



US 60 (GRAND AVENUE): SR 303L TO SR 74 CORRIDOR STUDY

Final Report

February 2026

US 60 (GRAND AVENUE): SR 303L TO SR 74 CORRIDOR STUDY

Executive Summary

February 2026

Prepared for:

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List of Acronyms

ACC	American Corporation Commission
ACS	U.S. Census Bureau American Community Survey
ADOT	Arizona Department of Transportation
ADT	Average Daily Traffic
ASLD	Arizona State Land Department
BLM	Bureau of Land Management
BNSF	Burlington Northern Santa Fe Railway
CAP	Central Arizona Project
CIP	Capital Improvement Program
DU	Dwelling Unit
EDDM	Every Direct Door Mail
FCDMC	Flood Control District of Maricopa
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
LAFB	Luke Air Force Base
LOS	Level of Service
LRTP	Long Range Transportation Plan
LU	Land Use
MAG	Maricopa Association of Government
MCDOT	Maricopa County Department of Transportation
MPA	Municipal Planning Area
MPO	Metropolitan Planning Organization
PAD	Planned Area Development
PAG	Policy Advisory Group
PCD	Planned Community Development
RTP	Regional Transportation Plan

R/W	Right of Way
SR	State Route
TAG	Technical Advisory Group
TAZ	Transportation Analysis Zone
TDM	Travel Demand Model
TI	Traffic Interchange
USDOT	U.S. Department of Transportation
USPS	U.S. Postal Service
VHT	Vehicle Hours Traveled
VMT	Vehicle Miles Traveled
VOC	Volume Over Capacity

1 Introduction

The US 60 (Grand Avenue): Loop 303 (Estrella) to State Route 74 Corridor Study has been conducted to examine transportation needs in the area surrounding US 60 and to recommend actions to improve and maintain traffic operations and safety for years to come. Much of the area surrounding this segment of US 60 is currently rural in nature and has minimal road infrastructure. In order to identify needed improvements to US 60, it was necessary to establish what new arterial streets would be built in the surrounding area and when they would be built. For this reason, the study area was defined to extend well beyond the alignment of US 60, as shown in **Figure 1**, so that the plans for new developments and the streets connecting them could be included in the analysis. The study area is bounded by Sun Valley Parkway/Bell Road on the south, SR 74 on the north, SR-303L and Vistancia Boulevard on the east, and 259th Avenue on the west. Portions of the cities of Surprise and Peoria, portions of unincorporated Maricopa County and the communities of Wittmann, Circle City, and Morristown are included in the project area. As a result, this study not only considers the future improvement needed to US 60, but also considers the surrounding arterial streets and the capacities those future street networks will need over time.

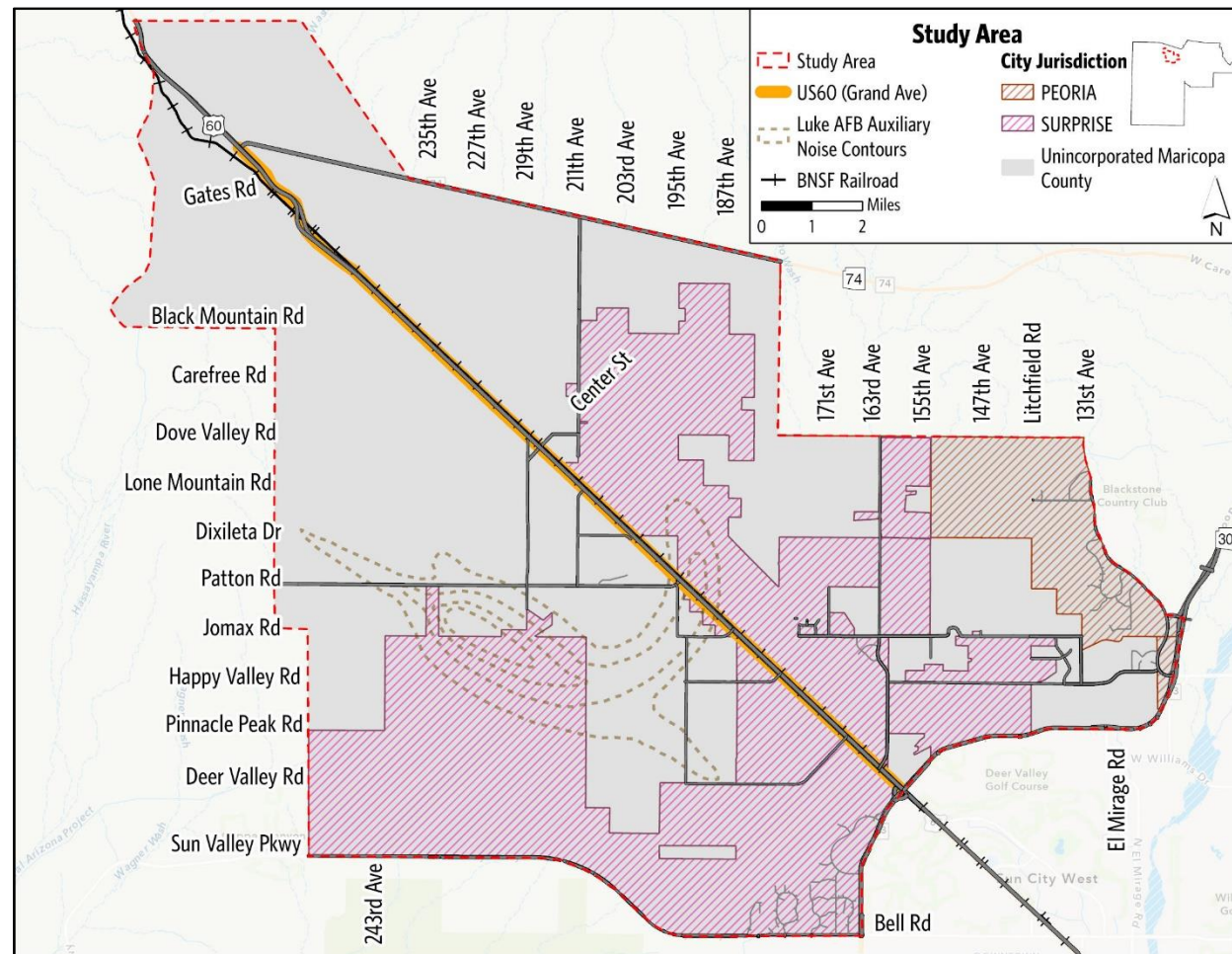


Figure 1: Study Area

1.1 Objectives of the Study

This corridor study is a comprehensive, long range planning effort led by the Maricopa Association of Governments (MAG) to evaluate the travel demand, operational performance, safety conditions, and future infrastructure needs along one of the North Valley's most critical transportation corridors. As the metropolitan planning organization (MPO) for the Phoenix metropolitan area, MAG is responsible for developing and maintaining the Regional Transportation Plan (RTP), coordinating transportation investments, and helping to support a transportation system that contributes to the region's economic growth and quality of life.

US 60, also known as Grand Avenue or the Phoenix-Wickenburg Highway, plays a central role in the regional transportation network, serving as a major commuter route, freight corridor, and connector to key employment, educational, and commercial destinations. With the region's population projected to grow substantially through 2050, and with especially strong growth occurring in the Northwest Valley surrounding the corridor, US 60 is expected to experience increasing travel demand, evolving land use patterns, and heightened pressure on system performance. This study was initiated to proactively assess these changes and identify a sequenced set of improvements that can guide investment decisions over the next few decades.

The objectives of this study are fourfold:

1. **Document existing conditions** along the corridor, including traffic operations, and traffic safety;
2. **Evaluate future conditions** under 2030, 2040, and 2050 planning horizons to quantify future traffic volumes, travel patterns, and system performance;
3. **Establish a set of key recommendations** to guide the process of planning and implementing future transportation improvements throughout the study area; and
4. **Provide information on the transportation needs arising over time** to assist decision makers as they plan and program funds for the transportation improvements so that the improvements can be implemented as they are needed.

The US 60 Corridor Study provides a forward looking, data driven framework for guiding transportation investment in this high-growth area in the region along one of its most important corridors. By integrating technical analysis, stakeholder collaboration, and public input, the study offers a clear path toward improving mobility, safety, and economic vitality through 2050. This chapter provides an overview of the study area, the stakeholders involved, the public engagement process, and the structure of the full document. It establishes the foundation for the technical analysis and recommendations presented in subsequent chapters.

1.2 Study Background and Regional Context

MAG's long-range planning framework described in MOMENTUM 2050, the Regional Transportation Plan (RTP), emphasizes the importance of maintaining a safe, efficient, and multimodal transportation system that supports regional mobility and economic vitality. Several study area trends underscore the need for a comprehensive corridor study at this time:

- **Rapid population and employment growth** in the West Valley, particularly in northern Surprise and western Peoria.
- **Increasing travel demand** associated with new residential development, expanding employment centers, and regional economic activity that is already causing congestion in some portions of the study area.
- **Evolving land-use patterns**, including new planned developments that are already transitioning much of the study area into a more urbanized environment.
- **The need for new and higher-capacity transportation infrastructure** that requires additional investment to maintain safety and operational performance through this transition.

The information provided in corridor study will feed into MAG's broader regional planning initiatives, including the long-range RTP, 20-year Proposition 479 freeway and arterial life cycle programs, and short-range Transportation Improvement Program (TIP). It will also feed into ADOT's statewide planning goals as well as the local municipalities' transportation plans and programs.

1.3 Planning Process

The planning process for the US 60 Corridor Study followed a structured, collaborative, and data driven approach designed to bring the local, regional, and statewide agencies together in identifying the transportation needs of the study area and prioritizing their solutions. Agencies participating in the study included MAG, ADOT, the City of Surprise, the City of Peoria, the Maricopa County Department of Transportation (MCDOT), and the Arizona State Land Department (ASLD). These agencies participated in the Technical Advisory Group (TAG) and Policy Advisory Group (PAG) to help guide the process, and ensure that technical expertise and policy direction were integrated at every stage. The Federal Highway Administration (FHWA) was also an active member of the TAG. Each of these agencies contributed data, technical expertise, and local perspectives. In addition to these agencies, the Burlington Northern Santa Fe Railway (BNSF) also participated on the Technical Advisory Group where it contributed data on their proposed intermodal facility for use in the study's modeling and analyses. A vision and goals workshop attended by these agencies helped establish shared objectives and identify strategic themes for corridor improvement. Technical analysis was conducted using the latest MAG travel demand model for the year 2050, supplemented by operational assessments and regional freight considerations. Public engagement activities provided additional insight into community priorities and corridor challenges. Together, these steps created a coordinated framework that informed the development and evaluation of improvement strategies.

The study timeline and key milestones are presented in **Figure 2** below:

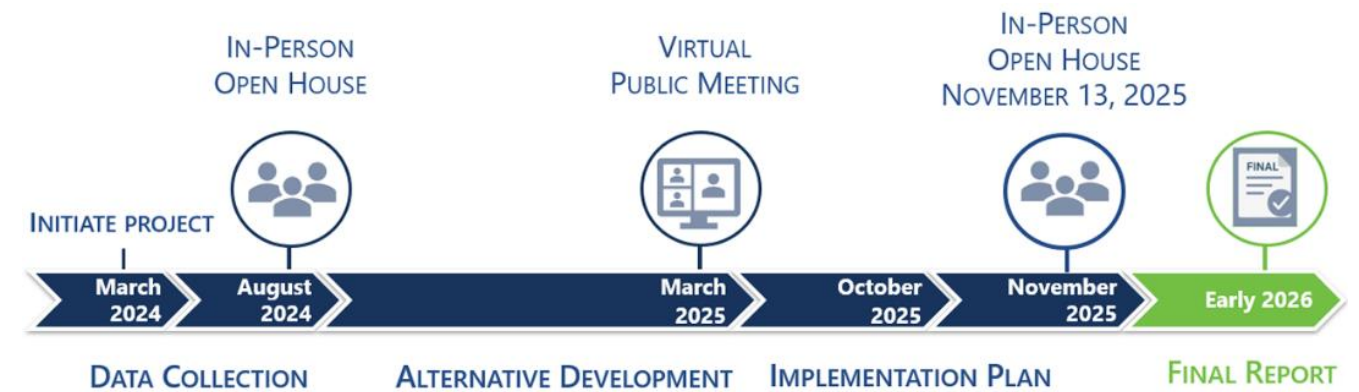


Figure 2: Project Timeline

1.4 Description of US 60

US 60 forms a diagonal axis through the Northwest Valley, connecting several communities in the West Valley, including Phoenix, Glendale, Peoria, Sun City, Sun City West, Youngtown, El Mirage, and Surprise. US 60 within the study area extends in the northwest direction from SR 303L to SR 74, approximately 18.5 miles. While US 60 is controlled and maintained by ADOT, it is a component of the Federal Highway System (FHS). For purposes of this study, US 60/Grand Avenue is viewed as an east-west roadway (which is its official designation in the FHS). Therefore, the directionality of US 60 will be described as eastbound or westbound. Features and characteristics immediately associated with the roadway and the project corridor are referred to as being located north or south of the facility, as appropriate. Beyond the corridor, for reasons of regional coherence, the accepted geographic points of the compass – north, east, south, and west – are employed in descriptive narrative for orientation.

US 60 within the study area has been functioning as a rural highway but, more recently, the southern portion of the highway is beginning to transition to a more urbanized roadway requiring traffic signals and more travel lanes. US 60 serves several key functions within the regional transportation system:

- **Regional Commuter Route:** Connecting Northwest Valley communities to central Phoenix and major employment centers.
- **Freight Corridor:** Supporting regional goods movement between industrial areas and distribution centers and providing access to broader statewide and interstate markets.

The corridor's importance extends beyond daily travel; it is a backbone of regional mobility and economic activity. The corridor traverses multiple jurisdictions, each with unique land-use characteristics, transportation priorities, and growth trajectories. In recent years, the eastern portion of the study area has been growing rapidly and is now highly urbanized, which continues at a rapid pace. The southern and western portions have begun to experience rapid development more recently and are now urbanizing even more rapidly. The northern portions of the study area have not been experiencing rapid growth and are still primarily rural. These land-use patterns will influence travel behavior, multimodal needs, and the types of improvements required to support future growth.

1.5 Stakeholder Coordination

1.5.1 Technical Advisory Group

MAG convened a technical advisory group (TAG) composed of transportation planners, engineers, and subject-matter experts from participating member agencies. The TAG met once a month and at key milestones to:

- Review data and methodologies;
- Evaluate alternatives;
- Provide guidance on feasibility and implementation; and
- Ensure consistency with regional planning frameworks.

1.5.2 Policy Advisory Group

In addition to the TAG, the study team coordinated with leadership from the stakeholder agencies (City of Surprise, City of Peoria, ADOT and MCDOT) to ensure that the findings and recommendations aligned with each agency's policies and transportation improvement priorities. This leadership group, referred to as the Policy Advisory Group (PAG), met quarterly and at key project milestones to provide strategic guidance and direction.

1.6 Vision and Goals Workshop

As part of the early study development process, MAG convened a joint vision and goals workshop with members of both the TAG and the PAG to establish a shared foundation for the study. During this workshop, participants worked together to identify the goals and objectives that should guide transportation planning within the US 60 study area, reflecting regional priorities related to mobility, safety, and economic vitality.

The workshop also provided an opportunity for agency leaders and technical staff to discuss emerging challenges, long-term growth pressures, access to US 60, and the operational constraints that influence the corridor's performance. Using study data and analyses, the workshop participants evaluated a range of strategic solutions, including operational improvements, enhanced connectivity to and across US 60, improved access to the corridor, new connections to Sun Valley Parkway and SR 74, and targeted capacity investments that address existing issues while supporting future travel demand. Additionally, the workshop explored solutions related to the overall character and function of US 60, including how the corridor should evolve to balance regional mobility with local access needs. The discussion also considered freight mobility, traffic operations, and long-term infrastructure needs in the study area. The outcomes of this workshop informed the development of the study's evaluation framework and ensured that subsequent technical analyses were aligned with a unified regional vision for the corridor.

Some strategic ideas identified through this workshop are summarized below:

- Improve access from the study area to SR 303L;
- Improve access to SR 74;

- Increase capacity on US 60;
- More crossings of US 60 are needed;
- Find a way to connect 163rd Avenue to Bell Road after crossing US 60;
- Managing access to US 60 north of Patton Road needs a plan; and
- More connections to US 60 will need safety measures soon.

1.7 Public Engagement Process

MAG implemented a multi-phase public engagement strategy designed to reach a broad cross-section of corridor users. Engagement methods included:

- Public meetings and open houses;
- Online interactive mapping tools;
- Stakeholder input;
- Project website updates and digital outreach; and
- Mail Outreach using United States Postal Service (USPS) Every Door Direct Mail (EDDM) shown in

Figure 3.



Figure 3: Image of the Project Open House Direct Mailer

The following public meetings were conducted for the study:

- Public Meeting 1 (In-Person Open House): Held in an open house format where residents and stakeholders met with the study team to share input on interim improvements, identify problem areas, and highlight key considerations for developing corridor solutions;
- Public Meeting 2 (Virtual): Presented analysis findings based on the 2050 General Plan scenario, including identified operational issues and problem areas within the transportation network. Residents provided comments on potential solutions via the project website; and
- Public Meeting 3 (In-Person and Virtual Hybrid): Provided an overview of anticipated infrastructure needs over time within the study area and presented feasible alternatives for the system interchange at SR 303L and US 60.

1.7.1 Key Themes from Public Input

Public feedback highlighted:

- Congestion during peak periods;
- Safety concerns at specific intersections;
- Concern about high truck volumes;
- Desire for improved connectivity in the study area,
 - Through new connections to US 60 from north side, and
 - Through additional connections to Sun Valley Parkway;
- Support for major investments at US 60 and SR 303 Traffic Interchange (TI); and
- Support for phased improvements despite frustration over the long timeline.

These themes directly informed the development of improvement strategies.

1.8 Structure of the Full Document

The remainder of the US 60 Corridor Study report is organized into the following chapters:

Chapter 2 – Existing Conditions

A detailed assessment of current traffic operations, safety performance, multimodal facilities, land use, and environmental considerations.

Chapter 3 – Future (2050) Conditions

Discussion of MAG’s 2050 socio-economic forecasts and review of land use transformations between the existing analysis and 2050. The ongoing and planned transportation improvements and future general plans are reviewed. Areas of concern are highlighted across a hypothetical 2050 road network.

Chapter 4 – Analysis of Potential Solutions and Key Findings

Mitigation alternatives are developed for each of the areas of concern and several 2050 alternative scenario networks are evaluated with these mitigation alternatives. Key findings of the 2050 scenarios are discussed.

Chapter 5 – Key Recommendations

Key recommendations are given for the problem areas identified through the 2050 analysis. The mitigation alternatives that were highly favored from the public outreach efforts are incorporated into the key recommendations.

Chapter 6 – Interim Conditions (2030, 2040, 2050)

Evaluation of interim years 2030, 2040, and 2050 traffic volumes, system performance, and multimodal needs based on MAG’s socio-economic forecasts with greater focus on the year 2050, which is the horizon year of the RTP.

Chapter 7 – Full Build Out Conditions (After 2050)

Evaluation of a theoretical undated future when the entire growth capacity of the area General Plans is achieved, looking at traffic volumes and anticipated infrastructure needs based on the local jurisdictions’ ultimate plans.

Chapter 8 – Public Involvement Summary

Provides an overview of the public involvement meetings summaries.

Chapter 9- Conclusions

Provides a brief summary of the project and major findings.

2 Existing Study Area Conditions

This section provides an overview of the existing conditions in the study area including socioeconomic conditions, land use, the access points to US 60, and rail impacts on the roadway network. A detailed report on the existing conditions is included in **Appendix A**.

2.1 Population, Housing, Employment, and Land Use

Demographic and socioeconomic characteristics of the study area were derived from the MAG Socioeconomic Projections (2023) and the U.S. Census Bureau's 2018–2022 American Community Survey (ACS). In 2023, the study area was home to an estimated 56,757 residents, with a nearly even gender distribution (49.2 percent male and 50.8 percent female). At the end of 2023, the 128,510 acres within the study area contained approximately 25,561 dwelling units, of which about 90 percent were occupied. Roughly 8 percent of all units were identified as seasonal or recreational housing, reflecting the presence of part-time residents and second-home owners. The average household size in the study area is 2.47 persons, slightly lower than the averages in the surrounding jurisdictions: 2.57 in Surprise, 2.7 in Peoria, and 2.67 in Maricopa County.

The study area is predominantly residential, with most residents commuting to other parts of the Phoenix metropolitan region for employment. Local job opportunities remain limited and are concentrated in school districts, retail establishments, construction trades, and light industrial businesses. Approximately 366 employers operate within the study area, collectively supporting about 3,800 jobs.

Existing land use in the study area consists of a mix of residential neighborhoods, commercial development, and open space. Areas closer to SR 303L exhibit a more urban and suburban character, while the unincorporated portions of Maricopa County retain a distinctly rural or semi-rural feel. The study area is experiencing rapid residential growth, and this trend is expected to continue in the coming years. Anticipated growth is projected to be more pronounced north of US 60 compared to areas to its south.

The imbalance between rapid residential growth and the relatively modest expansion of local employment opportunities is placing increasing pressure on the major corridors within the study area, particularly near the interchange of US 60 and SR 303L. Outward-bound commuting concentrates peak-period traffic on this small area, contributing to operational deficiencies such as congestion, reduced travel speeds, and longer queueing.

A snapshot of existing demographics and land use conditions is presented in **Figure 4** below. The study area population and employment densities are shown in **Figure 5** and **Figure 6** respectively.

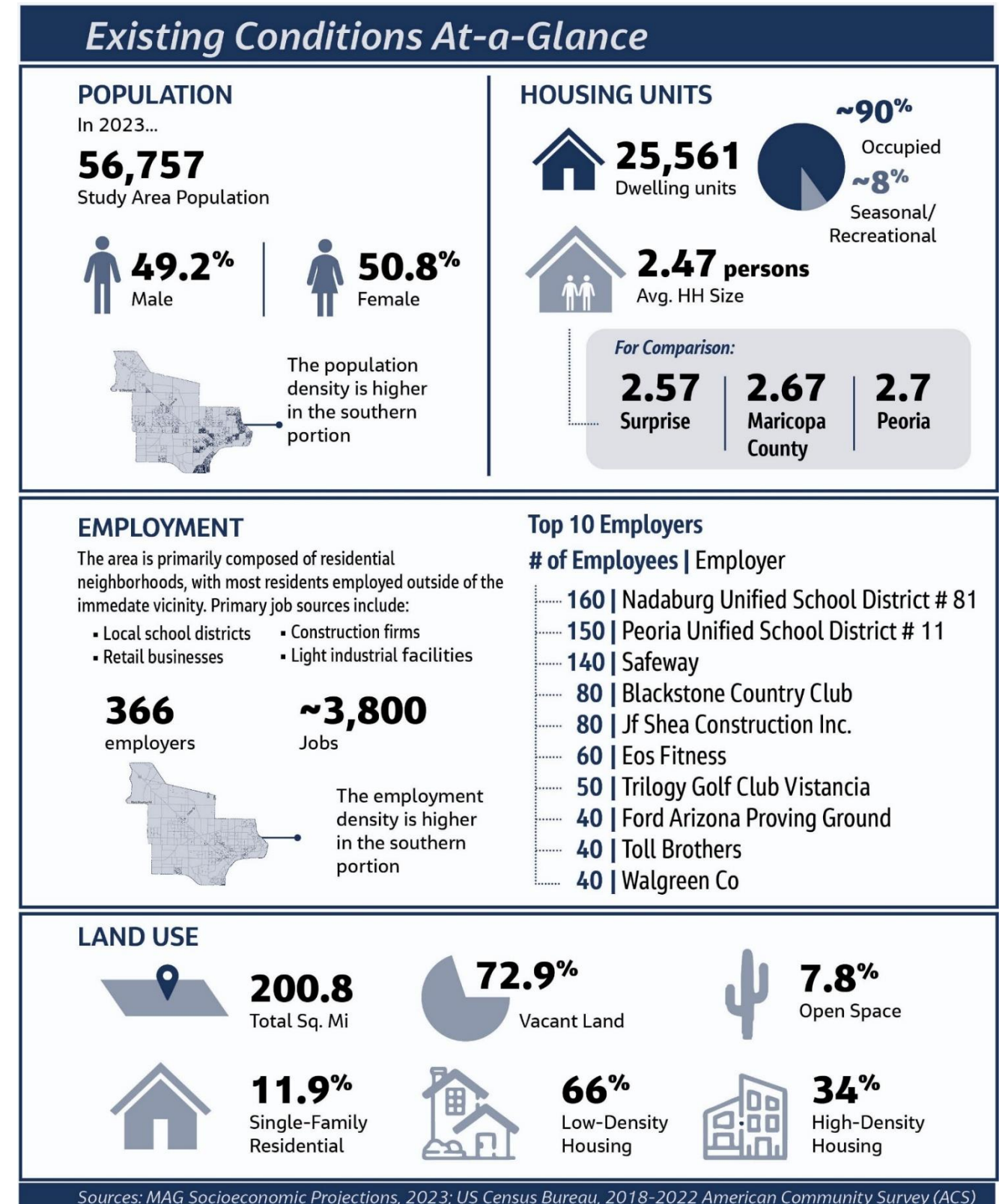


Figure 4: Snapshot of the Study Area

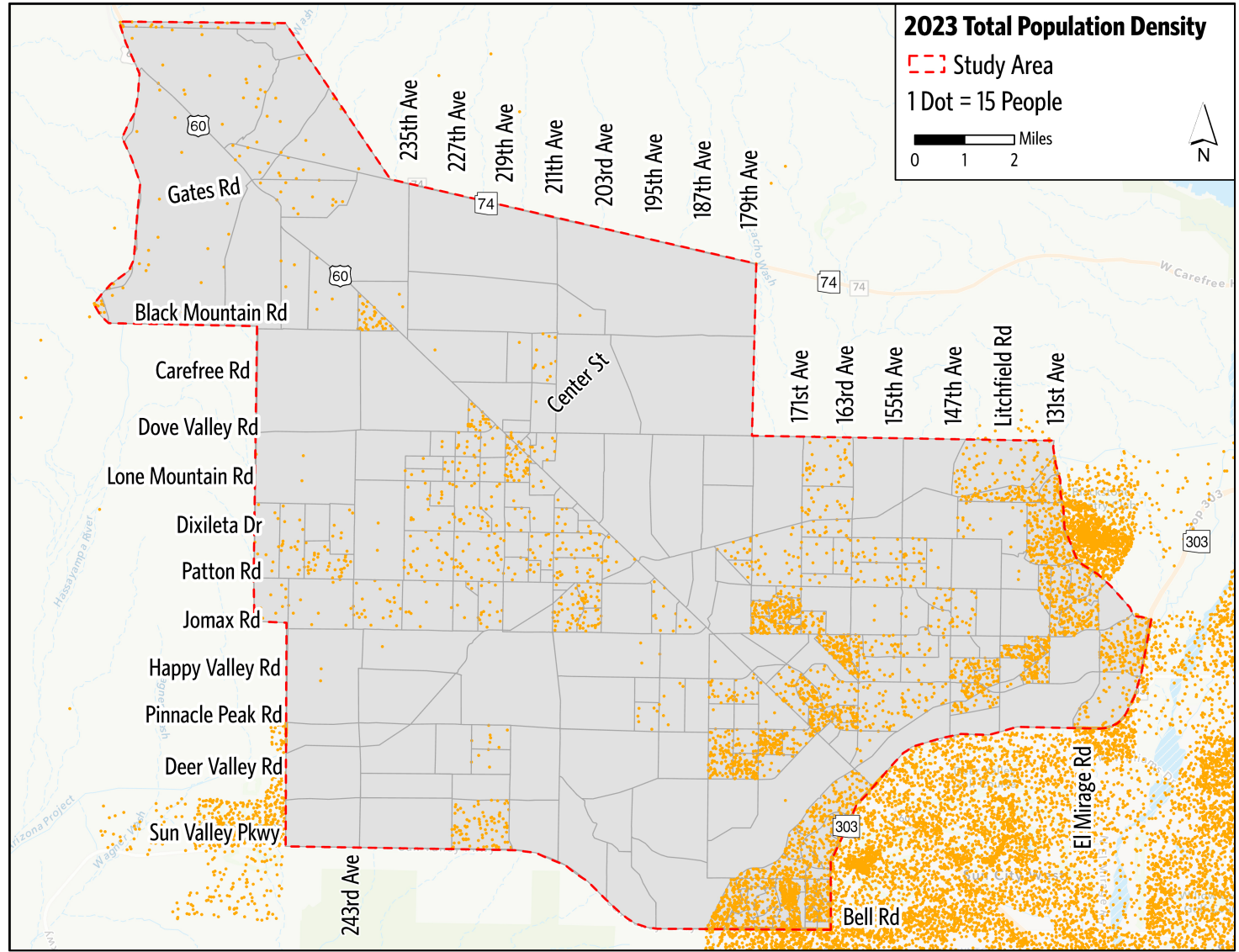


Figure 5: Study Area Population Density (2023)

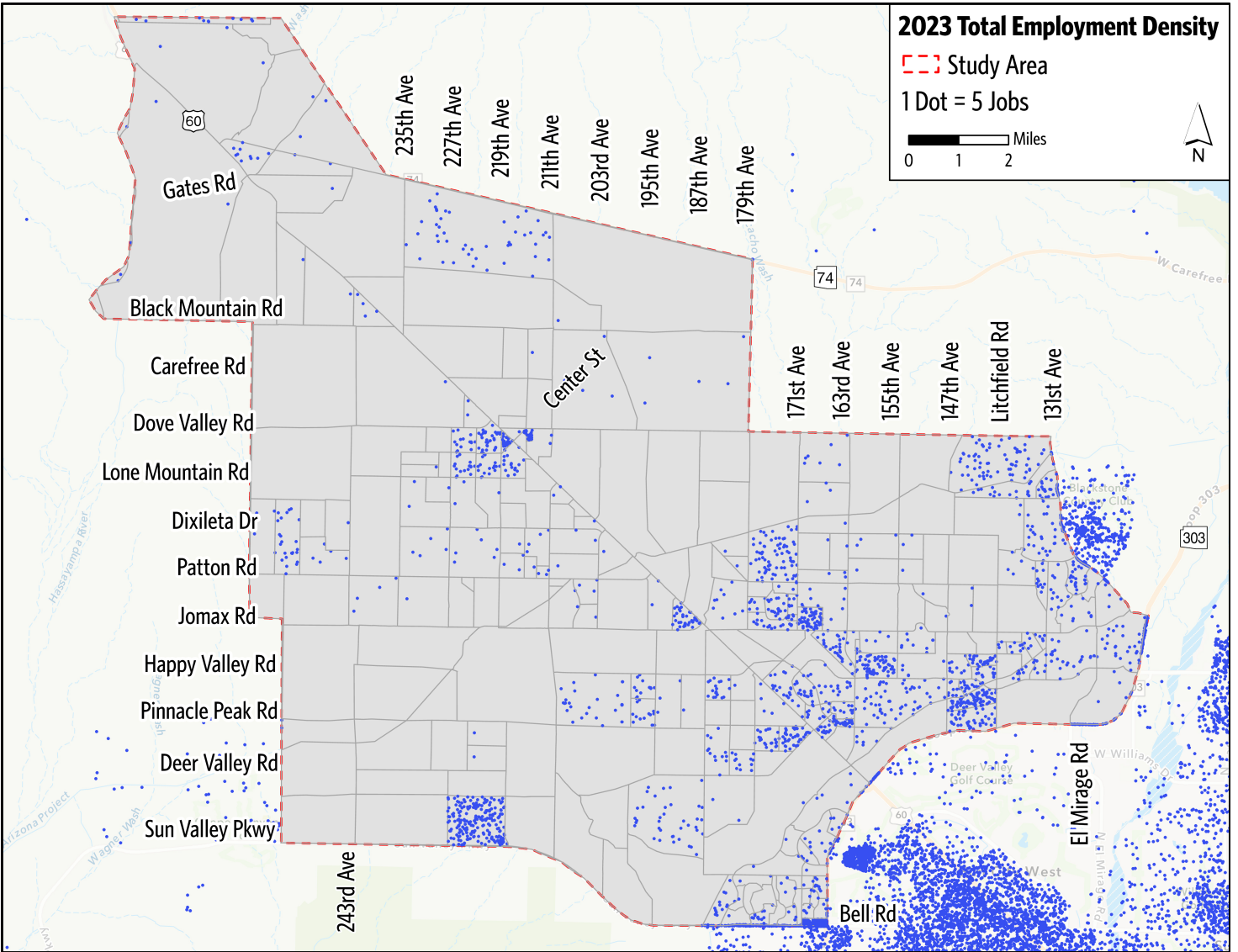


Figure 6: Study Area Employment Density (2023)

2.2 Existing Corridor Conditions

The portion of US 60 within the study area from SR 303L to SR 74 is approximately 18.5 miles long and is located entirely within Maricopa County. US 60 passes through the City of Surprise and unincorporated Maricopa County, serving the communities of Wittmann, Circle City, and Morristown. East of the project area (i.e., east of SR 303L/Estrella Freeway), US 60 has multiple adjacent “strip” commercial facilities (strip facilities are those retail stores that are typically grouped within a long one-story building). As access points to commercial and residential developments/sites have multiplied, traffic flow has experienced increased delays due to vehicles slowing to make turns. The current posted speed limits along the US 60 study corridor range from 45 mph to 65 mph. In the vicinity of the Wittman area, the posted speed limit drops to 45 mph; south of 163rd Avenue the posted speed limit is 55 mph; the rest of the US 60 corridor in the study area has a posted speed of 65 mph. Most arterial streets in the study area have a posted speed limit of 45 mph.

Near the SR 303L interchange, US 60 is a six-lane divided highway. West of 163rd Avenue, it narrows to a four-lane divided highway with an unpaved median. The median width varies along this section, ranging from 0 to 60 feet. The roadway typically has 12-foot lanes and 10-foot outside shoulders, except at canal crossings. The portion of the study area near US 60 between 203rd Avenue and SR 303L is highly congested during the peak traffic hours due to the limited access points for residents at the large planned communities to reach US 60 and SR 303L from the north side of US 60.

A snapshot of the existing corridor is presented in **Figure 7**.

2.2.1 Access Points

Access control and access management is a key issue along the entirety of the corridor. The US 60 corridor in the study area has four signalized intersections and 60 stop control access points consisting of roadway connections and driveways at US 60. There are very few access points along the north side of US 60, as the BNSF railroad corridor parallels the roadway and offers limited at-grade crossing opportunities. The south side of US 60 features many more access points, most of which are T-intersection stop control access points from driveways and minor side streets **Figure 8** and **Figure 9** illustrate the location of the southbound and northbound access points along US 60. **Table 1** and **Table 2** provide the associated details.

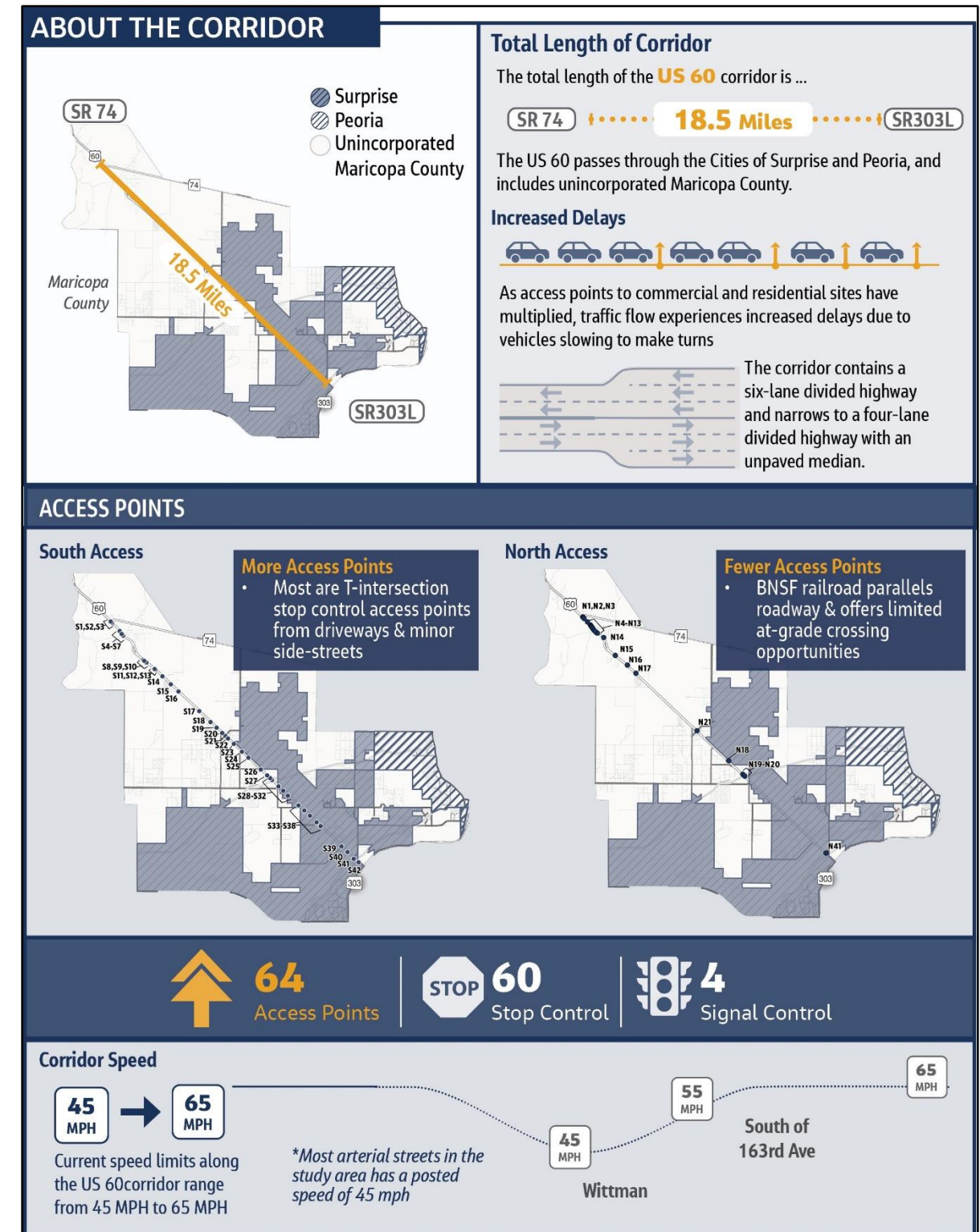


Figure 7: Snapshot of US 60 in Existing Conditions

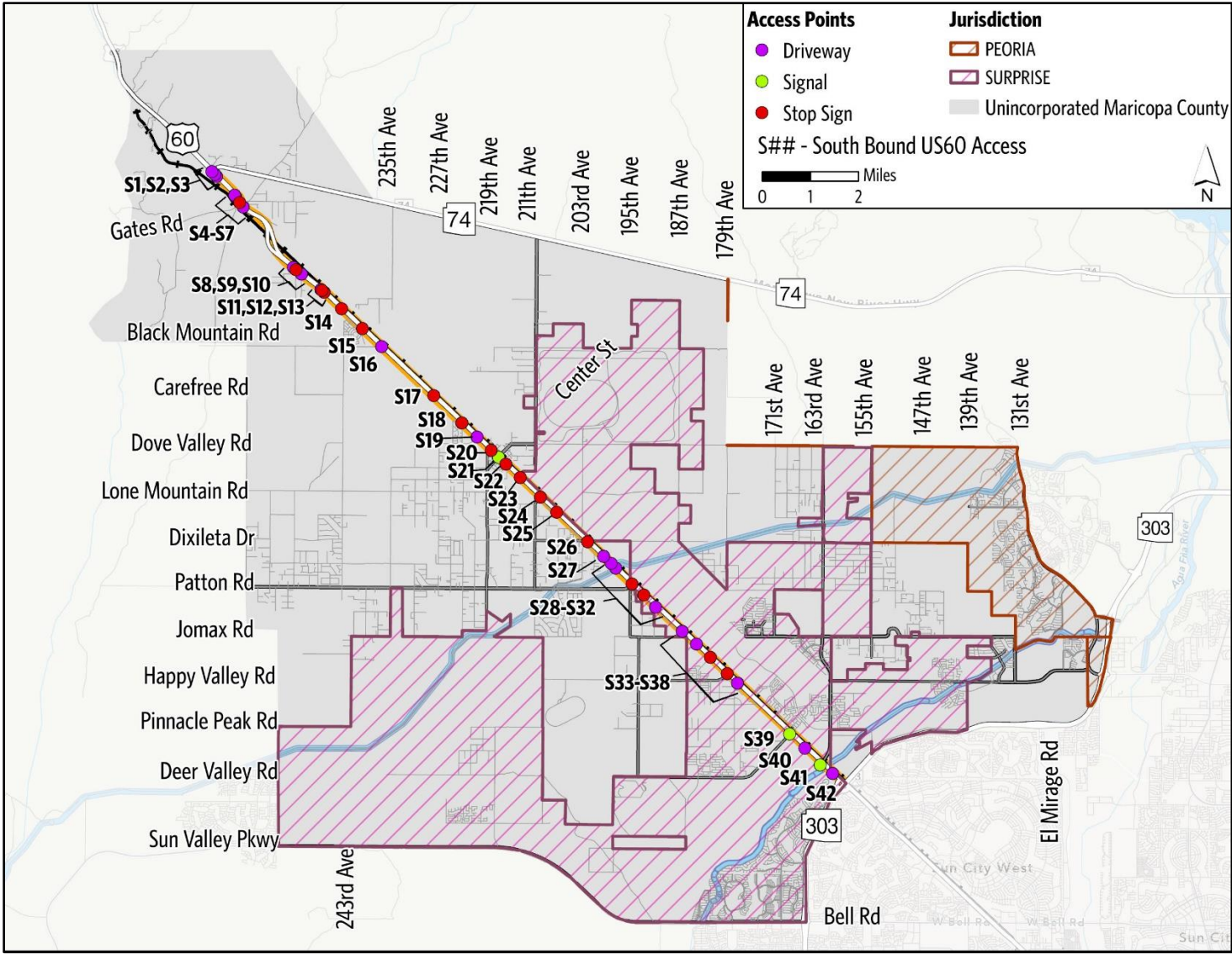


Figure 8: Access Points Along South Side of US 60

Table 1: Access Points South of US 60

Access Pt. ID	Type of Access/Roadway	Intersection Condition	Intersection Control	Notes
S1	Turnout	Paved Turnout	Stop	Mobile Home & RV Park
S2	Turnout	Paved Turnout	Stop	Cactus Nursery
S3	Turnout	Gravel Turnout	Stop	Cactus Nursery
S4	Turnout	Gravel Turnout	Stop	Mobile Home Park
S5	Turnout	Gravel Turnout	Stop	Private/Residential
S6	Gates Rd	Paved 4-way	Stop Sign	RR-Xing on Gates Road
S7	Gates Rd	Gravel Turnout	Stop	Access Restricted
S8	Turnout	Paved Turnout	Stop	APS Electric Substation
S9	251st Ave	Paved Turnout	Stop Sign	Residential w/ Median Break
S10	Turnout	Dirt Turnout	Stop	"Western Thrift Store"
S11	Pine Rd	Paved Roadway	Stop	

Access Pt. ID	Type of Access/Roadway	Intersection Condition	Intersection Control	Notes
S12	Turnout	Paved Turnout	Stop Sign	"Western Trails Ranch" w/ Median Break
S13	234rd Ave	Paved Turnout	Stop Sign	
S14	London Rd	Paved Roadway	Stop Sign	w/ Median Break
S15	Black Mountain Rd	Paved Turnout	Stop	
S16	Turnaround	Paved Turnout	-	To Dirt Road
S17	Private Driveway	Paved Turnout	Stop Sign	w/ Median Break
S18	Happy Ln	Paved Roadway	Stop Sign	w/ Median Break
S19	Dove Valley Rd	Paved T Intersection	Stop	
S20	Pine St	Paved T Intersection	Stop Sign	
S21	Center St	Paved 4-way	Signal	RR-Xing on Center St
S22	Poplar St	Paved T intersection	Stop Sign	
S23	215th Ave & Frontage Rd Access	Paved T intersection	Stop Sign	"Welch Garage"
S24	211th St	Paved T Intersection	Stop Sign	
S25	Montgomery Rd	Paved T Intersection	Stop Sign	
S26	203rd Ave - South	Paved T intersection	Stop Sign	
S27	Turnout - West of canal	Paved Turnout	Stop	CAP Access Road
S28	Turnout - East of canal	Paved Turnout	Stop	CAP Access Road
S29	Patton Rd	Paved T Intersection	Stop Sign	w/ Median Break
S30	Arnold Rd (193rd Ave)	Paved T Intersection	Stop	
S31	191st Ave	Paved T Intersection	Stop	
S32	Jomax Rd	Paved T Intersection	Stop	
S33	Turnout to Dirt Road	Paved Turnout	Stop	Residence and Open Desert
S34	Happy Valley Rd	Paved T Intersection	Stop Sign	w/ Median Break
S35	Frontage Rd Access	Paved T Intersection	Stop	
S36	Norwich Dr	Paved T Intersection	Stop	
S37	Turnout	Paved Turnout	Stop Sign	To Private Homes
S38	Turnout	Paved Turnout	Stop Sign	Private Homes w/ Median Break
S39	Deer Valley Rd	Paved T Intersection	Signal	To landfill
S40	Frontage Rd Access	Paved T Intersection	Stop	
S41	163rd Ave	Paved 4-way	Signal	RR-Xing
S42	Frontage Rd	Paved T Intersection	Stop	Industrial Park & MCFCD

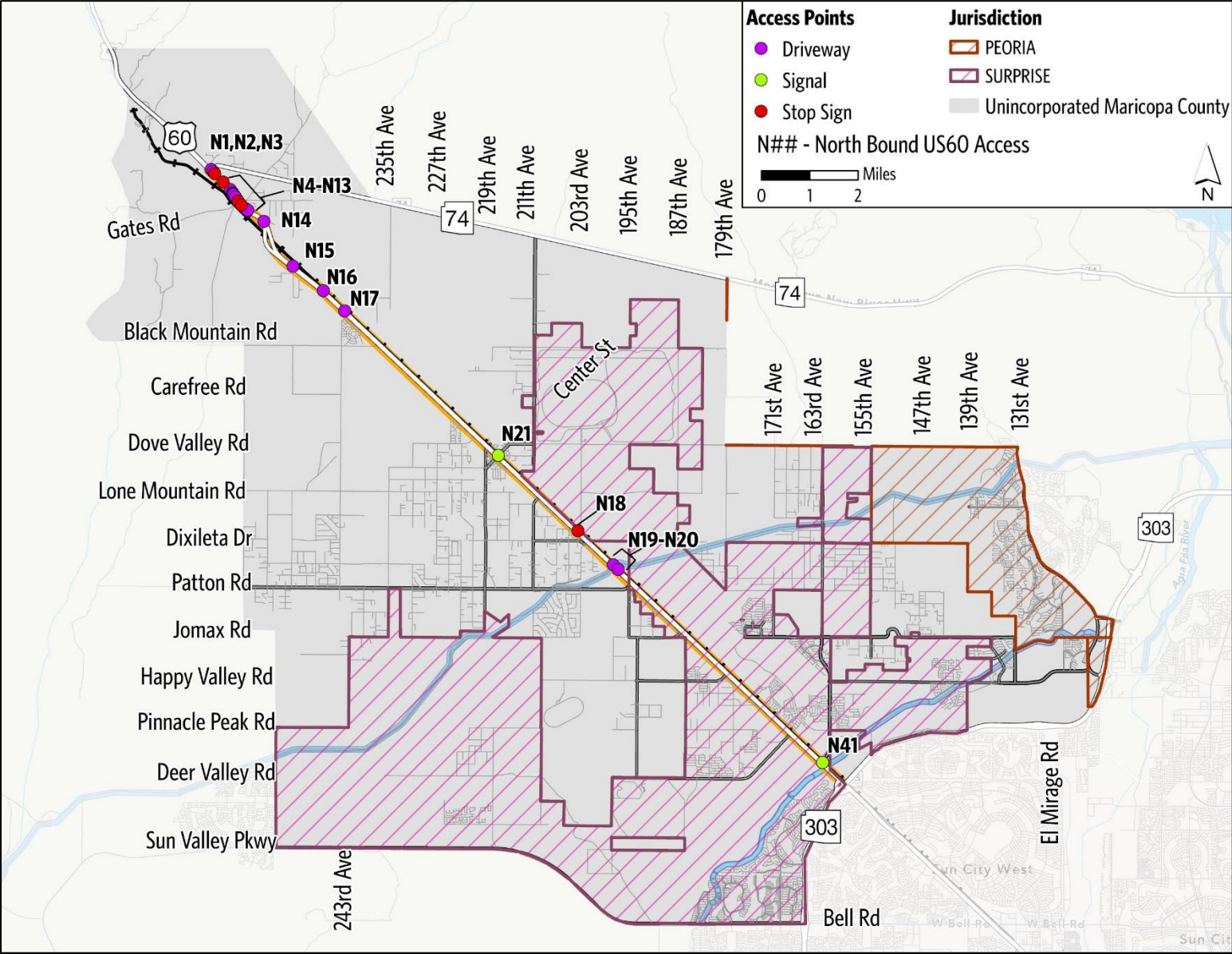


Figure 9: Access Points Along North Side of US 60

Table 2: Access Points North of US 60

Access Pt. ID	Type of Access/Roadway	Intersection Condition	Intersection Control	Notes
N1	SR 74	Paved Roadway	Stop	Full access
N2	Turnout	Paved Turnout	Stop	Private Road
N3	Turnout	Paved Turnout	Stop Sign	To Residential w/ Median Break
N4	Turnout	Paved Turnout	Stop	Private Road
N5	Turnout	Paved Turnout	Stop Sign	To Residential w/ Median Break
N7	Turnout- Private/Residential	Paved Turnout	Stop	Mobile Home Park – 26106 US 60
N8	Turnout- Private/Residential	Paved Turnout	Stop	“Gem Store”
N9	Turnout – Private/Residential	Dirt	Stop	“Antique Liquor Store”
N10	Turnout	Dirt	Stop	Private Road
N11	Turnout	Dirt	Stop	Private Road
N12	Turnout	Dirt	Stop	Private Road
N13	Turnout	Dirt	Stop	Private Road
N6	Rockaway Hills Dr	Paved Intersection	Stop Sign	Gates Rd on East side with RR-Xing
N14	Castle Hot Springs Rd	Paved Intersection	Stop Sign	
N15	Turnout	Paved Turnout	Stop	Private Road
N16	Landfill Rd	Paved Roadway	Stop	“Morristown Transfer Station”
N17	Turnout	Paved Turnout	Stop	To RR-Xing and Open Desert
N21	Center St	Paved 4-way	Signal	RR-Xing/Ped X-ing/ Sidewalk
N18	203rd Ave - North	Paved T Intersection	Stop Sign	RR-Xing
N19	Turnout – West of canal	Paved Turnout	Stop	CAP Access Road w/RR-Xing
N20	Turnout – East of canal	Paved Turnout	Stop	CAP Access Road w/RR- Xing
N41	163rd Ave	Paved Roadway	Signal	RR-Xing

Additional key access points surrounding the study area are located along SR 303L. Traffic interchanges along SR 303L surrounding the study area include:

- Bell Road/SR 303L – SPUI configuration
- US 60/SR 303L – Modified Clover configuration
- El Mirage Road/SR 303L – Diamond configuration
- Happy Valley Parkway/SR 303L – SPUI configuration
- Jomax Road/SR 303L – Diamond configuration
- Lone Mountain Parkway/SR 303L – SPUI configuration

2.2.2 Railroad Facilities

Adjacent to US 60 is a railroad line owned and operated by BNSF. BNSF freight activity in the project area has increased recently, and train movements regularly interrupt the traffic flow. Approximately eight trains operate over the line from Phoenix in the south to Williams Junction Station in the north. The railway connects to the east-to-west lines of BNSF's Seligman Subdivision and Southern Transcon. Glendale Transload Terminal is the central intermodal facility along US 60. Freight traffic is expected to increase in the future, adding to the already congested conditions.

There are four at-grade railroad crossings in the study area:

- 163rd Avenue/US 60
- 203rd Avenue/US 60
- Center Street/US 60
- Gates Road/US 60

Delays associated with train crossings exacerbate the congestion near these at-grade intersections. Limited opportunities to cross the railroad and access US 60 creates congestion and results in excessive delays for residents in the area. Additionally, railroad operations create excessive delays for emergency services in the area.

2.2.3 Daily Traffic Volumes

Average Daily Traffic (ADT) counts were taken along the corridor on Tuesday, April 16th, 2024. ADT volumes are shown in **Figure 10** and were collected at the following locations:

- US 60/London Road
- US 60/Rockaway Hills Road
- El Mirage Road/Lone Mountain Parkway
- El Mirage Road/Vistancia Boulevard
- Vistancia Boulevard/Happy Valley Road
- Vistancia Boulevard/Jomax Parkway
- 163rd Avenue/Happy Valley Road

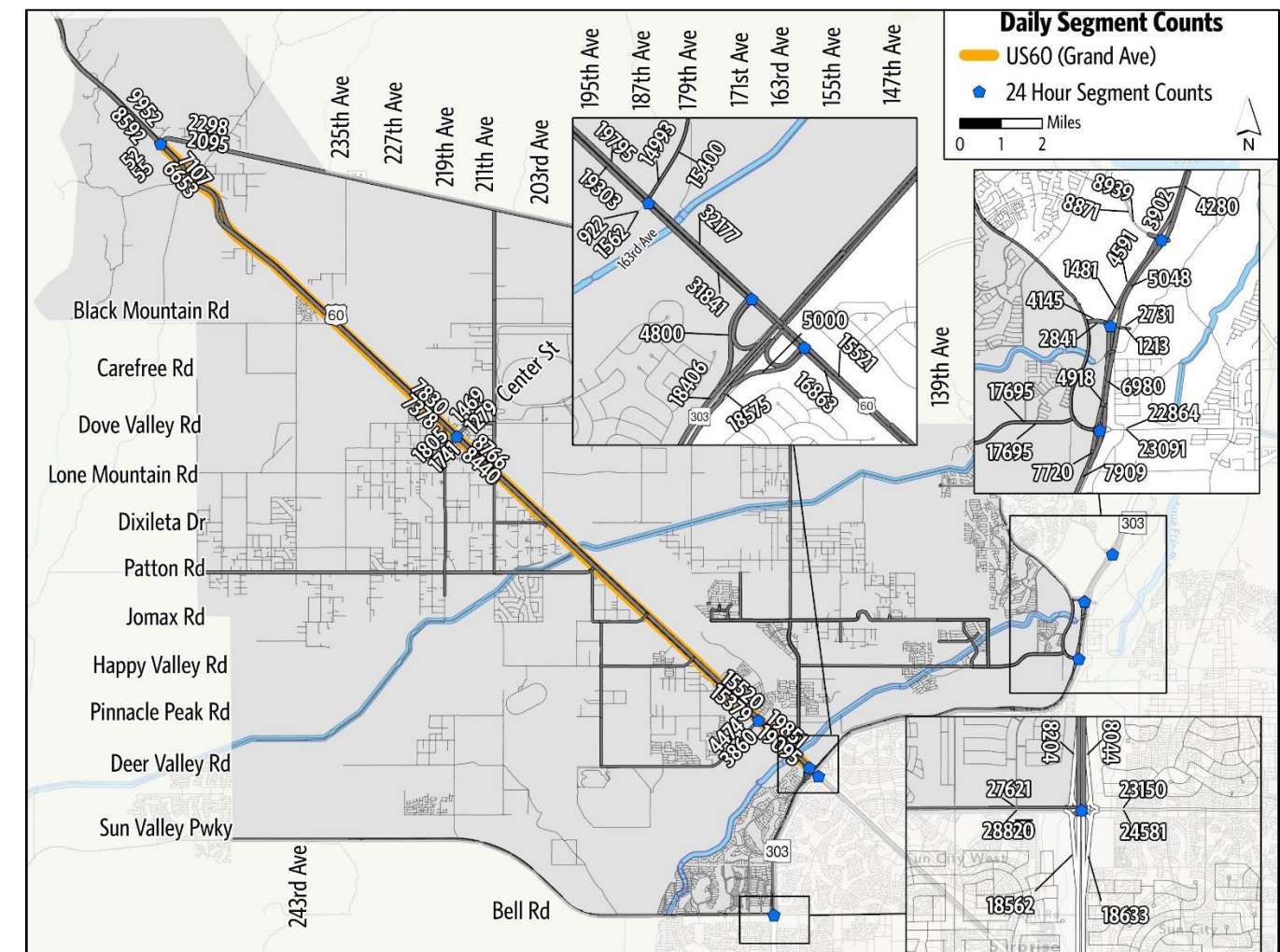


Figure 10: Daily Traffic Volumes (2024)

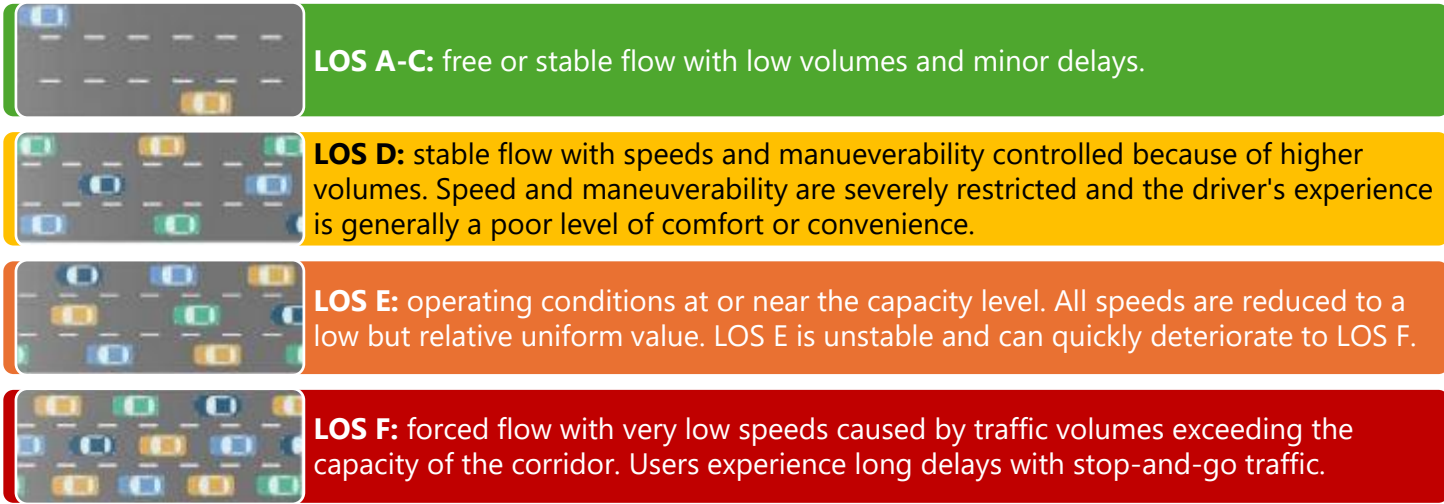
Traffic volumes along US 60 are highest between the US 60/SR 303L TI and 163rd Avenue along US 60. At over 60,000 vehicles per day, traffic volume in this area exceeds the current roadway capacity. Other locations with

high daily traffic volumes include Happy Valley Parkway at SR 303L (more than 45,000 vehicles per day), and Bell Road at SR 303L (more than 55,000 vehicles per day). A summary of the daily traffic volumes is included in **Figure 10**.

US 60 functions as a vital link between northwest Arizona and I-40, making it an attractive alternative to I-17 for freight traffic bound for I-40, California, and Nevada. The Loop 303 corridor is also rapidly developing into a major logistics hub, with numerous warehouse and distribution facilities locating along it. Consequently, heavy trucks make up a substantial share of daily traffic on US 60 within the study area. High truck volumes on major corridors like US 60 can contribute to significant travel delays because trucks generally travel and accelerate more slowly than passenger vehicles. These delays are further compounded at signalized intersections, where trucks require longer start-up times after stopping, reducing overall traffic flow efficiency.

2.3 Traffic Operational Analysis

Traffic operational analysis was conducted to understand the traffic flow efficiency at key intersections in the study area. All the signalized intersections and some select stop controlled intersections are included in this analysis. The analysis is reported for the AM and PM Peak Hours and considers Level of Service (LOS) and delays at the key intersections. The LOS is broken down into ratings A through F. A being the best condition with low delays and F being the worst condition with high delays and slow speeds.



The analysis was conducted in Synchro using the field observed traffic counts and the signal timings provided by ADOT for intersections along US 60, and by the cities of Surprise and Peoria. The intersection turning movement counts were collected for key intersections on Tuesday, April 16th, 2024. **Figure 11** shows the AM and PM peak hour turning movement counts for the following locations:

1. SR 303L Northbound/US 60
2. SR 303L Southbound/US 60
3. 163rd Avenue/US 60
4. Deer Valley Road/US 60
5. Center Street/US 60
6. Bell Road/SR 303L

7. Happy Valley Road/163rd Avenue
8. Happy Valley Road/SR 303L
9. Happy Valley Road/ Vistancia Boulevard
10. Jomax Road/SR 303L
11. Jomax Road/Vistancia Boulevard
12. El Mirage Road/Vistancia Blvd
13. Lone Mountain Parkway/SR 303L
14. Lone Mountain Parkway/El Mirage Road

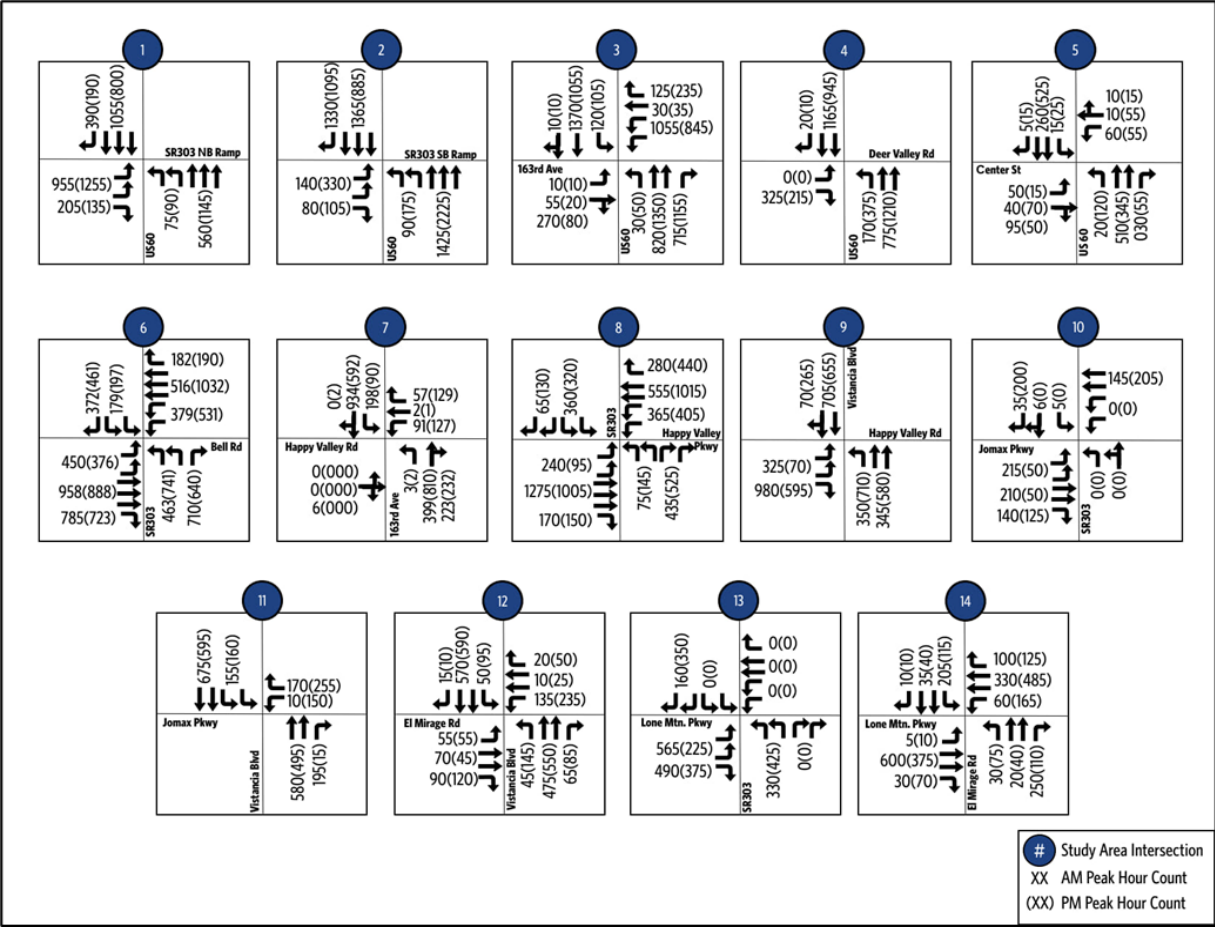


Figure 11: AM and PM Peak Hour Intersection Turning Movement Counts (2024)

Figure 12 identifies the overall intersection LOS at key intersections for the AM peak hour and **Figure 13** for the PM peak hour. Attendees expressed during the community outreach efforts that the 163rd Avenue-US 60-SR 303L area has problems with long wait times and heavy queueing. Many of the comments received stated that the intersection at 163rd Avenue and US 60 was the only way to cross from the north side of US 60 to other parts of the region. These concerns are validated with the failing LOS during the peak hour traffic analysis, with average delays over 80 seconds per vehicle.

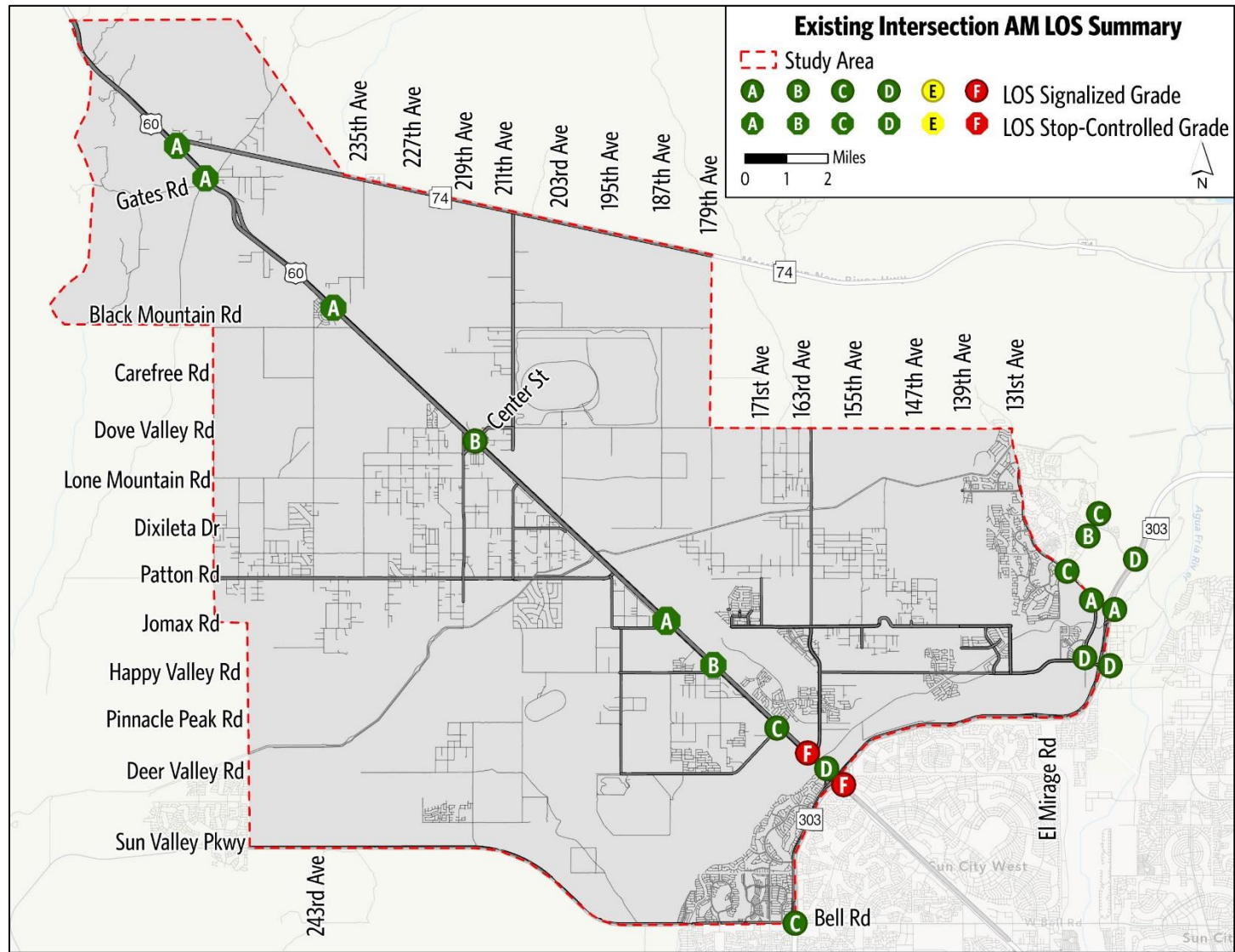


Figure 12: Existing AM Peak Hour Level of Service

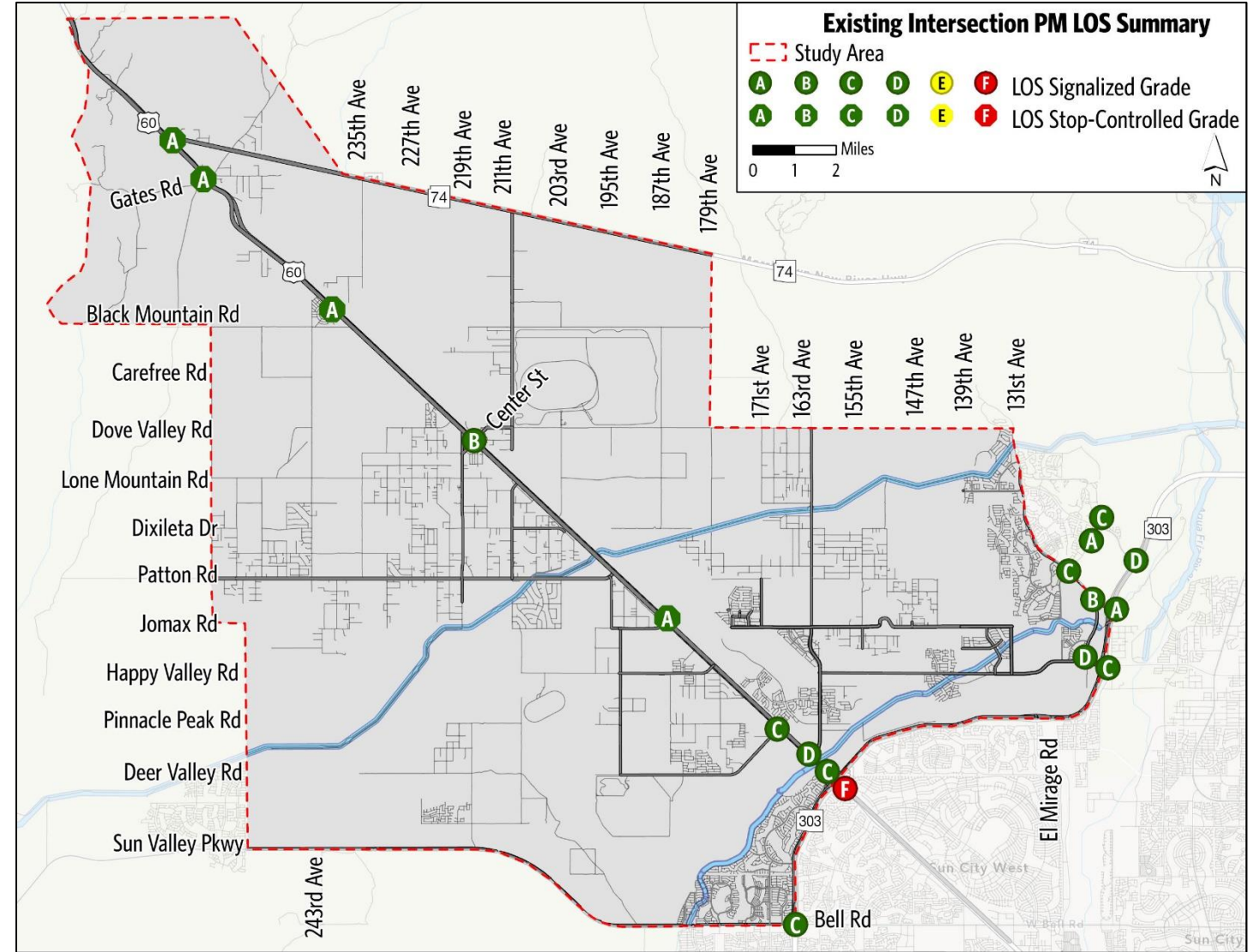


Figure 13: Existing PM Peak Hour Level of Service

2.4 Safety Assessment

A crash analysis was conducted for the study area to identify current trends, patterns, common crash types, and high-crash locations. The purpose of this analysis is to locate safety hazard areas that may need infrastructure improvements to enhance overall safety. Crash data for the five-year period, January 1, 2019 to December 21, 2023, within the study area was obtained from the ADOT crash data system and analyzed in **Table 3**. A total of 1,357 crashes occurred throughout the study area during this period including 14 fatal crashes, 53 serious injury crashes, and five pedestrian crashes. For person-level incidents, there were 29 fatalities (18 along US 60 and five at 163rd Avenue/US 60 intersection) and 94 serious injuries (42 along US 60 and 18 at 163rd Avenue/US 60 intersection). **Figure 14** displays the crash heatmap based on the crash density throughout the study area. There is a concentration of crashes along the US 60 corridor; the crashes along the corridor increase with the traffic volume suggesting congestion as a key contributor. Another area of concern is the Sun Valley Parkway/Bell Road corridor near the SR 303L interchange area; there is a high concentration of residential and commercial access roads in this area increasing the likelihood of crashes. Intersections near SR 303L experience high rates of crashes as compared to other intersections in the study area.

Table 3: Crash Summary by Injury Severity and Year

Crash Injury Severity	2019	2020	2021	2022	2023	Total
No Injury	130	98	155	187	245	815
Possible Injury	41	31	49	60	77	258
Suspected Minor Injury	47	30	42	29	69	217
Suspected Serious Injury	9	7	16	11	10	53
Fatal	2	2	0	5	5	14
Total	229	168	262	292	406	1357

The economic impact of the crashes in the study area was computed using the USDOT's recommended monetized value of each crash injury category (**Table 4**). The average annual economic impact resulting from crashes within the study area is \$124.3 million.

Table 4: USDOT Value of Reduced Fatalities, Injuries, and Crashes in Millions of Dollars

KABCO Levels	Monetized Value	2019	2020	2021	2022	2023
O – No Injury	\$5,000	\$1.5	\$1.1	\$1.8	\$2.1	\$2.9
C – Possible Injury	\$111,700	\$9.4	\$8.1	\$8.5	\$10.3	\$15.4
B – Non-incapacitating Injury	\$233,800	\$14.7	\$11.5	\$16.1	\$17.5	\$26.4
A – Incapacitating Injury	\$1,188,200	\$15.5	\$15.4	\$32.1	\$22.6	\$26.1
K – Killed	\$12,500,000	\$25.0	\$37.5	\$0	\$162.5	\$137.5
<i>Subtotal (\$ Million)</i>		\$66.1	\$73.6	\$58.5	\$215.0	\$208.3

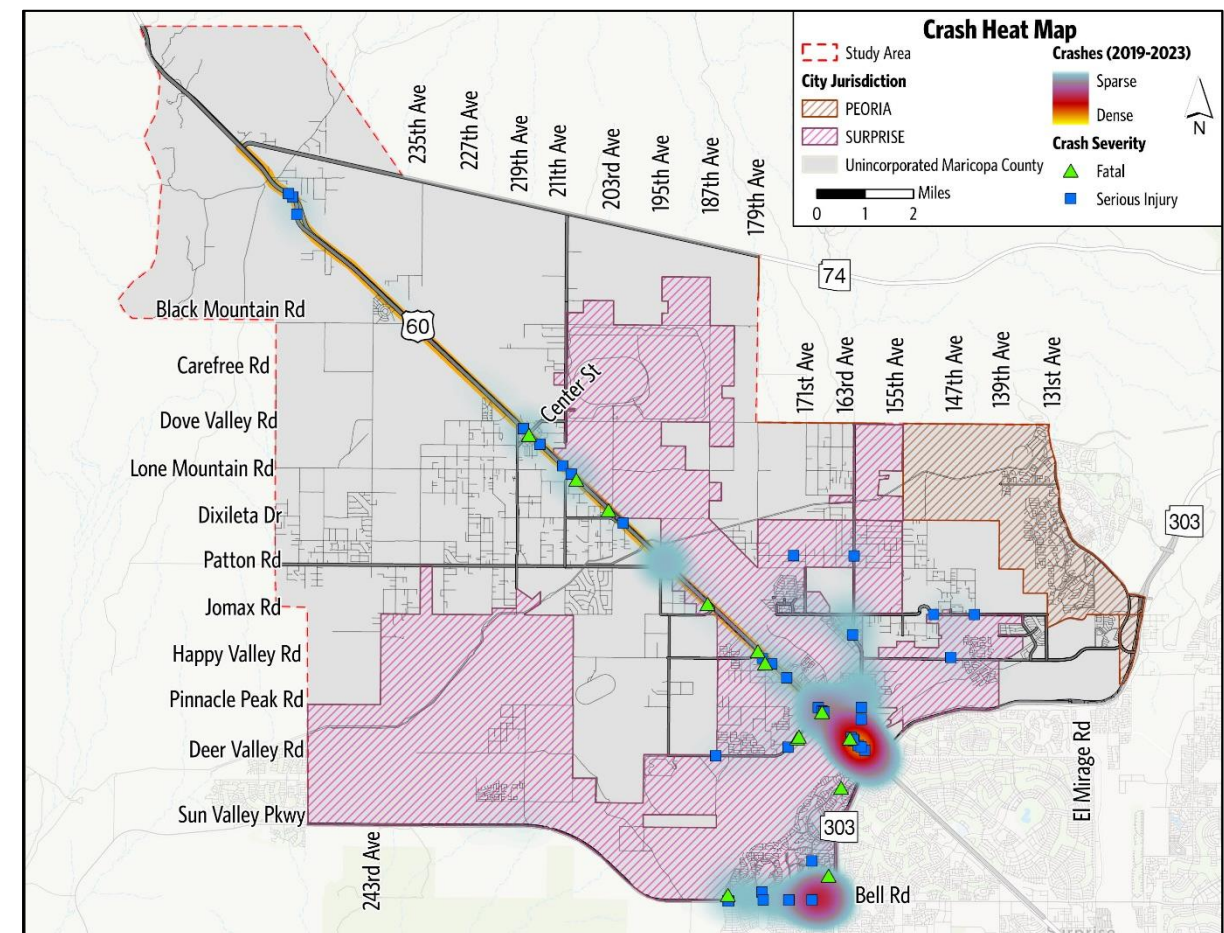


Figure 14: Crash Heat Map

2.5 Completed and Ongoing Transportation Improvements

In the last few years, residents have expressed increasing concern regarding congestion and its impacts on safety and quality of life. To mitigate excessive delays and to improve overall safety, MAG, ADOT and City of Surprise have implemented some improvements in the vicinity of the US 60 and SR 303L interchange area and along 163rd Avenue. There are additional interim improvements led by MAG, ADOT and the City of Surprise. These interim improvements are expected to further reduce congestion along 163rd Avenue and at the SR 303L interchange. While these improvements are expected to improve traffic operations and reduce traffic delays in the near term, they are not expected to be sufficient to handle the large influx of traffic due to anticipated growth in development activity in the area.

A summary of the near-term improvements is presented below:

2.5.1 Phase 1 Interim Solutions (Completed)

The Phase 1 interim improvements are illustrated in **Figure 15**. These include:

- US 60/163rd Avenue: Add a third left lane from southbound 163rd Avenue to US 60. Add a second right turn lane from westbound US 60 to 163rd Avenue. Extend the existing east- and westbound US 60 third lane to 163rd Avenue (westbound December 2023; eastbound summer 2024).
- US 60/SR 303L: Add a second lane to the northbound SR 303L off-ramp at US 60. Add a left-turn lane from northbound SR 303L off-ramp to westbound US 60.
- Other improvements include restriping, new signs, and traffic-signal timing adjustments.

2.5.2 Phase 2 Interim Solutions (Ongoing)

On October 23, 2024, the MAG regional council approved an additional set of intersection capacity enhancements to further improve traffic operations and safety. These improvements are anticipated to cost \$4.2M and are to be completed by the Spring of 2026. The Phase 2 Interim Solutions are illustrated in **Figure 16** and summarized below:

- US 60/SB SR 303L Ramp Intersection: Add a second eastbound right turn lane onto the SR 303L southbound on ramp. Add a third northbound left turn lane from southbound SR 303L off ramp onto westbound US 60.
- US 60 to SR 303L Southbound Ramp Merge: Lengthen the new two-lane portion of the southbound SR 303L entrance ramp for safe merging and efficient operations.
- US 60/NB SR 303L Ramp Intersection: Add a second eastbound right turn lane onto the SR 303L northbound on ramp. Add a third northbound left turn lane from southbound SR 303L off ramp onto westbound US 60.
- Extend US 60 westbound to SR 303L northbound left turn lanes to provide more storage for turning vehicles.
- Add fourth through lane on eastbound and westbound US 60 through its intersection with 163rd Avenue.

While these additional capacity improvements will help to mitigate some of the congestion issues, the southern portion of the study area will still experience long delays and travel times. Major roadway improvements are needed to accommodate the growing traffic demand within the study area. The population and development is

expected to continue expanding at a rapid pace, and the few access points to SR 303L and US 60 will not be able to handle the heavy traffic for more than a few years. Significant capital improvements are needed to fully mitigate this problem.

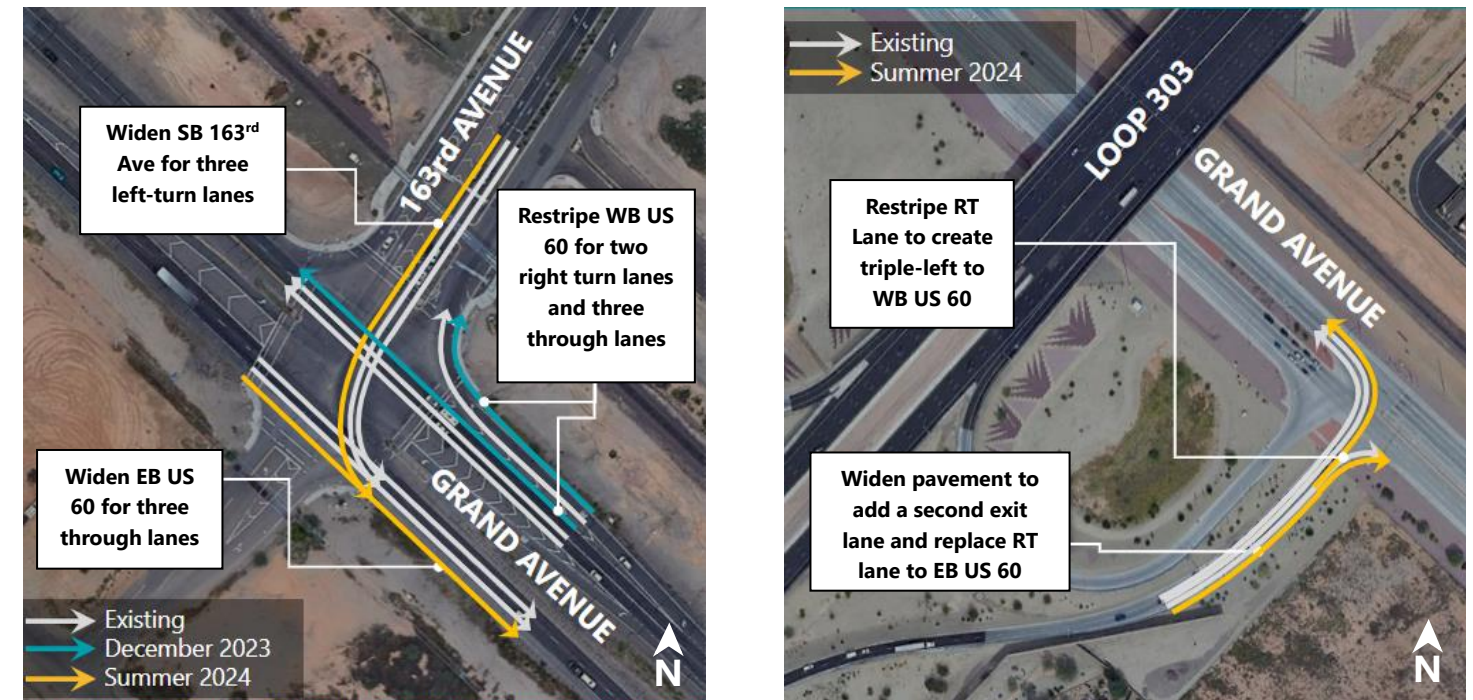


Figure 15: Completed Interim Improvements

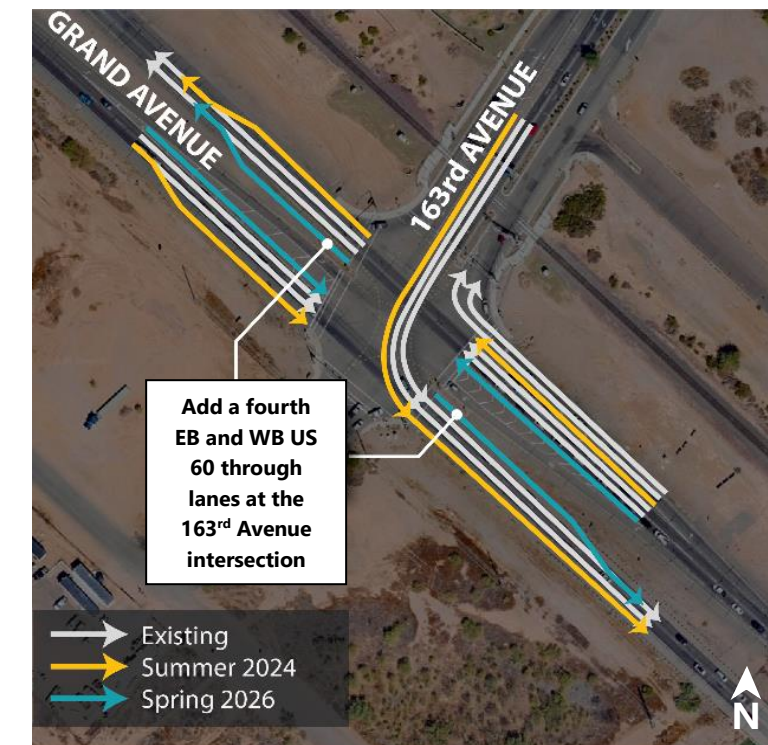
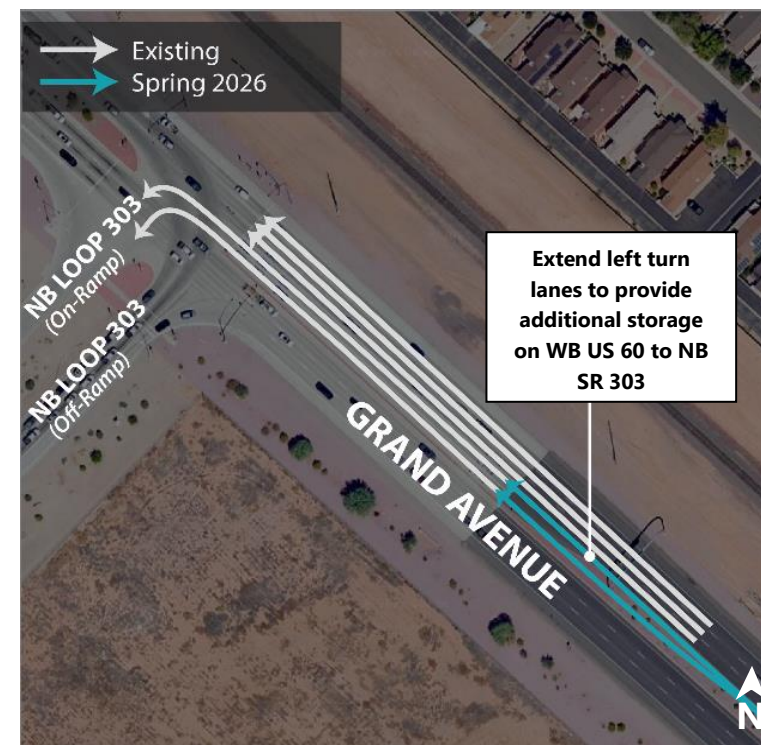
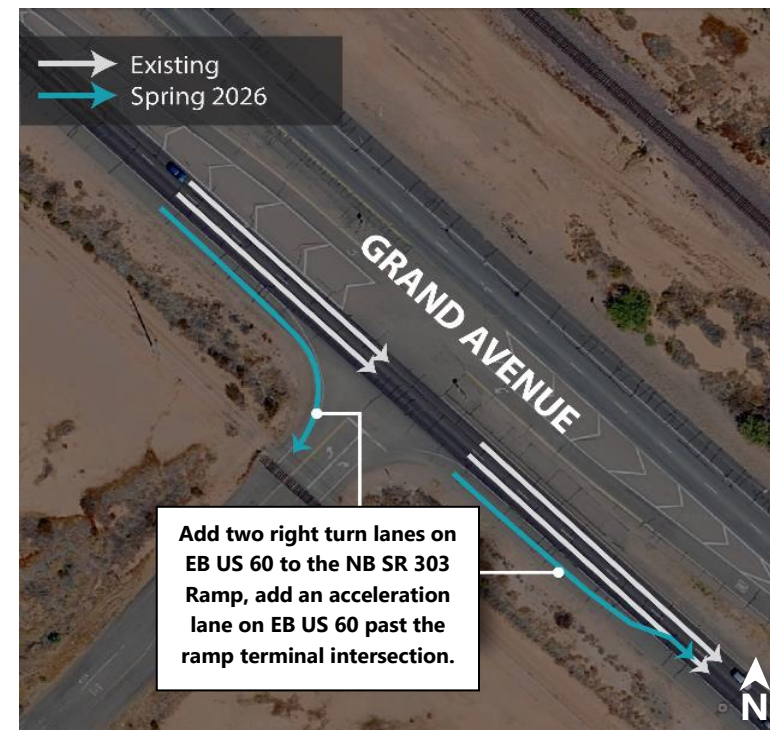
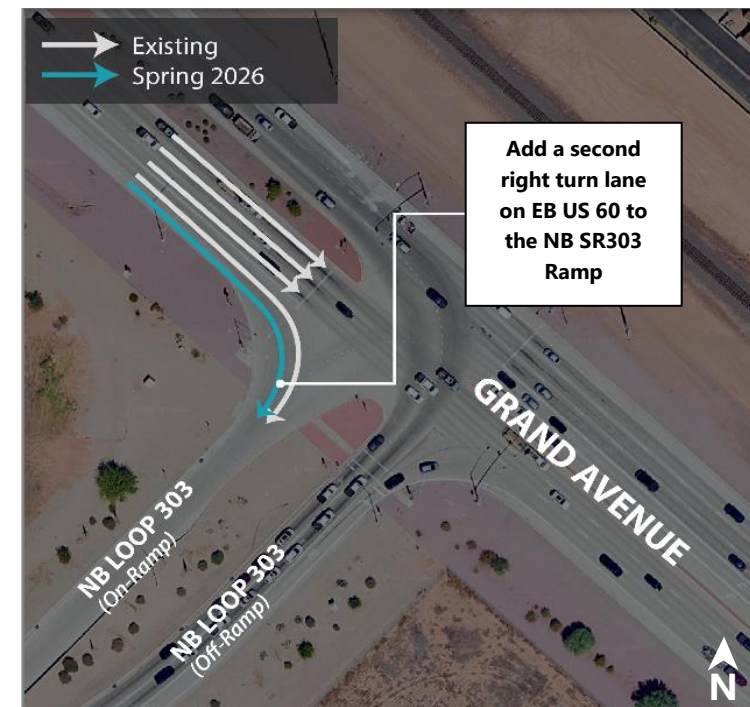
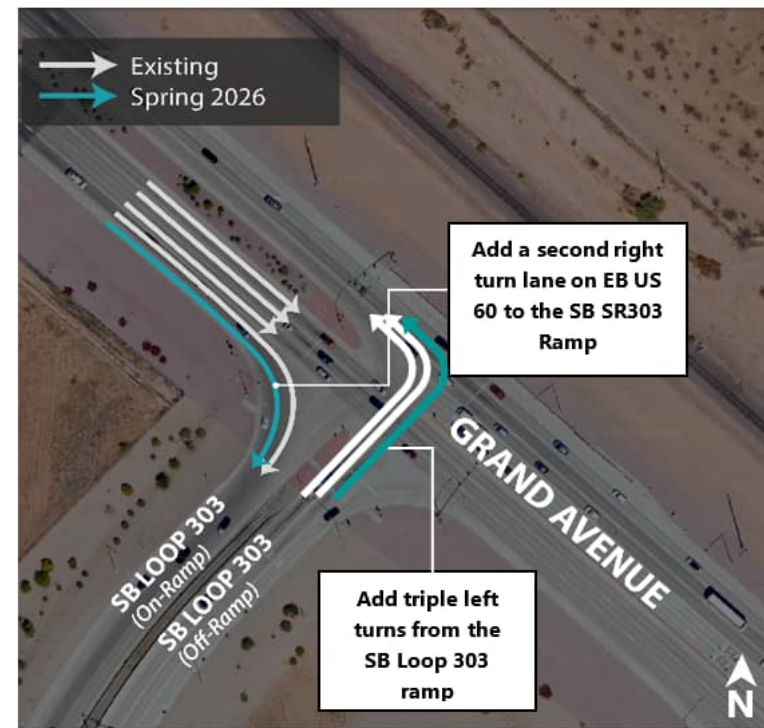


Figure 16: Ongoing Interim Improvements

3 Future (2050) Study Area Conditions

In the next 27 years, the socioeconomic composition of the study area is anticipated to transform as the population, number of households, and total employment rise at a significant rate. This chapter looks at projections between 2023 and 2050 to gain an understanding of how quickly the study area is growing and what it will look like in the year 2050. MAG’s RTP serves as the long-range planning framework guiding current alignment, and its horizon year of 2050 is therefore applied as the designated design horizon year for this study. The chapter focuses on the year 2050 as a starting point in gaining an understanding of future travel demand and the need for additional transportation infrastructure throughout the study area. Included in this chapter are the following sections:

- Projected population, housing and employment – quantitative summaries of growth within the study area;
- Future land uses – Summaries of expected new developments throughout the study area and the land uses within them;
- The “2050 Future General Plans Network” road system – An assessment of how the planned ultimate road systems in the study area would work if all roads were fully built out by 2050; and
- Areas of concern – Identification of areas requiring careful attention during this study

3.1 Projected Population, Housing, and Employment

MAG begins its regional population and employment projections with the official county-level control totals produced by the Arizona State Demographer. These figures are required under state law to anchor long-range planning, and MAG must use them to ensure consistency with state statutes governing MPO responsibilities as well as federal transportation and air quality planning requirements. The State Demographer’s projections establish the population and employment totals for each county, and MAG’s forecasts must remain aligned with those numbers.

From that starting point, MAG works closely with every city, town, and county in the region to project the growth in a way that reflects actual development expectations. Local governments provide detailed information on general plans, zoning, approved projects, infrastructure capacity, and economic development priorities. MAG integrates this local knowledge with its land use and employment allocation models, refining the projections through multiple rounds of review with jurisdictions before final approval by MAG’s policy committees. The result is a regionally consistent and locally informed forecast used across transportation, air quality, and infrastructure planning.

The socioeconomic growth of the jurisdictions within the study area is shown in **Table 5**. A noteworthy phenomenon is the amount of growth within the study area propelling the demographic landscape forward in the City of Surprise and its planning area. By 2030, the population of Surprise within the study area more than doubles, with the 2030 population equal to 2.3 times the 2023 population. This trend continues over subsequent decades. By 2040, Surprise population within the study area will be 3.9 times the 2023 population, and by 2050, the population is projected to be 4.4 times the 2023 population. Peoria’s population within the study area road network throughout the study area will achieve even higher growth ratios. For Peoria, the population within the study area will be 3.4 times the 2023 population by 2030, 11 times the 2023 population

by 2040, and increases to a factor of 13.6 by 2050 compared to the existing population. For the unincorporated Maricopa County portion of the study area, the low density of the population, at 200 people, expands to cover a larger area, reaching a total of 900 people. By 2050, employment growth lags slightly behind the population in each jurisdiction, reaching a total employment in the study area that will be 3.3 times the 2023 employment.

Table 5: Socioeconomic Growth of the Jurisdictions within the Study Area, Existing to 2050

Growth Area by Jurisdiction	2023	2030	2040	2050
Surprise Population	53,000	123,000	209,300	231,140
Peoria Population	3,000	10,300	33,000	40,800
Unincorporated Maricopa County Population	200	220	700	900
Total Population	56,200	133,740	243,000	272,840
Surprise Employment	8,400	13,000	25,000	31,000
Peoria Employment	2,400	1,800	3,170	4,330
Unincorporated Maricopa County Employment	10	10	230	450
Total Employment	10,810	14,810	29,200	36,080

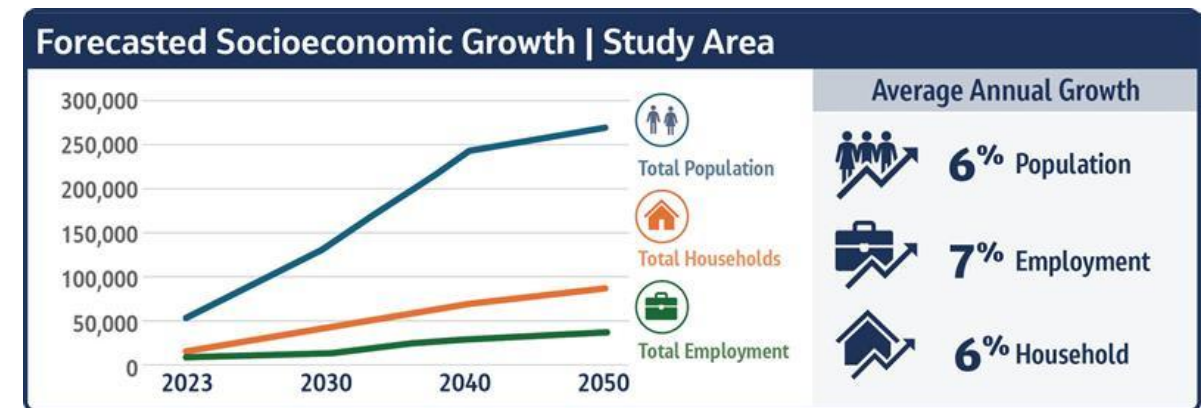


Figure 17: Study Area Forecasted Socioeconomic Growth

Figure 17 shows the progression of growth within the study area from 2020 to 2050. This visualization provides a comprehensive overview of evolving demographics, and will be useful in strategic planning, infrastructure development, and the formulation of policies that will cater to the needs of the expanding population in this high-growth area. The dispersed growth within the study area suggests the need to improve the road network throughout the study area.

The following pages present demographic forecasts for the study area in 2030, 2040, and 2050. Maps illustrating population density are shown for 2023, 2030, 2040, and 2050 in **Figure 18**. These maps highlight a significant transformation of the study area from its current state of open, vacant land to a densely populated region by 2050.



3.2 Future Land Uses

As noted in Chapter 2, over 70 percent of the study area is currently vacant land. However, several new residential communities and commercial/industrial developments are planned. These planned developments will fill up much of the vacant land. Today, the study area is roughly 30 percent developed and 70 percent vacant land. By 2050, it will be 61 percent developed and 39 percent vacant land. The developed land in 2050 will include residential (70 percent), commercial/mixed use (12 percent), industrial/warehousing (1 percent), and other uses (17 percent). The population growth from 2023 to 2050 increased by nearly five times while the developments increased by twice as much. These values help illustrate the much higher development density than the current land uses within the study area.

Figure 19 highlights the status of the largest proposed development projects being processed in the study area. Each of these proposed projects is described below. Together these eleven proposed projects will bring 52 percent of the expected growth in population and 30 percent of new non-residential acres projected for the year 2050.

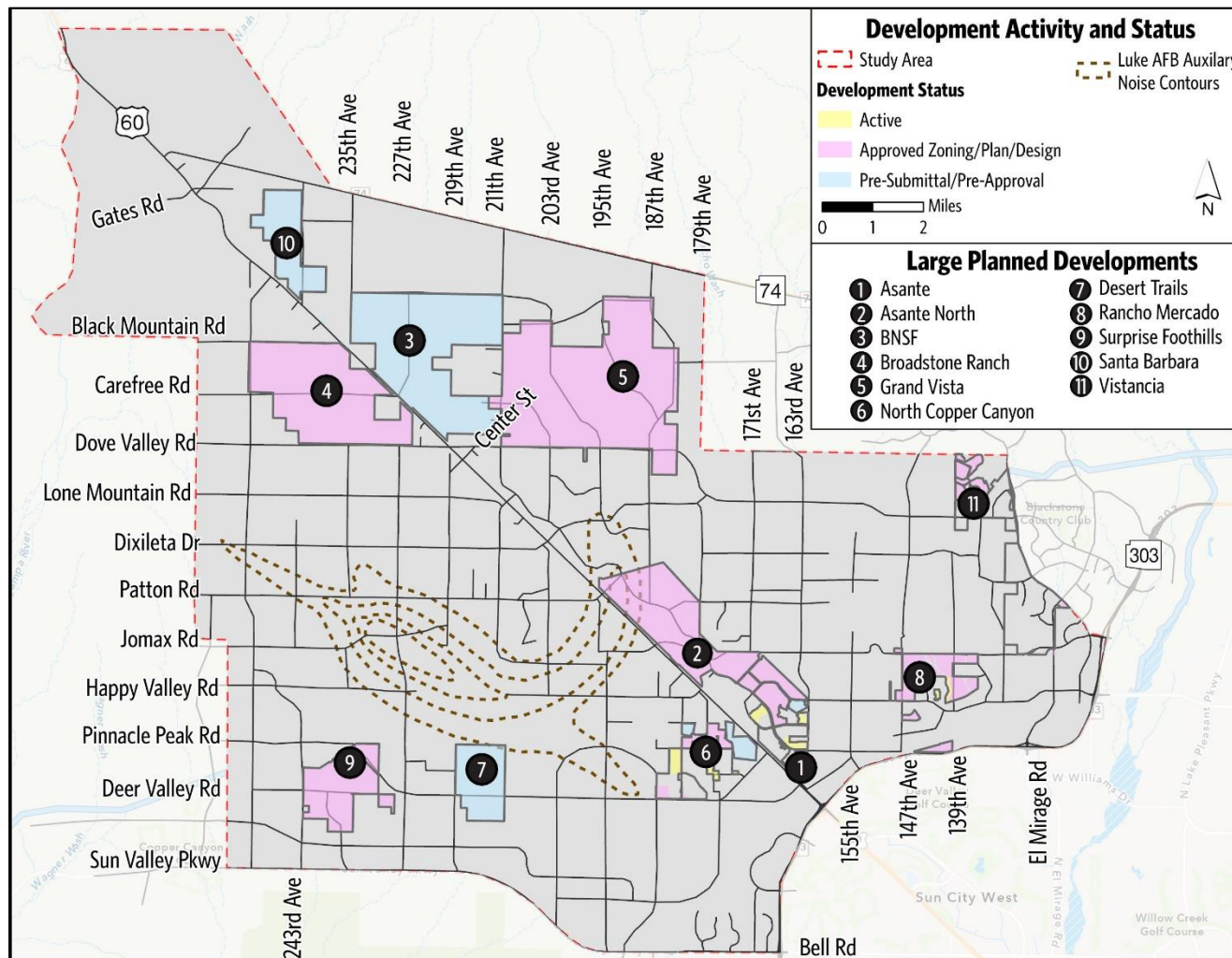


Figure 19: Key Developments in the Study Area

Details associated with each of the key developments identified in **Figure 19** are included below. Many of these developments include large, master-planned communities with residential housing and mixed-use units across hundreds of acres.

1. Asante

The Asante development will be a large, master-planned community featuring primarily high-density single-family housing in the City of Surprise. The master development plan has been formally approved by the City of Surprise Planning and Zoning Commission and City Council. Several components are progressing simultaneously, including large-scale homebuilding and the Asante Trails mixed-use retail corridor. The master-planned community is not yet fully entitled, but portions of the residential and commercial developments have received approvals and remaining development stages are under review by the Surprise Planning and Zoning Commission. Located adjacent to US 60, 4,868 residential units across 1,900 acres are proposed along Pat Tillman Boulevard and 163rd Avenue. The community is expected to incorporate various land uses including residential, commercial, and recreational spaces. Because the BNSF rail and Beardsley canal intersect the area, establishing connections to planned residential neighborhoods and open space linkages is essential to ensure the development is not isolated from the rest of the City of Surprise.

2. Asante North

Asante North encompasses the northern portion of the Asante development. The Asante North development plan has been formally approved by the City of Surprise Planning and Zoning Commission and City Council. The proposed area will span over 1,902 acres and include over 8,300 residential units along US 60. Asante North includes the Asante Trails development, a 90-acre mixed-use project that will include various employment opportunities including commercial, office, entertainment, medical, and regional shopping services. In addition, the future construction of the HonorHealth Hospital Campus will occupy approximately 20 acres in Asante Trails. The HonorHealth Hospital Campus will include medical offices, retail, and hotel space, further expanding healthcare services to the community.

3. BNSF Intermodal Facility

BNSF has announced plans for a BNSF Intermodal Facility, Logistics Park, and Logistics Center adjacent to US 60, with construction expected to begin in 2028. If approved, this facility could generate a significant volume of truck traffic traversing US 60 to deliver freight to regional and statewide destinations. The location of the new regional rail facility would include 4,321 acres. The site would integrate BNSF's main rail line in Arizona with its broader freight rail network, serving as a transfer hub for standardized containers and trailers for rail shipments. Additionally, the new facility could increase rail capacity that would expand the region's ability to process and deliver goods through multiple modes of transportation.

4. Broadstone Ranch

Broadstone Ranch is a planned mixed-use, master-planned development in the northwestern portion of the study area along US 60. Although Broadstone Ranch is not currently within the City of Surprise's city limits, the area is anticipated to be annexed as the development progresses under a Pre-Annexation Development Agreement (PADA) and not a traditional PAD. The City of Surprise Planning and Zoning Commission and City

Council have formally approved development actions for Broadstone Ranch and the project is active and officially authorized within the city's planning framework. The development will span over 2,900 acres and include 9,455 residential units. Broadstone Ranch will include single-family residential neighborhoods, multi-family housing, retail and office space, and schools all connected by walking trails and planned open spaces. Because much of the proposed development is situated on undeveloped land, establishing residential connections, open spaces linkages, and convenient access to US 60 will be a priority during construction.

5. Grand Vista

Grand Vista is a master-planned community in the northeast portion of the study area near Wittman. The City of Surprise Planning and Zoning Commission and City Council have formally approved the Grand Vista development. The development will span more than 5,500 acres and include 14,425 residential units of medium-density, single-family housing. Grand Vista will also feature neighborhood parks, mixed-use retail and office space, and amenities, such as golf courses. The site today is located on undeveloped land with limited roadway connectivity, necessitating the construction of new roadway infrastructure to ensure the community is well connected to the US 60 corridor.

6. North Copper Canyon

North Copper Canyon is a master-planned community located west of US 60 and the SR 303L freeway in the City of Surprise. The City of Surprise Planning and Zoning Commission and City Council have formally approved the North Copper Canyon development. North Copper Canyon is in various stages of development with portions of the project partially built out and occupied, but a large portion of the development is still under active construction. Approximately 70 percent of the community is built and occupied and roughly 30 percent remains under construction or is planned for future development. The development will span over 1,000 acres and include approximately 4,500 units, offering a variety of single-family and multi-family housing options along with numerous outdoor and active living amenities. Its location provides convenient access to both US 60 and the SR 303L corridor.

7. Desert Trails

Desert Trails is a proposed master-planned community spanning approximately 900 acres with more than 2,000 proposed residential units. The Desert Trails development has not been approved by the City of Surprise Planning and Zoning Commission and City Council and is currently in the rezoning request stage. The community would be located on both sides of Deer Valley Road between 219th Avenue and the future alignment of 211th Avenue, extending north to the Pinnacle Peak alignment within the City of Surprise. Desert Trails would primarily consist of single-family homes, along with multi-family housing, a site for a K-8 school, commercial space, and a neighborhood park with a public trailhead.

8. Rancho Mercado

Rancho Mercado is an active master-planned community in the City of Surprise. The City of Surprise Planning and Zoning Commission and City Council have formally approved the Rancho Mercado development. Various phases of construction are underway, and many residences have already been completed. Approximately 60 percent of the community is built and occupied and roughly 40 percent remain under construction or is

planned for future development. Located in the eastern portion of the study area, the community is bounded by Happy Valley Road and Jomax Road and has convenient access to the SR 303L freeway. The development spans over 1,150 acres and upon completion, will include 4,033 residential units. Most of Rancho Mercado is for residential use accompanied by neighborhood parks, playgrounds, and green space throughout the community.

9. Surprise Foothills

Surprise Foothills is a master-planned community emphasizing mixed-use development, spanning approximately 1,170 acres with over 3,5000 proposed residential units. The Surprise Foothills development has been formally approved by the City of Surprise Planning and Zoning Commission and City Council. The site is in the western portion of the study area located on both sides of Deer Valley Road with convenient access to the SR 303L freeway. The community will prioritize high-density housing options integrated with commercial centers. Surprise Foothills will feature a community clubhouse, neighborhood parks, sports courts, a planned school site, and other outdoor amenities. Surprise Foothills is expected to evolve into a live-work-play community offering different residential, recreational, and commercial uses.

10. Santa Barbara Ranch

Santa Barbara Ranch is a proposed master-planned community in the northeastern portion of the study area near Morristown. Maricopa County has jurisdiction regarding the zoning and land-use approvals of the Santa Barbara Ranch development. The Maricopa County Board did not approve of the development and sent the application back to the County Planning & Zoning Commission for further review. Located partially along US 60 and adjacent to SR 74, Santa Barbara Ranch would span 965 acres with 2,500 residential units proposed. This medium-density development could include 3-5 homes per acre. The site is currently undergoing the process of rezoning from rural-residential to multi-family and high-density residential land uses. Expanding the existing roadway network to connect residential areas throughout Santa Barabara Ranch will be essential.

11. Vistancia

Vistancia is a large, master-planned community located along the SR 303L freeway and Lone Mountain Parkway in the easternmost portion of the study area. The Peoria Planned Community District has fully approved the Vistancia master plan, including numerous sub-communities within it. Vistancia is being developed in multiple phases, with some areas fully built out and others still active with new construction. Approximately 65 percent of the community is currently developed and occupied, while the remaining 35 percent is still under construction or planned for future build-out. The development spans more than 7,100 acres within the City of Peoria and includes over 10,500 residential units. Vistancia is organized into three distinct communities: the Village at Vistancia, Blackstone at Vistancia, and Trilogy at Vistancia. The Village at Vistancia consists primarily of single-family homes in family-oriented neighborhoods that feature parks, playgrounds, and schools. Blackstone at Vistancia includes single-family homes and estate-style residences centered around the Blackstone Country Club and its golf course. Trilogy at Vistancia is an active-adult community offering amenities such as fitness centers, recreation facilities, and social clubs. Across the entire development, approximately 440 acres are designated for commercial uses. In addition to the key developments identified above, several other projects are planned within the study area. The bold-faced numbered entries in **Table 6**

correspond to the developments highlighted in **Figure 19**. Collectively, these planned projects would introduce more than 170,000 new residents to the study area and add nearly 12,900 acres of non-residential development. Of the total 128,510 acres within the study area, over 34,360 are residential acres. Many of the approved developments are located directly along US 60 and are either in the planning or design phase.

The scale and concentration of these planned projects illustrate the rapid pace of growth expected in the region. As these developments advance, they will significantly influence future travel patterns, infrastructure needs, and the overall character of the study area. Their proximity to US 60 also underscores the importance of coordinated land use and transportation planning to ensure that the corridor can safely and efficiently accommodate the increased activity generated by this level of development.

Table 6: List of Developments in the Study Area

Development Projects	Jurisdiction	Acres	Proposed Residential Units	Land Use	Status
1 Asante	Surprise	1,124.64	4,868	Single Family High Density	Approved Zoning/Plan/design
Asante Active Adult	Surprise	405.58	1,542	Single Family Medium Density	Approved Zoning/Plan/design
2 Asante North	Surprise	1,902.46	8,385	Single Family High Density	Approved Zoning/Plan/design
3 BNSF Rail Yard¹	Maricopa County	4,321	0	Mixed-use employment	Pre-Approval
4 Broadstone Ranch	Surprise	2,868.93	9,455	Single Family Medium Density	Approved Zoning/Plan/design
BT Sunhaven Rezone	Surprise	197.34	0	Industrial	Pre-Submittal/Pre-Approval
Buena Vista Ranch	Surprise	403.82	1,285	Single Family Medium Density	Approved Zoning/Plan/design
SW Corner of Pinnacle Peak Road and 115th Avenue	Surprise	23.81	Unknown	Public/Special Event/Military	Active
Churchill South	Surprise	523.88	99	Single Family Medium Density	Active
Cielo Crossing	Surprise	571.49	4,000	Planned Development	Approved Zoning/Plan/design
Cowley	Peoria	279.26	792	Single Family Medium Density	Approved Zoning/Plan/design
Coyote Trails	Maricopa County	155.96	120	Single Family Low Density	Active
7 Desert Trails	Surprise	879.25	2,234	Single Family Medium Density	Pre-Approval
Dove Valley	Surprise	639.29	219	Single Family Low Density	Active
Fieldhouse	Surprise	514.04	2,937	Mixed Use	Pre-Submittal/Pre-Approval
5 Grand Vista	Surprise	5,462.36	14,425	Single Family Medium Density	Approved Zoning/Plan/design
Lake Pleasant Heights	Peoria	3,330.92	6,853	Passive/Restricted Open Space	Approved Zoning/Plan/design

¹ This project application includes a change in the current zoning for a portion of the land area.

Development Projects	Jurisdiction	Acres	Proposed Residential Units	Land Use	Status
Lone Mountain Ranch	Surprise	579.75	2,102	Single Family Medium Density	Pre-Submittal/Pre-Approval
Mesquite Mountain Ranch	Surprise	716.28	3,264	Single Family Medium Density	Platted/Site Plan
6 North Copper Canyon	Surprise	1,065.81	4,511	Single Family High Density	Active
Northwest Regional Landfill	Surprise	1,156.44	0	Other Employment	Active
Patton Acres Survey Lot 1-16	Surprise	521.03	24	Single Family Low Density	Active
Rancho Cabrillo	Peoria	550.52	1,506	Single Family Medium Density	Approved Zoning/Plan/design
8 Rancho Mercado	Surprise	1,187.89	4,033	Business Park	Active
Saddleback Heights	Peoria	5,256.42	8,267	Single Family Medium Density	Approved Zoning/Plan/design
Saddleback Heights (State Land Areas)	Peoria	740.98	926	Single Family Medium Density	Approved Zoning/Plan/design
10 Santa Barbara Ranch	Surprise	965.73	2,522	Planned Development	Pre-Submittal/Pre-Approval
School District #75 NW of Grand Ave & Castle Hot Springs Rd	Surprise	4.74	0	Educational	Pre-Submittal/Pre-Approval
Sierra Norte	Surprise	160.07	374	Single Family Medium Density	Pre-Submittal/Pre-Approval
Soleada	Surprise	637.34	416	Single Family Low Density	Pre-Submittal/Pre-Approval
Sunhaven North	Surprise	504.96	1,447	Single Family Medium Density	Approved Zoning/Plan/design
9 Surprise Foothills	Surprise	1,168.26	3,591	Single Family High Density	Approved Zoning/Plan/design
Surprise Ranch	Surprise	197.54	694	Single Family Medium Density	Pre-Submittal/Pre-Approval
Trilogy West	Peoria	339.21	1,011	Single Family High Density	Active
TRIM Southwest	Surprise	37.61	136	Mixed Use	Pre-Submittal/Pre-Approval
Verdugo	Surprise	171.42	555	Single Family Medium Density	Active
Vista Winds Senior Living Campus at Vistancia	Peoria	26.5	218	Medical/Nursing Home	Active
11 Vistancia	Peoria	7,110.92	10,547	Mixed Use	Approved Zoning/Plan/design
Walden Ranch DMP	Surprise	518.02	1,417	Public/Special Event/Military	Approved Zoning/Plan/design
North Peoria Gateway ²	Peoria	1,620.00	13,989	Mixed Use	Approved Zoning/Plan/design

² This development is only partially located within the study area. The full development boundaries extend north and east into the City of Peoria's jurisdiction.

3.3 Ongoing and Programmed Transportation Improvements

While long term infrastructure solutions are needed to support the projected growth within the study area, near-term capital improvements are critical to support the continued development and population growth in the coming years. This area is slated for many new housing and commercial developments, and the surrounding infrastructure will need to be expanded to support the future traffic. The projects scheduled to be open to traffic by or before 2030 and slated for construction post 2030 are identified in **Figure 20:**

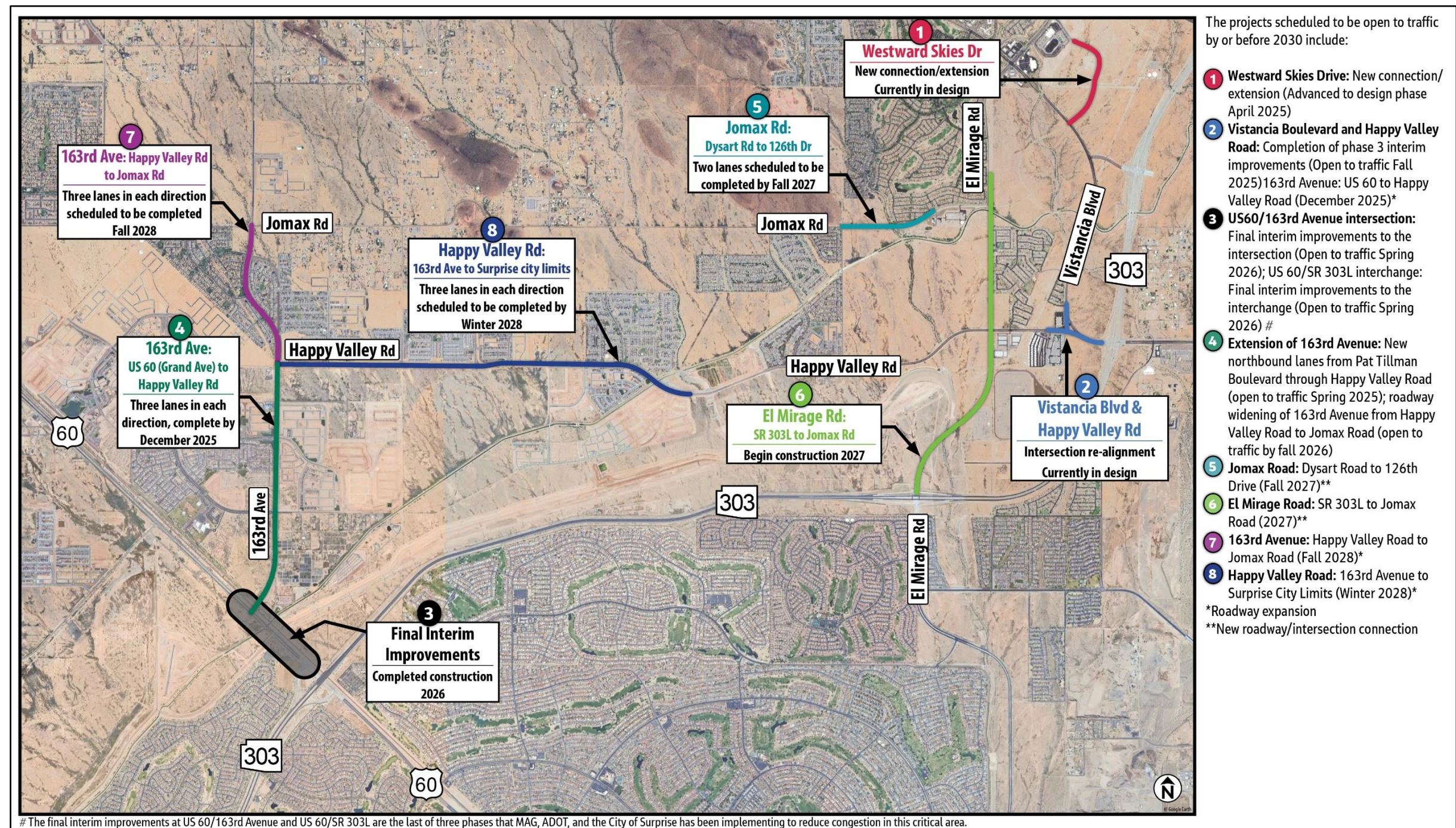


Figure 20: Planned Capital Improvement Projects (2021-2035)

163rd Avenue: Happy Valley Road to Jomax Road Roadway Expansion

This corridor is slated for intersection widening and multimodal upgrades, including expanded travel lanes and pedestrian infrastructure. Phase 2 focuses on the 163rd Avenue and Jomax Road intersection, which will be widened to three lanes in each direction, improving traffic flow and decreasing travel time. The project is currently in the planning and funding alignment stage, with implementation expected within a five-year horizon. This investment is driven by significant nearby growth, including the Nobella master planned community, which will deliver more than 600 single-family homes at the intersection of 163rd Avenue and Jomax Road. Additional neighborhood retail is planned at the southwest corner of Jomax Road and 163rd Avenue, complementing the area's residential expansion. These expansions underscore the need for roadway improvements to support increased residential density, commercial activity, and safe multimodal connections.

163rd Avenue: US 60 to Happy Valley Road Roadway Expansion

The 163rd Avenue transportation improvement project from US 60 to Happy Valley Road is an active capital initiative that will expand the corridor to three lanes in each direction, with completion targeted for December 2025. This upgrade supports Surprise's long-term transportation goals by improving capacity, safety, and multimodal readiness. It also provides essential infrastructure for Asante Trails mixed-use development, which includes a new HonorHealth medical campus, a retail center with multiple national tenants, and a build-to-rent residential community. The corridor also supports the Asante North neighborhoods, featuring diverse single-family and active adult housing options. Together, these projects will transform the corridor into a hub of healthcare, commerce, and housing, while ensuring multimodal access for residents and visitors. Construction is progressing toward its end-of-year 2025 milestone, positioning 163rd Avenue as a critical corridor supporting Surprise's next phase of growth.

Happy Valley Road: 163rd Avenue to Surprise City Limits Roadway Expansion

This capital improvement effort is part of Surprise's broader transportation infrastructure upgrades, designed to accommodate regional growth and improve traffic flow. The project includes roadway expansion, drainage improvements, and multimodal enhancements to support future transit services and pedestrian access. Construction is expected to proceed in phases, with full buildout targeted for late 2028. This investment is directly tied to significant growth in the surrounding area, including large single-family expansions such as the Asante North neighborhoods, the Rancho Mercado master-planned community with more than 2,000 single family homes alongside retail facilities near the area. These developments, combined with ongoing commercial activity along the SR 303L corridor, reinforce the need for expanded roadway capacity to accommodate rising traffic volumes, provide safe multimodal connections, and ensure efficient integration between new neighborhoods and the regional transportation network.

US 60/163rd Avenue Intersection Near-Term Improvements

Led by ADOT in partnership with MAG and the City of Surprise, near-term capacity improvements were recently added to the intersection of 163rd Avenue and US 60 in 2025. A third northbound through lane has been added to the existing 2 through lanes and a second right turn lane has been added at the northbound approach along US 60. A third southbound through lane has been added to the existing 2 through lanes. Along 163rd Avenue, another eastbound through lane and right turn lane has been added to the existing eastbound left turn pocket lane and right turn pocket lane. The westbound approach features a third left turn pocket lane added to the existing 2 left turn pocket lanes, 1 westbound through lane, and 1 westbound right lane. Additional improvements include ADA-compliant sidewalk and ramp modifications and asphalt replacement. This intersection will undergo additional capacity enhancements in the future, targeting 2031-2035 for a final buildout construction. Details of the final buildout configuration are shown in the 2050 Recommended Network intersection configurations. The Maricopa Association of Governments has allocated over \$4 million in funding through the Proposition 400 Freeway Life Cycle Program to support these long-term improvements. These investments are directly tied to rapid growth in the surrounding area, including the Sterling Grove master-planned community with more than 2,000 homes, the expanding Prāsada mixed-use district with retail, employment, and multifamily housing, and additional subdivisions along the SR 303L corridor that continue to add new residential density. Together, these developments underscore the need for both near-term and long-term intersection improvements to accommodate rising traffic volumes, enhance multimodal access, and sustain Surprise's next phase of growth. The completed near-term improvements are identified in **Figure 21**.

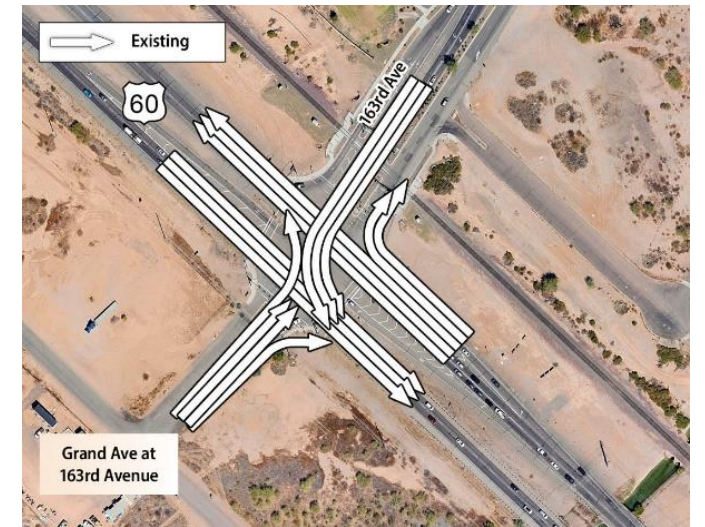


Figure 21: US 60/163rd Avenue Near Term Improvements

Vistancia Boulevard and Happy Valley Road: Intersection re-alignment (currently in design)

The intersection of Vistancia Boulevard and Happy Valley Road is currently in design for a planned re-alignment that will improve traffic operations and enhance multimodal safety. This project, which includes both interim and long-term improvements, is a part of Peoria's broadened transportation strategy to strengthen east-west connectivity to accommodate rapid growth in the northwest Valley. Planned improvements include realigned approaches, signal upgrades, and pedestrian infrastructure to support future transit service and safe crossings. The interim improvement includes additional left turns lanes for northbound Vistancia Boulevard to westbound Happy Valley Road, improving access for travelers headed west on Happy Valley Road. Other improvements include enhanced traffic signal timing to improve safety and traffic efficiency, and adjusting the center median to accommodate the new left-turn lane as well as upgrades to signal infrastructure. Interim improvements were completed in October 2025.

Long-term improvements comprise a complete intersection re-alignment by shifting Happy Valley Road westward to transform the current layout into a four-way intersection for smoother traffic flow. Happy Valley Road will include added capacity with roadway widening from 4 lanes to 6 lanes at this location. This investment is driven by significant nearby growth, including the Sterling Grove master-planned community with more than 2,000 homes, the Asante North neighborhoods offering diverse single-family and active adult housing. Together, these developments underscore the need for intersection re-alignment to accommodate rising traffic volumes, improve safety, and ensure efficient connections between new neighborhoods and the regional transportation network. The improvements are highlighted in **Figure 22** and **Figure 23**.



Figure 22: Interim Improvements at Vistancia Boulevard and Happy Valley Road



Figure 23: Planned Ultimate Configuration at Vistancia Boulevard and Happy Valley Road

US 60 and SR 303L Southbound Ramp Intersection

Led by ADOT in partnership with MAG and the City of Surprise, near-term capacity improvements were recently added to the SR 303L and US 60 interchange in 2025. The intersection of SR 303L Southbound and US 60 includes 2 existing through lanes, 1 existing shared through-right lane with ongoing improvement of 1 right turn lane added (opens to 2 lanes on the SR 303L southbound on-ramp) along US 60 eastbound. The SR 303L southbound ramp approach includes 2 existing left turn lanes and 1 existing right turn lane, with ongoing improvement of adding striping so the outer lane is a shared left-right lane. The existing westbound US 60 approach includes 3 through lanes. The intersection of SR 303L Northbound and US 60 includes 3 US 60 eastbound through lanes, 1 eastbound right turn lane, 3 US 60 westbound through lanes, and 2 westbound left turn pocket lanes. The SR 303L northbound ramp approach includes 2 existing left turn lanes and 1 existing right turn lane. This approach added a third left turn lane and a second left turn lane in 2025 as a part of completed near-term improvements. This intersection will undergo additional capacity enhancements in the future, targeting 2031-2035 for a final buildout construction. Details of the final buildout configuration are shown in the 2050 Recommended Network intersection configurations. The Maricopa Association of Governments has allocated over \$4 million in funding through the Proposition 400 Freeway Life Cycle Program to support these long-term improvements. These roadway investments are directly tied to rapid growth in the surrounding area, including the Sterling Grove master planned community with more than 2,000 homes, the Prasada mixed use district with retail, employment, and multifamily housing, and new multifamily projects such as Arterra and Orchard Springs that add hundreds of units along the SR 303L corridor. Together, these developments highlight the need for near-term and long-term interchange improvements to accommodate rising traffic volumes and ensure safe, efficient regional mobility. The improvements outlined above are illustrated in **Figure 24**.

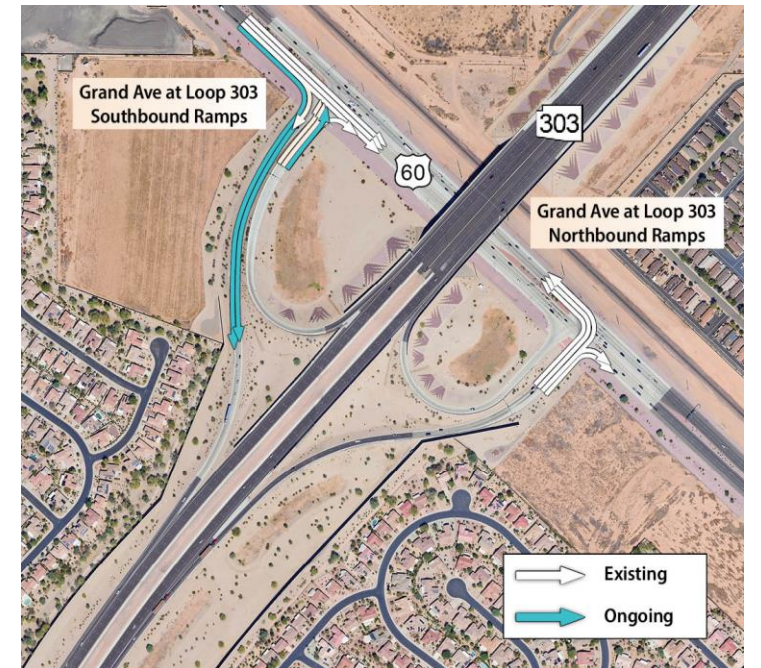


Figure 24: Interim Improvements at US 60 and SR 303L Southbound Ramps

El Mirage Road: SR 303L to Jomax Road Roadway Extension

El Mirage Road extension from SR 303L to Jomax Road is a key component of Peoria's long-range transportation strategy, identified for capacity upgrades, multimodal enhancements, and transit-supportive infrastructure to accommodate regional growth and improve connectivity between SR 303L and northern Peoria. While specific design elements and timelines are still being finalized, the project is expected to include roadway widening, signalized intersections, pedestrian facilities, and drainage improvements. Design is anticipated within the next planning cycle (Fiscal years 2026-2027), and construction is anticipated to proceed in Fiscal years 2028-2029 pending funding and interagency coordination.

Jomax Road: Dysart Road to 126th Drive New Roadway

This initiative between the cities of Surprise and Peoria will create a new east-west corridor to improve regional access and emergency response capabilities. The project includes design, right-of-way acquisition, and construction of a two-lane roadway, filling an existing gap between existing segments. It will provide an additional access point into north Surprise and enhance connectivity to SR 303L and Happy Valley Road. Construction is scheduled for Fall 2027. This investment is driven by significant nearby growth, including the Rancho Mercado and Visara master planned communities, the Asante North neighborhoods with diverse single family and active adult housing, the Asante Trails mixed use project anchored by a new HonorHealth medical campus and retail center, and new developments that will add hundreds of additional homes along with retail facilities. These new developments reinforce the need for expanded roadway connections to accommodate rising traffic volumes and ensure safe, efficient mobility for Surprise’s growing population.

Westward Skies Drive: New Roadway Connection

This new connection aims to improve traffic flow and accessibility in the rapidly developing North Peoria Gateway and Five North areas of Peoria. The Five North project will extend Westward Skies Drive to support future residential and commercial growth, with design work focused on roadway alignment, multimodal infrastructure, and integration with surrounding arterials. City officials emphasized its importance for long-term mobility and connectivity, and the design phase is actively underway. This section of Westward Skies Drive will provide access to the future Vistancia large-scale residential and commercial development, a 7,100 acres community that will deliver thousands of single-family homes, schools, parks, and commercial centers. The North Peoria Gateway development will add over 13,000 units across 1,620 acres to support the rising population growth in the area. Together, these developments highlight the need for expanded roadway connections to accommodate rising traffic volumes and ensure safe, efficient, mobility across Peoria and Surprise’s growing northwest Valley.

Other Improvements Identified During This Study:

Even as this corridor was in its early stages, it became apparent that significant other improvements were needed on an urgent basis. This prompted MAG, ADOT, and the City of Surprise to begin planning for some critically needed improvements by identifying locations and alignments of new facilities, performing a Project Assessment study, and programming funds for the future improvements.

Due to the relationship of the findings of this study and the expedited actions of the participating agencies, these planned improvements are described in detail later in this report. These improvements include:

- A new SR 303L traffic interchange east of the existing SR 303L/US 60 interchange;
- New arterial streets providing access to this new interchange from the study area, and;
- Major upgrades to the existing SR 303L/US 60 interchange and the intersection of US 60 and 163rd Avenue.

3.4 The “2050 General Plans Network” Scenario

An assessment of future conditions in the year 2050 was conducted to establish a baseline understanding of future travel demand and the potential need for additional transportation infrastructure throughout the study area. The study team began by identifying a theoretical future year scenario in which all streets and roadways planned by the local jurisdictions, including the cities of Surprise and Peoria as well as MCDOT were built to their full ultimate capacity (number of lanes) by the year 2050. Each jurisdiction maintains a transportation plan, either integrated into its General Plan or adopted as a separate document, that outlines future roadway alignments and the ultimate cross sections, including the number of lanes, anticipated for each facility.

Although these plans specify the intended roadway configurations, they do not provide timelines for when individual improvements will be constructed. For this study, the planned roadway network and associated ultimate lane configurations were consolidated into what is referred to as the “2050 General Plans Network.” This network, shown in **Figure 25**, represents the combined long-range vision for the transportation system within the study area. When fully built out, the 2050 General Plans Network would form a comprehensive roadway system that offers substantial capacity and provides access to nearly all parts of the study area. However, full capacity of the entire road network identified in the jurisdictions’ general plans could not be achieved by the year 2050. This hypothetical network served only as a scenario for evaluating future travel patterns and identifying where additional right-of-way preservation or infrastructure investment may be needed to support mobility through the year 2050.

One regional facility included in the 2050 General Plans Network is the inclusion of a traffic interchange at SR 303L and Litchfield Road. This location is approximately one mile west of the existing interchange at SR 303L and El Mirage Road. This interchange has been identified for implementation in the later years of MAG’s Freeway Life Cycle Program (FLCP).

3.4.1 Travel Demand Model Refinements

MAG analyzes the roads, highways, and freeways throughout the region using the MAG TDM. This travel demand model is described in Chapter 2 of this report, together with the steps taken to calibrate and validate the model and add details to create a customized corridor-level model for use in this corridor study. MAG routinely prepares regional model runs for future years, including 2030, 2040, and 2050. The MAG regional model for these years was similarly customized for use in analyzing future years in this study, integrating all of the growth anticipated throughout the region as well as all of the transportation improvements identified in the RTP (MOMENTUM 2050) for the next 25 years.

The customized MAG model also included specific adjustments to the number of heavy trucks (trucks with a cab and a separate trailer) on the highway network. This adjustment was made to ensure an accurate estimate of future truck volumes would be made. The heavy truck adjustments consisted of two actions:

- Factoring up the number of heavy trucks on the network to reflect a high rate of truck growth in recent years; and
- Incorporating the number of heavy trucks traveling to and from the BNSF intermodal facility that BNSF has estimated would be generated by their proposed project.

This customized year 2050 MAG model was used to analyze the 2050 Master Plans Network, with the assumption that all of the General Plans Network roads would be built to their full capacity by 2050. This assumption is actually unreasonable, since most of the arterial street system is built in phases by private developers at the time they are building their developments. Since the full ultimate population and employment anticipated in the general plans would not be reached by 2050, it is unreasonable to assume all of the general plan streets would be built or that they would all be at their full ultimate capacity by 2050. It has been used in this study as a preliminary scenario to help establish a phased approach to addressing the transportation needs of the study area from now to the year 2050. The subsequent phased approach was based on adding streets and adding lanes to existing streets only as needed over time. At the end of this process was a new year 2050 scenario that is different from this 2050 General Plans Network scenario. The final year 2050 needs are presented in a later chapter of this report.

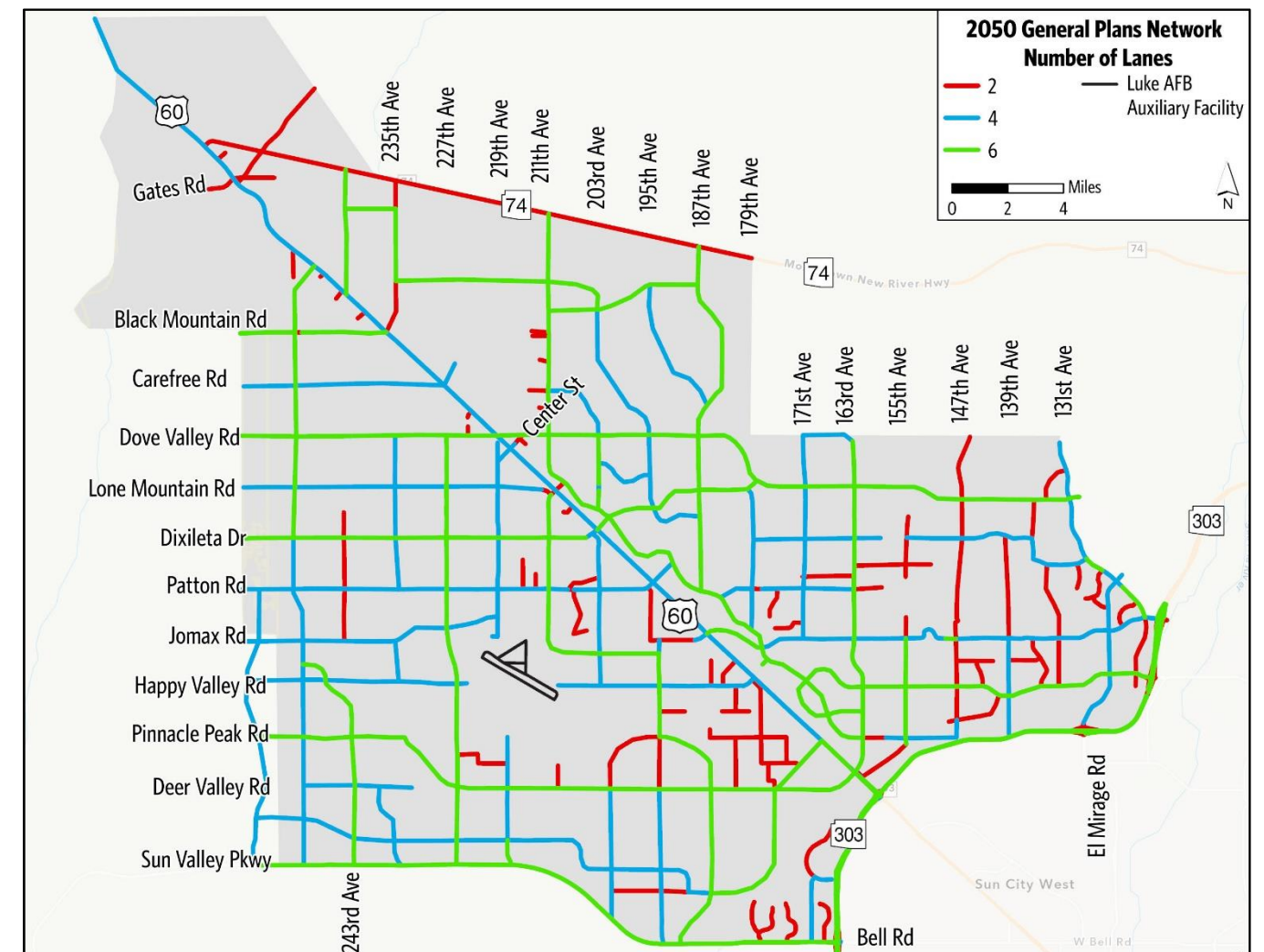


Figure 25: General Plan Network

3.4.2 Findings

For the 2050 General Plans Network analysis, a comparison of future traffic demand to roadway capacity was undertaken to understand how well this master plans network would serve the anticipated demand in the year 2050. This analysis identified areas of concern, where future congestion or other operational problems might appear. This analysis began with a comparison of future traffic demand for vehicles against the ultimate roadway capacity to determine whether the full ultimate number of lanes would be needed by the year 2050 for some streets and whether the ultimate number of lanes would be enough to meet future demand on other streets.

Figure 26 is a map that illustrates the findings of this analysis from a different perspective. The General Plans Network streets are color-coded in this figure based on the ratio of year 2050 demand to the full planned ultimate capacity of each street. Streets that do not need to be at their full capacity with the ultimate number of lanes by 2050 are shown in green. Streets that will need to be at their full capacity by 2050 are shown in blue. Streets where traffic demand will exceed their capacity even with the ultimate number of lanes are shown in red. Streets that are colored dark red will need significantly more than their ultimate capacity in order to serve the traffic demand by the year 2050.

As this Figure shows, there will be many areas throughout the 2050 General Plans network where the future traffic demand is low enough that the streets do not need to be at their full capacity by 2050. Most of these streets are in the western and northern portions of the study area. There are also several streets that will need to have their ultimate number of lanes by the year 2050 to meet the anticipated traffic demand. These tend to be in the eastern and far northern portions of the study area.

There are also several roadways that will not be able to carry all of the anticipated traffic demand in 2050, even with their full ultimate number of lanes. One of these roadways is US 60. The reason this roadway is red is that there are currently no plans to widen US 60 within the study area. Improvements to federal highways like US 60 are typically not included in local jurisdictions in their general plans because they are planned and implemented at the regional level. The same applies to state highways like SR 74. There are currently no regional plans to add capacity to either of these roadways between now and the year 2050. The finding of this study is that improvements will be needed to US 60 and may be needed to a portion of SR 74 by the year 2050. For SR 74, that need will exist in only a small portion of the study area, east of 187th Avenue. But for US 60, there is a need to increase capacity through a significant portion of the study area.

In the eastern portion of the study area, several streets show a need for more capacity by the year 2050. These streets tend to be short sections of streets clustered near interchanges with SR 303L, where the number of vehicles accessing the freeway may exceed the planned capacity for those streets. This need also spills out to some of the interchange ramps, which may also need more capacity in the future.

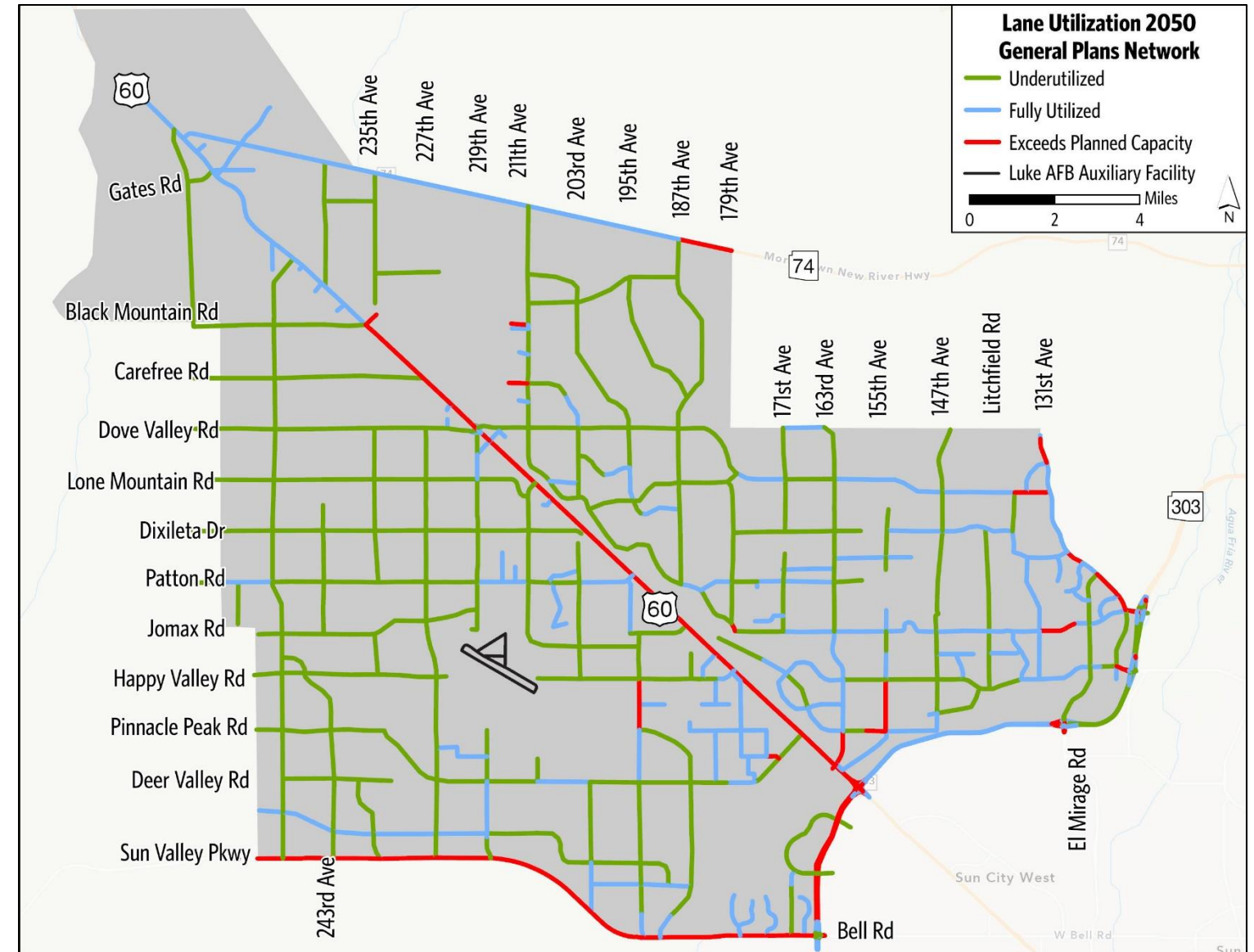


Figure 26: Lane Utilization Analysis of the General Plan Network

3.4.3 Areas of Concern

Based on the Demand to Capacity analysis for the 2050 General Plans Network and an assessment of localized traffic flow in some areas, ten areas of concern were identified by the project team. These ten areas are identified in **Figure 27** and include:

1. US 60 from Jomax Road to SR 303L and 163rd Avenue from Pat Tillman Boulevard to US 60
2. Sun Valley Parkway from Canyon Springs Boulevard to SR 303L
3. Access to SR 303L from Peoria
4. 203rd Avenue/Bradley Road/Future Lone Mountain Road Connections to US 60
5. Jomax Road Access to Pat Tillman Boulevard Continuing to US 60
6. Access to Sun Valley Parkway from Happy Valley Road
7. Dove Valley Road/Center Street/Crozier Road in Wittmann
8. Arterial Network with Probable Gaps (Area Wide)
9. Railroad Crossings (Area Wide)
10. Access Management (Area Wide)

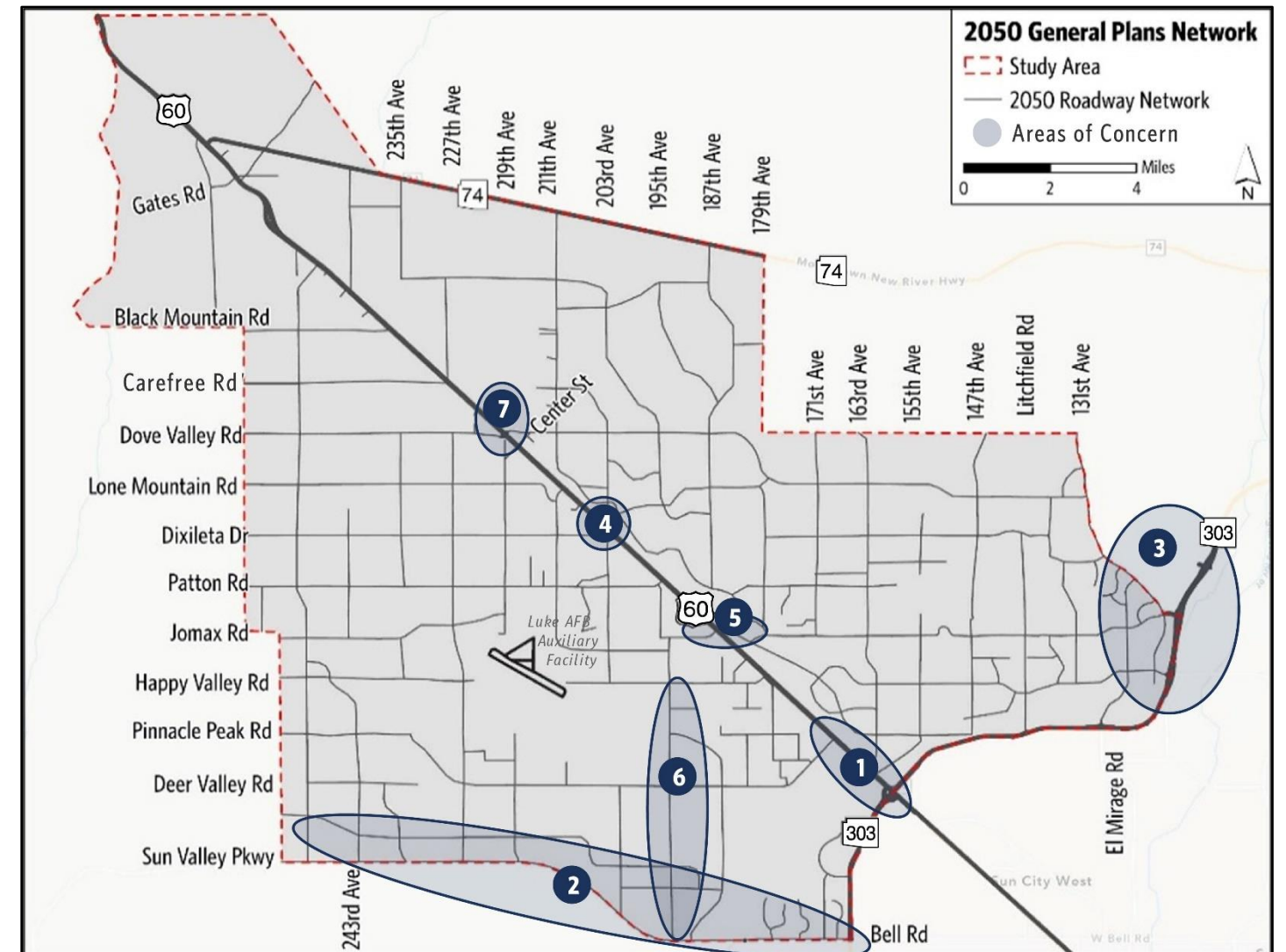


Figure 27: General Plan Network - Areas of Concern

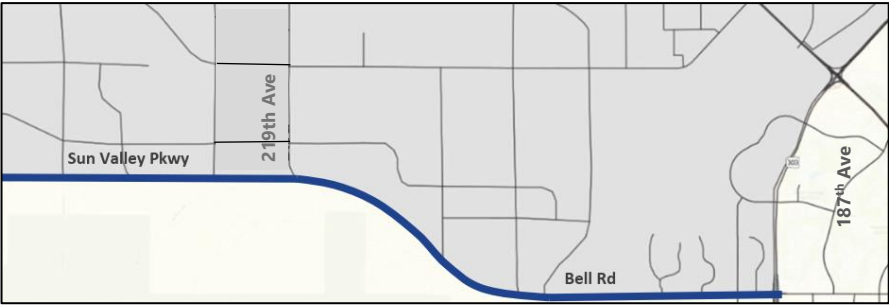
Area of Concern 1: US 60 from Jomax Road to SR 303L and 163rd Avenue from Pat Tillman Boulevard to US 60

In 2050, traffic volumes on US 60 between 163rd Avenue and SR 303L exceed those on SR 303L between US 60 and Bell Road. Approximately 147,000 vpd would travel between 163rd Avenue and SR 303L in this scenario, while 135,000 vpd would travel along SR 303L near Bell Road and 89,000 vpd travel along SR 303L near Litchfield Road. The high demand along Grand Avenue is partially attributed to 163rd Avenue funneling most of the traffic out of the densely populated area with continued development growth near the south end of the study area. Along SR 303L, interchanges are generally spaced at 1-mile intervals but there is 3-mile spacing between the Bell Road-SR 303L interchange and a proposed new future interchange at Litchfield Road-SR 303L. Under existing conditions, the nearest SR 303L interchange with east-west cross connectivity is at Happy Valley Parkway, located 7 miles from US 60.



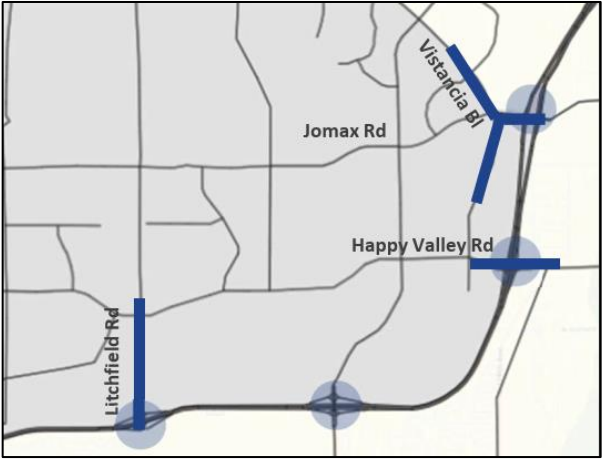
Area of Concern 2: Sun Valley Parkway/ Bell Road from Canyon Springs Boulevard to SR 303L

Sun Valley Parkway/Bell Road experiences multiple segments where traffic demand exceeds roadway capacity, resulting in severe congestion. As a major arterial, it carries local traffic from surrounding residential neighborhoods as well as trips generated by commercial centers along Bell Road near SR 303L, including WinCo and Sam’s Club. By 2050, traffic volumes are projected to reach nearly 48,000 vpd at Canyon Springs Boulevard and nearly 95,000 vpd at 187th Avenue. This area has a high development density and will continue to add residential developments within the study area north of Sun Valley Parkway. Adding additional traffic in 2050 to the current Sun Valley Parkway Lane configuration will create high delays, increase potential for crashes, and increase travel times along the street.



Area of Concern 3: Access to SR 303L from the Eastern Study Area and Peoria

By 2050, there will be four interchanges within the eastern study area in this scenario with full access to the arterial street network: Litchfield Road-SR 303L TI, El Mirage Road-SR 303L TI, Happy Valley Parkway-Loop SR 303L TI, and Jomax Road-SR 303L TI. In the 2050 General Plans Network, the Litchfield Road link accessing the TI will be severely congested during peak periods. Other severely congested links to these TIs in Peoria include the western ramps at the El Mirage Road TI, west link of Happy Valley Parkway approaching the TI, and west link of Jomax Road approaching the TI. As the population and developments continue to increase within the southern portion of the study area, the traffic accessing the TIs causes the arterial roadways to be over capacity, and long delays will result for vehicles bound for SR 303L.



Area of Concern 4: 203rd Avenue/Bradley Road/Future Lone Mountain Road Connections to US 60

Along Grand Avenue, the future 2050 traffic demand exceeds the roadway capacity between the south 203rd Avenue and north 203rd Avenue access points (54,000 vpd). South of this segment, US 60 has a daily traffic volume of 45,000 vpd and north of this segment, US 60 has a daily traffic volume of 34,000 vpd. Along north 203rd Avenue approaching US 60, the daily traffic is nearly 34,000 vpd and along south 203rd Avenue approaching US 60, the daily traffic is 11,000 vpd. This location does not provide efficient traffic flows due to the offset and closely-spaced 203rd Avenue intersections. The roadway alignment of Lone Mountain Road intersects north 203rd Avenue close to US 60 and the roadway alignment of Dixileta Road intersects south 203rd Avenue close to US 60. These roadways add more traffic queues as conflicts for merging traffic from these side streets impact 203rd Avenue traffic flows in 2050. Additional issues arise on the north side of 203rd Avenue as the at-grade railroad crossing is present.



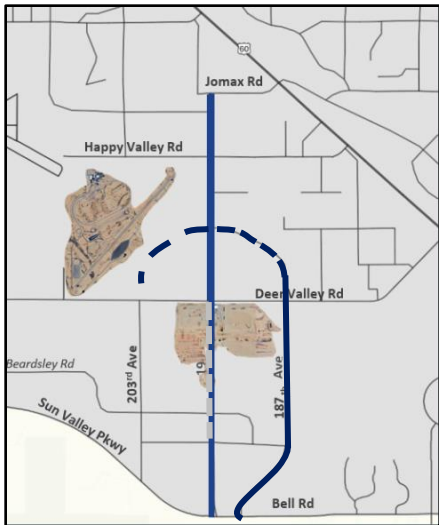
Area of Concern 5: Jomax Road Access to Pat Tillman Boulevard Continuing to US 60

In 2050, traffic demand will exceed roadway capacity along US 60 near Jomax Road (48,000 vpd). In this scenario, Jomax Road is extended to the east and connects with Pat Tillman Boulevard/US 60 in a full access intersection. Jomax Road connects to Pat Tillman Boulevard near the Pat Tillman Boulevard/US 60 intersection and adds 38,000 vpd along Pat Tillman Road. If these intersections are offset from each other, the split roadway links at Jomax Road on both sides of Grand Avenue create inefficient traffic flows. Traffic must connect through several arterials and intersections to travel along US 60 or Pat Tillman Boulevard. Traffic on the west side of US 60 must connect via 211th Avenue or 195th Avenue to reach Jomax Road/US 60 and traffic on the east side of US 60 must connect via 163rd Avenue, 171st Avenue, 179th Avenue, or 211th Avenue to reach Pat Tillman Boulevard/US 60.



Area of Concern 6: Access to Sun Valley Parkway/ Bell Road from Happy Valley Road

There are several segments along 195th Avenue where 2050 traffic demand exceeds roadway capacity. Sun Valley Parkway has many segments where the demand exceeds the roadway capacity with severely congested conditions in the 2050 General Plans Network scenario. The landfill, the Ford Proving Grounds, and the Luke Air Force Base facility create physical and operational constraints that limit opportunities to establish continuous through-movements in this area. At the same time, residential growth is expected to continue, including the expansion of the North Copper Canyon and Rio Rancho Estates master-planned communities. Together, these factors further strain roadway capacity and circulation in the area. Residential traffic from Happy Valley Road and Deer Valley Road that are bound for Sun Valley Parkway/Bell Road will therefore require a solution.



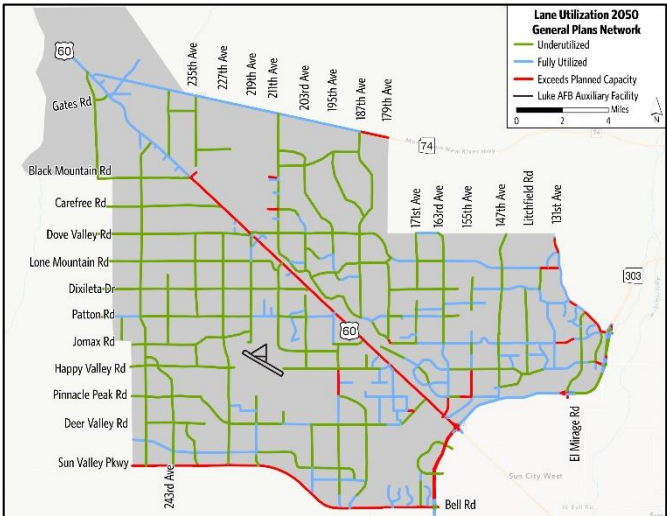
Area of Concern 7: Dove Valley Road/Center Street/Crozier Road in Wittmann

This location is within the community of Wittmann, and Center Street is the only signalized, full access crossing with US 60 north of 163rd Avenue. Wittmann is a rural community today and will likely remain a rural community to the year 2050 and beyond. In addition, there is a school adjacent to Center Street just north of US 60. As development builds around Wittman over time, there will likely be a large increase in demand for traffic to access US 60 via Center Street. This could potentially have a negative impact on Wittmann and on the students at the nearby school. Care should be taken to minimize this impact, if possible.



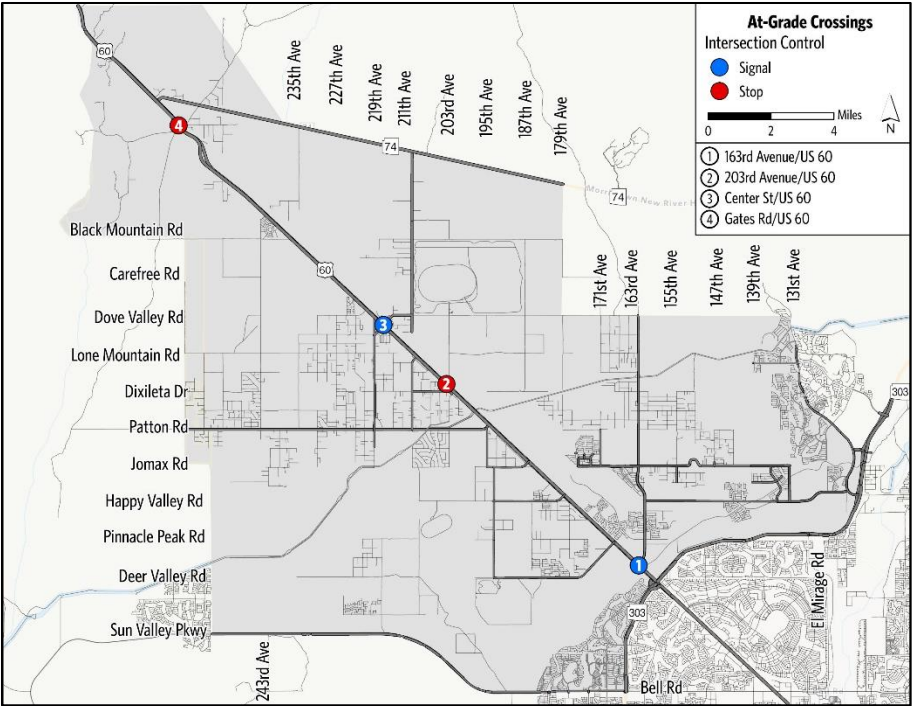
Area of Concern 8: Arterial Network with Probable Gaps (Area Wide)

Typically, new arterial streets are built by land developers as they develop their properties. However, there will be times when there are gaps between new development projects which will then create gaps in the street network. There may also be locations where developers do not actually build connections to US 60, even when nearby. When these events occur, it may be necessary for the local jurisdictions to step in and fill in some of these gaps to avoid localized traffic congestion to appear. As population increases and developments continue in the study area, congestion may increase in some locations. The local Jurisdictions may need to monitor these locations for additional capacity enhancements.



Area of Concern 9: Railroad Crossings (Area Wide)

This study does not address the issue of whether roads crossing the railroad tracks and should be grade separated. The study examined where new roadway connections crossing the railroad would be needed to improve access to the northern portions of US 60. Its scope is limited to identifying suitable connection locations and determining the appropriate size of intersections if those facilities were built.



Area of Concern 10: Access Management (Area Wide)

Access management within the study area varies from segment to segment along US 60 since the character of the study area varies greatly between the south end and north end of the US 60. The southern portion of the study area is expected to continue to grow rapidly; the population will increase nearly five-fold and several large planned developments will be added near US 60 and SR 303L by 2050. The middle segment along US 60 between 203rd Avenue and Carefree Road is less densely populated and has fewer developments, but is still expected to grow. The northern segment of US 60 is sparsely populated with fewer developments, and no additional access points are planned north of Carefree Road to SR 74. There are many existing access locations along US 60 today, and more will be expected over time. Most, if not all of these access locations will soon reach the point that they will require action to improve safety due to the growth of traffic along US 60 (including a larger increase in heavy truck traffic). An access management plan is needed to ensure these future actions are implemented in a planned and organized manner.

4 Analysis of Potential Solutions and Key Findings

4.1 Identification of Alternatives to Mitigate Problems in the Areas of Concern

After the areas of concern were defined, the study team identified alternative mitigation strategies as potential solutions for each of the ten areas. These mitigation measures for the ten areas of concern are listed below.

Alternatives for Area of Concern 1: US 60 from Jomax Road to SR 303L and 163rd Avenue from Pat Tillman Boulevard to US 60

1. Upgrade Grand Avenue/163rd Avenue intersection and Grand Avenue/SR 303L interchange.
2. Build a new SR 303L interchange east of Grand Avenue.
3. Include a new interchange and extend 163rd Avenue south to connect with Deer Valley Road and add a connection to Bell Road.
4. All of the above.

Alternatives for Area of Concern 2: Sun Valley Parkway from Canyon Springs Boulevard to SR 303L

1. Widen Bell Road/Sun Valley Parkway as an arterial street to the width needed to meet total demand.
2. In addition to Alternative 2.1, provide a new connection from Deer Valley Road to 187th Avenue.

Alternatives for Area of Concern 3: Access to SR 303L from Peoria

1. Widen access roads.

Alternatives for Area of Concern 4: 203rd Avenue/Bradley Road/Future Lone Mountain Road Connection(s) to US 60

1. Develop a design solution allowing these two closely spaced three-leg intersections within US 60 to operate well.
2. Convert these two intersections into a single 6-leg intersection.
3. Realign Dixileta Road and Lone Mountain Road and create intersections with a bridge at 203rd.

Alternatives for Area of Concern 5: Jomax Road Access to Pat Tillman Boulevard Continuing to US 60

1. Keep the intersection of Pat Tillman Boulevard with US 60 as an at-grade four-leg signalized intersection.
2. Realign Jomax Road as a continuous east-west roadway from Pat Tillman Boulevard all the way to 211th Avenue.

Alternatives for Area of Concern 6: Access to Sun Valley Parkway from Happy Valley Road

1. Widen 195th Avenue and extend it through the existing landfill.
2. Provide a parallel north-south road connection east of 187th Avenue connecting Deer Valley Road to Sun Valley Parkway.
3. Provide a connection to 203rd Avenue between Happy Valley Road and Deer Valley Road.
4. Fill the gap on 187th Avenue between Jomax Road and Deer Valley Road.

Alternatives for Area of Concern 7: Dove Valley Road/Center Street/Crozier Road in Wittmann

1. Develop a design concept that allows all movements to accommodate demand, at grade, with signal coordination.
2. Elevate Center Street over US 60 and provide a four-legged intersection at US 60 and Dove Valley Road.
3. Elevate Center Street over US 60 and provide four-legged intersections on US 60 at Dove Valley Road and 211th Avenue (with Lone Mountain Road potentially bridging over US 60).

Alternatives for Area of Concern 8: Arterial Network with Probably Gaps (Area Wide – No Specific Alternatives Defined)

Alternatives for Area of Concern 9: Railroad Crossings

1. Keep the number of at-grade crossings at the current level with new at-grade crossings allowed only after an existing crossing is grade separated or removed.
2. Set an agreed-upon maximum limit of at-grade crossings and require all other crossings to be elevated.
3. Do not allow any new at-grade crossings, and grade separate existing crossings over time.
4. Establish a policy that all railroad crossings should also be US 60 crossings, or they should be moved to locations that can cross US 60.

Alternatives for Area of Concern 10: Access Management

1. Add acceleration and deceleration lanes at every unsignalized access point along US 60.
2. Create new frontage roads and reduce the number of unsignalized access points along US 60.
3. Hybrid of Alternatives 1 and 2.

4.2 Public Meeting #2 – March 3, 2025 – Virtual Meeting and Online Survey

At this point in the study, a virtual public meeting was conducted in order to obtain community input on the areas of concern and the alternative mitigations that had been identified. Following the public meeting, an online public comment form was available for participants to give their input on the ten areas of concern and alternatives presented during the meeting. A total of 249 comment forms were received, with participants marking down their opinions more than 4,800 times. More than 600 additional comments were made by the participants as well. On average, each person filling out the forms provided their opinions and comments 22 times. This was a clear indication that they were fully engaged in the process and wanted to be heard. Images of the various alternative mitigations were provided in the online comment forms. These images, documenting all the comments and opinions provided by the responders, and findings from the Public Meeting #2 are provided in **Chapter 8: Public Engagement Summaries**. The full details and outreach summary reports are available in **Appendix C**.

Key themes from the public comment forms included the following.

- Frustration with the pace of improvements: Many participants expressed impatience that projects are not happening quickly enough given rapid growth.
- Neighborhood access concerns: Strong calls for more access points into and out of neighborhoods; people feel trapped in emergencies.

- Need to add capacity: Requests for additional lanes, acceleration/deceleration lanes, and turn lanes to improve flow and safety.
- Dirt roads: desire to pave the dirt roads, but also recognition of their importance for access.
- Congestion and emergency response: Bottlenecks seen as obstructing travel and increasing emergency response times.
- Speeding on US 60: Safety concerns tied to traffic traveling at speeds higher than posted speed limits.
- Truck traffic: Concerns about increasing freight movement and its impact on congestion and safety

4.3 Creation of Scenarios for Evaluating Potential Solutions

Even as the community was responding to the online comment forms, the study team began to analyze concerns that had been identified and to assess the effectiveness of the alternative solutions. In addition to the 2050 General Plans Network scenario, four new scenarios were defined to contain a different mix of the alternative solutions, and numbered Scenario 2 through Scenario 5. Each of the scenarios were then tested using the MAG TDM as a means of determining which of the alternatives at each area of concern would be most effective. The alternative mitigations identified for each area of concern and how they were packaged into the scenarios are summarized in **Table 7**.

Table 7: 2050 Scenarios Comparison, Mitigation Measures Added

	MODEL RUN 0 – NEW TRAFFIC INTERCHANGE	MODEL RUN 1 – ALTERNATIVE 1 IMPROVEMENTS	MODEL RUN 2 – ADD CONNECTIONS #1	MODEL RUN 3 – ADD CONNECTIONS #2	MODEL RUN 4 – MAXIMUM CAPACITY	MODEL RUN 5 – REMOVE SELECT ITEMS
AREA OF CONCERN	Base Scenario	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
1 - Grand/163 rd /SR 303L	GP Network	1 Ultimate improvements.	2 Add connection to Deer Valley	3 Add connection to Deer Valley	3 Add connection to Deer Valley	Remove Litchfield Road Interchange
2- Bell/Sun Valley Parkway	GP Network	1 Widen	1 Widen	2 Add connection to Deer Valley	2 Add connection to Deer Valley	2 Add connection to Deer Valley
3- Peoria Freeway Access	GP Network	1 Widen	1 Widen	1 Widen	2 More if needed	2 More if needed
4- Grand/Lone Mountain	GP Network	1 Two separate intersections	2 Six-leg intersection	3 Four-leg intersection (203 rd bridge)	2 Six-leg intersection	2 Four-leg intersection (203 rd Bridge)
5- Pat Tillman/ Jomax	GP Network	1 GP concept	1 GP concept	2 Straighten Jomax	2 Straighten Jomax	2 Straighten Jomax
6- Happy Valley to Bell	GP Network	1 Widen/ through landfill	2 Connect Deer Valley to Bell	4 Parallel Connector E	4 Parallel Connector E + W	4 Parallel Connector E + W
7 - Wittman Access	GP Network	1 Add Dove Valley	2 Disconnect Central	3 Add 211 th intersection	3 Add 211 th 6-leg	3 Add 211 th 6-leg
8 - Arterial Network	GP Network	1 Widen	1 Widen	1 Widen	1 Widen	1 Widen
9 - RR Crossings	All at-Grade	All at-Grade	All at-Grade	All At-Grade	All At-Grade	All At-Grade
10 - Access Management	Only where planned	1 Accel/decel lanes	1 Accel/decel lanes	1 Accel/decel lanes	3 Hybrid	3 Hybrid
Comments	This analysis will quantify lanes needed based on General Plan Network connections.	This analysis will examine the effectiveness of all Alternative 1 improvement.	This analysis will examine the effectiveness of additional connections (#1).	This analysis will examine the effectiveness of additional connections (#2).	This analysis will examine the effectiveness of maximizing capacity and connectivity.	This will be a separate run requested after examining the previous 4 model runs.

4.4 Analysis Findings

Finding #1: Access to SR 303L is a critical need throughout the entire study area; most notably in the western portion where demand to access SR 303L is especially high.

An assessment of the demand for vehicles to gain access to or to cross SR 303L from the study area was quite revealing. The assessment consisted of calculating the volumes of daily traffic approaching or departing SR 303L along eight existing and planned future interchanges, beginning with the Bell Road interchange to the west and ending with the Lone Mountain Road interchange to the east.

As **Figure 28** illustrates, these eight interchanges included:

- Bell Road;
- US 60;
- A new interchange east of US 60 connecting to 155th Avenue;
- A new planned interchange connecting to a new Litchfield Road northern connection;
- El Mirage Road, including a northern extension of this arterial street from SR 303L to Jomax Road;
- Happy Valley Road;
- Jomax Road; and
- Lone Mountain Road.

As shown in **Figure 28**, the volume of daily vehicles accessing SR 303L from the study area is much higher for the three westernmost interchanges (Bell Road, US 60, and the new interchange at 155th Avenue), at 297,000 vehicles, than for the five interchanges further east, at 156,000 vehicles. In fact, the US 60 interchange alone will be accessed by more vehicles in the year 2050 (more than 160,000) than the five eastern interchanges will have collectively.

The sheer volumes of traffic accessing SR 303L from Bell Road and US 60 are a clear indication that solving the congestion problem at these interchanges will be a real challenge. The challenge is not only to find a working design for the interchanges, but also to provide the needed capacity on US 60 and the arterial streets accessing these interchanges. While the western interchanges have significant challenges, the remaining five eastern interchanges also show the need for greater capacity, both at the interchanges themselves and for the arterial streets accessing them.

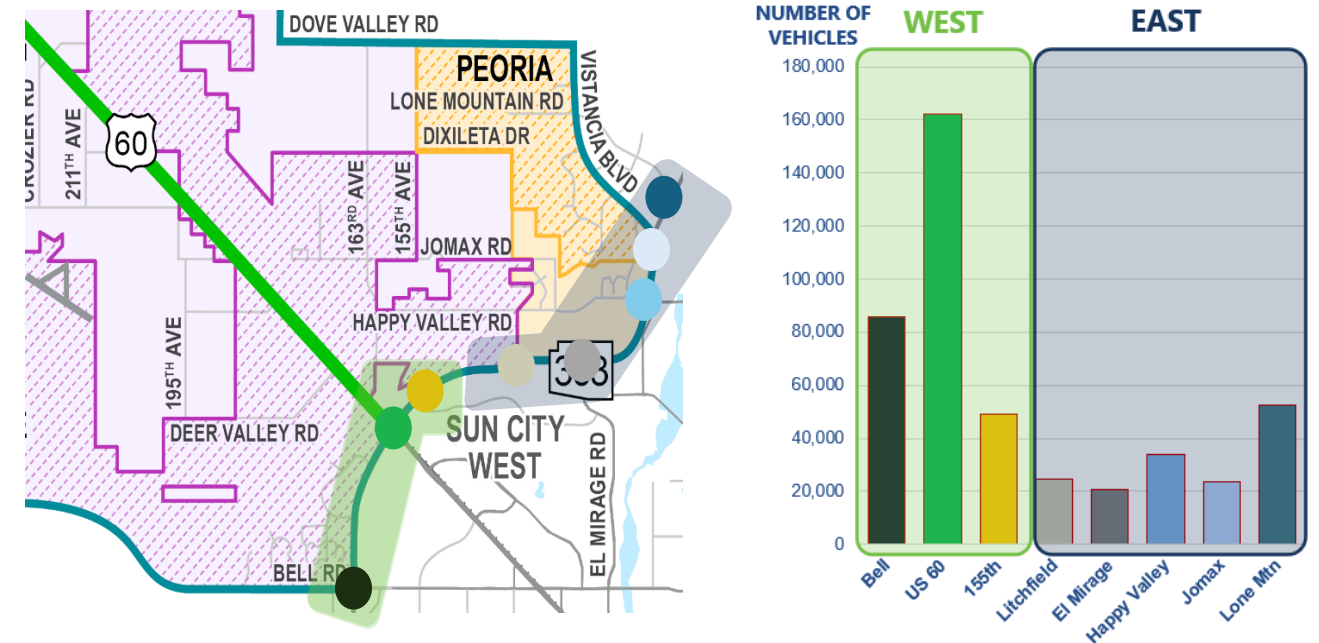


Figure 28: 2050 Travel Demand at SR 303L TIs

Finding #2: Future year traffic volumes on US 60 changed very little between the alternative scenarios

The 2050 daily traffic demand among the five different alternative improvement scenarios for US 60 traffic demand is shown in **Table 8** and **Figure 29**. Through most of the study area, vehicle demand on Grand Avenue changes very little between all five scenarios. Major differences do appear, however, south of Deer Valley Road and continue to the US 60/SR 303L interchange. The addition of a new interchange east of US 60 connecting to 155th Avenue, which is included in scenarios two through five, effectively reduces the demand for US 60 by ten percent, or 16,000 daily vehicles. This impact is not changed significantly by any of the other alternative improvements that were identified in the earlier analysis. The conclusion made from this finding is that a solution is needed that can carry all of the vehicle demand through the SR 303L/US 60 interchange and at the intersection of US 60 with 163rd Avenue as well.

Table 8: 2050 Daily Travel Demand Along US 60 Among the Five Alternative Improvement Scenarios

Location along US 60	2050 Scenario 1 Daily Volume	2050 Scenario 2 Daily Volume	2050 Scenario 3 Daily Volume	2050 Scenario 4 Daily Volume	2050 Scenario 5 Daily Volume
West of 263 rd Avenue	33,706	33,714	33,710	33,709	33,714
West of SR 74	29,148	29,147	29,143	29,141	29,137
West of Gates Road	17,786	18,077	18,025	18,016	18,150
West of Black Mountain Road	22,069	22,395	22,321	22,320	22,488
West of Dove Valley Road	45,309	45,544	45,419	45,394	45,590
West of 211 th Avenue	44,347	43,400	46,780	45,444	46,323
West of 203 rd Avenue	47,508	48,073	51,024	46,867	46,328
West of Patton Road	62,222	61,814	59,934	57,839	56,265
West of Pat Tillman Boulevard	69,931	70,332	67,516	68,401	68,740
West of Deer Valley Road	70,907	70,036	69,270	74,595	70,562
West of 163 rd Avenue	107,777	84,965	84,179	91,325	85,740
West of SR 303L	176,325	160,137	160,757	162,357	160,187
East of SR 303L	66,235	66,247	66,276	66,328	66,721

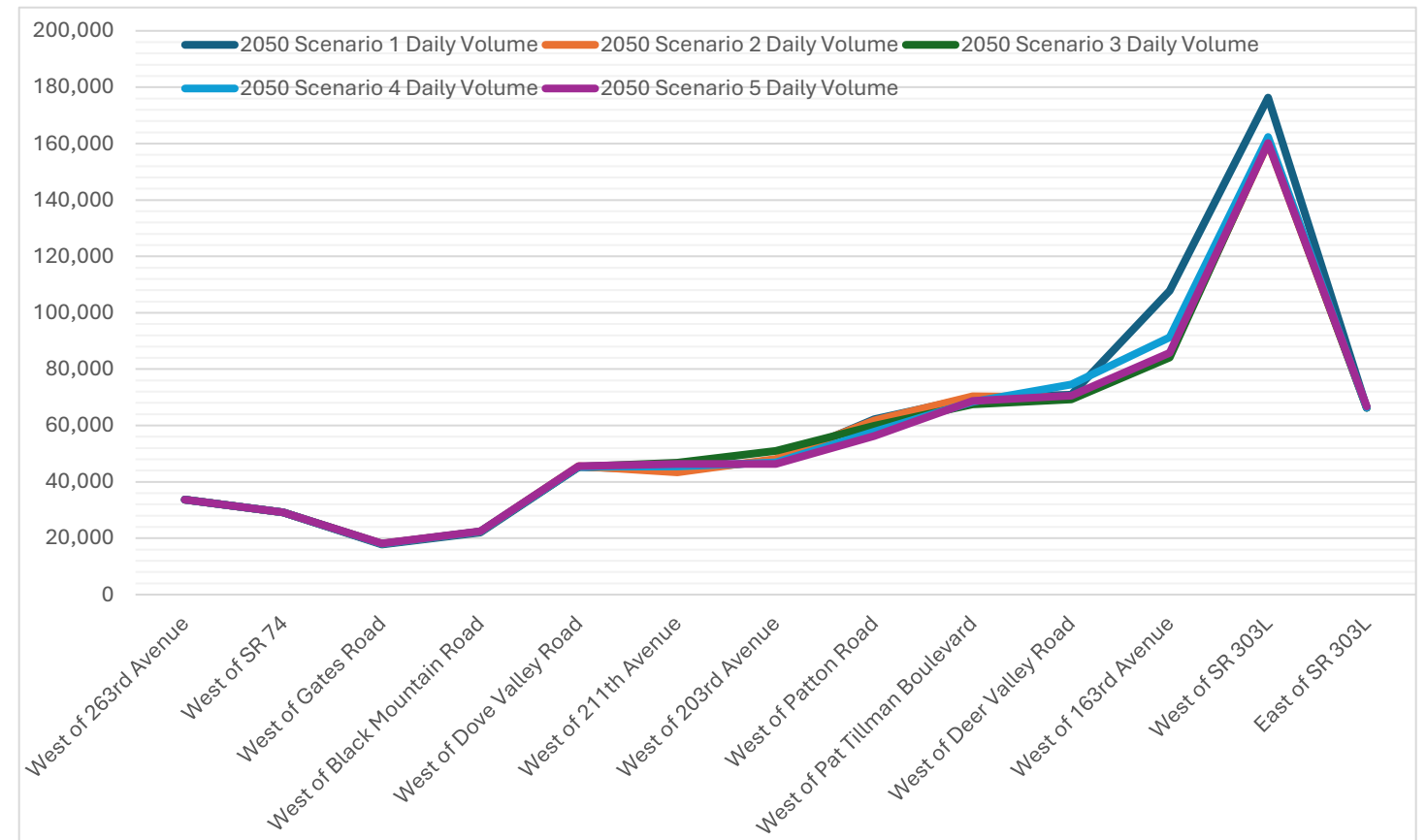


Figure 29: 2050 Daily Travel Demand Along US 60 Among the Five Alternative Improvement Scenarios

Finding #3: Traffic volumes on SR 303L change very little between the alternative scenarios

The 2050 daily traffic demand along SR 303L among the five different alternative improvement scenarios is shown in **Table 9** and **Figure 30**. SR 303L traffic is affected by the 155th Avenue interchange in Scenarios 2 through 5 with an increase of twelve to fourteen percent between US 60 and the 155th Avenue interchange. Other improvements considered within the study area had very little impact on SR 303L volumes. The lowest traffic demand along SR 303L is between Happy Valley Road and Jomax Road TIs with nearly 70,000 vehicles per day (vpd) and the highest traffic along SR 303L is south of Bell Road TI with over 180,000 vpd.

Table 9: 2050 Daily Traffic Demand Along SR 303L for the Five Alternate Scenarios

Location along SR 303L	2050 Scenario 1 Daily Volume	2050 Scenario 2 Daily Volume	2050 Scenario 3 Daily Volume	2050 Scenario 4 Daily Volume	2050 Scenario 5 Daily Volume
South of Bell Road	181,926	184,274	184,242	184,298	184,256
South of US 60	159,962	157,846	157,618	158,223	157,412
South of 155 th Avenue	101,636	113,088	113,862	115,214	113,709
South of Litchfield Road	101,636	99,214	99,926	101,893	104,178
South of El Mirage Road	102,870	100,565	101,277	101,892	104,950
South of Happy Valley Road	71,262	73,254	73,613	73,955	72,151
South of Jomax Road	69,748	73,199	72,915	72,920	71,652
South of Lone Mountain Parkway	88,346	88,783	88,758	88,489	87,134
North of Lone Mountain Parkway	103,162	102,428	105,428	105,221	104,600

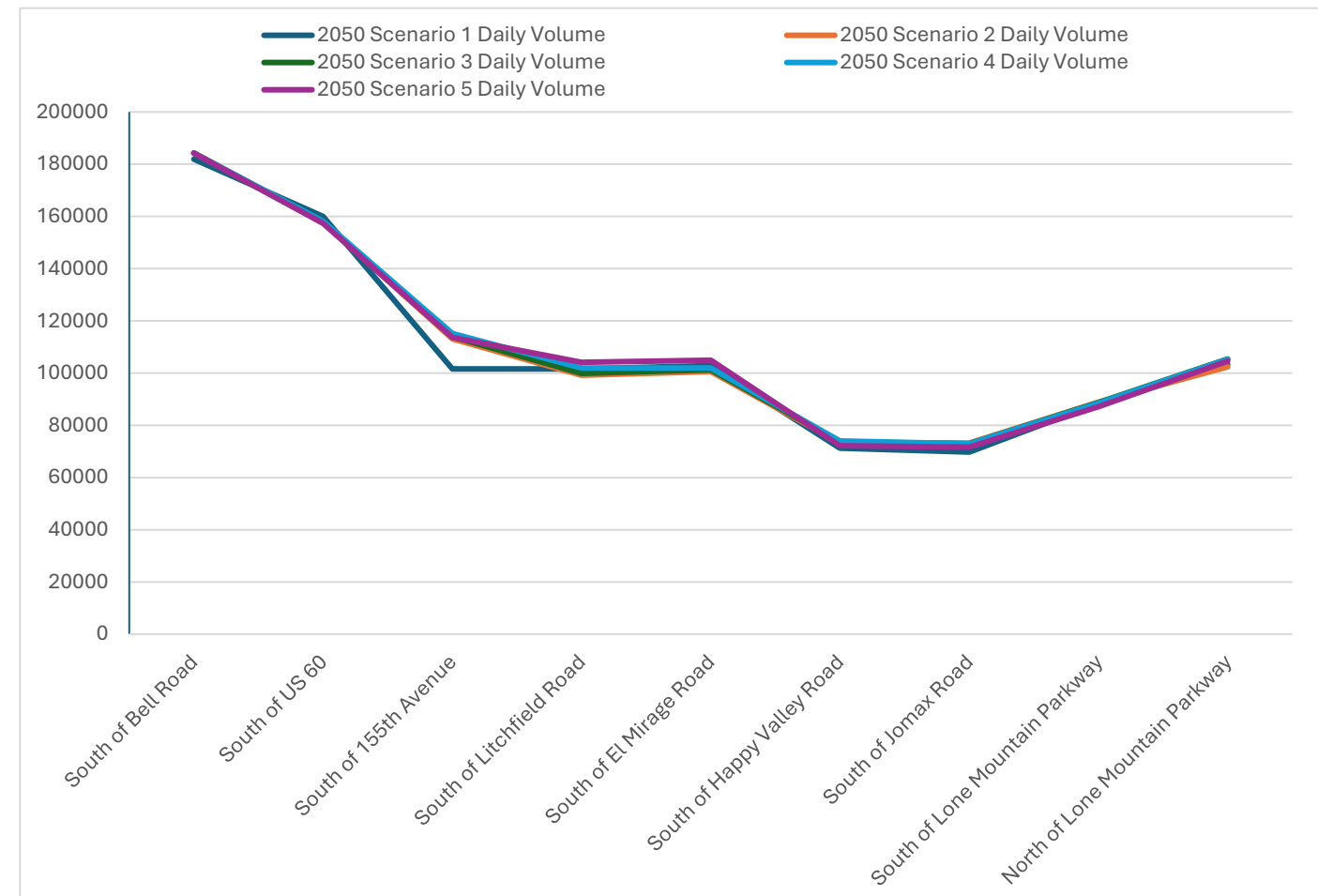


Figure 30: 2050 Daily Travel Demand Along SR 303L for the Five Alternate Scenarios

Finding #4: The US 60/163rd Avenue/SR 303L area requires major upgrades

Near 163rd Avenue and US 60, all the scenarios show traffic demand exceeding the roadway capacity with severely congested conditions. Even with roadway widening improvements, the traffic flow efficiency within this area would be poor due to the closely spaced intersections at 163rd Avenue/US 60 and the US 60/SR 303L ramps. Major upgrades will be needed to this area as the population and developments continue to sprout throughout the study area. The current configuration of this area has all at-grade roadways and ramps (ramp connections to US 60 are elevated at connection to SR 303L bridge). The railroad line on the east side of US 60 currently has an at-grade crossing at 163rd Avenue, contributing to delays and longer travel times for already frustrated travelers. This area is and will continue to be the most significant congestion problem in the study area until major upgrades are made to the US 60/SR 303L interchange and the US 60/163rd Avenue intersection.

Finding #5: A new SR 303L interchange is needed east of US 60 before the US 60/SR 303L interchange can be upgraded.

The conclusion that a new interchange is needed on SR 303L east of US 60 was made even before this corridor study began. The primary reason for this decision was that there needed to be an alternative way for people in the western portion of the study area to access or cross over SR 303L. Having an alternative path would ensure that if and when the US 60/SR 303L interchange were to be heavily congested or if portions of it were closed during emergencies, there would always be an alternative pathway for travelers. This new alternative would need to be open to traffic before construction of major upgrades to the US 60/SR 303L interchange could commence. Action was taken immediately to determine the best location for this new interchange and to prepare for design to begin as quickly as possible.

ADOT completed the SR303L Traffic Interchange Alternatives Project Assessment study in June of 2025, in which alternative locations along SR 303L northeast of US 60 were evaluated in an effort to find the best location and design concept for this new interchange. The study evaluated four design alternatives, including SR 303L interchanges at 155th, 151st and 147th avenues and Litchfield Road. These alternatives were presented for stakeholder input during a review of the Initial Project Assessment and shared with the public during a February 2025 public meeting hosted by MAG. Agencies providing input for the evaluation criteria and Evaluation Matrix include ADOT, MAG, City of Surprise, Arizona State Land Department (ASLD), Maricopa County Department of Transportation (MCDOT), and Flood Control District of Maricopa County FCDMC).

Upon completing a technical evaluation and incorporating public input, ADOT recommended moving forward with the 155th Avenue Traffic Interchange alternative. During the public comment period, the 155th Avenue TI location was ranked the highest by the public. The public ranking along with the results of the evaluation matrix identified the 155th Avenue TI as the preferred location for this project. Extensions of existing roads will be needed to provide access to this new interchange. Future arterial roadway connections include Happy Valley Road at 155th Avenue and Pinnacle Peak Road and McMicken Way connections at 155th Avenue.

Figure 31 and **Figure 32** illustrate the traffic bandwidth flow impact that the new 155th Avenue interchange would have on the US 60/SR 303L interchange. The figures include traffic flows using the US 60/SR 303L interchange and the traffic using the 155th Avenue/SR 303L interchange. The bandwidth plots visually describe the areas within the study area where traffic accesses the interchange (red link) and where this traffic would start and end (purple links). The width of each band displays the amount of traffic. In the illustrations, the 155th interchange generally attracts vehicles from the northeast side of US 60, while the US 60 interchange attracts vehicles on the west side of US 60 and further north in the study area

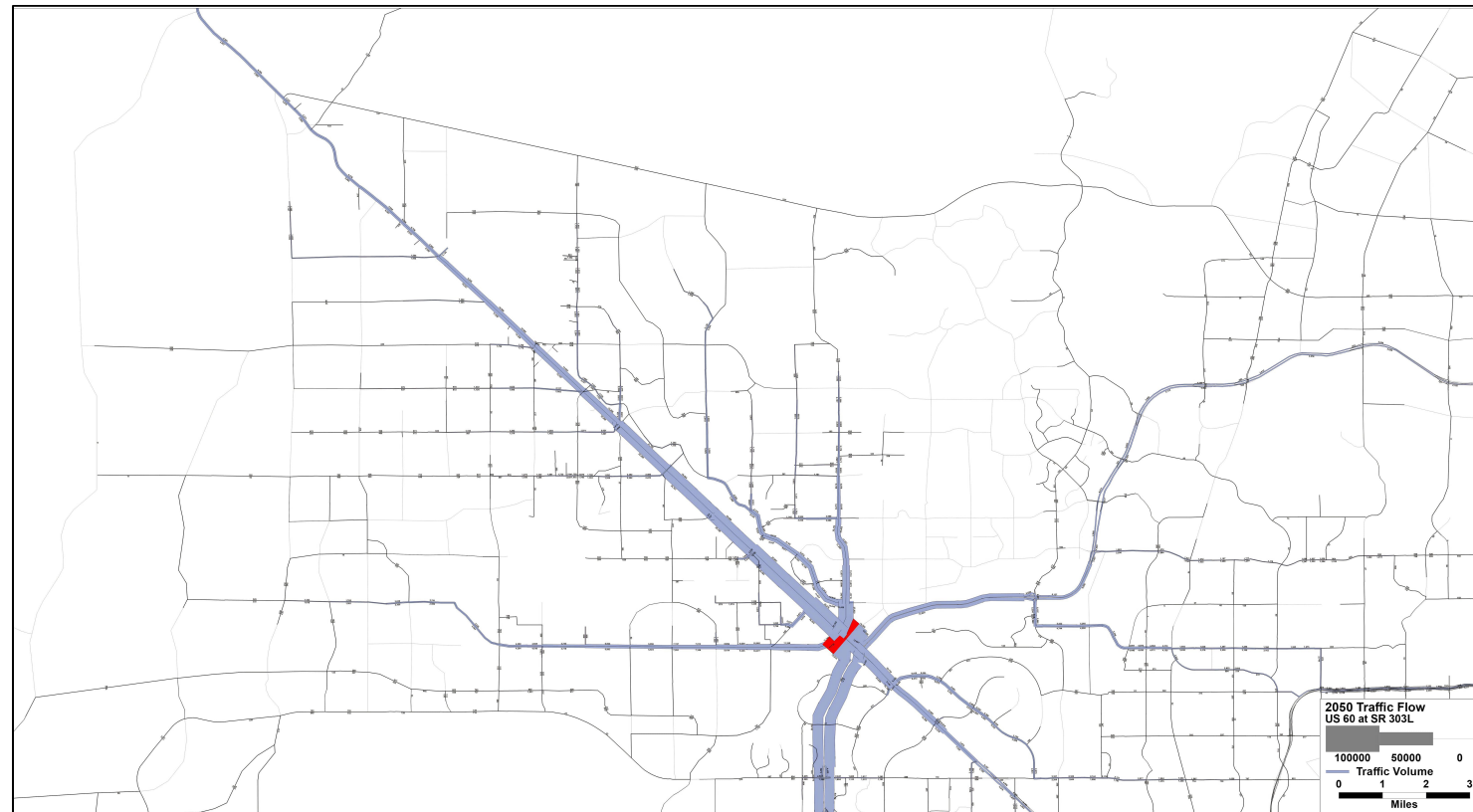


Figure 31: Travel Demand Flows Bandwidth at US 60 near the SR 303L TI

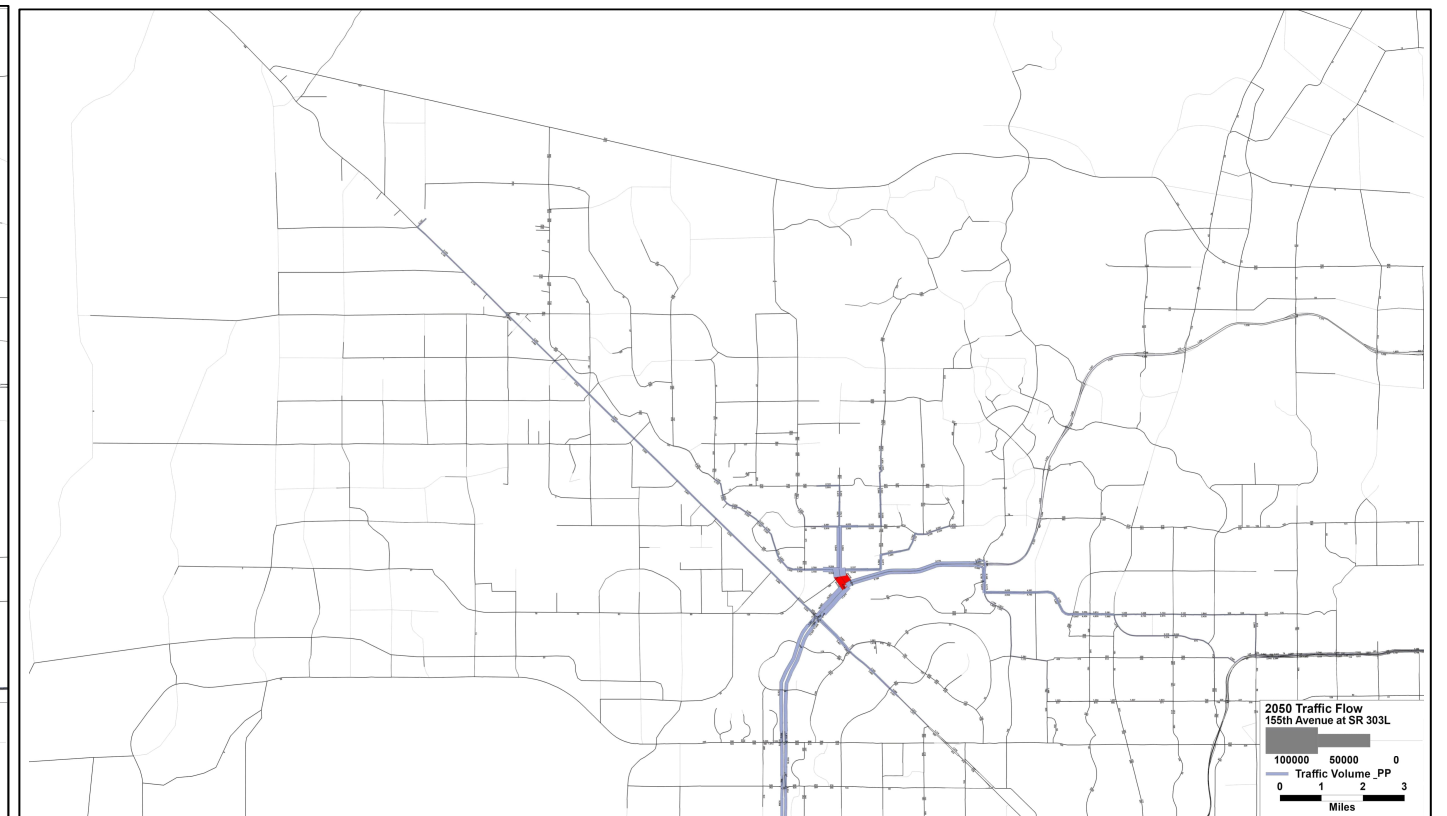


Figure 32: Travel Demand Flows Bandwidth at SR 303L and 155th Avenue

Finding #6: Lone Mountain Road is becoming an important east-west throughfare.

Lone Mountain Road carries approximately 14,000 vpd in existing conditions. This daily traffic will increase by 2050, with an estimated 50,000 vpd traveling along Lone Mountain Road as it approaches SR 303L. As shown in **Figure 33**, Lone Mountain Road is becoming an important access route to SR 303L and points east for a large portion of the study area.

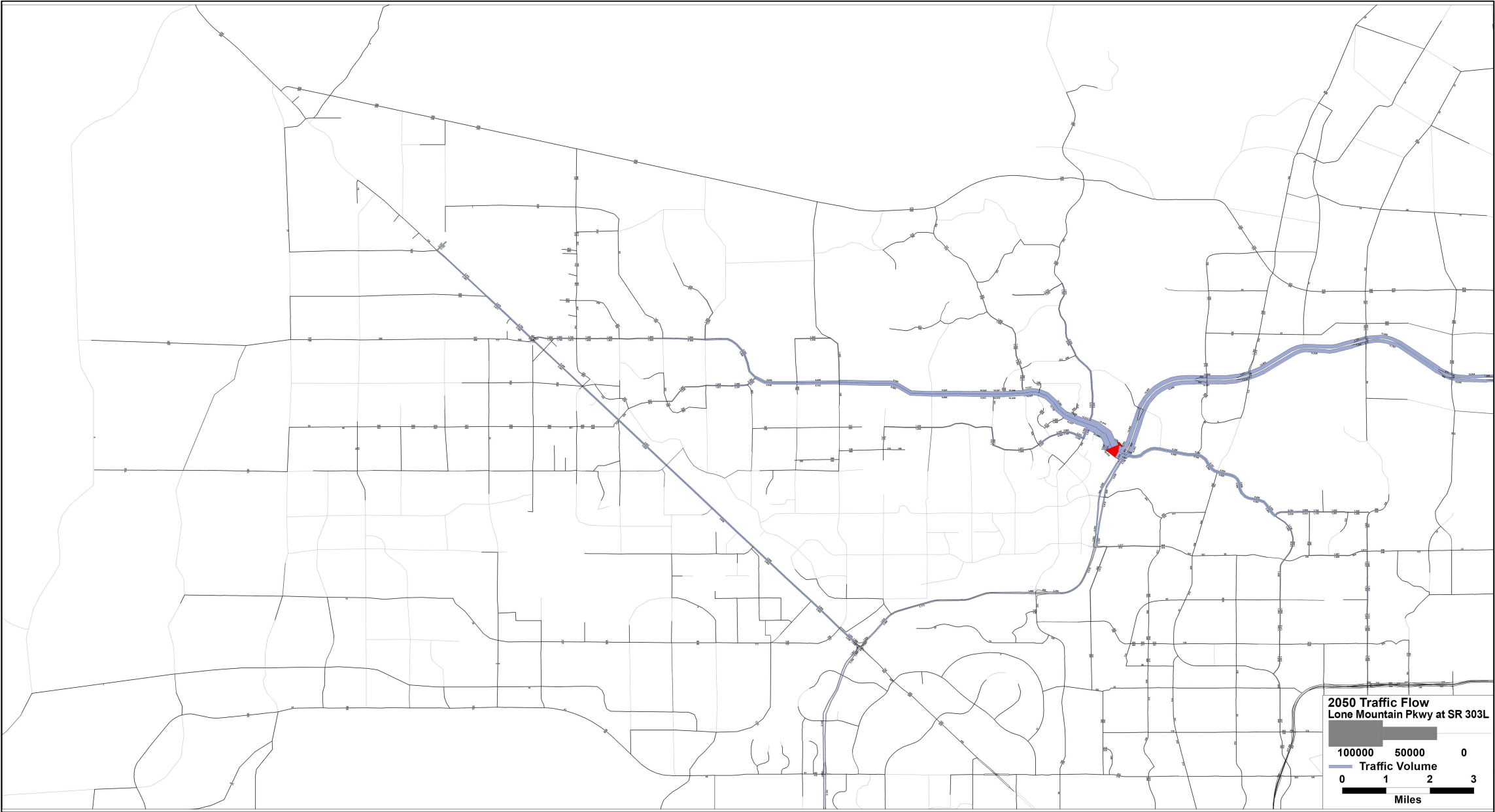


Figure 33: Travel Demand Flows Bandwidth at SR 303L and Lone Mountain Road

Finding #7: US 60 will need to be widened between 163rd Avenue and Carefree Road

Today, US 60 is a separated four-lane highway within the study area. In the 2050 General Plans Network, the US 60 roadway remains a 4-lane cross section since no improvements to US 60 have been planned by the local jurisdictions, MAG or ADOT. In reality, some portions of US 60 are in need of widening today, and more widening will be needed over time as the population of the study area continues to grow.

Finding #8: South of Patton Road, the land surrounding US 60 will become more urbanized, while the land surrounding US 60 north of Patton Road will maintain its rural nature to beyond the year 2050

The southern portion of the study area below Patton Road is where much of the future population, housing, employment and commercial developments are slated to significantly increase by 2050. This portion of the study area is already beginning to urbanize. It will continue to become more urbanized as time goes on. North of Patton Road, the traffic volume drops off significantly since not as many new developments and people will be added to this area compared to the southern portion. North of Patton Road, US 60 will serve the community members of Wittmann and Morristown as well as travelers continuing to SR 74 and US 60 towards Las Vegas. The rural nature will remain north of Patton Road, and minimal roadway expansions will be needed.

Finding #9: The growth of traffic will require new safety measures to be taken along US 60 through its entire length in the study area

With heavy growth in passenger vehicles and heavy trucks along all of US 60, it will become ever more difficult and unsafe for vehicles to enter onto or exit off of the highway from an unsignalized access point. By the year 2050, the growing volumes will reach the point where safety measures will be required at virtually every unsignalized access point.

Finding #10: Not all arterial streets in the General Plans Network will need to be at full capacity by 2050, and some may not be needed at all until after 2050.

During this analysis, an assessment was made for every roadway in the study area to determine the number of lanes that would be needed by the year 2050. **Figure 34** shows the results of this assessment. In this figure, all the roadways in the study area are color-coded. Those in green will not require the ultimate number of lanes as shown in the General Plans. Those in blue will need all of the lanes designated in the General Plans and will operate at acceptable levels of service. For those roadways shown in red, The capacity achieved with the ultimate number of lanes will be insufficient to meet the expected demand in 2050.

Many roadways of the 2050 General Plans Network demand to capacity analysis show blue links where the traffic demand does not exceed the roadway capacity and drivers have free flow conditions. The 2050 General Plans Network was created with the assumption that all of the General Plans Network roads would be built to their full capacity by 2050. This scenario is actually unreasonable, since most of the arterial street system is built in phases by private developers at the time they are building their developments. Since the full ultimate population and employment anticipated in the general plans would not be reached by 2050, it is unreasonable to assume all of the general plan streets would be built or that they would all be at their full ultimate capacity by 2050. Thus, many of the blue links with free flow conditions may not need to be built or have lane expansions by 2050.

Finding #11: Six-leg signalized intersections at US 60 and two arterial streets (such as the future intersection of US 60, 203rd Avenue and a future extended Bradley Road) will fail by the year 2050. All intersections with US 60 should have no more than four legs

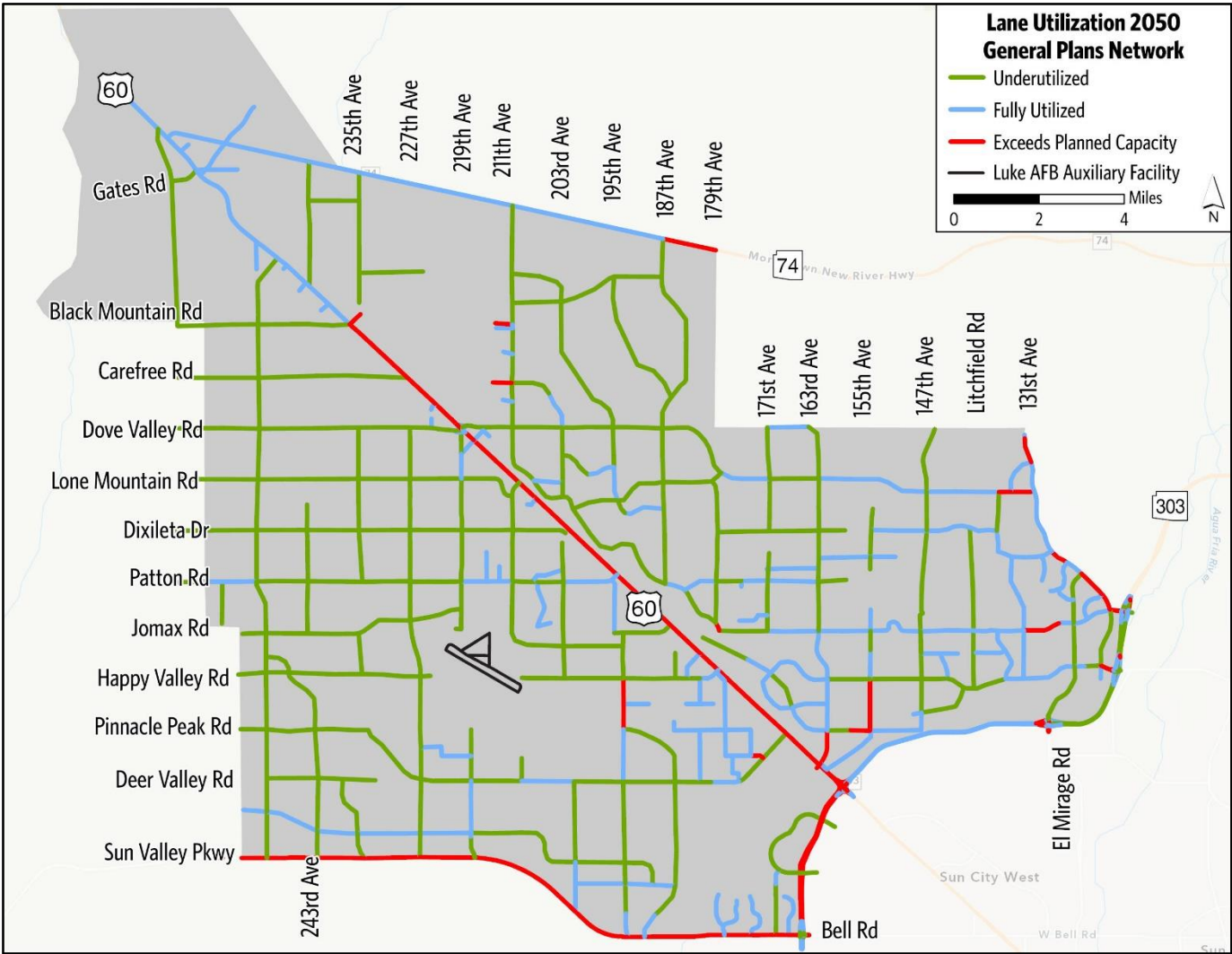


Figure 34: Lane Utilization of the 2050 General Plan Network

Six-leg intersections have been historically disapproved by the public and create complex roadway construction, operation, and maintenance issues throughout the valley. A six-legged intersection configuration was modeled for the offset 203rd Avenue roadways in a junction with US 60 and Bradley Road. This six-legged intersection has a large traffic demand that exceeds the intersection capacity in 2050, and the intersection fails operationally with average delays higher than 80 seconds per vehicle. This six-legged configuration was also modeled for the junction of 211th Avenue/Lone Mountain Road/US 60 with the same results of failing intersection LOS during peak hour conditions. All intersections with US 60 should have no more than four legs to not overwhelm intersection traffic to be over the capacity during peak hour conditions.

Finding #12: This corridor study is not an appropriate venue to make recommendations on whether streets accessing or crossing US 60 should be elevated over the railroad track.

As this study progressed, it became apparent that this study was not the most appropriate venue to discuss or determine when, or even if streets crossing the railroad track should be elevated to avoid safety and operational issues related to at-grade crossings. The purpose of this corridor study has been to look into the future and determine what roadway improvements will be needed and when. In this fiscally constrained environment, the focus is to identify improvements that meet the highway demands at minimal cost, while also allowing for future improvements if needed over time.

This approach is not intended to imply that grade separations will not be needed for streets crossing the track but is intended to illustrate the type of intersections along US 60 needed to handle traffic over time. Whether those traffic intersections are at-grade or elevated will need to be discussed in a separate venue

5 Key Recommendations

After considering the public comments from the online survey forms, comments from the partnering agencies, and the finding of the technical analyses, the study team has developed a series of key recommendations. These recommendations are intended to provide guidance to the local jurisdictions, ADOT, and MAG as the agencies seek to find cost-effective solutions to the concerns identified in earlier chapters and other problems found during the analysis.

These recommendations are not influenced by funding that may or may not be available. Some of them are already funded by local jurisdictions and their developers, regional programs such as Proposition 479 in Maricopa County, state appropriations, and federal sources. Other improvements have not been previously identified as needs and are not currently included in any funding programs.

Once this final report and its recommendations are accepted by the MAG Regional Council, immediate actions will commence to begin designing some of them, while others will become the subjects of future efforts to find funding opportunities for them.

5.1 Improve Access to SR 303L from US 60

The most important improvement needed in the study area is to improve access to SR 303L from US 60. The portion of US 60 between 155th Avenue and SR 303L is by far the most significant traffic problem in the study area today and will continue to be for a few more years. This problem is complex and will require a complex solution.

The recommendations for access to SR 303L from US 60 are already underway. They follow a three-step process:

- Step 1: Implement Small Improvements;
- Step 2: Build the 155th Avenue/SR 303L interchange; and
- Step 3: Build Major Upgrades.

Each step is expanded upon below.

Step 1: Implement Small Improvements

The implementation of small, near-term improvements is already underway. Efforts began in the Fall of 2024, and construction is anticipated to be completed by the Summer of 2026. **Figure 35** details the upgrades at US 60 and 163rd Avenue, US 60 and SR 303L SB Ramps, and US 60 and SR 303L NB Ramps. Illustrated in white includes the completed construction of additional capacity improvements and the existing turn lane configurations, while lanes identified in blue represent ongoing efforts. In addition to the improvements illustrated in this figure, a second signal controller will be provided at the SR 303L northbound ramps intersection that will give the intersection greater capacity. These small improvements primarily focus on constructing additional lanes to increase roadway capacity along US 60 and the SR 303L freeway.

These improvements are already offering some relief to the congestion in this area but, unfortunately, continuing population growth is quickly bringing more traffic to the area. Within a year or two, the peak

congestion levels experienced in 2024 will again be reached or even exceeded. Much more significant improvements are needed.

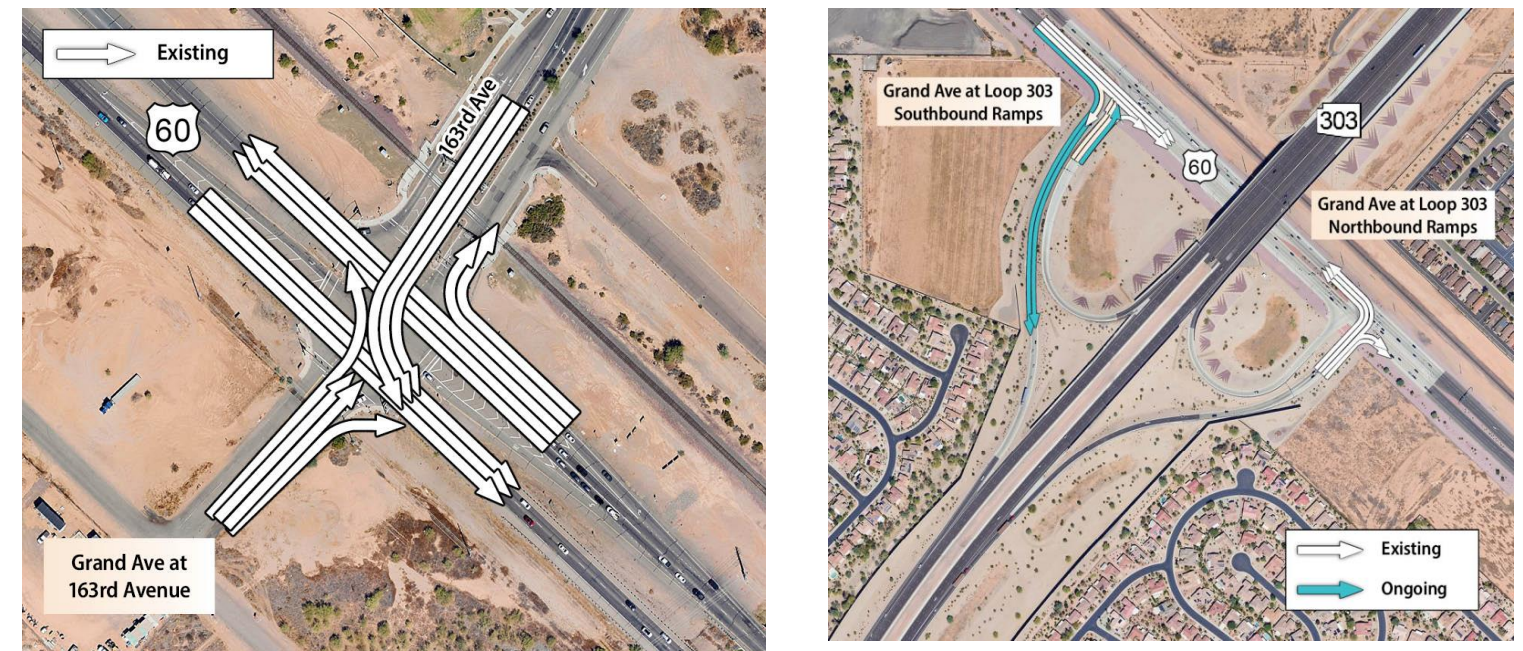


Figure 35: Step 1 Improvements at the US 60 and SR 303L Area

Step 2: Build the 155th Avenue/SR 303L interchange

The next step is to build the 155th Avenue/SR 303L interchange, located about a mile northeast of US 60 and SR 303L. A project assessment conducted by ADOT determined that the SR 303L interchange location connecting at 155th Avenue would provide the most relief to the congestion in this area. The severity of congestion and urgency to find effective solutions have led to the ADOT project assessment, and the interchange will begin design immediately after this final report and its recommendations are accepted by the MAG Regional Council.

The proposed interchange concept is illustrated in **Figure 36**. The design of the interchange differs from most interchange layouts in the MAG region. A modified diamond design is required because the interchange cannot extend southwards due to privately owned occupied land. Although the interchange can only flow north of SR 303L, further modifications are necessary due to a series of high-power electric transmission lines parallel to the freeway north of the proposed interchange. These transmission lines require the interchange ramps to be located at ground level with a signalized intersection close to the freeway. In this figure, the blue dotted arterial streets have already been funded in MAG's Arterial Life Cycle Program through the joint efforts of MAG and the City of Surprise. The purple dotted street is not yet funded. Design of the interchange is expected to begin in early 2026 and construction is planned for 2028. Additional arterial street connections to support the traffic flow to this region include the extension of Happy Valley Road to 155th Avenue, 155th Avenue extension to SR 303L, Pinnacle Peak Road extension from 163rd Avenue to 155th Avenue, and McMicken Way extension from 147th Avenue to 155th Avenue.

It is important to note that this figure is not an engineering drawing. It is a not-to-scale illustration showing what the interchange might look like in plan view. The locations of the ramps and roadways are imprecise. More detailed drawings will be prepared during the upcoming design stages for this interchange.

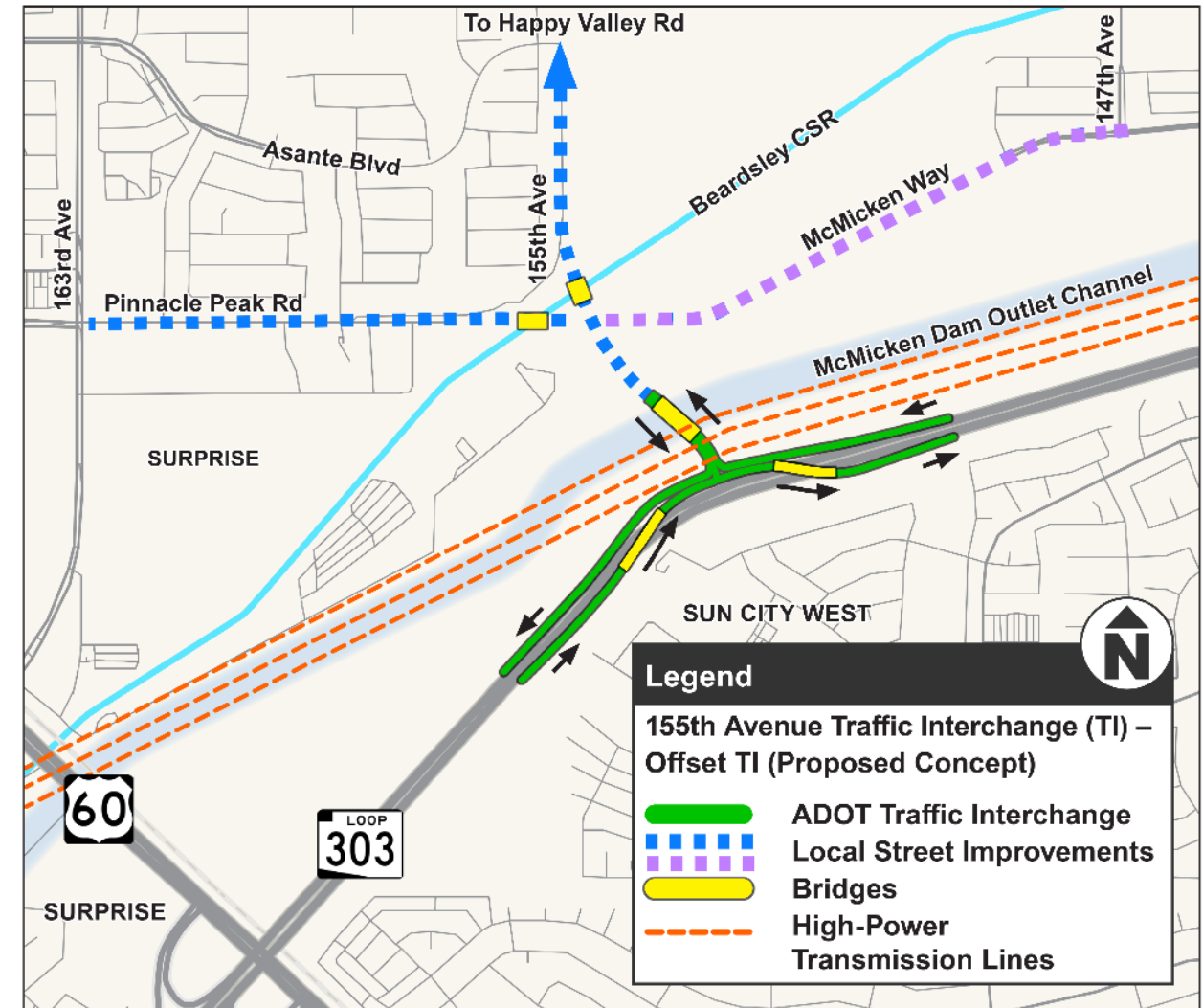


Figure 36: Step 2 Improvements with New 155th Avenue/SR 303L Traffic Interchange

Step 3: Build Major Upgrades

The improvements made in Step 1 will help to alleviate the congestion in the area. The improvements made in Step 2 will provide an alternative path that will enable travelers to bypass US 60 between 163rd Avenue and SR 303L. Only when these two steps are completed can major upgrades to the US 60/163rd Avenue intersection and the US 60/SR 303L interchange commence construction. **Figure 37** shows the locations of these upgrades. The green circle at the bottom is the US 60/SR 303L interchange. The green circle on the top is the US 60/163rd Avenue intersection.

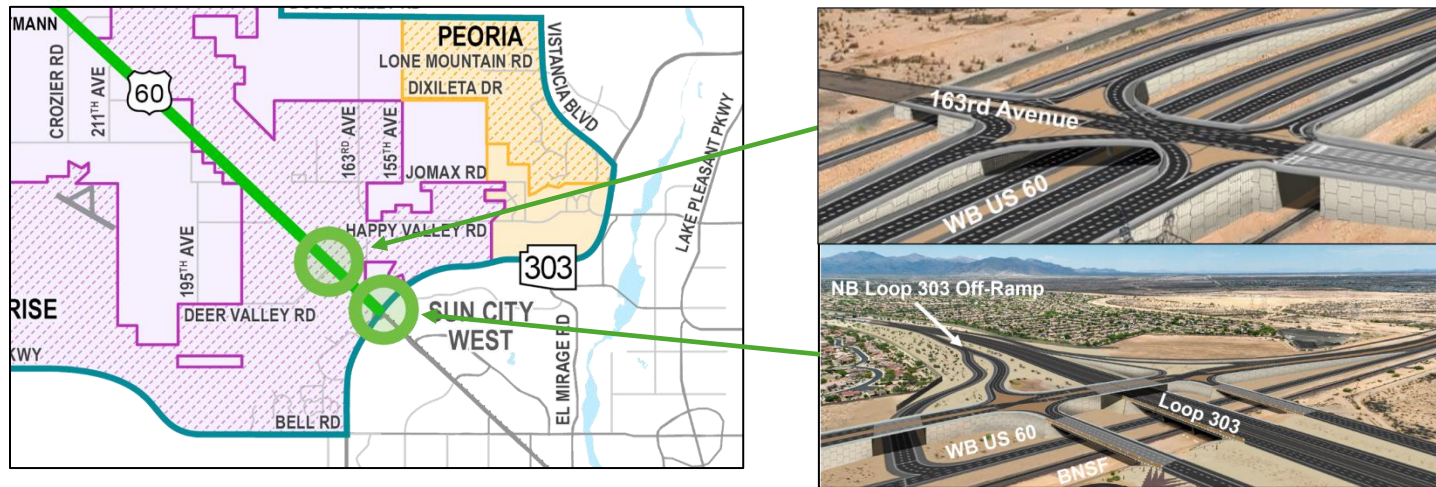


Figure 37: Step 3 Major Improvements at the US 60/SR 303L/163rd TIs

At the interchange at US 60 and SR 303L, the recommendation proposes an elevated interchange above the freeway to help separate traffic and accommodate heavy traffic movements both above and below the freeway. At the intersection of US 60 and 163rd Avenue, the recommendation proposed an elevated intersection. The proposed concepts at these two locations are shown in **Figure 38**.



Figure 38: Complex Interchange Concept at US 60/SR 303L/163rd Avenue

The recommended US 60/SR 303L interchange concept separates traffic destined to northbound 163rd Avenue from the traffic destined to westbound US 60. Traffic destined to northbound 163rd Avenue splits away from the northbound SR 303L off-ramp and from westbound US 60 to a separate roadway that passes under the freeway and continues all the way to free right-turn only lanes at 163rd Avenue. These movements are shown in blue in **Figure 39**. In a similar fashion, the recommended Grand Avenue/163rd Avenue intersection concept separates traffic destined to southbound SR 303L from traffic destined to eastbound Grand Avenue. These movements are shown in purple in the figure.

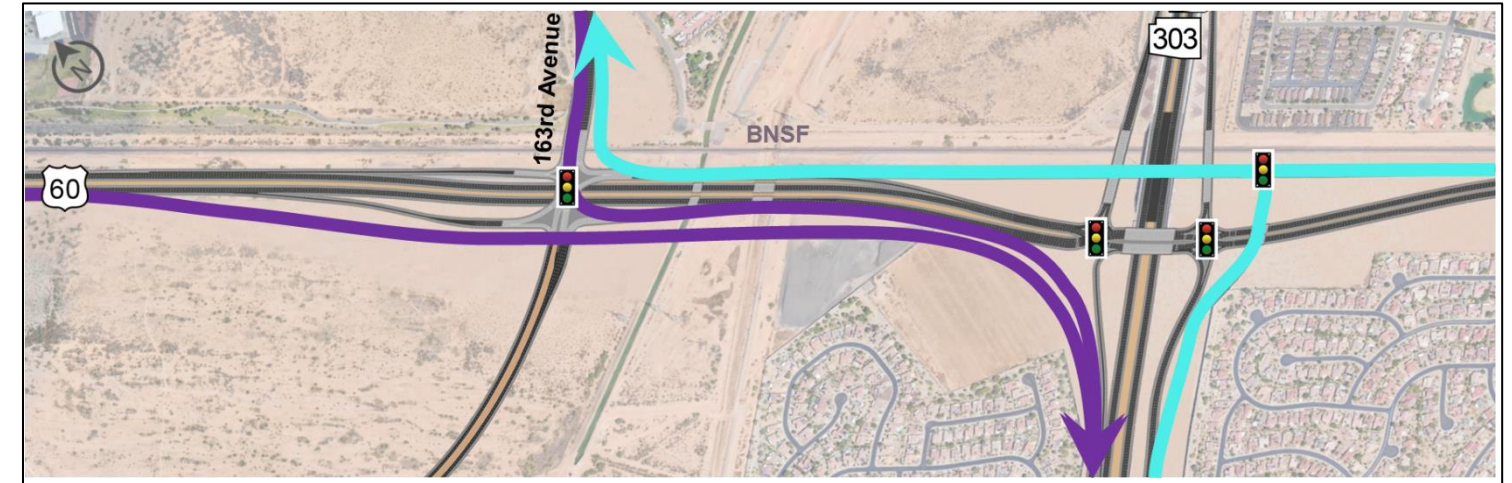


Figure 39: Traffic Flows to Southbound SR 303L and to Northbound 163rd Avenue

Both upgrades must be fully integrated to improve roadway capacity along US 60. This means they must be designed and implemented together to succeed in improving traffic flows and reducing travel times.

5.2 Improve Access to SR 303L from Other Study Area Arterial Streets

Demand for access to SR 303L is growing at all interchanges, not only at Grand Avenue. The analysis shows that arterial streets will need to be widened by the year 2050, as will some of the interchange ramps. Locations that will likely require improvements to ramps or the streets connecting to them include Bell Road, El Mirage Road (an extension of El Mirage road between SR 303L and Jomax Road), and Lone Mountain Road. These locations are shown in **Figure 40**.

This recommendation addresses the following areas of concern:

- Area of Concern 1: Grand Avenue and 163rd Avenue from Pat Tillman Boulevard to SR 303L
- Area of Concern 2: Sun Valley Parkway from Canyon Springs Boulevard to SR 303L
- Area of Concern 3: Access to SR 303L from Peoria

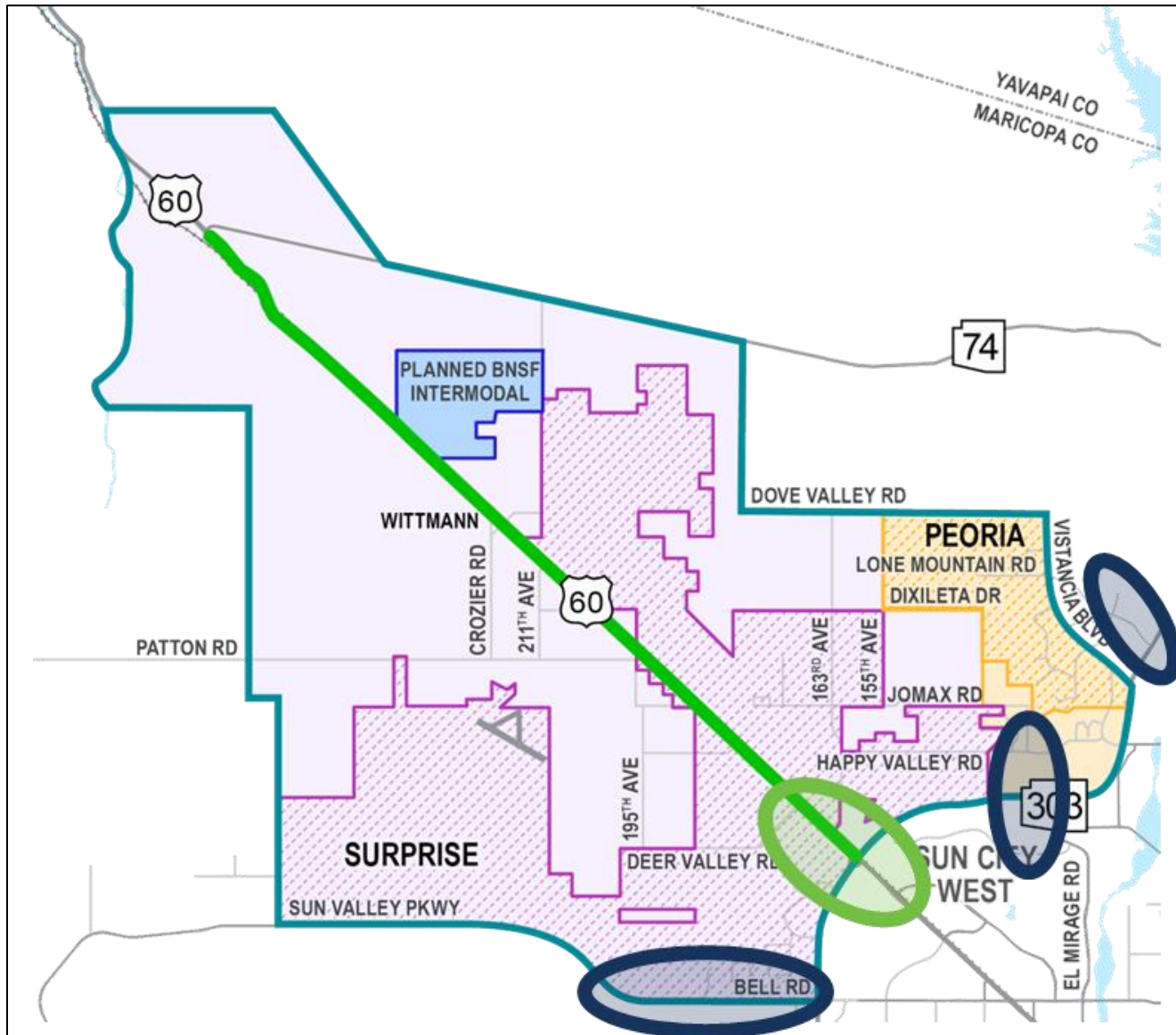


Figure 40: Future Expansion of Arterials and Traffic Interchanges

5.3 Access Management Plan for US 60 (Grand Avenue)

The next area of recommendations focuses on the development of an access management plan along US 60. Today, the primary need to improve roadway capacity is along US 60 and SR 303L.

This Access Management Plan will have the following elements:

- A plan for arterial streets that will connect to and continue across Grand Avenue;
- A plan for the urbanization of the areas surrounding Grand Avenue in the southern portion of the study area; and
- A plan for the implementation of safety measures at access points on Grand Avenue in the northern portion of the study area.

5.3.1 A plan for arterial streets that will connect to and continue across Grand Avenue

Today, there are only two signalized intersections where arterial streets connect with and continue across Grand Avenue north of the Grand Avenue/SR 303L interchange. One is at 163rd Avenue, and the other is at Center Street in Wittmann. The distance between 163rd Avenue and Center Street is more than nine miles. There is one other signalized intersection at Deer Valley Road, but that intersection only connects to the southwest. Across this nine-mile span, the only way for a vehicle to go across Grand Avenue is to first turn onto Grand Avenue and then turn again at a different location that has a connection from the other side of the highway. Often, it also requires a U-turn on Grand Avenue in order to make the trip. Measuring from 163rd Avenue, the closest location where a vehicle entering Grand Avenue from 163rd Avenue heading north would be able to exit Grand Avenue and turn to the north or east is seven miles away at 203rd Avenue.

As the study area continues to grow in population, finding a way to cross the highway will become increasingly important. As traffic volumes continue to grow, the number of full-access intersections needs to grow with it. If this is not achieved, the few intersections that will exist will become overloaded by the demand. To avoid this, it will be important to preserve access points that have the potential to provide full access intersections with Grand Avenue. A review of the General Plans Network resulted in identifying eight full-access points, as shown in **Figure 41**. These points that have the potential for full access, including turning in all directions and passing across Grand Avenue include:

- 163rd Avenue;
- Jomax Road/Pat Tillman Drive;
- Patton Road;
- 203rd Avenue/Dixileta Road;
- 211th Avenue/Lone Mountain Road;
- Dove Valley Road;
- Carefree Road; and
- Gates Road.

It is quite often the case that land developers propose master plans that exclude streets that have been adopted into a jurisdiction's General Plan, which often results in traffic problems as vehicles from other parts of the local jurisdiction lose access to important roadways. The Access Management Plan for Grand Avenue in the

study area should make it clear that all of these recommended full-access points be reserved and protected from removal or reductions in the movements allowed.

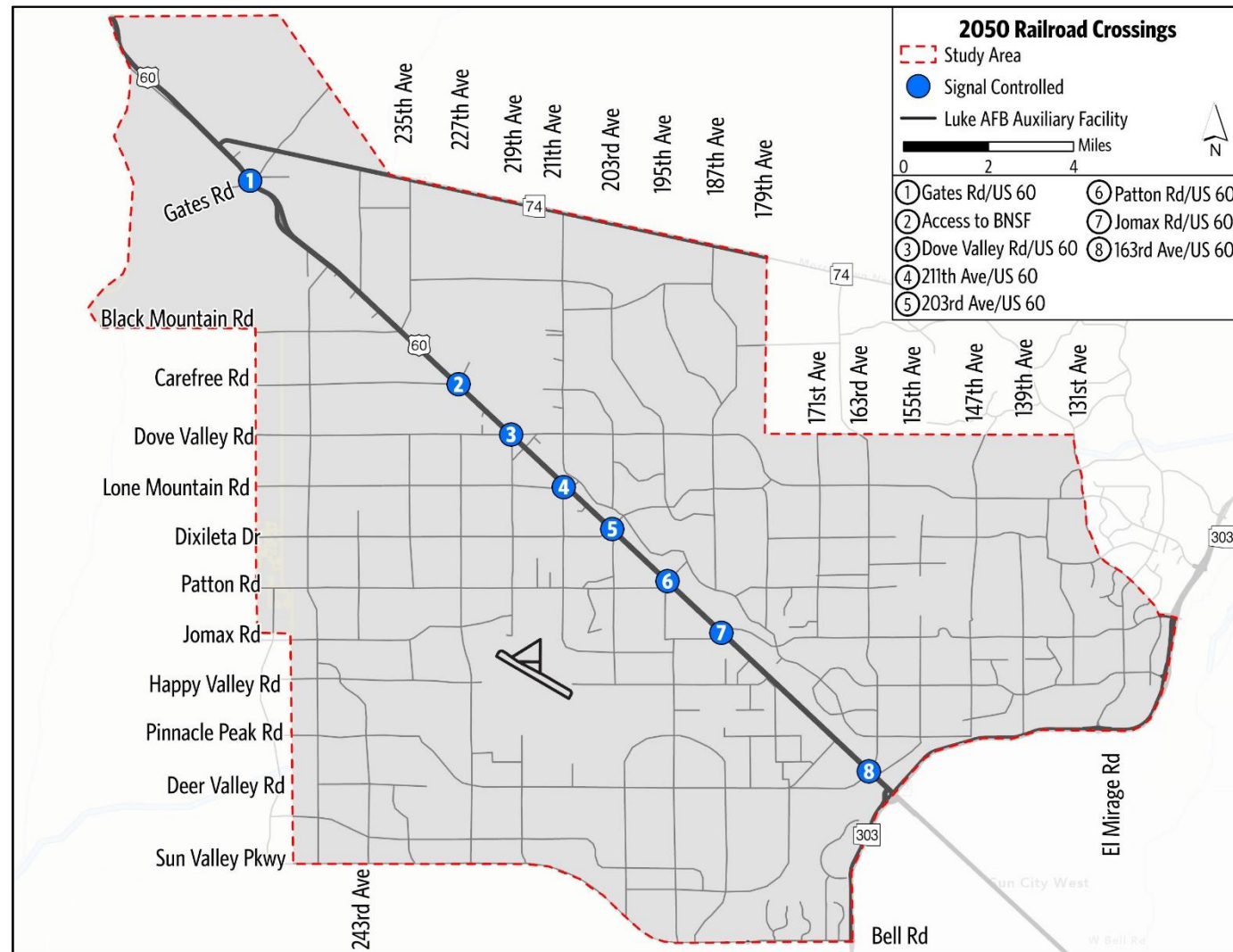


Figure 41: Full Access Railroad Crossings along US 60

This list of future full-access points does not include the existing signalized intersection of Grand Avenue and Center Street in Wittmann. The reason for this is that the town of Wittmann is expected to remain rural in nature beyond the year 2050. If Center Street were to be one of the full-access points with Grand Avenue, traffic from outside Wittmann would be drawn to use the Center Street intersection to access Grand Avenue. To avoid that, and maintain the rural nature of the town, this recommendation includes elevating Center Street so that it crosses over Grand Avenue and the railroad track without stopping. The existing traffic signal is recommended to be moved to the intersection of Dove Valley Road when it is realigned on the south side and extended on the north side to form a new intersection with Grand Avenue.

This recommendation addresses the following areas of concern:

- Area of Concern 4: 203rd Avenue/Bradley Road/Future Lone Mountain Road Connection(s) to Grand Avenue
- Area of Concern 5: Jomax Road Access to Pat Tillman Boulevard Continuing to Grand Avenue
- Area of Concern 7: Dove Valley Road/Center Street/Crozier Road in Wittmann
- Area of Concern 9: Railroad Crossings

5.3.2. A plan for the urbanization of the areas surrounding Grand Avenue in the southern portion of the study area

One of the key findings of this study was that the southern portion of Grand Avenue, from SR 303L to Patton Road, will be urbanizing rapidly between now and the year 2050. In Chapter three of this report, the density of the expected urbanization was shown in a series of population dot maps in which the population density was shown by the number of dots in various areas of the study area. **Figure 42** shows the 2050 population density dot map and compares the density of the southern portion of the study area to the density of an area south of SR 303L. The box in the population dot map shows an area surrounding Grand Avenue south of SR 303L roughly between Reems Road and Bell Road. The area north of SR 303L will have an equal or greater population density in 2050 than the area south of SR 303L. The image on the left side of the figure shows a plan view of that area. It can be inferred that, by the year 2050, the development north of SR 303L will be as dense as or more dense than the image on the left side of the figure.

With this future level of density in the southern portion of the study area, it can be expected that the character of the surrounding area and of Grand Avenue will be similar to the image in this figure. Grand Avenue, then, can be expected to have several traffic signals and lower speed limits than exist on Grand Avenue in the study area today.

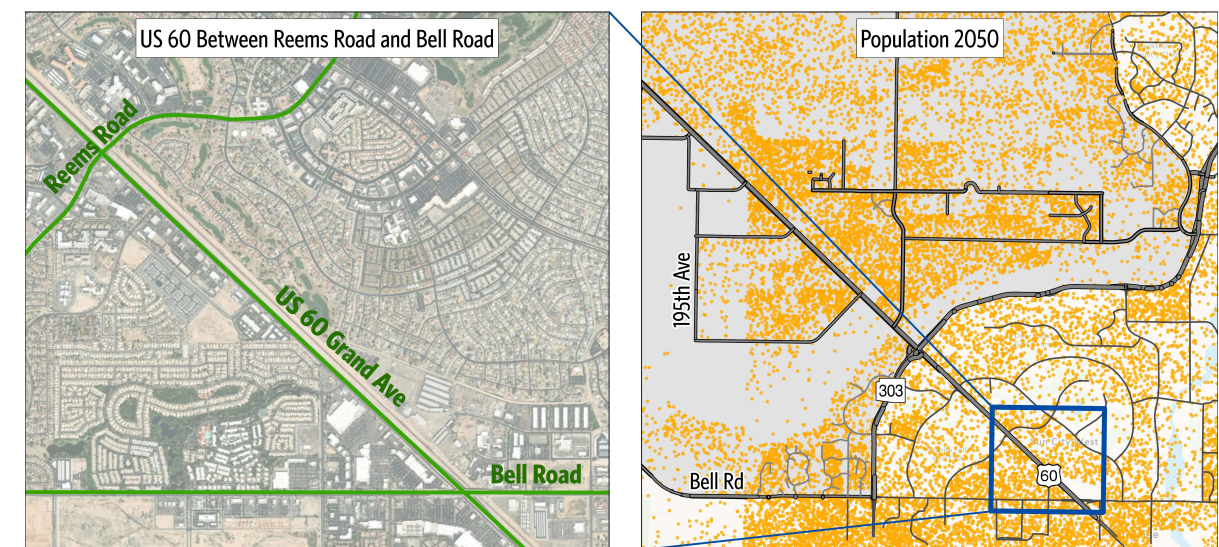


Figure 42: Future Population Density Expected within the Southern Portion of the Study Area

It can be expected that the land developers who develop the southern portion of the study area will prepare master plans of their developments and will plan all the arterial streets and intersections within and adjacent to their projects. And, in general they will also build the streets and intersections.

This recommendation addresses the following areas of concerns:

- Area of Concern 1: Grand Avenue and 163rd Avenue from Pat Tillman Boulevard to SR 303L
- Area of Concern 2: Sun Valley Parkway from Canyon Springs Boulevard to SR 303L
- Area of Concern 5: Jomax Road Access to Pat Tillman Boulevard Continuing to Grand Avenue
- Area of Concern 6: Access to Sun Valley Parkway from Happy Valley Road
- Area of Concern 8: Arterial Network with Probable Gaps

5.3.3 A plan for the implementation of safety measures at access points on Grand Avenue in the northern portion of the study area

As growth continues along US 60, the northern portion of the study area will face safety issues due to the existing rural environment and high speed limits. **Figure 43** illustrates the existing access points along US 60. Red dots are unsignalized access points and green dots are signalized access points. The growing amount of traffic along the corridor will require safety improvements before 2050. The overall focus of the access management plan is to make US 60 safer over time. Measures to more safely accommodate the growing number of vehicles and heavy trucks along the corridor are necessary to reduce risk of high speed crashes and traffic congestion during peak periods.

Measures to improve safety may include adding acceleration and deceleration lanes, creating new signalized intersections, or limiting the number of points with direct access to US 60 and provision of frontage roads to create access opportunities for more locations.

This recommendation addresses the following areas of concerns:

- Area of Concern 7: Dove Valley Road/Center Street/Crozier Road in Wittmann
- Area of Concern 8: Arterial Network with Probable Gaps
- Area of Concern 9: Railroad Crossings
- Area of Concern 10: Access Management

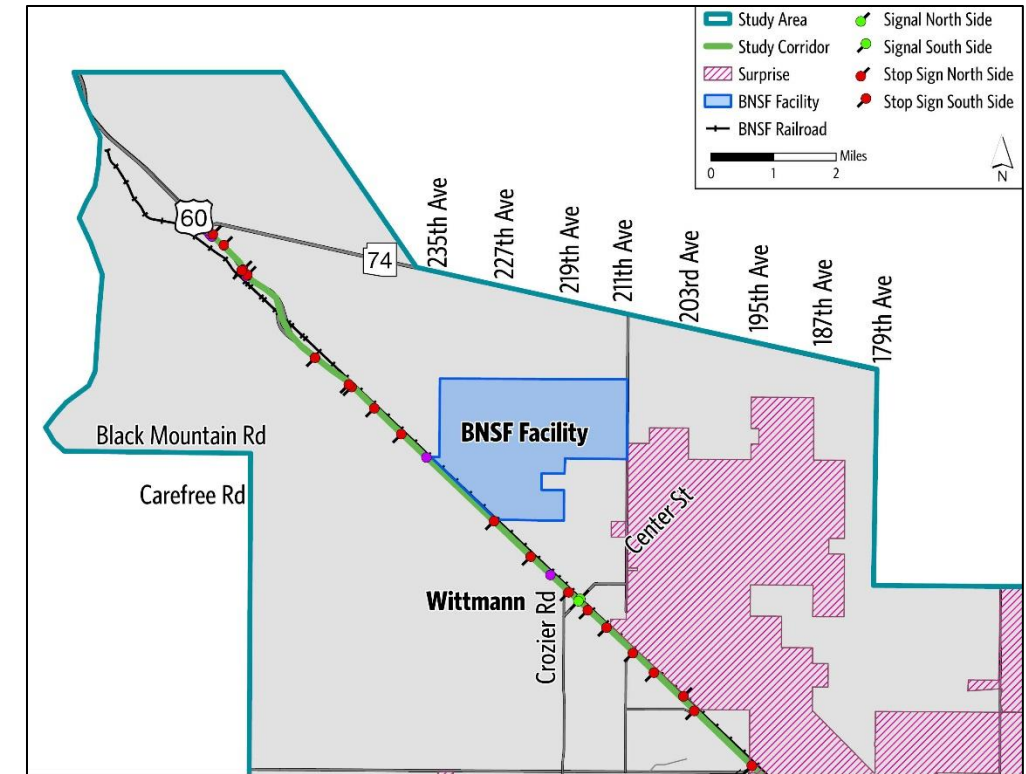


Figure 43: Existing US 60 Corridor Northern Access Points

5.3.4 Enforcement of the Access Management Plan

In a previous study of this area, the recommendation was made for ADOT to prepare and enforce the Access Management Plan for US 60. Further research into this possibility revealed that ADOT has never been given enforcement authority for access management plans before. The authority for ADOT to enforce these plans is contingent on the Arizona State Transportation Board to approve the plan and give ADOT the enforcement authority. There is no precedent for the State Transportation Board granting ADOT this type of enforcement authority, and it is therefore unlikely that such authority would be provided for the US 60 corridor.

Given the low likelihood of ADOT being able to enforce any access management plan, a more effective enforcement mechanism would come from local jurisdictions. Cities and counties have the authority to adopt and implement their own master plans, including the classification, size, and alignment of arterial streets and the way those streets connect to state and federal highways. Through this authority, local jurisdictions can adopt and enforce the Access Management Plan for the segment of US 60/Grand Avenue between SR 303L and SR 74. Most of the US 60 corridor lies within the city limits or planning area of the City of Surprise, with a smaller portion located in unincorporated Maricopa County.

The recommendation in this study is that the City of Surprise, MCDOT, and ADOT work together to prepare an Access Management Plan for US 60 between SR 303L and SR 74, and that the City of Surprise and Maricopa County enforce the plan in their reviews of proposed land development projects and in finding ways to ensure safe access to US 60 for existing developments on a continuing basis. The Access Management Plan should include:

- Identification of locations where the opportunities for full-access street connections with US 60 are to be preserved;
- Procedures for working with the development community in the planning of new projects within the southern portion of the study area to ensure compatibility with the goals and objectives of the Access Management Plan and the applicable Master Plan;
- A plan to minimize the number of signalized intersections along the northern portion of US 60 while ensuring safe access to US 60 for all existing and future developments over time in the northern portion of the study area; and
- A mechanism for identifying gaps in the evolving road network within the study area that cannot be built by developers in the time needed, and a procedure to explore ways to find funding to design and implement them.

This recommendation addresses the following areas of concerns:

- Area of Concern 8: Arterial Network with Probable Gaps
- Area of Concern 9: Railroad Crossings
- Area of Concern 10: Access Management

6 Interim Year Analyses

The objective of this study has been to identify transportation improvements needed in the study area and to determine when they would be needed. The previous chapters of this report have documented the analysis conducted during this study and have provided a series of key recommendations to be followed going forward. This chapter provides recommendations on when the transportation improvements would be needed. It provides information for the years 2030, 2040, and 2050.

Caution should be used in interpreting the precise findings in this chapter. The results provided in this chapter are not intended as recommendations. They are being provided to inform the local jurisdictions, their developers, ADOT, MAG, and others of what improvements may be needed by the interim years analyzed. The rate at which new developments are built and occupied may be different than what has been assumed in this study, and the interactions between geographic areas as development occurs may not be the same as what has been assumed in this study.

The information in this chapter is illustrative of what the future needs will be over time. It is intended to inform the organizations named above on what the current growth projections for the area may require in order to avoid congested conditions by the future years analyzed. While the precise locations requiring improvements may be different than shown in this report, having this illustrative information in advance will be helpful to these organizations in establishing improvement plans for the coming years.

6.1 Methodology

The process used in determining when various transportation improvements would be needed was performed in sequential order, beginning with the year 2030 and ending with the year 2050. One of the findings described in an earlier chapter was that not all of the General Plans Network streets will be needed at their full capacity by the year 2050. The 2050 analysis in this chapter describes the extent to which General Plan streets will be needed by that time, including their general alignments, number of lanes, and connections to Grand Avenue and other streets.

In each future year, the MAG TDM was run and total volumes on the transportation network were recorded. To avoid having each interim year model run taking one full week or more of computing time to complete, the process was expedited by conducting an external adjustment to the MAG model trip tables for the future years. For the years 2030 and 2040, the future year trip tables were developed through a series of interpolations in which each cell of a trip table representing trips between a study area TAZ and any other TAZ was interpolated between the year 2023 and the year 2050 based on the percentage of growth in population and employment occurring in the study area TAZ(s) by the future year.

For example, in the 2030 evaluation, for each cell in a trip table representing vehicle trips between two zones (call them TAZ A and TAZ B), a ratio would be calculated equal to the growth of population plus employment in the study area TAZs between 2023 and 2030 divided by the growth of population and employment between 2023 and 2050. That percentage would then be used to interpolate the number of vehicle trips uniquely in each particular cell of each trip table. The rows and columns for each of the study area TAZ cells were then inserted into the MAG Conformity Model trip tables for 2030. This resulted in a reasonably reliable planning-level trip

table to use in the procedure that saved about six days of processing time for each model run, which needed to be performed sequentially.

Once the trips tables for the year 2030 were developed, they were assigned to the 2023 transportation network. In areas where new developments were to be occupied in 2030, the adjacent streets were added to the network and, in some cases, extended to the closest street already in the network.

This procedure was repeated for the year 2040. For 2050, the trip tables developed earlier in the project for the 2050 General Plans Network were used without interpolation.

Once the model runs were completed, the study team determined the number of lanes that would be needed in each interim year scenario, revised the network to include these improvements, and then re-ran the model assignment. As in previous analyses, the number of lanes needed is determined by the maximum demand/capacity ratio of each link. The number of lanes needed is the minimum number of lanes that achieves a demand/capacity ratio of 0.9 or lower. If the number of lanes needed is less than the existing number of lanes, the existing number of lanes is maintained.

The results for each interim year are summarized below. More detailed documentation on the process and its results are provided in **Appendix D**.

6.2 Interim Year 2030 Analysis

The analysis of year 2030 interim conditions yielded both clear insights and unexpected findings. On one hand, the analysis clearly indicated the need for some streets to be widened and new streets to be built. But on the other hand, some of these improvements were identified in locations that were not anticipated. In several cases, the apparent traffic demand exceeded even the ultimate planned capacity of the road.

Further analysis revealed the likely causes of these unexpected results. The two figures below illustrate these likely causes. The base maps used in these figures were selected for their effectiveness in illustrating these causes. They do not represent the anticipated year 2030 road network, nor should they infer any policy recommendations.

Figure 44 illustrates a series of black circles and ovals that outline the areas of denser development anticipated by 2030. These areas are characterized by internal streets that provide local circulation, including numerous smaller streets not shown in the map. At the same time, they include large expanses of undeveloped land with no street infrastructure. As a result, these development areas rely heavily on a limited number of existing roads, sometimes only a single roadway, for broader access to the study area and Northwest Valley. For example, the development area in the southwest corner of the study area is almost entirely dependent on Sun Valley Parkway/Bell Road for access. Similarly, the two central development areas rely on US 60 (Grand Avenue), while the two eastern areas depend on Vistancia Boulevard and El Mirage Road. Notably, there are no roads connecting these dense development areas to one another.

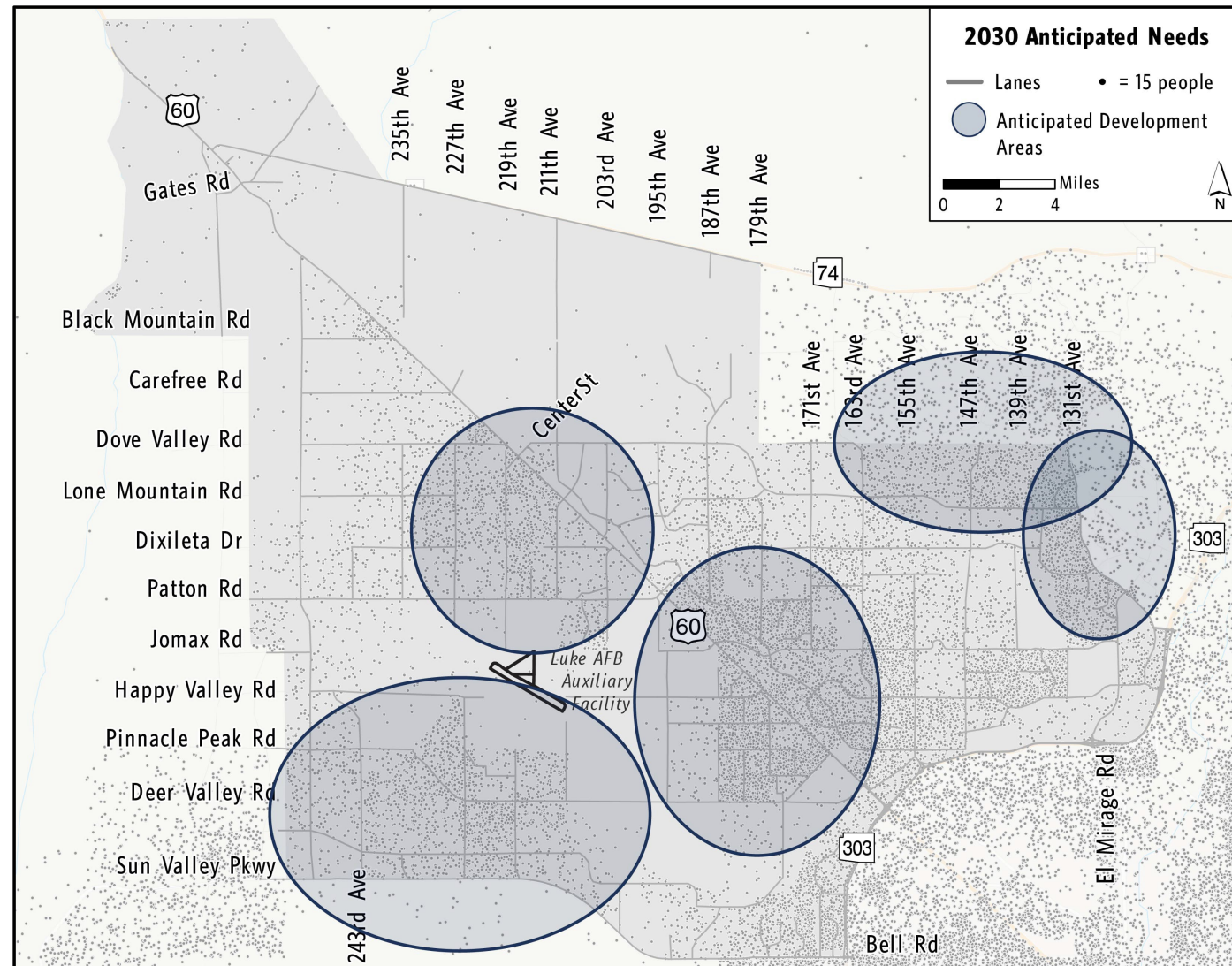


Figure 44: Denser Development Areas Anticipated by 2030

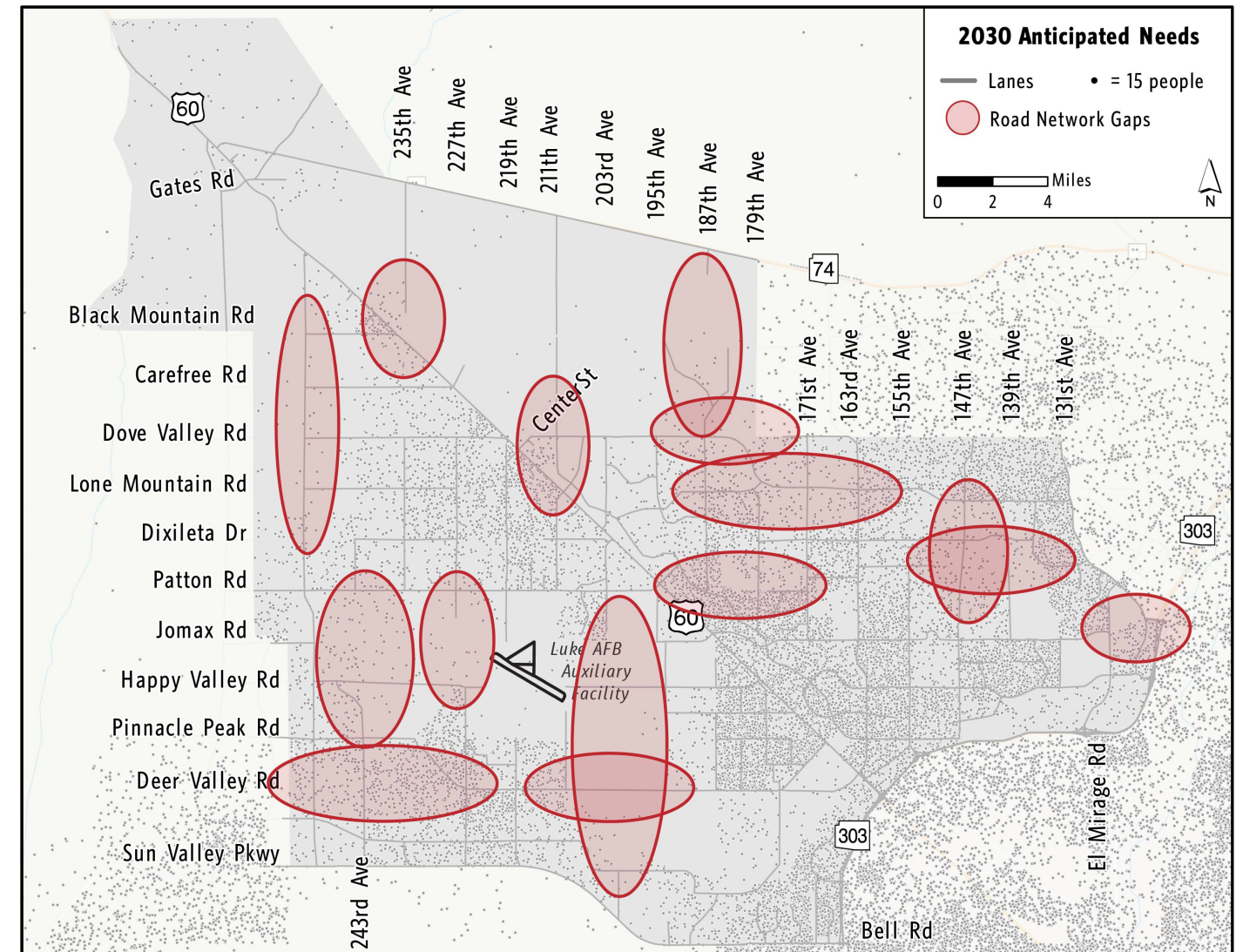


Figure 45: Gaps in the Road Network

Figure 45 examines the road network in the study area. The figure includes a series of red ovals that highlight gaps in the road network. Currently, only three roadways extend across the entire study area from one end to the other: US 60 (Grand Avenue), SR 74, and Sun Valley Parkway/Bell Road. 163rd Avenue runs from US 60 to Dove Valley Road but does not reach SR 74. In fact, within the study area, there are only two routes connecting US 60 and SR 74. The first is Castle Hot Springs Road in Morristown, where the distance between the two highways is less than one mile. The second is a route via Center Street to Dove Valley Road and then to 211th Avenue, which terminates at SR 74. East of 211th Avenue, no other roadway connects the densely developed portions of the study area to SR 74. While a potential connection exists at 187th Avenue, this roadway is currently a gated dirt road north of Dove Valley Road and is not open to the public. The lack of alternative connections to SR 74 will likely result in a disproportionate volume of traffic using 211th Avenue, even for trips headed east toward I-17. This could lead to congestion on SR 74 east of 211th Avenue as early as 2030.

To the southwest of US 60 (Grand Avenue), there is not a single road today that connects US 60 (Grand Avenue) to Sun Valley Parkway/Bell Road, and such a connection may not yet be available in 2030. There is no road that would allow trips generated in the southwest corner of the study area to access Patton Road to the north or US 60 (Grand Avenue) to the east.

In the east-west direction, Lone Mountain Road is emerging as an important connector to SR 303L east of the study area. However, in the 2030 figure, Lone Mountain does not continue west of 163rd Avenue. Dove Valley Road appears to be a strong candidate to provide east-west connectivity, but it has multiple small gaps that negate this opportunity. In the eastern portion of the study area, Jomax Road does not yet connect all the way to SR 303L, and Happy Valley is precluded from ever connecting to US 60. Further west, Patton Road connects the entire western side of the study area to US 60, but it is currently unpaved and does not cross US 60. Patton Road is not planned to cross US 60 or to be a continuous street to the east. There are no other east-west roads that will continue from US 60 to the western study area boundary by 2030.

To the credit of the cities of Surprise and Peoria and the development in their jurisdictions, plans are underway to fill in several of the gaps illustrated in these figures. But even with these efforts, the underlying need for more road connections throughout the study area is unlikely to be met by development alone. Keeping pace with rapid population growth in the near- to mid-term while maintaining an efficient roadway system will remain a significant challenge.

The 2030 analysis included an assumption of the number of signalized and unsignalized access points along US 60. These locations included:

1. SR 303L NB ramps
2. SR 303L SB ramps
3. 163rd Avenue
4. Deer Valley Road
5. Happy Valley Road
6. Jomax Road
7. Patton Road
8. 203rd Avenue
9. 211th Avenue
10. Center Street
11. Dove Valley Road
12. Carefree Road
13. Black Mountain Road
14. Gates Road
15. SR 74

Given the travel demand anticipated in 2030 if the development assumptions of this analysis are achieved, the intersections may need to have the capacity shown in **Figure 46**. Six of the fifteen intersections could still be stop-controlled, while the other nine intersections would need to be signalized. The two intersections in the US 60/SR 303L interchange will not be improved beyond the work being completed now. The intersection at SR 74

will be changed from a T-intersection to a full 4-leg intersection by adding a new connection south of US 60 and eliminating access directly to US 60 west of the intersection to improve safety. In this scenario, the 203rd Avenue intersection is changed from two offset T-intersections to a single full 4-leg intersection by realigning 203rd Avenue north and south of US 60 to meet together at a single point on US 60. The Jomax Road intersection will be a full 4-leg intersection connecting to Pat Tillman Road north of US 60. The intersections at the SR 303L interchange, Deer Valley Road, Happy Valley Road, Patton Road, 211th Avenue, Dove Valley Road, and Black Mountain Road will be T-intersections in this scenario.

The 2030 analysis also included an assessment of what the SR 303L interchanges would look like in this scenario. These locations included:

16. Bell Road
17. 155th Avenue
18. El Mirage Road
19. Happy Valley Road
20. Jomax Road
21. Lone Mountain Road

Aside from the interim improvements that have just been completed at this location, no additional changes are anticipated to the intersections at the US 60/SR 303L interchange. The Bell Road interchange has changed the northbound right turn lane to a free turn. The 155th Avenue interchange is assumed to be open to traffic. The El Mirage Road interchange has the added north side connection, with El Mirage Road extended to Jomax Road. At the Jomax Road interchange, Jomax Road is assumed to be extended to the west to El Mirage Road, and to the east to an extension of 113th Avenue. The Lone Mountain Road interchange is upgraded to its ultimate capacity and is extended east to an extension of 113th Avenue. **Figure 46** and **Figure 47** illustrate the network intersection configurations in the study in 2030.

2030 Interim Network Intersection Configurations along US 60

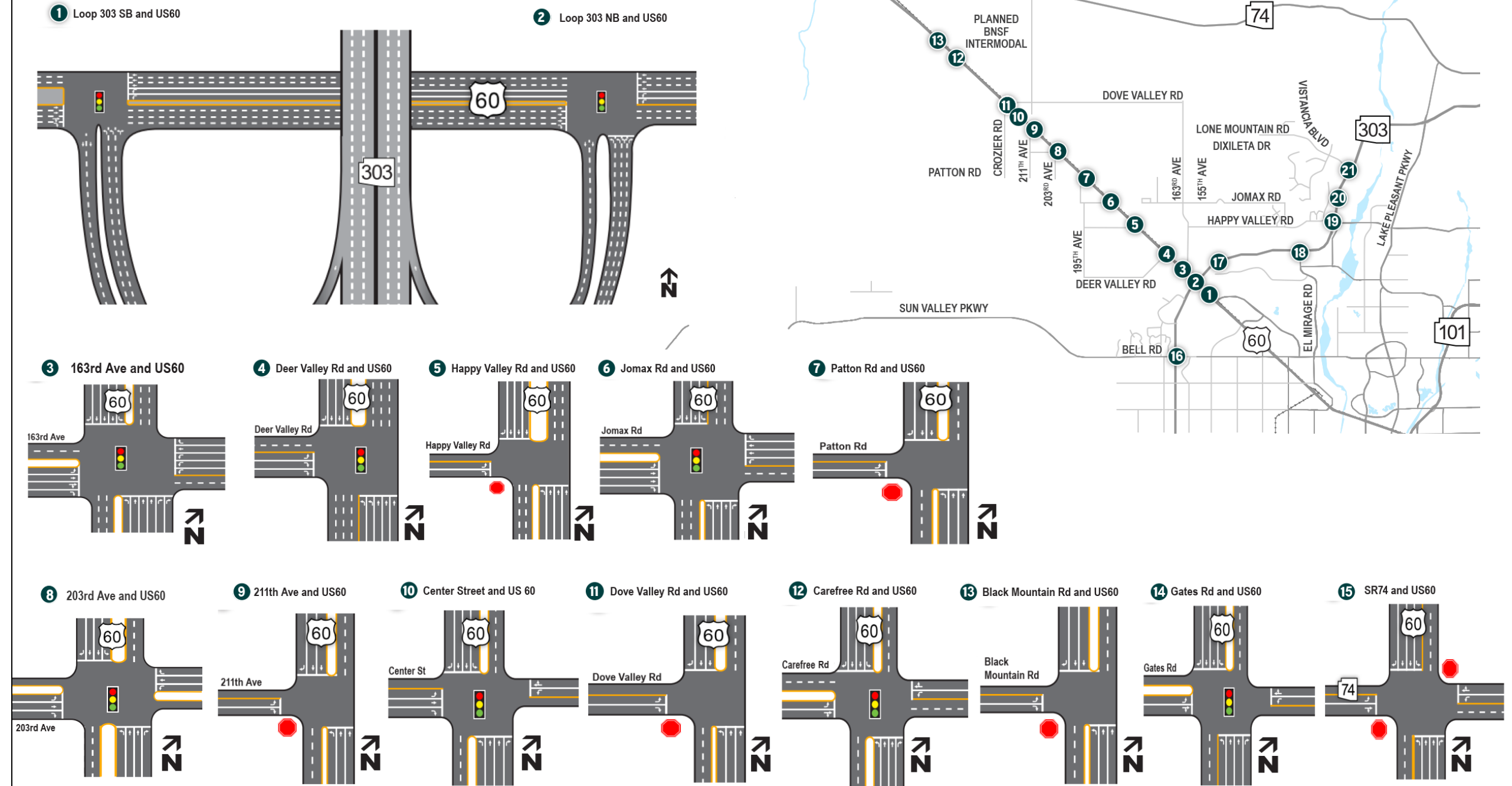


Figure 46: 2030 Intersection Configurations along Grand Avenue and SR 303L

2030 Interim Network Intersection Configurations along SR 303L

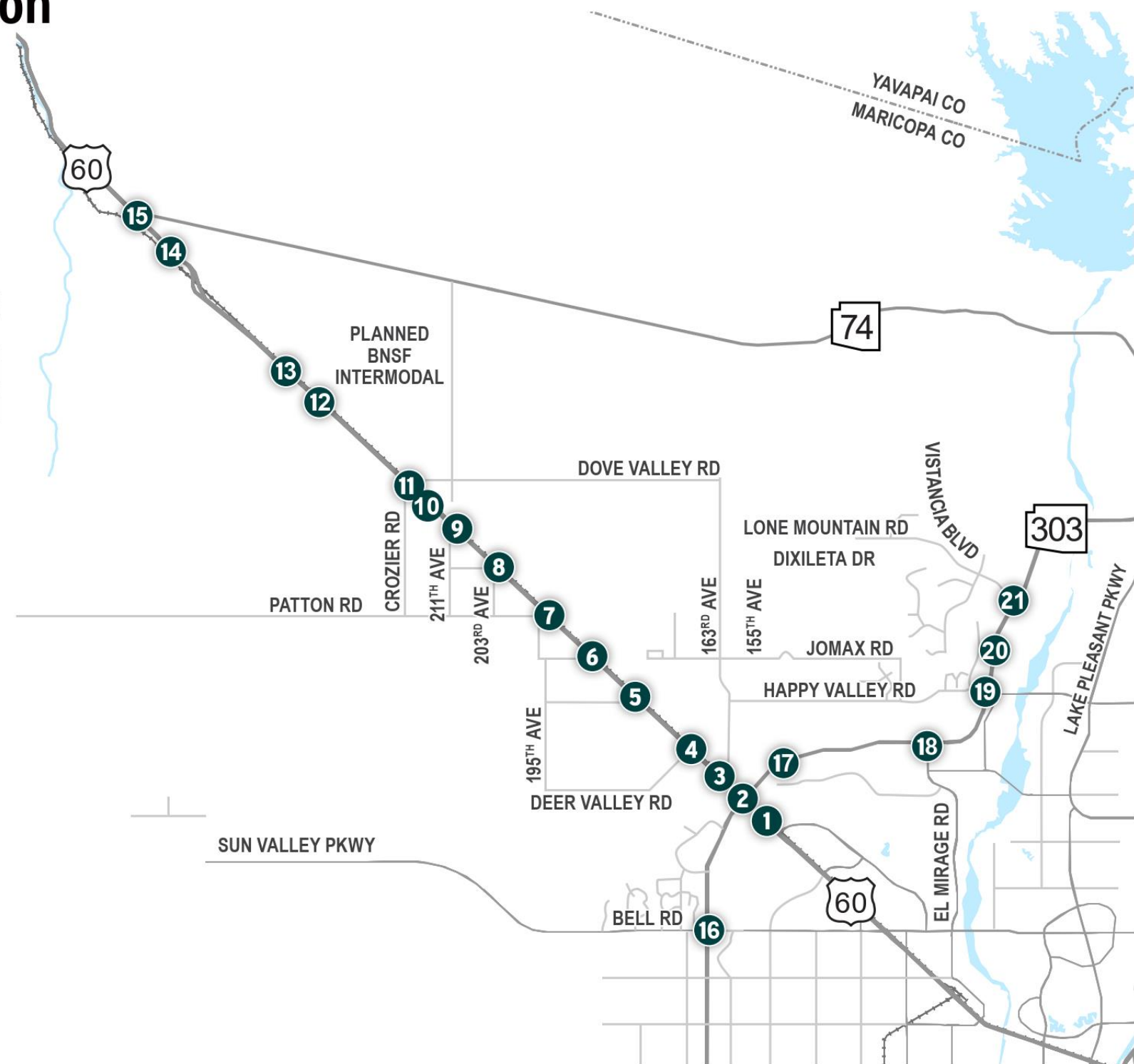
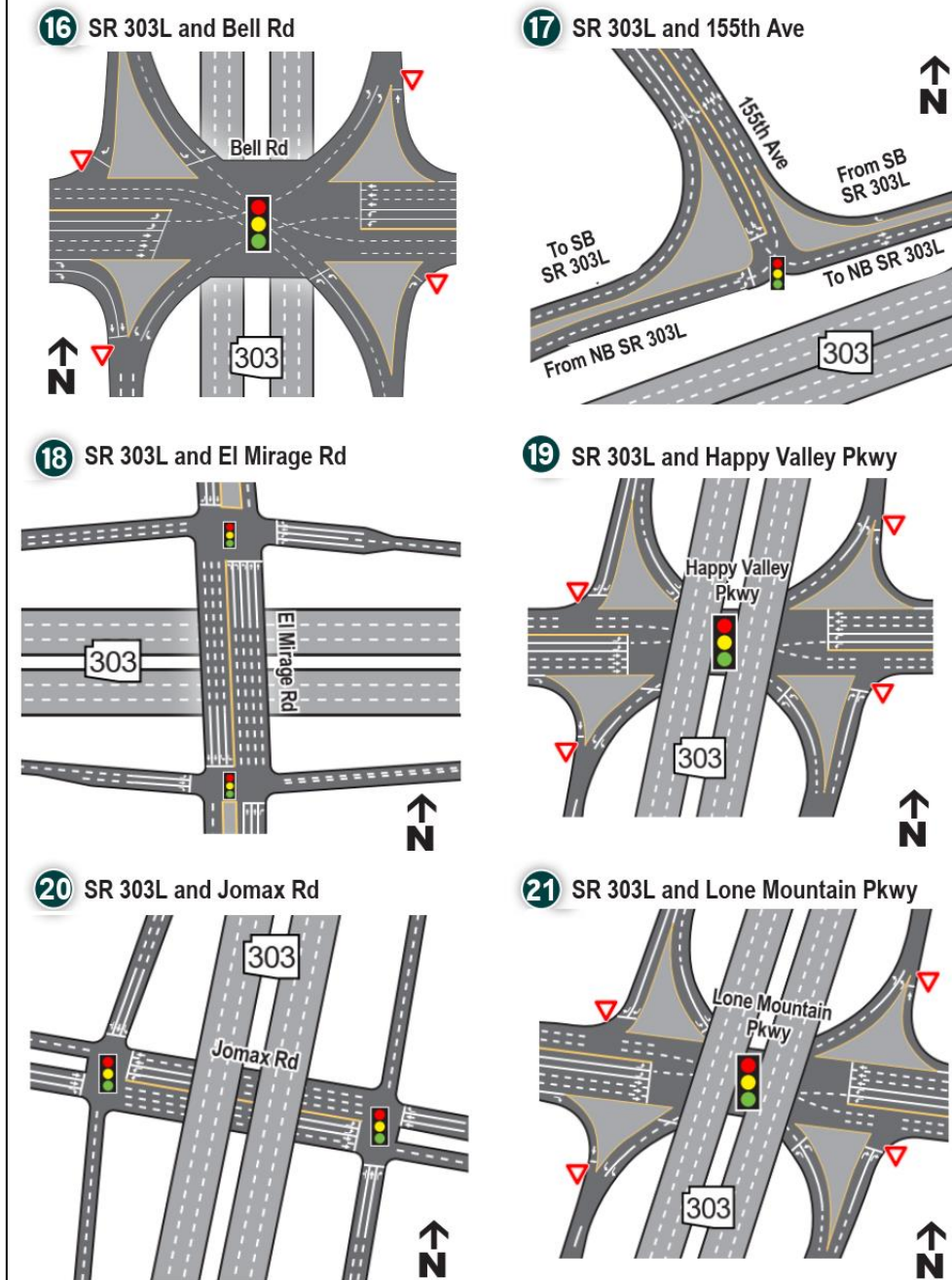


Figure 47: 2030 Intersection Configurations along Grand Avenue and SR 303L (continued)

6.3 Interim Year 2040 Analysis

In the decade between 2030 and 2040, the population in the study area will continue to grow at nearly the same growth rate of 11,000 people per year as is occurring between 2023 and 2030. So this decade will add about 110,000 more people to the study area population. The speed at which the roadway network will need to expand will not slow down during this decade.

The **Figure 48** and **Figure 49** illustrate what the development pattern and road network might look like in 2040. As was the case for 2030 figures, the base maps used in these figures were selected for their effectiveness in illustration only. They do not represent the anticipated year 2040 road network, nor should they be inferred to imply any policy recommendations.

Figure 48 illustrates how the development pattern will change by 2040. Certainly, the overall population density is higher by 2040, and new pockets of higher-density development have sprung up. And, in general, there are more roads connecting these higher density pockets of development together. There is a new north-south road at approximately the alignment of 251st Avenue that runs from Sun Valley Parkway all the way to US 60. 211th Avenue runs all the way from Patton Road to SR 74, although the connection at US 60 is less than ideal. Lone Mountain Road now connects with Dove Valley Road to form a continuous route from SR 303L to Center Street. And there are more north-south roads between Jomax Road and Dove Valley Road.

By far the most significant roadway change in 2040 is the completion of the full ultimate upgrades to the intersection of US 60 with 163rd Avenue and SR 303L/US 60 interchange. These improvements will completely change the travel experience for a very high percentage of trips in the study area and bring greater stability to the road network throughout the study area.

Yet, even with these addition to the road network, there continue to be significant gaps. **Figure 49** shows that even with the addition roads, the gaps will still prevent the network from providing the efficiency of travel that would be needed by 2040.

The 2040 analysis included an assumption of the number of signalized and unsignalized access points along US 60. These locations included:

1. Entrance ramp from NB SR 303L to WB US 60;
2. SR 303L/US 60 Interchange;
3. 163rd Avenue;
4. Deer Valley Road;
5. Happy Valley Road;
6. Jomax Road;
7. Patton Road;
8. 203rd Avenue;
9. 211th Avenue;
10. Dove Valley Road;
11. Carefree Road;
12. Black Mountain Road;

13. Gates Road; and
14. SR 74.

Given the travel demand anticipated in 2040 if the development assumptions of this analysis are achieved, the intersections along US 60 may need to have the capacity shown in **Figure 50**. By 2040, the traffic interchange at SR 303L and US 60 will be transformed as described in Chapter 4 into a diverging diamond interchange elevated over SR 303L with additional ramps separating major traffic movements from each other and enabling all movements to achieve acceptable levels of service. This interchange will be fully integrated with the new elevated intersection of US 60 and 163rd Avenue which will also separate major traffic movements into more manageable groups that will also achieve acceptable levels of service.

All of the eleven other intersections on US 60 will need to be signalized. The Deer Valley intersection will not require more lanes than in the 2030 interim scenario. The now signalized Happy Valley intersection will require additional through lanes on US 60. The Jomax Road intersection will work with no additional changes from 2030. The Patton Road intersection will become a full four-leg intersection in this scenario, crossing over US 60 and connecting to North Pat Tillman Boulevard. The 203rd Avenue intersection will require more through lanes on US 60. The 211th Avenue intersection will become a full four-leg intersection connecting to 211th Avenue on the north side of US 60. The Dove Valley Road intersection will become a full four-leg intersection connecting with an extension of Dove Valley Road north of US 60, Center street will be elevated over US 60, and the signal currently at Center Street and US 60 will be moved to the intersection of Dove Valley Road and US 60. The intersection at Carefree Road will not require more through lanes on US 60, but the entry from the north side of US 60 will require an additional lane. The intersection at Black Mountain Road will not require additional lanes; nor will the intersections at Gates Road or SR 74.

The number and locations of interchanges along SR 303L are the same as the interchanges in the 2030 scenario. In this 2040 scenario, the future Litchfield Road interchange is not included. The interchange at Bell Road is the same as in the 2030 scenario, as is the 155th Avenue interchange. The number of lanes on the ramps at the interchange with El Mirage Road are the same as in 2030; however, the number of lanes passing under the freeway bridge will increase from nine lanes to eleven lanes. It is unclear whether this number of lanes could be accommodated under the existing freeway bridge. The impact to the design of the El Mirage Road interchange might raise the question of whether it would be time to implement the Litchfield Road interchange. The number of lanes on the Happy Valley Road interchange are the same as in the 2030 scenario as are the number of lanes in the intersection. At the Jomax Road interchange, the number of lanes on the ramps and at the intersections are the same as in the 2030 scenario. The Lone Mountain Parkway interchange will need the number of lanes to be increased by restriping to the full number of lanes for which the interchange was designed.

The key takeaway from the 2040 interim analysis is that it will not get any easier to keep up with the growth in travel demand or to prevent some roadway links becoming overly congested in the decade leading up to 2040. **Figure 50** and **Figure 51** illustrate the network intersection configurations in the study in 2040.

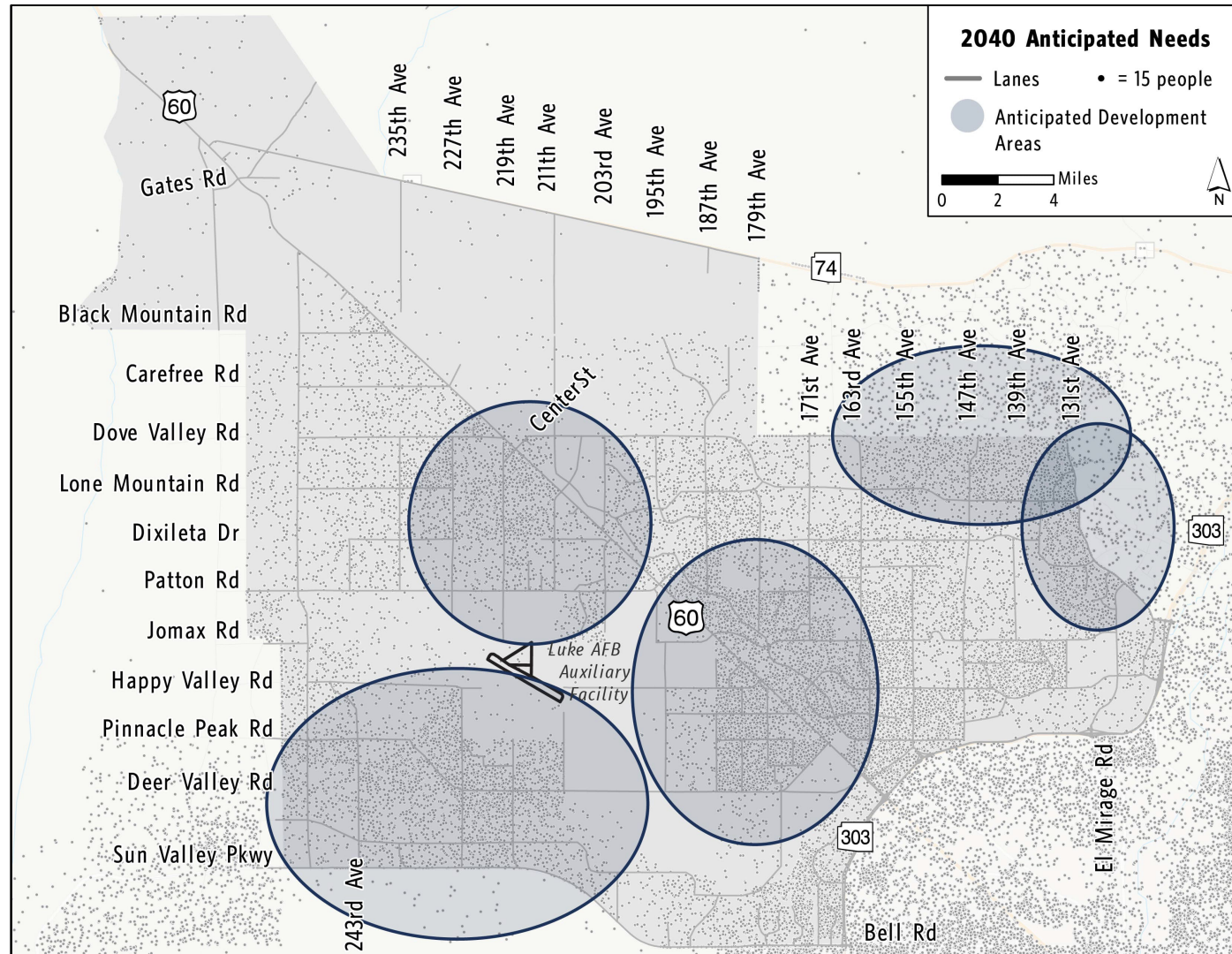


Figure 48: Denser Development Areas Anticipated by 2040

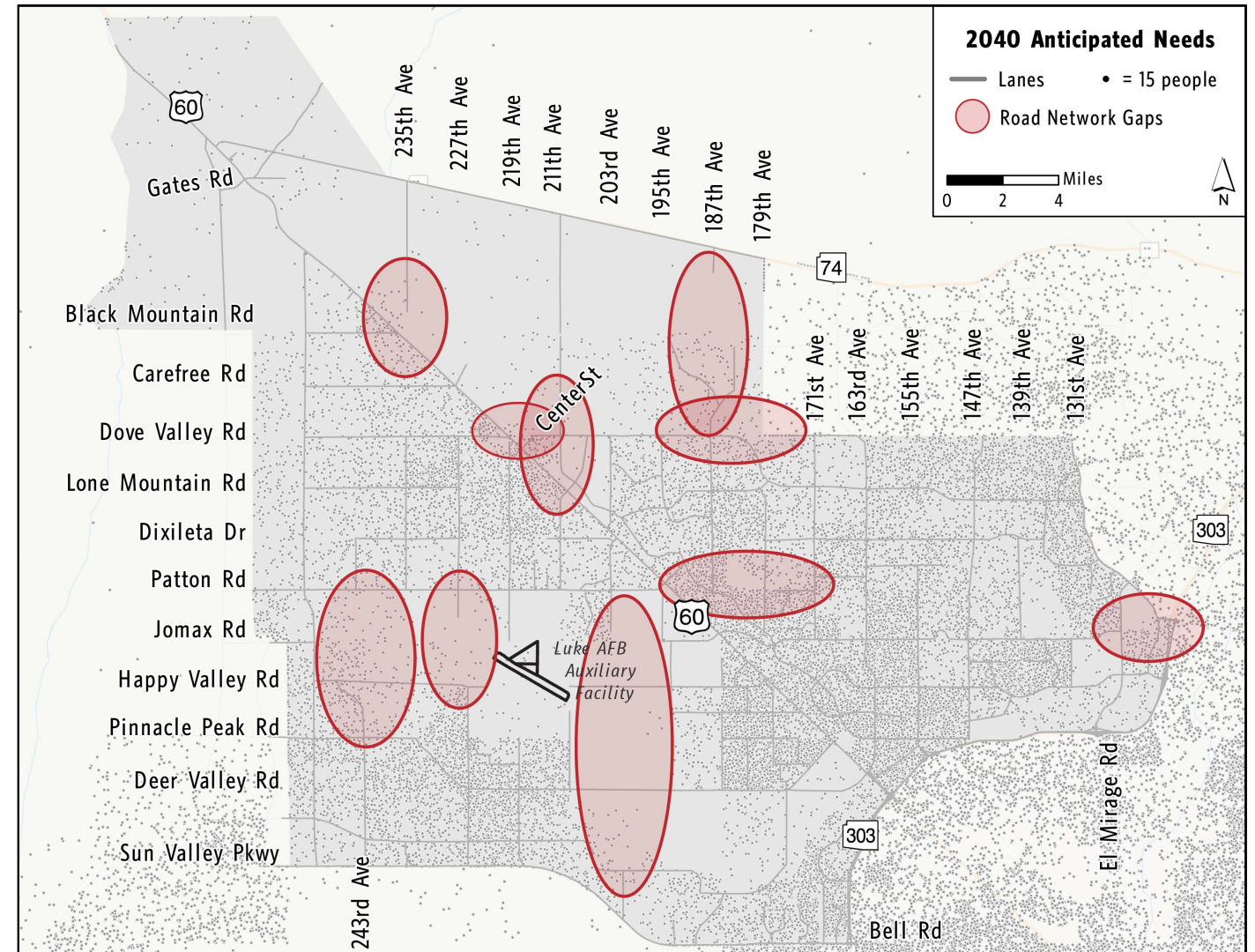


Figure 49: Gaps in the Road Network Denser Development Areas Anticipated by 2040

2040 Interim Network Intersection Configurations along US 60

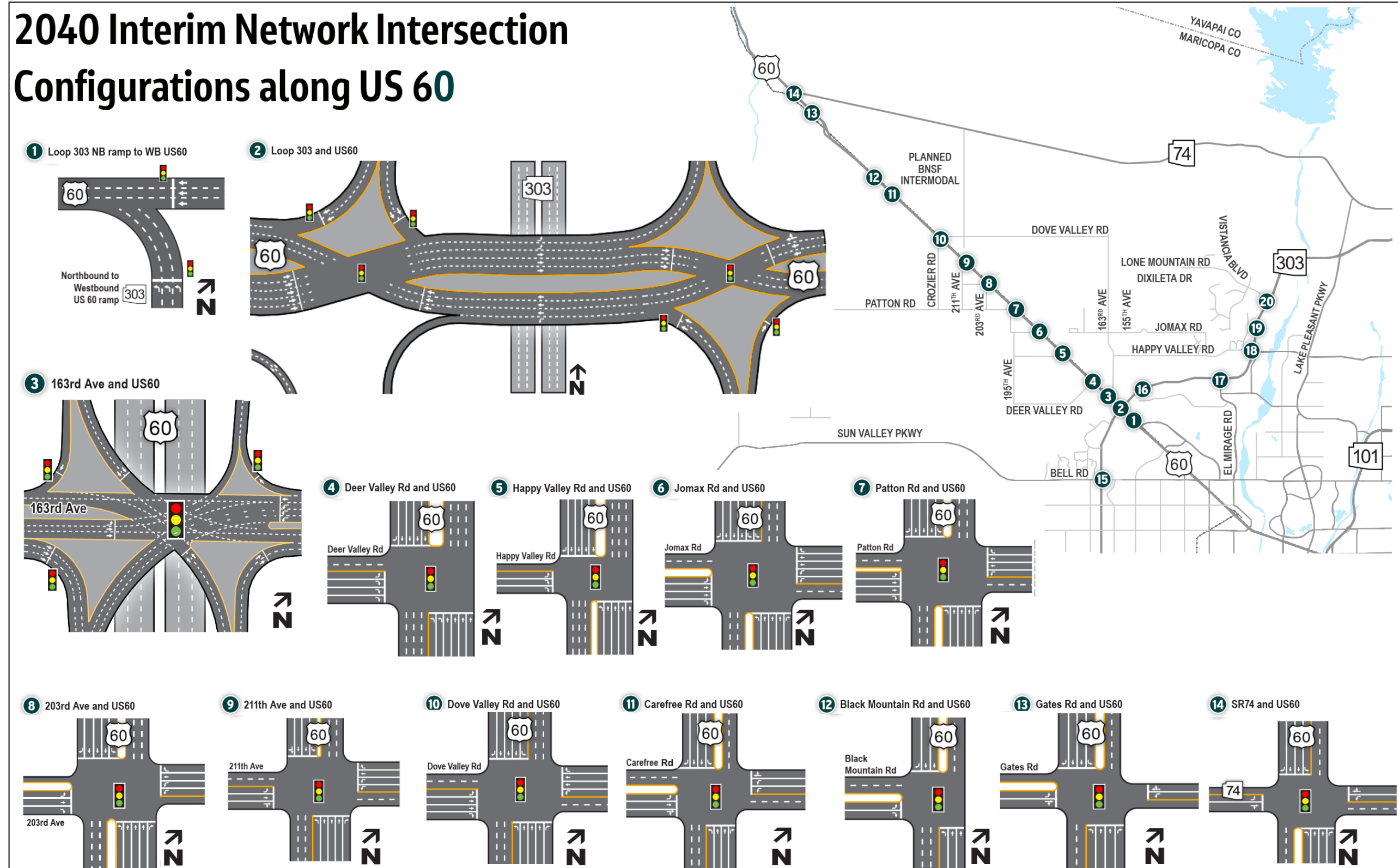


Figure 50: 2040 Intersection Configurations along Grand Avenue and SR 303L

2040 Interim Network Intersection Configurations along SR 303L

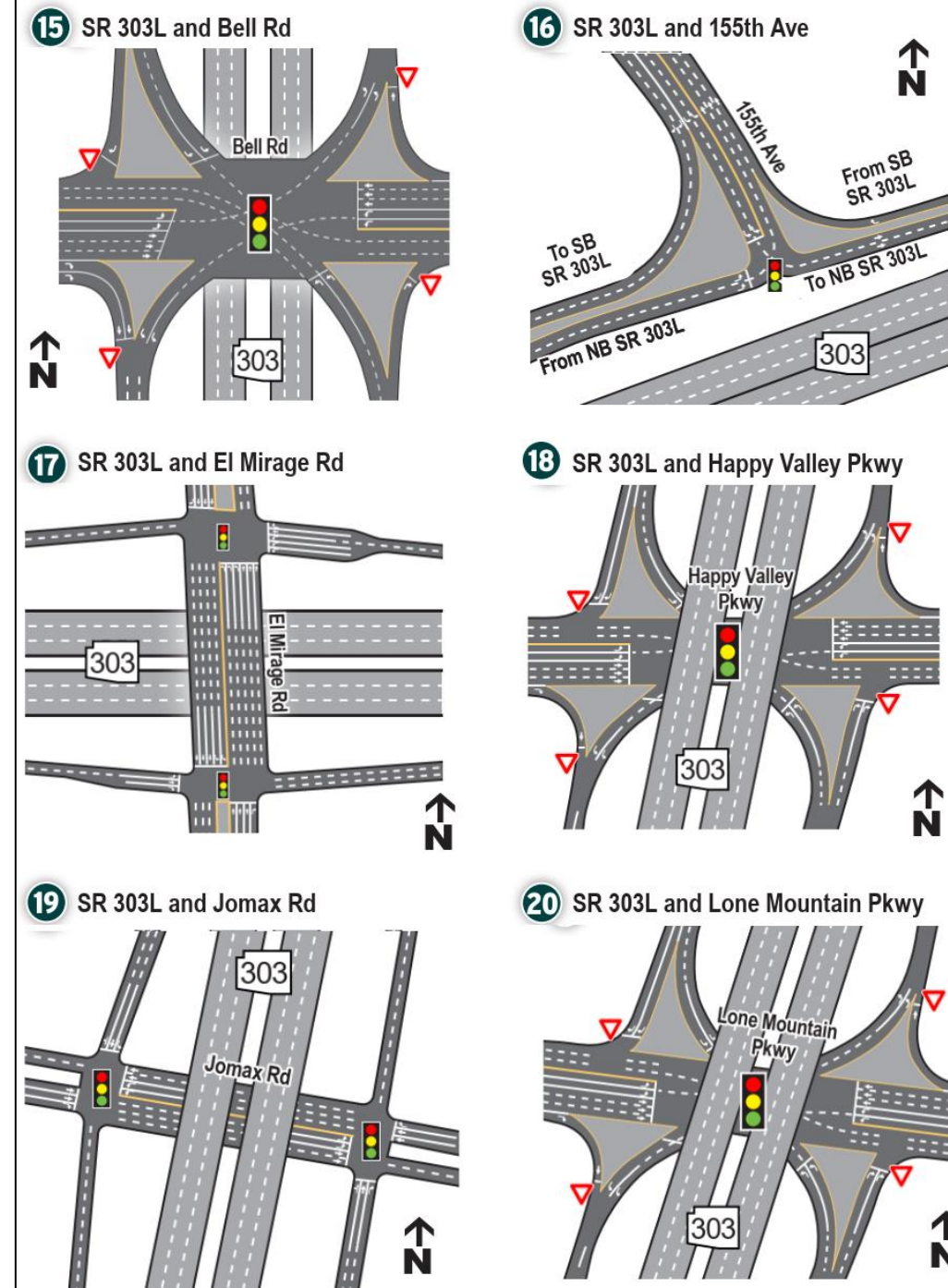


Figure 51: 2040 Intersection Configurations along Grand Avenue and SR 303L (continued)

6.4 Interim Year 2050 Analysis

In earlier chapters, a year 2050 scenario was used in testing alternative transportation improvements and developing recommended strategies. That scenario was called the 2050 General Plans Network scenario. All of the roadways and their capacities in that scenario were based on the local jurisdictions' general plans. It is not expected that the entire network of roadways in the general plans would be built by 2050, or that those that are built would have their ultimate number of lanes. That network was used as a preliminary step in the analytical process and should not be considered a recommended network for the year 2050.

This section takes a more realistic look at what the study area transportation network might actually look like in the year 2050. By 2050, the rapid development period currently being experienced will have ended, and a more moderate period of growth will be underway. The 2050 Interim network can be considered a target to achieve over the next 24 years, to a time that is consistent with the MAG 2050 RTP, MOMENTUM.

This section identifies the capacity needed on the roads that are expected to be built by the year 2050. The network is called the 2050 Interim Network because it is a snapshot of what the evolving road network might need to look like in the year 2050. It also signifies that the network will continue to evolve beyond the year 2050.

6.4.1 2050 Interim Network Roads and Number of Lanes

As population and employment continue to increase in the study area, the road network will continue to evolve and move closer to the full capacity of the 2050 General Plans Network, previously defined.

In modeling the 2050 Interim Network scenario, improvements identified in the 2030 Interim and 2040 interim networks were incorporated, including:

- The new SR 303L/155th Avenue interchange;
- Full ultimate upgrades to the US 60/163rd Avenue intersection and the US 60/SR 303L interchange;
- The northern extension of El Mirage Road from its interchange at SR 303L to Jomax Road;
- Roads added in the 2030 Interim and 2040 Interim networks;
- Road widening in the 2030 Interim and 2040 Interim networks;
- Lanes added to intersections at interchange ramps in the 2030 Interim and 2040 Interim networks;
- Improvements made to SR 303L interchanges in the 2030 Interim and 2040 Interim networks;
- Intersection improvements added in the 2030 Interim and 2040 Interim networks;

After this test run was completed, the network was further revised based on the VOC ratios from the test run, and a full 2050 Interim Network scenario model run was conducted. Another VOC analysis was conducted on this final model run. The results of that final VOC analysis are reported here.

Figure 52 shows the 2050 Interim Scenario Road system map. This map is based on the VOC ratios determined in the 2050 Interim Scenario model run. In this map, only a few roads identified in the 2050 General Plans Network are not included, such as:

- The east-west connector road north of Black Mountain Road between 235th Avenue and 211th Avenue;

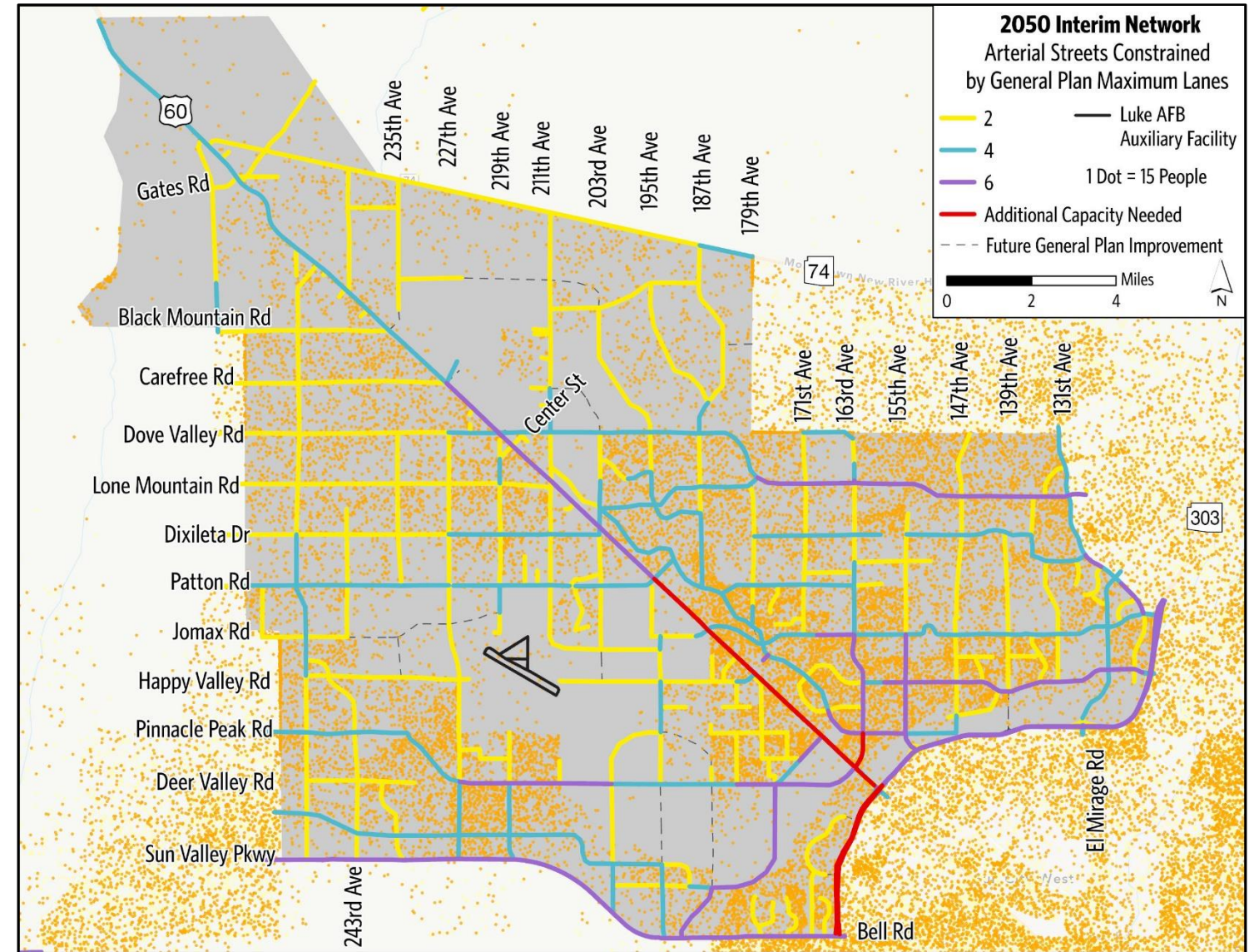


Figure 52: 2050 Interim Network Number of Lanes

- Jomax Road between 243rd Avenue and 227th Avenue;
- The north-south connector road on 195th Avenue south of Deer Valley Road (passing through the existing landfill); and
- The north-south connector road on 187th Avenue south of Deer Valley Road.

For the roads that are included, the number of lanes is shown based on the DOC ratios determined by the 2050 Interim Network scenario model runs. Roads that would not need the full General Plan capacities include:

- Dove Valley Road between 227th Avenue and 203rd Avenue;
- Dove Valley Road between 187th Avenue and US 60;
- The north-south connector along 179th Avenue between Dove Valley Road and Bell Road;
- Dove Valley Road east of 179th Avenue;

- Dove Valley Road between 187th Avenue and US 60; and
- Happy Valley Road east of 163rd Avenue.

The remainder of the roads have the full number of lanes allowed in the General Plans. For some roads this is would be 2 lanes, 4 lanes for others, and 6 lane for the rest. No roads shown in this figure have more lanes than the number of lanes allowed in the General Plans, except for US 60, SR 74, and SR 303L. These highways and freeways currently have no plans for improvement beyond those identified in this report. The number of lanes shown for these facilities is based on the number of lanes needed as indicated by the 2050 Interim Scenario model run.

The number of lanes shown in **Figure 52** above has been limited to the maximum number allowed by the General Plans. According to the final model run, not all of these roads will be operating with traffic demand within their capacities. As **Figure 53** shows, the 2050 Interim Network performs very well for nearly the entire study area, even with many of the roads not having their maximum allowable number of lanes. This is an indication that the local jurisdictions have generally done an excellent job in defining an arterial street network to meet the travel demands in the year 2050. As described in the 2030 and 2040 interim year analyses, the challenge will be ensuring all of the streets shown in the 2050 Interim Network in **Figure 52** are built to the widths illustrated by that time. But, as a general rule, it seems that some of these roads could fall behind schedule with only a small impact of overall network performance.

There are, however, a few exceptions in this finding, as described below:

- US 60 (Grand Avenue) between Dixileta Road and Deer Valley Road will be congested if the number of lanes along this segment are not increased before 2050. In fact, the 2030 and 2040 Interim analyses have indicated the need to widen this segment as early as 2030.
- US 60 between Deer Valley Road and 163rd Avenue will need a more substantial improvement, as it will be the transition from the major upgrades to the US 60/SR 303L interchange and the US 60/163rd Avenue intersection. The study also finds that improvements to US 60 (Grand Avenue) between Deer Valley and 163rd Avenue will be necessary once the ultimate interchange concept at US 60 (Grand Avenue)/163rd Avenue/SR 303L is constructed.
- SR 74 east of 187th Avenue is shown to be congested in the 2050 Interim network that continues to the east outside of the study area. This is another example where the lack of sufficient arterial connections and crossings may cause congestion. This study identifies a need for local street capacity and connectivity to SR 74 to be further evaluated.
- Sun Valley Parkway/Bell Road along its entire length will require a reassessment of the roadway classification or even the possible upgrade of a road to a higher-level design concept may be warranted. As has been described in the 2030 and 2040 Interim analyses, heavy demand on specific roads may be the result of an insufficient number of nearby streets that would offer alternatives to these overburdened roads. These interim analyses also indicated that portions of Sun Valley Parkway/Bell Road would begin to experience this problem beginning as early as 2030. It is recommended that a new corridor study be undertaken to address this issue as soon as possible.

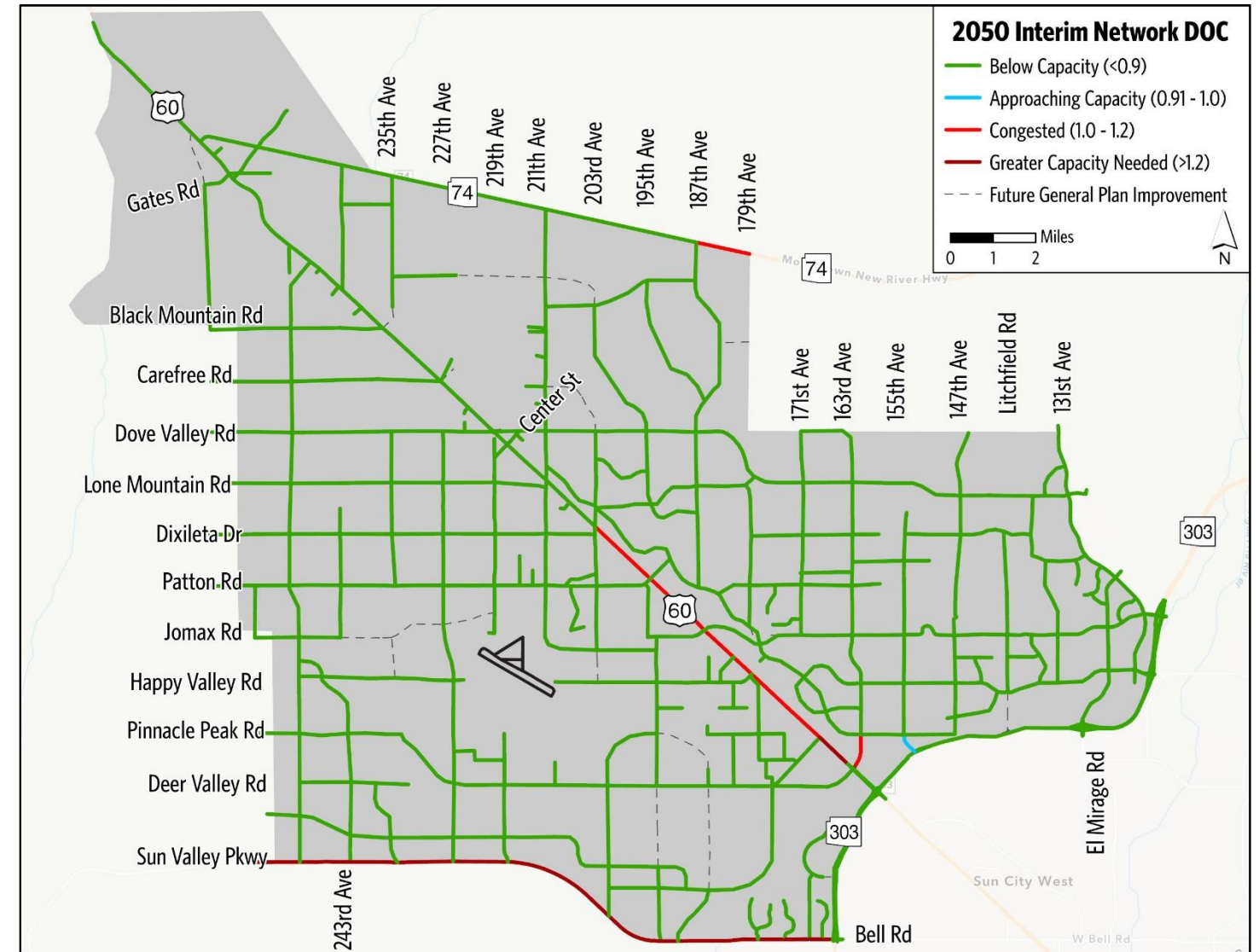


Figure 53: 2050 Interim Network Performance

For arterial streets, the recommended reassessment would be under the authority of the appropriate local jurisdiction. Along the freeways and federal or state highways, MAG and ADOT are responsible for this reassessment.

6.4.2 2050 Interim Network Intersections Along US 60

The 2050 Interim Network includes 18 key intersections along US 60 within the study area. The intersection lane configurations were optimized to provide acceptable levels of service and acceptable queue lengths throughout the study area. Details of key intersections along US 60 are included in **Table 10**.

Table 10: 2050 Interim Network Key Intersection Configurations

ID	Intersection Name	Type of Intersection in 2030
1	163rd Avenue and US 60	Single Point Urban Interchange
2	Deer Valley Road and US 60	Signalized 3-legged intersection
3	Happy Valley Road and US 60	Signalized 3-legged intersection
4	Jomax Road and US 60	Signalized 4-legged intersection
5	Patton Road and US 60	Signalized 4-legged intersection
6	203rd Avenue and US 60	Signalized 4-legged intersection
7	211th Avenue and US 60	Signalized 4-legged intersection
8	Dove Valley Road and US 60	Signalized 4-legged intersection
9	Carefree Road (BNSF) and US 60	Signalized 4-legged intersection
10	Black Mountain and US 60	Signalized 3-legged intersection
11	Gates Road and US 60	Signalized 4-legged intersection
12	SR 74 and US 60	Signalized 4-legged intersection
13	Bell Road and L303	Diamond Interchange
14	155th Avenue and L303	Offset Interchange
15	El Mirage Road and L303	Diamond Interchange
16	Happy Valley Parkway and L303	Diamond Interchange
17	Jomax Road and L303	Diamond Interchange
18	Lone Mountain Parkway and L303	Diamond Interchange

6.4.3 2050 Interim Network Interchanges Along SR 303L

The 2050 Interim Network includes 18 key intersections along the study area are illustrated in **Figure 54** and **Figure 55**.

2050 Interim Network Intersection Configurations along US 60

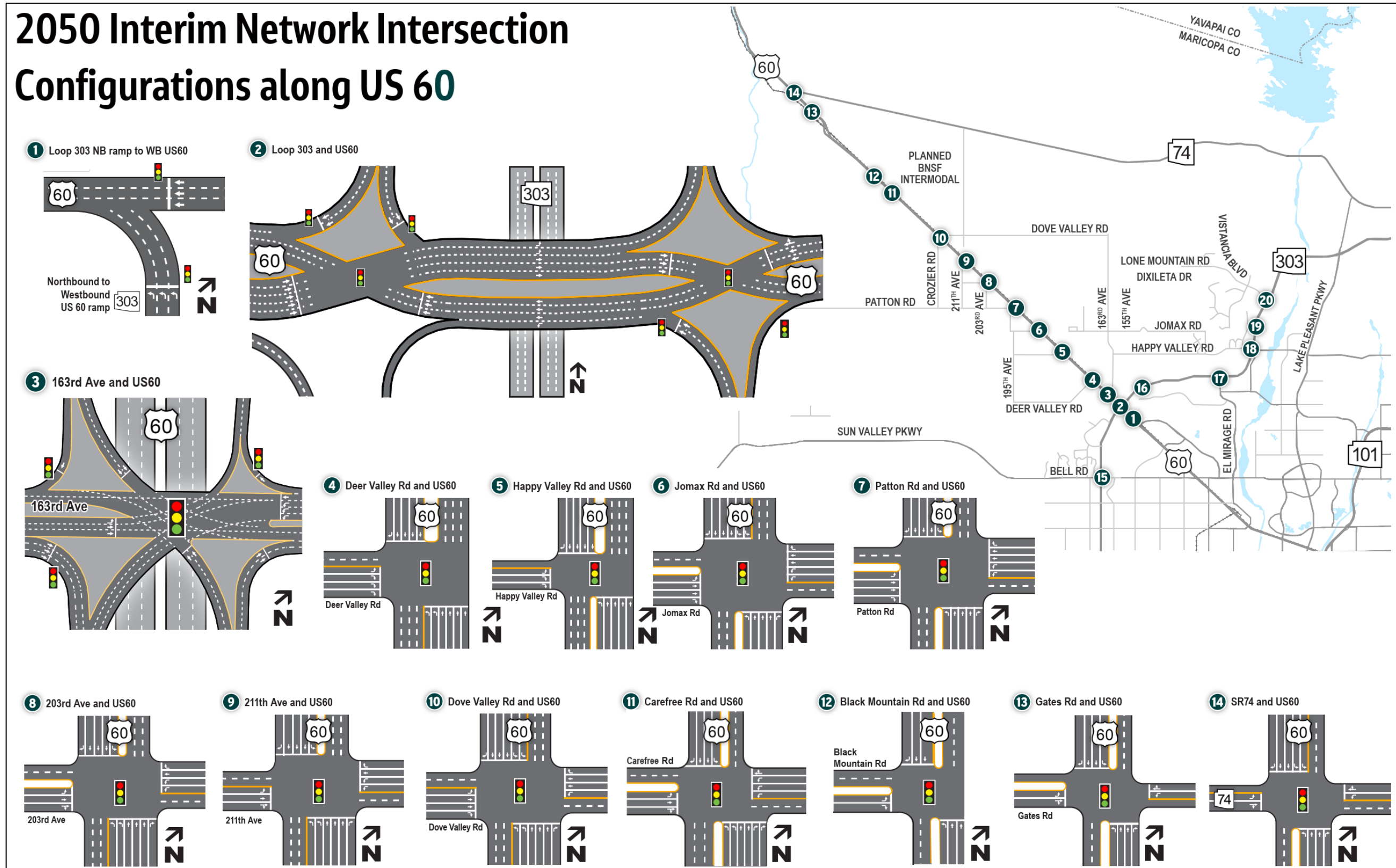


Figure 54: 2050 Intersection Configurations along Grand Avenue and SR 303L

2050 Interim Network Intersection Configurations along SR 303L

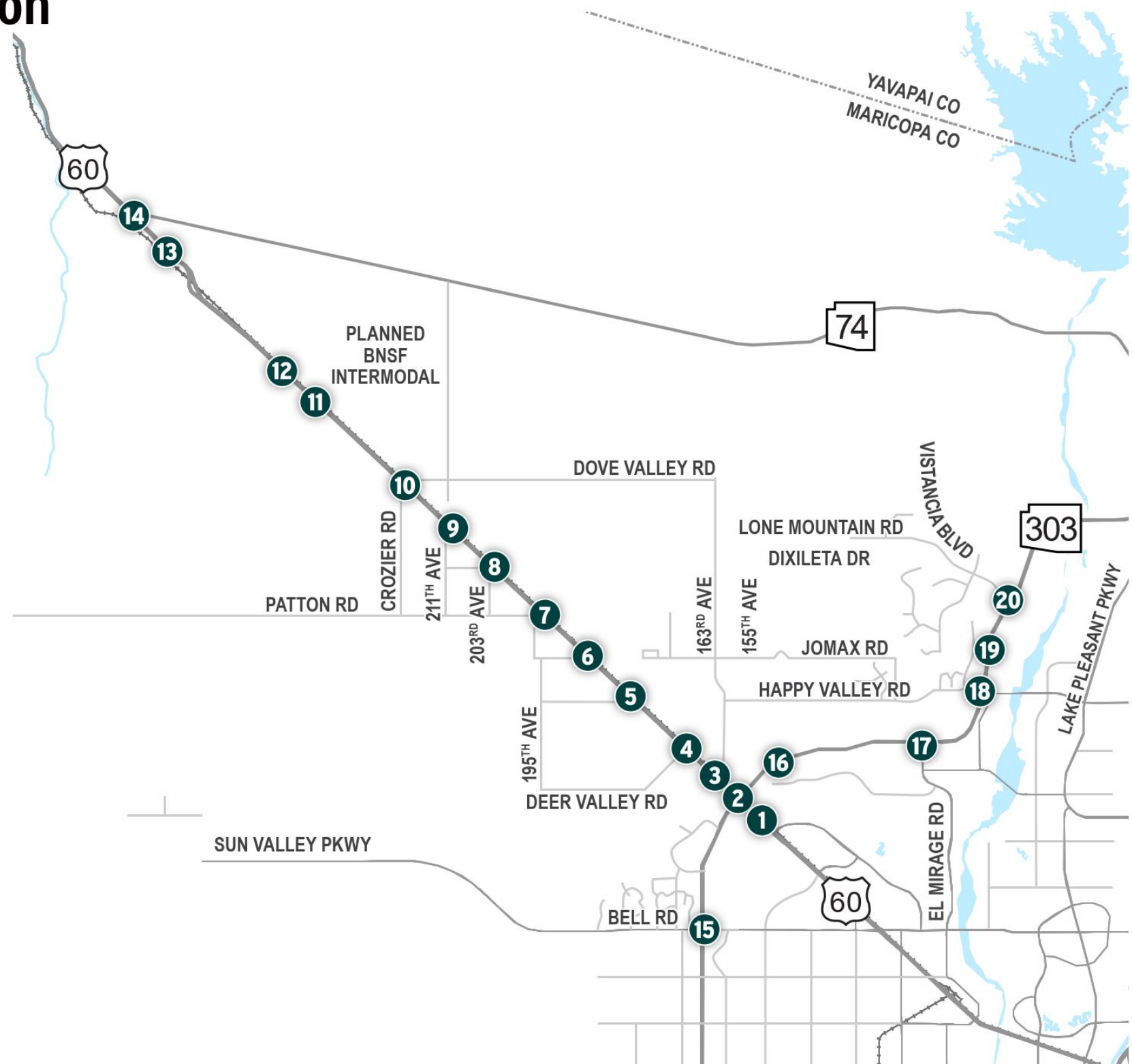
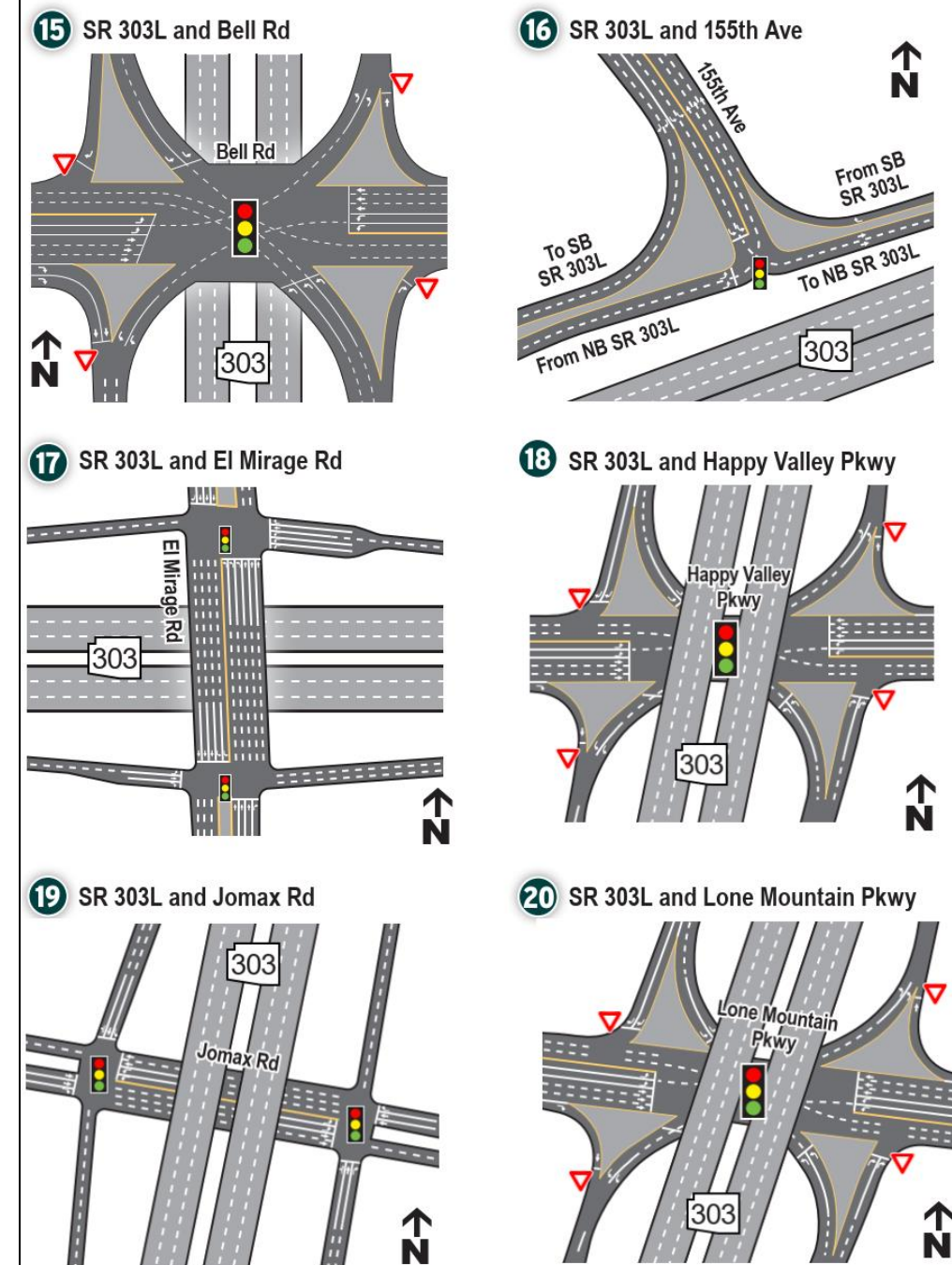


Figure 55: 2050 Intersection Configurations along Grand Avenue and SR 303L (Continued)

6.4.3 2050 Interim Network Traffic Operations

This section has graphics showing LOS peak hour bubbles for each intersection. **Figure 56** shows the 2050 Anticipated Needs Network AM Peak Hour LOS and **Figure 57** shows the 2050 Anticipated Needs Network PM Peak Hour LOS. Intersection signal timing plans were optimized so that intersection LOS is at an acceptable level of LOS D.

Appendix D includes the peak hour volumes graphics with intersection geometry details and summary tables for key intersections approach delays and LOS during the AM and PM peak hours.

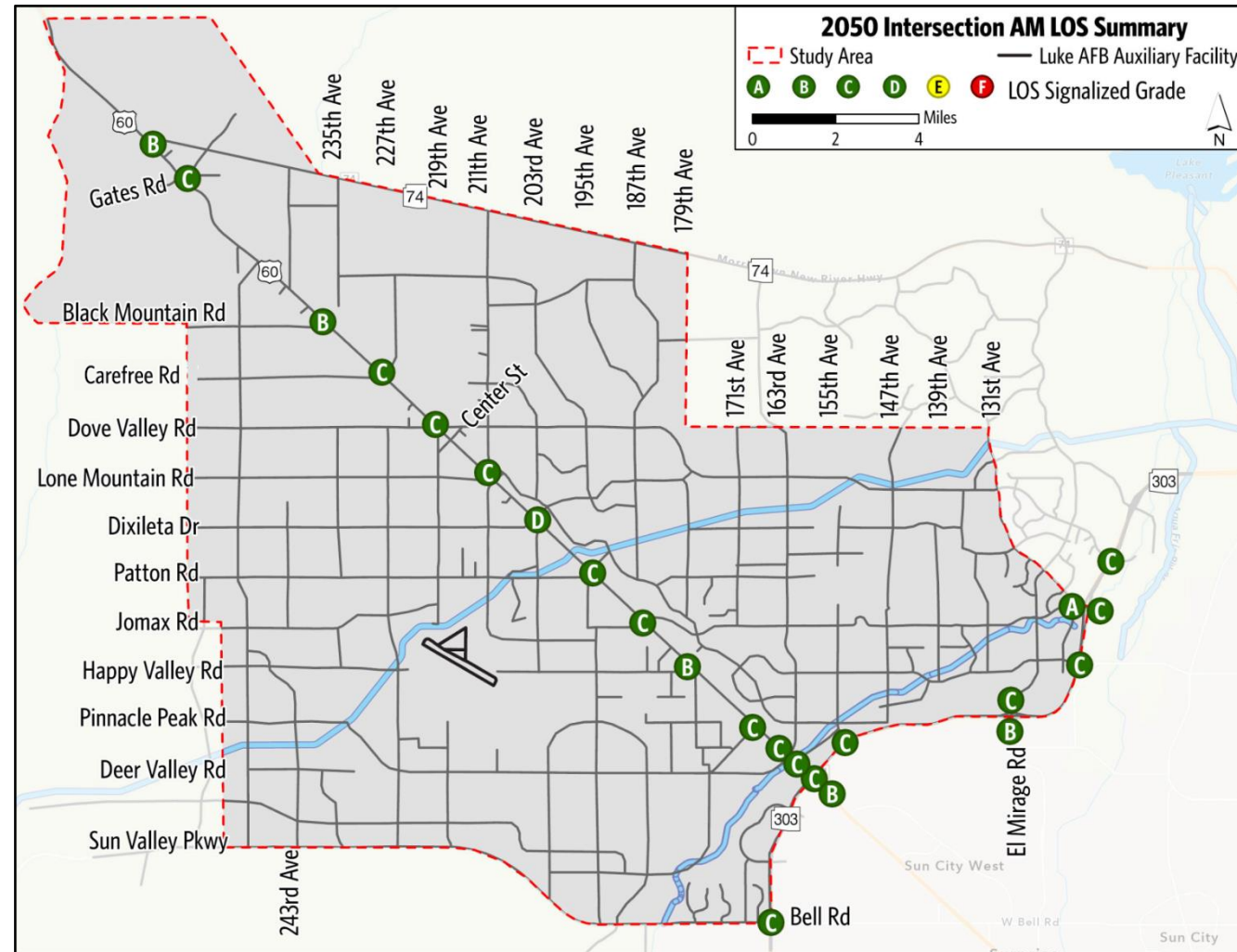


Figure 56: 2050 AM Intersection LOS

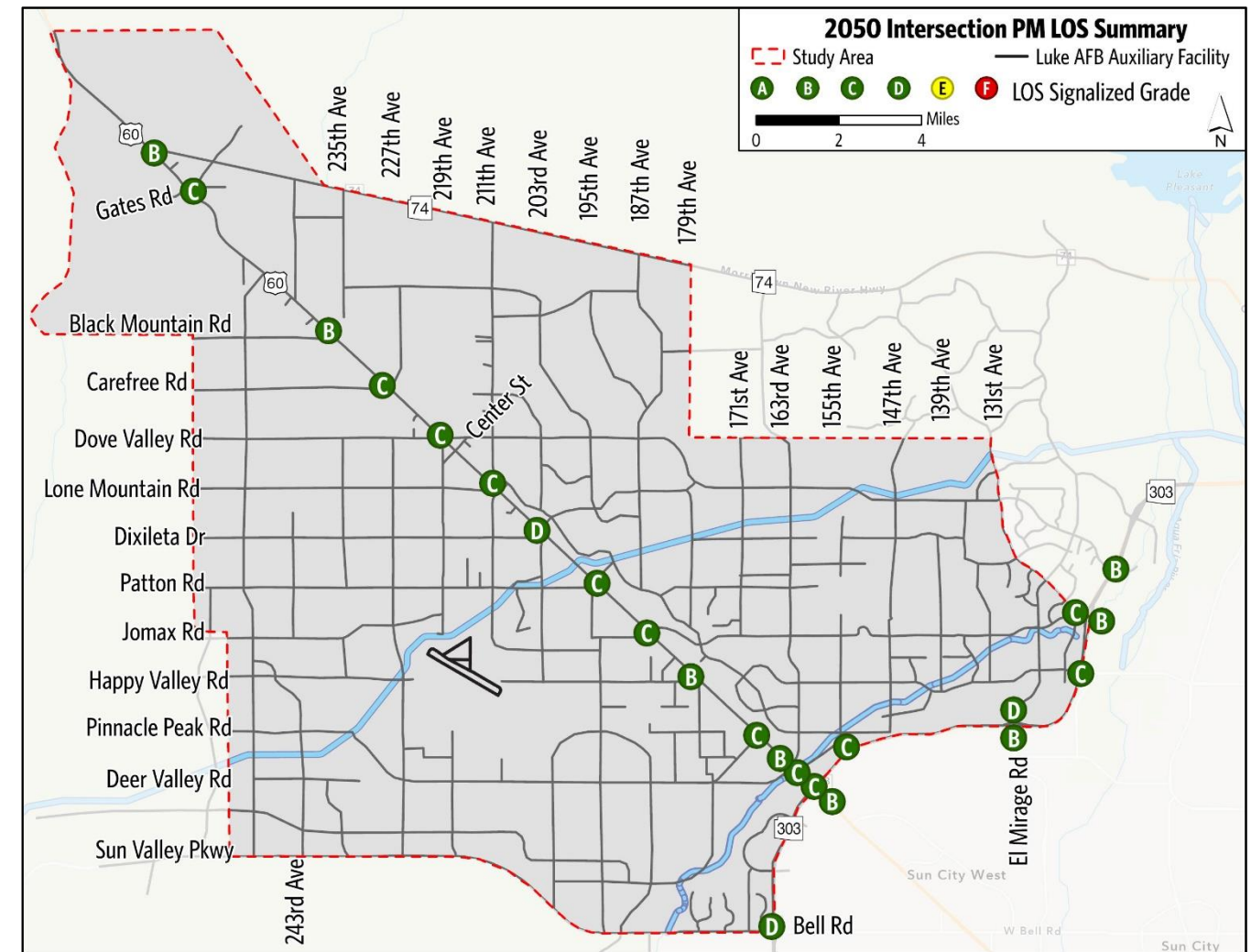


Figure 57: 2050 PM Intersection LOS

7 Full Buildout Condition Network Analysis

This chapter presents an evaluation of future travel demand under the long-range network conditions envisioned by local jurisdictions when the full development capacity of their Master Plan are achieved. Using each jurisdiction's adopted General Plan network as the foundation, the study team developed a full build-out scenario that reflects the maximum possible population and employment totals throughout the study area. The TDM was run for this scenario, and the result of the model run was an indication of what the total travel demand would be in the study area for this futuristic scenario.

7.1 Methodology

To model this scenario, MAG evaluated the general plans of every local jurisdiction in the region and developed a Full Buildout socio-economic database for the entire region. This approach enables the analysis to analyze the full buildout of the study area in a future context in which the entire region has grown to its maximum potential under current general plans. This approach avoids the potential of the model distributing a very large number of trips in the study area to a region with lower trip generation. This approach helps to ensure a reasonable distribution of trips is maintained.

Even with this intent, it turned out that the model struggled to assign the massive number of vehicle trips on a regional highway network that did not grow beyond year 2050 capacities. It was necessary to find an assignment procedure that would successfully complete the assignment. This was accomplished by assigning one-fourth of the total trips generated regionwide and then multiplying the resulting vehicle volumes by four. Recognizing that this procedure reduces the reliability of the final assignment volumes, a decision was made not to report the volumes on individual roadway links, but to evaluate the impacts of such large number in more general terms. A comparison of the travel demand achieved using this method to the 2050 interim condition travel demand is illustrated in **Figure 58**.

7.2 Full Buildout Condition Analysis Findings

Several important findings were made during this analysis, as follows.

1. Non-residential development was balanced

Local General Plans collectively envision substantial non-residential development, including commercial, industrial, and medical uses. These plans reflect the economic aspirations of local jurisdictions and their commitment to fostering employment opportunities. However, when evaluated at a regional scale, the combined potential for these land uses resulted in a jobs-to-housing ratio that was weighted toward employment. To promote a more balanced and sustainable growth pattern, the study team refined non-residential land use assumptions in the Full Buildout scenario across the region, including within the study area. This adjustment ensures alignment with long-term regional objectives for housing and employment balance while respecting the intent of local General Plans.

2. Within the study area, the Full Buildout population and employment are far greater than the anticipated 2050 levels.

As **Table 11** shows, the total buildout population and employment in the study area are far higher than the 2050 estimates. For population, the full buildout total is nearly double the 2050 population (a 93 percent increase, reaching 525,000). Employment grows even faster, with an increase of 173 percent, reaching nearly 99,000.

Table 11: Population and Employment 2023 to Full Buildout

Growth Area by Jurisdiction	2023	2030	2040	2050	Full Buildout
Surprise Population	53,000	123,000	209,300	231,140	473,459
Peoria Population	3,000	10,300	33,000	40,800	50,841
Unincorporated Maricopa County Population	200	220	700	900	1,000
Total Population	56,200	133,740	243,000	272,840	525,300
Surprise Employment	8,400	13,000	25,800	31,300	89,096
Peoria Employment	2,400	1,800	3,170	4,330	9,509
Unincorporated Maricopa County Employment	10	10	230	450	500
Total Employment	10,810	14,810	29,200	36,080	98,695

3. The increase in study area trips being generated is commensurate with the magnitude of the Full Buildout population and employment growth.

The original intent of the Full Buildout analysis was to identify the amount of right-of-way local jurisdictions should preserve to support future roadway improvements. However, the projected increase in vehicle trips under a Full Buildout scenario would have far-reaching impacts on the entire study area's transportation system, making right-of-way preservation only one part of a much larger challenge. A doubling of trips would reasonably result in significant increases in traffic volumes across the network, as illustrated in **Figure 58**.

Given that the 2050 Interim Network closely resembles the Full General Plan network, and that even by 2050 some major corridors would require substantial capacity enhancements, it is unlikely that the planned network could fully accommodate the level of demand projected under Full Buildout conditions. This raises an important question: how can the capacity of an entire roadway network be meaningfully increased? Adding multiple lanes to existing roads would have considerable impacts on surrounding land uses and entail prohibitive costs. Closing gaps in the network would help but alone would not provide the necessary capacity.

Constructing additional roadways to create a denser network could offer relief, yet such an approach would conflict with current and planned development patterns.

The good news is that Full Buildout represents a long-term scenario that may never fully materialize. Over time, development activity could slow as congestion reaches critical levels, and societal changes in how people live, work, and travel may reduce traffic demand. Additionally, emerging technologies could significantly enhance roadway capacity, mitigating some of the challenges anticipated today.

The largest impacts appear to occur to the largest roadways. SR 303L, US 60 (Grand Avenue), and Bell Road/Sun Valley Parkway. However, there may be other arterial streets that would see traffic volumes one day exceed their planned capacity.

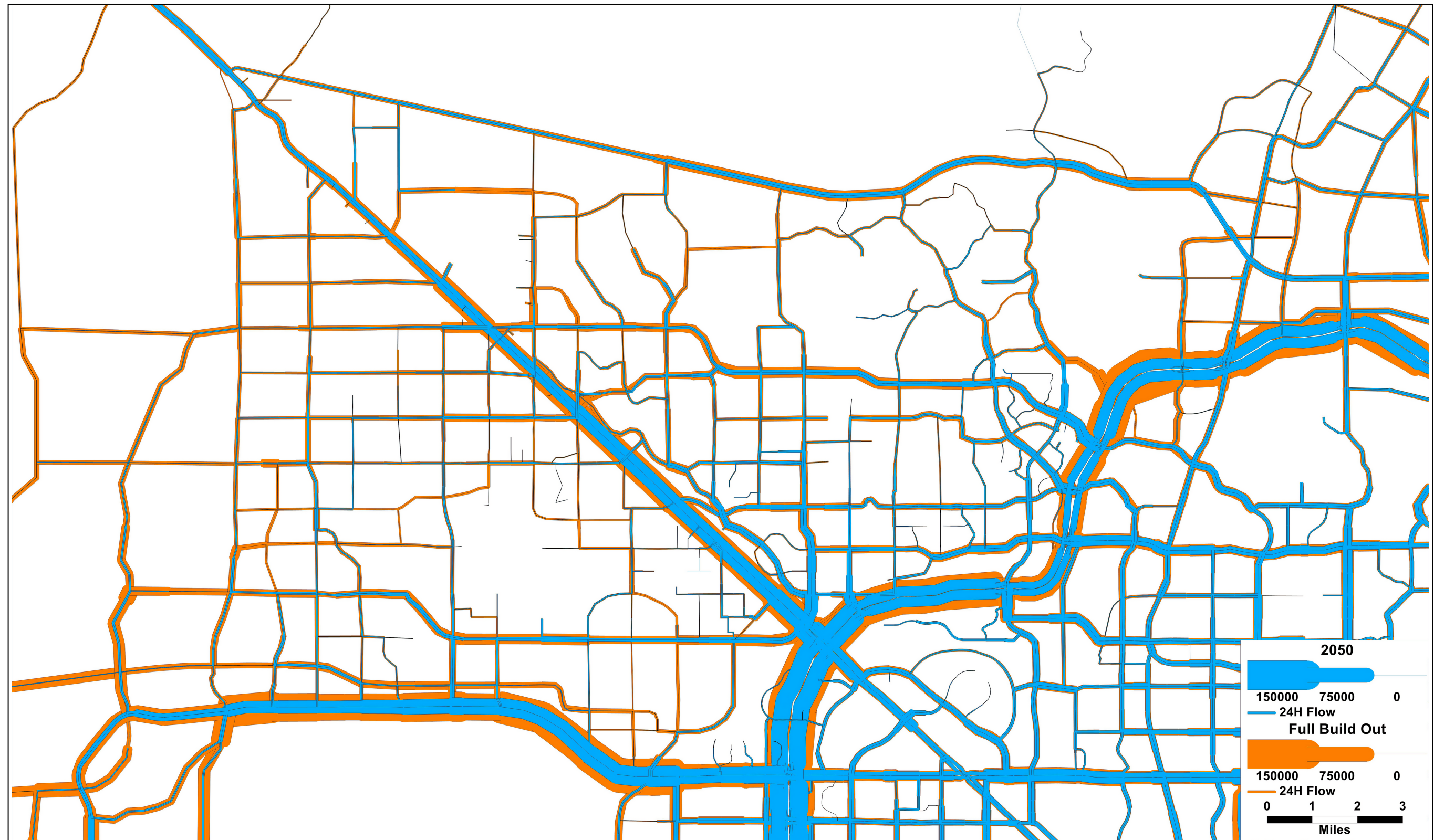


Figure 58: Comparison of Travel Demand Bandwidths between 2050 and Full Buildout

8 Public Outreach Summary

This section highlights key conclusions following the three public meetings conducted for this project: Public Meeting 1 – Open House on August 14, 2024, Public Meeting 2 – Online Meeting on March 3, 2025, and Public Meeting 3 – Final Meeting In Person on November 13, 2025. The full public outreach summaries are included in Appendix C.

8.1 Public Meeting 1 Open House - August 14, 2024

The first round of outreach included a project website with an interactive map, which gathered 76 comments, and a public open house on August 14, 2024, attended by more than 150 residents. Outreach was supported by direct mail to 23,000 households and social media promotion.

Residents voiced frustration that improvements are not happening quickly enough, with several noting that “it takes half an hour just to move through the intersection at 163rd Avenue.” Many expressed concern about limited neighborhood access, saying they feel “trapped” during emergencies because there is only one way in and out of certain subdivisions. Emergency responders were cited as struggling to reach destinations on time due to congestion. Requests were common for paving dirt roads to provide reliable secondary routes and for developing a stronger arterial grid to distribute traffic.

Capacity and safety were recurring themes. Residents asked for additional lanes on Grand Avenue, more turn lanes at key intersections, and acceleration/deceleration lanes to improve traffic flow. Speeding was described as a major hazard, with one participant stating that “people drive too fast in the area of 163rd Avenue and Grand.” Others pointed to poor signal timing, where left-turn queues back up and block intersections, and asked for better synchronization of lights. Concerns about truck traffic were raised repeatedly, along with worries about the potential impacts of a new BNSF rail facility, which many feared would worsen congestion and safety risks.

Despite frustrations, participants expressed appreciation for the transparency of the process and the presence of agency staff. The outreach meeting confirmed strong public engagement and provided detailed, location-specific feedback that will inform technical analysis and guide future rounds of engagement.

8.2 Public Meeting 2 Online – March 3, 2025

The second round of public engagement for the US 60 (Grand Avenue) SR 303L to SR 74 Corridor Study, led by MAG in partnership with Surprise, Peoria, ADOT, and MCDOT, focused on presenting conceptual strategies and gathering community feedback on potential improvements. More than 200 residents participated through open houses, online tools, and direct comments. Input was highly specific, reflecting both frustration with current conditions and clear priorities for future investment. Residents repeatedly emphasized the need for additional lanes on Grand Avenue to relieve congestion, particularly between 163rd Avenue and SR 303L, and called for new turn lanes acceleration/deceleration lanes to improve safety at busy intersections. Many expressed concerns about limited neighborhood access, noting that single entry points leave them “trapped” during emergencies and delay fire and ambulance response. Requests were common for paving dirt roads to provide reliable secondary routes and for developing a stronger arterial grid to distribute traffic.

Safety concerns were a dominant theme during the public engagement meeting. Residents cited dangerous speeding on Grand Avenue, inadequate signal timing at intersections such as Gates Road and Castle Hot Springs Road, and the need for clearer signage and pavement markings. Truck traffic was frequently mentioned, with calls to better manage freight movement and better mitigate impacts from the proposed BNSF rail facility, which many feared would worsen congestion and safety risks. Several participants asked for new crossings and interchanges to improve connectivity, including additional access points to SR 303L and safer pedestrian/ bicycle facilities. Others highlighted the importance of emergency access routes and suggested that congestion is already slowing response times.

Following the public meeting on March 3rd, 2025, an online comment form was open for public input. The online comment form included the ten areas of concern and potential improvement alternatives for each area as described during the meeting. These ten areas of concern included:

1. Grand Avenue and 163rd Avenue from Pat Tillman Boulevard to SR 303L
2. Sun Valley Parkway from Canyon Springs Boulevard to SR 303L
3. Access to SR 303L from Peoria
4. 203rd Avenue/Bradley Road/Future Lone Mountain Road connection(s) to Grand Avenue
5. Jomax Road Access to Pat Tillman Boulevard continuing to Grand Avenue
6. Access to Sun Valley Parkway from Happy Valley Road
7. Dove Valley Road/Center Street/Crozier Road in Wittmann
8. Arterial Network with Probable Gaps
9. Railroad Crossings (Area Wide)
10. Access Management (Area Wide)

Overall, the feedback underscored a strong desire for accelerated action to match the pace of rapid development in the Northwest Valley. While residents appreciated the transparency of the process and the presence of agency staff, they stressed that improvements must move faster to keep up with growth. This input will directly inform refinement of conceptual strategies into recommended improvements, ensuring that capacity expansion, safety enhancements, and multimodal options are prioritized in the next phase of corridor planning.

Key Themes from Public Input:

- Frustration with pace of improvements - Many participants expressed impatience that projects are not happening quickly enough given rapid growth.
- Neighborhood access concerns. Strong calls for more access points into and out of neighborhoods; people feel trapped in emergencies.
- Need to add capacity: Requests for additional lanes, acceleration/deceleration lanes, and turn lanes to improve flow and safety.
- Dirt roads: mixed input- desire pave dirt roads, but also recognition of their importance for access.
- Congestion and emergency response: Bottlenecks seen as reducing efficiency and increasing emergency response times.
- Speeding on Grand Avenue: Safety concerns tied to high travel speeds.
- Truck traffic: Concerns about increasing freight movement and its impact on congestion and safety.
- Potential BNSF rail facility: Various concerns raised about impacts of a new rail facility in the study area.

8.3 Public Meeting 3 Open House – November 13, 2025

The third round of public engagement for the MAG US 60 (Grand Avenue) Corridor Study was conducted to present the recommended improvements for the corridor and to document final community input prior to completing the study. Engagement activities included an in-person public open house held on November 13, 2025, and an online comment form available from November 13, 2025 through December 15, 2025.

Participation Overview

- Over 175 attendees participated in the in-person open house.
- 70 email addresses were collected for future project updates.
- 16 handwritten comment cards were submitted.

Collectively, these inputs provided detailed feedback on safety concerns, operational challenges, and community priorities for long-term mobility and access within the study area.

Participants consistently identified the US 60/163rd Avenue and SR 303L/ Grand Avenue interchanges as high-risk locations due to frequent collisions, long queues extending onto high-speed facilities, and limited emergency access for rapidly growing neighborhoods. Many residents expressed strong support for grade-separated interchanges and freeway-style solutions, including the removal of traffic signals along US 60, construction of overpasses and directional ramps, and consideration of future lane expansion. A significant portion of comments reflected dissatisfaction with the projected implementation timelines extending into the 2030-2050 horizon, with participants emphasizing the need to accelerate design and construction to mitigate existing congestion and safety issues.

Residents also expressed concern that development approvals have outpaces transportation capacity, resulting in increasing congestion, noise, and perceived declines in property values. Many requested that development be paused until infrastructure improvements are implemented and expressed expectations that developers and BNSF contribute financially to required upgrades. Additional concerns focused on the impacts of rail and truck traffic associated with the proposed BNSF logistics hub, including noise, safety, and the need for dedicated truck routes or access points. Stakeholders also highlighted the need for additional access, recommending extensions to Jomax Road, improvements to 163rd Avenue, additional SR 303L ramps, enhanced east-west connectivity, and the development of separated bicycle facilities. Noise and quality-of-life concerns were also raised, with requests for sound walls, speed management strategies, and restrictions on heavy-vehicle operations.

The open house itself was structured as an informal, station-based event designed to maximize individual engagement. Participants interacted directly with MAG and partner agency staff and provided input through:

- Verbal discussions
- Comment cards
- Mark-ups on large aerial roll plots
- QR-linked online comment forms

Open house materials included a captioned informational video summarizing the study process and recommended improvements, a computer-based simulation comparing existing and projected 2050 traffic

conditions, and detailed poster boards and aerial roll plots that allowed participants to review concepts, identify concerns, and provide location-specific feedback. Spanish and ASL interpretation services were available.

Publicity for the event was coordinated across MAG, the City of Surprise, The City of Peoria, ADOT, and MCDOT, using USPS Every Door Mail postcards, social media posts, email distributions, and a partner publicity toolkit containing graphics and template text. The study team identified the value of consistent, coordinated outreach materials across partner agencies and recommends adopting this approach as a standard practice for future transportation planning efforts.

9 Conclusion

The US 60 Corridor Study provides a comprehensive, data-driven foundation for guiding transportation investment in one of the fastest-growing regions in the state. The analysis confirms what residents, local agencies, and regional partners have observed. Rapid population and employment growth, combined with limited access to SR 303L and constrained north-south connectivity, is placing increasing pressure on US 60 and the surrounding arterial network. Existing conditions near 163rd Avenue and the SR 303L interchange, safety challenges at unsignalized access points, and the operational impacts of at-grade railroad crossings already affect daily travel and emergency response. These issues will intensify as development accelerates through 2030, 2040, and 2050.

Through detailed modeling, scenario testing, and extensive public engagement, the study has identified the improvements needed to maintain mobility, enhance safety, and supports the region's long-term economic vitality. Key findings highlight the need for additional access to SR 303L, major upgrades at the US 60/163rd Avenue/SR 303L system interchange area, expanded east-west and north-south arterial connections, and targeted widening of the US 60 between 163rd Avenue and Carefree Road.

The anticipated improvement needs identified through this study provides a clear roadmap for coordinated regional action. As the region continues to grow, the findings of the study will guide MAG, ADOT, local jurisdictions, and development partners in planning, programming, and delivering the infrastructure needed to keep the corridor functioning effectively.