SOUTHERN NAVAJO AND APACHE COUNTIES TRANSPORTATION PLAN

Working Paper 1: Current and Future Conditions

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Prepared for:
ADOT Multimodal Planning Division
Planning Assistance for Rural Areas Program

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1. INTRODUCTION

This study prepares a long-range multimodal transportation plan that updates the *2007 Southern Navajo/Apache County Sub-Regional Transportation Plan*.

Navajo and Apache Counties are in the central portion of eastern Arizona. The region is a popular destination for both winter and summer recreational visitors, and during these seasonal peaks in population, the community experiences congestion and heavy impacts on its transportation infrastructure. The primary motivation for the study is to identify and prioritize transportation investments for the region that will address mobility needs of the communities while providing a strong connection and alignment of transportation investments to support economic development in the region.

1.1 STUDY OBJECTIVES

Objectives for the Southern Navajo and Apache Counties Transportation Plan are:

- Review current and future conditions within the study area. Document known major future development. Assess multimodal transportation conditions, including growth patterns, congestion, freight, transit connectivity, bicycle, pedestrian, ITS, and safety.
- Identify transportation issues and needs
- Identify and analyze feasible alternatives for addressing the needs, and improving the transportation network in the study area.
- Prepare an economic analysis to assist in transportation improvement project justification, support funding applications, and assist in prioritizing projects.
- Recommend high-priority projects for consideration to include in the local jurisdiction capital improvement program development, and in the ADOT P2P program.

1.2 STUDY AREA

The study area is illustrated in **Figure 1** and includes an approximately 1,900 square mile area that encompasses the City of Show Low, Town of Snowflake, Town of Taylor, Town of Pinetop-Lakeside, and the unincorporated areas of southern Navajo and Apache Counties, including the communities of Concho and Vernon. The study area does not include an assessment of transportation networks and needs on the White Mountain Apache Indian Reservation or the Zuni Indian Reservation.

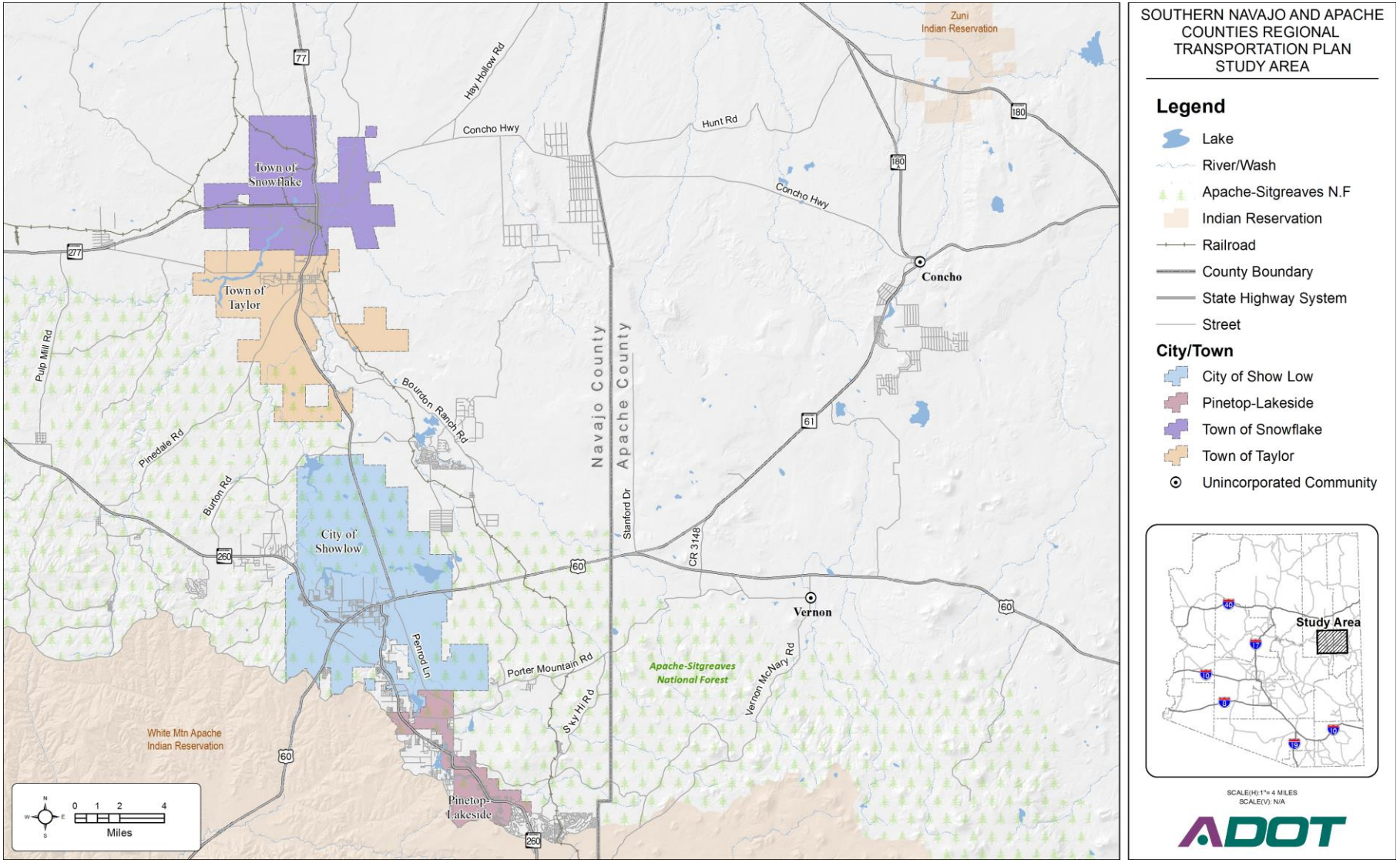


Figure 1: Study Area

1.3 STUDY PROCESS

Figure 2 provides an overview of the study process used for the Southern Navajo and Apache Counties Transportation Plan.

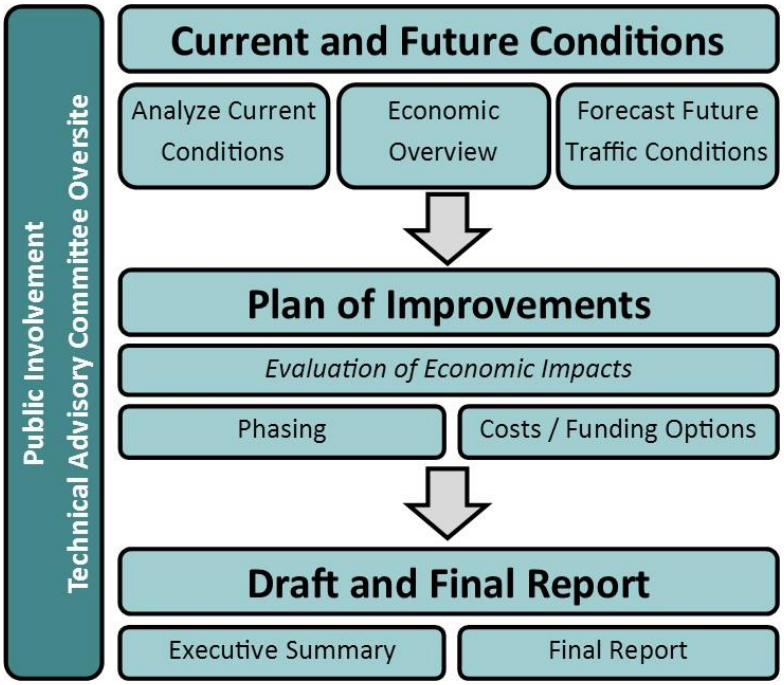


Figure 2: Study Process

The purpose of the study is to identify transportation needs and priorities for the region. A primary input to identification of transportation needs is consideration of improvements that will promote economic growth and development.

Transportation projects and priorities that emerge from this study will focus on those that can be reasonably and feasibly implemented with available funds and will positively impact the economic development potential of the region. The available funds include current funding and programming mechanisms, potential grants, or private investment.

TECHICAL ADVISORY COMMITTEE

A project Technical Advisory Committee (TAC) was established that included representatives from study area local governments and agencies. The TAC provides input and insight into the study from both the perspective of each member's respective agency, and while considering the broader region. TAC members included representatives of the following agencies:

- Arizona Department of Transportation, Multimodal Planning Division
- Arizona Department of Transportation, Northeast District
- Navajo County
- Apache County
- City of Show Low
- Town of Taylor
- Town of Pinetop-Lakeside
- Town of Snowflake
- Northern Arizona Council of Governments

STAKEHOLDER ROUNDTABLE MEETINGS

The study team conducted stakeholder roundtable meetings with agency representatives from the study area to gather more detailed input on transportation needs and priorities related to safety, economic development, and mobility in the region. The stakeholder roundtable meetings represented the following interest areas:

- Community Planning, Engineering, and Maintenance
- Emergency Services and Public Safety
- Transit
- Economic Development

The meeting format included an overview of the study and an open discussion of transportation, safety, mobility, and economic development needs and priorities. A summary of input provided on transportation needs and perspectives are provided in **Appendix A**.

The following are key and overarching issues that were identified by stakeholders related to transportation needs within the study area:

- There are congestion/capacity issues on US 60 and SR 260 in the City of Show Low; this impacts important transportation operations such emergency vehicle response time, transit schedule-adherence, and general mobility. Improvements to the highway system as well as the identification of viable alternative routes to the highways is critical for the region.
- There is a need to provide better east-west connectivity and emergency access in the region. Currently Deuce of Clubs is the only roadway that crosses Show Low Creek and provides access to the eastern part of Show Low. This presents a safety concern for the area in the case of a flooding event.
- It is important that the services within Show Low, especially the medical facilities, are accessible to residents from both counties. Infrastructure and services are needed to enable all people, including those who drive and those that do not, to travel to/from Show Low as needed.
- There is an anticipated growth and development in industry along the corridor between Taylor/Snowflake and Holbrook, which is anticipated to bring an increase in heavy truck traffic throughout the regional roadway network.
- There is a need for a more consistent vision for the roadway cross section within and between Show Low and Pinetop-Lakeside. This will help ensure connectivity between jurisdictions and between modes and can help agencies better manage operations on key connecting streets between neighboring agencies.

2. EXISTING TRANSPORTATION CONDITIONS

This section describes the existing multimodal transportation system within the study area. It provides details on the road network, public transit system, and bicycle and pedestrian facility characteristics.

2.1 SUMMARY OF PREVIOUS PLANS AND STUDIES

Several studies were reviewed for the development of this transportation plan, including:

- Southern Navajo/Apache County Sub Regional Transportation Plan (2007)
- Navajo County Central Region Transportation Study (2010)
- NACOG 2017-2020 Coordinated Mobility Plan (2017)
- Pinetop-Lakeside, SR 260, Pedestrian Safety Solutions Study (2015)
- Pinetop Lakeside Community Transportation Plan (2007)
- City of Show Low Trails Master Plan (2008)
- Show Low Trails and Transit Connectivity Study (2014)
- Snowflake/Taylor Multijurisdictional Transportation Plan (2011)
- Snowflake Second Knolls Development Regional Transportation Study (2014)
- SR 260 / US 60 Corridor Profile Study, Heber-Overgaard to New Mexico State Line (2018)
- SR 77 Corridor Profile Study, Holbrook to Show Low (2018)

Table 1 summarizes the transportation projects that were recommended in the studies that were reviewed and provides the status of the recommended project.

Table 1: Summary of Projects Identified in Previous Plans and Studies

Plan	Recommendation	Recommended Priority	Status	TAC Comments Priority
Southern Navajo/Apache County Sub-Regional Trans Plan (2007)	**Navajo County**			
	Construct Western North-South Bypass from Pinedale Rd to Paper Mill Rd	Long-Range	-	-
	Construct Forest Road 133 between Lone Pine Dam Rd and Pinedale Rd	Long-Range	-	-
	Construct Lone Pine Dam Rd between Sr 260 (Clark Rd) and Forest Rd 133	Long-Range	-	-
	Widen Bourdon Ranch Rd to 4 lanes between US 60 (Deuce of Clubs) and Bourdon Ranch Rd Extension	Long-Range	-	-
	Construct Bourdon Ranch Rd Extension between Bourdon Ranch Rd and Concho Hwy	Long-Range	-	-
	Widen Porter Mountain Rd between SR 260 (White Mountain Rd) and Penrod Rd to 4 lanes	Long-Range	-	-
	Construct Sky Hi Rd Extension between Porter Mountain Rd and US 60	Long-Range	-	-
	Apache County			
	Construct Vernon-McNary Rd Extension from US 60 to US 61	Long-Range	-	-
	Construct Mazatzal Rd Extension between County line and Stanford Rd	Long-Range	-	-
	Construct CR 8500 between Stanford Rd and SR 61	Long-Range	-	-
	Construct CR 8500 to Concho Hwy	Long-Range	-	-

Table 1: Summary of Projects Identified in Previous Plans and Studies (continued)

Plan	Recommendation	Recommended Priority	Status	TAC Comments Priority
Southern Navajo/Apache County Sub-Regional Trans Plan (2007)	**ADOT**			
	Widen SR 77 to 4 lanes between Deuce of Clubs (US 60) and Pinedale Rd	Mid-Range	-	-
	Widen SR 260 (Clark Rd) to 4 lanes between Burton Rd and Old Linden Rd	Long-Range	-	-
	Widen US 60 (Deuce of Clubs) to 4 lanes between Rim Rd and Clark Rd (SR 260)	Long-Range	-	-
	Widen US 60 to 4 lanes between SR 77 and SR 61	Mid-Range	-	-
	Construct new traffic interchange at US 60 and SR 77	Long-Range	-	-
	Construct new traffic interchange at SR 77 and Silver Lake Blvd	Long-Range	-	-
	Pinetop-Lakeside			
	Widen Porter Mountain Rd to 4 lanes between SR 260 (White Mountain Rd) and Penrod Rd	Mid-Range		
	Widen Penrod Rd to 4 lanes between Porter Mountain Rd and Show Low City limits	Mid-Range		
	Construct Rim Rd between SR 260 (White Mountain Rd) and Show Low City limits	Long-Range		
	Show Low			
	Construct Woolford Extension between SR 260 (White Mountain Rd) and Penrod Rd	Short-Range	Programmed	High Priority
	Construct Summit Way between US 60 (Deuce of Clubs) and SR 260 (White Mountain Rd)	Long-Range	Not implemented	Medium Priority
	Construct Scott Ranch Rd between SR 260 (White Mountain Rd) and Penrod Rd	Short-Range	Programmed –	High Priority
	Widen Penrod Rd to 4 lanes between City limits and US 60 (Deuce of Clubs)	Mid-Range	Not implemented	Medium Priority
	Construct Rim Rd between City limits and US 60	Long-Range	Not implemented	Medium Priority
	Taylor			
	Construct Willow Ln/Center St Extension between Bordon Ranch Rd and Bourdon Ranch Rd Extension	Long-Range	-	-
	Widen Paper Mill Rd to 4 lanes between Freeman Hollow Rd and SR 77	Long-Range	-	-
	Construct Airport Rd between Willow Ln and SR 77	Long-Range	-	-
	Snowflake			
	Construct 7th St between SR 77 and Bourdon Ranch Rd Extension	Long-Range	-	-
	Construct Hatch/Rodeo Dr. between SR 77 and Bourdon Ranch Rd Extension	Long-Range	-	-

Table 1: Summary of Projects Identified in Previous Plans and Studies (continued)

Plan	Recommendation	Recommended Priority	Status	TAC Comments on Priority
Navajo County Regional Trans. Study (2010)	Establish bus service between Heber-Overgaard and Show Low to interface with the White Mountain Connection at a new transit hub	-	-	-
	Evaluate SR 77 between Snowflake and Holbrook for safety and capacity improvements	-	-	-
	Examine SR 260 between Heber-Overgaard and Snowflake to identify shoulder with improvements where shoulders are less than 4 feet wide	-	-	-
	Examine potential to establish rails-with-trails corridor for abandon railroad between Snowflake and McNary	-	-	-
Pinetop-Lakeside Pedestrian Safety Solutions Study (2015)	Rainbow Lake Pedestrian Improvements: • Sidewalk and ADA ramp improvements on the east side of Lakeview Ln from SR 260 to Rainbow Lake Ln • Pedestrian pathway and bridge crossing the spillway of Rainbow Lake Dam • Seal coat and striping reconfigurations on Rainbow Lake Ln from Lakeview Ln to Niels Hansen Dr. • ADA ramp and driveway improvements from intersection of Rainbow Lake Ln and Niels Hansen Dr., north of SR 260	-	-	-
	SR 260 sidewalk and Driveway Improvements	-	-	-
	SR 260 median improvements	-	-	-
	Penrod Land Traffic Signal and Parking Improvements	Short-range	-	-
	Pine Lake Road Pedestrian Hybrid Beacon	-	-	-
	Hill Drive to Buck Springs Road Shared Use Path	-	-	-
Show Low Trails and Transit Connectivity Study (2014)	Sidewalk recommendations:	SW#1- SW# 10-Short range SW#11-long range SW#12 and SW13-Medium range	Sidewalks:	-
	SW #1: Deuce of Clubs from SR 260 to the Show Low Aquatic Center		SW1-Implemented	-
	SW #2: Central Ave – North of Paloma St		SW2-Implemented	-
	SW #3: McNeil St –4th Avenue to the Deuce of Clubs		-	-
	SW #4: Cooley St – Timberstone Apts. east to Central Ave		SW4-Implemented	-
	SW #5: Cooley St – Timberstone Apts. west to 4th Ave.		SW5-Implemented	-
	SW #6: 4th Ave – west side of roadway – Old Linden Rd to Cooley St		-	-
	SW #7: 4th Ave – west side of roadway – Cooley St to McNeil St		-	-
	SW #8: 16th Ave – south of McNeil St, east side of roadway		SW8 - Programmed	High Priority
	SW #9: Hall St –White Mountain Rd to 8th St		SW9–Not implemented	Medium Priority
	SW #10: 9th St –south of City Hall – both sides of road		SW 10 - Implemented	-
	SW #11: 8th St from Whipple Rd south to Woolford Rd		SW11-Not Implemented	Medium Priority

Table 1: Summary of Projects Identified in Previous Plans and Studies (continued)

Plan	Recommendation	Recommended Priority	Status	TAC Comments Priority
Show Low Trails and Transit Connectivity Study (2014)	SW #12: 5th St, existing transit stop at Hunning St to the Deuce of Clubs		-	-
	SW #13: Central Ave – east side of roadway, Old Linden to Thornton Rd		-	Not needed/Low priority
	Shared use paths (SUP) recommendations:	SUP#1, 5, 8 – short range SUP#2,4,12,14,15,16,17 – medium range SUP#3,6,7,9,10,11,13 – long range	Shared use paths:	-
	SUP #1: US 60 from Summit Trail to Clark Road (n. side of US 60)		-	-
	SUP #2: Fool Hollow Recreation Area Entrance Road		-	-
	SUP #3: Clark Road		-	-
	SUP #4: North 16th Ave - Old Linden Rd to Show Low Creek		-	-
	SUP #5: North 16th Ave – Old Linden Road to McNeil Street		-	-
	SUP #6: Thornton Road from Central Avenue to 16th Avenue/22nd Avenue		SUP 6- Not implemented	Medium Priority
	SUP #7: Thornton Road from Central Avenue to SR 77		SUP 7- Not implemented	Medium Priority
	SUP#8: Woolford Road – Whipple Road south and east to White Mountain Road		SUP 8 - Not Implemented	High Priority
	SUP #9: Summit Trail – south of US 60		-	-
	SUP #10: Sierra Pines Trail		-	-
	SUP #11: Woolford Rd-east of White Mountain Rd to Show Low Bluffs		SUP 11 - Not Implemented	High Priority
	SUP #12: Central Avenue – Thornton Road (alignment) to Show Low Creek		-	-
	SUP #13: Central Ave/Pine Drive south of Woolford Road to Buena Vista Trail		-	-
	SUP #14: Penrod Road – Deuce of Clubs to Show Low Lake Road		SUP 14 - Not Implemented	Medium Priority
	SUP #15: White Mountain Road –west side of roadway, south of Pine Oaks subdivision to Park Pineway Shopping Center		SUP 15 - Not Implemented	High Priority
	SUP #16: 8th Street, Whipple Road to Owens		SUP 16 - Not Implemented	Medium Priority
	SUP #17: White Mountain Road (east side), Meadowview Trailhead to Ponderosa Parkway Shopping Center		SUP 17 - Not Implemented	Medium Priority
	Multiuse Trails(MUT) recommendations: MUT #1: Bagnal Draw – Los Caballos Trail to Fool Hollow Recreation Area MUT#2: Show Low Bluff MUT#3: Show Low Creek Trail MUT#4: Show Low Lake Nature Loop MUT#5: Show Low Timber Mesa-Buena Vista Connector Trail MUT #6: Torreon – Chihuahua Connector MUT#7: North 6th St to USFS and Maverick Motorized Trail MUT #8: Long Lake MUT#9: Mongollon Rim Rd	MUT#1, 2,5, - short range MUT # 4,7- medium range MUT# 6,8,9 – long range MUT #3- short, mid and long range	-	-

Table 1: Summary of Projects Identified in Previous Plans and Studies (continued)

Plan	Recommendation	Recommended Priority	Status	TAC Comments on Priority
Show Low Trails and Transit Connectivity Study (2014)	**Bike lane recommendations:** Old Linden Rd Whipple Rd	Short range	-	-
	Bike route/shared roadway recommendations: Central Ave, Sierra Pines Dr., Summit Trail -short range		-	-
	Deuce of Clubs		-	-
	White Mountain Rd		Not implemented	High Priority
	Clark Rd		-	-
	Central Ave (Old Linden Rd south to Whipple St)		Not implemented	High Priority
	Sierra Pines Dr.		-	
	Summit Trail		-	-
	Transit recommendations:			
	Adding additional vehicle to the Four Seasons Connection deviated fixed route transit service		Not Implemented	Medium Priority
	Installing bus pullouts along the major thoroughfares		Programmed	Medium Priority
	Switching from deviated route service to fixed route with complementary paratransit service		Not implemented	Not Needed / Low Priority
	Restructuring the existing routing system		Not implemented	Medium Priority
	Shortening the existing routes (eliminating bus stops)		Not implemented	Not Needed / Low Priority
	Extending the days and hours of operations		Not implemented	Not Needed / Low Priority
	Lengthening the current headways		Not implemented	Not Needed / Low Priority
	Implement transit stop plan of improvements		Programmed	Medium Priority
SR 260 / US 60 Corridor Profile Study, Heber-Overgaard to New Mexico State Line (2018)	Other corridor recommendations were: Conduct access management studies in the future for the more populated areas of the SR 260 / US 60 corridor:	Addresses priority needs for inclusion in ADOT Planning to Programming Process (P2P).	-	-
	US 60 through the Town Show Low from MP 340-342	Not Implemented	High Priority	-
	SR 260 beginning in Show Low to Pinetop-Lakeside from MP 341-355	Not Implemented	High Priority	-
	Conduct future wildlife mitigation studies to address and reduce the high number of animal crashes on the SR 260/US 60 corridor.	-	-	-

Table 1: Summary of Projects Identified in Previous Plans and Studies (continued)

Plan	Recommendation	Recommended Priority	Status	TAC Comments on Priority
Snowflake/Taylor Multijurisdictional Transportation Plan (2011)	10 proposed roadways and 1 future proposed connector road were analyzed to identify proposed ROW needs, structure needs, and drainage requirements: Proposed roadway #1: New roadway - From SR-277 north on Harvest Valley to east on Flake St. connecting to SR-77 Proposed roadway #2: New roadway - Continuing from existing W. 7th Street at Hwy SR-77, east to proposed road #6 (Old Woodruff Rd) Proposed roadway #3: continuing from existing Belly Button Road at Hwy SR-77, east to proposed road #6 (Old Woodruff Rd) Proposed roadway #4: New roadway - Continuing north from existing Centennial Blvd & 7th Street to SR-277 Proposed roadway #5: Center Street extension - Center Street from 700 Street East west to proposed road #6 (Old Woodruff Road) Proposed roadway #6: New Roadway - Continuing Old Woodruff Road from SR-277 south and connecting to Bourdon Ranch Proposed roadway #7: New Roadway - Continuing Harvest Valley Road from Paper Mill Road south and connecting to Pinedale Road Proposed roadway #8 and 10: New Roadway - East-West connection between SR-77 and proposed road #6 (Old Woodruff Road) Proposed roadway #9: New Roadway - Continuing on Centennial Blvd at Paper Mill Road south and connecting to Pinedale Road Proposed roadway #11: New Roadway - East-West connection between Pinedale Road and Bourdon Ranch Proposed Connector: New Roadway - East-West connection between Freeman Hollow Rd and Harvest Valley	Long-term	-	-
SR 260 / US 60 Corridor Profile Study, Heber-Overgaard to New Mexico State Line (2018)	SR 260/US 60, Show Low Safety Improvements, MP 341-343	Addresses priority needs for inclusion in ADOT Planning to Programming Process (P2P).	-	-
	SR 260, Pinetop Area Mobility and Freight Improvements, MP 341-355		-	-
	US 60, Show Low Area Mobility and Freight Improvements, MP 345-352		-	-
	US 60, Vernon Area Safety Improvements, MP 352-384		-	-
SR 77 Corridor Profile Study, Holbrook to Show Low (2018)	Three options were provided for SR 77, MP 347-351 Option A - Show Low to Shumway Area Safety Improvements (Centerline Rumble Strip) Option B - Show Low to Shumway Area Safety Improvements (Concrete Barrier) Option C - Show Low to Shumway Area Safety Improvements (Four-Lane Divided)	Addresses priority needs for inclusion in ADOT Planning to Programming Process (P2P).	-	-

2.2 ROAD CHARACTERISTICS

ROAD SYSTEM OVERVIEW

This section provides an overview of major state, county, and locally-owned roads within the study area. **Figure 3** depicts the ownership of study area roadways.

State

US 60 is part of the National Highway System and provides connectivity between Show Low, Globe, and the Phoenix metropolitan area to the southwest, and between Show Low and Springerville/Eager in Apache County to the east. Through Show Low, US 60 is known as Deuce of Clubs Road and is a five-lane facility with a continuous center left-turn lane. In rural portions of the Study Area, US 60 is a two-lane highway.

SR 260 connects Show Low to Payson to the west, Pinetop-Lakeside to the southeast. Further east, SR 260 continues to Springerville and Eager. On the west side of Show Low, SR 260 is known as S. Clark Road. On the east side of Show Low, SR 260 is White Mountain Road. In the urbanized portions of Show Low and Pinetop-Lakeside, SR 260 is a five-lane facility with a continuous center left-turn lane. In rural areas west of Show Low and south of Pinetop-Lakeside, this facility exists as a two-lane highway.

SR 77 connects the communities of Show Low, Taylor, and Snowflake and ultimately to Holbrook and Interstate 40. SR 77 also connects Show Low to Globe to the south. In the urbanized portion of Show Low, Within the urban area, SR 77 is a three-lane facility with a continuous center left-turn lane. In rural portions northeast of Show Low, this facility is a two-lane highway.

SR 277 connects Snowflake and Heber/Overgaard in western Navajo County, as well as Payson in Gila County via SR 377 and SR 260. This rural facility exists as a two-lane highway.

County

Bourdon Ranch Road is a north-south roadway that provides access to in the White Mountain Estates area between Show Low and Taylor. Bourdon Ranch Road rough runs parallel to SR 77. The roadway is a rural two-lane highway that connects Taylor to US 60. As it enters Taylor, the road turns into Love Lake Road and 700 St. Street.

Porter Mountain Road is a two-lane east-west County road in Navajo County and turns into County Route 3144 in Apache County. It connects the Town of Pinetop-Lakeside to Vernon and serves an alternative route to US 60. A portion of the road is on Forest Service land and is unpaved. The route is used by commuters between Vernon and Show Low.

Concho Highway is a two-lane east-west County route that connects the community of Concho to the Town of Snowflake. Stakeholders suggested that the route has some of the highest traffic volumes of Apache County roads and experiences truck traffic from mining/quarry operations.

Vernon McNary Road is a north-south Apache County route that connects Vernon to the County Club area south of Pinetop-Lakeside. The road is two-lane, unpaved and almost entirely on Forest Service land and maintained by Apache County. The route can serve as an alternative route or evacuation route for the County Club area.

Local

Penrod Road is north-south roadway that parallels SR 260 south of Show Low and provides access between Pinetop-Lakeside and SR 77 at US 60 east of Show Low. It exists as a rural two-lane highway.

NUMBER OF LANES

Figure 4 shows the number of lanes on major roads in the study area. Most roads in the study area have two lanes; there are five lanes on sections of SR 260 and US 60 in the Show Low and Pinetop-Lakeside areas and on SR 77 between Taylor and Snowflake and in an area between Show Low and Taylor.

INTELLIGENT TRANSPORTATION SYSTEMS

Intelligent transportation systems (ITS) are moderately deployed in the study area to support traffic control and traffic management. Traffic signals are located on state-owned roads within the developed areas of Show Low, Pinetop-Lakeside and Snowflake; there are no locally-operated traffic signals in the study area. There are two Variable Message Signs (VMS) in the study area. ADOT traffic signal and VMS locations are also shown in **Figure 4**. Traffic control devices in the City of Show Low and Pinetop-Lakeside are shown in **Figure 5**.

SPEEDS

Figure 6 depicts speed limits for many study area roadways for which data was available.

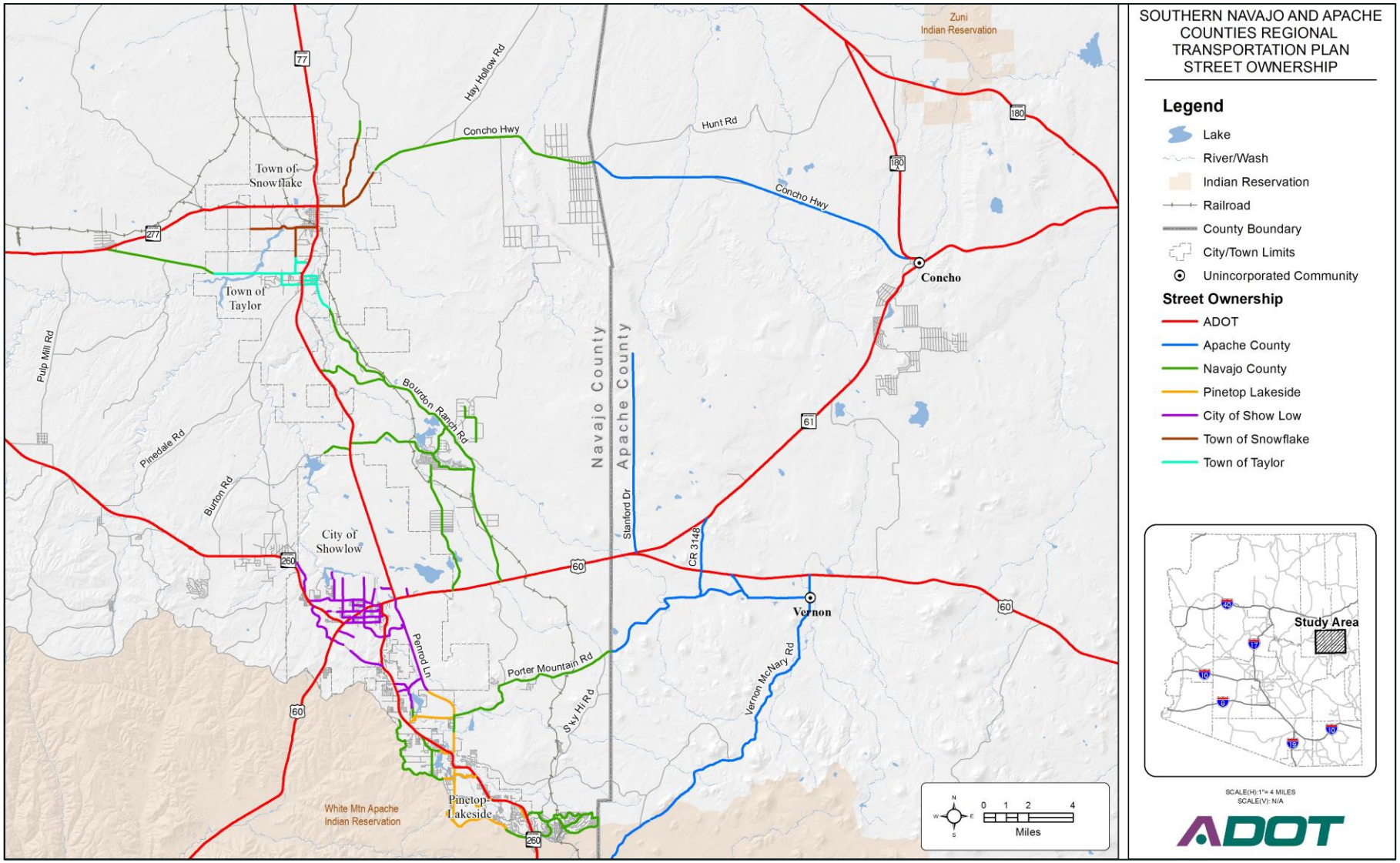


Figure 3: Roadway Ownership within the Study Area

Figure 4: Number of Through Traffic Lanes and ADOT Traffic Control

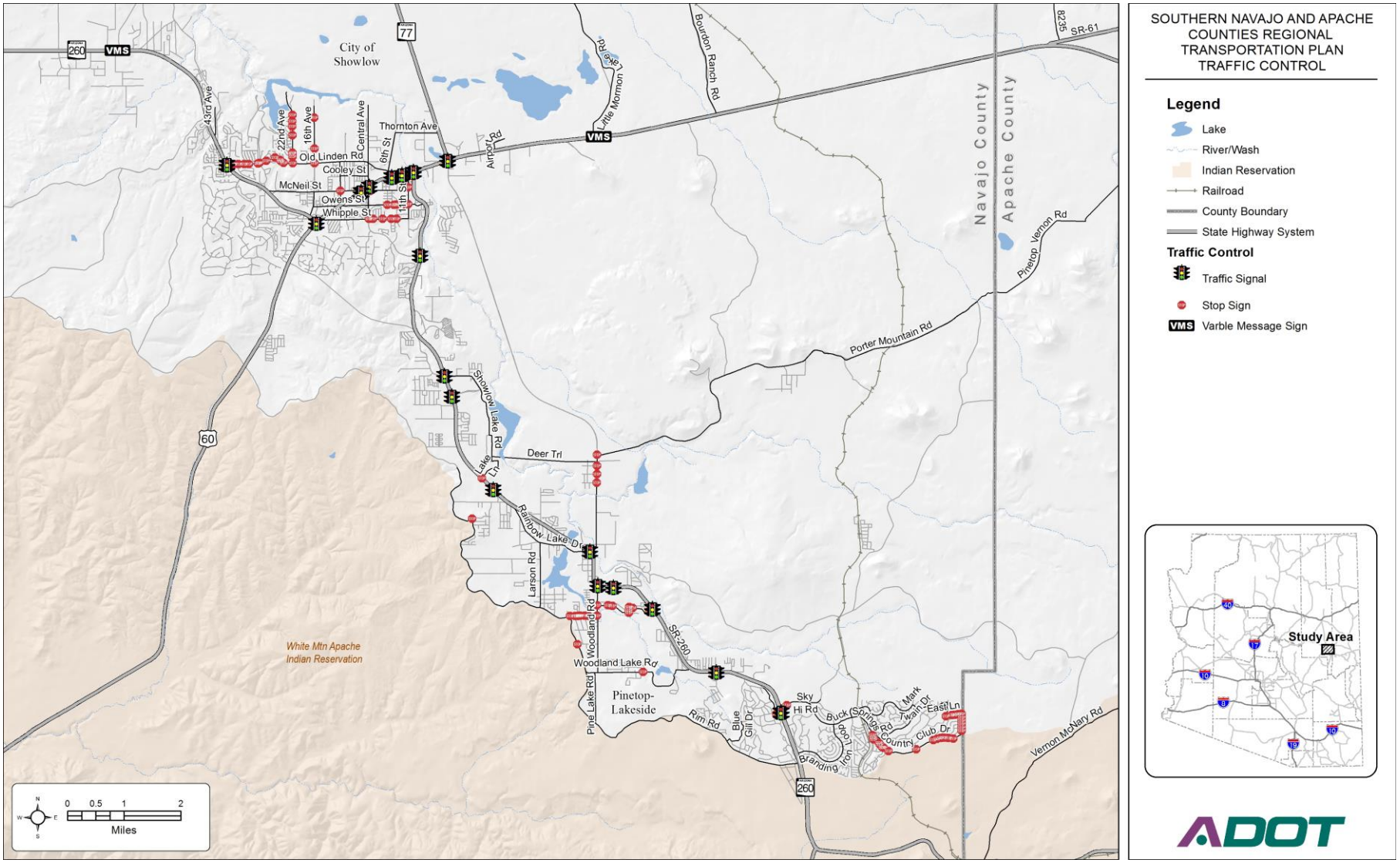


Figure 5: Traffic Control Devices in Show Low and Pinetop-Lakeside

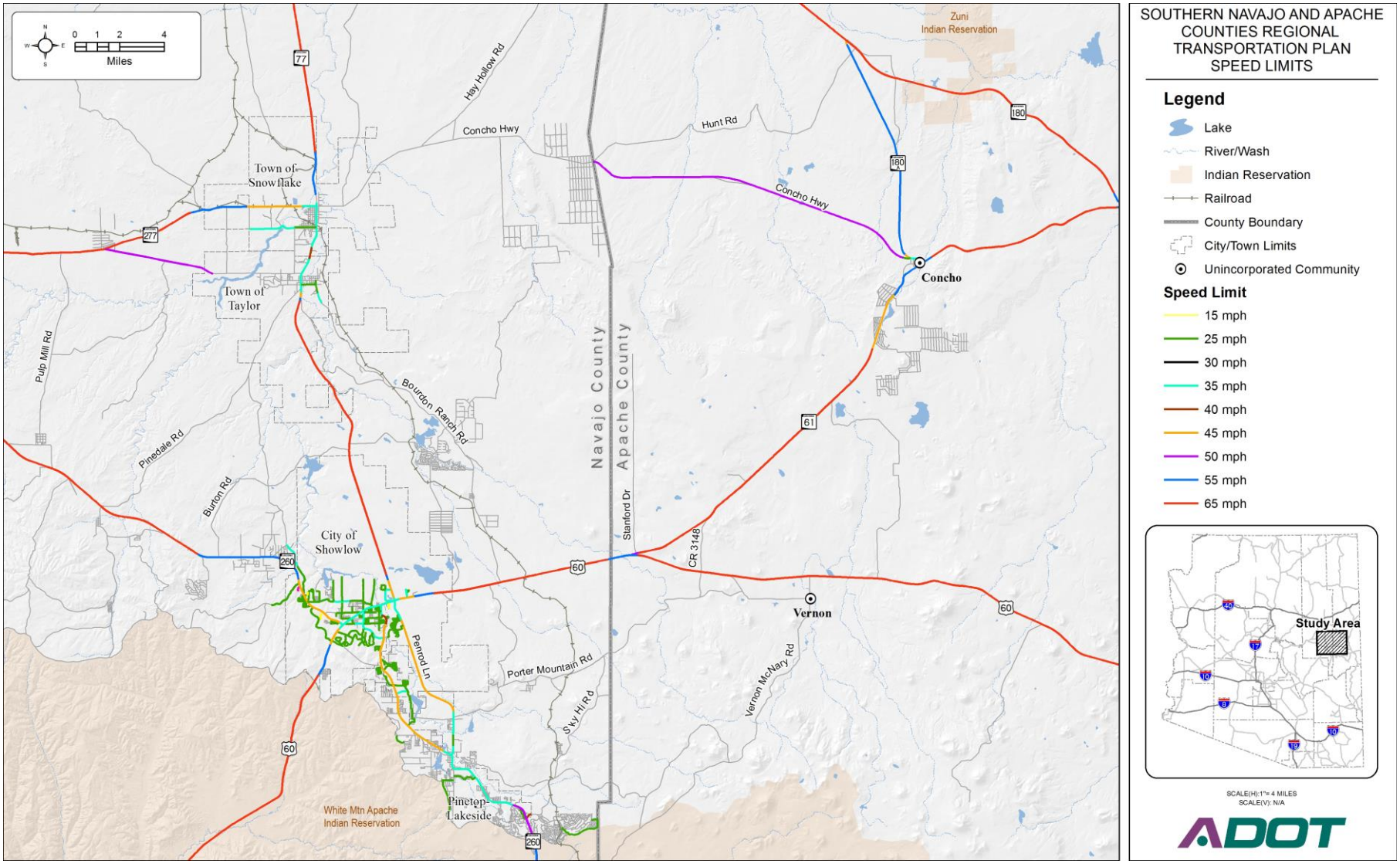


Figure 6: Speed Limits

2.3 ROAD FUNCTIONAL CLASSIFICATION

Figure 7 shows FHWA functional classification for facilities within the study area, which is based on the ADOT functional classification contained in both the NACOG GIS database and the ADOT GIS database. The FHWA functional classification definitions are described below:

- **Principal Arterial**: This facility serves regional circulation needs. It moves traffic at moderate speeds while providing limited access to adjacent land. Access is controlled through raised medians and through spacing and location of driveways and intersections.
- **Minor Arterial**: This facility is generally a four-lane and sometimes a two-lane road. Its purpose is to serve regional/sub-regional traffic circulation needs by moving traffic at moderate speeds while providing limited access to adjacent land.
- **Major Collector**: This facility provides for shorter distance trips, generally less than three miles, and primarily serves to collect and distribute traffic between key traffic generators, local streets and arterial streets. This classification provides direct access to abutting land.
- **Urban Collector**: Urban Collectors serve shorter distance trips than the Major Collector (generally less than one mile). They provide direct access to adjacent land and collect and distribute traffic between key traffic generators, local streets and arterial streets.
- **Local Street**: Local Streets provide direct access to adjacent land and distribute traffic to collector facilities.

Most of the study area roadways are classified as ‘rural’; there are some facilities in Show Low and Pinetop-Lakeside classified as ‘urban’ as well as a few in Snowflake and Taylor.

This study will consider the potential future functional classification upgrades of roadways as part of the final recommendations.

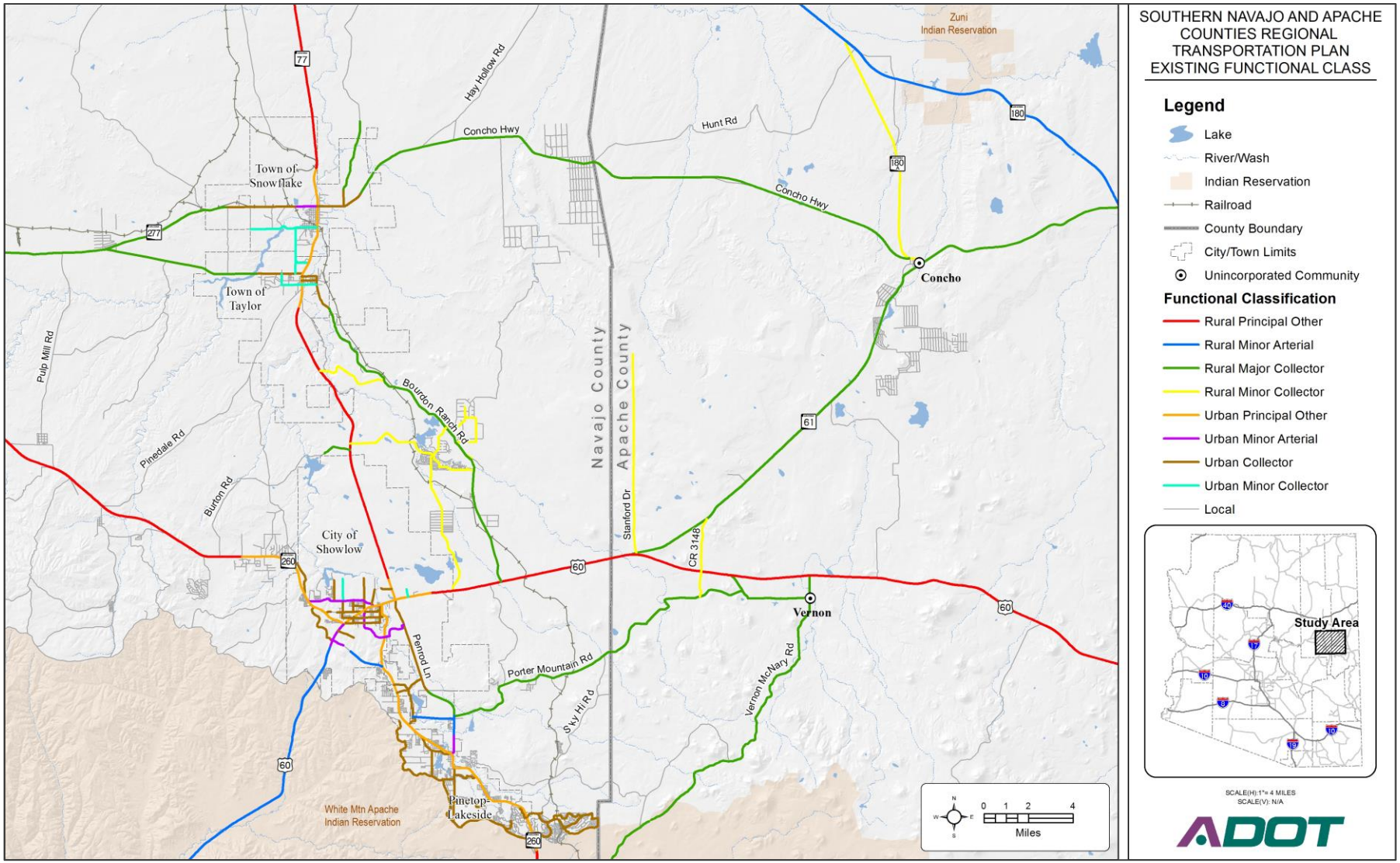


Figure 7: Functional Classification

2.4 CURRENT TRAFFIC VOLUMES AND CONGESTION LEVELS

CURRENT TRAFFIC VOLUMES

Current traffic volumes were obtained from both state and local sources. The ADOT Traffic Count Database System (TCDS) has information on ADOT traffic count data as well traffic counts from local jurisdictions. The county and local municipalities, in general, have comprehensive traffic count programs that result in up-to-date and robust traffic data.

Figure 8 shows the reported traffic volumes and calculated Level of Service (LOS) for the general study area, and **Figure 9** shows the traffic counts reported by the City of Show Low[1] and the calculated LOS.

LEVELS OF SERVICE

Congestion levels for 2017 conditions were estimated using a level of service analysis described in the Florida DOT Quality/Level of Service Handbook (2014). LOS is a quantitative measurement of operational characteristics of traffic and the perception of the traffic conditions by both motorists and passengers. There are six levels of service defined by the Highway Capacity Manual 2010 (HCM), published by the Transportation Research Board (TRB). Each level of service is given a letter designation from A to F, with A representing the optimal or best condition and F being the worst:

LOS A: Best, free flow operations (on uninterrupted flow facilities) and very low delay (on interrupted flow facilities). Freedom to select desired speeds and to maneuver within traffic is extremely high.

LOS B: Flow is stable, but presence of other users is noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver within traffic.

LOS C: Flow is stable, but the operation of users is becoming affected by the presence of other users. Maneuvering within traffic requires substantial vigilance on the part of the user.

LOS D: High density but stable flow. Speed and freedom to maneuver are severely restricted. The driver is experiencing a generally poor level of comfort and convenience.

LOS E: Flow is at or near capacity. All speeds are reduced to a low, but relatively uniform value. Freedom to maneuver within traffic is extremely difficult. Comfort and convenience levels are extremely poor.

LOS F: Worse, facility has failed, or a breakdown has occurred.

LOS A, B, and C are generally considered to be satisfactory service levels, while the influence of congestion becomes more noticeable at LOS D. LOS E is undesirable and is considered by most agencies to be the limit of acceptable delay, and LOS F conditions are considered unacceptable to most drivers. Most jurisdictions strive to attain a LOS of at least D or better on all roads and signalized intersections in urban areas, and LOS C is targeted for rural conditions.

[1] The City of Show Low conducts traffic counts annually between May and September

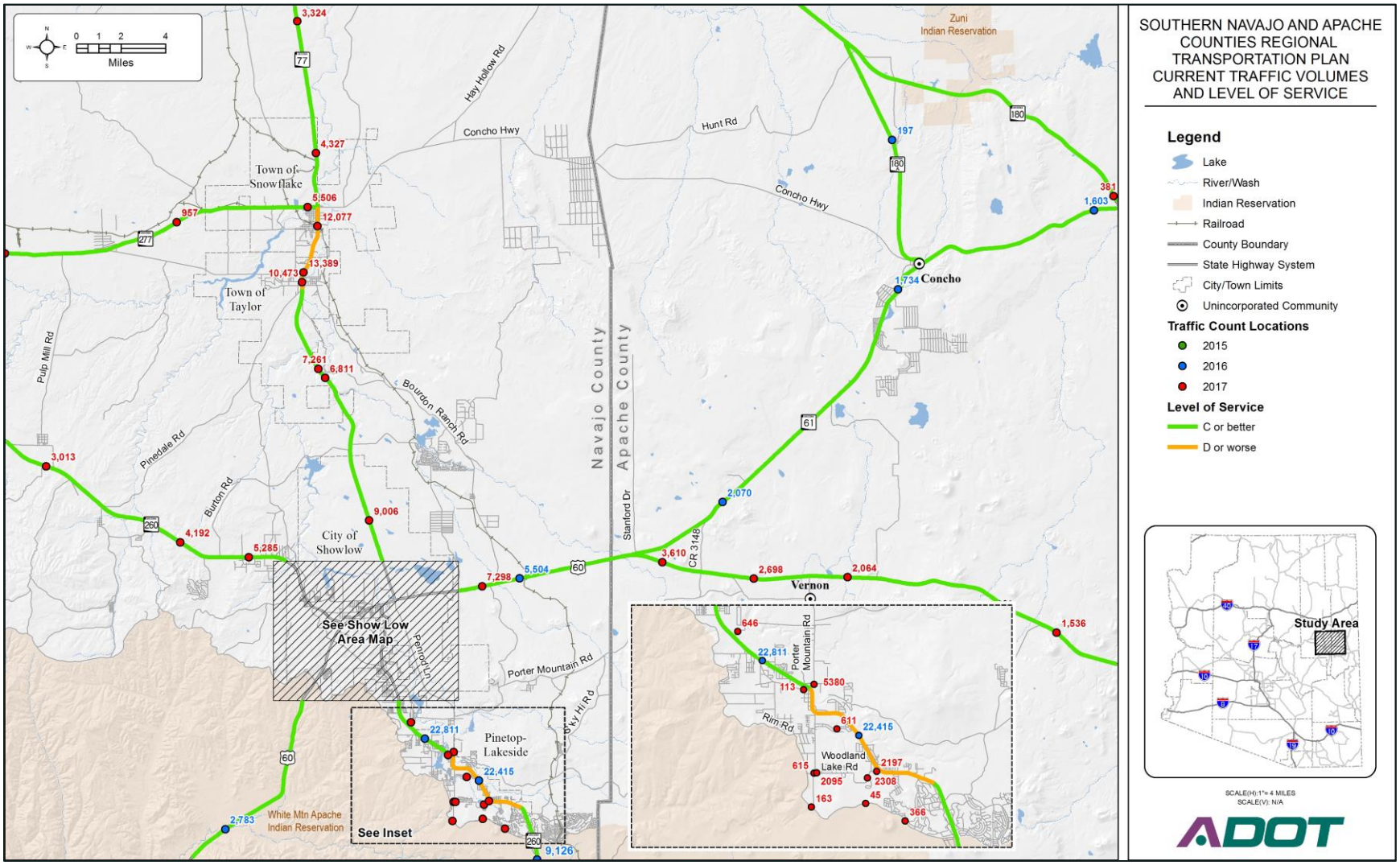


Figure 8: Traffic Counts and Level of Service for State Highways

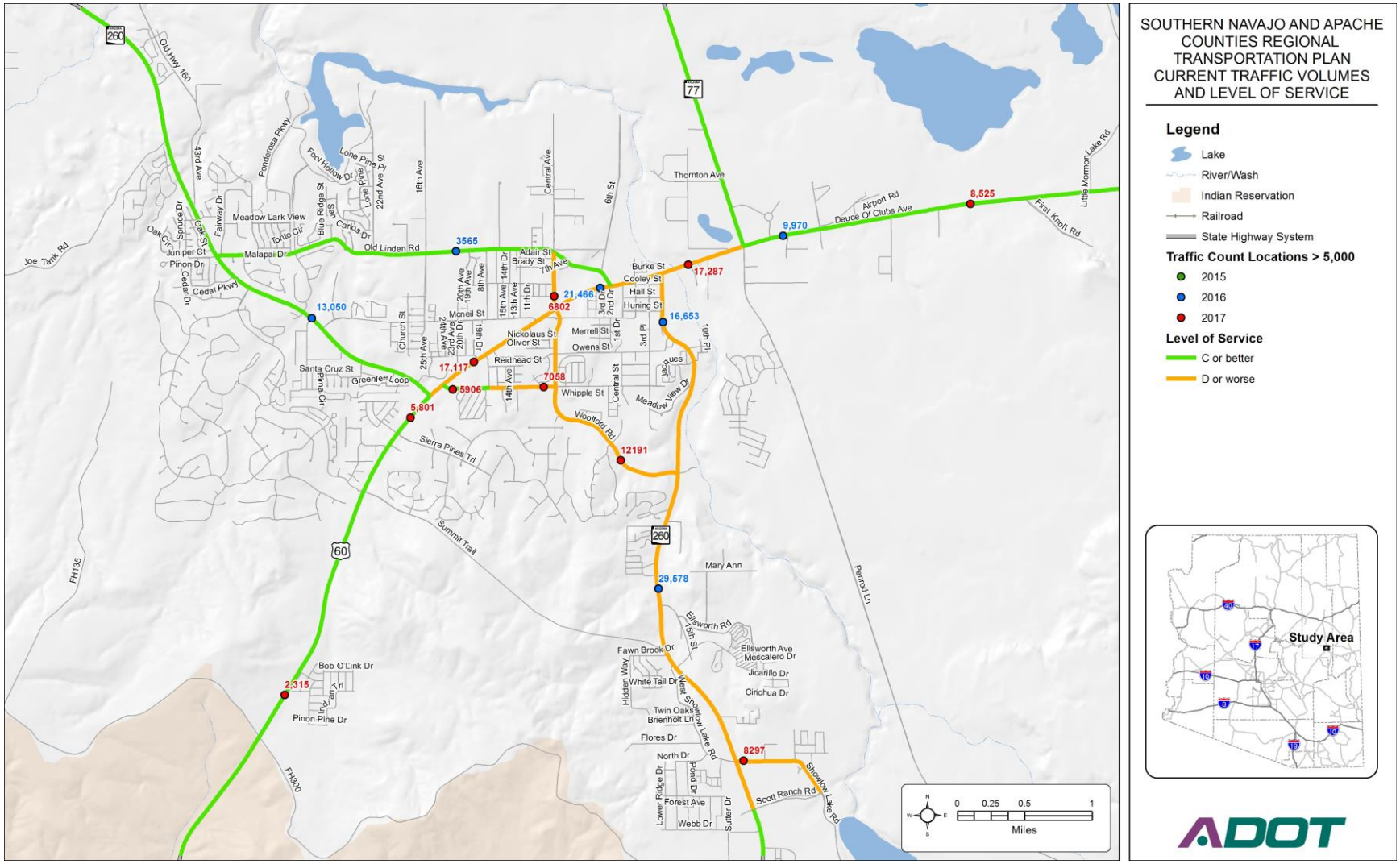


Figure 9: City of Show Low Traffic Counts and Level of Service

Most of the state highway system within the study area operates at LOS C or better based on 2017 traffic volume data available from ADOT[2]. However, there are four locations where the roadway operates at LOS D or lower:

- US 60/Deuce of Clubs between SR 260/Clark Road and SR 77 in Show Low
- SR 260/White Mountain Road between US 60/Deuce of Clubs and Scott Ranch Road in Show Low
- US 260/White Mountain Boulevard between Porter Mountain Road and Buck Springs Road in Pinetop-Lakeside
- SR 77/Main Street between Paper Mill Road and SR 277 in Taylor/Snowflake

Within the City of Show Low, there are four roadway segments that are operating at a LOS D or worse based on the City's 2017 traffic counts[3]. These are:

- Central Avenue from Old Linden Road to Woolford Road
- Whipple Street from 8th Avenue to Central Avenue
- Woolford Road from Central Avenue to SR 260
- Show Low Lake Road from SR 260 to Scott Ranch Road

All other roadways in Show Low are operating at LOS C or better based on 2017 count data. Primary corridors in the study area do experience peak periods of congestion associated with winter or summer recreation. During these periods, primary roadways may experience LOS E or LOS F.

TRUCK ROUTES

Figure 10 identifies the percentage of the AADT volume generated by trucks or commercial vehicles on ADOT-owned roadways. While all state-owned roadways within the study area support significant truck traffic, SR 260 west of Show Low and SR 180 north of Concho are the most critical routes for trucks based on percent volume. Overall, truck volumes within the study area are generally consistent throughout, averaging between seven and nine percent of the total traffic volume.

While the state highways are the primary facilities used by trucks, stakeholders identified challenges with truck traffic on county and locally-owned roadways, especially when there are restrictions on the state routes. In the City of Show Low, Woolford Road and Whipple Street are two local roads in which there is regular truck traffic because these roadways are used as a bypass for SR 260 and US 60/Deuce of Clubs when there is congestion or a crash that is a restriction those roadways. These roadways do not support truck traffic and stakeholders suggested that they need to be upgraded or an alternative route for trucks needs to be identified for times when there are restrictions to the state highways.

County Route 3144 in Apache County turns into Porter Mountain Road in Navajo County and is used by truck traffic from logging operations, and trucks use this roadway as an alternate to US 60 to avoid congestion or restrictions due to crashes on US 60. Concho Highway in Apache County, which turns into SR 277 in Navajo County, also experiences truck traffic with trucks carrying commodities such as sand and gravel.

[2] The roadways within the study area were analyzed using Table 3 in the Florida DOT Quality/Level of Service Handbook, with the exception of the roadways within the urbanized areas of Show Low and Pinetop-Lakeside, which were analyzed using Table 2.

[3] The roadways in the City of Show Low were analyzed using Table 2 in the Florida DOT Quality/Level of Service Handbook. Roads with speed limits over 40 mph were evaluated as Class I signalized arterials and roadways with speed limits 35 mph or lower were evaluated as Class II signalized arterials.

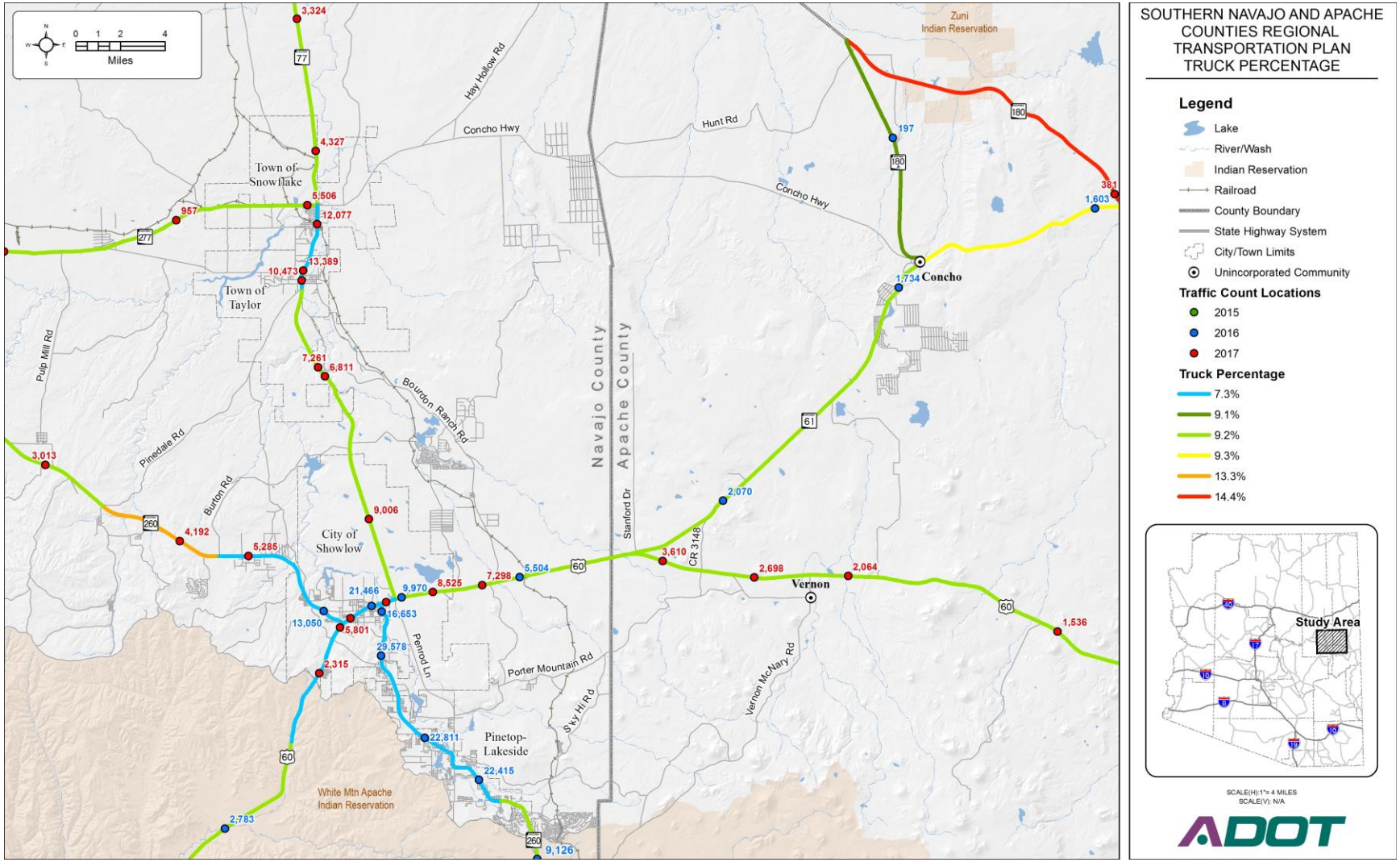


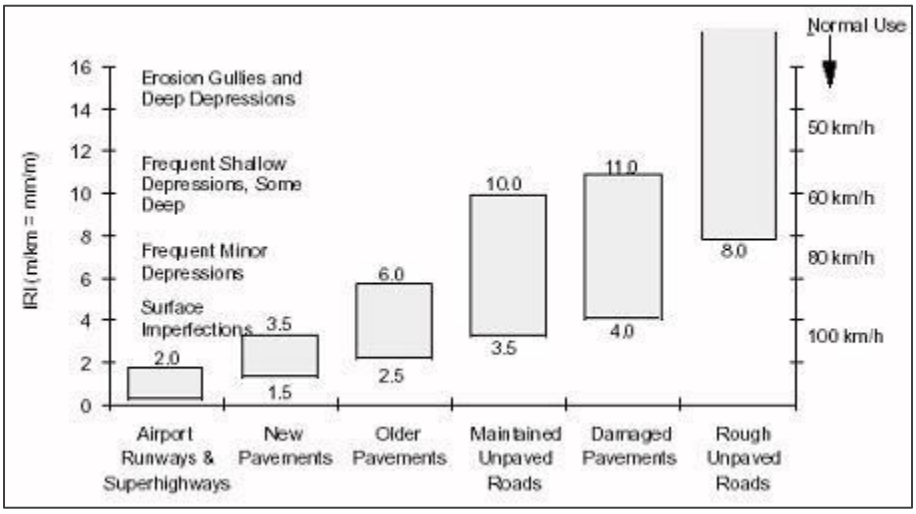
Figure 10: Percentage of Traffic Volume Trucks on Study Area Highways

2.5 PAVEMENT CONDITIONS

This section presents pavement conditions of study area roadways.

PAVEMENT CONDITIONS

ADOT uses the International Roughness Index (IRI) rating system to rate the condition of their pavement. The IRI is a standardized roughness measurement whose scale is defined in **Figure 11**.



Source: www.pavementinteractive.org/roughness

Figure 11: IRI Scale

Figure 12 shows pavement conditions on state-owned roadways in 2015. Within the study area 41% of the roadways have pavement conditions that are in 'Good' or better (IRI <95). 24% of the roadways have pavement that are considered 'Poor' (IRI >170).

In addition to the pavement condition on state roadways, pavement condition information was obtained from the City of Show Low and is shown in **Figure 13**. The City of Show Low has a regular pavement preservation program using a rotating system that addresses roadways within a 6-year cycle. The City uses the Pavement Survey Evaluation and Rating (PASER) system, which uses the following ratings:

RATINGS ARE RELATED TO NEEDED MAINTENANCE OR REPAIR	
Rating 9 & 10	No maintenance required
Rating 8	Little or no maintenance
Rating 7	Routine maintenance, cracksealing and minor patching
Rating 5 & 6	Preservative treatments (sealcoating)
Rating 3 & 4	Structural improvement and leveling (overlay or recycling)
Rating 1 & 2	Reconstruction

Source: Asphalt PASER Manual. Transportation Information Center

Within the City of Show Low, 80% of roadways are in at least 'Good' condition (Rating 7 or higher) while less than 1% are rated as 'Very Poor' or 'Failing' (Rating 2 or below).

UNPAVED ROADS

Figure 14 identifies key unpaved roads within the study area. These roadways are maintained by their respective owner and are used regularly by both trucks and drivers for commuting, day-to-day activities and recreational purposes.

Currently, Apache and Navajo Counties are exploring grant funding opportunities to upgrade an approximately 7-mile portion of Porter Mountain Road/Apache County Route 3144 on Forest Service land that is currently an unpaved roadway to convert it into a two-lane paved roadway; the route is paved on either side of this 7-mile portion. This route is serves as an alternate route for US 60 in west Navajo County/east Apache County and is used by trucks carrying freight, commuters traveling to work, and residents traveling to use the medical facilities in Show Low.

Additionally, Vernon McNary Road, which connects Vernon and McNary (outside of the study area), is currently a gravel road that is maintained by Apache County. This roadway is considered an evacuation route for McNary and the country club residential areas south of Pinetop-Lakeside during forest fire season or for other emergencies.

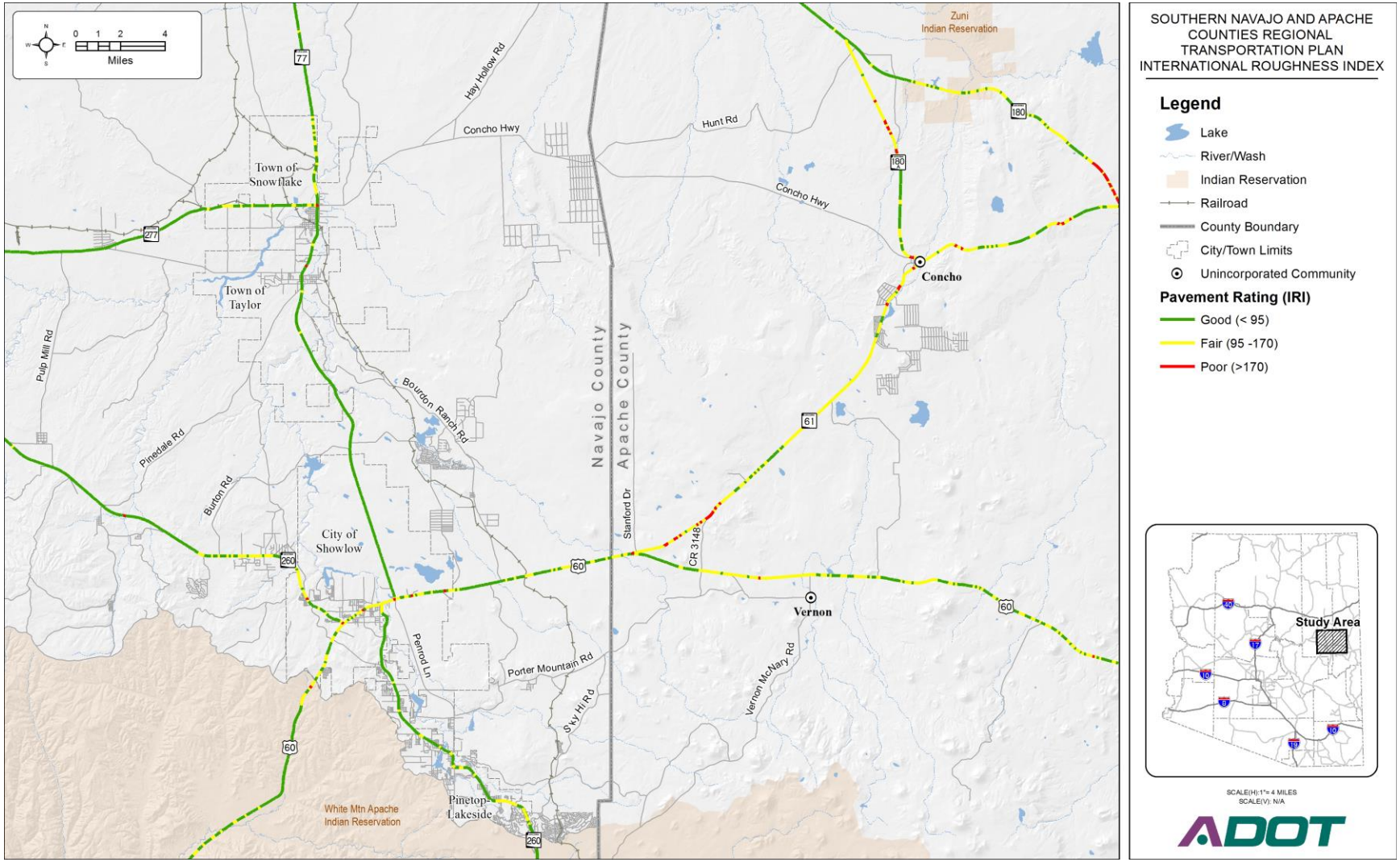


Figure 12: Pavement Conditions within the Study Area

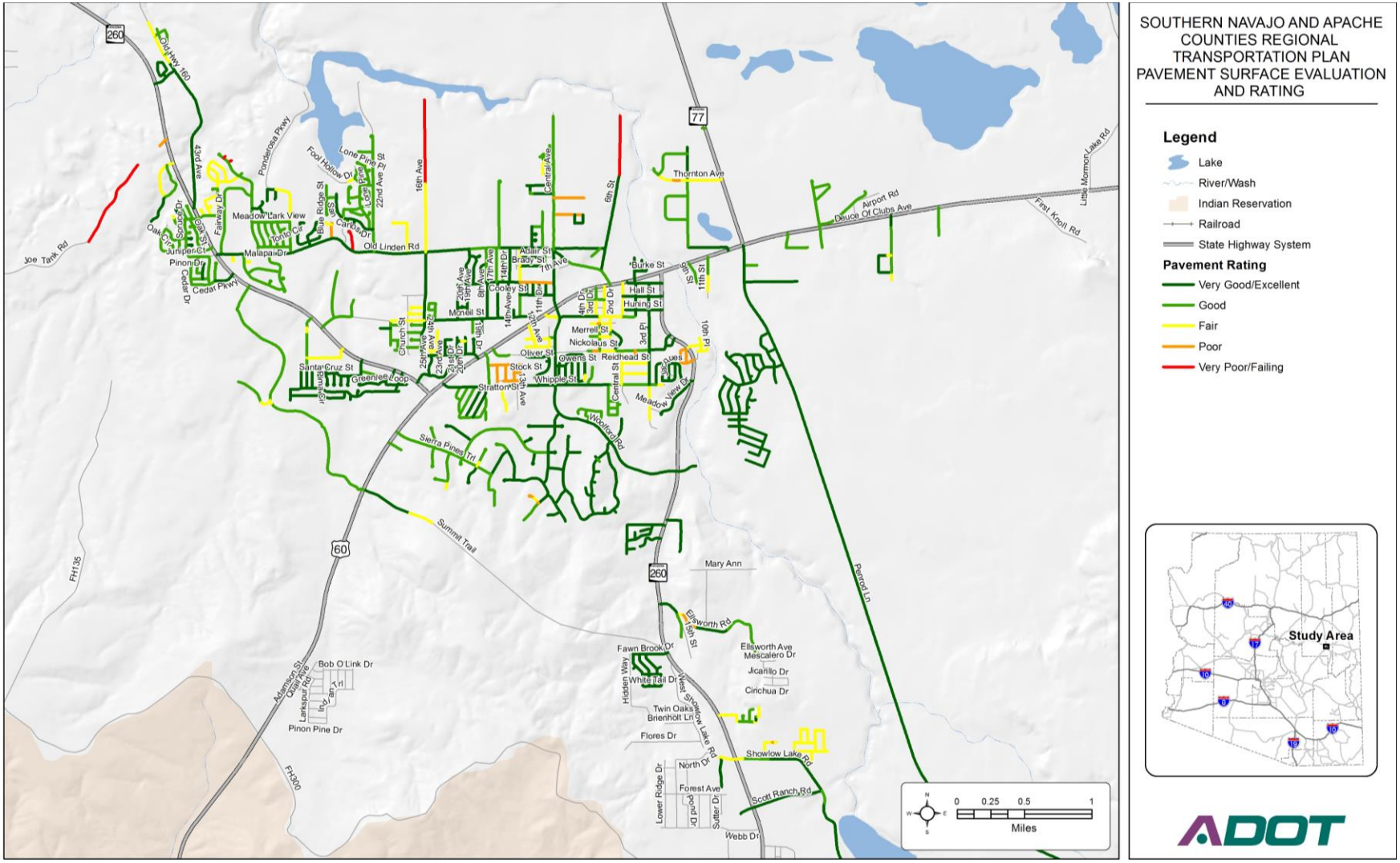


Figure 13: Pavement Conditions within the City of Show Low

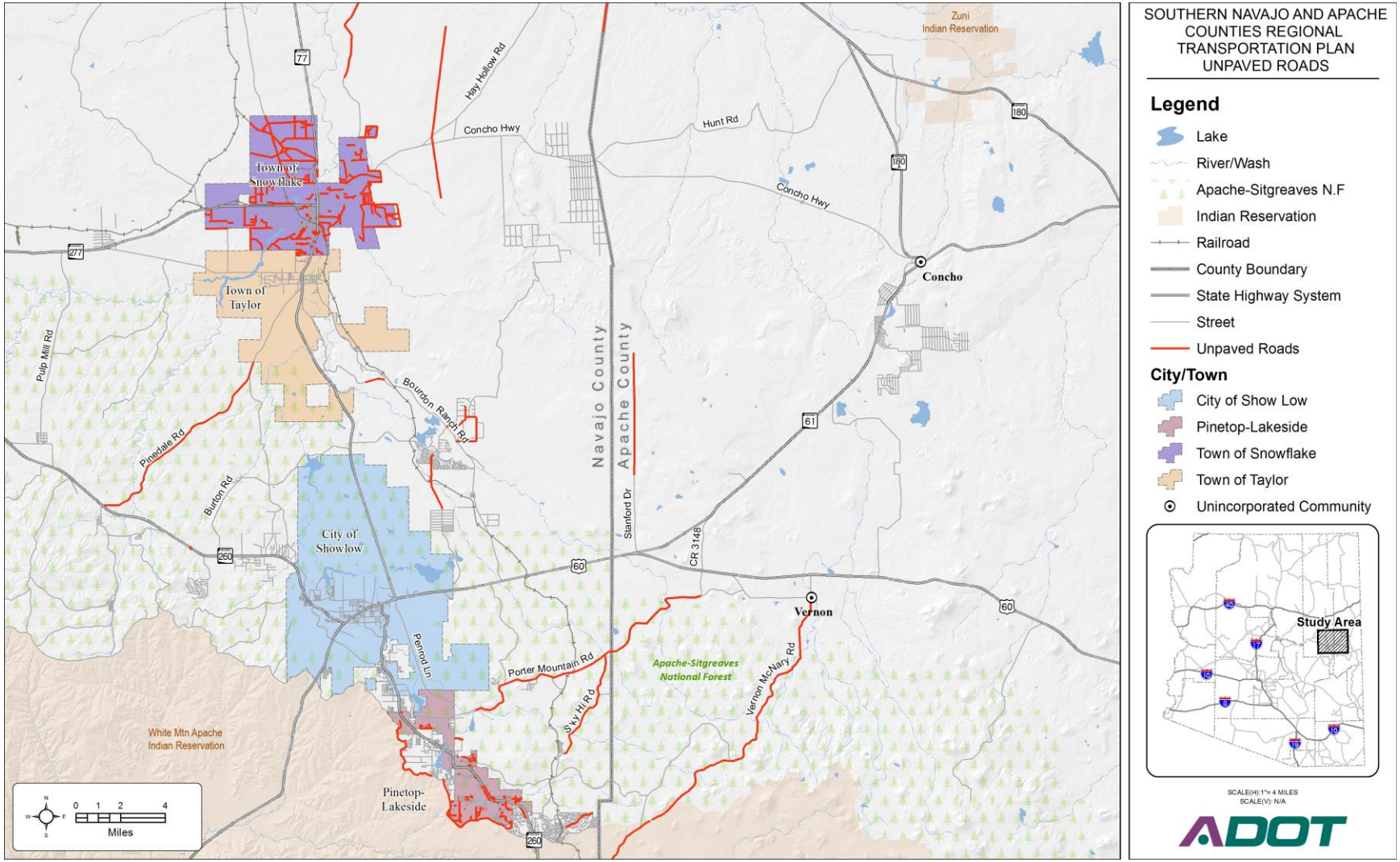


Figure 14: Key Unpaved Roads within the Study Area

2.6 PUBLIC TRANSIT

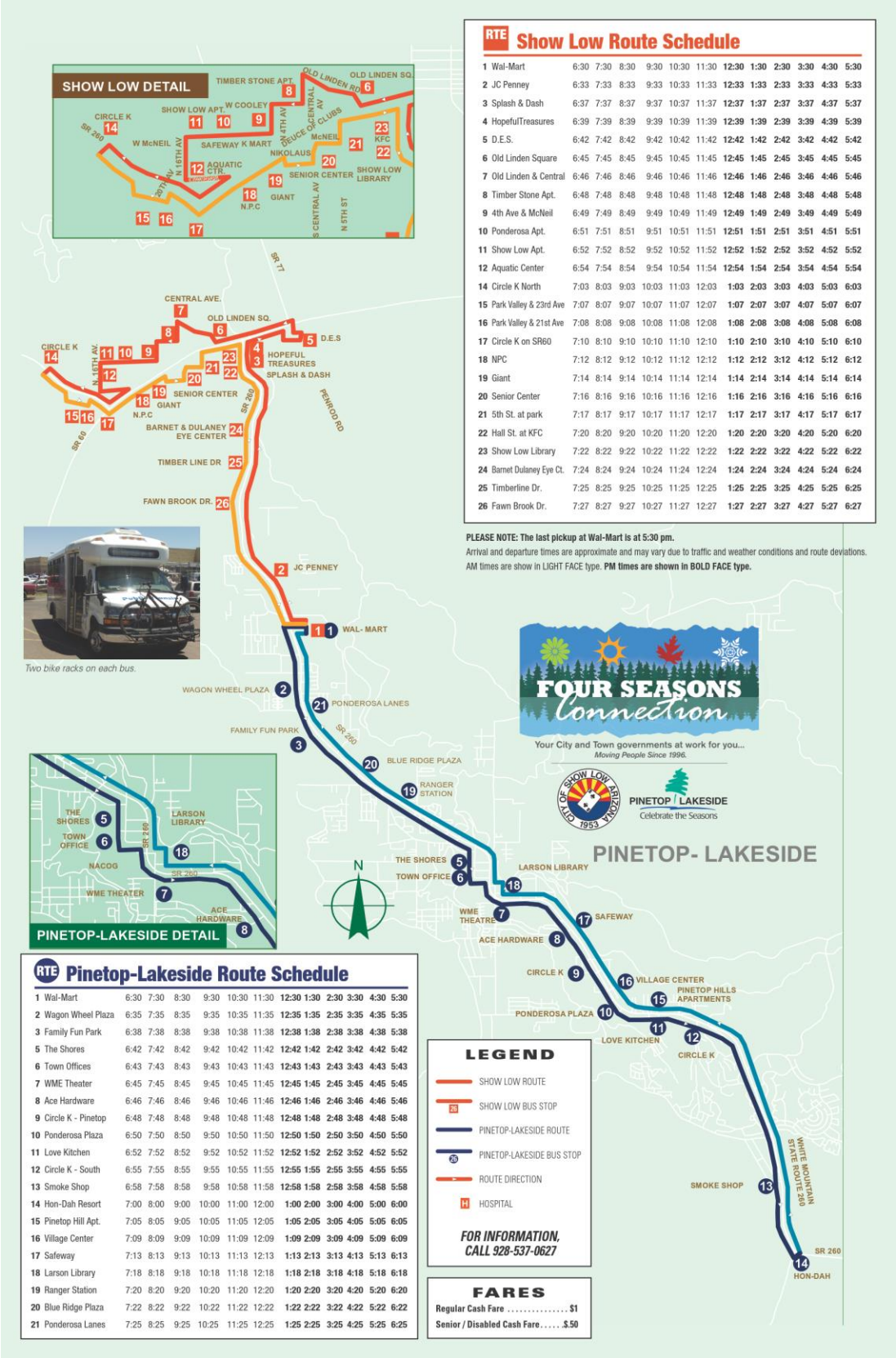
Show Low's 5311 Rural Transportation Program has provided public transportation to the region since 1996. The City operates two service routes – the Four Seasons Connection and the White Mountains Connection. These two routes are deviated fixed route service, enabling riders to be picked up at a requested location if the location is within ¼-mile of the fixed route and the request is received at least 24 hours prior to the pick-up time. The two routes cover a broad service area, extending from Hon-Dah Resort to the southwest side of Show Low.

Various public and private partnerships help finance the services; for example, all bus stops for both routes are located on private property through agreements with the landowner to allow the buses to enter the parking lot and pick-up or drop-off riders.

FOUR SEASONS CONNECTION

The Four Seasons Connection operates two local circulator routes that serve Show Low and Pinetop-Lakeside that run Monday through Saturday, 6:30 a.m. – 7:00 p.m. Buses run year-round and start at the Walmart in Show Low, which functions as the transit hub and can accommodate 2 buses in a dedicated staging location. The buses run every hour on the half hour, enabling passengers to conveniently transfer between routes. The routes are depicted in **Figure 16**; there are 21 stops within Pinetop-Lakeside, with the southern-most stop located at the Hon-Dah Resort before the route returns to the transit hub at Walmart. There are 26 designated stops within Show Low circulator route.

Ridership for the two Four Seasons Connection routes (2017-2017) are shown in **Figures 17** and **18**. In general, the routes have seen consistent ridership levels the past two years, with the Pinetop-Lakeside route seeing slightly higher ridership than the Show Low route. The maximum recorded monthly ridership in the past two years was 8,027 passenger-trips for the Pinetop-Lakeside route and 7,654 passenger-trips for the Show Low route. The highest ridership for both routes is seen in March and August, while the lowest ridership is generally seen in November through February. The transit stop that experiences the most riders is the Show Low Walmart - the transit hub for all bus services. The stop with the next highest ridership for the Pinetop-Lakeside route is at the Hon-Dah Casino; the stop with the next highest ridership for the Show Low route is at the KFC on Hall Street.



Show Low Route Schedule

1 Wal-Mart	6:30	7:30	8:30	9:30	10:30	11:30	**12:30**	**1:30**	**2:30**	**3:30**	**4:30**	**5:30**
2 JC Penney	6:33	7:33	8:33	9:33	10:33	11:33	**12:33**	**1:33**	**2:33**	**3:33**	**4:33**	**5:33**
3 Splash & Dash	6:37	7:37	8:37	9:37	10:37	11:37	**12:37**	**1:37**	**2:37**	**3:37**	**4:37**	**5:37**
4 HopefulTreasures	6:39	7:39	8:39	9:39	10:39	11:39	**12:39**	**1:39**	**2:39**	**3:39**	**4:39**	**5:39**
5 D.E.S.	6:42	7:42	8:42	9:42	10:42	11:42	**12:42**	**1:42**	**2:42**	**3:42**	**4:42**	**5:42**
6 Old Linden Square	6:45	7:45	8:45	9:45	10:45	11:45	**12:45**	**1:45**	**2:45**	**3:45**	**4:45**	**5:45**
7 Old Linden & Central	6:46	7:46	8:46	9:46	10:46	11:46	**12:46**	**1:46**	**2:46**	**3:46**	**4:46**	**5:46**
8 Timber Stone Apt.	6:48	7:48	8:48	9:48	10:48	11:48	**12:48**	**1:48**	**2:48**	**3:48**	**4:48**	**5:48**
9 4th Ave & McNeil	6:49	7:49	8:49	9:49	10:49	11:49	**12:49**	**1:49**	**2:49**	**3:49**	**4:49**	**5:49**
10 Ponderosa Apt.	6:51	7:51	8:51	9:51	10:51	11:51	**12:51**	**1:51**	**2:51**	**3:51**	**4:51**	**5:51**
11 Show Low Apt.	6:52	7:52	8:52	9:52	10:52	11:52	**12:52**	**1:52**	**2:52**	**3:52**	**4:52**	**5:52**
12 Aquatic Center	6:54	7:54	8:54	9:54	10:54	11:54	**12:54**	**1:54**	**2:54**	**3:54**	**4:54**	**5:54**
14 Circle K North	7:03	8:03	9:03	10:03	11:03	12:03	**1:03**	**2:03**	**3:03**	**4:03**	**5:03**	**6:03**
15 Park Valley & 23rd Ave	7:07	8:07	9:07	10:07	11:07	12:07	**1:07**	**2:07**	**3:07**	**4:07**	**5:07**	**6:07**
16 Park Valley & 21st Ave	7:08	8:08	9:08	10:08	11:08	12:08	**1:08**	**2:08**	**3:08**	**4:08**	**5:08**	**6:08**
17 Circle K on SR60	7:10	8:10	9:10	10:10	11:10	12:10	**1:10**	**2:10**	**3:10**	**4:10**	**5:10**	**6:10**
18 NPC	7:12	8:12	9:12	10:12	11:12	12:12	**1:12**	**2:12**	**3:12**	**4:12**	**5:12**	**6:12**
19 Giant	7:14	8:14	9:14	10:14	11:14	12:14	**1:14**	**2:14**	**3:14**	**4:14**	**5:14**	**6:14**
20 Senior Center	7:16	8:16	9:16	10:16	11:16	12:16	**1:16**	**2:16**	**3:16**	**4:16**	**5:16**	**6:16**
21 5th St. at park	7:17	8:17	9:17	10:17	11:17	12:17	**1:17**	**2:17**	**3:17**	**4:17**	**5:17**	**6:17**
22 Hall St. at KFC	7:20	8:20	9:20	10:20	11:20	12:20	**1:20**	**2:20**	**3:20**	**4:20**	**5:20**	**6:20**
23 Show Low Library	7:22	8:22	9:22	10:22	11:22	12:22	**1:22**	**2:22**	**3:22**	**4:22**	**5:22**	**6:22**
24 Barnet Dulaney Eye Ct.	7:24	8:24	9:24	10:24	11:24	12:24	**1:24**	**2:24**	**3:24**	**4:24**	**5:24**	**6:24**
25 Timberline Dr.	7:25	8:25	9:25	10:25	11:25	12:25	**1:25**	**2:25**	**3:25**	**4:25**	**5:25**	**6:25**
26 Fawn Brook Dr.	7:27	8:27	9:27	10:27	11:27	12:27	**1:27**	**2:27**	**3:27**	**4:27**	**5:27**	**6:27**

PLEASE NOTE: The last pickup at Wal-Mart is at 5:30 pm.
Arrival and departure times are approximate and may vary due to traffic and weather conditions and route deviations.
AM times are show in LIGHT FACE type. **PM times are shown in BOLD FACE type.**

Pinetop-Lakeside Route Schedule

1 Wal-Mart	6:30	7:30	8:30	9:30	10:30	11:30	**12:30**	**1:30**	**2:30**	**3:30**	**4:30**	**5:30**
2 Wagon Wheel Plaza	6:35	7:35	8:35	9:35	10:35	11:35	**12:35**	**1:35**	**2:35**	**3:35**	**4:35**	**5:35**
3 Family Fun Park	6:38	7:38	8:38	9:38	10:38	11:38	**12:38**	**1:38**	**2:38**	**3:38**	**4:38**	**5:38**
5 The Shores	6:42	7:42	8:42	9:42	10:42	11:42	**12:42**	**1:42**	**2:42**	**3:42**	**4:42**	**5:42**
6 Town Offices	6:43	7:43	8:43	9:43	10:43	11:43	**12:43**	**1:43**	**2:43**	**3:43**	**4:43**	**5:43**
7 WME Theater	6:45	7:45	8:45	9:45	10:45	11:45	**12:45**	**1:45**	**2:45**	**3:45**	**4:45**	**5:45**
8 Ace Hardware	6:46	7:46	8:46	9:46	10:46	11:46	**12:46**	**1:46**	**2:46**	**3:46**	**4:46**	**5:46**
9 Circle K - Pinetop	6:48	7:48	8:48	9:48	10:48	11:48	**12:48**	**1:48**	**2:48**	**3:48**	**4:48**	**5:48**
10 Ponderosa Plaza	6:50	7:50	8:50	9:50	10:50	11:50	**12:50**	**1:50**	**2:50**	**3:50**	**4:50**	**5:50**
11 Love Kitchen	6:52	7:52	8:52	9:52	10:52	11:52	**12:52**	**1:52**	**2:52**	**3:52**	**4:52**	**5:52**
12 Circle K - South	6:55	7:55	8:55	9:55	10:55	11:55	**12:55**	**1:55**	**2:55**	**3:55**	**4:55**	**5:55**
13 Smoke Shop	6:58	7:58	8:58	9:58	10:58	11:58	**12:58**	**1:58**	**2:58**	**3:58**	**4:58**	**5:58**
14 Hon-Dah Resort	7:00	8:00	9:00	10:00	11:00	12:00	**1:00**	**2:00**	**3:00**	**4:00**	**5:00**	**6:00**
15 Pinetop Hill Apt.	7:05	8:05	9:05	10:05	11:05	12:05	**1:05**	**2:05**	**3:05**	**4:05**	**5:05**	**6:05**
16 Village Center	7:09	8:09	9:09	10:09	11:09	12:09	**1:09**	**2:09**	**3:09**	**4:09**	**5:09**	**6:09**
17 Safeway	7:13	8:13	9:13	10:13	11:13	12:13	**1:13**	**2:13**	**3:13**	**4:13**	**5:13**	**6:13**
18 Larson Library	7:18	8:18	9:18	10:18	11:18	12:18	**1:18**	**2:18**	**3:18**	**4:18**	**5:18**	**6:18**
19 Ranger Station	7:20	8:20	9:20	10:20	11:20	12:20	**1:20**	**2:20**	**3:20**	**4:20**	**5:20**	**6:20**
20 Blue Ridge Plaza	7:22	8:22	9:22	10:22	11:22	12:22	**1:22**	**2:22**	**3:22**	**4:22**	**5:22**	**6:22**
21 Ponderosa Lanes	7:25	8:25	9:25	10:25	11:25	12:25	**1:25**	**2:25**	**3:25**	**4:25**	**5:25**	**6:25**

Source: City of Show Low

Figure 15: Four Seasons Connection Bus Route Map

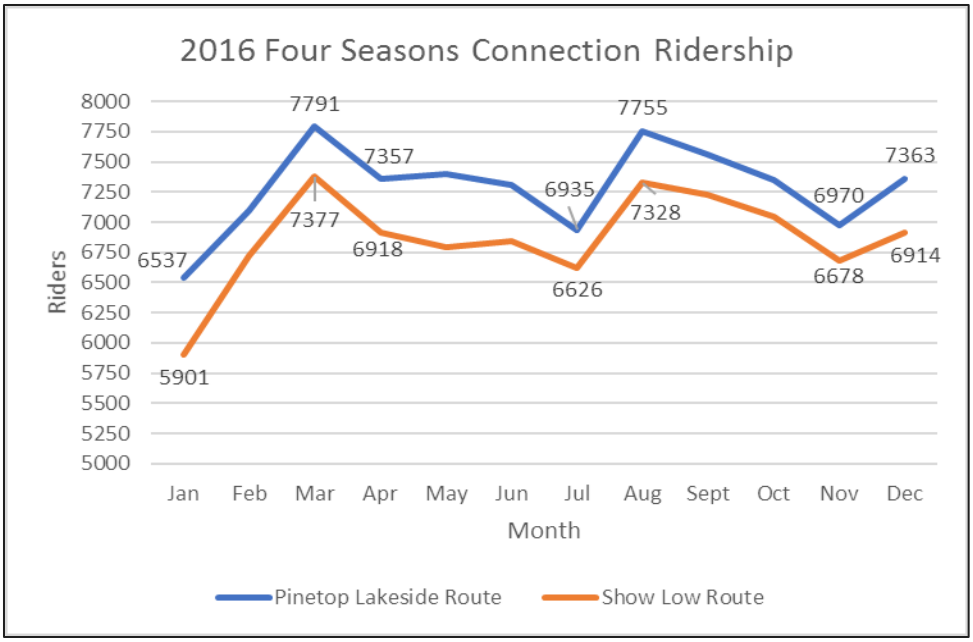


Figure 16: 2016 Ridership for the Four Seasons Connection

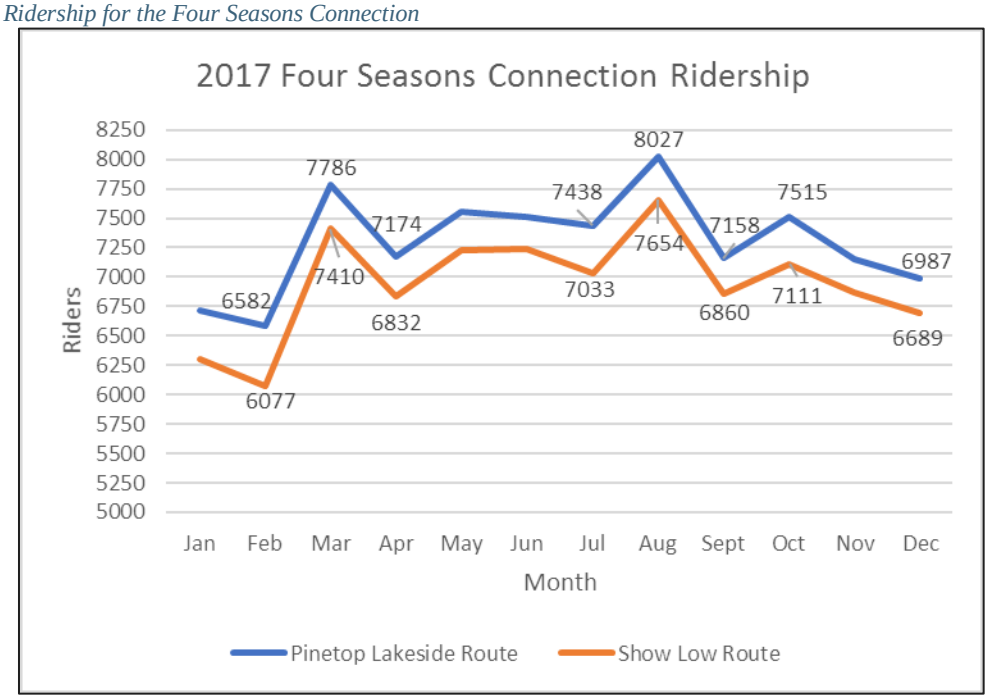


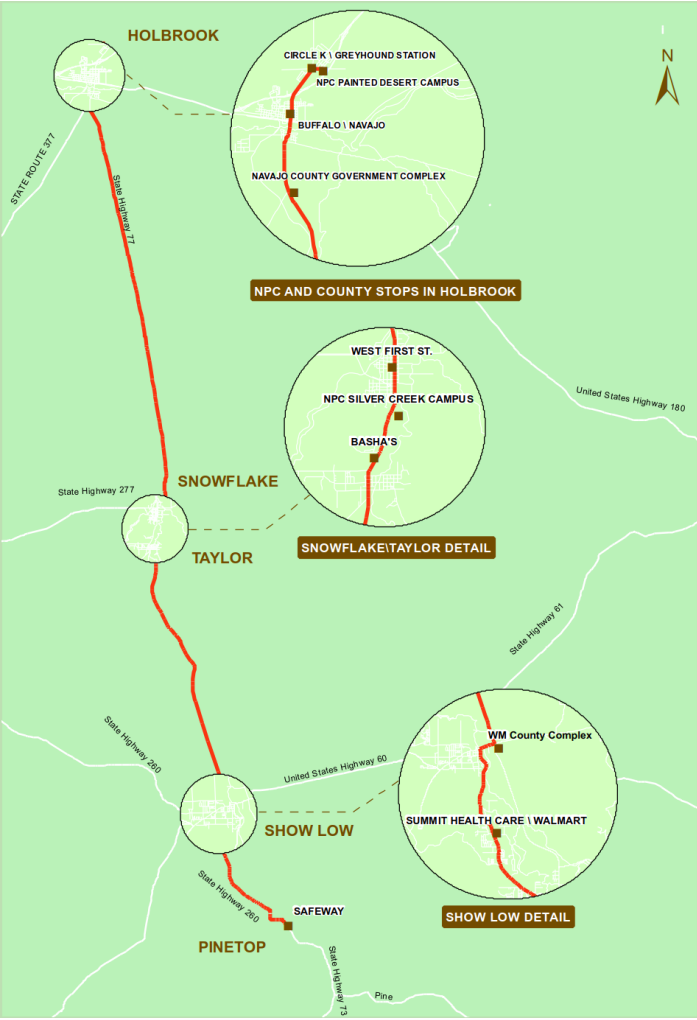
Figure 17: 2017 Ridership for the Four Seasons Connection

WHITE MOUNTAIN CONNECTION

The White Mountain Connection is a regional commuter route that serves the communities of Pinetop-Lakeside, Show Low, Snowflake, Taylor, and Holbrook, as shown in **Figure 18**. Buses operate year-round Monday through Friday, 6:30 a.m. – 7:00 p.m. and make three round trips each day between Pinetop-Lakeside and Holbrook. There are eight stops along the White Mountain Connection route, and the target riders are those that are commuting to and from Holbrook. The bus provides service to destinations such as campuses, healthcare facilities, government complexes and the Greyhound bus

station in Holbrook. Passengers can also connect to the Four Seasons Connection bus at the following three locations:

- Safeway in Pinetop
- County complex in Show Low on 9th Street
- Walmart in Show Low (transit hub)



White Mountain Connection Bus Schedule

	MORNING RUN	MID DAY RUN	EVENING RUN
NORTHBOUND	**Pinetop-Lakeside** TIME Safeway 6:30	**Pinetop-Lakeside** TIME Safeway 11:20	**Pinetop-Lakeside** TIME Safeway 3:20
	Show Low Summit Healthcare/ Walmart* 6:40 Navajo County White Mountain Complex 6:45	**Show Low** Summit Healthcare/ Walmart* 11:20 Navajo County White Mountain Complex 11:35	**Show Low** Summit Healthcare/Walmart* 3:30 Navajo County White Mountain Complex 3:35
	Taylor Bashas' 7:10	**Taylor** Bashas' 12:00	**Taylor** Bashas' 4:00
	Snowflake NPC 7:15 West First St. 7:20	**Snowflake** NPC 12:05 West First St. 12:10	**Snowflake** NPC 4:05 West First St. 4:10
	Holbrook County Complex 7:40	**Holbrook** County Complex 12:35	**Holbrook** County Complex 4:35
SOUTHBOUND	**Holbrook** NPC 8:00 Circle K / Greyhound Station 8:10 Buffalo / Navajo 8:20 County Complex 8:25	**Holbrook** NPC 12:45 Circle K / Greyhound Station 1:00 Buffalo / Navajo 1:05 County Complex 1:10	**Holbrook** NPC 4:45 Circle K / Greyhound Station 5:00 Buffalo / Navajo 5:05 County Complex 5:10
	Snowflake West First St. 8:45 NPC 8:50	**Snowflake** West First St. 1:35 NPC 1:40	**Snowflake** West First St. 5:35 NPC 5:40
	Taylor Bashas' 8:55	**Taylor** Bashas' 1:45	**Taylor** Bashas' 5:45
	Show Low Navajo County White Mountain Complex 9:20 Summit Healthcare/ Walmart* 9:30	**Show Low** Navajo County White Mountain Complex 2:15 Summit Healthcare/ Walmart* 2:30	**Show Low** Navajo County White Mountain Complex 6:00 Summit Healthcare/ Walmart* 6:15
	Pinetop-Lakeside Safeway 10:00	**Pinetop-Lakeside** Safeway 2:45	**Pinetop-Lakeside** Safeway 6:30

*estimated

FARE RATES:

Within the same town $1
To the next town $3
Anywhere else on the route $5
All-Day Pass $8

Longer-term bus passes:

Monthly Pass (unlimited rides) $60
Monthly Pass (for Snowflake or Taylor) $30
Student Semester Pass $70

20-Punch Pass
is available for Seniors and Disabled for $10. Each punch is good for a $0.50 fare, so a trip from Holbrook to Show Low would take five punches at a cost of $2.50.

The All-Day Pass provides a free transfer to Four Seasons Connection in Show Low.

For more information, contact Thomas Hakenewerth at (928) 537-0627

Source: City of Show Low

Figure 18: White Mountain Connection Bus Route Map and Schedule

Ridership for the White Mountain Connection for the past two years (2016-2017) is shown in **Figure 19**. There was not much change in ridership levels between 2016 and 2017, with the highest ridership in March, August and October which is similar to the ridership peaks for the Four Seasons Connection. The highest ridership experienced on the White Mountain connection in the past two years is 1,484 riders. The lowest ridership is in November, December and January, which is also consistent with what is seen on the Four Seasons Connection.

The stop that sees the highest number of riders on this route is at the County Complex in Holbrook. The stop with the second highest ridership is at the Circle K/Greyhound Station stop.

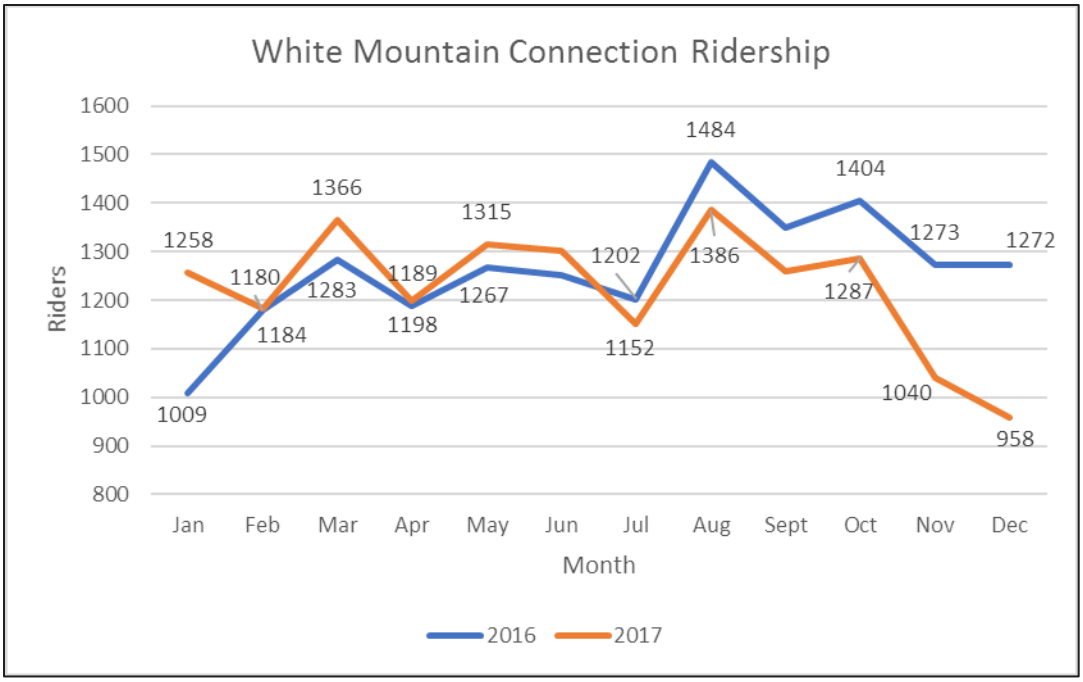


Figure 19: Ridership for the White Mountain Connection

OTHER TRANSIT SERVICES

There are additional formalized transit services that interact with the study area but are not operated by study area partners. The White Mountain Apache Tribe provides transit service that connects at the Hon-Dah Resort, which is also served by the Four Seasons Connection. Within the next two years, an additional service line is planned to be added that will travel US 60 from Cibecue to Show Low, and will also connect to existing services.

Communities and organizations also provide mobility services for residents to medical, education and shopping facilities. The Town of Springerville, AZ, where the Round Valley Senior Center is located, has secured funding to provide shuttle service to Show Low several times per month. The community is in the process of applying for additional funding to increase the frequency of this service to multiple times a week instead of per month.

2.7 NON-MOTORIZED TRANSPORTATION

Figure 20 shows the existing network of bicycle and pedestrian infrastructure in the Show Low/Pinetop-Lakeside area. This network includes sidewalks, designated on-street bicycle lanes, shared-use paths and recreational trails.

EXISTING BICYCLE FACILITIES

The City of Show Low Trails and Transit Connectivity Study (2014) documented existing bike lanes and shared use paths in the City of Show Low. These are shown in **Figure 20.**

Bicycles are allowed on all state highways including US 60, SR 260, and SR 77. However, state highways are not designated, signed, or marked as bicycle routes, and the available shoulder width available for bicyclists is variable.

In addition to on-street bicycle facilities, there is a network of multi-use paths in both jurisdictions, some of which are adjacent to roadways and others that are separated from roadways and traverse the area. It was noted by stakeholders that these shared-use paths are largely used for recreational purposes but do provide some connectivity that would allow them to be used for daily trips.

EXISTING PEDESTRIAN FACILITIES

Sidewalks are present along most major streets within the urbanized areas of Show Low and Pinetop-Lakeside, including state highways. A review of the data shows that recent development within the urbanized areas generally include sidewalks.

Shared-use paths and trails, as previously described, also accommodate pedestrian mobility, but are primarily used for recreational purposes. Sidewalks are also shown in **Figure 20**.

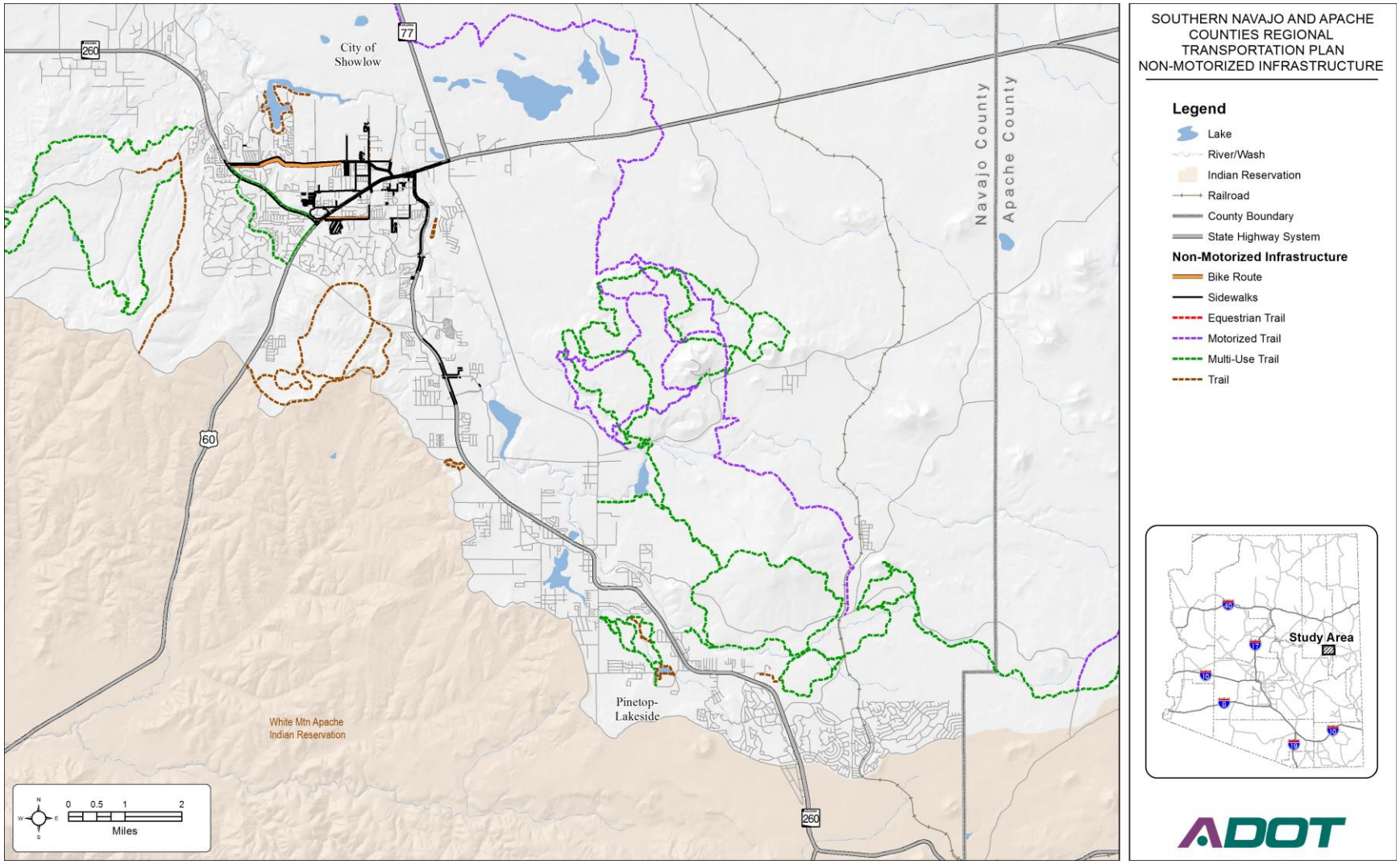


Figure 20: Non- Motorized Transportation Infrastructure in Show Low and Pinetop-Lakeside

2.8 TRANSPORTATION SAFETY

Figure 21 shows fatal and incapacitating crashes that have occurred in the study area between 2012 and 2016. **Figure 22** shows the fatal and incapacitating crashes involving pedestrians and bicyclists from 2012 to 2016. This data, provided by NACOG, represents reported crashes within Navajo and Apache Counties annually.

During stakeholder interviews for this project, the following intersections were identified by stakeholders as intersections with a high number of crashes:

- Show Low Lake Road-Cub Lake Road and SR 260[4]
- Woolford and SR 260, Show Low
- Old Linden Road and SR 260, Show Low
- Old Linden Road and Central Avenue, Show Low
- Central Avenue and US 60/Deuce of Clubs, Show Low
- US 60 and Whipple Road, Show Low
- US 60 and Apache County Route 3148 in Apache County[5]

Additionally, Stanford Drive in Apache County was identified has a high-crash location within the study area due to geometric challenges related to roads slope and vertical curves; however, these crashes have not been reported, and thus are not included in NACOG's or ADOT's crash database. NACOG, in partnership with the Flagstaff Metropolitan Planning Organization and Central Yavapai Metropolitan Planning Organization, is developing a Regional Strategic Transportation Safety (RSTS) Plan that will recommend improvements and strategies to reduce fatalities and serious injuries within the region. As part of the RSTS planning effort, a network screening was completed to identify intersections and roadway segments with the highest occurrence of fatal and incapacitating crashes. Intersections within the study area that were identified in this screening process are:

- SR 260/Clark Rd and US 60/Deuce of Clubs Ave (Show Low)
- US 60/Deuce of Clubs and E Old Linden Road (Show Low)
- SR 260 and Penrod Ln (Pinetop-Lakeside)
- SR 277 and Paper Mill Rd (Navajo County)
- SR 77 and W Center St (Snowflake)

Roadway segments were also screened based on crash risk, crash frequency, crash trends, and existing roadway characteristics to identify segments where safety improvements are needed. Segments within the study area that were highlighted through this screening process were:

- SR 61 from milepost (MP) 352.88 to US 180 in Apache County
- US 60 from MP 352.88 to MP 373 in Apache County
- SR 77 from SR 277 to US 60 in Navajo County
- SR 260 from SR 277 to US 60 in Navajo County
- SR 260 from US 60 to SR 73 in Navajo County
- US 60 from SR 260 to MP 317 in Navajo County

[4] *The City of Show Low is pursuing Highway Safety Improvement Program (HSIP) funding to address this location*

[5] *Apache County has obtained HSIP funding to address this location*

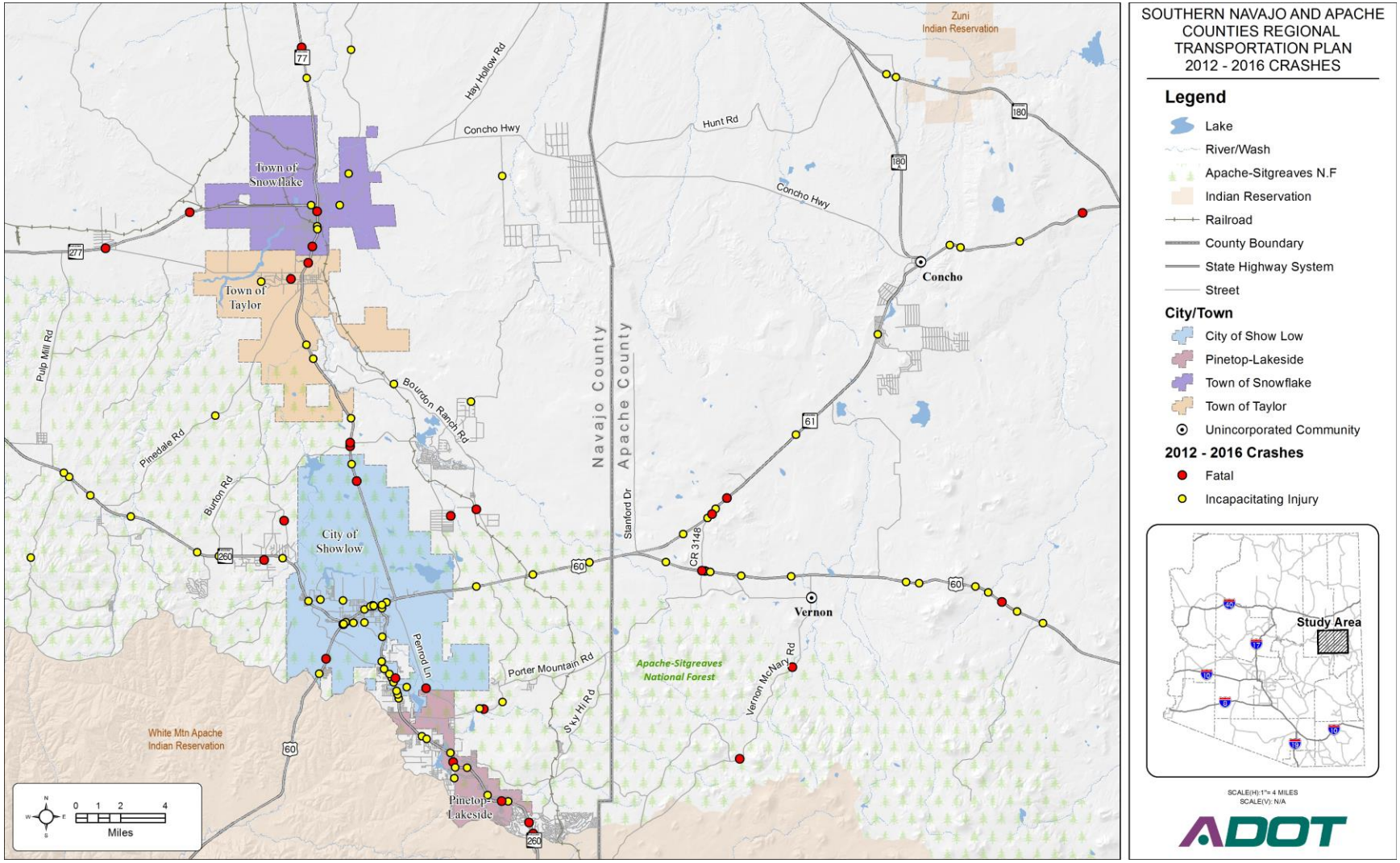


Figure 21: Reported Vehicle Crashes (2012-2016)

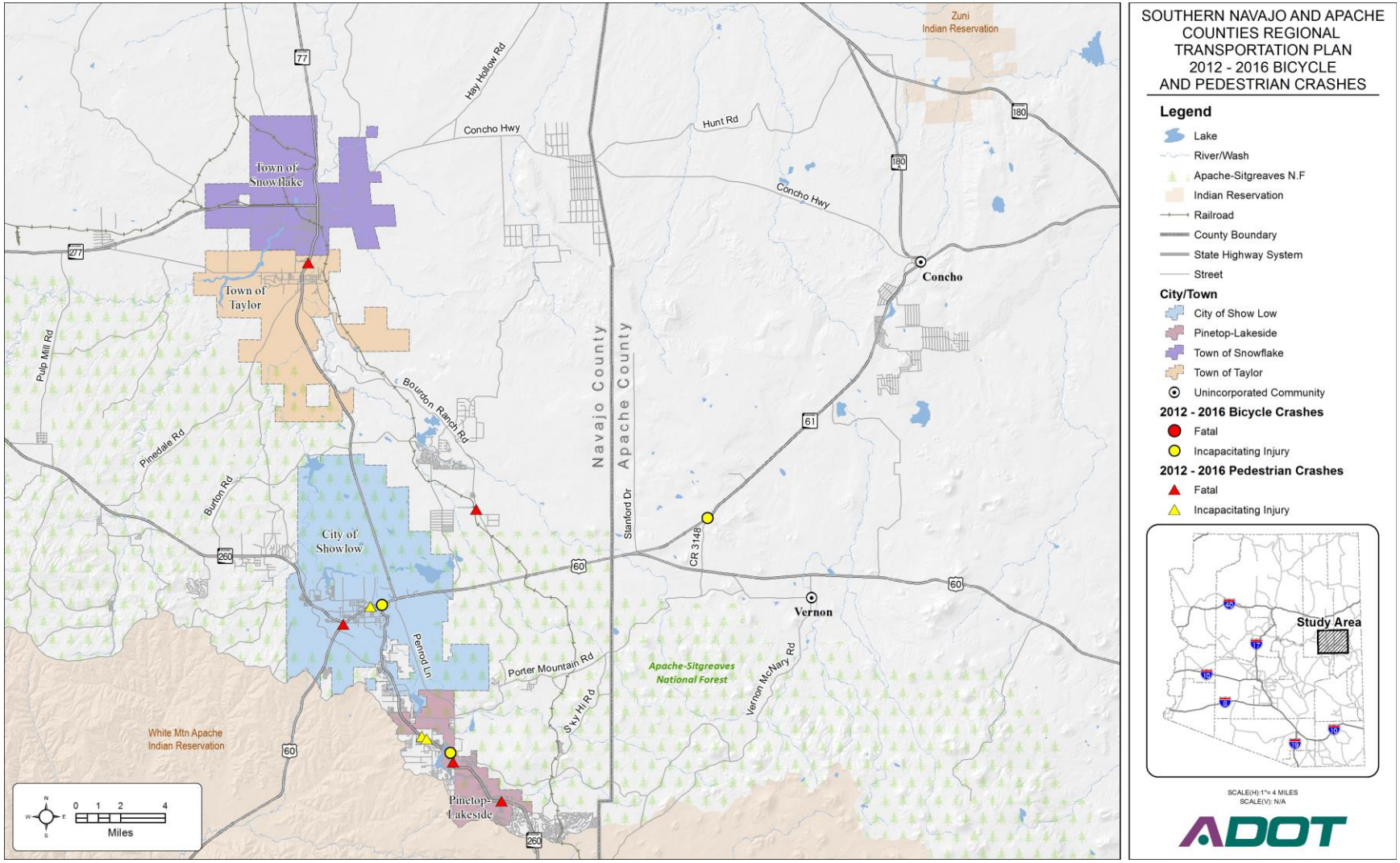


Figure 22: Reported Bicycle and Pedestrian Crashes (2012-2016)

3. ECONOMIC AND DEMOGRAPHIC OVERVIEW

This chapter presents an economic and demographic assessment of Southern Navajo and Apache Counties Transportation Plan study area, which encompasses the communities of Show Low, Pinetop/Lakeside, Taylor, Snowflake, and the unincorporated communities of Vernon and Concho. A number of the variables presented in this assessment are only available at the county level, but where data is available at the city level, it is included. Data for the study area is also compared to the state as a benchmark.

Understanding historic and projected demographic and economic trends in the study area will provide a basis for evaluating the impacts of proposed transportation improvements later in the study and their influence on local economic development potential. This assessment identifies both strengths and potential issues in the local economy that will guide the way that transportation improvements can be used to support economic development.

This chapter provides a broad range of information on key socio-economic attributes for cities and counties in the study area as compared to the state of Arizona including:

- Population and Demographics – historic and projected population, age, race, household size, household, and per capita income
- Workforce – educational attainment, employment by occupation, unemployment trends, labor force participation, commuting patterns, distribution of jobs by worker age, income level, and educational attainment
- Economy – projected job growth, economic base, local industry specialization, taxable sales, and construction activity

The key is to understand what the communities in southern Navajo and Apache Counties offer that is more valuable to expanding and relocating businesses than their competitor's attributes. These factors will allow the region to gauge its comparative advantages in the larger state and national marketplace and to identify areas that can be improved to enhance competitiveness for job creation and capital investment.

3.1 POPULATION AND DEMOGRAPHICS

An initial measure to understand the study area in the context of the state is to look at population size. While the individual communities that are part of the study area have a combined population of only 26,000, the two-county region has a current population of about 184,000[6]. These two counties account for 2.6 percent of the state's population (**Table 2**). The population of Navajo and Apache counties has been relatively unchanged since 2010. While the state has grown by close to 9 percent since 2010 on a base of over 6 million people, Navajo and Apache counties have only grown by 1 to 3 percent over seven years. However, about 37 percent of the growth within Navajo County can be attributed to the communities in the study area. Among these communities, the City of Show Low had the most growth since 2010, adding over 700 new residents during this period.

[6] While the study area only includes southern Navajo and Apache counties, population estimates are only available for the whole county.

Table 2: Historic Population Trends

	City of Show Low	Town of Pinetop-Lakeside	Town of Taylor	Town of Snowflake	Vernon CDP	Concho CDP	Navajo County	Apache County	State of Arizona
Population									
2010	10,666	4,289	4,126	5,609	26	121	107,677	71,685	6,401,569
2017	11,377	4,463	4,292	5,882	30	181	111,266	72,713	6,965,897
Percent Change	6.67%	4.06%	4.02%	4.87%	15.38%	49.59%	3.33%	1.43%	8.82%

Source: U.S. Census Bureau, American Community Survey, 2010 and 2016 5-year estimates (Vernon and Concho); Arizona Office of Economic Opportunity, Annual Population Estimates for Counties and Incorporated Places.

Note: Current population estimates for Vernon and Concho (Census Designated Places) are for 2016.

Population projections are not available for cities, but they are available for counties. Navajo County is projected to grow at about 0.5 percent per year through 2025 and then slow to 0.4 percent annual growth by 2030 (**Table 3**). In contrast, Apache County is expected to have a loss of about 1,600 residents by 2030.

Table 3: Projected Population Growth

	Projected Population			Annual Growth Rate		
Year	Navajo County	Apache County	State of Arizona	Navajo County	Apache County	State of Arizona
2017	111,266	72,713	6,965,897	na	na	na
2020	113,063	72,666	7,346,787	0.54%	-0.02%	1.82%
2025	115,986	72,223	7,944,753	0.52%	-0.12%	1.63%
2030	118,200	71,100	8,535,900	0.38%	-0.31%	1.49%

Source: Arizona Office of Economic Opportunity, Population Projections 2015 to 2050, Medium Series.

AGE STRUCTURE

The age structure of the population in Navajo and Apache Counties is relatively similar to the state, with a few exceptions. With a median age of 33.5 years and an above average share of residents under 18 years old, Apache County appears to be somewhat younger than the state, which has a median age of 37.1 (**Table 4**). The median age in Navajo County of 35.8 is closer to the state average. All three areas have shown increases in median age since 2010 as a result of the large aging Baby Boomer generation. In both Navajo County and the state, 16 percent of the population is over 65, compared to only 13 percent in Apache County. The population aged 65 and over has grown at a significantly higher rate than the population as a whole in both the study area counties and the state.
At the other end of the spectrum, there has been modest growth in the population under 18 in Navajo and Apache counties, while the young adult population (18 to 24) has declined. This may be due a portion of the young adult population leaving the region for college, military service or job opportunities.

The share of the population that is in the working-age range (25 to 64) is 47 percent, which is only slightly lower than the state average of 50 percent. Age structure, combined with labor force participation rates are important determinants of the size of the current and future workforce that will be available to support economic development.

Table 4: Population by Age

	Navajo County			Apache County			State of Arizona		
	2010	2017	Average Annual Change	2010	2017	Average Annual Change	2010	2017	Average Annual Change
Total Population	107,677	111,266	0.5%	71,685	72,713	0.2%	6,401,569	6,965,897	1.3%
Under 18	33,165	31,043	-0.9%	23,298	21,305	-1.3%	1,651,605	1,671,815	0.2%
18 - 24	10,337	10,236	-0.1%	7,384	7,562	0.3%	633,755	689,624	1.3%
25 - 44	24,335	24,924	0.3%	15,914	16,360	0.4%	1,722,022	1,804,167	0.7%
45 - 64	26,489	27,594	0.6%	17,204	17,815	0.5%	1,542,778	1,692,713	1.4%
65 & Over	13,352	17,469	4.4%	7,885	9,671	2.6%	851,409	1,107,578	4.3%
Share of Population 25 to 64	47%	47%		46%	47%		51%	50%	
Population Under 18	31%	28%		33%	29%		26%	24%	
Population Over 65	12%	16%		11%	13%		13%	16%	
Median Age	33.8	35.8		31.5	33.5		35.5	37.1	

Source: U.S Census Bureau, American Community Survey 2010 and 2016 5-year estimates of percent distribution of population by age; Arizona Office of Economic Opportunity, Population Estimates.

HOUSEHOLD SIZE

Household size is generally related to the demographic structure of the population, including age, but can also be an indicator of family structure. Household sizes in the study area are above average at 3.1 persons in Navajo County and 3.7 persons in Apache County, versus a state average of 2.7 persons. This may be due to more multi-generational families living in the same household (**Table 5**).

INCOME

Median household income is a general measure of standard of living, as well as a measure of typical wage and skill levels. At just under $32,500, median household income in Apache County is 37 percent below the state average (**Table 5**). Navajo County has a slightly higher median household income of $36,900, but is still 28 percent below the state average. This is an indicator of the lack of skilled workers within the resident work force. Median household income has increased in Apache County since 2010, but has declined in Navajo County during the post-recession period compared to 2 percent growth at the state level.

In terms of per capita income, Apache and Navajo Counties again fall significantly below the state average at $13,400 to $16,600 of income per person compared to $26,700 for the state. This is due to a combination of larger household sizes and lower median household incomes. However, per capita income grew by 9 percent since 2010 in Apache County, which is significantly more than the state growth rate, but remained relatively unchanged in Navajo County.

Table 5: Household and Per Capita Income

	Navajo County			Apache County			State of Arizona		
	2010	2016	Change	2010	2016	Change	2010	2016	Change
Households	35,366	34,090	-3.6%	18,859	19,351	2.6%	2,326,468	2,448,919	5.3%
Population per Household	2.97	3.10	4.4%	3.61	3.67	1.7%	2.63	2.69	2.3%
Median Household Income	$39,774	$36,868	-7%	$30,184	$32,460	8%	$50,448	$51,340	2%
Per Capita Income	$16,745	$16,564	-1%	$12,294	$13,428	9%	$25,680	$26,686	4%

Source: U.S Census Bureau, American Community Survey 2010 and 2016 5-year estimates.

POPULATION DIVERSITY

Diversity is another important factor in terms of attracting both companies and workers; however, it can be both a positive and a negative factor. For communities where the minority populations tend to be less educated or have language barriers, this can limit their workforce potential. To the extent that minority populations are well educated, with specialized skills in particular industries, the population's diversity can make an area more attractive to employers.

About 78 percent of the population in Apache County is non-white, compared to 52 percent of the population in Navajo County and 22 percent statewide (**Table 6**). Native Americans make up the majority of the population in Apache County, over 73 percent, and about 44 percent of the population of Navajo County. These two counties account for about one-third of the state's Native American population. Only 6 to 11 percent of region's population is of Hispanic origin, which is significantly below the statewide average of 31 percent. The distribution of population by race and ethnicity has not changed significantly in either county since 2010.

Table 6: Population by Race and Ethnicity

	Navajo County				Apache County				State of Arizona			
	2010		2017		2010		2017		2010		2017	
Total	**107,677**	**100%**	**111,266**	**100%**	**71,685**	**100%**	**72,713**	**100%**	**6,401,569**	**100%**	**6,965,897**	**100%**
White	52,008	48%	53,074	48%	17,204	24%	16,360	23%	5,006,027	78%	5,419,468	78%
Black or African American	861	1%	890	1%	215	0%	364	1%	249,661	4%	299,534	4%
Native American	46,301	43%	48,957	44%	52,330	73%	53,226	73%	288,071	5%	306,499	4%
Asian or Pacific Islander	538	1%	779	1%	287	0%	364	1%	179,244	3%	222,909	3%
Other Race	4,415	4%	3,894	4%	860	1%	654	1%	505,724	8%	487,613	7%
Two or more Races	3,553	3%	3,672	3%	789	1%	1,745	2%	172,842	3%	229,875	3%
Hispanic Origin	11,306	11%	12,239	11%	4,301	6%	4,290	6%	20,789	29%	22,177	31%

Source: U.S Census Bureau, American Community Survey 2010 and 2016 5-year estimates of percent distribution of population by race; Arizona Office of Economic Opportunity, Population Estimates.

A Title VI Environmental Justice and Limit English Proficiency compliance review was completed through the 'EJSCREEN' function as part of the 2010 Census and the 2011-2015 American Community Survey (ACS); the results of this review are found in **Appendix B**. This review found that 90 percent of the population within the study area speaks English and three percent report to speak English "less than well".

Demographic strengths for this study area include the following:

- Stable population base
- Below average median age
- Ethnic diversity

3.2 WORKFORCE

Availability of talent is a key factor in nearly every site location decision. According to Area Development's Annual Site Consultant Survey, labor availability is the number one reason for domestic relocations, while the cost of labor is the fourth reason for relocation. According to the survey, 95 percent of the consultants reported that availability of skilled labor is very important relative

to facility plans or current operations for their site selection clients[7]. The issue is generally that advanced skills, such as machine tool programming, bioprocessing, advanced welding and similar occupations, are lacking. Within both the services and manufacturing sector, science, technology, engineering, and mathematics (STEM) education has become increasingly important and is generally seen as lacking in the nation's current work force[8]. With a national shortage of technical talent, workforce development programs and training grants are becoming increasingly important. The competitive edge goes to communities and regions that have an adaptable skilled workforce as well as a strong post-secondary education system that can respond to changing market demands.

EDUCATIONAL ATTAINMENT

In addition to examining general demographics, it is important to look at the education levels of the workforce. Educational attainment is a particularly important measure in terms of being able to demonstrate to both existing and prospective employers that the resident workforce is sufficiently skilled to support their needs. The majority of jobs created in this country over the next ten years will require some post-high school education, although not necessarily a degree.

The first measure of educational attainment is the highest degree attained by the adult population and it refers to the level of education already completed by local residents, which is different from current enrollment in college or graduate school. Both Navajo and Apache County fall significantly below the state average in terms of the share of the adult population with bachelor's or graduate degrees (**Table 7**). However, the share of adults with an associate's degree or some college is at or above the state average. To some extent, this may be reflective of the region's economic base and the educational requirements of existing employers. However, education levels of the workforce will limit the types of companies that will be attracted to the study area.

Table 7: Educational Attainment

	Navajo County		Apache County		State of Arizona	
	Number	Percent	Number	Percent	Number	Percent
Total Population (25+ Years)	63,894		40,189		4,017,638	
Less Than 9th Grade	5,010	7.8%	6,433	16.0%	265,859	6.6%
9th to 12th Grade, No Diploma	7,463	11.7%	4,785	11.9%	338,504	8.4%
High School Graduate	19,141	30.0%	12,695	31.6%	1,008,463	25.1%
Some College	17,391	27.2%	8,957	22.3%	1,026,418	25.5%
Associate's Degree	5,675	8.9%	3,185	7.9%	321,019	8.0%
Bachelor's Degree	5,716	8.9%	2,732	6.8%	672,317	16.7%
Graduate or Professional Degree	3,498	5.5%	1,402	3.5%	385,058	9.6%
High School Graduate	51,421	80.5%	28,971	72.1%	3,413,275	85.0%
College or Graduate Degree	14,889	23.3%	7,319	18.2%	1,378,394	34.3%

Source: U.S Census Bureau, American Community Survey 2016 5-year estimates.

[7] Gambale Geraldine. (Q1 2018). 32nd Annual Corporate Survey and the 14th Annual Consultants Survey. *Area Development*. Retrieved from http://www.areadevelopment.com/Corporate-Consultants-Survey-Results/Q1-2018/32nd-annual-corporate-survey-14th-annual-consultants-survey.shtml.

[8] Gambale, Geraldine. (Q1 2017). 13th Annual Consultants Survey: Confidence in the U.S. Economy, Concern over Proposed Trump Policies. Area Development. Retrieved from http://www.areadevelopment.com/Corporate-Consultants-Survey-Results/Q1-2017/responding-consultants-say-finding-skilled-labor-number-one-priority.shtml.

Age-specific levels of educational attainment show a similar scenario for Navajo and Apache Counties versus the state with few differences in the education level of residents based on age. Adults ages 35 and older are somewhat much more likely to have a bachelor's degree in Navajo County than younger residents. In Apache County, the share of residents with a bachelor's degree does not increase until age 45 or older, although the share of college graduates is below the state average for all age cohorts (**Table 8**). There is less variation in educational attainment by age for higher school graduates in the study area, with the exception of the population 65 and older who are much less likely to be high school graduates.

Table 8: Educational Attainment by Age

	High School Graduate			Bachelor's Degree or Higher		
Population by Age	Navajo County	Apache County	State of Arizona	Navajo County	Apache County	State of Arizona
25-34 Years	84.3%	86.1%	86.5%	8.7%	8.0%	26.5%
35-44 Years	84.0%	86.7%	84.9%	15.1%	9.7%	29.6%
45-64 Years	83.6%	80.4%	86.9%	14.3%	13.0%	28.1%
65 Years +	74.4%	60.4%	86.0%	18.8%	11.3%	27.6%

Source: U.S Census Bureau, American Community Survey 2016 5-year estimates.

In order to fully understand study area's labor resources, it is important to understand in greater detail the types of skill sets represented in the resident workforce. Both Navajo and Apache Counties have a significantly lower share of the resident workforce in management, technical, administrative, and sales occupations than the state average (**Table 9**). However, Navajo County has more than twice the state average share of workers in farming, fishing and forestry occupations, and a high share of workers in transportation occupations. Apache County has a higher than average share of its resident workforce in healthcare support, education and construction occupations. The location quotients in **Table 9** indicate the share of employment in a particular occupation, versus the share of employment in that occupation at the state level. Location quotients less than one indicate a below average share of workers in a particular occupation, whereas values greater than one indicate an above average share and a competitive advantage.

Table 9: Resident Workforce by Occupation

Occupations	Navajo County Employed Residents	Navajo County Share	Navajo County Location Quotient*	Apache County Employed Residents	Apache County Share	Apache County Location Quotient*	State of Arizona Employed Residents	State of Arizona Share
Total	32,364			18,258			2,879,372	
Management, business and finance	3,115	10%	0.67	1,635	9%	0.62	414,794	14%
Computer and mathematical occupations	249	1%	0.28	175	1%	0.34	80,297	3%
Architecture and engineering	314	1%	0.50	179	1%	0.50	56,273	2%
Life, physical, and social science	246	1%	1.17	54	0%	0.45	18,780	1%
Community and social services	709	2%	1.24	488	3%	1.52	50,728	2%
Legal occupations	93	0%	0.29	86	0%	0.48	28,160	1%
Education, training, and library occupations	2,284	7%	1.28	1,705	9%	1.70	158,570	6%
Arts, design, entertainment, sports, media	508	2%	0.91	146	1%	0.46	49,929	2%
Health practitioners and technologists	1,896	6%	1.05	952	5%	0.94	160,461	6%
Healthcare support occupations	815	3%	1.23	703	4%	1.89	58,807	2%
Protective services	1,333	4%	1.47	839	5%	1.64	80,898	3%
Food preparation and serving	2,778	9%	1.36	1,065	6%	0.92	181,706	6%
Building and grounds maintenance	2,057	6%	1.39	1,033	6%	1.24	131,335	5%
Personal care and service	1,212	4%	0.90	1,045	6%	1.38	119,478	4%
Sales and related occupations	3,094	10%	0.83	1,278	7%	0.61	331,949	12%
Office and administrative support	4,097	13%	0.88	2,331	13%	0.89	415,271	14%
Farming, fishing, and forestry	422	1%	2.14	169	1%	1.52	17,577	1%
Construction and extraction	1,924	6%	1.17	1,581	9%	1.70	146,448	5%
Installation, maintenance, and repair	1,287	4%	1.15	546	3%	0.86	99,637	3%
Production	1,464	5%	1.08	1,013	6%	1.33	120,491	4%
Transportation	1,829	6%	1.70	799	4%	1.31	95,865	3%
Material moving	638	2%	0.92	436	2%	1.11	61,918	2%

Source: U.S. Census Bureau, American Community Survey, 2016 5-year estimates.
* Location quotient relative to the state.

LABOR FORCE AND UNEMPLOYMENT

Another measure of workforce capacity is labor force growth. Labor force includes both individuals who are employed, as well as those who are unemployed and are actively looking for work. Looking back over the past seven years (from 2010 to 2017), the labor force in Navajo and Apache Counties declined moderately from 2010 through 2015. In Apache County, that downward trend continued through 2017, reflecting a 14 percent loss over seven years, which is significant and creates a challenge with regard to economic development. In Navajo County, the labor force began to grow again in 2016, but is not yet back to 2010 levels (**Table 10**). In contrast, the state's labor force has shown net growth, increasing by 7 percent since 2010. It is important to remember that labor markets do not follow strict jurisdictional boundaries and people frequently work in different communities than where they live. Companies interested in locating or expanding in the study area may be able to attract workers from elsewhere in the region, in addition to potential workers living in the city where the company is located.

Table 10: Labor Force and Unemployment

	2010	2011	2012	2013	2014	2015	2016	2017	Change 2010-2017
Total Labor Force									
Navajo County	43,903	43,344	42,953	42,014	41,609	40,658	41,331	42,432	-5.9%
Apache County	23,438	23,040	22,804	21,876	21,171	20,584	20,064	19,877	-14.4%
State of Arizona	3,089,705	3,037,017	3,028,878	3,029,425	3,087,942	3,153,040	3,225,703	3,312,720	7.2%
Employment									
Navajo County	37,450	36,914	36,886	36,361	37,011	36,752	37,967	39,389	1.4%
Apache County	19,589	18,788	18,480	17,852	17,859	17,863	17,791	17,801	-9.1%
State of Arizona	2,769,454	2,748,470	2,776,349	2,794,697	2,878,611	2,962,245	3,052,788	3,151,405	13.8%
Unemployment Rate									
Navajo County	14.7%	14.8%	14.1%	13.5%	11.1%	9.6%	8.1%	7.2%	-44.9%
Apache County	16.4%	18.5%	19.0%	18.4%	15.6%	13.2%	11.3%	10.4%	-31.1%
State of Arizona	10.4%	9.5%	8.3%	7.7%	6.8%	6.1%	5.4%	4.9%	-36.3%
Labor Force Participation Rate (population age 18+)									
Navajo County	58.8%	57.9%	56.6%	54.5%	53.4%	51.7%	51.9%	52.9%	-11.8%
Apache County	48.4%	47.1%	46.1%	43.7%	42.2%	40.5%	39.3%	38.7%	-18.8%
State of Arizona	65.0%	63.4%	62.4%	61.4%	61.5%	61.6%	62.1%	62.6%	-4.5%

Sources: U.S Census Bureau, American Community Survey, 2010-2016; Bureau of Labor Statistics, Local Area Unemployment Statistics, 2010-2017.

In terms of unemployment, both the counties and the state have experienced significant declines in unemployment since 2010, although the unemployment rates in these counties are consistently above statewide levels. In Navajo County, the unemployment rate peaked in 2011 at 14.8 percent, but has since declined to 7.2 percent in 2017, about 2 percent above statewide levels. In Apache County, the unemployment peaked at a staggering 19.0 percent in 2012 and has since declined to 10.4 percent. Despite this improvement, the current unemployment rate in Apache County is at the same level as state unemployment was at the peak of the recession. On a positive note, as labor markets in urban areas continue to tighten, the study area has the capacity to expand employment based on its existing labor force.

LABOR FORCE PARTICIPATION RATE

The labor force participation rate is a measure of the share of the population that is working or seeking work. Because the participation rate includes both employed and unemployed persons, it is a better metric for indicating the potential pool of workers. Labor force participation has been slowly declining throughout the country, although the rate of decline in Navajo and Apache County has been significantly above the state. In 2010, the participation rates in Navajo and Apache Counties ranged from 48 percent to 59 percent. Navajo County's participation rate has declined 6 percent and Apache County has declined almost 10 percent from 2010 to 2017, while the state participation rate declined by only 2.5 percent. Participation rates typically vary depending on the age structure and education levels of the region and have declined nationally as the Baby Boomer generation begins to retire. However, neither county has an above average share of population over 65, so it is likely that the decline in participation is due in part to discouraged workers dropping out of the labor force rather than an aging population. This is important since the labor participation rate is a key indicator of workforce availability and the overall economic health of the region.

COMMUTING PATTERNS

Commuting is both a quality of life and labor availability issue. Ease of commuting directly impacts quality of life, in terms of the time spent driving and the intensity of congestion. However, being able to draw from a large labor shed area is an advantage for employers.

Average travel time to work is less for residents in the study area at 18 to 23 minutes, versus the state average at 25 minutes (**Table 11**). Only about 16 percent of residents in Show Low and Pinetop-Lakeside commute more than 30 minutes per day, compared to 34 percent in Snowflake and Taylor[9]. About 40 percent of Show Low residents live and work in the city, and an additional 15 percent work elsewhere in the study area. A similar percentage of residents in Pinetop-Lakeside live and work within the study area, but a higher share commute outside the community. In Snowflake and Taylor about 30 to 40 percent of residents live and work in their home communities, while an additional 15 percent commute to Show Low or Pinetop-Lakeside. An estimated 10 to 20 percent of residents in the study area work in the Phoenix metro area. Having a large share of residents who both live and work locally makes for a more connected community and enhances quality of life.

Table 11: Commuting Patterns

	City of Show Low	Town of Pinetop-Lakeside	Town of Taylor	Town of Snowflake
Mean Travel Time to Work (minutes)	18.2	19.7	22.6	22.3
Share Commuting > 30 minutes	14%	18%	34%	33%
Where Residents Work:				
City of Show Low	40%	21%	12%	13%
Town of Pinetop-Lakeside	11%	22%	3%	2%
Town of Taylor	3%	1%	13%	11%
Town of Snowflake	1%	2%	17%	28%
City of Flagstaff	2%	2%	2%	2%
City of Holbrook	3%	1%	3%	4%
Lake of the Woods	2%	3%	1%	1%
Wagon Wheel	4%	2%	2%	2%
Whiteriver	3%	5%	0%	1%
Phoenix Metro Area	10%	15%	21%	14%
Other Locations	22%	25%	27%	23%

U.S. Census Bureau: American Community Survey, 2016 5 year estimates; OnTheMap Application (http://onthemap.ces.census.gov), 2015 data.

DISTRIBUTION OF JOBS BY EARNINGS LEVEL, EDUCATION, & WORKER AGE

When evaluating the local workforce and the potential for future job growth, it is useful to have information on the characteristics of job holders. This can be expressed in terms of worker age, educational attainment and earnings level. This data reflects worker characteristics and not job requirements. An aging population nationally makes demographic characteristics increasingly important in the site selection process. Communities that might appear at first glance to have an abundance of workers could be at risk of future shortages if a significant share of their workforce is 55 or older and will be retiring soon.

The distribution of job holders by age is somewhat different in Navajo and Apache Counties than in the state overall. The share of jobs held by workers under age 30 is lower in Navajo and Apache Counties at 14 to 20 percent, versus 23 percent statewide, while the share of workers over 55 is higher at 26 to 27 percent, versus 22 percent for the state, indicating potential for future declines in the labor

[9] Data for Vernon and Concho is not available due to the small sample size.

force as these people retire (**Table 12**). Despite having a younger than average population in the region, it appears that a smaller share of the population under 30 is participating in the labor force.

Table 12: Percent of Jobs by Age Cohort

	Total Jobs	Age 18 to 29	Age 30 to 54	Age 55 +
Navajo County	24,137	19.9%	54.5%	25.6%
Apache County	16,486	13.7%	59.7%	26.6%
State of Arizona	2,589,360	22.5%	55.6%	21.9%

U.S. Census Bureau, OnTheMap, 2015 data.

The distribution of job holders by earnings level is an indicator of the skill base and experience level of the local workforce. There is quite a bit of variance among the three areas. Apache County actually has a higher than average share of middle income workers earning $1,250 to $3,333 per month, and a lower share of workers earning $1,250 or less (**Table 13**). This is likely due to the predominance of higher paying jobs in the mining and utility industries. Navajo County is more similar to the state in terms of middle income earners, but is significantly skewed toward lower income workers earning $1,250 per month or less, versus those earning $3,333 or more.

Table 13: Percent of Jobs by Monthly Earning Level

	Total Jobs	$1,250 or Less	$1,251 to $3,333	More than $3,333
Navajo County	24,137	27.6%	41.0%	31.4%
Apache County	16,486	19.7%	42.6%	37.7%
State of Arizona	2,589,360	23.7%	37.2%	39.1%

U.S. Census Bureau, OnTheMap, 2015 data.

The final measure of workforce distribution is the share of job holders by education level. Although Navajo and Apache Counties have lower overall educational attainment, there is less variation for residents in the workforce. The region has an above average share of workers with some college or an associate's degree. The share of workers with a bachelor's or graduate degree is below average, but only about 4 percent lower than the state (**Table 14**). To some extent, this is reflective of the educational requirements of the jobs available in in the region. It is also important to note than most of the jobs created over the next ten years will require post-secondary education, but not necessarily a degree. Northland Pioneer College is an important partner in preparing the resident workforce to meet the evolving needs of employers requiring a more technology-savvy workforce in the future.

Table 14: Percent of Jobs by Worker Educational Attainment

	Total Jobs	Less than High School	High School Graduate	Some College or Assoc. Degree	Bachelor or Grad Degree	Not Available
Navajo County	24,137	11.4%	24.9%	28.0%	15.8%	19.9%
Apache County	16,486	12.5%	26.7%	31.6%	15.5%	13.7%
State of Arizona	2,589,360	12.0%	20.2%	25.7%	19.5%	22.5%

U.S. Census Bureau, OnTheMap, 2015 data.

Competitive labor force strengths for the study area including the following:

- Above average share of workforce with some college or an associate's degree
- Available capacity within the existing labor force
- Geographically large labor shed area for employers
- Above average resident workforce in health care, transportation, and construction occupations

3.3 ECONOMY

The overall robustness of a local economy can be measured in terms of its ability to create new jobs. Growth projections are not available for the study area specifically, although projections for Navajo and Apache Counties show fairly slow growth of 1.4 percent to 1.6 percent per year over the next 15 years, with growth rates declining over time (**Table 14**). This equates to about 17,400 new jobs by 2030 in the two-county area. Projected job growth rates for the state are also declining over time, but range from 2.1 percent to 1.8 percent annually.

Table 15: Projected Job Growth

Projected Job Growth	2015	2020	2025	2030
Navajo County	41,280	44,660	48,050	51,410
Apache County	30,910	33,340	35,770	38,200
State of Arizona	3,536,250	3,905,740	4,286,110	4,675,370
Annual Growth Rate		2015-2020	2020-2025	2025-2030
Navajo County	na	1.6%	1.5%	1.4%
Apache County	na	1.6%	1.5%	1.4%
State of Arizona	na	2.1%	1.9%	1.8%

Source: Woods & Poole Economics, 2016.

EMPLOYMENT BY SECTOR

To understand why the economies in some markets have stronger projections than others, it is important to look at the distribution of employment and establishments by industry sector. Note that this data reflects employment by place of work, not by worker place of residence. As of 2016, which is the most current data available at this level of detail, there were about 27,400 people employed in Navajo County and 17,700 people employed in Apache County (**Table 16**). Government is the largest sector in both Navajo and Apache Counties. This sector accounts for 34 to 60 percent of employment, respectively, compared only 15 percent of employment statewide. Other large sectors in Navajo County include health care, retail, food services, and accommodations that are driven by tourism. In Apache County, the only non-government sector with significant employment is health care.

Table 16: Employment by Sector

Industry	Navajo County Jobs	Navajo County Share	Navajo County *Location Quotient	Apache County Jobs	Apache County Share	Apache County *Location Quotient	State of Arizona Jobs	State of Arizona Share	State of Arizona *Location Quotient
Total	27,477	100%		17,666	100%		2,686,421	100%	
Agriculture, Forestry & Fishing	266	1%	0.93	35	0%	0.19	25,461	1%	0.91
Mining	454	2%	3.25	138	1%	1.53	11,387	0%	0.83
Utilities	100	0%	0.79	338	2%	4.17	12,274	0%	1.00
Construction	1,480	5%	0.97	219	1%	0.22	134,049	5%	0.90
Manufacturing	256	1%	0.09	81	0%	0.04	158,693	6%	0.58
Wholesale Trade	192	1%	0.14	150	1%	0.17	93,575	3%	0.72
Retail Trade	4,027	15%	1.12	995	6%	0.43	325,565	12%	0.92
Transportation & Warehousing	434	2%	0.40	268	2%	0.38	79,012	3%	0.74
Information	996	4%	1.56	129	1%	0.31	44,917	2%	0.72
Finance & Insurance	285	1%	0.21	73	0%	0.09	148,116	6%	1.14
Real Estate, Rental & Leasing	278	1%	0.57	328	2%	1.05	49,415	2%	1.04
Professional & Technical Services	386	1%	0.19	99	1%	0.08	139,812	5%	0.71
Management of Companies	124	0%	0.24	0	0%	0.00	31,471	1%	0.63
Administrative & Support Services	661	2%	0.32	259	1%	0.20	238,701	9%	1.20
Educational Services	529	2%	0.84	399	2%	0.98	57,447	2%	0.93
Health Care & Social Assistance	3,724	14%	0.86	2,373	13%	0.86	348,014	13%	0.83
Arts, Entertainment & Recreation	191	1%	0.37	21	0%	0.06	40,319	2%	0.81
Accommodation & Food Services	3,254	12%	1.07	1,141	6%	0.58	266,449	10%	0.90
Other Services	460	2%	0.49	93	1%	0.15	70,644	3%	0.77
Government	9,380	34%	1.93	10,527	60%	3.36	411,100	15%	0.86

Source: IMPLAN ES202 2016 data for Navajo and Apache Counties, Bureau of Labor Statistics Employment and Output Projections, 2018; Arizona Office of Economic Opportunity, Arizona Statewide 2016 QCEW data.

* Location quotient relative to the United States

While outside of the immediate study area, the Navajo Generating Station and associated Kayenta mine employs more than 750 people, mostly residents of the Navajo Nation, and accounts for a significant portion of the revenue for the Navajo and Hopi tribes. The Navajo government received approximability 22 percent of its revenue from the operation, while the Hopi revenues from the mine are 85 percent of their budget[10]. The anticipated closing of the station and mine will have associated economic impacts on the region, both related to employment and revenue, although these impacts may be more concentrated in areas north of this immediate study area.

LOCAL INDUSTRY SPECIALIZATIONS

Table 17 shows all private sector industries in the two-county region with 150 or more employees, grouped into clusters of related industries. The largest industry clusters are health care, hospitality, local and regional retail, local services, education, construction, mining, and utilities. Note that many of these larger industries, with the exception of mining and utilities and hospitality, are local-serving and do not bring new wealth into the region by exporting goods and services outside the area.

Another way to understand the economic base of the region is to look at industry specializations within the two-county area. Location quotients are used here to compare the share of total industry employment in a given sector in Navajo and Apache Counties and the state to that same ratio for the nation. A location quotient is a method for quantifying how concentrated a particular industry is in a region or state, as compared to the nation. The location quotient helps to identify a particular strength

[10] https://www.nbcnews.com/news/us-news/biggest-coal-burning-power-plant-west-most-likely-shutting-down-n864981

or point of differentiation for a region. All location quotients should be viewed in the context of the U.S. average of 1.0.

Note that some of the industries with high location quotients do not employ large numbers of people, but they account for a larger share of employment in the region than would be expected given the size of the industry nationally, and the overall size of the area's economy.

Table 17: Largest Private Sector Industries

		Navajo/Apache 2016			Location	Projected Annual U.S. Growth 2016-2026	
NAICS	Description	Jobs	Firms	Avg Wage	Quotient	Employment	Output
	Mining and Utilities	**622**					
212111	Bituminous coal and lignite surface mining	378	3	$91,571	76.06	-0.7%	2.0%
221112	Fossil fuel electric power generation	244	1	$101,823	12.34	0.2%	1.5%
	Construction	**765**					
236115	New single-family general contractors	159	45	$27,483	2.22	1.2%	2.7%
236210	Industrial building construction	189	3	$56,993	5.51	1.2%	2.7%
236220	Commercial building construction	259	13	$51,588	2.05	1.2%	2.7%
238992	All other nonresidential trade contractors	158	7	$59,960	4.40	1.2%	2.7%
	Local and Regional Retail	**3,337**					
441110	New car dealers	259	9	$40,776	1.10	0.8%	2.2%
444110	Home centers	332	5	$23,245	2.27	0.2%	2.9%
445110	Supermarkets and other grocery stores	997	20	$23,917	1.87	0.1%	1.3%
447110	Gasoline stations with convenience stores	677	51	$17,745	3.94	0.2%	2.9%
452111	Department stores, except discount	261	2	$20,872	2.62	0.3%	2.2%
452910	Warehouse clubs and supercenters	631	2	$25,417	2.02	0.3%	2.2%
452990	All other general merchandise stores	181	27	$16,229	2.08	0.3%	2.2%
	Hospitality	**4,169**					
453220	Gift, novelty, and souvenir stores	207	15	$20,631	6.23	0.2%	2.9%
721110	Hotels and motels, except casino hotels	1,045	58	$17,119	3.16	0.2%	1.9%
722511	Full-service restaurants	1,166	77	$15,899	1.04	0.9%	1.5%
722513	Limited-service restaurants	1,751	68	$14,234	1.96	0.9%	1.5%
	Local Services	**1,316**					
511110	Newspaper publishers	166	3	$74,419	4.46	-2.6%	-0.9%
515210	Cable and other subscription programming	612	2	$71,364	52.61	-2.5%	2.4%
531311	Residential property managers	212	7	$26,616	2.37	0.7%	2.4%
561320	Temporary help services	327	7	$19,759	0.54	0.5%	2.6%
	Education						
611110	Elementary and secondary schools	898	19	$37,262	5.42	1.2%	0.3%
	Health Care	**5,133**					
621111	Offices of physicians, except mental health	266	49	$53,722	0.51	2.0%	3.7%
621210	Offices of dentists	231	31	$35,469	1.19	1.8%	2.1%
621420	Outpatient mental health centers	376	10	$34,952	7.97	3.2%	2.6%
621498	All other outpatient care centers	362	2	$65,043	11.51	3.2%	2.6%
621610	Home health care services	549	13	$19,907	1.92	4.4%	3.1%
622110	General medical and surgical hospitals	2,464	6	$61,043	2.54	0.8%	3.2%
623110	Nursing care facilities	373	7	$31,470	1.08	1.2%	3.0%
623311	Continuing care retirement communities	186	2	$25,687	1.86	1.2%	3.0%
624120	Services for the elderly and disabled	326	14	$15,990	0.95	3.4%	2.5%

Source: IMPLAN ES202 data for Navajo and Apache Counties, Bureau of Labor Statistics Industry Employment and Output Projections, October 2017.

The industries in **Table 18** are those where Navajo and Apache Counties have a high level of specialization, as indicated by a location quotient of 2.0 or greater. The list is limited to non-local serving industries with current local employment of 20 or more. Local industry specializations include the categories of agriculture, logging and wood products, mining and utilities, transportation, and hospitality. Some of these industries have a presence in the study area, while some are located in other

parts of Navajo and Apache Counties. Resource industries like logging support local wood product manufacturing, and also biomass electricity generation. There are several coal mining operations in other parts of Navajo County that serve the Cholla Power Plant in Joseph City. The mining and utilities sector also includes sand and gravel mining. Transportation includes both air transportation and transportation support services. Hospitality and tourism represents a mix of retail and lodging.

Table 18: Local Industry Specializations

NAICS	Description	Navajo/Apache 2016 Jobs	Firms	Avg Wage	Location Quotient	Projected Annual U.S. Growth 2016-2026 Employment	Output
	Agriculture						
112000	Cattle and hog production	136	9	$33,886	2.49	-0.3%	1.5%
	Logging and Wood Products						
113300	Logging	103	7	$46,648	9.51	-2.2%	1.1%
321113	Sawmills	68	3	$40,931	3.97	-0.1%	1.8%
321912	Cut stock, resawing lumber, and planing	32	1	$29,787	11.09	-0.5%	2.4%
321918	Other millwork, including flooring	21	2	$35,920	2.61	-0.5%	2.4%
321999	All other miscellaneous wood product mfg.	56	2	$26,962	11.29	-0.5%	2.4%
221117	Biomass electric power generation	46	1	$65,417	141.75	0.2%	1.5%
	Mining and Utilities						
212111	Bituminous coal and lignite surface mining	378	3	$91,571	76.06	-0.7%	2.0%
213113	Support activities for coal mining	28	1	$69,876	25.47	2.4%	2.7%
221112	Fossil fuel electric power generation	244	1	$101,823	12.34	0.2%	1.5%
221121	Electric bulk power transmission and control	27	1	$110,928	4.91	0.2%	1.5%
486210	Pipeline transportation of natural gas	30	2	$57,815	4.88	0.0%	2.5%
212321	Construction sand and gravel mining	92	6	$38,888	15.56	-0.8%	1.4%
212322	Industrial sand mining	72	1	$40,428	66.42	-0.8%	1.4%
	Transportation						
424710	Petroleum bulk stations and terminals	23	2	$64,507	3.48	0.2%	2.6%
481219	Other nonscheduled air transportation	138	1	$26,143	132.85	0.3%	2.1%
561599	All other travel arrangement services	45	2	$23,220	2.40	1.0%	2.2%
	Hospitality and Tourism						
453220	Gift, novelty, and souvenir stores	207	15	$20,631	6.23	0.2%	2.9%
721110	Hotels and motels, except casino hotels	1,045	58	$17,119	3.16	0.2%	1.9%
721199	All other traveler accommodation	47	6	$19,192	15.52	0.2%	1.9%
721211	RV parks and campgrounds	32	7	$20,041	5.15	0.2%	1.9%

Source: IMPLAN ES202 data for Navajo and Apache Counties, Bureau of Labor Statistics Industry Employment and Output Projections, October 2017.

NATIONAL GROWTH PROJECTIONS

Overall, the projections show a national economy that is returning to a more consistent growth path, but long-term trends show less growth than was expected prior to the Great Recession. The combination of a slowing of population growth and a continuation of longstanding trends of decreasing labor force participation are contributing factors. Service sectors will account for the majority of the projected job growth nationally. Specifically, industries related to health care are projected to add the most new jobs over the next decade, as the aging population increases demand for health services according to the Bureau of Labor Statistics. Growth in health care and social assistance will account for nearly one third of all jobs added during the 2016 to 2026 period, or about 4.0 million jobs[11]. The other sector with a high rate of projected employment growth during the next decade is professional and business services. This sector is expected to add almost 2.2 million jobs, which is the second-largest increase among all major sectors. The growing need for consulting services to help businesses

[11] Bureau of Labor Statistics, Industry Employment and Output Projections to 2026 Press Release, October 24, 2017.

keep pace with the latest technology, government regulations, management, and production techniques, is expected to drive growth in this industry. Overall, about 9 out of 10 jobs added in the United States over the next ten years will be in service sectors.

In looking at high growth industries for Navajo and Apache Counties, it is important to consider how the region compares to the nation. **Table 19** shows a listing of high growth industries nationally in terms of output and employment. Health care tops the list for projected employment growth nationally. There are several high growth health care industries with a sizeable presence in the two-county area including home health care services, outpatient mental health care centers and all other outpatient care centers.

The other measure of industry growth is output. Top growth industries nationally in terms of output include those that will experience growth primarily as a result of new technology rather than increased manpower. These include information services and software as well as health care. Output growth in information services related to computing can be linked to increased demand for network and computer systems security, mobile applications, software and custom programming services, as well as the health care industry's on-going demand for information technology and data management. Due to rapid technological change and increased productivity, growth in output will exceed growth in employment in these industries.

Among the 21 high output growth industries shown in **Table 19**, the only industries with sizeable employment locally is general hospitals, offices of physicians, and ambulance services. Employment in information services such as internet publishing, satellite telecommunications, and software publishers is very limited in Navajo and Apache Counties, and generally tends to be concentrated more urban areas.

Table 19: Local Presence of National High Growth Industries

NAICS	Description	Navajo/Apache 2016 Jobs	Firms	Avg Wage	Projected Annual U.S. Growth 2016-2026 Employment	Output
National High Employment Growth						
621610	Home health care services	549	13	$19,907	4.4%	3.1%
519110	News syndicates	0	0	$0	4.0%	5.7%
519130	Internet Publishing, Broadcasting, Web Search P	1	1	$313,462	4.0%	5.7%
519190	Other information services	0	0	$0	4.0%	5.7%
621410	Family planning centers	0	0	$0	3.2%	2.6%
621420	Outpatient mental health centers	376	10	$34,952	3.2%	2.6%
621491	HMO medical centers	0	0	$0	3.2%	2.6%
621492	Kidney dialysis centers	73	4	$75,868	3.2%	2.6%
621493	Freestanding emergency medical centers	46	4	$60,297	3.2%	2.6%
621498	All other outpatient care centers	362	2	$65,043	3.2%	2.6%
621310	Offices of chiropractors	33	12	$25,136	2.7%	3.4%
621320	Offices of optometrists	39	6	$31,617	2.7%	3.4%
621330	Offices of mental health practitioners	6	4	$16,309	2.7%	3.4%
621340	Offices of specialty therapists	37	11	$42,429	2.7%	3.4%
621391	Offices of podiatrists	8	3	$29,731	2.7%	3.4%
621399	Offices of miscellaneous health practitioners	11	4	$32,905	2.7%	3.4%
621511	Medical laboratories	0	0	$0	2.5%	3.2%
621512	Diagnostic imaging centers	6	1	$63,195	2.5%	3.2%
National High Output Growth						
519110	News syndicates	0	0	$0	4.0%	5.7%
519130	Internet Publishing, Web Search Portals	1	1	$313,462	4.0%	5.7%
519190	Other information services	0	0	$0	4.0%	5.7%
517410	Satellite telecommunications	0	0	$0	-1.9%	5.3%
517911	Telecommunications resellers	4	1	$52,207	-1.9%	5.3%
517919	All other telecommunications	1	1	$53,534	-1.9%	5.3%
511210	Software publishers	1	1	$144,938	1.8%	4.2%
621111	Offices of physicians, except mental health	266	49	$53,722	2.0%	3.7%
621112	Offices of mental health physicians	2	1	$51,805	2.0%	3.7%
621310	Offices of chiropractors	33	12	$25,136	2.7%	3.4%
621320	Offices of optometrists	39	6	$31,617	2.7%	3.4%
621330	Offices of mental health practitioners	6	4	$16,309	2.7%	3.4%
621340	Offices of specialty therapists	37	11	$42,429	2.7%	3.4%
621391	Offices of podiatrists	8	3	$29,731	2.7%	3.4%
621399	Offices of miscellaneous health practitioners	11	4	$32,905	2.7%	3.4%
621511	Medical laboratories	0	0	$0	2.5%	3.2%
621512	Diagnostic imaging centers	6	1	$63,195	2.5%	3.2%
621910	Ambulance services	107	7	$50,118	2.4%	3.2%
621991	Blood and organ banks	0	0	$0	2.4%	3.2%
621999	Miscellaneous ambulatory health care services	7	1	$65,335	2.4%	3.2%
622110	General medical and surgical hospitals	2,464	6	$61,043	0.8%	3.2%
622210	Psychiatric and substance abuse hospitals	0	0	$0	0.8%	3.2%
622310	Other hospitals	0	0	$0	0.8%	3.2%

Source: IMPLAN ES202 2016 data by county, Bureau of Labor Statistics Industry Employment and Output Projections, October 2017.

TAXABLE SALES BY INDUSTRY

Taxable sales are another key indicator of local economic conditions. Total taxable sales are 18 percent above 2010 levels in Navajo County, while Apache County remains below 2010 levels. Both counties have shown less growth in taxable sales than the state as a whole.

There are also significant variations in terms of the distribution of taxable sales by sector. The retail sector is the largest source of sales tax revenue in both counties and the state, although Navajo County

has a significantly higher share of taxable sales coming from retail at 67 percent versus 55 for the state. Apache County has a much lower share of retail sales at 39 percent (**Table 20**). This is largely due to the level of tourism sales in Navajo County. Both counties have a higher than average share of taxable hotel/motel sales but a lower than average share of restaurant and bar sales, which is not consistent with tourist areas. In terms of construction sales tax, Navajo County has a lower than average share of sales from this sometimes volatile sector at 6 percent, while Apache County has a higher than average share 12 percent, compared to a state average of 9 percent. However, construction sales in Apache County have dropped 59 percent since 2010.

Total taxable sales per capita for 2017 are about 28 percent below the state average in Navajo County, despite the boost in sales from tourists, and 75 percent below the state average in Apache County. The very low levels of taxable sales per capita in Apache County put a strain on local governments to provide services to residents and businesses given the limited revenue generating capacity.

Table 20: Taxable Sales by Industry

	Navajo County			Apache County			State of Arizona		
	2010	2017	Change	2010	2017	Change	2010	2017	Change
Total Taxable Sales (000's)	$1,134,147	$1,334,771	17.7%	$331,681	$302,117	-8.9%	$87,428,673	$115,363,982	32.0%
Mining	na	na		na	na	na	$1,267,131	$875,734	-30.9%
Communication & Utilities	$135,901	$131,965	-2.9%	$30,925	$27,343	-11.6%	$12,972,453	$11,921,163	-8.1%
Construction	$106,072	$74,247	-30.0%	$88,152	$36,150	-59.0%	$9,311,612	$10,252,613	10.1%
Printing and Publishing	$1,538	$1,545	0.4%	$454	$156	-65.6%	$340,666	$325,066	-4.6%
Transportation	$0	$0	0.0%	$0	$0	0.0%	$43,630	$62,062	42.2%
Retail Trade	$705,558	$896,175	27.0%	$63,927	$118,952	86.1%	$42,913,931	$63,922,406	49.0%
Real Estate, Rental & Leasing	$24,495	$26,009	6.2%	$4,151	$7,844	88.9%	$3,127,970	$3,947,210	26.2%
Restaurants & Bars	$84,617	$117,206	38.5%	$11,512	$15,823	37.5%	$9,020,795	$13,571,567	50.4%
Amusements	$6,320	$2,323	-63.3%	$148	$690	367.2%	$1,051,919	$1,323,661	
Hotel/Motel	$30,454	$41,071	34.9%	$13,153	$10,478	-20.3%	$1,949,656	$3,058,663	56.9%
Use Tax and Other	$39,191	$44,231	12.9%	$119,260	$84,682	-29.0%	$5,428,910	$6,103,838	12.4%
Percent Non-Retail Sales	$3,136	$2,868		$3,573	$2,292		$5,380	$5,246	
Sales per Capita	$10,533	$11,996		$4,627	$4,155		$13,657	$16,561	

Source: Arizona Department of Revenue, Annual Reports for 2010 and 2017.

RESIDENTIAL CONSTRUCTION

Construction activity is often a leading economic indicator. Residential construction activity in Navajo and Apache counties declined through 2012, but then began an upward trend that has continued through this year, although Apache County is still below 2010 levels. The level of activity in smaller communities like Taylor and Snowflake remains at less than 15 units per year, whereas Show Low has seen a significant uptick with 113 new units permitted in 2017, versus 50 to 60 units in previous years since the recovery (**Table 21**)[12]. Pinetop-Lakeside has also experienced an upward trend with a significant increase in activity in 2017. Note that both of these communities have a fair amount of vacation home activity, and so residential construction is not necessarily correlated with population growth.

[12] Data for Show Low is from the Census Monthly Building Permit Survey and represents calendar year activity.

Table 21: Residential Construction Activity

	2010	2011	2012	2013	2014	2015	2016	2017
Housing Units								
City of Show Low	50	27	13	35	55	52	66	113
Town of Pinetop-Lakeside	9	9	10	18	24	18	21	32
Town of Taylor	2	1	3	3	2	3	5	4
Town of Snowflake	3	0	2	7	6	8	11	na
Navajo County Total	140	100	93	144	191	177	221	275
Apache County Total	48	40	21	31	38	29	36	37
Value (000's)								
City of Show Low	$7,375	$6,566	$4,257	$8,656	$12,043	$10,252	$13,434	$22,110
Town of Pinetop-Lakeside	$3,749	$2,545	$3,313	$4,725	$6,165	$5,053	$4,115	$6,516
Town of Taylor	$502	$468	$570	$570	$350	$540	$900	$720
Town of Snowflake	$793	$0	$456	$1,512	$841	$2,068	$3,240	na
Navajo County Total	$19,872	$16,153	$17,206	$32,794	$33,104	$31,666	$40,684	$49,534
Apache County Total	$9,303	$8,024	$3,938	$6,920	$8,649	$5,308	$8,379	$8,392

Source: U.S. Bureau of the Census, Building Permits Survey; Town of Pinetop-Lakeside 2017 CAFR.

Competitive economic strengths for the study area include the following:

- Strong concentration of jobs in forestry and wood products, mining and utilities and hospitality
- Taxable sales growth in Navajo County
- Increased construction activity in Show Low and Pinetop-Lakeside

3.4 SUMMARY OF FINDINGS

Overall, the study area has some key advantages, such as an attractive quality of life, a stable population base, available workers, a strong base of government, and hospitality employment. However, there are some red flags that will significantly hamper the study area's ability to compete for economic development projects if not addressed. They include the education levels of the workforce and low labor force participation. The matrix in **Table 22** provides a summary of comparative advantages and disadvantages for the study area.

Table 22: Summary of Economic Strengths and Weaknesses

Business Climate Factor	Strength or Weakness
Population and Demographics	
Projected Population Growth	-
Age Structure	+
Household and Per Capita Income Growth	-
Diversity	+
Workforce	
Educational Attainment	-
Share of Workforce with Some College or Associate'	+
Share of Workforce with Bachelor's Degree	-
Production, Construction and Maintenance Occupatior	+
Management and Administrative Occupations	-
Transportation and Material Moving Occupations	+
Labor Force Growth	-
Unemployment Rates	+
Labor Force Participation	-
Laborshed and Commuting	+
Economy	
Projected Job Growth	+
Industry Diversification	-
Retail Sales Per Capita	-
Construction Activity	+

4. FUTURE TRANSPORTATION CONDITIONS

This section looks at historic trends in community and transportation factors within the study area and considers how these historic trends influence future transportation conditions.

4.1 HISTORIC GROWTH IN THE STUDY AREA

HISTORIC POPULATION TRENDS

Section 4.1 discusses historic population trends for the study area. The population of Navajo and Apache Counties has been relatively unchanged since 2010, with 1 to 3 percent growth seen over seven years. Of the local jurisdictions, the City of Show Low saw the largest growth since 2010 adding over 700 new residents.

Navajo County is projected to grow at about 0.5 percent per year through 2025 and then slow to 0.4 percent annual growth by 2030. In contrast, Apache County is expected to have a loss of about 1,600 residents by 2030.

HISTORIC TRAFFIC GROWTH RATES ON MAJOR ROADS

Table 23 provides historic growth rates for traffic volumes on the state highway system within the study area and for the City of Show Low. These growth rates are based on the most recent traffic count data available from ADOT and the City of Show Low. **Figure 23** shows growth rates for the state highway system at the corridor-level. **Figure 24** highlights the locations within the City of Show Low that have experienced an increase in traffic volumes of at least 1,000 vehicles since 2014; the figure also provides both the 12-year and 3-year historic growth rates calculated for each of those locations.

Table 23: Historic Traffic Growth Rates in the Study Area

	State Highways in Study Area		City of Show Low	
	2008 – 2016	**2013 – 2016**	**2005 – 2017**	**2014 – 2017**
Average Annual Traffic Growth Rate	0.48%	2.90%	0.96%	5.99%
Maximum Annual Traffic Growth Rate	10.92%	13.43%	11.70%	31.45%
Minimum Annual Traffic Growth Rate	-9.20%	-20.39%	-8.30%	-14.77%

On average, traffic volumes on roadways within the study area have been increasing over time, but have been increasing faster within the last three to four years. The City of Show Low is experiencing faster growth than the study area as a whole, with almost a six percent average growth in traffic volumes in the City.

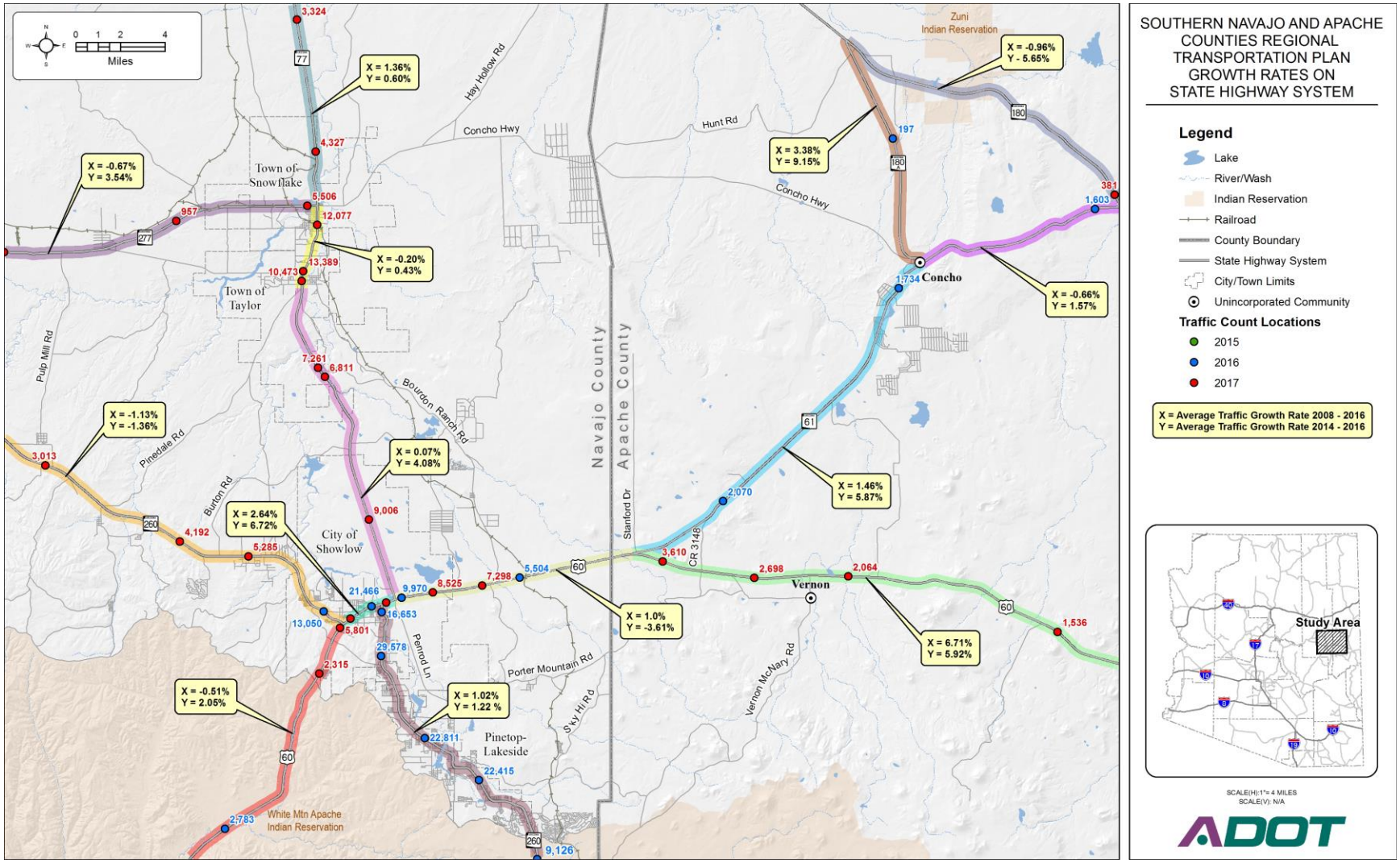


Figure 23: Historic Growth Rates in Study Area

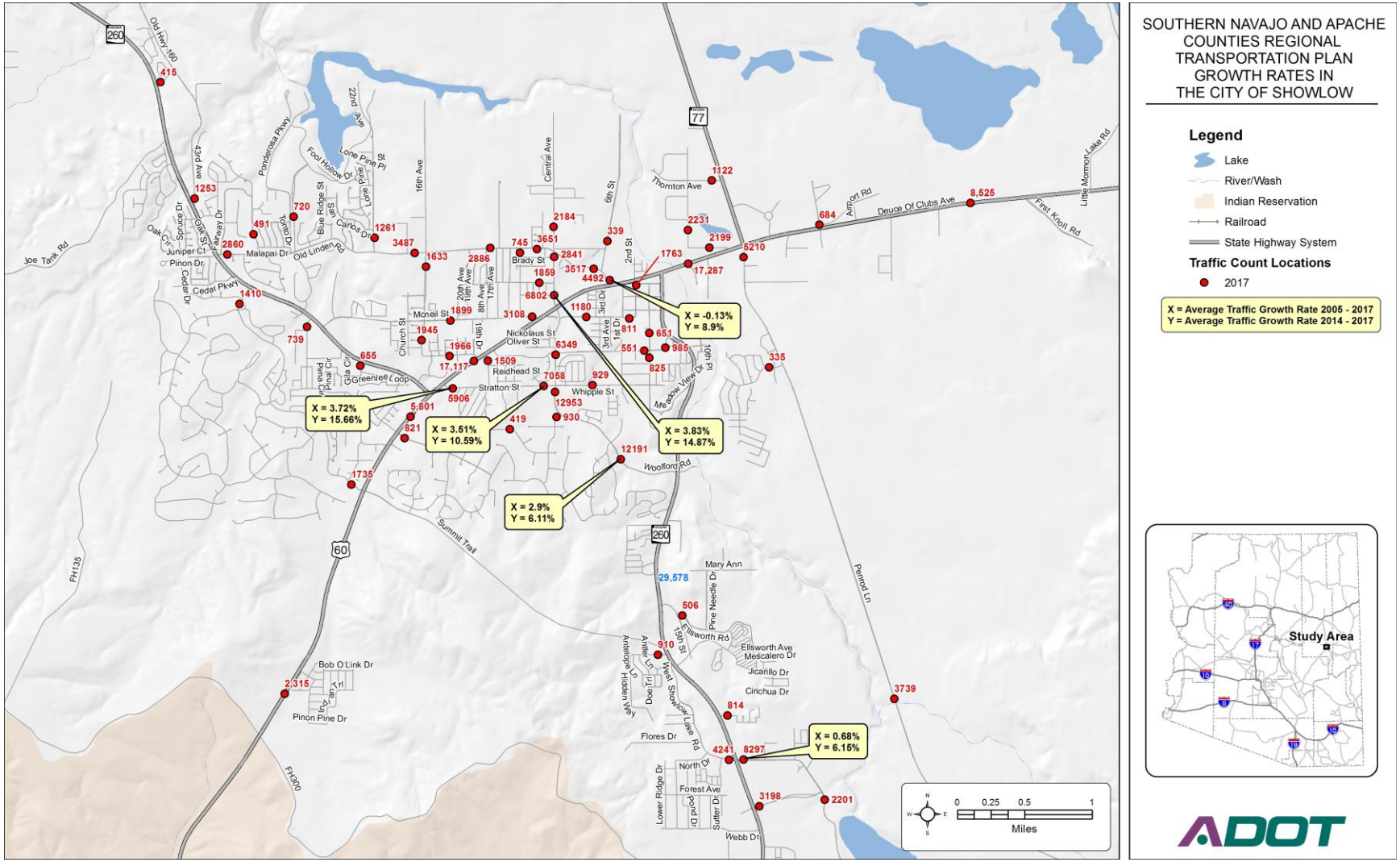


Figure 24: High-Traffic Growth Locations in the City of Show Low

FORECAST TRAFFIC VOLUMES

Based on the historic growth rates that were calculated from ADOT and City of Show Low traffic counts, future volume projections for 2025, 2030, and 2040 were calculated to inform identification of roadways that may experience congestion in the future, assuming no capacity enhancements are made to the current transportation system. **Figures 25 – 30** show the projected volumes and calculated levels of service for state highways in study area and for key corridors within the City of Show Low.

2025 Congested Segments

Based on the projected traffic volumes for 2025, the following roadways will operate a LOS D or worse by 2025.

- US 60/Deuce of Clubs from SR 260/Clark Road to Bordon Ranch Road
- SR 260/White Mountain Road from US 60/Deuce of Clubs (in Show Low) and Buck Springs Road (in Pinetop-Lakeside)
- SR 77/Main Street from SR 277 to south of Paper Mill Road
- Central Avenue from Old Linden Road to Woolford Road, Show Low
- Whipple Street from Deuce of Clubs to Central Avenue, Show Low
- Woolford Road from Central Avenue to SR 260, Show Low
- Show Low Lake Road from SR 260 to Scott Ranch Road, Show Low

2030 Congested Segments

Based on the projected traffic volumes for 2030, the following additional roadways, in addition to those listed above, will be operate at LOS D or worse by 2030.

- US 60 west of Show Low from SR 260 to Summit Trail

2040 Congested Segments

Based on the projected traffic volumes for 2040, the following additional roadways, in addition to those listed above, will operate at LOS D or worse by 2040:

- US 60 from Bordon Ranch Road to the east
- US 60 from SR 61 to Apache County Route 3540

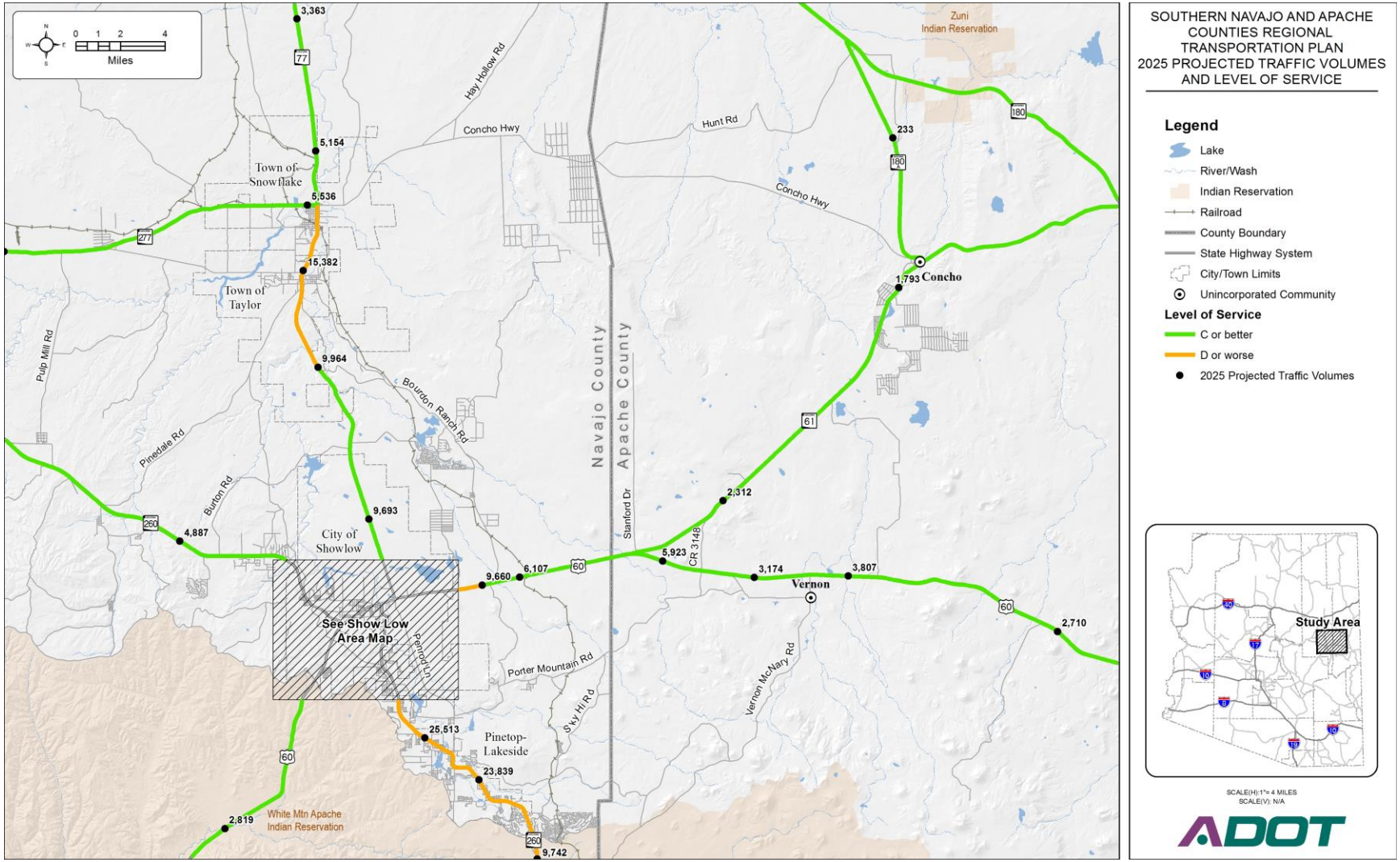


Figure 25: 2025 Projected Traffic Volumes and Level of Service

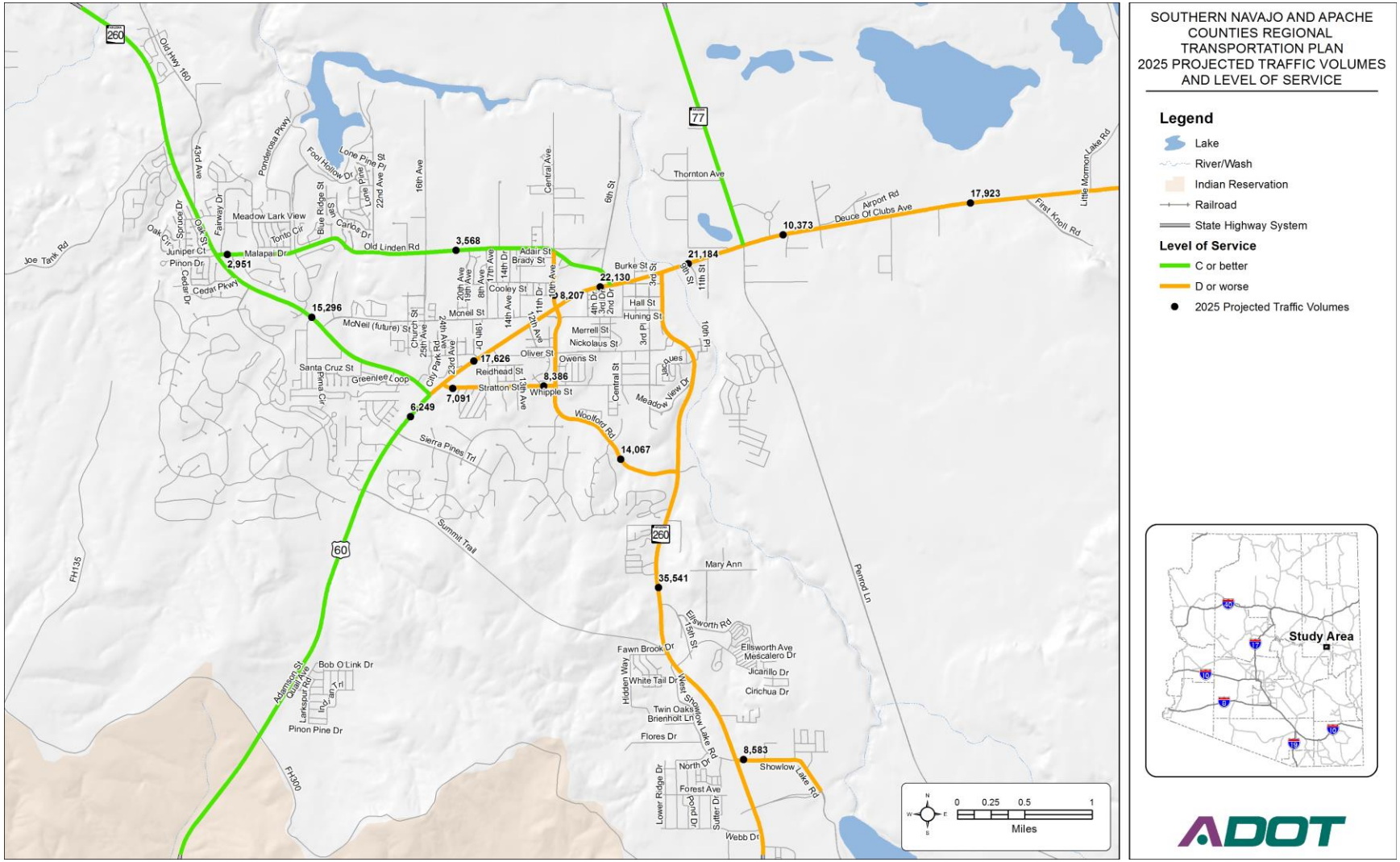


Figure 26: 2025 Projected Traffic Volumes and Level of Service within the City of Show Low

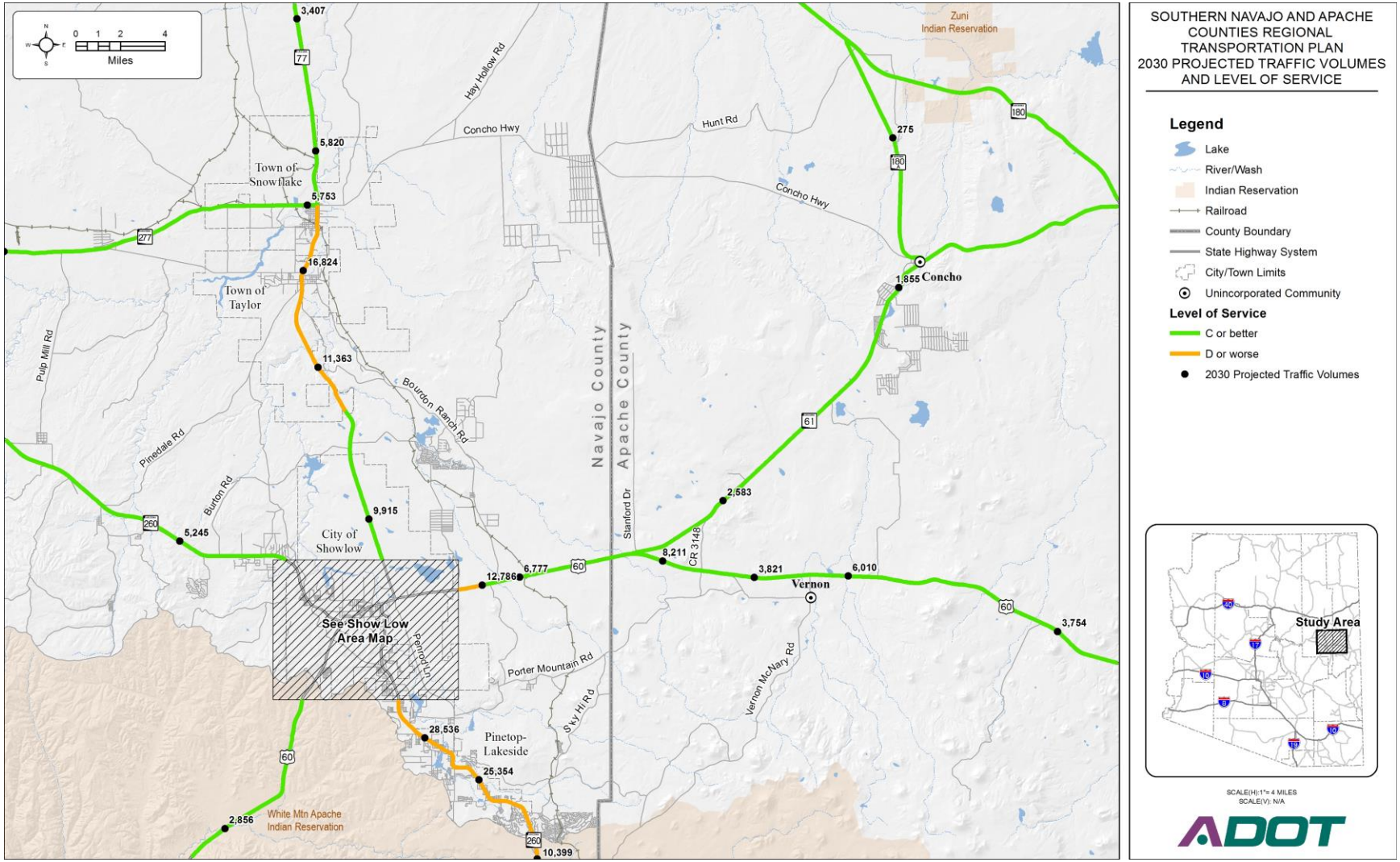


Figure 27: 2030 Projected Traffic Volumes and Level of Service

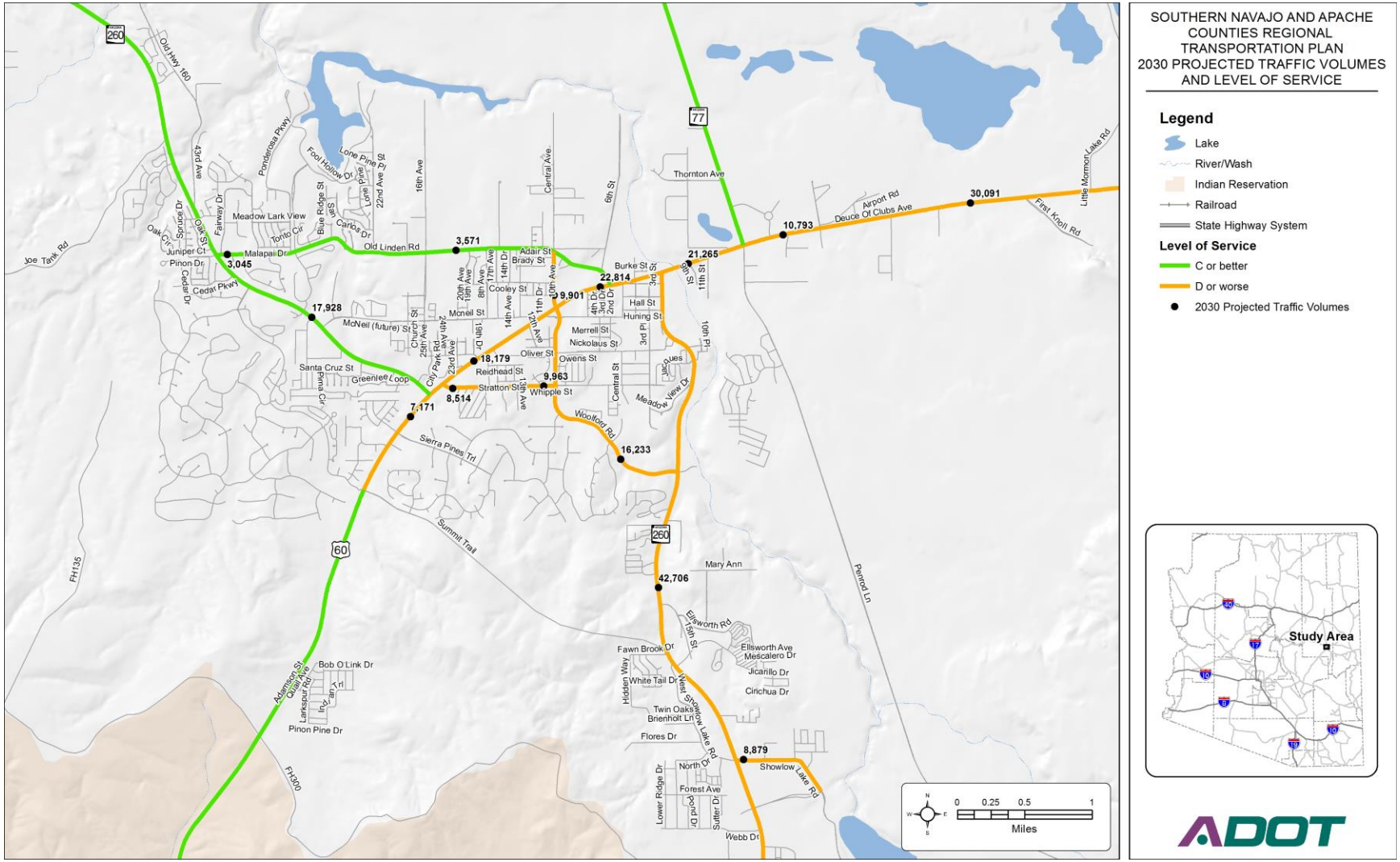


Figure 28: 2030 Projected Traffic Volumes and Level of Service within the City of Show Low

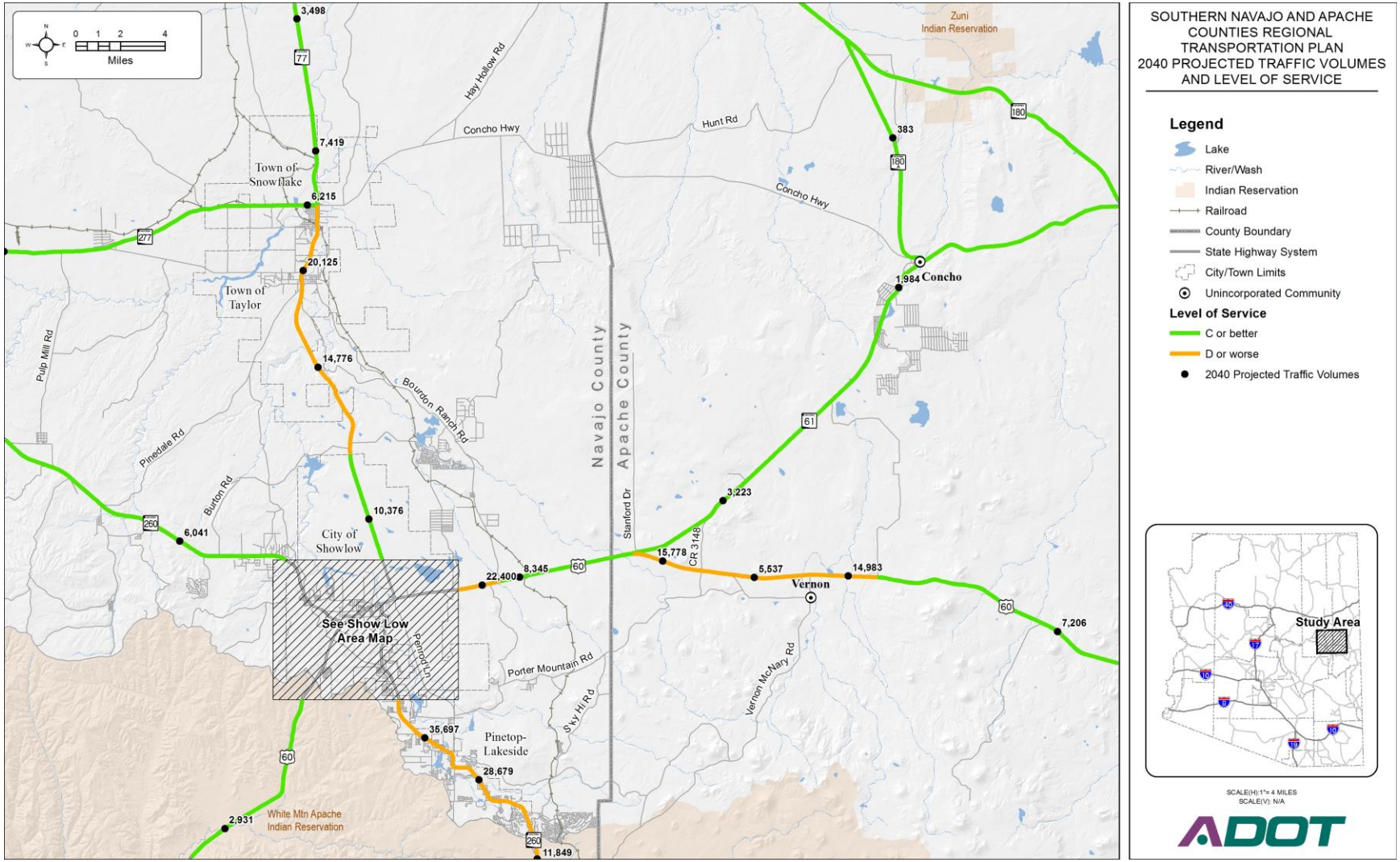


Figure 29: 2040 Projected Traffic Volumes and Level of Service

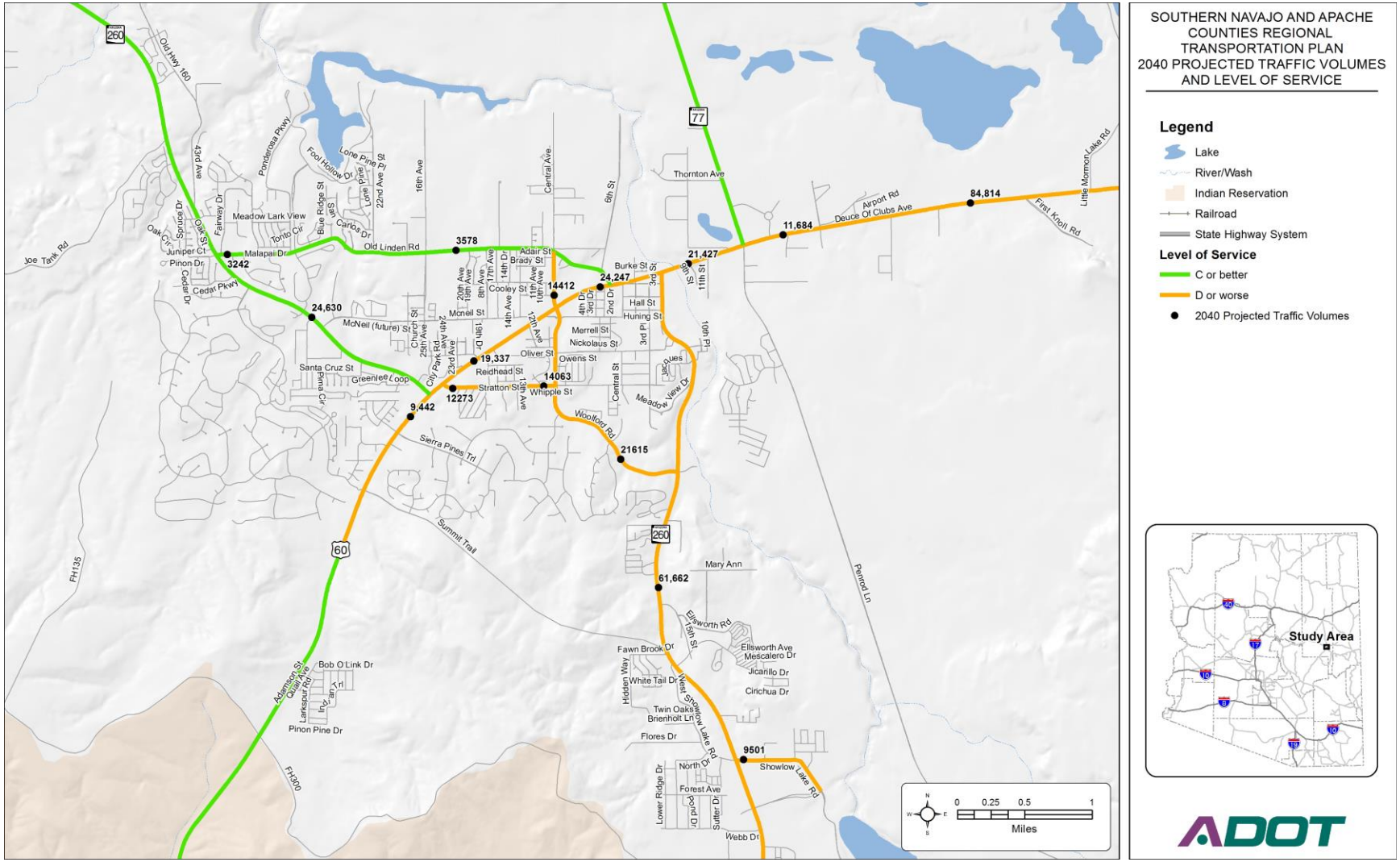


Figure 30: 2040 Projected Traffic Volumes and Level of Service within the City of Show Low

FUTURE NON-MOTORIZED TRANSPORTATION INFRASTRUCTURE

Figure 31 shows the proposed and desired non-motorized transportation network in the study area.

FUTURE EMPLOYMENT CENTERS

During stakeholder interviews, stakeholders identified economic development opportunity areas that are either 'shovel ready' or otherwise provide opportunities for future development. There are three industrial parks totaling 300 acres in City of Show Low that have available lots for development. These are located in the area around the intersection of Deuce of Clubs and Penrod Road, providing access to Downtown Show Low, the Show Low Airport, and regional corridors including US 60, SR 77 and the Penrod corridor, which is identified for major, future growth.

There are also three areas within Navajo County that have been designated as 'Opportunity Zones.' These areas were identified based on potential for development and industrial job creation and include:

- The site of the old papermill in Snowflake - this site is served by rail, highway, natural gas and water, thus making it well suited for industrial development. Because the rail line has been preserved and traverses private land, there is land available around the site to support expansion.
- The area around Show Low airport - there is available land and access to the airport. A portion of the US 60 within this area was recently widened in this area to support improved traffic flow.
- The area around the Cholla Power Plant – APS currently owns more than 200 acres of land around the plant, and with the impending closing of the plant, Navajo County is working to identify compatible uses for the area around the site.

The corridor between Taylor/Snowflake and Holbrook is an area for growth in the natural resources industries, including mining and power generation. Site feasibility studies and testing have been completed for commodities such as potash, helium, and oil as well as power generating facilities using renewable sources, including wind and solar. These areas have the potential to produce up to 1,000 or more jobs, and would result in the generation of a significant amount of commuter and freight traffic along the corridor.

Within the City of Show Low, the Summit Healthcare Regional Medical Center is currently undergoing an $80 million expansion project that will increase the capacity of the hospital and may attract additional medical service providers to the area. This expansion is in response to the growth of the hospital and its associated facilities over the past 10 years, with the employee base doubling from 600 to 1200 during that time period. After the completion of the expansion, the hospital will still own 16 acres of land around the property that will remain undeveloped.

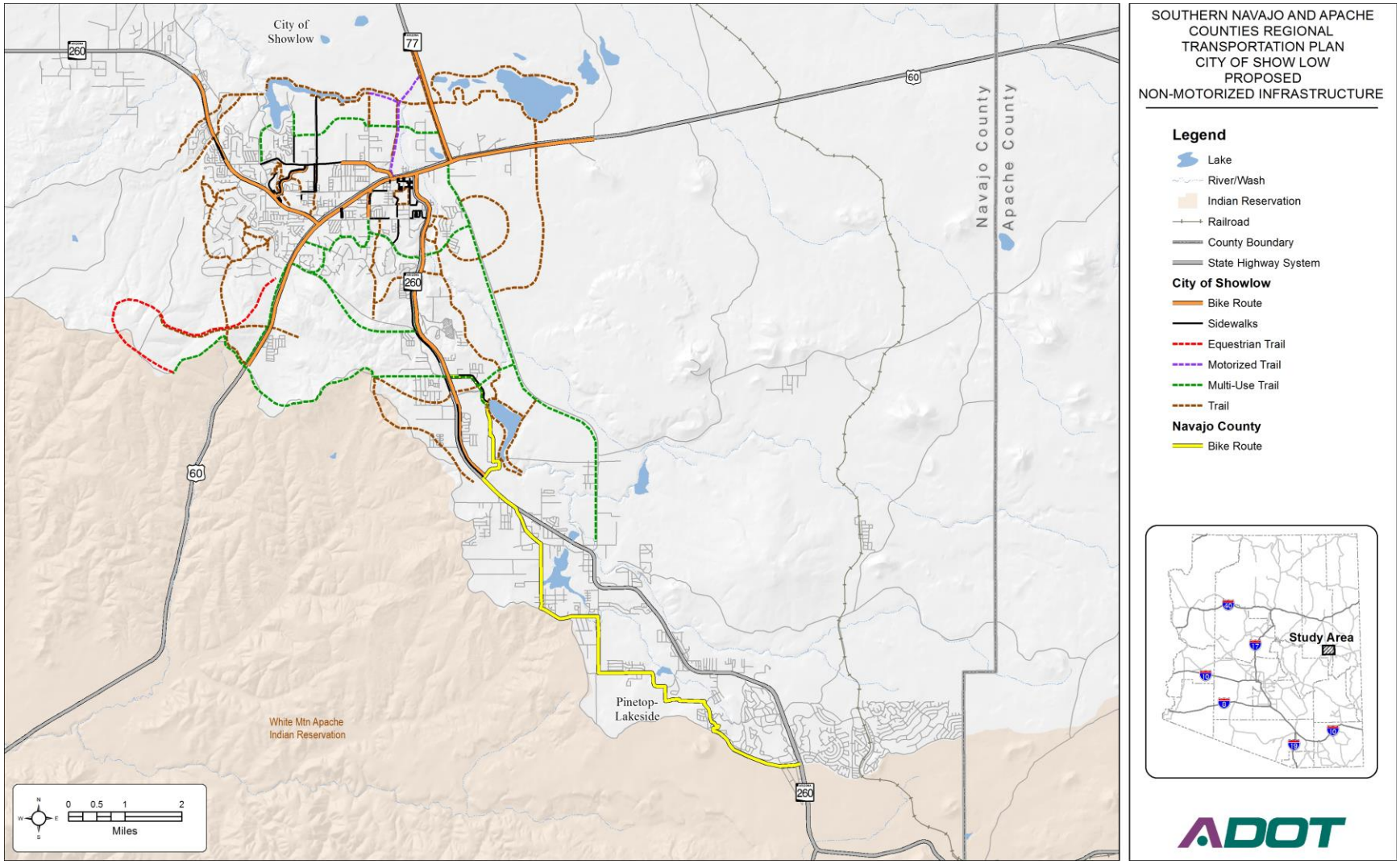


Figure 31: Proposed Future Non-Motorized Infrastructure

Show Low is also looking at the feasibility of locating a convention center/event center within the City, with the current preferred option being at the intersection of US 60 and Penrod Lane in the center of Show Low. Such a facility would attract supporting services such as hotels and restaurants to provide a large, cumulative impact to the economy as well as to the transportation system around that location.

The Town of Pinetop-Lakeside is considering developing a sport complex along Penrod Lane that, if constructed, would be marketed to attract large, and possibly national-level tournaments for multiple sports.

While outside of the study area, the Navajo Generation Station and the associated Kayenta coal mine, are major employments center for northeastern Arizona, employing more than 750 workers at the two sites. It is likely that, in 2019, the generating station will be permanently closing, and with that would also come the closing of the Kayenta mine. The impacts of these anticipated closures will also impact traffic patterns within the region; there would be an associated reduction in work travel to/from the generation station and mine and a change in commuting patterns depending on the future employment opportunities that those workers seek out.

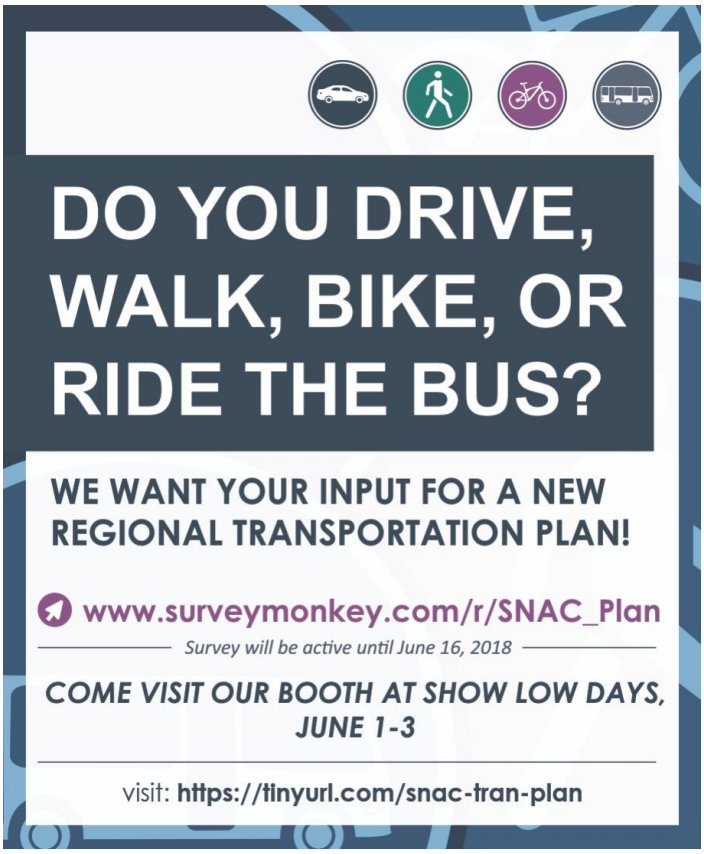
AREAS OF FUTURE RESIDENTAL GROWTH

There are a few areas within the region where residential growth is expected to occur. Within Show Low, the Show Low Bluff development is an approved planned unit development that is located along the east side of Penrod Lane. The development and has a master plan for 3,500 units and has in place much of the necessary infrastructure that was already constructed before the 2008 economic downturn. The reignition of this development would create massive residential opportunity within the City of Show Low.

Additionally, the Porter Mountain Road corridor is a likely location for residential development if a connection is established between SR 260 and Penrod Lane, as previously discussed. Currently, the lack of connection between the west and east side of Show Low and Pinetop-Lakeside largely inhibits growth in the eastern portion of Navajo County, south of US 60, but creating that connection will open a significant amount of developable land for both residential and non-residential development.
Within Apache County, the Show Low Pines area is the single largest growing area in the County, with 10 square miles of subdivision available. This development is located at the northern end of Stanford Road, which is accessed by US 60; Stanford Road is identified by Apache County as one of the most challenging roadways in the County, due to geometric issues with the existing roadway, and there are studies being completed to find solutions to these challenges and make sure the roadway can support any further development and growth.

5. PUBLIC OUTREACH

Public outreach was conducted to obtain input on the Southern Navajo and Apache Counties Regional Transportation Plan to make sure that the plan reflects the needs of the public throughout the study area.



Public input was obtained through a survey that was available for input from May 25 to June 21, 2018. During this time frame, over 470 total surveys where completed that provided public input to the Plan.

The survey was conducted via an online platform, but was also made available in hard copy format at a project booth at the Show Low Days Community event on June 1- 3, 2018.

The online survey was widely advertised through several means including press releases and links to the Survey site in:

- City of Show Low website and e-mail notification list
- City of Show Low social media sites (Facebook, Twitter)
- Pinetop-Lakeside Talk of the Town newsletter
- ADOT website
- Silver Creek Herald

The annual Show Low Days event, as a whole, saw approximately 9,500 persons in attendance over the three-day period. At Show Low Days the Project Public Outreach Team had a booth that included a bus provided by Show Low City, a canopy tent, two large banners, and balloons. Participants were invited to sit down in the shade of the canopy tent and choose between a hard copy of the survey or an online version on an iPad.

The project booth at the event and provided an opportunity to make area residents and visitors aware of the study and obtain information on transportation needs. Many participants who attended Show Low Days had already read about the survey in the newspaper and were excited to complete it at the booth. Others who had not heard about the survey before were interested in participating in the survey.

Both positive and negative feedback regarding transportation in the Show Low area was received. Between the three days of this event a total of 160 surveys were completed (both electronically and on the iPads).

PUBLIC SURVEY OVERVIEW

The public input survey consisted of nine questions:

1. Which of the following ways do you typically travel on a daily basis (check all that apply)?
2. How would you rank these issues with the current transportation system in the southern Navajo and Apache counties region?
3. When you travel to work, school, or shopping in the in the identified southern Navajo and Apache counties region, what roadway section or intersection has the greatest need for improvements to increase your safety or mobility as you travel?
4. Imagine that you were given $100 to invest for transportation improvements. Using the box next to each improvement, enter the portion of that $100 that you would dedicate to that improvement.
5. Rank the following factors in order of importance when prioritizing transportation projects.
6. What is your residency status in the study area?
7. What is your age?
8. Do you have any other comments?
9. Optional: If you would like to be added to the email mailing list for study updates and meeting notices then please provide your name and email.

Detailed survey results are provided in **Appendix C**.

6. TRANSPORTATION NEEDS

This chapter provides an overview of transportation needs within the study area. Multimodal needs are identified roadways, transit, and bicycle and pedestrian transportation.

The needs analysis was developed through a process which considered:

- Stakeholder and TAC member/public input
- Traffic and capacity analysis
- Crash data assessment
- Review of road conditions and pavement conditions
- Review of previous studies and reports

ROADWAY NEEDS

Key roadway improvement issue areas identified are:

Roadway improvements to support economic development and tourism – Road improvements to support and enhance economic development is important. Examples include:

- Road improvements to support the hospital expansion and development in the area. Improvements to Scott Ranch Road and Penrod Road were mentioned by stakeholders.
- Road improvements to support tourism growth, particularly from Tucson / Mexico to Show Low via Globe and US 60.
- Road improvements to support opportunity zones including the Cholla Power plant area, old paper mill, and airport area.
- Capacity and traffic improvements to improve traffic congestion during the summer tourism season.

Need for emergency evacuation routes and improvements to support emergency response – Wildfires are a key concern in the region and stakeholders have expressed the need for improvements to provide route alternatives that can be used as evacuation routes. Transportation needs related to improved emergency access are:

- Need to provide a loop system to connect all four legs of US 60 and SR 260 around Show Low. Stakeholders commented that a new route using an extension of Summit Trails would be more appropriate than using Woolford Road to Whipple Road, because Woolford Road is narrow neighborhood roads that cannot accommodate high volumes or big trucks which has geometric constraints. The intersection of Whipple Road and US 60 is a high crash location, involving vehicles turning left from Whipple Road.
- Additional Dynamic Message Signs (DMS) to support emergency response and evacuation.
- Improvements to support fire station access such as signal beacons and emergency vehicle preemption on state highways.
- Improvements to transportation infrastructure to accommodate flooding risks. An issue is that there is only one bridge on SR 260 to cross the creek and if that bridge is lost there is no way to get emergency vehicles from one side of Show Low to another.
- Many roads change names by jurisdiction, which is challenging to emergency responders.

Paving improvements, particularly on routes used as freight routes– Road improvements to Concho-Snowflake Road (County Road 5020) was noted as a need to support truck volumes. Paving

on Porter Mountain Road (County Road 3144) was also noted as a need to support logging traffic. On US 60, freight improvement needs were noted on the segment from MP 345 to MP 352, which included widen shoulders in both directions, add passing lane in EB direction (MP 349-350), add passing lane in WB direction (MP 350-351).

Safety improvements – Safety improvements were recommended at several intersections and road segments. At intersections, improvements primarily relate to supporting turn lanes at intersections or providing acceleration/deceleration lanes for traffic merging onto a state highway. Improvement needs on road segments also relate to access management. Safety improvements were identified in ADOT Corridor Profile studies:

US 60 (MP 352 to MP 384): Widen shoulders in both directions, install centerline rumble strips, construct right and left turn lanes at the intersection of US 60 and County Road 3330/3331 (MP 354.25), install curve warning signage (EB MP 366 and WB MP 368), install chevrons (EB MP 366.25-366.50 and WB MP 366.75-367), and install dynamic weather warning beacons (EB MP 366 and WB MP 368).

*SR 77 (MP 347 to MP 351): c*oncrete barrier (MP 347 – 351), widen (inside) shoulder (MP 347 – 351), install curve warning signage (NB MP 350 and SB MP 351), and install chevrons (MP 350.45 – 350.6).

Traffic control improvements – Traffic control improvements were identified at key intersections and were related to signal timing improvements, signal phasing, or traffic signal installation.

Emergency service providers requested backplates on traffic signals on SR 260 and US 60 to reduce glare. They suggested a need for emergency vehicle preemption for fire vehicles along signalized corridor and installation of traffic control at fire station driveways that are located along state highways to help facilitate fire truck turning movements as they enter onto the state highway during emergency response.

Roadway improvement needs identified by agency stakeholders and in approved plans and studies are summarized in **Table 24,** and are shown graphically in **Figures 30 and 31**.

NEEDS IDENTIFIED DURING PUBLIC OUTRECH

Public input related to transportation needs, concerns and challenges within the study area was gathered as part of the survey that was described in Section 5. Needs identified by the public considered both capital needs (i.e. additional lanes, new traffic signals, etc.) as well as operational needs (i.e. adjustments to traffic signal timing and phasing). A summary of some of the specific needs identified by the public are provided in **Table 25**. The complete list of needs and challenges identified in the public survey is found in **Appendix C**.

Table 24: Roadway Needs

Reference Number	Jurisdiction	Road or Intersection	From	To	Length (miles)	Description of Transportation Need	Comments
New Road Construction Needs							
1	Show Low	Scott Ranch Road -- Phase 2	Show Low Lake Road	Penrod Road	0.75	Improved access through new two-lane road construction	Road extension will support future development and access to hospital.
2	Show Low	Thornton Corridor- Phase 1	6th Street	Central Avenue	0.50	Improved access through new two-lane road construction	In City CIP, planned for 2019. In partnership with Flood Control.
3	Show Low	Thornton Corridor – Phase 2	Central Avenue	16th Avenue	1.00	Improved access through new two-lane road construction	
4	Show Low	Thornton Corridor – Phase 3	16th Avenue	22nd Avenue	0.40	Improved access through new two-lane road construction	
5	Show Low	Thornton Corridor – Phase 4 (Future Crossing)	6th Street	Commerce Dr.	0.30	Improved access through new two-lane road construction, including bridge	
6	Show Low	Woolford Road Crossing	Approximately 800 feet east of SR 260	West end of Joppa Street	0.62	Improved access through new two-lane road construction with bridge	Bridge construction should be done by private development related to the Show Low Bluff development.
7	Show Low	Summit Trail	Southeast end of Summit Trail	SR 260	2.10	Improved access through new two-lane road construction	Dependent on land exchange with U.S. Forest Service - has been in process for 15 years. Noted as need to support emergency evacuation.
Roadway Improvement Needs							
8	Apache County	Stanford Dr.	US 60	Show Low Pines development	2.0	Improvements to alleviate slope and vertical curve issues	Connects to Show Low Pines area – single largest growing area in Apache County. Current project has 95% plans – RFQ for DCR on that route. Constricted on land around hill (bordered by state, private land); potentially looking for route options around the hill.

Table 24. Roadway Needs, Continued

Reference Number	Jurisdiction	Road or Intersection	From	To	Length (miles)	Description of Transportation Need	Comments
9	Show Low	Woolford Road / Central Avenue	Deuce of Clubs	SR 260	1.9	Upgrade road to support truck traffic	Used as a bypass route for SR 260 and Deuce of Clubs.
10	Show Low	Whipple Street	US 60	Central Ave	0.8	Upgrade road to support truck traffic or find alternate route that better supports truck traffic	
11	Show Low	Penrod Rd	Deuce of Clubs	Bluff Ridge Rd	1.34	Improvements to support development and Show Low Bluffs Master Planned Community Shoulder improvement needs	Noted by stakeholders as an improvement corridor – there is potential for development of a convention center/event center.
12	Show Low	Deuce of Clubs	340	342	2	Access management needs	ADOT SR 260/US 60 Corridor Profile Study noted a need for an access management study
13	ADOT	SR 260	MP 337	MP 340	3	Complete streets elements such as bike lanes, center median.	Per stakeholder input
14	ADOT	SR 260	MP 341	355	14	Access management, mobility and freight needs per SR 260 / US 60 Corridor Profile Study (March 2018)	<u>Pinetop Area Mobility and Freight Improvements (SR 260 MP 341-355)</u> • Add a through lane in both EB and WB directions (MP 341-355.05)
15	ADOT	US 60	MP 341	MP 343	2	Safety improvements needs per SR 260 / US 60 Corridor Profile Study, Heber-Overgaard to New Mexico State Line (March 2018)	<u>Show Low Safety Improvements (US 60 MP 341-343)</u> • Install raised median (MP 341-343) • Install high-visibility striping (MP 341-343) • Install lighting (MP 342-343) • Install right turn lane (MP 342.2)

Table 24. Roadway Needs, Continued

Reference Number	Jurisdiction	Road or Intersection	From	To	Length (miles)	Description of Transportation Need	Comments
16	ADOT	US 60	MP 345	MP 352	7	Freight improvement needs per SR 260 / US 60 Corridor Profile Study, Heber-Overgaard to New Mexico State Line (March 2018)	Show Low Area Mobility and Freight Improvements (US 60 MP 345-352) • Widen shoulders in both directions • Add passing lane in EB direction (MP 349-350) • Add passing lane in WB direction (MP 350-351)
17	ADOT	US 60	MP 352	MP 384	32	Safety improvement needs per SR 260 / US 60 Corridor Profile Study, Heber-Overgaard to New Mexico State Line (March 2018)	Vernon Area Safety Improvements • Widen shoulders in both directions • Install centerline rumble strips • Construct right and left turn lanes at the intersection of US 60 and County Road 3330/3331 (MP 354.25) • Install curve warning signage (EB MP 366 and WB MP 368) • Install chevrons (EB MP 366.25-366.50 and WB MP 366.75-367) • Install dynamic weather warning beacons (EB MP 366 and WB MP 368)
18	ADOT	SR 77	347	351	4	Safety needs per SR 77 Corridor Profile Study, Holbrook to Show Low (March 2018)	ADOT study identified three options, all that include installation of curve warning signs (NB MP 350 and SB MP 351), install chevrons (MP 350.45-350.6)
Intersection Improvement Needs							
19	ADOT / Pinetop - Lakeside	SR 260 / Woodland Lake Rd			N/A	New traffic signal (when warranted)	Close to meeting signal warrant. Located on key detour route. There have been fatalities near this intersection.

Table 24. Roadway Needs, Continued

Reference Number	Jurisdiction	Road or Intersection	From	To	Length (miles)	Description of Transportation Need	Comments
20	Pinetop - Lakeside	White Mountain Blvd / Penrod Ln			N/A	Intersection and access management improvements	City is going after HSIP funds to reconfigure the intersection and close off some driveways.
21	ADOT/Show Low	Deuce of Clubs (US 60) / Central Avenue			N/A	Safety improvements – need is for a protected left turn signal	Left turning traffic mentioned as an issue.
22	Apache County	County Route 3148/SR 60			N/A	Intersection improvements to increase awareness of US 60 for drivers on side streets; such as signage, traffic calming/speed reduction	County is pursuing HSIP funding.
23	ADOT / Show Low	US 60/Whipple Road			N/A	Intersection safety improvements	Vehicles turning left onto US 60 is an issue.
24	ADOT/Show Low	Woolford Rd / SR 260			N/A	Intersection safety improvements, signal timing improvements	
25	Show Low	Show Low Lake Road-Cub Lake Road / SR 260			N/A	Intersection safety improvements	The City of Show Low is pursuing Highway Safety Improvement Program (HSIP) funding
26	Pinetop-Lakeside	Rainbow Lake Dr. / SR 260			N/A	Deceleration/acceleration lanes on SR 260	
27	Show Low	Old Linden Road / Central Ave			N/A	Intersection safety improvements	
Paving Improvement Needs							
28	Apache County / Navajo County	County Road 3144 (Porter Mountain Road)	Thunder Horse Rd	County Road 3066	7	Reconstruct dirt road to a 2-lane paved roadway	Critical bypass route - County Route 3144 becomes Porter Mountain Rd at the County line – road is not paved along portion that goes through forest land (~7 miles)
29	Apache County	Concho-Snowflake Road (County Road 5020)	County Road 5270/ Hunt Road	Concho (County Road 5043)	18	Reconstruction/repaving to improve pavement conditions to support truck traffic and higher speeds	High truck volumes. County would like to conduct speed studies to potential raise the speed limit from 50 mph to 55 mph

Table 24. Roadway Needs, Continued

Reference Number	Jurisdiction	Road or Intersection	From	To	Length (miles)	Description of Transportation Need	Comments
30	U.S Forest Service	Vernon-McNary Road	0.22 miles south of County Rd N	Route 60	0.72	Pave two-lane gravel road	On U.S. Forest Service land but maintained by Apache County. Currently a gravel road, and is an evacuation route.
ITS/Traffic Control Improvement Needs							
31	Show Low	Fire stations: Farmbrook Rd / SR 260 6884 Highway 260 (Linden Rd / SR 260) 2933 W White Mountain Blvd			N/A	Signal beacons at fire stations	This project would assist fire and ambulance vehicle access in responding to emergencies
32	ADOT	SR 260, US 60	N/A	N/A	N/A	Emergency signal preemption for fire trucks along state highways	This project would assist fire and ambulance vehicle access in responding to emergencies
33	ADOT	SR 260 and US 60 traffic signals			N/A	Install traffic signal back plate to reduce glare	Visibility issues from the sun along SR 260 and US 60 – install traffic signal back plate to reduce glare
34	ADOT	US 60	N/A	N/A	N/A	More VMS along US 60 towards Apache County	More portable DMS to support evacuation. Evacuation routes have to be dynamic and changeable when dealing with wildfires
Additional Study Needs							
35	Show Low	N/A	N/A	N/A	N/A	Truck Commodity study	Need to understand the type of cargo and the type of vehicles that will be passing through and implications for SR 260 widening
36	Show Low/ Apache and Navajo County	N/A	N/A	N/A	N/A	Consistency of roadway names	Many roads change name by jurisdiction and have multiple names

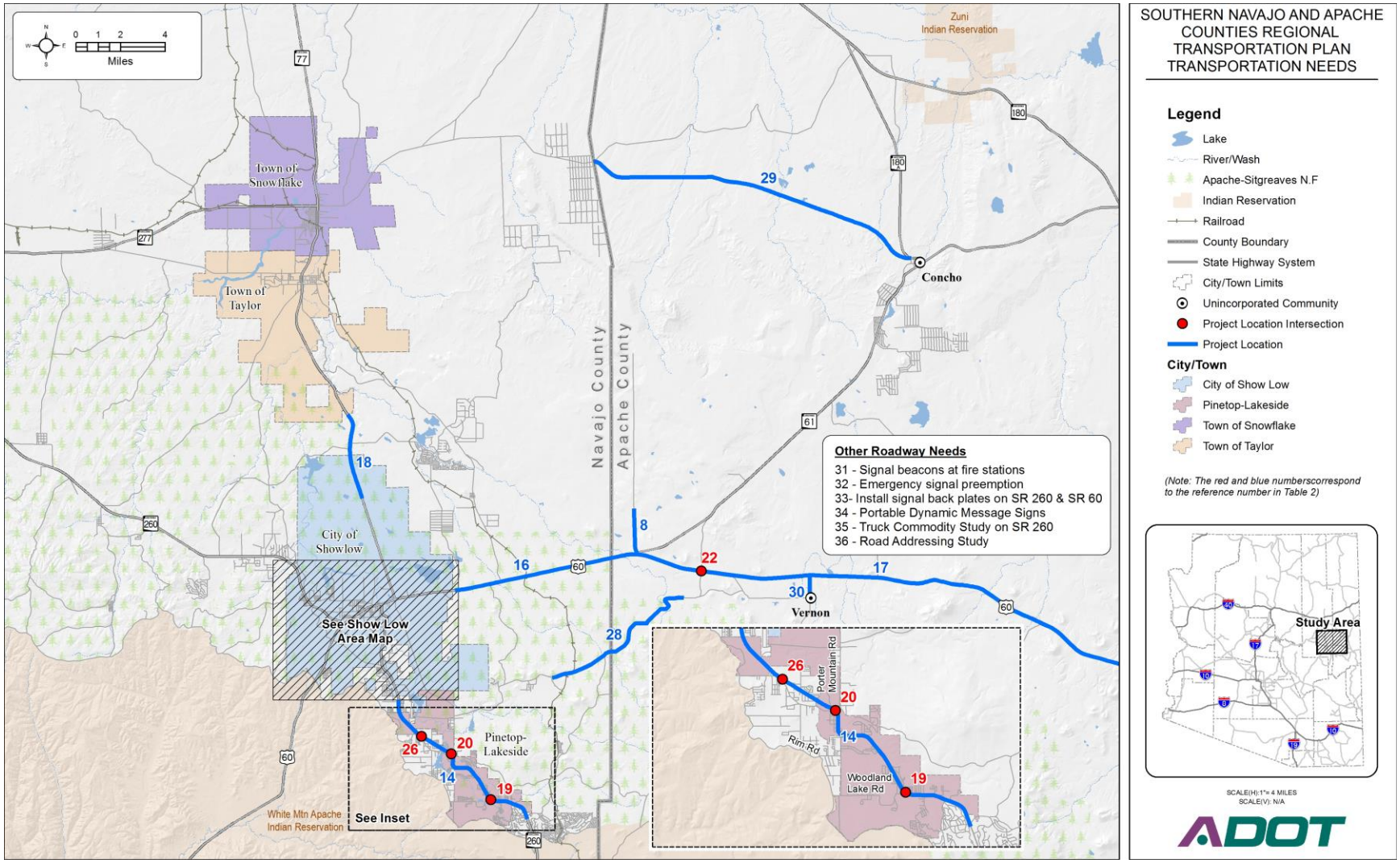


Figure 32: Roadway Needs in the Study Area

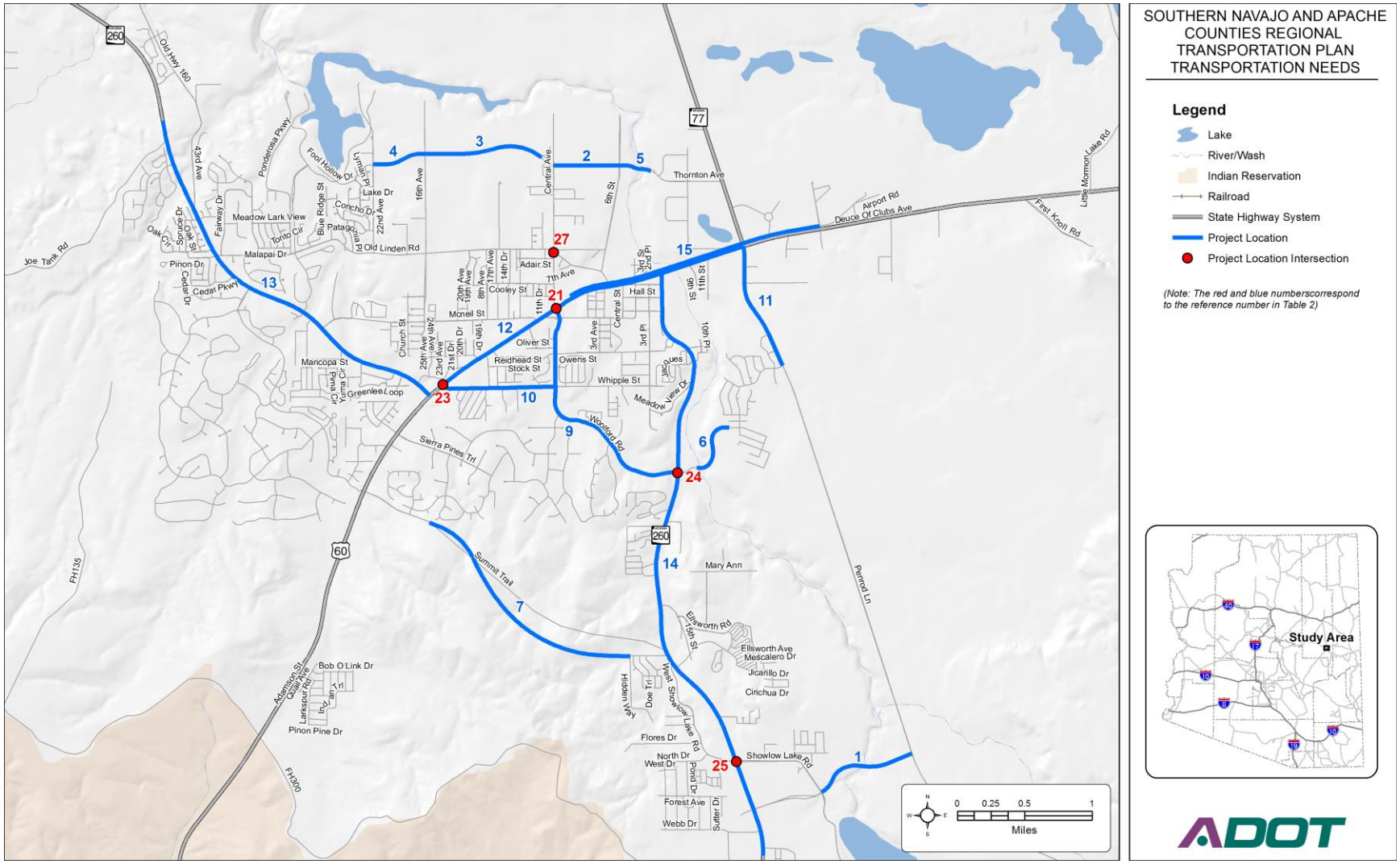


Figure 33: Roadway Needs in the City of Show Low

Table 25: Roadway Needs Identified by the Public

Jurisdiction	Road or Intersection	From	To	Length (miles)	Description of Transportation Need
Roadway Improvement Needs					
Pinetop-Lakeside	SR 260/ Pine Lake Road			N/A	Circle K access management challenges
Show Low	Old Lindon Road	Deuce of Clubs	16th Street	1.5	Request for additional travel lanes
ADOT	US 60	Vernon	Show Low	19.5	
ADOT	SR 61	Stanford	Concho	19	
ADOT	SR 77	Snowflake	Show Low	19.6	
Apache County	Concho Highway	Concho	Snowflake	29.8	
ADOT	SR 277	Heber	Snowflake	31	
Intersection Improvement Needs					
ADOT, Show Low	Deuce of Clubs / 9th Street Whipple Street / Central Avenue			N/A	Request for a roundabout
Various	Deuce of Clubs / Old Lindon Road Deuce of Clubs / McNeil Road White Mountain Blvd at Arizona Game and Fish SR 260 / Burton Road SR 260 / Chaparral Drive SR 260 at 43rd Ave (MP 337.7)			N//A	Request construction of turn lanes
Paving Needs					
Apache County	Vernon Road	Passing by the cemetery		N/A	Dirt road needs to be resurfaced
ITS/Traffic Control Needs					
Various	Deuce of Clubs / Old Linden Road Deuce of Clubs / Penrod Road White Mountain Road / Woolford Road White Mountain Blvd / Woodland Road			N/A	Request traffic signal re-timing study
ADOT	Deuce of Clubs / Central Avenue Deuce of Clubs / Old Linden Road Deuce of Clubs / Penrod Road White Mountain Road / Woolford Road White Mountain Road / Pine Parkway Plaza White Mountain Blvd / Safeway Plaza			N/A	Request for left turn arrow/phasing

Table 25: Roadway Needs Identified by the Public, Continued

Jurisdiction	Road or Intersection	From	To	Length (miles)	Description of Transportation Need
Various	Deuce of Clubs / Safeway Plaza White Mountain Road / Ellsworth Road Old Lindon Road at the High School Old Lindon Road / Central Avenue White Mountain Blvd / Woodland Lake Road White Mountain Blvd / Rainbow Lake Drive White Mountain Blvd / Wagon Wheel Plaza White Mountain Blvd / Pine Lake Road SR 77 / SR 377 Sierra Pines Trail (subdivision) entrance			N/A	Request traffic signal warrant study
Show Low, ADOT, Pinetop Lakeside	Penrod Road White Mountain Blvd/Pine Lake Road Concho Highway, east of Snowflake			N/A	Request for speed limit study
Other Needs					
Pinetop-Lakeside	White Mountain Blvd /Pine Lake Road			N/A	Improve driver line of sight (Raise Circle K sign)
Snowflake	Concho Highway / El Dorado			N/A	Driver line of sight issues

TRANSIT NEEDS

Key transit needs that were identified by both stakeholders and the public include:

- Improvements to reduce congestion and delays on SR 260 to help maintain transit schedule adherence.
- Feasibility of an expansion of the Four Seasons route to add a new bus into the route and expand the route for the bus to cover more of the Show Low and Pinetop-Lakeside community.
- Potential for a regional circulator that could bring persons to a transit hub in Show Low. Potential service areas are the White Mountain Lakes Community, Heber-Overgaard area, Snowflake /Taylor area (especially when a new hospital expansion is complete), Concho, Vernon, and Springerville.
- A replacement program for transit shelters is needed, as current shelters have maintenance needs.
- Potential to partner with agencies, or potentially Apache County, to provide services to the elderly and handicapped community, that can be funded under the Federal Transit Administration 5310 program.
- Potential service enhancements to improve transit service between Show Low and Holbrook, which is currently provided by the White Mountain Connection three times per day, Monday through Friday. The service is not designed for workers wanting to travel from Show Low to Holbrook, but not for workers wanting to travel from Holbrook to Show Low.
- Coordination with White Mountain Apache Tribe as they expand transit service to Show Low in the future.
- Consider development of a mobile application that would provide more accessible and real-time information to transit riders about the location of bus stops and the bus schedule as well as real-time bus location (via GPS) to support route planning.

A summary of transit improvement needs is provided in **Table 26**.

Table 26: Transit Improvement Needs

Jurisdiction	Description of Transportation Need	Comments
Service Improvement Needs		
All	Feasibility of a regional circulator to serve more communities in the region	
Show Low	Potential service enhancements to improve transit service between Show Low and Holbrook, which is currently provided by the White Mountain Connection three times per day, Monday through Friday	
Show Low	Transit services that provide transportation to elderly and handicapped to facilitate access to basic services	Public input
Show Low	New funding partners such as schools, or businesses.	
Capital Improvement Needs		
Show Low	Bus shelter replacements	Currently 28 shelters that were built locally
Show Low	Six bus pullouts on SR 260	Currently working with ADOT to get easements

BICYCLE AND PEDESTRIAN TRANSPORTATION NEEDS

Bicycle and pedestrian improvement needs were identified through stakeholder outreach, public outreach, and information from studies such as the Pinetop -Lakeside SR 260 Pedestrian Safety Solutions Study – Concept Plan and Report (December 2015), and the Show Low Trails and Connectivity Study (2014). Bicycle and pedestrian improvement needs are summarized on **Table 27**.

Table 27: Bicycle and Pedestrian Improvement Needs

Jurisdiction	Road or Intersection	From	To	Length	Description of Transportation Need	Comments
Show Low	Woolford Road	Deuce of Clubs	SR 260	1.3	Construct a multiuse path to provide connectivity	There is gap in bicycle/pedestrian infrastructure between Woolford Rd & hospital
Pinetop-Lakeside	Woodland Road	Navajo	Settlers Ln	0.75	Construct sidewalk, curb, gutter and bike lane on east side of roadway	Construction anticipated to start end of March 2018
ADOT	SR 260	US 60/SR 260	Hon-Dah Resort	16	Corridor vision for SR 260 between Hon-Dah Resort and SR 260/ SR 60 intersection	Desire for one cross section for the corridor that includes vehicle, bicycle and pedestrian facilities
ADOT	General policy	N/A	N/A	N/A	Revise ADOT snowplow policy so that snow is plowed to the middle rather than the side/sidewalk	
ADOT	General policy	N/A	N/A	N/A	When ADOT undertakes a pavement preservation project, municipality should inquire about ADA transition plan needs to see if ramps and sidewalks can be added/upgraded as part of the project	There is a pavement preservation project along the SR 260 corridor programmed for 2021
Show Low	Various	SR 77, Snowflake to Show Low White Mountain Road Deuce of Clubs SR 73 SR 260, Linden to Show Low SR 61			Implement findings of Show Low Trails and Transit Connectivity Study	Study recommendations as well as public input
Pinetop-Lakeside	SR 260	Various	Various	Various	Implement phased improvements per the Pinetop-Lakeside Pedestrian Safety Solutions Study (2015)	• Phase A: Rainbow Lake Pedestrian Improvements • Phase B: SR 260 Sidewalk and Driveway Improvements • Phase C: SR 260 Median and Paved Shoulder Improvements • Phase D: Penrod Lane Traffic Signal and Parking Improvements • Phase E: Pine Lake Road Pedestrian Hybrid Beacon (PHB) • Phase F: Hill Drive to Buck Springs Road Shared-Use Path

APPENDIX A – STAKEHOLDER MEETING SUMMARIES

Show Low Community Transportation Plan Update
Task Assignment: MPD0025-18

Economic Development Focus Group

Wednesday, February 28, 2018
City of Show Low City Hall
Deuce of Clubs Conference Room
1:00 pm – 2:00 pm

Attendees:
Daniel Gabiou, ADOT MPD
Lisa Robertson, City of Show Low
Steve North, City of Show Low
Ed Muder, City of Show Low
Paul Watson, Navajo County
Brent Crowther, Kimley-Horn
Amy Garinger, Kimley-Horn
Sarah Murley, Applied Economics

Meeting Notes

Existing Data/Information

- The City of Show Low experienced an 8-9% sales tax growth last year
- Navajo and Apache county received and ACC grant (next generation power grant) to look at adverse impacts of the coal related power industry
    - Final document available towards end of May /early June
- Steve North to provide updated data for the 12-15 aspects of economy in the City and the basis for their target industry, which was completed as part of a strategic planning process in 2011
    - Will also provide 2017 business survey analysis
- The Governor's Office of Economic Opportunity has a data source that they use that they feel is accurate for the region
- How to measure impact of online shopping – Amazon and FedEx trucks are everywhere

Economic Development Opportunity areas in the region

- 3 industrial parks that are shovel ready
- Areas to develop in the future
    - Old papermill site
        - Rail has been preserved and private land is dissected by it and lots of available land
        - Has rail, water, natural gas, highway – well suited for industrial uses
    - Cholla power plant site closing soon
        - APS owns 200+ acres around plant
        - Navajo county working to find compatible uses around power plant and ultimately replacing it

- Opportunity zones (tax advantages for low income areas) – 3 census tracks identified in tax bill from December; areas that have potential for 'industrial job creation'
    - Show low airport (smallest)
    - Near old paper mill
    - Cholla power plant

City of Show Low Economic Development

- Healthcare
    - Hospital went from 600 to 1200 employees in 10 years (including satellite medical clinics)
    - Currently undergoing an $80M expansion and the property still has 16 acres of land that is undeveloped
    - A key transportation need is to provide better access to this facility via the Penrod road extension/Scott Ranch Road
- Tourism/hospitality
    - Improvements on 260 in Payson would encourage more tourism in Show Low
    - An Old ADOT scoping study identified a 2-lane highway out in Lindon area outside of Show Low jurisdiction – connects to a 5-lane highway within City and resulting in congestion
    - The region gets lots of tourism activity from Tucson/Mexico during ski season – US 60 from Globe to Show Low is an important route for this
    - Penrod Road corridor – potential for development of a convention center/event center
        - Currently in phase 2 feasibility study (5-6 potential sites)
- Entrepreneurship
    - People live in Phoenix and run a small business here
    - Information transportation/communications – focus on broadband capacity (currently very bad right now); often in parallel with highway facilities
    - Healthcare – doing more telemedicine (for specialists for rural areas)
    - Education – increase capacity to all schools and libraries for e-learning

Transportation opportunities and challenges

- ADOT widened part of SR 260 near airport but ran out of money and didn't finish whole section
- Show Low Lake/Cub Lake intersection is a big issue
- New traffic light being installed to enter the hospital, may help with congestion but may also make other areas worse
- Scott Ranch road would help a lot with accessibility of medical, residential and commercial in that area and create opportunity for more development

Industrial sectors to focus on in the region

- Small manufactures
- Outdoor industry/recreational equipment
- Industry tied to natural resources in area
    - Forestry has some room to grow as forest service releases more
    - Potash basin (Holbrook area) where test wells engineering feasibility studies done – fertilizer for agricultural industry
- Have talked about potential mine that would support almost 1000 jobs (only going to happen if price of commodities goes up)
    - Helium test drilling up north of Holbrook and has identified some oil
    - Renewable (wind, solar) up there as well (Holbrook)
- Retail areas – White Mountain Road and Deuce of Clubs

Current Economic Development landscape and Opportunities

- Park Byway Plaza is where most of retail currently is, except of Home Depot
- Area where all of the highways come together is the hub of the city and has spokes that feed it
- Emergency services connection is critical
- Show Low Bluff development is an approved PUD that has a master plan and lots of infrastructure that was already built before the downturn; this development could come back and be completed
- Looking into a sports complex that would attract tournaments (potentially national tournaments) along Penrod
    - Consideration for hotels that would come along with both the convention center and/or the sport complex
- Close down Deuce of Clubs for annual events
    - Show Low Days and 4th of July
    - Need to improve some of the diversion routes like Whipple/Woolford that are used when Deuce of Clubs is shut down and to support downtown bypass

Show Low Community Transportation Plan Update
Task Assignment: MPD0025-18
Emergency Services and Public Safety Focus Group

Monday, March 26, 2018
City of Show Low City Hall
Deuce of Clubs Conference Room
2:30 pm – 3:30 pm

Attendees:
Daniel Gabiou, ADOT MPD
Chief Brian Savage, Timber Mesa Fire
Marshall Brian Russell, Timber Mesa Fire
Chief Joe Shelley, Show Low PD
Brent Crowther, Kimley-Horn
Amy Garinger, Kimley-Horn

Meeting Notes
Locations with crashes/safety issues

- Intersection of 260 at Woolford – high injury rate because of speed (45mph)
- Central and Deuce of Clubs – size of intersection, amount of cars, forcing left turns
- Only diversion route for SR 260 highway is Woolford to Whipple to the US 60
    - Woolford is a 25mph, narrow neighborhood road that cannot accommodate high volumes or big trucks (trucks are usually restricted); usually has people walking or bicycling with children
    - There are also tight corners and blind curves
- Several accidents at old Linden and 260 north
- Central Avenue – traffic signal does not provide time for left hand turn off of 60 onto Central in either direction
    - Police have asked for changes to that signal
    - There are kids coming out of school that use that intersection
- They recently worked with ADOT to increase clearance time on the left turn movement from 60 west to 260 south to 5 seconds, which has help a lot with congestion and accidents
- Three are 3 fire stations along 260 but none of them can respond to issues along the Penrod corridor in a reasonable time – need to have at least one of those connectors that are identified:
    - Scott Ranch Rd and Summit Trail
- Rainbow lake Rd/SR 260 intersection; currently stop controlled
    - Would benefit from addition of deceleration/right turns lanes on SR 260
    - Look into removing access points
- Grade is an issue on 260 – highway is built up, but driveways require navigating of a 12% grade down into parking lot
    - Trucks/trailers bottom out and require heavy tow to get them
- Intersection of Whipple and US 60 is a high crash location, involving vehicles turning left from Whipple onto 260

    - Currently no traffic signal or support for the turning movement
    - The intersection would also benefit from a deceleration/right turn lane from US 60 to turn onto Whipple
- Lack of transportation infrastructure to accommodate flooding risk
    - There is only one bridge on 260 to cross the creek, and that bridge is lost, there is no way to get resources from one side of City to the other
    - Most fire/EMS assets are coming from east/north side of bridge and would not be able to respond to the west/south

Key Transportation Issues and Needs

- Create a loop system to connect all 4 legs of 60/260 around Show Low
    - Needed for evacuation route for fires and for Fire vehicle access for forest fires
    - Scott Ranch Rd to access current and new communities (including Show Low Bluffs, which is growing)
    - Need to stop using Woolford/Whipple as a bypass for the highway and create a more appropriate route – Summit Trails
- Consistency with roadway naming
    - Many roads change name by jurisdiction and have multiple names
        - Ex: White mountain Road (N/S portion) = White mountain Blvd (E/W portion) = Highway 260
    - Very challenging for responders to know where they need to go; trying to unify at a single name (Highway 260)
- Widening of 260 between Show Low and Heber will bring a lot more truck traffic to the area because drivers will use it instead of I-17
    - Trying to get a commodity study completed so that they can understand the type of cargo and the type of vehicles that will be passing through
- Traffic volumes and congestion doubles in the summer as compared to the winter
- There is a lot of residential development in the area that will bring more people and more traffic
- There are big challenges related to providing safe bicycle and pedestrian faculties throughout the region
- To support incident management, detouring and evacuation
    - More permanent DMS along US 60 out towards Apache county (have signs coming into town on the other 3 routes)
    - More portable DMS to support evacuation because evacuation routes have to be dynamic and changeable when dealing with wildfires
        - City has 4, County has 4, ADOT has 2, but they would benefit from having more that could be used
- Porter Mountain across Billing Creek – bridge needs improvement
- Traffic signal light visibility in the sun along SR 260 and US 60 – need a back plate to reduce glare
- Consider solutions for fire stations located along highways; trucks have a hard timing pulling straight onto high speed traffic

- 3 fire stations
    - Farmbrook and 260
    - 6884 Highway 260 (Linden and 260)
    - 2933 W White Mountain Blvd
- Consider signal/beacon for when fire trucks are dispatching
- Consider some emergency vehicle preemption at traffic signals for fire trucks along state highway

Show Low Community Transportation Plan Update
Task Assignment: MPD0025-18

Community Planning, Engineering and Maintenance Focus Group
Monday, March 26, 2018
City of Show Low City Hall
Deuce of Clubs Conference Room
1:00 pm – 2:30 pm

Attendees:
Daniel Gabiou, ADOT MPD
Lisa Robertson, Show Low
Matt Patterson, Pinetop-Lakeside
Bill Kopp, Show Low
Shane Hemesath, Show Low
Justen Tregaskes, Show Low
Dave Swietanski, Apache County
Ferrin Crosby, Apache County
Jason James, NACOG
Brent Crowther, Kimley-Horn
Amy Garinger, Kimley-Horn

Meeting Notes

Key Transportation Needs and Priorities

- City of Show Low
  - 1. Extend Scott Ranch Road (Phase 2) connection across creek
  - 2. Construct new Thornton Corridor in northern portion of city; 6th St to Central
    - Partnership with flood control
    - In the City CIP and should constructed next year
  - 3. Extend Woolford to east side of SR 260
    - Bridge construction should be done by private development related to the Show Low Bluff development
  - 4. Extend Summit Trail to connect to 260
    - Dependent on land exchange with forest service
    - Has been in process for 15 years
- City of Pinetop-Lakeside
  - Scott Ranch Road extension
    - Porter Mountain corridor is not developed because of the lack of connection
    - Most important for economic development and growth
  - Woodland Rd is currently being expanded to add a bike lane and sidewalk to one side
    - Navajo county owns the other side of the road and are not participating);
    - Infrastructure will connect bike/pedestrian from the school to the park
  - Intersection of Woodland Lake and 260
    - Missed signal warrant cut off by 23 cars; traffic volumes during the week are lower but they are very high on the weekends, but warrant studies require counts for 3 days in the middle of the week

        - Have had fatalities on both sides of intersection but not at intersections
        - The intersection is a key detour to get around 260 when it is closed during parades or incidents
    - Completed a study for the 260 Corridor that has recommendations for some complete street elements (bike lanes, center median)
        - Having a hard time to get ADOT to buy-off on median and some other recommendations
    - Traffic signal at Red Devil restaurant has major safety issues
        - City is going after HSIP funds to reconfigure the intersection and close off some driveways
    - Project along Woodland Lake Road
        - In the NEPA process right now because the road goes across forest land
        - Challenging because woodland Lake Road has development right up against road
    - Pinetop has issues with fatalities from people crossing the road, not as much from vehicle-vehicle collisions
- Apache County
    - Need critical bypasses for US 60 using County Route 3144
        - Identified as overflow/detour route for SR 60 east and west in Navajo County
        - 3144 becomes Porter Mountain Rd at the County line – road is not paved along portion that goes through forest land (~7 miles)
        - High percentage of logging trucks
        - Used by people who live in Vernon and going to Show Low to work or going to use medical facilities
        - Need to complete a feasibility study for upgrading this road to a 2-lane paved roadway
            - Will need right of way
            - Looking at pursuing a FLAP (federal lands access program) grant jointly with Navajo County to get funding
        - Apache county to give counts
    - County is pursuing HSIP funding for intersection improvements at 3148 and SR 60
        - 2 fatalities in 2 years
        - Considering way to increase awareness of US 60 for drivers on side streets
            - Signage, traffic calming/speed reduction
    - Stanford Rd is a growth area for the County but has major safety and geometry issues (slope and vertical curve)
        - Connects to Show Low Pines area – single largest growing area in Apache County (10 square miles of subdivision)
        - Current project has 95% plans – RFQ for DCR on that route
        - Feasibility studies to look at alternatives to alleviate grade issues
            - 15-20% slope – winters are treacherous and have had fatalities on the hill)

            - Constricted on land around that hill (bordered by state, private land); potentially looking for route options around the hill
    - Concho-Snowflake Road – pavement conditions need improvement
        - One of the higher ADT roads in the county and lots of truck traffic related to transfer stations, trucks with sand and gravel
        - Traveling from St. Johns going to Snowflake
        - Recently upgraded bridges along there and removed weight restriction
        - County did a speed study 8 or 9 years ago that the County would like to revisit
            - Looking to take speed limit from 50 to 55 but there are currently 2 locations along the road that would not have appropriate geometry to support a 65mph limit
    - Vernon-McNary road
        - On forest land but maintained by County
            - Generally 2 lanes and unpaved – County has gravel service – added limestone from local mine
        - Escape route for Country Club south of Pinetop
        -

Additional Transportation Needs or Challenges

- Bicycle and Pedestrian infrastructure
    - There is gap in bicycle/pedestrian infrastructure between Woolford Rd and the hospital
        - Consider multi-use paths to fill the gap and provide connectivity
        - Current path gets a good amount of recreational/community uses – dog walkers, parents with kids on bikes
        - When ADOT undertakes a pavement preservation project, municipality should inquire about ADA transition plan needs to see if ramps and sidewalks can be added/upgraded as part of the project (part of a new law)
            - There is a pavement preservation project along the corridor programmed for 2021
            - One challenge is that ADOT hands all maintenance responsibility for sidewalks to the local agency, and agencies don't have the resources to maintain them (Pinetop does not maintain their sidewalks)
        - Provide pedestrian connectivity between Woolford and Deuce of Clubs
        - Central is wide enough to consider bicycle and pedestrian infrastructure
        - The atrium and maverick in Pinetop – missing sidewalk and curb
        - Need to talk with the District about ADOT snowplow policy and having the snow plowed to the middle rather than the side, which creates pedestrian barriers so people can't walk
    - 260 Corridor
        - Need a multi-jurisdiction corridor vision between Hon-Dah and 260/60 intersection
            - Want one design (cross section) all of the way through (Ex: have bicycle lane on the inside of the curb (shared use path buffered by curb))

- Future traffic demand
    - Penrod corridor with new event center and lots of areas with commercial zoning
    - City demographics are changing where people are making Show Low their primary home instead of their secondary home
- Maintenance Challenges
    - Cities are having trouble with finding staff (adequate number of staff and staff with necessary skills)
    - Show Low does pavement preservation on a rotating 6-year cycle to cover all roads
    - Pavement projects can only occur between April and November, which makes it difficult to stay on top of it
    - Pinetop is looking to try and increase TPT (sales tax) tax to support maintenance – allocation from HURF is not enough
    - Show Low provides streets department $1million per year from the General Fund to supplement reduced HURF
        - HURF is based on population and secondary homes do not count towards population, which skews the region's HURF allocation
    - A big impact on the roadways are weekend visitors with trailers

General Input on Study

- Change name to Southern Apache and Navajo Sub-Regional Transportation Study – just saying Show Low Community is not sufficient
- The phase 1 of public outreach needs to provide other mechanisms besides a survey to gather public input
    - KH will look to attend events such as Show Low days to expand opportunities for public outreach

Show Low Community Transportation Plan Update
Task Assignment: MPD0025-18

Transit Focus Group
Monday, March 26, 2018
City of Show Low City Hall
Deuce of Clubs Conference Room
11:00 am – 12:00 pm

Attendees:
Daniel Gabiou, ADOT MPD
Lisa Robertson, Show Low
Jason James, NACOG
Thomas Hakenewarth, MV Transit
Jennifer O'Connor, NACOG (via teleconference)
Todd Morris, NACOG (via teleconference)
Brent Crowther, Kimley-Horn
Amy Garinger, Kimley-Horn

Meeting Notes

Current Transit Routes within the Region

- Current services are funded by 5311 and is a deviated fixed route service
  - Someone will call 24 hours in advanced and can the bus to pick them us within ¼ mile of the set route
- All bus stop locations are on private property, where there are agreements with the landowner that the bus can enter the parking lot and people riding the bus can park there
- Four Seasons Route
  - Runs Monday – Saturday from 6:30am to 7pm
  - Starts at Walmart in Show Low at transit hub – there is a dedicated location that can accommodate 2 buses and has bus stop amenities
  - Both buses leave on half our and the route takes 1 hour to go up 260, down 60 and back to the Walmart in Show Low
  - Circle K on 260 is last pick up
- White Mountain Connection
  - Runs Monday – Friday from 6am to 7pm
  - Provides more express service between Show Low and Holbrook three times per day, targeting those traveling from Show Low to Holbrook for work
    - It is not useful for people in Holbrook who need to travel to Show Low because the bus does not arrive back in Show Low until 9:30am
  - Start at Safeway in Pinetop, stops at Walmart transit hub, County offices in Show Low, goes up 77 and stops at Walmart in Taylor, NPC in Snowflake, Center street near Dollar General in Snowflake, then County complex in Holbrook, then NPC in Holbrook and turns around and meets Greyhound at Circle K in Holbrook and then come back to Show Low

- There is interest in communities in Apache County (VA services, DES services) to connect to existing services in Show Low
    - Springerville – Round Valley Senior Center has secured funding to provide a shuttle service a few times per month to Show Low for residents to allow access to medical facilities and shopping and are actively promoting this service
    - Applying for 5210 to try and fund operations of a few buses a week to Show Low
    - There is a similar need for transit connectivity between Concho and Vernon and the Show Low area for health care and shopping resources for seniors, disabilities and veterans
- The casino provides shuttles for employees between Show Low and the casino, but they do not provide public shuttles
- White Mountain Apache tribe has some existing bus service that is starting to be well connected
    - Current service to Cibecue with the intent that that bus will connect with San Carlos service out of Globe
        - Phase 1 is White River to Hon-Dah casino and hits McNary; second bus goes opposite between White River and Cibecue and then from Cibecue to Salt River Canyon, where it would meet the San Carlos service
        - Phase 2 Cibecue up the 60 to Show Low – hoping to have implemented in the next 18 months

Key Transit Challenges and Needs

- Bus service in this community is important because the community is very spread out and distances are not walkable, especially for elderly and disabled population
- Transit system is plateau with ridership because they are not getting any new riders and anyone who would use the existing service already does use it
    - The bus service has not changed since its inception in 1996, although the community has grown significantly
    - If the private companies that they have agreements with to use the parking lots decide they don't want to provide access to the lot anymore, then that stop just has to be dropped from the route and that part of the community loses service
- Other issue is head time and schedule adherence
    - The Four Seasons is a local circulator and seasonal variation in traffic results in congestion
        - Buses are waiting 5-8 mins to get onto the road from their stop because the 260 is backed up
    - Show Low and MV Transit are looking into instituting bus pull-outs to help with reducing head time (working on submitting a permit request to ADOT to get easements along SR 260, and then they would need to get funding); looking at 6 pull outs at $100k-$150k each)
        - Would allow the bus to avoid having to leave the state highway to pick up people in the parking lot and then trying to turn back onto the state highway

        - Would address a safety hazard, as it is not safe for the buses to have to navigate through parking lots and conflicting with pedestrians
        - Would reduce wear and tear on buses from maneuvering through parking lots
        - Would not address underlying issue of congestion/heavy traffic on the state highway that makes it difficult for buses to turn on to
        - Should look to work with the hospital right now as they are undergoing expansion to get a bus pull out at the intersection that is being built and signalized for the hospital.
    - In the summertime, between the 260 in Pinetop-Lakeside and the casino, there is heavy traffic because it is the only way out of the area, and this creates bus schedule challenges
        - Construction of the Scott Ranch Road Phase 2 would alleviate some of this traffic because there would be multiple routes available
- Transportation between Show Low and Holbrook will be important because of future economic development that is projected to occur between Taylor and Holbrook
    - The Town Manager of Taylor is pro-transit, but having some trouble selling it to Council
    - Snowflake decision makers do not see value in funding transit at this point

Opportunities and Challenges with Expanding Service

- There has not be willingness from all local partners to provide funding for transit service and current funding partners are not willing to increase their funding levels
- Show Low would like to consider expanding the Four Seasons route and add another bus
    - This would require completely reworking the current route and would require additional funding from agencies who are getting new service
    - Partners are looking to get a solid plan in place that includes the specific route and stops that they would like to expand to, and then go to ADOT to ask for more money
- Best way to get connection to outlying communities is to have them create a sort of local circulator that collects people and brings then to one location, and then the Show Low service can meet the circulator at a transit hub
    - White Mountain Lakes community is a fast-growing area and has requested bus service several times, but Show Low can't provide this service unless the community provides funding
    - Heber Overgaard wants a service too
    - When hospital expansion is completed, there may need to be better service in Snowflake/Taylor and Holbrook
- Transit needs and opportunities need to be included in all larger transportation studies for the region so that they are considered when making future investments
- Considering opportunities to partner with services like ChangePoint to provide paratransit service that is funded through 5310
    - Currently, providing both services is cost prohibitive
    - Try to broaden eligibility of these services that are currently paratransit only; currently, ChangePoint is used to provide mandatory transportation to/from behavioral health

appointments and services, but they don't provide day-to-day services for trips to the grocery store and other essential services
        - Investigating this as part of passenger transportation study
- Bus stop shelters – getting to a point where they need major maintenance/rebuilding
    - Currently have 28 of them
    - They have been being built locally with local materials, but they would benefit from usually more replaceable manufactured parts to allow for easier maintenance
        - Looking into agreement with Arizona Correctional Institute (ACI), for upgrading shelters
    - All stops currently have enough benches, but if there are any service expansions or addition of new services, the transit hub at Walmart in Show Low may need to be expanded to fit more buses and more people
        - Walmart gave an easement to create the hub and it can currently fit 2 buses
- Going forward, to support transit ridership and expansion, a key partnership will likely be with educational institutions/colleges
    - This is seen with NAPTA, where a key to their success is a partnership with NAU

NACOG Passenger Transportation Study

- Will not focus exclusively on traditional transit, but will also look at rideshare, vanpool, volunteer driver programs, etc.
    - April 5th Steering committee meeting will formally kick off public outreach component of plan
- Goal is to develop a regional long-range vision for passenger transportation
    - Will consider local services and their needs, but the focus is on inter-city/regional connections
    - Key passengers are elderly and disabled
- Phase 1 tasks including assessing current inventory, look at potential needs, and identifying priority corridors
- Phase 2 is focused more implementation details

Ultimately looking for local communities to administer programs or look at expansion of regional service provides (Navajo transit service, or Hopi transit).

APPENDIX B – TITLE VI ENVIRONMENTAL JUSTICE REVIEW OUTPUTS

EJSCREEN ACS Summary Report

Location: User-specified polygonal location
Ring (buffer): 0-mile radius
Description:

Summary of ACS Estimates	2011 - 2015
Population	35,794
Population Density (per sq. mile)	77
Minority Population	6,476
% Minority	18%
Households	13,521
Housing Units	26,208
Housing Units Built Before 1950	538
Per Capita Income	23,615
Land Area (sq. miles) (Source: SF1)	464.24
% Land Area	100%
Water Area (sq. miles) (Source: SF1)	1.28
% Water Area	0%

	2011 - 2015 ACS Estimates	Percent	MOE (±)
Population by Race			
Total	35,794	100%	634
Population Reporting One Race	34,937	98%	1,284
White	32,704	91%	640
Black	92	0%	58
American Indian	1,020	3%	230
Asian	228	1%	82
Pacific Islander	0	0%	17
Some Other Race	893	2%	257
Population Reporting Two or More Races	857	2%	182
Total Hispanic Population	4,704	13%	384
Total Non-Hispanic Population	31,090		
White Alone	29,318	82%	589
Black Alone	77	0%	58
American Indian Alone	976	3%	230
Non-Hispanic Asian Alone	228	1%	82
Pacific Islander Alone	0	0%	17
Other Race Alone	0	0%	17
Two or More Races Alone	491	1%	165
Population by Sex			
Male	17,604	49%	378
Female	18,190	51%	402
Population by Age			
Age 0-4	2,288	6%	190
Age 0-17	8,830	25%	313
Age 18+	26,964	75%	531
Age 65+	7,934	22%	275

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available.
Source: U.S. Census Bureau, American Community Survey (ACS) 2011 - 2015.

EJSCREEN ACS Summary Report

Location: User-specified polygonal location
Ring (buffer): 0-mile radius
Description:

	2011 - 2015 ACS Estimates	Percent	MOE (±)
Population 25+ by Educational Attainment			
Total	24,619	100%	507
Less than 9th Grade	849	3%	116
9th - 12th Grade, No Diploma	2,157	9%	147
High School Graduate	6,479	26%	270
Some College, No Degree	10,046	41%	373
Associate Degree	2,405	10%	170
Bachelor's Degree or more	5,087	21%	212
Population Age 5+ Years by Ability to Speak English			
Total	33,506	100%	553
Speak only English	30,003	90%	543
Non-English at Home[1+2+3+4]	3,503	10%	282
[1]Speak English "very well"	2,847	8%	256
[2]Speak English "well"	311	1%	81
[3]Speak English "not well"	286	1%	91
[4]Speak English "not at all"	59	0%	47
[3+4]Speak English "less than well"	345	1%	91
[2+3+4]Speak English "less than very well"	656	2%	121
Linguistically Isolated Households*			
Total	133	100%	60
Speak Spanish	98	74%	56
Speak Other Indo-European Languages	22	17%	20
Speak Asian-Pacific Island Languages	13	10%	12
Speak Other Languages	0	0%	17
Households by Household Income			
Household Income Base	13,521	100%	268
< $15,000	1,966	15%	184
$15,000 - $25,000	1,586	12%	144
$25,000 - $50,000	3,682	27%	184
$50,000 - $75,000	2,964	22%	143
$75,000 +	3,323	25%	195
Occupied Housing Units by Tenure			
Total	13,521	100%	268
Owner Occupied	9,572	71%	247
Renter Occupied	3,949	29%	187
Employed Population Age 16+ Years			
Total	27,913	100%	522
In Labor Force	14,593	52%	386
Civilian Unemployed in Labor Force	1,557	6%	155
Not In Labor Force	13,320	48%	417

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2011 - 2015.

*Households in which no one 14 and over speaks English "very well" or speaks English only.

EJSCREEN ACS Summary Report

Location: User-specified polygonal location
Ring (buffer): 0-mile radius
Description:

	2011 - 2015 ACS Estimates	Percent	MOE (±)
Population by Language Spoken at Home*			
Total (persons age 5 and above)	33,506	100%	553
English	30,003	90%	590
Spanish	2,418	7%	279
French	104	0%	73
French Creole	0	0%	17
Italian	90	0%	92
Portuguese	36	0%	59
German	78	0%	44
Yiddish	0	0%	17
Other West Germanic	12	0%	17
Scandinavian	48	0%	38
Greek	0	0%	17
Russian	48	0%	78
Polish	59	0%	63
Serbo-Croatian	0	0%	17
Other Slavic	0	0%	17
Armenian	0	0%	17
Persian	0	0%	17
Gujarathi	0	0%	17
Hindi	0	0%	17
Urdu	0	0%	17
Other Indic	66	0%	70
Other Indo-European	0	0%	17
Chinese	0	0%	17
Japanese	42	0%	60
Korean	0	0%	17
Mon-Khmer, Cambodian	30	0%	42
Hmong	0	0%	17
Thai	0	0%	17
Laotian	0	0%	17
Vietnamese	0	0%	17
Other Asian	0	0%	17
Tagalog	35	0%	32
Other Pacific Island	32	0%	52
Navajo	273	1%	114
Other Native American	97	0%	85
Hungarian	36	0%	56
Arabic	0	0%	17
Hebrew	0	0%	17
African	0	0%	17
Other and non-specified	0	0%	17
Total Non-English	3,503	10%	806

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2011 - 2015.
*Population by Language Spoken at Home is available at the census tract summary level and up.

EJSCREEN Census 2010 Summary Report

Location: User-specified polygonal location
Ring (buffer): 0-mile radius
Description:

Summary	Census 2010
Population	36,430
Population Density (per sq. mile)	78
Minority Population	6,925
% Minority	19%
Households	14,107
Housing Units	26,397
Land Area (sq. miles)	464.24
% Land Area	100%
Water Area (sq. miles)	1.28
% Water Area	0%

Population by Race	Number	Percent
Total	36,430	-------
Population Reporting One Race	35,548	98%
White	32,113	88%
Black	135	0%
American Indian	1,291	4%
Asian	239	1%
Pacific Islander	37	0%
Some Other Race	1,734	5%
Population Reporting Two or More Races	882	2%
Total Hispanic Population	4,820	13%
Total Non-Hispanic Population	31,610	87%
White Alone	29,505	81%
Black Alone	113	0%
American Indian Alone	1,194	3%
Non-Hispanic Asian Alone	223	1%
Pacific Islander Alone	31	0%
Other Race Alone	16	0%
Two or More Races Alone	527	1%

Population by Sex	Number	Percent
Male	18,168	50%
Female	18,262	50%

Population by Age	Number	Percent
Age 0-4	2,516	7%
Age 0-17	9,498	26%
Age 18+	26,932	74%
Age 65+	6,459	18%

Households by Tenure	Number	Percent
Total	14,107	
Owner Occupied	10,474	74%
Renter Occupied	3,633	26%

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, Census 2010 Summary File 1.

APPENDIX C – SUMMARY OF PUBLIC OUTREACH – PHASE 1

SURVEY RESULTS FROM PUBLIC OUTREACH PHASE 1

The survey was available through an online website and hard copies of the survey were available during Show Low Days. The survey was conducted between May 21, 2018 through June 21, 2018.

The survey consisted of nine questions:

1. Which of the following ways do you typically travel on a daily basis (check all that apply)?
2. How would you rank these issues with the current transportation system in the southern Navajo and Apache counties region?
3. When you travel to work, school, or shopping in the in the identified southern Navajo and Apache counties region, what roadway section or intersection has the greatest need for improvements to increase your safety or mobility as you travel?
4. Imagine that you were given $100 to invest for transportation improvements. Using the box next to each improvement, enter the portion of that $100 that you would dedicate to that improvement.
5. Rank the following factors in order of importance when prioritizing transportation projects.
6. What is your residency status in the study area?
7. What is your age?
8. Do you have any other comments?
9. Optional: If you would like to be added to the email mailing list for study updates and meeting notices then please provide your name and email.

A large survey response was received, as 467 surveys were completed. A summary of responses to each survey question is provided as follows.

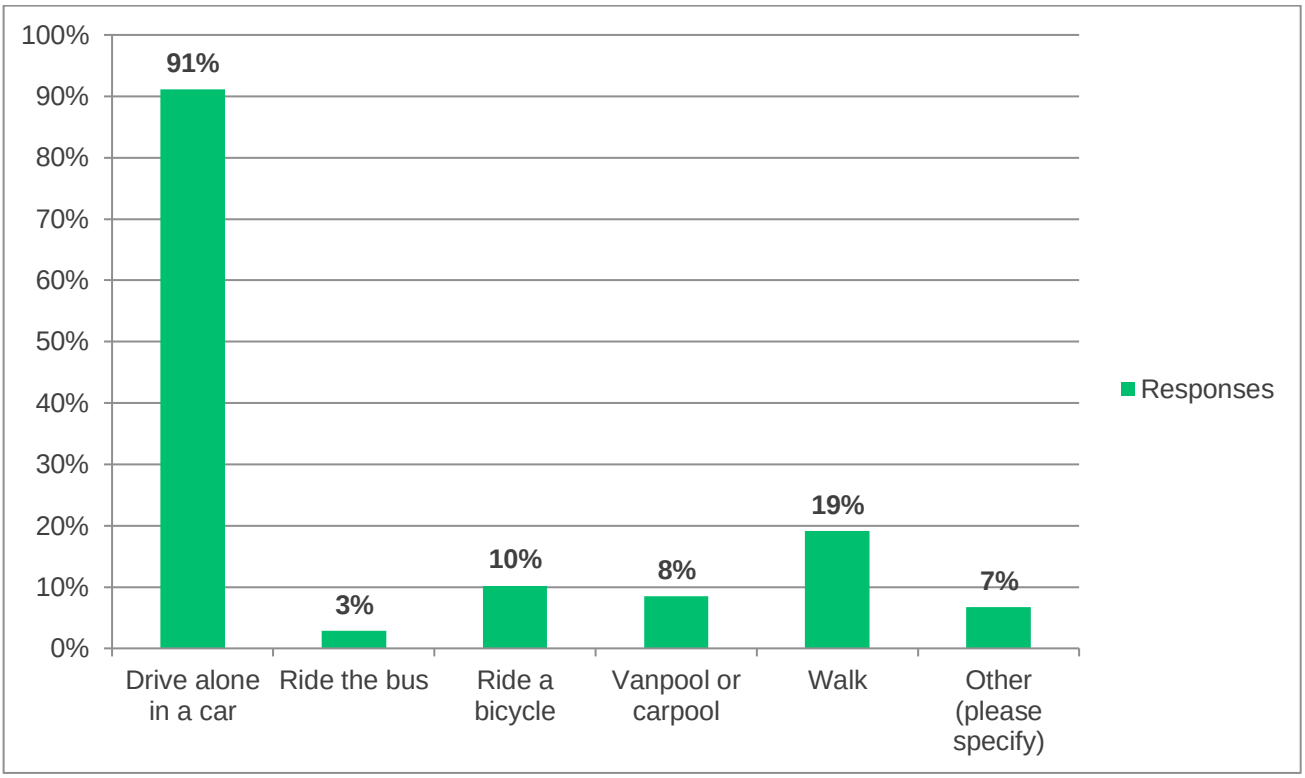
QUESTION 1. WHICH OF THE FOLLOWING WAYS DO YOU TYPICALLY TRAVEL ON A DAILY BASIS (CHECK ALL THAT APPLY)

The most common response to the question "Which of the following ways do you typically travel on a daily basis?" was that respondents drove alone in a car (91%). Responses are summarized in **Table B1** and **Figure B1**.

Table B1 : Responses to Question 1

Answer Choices	Responses – Percent	Responses – Number
Drive alone in a car	91%	420
Ride the bus	3%	13
Ride a bicycle	10%	47
Vanpool or carpool	8%	39
Walk	19%	88
Other (please specify)	7%	31

Figure B 1. Responses to Question 1 - Which of the Following Ways Do You Travel on a Daily Basis?



QUESTION 2. HOW WOULD YOU RANK THESE ISSUES WITH THE CURRENT TRANSPORTATION SYSTEM IN THE SOUTHERN NAVAJO AND APACHE COUNTIES REGION?

Question 2 asked respondents "How would you rank these issues with the current transportation system in the southern Navajo and Apache counties region?" This "region" includes the City of Show Low, the Towns of Taylor, Snowflake and Pinetop-Lakeside, and areas of Navajo and Apache Counties, including Vernon and Concho. A summary of responses is provided in **Table B2** and shown graphically in **Figure B2**.

With respect to daily traffic congestion, the majority of respondents ranked this as an "average" concern. By comparison, survey respondents ranked seasonal traffic congestion as either "very poor" or "poor" by a total of 72% of respondents.

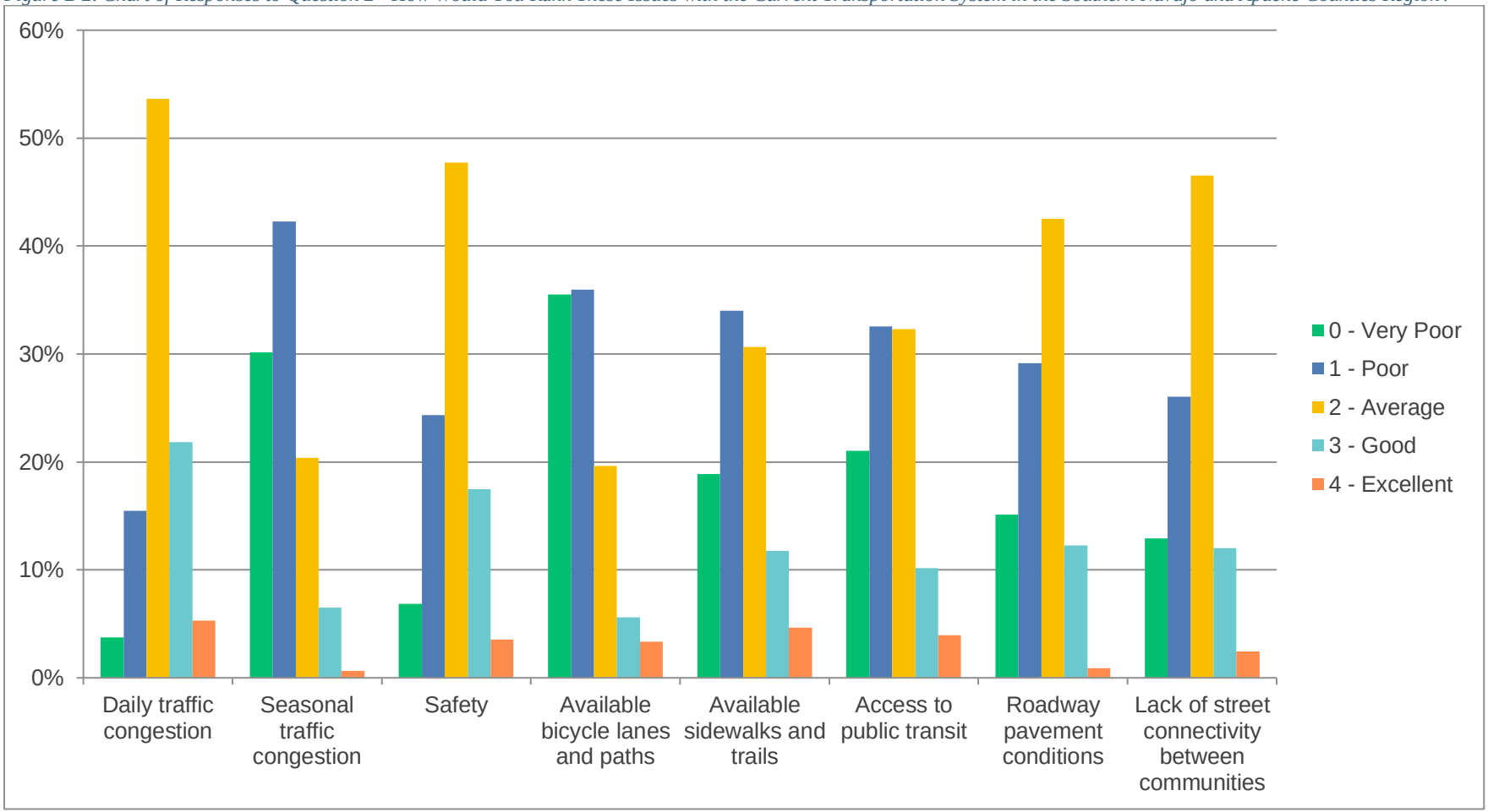
The issue of safety was ranked as average by the highest percentage of respondents to this issue. Similarly, the issues of roadway pavement conditions and lack of street connectivity was rated as average by 43% and 47% of respondents, respectively.

With respect to multimodal transportation issues, a combined 71% percent of respondents ranked available bicycle lanes or paths as either poor or very poor. Available sidewalks and trails was ranked as poor by 34% of respondents and average by 31% of respondents. Access to public transit was ranked as average by 32% of respondents and poor by 33% of respondents.

Table B 2. Responses to Survey Question 2 - How Would You Rank These Issues with the Current Transportation System in the Southern Navajo and Apache Counties Region?

Issues	0 - Very Poor		1 - Poor		2 - Average		3 - Good		4 - Excellent	
Daily traffic congestion	4%	17	15%	70	54%	243	22%	99	5%	24
Seasonal traffic congestion	30%	139	42%	195	20%	94	7%	30	1%	3
Safety	7%	29	24%	103	48%	202	17%	74	4%	15
Available bicycle lanes and paths	35%	159	36%	161	20%	88	6%	25	3%	15
Available sidewalks and trails	19%	85	34%	153	31%	138	12%	53	5%	21
Access to public transit	21%	91	33%	141	32%	140	10%	44	4%	17
Roadway pavement conditions	15%	69	29%	133	43%	194	12%	56	1%	4
Lack of street connectivity between communities	13%	58	26%	117	47%	209	12%	54	2%	11

Figure B 2. Chart of Responses to Question 2 - How Would You Rank These Issues with the Current Transportation System in the Southern Navajo and Apache Counties Region?



QUESTION 3. WHEN YOU TRAVEL TO WORK, SCHOOL, OR SHOPPING IN THE IN THE IDENTIFIED SOUTHERN NAVAJO AND APACHE COUNTIES REGION, WHAT ROADWAY SECTION OR INTERSECTION HAS THE GREATEST NEED FOR IMPROVEMENTS TO INCREASE YOUR SAFETY OR MOBILITY AS YOU TRAVEL?

There were four hundred thirteen (413) responses to the open-ended question "when you travel to work, school, or shopping in the in the identified southern Navajo and Apache counties region, what roadway section or intersection has the greatest need for improvements to increase your safety or mobility as you travel?"

Summary of Comments

General comments included the needs for roundabouts rather than traffic signals, more street lighting, need for left turn signal phases, turn lanes at intersections, and need for additional traffic signals. Other concerns included the need for improved traffic signal timing in Show Low and Pinetop - a particular concern was when traffic signals change when there is no traffic on the cross street. One person commented that previously straight-through traffic shared the right-turn lane and fewer drivers making left turns failed to yield right of way to oncoming traffic. We need to return to the prior lane assignment.

Other general transportation concerns included road safety, intersections near schools, implementation of a distracted driving awareness campaign, and need for clear street signs. Access to smaller local businesses was also a general concern.

There were many segments of SR 260 that had comments relating to congestion or access concerns. Most frequently congestion concerns were mentioned on SR 260 between Show Low and Lakeside and Pinetop. Other SR 260 transportation improvement needs mentioned on SR 260 from Show Low to Heber, Holbrook, Payson, and to Woods Canyon Lake. There were several comments regarding the need for alternate routes to SR 260. Suggestions were to extend Penrod Road and Rim Road. On person suggested an alternate route to Lakeside from SR 60/SR 61would reduce traffic on 260, particularly in the summer.

Area-Specific Comments

Where possible, comments were organized by jurisdiction. For clarification, through the downtown Show Low area SR 260 and US 60 is called Deuce of Clubs. SR 260 is referred to as White Mountain Road south of the Deuce of Clubs. Through the Pinetop and Lakeside area, SR 260 is referred to as White Mountain Boulevard.

Show Low Area

Downtown

In the downtown area, many of the comments related to traffic congestion on Deuce of Clubs. A new traffic signal was requested at the Deuce of Clubs/Safeway Plaza intersection. Intersections where east-west left turn arrow/phasing was requested were:

- Deuce of Clubs/Central Avenue
- Deuce of Clubs/Old Linden Road - several comments noted that that the traffic signal timing could be improved at this intersection, because the traffic lights change when there is no traffic on the cross street. Other comments were:

- Need for right turn lanes from SR 260 to Old Linden Rd
- Traffic lights should flash after 8pm.
- Needs a green left turn signal/arrows. Used by parents when dropping off & picking up their children from the nearby elementary and high schools.

Other intersections mentioned as needing improvements were:

- Deuce of Clubs/Penrod Road – drivers have a long wait turning south onto Penrod Rd for left turn arrow when there is no traffic on the Deuce of Clubs
- Deuce of Clubs/Owens Rd
- Deuce of Clubs/Center St
- Deuce of Clubs/Whipple
- Deuce of Clubs/SR 260
- Deuce of Clubs/9th Street – remove the traffic signal and replace it with a roundabout
- Deuce of Clubs/McNeil Road – drivers in the McNeil Road southbound left turn/ through lane are frequently cut off by motorists making left turns from the opposite direction.

White Mountain Road

Many of the comments on this section of SR 260 related to the need for a left run phase at an existing traffic signal, which was requested at the following locations:

- White Mountain Road /Cub Lake Road/Show Low Lake Road – Commenters cited traffic congestion, particularly when the Summit Regional Hospital and from the Walmart Supercenter.
- White Mountain Road/Woolford Road - needs a left turn arrow/phase for cross street traffic on Woolford Road. Some commenters mentioned that the traffic signal phase on Woolford (used by persons exiting the movie theater on the southwest corner) is too short.
- White Mountain Road/Pine Parkway Plaza (4441 S. White Mountain Road) – needs left turn arrows
- White Mountain Road, south of Deuce of Clubs intersection - Difficult to turn
- White Mountain Road/Ellsworth Road - needs a traffic signal
- White Mountain Road/Hall Street – turn area is congested
- White Mountain Road/Blue Ridge High School
- White Mountain Road (SR 260), milepost 344.8 to milepost 346.3,
- SR 260/S. Penrod Lane intersection
- White Mountain Road, milepost 351.6 to milepost 352 approach into White Mountain Village shopping center has large grade breaks and vehicles turning in are slow.
- White Mountain Road, between Central/Woolford and a little past Walmart in Show Low
- White Mountain Road, between Walmart and Summit Healthcare in Show Low - congested.

Other comments on White Mountain Road included the need to activate red light cameras, mark access drives with yellow paint, need for signalized pedestrian crossings, and general observations about the difficulty turning on White Mountain Road.

Comments on other roadways in the Show Low Area

- Penrod Road - Specific comments about Penrod Road were that it needs a higher speed limit
- There is a need to connect Penrod Road / Porter Mountain Road to White Mountain Road as an alternate route for traffic accidents or to avoid seasonal congestion.

- Old Linden Road – comments related to difficulty in turning onto Old Linden Road and the need to widen Old Linden Rd to 5 lanes from Deuce of Clubs to 16th Street with added traffic lights at the High School and Central Ave.
- Burton Road – needs a left turn lane from SR 260
- Whipple Street/Central Avenue – Comments that this four-way stop controlled intersection needs a roundabout. Another comment was that the southeast corner is too narrow for safe right turns from Whipple Street.
- Sierra Pines Drive- hard to exit the road towards Show Low
- Sierra Pines Trail - Comment that there is a lot of cut-through traffic through the Sierra Pines subdivision. Exiting Sierra Pines towards Show Low is challenging. Stop light seems worthy of being in the plan.
- Concerns about lack of alternate access to Show Low and Pinetop/Lakeside when there is a crash on the state routes.

Pinetop and Lakeside Area

White Mountain Boulevard

There were several requests for new traffic signals at the following intersections:

- White Mountain Blvd/Rainbow Lake Drive -very difficult to make a left turn at the stop sign during the summer and often dangerous as traffic thinks the middle lane is a merge lane.
- White Mountain Blvd/Woodland Lake Road – one person verbally commented that at one time there was a petition for a traffic signal that included 800+ signatures
- White Mountain Blvd/Wagon Wheel Plaza
- White Mountain Blvd /Pine Lake Road - there were several safety concerns noted. There are too many Circle-K access points, needs access management. Multiple conflicts were noted including traffic using White Mountain Blvd, vehicles turning from Pine Lake Road, pedestrians walking across White Mountain Blvd. and Pinetop-Lakeside Fire and EMT vehicles turning on the intersection from their Pine Lake Road Station. The Circle K sign that blocks the sight line for vehicles from Pine Lake Rd. (Raise the sign above vehicle height). Westbound traffic on SR 260 goes from a 50 to 35-mph speed limit a short distance east of the intersection. Other comments noted difficulty turning left, or west, from Pine Lake Rd to White Mountain Blvd. Lower the speed limit to 35 mph much further east and enforce those limits.

Other transportation concerns were:

- White Mountain Blvd/Safeway Plaza (20 White Mountain Blvd, Lakeside) – needs a left turn phase at the traffic signal
- White Mountain Blvd /Woodland Rd - the traffic signal timing on the Woodland Road approaches is too long
- White Mountain Blvd at Arizona Game and Fish Office (2878 White Mountain Blvd) – needs a left turn lane
- White Mountain Blvd /Pineview Drive - The side street next to the Pinetop Post Office. It is nearly impossible to turn left from there onto SR 260 between May and September.
- Neighborhood and feeder streets to White Mountain Blvd in Pinetop/Lakeside
- Increase the speed limit between Lakeside and the Maverick and widen the road.
- Arlene Lane, in Lakeside between Woodland Lake Road and Yavapai Lane.
- Larson and Rim Road, residential area, low speed limit, but people travel very fast on that road, would benefit from some type of speed limiting factors.

- Access to Hondah Resort and Casino from Pinetop.

Other intersections mentioned with traffic issues (unspecified) were White Mountain Blvd / Niels Hansen Lane, and White Mountain Blvd / Porter Mountain Road (in Lakeside).

Linden Area

- SR 260/Chaparral Drive – needs turn lanes
- There is a need for turn lanes on SR 260 in the Linden area
- Hwy 260 MP 337.7 @ 43rd Ave - traveling towards Linden, extend the 2 lanes to exit 43rd Ave. This is a huge safety issue when slowing on 260 to make the turn. People have to brake hard for people trying to make the right turn onto 43rd Ave safely.

Snowflake and Taylor Areas

There were several comments regarding the need for traffic signals in Snowflake at West 7th St./ Main Street and the Snowflake Junior High School access on Main Street. There is also concern that there is not a reduced speed limit when school lets out. Other comments were:

- Congestion on Main Street from Our Lady of the Snow Catholic Church (1655 S. Main Street) to West 7th South
- Going through Snowflake and Taylor significantly increases travel time to Show Low for shopping and emergencies.

Other roads mentioned as having traffic concerns included:

- Road between Holbrook to Snowflake
- Concho Highway, east of Snowflake. One person commented "The Concho Highway is 35 mph up and down the big hill at the sign and I am constantly breaking going down into Snowflake. I know it's a speed trap but people almost slam into me daily". Another person commented "When stopped in a small vehicle at El Dorado and Concho Highway the view of eastbound traffic is obstructed by the height of the highway".
- Pinedale Road to Taylor
- Widen road to Taylor (assume this is SR 77)
- Congestion in Town of Snowflake is horrendous. The Town needs a couple more stop lights to break up traffic.

Vernon Area

- Vernon Road as it turns to go by the cemetery and continues into the forest is in such bad condition. It has extensive wash boarding and is so dusty when driven that visibility is greatly diminished, that even during the day it is hard to see the oncoming traffic.

Other State or US Route Concerns

This section describes other route specific concerns that were not summarized previously.

US 60

In general, transportation needs on US 60 were additional passing lanes or road widening to four lanes, particularly between Show Low and SR 61, or Show Low to Springerville. Another need was repaving the road from Show Low to Springerville and Show Low to Vernon.

Other intersections or road segments mentioned were:

- US 60 to Bourdon Ranch Road

- US 60/SR 77
- US 60/Central Avenue - Need a left turn arrow for turning from US 60.
- SR 60/ Owens Rd
- US 60 from Heber to Springerville
- US 60, Vernon to Show Low
    - In poor condition and needs resurfaced.
    - Needs to be two lanes per direction – comment was it is a very dangerous daily drive
    - Needs at least two passing lanes
    - Too busy for a two lanes road
    - People drive either 10 mph over or under the speed limit
    - Needs passing lanes and wider shoulders

<u>SR 61</u>
Comments on SR 61 were that passing lanes are needed between Show Low and Concho, not just passing zones. One commenter mentioned that they did not care for the type of rotary design from Show Low to Concho when headed to Show Low Pines as well.

<u>SR 77</u>
Comments on SR 77 mainly related to the need to widen SR 77 to four lanes between Snowflake and Show Low. Other transportation improvement needs were:

- Holbrook to Show Low needs to be a divided highway. Alternative routes need to be considered. SR 277 needs to be expanded and run all the way to Concho from Heber.
- SR 77 needs traffic enforcement. Cars and trucks drive too fast on this road and pass other vehicles too frequently
- SR 77/ access to C-A-L Ranch store
- SR 77 / turnoff to Airport and Holbrook
- SR 77/SR 260
- SR 77/ SR 377 – needs a traffic signal

<u>SR 277</u>
Comments on SR 277 related to the need to improve SR 277 to Concho Highway, provide more passing lanes between Heber-Overgaard and Snowflake/Taylor, or widening SR 277 to four lanes.

Bicycle and Pedestrian Issues

Several comments related to the need for bicycle/ walking paths. Areas mentioned were:

- In Snowflake-Taylor and connecting to Show Low
- Between Pinetop and Show Low
- In downtown areas where there is no space for bicyclists riding in roadway
- White Mountain Rd. and Deuce of Clubs
- SR 260 (White Mountain Road) - needs pedestrian/bike safety improvements, there currently aren't any between the stretches of business areas
- SR 73

Designated bike routes or bike lanes were requested between Show Low and Linden and on SR 60, 61, and 260. Other comments on bike lanes said that they should be included in any improvement. Another respondent noted that there are very few bike lanes and those present were not maintained. Whipple Road was mentioned in this comment.

Pedestrian crosswalks on SR 260 in Show Low were needed every quarter-mile.

Transit Comments

Transit-related comments included the following. It should be noted that these were verbal comments received during the Show Low Days outreach.

- A senior bus and taxi service is needed to take seniors where they need to go.
- Ride sharing such as Uber and more public transit is needed.
- GPS capabilities are needed on the busses so those waiting for the bus can track its location from a mobile app.
- More bus service and frequency is needed for people to access basic needs - doctor appointments, groceries, etc.
- Need a bus service from Pinetop to Sunrise. (this comment is from Vanessa who is in a wheelchair and has a difficult time getting from place to place).
- Stops and times of the buses needs to be clearer. Consider making an app that will tell you where to go - a route planning app. More communication is needed on drop-off and pick-up.

QUESTION 4. IMAGINE THAT YOU WERE GIVEN $100 TO INVEST FOR TRANSPORTATION IMPROVEMENTS. USING THE BOX NEXT TO EACH IMPROVEMENT, ENTER THE PORTION OF THAT $100 THAT YOU WOULD DEDICATE TO THAT IMPROVEMENT. ENTER A WHOLE NUMBER BETWEEN 0 - 100.

Question 4 asked respondents to divide $100 among six choices for transportation improvements:

- Construct new or widen roadways
- Maintain the pavement surface of existing roadways
- Build or improve sidewalks, trails or paths
- Designate bicycle lanes on roadways
- Use technology to reduce congestion (e.g. coordinate traffic signals)
- Provide expanded transit service

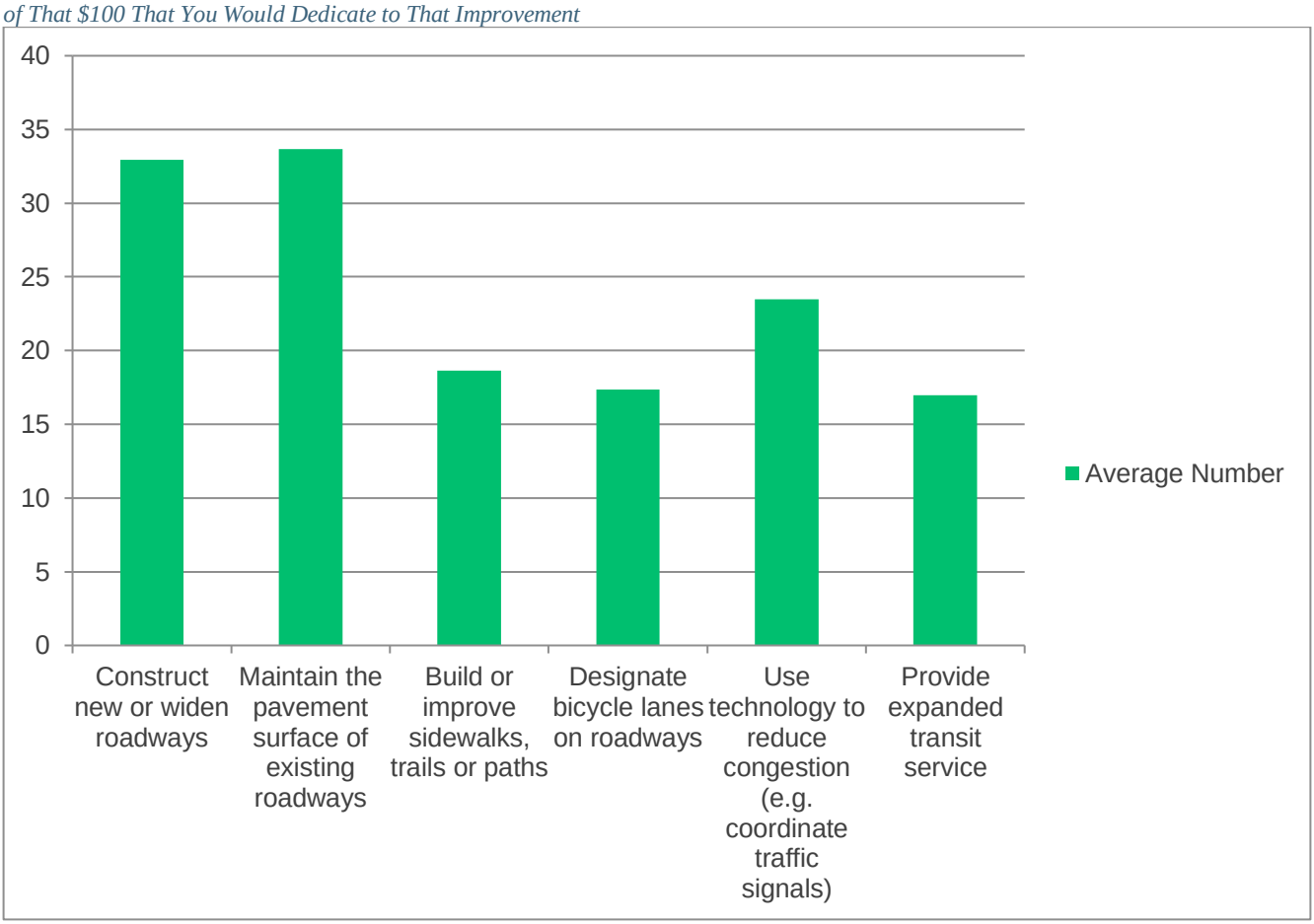
Table B3 summarizes the average dollar allocation to each category of transportation improvement, which is also shown graphically in **Figure B3**.

The highest allocation was to maintain the pavement surface of existing roadways, followed closely by allocating dollars for constructing new or widen roadways.

Table B 3. Response to Question 4- Imagine That You Were Given $100 to Invest for Transportation Improvements - Enter the Portion of That $100 That You Would Dedicate to That Improvement

Transportation Improvement	Average Amount of Dollars Allocated of $100
Maintain the pavement surface of existing roadways	$34
Construct new or widen roadways	$33
Use technology to reduce congestion (e.g. coordinate traffic signals)	$23
Build or improve sidewalks, trails or paths	$19
Designate bicycle lanes on roadways	$17
Provide expanded transit service	$17

Figure B 3 Responses to Question 4- Imagine That You Were Given $100 to Invest for Transportation Improvements - Enter the Portion of That $100 That You Would Dedicate to That Improvement



QUESTION 5. RANK THE FOLLOWING FACTORS IN ORDER OF IMPORTANCE WHEN PRIORITIZING TRANSPORTATION PROJECTS? (1= MOST IMPORTANT; 7 = LEAST IMPORTANT)

Question 5 asked respondents to rank the importance of factors to use in prioritizing transportation projects. The factors were:

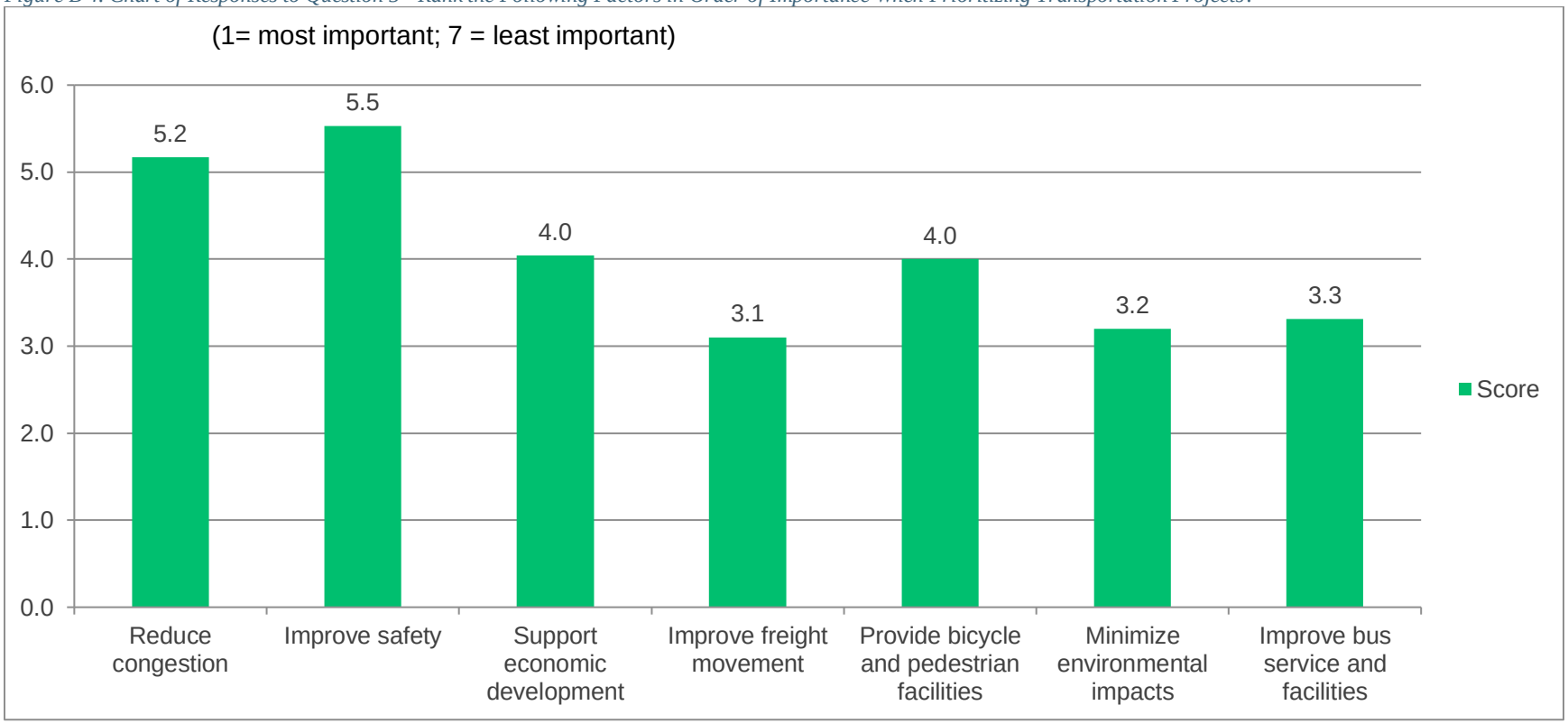
- Reduce congestion
- Improve safety
- Support economic development
- Improve freight movement
- Provide bicycle and pedestrian facilities
- Minimize environmental impacts
- Improve bus service and facilities

The highest rated factor was "Improve safety." That was followed by "Reduce congestion." Responses are summarized in **Table B4** and shown graphically in **Figure B4**. There were 457 responses to this question.

Table B 4. Summary of Responses to Question 5- Rank the Following Factors in Order of Importance When Prioritizing Transportation Projects?

Factor	Ranking														Total	Score
	1		**2**		**3**		**4**		**5**		**6**		**7**			
Reduce congestion	33%	143	22%	95	13%	57	10%	41	8%	35	7%	28	7%	28	427	5.17
Improve safety	34%	143	28%	117	15%	63	10%	43	7%	30	4%	15	2%	8	419	5.53
Support economic development	8%	33	13%	53	24%	99	18%	77	15%	63	14%	58	9%	36	419	4.04
Improve freight movement	4%	16	7%	28	11%	46	20%	83	17%	72	17%	70	25%	105	420	3.1
Provide bicycle and pedestrian facilities	9%	37	14%	61	18%	78	15%	65	23%	99	12%	50	9%	38	428	4
Minimize environmental impacts	7%	30	8%	35	8%	35	17%	73	16%	68	22%	95	22%	93	429	3.2
Improve bus service and facilities	10%	42	9%	41	12%	52	11%	47	12%	53	21%	92	25%	108	435	3.31

Figure B 4. Chart of Responses to Question 5 - Rank the Following Factors in Order of Importance When Prioritizing Transportation Projects?



QUESTION 6. WHAT IS YOUR RESIDENCY STATUS IN THE STUDY AREA?

Question 6 asked respondents whether they were a full-time resident, part time seasonal resident (more than 2 months a year, but less than full time), or a visitor. Of the 463 respondents, 73% were fulltime residents, 19% were part time residents, and 8% were visitors.

QUESTION 7. WHAT IS YOUR AGE?

Question 7, which was an optional question, asked respondents their age. Six age categories were given. The highest number of respondents were in the 56 to 70 age range. There were 453 respondents to this question. Responses are summarized in **Table B5**.

Table B5. Responses to Question 7 - What is Your Age?

Age Range	Percent	Number of Respondents
16-26	5%	24
27-40	18%	80
41-55	27%	123
56-70	40%	181
71-80	8%	35
Over 80	2%	10

QUESTION 8. DO YOU HAVE ANY OTHER COMMENTS?

Question 8 was an open-ended question which asked survey respondents if they had any other questions. There were approximately 282 responses to this question, which are provided in **Table B6**. Responses such as "no", "none," and "n/a", were removed for space considerations. Personal identifiers, such as phone numbers, were removed, and minor spelling and capitalizations edits were made.

Table B6. Responses to Question 8 - Do You Have Any Other Comments?

Survey Response to Survey Question #8
I'd love a bike lane out to at least lone pine Dam Rd. On the 260
Teach people to not drive in the left lane and slow traffic
No roundabouts or medians in the areas. Too hard to get where you are going especially with the amount of summer traffic and winter snow in roadways.
I live in Apache County in the Concho area and work in Navajo County. I drive to work but I know there are people in Apache County who need better access to public transportation.
Keep White Mountains as quaint as possible.
Stop spending money planting trees along the Deuce! what a waste of money and why do we need more trees down by the park???
I live on Central/Wohlford. The traffic that drives past my house is insane. We need to do something to get the traffic back through town and not through my neighborhood driving way over the posted speed limit. Never ANY cops being seen watching for speeders. The noise is constant until about 11 at night. Need some local traffic only ideas on this road for sure.
It's shameful how Hwy 60 is ignored. The hwy. To Snowflake has been kept up perfectly. The state seems to be partial. We have so many vehicles and trucks on this road now.
You guys are doing a great job. More walking & bike abilities in the smaller communities would be awesome!
Speed limits need to be enforced.

Survey Response to Survey Question #8
Double lanes between Snowflake/Taylor to Show Low.
Need to fix turning lane into maverick at show low intersection.
The road from Penrod and down to Home Depot need to be budgeted. People come down from the north and also east, Apache County can use that road as a short cut to local shopping and in case of an emergency to the Hospital. In my opinion one of the most important roads that need to happen soon in either county.
Appreciate you asking!! Thank you!
U.S 60 between show low and Vernon needs more passing opportunities.
I hope you will take the concerns of residents using Pine Lake Road. Trying to make a left onto 260 is life threatening.
US Hwy 60 between Springerville and Show also needs resurfacing, and perhaps an added turn lane between the Junction with AZ 61 and Show Low.
ADOT needs to 1) put more money and attention to improve and repair pavement surfaces and 2) coordinate traffic signals, especially on SR260, to help traffic flow
Transportation from the airport to hotels or businesses is lacking. Need shuttle service for the immediate area. We also need train access for logistics aiding in business development for the area.
Congestion, elderly drivers, 18 wheelers, summer visitors, potholes, are all concerns, also lack of sidewalks.
Cut back obstructions at corners to better see oncoming traffic
Renew Hwy 260 project-show low to Heber
Show Low Lake road is a disgrace. It needs to be maintained
Our bus drivers are excellent. Enough said!!
Pl have more paved or otherwise bike paths and trails for recreational (regular) bikes, not just mountain bikes
What's up with cancelling Hwy 260 project between Show low and Heber?? we want it and have been waiting!!!
SERIOUSLY LOOK AT PUTTING A STOP LIGHT AT WAGON WHEEL PLAZA RD..BEFORE SOMEONE GETS KILLED THERE
Bikes pay no HURT tax. Tax electric vehicles and bicycles.
Public transportation from linden-show low- would be amazing
The bridge in Lakeside across Billy Creek on Penrod, children use it to go to school. Needs a solution for walkers/bike riders.
Please synchronize the traffic lights on the Deuce to assist in Flowing traffic ~ all the stop & go wastes huge amount of resources and creates more pollution and congestion
Accidents at Woolford and Cub Lake Road intersections are avoidable with the right design. Do the right thing.
Expanded bus services and community connectivity would resolve other safety and condition issues
Widening the major roads is almost impossible. We need more turn lanes.
The lights on 260 Between Show Low and Pinetop need red light cameras. There is a lot of red light running. Also there is a lot of speeding on the highway.
Remember that allowing Freight laden vehicles to travel on our public city streets will shorten the life of the road. have a better long-range plan for capital projects. Don't just patch holes. Within the last two weeks someone has changed the timing of the lights I travel through everyday. It's asking for an accident. Remember we are creatures of habit. Not enough traffic for using technology to reduce congestion for this to work efficiently.
Highway turn S.L. to Heber has no passing lanes with ways entrance to the art... in the independent recently
Don't leave 35 mph signs up where NOBODY is out there working!
Remove construction signs when no construction is being done
I walk to Fish and Game. Thank you for your support.
On passing lanes have left end so trucks, RV, etc. Don't get cut off.
None. Buses are great but we need more frequency.
I am actually between the ages of 11-15 and want more bike lanes so that I can get from place to place, especially since I cannot drive. I also want to get in shape by biking more.
Fix the stoplight by the Show Low movie theater
Need to have more community input in projects that affect Show Low and surrounding communities, more good relation with tribes

Survey Response to Survey Question #8
Love the bus service and so grateful for it. Would love it on Sundays, employ more bus drivers. It is difficult to travel on sidewalks with a wheel chair. Those need to be improved and maintained and there needs to be more of them. NO weapons allowed on buses.
Fix highway 60 between Show Low and Springerville before it's destroyed.
Roadway congestion is a major issue. Especially during the summer months. Also, a huge issue at Hwy 260 and Woolford with vehicles turning left off 260 onto Woolford. Tons of collisions!
I have not seen this format of a survey before. Excellent format and content. MAGA.
It seems like the communities with higher population will get more priority because they have a bigger voice, but that doesn't mean they have the greatest need.
County roads needs to be milled and paved and not just fill in the cracks that doesn't last very long. Especially the road between Holbrook & Heber
Adding more turn lanes to a lot of the businesses on the highway such as ellsworth heights, rainbow lake dr
The safety on the bus is dicey. it's not the bus driver's fault, but drunk people (if the driver lets the on the bus) can get aggressive during the summer. We need more bus drivers to fill in if someone is sick or tired of dealing with rude people. Plus, a ban on weapons on the bus is needed. Need more stops in Snow Flake.
US 60 needs to be widened (4 lane) between Vernon to Show Low. It should also include a wide breakdown lane.
We're really in need of dedicated like path/trails-paved.
I think the town needs more bike paths, people want to ride, but it can be rough
Bike Lanes
Widen Penrod Road- cut Cub Rd thru to hospital-widen 260 all the way from Payson to New Mexico.
Thank you for doing this survey!
I would like to ride the bus, but the hours do not correspond with my work hours
The highway from Rim to Heber Must up as four lane highway. More passing lanes Heber to Show Low.
Penrod Rd needs to be 55 MPH and most roads (not Highway) in lakeside leave no room for pedestrians, unsafe to take a walk or ride bikes with my kids, very frustrating
Increased police presence. Don't look the other way when seasonal visitors break the law.
Need a traffic light at Meadow and Woodland. It is a very dangerous intersection.
We need to deal with dust issues in communities caused by dirt roads. Too much traffic to justify dirt roads in our neighborhoods! It is a deterrent for economic growth, for air quality and overall health which impacts business and tourism as well!
I live on a main artery and it's dirt. Tons of dust
More arrow signs so it's safer to make turns. They need to do roadwork at night so it's safer for both workers and the drivers. It's not hot either.
It would be great to have sidewalks and bike path on both sides of White Mtn. Vlcd by movie theater and along White Mtn. Blvd to Lakeside
We need stores up here, like Fry's, Golden Corral & either Sam's Club or Costco, & ray's pizza & bring rt black bull back
Need arrows on all 4 directions on Deuce of Clubs/Cooley light. Traffic lights at Old Linden Road/Hwy 260 and Deuce of clubs/9th should flash for yield after 8pm.
I have been a full-time resident of Pinetop for 26 years. In that time I have seen many improvements to put roads. While I am grateful for what has been accomplished, I feel we still have problems that need to be addressed. I would like to see better road maintenance on all our roads. Winter takes a toll and too often repairs are not done in a timely manner. My biggest concern however, is the intersection of Pine Lake road and Hwy 260. I feel a traffic light is needed there. Traffic comes westbound down the hill on 260 often at a high rate of speed. There is a fire station on Pine Lake road that needs a safe way to get into 260. There is also a Circle K that has multiple entrances that cause confusion about right of way. Cars and trucks often park at Circle K in such a way that they block the view of oncoming traffic for cars attempting to turn left from Pine Lake Road into 260. It is a very dangerous situation that needs to be addressed. A few years ago there was an accident at this intersection that killed 3 people and badly injured several more. At that time those of us that live in Pine Lake Road were told that we would be next in line for a traffic light after the one at Penrod and 260 was installed. I think the time for that light has come before more lives are lost.
Over all pretty good- summer visitor times lots of congestion- left turns difficulty into business
More handicap friendly embellishes
Repair pot holes in a timely manner. the $100 is for the road from Heber to Show Low

Survey Response to Survey Question #8
A lot of homes and households north of last stop on current transit system
Too many car accidents. Pot holes.
Roads need paved better
Pine Parkway Shopping Mall left turn arrow going both directions - all 4 legs of intersection need one.
Improve safety of intersection White Mountain and Shell Station theater
More left turn signals
Finish road and street repairs started sub division roads not finished. sidewalks needed on central
Need more turn lanes on central Ave and Nicholas S and sidewalks. Turn signals from on this Deuce left and right to central.
I live in Pineridge Estates. Most of the residents are very old. Many are veterans. We have an exceptionally hard time turning left from Pine Lake Road onto White Mountain Blvd. It's scary to make that left. Not only are cars in 4 lanes but there are the "Lion's Den" and "El Patron's" parking lot on one side of White Mountain Blvd. and "Circle K" on the other side of the road with lots of cars also trying to pull out onto White Mountain Blvd. Many people just stamp on the gas and pull out right in front of oncoming cars. It's a very accident-prone intersection. I worry that one of my neighbors will be killed there, not to mention myself or my husband. Another safety issue is that the "Circle K" has three openings onto White Mountain Blvd and a two-car wide opening onto Pine Lake Road to complicate matters further. When driving South on White Mountain Blvd. you really can't safely signal to turn right from White Mountain Blvd onto Pine Lake Road until you're exactly at the intersection because if you signal earlier people exiting the gas station assume you're turning in there and will pull out in front of you unexpectedly. If you wait to signal til the last minute you're likely to get rear ended.....It's just a very unsafe intersection that has needed a traffic light desperately for years. I think your highest priority should be to install a traffic light at this intersection. The fire station is also there and I am truly amazed that a traffic light has not been installed for the safety and efficiency of the fire department long ago.
The roadway noted above needs paving or some other effective method of reducing/eliminating dust.
I used to live in California and moved here about a year ago. The saying about California drivers is true, they do (generally) drive like idiots. But I never had a problem driving until I moved to Show Low. Here, at the intersections mentioned above, I've had way too many close calls. Not that the Show Low drivers are worse than California (they're not!), but your existing traffic controls cram everyone into the intersection at the same time. And that's more accidents waiting to happen.
Please look closely at this unsafe intersection, but also how hazardous the present White Mountain Blvd is to everyone.
I vacation in this area. I have often thought it would be nice to ride my bike between cities to enjoy the beautiful scenery. This is not possible under current conditions. There is no shoulder in many places, and the places there are, are in such bad condition riding a bike is unpleasant. I have ridden my bike on the shoulders between Globe to Show Low. Expanding this infrastructure to include the other cities in this study would enhance my desire to extend my ride.
Some input/coordination with the White Mountain Apache Tribe
I really love Show Low It is quiet and has fresh air and better drinking water than here in Phoenix. I would like to build a small home on my property so that I can live there at least 6 mo. out the year every year. I'm just concerned about the wear on my truck, waiting for electricity, trying to get a septic or other means of running water up there that isn't so expensive in order to do that. I have 21 yrs in retail as a manager and 10 years or warehouse receiving exp. I'm looking forward to being a part of your community. Thank You,
Please consider repaving if fixing highway 60. You have to drive around the holes and depressions in the pavement. It's not safe! And if you hit one, it does damage to your vehicle. A lot of travelers use that road. It needs to be repaved.
Surface conditions on highway 60 between Show Low and Springerville is terrible. Highway 60 East of Springerville has less traffic and more passing lanes than it does between Springerville and Show Low, why? Highway 261, the cracks are so big I prefer to take dirt roads to get to Big Lake.
I appreciate all the hard work that is done to maintain the roads in the Apache/ Navajo county area but I believe more attention needs to be given to the county dirt roads that visitors use to access the forests. Thank you for your time.
Yes. There should be ZERO tolerance for distracted driving. This includes texting while driving. There should also be ZERO tolerance for drivers who crowd bicyclists.
around Charlie Clarks, with several driveways across the street is always precarious
Show Low no longer has slow periods where traffic is manageable. It's busy all year long and with business development concentrated at Show Low's southern city limit, the area has become extremely congested. The road has not been widened in decades yet is expected handle the current level of traffic due to growth.
I urge a 'Complete Streets' planning & design approach as part of the process.

Survey Response to Survey Question #8
Highway 260 is in need of widening...it should have been done a long time ago when the project was started... extremely dangerous road.
1) Highway 60 was just widened at the 77. Poor quality construction, I can still see paint stripes for lanes and transitions are terrible and the construction signs with various speeds have been up for weeks, speed limit to 55, 200 ft. away down to 45, 200 ft. away down to 35 back to 45, construction signs up - no construction for the past three weeks 06/06/18; 2) Highway 60 was just graveled/oiled, what about the daily traffic on such a poor-quality road, maybe a new road? humps/bumps/pot holes. I see 61 was just redone, I doubt the NM/Colorado residents use 61. Springerville/Eager uses for daily traffic, school buses, ME I LIVE IN VERNON, copper-lumber-long haul-New Mexico residents-Colorado residents, RV's seasonal folks -- this is main thoroughfare, awful to drive humpy-bumpy.
4-lane road needs to be built from Show Low to Payson
Many roadways have no shoulder making it extremely dangerous when oncoming traffic crosses the line. Need more passing lanes!
The previous question which asked to distribute a hypothetical dollar amt. to the program of desire did not include what would have been my first and only choice - anti-littering & highway clean-up initiatives (including an education piece).
The light at Whipple and 260 backs up going towards Pinetop due to the long-left turn and the long arrow at whippet. The main highway should move traffic not giving priority to the whippet street traffic. During mid-summer it can back up clear to the meadow. At times I have counted only 4_5 cars going towards Pinetop gets thru the light. Especially during high volume times like July 4, it can take 1/2 hour to get from Show Low to wagon wheel. I drive this every day and the main highway is always giving way to the side road traffic. This is backwards. Let 260 move and make whippet wait
Stop the practice of brining major roadways to a screeching halt so that one vehicle can make a left turn onto an open road with limited traffic, i.e., the idiotic new light on 260 approaching Show Low, or the multiple uncoordinated traffic lights through the city. Additionally, the absurd speed limit between Show Low and Pine Top suggests Transportation management is more interested in revenue generation from frustrated drivers than traffic movement.
State highways need to be traveled safely. Leaving Show low going into Linden, the highway is very dark and it is hard to see lines in the dark with any bad weather. Painting and markers/reflectors/delineation would be great!
No Bicycles. Left turn lane at Burton Rd.
I fully support determining the best way to maintain street quality, improve safety, etc., but am more interested/focused on facilitating alternative transportation in the form of SEPARATED (not a bike lane attached to a highway which I consider extremely unsafe) walkways, sidewalks, pathways, bike paths, etc. Who wants to walk or ride immediately adjacent to a busy highway? Even 5 feet offset makes a huge difference, and make them wide enough for two people to bike side by side. Thanks!!!
Rim Road west of show low could be paved as an alternate route when White Mtn. Blvd. is blocked and as an alt evac for fire.
Traffic at 60/260 could stand to be a little longer for left turning traffic, especially now with summer congestion.
Traffic is getting worse and more dangerous due to increased seasonal traffic.
Need more by bypass options from town to town much like Prescott and Prescott Valley has done.
Teach the flat lander desert dwellers to SLOW down.
Get out of our f……lives. You and your ilk are bureaucratic swarms of infesting parasites on our lives. The last thing Americans and Arizona's desire is ANOTHER executive government agency exercising bureaucratic control over them IN THE NAME OF SAFETY. WE WANT LIBERTY, NOT SAFETY. GET OUT OF OUR LIVES.
Drivers courses for beginning drivers would be a boon to safety in the area.
Please widen the highway to 4 lanes from Show Low to Forest Lakes!
Need more speed limit signs between Heber & Show Low
Too many people have to die before you do anything about these problems. Five years ago a lot of roads could have been fixed. Including the promised widening of Hwy 260. I would be interested to see how many accidents have occurred because of the two-lane Hwy all the way from Heber/Overgaard.
Re paint the roads to signify if you're going straight turning
Public transport would be such an amazing community booster for show low cause so many choose to go without or simply not able to get places because of no way to get around besides a personal vehicle or man power which most aren't willing to give
Hwy 60 from Show Low to Springerville gets rougher every day.
We need more connections to Penrod Road from SR 260
Speed limits need enforced. Woodland lake road is good example.

Survey Response to Survey Question #8
Please consider adding more bike lanes to the roads. Or at least the very few bike lanes that we have in the area it would be nice to not have to dodge rocks, glass etc when riding.
Please raise the manhole covers on the road so it is a smoother ride. Some are very low and it jars you if you hit them with your tires.
More stop lights in the Pinetop-lakeside area, and sidewalk connection from show low theatre to pizza hut
Fix shoulders on highways
Intersection in front of Safeway in Show Low is very congested
Hwy 77 needs to be 4 lanes from Show Low to Holbrook Hwy 60 and 61 need to be widened or put in more passing lanes and repaved
The highway between Holbrook and Heber is a death trap, with high speed reckless drivers, and no passing lanes.
What are the chances of 4 lanes on State Rt. 77 between Snowflake and Holbrook? And between Show Low and Lakeside? That would reduce travel frustration.
Please put in passing lanes on Hwy 60 from Vernon to Show Low, build the road from Hwy 260 to Penrod Rd, build a bypass road along the rim from Clark Rd past Pinetop.
From Phx side of Show Low, need a cutoff road to Lakeside/PT. Raise speed limit on Porter Mtn Rd to S.L.
Reduce the speed limit to 55 mph on US-180 through Nutrioso (similar to the reduction on US-60 through the Vernon intersection).
More reflective lines on roadway (260)
Economic development is very important to improve the quality of life for folks who live here year-round. That will also attract more people to move here. It should be our top priority.
We need a light at Rainbow Lake drive
In regard to the proposed four- lane widening along the stretch of the 260 between Heber and Show Low, I am NOT in favor of this proposal. I would much rather see the speed limit dropped to 55 mph along its entire length. A stronger presence of DPS and Show Low police would also help. The adverse environmental impact of widening the 260 is just not worth it.
Need for stop lights in Pinetop. One at Woodland Rd and redesign intersection of Penrod.
A traffic light is needed on US 60 Deuce of Clubs at Safeway shopping center.
When Chip sealing rock is laid down, too many people do not follow the posted very slow speed limit and therefore many chipped windshields result from opposite traffic flow. Suggest packing the rock down with machinery instead of having vehicles doing it.
Need new and better roads to improve travel and safety, and better bike lanes for outdoors
We need more arterial highways to connect Show Low to Pine top-Lakeside and Show Low to Taylor-Snowflake. Widening Whipple, Central, and Woolford would be a great start, they need more lanes. Wooldford needs to be completed to Penrod. Central should be extended north to 77. We need a road from the 60 by Torreon cut through to the 260-south end of Show Low. We need Scott Ranch Road to connect to Penrod. Penrod needs to be widened from Show Low to Lakeside to allow more traffic and faster flow. Smith Ranch Road near Linden needs to extend across to the 77.
ADOT needs to listen to the safety concerns! If a community indicates that they need a traffic light, then ADOT should take that comment seriously. It should not take an incident, crash, injury, or death for ADOT to consider putting in a traffic light. The local citizens recognize when there is an issue and ADOT needs to listen to those concerns! When the actual traffic study is done, put the vehicle counting devices where the citizens recommend and during the times the citizens indicate there is a problem, i.e. don't do a traffic count by a school during summer break, it needs to be during a school session to get accurate data.
City of Show Low is planting trees on the north side of US 60, east of Clark Rd/SR 260 that blocks the view of ADOT signage. The radar speed-warning sign on US 60 needs to be moved to the block west of the T-intersection with Whipple, to discourage eastbound motorists from accelerating back to 45 mph as they approach that intersection. More to the point, that intersection would benefit greatly from a traffic signal as it is the site of numerous vehicle collisions.
Such a beautiful area with limited bike routes. Biking could be such a boon to business if opportunities were here for Valley bikers and families.
Need to plan for future growth. Lot of places through Show Low and Pinetop-Lakeside are terrifying trying to turn left during peak seasons but don't want a bunch of stop lights causing more congestion either
Traffic signal timing is non-existent, or so it seems. As mentioned, Woodland Rd is the worst.
Bike lanes always in new development, we have such a beautiful community for cycling and so much opportunity to make it better than it already is. Getting people active healthy and invested in their community, thx for the survey

Survey Response to Survey Question #8
I could probably ride a bicycle to anywhere in Pinetop-Lakeside almost as fast as driving but it's not very safe to do this. Put in paved bike paths along Billy Creek, or other areas without traffic, with connectors to pubs and shopping & will use them
Used to be an avid road cyclist, but the roads have become way to dangerous due to increased car traffic. Not safe by any means.
Reservation roadways need attention.
Need a bypass road around Show Low. When there is an accident or incident on SR 260, it can be impossible to get up to Pinetop, to Snowflake, etc.
Would like to see bike lanes and bike safety a priority. The White Mountains could be a Mecca for rode and mountain bikers. Well-marked bike lanes are a must!!
Wider bike lanes. More warning signs
More ADOT message boards in region.
We must improve traffic management when an accident occurs. There is extremely poor traffic management during these incidents causing significant backups. This is managed so much better everywhere else. Since there are little to no other options to most of us aside from 260, we must assign some of those on scene to improve traffic flow and avoid traffic coming to a standstill. Thank you for asking.
This community has an amazing climate for outdoor activity, the more safe and accessible outdoor physical activities are (i.e. bike lanes, sidewalks, trails) the better for the community as a whole.
Improved bike access could be a huge economic boon to our community. We could become a biking destination. Currently weather patterns are inhibiting the ski tourist draw but biking could be a nearly year-round draw.
We live in a rural area where public transportation between cities isn't realistic. The costs of running a bus or other transportation system would be far higher than the benefits for the few people that live here. There is no problem with maintaining roads or paying for safer intersections but asking for public transportation between small towns or a bus system is not realistic.
Coordinating the traffic lights would be an inexpensive fix that could be done quickly without a huge capital outlay to improve traffic flow through our towns.
More highway patrolman
Really need more safe bike lanes
Ban cell phone in cars & Trucks & Enforce the ban
In addition to roadway changes AZDOT needs to champion cell phone safety laws (no use while driving) that will improve things a ton.
I dare anybody involved in community planning to try run errands by walking or cycling. The built environment clearly shows that this is not a priority and it's ridiculous to have to use automobiles to get around these tiny communities!
The roads from Tucson to Pinetop have been very well maintained and improved over the years! Good job!
The time on lights changing from green to red needs work there ether way to quick or way to slow I have be stuck at the light on Old Linden Road turn on the Duece of Clubs for 30 minutes
Concho highway could really use a bike lane or shoulder for bikes. A lot of professional bikers are using it and in the 35 no passing zone it can make getting around them dangerous.
People in this area drive too aggressively and enforcement is not sufficient
Investigate Apache County for misappropriation of funds, malfeasance and dereliction of duties (they hire unqualified assessors)
It would be nice to have more connections with Penrod as a way to relieve congestion on White Mtn. Blvd.
The side streets in Pinetop are in dire need of resurfacing and/or new pavement. Patching no longer works, as they get torn the second the first snow plow goes over, and pot holes keep widening each year.
Should have included Heber/Overgaard in this map. We pay taxes too!
More traffic lights. We need to stop the flow of traffic in some parts of town. Especially in the summer time. :)
Members of the public need more access to public transportation. That will help improve economic issues for the region.
How do I contact the Person who would authorize a turn arrow on a state road?
Please consider a bus route down Old Linden Road. Also, look into white pavement to reduce the heat produced from black pavement
Lights at intersections are needed!!
We need left turn lights all way round @ Central & the Deuce

Survey Response to Survey Question #8
I would like to see more left turn arrows and wider highways to travel to and from Show Low or the White Mountains.
The condition of State Roads that run through Show Low are in terrible condition also, there are three main areas that need better signaling at the following intersections;1. State Route 60 & Central Ave 2. State Route 60 & W. Owens 3. State Route 260 & Cub Lake Rd/Show Low Lake Rd.
Put the traffic light at Old Linden Road and 260 on a timer so it only works during the busy time of day
It would also help if people knew how to drive and use the lanes correctly.
Please add the turn arrow at the Deuce and Central
More safe passing lanes into the region and lights timed to support the highways through town would be majorly beneficial.
Street lighting and drainage is another issue
It would be great if the White Mountain Transport made the trip from Holbrook/Taylor Snowflake to Show Low earlier in the day! Specifically, for people who work in Show Low!
Pinetop-Lakeside: Our paved residential streets have not been maintained for more than 25 years due to no state funding of any kind. Our streets are deteriorating to dirt. We desperately need state support to restore our residential streets.
The first questions are not worded in such a way to make sense. I left them blank. But, this area has a terrible issue with seasonal traffic and there are also problems with connectivity between communities.
You need to tax plates on trailers to bring in additional revenue so roads in areas outside of Phoenix can be paved on a regular basis not every 15 to 20 years the roads become hazardous when not maintained.
Start at White Mountain Boulevard and Woolford Road, almost a weekly accident.
The road network in the area is really pretty good. Worst is during holiday week/weekends when visitors are in the area.
We have many issues in Apache County, ADOT controlled routes often being cited from constituents with concerns. Any additional input needed, please contact me. Doyel Shamley, Apache County Supervisor, D3
I grew up in the White Mountains and my parents still reside in the White Mountains so I have an interest in the positive development of the area.
People in the mountains a lot of them don't use their turning signals.
I propose study for road/highway on 60 that goes around Show Low from the Southwest direct to Pinetop Lakeside area.
Thank you for asking. Will be able to have a public forum to see the results of the surveys?
Bypasses will soon be a needed thing and would help
Payson needs a bypass from the Beeline to 260. This would help a great deal especially during holidays. It can take 45 minutes to get through town.
Build wildlife tunnels or bridges that people can always use to safely cross freeways.
Don't discount a transit solution just because you "can't" spend money on it. Find a way to support transit solutions here and throughout Arizona. Be really Multimodal.
Glad a friend sent me this link
Widening state highways to a minimum of 2 lanes for each direction would reduce traffic congestion between communities, improve safety, and provide for easier freight delivery which would in turn provide for better economic development. With improved economic development additional tourism dollars could then be allocated to bicycle lanes, sidewalks, and trails.
Show Low and the surrounding areas are a nice rural community. Please try to keep it from becoming a metroarea!
Have lived in area for over 80 years & traffic conditions have gotten to be horrible. Can hardly make a left hand turn across traffic any more.
A route connecting 260 from the intersection of 260 and 60 to Pinetop without having to go through Show Low would be nice.
I love the area and the pristine landscape and I would like to see it maintain it's current level or better. The roads are starting to show their age and there isn't much room on the shoulders if you're walking.
Please no more roadway lighting. Signal coordination would go a long way.
Make it a toll road