



EXECUTIVE
SUMMARY

CITY OF MESA 2050 TRANSPORTATION MASTER PLAN



GUIDING **MESA** INTO THE FUTURE

The Mesa Transportation Master Plan will serve as a roadmap for improving our transportation system so everyone can safely and comfortably drive, walk, bike, or ride.



Mesa is changing – more people and businesses are moving here every day, and the mobility needs of our residents are increasing. To provide our residents, visitors, and businesses with a transportation system that works, we need to face our transportation future head-on. The *Mesa Transportation Master Plan (TMP)* serves as a roadmap for transportation investment, policy, and future needs in Mesa for the next 25 years so everyone can safely and comfortably drive, walk, bike, or ride. While the Maricopa Association of Governments' (MAG) Regional Transportation Plan (RTP) and the Regional Strategic Transportation Infrastructure Investment Plan (RSTIIP) sets forth a regional vision for transportation for all of the Phoenix metro area, the Mesa TMP focuses on mobility needs in the City of Mesa at a macro-level.

How Mesa Will Use the TMP

The TMP builds on the City's strategic goals, past planning efforts, and aligns transportation needs and recommendations with other City and regional planning efforts. Ultimately, the TMP serves as the guiding vision for transportation investment, policy, and future needs in the City's current limits and within the greater Mesa Municipal Planning Area (MPA).

INFORMED BY



INFORMS:



MESA'S TRANSPORTATION FUTURE

The TMP sets the foundation for rethinking the way Mesa plans and designs its transportation system. The TMP outlines a way forward to improve how people move in and through the City, by developing complete, balanced networks that allows everyone, regardless of their age, ability or socioeconomic status, to comfortably and safely travel to the places that matter to them most.

Building Mesa's Transportation System of Tomorrow

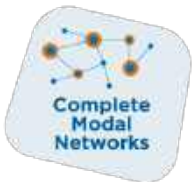
Compared to previous plans, the 2024 TMP includes several unique and innovative elements.



Phased Multimodal Action Plan. Based on extensive data analysis and feedback from the community and stakeholders, the TMP provides a roadmap for projects and programs to bring to life Mesa's multimodal vision. At the end of the day, the phased improvement plan systematically guides transportation investments and project development.



Travelsheds - Transportation Improvements for Mesa's Unique Subareas. Mesa is comprised of a variety of neighborhoods and subareas, each with their own unique character. Beyond distinct physical characteristics, each subarea/travelshed has diverse cultural and population groups that help drive transportation needs. The TMP evaluated each of these unique travelsheds to understand what transportation improvements residents and businesses need and how they would like to travel.



Complete, Transportation Networks. Mesa's vision for mobility includes a transportation system that is safe, reliable, and complete for everyone. To achieve this vision, the TMP created complete and connected networks for all modes so that people traveling through, to, and around Mesa have a variety of options regardless of their age, ability, or travel mode. Working together as a system, these complete networks create reliable and attractive transportation choices for all modes including biking, walking, and transit.



Street Typologies. Current one-size-fits-most design standards make it difficult to accommodate all modes and to adjust designs based on the unique needs of a neighborhood. The TMP developed street typologies that strike a balance between roadway functional classification, adjacent land use, and competing travel needs and uses. Within limited right-of-way, street typologies allow Mesa to make design trade-offs to design a street to best fit the function and need of various travel modes.



Corridors of Opportunity. The City of Mesa street network and the adjacent land uses have evolved over the years and the user needs have evolved as well. There are several streets in the City that could be reconfigured to better support the land uses adjacent to the streets and address the changing modal needs of the users.

DEVELOPING THE PLAN

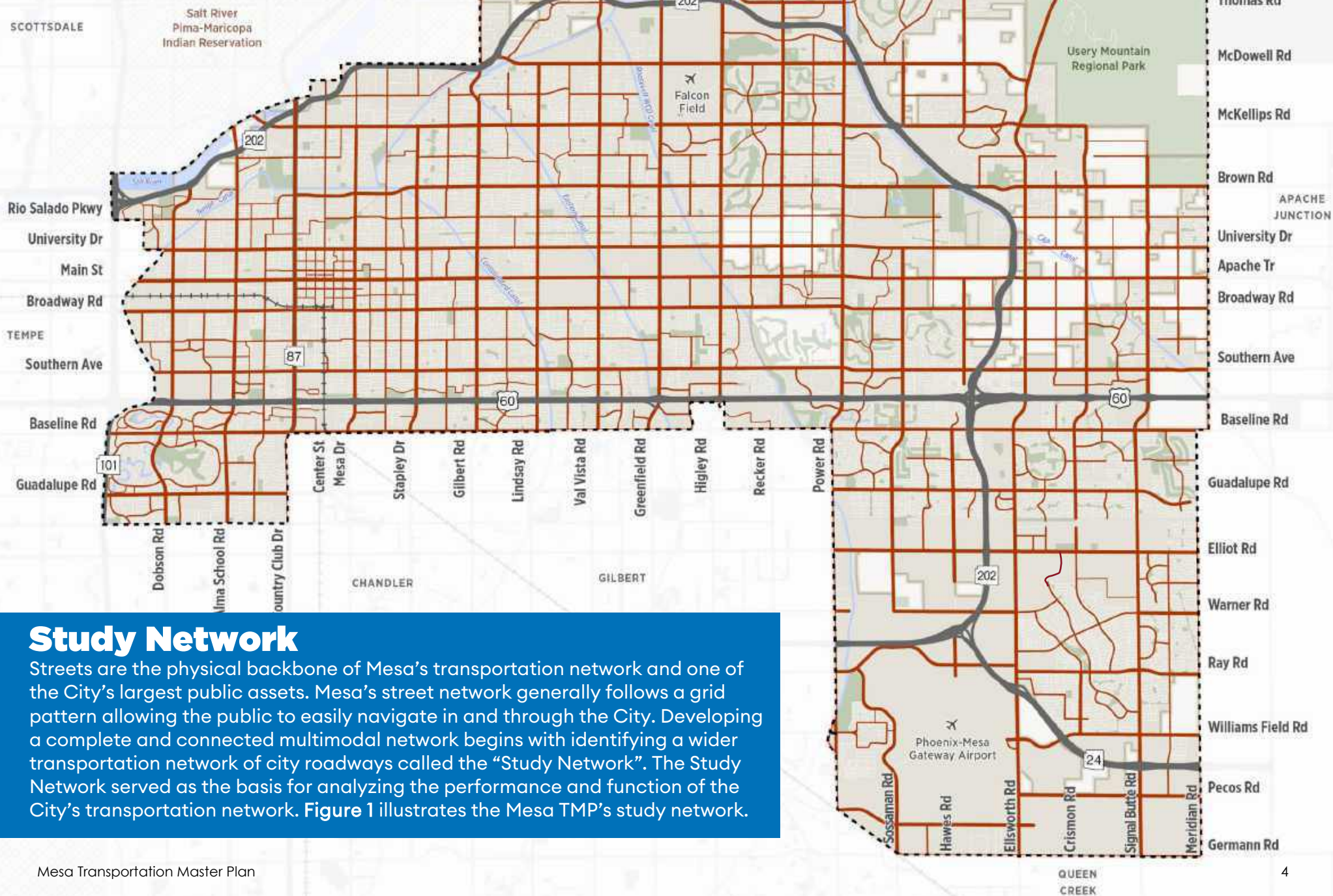
The development of the Mesa Transportation Master Plan was a collaborative effort that brought together residents, the business community, regional partners, local stakeholders, and internal City departments to create a strategic transportation vision for Mesa. The Plan's process included listening, complex technical analysis, as well as coordination with the Mesa 2050 General Plan, the Mesa Transit Master Plan, and the Mesa Balanced Housing Plan updates. Ultimately, the plan developed a series of short-, mid-, and long-term improvements to address Mesa's growing multimodal needs. The multi-phased process included the following steps:



Mesa Municipal Planning Area (Mesa MPA)

Beyond the incorporated jurisdictional boundary of the City, the TMP covers a larger area of influence called the Municipal Planning Area (MPA). Mesa's MPA includes the incorporated City limits and land in unincorporated areas within Maricopa County. The Mesa MPA and unincorporated county areas, or "County Islands" are denoted in **Figure 1**.

FIGURE 1. STUDY NETWORK



Study Network

Streets are the physical backbone of Mesa’s transportation network and one of the City’s largest public assets. Mesa’s street network generally follows a grid pattern allowing the public to easily navigate in and through the City. Developing a complete and connected multimodal network begins with identifying a wider transportation network of city roadways called the “Study Network”. The Study Network served as the basis for analyzing the performance and function of the City’s transportation network. Figure 1 illustrates the Mesa TMP’s study network.

MESA'S MOBILITY VISION AND GOALS

The establishment of a clear vision and goals is important because they set a foundation for plan development and ultimately inform decision-making and prioritizing transportation improvement investments. The TMP goals and objectives outlined in this section were founded and informed by the Mesa 2050 General Plan, community feedback during the TMP, regional and federal goals, other City plans, and City staff feedback.

Mesa's Mobility Vision

The Mesa TMP carries forward the General Plan's connectivity, safety, and multimodal principles to establish a framework for developing and implementing a transportation system that enhances the community's quality of life, provides travel options for all users, embraces technology, and better connects people to the places that matter to them, regardless of the mode of travel. The following is Mesa's transportation vision statement:

“Mesa's transportation network is a safe, resilient, efficient, and interconnected multimodal system that supports and strengthens Mesa and its economy.”

Mesa's Guiding Principles

The guiding principles and strategies for the TMP will help achieve the desired outcomes established in the vision statement. Guiding principles are general statements that the TMP aims to achieve over time. These goals align with – and do not replace – adopted policies and goals from the General Plan.



Manage and Maintain

Promote stewardship of a sustainable and efficient transportation system through strategic system management and preservation.



Safety First

Create a transportation network that consists of safe and comfortable mobility options for all current and future users.



Connections and Choices

Develop an integrated and complete multimodal transportation network that provides improved and accessible mobility options for all modes, including focused consideration for disadvantaged and underserved communities and groups.



Anticipate and Adapt

Recognize that the transportation sector has been experiencing rapid change in recent years due to technological advancements and initiatives from both the public sector and the private sector. Adapt to emerging technologies, land use changes, and transportation mobility demands by being innovative and flexible to ensure a resilient and responsive transportation system.



Thrive and Prosper

Strengthen the City, its residents, and its businesses, by advancing equity, inclusion, and economic competitiveness through improved transportation access to jobs, education, services, and goods.

HOW WE ENGAGED THE COMMUNITY

Throughout the TMP planning process, input was gathered from residents, businesses, organizations, City leaders and staff, and regional planning partners to ensure that the TMP reflects the needs and priorities of those that use our transportation system.

Project Website

In coordination with the Mesa General Plan Update, a Mesa Transportation Master Plan (TMP) project website was developed and launched in January 2023, allowing the public easy access to important information about the TMP. The website **TomorrowsMesa.com** included document links, survey links, and a way to sign up for the project mailing list.

Spreading the Word

To provide opportunities for our planning partners and stakeholders to participate in the planning process, the following activities were conducted:

- Interactive workshops were conducted with stakeholders and regional partners to gather feedback on current issues and draft recommendations.
- A project specific booth was hosted at numerous community events, including I Love Mesa Day, Downtown Mesa's Farmers Market, Celebrate Mesa, CycloMesa, and major events hosted by the 2050 General Plan.
- Flyers and signs were distributed to key activity centers throughout the City.
- Social media posts and e-mail blasts to direct community members to the project website.

Surveys and Mapping Activities

During outreach efforts, we heard from thousands of people through surveys and online mapping tools. Shared on the project website, via social media, and by community members, the Mesa TMP surveys invited people to share their values; describe the type of improvements they would most like to see; and map ideas for specific walking, biking, bus, and driving projects.



3,448 VISITORS TO PROJECT WEBSITE

1,145 SURVEYS COMPLETED

221 MAP COMMENTS PROVIDED



MESA IS GROWING AND CHANGING

Mesa continues to grow steadily. While this growth creates opportunities, it poses challenges to our transportation network. Understanding where growth is greatest is imperative to creating a plan that manages the increased demands on our transportation system.

Population and Employment Growth

Since 1990, the City of Mesa's population has increased by 77% and population growth is not expected to slow down. As shown in Table 1, the Mesa Municipal Planning Area's population is anticipated to increase by another 18%. Much of this growth is expected to be in-fill development and growth south of US 60 in southeast Mesa and the Eastmark Areas. Furthermore, with over 158,230 people working in the City today, Mesa is one of the fastest growing job markets and economies in the Phoenix metropolitan area. By 2050, employment in the Mesa Municipal Planning Area is projected to increase by over 48%.

Table 1: Projected Socioeconomic Conditions for the Mesa Municipal Planning Area

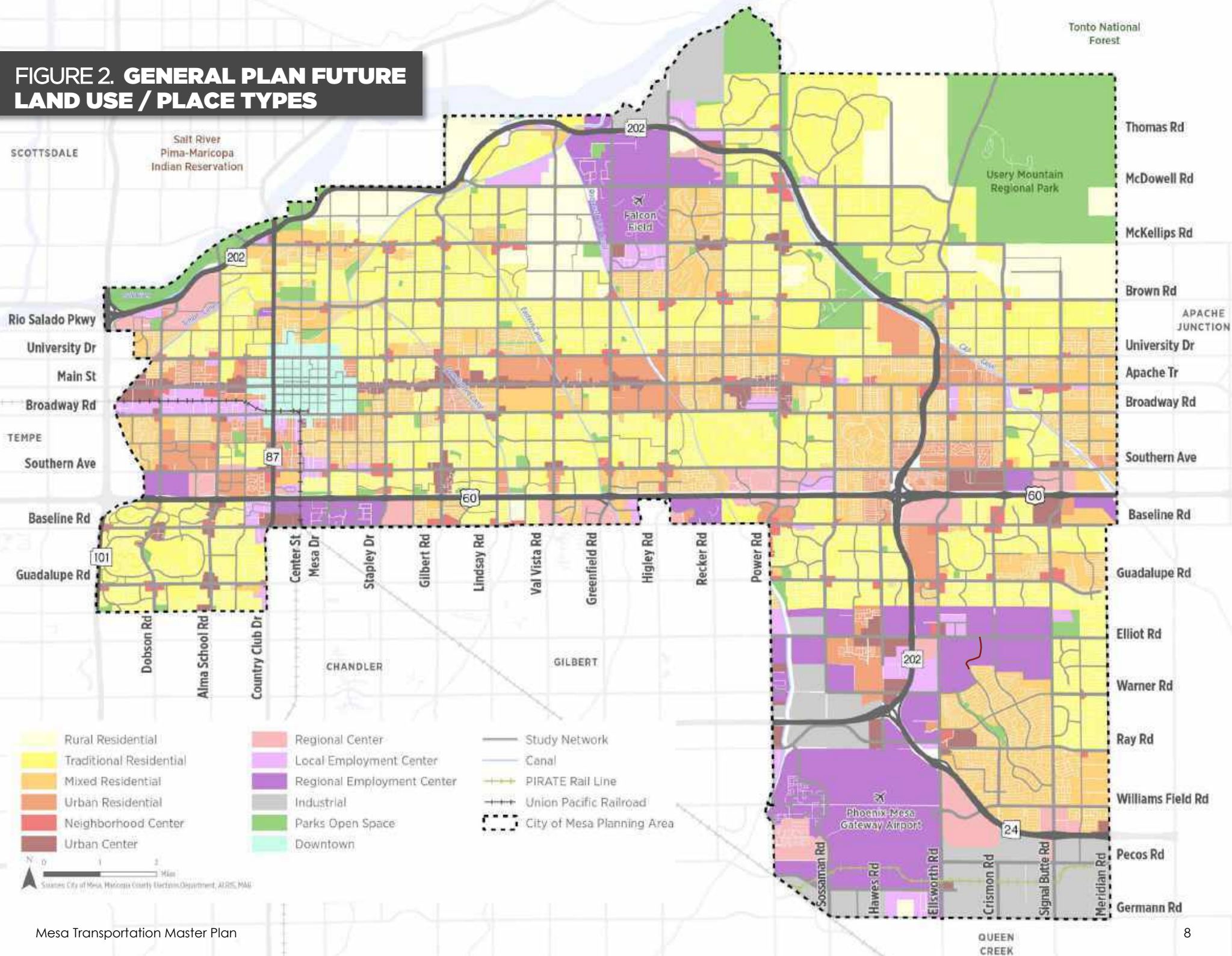
	Current (2021)	Near-Term (2030)	Mid-Term (2035)	Long-Term (2050)
Total Population ¹	544,976	589,900	609,800	645,500
Total Housing Units	243,003	263,017	279,982	285,254
Total Employment	208,200	237,500	259,600	308,900

Source: MAG 2024 Updated Socioeconomic Data Scenario Runs
¹ includes resident population and group quarter (correction, institutional, and military) population

Future Growth Strategy

Figure 2 illustrates future land use / place type designations that describe the land uses, densities, intensities, and the character of residential, commercial, and industrial areas within the MPA. These future land use designations offer guidance for City staff, elected officials, residents, business owners, and developers for navigating and reviewing development proposals.

**FIGURE 2. GENERAL PLAN FUTURE
LAND USE / PLACE TYPES**



What Happens to Roadway Congestion Levels If We Do Nothing?

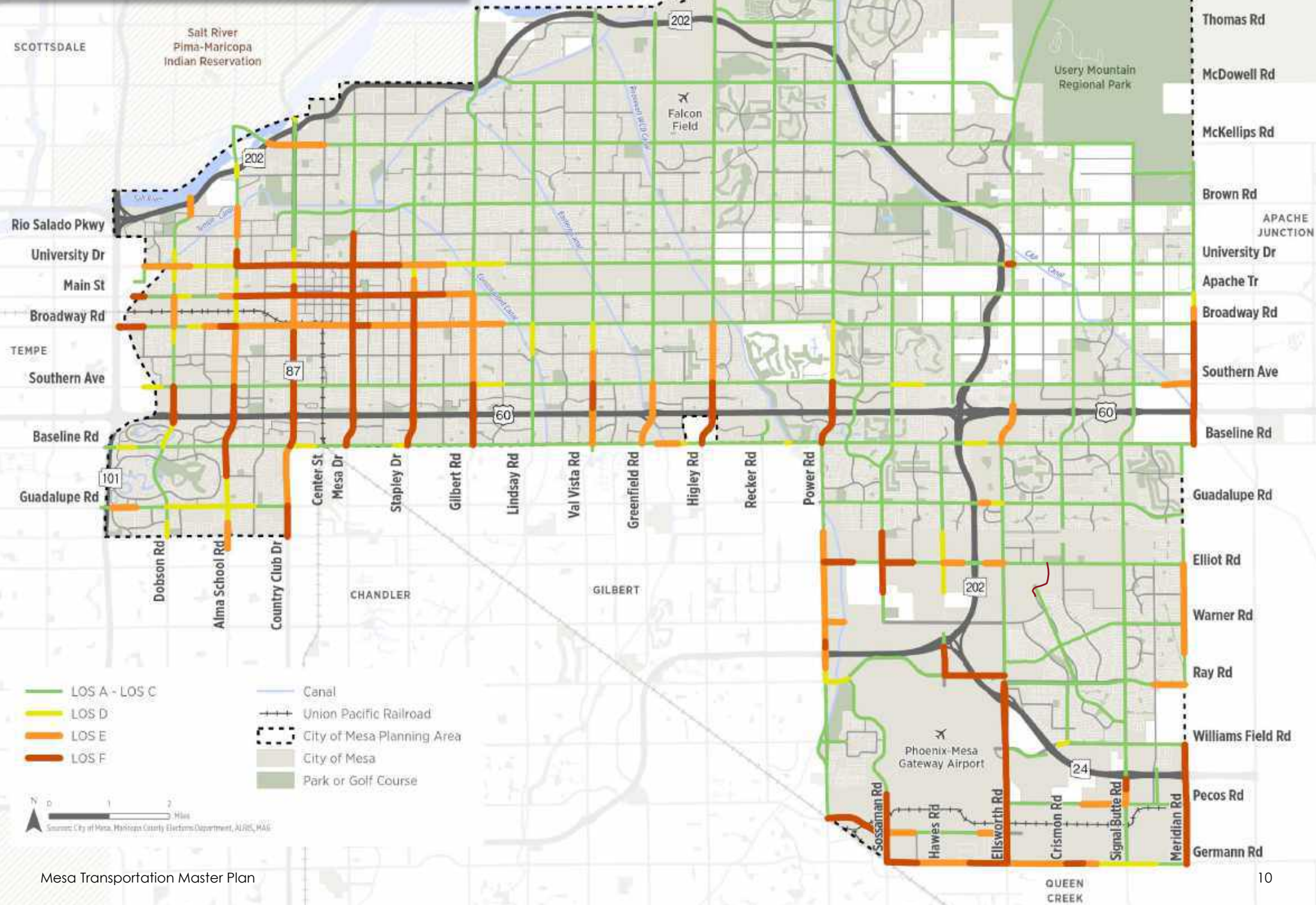
Population and employment changes can increase demand on Mesa's current transportation system and directly affect roadway conditions. To quantify the impact of projected growth on Mesa's transportation system, a No-Build analysis was conducted to forecast congestion levels due to projected growth.

Level of Service (LOS) is a term used to describe traffic operations and congestion levels. LOS values were determined for each roadway segment using a ratio of volume to capacity (V/C). LOS represents:

- **LOS A to LOS C** - little or no congestion)
- **LOS D** - moderate congestion)
- **LOS E** - at or nearing capacity)
- **LOS F** - over capacity)



FIGURE 3. PROJECTED LONG-TERM (2050) LEVEL OF SERVICE



WHAT ARE MESA'S CURRENT AND FUTURE TRANSPORTATION NEEDS?

The Transportation Master Plan (TMP) identifies a universe of needs for the City to consider for implementation. Together, the recommended needs will help reshape Mesa's transportation system to better move vehicles and people. Needs identified in the TMP include a variety of types that combined create a transportation system that helps to improve safety and mobility for everyone. Recommended needs include investments in the following types:



Roadway and Safety Needs
include roadway widening, new roads, intersection improvements, and safety needs



Pedestrian Needs
are where gaps exist and identify locations where we can improve connectivity and accessibility



Bicycle Needs
identify gaps that can be improved to enhance biking and expand connections to local and regional destinations



Transit Needs
identify opportunities to provide affordable and convenient local and regional travel options

A Phased Approach

Transportation needs were evaluated and assessed on how well they met the goals of the TMP, their overall benefits, and the level of feasibility of the project need. Based on the evaluation, needs were categorized into three Tiers that represent priority for implementation.

Short-Term

Short-Term Horizon (Y2024 to Y2030): Needs that help achieve the goals of the TMP that the City should consider implementing within a 1 to 7-year timeframe.

Mid-Term

Mid-Term Horizon (Y2031 to Y2035): Needs that help achieve the goals of the TMP but may not be needed in the immediate future or may be too expensive to find funding in the short-term horizon. Mid-Term needs may be considered for implementation over an 8 to 15-year timeframe or if funding opportunities arise early or needs of the community change.

Long-Term

Long-Term Horizon (Y2036 to Y2050): Needs that also help achieve the goals of the TMP but have a major cost or other constraints or may not be needed in the immediate future. Long-Term needs should be considered for implementation over a 16 to 25-year timeframe or if funding opportunities arise early or needs of the community change.

Figures 4 – 8 illustrate recommended transportation needs as presented in the Mesa TMP Final Report. Detailed information for each identified need is also provided in the Mesa TMP Final Report.

FIGURE 4. RECOMMENDED ROADWAY IMPROVEMENT NEEDS

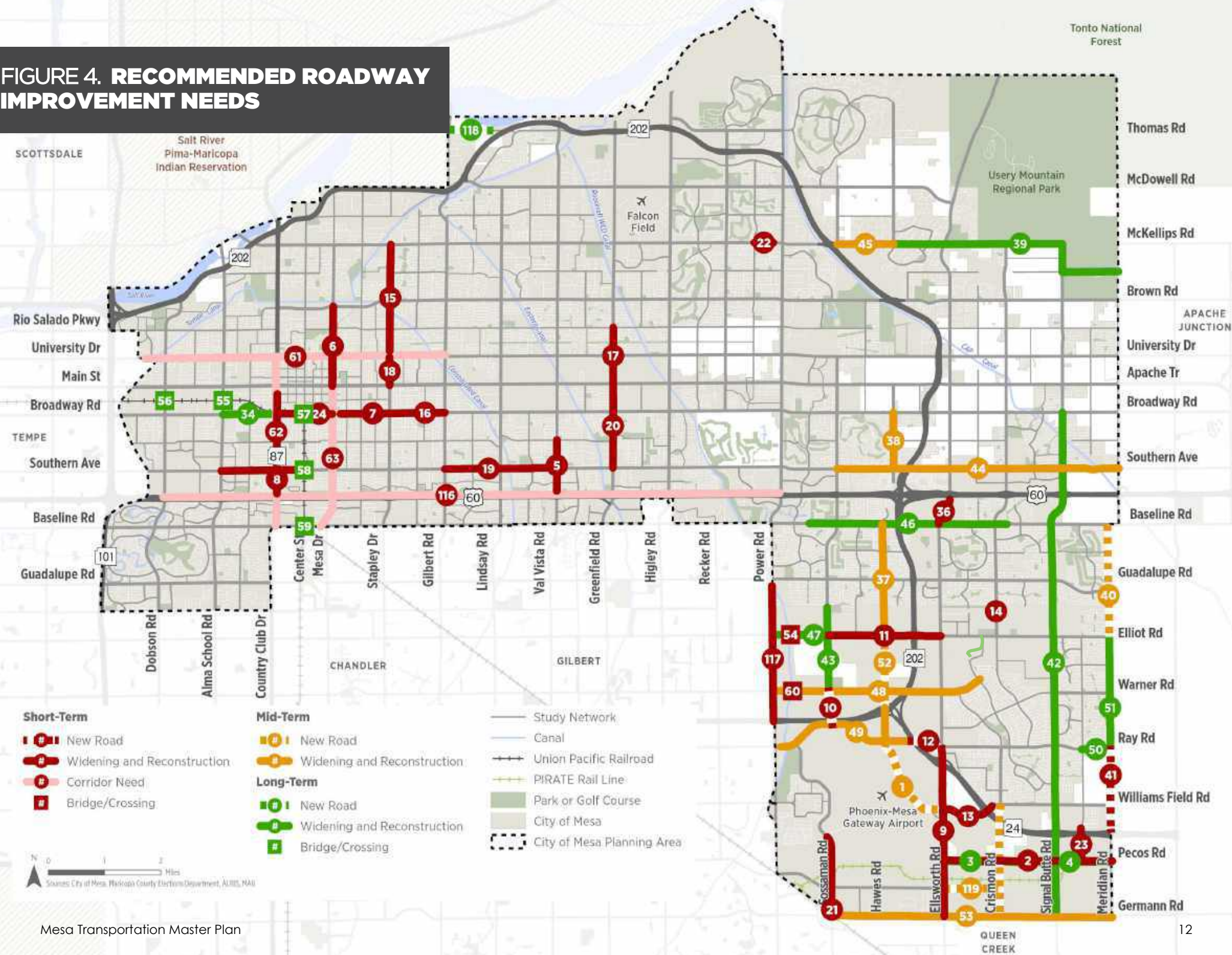


FIGURE 5. **SHARED-USE PATH NETWORK NEEDS**

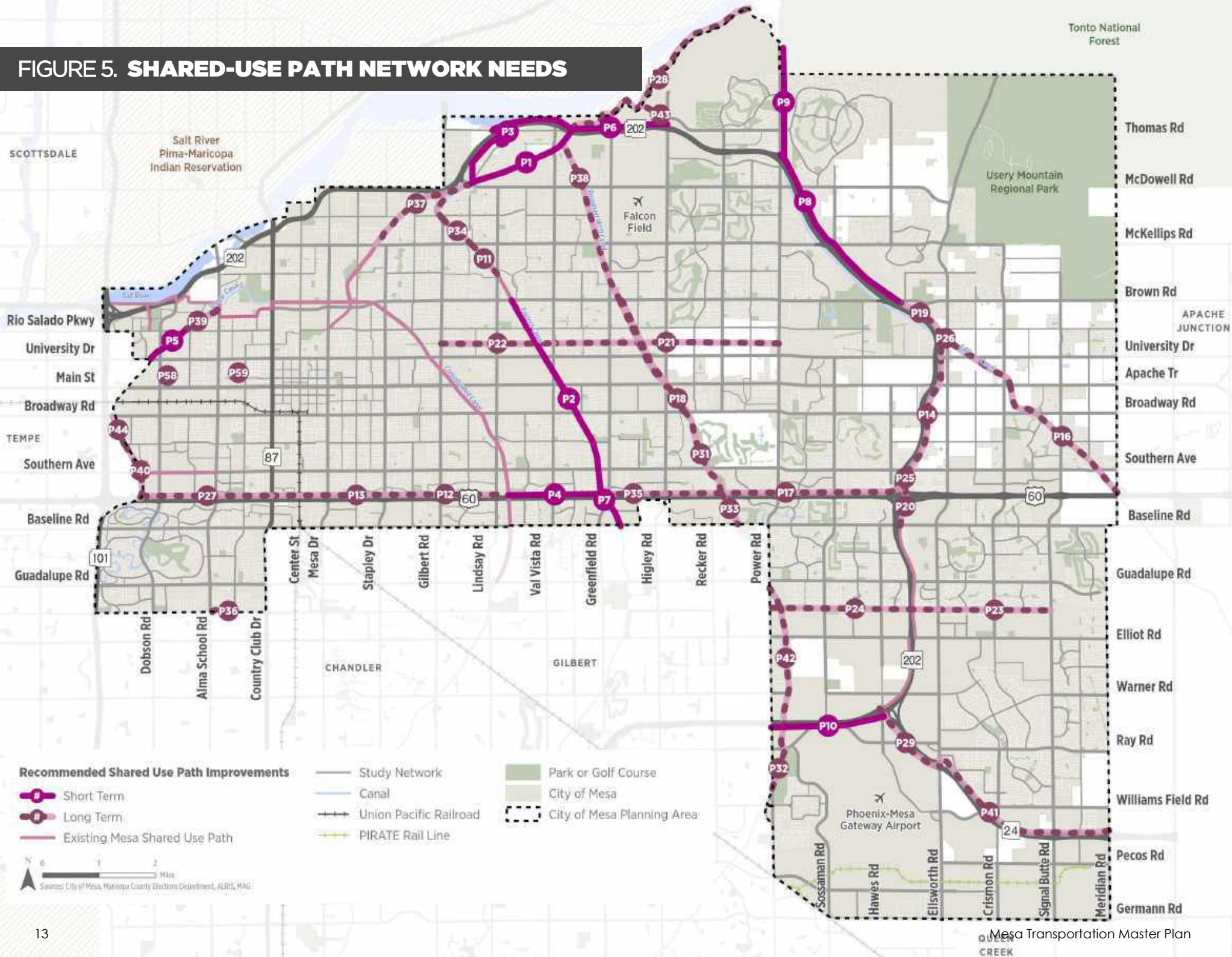


FIGURE 6 SIDEWALK IMPROVEMENT NEEDS

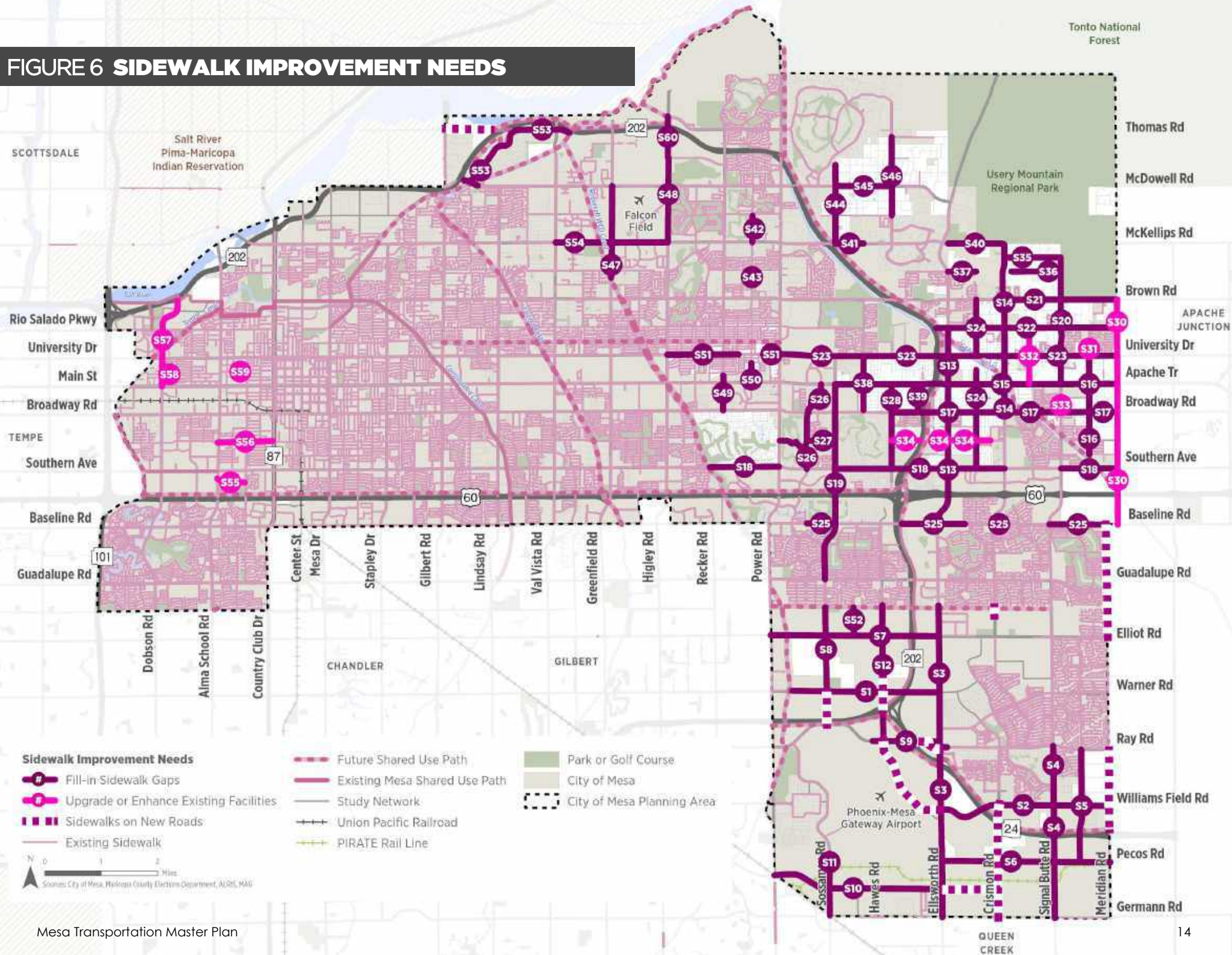


FIGURE 7. RECOMMENDED NEW BICYCLE FACILITY NEEDS

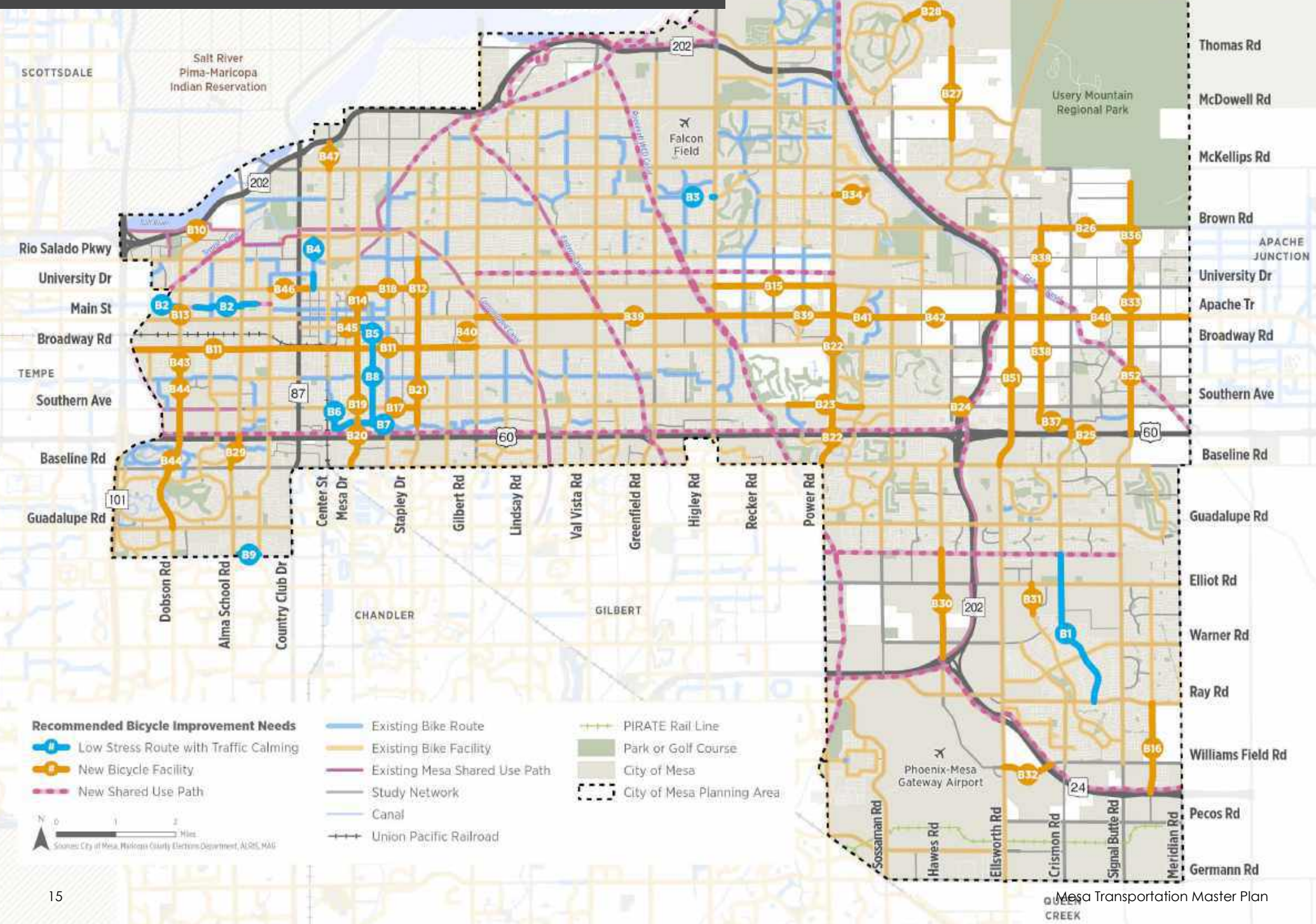
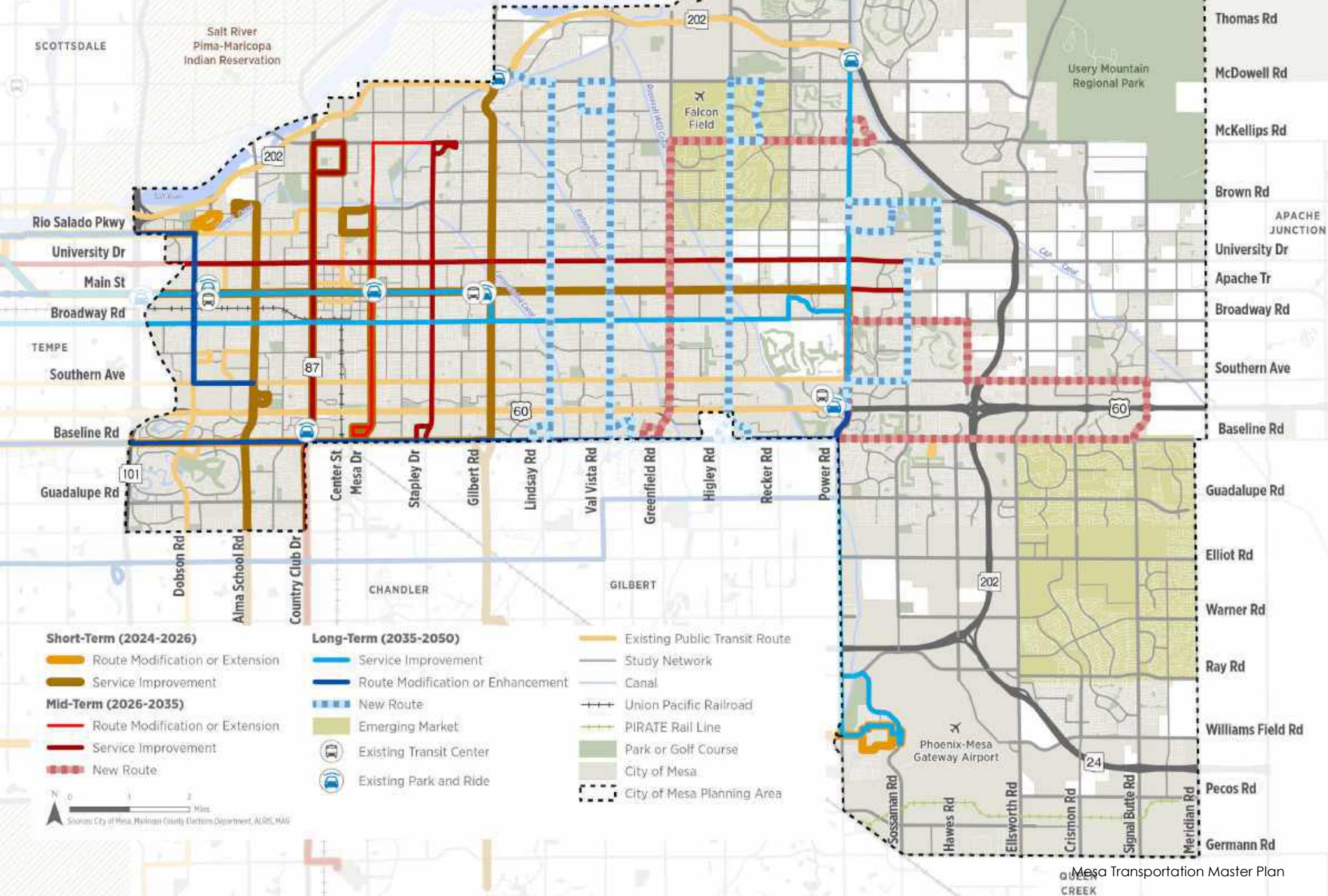


FIGURE 8. RECOMMENDED TRANSIT SERVICE NEEDS FROM THE TRANSIT MASTER PLAN



PLANNING FOR MESA'S UNIQUE TRAVEL SHEDS

Travel sheds are geographic sub areas with similar socioeconomic, land use, and travel characteristics where residents and visitors who have similar transportation needs reside. Within each travel shed there are streets and multimodal facilities to help move people and goods. By analyzing travel sheds, the Mesa TMP creates strategies for the physical and operational improvements and investments necessary to meet Mesa's unique mobility needs while preserving Mesa's neighborhoods and communities. Figure 9 illustrates Mesa's unique travel sheds.

What Defines a Travel Shed?

The development of each travel shed was a multi-step process that overlaid the following data items to determine the socioeconomic and travel trends and ultimately the extent of each travel shed.



Population and Socioeconomic Makeup



Land Use Characteristics

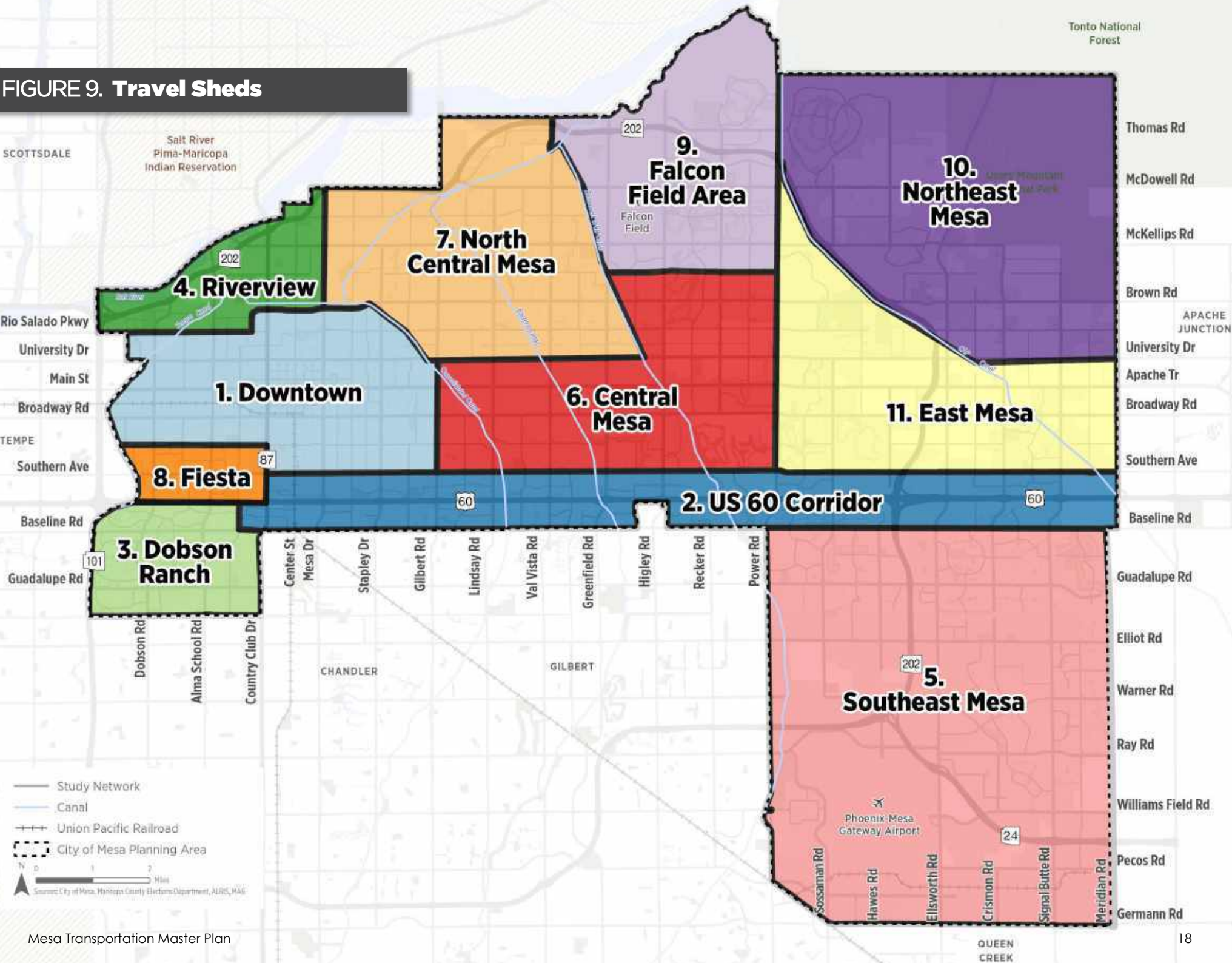


Physical Features and Natural Barriers



Mobility Trends

FIGURE 9. Travel Sheds



CREATING COMPLETE NETWORKS

Mesa's transportation system is made up of a collection of streets that move people and goods to and through the City. With street space at a premium, however, cars, buses, pedestrians, cyclists, emergency vehicles and trucks compete for space. Fortunately, there are actions Mesa can take to manage and design streets to prioritize moving vehicles, people, and goods more efficiently and safely.

Complete networks recognize that not every street can prioritize every mode, but rather that some streets prioritize one or more modes so that collectively, every mode has a complete and interconnected system. Working together as a system, these complete networks create reliable and attractive transportation choices regardless of what mode of travel is used. Each complete network is comprised of:

- **The Primary Network** represents a collection of streets that create vital local and regional connections by mode. Collectively, the primary network creates a high-quality, high-performing network to move people by mode.
- **The Supporting Network** strengthens the complete network by connecting the primary network to residents, businesses, and activity centers throughout the City.

The outcomes of the complete networks lay the groundwork for strategic investments and decision-making along the primary multimodal corridors to better move people and goods no matter what mode. Chapter 7 of the Mesa TMP provides additional information on the recommended complete networks.

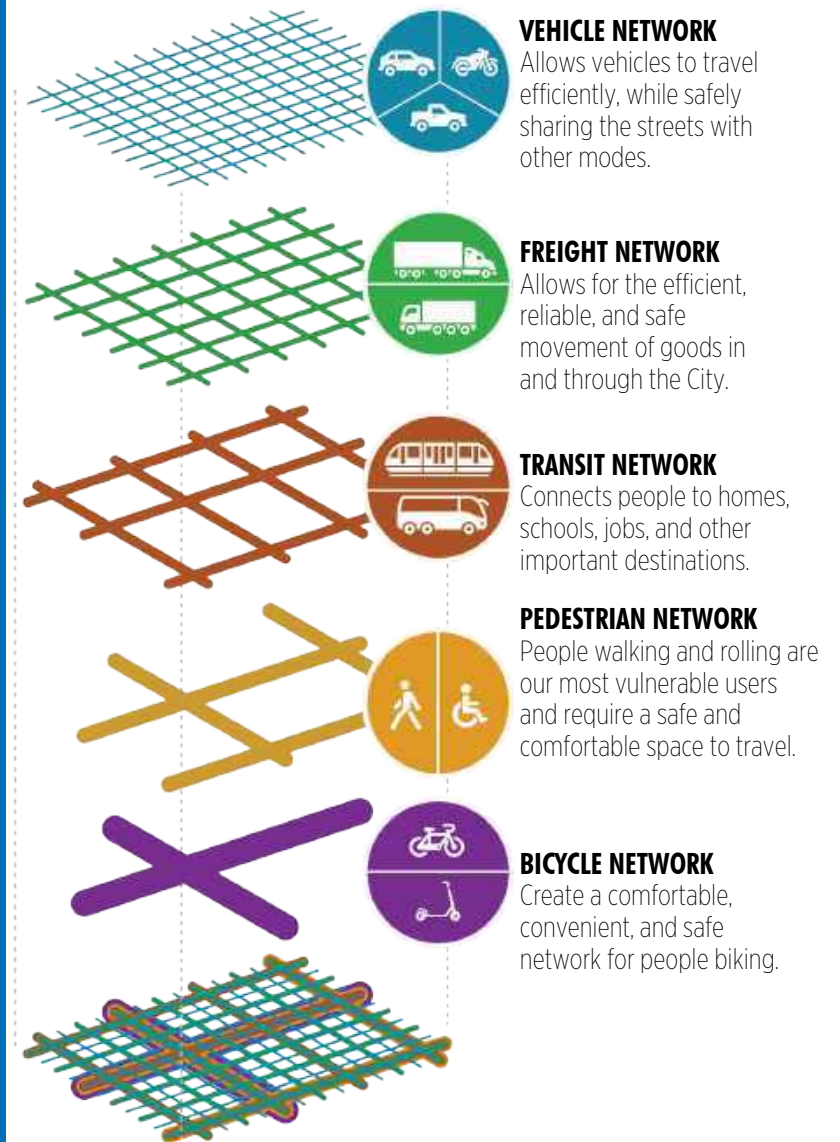
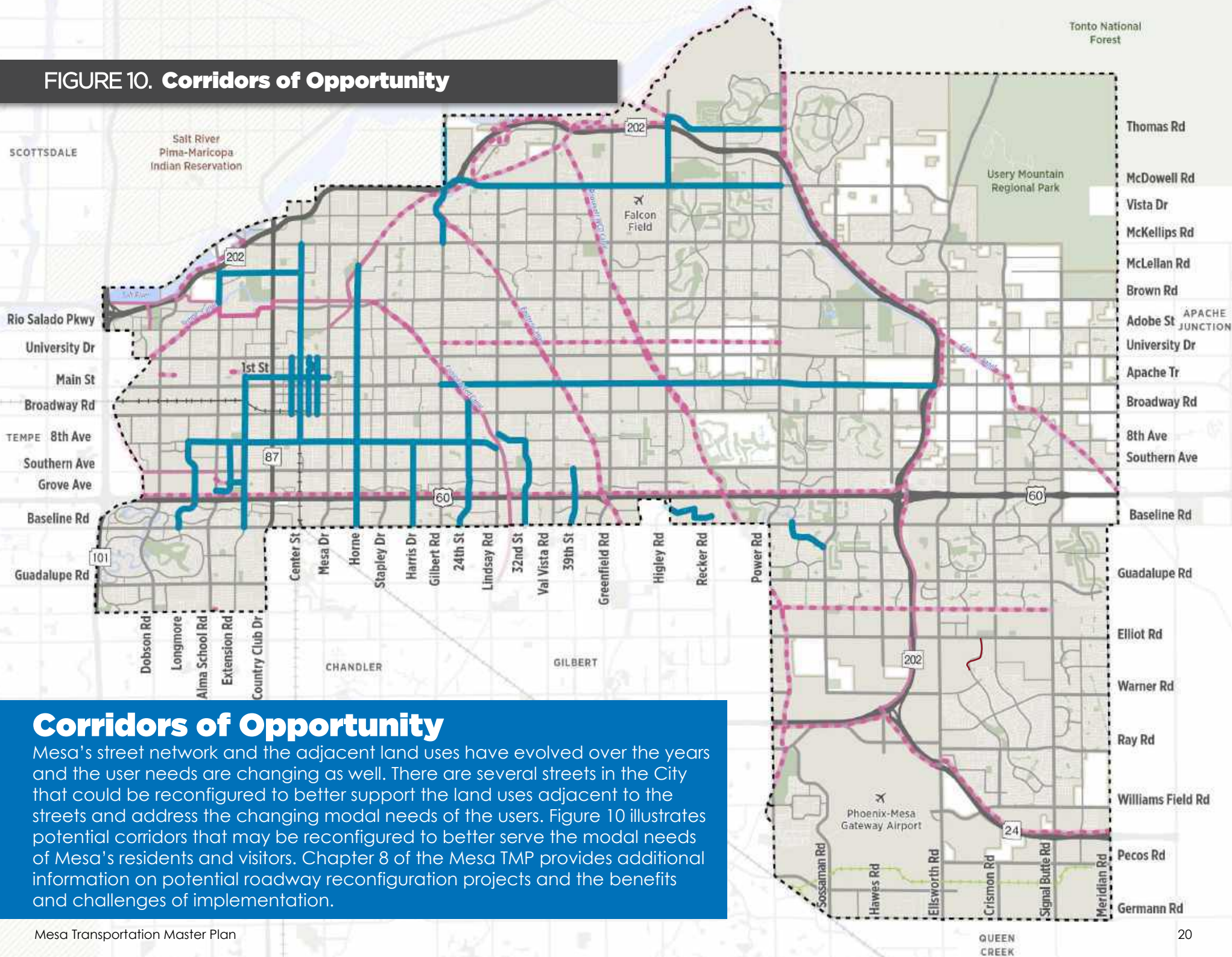


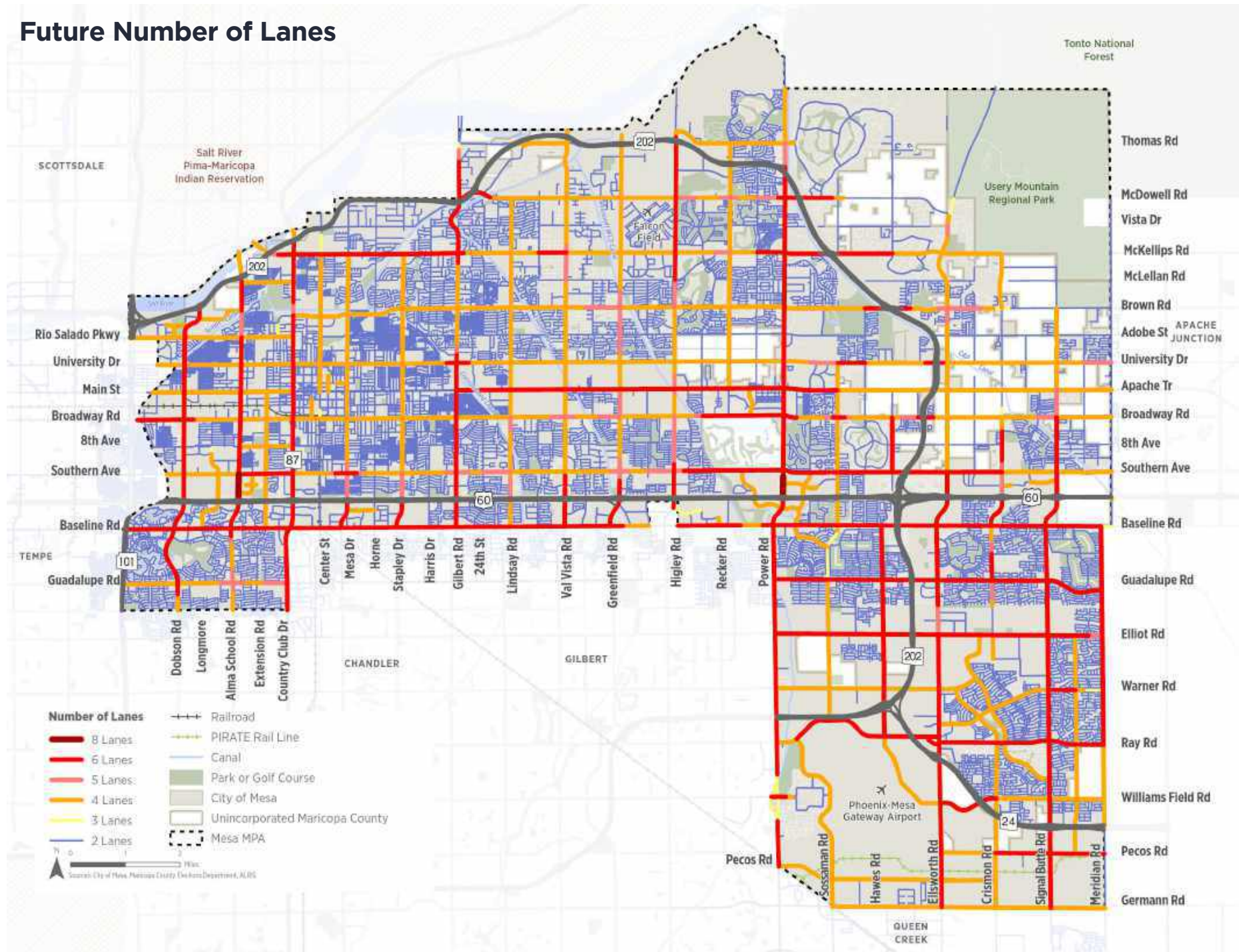
FIGURE 10. Corridors of Opportunity



Corridors of Opportunity

Mesa's street network and the adjacent land uses have evolved over the years and the user needs are changing as well. There are several streets in the City that could be reconfigured to better support the land uses adjacent to the streets and address the changing modal needs of the users. Figure 10 illustrates potential corridors that may be reconfigured to better serve the modal needs of Mesa's residents and visitors. Chapter 8 of the Mesa TMP provides additional information on potential roadway reconfiguration projects and the benefits and challenges of implementation.

Future Number of Lanes



WHAT'S NEXT?

The completion of the Transportation Master Plan is the first of many steps that need to occur to realize Mesa's multimodal transportation future. The TMP provides a starting point and tools to help developers, planners, engineers, and community advocates to expand and enhance Mesa's transportation system to meet the City's growing needs. Making the TMP vision a reality requires a comprehensive approach that includes policy, design, partnerships, and above all, dedication, and commitment by Mesa staff.

