



CONNECTIONS 2040

Metropolitan Transportation Plan



EXECUTIVE SUMMARY

The Albuquerque metropolitan area is a dynamic place. With close to a million residents, and the state's largest concentration of jobs, it is the state's economic center. The safe and efficient movement of people and goods is important for the region to thrive and the economy to flourish. This involves keeping our transportation infrastructure in good working order, improving or adding roads, bike facilities, and sidewalks, providing quality transit service, and fine-tuning traffic operations through signal timing, real-time traveler information, and other technology-based solutions.

The Mid-Region Metropolitan Planning Organization (MRMPO) plays an important role in keeping the region moving. It covers the greater Albuquerque metro from Belen to the south to Pueblo de Cochiti to the north. Working together with various entities and the public in central New Mexico, MRMPO facilitates the development of the Metropolitan Transportation Plan (MTP), a long-range transportation plan which helps guide transportation investment in the region.

While our region's infrastructure needs continue to mount, our sources of transportation funding have become more limited and unpredictable. Because of this, it is imperative that projects listed in the **Connections 2040 MTP** fill a critical gap in the regional transportation system to ensure the greatest return on investment of public dollars.

Metropolitan Transportation Board

The **Connections 2040 MTP** is adopted by the Metropolitan Transportation Board (MTB). The MTB is the transportation policy making body for the region and is comprised of elected officials from local, county, and Tribal governments in Bernalillo, Sandoval, and Valencia Counties as well as other advisory agencies such as the New Mexico Department of Transportation and public school districts.



The Mid-Region Metropolitan Planning Organization (MRMPO) is a division of the Mid-Region Council of Governments (MRCOG), an association of local governments and special units of government in New Mexico's middle Rio Grande region tasked with conducting and coordinating regional planning efforts.





CONNECTIONS 2040

Metropolitan Transportation Plan

What's New in this MTP?

- Although the *Connections 2040 MTP* has the same horizon year of 2040 as the previous MTP, the updated plan includes the use of a new base year, which is 2016.
- For the first time, this MTP includes an illustrative listing of projects that are currently unfunded but would be included in the approved plan if additional resources become available.
- This plan includes new socioeconomic forecasts and new travel demand forecasts based on the updated roadway network. The Target Scenario was also updated, and the benefits are summarized in Chapter 3.
- New analysis was undertaken on mode share along the Priority Investment Transit Network, connectivity impacts, and the estimated costs and number of residents that could be served by the Long Range Transit Network.
- There is an expanded description of Transportation Systems Management and Operations strategies with discussions about Intelligent Transportation Systems and Autonomous and Connected Vehicle Technology.
- The Environmental Resiliency chapter includes newly mapped data on wildlife/vehicle collisions as well as areas of the region that are experiencing urban heat island effects.
- Greater emphasis is given to the Active Transportation goal, with an entire chapter devoted to bicycle and pedestrian travel and improving safety for these modes.
- Consideration of the relationship between transportation and economic conditions is looked at more robustly in the Economic Linkages chapter, with new analyses on the economic impact of the Plan and an analysis of the fiscal implications of different growth scenarios.

We invite you to read and reflect on this updated long-range transportation plan, the *Connections 2040 MTP*, our regional blueprint for how we can make the needed improvements and connections for moving forward as we step—bike, scooter, ride, or drive—into the future!

Regional Projections

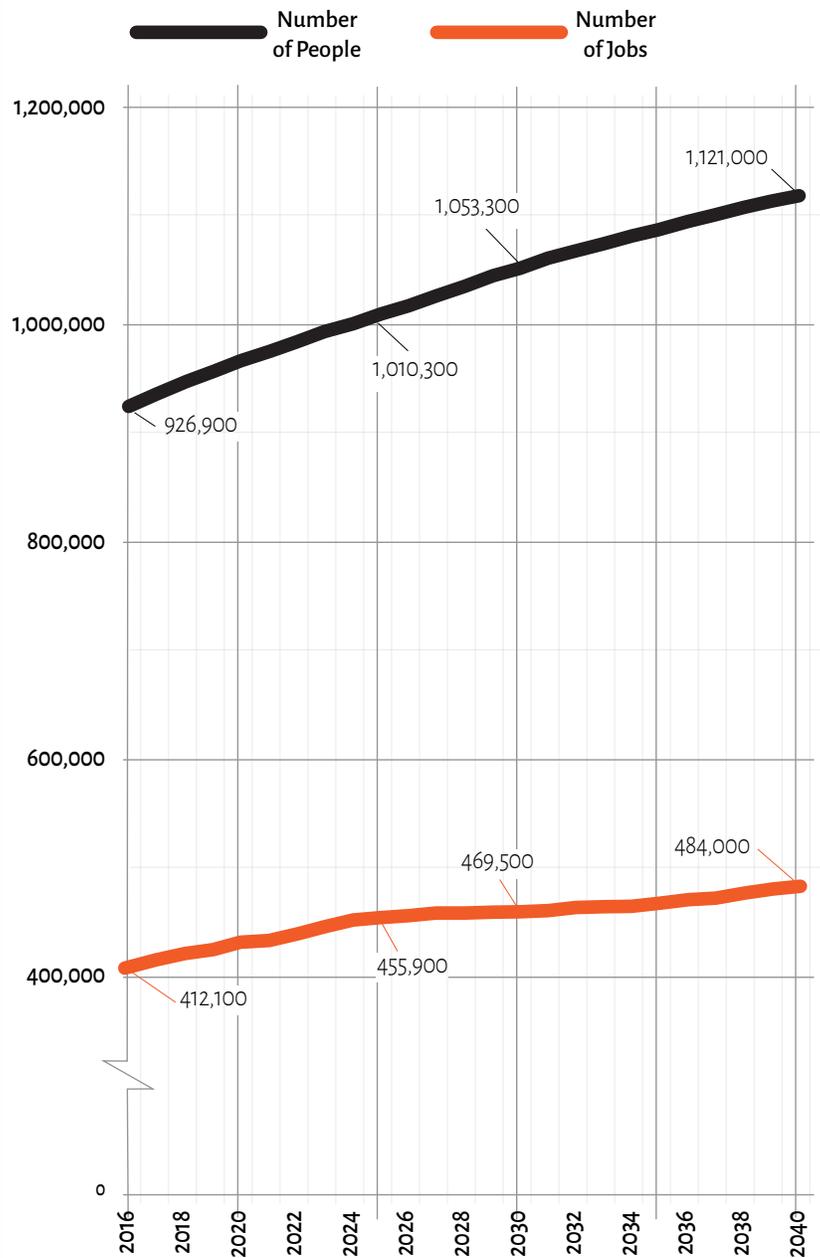
The *Connections 2040 MTP* provides a framework for looking at projected population and employment growth as well as the impact of that growth on our transportation system.

Looking 20 years ahead helps us proactively prepare for the future; a future that includes nearly 200,000 more residents and an additional 72,000 jobs. In terms of transportation needs, people in this region currently travel about 1.6 million miles on average in a given year. This is expected to increase to 1.9 million miles by 2040.

If we do not invest in future upgrades to our transportation system, there will be an approximate 73 percent increase in hours spent sitting in traffic during peak commuting times by 2040, resulting in an 16 percent reduction in average system-wide speeds.

By pursuing the projects listed in the MTP we will improve our future. Targeted investments over the next 20 years will result in a 20 percent decrease in congested lane-miles during peak commutes when compared with a “do-nothing” scenario. The economic benefits of a more efficient transportation network are substantial, with **an estimated savings in travel time worth approximately \$2 billion dollars over the life of the plan.**

Population and Employment Forecast MRCOG Region, 2016-2040



Identifying Gaps in the Current Transportation System

The central focus of the *Connections 2040 MTP* is on addressing existing gaps in the transportation system so that greater connections across our region can be achieved in the long term. As part of the MTP outreach efforts to the general public, as well as public agencies, certain system-wide gaps and other transportation-related concerns were identified.

Public Outreach

The public participated in the development of the plan through public meetings, an online questionnaire (also available in hard copy and in Spanish), an online interactive “gaps” map, as well as at community events, meetings, and presentations around the region. In addition, comments and questions were accepted by (e)mail throughout the process. Over 30 feedback opportunities were provided by MRMPO and approximately 1,826 data inputs were received (comments, questionnaires submitted, and funding votes) from the public and agency stakeholders. Efforts were made to meet people where they were and to reach groups that don't typically participate, such as young adults and low-income populations.

Other Concerns Raised

LAND USE

Lack of jobs and daily destinations on the Westside
Lack of integrated land use and transportation planning
Neighborhoods not connected to schools

FREIGHT

Lack of a complete freight network
Gaps in Westside freight corridors
Air, rail, and truck freight not integrated

ITS

Poor signal timing and coordination at intersections
Need to use technology to manage traffic operations
Travelers need improved access to information

POLICY

Need better coordination between agencies
Not enough consideration of issues of equity
Better implementation of the MTP

System-wide Gaps by Mode

PEDESTRIAN & BICYCLE

Crosswalks are unsafe - too many speeding vehicles
Poor facility design—e.g. lack of buffered bike lanes, pedestrian crossing (hawk) signals, well-maintained sidewalks
Bicycle and pedestrian networks are incomplete

TRANSIT

Transit service not frequent enough and hours too limited
Transit needs to expand to underserved areas
Lack of support and funding for transit

ROADWAYS

Poor maintenance of our existing roadway infrastructure
Lack of roadway connections and river crossings
Too much congestion and bottlenecks

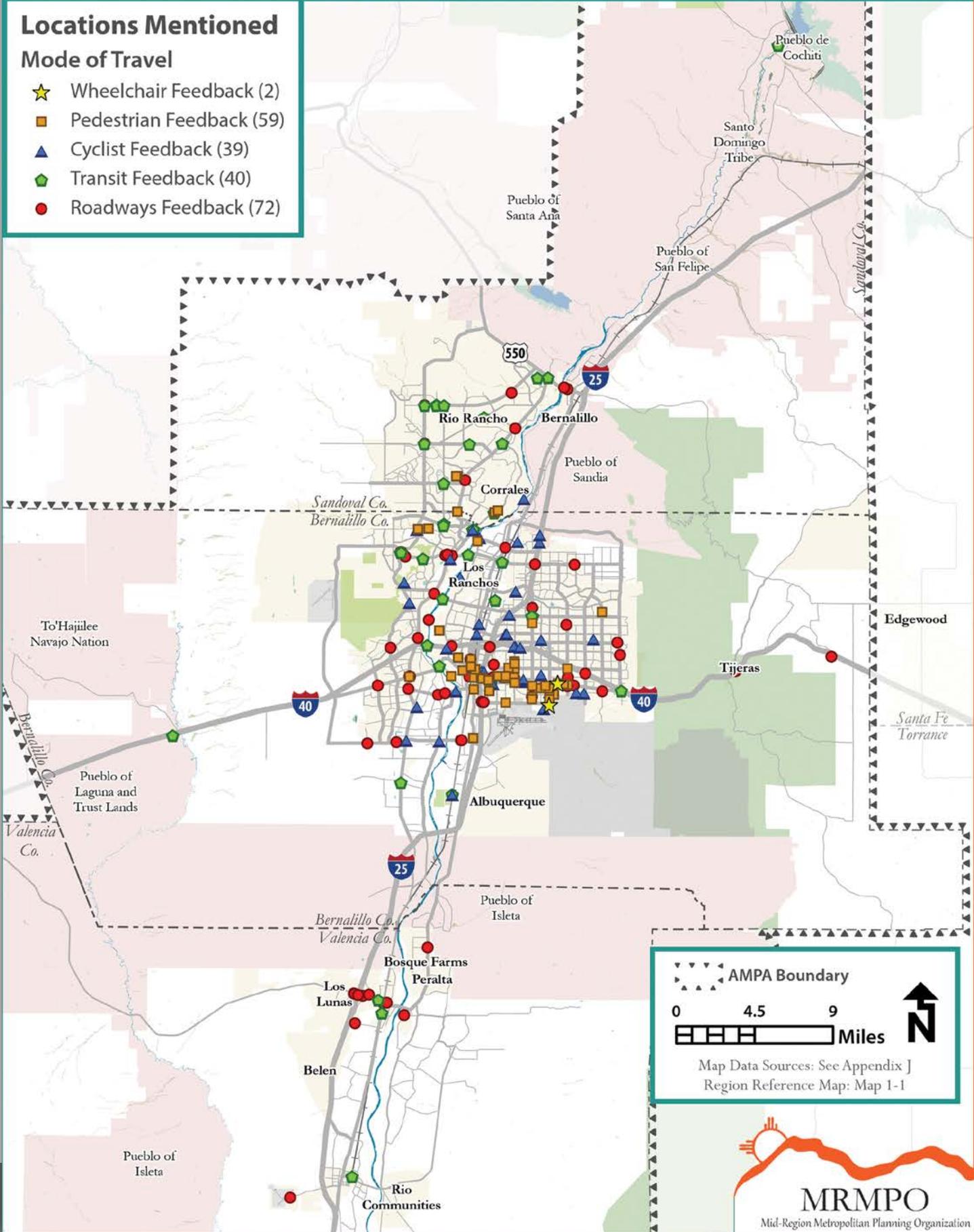


Public Feedback on Transportation Gaps

Locations Mentioned

Mode of Travel

- ★ Wheelchair Feedback (2)
- Pedestrian Feedback (59)
- ▲ Cyclist Feedback (39)
- ◆ Transit Feedback (40)
- Roadways Feedback (72)



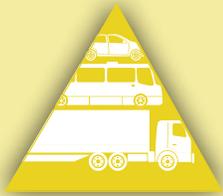
MTB Goals and Pathways*

Transportation projects included in the MTP must align with the long-range plan's vision and goals. There are four overarching goals that guide the **Connections 2040 MTP** which incorporate the federal performance goals set forth by the FAST Act.**

Each goal is accompanied by a list of pathways, or strategies. They will help guide regional planning and policy decisions and make sure transportation-related

plans align with the regional vision expressed in the **Connections 2040 MTP**.

The pathways associated with each goal focus on closing existing gaps in the transportation system by improving connections. Greater connectivity helps improve the efficiency and safety for all modes of travel and helps increase the viability of walking, bicycling, and taking transit.



OPTIMIZED MOBILITY

- Develop a long-range regional transit plan in coordination with public service agencies, municipalities, and developers that contains prioritized transit investments
- Enhance the safety, frequency, availability, and reliability of transit
- Adopt mixed-use and higher-density zoning along transit corridors to support ridership
- Develop and implement roadway connectivity standards
- Improve multi-modal options and last mile connections
- Adopt policies and standards that support Complete Streets and context sensitive design standards



ECONOMIC LINKAGES

- Encourage place-making and the proliferation of community identity and innovation
- Incentivize redevelopment, transit-oriented development, and infill in order to maximize the utility of existing infrastructure
- Ensure project readiness in transportation funding decisions
- Support projects utilizing innovative technologies
- Support and coordinate freight operations and movement, and industrial development
- Promote fiscally responsible growth patterns



ACTIVE TRANSPORTATION

- Implement the recommendations in the Long Range Transportation System Guide (LRTS) and Regional Transportation Safety Action Plan (RTSAP)
- Ensure the health and safety of the traveling public
- Improve the user experience for cyclists, pedestrians, and transit riders with thoughtful connections and design
- Prioritize a well-connected and safe transportation network
- Improve access to and within activity centers and transit corridors
- Consider the needs of people of all ages and abilities in the design and operation of active transportation infrastructure



ENVIRONMENTAL RESILIENCY

- Integrate ecological principles in transportation and land use planning
- Prepare Emergency Management Plans with a focus on multi-agency coordination
- Encourage low-impact and sustainable development strategies in natural or culturally sensitive areas
- Promote natural resource and greenspace conservation
- Provide non-motorized access and safe routes to recreational areas and open space
- Consider transfer of development rights and land purchases to conserve and create new open spaces
- Require coordination of drainage and landscape plans to maximize efficient use of stormwater

*See full document Chapter 9 for a detailed discussion of pathways and Appendix G for a full list of pathways.

** National performance goals are discussed in Chapter 1.

Performance-Driven

The *Connections 2040 MTP* is the first MTP that includes quantitative federal performance measures to help measure the region's performance. These include metrics that measure safety, pavement and bridge condition, and freight movement. Additional federal performance measures will be included as part of the MTP as they are finalized and approved at the federal level. *

Fiscally Constrained

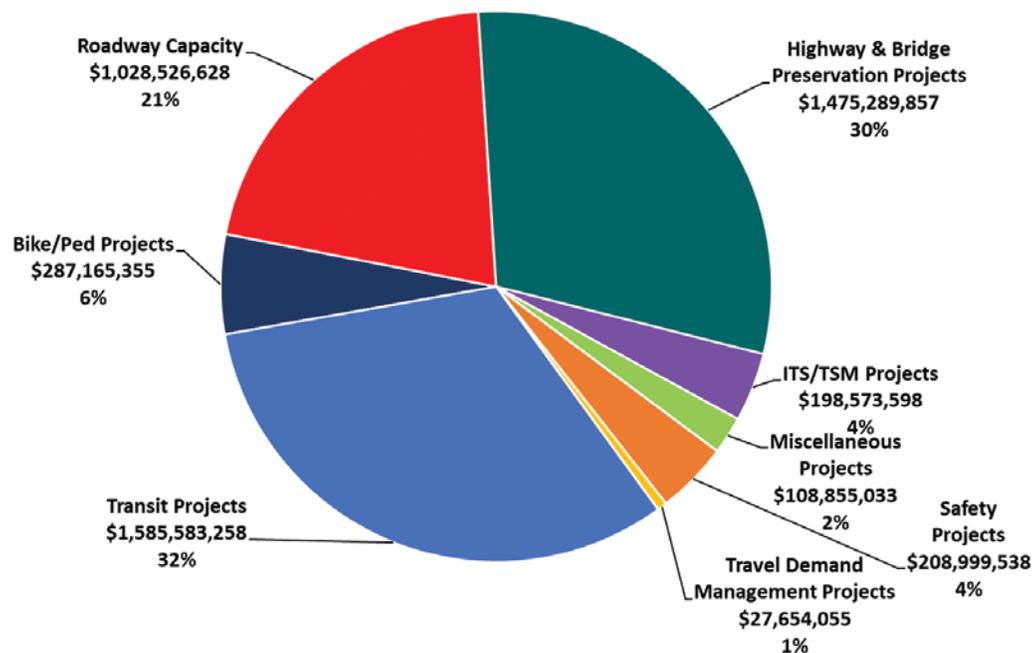
Metropolitan transportation plans are required to be fiscally constrained. This means that these long-range transportation plans must demonstrate that projects can be implemented using committed, available, or reasonably expected future revenue sources. In other words, the total cost of all transportation projects and expenditures in the MTP cannot exceed the projected financial resources available.

Financial Plan

In all, this MTP includes an estimated \$11.45 billion in public and private funds that are available in the AMPA for maintenance, operations, and capital projects.** The chart below shows how the \$4.9 billion in public funds available for capital projects will be spent across the different project types over the next 20 years. Projects include new interchanges, additional and expanded roadways, various pedestrian improvements, and expanded transit services.

This MTP continues to emphasize preserving existing infrastructure, and funding reflects a prudent continuation of a shift from investment in building new roadways to first making sure that what we already have built is maintained. The plan includes approximately \$1.5 billion dollars of available public funds to preserve roads and bridges nearing the end of their lifespan while considering additional investments that improve the efficiency of our existing transportation infrastructure.

2040 MTP Publicly Funded Projects by Type



*More information on the federal performance measures is found in Appendix I.

**See Appendix D for a detailed fiscal constraint analysis.



The Target Scenario

This MTP updates the region's preferred growth scenario, the Target Scenario. The Target Scenario envisions a future with bustling activity centers and transit nodes, where rural character is preserved, where there is a well-connected multi-modal transportation network, and where street design that considers all users is commonplace. The **Connections 2040 MTP** helps forward that vision with eight guiding principles. These guiding principles help inform planning and decision making toward this shared vision.

Heavily guided by input from member governments and stakeholders, **Connections 2040 MTP** updated the listing of key locations identified for targeted investment. They all are regionally significant *and* support local planning efforts.

The guiding principles are the heart of the Target Scenario, and the key locations form its backbone.

An analysis of the Target Scenario* demonstrates that when implemented, the Target Scenario can help to:

- shift 13,000 jobs to locations west of the Rio Grande
- increase pedestrian access of 3,000 households to transit
- reduce land consumption by 1,500 acres
- take nearly 40,000 vehicle trips off river crossings per day
- decrease PM peak hour delay across the river by 43 percent
- improve safety for all modes of travel

Eight Guiding Principles

- ▶ **COORDINATE land use and transportation planning**
Reduces congestion and encourages shorter trips
- ▶ **PRIORITIZE existing infrastructure**
Necessary for fiscally responsible growth
- ▶ **FOCUS on active place-making**
Encourages economic development and a sense of community
- ▶ **INVEST in activity centers and transit-oriented development**
Supports economic viability and access to services
- ▶ **BALANCE housing and jobs particularly on the Westside**
Decreases trips across the river
- ▶ **BUILD connected multi-modal travel networks**
Provides shorter and safer routes for everyone
- ▶ **SUPPORT premium regional transit**
Improves equity and frequency of transit services
- ▶ **ENCOURAGE diverse housing options**
Responds to changing consumer preferences

*See full document Chapter 3 for complete analysis of the Target Scenario

Key Locations of the Target Scenario

Key Transit

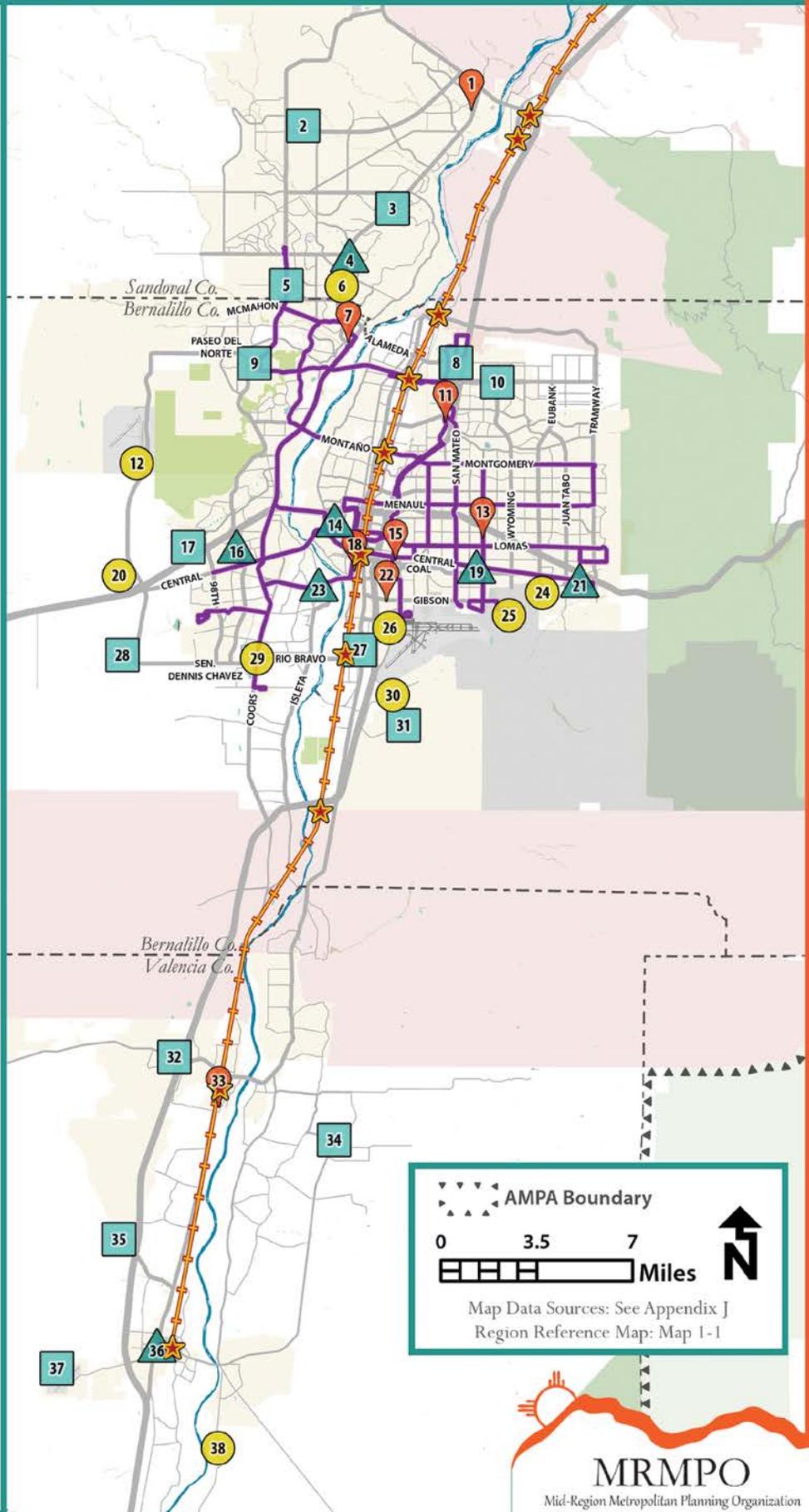
-  Target Scenario Transit Network
-  Rail Runner
-  Rail Runner Stops

Key Centers

-  Regional Center
-  Opportunity Center
-  Reinvestment Center
-  Employment Center

Key Center Names

1. NM 550
2. Rio Rancho City Center
3. Northern and 528
4. Southern and 528
5. Unser Gateway
6. Intel
7. Cottonwood Mall
8. North Jefferson
9. Volcano Heights
10. La Cueva Center
11. South Jefferson
12. Double Eagle II
13. Uptown
14. Sawmill
15. UNM
16. Atrisco Business Park
17. Petroglyphs Town Center
18. Downtown Albuquerque
19. Fairgrounds
20. Upper Petroglyphs
21. East Gateway
22. CNM/ Stadiums
23. Five Points
24. Sandia Science & Technology Park
25. KAFB
26. Sunport Airport
27. Sunport Commerce Center
28. Santolina
29. Las Estancias
30. Sunport South
31. Mesa del Sol
32. West Los Lunas
33. Los Lunas RR Station
34. Manzano Center
35. Belen Intermodal Center
36. Downtown Belen
37. Belen Airport
38. Rio Grande Industrial



MTP Projects

Below is a listing by travel mode of some of the major projects that are planned for the lifetime of the *Connections 2040 MTP*.*

Five Major Roadway Projects

- Completing Unser Blvd. corridor improvements
- Widening of I-25 Northbound between Rio Bravo Blvd. and Sunport Blvd.
- Reconstructing the I-25/Cesar Chavez Blvd. interchange
- Reconstructing the I-25/Gibson Blvd. interchange
- Reconstructing the I-25/Montgomery Blvd. interchange

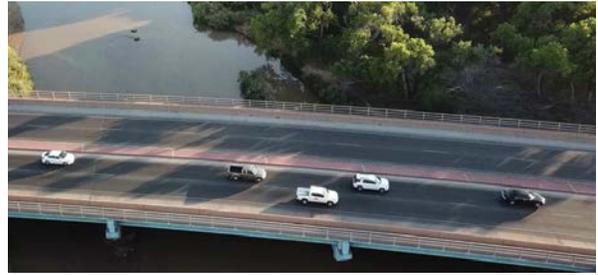
RIVER CROSSING | The MTP includes resources for constructing a new river crossing in Los Lunas. This project will result in faster response times for emergency services and improve congestion and commute times for the growing number of residents in Valencia County. The project enjoys broad community support.

Five Major Transit Projects

- Implementing Albuquerque Rapid Transit (ART) along Central Avenue.
- Planning for rapid bus service in the UNM/CNM/Sunport area to complement the ART.
- Improvements to NM Rail Runner Express service and infrastructure.
- Implementing Positive Train Control (PTC), a federally mandated rail safety system.
- Developing additional Park and Ride facilities in the metropolitan area.

Five Major Bicycle/Pedestrian Projects

- Provide a continuous bike/pedestrian trail along Paseo del Norte. (To be constructed in phases.)
- North Diversion Channel Trail Rehabilitation.
- Construct a safe, multi-use trail from the softball fields to the Santo Domingo Trading Post.
- Construct missing bike lanes along University Blvd.
- Construct a multi-use trail along 2nd Street with a connection to the new Valle de Oro National Wildlife Refuge and other existing trails.



* The full list can be found in Appendix A. A list of "major projects" is featured in Chapter 8. In addition, an Illustrative List of projects is included in Appendix B. This list is separate from the MTP fiscally constrained list and is comprised of projects that have been identified as potential projects, but lack either a local agency sponsor and/or identified funding sources. Appendix C provides the status of projects that have been of regional interest over the course of several long range plans.

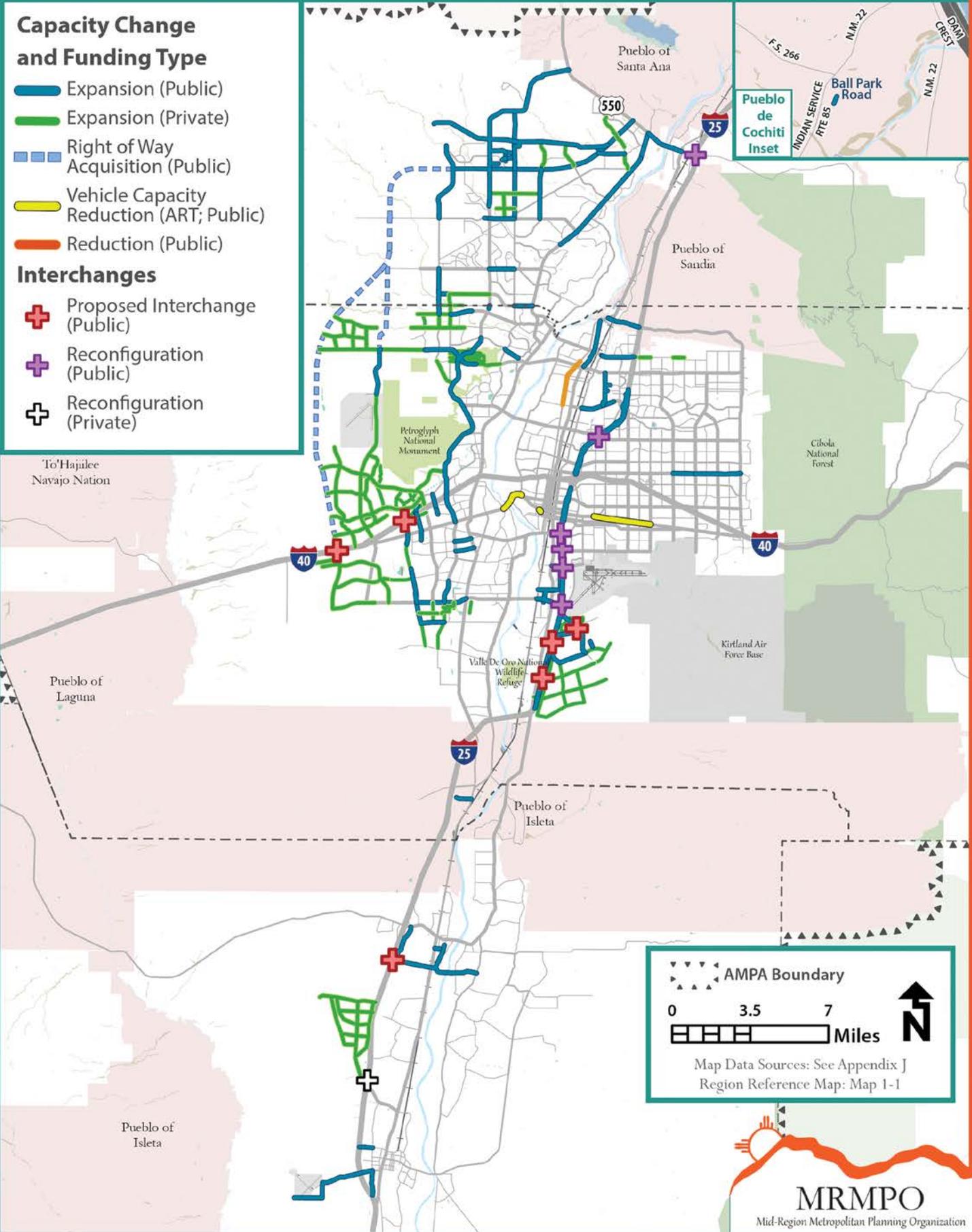
Roadway Vehicle Capacity Projects (2016 - 2040)

Capacity Change and Funding Type

- Expansion (Public)
- Expansion (Private)
- - - Right of Way Acquisition (Public)
- Vehicle Capacity Reduction (ART; Public)
- Reduction (Public)

Interchanges

- + Proposed Interchange (Public)
- + Reconfiguration (Public)
- + Reconfiguration (Private)



10 KEY TAKEAWAYS



Community Engagement

1 → In developing this Plan, MRMPO focused on getting out into communities instead of asking people to come to us. In addition, a conscious shift was made from presenting research to gathering perspectives.

2 → Many public comments emphasized that ADA compliant, complete street infrastructure and efficient transit service are not simply amenities, but a necessity for safe daily travel. Not all residents own vehicles, and our region ranks among the most dangerous places nationwide for pedestrians.

Safety

3 → Over a third of our region's traffic fatalities involve pedestrians or bicyclists. It is imperative that we take into account the safety of the most vulnerable of our roadway users when designing new roadways or retrofitting old ones.

4 → Excessive speed and dangerous driving are responsible for 25 percent of the region's fatal crashes. The Plan recommends implementing traffic calming treatments on dangerous roadways and to step up enforcement that confronts the most dangerous driving behaviors where appropriate.

Regional Growth

5 → Annual census estimates show modest population growth, reversing out-migration patterns following the Great Recession. The region is expected to reach one million residents by 2025.

6 → More than 72,000 new jobs are expected to be added by 2040. However, working-age people will likely make up a smaller percentage of the total population.

Regional Trends and Target Scenario

7 → Current trends point toward more mixed-use and multifamily housing, and – with continued investment in multi-modal transportation – additional growth in activity centers. This may help alleviate the amount of time people will spend in their vehicles over the next twenty years.

8 → The Target Scenario represents our Board-adopted vision for more resilient land-use development patterns. Achieving a healthier balance of jobs and housing on the west side of the Rio Grande will reduce anticipated river crossing delays by 43 percent.

Implementation Strategies

9 → The MTP recommends local communities follow the region's complete streets guide, *the Long Range Transportation Systems Guide* which contains proven strategies for improving safety for all roadway users.

10 → Smart technologies, such as Intelligent Transportation Systems (ITS), allow us to get the most capacity out of our existing roadways. The MTP details how emerging technologies and autonomous vehicles may influence travel behaviors over the coming decades.

