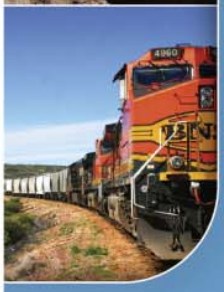




I-11 and Intermountain West Corridor Study

Corridor Operations Focus Group
February 19, 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 February 19, 2013, the Corridor Operations Focus Group was held. Meetings were conducted simultaneously in three locations: Las Vegas, Nevada; Carson City, Nevada; and Surprise, Arizona. Additionally, individuals could call-in and log-on to participate in a live webinar. A total of 38 participants signed in. The following report summarizes the results of this focus group.

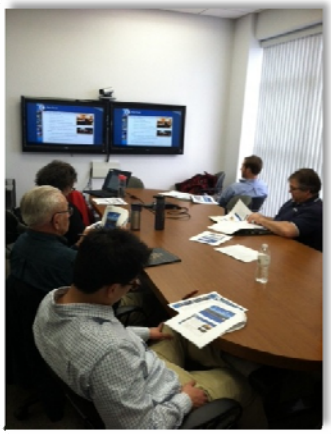


Photo 1: Carson City, Nevada participants viewing and listening to the presentation

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 prior to the focus group meeting.

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 provided a brief review of the project, vision concepts and work plan and schedule. Jennifer Roberts, project team member, reviewed existing transport characteristics then turned it back to Ms. Rosenberg who discussed multimodal opportunities. Audra Koester Thomas, project team member, highlighted some of the feedback already received relative to corridor operation opportunities and introduced the focus group discussion questions.

Photo 2: Las Vegas, Nevada participants follow along with the presentation

At the completion of the PowerPoint presentation, breakout session discussions were facilitated. Facilitators asked participants at each location to provide feedback on the following:

- Why is this Corridor needed and how important is it—or not?
- What particular modes are viable for this Corridor and what factors/thresholds need to be met to justify those modes?
- What other interesting developments or emerging technologies should be considered as we plan this Corridor?
- What existing/planned transportation hubs (i.e. airports, major rail stations, LPOEs) are critical for this Corridor to connect?
- Is there anything else that we should consider in this Corridor planning effort, and are there key groups/individuals missing from this dialogue?

The following identifies some of key points derived from the focus group discussion; full reports summarizing the discussion in each location are included in this report.

- We should look for additional uses for the highway to increase traffic, and thereby toll revenues, such as truck plazas. Solar generation within the corridor is another concept for revenue generation; however it does not need to be developed within the highway right of way. Federal land anywhere could be leased with the revenues earmarked for the highway corridor.
- This Corridor is needed to help diversify our city economically and culturally, to help us compete with other large cities, and to provide a reliable north-south route connecting the communities of Phoenix and Las Vegas (and beyond)
- Multimodal considerations should be emphasized within this Corridor, especially passenger and freight rail even if rail alternatives have significant geographic constraints (including between the Hoover Dam and Kingman). If near-shoring in Mexico really expands as predicted, then a rail connection to Las Vegas and other points north would be important.
- We need to secure sufficient right of way now to include rail and other components in the Corridor—despite the geographic or political challenges that exist now. Who knows what technologies or politics will evolve that will make rail or other modes feasible in the future
- Self-navigating vehicles are becoming a reality, and need to be considered in the design of I-11.

Carson City, Nevada Meeting Summary Report

NDOT
Room 108
1301 Old Hot Springs Rd.
Carson City, NV

Meeting Feedback

Following a brief PowerPoint presentation, Sondra Rosenberg facilitated participants in a dialogue regarding corridor operations opportunities related to the I-11 Corridor. The following feedback was provided by participants as part of that discussion.

Why is this Corridor needed and how important is it—or not?

- It is a vital corridor within Nevada, connecting the northern and southern portions by more than just a two-lane facility. It should accommodate passenger and freight and the Corridor should be extended to connect Arizona to Idaho
- The study team should utilize freight and accident data to determine if the Corridor is viable and/or to make a case for the Corridor
- Average daily truck traffic continues to grow each year, even with the declining economy
- Congestion on existing facilities (I-5, I-15) builds a case for an I-11 Corridor
- This is an opportunity to use technology to build a better facility
- This is an opportunity to offer more facilities, such as truck parking (truck stops, rest areas, etc.) where needed
- This is an opportunity to divert truck traffic in the case of weather events or to have redundant corridors in case of other emergencies
- Test corridor for new technologies such as lighted roadways, self heating, etc.
- An I-11 Corridor will continue to be important for the economy
- Some questions to consider:
    - Do we know what freight is currently moving east-west that might divert to a north-south corridor?
    - Does accident data show the need for additional lanes or dedicated lanes?
    - How does a future I-11 Corridor compete with other existing facilities?
    - Can we do a survey of truckers to ask these questions?

What particular modes are viable for this Corridor and what factors/thresholds need to be met to justify those modes?

- Land ferries for geothermal facilities; the can be an economic builder
- Increase in mining (i.e. fracking) will increase the demand for heavy truck, rail, etc.
- Access to outdoor activities in remote areas might be a consideration (by train?)
- Preserving state roadway system is important; utilizing any opportunity to remove heavy trucks from the Corridor and place freight on rail would save repair/lifecycle cost
- Environmental impacts could be realized by removing trucks and utilizing rail; huge GHG savings
- Airport connections are critical, including central hubs along Corridor (Phoenix, Las Vegas, Ely, Boise, etc.); Fed-Ex and UPS are getting to more remote locations without long truck hauls (Ely

which is a remote location but could be a new western hub; Silver Springs is built for larger planes but may need runway extensions for additional use)

- Connecting Las Vegas and Phoenix via freight rail should be considered, but challenges include track ownership and topography
- Connecting Las Vegas northeast to Ely and locations north could potentially utilize an old railroad right of way, but what would it take to connect and rebuild line?
- Contemplating gas line infrastructure could be considered as future needs exist across the Colorado River
- When considering a second bridge at Laughlin/Bullhead City, what would serve as a construction-related detour?

What other interesting developments or emerging technologies should be considered as we plan this Corridor?

- Projected volumes will drive infrastructure development (including the need for truck lanes, high occupancy vehicle lanes, a "smart corridor", etc.)
- Fiber connectivity should be considered, or at least placement of a conduit for any new construction
- Federal funds should be considered for providing connectivity to rural areas
- Interstate communications protocol should be considered
- Continue bi-state communication (e.g. Hoover bypass wind warning)
- National security and evacuation needs should be considered
- Smart roadway infrastructure, including lighting, should be considered; features may add expense, but lifecycle costs may be lower
- Consider future Federal Aviation Administration drone sites
- Consider weather conditions throughout corridor and apply appropriate technologies (e.g. anti-icing, road weather information systems, visibility warnings, wind warnings, etc.)
- Consider smart parking and plug-in parking to reduce idling
- Consider public private partnerships (e.g. truck facilities; public facilities provided by private entities)
- UNEV pipeline (eastern side of Nevada) could provide off-shoot opportunities; consider providing fuel sources in Nevada, not just from California
- Consider solar, tolling and public private partnerships
- Consider application of autonomous vehicles
- Review what speed potential rail opportunities would exist

What existing/planned transportation hubs (i.e. airports, major rail stations, LPOEs) are critical for this Corridor to connect?

- Bus connections, particularly near urban areas
- Energy corridors (but how wide would right of way need to be?)
- Military installations
- Also consider:

  - Truck stops/parking, located by considering potential weather impacts and driver regulations
  - Land ownership, look at federally owned land for placement of the Corridor

Is there anything else that we should consider in this Corridor planning effort, and are there key groups/individuals missing from this dialogue?

- Include the following groups/individuals in the dialogue:
  - Department of Defense
  - Tourism interests
  - GOEDA – Econ. Development
  - Casinos
  - LVCVA
  - Tim Crowley – mining
  - Planning commissions
- Consider TIMS for clearing incidents; pay for performance
- Consider reliability program based on volumes of traffic
- New airport (Ivanpah, or others) as well as truck and rail access to facilities
- Consider strategies for the Corridor to bypass/get around Las Vegas
- Consider a fuel pipeline out of Phoenix into this Corridor to accommodate future population demands
- Look at Caltrans efforts on US 395; does it make sense to connect to 95?
- US 93 alignment should have followed SR 318

Las Vegas, Nevada Meeting Summary Report

RTC Southern Nevada
Room 296
600 S. Grand Central Pkwy.
Las Vegas, NV

Meeting Feedback

Following a brief PowerPoint presentation, Dan Andersen facilitated participants in a dialogue regarding corridor operations opportunities related to the I-11 Corridor. The following feedback was provided by participants as part of that discussion.

Why is this Corridor needed and how important is it—or not?

- This Corridor is needed to help diversify our city economically and culturally, and to help us compete with other large cities
- This Corridor will enhance multimodal development which subsequently spurs economic development

What particular modes are viable for this Corridor and what factors/thresholds need to be met to justify those modes?

- Rail has significant geographic constraints between the Hoover Dam and Kingman, especially just south of the Dam, 17 miles through the Lake Mead National Recreation Area (LMNRA). Constructing rail within LMNRA, or any national park, is prohibited and requires legislative approval. The same is true of overhead power lines; this is an important factor as we consider sharing the Corridor with utilities. However, US 93 could be expanded through LMNRA as there is sufficient center median
- Rail could potentially (roughly) follow the US 95 alignment from Needles, north to Las Vegas, and thereby avoid the LMNRA and geographic constraints
- If nearshoring in Mexico really expands as predicted, then a rail connection to Las Vegas and other points north would be important
- There is existing rail right of way in Northern Nevada from abandoned rail lines; however they never abandoned the right of way. The Nevada State Rail Plan is a good reference for those opportunities
- We have limited influence over Union Pacific Railroad and BNSF Railway
- Maybe rail does not need to be contiguous through the entire Corridor all at once, but could begin now by adding segments and connectivity where available; we need to prepare for 50 years from now
- Freight rail does not have to tie directly into the heart of Las Vegas
- Rail doesn't have to follow the highway alignment
- We need to secure sufficient right of way now to include rail and other components in the Corridor despite the geographic or political challenges that exist now. Who knows what technologies or politics will evolve that will make rail or other modes feasible in the future

What other interesting developments or emerging technologies should be considered as we plan this Corridor?

- The Nevada Legislature wanted to replicate the success of the Dallas-Ft. Worth area, and thus commissioned an inland ports study. The Governor's office is wrapping up the study now
- We need to consider the changing demands and fuel types for vehicles and provide for future alternative fueling stations including electric, hydrogen and natural gas
- Electrification of truck stops and other trucking amenities should be considered
- Implement intelligent transportation systems along I-11, similar to what NDOT has deployed on I-15 between Las Vegas and Primm; advanced warnings on long corridors is very helpful
- Consider higher design speeds where possible. Advances in technology may make higher speeds more feasible in the future
- Pavement materials and applications are evolving; we should use the latest materials as part of this Corridor
- Self-navigating vehicles are becoming a reality and need to be considered in the design of I-11. John O'Rouke from the Nevada Highway Patrol test drove a Google vehicle and was amazed at the accuracy, safety and responsiveness of the vehicle. The vehicle stopped safely for an un-planned, unexpected pedestrian who stepped off the curb in front of the car

What existing/planned transportation hubs (i.e. airports, major rail stations, LPOEs) are critical for this Corridor to connect?

- If passenger rail is to be developed in the Corridor then it would need to connect with ExpressWest (or other high speed rail between Southern California and Las Vegas)
- A connection with the proposed Southern Nevada Supplemental Airport (SNSA, commonly referred to as the Ivanpah Airport) could be important, especially if I-11 bypassed Las Vegas to the south and west and continued north through Pahrump
- Business parks typically develop around reliever airports, which would benefit from additional highway network connections. For instance, the Scottsdale Airport has huge development surrounding it. However, business park connectivity would primarily be needed with Las Vegas, not Phoenix, which would be served by I-15
- While there is some support for routing I-11 around Las Vegas to avoid further congestion at the Spaghetti Bowl, for tourism or other purposes, maybe an I-11 that connects to the heart of Las Vegas is viable

Is there anything else that we should consider in this Corridor planning effort, and are there key groups/individuals missing from this dialogue?

- Include:
    - Bike clubs (it would be great to be able to make a bicycle trip between our cities)
    - Center for Business and Economic Research

Surprise, Arizona Meeting Summary Report

Communiversity
Room 1004
15950 N. Civic Center Plaza
Surprise, AZ

Meeting Feedback

Following a brief PowerPoint presentation, John McNamara facilitated participants in a dialogue regarding corridor operations opportunities related to the I-11 Corridor. The following feedback was provided by participants as part of that discussion.

Why is this Corridor needed and how important is it—or not?

- The need for this Corridor has already been discussed in several previous planning studies, such as the MAG I-10/Hassayampa Valley Transportation Framework Study, federal corridor designations noting the importance of CANAMEX/I-11, and most recently in the MAG Freight Transportation Framework Study. The MAG Freight Transportation Framework Study preliminary recommendations have shown that Arizona serves as a pass-through state for freight
    - By constructing a north-south freight corridor and being able to take advantage of transportation junction opportunities, Arizona can add value to goods. This could be the game changer for freight-related economic development
    - The Corridor could provide jobs and help diversify the economy
- US 93 is not a safe corridor to drive, although the improvements underway by ADOT are helping. If this study can establish a connection between I-10 and US 93, a true bypass around the Phoenix metropolitan area can be established (I-8, SR 85, I-11 connection to US 93). Additionally, the bypass could divert interstate truck traffic out of the core of the metropolitan area and decrease air quality issues
- When the Interstate system was built, its main purpose was defense and national security. As homeland security remains a national priority, could connecting (e.g., having some form of Interstate access) Arizona and Nevada defense installations serve as a need for the Corridor?

What particular modes are viable for this Corridor and what factors/thresholds need to be met to justify those modes?

- Freight rail is important. For the prospect of an inland port to be feasible, it is important to be served by more than one railroad. Currently, the only location UPRR and BNSF connect is in downtown Phoenix, which has no room for growth of freight-related industries. This Corridor could provide a freight connector between the two railroads, allowing inland port development anywhere within the Phoenix West Valley
- Unsure what the general population's interest in long-distance passenger rail is at this time; cultural/demographic shift would be required to justify the investment. However, this could be a viable need long-term. Arizona needs to develop a backbone local and regional transit system to support any form of long-distance passenger rail

What other interesting developments or emerging technologies should be considered as we plan this Corridor?

- Many new automotive technologies are already available and don't require alterations to the roadway corridor for implementation

- Ideas that should be considered include Wi-Fi technology at rest stops; monetize Wi-Fi along the road (e.g., children connecting to Netflix while on a car ride, but enforce that drivers do not use it)
- Consider solar energy to power lighting and other electricity needs
- Consider solar panels in right of way to supplement power for trains

What existing/planned transportation hubs (i.e. airports, major rail stations, LPOEs) are critical for this Corridor to connect?

- Connect inland port developments with rail and aviation services
- Connect land ports of entry (LPOE) to foster trade with Mexico. Currently only one Arizona LPOE has a rail crossing and is served by only one railroad (UPRR). To truly facilitate international trade, other railroad companies should be able to access the LPOE (e.g., freight rail connector, as discussed above)

Is there anything else that we should consider in this Corridor planning effort, and are there key groups/individuals missing from this dialogue?

- It would be interesting to see the support level for an I-11 Corridor amongst the Arizona State Transportation Board

Webinar Meeting Summary Report

Meeting conducted via Live Meeting and teleconference

Meeting Feedback

Following a brief PowerPoint presentation, Jenny Roberts and Audra Koester Thomas solicited feedback online and via teleconference regarding corridor operations opportunities related to the I-11 Corridor. The following feedback was provided by participants as part of that discussion.

Why is this Corridor needed and how important is it—or not?

- This Corridor is critical to moving freight from Mexico north to Canada
- This Corridor may be needed for passenger/freight movement, but only mass-transit/freight options should be considered. ADOT and NDOT should focus on passenger rail and freight rail only in order to minimize impacts to the environment, public health and safety, etc.
- Any "new pavement" construction should be considered carefully. Should the corridor be built, those cities/regions not along the final Corridor will lose out on potential economic development. Efficient and economic connectivity between Nevada and Arizona could have great benefits
- This Corridor is needed because the existing regional infrastructure was developed prior to the significant population growth of Arizona and Nevada; roads and railways travel east-west (not north-south), currently designed to carry people and goods between the West Coast and population centers east of Arizona and Nevada instead of between these population centers. New road and rail connections are needed

What particular modes are viable for this Corridor and what factors/thresholds need to be met to justify those modes?

- Fuel, time and emissions should be less for freight and passenger rail than lines currently used
- The modes that are viable for this Corridor are rail and highway uses facilitating the transport of freight and people from Mexico to Canada
- Modes for this Corridor should focus on moving people and goods without adding significantly more infrastructure or spurring more sprawl/development. Movement of people should focus on alternate modes and should seek to reduce the number of vehicles on the roads. Passenger rail and freight rail are well suited for this Corridor
- Currently there are very few modes of transport from Phoenix to northern Nevada and beyond (limited to vehicle and air modes). Rail connectivity may be a viable mode if freight and passenger demand can support the system
- A commuter rail feasibility study could help to identify appropriate right of way widths for future expansions
- Highway, passenger rail and freight rail modes are viable for this Corridor. As was suggested, the distance between Vegas and Phoenix would be conducive to attracting rail passengers. Significant movement of freight to/from Arizona and flows to/from the north and west. These are "missing links" that will perform well

What other interesting developments or emerging technologies should be considered as we plan this Corridor?

- Utilizing weigh-in-motion technology would allow the inspection of trucks from Mexico requiring inspection while allowing pre-screened trucks to bypass inspection sites
- Ensure reliable, strong cell service is available along the entire Corridor
- Provide Wi-Fi throughout the Corridor. This will enable rail travelers to conduct business en-route and encourage ridership. Support maintenance with easements leased to utilities. Stay with traditional rail rather than exotic alternatives
- Consider use of rapid charging stations; work with the intelligent transportation system experts to ensure that the route will be compatible with the emerging autonomous vehicles
- Consider solar/rechargeable fueling stations, hot spots and Wi-Fi bus shelters

What existing/planned transportation hubs (i.e. airports, major rail stations, LPOEs) are critical for this Corridor to connect?

- Connect existing airports and existing rail stations is imperative. Otherwise new airports and rail stations will be needed along the corridor in the future. The investment in existing transportation centers will be wasted if they are isolated from the corridor.
- Connect: LAS McCarran Airport; PHX Sky Harbor Airport; Sunset, Chief, and Zephyr AMTRAK routes; freight inland ports in Surprise and Kingman (Arizona); future freight inland ports and passenger hubs
- Connect north-south: Sonora, Mexico --> Phoenix --> Las Vegas --> Seattle
- Consider trail heads/bicycle amenities and overall bikeways along the corridor adjacent to rapid transit/bus stations and park and ride facilities

Is there anything else that we should consider in this Corridor planning effort, and are there key groups/individuals missing from this dialogue?

- Consider these questions as part of the study:
    - Does the corridor relieve congestion?
    - Does the corridor create congestion elsewhere?
    - Does the corridor create environmental issues?
    - Can the corridor mitigate environmental issues?
- Interim highway service exists in the form of US 93 and connecting roads. Consider recommending the development of interim rail service using existing rail lines from Phoenix to Parker, Arizona, and building connecting links from west of Parker north to the Union Pacific line from California to Las Vegas
- Be sure to include:
    - ASU
    - NAU
    - Sonoran Institute
    - Bicycle interest groups

Post-Meeting Feedback

Feedback provided after the meeting via the follow-up questionnaire to Stakeholder Partners or by other means. Feedback is provided as it was submitted and neither edited nor grammatically corrected.

Why is this Corridor needed and how important is it—or not?

- The corridor is essential to make the movement from Phoenix to Las Vegas safer and quicker. This improved corridor will enhance the economies of the whole corridor area, which is an outstanding year-round region to do business and to enjoy life, and live.
- I think it is necessary to support economic development and the oil and gas exploration, mining and outdoor sports
- Freight is either going to move east from Phoenix and north to the midwest or it can move north if I-11 is developed to Las Vegas and then north east on I-15 providing two possible efficient routs to move the freight
- Building an integrated I-11 provides untold opportunity for transportation, manufacturing, and distribution as well as other industry, such as tourism and complementing small businesses, driven by an accessible high mobility and reliable transportation corridor.
- This corridor provides an important opportunity for future regional traffic as well as interstate travel. The ability to bypass heavy traffic on I-10 will be imperative as the Maricopa County/Phoenix area continues to grow!

What particular modes are viable for this Corridor and what factors/thresholds need to be met to justify those modes?

- Vehicular transportation routes; high-speed rail; and telecommunications.
- If, and this is a big if, Mexican ports are a good alternative, we need to move goods N & S not just E & W. There is alot of manufacturing in Mexico supporting the automobile industry and this would be another plus for improving roads and rail.
- Truck traffic and the addition of rail would be excellent transportation modes. I rail is developed at the same time trains could then hook up with the main UP line out of Las Vegas
- Mohave County sees several “game changing” scale opportunities enabling I-11 to develop and function as a transportation and economic corridor throughout the Intermountain West. Viable modes include passenger cars, trucks, rail, and a key material transport mode - pipelines (e.g., water, etc.) Also consider dedicated car or truck lanes.

What other interesting developments or emerging technologies should be considered as we plan this Corridor?

- Intermodal Transfer Station in the Kingman area.
- Not to think about what is now available, but what the future may evolve into as far as moving people and goods. These types of projects also give a shot in the arm to support economics that provide needs along the corridor
- NA
- Connected vehicle applications employing a robust technological platform throughout the corridor enables integration of future multi-mode vehicle and infrastructure controls for safety and mobility while effecting reduced passenger and freight transport unit costs. Alternative energy production promotes multi-mode vehicle opportunities.
- 1. Public Private Partnerships. 2. Gudided car system3. Sustainable materials/technology

What existing/planned transportation hubs (i.e. airports, major rail stations, LPOEs) are critical for this Corridor to connect?

- Development of Kingman as the crossroads for 1-40 and I-11 with the BNSF rail lines.
- Ivanpah, Ely and what other hubs are identified by the study
- With U.S. 93 likely serving as the preferred corridor footprint for I-11, the nearest existing Mohave County transportation hub includes the Kingman Airport, currently configured to accommodate cargo aircraft, and its adjacent industrial park.

Is there anything else that we should consider in this Corridor planning effort, and are there key groups/individuals missing from this dialogue?

- Alan Coyner of the Nevada Division of minerals can give us an update on the oil and gas exploration and what their needs are if marketable quantities are found.
- This could be an economic steam engine for both Phoenix and Las Vegas
- Source documents on the powerpoint slides are helpful (particularly clickable links, if possible) and would give the study more credibility (some stats are sourced, some aren't).
- Please provide adequate consideration of the no-action alternative. We do not need additional freeways, yet assessments typically treat the no-action alternative as non-viable.

Appendices

List of Attendees by Agency

Presentation Transcript

PowerPoint Presentation

List of Attendees by Agency

Meeting	First Name	Last Name	Agency
Surprise	Asad	Karim	ADOT
Webinar	Michael	Kies	ADOT
Webinar	John	McNamara	AECOM
Surprise	Jaclyn	Pfeiffer	AECOM
Surprise	Vijayant	Rajvanshi	AECOM
Webinar	Jim	Dickey	Arizona Transit Association
Las Vegas	Dan	Andersen	CH2M HILL
Las Vegas	Bardia	Nezhati	CH2M HILL
Webinar	Jennifer	Roberts	CH2M HILL
Webinar	Tracy	Stevens	City of Avondale
Webinar	Kevin	Louis	City of Casa Grande
Las Vegas	Jason	Rogers	City of Henderson
Las Vegas	David	Bowers	City of Las Vegas
Las Vegas	Marco	Velotta	City of Las Vegas
Las Vegas	Philip	Klevorick	Clark County Comprehensive Planning Department
Surprise	Jim	Kenny	El Dorado Holdings
Carson City	Greg	Novak	Federal Highway Administration, Nevada Division
Carson City	Jin	Zhen	Federal Highway Administration, Nevada Division
Webinar	James	Schleich	Huitt-Zollars, Inc
Las Vegas	Bruce	Nyhuis	National Park Service
Carson City	Denise	Inda	NDOT
Carson City	Jeffrey	Richter	NDOT
Webinar	Tony	Rivera	NDOT
Carson City	Sondra	Rosenberg	NDOT
Carson City	Kent	Steele	NDOT
Carson City	Bill	Thompson	NDOT
Carson City	Kevin	Verre	NDOT
Las Vegas	John	O'Rourke	Nevada Highway Patrol
Carson City	Pete	Konesky	Nevada State Office of Energy
Las Vegas	Cash	Jaszczak	Nye County
Webinar	Andy	Smith	Pinal County
Webinar	Audra	Koester Thomas	PSA
Webinar	Robert	Bohannan	R.H. Bohannan and Associates
Las Vegas	Suparna	Dasgupta	Regional Transportation Commission of Southern Nevada
Las Vegas	Michael	Gainor	Regional Transportation Commission of Southern Nevada
Las Vegas	Beth	Xie	Regional Transportation Commission of Southern Nevada

Meeting	First Name	Last Name	Agency
Webinar	Lissa	Butterfield	Reno-Tahoe Airport Authority
Webinar	Tiffany	Sprague	Sierra Club

Presentation Transcript

The following is a transcript of the focus group presentation. It was completed in real-time, and is has not been edited, proofread or corrected. It may contain computer-generated mistranslations or electronic transmission errors, and may have inaccurate references, spellings or word usage. It is provided for purposes of reference only.

Operator: Good afternoon. My name is Brandon, and I will be your conference operator today. At this time, I would like to welcome everyone to the Focus Group Meeting for the I-11 Study Conference Call.

All lines have been placed on mute to prevent any background noise. After the speaker's remarks, all lines will be opened in order for you to ask questions. If you should need any assistance during the call, please press star then zero and an operator will come back online to assist you.

Thank you. Ms. Rosenberg, you may begin your conference.

Sondra Rosenberg: Thank you very much and thank you all for joining us today for the I-11 and Intermountain West Corridor Study Focus Group Meeting on Corridor Operations. The way this works to those of you who haven't been to any of these yet is we'll be giving a brief presentation and then we will break out for discussion and those discussions will occur at the various different locations and then those of you who are joining us by web and phone, please stay on the line and the discussion will be facilitated via the website and the phone call. So, with that, I'm going to give a brief study overview and then I'm going to turn it over to Jenny who's going to talk about existing transportation characteristics.

I'm going to come back and review multimodal opportunities, then I'm going to turn it over for discussion on how the input and discussion is going to occur, questions, things we've heard already, as well as next steps and then we'll break off for individual discussions. Next slide. And I do have to apologize my counterpart, Mike Kies at the Arizona Department of Transportation, was not able to join us today.

So, I'm sorry that you'll have to hear for me twice. And for those of you who don't know me in other locations, my name is Sondra Rosenberg and I'm the Nevada DOT's project manager for this. So, a little bit of background, various different

transportation authorizations can identify high priority corridors and the CANAMEX Corridor was designated back in 1995.

Some previous work was done before that and some additional work advancing that corridor has been done since then with various different studies through the Maricopa Association of Governments, RTC of Southern Nevada, Nevada DOT, Arizona DOT and most recently in the most recent transportation authorization moving ahead some progress in the 21st Century, the CANAMEX Corridor section, which is U.S. 93 between Phoenix and Las Vegas was designated as future Interstate-11. Since then, Arizona and Nevada geo-keys have signed an agreement and begun doing this study, which we'll look at it in more detail. Next slide.

So, this study includes two levels of investigation. We're looking at very detailed corridor planning between Las Vegas and Phoenix. That portion, which was designated as future Interstate-11, as well as high-level visioning for the areas north and south of that, potentially connecting all the way from Mexico to Canada with a new corridor.

We're looking at multimodal consideration, not just interstate and highway but freight rail, passenger rail, public transportation, as well as the transport of utilities and those sorts of things. Next slide. Well, there's lots of opportunities for this new corridor to enhance local, regional, national and global connectivity not just between Phoenix and Las Vegas but, you know, the southwest beyond that.

The opportunity to form unique connections with Asia and Mexico and the Southwestern United States, ultimately and potentially extending all the way to Canada; enhance economic competitiveness; provide redundancy and flexibility with the network and the opportunity to accommodate evolving modal choices and this is potentially a new corridor. We have the opportunity to accommodate what we see fit and how we see the future demand and to promote sustainable development. Next slide.

So, this is how the study is organized. At the top is the project sponsors and that is DOT and Arizona DOT where the -- you know, we're the ones heading this up. But we're working very, very closely with our core agency partners including Federal Highway Administrations, Federal Railroad Administration and the MPOs for the

Metropolitan areas of Phoenix and Las Vegas, which will be MAG and the RTC of Southern Nevada.

Just below that and really guiding and feeding a lot of this effort is our stakeholder partners, which are, you know, any entity or agency that has a stake in this and wants to have a say on this and wants to participate as a partner in this study. And then, we've developed these focus groups and these focus groups have we've brought together today is focusing on corridor operations. We've already met to discuss environment and sustainability, utility and energy, land use and community development, economic development and freight users and we have one more focus group meeting coming up next week to discuss alternative delivery and finance.

And we're supported by a consultant team and we also are consistently constantly looking for input from the public, as well as house that's corridor developed. Next slide. So, this is where we are at over the past six months or so.

We've really been collecting a lot of information and putting together the first technical memorandum. We're holding off on any deliverables until we've finished out with all focus groups because we've realized we're getting a lot of great input and additional data sources as we go through this focus group meeting. So, all that data that we're collecting and information guidance we're collecting, we'll see the preliminary business case foundation, which will then ultimately go into the corridor justification report.

And that's really our first big deliverable. After we determine if this corridor is justified, then we go through a more detailed planning of the different sections of that corridor. You know, the Northern Nevada section as we call it, which is Las Vegas North; the Las Vegas to Phoenix area, which we call our priority section and then the section south of Las Vegas.

So, that's where we'll start getting in to those different corridor alignments and that will ultimately feed in to the corridor concept report, which will be our final deliverable. So, with that, I'm going to pass it on over to (Jenny) to talk about some of the details in existing characteristics.

Jenny Roberts: Thanks, Sondra. As Sondra just pointed out, we've been working on the first technical memorandum for this study, which we're calling on existing and future corridor conditions tech memo. And as part of that effort, we've reviewed the existing transport characteristics in both Arizona and Nevada.

So, I'm just going to briefly summarize some of that information. So, we'll start off with highways. The purple lines on the roadway network map represent the east-west routes and the green lines highlight the north-south routes in both states.

And as you can see on this map, Interstate highway travel in Nevada and Arizona are primarily east-west movements. We've got I-8, I-10 and I-40 across Arizona and I-80 across Northern Nevada. So, north-south travel on these two spaces served by I-15 in Southern Nevada and I-17 and I-19 in Arizona.

And this map, the green lines on this represent the congressionally designated high priority corridors. And as Sondra mentioned, the CANAMEX corridor was designated in 1995 and that's shown in blue on this map and that includes I-19 from Nogales to Tucson and I-10 from Tucson to Phoenix, U.S. 93 from Wickenburg to Vegas, which is also a designated future I-11 and I-15 from Vegas to Canada. When you get to U.S. 95 in Nevada, it's also a high priority corridor.

But the majority of north-south travel between these two states uses U.S. 93. Next slide here is passenger rail. It is similar to highways.

Intercity and interstate passenger rail is restricted to east-west travel in both Arizona and Nevada. And as shown on the map on the right, there's three Amtrak rails serving Arizona; the Sunset Limited and Texas Eagle route across Southern Arizona, which was the orange line on the map and the Southwest Chief Route across Northern Arizona, which is the green line on this map. In Nevada, there's on Amtrak route, which is the California Zephyr and it runs across Northern Nevada (tail well) to IED.

But you can see looking at these, both states are lacking north-south passenger rail and Las Vegas has no passenger rail connections. The freight rail map on this slide shows the trend volumes on primary freight corridors in the U.S. and the red dot showed the freight crossings on the U.S. and Mexico border. So, there's two

primary east-west freight corridors in both states, as well as several branch and short lines.

However, none of the freight movement within the State of Nevada is transported via rail due to the lack of rail connections between Northern and Southern Nevada. And, of course, 30 percent of U.S. imports from Asia arrive at the west coast port and various transportation modes are used to transport those goods from these ports to distribution centers to the east. Arizona has nine land ports of entry where nearly 21 million people crossed into the U.S. in 2011.

The chart on this slide shows how these crossings were distributed between those nine ports of industry and by what modes. Over $22-1/2 million and 10 million tons of goods were imported and exported through these border crossings and Nogales has the only rail track along the Arizona and Mexico border. And the last topic was aviation.

Arizona and Nevada has two of the top ten busiest airports in North America. Las Vegas' McCarran International Airport is rank number eight and Phoenix Sky Harbor is rank number nine. And approximately 2-1/2 million passengers travel between these two states in 2011 and this table shows the total number of passengers that traveled between the airports in the four major metropolitan areas in both Nevada and Arizona.

You can see in this table 1-1/2 million people travel between Phoenix and Vegas alone. But McCarran and Sky Harbor among the top ten destinations from each of these four airports. So, with that, I'm going to hand it back to Sondra to discuss the multimodal opportunities.

Sondra Rosenberg: Thank you Jenny. So, there's lots of opportunities as I said with these corridors, potentially new corridor. We're looking at sort of long, long term.

So, we really have the opportunity here to shape this future corridor based on what we think is going to happen in the future based on lessons learned from previous corridors. So, next slide please. So, there's the opportunity to include flexibility and respond to societal changes such as demographic, which show an increasing demand for other forms of transportation besides the single occupancy vehicle,

potential to accommodate the transmission of new technology including intelligent transportation system, telecommunications, renewable energy transport and the list goes on.

There's certainly opportunities for the development of alternative energy, maybe not in our right of way but along the same corridor, other things to consider. Use of intelligent transportation systems to minimize the footprint by enhancing mobility and operations through technology. And the corridor between Phoenix and Las Vegas has been shown to be within the group's sweet spot for a potential passenger rail corridor.

That area, that's a little bit longer than people who would prefer to drive by themselves but maybe not long enough that people want to go through the house as going to an airport. Next slide. There are certainly constraints through this corridor as I grew all aware of.

You know, there is that big hole in the ground. There's topography of the Colorado River. Certainly, funding is an issue.

Changing demographics as we mentioned. Border crossings, what -- you know, what do we build to the -- to either border and what's going to this on the other side of that border is certainly important to consider international facilities and, of course, sensitive lands and wild life migration path. So, there's several reasons why these areas haven't been built out to date and these are just some of them.

But we also -- next slide please. We also have the opportunity to look for technology enhancements to help us sort of grow into the 21st century. Alternative fuel and electric vehicle recharging station, that's certainly something that has come to our attention in the past years.

Waste station or pre-clearance systems including electronic credentialing and screening, way in motion, smart parking for heavy trucks. We all recognize the truck parking continues to be an issue on many of our corridors. Smart signs, corridor-wide information sharing, which includes real-time travel information and some of the traditional things we were -- we've all gotten use to such as 511 traveler

information, dynamic message sign, close circuit T.V. and those that are sort of in development as well such those smart times.

Regional and interstate incident management, safety pullouts, weak areas. We need to consider safety truck parking, all those of sort of things. With these days, technology can help us to accommodate a lot of that.

Next slide. And, now, I'm going to pass it back over to Audra to talk about -- to lead us into the discussion we're going to have.

Audra Koester Thomas: Thanks so much, Sondra. Again, my name is Audra Koester Thomas), and I will just lead you through how we're going to use your input. Again, if you are somebody who has participated in a previous focus group, these slides will look familiar. How are going to be using your feedback?

We really need to understand whether or not this corridor is important. As Sondra had identified some of our major deliverables as part of this projects include the corridor justification report and preliminary business case foundation, which we'll outline the need if any for this corridor. We'll also be looking for your input on modal development and what should be included as part of this corridor.

In fact, we have a specific question related to that today. And what should the corridor look like including technology, not just the physical environment -- physical built environment? We will be using your feedback to inform not only this phase but future phases of this project to create a holistic and flexible corridor and in particular relation to any potential future NEPA-related study.

We want to make sure that the decisions that are made are inclusive of feedbacks not just from our important key stakeholders such as yourselves but the public as well. So, as we move along, we have already received some feedback. So, of you participated with us last fall in the first stakeholder partners meeting that we held in a similar fashion in several locations in Arizona and Nevada through a joint presentation.

We've already heard a lot of feedback related to the desire for multimodal -- a multimodal corridor including a north-south passenger and freight rail alternative

and the importance of that. And if you will recall some of the slides that were covered by Jenny earlier today identified that gap in access. We want -- we heard that.

We want to incorporate connected vehicle infrastructure to minimize future costs for travel and to utilize potential comment right away for telecommunications, energy, not just a transportation corridor ad some of you may have been involved in earlier focus groups or we really focused on that as part of the utility discussion. We've heard ideas including providing information technology assets including things like Wi-Fi to the traveling publics and to provide efficient connections to airports and other key hubs will be a question we ask as well for you today. And then, the desire to be a smart corridor incorporating various future technologies and the potential to expand to a known technology at this point in time.

So, with that, we have several questions for you today. The first question we're going to open up with is, why is this corridor and how important is it or isn't it? It's important to realize relevant to the course NEPA -- future NEPA documentation that we are considering a no-build option as well.

And so, some of our preliminary study really needs to investigate what is the need for this corridor. So, we'll be opening our conversation with that question. Then, we'll move in to the multimodal aspect and ask for, what particular modes are viable for this corridor?

And to those modes, what are the factors or thresholds that need to be met to actually justify the implementation of those model aspects. We'll also be asking you what interesting developments or emerging technologies are interesting and should be considered as we plan for this corridor and also what existing our plan transportation hubs such as airports, rail stations, ports of entry are critical for this corridor to connect and then we'll finish up with our standard question. Is there anything else that we need to consider in this planning effort or are there any key groups or individuals missing from the dialogue?

It's an opportunity. If we didn't cover something that you are hoping that we would cover today, it's an opportunity for you to provide that feedback then. After we get

through our discussion, it's important to recognize that this is just one element in the larger phase.

As Sondra indicated earlier, we've held these focus groups over the course of January and February and we're closing in on our last two today for corridor operations and then next week with our final focus group on alternative delivery in finance. As Sondra mentioned, we have a couple key documents pending. The research and study team has been busy incorporating aspects to the technical memorandum.

But as Sondra mentioned, we've been really informed by these focus groups and that deliverable won't be provided and shared until we conclude these focus group meetings because of some of the important information we've gathered from this event. And then, the point of our business case and corridor justification reports will be coming later this spring and summer with anticipated stakeholder partners' meeting. Our second sometime in May.

So, with that, thank you for participating again. Sondra, I'll ask if you have any final closing statements or comments that you would like to make before we split up into our individual meetings.

Sondra Rosenberg: No. I just want to thank everyone for their time today.

Audra Koester Thomas: All right. Great. Thanks so much, everybody and if you're part of the webinar or conference call, if you will just hold on for a minutes while the other locations disconnect and Jenny and I will pick up the conversation with you here in just a moment.

I-11 & Intermountain West Corridor Study

Focus Group Meeting

Corridor Operations

In partnership with

February 19, 2013

Agenda

- Study overview
- Review of existing transport characteristics
- Review multimodal opportunities
- Input on the vision for corridor operations and modes in the corridor
- 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

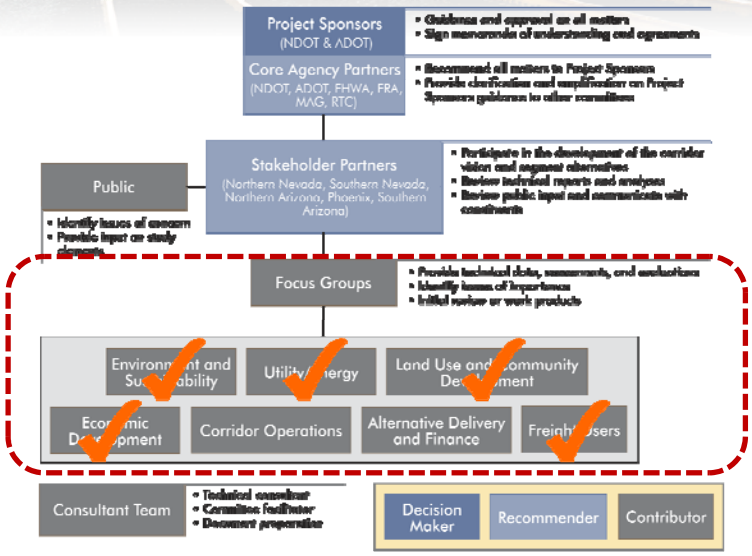
- **Enhance local, regional, national and global connectivity**
  - Complete regional connections between Southern California, Phoenix, and Las Vegas
  - Form unique connections with Asia, Mexico, and the Southwest US—ultimately extending to Canada
- Enhance economic competiveness and activity
- **Provide network redundancy and flexibility**
- **Provide flexibility for evolving modal choices**
  - Demographic changes may create higher demand for passenger rail
  - Incorporate technology
  - Include utilities and communications
- Promote sustainable development





5

Study Participants



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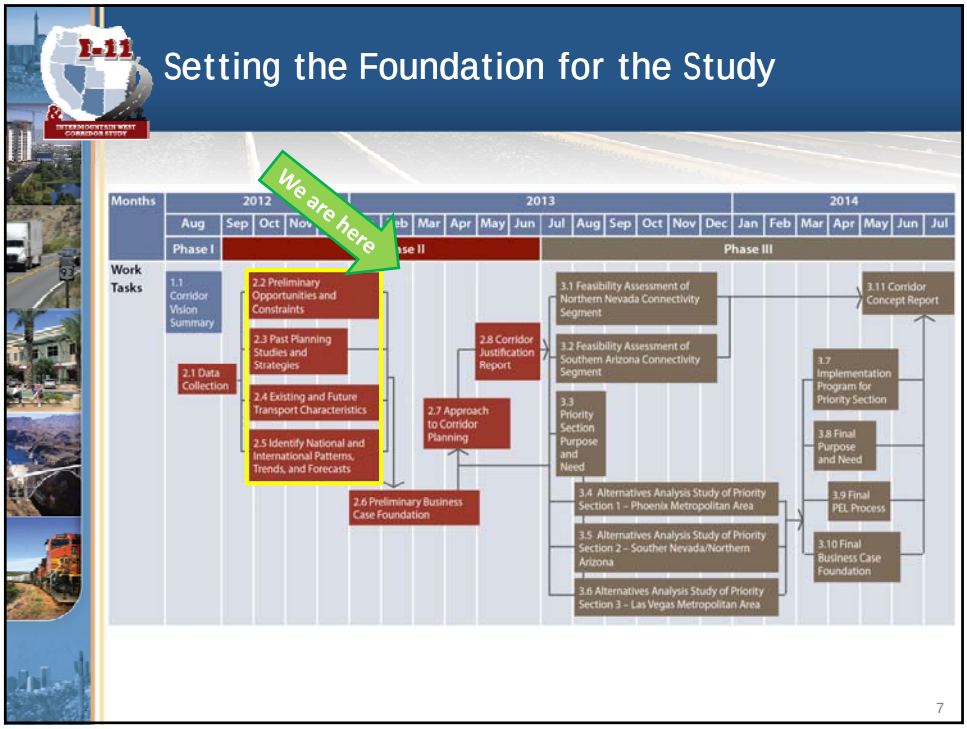

Setting the Foundation for the Study
We are here
Months
2012
2013
2014
Aug
Sep
Oct
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Phase I
Phase II
Phase III
Work Tasks
1.1 Corridor Vision Summary
2.1 Data Collection
2.2 Preliminary Opportunities and Constraints
2.3 Past Planning 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
7


NEVADA DOT
ADOT
Existing Transport Characteristics

Existing Transport Characteristics: Highways

- Interstate highway travel in Nevada and Arizona are primarily east-west movements
  - I-8**, I-10, I-40 and I-80** all serve east-west travel (**transcontinental routes**)
  - I-15, I-17, and I-19 serve north-south travel

Arizona & Nevada Roadway Network

9

Existing Transport Characteristics: Highways

- Congress designated some north-south "high priority corridors"
  - CANAMEX (blue on the map)
  - US 95
- Most north-south travel between Arizona and Nevada uses US 93

Arizona & Nevada Roadway Network

10

Existing Transport Characteristics: Passenger Rail

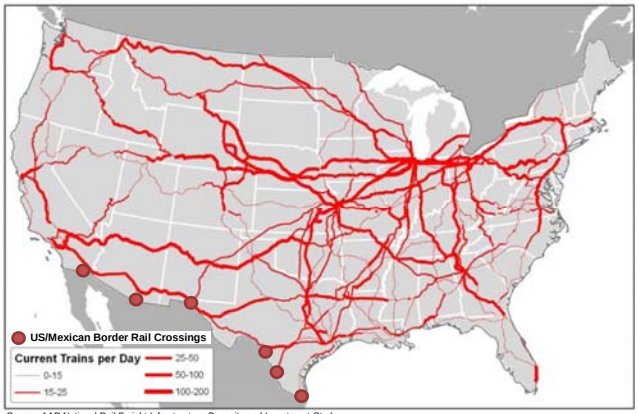
- Intercity and interstate passenger rail is restricted to east-west travel in Arizona and Nevada
- Three Amtrak routes serve Arizona
  - Southwest Chief
  - Sunset Limited (and Texas Eagle)
- One Amtrak route serves Nevada (California Zephyr)
- States lack north-south passenger rail
- Las Vegas has no passenger rail connections

Arizona & Nevada Amtrak Rail Routes

11

Existing Transport Characteristics: Freight Rail

- Two primary east-west freight rail corridors in both Arizona and Nevada
- Several branch and short lines
- Lack of rail connections between southern and northern population centers in Nevada



Source: AAR National Rail Freight Infrastructure Capacity and Investment Study

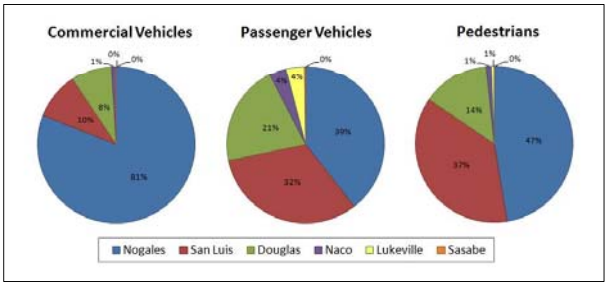
2007 Corridor Volumes by Primary Freight Corridor

12

Existing Transport Characteristics: Ports

- 70% of U.S. imports from Asia arrive on the West Coast with the majority destined for the Midwest and Texas
- Nearly 21 million people crossed into the U.S. through Arizona LPOEs in 2011
- Over $22.5 million and 10 million tons of goods were imported/exported to/from Mexico through Arizona border crossings
- Nogales DeConcini LPOE has the only rail crossing in Arizona

Nogales LPOE



2011 Distribution of Mexico-to-Arizona Border Crossings by Mode

13

Existing Transport Characteristics: Aviation

- Two of the top 10busiest airports in North America: McCarran (#8) and Sky Harbor (#9)
- 2.5 million air passengers traveled between Arizona and Nevada in 2011
- McCarran and Sky Harbor are among the top 10 destinations from the primary airports in each state: TUS, PHX, LAS and RNO

2011 Total Domestic Air Passenger Enplanements by Origin and Destination

Origin/Destination	Tucson	Phoenix Sky Harbor	Las Vegas McCarran	Reno/Tahoe
Tucson	0	204,492	155,174	1,094
Phoenix Sky Harbor	197,950	0	767,923	214,540
Las Vegas McCarran	156,608	759,415	0	324,359
Reno/Tahoe	972	221,891	318,538	0

Source: BTS Data T-100 Domestic Market (U.S. Carriers)
Note: The number of enplanements is the total number of passengers boarding an airplane at the origin airport and deplaned at the destination airport. It does not include arriving or through passengers.

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NEVADA DOT
ADOT
I-11
Multimodal Opportunities


I-11
Multimodal Opportunities
• This corridor has the opportunity to include flexibility and provide options to respond to societal changes in the region
– Demographics show demand for alternative transportation modes (i.e. passenger rail)
– Potential to accommodate transmission of new technology (ITS, telecommunications, renewable energy, etc.)
• Opportunities for alternative energy (solar development, wind farms, etc.)
• Use of Intelligent Transportation Systems to minimize footprint by enhancing mobility and operations through communication technologies
• Corridor between Phoenix and Las Vegas is within the "sweet spot" (200-300 miles) for potential passenger rail corridor
16

Multimodal Constraints

- Crossing the Colorado River
- Topography
- Funding
- Changing demographics
- International border crossings
- International facilities
- Sensitive lands and wildlife migration paths

17

Potential Technology Enhancements for Consideration in the Corridor

- Alternative fuel / electric vehicle recharging stations
- Weigh station pre-clearance systems
  - Electronic credentialing/screening
  - Weigh-in-motion
- Smart parking for heavy trucks
- Smart signs
- Corridor-wide information sharing
  - Reliable real-time traveler information
  - 511, DMS, CCTV, etc.
- Regional and interstate incident management
- Safety pullouts/relief areas

Source: ADOT

Source: US Department of Energy

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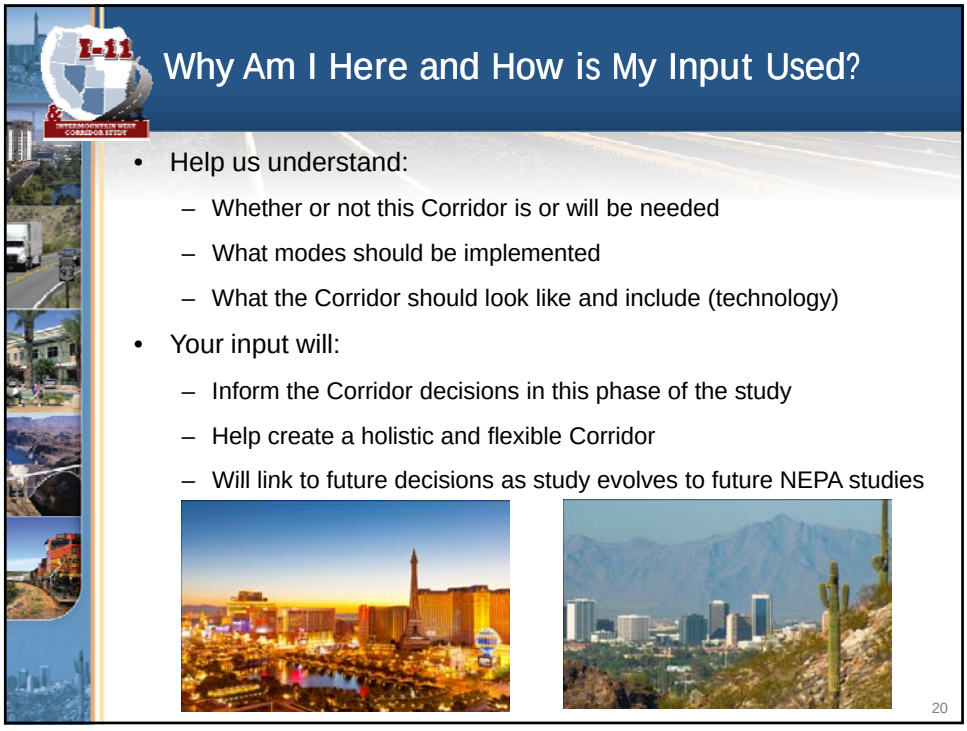
NEVADA DOT
ADOT
I-11
Discussion


I-11
Why Am I Here and How is My Input Used?
• Help us understand:
– Whether or not this Corridor is or will be needed
– What modes should be implemented
– What the Corridor should look like and include (technology)
• 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
20

Stakeholder Partner's Input Received to-date: Corridor Operations Opportunities

- Provide a multimodal corridor including north-south passenger and freight rail
- Incorporate future connected vehicle infrastructure to entire Corridor (minimize user costs for travel)
- Utilize common right of way corridor for multiple uses (telecommunications, transportation, energy, etc.) which could be a source of revenue for construction and maintenance.
- Provide travelers with access to information technology (e.g., wi-fi)
- Provide efficient connections to airports
- Become a "smart" corridor, incorporating various technologies and infrastructure

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Discussion Questions

- Why is this Corridor needed and how important is it—or not?
- What particular modes are viable for this Corridor and what factors/thresholds need to be met to justify those modes?
- What other interesting developments or emerging technologies should be considered as we plan this Corridor?
- What existing/planned transportation hubs (i.e. airports, major rail stations, LPOEs) are critical for this Corridor to connect?
- Is there anything else that we should consider in this Corridor planning effort, and are there key groups/individuals missing from this dialogue?

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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)

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ADOT
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