Central Yavapai Metropolitan Planning Organization

# Regional Transportation Plan Update 2040

## EXECUTIVE SUMMARY

April 2015


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# Central Yavapai Metropolitan Planning Organization
# Transportation Plan Update 2040

Executive Summary
April 2015

Member Agencies:
City of Prescott
Town of Chino Valley
Town of Dewey-Humboldt
Town of Prescott Valley
Yavapai County
Arizona Department of Transportation

# Table of Contents


1.0 Introduction ..... 1
1.1 Purpose of the Regional Transportation Plan Update ..... 1
1.2 Key Findings and Limitations of Related Studies ..... 1
2.0 Public Involvement ..... 3
3.0 Future Socio-Economic Conditions ..... 4
3.1 Future 2040 Population Growth Areas ..... 4
3.2 Future 2040 Employment Growth Areas ..... 4
4.0 Needs Analysis ..... 8
4.1 Development of the No-Build Network ..... 8
4.2 Network Analysis ..... 9
5.0 CYMPO 2040 Regional Transportation Plan ..... 13
5.1 Alternatives Analysis ..... 13
5.2 2040 Recommended Network ..... 13
5.3 Future Multimodal Transportation Facilities ..... 18
6.0 Implementation ..... 19
6.1 Short-Term Improvement Projects ..... 19
6.2 Draft Project Implementation Schedule ..... 19
6.3 Environmental Considerations ..... 23
6.4 Potential Sources of Funding ..... 23


# List of Figures


Figure 1 – CYMPO Planning Area ..... 2
Figure 2 – 2040 Population Projections ..... 6
Figure 3 – 2040 Employment Projections ..... 7
Figure 4 – Level-of-Service Roadway Conditions ..... 10
Figure 5 – CYMPO 2040 No-Build Traffic Volumes and Levels-of-Service ..... 12
Figure 6 – CYMPO 2040 Recommended Regional Network ..... 15
Figure 7 – CYMPO Recommended 2040 Traffic Volumes and Levels-of-Service ..... 17

# List of Tables

Table 1 – Projected Population ..... 4
Table 2 – Current and Projected Employment ..... 5
Table 3 – Improvement Projects Included in No-Build Network ..... 8
Table 4 – V/C Ratio Thresholds for Levels of Service ..... 9
Table 5 – Improvement Projects Included in 2040 Recommended Network ..... 14
Table 6 – Draft Project Implementation Schedule ..... 19

# 1.0 Introduction

Central Yavapai County is located approximately 80 miles northwest of Phoenix and is served by State Routes (SR) 69, 169, 89 and 89A. State Route 69 connects with Interstate 17 (I-17) at Cordes Junction, about 20 miles southeast of the study area. The Central Yavapai Metropolitan Planning Organization (CYMPO) encompasses the communities of Prescott, Prescott Valley, Chino Valley, Dewey-Humboldt, portions of Yavapai County and the Yavapai Prescott Indian Tribe, including an area of approximately 401 square miles. Figure 1 shows the location of these communities and the planning influence area. The planning influence area is larger than the MPO boundaries to encompass areas of influence outside the immediate metropolitan area.

The CYMPO is one of the fastest growing areas in Arizona. As Figure 1 shows, Prescott is located in the west-central portion of the region; Prescott Valley lies east of Prescott, Chino Valley lies to the north of Prescott, and Dewey-Humboldt is just south of Prescott Valley at the intersection of SR 169 and SR 69. State Routes 69, 89, and 89A serve as the main thoroughfares within the CYMPO, tie the communities together, and also function as important commercial corridors within each community – an important dual role that this study will address.

## 1.1 Purpose of the Regional Transportation Plan Update

The purpose of this Regional Transportation Plan (RTP) Update is to validate the previous 2011 CYMPO RTP Update, and reprioritize transportation investments for the metropolitan area with a 2040 target buildout. The plan focuses on short-, medium-, and long-term transportation investments and is not financially constrained due to the uncertainty of transportation funding availability.

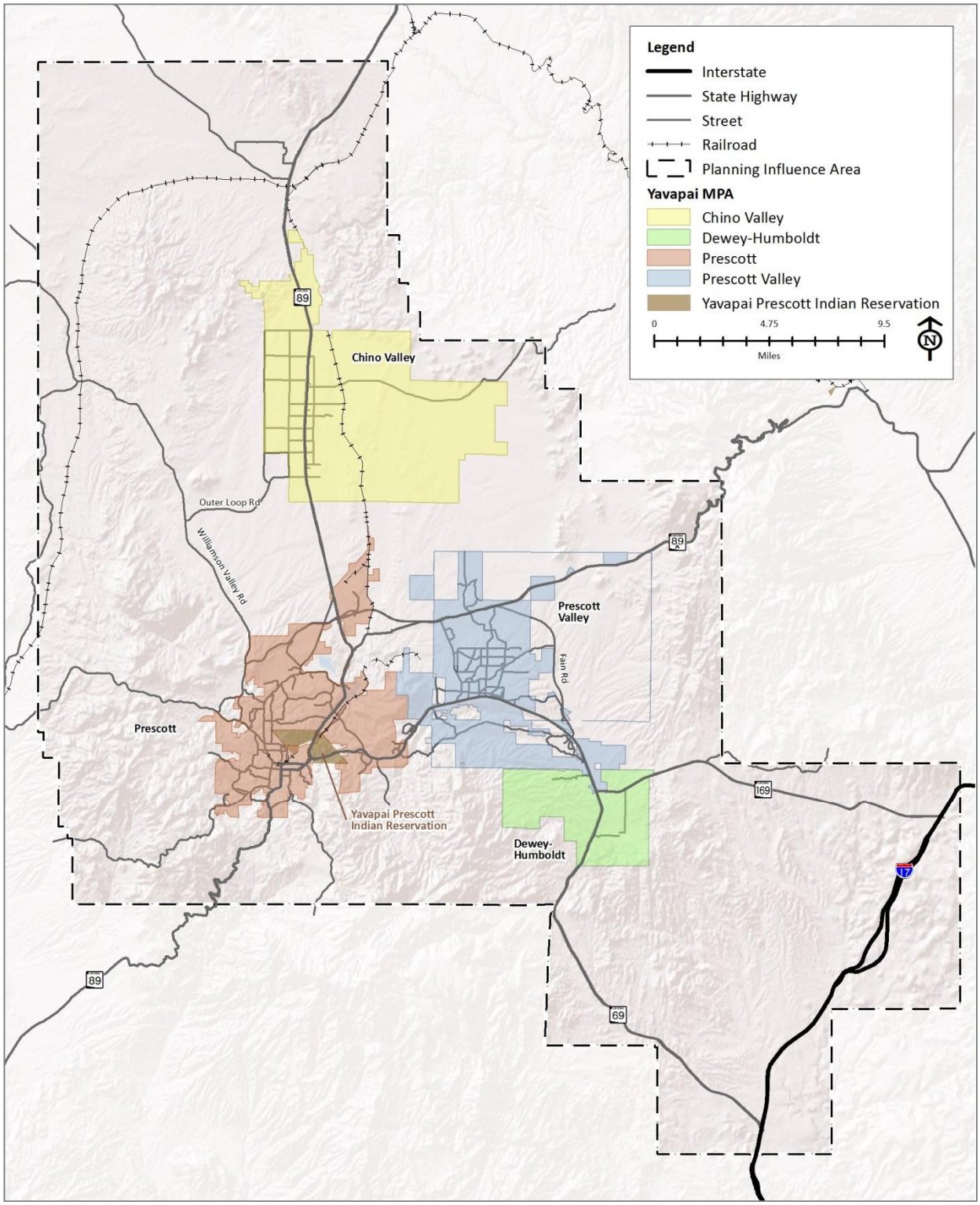
## 1.2 Key Findings and Limitations of Related Studies

The *2030 Regional Transportation Plan* (RTP) for the quad-city Prescott area was adopted by the Central Yavapai Metropolitan Planning Organization (CYMPO) in December 2006. This study was prepared during the economic "boom", where population growth between 2004 and 2030 was estimated to increase by over 270 percent.

The socioeconomic data presented in that study has been questioned in recent years as being inaccurate due to the Great Recession that began in December 2007 and took a sharp downward turn in September 2008. In response, CYMPO updated the socioeconomic data for the planning area in the *2011 RTP Update*, completed in June 2012. The updated study referenced the 2000 and 2010 Census Data and resulted in population growth estimates for 2030 to be more on the magnitude of a 100 percent increase. Altogether, 2030 population projections were 50 percent less than predicted in the 2006 study, and 2030 employment projections were 13 percent less than predicted in the 2006 study.

All of the socioeconomic changes noted above contribute to the need for an update to the RTP that incorporates refined socioeconomic data inputs to reflect 2010 U.S. Census data. In addition, an assessment of existing and future multimodal transportation needs is required to develop a plan and implementation program for transportation investments through 2040 that respond to projected travel patterns and mobility needs – both from a legislative perspective (adhering to the requirements of the

Figure 1 – CYMPO Planning Area



*Moving Ahead for Progress in the 21st Century [MAP-21]* legislation) and from a local agency funding need.

The ultimate goal of this plan is to adjust traffic projection inputs to more accurately reflect population and employment growth in the region and to synchronize with national performance measures so as to maximize CYMPO's opportunities to receive federal transportation funding. The travel demand model will be re-run with new data to estimate the traffic volumes on the existing and proposed roadway network. This data will be used to recommend short-term, mid-term, and long-term transportation needs.

## 2.0 Public Involvement

A Public Involvement Plan was developed for the Regional Transportation Plan Update process. As part of the plan update, two sets of public meetings were held. The first set of public meeting were held on April 23, 2014 between 1 p.m. and 3 p.m. and 5:30 p.m. and 7:30 p.m. and sought the public's input on the existing transportation needs and areas where the study should focus. Both meetings were held in the Town of Prescott Valley Library Auditorium. In total 39 people attended from the communities as well as elected officials and local government representatives.

The second set of public meetings were held on Monday, September 29, 2014 between 1 p.m. and 3 p.m. and 5:30 p.m. and 7:30 p.m. to provide input on the existing transportation needs and areas where the study should focus. Both meetings were held in the City of Prescott council chambers. In total 32 people attended from the communities as well as elected officials and local government representatives.

# 3.0 Future Socio-Economic Conditions

## 3.1 Future 2040 Population Growth Areas

Table 1 presents projected population growth to 2040. Socioeconomic projections were validated with each member jurisdiction to account for any major recent land use changes that may impact future allocations of population and employment.

Per these socioeconomic projections, by 2040 the CYMPO region is projected to increase its population by more than 74 percent over the 2010 base population – for an anticipated total of 214,000 people. This population forecast translates to an average annual growth rate between two and three percent over the next 25 years. When comparing the 2030 estimates developed during the *2006 CYMPO RTP* with the new 2040 projections based on the 2010 Census data, a decrease in projected population of almost 50 percent occurred. This decrease is attributed to the changed economic conditions due to the Great Recession. Figure 2 displays the final projected population densities in 2040 by TAZ.

Table 1 – Projected Population

| Jurisdiction | 2010 | 2040 | Increase | Percent Growth |
|---|---|---|---|---|
| Chino Valley | 11,000 | 19,000 | 8,000 | 73% |
| Dewey-Humboldt | 4,000 | 6,000 | 2,000 | 50% |
| Prescott | 40,000 | 76,000 | 36,000 | 90% |
| Prescott Valley | 39,000 | 79,000 | 40,000 | 103% |
| Yavapai County (in CYMPO) | 29,000 | 34,000 | 5,000 | 17% |
| TOTAL | 123,000 | 214,000 | 91,000 | 74% |

Source: 2010 Census, CYMPO Travel Demand Mode

## 3.2 Future 2040 Employment Growth Areas

The final projections used for 2040 employment density distribution by TAZ are displayed on Figure 3. Like the population projections, the ADOT 2040 statewide model employment information by TAZ was verified, and the employment in each TAZ adjusted, to reflect the areas of future growth in the region. The verification included the review of planning documents and input from members of the TAC.

Table 2 lists the current and future projected employment numbers by jurisdiction for 2010 and 2040. The total employment for the region in 2010 is estimated at slightly over 37,000 jobs. Prescott has the largest employee base, while the community of Dewey-Humboldt has the smallest.

Table 2 – Current and Projected Employment

| Jurisdiction | 2010 | 2040 | Increase | Percent Growth |
|---|---|---|---|---|
| Chino Valley | 2,000 | 4,000 | 2,000 | 100% |
| Dewey-Humboldt | 300 | 500 | 200 | 60% |
| Prescott | 25,000 | 60,000 | 35,000 | 140% |
| Prescott Valley | 9,000 | 16,000 | 7,000 | 78% |
| Yavapai County (in CYMPO) | 1,000 | 1,000 | 0 | 0% |
| TOTAL | 37,300 | 81,500 | 44,200 | 119% |

Source: CYMPO Travel Demand Model

Figure 2 – 2040 Population Projections

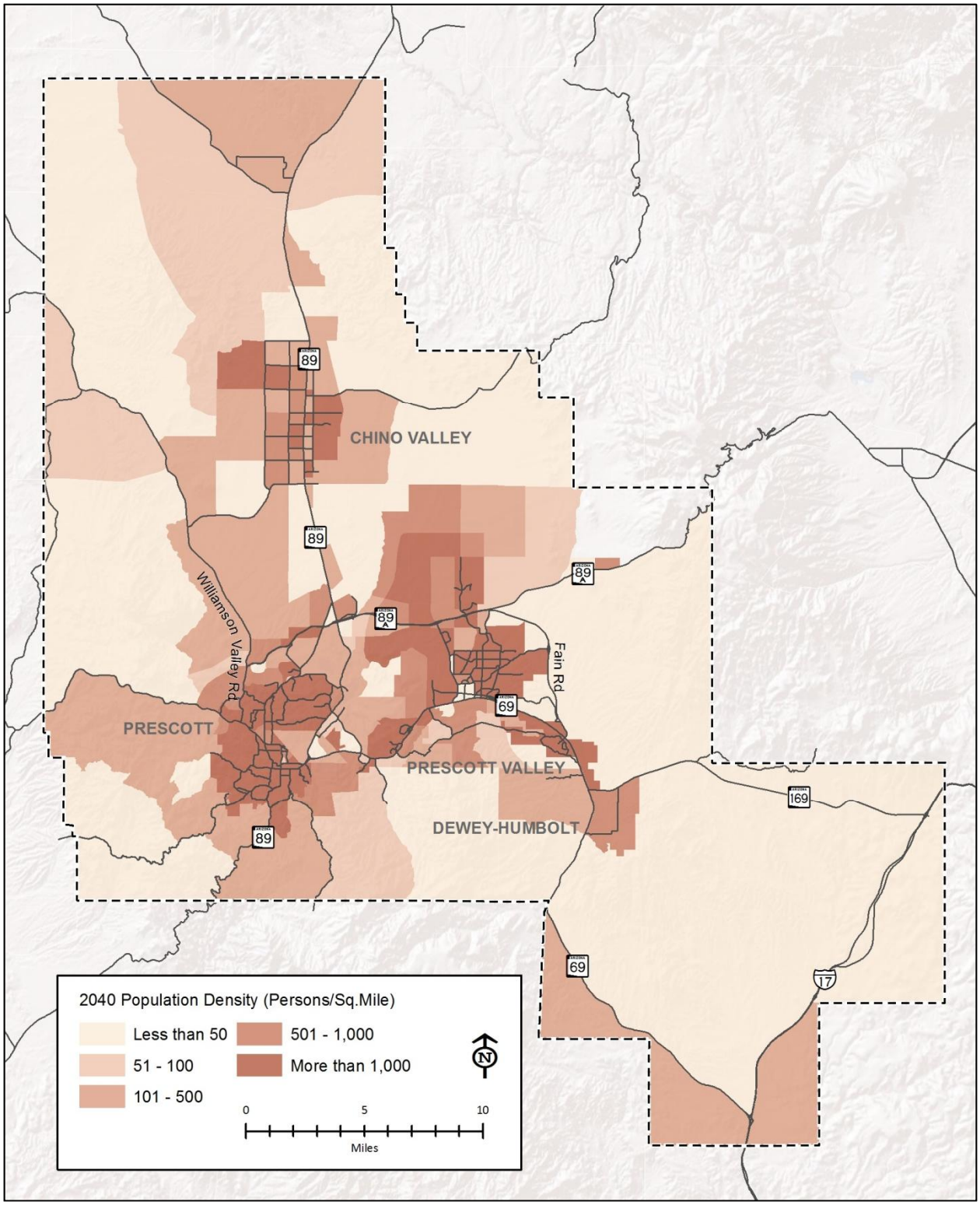
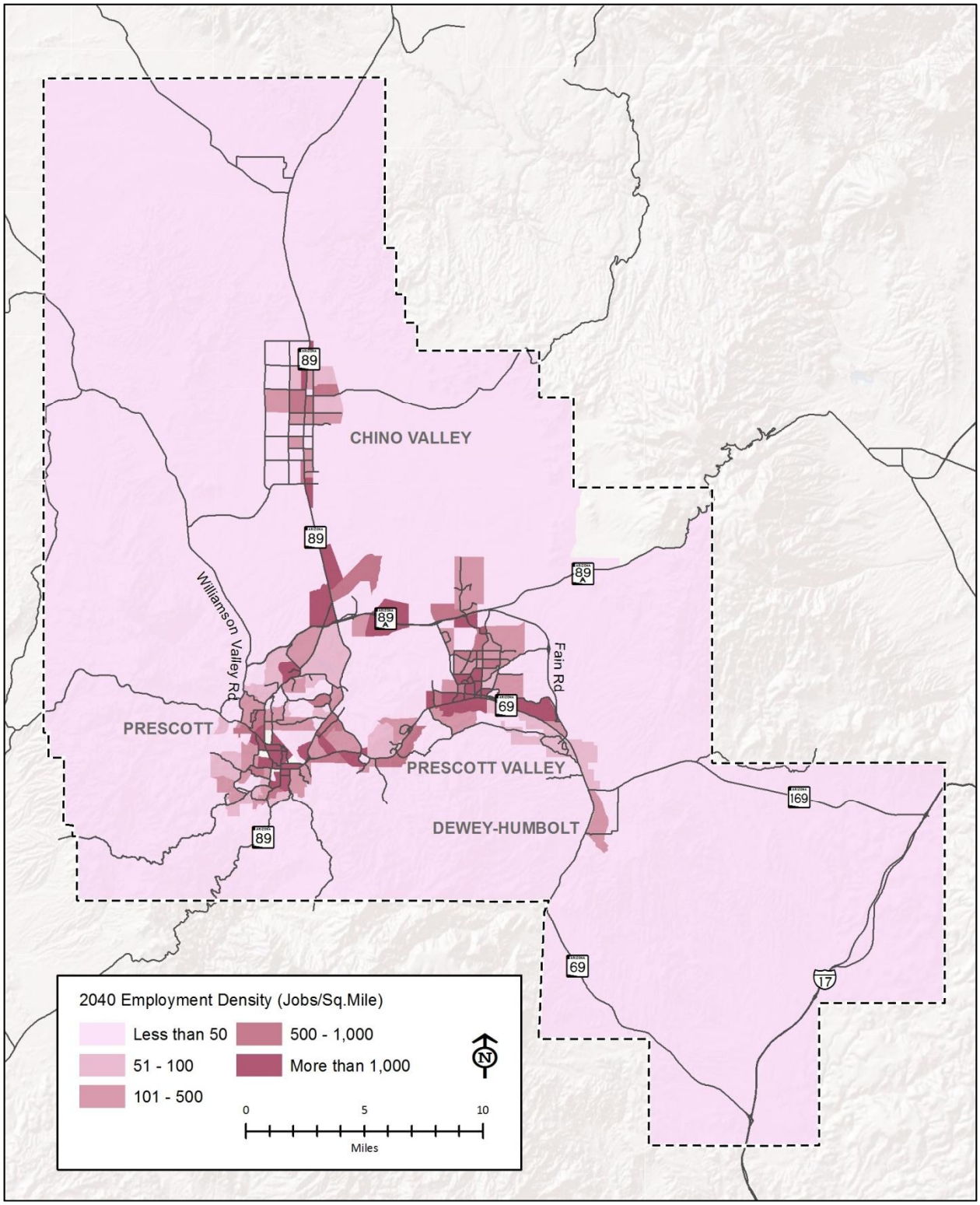


Figure 3 – 2040 Employment Projections



# 4.0 Needs Analysis

In an effort to further examine the transportation needs in the CYMPO region under future conditions, the No-Build network was modeled and the resultant volumes and capacity levels analyzed. The No-Build network includes the existing transportation network and completely funded projects, thus identifying any regional needs that will exist in the future transportation system if no other improvements are programed.

## 4.1 Development of the No-Build Network

Typically, a No-Build network is exactly the same as the existing network; however, there are current projects being planned, designed, or constructed in the CYMPO region that are fully funded. The No-Build network for this RTP therefore consists of the existing network, with the addition of those projects that are currently programmed and fully funded. Descriptions of projects included in the No-Build network are provided below in the text and in Table 3. Other projects listed in CIPs, TIPs, and planning documents are not fully funded at the time of this study and evaluation, and hence not part of the No-Build.

Table 3 – Improvement Projects Included in No-Build Network

| Project name | Description | Jurisdiction | Document |
|---|---|---|---|
| SR 89 Widening | Design and construct 2 new lanes on SR 89 (89A to Chino Valley) | ADOT | CYMPO 2014-2018 MTIP |
| Realigned Willow Creek Road | Realign Willow Creek Road between Pioneer Pkwy-Deep Well Ranch Road | Prescott and Yavapai County | CYMPO 2014-2018 MTIP |
| Deep Well Ranch Road | Part of the SR 89 Widening Project | ADOT | CYMPO 2014-2018 MTIP |
| James Lane | Design and construct new connector facility between Willow Creek Road and SR 89 north of Pioneer Pkwy | ADOT/CYMPO | CYMPO 2014-2023 MTIP as part of SR89 – Deep Well Ranch Road to SR89A |
| Viewpoint Drive Connector | Extension of Viewpoint Drive from Manley Drive to Roundup Drive | Prescott Valley | CYMPO 2015-2024 MTIP - Local Jurisdiction Projects |
| Enterprise Parkway | Design and construct new 2-lane facility between SR 69 and East Valley Road east of Mendecino Drive | Prescott Valley | CYMPO 2015-2024 MTIP - Local Jurisdiction Projects |
| Extend Road 4 South | Road 4 South extension from the Sun Edison Project to Peavine Trail | Chino Valley | CYMPO 2015-2024 MTIP - Local Jurisdiction Projects |

| | | | |
|---|---|---|---|
| Extend Center Street | Center Street extension from Road 1 East to Peavine Trail | Chino Valley | CYMPO 2015-2024 MTIP - Local Jurisdiction Projects |
| Extend Road 1 East | Road 1 East extension from Road 3 South to 1,000' north of the future alignment of Road 5 South | Chino Valley | Chino Valley – Annual Budget for Fiscal Year Ending in June 30, 2014 |
| Peavine Trail | Design and construct new 2-lane facility connecting Road 4 South to Center Street east of Road 1 East (adjacent to current multi-use Peavine Trail) | Chino Valley | CYMPO 2015-2024 MTIP - Local Jurisdiction Projects |
| Robert Road Widening | Design and construct 2 new lanes on Robert Road from Tranquil Blvd. to Long Mesa Drive | Prescott Valley | CYMPO 2015-2024 MTIP - Local Jurisdiction Projects |

## 4.2 Network Analysis

### 4.2.1 Network Analysis Procedures

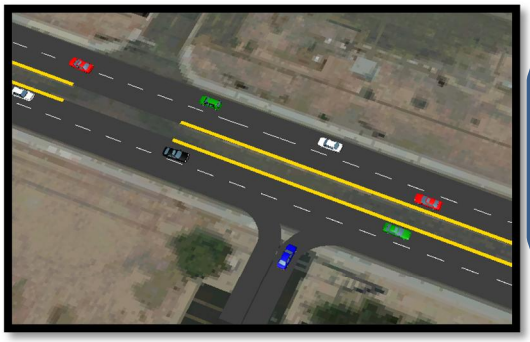
Level-of-service (LOS) analysis was used to assess the general state of traffic operating conditions on the roadway system of the validated existing model and future roadway network models. The concept of LOS uses qualitative measures that characterize operational conditions within a stream of traffic. The descriptions of individual levels-of-service characterize these conditions in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort, and convenience. Six levels of service are defined. They are given letter designations from "A" to "F," with "A" representing the best operational conditions and LOS "F" representing an over capacity condition with a high degree of congestion. Each LOS represents a range of operating conditions. Figure 4 depicts the general operating conditions under each LOS.

LOS for this analysis was assigned according to the volume-to-capacity (V/C) ratio. The capacity of a roadway segment is the designation of how much traffic a roadway segment can carry, and is based on the road's functional classification and number of lanes. The V/C ratio is calculated as the 24-hour total volume on a particular roadway segment, divided by the 24-hour total capacity on that same segment. Therefore, values approaching one (1.0) represent worse LOS, and values greater than 1 represent a severely congested, over-capacity roadway. Table 4 displays the V/C ratio associated with each level of service rating.

Table 4 – V/C Ratio Thresholds for Levels of Service

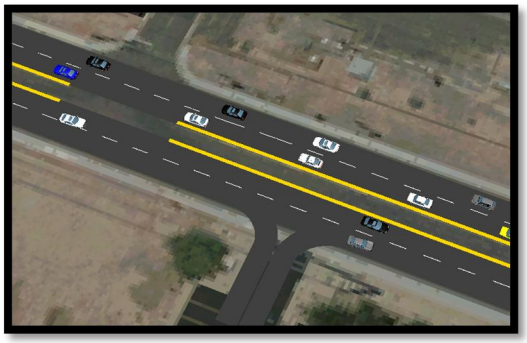
| Level of Service | V/C Ratio |
|---|---|
| A – C | < 0.75 |
| D | < 0.90 |
| E | < 1.00 |
| F | ≥ 1.00 |

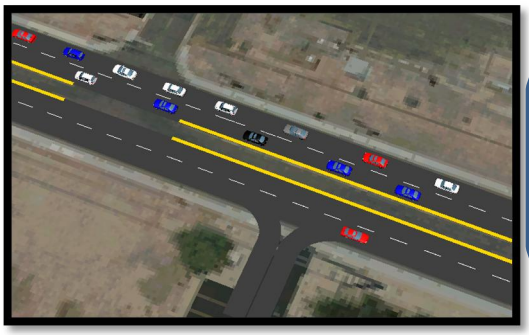
Figure 4 – Level-of-Service Roadway Conditions



LOS A through C: Light traffic flow, no congestion, free flow speeds

LOS D: Moderate congestion, traffic restricts lane changes, speeds slightly reduced





LOS E: Congested roadways, irregular traffic flow, speeds greatly reduced

LOS F: Roadways at or above capacity, gridlock and traffic jams common, expect frequent stops

### 4.2.2 2040 No-Build Network Analysis

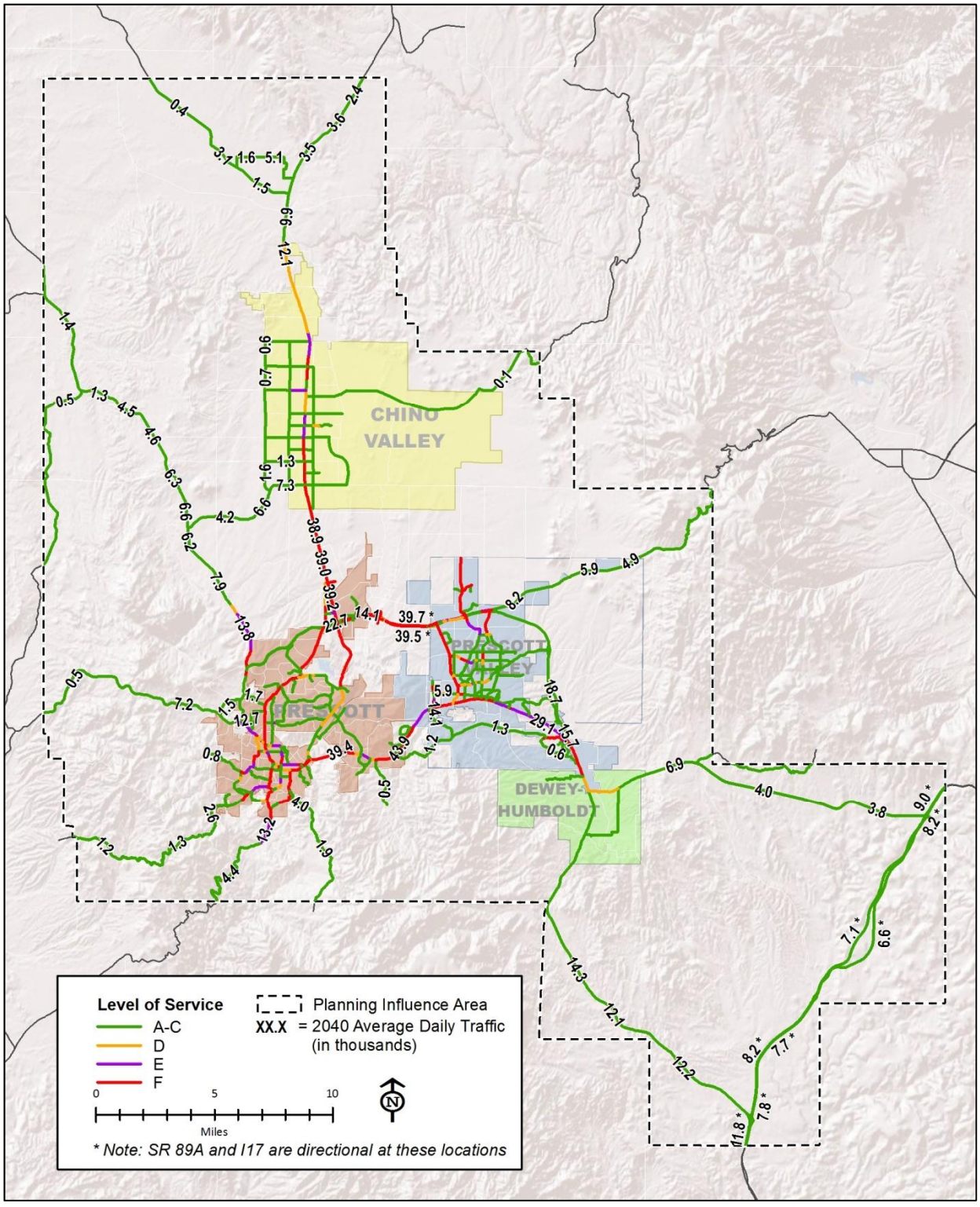
The No-Build network was modeled in conjunction with the 2040 socio-economic parameters to evaluate the CYMPO transportation network in 2040 if no additional improvement projects are programmed. The resultant volumes of the 2040 No-Build Network and LOS projections based on V/C ratio are displayed in Figure 5.

The LOS estimates indicate that several segments in the network are predicted to fail at LOS "F" under the 2025 No-Build conditions. Those segments consist of the following:

- Robert Road from SR 89A to Long Mesa Drive
- Viewpoint Drive north of SR 89A
- Glassford Hill Road generally between SR 69 and SR 89A
- Several segments of SR 69 between SR 89 and SR 169
- SR 89 between approximately Willow Lake Road to the north of SR 89A
- Various segments in downtown Prescott
- Various segments of Willow Creek Road between SR 89 and downtown Prescott.
- Williamson Valley Road near Pioneer Parkway
- SR 89A between SR 89 and Viewpoint Drive

This analysis indicates that several of the regional routes in the CYMPO region are anticipated to experience congested conditions in 2040 if no roadway improvements beyond "No-Build" are implemented.

Figure 5 – CYMPO 2040 No-Build Traffic Volumes and Levels-of-Service



# 5.0 CYMPO 2040 Regional Transportation Plan

## 5.1 Alternatives Analysis

Four alternative transportation networks for the 2040 horizon design year were developed by the Technical Advisory Committee (TAC). These alternatives were drawn from a list of planned projects in the CYMPO planning area, which was based in turn upon the 2011 RTP update, Yavapai County plans, and city and town CIPs and general plans. Each alternative represents a different combination of improvements to existing roadways and/or new facilities, assembled to evaluate the combined projects' effect on congestion in the region. Network alternatives were evaluated and evaluation results were then used to quantitatively rank the alternatives based on their technical merits.

## 5.2 2040 Recommended Network

### 5.2.1 2040 Recommended Network Description

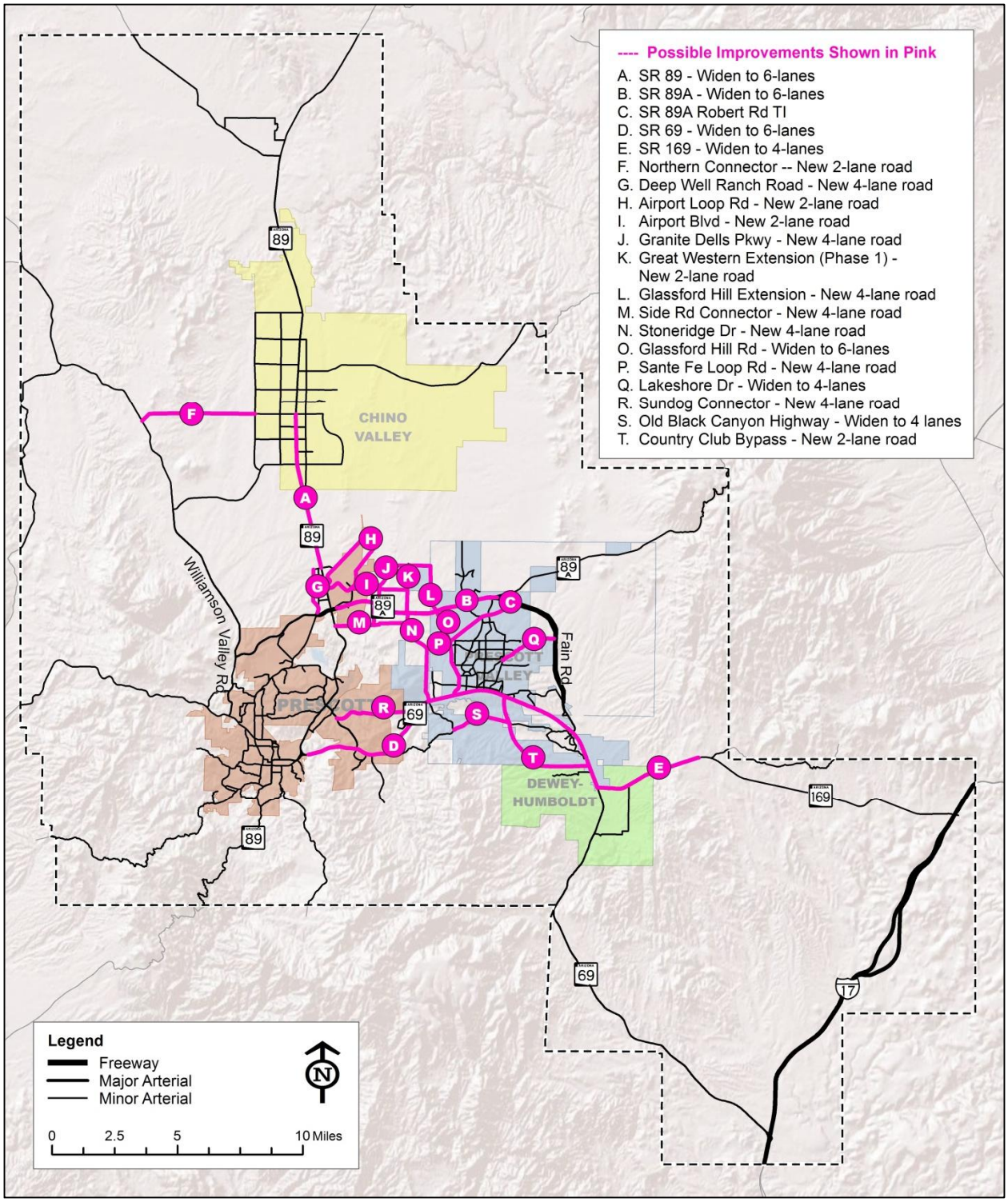
The project team reviewed the results of the alternative selection process. A base alternative (Alternative 1) was identified as the scenario that would be most beneficial for the region. It is anticipated to provide a great deal of benefit to the system with the lowest cost of the four alternatives, when compared to the No-Build scenario. It is projected to reduce the length of congested roadway by 30 miles. It adds 24 miles of access-controlled highway facilities and has the highest ranking for ease of implementation.

In addition to the improvements included in the base alternative, the recommended network was modified to include additional facility improvements that would enhance the regional network to further alleviate congestion, while still being considered reasonable or feasible for cost and implementation. The 2040 recommended improvements are listed in Table 5 and displayed geographically in Figure 6.

Table 5 – Improvement Projects Included in 2040 Recommended Network

| Project name | Description | Jurisdiction |
|---|---|---|
| SR 89 Widening | Widen to 6 lanes (Deep Well Ranch Road to Center Street) | ADOT |
| SR 89A Widening | Widen to 6 lanes (SR 89 to Robert Road) | ADOT |
| SR89A/Robert Road Traffic Interchange (TI) | New Robert Road (TI), includes portion of Santa Fe Loop Road, grade separation of Robert Road, and new ramps | ADOT/Local Jurisdiction |
| SR 69 Widening | Complete widening to 6 lanes (SR 89 to SR 169) | ADOT |
| SR 169 Widening | Widen to 6 lanes (SR 69 to Old Cherry Road) | ADOT |
| Northern Connector | New 2-lane facility between Reed Road and Williamson Valley Road | Yavapai County |
| Deep Well Ranch Road | New 4-lane facility between existing Deep Well Ranch Road and Willow Creek Road | Prescott |
| Airport Loop Road | New 2-lane facility looping around the airport | Prescott |
| Airport Boulevard | New 4-lane facility between SR 89A and Great Western Extension | Prescott |
| Granite Dells Parkway | New 4-lane facility between SR 89A and Great Western Extension | Prescott |
| Great Western Extension (Phase 1) | Phase 1 includes new 2-lane facility to the north of SR 89A | Yavapai County |
| Glassford Hill Extension | New 4-lane facility between SR 89A and Great Western Extension | Prescott Valley |
| Side Road Connector | New 4-lane facility between SR 89A and Stoneridge Drive | Prescott |
| Stoneridge Drive | New 4-lane facility between SR 69 and SR 89A | Prescott Valley |
| Glassford Hill Road Widening | Complete widening to 6 lanes (SR 69 to SR 89A) | Prescott Valley |
| Santa Fe Loop Road | New 4-lane facility between Robert Road and Stoneridge Drive | Prescott Valley |
| Lakeshore Drive Widening | Widen to 6 lanes (Navajo Drive to Fain Road) | Prescott Valley |
| Sundog Connector | New 4-lane facility between Prescott Lakes Parkway and SR 69 | Prescott |
| Old Black Canyon Highway Widening | Widen to 6 lanes between Stoneridge Drive and Country Club Bypass | Prescott Valley |
| Country Club Bypass | New 2-lane facility bypassing SR 69 around the Country Club | Prescott Valley |

Figure 6 – CYMPO 2040 Recommended Regional Network



### 5.2.2 2040 Recommended Network Performance

Figure 7 displays the anticipated traffic volumes and level of service (LOS) of the 2040 recommended network. Volume is represented by the numeric values shown on the roadways, while LOS (based on volume/capacity [V/C] ratio) is represented through color. LOS F signifies the most congested roadway segments and is shown in red.

The figure indicates that the following highest-volume roadways in the CYMPO region cover most of the regional routes, including SR 69 between Dewey-Humboldt and Prescott, SR 89A between Viewpoint Drive and SR 89, SR 89 between downtown Prescott and approximately Road 2 North, Glassford Hill Road between SR 69 and SR 89A, and Willow Creek Road between SR 89A and downtown Prescott. Some of the new facilities recommended in this network are anticipated to also carry relatively high volumes, such as Stoneridge Drive between SR 69 and SR 89A, Santa Fe Loop Road between Stoneridge Drive and Robert Road, Sundog Connector, Granite Dells Road, and Glassford Hill Extension north of SR 89A.

The V/C ratios indicate a significant improvement over the 2040 No-Build network. Improved areas include the following roadways:

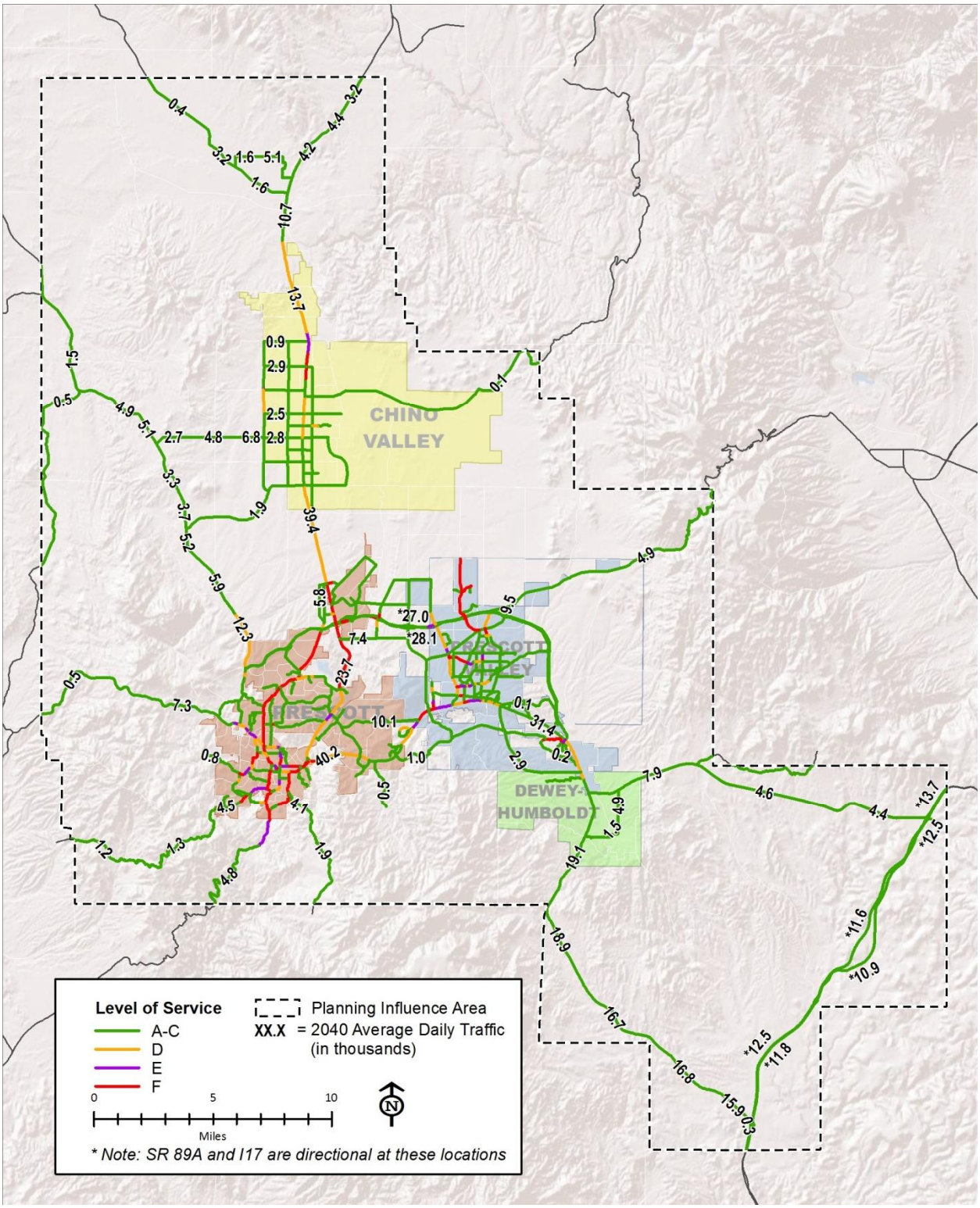
- SR 89 between Deep Well Ranch Road and Center Street
- Williamson Valley Road north of Pioneer Parkway
- SR 69 in multiple segments from SR 89 to SR 169
- Glassford Hill Road from SR 69 to SR 89A
- SR 89A between SR 89 and Robert Road
- Willow Creek Road between Pioneer Parkway and SR 89
- Robert Road near SR 89A

However, some areas of the recommended network are still anticipated to operate at congested levels. These roadways include the following:

- SR 89 between Deep Well Ranch Road and approximately Willow Lake Road
- Segments of SR 89 north of Center Street
- Segments of SR 89 in the downtown Prescott area
- Willow Creek Road between Pioneer Parkway and downtown Prescott
- Multiple roadways in the downtown Prescott area
- Small segments of SR 69 in Prescott Valley
- Viewpoint Drive north of Santa Fe Loop Road
- Small portions of multiple roadways in Prescott Valley

Further study is recommended for improvements beyond 2040 to address some of these congestion issues. The previously planned projects that were not recommended for implementation by 2040 are recommended to be further studied and evaluated for possible implementation beyond 2040.

Figure 7 – CYMPO Recommended 2040 Traffic Volumes and Levels-of-Service



## 5.3 Future Multimodal Transportation Facilities

The City of Prescott's Bicycle and Pedestrian Master Plan identified high-priority requests for Complete Street improvements for inclusion in future Capital Improvement Programming (CIP). These high-priority projects include:

1. Projects listed in the current CIP, programmed to be designed/constructed in 5 to 10 years
2. Projects recommended for inclusion in the CIP for design/construction in 5 to 10 years

Some example high-priority projects in Prescott include:

- Ruth/Demerse, Whipple to Montebello Lane – sidewalks on both sides with crosswalk at Rosser Street
- Sidewalk improvements providing linkage from the Ruth, Demerse project to the Prescott Heights neighborhood
- Mt. Vernon, Senator Highway Improvements – sidewalk construction with potential striped bike lane
- Rosser Street Reconstruction – modification to intersection (SR 89) and signal to provide pedestrian crossing
- East Gurley Street west to Thumb Butte Road to Thumb Butte Park – study reconstruction of street to accommodate pedestrian and bicycle traffic
- Green Lane sidewalks, Santa Fe Springs to Meadowridge Lane – construction of sidewalks
- Moeller Street sidewalks, Mt. Vernon to Rush Street – reconstruction of sidewalks
- Country Club Drive, street improvements associated with utility system improvements
- Park Avenue, West Gurley to Copper Basin Road – investigate opportunity to provide bike lanes
- Goodwin Street, Bradshaw Drive to Glenwood Avenue to Park Avenue – reconstruction of sidewalks

The Town of Prescott Valley has considered a potential future light rail facility along the Santa Fe Loop Road, right-of-way for which has already been preserved.

# 6.0 Implementation

In a region with growing travel demand, the plan for the future circulation network is equally as important as the plan for implementing that network. Without scheduling and identification of possible funding sources, the network improvements cannot be implemented. The recommendations include projects for short-term improvements, mid-term improvements (2025 recommended network), long-term improvements (2040 recommended network), and long-term projects to be studied.

## 6.1 Short-Term Improvement Projects

The Technical Advisory Committee (TAC) identified areas within the CYMPO region that were areas of interest for immediate improvements. The areas investigated were those with potential congestion issues and may have potential for improved traffic conditions with relatively low-cost improvements. The three areas identified include:

1. The SR 89 and SR 89A/Pioneer Parkway Traffic Interchange
2. The intersection of SR 69 and SR 169
3. The traffic interchanges along SR 89A between SR 89 and Robert Road

## 6.2 Draft Project Implementation Schedule

The implementation plan that follows is a draft schedule that identifies the time frame in which each improvement project will be completed. The time frame for each project or corridor was identified through collaboration with the TAC in addition to results of the 2025 and 2040 future network models. The projects listed in Table 6 below do not include those that have already been programmed prior to Fiscal Year (FY) 2015.

Table 6 – Draft Project Implementation Schedule

| Facility | FY2015-2020 (Funded) | FY 2020-2025 | FY 2025-2040 | Beyond 2040 |
|---|---|---|---|---|
| SR 89 | Widen to 4 lanes between SR 89A and Chino Valley | Intersection improvements at SR 89A | Widen to 6 lanes between Deep Well Ranch Road and Center Street | Further study for widening to 6 lanes between SR 89A and Deep Well Ranch Road<br><br>Further study for widening to 4 lanes between MP 314 and SR 89A |

| Facility | FY2015-2020 (Funded) | FY 2020-2025 | FY 2025-2040 | Beyond 2040 |
|---|---|---|---|---|
| SR 69 | | Widen to 6 lanes in segments with greatest need between SR 89 and SR 169<br><br>Intersection improvements at SR 169 | Widen to 6 lanes in all remaining segments from SR 89 to SR 169 | |
| SR 89A | * Conduct traffic study for mainline and interchanges between SR 89 and Fain Road | Construct the Robert Road traffic interchange | Widen to 6 lanes between SR 89 and Fain Road | Further study for widening to 4-lanes between Fain Road and MP 329 |
| SR 169 | | | Widen to 4 lanes between SR 69 and Old Cherry Road | |
| I-17 | | | | Widen to 6 lanes between SR 69 and SR 169 |
| Glassford Hill Road | | Widen to 6 lanes between SR 69 and SR 89A | | |
| Side Road Connector | | Construct new 4-lane facility | | |
| Stoneridge Drive | | Construct new 4-lane facility | | |
| Northern Connector | | | Construct new 2-lane facility | |
| Deep Well Ranch Road | Construct portion of new facility | | Construct new 4-lane facility | |
| Airport Loop Road | | | Construct new 2-lane facility | |
| Airport Boulevard | | | Construct new 2-lane facility | |
| Granite Dells Parkway | | | Construct new 4-lane facility | |
| Great Western Extension | | | Construct Phase I as a new 2-lane facility | Study and construct final phases of access controlled facility |

| Facility | FY2015-2020 (Funded) | FY 2020-2025 | FY 2025-2040 | Beyond 2040 |
|---|---|---|---|---|
| Glassford Hill Extension | | | Construct new 4-lane facility | |
| Santa Fe Loop Road | | | Construct new 4-lane facility | |
| Lakeshore Drive | | | Widen to 4 lanes from Fain Road to Navajo Drive | |
| Sundog Connector | | | Construct new 4-lane facility | |
| Old Black Canyon Highway | | | Widen to 4 lanes between Stoneridge Drive and Country Club Bypass | |
| Country Club Bypass | | | Construct new 2-lane facility | |
| Chino Valley Extension | | | | Study and construct new 4-lane access-controlled facility |
| Fain Road to SR 169 Connector | | | | Study and construct new 4-lane access-controlled facility |
| SR 169 to I-17 Connector | | | | Study and construct new 4-lane access-controlled facility |
| Navajo Drive | | | | Study and construct new 2-lane facility |
| Willow Creek Road | Realign Willow Creek Road between Pioneer Pkwy-Deep Well Ranch Road | | | |

| Facility | FY2015-2020 (Funded) | FY 2020-2025 | FY 2025-2040 | Beyond 2040 |
|---|---|---|---|---|
| James Lane | Design and construct new connector facility between Willow Creek Road and SR 89 north of Pioneer Pkwy | | | |
| Viewpoint Drive Connector | Extension of Viewpoint Drive from Manley Drive to Roundup Drive | | | |
| Enterprise Parkway | Design and construct new 2-lane facility between SR 69 and East Valley Road east of Mendecino Drive | | | |
| Road 4 South | Road 4 South extension from the Sun Edison Project to Peavine Trail | | | |
| Center Street | Center Street extension from Road 1 East to Peavine Trail | | | |
| Road 1 East | Road 1 East extension from Road 3 South to 1,000' north of the future alignment of Road 5 South | | | |
| Peavine Trail | Design and construct new 2-lane facility connecting Road 4 South to Center Street east of Road 1 East | | | |

| Facility | FY2015-2020 (Funded) | FY 2020-2025 | FY 2025-2040 | Beyond 2040 |
|---|---|---|---|---|
| Robert Road Widening | Design and construct 2 new lanes on Robert Road from Tranquil Blvd. to Long Mesa Drive | | | |

* Not funded

## 6.3 Environmental Considerations

One of the largest populations of pronghorn in Arizona is found in central Yavapai County in the area bounded by Prescott, Prescott Valley, Chino Valley, Paulden and Seligman. AGFD refers to pronghorn in this area as the Central Yavapai County Herd. The area supports 15-25 percent of the statewide pronghorn population in one of the highest density populations in the state.

A pronghorn GPS movement study within the study area was initiated by AGFD in 2009-2010. Future corridor improvement studies should coordinate with AGFD on locations and design of pronghorn crossing structures (i.e. wildlife underpasses, overpasses) and any other measures (i.e. funnel fencing, etc.) recommended to maintain permeability and mitigate the potential impacts of roadway improvements on pronghorn movements. It is recommended the information available from AGFD be referenced by the local jurisdictions and developers to plan future wildlife corridors as part of the development process. This will align future crossings with the preservation of future open spaces for wildlife movement. Future improvement studies should also coordinate with AGFD in cooperation with local community groups with open space, recreation, and/or habitat preservation as their mission, to assist in locating, prioritizing and conserving open space in accordance with the local area Land Use/General Plans. These lands should be considered options for conservation easements, or other legal mechanism, when CYMPO considers highway corridor planning. The CYMPO and AGFD should collaborate with these groups to seek those measures necessary to maintain habitat permeability and recognizes the role that ecological systems hold in providing green infrastructure for storm water management, as well as compatibility of multi-modal (bicycle, walking, horseback, etc.) accesses to the highway corridor for aesthetic and recreational value.

## 6.4 Potential Sources of Funding

This section reviews existing and potential transportation funding options available to CYMPO and its member agencies. It identifies and quantifies transportation revenue sources currently used by jurisdictions in the state, and funding options that are statutorily available but not currently used.

### 6.4.1 Basic Sources of Transportation Revenue

There are many sources and types of transportation revenue, each with its advantages and limitations. No single source meets all of the needs, so jurisdictions must rely on multiple revenue streams. Most major transportation sources are public revenue, levied, and collected as taxes by federal, state, and

local governments. Public-private partnerships and direct private ownership, operation, and maintenance of transportation facilities do occur, however, and could become more prominent in the future.

Some transportation revenue comes from direct user taxes and fees, such as the (per gallon) tax on gasoline sales, the vehicle license tax, toll roads, and transit fares. These taxes and fees are assessed on the users of transportation systems, to offset the demands that users make for new capital investments as well as for operations and maintenance. The amount is different in Arizona than in other states because their taxes and fee structure are different. Other transportation revenue consists of indirect taxes and fees levied by governments that allocate the revenue to transportation purposes. Property taxes and sales taxes are the primary sources of indirect transportation revenue. They are considered indirect because they are imposed on the taxpaying public at large, rather than on transportation system users in particular.

### 6.4.2 Multimodal Funding Opportunities and Constraints

The following federal funding sources could be tapped for future transit projects. Nearly all federal grant programs require a local match, either in cash or in kind. Although the capital needs of most transit systems are largely funded through federal programs, operating funds must be found locally.

- Section 5307 Urbanized Area Formula Grants: for expenses related to planning, engineering, design, and evaluation of transit projects and other technical studies, as well as capital investments in bus and bus-related activities.
- Section 5309 Discretionary Capital Grants: can be used for new and replacement buses and facilities and new fixed guideway systems.
- Section 5310 Elderly and Disabled Transportation Grants: available to public and private, not-for-profit entities to cover 80% of the cost for purchasing vans, small buses, and related capital equipment. During FY 2014, various agencies within CYMPO have been awarded a total of $230,000 in grants ($184,000 federal, $46,000 local) under Section 5310 capital awards, and $70,000 ($35,000 federal, $35,000 local) in operating awards.
- Section 5316 Jobs Access/Reverse Commute Program: for new transit service designed to assist welfare recipients and other low-income individuals to get to jobs, training and child care services.
- Section 5317 New Freedom Initiatives Grants: designed to encourage services and facility improvements to address the transportation needs of persons with disabilities that go beyond those required by the ADA.