.gov/watersmart/bsp/docs/finalreport/SantaFe/Santa-Fe-Basin-Final.pdf>

WHAT PEOPLE SAID

Several recurring themes emerged from these plans, indicating consistency in the public voice about their desired transportation improvements:

1. Increase connectivity for all modes of transportation
 - Increase walking and biking routes that allow people to get to their destinations easily
 - Improve transit service to important destinations, such as healthcare facilities and grocery stores
2. Design for transportation options
 - Plan neighborhoods that promote walking, biking, and public transit
3. Develop safety for all road users
 - Improve perceptions of safety on public transit and at stops, especially for youth
 - Address safety concerns regarding motorist operating behavior around people walking and biking
4. Increase frequency and expand evening and weekend transit services
5. Improve the quality of transportation facilities
 - Walking improvements: better sidewalk conditions, crosswalks, and lighting
 - Bicycle improvements: better wayfinding signage and infrastructure design
 - Transit improvements: more signs, shelters, benches, and bicycle storage at transit stops.



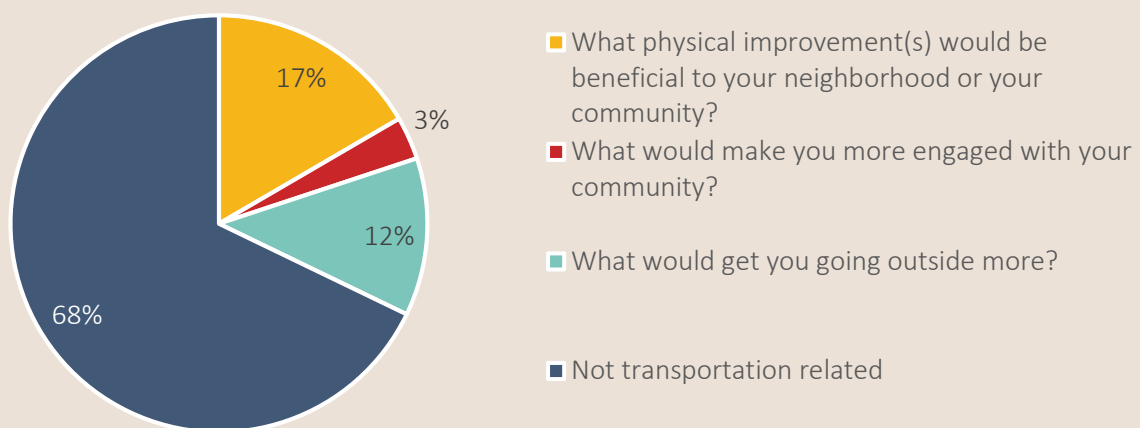
YOUTH ADVISORY BOARD INPUT

In fall 2019, the Mayor's Youth Advisory Board (MYAB) pursued youth community engagement through a three question survey. After accounting for duplicated responses, they received 482 responses (408 in English, and 74 in Spanish). The questions asked were:

1. What physical improvement(s) would be beneficial to your neighborhood or your community?
2. What would make you more engaged with your community?
3. What would get you going outside more?

The Santa Fe MPO found that 114 (24 percent) respondents replied to at least one of the questions with feedback pertaining to our transportation network resulting in 11 percent of all 1,446 comments being transportation related.

FIGURE 2-7. MYAB COMMENTS RELATED TO TRANSPORTATION BY QUESTION



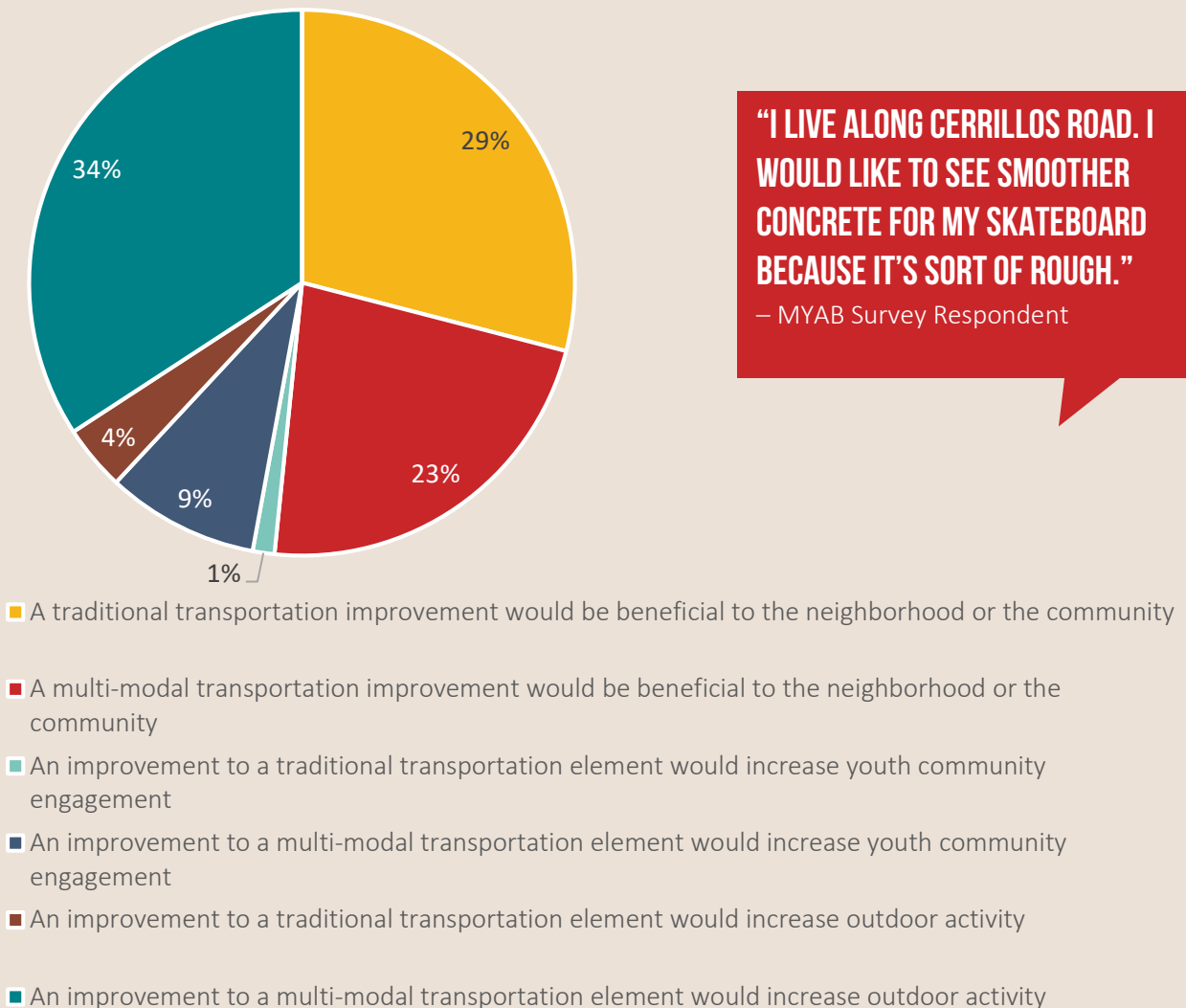
“PUBLIC SPACES FOR TEENS THAT DON'T NEED MONEY. BETTER AND MORE EFFECTIVE PUBLIC TRANSPORT WOULD ALSO BE BENEFICIAL, ESPECIALLY FOR TEENS WHO CAN'T DRIVE YET.” – MYAB

Survey Respondent

This survey demonstrates that many Santa Fe youth are aware of the impact that traditional automobile-oriented and multimodal transportation infrastructure improvements can have on their community; 9 percent of responses to Question 1 were related to traditional automobile-oriented transportation elements, including traffic safety, street maintenance and design, and traffic lights. An additional 8 percent of the responses to this question were related to multimodal transportation elements such as sidewalks, bike trails, hiking paths, and bus improvements. Multimodal transportation elements were occasionally mentioned in response to increased

community engagement (3 percent of responses to Question 2), whereas automobile-oriented transportation elements were not associated with increased community engagement. Many comments (11 percent of responses to Question 3) suggested that improvements to multimodal transportation elements would increase our youth's time spent outdoors.

FIGURE 2-8. TRANSPORTATION-RELATED COMMENTS: TRADITIONAL AND MULTIMODAL

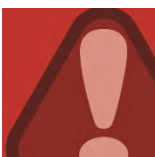


VISION AND GOALS

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 nine goals are the foundation for performance measures, performance targets, recommended policy, and project implementation actions described in later chapters of this MTP.

VISION

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



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

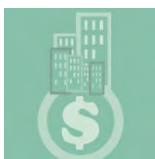


CONGESTION RELIEF & SYSTEM

OPERATIONS: An efficient and reliable transportation system poised to leverage emerging technologies.

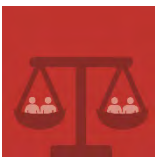


PUBLIC HEALTH: A transportation system that supports healthy lifestyles.



ECONOMIC & COMMUNITY

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



SOCIAL EQUITY: Equitable investments in transportation that enable quality of life for all residents.



SYSTEM PRESERVATION: A well-maintained transportation system.

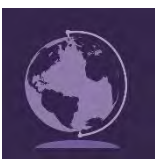


MULTIMODAL MOBILITY & ACCESSIBILITY: An accessible, connected, and integrated transportation system.



PARTNERSHIP & FUNDING:

Regional collaboration in transportation planning, funding, and implementation.



ENVIRONMENTAL

STEWARDSHIP: A transportation system that protects and enhances the natural, cultural, and built environment and mitigates climate change.

CHAPTER 3: PEOPLE & PLACES



This chapter describes the current and future population and employment trends, demographic composition, as well as our region's natural and cultural resources; all of which are critical to making informed transportation investments.

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.

Understanding the demographic composition of the region (age, gender, race/ethnicity, ability/disability, etc.) is critical to making informed transportation investment decisions, and achieving the region's social equity goal of providing equitable investments in transportation to enable quality of life for all residents.

METROPOLITAN PLANNING AREA

The Santa Fe Metropolitan Planning Area (SFMPA) includes portions of Santa Fe County, the Pueblo of Tesuque, the Agua Fria Traditional Village, and the entire city of Santa Fe (Figure 3-1). The SFMPA was designated as an 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.

HOUSEHOLDS AND POPULATION

The Santa Fe metro area has an estimated population of 120,485, with over 50,000 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.

POPULATION FORECASTS

The MPO planning area is expected to experience just over 20 percent population growth during the 25-year period between 2020 and 2045; or an average annual rate of 0.82 percent. During this period, the MPO area is expected to grow from 120,485 people to 145,843 people, resulting in an estimated 25,358 additional people living in our region. Table 3-1 shows the population forecasts over time for the city of Santa Fe, Santa Fe MPO, and Santa Fe County.

TABLE 3-1. POPULATION FORECASTS

	City of Santa Fe	MPO Planning Area	Santa Fe County
2020	85,223	123,189	151,767
2025	85,897	128,008	157,104
2030	87,543	133,431	162,782
2035	91,000	138,610	169,142
2040	94,318	143,674	175,242
2045	95,742	145,843	177,888 (1.51%+)

PROJECTIONS METHODOLOGY STATEMENT

Demographic information and forecasts serve to inform all elements of the 2020-2045 MTP Update.

The University of New Mexico Geospatial and Population Studies (GPS) releases periodic July 1 population projections for New Mexico and its 33 counties. Several state agencies and private entities use these projections for research and planning purposes. GPS uses a standard cohort component method based on the demographic balancing equation:

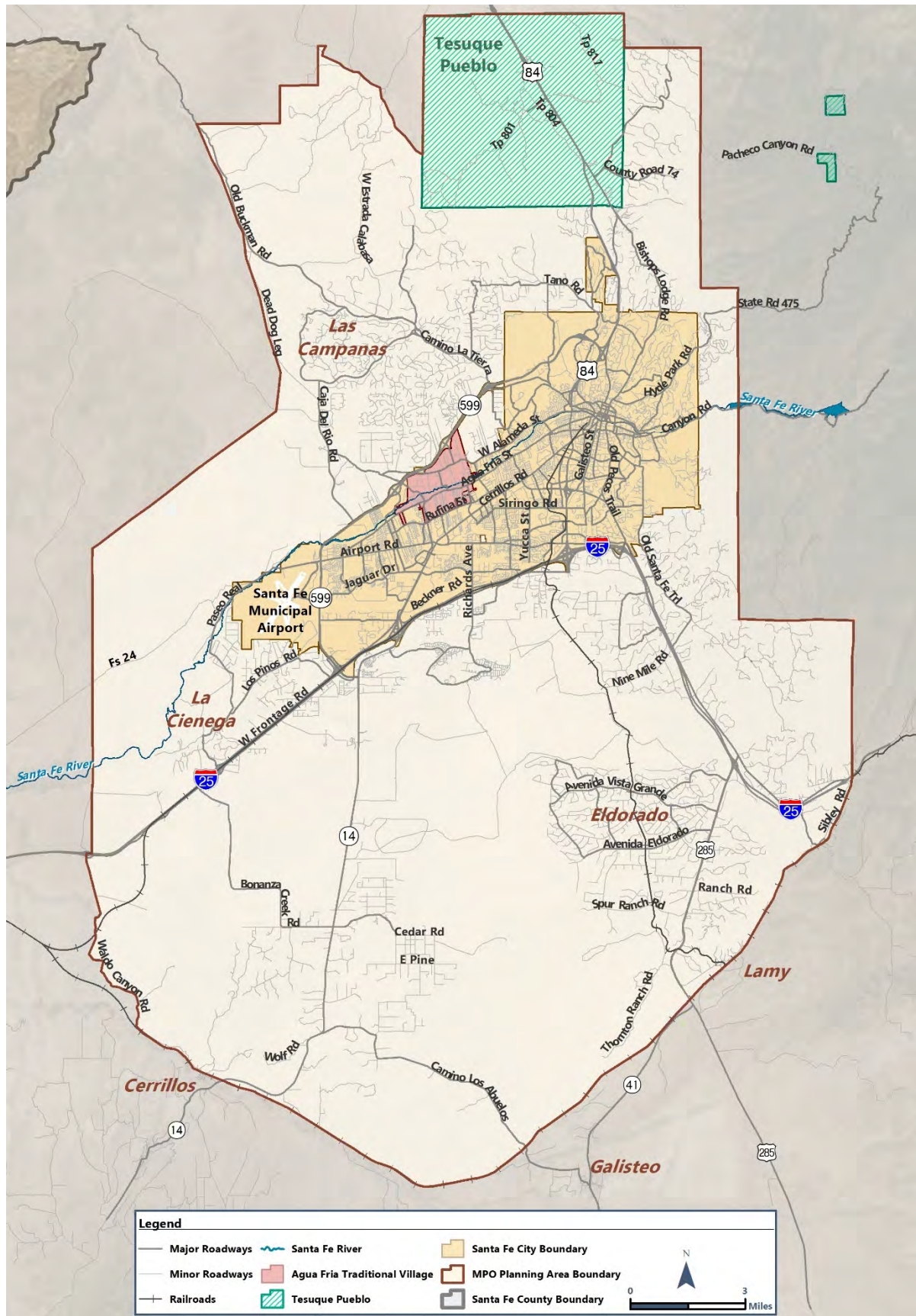
$$Pop_t = Pop_{t-1} + Births - Deaths + Net Migration$$

These 2020-2040 five-year interval projections begin with GPS population estimates. From this, the number of expected deaths is subtracted from the population using life tables calculated from the New Mexico Department of Health. Next, the number of expected births for the female population ages 15-44 is calculated using fertility data from the New Mexico Department of Health. Finally, net migration is calculated based on recent historical trends. This was not straightforward for the 2020-2045 estimates because of large in-migration between 2000 and 2010 and because of large out-migration between 2010 and 2015. Neither of these trends is expected to soon return or continue. Therefore, migration was roughly calculated as half the net migration observed between 2000 and 2010.

This process is completed for each county and then controlled to a statewide projection total.

The adoption of this plan shall formally accept this MTP as the “official 2045 forecasts” for the Santa Fe MPO until this plan is either amended or updated.

FIGURE 3-1. SANTA FE METROPOLITAN PLANNING AREA



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 anticipated in southwest Santa Fe.

DEMOGRAPHICS

AGE

The Santa Fe region has a large aging population, with the 55-64 and 65-74 age groups being the two largest. Together, people in these two age groups make up nearly 30 percent of the region's entire population, as shown on Figure 3-2.

FIGURE 3-2. POPULATION BY AGE GROUP

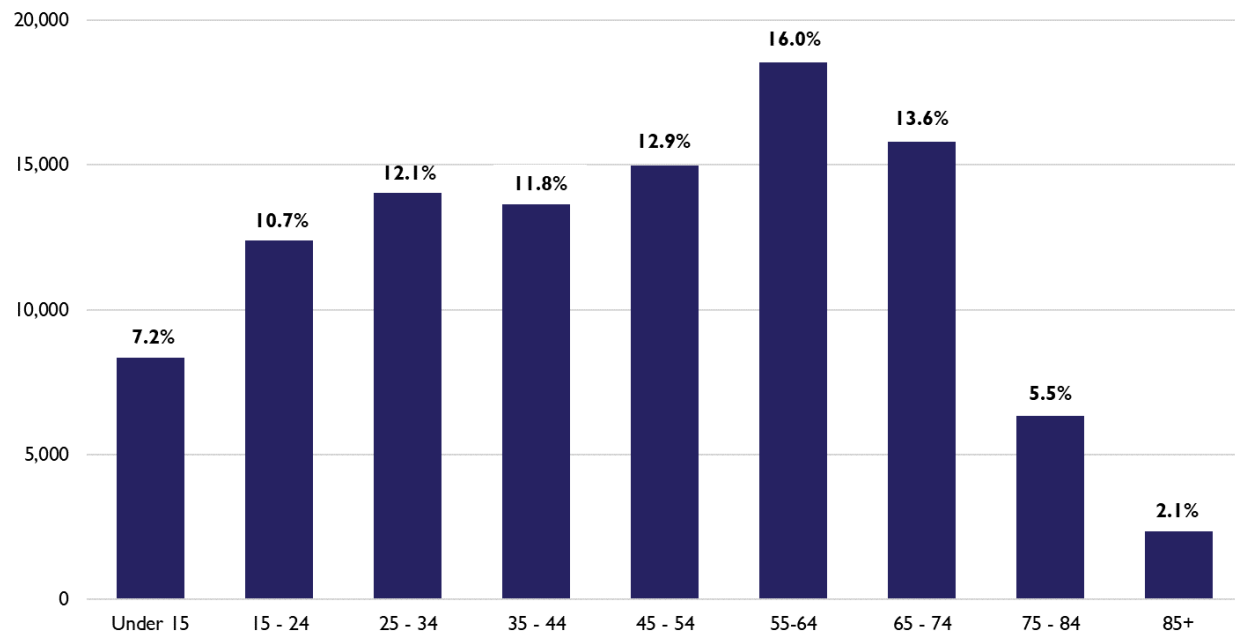
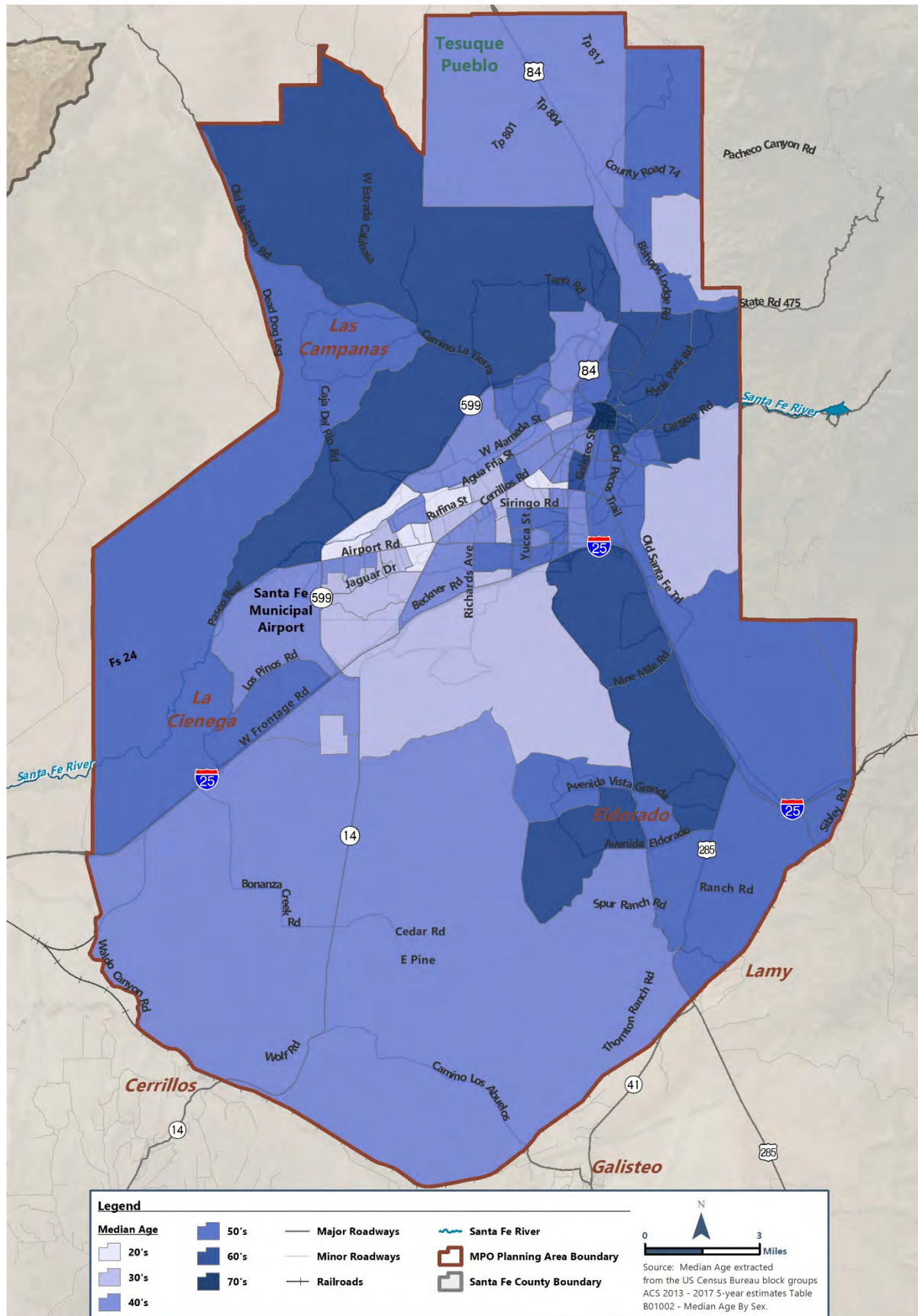


Figure 3-3 shows the median age for different areas of our region. There is a striking distinction between where younger and older citizens live. This trend is anticipated to continue for the near future. The aging population is largely concentrated in the northern part of the region and near Eldorado, where several census tracts have median ages in the 60s. Younger residents are more heavily concentrated on the west side of the urban core where most census tracts have median ages in the 20s or 30s. The downtown area is characterized by an older population, higher real estate values, low housing growth, and higher median household income.

MYTH: Higher-density development overburdens public services and requires more infrastructure support systems.

FACT: The compact nature of higher-density development requires less extensive infrastructure to support it and the diversity of people living in these communities – fewer families with small children – puts less demand on schools and other public services than low-density housing. Unfortunately, low-density development often does not pay enough property taxes to cover the services and infrastructure costs required to serve the community.

FIGURE 3-3. MEDIAN AGE



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.

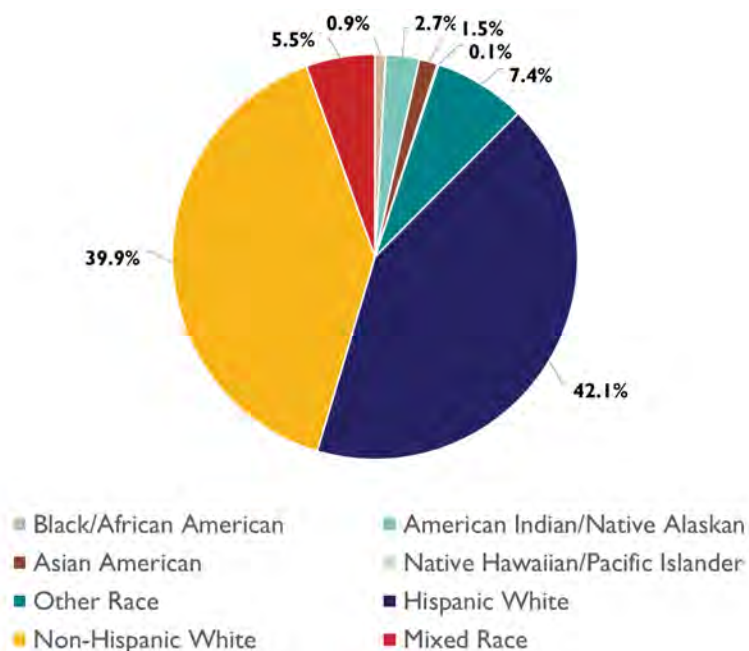
The number of older adults (age 65 and older) in the Santa Fe Metropolitan Statistical Area is expected to increase from 20 percent of the population in 2015 to 33 percent of the population in 2040.

RACE AND ETHNICITY

New Mexico is known for its three predominant cultures: Native America, Spanish (i.e., Hispanic or Latino), and Anglo. The largest racial/ethnic demographic in the Santa Fe region is Hispanic, with over 42 percent of all residents identifying themselves as such (as shown on Figure 3-4). Non-Hispanic White is the second largest; together with Hispanics, they account for eight of every ten Santa Fe residents. People identifying solely as Black/African American, American Indian, Asian, or Native Hawaii/Pacific Islander in the region make up roughly 5 percent of the total population. Just over 3,000 American Indians live in the Santa Fe MPA.

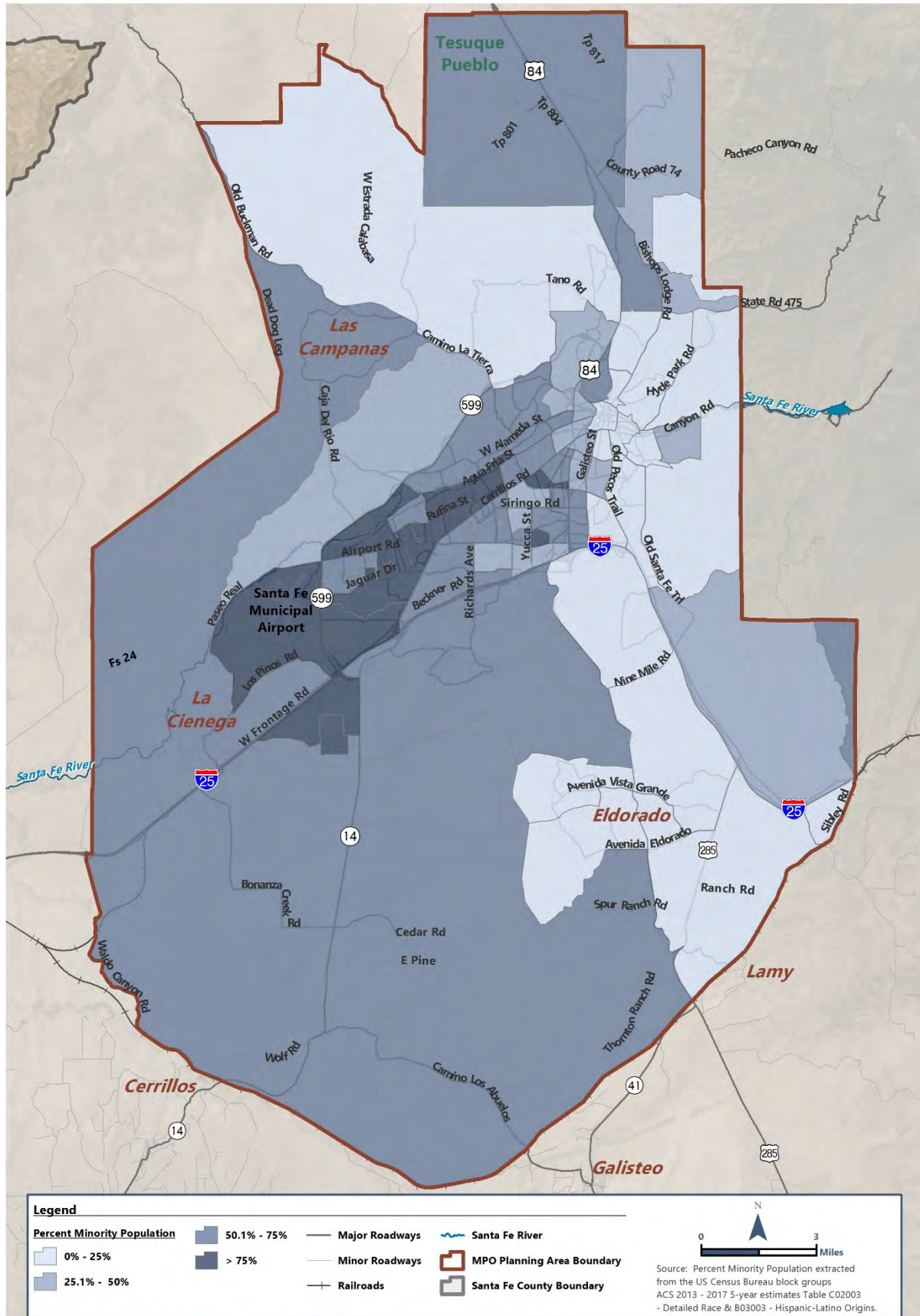


FIGURE 3-4. POPULATION BY RACE/ETHNICITY



As shown on Figure 3-5, minority populations (non-white) are heavily concentrated on the west side of the urban core and around Santa Fe Municipal Airport—over 75 percent of residents in these areas are minorities. There are also substantial minority populations in the southwest part of the region and near the Pueblo of Tesuque.

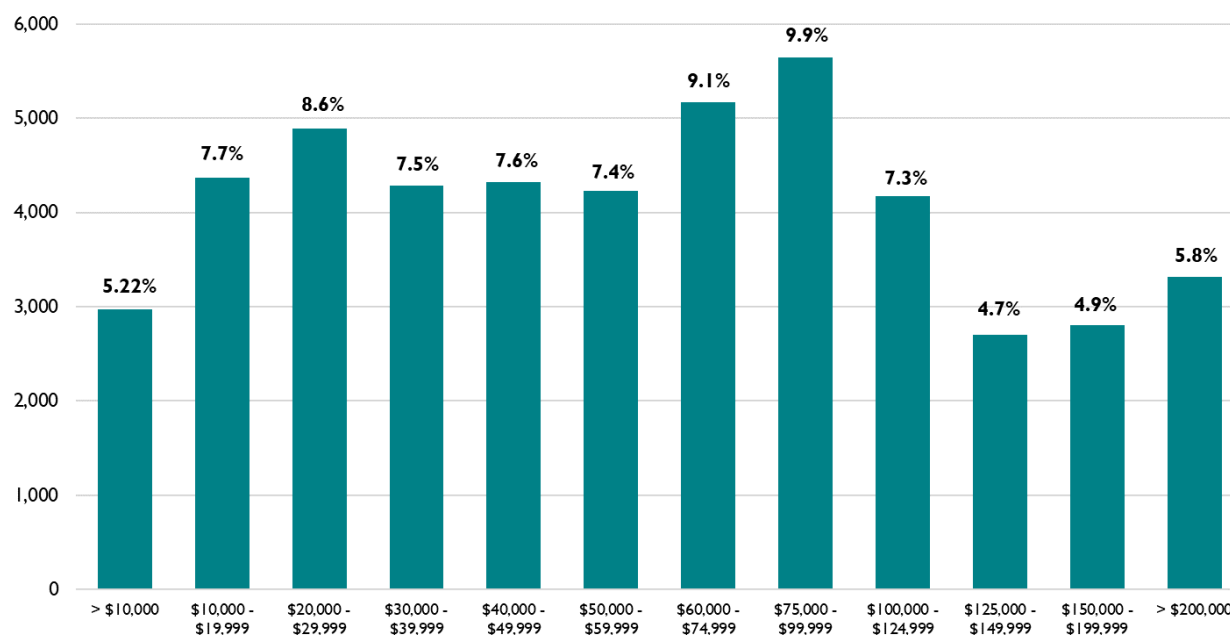
FIGURE 3-5. MINORITY POPULATION



HOUSEHOLD INCOME

The Santa Fe area is characterized by considerable variation in family and individual income and wealth. The area is home to very wealthy individuals, many who have come from other places and some who live in Santa Fe 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. As shown on Figure 3-6, the most common household income range in the Santa Fe region is between \$75,000 and \$100,000 per year. Nearly 30 percent of all households earn less than \$40,000 per year, and another 20 percent earn between \$60,000 and \$100,000. Approximately 6,000 households, 10.5 percent of the total, in the Santa Fe region fit the census definition of low income. The concentration of low-income households is depicted on Figure 3-7.

FIGURE 3-6. HOUSEHOLD INCOME



DISABLED POPULATION

Approximately 19,000 people, or 13 percent of the total population, in the Santa Fe region have a disability. As shown on Figure 3-8, the southern part of the region and the south and east portions of the urban core have the highest concentrations of disabled residents.

ZERO VEHICLE HOUSEHOLDS

Approximately 2,000 households, 3.5 percent of the total, in the Santa Fe region do not own a vehicle. Zero-vehicles households are concentrated in the urban core and the southwest, as shown on Figure 3-9.

FIGURE 3-7. LOW-INCOME HOUSEHOLDS

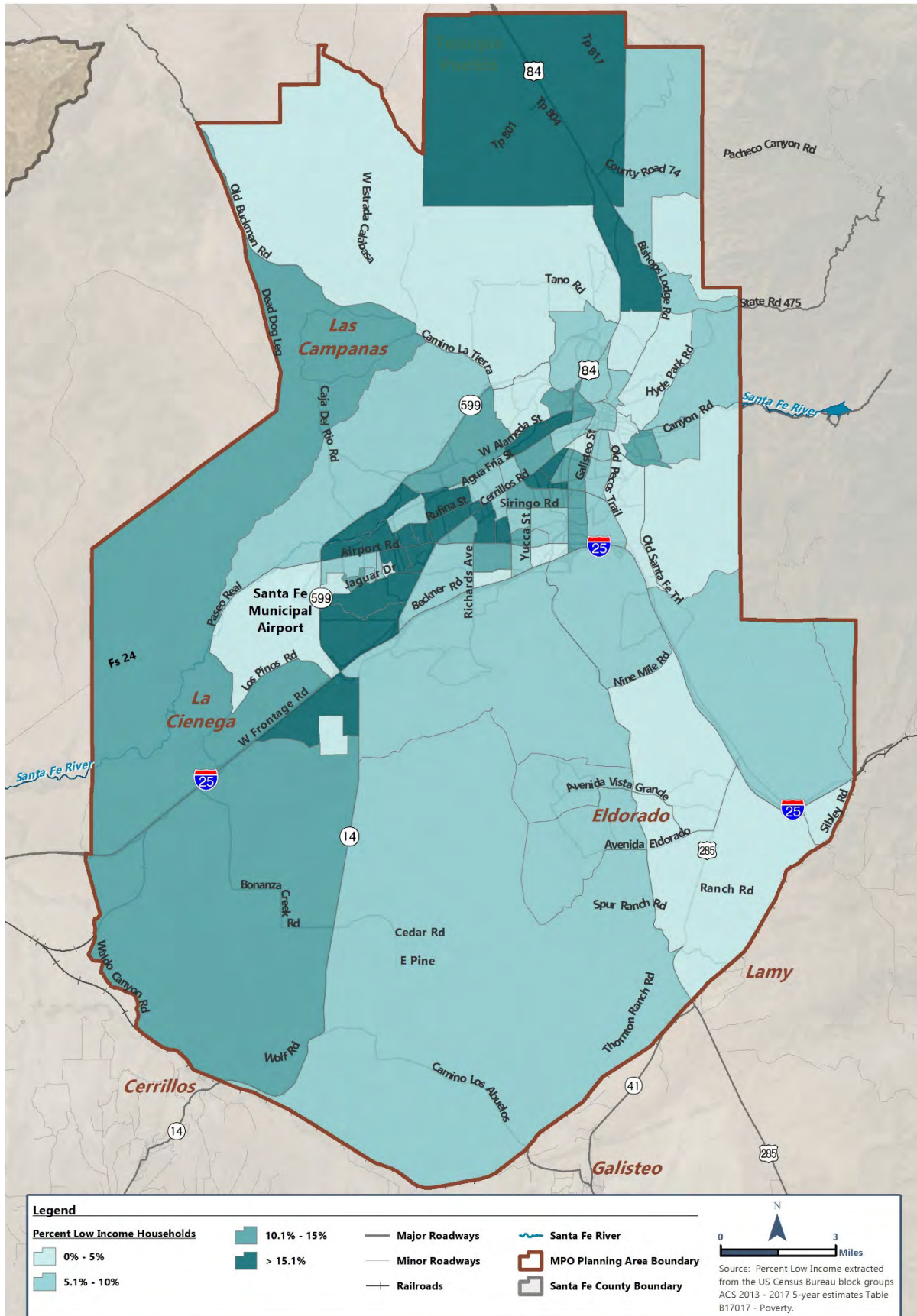


FIGURE 3-8. DISABLED POPULATION

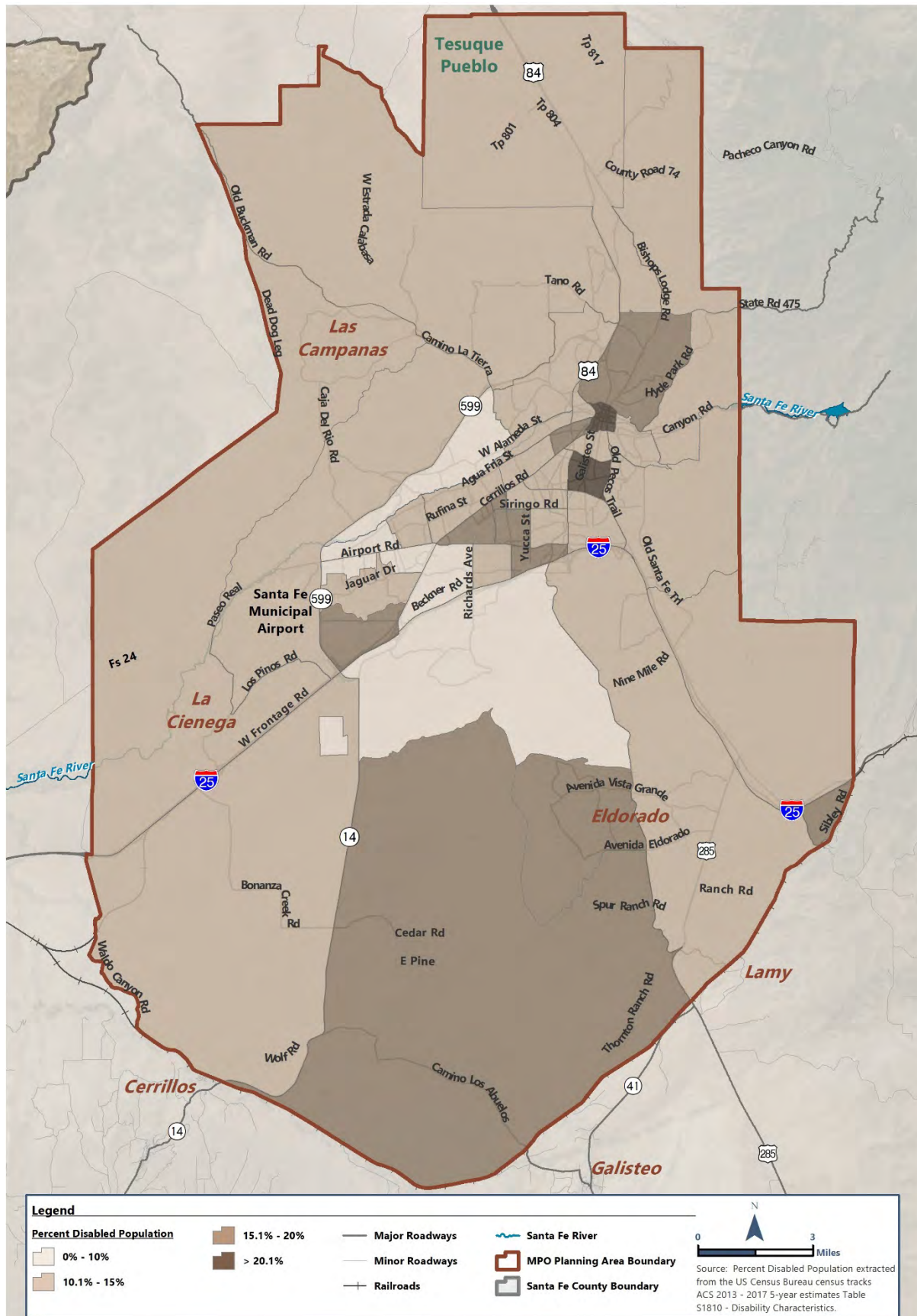
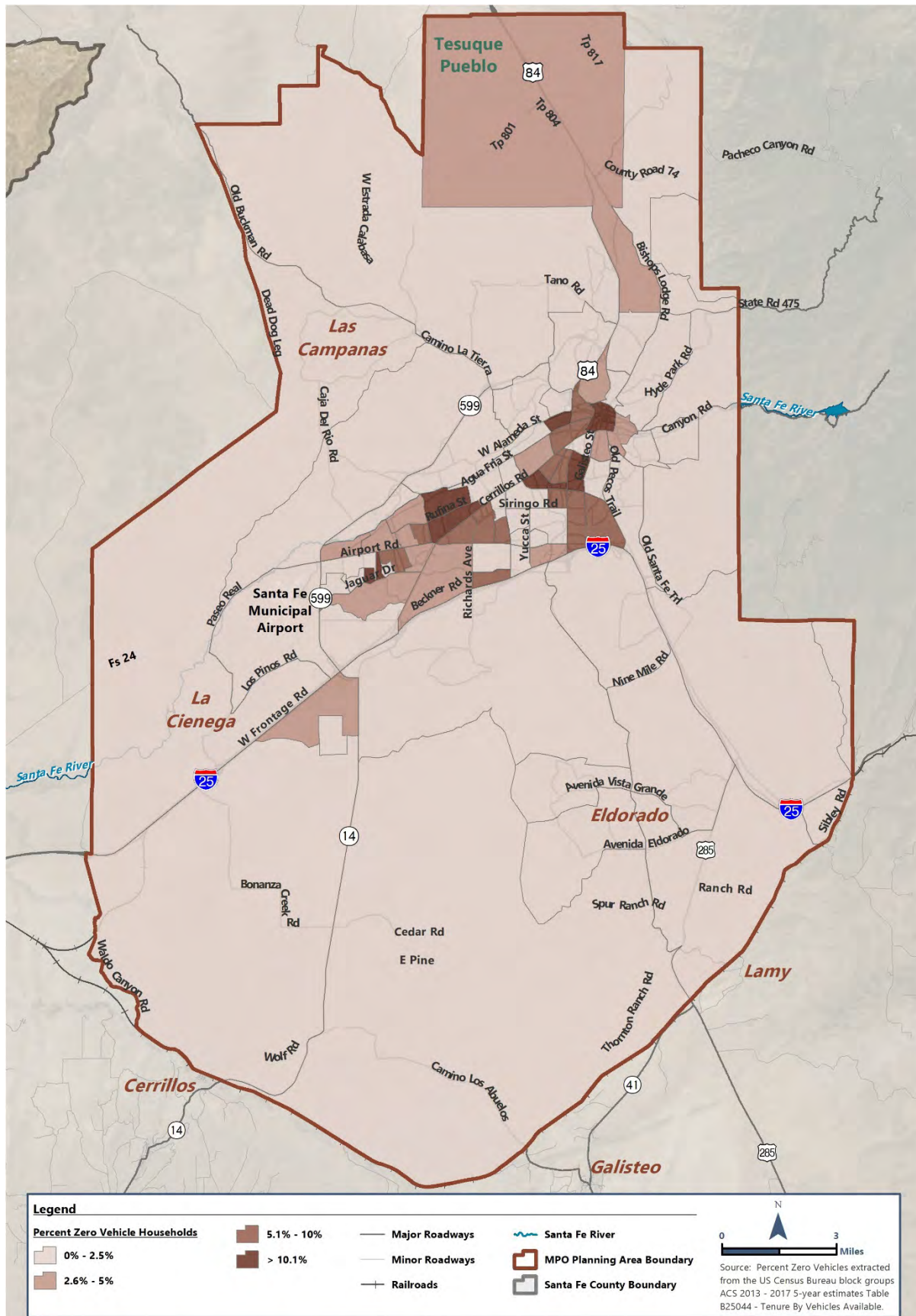


FIGURE 3-9. ZERO VEHICLE HOUSEHOLDS



PUEBLOS AND VILLAGES

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.

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.



Agua Fria, 1900

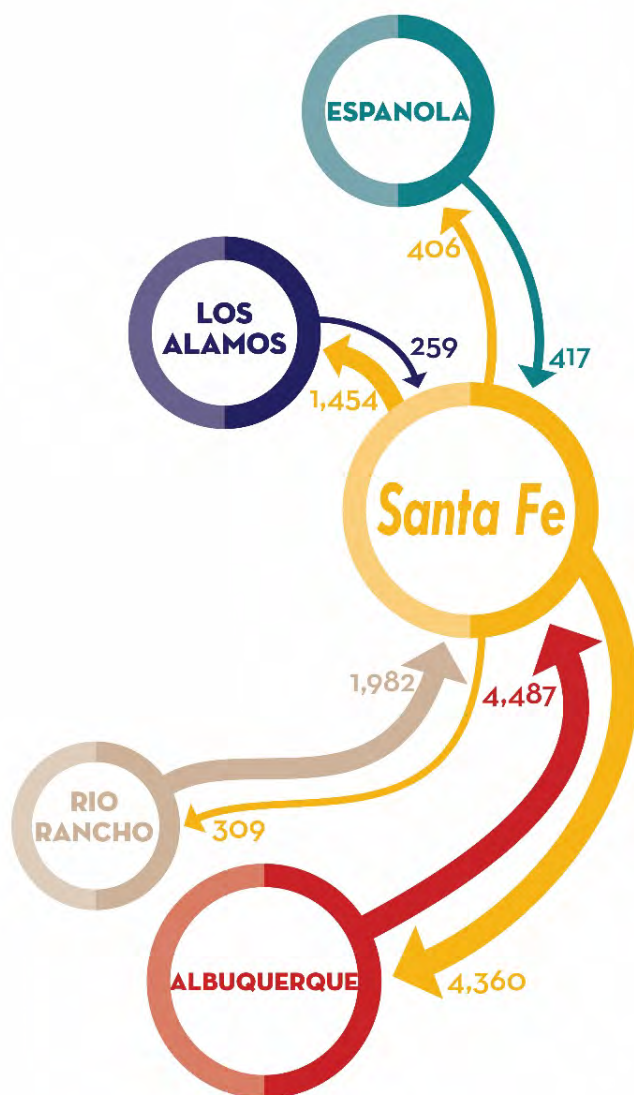
EMPLOYMENT

CURRENT CONDITIONS

Our region currently employs over 65,000 people in a range of industries. Figure 3-10 shows the distribution of people commuting into and out of Santa Fe for work. The number of people living and employed in Santa Fe has decreased since 2002, while the number employed in Santa Fe, but living outside the city has increased. This trend demonstrates an increasing demand for longer distance commuting into and out of the City.

COMMUTING PATTERNS

FIGURE 3-10. COMMUTER FLOWS (DAILY)



Santa Fe's transportation system needs to account for and serve not only people traveling within the City, but also people traveling into and out of the City. As the fourth largest city in New Mexico, Santa Fe attracts a large number of commuters from other surrounding communities every day – nearly 25,000 people who work in Santa Fe live outside the city limits. Also, over 13,000 Santa Fe residents commute to other places. Combined, these commute flows result in an extra 12,000 people in Santa Fe. The numbers of inbound and outbound commuters have both been growing steadily over time, with 22 percent and 30 percent increases, respectively, between 2002 and 2017. At the same time, the number of people both employed and living in Santa Fe has been declining; in 2017, there were more people employed in Santa Fe but living elsewhere than there were people working and living in the City.

Albuquerque is both the most common origin for people commuting into Santa Fe and the most common destination for people commuting out, with over 4,000 people going each way in 2017. Los Alamos also attracts a large number of Santa Fe residents for work, and large numbers of Rio Rancho and Eldorado residents commute to Santa Fe.

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.¹ Employment is forecasted to generate approximately 3,850 new jobs by 2026, as shown in Table 3-2.

¹ New Mexico Department of Workforce Solutions.

TABLE 3-2. EMPLOYMENT FORECASTS

	Santa Fe MPO
2016	65,230
2026	69,080
% Growth	5.9%
Annual % Growth	0.57%

"ONE BEAUTIFUL AUTUMN DAY I GRABBED MY WATERCOLORS AND BICYCLED DOWN THE SANTA RIVER WALK-BIKE TRAIL. THE MOUNTAINS WERE GLOWING, WITH BITS OF SNOW AT THE TOP, SO I STOPPED TO PAINT THE SCENE."

STREET STORY

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 and NM 599 corridors. Santa Fe County anticipates that future growth will occur in two primary areas: the Community College District south of I-25 and the areas to the north of the Santa Fe Airport and the NM 599 corridor. The highest growth in employment is expected in southwest Santa Fe in proximity to the airport.

TRANSPORTATION AND OUR 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 from roads and facilities designed in a way that matches the context and continuity of natural systems.



NATURAL ENVIRONMENT

Santa Fe enjoys abundant annual sunshine, moderate annual temperatures, access to a distinctive high desert landscape that has accommodated human settlement for thousands of years. The realization that the Santa Fe Metropolitan Area is inheritably linked to global environmental issues, including the concern of anthropogenic effects of climate change, cannot be underscored by the specific impacts of our transportation system. It is embedded in our goals to minimize the impacts to Santa Fe's natural environment by striving to understand how transportation activities contribute directly, indirectly, and cumulatively to environmental challenges. The MTP is a means to gage the scale of impact by taking into account the level of contribution and the geographical scale of the entirety of our transportation system.

STORMWATER

Stormwater drainage has real consequences to waterways. Especially in urbanized areas, the impervious surfaces making up our transportation network could be the greatest contributor of pollution via stormwater runoff to surface waters in our area. The impacts on water quality in the United States are so high that discharges from our conveyance system are regulated by two stormwater discharge permits. They are an MS4 permit (Municipal Separate Storm Sewer Systems) and a NPDES (National Pollutant Discharge Elimination System) permit. According to NMED, “Regulated conveyance systems include roads with drains, municipal streets,

catch basins, curbs, gutters, storm drains, piping, channels, ditches, tunnels and conduits. It does not include combined sewer overflows and publicly-owned treatment works.”²

In 2016, Santa Fe received \$150,000 for technical assistance in developing a long-term stormwater management plan using the EPA’s step-by-step guide and web-based toolkit.³ Suggested techniques include the incorporation of green infrastructure along streets by using natural features, curb cuts, and permeable pavements to slow runoff and increase infiltration. The plan details the importance of mapping directly connected impervious cover, such as streets, gutters, pipes, and culverts. When the mapping is done, the transportation network will likely be the single largest feature, reflecting the important role our transportation system is playing in shifting stream and arroyo conditions.

While stormwater can be viewed as an issue to be managed, in arid and semi-arid regions water managers have been increasingly recognizing stormwater as an asset to be captured instead. Commercialized reuse of stormwater for irrigation and other grey-water uses is occurring in some cities across the west, including El Paso, Tucson, and Denver. In semi-arid regions like Santa Fe, rainwater harvesting by private individuals has the potential to decrease stormwater discharge, if widely adopted⁴.

STREETS AND STORMWATER

Our transportation network as a stormwater conveyance system impacts waterways in two important ways. First, it directly carries pollutants into the waterway and is detrimental to water quality. Second, it adds to the amount of impervious surface modifying the natural environment. This alters the timing of runoff and decreases the volume of water that is able to infiltrate and replenish aquifers. Simultaneously it increases the duration of stream flow from singular rain events and the frequency of runoff events, both of which can intensify erosive processes and sediment loads.



² New Mexico Environment Department, Surface Water Quality Bureau. 2017. SANTA FE RIVER E. COLI TOTAL MAXIMUM DAILY LOADS (TMDLS): [CIENEGA CREEK TO NICHOLS RESERVOIR]. Santa Fe NM. https://www.env.nm.gov/surface-water-quality/wp-content/uploads/sites/25/2016/03/FINAL-SFR-TMDL_EPAapproved_050317.pdf

³ <https://www.santafenm.gov/river-and-watershed>

SEVERE THUNDERSTORMS AND THE DENSITY OF IMPERVIOUS SURFACES

According to NOAA's Albuquerque-area top 5 weather stories of 2018, a Community Collaborative Rain, Hail, and Snow Network observer in Santa Fe "measured 3.70 inches of rain in less than one hour, which equated to a 500- or 1000-year precipitation event. A total of 10 roadways were closed due to flood debris and high water. Local emergency services responded to five swift water rescues. A total of 100 homes experienced damage from flood waters, of which 33 saw major damage and 6 were completely destroyed. Flood waters inundated the basement of the county courthouse. Flash flooding also occurred along Cienega Creek resulting in damage to several homes in La Cienega. A shelter was set up at the Genoveva Chavez Community Center."

The amount of rain received within an hour was exceptionally high during this event, perhaps due to the increasing storm intensity expected from climate change. However, the location of the storm over an urban area with a high density of impervious surfaces was also an important factor influencing the rapidity of the flooding and the volume of stormwater delivered to the arroyos and river that evening.

Sources:

<https://www.weather.gov/abq/Thetop5weatherstoriesof2018>

Kossin, J.P., T. Hall, T. Knutson, K.E. Kunkel, R.J. Trapp, D.E. Waliser, and M.F. Wehner, 2017: Extreme storms. In: Climate Science Special Report: Fourth National Climate Assessment, Volume I [Wuebbles, D.J., D.W. Fahey, K.A. Hibbard, D.J. Dokken, B.C. Stewart, and T.K. Maycock (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, pp. 257-276, doi: 10.7930/J07S7KXX. Available at <https://science2017.globalchange.gov/chapter/9/>, accessed 12/2019.

OUTDOOR RECREATION

Santa Fe is the nearest major population center to the Santa Fe National Forest. Recreation in the forest represents a \$23.7 million industry for the state⁴, which is more than the extractive industries of mining and timber. These assets bring incalculable benefits to local residents who are the primary users of the forest and other nearby public lands. Nearly half of the users are visitors to the area, and USFS public outreach efforts have recognized the open spaces as having the potential of increasing the percent of younger visitors to Santa Fe, whose median age in 2015 was 61 years⁵. In a report developed for the city's Department of Economic Development⁶, "arts, entertainment, and recreation" was identified as one of the 4 "basic" industries in Santa Fe that could help to stimulate economic growth in the city.

RECREATION-BASED TOURISM

The passage of bill 462 on July 1, 2019, by the New Mexico State Legislature established an Outdoor Recreation Division within the Department of Economic Development to develop recreational-based tourism.

The Santa Fe century is an event featuring bicycle routes up to 100 miles in length. This event, which has drawn nearly 3,000 people in past years, is notable because it is one of the earliest rides of its kind in the country, being held in mid-May.

<https://www.nmlegis.gov/Sessions/19%20Regular/final/SB0462.pdf>

<http://santafecentury.com/index.html>

⁴ <https://www.fs.fed.us/emc/economics/documents/at-a-glance/benefits-to-people/southwest/BTP-SantaFe.pdf>

⁵ 2015 Santa Fe Visitor Information Survey: PDF available on this web page:
https://www.santafenm.gov/convention_and_visitors_bureau

⁶ The Hunt Institute for Global Competitiveness. 2018. University Economic Profile of Santa Fe, NM. of Texas at El Paso.
<https://www.santafenm.gov/media/files/Economic%20Development%20Research%202019/Brief%20Economic%20Leakage%20Analysis%20for%20Santa%20Fe,%20NM.pdf>

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. This MTP strives to maintain or improve the region's air quality through strategic transportation investments to reduce idling and vehicle miles traveled. This goal can be achieved through congestion reduction measures and facilitation of alternative travel modes that pollute less than single occupant vehicles like transit, bicycling, and walking.

TRANSPORTATION AND AIR QUALITY

Atmospheric emissions from pollutants produced by transportation, especially by the internal combustion engine, are associated with air pollution and global climate change. Some pollutants (NO_x, CO, O₃, VOC, etc.) can produce respiratory troubles and aggravate cardiovascular illnesses. An estimated 3 million deaths per year are related to air pollution, although the contribution of transportation is less clear. In urban regions, about 50% of all air pollution emanates from automobile traffic.

Source: The Geography of Transport Systems, Jean-Paul Rodrigue, 2017 New York: Routledge)

CULTURAL ENVIRONMENT

The Santa Fe area enjoys a rich and vibrant cultural history punctuated by the convergence of Native Americans, Spanish, Anglo, and Latin American peoples. Each brings important traditional, familial, and contemporary values that impact the area's transportation system. Specifically, mobility is one of the most fundamental and important characteristics of human activity, and our cultural values play a role in how we express our value of mobility choices.

The importance of these values cannot be underscored as we contemplate transportation decision-making today and in the future. Mobility as an activity is constrained by factors such as the propensity, intensity, and scale of mobility options that impact the accessibility of resources.

Mobility options are also supported and influenced culturally as local planning, land use, housing, public transit, and other policies and investments play out. Eighty percent of metropolitan area residents and commuters elect to, or are otherwise limited to, utilization of the single passenger automobile for the majority of commuting and other trips, yet there is a desire to use other modes, based on past and present survey instruments and testimonials from real estate professionals, indicating a portion of these people would prefer more options.

Transportation systems are generally not a homogeneous system but include diverse options at times in competition. Santa Fe "the city different" and the metro area are actually no different. A local example may include the difference

between the downtown area, which enjoys destinations within walking and bicycling distance, access to multiple transit routes and services including the Rail Runner Express commuter train versus a preponderance of neighborhoods in the southern part of the network that have primary access to motor vehicle roadways and limited access to other options.





CHAPTER 4: GETTING AROUND



This chapter presents our region's current multimodal transportation system and explores national trends, innovative transportation designs, and plans being implemented that shed light on what our region may look like

CONSIDERATION OF ALL MODES

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, transit services, a series of bicycle and pedestrian multi-use paths, a railway line, and the Santa Fe Regional Airport. Our region has demonstrated its commitment to provide mobility choices by investing in infrastructure for bicycling, walking, and riding transit.

Smart Growth America states, "Everyone, regardless of age, ability, income, race, or ethnicity, ought to have safe, comfortable, and convenient access to community destinations and public places – whether walking, driving, bicycling, or taking public transportation." Too often, transportation infrastructure discussions center on the needs of motorists while relegating other users to being secondary considerations. For reasons ranging from social equity to the serious and growing threats of climate change, a shift in thinking is needed to ensure that active modes and transit receive the same level of attention and accommodation, and that personal vehicle

2019 NEW MEXICO CLIMATE STRATEGY

In 2019, the New Mexico Interagency Climate Change Task Force published a report on strategies to achieve a 45 percent reduction in net greenhouse gas emissions by 2030, compared to 2005 levels. The report identifies transportation as the second largest contributor to greenhouse gas emissions in New Mexico. Two policy strategies are identified to reduce transportation emissions: increase the adoption of cleaner vehicles by incentivizing electric vehicle purchases and charging infrastructure, and reduce vehicle miles traveled by investing in transportation options such as transit and bicycle and pedestrian-friendly streets.

use is not the only comfortable and convenient option for getting around. The continued development and adoption of Multimodal Level of Service tools is helping to change the focus of transportation planning and design.



REGIONAL TRANSIT AND RAIL SYSTEM

The Santa Fe metro area has seen moderate growth in regional transit services over the past 10 years. Five public agencies now serve 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

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-seven 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 nearly 1 million, a substantial increase in the past 10 years. Santa Fe Trails is serviced by a fleet of 30 state-of-the-art buses and hosts 10 distinct routes, 3 downtown Santa Fe Pick-Up shuttle routes, and Santa Fe Ride, an ADA/senior service. Figure 4-1 shows the Santa Fe Trails bus routes.

NORTH CENTRAL REGIONAL TRANSIT DISTRICT

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, NCRTD began servicing the region in 2007 and currently provides 29 fixed and demand-response routes, 9 of which service the metro area, as shown on Figure 4-2.

The Blue Bus provides service for students and commuters traveling from the north or greater Española and Los Alamos area to the Town of Edgewood at the County's southernmost boarder, as well as service within the Santa Fe region to Eldorado and La Cienega. NCRTD also operates fee-based recreational transit service, such as the weekend Taos Express and the Santa Fe Mountain Trail.



FIGURE 4-1. SANTA FE TRAILS BUS ROUTES

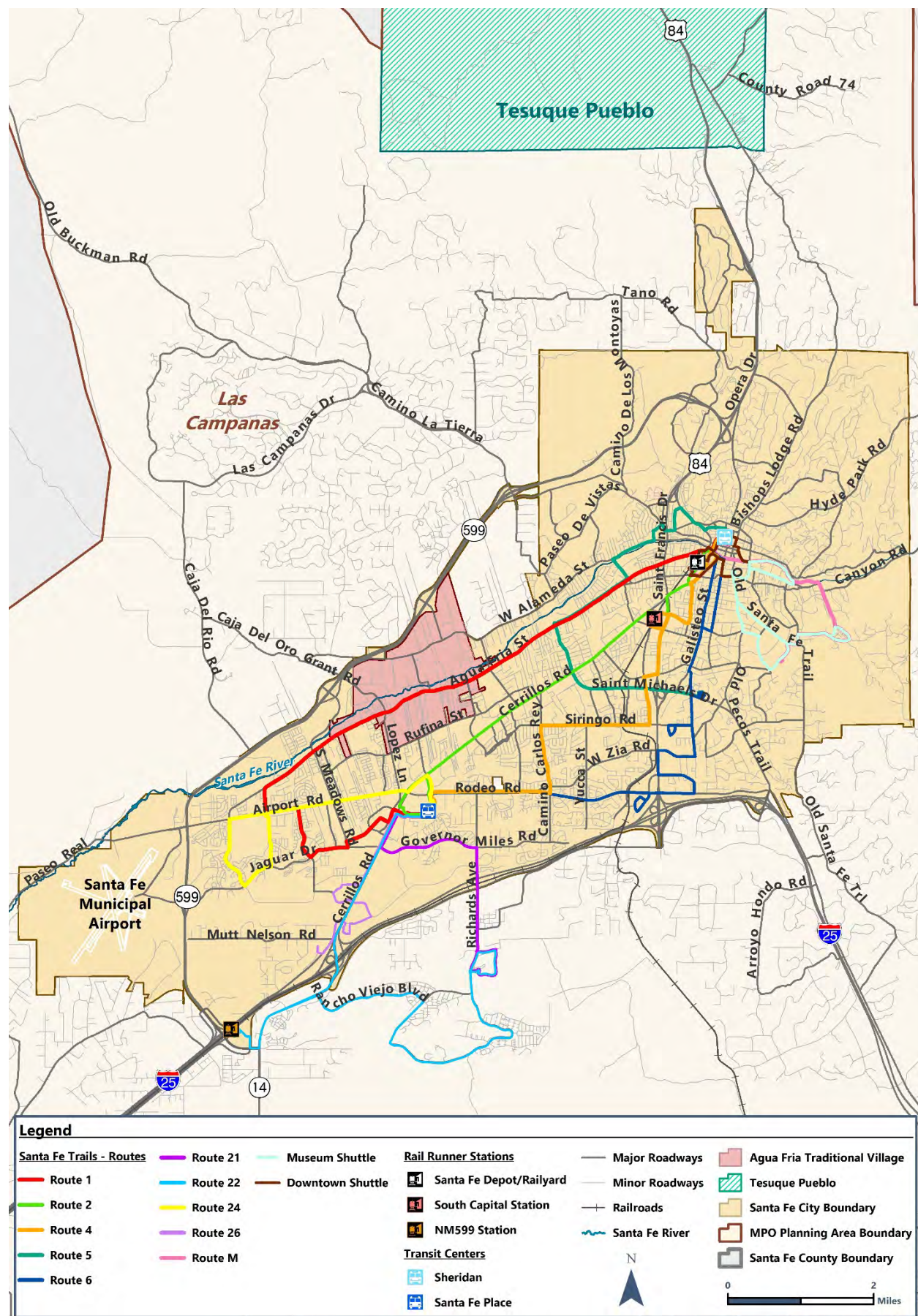
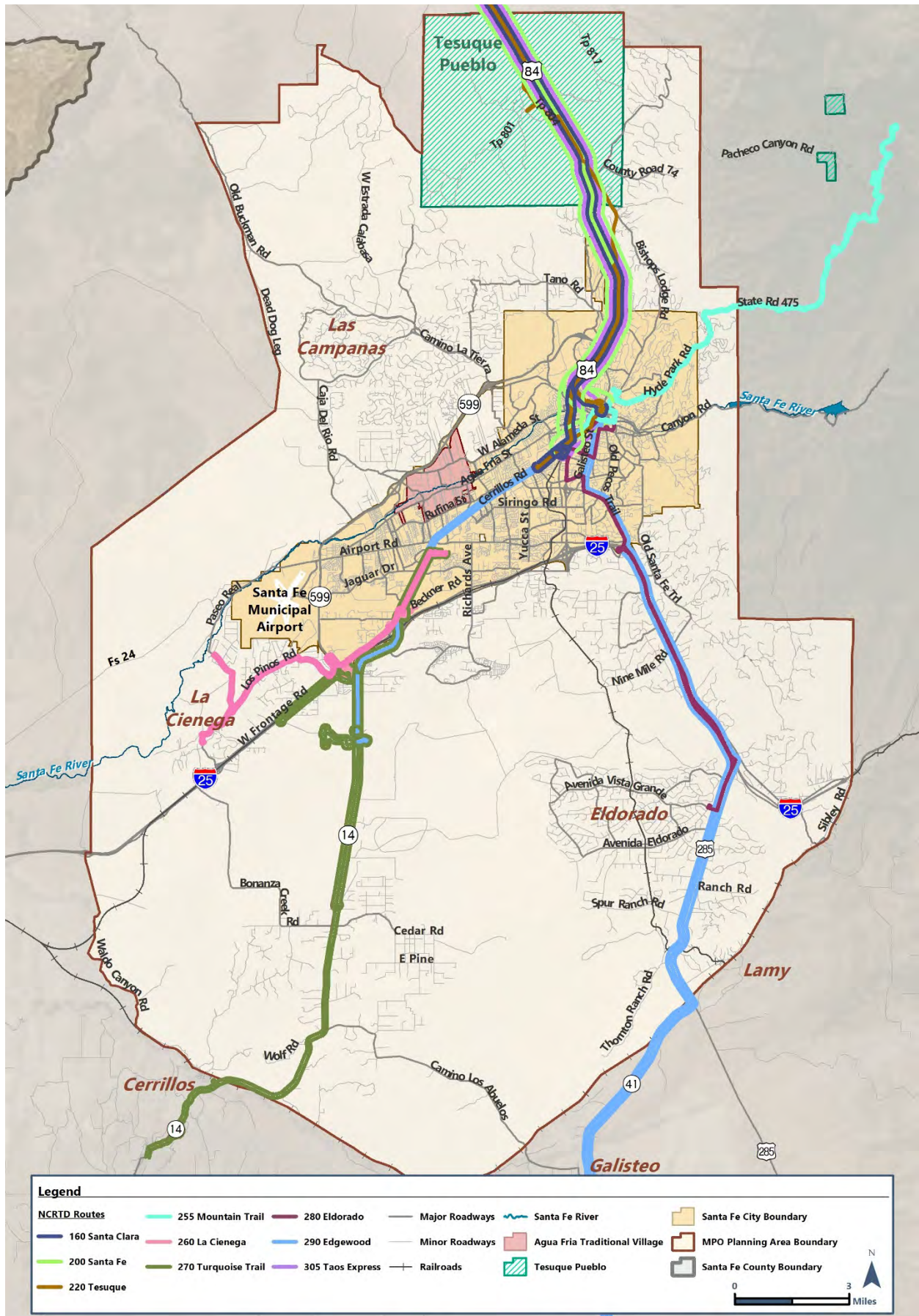


FIGURE 4-2. NCRTD BUS ROUTES



NEW MEXICO PARK & RIDE

Starting with nine buses and three routes, the New Mexico Park & Ride began service in 2003. The NMDOT operates the Park & Ride Shuttles with four routes servicing the metro area for commuters from Los Alamos, Española, Albuquerque, and Las Vegas, New Mexico; all routes connect to New Mexico Rail Runner Express (NMRX) stations (routes are shown on Figure 4-3). In State Fiscal Year 2019, statewide the Park & Ride:

- Removed 7.68 million vehicle miles during the busiest commute hours;
- Reduced carbon emissions by 3,598 tons; and
- Served an Average Daily Ridership of 926 passengers.¹

NEW MEXICO RAIL RUNNER EXPRESS

The NMRX is New Mexico's first commuter rail service. Inaugurated in 2006 and administered by the Rio Metro Regional Transit District, it now provides service seven days a week to 15 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 four stations: Railyard Depot, South Capital, Zia, and 599. In 2019, more than 270,000 passengers boarded the NMRX in Santa Fe County.

AMTRAK

Amtrak's Southwest Chief makes a stop at Lamy, New Mexico, outside the southeastern most edge of the SFMPA. Amtrak contracts with Road Runner, a private entity, to provide access to downtown Santa Fe and transit connections.

Santa Fe Southern Railway extends from Lamy, where it connects with Amtrak's Southwest Chief, to Santa Fe at the Railyard Depot, sharing the tracks with the New Mexico Rail Runner Express for the northernmost 4.5 miles. Plans are in place to refurbish the now inactive historic rail line, built by predecessor Atchison Topeka & Santa Fe Railway in 1880, and to resume year-round passenger excursion rail service between Santa Fe, Eldorado, and Lamy using historic equipment. With one of Santa Fe's major bikeway trails, the Rail Trail, paralleling the railroad for its full 16-mile length, plans are developing to offer



TRANSIT IS KEY IN MULTIMODAL SYSTEMS

A primary component of both the Public Transit Master Plan and 2017 Teen Mobility Plan is that transit ridership depends heavily on the quality of the pedestrian and bicycle facilities available where transit stops. Transit plays a key role in supporting 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 strive for: sustainable, livable, compact mixed-uses neighborhoods, and higher LOS for those who need it most, is the challenge facing entities making investment choices in our community today.

¹https://dot.state.nm.us/content/dam/nmdot/ParkNRide/5_NMDOT%20Park%20and%20Ride%20Factsheet_January_2020.pdf

coordinated service so that bikers can bike in one direction and ride the train in the other direction as they so choose. In the future, the private rail line may offer the potential for commuter rail service from Eldorado to Santa Fe.

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

SENIOR TRANSPORTATION

In addition to local transit agencies, the City of Santa Fe and Santa Fe County provide low-fee and free (respectively) transportation services to adults age 60 and older during regular business hours. These services prioritize transportation to medical appointments but can also be used by seniors to travel to the grocery store or run other errands.

MYTH: Public transportation only benefits those who use it.

FACT: Public transportation benefits the whole community by reducing traffic congestion. According to the American Public Transportation Association (APTA), "Americans living in areas served by public transportation save 646 million hours in travel time and 398 million gallons of fuel in congestion reduction."

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.

The SFMPA has a high level of transit service within and into the city. Our ridership exceeds the vast majority of peer systems. For a community of about 120,000 persons, the Santa Fe metro area saw over 2 million one-way trips (unlinked), comparing very favorably to similar sized communities. Table 4-1. Transit Ridership shows ridership on the various major transit services in the region.

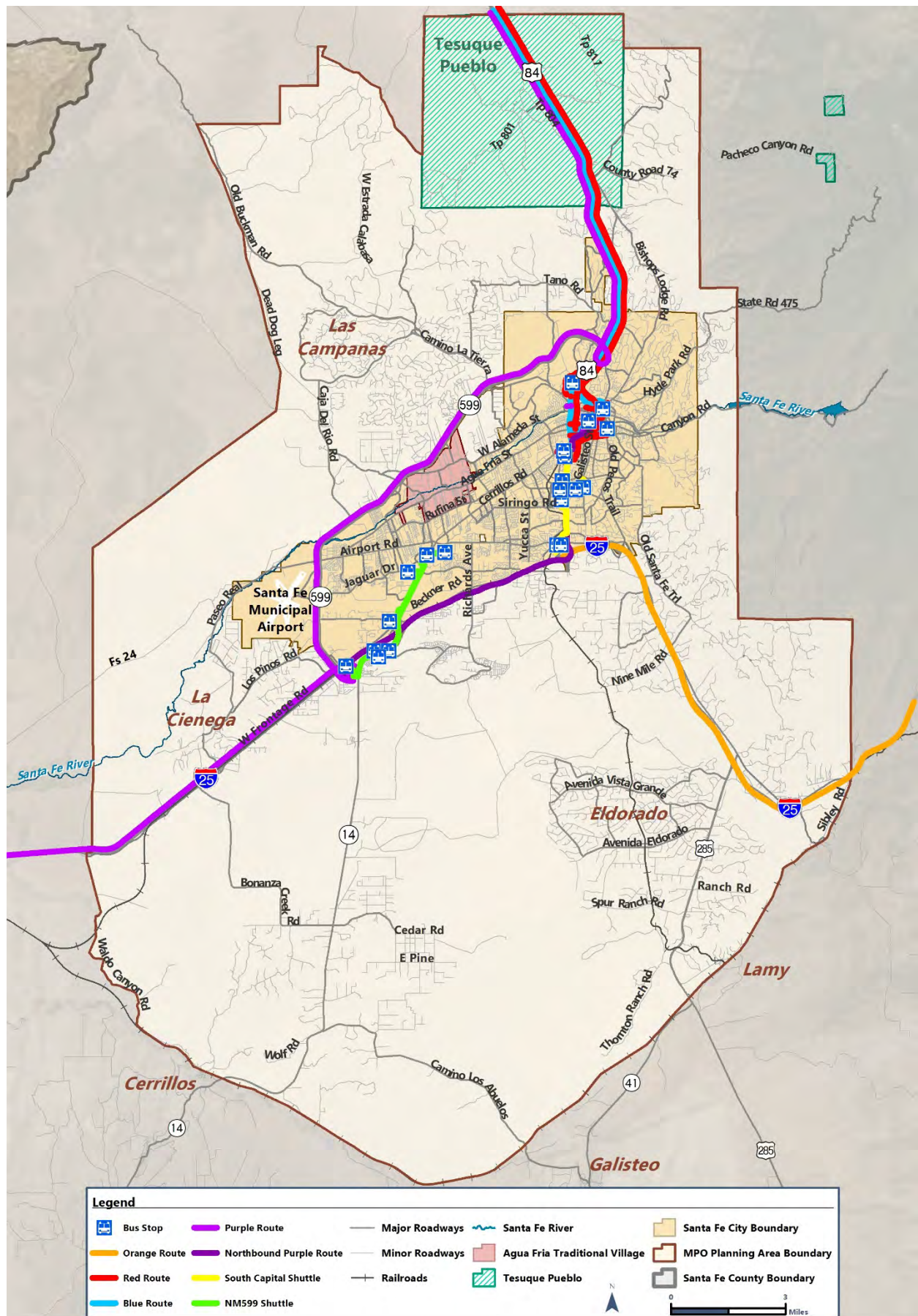
TABLE 4-1. TRANSIT RIDERSHIP

Service Provider	Annual Ridership (CY19)
Santa Fe Trails	759,500
Santa Fe Pick-Up	72,000
NCRTD*	294,310
NM Park & Ride*	232,830
Rail Runner Express*	744,050

**Fixed routes serving Santa Fe*

The MPO promotes public investment in and 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 Metropolitan Public Transit Master Plan, the backbone of the interconnected transit network may help people make smarter decisions about where to locate their homes and businesses depending on their mobility needs.

FIGURE 4-3. NEW MEXICO PARK & RIDE BUS ROUTES



TRANSIT RECOMMENDATIONS

Santa Fe MPO's Public Transit Master Plan identifies the following recommendations to improve transit in the Santa Fe region:

- Investments in technology, including websites, real-time GPS tracking, trip planners, and 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 offers 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.
- Stakeholder and public input clearly emphasized a desire for increased evening and weekend services throughout the metro area by Santa Fe Trails and the Rail Runner.
- Additional access needs have been identified to include human services, medical facilities, advanced educational institutions, general access around the south side of Santa Fe, and linkages to the Santa Fe Regional Airport and Albuquerque International Sunport Airport.
- 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. It is recommended that transit services coordinate efforts to address the issues of safety and security on a regional basis. Some examples include developing a regionwide policy for handling inebriated persons, collective security certification requirements, marketing campaigns, and empowering riders to report incidents in a safe and secure manner.
- 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.
- Similarly, concerns of the "first mile and last mile," or how and where transit stops connect to the beginning or end of a trip, should be addressed and options such as bike-share or e-scooters evaluated.



ACTIVE TRANSPORTATION

Active transportation (bicycle and pedestrian) is an integral component of this 2020-2045 MTP. The 2015 Pedestrian Master Plan and 2019 Bicycle Master Plan supplement the 2020-2045 MTP with specific recommendations for improving walking and biking in the Santa Fe region.

Public input consistently includes a desire for increased and improved transportation options, including safe walking and biking routes. Supporting active transportation can efficiently and cost-effectively improve our existing transportation system, providing benefits to all street users.



BIKEWAYS

Benefits of a comprehensive bicycle network 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.

In 2019, the Santa Fe MPO adopted the second Metropolitan Bicycle Master Plan (BMP), providing an update to the 2012 Bicycle Master Plan. The 2019 BMP reflects the latest innovations in municipal planning for bicycles and sets a goal of creating an all ages and abilities bicycle network that addresses issues of equity and access. The plan outlines policy recommendations and implementation steps to achieve an improved bicycle network.

The Santa Fe MPO regularly updates and publishes the Santa Fe Bikeways and Trails Map outlining the existing system of trails, on-street bicycle facilities, and recreation destinations, as well as schools, bike shops, and train stops. The most recent update was issued in 2018 and is available in both print and digital form.

In 2013, the Santa Fe MPO invested in six passive infrared pedestrian/bicycle 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 bicycling and to improving conditions for those who choose to walk and ride bikes.

EXISTING BIKE NETWORK

Santa Fe's bike network is a combination of on-street facilities—including designated bike lanes, striped shoulders, and lanes shared with motor vehicle traffic—and off-street 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.



BICYCLE FRIENDLY COMMUNITY

Santa Fe has been a Silver-level Bicycle Friendly Community since 2013. In 2017, the League of American Bicyclists gave key steps to the City of Santa Fe to attain Gold-level status. The BMP sets the goal of Gold-level status by 2024.

OFF STREET

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 trails encompass approximately 28 miles of paved urban trails and 11 miles of unpaved urban trails, not including minor paved trails within subdivisions and parks, nor other soft-surface recreational trails.

These multi-use trails can be thought of as core pieces of the region's "arterial bikeways." They typically

2019 BICYCLE MASTER PLAN VISION

Santa Fe is a place where people of all ages and abilities can safely and comfortably have bicycle and pedestrian access along a comprehensive network of multi-use trails and complete streets, connecting residential neighborhoods with employment centers, parks, open space, schools, retail centers, and other public and private services throughout the metropolitan area.

MYTH: Bicyclists don't follow the rules of the road.

FACT: One of the most common arguments against providing bicycle infrastructure is that cyclists break the law all the time. The *Journal of Transport and Land Use* conducted a study to understand how often cyclists are breaking the law and what informs cyclist behavior. Drivers often see certain kinds of law-breaking as acceptable behavior, e.g., speeding, passing in a bike lane, etc., because it is viewed as "not that bad" or that there is a perfectly acceptable reason for doing it—however, this same nuance and flexibility is not afforded to cyclists.

The study found that when cyclists knowingly disobey traffic laws, more than 70 percent of the time, it is because they feel it is necessary to stay safe. Meanwhile, when drivers knowingly disobey traffic laws, 77 percent of the time, it is to save time. The study found that drivers and cyclists break traffic laws at similar rates—8 to 9 percent for drivers and 7 to 8 percent for cyclists.

follow alignments that are independent of streets, such as waterways, arroyos, and active or abandoned rail lines. This minimizes conflicts with motor vehicles, increases recreational value, and maximizes the extent to which the transportation alignment complements the existing street system. Together with existing and planned street 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.

ON STREET

On-street bicycle facilities include 190 miles of shared lanes and 108 miles of bicycle lanes on streets with speed limits from 25 miles per hour to greater than 40 miles per hour. Since the 2012 BMP there has

been a greater acknowledgement that the majority of the population does not feel comfortable riding in bike lanes at the edge of a busy street, but would feel safe in a protected bicycle lane. The BMP identifies the goal of 10 miles of buffered bike lanes and 1 mile of a separated bikeway by 2024.

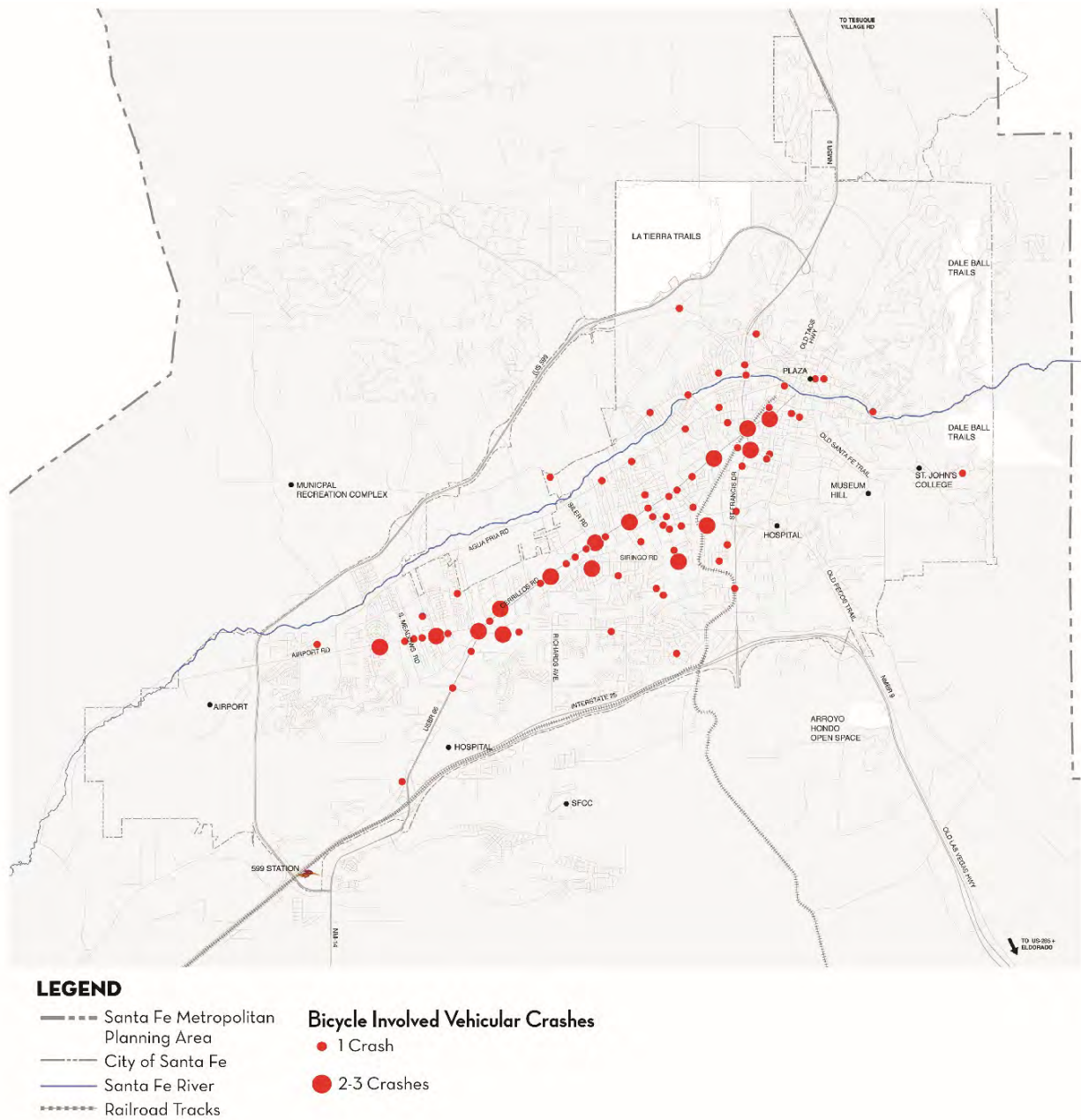
CRASH HISTORY

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. Since March 2015, the Santa Fe Police Department has adjusted field data collection methods on crashes to facilitate the analysis of those occurring with bicycles. In 2018, the City of Santa Fe Police Department, Crime Analysis Division conducted its first analysis of bicycle crashes documented over a 3-year time frame (March 1, 2015, to February 28, 2018). Locations of bicycle-related crashes occurred predominantly at intersections and on principal arterials, including Cerrillos Road, Airport Road, St. Francis Drive, and St. Michaels Drive (Figure 4-4).

"RIDING MY BIKE, I ALMOST GOT HIT BY A CAMPER TRAILER ON ST. FRANCIS, AND NOW TRY TO AVOID THAT STREET."

STREET STORY

FIGURE 4-4. BICYCLE CRASH PATTERNS



Note: Priority network alignments illustrated are diagrammatic and for planning purposes only. Actual alignments may be adjusted according to available easements property acquisition, and other planning considerations.



Produced for the Santa Fe MPO
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BIKEWAY SYSTEM IMPROVEMENTS

The 2019 BMP reflects a shift in emphasis toward a vision for a bicycle network that serves all ages and abilities. To achieve this, the BMP outlines 8 policy recommendations and 12 implementation steps to develop a complete bicycle network that is integrated, effective, and improves on existing bicycle facilities.

SANTA FE MPO 2019 BICYCLE MASTER PLAN

Key Policy Recommendations



Implementation Steps

- 1 Complete critical network connections for bicyclists and pedestrians
- 2 Include bicycle facility upgrades as part of roadway retrofits
- 3 Improve bicycle signage and wayfinding on trails and roads
- 4 Implement “Complete Streets” policies for all roadway construction and maintenance
- 5 Support higher-density, mixed-use development
- 6 Adopt Engineering Guidelines for bicycle facility planning, design, construction, and maintenance
- 7 Coordinate bikeway facility planning efforts
- 8 Improve and expand bicycle parking
- 9 Target investments in new infrastructure that maximizes cost-effectiveness toward a better bikeway system
- 10 Gather data to support and guide bicycle planning
- 11 Support proactive maintenance of on-road and off-road facilities while minimizing impact to users
- 12 Research, consider, promote, and implement best design practices

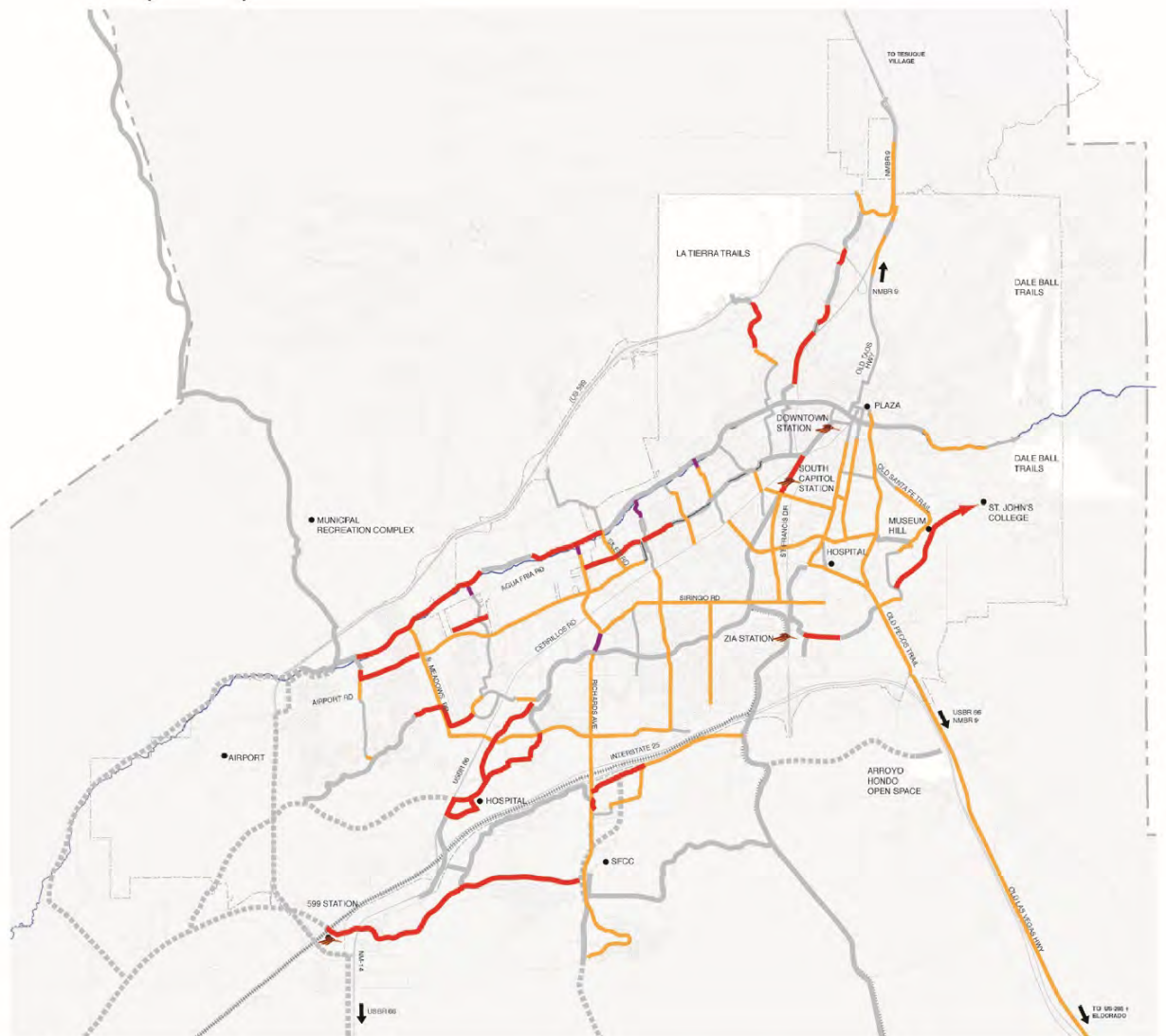
To complete the bicycle network, a series of major concerns and gaps must be improved and/or completed. Figure 4-5 illustrates disconnected segments of bicycle infrastructure that affect the current bicycle network. Additionally, the 2019 BMP lists approximately 150 proposed on-street and off-street bicycle projects prioritized by demand, connectivity, safety, feasibility, and access and divided into three phases of development. An interactive map of the BMP projects is available online at <https://bike.santafempo.org/#>.

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 or shared lane arrows, 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-street crossings to help local governments prioritize improvements to at-grade crossings and potential locations for grade-separated crossings.

“MY FAVORITE STREETS IN SANTA FE ARE THE ONES TERMED “BIKE FRIENDLY.” THEY HAVE THE SHARROWS AND A SIDE BIKE LANE. I LIVE ON DON GASPAR AVE AND TO ME, THIS IS A LOVELY STREET. IT IS ONLY MISSING CURB CUTS THAT WOULD SUPPORT THE LARGE BEAUTIFUL TREES. I FEEL SAD TO SEE ALL THAT STORMWATER RESOURCE FLOWING AWAY.”

STREET STORY

FIGURE 4-5. BIKE NETWORK GAPS + CONCERNS



LEGEND

- Santa Fe Metropolitan Planning Area
- City of Santa Fe
- Santa Fe River
- Railroad Tracks

Urban Trails Bicycle Network

- Network Gaps, Trails
- Existing Trail
- Existing Trail Route, On Road
- Trail Planning Corridor (Long Term Plans)

On Road Bicycle Network

- Network Gaps, Urban Trail/On Road/Connector
- Network Concerns, ≥ 30 MPH or $\geq 6,000$ AADT
- Existing Primary Network Connections

Note: Priority network alignments illustrated are diagrammatic and for planning purposes only. Actual alignments may be adjusted according to available easements property acquisition, and other planning considerations.



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ON-STREET IMPROVEMENTS

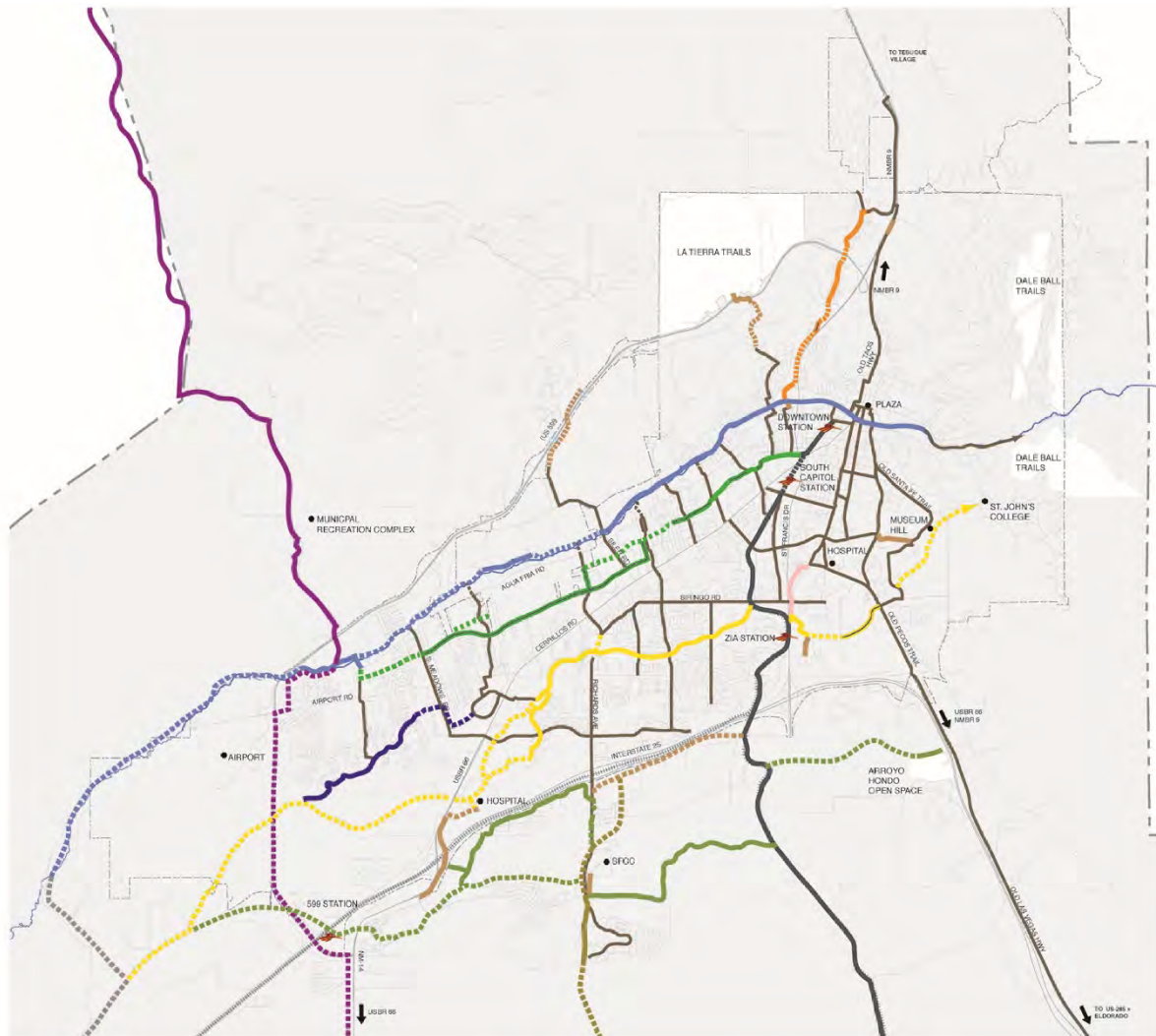
Future construction or reconstruction of MPO-area streets classified at the collector or arterial level should include appropriately paved shoulders or bicycle lanes (preferably buffered or protected) where feasible. Many MPO-area streets classified as arterials or major collectors have no paved shoulder or have narrow shoulders that do not meet AASHTO minimums as bicycle facilities. In some cases, a retrofit is possible simply through restriping or repaving the street. In most cases, a retrofit to create sufficient space for bicyclists would require widening the street. Figure 4-6 depicts the Vision 2040 Bicycle Network.

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 4-6. VISION 2040 BICYCLE NETWORK



LEGEND

- Santa Fe Metropolitan Planning Area
- City of Santa Fe
- Santa Fe River
- Railroad Tracks

Trails Key

- Existing Trail
- Existing Trail Route, On Road
- Planned Trail

- Connector Trail
- Acequia Trail
- Arroyo Chamiso Trail
- Arroyo Hondo Trail
- Cañada Rincon Trail
- El Camino Real Trail / Rio Grade Trail
- Santa Fe Rail Trail
- Santa Fe River Trail
- St. Francis Trail
- Tierra Contenta Trails

Trail Planning Corridors (Long Term Plans)

- ATSF Regional Trail
- NM Central Regional Trail
- Bonanza Creek/Madrid Spur/NM14
- Rio Grande Trail

On Road Bicycle Network

- Primary Network Connections
- Primary Network Connections, Proposed

Note: Priority network alignments illustrated are diagrammatic and for planning purposes only. Actual alignments may be adjusted according to available easements property acquisition, and other planning considerations.



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PEDESTRIAN SYSTEM

Having a walkable community is not only desirable, but also essential to many Santa Fe area residents. Communities with safe and connected walking routes support physical health, safety, and access to transit stops. Walkability is especially important for populations that are not able to drive, such as children, older adults, and low-income individuals without access to a vehicle.

In 2015 the MPO adopted the first Pedestrian Master Plan, which included an assessment of sidewalks, intersections, and urban trails; recommendations for infrastructure improvements and policies; and design standards. In 2016, the MPO commissioned a Bus Stop and Sidewalk Connectivity Assessment to identify steps that could be taken to improve bus stops and pathways to improve transit access. These documents, along with a City of Santa Fe Transition Public Right-of-Way Update, informed the 2019 Pedestrian Improvement Project, which prioritized pedestrian improvements and included cost estimates of each type of identified improvement.



EXISTING PEDESTRIAN SYSTEM

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 improvements by individual landowners or developers and somewhat more comprehensive improvements through public street projects, the only consistent aspect of the pedestrian circulation system throughout the area is its inconsistency.

SIDEWALKS

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

“I LOVE LIVING IN SOUTH CAPITOL, ESPECIALLY BECAUSE THE NEIGHBORHOOD IS SO WALKABLE. TAKING WALKS AFTER DINNER WITH THE DOG, MY DAUGHTER COLLECTING SNAILS AND MY SON PRACTICING RIDING HIS SKATEBOARD. WALKING TO THE FARMERS MARKET OR TO SEE MUSIC AT THE RAILYARD. THESE ARE THE THINGS THAT MAKE LIVING IN SANTA FE SPECIAL.”

STREET STORY

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 streets 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.

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.

The sidewalk inventory provides a database of the existing pedestrian network, documenting existing sidewalks on both sides of the street, one side of the street, and missing sidewalks. The inventory includes off-street paved urban trail segments, as summarized in Table 4-2. The sidewalk inventory (Figure 4-7) reveals where there are gaps within the network that impair connectivity and may impact the public’s willingness to walk. Nearly 170 miles of gaps in the sidewalk and urban trail network have been identified. The need for sidewalks is greatest in areas with higher population density; sidewalks are not necessarily needed in the more rural areas with lower population density.

TABLE 4-2. SIDEWALK AND TRAIL INVENTORY

	Miles
Sidewalks on at least One Side	348
Major Urban Trails	62
Minor Urban Trails	45
Total	455

PEDESTRIAN SYSTEM IMPROVEMENTS

It is fair to state that member agencies, through the development of street projects and requisite pedestrian facilities for new developments, have produced better pedestrian facilities overall in the last decade, but as the Pedestrian Master Plan revealed, the gaps and needs in the metro area are enormous.

The 2019 Pedestrian Improvement Project sought to prioritize the pedestrian projects identified in previous planning efforts. Potential improvements at bus stops, curb ramps, sidewalks, and intersections were evaluated based on proximity to youth and older adults, schools, population density, low-income population, and transit stops. From this evaluation, several maps of priority pedestrian improvements were generated. As shown on Figure 4-8, the Pedestrian Improvement Project identified 40 miles of highest priority sidewalk improvements and 29 miles of next highest priority sidewalk improvements within the city of Santa Fe.

The evaluation criteria developed for the Pedestrian Improvement Project should be used to evaluate and prioritize future pedestrian projects within the MPO area for funding and implementation. Through this process, the MPO desires that the benefits of investing in and improving all areas of the pedestrian system are 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.



FIGURE 4-7. SIDEWALK GAPS

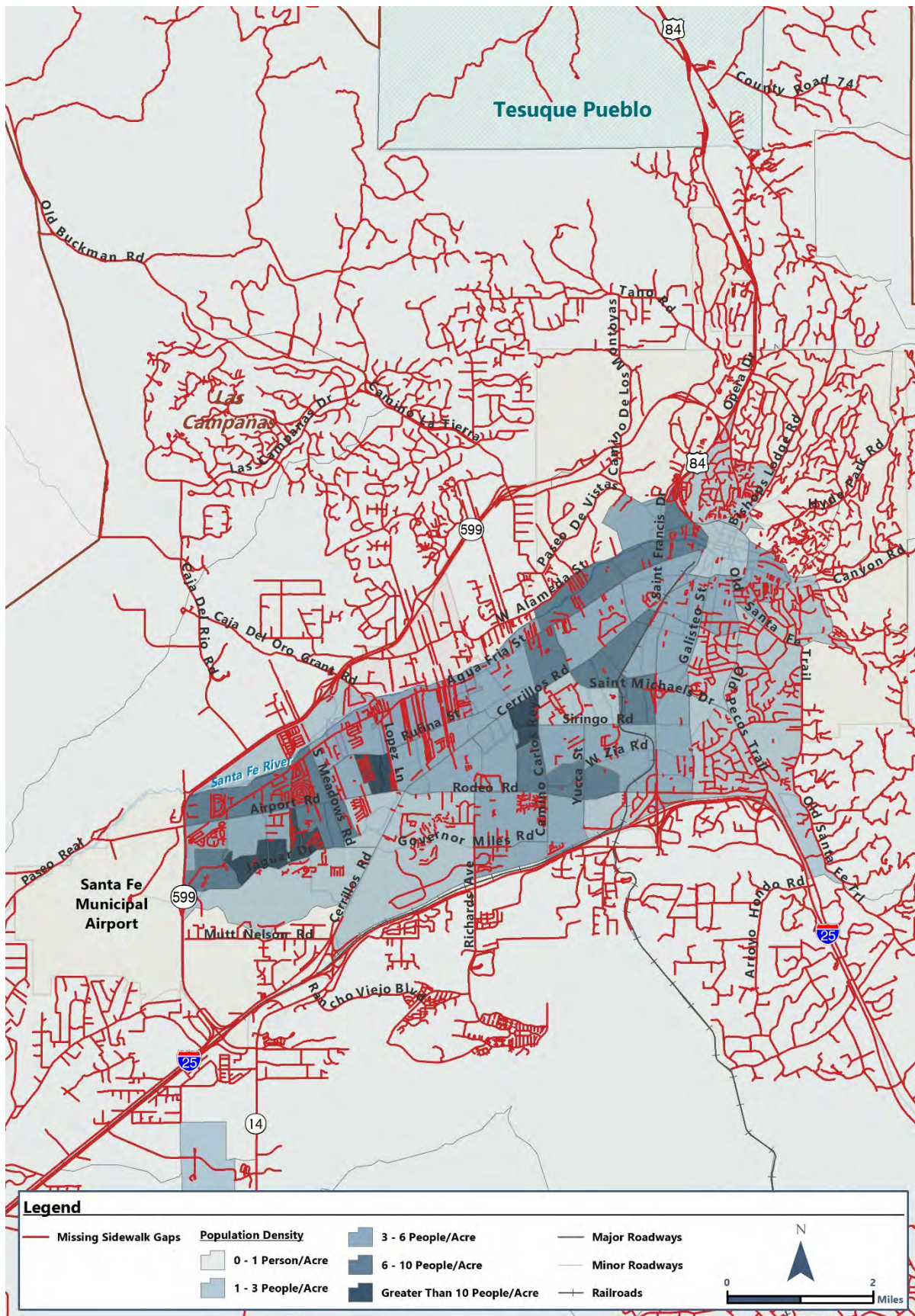
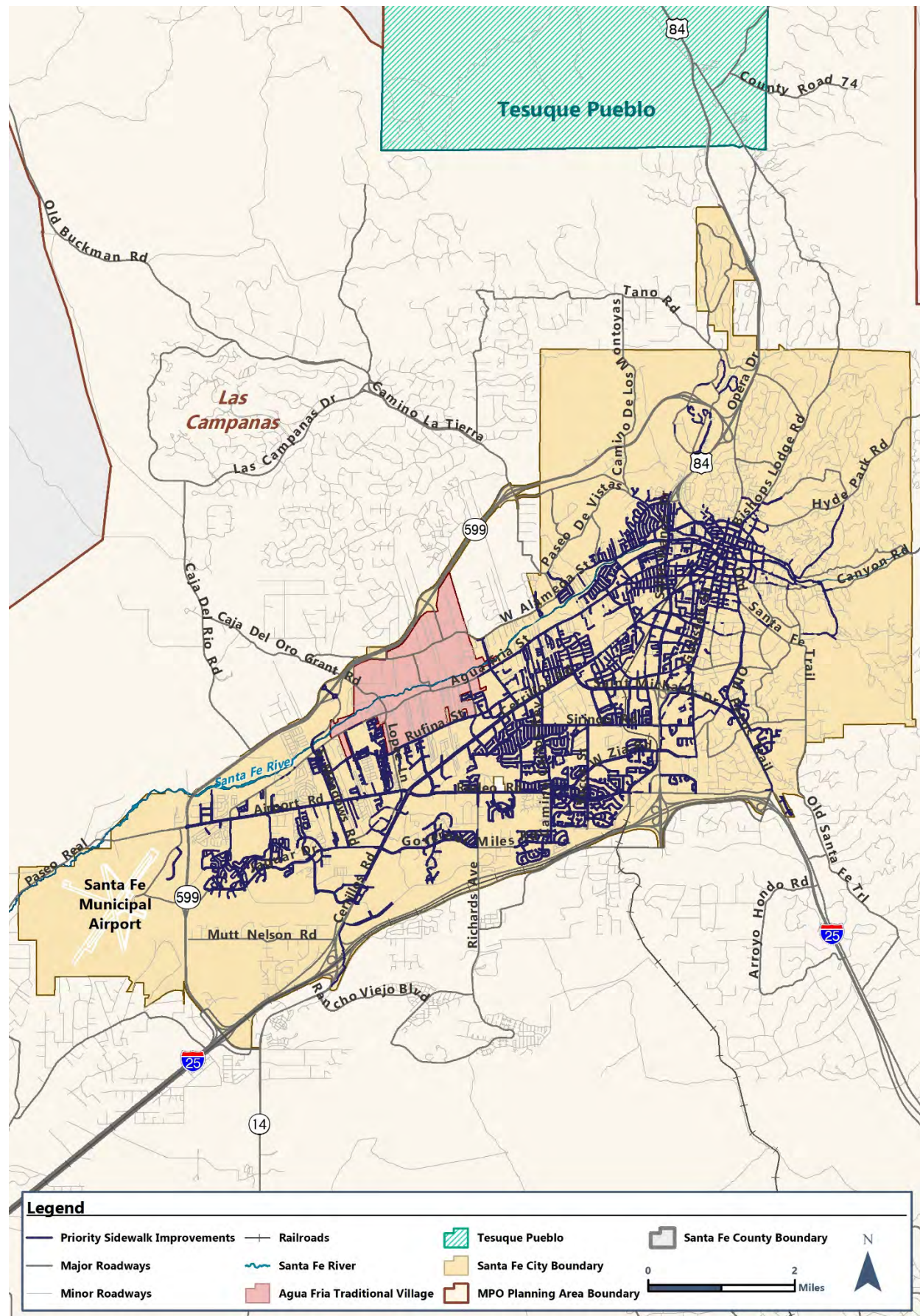


FIGURE 4-8. SIDEWALK IMPROVEMENTS

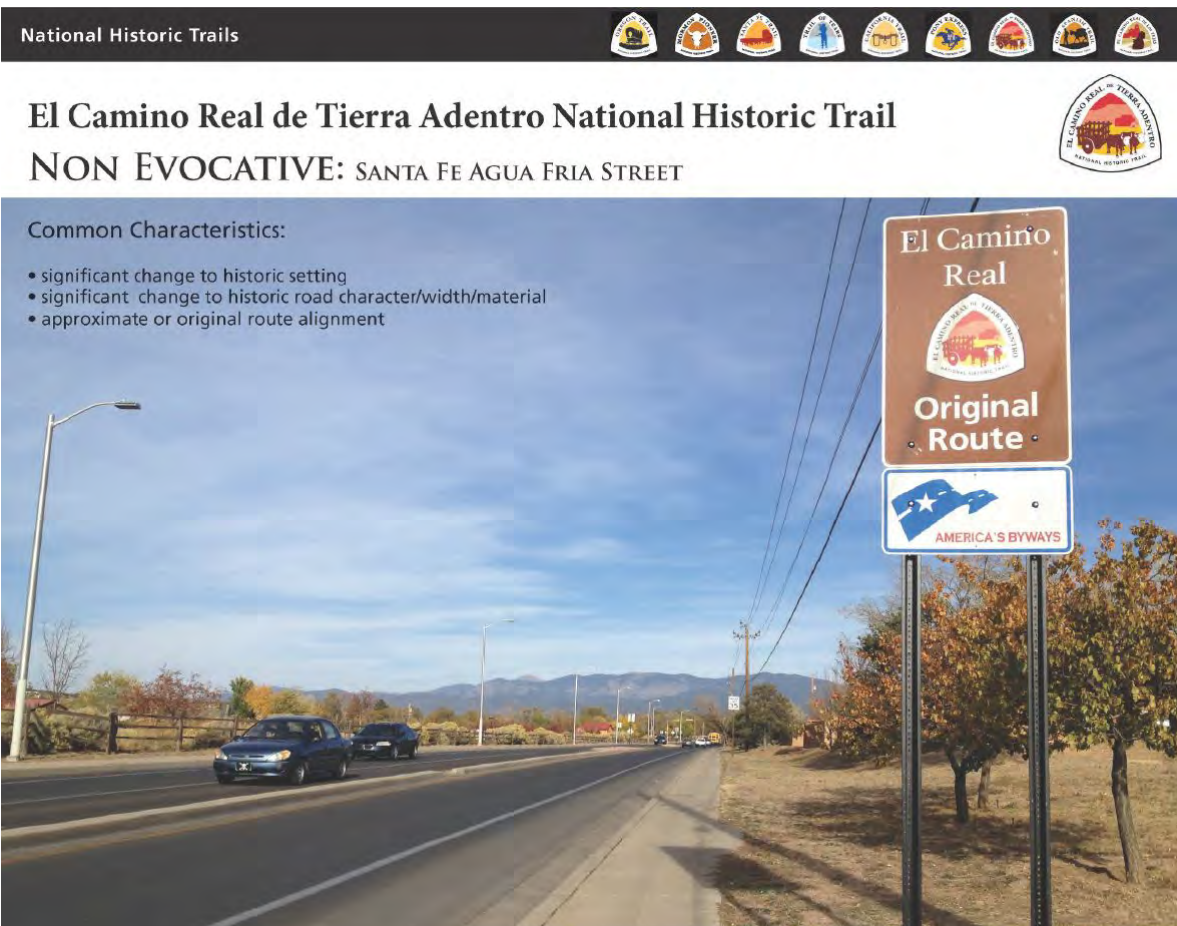


NATIONAL TRAIL SYSTEM

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 4-9 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/).
- **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/).



National Historic Trails



El Camino Real de Tierra Adentro National Historic Trail

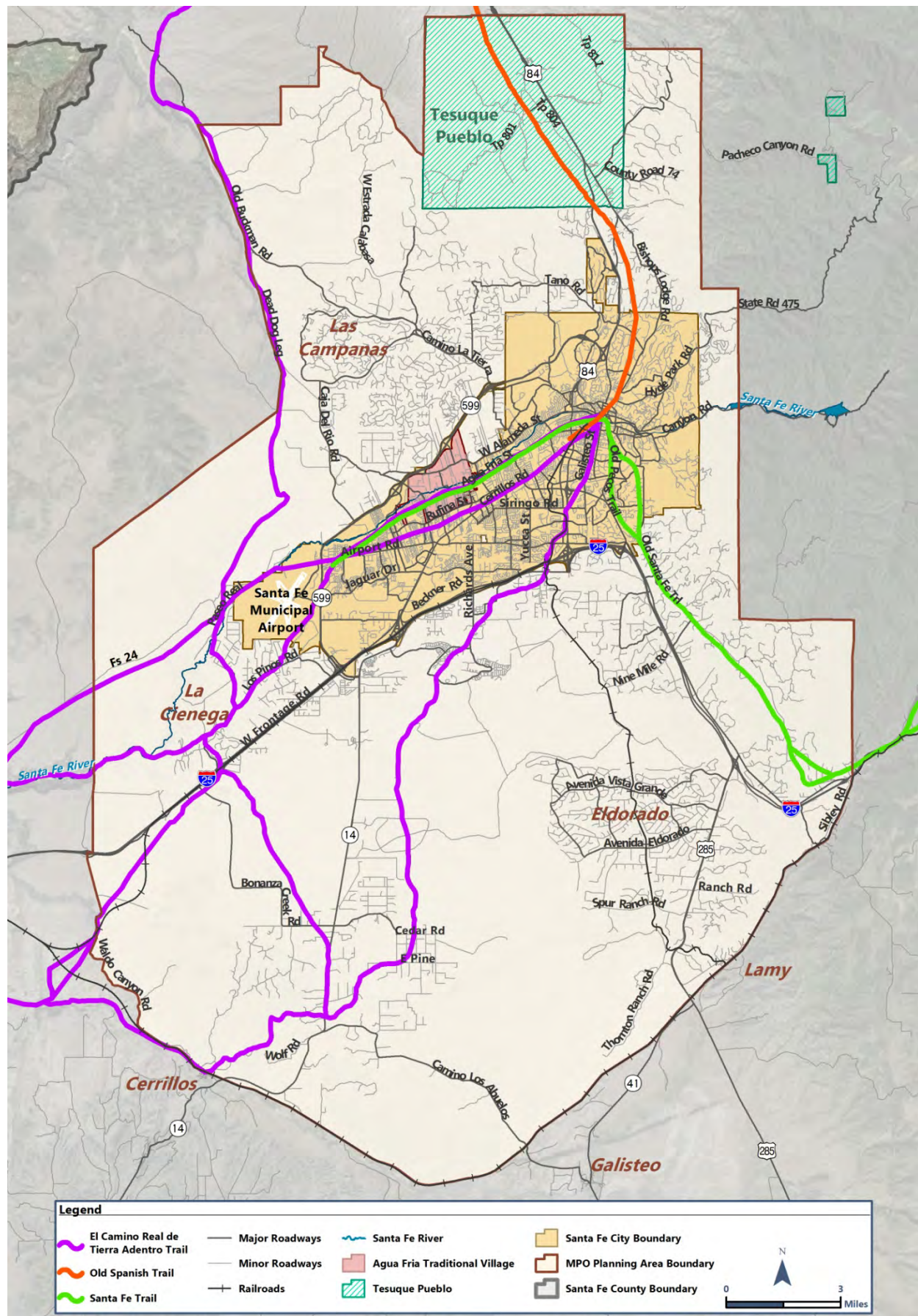
NON EVOCATIVE: SANTA FE AGUA FRIA STREET



Common Characteristics:

- significant change to historic setting
- significant change to historic road character/width/material
- approximate or original route alignment

FIGURE 4-9. NATIONAL HISTORIC TRAILS



GREATER SANTA FE RECREATION PARTNERSHIP

The Greater Santa Fe Recreation Partnership (GSFRP) Trails Working group has been working since mid-2018 across local, state, and federal government agencies, Tribes, user-groups, and recreation-oriented non-profits to identify, prioritize, and implement priority trail projects meeting the following objectives:

- Connect existing trail networks and communities
- Spread trail use across the landscape to reduce user conflict
- Provide a wide range of high-quality motorized and non-motorized trail opportunities
- Address increasing demand for trail-based recreation opportunities
- Provide physical, mental, and economic benefits to communities through high-quality recreation opportunities and increased tourism
- Ensure the protection of natural and cultural resources through the appropriate design and location of trails, as well as addressing demand to discourage unauthorized trail building
- Minimize future trail maintenance needs through sustainable trail design and collaboration across land management agencies and user groups



In addition to ongoing collaboration across these stakeholder groups, the GSFRP has hosted two community workshops to solicit input about trails planning from the broader community and to distill the vast demand for new trail priorities into a smaller number of priority projects. Approximately 75 members of the public attended each community workshop to vote and provide input on projects that should be considered by the land management agencies, with dozens more providing input online.

The geographic scope of the collaborative includes Santa Fe and the surrounding area, the Caja del Rio, the Los Alamos area and the Jemez Mountains, and the Galisteo area. In general, the geographic subareas are defined as:

- **Santa Fe:** within and directly surrounding the city of Santa Fe, including the southwestern slopes of the Sangre de Cristo Mountains generally to the east of the city.
- **Caja del Rio:** the Caja del Rio Plateau to the west of Santa Fe and south of the Rio Grande.
- **Los Alamos area and the Jemez Mountains:** the eastern portion of the Jemez Mountains in Los Alamos County and the northeastern portion of Sandoval County.
- **Galisteo:** the southern foothills of the Sangre de Cristo Mountains near the communities of Eldorado, Lamy, and Galisteo.

Project categories include new trail construction, trailhead enhancement and construction, trail maintenance, and trail signage improvements. Implementation of priority projects is expected to occur over a -5 to 10-year timeframe starting in 2020, and project priorities are expected to be announced in the first half of 2020. No project implementation will occur absent specific project authorization in accordance with the authorities and regulatory obligations for any given land management agency (e.g., NEPA for federal agencies).



STREET SYSTEM

An effective street network is vital to the well-being of the region, allowing people and goods to move safely and efficiently throughout. The MPO is committed to making streets work for everyone. While most often associated with vehicular traffic, streets are intended to provide mobility for all—drivers, bicyclists, pedestrians, and transit riders are all street users. Due to the varying and sometimes conflicting needs of different modes, many of Santa Fe’s streets are more suited to certain types of travel than other; surrounding land use context also influences the characteristics of a given street. The preferred network of streets for vehicular movement is not identical to those for active transportation or transit routing.

The federal government maintains regulations for classifying streets based on the level of vehicular mobility and access they provide. Functional Classification is a method the MPO uses for doing so and can be used to dictate design, usage, and land use requirements and regulations. Figure 4-10 shows Functional Classifications defined by the level of mobility versus access that a street provides, 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

Streets with higher Functional Classifications (e.g., Interstates and Arterials) are generally less comfortable for bicyclists and pedestrians due to the high motor vehicle speeds and volumes. They can be served by implementing dedicated and separated active facilities along these busier streets, or by ensuring Collectors and Local Streets are designed to prioritize safe, convenient, and comfortable active travel. Enhancing person mobility, not vehicular mobility, is the overarching emphasis of transportation planning, and balances are necessary to ensure every person’s needs are met.

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 street network that was considered critical to the nation’s economy, defense, and mobility. 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 (FHWA) 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 4-11 shows the NHS routes in our region.

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.

With the exception of Local and Rural Minor Collectors, all other Functionally Classified streets are eligible to receive federal funds and are deemed as “Regionally Significant.”

FIGURE 4-10. STREET FUNCTIONAL CLASSIFICATIONS

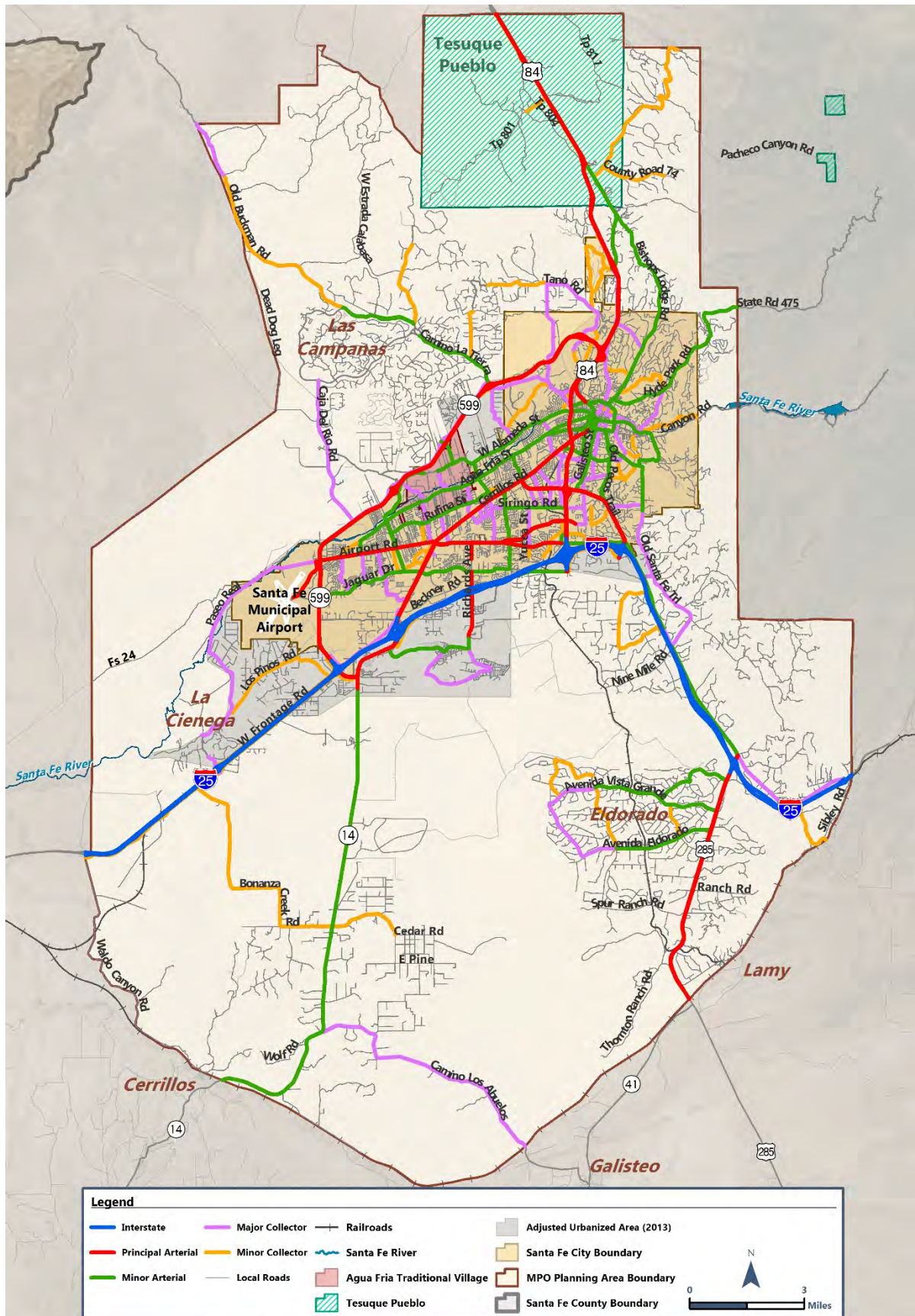
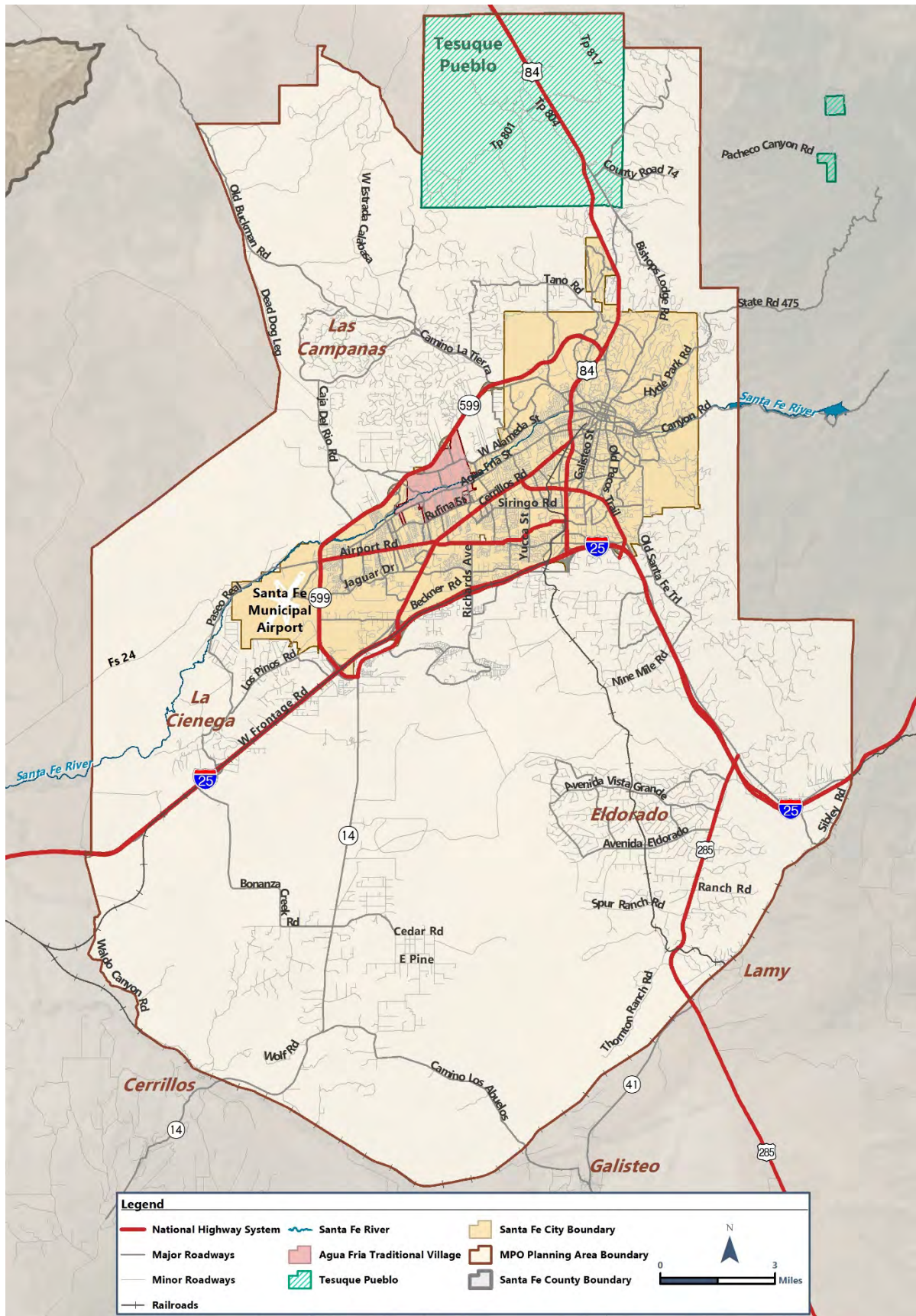


FIGURE 4-11. NATIONAL HIGHWAY SYSTEM (NHS)



CURRENT TRAFFIC VOLUMES AND CONGESTION

The MPO uses traffic count data collected and maintained by the NMDOT. There are 17 permanent count locations in Santa Fe County, and most are located within the MPO area. These counters are able to take daily traffic volumes. The NMDOT can collect counts in up to 619 other locations each year, though annual average daily traffic (AADT) counts at these locations are less accurate because data is not collected continuously throughout the year.

These counts provide a snapshot of traffic volumes and characteristics on the streets within Santa Fe. Figure 4-12 shows average weekday traffic volumes on major area streets. While 64,000 vehicles are carried by Highway 84/285 near the NM 599 exit, the average number of vehicles on Santa Fe area streets is much lower: between 9,000 and 10,000 vehicles per day. Counts vary widely depending on the street. Many local streets have counts less than 100 vehicles per



day, but counts exceed 55,000 vehicles per day on Cerrillos Road, 45,000 vehicles per day on St. Francis Drive, 35,000 vehicles per day on Airport Road and St. Michaels Drive, and counts exceeded 30,000 vehicles per day on Rodeo Road in 2018. These data provide the basis to develop growth trends.

MYTH: Roadways should be designed to accommodate rush hour traffic.

FACT: Many cities design roads and intersections efficiently during the peak hour, the most congested hour of the day. This approach means that for the other 23 hours of the day, the road or intersection is overdesigned. Additionally, the operational analyses that determine intersection and roadway design are based on traffic volumes projected 20+ years into the future—meaning that roads and intersections are overdesigned for all existing use. Overdesigned roadways encourage higher speeds and decrease the appeal for alternative modes such as bicycling and walking. These facilities are likely to function poorly for the surrounding community because building roads for greater peak hour capacity attracts heavier traffic volumes thereby disrupting local communities, promoting sprawl, and requiring additional spending on infrastructure.

FIGURE 4-12. 2018 DAILY TRAFFIC COUNTS

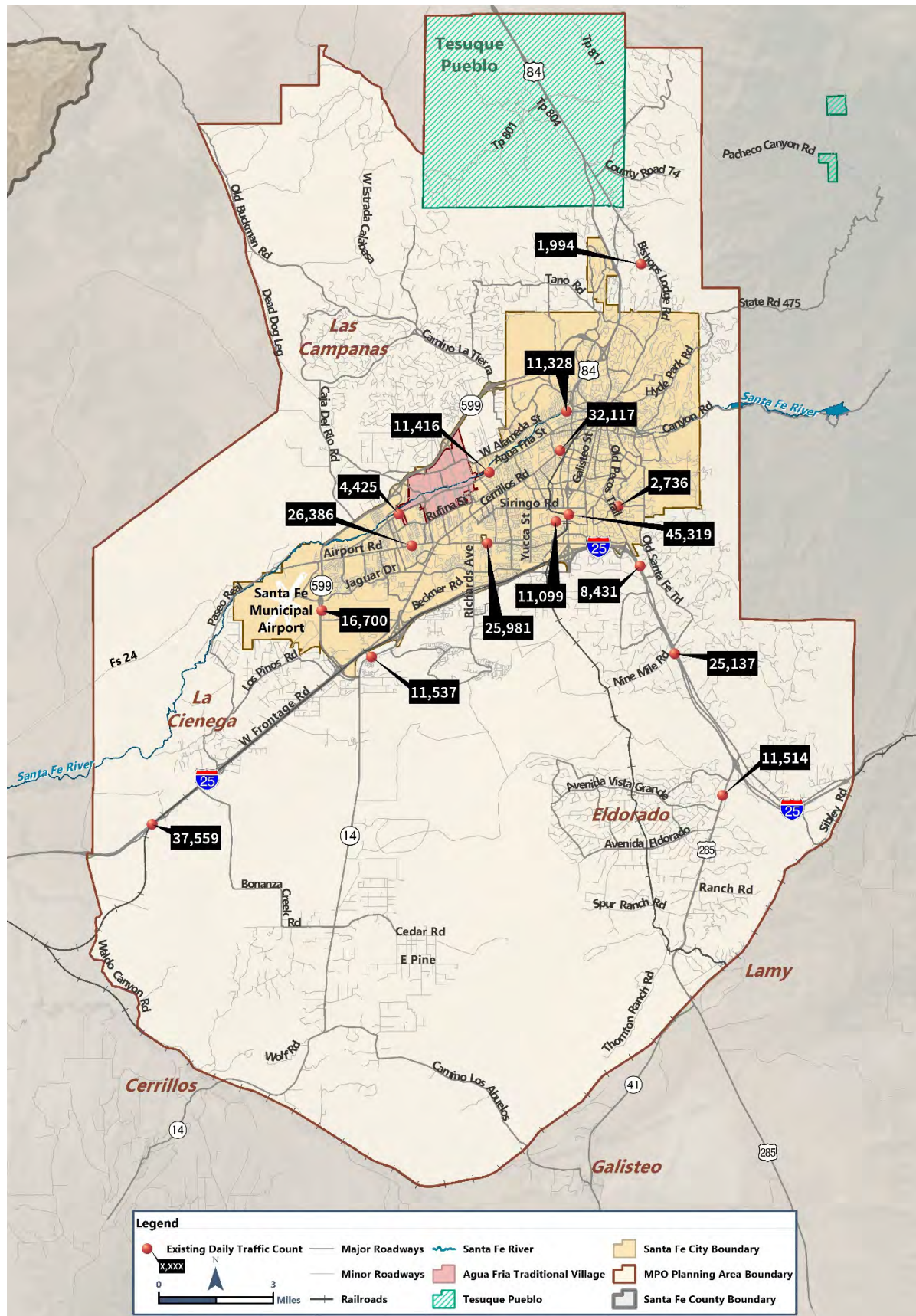
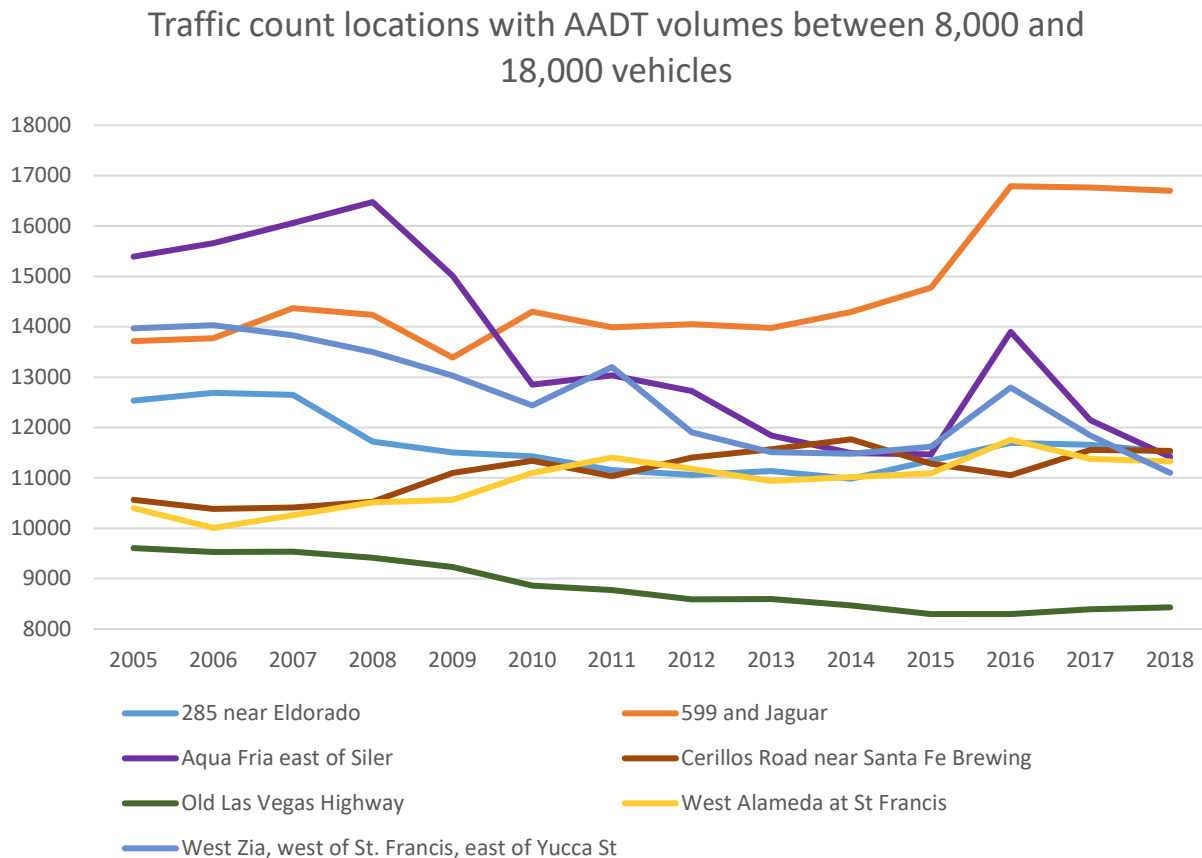


Figure 4-13 shows long-term trends at the seven permanent traffic count locations with 2018 AADT volumes between 8,000 and 18,000 in Santa Fe. Long-term trends vary and are roadway dependent, as detailed in Table 4-3. Agua Fria east of Siler shows a sudden decrease in 2008, and continues to decline slowly through 2018. Meanwhile traffic on west Alameda has increased slowly simultaneously, perhaps carrying the traffic once handled by Agua Fria and showing the utility of the roundabout completed in 2011 at Siler and Alameda. In contrast, traffic at 599 and Jaguar Road increased suddenly in 2016 and was sustained through 2018, likely reflecting the increased population density on the south side and, consequently, a higher average traffic volume expected in this area.

FIGURE 4-13. HISTORIC DAILY TRAFFIC COUNTS (CHANGE TO AGUA FRIA EAST OF SILER BELOW)



The congestion experienced on Santa Fe's streets 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.

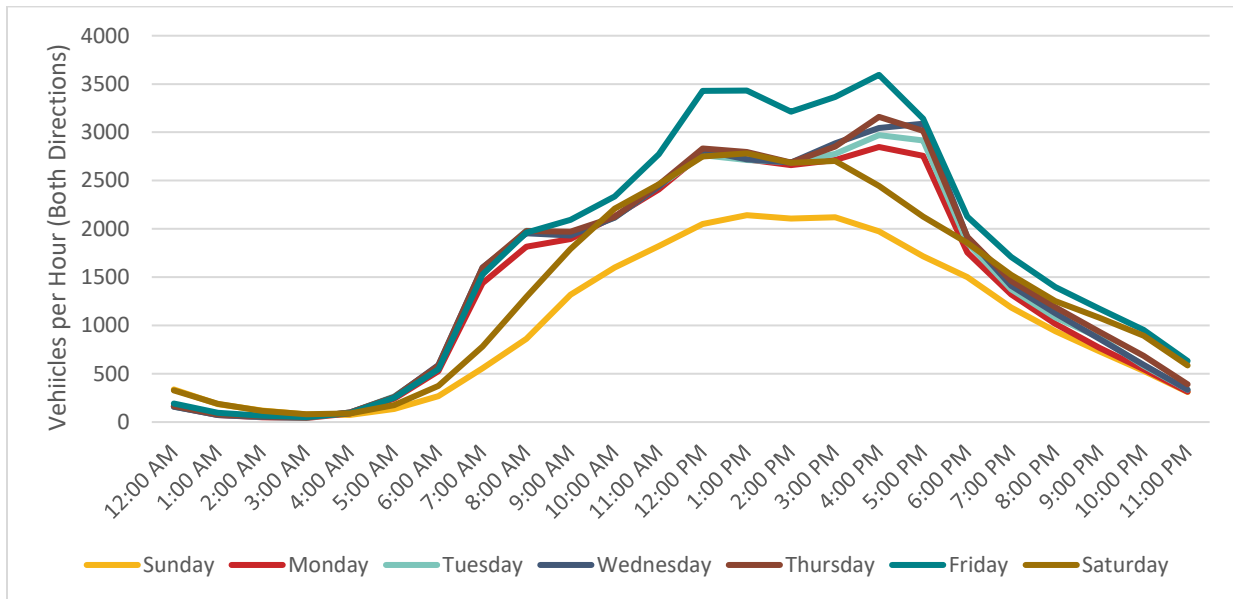
The peak periods where congestion is most noticeable in Santa Fe are relatively short, approximately 30-minute ranges starting around 7:30 AM and 5:00 PM. However, traffic peaks at different times on different streets. Generally, rush hour peaks at 4:30 PM on Cerrillos near Alta Vista (see Figure 4-14). Daily traffic patterns are influenced by the land use surrounding the point of interest. This section on Cerrillos appears to have three peaks, one starting at 7:00 AM and ending by 9:00 AM, another around lunch, and a final starting at ~3:30 PM, peaking at 4:30 PM, and ending at ~5:30 PM. The rush hour peaks reflect movement of the workforce, the lunch hour's movement, or access to evening entertainment.

TABLE 4-3. HISTORIC DALY TRAFFIC COUNTS AND CHANGE OVER TIME

Name	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2005- 2009	2010- 2014	2015- 2018	2005- 2014	2010- 2018
US 285 north of Avenida Vista Grande	12,536	12,689	12,648	11,722	11,506	11,426	11,156	11,062	11,135	10,983	11,344	11,698	11,656	11,514	-2.12%	-0.98%	0.50%	-1.46%	0.10%
NM 599 between I-25 and Airport Road	13,714	13,775	14,373	14,236	13,389	14,299	13,988	14,055	13,978	14,294	14,777	16,791	16,765	16,700	-0.60%	-0.01%	4.16%	0.46%	1.96%
Agua Fria between Camino de Los Lopez and Jemez Road	5,164	5,085	5,553	5,678	4,608	5,191	3,257	4,711	3,961	3,781	3,888	4,395	NA	4,425	-2.81%	-7.62%	4.41%	-3.40%	-1.98%
Airport Road between Zepol Road and Jemez Road	28,369	28,928	28,646	27,476	28,238	27,451	22,426	27,520	27,192	25,989	26,291	26,572	26,655	26,386	-0.12%	-1.36%	0.12%	-0.97%	-0.49%
Agua Fria east of Siler Road	15,393	15,660	16,063	16,477	15,009	12,849	13,033	12,724	11,843	11,492	11,469	13,897	12,144	11,416	-0.63%	-2.75%	-0.15%	-3.20%	-1.47%
Bishops Lodge Road north of Camino Encantado	2,959	2,960	2,799	2,618	2,483	2,517	2,500	2,391	2,272	2,351	2,062	1,946	1,964	1,994	-4.29%	-1.69%	-1.11%	-2.52%	-2.87%
Cerrillos Road north of Alta Vista	NA	NA	NA	31,019	31,975	32,489	28,903	30,819	31,760	32,053	32,149	27,467	30,473	32,117		-0.34%	-0.03%		-0.14%
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	11,281	11,052	11,554	11,537	1.25%	0.92%	0.75%	1.21%	0.21%
East Zia Rd east of Calle de Sebastian	2,841	2,691	2,604	2,591	2,590	2,507	2,430	2,441	2,384	2,449	2,433	2,515	2,642	2,736	-2.29%	-0.58%	3.99%	-1.64%	1.10%
I-25 south of US 285 Lamy Interchange	25,337	25,387	24,784	23,065	23,637	23,589	22,604	22,401	22,628	23,262	24,032	25,041	25,218	25,137	-1.72%	-0.35%	1.51%	-0.94%	0.80%

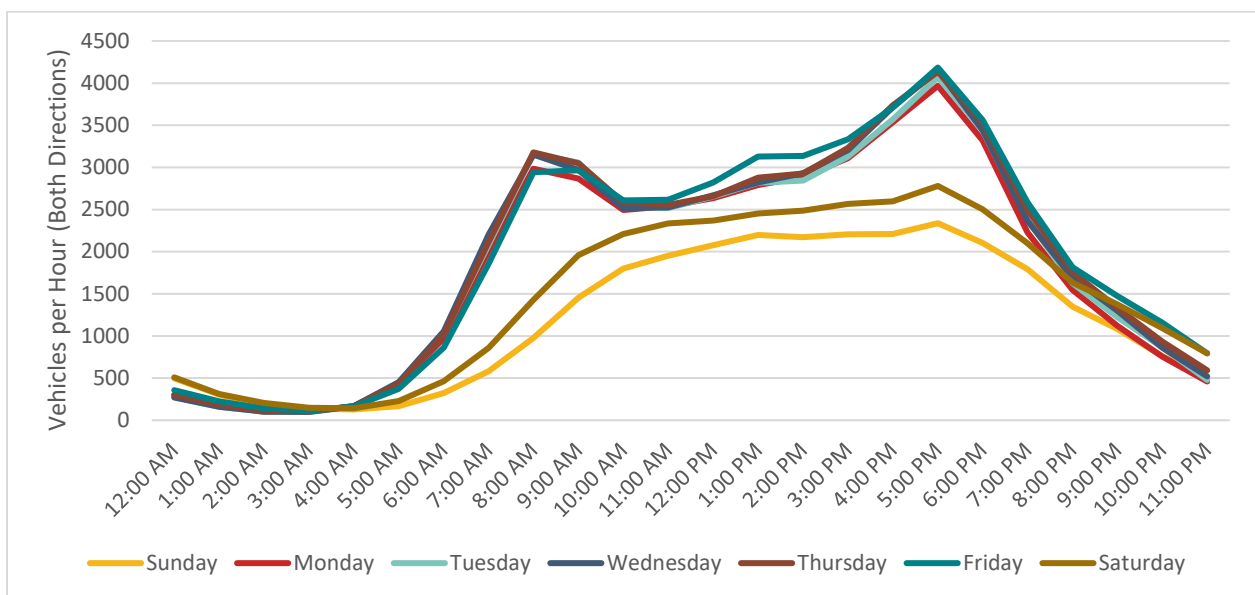
Name	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2005- 2009	2010- 2014	2015- 2018	2005- 2014	2010- 2018
I-25 southwest of NM 587 La Cienega Interchange	36,116	35,694	36,650	37,612	33,448	34,533	33,187	33,315	33,761	34,342	35,780	37,799	35,250	37,559	-1.90%	-0.14%	1.63%	-0.56%	1.06%
Old Las Vegas Highway between Sunset Spirits and Arroyo Hondo Road	9,606	9,529	9,534	9,416	9,233	8,864	8,772	8,588	8,593	8,465	8,299	8,296	8,394	8,431	-0.99%	-1.14%	0.53%	-1.40%	-0.62%
Rodeo Road east of Richards Avenue	31,175	30,976	27,680	29,984	28,748	27,898	29,004	28,306	26,752	26,616	26,831	26,402	26,19	25,981	-2.01%	-1.17%	-1.07%	-1.74%	-0.89%
St Francis Drive between Alta Vista and Cordova	42,288	43,633	44,260	38,630	41,934	41,833	42,162	40,415	41,085	41,939	NA	NA	NA	NA	-0.21%	0.06%		-0.09%	
St Francis Drive between Zia Road and Siringo Road	41,572	45,429	46,604	46,632	47,488	45,784	45,212	43,507	43,714	43,799	44,703	46,231	45,684	45,319	3.38%	-1.10%	0.46%	0.58%	-0.13%
West Alameda between Solano Street and St Francis Drive	10,402	10,007	10,258	10,512	10,564	11,095	11,404	11,183	10,941	11,013	11,090	11,757	11,376	11,328	0.39%	-0.19%	0.71%	0.64%	0.26%
Zia Road between Galisteo and Vo Tech Road	13,971	14,031	13,828	13,498	13,027	12,436	13,199	11,907	11,513	11,482	11,616	12,794	11,842	11,099	-1.73%	-1.98%	-1.51%	-2.16%	-1.41%

FIGURE 4-14. CERRILLOS ROAD TRAFFIC VOLUMES (AT ALTA VISTA STREET)



A different and much more regular traffic pattern can be seen on St Francis Drive near Zia Road where there are two regular peaks at 8:30 AM and 5:30 PM (see Figure 4-15). Closer examination of this pattern shows a strong directional element to the traffic pattern on this street, with many more people traveling in the northbound direction in the morning and becoming southbound in the evening. Much of the weekly traffic on this street is attributed to commuters who are using I-25 to work in the Santa Fe metropolitan area. This reflects more dispersed commercial locations in this area as compared with Cerrillos at Alta Vista Street.

FIGURE 4-15. ST. FRANCIS DRIVE TRAFFIC VOLUMES (NEAR ZIA ROAD)



CRASH HISTORY

Between 2010 and 2018, the MPO found that 69 percent of all crashes in the SFMPA occurred within 30 meters (~100 ft) of an identified intersection.² However, the distribution of crashes is uneven; crashes have occurred at only 37 percent of SFMPA intersections, and most of these intersections experience crash rates of less than 1 crash per year. It is expected that intersections carrying larger traffic volumes will experience a higher frequency of crashes due to the increased number of interactions that occur there. This is true of the 21 intersections in Santa Fe that averaged more than 20 crashes per year over this time period.³ Because our transportation network is designed to funnel traffic into these high crash frequency locations, they deserve focused attention to improve safety. Intersection crash locations and counts are shown on Figure 4-16.

Over this 9-year period, there were 150 fatal crashes of which 70 (47 percent) occurred within the intersection zone. Most of the fatal crashes at intersections (45 crashes) were alcohol/drug use related, and more than one-third (41 percent) of fatal intersection crashes involved a pedestrian (28 crashes) or a cyclist (1 crash). The intersections with fatal crashes are shown on Figure 4-17.

There have been 9,065 injurious crashes in Santa Fe, with most (75 percent) occurring within the intersection zone. The leading factor identified in the cause of these crashes is “following too closely,” followed by “failing to yield a right-of-way.” The 14,239 crashes classified as “Property Damage only Crashes” are similarly far more likely to occur within the intersection zone (75 percent), and the leading three causes are following too closely, failing to yield the right-of-way, and driver inattention. The factors related to fatal crashes at all locations are shown on Figure 4-18, and the factors related to injury and property damage only crashes at intersections are shown on Figure 4-19 and Figure 4-20, respectively.

In the SFMPA, pedestrians and cyclists are clearly most vulnerable at intersections with 90 percent of the 630 pedestrian/cyclist crashes (343 pedestrian crashes and 292 bicyclist crashes) occurring at intersections. This differs from national statistics where only 18 percent of pedestrian fatalities occurred at an intersection.⁴ In the SFMPA, 92 percent of intersection crashes involving a pedestrian and 76 percent involving a bicyclist were fatal or injurious. Because New Mexico was identified by NHTSA in 2019 as the state having the highest rate of pedestrian traffic deaths in the United States, intersections with more than one pedestrian or bicyclist crash deserve considerable scrutiny. Bicycle and pedestrian involved crashes at intersections are shown on Figure 4-21.

“I CANNOT COMMENT ON THE PHRASE ‘GLORIOUS CARS’; I AM TOO ABASHED BY THE POOR DRIVING HABITS OF TOO MANY DRIVERS.” - Survey Respondent



² These data do not include pedestrian/cyclist collisions with the Rail Runner.

³ In the past, Santa Fe MPO staff have normalized these numbers into crash rates by dividing the number of crashes at an intersection by AADT. This method allows an understanding of the probability of a crash incident relative to the volume of traffic carried by the intersection. However, raw crash frequency retains valuable information about which intersections harm the most people, so this analysis does not consider baseline traffic volumes.

⁴ 2017 Traffic Safety Fact. NHTSA. <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812681>

FIGURE 4-16. ANNUAL AVERAGE INTERSECTION CRASH COUNTS (2010-2018)

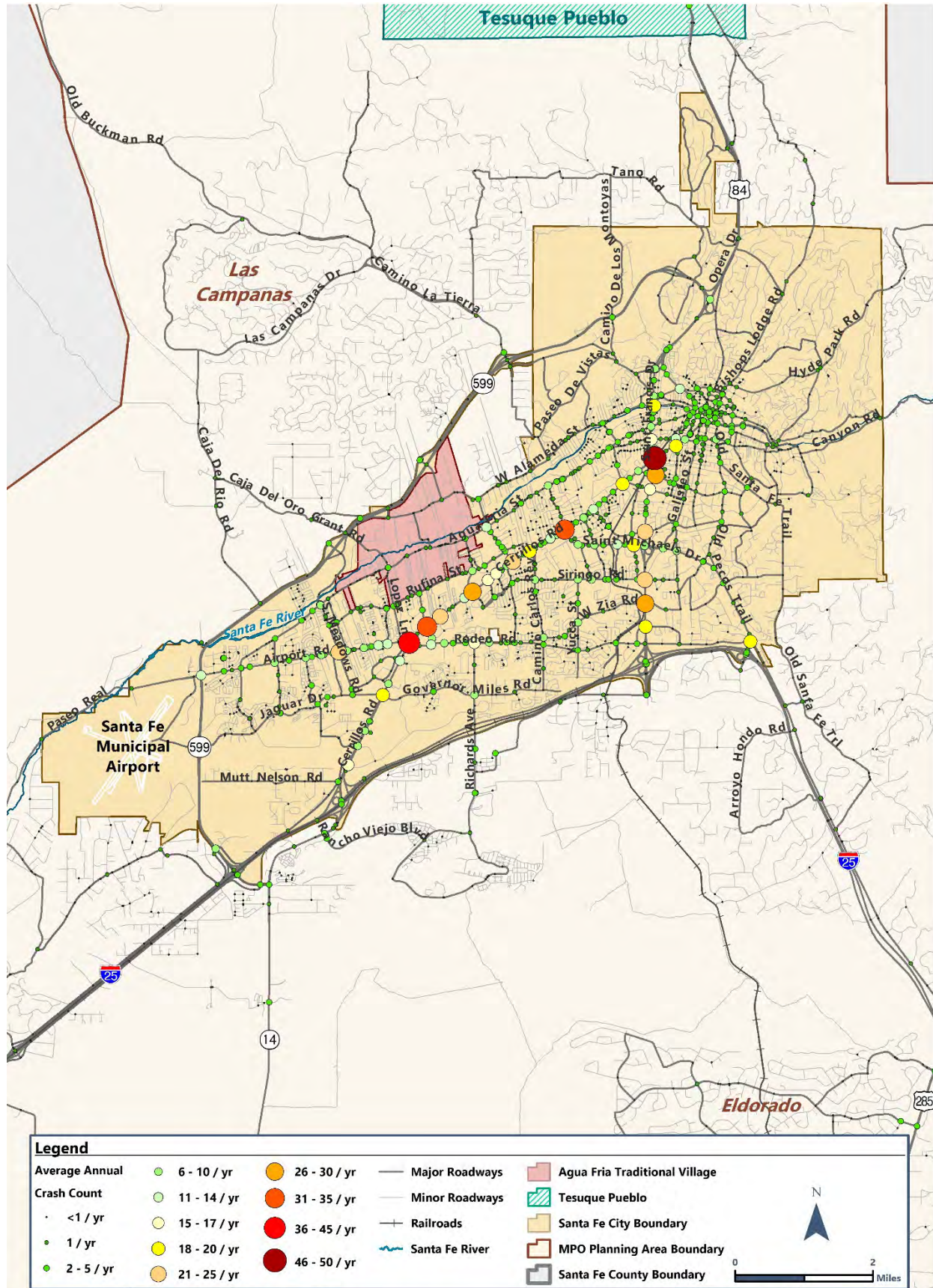


FIGURE 4-17. FATAL CRASH LOCATIONS (2010-2018)

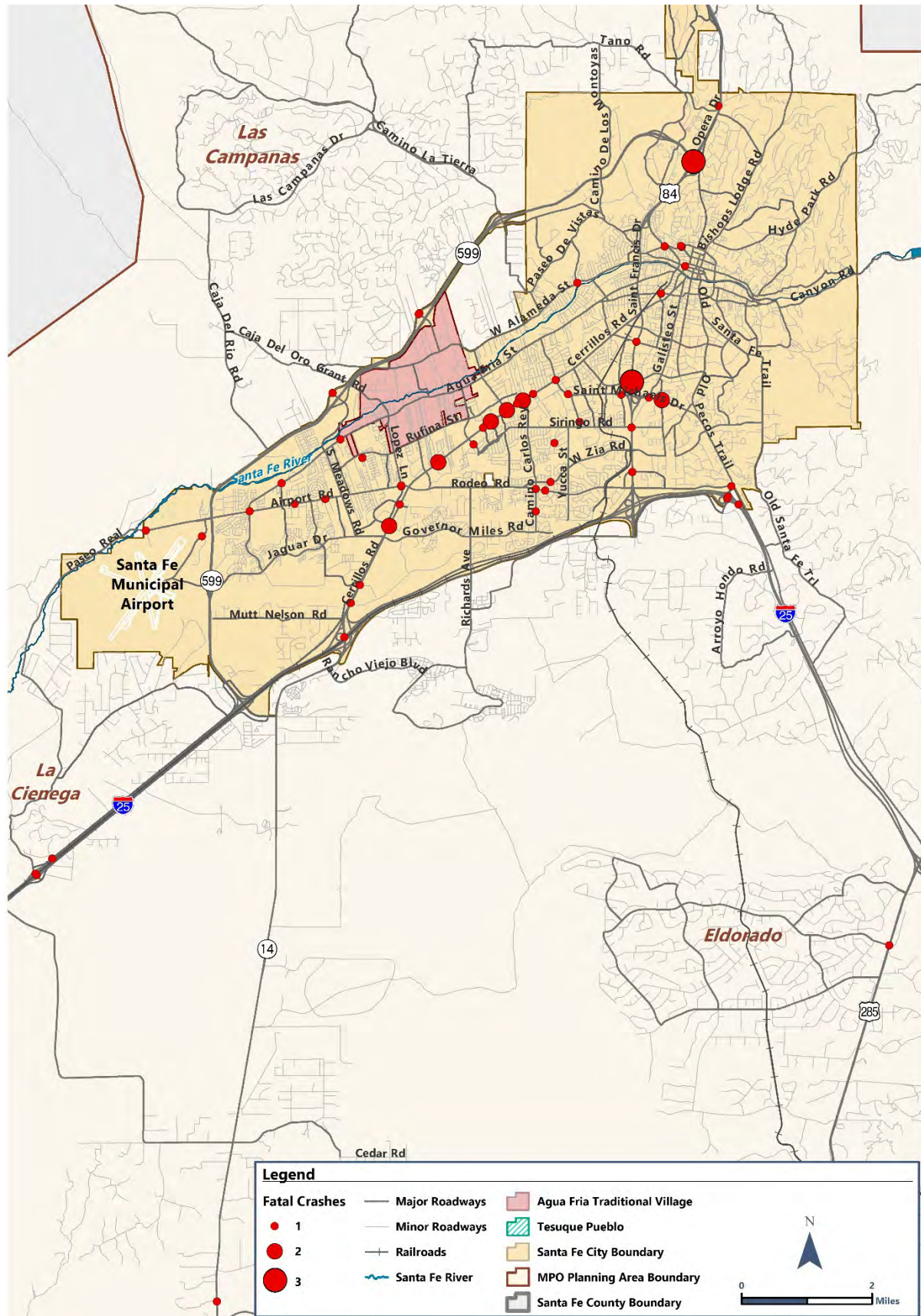


FIGURE 4-18. FACTORS RELATED TO FATAL CRASHES

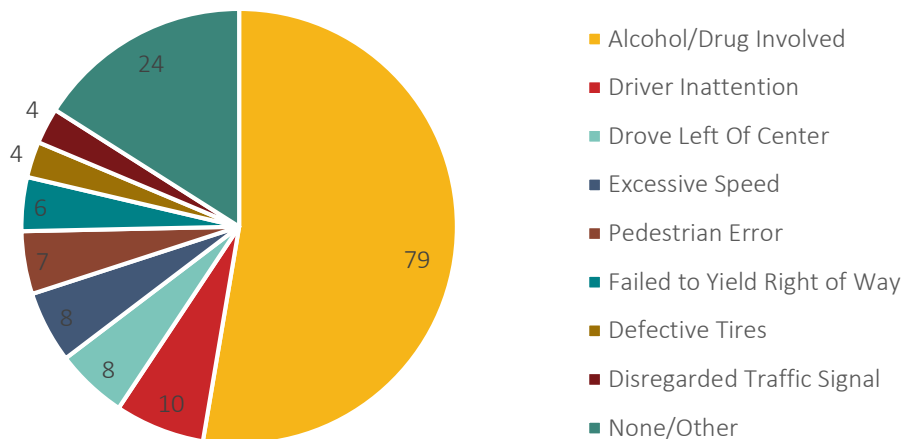


FIGURE 4-19. FACTORS RELATED TO INJURY CRASHES AT INTERSECTIONS

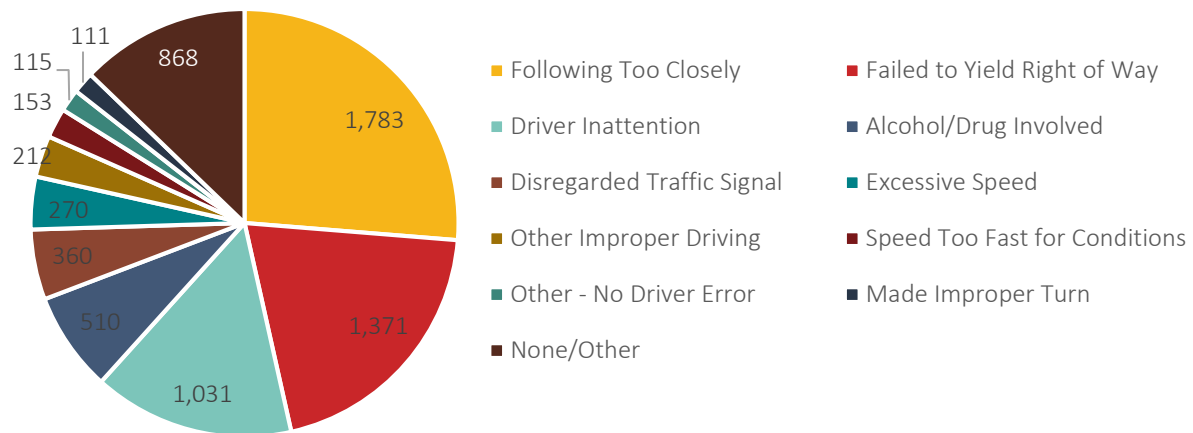


FIGURE 4-20. FACTORS RELATED TO PROPERTY DAMAGE ONLY CRASHES AT INTERSECTIONS

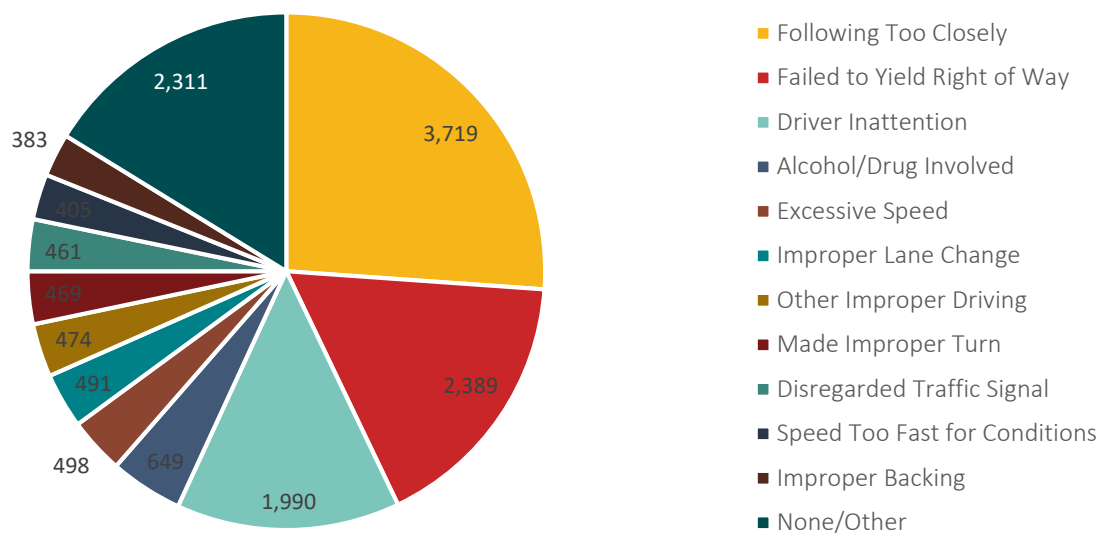
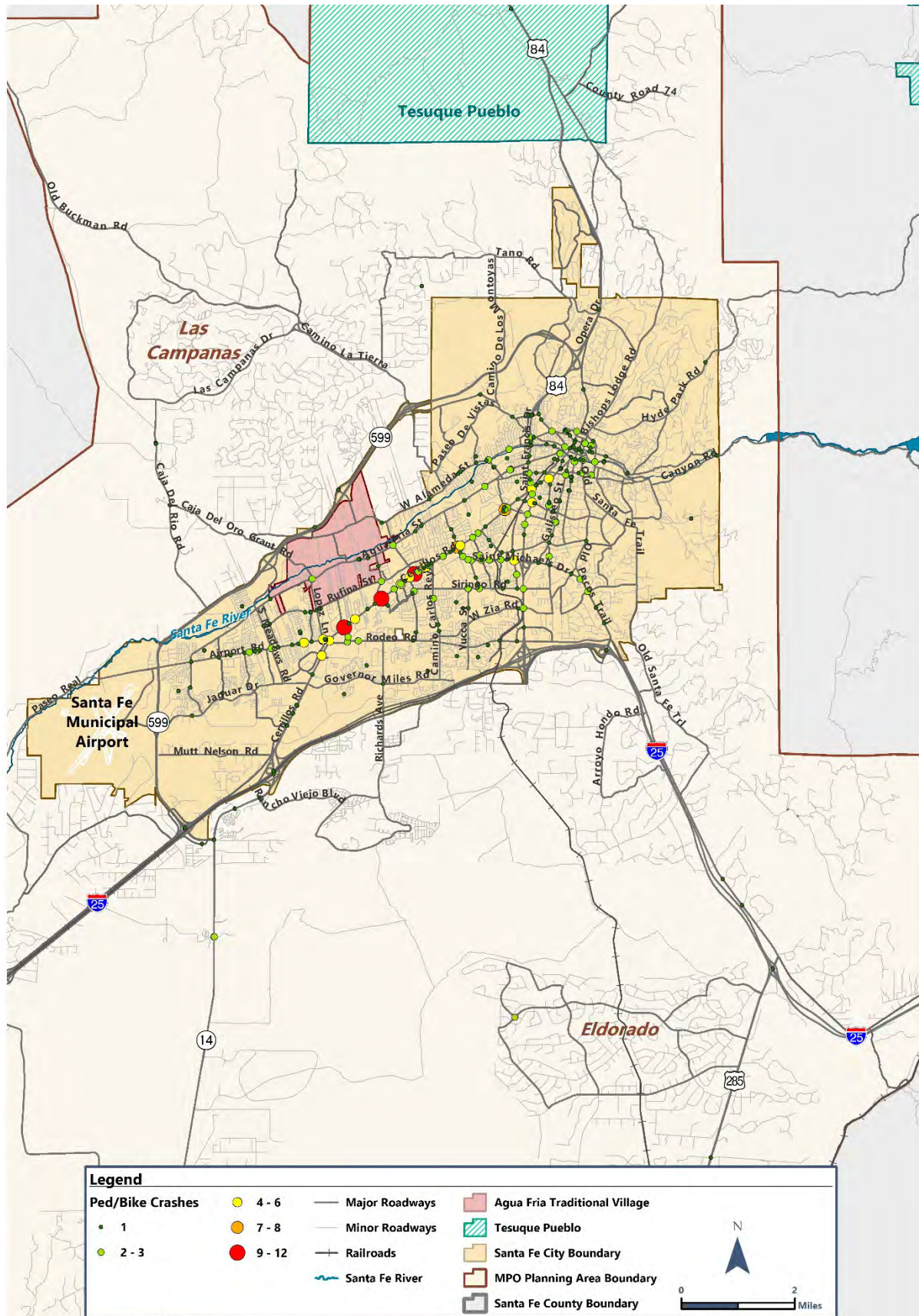


FIGURE 4-21. INTERSECTION CRASHES INVOLVING BICYCLISTS AND PEDESTRIANS (2010-2018)



CORRIDOR STUDIES AND FUTURE STREET 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 in 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

Additional detailed studies include:

- Santa Fe County Sustainable Land Development Plan
- White Paper on Possible Richards Avenue Extension and Arroyo Chamiso Crossing
- Richards Avenue Interchange on I-25
- St. Michaels Drive (Re-Mike)

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.

MYTH: Roads should assume that drivers will exceed legal limits and, therefore, should be designed to accommodate travel speeds and traffic volumes of at least 25 percent over expectations.

FACT: The design of the road itself shapes the behaviors of users—if a road is designed to accommodate higher speeds, drivers will use it as such.



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, 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. 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. The study did result in the now I-25/NM 14 diverging diamond intersection as a means to provide additional capacity and safety to the corridor.

NM 599 INTERCHANGE PRIORITY PLAN AND THE SUBSEQUENT 2018 UPDATE

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 Waste Isolation Pilot Project 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. The bypass was originally designed as a limited access facility with 12 access points intended 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 Ridgeway 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.

The NMDOT wanted to re-study and re-prioritize preferred improvements along the corridor in the 2018 update due to the following:

- There has been a significant reduction in projected traffic demand and development growth in the Santa Fe MPO regional model compared to what was projected in the original 2010 study.
- Since the last study several significant crashes, including two fatal crashes, have occurred at the Via Veteranos intersection.
- Since the 2010 study there have been significant advances in the assessment of safety. Specifically, the 2010 Highway Safety Manual has provided a predictive method to determine

expected numbers of crashes based on traffic demands and lane geometry. Additionally, the impact of a particular road improvement on predicted crashes for a given facility can be determined through the use of crash modification/crash reduction factors.

- Some improvements have been made along the corridor since the original study, including the construction of a new interchange at Jaguar Road and Meadows Road (CR 62) and in 2019 the completion of interim safety improvements at Via Veteranos (CR 70) limiting turning and crossing options.

Table 28 NM 599 Priority Matrix

Focus Area	I-25 Frontage Road		Airport Road		Caja Del Rio		Via Veteranos (CR 70)		Ephraim Road		Camino de Los Montañas	
	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments	Score	Comments
Traffic Operations (10 Possible)	6	Traffic Operations will slightly improve over "No-Build".	6	Traffic Operations will slightly improve over "No-Build".	6	Traffic Operations will slightly improve over "No-Build".	8	Traffic Operations will improve failing minor street left-turn movements to acceptable operating levels.	6	Traffic Operations will slightly improve over "No-Build".	8	Traffic Operations will improve failing minor street left-turn movements to acceptable operating levels.
Safety Benefit (Crash Reduction) (15 Possible)	3	Predicted crashes from 2025 to 2040 will be reduced slightly.	8	Crashes will be more significantly reduced with this alternative. Some of the potential crash savings are offset by predicted crash rates for the new ramp terminal intersections.	0	There are little to no crashes now or under "No-Build" and this option would provide little if any crash reduction.	8	Crashes will be most significantly reduced with this alternative compared to the other locations.	0	Little, if any, crash reduction expected due to very low demands.	6	More modest crash reductions than Airport or Via Veteranos but significantly more than West Frontage Road.
Connectivity (10 Possible)	6	This option will maintain connectivity with slightly out of way routing compared to the current intersection.	10	This alternative will maintain connectivity with the added convenience of on-off ramps.	6	While connectivity would be improved over today's conditions; there are few adjacent developments to connect to.	10	This alternative will maintain connectivity with the added convenience of on-off ramps.	4	While connectivity would be improved over today's conditions; there are few adjacent developments to connect to.	10	This alternative will maintain connectivity with the added convenience of on-off ramps.
Right-of-Way (15 Possible)	15	No new Right-of-Way Required.	15	No new Right-of-Way Required.	3	Approximately 31 Acres of new Right-of-Way is required.	15	No new Right-of-Way Required.	15	No new Right-of-Way Required.	9	Approximately 7 acres of new Right-of-Way required.
Construction Impacts (10 Possible)	8	Minimal utility and environmental impacts.	4	Utility and environmental impacts anticipated	4	Utility and environmental impacts anticipated	4	Utility and environmental impacts anticipated	8	Minimal utility and environmental impacts.	6	Minimal utility impacts with some environmental impacts.
Construction Cost (15 Possible)	12	\$6,430,000	3	\$11,640,000	6	\$8,130,000	9	\$7,650,000	9	\$8,000,000	6	\$10,220,000
Safety Benefit/Construction Cost Ratio (25 Possible)	5	Crash reduction benefit to cost ratio is 1.30	10	Crash reduction benefit to cost ratio is 2.52	0	NA	20	Crash reduction benefit to cost ratio is 15.49	0	NA	15	Crash reduction benefit to cost ratio is 7.73
Total	55		56		25		74		42		60	

SANTA FE COUNTY SUSTAINABLE LAND DEVELOPMENT PLANS

In 2015 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 Transportation Element of the SGMP studied in detail 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).

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

WHITE PAPER ON POSSIBLE RICHARDS AVENUE EXTENSION AND ARROYO CHAMISO CROSSING

The NMDOT completed a white paper on a possible Richards Avenue extension 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 the Richards Avenue extension from Rodeo to Cerrillos would have the largest impact on local travel patterns,

reducing traffic volumes on adjacent residential streets such as Avenida de las Campanas and Camino Carlos Rey, but only 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).

Based on the 2015 MTP's recommendations, the City embarked on a phase A, B, and C alignment study of what is now called the Arroyo Chamiso Crossing. As of January 2020, phase A has been completed pending public comment and further analysis of selected routes.

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 Niño 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 upgrade the entire length to frontage road specifications from St. Francis Drive to Richards Avenue. Santa Fe County has elected to complete this project and began design in 2018 with construction to commence in 2020.
- 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. Santa Fe County has elected to complete this project and began design in 2018 with construction to commence in 2020.
- 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.
- 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.

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.

Currently, the City is finalizing negotiations with the NMDOT to take ownership over a significant segment of St. Michaels Drive in 2020 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 possible changes to St. Michaels Drive, the Santa Fe MPO recognizes the potential for redevelopment initiatives, safety improvements, and enhancements to support walking, biking, and transit. The Santa Fe MPO will continue to monitor and support progress on the corridor where appropriate.

RE-MIKE IS...

A public/private partnership that includes the City of Santa Fe, local businesses, educational institutions, and community organizations. Extensive data collection and an urban prototyping festival conducted in 2012 set the groundwork for exploring opportunities to transform the St. Michaels Drive Corridor.

ROADWAY CONGESTION EMPHASIS AREAS

As mentioned throughout this chapter, without major improvements in a multimodal network, 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 that show the need for mobility and/or safety improvements to accommodate year 2045 traffic congestion levels and to ensure mobility for non-vehicular travel and for freight/commerce are:

- 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, which 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 Ridgetop 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.
- 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).
- Old Pecos Trail from I-25 to downtown Santa Fe.



FREIGHT

REGIONAL: Freight is vital to the SFMPA'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. 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 10 to 12 percent of the total number of vehicles on major highways in the region. I-25, which traverses the Santa Fe metro area, is the major north/south freight route through the state carrying between 3,000 and 5,000 trucks per day.⁵

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 near Carlsbad.

FREIGHT AND ECONOMIC VITALITY

Santa Fe's economic vitality and the quality of life it offers depend on the ability of manufacturers, retailers, and distributors to efficiently transport their goods throughout the region. From package carriers to pizza deliverers, many workers in freight delivery roles rely on the transportation system to carry out their day-to-day tasks. Congestion, poor maintenance, and other street issues are particularly disruptive to their way of life. Even people without a direct connection to the freight industry benefit from it every day, further highlighting the economic necessity of smooth delivery operations. The proliferation of online shopping and smartphone apps that offer door-to-door pickup and delivery of everything from groceries and restaurant meals to dry cleaning is changing the freight industry considerably. Online sales have been growing at a rate of approximately 12 percent to 15 percent for the past five years, putting a major strain on the trucking industry and leading to heightened investment in autonomous truck research and development. At the same time, anybody with a driver's license and car can now become a delivery driver for companies like Postmates and Instacart through a simple registration process. These recent and continuing developments relating to freight delivery have implications for transportation planning and are being closely monitored by the MPO.

⁵ <https://www.nmlegis.gov/handouts/TIRS%20101017%20Item%201%20B%20-%20Interstate%20Traffic%20data-map.pdf>

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 Freight 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.

The New Mexico State Rail Plan⁶ and the New Mexico Freight Plan⁷ were adopted in 2014 and 2015, respectively. Both contain more details about freight.

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 2015 *New Mexico Freight Plan* expected the I-25 corridor between Albuquerque and Santa Fe to see “significant” truck volume growth by 2035. Additionally, concerns about the levels of truck traffic on Cerrillos Road and St. Francis Drive through the urban core have previously been identified.

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 2015 New Mexico Freight Plan did not include any specific projects to improve freight in the Santa Fe region; however, the following New Mexico 2040 Transportation Plan goals and how they relate to freight offer opportunities to improve freight functionality in the SFMPA.

Goal	How Freight Impacts/ Is Impacted by these Goals
Goal 1: Operate with Transparency and Accountability	Partnership with shippers, carriers, and operators is critical to address freight needs.
Goal 2: Improve Safety for All System Users	Impacts on local communities Truck parking Truck and rail safety
Goal 3: Preserve and Maintain our Transportation Assets for the Long Term	Maintain the truck network in a condition to support access and mobility Impacts of local delivery on condition of local system
Goal 4: Provide Multimodal Access and Connectivity for Community Prosperity and Health	Support key industries Support communities (freight to eat) Support thru movements
Goal 5: Respect New Mexico’s Cultures, Environment, History and Quality of Life	Address impacts on communities – air quality, noise, quality of life issues

⁶ https://dot.state.nm.us/content/dam/nmdot/Transit_Rail/NewMexicoStateRailPlan2014.pdf

⁷ https://www.dot.state.nm.us/content/dam/nmdot/planning/NM_2040_Plan-Freight_Plan.pdf



AVIATION

The Santa Fe Regional Airport (SAF) is a small non-hub commercial service and general aviation airport that has seen substantive annual increases in commercial activity since 2010. In 2020, two commercial airlines service SAF:

- American Airlines, with destinations to Dallas/Fort Worth and Phoenix and
- United Airlines, with service to Denver.

Additionally, SAF serves general aviation and corporate business aviation tenants, as well as itinerant operators.

Passenger growth averaged 22 percent per year between 2016 and 2018 and increased from 146,126 onboards in 2016 to 230,398 in 2018, an 81.3 percent load factor. The past decade has seen considerable growth; in 2009 there were just 19,653 onboards from commercial flights.

The Terminal Building, built in 1957, offers a variety of services for the traveling public. Amenities include airline ticket counters, parking pre-pay envelopes and drop box, baggage claim, rental car counters, restrooms, vending machines, free Wifi, and airport management offices. Ground transportation includes rental car services, private shuttle services, limos, and ride share services. 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.

The SAF is supported by the Santa Fe Regional 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 commissioned the development of an Airport Master Plan, which was completed in 2017. The Master Plan is intended to provide guidance for future development and justification for projects for which the airport may receive funding through an updated capital improvement program to

demonstrate the future investment required by the City of Santa Fe, as well as the Federal Aviation Administration and NMDOT.⁸

In January 2020, the City of Santa Fe requested \$10 million from the State Legislature to expand the Santa Fe Regional Airport terminal, just part of a \$21.5 million plan to improve the terminal, parking lot, and circulation road.⁹

MAINTENANCE

SANTA FE COUNTY: Santa Fe County has maintenance responsibilities for approximately 560 miles of street, approximately one-third 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 streets, the high-volume traffic streets, and then filters down to priority two and local streets.

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

NMDOT: The SFMPA is serviced by NMDOT'S District 5. The District 5 engineer is responsible for street construction, street 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 streets within the district. Responsibilities include street 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 streets:

- Cerrillos Road – St. Francis Drive west to city limits (from St. Francis Drive to Beckner Road is slated to be transferred to the City; St. Michaels Drive to Beckner Road will be first)
- St. Michael's Drive – Cerrillos Road to Old Pecos Trail (from Cerrillos Road to St. Francis Drive is pending transfer to the City)
- St. Francis Drive – I-25 to US 285
- Paseo De Peralta – St. Francis Drive to Bishops Lodge

LIFE CYCLE COSTS

The cost of transportation infrastructure has not only a capital component, but a maintenance component over the useful life of the asset as well. Combined with the indirect costs of construction and maintenance to system users, these represent the life-cycle cost, a critical factor during the alternatives evaluation process of a transportation design project. Considering only upfront capital expenditures does not provide an accurate understanding of the full financial burden of an alternative and may lead agencies to choose one that ultimately results in a higher cost. The maintenance costs over the life of a street can be equal to or greater than the initial capital or investment.

⁸ <https://flysantafe.com/airport-master-plan/>

⁹ https://www.santafenewmexican.com/news/local_news/santa-fe-aims-high-with-capital-projects-wish-list/article_2d6f047d-56a4-5e9a-b76c-18628812915e.html

- 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

CITY OF SANTA FE: The City of Santa Fe provides street maintenance via the City Streets and Drainage Maintenance Division. The City has approximately 1,100 designated streets, with approximately 940 lane miles and 41 miles of unpaved streets.

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.

PUEBLO OF TESUQUE: The Pueblo of Tesuque currently handles street maintenance within their land; however, they have cited challenges with meeting the maintenance, cleanup, snow removal, and salting needs. A potential solution is to create a cooperative agreement with Santa Fe County for them to maintain specific streets within the Pueblo.

CHAPTER 5: TRANSPORTATION REIMAGINED: A NEW ROADMAP FOR ACTION



This chapter explores how quality of life in Santa Fe is influenced by our ability to move around the city in ways that are sustainable, offer public health benefits, and are equitable for all community members.

Dulce Melara, El Camino Real Academy; Artwork shown at City of Santa Fe Arts Commission's Community Gallery.

It is clear that both our community and our member agencies aspire to invest in a transportation network that offers Santa Fe transportation options. The goals set forth in this plan strive toward a different outcome from how our transportation system currently functions. With the desire for a different outcome in mind, transportation decisions and investments should be approached in a different way. The three topics of sustainability, public health, and social equity offer a new lens through which we explore transportation design tools to help achieve the transportation options desired by our community.



SUSTAINABILITY

“We envision a thriving community where climate impacts are neutralized, natural resources are abundant and clean, and sustainable economic activity is generated through enhancing social equity and the regenerative capacity of the environment.”¹

Transportation plays an important role in creating a sustainable Santa Fe—from reducing vehicle emissions and associated air pollution through conversion to electric vehicles and shifts to cleaner travel modes like biking, walking, and transit to minimizing environmental impacts through context sensitive design. Sustainable transportation solutions are a critical element to reversing the effects of climate change. Sustainable Santa Fe establishes a goal for the City to achieve carbon neutrality by 2040. The transportation strategies in Sustainable Santa Fe include:

Transportation



Plan for and invest in a safe, modernized transportation system that supports low-emission, active, and equitable mobility options for all users.

- A. Achieve annual reductions in daily vehicle miles traveled (DVMT).
- B. Achieve annual increases in the total miles of sidewalks, on-road bicycle lanes and multi-use paths.
- C. Increase public transit ridership annually.
- D. Increase the proportion of low and zero emissions City fleet vehicles.
- E. Increase the proportion of low and zero emissions vehicles used in the community.



PUBLIC HEALTH

Decision-making and choices in transportation policies, planning, and infrastructure can have significant impacts on public health. Transportation systems can help prevent chronic illness and protect and prolong life through informed transportation choices for all people in our community. Healthy transportation:

- Encourages reliable, safe, and cost-effective transportation options;
- Emphasizes the importance of focusing on the movement of people rather than vehicles;
- Increases active and public transportation options for all; and
- Leverages transportation to connect people to jobs, schools, parks, healthcare, family and friends, healthy food, recreation, and entertainment.



Investments are needed in active transportation modes such as biking, walking, and rolling (wheelchairs, walkers), and transit infrastructure such as buses and passenger rail.

¹ Sustainable Santa Fe 25-Year Plan, 2018.

FHWA PROVEN SAFETY COUNTERMEASURES

Safety for all users of the transportation network is a major component of transportation's contribution to public health. FHWA began promoting roadway infrastructure safety treatments and strategies aimed at reducing serious injuries and fatalities. The list of Proven Safety Countermeasures includes 20 treatments and strategies to address roadway departure, intersection, and pedestrian and bicycle crashes. More information about the initiative and the specific countermeasures can be found at <https://safety.fhwa.dot.gov/provencountermeasures/>.



SOCIAL EQUITY

Everyone needs to get from point A to point B. Everyone also deserves the opportunity to achieve their full potential regardless of where they live, how they travel, who they are, or what social position they occupy. As a part of Santa Fe's MTP development, the needs of all people are being considered, not only from an equality perspective, but also through the lens of equity. An equitable transportation network offers convenient and affordable access to jobs, medical services, education, grocery shopping, and social/recreational activities. Access results in opportunities that can often positively influence personal health and quality of life.

EQUALITY



EQUITY



EQUALITY IS WHEN EVERYONE IS TREATED THE SAME. EQUITY IS WHEN EVERYONE HAS ACCESS TO WHAT THEY NEED TO BE SUCCESSFUL.

SUSTAINABLE TRANSPORTATION DESIGN TOOLS

The Sustainable Transportation Design tools listed in this section provide a high-level assessment of best management practices focused on providing a high-quality transportation network while honoring environmental, public health, and social equity with cost-effective treatments.

COMPLETE STREETS

Complete Streets are not just roadways but public spaces 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. In 2007, the Santa Fe MPO supported the national Complete Streets movement via Resolution 2007-1, “A Resolution Advancing Complete Streets for the Santa Fe Metropolitan Planning Area.” Though our member agencies have made significant strides in enhancing the roadway network to accommodate all users, more progress is required to complete the network.

WHAT IS A COMPLETE STREET?



Complete Streets enable safe and comfortable transportation via modes other than single occupancy vehicles, thereby offering an opportunity to **reduce transportation-related greenhouse gas emissions**. By planning and designing for different transportation modes, complete streets provide a more just and **equitable system that doesn't penalize people** with unsafe conditions who don't or are not able to drive a car. Safe streets **improve public health** by enabling active forms of transportation and reducing severe crashes, and reliable transit can improve public health by providing **access to medical services**.

COMPLETE STREETS DESIGN EXAMPLES

Complete Streets to accommodate all users have been incorporated into several road upgrades in our region.

South Meadows Road between Airport and Agua Fria



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

Cerrillos Road Improvements



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, 6-foot buffered sidewalks, 5-foot bike lanes, bus landings and right-turn auxiliary lanes, median modifications, landscaping, and bus stops. However, improvements to Cerrillos Road should still be made to slow traffic speeds, improve pedestrian crossings, make riding a bicycle more comfortable, and increase safety for all modes.

Amy Biehl Community School



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.

GREEN INFRASTRUCTURE

Transportation and planning policy should include an emphasis on harvesting stormwater and incorporating green infrastructure in the design and retrofit of urban and rural roadways. A flooded or debris-strewn street impedes the use of the roadway by the community and is not a complete street.

Water from roofs, streets, and parking lots concentrates and becomes stormwater runoff. Streets channel and direct stormwater flows providing a system along which all stormwater can be conveyed. Large arroyos and the Santa Fe River are the receivers of such water and are often polluted with excess toxins, sediment, and debris. Through more holistic designs, streets can provide opportunities to capture and infiltrate stormwater back into the environment, creating ecological, economic, and public health benefits.

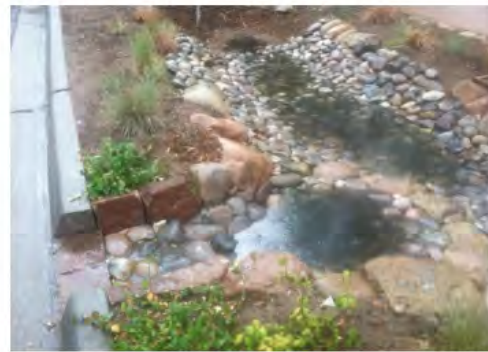
City agencies control the design, construction, maintenance, and permitting of public rights-of-way. An interdepartmental approach to street design and retrofits allows project design that emphasizes both the management of stormwater and the health, safety, and mobility goals of complete streets. Integrated design strategies address water quality and regulatory compliance, along with traffic calming, bike and pedestrian access, safety, public health, community development, and equity.

“MY FAVORITE STREET IN SANTA FE IS E. ALAMEDA. MY KIDS LOVE WHEN WE DRIVE THROUGH THE ‘TREE TUNNEL.’ THEY LOVE THE WAY THE TREE BRANCHES HANG OVER. IT HAS BECOME SUCH A GREAT GATEWAY FROM OUR HOME TO WORK AND SCHOOL.”

STREET STORY



Storm water infiltration features that have been installed on Alameda Street



**To capture pollutants and litter before they enter the Santa Fe River
To encourage infiltration to support adjacent plant life
To reduce the damaging, eroding forces of storm water**

Green infrastructure is an approach to water management that protects, restores, or mimics the natural water cycle. Practices provide an opportunity for long-term sustainability and can help communities protect the environment and human health while providing other social and economic benefits. Green infrastructure practices include permeable pavements, rain gardens, bioretention cells (or bioswales), vegetative swales, infiltration trenches, green roofs, planter boxes, rainwater harvesting (rain barrels or cisterns), rooftop (downspout) disconnection, and urban tree canopies. For example, at least half of the landmass of most urban areas is covered with an impervious surface. Green infrastructure such as permeable pavement can be applied in roadways, multi-use paths, parking lots, and areas with light traffic. Areas that would otherwise be impervious can filter and infiltrate stormwater, increasing water quality while contributing to aquifer recharge.² The River, Watershed and Trails Division of Santa Fe's Public Works Department³ implements green infrastructure around Santa Fe. The 11 Rain Gardens along Alameda completed in 2019 are estimated to capture 565,450 gallons annually.⁴ Other design ideas specific to Santa Fe can be found in this division's document titled "Incorporating Green Infrastructure into Roadway Projects in Santa Fe."⁵

² <https://www.epa.gov/green-infrastructure/what-green-infrastructure>

³ https://www.santafenm.gov/river_and_watershed

⁴ Santa Fe Watershed Association. Accessed 12/2019. Available at <http://www.santafewatershed.org/rain-garden/>

⁵ https://www.santafenm.gov/media/archive_center/Santa_Fe_GI_Guidebook_for_Road_Projects_10092019.pdf

Green infrastructure not only is an aesthetically pleasing way to provide green ways and traffic calming spaces for the community, but also lessens the wear and tear on municipal stormwater systems by slowing water, decreasing conveyance volumes, and filtering sediment that could otherwise clog culverts and other structures. Green stormwater infrastructure is often less costly to implement than standard, gray infrastructure. In 2010, New York City estimated that updating the city's stormwater system to control combined sewer overflows using only gray infrastructure would cost the city \$6.8 billion of capital investment over twenty years. By blending gray and green strategies, the city reduced its estimated cost by \$1.5 billion (NACTO). Implementing green infrastructure can reduce the maintenance and repair needs of municipal systems leading to lower long-term operating costs for cities.



Green infrastructure complements gray infrastructure, adding aesthetic and **health benefits**, while increasing the efficacy and longevity of more traditional structures.⁶ Green infrastructure can **mitigate flood risk** by slowing and reducing stormwater discharges.

CONTEXT SENSITIVE SOLUTIONS

Every project is unique; each requires a unique solution. Context Sensitive Solutions (CSS) principles applied to transportation projects involve a much broader range of disciplines than traditional transportation design methods, which rely exclusively on the judgment of traffic engineers. We are in an era of constrained funding, environmental sensitivity, and strong community desire for sustainable transportation systems. This presents a challenge in 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.

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.



CSS designs emphasize preservation and **enhancement of community and natural environment**. Flexibility and creativity in design help to balance access, **safety, mobility**, community, and environmental goals. CSS involves multiple stakeholders throughout the design process, increasing the likelihood that transportation equity concerns will be considered at an early stage.



⁶ Xu, Changqing; Tang, Tang; Jia, Haifeng; et al. 2019. Benefits of coupled green and grey infrastructure systems: Evidence based on analytic hierarchy process and life cycle costing. RESOURCES CONSERVATION AND RECYCLING, Volume: 151, Article Number: UNSP 104478.

LAND USE STRATEGIES

Smart growth is an urban planning and transportation theory that supports density and concentrates growth in the center of a city to avoid urban sprawl. Smart growth also advocates compact, transit-oriented-development (TOD), walkable, bicycle-friendly land use, neighborhood schools, Complete Streets, mixed-use development with a range of housing choices, and “complete neighborhoods,” which have a close proximity between where we live or work and the destinations and services we access.



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**.



One land use strategy is proper land access, or driveway access points, through access management planning. 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.

LAND USE & TRANSPORTATION

Developments such as Railyard Flats and Capitol Flats are positioned to be TOD-type developments once built out with densities and proximities that 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.

MYTH: Higher-density development creates more regional traffic congestion and parking problems than low-density development.

FACT: Higher-density development generates less traffic than low-density development per unit, makes walking and public transit more feasible and creates opportunities for shared parking. According to the National Personal Transportation Survey, doubling density decreases vehicle miles traveled by 38 percent.

TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) strategies and policies, including carpooling, vanpooling, telecommuting, flexible work schedules, and parking management, are used to reduce demands on the transportation system, which can, in turn, **reduce transportation sector impacts on the environment**. Examples of TDM strategies include:



- Encourage the use of alternative modes by partnering with regional organizations to promote options and incentives to discourage driving alone.
- Support and promote websites providing information on carpooling and vanpooling and regional campaigns to encourage people to try alternatives to driving alone.
- Encourage and support employee use of alternative modes, telecommuting, and flexible work schedules.
- Consider reducing parking requirements for businesses instituting TDM policies and actions.

- Encourage carpool, car-share, and ride-share programs.
- Consider incentive programs (such as subsidizing transit passes) **for young people and older adults.**



TRANSPORTATION SYSTEM MANAGEMENT

Transportation System Management (TSM) strategies provide congestion mitigation by enhancing existing capacity or roadway operations, **without substantial investment** in new capacity (lanes or facilities) and **associated environmental impacts**. 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 and 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
- Special events traffic and congestion management strategies
- Intelligent Transportation Systems (ITS) – wireless and wire line communications-based information and electronics technologies to improve traveler information

ROUNDBABOUTS

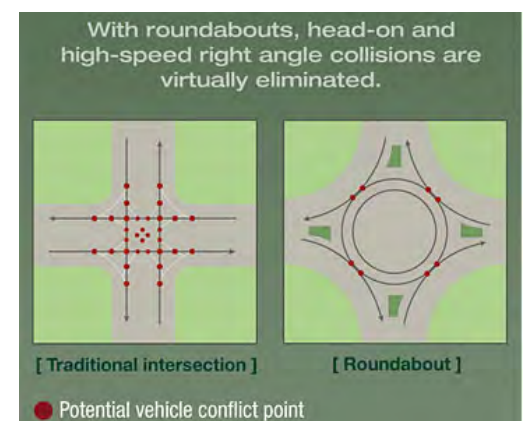
Roundabouts have been used for intersection control around the world for decades, but the first modern roundabout in the United States was not constructed until 1990 in Las Vegas, Nevada. Since then, roundabouts have slowly gained popularity and are now



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.⁷ By reducing idling time, roundabouts have the potential to **reduce air pollution** compared to traditional signalized intersections.



⁷<http://safety.fhwa.dot.gov/intersection/roundabouts/fhwsa08006/>

MICRO-MOBILITY

Micro-mobility usually consists of small human- or electric-powered vehicles, including bikes, e-bikes, and e-scooters commonly deployed by independent operators as a shared-use fleet (both docked and dockless). This new mobility service can benefit the community by offering another transportation option.

E-scooters and other micro-mobility devices offer several notable benefits that have gained them a positive reputation among the general public. A 2018 survey covering 11 major US cities found over two-thirds of people support their adoption. The primary opportunities presented by e-scooters stem from their potential to reduce personal motor vehicle trips and mitigate the associated environmental and traffic-related concerns.



One of the most apparent benefits of micro-mobility options, including bike share and e-scooters, is their **substantially smaller ecological footprint** compared to a personal motor vehicle. E-scooters require a fraction of the energy to operate and don't consume fossil fuels, so any motor vehicle trip replaced by a scooter trip is a net reduction in emissions. Their overall impact on the environment, though, depends on the source of the electricity that powers them.

MOBILITY HUBS

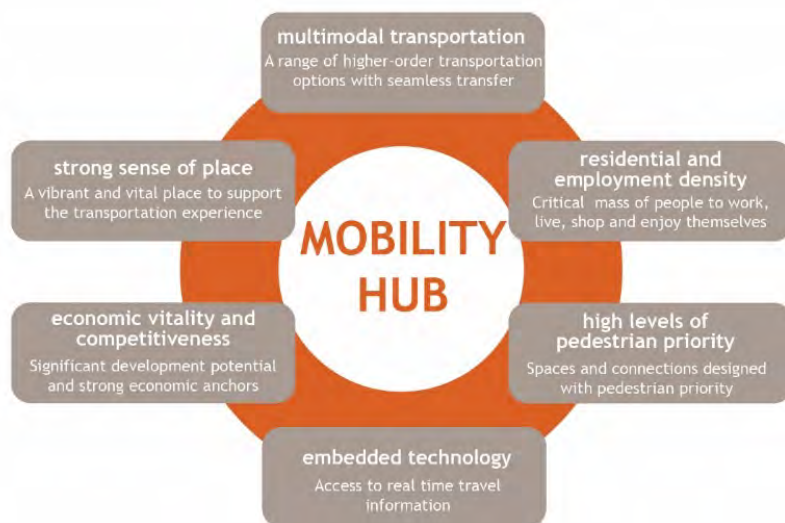
For alternative travel modes to be viable, it is critical to have strong connectivity among modes. Intermodal connectivity allows a seamless transportation system facilitating easy and efficient movements among modes. Intermodal connections are most prevalent at locations where a variety of travel modes intersect. An example is the South Capitol Station. This location serves as a park and ride for transit users, provides access to a variety of transit services (Rail Runner and local bus service), interfaces between the on-street and off-street bicycle network, has adequate pedestrian infrastructure, and provides wayfinding/traveler information. Intermodal connectivity points can also include a variety of public and/or private sector driven mobility options to support community needs, such as electric vehicle charging stations, carsharing, and bikesharing.

To encourage the use of new mobility options and forthcoming technology changes, there is a need to proactively plan for a strong interface among travel modes, allowing a mix of mobility



options that are well connected. **Travel time and cost of travel must be competitive** with ownership of private vehicles for alternative modes to be competitive.

Parking is an important aspect of mobility hub design. Bike parking that is abundant and secure is important. Conversely, vehicle parking pricing (through time restrictions or metering) can be used to disincentivize automobile use and encourage other modes.



Source: Metrolinx (Toronto), *Mobility Hub Guidelines*, 2011



CHAPTER 6: MAKING CHOICES



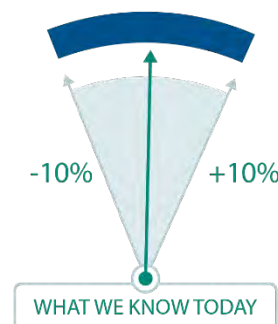
This chapter forms the basis for making difficult choices about how best to prioritize and phase transportation improvement projects.

Transportation needs and opportunities in our region are great. The needs-based plan presented in Chapter 4 will be implemented over a long period of time due to funding limitations. Current funding realities indicate that not all desired projects will be built within this plan's 25-year time horizon. This chapter describes the process for selecting priority transportation projects based on their ability to contribute toward achieving the MTP goals.

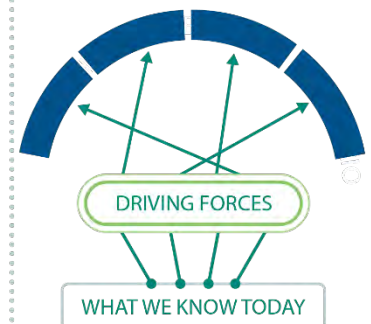
SCENARIO PLANNING

Traditional forecast planning projects a future by extrapolating from the recent past and what is known today. Scenario planning is a tool for foresight that improves perception by creating memories of the future and learning by imaging the years ahead. Scenario planning provides a structured environment to alter assumptions about the future, discover blind spots, and identify new opportunities.

FORECAST PLANNING EXTRAPOLATING FROM THE RECENT PAST



SCENARIO PLANNING ENVISIONING MULTIPLE FUTURES



A scenario planning workshop with approximately 25 stakeholders representing different interests from around the region was held on November 12, 2019, to better imagine the range of influence that disruptive and emerging technologies may have on the future of mobility in Santa Fe. The purposes of the workshop were to:

- Imagine the range of influence of unknown forces and the impacts of disruptive and emerging technologies
- Identify common themes and strategies for integration into the Metropolitan Transportation Plan

SCENARIOS....

are “tools for foresight – discussions and documents whose purpose is not a prediction or a plan, but a change in the mindset of the people who use them.” – Arie DeGeus

DRIVING FORCES

The pre-workshop survey asked workshop participants to consider several key trends/forces that may impact transportation and mobility in Santa Fe. We asked for input on the level of potential impact of and uncertainty associated with mobility-as-a-service, transportation electrification, driverless cars, demographic shifts, policy implications, and the economy.

Plotting the average values of the responses received for impact and uncertainty of the surveyed

trends/forces revealed that driverless cars have the highest level of uncertainty, while economic health has the potential to have the highest impact. Figure 6-1 summarizes the survey results showing the range of responses received from participants.

The survey also inquired about other driving forces and key trends that participants thought would impact the future of transportation and mobility in Santa Fe. Survey responses included transportation mode preferences, environmental impacts and climate change, preferences for experiences vs. things, neighborhood autonomy, oil and gas prices, work/employment trends and zoning, land use and development codes.

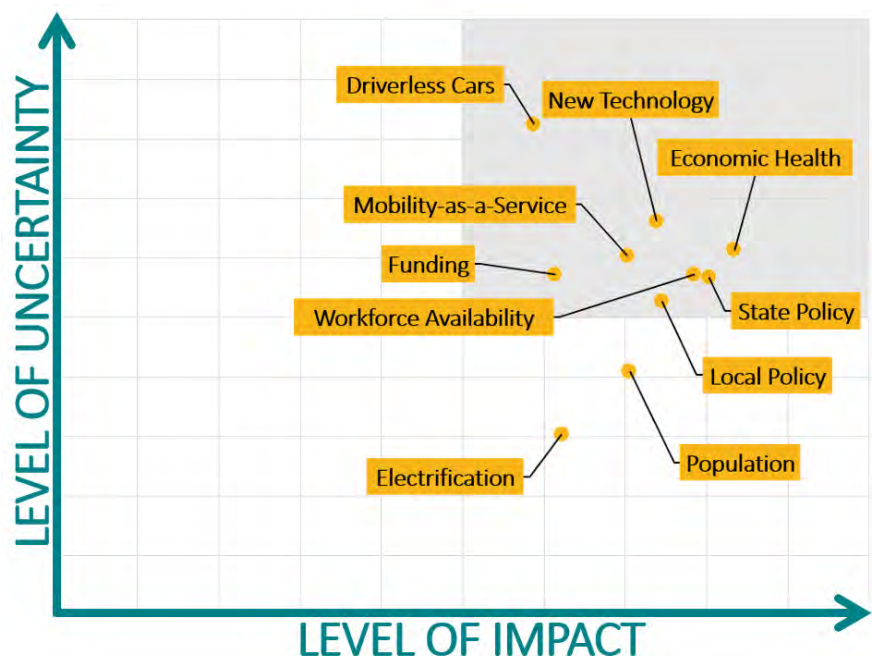
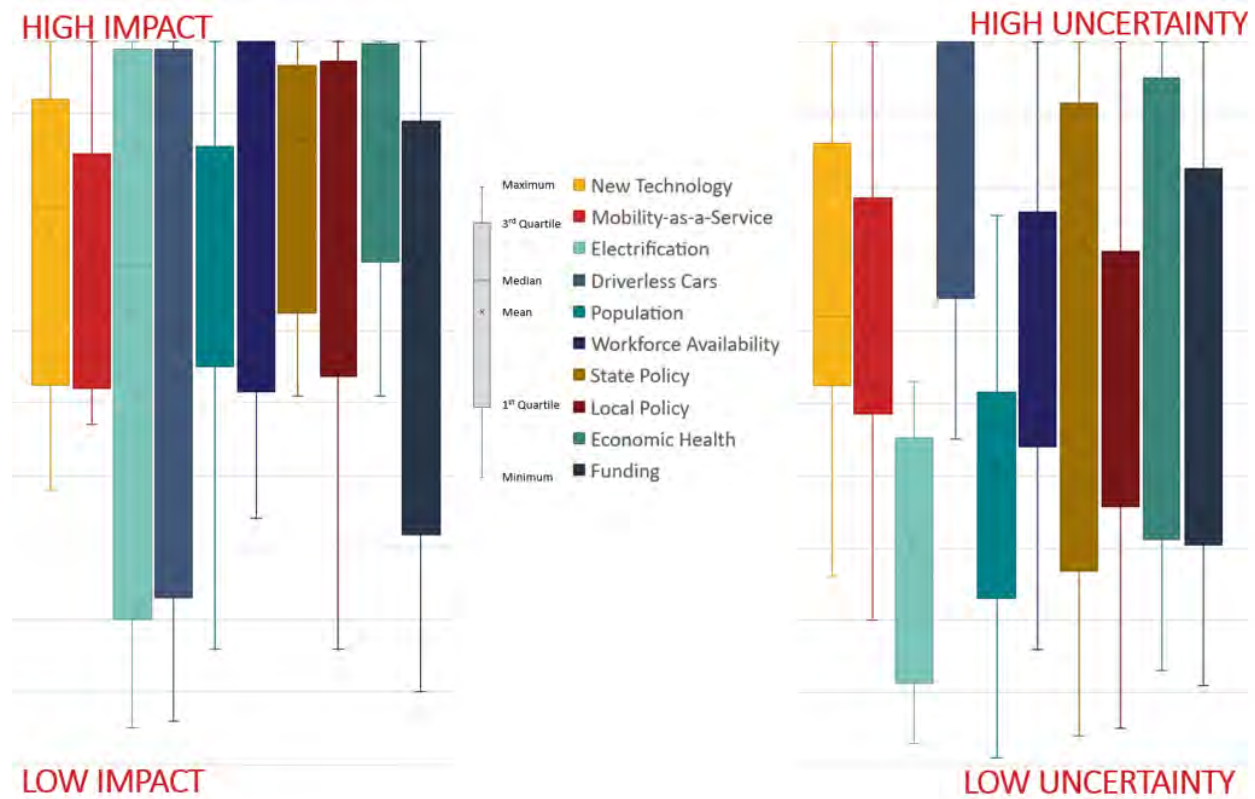


FIGURE 6-1. IMPACT AND LEVEL OF CERTAINTY OF DRIVING FORCES AND TRENDS



ELECTRIFICATION EXAMPLE

The graph in Figure 6-1 shows the minimum, first quartile, median, mean, third quartile, and maximum values for the responses received. The larger the box, the greater the range in responses for the given category. For example, the impact of electrification received a wide range of responses about the level of impact, whereas the uncertainty of electrification was shown to have a greater level of agreement. This response suggests that electrification is a driving trend that is relatively certain to advance, however, the level of impact on the community is unclear and will require monitoring.

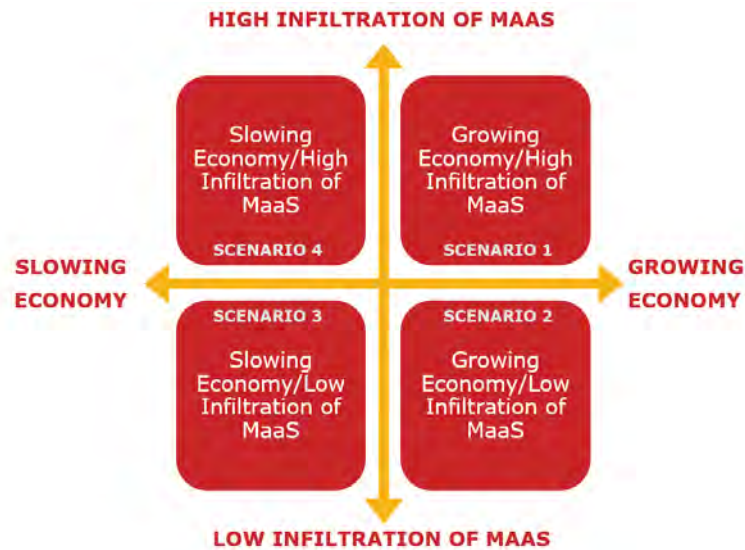
SCENARIOS

For the scenario planning exercise, two key forces/trends were selected from the survey that helped capture a wide range of potential futures. The scenarios looked at (1) health of the economy and (2) infiltration of mobility-as-a-service.

These two forces/trends were selected to explore the intersection of economic health (a trend that is predominantly outside the control of the SFMPO) and mobility-as-a-service (a trend on which the SFMPO could have a high degree of influence). Mobility-as-a-service (MaaS) options have the potential to serve as a platform for some of the other key trends/forces such as electrification, driverless vehicle technologies, etc.

The two trends were plotted on intersecting axes to explore the range of potential scenarios:

- Economic Health: Growing Economy vs. Slowing Economy
- Infiltration of Mobility-as-a-Service: High Infiltration of MaaS vs. Low Infiltration of MaaS



Workshop participants were given examples of how transportation technologies are changing the way that people and goods are moved and how citizens engage with transportation and mobility options. Potential MaaS options to consider in the scenarios include car-share, ride-hailing, bike share, e-scooter, and other programs that may emerge as new mobility options.

Participants were asked to think about how MaaS options may materialize in various scenarios and to give due consideration to complementary technologies—including the potential for vehicle automation to target shared mobility vs. private mobility, electrification of fleets vs. private vehicles—and to help identify strategies to ensure that the spectrum of citizen mobility needs are met.

Participants were split into four groups, and attendees from the same office were asked to join different groups. Each group was given a scenario to explore and a brief narrative of their assigned scenario to set the stage for small group discussion. The scenario descriptions are summarized below.

SCENARIO 1 – GROWING ECONOMY/HIGH INFILTRATION OF MAAS

A growing economy and public acceptance of MaaS make Santa Fe an attractive market for a variety of MaaS options including, but not limited to, dockless bikes, e-scooters, ride-hailing, automated shuttles, carshare, and other products that may not exist today. Citizens do not feel a strong affinity for owning a personal vehicle, prioritizing convenience and comfort over ownership.

SCENARIO 2 – GROWING ECONOMY/LOW INFILTRATION OF MAAS

Population prefers being in private vehicles reflecting that private ownership provides the greatest degree of independence. There is low demand for MaaS options, and private providers view Santa Fe as a risky market for investment. A growing economy provides a steady revenue stream for the City to invest in transportation infrastructure and Santa Fe has invested in a well-connected bike/ped network and high-quality transit service.

SCENARIO 3 – SLOWING ECONOMY/HIGH INFILTRATION OF MAAS

A slowing economy creates a financial strain on budgets. A growing percentage of the population cannot afford to own a car, generating a demand for alternative transportation and mobility options. MaaS options include bike share, e-scooters, automated shuttles, ridesharing/ride-hailing, carshare, and more. The constrained economic environment reduces the ability for public and private sectors to unilaterally meet demand for mobility options.

SCENARIO 4 – SLOWING ECONOMY/LOW INFILTRATION OF MAAS

A slowing economy leads many to adopt a business-as-usual approach. The City continues to plan, invest, and build infrastructure as it has been for years and private companies are offering service only when conditions and incentives reduce risk. People may not be able to afford a car, but the number of transportation options does not differ greatly from those offered today.

OPPORTUNITIES & IMPLICATIONS

The workshop participants were divided into four groups, and each group was assigned a scenario. The four scenario groups were given an Opportunities & Implications worksheet and were encouraged to consider:

- How could the conditions in the scenario impact Santa Fe?
- What opportunities does the scenario present?
- What pitfalls do you want to be sure to avoid?

A summary of the groups' discussions is provided in Appendix C.

STRATEGIES & POLICIES

The groups were given a Strategies worksheet and were asked to think of scenarios as different hands of cards that they have been dealt and to strategize ways to play their hand. Each group was asked to identify the top three strategies that they felt would most increase the likelihood of success under their scenario. The group then worked together to test the strategies by asking:

- Which strategies are common among all scenarios?
- Which strategies would be beneficial in one scenario but detrimental in another?

The strategy and policy ideas from the scenario planning workshop are summarized in Appendix C. These strategies, particularly those that were deemed beneficial regardless of the scenario, have been considered in making choices about transportation priorities as described in the remainder of this chapter.

STRATEGIES

Examples of strategies identified through the scenario planning workshop include:

- Develop and implement **EDUCATION CAMPAIGNS** as new transportation technologies are introduced to ensure equal opportunities and understanding.
- Develop public/private partnerships to **SUBSIDIZE MOBILITY-AS-A-SERVICE** for low-income populations.
- **ENGAGE YOUTH** to help develop a transportation system that they want and will keep them in Santa Fe to strengthen the economy and build a system for future users.

PROJECT 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 project is linked to the goals, as presented in Chapter 2.

PROJECT EVALUATION

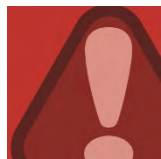


The Regional Roadway system projects represent the region's needs over the next 25 years. Each project has been evaluated based on criteria that stem from the nine MPO goals in the performance categories of:

- Safety
- Multimodal Mobility & Accessibility
- Environmental Stewardship
- Congestion Relief & System Operations
- Economic & Community Vitality
- System Preservation
- Partnership & Funding
- Public Health
- Social Equity

The intent of the roadway prioritization process is to prioritize those projects that are expected to contribute the greatest toward reaching the MPO goals.

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



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



ENVIRONMENTAL STEWARDSHIP

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

Evaluation: 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



CONGESTION RELIEF & SYSTEM OPERATIONS

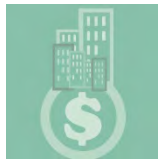
Goal: An efficient and reliable transportation system poised to leverage emerging technologies.

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 reconfiguration that optimizes traffic flow and supports multimodal travel, such as introducing a roundabout at an intersection.

- ☒ 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 for 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.



SYSTEM PRESERVATION

Goal: A well-maintained transportation system.

Evaluation: 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 or repair infrastructure that is in poor condition
-  Project will reconstruct or 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



Project will add miles to the transportation network, requiring additional maintenance



Project will negatively impact transportation assets



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

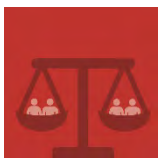


PUBLIC HEALTH

Goal: A transportation system that supports healthy lifestyles.

Evaluation: Does the proposed project encourage active transportation modes like biking and walking, improve air quality, improve safety, and/or improve access to essential services?

Proposed projects that are expected to contribute to public health are denoted in Table 6-1.



SOCIAL EQUITY

Goal: Equitable investments in transportation that enable quality of life for all residents.

Evaluation: Would the proposed project contribute to quality of life in an area of the region with concentrations of underserved populations?

Proposed projects that are located in areas with concentrations (top quartile) of traditionally underserved low-income and minority populations and that don't primarily benefit vehicles are denoted in Table 6-1.

EVALUATION RESULTS

Table 6-1 identifies the list of prioritized publicly funded Regional Roadway projects. The alignments for the “Future Roads and Extensions” are approximations. All listed projects require further public review and input before moving toward construction.

The Regional Roadway Priorities List is 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 6-1 lists the lead agency, project cost, time frame, and an indication of the multimodal elements (pedestrian, bike, and transit) included in each project. All projects are depicted in the Fiscally Constrained Plan and Illustrative Plan maps in Chapter 7. A comprehensive list of Santa Fe County project is provided in Appendix D.

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.

MODAL MASTER PLANS

The Santa Fe MPO is host to multiple Metropolitan Master Plans, each intended to provide a comprehensive and focused analysis for each transportation mode. The Master Plans are developed in coordination and conjunction with the processes set forth in the adoption of this MTP. As intended, projects, policies, and programs proposed and recommended in each master plan both inform the development of updates to the MTP, including alignment with MTP goals, and enjoy opportunities to become funded and implemented in accordance with MPO policies. The Master Plans are as follows:

- 2015 Metropolitan Public Transit Master Plan
- 2019 Metropolitan Bicycle Master Plan
- 2015 Metropolitan Pedestrian Master Plan

MYTH: Transportation costs in America are low.

FACT: According to the Bureau of Labor Statistics, average transportation costs (gas, insurance, car payments, maintenance, etc.) in America grew from \$9,049 to \$9,761 from 2016 to 2018 and comprise approximately 16 percent of consumer expenses. This is second only to housing costs, which comprise approximately 33 percent of consumer expenditures.

Within the Santa Fe MPO, the average household spends \$12,321 on transportation annually; approximately 23 percent of income is spent on transportation.

“MY HUSBAND HAD TAKEN ME TO JOSEPH’S TO CELEBRATE MY BIRTHDAY A COUPLE OF SUMMERS AGO. WE WERE IN TOWN TO EXPLORE MOVING HERE. I REMEMBER I LOOKED OUT THE WINDOW AND NOTICED BICYCLISTS WHIZZING PAST. I THOUGHT “OH! THIS IS A TOWN WHERE PEOPLE GET AROUND ON BIKES! WE MOVED HERE AND WERE RIDING OUR BIKES PAST JOSEPH’S AND MY HUSBAND RECALLED OUR DINNER. HE SAID “NOW YOU’RE ONE OF THOSE PEOPLE HERE WHO GETS AROUND BY BIKE.”

STREET STORY

TABLE 6-1. REGIONAL ROADWAY PRIORITIES

Legend: ● = Positive impact ◐ = Partially positive impact ○ = No net impact ◑ = Partially negative impact ● = Negative impact  = Bike  = Pedestrian  = Transit  = Public Health  = Social Equity

Rank	Project Name and Description	Lead Agency	Cost (2020 Dollars)	Multimodal, Public Health and Social Equity Elements	Evaluation Criteria								Time Frame/ Need
					Safety & Security	Multimodal Mobility & Accessibility	Greenhouse Gas Reduction	Congestion Relief & System Operations	Economic Vitality: Freight & Commerce	Commercial & Community Vitality	System Preservation	Partnership & Funding	
1	Cerrillos Road Reconstruction (St. Michaels Drive to St. Francis Drive): Reconstruct to add medians, drainage, bike lanes, sidewalks and transit facilities.	NMDOT	\$18,000,000	    	●	●	○	●	○	●	◐	●	Short
2	S100440 - NM 466 (St. Michaels): Study, design, and construction of the St. Francis Drive/St. Michaels Drive interchange; pedestrian ADA improvements; pavement preservation; bridge reconstruction.	NMDOT	\$15,540,000	  	●	●	○	●	○	◐	●	◐	Short
3	S100460 - Guadalupe Street Road Diet & Paseo de Peralta/Guadalupe Street Intersection Improvements: 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. Reconfigure intersection to improve pedestrian crossings and upgrade traffic signals.	City of Santa Fe	\$4,150,000	  	●	●	◐	○	○	●	◐	◐	Short
4	S100122 - South/East Connector: ROW acquisition, design, and construction of a new roadway.	Santa Fe County	\$4,750,000	  	●	●	◐	●	○	○	◑	●	Short
5	S100470 - St. Michaels' Underpass: Design and construction of an underpass along the Rail Trail.	City of Santa Fe	\$4,700,000	   	●	●	○	○	○	◐	○	●	Short
6	S100370 - Agua Fria Street/Cottonwood Drive Intersection Safety Improvements: Construct a roundabout at the intersection.	City of Santa Fe	\$1,775,000	 	●	◐	○	◐	○	○	◐	◐	Short
7	Tierra Contenta Trail: Buffalo Grass to South Meadows Road	City of Santa Fe	\$575,000	   	◐	●	○	○	○	●	◑	●	Short
8	S100660 - Cañada Rincon Trail: Calle Mejia to Camino Francisca	City of Santa Fe	\$900,000	  	●	●	○	○	○	◐	◑	◐	Short
9	S100650 - Acequia Trail: Rufina to San Felipe	City of Santa Fe	\$1,500,000	   	●	●	○	○	○	◐	◑	◐	Short
10	S100630 - Arroyo Hondo Trail Segment 2: Construct segment 2 of the Arroyo Hondo Trail 1.2 miles.	Santa Fe County	\$1,400,000	  	●	●	○	○	○	◐	◑	◐	Short
11	S100640 - Arroyo Hondo Trail Segment 3: Construct segment 3 of the Arroyo Hondo Trail. 1.6 miles Engineering for connection to Richards Avenue.	Santa Fe County	\$1,700,000	  	●	●	○	○	○	◐	◑	◐	Short
12	Agua Fria/South Meadows Intersection Improvements: Reconfigure intersection to include left turn bays on Agua Fria and improve pedestrian crossings and upgrade traffic signals.	City of Santa Fe	\$3,150,000	  	◐	◐	○	●	○	○	○	◐	Short
13	S100430 - NM 599/US285 Ramp: Lengthen southbound on-ramp from NM 599 to US 84/285	NMDOT	\$3,200,000		◐	○	○	◐	○	○	○	◐	Short

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Rank	Project Name and Description	Lead Agency	Cost (2020 Dollars)	Multimodal, Public Health and Social Equity Elements	Evaluation Criteria								Time Frame/ Need
					Safety & Security	Multimodal Mobility & Accessibility	Greenhouse Gas Reduction	Congestion Relief & System Operations	Economic Vitality: Freight & Commerce	Commercial & Community Vitality	System Preservation	Partnership & Funding	
14	St. Michaels Roadway Reconstruction Study	City of Santa Fe	\$500,000	🚲 🚶 ❤️ ⚖️	●	●	○	◐	◐	●	●	●	Short/Medium
15	Cerrillos/Sandoval Intersection Improvements: Pedestrian improvements, striping, signage, reconfigure medians.	City of Santa Fe	\$1,800,000	🚶 ❤️	●	●	○	◐	○	◐	●	◐	Short/Medium
16	Hyde Park Road (NM 475) Shoulder Improvements: Widen from Artist Road to Hyde Memorial State Park – Design.	NMDOT	\$1,600,000	🚲 ❤️	●	●	○	○	○	○	●	●	Short/Medium
17	Bishops Lodge Road and Tesuque Village Road Multimodal Road Safety Audit	Santa Fe County	\$50,000	🚲 🚶 ❤️ ⚖️	●	●	○	◐	○	○	○	●	Short/Medium
18	Camino del Monte Sol: expand the roadway to add shoulders and repave from Camino de Cruz Blanca to Old Santa Fe Trail.	City of Santa Fe	\$120,000	🚲 ❤️	●	◐	○	○	○	◐	◐	◐	Short/Medium
19	St. Francis Drive Pedestrian Intersection improvement: Pedestrian improvements at all the intersections along St. Francis Drive.	NMDOT/City of Santa Fe	\$600,000	🚶 ❤️	●	◐	○	○	○	◐	○	◐	Short/Medium
20	US-285 Frontage Road Corridor Study through the Pueblo of Tesuque.	NMDOT	\$175,000	❤️ ⚖️	●	◐	○	○	○	○	◐	●	Short/Medium
21	Paseo del Sol Extension: Roadway extension of Paseo del Sol within the Tierra Contenta Master Planned development. The roadway will include 2 travel lanes, bicycle lanes, sidewalk, lighting and landscaping.	City of Santa Fe	\$8,000,000	🚲 🚶 ❤️ ⚖️	●	●	○	○	○	◐	◑	◐	Short/Medium
22	Segment 1 of the Arroyo Hondo Trail	Santa Fe County	\$1,900,000	🚲 🚶 ❤️	●	●	○	○	○	◐	◑	◐	Short/Medium
23	Sandoval/Montezuma Intersection Improvements: Pedestrian improvements, striping, signage.	City of Santa Fe	\$850,000	🚶 ❤️	◐	◐	○	○	○	◐	○	◐	Short/Medium
24	NM 599/Via Veteranos (CR 70) Interchange: Construct a new interchange.	NMDOT	\$8,000,000	❤️	●	○	○	◐	○	○	○	◐	Short/Medium
25	San Felipe Road Reconstruction: Reconstruct roadway from Airport Road to Agua Fria Street and add bike lanes, curb and gutter, sidewalk.	City of Santa Fe	\$1,600,000	🚲 🚶 ❤️ ⚖️	○	●	○	○	○	◐	○	◐	Short/Medium
26	Rancho Viejo Boulevard Bike Lanes (Shoulders): Widen from NM 14 to Avenida del Sur to add bike lanes.	Santa Fe County	\$1,000,000	🚲 ❤️	○	●	○	○	○	○	○	◐	Short/Medium
27	Rehabilitation or Replacement of Paseo de Peralta Bridge over the Santa Fe River	City of Santa Fe	\$2,500,000		○	○	○	○	○	○	●	○	Short/Medium
28	Cerro Gordo Reconstruction: Roadway improvements from Armijo Lane to Canyon Road. Existing road consists of millings over a dirt road and will need to be engineered for drainage and pavement.	City of Santa Fe	\$2,750,000		○	○	○	○	○	○	●	○	Short/Medium
29	Santa Fe River Trail – Constellation Drive to Paseo Real	City of Santa Fe	\$7,000,000	🚲 🚶 ❤️ ⚖️	●	●	○	○	○	◐	◑	●	Medium

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Rank	Project Name and Description	Lead Agency	Cost (2020 Dollars)	Multimodal, Public Health and Social Equity Elements	Evaluation Criteria								Time Frame/ Need
					Safety & Security	Multimodal Mobility & Accessibility	Greenhouse Gas Reduction	Congestion Relief & System Operations	Economic Vitality: Freight & Commerce	Commercial & Community Vitality	System Preservation	Partnership & Funding	
30	Santa Fe River Trail – From Siler South to San Ysidro Crossing	Santa Fe County	\$5,000,000	🚲 🚶 ❤️ ⚖️	●	●	○	○	○	◐	◑	●	Medium
31	Santa Fe River Trail – From Caja del Oro Grant Road to San Felipe Road	Santa Fe County	\$7,980,000	🚲 🚶 ❤️ ⚖️	●	●	○	○	○	◐	◑	●	Medium
32	Bike Lane Loop: Richards, A Van Nu Po, and Avenida del Sur	Santa Fe County	\$2,000,000	🚲 ❤️	●	●	○	○	○	◐	○	○	Medium
33	Bishop Lodge Road bicycle, pedestrian, ADA, and transit improvements.	Santa Fe County	\$4,000,000	🚲 🚶 🚌 ❤️ ⚖️	●	●	○	○	○	○	○	◐	Medium
34	Agua Fria Road/Henry Lynch Street Intersection Roundabout	Santa Fe County	\$130,000	❤️ ⚖️	◐	◐	◐	◐	○	○	◐	○	Medium
35	Governor Miles Road Reconstruction: Reconstruct roadway from Richards Avenue to Pueblos del Sol and add bike lanes, curb and gutter, sidewalk.	City of Santa Fe	\$2,000,000	🚲 🚶 ❤️	○	●	○	○	○	◐	○	◐	Medium
36	Henry Lynch Road Reconstruction: Reconstruction from Agua Fria to Rufina Street and add bike lanes, sidewalk.	City of Santa Fe	\$2,200,000	🚲 🚶 ❤️ ⚖️	○	●	○	○	○	◐	○	◐	Medium
37	NM 599/Camino de los Montoyas Interchange w/ Frontage Road: Construct a new interchange.	NMDOT	\$11,050,000	❤️	●	○	○	◐	○	○	○	◐	Medium
38	St. Francis Street Lights Between W. San Mateo and Cerrillos	NMDOT	\$500,000	🚶 ❤️ ⚖️	●	◐	○	○	○	◐	○	○	Medium
39	Rehabilitation or Replacement of 3 Downtown Bridges over the Santa Fe River: Galisteo, Don Gaspar, Delgado Street.	City of Santa Fe	\$4,000,000		○	○	○	○	○	○	●	○	Medium
40	Avenida Del Sur Extension: Construct a new road and upgrade existing roadway from NM 14 to A Van Nu Po.	Santa Fe County	\$3,675,000	⚖️	○	○	◐	○	○	○	◑	○	Medium
41	Hyde Park Road (NM 475) Shoulder Improvements: Widen from Artist Road to Hyde Memorial State Park – Construction.	NMDOT	\$14,400,000	🚲 ❤️	●	●	○	○	○	○	●	●	Medium/Long
42	Rufina Street/Lopez Lane Intersection Improvements: Pedestrian improvements, striping, signage, reconfigure medians.	City of Santa Fe	\$1,800,000	🚶 ❤️ ⚖️	●	●	○	○	○	◐	○	○	Medium/Long
43	Beckner Road/Richards Avenue Intersection Improvements: Pedestrian improvements, striping, signage.	City of Santa Fe	\$2,000,000	🚶 ❤️	●	●	○	○	○	◐	○	○	Medium/Long
44	Tesuque Village Road Bike Lanes: Extend bike lanes from the Tesuque Pueblo Fire Department to the Pueblo of Tesuque boundary.	Santa Fe County	\$1,650,000	🚲 ❤️ ⚖️	◐	●	○	○	○	○	○	◐	Medium/Long
45	Jaguar Drive Extension to Municipal Airport: Roadway connection from NM 599 to the Santa Fe Regional Airport. The two-lane roadway may include bicycle lanes, curb and gutter, sidewalk, landscaping, and drainage accommodations.	City of Santa Fe	\$5,000,000	🚲 🚶 ❤️ ⚖️	○	◐	◐	◐	◐	○	◑	◐	Medium/Long

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					Safety & Security	Multimodal Mobility & Accessibility	Greenhouse Gas Reduction	Congestion Relief & System Operations	Economic Vitality: Freight & Commerce	Commercial & Community Vitality	System Preservation	Partnership & Funding	
46	NM 599/I-25 Frontage Road Overpass: Construct an overpass to carry the North Frontage Road over NM 599. Reconfigure existing Frontage Road at grade intersection with NM 599 to right in/right out only.	NMDOT	\$6,000,000	❤️	◐	○	○	◐	○	○	○	◐	Medium/Long
47	West Alameda Street Bike Lanes (City): Widen from Calle Nopal to Siler Road to add bike lanes and improve drainage.	City of Santa Fe	\$7,000,000	🚲 ❤️ ⚖️	○	●	○	○	○	○	○	◐	Medium/Long
48	West Alameda Street Bike Lanes (County): Widen from Chicoma Vista to Frontage Road to add bike lanes.	Santa Fe County	\$1,000,000	🚲 🚶 🚌 ❤️ ⚖️	○	●	○	○	○	○	○	◐	Medium/Long
49	Calle Po Ae Pi Extension: Pave dirt section include sidewalks.	City of Santa Fe	\$1,000,000	🚲 ❤️	○	◐	○	○	○	◐	●	○	Medium/Long
50	Acequia Trail – Otowi to La Cieneguita via Maclovía Park, Gallegos Drive, and Los Hermanos Rodríguez Park	City of Santa Fe	\$750,000	🚲 🚶 ❤️ ⚖️	◐	●	○	○	○	◐	◑	○	Medium/Long
51	Los Sueños Trail and La Vida Lane Road Improvements	Santa Fe County	\$3,000,000		○	○	○	○	○	○	◐	○	Medium/Long
52	Rufina Street Connection: New roadway connection between Harrison Road and Camino Carlos Rey	City of Santa Fe	\$500,000	❤️ ⚖️	○	◐	○	○	○	○	◑	○	Medium/Long
53	Los Sueños Trail street extension	Santa Fe County	\$3,000,000		○	○	◐	○	○	○	◑	○	Medium/Long
54	Caja del Rio/Paseo Real Connector	Santa Fe County	\$3,433,647		○	○	◐	○	○	○	◑	○	Medium/Long
55	County Road 62 Realignment and Improvements: NM 599 to Caja del Oro Grant Road	Santa Fe County	\$3,000,000		○	○	○	○	○	○	◑	○	Medium/Long
56	NM 599/Airport Road Interchange: Construct a new interchange.	NMDOT	\$11,000,000	❤️	●	○	○	◐	○	○	○	◐	Long
57	I-25/NM 466: Interchange Improvements: Reconfigure interchange and lengthen ramp.	NMDOT	\$7,200,000	❤️	●	○	○	◐	○	○	○	◐	Long
58	I-25/NM 599: Interchange Ramp Improvements: Lengthen on- and off-ramps.	NMDOT	\$2,500,000	❤️	◐	○	○	◐	○	○	○	◐	Long
59	Old Santa Fe Trail Bike Lanes (County): Widen from El Gancho Way to Two Trails Road.	Santa Fe County	\$1,000,000	🚲 ❤️	○	●	○	○	○	○	○	◐	Long
60	I-25/St. Francis Drive: Interchange Improvements: Reconfigure interchange and lengthen ramp.	NMDOT	\$8,300,000	❤️	◐	○	○	◐	○	○	○	◐	Long
61	North West Quadrant Trail: Segment of trail within the North West Quadrant area.	City of Santa Fe	\$300,000	🚲 🚶 ❤️	◐	●	○	○	○	○	◑	○	Long
62	La Tierra/Jacona Connection Study	Santa Fe County	\$500,000		○	○	◐	◐	◐	○	◑	○	Long

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63	I-25 Auxiliary Lanes: NM 599 to Cerrillos: Construct a third lane in each direction between interchanges.	NMDOT	\$4,000,000		○	○	○	◐	○	○	◑	◐	Long
64	I-25 Auxiliary Lanes: St. Francis Drive to NM 466: Construct a third lane in each direction between interchanges.	NMDOT	\$2,000,000		○	○	○	◐	○	○	◑	◐	Long
65	I-25 Auxiliary Lanes: Cerrillos to St. Francis Drive: Construct a third lane in each direction between interchanges.	NMDOT	\$17,000,000		○	○	○	◐	○	○	◑	◐	Long
66	I-25/Richards Avenue Interchange: Construct a new interchange.	NMDOT	\$25,000,000		○	◑	○	◐	◐	○	◑	◐	Long
67	Extension of NM 599 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		○	○	○	○	○	○	○	◑	Long



CHAPTER 7: MOVING FORWARD



This chapter presents a plan to implement high-priority projects that are expected to be funded over the next 25 years based on anticipated funding, including mobility, safety, and major rehabilitation.

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.

FINANCIAL SUMMARY AND OUTLOOK

Over the past 5 years an average of just over \$15 million has been programmed through the SFMPO. Not all of this funding has been used for new infrastructure, but rather for maintenance activities such as bridge rehabilitations or repaving projects. Those projects that were wholly or partially for maintenance activities were identified and the associated programmed funds recorded. Table 7-1 shows the average amount of programmed funds used for maintenance activities by funding source and the calculation of the balance that will be used to determine the *Reasonably Expected Revenue Projection*.

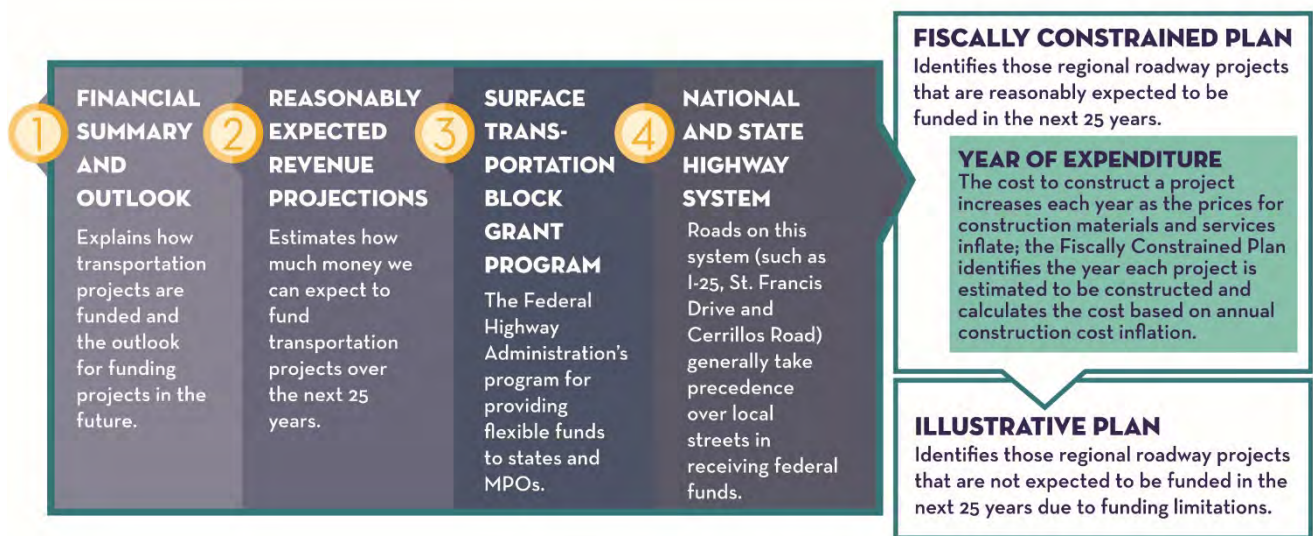


TABLE 7-1. CALCULATION OF BASE REASONABLY EXPECTED REVENUE PROJECTION

5 Year Average	Federal	State	Local	Total
Total Programmed Funding	\$10,132,466	\$2,301,435	\$2,857,035	\$15,290,936
Maintenance Activities	\$6,706,930	\$2,640,856	\$0	\$9,347,786
% Maintenance	66.19%	114.75%	0%	61.13%
Base Revenue Projections	\$3,425,537	(\$339,421)	\$2,857,035	\$5,943,150

This analysis indicates approximately 61.13 percent of the funding programmed in the TIP was used for maintenance activities. Since maintenance projects are not typically called out in the MTP, this funding amount has been subtracted from the total programmed amount to give a Reasonably Expected Revenue Projection of \$5,943,150 per year. This estimate is rounded to **\$6.0 million** per year for calculating the expected funding to be applied to the MTP.

Based on the funding projections in the New Mexico Transportation Plan, funding is expected to grow at 2 percent per year through 2040. We are simply extending that formula through 2045. Table 7-2 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 Metropolitan Transportation Plan.



TABLE 7-2. REASONABLY EXPECTED REVENUE PROJECTIONS

Time Period	Reasonably Expected Revenue Projections
2021 – 2025	\$62,268,620*
2026 – 2030	\$31,848,726
2031 – 2035	\$35,163,567
2036 – 2040	\$38,823,419
2041 – 2045	\$42,864,192
Total	\$210,968,523

*The first 5 year average from 2021-2025 includes a projected funding level of \$62,268,620 based on actual project costs programmed in the current Transportation Improvement Program and/or with funding earmarked.

FISCALLY CONSTRAINED PLAN

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. The MTP is consistent with the City of Santa Fe General Plan, Santa Fe County Sustainable Growth Management Plan, and NMDOT State Transportation Plan.

For the MTP list of projects to be fiscally constrained, the cost of building or implementing regional project priorities must 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 Plan (on page 7-10) and make up the region’s funding shortfall.

Projects included in the *Fiscally Constrained MTP project list* (Table 7-3 and Figure 7-1) reflect the metropolitan area’s top priorities to be implemented as part of the regional transportation system over the next 25 years. These projects are implemented based on need and funding availability; the project rankings from Chapter 6 are provided to demonstrate that these projects meet MTP objectives but are not intended to dictate the order in which projects are undertaken.

The MTP plans for “*year of expenditure*” costs and revenues. The 2015 MTP details analysis of FHWA’s National Highway Construction Cost Index to determine average changes over time in prices paid by state transportation departments for roadway construction materials and services. This MTP assumes the same 2.5 percent yearly escalation in construction cost estimates as identified in the 2015 MTP. An approximate year-of-expenditure was estimated based on the priority rankings and the expected revenue stream.

“FIRST, I HAVE TO SAY THAT OUR INVESTMENTS IN TRAIL INFRASTRUCTURE HAVE CHANGED THE COMMUNITY FOR THE BETTER. I RIDE A BIKE TO WORK AND FIND THE NEW TRAILS AMAZING. SO MANY MORE PEOPLE OUT AND ABOUT. THIS IS WHAT IS AT THE CORE OF COMMUNITY. BUT I ALSO HAVE BEEN WALKING A BABY WITH A STROLLER REGULARLY OVER THE LAST YEAR AND AM PRETTY ALARMED ABOUT THE CONDITION OF SIDEWALKS, ACCESS, OBSTRUCTIONS, ETC. IF PEOPLE WITH STROLLERS OR PEOPLE IN WHEELCHAIRS CAN’T GET TO THE TRAILS, IT’S LIKE NOT HAVING THEM.”

STREET STORY

TABLE 7-3. FISCALLY CONSTRAINED PROJECTS

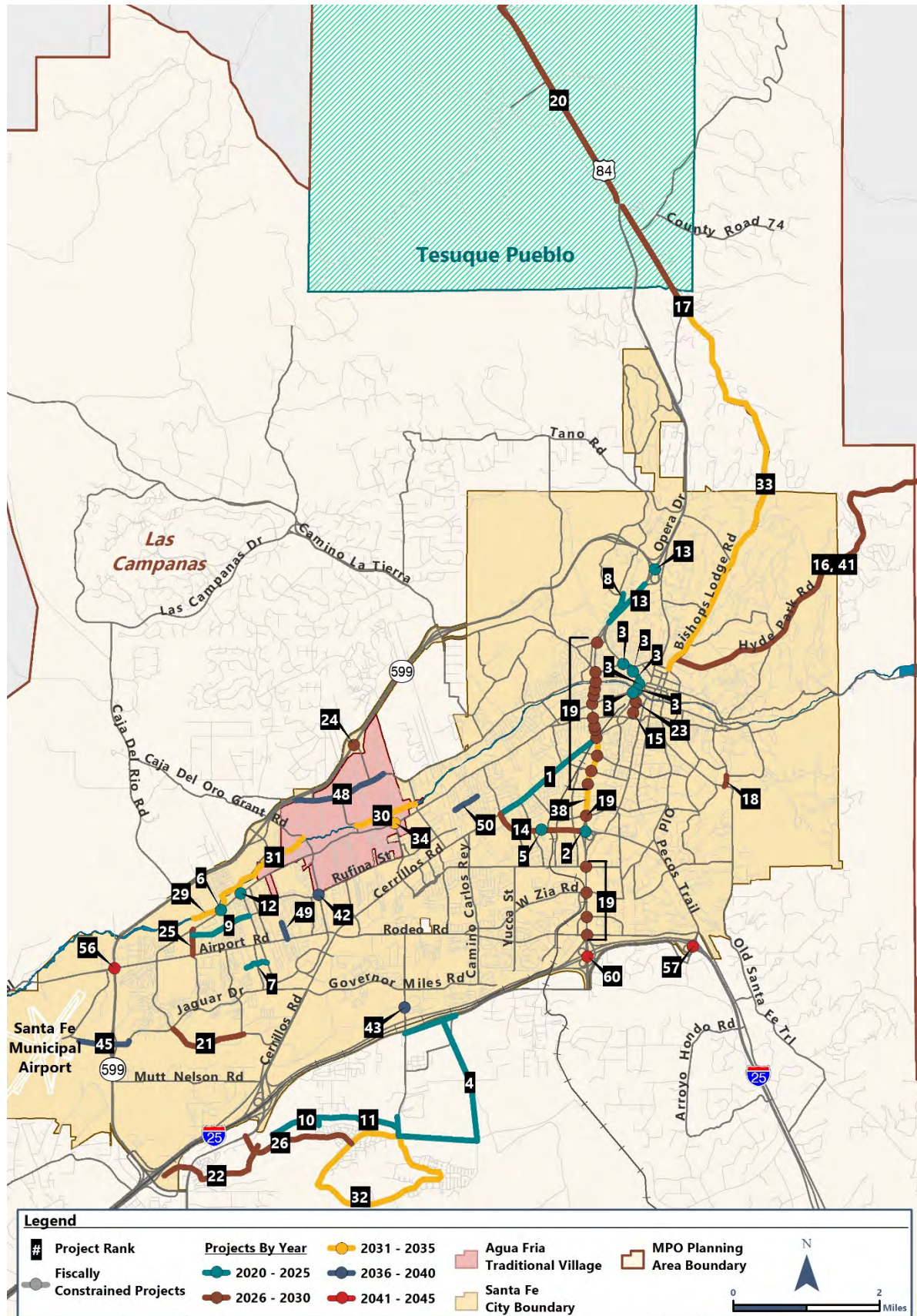
Rank	Project Name and Description	Lead Agency	Cost (2020 Dollars)	Time Frame/ Need	Year of Expenditure (YOE)		
					Year	YOE Cost	Cumulative Cost (YOE)
1	Cerrillos Road Reconstruction (St. Michaels Drive to St. Francis Drive): Reconstruct to add medians, drainage, bike lanes, sidewalks, and transit facilities.	NMDOT	\$18,000,000	Short	2021	\$18,000,000	\$18,000,000
2	S100440 - NM 466 (St. Michaels): Study, design, and construction of the St. Francis Drive/St. Michaels Drive interchange; pedestrian ADA improvements; pavement preservation; bridge reconstruction.	NMDOT	\$15,540,000	Short	2021	\$15,540,000	\$33,540,000
3	S100460 - Guadalupe Street Road Diet & Paseo de Peralta/Guadalupe Street Intersection Improvements: 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. Reconfigure intersection to improve pedestrian crossings and upgrade traffic signals.	City of Santa Fe	\$4,150,000	Short	2021	\$4,150,000	\$37,690,000
4	S100122 - South/East Connector: ROW acquisition, design, and construction of a new roadway.	Santa Fe County	\$4,750,000	Short	2021	\$4,750,000	\$42,440,000
5	S100470 - St. Michaels' Underpass: Design and construction of an underpass along the Rail Trail.	City of Santa Fe	\$4,700,000	Short	2021	\$4,700,000	\$47,140,000
6	S100370 - Agua Fria Street/Cottonwood Drive Intersection Safety Improvements: Construct a roundabout at the intersection.	City of Santa Fe	\$1,775,000	Short	2021	\$1,775,000	\$48,915,000
7	Tierra Contenta Trail: Buffalo Grass to South Meadows Road	City of Santa Fe	\$575,000	Short	2021	\$575,000	\$49,490,000
8	S100660 - Cañada Rincon Trail: Calle Mejia to Camino Francisca	City of Santa Fe	\$900,000	Short	2021	\$900,000	\$50,390,000
9	S100650 - Acequia Trail: Rufina to San Felipe	City of Santa Fe	\$1,500,000	Short	2021	\$1,500,000	\$51,890,000

Rank	Project Name and Description	Lead Agency	Cost (2020 Dollars)	Time Frame/ Need	Year of Expenditure (YOE)		
					Year	YOE Cost	Cumulative Cost (YOE)
10	S100630 - Arroyo Hondo Trail Segment 2: Construct segment 2 of the Arroyo Hondo Trail 1.2 miles.	Santa Fe County	\$1,400,000	Short	2021	\$1,400,000	\$53,290,000
11	S100640 - Arroyo Hondo Trail Segment 3: Construct segment 3 of the Arroyo Hondo Trail. 1.6 miles Engineering for connection to Richards Avenue.	Santa Fe County	\$1,700,000	Short	2021	\$1,700,000	\$54,990,000
12	Agua Fria/South Meadows Intersection Improvements: Reconfigure intersection to include left turn bays on Agua Fria and improve pedestrian crossings and upgrade traffic signals.	City of Santa Fe	\$3,150,000	Short	2021	\$3,150,000	\$58,140,000
13	S100430 - NM 599/US285 Ramp: Lengthen southbound on-ramp from NM 599 to US 84/285.	NMDOT	\$3,200,000	Short	2021	\$4,128,620	\$62,268,620
14	St. Michaels Roadway Reconstruction Study	City of Santa Fe	\$500,000	Short/Medium	2026	\$565,704	\$62,834,324
15	Cerrillos/Sandoval Intersection Improvements: Pedestrian improvements, striping, signage, reconfigure medians.	City of Santa Fe	\$1,800,000	Short/Medium	2026	\$2,036,535	\$64,870,859
16	Hyde Park Road (NM 475) Shoulder Improvements: Widen from Artist Road to Hyde Memorial State Park – Design.	NMDOT	\$1,600,000	Short/Medium	2026	\$1,810,253	\$66,681,112
17	Bishops Lodge Road and Tesuque Village Road Multimodal Road Safety Audit	Santa Fe County	\$50,000	Short/Medium	2027	\$57,985	\$66,739,097
18	Camino del Monte Sol: Expand the roadway to add shoulders and repave from Camino de Cruz Blanca to Old Santa Fe Trail.	City of Santa Fe	\$120,000	Short/Medium	2027	\$139,163	\$66,878,260
19	St. Francis Drive Pedestrian Intersection Improvements: Pedestrian improvements at all the intersections along St. Francis Drive.	NMDOT/City of Santa Fe	\$600,000	Short/Medium	2028	\$713,211	\$67,591,471
20	US 285 Frontage Road Corridor Study through the Pueblo of Tesuque	NMDOT	\$175,000	Short/Medium	2028	\$208,020	\$67,799,491

Rank	Project Name and Description	Lead Agency	Cost (2020 Dollars)	Time Frame/ Need	Year of Expenditure (YOE)		
					Year	YOE Cost	Cumulative Cost (YOE)
21	Paseo del Sol Extension: Roadway extension of Paseo del Sol within the Tierra Contenta Master Planned development. The roadway will include 2 travel lanes, bicycle lanes, sidewalk, lighting, and landscaping.	City of Santa Fe	\$8,000,000	Short/Medium	2028	\$9,509,486	\$77,308,977
22	Segment 1 of the Arroyo Hondo Trail	Santa Fe County	\$1,900,000	Short/Medium	2029	\$2,314,966	\$79,623,943
23	Sandoval/Montezuma Intersection Improvements: Pedestrian improvements, striping, signage.	City of Santa Fe	\$850,000	Short/Medium	2029	\$1,035,642	\$80,659,585
24	NM 599/Via Veteranos (CR 70) Interchange: Construct a new interchange.	NMDOT	\$8,000,000	Short/Medium	2030	\$9,990,904	\$90,650,489
25	San Felipe Road Reconstruction: Reconstruct roadway from Airport Road to Agua Fria Street and add bike lanes, curb and gutter, sidewalk.	City of Santa Fe	\$1,600,000	Short/Medium	2030	\$1,998,181	\$92,648,670
26	Rancho Viejo Blvd Bike Lanes (Shoulders): Widen from NM 14 to Avenida del Sur to add bike lanes.	Santa Fe County	\$1,000,000	Short/Medium	2030	\$1,248,863	\$93,897,533
29	Santa Fe River Trail – Constellation Dr. to Paseo Real	City of Santa Fe	\$7,000,000	Medium	2031	\$8,960,592	\$102,858,125
30	Santa Fe River Trail – From Siler South to San Ysidro Crossing	Santa Fe County	\$5,000,000	Medium	2031	\$6,400,423	\$109,258,547
31	Santa Fe River Trail – From Caja del Oro Grant Road to San Felipe Road	Santa Fe County	\$7,980,000	Medium	2032	\$10,470,452	\$119,728,999
32	Bike Lane Loop: Richards, A Van Nu Po, and Avenida del Sur	Santa Fe County	\$2,000,000	Medium	2033	\$2,689,778	\$122,418,777
33	Bishop Lodge Road bicycle, pedestrian, ADA, and transit improvements	Santa Fe County	\$4,000,000	Medium	2034	\$5,514,044	\$127,932,821
34	Agua Fria Road/Henry Lynch Street Intersection Roundabout	Santa Fe County	\$130,000	Medium	2034	\$179,206	\$128,112,027
38	St. Francis Street Lights Between W. San Mateo and Cerrillos	NMDOT	\$500,000	Medium	2035	\$706,487	\$128,818,514

Rank	Project Name and Description	Lead Agency	Cost (2020 Dollars)	Time Frame/ Need	Year of Expenditure (YOE)		
					Year	YOE Cost	Cumulative Cost (YOE)
41	Hyde Park Road (NM 475) Shoulder Improvements: Widen from Artist Road to Hyde Memorial State Park – Construction.	NMDOT	\$14,400,000	Medium/Long	2036	\$20,855,494	\$149,674,008
42	Rufina Street/Lopez Lane Intersection Improvements: Pedestrian improvements, striping, signage, reconfigure medians.	City of Santa Fe	\$1,800,000	Medium/Long	2037	\$2,672,110	\$152,346,118
43	Beckner Road/Richards Avenue Intersection Improvements: Pedestrian improvements, striping, signage.	City of Santa Fe	\$2,000,000	Medium/Long	2038	\$3,043,237	\$155,389,354
45	Jaguar Drive Extension to Municipal Airport: Roadway connection from NM 599 to the Santa Fe Regional Airport. The two-lane roadway may include bicycle lanes, curb and gutter, sidewalk, landscaping, and drainage accommodations.	City of Santa Fe	\$5,000,000	Medium/Long	2039	\$7,798,294	\$163,187,648
48	West Alameda Street Bike Lanes (County): Widen from Chicoma Vista to Frontage Road to add bike lanes.	Santa Fe County	\$1,000,000	Medium/Long	2037	\$1,484,506	\$164,672,154
49	Calle Po Ae Pi Extension: Pave dirt section include sidewalks.	City of Santa Fe	\$1,000,000	Medium/Long	2040	\$1,598,650	\$166,270,804
50	Acequia Trail – Otowi to La Cieneguita via Maclovio Park, Gallegos Drive, and Los Hermanos Rodriguez Park	City of Santa Fe	\$750,000	Medium/Long	2040	\$1,198,988	\$167,469,791
56	NM 599/Airport Road Interchange: Construct a new interchange.	NMDOT	\$11,000,000	Long	2041	\$18,024,781	\$185,494,572
57	I-25/NM 466: Interchange Improvements: Reconfigure interchange and lengthen ramp.	NMDOT	\$7,200,000	Long	2041	\$11,798,038	\$197,292,611
60	I-25/St. Francis Drive: Interchange Improvements: Reconfigure interchange and lengthen ramp.	NMDOT	\$8,300,000	Long	2041	\$13,600,516	\$210,893,127

FIGURE 7-1. FISCALLY CONSTRAINED PROJECTS



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 \$210 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 timeline 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 (FAST) Act Reauthorization, the main federal funding sources available in the SFMPA 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.

Local funding sources include the following:

- **Capital Improvements Program (CIP) Bonds:** The City and County sell revenue bonds pledged with local gross receipts taxes. The CIP bonds are used to undertake projects such as building roads, parks, and other necessary city improvements.
- **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. Based on forecast residential and nonresidential construction, the City might expect the road impact fee revenue to generate \$10.4 million over the next seven years.
- **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.

Appropriations to each state will be determined through negotiations and reauthorization of the FAST Act or a subsequent federal transportation bill. 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 the gas tax is not adjusted for inflation, revenues generated from this source have declined. The federal Highway Trust Fund comes from fuel taxes and heavy vehicle fees and taxes. Please note as this version of the MTP is being drafted, the short and long-term uncertainty resulting from the COVID-19 pandemic and existing and pending economic and policy impacts cannot be speculated but may be impacted by future reauthorizations.

GAS TAX

Since 1993, the federal 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 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.

ILLUSTRATIVE PLAN

The *Illustrative Project List* is shown in Table 7-4 and on Figure 7-2. The projects listed in Table 7-4 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 (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 7-4. ILLUSTRATIVE PLAN PROJECT

Rank	Project Name and Description	Lead Agency	Cost (2020 Dollars)	Time Frame/ Need
27	Rehabilitation or Replacement of Paseo de Peralta Bridge over the Santa Fe River	City of Santa Fe	\$2,500,000	Short/Medium
28	Cerro Gordo Reconstruction: Roadway improvements from Armijo Lane to Canyon Road. Existing road consists of millings over a dirt road and will need to be engineered for drainage and pavement.	City of Santa Fe	\$2,750,000	Short/Medium
35	Governor Miles Road Reconstruction: Reconstruct roadway from Richards Avenue to Pueblos del Sol and add bike lanes, curb and gutter, sidewalk.	City of Santa Fe	\$2,000,000	Medium
36	Henry Lynch Road Reconstruction: Reconstruction from Agua Fria to Rufina Street and add bike lanes, sidewalk.	City of Santa Fe	\$2,200,000	Medium
37	NM 599/Camino de los Montoyas Interchange w/ Frontage Road: Construct a new interchange.	NMDOT	\$11,050,000	Medium
39	Rehabilitation or Replacement of 3 Downtown Bridges over the Santa Fe River: Galisteo, Don Gaspar, Delgado Street.	City of Santa Fe	\$4,000,000	Medium
40	Avenida Del Sur Extension: Construct a new road and upgrade existing roadway from NM14 to A Van Nu Po.	Santa Fe County	\$3,675,000	Medium
44	Tesuque Village Road Bike Lanes: Extend bike lanes from the Tesuque Pueblo Fire Department to the Pueblo of Tesuque boundary.	Santa Fe County	\$1,650,000	Medium/Long
46	NM 599/I-25 Frontage Road Overpass: Construct an overpass to carry the North Frontage Road over NM 599. Reconfigure existing Frontage Road at grade intersection with NM 599 to right in/right out only.	NMDOT	\$6,000,000	Medium/Long
47	West Alameda Street Bike Lanes (City): Widen from Calle Nopal to Siler Road to add bike lanes and Improve drainage.	City of Santa Fe	\$7,000,000	Medium/Long
51	Los Sueños Trail and La Vida Lane Road Improvements	Santa Fe County	\$3,000,000	Medium/Long
52	Rufina Street Connection: New roadway connection between Harrison Road and Camino Carlos Rey.	City of Santa Fe	\$500,000	Medium/Long
53	Los Sueños Trail Extension	Santa Fe County	\$3,000,000	Medium/Long
54	Caja del Rio/Paseo Real Connector	Santa Fe County	\$3,433,647	Medium/Long
55	County Road 62 Realignment and Improvements: NM 599 to Caja del Oro Grant Road	Santa Fe County	\$3,000,000	Medium/Long

Rank	Project Name and Description	Lead Agency	Cost (2020 Dollars)	Time Frame/ Need
58	I-25/NM 599: Interchange Ramp Improvements: Lengthen on- and off-ramps.	NMDOT	\$2,500,000	Long
59	Old Santa Fe Trail Bike Lanes (County): Widen from El Gancho Way to Two Trails Road.	Santa Fe County	\$1,000,000	Long
61	North West Quadrant Trail: Segment of trail within the North West Quadrant area.	City of Santa Fe	\$300,000	Long
62	La Tierra/Jacona Connection Study	Santa Fe County	\$500,000	Long
63	I-25 Auxiliary Lanes: NM 599 to Cerrillos: Construct a third lane in each direction between interchanges.	NMDOT	\$4,000,000	Long
64	I-25 Auxiliary Lanes: St. Francis Drive to NM 466: Construct a third lane in each direction between interchanges.	NMDOT	\$2,000,000	Long
65	I-25 Auxiliary Lanes: Cerrillos to St. Francis Drive: Construct a third lane in each direction between interchanges.	NMDOT	\$17,000,000	Long
66	I-25/Richards Avenue Interchange: Construct a new interchange.	NMDOT	\$25,000,000	Long
67	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	Long

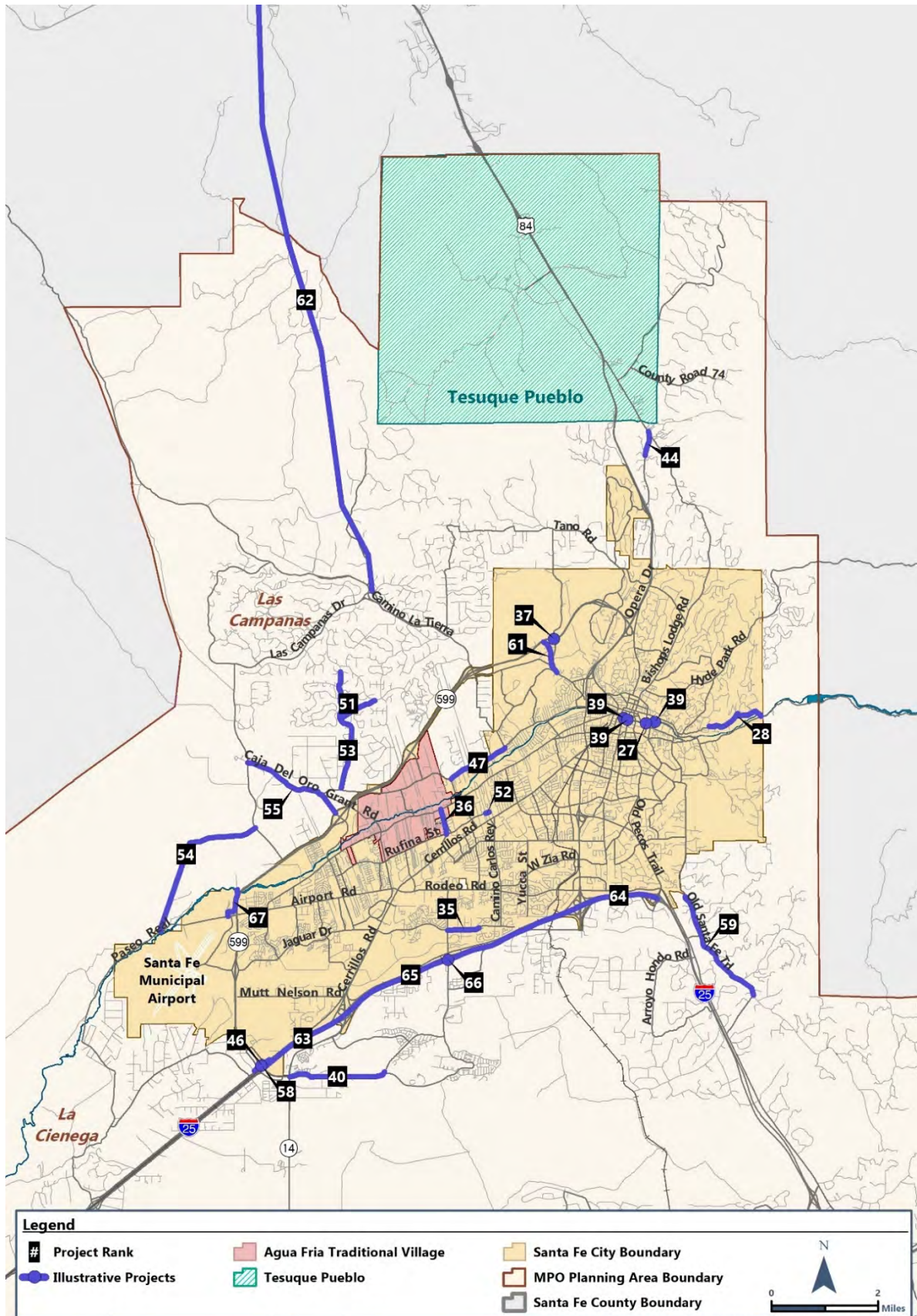
MYTH: Increasing transit funding does not increase ridership and transit should be defunded because no one uses it. Similarly, pedestrian and bicycle infrastructure should not be supported due to lack of use.

FACT: Improving the multimodal transportation network is not a matter of prioritizing or funding one mode over another but viewing the network as a system with infrastructure investment and planning to meet the larger needs of the network. A well-connected bicycle/pedestrian/transit network will naturally increase use.

Many argue that they never see full buses; therefore, the buses are not needed. Thinking about this relative to the number of single occupancy vehicles on the same roadway can give perspective to the number of vehicles that are being displaced by access to transit.

Like the empty bus myth, empty bike lanes and transit-only lanes are often viewed as an indication that bike lanes are not needed. However, this is often a product of viewing these lanes from an adjacent congested vehicle lane. Free-flowing BRT and bicycle traffic appears sparse adjacent to gridlocked vehicle traffic as a function of density, thereby creating a view from a vehicle that no one is using the bike lane. In this congested environment, a vehicle may be intermittently passed by a bicyclist or a bus; however, the bike and bus are moving while the vehicle may be stuck in congested traffic. The productivity of all lanes (bike, transit, vehicle) should be assessed as a function of person-throughput instead of density.

FIGURE 7-2. ILLUSTRATIVE PLAN PROJECTS



MODAL PLAN PRIORITIES

TRANSIT 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 7-5 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 subsequent updates to the PTMP.



TABLE 7-5. 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	Complete New Southside Center	Operations
	3	Implement bus stop improvements identified in the Pedestrian Improvement Program	Operations
	4	Conduct Origin-Destination Study and Short Range Plan	Planning
	5	Rebrand and market services	Marketing
	6	Routing revisions	Operations
	7	Revise service hours	Operations
	8	Manage mobility	Planning
	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	Complete Sheridan Avenue facility	Infrastructure
	15	Coordinate transit service efforts to address the issues of safety and security on a regional basis	Planning
	16	Private Sector: Refurbish Santa Fe Southern Railway and coordinate Rail Trail accessibility with Santa Fe Southern Railway	Infrastructure

BICYCLE PRIORITIES

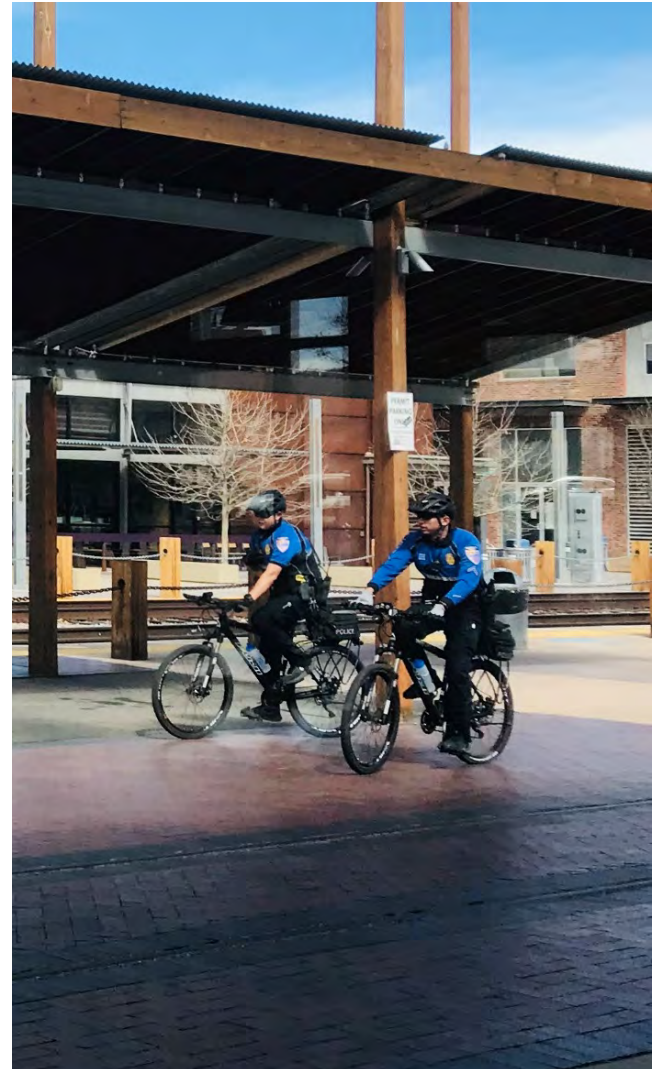
The priorities for new bicycle infrastructure include the extension of seamless multi-use trail and bikeway alignments from the downtown Plaza and Railyard areas to the southern, western, and northern extremes of the metropolitan area, as well as improved local bikeway connections and road crossings 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
- The Cañada Rincon Trail
- Connector Trails

On-street priorities include addressing gaps in the existing bicycle network and completing on-road sections of the Vision 2040 Bicycle Network; a connected low-stress bicycle network. This may be achieved through reducing stress on existing facilities by enhancing bike lanes with a protective buffer and/or barrier, and implementing road diets and complete streets such as the proposed projects:

- Paseo de Peralta (four or five lanes to three): West Alameda southwest to Guadalupe
- Paseo de Peralta / NM 475 (five lanes to three, or through reduction of lane widths): St. Francis Drive to Washington Avenue
- 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 (three lanes to two); restore shoulders west of Paseo de la Luz to the junction of US 285; 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
- Long-term consideration of other multi-lane roadways, including other segments of Cerrillos Road (east of St. Francis Drive), St. Francis Drive, and Guadalupe Street

Additional on- and off-street proposed improvements may be found in the Bicycle Master Plan, Chapter 4: Phase A, B, C Projects, pages 71-80, and at <https://bike.santafempo.org/#>.



PEDESTRIAN PRIORITIES

The Pedestrian Master Plan revealed 10 areas of concern and recommends that these areas be studied in a comprehensive manner to improve safety and mobility for all users. Additionally, the Pedestrian Improvement Project created a ranked list of low-cost and high-priority projects evaluated with objective criteria.

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
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 continue the Pedestrian Improvement Project and to use the Pedestrian Master Plan to leverage funding for both future studies and infrastructure improvements that may be derived from the data, information, and analysis found within these plans.





This chapter outlines performance measures that will be tracked over time to evaluate progress toward meeting our region's transportation goals and identifies strategies to achieve the plan goals.

The Santa Fe Metropolitan Transportation Plan establishes goals for the safety and mobility of our residents. The goals align with the USDOT goals outlined in MAP-21 and the FAST Act. This includes building a performance-based and multimodal program to strengthen the U.S. transportation system.

FEDERAL REQUIREMENTS

Federal surface transportation legislation, beginning with MAP-21 (2012) and continued in the FAST Act (2015), established performance requirements for states and MPOs under the Transportation Performance Management (TPM) Program to support the national transportation goals listed in Table 8-1 (as described in 23 USC § 150(b) and in 49 USC § 5301).

The Santa Fe MPO has historically adopted the federally mandated performance measures as set by the NMDOT and reported to FHWA pertaining to three categories of performance:

1. Safety Performance Management
2. Bridge and Pavement Condition Measures
3. System Performance, Freight, Congestion and Air Quality Measures

TABLE 8-1. NATIONAL PERFORMANCE GOAL AREAS

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 Delivery Delays	To reduce project costs, accelerate project completion, eliminate delays in project development, and reduce regulatory burdens

ALIGNMENT OF NATIONAL, STATE, AND REGIONAL GOALS

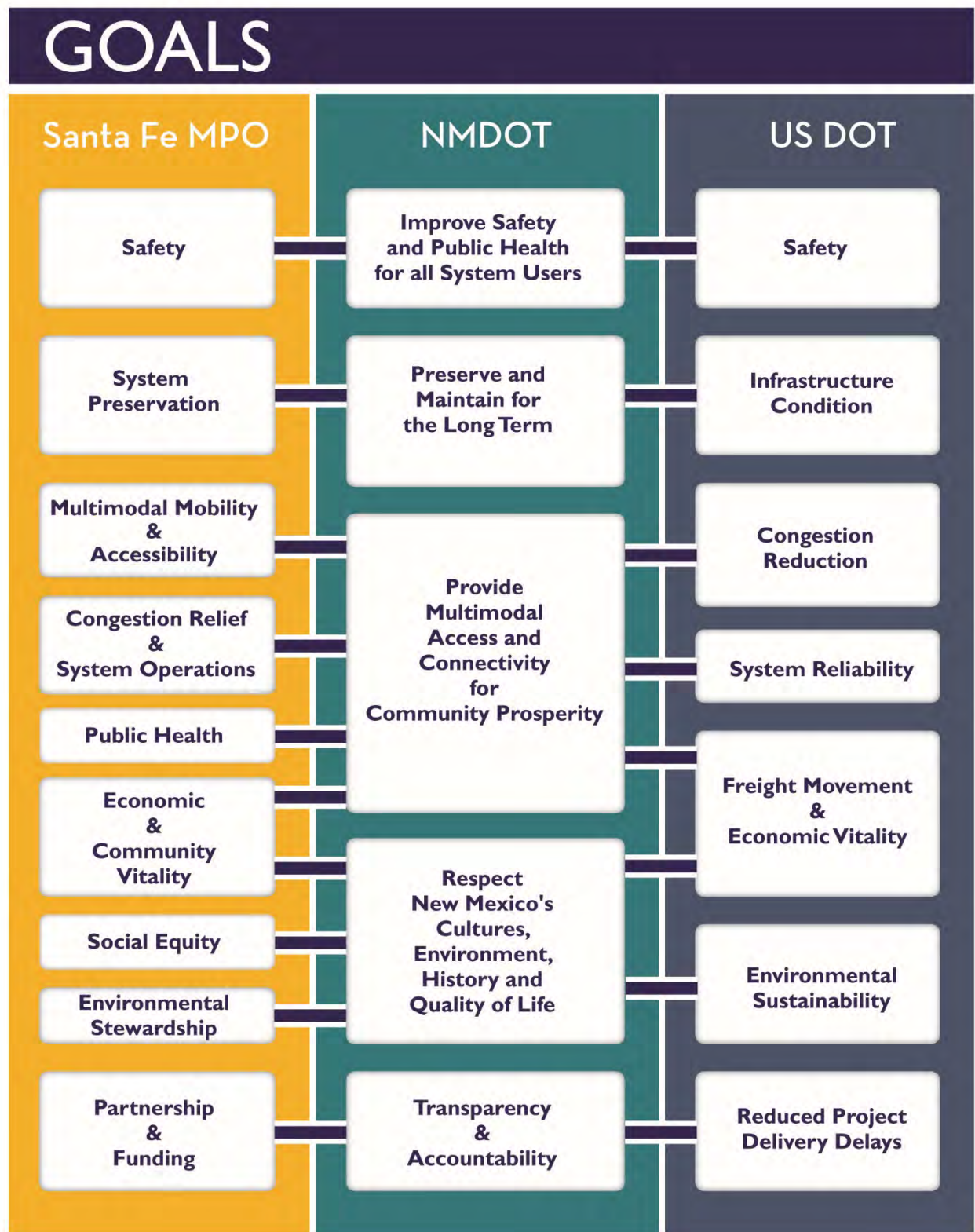
The Santa Fe MPO will implement a performance management approach with the approval of this MTP. The MPO will use this approach to realize stated goals by isolating specific system elements and broadly assessing system-level outcomes. Figure 8-1 identifies how the goals established by the MPO align with established state and federal goals.

PERFORMANCE MEASURES

The FHWA and Federal Transit Administration (FTA) are tasked with developing and issuing guidance for national performance measures. States are required to develop targets for each performance measure, and MPOs are then required to either adopt the state's targets or develop their own regionally specific targets. NMDOT established performance targets for the national performance measures in 2019. SFMPO subsequently adopted most of the State's targets with two exceptions—percent of NHS bridges in good condition and percent of NHS bridges in poor condition—for which SFMPO established region-specific targets.

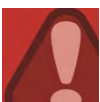
These categories are further broken down into specific targets as detailed in the following sections. This transportation performance management strategy allows the SFMPO to align with NMDOT and FHWA in systematically reporting standardized information to policy makers. In this way, investments can be made to support the achievement of national performance goals. This method ensures that targets and measures are developed in cooperative partnerships and are based on data and objective information.

FIGURE 8-1. ALIGNMENT OF NATIONAL, STATE, AND REGIONAL GOALS



SAFETY

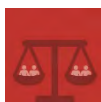
The safety and security of our transportation system for both motorized and non-motorized users are of critical importance to the Santa Fe MPO and its member agencies. The MPO supports safety improvements and engineering solutions that will reduce crash rates for vehicles, bicyclists, pedestrians, and transit riders in our region. The five safety performance measures are described below. Achieving the established targets will contribute toward reaching several of the Santa Fe MTP goals:



Safety



Public Health



Social Equity



Economic & Community Vitality

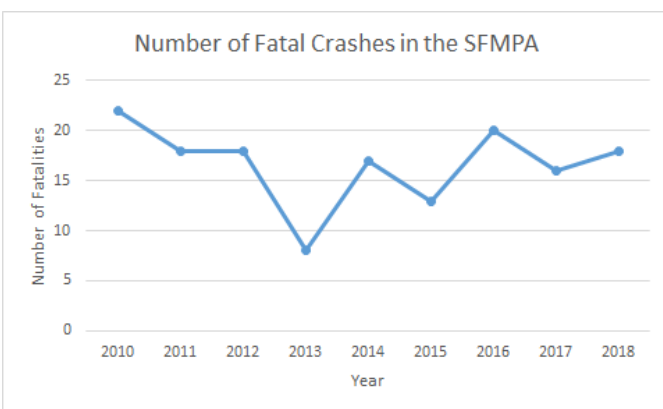
“ME SIENTO SEGURO EN LAS CALLES DE SANTA FE CUANDO ESTÁN BIEN ILUMINADAS Y HAY UN CAMINO DONDE CAMINAR.”

I feel safe on Santa Fe streets when they are well lit and there is a path to walk on.

– Survey Repondent

SAFETY 1 – NUMBER OF FATALITIES

SFMPA BASELINE DATA:



DESIRED TREND:



SANTA FE MPO TARGET:

SFMPA has adopted the NMDOT target and will work in partnership with the State and other regions to achieve the target.

STATEWIDE TARGET:

The NMDOT 2020 target for statewide total number of fatalities is 401.9. This target is consistent with the Highway Safety Program.

The State appears to be on track to reach its target in 2018, with 392 fatalities occurring in 2018.

SAFETY 2 – FATALITIES PER 100 MILLION VEHICLE MILES TRAVELED (VMT)

SFMPA BASELINE DATA: According to UNM’s annual crash reports prepared for the NMDOT (https://gps.unm.edu/gps_assets/tru_data/Crash-Reports/Annual-Reports/annual-report-2018.pdf), Santa Fe County was ranked as the 6 th NM county with the highest fatalities (0.9) per 100 million VMT in 2018. Please note that while the SFMPA is within county boundaries, the county is larger than the SFMPA. All 18 of the fatalities that were recorded in Santa Fe County occurred in the SFMPA.	DESIRED TREND: 
SANTA FE MPO TARGET: SFMPA has adopted the NMDOT target and will work in partnership with the State and other regions to achieve the target.	STATEWIDE TARGET: The NMDOT 2020 target rate of fatalities is 1.429 fatalities per 100 million VMT. This target is consistent with the Highway Safety Program. The State appears to be on track to reach its target, reporting 1.44 fatalities per 100 million VMT.

SAFETY 3 – NUMBER OF SERIOUS INJURIES

“TRAFFIC SAFETY IS A HUGE ISSUE IN SANTA FE. DRIVERS FREQUENTLY ALMOST RUN ME OVER WHILE I AM WALKING, MAINLY DUE TO DRIVING TOO FAST AND THE LACK OF CONNECTED SIDEWALKS. TRAFFIC SAFETY ALSO PREVENTS ME FROM RIDING MY BIKE IN MANY AREAS DUE TO FEAR OF BEING HIT BY AN INATTENTIVE DRIVER.” — Survey Respondent

SFMPA BASELINE DATA: Data currently unavailable.	DESIRED TREND: 
SANTA FE MPO TARGET: SFMPA has adopted the NMDOT target and will work in partnership with the State and other regions to achieve the target.	STATEWIDE TARGET: The NMDOT 2020 target is to decrease the number of serious injuries by 7.5 percent to 1,074.2. This target is consistent with the Highway Safety Program. The State is on track to reach its target, reporting 1,057 serious injuries in 2018.

SAFETY 4 – SERIOUS INJURIES PER 100 MILLION VEHICLE MILES TRAVELED (VMT)

SFMPA BASELINE DATA: Data currently unavailable.	DESIRED TREND: 
SANTA FE MPO TARGET: SFMPO has adopted the NMDOT target and will work in partnership with the State and other regions to achieve the target.	STATEWIDE TARGET: The NMDOT 2020 target rate of serious injuries is 3.82 serious injuries per 100 million VMT. The State is not on track to reach its target, reporting a rate of 3.87 serious injuries per 100 million VMT.

“I RIDE MY BIKE AND WALK AROUND OUR CITY. THERE ARE MANY TIMES I DO NOT FEEL SAFE AND WOULD LIKE TO SEE NEW BIKE PATHS AND SIDEWALK REPAIRS.” – Survey Respondent

SAFETY 5 – NUMBER OF NON-MOTORIZED FATALITIES AND SERIOUS INJURIES

SFMPA BASELINE DATA: Data for the county show that at least 15 pedestrians and bicyclists were involved in a crash of this type, represented by 7 fatal crashes and 8 serious injury crashes. https://gps.unm.edu/gps_assets/tru_data/Crash-Reports/Community-Reports/2018-community-reports/County_SantaFe.pdf	DESIRED TREND: 
SANTA FE MPO TARGET: SFMPO has adopted the NMDOT target and will work in partnership with the State and other regions to achieve the target.	STATEWIDE TARGET: The NMDOT 2020 target for number of non-motorized fatalities and serious injuries is 204.0. The State is not on track to reach its target, reporting 205.0 crashes of this type. In NM in 2018, there were 95 fatalities and 110 serious injuries for non-motorized vehicles. Of these, 7 percent occurred in Santa Fe County.

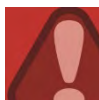
BRIDGE AND PAVEMENT

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. The six bridge and pavement performance measures are described below. Achieving the established targets will contribute toward reaching several SFMTP goals:

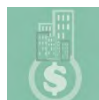
"WHEN SANTA FE STREETS ARE MAINTAINED [WE GET] BETTER QUALITY OF LIFE, HEALTH OUTCOMES LIKE LOWER BLOOD PRESSURE, STRESS RELIEF THROUGH MOVEMENT, AND BETTER BLOOD SUGAR CONTROL." – Survey Respondent



System Preservation



Safety



Economic & Community Vitality

BRIDGE AND PAVEMENT 1 – PERCENT OF INTERSTATE PAVEMENTS ON THE NHS IN GOOD CONDITION

SFMPA BASELINE DATA: Data currently unavailable.	DESIRED TREND: 
SANTA FE MPO TARGET: SFMPA has adopted the NMDOT target and will work in partnership with the State and other regions to achieve the target.	STATEWIDE TARGET: The NMDOT 2021 target for percent of interstate pavement on the NHS in good condition is 59.1 percent.

BRIDGE AND PAVEMENT 2 – PERCENT OF INTERSTATE PAVEMENTS ON THE NHS IN POOR CONDITION

SFMPA BASELINE DATA: Data currently unavailable.	DESIRED TREND: 
SANTA FE MPO TARGET: SFMPA has adopted the NMDOT target and will work in partnership with the State and other regions to achieve the target.	STATEWIDE TARGET: The NMDOT 2021 target for percent of interstate pavement on the NHS in poor condition is 5 percent.

BRIDGE AND PAVEMENT 3 – PERCENT OF NON-INTERSTATE PAVEMENTS ON THE NHS IN GOOD CONDITION

SFMPA BASELINE DATA: Data currently unavailable.	DESIRED TREND: 
SANTA FE MPO TARGET: SFMPO has adopted the NMDOT target and will work in partnership with the State and other regions to achieve the target.	STATEWIDE TARGET: The NMDOT 2021 target for percent of non-interstate pavement on the NHS in good condition is 34.2 percent.

BRIDGE AND PAVEMENT 4 – PERCENT OF NON-INTERSTATE PAVEMENTS ON THE NHS IN POOR CONDITION

SFMPA BASELINE DATA: Data currently unavailable.	DESIRED TREND: 
SANTA FE MPO TARGET: SFMPO has adopted the NMDOT target and will work in partnership with the State and other regions to achieve the target.	STATEWIDE TARGET: The NMDOT 2021 target for percent of non-interstate pavement on the NHS in poor condition is 9 percent.

BRIDGE AND PAVEMENT 5 – PERCENT OF BRIDGES ON THE NHS IN GOOD CONDITION

SFMPA BASELINE DATA: Data currently unavailable.	DESIRED TREND: 
SANTA FE MPO TARGET: The SFMPO Policy Board adopted a modified target for the SFMPO area of 55 percent of bridges on the NHS in good condition in 2021 based on the NMDOT's Bridge Management Engineer's recommendation.	STATEWIDE TARGET: The NMDOT 2021 target for percent of bridges on the NHS in good condition is 30 percent.

BRIDGE AND PAVEMENT 6 – PERCENT OF BRIDGES ON THE NHS IN POOR CONDITION

SFMPO BASELINE DATA: Data currently unavailable.	DESIRED TREND: 
SANTA FE MPO TARGET: The SFMPO Policy Board adopted a modified target for the SFMPO area of 6 percent of bridges on the NHS in poor condition in 2021 based on the NMDOT's Bridge Management Engineer's recommendation.	STATEWIDE TARGET: The NMDOT 2021 target for percent of bridges on the NHS in poor condition is 2.5 percent.

SYSTEM PERFORMANCE, FREIGHT, CONGESTION, AND AIR QUALITY

Traffic congestion is a regular occurrence, particularly during peak commuting hours when many people are traveling at the same time. Travelers are used to congestion and plan for it. But when unexpected congestion causes a trip to take longer than was planned, people are late for work, late for appointments, or late for school. Truckers carrying freight are late to a manufacturer, disrupting just in time delivery. Travelers, regardless of travel mode, want travel time reliability – consistency or dependability in travel times, as measured from day-to-day and/or across different times of the day. Travel time reliability is a critical metric used to assess transportation system performance. The three system performance measures are described below. Achieving the established targets will contribute toward reaching several Santa Fe MTP goals:

“THE TRAFFIC SYSTEM WORKS BEST WHEN RULES/LAWS MAKE SENSE TO DRIVERS AND ALL WHO MEET UP AT INTERSECTIONS.” – Survey Respondent



Congestion Relief & System Operations



Environmental Stewardship



Economic & Community Vitality



Multimodal Mobility & Accessibility

SYSTEM PERFORMANCE 1 – PERCENT OF PERSON-MILES TRAVELED ON THE INTERSTATE SYSTEM THAT ARE RELIABLE

SFMPA BASELINE DATA: Data currently unavailable.	DESIRED TREND: 
SANTA FE MPO TARGET: SFMPA has adopted the NMDOT target and will work in partnership with the State and other regions to achieve the target.	STATEWIDE TARGET: The NMDOT 2021 target for percent of person-miles traveled on the interstate system that are reliable is 96.1 percent.

SYSTEM PERFORMANCE 2 – PERCENT OF PERSON-MILES TRAVELED ON THE NON-INTERSTATE NHS THAT ARE RELIABLE

SFMPA BASELINE DATA: Data currently unavailable.	DESIRED TREND: 
SANTA FE MPO TARGET: SFMPA has adopted the NMDOT target and will work in partnership with the State and other regions to achieve the target.	STATEWIDE TARGET: The NMDOT 2021 target for percent of person-miles traveled on the non-interstate NHS that are reliable is 90.4 percent.

SYSTEM PERFORMANCE 3 – TRUCK TRAVEL TIME RELIABILITY (TTTR) INDEX

SFMPA BASELINE DATA: Data currently unavailable.	DESIRED TREND: 
SANTA FE MPO TARGET: SFMPA has adopted the NMDOT target and will work in partnership with the State and other regions to achieve the target.	STATEWIDE TARGET: The NMDOT 2021 target for truck travel time reliability index is 1.15.

TRANSIT

Transit performance is represented by two types of performance measures: Public Transportation Agency Safety Plan (PTASP) measures and Transit Asset Management (TAM) measures. The PTASP requirements are new and must be coordinated between the SFMPO and the area's transit providers including NCRTD and Santa Fe Trails by July 20, 2020. They will then be updated every four years.

“BETTER BUS AND RAIL SERVICE IS CRUCIAL FOR LOW-INCOME PEOPLE IN SANTA FE.”

– Survey Respondent

“SUPPORTING THE BUS ROUTES HELPS THOSE THAT NEED AFFORDABLE TRANSPORT.”

– Survey Respondent

The TAM requirements are also updated every four years and were last approved by the Santa Fe Transportation Policy Board on November 20, 2017.

TAM PERFORMANCE 1 – VEHICLE DEGRADATION

SFMPA BASELINE DATA: Data currently unavailable.	DESIRED TREND: 
SANTA FE MPO TARGET: Decrease Vehicle Degradation: Monitor trends on equipment and perform time change on common wear components. Maintain tools and equipment in the shop.	MEASURE: Reduce the number of vehicle hour/downtime by 12 percent: Increase the life expectancy of vehicles by a minimum of 2 years above FTA recommendations.

TAM PERFORMANCE 2 – EQUIPMENT DEGRADATION

SFMPA BASELINE DATA: Data currently unavailable.	DESIRED TREND: 
SANTA FE MPO TARGET: Reduce the number of vehicle hour/downtime by 12 percent: Increase the life expectancy of vehicles by a minimum of 2 years above FTA recommendations.	STATEWIDE TARGET: Prolong equipment life expectancy by 10 percent.

TAM PERFORMANCE 3 – FACILITY DEGRADATION

SFMPA BASELINE DATA: Data currently unavailable.	DESIRED TREND: 
SANTA FE MPO TARGET: Reduce facility depreciation. Routine and proactive preventative maintenance.	MEASURE: Prolong facility depreciation by 8 percent.

TAM PERFORMANCE 4 – CUSTOMER SERVICE

SFMPA BASELINE DATA: Data currently unavailable.	DESIRED TREND: 
SANTA FE MPO TARGET: Improve customer service. Keep customers informed and improve response time. Increase community engagement participation.	MEASURE: Reduce the number of customer complaints by 10 percent.

Additional details about each performance measure, including the background and justification, as well as the signed MPO Self-Certification Performance Measure Targets, are included in Appendix E.

IMPLEMENTATION STRATEGIES

Table 8-2 identifies the strategies to be implemented over the next five years by the SFMPO and the MPO member agencies to support achievement of the State’s performance targets and the region’s transportation goals. Many of the strategies aim to address more than one goal area, as denoted in Table 8-2.

TABLE 8-2. IMPLEMENTATION STRATEGIES

STRATEGY		GOAL ADDRESSED									MPO Primary Responsibility	Opportunity for Member Agencies
		Safety	Public Health	Social Equity	Multimodal Mobility & Accessibility	Environmental Stewardship	Congestion Relief & System Operations	Economic & Community Vitality	System Preservation	Partnerships & Funding		
Data Tracking												
1	Pursue baseline data from NMDOT and establish performance targets for the approved performance measures.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
2	Develop a methodology to estimate annual VMT in the region to normalize crash data (crashes per VMT).	✓									✓	
3	Stratify injury crash data to identify serious injury crashes.	✓									✓	
4	Develop an approach to track miles of sidewalks, multi-use paths, and on-road bicycle facilities.				✓						✓	
5	Develop a spatial database of housing, commercial, and transportation projects to enable tracking of project completion.					✓					✓	
6	Develop an approach to track annual transportation funding by mode.									✓	✓	
7	Develop a maintenance and monitoring plan for all green infrastructure and integrate it with the asset management plan and software to streamline the process of building and maintaining green infrastructure					✓			✓			✓

STRATEGY

STRATEGY

		GOAL ADDRESSED									MPO Primary Responsibility	Opportunity for Member Agencies
		Safety	Public Health	Social Equity	Multimodal Mobility & Accessibility	Environmental Stewardship	Congestion Relief & System Operations	Economic & Community Vitality	System Preservation	Partnerships & Funding		
Education & Outreach												
8	Continue Technical Coordinating Committee.						✓			✓	✓	
9	Encourage hosting of transportation-related cultural, recreational, and professional events.							✓			✓	
10	Use social marketing to reach out to the general public and visitors.			✓	✓			✓			✓	
11	Continue to develop partnerships with local public health organizations.		✓							✓	✓	
12	Participate with local public health events and planning initiatives to help showcase how the MPO is supporting and may contribute to public health goals.		✓							✓	✓	
13	Continue to promote active transportation with events like Bike-to-Work Week.		✓		✓						✓	
14	Encourage bicycle parking at workplaces and public spaces.		✓		✓						✓	
15	Develop and implement education campaigns as new transportation technologies are introduced to ensure equal opportunities and understanding.			✓							✓	
16	Engage youth to help develop a transportation system that they want and will keep them in Santa Fe to strengthen the economy and build a system for future users							✓			✓	
17	Education/enforcement – partner with public schools to educate on safety and availability of public transit/public services.				✓					✓	✓	
18	Encourage public education and awareness of safety and sharing the road with others.	✓		✓	✓						✓	

STRATEGY

		GOAL ADDRESSED									MPO Primary Responsibility	Opportunity for Member Agencies
		Safety	Public Health	Social Equity	Multimodal Mobility & Accessibility	Environmental Stewardship	Congestion Relief & System Operations	Economic & Community Vitality	System Preservation	Partnerships & Funding		
19	Implement commuter transportation demand management strategies.				✓	✓	✓			✓	✓	
20	Engage and coordinate with art organizations to facilitate transportation education, awareness, and cultural overlap.			✓	✓			✓			✓	
21	Improve engagement with underserved communities by identifying and coordinating with active organizations and individuals.			✓							✓	
22	Coordinate public information messages across departments to incorporate green infrastructure and transportation information regarding environmental stewardship and the importance of protecting Santa Fe's ecosystems.					✓					✓	✓
Funding												
23	Research and consider creative alternative funding sources, such as public-private partnerships.									✓	✓	
24	Study gross receipt tax increases to support transit improvements in the region.				✓					✓	✓	
25	Develop public-private partnerships to subsidize mobility-as-a-service for low-income populations.			✓						✓	✓	

STRATEGY

STRATEGY

		GOAL ADDRESSED									MPO Primary Responsibility	Opportunity for Member Agencies
		Safety	Public Health	Social Equity	Multimodal Mobility & Accessibility	Environmental Stewardship	Congestion Relief & System Operations	Economic & Community Vitality	System Preservation	Partnerships & Funding		
Infrastructure												
26	Identify high crash locations in the MPO planning area, assist member agencies in planning improvements, and identify founding for implementation.	✓	✓							✓	✓	
27	Promote the creation of a low-stress network for bicyclists.	✓	✓		✓						✓	
28	Design and implement protected bike lanes to increase safety and encourage bicycle use.	✓	✓		✓							✓
29	Identify high crash locations (including a focus on pedestrian crashes) in the MPO planning are, assist member agencies in planning improvements, and identify funding for implementation.	✓	✓		✓						✓	
30	Review all roadway projects to ensure that they meet the intentions of the MPO's Complete Streets policy.			✓	✓						✓	
31	Evaluate opportunities for development of intermodal facilities to enhance transfers between modes, such as elevated loading stations along the Rail Trail and Santa Fe Southern Railway.				✓							✓
32	Use the Bicycle Master Plan and pedestrian design guidelines and other appropriate standards to create safe and comfortable facilities for bicyclists and pedestrians for all transportation projects.				✓			✓				✓
33	Identify multimodal network gaps and prioritize improvements.			✓	✓						✓	
34	Enhance bike network and walkability through improved wayfinding streetscape, increased bike parking, and traffic control projects.				✓			✓				✓
35	Ensure that appropriate fiber optics are installed for all transportation projects.						✓					✓

STRATEGY

		GOAL ADDRESSED									MPO Primary Responsibility	Opportunity for Member Agencies
		Safety	Public Health	Social Equity	Multimodal Mobility & Accessibility	Environmental Stewardship	Congestion Relief & System Operations	Economic & Community Vitality	System Preservation	Partnerships & Funding		
36	Improve and/or expand transportation facilities to support job access.							✓				✓
37	Integrate sustainable design into transportation projects using low-impact development (LID) or green infrastructure techniques to slow and reduce stormwater runoff, and increase infrastructure lifespan through effective drainage design.					✓			✓			✓
38	Implement engineering solutions that improve bridge and roadway security.	✓	✓									✓
39	Identify and assess all roadways that may be eligible for a "Road Diet."	✓			✓						✓	
40	Use pop-up projects to demonstrate infrastructure possibilities.	✓	✓	✓	✓			✓			✓	
41	Support Santa Fe Southern Railway refurbishment and Rail Trail intermodal accessibility.		✓		✓			✓	✓	✓		✓
Land Use												
42	Update development standards to require a connected street network.				✓			✓				✓
43	Ensure that new development is adequately connected to the transportation system.				✓	✓		✓				✓
44	Support mixed-use development and population and employment density that supports alternative modes of transportation.		✓		✓	✓		✓				✓
45	Support a long-range vision and master planned land-uses that realize sustainable and vital mixed-use neighborhoods, not incremental and disparate sprawling development.					✓		✓				✓

STRATEGY

		GOAL ADDRESSED									MPO Primary Responsibility	Opportunity for Member Agencies
		Safety	Public Health	Social Equity	Multimodal Mobility & Accessibility	Environmental Stewardship	Congestion Relief & System Operations	Economic & Community Vitality	System Preservation	Partnerships & Funding		
46	Coordinate with local agencies to ensure land use planning requirements are conducive to pedestrian and bicycle travel.				✓					✓	✓	
47	Encourage consideration of the transportation system in economic development planning.							✓				✓
48	Land use policy reform to promote density and land use flexibility, reduce trips, support MaaS by allowing vending in the ROW, support itinerant vendor permits, etc.					✓		✓				✓
Maintenance & Operations												
49	Develop asset management plans to extend the life of fleet and facilities.								✓			✓
50	Improve coordination of signal timing.						✓					✓
51	Implement and/or improve mobile technology that provides next bus/train information and trail networks.				✓		✓					✓
52	Use technology that is known and learn from best practices from other states to create efficiencies in what we have.						✓					✓
53	Develop asset management plans to extend the life of fleet and facilities.								✓			✓
54	Develop a maintenance and monitoring plan for all green infrastructure as it is implemented. Include the costs in project budget developments and train all inspectors and volunteers in maintenance techniques and timing.					✓			✓			✓

STRATEGY

STRATEGY

		GOAL ADDRESSED									MPO Primary Responsibility	Opportunity for Member Agencies
		Safety	Public Health	Social Equity	Multimodal Mobility & Accessibility	Environmental Stewardship	Congestion Relief & System Operations	Economic & Community Vitality	System Preservation	Partnerships & Funding		
Policies												
55	Support and advocate for any needed regulatory changes to improve agency work practices and timeliness of project delivery.									✓	✓	
56	Provide effective regulations for safety as new transportation technologies are introduced.	✓										✓
57	Provide flexible and efficient regulations to be able to support new transportation technologies and reduce the likelihood of unintended negative consequences.				✓							✓
58	Code revisions should support complete streets definitions that include stormwater management to enhance urban green spaces that provide traffic calming, reduce urban heat island effects, reduce air and noise pollution, and provide safe refuges for pedestrians and cyclists.					✓			✓			✓
Programs												
59	Develop and implement Safe Routes to Schools program.	✓	✓	✓			✓					✓
60	Transition to low emission vehicle fleets.		✓			✓						✓
61	Support programs and projects that adapt to climate change scenarios including severe weather occurrences.					✓					✓	
62	Support development of evacuation plans and emergency response protocols, including supportive ITS architecture.	✓	✓									✓
63	Support technology improvements that minimize cyber attacks on transportation control systems.	✓						✓				✓
64	Support management and pricing strategies that increase tourism spending.							✓				✓

STRATEGY

STRATEGY

		GOAL ADDRESSED									MPO Primary Responsibility	Opportunity for Member Agencies
		Safety	Public Health	Social Equity	Multimodal Mobility & Accessibility	Environmental Stewardship	Congestion Relief & System Operations	Economic & Community Vitality	System Preservation	Partnerships & Funding		
Studies & Staffing												
65	Develop a bicycle facility inventory and user profile.				✓						✓	
66	Update the 2019 Bikeways and Trails Plan, the Pedestrian Plan, and the Transit Master Plan.				✓						✓	
67	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.				✓						✓	
68	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.				✓		✓				✓	
69	Outline costs and benefits of universal transit passes for businesses, educational institutions, and governmental institutions.				✓						✓	
70	Conduct Metro Area Community Health Impact Analysis.		✓	✓							✓	
71	Identify existing emergency transportation plans for the region and areas where the MPO can provide support.	✓									✓	
72	Hire a full-time mobility manager/transportation planner/active transportation planner.						✓					✓

