



Southern Navajo and Apache Counties **Transportation Plan**

Final Report | Version 1.2 | March 29, 2019

Prepared for:

ADOT Multimodal Planning Division
Planning Assistance for Rural Areas Program



Prepared by:

Kimley»Horn

In Association with

Applied Economics, LLC

Table of Contents

Executive Summary	ix
Recommended Projects.....	xiii
1. Introduction.....	2
1.1 Study Objectives	2
1.2 Study Area	2
1.3 Study Process.....	4
2. Current Conditions.....	6
2.1 Previous Plans and Studies.....	6
2.2 Road Characteristics	7
2.3 Road Functional Classification	7
2.4 Current Traffic Volumes and Congestion Levels	14
2.5 Pavement Conditions.....	18
2.6 Public Transit.....	22
2.7 Non-Motorized Transportation.....	25
2.8 Transportation Safety	27
3. Economic and Demographic Overview	32
3.1 Population and Demographics.....	32
3.2 Workforce.....	33
3.3 Economy	35
3.4 Summary of Findings	36
4. Future Transportation Conditions.....	39
4.1 Forecasted Traffic Volumes and Congestion	39
4.2 Future Non-Motorized Transportation Infrastructure	39

4.3 Future Employment Centers.....	43
4.4 Future Residential Growth Areas.....	43
5. Improvement Alternatives	45
5.1 Transportation Needs	45
5.2 Major Capital Projects	45
5.3 Safety Projects.....	47
5.4 Traffic Operations Projects	49
5.5 Multimodal Projects	50
5.6 Policies and Studies.....	50
6. Evaluation Criteria and Alternatives Analysis.....	54
6.1 Evaluation Methodology.....	54
6.2 Project Scoring Results	56
6.3 Economic Evaluation.....	59
7. Recommended Plan of Improvements.....	62
8. Public Involvement	69
8.1 Public Outreach Phase 1	69
8.2 Public Outreach Phase 2	70
Appendix A – Large Capital Project Detail Sheets	72
Appendix B – Economic Analysis.....	85
Impact Approach and Assumptions.....	85
Economic Evaluation of Proposed Transportation Improvements.....	86
Appendix C – High Priority Project Refinement	101
Appendix D – Phase 1 Survey Responses	113
Appendix E – Phase 2 Comment Sheet Responses	137

Table of Figures

Figure E-1: Study Area.....	x
Figure E-2: Recommended Projects.....	xvi
Figure 1: Study Area.....	3
Figure 2: Study Process.....	4
Figure 3: Roadway Ownership.....	9
Figure 4: Number of Through Traffic Lanes and ADOT Traffic Control.....	10
Figure 5: Traffic Control Devices in Show Low and Pinetop-Lakeside.....	11
Figure 6: Speed Limits.....	12
Figure 7: Functional Classification.....	13
Figure 8: Traffic Counts and Level of Service for State Highways.....	15
Figure 9: City of Show Low Traffic Counts and Level of Service.....	16
Figure 10: Percentage of Trucks on State Highways.....	17
Figure 11: ADOT Pavement Condition (2015).....	19
Figure 12: City of Show Low Pavement Conditions.....	20
Figure 13: Key Unpaved Roads.....	21
Figure 14: Four Seasons Connection Map.....	23
Figure 15: White Mountain Connection Map.....	24
Figure 16: Non-Motorized Transportation Infrastructure in Show Low and Pinetop-Lakeside....	26
Figure 17: Reported Vehicle Crashes (2012-2016).....	28
Figure 18: Reported Bicycle and Pedestrian Crashes (2012-2016).....	29
Figure 19: NACOG RSTSP High Crash Locations.....	30
Figure 20: 2040 Projected Traffic Volumes and Level of Service.....	40
Figure 21: 2040 Projected Traffic Volumes and Level of Service within the City of Show Low	41
Figure 22: Proposed Future Non-Motorized Infrastructure.....	42

Figure 23: Recommended Projects	67
Figure B-1: Scott Ranch Road Phase II Assumed Land Uses	87
Figure B-2: Thornton Corridor Phases I-IV Assumed Land Uses.....	89
Figure B-3: Woolford Road Crossing Assumed Land Uses.....	91
Figure B-4: Summit Trail Extension Assumed Land Uses	93
Figure B-5: Woolford Road/Central Ave Improvements Assumed Land Uses	95
Figure B-6: Stanford Drive Improvements Assumed Land Uses.....	97
Figure B-7: Porter Mountain Road/CR 3144/CR 3148 Improvements Assumed Land Uses.....	98
Figure C-1: Woolford Road/Central Avenue Cross-Section A (74')	103
Figure C-2: Woolford Road/Central Avenue Cross-Section B (68')	103
Figure C-3: Woolford Road/Central Avenue Cross-Section C (68')	104
Figure C-4: SR 260 Cross-Section (98')	105
Figure C-5: SR 260 Narrow Cross-Section (80')	106
Figure C-6: SR 260 (Old Linden Road to US 60) Alternative A	109
Figure C-7: SR 260 (Old Linden Road to US 60) Alternative B	109
Figure C-8: SR 260 (MP 337 to Old Linden Road)	110
Figure D-1: Responses to Question 1	113
Figure D-2: Responses to Question 2	115
Figure D-3: Responses to Question 4	121

Table of Tables

Table E-1: Summary of Socioeconomic Impacts.....	xii
Table E-2: Short-Term Project Recommendations.....	xiii
Table E-3: Mid-Term Project Recommendations.....	xiv
Table E-4: Long-Term Project Recommendations	xv
Table 1: TAC Recommended High-Priority Projects from Past Studies	7
Table 2: Economic Comparative Advantages and Disadvantages	37
Table 3: Major Capital Projects Advanced to Project Evaluation	46
Table 4: Safety Projects Advanced to Project Evaluation.....	47
Table 5: Traffic Operations Projects Advancing to Project Evaluation.....	49
Table 6: Multimodal Projects Advanced to Project Evaluation	50
Table 7: Additional Study Needs	51
Table 8: Project Scoring Methodology.....	54
Table 9: Major Capital Projects Scoring Results	56
Table 10: Safety Projects Scoring Results.....	57
Table 11: Traffic Operations Projects Scoring Results	58
Table 12: Multimodal Projects Scoring Results	58
Table 13: Summary of Socioeconomic Impacts	60
Table 14: Short-Term Project Recommendations.....	63
Table 15: Mid-Term Project Recommendations	64
Table 16: Long-Term Project Recommendations.....	64
Table 17: Projects Removed from Consideration	66
Table D-1: Responses to Question 1	113
Table D-2: Responses to Question 2	114
Table D-3: Responses to Question 4	120

Table D-4: Responses to Question 5122

Table D-5: Responses to Question 7124

Table D-6: Responses to Question 8 125

Abbreviations

- ▲ **(4FRI)** Four Forest Restoration Initiative
- ▲ **(ADOT)** Arizona Department of Transportation
- ▲ **(ADT)** Average Daily Traffic
- ▲ **(BUILD)** Better Utilizing Investments to Leverage Development
- ▲ **(CE)** Categorical Exclusion
- ▲ **(CIPs)** Capital Improvement Plans
- ▲ **(CPS)** Corridor Profile Study
- ▲ **(HSIP)** Highway Safety Improvement Program
- ▲ **(HURF)** Highway User Revenue Fund Exchange
- ▲ **(ITS)** Intelligent Transportation Systems
- ▲ **(LOS)** Level of Service
- ▲ **(NACOG)** Northern Arizona Council of Governments
- ▲ **(NEPA)** National Environmental Policy Act
- ▲ **(NHPP)** National Highway Performance Program
- ▲ **(P2P)** Planning to Programming
- ▲ **(PHB)** Pedestrian Hybrid Beacons
- ▲ **(RSTSP)** Regional Strategic Transportation Safety Plan
- ▲ **(STEM)** Science, Technology, Engineering, And Mathematics
- ▲ **(TAC)** Technical Advisory Committee
- ▲ **(TIFIA)** Transportation Infrastructure Finance and Innovation Act
- ▲ **(TIP)** Transportation Investment Plan
- ▲ **(VMS)** Variable Message Signs



Executive Summary

Executive Summary

This study is a long-range multimodal transportation plan that updates the *2007 Southern Navajo/Apache County Sub-Regional Transportation Plan*. The purpose of this project is to identify and prioritize regional transportation investments that will address mobility needs of the communities while supporting economic development in the region.

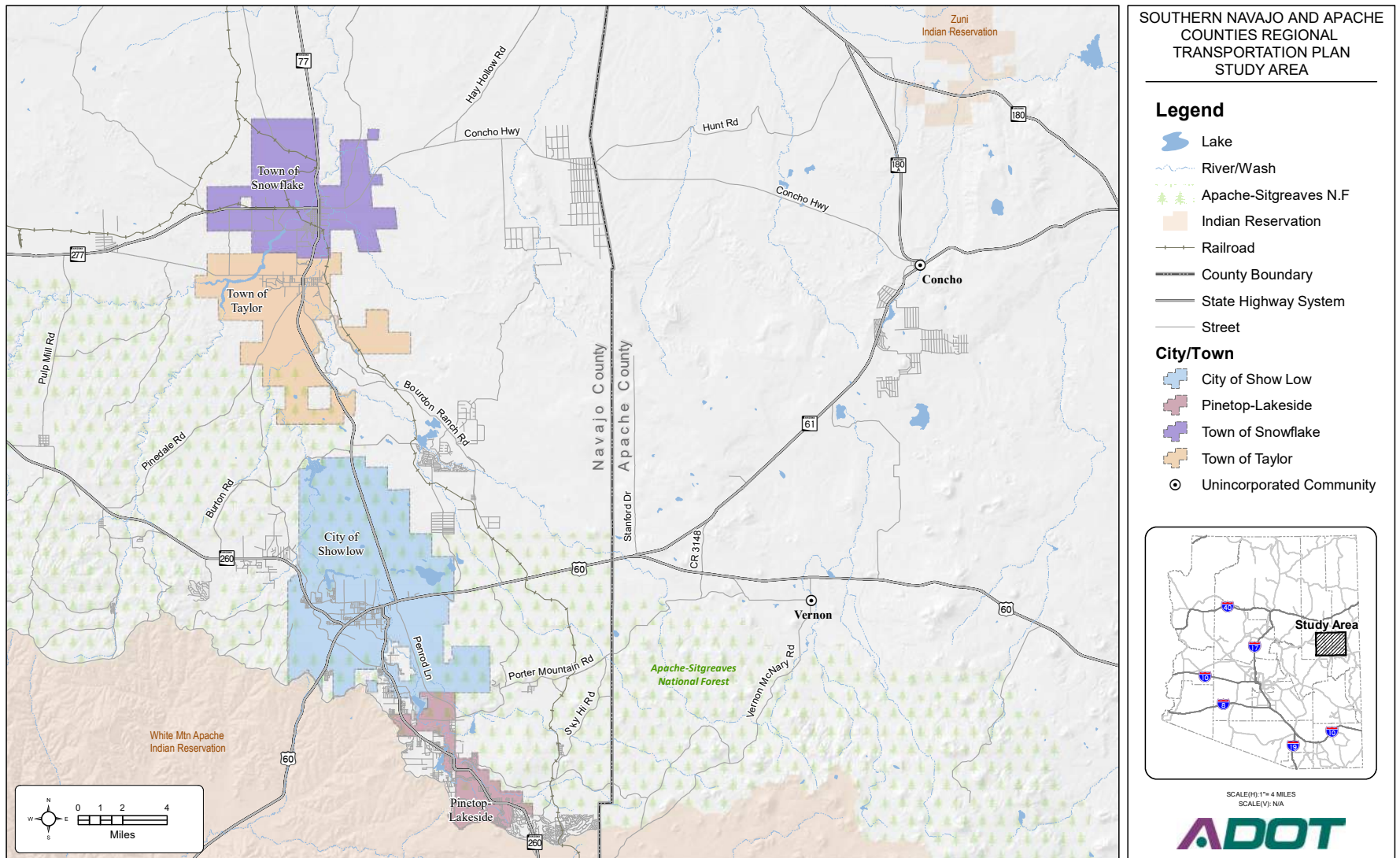
Objectives for the Southern Navajo and Apache Counties Transportation Plan are:

- ▲ Review current and future conditions within the study area.
 - » Document growth patterns and known major future development.
 - » Assess multimodal transportation conditions, congestion, freight, transit connectivity, bicycle, pedestrian, intelligent transportation systems (ITS), and safety.
- ▲ Identify transportation issues and needs.
- ▲ Identify and analyze feasible transportation alternatives for addressing transportation 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 programs, and in the Arizona Department of Transportation (ADOT) Planning-to Programming (P2P) process.

The study area is illustrated in **Figure E-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 E-1: Study Area



Transportation Needs

A review of past planning studies in the area, an existing and future conditions analysis, stakeholder engagement, and public involvement led to the identification of transportation needs. The identified transportation needs are as follows:

- ▲ Address Traffic Congestion on Existing or Forecasted Congested Routes
- ▲ Improve Connectivity between Major Roadways in the Region
- ▲ Support Industrial Growth in Industrial Parks and Opportunity Zones
- ▲ Improve Multimodal Safety on SR 260 Between Show Low and Pinetop-Lakeside
- ▲ Support Tourism and Economic Development
- ▲ Address High Crash Rates
- ▲ Improve Emergency Response Times
- ▲ Provide Adequate Evacuation Routes
- ▲ Improve Transit Coverage within the Urban Areas
- ▲ Supplement Regional Transit Connections
- ▲ Increase Multimodal Access to Show Low Medical and Social Services
- ▲ Improve Multimodal Safety

Project Identification

Several potential transportation improvement alternatives were identified from discussions with the Technical Advisory Committee (TAC) and local agency staff, public input, and the traffic and safety analysis. The improvement alternatives were subsequently refined based on additional discussions with the TAC and local agency staff. Projects are organized into five categories:

- ▲ **Major Capital Projects:** New roadways or major improvements to existing roadways (11 projects identified).
- ▲ **Safety Projects:** Improve identified intersections and roadway segments that have been identified in the Northern Arizona Council of Governments (NACOG) Regional Strategic Transportation Safety Plan (RSTSP) and locations identified by local agency stakeholders (21 projects identified).
- ▲ **Traffic Operations Projects:** Improve traffic flow without adding substantially to the existing infrastructure, such as signalizing intersections, adding left-turn phases to existing signals, and adding turn lanes (10 projects identified).
- ▲ **Multimodal Projects:** Improvements to sidewalks, trails, bicycle lanes, and transit (8 projects identified).
- ▲ **Policies/Studies:** Study topics and policy changes that were identified through the public and stakeholder engagement process (8 studies/policy changes identified).

Project Evaluation and Economic Impacts Evaluation

Projects were evaluated using an objective scoring methodology intended to evaluate the entire life cycle of the project, from planning through operations and maintenance. The methodology evaluates the proposed projects on a point-based system, with 100 possible points. The points are broken down into five categories:

- ▲ **Ease of Implementation:** 40 points
- ▲ **Safety:** 20 points
- ▲ **Vehicle Mobility:** 15 points
- ▲ **Freight Mobility:** 5 points
- ▲ **Transit, Bicycle, and Pedestrian Mobility:** 20 points

In addition to the project evaluation, an economic impact evaluation was performed on 10 of the major capital projects. The potential economic impacts were measured in terms of land use (acres by use), nonresidential square footage and employment, housing units (single and multi-family), and population.

The evaluation demonstrated that seven of the projects would provide measurable development impacts:

1. Scott Ranch Road Phase II
2. Thornton Corridor Phases I-IV
3. Woolford Road Crossing
4. Summit Trail Extension
5. Central Avenue/Woolford Road Improvements
6. Stanford Drive Improvements
7. Porter Mountain Road/CR 3144/CR 3148 Paving

The remaining three improvements are described in the evaluation, but do not create quantifiable development potential:

8. US 60 Widening
9. SR 61 Widening
10. SR 77 Widening

A summary of the economic impacts by project is shown in **Table E-1**.

Table E-1: Summary of Socioeconomic Impacts

Project	Primary Acres	Secondary Acres	Housing Units	Population	Nonresidential Square Feet	Employment
Scott Ranch Road Phase II	126.57	110.69	656	1,359	946,000	1,490
Thornton Corridor Phases I-IV	553.54	148.6	1,065	2,533	1,820,000	1,640
Woolford Road Crossing	522.48	13.15	1,379	2,998	865,000	1,120
Summit Trail Extension	992.43	32.23	1,589	3,773	449,000	810
Central Avenue/ Woolford Road Improvements	11.9	192.04	570	1,194	176,000	260
Stanford Drive Improvements	0.0	1,197.33	143	341	43,000	80
Porter Mountain Road/CR 3144/CR 3148	1,147.07	0.00	229	544	0	0
Total	3,353.99	1,694.04	5,631	12,742	4,299,000	5,400

Recommended Projects

Based on the results of the project prioritization and economic evaluation, a list of recommended projects was developed and categorized into short-, mid-, and long-term projects. Short-term projects are shown in **Table E-2**, mid-term projects in **Table E-3**, and long-term projects in **Table E-4**. A map of the recommended projects is included in **Figure E-2**.

High scoring projects (45 points and higher) are listed under short- and mid-term

timeframes considering funding constraints and environmental processes. Projects that scored moderately well (30-40 points) are listed as mid-term and long-term projects based on their scoring outcomes. Low priority projects (25 points or less) are omitted as they likely are not critical within the 2040 horizon year.

The recommended studies were added to the short-term projects list as they will help define additional projects in subsequent years. The short-term projects are the highest priority for identifying grant funding and other funding sources for implementation.

Table E-2: Short-Term Project Recommendations

Map No.	Name	Type	Score	Economic Impact	Prioritization	Est. Cost
1	SR 260/Show Low Lake Road-Cub Lake Road	Safety	65	-	High	\$800,000
2	Scott Ranch Road Phase II	Major Capital	60	Emp: 1,490 Pop: 1,359	High	\$9M-\$11M
3	Woolford Road Crossing	Major Capital	55	Emp: 1,120 Pop: 2,998	High	\$6.5M
4	Thornton Corridor Phases I-IV	Major Capital	50	Emp: 1,640 Pop: 2,533	High	\$3M-\$4M
5	US 60 (MP 352-384)	Safety	45	-	High	\$29.4M
6	Pinetop-Lakeside Pedestrian Safety Study Recommendations	Multimodal	45	-	High	\$8.8M
STUDIES/PLANS						
-	Truck Commodity Study	Study/Policy	N/A	N/A	High	-
-	Consistency of Road Names Study	Study/Policy	N/A	N/A	High	-
-	Left-Turn Phase Study	Study/Policy	N/A	N/A	High	-
-	Traffic Signal Warrant Study	Study/Policy	N/A	N/A	High	-
-	Intersection Turn Lane Analysis	Study/Policy	N/A	N/A	High	-
-	Regional Transit Circulator Feasibility Study	Study/Policy	N/A	N/A	High	-
-	Review Snow Plow Practices	Study/Policy	N/A	N/A	High	-
-	Pavement Preservation/Coordination with Local Agencies	Study/Policy	N/A	N/A	High	-

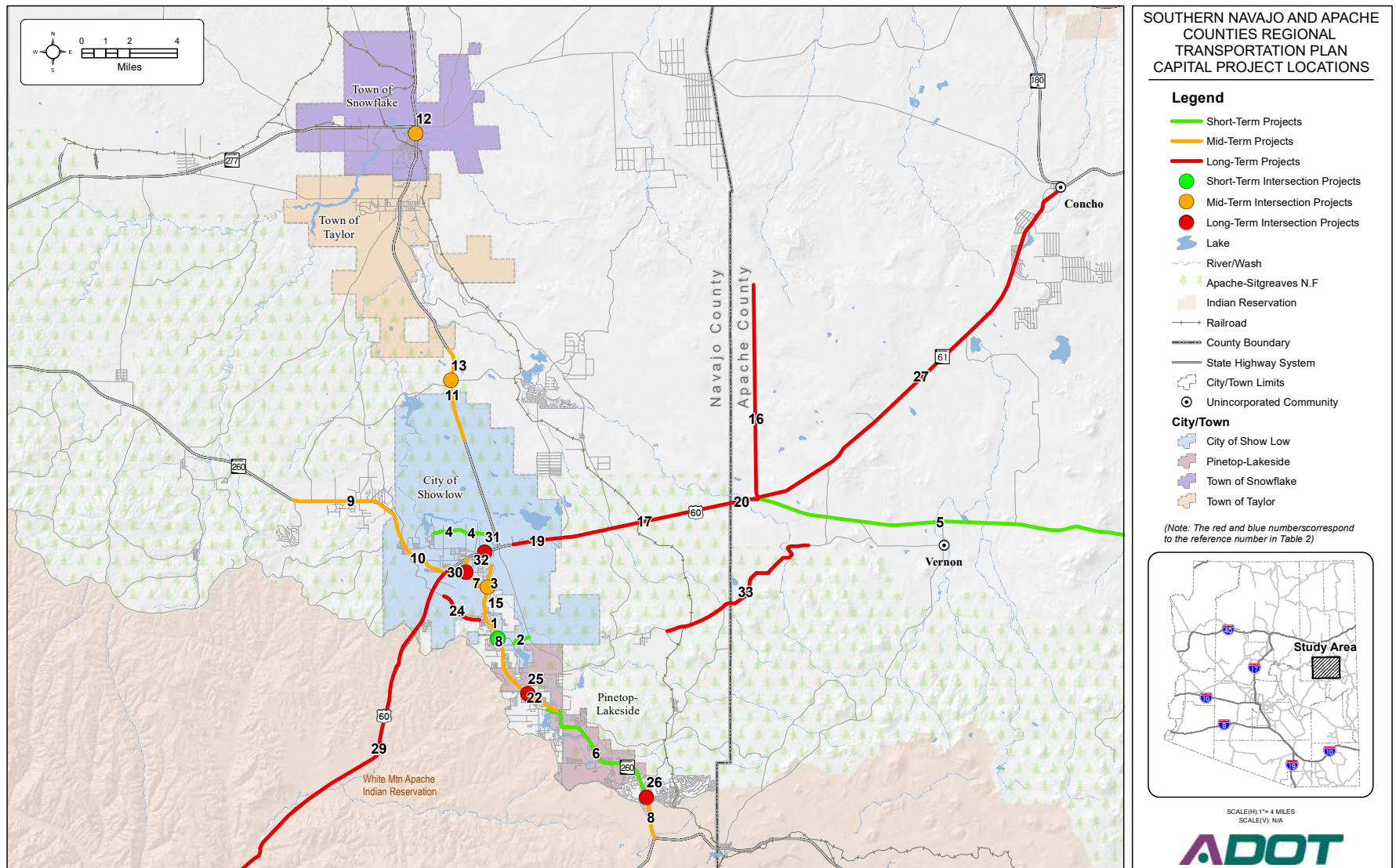
Table E-3: Mid-Term Project Recommendations

Map No.	Name	Type	Score	Economic Impact	Prioritization	Est. Cost
7	Woolford Road/Central Avenue Improvements	Major Capital	55	Emp: 260 Pop: 1,194	High	\$14M-\$15M
8	SR 260 Cross-Section (US 60 to SR 73)	Multimodal	55	-	High	\$20M-\$25M
9	SR 260 Widening (Timberland Road to Old Linden Road)	Major Capital	50	-	High	\$9.5M
10	SR 260 Cross-Section (MP 337-340)	Multimodal	45	-	High	\$7M-\$11.5M
11	SR 77 (MP 347-351)	Safety	40	-	Medium	-
12	SR 77/Center Street (Snowflake)	Safety	40	-	Medium	-
13	SR 77/White Mountain Lake Road	Safety	40	-	Medium	-
14	SR 260 Bus Pull-Outs	Multimodal	40	-	Medium	-
15	SR 260/Woolford Road	Safety	40	-	Medium	-

Table E-4: Long-Term Project Recommendations

Map No.	Name	Type	Score	Economic Impact	Prioritization	Est. Cost
16	Stanford Drive Reconstruction	Major Capital	35	Emp: 80 Pop: 341	Medium	-
17	US 60 Widening (Show Low to Vernon)	Major Capital	35	Low	Medium	-
18	SR 77 Widening (Show Low to Taylor)	Major Capital	35	Low	Medium	-
19	US 60 (MP 341-343)	Safety	35	-	Medium	-
20	US 60 (MP 345-352)	Safety	35	-	Medium	-
21	US 60 Variable Message Signs	Safety	35	-	Medium	-
22	SR 260 Raised Median (Vacation Village Drive to Wagon Wheel Lane)	Safety	35	-	Medium	-
23	Supplement/Expand White Mountain Connection	Multimodal Project	35	-	Medium	-
24	Summit Trail Extension	Major Capital Project	30	Emp: 810 Pop: 3,773	Medium	-
25	SR 260/Rainbow Lake Road	Safety	30	-	Medium	-
26	SR 260/Branding Iron Loop	Safety	30	-	Medium	-
27	SR 61 (MP 352-373)	Safety	30	-	Medium	-
28	SR 260 (SR 277 to US 60)	Safety	30	-	Medium	-
29	US 60 (MP 317 to SR 260)	Safety	30	-	Medium	-
30	Whipple Road Traffic Calming	Traffic Operations	30	-	Medium	-
31	US 60/SR 260 Signal Modifications	Traffic Operations	30	-	Medium	-
32	Whipple St/Central Ave Roundabout	Traffic Operations	30	-	Medium	-
33	Porter Mountain Road/ CR-3144 Paving/ Reconstruction	Major Capital	25	Emp: 0 Pop: 544	Low	-

Figure E-2: Recommended Projects





Introduction

1. Introduction

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

Navajo and Apache Counties are in central-eastern Arizona and the region is a popular destination for winter and summer recreational visitors. During these seasonal peaks, the increased population leads to heavy congestion on the study area roadways.

The purpose of this project is to identify and prioritize regional transportation improvements that will address mobility needs of the communities while supporting economic development in the region.

This document summarizes existing transportation conditions and needs, project evaluations, economic impacts, and transportation improvement recommendations.

1.1 Study Objectives

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

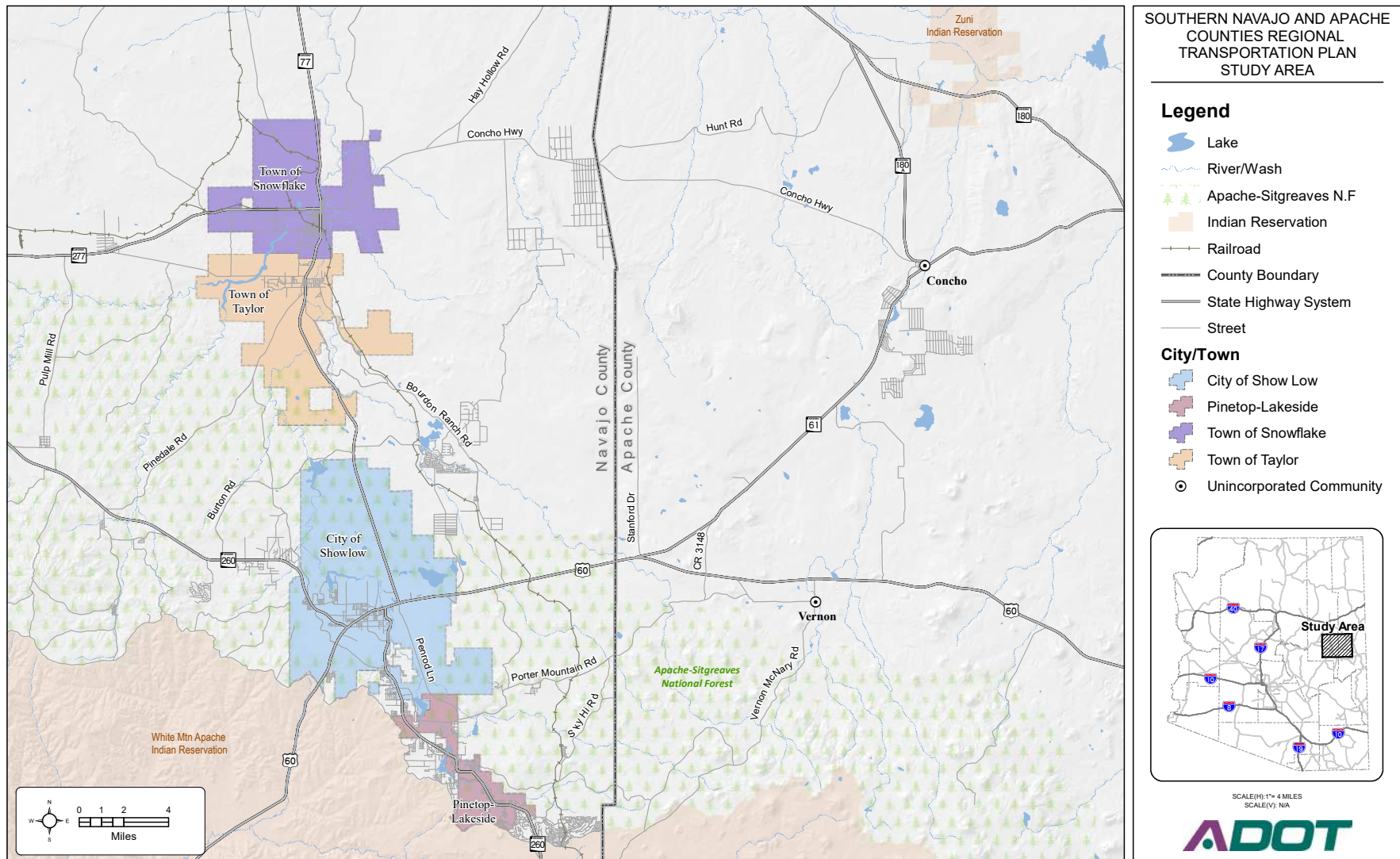
- ▲ Review current and future conditions within the study area
 - » Document growth patterns and known major future development
 - » Assess multimodal transportation conditions, congestion, freight, transit connectivity, bicycle, pedestrian, ITS, and safety.
- ▲ Identify transportation issues and needs.
- ▲ Identify and analyze feasible transportation alternatives for addressing transportation 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 programs, and in the ADOT P2P process.

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

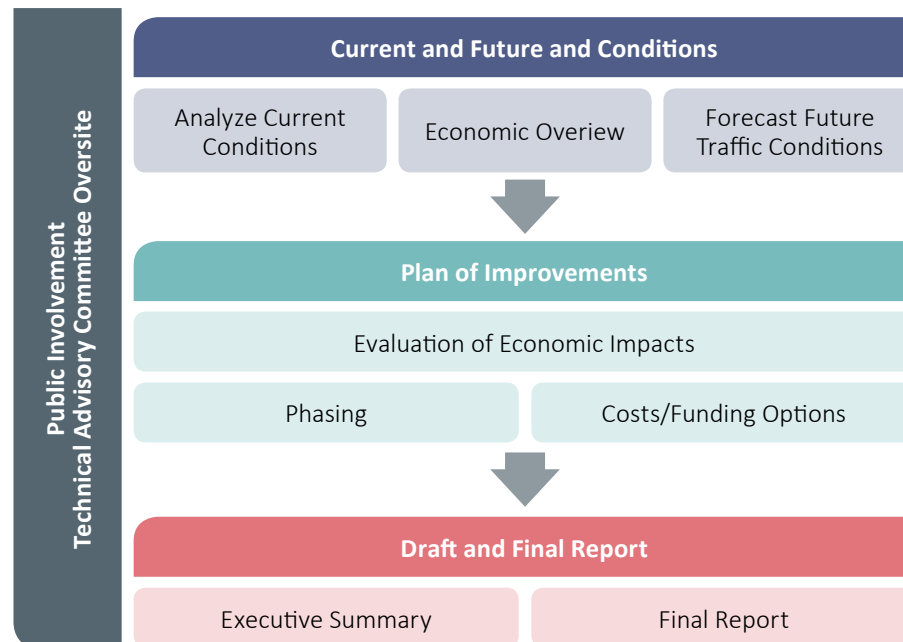


1.3 Study Process

Figure 2 provides an overview of the Southern Navajo and Apache Counties Transportation Plan study process. Two working papers were developed as part of this study:

- ▲ **Working Paper 1:** Current and Future Conditions (July 2018)
- ▲ **Working Paper 2:** Plan of Improvements (February 2019)

Figure 2: Study Process



Transportation projects that emerged from this study were focused on those improvements that could be reasonably and feasibly implemented within existing funding programs. Each project was considered for its potential to positively impact the economic development potential of the region. Available funds include current funding and programming mechanisms (e.g. ADOT 5-Year Program, Local Capital Improvement Plans (CIPs), potential grants, or private investment).

Technical Advisory Committee

A project TAC was established including representatives from study area local governments and agencies. The TAC provided input and insight into the study from both the perspective of each member's respective agency, and considering the broader region. TAC members included representatives of the following agencies:

- ▲ ADOT, Multimodal Planning Division
- ▲ ADOT, 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



Current Conditions

2. Current Conditions

This section provides a summary of the existing conditions of the multimodal transportation system within the study area as well as past analyses that have been performed.

2.1 Previous Plans and Studies

Previous transportation 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)

The findings of these studies were presented to the TAC to determine which recommendations were still viewed as high priorities. These transportation projects, their recommended priority, and current status, are listed in **Table 1** below.

Table 1: TAC Recommended High-Priority Projects from Past Studies

Plan	Recommendation	Study Recommended Priority	Status
Southern Navajo/Apache County Sub-Regional Trans Plan (2007)	Construct Woolford Road extension between SR 260 and Penrod Road	Short-Range	Programmed
	Construct Scott Ranch Road between SR 260 and Penrod Road	Short-Range	Programmed
Show Low Trails and Transit Connectivity Study (2014)	Construct sidewalk on 16th Ave (east side of roadway) south of McNeil Street	Short-Range	Programmed
	Construct shared-use path on Woolford Road from Whipple Street to SR 260	Short-Range	Not implemented
	Construct shared-use path on Woolford Road from SR 260 to Show Low Bluff (with new roadway)	Long-Range	Not implemented
	Construct shared-use path on SR 260 (west side of roadway) from Pine Oaks subdivision to Park Pineway Shopping Center	Medium-Range	Not implemented

2.2 Road Characteristics

This section provides an overview of the physical characteristics and maintenance responsibilities of the road system within the study area.

Figure 3 shows the ownership and maintenance responsibilities of the major roadways within the study area. The roadway ownership can often determine which types of improvements are possible as well as what types of funding sources are available.

Figure 4 shows the number of lanes on major roads within 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 as well as on SR 77 between Taylor and Snowflake, as well as an area between Show Low and Taylor.

ITS support traffic control and traffic management in the study area. 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**.

Figure 6 shows speed limits for study area roadways for which data was available. Speed limits provide a safe, consistent, and reasonable speed to protect drivers, pedestrians, and bicyclists along the roadway.

2.3 Road Functional Classification

Figure 7 shows FHWA functional classifications for roads within the study area. 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 as well as through spacing and location of driveways and intersections.

- ▲ **Minor Arterial:** This facility's purpose is to serve regional/sub-regional traffic circulation needs by moving traffic at moderate speeds, while providing limited access to adjacent land and connectivity to the major arterials.
- ▲ **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.

Figure 3: Roadway Ownership

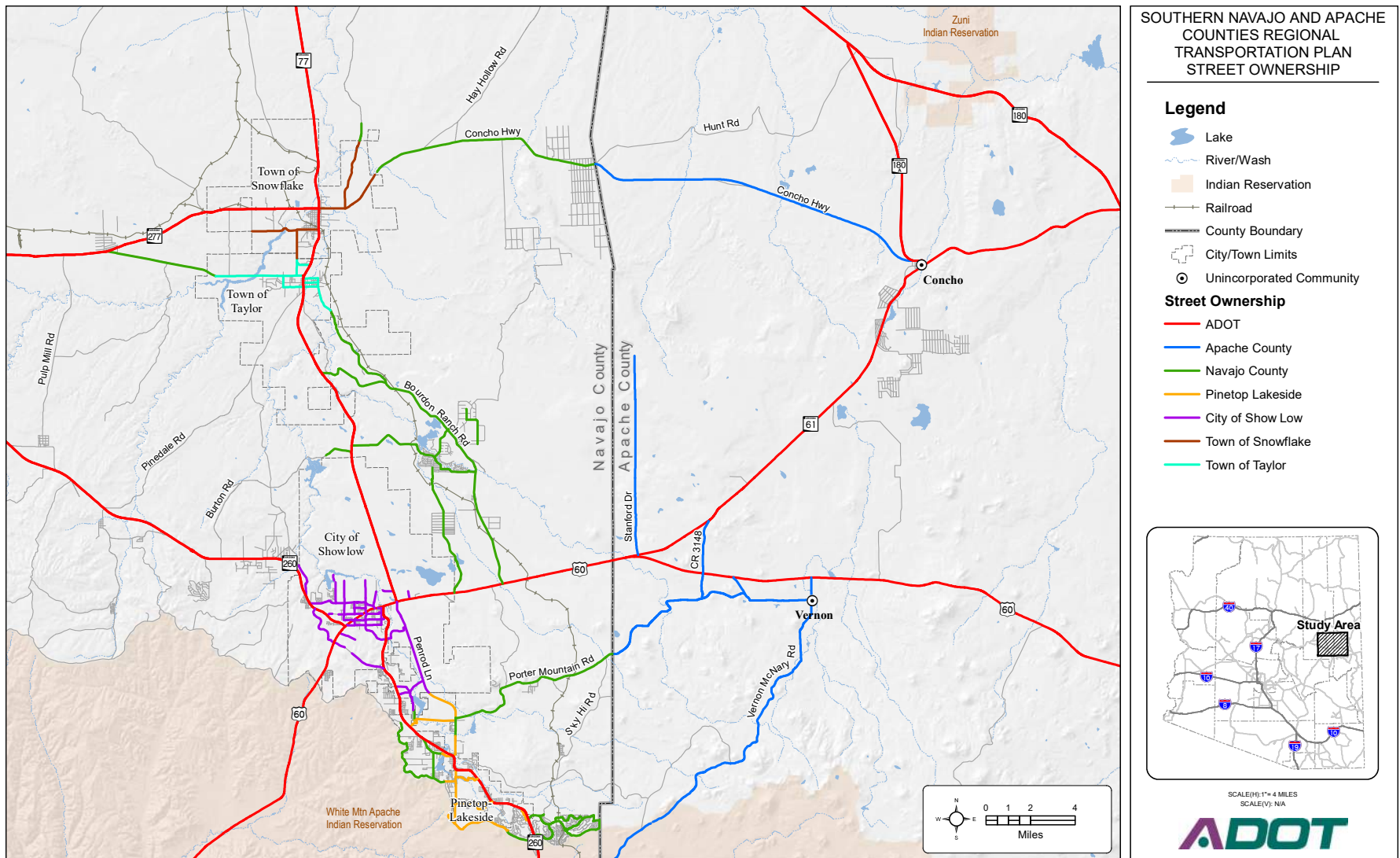


Figure 4: Number of Through Traffic Lanes and ADOT Traffic Control



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

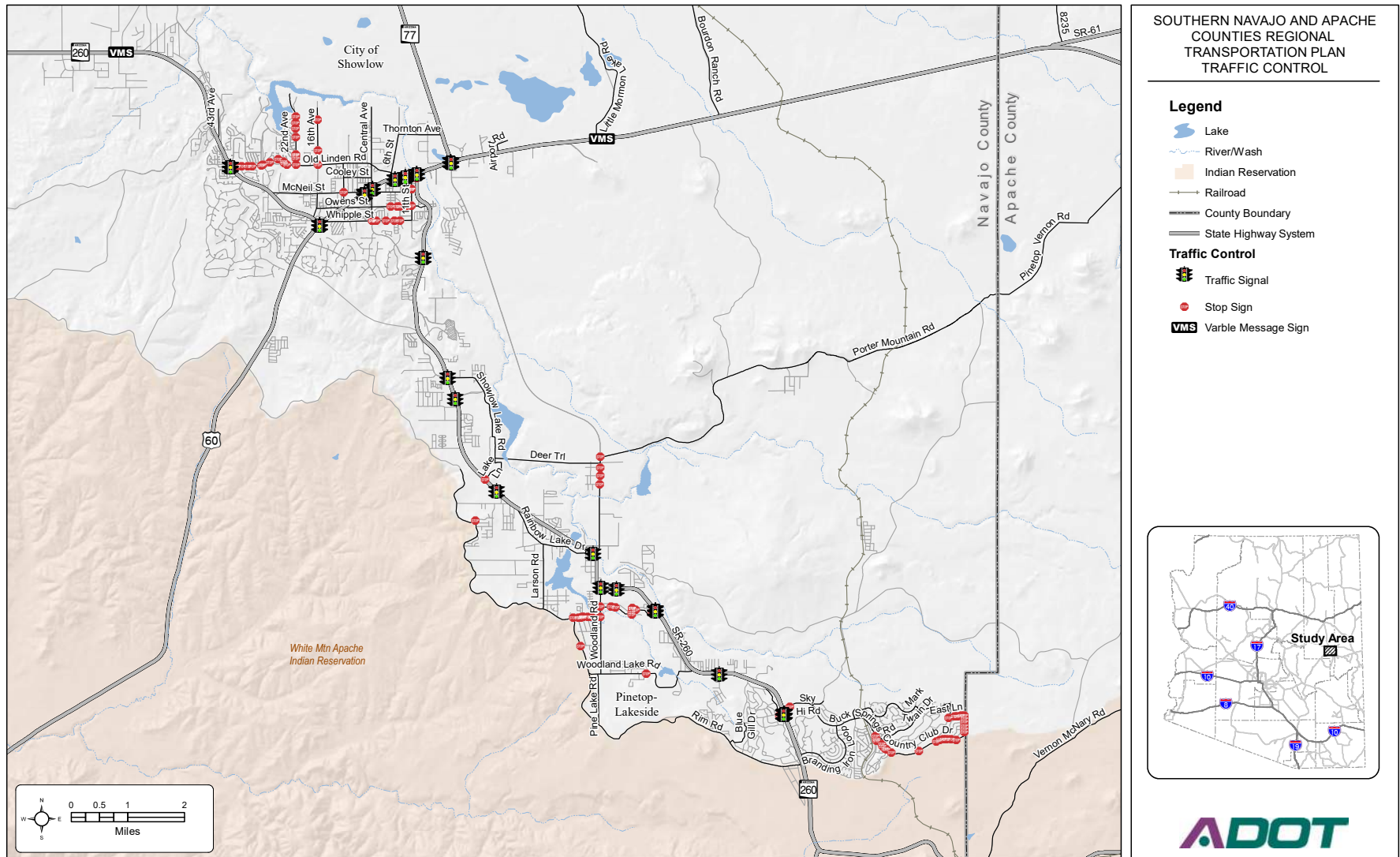


Figure 6: Speed Limits

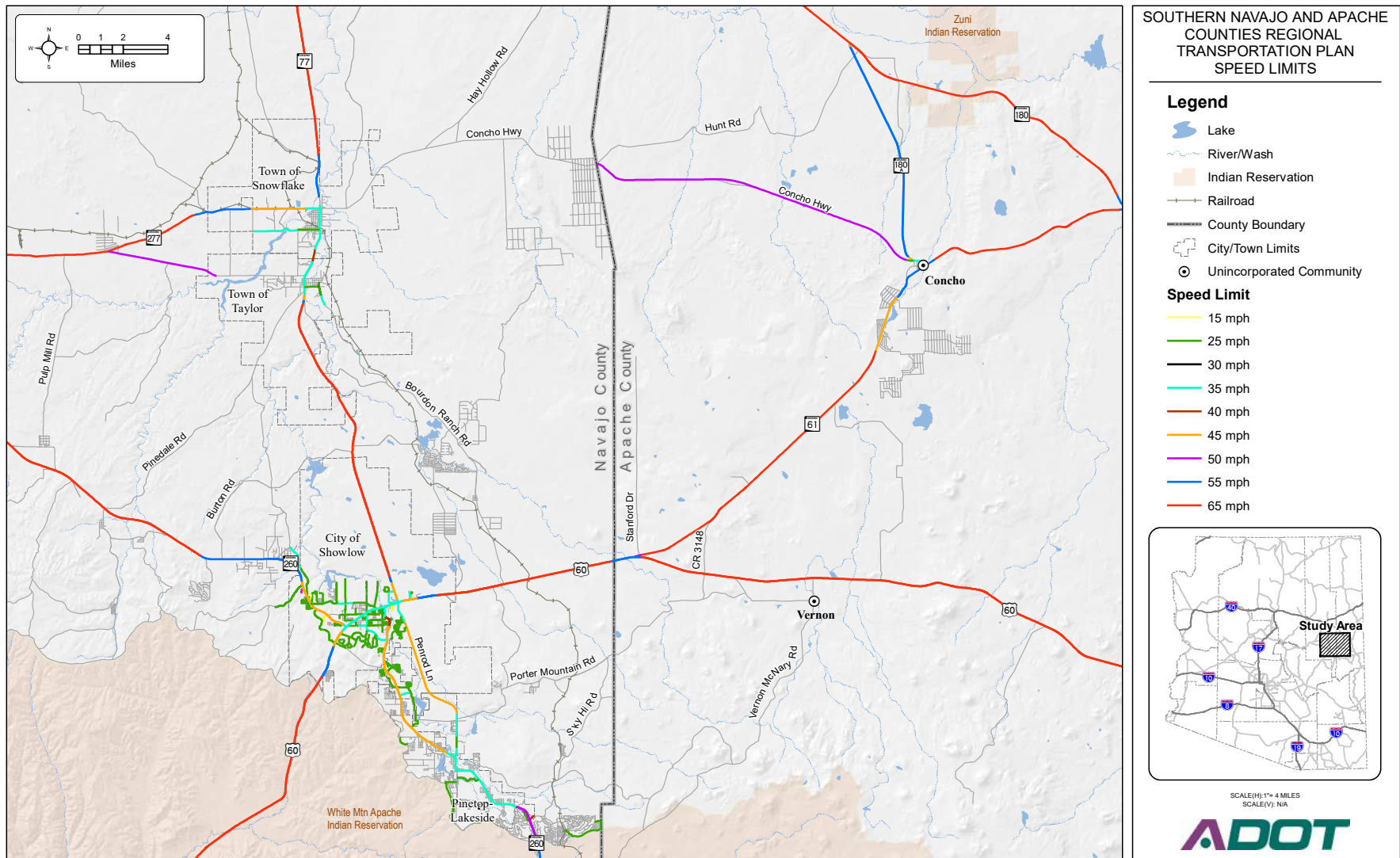
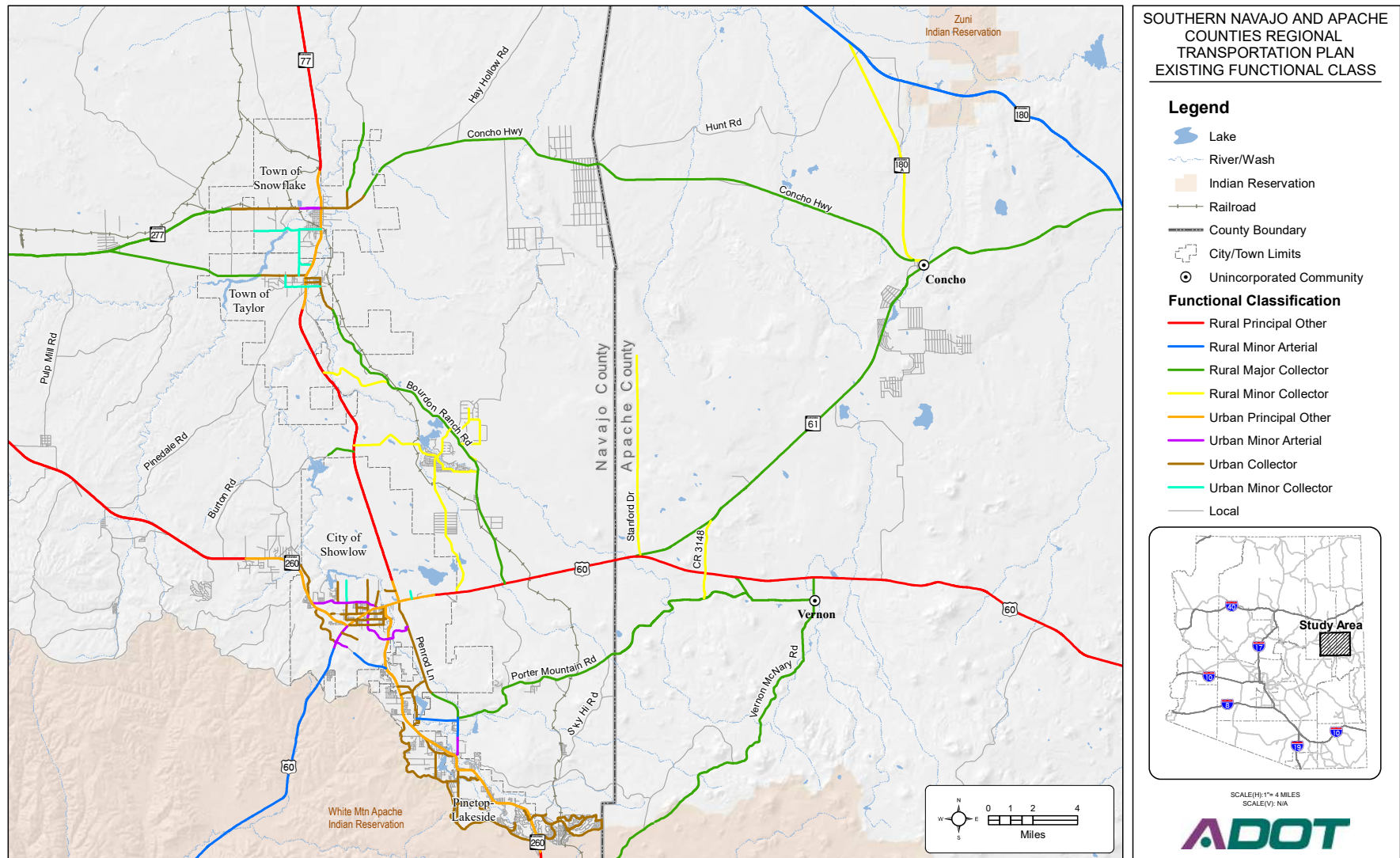


Figure 7: Functional Classification



2.4 Current Traffic Volumes and Congestion Levels

Figure 8 shows the reported traffic volumes and calculated Level of Service (LOS) for study area roads, and **Figure 9** shows these data for the City of Show Low.

Congestion levels for current 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.

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. However, there are four locations where the roadway operates at LOS D or lower:

- ▲ US 60 between SR 260 and SR 77 in Show Low
- ▲ SR 260 between US 60 and Scott Ranch Road in Show Low
- ▲ US 260 between Porter Mountain Road and Buck Springs Road in Pinetop-Lakeside
- ▲ SR 77 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. 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.

Figure 10 identifies the percentage of the annual average daily traffic (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.

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

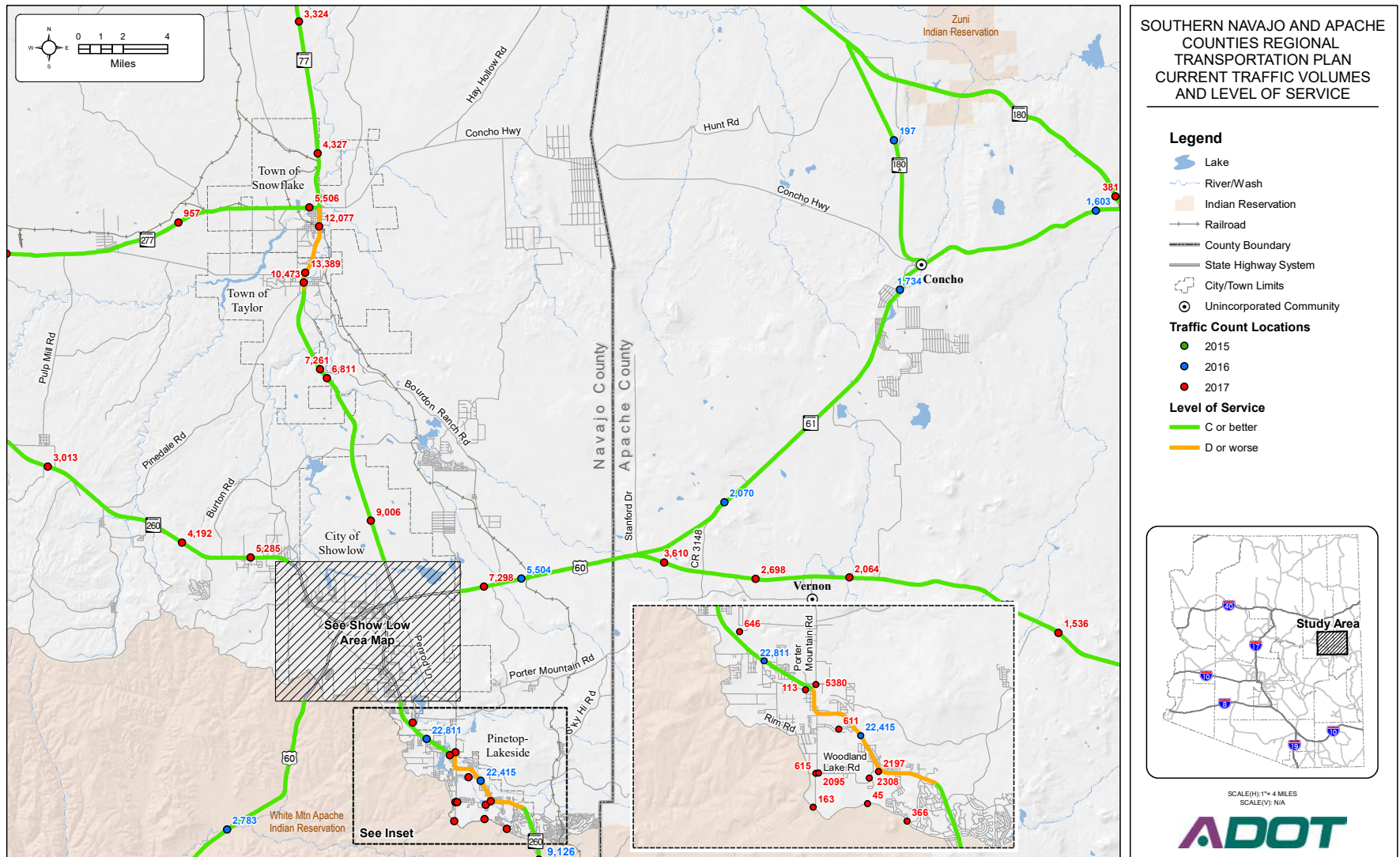


Figure 9: City of Show Low Traffic Counts and Level of Service

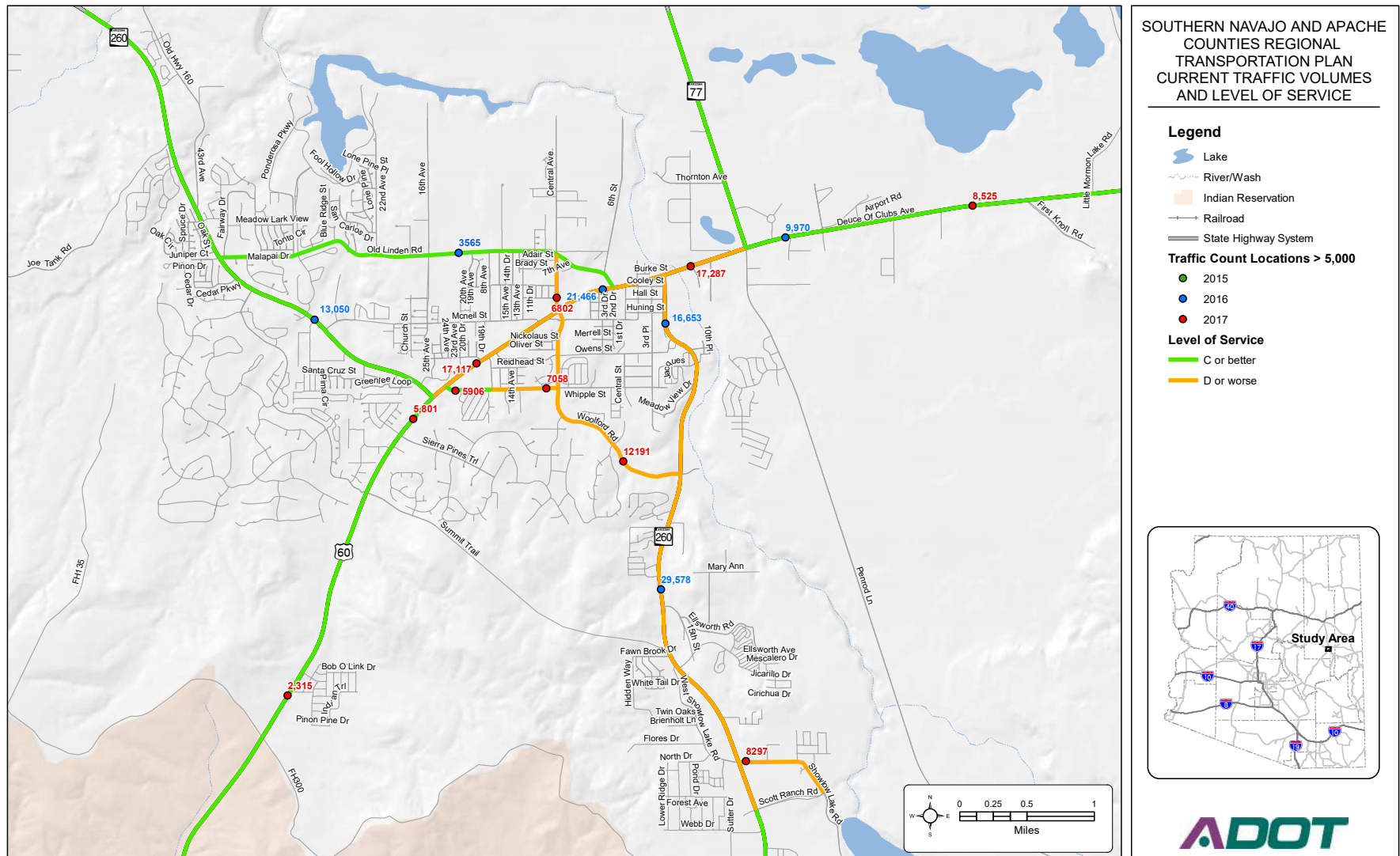
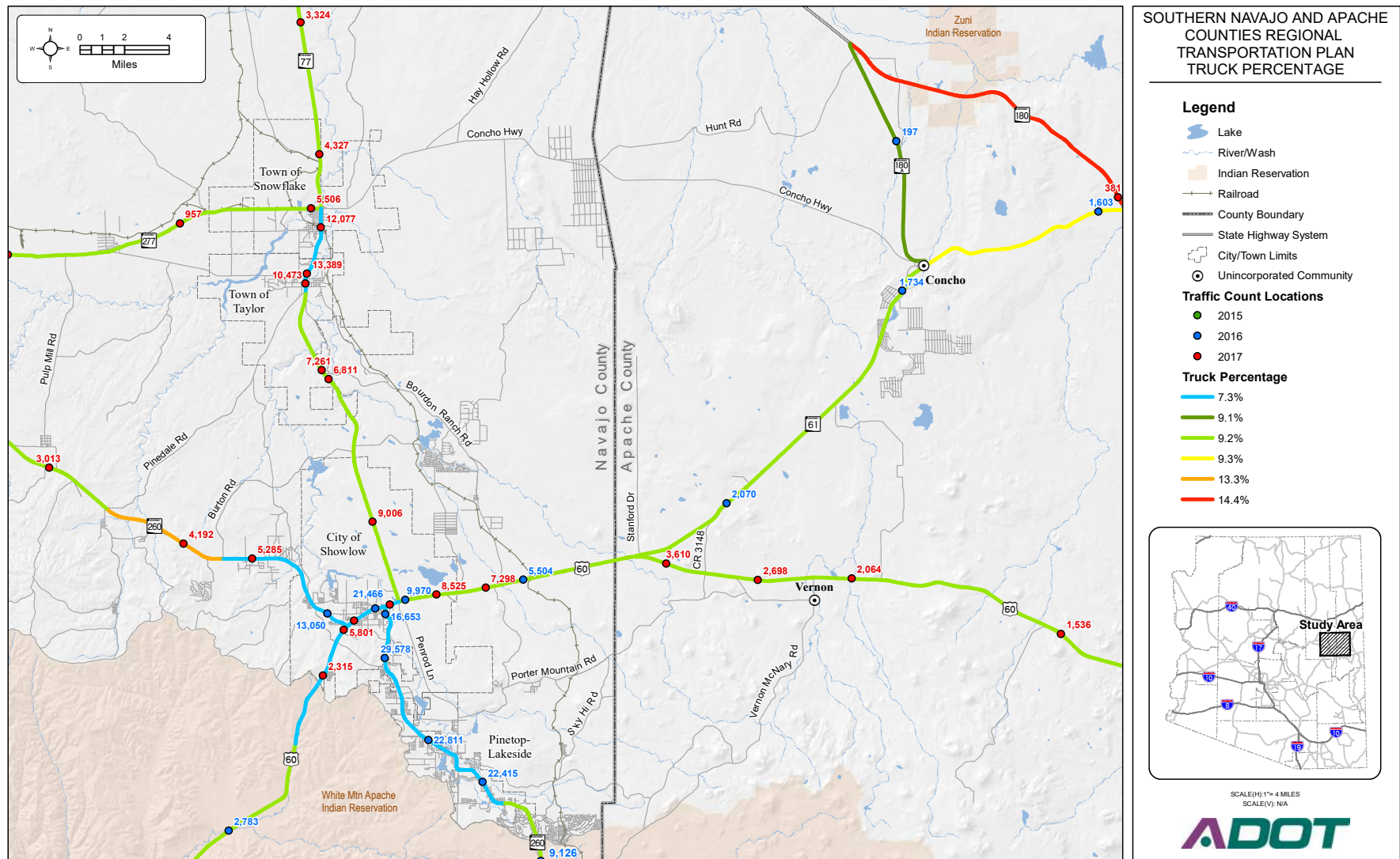


Figure 10: Percentage of Trucks on State Highways



2.5 Pavement Conditions

Figure 11 shows pavement conditions on state-owned roadways in 2015. Within the study area 41% of the roadways have pavement conditions that are in a condition of 'Good' or better. 24% of the roadways have pavement that are considered 'Poor'.

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 12**. Within the City of Show Low, 80% of roadways are in at least 'Good' condition while less than 1% are rated as 'Very Poor' or 'Failing'.

Figure 13 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.

Figure 11: ADOT Pavement Condition (2015)

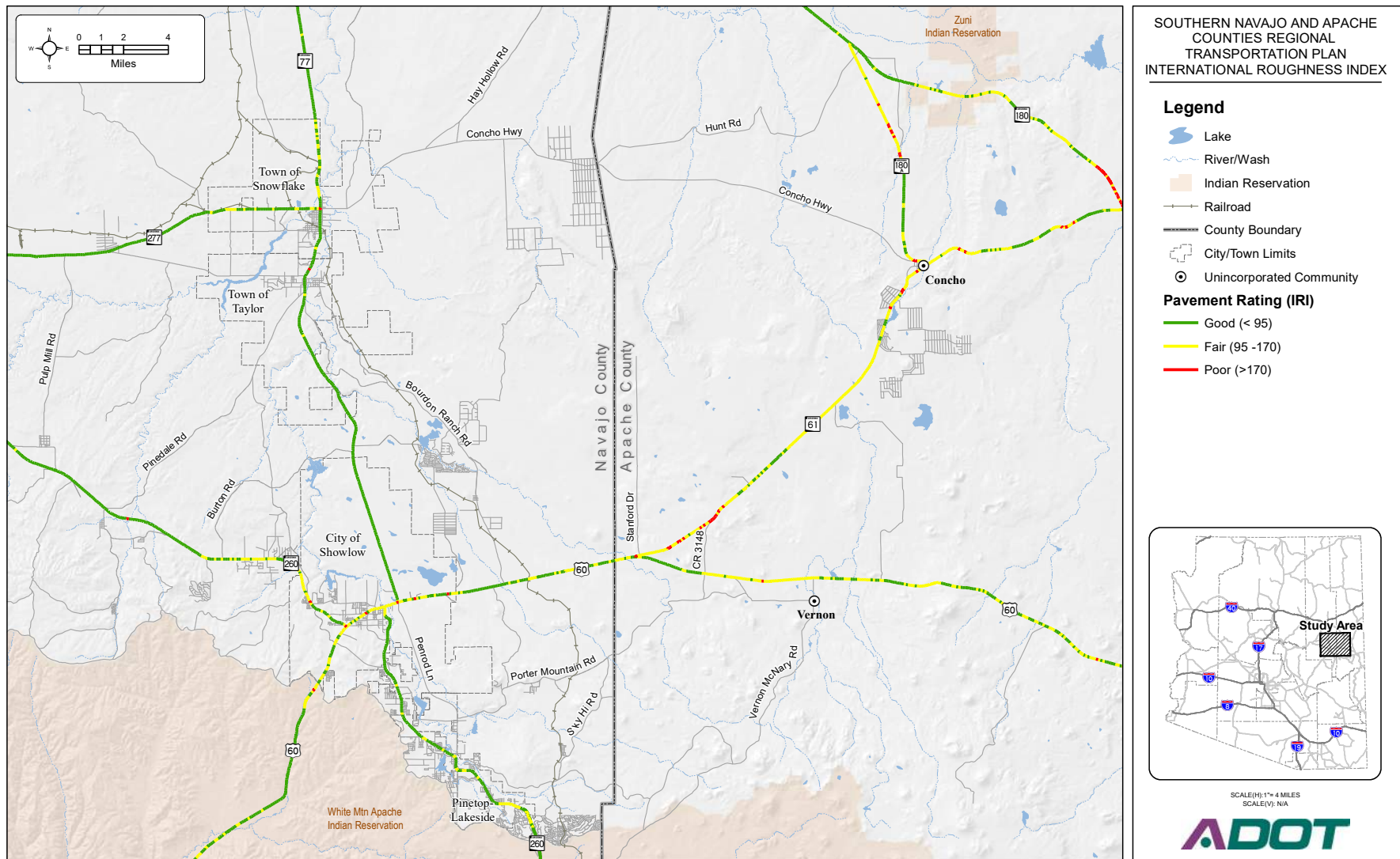


Figure 12: City of Show Low Pavement Conditions

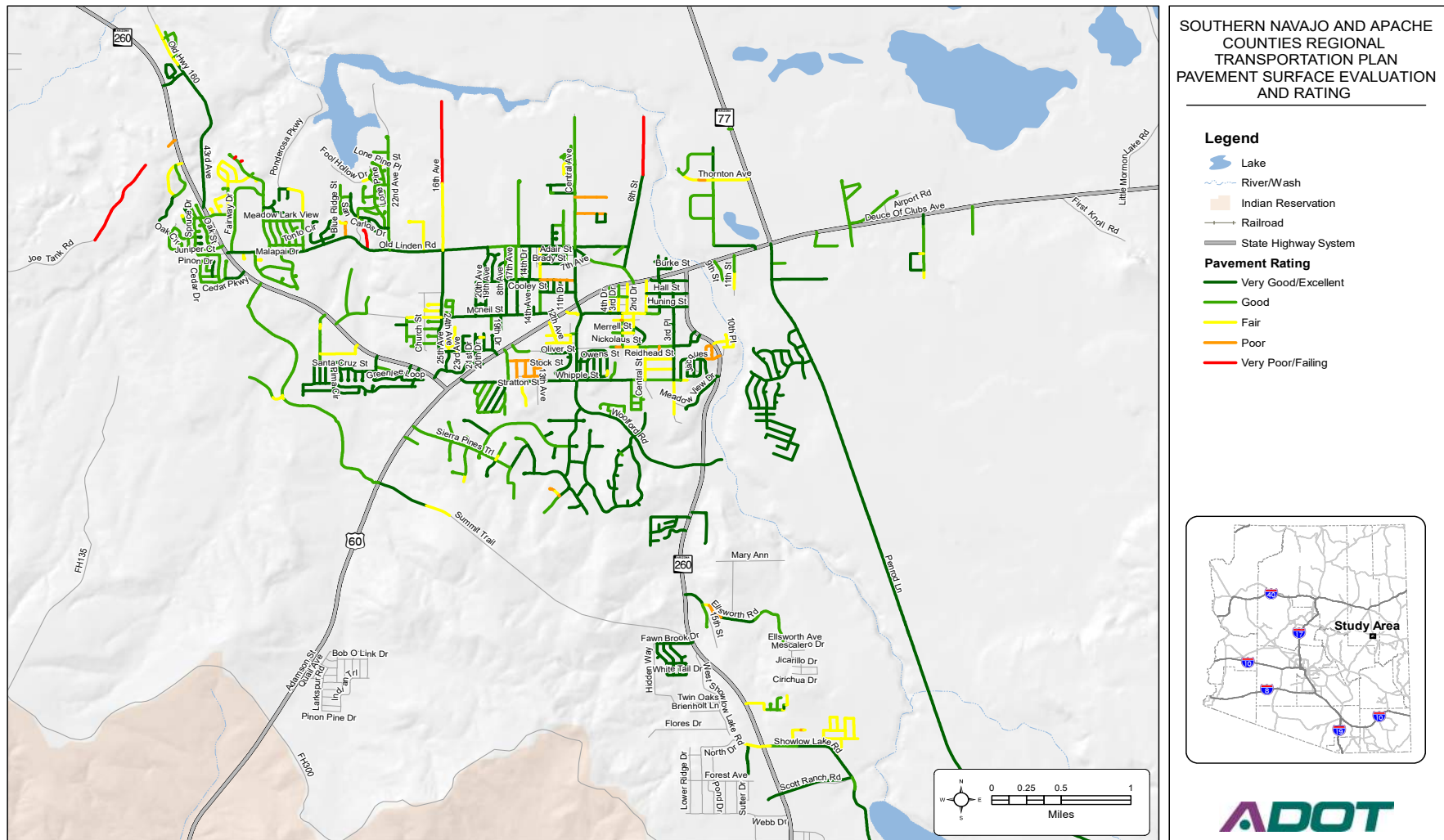
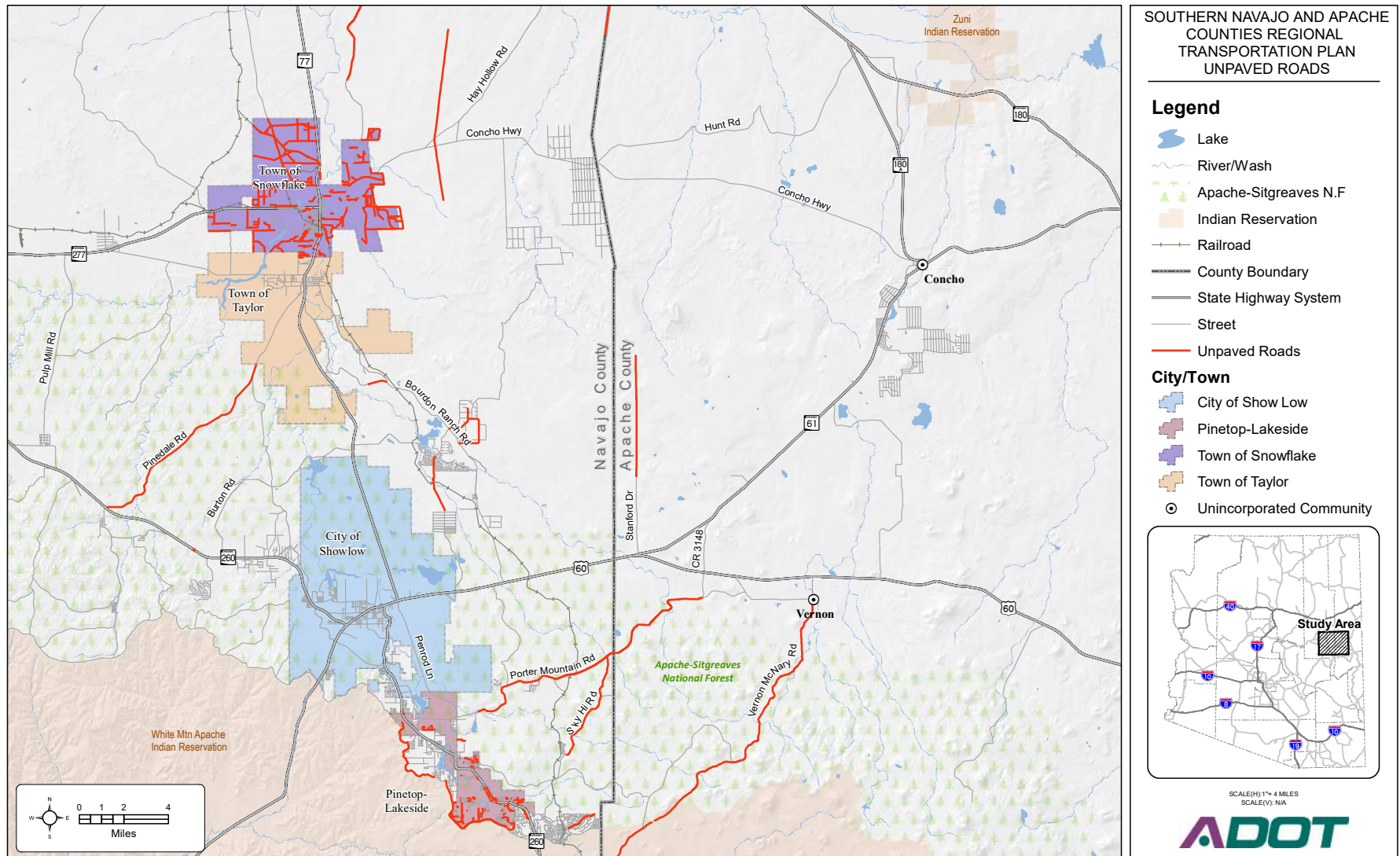


Figure 13: Key Unpaved Roads



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 Mountain 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.

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 two 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 14**; 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.

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 15**. 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 Northland Pioneer College campuses, healthcare facilities, Navajo County 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-Lakeside
- ▲ County complex in Show Low on 9th Street
- ▲ Walmart in Show Low (transit hub)

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 the Fort Apache Connection Transit System, that connects to the Four Seasons Connection at the Hon-Dah Resort. 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.

Figure 14: *Four Seasons Connection Map*

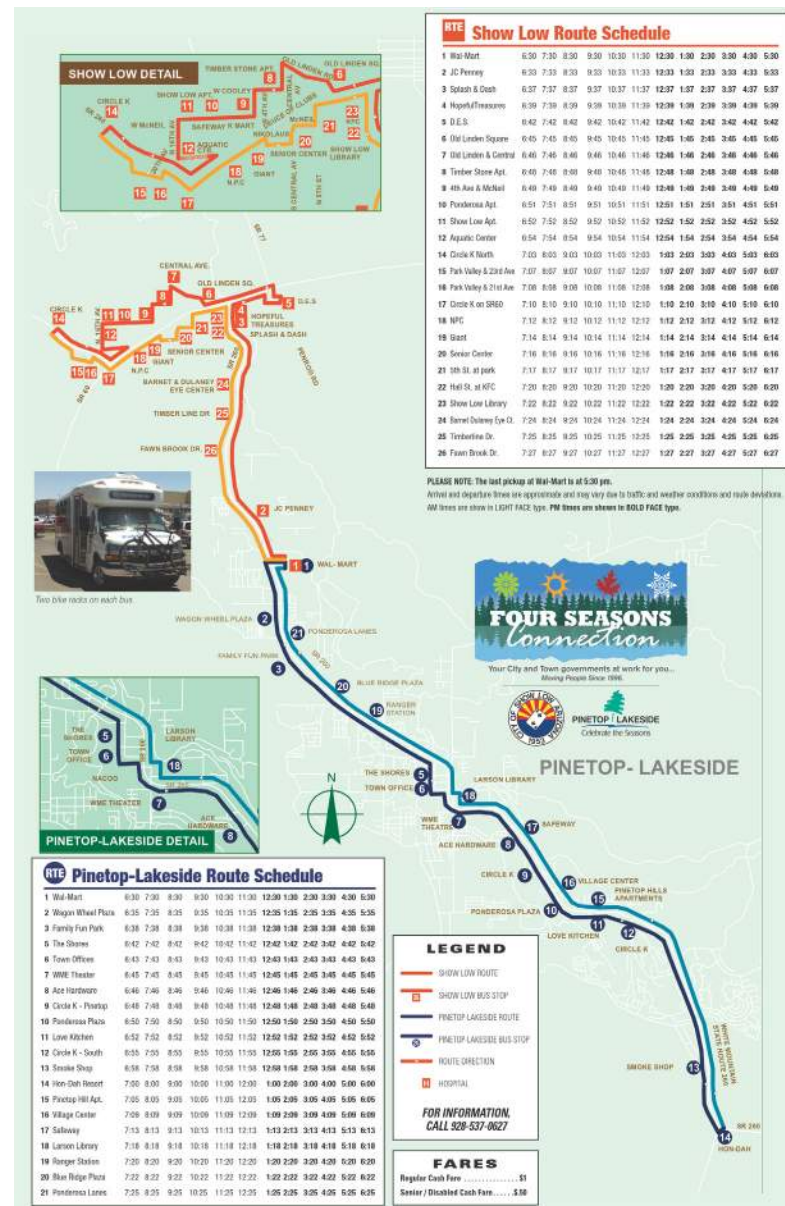
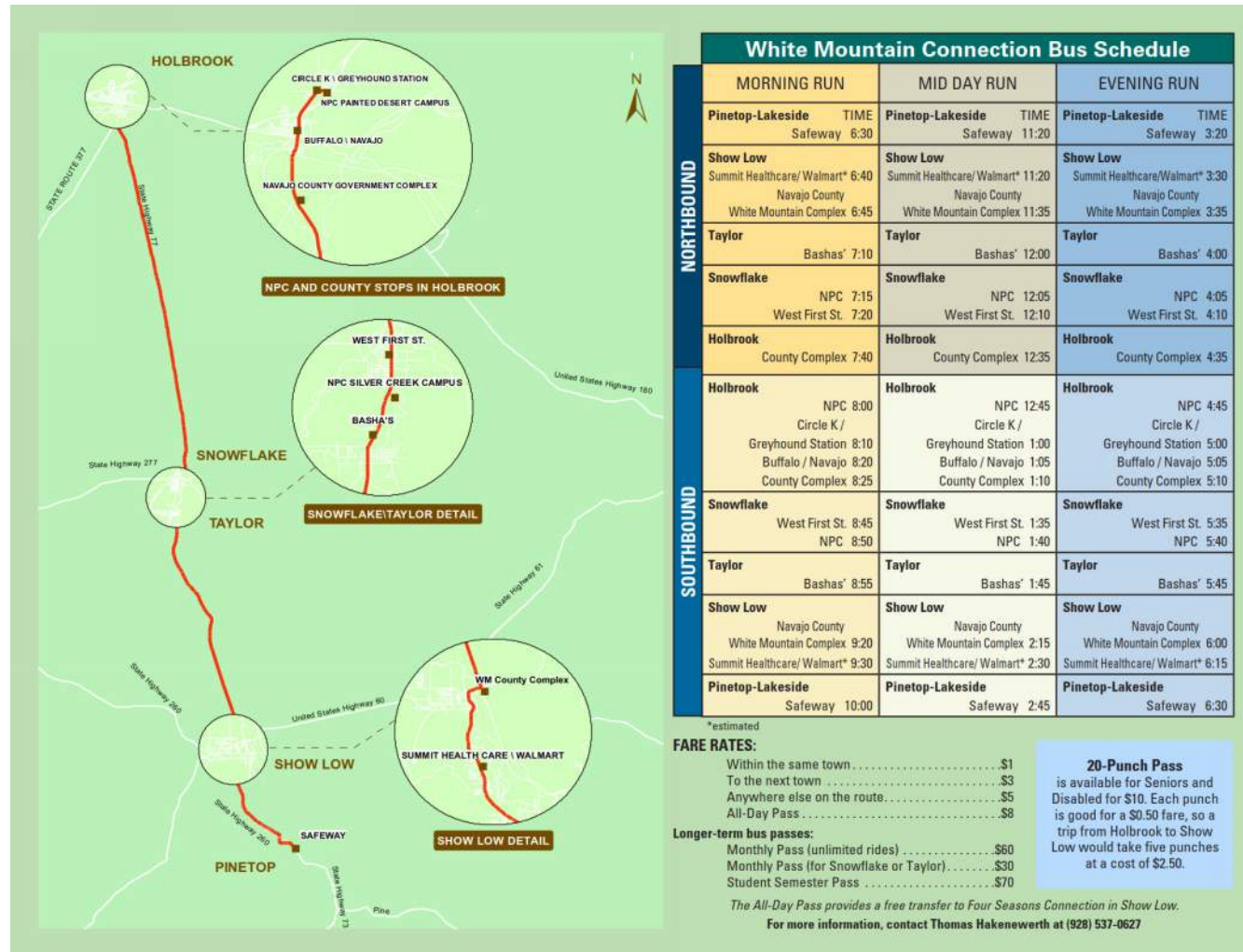


Figure 15: White Mountain Connection Map



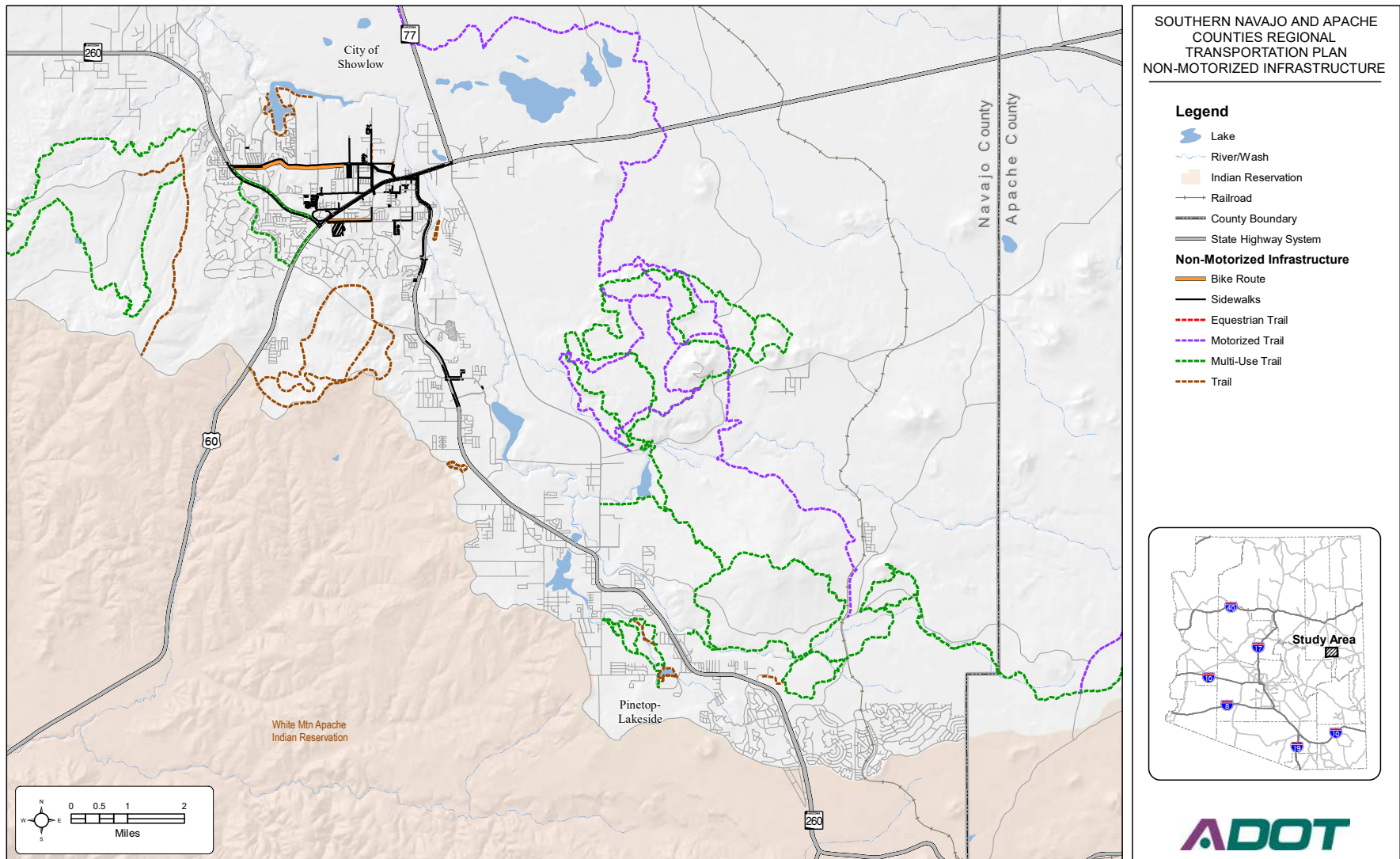
2.7 Non-Motorized Transportation

Figure 16 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.

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 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.

Figure 16: Non-Motorized Transportation Infrastructure in Show Low and Pinetop-Lakeside



2.8 Transportation Safety

Figure 17 shows fatal and incapacitating crashes that have occurred in the study area between 2012 and 2016. **Figure 18** 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.

NACOG, in partnership with the Flagstaff Metropolitan Planning Organization and Central Yavapai Metropolitan Planning Organization, developed a RSTSP that recommended improvements and strategies to reduce fatalities and serious injuries within the region. As part of the RSTSP planning effort, a network screening was completed to identify intersections and roadway segments with the highest occurrence of fatal and incapacitating crashes. Intersections and segments within the study area that were identified in this screening process are shown in **Figure 19**. Intersections within the study area that were identified in this screening process are:

- ▲ SR 260/Clark Road and US 60/Deuce of Clubs Avenue (Show Low)
- ▲ US 60/Deuce of Clubs and East Old Linden Road (Show Low)
- ▲ SR 260 and Penrod Lane (Pinetop-Lakeside)
- ▲ SR 277 and Paper Mill Road (Navajo County)
- ▲ SR 77 and West Center Street (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

Figure 17: Reported Vehicle Crashes (2012-2016)

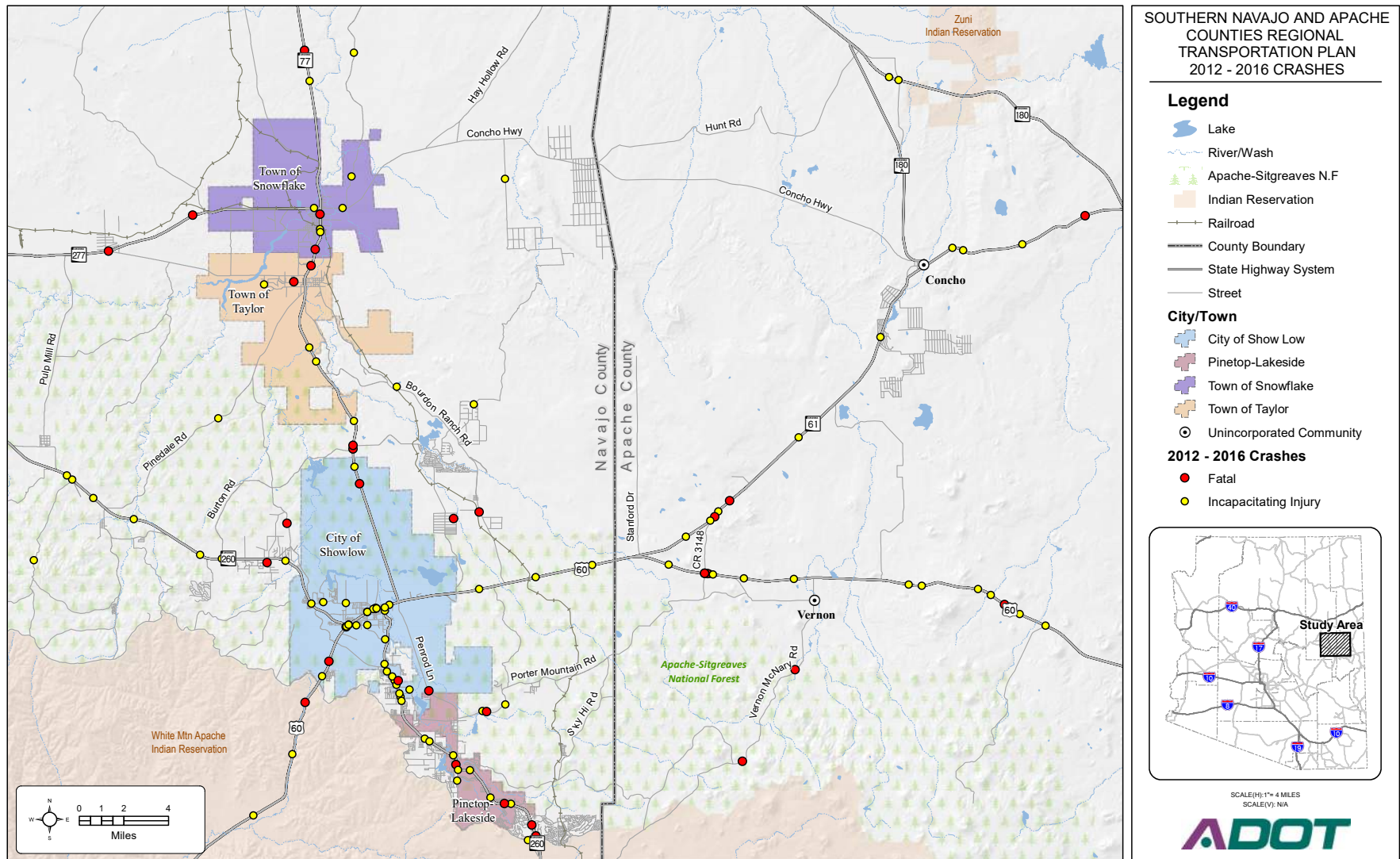


Figure 18: Reported Bicycle and Pedestrian Crashes (2012-2016)

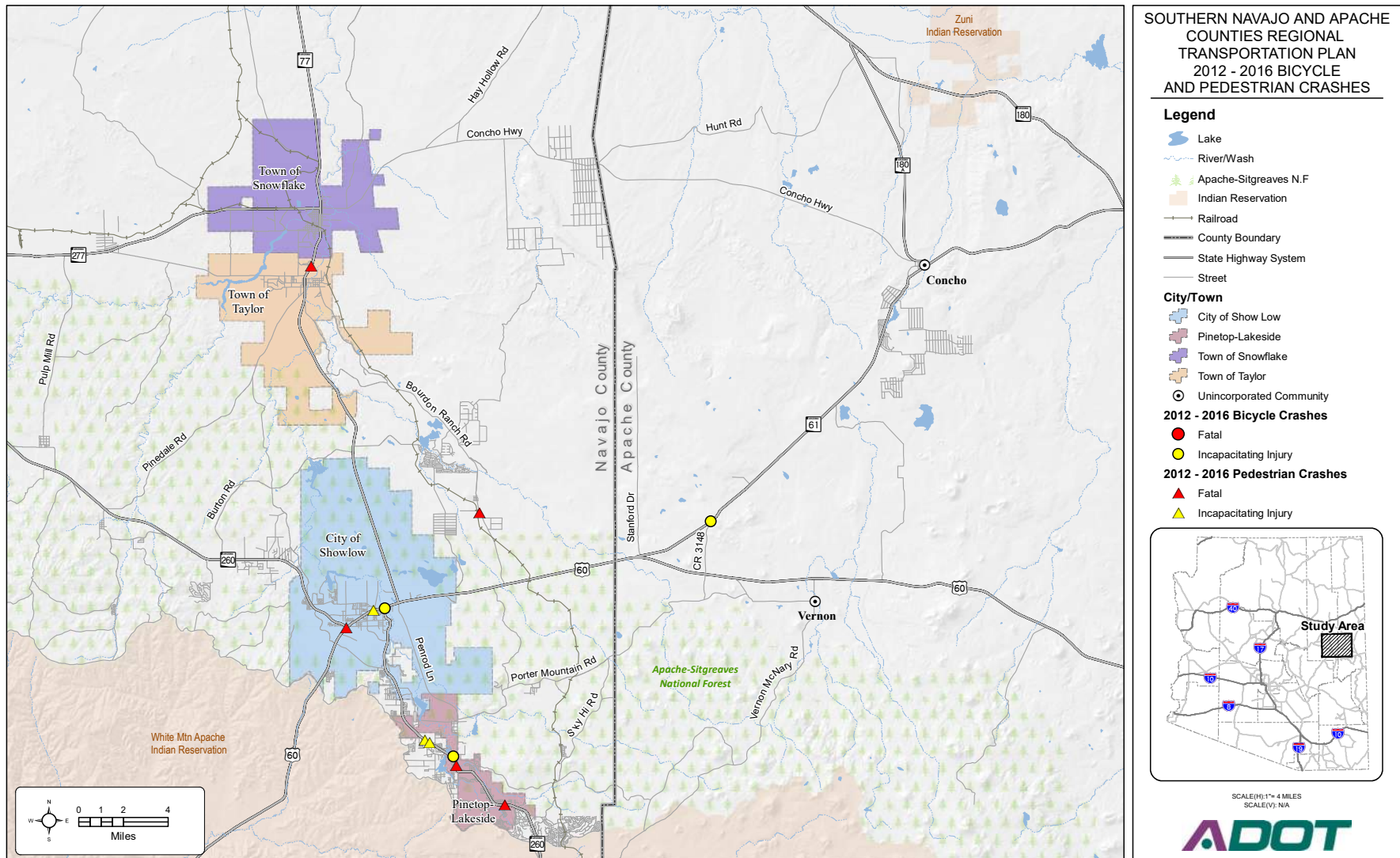
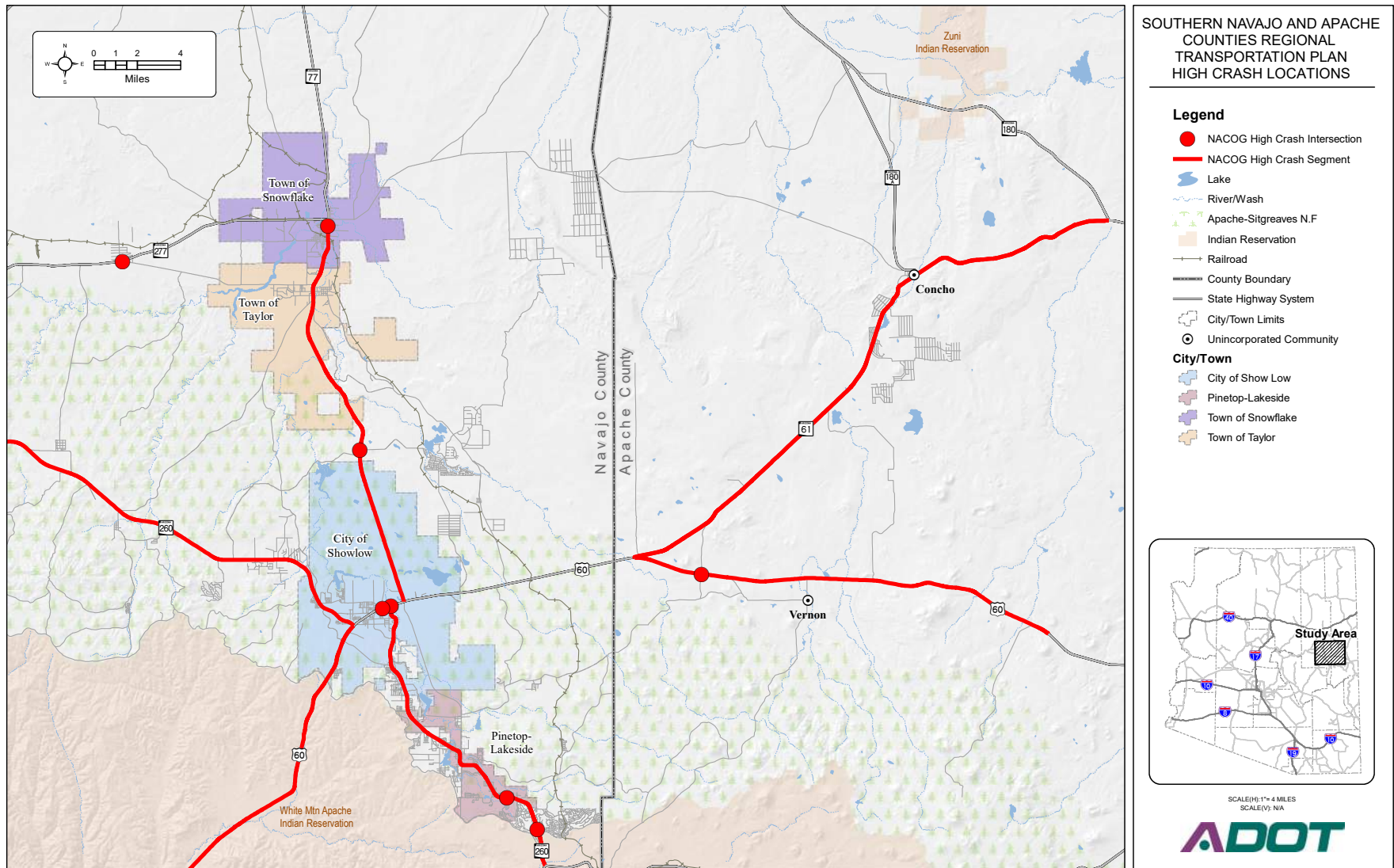


Figure 19: NACOG RSTSP High Crash Locations



Economic and Demographic Overview

3. Economic and Demographic Overview

This section provides a summary of the economic and demographic analysis performed.

3.1 Population and Demographics

An initial measure to understand the Southern Navajo and Apache County 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.
- ▲ While the state has grown by close to 9% since 2010, Navajo and Apache counties have only grown by 1% to 3% over seven years.
- ▲ The City of Show Low had the most growth since 2010, adding over 700 new residents during this period.
- ▲ Navajo County is projected to grow at about 0.5% per year through 2025 and then slow to 0.4% annual growth by 2030.
- ▲ Apache County is expected to have a loss of about 1,600 residents by 2030.

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 years.
- ▲ The median age in Navajo County of 35.8 years is closer to the state average.
- ▲ In Navajo County, 16% of the population is over 65 years, compared to only 13% in Apache County.
- ▲ There has been modest growth in the population under 18 years in Navajo and Apache counties, while the young adult population (18 to 24 years) 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 years) is 47%.

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.

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% below the state average.
- Navajo County has a slightly higher median household income of \$36,900 but is still 28% below the state average.
- Median household income has increased in Apache County since 2010 but has declined in Navajo County during the post-recession period compared to 2% growth at the state level.

Population Diversity

Diversity is another important factor in terms of attracting both companies and workers.

About 78% of the population in Apache County is non-white, compared to 52 percent of the population in Navajo County and 22% statewide.

Native Americans make up the majority of the population in Apache County, over 73%, and about 44% of the population of Navajo County.

These two counties account for about one-third of the state's Native American population.

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. 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.

Educational Attainment

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 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.

- 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
- The share of adults with an associate's degree or some college is at or above the state average.
- Education levels of the workforce will limit the types of companies that will be attracted to the study area.

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.
- 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

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.

- ▲ 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% 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.
- ▲ Both counties 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%, but has since declined to 7.2% in 2017.
- ▲ In Apache County, the unemployment peaked at a staggering 19.0% in 2012 and has since declined to 10.4%.

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.

- ▲ In 2010, the participation rates in Navajo and Apache Counties ranged from 48% to 59%.
- ▲ Navajo County's participation rate has declined 6% and Apache County has declined almost 10% from 2010 to 2017, while the state participation rate declined by only 2.5%.
- ▲ 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.

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.
- ▲ Only about 16% of residents in Show Low and Pinetop-Lakeside commute more than 30 minutes per day, compared to 34% in Snowflake and Taylor.
- ▲ About 40% of Show Low residents live and work in the city, and an additional 15% 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% of residents live and work in their home communities, while an additional 15% commute to Show Low or Pinetop-Lakeside.
- ▲ An estimated 10% to 20% of residents in the study area work in the Phoenix metro area.

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.

- ▲ The share of jobs held by workers under age 30 is lower in Navajo and Apache Counties at 14% to 20%, versus 23% statewide.
- ▲ The share of workers over 55 is higher at 26% to 27%, versus 22% for the state.
- ▲ 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.

The distribution of job holders by earnings level is an indicator of the skill base and experience level of the local workforce.

- ▲ Apache County 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. 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.

The final measure of workforce distribution is the share of job holders by education level.

- ▲ 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 the state average
- ▲ 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.

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% to 1.6% per year over the next 15 years, with growth rates declining over time. 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% to 1.8% annually.

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.

- ▲ 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.
- ▲ Government is the largest sector in both Navajo and Apache Counties accounting for 34% to 60% of employment, respectively, compared only 15% 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.

Local Industry Specializations

- ▲ The largest industry clusters in the region are health care, hospitality, local and regional retail, local services, education, construction, mining and utilities.
- ▲ Many of these larger industries, except for 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.
- ▲ Local industry specializations include the categories of agriculture, logging and wood products, mining and utilities, transportation, and hospitality.

National Growth Projections

Service sectors will account for much 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. 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. Overall, about nine 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. Among the 21-high output growth industries, the only industries with sizable employment locally is general hospitals, offices of physicians, and ambulance services. Employment 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.

Taxable Sales by Industry

Taxable sales are another key indicator of local economic conditions. Key statistics are:

- ▲ Total taxable sales are 18% above 2010 levels in Navajo County.
- ▲ 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, although Navajo County has a significantly higher share of taxable sales coming from retail at 67% versus 55% for the state. Apache County has a much lower share of retail sales at 39%. This mismatch 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%, while Apache County has a higher than average share at 12%, compared to a state average of 9%. However, construction sales in Apache County have dropped 59% since 2010.
- ▲ Total taxable sales per capita for 2017 are about 28% below the state average in Navajo County, despite the boost in sales from tourists, and 75% below the state average in Apache County.

Residential Construction

Construction activity is often a leading economic indicator.

- ▲ Residential construction activity in Navajo and Apache counties declined through 2012, but began an upward trend that has continued through 2017.
- ▲ The level of activity in smaller communities like Taylor and Snowflake remains 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.
- ▲ Pinetop-Lakeside has also experienced an upward trend with a significant increase in activity in 2017.

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 2** provides a summary of comparative advantages and disadvantages for the study area.

Table 2: *Economic Comparative Advantages and Disadvantages*

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 Occupation	+
Management and Administrative Occupations	-
Transportation and Material Moving Operations	+
Labor Force Growth	-
Unemployment Rates	+
Labor Force Participation	-
Labor Shed and Commuting	+
Economy	
Projected Job Growth	+
Industry Diversification	-
Retail Sales Per Capita	-
Construction Activity	+



Future Transportation Conditions

4. Future Transportation Conditions

This section provides a summary of historic trends in community and transportation factors within the study area and considers how these historic trends influence future transportation conditions.

4.1 Forecasted Traffic Volumes and Congestion

Based on 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 identify roadways that may experience congestion in the future, assuming no capacity enhancements are made to the current transportation system. **Figure 20** and **Figure 21** show the projected volumes and calculated LOS for state highways in the study area and for key corridors within the City of Show Low in 2040.

Future Congested Segments

Based on the projected traffic volumes for 2040, the following roadways will operate a LOS D or worse by 2040.

- ▲ US 60/Deuce of Clubs from Summit Trail 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
- ▲ US 60 from SR 61 to Apache County Route 3540

4.2 Future Non-Motorized Transportation Infrastructure

Figure 22 shows the proposed and desired non-motorized transportation network in the study area.

Figure 20: 2040 Projected Traffic Volumes and Level of Service

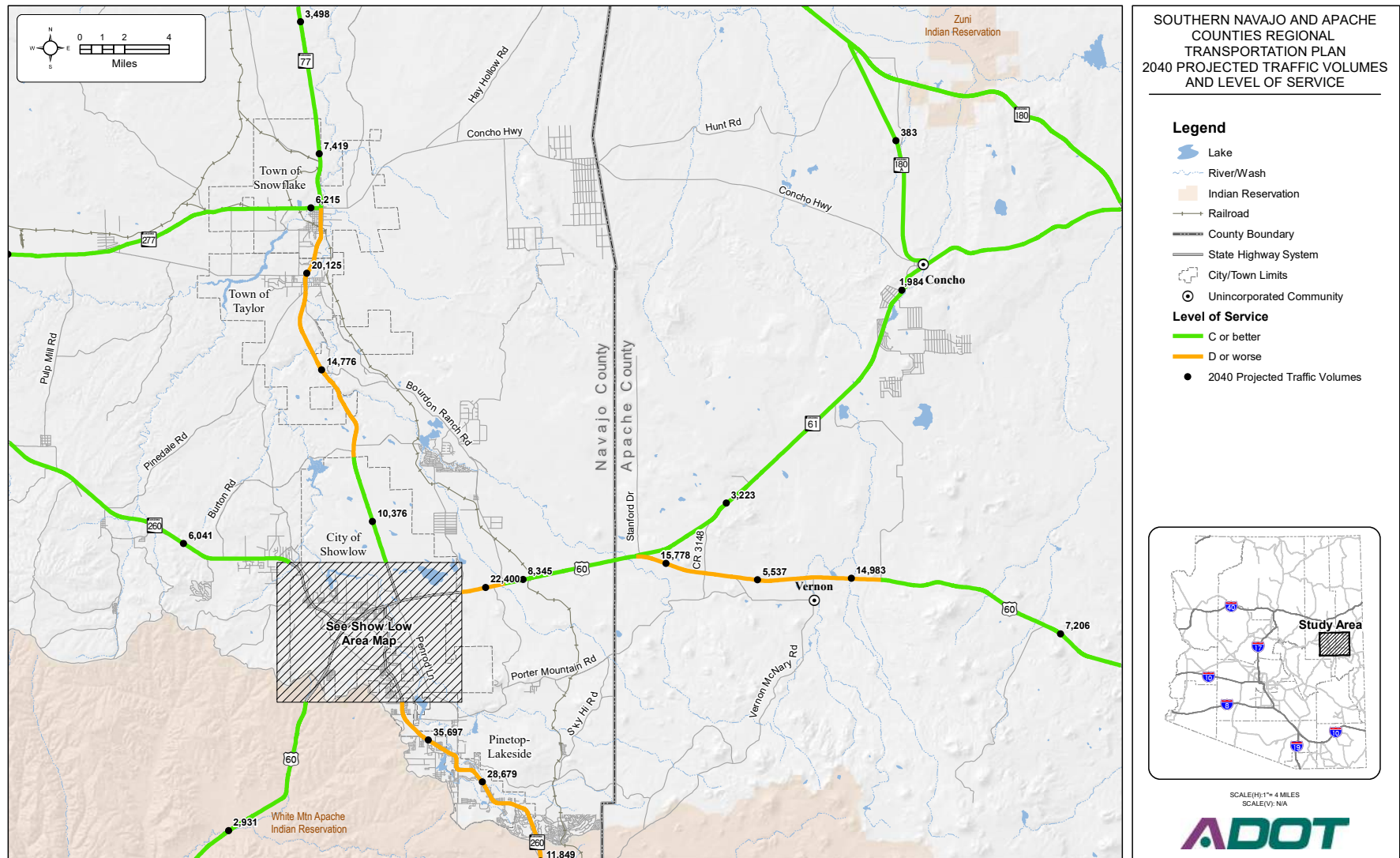


Figure 21: 2040 Projected Traffic Volumes and Level of Service within the City of Show Low

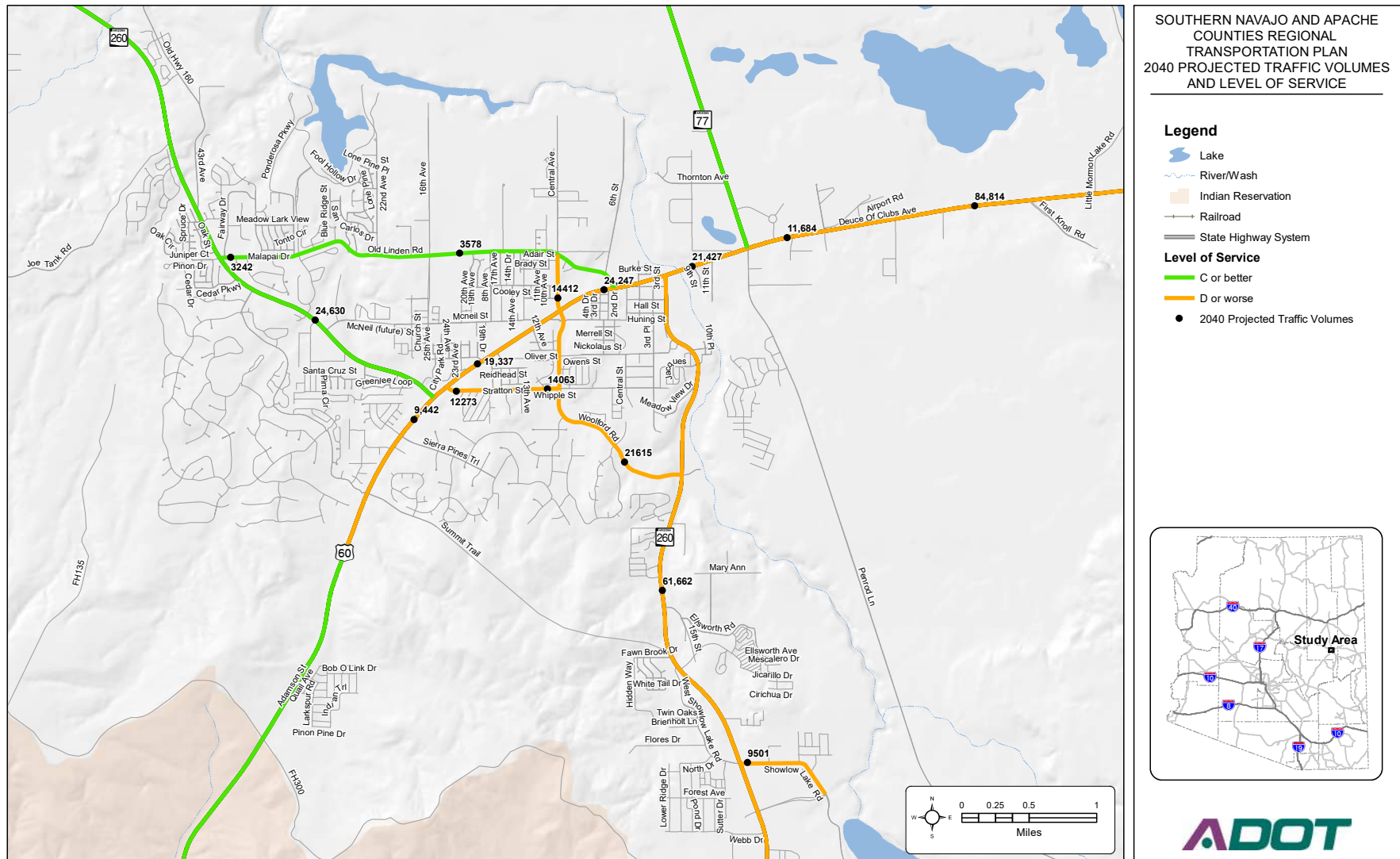
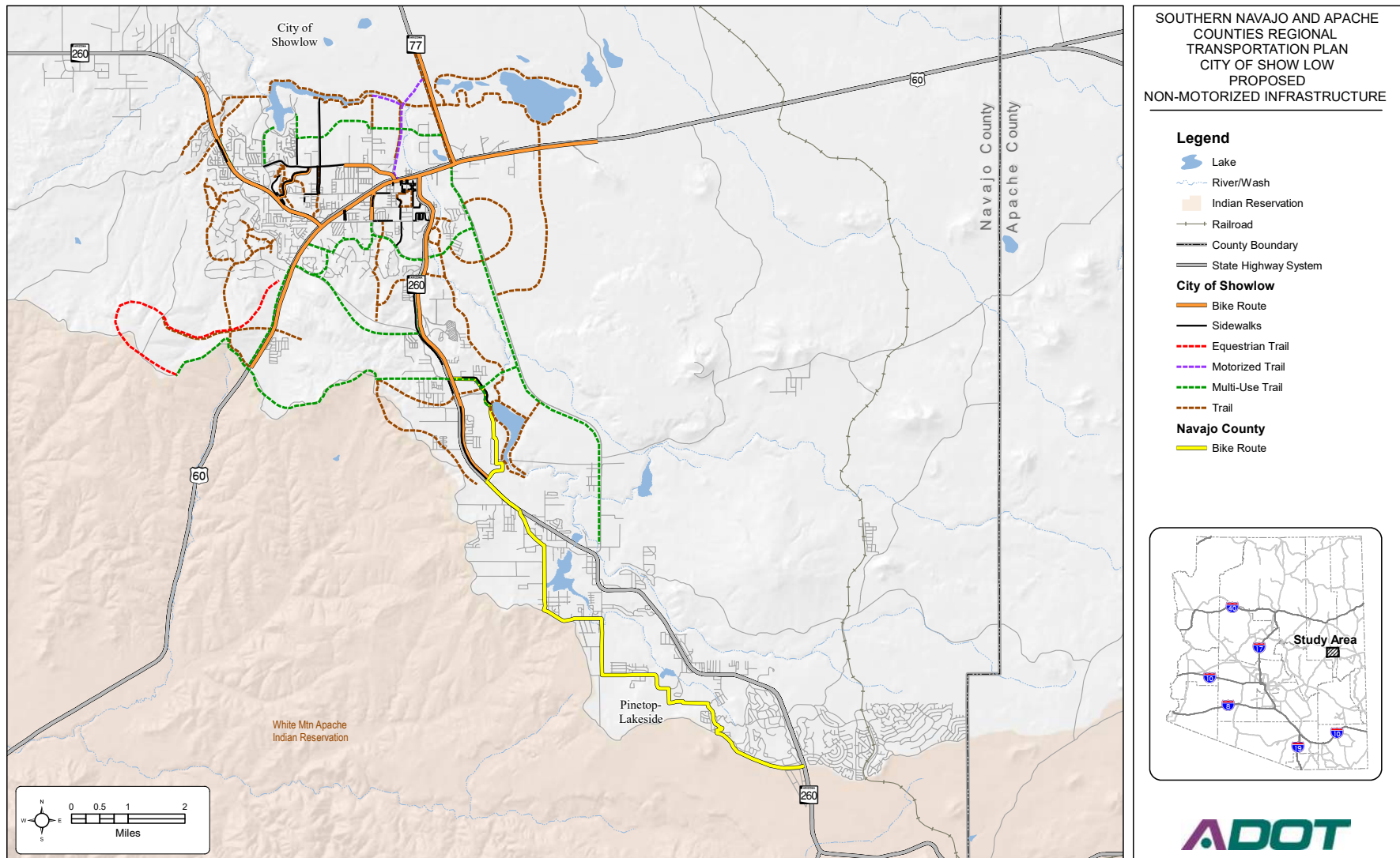


Figure 22: Proposed Future Non-Motorized Infrastructure



4.3 Future Employment Centers

During interviews, stakeholders identified economic development opportunity areas that are either 'shovel ready' or otherwise provide opportunities for future development.

- ▲ Industrial Parks within Show Low near the Intersection of US 60 and SR 77
- ▲ Navajo County Opportunity Zones
- ▲ Old Paper Mill in Snowflake
- ▲ Show Low Airport
- ▲ Cholla Power Plant
- ▲ The corridor between Taylor/Snowflake and Holbrook is an area for growth in the natural resources industries, including mining and power generation.
- ▲ 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.
- ▲ Show Low is also looking at the feasibility of locating a convention center/ event center within the City, with the current preferred option being near the intersection of US 60 and Penrod Road.
- ▲ The Town of Pinetop-Lakeside is considering developing a sports complex along Penrod Road.

While outside of the study area, the Navajo Generating Station and the associated Kayenta coal mine, are major employment centers for northeastern Arizona, employing more than 750 workers at the two sites. It is likely that in 2019, the Navajo 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 generating station and mine and a change in commuting patterns depending on the future employment opportunities that those workers seek out.

4.4 Future Residential Growth Areas

There are several 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 west side of Penrod Road. The development 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 Porter Mountain Road corridor is a likely location for residential development if a connection is established between SR 260 and Penrod Road. 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. 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 growth area in the County, with 10 square miles of subdivision area available. This development is located at the northern end of Stanford Road, which is accessed by US 60.



Improvement Alternatives

5. Improvement Alternatives

This chapter summarizes transportation needs and potential transportation improvements that were evaluated to address the needs.

5.1 Transportation Needs

A review of past planning studies in the area, stakeholder engagement, and public involvement led to identification of transportation needs. These transportation needs are as follows:

- ▲ Address Traffic Congestion on Existing or Forecasted Congested Routes
- ▲ Improve Connectivity Between Major Roadways in the Region
- ▲ Support Industrial Growth in Industrial Parks and Opportunity Zones
- ▲ Improve Multimodal Safety on SR 260 Between Show Low and Pinetop-Lakeside
- ▲ Support Tourism and Economic Development
- ▲ Address High Crash Rates
- ▲ Improve Emergency Response Times
- ▲ Provide Adequate Evacuation Routes
- ▲ Improve Transit Coverage within the Urban Areas
- ▲ Supplement Regional Transit Connections
- ▲ Increase Multimodal Access to Show Low Medical and Social Services
- ▲ Improve Multimodal Safety

5.2 Major Capital Projects

Major capital projects consist of construction of new roadways or major improvements to existing roadways. **Table 3** lists major capital projects advanced to project evaluation and prioritization. Additional detail on major capital projects is provided in Appendix A.

Table 3: Major Capital Projects Advanced to Project Evaluation

No.	Name	Description	Primary Need	Jurisdiction	Location	Length (mi)
1	Scott Ranch Road Phase II	New Two-Lane Roadway	Regional Connectivity	Show Low	Show Low	0.75
2	Thornton Corridor Phases I-IV	New Two-Lane Roadway	Regional Connectivity	Show Low	Show Low	2.2
3	Woolford Road Crossing	New Two-Lane Roadway	Regional Connectivity	Show Low	Show Low	0.6
4	Summit Trail Extension	New Two-Lane Roadway	Regional Connectivity	Show Low	Show Low	2.1
5	Central Avenue/ Woolford Road Improvements	Capacity and Freight Improvements, Shared-Use Path	Congestion Mitigation	Show Low	Show Low	1.9
6	Stanford Drive Reconstruction	Geometric Improvement, Realignment, Extension of Paved Road	Safety	Apache County	Apache County	10
7	CR 3144 – Porter Mountain Road/ CR-3148 Paving	Paving of Gravel and Chip-Seal Portions of Roadway	Regional Connectivity	Apache County	Apache County	4.5
8	US 60 (Show Low to Vernon)	Roadway Widening	Congestion Mitigation	ADOT	Navajo and Apache Counties	20
9	SR 61 (Stanford to Concho)	Roadway Widening	Congestion Mitigation	ADOT	Apache County	20
10	SR 77 (Show Low to Snowflake)	Roadway Widening	Congestion Mitigation	ADOT	Navajo County	19
11	SR 260 (Timberland Road to Old Linden Road)	Roadway Widening	Congestion Mitigation	ADOT	Show Low/ Navajo County	6

5.3 Safety Projects

Safety projects are described in **Table 4**. Their purpose is to improve identified safety needs at intersections and on roadway segments. Safety projects target locations identified in the NACOG RSTSP, as well as locations identified by local agency stakeholders.

Table 4: Safety Projects Advanced to Project Evaluation

No.	Name	Description	NACOG Location	Jurisdiction	Location	Length (mi)
1	US 60 (MP 341-355)	Raised median, striping, lighting, turn lanes	No	ADOT	Navajo County	14
2	US 60 (MP 345-352)	Widen shoulders, add passing lanes	No	ADOT	Navajo County	7
3	US 60 (MP 352-384)	Widen shoulders, rumble strips, turn lanes, additional signage and striping, dynamic weather warning beacons	Yes	ADOT	Apache County	32
4	SR 77 (MP 347-351)	Curve warning signs, striping	Yes	ADOT	Navajo County	4
5	SR 260 at Penrod Road	Access management and intersection improvements	Yes	ADOT/ Pinetop-Lakeside	Pinetop-Lakeside	N/A
6	SR 260 at Woolford Road	Intersection safety improvements	No	ADOT/ Show Low	Show Low	N/A
7	SR 260 at Show Low Lake Road/ Cub Lake Road	Intersection safety improvements; add right turn lanes on each intersection approach	Yes	ADOT/Show Low	Show Low	N/A
8	SR 260 at Rainbow Lake Road	Acceleration/deceleration lanes on SR 260, other safety improvements	Yes	ADOT/Pinetop-Lakeside	Pinetop-Lakeside	N/A
9	US 60 Variable Message Signs	Portable DMS to support evacuation, emergencies	Yes	ADOT	Navajo and Apache County	N/A
10	SR 260 at Branding Iron Loop	Warning signage, lighting, potential alternative design	Yes	ADOT/Navajo County	Navajo County	N/A
11	SR 61 (MP 353-373)	Add shoulders, centerline rumble strip, evaluate turn lanes/ access management at CR 3148	Yes	ADOT/Apache County	Apache County	20
12	SR 260 (SR 277 to US 60)	Add centerline rumble strip, turn lanes, access management, passing lanes	Yes	ADOT	Navajo County	35
13	SR 260 (Vacation Village Drive to Wagon Wheel Lane)	Add a raised median	Yes	ADOT	Show Low	1.6
14	US 60 (SR 260 to MP 317)	Add centerline rumble strip, turn lanes, access management, passing or climbing lanes	Yes	ADOT	Navajo County	23
15	US 60 at Old Linden Road	Access management, advanced warning signage	Yes	ADOT/Show Low	Show Low	N/A

No.	Name	Description	NACOG Location	Jurisdiction	Location	Length (mi)
16	SR 277 at Paper Mill Road	Additional warning signage, lighting, transverse rumble strips on Paper Mill Road	Yes	ADOT/Navajo County	Navajo County	N/A
17	SR 77 at Center Street (Snowflake)	Add signal or hawk for pedestrians, bump-outs to reduce crossing distance	Yes	ADOT/ Snowflake	Snowflake	N/A
18	SR 77 at White Mountain Lake Road	Intersection safety improvements	Yes	ADOT/Navajo County	Navajo County	N/A
19	Concho Highway at El Dorado Road	Intersection safety improvements	No	Navajo County	Navajo County	N/A
20	US 60 at Bordon Ranch Road	Intersection safety improvements	No	ADOT/Navajo County	Navajo County	N/A
21	US 60 at Mormon Lake Road	Intersection safety improvements	No	ADOT/Navajo County	Navajo County	N/A

5.4 Traffic Operations Projects

Traffic operations projects include signalizing intersections, adding left-turn phases to existing signals, reconstructing the intersection to a different type, such as a roundabout, adding turn lanes, and other measures that improve the flow of traffic without adding substantially to the existing infrastructure. **Table 5** summarizes the traffic operations projects advanced to the project evaluation phase.

Table 5: Traffic Operations Projects Advancing to Project Evaluation

No.	Name	Description	Primary Need	Jurisdiction	Location	Length (mi)
1	Whipple Road (US 60 to Central Avenue)	Add traffic calming to deter through traffic	Congestion Mitigation	Show Low	Show Low	0.85
2	Old Linden Road at Central Avenue	Add a roundabout	Congestion Mitigation	Show Low	Show Low	N/A
3	Concho Highway	Make improvements to raise the speed limit	Regional Connectivity	Navajo and Apache County	Navajo and Apache Co.	30
4	Vernon-McNary Road	Pave gravel road	Evacuation Route	US Forest Service	Apache County	0.8
5	Fire Station Signals	Emergency signals at fire stations	Emergency Response	ADOT	Region-wide	N/A
6	US 60 at SR 260	Emergency signal preemption	Emergency Response	ADOT	Show Low	N/A
7	US 60 at SR 260	Install backplates on the signal to reduce glare	Safety	ADOT	Show Low	N/A
8	Show Low Lake Road (SR 260 to Scott Ranch Road)	Extend center left turn lane, evaluate turn lane warrants	Congestion Mitigation	Show Low	Show Low	0.75
9	SR 77 (Frost Street to Cooley Street)	Add right and left-turn lanes, enlarge turning radii, add signage for industrial parks	Freight Improvement	ADOT/ Show Low	Show Low	1.2
10	Central Avenue at Whipple Street	Add a roundabout	Congestion Mitigation	Show Low	Show Low	N/A

5.5 Multimodal Projects

Multimodal projects include complete streets elements, such as improvements to sidewalks, trails, bicycle lanes, and transit. Complete streets principles improve mobility and safety for all modes of transportation. **Table 6** outlines the multimodal projects advanced to the evaluation phase.

Table 6: Multimodal Projects Advanced to Project Evaluation

No.	Name	Description	Primary Need	Jurisdiction	Location	Length (mi)
1	SR 260 Complete Street (MP 337-340)	Complete streets elements, center median	Multimodal Safety	ADOT	Show Low (West Side)	3
2	SR 260 (US 60 to SR 73)	Complete streets elements	Multimodal Safety	ADOT	Regionwide	16
3	ADOT Route Trails	Implement trail suggestions from Show Low trails and transit connectivity study	Multimodal Safety	ADOT/Show Low	Regionwide	N/A
4	SR 260 (Pinetop-Lakeside)	Implement findings of the Pinetop-Lakeside pedestrian safety study	Multimodal Safety	Pinetop-Lakeside	Pinetop-Lakeside	N/A
5	White Mountain Connection	Supplement/expand service on the White Mountain connection	Regional Transit Connections	Various	Regionwide	N/A
6	Paratransit Service	Provide paratransit service for the elderly and disabled to access services	Access Show Low Services	Various	Regionwide	N/A
7	Bus Shelters	Replace aging bus shelters and add new shelters	Regional Transit Connections	Various	Regionwide	N/A
8	SR 260 Bus Pull-Outs	Construct bus pull-outs on SR 260	Regional Transit Connections	Various	Regionwide	N/A

5.6 Policies and Studies

Additional study topics and policy changes were identified through the public and stakeholder engagement process. These additional studies and recommended policy changes are listed in **Table 7**. No additional evaluation or prioritization is performed for these projects.

Table 7: Additional Study Needs

No.	Name	Project Type	Description	Jurisdiction	Location
1	Truck Commodity Study	Additional Study	A study of the types of products that are imported, produced, and pass through the study area	Show Low	Show Low
2	Consistency of Road Names Study	Additional Study	Identify continuous roadways that change names at jurisdictional boundaries and build consensus on a single name	Various	Region-wide
3	Left-Turn Phase Study	Additional Study	Perform traffic analyses to determine where additional left-turn phases should be implemented as listed in "Location" column	ADOT	US 60/Central Avenue US 60/Old Linden Road US 60/Penrod Road SR 260/Woolford Road SR 260/Pine Parkway Plaza SR 260/Safeway Plaza
4	Traffic Signal Warrant Study	Additional Study	Perform traffic signal warrant analyses to determine if traffic signals are warranted at additional intersections on state highways, as listed in "Location" column	ADOT	US 60/Safeway Plaza SR 260/Ellsworth Road Old Linden Road/High School Old Linden Road/Central Avenue SR 260/Woodland Lake Road SR 260/Rainbow Lake Road SR 260/Wagon Wheel Plaza SR 260/Pine Lake Road SR 77/SR 377 Sierra Pines Trail Entrance

No.	Name	Project Type	Description	Jurisdiction	Location
5	Intersection Turn Lanes Analysis	Additional Study	Perform traffic analyses to determine if new turn lanes are justified at intersections on state highways, as listed in "Location" column.	ADOT	US 60/Central Avenue US 60/Old Linden Road US 60/McNeil Road SR 260/AZ Game & Fish SR 260/Burton Road SR 260/Chaparral Drive SR 260/43 rd Avenue
6	Regional Circulator Feasibility Study	Additional Study	Study feasibility of a regional transit circular to improve service to communities; additional funding sources would be required.	Various	Regionwide
7	Snow Plow Practices Review	Practices Review	Review snow plow practices to identify practices to maintain walkable sidewalks during winter months.	ADOT	Regionwide
8	Pavement Preservation / Coordination with Local Agencies	Practices Review	Improve coordination practices between municipalities and ADOT when scoping resurfacing projects, to address sidewalk/bicycle/ADA needs	Various	Regionwide



Evaluation Criteria and Alternatives Analysis

6. Evaluation Criteria and Alternatives Analysis

This section provides a summary of the project evaluation criteria, scoring results, and economic impacts of proposed transportation projects.

6.1 Evaluation Methodology

A methodology was developed to objectively compare the strengths and weaknesses of each project. The methodology concisely scores projects for a range of criteria and evaluates the proposed projects on a point-based system, with 100 possible points. The scoring categories are designed to encapsulate the entire life cycle of each project, from planning through operations and maintenance. The point scoring guidelines are provided in **Table 8** below.

Table 8: *Project Scoring Methodology*

Scoring Category	Avail. Points	Scoring Guidelines
EASE OF IMPLEMENTATION	40	
Capital Funding	10	Funding already programmed or can be accomplished through an existing funding mechanism. 10 points
		Requires funding from a competitive grant (not yet obtained) or a local match for funding has not been identified. 5 points
		No funding identified or available. 0 points
Operations and Maintenance Funding	5	Operations and maintenance funding established or can be accomplished through an existing funding mechanism. 5 points
		No operations and maintenance funding identified. 0 points
Implementation Readiness	5	Project design is complete or underway. 5 points
		Project design has not yet been started. 0 points
Project Combination	5	Project can be constructed in conjunction with another project. 5 points
		Project must be completed alone. 0 points
Jurisdictional Entities	5	Project exists entirely within one jurisdiction or already has an interjurisdictional agreement for the project. 5 points
		Project is in multiple jurisdictions and does not have an interjurisdictional agreement. 0 points

Scoring Category	Avail. Points	Scoring Guidelines
Environmental Impact / Clearance	10	Project does not require environmental impact analyses or environmental clearance has already been provided. 10 points Environmental impact analysis is underway. 5 points Project has known environmental impacts or environmental analysis has not yet been started. 0 points
SAFETY	20	
Safety	15	Addresses safety on a NACOG location. 15 points Addresses safety, not on a NACOG location. 5 points Does not address safety. 0 points
Emergency Response / Evacuation Routes	5	Project would improve emergency response times or provide an evacuation route. 5 points Project would not improve emergency response times or provide an evacuation route. 0 points
VEHICLE MOBILITY	15	
Addresses a Known Congestion Location	5	Improves congestion on a 2025, 2030 or 2040 congested segment. 5 points Provides an alternate or parallel route to a congested segment. 5 points Does not improve congestion on a known congested segment or intersection. 0 points
Improves Regional Connectivity	5	Provides an additional connection between major roadways. 5 points Does not provide an additional connection between major roadways. 0 points
Improves Access to Industrial Area / Opportunity Zone	5	Improves access to an industrial area or Opportunity Zone. 5 points Does not improve access to an industrial area or Opportunity Zone. 0 points
FREIGHT MOBILITY	5	
Freight Mobility	5	Improves freight mobility (access, bottlenecks, etc.). 5 points Does not improve freight mobility (access, bottlenecks, etc.). 0 points
TRANSIT, BICYCLE, AND PEDESTRIAN MOBILITY	20	
Improves Multimodal Safety Accommodations	10	Adds additional safety accommodations for multimodal safety. 10 points Does not add additional safety accommodations for multimodal safety. 0 points
Increases Connectivity of Multimodal Network	5	Increases connectivity of the sidewalk, bike facility, trail, or transit network. 5 points Does not increase connectivity of the multimodal network. 0 points
Improves Multimodal Access to Show Low Services	5	Improves pedestrian, bicycle, or transit access to Show Low services. 5 points Does not improve multimodal access to Show Low services. 0 points
TOTAL POINTS	100	

6.2 Project Scoring Results

The resulting scores for proposed projects are listed in **Table 9** through **Table 12**. Out of all project categories, the highest-scoring projects are:

- ▲ SR 260/Show Low Lake Road-Cub Lake Road Safety Improvements
- ▲ Scott Ranch Road Phase II
- ▲ Woolford Road Crossing
- ▲ Woolford Road/Central Avenue Improvements
- ▲ SR 260 Single Cross-Section with Complete Streets Elements (US 60 to SR 73)

Table 9: Major Capital Projects Scoring Results

Project	Ease of Implementation (40)	Safety (20)	Vehicle Mobility (15)	Freight Mobility (5)	Transit, Bicycle, and Pedestrian Mobility (20)	Total (100)
Scott Ranch Road Phase II	35	5	5	5	10	60
Woolford Road Crossing	40	5	5	0	5	55
Woolford Road/ Central Avenue Improvements	25	0	5	5	20	55
Thornton Corridor Phases I-IV	30	5	10	5	0	50
SR 260 Widening (Timberland Road to Old Linden Road)	15	20	10	5	0	50
Stanford Drive Reconstruction	30	5	0	0	0	35
US 60 Widening (Show Low to Vernon)	5	15	10	5	0	35
SR 77 Widening (Show Low to Taylor)	5	15	10	5	0	35
Summit Trail Extension	15	5	5	5	0	30
Porter Mountain Road/ CR-3144 Paving/ Reconstruction	15	5	5	0	0	25
SR 61 Widening (Stanford to Concho)	5	15	0	0	0	20

Table 10: Safety Projects Scoring Results

Project	Ease of Implementation (40)	Safety (20)	Vehicle Mobility (15)	Freight Mobility (5)	Transit, Bicycle, and Pedestrian Mobility (20)	Total (100)
SR 260/Show Low Lake Road-Cub Lake Road	40	20	5	0	0	65
US 60 (MP 352-384)	25	15	5	0	0	45
SR 77 (MP 347-351)	25	15	0	0	0	40
SR 77/Center Street (Snowflake)	10	15	0	0	15	40
SR 77/White Mountain Lake Road	25	15	0	0	0	40
SR 260/Woolford Road	20	15	5	0	0	40
US 60 (MP 341-343)	25	5	5	0	0	35
US 60 (MP 345-352)	25	5	5	0	0	35
US 60 Variable Message Signs	15	20	0	0	0	35
SR 260 Raised Median (Vacation Village Drive to Wagon Wheel Lane)	15	15	5	0	0	35
SR 260/Rainbow Lake Road	10	15	5	0	0	30
SR 260/Branding Iron Loop	15	15	0	0	0	30
SR 61 (MP 352-373)	15	15	0	0	0	30
SR 260 (SR 277 to US 60)	15	15	0	0	0	30
US 60 (MP 317 to SR 260)	15	15	0	0	0	30
SR 260/Penrod Lane	10	15	0	0	0	25
US 60/Old Linden Road	10	15	0	0	0	25
SR 277/Paper Mill Road	10	15	0	0	0	25
Concho Highway/El Dorado Road	15	5	0	0	0	20
US 60/Bordon Ranch Road	15	5	0	0	0	20
US 60/Mormon Lake Road	15	5	0	0	0	20

Table 11: *Traffic Operations Projects Scoring Results*

Project	Ease of Implementation (40)	Safety (20)	Vehicle Mobility (15)	Freight Mobility (5)	Transit, Bicycle, and Pedestrian Mobility (20)	Total (100)
Whipple Road Traffic Calming	15	5	0	0	10	30
US 60/SR 260 Signal Modifications	10	20	0	0	0	30
Old Linden Road/Central Avenue Roundabout	15	5	5	0	10	30
SR 77 Industrial Access Improvements	15	0	5	5	0	25
Whipple Street/Central Avenue Roundabout	15	5	5	0	0	25
Concho Highway Intersection Improvements	15	5	0	0	0	20
Vernon-McNary Road Paving	15	5	0	0	0	20
Show Low Lake Road Operational Improvements	15	0	5	0	0	20
Fire Station Signals	10	5	0	0	0	15

Table 12: *Multimodal Projects Scoring Results*

Project	Ease of Implementation (40)	Safety (20)	Vehicle Mobility (15)	Freight Mobility (5)	Transit, Bicycle, and Pedestrian Mobility (20)	Total (100)
SR Complete Streets Elements (US 60 to SR 73)	15	15	5	0	20	55
SR 260 Complete Streets Elements (MP 337-340)	15	15	0	0	15	45
Pinetop-Lakeside Pedestrian Safety Study Recommendations	10	15	5	0	15	45
SR 260 Bus Pull-Outs	10	15	5	0	10	40
Supplement/Expand White Mountain Connection	10	0	15	0	10	35
ADOT Route Trails	5	0	0	0	20	25
Implement Regional Paratransit Services	10	0	0	0	10	20
Bus Shelter Replacements	10	0	0	0	10	20

6.3 Economic Evaluation

A stated purpose of the Southern Navajo and Apache Counties Transportation Plan is to identify projects that could provide economic benefits to the region. To achieve this objective, an economic evaluation of capital projects was conducted to identify areas of impact for ten of the proposed major capital projects to forecast the level of future development activity and related socioeconomic impacts that could occur within those areas, if supported by transportation improvements.

The potential economic impacts are measured in terms of land use (acres by use), nonresidential square footage and employment, housing units (single and multi-family), and population.

The evaluation demonstrated that seven of the projects would provide measurable development impacts:

1. Scott Ranch Road Phase II would provide a 1.3-mile connection through Forest Service and private land from Show Low Lake Road to Penrod Road in the City of Show Low and would increase access to Summit Healthcare Regional Medical Center and the surrounding commercial area on SR 260.
2. Thornton Corridor Phases I-IV would extend Thornton Road two miles from 22nd Avenue to Commerce Drive in the City of Show Low, providing an additional crossing over Show Low Creek.
3. Woolford Road Crossing is a 0.6-mile extension of Woolford Road between SR 260 and Lorenzo Sitgreaves Drive in the Show Low Bluff development. This roadway will ultimately connect to Penrod Road through the development.
4. Summit Trail Extension would extend Summit Trail 1.9 miles east from Snow Creek Loop to SR 260 in the City of Show Low to relieve traffic on highways and other arterials.
5. Central Avenue/Woolford Road improvements are related to the Woolford Road Crossing and would include widening of a 1.85-mile segment from US 60 to SR 260 to improve traffic flow in the City of Show Low.
6. Stanford Drive Improvements would include improvements along a 10-plus-mile corridor of Stanford Drive, north of an ongoing reconstruction project, which is just east of the US 60 and US 61 split in Apache County.
7. Porter Mountain Road/CR 3144/CR 3148 includes improvements to a 9.65-mile corridor between Sponseller Road and US 60 in Navajo and Apache Counties.

The remaining three improvements are described in this evaluation, but do not create quantifiable development potential:

1. US 60 Widening covers an 18.9-mile segment of the existing highway from the city limits of Show Low to CR 3148 in Vernon to address congestion.
2. SR 61 Widening covers a 19.1-mile segment of the existing roadway between US 60 and SR 180A in Apache County to address congestion.
3. SR 77 Widening covers an 18.9-mile segment of the existing roadway between US 60 in Show Low and SR 277 in Taylor to address congestion.

A summary of the economic impacts by project is shown in **Table 13**. The greatest impacts in terms of nonresidential development would be from the first three projects where roadway extensions, in combination with other economic development factors, could ultimately result in the development of 3.6 million square feet of new retail, employment and hotel development on vacant land adjacent to the proposed road extensions. More details about the economic evaluation are provided in Appendix B.

The Thornton Corridor, Woolford Road Crossing, and Summit Trail Extension projects have the most residential development potential with impacts of 1,000 to 1,600 housing units each, including both single family and multi-family units. The remaining projects are improvements of existing roadways or are in areas that are further from existing development, and thus the economic impacts are more limited and likely to be longer term.

Table 13: *Summary of Socioeconomic Impacts*

Project	Primary Acres	Secondary Acres	Housing Units	Population	Non-residential Square Feet	Employment
Scott Ranch Road Phase II	126.57	110.69	656	1,359	946,000	1,490
Thornton Corridor Phases I-IV	553.54	148.6	1,065	2,533	1,820,000	1,640
Woolford Road Crossing	522.48	13.15	1,379	2,998	865,000	1,120
Summit Trail Extension	992.43	32.23	1,589	3,773	449,000	810
Central Avenue/ Woolford Road Improvements	11.9	192.04	570	1,194	176,000	260
Stanford Drive Improvements	0.0	1,197.33	143	341	43,000	80
Porter Mountain Road/CR 3144/CR 3148	1,147.07	0.00	229	544	0	0
Total	3,353.99	1,694.04	5,631	12,742	4,299,000	5,400



Recommended Plan of Improvements

7. Recommended Plan of Improvements

This section provides a summary of the recommended plan of improvements. Based on the results of the project prioritization and economic evaluation, a list of recommended projects was developed and categorized into short-, mid-, and long-term projects. Short-term projects are shown in **Table 14**, mid-term projects in **Table 15**, and long-term projects in **Table 16**.

High scoring projects (45 points and higher) are listed under short- and mid-term timeframes considering funding constraints and environmental processes. Additional project refinement for the short-term recommendations is provided in Appendix C. Projects that scored moderately well (30-40 points) are listed in mid-term and long-term projects based on their scoring outcomes. Low priority projects (25 points or less), from the project prioritization, are omitted as they likely are not critical within the 2040 horizon year. These projects are provided in **Table 17**.

All of the recommended studies were added to the short-term projects list as they will help define additional projects in subsequent years. The short-term projects are recommended as the highest priority for identifying grant funding and other sources to implement as quickly as feasible.

A map of the recommended projects is included in **Figure 23**.

Table 14: Short-Term Project Recommendations

Map No.	Name	Type	Score	Economic Impact	Prioritization	Est. Cost
1	SR 260/Show Low Lake Road-Cub Lake Road	Safety	65	-	High	\$800,000
2	Scott Ranch Road Phase II	Major Capital	60	Emp: 1,490 Pop: 1,359	High	\$9M-\$11M
3	Woolford Road Crossing	Major Capital	55	Emp: 1,120 Pop: 2,998	High	\$6.5M
4	Thornton Corridor Phases I-IV	Major Capital	50	Emp: 1,640 Pop: 2,533	High	\$3M-\$4M
5	US 60 (MP 352-384)	Safety	45	-	High	\$29.4M
6	Pinetop-Lakeside Pedestrian Safety Study Recommendations	Multimodal	45	-	High	\$8.8M
STUDIES/PLANS						
-	Truck Commodity Study	Study/Policy	N/A	N/A	High	-
-	Consistency of Road Names Study	Study/Policy	N/A	N/A	High	-
-	Left-Turn Phase Study	Study/Policy	N/A	N/A	High	-
-	Signal Warrant Study	Study/Policy	N/A	N/A	High	-
-	Turn Lane Study	Study/Policy	N/A	N/A	High	-
-	Regional Transit Circulator and Transit Funding Study	Study/Policy	N/A	N/A	High	-
-	Revise Snow Plow Policy	Study/Policy	N/A	N/A	High	-
-	Resurfacing ADA Policy	Study/Policy	N/A	N/A	High	-

Table 15: Mid-Term Project Recommendations

Map No.	Name	Type	Score	Economic Impact	Prioritization	Est. Cost
7	Woolford Road/Central Avenue Improvements	Major Capital	55	Emp: 260 Pop: 1,194	High	\$14M-\$15M
8	SR 260 Cross-Section (US 60 to SR 73)	Multimodal	55	-	High	\$20M-\$25M
9	SR 260 Widening (Timberland Road to Old Linden Road)	Major Capital	50	-	High	\$9.5M
10	SR 260 Cross-Section (MP 337-340)	Multimodal	45	-	High	\$7M-\$11.5M
11	SR 77 (MP 347-351)	Safety	40	-	Medium	-
12	SR 77/Center Street (Snowflake)	Safety	40	-	Medium	-
13	SR 77/White Mountain Lake Road	Safety	40	-	Medium	-
14	SR 260 Bus Pull-Outs	Multimodal	40	-	Medium	-
15	SR 260/Woolford Road	Safety	40	-	Medium	-

Table 16: Long-Term Project Recommendations

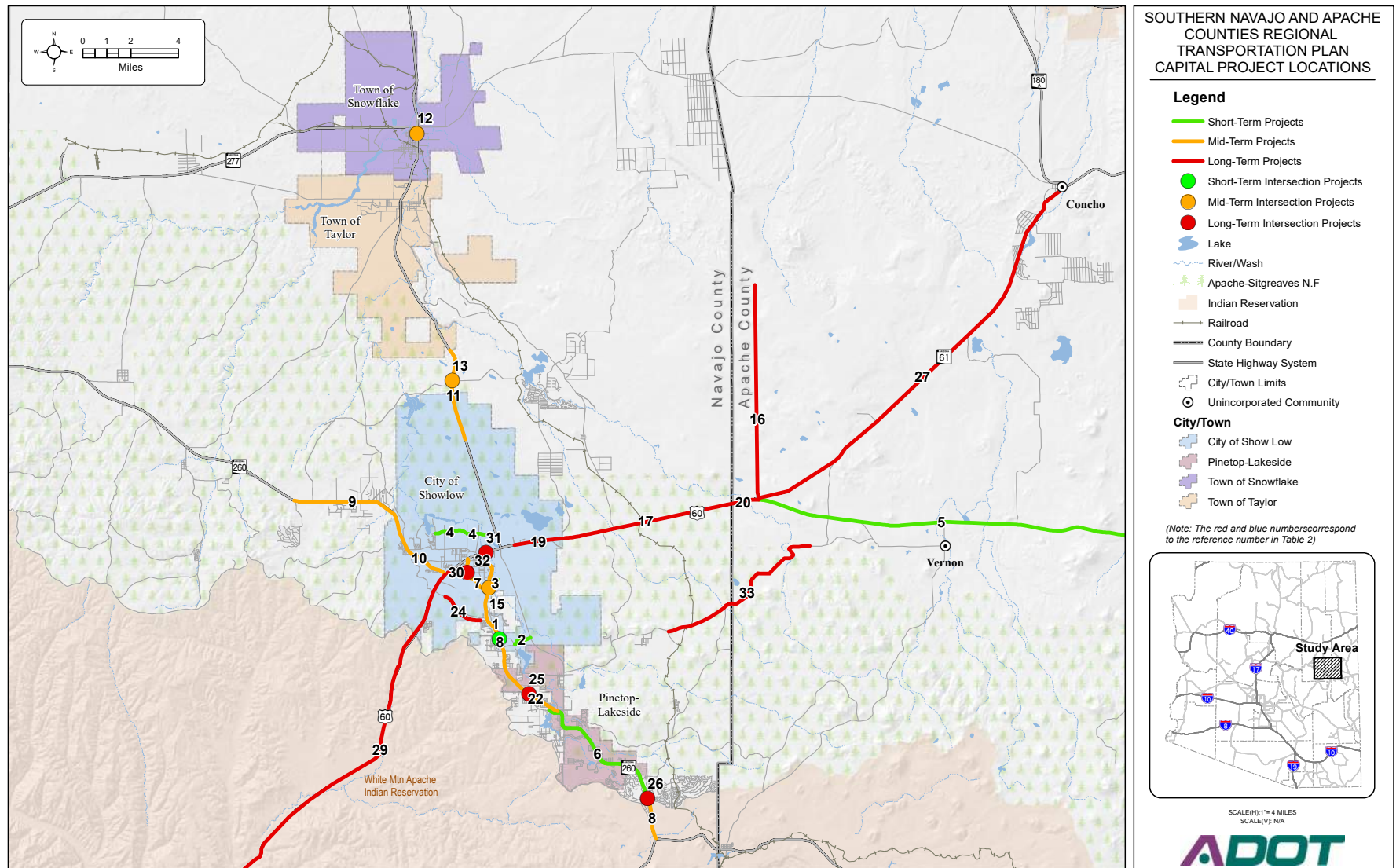
Map No.	Name	Type	Score	Economic Impact	Prioritization	Est. Cost
16	Stanford Dr. Reconstruction	Major Capital	35	Emp: 80 Pop: 341	Medium	-
17	US 60 Widening (Show Low to Vernon)	Major Capital	35	Low	Medium	-
18	SR 77 Widening (Show Low to Taylor)	Major Capital	35	Low	Medium	-
19	US 60 (MP 341-343)	Safety	35	-	Medium	-
20	US 60 (MP 345-352)	Safety	35	-	Medium	-
21	US 60 Variable Message Signs	Safety	35	-	Medium	-

Map No.	Name	Type	Score	Economic Impact	Prioritization	Est. Cost
22	SR 260 Raised Median (Vacation Village Drive to Wagon Wheel Lane)	Safety	35	-	Medium	-
23	Supplement/Expand White Mountain Connection	Multimodal Project	35	-	Medium	-
24	Summit Trail Extension	Major Capital Project	30	Emp: 810 Pop: 3,773	Medium	-
25	SR 260/Rainbow Lake Road	Safety	30	-	Medium	-
26	SR 260/Branding Iron Loop	Safety	30	-	Medium	-
27	SR 61 (MP 352-373)	Safety	30	-	Medium	-
28	SR 260 (SR 277 to US 60)	Safety	30	-	Medium	-
29	US 60 (MP 317 to SR 260)	Safety	30	-	Medium	-
30	Whipple Road Traffic Calming	Traffic Operations	30	-	Medium	-
31	US 60/SR 260 Signal Modifications	Traffic Operations	30	-	Medium	-
32	Whipple St/Central Ave Roundabout	Traffic Operations	30	-	Medium	-
33	Porter Mountain Road/ CR-3144 Paving/ Reconstruction	Major Capital	25	Emp: 0 Pop: 544	Low	-

Table 17: *Projects Removed from Consideration*

Name	Type	Score	Economic Impact	Prioritization	Estimated Cost
SR 260/Penrod Lane	Safety	25	-	Low	-
US 60/Old Linden Road	Safety	25	-	Low	-
SR 277/Paper Mill Road	Safety	25	-	Low	-
SR 77 Industrial Access Improvements	Traffic Operations	25	-	Low	-
ADOT Route Trails	Multimodal	25	-	Low	-
SR 61 Widening (US 60 to Concho)	Major Capital	20	-	Low	-
Concho Hwy/El Dorado Road	Safety	20	-	Low	-
US 60/Bordon Ranch Road	Safety	20	-	Low	-
Old Linden Road/Central Avenue Roundabout	Traffic Operations	20	-	Low	-
Concho Hwy Intersection Improvements	Traffic Operations	20	-	Low	-
Vernon-McNary Road Paving	Traffic Operations	20	-	Low	-
Show Low Lake Road Operational Improvements	Traffic Operations	20	-	Low	-
Implement Regional Paratransit Services	Multimodal	20	-	Low	-
Bus Shelter Replacements	Multimodal	20	-	Low	-
Fire Station Signals	Traffic Operations	15	-	Low	-

Figure 23: Recommended Projects





Public Involvement

8. Public Involvement

Two rounds of public outreach were conducted during the Southern Navajo and Apache Counties Transportation Plan. The first round occurred in May and June of 2018 and the second round occurred in January and February of 2019. The two rounds of involvement are described below.

8.1 Public Outreach Phase 1

The first round of public outreach was conducted to obtain input 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 from May 25 to June 21, 2018. During this time frame, 467 surveys were 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. 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 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.

Survey responses are summarized in **Appendix D**.



8.2 Public Outreach Phase 2

The second round of outreach was conducted to obtain feedback from the public on the recommended projects and their prioritization in Working Paper 2: Plan of Improvements. Public input was obtained both in-person at a public open house and online through ADOT's website.

A public open house was held at Show Low City Hall on February 7, 2019 from 4 - 6 p.m. The open house was promoted in various ways to maximize potential attendance turnout, including a print advertisement in the White Mountain Independent, articles in local publications, information posted on ADOT's website, flyers distributed at Show Low City Hall, and an email blast sent to people who had provided their contact information during the previous phase of public outreach in May and June of 2018. The open house was attended by approximately 20 community members.

As attendees entered the meeting room, they were greeted by a member of the study team and provided with a project fact sheet and comment form. The open house featured an introductory presentation given by the project team. The presentation provided attendees with an overview of the project and tasks completed thus far; the methodology and results of the project evaluation process and economic impact evaluation; specifics for high-priority projects that were previously largely undefined; and the initial prioritized list of recommended projects.

After the presentation concluded, attendees had the opportunity to ask questions of the project team and provide input into the prioritization of projects. Once all the questions and comments were addressed, attendees had the opportunity to review a series of eight display boards that were set up around the room, which included:

- ▲ Project overview, including the study purpose, objectives, and study area;
- ▲ Project schedule and remaining steps;
- ▲ Transportation needs identified in earlier phases of the plan, and an overview of initial improvement alternatives;
- ▲ Project scoring methodology and results;
- ▲ Economic impacts overview and evaluation; and
- ▲ Lists of initial short-, medium, and long-term recommended projects, along with maps showing their locations.

While attendees were able to discuss topics of interest with project team members during the remainder of the open house, they were encouraged to provide feedback on the priority of projects by completing and submitting a comment form. Additionally, hard copies of Working Paper 2: Plan of Improvements were available for attendees to review, which provided them with more detail on specific projects.

For community members not able to attend the public open house, the Working Paper 2: Plan of Improvements document was posted on ADOT's website (<http://www.azdot.gov/snac>). An online fillable pdf of the comment form on ADOT's website enabled citizens another way to provide feedback on the working paper, the proposed projects, and the prioritization. The online comment form was available from January 31 through February 21, 2019. Respondents were asked to mail or email their responses to the project team. The feedback from the comment form provided by the public both at the open house and online is provided in

Appendix E.

The most common comments heard during the public meeting and through the comment forms are summarized in the following bullets:

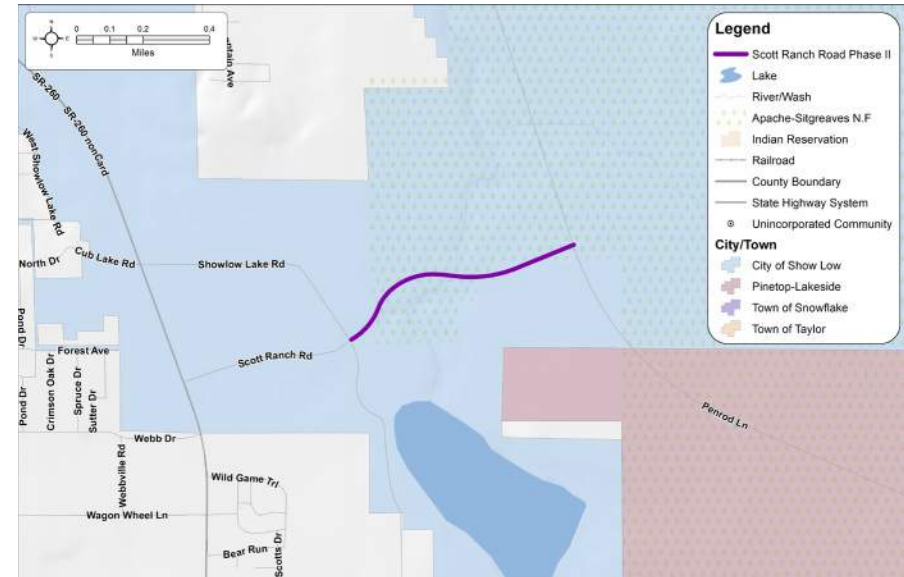
- ▲ Widening State Route 260 from Show Low toward Heber-Overgaard should be a higher priority in the plan. The project has been discussed for more than 10 years and a Design Concept Report (DCR) was previously funded in the ADOT 5-Year Plan but was dropped due to funding shortages. The public would like to see planning for that project reignited due to safety and congestion issues experienced along the corridor.
- ▲ Drivers experience substantial congestion along Central Avenue and Woolford Road in central Show Low, and they would support improvements to this corridor.
- ▲ Whipple Street between Central Avenue and US 60, also in central Show Low, experiences similar conditions; the intersection with US 60 needs improvements.
- ▲ There is a cut-through traffic issue in the Snow Creek subdivision in southwest Show Low due to the congestion along Central Avenue and delay at the intersection with Whipple Street.
- ▲ More widespread bicycle accommodations are needed on the main roadways within the study area, particularly SR 260 between Show Low and Pinetop-Lakeside.
- ▲ Increase emphasis on multimodal projects on SR 260. Cycling on the roadways in the study area is unsafe and there is a demand for cycling because many people avoid riding their bicycles in the urbanized areas because of this safety concern.



Appendix A - Large Capital Project Detail Sheets

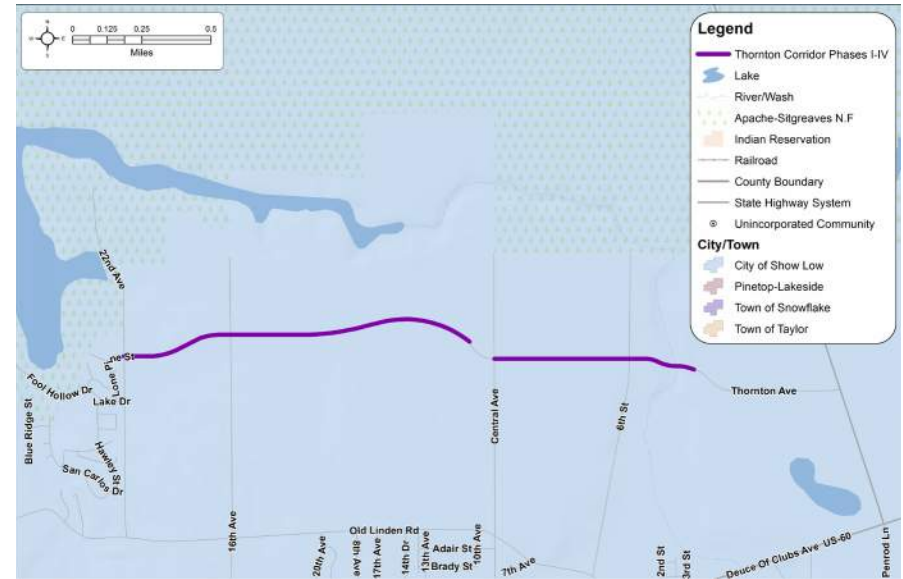
Appendix A – Large Capital Project Detail Sheets

Project Name	Scott Ranch Road Phase II
Project Location	Show Low Lake Road to Penrod Road
Project Length (miles)	1.3
Functional Classification	Major Collector
Roadway Ownership/ Maintenance	City of Show Low
Current Land Use	Residential, vacant
Project Justification	Improve regional mobility, increase access to hospital and major retail area, relieve traffic on SR 260, provide the only 100-year flood resistant bridge over Show Low Creek
Planning-Level Cost	\$9,000,000 - \$11,000,000
Funding Status	\$1,300,000 set aside by City of Show Low, City seeking BUILD grant for remainder of project
Roadway Lanes	2 (1 eastbound and 1 westbound)
Design Status	30% Design complete
Utility Expansion	Yes
Other Jurisdiction Coordination	Yes – Forest Service (clearance already provided)
Environmental Clearances	Section 404 of the Clean Water Act waterway clearance and permitting underway, clearance obtained for remainder of corridor
Multimodal Accommodations	Sidewalks on both sides, no bike lanes or transit accommodations



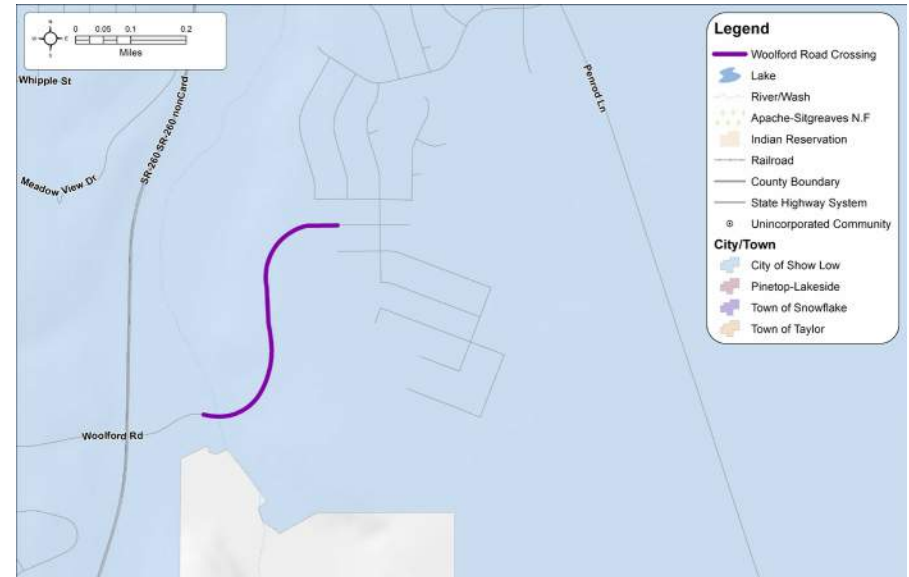
Location Map

Project Name	Thornton Corridor – Phases I-IV
Project Location	22 nd Avenue to Commerce Drive
Project Length (miles)	2.0
Functional Classification	Major Collector
Roadway Ownership/Maintenance	City of Show Low
Current Land Use	Residential, light industrial, vacant
Project Justification	Improve regional mobility, provide an additional crossing over Show Low Creek, increase access to vacant land
Planning-Level Cost	\$3,000,000 - \$4,000,000
Funding Status	Phase I fully funded, Phases II and III not funded, Phase IV construction not funded, but in CIP and has R/W in place with utilities already laid
Roadway Lanes	2 (1 eastbound and 1 westbound)
Design Status	Phase I complete, remaining phases not designed
Utility Expansion	Phase IV utilities in place already, Phase II water extension, no expansions with Phases I or III
Other Jurisdiction Coordination	Flood Control District for Phase IV, other phases all within Show Low
Environmental Clearances	404 Waterway clearance required for Phase IV, none needed for other phases
Multimodal Accommodations	None



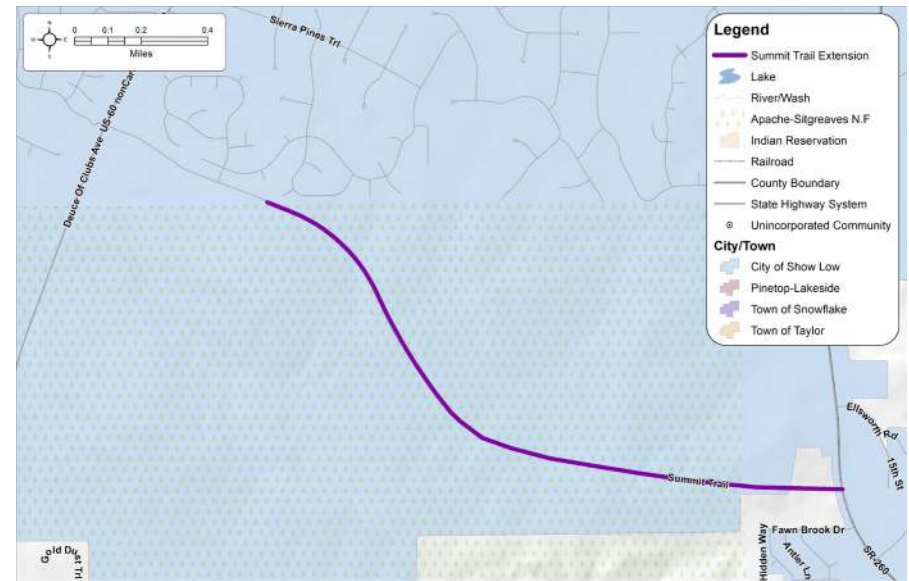
Location Map

Project Name	Woolford Road Crossing
Project Location	East of SR 260 to Lorenzo Sitgreaves Drive
Project Length (miles)	0.6
Functional Classification	Minor Arterial
Roadway Ownership/ Maintenance	City of Show Low
Current Land Use	Residential, commercial, vacant
Project Justification	Improve regional mobility, provide an additional crossing over Show Low Creek, increase access to a known growth area
Planning-Level Cost	Unknown
Funding Status	Developer of Show Low Bluffs will construct the roadway and bridge when they reach a threshold of platted residential lots
Roadway Lanes	2 (1 eastbound and 1 westbound)
Design Status	100% designed
Utility Expansion	None required – utilities already exist
Other Jurisdiction Coordination	None, PUD zoning exists along Penrod Road
Environmental Clearances	All clearances already obtained
Multimodal Accommodations	Sidewalks on both sides, no bike lanes or transit accommodations



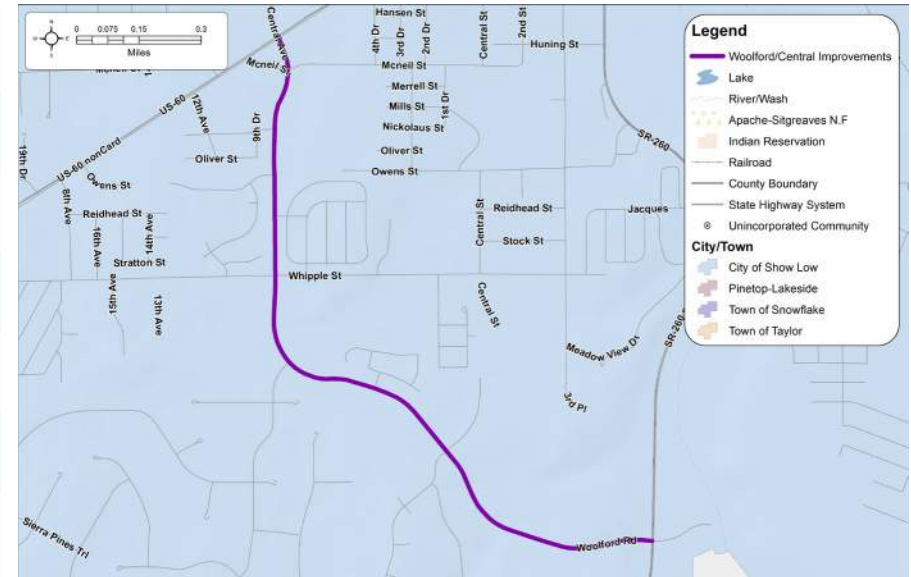
Location Map

Project Name	Summit Trail Extension
Project Location	East of Snow Creek Loop to SR 260
Project Length (miles)	1.9
Functional Classification	Minor Arterial
Roadway Ownership/Maintenance	City of Show Low
Current Land Use	Residential, vacant
Project Justification	Improve regional mobility, relieve traffic on US 60, SR 260, Whipple Street, and Central Avenue/Woolford Road
Planning-Level Cost	Unknown
Funding Status	None identified
Roadway Lanes	2 (1 eastbound and 1 westbound)
Design Status	Not started
Utility Expansion	None with project
Other Jurisdiction Coordination	Forest service – requires land swap
Environmental Clearances	None expected
Multimodal Accommodations	None anticipated



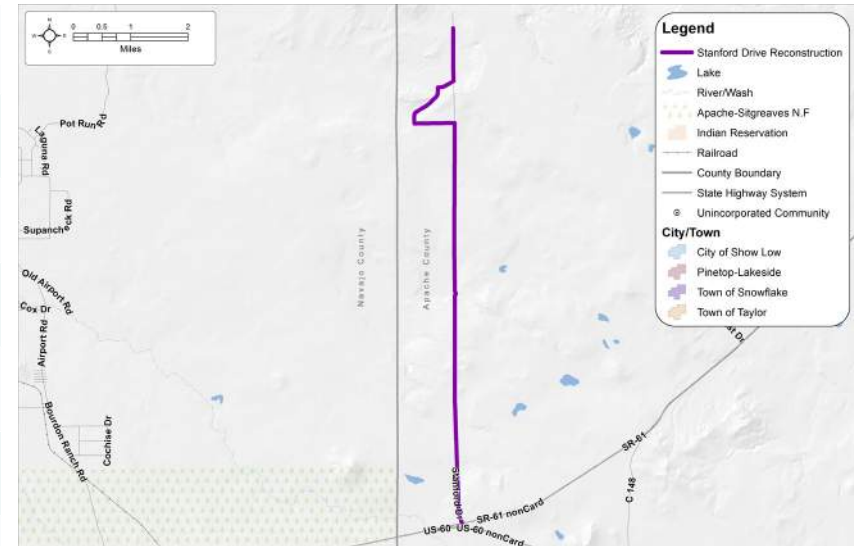
Location Map

Project Name	Woolford Road/Central Avenue Improvements
Project Location	US 60 to SR 260
Project Length (miles)	1.85
Functional Classification	Minor Arterial
Roadway Ownership/ Maintenance	City of Show Low
Current Land Use	Residential, commercial
Project Justification	Accommodate additional truck traffic and improve traffic flow, improve pedestrian and bicycle connectivity
Planning-Level Cost	\$13,000,000 - \$14,000,000
Funding Status	None identified
Roadway Lanes	2 (1 eastbound/southbound and 1 westbound/northbound)
Design Status	Multi-use trail designed, roadway improvements not designed
Utility Expansion	None required
Other Jurisdiction Coordination	None
Environmental Clearances	None expected
Multimodal Accommodations	Multi-use trail



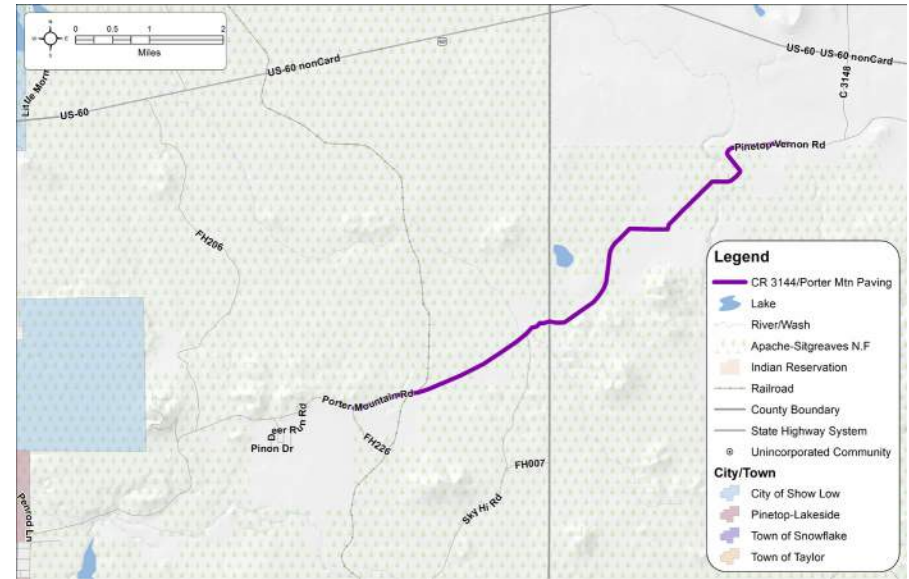
Location Map

Project Name	Stanford Drive Reconstruction
Project Location	East of Snow Creek Loop to SR 260
Project Length (miles)	9.75
Functional Classification	Minor Collector
Roadway Ownership/Maintenance	Apache County
Current Land Use	Residential, vacant
Project Justification	Improve safety, increase access to undeveloped land
Planning-Level Cost	Unknown
Funding Status	Phase I (southern 2 miles) fully funded, Phase II unfunded
Roadway Lanes	2 (1 northbound and 1 southbound)
Design Status	Phase I complete, Phase II not started
Utility Expansion	None with project
Other Jurisdiction Coordination	None
Environmental Clearances	Categorical exclusion obtained for Phase I, anticipated to be required for Phase II
Multimodal Accommodations	None anticipated



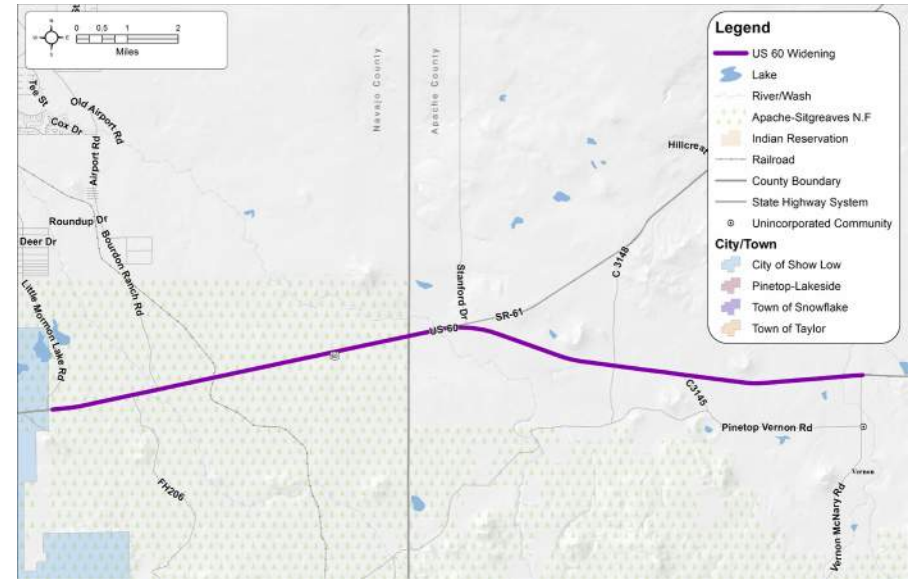
Location Map

Project Name	CR 3144/Porter Mountain Road/CR 3148 Paving
Project Location	Morgan Mountain Fire Road to US 60
Project Length (miles)	9.65
Functional Classification	Major Collector
Roadway Ownership/ Maintenance	Navajo and Apache Counties
Current Land Use	Residential, vacant
Project Justification	Provide alternative east-west connection to US 60, improve emergency services and evacuation routes
Planning-Level Cost	Unknown
Funding Status	None identified
Roadway Lanes	2 (1 eastbound and 1 westbound)
Design Status	Not started
Utility Expansion	None anticipated
Other Jurisdiction Coordination	Forest Service
Environmental Clearances	None anticipated
Multimodal Accommodations	None anticipated



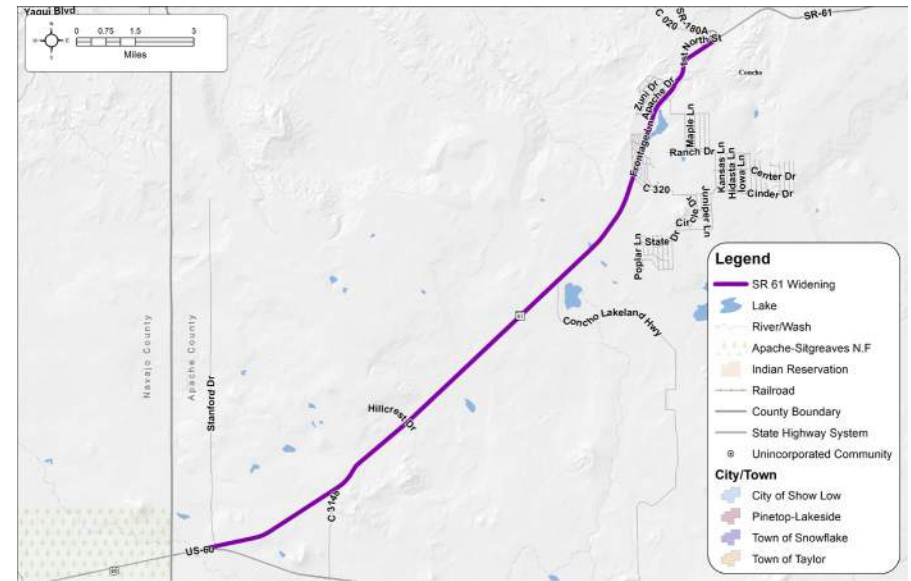
Location Map

Project Name	US 60 Widening
Project Location	Show Low (Penrod Road) to Vernon (CR 3148)
Project Length (miles)	18.9
Functional Classification	Principal Arterial
Roadway Ownership/ Maintenance	ADOT
Current Land Use	Residential, commercial, vacant
Project Justification	Address congestion
Planning-Level Cost	Unknown
Funding Status	None identified
Roadway Lanes	5 (2 eastbound, 2 westbound, center left turn lane)
Design Status	Not started
Utility Expansion	None anticipated
Other Jurisdiction Coordination	City of Show Low, Navajo County, Apache County
Environmental Clearances	NEPA compliance/documentation required
Multimodal Accommodations	None anticipated



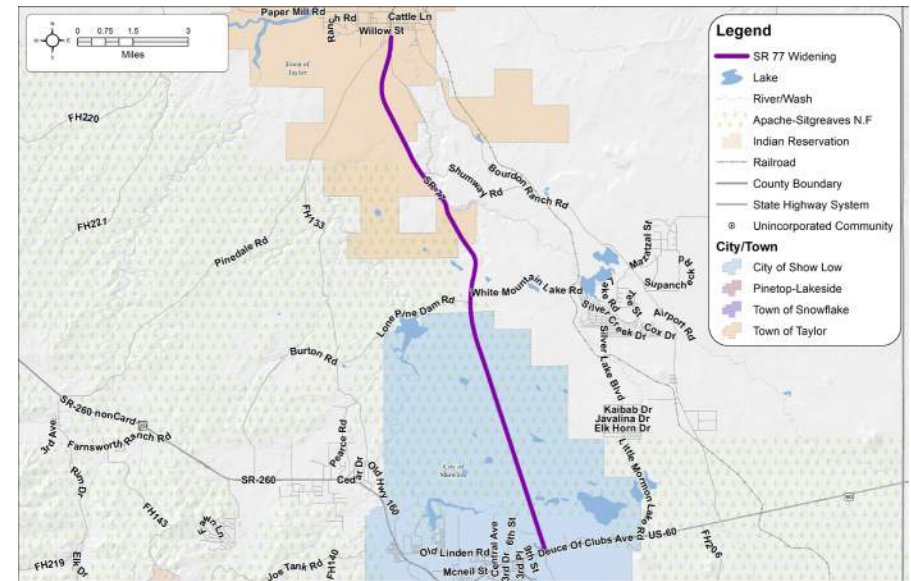
Location Map

Project Name	SR 61 Widening
Project Location	US 60 to SR 180A
Project Length (miles)	19.1
Functional Classification	Major Collector
Roadway Ownership/Maintenance	ADOT
Current Land Use	Residential, commercial, vacant
Project Justification	Address congestion
Planning-Level Cost	Unknown
Funding Status	None identified
Roadway Lanes	5 (2 northbound, 2 southbound, center left turn lane)
Design Status	Not started
Utility Expansion	None anticipated
Other Jurisdiction Coordination	Apache County
Environmental Clearances	NEPA compliance/documentation required
Multimodal Accommodations	None anticipated



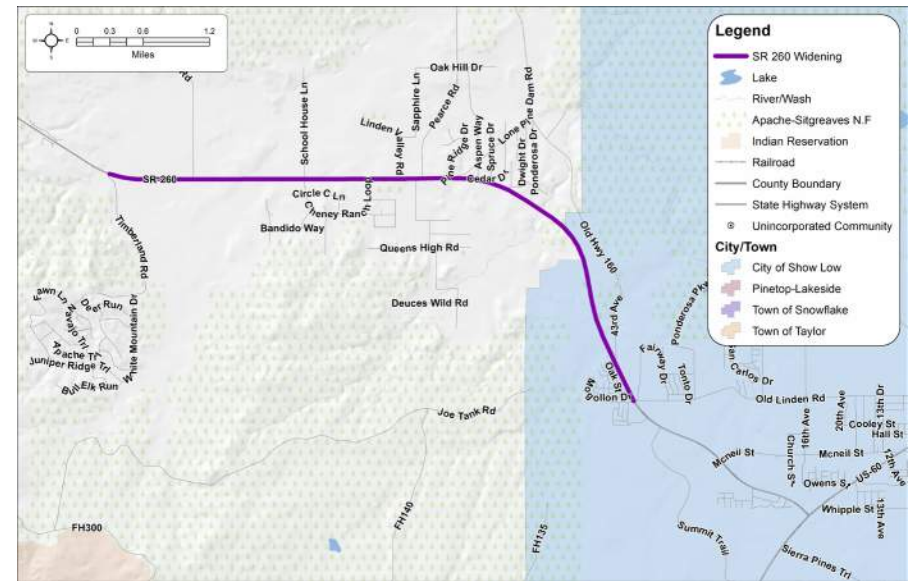
Location Map

Project Name	SR 77 Widening
Project Location	US 60 to SR 277
Project Length (miles)	18.9
Functional Classification	Principal Arterial
Roadway Ownership/Maintenance	ADOT
Current Land Use	Residential, commercial, industrial, vacant
Project Justification	Address congestion
Planning-Level Cost	Unknown
Funding Status	None identified
Roadway Lanes	5 (2 northbound, 2 southbound, center left turn lane)
Design Status	Not started
Utility Expansion	None anticipated
Other Jurisdiction Coordination	Navajo County
Environmental Clearances	NEPA compliance/documentation required
Multimodal Accommodations	None anticipated



Location Map

Project Name	SR 260 Widening
Project Location	Timberland Road to Old Linden Road
Project Length (miles)	6
Functional Classification	Principal Arterial
Roadway Ownership/ Maintenance	ADOT
Current Land Use	Residential, commercial, vacant
Project Justification	Address congestion
Planning-Level Cost	\$9,500,000
Funding Status	None identified
Roadway Lanes	5 (2 northbound, 2 southbound, center left turn lane)
Design Status	Not started
Utility Expansion	None anticipated
Other Jurisdiction Coordination	Navajo County, City of Show Low
Environmental Clearances	NEPA compliance/documentation required
Multimodal Accommodations	None anticipated



Location Map



Appendix B - Economic Analysis

Appendix B – Economic Analysis

This Appendix describes the methodology used to develop the land use assumptions and the resulting socioeconomic impacts for each of the 10 capital projects that were analyzed. It is important to clarify that the projected land use and socioeconomic impacts are more likely if the proposed transportation improvement is completed; however, these transportation improvements alone are not sufficient to cause this development. They are a major factor enhancing overall accessibility within the area of impact, but demand for commercial and/or residential development, land values and general economic conditions will all be important determinants of when, and to what extent, these development changes occur.

For most of the projects, there are both primary and secondary areas of impact for the proposed transportation improvement. Development potential is most likely to be affected in the primary area of impact; however, given the length of the proposed new roadway improvement and/or the connections to other developed areas that it creates, there may be secondary areas that would also benefit, even though the road improvement may not extend into the secondary area.

Impact Approach and Assumptions

This section describes the approach used to estimate changes in land use and development, as well as the methodology used to estimate the socioeconomic impacts including population, employment, square footage and housing units.

Land Use Projections

The area of impact is defined at the parcel level relative to the terminus of each new road segment, or the area of impact may be a corridor for improvements to existing roadways. In most cases, the parcels within the areas of impact are currently vacant. The boundaries of the area of impact are defined by natural boundaries, such as other existing roadways or waterways, and land by ownership, such as Forest Service land that is not developable.

Projections about future land use form the foundation for the evaluation of the potential economic effects of the proposed transportation improvements. The evaluation starts with land use data from city and county general plans, and then applies future development and density assumptions to vacant parcels in each area of impact. These assumptions are based on surrounding development, known development plans, roadway connections to other existing development that are created by the improvement, and land use and land ownership within the area of impact. Some additional factors for consideration include character of the area, density, condition, service to the community, relationship to adjacent parcels, and historical significance.

Socioeconomic Impacts

Future land use and development density are used to drive projections of housing units and population, as well as nonresidential square footage and employment. In almost all cases, the land is currently undeveloped, so there is no existing socioeconomic impact, or any potential for redevelopment.

To estimate the socioeconomic impact, the number of acres by land use likely to be built in the future was translated into additional housing units and nonresidential square footage. These conversions were based on the current prevailing housing unit densities and floor-area-ratios in and around the area of impact. The final translation into population and employment results from applying average long-term occupancy rates and population and employment density standards.

Economic Evaluation of Proposed Transportation Improvements

A summary of the economic impact of the proposed improvements is provided below.

Scott Ranch Road Phase II

This extension of Scott Ranch Road would connect Penrod Road on the east to Show Low Lake Road on the west. The primary area of impact would be along the extension and along Penrod Road, and the secondary area of impact would be beyond Show Low Lake Road, in and around the hospital and existing commercial development district along White Mountain Road/SR 260. This roadway extension would provide an alternative route from downtown Show Low, or from Snowflake/Taylor, to the hospital and commercial core along SR 260 at Scott Ranch Road. Because this extension would increase traffic along Penrod Road, there is development potential at the new intersection with Scott Ranch Road. This new roadway would also provide another access point into the commercial and medical area west of Show Low Lake Road, generating additional development potential.

The expanding services at Summit Healthcare Regional Medical Center are a major factor driving traffic into the project area, and traffic is expected to increase substantially on the east side of the facility should it be connected directly to Penrod Road via Scott Ranch Road.

Land Use and Development Potential

The development areas and assumed land uses are shown in **Figure B-1**. The primary area of impact includes 127 acres of vacant land with potential for development. Of that total, 103 acres are anticipated to be a single-family development south of the new road extension, approximately 10 acres would be retail south of the new section of Scott Ranch Road, 8 acres could be a hotel site along Penrod Road, and the remaining six acres along Penrod Road could be employment uses, such as light industrial or building material suppliers.

The secondary area of impact includes 11 vacant acres along the existing portion of Scott Ranch Road west of SR 260. An estimated 35 acres, just south of the hospital, could develop as additional medical office or other local-serving office. On the northwest corner of Scott Ranch Road and Show Low Lake Road, there is potential for 13 acres of multi-family development as a transition between the medical and office area and other lower density residential development to the east. Along SR 260, there is additional retail potential on about 20 acres on both sides of the road, immediately south of Lowe's and Home Depot. There is also single family residential potential of nearly 40 acres on the south side of the existing portion of Scott Ranch Road, just west of Show Low Lake Road.

Socioeconomic Impacts

The development potential within the primary impact area includes the following:

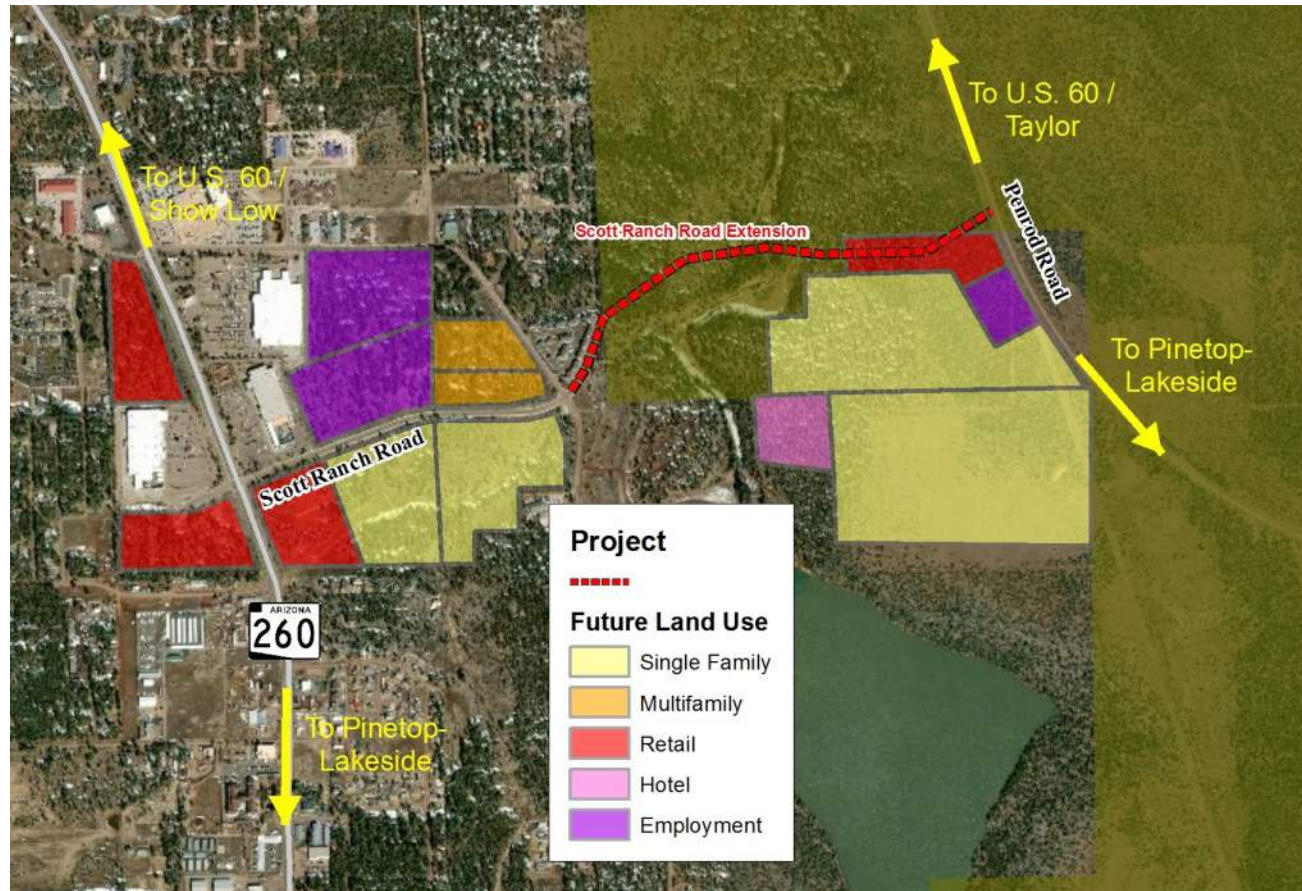
- ▲ 270 single family units at a density of 2.6 units per acre with an estimated population of 640 people.
- ▲ 57,000 square feet of employment (light industrial) uses that could support estimated employment of about 70 people.
- ▲ 147,000 square feet of full-service hotel and retail/restaurant uses that could support estimated employment of about 100 people.
- ▲ 84,000 square feet of retail uses that could support estimated employment of about 150 people.

The development potential within the secondary impact area includes the following:

- ▲ 269 multi-family units with an estimated population of 440 people.
- ▲ 117 single family units at a density of 3.0 units per acre with an estimated population of 720 people.
- ▲ 454,000 square feet of employment uses (medical office, other local-serving office and services) that could support estimated employment of about 800 people.
- ▲ 204,000 square feet of retail uses that could support estimated employment of about 370 people.

The extension of Scott Ranch Road from an existing commercial core in the City of Show Low across to Penrod Road has the second highest impact of all the proposed projects in terms of nonresidential development after the Thornton Corridor project.

Figure B-1: Scott Ranch Road Phase II Assumed Land Uses



Thornton Corridor Phases I-IV

The Thornton Road Corridor Phase I-IV project would extend Thornton Road from Commerce Drive in the Airport Industrial Park to 22nd Avenue, north of Old Linden Road. Thornton Road currently extends from SR 77 into the Airport Industrial Park and terminates at Show Low Creek. This extension would create additional accessibility within the industrial park, as well as opening residential development areas west of the industrial park near Fools Hollow Lake.

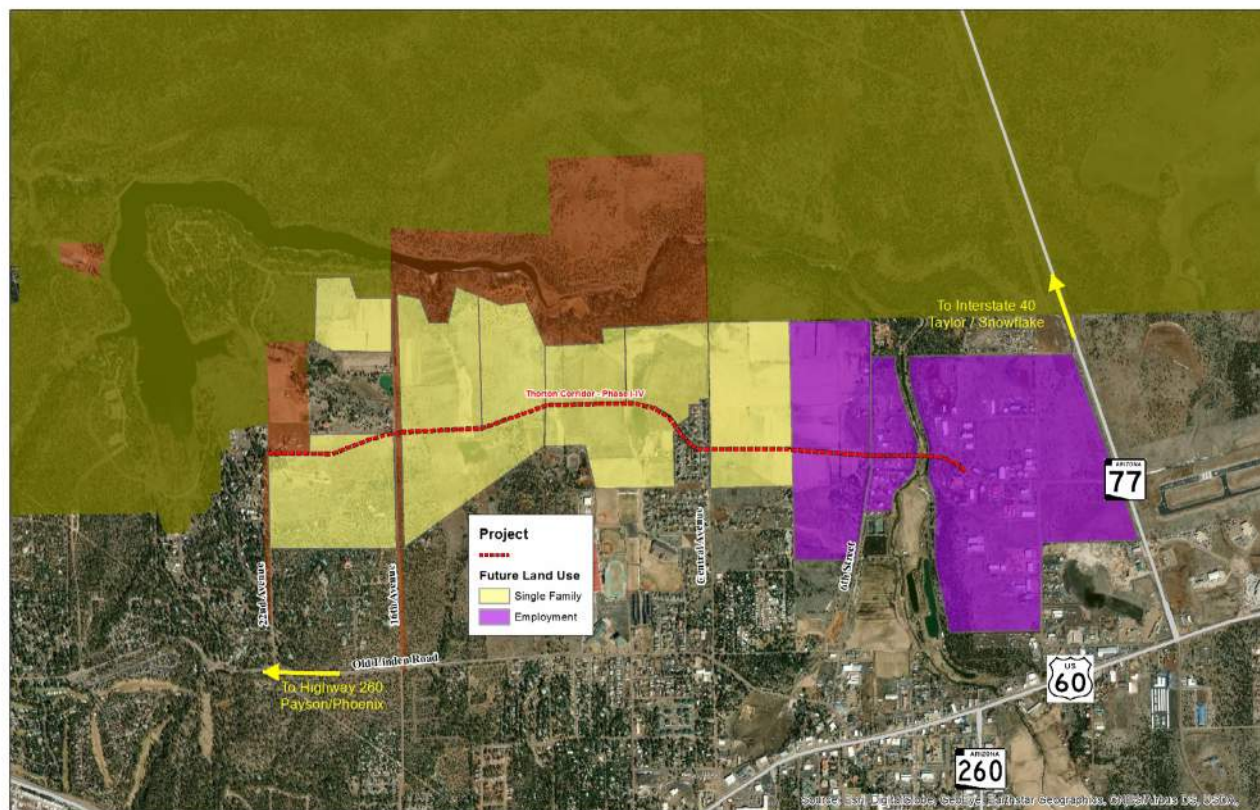
Land Use and Development Potential

The impact areas and assumed land uses are provided in **Figure B-2**. The primary area of impact includes 553.54 acres of vacant land with potential for development between 6th Street and 22nd Avenue along the Thornton Corridor. In addition to the vacant land, there are approximately 26 acres of lower density existing industrial development in the industrial primary area including a sewer treatment plant. These areas are excluded from the vacant land totals, along with undevelopable land in Show Low Creek.

Within the planned residential areas, there are a small number of existing rural residential units scattered throughout the area. Within the primary area of impact, it is anticipated that nearly 475 acres could develop with single family housing at a density of two units per acre in most of the area, but with slightly higher densities (three units per acre) in the area just to the west of existing medium density residential along Central Avenue. The residential parcel in the far northwest corner of the area of impact, closer to Fools Hollow Lake, is projected to have lower-density development with only 0.33 units per acre. An estimated 80 acres along the west side of 6th Street could develop with employment uses, primarily light industrial, similar to the existing development within the Airport Industrial Park. The secondary area of impact includes close to 150 vacant acres between SR 77 and 6th Street with additional employment potential. Thornton Road already exists in part of this area, and about half of the total acreage is developed with a host of industrial users. The road extension beyond Show Low Creek would create increased accessibility and potentially increase the density and level of industrial development on vacant land in the Airport Industrial Park.



Figure B-2: Thornton Corridor Phases I-IV Assumed Land Uses



Socioeconomic Impacts

The development potential within the primary impact area includes the following:

- ▲ 1,065 single family units at an average density of two units per acre with an estimated population of 2,530 people.
- ▲ 525,000 square feet of employment (light industrial) uses that could support estimated employment of more than 450 people.

The development potential within the secondary impact area includes the following:

1.3 million square feet of employment (light industrial) uses that could support estimated employment of about 1,200 people.

The Thornton Corridor would impact both the Airport Industrial Park and potential residential areas between the industrial park and Fools Hollow Lake. Given the size of the area of impact and the likely level of development intensity in this area, this project would create the largest nonresidential impacts and the third largest residential impacts among the seven projects evaluated in this report.

Woolford Road Crossing

The Woolford Road Crossing project would extend Woolford Road from SR 260 into the Show Low Bluff development, eventually providing an alternative connection to Penrod Road. Residential development within Show Low Bluff is currently limited without a second point of access for emergency services. This road extension would allow the project to move forward and continue building additional residential units. While a majority of the project is single family housing, there is potential for commercial development. Additional long-term development is possible along the east side of Penrod Road.

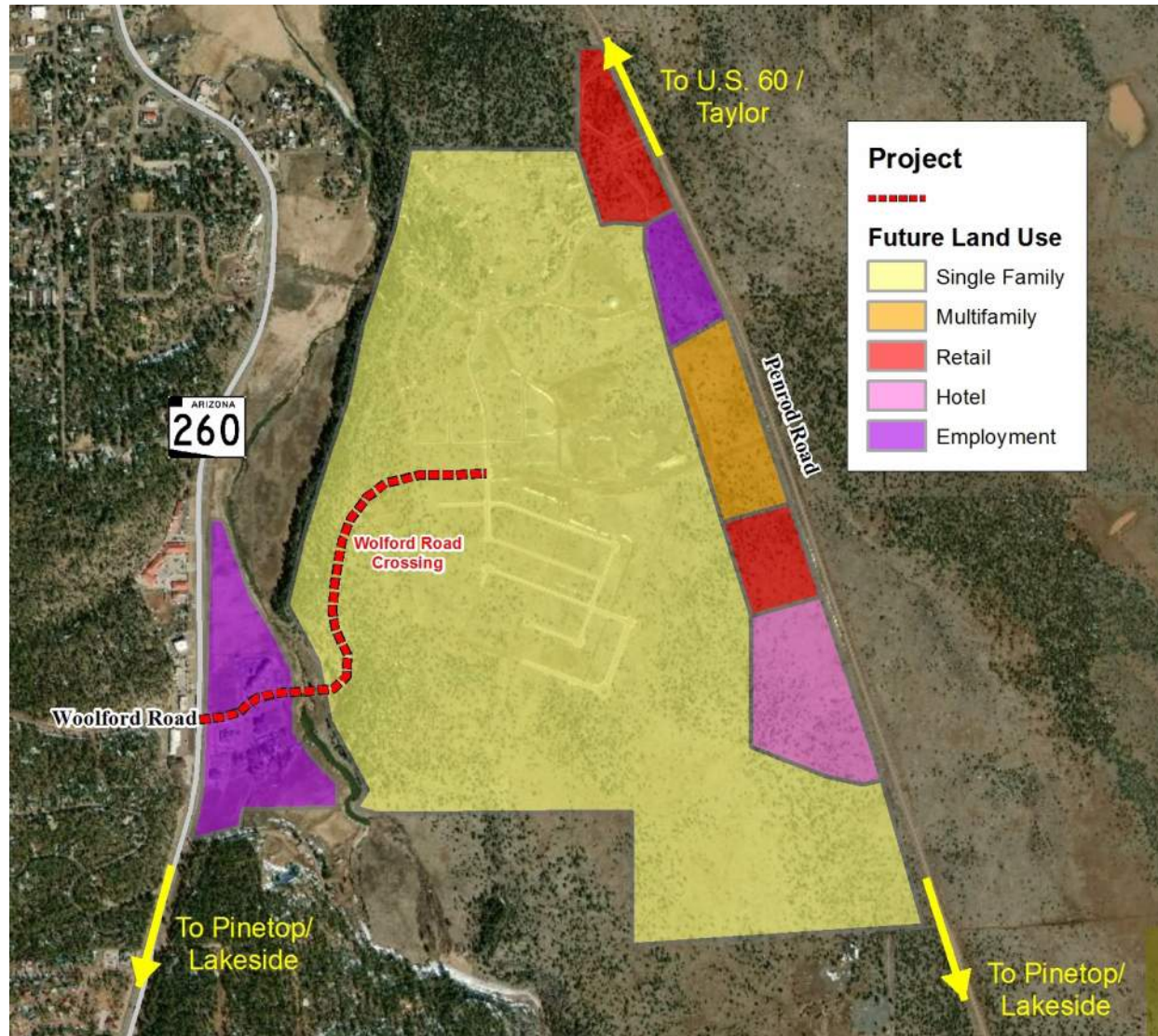
Land Use and Development Potential

The impact areas and assumed land uses are provided in **Figure B-3**. The land use impacts for this project are generally based on the Technical Master Plan for Show Low Bluff and current development in the region. The primary area of impact includes about 520 acres of vacant land with potential for development. Of that total, about 440 acres are anticipated to be single family residential at an estimated density of 2.3 units per acre. About 50 homes are already built. The primary area of impact also includes potential development along Penrod Road of about 20 acres of multi-family development, a 25-acre conference hotel, a 26-acre community retail center, and about nine acres of additional employment uses, most likely medical office and other services. Note that the exact placement of these nonresidential uses along Penrod Road may vary and the accompanying map is for illustrative purposes only.

The secondary area of impact includes 13 vacant acres outside of Show Low Bluff where Woolford Road meets SR 260. The area indicated on the map includes a total of 36 acres, of which approximately 23 acres are already developed with a Hampton Inn, a bank, and medical and professional offices. As Show Low Bluff develops and traffic along this segment of SR 260 increases, there is additional commercial potential on SR 260 that is indirectly influenced by the Woolford Road extension.



Figure B-3: Woolford Road Crossing Assumed Land Uses



Socioeconomic Impacts

The development potential within the primary impact area includes the following:

- ▲ 1,010 single family units at an average density of 2.3 units per acre and an estimated population of 2,400 people.
- ▲ 369 multi-family units at an average density of 18 units per acre and an estimated population of 330 people.
- ▲ 112,000 square feet of employment (office/service) uses that could support estimated employment of 200 people.
- ▲ 343,000 square feet of conference hotel development that could support estimated employment of 240 people.
- ▲ 238,000 square feet of community retail that could support estimated employment of 370 people.

The development potential within the secondary impact area includes the following:

- ▲ 172,000 square feet of employment (office/service/retail) uses that could support estimated employment of about 300 people.

As Show Low Bluff builds out, there will likely be additional mixed-use development on the east side of Penrod Road in the long term, but more transportation improvements would be required to provide access to that area. Woolford Road Crossing would allow development that is already in progress at Show Low Bluff to continue to its full potential. With a primary area of impact of over 500 acres, this project creates the second largest combined residential and nonresidential impacts, including a broad range of nonresidential development, as well as a mix of single and multi-family residential development.

Summit Trail Extension

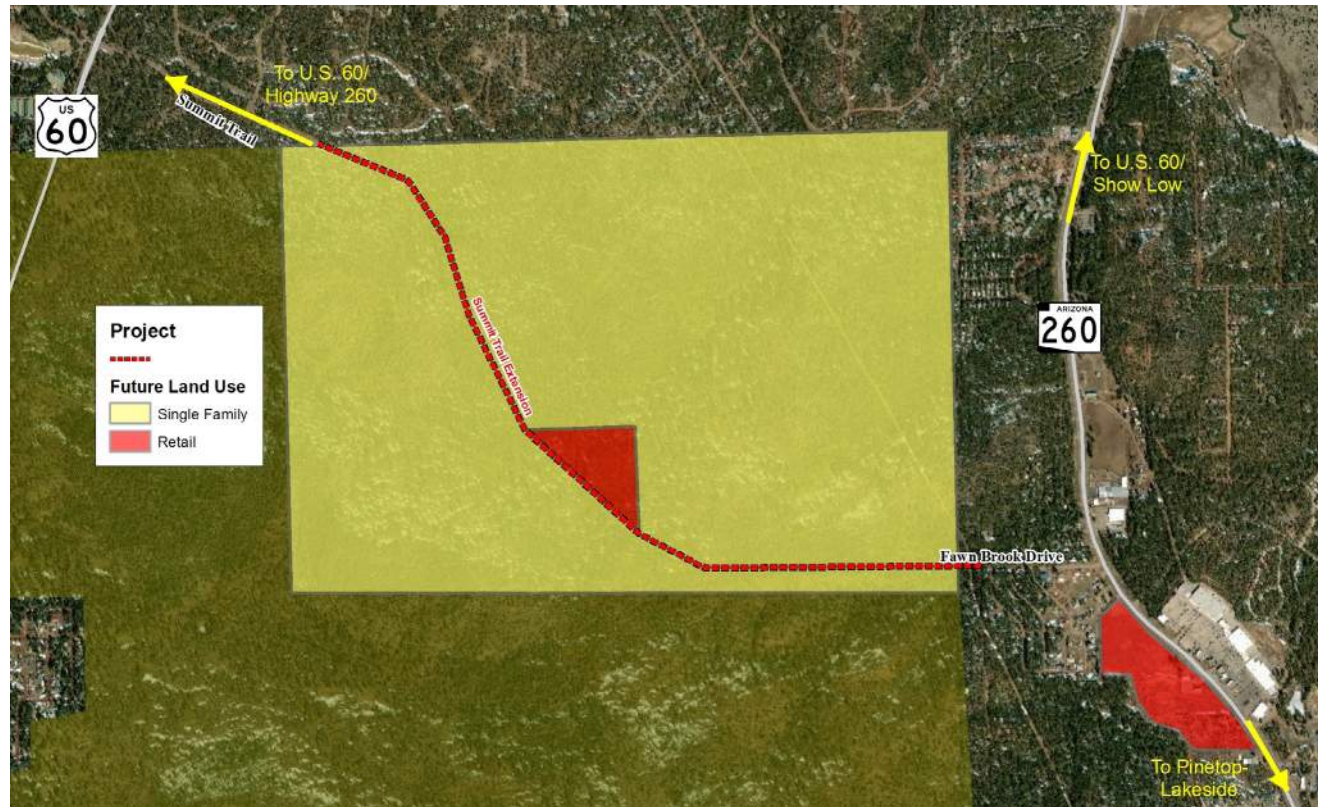
The Summit Trail Extension is a longer-term project that would extend Summit Trail through what is currently Forest Service Land from US 60 just east of Snow Creek Loop through to SR 260, potentially in the vicinity of Fawn Brook Drive. This project would require a land exchange with the Forest Service to create right-of-way and development potential along the new roadway. The Summit Trail Extension would effectively create an alternative route around downtown Show Low for traffic going between Payson and Pinetop-Lakeside. Depending on the number of travelers on SR 260 that currently stop in downtown Show Low, there could be a negative impact on businesses in that area.

Land Use and Development Potential

The impact areas and assumed land uses are provided in **Figure B-4**. The primary area of impact includes about 990 acres of vacant land with potential for low density single family development and local-serving commercial development. Since the area is currently owned by the Forest Service, there is no existing development. Within the primary area of impact, it is anticipated at 970 acres could develop with single family housing at a density of one unit per acre on the south side of Summit Trail, and 2 units per acre on the north side of Summit Trail. Given the number of estimated housing units and the proximity to other existing commercial development, it is likely that a neighborhood commercial center would develop somewhere in the area of impact. This retail development is estimated at 20 acres along Summit Trail. This development potential is likely to be in the long term, perhaps 20 or more years in the future.

The secondary area of impact includes 32.23 vacant acres along SR 260, just south of Fawn Brook Drive. There is existing commercial development on the east side of SR 260 and it is likely that increased traffic in and out of the new residential development in the primary area of impact would also support additional commercial development along the SR 260 corridor.

Figure B-4: Summit Trail Extension Assumed Land Uses



Socioeconomic Impacts

The development potential within the primary impact area includes the following:

- ▲ Nearly 1,600 single family units at an average density of 1.6 units per acre with an estimated population of 3,800 people.
- ▲ 168,000 square feet of neighborhood retail uses that could support estimated employment of about 300 people.

The development potential within the secondary impact area includes the following:

- ▲ 281,000 square feet of retail uses that could support estimated employment of about 500 people.

The Summit Trail Extension creates the largest area of impact in terms of acreage; however, development in this area is likely to be low density and longer term since it requires a land exchange with the Forest Service. Overall, this project creates the greatest residential impacts in terms of the number of housing units, and the fourth largest nonresidential impacts in terms of square feet of new development.

Central Avenue/Woolford Road Improvements

Unlike the previous projects, the Central Avenue/Woolford Road project improves an existing road that connects SR 260 to US 60 and provides a bypass around downtown Show Low. The route is already well used and needs improvement to handle the existing and projected traffic volumes. There are existing neighborhoods along this route, as well as some large vacant land parcels.

Land Use and Development Potential

The impact areas and assumed land uses are provided in **Figure B-5**. Since Woolford Road/Central Avenue is an existing roadway, the only new development in the primary area of impact would be the retail and employment areas on the south side of US 60 along Central Avenue. These improvements may also create potential for additional residential development, but the improvements are not a primary factor driving that development.

The primary area of impact includes about 12 acres along Central Avenue adjacent to an existing commercial development along US 60 and is anticipated to develop with retail and office/service uses.

The secondary area of impact includes approximately 192 acres of vacant land with potential for a low- to medium-density single family development on 169 acres at an average of two units per acre, and 11 acres of multi-family development potential close to US 60 serving as a transition between the anticipated commercial development in the primary area of impact and existing single-family development. This single-family area includes Pine Haven, which was fully improved and platted, but only two homes have been built. The area south of Pine Haven is likely to be lower in density. It has three existing four-acre residential properties and six unbuilt four-acre properties, including one that is owned by the City of Show Low. The residential areas on the west side of Woolford Road/Central Avenue are assumed to develop at a density of two units per acre, similar to existing adjacent residential development. In addition, there is a 12-acre vacant parcel on Woolford Road that is owned by St. Anthony School and could house an additional campus in the future. The roadway improvements would create additional capacity for the traffic associated with a school facility.

Socioeconomic Impacts

The development potential within the primary impact area includes the following:

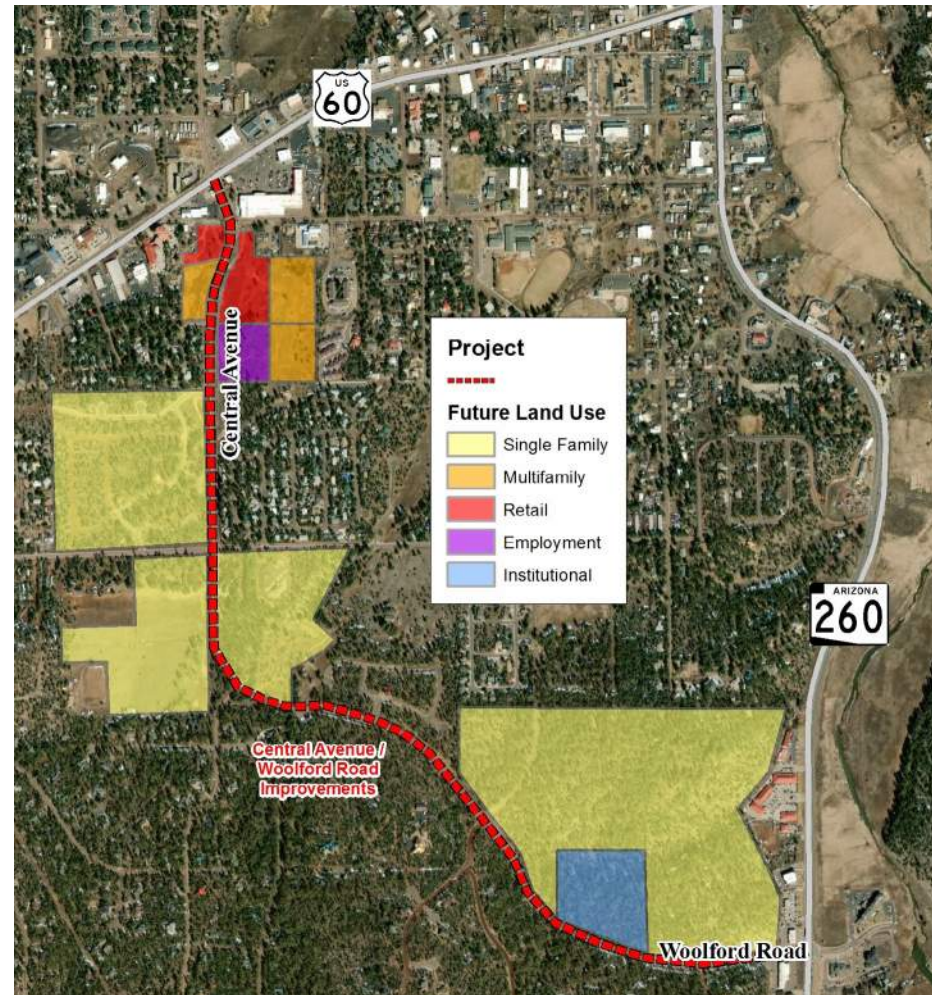
- ▲ 63,000 square feet of retail development that could support estimated employment of about 110 people.
- ▲ 51,000 square feet of employment (office/service) development that could support estimated employment of about 90 people.

The development potential within the secondary impact area includes the following:

- ▲ 350 single family units at an average density of 2.1 units per acre with an estimated population of 840 people.
- ▲ 62,000 square feet of institutional (private school) development that could support estimated employment of about 60 people.



Figure B-5: Woolford Road/Central Ave Improvements Assumed Land Uses



In comparison to other projects, the magnitude of impacts from the Central Avenue/Woodford Road improvement is less since the roadway already exists, and the amount of vacant land within the area of impact is relatively small.

Stanford Drive Improvements

Stanford Drive is located just east of the US 60/SR 61 split (referred to locally as “The Y”). It is located eight miles east of the City of Show Low along the route to Concho in Apache County. While the entire project would include 9.75 miles of improvements, this evaluation is limited to the first two miles north of SR 61 because there is no evidence of significant development potential north of that area. The first three-plus miles of the roadway are marginally surfaced, is narrow and lacks shoulders. There is an existing general store, gas station, and Dollar General variety store at the intersection of Stanford Drive and SR 61.

The impact areas and assumed land uses are provided in **Figure B-6**. Since Stanford Drive is an existing roadway, albeit minimally surfaced, this project does not have a primary area of impact. The improvements may create potential for additional residential development, but they are not the primary factor enabling that development.

The secondary area of impact includes about 1,190 acres of vacant land with potential for very low density single family development ranging from 0.09 to 0.16 units per acre. There are about 30 existing units within the two single family areas shown on the map. In addition to the single-family development, there is also a nine-acre commercial area, of which five acres are vacant and available for additional development. It should be noted that there is additional development potential in this area in the longer term.

Socioeconomic Impacts

The development potential within the secondary impact area includes the following:

- ▲ 140 single family units at an average density of 0.12 units per acre with an estimated population of 340 people.
- ▲ 43,000 square feet of retail development that could support estimated employment of about 80 people.

The economic impacts from Stanford Drive Improvements are relatively small compared to the other large capital projects. Although the number of acres in the secondary impact area is large, the expected density of residential development is very low, resulting in the lowest number of potential new housing units of the seven projects included in this evaluation.



Figure B-6: Stanford Drive Improvements Assumed Land Uses



Porter Mountain Road/CR 3144/CR 3148 Improvements

This project includes a 9.65-mile corridor of Porter Mountain Road, which is currently unpaved, and primarily crosses through Forest Service land. It is accessible from Penrod Road south of Show Low. The corridor crosses the Navajo County line into Apache County where it ultimately connects to CR 3148, which ultimately connects to US 60. There are several private land holdings along this route that have potential for future rural residential development.

Land Use and Development Potential

The impact areas and assumed land uses are provided in **Figure B-7**. The primary area of impact includes 1,147 acres of vacant land in six non-contiguous private land areas within the Apache Sitgreaves National Forest. There are about 10 to 15 existing housing units within this corridor. With improved access, there is potential for very low density single-family development at an average of 0.2 units per acre based on the density of existing development in the area. The project would also increase accessibility between the Vernon area along US 60 and retail, service and employment opportunities in the SR 260 corridor, especially when combined with the Scott Ranch Road project. This could help support additional commercial development in the Penrod Road and SR 260 corridors in the future and support residential development in the Vernon and Stanford Road Areas. However, given the indirect nature of the transportation improvement on this future development, the specific impacts are not quantifiable.



Figure B-7: Porter Mountain Road/CR 3144/CR 3148 Improvements Assumed Land Uses



Socioeconomic Impacts

The development potential within the primary impact area includes the following:

- ▲ About 230 single family units at an average density of 0.2 units per acre with an estimated population of 540 people.

While the acreage of the primary area of impact is the largest among the seven projects included here, the expected development density is very low, and thus the number of new housing units is less than for the other proposed improvements. The Porter Mountain Road project is the only project that does not have any quantifiable nonresidential development impacts. That said, increased traffic on Porter Mountain Road from the east could indirectly support a potential node for retail and service development at the intersection of Penrod and Porter Mountain Roads, about six miles west of the project.

There is also a possibility that use of the route could expand, and the project could receive some funding, as part of the Four Forest Restoration Initiative (4FRI). The goal of 4FRI is to “restore the structure, pattern, composition, and health of fire-adapted ponderosa pine ecosystems, reduce fuels and the risk of unnaturally severe wildfires, and provide for wildlife and plant diversity.” Road reconstruction is often necessary to accommodate traffic for timber sales and healthy forests program projects, which would primarily create temporary jobs.

However, according to the US Forest Service, “in addition to creating sustainable ecosystems, one of the key objectives is creating and developing sustainable industries.” The impacts on permanent employment resulting from this initiative is currently unknown, and no employment was added to the potential economic impacts.

US 60 Widening (Show Low to Vernon)

The US 60 widening project includes an 18.9-mile corridor of US 60 that extends from the Show Low city limits to the community of Vernon in Apache County. Vernon offers affordable rural housing options for people who work in Show Low and there is some congestion on US 60 from commuters, as well as through traffic. However, given that additional demand for housing in Vernon would be driven by population and job growth in the region rather than accessibility, this project does not have a quantifiable economic impact. Additionally, the roadway is not congested enough to limit economic development; therefore, widening the roadway would not spur additional economic development within the horizon year of this study.

SR 61 Widening (Vernon to Concho)

The SR 61 widening project includes a 19.1-mile corridor of SR 61 that extends from the US 60/SR 61 split to the community of Concho in Apache County. The roadway is not congested enough to limit economic development; therefore, widening the roadway would not spur additional economic development within the horizon year of this study.

SR 77 Widening (Show Low to Taylor)

The SR 77 widening project includes an 18.9-mile corridor of SR 77 that extends from US 60/Deuce of Clubs in downtown Show Low to SR 277 in Taylor. Although this project could improve accessibility to the former paper mill site in Snowflake, the primary attraction of that site for the mill was rail access, not highway access. The mill has been closed since 2012 and it is unlikely that improvements to SR 77 will spur redevelopment of the site. The roadway is not congested enough to limit economic development; therefore, widening the roadway would not spur additional economic development at this time.



Appendix C - High Priority Project Refinement

Appendix C – High Priority Project Refinement

While some of the high priority projects are well defined because they have already gone through project refinement and been partially or fully designed, some of the high-priority projects are much more conceptual. This appendix details the design and project development status of high-priority projects in and provides conceptual design elements for projects that have not been as defined.

SR 260/Show Low Lake Road-Cub Lake Road Safety and Capacity Improvements

Design is already underway to make capacity and safety improvements to the intersection of SR 260 and Show Low Lake Road/Cub Lake Road near the White Mountain Regional Medical Center. The project is fully funded and programmed in the NACOG Transportation Investment Plan (TIP) to the amount of \$800,000 of Highway User Revenue Fund (HURF) Exchange program monies for FY21.

Preliminary plans for the intersection include the addition of right-turn lanes at all four quadrants of the intersection, which will necessitate modifying the location of the existing signal infrastructure. The right-turn lanes will not only improve traffic operations at the intersection, but the right-turn lanes on SR 260 will allow turning vehicles to pull out of the through lanes as they decelerate, which will help reduce rear-end collisions. The proximity to the hospital makes this project particularly important for efficient emergency response.

Scott Ranch Road Phase II

Scott Ranch Road Phase II is nearly shovel-ready. A categorical exclusion (CE) was obtained from ADOT through the National Environmental Policy Act (NEPA) process in September of 2011; since that time Scott Ranch Road has been extended from its terminus just east of SR 260 to Show Low Lake Road. The second phase, which extends across Show Low Creek to Penrod Road, already has 30% design completed and the City of Show Low has set aside \$1,300,000 as a local match to obtain grant funding for the remainder of the project. Additionally, the Section 404 Permit required by the Clean Water Act is currently being studied and obtained for the bridge over Show Low Creek. As the project is already partially through the design process, further refinement is not necessary for this project.

The City is seeking to obtain a Better Utilizing Investments to Leverage Development (BUILD) grant, administered by the U.S. Department of Transportation, to fund the remainder of the estimated \$9M - \$11M project.

Woolford Road Crossing

Design and planning for the Woolford Road Crossing (extension over Show Low Creek to Lorenzo Sitgreaves Drive) has been completed. The environmental clearances to cross Show Low Creek have been obtained and the roadway and bridge are 100% designed. The responsibility for funding the roadway extension and bridge are the responsibility of the developer of Show Low Bluffs, the large mixed-use development on the east side of Show Low Creek.

The entitlements for the Show Low Bluffs development includes the requirement that once 310 residential lots have been platted, the developer must construct the new roadway and bridge. As Show Low Bluffs continues to develop, the developer is responsible for further extending Woolford Road from Lorenzo Sitgreaves Drive to Penrod Road, which

will complete the new connection between SR 260 and Penrod Road. The timing of these extensions is dependent on the pace at which Show Low Bluffs develops.

Woolford Road/Central Avenue Improvements

The Woolford Road/Central Avenue corridor between US 60 (Deuce of Clubs) and SR 260 has become relatively congested due to regional traffic using the corridor to bypass central Show Low. The roadway currently has an average daily traffic (ADT) volume of over 12,000 vehicles. By 2040 the traffic volumes are anticipated to be over 20,000 vehicles per day. Capacity improvements are needed to accommodate the additional demand. However, no specific plans have been developed by the City of Show Low.

Based on information provided by the City of Show Low, the right-of-way varies throughout the corridor. There is over 100 feet of right-of-way available on the corridor between approximately Sierra Park Trail and just west of SR 260. However, the topography is challenging through this segment and the roadway footprint should be minimized to limit grading efforts as much as possible. There are current plans to add a multi-use trail along a segment of the corridor between Whipple Street and SR 260, where currently no pedestrian facilities exist.

The right-of-way at the intersection with SR 260 narrows to approximately 80 feet. Additional capacity improvements are likely needed at the intersection of SR 260 and Woolford Road, including dual northbound left-turn lanes and potentially dual eastbound right-turn lanes to accommodate demand. Further traffic analysis would be warranted to confirm the most cost-effective improvements and the impacts to the constrained right-of-way on Woolford Road.

The segment of Central Avenue between Sierra Park Trail and Owens Street is 68 feet wide. From Owens Street northward to US 60 (Deuce of Clubs), the right-of-way width varies, but is never narrower than approximately 80 feet.

Potential cross-sections for the corridor are:

- ▲ Cross-section A (Optimal): shown in **Figure C-1**:
 - ▲ **Location**: US 60 (Deuce of Clubs) to Owens Street
 - ▲ **Travel Lanes**: Four 11-foot travel lanes
 - ▲ **Median**: 12-foot center median that can be used for left-turn lanes at intersections
 - ▲ **Pedestrian Accommodations**: Six-foot standard sidewalk on both sides with three-foot landscape buffers

- ▲ Cross-section B (Narrow): shown in **Figure C-2**:
 - ▲ **Location**: Owens Street to Whipple Street
 - ▲ **Travel Lanes**: Four 11-foot travel lanes
 - ▲ **Median**: 12-foot center median that can be used for left-turn lanes at intersections
 - ▲ **Pedestrian Accommodations**: Six-foot standard sidewalk on both sides with no landscape buffers
- ▲ Cross-section C (Narrow with Trail): shown in **Figure C-3**:
 - ▲ **Location**: Whipple Street to SR 260
 - ▲ **Travel Lanes**: Four 11-foot travel lanes
 - ▲ **Median**: 4-foot concrete center median on segments between intersections. The roadway should widen out at intersections to allow for dedicated left-turn lanes at Sierra Park Trail, Pine Vista Drive, and Twin Peak Trail.
 - ▲ **Pedestrian Accommodations**: Six-foot standard sidewalk on one side and a 10-foot shared-use path on the other side with two-foot buffers. To limit grading activities, the sidewalk and shared-use path can follow the terrain more closely, though they still need to be ADA compliant.

A planning-level cost estimate for this project is between \$14M and \$15M. Due to the size of the project, funding for the project will need to come from several sources, including local, federal, and state funding sources.

Figure C-1: Woolford Road/Central Avenue Cross-Section A (74')

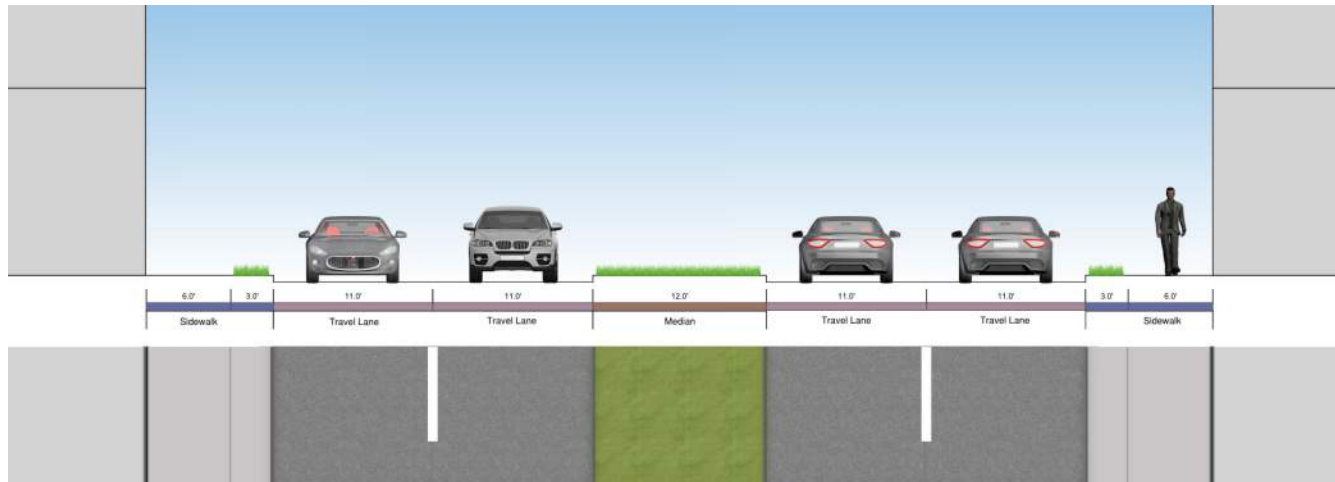


Figure C-2: Woolford Road/Central Avenue Cross-Section B (68')

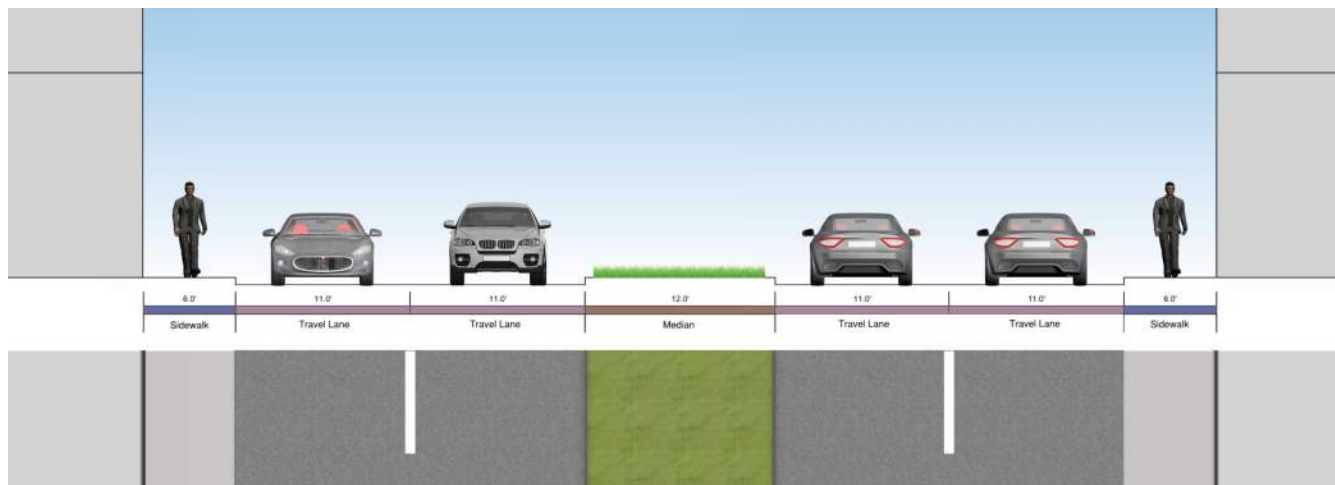
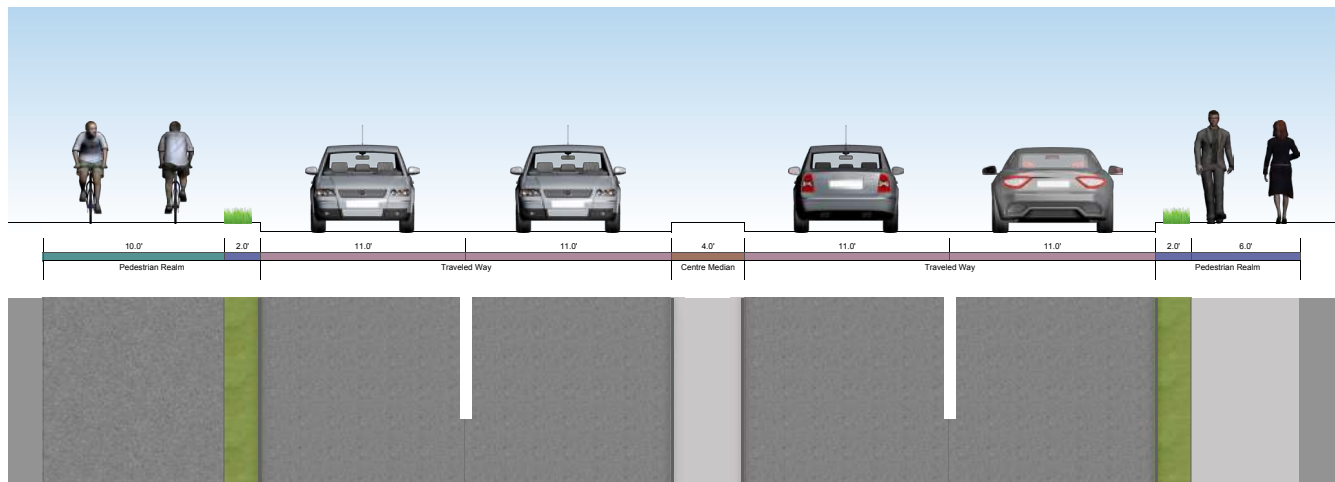


Figure C-3: Woolford Road/Central Avenue Cross-Section C (68')



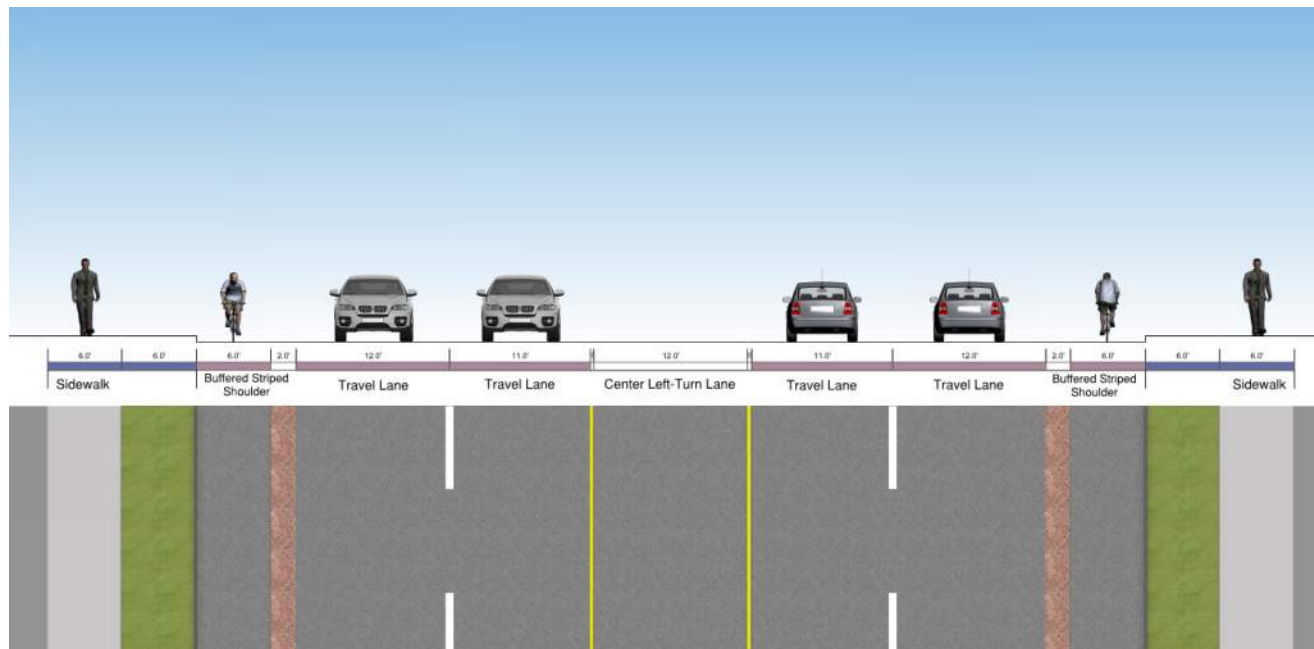
SR 260 Cross-Section (US 60 – SR 73)

SR 260 is the main route between Show Low and Pinetop-Lakeside. The roadway is currently a five-lane section with inconsistent pedestrian facilities as it travels through Show Low, Pinetop-Lakeside, and unincorporated Navajo County. There is a desire, as shown by the public and stakeholder input, to have a consistent pedestrian and bicycle infrastructure along the length of the roadway between US 60 in Show Low and SR 73 south of Pinetop-Lakeside.

Figure C-4 shows an optimal cross-section that could be implemented on a majority of the corridor. The cross-section is 98 feet wide and includes:

- ▲ Two travel lanes in each direction, with the outside lane slightly wider to accommodate trucks;
- ▲ A center median that can be a raised landscaped median and providing left turn lanes at intersections; or a continuous left turn lane, similar to much of the existing roadway; the median can be implemented at strategic locations to accommodate pedestrian crossings.
- ▲ Striped paved shoulders (for use by bicyclists) on both sides of the road with buffer zones due to the high-speed traffic on the roadway;
- ▲ A landscape buffer between the roadway and the sidewalk; and
- ▲ Sidewalks on both sides of the roadway to accommodate pedestrians.

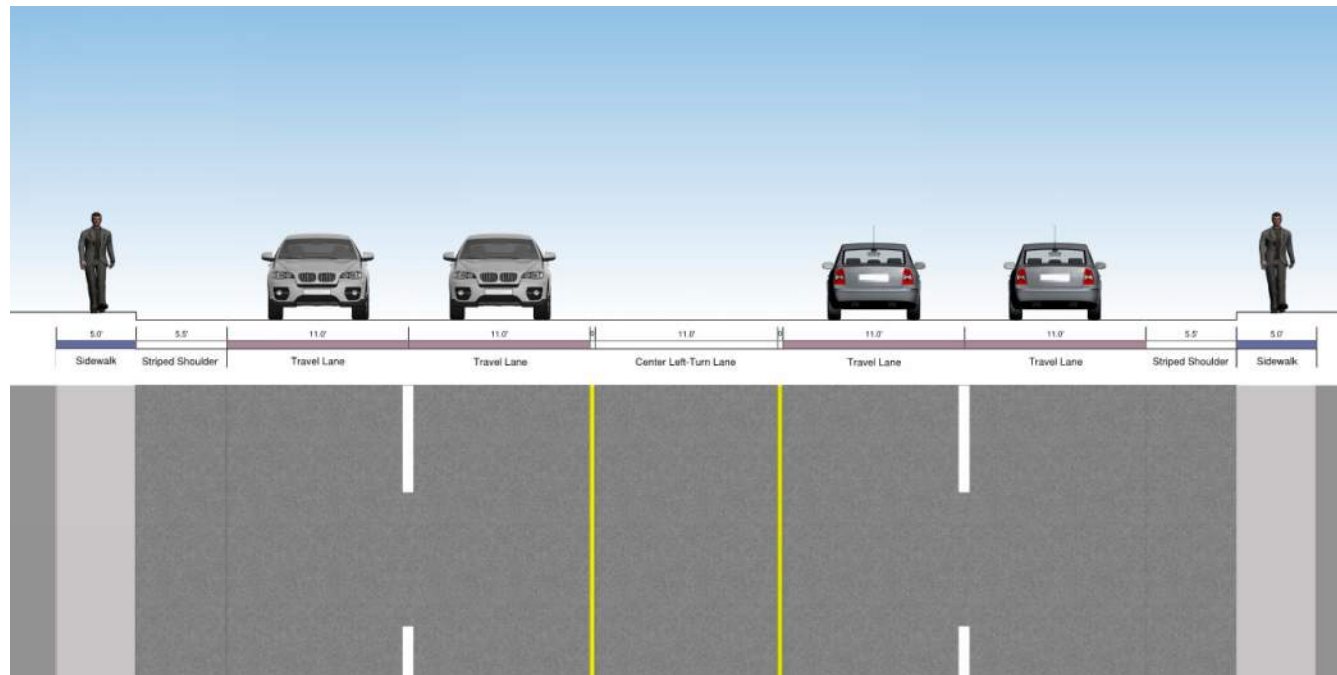
Figure C-4: SR 260 Cross-Section (98')



For the sections that go as narrow as 80 feet of right-of-way, a minimal cross-section has been developed as shown in Figure C-5. Differences between the optimal cross-section and the narrow cross-section include:

- ▲ The 12-foot outside lane has been narrowed to an 11-foot lane;
- ▲ The buffer has been removed between the outside travel lane and the striped paved shoulder;
- ▲ The landscape buffer has been removed, along with the ability to provide right-turn lanes (though some could be added at select locations where the right-of-way allows).

Figure C-5: SR 260 Narrow Cross-Section (80')



For the section of SR 260 between Woodland Lake Road and Poplar Drive (central Pinetop), a majority of sidewalk is constructed outside of existing right-of-way, imposing challenges to providing additional space for pedestrians and bicycles. There are already continuous sidewalks along both sides of the roadway; however, there is not room to add striped paved shoulders (for use by bicyclists) while maintaining two travel lanes in each direction and a center left turn lane.

While not an optimal solution because of the relatively high-speed limit (35 mph), the roadway may be configured as recommended in the Pinetop-Lakeside Pedestrian Safety study and include “Bikes May Use Full Lane” signage to accommodate bicycles on the roadway.

The section of SR 260 east of Worldmark Road is a divided highway with a speed limit of 50 mph (and then 55 mph east of Branding Iron Loop). There is an existing shared-use path on the east side of the roadway to Branding Iron Loop, which could be widened to a 10-12-foot shared-use path. This recommendation is consistent with the Pinetop-Lakeside Pedestrian Safety Study, which recommended reconstruction of the current shared-use path between Hill Drive and Buck Springs Road. The shared-use path would be extended to SR 73 and provide multimodal access to the Hon-Dah Resort and adjacent residential areas.

A planning-level cost for this project (17 miles of improvements) is \$20M-\$25M, including design, environmental clearances, construction, and contingencies. Due to the size of the project, it would be implemented in several phases.

Federal funding opportunities to implement safety and multimodal improvements to state highways include:

- ▲ BUILD Grants
- ▲ Transportation Infrastructure Finance and Innovation Act (TIFIA) Loans
- ▲ Highway Safety Improvement Program (HSIP) Grants
- ▲ STBG Funding

These funding sources could be viable options, but they are highly competitive and require a local match. State funding sources, such as HURF funding, and local funding sources, such as bonding or a transportation trust fund (TTF) could be used to supplement other sources of funding.

Thornton Corridor Phases I-IV

The Thornton Road corridor, once completed, will provide the only continuous east-west corridor north of US 60 that crosses Show Low Creek. As congestion along US 60 increases, Thornton Road will serve as an alternate route for local traffic, while also opening a substantial amount of vacant land to residential development on the north side of the city. Phase I, the section between Central Avenue and 6th Street, is already fully designed and funded. It is anticipated to begin construction in Spring of 2019 for a cost of \$535,000.

Design has not begun, and funding sources have not been identified for Phase II or III (from the current west end of Thornton Road west of Central Avenue to 22nd Street). Phase IV (the section between 6th Street and Commerce Drive) is in Show Low's CIP. The right-of-way is already in place for Phase IV and utilities have already been laid. An idea to reduce overall cost of Phase IV is to provide a low-water crossing instead of a full bridge over Show Low Creek, which will reduce the overall cost substantially.

Phase I will be built as a 24-foot-wide roadway, with curb on both sides. No sidewalks or bicycle accommodations are envisioned, though sidewalks could be a requirement for developers to add when and if the land is subdivided and developed. It is envisioned that the subsequent phases would be built to a similar cross-section. A planning-level cost for Phases II and III is between \$3M and \$4M. These phases could be built as development occurs, either by the developers themselves or through impact fees.

US 60 (MP 352 – 384) Safety Improvements

This project was introduced and defined by the SR 260/US 60 Corridor Profile Study (CPS), completed in March of 2018. Safety improvements through the Vernon area on US 60 arose as the highest priority project in the CPS. The CPS estimated the cost for improvements at \$29.4M and includes the following 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 curve chevrons (EB MP 366.25-366.5 and WB MP 366.75-367)
- ▲ Install dynamic weather warning beacons (EB MP 366 and WB MP 368)

A potential funding source is an application to the ADOT HSIP. The HSIP program provides states with funding to help achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-state-owned public roads and roads on tribal lands.

SR 260 Cross-Section (MP 337 – 340)

Similar to SR 260 between Show Low and Pinetop-Lakeside, SR 260 on the west side of Show Low is a high-speed, high-volume roadway that attracts both local and long-distance traffic. The road provides access to several residential developments; there is a need to accommodate pedestrian and bicycle demand for both recreation and commuting needs.

Between Old Linden Road and US 60, SR 260 is a five-lane section, with two travel lanes in each direction and a center continuous left turn lane. There are continuous sidewalks on the south side of the roadway, and a mix of sidewalks and shared-use path on the north side of the roadway. Between MP 337 and Old Linden Road, SR 260 is predominantly a two-lane rural section highway, with narrow shoulders.

Two alternative roadway concepts are proposed to improve multimodal safety on the section of SR 260 between Old Linden Road and US 60, while maintaining the existing roadway width to avoid full reconstruction:

Alternative A: shown in Figure C-6:

- » Narrow all the travel lanes to 11 feet
- » Add an 11-foot center median that can accommodate left turn lanes at intersections
- » Add a 5.5-foot striped paved shoulder on both sides of the roadway
- » Maintain existing sidewalks on the south side of the road and mix of sidewalks and shared-use path on the north side of the road. The addition of striped paved shoulder adds additional separation between vehicular traffic and the sidewalks, increasing the comfort of pedestrians.
- » Planning-level cost: \$3M - \$4M (assumes mill and overlay of entire roadway)

Alternative B: shown in Figure C-7:

- » Narrow the inner travel lanes to 11 feet
- » Add a 12-foot center median that can accommodate left turn lanes and intersections
- » Add a 6-foot striped paved shoulder with a 2-foot buffer to the eastbound side of the roadway
- » Reconstruct the shared-use path on the north side of the roadway to a continuous 10-foot paved path for the entire length of the segment, which would replace the existing sidewalk. This path would accommodate both pedestrian and bicycle traffic, removing the need for a westbound striped paved shoulder.
- » Planning-level cost: \$5.5M - \$6.5M (assumes mill and overlay of entire roadway)

Figure C-6: SR 260 (Old Linden Road to US 60) Alternative A

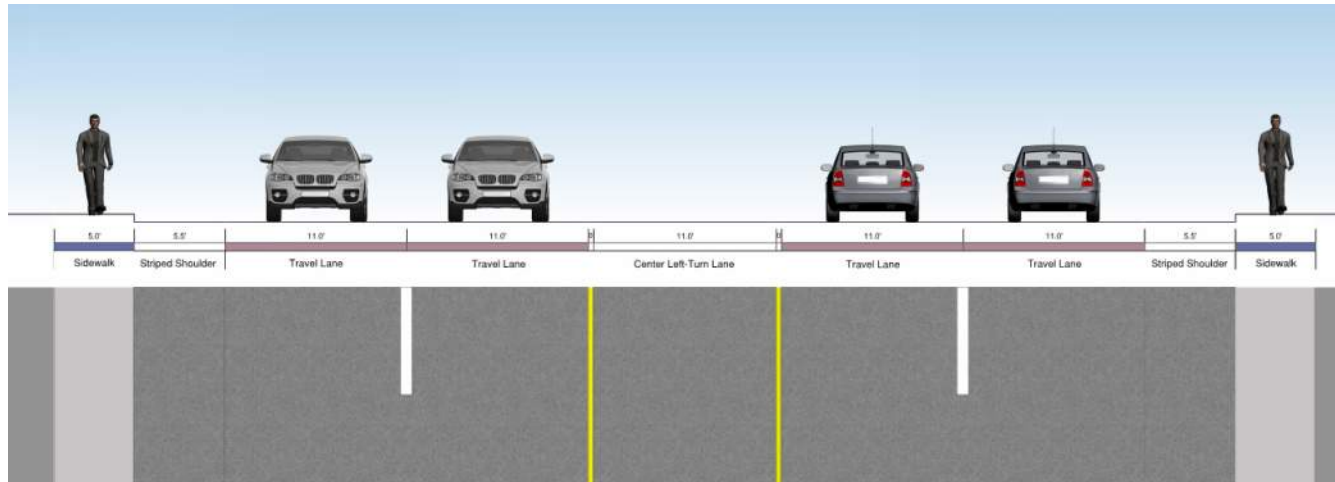
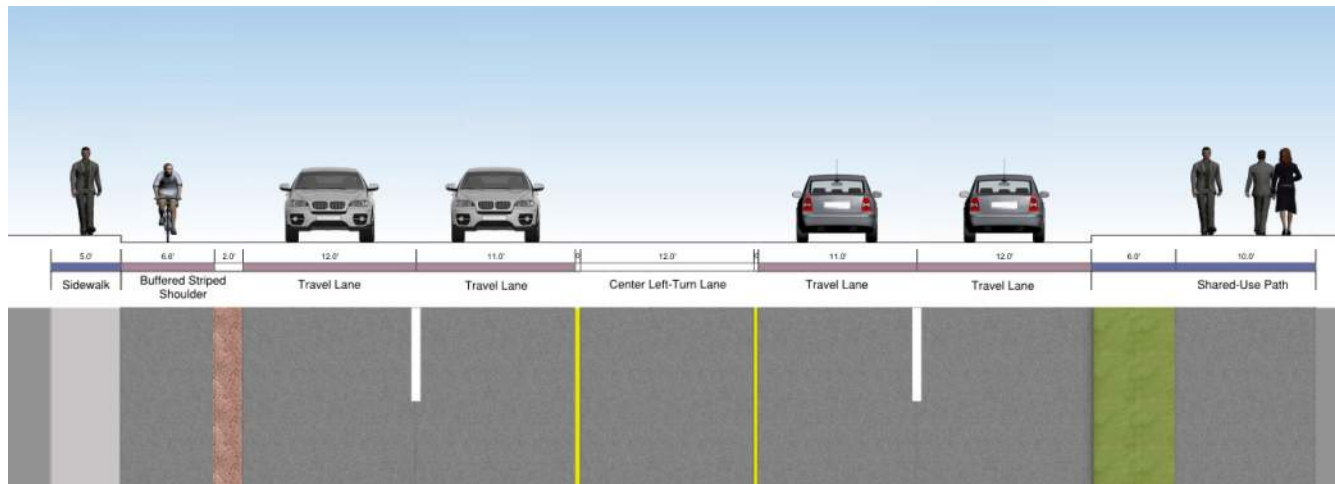


Figure C-7: SR 260 (Old Linden Road to US 60) Alternative B



An interim concept was developed for the segment of SR 260 between MP 337 (approximately Smith Ranch Road) to Old Linden Road which could be implemented before this segment of roadway is widened (shown in **Figure C-8**). Features of this alternative include:

- ▲ Widen the existing shoulders to 10 feet, which would accommodate bicycles
- ▲ Add a center left-turn lane through the entire segment
- ▲ Add a 10-foot shared-use path on the north side of the roadway to accommodate pedestrian demand and cyclists who are uncomfortable riding on the roadway
- ▲ Planning-level cost: \$4M - \$5M

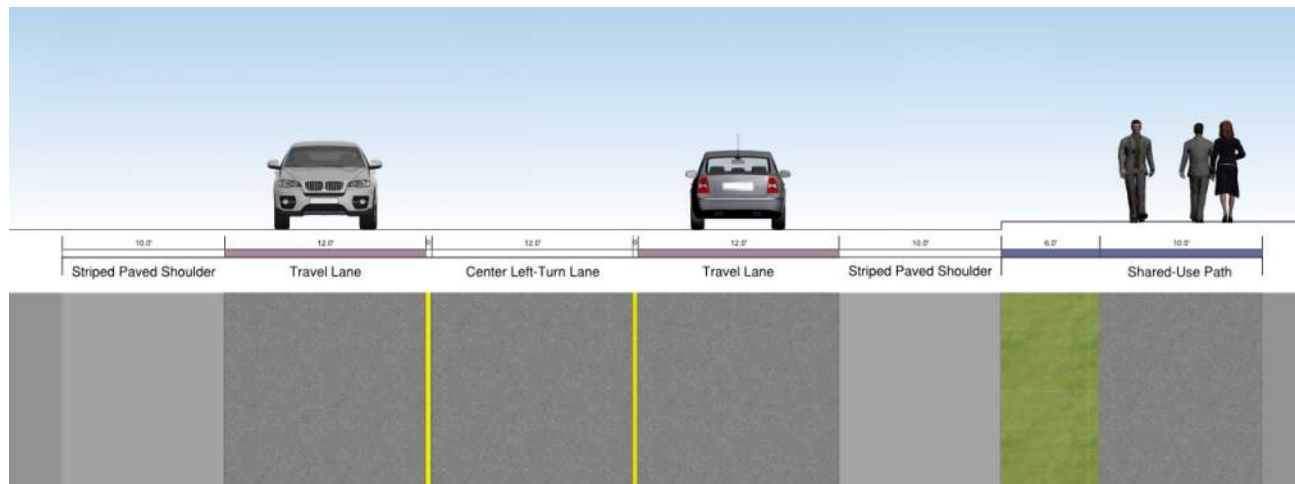
For all alternatives, additional pedestrian crossings should be provided throughout the corridor. Currently the only marked crosswalk in the entire three-mile stretch is at Old Linden Road. Additional crossings should include signals or pedestrian hybrid beacons (PHB) to increase driver awareness of crossing pedestrians and bicycles.

There are several federal funding opportunities available to implement safety and multimodal improvements to state highways including:

- ▲ National Highway Performance Program (NHPP) Funding
- ▲ BUILD Grants
- ▲ Transportation Infrastructure Finance and Innovation Act (TIFIA) Loans
- ▲ HSIP Grants
- ▲ TBG Funding

These funding sources could be viable options, but they are highly competitive and require a local match. State funding sources, such as HURF funding, and local funding sources, such as bonding or a TTF could be used to supplement other sources of funding.

Figure C-8: SR 260 (MP 337 to Old Linden Road)



Pinetop-Lakeside Pedestrian Safety Study Recommendations

The Pinetop-Lakeside Pedestrian Safety Study was completed in December of 2015 and includes recommendations to improve pedestrian safety, comfort, and connectivity throughout the Town of Pinetop-Lakeside, but a large portion of the study focused on pedestrian accommodations along and across SR 260. The plan was separated into six phases (A-F) and conceptual designs were created for each phase. High-level cost estimates were also developed so that the projects could be programmed. The improvements for each of the six phases include:

▲ Phase A: Rainbow Lake Pedestrian Improvements

- » Sidewalk and ADA ramp improvements on the east side of Lakeview Lane from SR 260 to Rainbow Lake Lane
- » Pedestrian pathway and a pedestrian bridge crossing the spillway of the Rainbow Lake Dam
- » Seal coating and striping reconfiguration on Rainbow Lake Lane from Lakeview Lane to Niels Hansen Drive to incorporate “Suggestion Lanes”
- » ADA ramp and driveway improvements from the intersection of Rainbow Lake Lane and Niels Hansen Drive, north to SR 260
- » Estimated Cost: \$550,000

▲ Phase B: SR 260 Sidewalk and Driveway Improvements

- » Replace existing sidewalk and add sidewalk where none currently exists so that there are continuous six-foot sidewalks offset six feet from the edge of the roadway on both sides of SR 260 from Niels Hansen Drive to Hill Drive
- » Estimated Cost: \$5,871,000

▲ Phase C: SR 260 Median and Paved Shoulder Improvements

- » Add pedestrian median islands in strategic locations along SR 260 between Niels Hansen Drive and Hill Drive to make crossing SR 260 easier
- » Stripe paved shoulders along the existing roadway to provide increased access for bicycles on portions of SR 260 with a curb-to-curb width of 68 feet or greater and shared lane signage where the curb-to-curb width is less than 68 feet
- » Estimated Cost: \$625,000

▲ Phase D: Penrod Lane Traffic Signal and Parking Improvements

- » Reconfigure the intersection to add a fourth leg on the north side to provide access to businesses on the north side of the roadway
- » Consolidate several driveways on the north side of the roadway to use the signalized intersection to improve access management and reduce pedestrian conflicts
- » Estimated Cost: \$867,000

▲ Phase E: Pine Lake Road PHB

- » Install a pedestrian hybrid beacon on SR 260 at the intersection with Pine Lake Road to accommodate pedestrian demand
- » Realign Pine Lake Road to intersect SR 260 at a right angle and provide a fourth leg on the north side of SR 260 to access the currently vacant parcels north of the intersection
- » Estimated Cost: \$395,000

▲ Hill Drive to Buck Springs Road Shared-Use Path

- » Reconstruct a shared-use path on the north side of SR 260 to provide pedestrian and bicycle access to the southeast side of Pinetop-Lakeside
- » Bring the shared-use path to current ADA standards and realign to intersect side streets adjacent to SR 260 to increase the visibility of pedestrians and cyclists
- » Estimated Cost: \$529,000

▲ SR 260 Widening (Timberland Road to Old Linden Road)

- » Conceptual design work has already been completed on this segment of SR 260 from previous ADOT planning activities completed in the mid-2000s. The plan at the time was to widen the current two-lane rural highway section, with a short section of three-lane roadway, to a five-lane highway section with two travel lanes in each direction and a central continuous left turn lane. This widening project would improve travel time reliability and safety by allowing left-turning vehicles to pull out of travel lanes and by allowing vehicles to easily pass trucks and other slow-moving vehicles.
- » As the design process moves forward on this project, evaluations for right-turn lanes, curb and gutter, pedestrian facilities (such as sidewalks or shared-use paths), and safe pedestrian crossings should be considered to ensure that residents and visitors are able to safely travel the corridor by any mode of transportation.



Appendix D - Phase 1 Survey Responses

Appendix D – Phase 1 Survey Responses

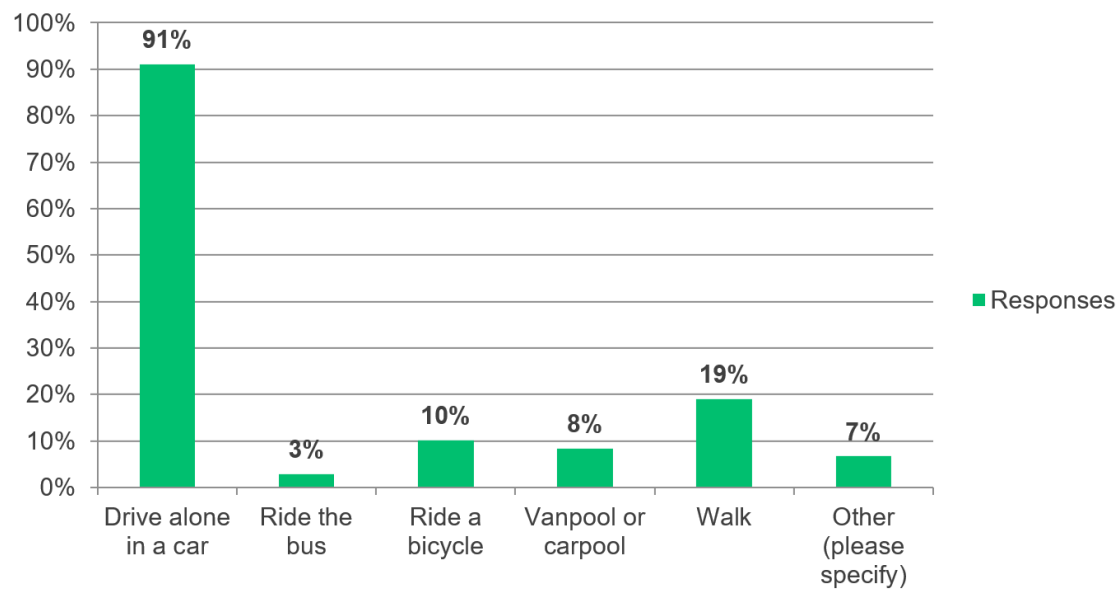
Question 1. Which of the following ways do you typically travel on a daily basis? (Check all that apply)

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 D-1** and **Figure D-1**.

Table D-1: 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 D-1: Responses to Question 1



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 D-2** and shown graphically in **Figure D-2**.

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.

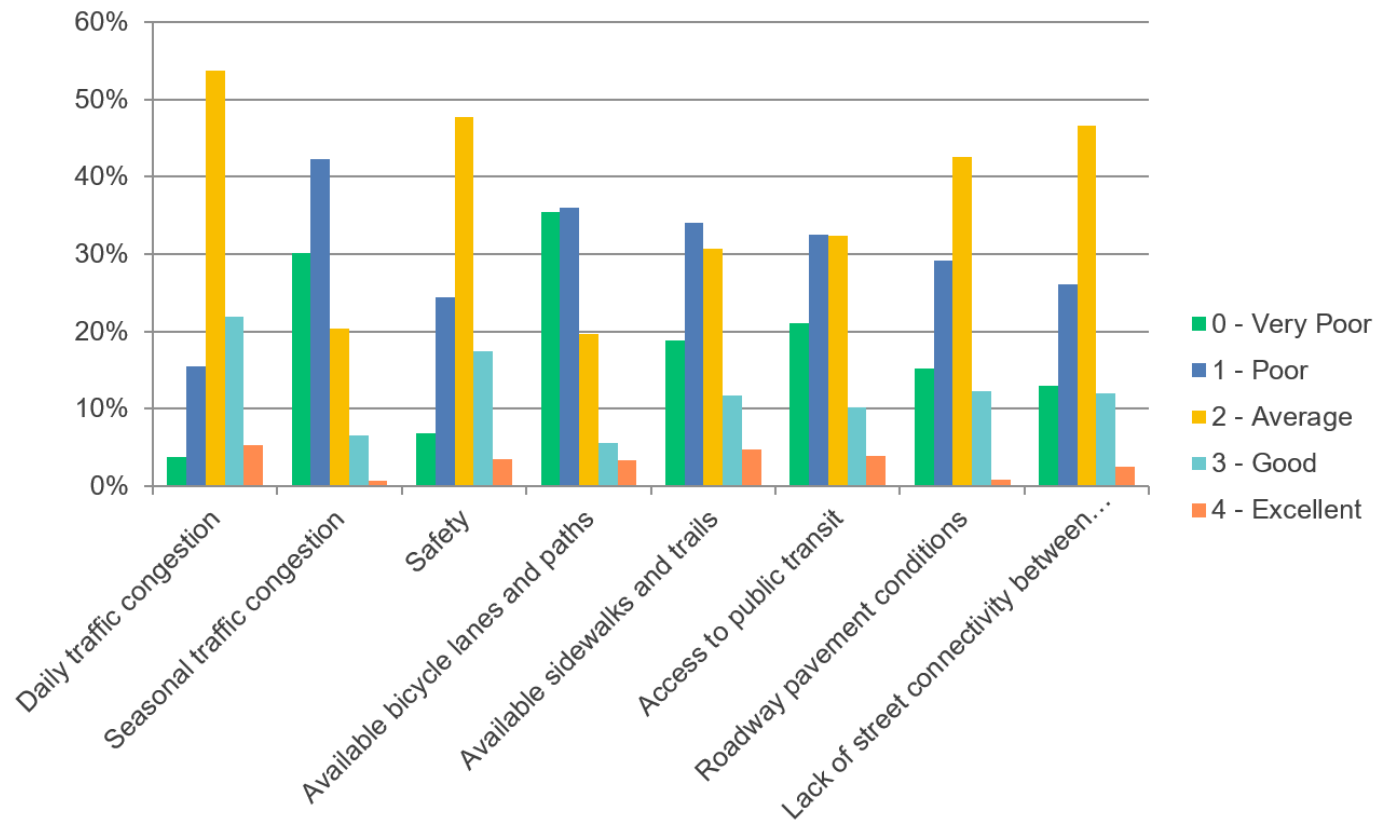
The issue of safety was ranked as average by the highest percentage of respondents to this issue. Similarly, the issues of roadway pavement conditions and lack of street connectivity was rated as average by 43% and 47% of respondents, respectively.

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 D-2: Responses to Question 2

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 D-2: Responses to Question 2



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-Lakeside - a particular concern was when traffic signals change without 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 Pinetop-Lakeside. 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. One person suggested an alternate route to Lakeside from SR 60/SR 61 would 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-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 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 Road.
 - » Traffic lights should flash after 8pm.
 - » Needs a green left turn signal/arrows. Used by parents when dropping off and 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 Road for left turn arrow when there is no traffic on the Deuce of Clubs.
- ▲ Deuce of Clubs/Owens Road.
- ▲ 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-turn 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/South 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 Road to 5 lanes from Deuce of Clubs to 16th Street with added traffic lights at the High School and Central Avenue.
- ▲ 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-Lakeside Area

White Mountain Boulevard

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

- ▲ White Mountain Boulevard/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 Boulevard/Wagon Wheel Plaza
- ▲ White Mountain Boulevard/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 Boulevard
 - » Vehicles turning from Pine Lake Road
 - » Pedestrians walking across White Mountain Boulevard
 - » Pinetop-Lakeside Fire and Emergency Medical Service (EMS) vehicles turning on the intersection from their Pine Lake Road Station
 - » Raise the Circle K sign that blocks the sight line for vehicles above vehicle height
 - » Westbound traffic on SR 260 goes from a 50 to 35-mph speed limit a short distance east of the intersection
 - » Difficulty turning left, or west, from Pine Lake Road to White Mountain Boulevard (Suggested a lower speed limit to 35 mph much further east and enforce those limits)

Other transportation concerns were:

- ▲ White Mountain Boulevard/Safeway Plaza (20 White Mountain Blvd, Lakeside) – Needs a left turn phase at the traffic signal

- ▲ White Mountain Boulevard/Woodland Road - The traffic signal timing on the Woodland Road approaches is too long
- ▲ White Mountain Boulevard at Arizona Game and Fish Office (2878 White Mountain Blvd) – Needs a left turn lane
- ▲ White Mountain Boulevard/Pineview Drive - The side street next to the Pinetop-Lakeside 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 Boulevard 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 Hon-Dah Resort and Casino from Pinetop-Lakeside

Other intersections mentioned with traffic issues (unspecified) were White Mountain Boulevard/Niels Hansen Lane, and White Mountain Boulevard/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 at 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 Street/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 South 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. 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 Road
- ▲ 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

SR 61

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.

SR 77

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

SR 277

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-Lakeside and Show Low
- ▲ In downtown areas where there is no space for bicyclists riding in roadway
- ▲ White Mountain Road 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

Verbal transit-related comments received during the Show Low Days outreach included the following:

- ▲ 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

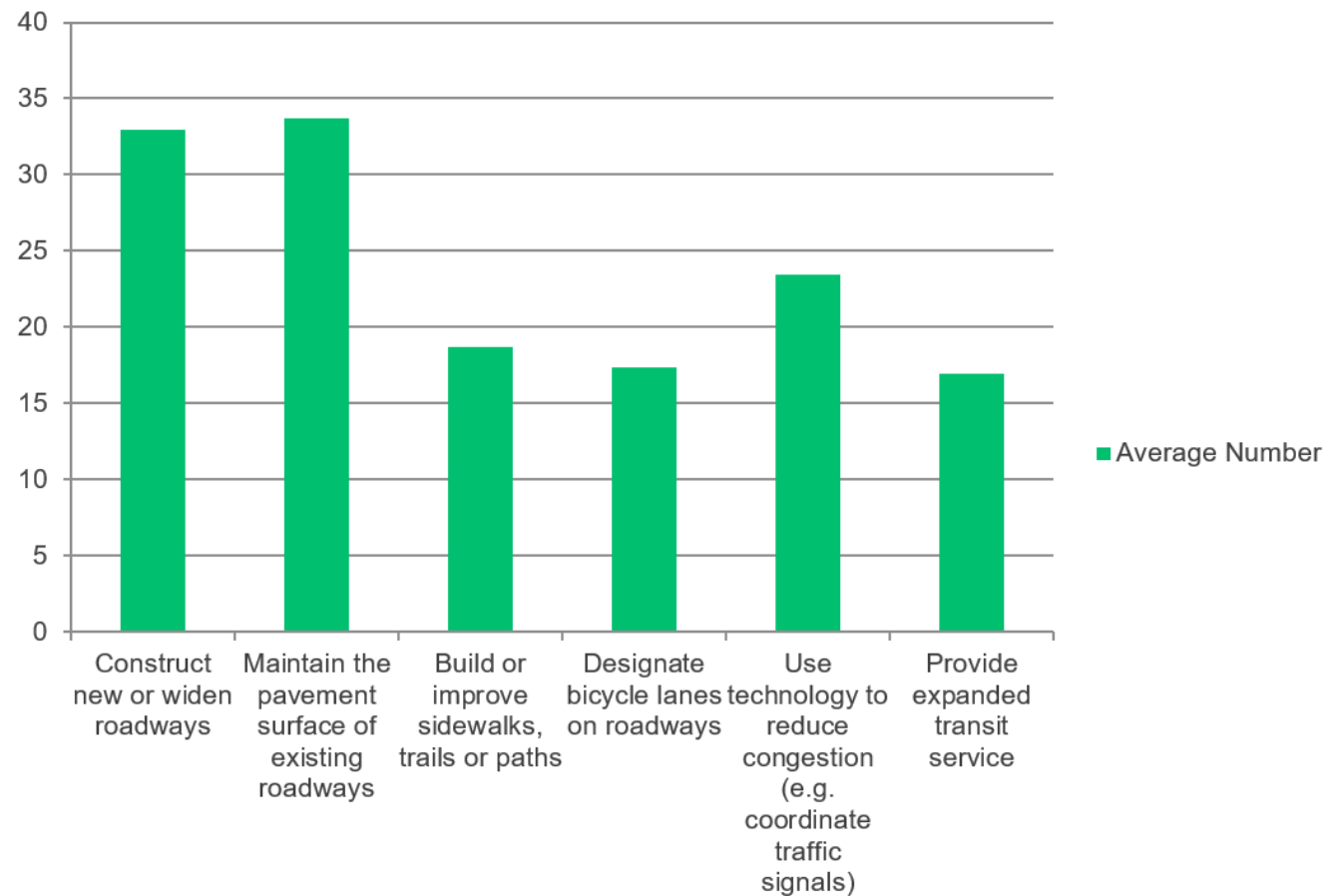
- ▲ Use technology to reduce congestion (e.g. coordinate traffic signals)
- ▲ Provide expanded transit service

Table D-3 summarizes the average dollar allocation to each category of transportation improvement, which is also shown graphically in **Figure D-3**. The highest allocation was to maintain the pavement surface of existing roadways, followed closely by allocating dollars for constructing new or widen roadways.

Table D-3: Responses to Question 4

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 D-3: Responses to Question 4



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

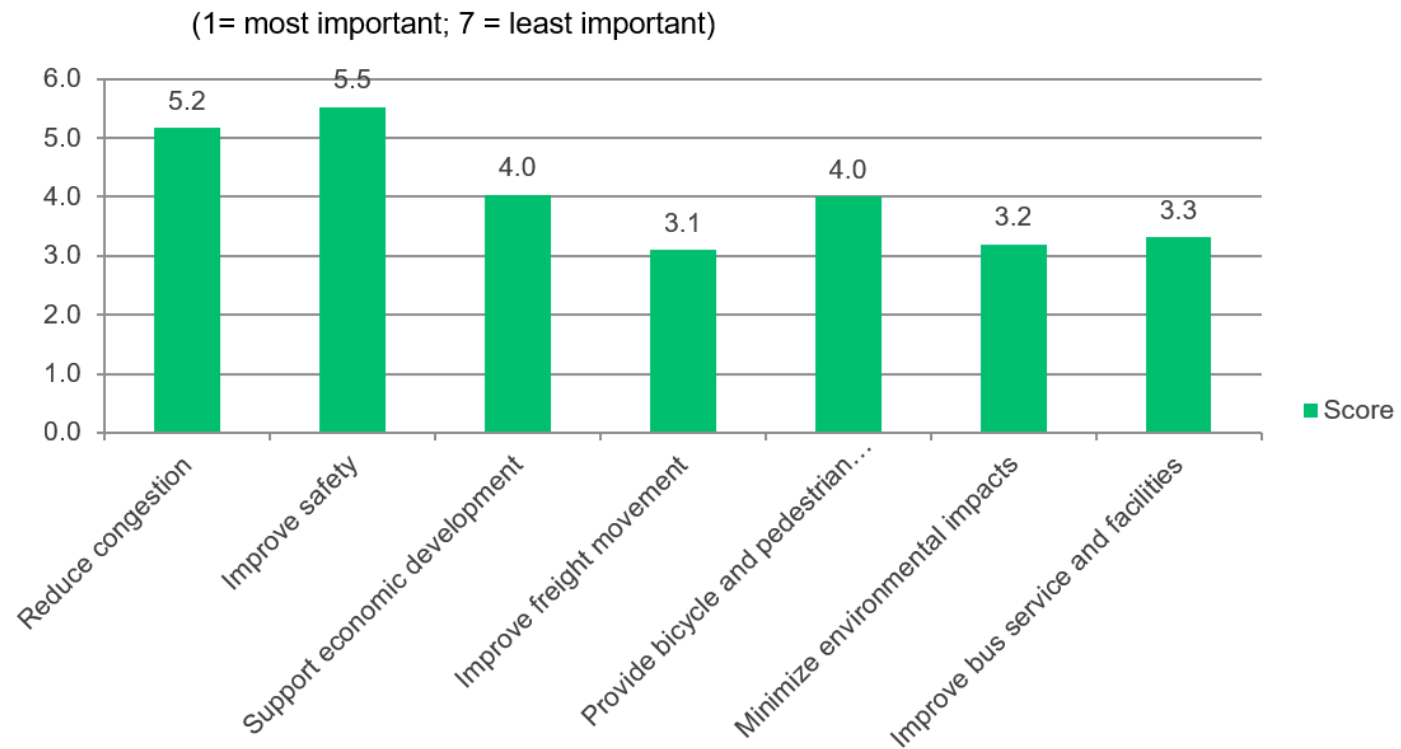
- ▲ Provide Bicycle and Pedestrian Facilities
- ▲ Minimize Environmental Impacts
- ▲ Improve Bus Service and Facilities

The highest rated factor was “Improve safety.” That was followed by “Reduce congestion.” Responses are summarized in **Table D-4** and shown graphically in **Figure D-4**. There were 457 responses to this question.

Table D-4: Responses to Question 5

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 D-4: Responses to Question 5



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 full-time 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 D-5**.

Table D-5: Responses to Question 7

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 D-6**. 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 D-6: Responses to Question 8

Survey Response to Survey Question #8
I'd love a bike lane out to at least lone pine Dam Road. 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.
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

Survey Response to Survey Question #8

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 Road..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

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.

Survey Response to Survey Question #8

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 Road 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 Road 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.

Survey Response to Survey Question #8

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

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.

Survey Response to Survey Question #8

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.

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).

Survey Response to Survey Question #8

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 Road.

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

Survey Response to Survey Question #8

Speed limits need enforced. Woodland lake road is good example.

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 Road, build a bypass road along the rim from Clark Road past Pinetop.

From Phx side of Show Low, need a cutoff road to Lakeside/PT. Raise speed limit on Porter Mtn Road 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 Road 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. Woolford 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.

Survey Response to Survey Question #8

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 Road/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 Road 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

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.

Survey Response to Survey Question #8

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

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 Road/Show Low Lake Road.

Survey Response to Survey Question #8

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.

Survey Response to Survey Question #8

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 its 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



Appendix E - Phase 2 Comment Sheet Responses

Appendix E – Phase 2 Comment Sheet Responses

Comments are organized by the four questions provided on the comment sheets. These responses include comments from the public open house, as well as comments received from the online comment form.

Question 1. From potential projects identified in Working Paper No. 2, which projects are most important?

- a. Scott Ranch Road because we need to be able to go around/a different way when accidents back up traffic.
- b. There is a project that was previously on the ADOT plan, what now seems to be missing: SR 260 widening from Show Low to Heber-Overgaard.
- c. Scott Ranch Road and Woolford Road.
- d. Bike lanes or shoulders that can accommodate bicycle traffic. Multimodal! This will improve safety and encourage less traffic.
- e. We feel that bicycle safety needs to have high priority. Local cyclists have begun to stop riding the road due to safety concerns.
- f. Map #7 – Woolford Road/Central Avenue needs to be short-term priority, traffic will soon be out of control.
- g. Improvements to US 60 between Show Low and Vernon. This is a dangerous stretch of highway because there are few places where cars can pass, and the shoulders are too narrow to be useful. Everyone I know who drives this road regularly has had close calls, if not collisions. Bicycle riding, too, is very hazardous because of inadequate shoulders.
- h. There are two extremely important projects for Show Low, both of which have regional significance. One project, which affects the broader motoring public, is widening SR 260 between Show Low and Heber to accommodate the growth in traffic, especially between Show Low and Timberland Road. The roadway – which also serves as a corridor between the White Mountains and cities to the north, south, and west – is heavily traveled with many roads and driveways intersecting the highway. On a smaller regional scale is extending Scott Ranch Road, which provides another access for Show Low’s neighbors to vital services, such as the hospital and other medical services.
- i. The Scott Ranch Road connection between Show Low Lake Road and Penrod Road is very important to the City of Show Low due to the accessibility to services like Summit Regional Hospital and other commercial businesses as well as providing a much needed 100-year crossing of Show Low Creek in the area. The widening of SR 260 between Heber and Show Low is another very important project for the SNAC region (probably ranked #2). The first phase of this large project should be focused on the section from Timberland Road (in Linden) to Show Low due to the large residential development traffic interacting with the tourist traffic on SR 260 entering the White Mountain region.

Question 2. From potential projects identified in Working Paper No. 2, which projects provide the most benefit to the community?

- a. Safety improvements, right-turn lanes, raised median in high-accident areas.
- b. Widening SR 260 from Heber to Show Low was on the 5-year plan. It’s a high priority for safety.
- c. Scott Ranch Road and Woolford Road.
- d. Pinetop-Lakeside Multimodal Improvements.
- e. Regarding attached paper and ADOT study “An Economic Impact Study of Bicycling in Arizona”, a safer cycling community can significantly improve small business survival.
- f. US 60 (MP 352-384) – adding rumble strips to the center line and widening shoulders in both directions will increase safety. There is a subdivision with about 75 homes off the south side of US 60 between MP 352 and MP 353 (Northfork Ranch). Widening the shoulders here will help those making right turns onto the subdivision roads when high-speed vehicles are following too closely. Turn lanes would be better, but I don’t see that mentioned in the project description.
- g. US 60 (MP 345-352) – you could make this stretch much safer by adding a few passing lanes (like SR 77 between Show Low and Snowflake). Also, the pavement is in poor condition in many places.
- h. We’ve identified four projects: SR 260/Show Low Lake Road intersection, SR 260 widening between Show Low and Timberland Road, Scott Ranch Road Phase II, and the Woolford Road crossing.
- i. The SR 260/Show Low Lake Road intersection, Scott Ranch Phase II, SR 260 widening from Timberland Road to Show Low, and the Woolford Road Crossing projects would provide the most benefit to the community.

Question 3. From the potential projects identified in Working Paper No. 2, are there projects, if included in the plan, that would make the plan less desirable?

- a. Don't think so!
- b. No. Another priority might be shoulder widening between Vernon and the "Y".
- c. US 60 Widening (Show Low to Vernon) – I don't think the full widening plan is needed at this time. Adding a few passing lanes would take care of the worst problems.
- d. SR 260 raised median project would make it less desirable.
- e. SR 260 raised median is one that would be less desirable.

Other Comments:

- a. We have lived here for 10 years and were so much counting on the Highway 260 improvements that were on the ADOT 10-year plan. We were extremely disappointed when that plan was changed as we had been counting down the years expecting to see the project start. Many people in the community feel the same way.
- b. We would like to see passing lanes on the road to Heber.
- c. Thanks for including citizens in this process.
- d. Thank you for coming to Show Low to hear the needs of the local people. I represent a group of people in the White Mountains who support resurrecting an earlier ADOT proposal to widen Highway 260 from a dangerous 2-lane road to a modern, functional 4-lane highway. The plan was proposed over 10 years ago when the 260 was already overcrowded and crumbling. ADOT agreed last year to reconsider adding the 260 expansion to their 5-year plan, with a possible adoption date of June 21st. I've reviewed your draft list of projects but I see no mention of the Highway 260 expansion plan. Please contact me regarding this omission. Our plan is still under ADOT consideration until June 21.
- e. We believe that if Summit Trail at US 60 went through to White Mountain Road it would greatly reduce the overwhelming amount of traffic on West Whipple Street and South Central Avenue. Most of the traffic on West Whipple Street and South Central Avenue is from people south and west of South Clark Road at the intersection of US 60 and South Clark Road. This includes several major developments like Torreon, Hacienda Pines, Snow Creek, parts of Sierra Pines, and several rural subdivisions south and west of Show Low. Please include completion of Summit Trail from US 60 to White Mountain Road in your plan.
- f. Show Low is a speed trap. I suggest that ADOT create a road to the east of Show Low to provide a reasonable alternative. Do you have any control over Show Low's speed trap?