Kimley-Horn and Associates, Inc.

APPENDIX 6

TECHNICAL MEMORANDUM 6 – PUBLIC AND STAKEHOLDER PARTICIPATION

Northern Parkway/ Tonopah Parkway Corridor Feasibility Study

Contract 2010-004
Project TT005

FINAL
Technical Memorandum 6
Public and Stakeholder Participation

Prepared by:

Kimley-Horn and Associates, Inc.

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1. INTRODUCTION

Technical Memorandum 6 (TM 6) entitled *Public and Stakeholder Participation*, documents the results of the interaction with partnering agencies, stakeholders, and the general public throughout the course of the *Northern Parkway: Tonopah Parkway to Turner Parkway and Tonopah Parkway: Northern Parkway to Interstate 10 Corridor Feasibility Study* (hereafter referred to as the *Northern Parkway/Tonopah Parkway CFS*, or "the project"). Specifically, TM 6 provides a summary of the study background and study area; a description of the Technical Advisory Committee (TAC) and stakeholder participation; and a summary of the general public involvement effort. Additional detailed information is included in the following companion documents: *Existing and Future Corridor Features* (TM 1), *Environmental Overview* (TM 2), *Conceptual Drainage Report* (TM 3), *Candidate Alternative Alignments and Evaluation* (TM 4), and *Detailed Preferred Alignment* (TM 5).

Engaging partnering agencies, stakeholders, and the public in building consensus has been and will continue to be critical to the success of this study, as well as any future implementation of its recommendations.

1.1 Background and Study Need

In July 2008, the Maricopa Association of Governments (MAG) completed the *Interstate 10/Hassayampa Valley Transportation Framework Study* (known as the *Hassayampa Framework Study*), that recommended a comprehensive roadway network to meet the future traffic demands that result when the area west of the White Tank Mountains is completely developed (hereafter referred to as buildout travel demand). This long-range regional transportation network includes the "Arizona Parkway" as a new facility type to supplement more traditional roadway classifications in meeting projected travel demand.

The Arizona Parkway utilizes a distinct intersection treatment that prohibits left turns at major cross-street intersections and controls intersection traffic movements with two-phased traffic signal control. Left-turn movements are made indirectly using directional left-turn crossovers in the median immediately downstream of cross-street intersections. The typical right-of-way width for an Arizona Parkway is 200 feet.

The *Hassayampa Framework Study* demonstrated the need for both Northern Parkway and Tonopah Parkway to meet buildout travel demands and provide a continuous parkway network. Although today's land development and travel demands in the project study area do not warrant major new high capacity roadways in the near-term future, the buildout forecast for future land development and travel demands does warrant major new high capacity roadways in the long-term future. Plans are already underway to convert some of the vacant lands within the project study area to land uses that will generate future traffic.

To preserve sufficient public right-of-way for the future Northern Parkway and Tonopah Parkway, the planning process needs to identify right-of-way requirements for buildout conditions. This study is the first step in the roadway development process and is meant to aid the governing bodies in defining and protecting a continuous future roadway corridor that can accommodate buildout traffic demands in the project study area.

The project scope of work for this study included the tasks necessary to prepare a corridor feasibility report that will provide the Maricopa County Department of Transportation (MCDOT), the Town of Buckeye, area property owners, developers, and other stakeholders with planning guidelines for future growth and development that will lead to the preservation of a 200-foot wide

right-of-way corridor to accommodate the typical Arizona Parkway design. This required significant coordination with various governing bodies, other public agencies, development interests, and the general public.

1.2 Project Study Area

The project study area includes the planned Northern Parkway, an east-west corridor centered on the Northern Avenue section line, from the planned Tonopah Parkway (411th Avenue alignment) to the planned Turner Parkway (267th Avenue alignment). The Northern Parkway corridor within the project study area is approximately 18 miles long and two miles wide. This section of Northern Parkway is referred to as the Northern Parkway Hassayampa section to distinguish it from other planned Northern Parkway sections east of the White Tank Mountains.

The project study area also includes the planned Tonopah Parkway, a north-south corridor centered on the 411th Avenue section line, from Interstate 10 (I-10) to the planned Northern Parkway. The Tonopah Parkway corridor within the project study area is approximately 3.75 miles long and two miles wide.

The project study area boundaries are shown in **Figure 1**.

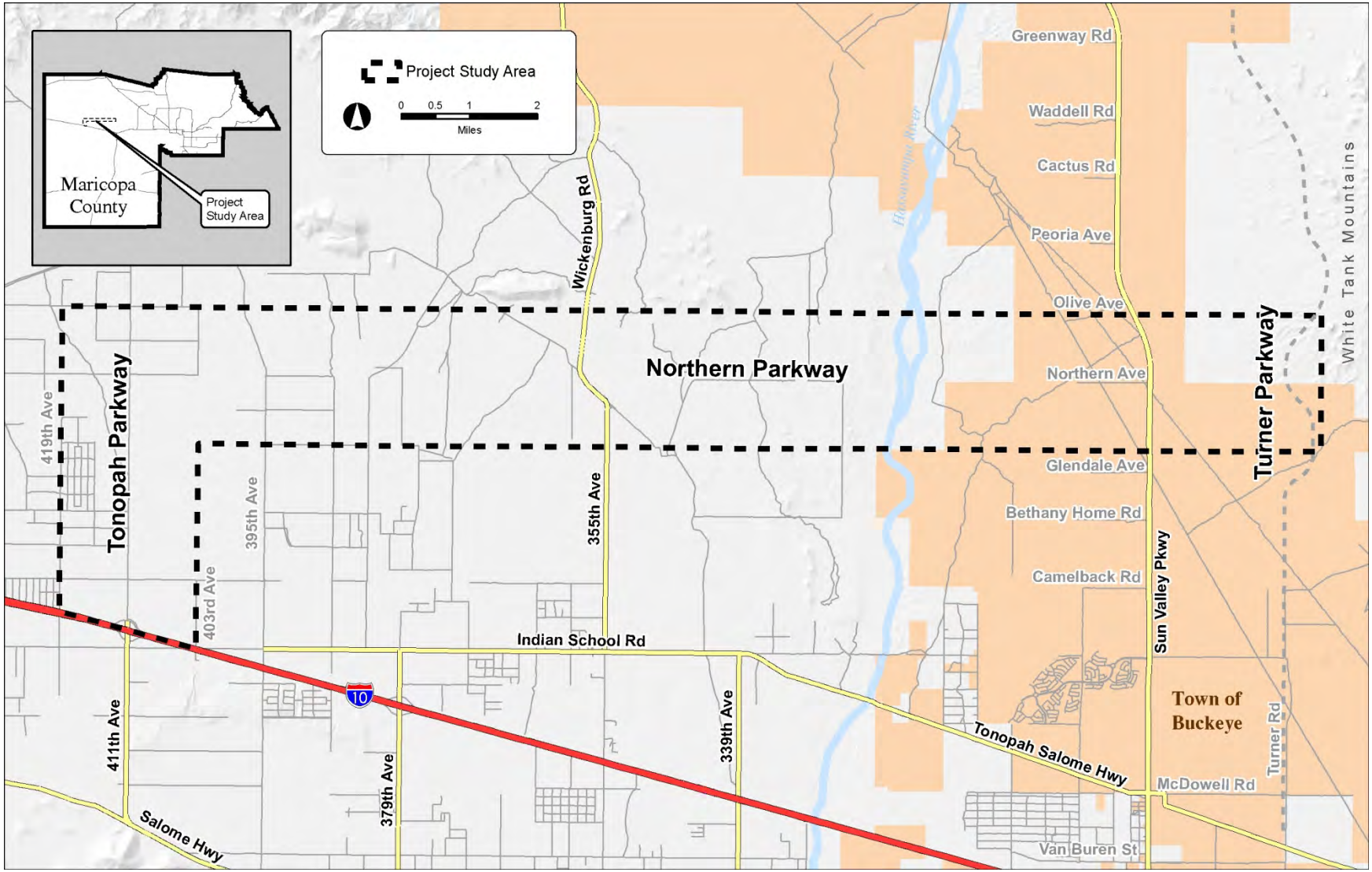

Figure 1 - Project Study Area

2. TECHNICAL ADVISORY COMMITTEE AND STAKEHOLDERS

2.1 Technical Advisory Committee and Project Stakeholder Representation

A combined TAC and stakeholder group was established by MCDOT to provide technical oversight and guidance throughout the study duration. The TAC and stakeholder group included over 50 individuals representing the following:

- Arizona Department of Transportation;
- Arizona Game and Fish Department;
- Arizona State Land Department;
- Businesses;
- Center for Desert Archaeology;
- Central Arizona Project;
- Community of Tonopah;
- Developers;
- Federal Highway Administration;
- Flood Control District of Maricopa County;
- Irrigation and Utility Companies;
- Maricopa Association of Governments;
- Maricopa County Farm Bureau;
- Maricopa County Planning and Development;
- Maricopa County Department of Transportation;
- Property Owners;
- Residents; and
- Town of Buckeye.

The role and responsibility of the TAC and stakeholder group was to meet at key decision and milestone points during the study to receive information on study progress, offer advice and guidance on study issues, inform the management of their respective agencies and organizations of the project study progress, and build consensus on study recommendations.

The TAC and stakeholders were also requested to review and comment on all draft technical memoranda and the draft final report. Comment response forms are included in **Appendix TM6-01** that show how comments submitted by the TAC and stakeholders regarding the draft study documents were addressed in the final study documents.

2.2 TAC/Stakeholder Meetings

All individuals in the stakeholder database (see **Appendix TM6-01**) were invited to participate in four TAC/stakeholder meetings that were scheduled at key milestones throughout the study process as follows:

- *July 14, 2010* – Study Purpose, Data Collection, and Issues Identification;
- *September 22, 2010* – Review Existing and Future Corridor Features, Environmental Overview, Conceptual Drainage Report, Constraints, and Evaluation Criteria;

- *November 15, 2010* – Review Conceptual Alternatives and Develop Candidate Alternatives; and
- *February 23, 2011* – Review Alternatives Evaluation, Discuss Preferred Alignment, and Develop Consensus on Study Recommendations.

Additional one-on-one meetings with stakeholders were conducted where necessary to obtain stakeholder input.

All meetings were well attended with a valuable exchange of questions, answers, and input to the study findings and recommendations. The TAC/stakeholder meeting agendas, presentations, and meeting summaries are included in **Appendix TM6-01**.

3. PUBLIC OPEN HOUSES

The MCDOT RightRoads Program, with assistance from the project team, conducted three public open house meetings at critical milestones in the study process as follows:

- *October 18, 2010* – "Project Scoping Phase" public meeting to provide area residents and other impacted stakeholders with an opportunity to inform project team members about the study area issues and local transportation needs. This meeting also provided the study team members with an opportunity to discuss and elicit feedback regarding the study purpose, goals and objectives;
- *February 15, 2011*– "Alternatives Analysis Phase" public meeting to provide the community an opportunity to comment on the roadway alignment alternatives being evaluated for the corridor; and
- *March 29, 2011* – "Study Findings and Recommendations Phase" public meeting to present the findings and recommendations of the study, including the preferred parkway alignment, the right-of-way footprint, and preliminary engineering details for the future Northern Parkway and Tonopah Parkway.

The public meetings were conducted in an "open house" format at the Tonopah Valley High School to provide a free, open, and accurate exchange of information between the project team and the public regarding specific issues and questions. Graphics, handouts, aerials, and display board exhibits presented study information. Comment sheets were distributed to all those in attendance so they could provide written comments. Meeting summaries were prepared that summarize the input received from the public.

The following meeting summaries provide highlights of the input received from the public. Additional detail on the public involvement process is provided in the *MCDOT RightRoads Program Summary of Public Involvement* in **Appendix TM6-02**.

3.1 Scoping Phase Public Meeting

Meeting purpose: Gather public comment regarding the study area, existing conditions, current corridor deficiencies, future transportation needs and public review of overall study goals and objectives.

Meeting time and location:

5:00 – 7:00 p.m., October 18, 2011
Tonopah Valley High School Cafeteria
38201 W. Indian School Road, Tonopah, AZ 85354

Attendance: 85

Meeting comments:

- Need to consider the monastery on the north edge of the study area;
- How can we get a copy of the ADOT framework study?;
- Who can we speak to about needed road improvements in the area?;
- Who can we speak to about the permitting process for a planned solar project (sign recently posted near 411th Avenue and Glendale Avenue)?;
- Need to build more roads now;
- How can we stop this project?;
- When will the project be built?;

- How will the project be financed?;
- Will this project cause my property taxes to increase?;
- There are tortoises, bighorn sheep, and deer in the study area. How will they be protected?;
- What types of environmental studies are being done as part of this project?;
- Put the roadways on section lines to avoid splitting properties;
- Don't bisect the agricultural operations;
- Why is this project needed?;
- The Northern Avenue alignment makes sense and should be the preferred alignment;
- What's the status of the Belmont development?;
- Residents moved to this area to be away from development and they don't want more roads/access. "Leave us alone.";
- Don't put the parkway through the subdivision west of 411th Ave.;
- Where will the parkway cross the Hassayampa River?; and
- Do we need all the roads that are in the Hassayampa Framework Study – who makes those decisions?

3.2 Alternatives Analysis Phase Public Meeting

Meeting purpose: Gather public comment regarding preliminary study findings, traffic analysis and corridor alignment alternatives, and future roadway options.

Meeting time and location:

5:00 – 7:00 p.m., February 15, 2011
Tonopah Valley High School Cafeteria
38201 W. Indian School Road, Tonopah, AZ 85354

Attendance: 62

Meeting comments:

- I prefer Alt. Route A because of the location of our property and monastery. We prefer the Alt. Route A in order to maintain both solitude and quiet. (Our Lady of Solitude Monastery);
- I am against the Northern Parkway all together. I moved out here to get away from all that. They can use small roads or the freeway;
- Great idea! Keep it on Northern;
- I love the proposed parkway plan on Northern. Hope it stays on Northern;
- I prefer alternative A;
- We prefer alternative A for the Northern Parkway;
- Very good maps and presentation;
- I prefer alternative A;
- The sisters and I live in a contemplative monastery and our charm is of quiet and solitude. We prefer Alternative A since the road is farther south from our chapel and home. Thank you and God bless you;

- What is the importance of all the areas labeled as "Potential Wildlife linkage Zones"? Are these areas restricted from being developed? What does this mean to me as a land owner?;
- The plan is necessary for future development and we agree with the study;
- Build the road on vacant land instead of impacting existing homes;
- Would like information on how to get roads built to our property;
- The roadway will be right at my front door;
- Keep the road on the section line;
- Would appreciate better indication of timeframe for the construction;
- It is good that the County is planning ahead now to prevent developments from going in where the road needs to be;
- Generally staying on the section line seems to make the most sense;
- While it looks like the road won't get built for a long time, designating the roadway right-of-way corridor now will restrict what I can do with my property that is within that corridor, reducing its value;
- There is no east-west roadway in the area, so any east-west road would be a welcome improvement;
- Keeping the Tonopah Parkway at the 411th/ I-10 TI is a good idea;
- Several folks commented that the A Alternative (Northern Parkway) appeared to be the best choice;
- Many attendees really thought the presentation was informative, well thought out and displayed to successfully communicate the story of the project & process; and
- Easier access to my property will be good.

3.3 Findings and Recommendations Phase Public Meeting

Meeting Purpose: Gather public comment regarding study findings and "Preferred Alternative", recommended access management strategies and guidelines, and an improvement phasing timeline.

Meeting time and location:

5:00 – 7:00 p.m., March 29, 2011
Tonopah Valley High School Cafeteria
38201 W. Indian School Road, Tonopah, AZ 85354

Attendance: 32

Comments/questions received by Project Team during discussions with meeting attendees:

- We would like to know when the parkways will be constructed and how they will be financed. We do not want to see our property taxes increased to pay for the parkways;
- Bethany Home Road needs to be paved to reduce dust and improve the condition of the road;
- Roadway improvements will be needed to serve construction traffic and employee traffic for the planned solar facility west of the project study area;
- Bicyclists need to be accommodated in the parkway design and should be allowed to make left turns at the major signalized intersections;

- The 411th Avenue section line alignment for Tonopah Parkway makes sense since it ties directly to the existing I-10 interchange;
- Roadway improvements will be needed to provide traffic service in the Northern Avenue corridor west of Tonopah Parkway and East of Turner Parkway;
- The Northern Parkway design will need to be coordinated with planning for the Hassayampa Freeway (Proposed I-11);
- Reasonable access points will be needed to serve adjacent residential areas and businesses;
- Preserving a 200' wide corridor for the future parkway is a good planning approach;
- Property owners will need to be fairly compensated if their property is need for the parkways;
- This is a good planning project to help property owners proceed with their land development plans;
- An all-weather bridge is needed to cross the Hassayampa River;
- Planned developments should participate in protecting right-of-way and in building the parkways;
- The recommended Alternative A alignment for Northern Parkway makes sense and appears to be the best alternative; and
- It is great that the County is planning ahead to preserve a right-of-way corridor now to avoid the problems ADOT has had with the South Mountain Freeway.

Kimley-Horn and Associates, Inc.

APPENDIX TM6-01

TAC/STAKEHOLDER DOCUMENTATION

Northern Parkway/Tonopah Parkway Corridor Feasibility Study

Technical Advisory Committee Members and Stakeholders

First Name	Last Name	Title	Company	E-mail	Phone	Address	City	State	Zip	TAC/Stakeholder Meeting Attendance			
										1	2	3	4
Aaron	Ashcroft	Civil Engineer	Central Arizona Project	aashcroft@cap-az.com	623-869-2257	23636 N. 7th St.	Phoenix	AZ	85080	X	X		X
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Stephen	Cleveland	Town Manager	Town of Buckeye	scleveland@buckeyeaz.gov	623-349-6099	530 E. Monroe Ave.	Buckeye	AZ	85326				
Roberta	Crowe	PIO	MCDOT	robertacrowe@mail.maricopa.gov	602-506-8003	2901 W. Durango St.	Phoenix	AZ	85009				
Hugh	Davidson	Environmental Planner	MCDOT	hughdavidson@mail.maricopa.gov	602-506-8082	2901 W. Durango St.	Phoenix	AZ	85009	X		X	
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Jeanette	Fish	Executive Director	Maricopa Co. Farm Bureau	mcfb@qwestoffice.net	602-437-1330	4001 E. Broadway Rd.	Phoenix	AZ	85040	X	X		
Mary	Frye	Engineer	FHWA	mary.frye@dot.gov	602-382-8979	4000 N. Central Ave.	Phoenix	AZ	85012				
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Brian	Kulina	Associate Planner	Town of Buckeye	bkulina@buckeyeaz.gov	623-349-6210	530 E. Monroe Ave.	Buckeye	AZ	85326	X	X	X	X
Denise	Lacey	Senior Planner	MCDOT	deniselacey@mail.maricopa.gov	602-506-6172	2901 W. Durango St.	Phoenix	AZ	85009	X	X	X	X
Richard	Maes	Project Manager	W Holdings	richardm@wholdings.com	480-831-2000	1121 W. Warner Rd., Ste 109	Tempe	AZ	85284		X	X	
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Kay	McNeely	Water Resources Specialist IV	ASLD	kmcneely@land.az.gov	602-542-3681	1616 W. Adams St.	Phoenix	AZ	85007	X	X		X
Jackie	Meck	Mayor	Town of Buckeye	jmeck@buckeyeaz.gov	623-349-6950	530 E. Monroe Ave.	Buckeye	AZ	85326				
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Ed	Stillings	Engineer	FHWA	ed.stillings@dot.gov	602-382-8966	4000 N. Central Ave.	Phoenix	AZ	85012				
Elizabeth	Story	Administrator	Tonopah Irrigation District	tonopah@tonopahid.org	623-386-4066	10410 East Javelina Ave	Mesa	AZ	85209				
Ray	Strauss	District 4 Councilmember	Town of Buckeye	rstrauss@buckeyeaz.gov	623-349-6949	530 E. Monroe Ave.	Buckeye	AZ	85326				
Tim	Strow	Planner	MAG	tstrow@azmag.gov	602-254-6300	302 N. 1st. Ave.	Phoenix	AZ	85003	X			
Nicolaas	Swart	Traffic	MCDOT	nicolaasswart@mail.maricopa.gov	602-506-0599	2901 W. Durango St.	Phoenix	AZ	85009	X	X		X*
Valerie	Swick	Project Manager	Flood Control District	vas@mail.maricopa.gov	602-506-2929	2801 W. Durango St.	Phoenix	AZ	85009	X	X	X	X
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Michelle	Yerger	Planner	Communities Southwest	myerger@commsw.com	480-315-2618	7001 N. Scottsdale Rd., 1015	Scottsdale	AZ	85253				X
Scott	Zipprich	Engineer	W. C. Scoutten, Inc.	scott@scoutten.com	623-547-4661	1626 N. Litchfield Rd., Ste 310	Goodyear	AZ	85395				X

X = In attendance

X* = Substitute in attendance

6/3/2011

Tech. Memo No.	Page No.	Reviewer	Comment	Response	Initial Response	Final Response
1, 2, & 3	General	Rick McFarlin/ MCDOT	No comments at this time.	*No response required.*	D	D
1, 2, & 3	General	Denise Lacey/ MCDOT	No comments at this time.	*No response required.*	D	D
1, 2, & 3	General	Thomas Bommarito/ AZGFD	No comments at this time.	*No response required.*	D	D
1, 2, & 3	General	Tim Strow/ MAG	No comments at this time.	*No response required.*	D	D
1, 2, & 3	General	Wayne Butch/ MCDOT	No comments at this time.	*No response required.*	D	D
1	General	Richard Maes/ W Holdings	We have reviewed the Northern Ave Corridor Study as it relates to the WVSV Sun Valley property and have no problems with the location along our Southern Boundary. Our plans will accommodate ROW for the future corridor. Our larger concern is how Northern Ave and Sun Valley Parkway will intersect? We also are concerned about other intersections both East and West of Sun Valley as to providing intersections that will connect to our Master Plan.	*The location of the Northern Parkway/ Sun Valley Parkway intersection will be determined during the detailed alignment phase of this study. The MCDOT Design Guideline Recommendations for the Arizona Parkway included in Appendix TM1-3 show the layout for typical parkway/parkway and parkway/arterial intersections. Refer to Sections 2.2.3 and 2.2.4 of TM1 for more details on the design and layout of the Arizona Parkway.*	B	D
1	General	Bill Ring/ LKY Development	Belmont is in favor of keeping the alignment that was already approved by MDOT and which is reflected on the approved Maricopa County DMP. Any changes may impact our ability to dedicate the right-of-way and work in conjunction with the State Land Department.	*These comments will be carried forward to the alternatives development and evaluation and considered at that time.*	D	D
1	General	Jeannette Fish/ Maricopa County Farm Bureau	Northern Parkway should not bisect farming operations.	*This comment will be carried forward to the alternatives development and evaluation and considered at that time.*	D	D

A. Will Comply
B. Clarify or Evaluate
C. Additional Information Needed
D. No Action Required

Tech. Memo No.	Page No.	Reviewer	Comment	Response	Initial Response	Final Response
1	20	Jeannette Fish/ Maricopa County Farm Bureau	Future land uses should include an agricultural category.	*The future land use data was obtained from MAG per the Hassayampa Framework Study. Agricultural land use is not anticipated within the study area for the build-out condition.*	B	D
1	34	Patrick Brown/ Pulte Group	The Typical Parkway/Parkway Intersection does not show the ROW length. Is there any additional acreage needed for this intersection over and above the 200' right of way width in both directions? If so what is the amount?	*Depending on the number of turn lanes required at the Parkway/Parkway intersection, there may be a need for a width of 225 feet for a distance of approximately 400 feet away from the center of the intersection. We will take a closer look at the intersections during the alternatives evaluation.*	B	D
1	Appendix TM1-04	Robyn Calihan/ LKY Development	The Belmont DMP is approved. Confirm you are referencing the approved Belmont DMP.	*We have confirmed that Appendix TM1-04 includes the approved DMP for Belmont.*	A	D
2	General	Joe Pinto/ MCDOT	Is there prime and unique farmland within the study area?	*Yes, Section 3.9 has been added to address Prime and Unique Farmland*	A	A
2	General	Joe Pinto/ MCDOT	Can maps and tables be reduced to fit with text? Update several legends for readability.	*Figures and tables within TM2 are set up to print in color on 8 1/2 x 11 paper with a landscape orientation to make them more legible for readers. To get the landscape orientation for the figures and tables when printing, check the box that says "Choose Paper Source by PDF page size".*	B	D

A. Will Comply
B. Clarify or Evaluate
C. Additional Information Needed
D. No Action Required

Tech. Memo No.	Page No.	Reviewer	Comment	Response	Initial Response	Final Response
2	1	Joe Pinto/ MCDOT	Paragraph 1: Add word 'known' between "to identify" and "environmental". Add phrase 'about the project' between "information" and "is included". Section 1.1, 1st paragraph: If the region is only partially developed, is the network needed? Sec. 1.1, 2nd paragraph: Is "downstream" the correct terminology?	*Paragraph 1 – Text modified to address comment.* *Section 1.1, 1st paragraph – The MAG Hassayampa Framework Study analyzed transportation network needs assuming a buildout, or fully developed, condition. The purpose of this study is to identify and protect a parkway corridor that will serve ultimate buildout conditions.* *Section 1.1, 2nd paragraph – "Downstream" is the terminology typically used in traffic analysis when referring to something further down the road in the direction of travel by a vehicle.*	A/B	A/D
2	2	Joe Pinto/ MCDOT	Sec. 1.2, 1st paragraph, 2nd sentence: Add 'The' at the beginning and add 'study area' after "Northern Parkway". Sec. 1.2, 1st paragraph, 3rd sentence: Revise the sentence to read as follows: 'The project area also encompasses the portion of the planned Tonopah Parkway study area from…Parkway, and is centered…wide.'	*Text modified to address comments.*	A	A

A. Will Comply
B. Clarify or Evaluate
C. Additional Information Needed
D. No Action Required

Tech. Memo No.	Page No.	Reviewer	Comment	Response	Initial Response	Final Response
2	5	Joe Pinto/ MCDOT	Sec. 2, 1st paragraph: Add 'known' between "potential" and "environmental issues". Sec. 2.1, 2nd paragraph: Can Figures 2 and 3 be combined? Sec. 2.1, 3rd paragraph: Figure 3 shows the western portion of the study area in Maricopa County, not Tonopah. Should Tonopah be shown on map? Sec. 2.2, 1st paragraph: Is ASLD used already? Sec. 2.2, 2nd paragraph: ADOT is not mentioned above. Sec. 2.2, 3rd paragraph: Add 'and' between "general plan" and "GIS data". How many houses per acre are associated with the "low density" and "higher density" uses? Are the large patches of retail, office, and industrial land uses existing or future?	*Text modified to address comments.* *Figure 2 is a more general graphic that is found in all three technical memoranda and public notification materials. Figure 3 highlights the jurisdictional boundaries.* *Tonopah is shown as an unincorporated community in Figure 3.* *ADOT is a land owner in the project study area, not a governing jurisdictional entity, so no mention of ADOT is made in the section on land jurisdiction.*	A/D	A/D
2	8-9	Joe Pinto/ MCDOT	Sec. 2.3, 4th paragraph: Is LEP considered a minority group? Sec. 2.3, 7th paragraph: What about Native American population threshold? Keep in mind whole study area would not be designed/built, so depending on what sections were constructed, there could be impacts to Title VI populations.	*LEP is not considered a minority group, but it is a federally protected population group. More text has been added regarding LEP populations.* *Text added summarizing where Title VI/Environmental Justice and LEP population percentages exceed the thresholds.* *Text added to address how impacts to these populations can change depending on where the roadway alignment is located.*	A	A

A. Will Comply
B. Clarify or Evaluate
C. Additional Information Needed
D. No Action Required

Tech. Memo No.	Page No.	Reviewer	Comment	Response	Initial Response	Final Response
2	13	Joe Pinto/ MCDOT	Sec. 3: What is the composition of the study area? Is this the typical plant community/habitat found throughout the project area? Sec. 3.1: Make statement that only habitat for snake is present. Other threatened and endangered habitat not present. No fly catcher or bat habitat in the wash areas? Sec. 3.1, 2nd paragraph: Add citation for "will likely be listed as threatened in the future".	*Text modified to address comments.*	A	A
2	16	Joe Pinto/ MCDOT	Sec. 3.1, 5th paragraph: Would a BR work? Sec. 3.2: Are these the only two species that came up? Sec. 3.2.1: WSC stands for "wildlife of special concern". Sec. 3.2, 2nd paragraph: Reference AGFD mitigation measures?	*Text modified to address comments.*	A	A
2	17-18	Joe Pinto/ MCDOT	Sec. 3.3, 1st paragraph: Discussion of PLZ 65 that even though it is shown not reaching Hassayampa, the assumption lies within Sec. 3.3, 2nd paragraph: Wildlife-friendly roadway design considerations should be coordinated with AGFD. Sec. 3.3 3rd paragraph: ID these areas in study area. Figure 6: Update PLZ	*Text modified to address comments.* *Boundary for PLZ 65 was confirmed, with text added to the body of the document noting that PLZ 65 can be assumed to essentially extend to the Hassayampa River.*	A/B	A/D
2	19	Joe Pinto/ MCDOT	Sec. 3.4, 3rd paragraph: Add 'and project is years away' after "42 square miles". Any seen during "windshield" survey? Sec. 3.5, 1st paragraph: Should "AZDA" be 'ADA'?	*Text modified to address comments.*	A/B	A
2	21	Joe Pinto/ MCDOT	Sec. 3.6, 2nd paragraph: Only if floodplains area modified. Crossing can be designed as to not affect floodplains. Sec. 3.7: Are the acronyms used again? If not, no need. Add 'Currently' to beginning of second sentence. The list should be reviewed again during design. Sec. 3.8, 1st paragraph: Dredge and/or fill? Sec. 3.8, 2nd paragraph: Is TID jurisdictional?	*Text modified to address comments.*	A	A

A. Will Comply
B. Clarify or Evaluate
C. Additional Information Needed
D. No Action Required

Tech. Memo No.	Page No.	Reviewer	Comment	Response	Initial Response	Final Response
2	22-23	Joe Pinto/ MCDOT	Sec. 3.8, 4th paragraph, 4th sentence: What about informal? Maybe Delete "formal". Delete "final". Sec. 3.8, 4th paragraph, 5th sentence: Fragment? Sec. 3.9: Add 'regardless if WUS is present' to the end of the last sentence. Sec. 3.10, 2nd paragraph: There's only 3 common but 31 soil types?	*Text modified to address comments.*	A	A
2	26	Joe Pinto/ MCDOT	Sec. 3.12, 4th paragraph, 5th sentence: Particularly 0_3? Sec. 3.12, 5th paragraph, 4th sentence: Impacts would be temporary in nature. Sec. 3.12: How will project affect other 6 pollutants?	*Text modified to address comments.*	A	A
2	26-27	Joe Pinto/ MCDOT	Sec. 3.13, 1st paragraph: Doesn't MCDOT use different thresholds? Sec. 3.13, 2nd paragraph, 1st sentence: Isn't there a percent increase too? Sec. 3.13, 2nd paragraph, 2nd sentence: For all activity categories? Sec. 3.13, 2nd paragraph, 4th sentence: Across the board? Sec. 3.13, 3rd paragraph, 1st sentence: Add 'Currently' to the beginning of the sentence. Sec. 3.13, 3rd paragraph: Future land uses have "B" category?	*Text modified to address comments.* *MCDOT noise abatement policy is based on the currently accepted practices and procedures used by federal and state transportation agencies to assess highway related noise impacts, consequently the thresholds are consistent with those of the FHWA and ADOT.*	A/B	A/D
2	27-28	Hugh Davidson/ MCDOT	Sec. 3.14 Hazardous Materials adequately treats any potential hazardous materials or solid waste sites that might come under effect by a construction project, to include identification of three (3) site locations subject to hazardous materials compliance/remediation that should be avoided by project design	*No response required.*	D	D

A. Will Comply
B. Clarify or Evaluate
C. Additional Information Needed
D. No Action Required

Tech. Memo No.	Page No.	Reviewer	Comment	Response	Initial Response	Final Response
2	28	Hugh Davidson/ MCDOT	In the last paragraph notification of the "…MCDOT Hazardous Materials Coordinator.." should be changed to "…MCDOT Environmental Planning section.." to better reflect the current agency structure	*Text modified to address comment.*	A	A
2	29-35	Hugh Davidson/ MCDOT	Section 4 - Cultural resources addresses both state-federal law/regulation that might be applicable; the section also addresses the current state of archaeological/historical inventory. Of particular usefulness at this stage of planning is the analysis of the adequacy of existing cultural resources survey data, some of which is quite dated (> 10-years old) and certainly not up to current standards. The CR analysis includes careful scrutiny of possible historical resources in the project area, and employs important historic maps of the Government Land Office to excellent effect. The anticipation that the documented Historic Context Statement on the Proto-historic historic and Homesteading era might come into play in cultural resource analysis is a commendable addition to this section.	*No response required.*	D	D
2	36	Hugh Davidson/ MCDOT	Section 5 - Section 4(f) resources includes analysis whether the possibility of Section 4(f) historic properties might exist in the project area; the consultant persuasively argues that this likelihood is non-existent	*No response required.*	D	D
2	36-37	Joe Pinto/ MCDOT	Sec. 5.1, 1st paragraph, 1st sentence: Add 'and federal aid funding' to the end of the sentence. Sec. 5.1, 4th paragraph, 1st sentence: What about cultural site? Sec. 5.1, 6th paragraph, 1st sentence: Does this include other 4(f) property other than cultural/historical? Sec 5.2: Include caveat paragraph similar to last paragraph of Section 5.1.	*Text modified to address comments*.	A/B	A

A. Will Comply
B. Clarify or Evaluate
C. Additional Information Needed
D. No Action Required

Tech. Memo No.	Page No.	Reviewer	Comment	Response	Initial Response	Final Response
2	38	Joe Pinto/ MCDOT	Sec. 6.3, 2nd paragraph: Need to make sure that mentioned populations aren't impacted more by selected alignment versus others.	*Text modified to address comment.*	A	A
2	39	Joe Pinto/ MCDOT	Sec. 6.4, 4th sentence: Add 'currently' between "which is" and "listed". Sec. 6.4: Endangered Species Act will need to be looked at again. Sec. 6.5, 2nd sentence: Add 'Treaty' between "Migratory Bird" and "Act". Sec. 6.6, 2nd paragraph: Maintaining coordination with AGFD with help facilitate this. Sec. 6.7: And to develop appropriate mitigation measures. Sec. 6.8: Haven't native plants been identified already?	*Text modified to address comments.*	A	A
2	40	Joe Pinto/ MCDOT	Sec. 6.9: Only if floodplains are altered. Sec. 6.10: Need caveat. Just because not impaired today doesn't mean it may be impaired in future. Sec. 6.14, 2nd sentence: Revise to read "…analysis should be conducted as part…process and VRM staff from BLM need to be included for those…land." Sec. 6.15, 1st sentence: Add 'the' between "within" and "air quality". Although other pollutants are currently in attainment, future environmental documentation shall verify status for all pollutants at the time of study/design.	*Text modified to address comments.*	A	A
2	41	Joe Pinto/ MCDOT	Sec. 6.17, 5th sentence: Add parenthesis. Only if hazmat evaluation recommend it. Sec. 6.19: Any chance a 4(f) property could be built in the future?	*Text modified to address comments.*	A	A

A. Will Comply
B. Clarify or Evaluate
C. Additional Information Needed
D. No Action Required

Tech. Memo No.	Page No.	Reviewer	Comment	Response	Initial Response	Final Response
2	42	Joe Pinto/ MCDOT	Sec. 6.20: Caveat future possibility? Sec. 6.21, 4th bullet: And still listed? Sec. 6.21, 7th bullet: Are the acronyms NWP or IP used before? Sec. 6.21, 8th bullet: Coordination with VRM staff of BLM. Sec. 6.21, 11th bullet: Cultural	*Text modified to address comments.*	A	A
2	41-42	Hugh Davidson/ MCDOT	MCDOT Environmental Planning concurs with the current Cultural Resources and Hazardous Materials compliance recommendations.	*No response required.*	D	D
3	General	Valerie Swick/ FCDMC	No comments at this time.	*No response required.*	D	D
3	General	Tom Sonnemann/ MCDOT	The rates of flow for the drainage crossing points were all for the 100-year event. While this is what is used for bridges, box culverts are designed for the 50-year event. For a six-barreled box culvert this would be equivalent to about a 100-year Q of 3,500 c.f.s., so for 100-year Q less than this, a 50-year Q should also be included (a box culvert's capacity is checked for both – 50-year Q through the structure and 100-year with 6-inch roadway overtopping max.).	*50-year peak flows will be required for design but the development of new hydrology was outside the scope of this feasibility study. Existing hydrologic studies included only 100-year results. These peak flows are presented for general planning and comparison purposes, with more detailed design flows to be developed during future design activities such as a Design Concept Report.*	D	D
3	General	Tom Sonnemann/ MCDOT	This study did not attempt to size the structures. If you do decide to do this due to someone's comment, please keep in mind that the MCDOT Roadway Design Manual (section 4.7) requires a minimum box culvert height of 4.0 ft., with a preferred minimum height in desert washes of 5.0 ft.	*The scope of this project does not include structure sizing and design, but we will keep these culvert recommendations in mind as alternatives are evaluated.*	A	A

A. Will Comply
B. Clarify or Evaluate
C. Additional Information Needed
D. No Action Required

Tech. Memo No.	Page No.	Reviewer	Comment	Response	Initial Response	Final Response
3	2	Kay McNeely/ ASLD	Sec. 1.2: Says western boundary is 411th Ave., but Figure 1 shows it extending to 419th.	*411th Avenue is the western boundary of the Northern Parkway corridor. The Tonopah Parkway (411th Avenue) corridor is centered on 411th Avenue but extends one mile either side of it, which extends the western boundary of the entire study area to 419th Avenue as shown in Figure 1.*	B	B
3	3	Kay McNeely/ ASLD	Figure 1: Could be improved upon by adding a Tonopah and Turner Parkway label, and 267th Ave Alignment label.	*Added labels for Tonopah Parkway and Turner Parkway to Figure 1.*	A	A
3	6	Kay McNeely/ ASLD	Sec. 2.2.4: Credit is not given to AZGS for the earth fissure map	*Text modified to address comment.*	A	A
3	9	Kay McNeely/ ASLD	Sec. 3.1, 2nd paragraph, last sentence: The unit used is meters, but on page 10, first sentence, the unit is feet. Consider using meters with feet in parentheses consistently for all measurements throughout the TM.	*Text modified to address comment.*	A	A
3	14	Kay McNeely/ ASLD	Sec. 3.4.2, 2nd paragraph: I think I know what you are trying to say here, but it is confusing. Do you mean to say something to the effect of: "Within the project study area, H1 zones typically correspond with the approximate areas delineated by effective floodplains. However, in two cases, the following discrepancies were observed:"	*Text modified to address comment.*	A	A
3	17	Kay McNeely/ ASLD	I'd like to see on one of the maps a clear delineation of the Tonopah canal and the boundaries of the Tonopah Irrigation District. (Maybe it's there and I missed it, but I don't think so.)	*Tonopah canal added to Figure 3. The boundaries of the TID were added to Figure 10 (Existing Utilities and Facilities) in TM1 and the appropriate reference added to Section 3.5.1 of TM 3.*	A	A

A. Will Comply
B. Clarify or Evaluate
C. Additional Information Needed
D. No Action Required

Tech. Memo No.	Page No.	Reviewer	Comment	Response	Initial Response	Final Response
4	General	Denise Lacey/ MCDOT	No comments at this time.	*No response required.*	D	D
4	General	Tim Strow/ MAG	No comments at this time.	*No response required.*	D	D
4	8	Robyn Calihan/ Belmont	Alternative A for Northern Parkway is the only acceptable alternative because it follows the approved Belmont Development Master Plan	*Alternative A received the most favorable rating in the evaluation matrix due to its consistency with approved development master plans.*	B	D
4	29	Kay McNeely/ ASLD	What does a "wildlife crossing treatment" entail? Please expound on this.	*Typical wildlife crossing treatments include roadway underpasses or overpasses at locations where wildlife movement is anticipated, usually near washes or heavily vegetated areas.*	B	A
4	30	Kay McNeely/ ASLD	Unclear what is meant by "high geologic flood hazard zones"	*These zones reflect historical geologic characteristics. The term "geologic" will be deleted to avoid potential confusion.*	A	A
4	33	Kay McNeely/ ASLD	The "unusable remnant parcels" mentioned in Alt A-1 and A-2 are not depicted on the maps. I am curious as to exactly where those are.	*There is a 200' wide strip parcel on the south side of the Northern Avenue section line immediately east of the Hassayampa River. If only a portion of this strip parcel were utilized for the Northern Parkway, there would be an unusable remnant because of its narrow width.*	B	D
4	35	Jim Sargent/ MCDOT	Discuss impact of the various alternatives on the proposed Hidden Waters Parkway (339th Avenue), Hassayampa Freeway (355th Avenue), Wintersburg Parkway (379th Avenue). How will the various alternatives affect these parkway-to-parkway interchanges?	*All alternatives will accommodate the proposed parkway-to-parkway interchanges with similar impacts. This statement has been added to the evaluation matrix for the "System Continuity and Capacity" evaluation criteria.*	B	A

A. Will Comply
B. Clarify or Evaluate
C. Additional Information Needed
D. No Action Required

Tech. Memo No.	Page No.	Reviewer	Comment	Response	Initial Response	Final Response
4	32	Tom Deitering and Ken Davis/ FHWA	All of the Tonopah Parkway alternatives should have similar ratings for the "System Continuity and Capacity" evaluation criteria as all provide system continuity and adequate capacity.	*A more favorable rating had initially been given to Alternative A because it would not require any curvature to align with the 411th Avenue interchange with I-10. Upon further consideration, the slight curvature on Alternatives B and C will not affect system continuity or capacity, so the rating for Alternative A has been modified to match the ratings for Alternatives B and C as requested.*	B	A

A. Will Comply
B. Clarify or Evaluate
C. Additional Information Needed
D. No Action Required

Tech. Memo No.	Page No.	Reviewer	Comment	Response	Initial Response	Final Response
5	General	Denise Lacey/ MCDOT	No comments at this time.	*No response required.*	D	D
5	General	Kay McNeely/ ASLD	Document is high quality and well done.	*Thanks.*	D	D
5	7	Robyn Calihan/ LKY/ Belmont	The preferred alignment matches the approved Belmont development master plan.	*We concur.*	D	D
5	8	Josh Hartmann/ Pulte	Section 3.1 – a bicycle path does not seem to be a compatible use for a parkway. Parkways have been claimed to have near-freeway capacities and design speeds of 55mph. Parkway crossover movements would also seem to not be conducive to bicycle travel.	*Arizona Parkways are intended to serve both motorized and non-motorized travel modes. While the design speed is 55 mph, the posted speed will be 45 mph or less, similar to most principal arterials throughout the region.*	B	D
5	11	Josh Hartmann/ Pulte	Table 1 should include acquisition costs for the parkway ROW to provide a more realistic estimate of the actual costs. The alignment runs through several entitled Master Plans that do not require the proposed ROW width. As these are by definition regional facilities that do not benefit a specific property, it is not appropriate to burden certain owners with the expense of "donating" these expanded ROWs.	*This report is a long-range transportation planning document. As such, all costs are subject to change over time. ROW costs are the most variable cost component due to market fluctuations, changes in property uses, and on-going dedications associated with the development master planning processes. As a result, it is difficult to develop a ROW cost estimate that will be applicable when the acquisition process takes place.*	B	D
5	Sheet 20 of 22	Josh Hartmann/ Pulte	There is an existing production well located east of Sun Valley Parkway on the southern half of the Northern Pkwy alignment shown as a cleared area on the lower alignment of Sheet 20 of 22. Please clarify if the proposed alignment would require the elimination of this well.	*Impacts to wells will be addressed in greater detail during the parkway design process when it will be determined whether to eliminate/relocate specific wells or make some other design accommodation.*	B	D

A. Will Comply
B. Clarify or Evaluate
C. Additional Information Needed
D. No Action Required

Tech. Memo No.	Page No.	Reviewer	Comment	Response	Initial Response	Final Response
5	Appendix TM5-01	Josh Hartmann/ Pulte	This corridor study should consider the actual corridor necessary to implement the parkways considered. There is no engineering justification for the ROW requirements shown on this exhibit. Town of Buckeye parkway standards require a 60 foot median, which would reduce the section for a 4-lane parkway to 162'. Using an arbitrary ROW width with increase the expense of acquiring and constructing the 4-lane section with no benefit.	*The purpose of this study is to plan for the ultimate buildout of Arizona Parkways based upon the Arizona Parkway design guidelines. This requires a 200-foot-wide right-of-way.*	B	D

A. Will Comply
B. Clarify or Evaluate
C. Additional Information Needed
D. No Action Required

Report Name	Page No.	Reviewer	Comment	Response	Initial Response	Final Response
Draft Final Report	General	Kay McNeely/ ASLD	Document is high quality and well done.	*Thanks.*	D	D
Draft Final Report	7 and 45	Robyn Calihan/ LKY/ Belmont	The preferred alignment matches the approved Belmont development master plan.	*We concur.*	D	D
Draft Final Report	24-25	Tab Bommarito/ AGFD	The Department is concerned about habitat loss and fragmentation. Connectivity needs to be maintained between the White Tank Mountain Regional Park and the Belmont Mountains. The Department recommends building bridges, culverts, and other crossing structures to maintain connectivity through the linkage areas.	*Wildlife linkage zone connectivity will be an ongoing consideration that will be addressed in more depth during the project design phase.*	B	D
Draft Final Report	24-25	Tab Bommarito/ AGFD	Linkage zone #65 is being reassessed with additional information to be provided in a final report. We recommend replacing the 2006 GIS data with the current draft design.	*As indicated above, wildlife linkage zone connectivity will be an ongoing consideration. Additional linkage zone designations may be developed before parkway design commences and the most current linkage zone data available at the time will be used in the parkway design phase.*	B	D
Draft Final Report	24-25	Tab Bommarito/ AGFD	Include the following statement: "AGFD recommends that during final design MCDOT refers to the linkage designs (provided as an attachment to this correspondence) and works with the Department to assist in developing wildlife crossings in biologically suitable locations."	*Text in Section 3 – Environmental Summary modified to incorporate requested language.*	B	A
Draft Final Report	1 and 8	Denise Lacey/ MCDOT	Add statement that one of the study needs is to provide a continuous parkway network.	*Text modified to address comment.*	A	A
Draft Final Report	5 and 33	Denise Lacey/ MCDOT	Use bold text to highlight the Northern Parkway and Tonopah Parkway alternatives headings.	*Text modified to address comment.*	A	A

A. Will Comply
B. Clarify or Evaluate
C. Additional Information Needed
D. No Action Required

Report Name	Page No.	Reviewer	Comment	Response	Initial Response	Final Response
Draft Final Report	8 and 55	Denise Lacey/ MCDOT	In the last bullet of next steps, insert right-of-way preservation before design and delete reference to operational issues.	*Text modified to address comment.*	A	A
Draft Final Report	49	Denise Lacey/ MCDOT	Delete reference to minimum median width.	*Text modified to address comment.*	A	A

A. Will Comply
B. Clarify or Evaluate
C. Additional Information Needed
D. No Action Required

Northern Parkway (Hassayampa Section) Corridor Feasibility Study
I-10 to Turner Parkway
Work Order TT005
Contract No. 2010-004

TECHNICAL ADVISORY COMMITTEE AND STAKEHOLDER MEETING

DATE: WEDNESDAY, JULY 14, 2010
TIME: 1:30 PM
LOCATION: MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
2901 WEST DURANGO STREET
MARICOPA CONFERENCE ROOM
PHOENIX, ARIZONA

AGENDA

1. Introduction and Opening Comments
2. Meeting Purpose
3. TAC/Stakeholder Membership, Roles, and Responsibilities
4. Study Need, Purpose, Goals, and Approach
5. Study Area
6. Study Schedule
7. Study Issues
    - Arizona Parkway Design Features
    - Environmental
    - Drainage
    - Development Master Plans and Entitlements
    - Transportation Network Continuity
    - Hassayampa River Crossing
    - Irrigation Canals and Other Utilities
8. Next Steps
9. Roundtable Discussion

FOR MORE INFORMATION CONTACT:
DENISE LACEY, MCDOT (602) 506-6172 OR
BRYAN PATTERSON, KIMLEY-HORN (480) 756-6135

Northern Parkway (Hassayampa Section) Corridor Feasibility Study

I-10 to Turner Parkway

TAC/Stakeholder Meeting No. 1

July 14, 2010

Meeting Purpose

- Introduce Project Team, Technical Advisory Committee (TAC), and Stakeholders
- Present Study Purpose, Goals, and Approach
- Discuss Study Area Limits and Schedule
- Present Key Study Issues
- Discuss Next Steps
- Obtain TAC and Stakeholder Input

TAC/Stakeholder Members

- MCDOT
- Maricopa County Planning & Development
- Town of Buckeye
- Maricopa Association of Governments
- Flood Control District of Maricopa County
- Arizona Department of Transportation
- Federal Highway Administration

TAC/Stakeholder Members

- Arizona State Land Department
- Arizona Game and Fish Department
- U.S. Bureau of Land Management
- Central Arizona Project
- Maricopa County Farm Bureau
- Landowners and Land Developers
- Utility and Irrigation Companies

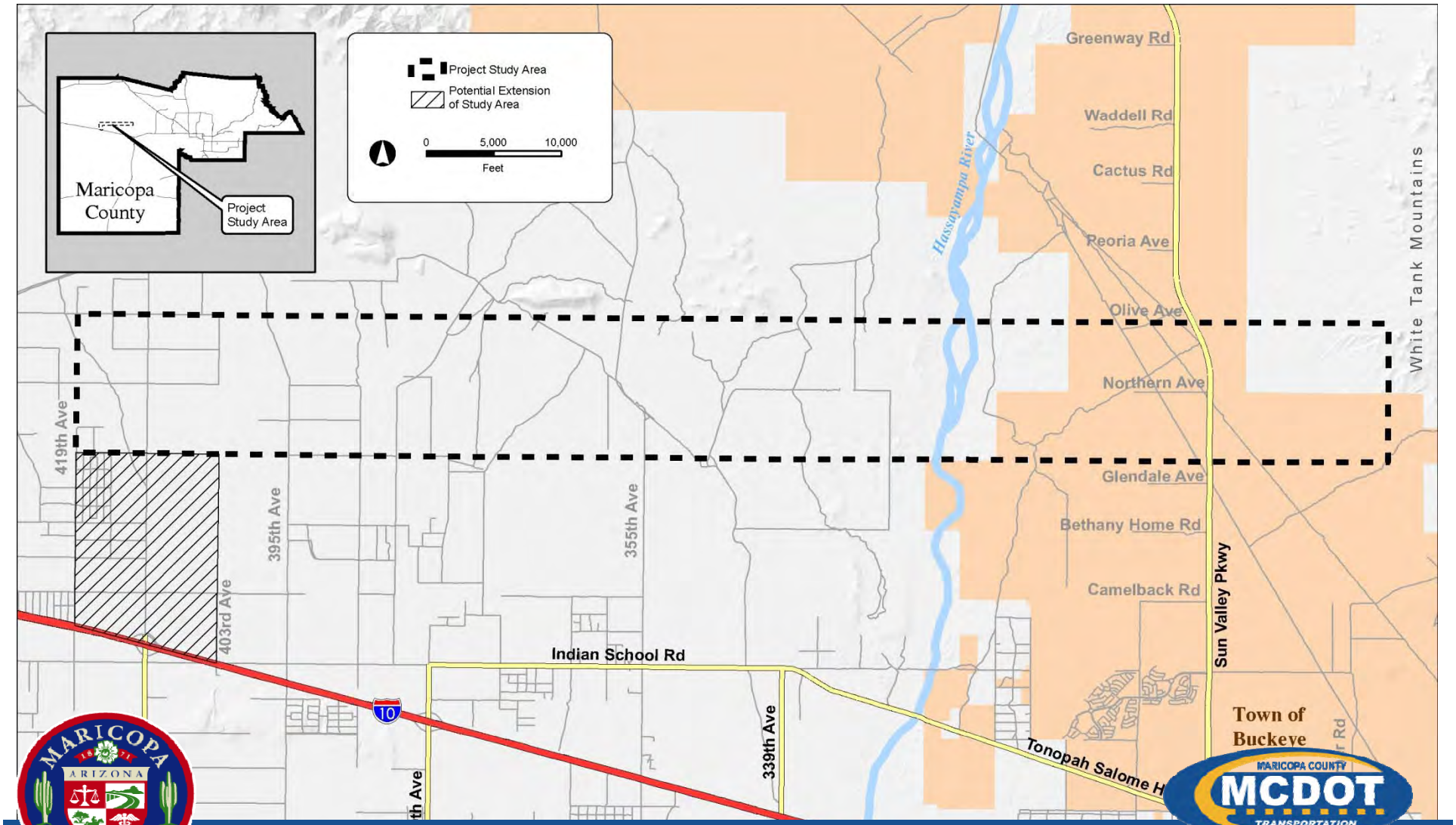
TAC/Stakeholder Roles and Responsibilities

- Attend and Provide Input at TAC/Stakeholder Meetings
- Identify Additional Stakeholders
- Provide Project-Related Data
- Review and Comment on Deliverables (TAC)

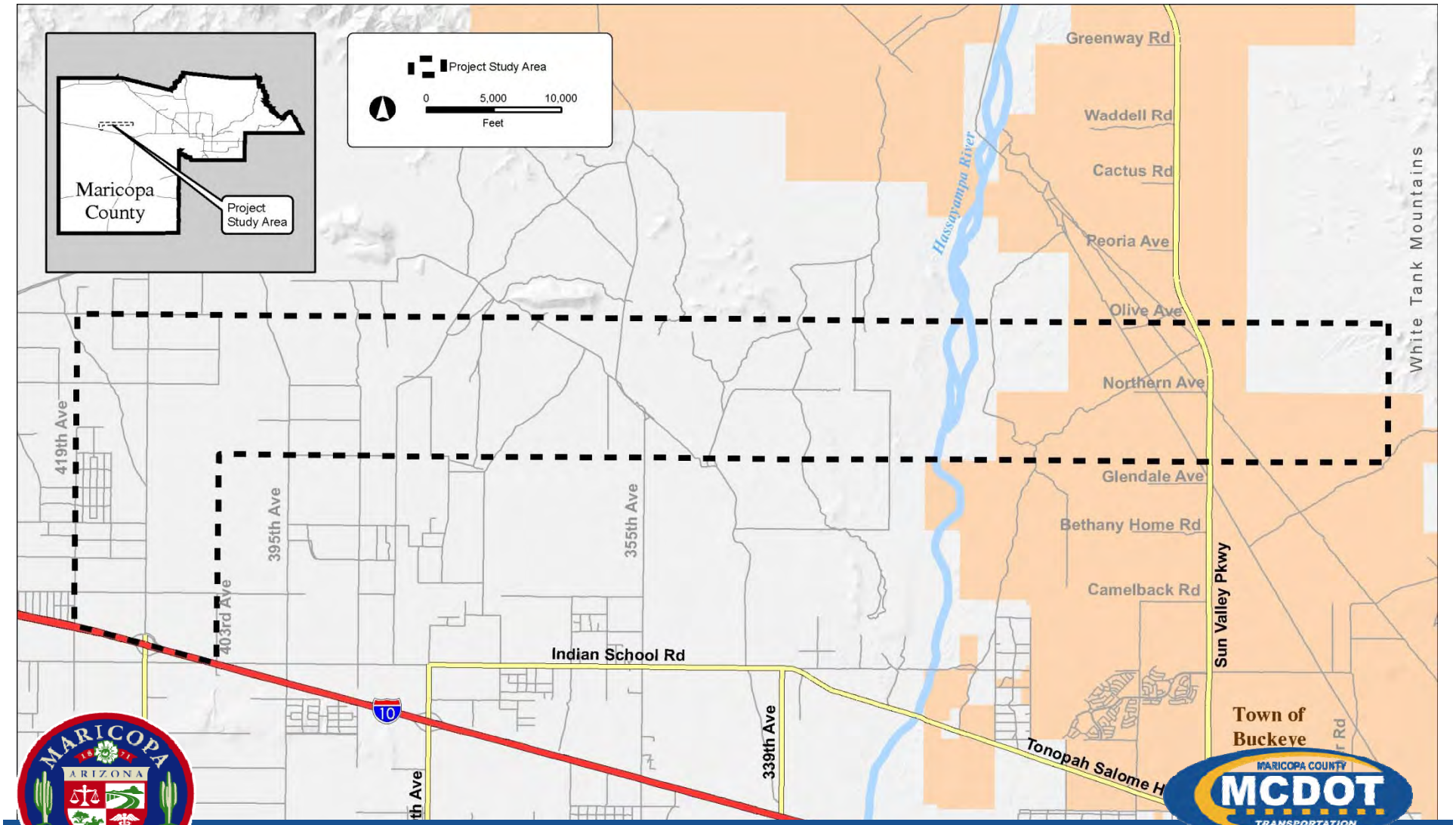
Need for the Study

- MAG Hassayampa Framework Study
  - From 459th Ave to White Tank Mountains between Wickenburg and Gila River
  - Projected "Buildout" Transportation Demands
  - Demonstrated Need for Network of Freeways, Parkways, and Arterial Roadways
- Need to Determine Roadway Alignments so Can Begin Preserving Right-of-Way Corridor

Original Project Study Area



Revised Project Study Area



Study Purpose

- Define and Assess Existing and Future Opportunities and Constraints
- Develop and Evaluate Alignment Alternatives
- Recommend a Preferred Alignment
- Define the Preferred Alignment in Detail
- Preserve and Protect Preferred Alignment Right-of-Way

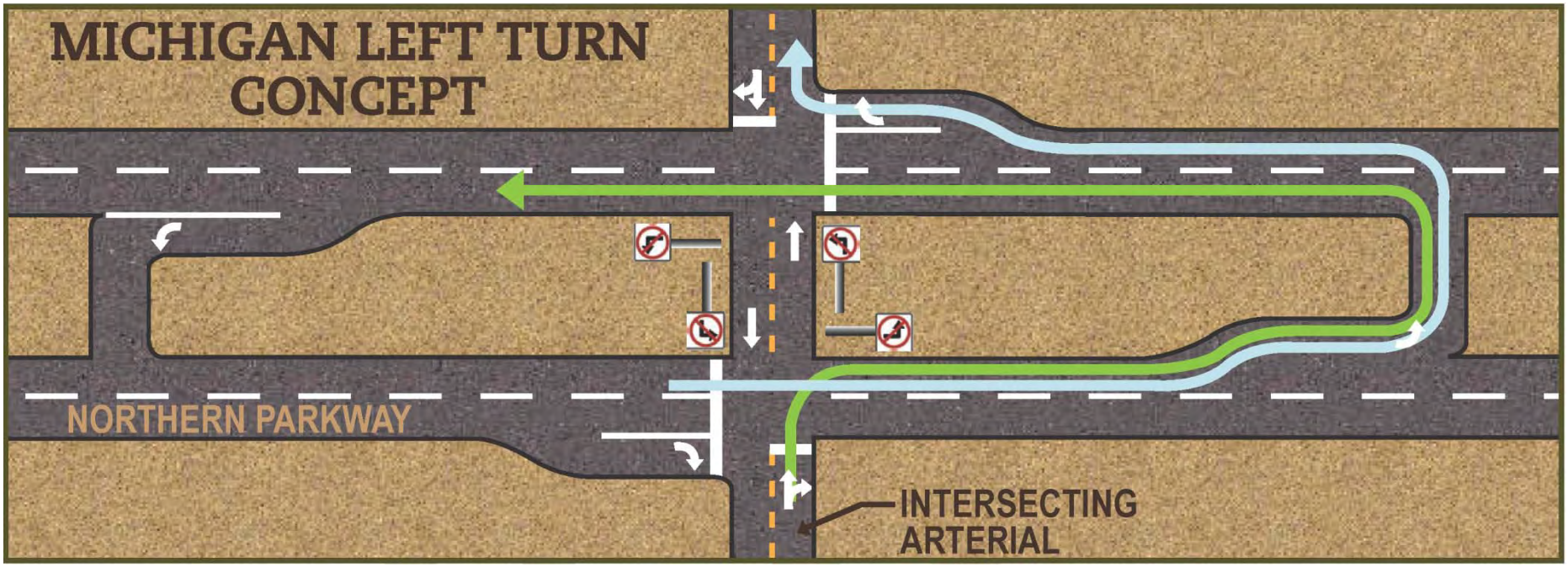
Study Goals

- Achieve Roadway Network Continuity and Connectivity
- Enhance Traffic Capacity and Safety
- Preserve the Environment
- Develop Consensus-Driven Improvement Alternatives

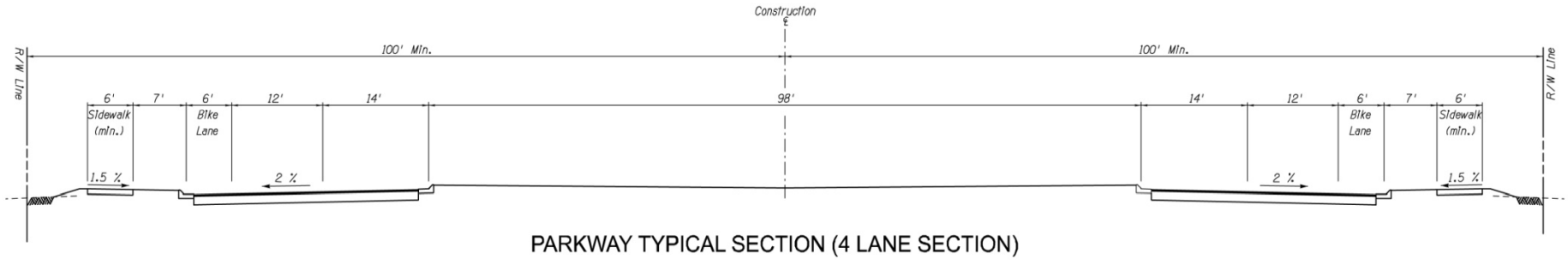
Study Scope and Approach

- Compile and Analyze Available Data
- Identify Potential “Arizona Parkway” Location Alternatives
- Perform “Fatal Flaw” Analyses
- Evaluate up to 3 Feasible Alternatives
- Recommend Preferred Alternative
- Detailed Drawings for Preferred Alternative

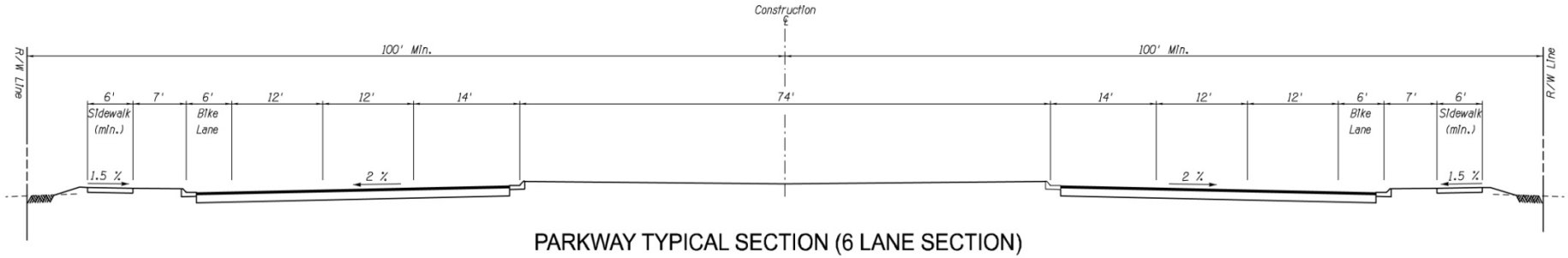
Arizona Parkway



Arizona Parkway



PARKWAY TYPICAL SECTION (4 LANE SECTION)



PARKWAY TYPICAL SECTION (6 LANE SECTION)

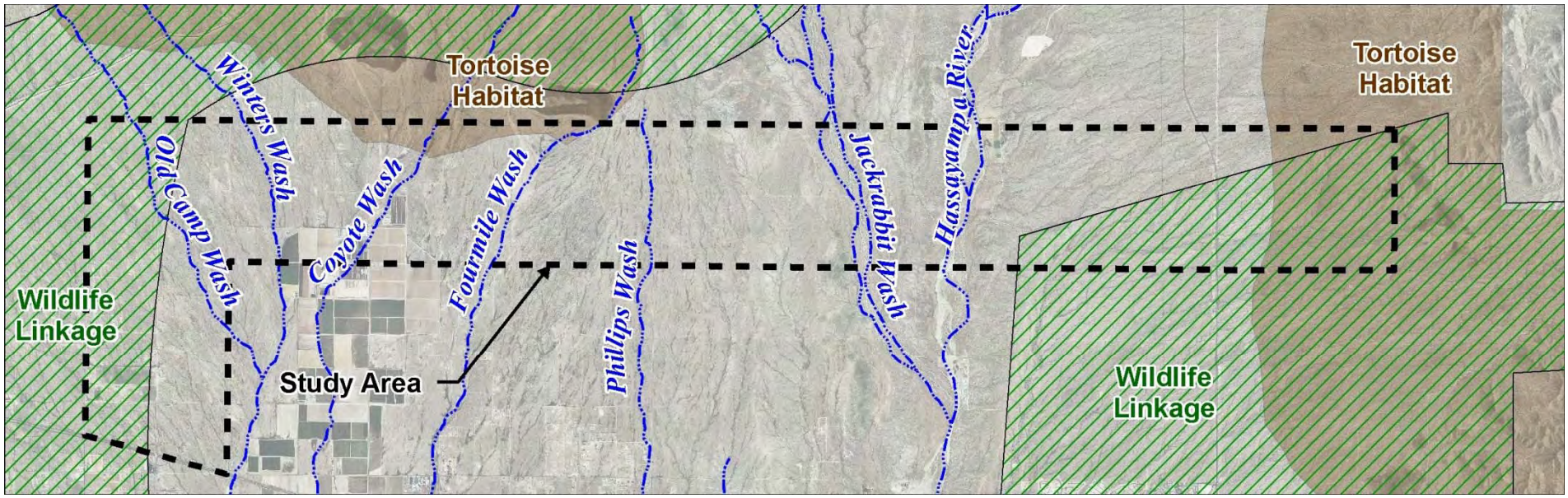
Project Schedule

TAC/Stakeholder #1 – Project Initiation	July 2010
Existing and Future Conditions	September 2010
TAC/Stakeholder #2 – Existing and Future Conditions	September 2010
Scoping Open House	October 2010
TAC/Stakeholder #3 – Conceptual Alternatives and Criteria	November 2010
Existing Conditions/Conceptual Alternatives Open House	January 2011
Alternatives Development and Evaluation	January 2011
TAC/Stakeholder #4 – Alternatives Evaluation	January 2011
Preferred Alternative	January 2011
Alternatives Evaluation/Preferred Alternative Open House	March 2011
Detailed Preferred Alignment	March 2011
TAC/Stakeholder #5 – Preferred Alignment	March 2011
Draft Final Report	April 2011
Final Report	May 2011

Issues and Challenges

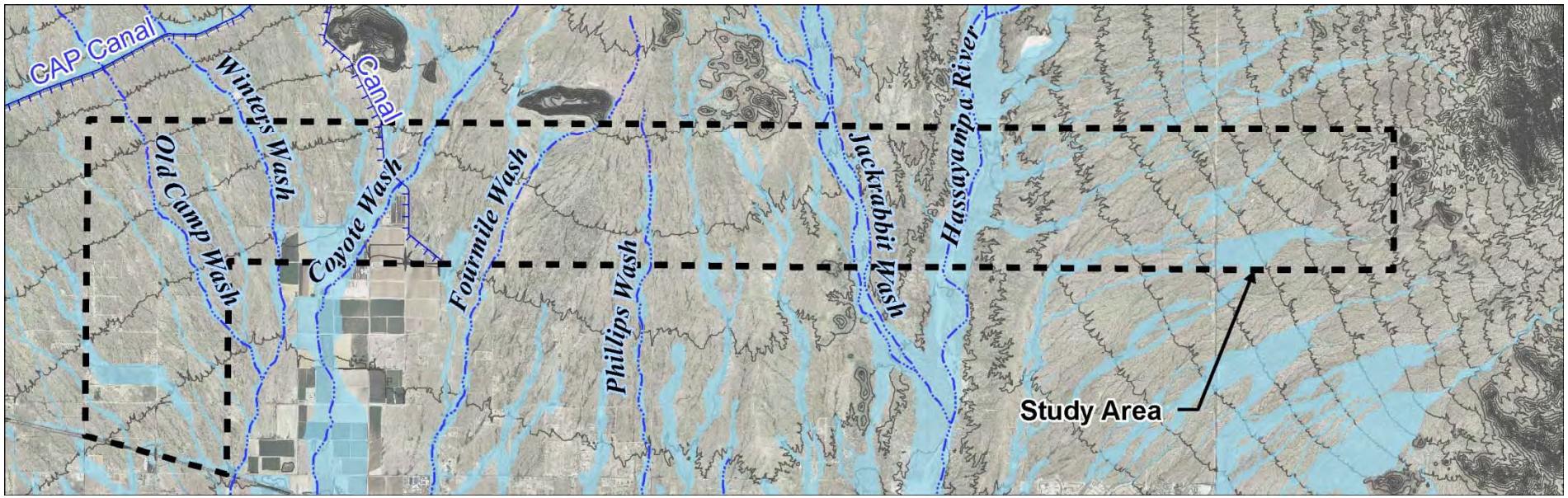
- Environmental
- Drainage
- Development Master Plans and Entitlements
- Transportation Network Continuity
- Hassayampa River Crossing
- Irrigation Canals
- Other Utilities

Environmental Issues

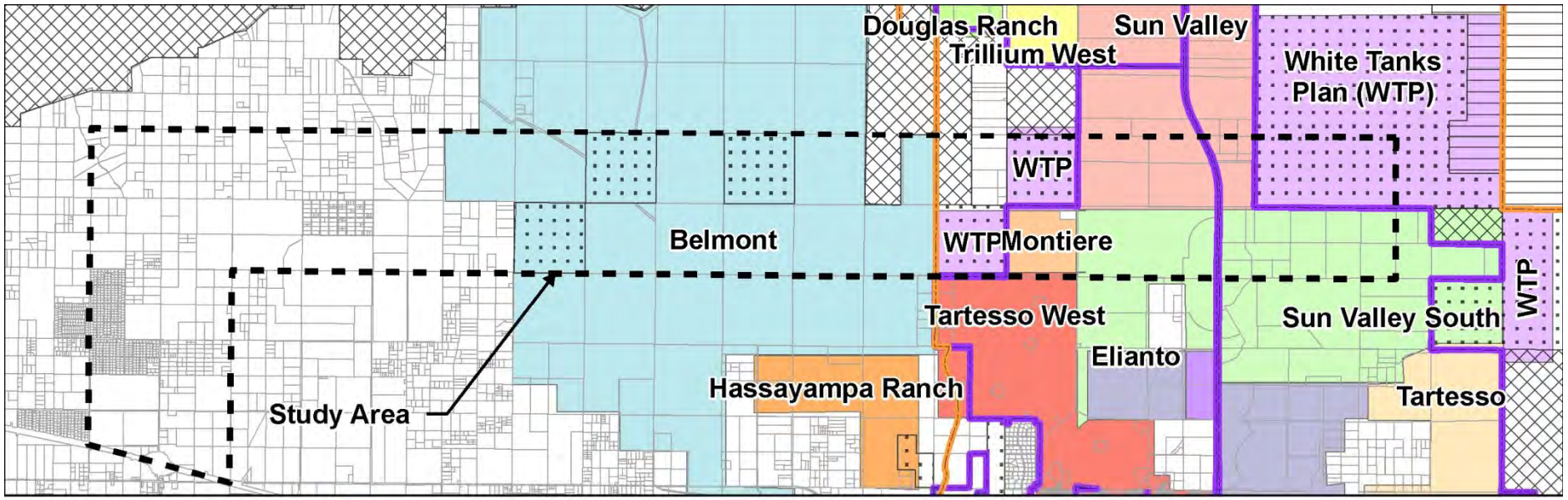


Environmental Issues

Drainage Issues

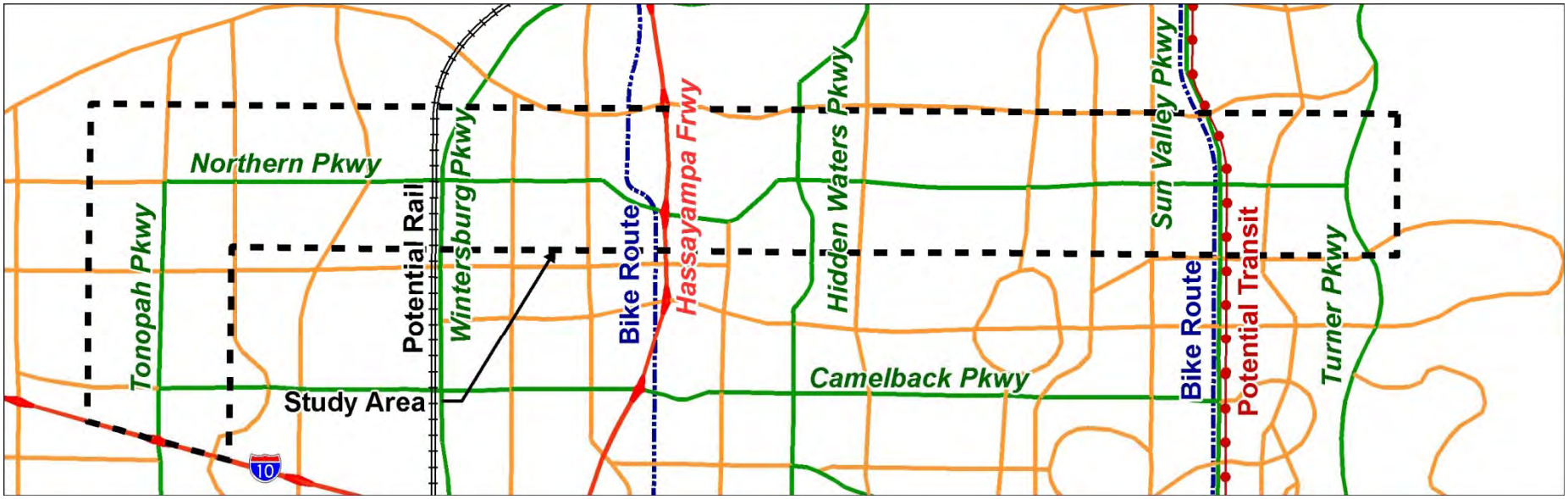


Development Master Plans



BLM
Local or State Parks
State Trust
Buckeye Jurisdiction Limits
Buckeye Municipal Planning Area

Transportation Network Continuity



Other Issues

- Hassayampa River Crossing
- Irrigation Facilities
- CAP Canal Finger
- Other Utilities
  - 345 kv
  - 500 kv
  - Gas Pipeline

Summary/Next Steps

- Collect and Analyze Data
- Draft Tech Memos on Existing and Future Corridor Features, Environmental Overview, and Drainage Overview
- Hold 2nd TAC/Stakeholder Meeting in September
- Hold 1st Public Open House in October

TAC/Stakeholder Roundtable Discussion

Meeting Purpose

This was the first Technical Advisory Committee (TAC)/Stakeholder meeting. Purposes of the meeting were to:

- Introduce the project team, TAC, and stakeholders;
- Present the study need, area, purpose, goals, scope, and approach;
- Present the project schedule;
- Present study issues and challenges;
- Discuss next steps; and
- Obtain TAC and stakeholder input.

Participants

See attached attendance list.

Meeting Summary

Introduction and Opening Comments – Denise Lacey from MCDOT welcomed the participants and asked them to introduce themselves. Denise explained that the purpose of the project is to identify feasible alternatives for Northern Parkway (Hassayampa Section) and select a preferred alignment to be protected for future development as a parkway facility to serve build-out traffic needs.

TAC/Stakeholder Membership, Roles, and Responsibilities – Bryan Patterson from Kimley-Horn (KHA) identified the agency partners, TAC members, and stakeholders. The TAC and stakeholders will meet jointly throughout the study to provide their input and any pertinent project-related information. They will also help identify additional stakeholders that should be invited to participate. TAC members, with expertise relating to certain elements, will be asked to review and comment on the various technical memos and reports that will be developed as the study progresses.

Study Need, Area, Purpose, Goals, and Approach – The MAG Hassayampa Valley Framework study identified the need for a network of freeways, parkways, and arterial roadways west of the White Tank Mountains to serve build-out development projections for the area. The project study area initially included Northern Parkway, a planned east-west corridor 18 miles long and two miles wide that is centered on the Northern Avenue section line from the planned Tonopah Parkway (411th Avenue alignment) to the planned Turner Parkway (267th Avenue alignment). Northern Parkway in the study area is referred to as the Northern Parkway Hassayampa section to distinguish it from other planned Northern Parkway sections east of the White Tank Mountains. The project study area has since been revised to also encompass the portion of the planned Tonopah Parkway from I-10 to the planned Northern Parkway. This expansion of the study area, which is centered on the 411th Avenue section line and runs north-south, is approximately 3.75 miles long and two miles wide. The Northern Parkway and Tonopah Parkway facilities are designated as "Arizona Parkways" that will provide significantly more capacity than a standard arterial street at a much lower cost than a freeway facility.

The Arizona Parkway design calls for a 200' wide right-of way width to provide for a wide median that will accommodate the indirect left turn concept. Under this concept, left turns are not permitted at major intersections and must be accomplished by passing through the intersection, making a "U" turn in

the median approximately 1/8 mile past the intersection, and then making a right turn. This allows for two-phase signal operation at major intersections, improving both capacity and safety.

The purpose of this study is to compile available, pertinent studies and data to be used for a "fatal flaw" analysis that will produce feasible alignment alternatives for a more in-depth evaluation. Up to three feasible alternatives will be identified for a more detailed evaluation. Based on the alternatives evaluation process, a preferred alignment will be identified. Detailed drawings will be prepared for the preferred alignment at 1" equals 200' to establish the right-of-way limits to be protected as development occurs.

Project Schedule – The project began in May 2010 and will be completed in May 2011. Up to 5 TAC/Stakeholder meetings will be held at key milestones of the study process. In addition, three public open houses will be held.

Study Issues – Key study issues will be documented in three technical memos:

- Existing and Future Corridor Features,
- Environmental Overview, and
- Drainage Overview.

Sarah Eichinger from KHA described some of the significant environmental issues that will be addressed as part of the study, such as wildlife linkages, Sonoran Desert Tortoise habitat, cultural resources, and impacts to historical and prime agricultural properties. Bob Eichinger from KHA discussed the major drainage issues in the corridor, which include traversing six named washes and the Hassayampa River. Michael Grandy from KHA discussed some of the development master plans already in place in the study area and presented transportation network continuity considerations. Frank Hoffmann from KHA discussed major roadway crossing issues such as the location of a bridge across the Hassayampa River, irrigation canal crossings, agricultural operations, and electrical transmission lines and natural gas pipelines that traverse the study area. Draft technical memos covering these topics are anticipated for completion in September 2010.

Next Steps – The next steps in the study process are to:

- Collect and analyze data;
- Complete the three technical memos referenced above;
- Hold the second TAC/Stakeholder meeting in September; and
- Hold the first public open house in October.

TAC/Stakeholder Roundtable – Following the staff presentations, the TAC/stakeholders engaged in an open roundtable discussion of items to consider as the study progresses. Key points from this discussion are:

- APS may have some substations planned in the study area.

- Erosion and scour issues have occurred south of I-10 at APS poles near the Hassayampa River and these same issues may exist in the study area along the Hassayampa River.

- There is a BLM database that may provide additional information on early homesteaders in the study area.

- The Central Arizona Project generated several archaeology reports that may pertain to the study area and provide insight on the types of cultural resources that may be present.

- FCDMC offered to provide cultural resource and environmental documentation from the Sun Valley Area Drainage Master Plan (ADMP).

- There are several State Land parcels in the study area. A separate meeting has occurred with State Land staff to discuss their concerns related to grazing ranges, minerals, right-of-way, land planning, and drainage.

- Agricultural properties should be kept intact and access provided so as to not disrupt farming operations.

Northern Parkway (Hassayampa Section) Corridor Feasibility Study - I-10 to Turner Parkway

Technical Advisory Committee Members and Stakeholders

First Name	Last Name	Title	Company	E-mail	Phone	Address	City	State	Zip	TAC/Stakeholder Meeting Attendance 1	2	3	4	5
Aaron	Ashcroft	Civil Engineer	Central Arizona Project	aashcroft@cap-az.com	623-869-2257	23636 N. 7th St.	Phoenix	AZ	85080	AA				
Daniel	Boschma	Dairy Manager	Tonopah Dairy	danboschma@hotmail.com	623-393-0175	6510 N. 395th Ave.	Tonopah	AZ	85354					
PB for → Mike	Brilz		Pulte Homes	mike.brilz@pulte.com	480-391-6198	15111 N. Pima Rd. Ste 100	Scottsdale	AZ	85260					
Wayne	Butch	Utilities	MCDOT	WayneButch@mail.maricopa.gov	602-506-8603	2901 W. Durango St.	Phoenix	AZ	85009	WB				
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Mark	Edelman	Project Manager	ASLD	medelman@land.az.gov	602-542-6331	1616 W. Adams	Phoenix	AZ	85007					
Bob RME	Eichinger	Drainage Project Manager	Kimley-Horn and Assoc.	bob.eichinger@kimley-horn.com	602-906-1182	7878 N. 16th St.	Phoenix	AZ	85020	RME				
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SE Jeanette	Fish	Executive Director	Maricopa Co. Farm Bureau	mcfb@qwestoffice.net	602-437-1330	4001 E. Broadway Rd.	Phoenix	AZ	85040					
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FH Frank	Hoffmann	Roadway Engineer	Kimley-Horn and Assoc.	frank.hoffman@kimley-horn.com	602-216-1272	7878 N. 16th St.	Phoenix	AZ	85020					
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Mike	Kern	Vice President	Communities Southwest	mkern@commsw.com	480-315-2626	7001 N. Scottsdale Rd., 1015	Scottsdale	AZ	85253					
Jeff	Klem	Project Manager	Elliot Homes	j.klem@elliotthomesaz.com	480-831-9200	1400 E. Southern Ave.	Tempe	AZ	85282					
Brian	Kulina	Associate Planner	Town of Buckeye	bkulina@buckeyeaz.gov	623-349-6210	530 E. Monroe	Buckeye	AZ	85326	BK				
Denise	Lacey	Senior Planner	MCDOT	deniselacey@mail.maricopa.gov	602-506-6172	2901 W. Durango St.	Phoenix	AZ	85009	[illegible]				
Richard	Mayes	Project Manager	W Holdings	richardm@wholdings.com	480-831-2000	1121 W. Warner Rd., Ste 109	Tempe	AZ	85284					
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Jackie	Meck	Mayor	Town of Buckeye	jmeck@buckeyeaz.gov	623-349-6950	530 E. Monroe	Buckeye	AZ	85326					
CG for → Scott	Omer	Director of Planning and Programming	ADOT	somer@azdot.gov	602-712-4786	206 S. 17th Ave.	Phoenix	AZ	85007	CG				
Bryan	Patterson	Project Manager	Kimley-Horn and Assoc.	bryan.patterson@kimley-horn.com	480-756-6135	2266 S. Dobson RD.	Mesa	AZ	85202	BP				
Joe	Pinto	Environmental Planner	MCDOT	joepinto@mail.maricopa.gov	602-506-8068	2901 W. Durango St.	Phoenix	AZ	85009					
Bill	Ring	Project Manager	LKY Holdings/Bellmont	ringeraz@yahoo.com	480-951-1281/602-402-1716	5040 E. Shea Blvd.	Scottsdale	AZ	85254					
Jami	Schulman		Communities Southwest	jschulman@commsw.com	480-315-2618	7001 N. Scottsdale Rd., 1015	Scottsdale	AZ	85253					
MS Woody	Scouten	Engineer	Town of Buckeye	woody@scoutten.com	623-547-4661x222	1646 N. Litchfield Rd., Ste 235	Goodyear	AZ	85338					
Troy	Smith	Habitat Program Manager	Arizona Game & Fish	trsmith@azgfd.gov	928-341-4068	9140E. 28th St.	Yuma	AZ	85365					
Ray	Strauss	District 4 Councilmember	Town of Buckeye	rstrauss@buckeyeaz.gov	623-349-6949	530 E. Monroe	Buckeye	AZ	85326					
Tim	Strow	Planner	MAG	tstrow@mag.maricopa.gov	602-254-6300	302 N. 1st. Avenue	Phoenix	AZ	85003	T				
Nicolaas	Swart	Traffic	MCDOT	nicolaasswart@mail.maricopa.gov	602-506-0599	2901 W. Durango St.	Phoenix	AZ	85009	[illegible]				
Valerie	Swick	Project Manager	Flood Control District	vas@mail.maricopa.gov	602-506-2929	2801 W. Durango St.	Phoenix	AZ	85009	VAS				
Gordon	Taylor	Planning and Engineering	ASLD	Gtaylor@land.az.gov		1616 W. Adams	Phoenix	AZ	85007					
Scott	Van Sant	Dairy Manager	Belmont Mountain Dairy	scottjanna@aol.com	623-327-1642	7220 N. 387th Ave.	Tonopah	AZ	85354					
Dana	Warnecke	Habitat Specialist	Arizona Game & Fish	dwarnecke@azgfd.gov	480-324-3547	7200 E. University Dr.	Mesa	AZ	85207					
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Michelle	Yerger		Communities Southwest	myerger@commsw.com	480-315-2618	7001 N. Scottsdale Rd., 1015	Scottsdale	AZ	85253					
Kristofer	Golder	Research Analyst	Communities Southwest	kgolder@commsw.com	480-315-2641	Same as above ↑				N.I.				
Kelly	Roy	MCDOT Utilities		kelly.roy@mail.maricopa.gov	506-5992	2901 W. . . .								

Northern Parkway (Hassayampa Section) Corridor Feasibility Study
I-10 to Turner Parkway
Work Order TT005
Contract No. 2010-004

TECHNICAL ADVISORY COMMITTEE AND STAKEHOLDER MEETING

DATE: WEDNESDAY, SEPTEMBER 22, 2010
TIME: 1:30 PM
LOCATION: MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
2901 WEST DURANGO STREET
MARICOPA CONFERENCE ROOM
PHOENIX, ARIZONA

AGENDA

1. Introduction and Opening Comments
2. Meeting Purpose
3. Summary of July 14 Meeting and Comments Received to Date
4. Draft Technical Memorandum No. 1 – Existing and Future Corridor Features
5. Draft Technical Memorandum No. 2 – Environmental Overview
6. Draft Technical Memorandum No. 3 – Conceptual Drainage Report
7. Opportunities and Constraints Overview
8. Next Steps
9. Conceptual Alternative Alignments Roundtable

FOR MORE INFORMATION CONTACT:
DENISE LACEY, MCDOT (602) 506-6172 OR
BRYAN PATTERSON, KIMLEY-HORN (480) 756-6135

Northern Parkway (Hassayampa Section) Corridor Feasibility Study

I-10 to Turner Parkway

TAC/Stakeholder Meeting No. 2

September 22, 2010

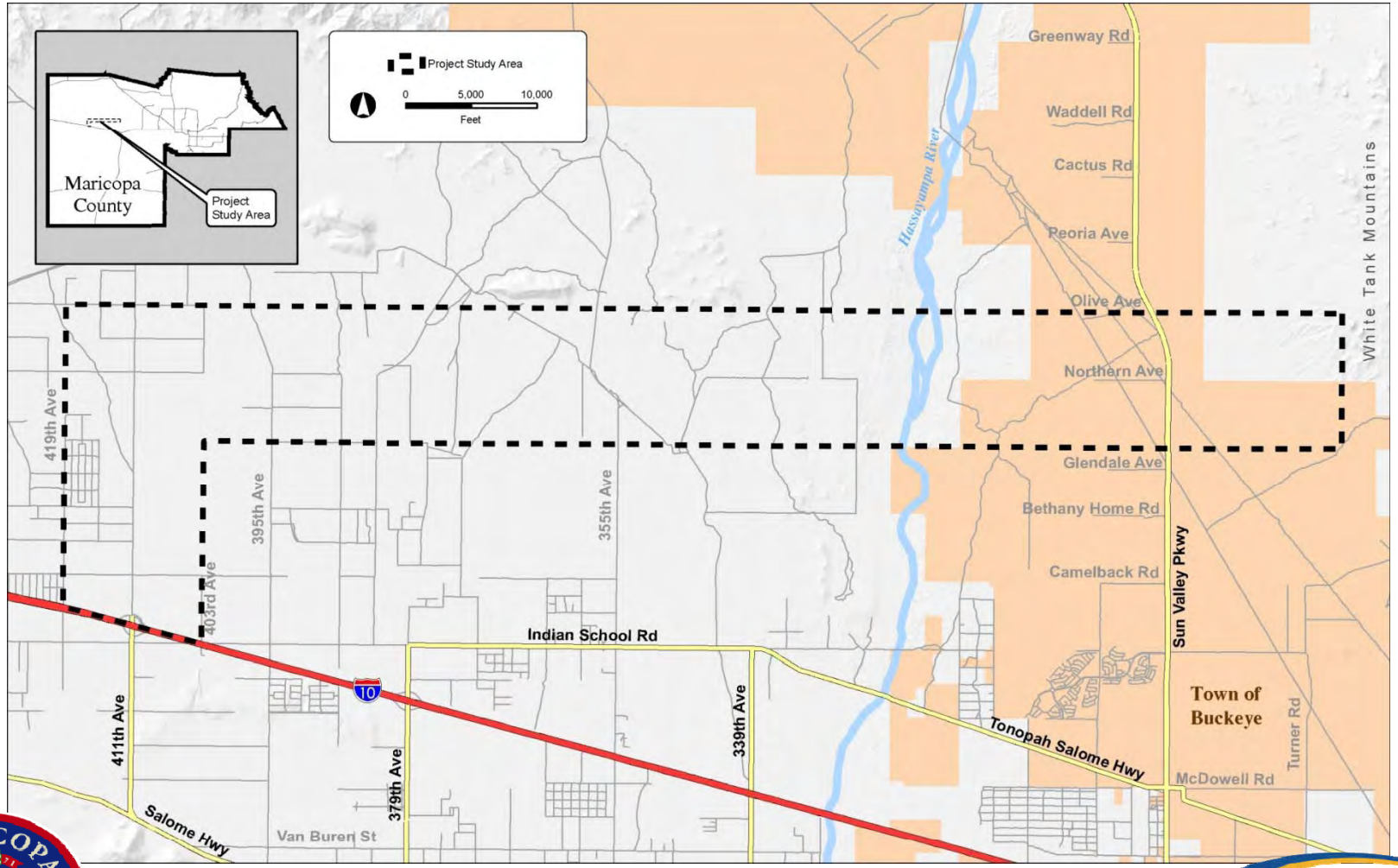
Meeting Objectives

- Review Progress to Date
- Present Key Findings in Draft Tech Memos (TM)
  - TM 1: Existing and Future Corridor Features
  - TM 2: Environmental Overview
  - TM 3: Conceptual Drainage Report
- Summarize Opportunities and Constraints
- Discuss Next Steps
- Roundtable Break-out Groups to Formulate Conceptual Alternatives

Progress to Date

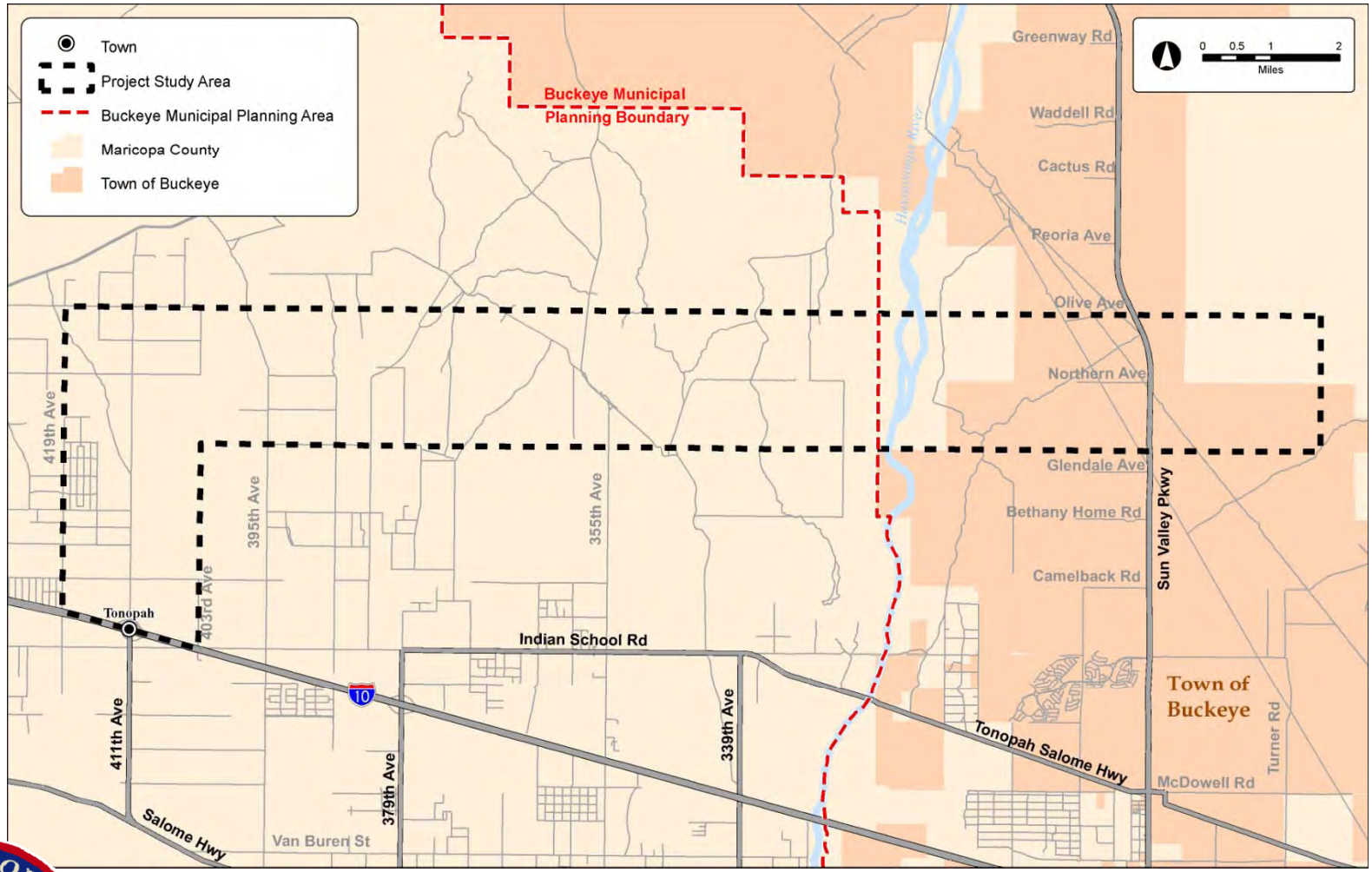
- Met with State Lands Department on June 23
- Completed Work Plan in June
- Held first TAC/Stakeholder Meeting on July 14
- Performed Field Reviews in August
- Completed Initial Drafts of TM 1, TM 2, and TM 3
- Scheduled First Open House for October 18

Project Study Area

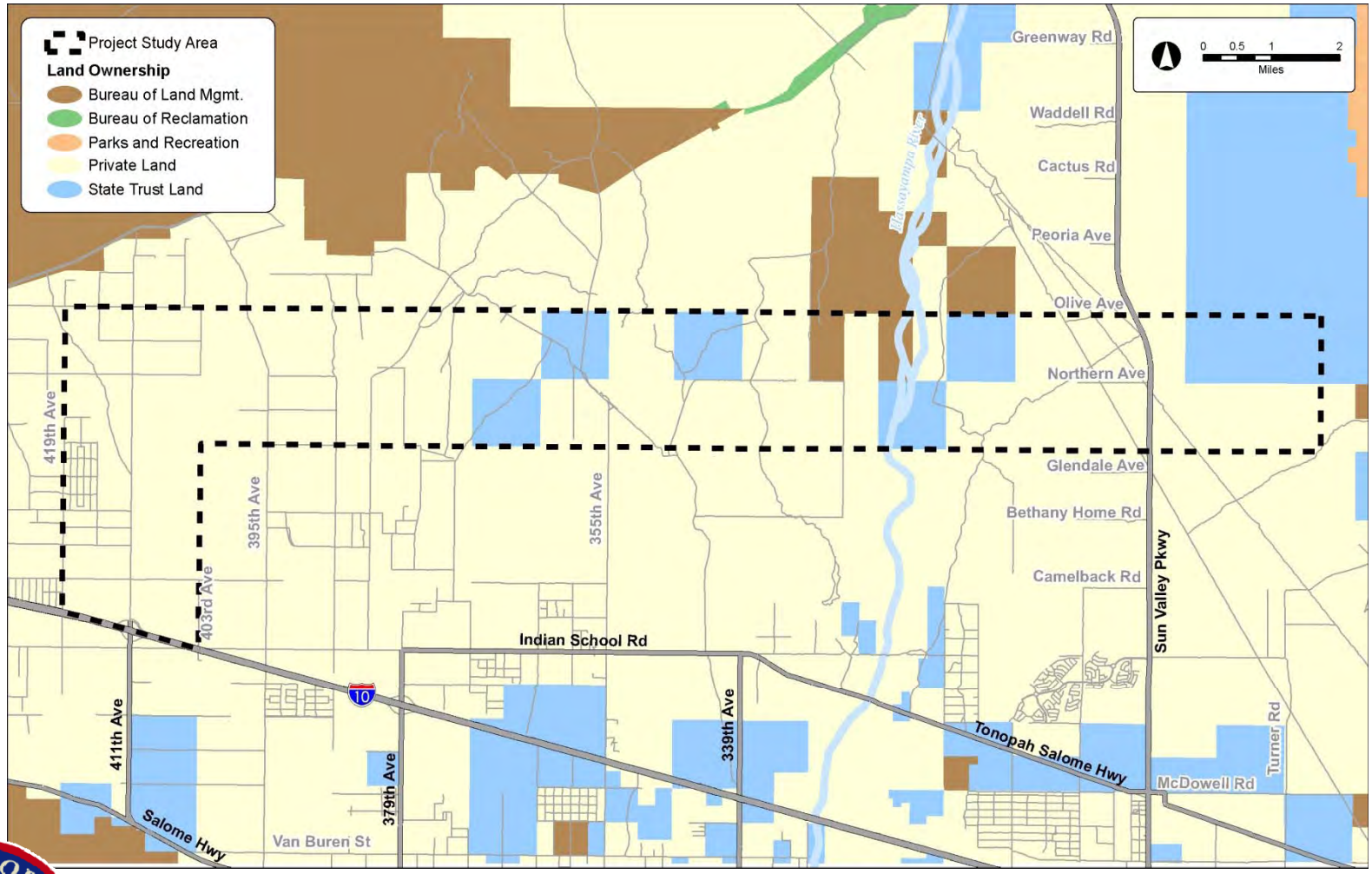


TM 1 – Existing and Future Corridor Features

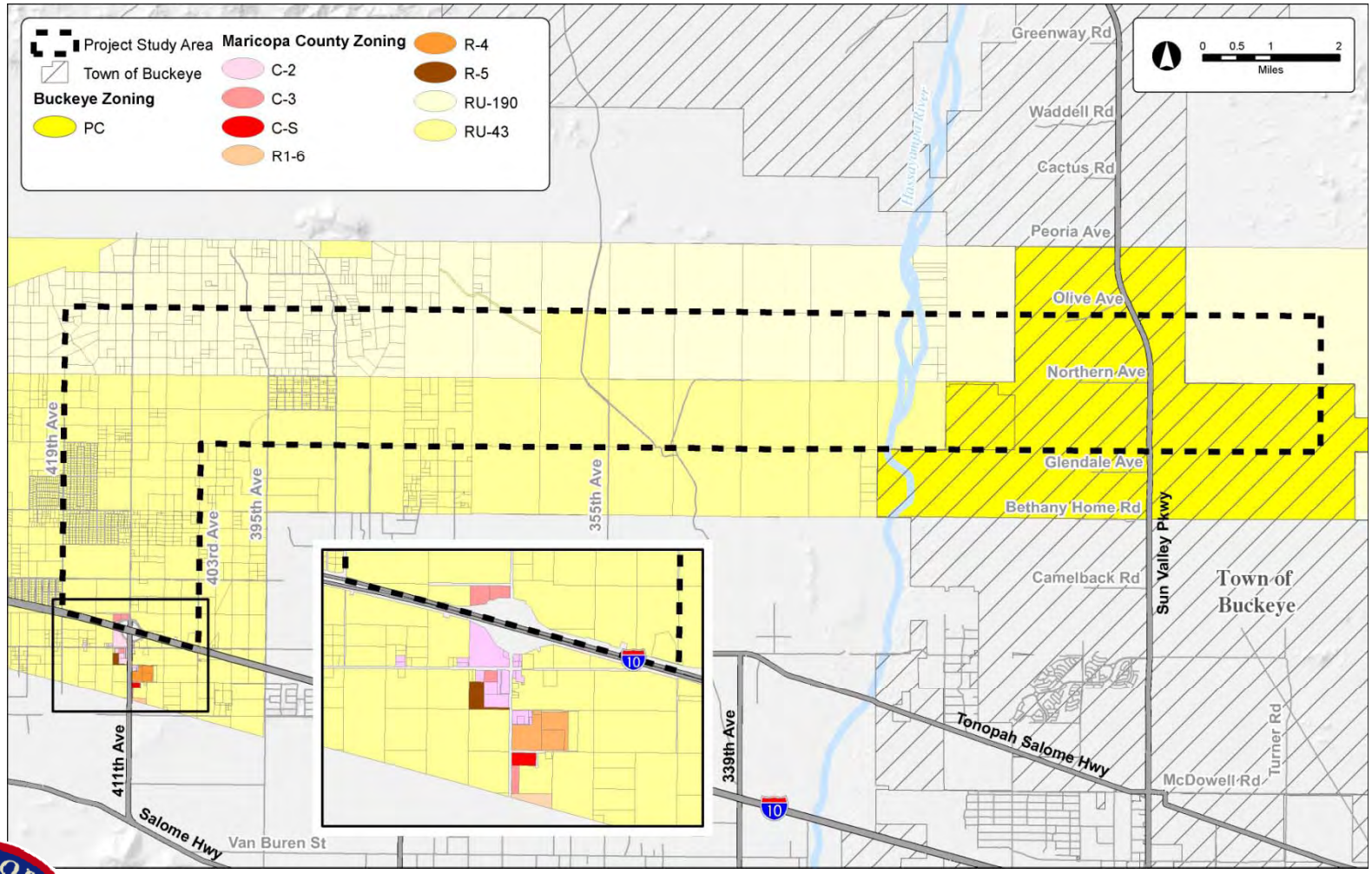
Jurisdictional Boundaries



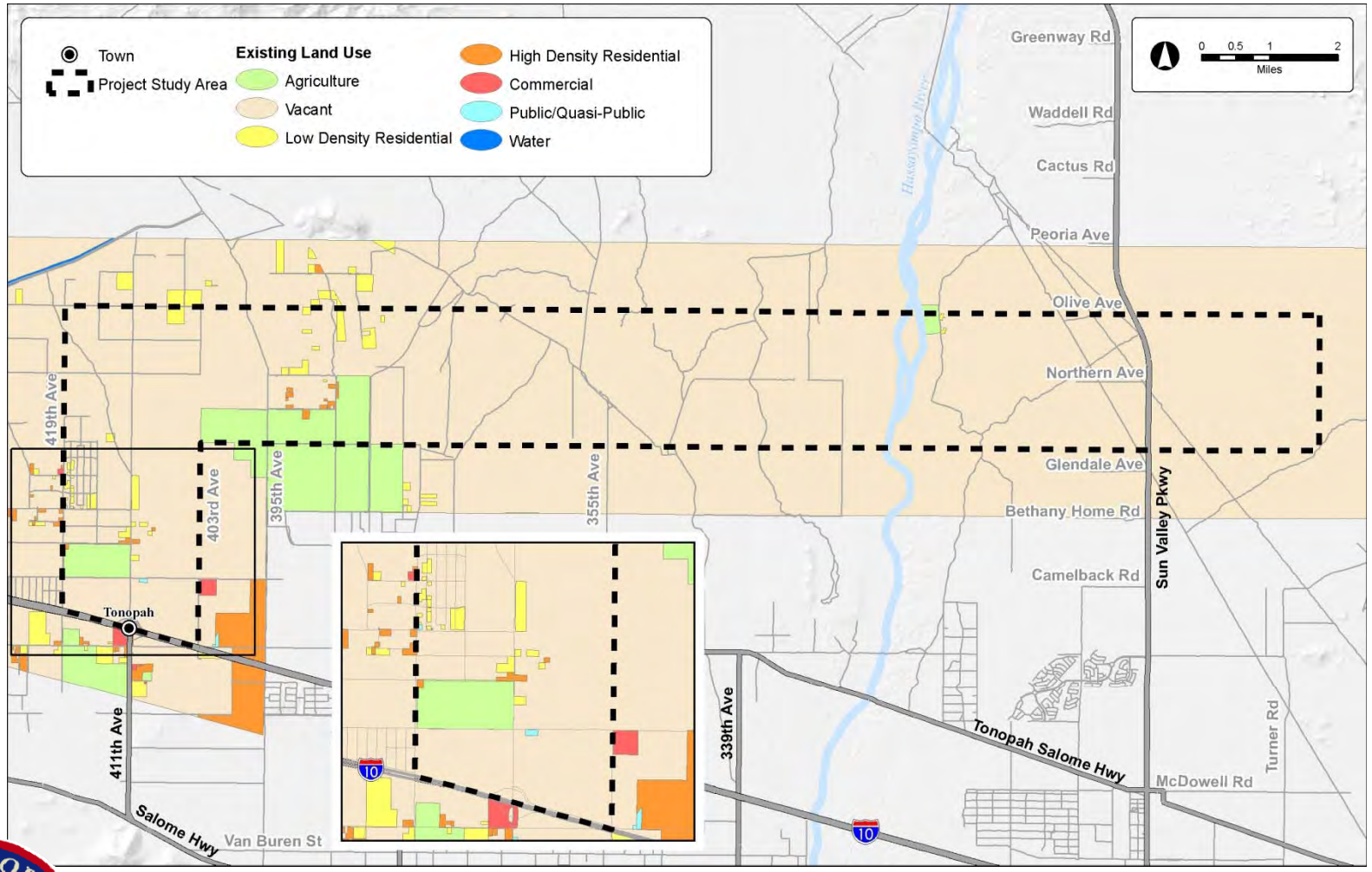
Land Ownership



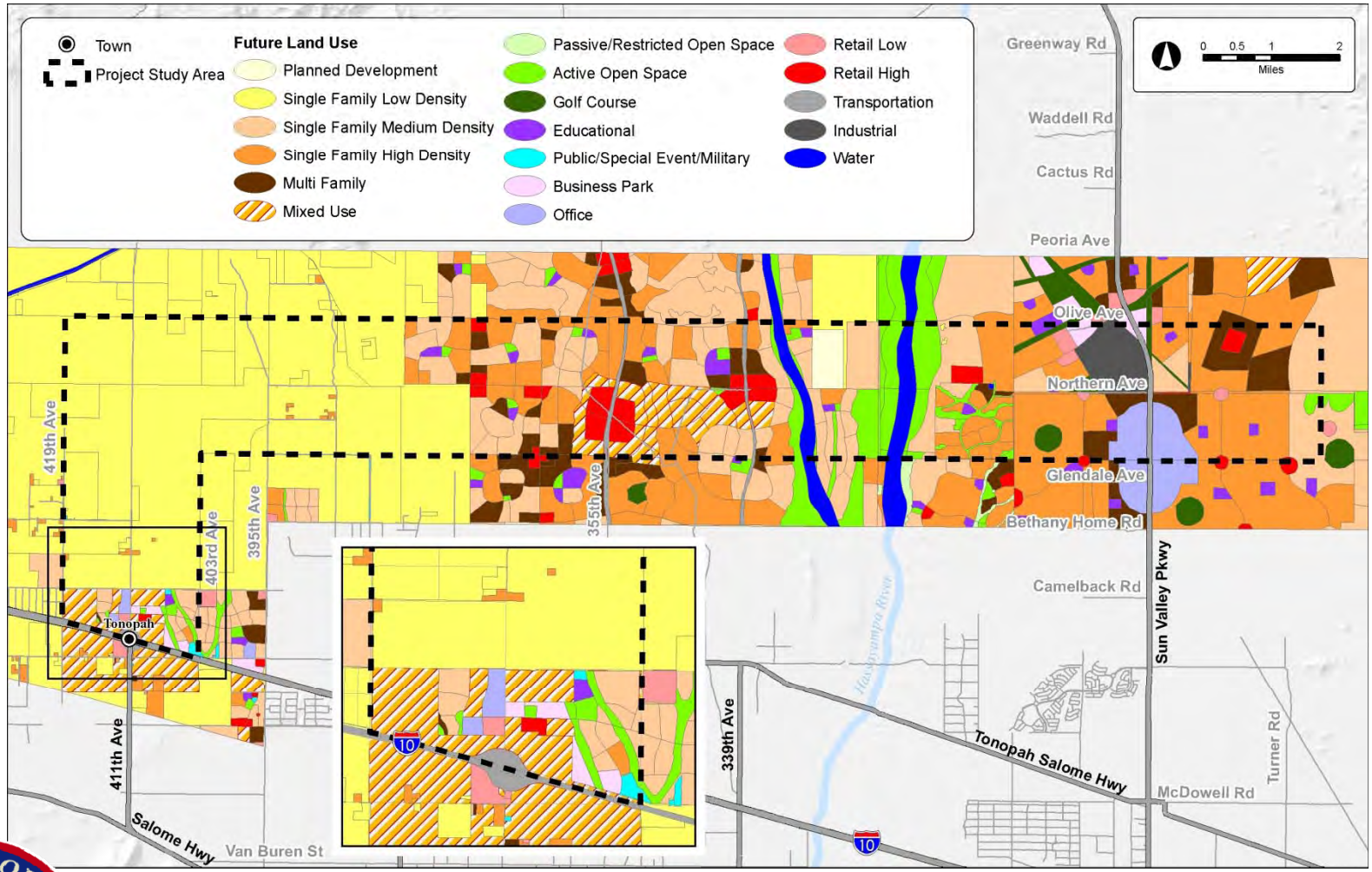
Zoning


Project Study Area
Town of Buckeye
Buckeye Zoning
PC
Maricopa County Zoning
C-2
C-3
C-S
R1-6
R-4
R-5
RU-190
RU-43
0 0.5 1 2
Miles
Greenway Rd
Waddell Rd
Cactus Rd
Peoria Ave
Olive Ave
Northern Ave
Glendale Ave
Bethany Home Rd
Camelback Rd
Sun Valley Pkwy
Town of Buckeye
Tonopah Salome Hwy
McDowell Rd
Turner Rd
Salome Hwy
Van Buren St
411th Ave
419th Ave
403rd Ave
395th Ave
355th Ave
339th Ave
10

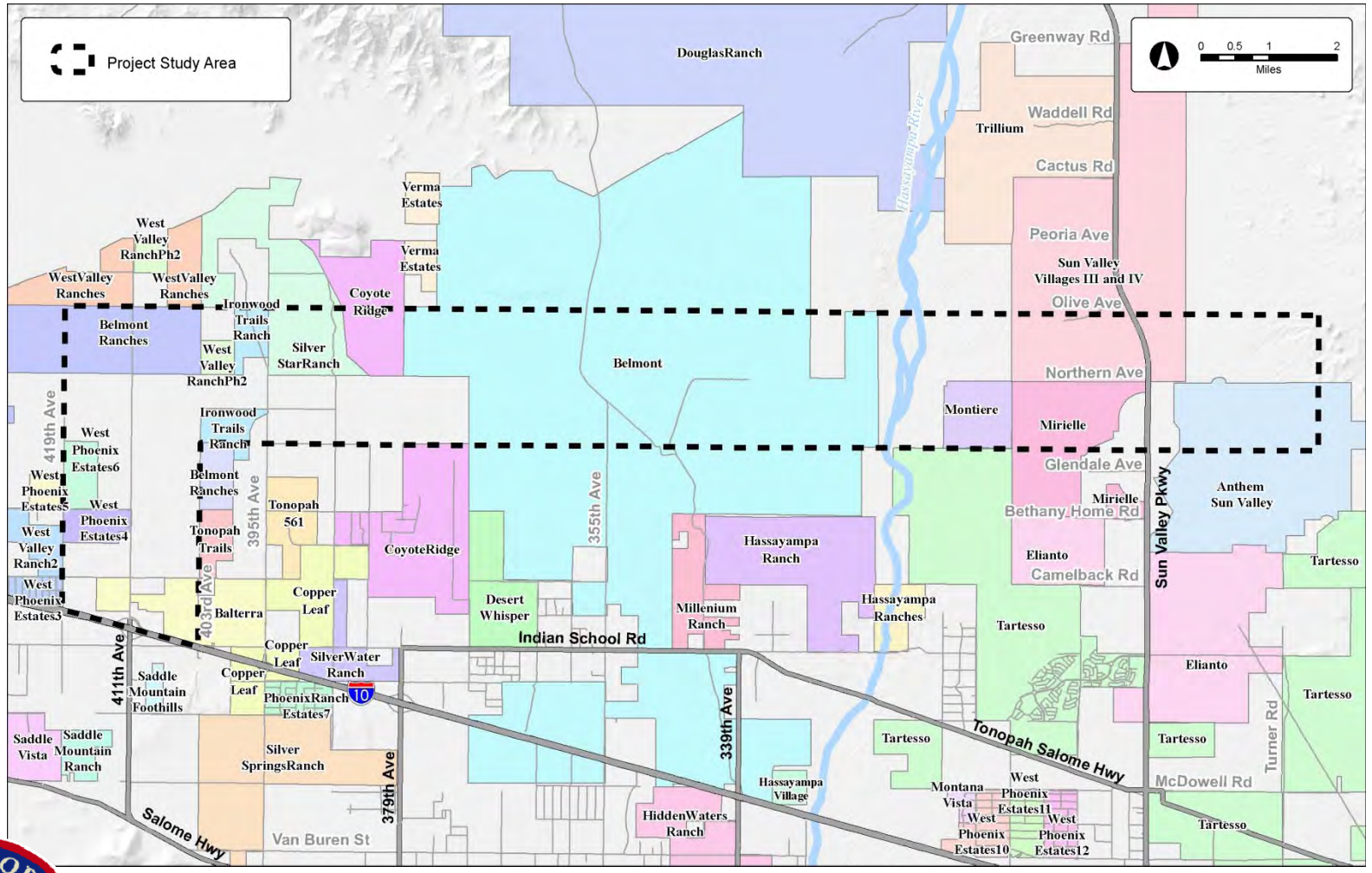
Existing Land Use



Future Land Use



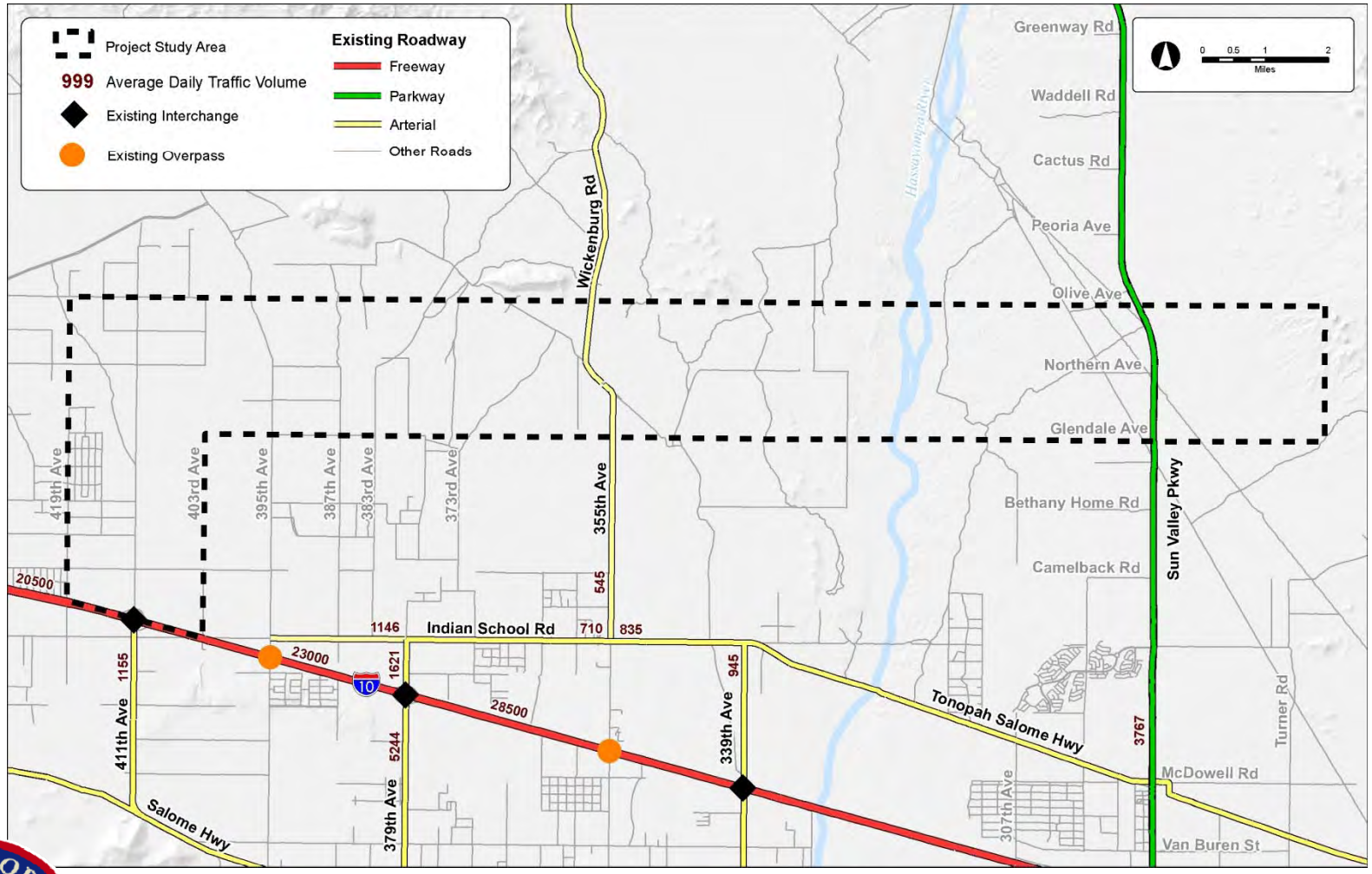
Existing and Planned Developments



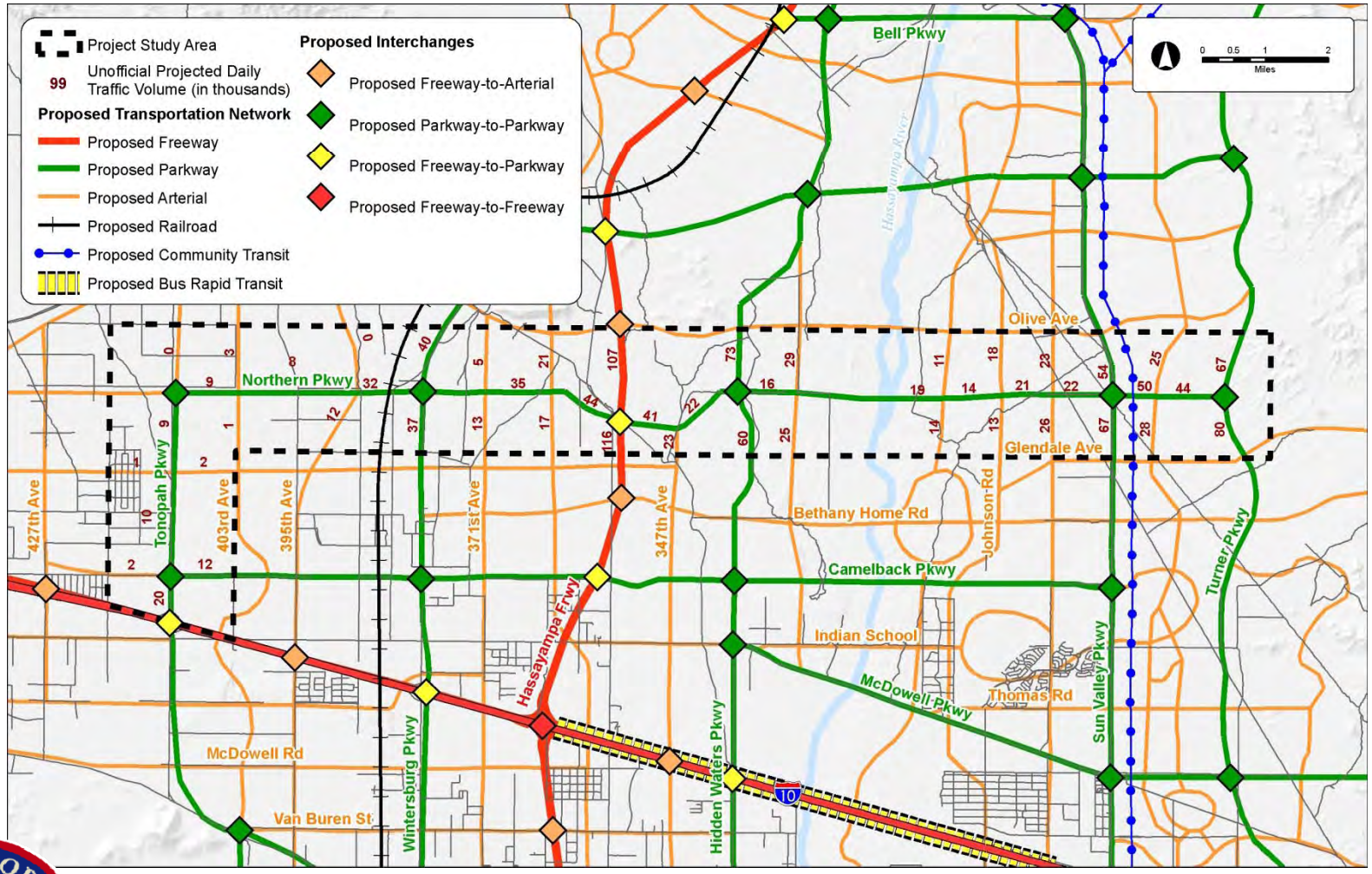
Existing and Planned Developments

Jurisdiction	Development Name	Area [acres]	Planned Units/ Existing Lots	Approval Date	Right-of-Way (R/W) Stipulations/Existing R/W	Assumed Functional Classification of Roadway	Length of Segment along Study Area Center Line	Timeframe for Final Plat/Plan of Development
Maricopa County	Balterra	1,110	4,458	Dec. 2006	130' full street R/W, 65' half street R/W (411th Av)	Major Arterial	1/2 mile	4 years
	West Phoenix Estates 4	780	228	Mar. 1970	55' half street R/W (411th Av)	Major Arterial	1/3 mile	Plat Recorded
	West Phoenix Estates 6	780	251	Sep. 1970	75' half street R/W (419th Av); 40' half street R/W (415th Av)	Major Arterial; Major Collector	N/A	Plat Recorded
	Belmont Ranches	3,220	8	Mar. 1993	33' half street easement (Northern Av); 55' half street easement (411th Av)	Minor Arterial; Major Arterial	3 miles	Plat Recorded
	West Valley Ranch Phase 2	160	4	Apr. 1996	33' half street easement (Northern Av)	Minor Arterial	1/2 mile	Plat Recorded
	Ironwood Trails Ranch	260	15	Oct. 1996	33' half street R/W (Northern Av)	Minor Arterial	1/8 mile	Plat Recorded
	Silver Star Ranch	2,000	54	Feb. 1996	35' half street easement/ 130' Designated County Road (Northern Av)	Major Arterial	1-1/2 miles	Plat Recorded
	Coyote Ridge	1,150	31	Jun. 1997	110' reserved easement (Northern Av)	Major Arterial	1/2 mile	Plat Recorded
	Belmont	24,800	48,000	Jun. 2008	200' full street R/W (Northern Av)	Parkway	7 miles	4 years
Town of Buckeye	Montiere	780	1,584	Jun. 2006	None (Northern Av)	Major Arterial	1-1/6 miles	N/A
	Mirielle	1,800	3,700±	Mar. 2008	65' half street R/W (Northern Av)	Major Arterial	2 miles	N/A
	Sun Valley Villages III and IV	6,600	8,500±	Apr. 2007	100' half street R/W (Northern Av)	Parkway	2-1/2 miles	N/A
	Anthem Sun Valley	4,300	6,500±	Oct. 2006	65' half street R/W (Northern Av)	Major Arterial	2-1/2 miles	N/A

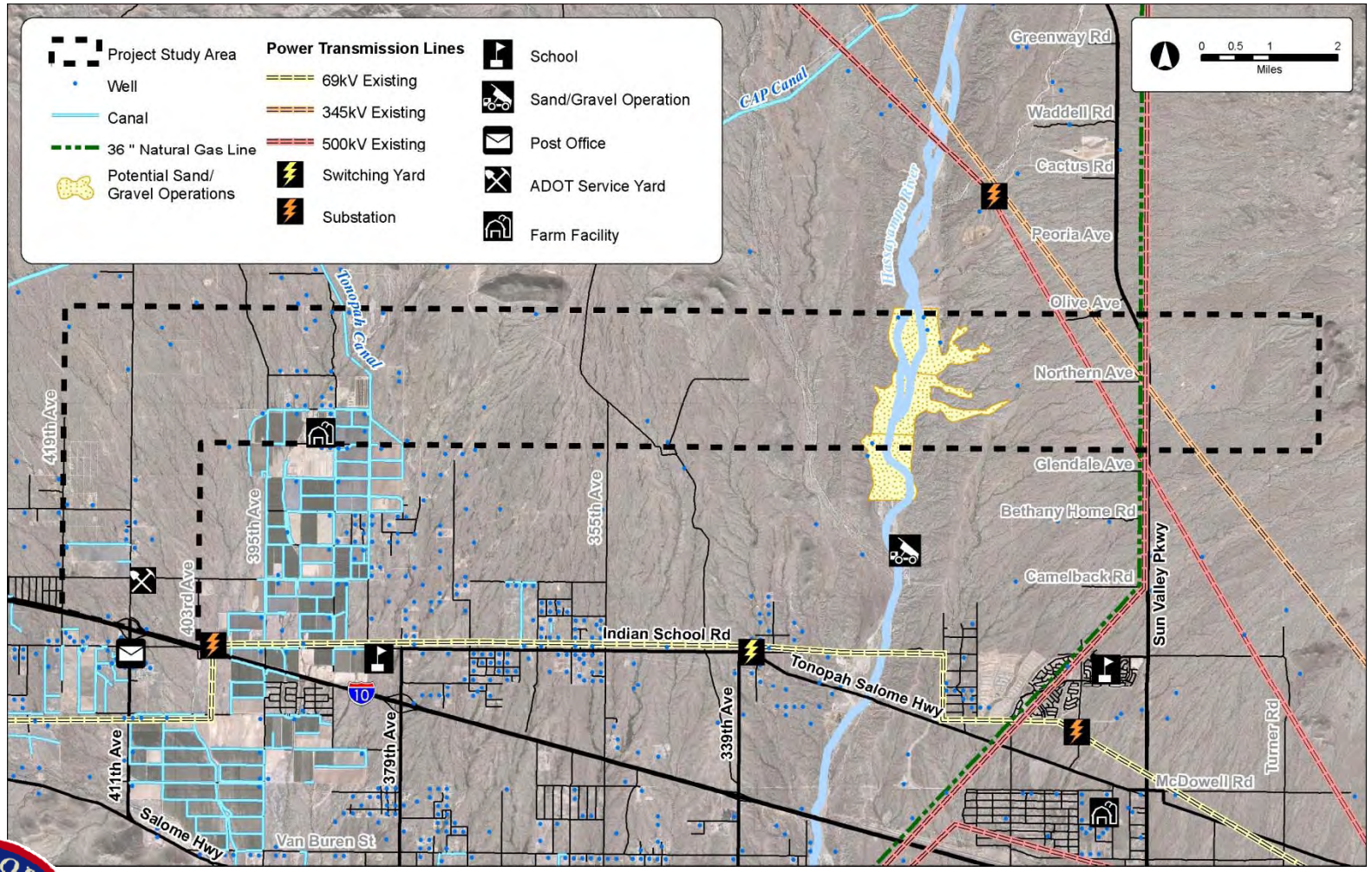
Existing Transportation Network



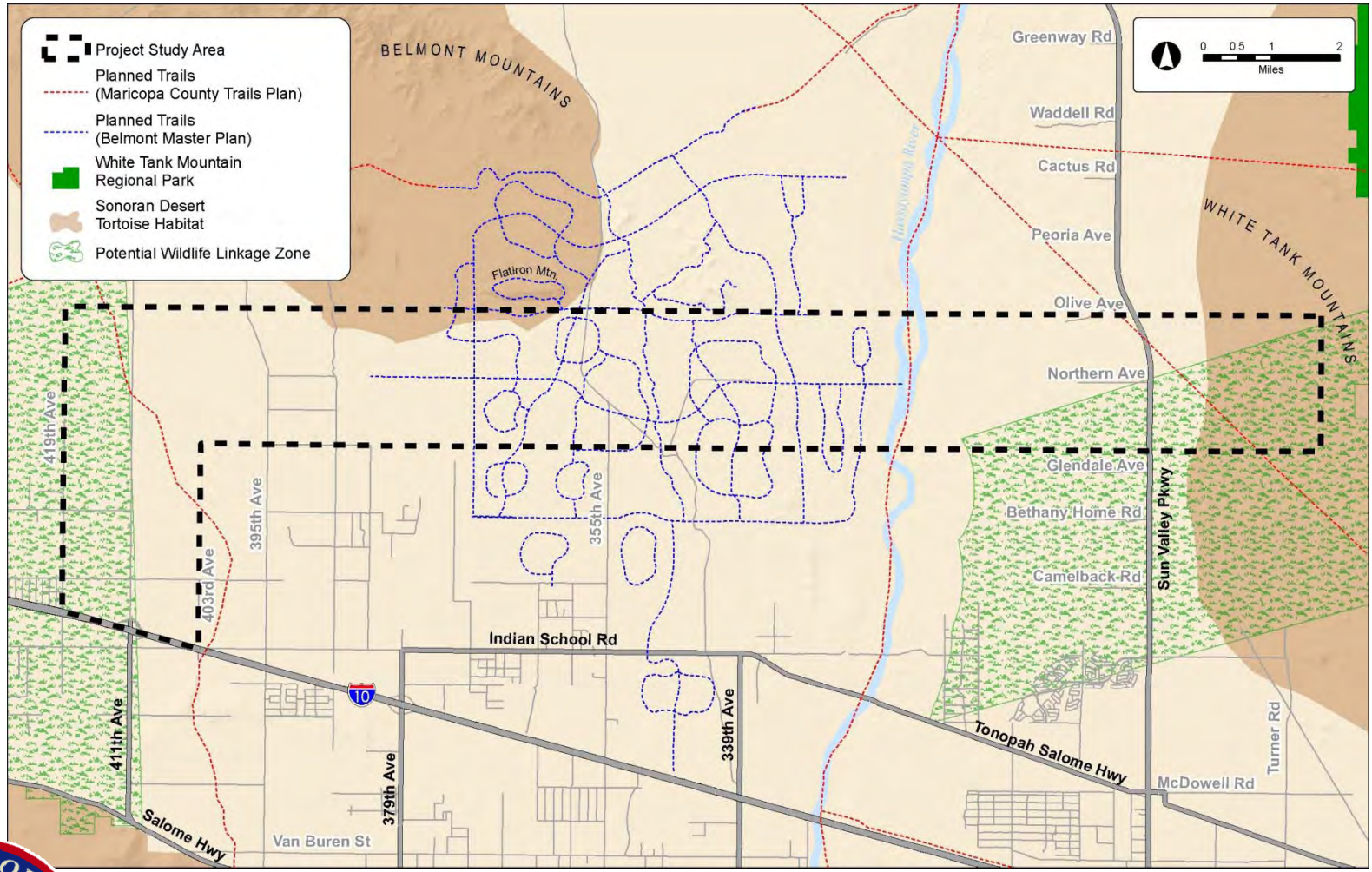
Future Transportation Network



Utilities and Facilities



Recreational Opportunities



Existing and Future Corridor Features Opportunities/Constraints

- Most of study area is vacant land
- Farms/agricultural lands
- State Trust and BLM land
- Existing communities with R/W or easements along 411th Avenue and Northern Avenue
- Master-planned communities with planned roadways, R/W

Existing and Future Corridor Features Opportunities/Constraints

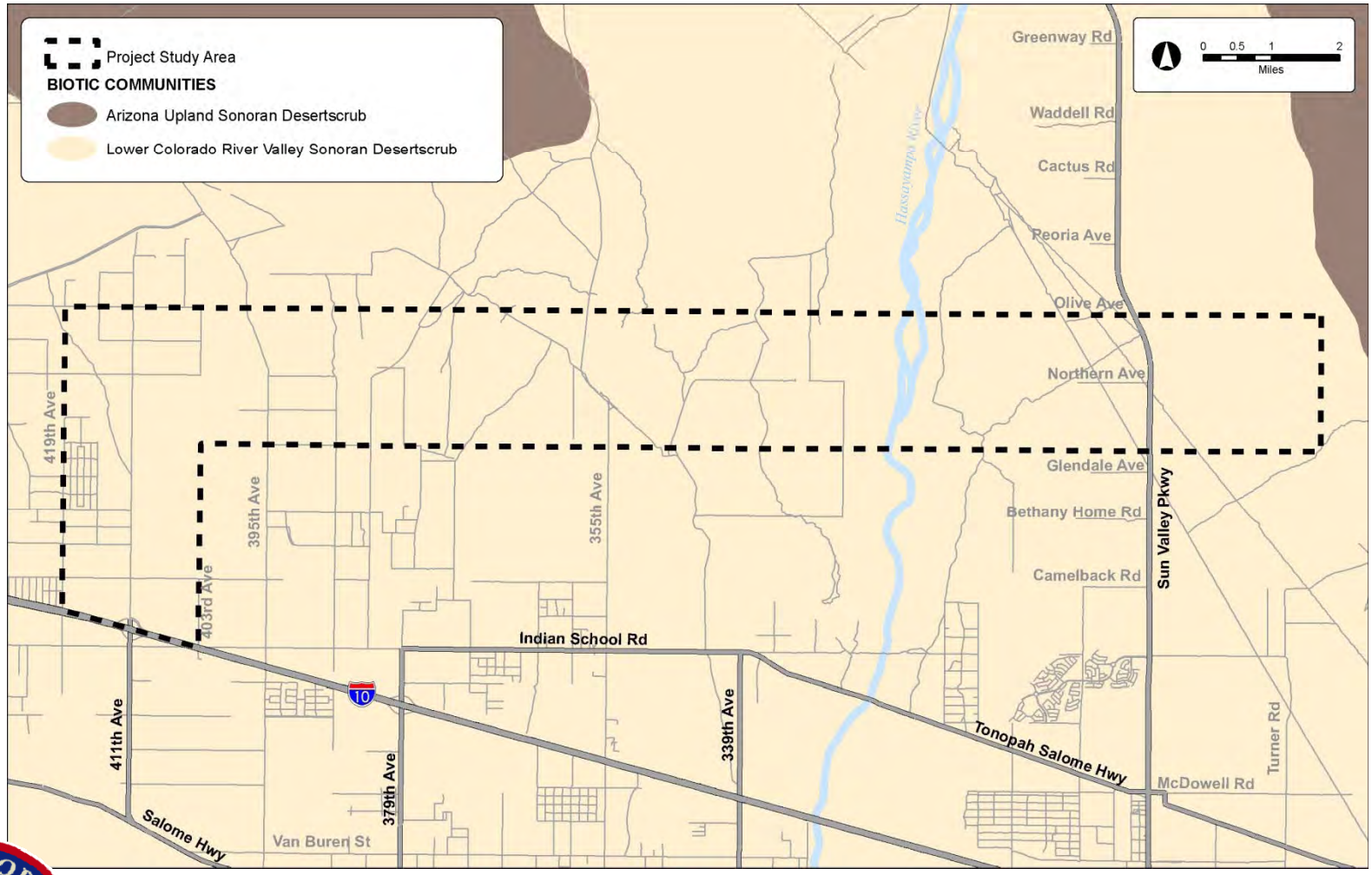
- Few existing roads
- I-10/411th Avenue interchange
- Planned parkways, arterials, and Hassayampa Freeway
- Planned transit and railroad

Existing and Future Corridor Features Opportunities/Constraints

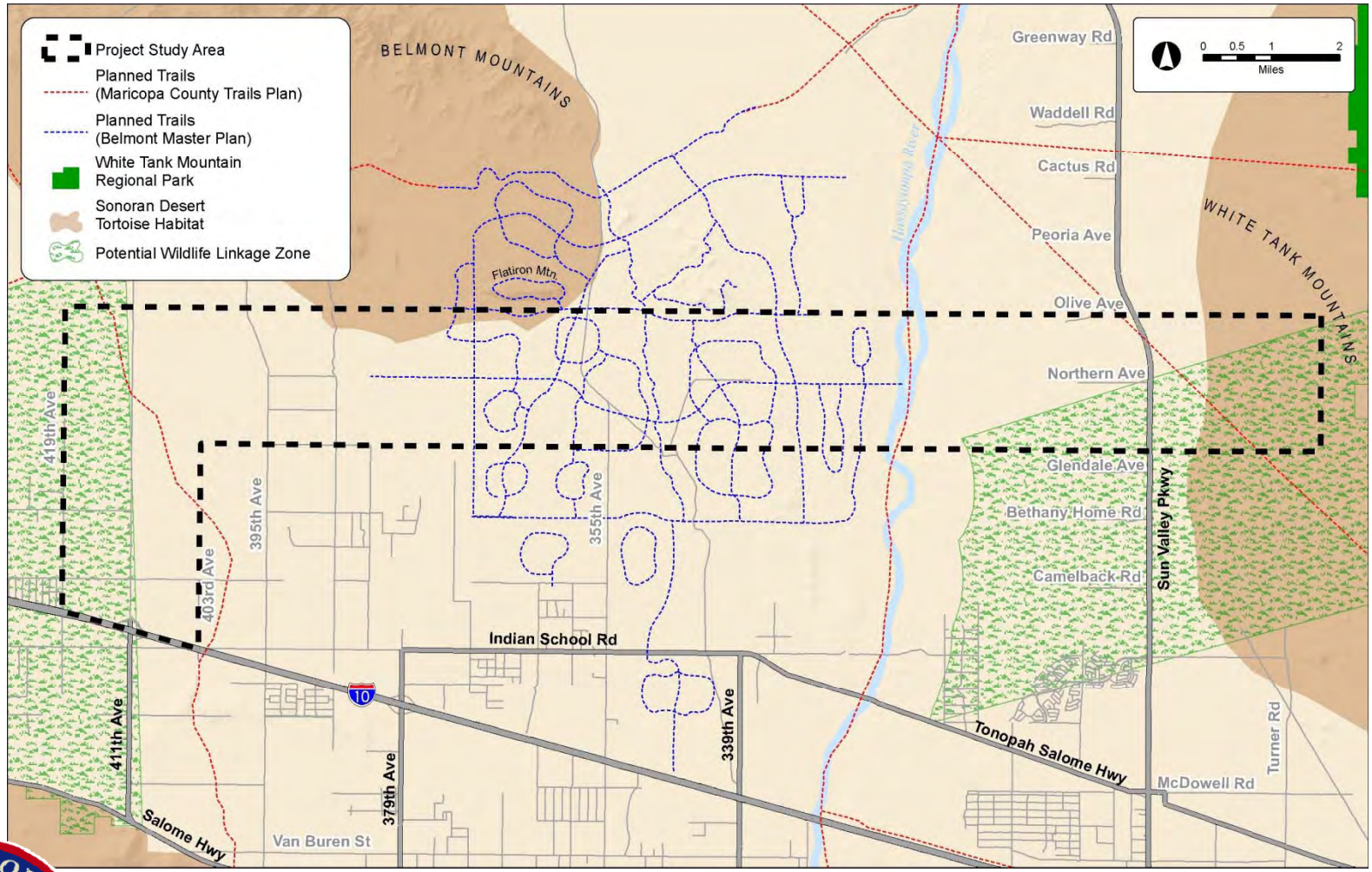
- Hassayampa River crossing
- High voltage power lines, gas line, and Tonopah Canal
- Potential sand and gravel operations near Hassayampa River
- Wildlife linkage zones at corridor ends
- Planned trails through the study area

TM 2 – Environmental Overview

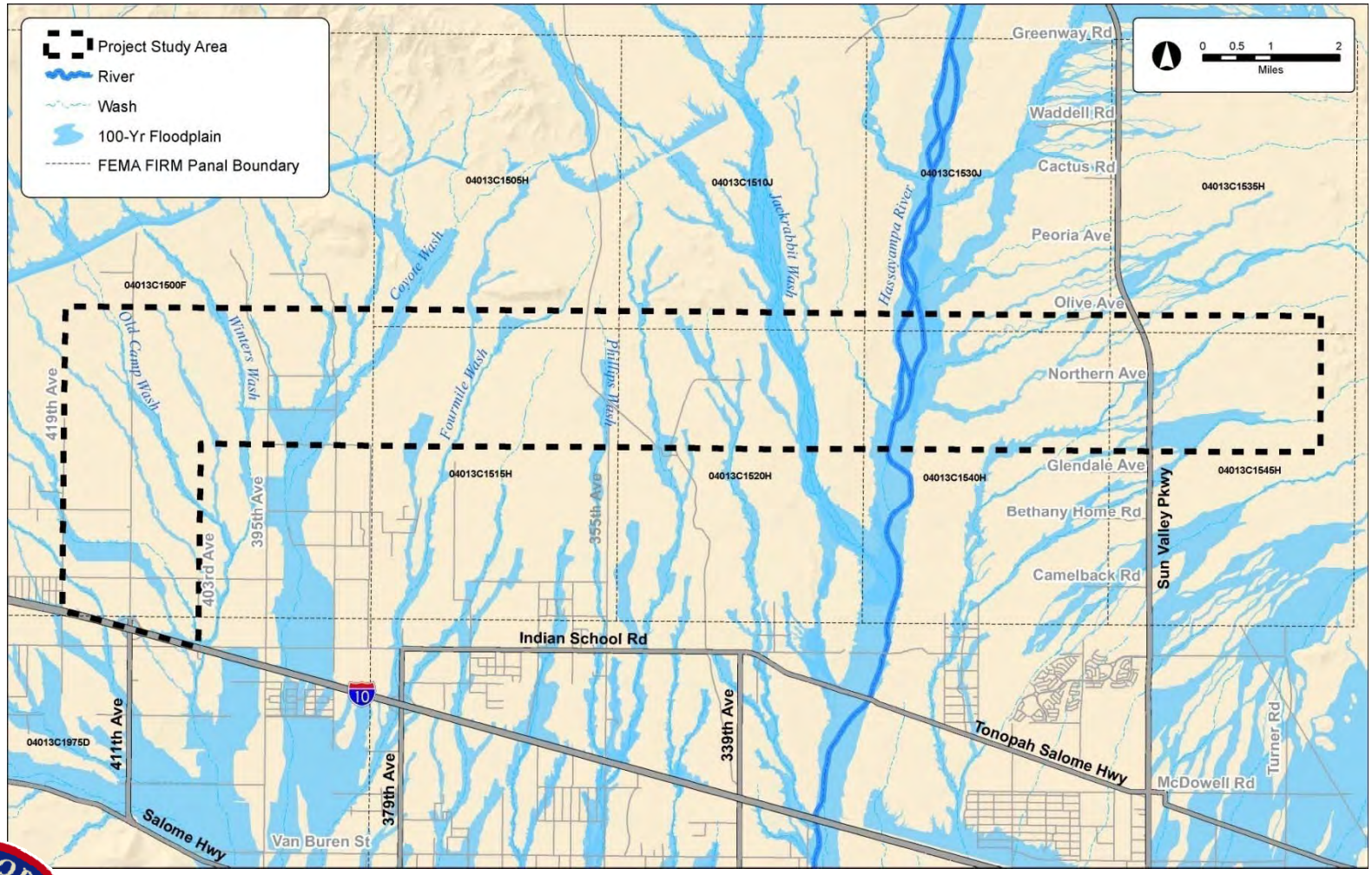
Biotic Communities



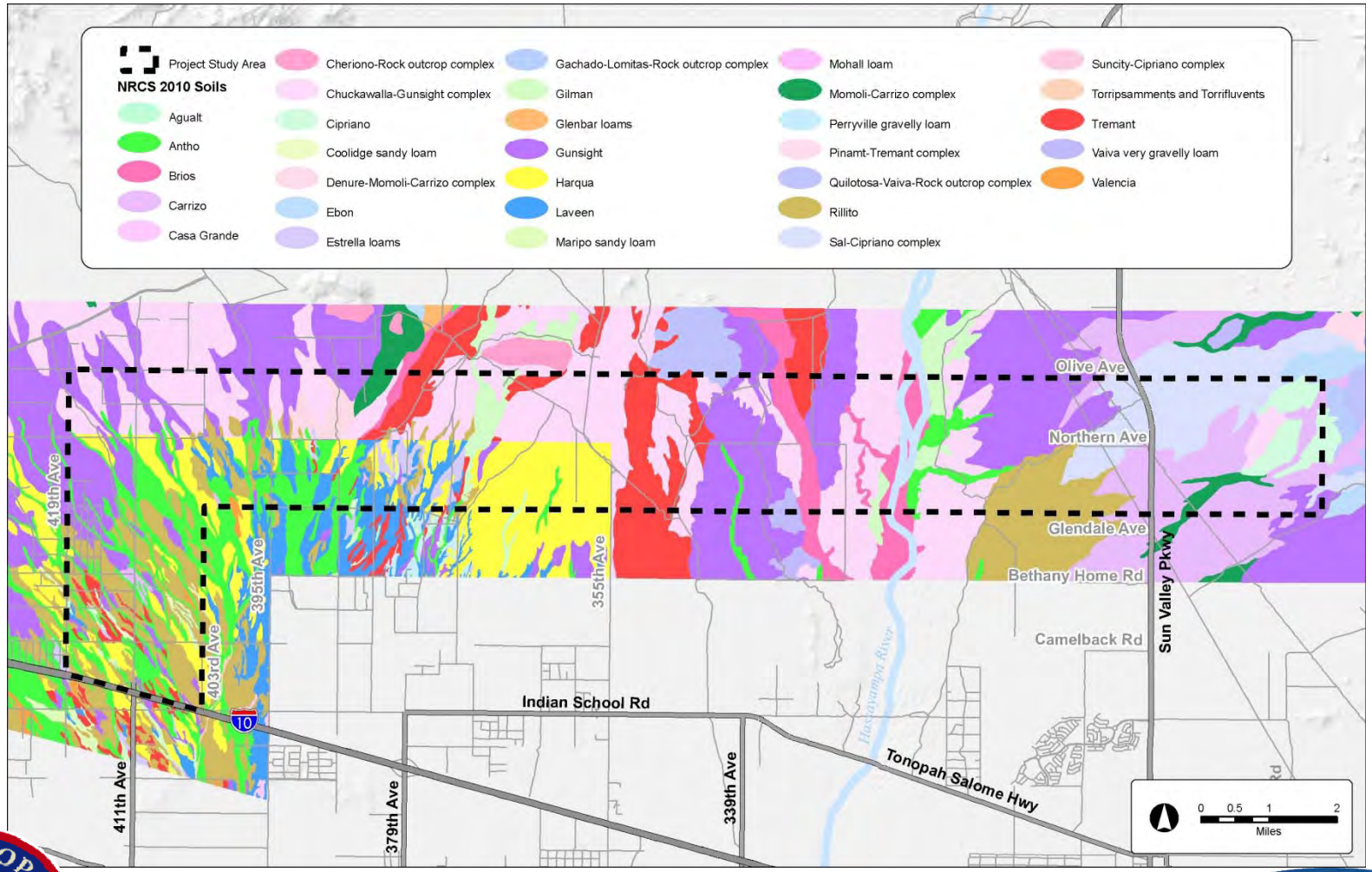
Tortoise Habitat and Wildlife Linkages



FEMA Floodplains and Washes



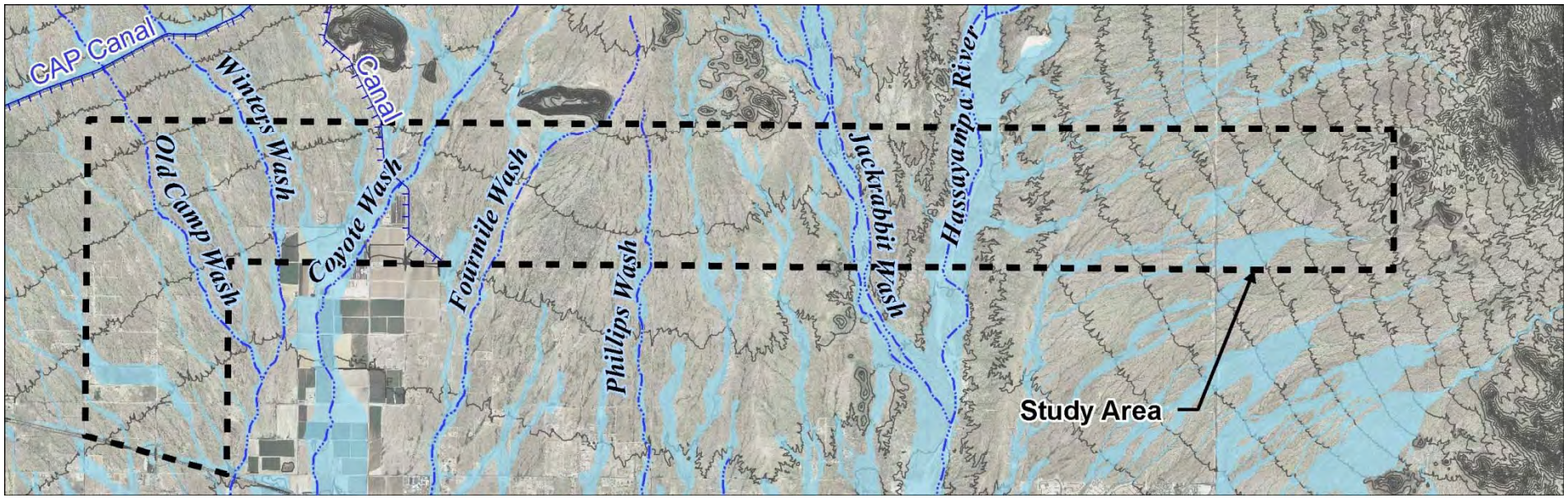
Soils


Project Study Area
NRCS 2010 Soils
Agualt
Antho
Brios
Carrizo
Casa Grande
Cheriono-Rock outcrop complex
Chuckawalla-Gunsight complex
Cipriano
Coolidge sandy loam
Denure-Momoli-Carrizo complex
Ebon
Estrella loams
Gachado-Lomitas-Rock outcrop complex
Gilman
Glenbar loams
Gunsight
Harqua
Laveen
Maripo sandy loam
Mohall loam
Momoli-Carrizo complex
Perryville gravelly loam
Pinamt-Tremant complex
Quilotosa-Vaiva-Rock outcrop complex
Rillito
Sal-Cipriano complex
Suncity-Cipriano complex
Torripsamments and Torrifluvents
Tremant
Vaiva very gravelly loam
Valencia
Olive Ave
Northern Ave
Glendale Ave
Bethany Home Rd
Camelback Rd
Indian School Rd
Tonopah Salome Hwy
Sun Valley Pkwy
419th Ave
403rd Ave
395th Ave
355th Ave
411th Ave
379th Ave
339th Ave
Hassayampa River
10
0 0.5 1 2
Miles

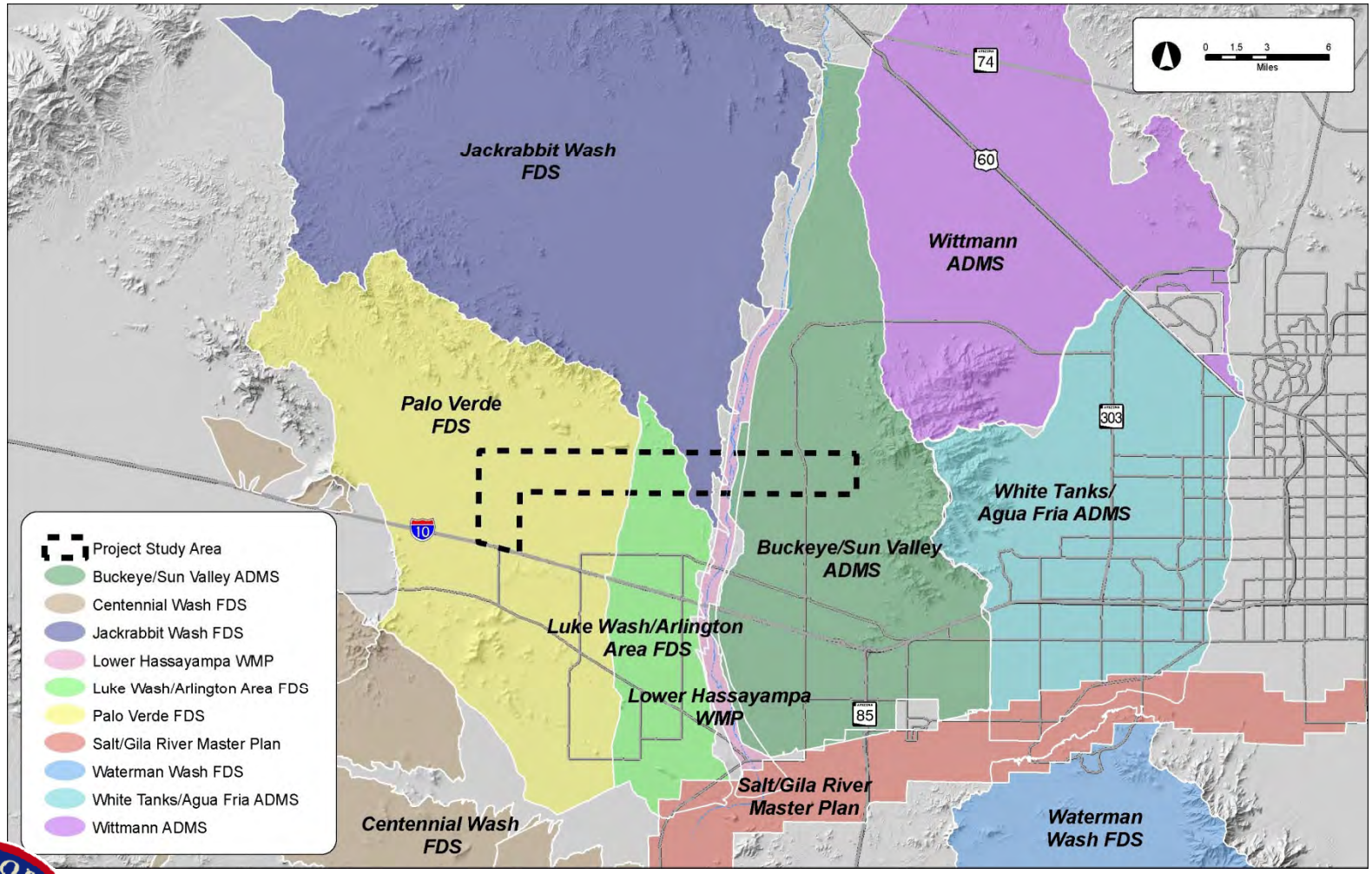
Environmental Overview Opportunities/Constraints

- Sonoran desert tortoise habitat
- Wildlife linkage zones at corridor ends
- FEMA floodplains
- Numerous wash crossings
- Section 404/401 of CWA for Hassayampa River crossing
- Cultural resources – most of area unsurveyed

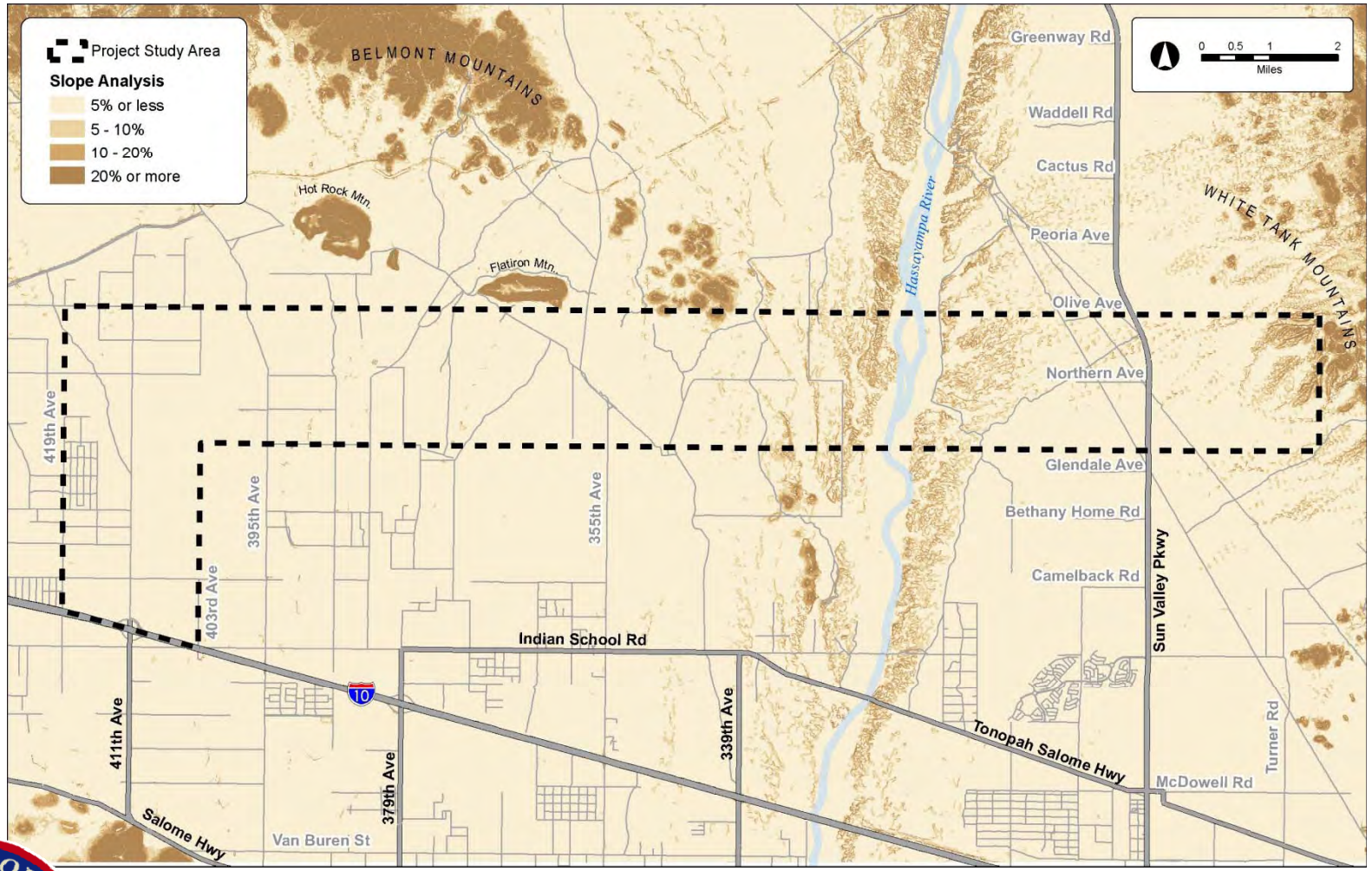
TM 3 – Conceptual Drainage Report



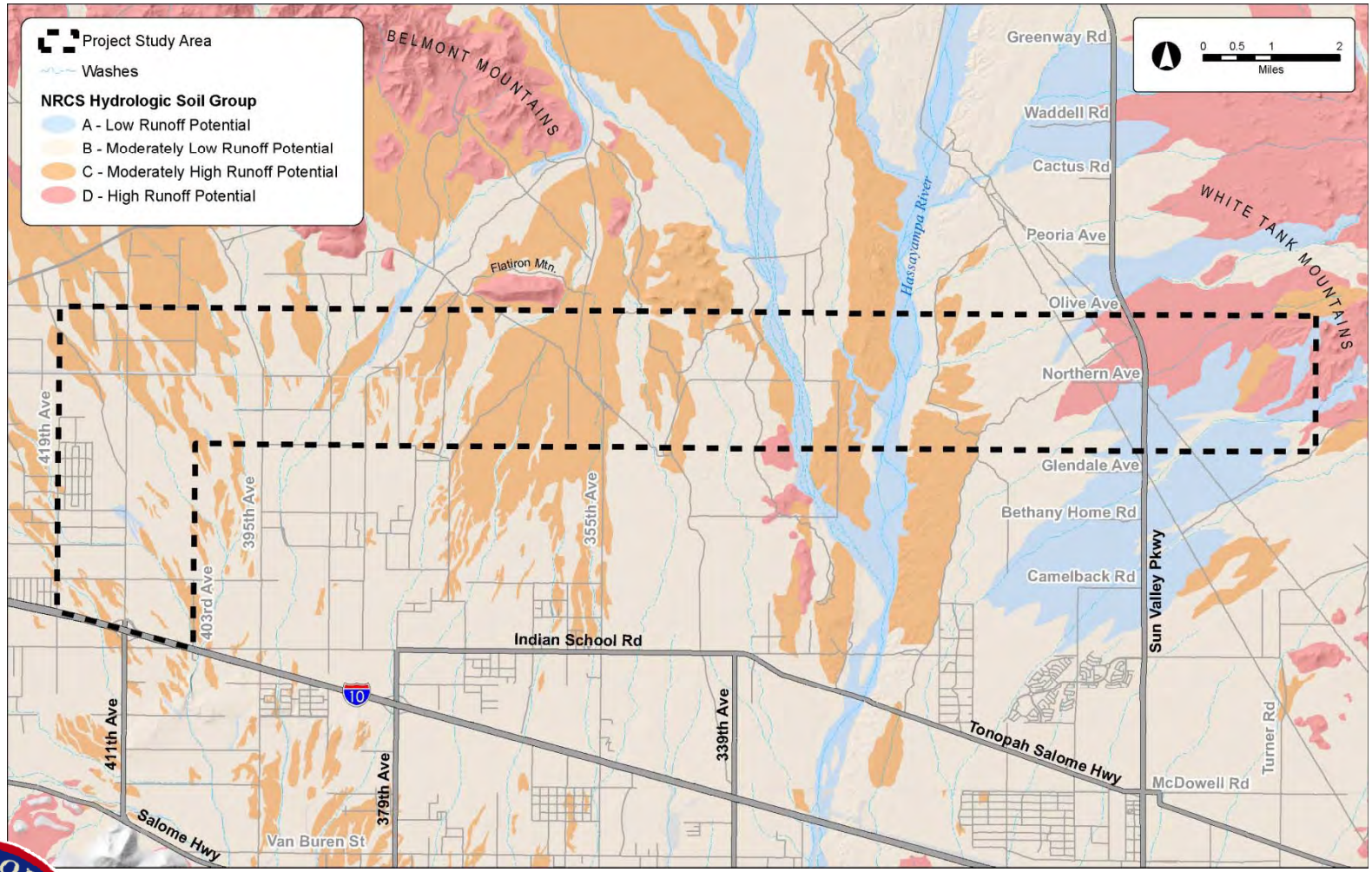
Area Drainage Studies



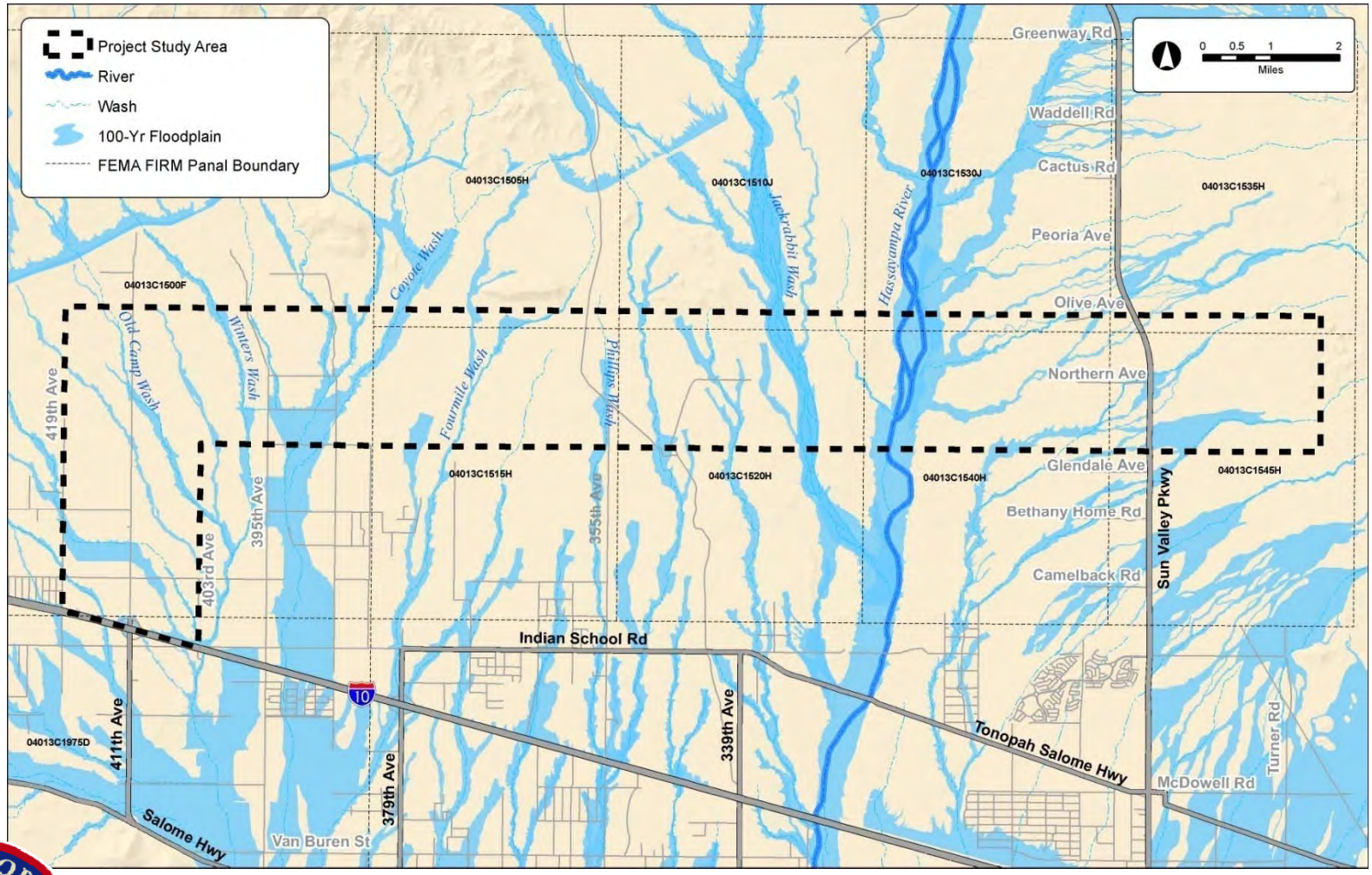
Topography


Project Study Area
Slope Analysis
5% or less
5 - 10%
10 - 20%
20% or more
0 0.5 1 2
Miles
BELMONT MOUNTAINS
Hot Rock Mtn.
Flatiron Mtn.
Hassayampa River
WHITE TANK MOUNTAINS
Greenway Rd
Waddell Rd
Cactus Rd
Peoria Ave
Olive Ave
Northern Ave
Glendale Ave
Bethany Home Rd
Camelback Rd
McDowell Rd
Turner Rd
Sun Valley Pkwy
Indian School Rd
Tonopah Salome Hwy
Salome Hwy
Van Buren St
419th Ave
403rd Ave
395th Ave
355th Ave
411th Ave
379th Ave
339th Ave
10

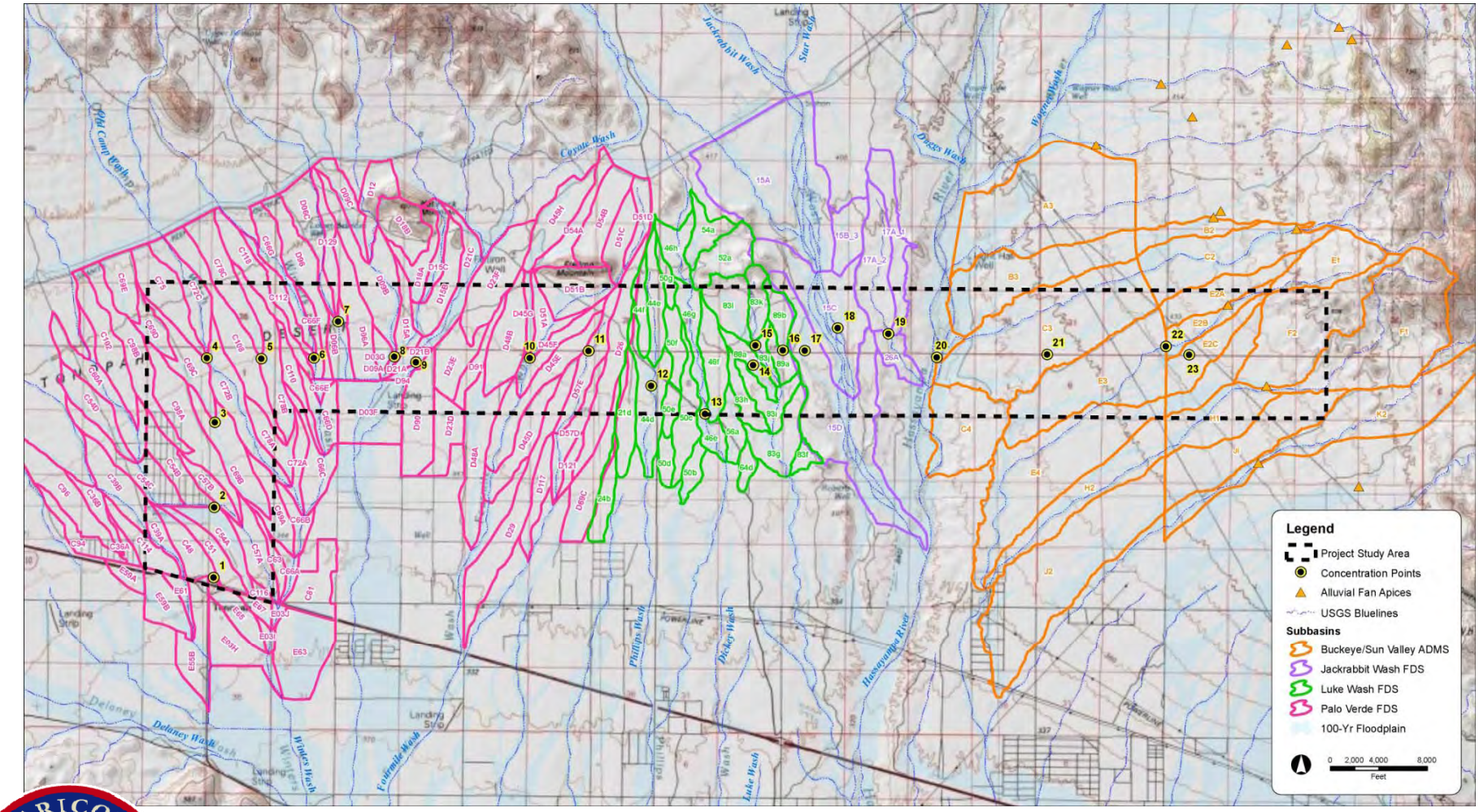
Soil Hydrologic Groups



Floodplains and Washes



Hydrology Workmap



Conceptual Drainage Report Opportunities/Constraints

- Relatively flat terrain
- Numerous wash crossings, alluvial fans
- Heavy drainage flows and sedimentation/erosion concerns
  - Jackrabbit Wash
  - Hassayampa River

Project Schedule

TAC/Stakeholder #1 – Project Initiation	July 14, 2010
Existing and Future Conditions	September 2010
TAC/Stakeholder #2 – Existing and Future Conditions	September 22, 2010
Scoping Open House	October 18, 2010
TAC/Stakeholder #3 – Conceptual Alternatives and Criteria	November 2010
Existing Conditions/Conceptual Alternatives Open House	January 2011
Alternatives Development and Evaluation	January 2011
TAC/Stakeholder #4 – Alternatives Evaluation	January 2011
Preferred Alternative	January 2011
Alternatives Evaluation/Preferred Alternative Open House	March 2011
Detailed Preferred Alignment	March 2011
TAC/Stakeholder #5 – Preferred Alignment	March 2011
Draft Final Report	April 2011
Final Report	May 2011

Summary/Next Steps

- Finalize TM 1, TM 2, and TM 3
- Hold 1st Public Open House on October 18
- Develop and Evaluate Conceptual Alternatives
- Hold 3rd TAC/Stakeholder Meeting in November to Identify Alternatives and Evaluation Criteria

TAC/Stakeholder Roundtable Discussion

Meeting Purpose

This was the second Technical Advisory Committee (TAC)/Stakeholder meeting. Purposes of the meeting were to:

- Review study progress to date;
- Present key findings in Draft Technical Memos 1, 2, and 3;
- Identify opportunities and constraints within the study area with respect to potential parkway alternatives;
- Obtain TAC and stakeholder input on potential conceptual alternatives; and
- Discuss next steps.

Participants

See attached attendance list.

Meeting Summary

Introduction and Opening Comments – Denise Lacey welcomed the participants and asked them to introduce themselves. Denise reported that Technical Memos 1, 2, and 3 had been uploaded to the Kimley-Horn and Associates (KHA) FTP site and that review comments are needed by October 8. Denise stressed the importance of getting feedback from all TAC and stakeholder representatives. Denise also mentioned that the first public open house has been scheduled for October 18 and encouraged everyone to attend.

Study Progress to Date – Bryan Patterson gave a brief overview of the following activities that have been performed:

- The project work plan was completed in June.
- A meeting with the Arizona State Land Department was held on June 23 to advise them of the study and discuss potential State Land issues that will need to be considered. A key issue is the preservation and enhancement of the economic potential of State Land within the corridor.
- The first TAC/Stakeholder meeting was held on July 14.
- Drafts of Technical Memos 1, 2, and 3 have been completed and posted on the KHA FTP site.
- The first public open house has been scheduled for October 18 from 5:00 to 7:00 pm at the Tonopah Valley High School.

Highlights of Technical Memo 1 – Existing and Future Corridor Features – Michael Grandy gave an overview of key findings reported in Technical Memo 1 and discussed information provided on the following exhibits:

- Jurisdictional Boundaries – The area west of the Hassayampa River is in unincorporated Maricopa County and the area east of the Hassayampa River is within the Buckeye Municipal Planning area, with most of the area already incorporated.

- Land Ownership – Most of the land within the study area is privately held. Arizona State Land Department owns five square miles within the study area and the U.S. Bureau of Land Management owns approximately one square mile.

- Zoning – Most of the study area is zoned for low density residential and agricultural uses with some commercial areas near the 411th Avenue interchange with Interstate 10 (I-10).

- Existing Land Uses – Nearly all of the study area is currently vacant desert land with some agricultural and low density residential properties in the western portion of the study area.

- Future Land Uses – The eastern two-thirds of the study area has received development entitlements through the Maricopa County and Town of Buckeye development master planning processes. This area will be a combination of single and multi-family residential units, retail, industrial, recreational, office, and educational land uses. Similar uses are planned for the areas near the 411th Avenue interchange with I-10. The remainder of the study area will remain as low density single family residential subdivisions. A question was raised regarding the definition and approval of areas designated as Active Open Space. Staff will research and respond to this question.

- Existing and Planned Developments – Brittany Price gave an overview of the planned developments in the study area. The largest planned development is Belmont, located in the central portion of the study area. There is a wide variety of roadway right-of-way dedication requirements that range from existing 33' half-street easements to planned 200' full width parkway dedications.

- Existing Transportation Network – The only existing paved roadways in the study area are the Sun Valley Parkway, Wickenburg Road, and a portion of 411th Avenue. There is a limited network of unpaved roadways with no continuous east-west connectivity.

- Future Transportation Network – The "build-out" transportation network as identified in the MAG Hassayampa Framework Study and the various development master plans includes a well developed network of freeways, parkways, arterial streets, railroad lines, transit lines, and trails. A question was raised regarding the time frame for the traffic projections. Michael responded that the volumes are for build-out land development assumptions, but given current development conditions, there is no definitive year for when this will occur. A question was also raised regarding the southerly dip in the Northern Parkway alignment near the Hassayampa Freeway interchange. Michael responded that this is the alignment shown in the Belmont development master plan. This alignment minimizes impacts on properties owned by Arizona State Land Department and is intended to provide access to a planned major commercial development in this area.

- Utilities and Facilities – Noteworthy utilities and facilities in the study area include 69kV, 345kV, and 500 kV power lines; a 36" natural gas line; an ADOT service yard; a dairy farm; the Tonopah Irrigation Canal; planned sand and gravel operations near the Hassayampa River; and numerous privately-owned wells.

- Recreational Opportunities – The study area includes a number of planned trails and is in close proximity to portions of the White Tank and Belmont Mountains.

Highlights of Technical Memo 2 – Environmental Overview – Sarah Eichinger summarized the key findings in Technical Memo 2 and discussed information included in the following exhibits:

- Biotic Communities – The entire study area lies within the Lower Colorado River Valley Sonoran Desertscrub biotic community.

- Tortoise Habitat and Wildlife Linkages – There are wildlife linkage zones at the far western and eastern portions of the study area and a Sonoran Desert Tortoise Habitat in the northwestern portion of the study area.

- FEMA Floodplains and Washes – There are a number of floodplains and washes that generally flow from north to south through the study area. The most significant floodplains include Jackrabbit Wash and the Hassayampa River.

- Soils – The underlying soil is composed of numerous soil types. Further study will be needed at the design stage to determine if the varying soil conditions would adversely impact proposed roadways.

Sarah reported that with respect to cultural resources, most of the study area has not been surveyed, and many of the existing surveys are out of date.

Highlights of Technical Memo No 3 – Conceptual Drainage Report – Alex Menez summarized the key findings in Technical Memo 3 and discussed information included in the following exhibits:

- Area Drainage Studies – All of the study area has been included in previously completed area drainage studies. There are numerous washes and alluvial fans. Areas near Jackrabbit Wash and the Hassayampa River are subject to heavy drainage flows, erosion, and sedimentation.

- Topography – The western portion of the study area is relatively flat with a gentle slope to the south. The terrain becomes more variable near Jackrabbit Wash, the Hassayampa River, and the White Tank Mountains. East of the Hassayanpa River, the topography slopes to the southwest.

- Soil Hydrologic Groups – Most of the study area has moderate runoff potential with some areas of high run-off potential hear the White Tank Mountains.

- Hydrology – Based on prior drainage studies, concentration points and flow volumes have been identified in the study area.

Next Steps – The next steps in the study process are to:

- Receive comments on Technical Memos 1, 2, and 3 by October 8 and finalize the reports;
- Hold the first public open house on October 18 at the Tonopah Valley High School;
- Develop and evaluate conceptual alternatives; and

- Hold the third TAC/Stakeholder meeting in November to identify alternatives and evaluation criteria.

TAC/Stakeholder Roundtable – Following the staff presentations, the TAC/stakeholders engaged in an open roundtable discussion to review and comment on potential opportunities and constraints displayed on aerial roll plots of the study area and provide input on potential conceptual alternatives. Key discussion points are summarized as follows:

- Future land uses should include an agricultural category.
- Northern Parkway should not bisect farming operations.
- Keep Northern Parkway on the section line north of the dairy operations.
- CAP does not own or have operation responsibility for the Tonopah Canal.
- The floodplain for Coyote Wash has been diverted over the past 60 years and the mapping needs to be updated to reflect this.
- Ironwood Trails Ranch should not be shown as a planned development. It is now part of the adjacent dairy farm.

Northern Parkway (Hassayampa Section) Corridor Feasibility Study - I-10 to Turner Parkway

Technical Advisory Committee Members and Stakeholders

First Name	Last Name	Title	Company	E-mail	Phone	Address	City	State	Zip	TAC/Stakeholder Meeting Attendance				
										1	2	3	4	5
Aaron	Ashcroft	Civil Engineer	Central Arizona Project	aashcroft@cap-az.com	623-869-2257	23636 N. 7th St.	Phoenix	AZ	85080	X	AA			
Tab	Bommarito	Habitat Specialist	Arizona Game & Fish	tbommarito@azgfd.gov	928-341-4069	9140 E. 28th St.	Yuma	AZ	85365					
Daniel	Boschma	Dairy Manager	Tonopah Dairy	danboschma@hotmail.com	623-393-0175	6510 N. 395th Ave.	Tonopah	AZ	85354					
Mike	Brilz		Pulte Homes	mike.brilz@pulte.com	480-391-6198	15111 N. Pima Rd. Ste 100	Scottsdale	AZ	85260	X*				
Wayne	Butch	Utilities	MCDOT	WayneButch@mail.maricopa.gov	602-506-8603	2901 W. Durango St.	Phoenix	AZ	85009	X	WB			
Stephen	Cleveland	Town Manager	Town of Buckeye	scleveland@buckeyeaz.gov	623-349-6099	530 E. Monroe Ave.	Buckeye	AZ	85326					
Roberta	Crowe	PIO	MCDOT	robertacrowe@mail.maricopa.gov	602-506-8003	2901 W. Durango St.	Phoenix	AZ	85009					
Hugh	Davidson	Environmental Planner	MCDOT	hughdavidson@mail.maricopa.gov	602-506-8082	2901 W. Durango St.	Phoenix	AZ	85009	X				
Ed	Dietrich	Senior Project Manager	ASLD	edietrich@land.az.gov	602-542-2653	1616 W. Adams St.	Phoenix	AZ	85007					
Mark	Edelman	Project Manager	ASLD	medelman@land.az.gov	602-542-6331	1616 W. Adams St.	Phoenix	AZ	85007					
Bob	Eichinger	Drainage Project Manager	Kimley-Horn and Assoc.	bob.eichinger@kimley-horn.com	602-906-1182	7878 N. 16th St.	Phoenix	AZ	85020	X				
Sarah	Eichinger	Environmental Project Manager	Kimley-Horn and Assoc.	sarah.eichinger@kimley-horn.com	602-371-4577	7878 N. 16th St.	Phoenix	AZ	85020	X	SE			
Jeanette	Fish	Executive Director	Maricopa Co. Farm Bureau	mcfb@gwestoffice.net	602-437-1330	4001 E. Broadway Rd.	Phoenix	AZ	85040	X				
Kristofer	Golder	Research Analyst	Communities Southwest	kgolder@commsw.com	480-315-2641	7001 N. Scottsdale Rd., 1015	Scottsdale	AZ	85253	X				
Jo Ann	Goodlow	Realty Specialist	BLM	joann_goodlow@blm.gov	623-580-5548	21605 N. 7th Ave.	Phoenix	AZ	85027					
Sharon	Gordon	Area 3 Engineer	FHWA	sharon.gordon@dot.gov	602-382-8972	4000 N. Central Ave.	Phoenix	AZ	85012					
Michael	Grandy	Deputy Project Manager	Kimley-Horn and Assoc.	michael.grandy@kimley-horn.com	480-756-6137	2266 S. Dobson Rd.	Mesa	AZ	85202	X				
Samir	Hatab	Engineer	MCDOT	samirhatab@mail.maricopa.gov	602-506-2867	2901 W. Durango St.	Phoenix	AZ	85009					
Chris	Heeter	President	Stardust Companies	cheeter@stardustco.com	480-607-5800x224	6730 N. Scottsdale Rd.	Scottsdale	AZ	85253	X				
Frank	Hoffmann	Roadway Engineer	Kimley-Horn and Assoc.	frank.hoffmann@kimley-horn.com	602-216-1272	7878 N. 16th St.	Phoenix	AZ	85020	X				
Al	Kattan	Project Management	MCDOT	AlKattan@mail.maricopa.gov	602-506-4618	2901 W. Durango St.	Phoenix	AZ	85009					
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Richard	~~Mayes~~ MAES	Project Manager	W Holdings	richardm@wholdings.com	480-831-2000	1121 W. Warner Rd., Ste 109	Tempe	AZ	85284					
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Kay	McNeely	Water Resources Specialist IV	ASLD	kmcneely@land.az.gov	602-542-3681	1616 W. Adams St.	Phoenix	AZ	85007	X	KMc			
Jackie	Meck	Mayor	Town of Buckeye	jmeck@buckeyeaz.gov	623-349-6950	530 E. Monroe Ave.	Buckeye	AZ	85326					
Rick	Moreau	President	Tonopah Valley Community Council	rick.moreau@aztvcc.org	623-393-9259	PO Box 117	Tonopah	AZ	85354					
Scott	Omer	Director of Planning and Programming	ADOT	somer@azdot.gov	602-712-4786	206 S. 17th Ave.	Phoenix	AZ	85007	X*				
Bryan	Patterson	Project Manager	Kimley-Horn and Assoc.	bryan.patterson@kimley-horn.com	480-756-6135	2266 S. Dobson Rd.	Mesa	AZ	85202	X	BP			
Joe	Pinto	Environmental Planner	MCDOT	joepinto@mail.maricopa.gov	602-506-8068	2901 W. Durango St.	Phoenix	AZ	85009					
Bill	Ring	Project Manager	LKY Holdings/Belmont	ringeraz@yahoo.com	480-951-1281/602-402-1716	5040 E. Shea Blvd.	Scottsdale	AZ	85254					
Kelly	Roy	Utilities	MCDOT	kelly.roy@mail.maricopa.gov	602-506-5992	2901 W. Durango St.	Phoenix	AZ	85009	X				
Jami	Schulman		Communities Southwest	jschulman@commsw.com	480-315-2618	7001 N. Scottsdale Rd., 1015	Scottsdale	AZ	85253					
Woody	Scouten	Engineer	Town of Buckeye	woody@scoutten.com	623-547-4661x222	1646 N. Litchfield Rd., Ste 235	Goodyear	AZ	85338	X				
Troy	Smith	Habitat Program Manager	Arizona Game & Fish	trsmith@azgfd.gov	928-341-4068	9140E. 28th St.	Yuma	AZ	85365					
Tom	Sonnemann	Bridge Engineer	MCDOT	tomsonnemann@mail.maricopa.gov	602-506-4880	2901 W. Durango St.	Phoenix	AZ	85009		TS			
Elizabeth	Story	Administrator	Tonopah Irrigation District	tonopah@tonopahid.org	623-386-4066	10410 East Javelina Ave	Mesa	AZ	85209					
Ray	Strauss	District 4 Councilmember	Town of Buckeye	rstrauss@buckeyeaz.gov	623-349-6949	530 E. Monroe Ave.	Buckeye	AZ	85326					
Tim	Strow	Planner	MAG	tstrow@mag.maricopa.gov	602-254-6300	302 N. 1st. Ave.	Phoenix	AZ	85003	X				
Nicolaas	Swart	Traffic	MCDOT	nicolaasswart@mail.maricopa.gov	602-506-0599	2901 W. Durango St.	Phoenix	AZ	85009	X	NSX			
Valerie	Swick	Project Manager	Flood Control District	vas@mail.maricopa.gov	602-506-2929	2801 W. Durango St.	Phoenix	AZ	85009	X	VS			
Gordon	Taylor	Planning and Engineering	ASLD	Gtaylor@land.az.gov		1616 W. Adams St.	Phoenix	AZ	85007					
Scott	Van Sant	Dairy Manager	Belmont Mountain Dairy	scottianna@aol.com	623-327-1642	7220 N. 387th Ave.	Tonopah	AZ	85354	X				
Dana	Warnecke	Habitat Specialist	Arizona Game & Fish	dwarnecke@azgfd.gov	480-324-3547	7200 E. University Dr.	Mesa	AZ	85207					
Michelle	Yerger		Communities Southwest	myerger@commsw.com	480-315-2618	7001 N. Scottsdale Rd., 1015	Scottsdale	AZ	85253					

Alex Munoz KHA

X = In attendance
X* = Substitute in attendance

9/22/2010

Northern Parkway/Tonopah Parkway
Corridor Feasibility Study
Work Order TT005
Contract No. 2010-004

TECHNICAL ADVISORY COMMITTEE AND STAKEHOLDER MEETING

DATE: MONDAY, NOVEMBER 15, 2010
TIME: 1:30 PM
LOCATION: MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
2901 WEST DURANGO STREET
APACHE/COCHISE CONFERENCE ROOMS
PHOENIX, ARIZONA

AGENDA

1. Introduction and Opening Comments
2. Meeting Purpose
3. Summary of September 22 TAC Meeting, October 18 Open House, and Comments Received to Date
4. Comments on Draft Technical Memoranda 1,2, and 3 – Existing and Future Corridor Features, Environmental Overview, and Conceptual Drainage Report
5. Conceptual Alignment Alternatives
6. Evaluation Criteria
7. Preliminary Candidate Alternatives for Further Consideration and Evaluation
8. Next Steps
9. Roundtable Discussion

FOR MORE INFORMATION CONTACT:
DENISE LACEY, MCDOT (602) 506-6172 OR
BRYAN PATTERSON, KIMLEY-HORN (480) 756-6135

Northern Parkway
Tonopah Parkway
Corridor Feasibility Study

TAC/Stakeholder Meeting No. 3

November 15, 2010

Meeting Purpose

- Summarize September 22 TAC Meeting
- Summarize October 18 Open House
- Summarize comments on draft technical memos
- Present and discuss conceptual alternatives
- Present and discuss evaluation criteria
- Present and discuss preliminary alternatives for further evaluation
- Discuss next steps
- Roundtable discussion

Summary of September 22 TAC Meeting

- Discussed highlights of Tech Memos 1-3
- Discussed opportunities and constraints
- Obtained TAC input on potential conceptual alternatives
  - Do not bisect farming operations
  - Follow section lines as much as possible
  - Be compatible with existing and planned land uses

Summary of October 18 Open House

- Held at Tonopah Valley High School – 60+ attendees
- Both support for and opposition to more roadways in the study area
- Preference for following section lines
- Concern about wildlife impacts – tortoises, deer, bighorn sheep
- Consider monastery on north study boundary
- How will the project be financed – will it increase taxes?
- What is the timing for the project?
- Where will Northern Parkway cross the Hassayampa River?

Comments on Draft Tech Memos

- Comment period extended
- Comment summary and response forms completed
- Tech Memos 1-3 revised and posted on project FTP site

Alternatives Development

- Opportunities, constraints, and “fatal flaws”
- Development master plans
- Field reviews
- Team brainstorming session
- TAC, stakeholder, and public input

Opportunities/Constraints

- Most of study area is vacant land
- Farms/agricultural lands
- State Trust and BLM land
- Existing communities with R/W or easements along 411th Avenue and Northern Avenue
- Master-planned communities with planned roadways, R/W
- Few existing roads

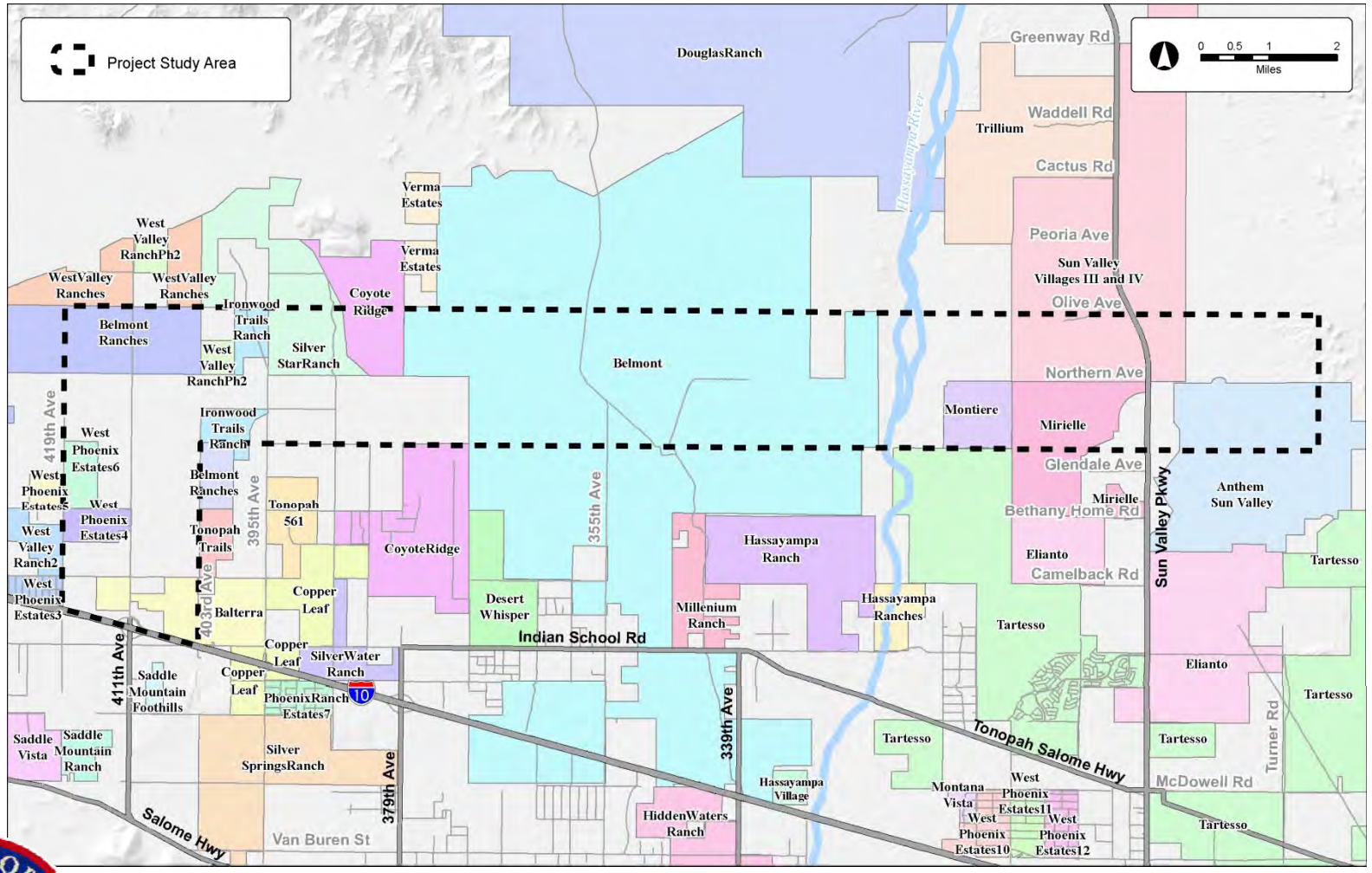
Opportunities/Constraints

- I-10/411th Avenue interchange
- Planned parkways, arterials, and Hassayampa Freeway
- Hassayampa River crossing
- Power lines, gas lines, and Tonopah Canal
- Potential sand and gravel operations
- Wildlife linkage zones
- Planned trails

Opportunities/Constraints

- Sonoran desert tortoise habitat
- FEMA floodplains
- Cultural resources
- Flat terrain
- Wash crossings and alluvial fans
  - Jackrabbit Wash
  - Hassayampa River

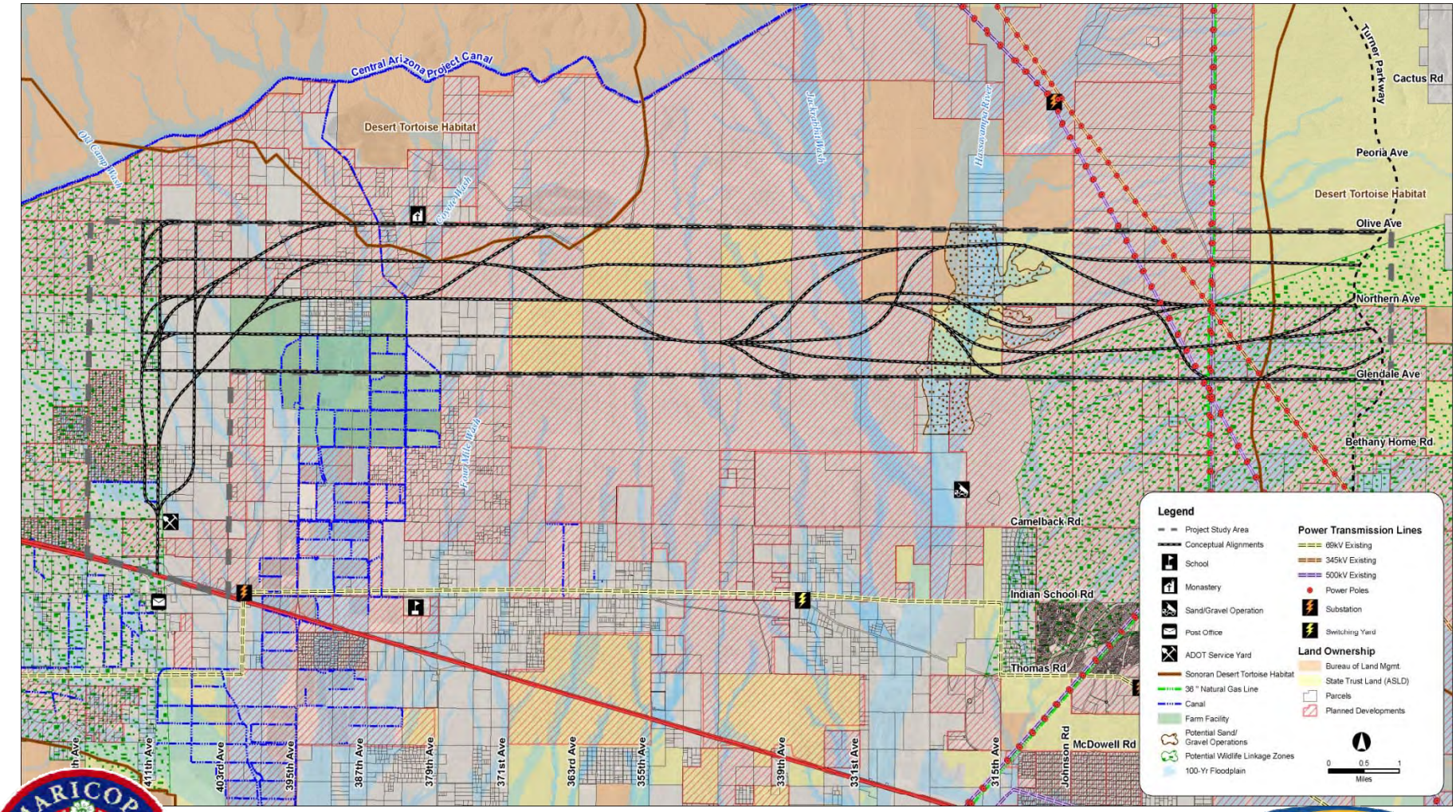
Existing and Planned Developments



Existing and Planned Developments

Jurisdiction	Development Name	Area [acres]	Planned Units/ Existing Lots	Approval Date	Right-of-Way (R/W) Stipulations/Existing R/W	Assumed Functional Classification of Roadway	Length of Segment along Study Area Center Line	Timeframe for Final Plat/Plan of Development
Maricopa County	Balterra	1,110	4,458	Dec. 2006	130' full street R/W, 65' half street R/W (411th Ave)	Major Arterial	1/2 mile	4 years
	West Phoenix Estates 4	780	228	Mar. 1970	55' half street R/W (411th Ave)	Major Arterial	1/3 mile	Plat Recorded
	West Phoenix Estates 6	780	251	Sep. 1970	75' half street R/W (419th Ave); 40' half street R/W (415th Ave)	Major Arterial; Major Collector	N/A	Plat Recorded
	Belmont Ranches	3,220	8	Mar. 1993	33' half street easement (Northern Ave); 55' half street easement (411th Ave)	Minor Arterial; Major Arterial	3 miles	Plat Recorded
	West Valley Ranch Phase 2	160	4	Apr. 1996	33' half street easement (Northern Ave)	Minor Arterial	1/2 mile	Plat Recorded
	Ironwood Trails Ranch	260	15	Oct. 1996	33' half street R/W (Northern Ave)	Minor Arterial	1/8 mile	Plat Recorded
	Silver Star Ranch	2,000	54	Feb. 1996	35' half street easement/ 130' Designated County Road (Northern Ave)	Major Arterial	1-1/2 miles	Plat Recorded
	Coyote Ridge	1,150	31	Jun. 1997	110' reserved easement (Northern Ave)	Major Arterial	1/2 mile	Plat Recorded
	Belmont	24,800	48,000	Jun. 2008	200' full street R/W (Northern Ave)	Parkway	7 miles	4 years
Town of Buckeye	Montiere	780	1,584	Jun. 2006	None (Northern Ave)	Major Arterial	1-1/6 miles	N/A
	Mirielle	1,733	8,419	Mar. 2008	65' half street R/W (Northern Ave)	Major Arterial	2 miles	N/A
	Sun Valley Villages III and IV	6,099	16,117	Apr. 2007	100' half street R/W (Northern Ave)	Parkway	2-1/2 miles	N/A
	Anthem Sun Valley	4,445	12,420	Oct. 2006	65' half street R/W (Northern Ave)	Major Arterial	2-1/2 miles	N/A
	Sun Valley South (Employment Center)	929	0	Jan. 2006	65' half street R/W (Northern Ave)	Major Arterial	2-1/2 miles	N/A

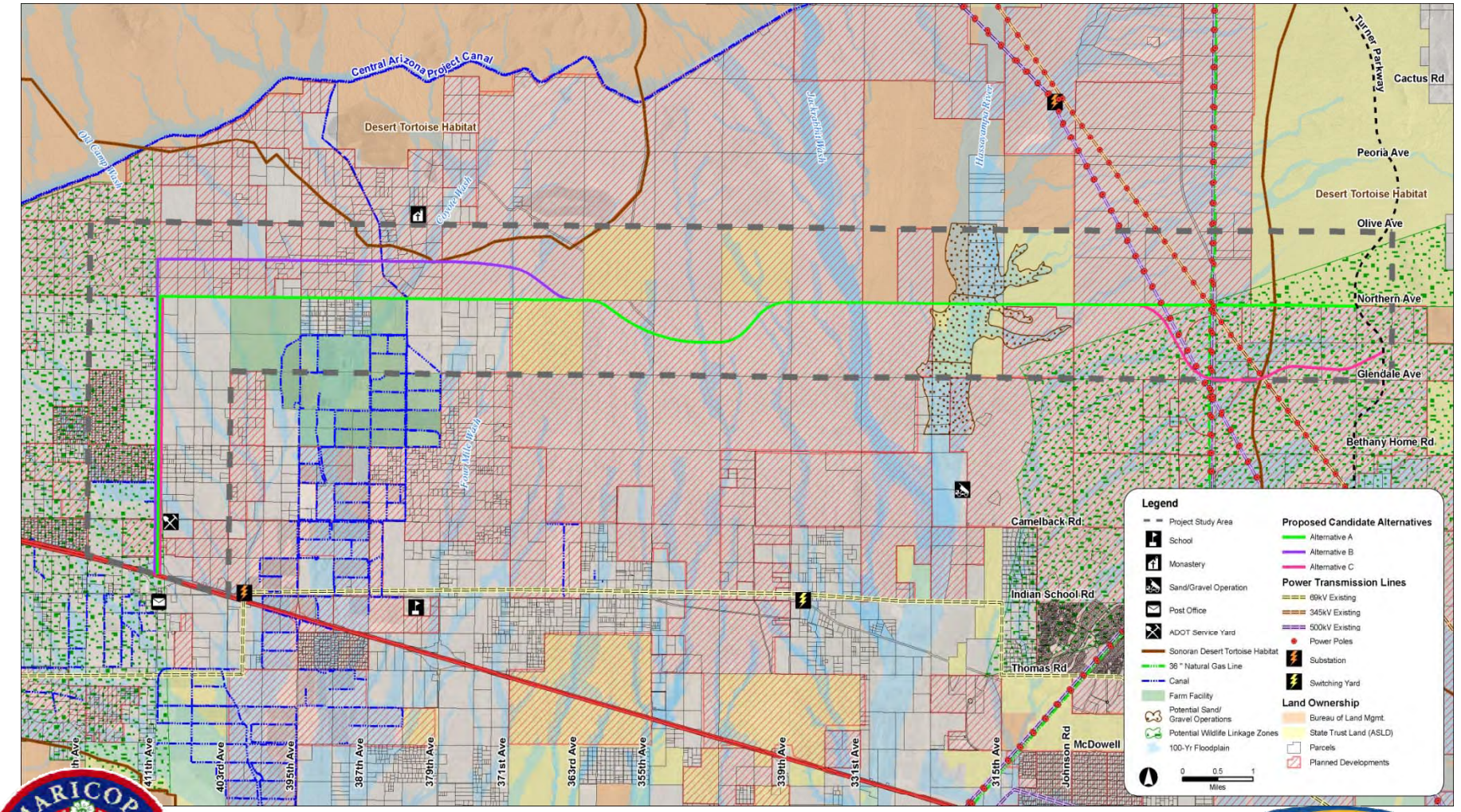
Conceptual Alternatives



Evaluation Criteria

- Future development compatibility
- System continuity and capacity
- Drainage impacts
- Irrigation impacts
- Building/property impacts
- Cultural/archaeological impacts
- Wildlife impacts
- Utility impacts
- Public acceptability
- Cost

Preliminary Candidate Alternatives



Next Steps

- Finalize and evaluate candidate alternatives
- Submit Draft Tech Memo 4 – *Candidate Alternative Alignments and Evaluation* - for TAC review in January 2011
- Hold 4th TAC Meeting and 2nd Open House in January 2011

Project Schedule

TAC/Stakeholder #1 – Project Initiation	July 14, 2010
Existing and Future Conditions	September 2010
TAC/Stakeholder #2 – Existing and Future Conditions	September 22, 2010
Scoping Open House	October 18, 2010
TAC/Stakeholder #3 – Conceptual Alternatives and Criteria	November 15, 2010
Existing Conditions/Conceptual Alternatives Open House	January 2011
Alternatives Development and Evaluation	January 2011
TAC/Stakeholder #4 – Alternatives Evaluation	January 2011
Preferred Alternative	January 2011
Alternatives Evaluation/Preferred Alternative Open House	March 2011
Detailed Preferred Alignment	March 2011
TAC/Stakeholder #5 – Preferred Alignment	March 2011
Draft Final Report	April 2011
Final Report	May 2011

Roundtable Discussion

Meeting Purpose

This was the third Technical Advisory Committee (TAC)/stakeholder meeting. Purposes of the meeting were to:

- Summarize input from the September 18 TAC/stakeholder meeting and October 18 public open house;
- Summarize TAC/stakeholder comments on Draft Technical Memos 1, 2, and 3;
- Present and discuss conceptual alternatives, evaluation criteria, and preliminary alternatives for further evaluation; and
- Discuss next steps.

Participants

See attached attendance list.

Meeting Summary

Introduction and Opening Comments – Denise Lacey welcomed the participants and asked them to introduce themselves. Denise thanked the committee members for providing comments on drafts of Technical Memos 1, 2, and 3. Final versions of the documents have been uploaded to the Kimley-Horn and Associates (KHA) FTP site and the documents will also be placed on the MCDOT website. Denise also explained that due to some public confusion regarding the Hassayampa reference in the title of the study, the title has been changed to *Northern Parkway: Tonopah Parkway to Turner Parkway and Tonopah Parkway: Northern Parkway to Interstate 10 Corridor Feasibility Study*, or *Northern Parkway/Tonopah Parkway CFS* for short.

Summary of the September 18 TAC Meeting and October 18 Public Open House – Bryan Patterson reviewed the topics addressed at the September 18 TAC/stakeholder meeting, which included: a discussion of the key findings in Tech Memos 1, 2, and 3; study area opportunities and constraints; and TAC input on potential conceptual alternatives. Bryan also reported that there was surprisingly good attendance at the October 18 Public Open House at Tonopah Valley High School. There were three general categories of attendees: (1) area residents and land owners who are supportive of transportation improvements that will enhance property values, (2) area residents and land owners who want to preserve the existing rural character of the study area, and (3) land developers who are also supportive of transportation improvements that will serve future development.

Comments on Draft Technical Memos 1, 2, and 3 – Bryan reported that the comment period was extended to provide adequate time for responses from all TAC/stakeholder representatives who wanted to submit comments. Comment summary and response forms along with the final versions of the tech memos are now on the KHA FTP site. Instructions for accessing the site were e-mailed to TAC/stakeholder representatives.

Conceptual Alternatives Development – Bryan explained that "conceptual alternatives" represent a broad spectrum of potentially feasible alternatives that would be narrowed down to as many as three "candidate alternatives" that would be evaluated in greater detail. Guiding the selection of locations for the conceptual alternatives were the identified opportunities/constraints, development master plans,

findings from project team field reviews and brainstorming sessions, and TAC, stakeholder, and public input. An exhibit showing the conceptual alternatives was presented to the TAC/stakeholders.

Identified opportunities/constraints within the project study area limits include predominance of vacant land, farming operations, State Trust and BLM land, existing and planned communities with roadway right-of-way and easements, few existing roads, I-10/411th Avenue interchange, planned transportation network, Hassayampa River, utilities, Tonopah Canal, potential sand/gravel operations, wildlife linkage zones, recreational trails, Sonoran desert tortoise habitat, FEMA floodplains, cultural resources, flat terrain, wash crossings and alluvial fans.

There are fourteen existing or planned developments within the project study area that include existing or stipulated right-of-way or easements for major roadways, primarily along the 411th Avenue and Northern Avenue section line alignments. Most of the conceptual alternatives follow these roadway right-of-way or easement alignments or are at least compatible with them where feasible.

Evaluation Criteria – Bryan presented the preliminary evaluation criteria against which the conceptual alternatives were evaluated to identify preliminary candidate alternatives that should be subjected to more detailed evaluation. The evaluation criteria consisted of future development compatibility, system continuity and capacity, drainage impacts, irrigation impacts, building/property impacts, cultural/ archaeological impacts, wildlife impacts, utility impacts, public acceptability, and cost. The evaluation of the conceptual alternatives was based on a qualitative "fatal flaw" approach.

No major concerns or issues were raised by the TAC or stakeholders regarding the presented evaluation criteria, although it was noted that some of the curved alignments could result in unusable remnant parcels or could impact existing irrigation facilities.

Preliminary Candidate Alternatives – Bryan indicated that due to the large amount of existing or stipulated right-of-way/easements for major roadways in the project study area, the conceptual alternatives that seem most viable are those generally along the existing or planned roadways or section lines. Bryan presented a map showing the selected preliminary candidate alternatives. The preliminary candidate alternatives are described in more detail below:

Tonopah Parkway – I-10 to Northern Parkway
For the north-south portion of the project study area that corresponds to Tonopah Parkway, three parallel preliminary candidate alternatives were identified for the Tonopah Parkway alignment. The centerline for Alternative A is the 411th Avenue section line. The centerline for Alternative B is shifted 35' to the west of Alternative A. The centerline for Alternative C is shifted 35' to the east of Alternative A.

Northern Parkway – Tonopah Parkway to 363rd Avenue
Two preliminary candidate alternatives were identified for the east-west Northern Parkway alignment between Tonopah Parkway and 363rd Avenue. The centerline for the first alternative is the Northern Avenue section line. The centerline for the second alternative is along the Butler Drive alignment, one-half mile north of the Northern Avenue section line, with a curved segment between 371st Avenue and 363rd Avenue that brings the second alternative alignment down to the Northern Avenue section line just west of 363rd Avenue.

Northern Parkway – 363rd Avenue to Bruner Road
One preliminary candidate alternative was identified for the east-west Northern Parkway alignment between 363rd Avenue and Bruner Road. The centerline for this alternative follows the right-of-way already stipulated for Northern Parkway in the Belmont development master plan (primarily the full 200' right-of-way needed for a parkway). This alignment dips approximately one-half mile south of the Northern Avenue section line between 363rd Avenue and 339th Avenue and then follows the Northern Avenue section line between 339th Avenue and Bruner Road.

This segment of Northern Parkway includes a crossing of the Hassayampa River. Bryan noted that additional analysis will be needed to determine if the roadway alignment across the Hassayampa River needs to shift slightly to the north or south to provide a more economical crossing of the river, but that the general idea was to stay as close to the Northern Avenue section line as possible.

Northern Parkway – Bruner Road to Turner Parkway
Two preliminary candidate alternatives were identified for the east-west Northern Parkway alignment between Bruner Road and Turner Parkway. The centerline for the first alternative is the Northern Avenue section line. The centerline for the second alternative curves south of the Northern Avenue section line just west of the existing 500 kV power lines and then parallels those power lines until reaching the Glendale Avenue section line, where it then goes along the Glendale Avenue alignment as shown in the Anthem Sun Valley master plan, ending at Turner Parkway about two-thirds of a mile south of the Northern Avenue section line.

The Northern Avenue section line includes a potentially constrained area near Sun Valley Parkway due to several power line towers clustered near the planned Northern Avenue/Sun Valley Parkway intersection. Bryan noted that additional analysis will be needed to determine if the roadway alignment across the power lines needs to shift slightly to the north or south to provide a more economical crossing of the power lines, but that the general idea was to stay as close to the Northern Avenue section line as possible.

Input on Preliminary Candidate Alternatives
Input received from the TAC/stakeholders was generally in favor of the preliminary candidate alternative alignments except for the alternative that shifts Northern Parkway south of the Northern Avenue section line between Bruner Road and Turner Parkway. Several TAC/stakeholder representatives voiced opposition to this southerly shift for Northern Parkway for the following reasons: the curved connections create unusable remnant parcels, the alignment doesn't follow the planned roadway networks of Mirielle, Sun Valley South, or Sun Valley Villages III and IV, the alignment would require additional right-of-way from Anthem Sun Valley, the alignment would change the character of the planned Northern Avenue and Glendale Avenue roadways through Anthem Sun Valley (separating the community), and an existing production well would be impacted.

After hearing the TAC/stakeholder input on the proposed southerly shift for Northern Parkway between Bruner Road and Turner Parkway, Bryan asked the TAC/stakeholders if they thought this alternative should be eliminated from further consideration. There was general consensus that this alternative should be eliminated, leaving only one alternative (along the Northern Avenue section line) for Northern Parkway between Bruner Road and Turner Parkway. TAC/stakeholder representatives suggested that the effort that would have been spent evaluating the southerly shift would be better

spent on more detailed analysis of alignment constraints at the planned Northern Avenue/Sun Valley Parkway intersection.

Next Steps – The next steps in the study process are to: finalize and evaluate the candidate alternatives, submit draft tech memo 4 – Candidate Alternative Alignments and Evaluation for TAC review, conduct the 4th TAC/stakeholder meeting, and conduct the second public open house.

TAC/Stakeholder Roundtable – TAC/stakeholder representatives expressed a consensus for proceeding with a more detailed evaluation of:

- the three Tonopah Parkway candidate alternatives;
- the two Northern Parkway candidate alternatives west of 363rd Avenue; and
- a single Northern Parkway candidate alternative east of 363rd Avenue, with more detailed alignment analysis at the Hassayampa River and where the power lines would be crossed.

Northern Parkway/Tonopah Parkway Corridor Feasibility Study

Technical Advisory Committee Members and Stakeholders

First Name	Last Name	Title	Company	E-mail	Phone	Address	City	State	Zip	TAC/Stakeholder Meeting Attendance				
										1	2	3	4	5
Aaron	Ashcroft	Civil Engineer	Central Arizona Project	aashcroft@cap-az.com	623-869-2257	23636 N. 7th St.	Phoenix	AZ	85080	X	X			
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Robyn	Calihan	Project Manager	LKY Development/Belmont	rcalihan@lkydev.com	480-951-1281/602-315-5474	5040 E. Shea Blvd. #254	Scottsdale	AZ	85254					
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Kay	McNeely	Water Resources Specialist IV	ASLD	kmcneely@land.az.gov	602-542-3681	1616 W. Adams St.	Phoenix	AZ	85007	X	X			
Jackie	Meck	Mayor	Town of Buckeye	jmeck@buckeyeaz.gov	623-349-6950	530 E. Monroe Ave.	Buckeye	AZ	85326					
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Joe	Pinto	Environmental Planner	MCDOT	joepinto@mail.maricopa.gov	602-506-8068	2901 W. Durango St.	Phoenix	AZ	85009		X			
Bill	Ring	Project Manager	LKY Development/Belmont	ringeraz@yahoo.com	480-951-1281/602-402-1716	5040 E. Shea Blvd.	Scottsdale	AZ	85254					
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Jami	Schulman		Communities Southwest	jschulman@commsw.com	480-315-2618	7001 N. Scottsdale Rd., 1015	Scottsdale	AZ	85253			X		
Woody	Scouten	Engineer	Town of Buckeye	woody@scoutten.com	623-547-4661x244	1646 N. Litchfield Rd., Ste 235	Goodyear	AZ	85338	X		X*		
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Ray	Strauss	District 4 Councilmember	Town of Buckeye	rstrauss@buckeyeaz.gov	623-349-6949	530 E. Monroe Ave.	Buckeye	AZ	85326					
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Valerie	Swick	Project Manager	Flood Control District	vas@mail.maricopa.gov	602-506-2929	2801 W. Durango St.	Phoenix	AZ	85009	X	X	X		
Gordon	Taylor	Planning and Engineering	ASLD	Gtaylor@land.az.gov		1616 W. Adams St.	Phoenix	AZ	85007					
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SCOTT Patrick	LOWE Brown	PUBLIC WORKS DIRECTOR Pulte Home Project Manager	TOWN of BUCKEYE Pulte	SLOWE@BUCKEYEAZ.GOV Patrick.Brown@PulteGroup.com	623 349 6815 480-862-7856	530 E. MONROE AVE 16767 N. Perimeter Dr.	BUCKEYE AZ Scottsdale AZ		85326 85260			X		

X = In attendance

X* = Substitute in attendance

Scott Zippich for JHS

11/15/2010

Northern Parkway/Tonopah Parkway
Corridor Feasibility Study
Work Order TT005
Contract No. 2010-004

TECHNICAL ADVISORY COMMITTEE AND STAKEHOLDER MEETING

DATE: WEDNESDAY, FEBRUARY 23, 2011
TIME: 1:30 PM
LOCATION: MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
2901 WEST DURANGO STREET
MARICOPA/COCHISE CONFERENCE ROOMS
PHOENIX, ARIZONA

AGENDA

1. Introduction and Opening Comments
2. Meeting Purpose
3. Summary of November 15 TAC Meeting, February 15 Open House, and Comments Received to Date
4. Alternatives Selected for Further Evaluation
5. Evaluation of Alternatives
6. Preferred Alignment
7. Comments on Draft Technical Memorandum 4 - *Candidate Alternative Alignments and Evaluation*
8. Next Steps
9. Roundtable Discussion

FOR MORE INFORMATION CONTACT:
DENISE LACEY, MCDOT (602) 506-6172 OR
BRYAN PATTERSON, KIMLEY-HORN (480) 756-6135

Northern Parkway
Tonopah Parkway
Corridor Feasibility Study

TAC/Stakeholder Meeting No. 4

February 23, 2011

Right Road Right Time Right Cost

Meeting Purpose

- Summarize November 15 TAC Meeting and February 15 Open House
- Present and discuss alternatives, evaluation of alternatives, and preferred alignment
- Obtain comments on Technical Memorandum 4 – *Candidate Alternative Alignments and Evaluation*
- Discuss next steps
- Roundtable discussion

Summary of November 15 TAC Meeting

- Reviewed opportunities and constraints
- Discussed conceptual alternatives, preliminary candidate alternatives, and evaluation criteria
- TAC/Stakeholder recommendations:
  - Eliminate alternative that shifts south of Northern Avenue between Bruner Road and Turner Parkway from further consideration

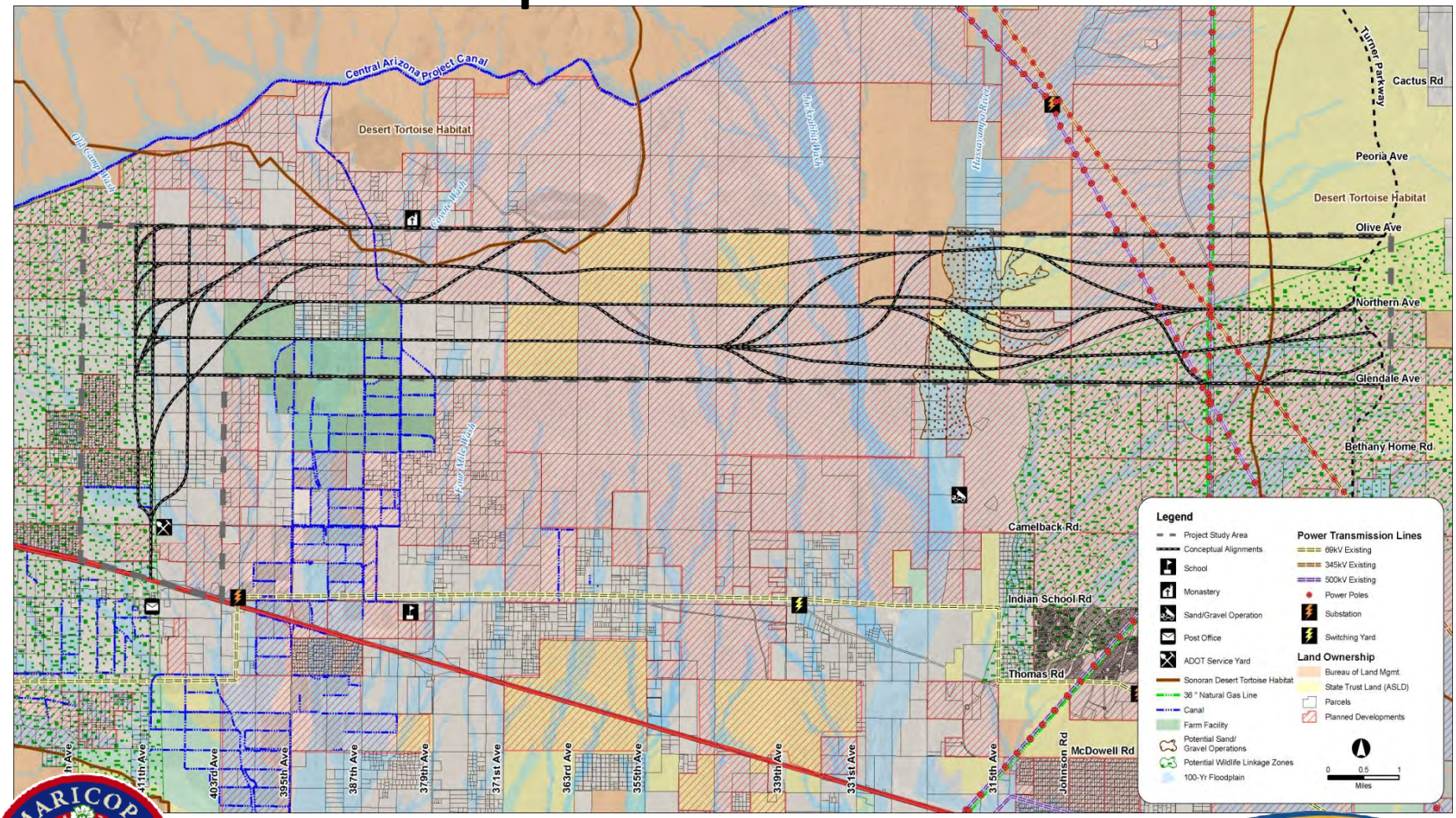
Summary of November 15 TAC Meeting - Continued

- Evaluate three Tonopah Parkway Alternatives
- Evaluate two Northern Parkway Alternatives west of 363rd Avenue
- Evaluate one Northern Parkway Alternative east of 363rd Avenue
- Perform more detailed analysis at Hassayampa River Crossing and Sun Valley Parkway Intersection

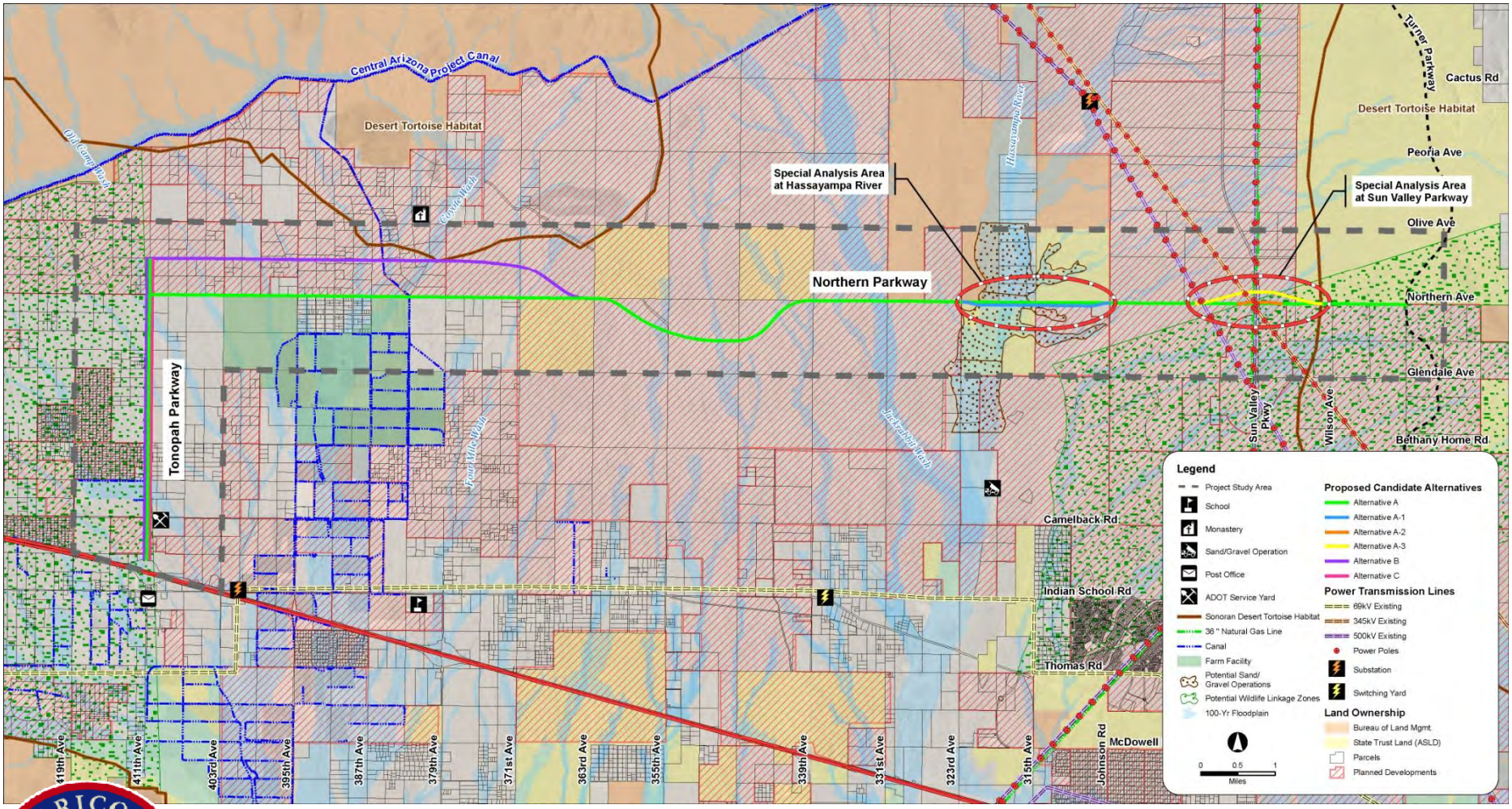
Summary of February 15 Open House

- Held at Tonopah Valley High School – 50+ attendees
- General support for more roadways in the study area to improve access and reduce dust pollution
- Preference for following section lines
- Concern about wildlife impacts – tortoises, deer, bighorn sheep
- Want improved access to monastery on north study boundary
- How will the project be financed – will it increase taxes?
- What is the timing for the project?
- What is a parkway and how does it operate?
- Good idea to be planning for the future

Conceptual Alternatives



Candidate Alternatives



Evaluation Criteria

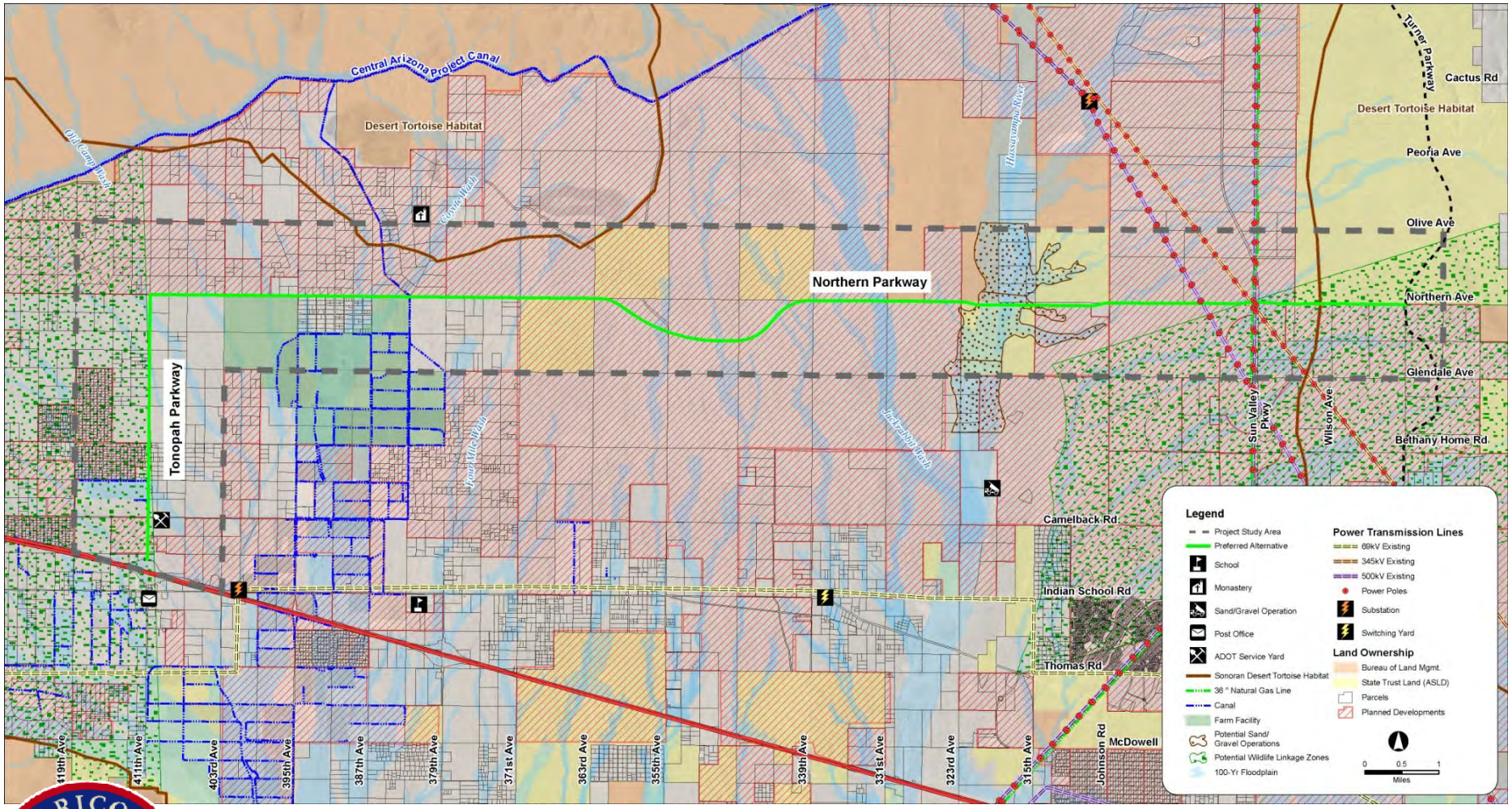
- Future development compatibility
- System continuity and capacity
- Drainage impacts
- Irrigation impacts
- Building/property impacts
- Wildlife impacts
- Cultural/archaeological impacts
- Utility impacts
- Public acceptability
- Cost

Evaluation Matrix

Evaluation Criteria	Tonopah Parkway Candidate Alternatives				Northern Parkway Candidate Alternatives		
	No-Build	*Alt. A*	*Alt. B*	*Alt. C*	*No-Build*	*Alt. A*	*Alt. B*
Future Development Compatibility	◒	○	◒	◓	●	◓	◒
System Continuity and Capacity	●	◎	◓	◓	●	◎	◓
Drainage Impacts	◒	◓	◓	◓	●	◓	◓
Irrigation Impacts	○	◒	◒	◒	○	◒	◒
Building/Property Impacts	○	◒	●	●	○	◒	◒
Wildlife Impacts	○	◒	◒	◒	○	◒	◒
Cultural/Archaeological Impacts	○	◒	◒	◒	○	◒	◒
Utility Impacts	○	◒	◒	◒	○	◒	◒
Public Acceptability	◒	◓	◒	◒	◒	◓	◒
Cost	○	◒	◒	◒	◓	◒	●

LEGEND: Strong advantage ◎ Advantage ◓ Neutral ○ Disadvantage ◒ Strong disadvantage ●

Preferred Alternatives



Comments Due on Draft Tech Memo 4

- Draft Tech Memo 4 posted on project FTP site on February 8
- Comment period closes today.

Next Steps

- Publish Final Tech Memo 4 - *Candidate Alternative Alignments and Evaluation*
- Prepare detailed drawings for preferred alignment
- Submit Draft Tech Memo 5 - *Detailed Preferred Alignment* for TAC review in March
- Hold 5th TAC Meeting (if necessary) and 3rd Open House in March
- Prepare Draft and Final Reports

Project Schedule

TAC/Stakeholder #1 – Project Initiation	July 14, 2010
Existing and Future Conditions	September 2010
TAC/Stakeholder #2 – Existing and Future Conditions	September 22, 2010
Scoping Open House	October 18, 2010
TAC/Stakeholder #3 – Conceptual Alternatives and Criteria	November 15, 2010
Existing Conditions/Conceptual Alternatives Open House	February 15, 2011
Alternatives Development and Evaluation	February 2011
TAC/Stakeholder #4 – Alternatives Evaluation	February 23, 2011
Preferred Alternative	March 2011
Alternatives Evaluation/Preferred Alternative Open House	March 2011
Detailed Preferred Alignment	March 2011
TAC/Stakeholder #5 – Preferred Alignment	March 2011
Draft Final Report	April 2011
Final Report	May 2011

Roundtable Discussion

Bighorn Sheep Overpass on U.S. 93

Source: Arizona Game and Fish Department

Meeting Purpose

This was the fourth Technical Advisory Committee (TAC)/stakeholder meeting. Purposes of the meeting were to:

- Summarize input from the November 15, 2010 TAC/stakeholder meeting and February 15, 2011 public open house;
- Present and discuss alternatives, evaluation of alternatives, and preferred alignment;
- Obtain comments on Technical Memorandum 4 – *Candidate Alternative Alignments and Evaluation*; and
- Discuss next steps.

Participants

See attached attendance list.

Meeting Summary

Introduction and Opening Comments – Denise Lacey welcomed the participants, thanked them for providing their input on the project, and asked them to introduce themselves.

Summary of the November 15 TAC Meeting and February 15 Public Open House – Bryan Patterson reviewed the topics addressed at the November 15, 2010 TAC/stakeholder meeting, which included: a review of study area opportunities and constraints; conceptual alternatives; candidate alternatives, and evaluation criteria. Recommendations from the meeting included:

- Eliminate Alternative C, the southerly shift between Bruner Road and Turner Parkway, from further consideration;
- Evaluate three Tonopah Parkway alternatives on the 411th Avenue alignment;
- Evaluate two Northern Parkway alternatives west of 363rd Avenue and one alternative east of 363rd Avenue; and
- Perform a more detailed analysis at the Hassayampa River Crossing and Sun Valley Parkway intersection.

Bryan reported that there were over 50 attendees at the February 15, 2011, Public Open House at Tonopah Valley High School. There was general support at this open house for transportation improvements in the area to provide better access, reduce dust pollution, and provide all-weather drainage crossings. Some attendees expressed a desire to retain the rural character of the area and protect wildlife. Alternative A for both the Tonopah Parkway and Northern Parkway received the most favorable public response.

Alternatives Selected for Further Evaluation – Bryan reviewed the alternatives development process. The process included a broad range of conceptual alternatives that were narrowed to a smaller number of alternatives for a more in-depth qualitative evaluation. The alternatives selected for further evaluation are described as follows:

Tonopah Parkway – I-10 to Northern Parkway
For the north-south portion of the project study area that corresponds to Tonopah Parkway, three alternatives were selected and evaluated. The centerline for Alternative A is the 411th Avenue section line. The centerline for Alternative B is shifted 35' to the west of Alternative A. The centerline for Alternative C is shifted 35' to the east of Alternative A.

Northern Parkway – Tonopah Parkway to 363rd Avenue
Two alternatives were evaluated for the east-west Northern Parkway alignment between Tonopah Parkway and 363rd Avenue. The centerline for Alternative A is the Northern Avenue section line. The centerline for Alternative B is along the Butler Drive alignment, one-half mile north of the Northern Avenue section line, with a curved segment between 371st Avenue and 363rd Avenue that brings Alternative B alignment down to the Northern Avenue section line just west of 363rd Avenue.

Northern Parkway – 363rd Avenue to Turner Parkway
One preliminary candidate alternative was identified for the east-west Northern Parkway alignment between 363rd Avenue and Turner Parkway. The centerline for this alternative follows the right-of-way already stipulated for Northern Parkway in the Belmont development master plan (primarily the full 200' right-of-way needed for a parkway). This alignment dips approximately one-half mile south of the Northern Avenue section line between 363rd Avenue and 339th Avenue and then follows the Northern Avenue section line between 339th Avenue and Turner Parkway.

This segment of Northern Parkway includes a crossing of the Hassayampa River. Bryan noted that additional analysis was performed to determine if the roadway alignment across the Hassayampa River needs to shift slightly to the north or south to provide a more economical crossing of the river. It was determined that there were no significant drainage or topography issues that would warrant a shift away from the Northern Avenue section line. However, there is a 200'-wide parcel on the south side of the section line in the vicinity of the Hassayampa River that provides an opportunity to shift the centerline slightly to the south. A southerly shift would make full use of the 200' wide parcel and eliminate leaving an unusable remnant parcel. For this reason the southerly shift shown as Alternative A-1is recommended in this area.

This segment of Northern Parkway also includes a potentially constrained area near Sun Valley Parkway due to several power line towers clustered near the planned Northern Avenue/Sun Valley Parkway intersection. Two alternatives were developed, Alternative A-2 and A-3, to shift the parkway to the north of the Northern Avenue section line to avoid relocating any existing power poles.

In recent communications between Frank Hoffmann, APS, and SRP, it has been determined that it is feasible to relocate the towers at an estimated cost of $400,000 to $500,000 per tower, provided that there are no changes to the existing power line alignment. Based on this information, it is now recommended that Alternative A (Northern Avenue section line) should be the preferred alignment at Sun Valley Parkway and the tower relocation option should be pursued further with the utility companies, MCDOT, and the Town of Buckeye.

Evaluation of Alternatives – Bryan briefly recapped the alternatives evaluation criteria of: future development compatibility, system continuity and capacity, drainage impacts, irrigation impacts, building/property impacts, cultural/ archaeological impacts, wildlife impacts, utility impacts, public

acceptability, and cost. Michael Grandy then provided a more detail description of how each parkway alternative was rated for these criteria as follows:

Tonopah Parkway

Future Development – the No-Build Alternative is not compatible with future development plans. Planned developments in the area are based on the assumption that 411th Avenue ultimately be a major arterial rather than a parkway. Alternative C would require the least additional right-of way through planned developments.

System Continuity and Capacity – the No-Build Alternative does not provide the level of service needed to accommodate long-term traffic projections. Alternative A provides the best system continuity with a direct connection to the existing I-10 interchange at 411th Avenue.

Drainage Impacts – the No-Build Alternative will not provide all-weather access in the study area. All three alternatives will provide similar levels of improved all-weather access.

Irrigation Impacts – the No-Build Alternative will have no impact on existing irrigation facilities. All three alternatives will require some relocation of irrigation facilities that are near 411th Avenue.

Building/Property Impacts – the No-Build Alternative will have no impacts on existing buildings or properties. Alternative A has the most equitable property impacts while Alternatives B and C will require the most relocation of existing buildings.

Wildlife Impacts – the No-Build Alternative will have no impacts on wildlife. Alternatives A, B, and C all will have similar degrees of negative impacts on wildlife movement in the area.

Cultural/Archaeological Impacts - the No-Build Alternative will have no impacts on cultural or archaeological resources. Alternatives A, B, and C all will have similar degrees of negative impacts on cultural or archaeological resources in the area.

Utility Impacts – the No-Build Alternative will have no impacts on existing utilities. Alternatives A, B, and C will all require similar utility relocations, primarily 12 kV electrical service lines.

Public Acceptability – the No-Build Alternative is supported by those in the area who want to preserve the rural character, but there appears to be more support for improving transportation facilities in the area to provide better all-weather access to properties. Alternative A is most heavily favored by the public and stakeholders due to its section-line alignment.

Cost – there are no capital costs associated with the No-Build Alternative. There are no significant capital or maintenance cost differences among Alternatives A, B, and C.

Northern Parkway

Future Development – the No-Build Alternative is not compatible with future development plans. Planned developments in the area are based on the assumption that Northern Avenue ultimately be a

major arterial or a parkway. Alternative A is the most compatible with planned developments in the study area.

System Continuity and Capacity – the No-Build Alternative does not provide the level of service needed to accommodate long-term traffic projections. Alternative A provides the most direct east-west system continuity while Alternative B would require out-of-direction travel due to its location ½ mile farther to the north.

Drainage Impacts – the No-Build Alternative will not provide all-weather access in the study area. Both alternatives will provide similar levels of improved all-weather access.

Irrigation Impacts – the No-Build Alternative will have no impact on existing irrigation facilities. Both alternatives will require some relocation of irrigation facilities in the western portion of the study area.

Building/Property Impacts – the No-Build Alternative will have no impacts on existing buildings or properties. There are very few buildings in close proximity to either alternative, so they have similar building and property impacts.

Wildlife Impacts – the No-Build Alternative will have no impacts on wildlife. Both alternatives will have similar degrees of negative impacts on wildlife movement in the area.

Cultural/Archaeological Impacts - the No-Build Alternative will have no impacts on cultural or archaeological resources. Both alternatives will have similar degrees of negative impacts on cultural or archaeological resources in the area.

Utility Impacts – the No-Build Alternative will have no impacts on existing utilities. Both alternatives will require similar utility relocations, primarily 12 kV electrical service lines.

Public Acceptability – the No-Build Alternative is supported by those in the area who want to preserve the rural character, but there appears to be more support for improving transportation facilities in the area to provide better all-weather access to properties. Alternative A is most heavily favored by the public and stakeholders due to its section-line alignment and its compatibility with development master plans.

Cost – there are no capital costs associated with the No-Build Alternative. Alternative A will have a slightly lower capital and maintenance cost because it is approximately one mile shorter in overall length.

Michael concluded the alternatives evaluation overview by indicating that Alternative A for the Tonopah Parkway and Alternative A for the Northern Parkway are recommended as the preferred alignments.

Comments on Draft Technical Memorandum 4 – *Candidate Alternative Alignments and Evaluation* – Bryan reported that comments have been received from MCDOT, Arizona State Lands, and LKY Development/Belmont. The comment period will be kept open until Friday, February 25, 2011, to provide sufficient time for TAC/stakeholder members to provide input.

Next Steps – The next steps in the study process are to:

- Finalize Technical Memorandum 4;

- Prepare detailed drawings of the preferred alignment at a scale of 1" = 200';
- Follow up with the Town of Buckeye and utility companies on the electrical tower relocation issues near Sun Valley Parkway;
- Prepare a draft of Technical Memorandum 5 – *Detailed Preferred Alignment* for TAC review and comment;
- Hold the third public open house in late March;
- Prepare a draft final report for TAC review and comment; and
- Publish the final report.

TAC/Stakeholder Roundtable – TAC/stakeholder representatives concurred with the recommendation to proceed with Alternative A as the preferred alignment for both the Tonopah Parkway and the Northern Parkway. There was discussion regarding whether or not there would be grade separations at the Sun Valley Parkway and Hassayampa Freeway. Sun Valley Parkway is planned to be an at-grade intersection while the planned Hassayampa Freeway needs to have a grade separation. These features will be shown on the detailed alignment drawings. There was also discussion about the need for a fifth TAC/Stakeholder meeting. There was general consensus that a fifth TAC/Stakeholder meeting will not be needed unless new issues or concerns are raised that significantly impact the recommendations from today's meeting. Additional one-on-one meetings can be scheduled to address specific concerns or issues that TAC/Stakeholders may have. Denise again thanked everyone for their participation and assistance in providing valuable input to the project.

Northern Parkway/Tonopah Parkway Corridor Feasibility Study

Technical Advisory Committee Members and Stakeholders

First Name	Last Name	Title	Company	E-mail	Phone	Address	City	State	Zip	TAC/Stakeholder Meeting Attendance				
										1	2	3	4	5
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Ken	Davis	Senior Engr Mgr. - Operations	FHWA	Ken.davis@dot.gov	602.382.8970	4000 N. Central Ave Phx Suite 1500	AZ		85012					

X = In attendance

X* = Substitute in attendance

2/23/2011

Meeting Purpose

The purpose of this coordination meeting was to inform the Arizona State Land Department (ASLD) about the Northern Parkway (Hassayampa Section) Corridor Feasibility Study and obtain ASLD input on the study.

Participants (see attached sign-in sheet for contact information)

Kay McNeely – ASLD Planning & Engineering
Gordon Taylor – ASLD Planning & Engineering
Lillian Moodey – ASLD Planning & Engineering
Mark Edelman – ASLD Planning & Engineering
Manny Patel – ASLD Planning & Engineering
Ruben Ojeda – ASLD Right-of-Way
Sue Russell – ASLD Right-of-Way
Keenan Murray – ASLD Minerals
Joe Dixon – ASLD Minerals
Willie Sommers – ASLD Range
Denise Lacey – Maricopa County Department of Transportation (MCDOT)
Bryan Patterson – Kimley-Horn and Associates, Inc. (KHA)
Michael Grandy – KHA

Meeting Summary

After introductions, Denise Lacey discussed the purpose, objectives, and study area of the Northern Parkway (Hassayampa Section) Corridor Feasibility Study. There are seven State Trust Land parcels in the study area for which ASLD is responsible – three west of the Hassayampa River and four east of the Hassayampa River. The main point of contact for ASLD on this study will be Kay McNeely, although Ruben Ojeda, Joe Dixon, and Keenan Murray asked to be added to the stakeholder database. ASLD mentioned that there are various divisions and sections within ASLD that could have an interest in the study, and as such, the different ASLD staff in attendance wanted to inform MCDOT and KHA of their interests and concerns in the study area.

Range – There are no grazing leases or permits on the four State Trust Land parcels east of the Hassayampa River. There are grazing special land permits on the three State Trust Land parcels west of the Hassayampa River. The annual fee for these permits is $165. Any facilities owned by ASLD or constructed by others through an approved permit with ASLD would be subject to reimbursement if they have to be removed or relocated for the proposed roadway. Currently, there are no such reimbursable facilities, although several facilities have been placed without approval from ASLD in Section 32 (3N 5W) that would not be eligible for reimbursement. These include an above-ground storage tank, a concrete drinking tank, and piping to a well on private land in Section 6. There is also a barbed wire fence in Section 36 and a well in Section 2.

Minerals – There are no current sand/gravel operations permits along the Hassayampa River in the study area. ASLD is concerned about how a proposed bridge where Northern Parkway crosses the Hassayampa River would impact the potential for future sand/gravel operations due to restrictions on sand/gravel operations within one mile upstream and two miles downstream of a bridge. Denise Lacey will follow up with MCDOT bridge staff to confirm what the restrictions are on sand/gravel operations

near MCDOT bridges. Keenan Murray was involved in a Mineral Assessment Asset Management GIS (MAAMGIS) project several years ago that mapped some of the potential aggregate locations in the Hassayampa River area that could potentially be good candidates for sand/gravel operations. He will send over to KHA more information on MAAMGIS and GIS files for the locations of the potential aggregate locations. ASLD is also concerned about access points for left-turning movements for sand/gravel operations vehicles if the indirect left-turn concept is implemented along Northern Parkway.

Right-of-Way – Any impacts to right-of-way or potential mineral value loss from Northern Parkway will need to be reimbursed. Any field work to be done by MCDOT or KHA should be done under an approved letter right-of-way entry permit from ASLD. Ruben Ojeda will send the right-of-way entry permit forms to KHA through Kay McNeely.

Planning – The development master planning done for Belmont includes the State Trust Land parcels west of the Hassayampa River. ASLD coordinated with Jason Hadley from Belmont to provide input from ASLD into the development master planning process. Belmont needs a plat approval by mid-2011 for the development master plan to remain in place. No master planning has taken place on the State Trust Land parcels east of the Hassayampa River, but ASLD did do an integrated land use White Tanks Conceptual Master Plan for the State Trust Land parcels near the White Tank Mountains that Buckeye incorporated into the land use plan within the Buckeye General Plan. The community of Tonopah has considering potentially incorporating in the past but ASLD does not support the incorporation.

Engineering – ASLD is interested in what the future land uses will be within the study area for parcels near State Trust Land parcels and how off-site drainage will be handled on those adjacent parcels. ASLD would like the Northern Parkway alignment to minimize remnant ASLD parcels and to not create additional floodplains. The Flood Control District of Maricopa County (FCDMC) is doing a water course master plan for the Hassayampa River that may provide pertinent data to this study.

Action Items

- KHA to add Ruben Ojeda, Joe Dixon, and Keenan Murray to the study's stakeholder database;
- Denise Lacey to follow up with MCDOT bridge staff to confirm what the restrictions are on sand/gravel operations near MCDOT bridges;
- Keenan Murray to send over to KHA more information on MAAMGIS and GIS files for the locations of the potential aggregate locations;
- ASLD to send the right-of-way entry permit forms to KHA. KHA/MCDOT will fill them out and return them to ASLD so a permit can be issued for KHA and MCDOT to access the study area ASLD parcels for data collection purposes; and
- ASLD, KHA, and MCDOT to continue collaborating and communicating throughout the study.

Meeting Attendance Sign-In Sheet

PLEASE PRINT INFORMATION

Date: 6/23/10 **Project / Application No.:** NORTHERN PARKWAY CORRIDOR

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5	Sue Russell	ASLD - ROW	602-542-3115	srussell@land.az.gov
6	Kay McNeely	ASLD - P+E	602.542.3618	kmcneely@land.az.gov
7	Michael Grandy	Kimley-Horn	480 756 6137	michael.grandy@kimley-horn.com
8	Denise Lacey	MCDOT	602-506-6172	deniselacey@mail.maricopa.gov
9	Bryan Patterson	Kimley-Horn	480-201-9163	bryan.patterson@kimley-horn.com
10	Keenan Murray	ASLD - Minerals	602-542-2686	Kmurray@land.az.gov
11	Joe Dixon	ASLD - Minerals	602-542-2685	j.dixon@land.az.gov
12	Willie Sommers	ASLD - Range	602-542-2696	wsommers@land.az.gov
13	Manny Patel	ASLD - Engineering	602-364-2596	mpatel@land.az.gov
14				
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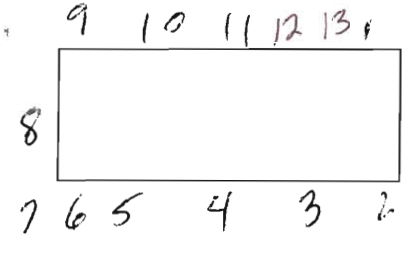
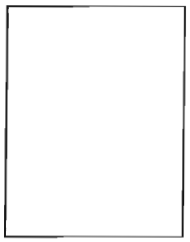
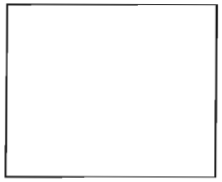
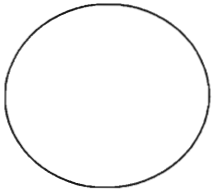
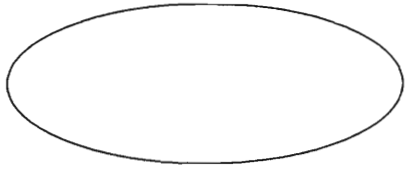










Attendees Table Position

Northern Parkway/Tonopah Parkway Corridor Feasibility Study
Coordination Meeting with Our Lady of Solitude Monastery
March 15, 2011

Meeting Purpose

The purpose of this coordination meeting was to follow up on questions and concerns that Sister Marie Andre of the Poor Clares of Perpetual Adoration (PCPA) had regarding the preliminary candidate alternatives for the Northern Parkway/Tonopah Parkway and to better understand and to discuss potential impacts to their current and planned facilities.

Participants

Sister Marie Andre, PCPA
Father Cohan (Visiting Priest from Washington, D.C.)
Roberta Crowe – Maricopa County Department of Transportation (MCDOT)
Denise Lacey – Maricopa County Department of Transportation (MCDOT)
Sarah Eichinger – Kimley-Horn and Associates, Inc. (KHA)

Meeting Summary

The Monastery consists of 40 acres of fenced property on 381st Ave approximately one mile north of the Northern Avenue alignment. There are several structures within the compound including living quarters for the Sisters, a separate guest accommodation, a well and water tank facility and the Chapel. The Chapel is an impressive Renaissance revival styled church built following a Basilica plan; the exterior is finished while the interior is still a work in progress. The Monastery and Chapel are currently not open to the public – a ceremony is scheduled for May 7, 2011, that will officially open the facility.

There are currently five Sisters that live at the Monastery full time. Plans for the Monastery include the construction of a cloistered living/working space for the Sisters (for up to 28 Nuns) attached to the Chapel on the north side of the building. This structure will be enclosed and once completed the Sisters will be cloistered in this facility. Additional uses within the facility will include a workshop, common space and sleeping quarters to accommodate visiting Sisters and Priests on retreat as well as friends & family of the Sisters & Priest.

Following a tour of the Chapel with Sr. Marie Andre and Father Cohan, we discussed the status of the current project and answered questions regarding the nature of corridor feasibility studies and what next steps may be taken after this project is concluded. The Sisters are very interested in the future development of and transportation studies for the area including the Hassayampa Framework Study, the Hidden Waters North Corridor Feasibility Study and the future Hassayampa Freeway/I-11 study. Their main concern is maintaining the serenity of their site while still enjoying ease of access.

Action Items

- KHA to share contact information with all.
- MCDOT to provide information regarding the Hassayampa Framework Study to the Sisters.

Northern Parkway/Tonopah Parkway Corridor Feasibility Study
Coordination Meeting with Pulte
November 15, 2010

Meeting Purpose

The purpose of this coordination meeting was to present conceptual alternatives and preliminary candidate alternatives for Northern Parkway to Pulte and to discuss potential impacts on Anthem Sun Valley, which is being developed by Pulte.

Participants

Josh Hartmann – Pulte Group
Patrick Brown – Pulte Homes, Inc.
Denise Lacey – Maricopa County Department of Transportation (MCDOT)
Bryan Patterson – Kimley-Horn and Associates, Inc. (KHA)
Michael Grandy – KHA

Meeting Summary

Denise Lacey discussed the status of the project and explained the need to consider the impact that alternatives for Northern Parkway may have on Pulte's Anthem Sun Valley community master plan.

Bryan Patterson provided exhibits showing the range of conceptual parkway alternatives and the preliminary candidate alternatives. He noted that there were two preliminary candidate alternatives, Alternative A and Alternative C, within the Anthem Sun Valley community master plan area between Sun Valley Parkway and Turner Parkway. The centerline for Alternative A is the Northern Avenue section line. The centerline for Alternative C goes along the Glendale Avenue alignment shown in the Anthem Sun Valley master plan, which starts at Sun Valley Parkway on the Glendale Avenue section line and ends at Turner Parkway about two-thirds of a mile south of the Northern Avenue section line.

Alternative A and Alternative C were selected as preliminary candidate alternatives because they follow previously planned roadway alignments and would minimize the amount of additional right-of-way needed for the 200' parkway. It is recognized that either alignment will impact the current Anthem Sun Valley plan because Anthem Sun Valley anticipated major arterial roadways instead of parkways traversing through the community.

Josh Hartmann and Patrick Brown from Pulte reiterated that a parkway along Northern Avenue (i.e., Alternative A) will require additional right-of-way through planned residential and commercial areas that include two schools and a park. A parkway along Glendale Avenue (i.e., Alternative C) will require additional right-of-way through several planned residential areas, a golf course, community center, worship center, park, school, and commercial areas. Alternative C would also likely have 404 environmental issues along the washes that parallel Glendale Avenue and school pedestrian crossing issues as the school along Glendale Avenue is anticipated to have students coming from properties on both sides of Glendale Avenue. Alternative C would also put the burden of the Northern Parkway 200' right-of-way requirement wholly on Pulte rather than having it split between developers, like would be the case with Alternative A, where Pulte would only be required to provide the southern 100' of parkway right-of-way.

Josh and Patrick said Pulte would prefer to keep its major arterial roadway network as currently planned to prevent having to revise the community master plan and the preplats that have already been prepared.

If, however, a parkway is going to be built through the Anthem Sun Valley area, Pulte's preference is the Alternative A alignment along the Northern Avenue section line as opposed to the Alternative C alignment along the planned Glendale Avenue alignment. Josh and Patrick said they would also prefer that Alternative C be dropped from consideration as a candidate alternative because it would impact Anthem Sun Valley significantly more than Alternative A and they do not consider it a viable alternative.

Northern Parkway/Tonopah Parkway Corridor Feasibility Study
Coordination Meeting with Town of Buckeye
November 1, 2010

Meeting Purpose

The purpose of this coordination meeting was to present conceptual alternatives and preliminary candidate alternatives for the Northern Parkway/Tonopah Parkway to the Town of Buckeye and to discuss potential impacts on master plan developments.

Participants

Larry Harmer, W. C. Scoutten, Inc.
Brian Kulina, Town of Buckeye
Denise Lacey – Maricopa County Department of Transportation (MCDOT)
Bryan Patterson – Kimley-Horn and Associates, Inc. (KHA)

Meeting Summary

Denise Lacey discussed the status of the project and explained the need to consider the impact that alternatives for the Northern Parkway/Tonopah Parkway may have on community master plans in the Buckeye Municipal Planning Area (MPA). Preliminary alternatives may need to be discussed in greater detail with the affected master plan developers.

Bryan Patterson provided exhibits showing the range of conceptual parkway alternatives, the preliminary candidate alternatives, and the potentially impacted master planned communities in the Buckeye MPA. Through the Buckeye MPA, the candidate alternatives follow either the Northern Avenue alignment or the Glendale Avenue alignment with a possible transition from Northern Avenue south to Glendale Avenue through a State Lands parcel along the Hassayampa River. The following is a summary of potential impacts on each master plan community:

Montiere – The Montiere development does not have any frontage directly on Northern Avenue and shows an arterial cross section for Glendale Avenue. As a result, a Parkway on Northern Avenue will not directly impact Montiere. A parkway on Glendale Avenue would require dedication of additional right-of-way and would impact the planned residential areas along Glendale Avenue. There are commercial and mixed use areas planned along Northern Avenue that would be better served by a Northern Avenue parkway alternative.

Mirielle – The Mirielle development is pursuing a plan amendment that is expected to show a parkway designation along the Northern Avenue alignment. Glendale Avenue is planned to dip south of the section line to connect to Johnson Road approximately 1/3 mile south of the section line. A parkway on the Glendale Avenue section line would impact planned medium density residential, park, mixed use, commercial, and high density residential land uses.

Sun Valley Villages III and IV – Sun Valley Villages III and IV are located north of the Northern Avenue Section line. A parkway is anticipated for the Northern Avenue alignment that would provide traffic service planned commercial and employment areas.

Sun Valley South – Sun Valley South is located south of the Northern Avenue Section line and anticipates a major arterial cross section along Northern Avenue and along Glendale Avenue. A

parkway along Northern Avenue or Glendale Avenue will require additional right-of-way through planned commercial areas.

Anthem Sun Valley – Anthem Sun Valley is located south of the Northern Avenue Section line and anticipates a major arterial cross section along Northern Avenue. A parkway along Northern Avenue will require additional right-of-way through planned residential and commercial areas. Glendale Avenue is planned as a major arterial that follows a meandering route north of the Glendale Avenue section line from Sun Valley Parkway to Turner Parkway. A parkway along Glendale Avenue will require additional right-of-way through several planned residential areas, a planned golf course, and planned commercial areas.

Valle Del Rio – Valle Del Rio is located south of the Glendale Avenue section line. A parkway along Glendale Avenue would impact planned commercial and mixed use parcels.

After reviewing the potential impacts of the Northern Avenue and the Glendale Avenue alternatives, Larry Harmer suggested considering an alternative that would transition from Northern Avenue South to Glendale Avenue along the west side of the power line easement just west of the Sun Valley Parkway. This alternative would have fewer impacts on the Montiere, Mirielle, and Valle Del Rio developments. In any case, the Glendale Avenue alternatives are a new consideration that will need to be reviewed with Woody Scoutten before being pursued further. Larry also asked for more detail on how the Northern and Glendale Avenue alternatives would intersect with Sun Valley Parkway and how they would avoid conflicts with the existing high voltage power lines/poles.

Action Items

- Larry Harmer and Brian Kulina to meet with Woody Scoutten the week of November 8-12 to review proposed parkway alternatives that were discussed.
- KHA to develop a parkway alternative that would transition from Northern Avenue to Glendale Avenue just west of the Sun Valley Parkway.
- KHA to provide more detail on intersections and power line/pole conflicts where Northern Avenue and Glendale Avenue intersect with Sun Valley Parkway.
- If Glendale Avenue alternative will be pursued further, KHA and MCDOT to schedule meetings with affected developers.

Kimley-Horn and Associates, Inc.

APPENDIX TM6-02

MCDOT RIGHTROADS PROGRAM SUMMARY OF PUBLIC INVOLVEMENT

MCDOT *RightRoads* Program

Summary of Public Involvement

April 20, 2011

Northern Parkway/Tonopah Parkway
Corridor Feasibility Study

Northern Parkway: Tonopah Parkway to Turner Parkway
Tonopah Parkway: Northern Parkway to Interstate 10

Maricopa County Department of Transportation

Maricopa County
Department of Transportation

2901 W. Durango St.
Phoenix, AZ 85009
Phone: 602-506-4608
Fax: 602-506-4882
www.maricopa.gov

MCDOT *RightRoads* Program
Summary of Public Involvement

Northern Parkway Corridor Feasibility Study
Interstate 10 to Turner Parkway
TT005

FINAL REPORT

PURPOSE OF PUBLIC INVOLVEMENT

This study evaluated planned corridor development and the resulting projected 2030 traffic volumes along the Northern Parkway/Tonopah Parkway corridor between Interstate 10 and the future Turner Parkway alignment to develop the most cost-effective improvement plans that include a recommendation for establishing the future roadway type, alignment, access management strategies, future drainage structures, network connectivity and prioritized construction phasing plans.

Gaining consensus among the agencies and the public is critical to the success of this transportation study as well as the future implementation of its recommendations to provide an efficient roadway for the long term.

Maricopa County Department of Transportation (MCDOT), Flood Control District of Maricopa County (FCDMC), Maricopa County Planning and Development, Arizona Department of Transportation (ADOT), Arizona State Land Department (ASLD), Maricopa Association of Governments (MAG), the Town of Buckeye, the Federal Highway Administration (FHWA), Arizona Game and Fish Department (AGFD), U.S. Bureau of Land Management (BLM), U.S. Fish and Wildlife Services (USFWS), Center for Desert Archaeology, the Sonoran Institute, Central Arizona Project (CAP), the Community of Tonopah, the Maricopa County Farm Bureau, area developers, irrigation and utility companies, local school districts, affected businesses, property owners and residents are all major stakeholders in this study.

The participation of stakeholder public and multi-agency involvement aids in the development of a consistent roadway and the resolution of conflicting agency requirements; facilitates ultimate regional traffic flow; and preserves the interests and rights of area residents and adjacent development.

STUDY INFORMATION & BACKGROUND

Background

The Northern Parkway/Tonopah Parkway Corridor Feasibility Study includes Northern Parkway between Tonopah Parkway and Turner Parkway and Tonopah Parkway between I-10 and Northern Parkway.

The Northern Parkway/Tonopah Parkway Corridor Feasibility Study is one of a series of long-range transportation planning studies being conducted by the Maricopa County Department of Transportation (MCDOT). These studies are evaluating future parkways identified in the recently completed Maricopa Association of Governments (MAG) Interstate 10 (I-10)/Hassayampa Valley Transportation Framework Study (2008) that recommended a comprehensive transportation network designed to meet the future traffic demands for the build-out of the area west of the White Tank Mountains. This long-range regional transportation network identified the need for a new type of high-capacity, non-freeway roadway facility that could safely handle the projected travel demands within the study area.

The primary purpose of this feasibility study is to identify the preferred corridor alignment for Northern Parkway and Tonopah Parkway, which are proposed as Arizona Parkways. This new roadway type, called the *"Arizona Parkway"* will offer significantly greater travel capacity than a major urban arterial roadway (traditional six-lane surface street) without employing full grade separations (overpasses or underpasses) at intersections with arterial cross-streets.

The Arizona Parkway intersection treatment controls intersection traffic movements with a two-phased traffic signal control and prohibits left turns at cross-street intersections. Instead, all left-turn movements are made using an "indirect" left-turn crossover immediately beyond the crossroad intersection. This type of intersection configuration provides the benefit of increased intersection capacity while still allowing for direct driveway access to development at each corner of the intersection.

Corridor Description

Northern Parkway: The segment of Northern Parkway under evaluation in this study is referred to as the Northern Parkway Hassayampa Section to distinguish it from other planned Northern Parkway segments east of the White Tank Mountains. The study area is an east-west corridor centered on the Northern Avenue section line from the planned Tonopah Parkway (411th Avenue alignment) to the planned Turner Parkway (267th Avenue alignment). The Northern Parkway study area is approximately 18 miles long and two miles wide.

Tonopah Parkway: This evaluation also includes the portion of the planned Tonopah Parkway which runs north-south centered on the 411th Avenue section line between I-10 and the planned Northern Parkway Hassayampa Section. The Tonopah Parkway study area is approximately 3.75 miles long and two miles wide.

Study Need

The MAG Hassayampa Valley Transportation Framework Study demonstrated the future need for both Northern Parkway and Tonopah Parkway. Although today's land development and travel demands do not warrant any major new high capacity roadways in the near-term, the "build-out" forecast for future land development and resulting travel demand within the study area warrant an entire network of future Arizona Parkways. Plans are already underway within the study area to convert vacant lands to land uses that will generate increased traffic volumes.

In order to preserve sufficient public right-of-way for the future Northern Parkway and Tonopah Parkway and protect these future roadway corridors from development and encroachment, the planning process needs to start now to identify roadway right-of-way requirements for forecasted build-out conditions. This current study is the first step in the roadway development process and is meant to aid the local jurisdictions in defining and protecting a continuous future roadway corridor that can accommodate build-out traffic demands in the project study area. To this end, the Northern Parkway/Tonopah Parkway study is needed to:

- Address regional and local growth and development (2.8 million population projected at build-out in the I-10/Hassayampa Valley Transportation Framework study area)
- Preserve and protect sufficient public right-of-way for high-capacity (non-freeway) transportation corridors
- Ensure future parkway compatibility with existing/future land uses and environmental conditions
- Identify potential connectivity issues with other future planned parkways and freeways

Study Goals and Objectives

The main focus of this feasibility study is to investigate, map, and analyze corridor constraints and opportunities to arrive at a recommended corridor alignment for the proposed Northern Parkway and Tonopah Parkway based on the Arizona Parkway indirect left-turn intersection design within a 200-foot right-of-way corridor. The goals and objectives of this study are:

- Achieve roadway network continuity and connectivity
    - Determine the preferred corridor alignment from a regional transportation corridor perspective;

    - Protect and preserve right-of-way for the preferred corridor alignment to maintain its long-term viability;
    - Provide future connectivity with primary and regional roadway facilities; and
    - Provide crossings of alluvial fans, drainage washes, rivers, and canals.
- Enhance traffic flow (capacity) and safety
    - Preserve functional integrity of the Arizona Parkway by recommending unique segment-specific solutions to address identified opportunities or constraints;
    - Identify areas that may require additional right-of-way or easements, especially at crossings with other parkways, alluvial fans, and utility corridors; and
    - Enhance traffic operations while maintaining reasonable access for developments.
- Preserve the environment
    - Comply with governing environmental regulations for new roadway development;
    - Minimize adverse impacts to the study area environment, including wildlife corridors and archeological sites; and
    - Enhance important environmental features (e.g., habitat areas).
- Develop consensus-driven alignment alternatives
    - Work with the Technical Advisory Committee and key stakeholders in developing feasible alignment alternatives;
    - Develop cost-effective roadway alignment alternatives;
    - Conduct public outreach to obtain input on alignment alternatives and build consensus; and
    - Ensure consistency between the study's transportation actions and regional and local plans.

Key Issues and Challenges

Early in the study process, a preliminary list of study issues and potential challenges was compiled. This list expands as the study progresses and input is obtained from public participation. Major issues identified at this stage include:

- Evaluation of drainage structures across alluvial fans and major washes
- Identification of the most feasible location for a future bridged crossing of the Hassayampa River
- Identification of ultimate roadway alignment and access management strategies to maximize revenue-generating potential for developable lands

- Determination of impacts of existing electrical line towers on the roadway alignment
- Consideration of environmental impacts (including existing agricultural operations, cultural resources, and wildlife habitat linkages)
- Coordination and compatibility with existing and planned land development

Study Milestones

Study Kick-off	July 2010
PHASE I: *Data Collection/Issues Identification*	July - November 2010
Technical Advisory Committee (TAC) Meeting #1	July 14, 2010
Technical Advisory Committee (TAC) Meeting #2	September 22, 2010
Public "Scoping" Public Input Meeting	October 18, 2010
Technical Advisory Committee (TAC) Meeting #3	November 15, 2010
PHASE II: *Alternative Analysis and Evaluation*	November 2010 - May 2011
Existing Conditions and	February 15, 2011
Conceptual Alternatives Public Input Meeting	February 2011
Technical Advisory Committee (TAC) Meeting #4	February 23, 2011
Preferred Alternative Alignment Evaluation	March 2011
Preferred Alternative Study Findings & Recommendations Public Input Meeting	March 29, 2011
Draft Final Report	April 2011
Study Completion/Final Report	May 2011

STUDY APPROACH

This corridor feasibility study is considered “long-range” transportation planning and is the earliest phase of project development. The outcome of a corridor feasibility study is an agreed-upon plan for the preservation of the right-of-way footprint for the future parkway corridor.

To accomplish this goal, the study is broken into two phases. Phase I is a planning level evaluation of the study corridor and consists of gathering data on existing and future study area features, assessing and evaluating the surrounding corridor conditions to aid in potential issues identification, and preparing constraints maps and base maps that will allow the study team to make well-founded recommendations for possible parkway corridor alignments within the study area. Conceptual corridor alignment alternatives are developed only to the extent necessary to conduct a meaningful comparative analysis/fatal flaws analysis. Conceptual alignment alternatives are evaluated for technical feasibility as well as public acceptability as part of this process.

Based upon Phase I “fatal flaw” evaluation and outcomes, up to three candidates for alternative alignments are advanced to Phase II for a more detailed preliminary engineering analysis. A “preferred” alignment is selected and implementation strategies are developed. This analysis addresses engineering feasibility, environmental compatibility, economic viability, compliance with Title VI of the Civil Rights Act of 1964, and community concerns.

Once a Preferred Alignment alternative has emerged and has general consensus, preliminary plans are prepared to delineate the corridor alignment, future parkway cross-section and public right-of-way requirements.

Both Phase I and Phase II are conducted in consultation with a Technical Advisory Committee (TAC) representing agency and constituency interests. The TAC assists in the identification and resolution of issues or differing jurisdictional requirements to build as broad-based a consensus as possible regarding the preferred alternative alignment for the future parkway.

ALTERNATIVE DEVELOPMENT OVERVIEW

Development of Alternatives

During the alternatives analysis, the study team identified and evaluated several conceptual alignments for Northern Parkway and Tonopah Parkway. The conceptual alternatives were developed to avoid as many corridor constraints as possible yet provide a wide range of options within the study area limits. Constraints that were considered in developing the conceptual alternatives include the following:

- Land ownership:
    - Bureau of Land Management; and
    - Arizona State Trust land.
- Land use:
    - Existing and planned developments;
    - Sonoran Desert Tortoise habitat;
    - Wildlife linkage zones;
    - Potential sand and gravel operations;
    - Agricultural operations; and
    - Our Lady of Solitude Monastery north of Olive Avenue.
- Transportation Connectivity:
    - I-10/411th Avenue interchange;
    - Sun Valley Parkway connection;
    - Future connections with Camelback Parkway, Wintersburg Parkway, Hassayampa Freeway, Hidden Waters Parkway, and Turner Parkway; and
    - Planned trail systems.
- Utilities/Facilities:
    - Irrigation canals – Tonopah Canal;
    - Gas pipelines and electrical power lines near Sun Valley Parkway; and
    - ADOT Service Yard near I-10 and 411th Avenue.
- Topography:
    - Steep slopes near Hassayampa River and Jackrabbit Wash; and
    - Steep slopes near White Tank Mountains.
- Others:
    - Potential cultural resources throughout the study area; and
    - Floodplains.

Many of the potential constraints can be mitigated as part of the project design and do not necessarily constitute “fatal flaws”. However, some of the constraints are considered to be more significant than others.
To narrow the range of alternatives to be evaluated in greater detail, a subjective, qualitative assessment was performed on all Conceptual Alternatives. “Candidate” Alternatives were selected from the conceptual alignments and presented to the TAC and stakeholders for review and input. The Candidate Alternatives are those that involve the fewest constraints and are the most compatible with existing land uses and future development master plans.

Northern Parkway Candidate Alternatives
Two Candidate Alternatives were proposed for the Northern Parkway segment between Tonopah Parkway and Turner Parkway,

- Alternative A – A 200-foot wide corridor centered on the Northern Avenue section line except for a three-mile dip to the south within the Belmont master planned community; and
- Alternative B – A 200-foot wide corridor with a centerline that shifts one-half mile north of Alternative A from Tonopah Parkway to 371st Avenue, then shifts south to proceed east on the Alternative A alignment from 363rd Avenue to Turner Parkway.

The above Northern Parkway alternatives are generally the most compatible with existing and planned developments when compared to the other alternatives considered. In lieu of developing a third Candidate Alternative for the Northern Parkway segment, the TAC and stakeholders recommended that variations of Alternative A and Alternative B be examined where electrical line towers currently exist close to the Northern Avenue section line near Sun Valley Parkway and also at the future crossing point of the Hassayampa River.

Tonopah Parkway Candidate Alternatives
Three Candidate Alternatives were proposed for the Tonopah Parkway segment between I-10 and Northern Parkway,

- Alternative A – A 200-foot wide corridor centered on the 411th Avenue section line;
- Alternative B – A 200-foot wide corridor with the centerline shifted 35-feet west of the 411th Avenue section line; and
- Alternative C – A 200-foot wide corridor with the centerline shifted 35-feet east of the 411th Avenue section line.

These alternatives have the least impact on existing subdivided properties, are most compatible with planned developments, and tie directly to the existing I-10 interchange with 411th Avenue.

Evaluation Criteria
The Candidate Alternatives, along with a “No-Build” Alternative, were evaluated based on the following criteria:

- Future Development Compatibility
- System Continuity and Capacity
- Drainage Impacts
- Irrigation Impacts
- Building/Property Impacts
- Wildlife Impacts
- Cultural/Archaeological Impacts
- Utility Impacts
- Public Acceptability
- Cost

Since most of the evaluation criteria listed above do not lend themselves to a numerical quantification, the evaluation was performed on a qualitative basis using the following descriptors to assess the relative positive or negative impacts of each alternative: Strong Advantage, Advantage, Neutral, Disadvantage and Strong Disadvantage.

For the Tonopah Parkway segment, the No-Build Alternative and Alternative A have the most positive ratings (i.e., more Strong advantage and Advantage ratings and/or fewer Strong disadvantage and Disadvantage ratings). For the Northern Parkway segment, the No-Build Alternative and Alternative A have the most positive ratings. (See Candidate Alternative Evaluation Summary).

MARICOPA COUNTY MCDOT TRANSPORTATION
Right Road Right Time Right Cost

Northern Parkway Corridor
Tonopah Pkwy to Turner Pkwy
Feasibility Study

Candidate Alternatives Evaluation Summary

Evaluation Criteria	Tonopah Parkway Candidate Alternatives				Northern Parkway Candidate Alternatives		
	No-Build	Preferred Alternative *Alt. A*	*Alt. B*	*Alt. C*	*No-Build*	Preferred Alternative *Alt. A*	*Alt. B*
Future Development Compatibility	◒	○	◒	◓	●	◓	◒
System Continuity and Capacity	●	◓	◓	◓	●	◎	◓
Drainage Impacts	◒	◓	◓	◓	●	◓	◓
Irrigation Impacts	○	◒	◒	◒	○	◒	◒
Building/Property Impacts	○	◒	●	●	○	◒	◒
Wildlife Impacts	○	◒	◒	◒	○	◒	◒
Cultural/Archaeological Impacts	○	◒	◒	◒	○	◒	◒
Utility Impacts	○	◒	◒	◒	○	◒	◒
Public Acceptability	◒	◓	◒	◒	◒	◓	◒
Cost	○	◒	◒	◒	◓	◒	●

LEGEND: Strong advantage ◎ Advantage ◓ Neutral ○ Disadvantage ◒ Strong disadvantage ●

Maricopa County Department of Transportation

Kimley-Horn and Associates, Inc.

Selection of the Preferred Alternative (Alignment)
Results of the Candidate Alternative evaluation were presented to TAC members and stakeholders at the February 23, 2011 TAC/stakeholder meeting for review and discussion. The evaluation results were also presented for review and input at the second public input meeting held on February 15, 2011.

For both the Tonopah Parkway and Northern Parkway segments, it was determined that the No-Build Alternative does not address the demonstrated long-term need for a high-capacity parkway facility in the study area. In addition, there was more TAC/Stakeholder and public support for Alternative A than for the No-Build or any other alternatives for both the Tonopah Parkway and Northern Parkway segments. As a result, Alternative A for Tonopah Parkway and Alternative A for Northern Parkway are recommended as the preferred alternative.

The factors that support the selection of the recommended preferred alternatives include the following:

Tonopah Parkway

- The No-Build Alternative will not provide a continuous, all-weather roadway and will not adequately serve projected traffic volumes associated with anticipated build-out land uses. Even though it may be many years before land uses and traffic volumes justify construction of a parkway facility, the transition from agricultural land uses and open desert to higher-intensity land uses is already occurring. Steps need to be taken now to preserve the long-term viability of constructing a parkway in the future by delineating the footprint and preferred location for Tonopah Parkway;
- Alternative A will result in the most equitable right-of-way acquisition by being centered on the 411th Avenue section line;
- Alternative A will not require any alignment shift to connect with the existing I-10 interchange at 411th Avenue;
- Alternative A is not expected to require any residential building demolition or relocation and will result in the fewest full property acquisitions;
- Alternative A has received the most stakeholder and public support because it has the most uniform and equitable impacts on adjacent properties; and
- Alternative A will have the lowest overall project cost because it is the shortest alternative, resulting in less right-of-way acquisition and lower construction costs.

Northern Parkway

- The No-Build Alternative will not provide a continuous, all-weather roadway and will not adequately serve projected traffic volumes associated with anticipated build-out land uses. Even though it may be many years before land uses and traffic volumes justify construction of a

parkway facility, the transition from agricultural land uses and open desert to higher-intensity land uses is already occurring. Steps need to be taken now to preserve the long-term viability of constructing a parkway in the future by delineating the roadway's footprint and preferred location for Northern Parkway;

- Alternative A generally follows the Northern Avenue section line, making maximum use of existing roadway right-of-way and providing the most direct east-west connection between Tonopah Parkway and Turner Parkway;
- Alternative A will result in the most equitable right-of-way acquisition by generally being centered on the Northern Avenue section line;
- Alternative A is the most compatible with planned developments. The Belmont and Sun Valley Villages III and IV master plans both have provisions for a 200-foot wide parkway facility;
- Alternative A has received significant stakeholder and public support because it has the most uniform and equitable impacts on adjacent properties and is the most compatible with planned developments along the corridor; and
- Alternative A will have the lowest overall project cost because it is the shortest alternative, resulting in less right-of-way acquisition and lower construction costs.

PUBLIC INVOLVEMENT

Through the course of this study's process, the MCDOT *RightRoads* Program conducted a total of three public input meetings to discuss and gather public comment on future improvements and recommendations for the Northern/Tonopah Parkway between Interstate 10 and Turner Parkway.

All public meetings were conducted in an "open house" format which provided a free, open and accurate exchange of information between area residents with specific issues or questions and the project team.

Approximately 85 area residents and other study stakeholders attended the first Public "Scoping" meeting on October 18, 2010. This initial public meeting provided area residents and other impacted stakeholders with an opportunity to inform project team members about the study area issues and local transportation needs. This meeting also provided the study team members with an opportunity to discuss and elicit feedback regarding the study purpose, goals and objectives.

The second public input meeting was held on February 15, 2011 to present the results of the Alternatives Analysis phase. The purpose of this public meeting was to provide the community with the opportunity to comment on preliminary study findings and provide feedback on the different roadway alignment alternatives being evaluated for both the Northern Parkway and Tonopah Parkway corridors. Approximately 60 area residents and other key stakeholders participated in this meeting.

The study team presented the findings and recommendations of the study, including the preferred parkway alignment, the right-of-way footprint for the future parkways, and preliminary engineering details at the final "Findings and Recommendations" public information meeting on March 29, 2011. The meeting was attended by 32 people.

Public Meeting Participants

MCDOT Engineering and Planning
- Denise Lacey
- Roberta Crowe
- Mike Pavlina

Kimley-Horn and Associates
- Bob Eichinger
- Sarah Eichinger
- Bryan Patterson
- Frank Hoffmann
- Michael Grandy,

Outreach Methods
The following outreach methods were used to inform and notify the general public and impacted residents about the study, public input meeting dates and locations and additional opportunities or means for input:

- Media releases
- Newspaper articles
- Display advertisements in local and regional publications
    - Arizona Republic
    - West Valley View
    - Buckeye Valley News
    - Buckeye Star
    - Tonopah Tribune
- MCDOT website
- Partner agency mediums
- Direct mail flyers to adjacent property owners and previous meeting attendees

Public Comment
Over 170 people attended three public input meetings conducted through the course of this study. Graphics, aerials and display exhibits presented corridor alternatives and study information. Study Fact Sheets and Comment Sheets were distributed to all those in attendance. The following information is representative of discussions that the project team had with meeting attendees and written comments received by Mcdot:

Scoping Phase Public Input Meeting
Meeting Purpose: Gather public comment regarding the study area, existing conditions, current corridor deficiencies, future transportation needs and public review of overall Study Goals and Objectives

5:00 – 7:00 p.m., October 18, 2011
Tonopah Valley High School Cafeteria
38201 W. Indian School Road, Tonopah, AZ 85354

Attendance: 85

Comments/questions received by Project Team during discussions with meeting attendees:

- Need to consider the monastery on the north edge of the study area.
- How can we get a copy of the ADOT framework study?
- Who can we speak to about needed road improvements in the area?
- Who can we speak to about the permitting process for a planned solar project (sign recently posted near 411th Avenue and Glendale Avenue)?
- Need to build more roads now.
- How can we stop this project?
- When will the project be built?

- How will the project be financed?
- Will this project cause my property taxes to increase?
- There are tortoises, bighorn sheep, and deer in the study area. How will they be protected?
- What type of environmental studies are being done as part of this project?
- Put the roadways on section lines to avoid splitting properties.
- Don't bisect the agricultural operations.
- Why is this project needed?
- The Northern Avenue alignment makes sense and should be the preferred alignment.
- What's the status of the Belmont development?
- Residents moved to this area to be away from development and they don't want more roads/access. "Leave us alone."
- Don't put the parkway through the subdivision west of 411th Ave.
- Where will the parkway cross the Hassayampa?
- Do we need all the roads that are in the Hassayampa Framework Study – who makes those decisions?

Alternatives Analysis Phase Public Input Meeting

Meeting Purpose: Gather public comment regarding preliminary study findings, traffic analysis and corridor alignment alternatives and future roadway options.

5:00 – 7:00 p.m., February 15, 2011
Tonopah Valley High School Cafeteria
38201 W. Indian School Road, Tonopah, AZ 85354

Attendance: 62

Written public comments:

- I prefer Alt. Route A because of the location of our property and monastery. We prefer the Alt. Route A in order to maintain both solitude and quiet. (Our Lady of Solitude Monastery).
- I am against the Northern Parkway all together. I moved out here to get away from all that. They can use small roads or the freeway.
- Great idea! Keep it on Northern.
- I love the proposed parkway plan on Northern. Hope it stays on Northern.
- I prefer alternative A.
- We prefer alternative A for the Northern Parkway.
- Very good maps and presentation.
- I prefer alternative A.
- The sisters and I live in a contemplative monastery and our charm is of quiet and solitude. We prefer Alternative A since the road is farther south from our chapel and home. Thank you and God bless you.

- What is the importance of all the areas labeled as “Potential Wildlife linkage Zones”? Are these areas restricted from being developed? What does this mean to me as a land owner?
- The plan is necessary for future development and we agree with the study.

Comments/questions received by Project Team during discussions with meeting attendees:

- Build the road on vacant land instead of impacting existing homes.
- Would like information on how to get roads built to our property.
- The roadway will be right at my front door.
- Keep the road on the section line.
- Would appreciate better indication of timeframe for the construction.
- It is good that the County is planning ahead now to prevent developments from going in where the road needs to be.
- Generally staying on the section line seems to make the most sense.
- While it looks like the road won’t get built for a long time, designating the roadway right-of-way corridor now will restrict what I can do with my property that is within that corridor, reducing its value.
- There is no east-west roadway in the area, so any east-west road would be a welcome improvement.
- Keeping the Tonopah Parkway at the 411 I-10 TI is a good idea.
- Several folks commented that the A Alternative (Northern Parkway) appeared to be the best choice.
- Many attendees really thought the presentation was informative, well thought out and displayed to successfully communicate the story of the project & process.
- Easier access to my property will be good.

Findings and Recommendations Phase Public Input Meeting
Purpose: Gather public comment regarding study findings and “Preferred Alternative”, recommended access management strategies and guidelines, and an improvement phasing timeline.

5:00 – 7:00 p.m., March 29, 2011
Tonopah Valley High School Cafeteria
38201 W. Indian School Road, Tonopah, AZ 85354

Attendance: 32

Comments/questions received by Project Team during discussions with meeting attendees:

- We would like to know when the parkways will be constructed and how they will be financed. We do not want to see our property taxes increased to pay for the parkways.
- Bethany Home Road needs to be paved to reduce dust and improve the condition of the road.
- Roadway improvements will be needed to serve construction traffic and employee traffic for the planned solar facility west of the project study area.
- Bicyclists need to be accommodated in the parkway design and should be allowed to make left turns at the major signalized intersections.
- The 411th Avenue section line alignment for Tonopah Parkway makes sense since it ties directly to the existing I-10 interchange.
- Roadway improvements will be needed to provide traffic service in the Northern Avenue corridor west of Tonopah Parkway and East of Turner Parkway.
- The Northern Parkway design will need to be coordinated with planning for the Hassayampa Freeway (Proposed I-11)
- Reasonable access points will be needed to serve adjacent residential areas and businesses.
- Preserving a 200' wide corridor for the future parkway is a good planning approach.
- Property owners will need to be fairly compensated if their property is need for the parkways.
- This is a good planning project to help property owners proceed with their land development plans.
- An all-weather bridge is needed to cross the Hassayampa River.
- Planned developments should participate in protecting right-of-way and in building the parkways.
- The recommended Alternative A alignment for Northern Parkway makes sense and appears to be the best alternative.
- It is great that the County is planning ahead to preserve a right-of-way corridor now to avoid the problems ADOT has had with the South Mountain Freeway.

FUTURE ACTIVITIES AND CONSIDERATIONS FOR FUTURE CORRIDOR DEVELOPMENT

As the preferred alternative becomes better defined through more in-depth phases of project development, additional elements will be considered that address the needs and impacts of future projects within the context of the current and future settings along both the Tonopah Parkway and Northern Parkway corridors.

The following are capsulated key issues identified during this study's Stakeholder Advisory Committee and public involvement process that should be taken into consideration by individual jurisdictions as the recommendations of this study are carried forward through design and construction:

- Project Funding. There is currently no funding programmed for construction. It can be anticipated that area developers will participate as part of project requirements.
- Access Management Strategies. MCDOT and local jurisdictions have specific expectations regarding roadway access. These strategies should be implemented to ensure a seamless roadway with efficient traffic flow, safety and good access to local land uses.
- Environmental Impacts and Noise Mitigation. Specific impacts on the local environment will require further evaluation in future project development.
- New Right-of-Way Requirements. Final roadway configuration will determine how much land will need to be acquired.
- Landscaping plans. Final project design will specify the type of landscaping to be used.
- Drainage Structures. Because the future roadway corridor crosses a number of washes and lies partly in a flood zone, it will be critical to ensure the roadway is designed to provide "all weather" crossings during major storm flows. Bridges along the new roadway will be designed during final roadway design.
- Bicycle, Pedestrian and Transit Access. Future projects will be designed to accommodate alternative modes of travel and provide access to trails and neighborhoods in the area.
- Corridor Traffic Management. ITS (Intelligent Transportation System) will control operation of traffic between jurisdictions and differing intersection configurations.
- Jurisdictional Coordination. As with the overall traffic control, implementation of different corridor improvements and access management concepts will need to be coordinated to ensure a safe, seamless and efficient transportation facility.

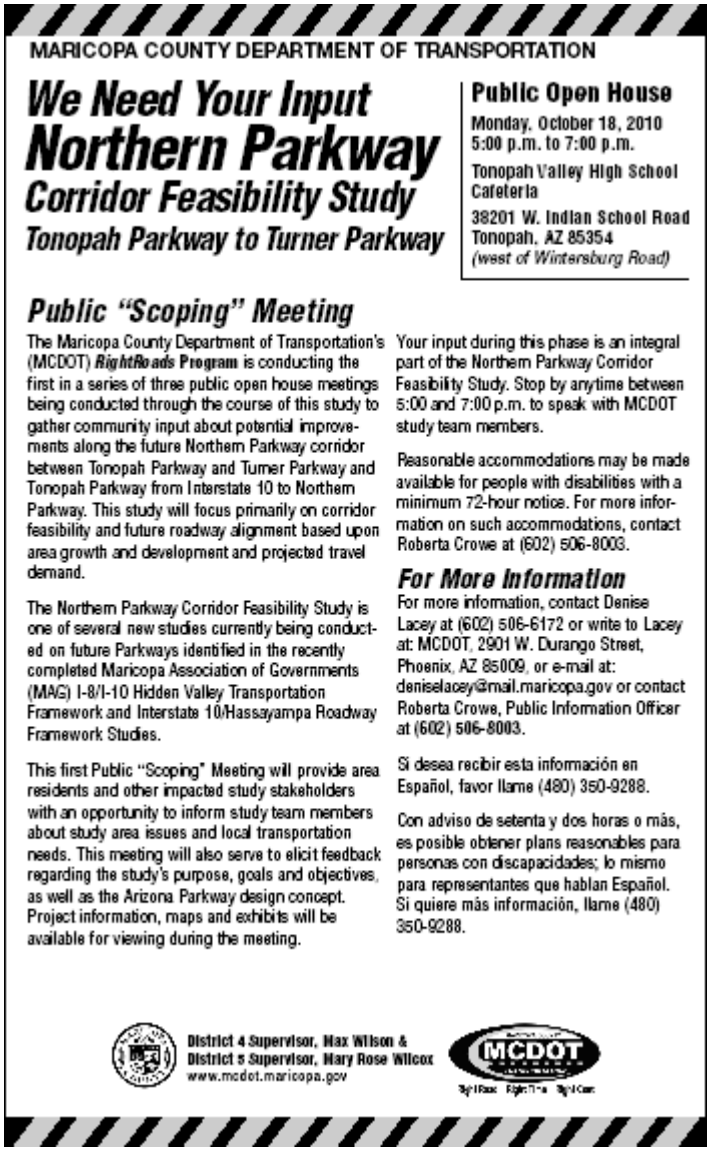
CONCLUSION

It is recommended that future project development build upon the public involvement program established during this study and continue as a comprehensive program progression.

For more information about the study, contact Denise Lacey, MCDOT Planning at 602/506-6172 or Roberta Crowe, MCDOT Public Information Officer at 602/506-8003.

Exhibit A:
Public Meeting Notification & Newspaper Display Advertisement

Scoping Phase Public Input Meeting
Newspaper Advertisement



MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION

We Need Your Input
Northern Parkway
Corridor Feasibility Study
Tonopah Parkway to Turner Parkway

Public Open House
Monday, October 18, 2010
5:00 p.m. to 7:00 p.m.
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38201 W. Indian School Road
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(west of Wintersburg Road)

Public "Scoping" Meeting

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Your input during this phase is an integral part of the Northern Parkway Corridor Feasibility Study. Stop by anytime between 5:00 and 7:00 p.m. to speak with MCDOT study team members.

Reasonable accommodations may be made available for people with disabilities with a minimum 72-hour notice. For more information on such accommodations, contact Roberta Crowe at (602) 506-8003.

For More Information

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District 4 Supervisor, Max Wilson &
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- Arizona Republic
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Scoping Phase Public Input Meeting
Mail Notification

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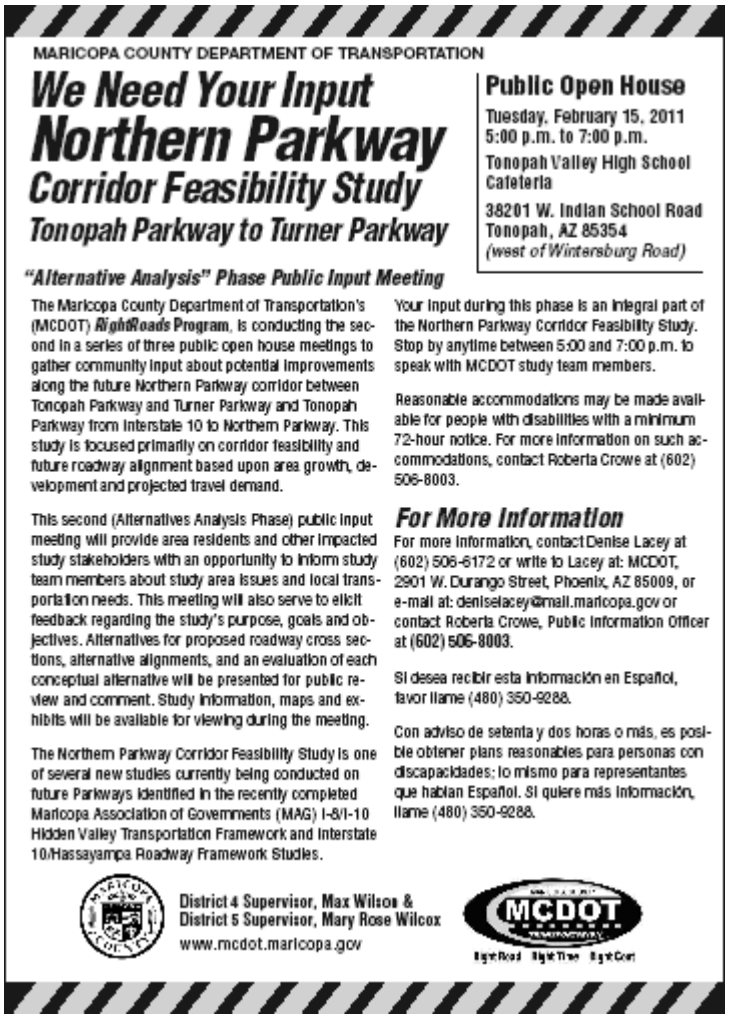
Alternatives Analysis Phase Public Input Meeting
Newspaper Advertisement



MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION

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"Alternative Analysis" Phase Public Input Meeting

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This second (Alternatives Analysis Phase) public input meeting will provide area residents and other impacted study stakeholders with an opportunity to inform study team members about study area issues and local transportation needs. This meeting will also serve to elicit feedback regarding the study's purpose, goals and objectives. Alternatives for proposed roadway cross sections, alternative alignments, and an evaluation of each conceptual alternative will be presented for public review and comment. Study information, maps and exhibits will be available for viewing during the meeting.

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Findings & Recommendations Phase Public Input Meeting
Newspaper Advertisement

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This final "Study Findings and Recommendations" public input meeting will provide area residents and other impacted study stakeholders with an opportunity to inform study team members about study area issues and local transportation needs. Evaluated alternatives along with the recommended "preferred" roadway cross section and future roadway alignment will be presented for public review and comment. Project information maps and exhibits will be available for viewing during the meeting.

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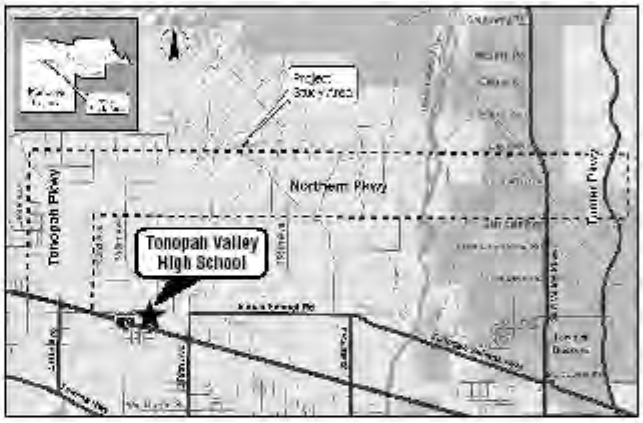

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Exhibit B:

1. **Public Meeting 1 "Scoping Phase"**
   Handouts, Exhibits/Graphics

2. **Public Meeting 2 "Alternatives Analysis" Phase"**
   Handouts, Exhibits/Graphics

3. **Public Meeting 3 "Findings and Recommendations Phase"**
   Handouts, Exhibits/Graphics

Northern Parkway Corridor Feasibility Study

I-10 to Turner Parkway

"Scoping Phase"

MARICOPA COUNTY MCDOT TRANSPORTATION

Right Road Right Time Right Cost

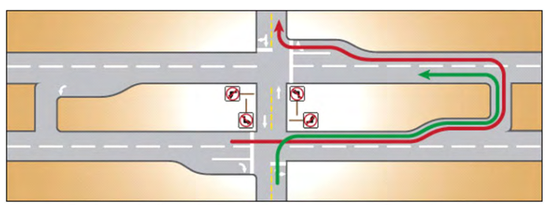
Maricopa County Department of Transportation October 18, 2010

BACKGROUND

The Northern Parkway (Hassayampa Section) Corridor Feasibility Study (I-10 to Turner Parkway) is one of a series of long-range transportation planning studies being conducted by the Maricopa County Department of Transportation (MCDOT). These studies are evaluating future parkways identified in the recently completed Maricopa Association of Governments (MAG) Interstate 10 (I-10)/Hassayampa Valley Transportation Framework Study (2008) that recommended a comprehensive transportation network designed to meet the future traffic demands for the build-out of the area west of the White Tank Mountains. This long range regional transportation network identified the need for a new type of high capacity non-freeway roadway facility that could safely handle the projected travel demands within the study area. The primary purpose of this feasibility study is to identify the preferred corridor alignment for the Northern Parkway (Hassayampa Section), which is proposed as an Arizona Parkway.

This new roadway type, called the "Arizona Parkway" will offer significantly greater travel capacity than a major urban arterial roadway (traditional six lane surface street) without employing full grade separations (overpasses or underpasses) at intersections with arterial cross streets. The Arizona Parkway intersection configuration also provides the benefit of increased intersection capacity while still allowing for direct driveway access to development at each corner of the intersection.

The Arizona Parkway includes a distinct intersection treatment that uses a simple green/yellow/red traffic signal control and prohibits left-turns at cross-street intersections. Instead, all left-turn movements are made using an "indirect" left-turn crossover immediately beyond the crossroad intersection.



Arizona Parkway Indirect Left-turn Intersection configuration

CORRIDOR DESCRIPTION

The Northern Parkway segment addressed in this study is referred to as the Northern Parkway (Hassayampa Section) to distinguish it from other planned Northern Parkway sections east of the White Tank Mountains. The Northern Parkway (Hassayampa Section) is an east-west corridor centered on the Northern Avenue section line, from the planned Tonopah Parkway (411th Avenue alignment) to the planned Turner Parkway (267th Avenue alignment). The corridor is approximately 18 miles long and two miles wide. The project study area also encompasses the portion of the planned Tonopah Parkway from I-10 to the planned Northern Parkway. This portion of the study area, which is centered on the 411th Avenue section line and runs north-south, is approximately 3.75 miles long and two miles wide.

STUDY NEED

The Hassayampa Framework Study demonstrated the need for both Northern Parkway and Tonopah Parkway. Although today's land development and travel demands in the project study area do not warrant major new high capacity roadways in the near-term future, the build-out forecast for future land development and travel demands does. Plans are already underway to convert some of the vacant lands within the project study area to land uses that will generate future traffic which will warrant major new high capacity roadways in the long-term future.

To preserve the public right-of-way for the future Northern Parkway and Tonopah Parkway and protect these future roadway corridors from development or encroachment, the planning process needs to start now to identify right-of-way requirements for build-out conditions. This current study is the first step in the roadway development process and is meant to aid the governing bodies in defining and protecting a continuous future roadway corridor that can accommodate build-out traffic demands in the project study area. To this end, the Northern Parkway (Hassayampa Section) study is needed to:

- Address regional and local growth and development (2.8 million population projected at

PUBLIC INVOLVEMENT

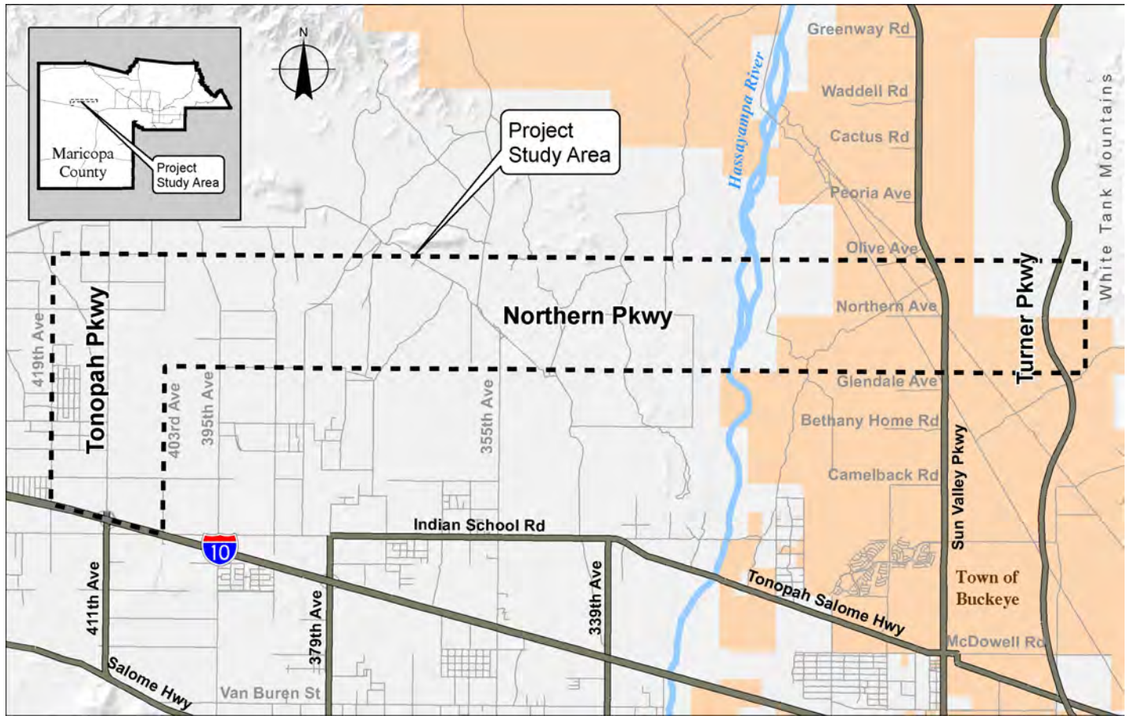
Gaining consensus among the agencies and the public is critical to the success of the study and implementation of its recommendations to provide a safe and efficient roadway for the long term.

Three public input meetings are conducted at critical milestones in the study process. The first Public "Scoping" meeting (October 18, 2010) will provide area residents and other impacted stakeholders with an opportunity to inform project team members about the study area issues and local transportation needs. This meeting will also provide the study team members with an opportunity to discuss and elicit feedback regarding the study purpose, goals and objectives.

The second "Alternatives Analysis" public meeting, currently scheduled for January 2011, will provide the community with the opportunity to comment on the different roadway alignment alternatives being evaluated for the corridor.

The final "Study Findings and Recommendations" public information meeting is currently slated for March 2011. At this meeting, the study team will present the findings and recommendations of the study, including the preferred parkway alignment, the right-of-way footprint, and preliminary engineering details.

Your input during each phase of the study process is very important and a vital component of study development.



Maricopa County Department of Transportation

www.mcdot.maricopa.gov

For more information, contact Denise Lacey at (602) 506-6172 or write to her at:
MCDOT, 2901 W. Durango Street, Phoenix, AZ 85009, or e-mail at: DeniseLacey@mail.maricopa.gov.

build-out in the I-10/Hassayampa Valley Transportation Framework study area)
- Preserve and protect sufficient public right-of-way for high-capacity (non-freeway) transportation corridors
- Ensure future parkway compatibility with existing/future land uses and environmental conditions
- Identify potential connectivity issues with other future planned parkways and freeways

STUDY GOALS AND OBJECTIVES

This corridor feasibility study is the first step in the roadway development process and is meant to aid the jurisdictional agencies in defining and protecting a continuous future parkway corridor that will safely accommodate projected travel demand. The main focus of this feasibility study is to investigate, map, and analyze corridor constraints and opportunities to arrive at a recommended corridor alignment for the proposed Northern Parkway based on the Arizona Parkway indirect left-turn intersection design within a 200-foot right-of-way corridor. The goals and objectives of this study are:

- Achieve roadway network continuity and connectivity
  - Determine the preferred corridor alignment from a regional transportation corridor perspective;
  - Protect and preserve right-of-way for the preferred corridor alignment to maintain its long-term viability;
  - Provide future connectivity with primary and regional roadway facilities; and
  - Provide crossings of alluvial fans, drainage washes, rivers, and canals.
- Enhance traffic flow (capacity) and safety
  - Preserve functional integrity of the Arizona Parkway by recommending unique segment-specific solutions to address identified opportunities or constraints;
  - Identify areas that may require additional right-of-way or easements, especially at crossings with other parkways, alluvial fans, and utility corridors; and
  - Enhance traffic operations while maintaining reasonable access for developments.
- Preserve the environment
  - Comply with governing environmental regulations for new roadway development;
  - Minimize adverse impacts to the study area environment, including wildlife corridors and archeological sites; and
  - Enhance important environmental features (e.g., habitat areas).
- Develop consensus-driven alignment alternatives
  - Work with the Technical Advisory Committee and key stakeholders in developing feasible alignment alternatives;
  - Develop cost-effective roadway alignment alternatives;
  - Conduct public outreach to obtain input on alignment alternatives and build consensus; and
  - Ensure consistency between the study's transportation actions and regional and local plans.

KEY ISSUES AND CHALLENGES

Early in the study process, a preliminary list of study issues and potential challenges was compiled. This list expands as the study progresses and input is obtained from public participation. Major issues identified at this stage include:

- Evaluation of drainage structures across alluvial fans and major washes
- Identification of the most feasible location for a bridged crossing of the Hassayampa River
- Identification of ultimate alignment and access management strategies to maximize revenue-generating potential for developable lands
- Consideration of environmental impacts (including existing agricultural operations, cultural resources, and wildlife habitat linkages)
- Coordination and compatibility with existing and planned land development

PROJECT STAKEHOLDERS

In addition to public stakeholders, the following is a list of agencies and stakeholder groups that are represented and participate in the study process:

- Maricopa County Department of Transportation (MCDOT)
- Flood Control District of Maricopa County (FCDMC)
- Maricopa County Planning and Development
- Arizona Department of Transportation (ADOT)
- Arizona State Land Department (ASLD)
- Maricopa Association of Governments (MAG)
- Town of Buckeye
- Federal Highway Administration (FHWA)
- Arizona Game and Fish Department (AGFD)
- U.S. Bureau of Land Management (BLM)
- U.S. Fish and Wildlife Services (USFWS)
- Center for Desert Archaeology
- Sonoran Institute
- Central Arizona Project (CAP)
- Community of Tonopah
- School Districts
- Maricopa County Farm Bureau
- Area Developers
- Irrigation and Utility Companies
- Affected Businesses, Property Owners and Residents

STUDY APPROACH

This corridor feasibility study is considered "long-range" transportation planning and is the earliest phase of project development. The outcome of a corridor feasibility study is an "agreed-upon plan" for the preservation of the right-of-way footprint for the future parkway corridor.

To accomplish this goal, the study is broken into two phases. Phase I is a planning level evaluation of the study corridor and consists of gathering data on existing and future study area features, assessing and evaluating the surrounding corridor conditions to aid in potential issues identification, and preparing constraints maps and base maps that will allow the study team to make well-founded recommendations for possible parkway corridor alignments within the study area. Conceptual corridor alignment alternatives are developed only to the extent necessary to conduct a meaningful comparative analysis/fatal flaws analysis. Conceptual alignment alternatives are evaluated for technical feasibility as well as public acceptability as part of this process.

Based upon Phase I "fatal flaw" evaluation and outcomes, up to three candidates for alternative alignments are advanced to Phase II for a more detailed preliminary engineering analysis. A "preferred" alignment is selected and implementation strategies are developed. This analysis addresses engineering feasibility, environmental compatibility, economic viability, compliance with Title VI of the Civil Rights Act of 1964, and community concerns.

Once a Preferred Alignment alternative has emerged and has general consensus, preliminary plans are prepared to delineate the corridor alignment, future parkway cross section and public right-of-way requirements.

Both Phase I and Phase II are conducted in consultation with a Technical Advisory Committee (TAC) representing agency and constituency interests. The TAC assists in the identification and resolution of issues or differing jurisdictional requirements to build as broad-based a consensus as possible regarding the preferred alternative alignment for the future parkway.

STUDY SCHEDULE

Study Kick-off	July 2010
PHASE I:	**July - November 2010**
Data Collection/Issues Identification	
Technical Advisory Committee (TAC) Meeting #1	July 14, 2010
Technical Advisory Committee (TAC) Meeting #2	September 22, 2010
Public "Scoping" Public Input Meeting	**October 18,2010**
Technical Advisory Committee (TAC) Meeting #3	November 16, 2010
PHASE II:	**November - May 2011**
Alternative Alignments Analysis and Evaluation	
Existing Conditions	**January 2011**
Conceptual Alignment Alternatives	
Public Input Meeting	
Alternative Alignments Development and Evaluation	January 2011
Technical Advisory Committee (TAC) Meeting #4	January, 2011
Preferred Alternative Alignment	January, 2011
Alternative Alignments Evaluation	**March 2011**
Preferred Alignment Public Input Meeting	
Technical Advisory Committee (TAC) Meeting #5	March 2011
Draft Final Report	April 2011
Study Completion/Final Report	**May 2011**

MCDOT

MARICOPA COUNTY MCDOT TRANSPORTATION

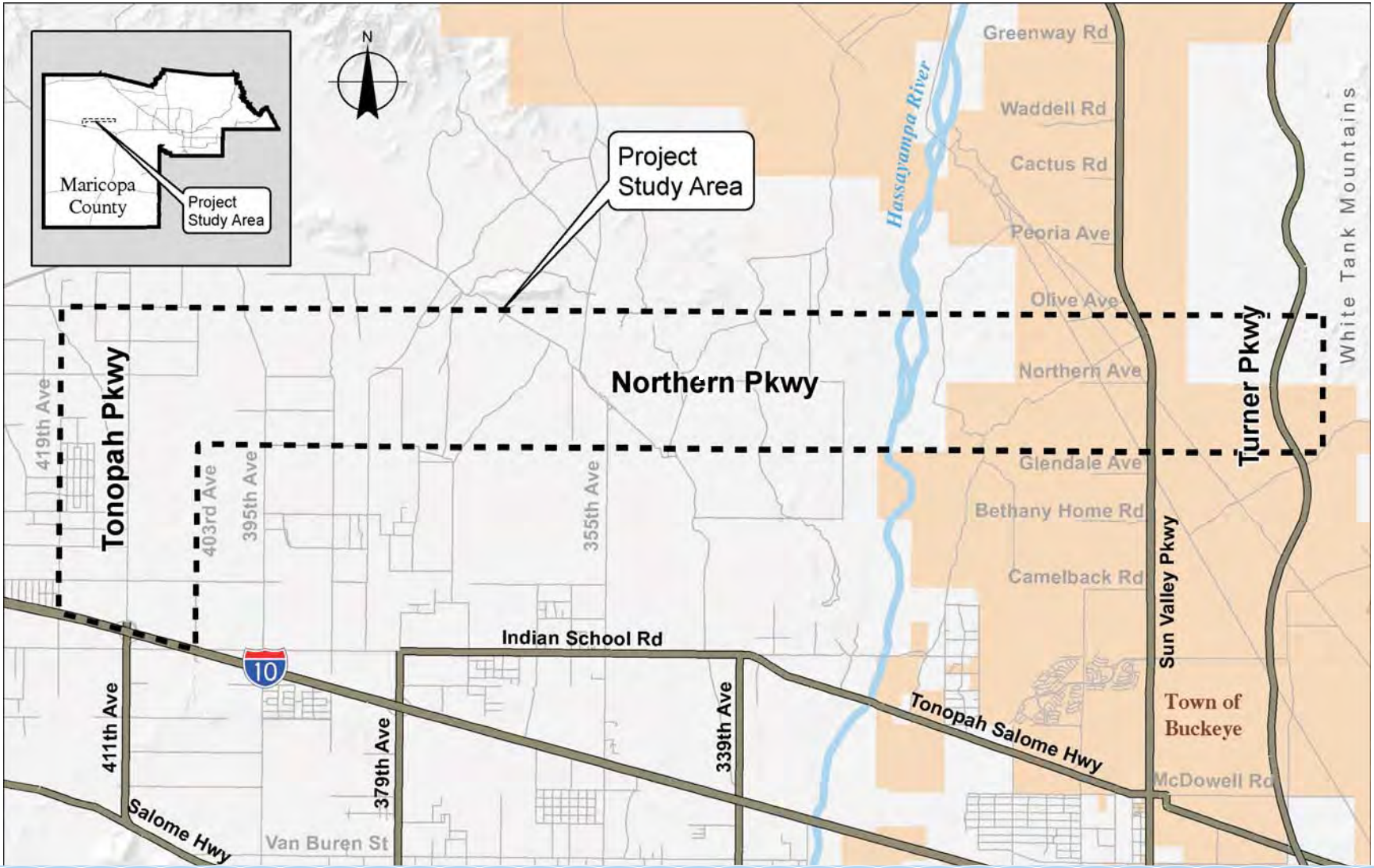
Right Road Right Time Right Cost

Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

Feasibility Study

PROJECT STUDY AREA



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MCDOT

MARICOPA COUNTY MCDOT TRANSPORTATION
Right Road Right Time Right Cost

Northern Parkway Corridor
Tonopah Pkwy to Turner Pkwy
Feasibility Study

Study Purpose

- Define and Assess Existing and Future Opportunities and Constraints
- Develop and Evaluate Alignment Alternatives
- Recommend a Preferred Alignment
- Define the Preferred Alignment in Detail
- Preserve and Protect Preferred Alignment Right-of-Way

Study Goals

- Achieve Roadway Network Continuity and Connectivity
- Enhance Traffic Capacity and Safety
- Preserve the Environment
- Develop Consensus-Driven Improvement Alternatives

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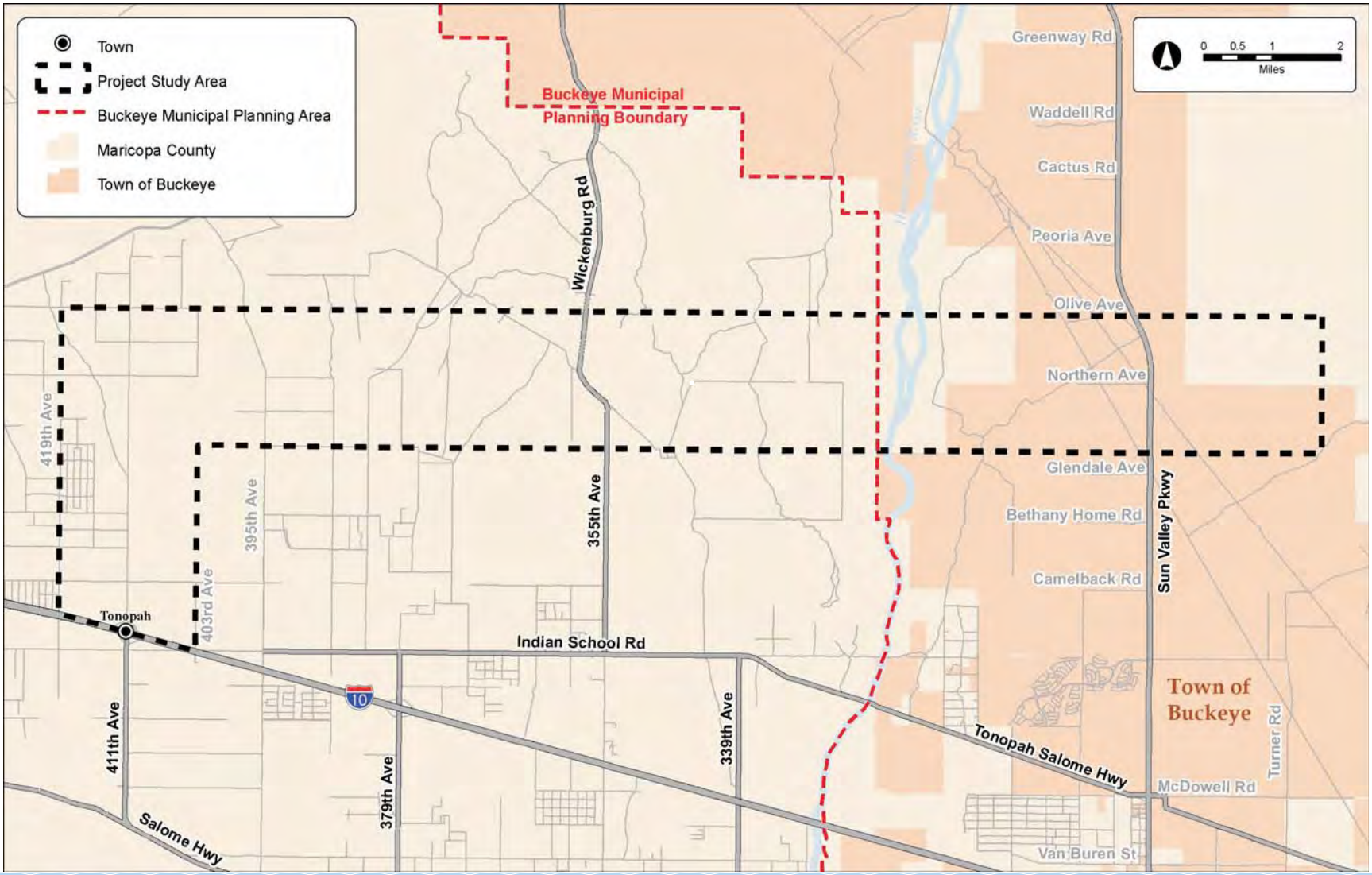
Tonopah Pkwy to Turner Pkwy

Feasibility Study

JURISDICTIONAL BOUNDARIES



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Northern Parkway Corridor
Tonopah Pkwy to Turner Pkwy
Feasibility Study

Interactive Study Process

YOU ARE HERE

SCOPING

STEP 1	STEP 2	STEP 3
INFORM	INVOLVE	INCLUDE
DEVELOP STAKEHOLDER DATABASE	DEVELOP ALTERNATIVES WITH STAKEHOLDER INPUT	DEVELOP IMPLEMENTATION PLAN WITH STAKEHOLDERS
• Identify Corridor Issues and Needs • Conduct Data Analysis	• Interactive Alternative Development • Evaluate Alternatives • Refine Alternatives	• Conceptual Concurrence on Recommended Alternative and Study Findings • Finalize Major Design Features

IMPLEMENTATION PLAN

- Project Development
- Funding Plan
- Access Management Plan

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Candidate Alignment Evaluation Criteria

- Development Compatibility
- System Continuity
- Drainage Impacts
- Irrigation Impacts
- Building/Property Impacts
- Cultural/Archaeological Impacts
- Wildlife Impacts
- Utility Impacts
- Public Acceptability
- Cost

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Northern Parkway Corridor
Tonopah Pkwy to Turner Pkwy
Feasibility Study

The Process
Transportation Improvement Program

Project Requests

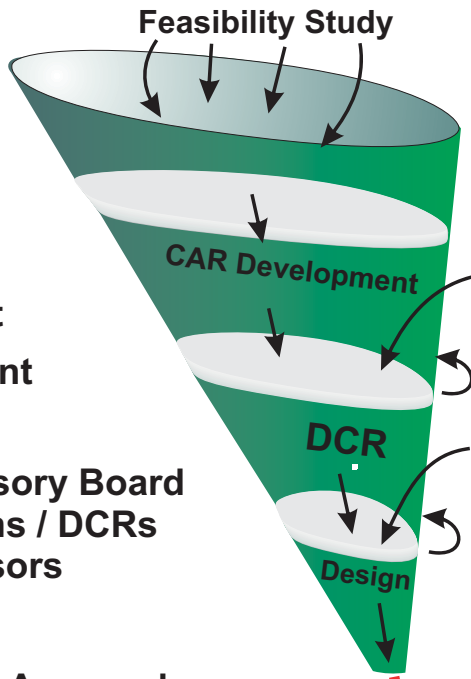
CAR development

DCR development

Transportation Advisory Board recommends Designs / DCRs to Board of Supervisors

BOS Approval

CONSTRUCTION



External CAR

Non-selected are recycled

External DCR or External Design

Non-selected are recycled

0

5 YEARS

5.5 YEARS

6.5 YEARS

7 YEARS

CAR = Candidate Assessment Report
DCR = Design Concept Report
BOS = Board of Supervisors

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Right Road Right Time Right Cost

Northern Parkway Corridor
Tonopah Pkwy to Turner Pkwy
Feasibility Study

STUDY SCHEDULE

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Technical Advisory Committee (TAC) Meeting #5	**March 2011**
Draft Final Report	**April 2011**

10-18-2010

Maricopa County Department of Transportation

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Study /Stakeholders

- Maricopa County Department of Transportation
- Maricopa County Planning & Development
- Town of Buckeye
- Maricopa Association of Governments
- Flood Control District of Maricopa County
- Arizona Department of Transportation
- Federal Highway Administration
- Arizona State Land Department
- Arizona Game and Fish Department
- U.S. Bureau of Land Management
- Central Arizona Project
- Maricopa County Farm Bureau
- Development Community
- Utility and Irrigation Companies
- Impacted Residents, Property Owners & Businesses

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Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

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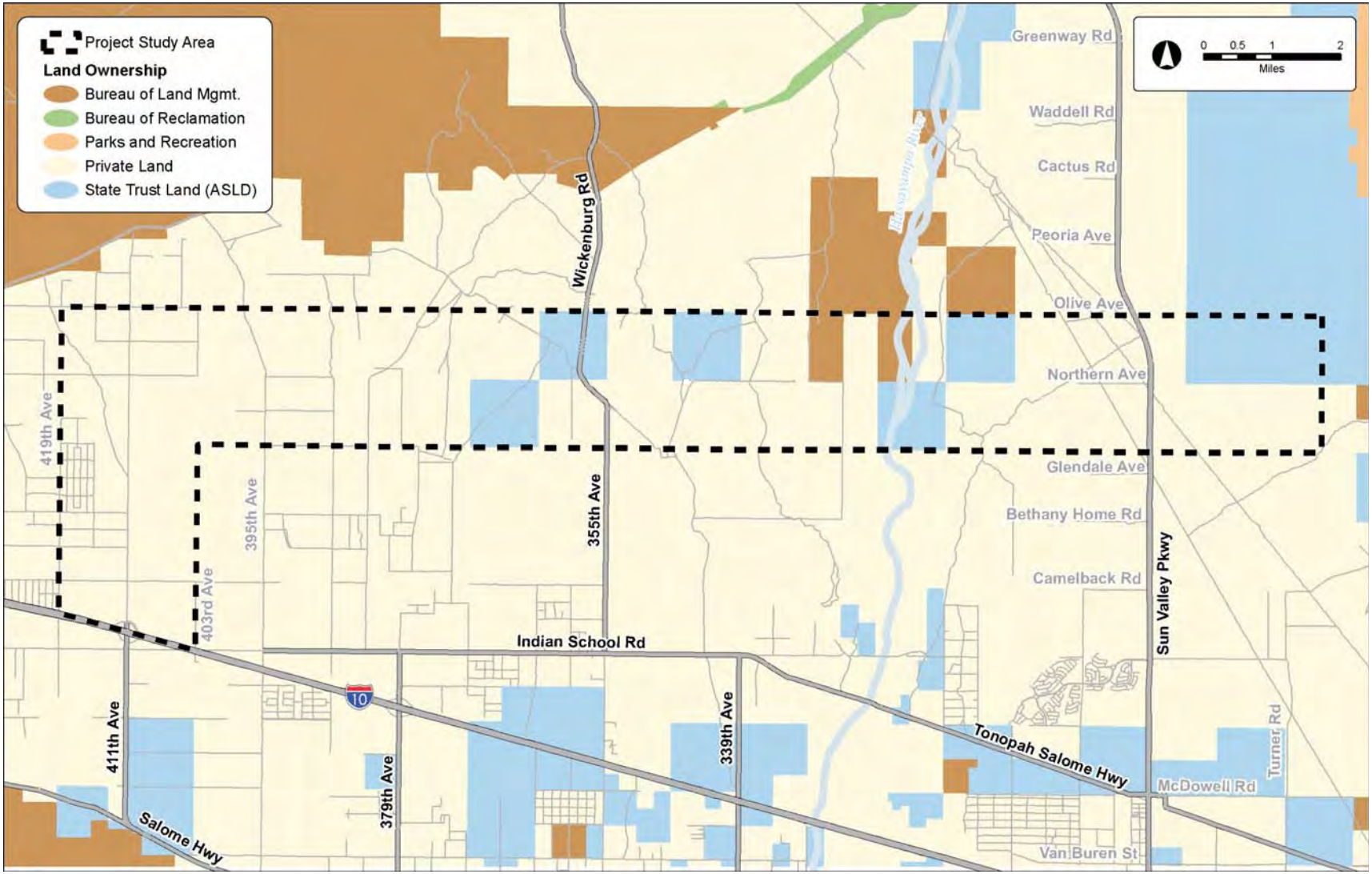
LAND OWNERSHIP



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Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

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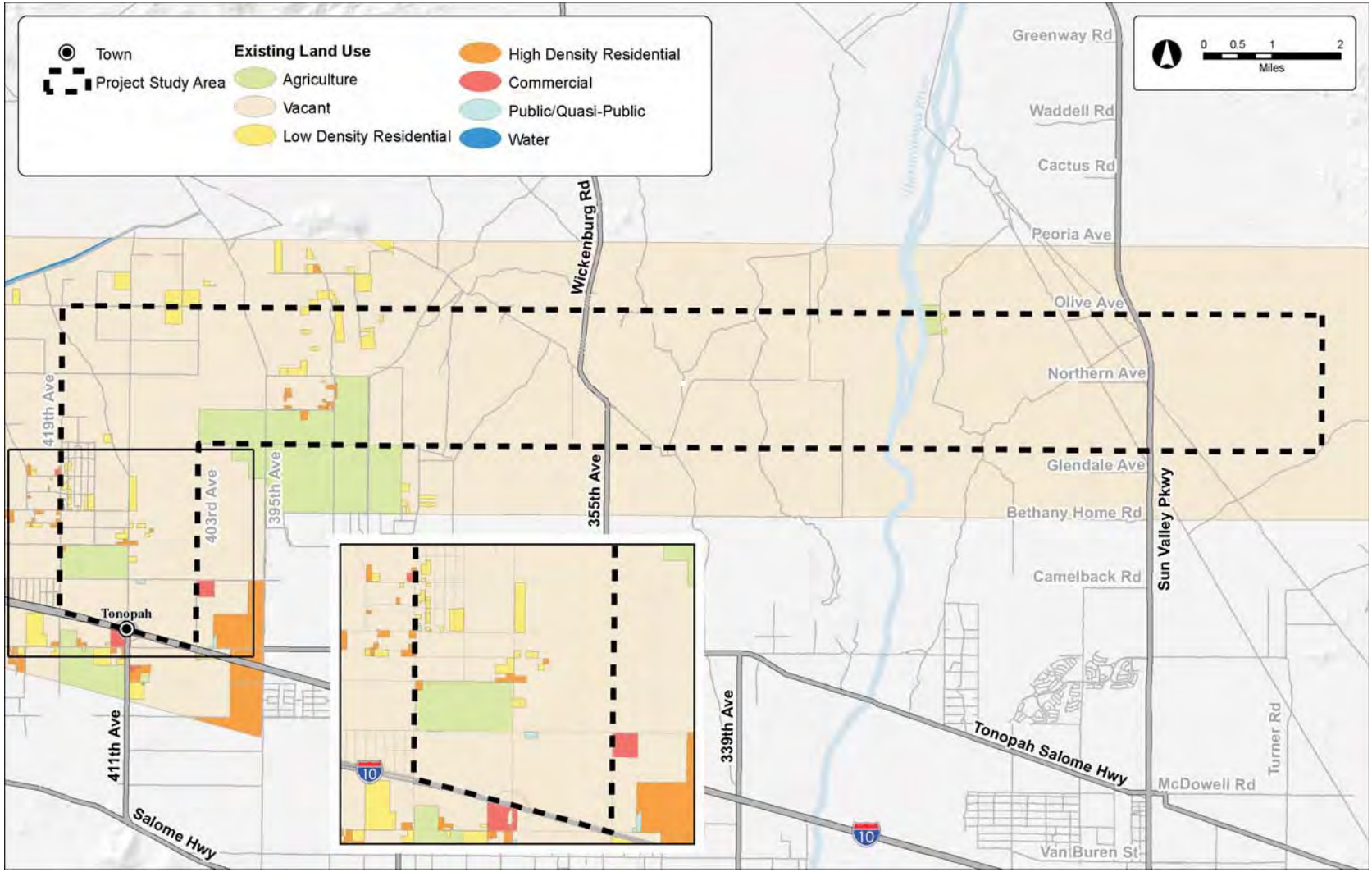
EXISTING LAND USE



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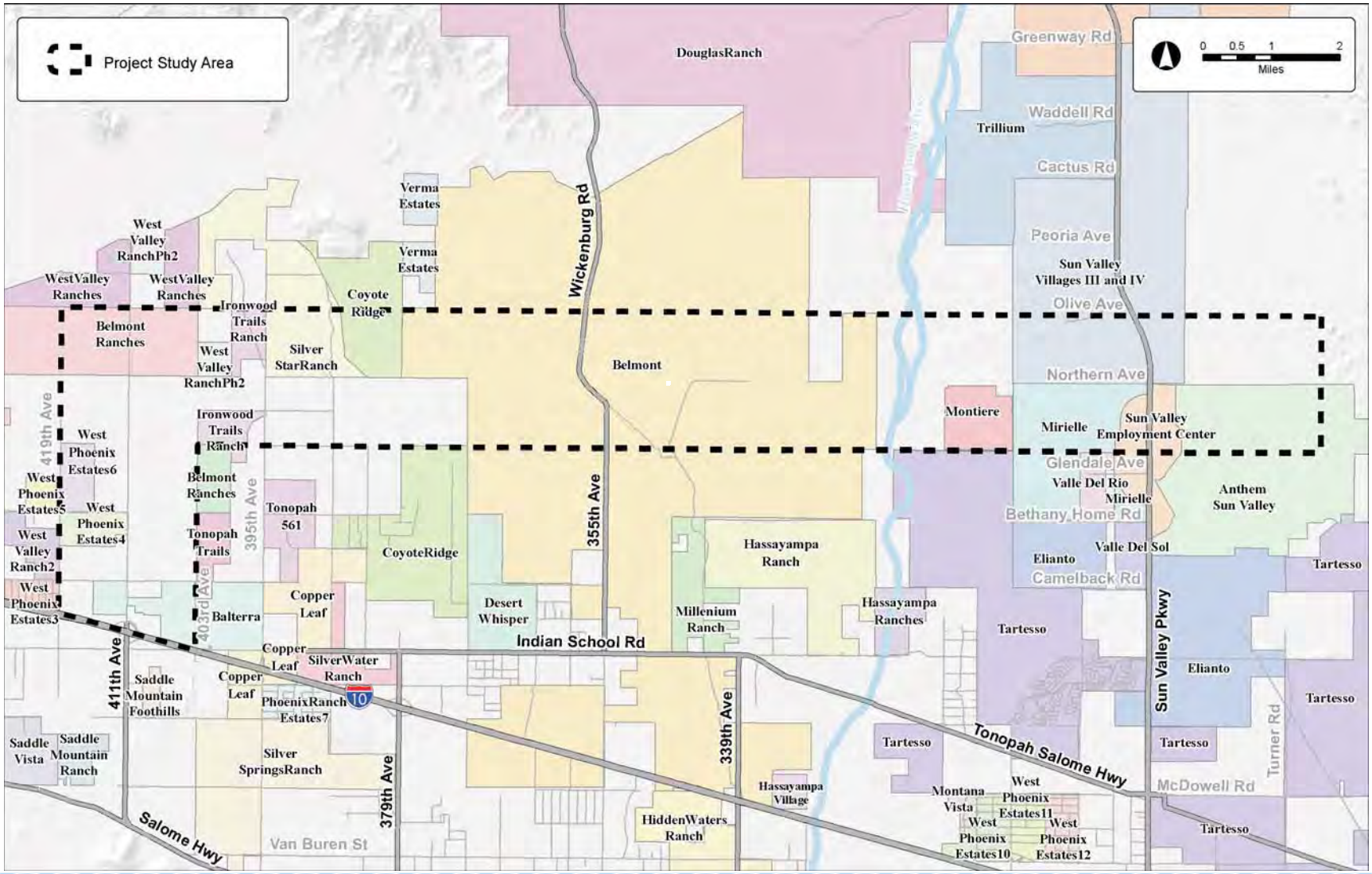
Right Road Right Time Right Cost

Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

Feasibility Study

EXISTING AND PLANNED DEVELOPMENTS



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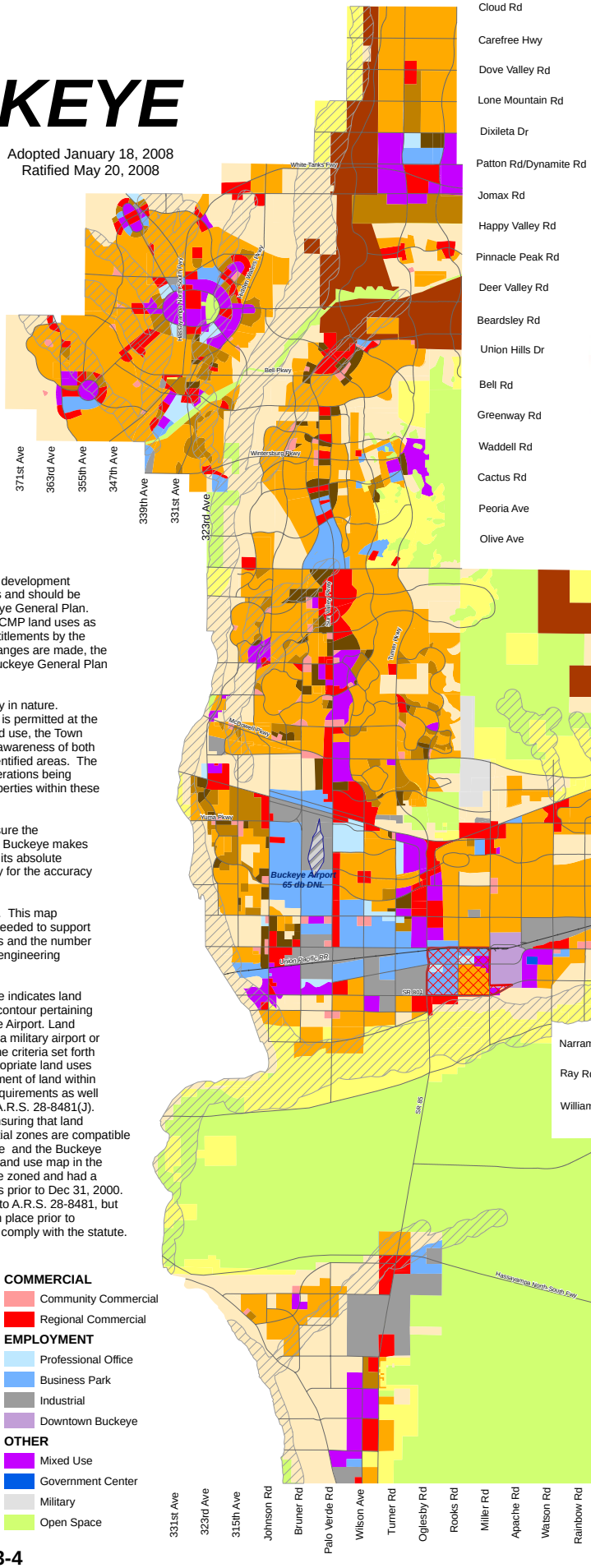
Town of

BUCKEYE

Adopted January 18, 2008
Ratified May 20, 2008



Notes:

All Community Master Plans (CMP) and development agreements remain as valid entitlements and should be referred to in conjunction with the Buckeye General Plan. The Land Use Map strives to reflect the CMP land uses as accurately as possible. The adopted entitlements by the Town of Buckeye are valid and if any changes are made, the policies and guidelines outlined in the Buckeye General Plan will be followed.

Floodway Transitional Areas are advisory in nature. Though development within these areas is permitted at the level of the designated General Plan land use, the Town wishes to emphasize the importance of awareness of both the hazards and sensitivities in these identified areas. The Town strongly encourages these considerations being addressed in development plans for properties within these areas.

While every effort has been made to ensure the accuracy of this information, the Town of Buckeye makes no warranty, expressed or implied, as to its absolute accuracy and expressly disclaims liability for the accuracy thereof.

Arterial / River crossings are conceptual. This map demonstrates the number of crossings needed to support development at build-out. Final locations and the number of crossings will be determined through engineering and water studies.

Town of Buckeye General Plan Land Use indicates land within the 65 day-night noise level (dnl) contour pertaining to Luke Air Force Base and the Buckeye Airport. Land within the designated 65 dnl adjacent to a military airport or ancillary military facility is restricted by the criteria set forth in A.R.S. 28-8481(J) which outlines appropriate land uses for such land. Any General Plan Amendment of land within these areas must also comply with all requirements as well as the compatible land uses outlined in A.R.S. 28-8481(J). The Town of Buckeye is committed to ensuring that land uses in the high noise or accident potential zones are compatible with the operation of Luke Air Force Base and the Buckeye Airport. Residential uses shown on the land use map in the 65 dnl area for Luke Air Force Base were zoned and had a development plan in place for those uses prior to Dec 31, 2000. These properties continue to be subject to A.R.S. 28-8481, but the development plans that have been in place prior to December 31, 2000 for these properties comply with the statute.

- Floodway Transitional Areas
- 65 db noise contour
- Downtown Expansion Area

RESIDENTIAL

- Very Low Density 0-1 du/ac
- Low Density 1.01-3 du/ac
- Medium Density 3.01-6 du/ac
- Medium High Density 6.01-10 du/ac
- High Density 10.01-15 du/ac
- Master Planned Community

COMMERCIAL

- Community Commercial
- Regional Commercial

EMPLOYMENT

- Professional Office
- Business Park
- Industrial
- Downtown Buckeye

OTHER

- Mixed Use
- Government Center
- Military
- Open Space

FIGURE 3-4

TOWN OF BUCKEYE
GENERAL PLAN LAND USE

One Town, One Vision!
General Plan and Development Code

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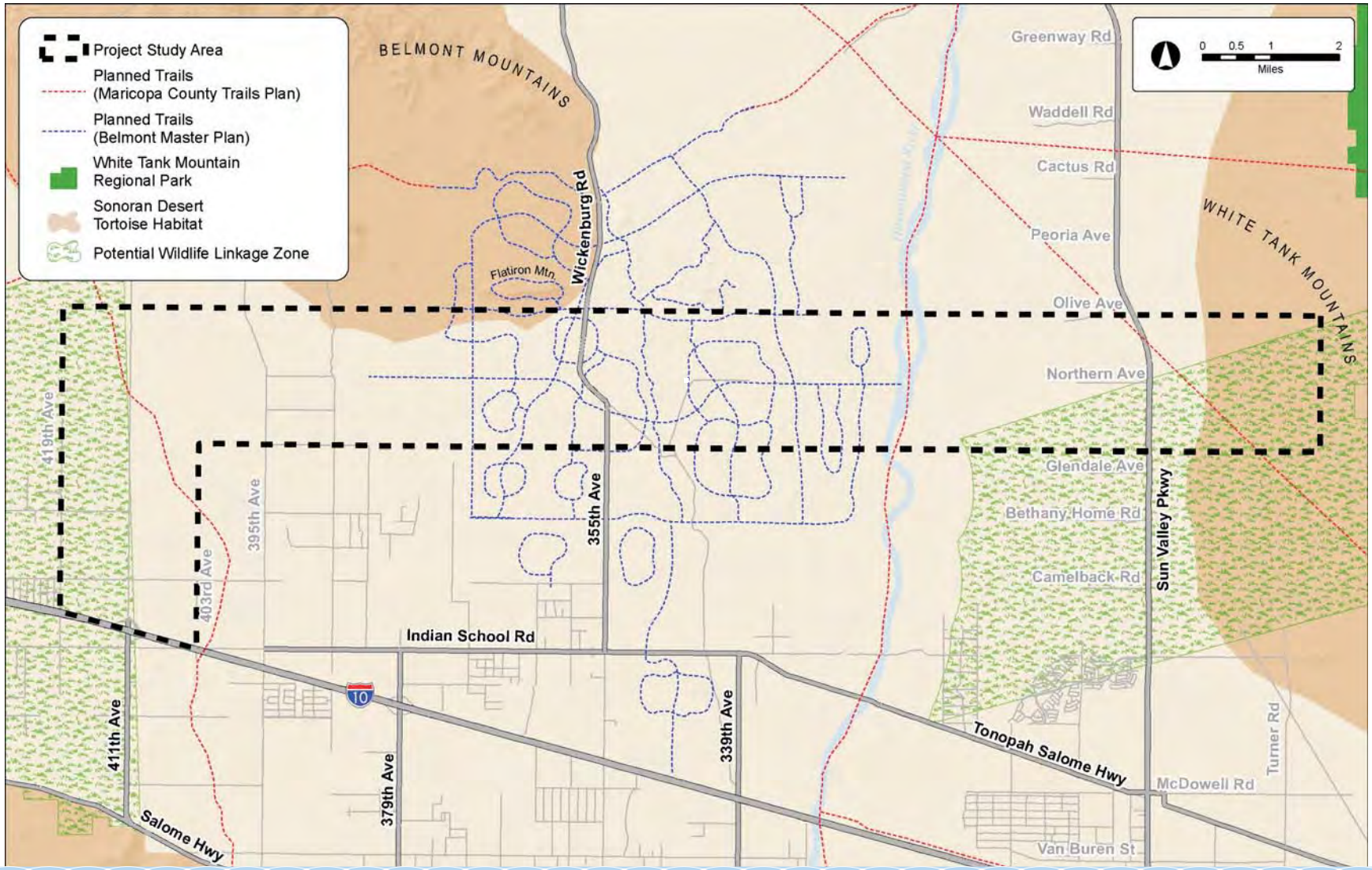
Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

Feasibility Study

RECREATIONAL AND WILDLIFE AREAS



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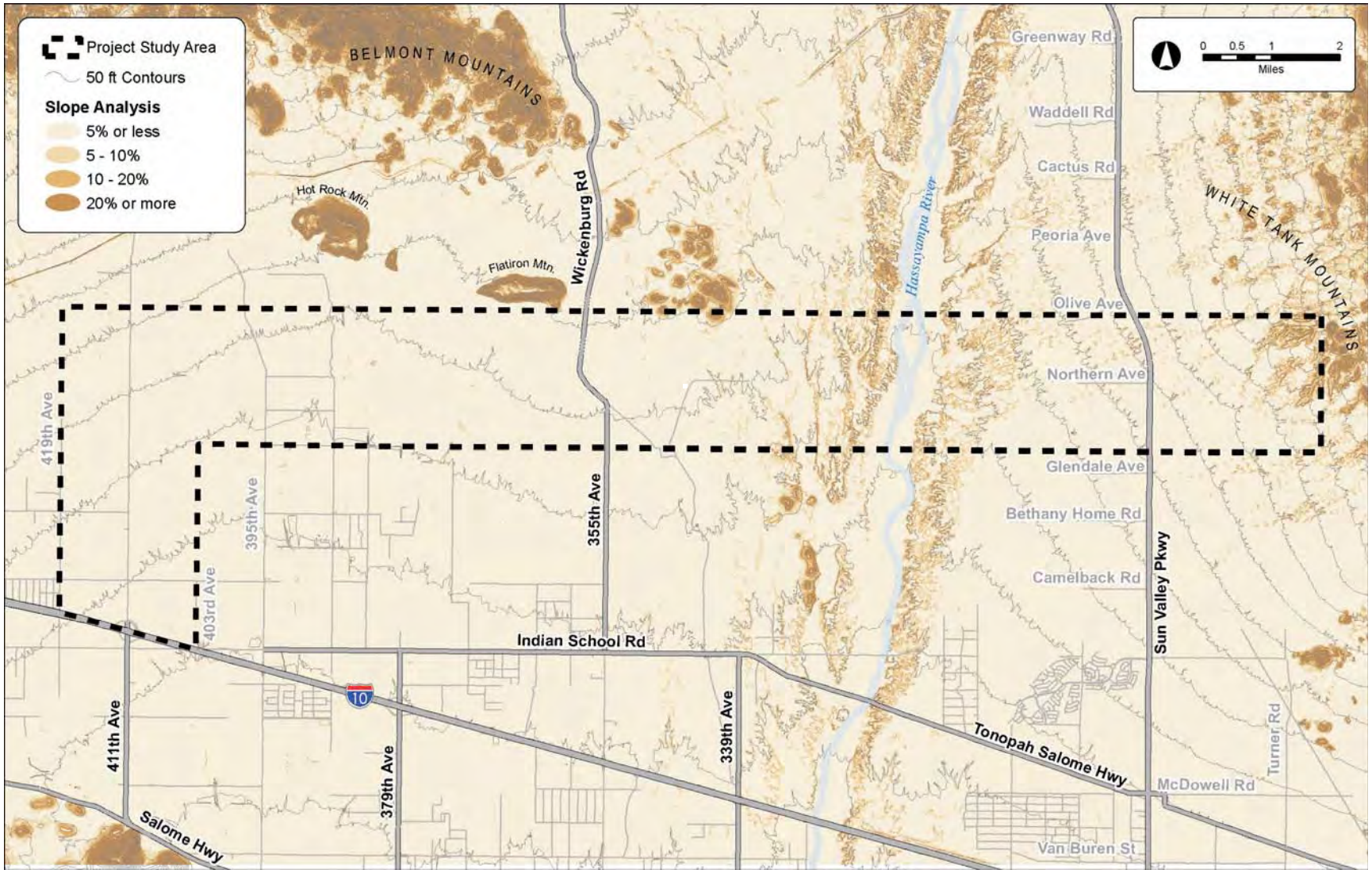
Right Road Right Time Right Cost

Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

Feasibility Study

TOPOGRAPHY



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Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

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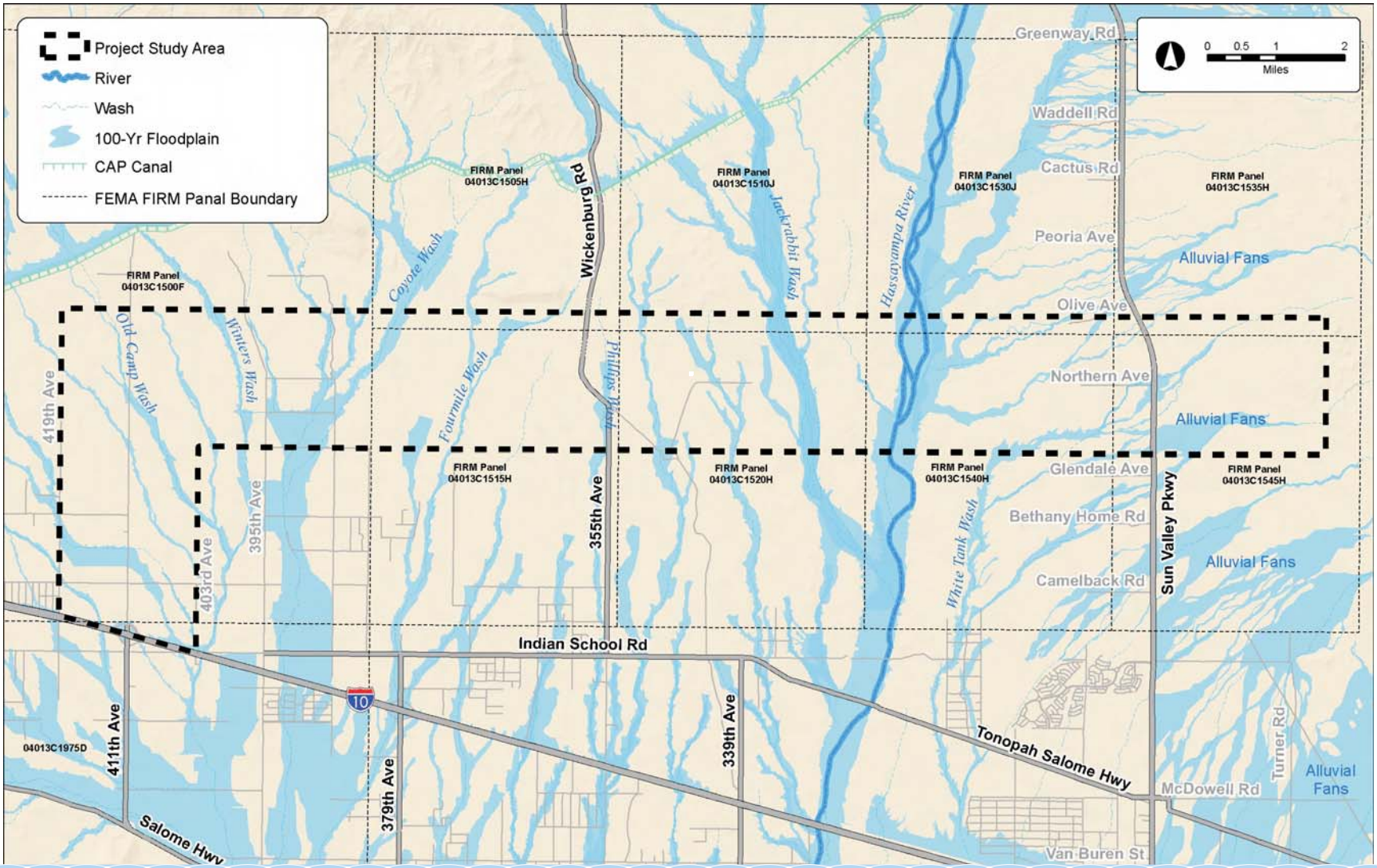
FLOODPLAINS AND WASHES



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Right Road Right Time Right Cost

Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

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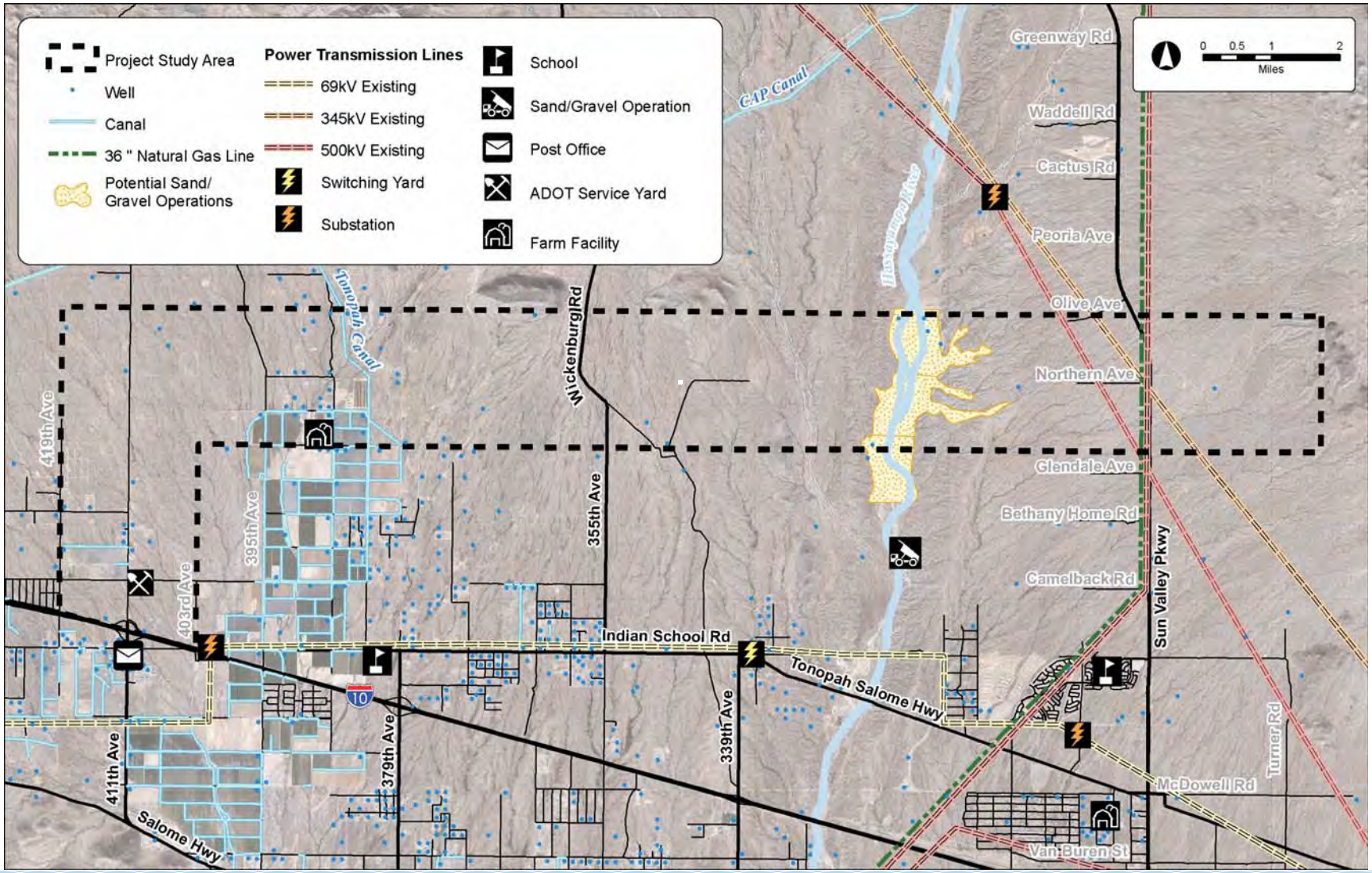
UTILITIES AND FACILITIES



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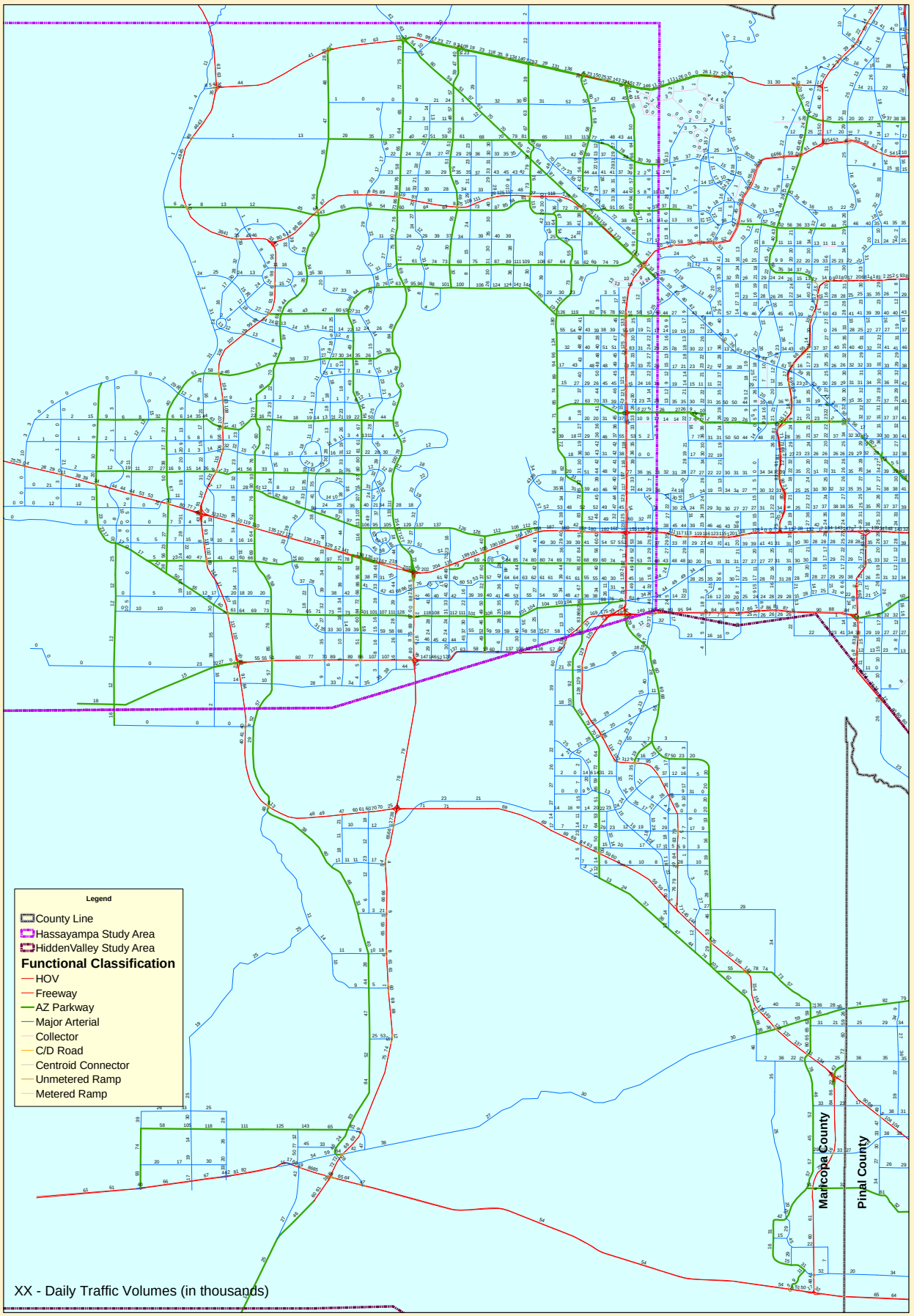


Data Source:
Maricopa Association of Governments,
Hidden Valley Buildout 24-Hour Volume Forecasts, and Hassayampa Valley Buildout 24-Hour Volume Forecasts,
Dated: September 30, 2008.
Prepared by: Wilson & Company,
Dated: 06/02/2009

MAG Buildout Traffic Projections
I-10/Hassayampa Valley Framework Study
I-10/HiddenValley Framework Study

N

0 1 2 4 6 8
Miles

MARICOPA COUNTY MCDOT TRANSPORTATION

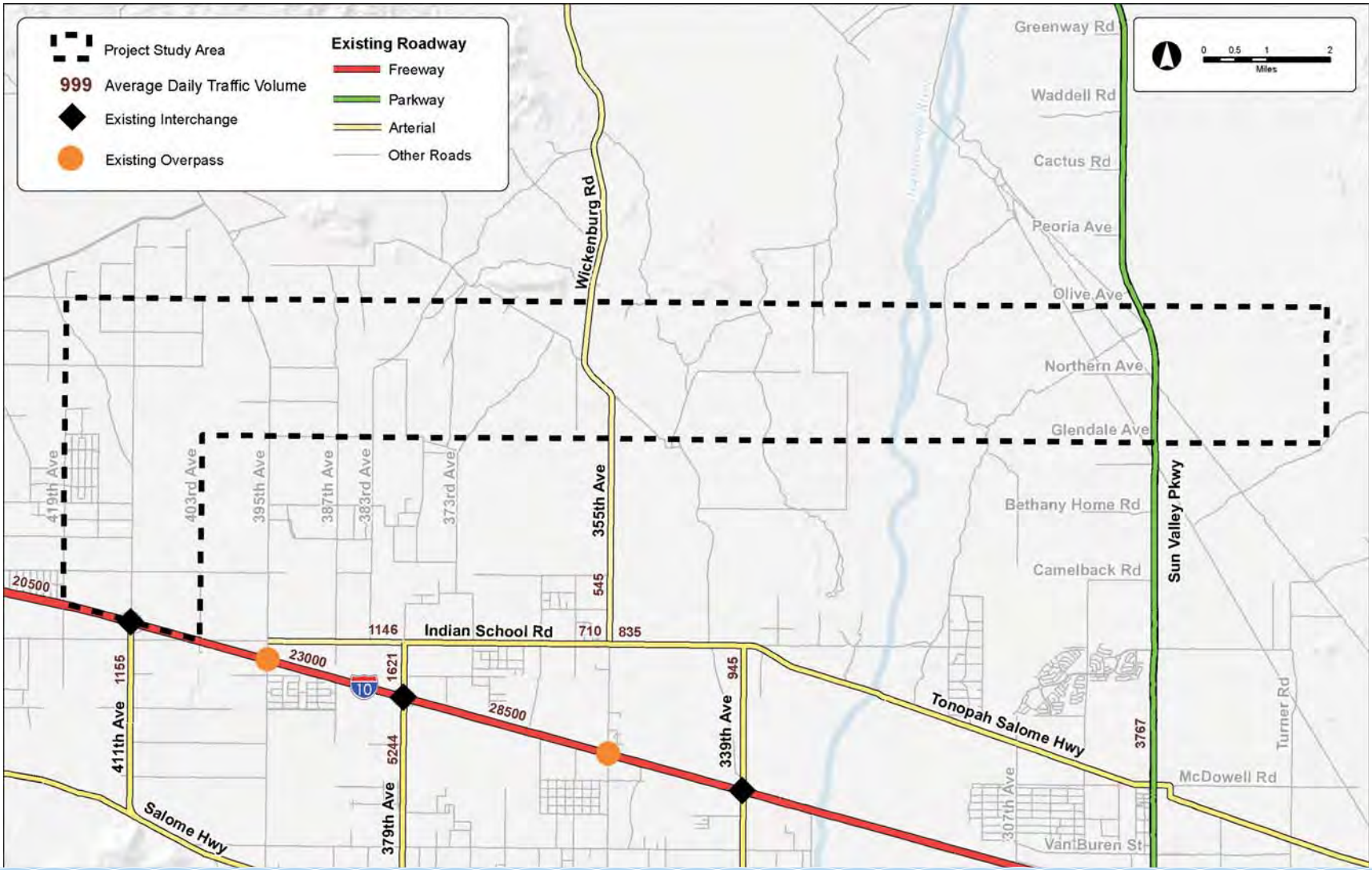
Right Road Right Time Right Cost

Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

Feasibility Study

EXISTING TRANSPORTATION NETWORK



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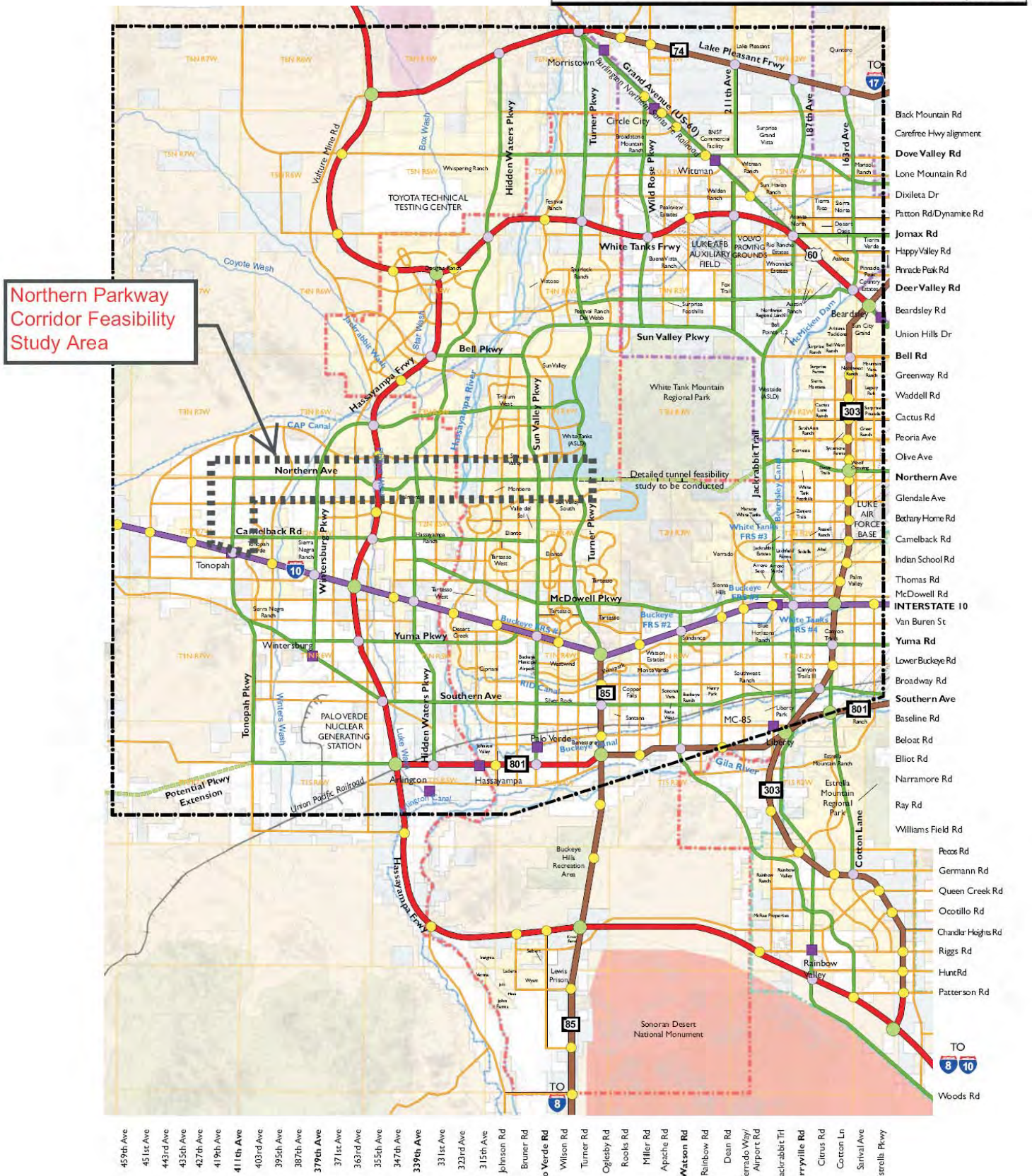
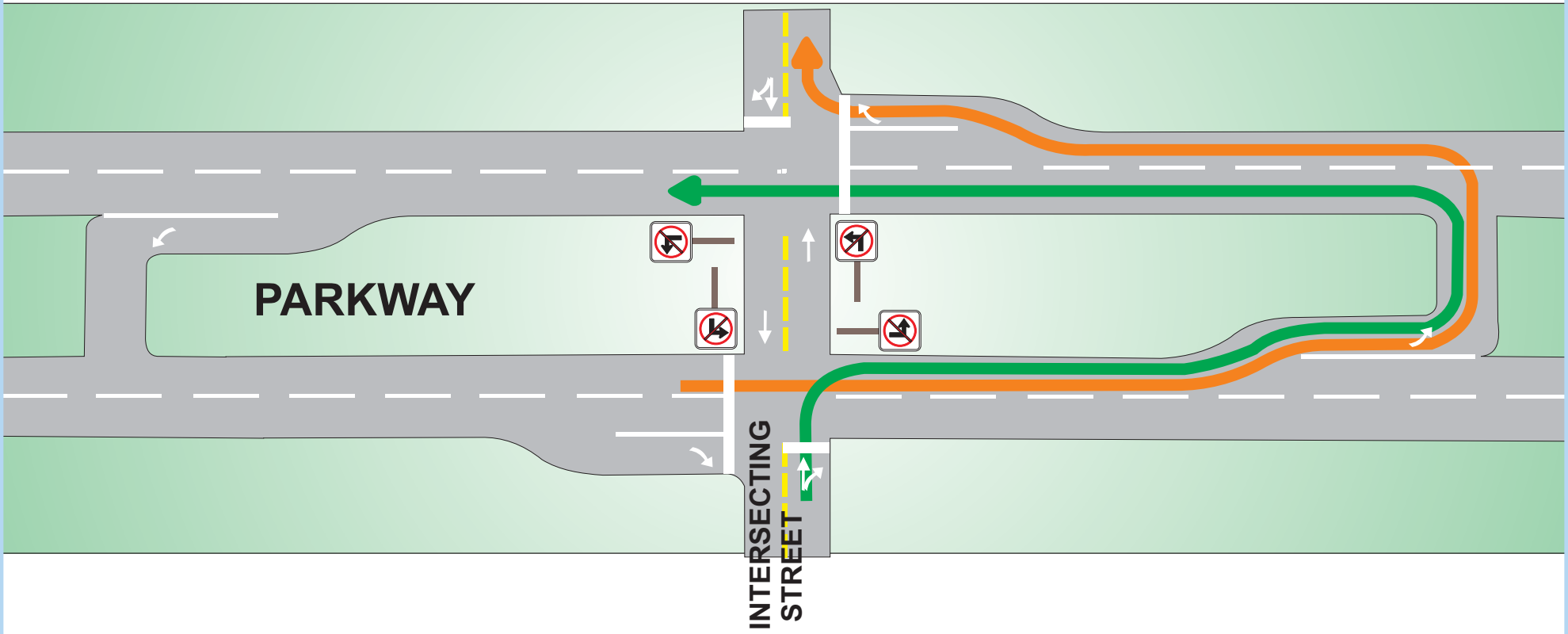
HASSAYAMPA FRAMEWORK FUTURE TRANSPORTATION NETWORK



MARICOPA COUNTY MCDOT TRANSPORTATION
Right Road Right Time Right Cost

Northern Parkway Corridor
Tonopah Pkwy to Turner Pkwy
Feasibility Study

ARIZONA PARKWAY
Indirect Left Turn Intersection



10-18-2010

Maricopa County Department of Transportation

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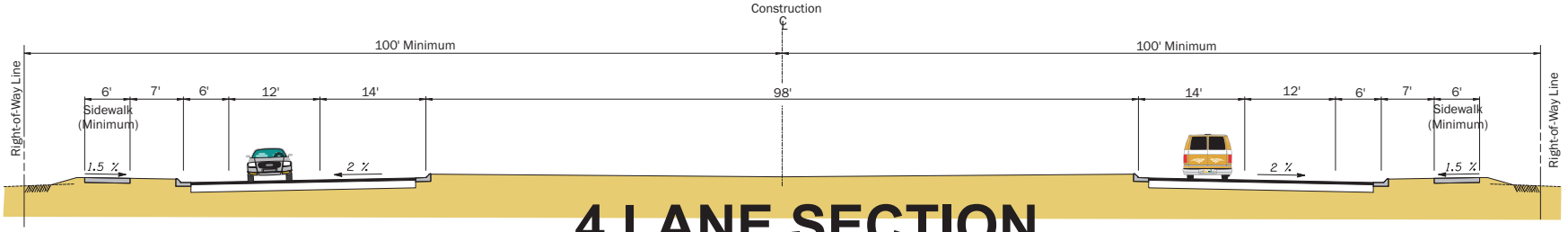
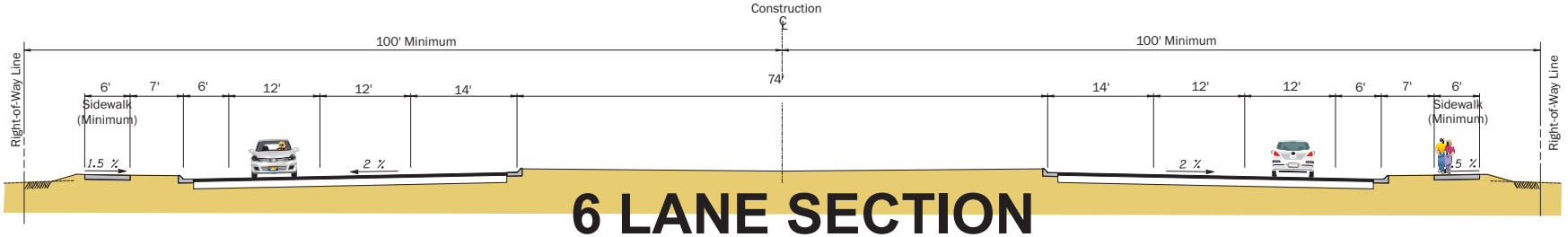
MARICOPA COUNTY MCDOT TRANSPORTATION
Right Road Right Time Right Cost

Northern Parkway Corridor
Tonopah Pkwy to Turner Pkwy
Feasibility Study

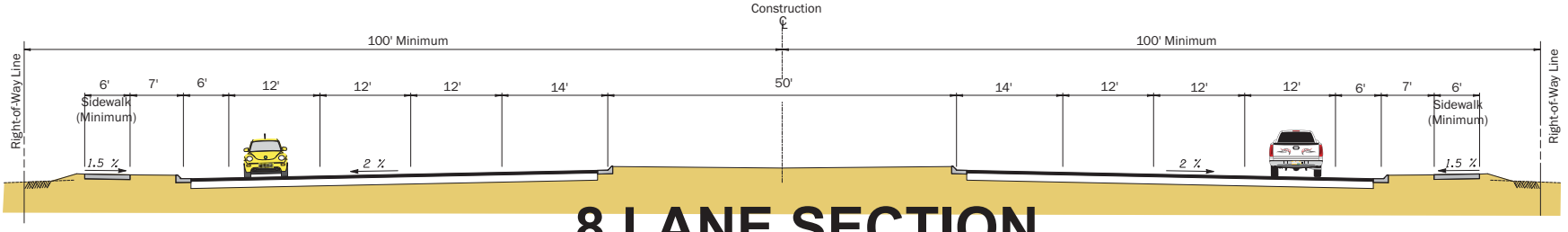
ARIZONA PARKWAY
TYPICAL SECTIONS



4 LANE SECTION



6 LANE SECTION



8 LANE SECTION

Note:
When curb is present, dimensions are to face of curb

10-18-2010

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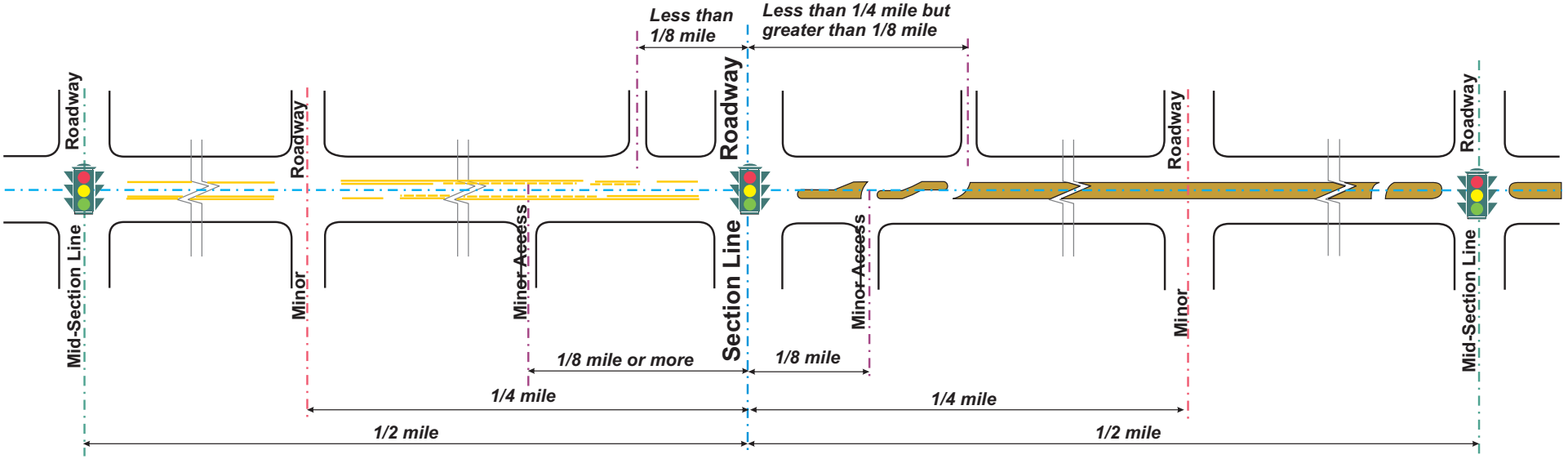
Northern Parkway Corridor
Tonopah Pkwy to Turner Pkwy
Feasibility Study

ARIZONA PARKWAY
Access Management Guidelines



Intersection Spacing

- Signalized intersections recommended at ½ mile increments.
- Non-signalized intersections should be separated by a minimum of 660 feet (1/8 mile).

Medians

- Both raised and flush center roadway medians are proposed for the Signal Butte Road corridor.
- Full access median breaks may be provided at 1/6 mile (880 feet) increments. All additional median openings should be partial access only type.
- Median openings are not recommended less than 660 feet (1/8 mile) from an arterial-to-arterial intersection.

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Environmental Process

Activity	Definition
Land Use Inventory	This is an analysis of the various land uses in the study area – residential, commercial, public facilities (schools, fire stations, etc.) or undeveloped lands; and how those uses might be affected by the project alternatives.
Socio-Economic Analysis	This is an analysis of the people who live in the area and local businesses. Potential impacts to the people that work and live in the vicinity are examined as well as potential impacts to businesses and social services, both temporary and permanent.
Clean Water Act, Section 404	A Federal Law, the Clean Water Act, regulates activities within what are known as the "Waters of the United States." The purpose of this law is to reduce water pollution and protect wetlands, such as marshes, which are essential wildlife habitats. A permit is needed when a company or an agency wants to intrude upon these lands, whether it is to build a dike, or a bridge, or whatever. The permit is called a "Section 404 Permit" because its purpose is described in Section 404 of the Clean Water Act. This portion of the Act is administered and the permits are granted by the US Army Corps of Engineers.
Endangered Species and State Sensitive Species	The ESA is a Federal Law enacted to protect those species of plants and animals that are or could become endangered, threatened, or otherwise in danger of extinction. Additionally, the Arizona Game and Fish Department list of sensitive plants and animals is reviewed for potential impacts due to the project.
Biological Surveys	A survey conducted by qualified biologists using approved survey methods to determine whether protected species are present in a project area.
Noise Evaluation	Sensitive receptor locations are mapped, such as homes or hospitals, and the potential for negative impacts are identified. At a future point in the project development process detailed noise measurements and prediction of future sound levels will occur. Mitigation measures as needed will be identified.
Air Quality	Air Quality analysis is conducted on a regional basis to identify whether areas are in conformance with national standards for particulate matter (dust), carbon monoxide and ozone.
Cultural Resources	Publicly funded projects are subject to the National Historic Preservation Act and Arizona Antiquities Act to insure archaeological and historical resources are considered in the project development process. Archaeologists and historians review the project area's history and pre-history so that negative impacts to important sites can be avoided or mitigated to the greatest extent that is practical.
Hazardous Materials	Qualified technicians search the records and conduct walking surveys of a project area to determine whether there are places that contain or once contained dangerous chemicals or hazardous waste.
Environmental Assessment	This is a type of environmental document used to summarize the results of all the studies noted above. The Environmental Assessment is used as a decision document for the project proponent, and is subject to review by affected agencies and the public.

10-18-2010

These alternatives have the least impact on existing subdivided properties, are most compatible with planned developments, and tie directly to the existing I-10 interchange with 411th Avenue.

EVALUATION CRITERIA

During the next phase of the study development process, Advanced Candidate Alternatives recommended for further consideration will be evaluated based on the following criteria:

- Future Development Compatibility
- System Continuity and Capacity
- Drainage Impacts
- Irrigation Impacts
- Building/Property Impacts
- Wildlife Impacts
- Cultural/Archaeological Impacts
- Utility Impacts
- Public Acceptability
- Cost

It is anticipated that the application of these evaluation criteria will result in the selection and identification of a Preferred Alternative (recommended alignment) that will be depicted in detailed engineering drawings to be used for future land development planning.

STUDY SCHEDULE

Study Kick-off	July 2010
PHASE I: Data Collection/Issues Identification	**July - November 2010**
Technical Advisory Committee (TAC) Meeting #1	July 14, 2010
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Technical Advisory Committee (TAC) Meeting #5	March 2011
Draft Final Report	April 2011
Study Completion/Final Report	**May 2011**

PUBLIC INVOLVEMENT

Gaining consensus among the agencies and the public is critical to the success of the study and implementation of its recommendations to provide a safe and efficient roadway for the long term.

Three public input meetings are conducted at critical milestones in the study process. Approximately 85 area residents and other study stakeholders attended the first Public "Scoping" meeting on October 18, 2010. This initial public meeting provided area residents and other impacted stakeholders with an opportunity to inform project team members about the study area issues and local transportation needs. This meeting also provided the study team members with an opportunity to discuss and elicit feedback regarding the study purpose, goals and objectives.

This current public input meeting (February 15, 2011), is being conducted during the Alternatives Analysis phase of the study. The purpose of this public meeting is to provide the community with the opportunity to comment on preliminary study findings and provide feedback on the different roadway alignment alternatives being evaluated for both the Northern Parkway and Tonopah Parkway corridors.

The final "Study Findings and Recommendations" public information meeting is currently slated for March 2011. At this meeting, the study team will present the findings and recommendations of the study, including the preferred parkway alignment, the right-of-way footprint for the future parkways, and preliminary engineering details.

Your input and feedback during each phase of the study process is very important and a vital component of study development.

Maricopa County
Department of Transportation

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Northern Parkway Corridor Feasibility Study

I-10 to Turner Parkway

"Alternatives Phase"

MARICOPA COUNTY MCDOT TRANSPORTATION

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Maricopa County Department of Transportation **February 15, 2011**

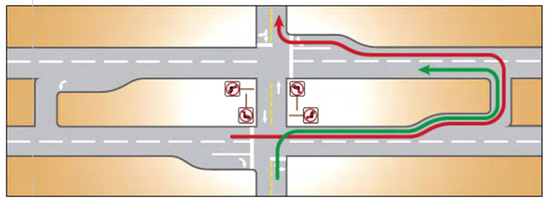
BACKGROUND

The Northern Parkway/Tonopah Parkway Corridor Feasibility Study includes Northern Parkway between Tonopah Parkway and Turner Parkway and Tonopah Parkway between I-10 and Northern Parkway.

The Northern Parkway/Tonopah Parkway Corridor Feasibility Study is one of a series of long-range transportation planning studies being conducted by the Maricopa County Department of Transportation (MCDOT). These studies are evaluating future parkways identified in the recently completed Maricopa Association of Governments (MAG) Interstate 10 (I-10)/Hassayampa Valley Transportation Framework Study (2008) that recommended a comprehensive transportation network designed to meet the future traffic demands for the build-out of the area west of the White Tank Mountains. This long-range regional transportation network identified the need for a new type of high-capacity, non-freeway roadway facility that could safely handle the projected travel demands within the study area.

The primary purpose of this feasibility study is to identify the preferred corridor alignment for Northern Parkway and Tonopah Parkway, which are proposed as Arizona Parkways. This new roadway type, called the "Arizona Parkway" will offer significantly greater travel capacity than a major urban arterial roadway (traditional six-lane surface street) without employing full grade separations (overpasses or underpasses) at intersections with arterial cross-streets.

The Arizona Parkway intersection treatment controls intersection traffic movements with a two-phased traffic signal control and prohibits left turns at cross-street intersections. Instead, all left-turn movements are made using an "indirect" left-turn crossover immediately beyond the crossroad intersection. This type of intersection configuration provides the benefit of increased intersection capacity while still allowing for direct driveway access to development at each corner of the intersection.



Arizona Parkway Indirect Left-turn Intersection configuration

CORRIDOR DESCRIPTION

Northern Parkway: The segment of Northern Parkway under evaluation in this study is referred to as the Northern Parkway Hassayampa Section to distinguish it from other planned Northern Parkway segments east of the White Tank Mountains. The study area is an east-west corridor centered on the Northern Avenue section line from the planned Tonopah Parkway (411th Avenue alignment) to the planned Turner Parkway (267th Avenue alignment). The Northern Parkway study area is approximately 18 miles long and two miles wide.

Tonopah Parkway: This evaluation also includes the portion of the planned Tonopah Parkway which runs north-south centered on the 411th Avenue section line between I-10 and the planned Northern Parkway Hassayampa Section. The Tonopah Parkway study area is approximately 3.75 miles long and two miles wide.

STUDY NEED

The MAG Hassayampa Valley Transportation Framework Study demonstrated the future need for both Northern Parkway and Tonopah Parkway. Although today's land development and travel demands do not warrant any major new high capacity roadways in the near-term, the "build-out" forecast for future land development and resulting travel demand within the study area warrant an entire network of future Arizona Parkways. Plans are already underway within the study area to convert vacant lands to land uses that will generate increased traffic volumes.

In order to preserve sufficient public right-of-way for the future Northern Parkway and Tonopah Parkway and protect these future roadway corridors from development and encroachment, the planning process needs to start now to identify roadway right-of-way requirements for forecasted build-out conditions. This current study is the first step in the roadway development process and is meant to aid the local jurisdictions in defining and protecting a continuous future roadway corridor that can accommodate build-out traffic demands in the project study area. To this end, the Northern Parkway/Tonopah Parkway study is needed to:

- Address regional and local growth and development (2.8 million population projected at build-out in the I-10/Hassayampa Valley Transportation Framework study area)
- Preserve and protect sufficient public right-of-way for high-capacity (non-freeway) transportation corridors

For more information, contact Denise Lacey at (602) 506-6172 or write to her at:
MCDOT, 2901 W. Durango Street, Phoenix, AZ 85009, or e-mail at: DeniseLacey@mail.maricopa.gov.

- Ensure future parkway compatibility with existing/future land uses and environmental conditions
- Identify potential connectivity issues with other future planned parkways and freeways

STUDY GOALS AND OBJECTIVES

The main focus of this feasibility study is to investigate, map, and analyze corridor constraints and opportunities to arrive at a recommended corridor alignment for the proposed Northern Parkway and Tonopah Parkway based on the Arizona Parkway indirect left-turn intersection design within a 200-foot right-of-way corridor. The goals and objectives of this study are:

- Achieve roadway network continuity and connectivity
  - Determine the preferred corridor alignment from a regional transportation corridor perspective;
  - Protect and preserve right-of-way for the preferred corridor alignment to maintain its long-term viability;
  - Provide future connectivity with primary and regional roadway facilities; and
  - Provide crossings of alluvial fans, drainage washes, rivers, and canals.
- Enhance traffic flow (capacity) and safety
  - Preserve functional integrity of the Arizona Parkway by recommending unique segment-specific solutions to address identified opportunities or constraints;
  - Identify areas that may require additional right-of-way or easements, especially at crossings with other parkways, alluvial fans, and utility corridors; and
  - Enhance traffic operations while maintaining reasonable access for developments.
- Preserve the environment
  - Comply with governing environmental regulations for new roadway development;
  - Minimize adverse impacts to the study area environment, including wildlife corridors and archeological sites; and
  - Enhance important environmental features (e.g., habitat areas).
- Develop consensus-driven alignment alternatives
  - Work with the Technical Advisory Committee and key stakeholders in developing feasible alignment alternatives;
  - Develop cost-effective roadway alignment alternatives;
  - Conduct public outreach to obtain input on alignment alternatives and build consensus; and
  - Ensure consistency between the study's transportation actions and regional and local plans.

KEY ISSUES AND CHALLENGES

Early in the study process, a preliminary list of study issues and potential challenges was compiled. This list expands as the study progresses and input is obtained from public participation. Major issues identified at this stage include:

- Evaluation of drainage structures across alluvial fans and major washes
- Identification of the most feasible location for a future bridged crossing of the Hassayampa River
- Identification of ultimate roadway alignment and access management strategies to maximize revenue-generating potential for developable lands
- Determination of impacts of existing electrical line towers on the roadway alignment
- Consideration of environmental impacts (including existing agricultural operations, cultural resources, and wildlife habitat linkages)
- Coordination and compatibility with existing and planned land development

PROJECT STAKEHOLDERS

In addition to public stakeholders, the following is a list of agencies and stakeholder groups that are represented and participate in the study process:

- Maricopa County Department of Transportation (MCDOT)
- Flood Control District of Maricopa County (FCDMC)
- Maricopa County Planning and Development
- Arizona Department of Transportation (ADOT)
- Arizona State Land Department (ASLD)
- Maricopa Association of Governments (MAG)
- Town of Buckeye
- Federal Highway Administration (FHWA)
- Arizona Game and Fish Department (AGFD)
- U.S. Bureau of Land Management (BLM)
- U.S. Fish and Wildlife Services (USFWS)
- Center for Desert Archaeology
- Sonoran Institute
- Central Arizona Project (CAP)
- Community of Tonopah
- School Districts
- Maricopa County Farm Bureau
- Area Developers
- Irrigation and Utility Companies
- Affected Businesses, Property Owners and Residents

STUDY APPROACH

This corridor feasibility study is considered "long-range" transportation planning and is the earliest phase of project development. The outcome of a corridor feasibility study is an agreed-upon plan for the preservation of the right-of-way footprint for the future parkway corridor.

To accomplish this goal, the study is broken into two phases. Phase I is a planning level evaluation of the study corridor and consists of gathering data on existing and future study area features, assessing and evaluating the surrounding corridor conditions to aid in potential issues identification, and preparing constraints maps and base maps that will allow the study team to make well-founded recommendations for possible parkway corridor alignments within the study area. Conceptual corridor alignment alternatives are developed only to the extent necessary to conduct a meaningful comparative analysis/fatal flaws analysis. Conceptual alignment alternatives are evaluated for technical feasibility as well as public acceptability as part of this process.

Based upon Phase I "fatal flaw" evaluation and outcomes, up to three candidates for alternative alignments are advanced to Phase II for a more detailed preliminary engineering analysis. A "preferred" alignment is selected and implementation strategies are developed. This analysis addresses engineering feasibility, environmental compatibility, economic viability, compliance with Title VI of the Civil Rights Act of 1964, and community concerns.

Once a Preferred Alignment alternative has emerged and has general consensus, preliminary plans are prepared to delineate the corridor alignment, future parkway cross-section and public right-of-way requirements.

Both Phase I and Phase II are conducted in consultation with a Technical Advisory Committee (TAC) representing agency and constituency interests. The TAC assists in the identification and resolution of issues or differing jurisdictional requirements to build as broad-based a consensus as possible regarding the preferred alternative alignment for the future parkway.

DEVELOPMENT OF ALTERNATIVES

During the alternatives analysis, the study team identified and evaluated several conceptual alignments for Northern Parkway and Tonopah Parkway. The conceptual alternatives were developed to avoid as many corridor constraints as possible yet provide a wide range of options within the study area limits. Constraints that were considered in developing the conceptual alternatives include the following:

- Land ownership:
  - Bureau of Land Management; and
  - Arizona State Trust land.
- Land use:
  - Existing and planned developments;
  - Sonoran Desert Tortoise habitat;
  - Wildlife linkage zones;
  - Potential sand and gravel operations;
  - Agricultural operations; and
  - Our Lady of Solitude Monastery north of Olive Avenue.
- Transportation Connectivity:
  - I-10/411th Avenue interchange;
  - Sun Valley Parkway connection;
  - Future connections with Camelback Parkway, Wintersburg Parkway, Hassayampa Freeway, Hidden Waters Parkway, and Turner Parkway; and
  - Planned trail systems.
- Utilities/Facilities:
  - Irrigation canals - Tonopah Canal;
  - Gas pipelines and electrical power lines near Sun Valley Parkway; and
  - ADOT Service Yard near I-10 and 411th Avenue.
- Topography:
  - Steep slopes near Hassayampa River and Jackrabbit Wash; and
  - Steep slopes near White Tank Mountains.
- Others:
  - Potential cultural resources throughout the study area; and
  - Floodplains.

Many of the potential constraints can be mitigated as part of the project design and do not necessarily constitute "fatal flaws". However, some of the constraints are considered to be more significant than others.

To narrow the range of alternatives to be evaluated in greater detail, a subjective, qualitative assessment was performed on all Conceptual Alternatives. "Candidate" Alternatives were selected from the conceptual alignments and presented to the TAC and stakeholders for review and input. The Candidate Alternatives are those that involve the fewest constraints and are the most compatible with existing land uses and future development master plans.

Northern Parkway Candidate Alternatives

Two Candidate Alternatives are proposed for the Northern Parkway segment between Tonopah Parkway and Turner Parkway,

- Alternative A - A 200-foot wide corridor centered on the Northern Avenue section line except for a three-mile dip to the south within the Belmont master planned community; and
- Alternative B - A 200-foot wide corridor with a centerline that shifts one-half mile north of Alternative A from Tonopah Parkway to 371st Avenue, then shifts south to proceed east on the Alternative A alignment from 363rd Avenue to Turner Parkway.

In lieu of developing a third Candidate Alternative for the Northern Parkway segment, the TAC and stakeholders recommended that variations of Alternative A and Alternative B be examined where electrical line towers currently exist close to the Northern Avenue section line near Sun Valley Parkway and also at the future crossing point of the Hassayampa River. It has been determined that these Northern Parkway alternatives are generally the most compatible with existing and planned developments.

Tonopah Parkway Candidate Alternatives

Three Candidate Alternatives are proposed for the Tonopah Parkway segment between I-10 and Northern Parkway,

- Alternative A - A 200-foot wide corridor centered on the 411th Avenue section line;
- Alternative B - A 200-foot wide corridor with the centerline shifted 35' west of the 411th Avenue section line; and
- Alternative C - A 200-foot wide corridor with the centerline shifted 35' east of the 411th Avenue section line.

MARICOPA COUNTY MCDOT TRANSPORTATION

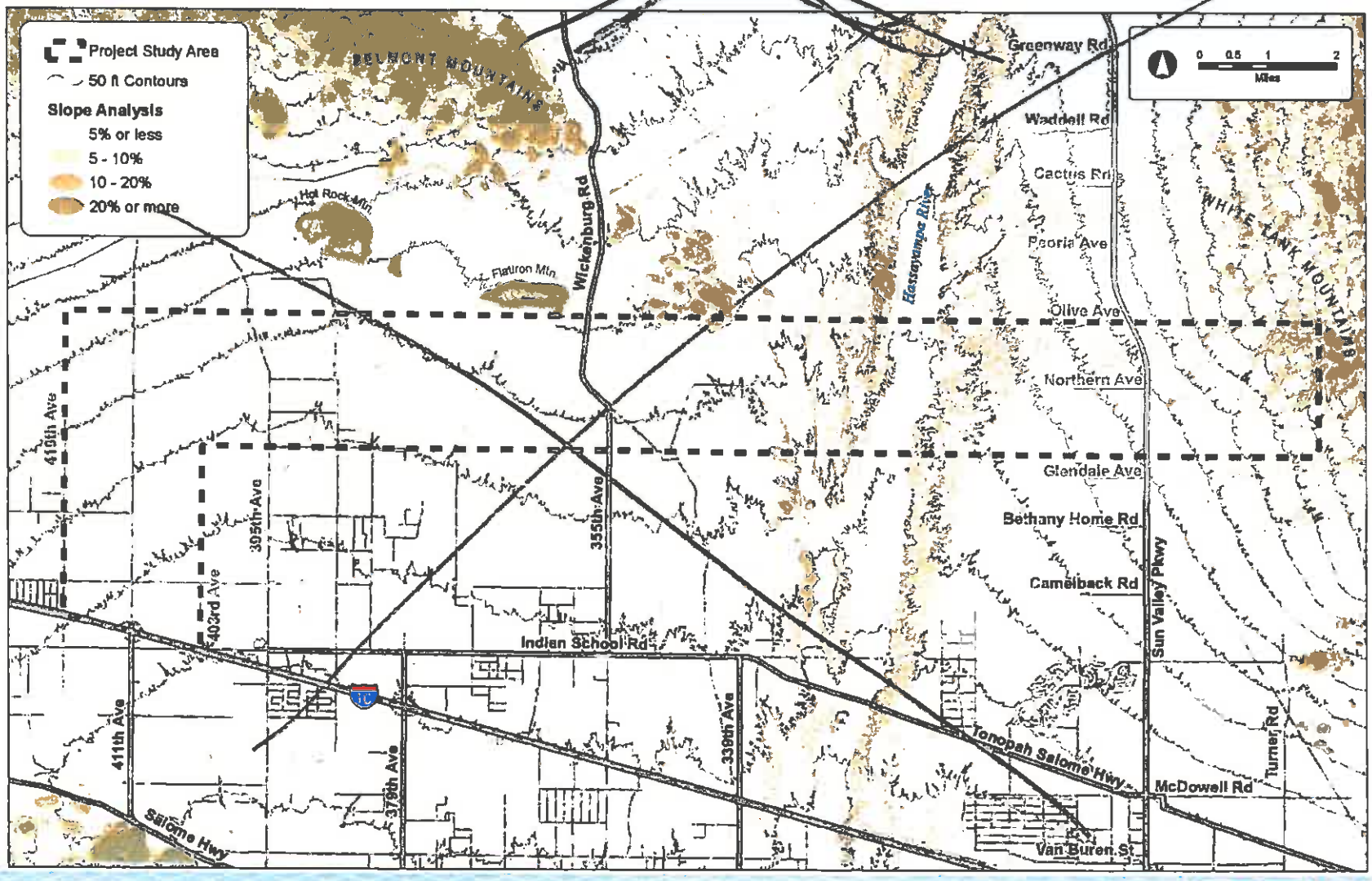
Right Road Right Time Right Cost

Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

Feasibility Study

TOPOGRAPHY



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Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

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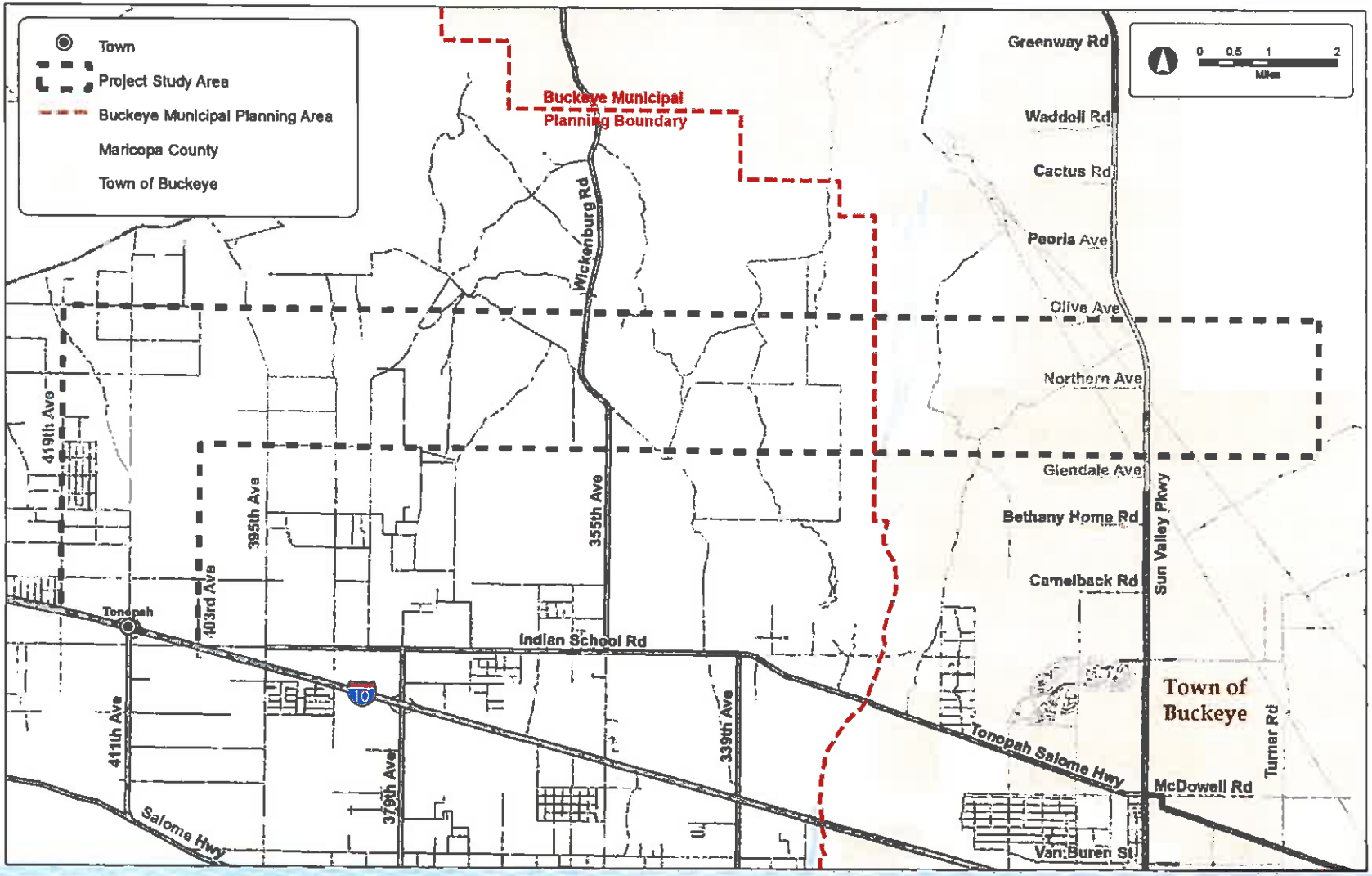
JURISDICTIONAL BOUNDARIES



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Northern Parkway Corridor
Tonopah Pkwy to Turner Pkwy
Feasibility Study

Study Purpose

- Define and Assess Existing and Future Opportunities and Constraints
- Develop and Evaluate Alignment Alternatives
- Recommend a Preferred Alignment
- Define the Preferred Alignment in Detail
- Preserve and Protect Preferred Alignment Right-of-Way

Study Goals

- Achieve Roadway Network Continuity and Connectivity
- Enhance Traffic Capacity and Safety
- Preserve the Environment
- Develop Consensus-Driven Improvement Alternatives

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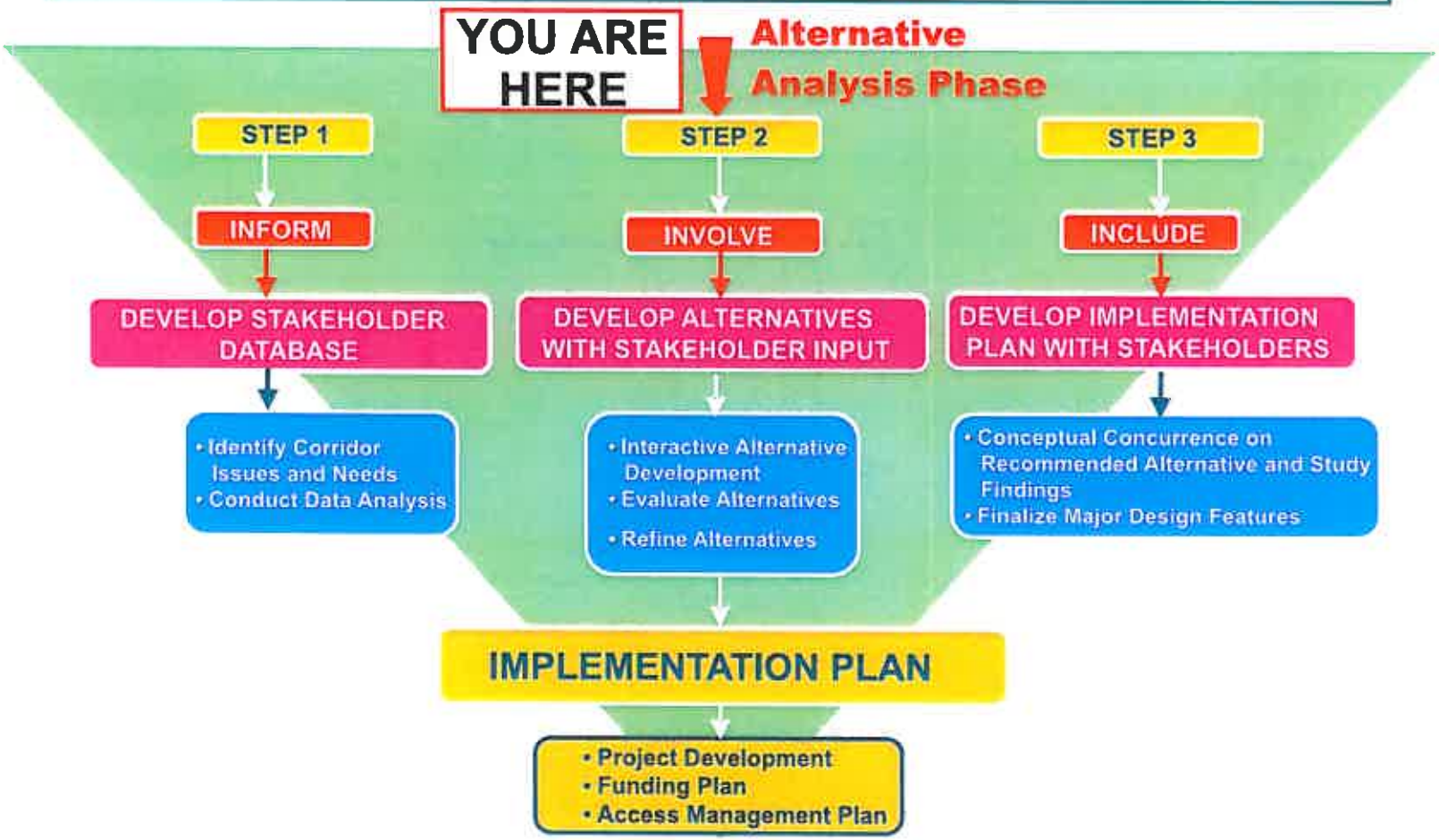
Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

Feasibility Study

Interactive Study Process



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Northern Parkway Corridor
Tonopah Pkwy to Turner Pkwy
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STUDY SCHEDULE

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Northern Parkway Corridor
Tonopah Pkwy to Turner Pkwy
Feasibility Study

Study Stakeholders

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- Central Arizona Project
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- Development Community
- Utility and Irrigation Companies
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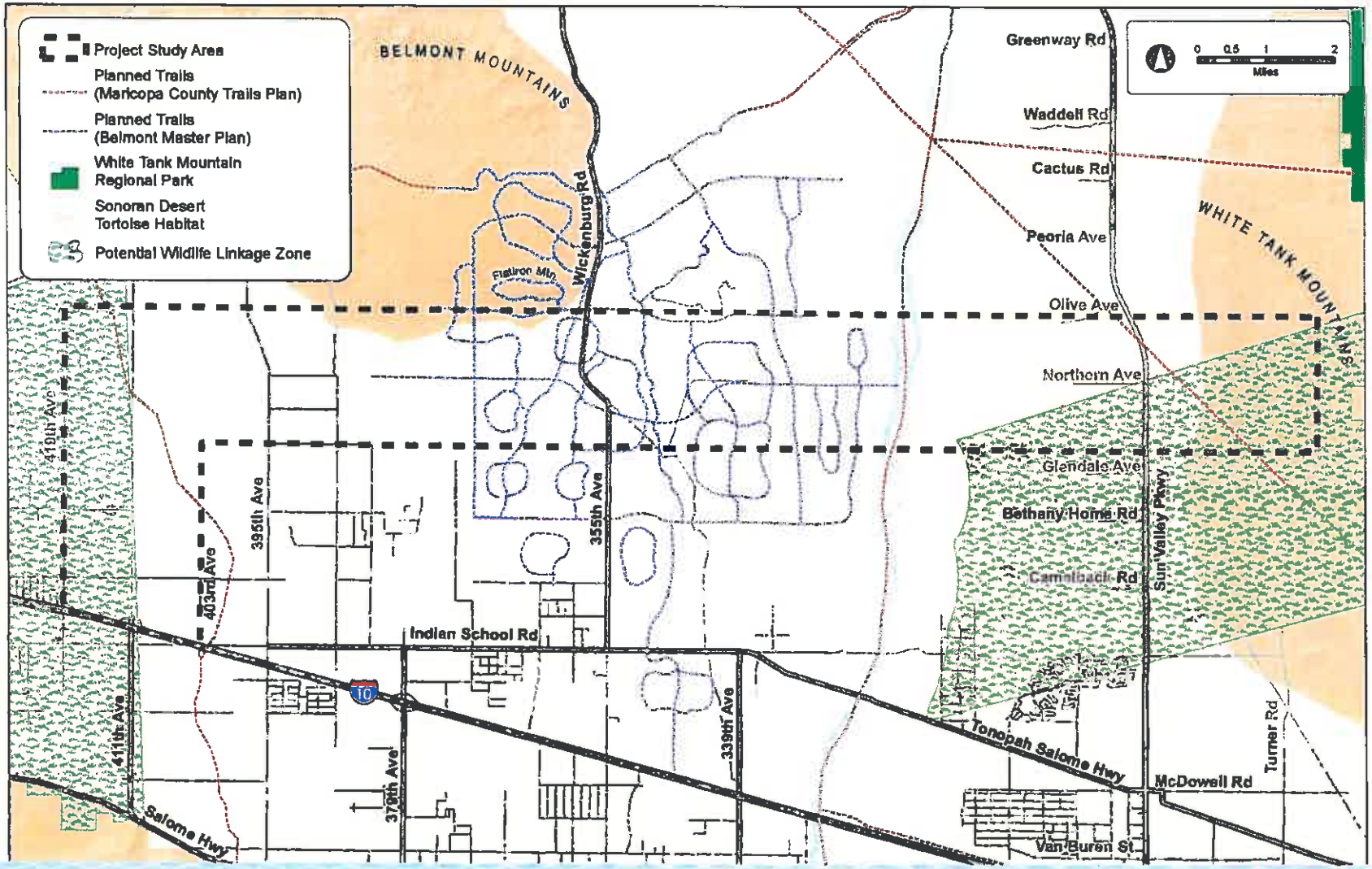
Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

Feasibility Study

RECREATIONAL AND WILDLIFE AREAS



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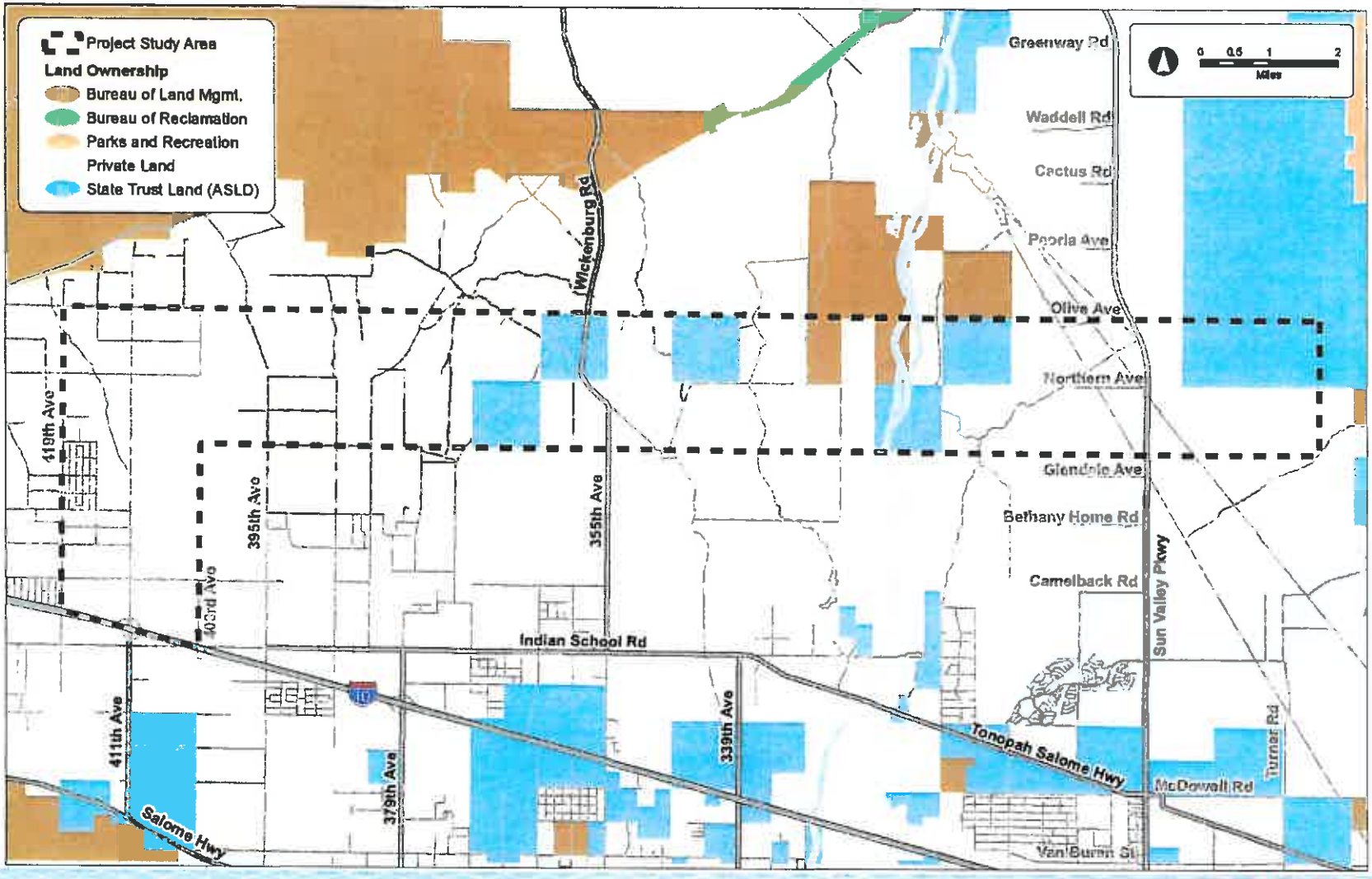
LAND OWNERSHIP



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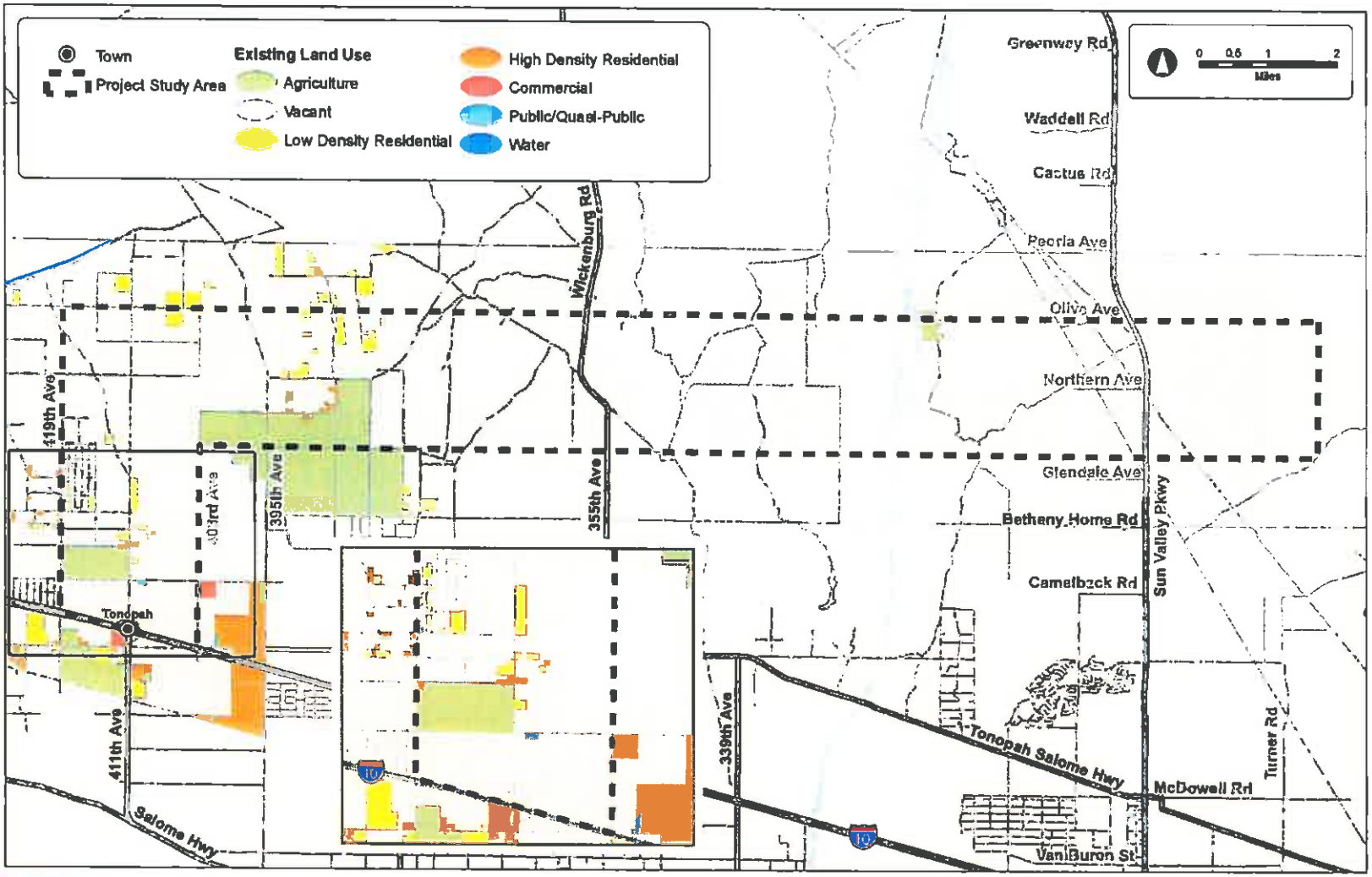
Feasibility Study

EXISTING LAND USE



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Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

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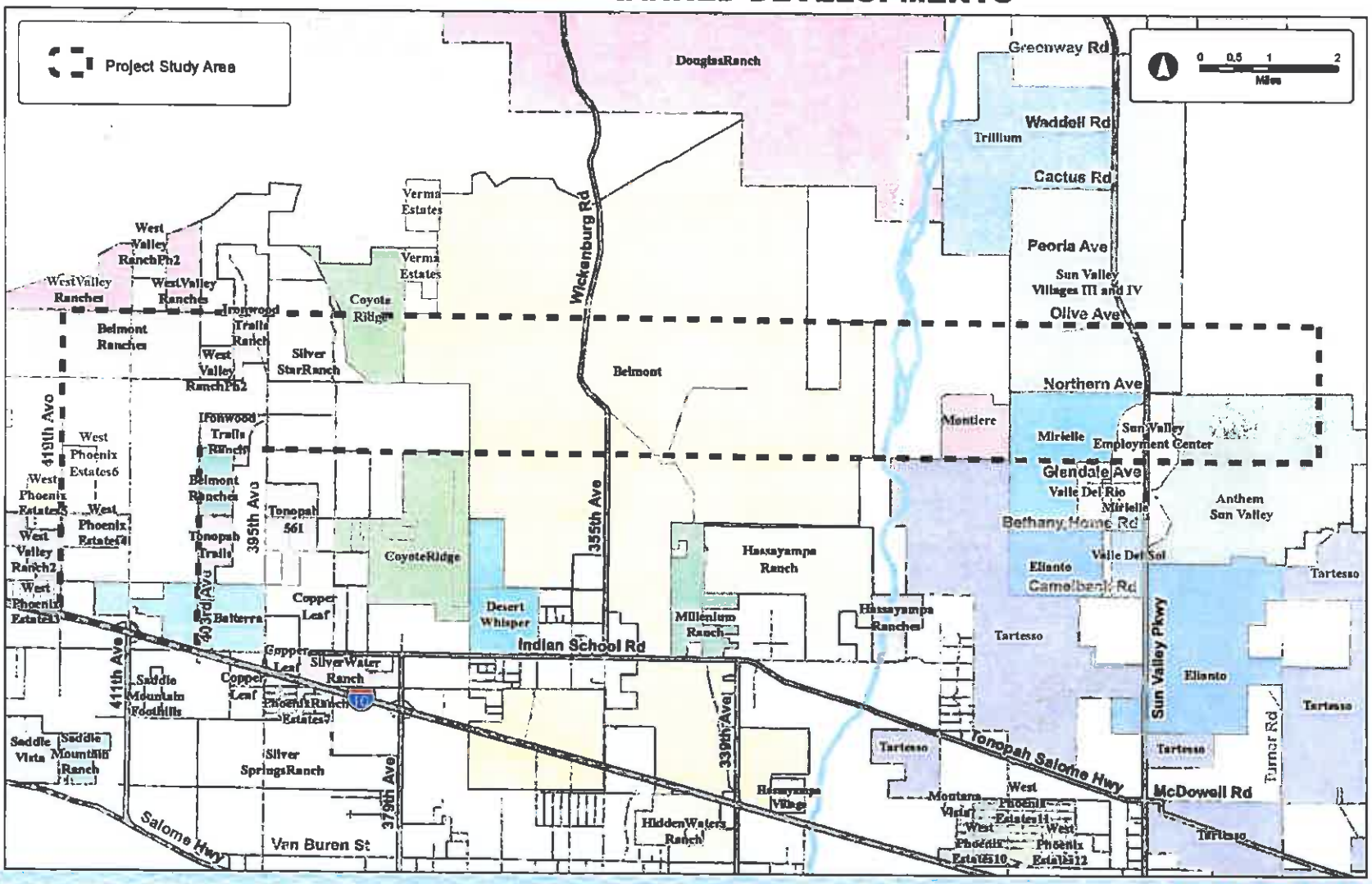
EXISTING AND PLANNED DEVELOPMENTS



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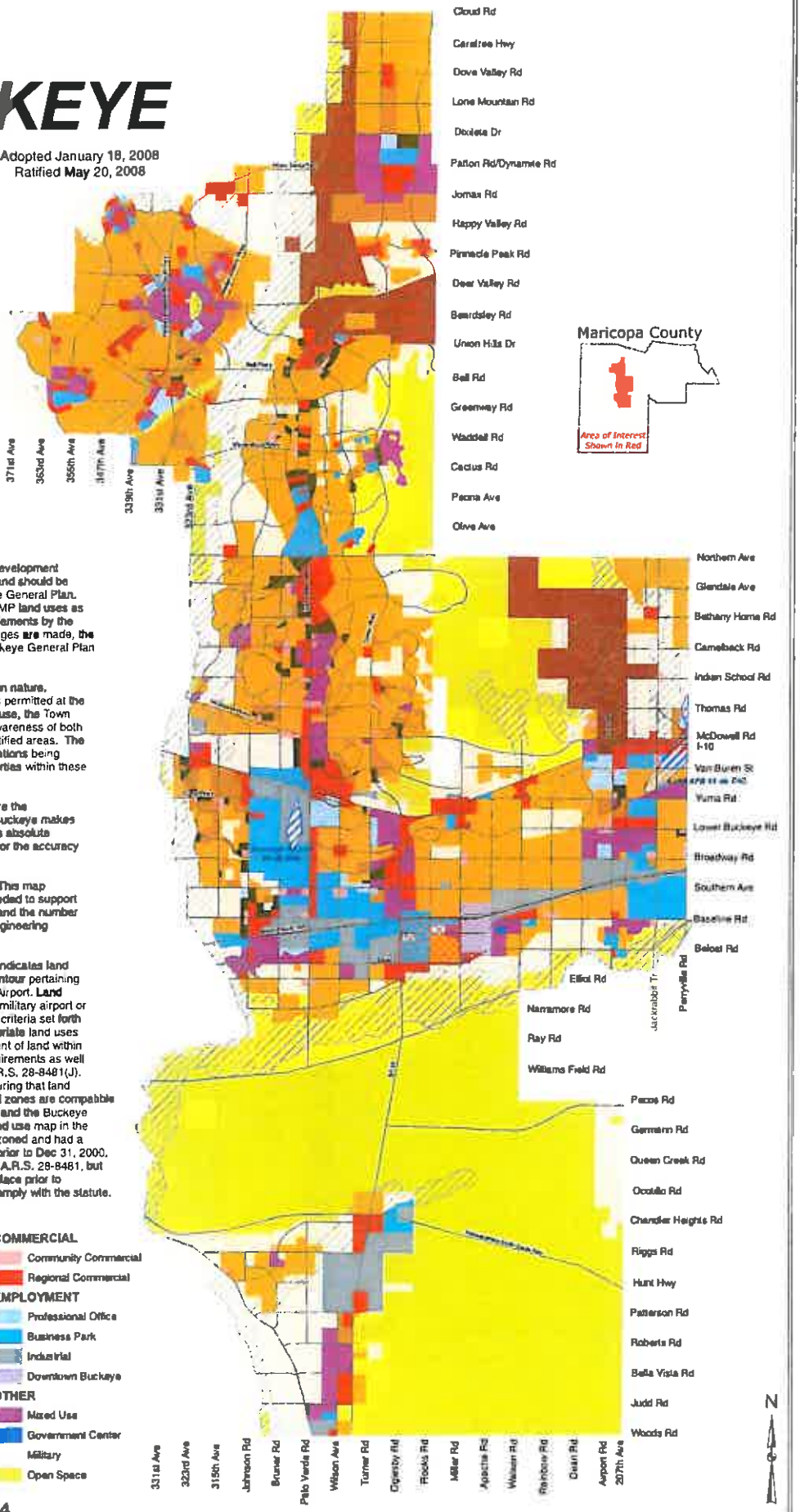
Town of BUCKEYE

Adopted January 18, 2008
Ratified May 20, 2008



Notes:

All Community Master Plans (CMP) and development agreements remain as valid entitlements and should be referred to in conjunction with the Buckeye General Plan. The Land Use Map strives to reflect the CMP land uses as accurately as possible. The adopted entitlements by the Town of Buckeye are valid and if any changes are made, the policies and guidelines outlined in the Buckeye General Plan will be followed.

Floodway Transitional Areas are advisory in nature. Though development within these areas is permitted at the level of the designated General Plan land use, the Town wishes to emphasize the importance of awareness of both the hazards and sensitivities in these identified areas. The Town strongly encourages these considerations being addressed in development plans for properties within these areas.

While every effort has been made to ensure the accuracy of this information, the Town of Buckeye makes no warranty, expressed or implied, as to its absolute accuracy and expressly disclaims liability for the accuracy thereof.

Arterial / River crossings are conceptual. This map demonstrates the number of crossings needed to support development at build-out. Final locations and the number of crossings will be determined through engineering and water studies.

Town of Buckeye General Plan Land Use indicates land within the 65 day-night noise level (dnl) contour pertaining to Luke Air Force Base and the Buckeye Airport. Land within the designated 65 dnl adjacent to a military airport or ancillary military facility is restricted by the criteria set forth in A.R.S. 28-8481(J) which outlines appropriate land uses for such land. Any General Plan Amendment of land within these areas must also comply with all requirements as well as the compatible land uses outlined in A.R.S. 28-8481(J). The Town of Buckeye is committed to ensuring that land uses in the high noise or accident potential zones are compatible with the operation of Luke Air Force Base and the Buckeye Airport. Residential uses shown on the land use map in the 65 dnl area for Luke Air Force Base were zoned and had a development plan in place for those uses prior to Dec 31, 2000. These properties continue to be subject to A.R.S. 28-8481, but the development plans that have been in place prior to December 31, 2000 for these properties comply with the statute.

- Floodway Transitional Areas
- 65 db noise contour
- Downtown Expansion Area

RESIDENTIAL
- Very Low Density 0-1 du/ac
- Low Density 1.01-3 du/ac
- Medium Density 3.01-6 du/ac
- Medium High Density 6.01-10 du/ac
- High Density 10.01-15 du/ac
- Master Planned Community

COMMERCIAL
- Community Commercial
- Regional Commercial

EMPLOYMENT
- Professional Office
- Business Park
- Industrial
- Downtown Buckeye

OTHER
- Mixed Use
- Government Center
- Military
- Open Space

FIGURE 3-4

TOWN OF BUCKEYE
GENERAL PLAN LAND USE

One Town, One Vision!
General Plan and Development Code

MARICOPA COUNTY MCDOT TRANSPORTATION

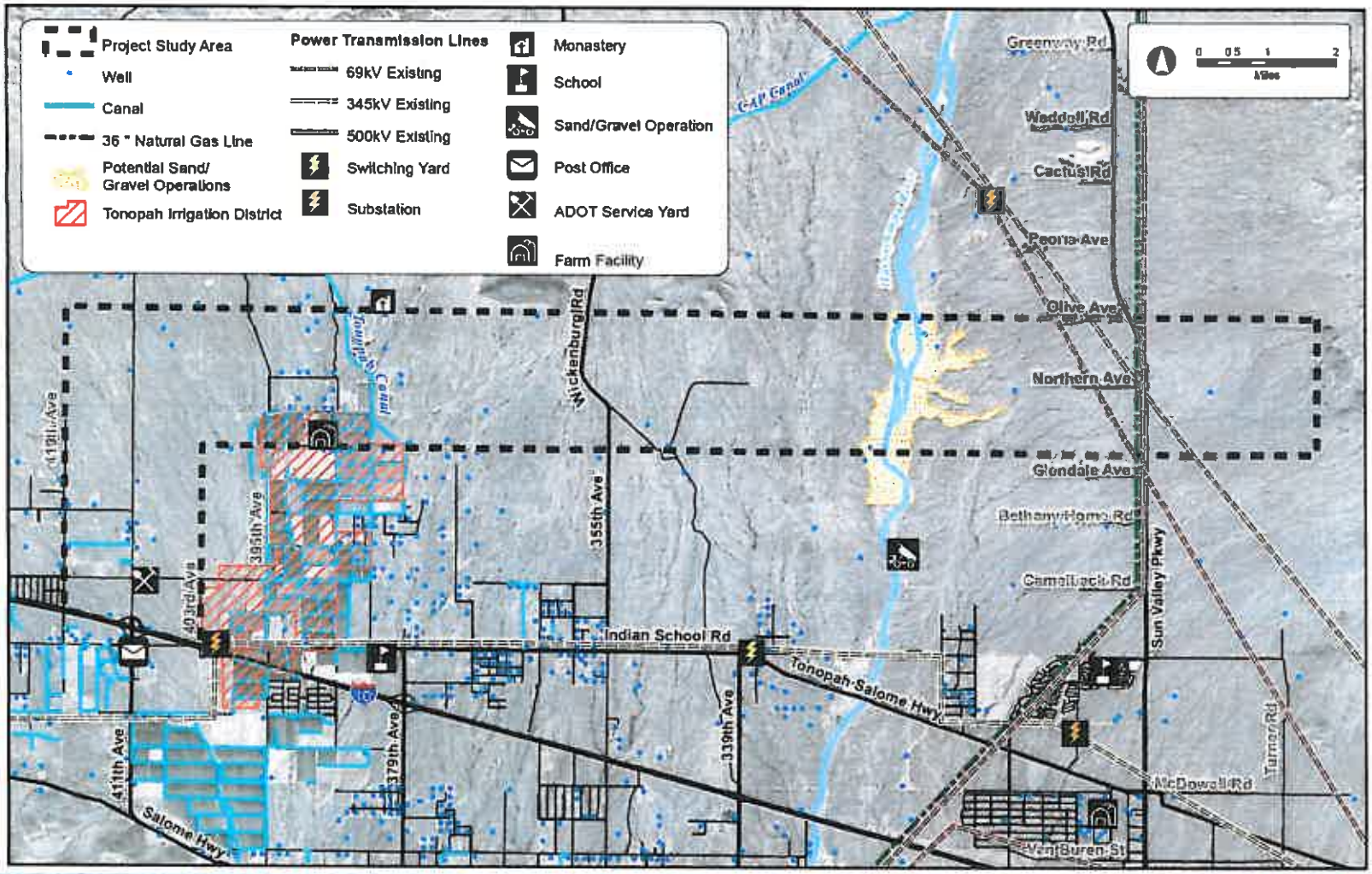
Right Road Right Time Right Cost

Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

Feasibility Study

EXISTING FACILITIES



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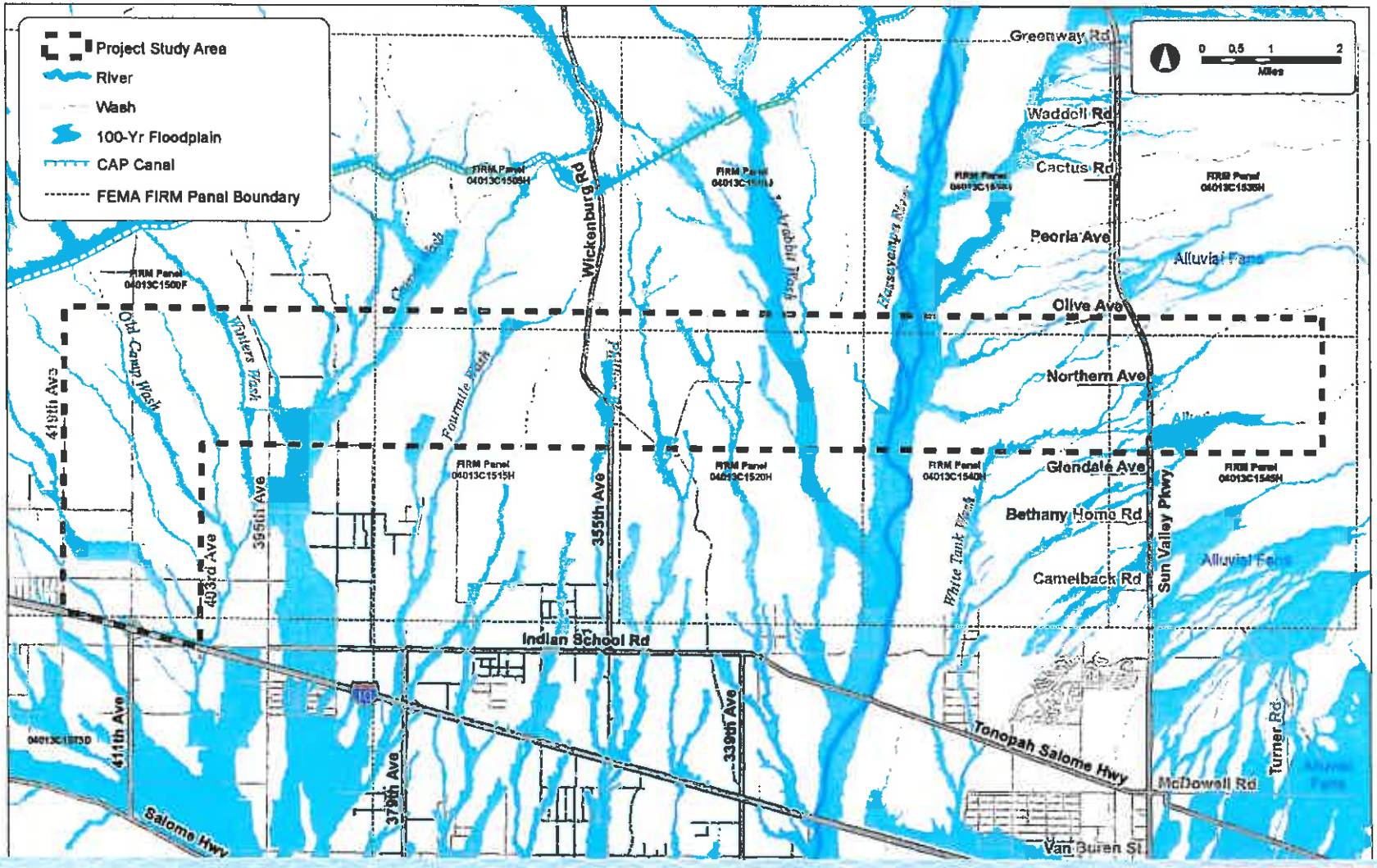
Right Road Right Time Right Cost

Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

Feasibility Study

FLOODPLAINS AND WASHES



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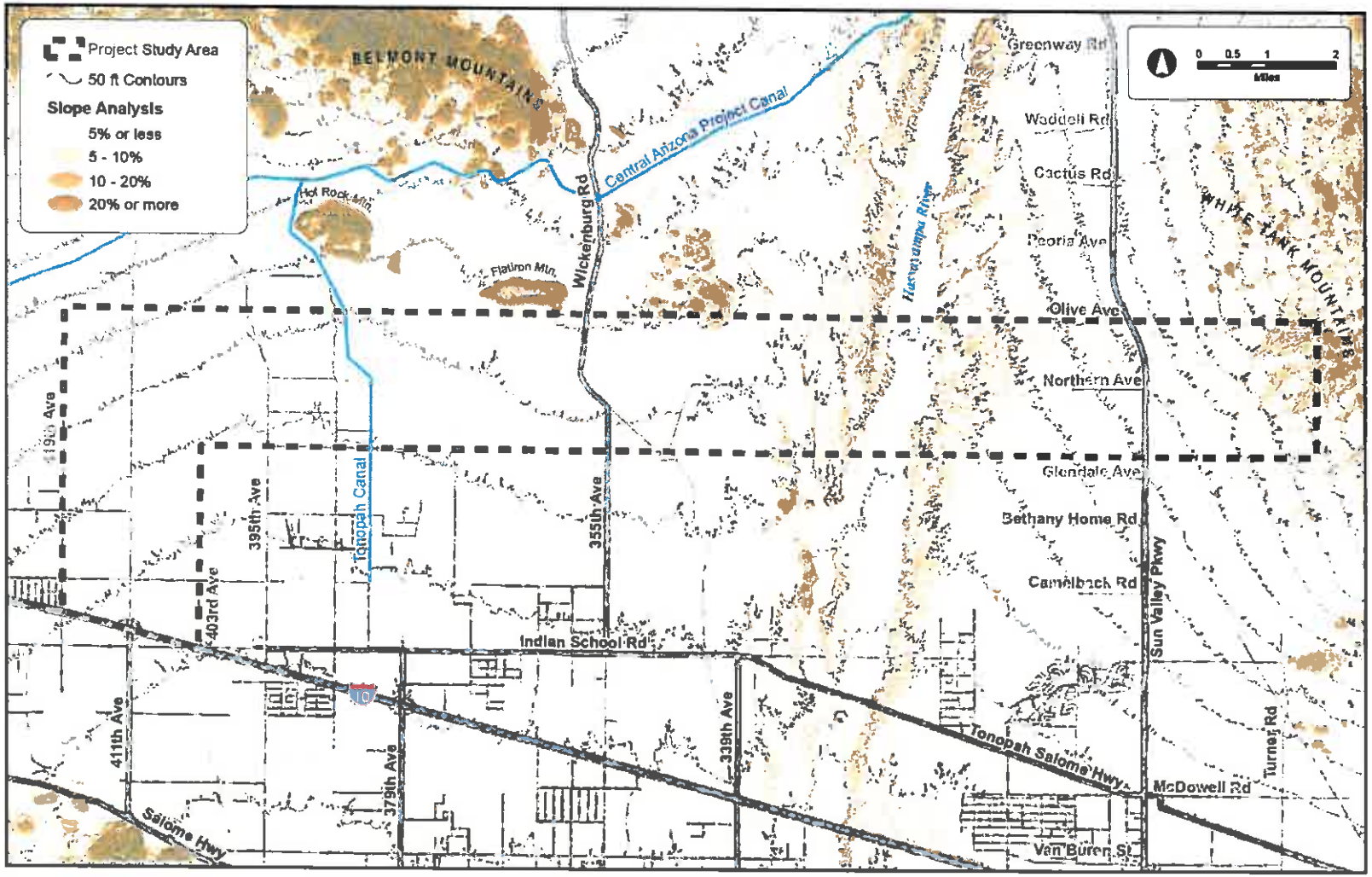
Right Road Right Time Right Cost

Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

Feasibility Study

SLOPE ANALYSIS



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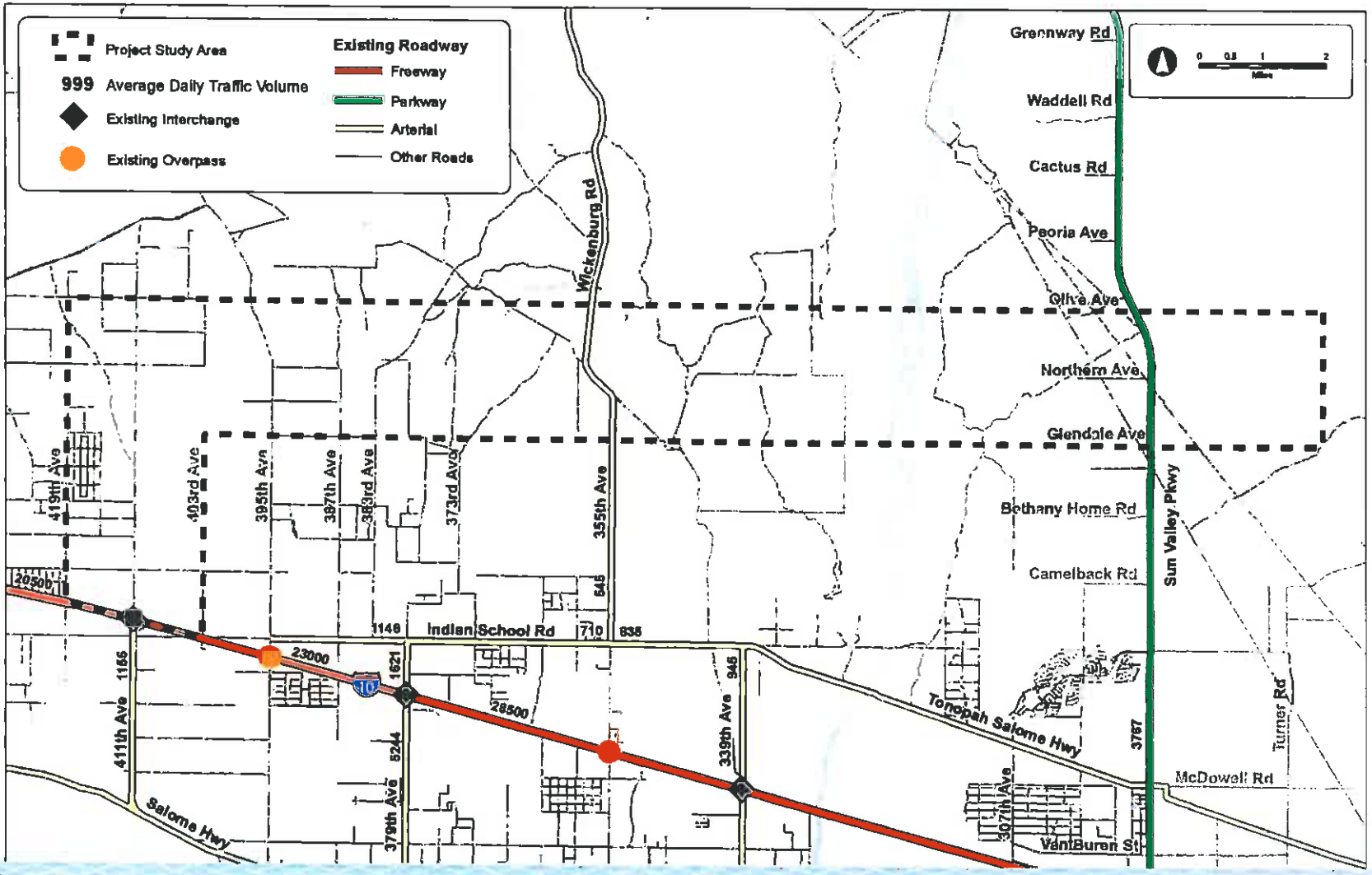
Right Road Right Time Right Cost

Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

Feasibility Study

EXISTING TRANSPORTATION NETWORK



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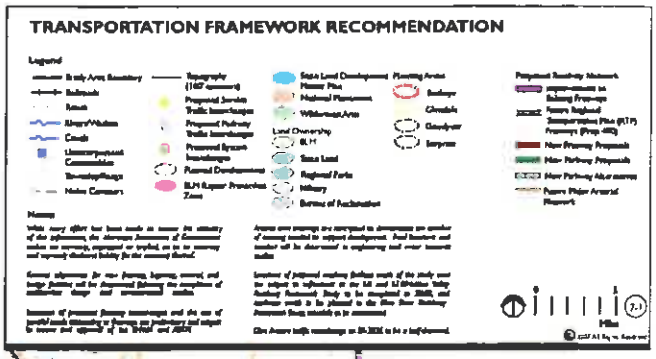
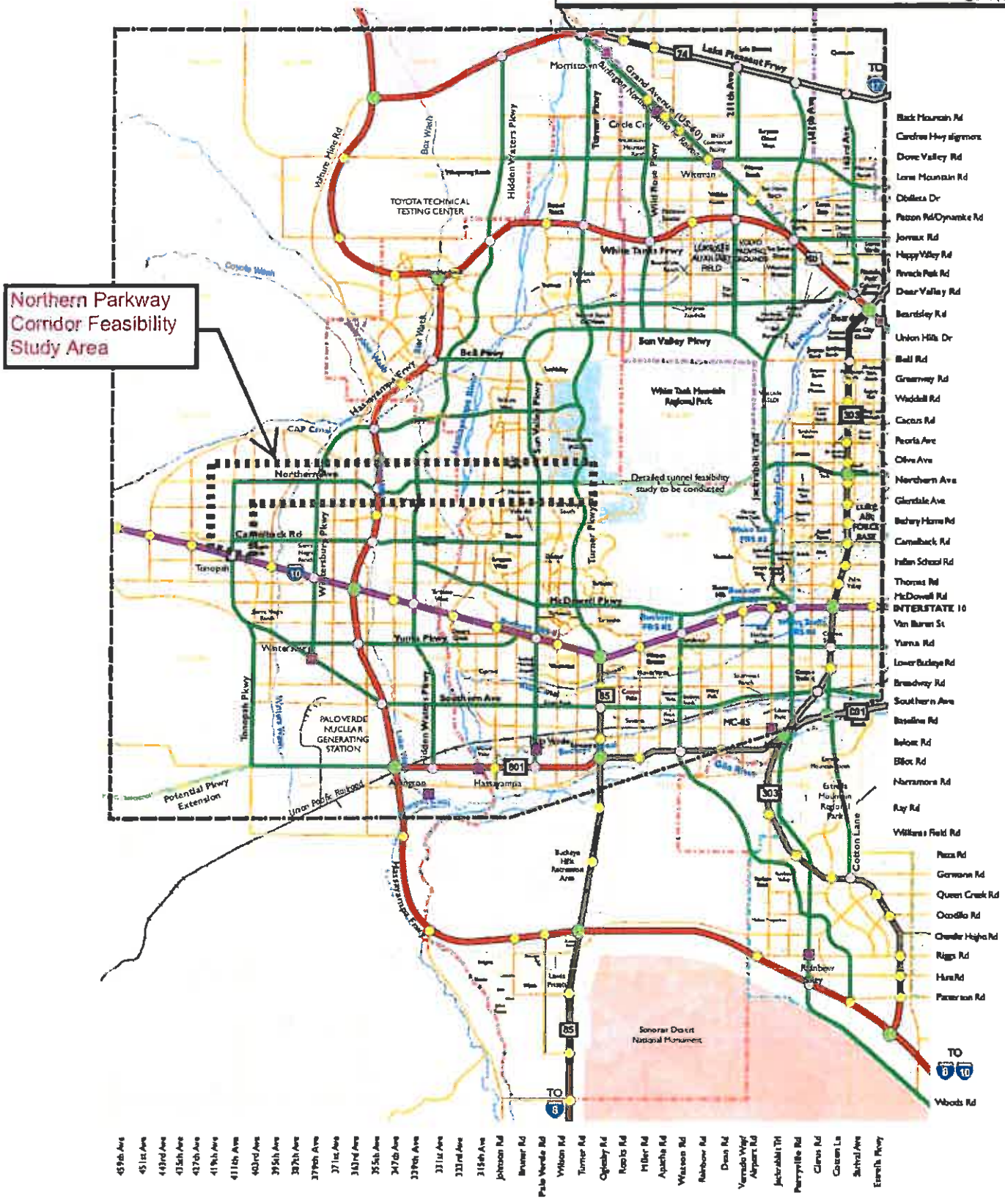
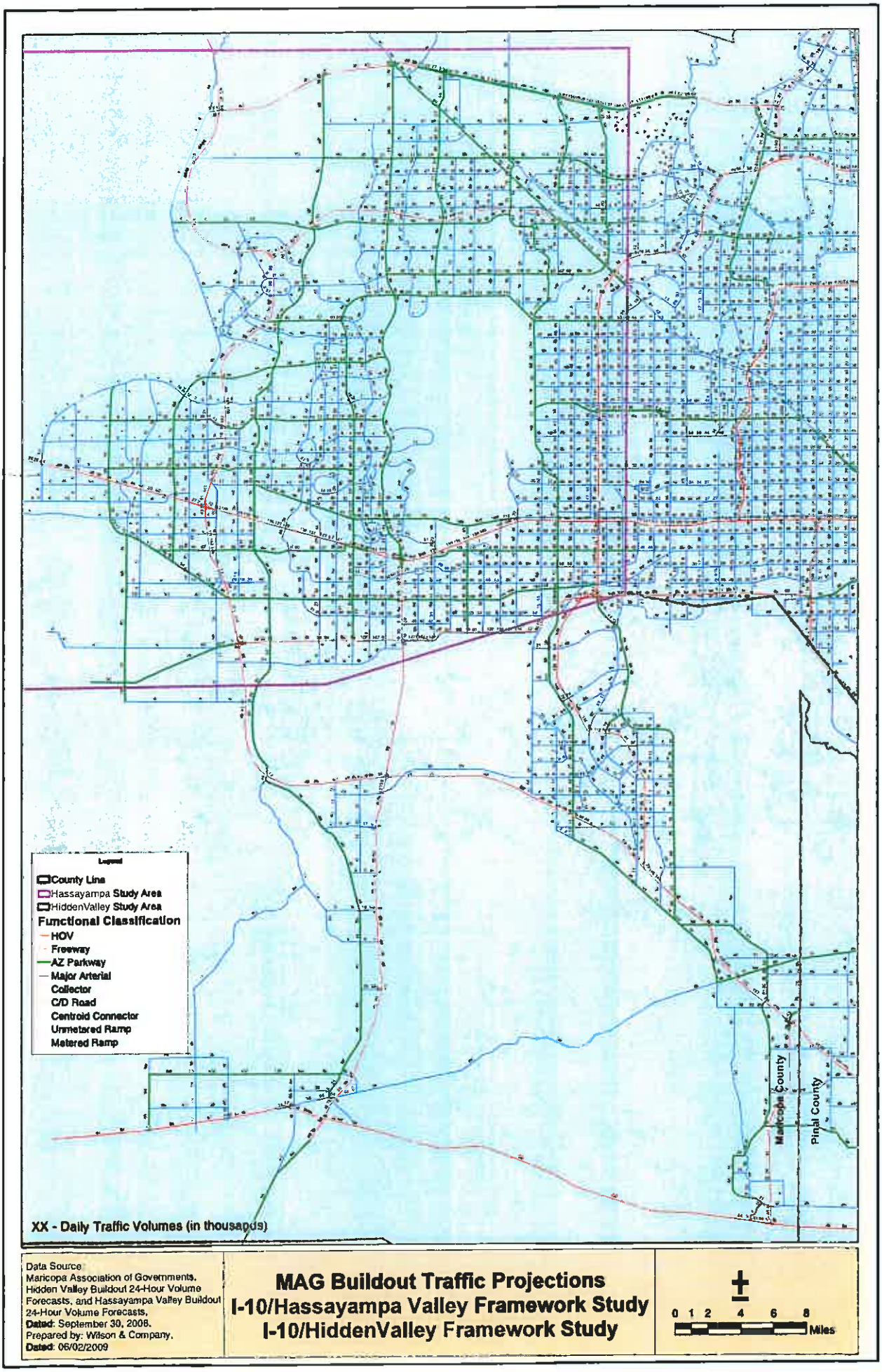
HASSAYAMPA FRAMEWORK FUTURE TRANSPORTATION NETWORK







Data Source:
Maricopa Association of Governments, Hidden Valley Buildout 24-Hour Volume Forecasts, and Hassayampa Valley Buildout 24-Hour Volume Forecasts.
Dated: September 30, 2008.
Prepared by: Wilson & Company.
Dated: 06/02/2009

MAG Buildout Traffic Projections
I-10/Hassayampa Valley Framework Study
I-10/HiddenValley Framework Study

0 1 2 4 6 8 Miles

MARICOPA COUNTY MCDOT TRANSPORTATION
Right Road Right Time Right Cost

Northern Parkway Corridor
Tonopah Pkwy to Turner Pkwy
Feasibility Study

Candidate Alignment Evaluation Criteria

- Development Compatibility
- System Continuity
- Drainage Impacts
- Irrigation Impacts
- Building/Property Impacts
- Cultural/Archaeological Impacts
- Wildlife Impacts
- Utility Impacts
- Public Acceptability
- Cost

MCDOT

MARICOPA COUNTY MCDOT TRANSPORTATION

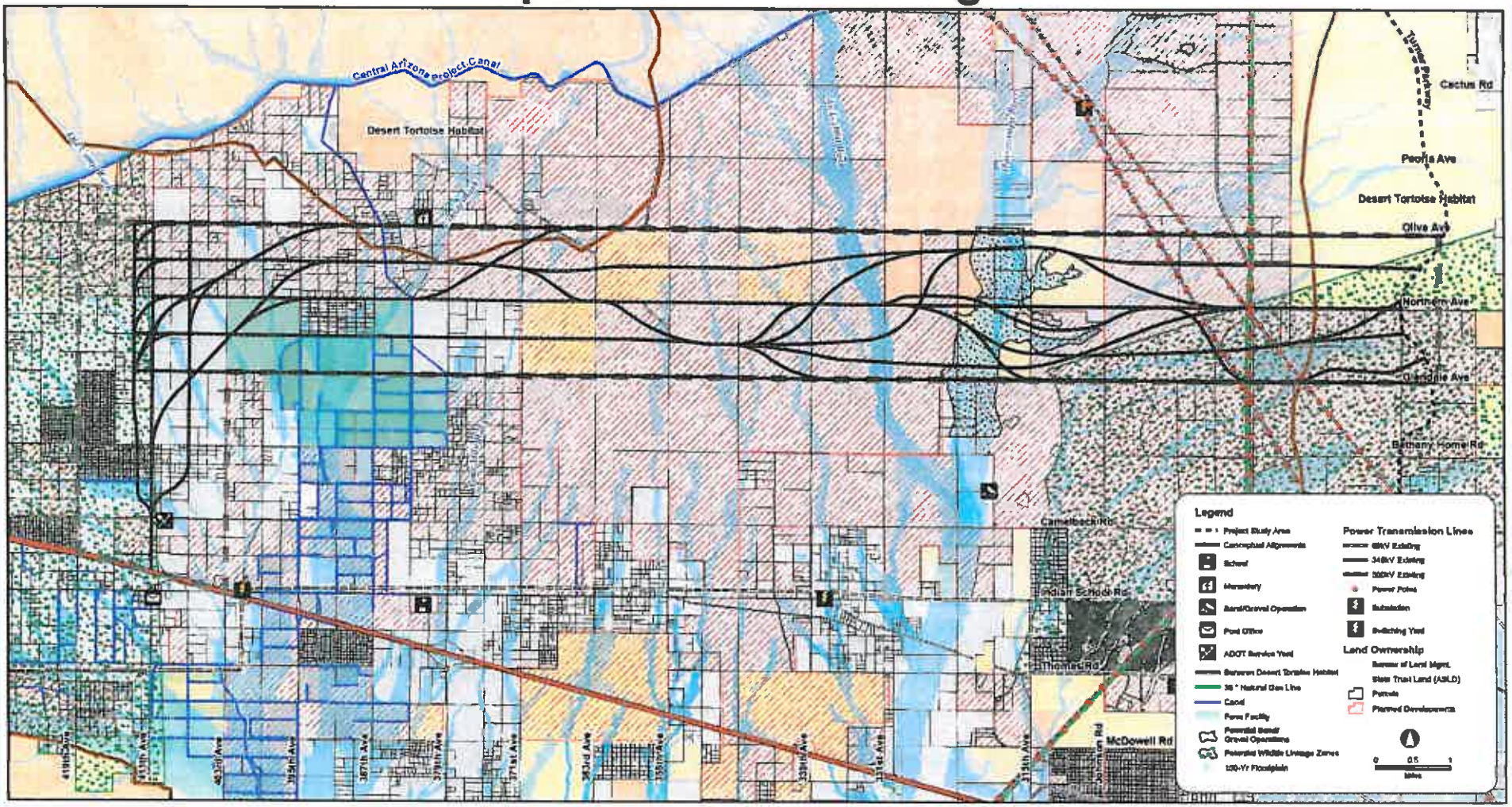
Right Road Right Time Right Cost

Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

Feasibility Study

Conceptual Alternative Alignments



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MARICOPA COUNTY MCDOT TRANSPORTATION
Right Road Right Time Right Cost

Northern Parkway Corridor
Tonopah Pkwy to Turner Pkwy
Feasibility Study

Summary of Evaluation of Candidate Alternatives Matrix

Evaluation Criteria	Tonopah Parkway Candidate Alternatives				Northern Parkway Candidate Alternatives		
	No-Build	*Alt. A*	*Alt. B*	*Alt. C*	*No-Build*	*Alt. A*	*Alt. B*
Future Development Compatibility	◒	○	◒	◓	●	◓	◒
System Continuity and Capacity	●	◉	◓	◓	●	◉	◓
Drainage Impacts	◒	◓	◓	◓	●	◓	◓
Irrigation Impacts	○	◒	◒	◒	○	◒	◒
Building/Property Impacts	○	◒	●	●	○	◒	◒
Wildlife Impacts	○	◒	◒	◒	○	◒	◒
Cultural/Archaeological Impacts	○	◒	◒	◒	○	◒	◒
Utility Impacts	○	◒	◒	◒	○	◒	◒
Public Acceptability							
Cost	○	◒	◒	◒	◓	◒	●

LEGEND: Strong advantage ◉ Advantage ◓ Neutral ○ Disadvantage ◒ Strong disadvantage ●

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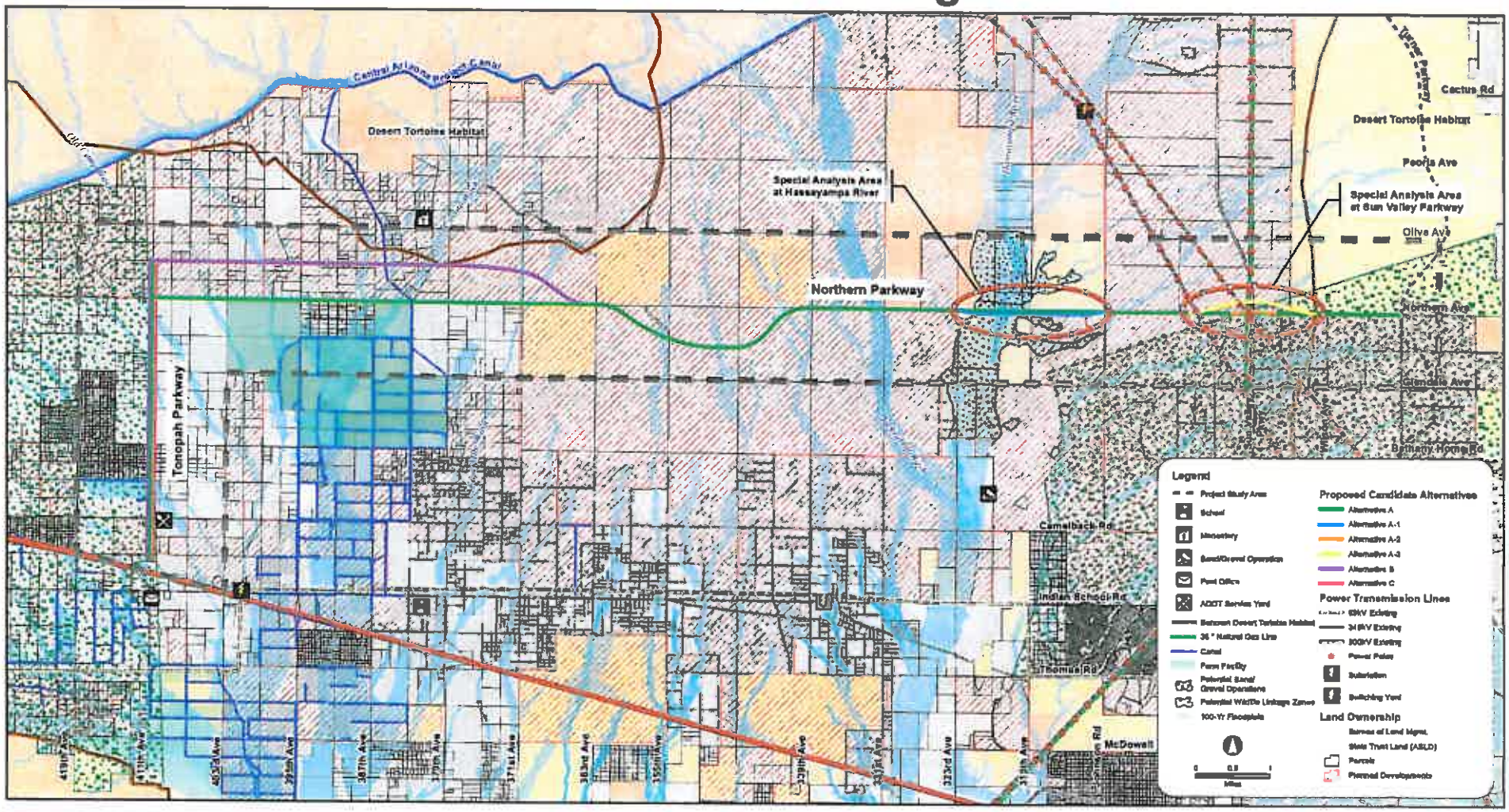
Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

Feasibility Study

Candidate Alternative Alignments



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Right Road Right Time Right Cost

Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

Feasibility Study

Environmental Process

Activity	Definition
Land UseInventory	This is an analysis of the various land uses in the study area – residential, commercial, public facilities (schools, fire stations, etc.) or undeveloped lands; and how those uses might be affected by the project alternatives.
Socio-Economic Analysis	This is an analysis of the people who live in the area and local businesses. Potential impacts to the people that work and live in the vicinity are examined as well as potential impacts to businesses and social services, both temporary and permanent.
Clean Water Act, Section 404	A Federal Law, the Clean Water Act, regulates activities within what are known as the "Waters of the United States." The purpose of this law is to reduce water pollution and protect wetlands, such as marshes, which are essential wildlife habitats. A permit is needed when a company or an agency wants to intrude upon these lands, whether it is to build a dike, or a bridge, or whatever. The permit is called a "Section 404 Permit" because its purpose is described in Section 404 of the Clean Water Act. This portion of the Act is administered and the permits are granted by the US Army Corps of Engineers.
Endangered Species and State Sensitive Species	The ESA is a Federal Law enacted to protect those species of plants and animals that are or could become endangered, threatened, or otherwise in danger of extinction. Additionally, the Arizona Game and Fish Department list of sensitive plants and animals is reviewed for potential impacts due to the project.
Biological Surveys	A survey conducted by qualified biologists using approved survey methods to determine whether protected species are present in a project area.
Noise Evaluation	Sensitive receptor locations are mapped, such as homes or hospitals, and the potential for negative impacts are identified. At a future point in the project development process detailed noise measurements and prediction of future sound levels will occur. Mitigation measures as needed will be identified.
Air Quality	Air Quality analysis is conducted on a regional basis to identify whether areas are in conformance with national standards for particulate matter (dust), carbon monoxide and ozone.
Cultural Resources	Publicly funded projects are subject to the National Historic Preservation Act and Arizona Antiquities Act to insure archaeological and historical resources are considered in the project development process. Archaeologists and historians review the project area's history and pre-history so that negative impacts to important sites can be avoided or mitigated to the greatest extent that is practical.
Hazardous Materials	Qualified technicians search the records and conduct walking surveys of a project area to determine whether there are places that contain or once contained dangerous chemicals or hazardous waste.
Environmental Assessment	This is a type of environmental document used to summarize the results of all the studies noted above. The Environmental Assessment is used as a decision document for the project proponent, and is subject to review by affected agencies and the public.

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Right Road Right Time Right Cost

Northern Parkway Corridor
Tonopah Pkwy to Turner Pkwy
Feasibility Study

The Process
Transportation Improvement Program

Project Requests

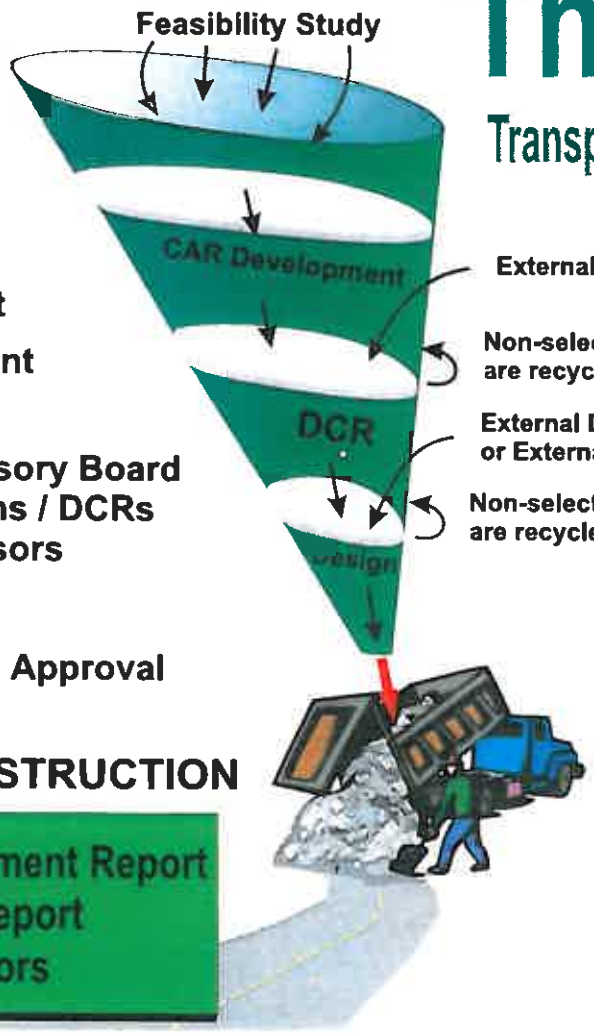
CAR development

DCR development

Transportation Advisory Board recommends Designs / DCRs to Board of Supervisors

BOS Approval

CONSTRUCTION



External CAR

Non-selected are recycled

External DCR or External Design

Non-selected are recycled

0

5 YEARS

5.5 YEARS

6.5 YEARS

7 YEARS

CAR = Candidate Assessment Report
DCR = Design Concept Report
BOS = Board of Supervisors

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MARICOPA COUNTY MCDOT TRANSPORTATION

Right Road Right Time Right Cost

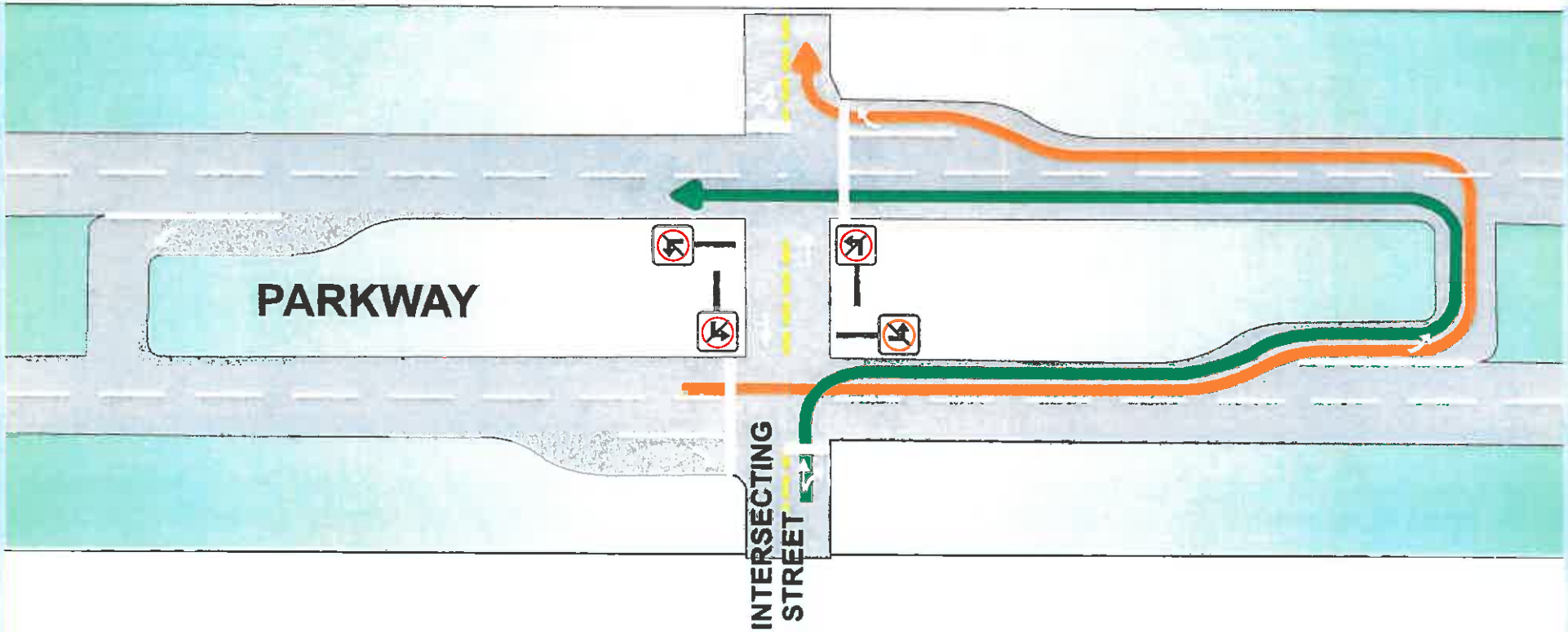
Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

Feasibility Study

ARIZONA PARKWAY

Indirect Left Turn Intersection



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Right Road Right Time Right Cost

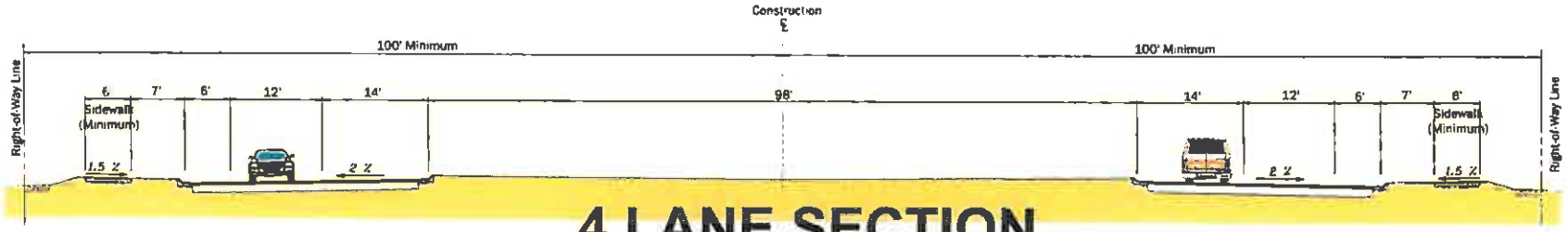
Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

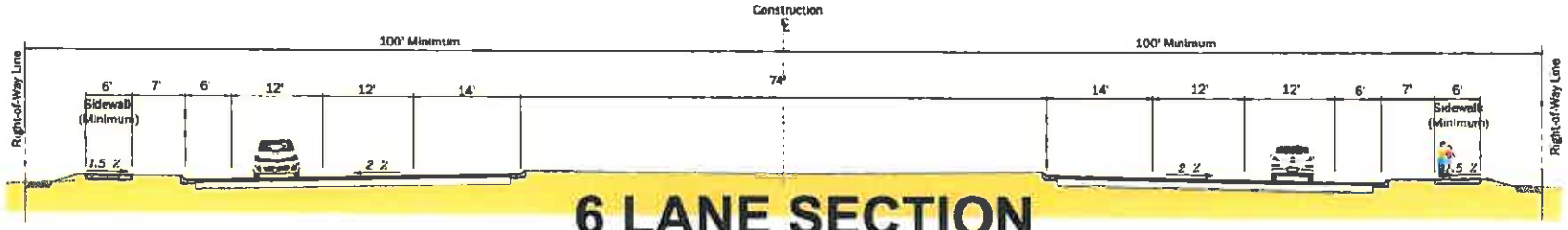
Feasibility Study

ARIZONA PARKWAY

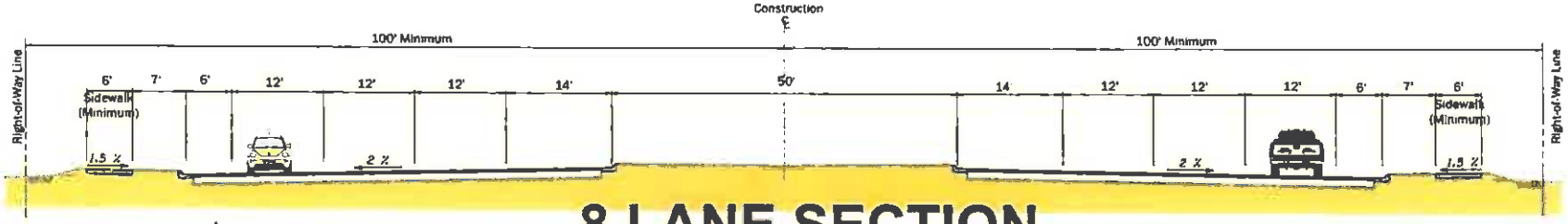
TYPICAL SECTIONS



4 LANE SECTION



6 LANE SECTION



8 LANE SECTION

Notes
When curb is present, dimensions are to face of curb

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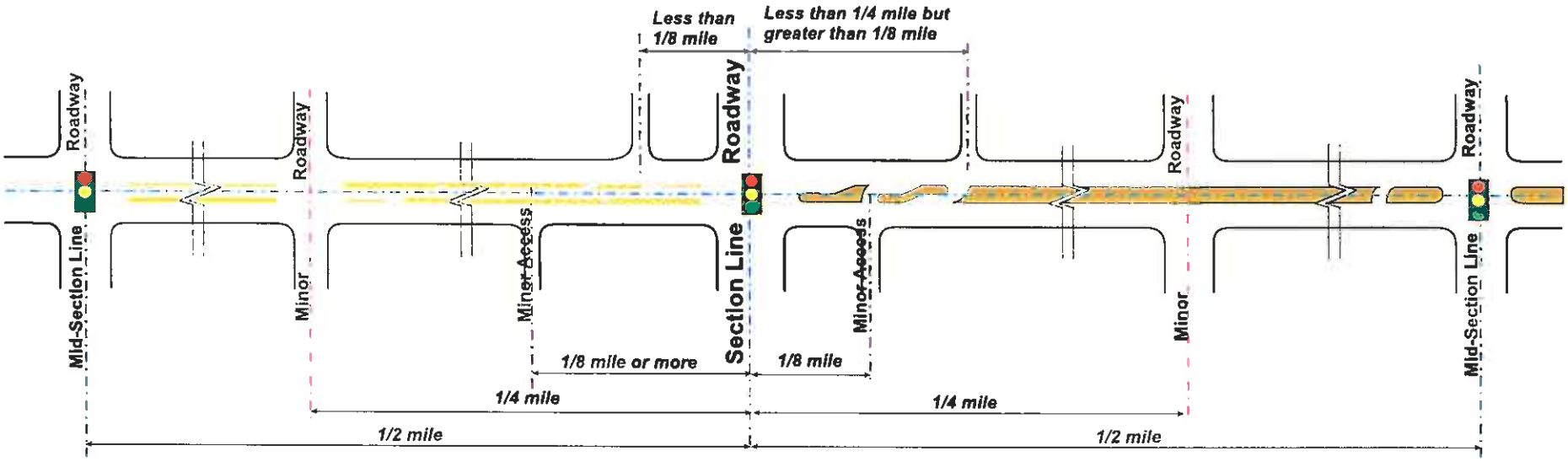
Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

Feasibility Study

ARIZONA PARKWAY

Access Management Guidelines



Intersection Spacing

- Signalized intersections recommended at ½ mile increments.
- Non-signalized intersections should be separated by a minimum of 660 feet (1/8 mile).

Medians

- Both raised and flush center roadway medians are proposed for the Signal Butte Road corridor.
- Full access median breaks may be provided at 1/6 mile (880 feet) increments. All additional median openings should be partial access only type.
- Median openings are not recommended less than 660 feet (1/8 mile) from an arterial-to-arterial intersection.

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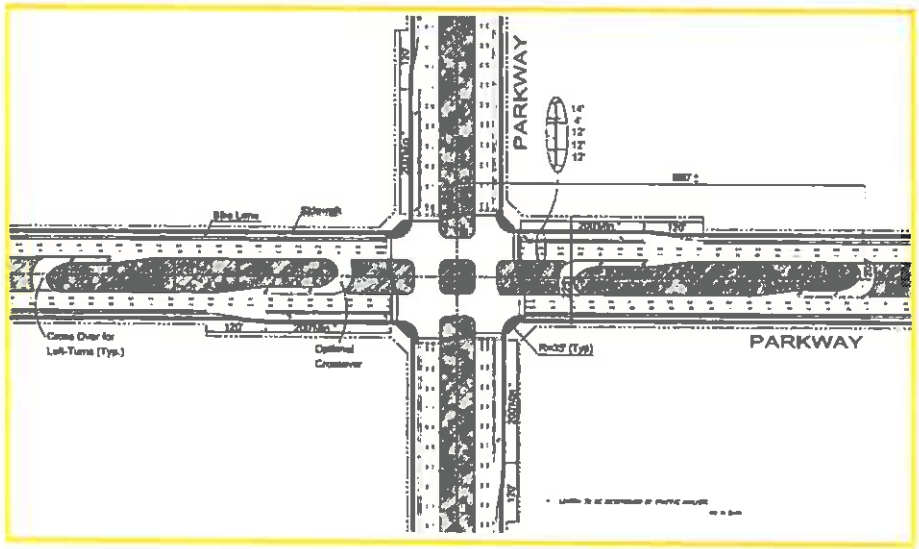
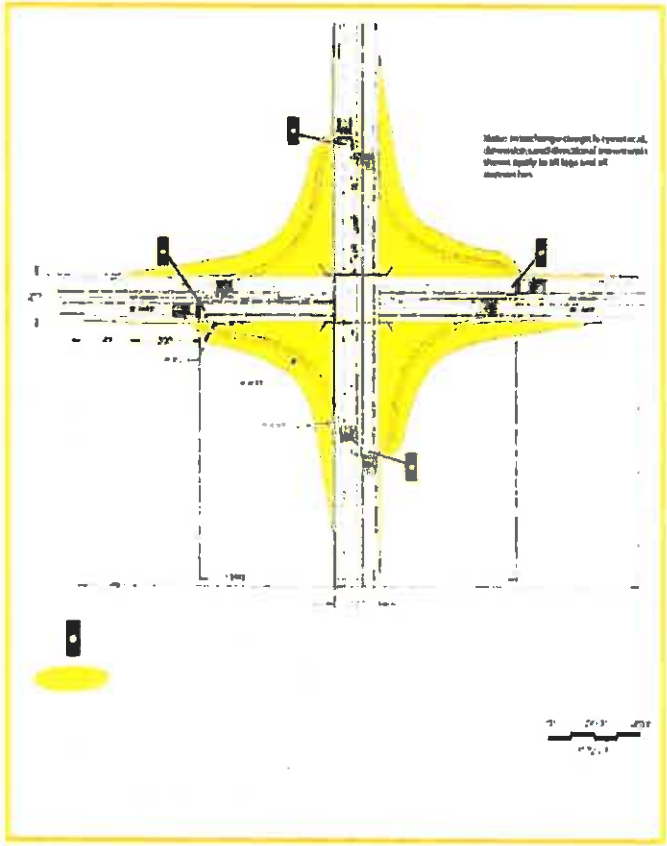
Northern Parkway Corridor
Tonopah Pkwy to Turner Pkwy
Feasibility Study

ARIZONA PARKWAY
Parkway-to-Parkway Intersections

At-Grade Intersection



Grade-Separated Intersection



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Tonopah Parkway

- The No-Build Alternative will not provide a continuous, all-weather roadway and will not adequately serve projected traffic volumes associated with anticipated build-out land uses. Even though it may be many years before land uses and traffic volumes justify construction of a parkway facility, the transition from agricultural land uses and open desert to higher-intensity land uses is already occurring. Steps need to be taken now to preserve the long-term viability of constructing a parkway in the future by delineating the footprint and preferred location for Tonopah Parkway;
- Alternative A will result in the most equitable right-of-way acquisition by being centered on the 411th Avenue section line;
- Alternative A will not require any alignment shift to connect with the existing I-10 interchange at 411th Avenue;
- Alternative A is not expected to require any residential building demolition or relocation and will result in the fewest full property acquisitions;
- Alternative A has received the most stakeholder and public support because it has the most uniform and equitable impacts on adjacent properties; and
- Alternative A will have the lowest overall project cost because it is the shortest alternative, resulting in less right-of-way acquisition and lower construction costs.

Northern Parkway

- The No-Build Alternative will not provide a continuous, all-weather roadway and will not adequately serve projected traffic volumes associated with anticipated build-out land uses. Even though it may be many years before land uses and traffic volumes justify construction of a parkway facility, the transition from agricultural land uses and open desert to higher-intensity land uses is already occurring. Steps need to be taken now to preserve the long-term viability of constructing a parkway in the future by delineating the roadway's footprint and preferred location for Northern Parkway;
- Alternative A generally follows the Northern Avenue section line, making maximum use of existing roadway right-of-way and providing the most direct east-west connection between Tonopah Parkway and Turner Parkway;
- Alternative A will result in the most equitable right-of-way acquisition by generally being centered on the Northern Avenue section line;
- Alternative A is the most compatible with planned developments. The Belmont and Sun Valley Villages III and IV master plans both have provisions for a 200-foot wide parkway facility;
- Alternative A has received significant stakeholder and public support because it has the most uniform and equitable impacts on adjacent properties and is the most compatible with planned developments along the corridor; and
- Alternative A will have the lowest overall project cost because it is the shortest alternative, resulting in less ` right-of-way acquisition and lower construction costs.

(See PREFERRED ALTERNATIVE insert)

STUDY SCHEDULE

Study Kick-off	July 2010
PHASE I:	**July - November 2010**
Data Collection/Issues Identification	
Technical Advisory Committee (TAC) Meeting #1	July 14, 2010
Technical Advisory Committee (TAC) Meeting #2	September 22, 2010
Public "Scoping" Public Input Meeting	**October 18, 2010**
Technical Advisory Committee (TAC) Meeting #3	November 15, 2010
PHASE II:	**November 2010 - May 2011**
Alternative Alignments Analysis and Evaluation	
Existing Conditions and Conceptual Alignment Alternatives Public Input Meeting	**February 15, 2011**
Alternative Alignments Development and Evaluation	February 2011
Technical Advisory Committee (TAC) Meeting #4	February 23, 2011
Preferred Alternative Alignment Evaluation	March 2011
Preferred Alternative Study Findings & Recommendations Input Meeting	**March 29, 2011**
Draft Final Report	April 2011
Study Completion/Final Report	May 2011

PUBLIC INVOLVEMENT

Gaining consensus among the agencies and the public is critical to the success of the study and implementation of its recommendations to provide a safe and efficient roadway for the long term.

Three public input meetings are conducted at critical milestones in the study process. Approximately 85 area residents and other study stakeholders attended the first Public "Scoping" meeting on October 18, 2010. This initial public meeting provided area residents and other impacted stakeholders with an opportunity to inform project team members about the study area issues and local transportation needs. This meeting also provided the study team members with an opportunity to discuss and elicit feedback regarding the study purpose, goals and objectives.

The second public input meeting was held on February 15, 2011 to present the Alternatives Analysis results. The purpose of this public meeting was to provide the community with the opportunity to comment on preliminary study findings and provide feedback on the different roadway alignment alternatives being evaluated for both the Northern Parkway and Tonopah Parkway corridors. Approximately 60 area residents and other key stakeholders participated in this meeting.

At the final "Findings and Recommendations" public information meeting (March 29, 2011) the study team will present the findings and recommendations of the study, including the preferred parkway alignment, the right-of-way footprint for the future parkways, and preliminary engineering details.

Your input and feedback during each phase of the study process is very important and a vital component of study development.

Maricopa County
Department of Transportation

www.mcdot.maricopa.gov

Northern Parkway/Tonopah Parkway Corridor Feasibility Study

I-10 to Turner Parkway

"Findings & Recommendation"

MARICOPA COUNTY MCDOT TRANSPORTATION

Right Road Right Time Right Cost

Maricopa County Department of Transportation March 29, 2011

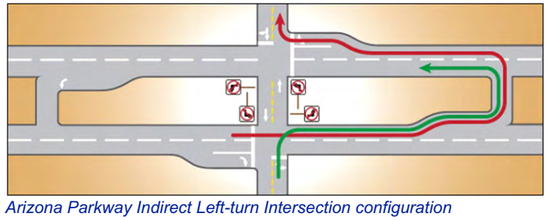
BACKGROUND

The Northern Parkway/Tonopah Parkway Corridor Feasibility Study includes Northern Parkway between Tonopah Parkway and Turner Parkway and Tonopah Parkway between I-10 and Northern Parkway.

The Northern Parkway/Tonopah Parkway Corridor Feasibility Study is one of a series of long-range transportation planning studies being conducted by the Maricopa County Department of Transportation (MCDOT). These studies are evaluating future parkways identified in the recently completed Maricopa Association of Governments (MAG) Interstate 10 (I-10)/Hassayampa Valley Transportation Framework Study (2008) that recommended a comprehensive transportation network designed to meet the future traffic demands for the build-out of the area west of the White Tank Mountains. This long-range regional transportation network identified the need for a new type of high-capacity, non-freeway roadway facility that could safely handle the projected travel demands within the study area.

The primary purpose of this feasibility study is to identify the preferred corridor alignment for Northern Parkway and Tonopah Parkway, which are proposed as Arizona Parkways. This new roadway type, called the "Arizona Parkway", will offer significantly greater travel capacity than a major urban arterial roadway (traditional six-lane surface street) without employing full grade separations (overpasses or underpasses) at intersections with arterial cross-streets.

The Arizona Parkway intersection treatment controls intersection traffic movements with a two-phased traffic signal control and prohibits left turns at cross-street intersections. Instead, all left-turn movements are made using an "indirect" left-turn crossover immediately beyond the crossroad intersection. This type of intersection configuration provides the benefit of increased intersection capacity while still allowing for direct driveway access to development at each corner of the intersection.



Arizona Parkway Indirect Left-turn Intersection configuration

CORRIDOR DESCRIPTION

Northern Parkway: The segment of Northern Parkway under evaluation in this study is referred to as the Northern Parkway Hassayampa Section to distinguish it from other planned Northern Parkway segments east of the White Tank Mountains. The study area is an east-west corridor centered on the Northern Avenue section line from the planned Tonopah Parkway (411th Avenue alignment) to the planned Turner Parkway (267th Avenue alignment). The Northern Parkway study area is approximately 18 miles long and two miles wide.

Tonopah Parkway: This evaluation also includes the portion of the planned Tonopah Parkway which runs north-south centered on the 411th Avenue section line between I-10 and the planned Northern Parkway Hassayampa Section. The Tonopah Parkway study area is approximately 3.75 miles long and two miles wide.

STUDY NEED

The MAG Hassayampa Valley Transportation Framework Study demonstrated the future need for both Northern Parkway and Tonopah Parkway. Although today's land development and travel demands do not warrant any major new high capacity roadways in the near-term, the "build-out" forecast for future land development and resulting travel demand within the study area warrant an entire network of future Arizona Parkways. Plans are already underway within the study area to convert vacant lands to land uses that will generate increased traffic volumes.

In order to preserve sufficient public right-of-way for the future Northern Parkway and Tonopah Parkway and protect these future roadway corridors from development and encroachment, the planning process needs to start now to identify roadway right-of-way requirements for forecasted build-out conditions. This current study is the first step in the roadway development process and is meant to aid the local jurisdictions in defining and protecting a continuous future roadway corridor that can accommodate build-out traffic demands in the project study area. To this end, the Northern Parkway/Tonopah Parkway study is needed to:

- Address regional and local growth and development (2.8 million population projected at build-out in the I-10/Hassayampa Valley Transportation Framework study area)
- Preserve and protect sufficient public right-of-way for high-capacity (non-freeway) transportation corridors
- Ensure future parkway compatibility with existing/future land uses and environmental conditions
- Identify potential connectivity issues with other future planned parkways and freeways

STUDY GOALS AND OBJECTIVES

The main focus of this feasibility study is to investigate, map, and analyze corridor constraints and opportunities to arrive at a recommended corridor alignment for the proposed Northern Parkway and Tonopah Parkway based on the Arizona Parkway indirect left-turn intersection design within a 200-foot right-of-way corridor. The goals and objectives of this study are:

- Achieve roadway network continuity and connectivity
  - Determine the preferred corridor alignment from a regional transportation corridor perspective;

For more information, contact Denise Lacey at (602) 506-6172 or write to her at:
MCDOT, 2901 W. Durango Street, Phoenix, AZ 85009, or e-mail at: DeniseLacey@mail.maricopa.gov.

  - Protect and preserve right-of-way for the preferred corridor alignment to maintain its long-term viability;
  - Provide future connectivity with primary and regional roadway facilities; and
  - Provide crossings of alluvial fans, drainage washes, rivers, and canals.
- Enhance traffic flow (capacity) and safety
  - Preserve functional integrity of the Arizona Parkway by recommending unique segment-specific solutions to address identified opportunities or constraints;
  - Identify areas that may require additional right-of-way or easements, especially at crossings with other parkways, alluvial fans, and utility corridors; and
  - Enhance traffic operations while maintaining reasonable access for developments.
- Preserve the environment
  - Comply with governing environmental regulations for new roadway development;
  - Minimize adverse impacts to the study area environment, including wildlife corridors and archeological sites; and
  - Enhance important environmental features (e.g., habitat areas).
- Develop consensus-driven alignment alternatives
  - Work with the Technical Advisory Committee and key stakeholders in developing feasible alignment alternatives;
  - Develop cost-effective roadway alignment alternatives;
  - Conduct public outreach to obtain input on alignment alternatives and build consensus; and
  - Ensure consistency between the study's transportation actions and regional and local plans.

KEY ISSUES AND CHALLENGES

Early in the study process, a preliminary list of study issues and potential challenges was compiled. This list expands as the study progresses and input is obtained from public participation. Major issues identified at this stage include:

- Evaluation of drainage structures across alluvial fans and major washes
- Identification of the most feasible location for a future bridged crossing of the Hassayampa River
- Identification of ultimate roadway alignment and access management strategies to maximize revenue-generating potential for developable lands
- Determination of impacts of existing electrical line towers on the roadway alignment
- Consideration of environmental impacts (including existing agricultural operations, cultural resources, and wildlife habitat linkages)
- Coordination and compatibility with existing and planned land development

PROJECT STAKEHOLDERS

In addition to public stakeholders, the following is a list of agencies and stakeholder groups that are represented and participate in the study process:

- Maricopa County Department of Transportation (MCDOT)
- Flood Control District of Maricopa County (FCDMC)
- Maricopa County Planning and Development
- Arizona Department of Transportation (ADOT)
- Arizona State Land Department (ASLD)
- Maricopa Association of Governments (MAG)
- Town of Buckeye
- Federal Highway Administration (FHWA)
- Arizona Game and Fish Department (AGFD)
- U.S. Bureau of Land Management (BLM)
- U.S. Fish and Wildlife Services (USFWS)
- Center for Desert Archaeology
- Sonoran Institute
- Central Arizona Project (CAP)
- Community of Tonopah
- School Districts
- Maricopa County Farm Bureau
- Area Developers
- Irrigation and Utility Companies
- Affected Businesses, Property Owners and Residents

STUDY APPROACH

This corridor feasibility study is considered "long-range" transportation planning and is the earliest phase of project development. The outcome of a corridor feasibility study is an agreed-upon plan for the preservation of the right-of-way footprint for the future parkway corridor.

To accomplish this goal, the study is broken into two phases. Phase I is a planning level evaluation of the study corridor and consists of gathering data on existing and future study area features, assessing and evaluating the surrounding corridor conditions to aid in potential issues identification, and preparing constraints maps and base maps that will allow the study team to make well-founded recommendations for possible parkway corridor alignments within the study area. Conceptual corridor alignment alternatives are developed only to the extent necessary to conduct a meaningful comparative analysis/fatal flaws analysis. Conceptual alignment alternatives are evaluated for technical feasibility as well as public acceptability as part of this process.

Based upon Phase I "fatal flaw" evaluation and outcomes, up to three candidates for alternative alignments are advanced to Phase II for a more detailed preliminary engineering analysis. A "preferred" alignment is selected and implementation strategies are developed. This analysis addresses engineering feasibility, environmental compatibility, economic viability, compliance with Title VI of the Civil Rights Act of 1964, and community concerns.

Once a Preferred Alignment alternative has emerged and has general consensus, preliminary plans are prepared to delineate the corridor alignment, future parkway cross-section and public right-of-way requirements.

Both Phase I and Phase II are conducted in consultation with a Technical Advisory Committee (TAC) representing agency and constituency interests. The TAC assists in the identification and resolution of issues or differing jurisdictional requirements to build as broad-based a consensus as possible regarding the preferred alternative alignment for the future parkway.

Development of Alternatives

During the alternatives analysis, the study team identified and evaluated several conceptual alignments for Northern Parkway and Tonopah Parkway. The conceptual alternatives were developed to avoid as many corridor constraints as possible yet provide a wide range of options within the study area limits. Constraints that were considered in developing the conceptual alternatives include the following:

- Land ownership:
  - Bureau of Land Management; and
  - Arizona State Trust land.
- Land use:
  - Existing and planned developments;
  - Sonoran Desert Tortoise habitat;
  - Wildlife linkage zones;
  - Potential sand and gravel operations;
  - Agricultural operations; and
  - Our Lady of Solitude Monastery north of Olive Avenue.
- Transportation Connectivity:
  - I-10/411th Avenue interchange;
  - Sun Valley Parkway connection;
  - Future connections with Camelback Parkway, Wintersburg Parkway, Hassayampa Freeway, Hidden Waters Parkway, and Turner Parkway; and
  - Planned trail systems.
- Utilities/Facilities:
  - Irrigation canals - Tonopah Canal;
  - Gas pipelines and electrical power lines near Sun Valley Parkway; and
  - ADOT Service Yard near I-10 and 411th Avenue.
- Topography:
  - Steep slopes near Hassayampa River and Jackrabbit Wash; and
  - Steep slopes near White Tank Mountains.
- Others:
  - Potential cultural resources throughout the study area; and
  - Floodplains.

Many of the potential constraints can be mitigated as part of the project design and do not necessarily constitute "fatal flaws". However, some of the constraints are considered to be more significant than others.

To narrow the range of alternatives to be evaluated in greater detail, a subjective, qualitative assessment was performed on all Conceptual Alternatives. "Candidate" Alternatives were selected from the conceptual alignments and presented to the TAC and stakeholders for review and input. The Candidate Alternatives are those that involve the fewest constraints and are the most compatible with existing land uses and future development master plans

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Northern Parkway Candidate Alternatives

Two Candidate Alternatives were proposed for the Northern Parkway segment between Tonopah Parkway and Turner Parkway,

- Alternative A - A 200-foot wide corridor centered on the Northern Avenue section line except for a three-mile dip to the south within the Belmont master planned community; and
- Alternative B - A 200-foot wide corridor with a centerline that shifts one-half mile north of Alternative A from Tonopah Parkway to 371st Avenue, then shifts south to proceed east on the Alternative “A” alignment from 363rd Avenue to Turner Parkway.

The above Northern Parkway alternatives are generally the most compatible with existing and planned developments when compared to the other alternatives considered. In lieu of developing a third Candidate Alternative for the Northern Parkway segment, the TAC and stakeholders recommended that variations of Alternative A and Alternative B be examined where electrical line towers currently exist close to the Northern Avenue section line near Sun Valley Parkway and also at the future crossing point of the Hassayampa River.

Tonopah Parkway Candidate Alternatives

Three Candidate Alternatives were proposed for the Tonopah Parkway segment between I-10 and Northern Parkway,

- Alternative A - A 200-foot wide corridor centered on the 411th Avenue section line;
- Alternative B - A 200-foot wide corridor with the centerline shifted 35' west of the 411th Avenue section line; and
- Alternative C - A 200-foot wide corridor with the centerline shifted 35' east of the 411th Avenue section line.

These alternatives have the least impact on existing subdivided properties, are most compatible with planned developments, and tie directly to the existing I-10 interchange with 411th Avenue.

(See CANDIDATE ALTERNATIVES GRAPHIC insert)

Evaluation Criteria

The Candidate Alternatives, along with a "No-Build" Alternative, were evaluated based on the following criteria:

- Future Development Compatibility
- System Continuity and Capacity
- Drainage Impacts
- Irrigation Impacts
- Building/Property Impacts
- Wildlife Impacts
- Cultural/Archaeological Impacts
- Utility Impacts
- Public Acceptability
- Cost

Since most of the evaluation criteria listed above do not lend themselves to a numerical quantification, the evaluation was performed on a qualitative basis using the following descriptors to assess the relative positive or negative impacts of each alternative: Strong Advantage, Advantage, Neutral, Disadvantage and Strong Disadvantage.

For the Tonopah Parkway segment, the No-Build Alternative and Alternative A have the most positive ratings (i.e., more Strong Advantage and Advantage ratings and/or fewer Strong Disadvantage and Disadvantage ratings). For the Northern Parkway segment, the No-Build Alternative and Alternative A have the most positive ratings.

(See CANDIDATE ALTERNATIVES MATRIX insert)

Selection of the Preferred Alternative (Alignment)

Results of the Candidate Alternative evaluation were presented to TAC members and stakeholders at the February 23, 2011 TAC/stakeholder meeting for review and discussion. The evaluation results were also presented for review and input at the second public input meeting held on February 15, 2011.

For both the Tonopah Parkway and Northern Parkway segments, it was determined that the No-Build Alternative does not address the demonstrated long-term need for a high-capacity parkway facility in the study area. In addition, there was more TAC/Stakeholder and public support for Alternative A than for the No-Build or any other alternatives for both the Tonopah Parkway and Northern Parkway segments. As a result, Alternative A for Tonopah Parkway and Alternative A for Northern Parkway are recommended as the preferred alternative.

Factors that support the selection of the recommended preferred alternatives include the following:

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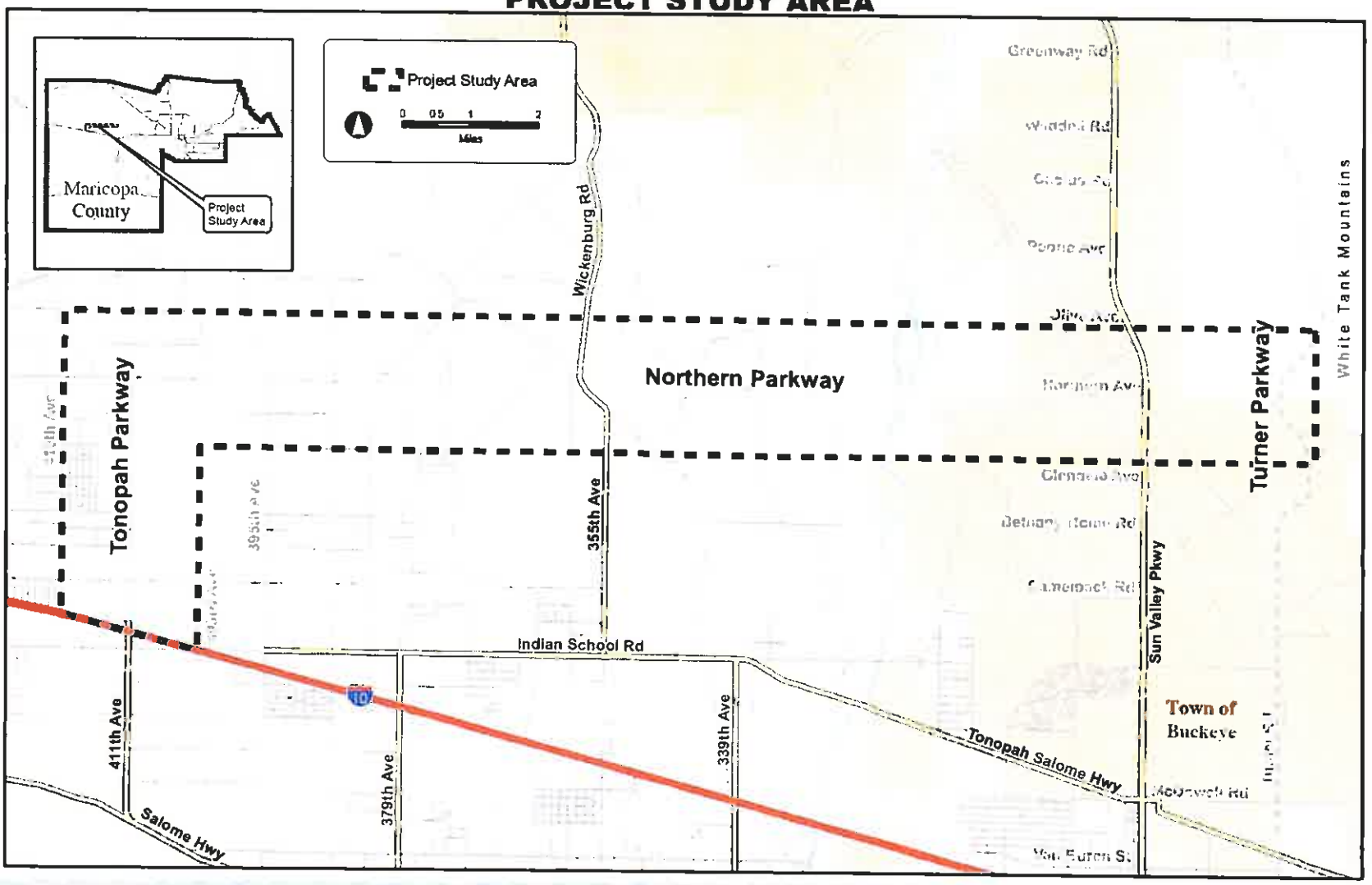
PROJECT STUDY AREA



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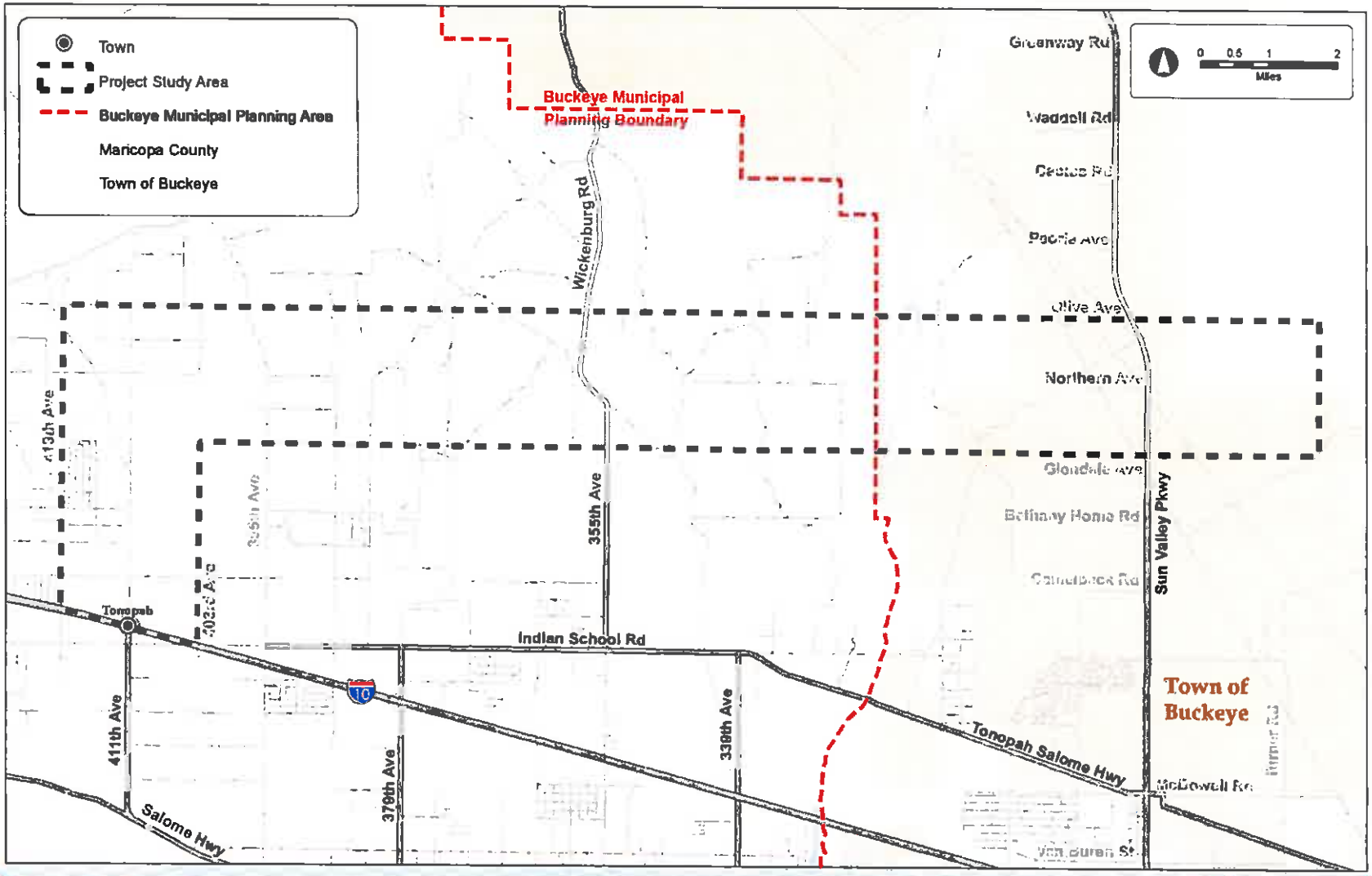
JURISDICTIONAL BOUNDARIES



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Study Purpose

- Define and Assess Existing and Future Opportunities and Constraints
- Develop and Evaluate Alignment Alternatives
- Recommend a Preferred Alignment
- Define the Preferred Alignment in Detail
- Preserve and Protect Preferred Alignment Right-of-Way

Study Goals

- Achieve Roadway Network Continuity and Connectivity
- Enhance Traffic Capacity and Safety
- Preserve the Environment
- Develop Consensus-Driven Improvement Alternatives

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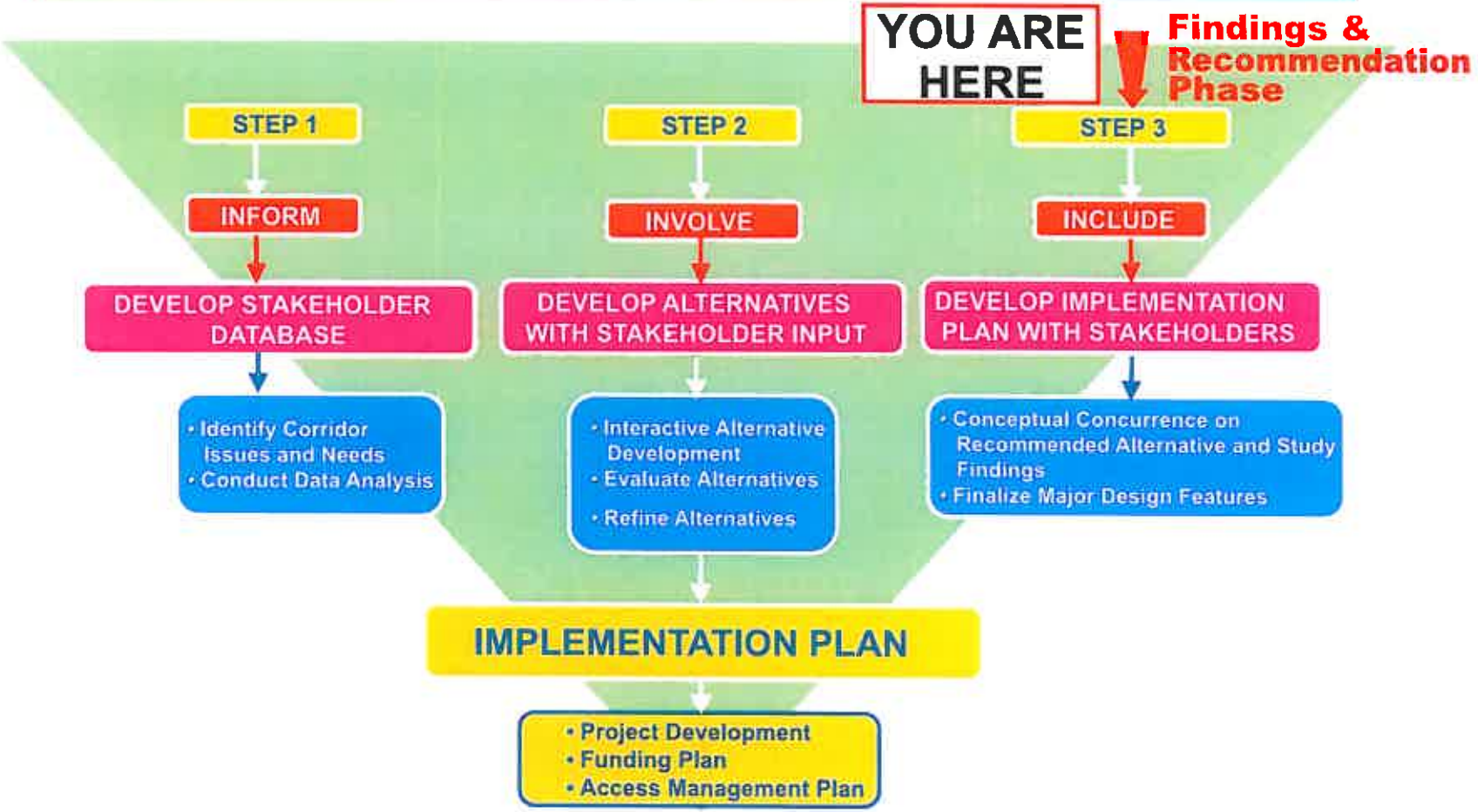
Interactive Study Process



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KEY ISSUES AND CHALLENGES

Early in the study process, a preliminary list of study issues and potential challenges was compiled. This list expands as the study progresses and input is obtained from public participation. Major issues identified at this stage include:

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STUDY SCHEDULE

Study Kick-off	July 2010
PHASE I: ***Data Collection/Issues Identification***	**July - November 2010**
Technical Advisory Committee (TAC) Meeting #1	July 14, 2010
Technical Advisory Committee (TAC) Meeting #2	September 22, 2010
Public "Scoping" Public Input Meeting	**October 18, 2010**
Technical Advisory Committee (TAC) Meeting #3	November 15, 2010
PHASE II: ***Alternative Alignments Analysis and Evaluation***	**November 2010 - May 2011**
Existing Conditions and Conceptual Alignment Alternatives Public Input Meeting	**February 15, 2011**
Alternative Alignments Development and Evaluation	February 2011
Technical Advisory Committee (TAC) Meeting #4	February 23, 2011
Preferred Alternative Alignment Evaluation	March 2011
Preferred Alternative Study Findings & Recommendations Public Input Meeting	**March 29, 2011**
Draft Final Report	April 2011
Study Completion/Final Report	**May 2011**

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Study Stakeholders

- Maricopa County Department of Transportation
- Maricopa County Planning & Development
- Town of Buckeye
- Maricopa Association of Governments
- Flood Control District of Maricopa County
- Arizona Department of Transportation
- Federal Highway Administration
- Arizona State Land Department
- Arizona Game and Fish Department
- U.S. Bureau of Land Management
- Central Arizona Project
- Maricopa County Farm Bureau
- Development Community
- Utility and Irrigation Companies
- Impacted Residents, Property Owners & Businesses

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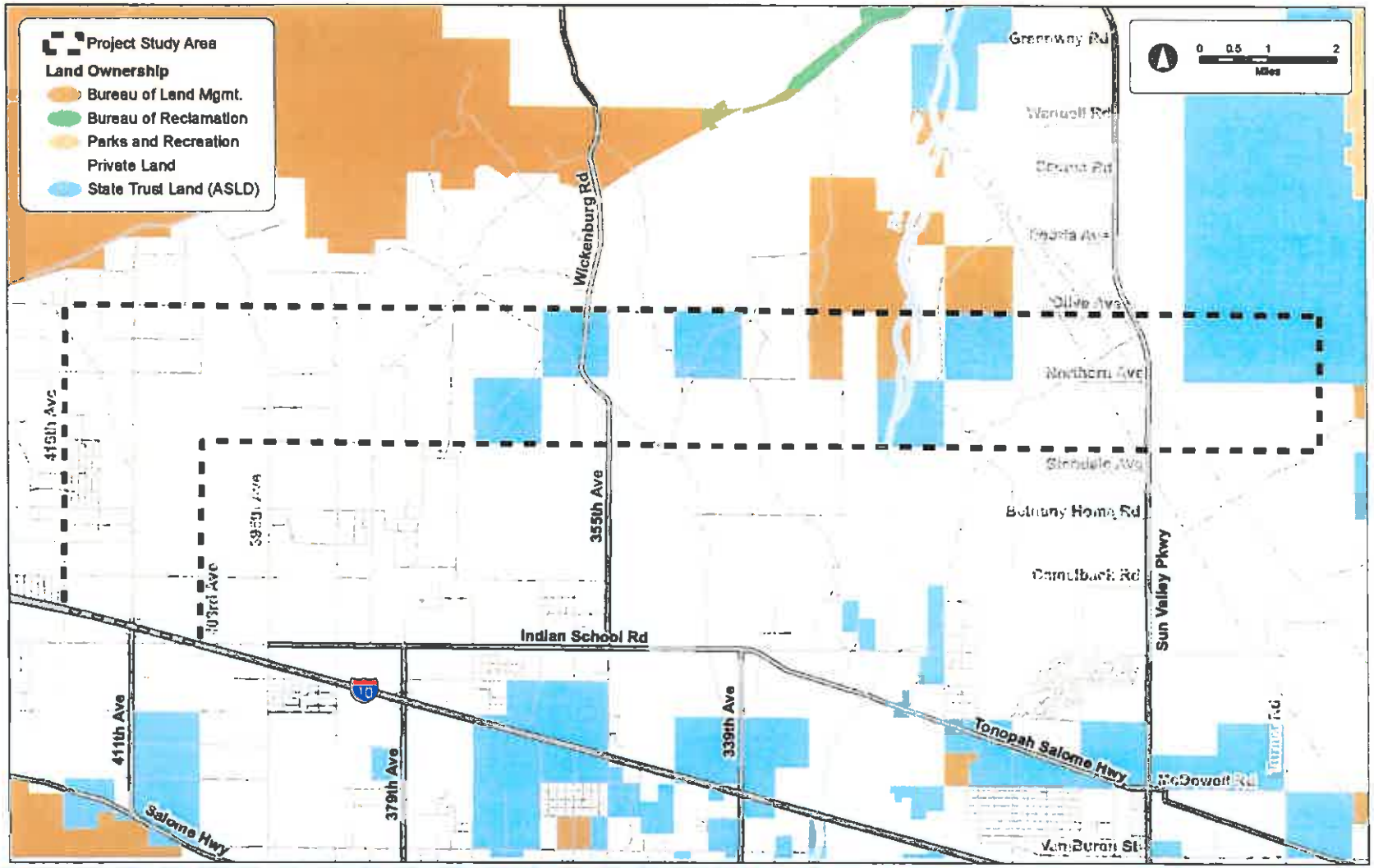
LAND OWNERSHIP



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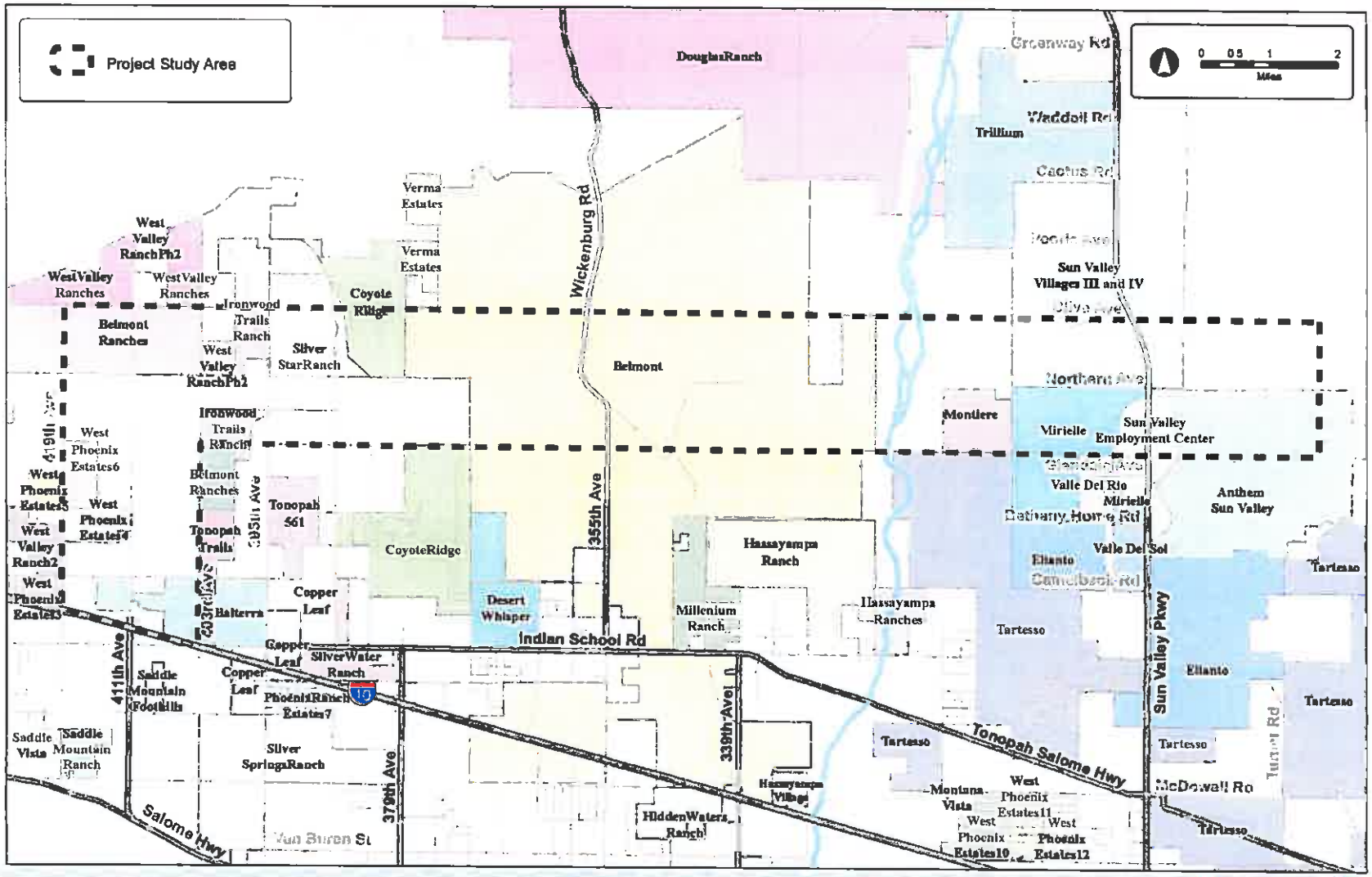
EXISTING AND PLANNED DEVELOPMENTS



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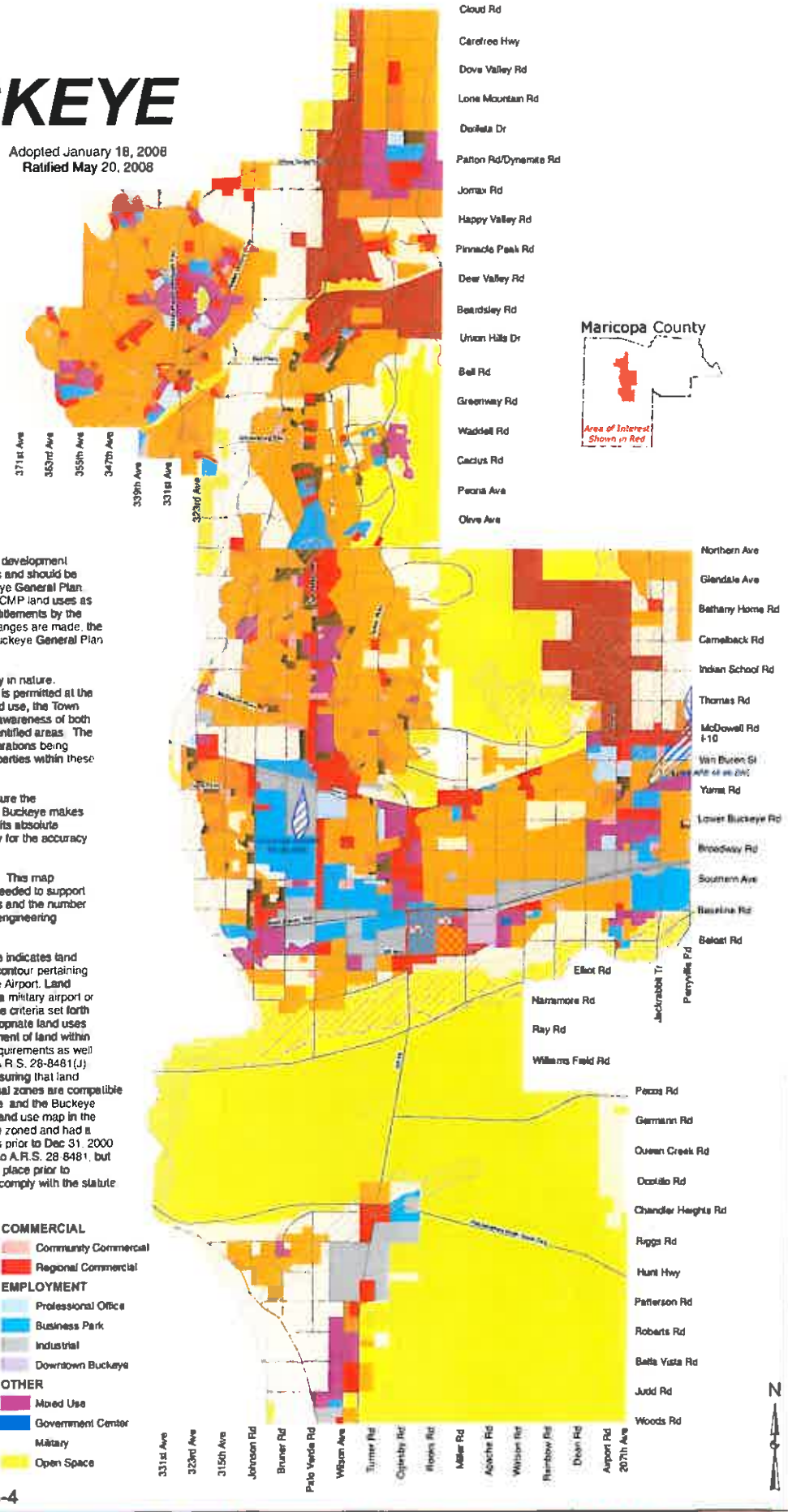
Town of BUCKEYE

Adopted January 18, 2008
Ratified May 20, 2008



Notes

All Community Master Plans (CMP) and development agreements remain as valid entitlements and should be referred to in conjunction with the Buckeye General Plan. The Land Use Map strives to reflect the CMP land uses as accurately as possible. The adopted entitlements by the Town of Buckeye are valid and if any changes are made, the policies and guidelines outlined in the Buckeye General Plan will be followed.

Floodway Transitional Areas are advisory in nature. Though development within these areas is permitted at the level of the designated General Plan land use, the Town wishes to emphasize the importance of awareness of both the hazards and sensitivities in these identified areas. The Town strongly encourages these considerations being addressed in development plans for properties within these areas.

While every effort has been made to ensure the accuracy of this information, the Town of Buckeye makes no warranty, expressed or implied, as to its absolute accuracy and expressly disclaims liability for the accuracy thereof.

Arterial / River crossings are conceptual. This map demonstrates the number of crossings needed to support development at build-out. Final locations and the number of crossings will be determined through engineering and water studies.

Town of Buckeye General Plan Land Use indicates land within the 65 day-night noise level (dnl) contour pertaining to Luke Air Force Base and the Buckeye Airport. Land within the designated 65 dnl adjacent to a military airport or ancillary military facility is restricted by the criteria set forth in A.R.S. 28-8481(J) which outlines appropriate land uses for such land. Any General Plan Amendment of land within these areas must also comply with all requirements as well as the compatible land uses outlined in A.R.S. 28-8461(J). The Town of Buckeye is committed to ensuring that land uses in the high noise or accident potential zones are compatible with the operation of Luke Air Force Base and the Buckeye Airport. Residential uses shown on the land use map in the 65 dnl area for Luke Air Force Base were zoned and had a development plan in place for those uses prior to Dec 31, 2000. These properties continue to be subject to A.R.S. 28-8481, but the development plans that have been in place prior to December 31, 2000 for these properties comply with the statute.

- Floodway Transitional Areas
- 65 db noise contour
- Downtown Expansion Area

RESIDENTIAL

- Very Low Density 0-1 du/ac
- Low Density 1.01-3 du/ac
- Medium Density 3.01-6 du/ac
- Medium High Density 6.01-10 du/ac
- High Density 10.01-15 du/ac
- Master Planned Community

COMMERCIAL

- Community Commercial
- Regional Commercial

EMPLOYMENT

- Professional Office
- Business Park
- Industrial
- Downtown Buckeye

OTHER

- Mixed Use
- Government Center
- Military
- Open Space

FIGURE 3-4

TOWN OF BUCKEYE
GENERAL PLAN LAND USE

One Town, One Vision!
General Plan and Development Code

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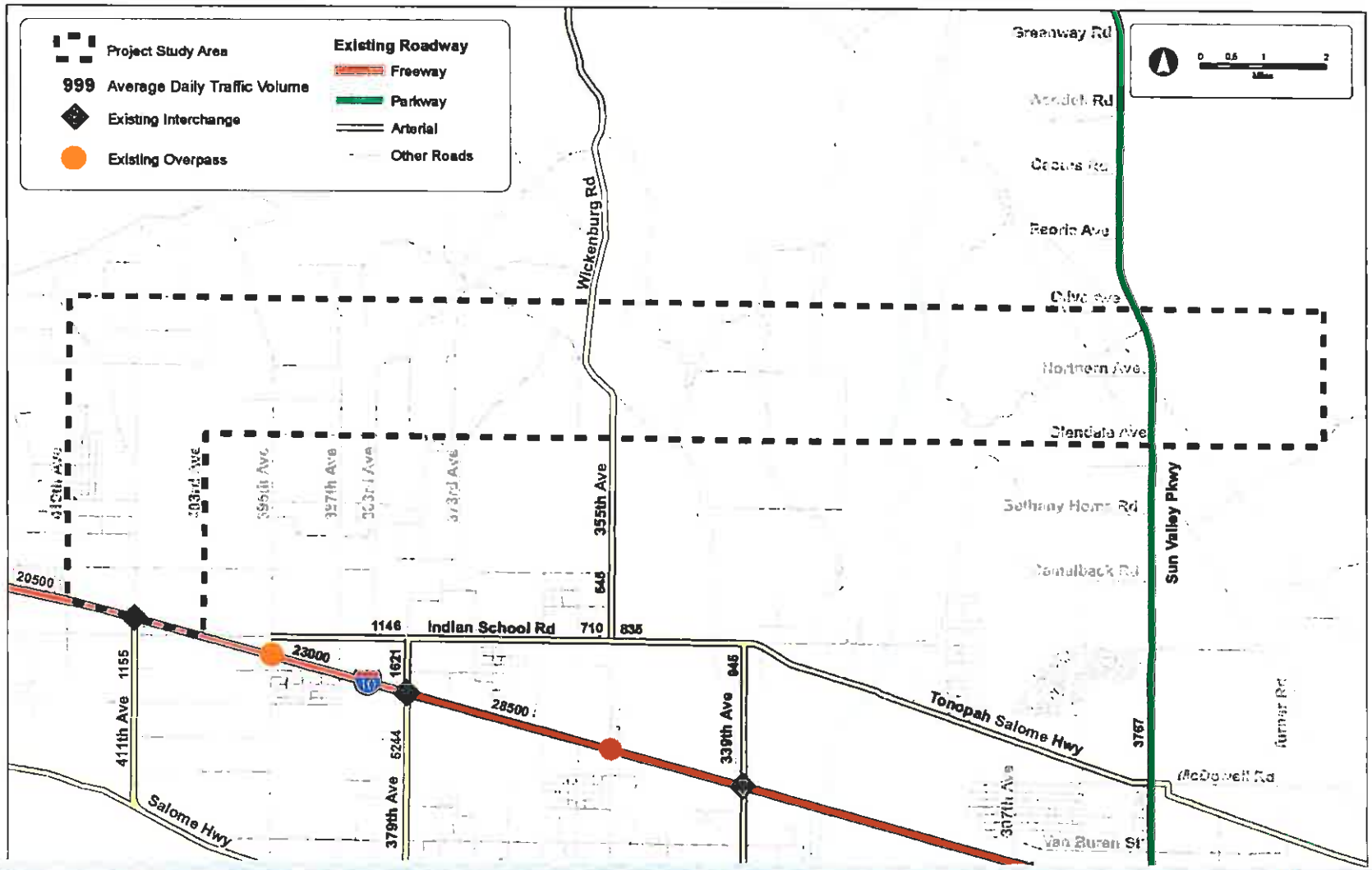
EXISTING TRANSPORTATION NETWORK



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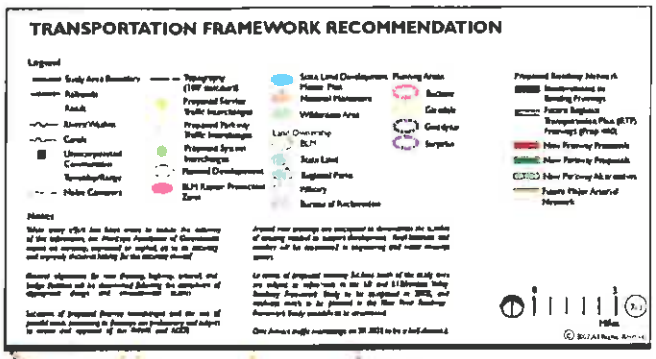
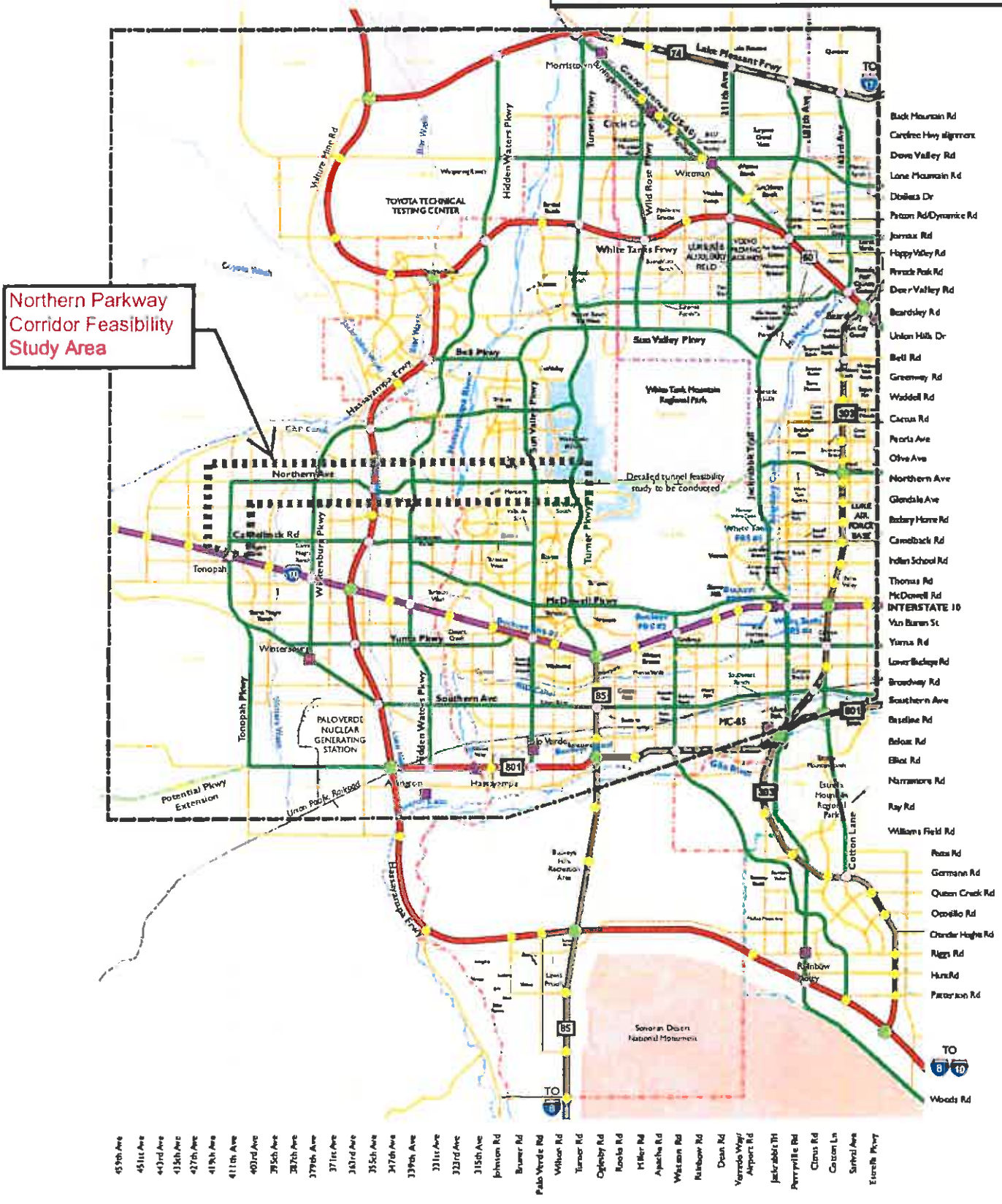
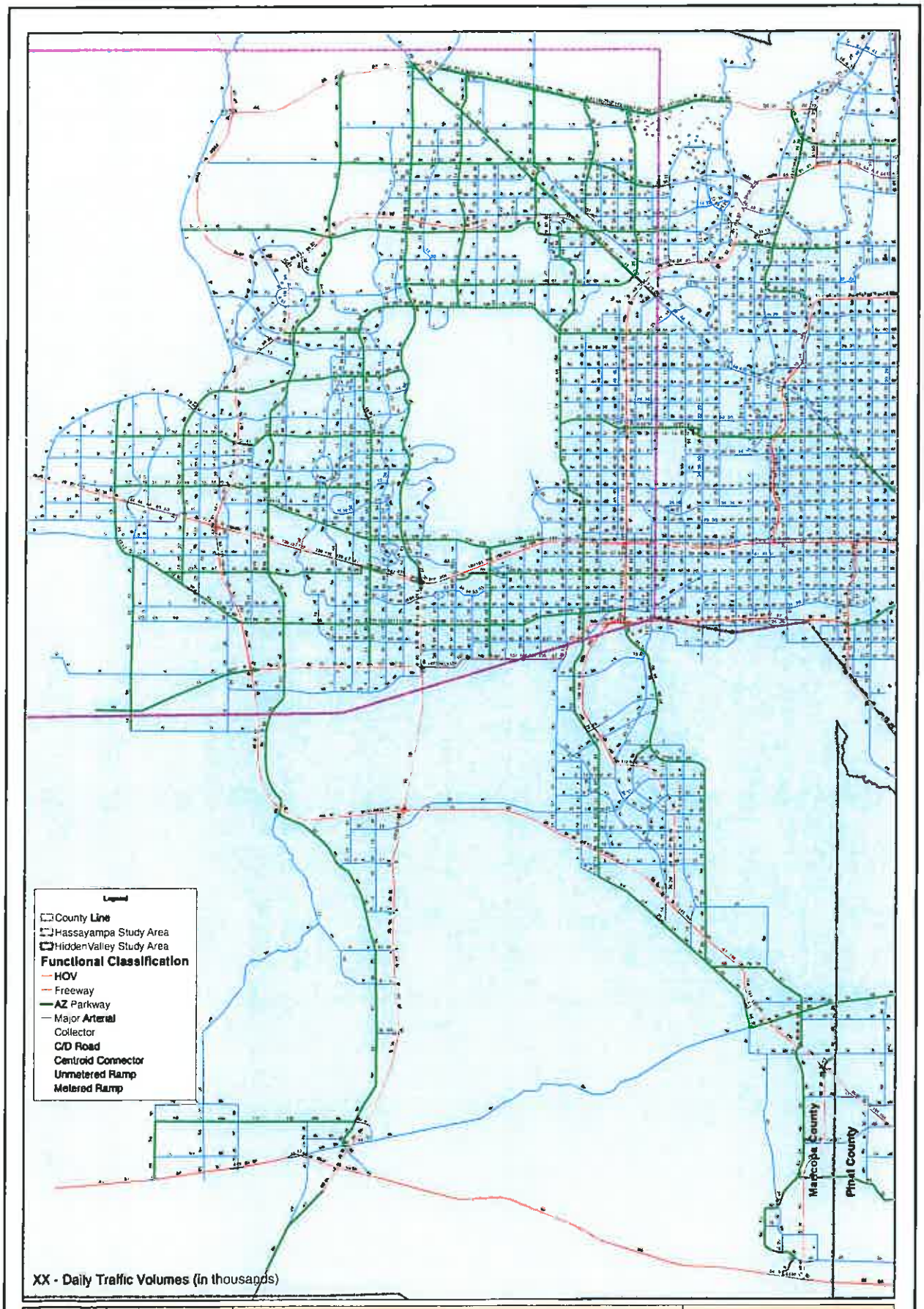
HASSAYAMPA FRAMEWORK FUTURE TRANSPORTATION NETWORK







Data Source:
Maricopa Association of Governments, Hidden Valley Buildout 24-Hour Volume Forecasts, and Hassayampa Valley Buildout 24-Hour Volume Forecasts, Dated: September 30, 2008.
Prepared by: Wilson & Company
Dated: 06/02/2009

MAG Buildout Traffic Projections
I-10/Hassayampa Valley Framework Study
I-10/HiddenValley Framework Study

0 1 2 4 6 8 Miles

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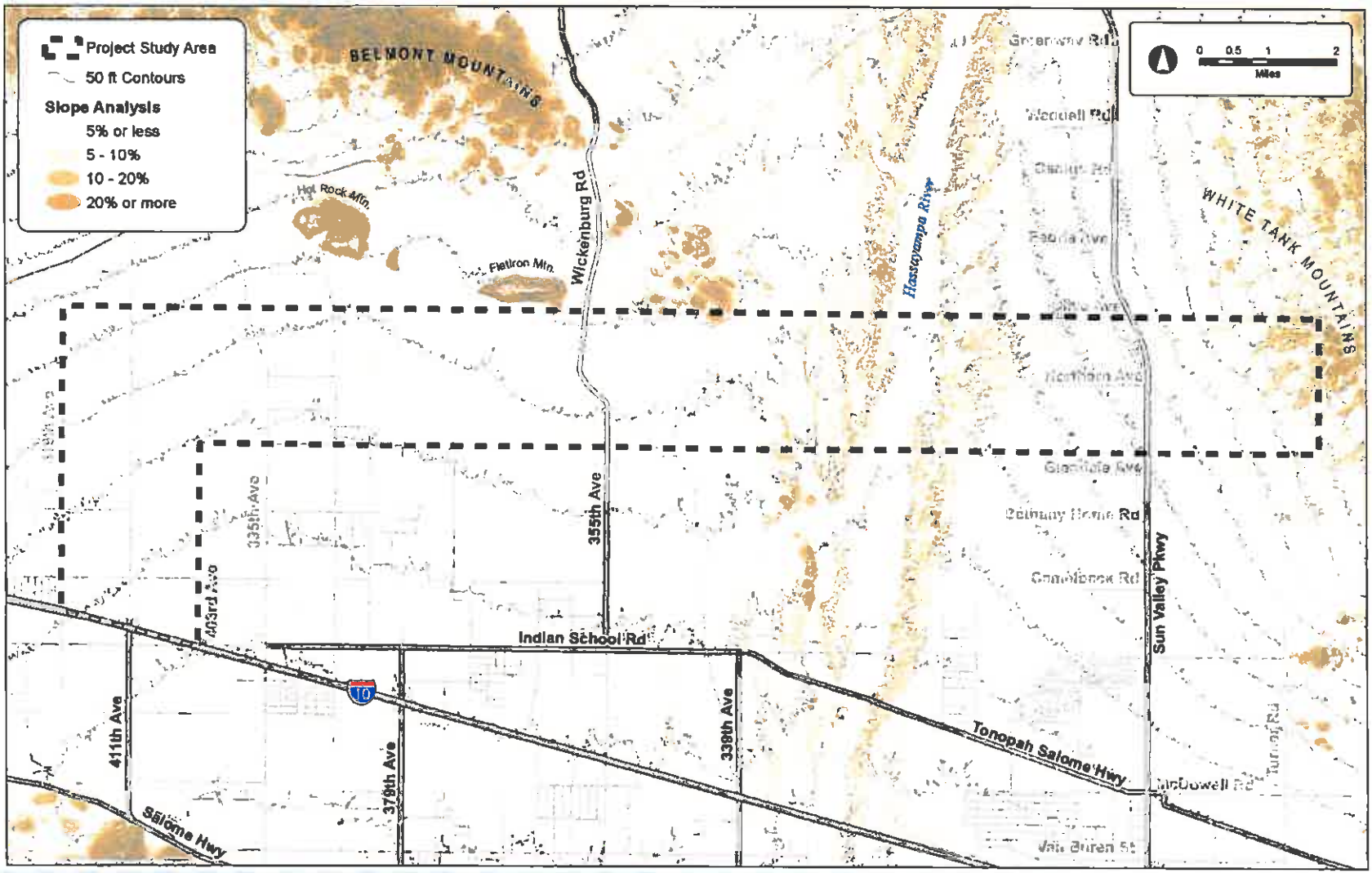
TOPOGRAPHY



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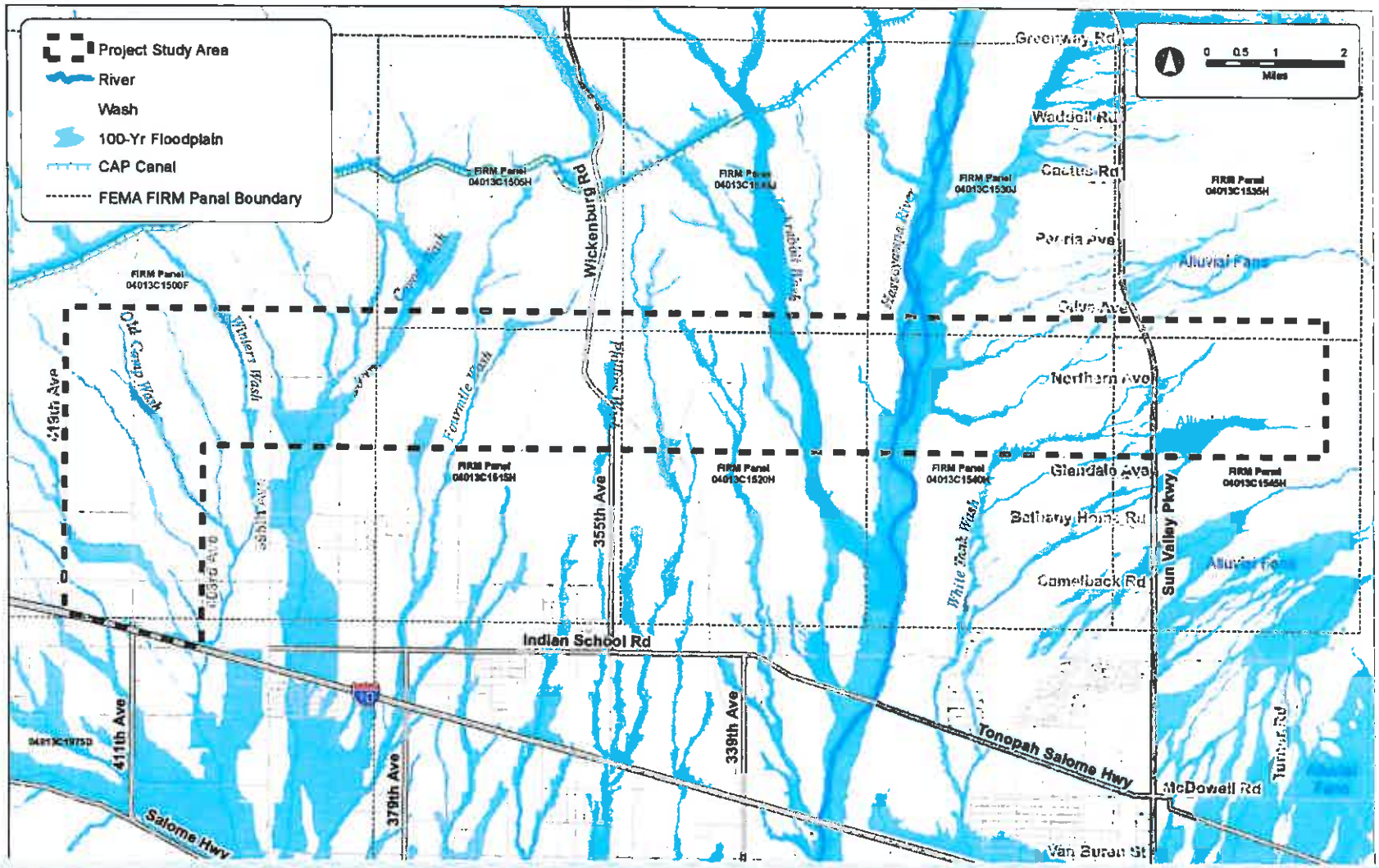
FLOODPLAINS AND WASHES



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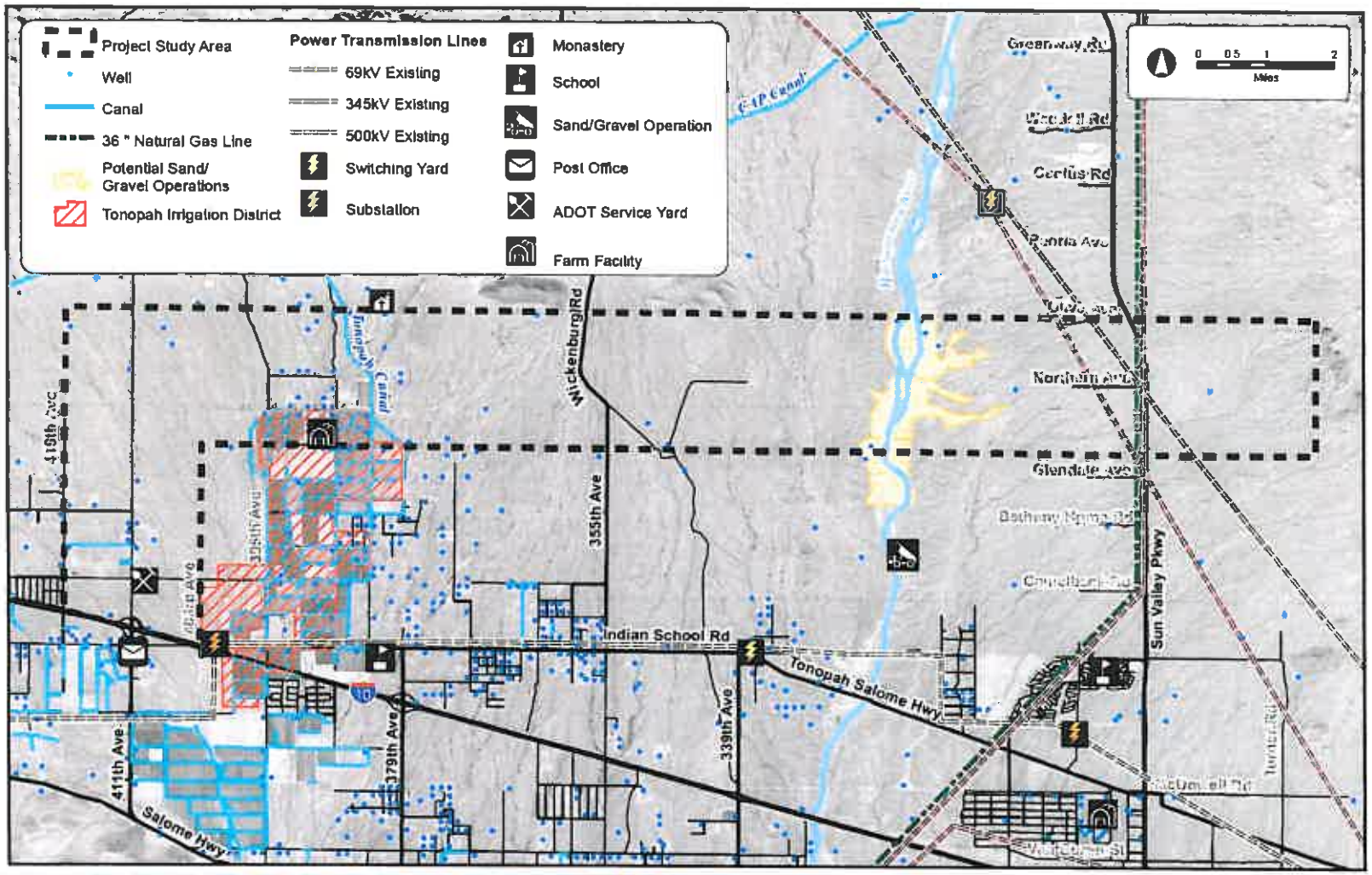
EXISTING FACILITIES



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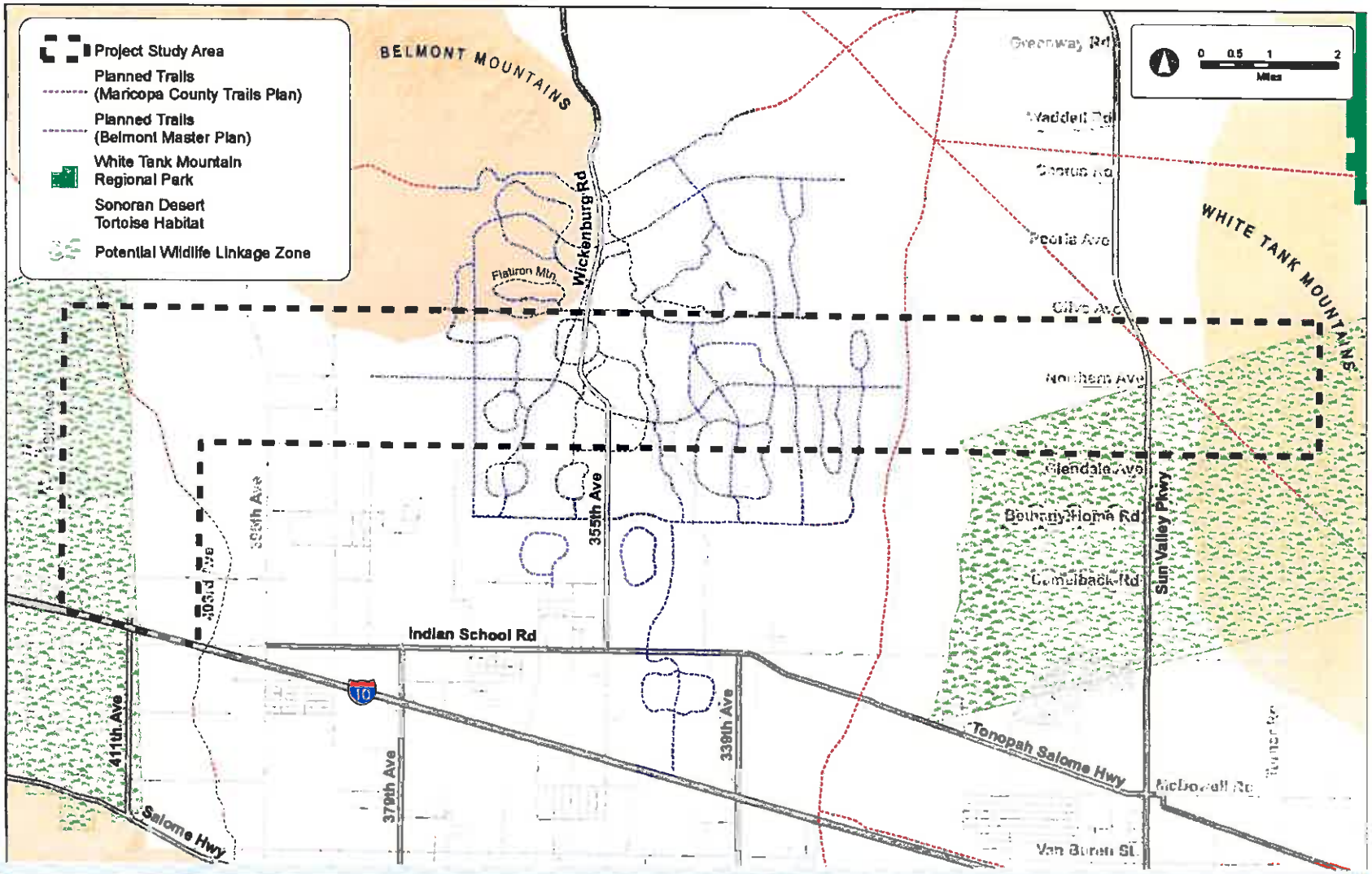
RECREATIONAL AND WILDLIFE AREAS



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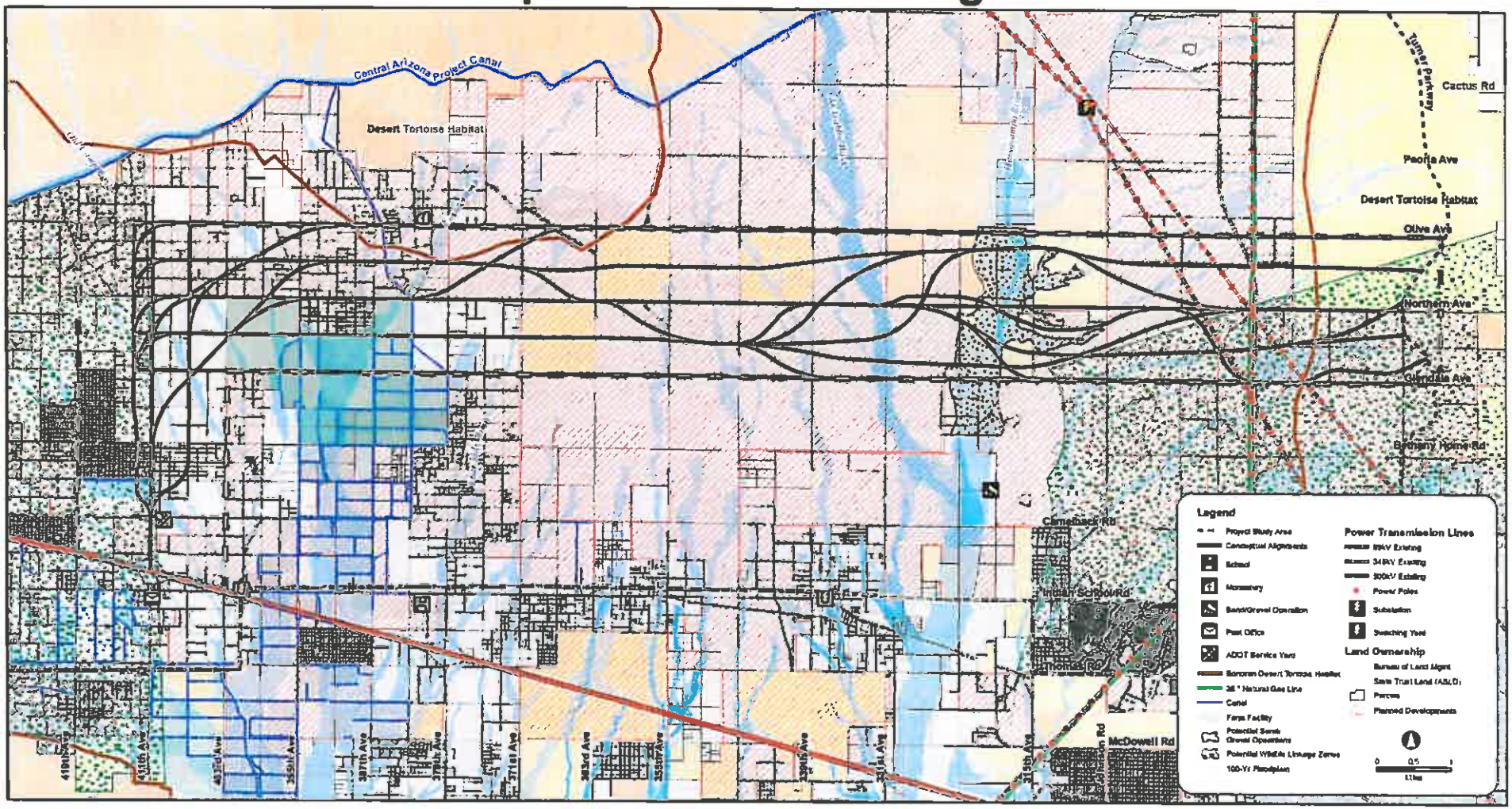
Conceptual Alternative Alignments



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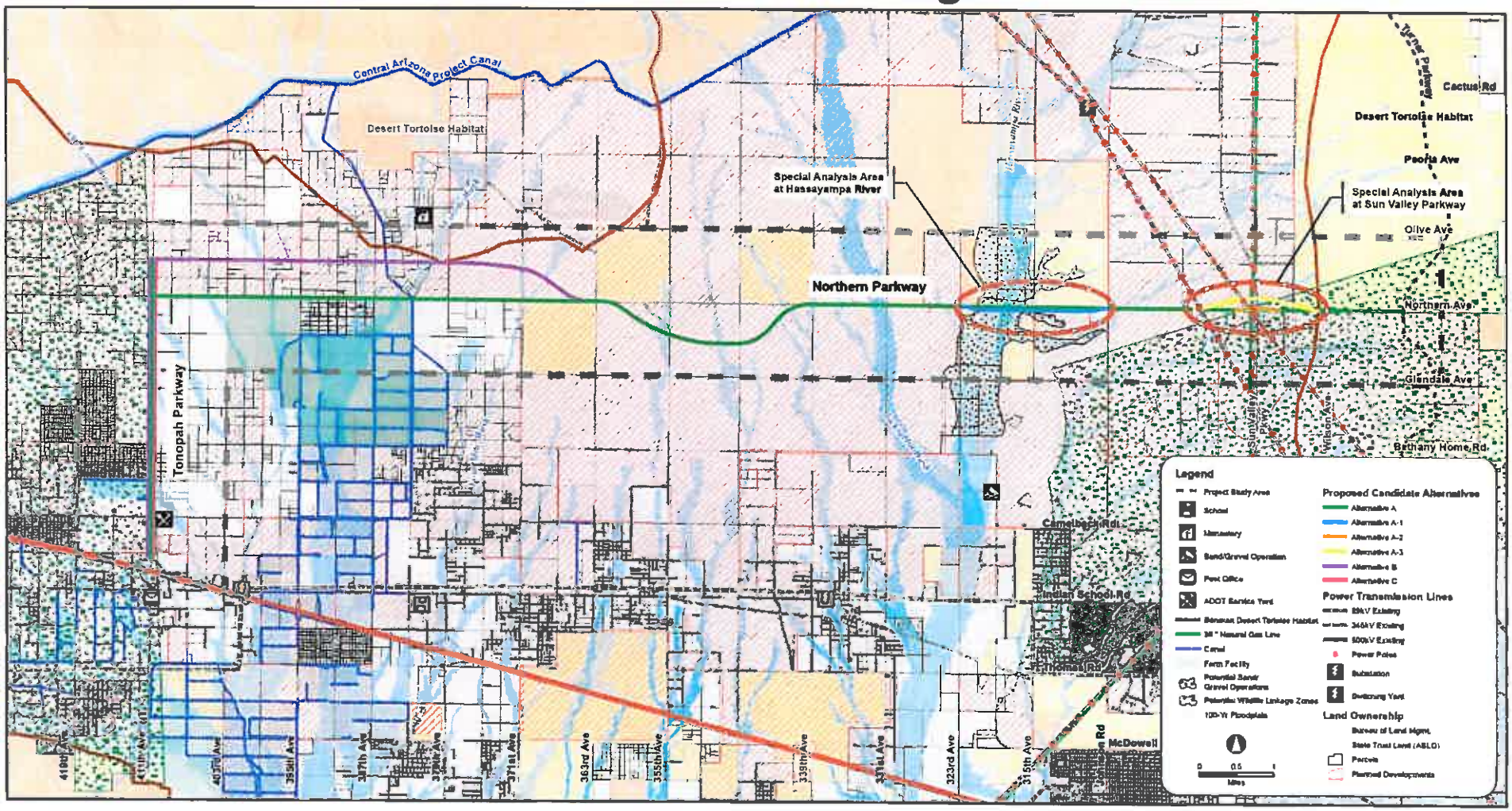
Candidate Alternative Alignments



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Candidate Alternatives Evaluation Summary

Evaluation Criteria	Tonopah Parkway Candidate Alternatives				Northern Parkway Candidate Alternatives		
	No-Build	Preferred Alternative Alt. A	Alt. B	Alt. C	No-Build	Preferred Alternative Alt. A	Alt. B
Future Development Compatibility	◒		◒	◓	●		◒
System Continuity and Capacity	●		◓	◓	●		◓
Drainage Impacts	◒		◓	◓	●		◓
Irrigation Impacts	○		◒	◒	○		◒
Building/Property Impacts	○		●	●	○		◒
Wildlife Impacts	○		◒	◒	○		◒
Cultural/Archaeological Impacts	○		◒	◒	○		◒
Utility Impacts	○		◒	◒	○		◒
Public Acceptability	◒		◒	◒	◒		◒
Cost	○		◒	◒	◓		●

LEGEND: Strong advantage ◉ Advantage ◓ Neutral ○ Disadvantage ◒ Strong disadvantage ●

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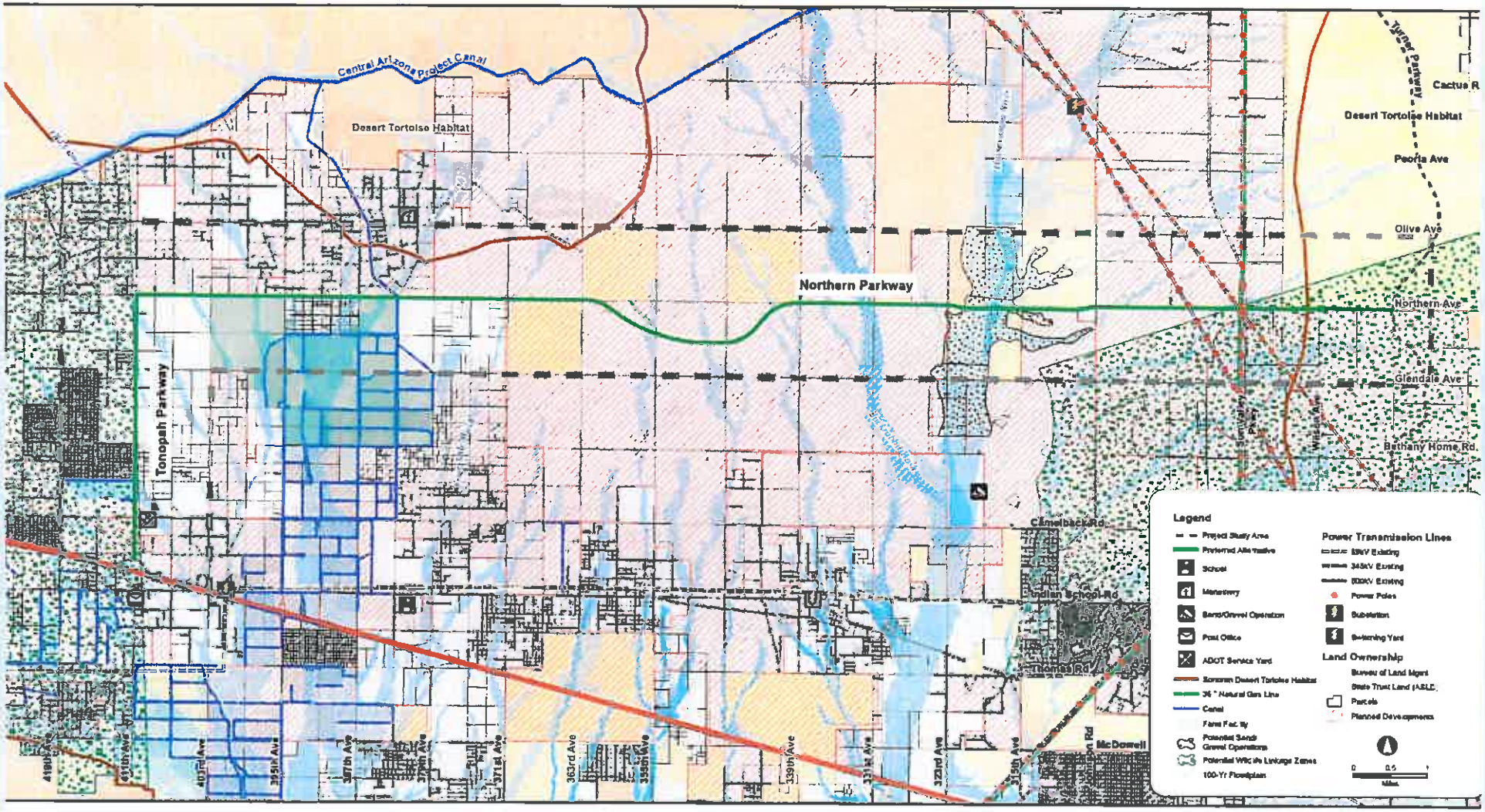
PREFERRED ALTERNATIVE



Maricopa County Department of Transportation

Kimley-Horn and Associates, Inc.

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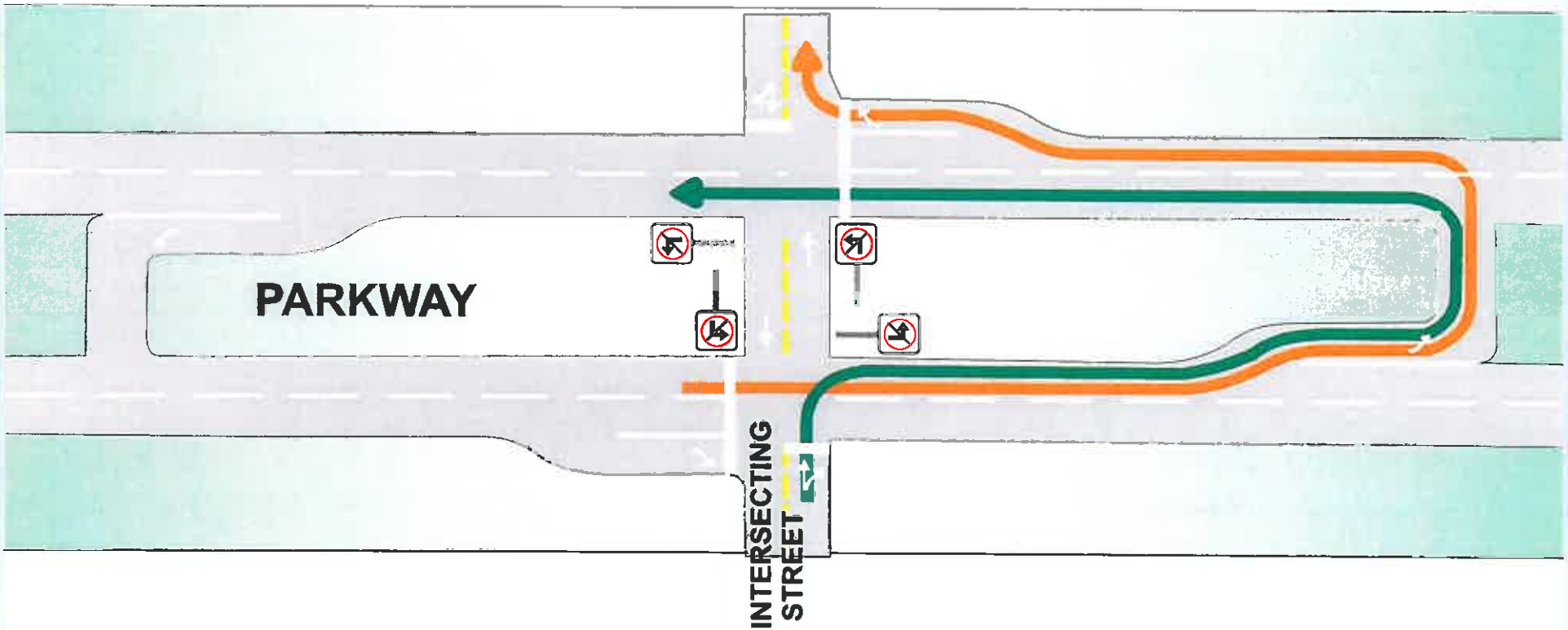
ARIZONA PARKWAY

Indirect Left Turn Intersection



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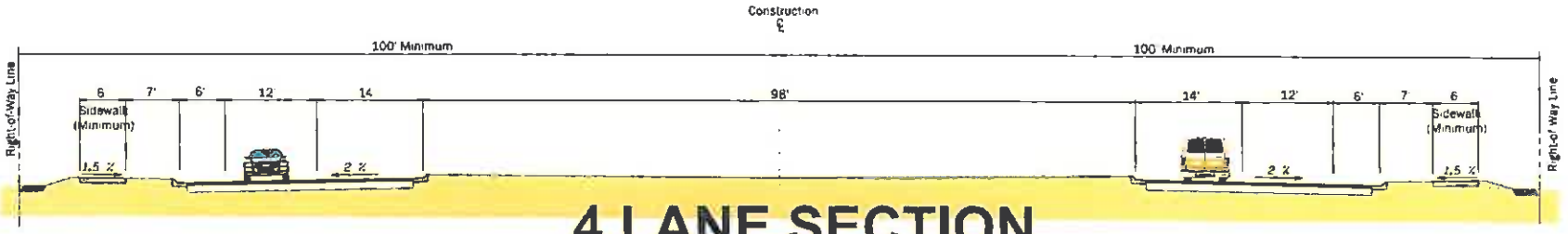
Northern Parkway Corridor

Tonopah Pkwy to Turner Pkwy

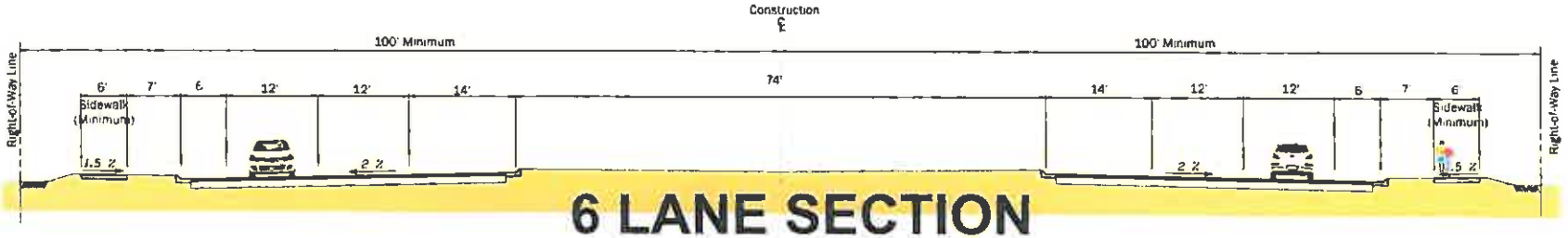
Feasibility Study

ARIZONA PARKWAY

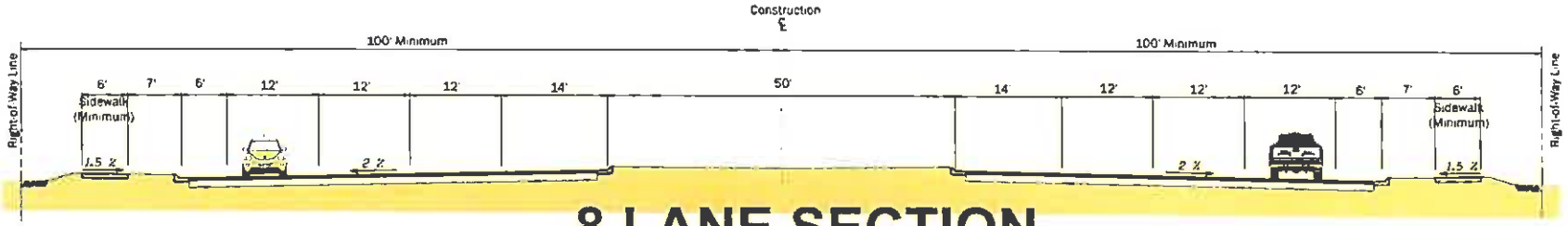
TYPICAL SECTIONS



4 LANE SECTION



6 LANE SECTION



8 LANE SECTION

Note:
When curb is present, dimensions are to face of curb

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Right Road Right Time Right Cost

Northern Parkway Corridor

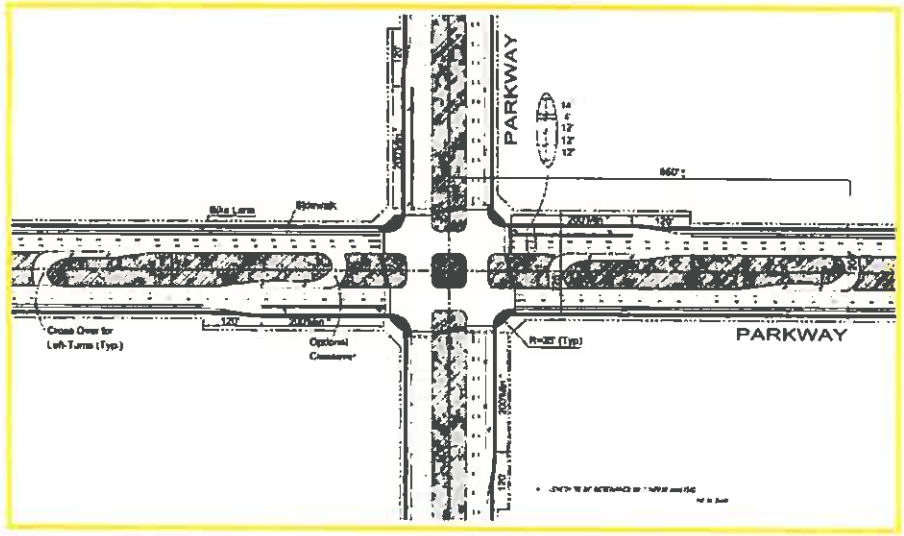
Tonopah Pkwy to Turner Pkwy

Feasibility Study

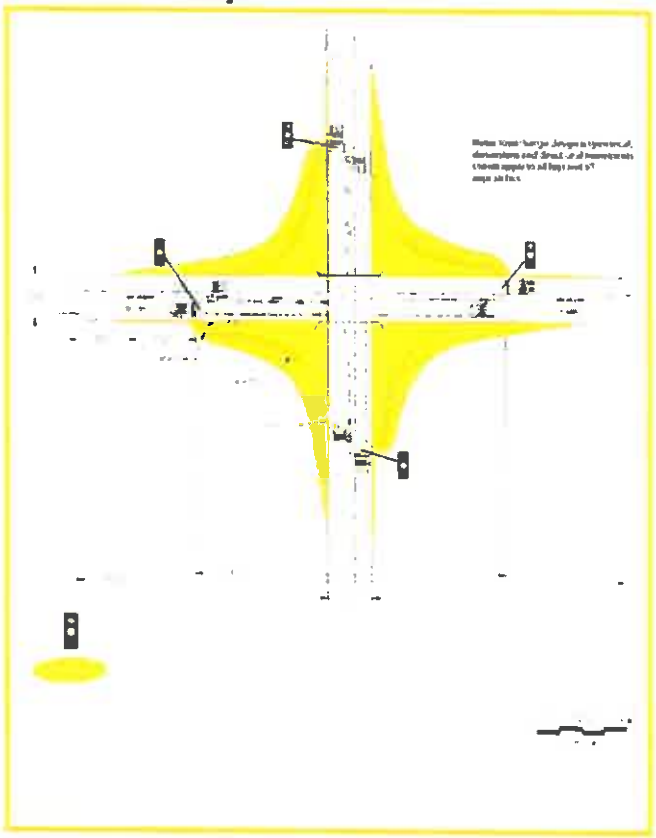
ARIZONA PARKWAY

Parkway-to-Parkway Intersections

At-Grade Intersection



Grade-Separated Intersection



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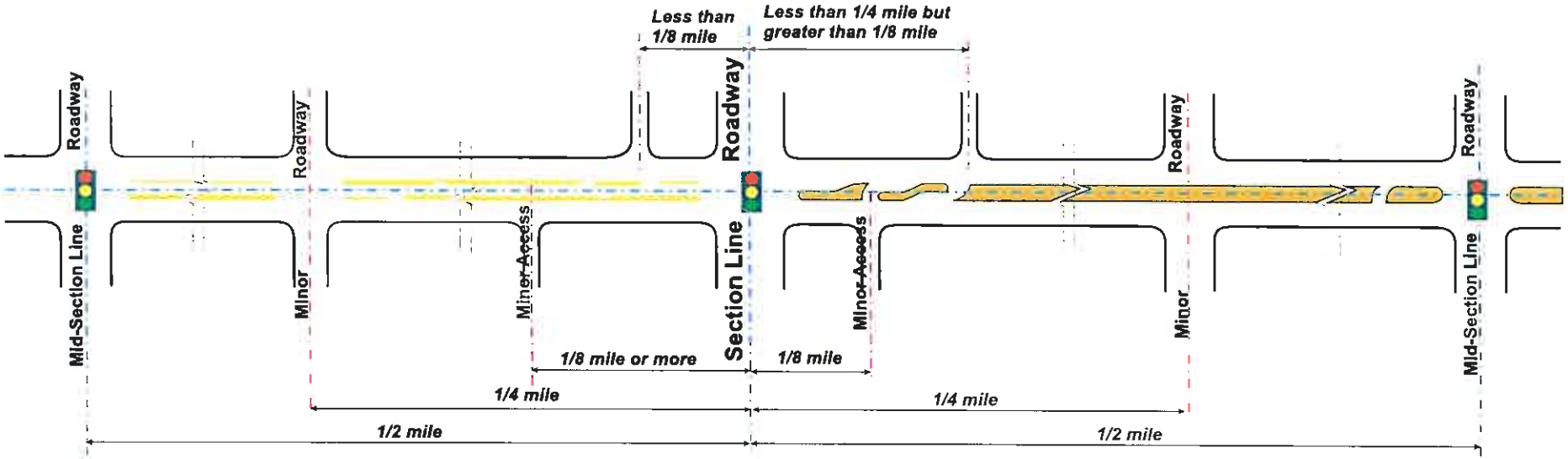
ARIZONA PARKWAY

Access Management Guidelines



Intersection Spacing

- Signalized intersections recommended at ½ mile increments.
- Non-signalized intersections should be separated by a minimum of 660 feet (1/8 mile).

Medians

- Both raised and flush center roadway medians are proposed for the Signal Butte Road corridor.
- Full access median breaks may be provided at 1/6 mile (880 feet) increments. All additional median openings should be partial access only type.
- Median openings are not recommended less than 660 feet (1/8 mile) from an arterial-to-arterial intersection.

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Feasibility Study

Environmental Process

Activity	Definition
Land Use Inventory	This is an analysis of the various land uses in the study area – residential, commercial, public facilities (schools, fire stations, etc.) or undeveloped lands; and how those uses might be affected by the project alternatives.
Socio-Economic Analysis	This is an analysis of the people who live in the area and local businesses. Potential impacts to the people that work and live in the vicinity are examined as well as potential impacts to businesses and social services, both temporary and permanent.
Clean Water Act, Section 404	A Federal Law, the Clean Water Act, regulates activities within what are known as the "Waters of the United States." The purpose of this law is to reduce water pollution and protect wetlands, such as marshes, which are essential wildlife habitats. A permit is needed when a company or an agency wants to intrude upon these lands, whether it is to build a dike, or a bridge, or whatever. The permit is called a "Section 404 Permit" because its purpose is described in Section 404 of the Clean Water Act. This portion of the Act is administered and the permits are granted by the US Army Corps of Engineers.
Endangered Species and State Sensitive Species	The ESA is a Federal Law enacted to protect those species of plants and animals that are or could become endangered, threatened, or otherwise in danger of extinction. Additionally, the Arizona Game and Fish Department list of sensitive plants and animals is reviewed for potential impacts due to the project.
Biological Surveys	A survey conducted by qualified biologists using approved survey methods to determine whether protected species are present in a project area.
Noise Evaluation	Sensitive receptor locations are mapped, such as homes or hospitals, and the potential for negative impacts are identified. At a future point in the project development process detailed noise measurements and prediction of future sound levels will occur. Mitigation measures as needed will be identified.
Air Quality	Air Quality analysis is conducted on a regional basis to identify whether areas are in conformance with national standards for particulate matter (dust), carbon monoxide and ozone.
Cultural Resources	Publicly funded projects are subject to the National Historic Preservation Act and Arizona Antiquities Act to insure archaeological and historical resources are considered in the project development process. Archaeologists and historians review the project area's history and pre-history so that negative impacts to important sites can be avoided or mitigated to the greatest extent that is practical.
Hazardous Materials	Qualified technicians search the records and conduct walking surveys of a project area to determine whether there are places that contain or once contained dangerous chemicals or hazardous waste.
Environmental Assessment	This is a type of environmental document used to summarize the results of all the studies noted above. The Environmental Assessment is used as a decision document for the project proponent, and is subject to review by affected agencies and the public.

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Tonopah Pkwy to Turner Pkwy

Feasibility Study

The Process

Transportation Improvement Program

Project Requests

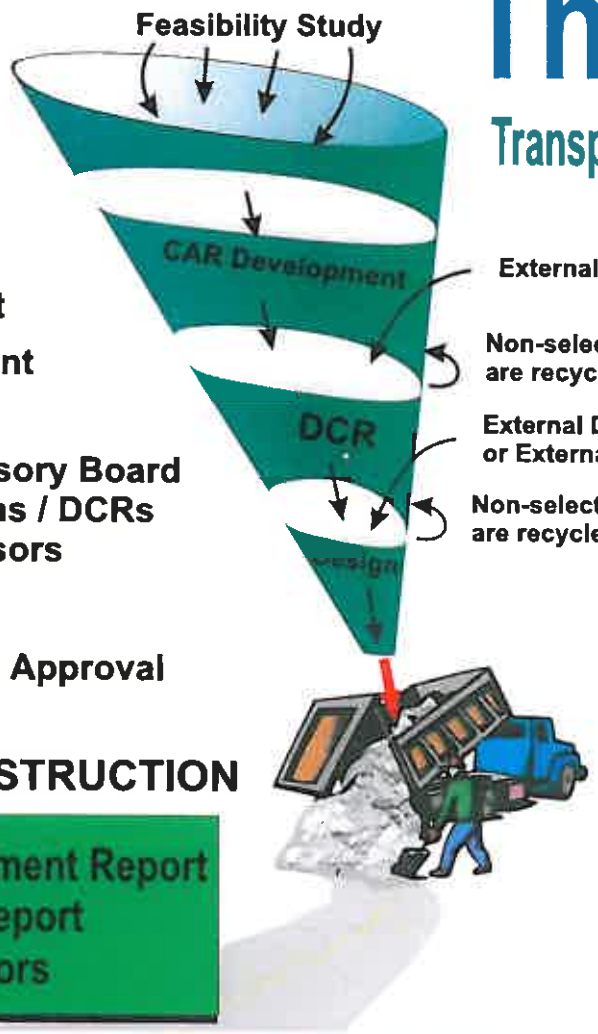
CAR development

DCR development

Transportation Advisory Board recommends Designs / DCRs to Board of Supervisors

BOS Approval

CONSTRUCTION



External CAR

Non-selected are recycled

External DCR or External Design

Non-selected are recycled

0

5 YEARS

5.5 YEARS

6.5 YEARS

7 YEARS

CAR = Candidate Assessment Report
DCR = Design Concept Report
BOS = Board of Supervisors

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