



I-11 and Intermountain West Corridor Study

Stakeholder Partners Meeting: Level 2 Preliminary Evaluation Results

Phoenix Metropolitan Area: January 21, 2014

Las Vegas Metropolitan Area: January 22, 2014

Northern Arizona: January 23, 2014

The Arizona and Nevada departments of transportation are working together on the two-year Interstate 11 (I-11) and Intermountain West Corridor Study (Corridor) that includes detailed corridor planning of a possible Interstate link between Phoenix and Las Vegas (Congressionally Designed as I-11), and high-level visioning for potentially extending the Corridor north to Canada and south to Mexico. Congress recognized the importance of the portion of the Corridor between Phoenix and Las Vegas and designated it as future I-11 in the recent transportation authorization bill, Moving Ahead for Progress in the 21st Century Act (MAP-21).

As part of the study, interested public agencies, non-profit organizations and private interests groups are invited to participate in a Stakeholder Partners group that will be asked to provide data and other input, and to share their opinions and ideas on decision points throughout the process. As part of this effort, Stakeholder Partners were invited to participate in a series of meetings for Phase 3 of the project. In January, the fourth meeting series occurred to review the results of the Level 2 Screening of alternatives. Three meetings were held in the Congressionally Designated Corridor study area: Surprise, Arizona for the Phoenix Metropolitan Segment; Kingman, Arizona for the Northern Arizona Segment; and Las Vegas, Nevada for the Las Vegas Metropolitan Segment. Additionally, individuals could call-in and log-on to participate in a live webinar for each of the three meetings. A total of 166 individuals signed in and participated in this series. The following report summarizes the results of these meetings.



Photo 1: Participants of the Las Vegas Metropolitan Stakeholder Partners meeting.

The comments presented in this report represent input from Stakeholder Partners that participated and will be reviewed and considered by the study team.

The purpose of this series of meetings was to receive feedback from Stakeholder Partners regarding the Level 2 Screening Analysis of alternatives for the Congressionally Designated portion of the Corridor. Participants were provided access to the PowerPoint presentation and draft Level 2 Preliminary Evaluation Results memorandum prior to the meetings.

Each meeting was initiated by a detailed, narrated PowerPoint presentation viewed on location and online. Project team members provided a review of results from the October 2013 Level 1 Preliminary Evaluation Results and modifications based on feedback received and a review of the results from the Level 2 Screening of segment alternatives. Attendees were invited to provide feedback relative to the Screening.



Photo 2: Participants of the Northern Arizona Stakeholder Partners meeting.

Phoenix Metropolitan Area Meeting Summary

January 21, 2014; 1 p.m. MST, noon PST
Communiversity @ Surprise
15950 N. Civic Center Plaza
Surprise, AZ

Meeting Feedback

After each section of the meeting's PowerPoint presentation, Mike Kies, project co-manager (ADOT), led a series of question and answer sessions on the Level 2 screening process and recommendations for the I-11 and Intermountain West Corridor Study, concentrating on the results from the Phoenix Metropolitan Area Section and Northern Arizona/Southern Nevada Section. The following feedback was provided by participants as part of that discussion.

General Questions and Comments

- What will be forwarded into the NEPA process, the purple hatching or the orange lines? *The purple hatching is recommended to move forward into future NEPA analysis.*
- For all alternatives, how wide of a corridor are you looking at? A new transportation corridor can have wide reaching impacts beyond the width of the corridor from a wildlife movement perspective. *This particular issue was taken into consideration in the environmental analysis. Moving forward, because many of the corridor alternatives are in close geographic proximity, it was difficult to note many as "unreasonable" which is why most are being recommended to be carried forward into NEPA.*
- New roads typically cost more money than upgrading existing facilities. Do you have money available for that? *Currently, no funding is available for any portion of the corridor. That is why the team put effort towards the Corridor Justification phase to understand the need for this facility and opportunities for future funding. There is currently a lot of private sector interest, and potential exists for a Public Private Partnership for implementation.*
- What was the basis for the original Congressional designation? *We are not aware of the whole background, but Las Vegas and Phoenix are the two largest metropolitan areas in the US not currently connected with an interstate highway. This corridor also stems from the CANAMEX corridor designation.*
- When you say that you are trying to understand how/if the Congressional designation should be different, what do you mean? *We believe the designation should be extended from Wickenburg to Nogales to create the connection to Mexico.*
- What is the process for extending the Congressional designation and will you pursue that? *Recently, ADOT, NDOT, MAG, and RTC met to work on a joint resolution to approach Congress with a proposal to extend the designation.*
- When will the NEPA process begin, once funding is identified? *Yes, a "reasonable expectation" of funding must be identified first, then NEPA studies may begin in advance of definitive funding.*
- Will the study get more specific before NEPA? *We understand the Corridor alternatives have actually gone from more specific to more general, opposite of what is normally anticipated, however no – these general corridors (purple hatching) are recommended to be moved forward into NEPA, where then more specific alternatives will be developed.*



Phoenix Metropolitan Area: recommendations north of I-10

- How long and valid are environmental clearance documents? ADOT previously conducted environmental work on the Wickenburg bypass. Is that being addressed or used on this study? *The full environmental documentation was never completed for the Wickenburg Bypass. However, this study will narrow down the alternatives for a major trade corridor and move the corridor into the environmental process in the next phase of study.*
- Will the planned Vulture Mountains Recreation Management Area (RMA) be a BLM park, or a county park? *BLM owns the land, and there will be Recreational Management Plan (RMP) leases for some specific uses, but overall the RMA will be managed by Maricopa County Parks and Recreation. The area is considered a “coordinated recreation management area”. BLM will remain the land manager, but operations of the RMA will be shared.*
- What is the width of the highway? This is very important for Wickenburg, as we don’t want to lose community facilities or the new roundabout. *While a general typical section has been developed, we cannot apply this throughout the corridor until more detailed environmental and engineering studies commence and lead to more specific design.*
- Is there any designation for I-11 as a truck route? Is it possible to designate the corridor running west of Wickenburg for trucks (and cars) to keep the freight traffic out of downtown Wickenburg? *Trucks tend to follow interstate corridors due to the characteristics associated with this type of corridor (faster speeds, access control, etc.). They will likely follow the interstate highway over a state highway without an official “truck route” designation.*
- For the evaluation summary table, the color legend is great, but might be more helpful if underneath the legend labels, very high was denoted as “positive” and very low denoted as “negative.” This will help clarify a few measures, such as cost. “Very high” does not literally mean a very high cost, but rather ranks positively due a lower cost.
- Consider placing the corridor west of downtown Wickenburg where there are minimal impacts and the corridor can take advantage of the airport, with signage directing travelers to downtown.

Phoenix Metropolitan Area: recommendations south of I-10

- Per the presentation, you will be maintaining SR 85 to I-8 as a viable corridor alternative? And it will be carried forth into NEPA? *Yes, that is what we are recommending. The purpose of this meeting is to confirm that recommendation.*
- On segments 15 and 85 (north of Sonoran Desert National Monument), why does the purple hatching extend south onto the Monument? Are you considering future corridor alternatives through the Monument? It might be better to remove the purple hatching on the Sonoran Desert National Monument for accuracy into the next phase of study; do not want to imply that area constitutes a reasonable or feasible area for alternatives. *We are not considering a corridor alternative extending through the Monument; this is simply shown as a broad corridor to illustrate the need to form a connection from Buckeye to Casa Grande via a new route. The hatching will be revised to omit the Monument.*
- I-10 and I-11 should intersect, but not be co-located for any length; I-10 is already congested. The efficiency of both corridors should be maintained.

Northern Arizona/Southern Nevada: recommendations

- Per the recommendation, will I-11 traffic be co-located on I-40 for a stretch? *Yes.*
- Please label the recommendations with the alternative letter (e.g., Alternative Q).



Multi-Use Opportunities

- What is the general width of I-10 near Marana that includes the UPRR railroad? *About 500 feet.*
- It is very expensive to relocate uses in downtown Wickenburg to accommodate 800 feet of right of way. *The intent is not to uniformly lay down 800 feet for the whole corridor. This analysis illustrates the opportunities and constraints in accommodating multiple modes and multiple uses.*
- Highway corridors curve; power transmission corridors do not. It is extremely expensive to have curves in utility transmission lines, which makes it difficult to exactly parallel a highway corridor unless there is a wide right-of-way width that allows the power corridor to weave back and forth to create straight angles.
- This study should account for new technologies. The future may not be constrained by current issues (e.g., terrain, curves).



Phoenix Metropolitan Area Webinar Meeting Summary

January 21, 2014; 1 p.m. MST, noon PST

Meeting conducted via Live Meeting and teleconference

Meeting Feedback

Following a brief PowerPoint presentation, team member Dan Andersen led participants in a facilitated dialogue. The following feedback was provided by participants as part of that discussion.

General Questions and Comments

- Albert Lannon, Avra Valley Coalition: With proposed alternatives traversing through Casa Grande (Arizona's "dustiest place"), have considerations been made regarding dust impacts? *A high-level air quality analysis has been facilitated, but not a specific analysis regarding dust impacts.*
- Albert Lannon, Avra Valley Coalition: I see the CAP has been included in this study; have they or others identified where the water is coming from to support the anticipated growth? *The reference to "CAP" in the presentation was to our Core Agency Partners, not the Central Arizona Project. This study was initiated to respond to future, planned growth; water availability is outside of this project's scope.*
- Albert Lannon, Avra Valley Coalition: I would recommend posting the New York Times article published January 5, 2014, on the project website ("Colorado River Drought Forces a Painful Reckoning for States").

Level 2 Screening Questions and Comments

- David Wessel, Flagstaff Metropolitan Planning Organization: How does the Level 2 criteria differ from the Level 1 criteria? *The criteria are the same; however, Level 2 measurements are more specific and quantifiable whereas the Level 1 was more qualitative in nature.*
- David Wessel, Flagstaff Metropolitan Planning Organization: What are the specifics regarding the modeling of the "no-build" option? *The 2035 No Build model network includes existing and planned facilities as reflected in the adopted regional transportation plans..*
- Kris Gade, ADOT: Does the draft Level 2 Preliminary Evaluation Results memorandum include the feedback provided by Arizona Game and Fish and the Nature Conservancy (Arizona)? *Yes.*
- David Wessel, Flagstaff Metropolitan Planning Organization: Some of the alignments are adjacent or parallel to existing infrastructure; does the study evaluate the interplay with loop routes (e.g. Loop 303 in the western portion of the Phoenix Metropolitan Area) and other regional planning? *Not specifically at this time, however, we anticipate this more detailed-type analysis to occur in future NEPA studies when specific alignments are evaluated and how those alignments impact existing congestion, etc.*
- Kris Gade, ADOT: Is it recommended that these alternatives move to a Tier 1 NEPA analysis? *Recommendations are the next phase of this study, with a joint meeting to discuss those recommendations anticipated in March.*



Las Vegas Metropolitan Area Meeting Summary

January 22, 2014; 9 a.m. PST, 10 a.m. MST
RTC-Southern Nevada
Room 108
600 S. Grand Central Parkway
Las Vegas, NV

Meeting Feedback

Following a brief PowerPoint presentation, Sondra Rosenberg, project co-manager (NDOT) led participants in a facilitated dialogue. The following feedback was provided by participants as part of that discussion.

General Questions and Comments

- Phil Klevorick, Clark County: Since US 95 south of Las Vegas is shown as a consideration for a possible future multimodal corridor, why not consider it for the highway portion of I-11 as well? *During the Level 1 analysis we considered US 95 south of Las Vegas, and determined that while it is an important corridor, it did not fully meet the goals and objectives of an I-11 corridor [see Level 1 Evaluation Results Summary, posted on the study website].*
- Cash Jaszczak, Nye County, NV: Will study reports highlight the benefits and uses of the alternatives not selected for I-11? *Yes.*
- Jim Garza, White Pine County: We have highlighted the benefits of US 93 north of Las Vegas, and submitted a report documenting those benefits; we ask that US 93 be reconsidered. *The team will review the submitted report and consider if there was new information that would affect the recommendations.*
- Are you coordinating your efforts with Project Neon? *Yes, there has been some coordination; however the implementation schedule of each is dramatically different.*
- Phil Klevorick, Clark County: Are you coordinating with the Paiute Nation? *Yes. We have contacted all of the tribes in Nevada and Arizona via mail and email; a representative from the Moapa Band of Paiutes attended a meeting in November 2013.*
- Are there enough rights of way for this corridor on US 95 north of Las Vegas? *We did not consider right of way needs in the Northern Nevada (or Southern Arizona) Future Connectivity Segment(s).*
- Cash Jaszczak, Nye County, NV: Are there other Tribal lands that would be affected by an I-11 corridor on US 95 north of Las Vegas? *We have reached out to all the Tribes for coordination and received some feedback, however, at this point specific impacts cannot be identified due to the width of the corridor.*
- Richard Howe, White Pine County: A ribbon cutting is scheduled tomorrow for the Eastern Energy Corridor.

Level 2 Screening Feedback

- Who would own the 800-foot right of way shown in the typical section? *We are currently considering the overall footprint that might be needed for I-11, recognizing that it will vary throughout the corridor. Right of way acquisitions and ownership considerations will need to be studied in the future as funding becomes available and alignments are set.*
- How long would it take for Congressional action to secure the BB-QQ alternative through the Lake Mead National Recreation Area (LMNRA)? *A possible alignment is illustrated in this study*



that crosses a small portion at the west side of the LMNRA, however, we have identified a broader area that should be studied during subsequent environmental studies as dictated by the National Environmental Policy Act (NEPA), some of which avoids the LMNRA. The exact alignment, and resulting need for any Congressional action, will be determined during the NEPA phase.

- Faye Streier, US Bureau of Reclamation: When would NEPA begin? *That is undetermined at this time. We believe that proposed actions need to be fiscally constrained before NEPA can begin.*
- Robert Murnane, City of Henderson: How is “Community Acceptance” criteria evaluated? *That criterion has not yet been evaluated in the preliminary Level 2 analysis, but will be completed based on feedback received from the Core Agency Partners, Stakeholder Partners, and the general public. The information that we are presenting to you will be posted on our website during the month of February, along with a survey for collecting specific feedback.*
- Robert Murnane, City of Henderson: Was Lakeshore Drive considered for part of BB-QQ? *No. However, an alignment between the Lake and mountains (roughly parallel to Lakeshore Drive) was considered during the Level 1 analysis. It was not recommended for further analysis because of the significantly greater impacts to the LMNRA and difficult terrain.*
- Faye Streier, Bureau of Reclamation: Why did BB-QQ score high on economic vitality? *In large part because of the short-term economic benefits from construction activity.*
- Phil Klevorick, Clark County: It will be a waste of time to study BB-QQ any further if the National Park Service (NPS) will reject it.
- Bruce Nyhuis, National Park Service: Alternative BB-QQ is not compatible with National Park Service land use.



Las Vegas Metropolitan Area Webinar Meeting Summary

January 22, 2014; 9 a.m. PST, 10 a.m. MST

Meeting conducted via Live Meeting and teleconference

Meeting Feedback

Following a brief PowerPoint presentation, team member Audra Koester Thomas led participants in a facilitated dialogue. The following feedback was provided by participants as part of that discussion.

General Questions and Comments

No feedback provided

Level 2 Screening Questions and Comments

No feedback provided



Northern Arizona Meeting Summary

January 23, 2014; 10 a.m. MST, 9 a.m. PST
Mohave County Public Works, Turquoise Room
3715 Sunshine Dr.
Kingman, AZ

Meeting Feedback

Following a brief PowerPoint presentation, Mike Kies, project co-manager (ADOT) led participants in a facilitated dialogue. The following feedback was provided by participants as part of that discussion.

General Questions and Comments

- Is ADOT committed to completing the 4-lane divided highway as currently planned, from Wickenburg to Kingman? If so, what is the timing? *Yes, ADOT intends to complete what is planned, but timing is uncertain currently, as it depends on available funding.*
- Are you considering charging stations for electric vehicles? *They fit very well with our vision of the Corridor, and are part of the reason for including a utility corridor in the footprint. Those details will be worked out during the design phase of the project.*
- How long will NEPA decisions remain in force? *As conditions change, NEPA documents need to be re-evaluated, which is a much quicker process than the initial evaluation and is often just for shorter segments.*
- Was a NAFTA corridor study conducted, similar to this? *Not specific to NAFTA, however a high-level study of the CANAMEX Corridor was conducted.*
- Rest areas with amenities are also important for truckers, as are other traveler services.

Level 2 Screening Feedback

- What would the typical section look like without rail? *We would still need frontage roads in some locations. Adding utilities to the corridor would depend on need.*
- Quartzsite is misspelled on one of the maps.



Northern Arizona Webinar Meeting Summary

January 23, 2014; 10 a.m. MST, 9 a.m. PST

Meeting conducted via Live Meeting and teleconference

Meeting Feedback

Following a brief PowerPoint presentation, team member Audra Koester Thomas led participants in a facilitated dialogue. The following feedback was provided by participants as part of that discussion.

General Questions and Comments

- Brian Wooldridge, US Fish and Wildlife Service: For the future, how can our agency be included in environmental sustainability discussions? *Thank you for your interest; we'll be sure to coordinate with you.*
- Richard Dennis, Caltrans, District 8: Can clearer graphics in the Level 2 memorandum be made available (i.e., multimodal considerations map)? *Certainly; we can work with you to ensure you have what you need.*
- Tiffany Sprague, Sierra Club – Grand Canyon Chapter: Initially this study indicated that it would evaluate multimodal opportunities, but it sounds like the focus is back to Interstate. *This study is focusing on mobility and connectivity and will provide recommendations for multimodal opportunities [funding is not currently available for rail, and utilities are beyond the control of departments of transportation].*
- Esther Corbett, Inter Tribal Council of Arizona: Have future meeting dates and locations been set? *The February public outreach effort is an online opportunity whereby interested individuals can review information and provide feedback using the i11study.com website. The next Stakeholder Partners meeting will occur jointly on March 19 in five locations (Tucson, Phoenix, Kingman, Las Vegas, and Reno) and via webinar; details will be made available once finalized.*

Level 2 Screening Questions and Comments

- Tiffany Sprague, Sierra Club – Grand Canyon Chapter: Regarding the Level 2 evaluation criteria, how is environmental sustainability “quantified”? *We teamed with Arizona Game and Fish and the Nature Conservancy who helped to inform the analysis. Their specific feedback is appended to the Level 2 memorandum, currently posted online.*
- Esther Corbett, Inter Tribal Council of Arizona: Some of the alternative rail corridors identified could impact additional tribes.



Post-Meeting Submitted Feedback

The following are comments and feedback received via e-mail and the project website from stakeholder partners through January 31, 2014. Additionally, six organizations submitted letters which can be found in their originally-submitted format in the appendix of this report.

- The RTC of S. NV does not object [to alternative BB-QQ] so long as there are no adverse environmental impacts resulting from the project.
- Grant Buma, Colorado River Indian Tribes: The Alternative Q: while it connects the large population centers it doesn't help the traffic along the Colorado River...especially Quartzite in the Winter and Parker and Lake Havasu City in the Summer.
- Robert Herr, City of Henderson: Please accept this e-mail as notification that City of Henderson staff has significant concerns with alignment BB-QQ as reflected in the documents provided at the January 21, 2014 stakeholder meeting. We have concerns not limited to the following:
 - Proximity of the proposed alignment to residential neighborhoods in the Old Vegas area
 - Proximity of the proposed alignment to residential neighborhoods, Section 9 and Section 27 rural neighborhoods
 - Proximity of the proposed alignment to the Tuscany, Calico Ridge and Lake Las Vegas neighborhoods, and other residential developments adjacent to Lake Mead Parkway
 - Impacts to commercial developments adjacent to Lake Mead Parkway
 - Impacts to the River Mountain Loop Trail, Lake Mead Trail, Golda Trailhead and other recreation facilities impacted by the proposed alignment
 - Impacts to the Area of Critical Environmental Concern (ACEC) and open space areas in the River Mountains
 - Impacts to the numerous power transmission lines in the proposed corridor and the potential to cause relocations.
 - Numerous impacts resulting from creation of a new freeway corridor passing through existing residential and commercial properties where no such facility could have been reasonably anticipated.
 - Regarding the Level 2 Evaluation Results by Category information provided at the meeting, I believe the Community Acceptance category scores should be changed from yellow, indicating moderate impact, for all alignments to N/A or simply blank with no coloration, with notation that Community Acceptance has not yet been sought or evaluated.

As stated above, these concerns are provided as a general listing of concerns and it is anticipated that we will be able to provide a more detailed listing and explanation of concerns within the next few weeks. Please notify me if there are any problems with this approach.

Finally, during our telephone conversation, you accepted my invitation for NDOT and the project team to give a project presentation to the Henderson City Council on March 4. In preparation for this, you requested a meeting between NDOT, the project consultants and City of Henderson staff. I was contacted by Dan Anderson from CH2M-Hill today and we will work to get something scheduled within the next week or two.

- Garrett TerBerg, Clark County Comprehensive Planning Department: I vote for the BB-QQ Alternative through Metro Las Vegas!
- J. Thomas Peterson, McCarran International Airport: In my review, I only came up with three items for your consideration:



- 1) Provide a one or two page executive summary that would include an explanation for the inclusion of Appendices A and B. Were the sister organizations in Nevada not asked to participate or did they decline to provide written input?
- 2) On page 8, emphasize (bold or make a separate paragraph) that Alternative AA in the Las Vegas Metro area was removed at this point in the evaluation process.
- 3) Beginning on page 21, consider revising the Evaluation Results descriptors from, in order, from Very High, High, Moderate, Low, and Very Low, to Excellent, Good, Fair, Poor, and Very Poor, as I believe these descriptors more accurately reflect the description of the generally numerically based results of the evaluation.

If you have any questions, please call or email me. Thank you for the opportunity provide additional feedback,

- Mark Abram, Frontier Communications: After reviewing the proposal outlined for the alignment of I-11, I would like to let it be known that I would favor Alternative Q. I find this is a more viable option from an economic standpoint as well as environmental.
- Tony Campbell, Mother Road Harley-Davidson, et al: Thank you for an excellent presentation on the I-11 study. I would like to support option Q following the existing AZ93 route. Thanks again for allowing us to be involved in the process.



Appendices

List of Attendees by Agency

PowerPoint Presentation

Stakeholder Post-Meeting Submitted Letters/Resolutions

- Arizona Game and Fish Department
- Sonoran Institute
- The City of Surprise, Arizona
- The Nature Conservancy
- The Town of Gila Bend, Arizona
- White Pine County



List of Attendees by Agency

Attendance Designations

S=Surprise, AZ

V=Las Vegas, NV

K=Kingman, AZ

W=Webinar/conference call

January 21, 2014 Phoenix Metro	January 22, 2014 Las Vegas Metro	January 23, 2014 Northern Arizona	First Name	Last Name	Organization
		K	Michele	Beggs	ADOT
W			Joanie	Cady	ADOT
W			Norris	Dodd	ADOT
S			Laura	Douglas	ADOT
W			Kris	Gade	ADOT
S	V	K	Michael	Kies	ADOT
		K	Michael	Kondelis	ADOT
		K	Carlos	Lopez	ADOT
S	W	W	Jaclyn	Kuechenmeister	AECOM
S	W	W	John	McNamara	AECOM
S			Vijayant	Rajvanshi	AECOM
W			Bart	Smith	Ak-Chin Indian Community
	V		Tom	Akers	Akers and Associates
	V		Ryan	Arnold	ARC Consulting
S			Tom	Martin	Arizona Automobile Hobbyist Council
S			Diane	Arnst	Arizona Department of Environmental Quality
S			Bill	Knowles	Arizona Game and Fish Department
S			Scott	Sprague	Arizona Game and Fish Department
S			Dana	Warnecke	Arizona Game and Fish Department
S			Eric	Fitzer	Arizona Governor's Office of Energy Policy
W			Michael	Horowitz	Arizona State Land Department
		W	Gordon	Taylor	Arizona State Land Department
S			Jim	Dickey	Arizona Transit Association
		K	Loyd	Barnett	Arizona Wildlife Federation
S			Val	Morrill	Arizona Wildlife Federation
		K	Duane	Nelson	Arizona Wildlife Federation
S			Ricardo	Carlo	Associated Minority Contractors of America
		W	Brent	Allen	Bureau of Land Management
S			Hillary	Conner	Bureau of Land Management
	V		Kerri-Anne	Thorpe	Bureau of Land Management



January 21, 2014 Phoenix Metro	January 22, 2014 Las Vegas Metro	January 23, 2014 Northern Arizona	First Name	Last Name	Organization
S			Michael	Johnson	Bureau of Land Management, Arizona State Office
	V		Dorothy Jean	Dickey	Bureau of Land Management, Southern Nevada
		W	Richard	Dennis	Caltrans
S			Scott	Higginson	CAN-DO Coalition
S			Jim	Dinkle	CAREDG (Central Az Economic Development Foundation)
		K	Thomas	Carter	CarterCommunications
W	V	K	Dan	Andersen	CH2M HILL
W	V	W	Bardia	Nezhati	CH2M HILL
W			Duane	Eitel	City of Casa Grande
S			Matthew	Ligouri	City of Goodyear
S			Joanne	Osborn	City of Goodyear
	V		Barbra	Coffee	City of Henderson
	V		Daniel	Fazekas	City of Henderson
	V		Tracy	Foutz	City of Henderson
	V		Santana	Garcia	City of Henderson
	V		Hon. Debra	March	City of Henderson
	V		Robert	Murnane	City of Henderson
		K	Richard	Anderson	City of Kingman
		K	Gary	Jeppson	City of Kingman
		K	Jen	Miles	City of Kingman
		K	Rob	Owen	City of Kingman
	V		Andy	Reed	City of Las Vegas
S			Diane	Landis	City of Litchfield Park
	V		Johanna	Murphy	City of North Las Vegas
W			Myesha	Harris	City of Phoenix
S			Stephen	Chang	City of Surprise
S			Martin	Lucero	City of Surprise
S			Roland	Winters	City of Surprise
	V		Sue	Baker	Clark County
	V		Dan	Kezar	Clark County
	V		Philip	Klevorick	Clark County
	V		Jon	Wardlaw	Clark County



January 21, 2014 Phoenix Metro	January 22, 2014 Las Vegas Metro	January 23, 2014 Northern Arizona	First Name	Last Name	Organization
V			Rodney	Langston	Clark County Department of Air Quality
W			Dawn	Leaper	Clark County Department of Air Quality
V			Tom	Peterson	Clark County Department of Aviation
S			Grant	Buma	Colorado River Indian Tribes
W			Ben	Rosenbaum	Congresswoman Dina Titus
V			Christy	Smith	Desert National Wildlife Refuge Complex
S			Tim	Wolfe	Dibble Engineering
S			Jim	Kenny	El Dorado Holdings
W			Ed	Stillings	Federal Highway Administration, Arizona Division
W			Dave	Wessel	FMPO (Coconino County)
	K		Stephen	Pebley	Frontier Communications
S			Tim	Oliver	Gila River Indian Community Department of Transportation
S			Irene	Kovala	Glendale Community College
W	W		Byron	Schlomach	Goldwater Institute
	W		Bob	Potts	Governor's Office of Economic Development
W			Claudia	Whitehead	Greater Phoenix Chamber of Commerce
V			Irene	Bustamante Adams	IBA & Associates
	W		Esther	Corbett	Inter Tribal Council of Arizona
	K		Robert	Riley	Kingman Airport Authority, Inc.
	K		Pam	Wilkinson	Kingman Area Chamber of Commerce
	K		Joshua	Noble	Kingman Visitor Center
W			AJ (Annette)	Thompson	Knight & Leavitt Associates, Inc.
V			Sondra	Cosgrove	League of Women Voters
V			Adam	Katschke	Lincoln County
S			Bob	Hazlett	Maricopa Association of Governments
W			John	Donohue	Maricopa Chamber of Commerce
W			Marla	Lewis	Maricopa Chamber of Commerce
S			Leigh	Johnson	Maricopa County
S			Denise	Lacey	Maricopa County
	W		John	Williams	Mohave Electric Cooperative, Inc.
V			Jhon	Carilli	National Nuclear Security Administration
V			Mike	Boyles	National Park Service



January 21, 2014 Phoenix Metro	January 22, 2014 Las Vegas Metro	January 23, 2014 Northern Arizona	First Name	Last Name	Organization
V			Bruce	Nyhuis	National Park Service
W			Natalie	Caffaratti	NDOT
W			Damon	Hodge	NDOT
V			David	Moreno	NDOT
V	W		Sondra	Rosenberg	NDOT
W			Kent	Steele	NDOT
V			Bill	Thompson	NDOT
W			Christopher	Young	NDOT
V			Bill	Cadwallader	Nellis Air Force Base
V			Victor	Rodriguez	Nellis Air Force Base
V			Brad	Hardenbrook	Nevada Department of Wildlife
V			Virginia	Valentine	Nevada Resort Association
V			Cindy	Creighton	Nevada Subcontractors Association
S			William	Olson	Newland Real Estate Group
V			Shawn	Arnold	NV Energy
V			Priscilla	Raudenbush	NV Energy
V			Cash	Jaszczak	Nye County
S			John	Bernal	Pima County
W			David	Maestas	Pinal County
S			Stefan	Baumann	Port of Tucson
W	W	W	Audra	Koester Thomas	PSA
W			Albert	Lannon	Rancho del Conejo Community Water Co-op, Inc.
W			Priscilla	Huff	Rancho Sahuarita
V			Angela	Castro	Regional Transportation Commission of Southern Nevada
V			Sue	Christiansen	Regional Transportation Commission of Southern Nevada
V			Raymond	Hess	Regional Transportation Commission of Southern Nevada
W			Lissa	Butterfield	Reno-Tahoe Airport Authority
S		W	Tiffany	Sprague	Sierra Club
S			David	Snider	Snider Consulting Services, LLC
S			Haylie	Hewitt	Sonoran Audubon Society
S			Ian	Dowdy	Sonoran Institute

January 21, 2014 Phoenix Metro	January 22, 2014 Las Vegas Metro	January 23, 2014 Northern Arizona	First Name	Last Name	Organization
V			J D	Allen	SouthWest Action Network
V			Michelle	Baltz-Mill	Southwest Gas Corporation
V			Lawrence	Garcia	Southwest Gas Corporation
S			James	Charters	SWAT / Transmission Corridor Work Group
S			Marisa	Guarinello	The Nature Conservancy
S			Marcos	Robles	The Nature Conservancy
S			John	Cook	Town of Wickenburg
S			Royce	Kardinal	Town of Wickenburg
S			Joshua	Wright	Town of Wickenburg
S			Gayle	Cooper	Town of Youngtown
V			Faye	Streier	U.S. Bureau of Reclamation, Lower Colorado Regional Office
W			Michael	Martinez	U.S. Fish and Wildlife Service
	W		Brian	Wooldridge	U.S. Fish and Wildlife Service
V			Michael	Naft	U.S. Representative Dina Titus
V			Michael	Sauer	UNLV
	K		Michael	Gibelyou	UNS Electric, Inc
	K		Michele	Walker	WACOG
W			Hon. Bonnie	Weber	Washoe County
V			Jim	Garza	White Pine County
V			Richard	Howe	White Pine County
W			Denise	Steiger	Wickenburg Regional Economic Development Partnership
S			Charlene	FitzGerald	Yuma Metropolitan Planning Organization (YMPO)
	K		Anthony	Campbell	
S			Robert	Osborne	
S			Rick	Penquite	
S			Jim	Pruka	

I-11 and Intermountain West Corridor Study: January 2014 Stakeholder Partners Meetings



I-11 & Intermountain West Corridor Study

Stakeholder Partners

Level 2 Preliminary Evaluation Results



In partnership with



Phoenix Metropolitan Area Section: January 21, 2014
Northern Arizona/Southern Nevada Section: January 23, 2014
Las Vegas Metropolitan Area Section: January 22, 2014

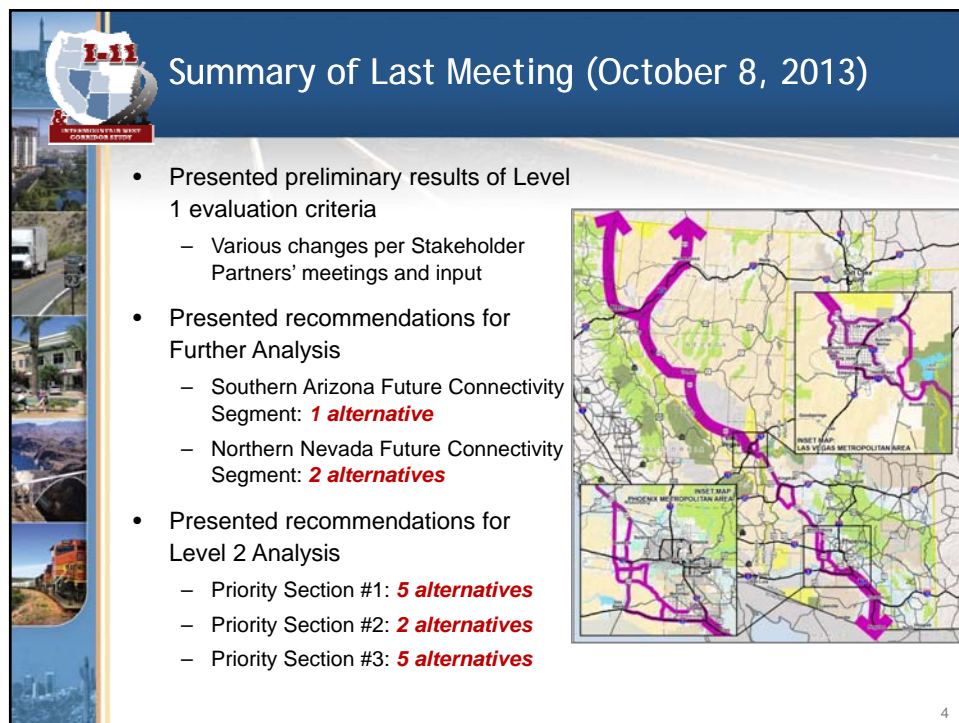
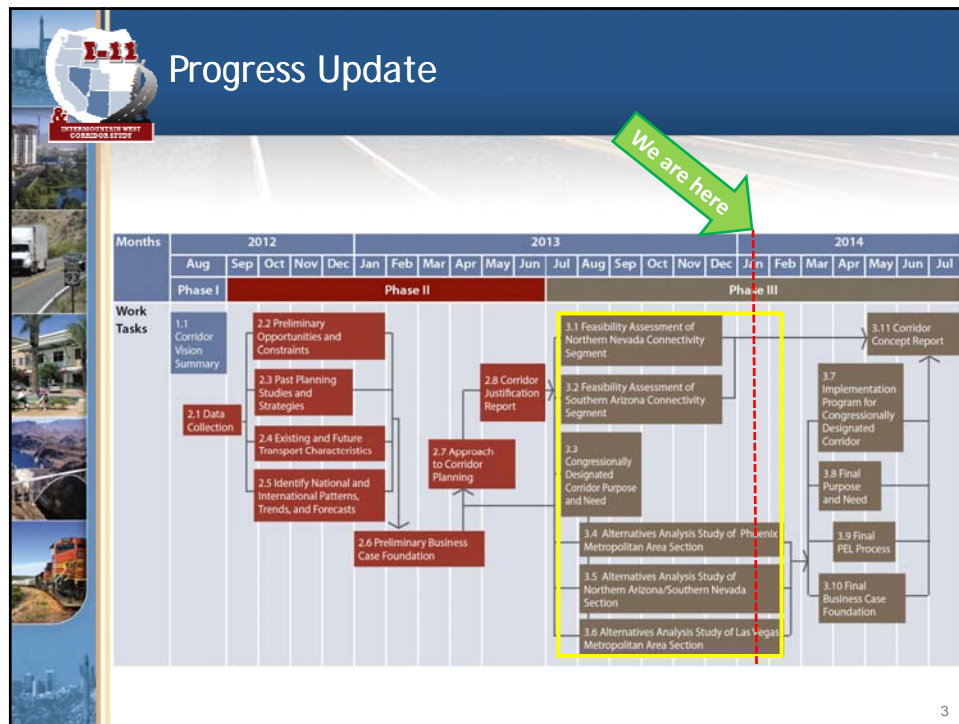



Agenda

- Progress update
- Summary of last meeting
- Purpose of this meeting
 - Review / discuss final recommendations of L1 Screening of Alternatives
 - Review / discuss preliminary results of L2 Screening of Alternatives
- Multi-Use Evaluation
- Next steps




I-11 and Intermountain West Corridor Study: January 2014 Stakeholder Partners Meetings







Modifications to Level 1 Recommendations (based on CAP, Stakeholder and public input)




Alternative G




Alternative H



Alternative I




Alternative LL




Alternative MM

- Phoenix Metropolitan Area
 - New proposed corridors generalized/straightened (All Alternatives)
 - Montgomery Road modification (Alternatives G and I)




A vertical strip of four small images on the left side of the slide. From top to bottom: a white semi-truck on a highway, a train, a car, and a city skyline.

6




Modifications to Level 1 Recommendations (based on CAP, Stakeholder and public input)

Alternative UU



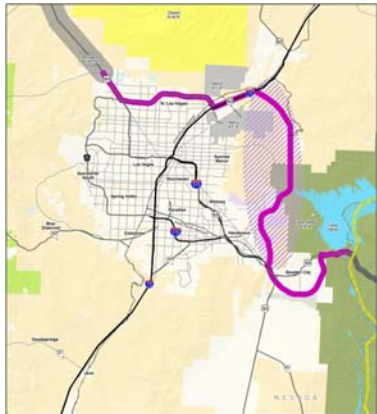
- Northern Arizona/Southern Nevada
 - Chicken Springs Road corridor realigned due to topographic constraints

7




Modifications to Level 1 Recommendations (based on CAP, Stakeholder and public input)

Alternative BB-QQ



- Las Vegas Metropolitan Area
 - Fatal flaws identified by stakeholders with northern segment of Alternative BB
 - Corridor alterations requested by stakeholders to Alternative QQ
 - ***Developed hybrid corridor merging east segment of Alternative BB and west segment of Alternative QQ***

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Revised Recommended Alternatives (with Stakeholder Partners' input)


Final Level 1 Recommended Alternatives

Segment	Initial Level 1 Recommended Alternatives	Final Level 1 Recommended Alternatives
Southern Arizona Future Connectivity Segment*	1 alternative	1 alternative
Phoenix Metropolitan Area	5 alternatives	5 alternatives
Northern Arizona / Southern Nevada	2 alternatives	2 alternatives
Las Vegas Metropolitan Area	5 alternatives	4 alternatives
Northern Nevada Future Connectivity Segment*	2 alternatives	2 alternatives

* Alternatives recommended in Future Connectivity Areas will not undergo Level 2 analysis; the reasonable range of alternatives are recommended for further study in future work efforts.




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Preliminary Results of Level 2 Screening of Alternatives



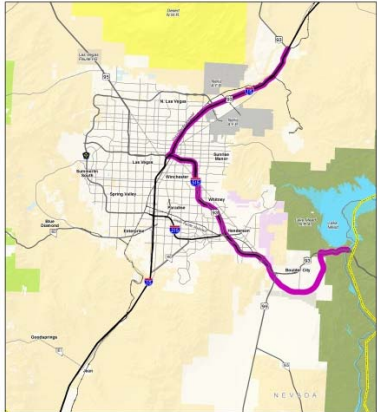


Level 2 Evaluation Process


Two Phase Process

1. Finalize Congressionally-Designated Corridor Level 2 Alternatives
 - Evaluate Level 2 alternatives for connectivity to adjacent segments
 - **Alternative AA REMOVED** - did not form a direct connection with Northern Nevada recommended (US-95) corridor
2. Conduct Level 2 Analysis using Detailed Evaluation Criteria

Alternative AA

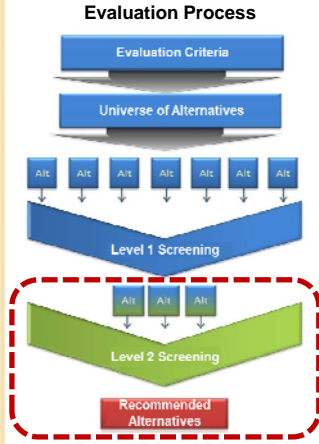


11




Level 2 Evaluation Criteria

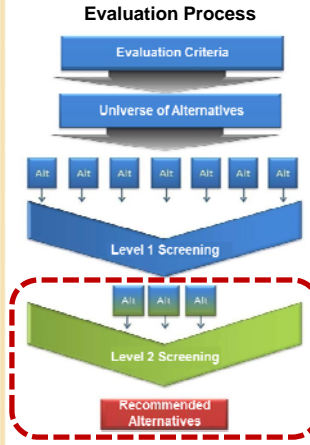
Evaluation Process



Evaluation Category	Proposed Criteria	Proposed Approach
Modal Interrelationships	1A How well does this corridor provide sufficient opportunity for a multi-use corridor?	1. Identify if multiple modes can be accommodated within current alignment alternative 2. If not, identify alternate rail corridors that will meet the same need for future modal implementation 3. Identify implications of each multimodal corridor option
	2A What are the estimated travel time savings over No-Build (2035)?	Quantitative analysis: based on travel times for each corridor using regional models compared to No-Build
Capacity/ Congestion	2B What are the total long distance vehicles miles traveled (VMT)?	Quantitative analysis: based on corridor VMT using statewide model for long distance trips (>50 miles)
	2C What are the total vehicle hours of delay?	Quantitative analysis: based on a comparison of corridor VHD between alternatives
	2D What is the average travel speed on the corridor?	Quantitative analysis: based on estimated 2035 corridor average PM peak period peak direction travel speeds
Economic Vitality	3A What are the expected short-term impacts to the regional economy, as measured by the number of jobs (direct, indirect and induced) and economic output from construction related activities?	Quantitative analysis: based on input from IMPLAN model
	3B What is the cost of delay?	Quantitative analysis: based on delay from the regional model multiplied by accepted factor for cost of delay
Transportation Plans and Policies	4A How well is this alternative consistent with short-term programmed transportation projects?	Qualitative analysis: based on how much of the alternative is documented in transportation plans
	4B How well is this alternative consistent with long-term transportation visions and plans?	



Level 2 Evaluation Criteria



Evaluation Process

Evaluation Criteria

Universe of Alternatives

Level 1 Screening

Level 2 Screening

Recommended Alternatives

Evaluation Category	Proposed Criteria	Proposed Approach
Environmental Sustainability	5A What is the impact to wildlife corridors and/or habitat blocks?	Quantitative analysis: based on GIS data layers and environmental data availability
	5B What is the impact to land managed for conservation or wildlife purposes?	
	5C How many linear miles of undisturbed waterways/floodplains are impacted?	
	5D What is the general impact to air quality conditions with this alternative?	Qualitative analysis: high-level, based on quantitative factors such as vehicle miles traveled and congestion
	5E What additional environmental concerns were identified by stakeholders?	Qualitative analysis: based on data or input received from resource agencies.
Land Use and Ownership	6A How consistent is this alternative with regional and local land use plans (including tribal plans, if available)?	Qualitative analysis: based on consistency with land use and resource plans (high/medium/low)
	6B How compatible is this alternative with major land ownership patterns and resource plans?	Qualitative analysis: based on compatibility with land ownership patterns using GIS data layers (high/medium/low)
Community Acceptance	7A How well is this alternative accepted by the Core Agency Partners?	Qualitative analysis: based on review of comments received on the alternative corridors
	7B How well is this alternative accepted by the Stakeholder Partners?	
	7C How well is this alternative accepted by the general public?	
Cost	8A What is the order of magnitude cost for this alternative, including construction, maintenance/operations, and right-of-way?	Quantitative analysis: based on ADOT/NDOT cost estimating tools plus an order of magnitude cost for right-of-way and a factor for operations and maintenance

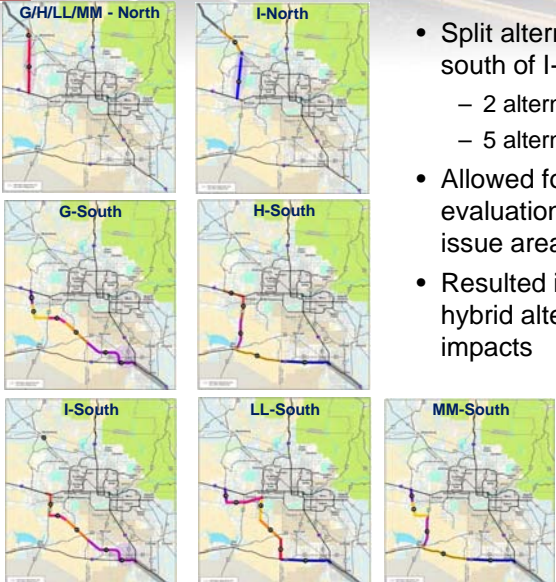
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Phoenix Metropolitan Area Level 2 Screening Results

Approach for Level 2 Analysis in Phoenix Metropolitan Area



- Split alternatives north and south of I-10
 - 2 alternatives north of I-10
 - 5 alternatives south of I-10
- Allowed for more focused evaluation to identify targeted issue areas
- Resulted in opportunity for hybrid alternatives to minimize impacts


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Level 2 Evaluation Results by Category

Alternative	Evaluation Category							
	Modal Interrelationships	Capacity/ Congestion	Economic Vitality	Transportation Plans / Policies	Environmental Sustainability	Land Use and Ownership	Community Acceptance	Cost
G/H/LL/MM - North	Very High	High	Moderate	Low	Low	Very High	High	High
I-North	High	High	Moderate	Very Low	Moderate	High	High	High
G - South	Very High	High	High	Low	Moderate	Very High	High	Very Low
H - South	High	High	High	Very High	High	High	High	High
I - South	High	High	High	High	Moderate	Very High	High	Moderate
LL - South	Very High	High	High	High	Moderate	Very High	High	Very Low
MM - South	High	High	High	High	Low	High	High	High


Very High High Moderate Low Very Low

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Recommended Reasonable and Feasible Corridors?

- Reasonable range of alternatives for the I-11 corridor to be carried into more detailed NEPA analyses in future studies based on the Level 2 Evaluation results
- Pending potential revisions based on additional input received from the Core Agency Partners and the Stakeholder Partners



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Recommended Reasonable and Feasible Corridors: Phoenix Metropolitan Area

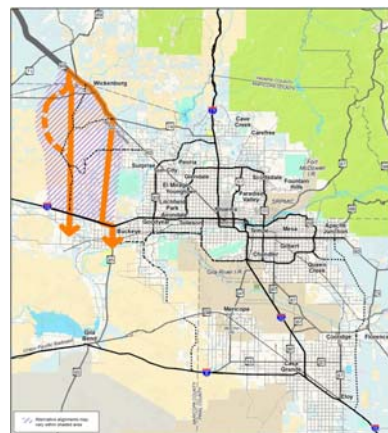
Alternative 1 North


- Alternative G/H/LL/MM-North and Alternative I-North with no modifications; new western link

- Opportunities**
 - Some ability to accommodate multiple uses through all of corridor
 - Most planned land uses compatible with implementation of major trade corridor
- Constraints**
 - Potential habitat and land ownership constraints; corridor traverses/proximate to planned BLM Vulture Mountains Cooperative Recreation Management Area
 - Potential impact to sensitive species, habitat, wildlife movement and land managed for conservation



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Recommended Reasonable and Feasible Corridors: Phoenix Metropolitan Area

Alternative 2 South

- Alternative H-South with no modifications
- Opportunities
 - Minimal environmental impacts anticipated due to use of existing corridors
 - Opportunities to improve habitat connectivity through corridor improvement
 - Lowest preliminary estimated total cost
- Constraints
 - Minimal travel time savings over No-Build



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Recommended Reasonable and Feasible Corridors: Phoenix Metropolitan Area

Alternative 3 South

- Potential new diagonal corridor options (Alternative G-South, I-South, and LL-South with modifications)
- Opportunities
 - Entire corridor included as future freeways in bqAZ
 - Compatibility with major land ownership categories
 - Ability to accommodate multiple uses through all of corridor
- Constraints
 - High impact to habitat; potential to form wildlife movement barrier through Sonoran Desert National Monument
 - More long-term air quality impacts to populated areas

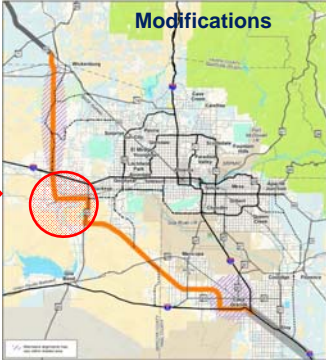




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Corridor Modifications: Phoenix Metropolitan Area

- Modifications to avoid Segment 86 south of I-10
 - High impact anticipated due to sensitive species, habitat, wildlife movement, land managed for conservation, and floodplains

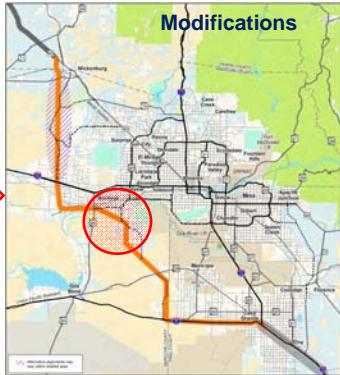




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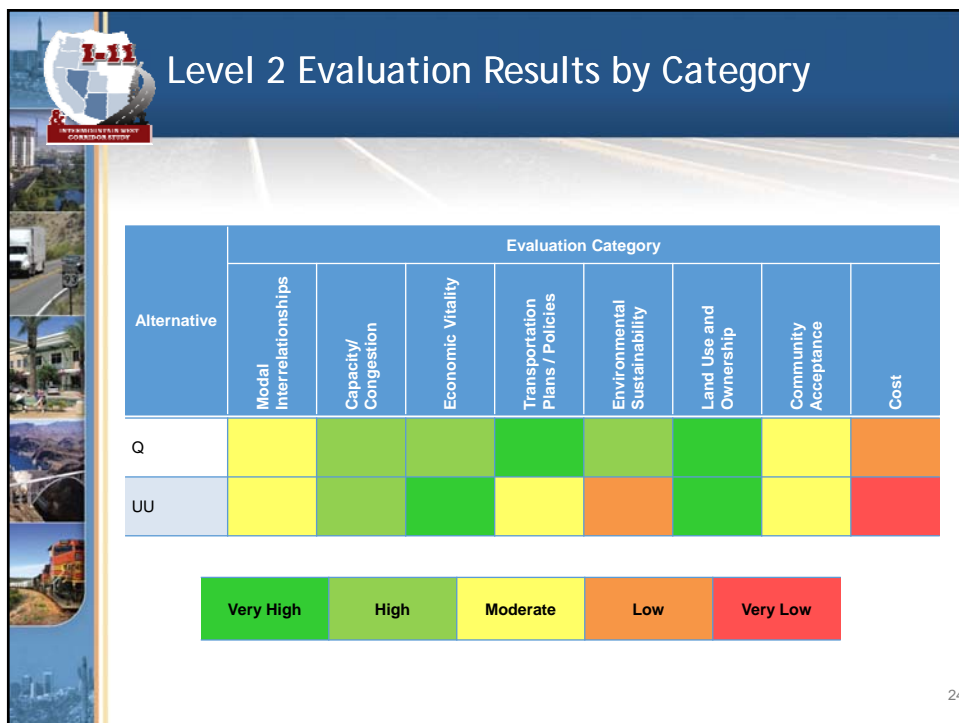


Corridor Modifications: Phoenix Metropolitan Area

- Modifications to Segment 85 and 87 south of I-10
 - Portions of Segments 85 (east of SR 85) and Segment 87 modified to create a less out of direction route connection



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Recommended Reasonable and Feasible Corridor: Northern AZ/Southern NV

Alternative Q




- **Opportunities**
 - Entire corridor included as future freeway in bqAZ; portions of corridor included for short-term improvements in STIP
 - Clustered nodes of planned land uses oriented toward commerce activities
 - Minimal environmental constraints
- **Constraints**
 - Limited ability to accommodate multiple modes through all of the corridor

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Findings for Alternative UU

Alternative UU



- **Opportunities**
 - Clustered nodes of planned land uses oriented toward commerce activities
- **Constraints**
 - Targeted high impact environmental constraints along Chicken Springs Road/Alamo Road area (Segment 91):
 - Habitat loss and degradation
 - Impact to land managed for conservation
 - Fragmentation of ecologically important areas
 - Environmental and financial constraints (primarily segment 91) outweigh the benefits

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Level 2 Evaluation Results by Category

Alternative	Evaluation Category							
	Modal Interrelationships	Capacity/ Congestion	Economic Vitality	Transportation Plans / Policies	Environmental Sustainability	Land Use and Ownership	Community Acceptance	Cost
Y								
Z								
BB-QQ								


Very High	High	Moderate	Low	Very Low
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Recommended Reasonable and Feasible Corridors: Las Vegas Metropolitan Area

Alternative BB-QQ



- **Opportunities**
 - Very high travel time savings and lesser anticipated delay (bypasses core of Las Vegas Valley)
 - Provides a more direct route from Phoenix to major logistics facilities and land uses
 - Majority of corridor has long-term planned transportation improvements
 - Provides direct connection to the CANAMEX corridor north of Vegas
- **Constraints**
 - Targeted high impact environmental constraints
 - Incompatibility with some land ownership patterns; LMNRA

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Recommended Reasonable and Feasible Corridors: Las Vegas Metropolitan Area

Alternative Y



- **Opportunities**
 - Minimal environmental impacts anticipated (mostly utilizes existing corridors)
 - Low preliminary estimated total cost
- **Constraints**
 - Inconsistent with residential land uses
 - Cannot accommodate multiple modes; reasonable alternatives require new corridor connectors not currently envisioned or present in any transportation plans
 - High air quality impacts adding traffic through a densely populated area

30





Recommended Reasonable and Feasible Corridors: Las Vegas Metropolitan Area


Alternative Z



- **Opportunities**
 - Fewer environmental impacts anticipated, as alternative utilizes existing corridors
- **Constraints**
 - Multiple constraints with adding traffic through a densely populated urban core: operational, air quality, environmental justice, incompatibility with existing built out land, etc.
 - Highest total vehicle hours of delay; poor travel speeds
 - Highest estimated total cost

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Multi-Use Evaluation

How well does this corridor provide sufficient opportunity for a multi-use corridor?

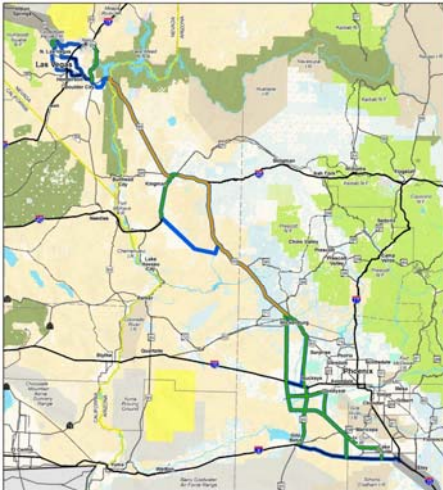
Approach to Criteria 1A

1. Identify if multiple modes or uses can be accommodated within current corridor
2. If not, identify alternate rail corridors that will meet the same need for future modal implementation
3. Identify implications of each multimodal corridor option

The diagram illustrates a cross-section of a highway corridor. At the top, a scale bar shows distances from 0 to 1000 feet. Below this, a series of vertical labels indicate various roadways and features: 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22nd, 23rd, 24th, 25th, 26th, 27th, 28th, 29th, 30th, 31st, 32nd, 33rd, 34th, 35th, 36th, 37th, 38th, 39th, 40th, 41st, 42nd, 43rd, 44th, 45th, 46th, 47th, 48th, 49th, 50th, 51st, 52nd, 53rd, 54th, 55th, 56th, 57th, 58th, 59th, 60th, 61st, 62nd, 63rd, 64th, 65th, 66th, 67th, 68th, 69th, 70th, 71st, 72nd, 73rd, 74th, 75th, 76th, 77th, 78th, 79th, 80th, 81st, 82nd, 83rd, 84th, 85th, 86th, 87th, 88th, 89th, 90th, 91st, 92nd, 93rd, 94th, 95th, 96th, 97th, 98th, 99th, 100th. The main section is labeled '400' HIGHWAY SECTION: 4 LANE (10 LANE ULTIMATE)'. Below this, a '300' CORRIDOR FOR MULTIPLE UTILITIES' is shown. To the right, a '100' FREIGHT AND/OR PASSENGER RAIL CORRIDOR' is depicted with a freight train and a passenger train. A note at the bottom states: 'Note: 400' Highway Section = 200' Utility Corridor + 100' Rail Corridor + 100' Right of Way; 400' Highway Section = 200' Utility Corridor + 200' Right of Way.'

1. Identify if multiple uses can be accommodated within current corridor

- Majority of alternatives **not able to accommodate multiple modes (specifically rail)**, throughout entire corridor due to right-of-way or terrain constraints
- Other uses within the corridor, such as transmission of energy and communications, are feasible through most of the alternatives



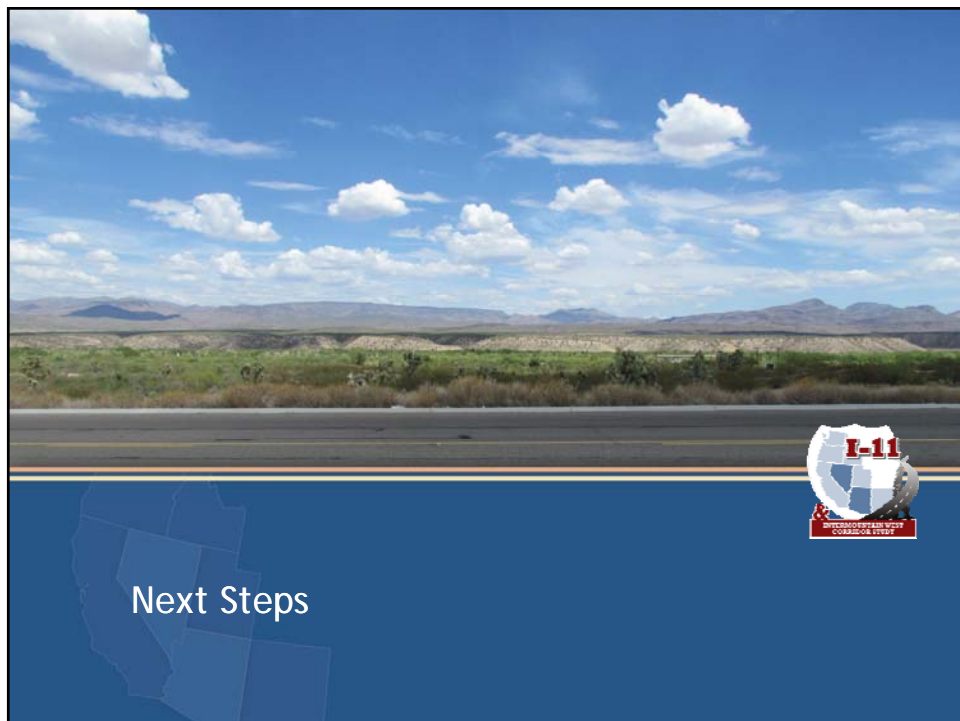
The map displays the I-11 corridor from Las Vegas in the north to Phoenix in the south. It shows several proposed high-speed rail alternatives: a blue line (I-11 High-Speed Rail Corridor Alternative), a green line (I-11 High-Speed Rail Corridor Alternative), and a brown line (I-11 High-Speed Rail Corridor Alternative). The map also indicates existing infrastructure such as Interstate 15, Interstate 10, and Interstate 8. Various land use and environmental constraints are shown, including National Security, State Boundary, County Boundary, and Future Connectivity Area. A legend at the bottom left explains the symbols used. A scale bar and north arrow are located at the bottom right.

Legend

- National Security
- State Boundary
- County Boundary
- Future Connectivity Area
- Unincorporated Community
- Metropolitan Area
- Interstate
- State Highway
- County Highway
- Future Connectivity Area
- I-11 High-Speed Rail Corridor Alternative
- I-11 High-Speed Rail Corridor Alternative
- I-11 High-Speed Rail Corridor Alternative
- I-11 High-Speed Rail Corridor Alternative

ALL INFORMATION IS PRELIMINARY / SUBJECT TO REVISION

Map identifies desired connections between metropolitan areas. Alternatives do not identify specific alignments, nor preclude multiple alignments within each alternative.

[illegible]



Next Steps

- **Congressionally-Designated Corridor Alternatives**
 - Complete the Level 2 evaluation with CAP, Stakeholder, and Public input for:
 - Phoenix Metropolitan Area
 - Northern Arizona and Southern Nevada
 - Las Vegas Metropolitan Area
 - Prepare Corridor Concept Report
- **Northern Nevada and Southern Arizona Future Connectivity Segments**
 - Prepare Feasibility Assessment Reports
- **Next Joint Stakeholder Partners Meeting** (March 19, 2014)
 - Review Final Recommendations



Current Study
NEPA Process
Design
Construction

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Project Contacts:

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(775) 888-7241

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THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT

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JAMES R. AMMONS, YUMA

DIRECTOR

LARRY D. VOYLES

DEPUTY DIRECTOR

TY E. GRAY



January 30, 2014

Mr. Michael Kies, PE
Arizona Department of Transportation
206 South 17th Avenue
Phoenix, AZ 85007

Re: Comments on I – 11 Level 2 Draft Evaluation Results

Dear Mr Kies:

The Arizona Game and Fish Department (Department) appreciated the opportunity to participate in the stakeholders meeting on January 21, 2014 to review the preliminary results of the Interstate 11 Intermountain West Multimodal Corridor Evaluation. We have reviewed the Technical Memorandum: Draft Level 2 Preliminary Evaluation Results Summary and provide the following comments for your review.

The Department is pleased to note that our evaluation added value to the evaluation of Environmental Sustainability Criteria. We look forward to continuing our participation in the evaluation and impact analysis process for Interstate 11.

The Department notes that the orange Reasonable and Feasible Corridor running southwest off of State Route 85 on Figure 19, Alternative 3 South does not match any segment in the Level 2 evaluation. We recognize that the alignments brought forth for future analysis may vary within the shaded area on the figure. However, this corridor was not evaluated. Because this corridor crosses undeveloped habitat, the evaluation may have indicated higher impacts than did our initial evaluation. We recommend this be considered in finalizing the Results Summary.

The Department thanks you for the opportunity to provide these comments. If you have any questions or wish further information please contact Bill Knowles at 928-341-4047 or bknowles@azgfd.gov.

Sincerely

Joyce Francis
Habitat Branch Chief



THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT

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JAMES R. AMMONS, YUMA

DIRECTOR

LARRY D. VOYLES

DEPUTY DIRECTOR

TY E. GRAY



cc: Jim DeVos, Assistant Director WMD
Jim Hinkle, Assistant Director Field Ops
Pat Barber Regional Supervisor Region IV
Rod Lucas Regional Supervisor Region VI
Tom Finley Regional Supervisor Region III
Bill Knowles, Habitat Program Manager, Region IV
Jaclyn Kuechenmeister, AECOM

Interstate 11

PRIORITY CORRIDOR ANALYSIS—PHOENIX TO LAS VEGAS



Figure 1: This area near Ship Rock is one of many amazing environmental resources that lie along the proposed Interstate 11 route. Careful avoidance and mitigation are necessary to protect this and other amazing features of Arizona.

The proposed Interstate 11 priority corridor from the area of Interstate 10 at Casa Grande north to the crossing of the Colorado River on U.S. 93 presents unique opportunities and challenges for the freight industry, renewable energy advocates, transportation engineers, environmentalists and all Arizonans concerned with the state's economic development. This preliminary evaluation of the priority corridor identifies challenges, constraints, and stakeholders who should have a greater role in the project planning process and establishes a framework for future considerations.

Ian Dowdy, AICP

Director, Sun Corridor Legacy Program

www.sonoraninstitute.org

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(602) 393-4310 x 308





Vision

The proposed Interstate 11 is envisioned as a multi-modal “smart corridor” that may include elements such as an interstate highway, passenger and/or freight rail, electrical and other energy transmission facilities, and state-of-the-art data infrastructure such as fiber-optic cable. These features make the proposed corridor appealing to conservation interests as it provides the opportunity to embark upon a more sustainable approach to corridor planning and development. The current model of infrastructure typically mandates parallel yet distant infrastructure elements that compound the impacts on environmental resources; by placing transmission lines, rail corridors, and highways parallel, yet separate from each other—and thereby exponentially increasing the harm to natural landscapes and wildlife. The Interstate 11, as proposed, further distinguishes itself by providing a significant opportunity for local communities to benefit from trade stimulated by the CANAMEX corridor and renewable energy development that would be served by integrated electrical transmission infrastructure.

Location and History

The proposed Interstate 11 is a segment of the CANAMEX corridor that was initially envisioned in 1996. More than two decades later, it remains highly popular with communities that could benefit from associated economic development brought by increased international trade and industrial development. In 2012, Congress approved a transportation omnibus bill (MAP-21) that included funding for planning and study of corridors throughout Arizona and Nevada that could become portions of the future CANAMEX route.

Today, a key segment of CANAMEX is embodied in the proposed Interstate 11 which is to connect Phoenix to Las Vegas and eventually to undetermined points in Mexico and the northern Nevada border. In Arizona, Interstate 93 is considered to be the logical location for the I-11, taking advantage of the recently completed Mike O’Callaghan-Pat Tillman Memorial Bridge that bypasses the Hoover Dam crossing while connecting Phoenix and Las Vegas—the two largest cities in the U.S. that are currently not connected by an interstate highway. From Wickenburg south, existing roads and facilities become less capable of accommodating the proposed interstate, making it necessary to either perform significant and costly upgrades to constrained roadways or to find alternative locations for the highway.

Renewable Energy along the I-11

The I-11 “smart corridor” concept is attractive to renewable energy advocates due to the large amount of lands suitable for solar and wind development with few environmentally sensitive resources located near the proposed highway. These lands were screened through the Bureau of Land Management’s (BLM) Restoration Design Energy Project (RDEP), a statewide assessment that was supported by environmental and wildlife groups, renewable energy developers, and utilities in Arizona. RDEP officially designated suitable BLM lands as Renewable Energy Development Areas (REDAs). However, because the assessment extended to other Arizona lands (excluding military and tribal lands), federal, state, and private lands with REDA-like qualities were also identified. As indicated in the table below, over 700,000 acres of REDA-quality lands are located within 20 miles of the highway. Significant renewable energy development of these lands will require additional electrical transmission lines to get power to markets, a costly but necessary measure in order to provide a more balanced and sustainable energy future.

Over the past year, the Arizona Solar Working Group (ASWG), comprised of environmental and wildlife advocates, utility companies, and solar energy developers, has been working to evaluate possible

corridors for renewable energy transmission throughout Arizona. Recently, a settlement with environmental advocates required the Departments of Energy and Interior to reevaluate corridors identified as West Wide Energy Corridors throughout 11 western states. The ASWG is evaluating and preparing recommendations for viable corridors with low ecological impacts. The proposed I-11 is one of the alignments likely to emerge as a preferred location for a transmission line; other locations near Interstates 10 and 8 are strong candidates as well. On December 17, 2013 five members of ASWG co-signed and submitted a letter to ADOT further articulating the need for energy transmission within the corridor.

Renewable Energy Development Area Lands				
Within 10 Miles of I-11	Acres	Energy Potential ¹ (MW)	Homes Powered ²	Carbon Displaced ³ (tons)
Non-BLM Nominated Sites	1,307	139	115,601	4,577,784
BLM Nominated Sites	1,606	170	142,046	5,625,036
Non-BLM REDA Lands	379,857	40,317	33,597,324	1,330,454,023
BLM REDA Lands	68,452	7,265	6,054,394	239,754,010
Solar Energy Zone	2,618	278	231,555	9,169,579
Total Energy Development Lands	453,840	48,169	40,140,920	1,589,580,431
Within 20 Miles of I-11	Acres	Energy Potential ¹ (MW)	Homes Powered ²	Carbon Displaced ³ (tons)
Non-BLM Nominated Sites	9,847	1,045	870,941	34,489,244
BLM Nominated Sites	4,616	490	408,273	16,167,599
Non-BLM REDA Lands	581,444	61,713	51,427,149	2,036,515,081
BLM REDA Lands	106,232	11,275	9,395,933	372,078,945
Solar Energy Zone	2,618	278	231,555	9,169,579
Total Energy Development Lands	704,757	74,801	62,333,850	2,468,420,448

¹Energy potential assumes the development will achieve a realized .1061 MW/Acre which is the mean planned production of approved BLM Solar applications as of 6/2013

²Assumes estimated energy demand of 12MW/10,000 homes

³Assumes 33,000 tons/MW photovoltaic panels

Initial Evaluation

In September 2013, the Sonoran Institute (SI) performed an initial evaluation of the I-11 corridor through GIS analysis which included consideration of conflicts to Areas of Critical Environmental Concern (ACECs), Sonoran desert tortoise habitat, wilderness areas, citizen proposed wilderness, Arizona State Land Department (ASLD) lands with conservation value, riparian zones, Visual Resource Management (VRM) zones, and REDA lands. In addition, SI embarked on a three-day field tour for a first-hand look at the I-11 alternatives extending from Phoenix to Nevada while meeting with local stakeholders along the way. This preliminary evaluation seemed to provide enough information to

demonstrate that the I-11, at least through this alignment, could be accomplished with limited and potentially mitigatable environmental impacts. More research is needed.

The “Energy Preferred Alternative”

The Sonoran Institute has identified an alternative for purposes of further analysis that seems to align with limiting and mitigating environmental impacts, while providing easy access to lands with renewable energy development potential. This alternative meets the performance criteria of the transportation modes, and optimizes the corridor for multiple other uses including energy transmission. The following considerations illustrate the merits of this alignment for evaluation:

1. **Gila Bend:** This small town has become the leader and incubator of the most progressive utility-scale renewable energy-friendly policy in the United States. The combination of electrical transmission infrastructure with the I-11 will allow the town to flourish and provide needed economic development and regional clean energy supply. It can also benefit from increased access and the economic development that would be enabled by the proximity of this corridor.
2. **Buckeye:** This community has prepared to take advantage of the freight industry that could come as a result of the I-11. Vast swaths of land near SR-85 and the Union Pacific Railway have been allocated for heavy industry including warehouse and distribution centers.
3. **SR-85:** Utilizing the SR-85 north from Gila Bend allows this highway, recently expanded to four lanes throughout most of its stretch, to become better utilized. Traffic congestion is less likely to occur in this remote area, making it less necessary to develop a new corridor north of the Sonoran Desert National Monument.
4. **SR-801:** The I-10 bypass (SR-801), located north and parallel to the Gila River in Buckeye, is a perfect candidate to connect the I-11 off of the SR-85 while keeping traffic off of the congested I-10. This location is preferable to the proposed Hassayampa Freeway alternative south of the Buckeye Hills near the historic Old US-80 Bridge and Gillespie Dam for a variety of reasons including conflicts with the Arlington State Wildlife area and the Gila River riparian zone, which is among the most valuable desert waterways in the state.
5. **Hassayampa Freeway (North of I-10):** The Hassayampa Framework Study was completed over three years ago after a lengthy and deliberative process that included the Town of Buckeye, City of Surprise, Maricopa County, the Town of Wickenburg, and a host of stakeholders including local developers. One of the outcomes of the Framework Study was this freeway alignment, located west of the Hassayampa River, which would provide a valuable missing transportation link between I-10 and the US-60 and SR-93. This proposed facility would be developed largely on private lands in rights-of-way that have been set aside by private developers solely for this purpose. However, this alignment poses challenges that need detailed design treatments to resolve.
6. **BLM Lands:** Once the Hassayampa Freeway leaves private developments it enters a segment of BLM land that has some environmental conflicts, including Category 2 Sonoran desert tortoise habitat. Mitigation measures would need to be implemented to limit the damage to this species. Also, the new Vulture Mountain recreation area is near this alignment alternative. Careful articulation of the roadway and access management, along with robust environmental mitigation will need to be implemented throughout these public lands.
7. **State Lands:** ASLD lands are prevalent west of Wickenburg. Development of the I-11 in this location could provide long-term benefit to the beneficiaries of the Trust and immediate revenue through rights-of-way sales.
8. **US-93:** The existing roadway is an excellent location for the I-11 from Wickenburg north to the I-40 and then north from Kingman to Nevada. The US-93 is in need of safety and convenience

improvements for the benefit of travelers between Phoenix and Las Vegas. Though some environmentally sensitive lands will be traversed by highway construction and other proximate infrastructure, these impacts will likely be limited and subject to mitigation.

Segment Analysis

A wide variety of factors must be considered when selecting the appropriate corridor for Interstate 11. The following qualitative analysis provides a baseline for further evaluation. Not only should the environmental factors be carefully examined for avoidance and mitigation, but the complex social and cultural dynamics of communities throughout the study area should also be a major part of the alternative selection process. For example, the reliance of the Town of Wickenburg on their equestrian heritage, or the strong agrarian history of Buckeye and their unique ambitions and goals, among others should be factors into alignment selection and design features. Other factors that are unique to every community include ambitions for growth, desires for environmental protection, and capacity to embrace infrastructure development. This analysis provides a list of key stakeholders to be included in the discussion of how the Interstate 11 corridor should be articulated through this dynamic region. The West Valley, though ambitious, remains the home of some of Arizona's most precious natural resources; that must be respected.

Important Note on Modes and Engineering Feasibility

The Interstate 11 corridor is a project with a very long implementation horizon as it may not be fully realized for fifty or more years. For this reason, it is essential that certain constraints have less of an impact on the selection of appropriate modes and features of the corridor since it is impossible to determine whether adequate solutions will be developed by the time the corridor is fully utilized. Improvements in materials and changes in engineering approaches may resolve some of the challenges that may limit the successful integration of certain modes in various areas. For example, it may seem unfeasible to have electrical transmission parallel to the highway through areas where the road curves as the current design and cost considerations would declare it impractical. In fifty years, however, materials and design of this infrastructure could change significantly, thereby alleviating this concern entirely. Similarly, heavy rail was not considered practical along US-93 due to the slopes of the roadway but in the future, these concerns may be resolved. Engineering constraints need to be allocated to the roadway segments through the engineering process, not the high level planning. The Sonoran Institute advises that if a segment is adequate to accommodate the mode, enable it for planning purposes and allow future work to determine its feasibility at the appropriate time.

Segment 46—Pat Tillman-Mike O'Callaghan Memorial Bridge to Kingman

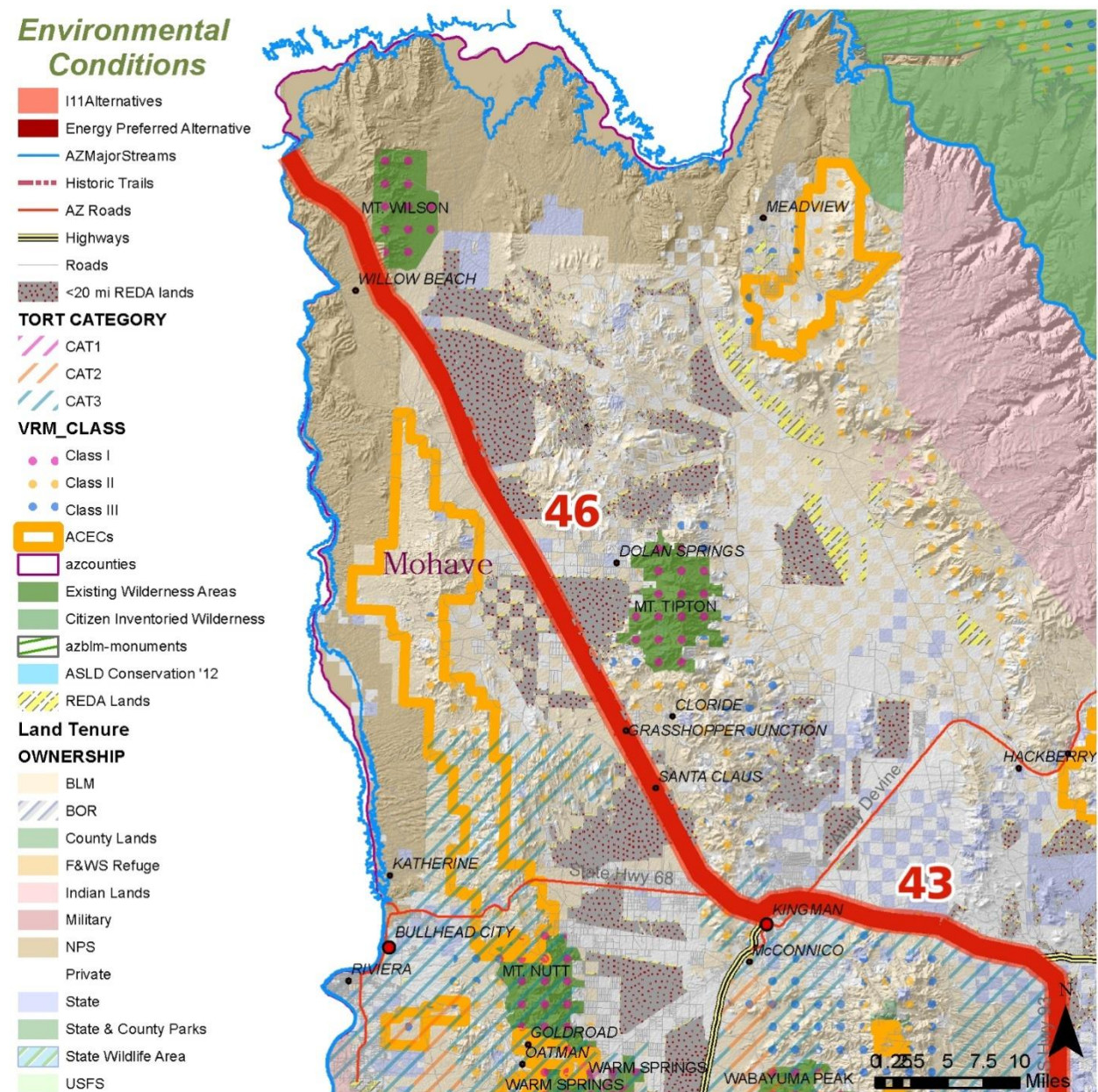


Figure 3: Segment 46 traverses the Lake Mead National Recreation Area and some impressive stretches of Mohave Desert. It also is adjacent to some valuable REDA lands and a proposed massive wind energy facility.

Segment 46

Opportunities

Provides an important connection to Nevada across the recently constructed Pat Tillman-Mike O'Callaghan Memorial Bridge.

Utilizes a corridor that has already been outfitted with wildlife crossing infrastructure over the roadway to minimize additional habitat fragmentation.

Is adjacent to significant REDA-quality lands that can benefit from an energy transmission corridor that can help move the energy to populous demand centers like Las Vegas, Phoenix, and California.

Much of the land is owned by the Bureau of Land Management

Challenges
The Lake Mead NRA has interest in protecting their view corridors which increases the complexity of aligning electrical transmission within the I-11.
Views from the Mt. Tipton and Mt. Wilson wilderness areas should be a consideration as the roadway is designed.
Additional wildlife crossings may be necessary from the mountainous region east of the corridor to the Lake Mead NRA.
The interchange from I-11 to I-40 should be carefully designed to respect the community of Kingman and the recreation and natural resources in the mountains west of the city.
Stakeholders
Mohave Wind Energy: Has a large wind farm approved south of Lake Mead NRA and north of the proposed I-11
City of Kingman: Residents and town leaders should be engaged to help identify important design and alignment considerations.
Mohave County: Should be engaged to allow the I-11 to respond to regional plans and considerations.
Centennial West transmission line: Planned to cross northern Arizona from northeast New Mexico to California.
Sierra Club: Has shared specific concerns about the highway corridor and should be engaged to discover how the design and location can be better implemented to respect environmental issues.
Arizona Wildlife Federation: A conservation group that is interested in protecting wildlife resources and finding win-win solutions for habitat protection and appropriate recreation.
Defenders of Wildlife: Should be engaged to evaluate and seek solutions for habitat loss and connectivity issues.
Arizona Wilderness Coalition: Has particular interest in Wilderness areas and should be consulted on visual resource impacts of the roadway with respect to Mt. Tipton and Mt. Wilson.
Arizona Game and Fish Department: Has data on wildlife movements that should be consulted to develop strategies to avoid and mitigate impacts.
Modal Considerations
Electrical transmission is challenging to articulate through this area though we feel it is important. The following comment was received from Jim Charters, Chairman of the Southwest Area Transmission Sub-Regional Planning Group (SWAT) with respect to transmission lines crossing the Colorado River. The full text of his comments will be included in the appendix to this report: <i>"The crossing of the Colorado River at Hoover is not trivial. Only one line crosses at this time, upstream. When the lake is up (it does this occasionally) all boat traffic must be restricted due to arc hazard. When the bridge was being designed Western considered additional crossings. There was a significant resistance to crossing in the recreation area downstream and very little space for crossing upstream because of the lake. Crossing the Colorado River south of the Recreation area and into the El Dorado Valley from the south via Searchlight was a logical path for the lines, if not for the highway."</i> Considering this comment, it may be worthwhile to study various crossing opportunities for the electrical transmission line separate from the Pat Tillman-Mike O'Callaghan Bridge.
Rail: It seems logical to locate rail freight and/or transit along the US-93 from Las Vegas to further enhance both tourism and freight connectivity. There are no known reasons why this segment is incompatible with rail development and operation though engineering constraints may be a factor.
Highway: The presence of the existing infrastructure along this corridor along with the limited environmental impacts known to be present seems to indicate that the highway portion of the I-11 is appropriately sited along the US-93 through this area.

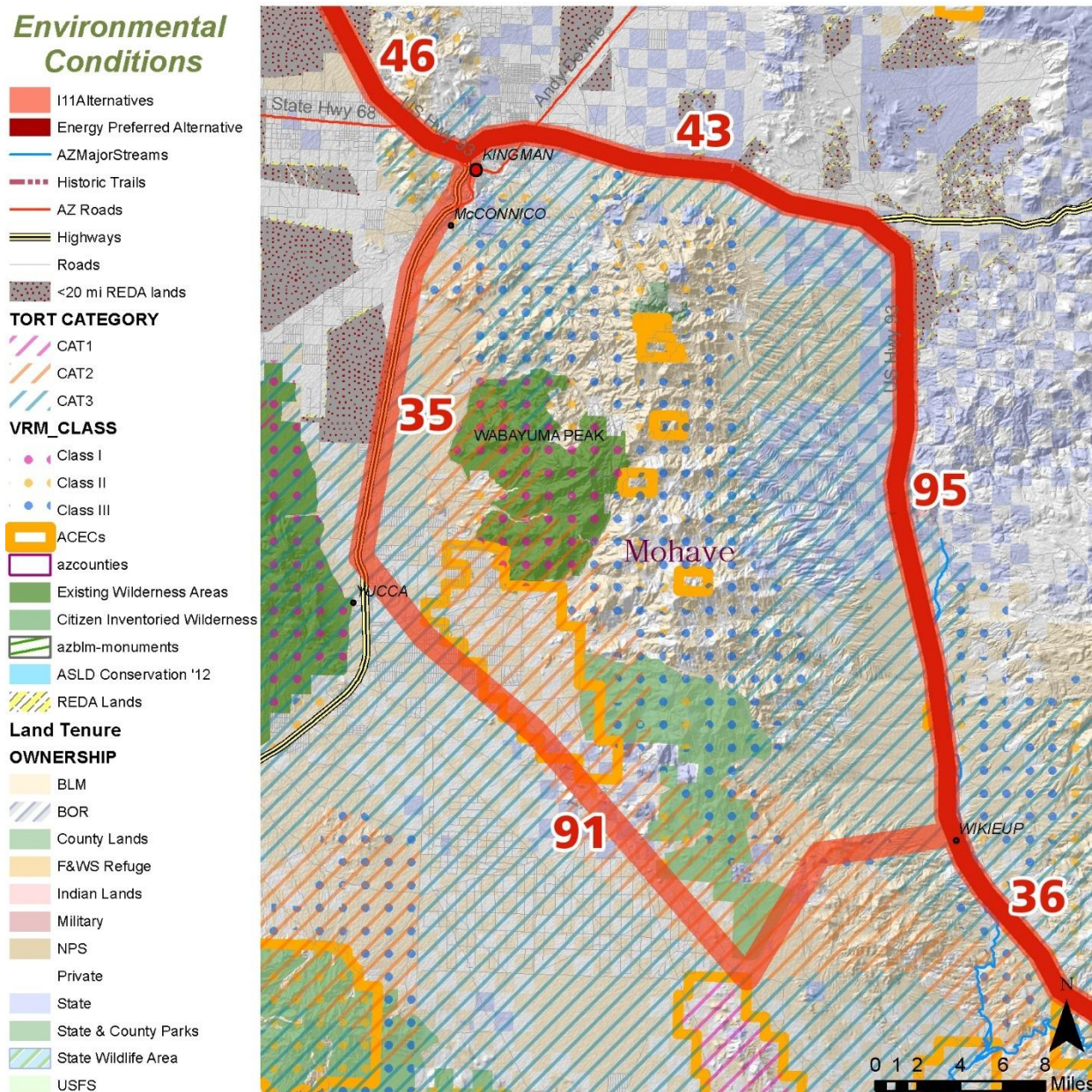


Figure 4: Segments 43, 95, 91, and 35 surround the Wabayuma Peak Wilderness area and a large number of other valuable environmental resources.

Segment 43—I-40 from Kingman East to US-93

Segment 43

Opportunities

- Uses an existing highway corridor thereby reducing the impacts of creating a new segment.
- Has a nearby railroad that could be used and/or upgraded for the multimodal aspect of the corridor.
- Can utilize existing freeway interchange designs at each I-40—US-93 junction.
- Provides economic development opportunity for the City of Kingman on private and state lands east of the developed area.
- Has limited impact with Sonoran desert tortoise habitat though category 3 lands exist to the south.

Challenges

- Private and state lands will need to be acquired which may present challenges to public opinion and concerns from impacted landowners.

Views from the Wabayuma Peak Wilderness area should be a consideration as the roadway is designed.
The corridor may need wildlife infrastructure to respect historical migration patterns.
Stakeholders
Mohave Wind Energy: Has a large wind farm approved south of Lake Mead NRA and north of the proposed I-11
City of Kingman: Residents and town leaders should be engaged to help identify important design and alignment considerations.
Mohave County: Should be engaged to allow the I-11 to respond to regional plans and considerations.
Centennial West transmission line: Planned to cross northern Arizona from northeast New Mexico to California.
Sierra Club: Has shared specific concerns about the highway corridor and should be engaged to discover how the design and location can be better implemented to respect environmental issues.
Arizona Wildlife Federation: A conservation group that is interested in protecting wildlife resources and finding win-win solutions for habitat protection and appropriate recreation.
Defenders of Wildlife: Should be engaged to evaluate and seek solutions for habitat loss and connectivity issues.
Arizona Wilderness Coalition: Has particular interest in Wilderness areas and should be consulted on visual resource impacts of the roadway with respect to Wabayuma Peak Wilderness area.
Arizona Game and Fish Department: Has data on wildlife movements that should be consulted to develop strategies to avoid and mitigate impacts.
A number of private developers have projects along this roadway that should be consulted to determine areas of collaboration and/or conflict.
The Hualapai Tribe has been engaged in projects in this area to protect their cultural resources. They should be consulted.
Modal Considerations
With the existing presence of rail, transmission, and a highway along this corridor it seems to reasonably accommodate all the considered modes within this smart corridor. Limited impacts to important wildlife and ecological resources are expected at this time.

Segment 35—I-40 from Kingman South to Approximately Yucca

Segment 35
Opportunities
Uses an existing highway corridor thereby reducing the impacts of creating a new segment.
Has a nearby railroad that could be used and/or upgraded for the multimodal aspect of the corridor.
Can utilize existing freeway interchange designs at the US-93 junction.
Provides economic development opportunity for the City of Kingman on private and state lands south of the developed area.
Has limited impact with Sonoran desert tortoise habitat though category 3 lands exist to the south.
REDA lands exist to the west of the corridor.
Provides access to developable private and state lands to the east.
Much of this corridor is under federal ownership, reducing the impact on private land owners.
Challenges
Private and state lands will need to be acquired which may present challenges to public opinion and concerns from impacted landowners.
Views from the Wabayuma Peak Wilderness area should be a consideration as the roadway is designed.
The corridor may need wildlife infrastructure to respect historical migration patterns.
This segment can only connect to US-93 through an additional east/west roadway that currently does not exist. Segment 91, discussed in more detail below, has significant impacts on environmental resources.
Stakeholders
Lake Mead NRA: Needs to be consulted about how electrical transmission could be articulated through their lands toward Nevada.
City of Kingman: Residents and town leaders should be engaged to help identify important design and alignment considerations.
Mohave County: Should be engaged to allow the I-11 to respond to regional plans and considerations.
Community of Yucca should be engaged in a discussion about the opportunities and challenges that the corridor would bring to them.
Sierra Club: Has shared specific concerns about the highway corridor and should be engaged to discover how the design and location can be better implemented to respect environmental issues.

Arizona Wildlife Federation: A conservation group that is interested in protecting wildlife resources and finding win-win solutions for habitat protection and appropriate recreation.
Defenders of Wildlife: Should be engaged to evaluate and seek solutions for habitat loss and connectivity issues.
Arizona Wilderness Coalition: Has particular interest in Wilderness areas and should be consulted on visual resource impacts of the roadway with respect to Wabayuma Peak Wilderness area.
Arizona Game and Fish Department: Has data on wildlife movements that should be consulted to develop strategies to avoid and mitigate impacts.
A number of private developers have projects along this roadway that should be consulted to determine areas of collaboration and/or conflict.
Modal Considerations
The presence of rail and highway infrastructure are nice, though they remain difficult to connect with the Phoenix area. Based on comments cited with Segment 46, this corridor segment could be used to get electrical transmission to the Searchlight area to cross Lake Mead NRA.

Segment 91—US-93 to I-40 around Chicken Springs Rd

Segment 91
Opportunities
Provides access to developable private and state lands near Golden Valley.
Challenges
This segment impacts or is directly adjacent to a number of critical environmental resources including: Sonoran desert tortoise Categories 1, 2 and 3 lands, two ACECs, Citizen Inventoried Wilderness, and BLM Visual Resource Management Zone 2 and 3.
The roadway if built along the terrain and slopes going up and over the Hualapai Mountains will cause significant environmental degradation.
Private lands will need to be acquired for this roadway to be built in this location.
Stakeholders
Mohave County: Should be engaged to allow the I-11 to respond to regional plans and considerations.
Community of Wikieup: Needs to be involved to help articulate the corridor around their community.
Community of Yucca should engaged in a discussion about the opportunities and challenges that the corridor would bring to them.
Sierra Club: Has shared specific concerns about the highway corridor and should be engaged to discover how the design and location can be better implemented to respect environmental issues.
Arizona Wildlife Federation: A conservation group that is interested in protecting wildlife resources and finding win-win solutions for habitat protection and appropriate recreation.
US Fish and Wildlife Service: Should be engaged in discussions around impacts to Sonoran desert tortoise habitat.
Defenders of Wildlife: Should be engaged to evaluate and seek solutions for habitat loss and connectivity issues.
Arizona Wilderness Coalition: Has particular interest in Wilderness areas and should be consulted on visual resource impacts of the roadway with respect to Wabayuma Peak Wilderness area.
Arizona Game and Fish Department: Has data on wildlife movements that should be consulted to develop strategies to avoid and mitigate impacts.
A number of private developers have projects along this roadway that should be consulted to determine areas of collaboration and/or conflict.
Modal Considerations
This segment is not a good candidate for any of the modes, especially rail and highway due to environmental constraints and slopes.

Segment 95—US-93 from I-40 south to Wikieup

Segment 95
Opportunities
Uses an existing highway corridor thereby reducing the impacts of creating a new segment.
Has existing electrical transmission infrastructure nearby.
Can utilize existing freeway interchange designs at the I-40—US-93 junction.
Provides opportunity for the small community of Wikieup
Has limited impact with Sonoran desert tortoise habitat though category 3 lands exist to the west.
Provides opportunity to some private and state lands on the northern section of the corridor.

Some of the impacted lands are under BLM ownership which may be easier and/or less expensive to acquire.
Some REDA lands exist on the northern extent of the segment.
Challenges
Private and state lands will need to be acquired which may present challenges to public opinion and concerns from impacted landowners.
Sonoran desert tortoise habitat will be impacted.
Wildlife corridors are impacted throughout this segment.
This segment runs parallel to the Big Sandy River which is an important riparian area.
Stakeholders
Community of Wikieup: The US-93 currently runs through this small town. Future designs should take into account the interests of the community.
Arizona Wilderness Coalition: Has worked throughout the state on river preservation and should be engaged in how the proposal may impact the Big Sandy.
Mohave County: Should be engaged to allow the I-11 to respond to regional plans and considerations.
Sierra Club: Has shared specific concerns about the highway corridor and should be engaged to discover how the design and location can be better implemented to respect environmental issues.
Arizona Wildlife Federation: A conservation group that is interested in protecting wildlife resources and finding win-win solutions for habitat protection and appropriate recreation.
Defenders of Wildlife: Should be engaged to evaluate and seek solutions for habitat loss and connectivity issues.
Audubon Society: Has interest in river preservation and should be engaged with how the corridor is designed with respect to riparian areas.
Modal Considerations
This segment may be appropriate for highway and utility infrastructure including electrical transmission.
Rail does not currently exist nearby but could, depending on the complexity of engineering the track and how much additional impacts are created around sensitive areas like the Big Sandy river.

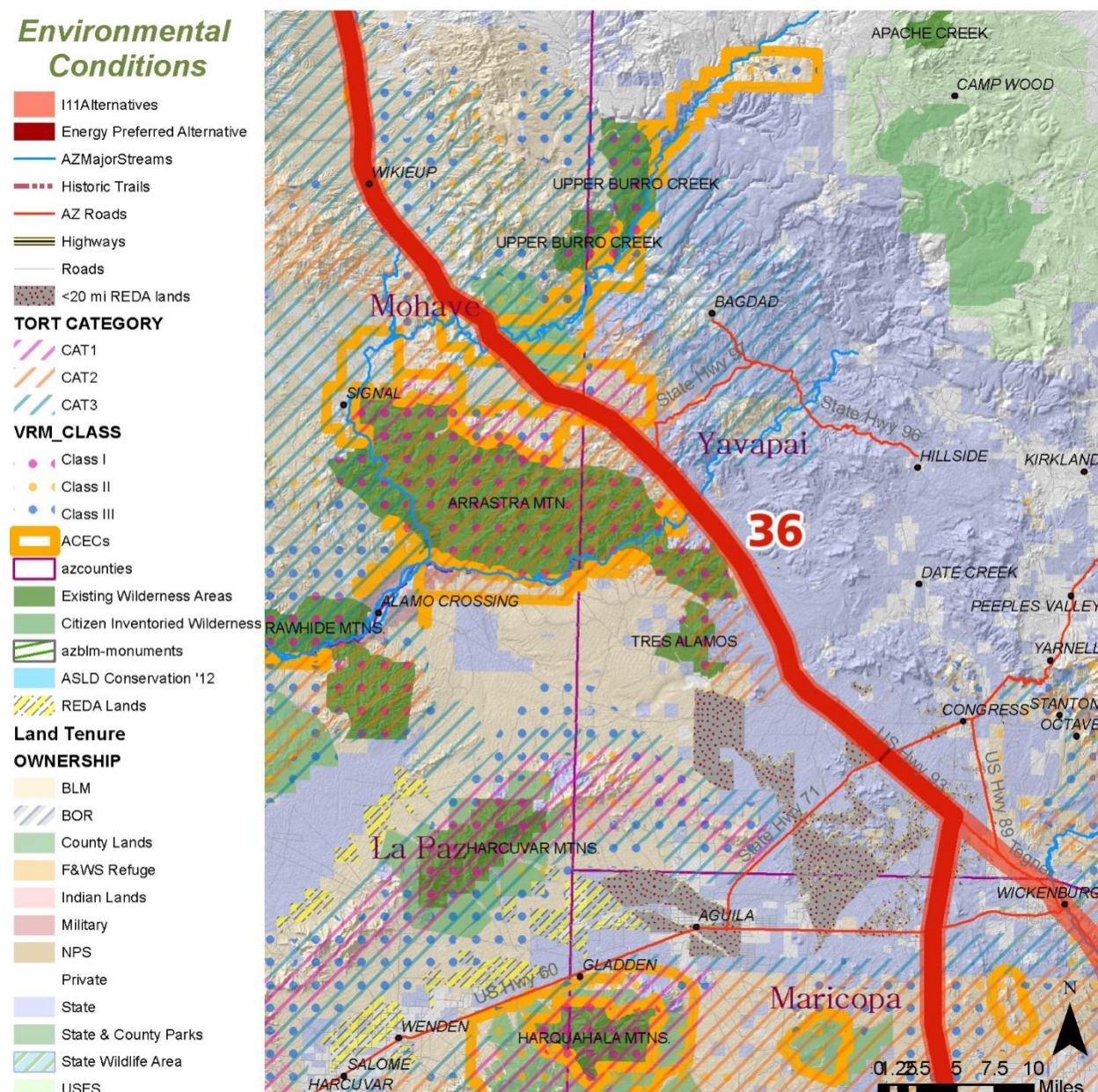


Figure 5: Segment 36 from Wikieup south to the Wickenburg area crosses some significant ecological resources requiring a careful approach to corridor design and development.

Segment 36—US-93 Wikieup South to the Wickenburg Area

Segment 36

Opportunities

- Uses an existing highway corridor thereby reducing the impacts of creating a new segment.
- Has existing electrical transmission infrastructure nearby.
- Some of the impacted lands are under BLM ownership which may be easier and/or less expensive to acquire.
- Can use existing upgraded bridge infrastructure over the Burro Creek and Santa Maria Rivers.
- Some REDA lands exist on the southern extent of the segment near Wickenburg.

Challenges

- Significant amounts of state lands will need to be acquired through much of this segment.
- Sonoran desert tortoise habitat of Categories 1, 2, and 3 will be impacted by this corridor segment.
- Wildlife corridors are impacted throughout this segment.

The Big Sandy River, Burro Creek, and the Santa Maria River are all crossed by this segment requiring significant care and disturbance avoidance.
Three different ACECs are impacted by this corridor.
A Citizen Inventoried Wilderness unit is directly adjacent to this segment along the east side of the corridor.
The Arrastra Mountain and Tres Alamos Wilderness areas are within view of this segment requiring care to avoid impacts to the solitude and visual values of these resources.
In a few areas, Visual Resource Management zones 1, 2, and 3 are near the corridor requiring care with how the facility is designed.
Stakeholders
Community of Wikieup: The US-93 currently runs through this small town. Future designs should take into account the interests of the community.
Arizona Wilderness Coalition: Has inventoried a proposed wilderness unit near Burro Creek on the east side of the corridor. Additionally, it is interested in the health and protection of the Santa Maria and Big Sandy rivers as well as Burro Creek. The Arrastra Mountain and Tres Alamos wilderness units are under their stewardship as well and may be impacted by views from this corridor.
Yavapai County: Should be engaged to allow the I-11 to respond to regional plans and considerations.
Sierra Club: Has shared specific concerns about the highway corridor and should be engaged to discover how the design and location can be better implemented to respect environmental issues.
Arizona Wildlife Federation: A conservation group that is interested in protecting wildlife resources and finding win-win solutions for habitat protection and appropriate recreation.
Defenders of Wildlife: Should be engaged to evaluate and seek solutions for habitat loss and connectivity issues.
American Rivers: May be interested in how the corridor can be articulated around these three challenging river crossings.
Town of Wickenburg: As the corridor gets closer to this community and enters their planning area, it will be important that they be engaged so they can plan the land uses and transportation elements around it.
Arizona State Land Department: A significant amount of ASLD lands are around the corridor around Wickenburg. They should be engaged to determine appropriate alignments to respect the value of lands for the Trust.
Audubon Society: Has interest in river preservation and should be engaged with how the corridor is designed with respect to riparian areas.
Modal Considerations
This segment requires significant design considerations to both integrate all modes and respect sensitive ecological features that are present throughout the corridor.
Electrical transmission is located near the corridor and could, with appropriate design considerations, be integrated into the highway design.
Rail does not currently exist nearby but could, depending on the complexity of engineering the track and how much additional impacts are created around sensitive areas like the Big Sandy, Santa Maria, and Burro Creek riparian areas.

Segments in Western Maricopa County

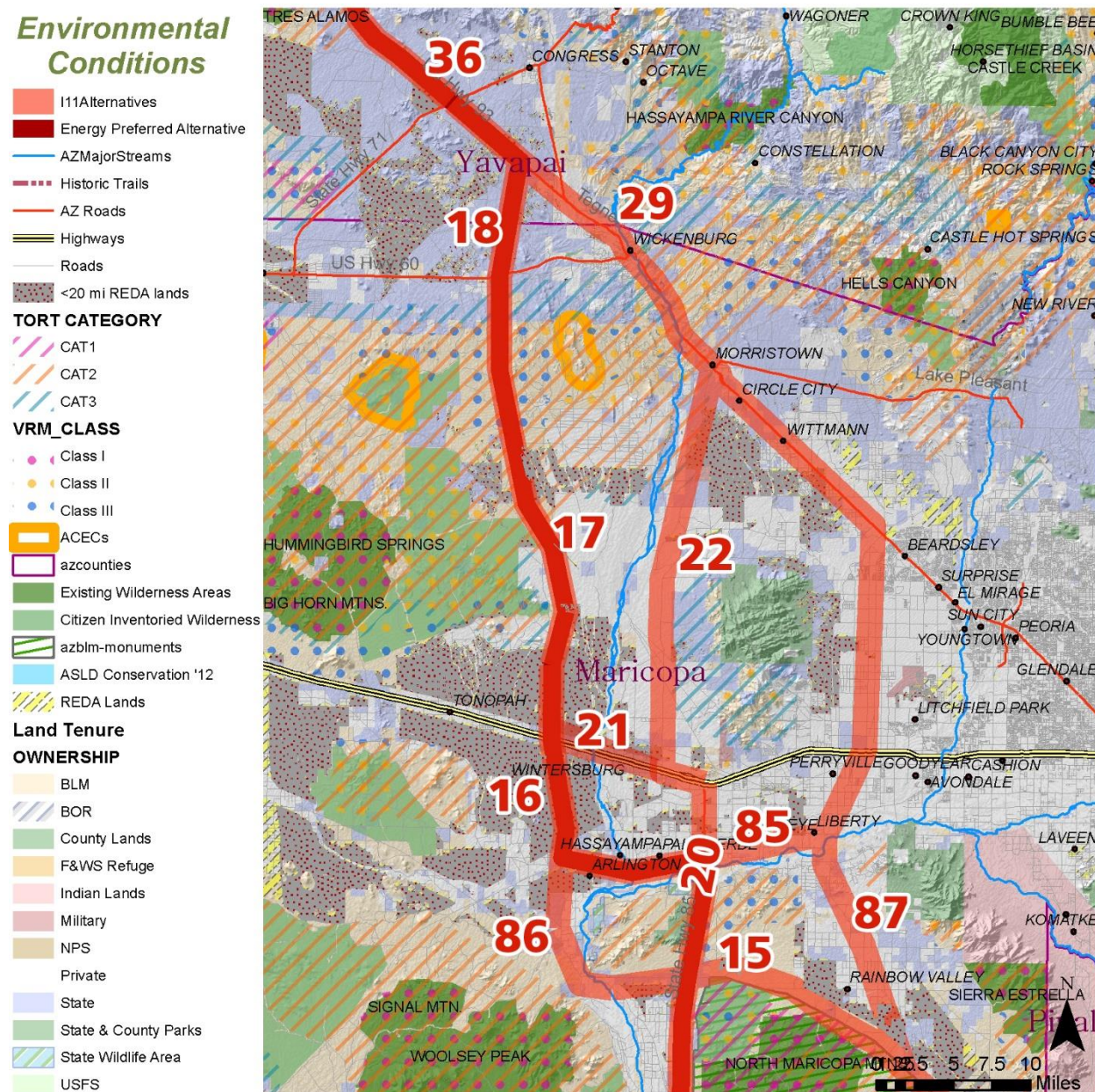


Figure 6: The corridor as it extends into Maricopa County becomes much more urban, going through areas that have been planned for development for many years. Notable areas of concern exist, however, including lands around Wickenburg and the Gila River.

Segment 18—Hassayampa Freeway Extended from US-60 to US-93

Opportunities

Bypasses the heart of Wickenburg allowing the community to expand into nearby state land parcels.

Has existing electrical transmission infrastructure nearby.

The development of this western highway connection will allow traffic to more easily bypass the Phoenix region and will provide access to US-93 from I-10 that is currently inadequate.

Some REDA lands exist west of the corridor on primarily state lands.

Challenges

Significant amounts of state lands will need to be acquired through much of this segment.

The community of Wickenburg could be adversely impacted if the corridor does not adequately respect their needs for access and tourism. Recent transportation efforts the community have resulted in negative views around infrastructure planning and development that need to be respected.
This segment relies on the development of the planned Hassayampa Freeway corridor through lands in segment 17 that are of high ecological value.
Stakeholders
Yavapai and Maricopa Counties: Should be engaged to allow the I-11 to respond to regional plans and considerations.
Sierra Club: Has shared specific concerns about the highway corridor and should be engaged to discover how the design and location can be better implemented to respect environmental issues.
Arizona Wildlife Federation: A conservation group that is interested in protecting wildlife resources and finding win-win solutions for habitat protection and appropriate recreation.
Defenders of Wildlife: Should be engaged to evaluate and seek solutions for habitat loss and connectivity issues.
Town of Wickenburg: As the corridor gets closer to this community and enters their planning area, it will be important that they be engaged so they can plan the land uses and transportation elements around it.
Arizona State Land Department: A significant amount of ASLD lands are around the corridor around Wickenburg. They should be engaged to determine appropriate alignments to respect the value of lands for the Trust.
Arizona Game and Fish Department (AZGFD): Has interest in preserving wildlife corridors in northern Maricopa County.
Modal Considerations
This segment could feasibly accommodate all modes.
Electrical transmission is located near the corridor and could, with appropriate design considerations, be integrated into the highway design.
Rail does not currently exist nearby but could, depending on the complexity of engineering the track. Currently rail takes another route through Wickenburg and north to Prescott.

Segment 17—Hassayampa Freeway from I-10 to US-60
Opportunities
Bypasses the heart of Wickenburg allowing the community to expand into nearby state land parcels.
Has existing electrical transmission infrastructure nearby.
Some REDA lands exist around the corridor on primarily state lands.
Utilizes land set aside by private developers for the corridor which will reduce the cost of property acquisition.
Provides access to growing segments of the City of Buckeye and surrounding Maricopa County.
The development of this western highway connection will allow traffic to more easily bypass the Phoenix region and will provide access to US-93 from I-10 that is currently inadequate.
Challenges
Significant amounts of state lands will need to be acquired through much of this segment.
The community of Wickenburg could be adversely impacted if the corridor does not adequately respect their needs for access and tourism. Recent transportation efforts the community have resulted in negative views around infrastructure planning and development that need to be respected.
This segment goes through some lands with high ecological value near the Vulture Mountain ACEC.
Impacts a large swath of Sonoran desert tortoise habitat Categories 2 and 3.
The corridor would disturb lands in visual resource management category 3.
The corridor could negatively impact ongoing efforts to develop the Vulture Mountain Cooperative Recreation Management Area (CRMA).
Lands west of segment 17 are included in legislation (HR 1799) to permanently designate a National Conservation Area and new wilderness units. The roadway needs to be located outside of this area.
Important wildlife corridors exist between the Belmont Mountains and the Hassayampa River. They will be interrupted by this corridor.
Equestrian access is an important feature of the Wickenburg culture and should be considered with corridor location and design.

Stakeholders
Wickenburg Conservation Foundation: A small group of individuals who are interested in protecting Wickenburg's unique sense of place and equestrian recreation opportunities. They are concerned about the development of a highway that may impact the Vulture Peak ACEC and the planned Vulture Mountain Cooperative Recreation Management Area (CRMA).
Maricopa County Parks: Leading the process to plan and implement the Vulture Mountain CRMA.
Maricopa County: Should be engaged to allow the I-11 to respond to regional plans and considerations including a major project in the southern portion of this segment.
Sierra Club: Has shared specific concerns about the highway corridor and should be engaged to discover how the design and location can be better implemented to respect environmental issues.
Arizona Wildlife Federation: A conservation group that is interested in protecting wildlife resources and finding win-win solutions for habitat protection and appropriate recreation.
Defenders of Wildlife: Should be engaged to evaluate and seek solutions for habitat loss and connectivity issues.
Arizona Game and Fish Department (AZGFD): Has interest in preserving wildlife corridors in northern Maricopa County.
Sonoran Desert Heritage Coalition: A collection groups and individuals who are advocating for the protection of about 1 million acres west of Phoenix and near this highway segment.
Town of Wickenburg: As the corridor gets closer to this community and enters their planning area, it will be important that they be engaged so they can plan the land uses and transportation elements around it.
Arizona State Land Department: A significant amount of ASLD lands are around the corridor around Wickenburg. They should be engaged to determine appropriate alignments to respect the value of lands for the Trust.
Town of Buckeye: Has lands and major developments near and adjacent to the roadway.
Modal Considerations
This segment could feasibly accommodate all modes.
Electrical transmission is located near the corridor and could, with appropriate design considerations, be integrated into the highway design.
Rail could be integrated into a corridor at this location which would also remove the need for goods and passengers to go through the heart of Phoenix to get to Wickenburg and points north.
The corridor may need to be wider than current development plans allow through the Douglas Ranch and Belmont communities. Design of the corridor should be coordinated with the community plans to ensure that there is adequate space for all modes.

Segment 29—US-60 from Sun Valley Parkway Extended to US-93
Opportunities
May be designed to integrate with the Town of Wickenburg to allow increased tourism and traffic for the community.
Uses an existing highway corridor allowing for reduced impacts of construction.
REDA lands exist adjacent to the corridor.
Has existing rail infrastructure in the corridor.
Challenges
Topography and natural resource constraints may restrict the full development of the corridor.
The community of Wickenburg could be adversely impacted as the corridor is large and may be difficult to navigate through the Town while preserving its unique identity and character.
This segment goes through some lands with high ecological value around the Hassayampa River Preserve.
Impacts a large swath of Sonoran desert tortoise habitat Categories 2 and 3.
The corridor may disturb lands in visual resource management categories 2 and 3.
Electrical transmission may be difficult to navigate through this segment due to ecological and environmental constraints.
Important wildlife corridors exist between the Hieroglyphic Mountains on the north and the Hassayampa River. These would need to be addressed.
Equestrian access is an important feature of the Wickenburg culture and should be considered with corridor location and design.
The Hassayampa River is an important feature to the ecology of this region. Impacts could be devastating to wildlife and the broader environment.

Stakeholders
Wickenburg Conservation Foundation: A small group of individuals who are interested in protecting Wickenburg's unique sense of place and equestrian recreation opportunities.
City of Surprise: A good portion of this segment goes through their planning area.
Maricopa County: Should be engaged to allow the I-11 to respond to regional plans and considerations.
Sierra Club: Has shared specific concerns about the highway corridor and should be engaged to discover how the design and location can be better implemented to respect environmental issues.
Arizona Wildlife Federation: A conservation group that is interested in protecting wildlife resources and finding win-win solutions for habitat protection and appropriate recreation.
Defenders of Wildlife: Should be engaged to evaluate and seek solutions for habitat loss and connectivity issues.
Arizona Game and Fish Department (AZGFD): Has interest in preserving wildlife corridors in northern Maricopa County.
The Nature Conservancy: Has acquired land and manages the Hassayampa River Preserve. They should be consulted on the impacts of this corridor on their interests.
Town of Wickenburg: As the corridor gets closer to this community and enters their planning area, it will be important that they be engaged so they can plan the land uses and transportation elements around it.
BNSF Railroad: Should be integrated into the development and integration of the rail component of this segment.
Communities of Morristown, Whitman, and Circle City lay along the route and should be integrated into the design and routing discussions.
Modal Considerations
This segment could feasibly accommodate rail and highway as they already exist in this area.
Electrical transmission may be difficult to articulate through sensitive lands along the Hassayampa River through areas under VRM 2 classification.

Segment 22—Sun Valley Parkway Extended from I-10 to US-60
Opportunities
Provides a missing link between I-10 and US-60 west of the White Tank Mountains.
REDA lands exist adjacent to the corridor.
Existing electrical transmission and a natural gas pipeline are nearby this segment.
Challenges
Planned communities along the route could be significantly impacted by this corridor as it will be much larger than the existing infrastructure that has already been accommodated.
Important wildlife corridors exist between the White Tank Mountains and the Hassayampa River that will need to be addressed.
Stakeholders
City of Surprise: Some of this segment goes through their planning area.
Maricopa County: Should be engaged to allow the I-11 to respond to regional plans and considerations.
Sierra Club: Has shared specific concerns about the highway corridor and should be engaged to discover how the design and location can be better implemented to respect environmental issues.
Arizona Wildlife Federation: A conservation group that is interested in protecting wildlife resources and finding win-win solutions for habitat protection and appropriate recreation.
Defenders of Wildlife: Should be engaged to evaluate and seek solutions for habitat loss and connectivity issues.
Arizona Game and Fish Department (AZGFD): Has interest in preserving wildlife corridors in northern Maricopa County. A significant linkage west of the White Tank Mountains is of high priority to them.
Town of Buckeye: Has significant interest in this corridor as it traverses a major growth area.
Developers and Landowners: Have existing entitlements on land near this corridor that would be significantly impacted by its development.
Modal Considerations
This segment could feasibly accommodate all modes though the corridor width required may not be feasible considering long-standing development entitlements that exist along the segment.

Segment 21—Interstate 10 from SR-85 to Hassayampa Freeway	
Opportunities	
Uses an existing corridor.	
Challenges	
This segment of I-10 will be over capacity in the coming years, requiring significant upgrades to keep a marginal level of service.	
Using this segment passes up the opportunity to develop additional east-west highway connections that are desperately needed.	
This area may not be suitable for additional utility construction as much of the corridor is constrained by existing development plans.	
Stakeholders	
Maricopa County Flood Control: Has flood structures on the north side of the I-10 and should be involved in the discussion about the future of this corridor.	
Maricopa County: Should be engaged to allow the I-11 to respond to regional plans and considerations.	
Sierra Club: Has shared specific concerns about the highway corridor and should be engaged to discover how the design and location can be better implemented to respect environmental issues.	
Town of Buckeye: Has significant interest in this corridor as it traverses a major growth area.	
Developers and Landowners: Have existing entitlements on land near this corridor that would be significantly impacted by its development.	
Modal Considerations	
This segment may not be a good candidate to serve rail and utility modes, though both are present nearby.	

Segment 16—Hassayampa Freeway from SR 801 (SR-30) to I-10	
Opportunities	
Serves a growth area in unincorporated Maricopa County.	
REDA lands exist along this segment.	
Relieves traffic off of I-10 through Buckeye.	
Existing electrical transmission is in this area along with the Palo Verde Nuclear Generating Station.	
Challenges	
Wildcat development nearby may pose challenges to locating the corridor.	
Stakeholders	
Maricopa County: Should be engaged to allow the I-11 to respond to regional plans and considerations.	
Sierra Club: Has shared specific concerns about the highway corridor and should be engaged to discover how the design and location can be better implemented to respect environmental issues.	
Arizona Game and Fish Department (AZGFD): Has interest in preserving wildlife corridors in western Maricopa County.	
Developers and Landowners: Have existing entitlements on land near this corridor that would be significantly impacted by its development.	
Modal Considerations	
This segment could feasibly accommodate all modes.	

Segment 20—SR-85 from Hassayampa Freeway to I-10	
Opportunities	
Uses an existing highway corridor thereby reducing impacts.	
Provides an important connection for rail and utilities from Gila Bend and I-8 north.	
Connects the renewable energy development occurring in Gila Bend to regional markets.	
Integrates freight, employment, and industrial development plans in Buckeye into regional transportation planning.	
Challenges	
Will need to be designed to protect the ecological values of the Gila River which is undergoing restoration efforts by Maricopa County, Buckeye, Goodyear, and a number of other organizations.	
Is adjacent to Sonoran desert tortoise habitat Category 2.	
Crosses the Gila River.	

Stakeholders
Maricopa County: Should be engaged to allow the I-11 to respond to regional plans and considerations.
Sierra Club: Has shared specific concerns about the highway corridor and should be engaged to discover how the design and location can be better implemented to respect environmental issues.
Developers and Landowners: Have existing entitlements on land near this corridor that would be significantly impacted by its development.
City of Buckeye: Roadway should integrate with city planning efforts and policies.
Audubon Society: Has interest in the Gila River corridor and should be involved in the planning and design of this segment.
Defenders of Wildlife: Should be engaged to discuss ways the corridor can avoid impacts on desert tortoise.
Arizona Game and Fish Department: Has interest in protecting the ecological values of the Gila River and related wildlife benefits.
Modal Considerations
This segment could feasibly accommodate all modes.

Segment 86—Hassayampa Freeway from SR-85 to SR-801 (SR-30)
Opportunities
Provides connectivity to the community of Arlington.
Challenges
Crosses the Gila River in an ecologically sensitive area around the Arlington State Wildlife Area, the historic Old US-80 bridge and the Gillespie Dam.
Fragments critical wildlife connectivity from the Gila Bend Mountains to the Gila River and Buckeye Hills.
Adjacent to Sonoran desert tortoise habitat Category 2.
Within the viewshed of Woolsey Peak Wilderness and Signal Mountain Wilderness which are VRM 1 areas.
Located adjacent to lands in the Sonoran Desert Heritage conservation proposal (HR1799) and should be articulated to remove conflict with these protection areas.
Stakeholders
Maricopa County: Should be engaged to allow the I-11 to respond to regional plans and considerations.
Sierra Club: Has shared specific concerns about the highway corridor and should be engaged to discover how the design and location can be better implemented to respect environmental issues.
Developers and Landowners: Have existing entitlements on land near this corridor that would be significantly impacted by its development.
City of Buckeye: Roadway should integrate with city planning efforts and policies.
Audubon Society: Has interest in the Gila River corridor and should be involved in the planning and design of this segment.
Arizona Game and Fish Department: Has interest in protecting the ecological values of the Gila River and related wildlife benefits.
Sonoran Desert Heritage Coalition: Should be engaged to determine areas of conflict and/or concern.
Gila River and Tohono O'odham Indian Communities: Some portions of this area have significant Native American ruins and heritage sites.
Great Bend of the Gila National Monument Coalition: Should be engaged to determine how this segment would conflict with this effort at a National Monument including lands in and around the Gila River.
Modal Considerations
All modes seem ill suited within this segment due to the cultural resources, historic heritage, and natural constraints.

Segment 87—SR-303 from SR-801 (SR-30) to Hassayampa Freeway
Opportunities
Serves a growth area through Buckeye and unincorporated Maricopa County.
REDA lands exist along this segment.
Provides a new connection from Mobile, SR-238 and I-8. Which also will serve the Cities of Goodyear and Avondale and their southernmost growth areas.
Existing electrical transmission is in this area.

Challenges
Will need to be designed to protect the ecological values of the Gila River which is undergoing restoration efforts by Maricopa County, Buckeye, Goodyear, and a number of other organizations.
May be challenged to go through the Rainbow Valley community which has scattered development.
Crosses the Gila River.
Stakeholders
Maricopa County: Should be engaged to allow the I-11 to respond to regional plans and considerations.
Sierra Club: Has shared specific concerns about the highway corridor and should be engaged to discover how the design and location can be better implemented to respect environmental issues.
Developers and Landowners: Have existing entitlements on land near this corridor that would be significantly impacted by its development.
City of Buckeye: Roadway should integrate with city planning efforts and policies.
City of Goodyear: The eastern edge of this corridor extends into Goodyear.
Audubon Society: Has interest in the Gila River corridor and should be involved in the planning and design of this segment.
Arizona Game and Fish Department: Has interest in protecting the ecological values of the Gila River and related wildlife benefits.
Community of Rainbow Valley: This unincorporated area of Maricopa County has a rural identity that should be considered in the planning process.
Modal Considerations
This segment could feasibly accommodate all modes.

Segments in Southern Maricopa County/Western Pinal County

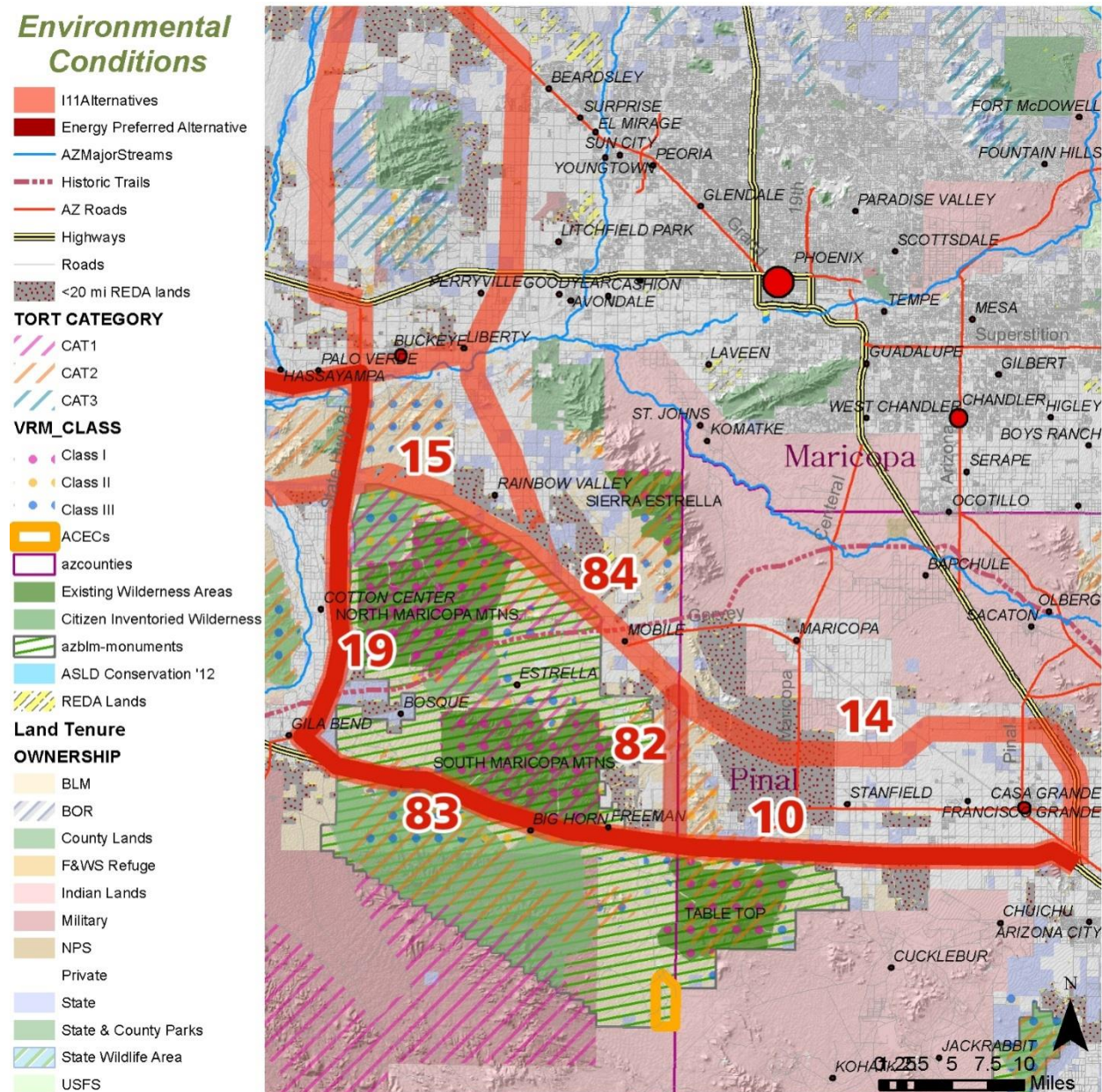


Figure 7: This portion of the corridor study centers around connecting Pinal and Maricopa Counties while avoiding impacts to the Sonoran Desert National Monument.

Segment 15—Hassayampa Freeway from SR-85 to SR-303

Opportunities

- Has electrical transmission and natural gas infrastructure near the corridor.
- REDA lands and the approved Sonoran Solar project exist adjacent to this segment.
- Connects Rainbow Valley and surrounding areas to the regional transportation network.
- Does not cross the Gila River which reduces impacts and cost.
- Much of the land is under BLM ownership thereby reducing the costs of acquisition.

Challenges

- Runs parallel to the Sonoran Desert National Monument (SDNM).
- Interrupts wildlife connectivity from the SDNM north to the Gila River.
- Adjacent to Sonoran desert tortoise habitat Category 1 and 2.

Within the viewshed of the North Maricopa Mountains and the Sierra Estrella Wilderness areas.
Adjacent to lands that are VRM zones 1, 2 and 3 which could impact the experience of users of the land.
Some of the lands are under private and state ownership which may increase the cost of development.
Citizen Inventoried Wilderness areas are near this proposal.
Stakeholders
Maricopa County: Should be engaged to allow the I-11 to respond to regional plans and considerations.
Sierra Club: Has shared specific concerns about the highway corridor and should be engaged to discover how the design and location can be better implemented to respect environmental issues.
Developers and Landowners: Have existing entitlements on land near this corridor that would be significantly impacted by its development.
City of Buckeye: Roadway should integrate with city planning efforts and policies.
Friends of Sonoran Desert National Monument: Are stewards of the monument and should be engaged with any proposal that would impact it.
Arizona Game and Fish Department: Has interest in protecting wildlife corridors in this area of Maricopa County.
Sonoran Desert Heritage Coalition: Should be engaged to determine areas of conflict and/or concern.
Gila River and Tohono O’odham Indian Communities: Some portions of this area have significant Native American ruins and heritage sites.
Arizona Wilderness Coalition: Has interest in protecting the quality of Arizona’s wilderness areas including those near this segment.
Modal Considerations
All modes can be feasibly accommodated in this segment.

Segment 19—SR-85 from the Hassayampa Freeway to Interstate 8
Opportunities
Uses an existing transportation corridor thereby reducing impacts and costs.
Has electrical transmission infrastructure near the corridor.
Connects Gila Bend to the regional transportation network and provides new economic opportunities to the community.
Provides an additional corridor to transmit renewable energy from Gila Bend: the leader in solar energy development.
Challenges
Runs parallel to the Sonoran Desert National Monument (SDNM).
Interrupts wildlife connectivity from the SDNM west to the Gila River and Gila Bend Mountains.
Adjacent to Sonoran desert tortoise habitat Category 1.
Within the viewshed of the North Maricopa Mountains Wilderness area.
Adjacent to lands that are VRM zones 1, 2 and 3 which could impact the experience of users of the land.
Much of these lands are under private and state ownership which may increase the cost of development.
Citizen Inventoried Wilderness areas are near this proposal.
Stakeholders
Maricopa County: Should be engaged to allow the I-11 to respond to regional plans and considerations.
Sierra Club: Has shared specific concerns about the highway corridor and should be engaged to discover how the design and location can be better implemented to respect environmental issues.
Friends of Sonoran Desert National Monument: Are stewards of the monument and should be engaged with any proposal that would impact it.
City of Buckeye: Roadway should integrate with city planning efforts and policies.
Town of Gila Bend: Should be engaged to coordinate the corridor with city planning efforts and policies.
Arizona Game and Fish Department: Has interest in protecting wildlife corridors in this area of Maricopa County.
Sonoran Desert Heritage Coalition: Should be engaged to determine areas of conflict and/or concern.
Arizona Wilderness Coalition: Has interest in protecting the quality of Arizona’s wilderness areas including those near this segment.
Modal Considerations
All modes can be feasibly accommodated in this segment.

Segment 83—I-8 from SR-85 to Hassayampa Freeway/Vekol Freeway	
Opportunities	
Has rail infrastructure near the corridor.	
REDA lands exist adjacent to this segment.	
Uses an existing transportation corridor, thereby reducing costs and impacts.	
Much of the land is under BLM ownership thereby reducing the costs of acquisition.	
Challenges	
Runs parallel to the Sonoran Desert National Monument (SDNM).	
Interrupts wildlife connectivity across the SDNM.	
Adjacent to Sonoran desert tortoise habitat Category 1 and 2.	
Within the viewshed of the South Maricopa Mountains Wilderness area.	
Adjacent to lands that are VRM zones 1, 2 and 3 which could impact the experience of users of the land.	
Citizen Inventoried Wilderness areas are near this proposal.	
Stakeholders	
Maricopa and Pinal Counties: Should be engaged to allow the I-11 to respond to regional plans and considerations.	
Sierra Club: Has shared specific concerns about the highway corridor and should be engaged to discover how the design and location can be better implemented to respect environmental issues.	
Town of Gila Bend: Should be engaged to coordinate the corridor with city planning efforts and policies.	
City of Buckeye: Roadway should integrate with city planning efforts and policies.	
City of Maricopa: Their planning area extends to the east side of the SDNM. They should be engaged to discover how the corridor would impact them.	
Friends of Sonoran Desert National Monument: Are stewards of the monument and should be engaged with any proposal that would impact it.	
Arizona Game and Fish Department: Has interest in protecting wildlife corridors in this area of Maricopa County.	
Sonoran Desert Heritage Coalition: Should be engaged to determine areas of conflict and/or concern.	
Gila River and Tohono O'odham Indian Communities: Some portions of this area have significant Native American ruins and heritage sites.	
Arizona Wilderness Coalition: Has interest in protecting the quality of Arizona's wilderness areas including those near this segment.	
Modal Considerations	
Highway and Rail modes seem to be feasibly developed in this segment with appropriate design and mitigation considerations.	
Electrical transmission may prove challenging due to the high amount of visual sensitivity in wilderness nearby and to protect the character of the SDNM.	

Segment 84—Hassayampa/Vekol Freeway from SR-303 to Segment 82	
Opportunities	
Has electrical transmission and natural gas infrastructure near the corridor.	
REDA lands exist adjacent to this segment.	
Connects Rainbow Valley and Mobile to the regional transportation network.	
Challenges	
Runs parallel to the Sonoran Desert National Monument (SDNM).	
Interrupts wildlife connectivity across the Rainbow Valley linkage which is a high priority wildlife corridor.	
Adjacent to Sonoran desert tortoise habitat Category 1 and 2.	
Within the viewshed of the Sierra Estrella Wilderness area.	
Much of the lands are under private and state ownership which may increase the cost of development.	
Stakeholders	
Maricopa and Pinal Counties: Should be engaged to allow the I-11 to respond to regional plans and considerations.	
Sierra Club: Has shared specific concerns about the highway corridor and should be engaged to discover how the design and location can be better implemented to respect environmental issues.	
Developers and Landowners: Have existing entitlements on land near this corridor that would be significantly impacted by its development.	
City of Buckeye: Roadway should integrate with city planning efforts and policies.	
City of Maricopa: Roadway should integrate with city planning efforts and policies.	

Friends of Sonoran Desert National Monument: Are stewards of the monument and should be engaged with any proposal that would impact it.
Arizona Game and Fish Department: Has interest in protecting wildlife corridors in this area of Maricopa County and has special interest in the Rainbow Valley linkage.
Sonoran Desert Heritage Coalition: Should be engaged to determine areas of conflict and/or concern.
Gila River and Tohono O'odham Indian Communities: Some portions of this area have significant Native American ruins and heritage sites.
Arizona Wilderness Coalition: Has interest in protecting the quality of Arizona's wilderness areas including those near this segment.
Modal Considerations
All modes can be feasibly accommodated in this segment.

Segment 82—From Hassayampa/Vekol Fwy to I-8
Opportunities
REDA lands exist adjacent to this segment.
Connects two major transportation corridors.
Challenges
Runs parallel to the Sonoran Desert National Monument (SDNM).
Conflicts with Sonoran desert tortoise habitat Category 2.
Stakeholders
Maricopa and Pinal Counties: Should be engaged to allow the I-11 to respond to regional plans and considerations.
Sierra Club: Has shared specific concerns about the highway corridor and should be engaged to discover how the design and location can be better implemented to respect environmental issues.
City of Maricopa: Roadway should integrate with city planning efforts and policies.
Friends of Sonoran Desert National Monument: Are stewards of the monument and should be engaged with any proposal that would impact it.
Arizona Game and Fish Department: Has interest in protecting wildlife corridors in this area of Maricopa and Pinal Counties.
Sonoran Desert Heritage Coalition: Should be engaged to determine areas of conflict and/or concern.
Gila River and Tohono O'odham Indian Communities: Some portions of this area have significant Native American ruins and heritage sites.
Modal Considerations
All modes can be feasibly accommodated in this segment.

Segment 10—I-8 from Segment 82 to I-10
Opportunities
Has rail infrastructure near the corridor.
REDA lands exist adjacent to this segment.
Uses an existing transportation corridor.
Challenges
Runs parallel to the Sonoran Desert National Monument (SDNM).
Conflicts with Sonoran desert tortoise habitat Category 2.
Within the viewshed of the Table Top Wilderness area.
Within or adjacent to VRM zones 1, 2 and 3 in the SDNM.
Much of the lands are under private and state ownership which may increase the cost of development.
Stakeholders
Pinal County: Should be engaged to allow the I-11 to respond to regional plans and considerations.
Sierra Club: Has shared specific concerns about the highway corridor and should be engaged to discover how the design and location can be better implemented to respect environmental issues.
City of Maricopa: Roadway should integrate with city planning efforts and policies.
Friends of Sonoran Desert National Monument: Are stewards of the monument and should be engaged with any proposal that would impact it.
Arizona Game and Fish Department: Has interest in protecting wildlife corridors in this area of Pinal County.

Gila River and Tohono O’odham Indian Communities: Some portions of this area have significant Native American ruins and heritage sites.
Arizona Wilderness Coalition: Has interest in protecting the quality of Arizona’s wilderness areas including those near this segment.
Modal Considerations
All modes can be feasibly accommodated in this segment.

Segment 14—Vekol/Hidden Valley Fwy from Segment 82 to I-10
Opportunities
Urban corridor with few environmental conflicts.
REDA lands exist adjacent to this segment.
Challenges
Adjacent to Sonoran desert tortoise habitat Category 2.
Much of the lands are under private and state ownership which may increase the cost of development.
Stakeholders
Pinal County: Should be engaged to allow the I-11 to respond to regional plans and considerations.
Sierra Club: Has shared specific concerns about the highway corridor and should be engaged to discover how the design and location can be better implemented to respect environmental issues.
City of Maricopa: Roadway should integrate with city planning efforts and policies.
Friends of Sonoran Desert National Monument: Are stewards of the monument and should be engaged with any proposal that would impact it.
Arizona Game and Fish Department: Has interest in protecting wildlife corridors in this area of Pinal County.
Gila River and Tohono O’odham Indian Communities: Some portions of this area have significant Native American ruins and heritage sites.
Modal Considerations
All modes can be feasibly accommodated in this segment.

Summary

Qualitative Segment Analysis Results

Though this analysis is purely qualitative, it is necessary to develop an approach to allow each segment to be compared with another. Some have greater impacts on private lands and development plans while others interrupt wildlife migration patterns. Indeed, all of the conflicts are important to be considered though the importance of each will vary depending on an individual’s values. The following considerations should be noted while reviewing the results:

1. As this is a qualitative analysis the scores are given as a “gut instinct” result and are not intended to be a definitive judgment.
2. In most cases the scores are comparisons with other alternatives with similar impacts. For example, a segment that gets a very poor rating of 9 for riparian impacts simply means it is the worst among similarly situated alternatives. A 1 would indicate it is the best or among the best.
3. In many cases not enough information is available to judge an alternative, especially around complex and unknown development plans and cultural resources. In these cases a 0 was awarded.
4. As with any high level planning exercise, the true impacts will be determined based upon site-specific solutions to these conflicts. Appropriate wildlife crossing infrastructure, for example, could mitigate and reduce a poor score for wildlife corridor impacts.
5. The priority is to avoid impacts; mitigating only as a last resort.

Category	I-11 Corridor Segment											
	46	43	35	91	95	36	29	18	17	22	21	16
Private Property/Development Planning Alignment	1	3	2	1	1	1	8	1	1	9	1	3
Desert Tortoise Habitat	1	3	6	8	3	8	5	1	6	1	1	1
Citizen Inventoried Wilderness	1	1	1	5	1	5	1	1	3	1	1	1
Wilderness Areas	1	1	2	2	1	3	1	1	1	1	1	1
Wildlife Corridors	2	1	4	9	3	5	7	2	6	3	1	1
Riparian Areas	1	1	1	1	3	5	8	1	1	1	1	1
Use of Existing Corridor	1	1	1	9	1	1	1	5	5	7	5	5
Enhances Transportation Connectivity	1	1	1	1	1	1	5	1	1	8	9	2
Enhances Renewable Energy Development	1	2	5	1	1	1	4	1	1	7	6	1
Historic/ Cultural Resources	1	1	1	0	0	0	3	0	2	1	1	0
Visual Resources	3	1	4	8	2	6	5	2	4	1	1	1
Enhancing State Land Value	0	2	1	1	2	1	4	1	1	1	1	1
Appropriate Modes (Rail:R, Highway: H, Utilities: U)	UHR	UHR	UHR		UH	UH	UHR	UHR	UHR	H	UHR	UHR
Total: Higher value denotes higher conflict/harm	14	18	29	46	19	37	52	17	32	41	29	18

Category	I-11 Corridor Segment										
	86	85	20	15	87	84	14	10	82	83	19
Private Property/Development Planning Alignment	1	1	1	1	3	2	0	1	0	1	1
Desert Tortoise Habitat	2	1	3	2	1	3	1	2	4	5	1
Citizen Inventoried Wilderness	1	1	1	3	1	1	1	1	1	3	2
Wilderness Areas	1	1	1	3	1	1	1	2	1	3	2
Wildlife Corridors	9	1	3	3	1	9	1	3	2	5	1
Riparian Areas	9	3	4	1	3	1	1	1	1	1	1
Use of Existing Corridor	9	1	1	5	5	5	5	1	5	1	1
Enhances Transportation Connectivity	1	1	1	2	1	1	1	1	2	3	1
Enhances Renewable Energy Development	5	5	1	1	1	1	4	1	1	3	1
Historic/ Cultural Resources	9	4	3	3	1	4	0	0	0	0	1
Visual Resources	5	3	2	5	1	4	1	3	3	4	3
Enhancing State Land Value	1	1	1	1	1	1	1	1	1	1	1
Appropriate Modes (Rail:R, Highway: H, Utilities: U)		UHR	UHR	UHR	UHR	UHR	UHR	UHR	UHR	HR	UHR
Total: Higher value denotes higher conflict/harm	53	23	22	30	20	33	17	17	21	30	16

Key:	
Beneficial/Low Conflict	1-3
Moderate Conflict	4-6
Harmful/High Conflict	7-9
Unknown/Mixed Bag	0
N/A	

Figure 8: This chart summarizes in a numeric way the qualitative analysis that was performed on the alternative segments. Low numbers indicate lower conflict or higher benefit.

Conclusion

In conclusion, it appears that the I-11 corridor could serve a valuable purpose to communities all throughout Arizona. Clearly, if economic projections are realized resulting from enhanced international trade, more serviceable regional transportation, and renewable energy development, the region could benefit greatly. These benefits however, should not be viewed separate from the potential impacts on Arizona's wildlife, culture, and heritage. Some corridor segments appear to pose significant risks to irreplaceable treasures like wildlife, scenic areas, and riparian zones. Significant impacts to these resources would result in a loss of identity, opportunity, and economic value. Priority should be placed on protecting our resources and values before looking to enhance and capitalize on new opportunities.

The Interstate 11, in its broadest sense: with the successful integration of multiple modes including utilities, rail, and highway infrastructure, presents an incredible opening not only to capture new economic opportunities but also to define a new approach to infrastructure development that searches for win-win answers, seeks to provide transparent choices, and avoids impacts while mitigating the unpreventable. Through our research and analysis it appears that the I-11, though impactful in many instances, provides opportunity and could be articulated in ways that would allow such conflicts to be appropriately resolved.

The Sun Corridor and Interstate 11

The Sonoran Institute retains a pragmatic yet powerful vision of the future of the Sun Corridor which includes promoting a vibrant and diverse economy while enabling an environmentally-conscious, sustainable, and resilient community. The I-11 in its multi-modal sense fits within this vision if it meets the following conditions:

1. It is planned and implemented with a transparent public process that respects all people and communities;
2. It avoids impacts with natural and cultural resources to the extent practicable;
3. It mitigates harms that occur to natural and cultural resources;
4. It contributes to enhanced renewable energy development and utilization;
5. It enables choice in transportation options by establishing a framework for multiple modes to utilize the corridor;
6. It is malleable to a range of possible though uncertain future outcomes; and
7. It connects underserved and underrepresented people and communities to new opportunities and transportation options.

This region of western Arizona has experienced decades of explosive growth resulting in profound associated cumulative environmental impacts. The addition of a new interstate, if not prudently planned for, could further contribute to the degradation of the fragile Sonoran Desert landscape and ecosystem. Planning for I-11 provides an opportunity to effectively promote numerous economic development objectives in a collaborative, integrated, and environmentally sound fashion. By working together, Arizonans can leverage this important opportunity to bring a more sustainable future AND a more vibrant and resilient economy—a future we can all agree upon.



Community and Economic Development Department

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January 21, 2014

Michael Kies, PE
Arizona Department of Transportation
206 S. 17th Ave.,
Phoenix, AZ 85007

Subject: Level 2 Evaluation Results for: Phoenix Metropolitan Area Section

Dear Mr. Kies,

The City of Surprise has reviewed the Level 2 Preliminary Evaluation Results for Phoenix Metropolitan Area. Our review and comments are provided in coordination with the presentation at your stakeholder meeting and the supporting documentation that was provided. The City of Surprise submits the following comments for consideration based on the best interest of the Phoenix metropolitan area.

The City of Surprise supports ADOT's current proposal to include the Northern alignment east of the Hassayampa River in the final recommended alignments/zone. However, as the southern portion of the alignment has been depicted as the current Sun Valley Parkway, it has received a more stringent score than otherwise may have, during the review process. The proposed Turner Parkway would connect to I-10 at the junction of I-10 and SR-85, eliminating the need for I-11 traffic to travel along I-10. The City believes that the proposed Turner Parkway would be a more fitting alignment which is found within the ultimate shaded area and has been supported by MCDOT in prior meetings.

As the project represents a new interstate alignment within an urbanizing area, it is critical that Interstate 11 serve the Phoenix metropolitan area, by traveling along a route where the most significant growth is anticipated to occur, but that does not encourage skip development, or creates unnecessary out of the way travel. Alternative I would use a new north-south corridor originating near the junction of US-60 and SR-74 Highways, traveling south to I-10. The City of Surprise supports further examination of Alternative I in future NEPA evaluations.

The City of Surprise would also caution the use of an alternative that would encourage out of the way travel such as the Alternative Corridor Option of the northern alignment west of the Hassayampa River. The City supports the conservation of open space and the benefits that the Vulture Mountains recreation area would provide to the region. However, the additional miles added would need to be accounted for in the State Implementation Plan, and could create unanticipated consequences in regards to the Ozone 8-Hour - Non-attainment area. These costs should be evaluated against the more direct travel route of the alternatives that are available.

Thank you for the opportunity to comment on the Level 2 Preliminary Evaluation Results for the Phoenix Metropolitan Area. If you have any questions regarding these comments, please contact me at (623) 222-3141. The City of Surprise looks forward to being fully engaged as a stakeholder partner in the planning process for the I-11 & Intermountain West Corridor Study.

Sincerely,



Martin Lucero
Transportation Planning Manager

January 31, 2014

Michael Kies
Director of Planning and Programming
Arizona Department of Transportation
206 S. 17th Avenue, Mail Drop: 310B
Phoenix, AZ 85007

Dear Mr. Kies:

On behalf of The Nature Conservancy in Arizona, thank you for the opportunity to provide comments on ADOT's draft Planning and Environmental Linkages Level 2 Evaluation Results. The draft provides a comprehensive summary of potential impacts and offset opportunities for the proposed alternatives. Should the project proceed to a NEPA analysis phase, inclusion of the analysis and comments by the Arizona Game and Fish Department and The Nature Conservancy should assist in that process.

The results of the Level 2 Evaluation draw attention to one of the Conservancy's outstanding concerns with regard to the I-11 project – significant issues with Alternative I-North (segments 22 & 29) that warrant it being excluded from further consideration. The Level 2 Evaluation indicates that for this alternative, seven of the eight Evaluation Categories received a low, very low, or moderate rating, with the Environmental Sustainability category receiving a low performance rating. ADOT's overall analysis for the seven alternatives in the Phoenix Metropolitan Area indicates that the I-North alternative has the lowest overall performance rating across all evaluation categories.

As characterized in our previous comments, there are a number of natural resource values that make the Hassayampa River watershed unique and irreplaceable. Outside of the Salt and Verde River systems that have vast watersheds in forested areas of the state, but contribute only a portion of perennial flow in the Sonoran desert, the Hassayampa River is one of four remaining perennial stream systems in the desert. The other three include the Bill Williams, Agua Fria, and San Pedro. The closest surface water of the Bill Williams lies 25 miles to the west of Hassayampa; the Agua Fria's closest perennial water is 30 miles to the northeast and the San Pedro is more than 125 miles to the southeast. With a rich abundance of native wildlife in the Hassayampa watershed and adjacent desert areas, the quantity and quality of surface waters and riparian habitat in the Hassayampa River is paramount to the long-term maintenance of the area's wildlife populations, including several endangered and threatened species.

The existing transportation infrastructure in segment 29, in particular, is already within 70 feet of surface waters on the Hassayampa River Preserve, presenting a continual risk of river degradation from accidental spills, accumulation of toxins in runoff from paved surfaces, and construction into the channel that would be required to reduce future flooding problems. The confined topography of that stretch leaves little flexibility to avoid impacts of an expanded transportation route. Additional or expanded infrastructure in such a confined setting will only increase the scope and magnitude of direct and indirect effects.

The regional importance of the Hassayampa River and its riparian resources combined with the magnitude and scope of potential impacts all factored in to our original assessment - that offsetting impacts would likely be infeasible. The low overall performance rating for I-North indicates that other factors beyond environmental sustainability are less favorable than the six other alternatives in the Metro Phoenix area. For these reasons we continue to recommend that the I-North alternative be removed from further consideration.

The Level 2 analysis prepared by ADOT is comprehensive and provides a good foundation for identifying alternatives that balance multiple objectives. We look forward to continued work in partnership with ADOT on the I-11 project analysis. If you have questions regarding our comments please do not hesitate to contact me. I can be reached at rmarshall@tnc.org or 520-547-3428.

Sincerely,



Rob Marshall
Director, Center for Science & Public Policy

Cc:

Governor Jan Brewer

Congressman Paul Gosar

Larry Voyles, Director, Arizona Game & Fish Department

Scott Higginson, Executive Director Interstate 11 Coalition

RESOLUTION NO. 14-02

A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF GILA BEND, MARICOPA COUNTY, ARIZONA, SUPPORTING SR85 AS THE PRIMARY ALIGNMENT FOR THE INTERSTATE 11 CORRIDOR, ALSO KNOWN AS "ALTERNATIVE H" IN THE LEVEL 1 EVALUATION RESULTS SUMMARY, DATED JANUARY 2014.

WHEREAS, Interstate 11 is a proposed Phoenix Bypass route connecting Las Vegas with Phoenix, while an exact alignment for I-11 is being determined through extensive future engineering and environmental studies; and

WHEREAS, work began in the summer of 2012 to examine a connection between Phoenix and Las Vegas, with the potential to extend north towards Canada and south to the Mexico border, creating a new corridor through the Intermountain West; and

WHEREAS, such a corridor would provide a new connection for communities, major trade hubs, existing and future domestic and international deep-water ports, as well as intersecting transcontinental roadways and railroad corridors; and

WHEREAS, The I-11 corridor could also be paired with rail and other infrastructure components, such as energy and telecommunications, to meet the region's needs; and

WHEREAS, in the Arizona Department of Transportation, the Nevada Department of Transportation, the Maricopa Association of Governments, the Regional Transportation Commission of Southern Nevada, Federal Highway Administration and Federal Railroad Administration are partners in this study; and

WHEREAS, the Town of Gila Bend's Pillars of Economic Development include the development of multimodal transportation, and Gila Bend is uniquely situated geographically, and possesses some key attributes that also make it ideal to develop multimodal transportation; and

WHEREAS, Gila Bend's multimodal resources include Interstate 8, State Route 85, State Route 238, the Union Pacific Railroad, the Gila Bend Municipal Airport, Rural Transit (Route 685) Utilities, and local transit.

WHEREAS, I-11 has been a cornerstone of the Governor's jobs and economic development agenda that examines current and future transportation and trade infrastructure needs to improve Arizona's competitiveness in a global marketplace; and

WHEREAS, Level 1 Evaluation Results Summary dated January 2014 ONLY recommends Alternative "H" as depicted in Exhibit A, attached hereto, and Alternative "I" as depicted in Exhibit B attached hereto, for Level 2 Analysis; and

NOW, THEREFORE, BE IT RESOLVED that the Gila Bend Town Council hereby strongly SUPPORTS Alternative H as the preferred corridor, specifically from I-10, connecting to I-8 solely by SR85; and

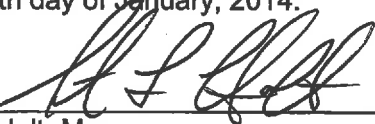
That the Gila Bend Town Council strongly OPPOSES Alternative I as the preferred corridor, specifically from I-10, partially traversing SR85, then creating a new west-east corridor, connecting to I-10; and

That the Gila Bend Town Council SUPPORTS Alternative I, ONLY as a parkway improvement, to be planned, funded, and constructed with monies and resources NOT associated with the I-11 corridor; and

That the Gila Bend Town Council strongly SUPPORTS the Alternative H corridor versus the Alternative I corridor as the Alternative H corridor, because:

- (1) Alternative H an existing corridor with a full access management plan already in place,
- (2) Alternative H is far less costly to acquire and construct,
- (3) Alternative H serves an existing community that has experienced over \$2 Billion in economic development since 2009,
- (4) Alternative H does not incur new and highly significant environmental constraints and wildlife constraints south of I-10,
- (5) Alternative H is far better suited for a by-pass route from an access management and efficiency standpoint,
- (6) Alternative H does not bisect environmentally sensitive areas, requiring costly infrastructure elements to facilitate environmental remediation,
- (7) Alternative H does not face strong opposition from stakeholder groups,
- (8) Alternative I does not serve any multimodality, whereas Alternative H serves vehicular, rail, transit, utilities, and air,
- (9) Alternative I does not serve any potential economic development locates, short term or long term,
- (10) Alternative I does not support sustainable economic development but rather supports greater urban sprawl which is a model proven to be economically and environmentally unsustainable and as clearly experienced with the recent great recession, economically disastrous, and should not be repeated,
- (11) Alternative H is the best and most efficient use of taxpayer money

PASSED AND ADOPTED by the Mayor and Council of the Town of Gila Bend, Arizona, this 28th day of January, 2014.

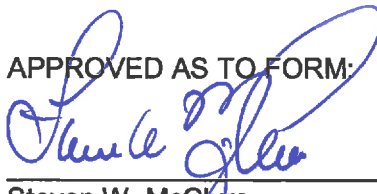


Steve Holt, Mayor

ATTEST:



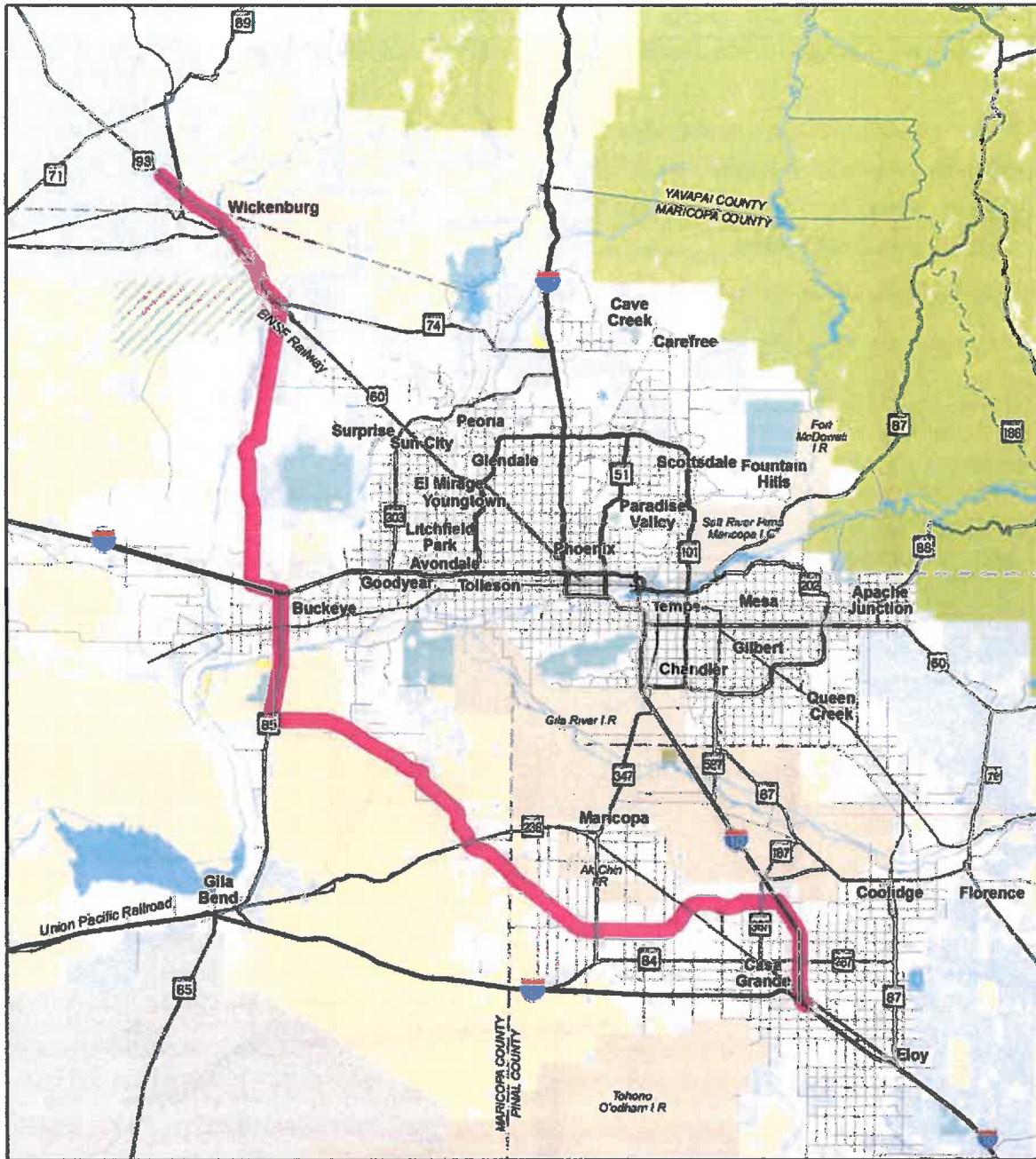
Beverly Turner, MMC
Town Clerk

APPROVED AS TO FORM:


Steven W. McClure,
Town Attorney



EXHIBIT B "Alternative I"



The White Pine County Board of County Commission have reviewed the proposed I-11 Intermountain West Corridor project and acknowledges our Congress has recognized the importance of the portion of the Corridor between Phoenix and Las Vegas and designated it as future I-11 in the recent transportation authorization bill, Moving Ahead for Progress in the 21st Century Act (MAP-21).

Developing a new north-south trade corridor through Nevada and Arizona could supplement the existing system and relieve freight congestion on I-5, one of only two (including I-15) continuous north-south Mexico-to-Canada interstate routes west of Texas. In reviewing the different alternatives for routing beyond Las Vegas, our Commission would like to bring to your attention important data collected by our staff.

The three alternative routes being reviewed for Nevada's link from Las Vegas to Canada are as followed.

Leaving Las Vegas per US-95 to Fallon, then into Reno, Nevada, up US-395 into California and terminating on I-5 at Eugene, Oregon: This route encompasses **(872) miles** of roadway that will need to address **(142) obstacles** that will need attention; i.e. bridges, railroad and highway crossing, per under and overpasses, narrow Right of Ways through townships, culverts, etc. In addition, the Las Vegas I-215 Beltway along the northern region of Las Vegas will need to be reconstructed to remove all traffic lights currently in place.

Leaving Las Vegas per US-95 to Fallon, continuing up US-95 to I-80 into Winnemucca, then into Oregon per US-20, terminating onto I-5 at Portland, Oregon: This route encompasses **(1,018) miles** of roadway that will need to address **(31) obstacles just in Nevada alone**, that will need attention; i.e. bridges, railroad and highway crossing, per under and overpasses, narrow Right of Ways through townships, culverts, etc. In addition, the Las Vegas I-215 Beltway along the northern region of Las Vegas will need to be reconstructed to remove all traffic lights currently in place.

Leaving Las Vegas per US-93, traveling north onto US-318 through Hiko and Lund, then onto US-6 for a short trip back onto US-93 north through Ely, continuing to Wells, Nevada and terminating on I-84 in Twin Falls, Idaho: This route encompasses **(535) miles** of roadway that will need to address **(41) obstacles along its entire length** that will need attention; i.e. bridges, railroad and highway crossing, per under and overpasses, narrow Right of Ways through townships, culverts, etc. In addition, the Las Vegas I-215 Beltway along the northern region of Las Vegas will not be utilized and therefore, will not need reconstruction costs allocated.

Our Commission supports the Alternative Route QQ along the eastern region of Las Vegas but only if it terminates at I-15 North and continues north per Alternative AA as previously removed from consideration. Utilizing US-93 not only saves construction costs per lane per mile at \$5M average times four lanes equaling \$20M per interstate roadway mile, it provides the least amount of private and tribal land interference, requiring land acquisition dollars.

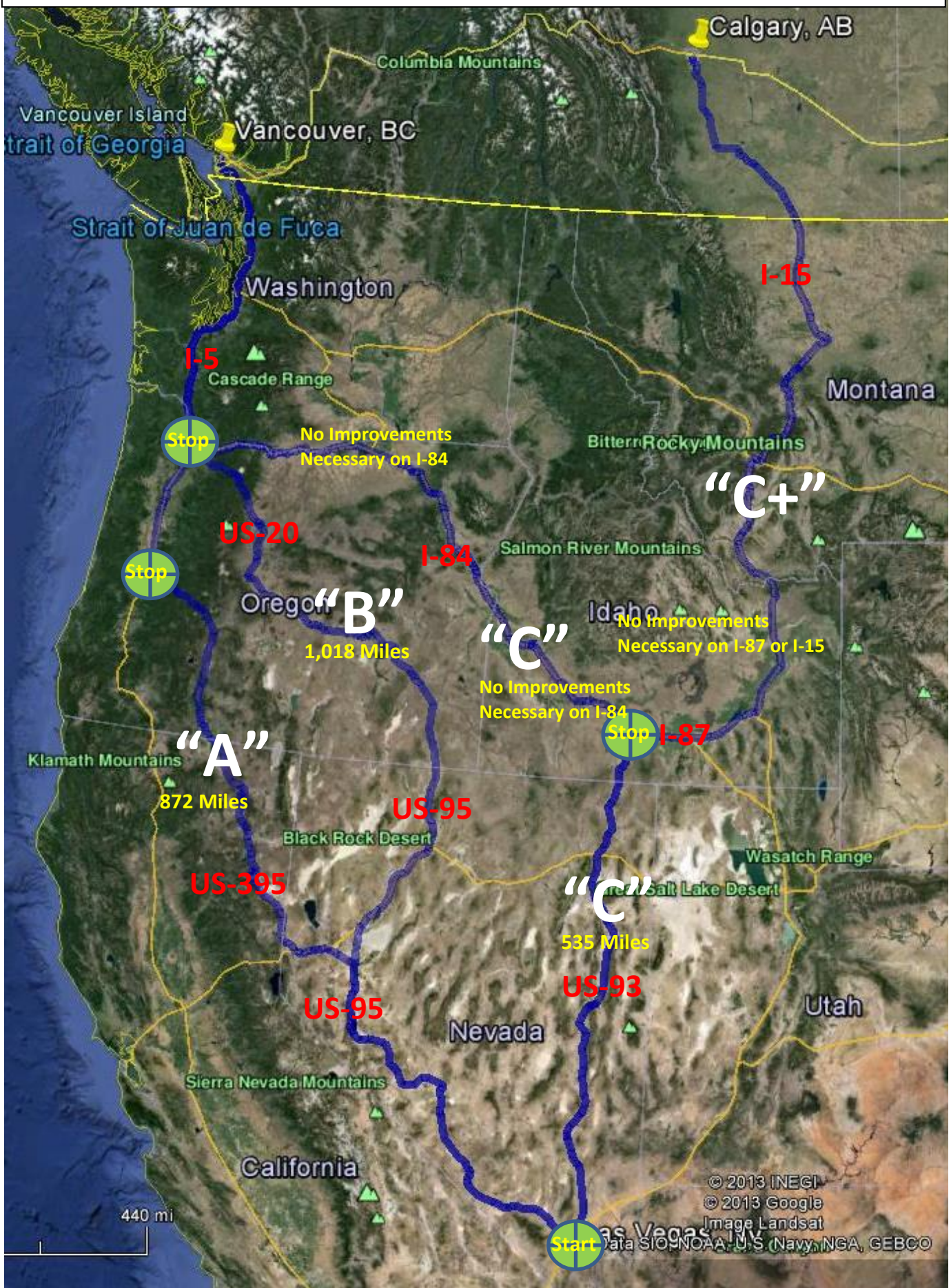
When comparing the alternative through Reno, Nevada to Eugene, Oregon as compared to Twin falls, Idaho, there is a difference of (337) roadway miles. Based at an assumption of an average cost at \$20M per mile per a (4) lane interstate, the project could incur an additional **\$6.74B US Dollars plus the costs to address a difference of (101) obstacles**, i.e. railroad and highway under and overpass, culverts, and large traffic bridge reconstruction projects, etc.

Based on economic drivers, the intent of this initiative was to include an upgraded highway, but could be paired with rail and other major infrastructure components—such as energy and telecommunications—to serve the nation’s needs in the West. White Pine County currently has the only major wind farm in Nevada, with the potential to utilize biomass, hydro and solar for future energy projects on the horizon. Oil and Gas exploration is an industrial cluster developing in White Pine County with over 1.5M acres of public lands currently leased for exploration; more than most counties in the US. And finally, the linear mileage for rail improvements along US-93 compared to US-95 are less than half of the linear miles.

Secondly, US-93 provides two access points into Canada, not just one as per the Reno – Eugene connection. US-93 enters into Twin Falls, Idaho per I-84, which extends west into Portland, Oregon then up into Vancouver, Canada. Per conversations with ODOT, the highway is under capacity and may be able to support additional traffic per I-11 commuters. If you go east on I-84 from Twin Falls, you will join I-87, which connects to I-15 from Salt Lake City, Utah and then proceeds north into Calgary, Canada. This preferred route would allow economic benefits to Nevada, Oregon, Idaho, and Montana, states with much needed boost to their economy.

Its no doubt Eastern Nevada is on the forefront of new energy development and will continue to provide a strong tax base for the State of Nevada with its Mining, Oil and Gas, and Renewable Energy Industries. Please consider the data provided to reconsider US-93 as a viable player for the most effective cost estimates to not only utilize Nevada for a section of I-11 Intermountain West Corridor, but to support the initiative to see the interstate help extend traffic flows into Canada per two destination points, Vancouver and Calgary.

US-93 is the most Economical Route to Improve with Two Access Points into Canada from Las Vegas, Nevada.





Route "A" : Las Vegas, NV USA - to - Vancouver, BC Canada 1,176 Miles

Improve Miles: 872 miles from Las Vegas to Eugene, OR.

Route:	Destination Point	Highway	Hurdles that will need Attention / \$\$
	Las Vegas, NV	I-15 / US-95	Paiute Dr. Bridge Underpass Mercury Hwy Double Bridge Overpass Downtown Beatty Narrow ROW Culvert Crossing Stonewall Mtn Downtown Goldfield Narrow ROW Culvert Hasbrouck Peak
	Tonopah, NV	US-95 / US-6	Downtown Tonopah Narrow ROW Culvert Crossing CR-89 Culvert Crossing CR-89 Downtown Mina Narrow ROW Downtown Luning Narrow ROW Downtown Hawthorne Narrow ROW Walker Lake Narrow ROW & Bridges ROW Thru Stillwater National Wildlife Refuge US-95 Culvert Bridge Overpass US-95 Culvert Bridge Overpass US-95 Culvert Bridge Overpass 2
	Fallon, NV	US-95/ US-50A	Downtown Fallon Narrow ROW Coleman Road Canal Bridge Overpass Lincoln Hwy Bridge Overpass Brush Garden Dr. Bridge Overpass Culvert Crossing Hazen Downtown Fernley Narrow ROW / Rotunda
	Fernley, NV	US-50A/ I-80	Narrow ROW along Canal Rd.
	Reno, NV	I-80/ US-395	Downtown Sparks & Reno Traffic Congestion Panther Dr. Double Bridge Overpass CR-430 Double Bridge Overpass Golden Valley Double Bridge 1 Overpass Golden Valley Double Bridge 2 Overpass Lemmon Dr. Double Bridge Overpass Stead Blvd. Double Bridge Overpass Culvert Crossing Stead Blvd. Red Rock Rd. Double Bridge Overpass White Lake Pkwy Double Bridge Underpass Village Pkwy Double Bridge Underpass Scott Rd. Culvert Crossing Scott Rd. Culvert Crossing 2 Scott Rd. Culvert Crossing 3 Hallelujah Junction Double Bridge Overpass Scott Rd. Culvert Crossing 4 Constantia Rd Culvert Crossing Constantia Rd Culvert Crossing 2 Constantia Rd Culvert Crossing 3 Bert Rd Bridge Culvert Crossing Bert Rd. Culvert Crossing 2 Doyle Railroad Bridge Overpass Laver Crossing Culvert Crossing Cowboy Joe Culvert Crossing Milford Rd Cemetary Culvert Crossing Lake Crest Rd Culvert Crossing

		Susanville Culvert Crossing
		Susanville Culvert Crossing 2
		Downtown Susanville Narrow ROW
CA-139A		Narrow winding Rd Lassen National Forest
		Wildlife Accident Potential with Trees at Road
		Ranch Barn Culvert Crossing
		Canal Crossing Bridge
		Sheephead Mtn Culvert Crossing
		Pass Thru Modoc National Forest
		Wildlife Accident Potential with Trees at Road
		Downtown Adin Narrow ROW
		Adin Culvert Crossing
		Adin Culvert Crossing Bridge 2
		Adin Culvert Crossing Bridge 3
		Roney Flat Rd Culvert Crossing Bridge
		Canby Bridge River Crossing
		Old Railroad Crossing Bridge Overpass
		Canal Crossing Bridge
		Canal Crossing Bridge 2
		Newell Culvert Crossing Bridge
		Newell Culvert Crossing Bridge 2
		Newell Culvert Crossing Bridge 3
		Newell Culvert Crossing Bridge 4
		Newell Culvert Crossing Bridge 5
		Newell Culvert Crossing Bridge 6
		Newell Culvert Crossing Bridge 7
		Newell Culvert Crossing Bridge 8
		Newell Culvert Crossing Bridge 9
		Newell Culvert Crossing Bridge 10
		Newell Culvert Crossing Bridge 11
		Newell Culvert Crossing Bridge 12
Hwy 50 / 39		Newell Culvert Crossing Bridge 13
		Downtown Merrill Narrow ROW\
		Merrill Culvert Crossing Bridge
		Anderson Rd River Bridge
		Wong Rd Culvert Crossing Bridge
		Matney Rd Canal Bridge
		Railroad Overpass
		Railroad Crossing
Hwy 140		Sharp Left Turn
		Altamont Narrow ROW
		Hwy 875-A Bridge Underpass
		Altamont Culvert Crossing Bridge
		Altamont Railroad Crossing Bridge
		Lake Ewauna Bridge Crossing
Hwy 140/ US-97		Hwy 140 US-97 Crossover Bridge
		Greensprings Dr. Crossover Bridge
		Lake Ewauna Bridge Crossing 2
Klamath Falls, OR	US-97	California Ave Bridge Overpass
		Klamath Bridge Detention Basin
		Oregon Ave Bridge Overpass
		Lakeport Blvd Railroad Bridge Overpass
		Hwy 39 Merge Bridge Underpass

		Algoma Rd Bridge Waterway
		Narrow Island ROW Upper Lake Klamath
		Hagelstein Co Park Bridge Crossover
		Farm Station Rd Railroad Bridge Overpass
		Williams River Bridge Crossover
		Hwy 422 Bridge Overpass
		Wildlife Animal Crossing Danger Zone
		Railroad Overpass Bridge
		Hwy 58 / US-97 Crossover Overpass Bridge
	Hwy 58	Hwy 58 Railroad Underpass
		Hwy 58 Creek Bridge Crossover
		Hwy 58 Dirt Road Overpass
		Hwy 58 Bridge
		Hwy 58 Narrow ROW at Lake Bank
		Hwy 58 Railroad Crossing Underpass
		Hwy 58 Bridge Stream Crossing
		Hwy 58 Bridge Stream Crossing 2
		Hwy 58 Bridge Stream Crossing 3
		Hwy 58 Bridge Stream Crossing 4
		Downtown Oakridge Narrow ROW
		Hwy 58 Bridge Stream Crossing 5
		Hwy 58 Dam Crossing
		Hwy 58 Dam Crossing 2
		Hwy 58 Dam Crossing 3
		Hwy 58 Dam Narrow ROW
		Hwy 58 Dam Narrow ROW 2
		Dilley Lane Bridge Crossing
		Hwy 58 Railroad Crossing Overpass
		I-5 Merge into Hwy 58
Eugene, OR	I-5	Possible no improvements needed
Portland, OR	I-5	Possible no improvements needed
Seattle, OR	I-5	Possible no improvements needed
Vancouver, BC	I-5	Possible no improvements needed



Route "B" : Las Vegas, NV USA - to - Vancouver, BC Canada 1,210 Miles

Improve Miles: 1,018 miles from Las Vegas, NV to Portland, OR.

Route:	Destination Point	Highway	Hurdles that will need Attention / \$\$
	Las Vegas, NV	I-15 / US-95	Paiute Dr. Bridge Underpass Mercury Hwy Double Bridge Overpass Downtown Beatty Narrow ROW Culvert Crossing Stonewall Mtn Downtown Goldfield Narrow ROW Culvert Hasbrouck Peak
	Tonopah, NV	US-95 / US-6	Downtown Tonopah Narrow ROW Culvert Crossing CR-89 Culvert Crossing CR-89 Downtown Mina Narrow ROW Downtown Luning Narrow ROW Downtown Hawthorne Narrow ROW Walker Lake Narrow ROW & Bridges ROW Thru Stillwater National Wildlife Refuge US-95 Culvert Bridge Overpass US-95 Culvert Bridge Overpass US-95 Culvert Bridge Overpass 2
	Fallon, NV	US-95/ US-50A	Downtown Fallon Narrow ROW Coleman Rd Culvert Bridge Overpass Lovelock Hwy Culvert Bridge Overpass Wade Ln Culvert Bridge overpass US-95 Culvert Bridge Overpass 3 US-95 Street Grade Railroad Crossing US-95 Culvert Bridge Overpass 4 I-80 Merge with US-95
	Winnemucca, NV	I-80 I-80 / US-95	Possible no improvements needed Major Off Ramp Construction needed E. National Bridge Stream Overpass Sharp Rt Hand Stop Sign Turn US-95 Culvert Bridge Overpass Downtown McDermitt Narrow ROW
		US-95/ Hwy 78	

Have not completed overview from McDermitt, Nevada to Portland, Oregon.

Portland, OR	I-5	Possible no improvements needed
Seattle, OR	I-5	Possible no improvements needed
Vancouver, BC	I-5	Possible no improvements needed



**Route "C" : Las Vegas, NV USA - to - Vancouver, BC Canada 1,216 Miles (Secondary access to Calgary, AB);
Improve Miles: 535 from Las Vegas to Twin Falls, ID.**

Route:	Destination Point	Highway	Hurdles that will need Attention / \$\$
	Las Vegas, NV	I-15	Possible no improvements needed
		US-93	I-15/ US-93 Bridge Underpass US-93 Culvert Crossing 1 US-93 Major Detention Basin Area Guardrail Elevated ROW US-93 Narrow Above Grade ROW US-93 Narrow Elevated ROW
		Hwy 318	Cattle Guard Crossing White river Narrow ROW Downtown Lund Narrow ROW US-93/US-6 Rt Turn Stop Light US-93 Narrow ROW US-93 Narrow Murrey Summit ROW
	Ely, NV	US-93	US-93 Lt Turn Stop Light US-93 Rt Turn Stop Light Downtown Ely Narrow ROW Ely Grade Level Railroad Crossing US-93 Grade Level Railroad Crossing Downtown McGill Narrow ROW US-93 Lt Turn Protected Light US-93 Grade level Railroad Crossing US-93 Detention Culvert under Roadway US-93 Grade Level Railroad Crossing
	Wells, NV	US-93	I-80/ US-93 Merge Underpass US-93 Railroad Crossing Overpass US-93 Wildlife Overpass Crosswalk US-93 Culvert Wildlife Underpass Crossing US-93 Culvert Wildlife Underpass Crossing US-93 Wildlife Crossing Overpass US-93 Bridge Stream Overpass US-93 Bridge Stream Overpass2 US-93 Bridge Stream Overpass3 Downtown Jackpot Narrow ROW US-93 Culvert Roadway Crossing US-93 Culvert Bridge Crossing US-93 Culvert Bridge Crossing US-93 Canal Bridge Overpass US-93 Canal Bridge Overpass US-93 Railroad Grade Level Crossing
	Twin Falls, ID	US-93/I-84	Downtown Twin Falls Narrow ROW US-93 Major River Expansion Bridge
	Boise, ID	I-84	Possible no improvements needed
	Pendleton, OR	I-84	Possible no improvements needed
	Portland, OR	I-5	Possible no improvements needed
	Seattle, OR	I-5	Possible no improvements needed

Information compiled by Jim Garza, White Pine County – Community & Economic Development Office
Google Earth shape file can be emailed upon request with pins placed at hurdles for review.
(775) 293-5567 wpcedc@mwpower.net