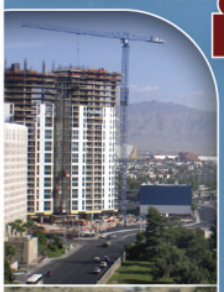
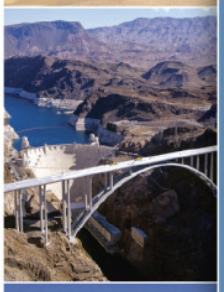
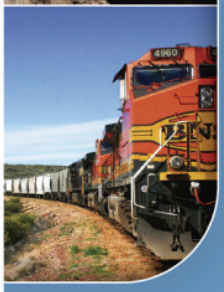




I-11 and Intermountain West Corridor Study

Utility/Energy Focus Group
January 8, 2013
1:30 – 3:30 p.m. PST, 2:30 – 4:30 p.m. MST

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 high priority Interstate link between Phoenix and Las Vegas (the I-11 portion), 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 could participate in a series of topical focus groups. On January 8, 2013, the Utility/Energy Focus Group was held. Meetings were conducted simultaneously in three locations: Carson City, Nevada; Las Vegas, Nevada; and Phoenix, Arizona. Additionally, individuals could call-in and log-on to participate in a live webinar. A total of 59 participants signed in. The following report summarizes the results of this focus group.

Photo 1: Las Vegas, Nevada, focus group participants

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 these focus groups was to provide an opportunity to validate and add to the information that has already been gathered by the study team in order to complete the first half of the study and development of the Corridor Justification Report. Participants were provided access to copies of the PowerPoint presentation and preliminary study maps presenting various energy and utility data. Plots of proposed energy corridors, wind energy potential, solar energy development and solar energy potential were displayed at each physical meeting location.

The meeting was initiated by a detailed PowerPoint presentation viewed at all locations and online. Project co-manager Sondra Rosenberg from the Nevada Department of Transportation (NDOT) provided a brief review of the project, vision concepts, and work plan and schedule while project co-manager Michael Kies from the Arizona Department of Transportation (ADOT) highlighted some of the feedback already received relative to utility and energy opportunities. Jaclyn

Pfeiffer, project team member, concluded the presentation with a review of past planning studies as well as a highlight of utility and energy data collected to date.

Photo 2: View of Carson City, Nevada, focus group participants via closed-circuit television

Dan Andersen, project team member, facilitated a simultaneous dialogue with participants using the following questions as a framework for discussion:

- Are there additional data sources we should consider?
- What infrastructure currently exists and where are potential service expansion areas?
- What are the top opportunities and constraints for including energy and utility within the corridor?
- Are there opportunities for cost saving/sharing in development of the corridor?
- What can this project do to lay the groundwork for coordination with your organization now and/or in the future?
- Is there anything else that we should consider in this corridor planning effort?
- Are there key groups/individuals missing from this dialogue?

Several key points highlight the focus group discussion:

- No long range utility or energy plans currently exist
- No immediate utility or energy expansion needs exist within the corridor
- Long-term flexibility of a common or consolidated corridor is needed
- Tradeoffs for a common or consolidated corridor should be considered
- Future technology options should be incorporated

Initial Thoughts and Clarifying Questions

What is the timeline for the study? *We are about 6 months through a 2-year schedule for this initial study. Environmental studies, design and construction would follow if the corridor has the support and funding to proceed.*

Please keep an open mind about future opportunities beyond just the segment from Phoenix to Las Vegas. *That is the plan. The priority segment from Phoenix to Las Vegas will have more definition at the end of this study, compared to the segments to the north and south, but is not the sole focus of this study. Possible opportunities and alignments will be considered for those future connectivity segments.*

Has the corridor been designated? *Yes; MAP 21 has designated US-93 as the future I-11, although this study is looking at corridor opportunities for from Mexico to Canada.*

Why are oil and gas not shown on the exhibits you presented? I believe there is a large gas pipeline between Phoenix and Las Vegas—possibly Kinder-Morgan—and a natural gas line from Phoenix to Los Angeles. *We have limited information on many of the utilities and planned utilities in the corridor, and welcome any input. We are considering the opportunities and constraints for combining all utilities, including oil and gas, within this corridor.*

What will the width of this multimodal corridor be? *We don't know the answer right now. We first need to determine the need for the corridor, including the utilities and modes that should be included within the right of way, and then we can determine the appropriate width.*

What is the study horizon? *The time horizon could be 2050 or beyond, a "buildout" timeframe that MAG estimates a Phoenix population of 12 million.*

Are there any additional data sources we should consider?

- NDOT and ADOT have permit data for utilities constructed within their right of way.
- UNLV and UNR have maps showing areas for potential geothermal energy generation.
- The mining industry has specific transportation infrastructure needs that should be considered in this study.
- There are some "grandfathered" solar energy zones not shown on the exhibits.
- Coordination with BLM (particularly field offices) will be valuable, as they own and manage the land and have been a party to previous studies. Eddie Arreola with BLM Resources would be a good contact.
- The Restoration Design Energy Project (RDEP) is a BLM initiative to identify lands across Arizona that may be suitable for the development of renewable energy. The RDEP Environmental Impact Statement (EIS) has been released and is available for review (http://www.blm.gov/az/st/en/prog/energy/arra_solar.html).
- Centennial West, SunZia and Southline are proposed utility corridors in Arizona.
- BP Wind Energy of North America proposes building the Mohave County Wind Farm project comprising up to 258 wind turbines on federally managed lands in Mohave County. The site–about 49,000 acres of public land–is in the White Hills area about 40 miles northwest of Kingman and 20 miles southeast of Hoover Dam. (http://www.blm.gov/az/st/en/prog/energy/wind/mohave.html)
- Western Area Power Administration website (http://www.wapa.gov)
- National Park Service
- Bureau of Reclamation
- Utility providers, such as APS

What infrastructure currently exists and where are potential service expansion areas?

Participants reported that existing and potential service expansion area information is proprietary and regulated by the Department of Homeland Security, and therefore cannot typically be shared openly with any specificity. Many utility representatives noted their willingness, however, to meeting one-on-one with the study team to share what information they could.

What are the top opportunities and constraints for including energy and utilities within the corridor?

- Southwest Gas does not currently have a need to or plans for a connection from Phoenix to Las Vegas, though willing to collaborate and consider options for sharing future right of way.
- One-time digs don't always work for utilities as providers typically only invest in additional infrastructure as demand merits.

- The corridor should include sufficient right of way to allow for future expansion. If such a right of way is established as part of a NEPA project, utility expansion would be faster and more efficient. Energy and utilities that could be considered as part of this consolidated corridor include: fiber, solar, liquid natural gas, transmission lines, telecommunications, and other future/emerging technologies.
- This study should not be limited to just the segment from Phoenix to Las Vegas, but should consider all of Arizona and Nevada for placement of possible utility corridors. *Our intent is to look for opportunities statewide.*
- A conceptual master plan from Canada to Mexico would help to clarify the needs and opportunities. *The outcome of this study will be a conceptual master plan of sorts. We are conducting this differently from most studies, in that we are seeking input from utility companies in the development of the plan. We would like our Stakeholder Partners to help us consider the needs that might exist if and when Phoenix and Las Vegas are fully built-out as well as what opportunities and markets might open up.*
- The corridor needs to be wide enough and segmented by utility type to address separation requirements and utility "compatibility".
- Consolidation of infrastructure and utilities could create cost efficiencies, but alternatively, could become a homeland security issue.
- Consolidation of infrastructure and utilities is a way to preserve natural areas and viewsheds.
- Hoover Dam could be a constraint for expansion of transmission corridors.
- Currently no gas or other existing pipelines parallel US 93.
- Solar panels in the right of way could support roadway lighting and recharge stations.
- Building linear synergy around a single infrastructure corridor helps to mitigate environmental impacts (such as bifurcatation of wilderness habitat that has occurred with fragmented infrastructure projects like the SunZia Southwest Transmission Project).
- Electrical transmission infrastructure along the I-11 corridor could facilitate the delivery of new solar energy to the California market.

Are there key groups/individuals missing from this dialogue?

- BLM
- Kern River
- United States Army Corps of Engineers

Additional feedback provided subsequent to the meeting

Are there additional utility/energy data sources we should consider?

- Transmission Utilities. They will have much more opportunity for investment on these large projects that a distribution company.
- I would recommend talking to El Paso Natural Gas (a Kinder Morgan company), Transwestern Natural Gas and Kern River Natural Gas. These companies are more likely to use a long utility corridor as they are interstate transmission companies.
- Natural gas fueling corridor between California and Texas.
- Is there a Department of Energy division with gas transmission lines oversight rather than each individual company? Arizona Blue Stake has maps of where each utility has facilities. Mohave Electric Cooperative has facilities along Hwy 93 between Wikieup and Petro truck stop. UniSource has facilities paralleling I-40 and Hwy 93 to Hoover Dam.

- A small group meeting that involves only the utilities is the best way to determine where facilities are or should be located to optimize future development.

What infrastructure currently exists and where are potential service expansion areas? - Responses

- Currently, Southwest Gas does not have anything under evaluation, but we would be able to provide more specific information as a project is more formalized.
- Not much existing. Great potential for expansion is related to new power plants.
- Major transmission line along I-8. Underutilized natural gas pipeline along I-8 and coming from the north somewhat parallel with Highway 95.
- This question came up and the service areas of the local utilities are a constraint. Any expansion should be looking at interstate utilities not intrastate. UniSource has facilities along 93 but not distribution voltage at all points. There may be some opportunities there.
- There is really no good transmission corridor between Phoenix and Las Vegas, thus the reason for creating a utility transmission corridor. "Service expansions" concern distribution and are outside the intended purpose of this Corridor.

What are the top opportunities and constraints for including energy and utility within the corridor?

- There are requirements for separation for facilities.
- Top opportunity would be new power plants. Constraints are long distances and cost.
- New opportunities exist for high-capacity pipeline placement within corridor right of way to permit transmission of water and other commodities of critical value to the west and nation. Alternative energy (e.g., solar and wind) production within corridor right of way provides overwhelming revenue potential and energy supply to critical need areas.
- It appears to me the Black Canyon Bridge poses a considerable restraint.
- Constraints are electricity transmission lines. Of major long term concern is water availability in the Phoenix/Tucson metro.
- A large fiber optics communication path with communication towers at regular intervals sized to handle a number of users. Provide empty conduit runs for future tech advances or utility needs. A constraint is the Hoover Dam Bridge. How are you going to cross there? Or somewhere else? Solar panels for electric car recharge stations and cell tower system are considerations.
- Combining linear infrastructure corridors is a great idea. Habitat fragmentation can be prevented by using existing rights-of-way or combining projects.
- The Corridor should have a Utility corridor within it to avoid future conflicts and cost. Any utility that is not currently occupying the Corridor area should be permitted, avoiding future relocation cost.

Are there opportunities for cost saving/sharing in development of the corridor?

- Corridor right of way lease for energy transmission and/or corridor right of way use for energy production proves compelling as a substantial revenue generator for corridor development and operation. Also, alternative energy production promotes multi-mode vehicle operating opportunities at low cost.
- Underutilized port infrastructure at San Luis II to take pressure off the need for other commercial port improvements.
- Intrastate utilities may be interested in developing alternate routes and increasing capacity for technology and communication advancements.

- Yes, if the original purpose (transmission) is narrowly maintained. If additional purposes are added then regulatory and other costs will go up making the corridor unlikely to be utilized.
- All utility companies would benefit from sharing the corridor as a cost saving to the alternative of purchasing private easements.

What can this project do to lay the groundwork for coordination with your organization now and/or in the future?

- Southwest Gas likes to be involved in projects from the beginning. It gives us plenty of time to budget, design and install facilities to be able to meet a timeline.
- Being aware of it is all Southwest Gas needs for now. As we mentioned in the meeting, we would not build a pipeline in the corridor unless we had a customer.
- Mohave County will continue to participate as a stakeholder agency.
- This project allows for the growth of Arizona in areas along the Colorado River with more senior water rights than Central Arizona Project. It positions western Arizona to take congestion pressure off California highways coming from Mexico north and east. This solidifies the importance of Highway 95 in the discussions of a Canadian/Mexico corridor.
- Once you have a feel for what will be the corridor and probable location alternatives you can meet with UniSource Energy's long range planners and see what synergies can be created. We cannot build until we have customers but we can plan for possible expansion and upgrades.
- A well planned and specific use Corridor with limited or no cost to utilize. Infrastructure placement itself will be expensive and if administrative costs and oversight are added it will likely result in limited or no use of the Corridor.
- Provide continued updates.

Is there anything else that we should consider in this Corridor planning effort?

- A median wide enough for light rail should be considered.
- The focus on the needs of the utilities that will use the Corridor should be considered. While it is important to hear from all interested stakeholders, many are focused on issues not involving the restricted use of the Corridor.
- I-11 corridor could be a boon to both Nevada and Arizona, especially if it runs from the Arizona/Mexican border to the Nevada/Idaho border. My preference would be for it to follow the US 93 route through Nevada as I feel this area needs the economic boost more than the US 95 route, and I feel the terrain is more favorable along 93.

Are there key groups/individuals missing from this dialogue?

- Natural gas transmission companies
- BLM and U.S. Bureau of Reclamation should attend these meetings.
- National Park Service and Bureau of Reclamation for Hoover Dam vicinity.

Do you have anything else you'd like to share with the I-11 team?

- Mohave County's vision toward substantiating I-11 funding and development delves outside the typical paradigm of highway planning. In fact, the County sees several game-changing, scale opportunities enabling I-11 to develop and function as a transportation and economic corridor throughout the Intermountain West.
- Great job! As a taxpayer, I trust the information generated during the focus groups is heeded during the project. It would be great to see "condensed" results of these corridor studies published in the Las Vegas and Phoenix newspapers, ensuring "the general public" is exposed to this monumental improvement project.

Appendices

List of Focus Group Attendees by Agency

PowerPoint Presentation

List of Attendees by Agency

Meeting	First Name	Last Name	Agency
Phoenix	Vicki	Bever	ADOT
Webinar	Matt	Carpenter	ADOT
Phoenix	Sayeed	Hani	ADOT
Webinar	Sayeed	Hani	ADOT
Phoenix	Michael	Kies	ADOT
Phoenix	Carlos	Lopez	ADOT
Webinar	Mohamed	Noun	ADOT
Phoenix	John	McNamara	AECOM
Phoenix	Jaclyn	Pfeiffer	AECOM
Webinar	Paul	Ochs	Ames Construction, Inc.
Webinar	Chad	Guzman	Arizona Public Service
Phoenix	Ian	Dowdy	Arizona Wilderness Coalition
Carson City	Brenda	Gilbert	BEC Environmental, Inc.
Las Vegas	Dan	Andersen	CH2M HILL
Las Vegas	Bardia	Nezhati	CH2M HILL
Webinar	Jennifer	Roberts	CH2M HILL
Webinar	John	Powell	Churchill County Communications
Las Vegas	Philip	Klevorick	Clark County Comprehensive Planning Department
Phoenix	Michael	Stull	Cox Communications
Carson City	Lee	Bonner	Douglas County
Webinar	Ed	Mueller	Esmeralda County
Webinar	Darrin	Badger	Focus Commercial Group
Carson City	Frankie	Vigil	Good Standing Outreach
Las Vegas	Denise	Gordon	HDR
Las Vegas	Stuart	Martin	Holman's of Nevada, Inc.
Phoenix	Ryan	Gish	Maricopa Association of Governments
Phoenix	Bob	Hazlett	Maricopa Association of Governments
Phoenix	Kelly	Taft	Maricopa Association of Governments
Carson City	Jessica	Biggin	NDOT
Carson City	Jerry	Claussen	NDOT
Las Vegas	Cleveland	Dudley	NDOT
Carson City	Sondra	Rosenberg	NDOT
Carson City	Kevin	Verre	NDOT
Phoenix	Pete	Konesky	Nevada State Office of Energy
Carson City	Brita	Tryggvi	Nevada State Office of Energy
Las Vegas	Shawn	Arnold	NV Energy
Carson City	Mike	Pidlypchak	NV Energy
Las Vegas	Priscilla	Raudenbush	NV Energy

Meeting	First Name	Last Name	Agency
Webinar	Bradley	Woodring	NV Energy
Las Vegas	Cash	Jaszczak	Nye County
Webinar	Kristina	Frontino	Paiute Pipeline Company
Webinar	Jesus	Martinez	Paiute Pipeline Company
Phoenix	Peggy	Fiandaca	PSA
Phoenix	Audra	Koester Thomas	PSA
Phoenix	Felipe	Zubia	ReSeed Advisors
Las Vegas	Ayoub	Ayoub	Southern Nevada Water Authority
Las Vegas	Larry	Tamashiro	Southern Nevada Water Authority
Las Vegas	Halli	Chesser	Southwest Gas Corporation
Las Vegas	Michael	Cooper	Southwest Gas Corporation
Webinar	Mindi	Dagerman	Southwest Gas Corporation
Webinar	Byron	Elkins	Southwest Gas Corporation
Las Vegas	William	Grennan	Southwest Gas Corporation
Las Vegas	Telma	Lopez	Southwest Gas Corporation
Las Vegas	Bryan	Thatcher	Southwest Gas Corporation
Webinar	Kevin	Thompson	Southwest Gas Corporation
Webinar	Mary	Mallory	Town of Prescott Valley
Webinar	Michael	Gibelyou	UNS Electric, Inc
Phoenix	Jessica	Herndon	Western Area Power Administration
Phoenix	Bruce	Ladewig	Western Area Power Administration
Phoenix	Denise	Steiger	Wickenburg Regional Economic Development Partnership

I-11 & Intermountain West Corridor Study

Focus Group Meeting

Utility and Energy

In partnership with

Presented by:

CH2MHILL
AECOM

January 8, 2013

Agenda

- Study Overview
- Input on Utility and Energy Opportunities within the Corridor
- Inventory of Corridor Conditions
- Discussion
- Next Steps

2

Background

- Federal transportation authorizations identified high priority corridors
- CANAMEX Corridor designated (1995)
- Corridor advanced through:
  - MAG Hassayampa and Hidden Valley Framework Studies (2006 – 2009)
  - Building a Quality Arizona (bqAZ, 2010)
  - NDOT/RTCSNV Boulder City Bypass (2005 and ongoing)
- CANAMEX Corridor along US 93 between Phoenix and Las Vegas designated as future "I-11" in MAP-21 (2012)
- Arizona and Nevada DOTs signed an interagency agreement and begin a joint planning study (2012+)

3

What Does this Study Entail?

- Two levels of investigation:
  - Detailed corridor planning between Las Vegas and Phoenix
  - High-level visioning from Las Vegas to Canada, and from Phoenix to Mexico
- Multimodal consideration:
  - Interstate/highway, freight rail, passenger rail, and public transportation
  - Power, telecommunication, etc.

4

Corridor Opportunities

- Enhance local, regional, national and global connectivity
- Enhance economic competiveness and activity
- Provide network redundancy and flexibility
- Provide flexibility for evolving modal choices
- Promote sustainable development





5

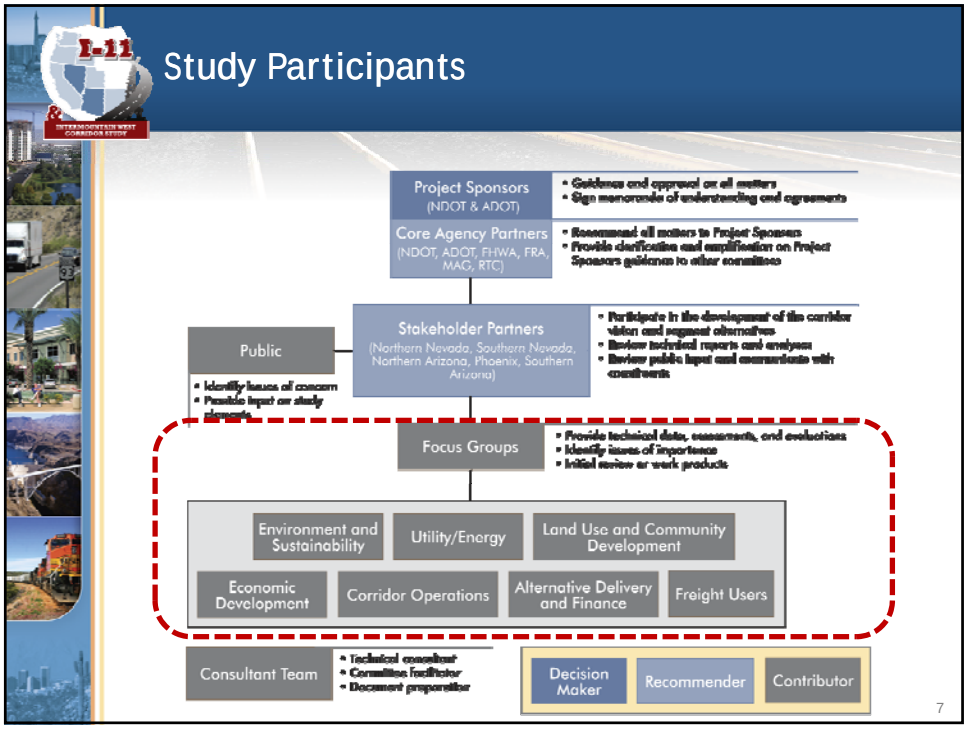
Corridor Opportunities

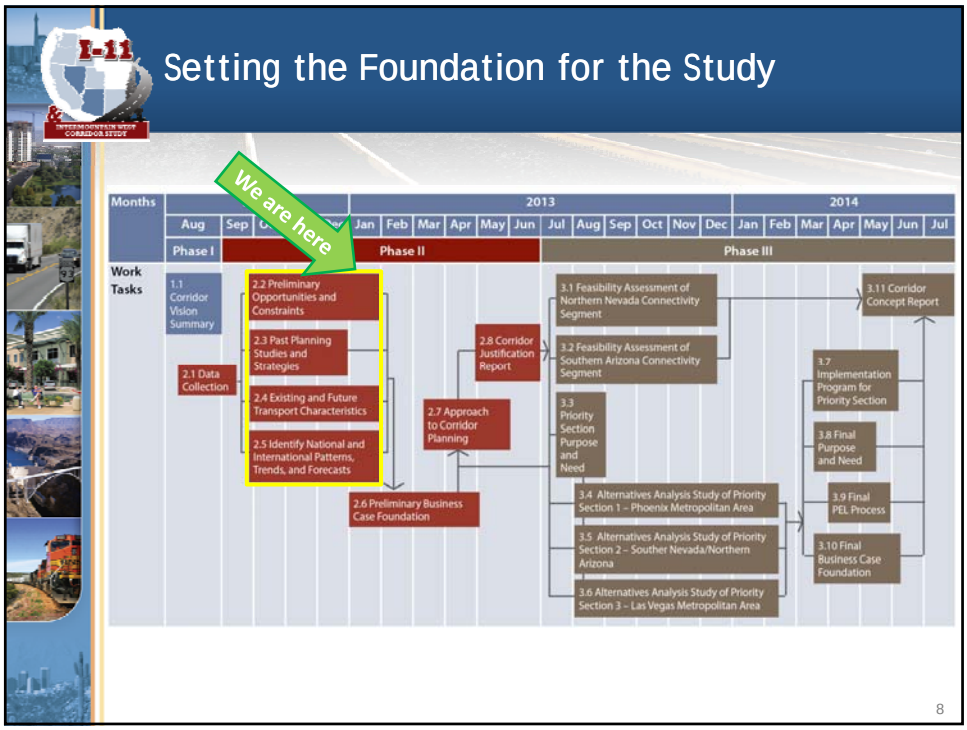
- Enhance local, regional, national and global connectivity
- Enhance economic competiveness and activity
- Provide network redundancy and flexibility
- **Provide flexibility for evolving modal choices**
  - **Passenger rail**
  - **Incorporate technology**
  - **Include utilities and communications**
- Promote sustainable development





6


Study Participants
Project Sponsors
(NDOT & ADOT)
Core Agency Partners
(NDOT, ADOT, FHWA, FRA, MAG, RTC)
Public
Stakeholder Partners
(Northern Nevada, Southern Nevada, Northern Arizona, Phoenix, Southern Arizona)
Focus Groups
Environment and Sustainability
Utility/Energy
Land Use and Community Development
Economic Development
Corridor Operations
Alternative Delivery and Finance
Freight Users
Consultant Team
Decision Maker
Recommender
Contributor
7


Setting the Foundation for the Study
We are here
Months
2013
2014
Aug
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Dec
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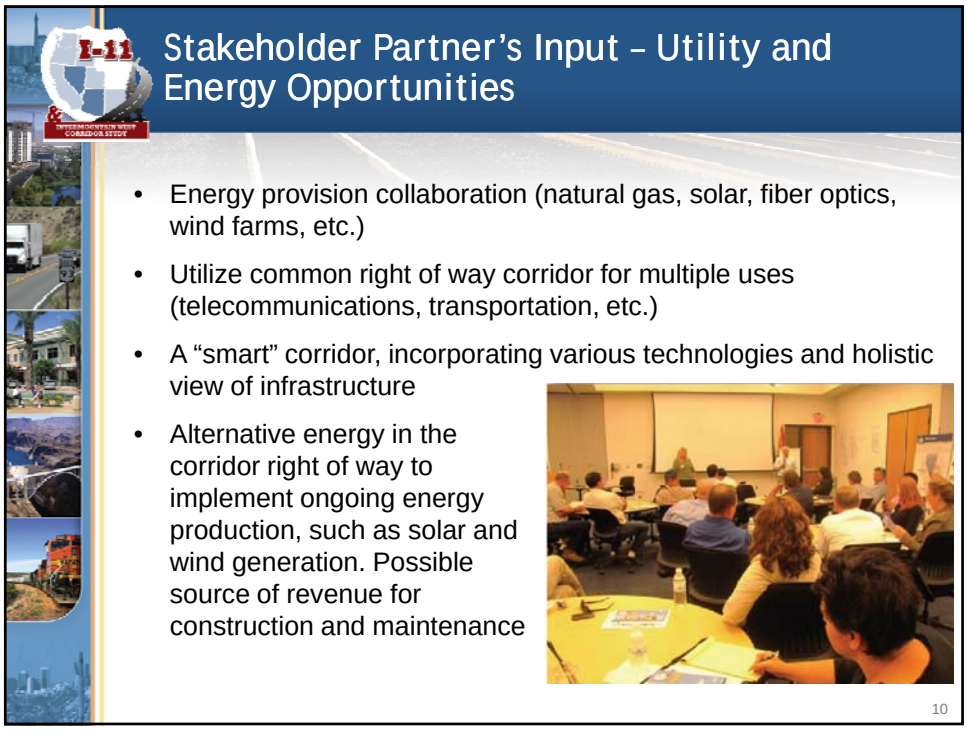
Feb
Mar
Apr
May
Jun
Jul
Phase I
Phase II
Phase III
Work Tasks
1.1 Corridor Vision Summary
2.1 Data Collection
2.2 Preliminary Opportunities and Constraints
2.3 Past Planning Studies and Strategies
2.4 Existing and Future Transport Characteristics
2.5 Identify National and International Patterns, Trends, and Forecasts
2.6 Preliminary Business Case Foundation
2.7 Approach to Corridor Planning
2.8 Corridor Justification Report
3.1 Feasibility Assessment of Northern Nevada Connectivity Segment
3.2 Feasibility Assessment of Southern Arizona Connectivity Segment
3.3 Priority Section Purpose and Need
3.4 Alternatives Analysis Study of Priority Section 1 – Phoenix Metropolitan Area
3.5 Alternatives Analysis Study of Priority Section 2 – Souther Nevada/Northern Arizona
3.6 Alternatives Analysis Study of Priority Section 3 – Las Vegas Metropolitan Area
3.7 Implementation Program for Priority Section
3.8 Final Purpose and Need
3.9 Final PEL Process
3.10 Final Business Case Foundation
3.11 Corridor Concept Report
8


NEVADA DOT
ADOT
I-11
Stakeholder Partner's Input on Utility and Energy Opportunities within the Corridor


I-11
Stakeholder Partner's Input – Utility and Energy Opportunities
• Energy provision collaboration (natural gas, solar, fiber optics, wind farms, etc.)
• Utilize common right of way corridor for multiple uses (telecommunications, transportation, etc.)
• A "smart" corridor, incorporating various technologies and holistic view of infrastructure
• Alternative energy in the corridor right of way to implement ongoing energy production, such as solar and wind generation. Possible source of revenue for construction and maintenance
10

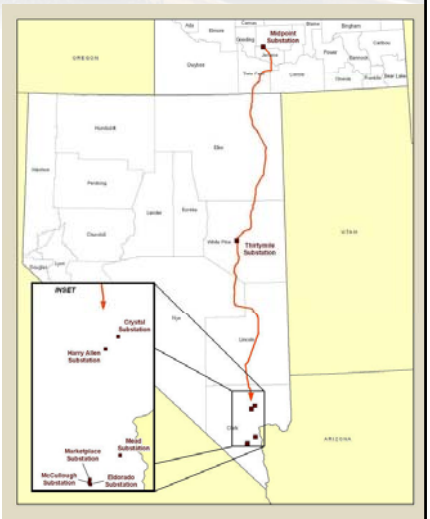
Stakeholder Partner's Input – Utility and Energy Opportunities

- Increase telecommunications infrastructure
- Transwestern pipelines and canals for water, fuels, slurry, other
- Ability to re-charge vehicles along corridor
- Installing dark fiber (currently only exists along US-95)
- Futuristic: pods / automated drive / smart signs / pavement heating elements / wind farms / carbon omission / solar
- Refer to "electrical distribution lines" not transmission lines
- Data centers (large energy users)

11

Stakeholder Partner's Input – Utility and Energy Opportunities

- Possible Northern Nevada alignment for the I-11 Corridor could use the same power line right of way (1,000 foot SWIP 500kV) granted by BLM to NV Energy and LS Power from Las Vegas to Idaho



12

Why Am I Here and How is My Input Used?

- Confirm inventory of corridor conditions
- Help us understand corridor issues and opportunities
- Your input will:
  - Inform the Corridor decisions in this phase of the study
  - Help create a holistic and flexible Corridor
  - Will link to future decisions as study evolves to future NEPA studies

13

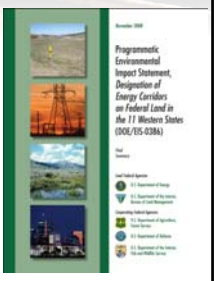
Technical Memorandum 1: Existing and Future Corridor Conditions

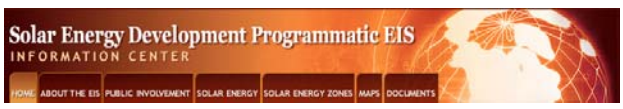
- **Introduction**
- **Existing Corridor Conditions (by project segment)**
  - Environmental Features
  - Topographic Features
  - Major Drainage Features
  - Major Land Ownership
  - Multimodal Transportation Network
  - **Major Utility Corridors**
  - **Solar Energy Potential**
  - **Wind Energy Potential**
  - Major Economic Activity Centers
- **Existing and Future Transportation Characteristics**
- **National and International Patterns, Trends, and Forecasts**
- **Appendix – Summary of Past Planning Studies**

15

Review of Past Planning Studies

- **West-Wide Energy Programmatic EIS (2008), prepared for U.S. Department of Energy (DOE)**
  - Several multimodal (pipeline and transmission line) corridors have been designated on federal lands in Arizona and Nevada; opportunity for shared corridors with the I-11 improvement
  - TransWest Express EIS (expected this Spring)
- **Solar Energy Development Programmatic EIS (2012), prepared for Office of Energy Efficiency and Renewable Energy, DOE**
  - Under the preferred alternative, the PEIS identifies categories of land to prioritize for development of solar energy zones, lands to be excluded from utility-scale solar energy development, and lands that may be developed through a variance process





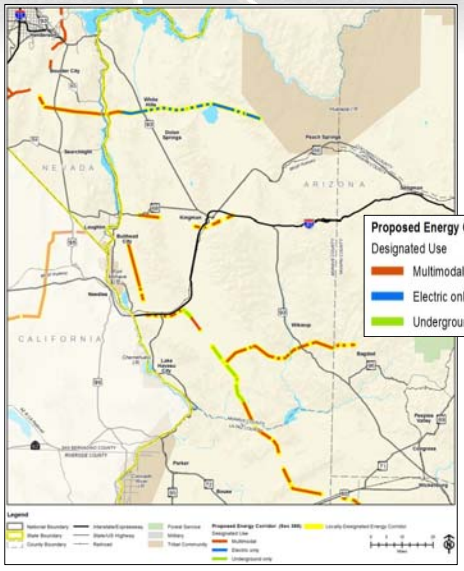
16

Stakeholder Coordination

- **Coordination with Digital Arizona Program (Arizona Strategic Enterprise Technology)**
  - Mapping the availability of broadband across Arizona, identifying what broadband infrastructure exists, what is planned, and where broadband gaps exist
  - Digital Arizona Highways Act of 2012 (April 2012) establishes "dig once" policy for telecommunications and transportation infrastructure
- **Received input from other telecommunications providers on potential to coordinate infrastructure development and expansion**
- **Mapped priority areas for utility-scale solar and wind energy development, as studied by the National Renewable Energy Laboratory (NREL)**

17

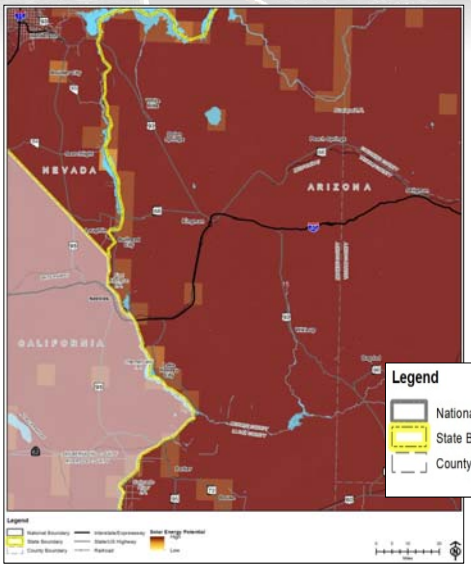
Energy Corridors



- Proposed energy corridors, as presented in the West-Wide Energy Programmatic EIS (2008)
- Northern Arizona/Southern Nevada priority section

18

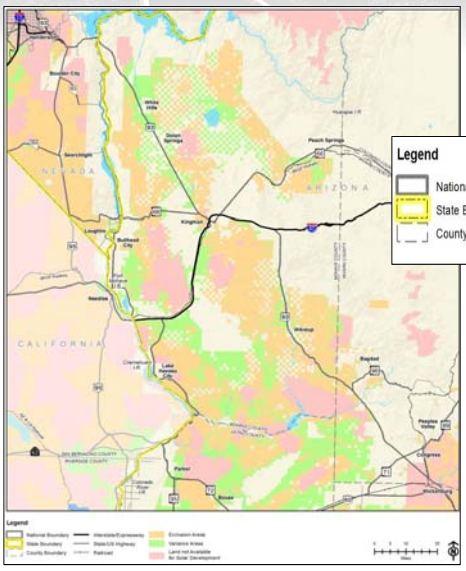
Solar Energy Potential



- Solar Energy Potential (NREL)
- Northern Arizona/Southern Nevada priority section

19

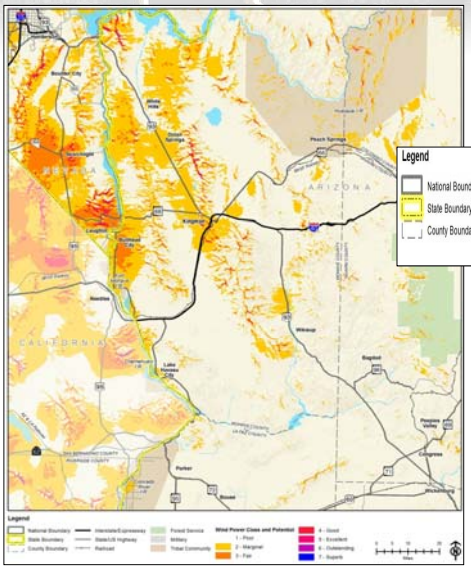
Solar Energy Development



- Solar Energy Development Programmatic EIS (2012),
- Northern Arizona/Southern Nevada priority section

20

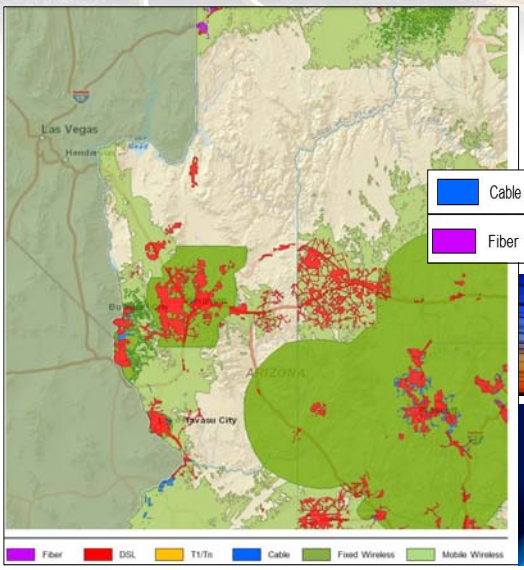
Wind Energy Potential



- Wind Energy Potential (NREL)
- Northern Arizona/Southern Nevada priority section

21

Broadband Availability



- Broadband Availability (ASET)
- Northern Arizona/Southern Nevada priority section

Cable | Fixed Wireless | Mobile Wireless
Fiber | DSL | T1/Tn

22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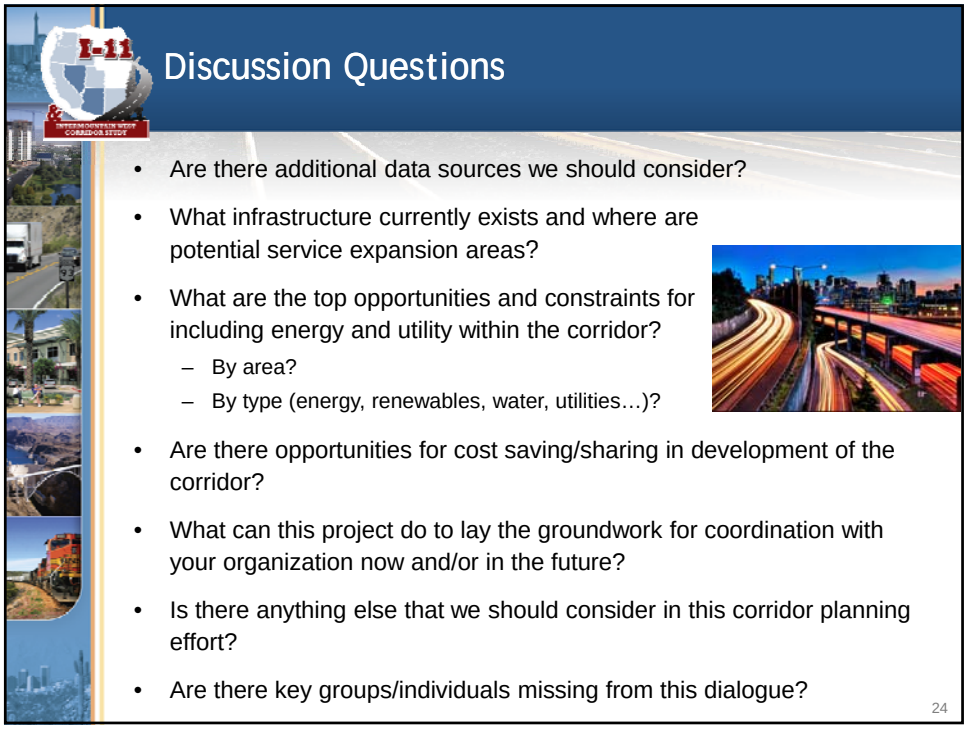
Discussion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Discussion Questions
• Are there additional data sources we should consider?
• What infrastructure currently exists and where are potential service expansion areas?
• What are the top opportunities and constraints for including energy and utility within the corridor?
– By area?
– By type (energy, renewables, water, utilities…)?
• Are there opportunities for cost saving/sharing in development of the corridor?
• What can this project do to lay the groundwork for coordination with your organization now and/or in the future?
• Is there anything else that we should consider in this corridor planning effort?
• Are there key groups/individuals missing from this dialogue?
24


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Next Steps


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Next Steps
Focus Group Meetings
January 8: Utility/Energy
January 22: Economic Development
January 29: Freight Users
February 5: Environment and Sustainability
February 12: Land Use and Community Development
February 19: Corridor Operations
February 26: Alternative Delivery and Finance
Reports
Technical Memorandum 1: Existing and Future Corridor Conditions (early Spring)
Preliminary Business Case Foundation (Late Spring)
Corridor Justification Report (Summer)
General Stakeholder Partners Meeting (May)
26


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