



**Southern Navajo and Apache Counties Regional Transportation Plan
Task Assignment: MPD0025-18**

Technical Advisory Committee (TAC) Meeting #4

Thursday, December 10, 2018
10:30 am – 12:00 pm
City of Show Low City Hall
Deuce of Clubs Conference Room

Attendees:

Lisa Robertson, City of Show Low
Bryan Cook, Navajo County
Dave Swietanski, Apache County
Sandra Phillips, Navajo County
Steve North, City of Show Low
Paul Watson, Navajo County

Rosalinda Federico, ADOT
Justin Johnson, City of Show Low
Bridgette Blake, Town of Pinetop-Lakeside
Brent Crowther, Kimley-Horn
Chris Joannes, Kimley-Horn
Rick Brammer, Applied Economics

Meeting Notes

B. Crowther began with an update of work completed to date since the last TAC meeting in August, which has included project evaluation, economic impact analyses, initial project prioritization, and the completion of Working Paper 2.

C. Joannes went through the project evaluation methodology and a summary of results. He stated that the methodology has remained largely the same since the last TAC meeting, and that the same methodology was applied to all projects. Group discussion around the project evaluation results included:

- P. Watson asked why some of the high-scoring projects were placed in the short-term projects list and some in the mid-term projects list.
 - C. Joannes responded that the funding of some of the high-scoring projects is more secure than others, and that a short-term timeframe was not realistic for some of the high-scoring projects due to their size and funding requirements.

R. Brammer provided the results from the economic analysis for each of the 10 large capital projects. Group discussion around the economic impact results included:

- S. Phillips asked if the team was aware of developer's plans for the area on the west side of Show Low Creek near the proposed Woolford Road Crossing and if it was absolute that the road would connect across the creek.
 - C. Joannes responded that the corridor is already in place to the west bank of Show Low Creek. However, if she is aware of any land use assumption changes to the economic analysis that the team would like to obtain those.
- S. Phillips asked if on the Thornton Corridor analysis, considerations for the floodplain and bridge crossing were included.

- C. Joannes responded that the creek crossing factored into the project evaluation both in the environmental clearances portion and the cost to construct portion.
- R. Brammer added that he removed the land that appeared to be floodplain from the land use totals for his economic analysis. He also stated that the area that he believes to be floodplain could be removed from the map.
- P. Watson stated that most of the traffic attempting to bypass central Show Low generally does not utilize Central Avenue to US 60 but uses Whipple Street between Central Avenue and US 60.
 - C. Joannes responded that previous conversations with the TAC resulted in the tactic to dissuade traffic from using Whipple Street because of its residential character and congestion/safety issues at the intersection of Whipple Street and US 60. Instead, traffic calming should be implemented on Whipple Street and Central Avenue should be upgraded to encourage traffic to use that corridor instead.
- S. Phillips asked if paving Porter Mountain Road/CR 3144 could lead to additional commercial development at Porter Mountain Road and Penrod Road.
 - R. Brammer responded that it could be evaluated, but that it would likely not be a very large commercial development.
 - P. Watson added that Navajo Apache Electric is looking into relocating their site from the corner of Porter Mountain Road and SR 260 to provide space for additional retail development.
 - R. Brammer responded that he will look at adding that location to his analysis, but that the paving of Porter Mountain Road/CR 3144 would likely not be the cause of new retail development at that location.
- B. Cook stated that there have been plans by ADOT to widen SR 77 between Show Low and Taylor that have gone through public comment, but the project has dropped off of the 5-year plan.

C. Joannes took the group through the project refinement section of Working Paper 2, which included potential design elements for the Woolford Road/Central Avenue Improvements Project, SR 260 (US 60 to SR 73) Project, and the SR 260 (MP 337-340) Project. Group discussion around the project refinement section included:

- S. Phillips asked what was included as recommendations in the Pinetop-Lakeside Pedestrian Safety Study and if she could get a copy of that report.
 - B. Crowther responded that he would send her a copy of the study, and that Matt Patterson from the Town of Pinetop-Lakeside was heavily involved in the project and would be the point of contact for any questions from the agency side.
- S. Phillips stated that she believes that the multimodal improvements to SR 260 between MP 337 and Old Linden Road should include a center left-turn lane because of the number of access points along the roadway.
 - C. Joannes stated that a center left-turn lane could be added and reflected in an updated cost estimate.

B. Crowther led the group through a discussion regarding the initial prioritization of projects into short-term, mid-term, and long-term project lists. Group discussion around the recommended projects section included:

- P. Watson requested that the list of projects removed from consideration be added to the recommended projects section of the report.
 - C. Joannes responded that he would add that.
- P. Watson stated that adding capacity improvements to the intersection of SR 260 and Show Low Lake Road is currently a major priority for the City of Show Low and should be moved up in the prioritization list.
 - L. Robertson said she would provide the plans to Kimley-Horn to be reflected in the report.
- P. Watson asked if Kimley-Horn intended to present this information to the White Mountain Regional Transportation Committee.
 - B. Crowther responded that the Draft Report could be presented to the Committee during the second public outreach phase.
 - P. Watson stated that he believes it would be better to provide information specifically in Working Paper 2 because it will allow them to have more input into the final product than reviewing the Draft Report.
 - L. Robertson stated that she believes the next meeting of the Committee would be in January or February of 2019.
 - B. Crowther responded that if the determination is made to present the materials from Working Paper 2, that presenting at the next meeting would be feasible. If, however, the Draft Report is going to be presented then the following meeting would be most appropriate.

B. Crowther thanked the TAC members for their time and stated that any additional comments on Working Paper 2 should be submitted to either himself or L. Robertson by December 17th, if possible.

The meeting concluded around 12:00 pm.

Next Steps

- Incorporate review comments to Working Paper 2
- Prepare the Draft Final Report
- Conduct the second public outreach phase
- Prepare the Public Involvement Summary Report
- Prepare the Final Report

Attachments

- PowerPoint presentation

**Southern Navajo and Apache
Counties (SNAC) Regional
Transportation Plan**

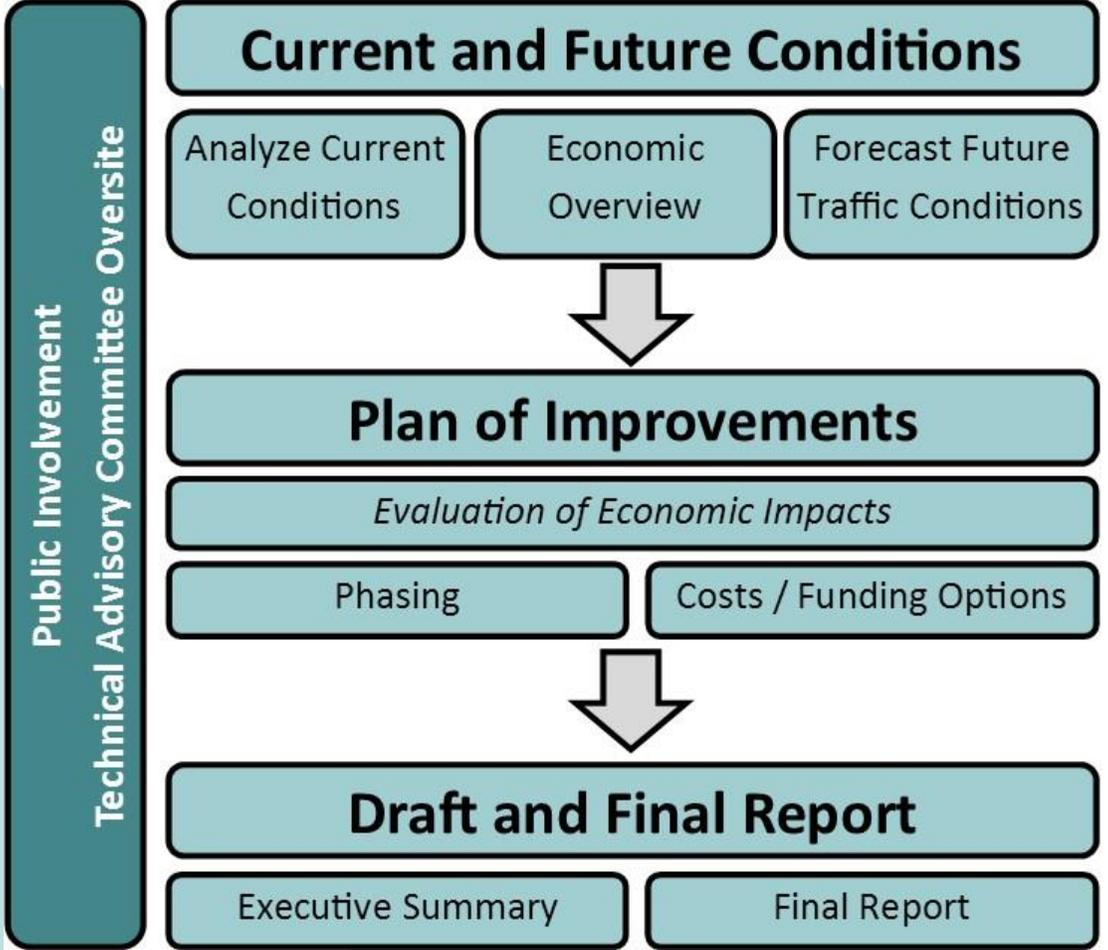
TAC Meeting 4

December 10, 2018

Agenda

1. Introductions
2. Review of Working Paper #2
 - a. Project Evaluation
 - b. Key Project Refinement
 - c. Recommended Projects
3. Next Steps

Study Tasks



- ~~1. Project Kickoff Meetings~~
- ~~2. Working Paper 1 – Current and Future Conditions~~
- ~~3. Public Outreach – Phase 1~~
4. Working Paper 2 – Plan of Improvements
5. Draft Final Report
6. Public Outreach – Phase 2
7. Public Involvement Summary Report
8. Final Report
9. GIS Data / Project Closeout
10. Coordination

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Project Evaluation

Evaluation Methodology

- Point-based scoring method (all projects), and economic evaluation (10 capital projects) used to determine priorities

Point-Based Evaluation (pp 13-16)

- Point-based system – 100 possible points
- Categories:
 - Ease of implementation – max 40 points
 - Safety – max 20 points
 - Vehicle mobility – max 15 points
 - Freight Mobility –max 5 points
 - Transit, bicycle, and pedestrian mobility – max 20 points
- All projects scored (summaries pp 14-16, individual scoring sheets in Appendix B)

Highest Scoring Projects

- 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)

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Economic Evaluation

Economic Evaluation

Key objective of this effort is to identify projects to provide economic benefits to the region

- 10 capital projects evaluated
- 7 projects had measurable development impacts
- Greatest impacts from roadway extensions where development can occur on vacant land nearby.

ECONOMIC IMPACTS QUANTIFIED

- Land use (acres by use)
- Non-residential square footage
- Employment
- Housing units (single and multi-family)
- Population

Summary of Socioeconomic Impacts of Projects with Highest Development Potential (p 18)

Project	Primary Acres	Secondary Acres	Housing Units	Population	Nonres. Square Feet	Employment
Scott Ranch Rd 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 Rd 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 Rd 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

Economic Evaluation Methodology – Land Use Projections (p 18)

- Defined at parcel level; area of impact defined by natural boundaries, real estate market, and development conditions
- Land use data from general plans; applied future development and density assumptions
- Additional factors considered, such as:
 - Character of land
 - Density
 - Condition
 - Service to the community
 - Relationship to adjacent parcels
 - Historical significance



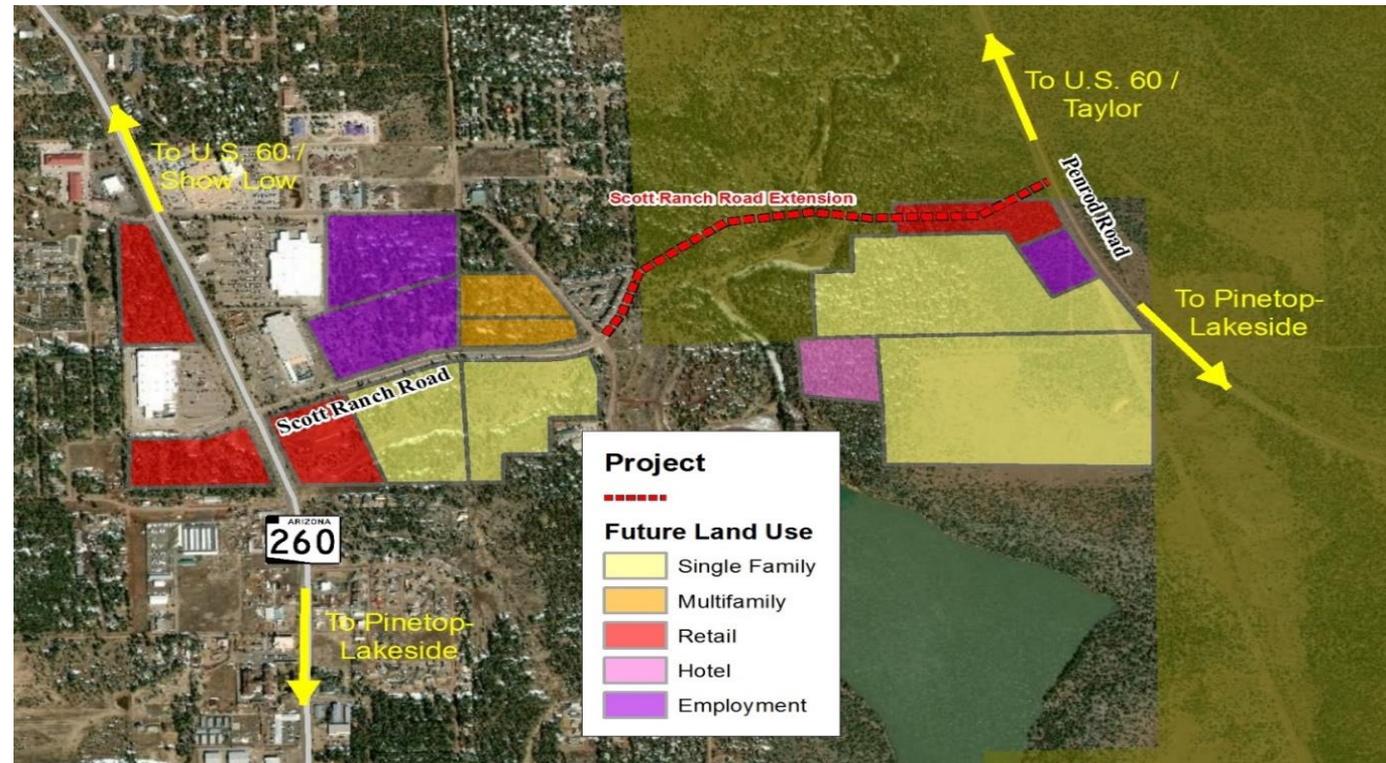
Economic Evaluation Methodology – Socioeconomic Impacts (p 18-19)

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



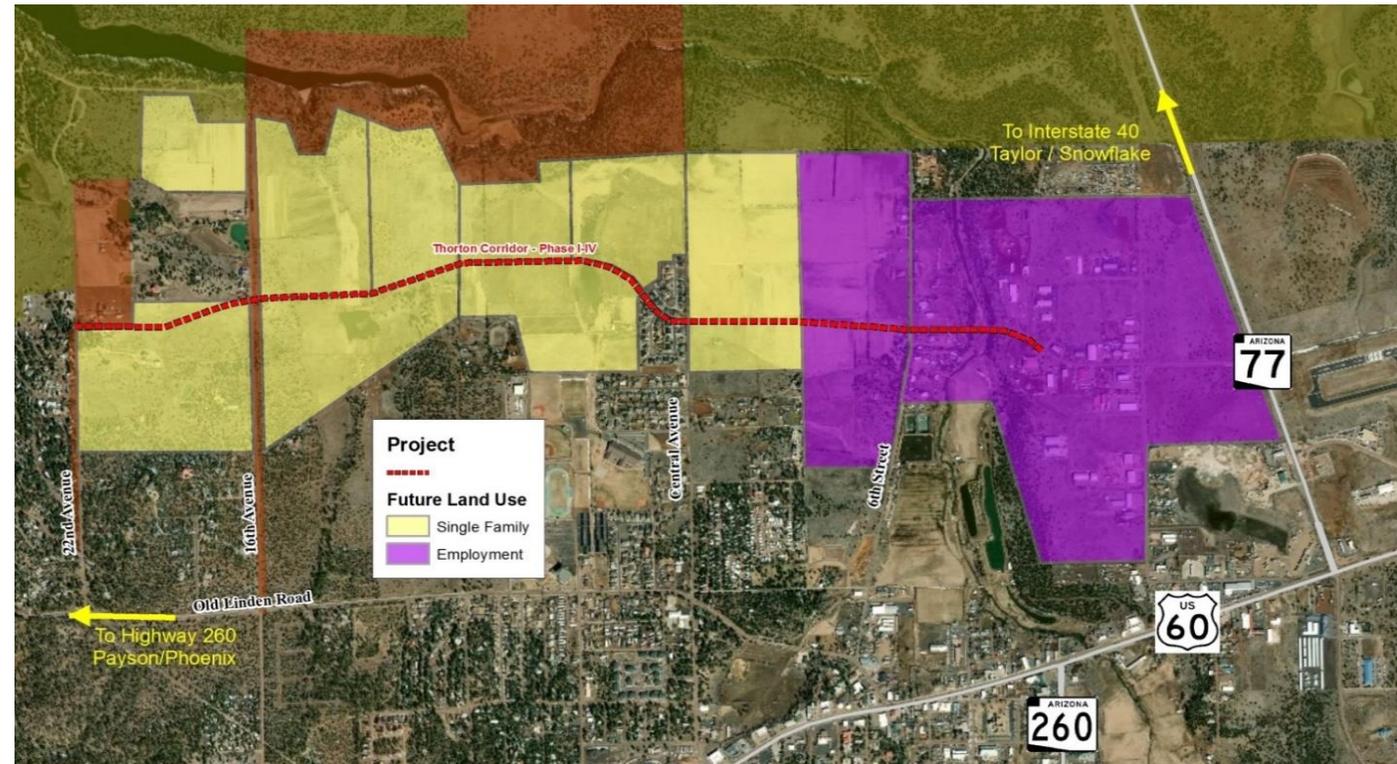
Economic Evaluation – Scott Ranch Rd Phase II, Penrod Rd to Show Low Lake Rd (pp 19-21)

- Scott Ranch Rd extension:
 - Provides an alternative route to the hospital and commercial core
 - Provides future development potential at new intersection with Scott Ranch Rd



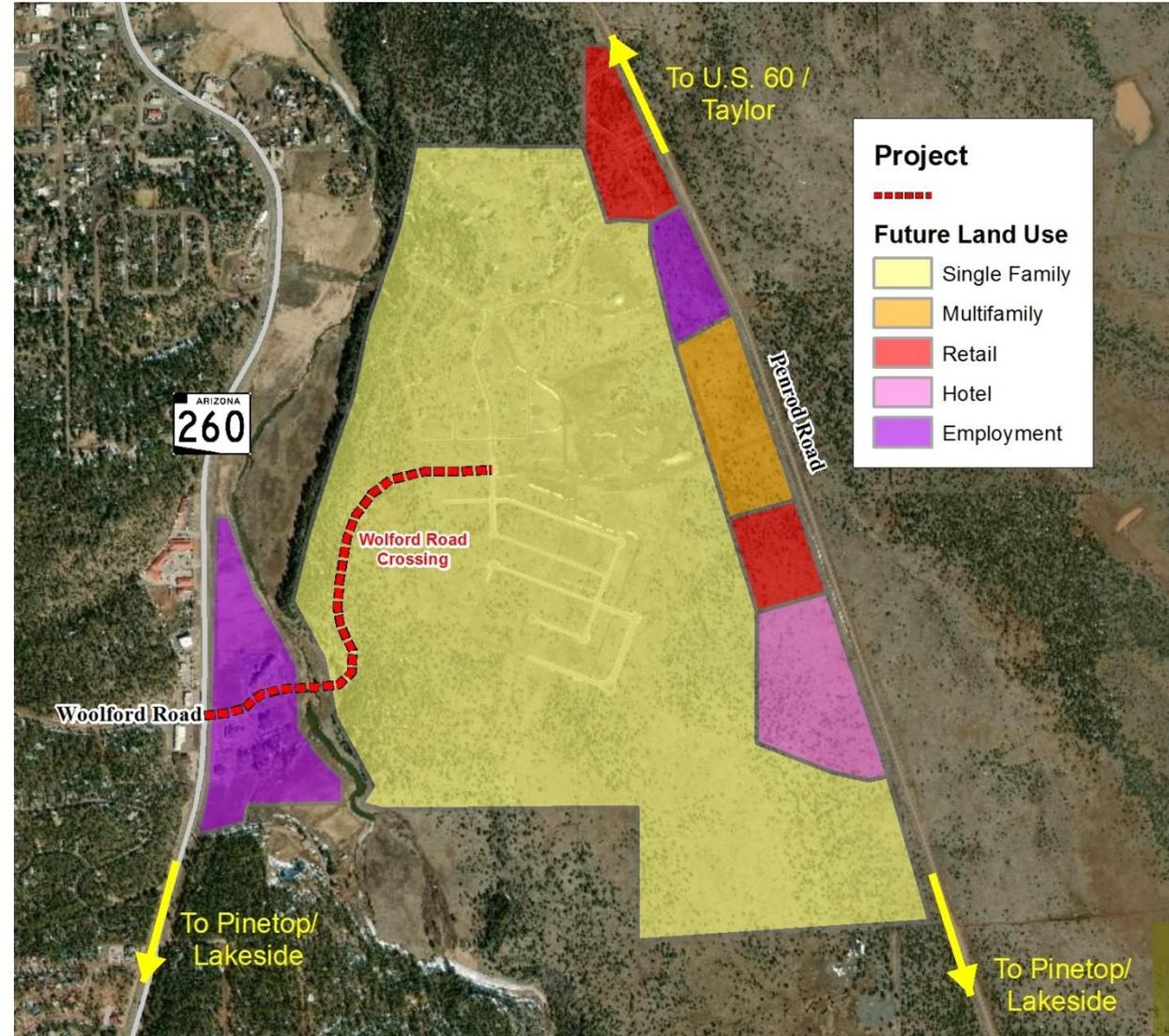
Economic Evaluation – Thornton Rd Corridor – Phases I-IV (Commerce Dr to 22nd Ave) (pp 21-22)

- Thornton Rd corridor:
 - Creates accessibility within the industrial park
 - Opens residential development areas west of the industrial park near Fools Hollow Lake.



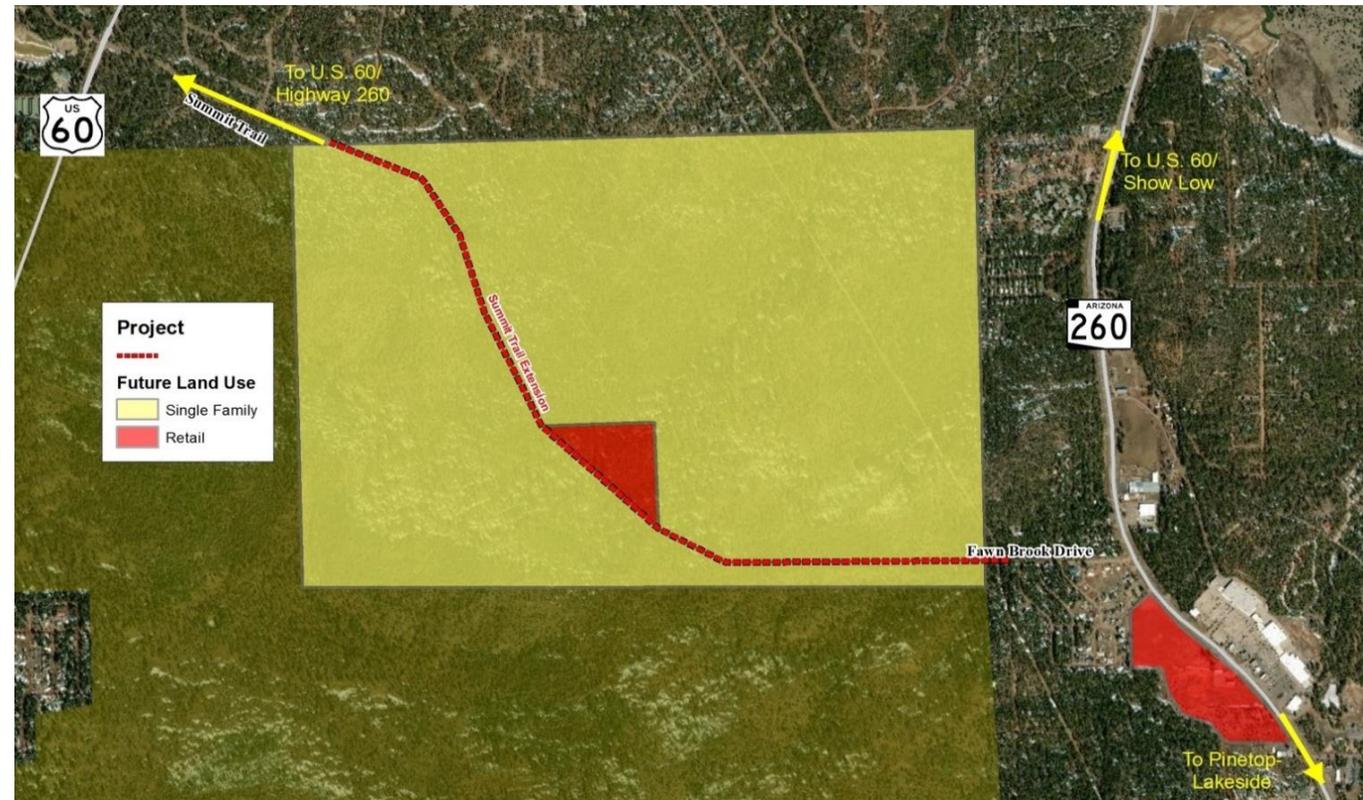
Woolford Rd Crossing, SR 260 to Show Low Bluffs Development (pp 23-25)

- Woolford Rd Crossing:
 - Enhances Show Low Bluffs development and provides emergency access
 - More commercial development potential on east side of Penrod Rd (long-term)



Summit Trail Extension, east of US 60 to SR 260 (pp 25–26)

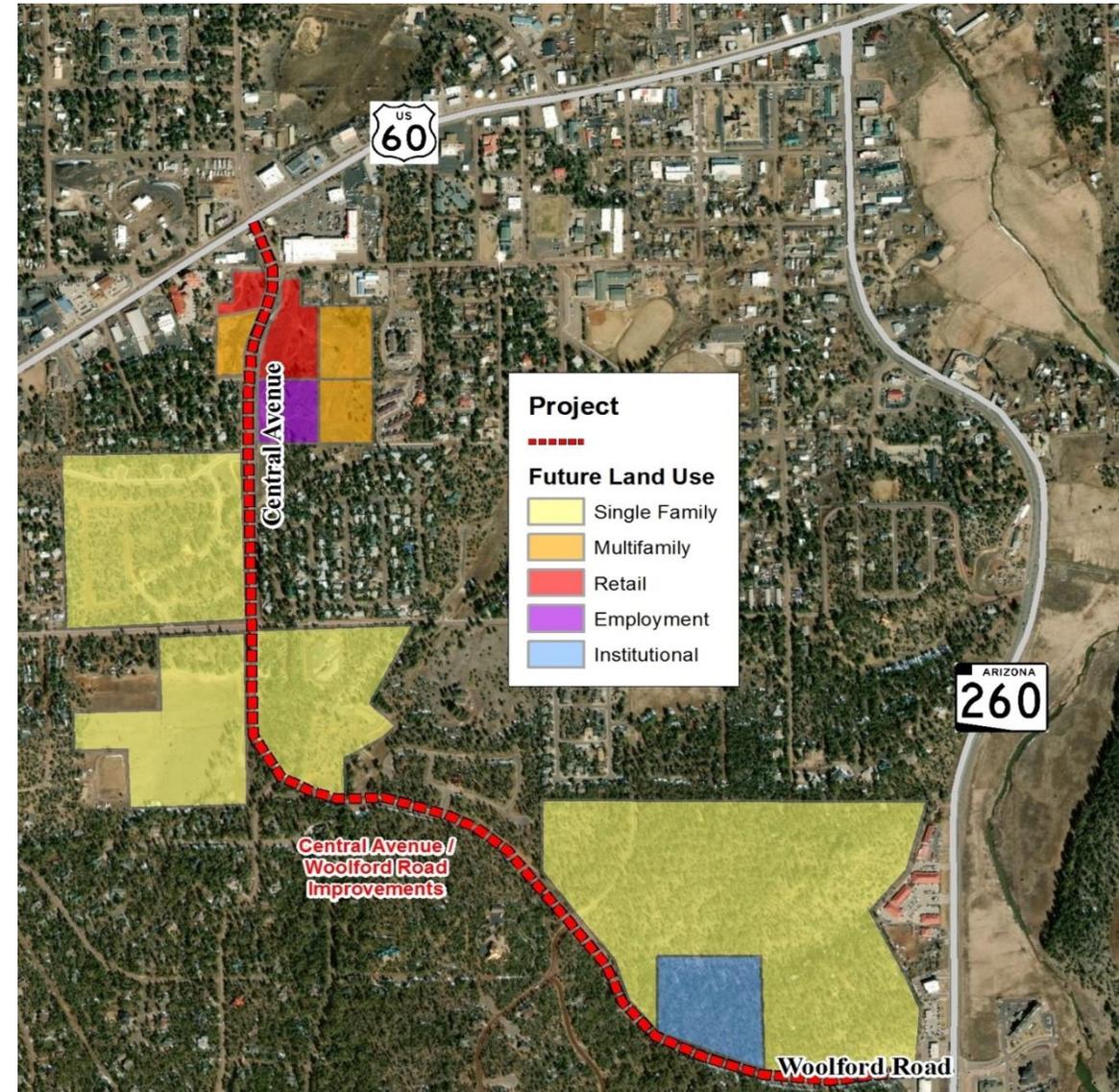
- Summit Trail Extension:
 - Longer term project
 - Requires land exchange with Forest Service
 - Residential development potential
 - Limited retail development – long term
 - This alternative route may have a negative impact on downtown Show Low businesses



Central Ave/Woolford Rd Improvements (pp 26-28)

Central Ave / Woolford Rd:

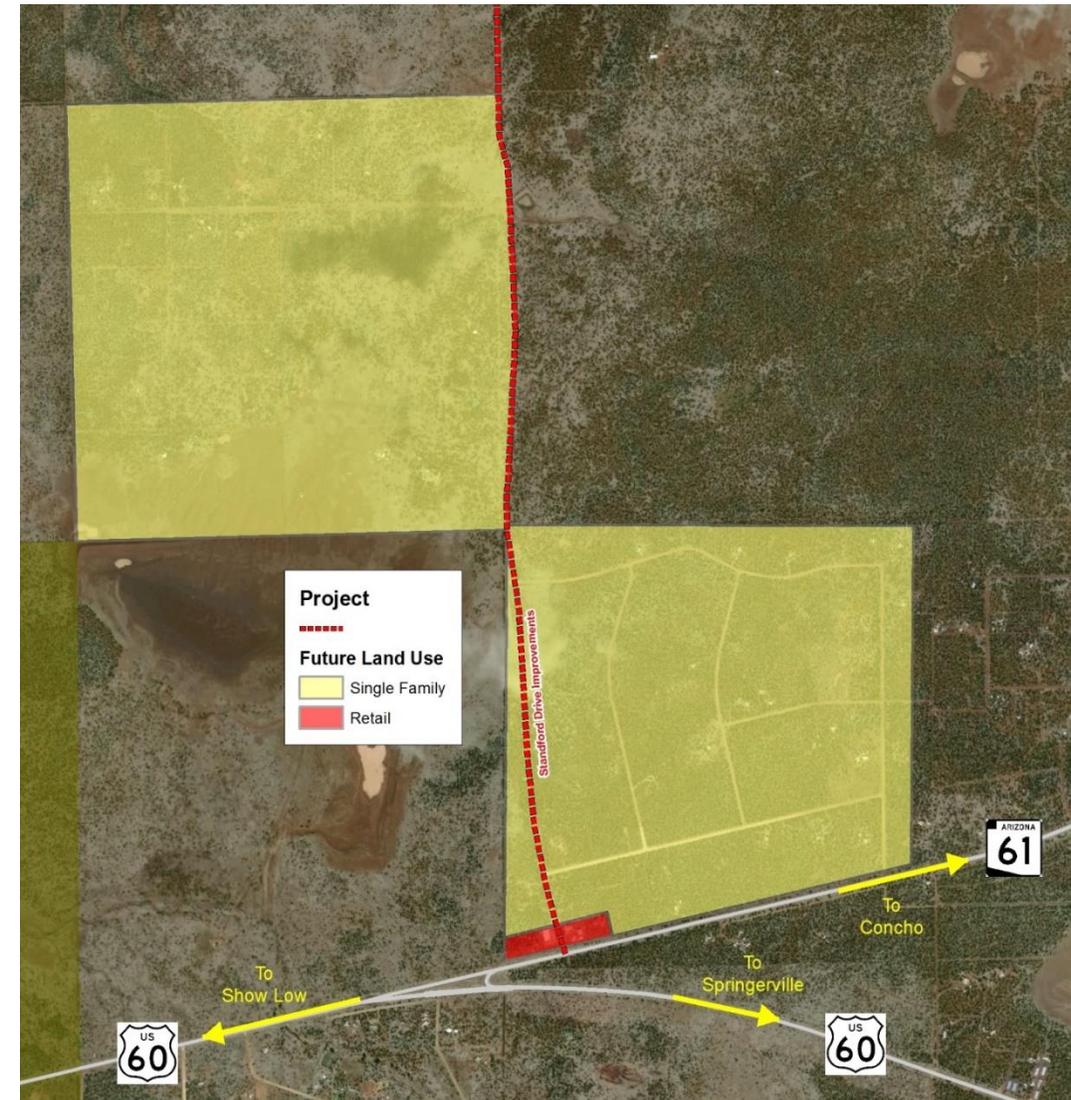
- Improves existing road which is well used
- Supports new retail and employment on south side of US 60 along Central Ave
- Supports new residential development
- Supports St. Anthony School parcel development



Stanford Drive Improvements (pp 29-30)

Stanford Drive:

- Impacts evaluated on first two miles north of SR 61
- Potential for additional residential development (very low density)



Porter Mountain Road/CR 3144/CR 3148 Improvements (pp 30-31)

Porter Mountain Rd:

- Some private parcels have potential for residential development (very low density)
- Project increases accessibility between Vernon and SR 260 corridor



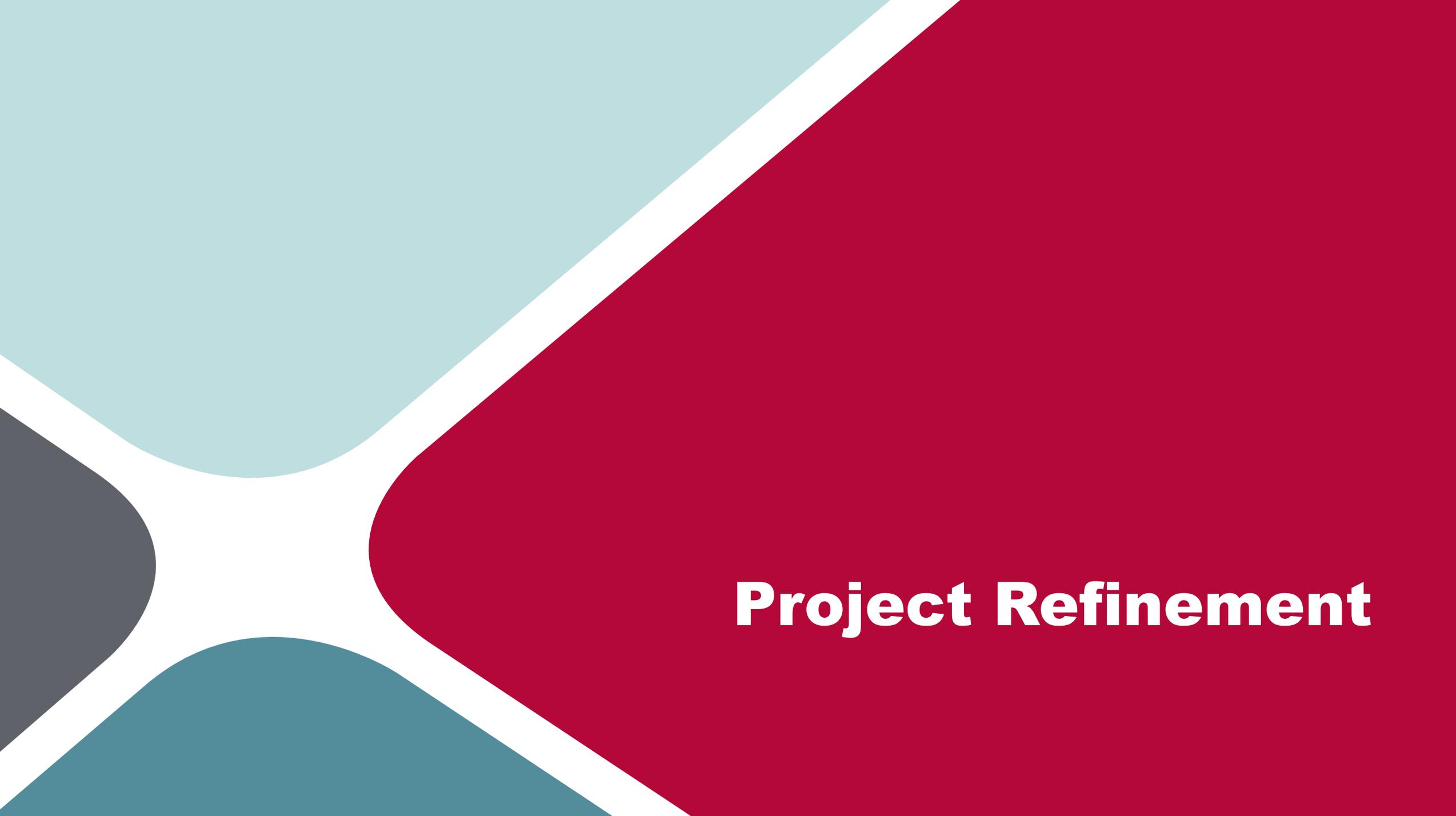
Other Projects Evaluated (p 32)

- US 60 widening (Show Low to Vernon)
- SR 61 widening (Vernon to Concho)
- SR 77 widening (Show Low to Taylor)
- In general, these roadways are not congested enough to limit economic development, so widening the road would not spur new development

Prioritization List (pp 32-33)

- Project scoring plus economic impacts were considered
- High, medium, or low prioritization assigned

Name	Type	Score	Economic Impact	Prioritization
Scott Ranch Rd Phase II	Large Capital Project	60	Employment: 1,490 Population: 1,359	High
Woolford Rd Crossing	Large Capital Project	55	Employment: 1,120 Population: 2,533	High
Woolford Rd/Central Ave Improvements	Large Capital Project	55	Employment: 260 Population: 1,194	High
SR 260 Complete Streets Elements (US 60 to SR 73)	Alternative Mode Project	55	Not Evaluated	High
Thornton Corridor Phases I-IV	Large Capital Project	50	Employment: 1,640 Population: 2,533	High
US 60 (MP 352-384)	Safety Project	45	Not Evaluated	High
SR 260 Complete Streets Elements (MP 337-340)	Alternative Mode Project	45	Not Evaluated	High
Pinetop-Lakeside Pedestrian Safety Study Recommendations	Alternative Mode Project	45	Not Evaluated	High
SR 77 (MP 347-351)	Safety Project	40	Not Evaluated	Medium
SR 260 Raised Median (Vacation Village Drive to Wagon Wheel Lane)	Safety Project	40	Not Evaluated	Medium
SR 77/Center Street (Snowflake)	Safety Project	40	Not Evaluated	Medium
SR 77/White Mountain Lake Road	Safety Project	40	Not Evaluated	Medium
SR 260 Bus Pull-Outs	Alternative Mode Project	40	Not Evaluated	Medium
Stanford Drive Reconstruction	Large Capital Project	35	Employment: 80 Population: 341	Medium

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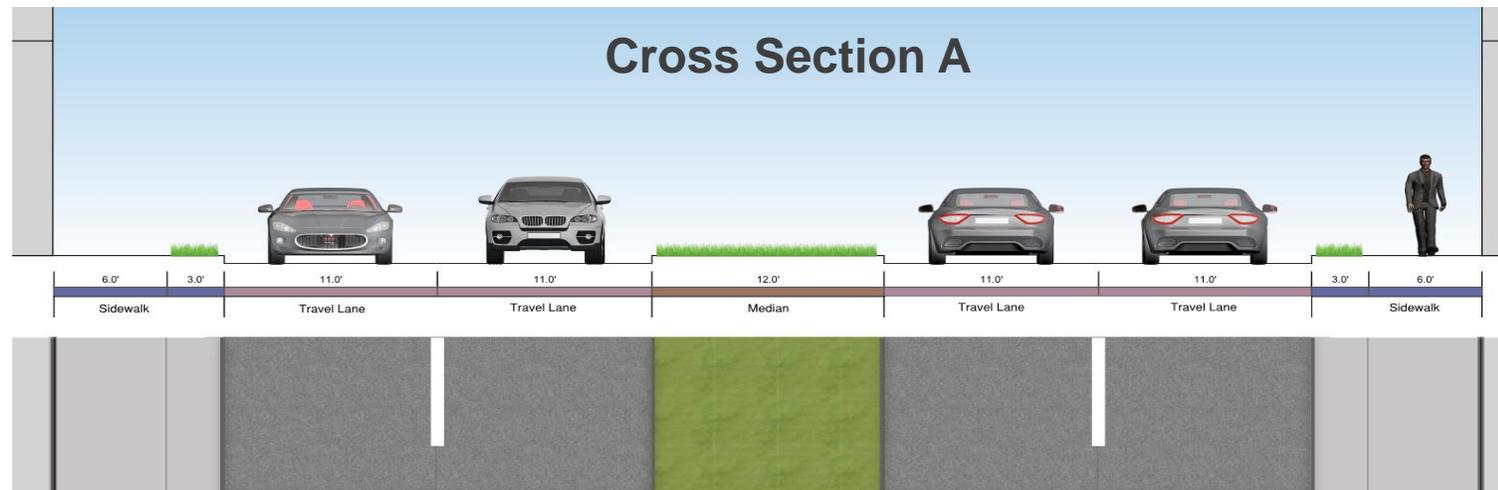
Project Refinement

High Priority Project Refinement

- Some high priority projects are well defined:
 - Scott Ranch Rd Phase II
 - Woolford Rd Crossing
 - Thornton Rd Corridor Phases I-IV
 - US 60 (MP 352-384) Safety Improvements
 - Pinetop-Lakeside Pedestrian Safety Study Recommendations
- Team developed conceptual design for these projects:
 - Woolford Road/Central Avenue Improvements
 - SR 260 (US 60-SR 73)
 - SR 260 Cross-section (MP 337-340)

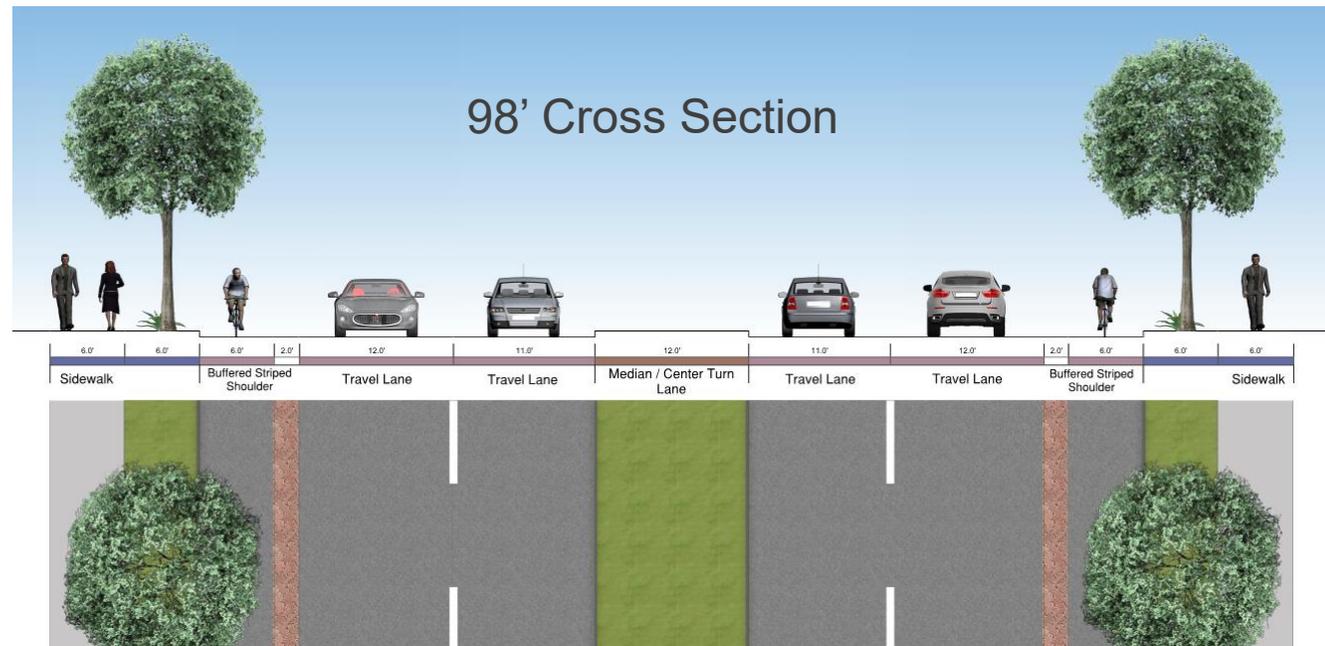
Woolford Road / Central Avenue (pp 34-37)

- Improved capacity needs - four alternative cross-sections:
 - Cross-section A (Optimal): Figure 11, p 36
 - Cross-section B (Narrow): Figure 12, p 36
 - Cross-section C (Narrow with Trail): Figure 13, p 37
 - Cross-section D (Optimal with Trail): Figure 14, p 37
- Planning-level cost \$12 -13M



SR 260 Cross-Section (US 60 – SR 73) (pp 38-40)

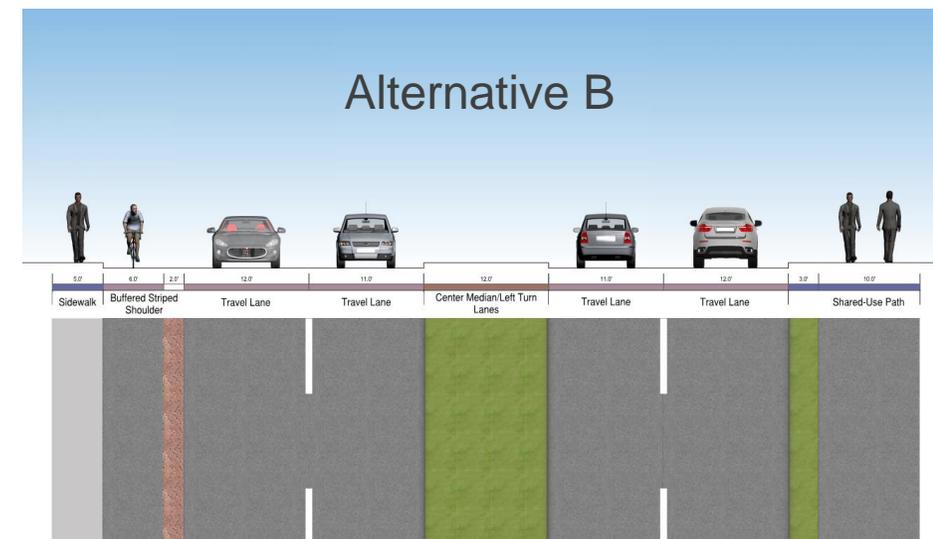
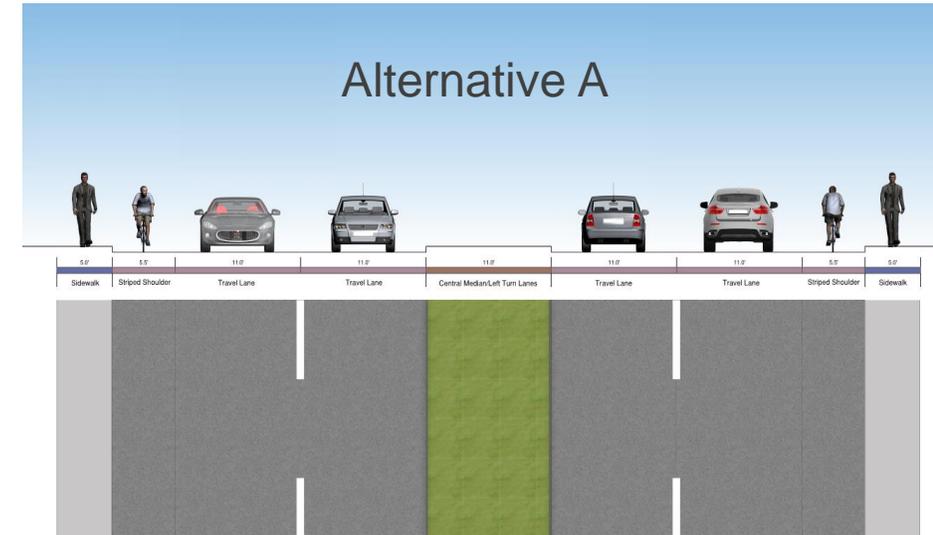
- Focus - consistent bike and pedestrian infrastructure
- Cross-sections developed for 98' ROW (majority of corridor) and 80' ROW
- Planning-level cost \$20M-\$25M
- Needs to be phased



SR 260 Cross-Section (MP 337 – 340) (Old Linden Road to US 60 Concepts)

Two concepts:

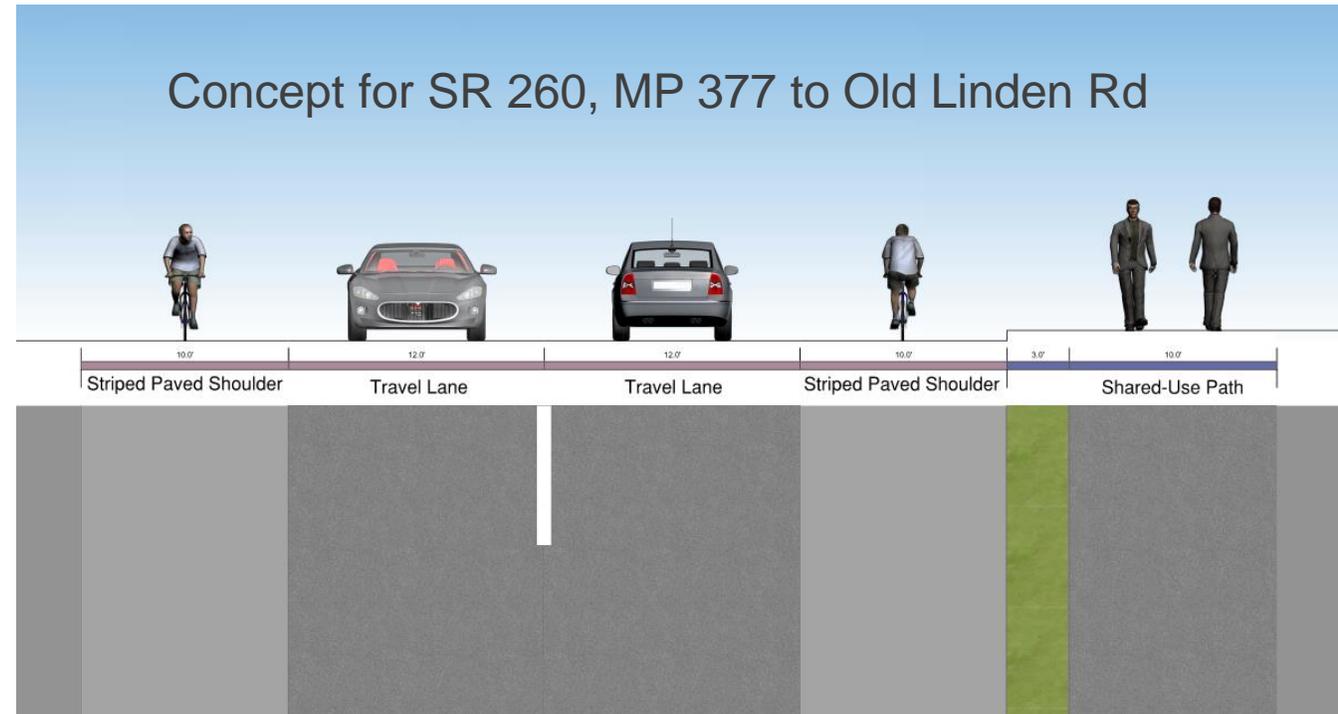
- Alternative A: Figure 17 (p 42)
 - 11' travel lanes, 11' median, 5.5' shoulder, maintain existing sidewalk / paths
 - Planning-level cost: \$4.5 - \$5M
- Alternative B: Figure 18 (p 42)
 - 11' travel lanes, 12' median, 6' shoulder, 2' buffer(EB side), 10' paved path (north side)
 - Planning-level cost: \$7- \$8M



SR 260 Cross-Section (MP 337 – 340) (MP 377 to Old Linden Rd Concept)

Concept: Figure 19 (p 43)

- 12' travel lanes, 10' shoulder, 10' shared use path
- Planning-level cost: \$3 - \$3.5M



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Recommended Projects

Recommended Projects – Short Term (0-5 Yrs) Capital, Safety and Multimodal Projects (p 46)

Name	Type	Score	Economic Impact	Prioritization	Est. Cost
Scott Ranch Road Phase II	Major Capital	60	Emp: 1,490 Pop: 1,359	High	\$9M-\$11M
Woolford Road Crossing	Major Capital	55	Emp: 1,120 Pop: 2,533	High	\$6.5M
Thornton Corridor Phases I-IV	Major Capital	50	Emp: 1,640 Pop: 2,533	High	\$3M-\$4M
US 60 (MP 352-384)	Safety	45	-	High	\$70M
Pinetop-Lakeside Pedestrian Safety Study Recommendations	Multimodal	45	-	High	\$8.8M

Recommended Projects – Short Term (0-5 Yrs), Con't)

– Studies and Policies (p 46)

Name	Type	Score	Economic Impact	Prioritization	Est. Cost
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	-

Recommended Projects – Mid-Term (5-10 Years) (p 47)

Name	Type	Score	Economic Impact	Prioritization	Est. Cost
Woolford Rd/Central Avenue Improvements	Major Capital	55	Emp: 260 Pop: 1,194	High	\$12M-\$13M
SR 260 Cross-Section (US 60 to SR 73)	Multimodal	55	-	High	\$20M-\$25M
SR 260 Cross-Section Elements (MP 337-340)	Multimodal	45	-	High	\$7.5M-\$11.5M
SR 77 (MP 347-351)	Safety	40	-	Medium	-
SR 77/Center Street (Snowflake)	Safety	40	-	Medium	-
SR 77/White Mountain Lake Road	Safety	40	-	Medium	-
SR 260 Bus Pull-Outs	Multimodal	40	-	Medium	-

Recommended Projects – Long Term (10-20 Years) (p47)

Name	Type	Score	Economic Impact	Prioritization	Est. Cost
Stanford Dr. Reconstruction	Major Capital	35	Emp: 80 Pop: 341	Medium	-
US 60 Widening (Show Low to Vernon)	Major Capital	35	Low	Medium	-
SR 77 Widening (Show Low to Taylor)	Major Capital	35	Low	Medium	-
US 60 (MP 341-343)	Safety	35	-	Medium	-
US 60 (MP 345-352)	Safety	35	-	Medium	-
SR 260/Show Low Lake Road-Cub Lake Road	Safety	35	-	Medium	-
US 60 Variable Message Signs	Safety	35	-	Medium	-
Supplement/Expand White Mountain Connection	Multimodal Project	35	-	Medium	-
Summit Trail Extension	Major Capital Project	30	Emp: 810 Pop: 3,773	Medium	-

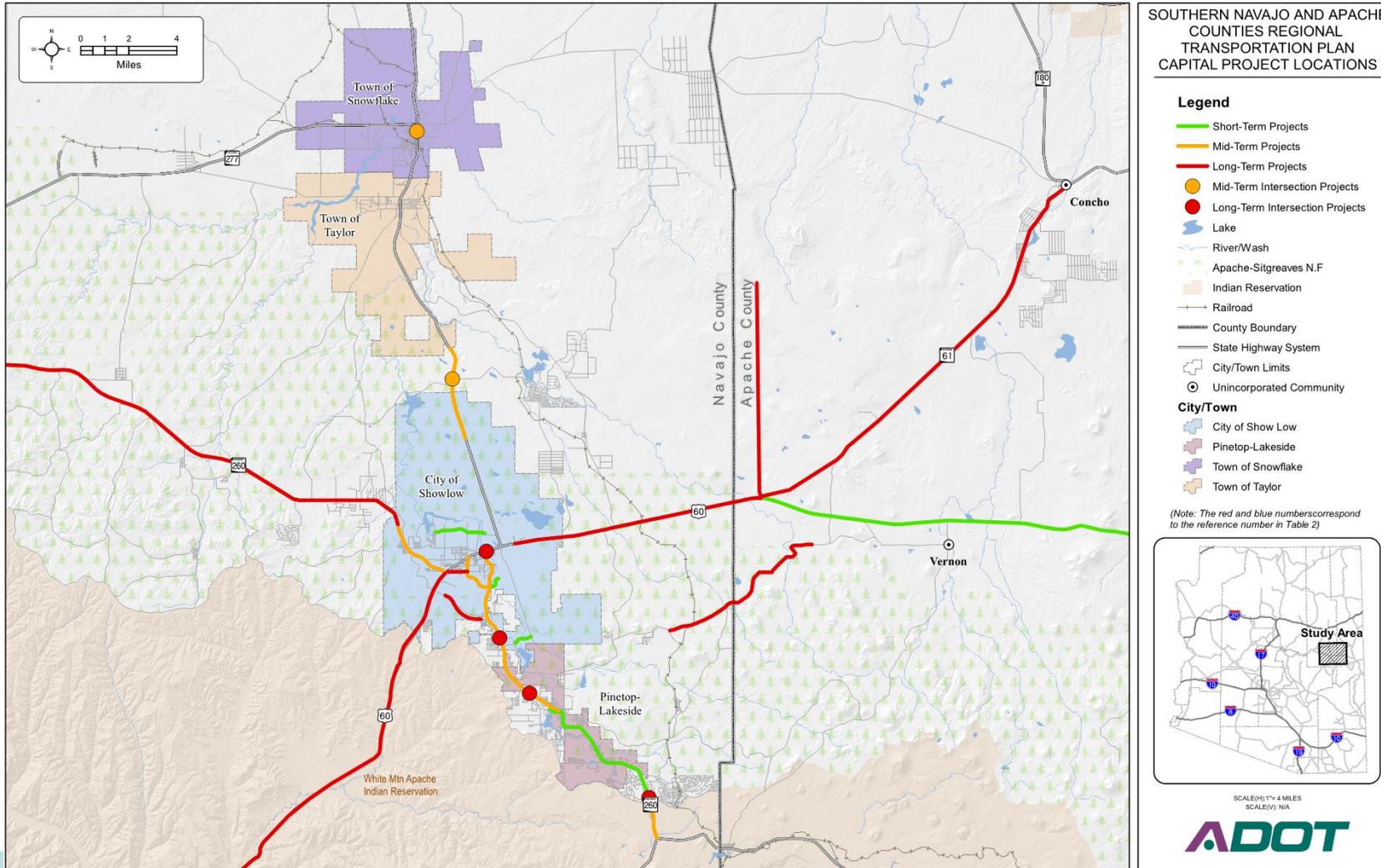
Recommended Projects – Long Term (10-20 Years), Con't (p47)

Name	Type	Score	Economic Impact	Prioritization	Est. Cost
SR 260/Woolford Road	Safety	30	-	Medium	-
SR 260/Rainbow Lake Road	Safety	30	-	Medium	-
SR 260/Branding Iron Loop	Safety	30	-	Medium	-
SR 61 (MP 352-373)	Safety	30	-	Medium	-
SR 260 (SR 277 to US 60)	Safety	30	-	Medium	-
US 60 (MP 317 to SR 260)	Safety	30	-	Medium	-
Whipple Road Traffic Calming	Traffic Operations	30	-	Medium	-
US 60/SR 260 Signal Modifications	Traffic Operations	30	-	Medium	-
Porter Mountain Road/CR-3144 Paving/Reconstruction	Major Capital	20	Emp: 0 Pop: 544	Low	-

Projects Removed from Consideration

Name	Type	Score
SR 260/Penrod Lane	Safety Project	25
US 60/Old Linden Road	Safety Project	25
SR 277/Paper Mill Road	Safety Project	25
SR 77 Industrial Access Improvements	Traffic Operations Project	25
Whipple St/Central Avenue Roundabout	Traffic Operations Project	25
ADOT Route Trails	Alternative Mode Projects	25
Porter Mountain Rd/ CR-3144 Paving/ Reconstruction	Large Capital Project	20
SR 61 Widening (Stanford to Concho)	Large Capital Project	20
Concho Hwy/El Dorado Road	Safety Project	20
US 60/Bordon Ranch Road	Safety Project	20
US 60/Mormon Lake Road	Safety Project	20
Old Linden Rd/Central Avenue Roundabout	Traffic Operations Project	20
Concho Hwy Intersection Improvements	Traffic Operations Project	20
Vernon-McNary Road Paving	Traffic Operations Project	20
Show Low Lake Road Operational Improvements	Traffic Operations Project	20
Implement Regional Paratransit Services	Alternative Mode Project	20
Bus Shelter Replacements	Alternative Mode Project	20
Fire Station Signals	Traffic Operations Project	15

Questions or Comments on Recommended Projects?

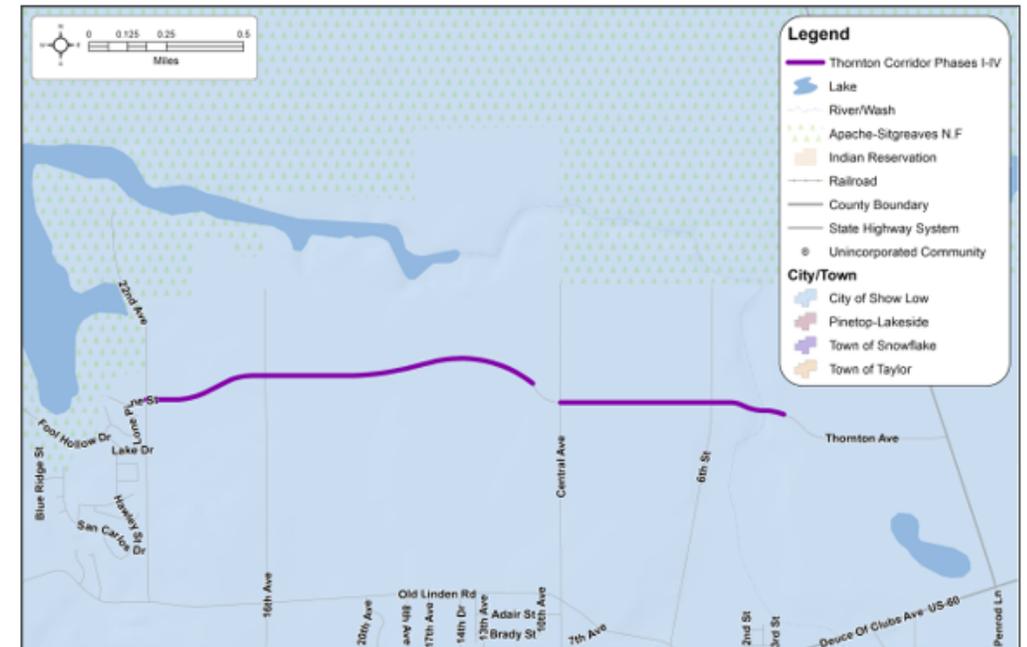


Capital Project Detail Sheets (Appendix A)

- Developed for large capital projects
- Includes key project features and map

Project Name	Thornton Corridor – Phases I-IV
Project Location	22nd 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	\$5,000,000
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



Next Steps

- Incorporate review comments on Working Paper 2 – please submit by 12/17
- Prepare Draft Final Report
- Public Outreach, Phase II
- Public Involvement Summary Report
- Final Report