Southern Arizona Leadership Council

Phase 2 Review and Phase 3 Process

In partnership with
Agenda

- Phase 2 Summary and Findings
- Discuss Goals and Objectives
- Discuss Evaluation Framework
- Discuss Alternative Modes to be Considered
Update Summary - Phases 1 & 2 Deliverables

Deliverables (Phases 1 & 2):

- Corridor Vision Summary (Completed)
- Initial PEL Checklist (Completed)
- Draft Public Involvement Plan (Completed)
- Corridor Justification Report (draft posted to website 7-2-2013)
- Existing Natural and Built Environment Tech Memo (under review)
The Southwest Triangle is on a trajectory to be the strongest American region that maintains linkages to the world’s fastest emerging economies in both Asia and Latin America.

The Southwest Triangle Megaregion and the Intermountain West have an opportunity to mirror the successes of the Texas Triangle and the NASCO Corridor.
Population and Economic Development Trends

- Population and economic growth in Arizona and Nevada will continue to outpace the U.S.
- Arizona and Nevada are focused on diversifying their economies

Existing and Future Transport Characteristics

- Additional capacity needed on north-south highways
- Congestion on US 93 is expected to increase
- 2.5 million air passengers travel between Arizona and Nevada
- Demand for passenger rail is expected to grow
- Trucks transport about 75 percent of freight by value in Arizona and Nevada
Preliminary Business Case Foundation

- The Intermountain West, under several scenarios considered, will experience significant sustained growth
- I-11 and the Intermountain West Corridor will be needed to prevent possible gridlock that could thwart projected economic growth
- By strategically enhancing transportation infrastructure, the region may also have the opportunity to enjoy incremental and significantly enhanced economic growth related to important trends in regional and national trade.
- The increasing importance of Mexico as a trading partner
- The reliability of freight movement will play a major role in deciding how goods are moved from international manufacturers to markets throughout the Intermountain West
Key justifications for the I-11 and Intermountain West Corridor

- Enable economic development
- Add needed north-south capacity
- Integrate the economies of the Southwest Triangle megaregion and improve connections to other regions
- Capitalize on Mexico’s growing role in North American manufacturing and trade
- Support economic development Initiatives of Arizona and Nevada
- Prevent congestion from crippling economic competitiveness
- Comply with enabling federal legislation
Update Summary - Phase 3 Deliverables

Deliverables: (Phase 3):

- Future Connectivity Corridor Feasibility Assessment (Winter 2014)
- Priority Corridor Segment Alternatives Study Report (Spring 2014)
- Final Purpose & Need (late Spring 2014)
- Final Business Case Foundation (late Spring 2014)
- Completed PEL Checklist (late Spring 2014)
- Corridor Concept Report (Summer 2014)
Goals and Objectives Statement
Purpose of the Goals and Objectives Statement

- First step in the development of the Project’s Purpose and Need Statement.
- Evaluates the need for the I-11 and Intermountain West Corridor to be shared with agencies and other stakeholders and provides a big-picture explanation of the potential benefits of the I-11 and Intermountain West Corridor.
- Shapes the range of corridor alignments developed and evaluated for the project.
- Project stakeholder input will be used in the development of the project’s Purpose and Need Statement as the study progresses.
- As we move from the planning stage to the NEPA phase, separate Purpose and Need Statements will be developed for each segment/project.
Corridor-wide Goals and Objectives

- The goal of the proposed action is to establish a high-capacity, limited-access, transportation corridor connecting Mexican ports and manufacturing areas with Arizona’s and Nevada’s largest regional, national and international manufacturing and economic activity centers to support regional, national and international trade.

- For AZ and NV, the goal of the proposed action is to assist in diversifying the states’ economies to target industry clusters that rely heavily on interconnected and efficient transportation systems to transport goods and facilitate business attraction/retention.
Corridor-wide Goals and Objectives

- Several factors that describe state and federal actions that speak to the need for the Corridor, as well as transportation problems the corridor has the potential to address include:
  - Legislation
  - System Linkage
  - Trade Corridor
  - Modal Interrelationships
  - Capacity/Congestion
  - Economics
  - Project Status
Federal transportation authorizations identified high priority corridors.

CANAMEX Corridor designated (1995).

CANAMEX Corridor along US 93 between Phoenix and Las Vegas designated as future “I-11” in MAP-21 (2012).

Other high priority corridors relevant to the study:

- US 395 from Reno to Canada (19)
- US 95/I-580 from Reno to Las Vegas (68)
- US 95 from Idaho/Oregon state border to Canada (43)
- Improving connections between Phoenix and Las Vegas establishes a critical missing leg of the Southwest Triangle Megaregion.

- Provide rural connectivity – linking rural areas to economic anchors, providing access to more jobs and services and creating economic opportunities.

- Provides new link between Phoenix and Las Vegas and fills missing connection between I-10 and US 93 south of Phoenix.

- Providing a safe and efficient connection between Phoenix and Las Vegas has the ability to prolong the need for additional airport expansions in Arizona and Nevada.
Largest LPOEs with Mexico are located in California and Texas which are well-connected to the National Highway System.

Major trade corridors I-5 and I-10 have grown more congested and less efficient, which will stimulate demand for additional north-south routes like the I-11 and Intermountain West Corridor to accommodate trade flows.

Freight flows create a crossroad of opportunities for the region’s economies, as the freight flows increase demand for commercial activity centers, distribution and logistics centers, and inland ports and reloading facilities.
Enhance highway connections with ports, rail intermodal facilities, and the region’s airports.

With connections to I-8, I-10, I-15 and I-40, the region would efficiently accommodate freight from the POLA/POLB by rail and/or highway.

Provide multimodal linkages between existing and future foreign ports and critical east-west, high-speed transportation corridors in the U.S., the junctions of which can provide significant regional economic development opportunities.
The metropolitan areas of Las Vegas and Phoenix rank in the top 50 cities for congestion costs per auto commuter, with Las Vegas ranked 41st ($532) and Phoenix 16th ($821).

Under all alternative trade scenarios considered, the region will experience significant sustained growth in the regional economy, accompanied by corresponding growth in travel demand.

Opportunity to attract freight shipments from less efficient travel corridors and experience economic growth, particularly at the transportation hubs that develop around the intersection of the north-south and east-west routes.
Between 2010 and 2030, the Intermountain West is projected to grow by over 28%, to 32.1 million people, which exceeds the forecasted U.S. growth rate of nearly 18%.

51% of employees in NV and 43% of employees in AZ work in industries that depend on a reliable regional transportation network for transporting goods and tourists.

Economic benefits from providing connectivity for activity centers between Mexico and Canada.
- NDOT and ADOT worked together to construct the Hoover Dam Bypass and to conduct US 93 corridor improvements on both sides of the bridge.

- ADOT plans to invest $0.5 billion dollars when funds become available to fully upgrade US 93 to a 4-lane divided highway north of Phoenix to the state line.

- NDOT fast-tracked improvements to widen US 93 to four lanes on the Nevada side of the bridge to Boulder City.

- Corridor also advancing through:
  - NDOT/RTCSNV Boulder City Bypass (2005 and ongoing)
Evaluation Criteria/Framework
Evaluation Process

- Multi-level evaluation process
  - Priority Corridor Segment
  - Future Connectivity Segments

- “Alternative” is an alignment containing one or more modes (e.g., highway, rail) within one or more corridor segment
  - Alternatives could consist of a new or existing transportation facility (or a combination of both)

- Alternatives to be evaluated using evaluation criteria which can be measured qualitatively or quantitatively

- Evaluation to result in two or more alternatives for further planning
Evaluation Process

Universe of Alternatives
- Stakeholders identify a broad range of alternatives for I-11 & Intermountain West Corridor (August 2013)

Evaluation Criteria
- Establish a set of criteria in order to evaluate how well each alternative address the identified project goals and objectives. (July 2013)

Level 1 Screening
- Utilizes a limited number of Evaluation Criteria to eliminate, or screen out, alternatives that do not meet the project goals and objectives (October 2013)

Level 2 Screening
- Detailed screening that incorporates a large number of Evaluation Criteria and Measures of Effectiveness to identify the Recommended Alternatives (December 2013)

Recommended Alternatives
- Recommend two or more alternatives, including No-Build, for further planning and environmental work during the next phase of project development (February 2014)
Proposed Evaluation Criteria - Level 1

- Legislation
- System Linkage
- Trade Corridor
- Modal Interrelationships
- Capacity/Congestion
- Economics
- Project Status / Transportation Policy
- Environmental Sustainability
- Land Use and Ownership
- Cost
- Community Acceptance

<table>
<thead>
<tr>
<th>Evaluation Category</th>
<th>Proposed Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislation</td>
<td>How well does the alternative meet the intent of legislative actions, including MAP-21 and the 1995 National Highway Systems Designation Act?</td>
</tr>
<tr>
<td>System Linkage</td>
<td>How well does this alternative connect major national and international activity centers from Mexico to Canada through the Intermountain West?</td>
</tr>
<tr>
<td>Modal Interrelationships</td>
<td>How well does this alternative most directly close gaps and/or develop missing linkages in the regional and national transportation network?</td>
</tr>
<tr>
<td>Capacity/Congestion</td>
<td>How well does this alternative connect with adjacent segments/sections?</td>
</tr>
<tr>
<td>Trade Corridor</td>
<td>How well does this alternative connect major freight hubs and high-capacity transportation corridors?</td>
</tr>
<tr>
<td>Project Status / Transportation Policy</td>
<td>How well does this alternative maximize opportunities for intermodal connectivity?</td>
</tr>
<tr>
<td>Environmental Sustainability</td>
<td>How well does this alternative relieve existing and projected congestion between and within the major activity centers in Nevada and Arizona?</td>
</tr>
<tr>
<td>Economics</td>
<td>How well does this alternative support state and national economic development goals?</td>
</tr>
<tr>
<td>Project Status / Transportation Policy</td>
<td>How well does this alternative comply with corridor-related actions taken to date?</td>
</tr>
<tr>
<td>Land Use and Ownership</td>
<td>How well does this alternative conform to locally adopted transportation plans?</td>
</tr>
<tr>
<td>Environmental Sustainability</td>
<td>How well does this alternative minimize environmental impacts (such as waterways, floodplains, aquifers, and biological connectivity)?</td>
</tr>
<tr>
<td>Cost</td>
<td>How consistent is this alternative with regional and local growth strategies and land ownership patterns?</td>
</tr>
<tr>
<td>Community Acceptance</td>
<td>How well is this alternative accepted by the local communities?</td>
</tr>
</tbody>
</table>
## Alternative Modes for Consideration

<table>
<thead>
<tr>
<th>Mode</th>
<th>Southern Arizona Future Connectivity Segment</th>
<th>Priority Corridor Segment</th>
<th>Northern Nevada Future Connectivity Segment</th>
<th>Reference Citations for Justification</th>
<th>Conceptual Approach</th>
<th>Issues for Further Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highway</td>
<td>![Highway Image]</td>
<td>![H]</td>
<td>![H]</td>
<td>Priority Corridor segments designated in MAP-21</td>
<td>Combination of new “greenfield” corridor and upgrades to existing corridors (e.g., US 93)</td>
<td>Requires demonstrated market demand; no current direct Greyhound bus service between Reno/Las Vegas or Las Vegas/Phoenix</td>
</tr>
<tr>
<td>Passenger Rail</td>
<td>![Passenger Rail Image]</td>
<td>![H]</td>
<td>![M]</td>
<td>![](FRA Southwest Multi-State Rail Planning Study)</td>
<td>Potentially accommodated within highway median, or elsewhere within right-of-way</td>
<td>Requires demonstrated market demand² – Intercity rail – High-speed rail</td>
</tr>
<tr>
<td>Freight Rail</td>
<td>![Freight Rail Image]</td>
<td>![H]</td>
<td>![M]</td>
<td>![](MAG Hassayampa and Hidden Valley framework studies)</td>
<td>Critical connectivity needed between Mexico, UP RR Sunset Route and BNSF Transcon corridors</td>
<td>Cost effectiveness of Peavine corridor reconstruction versus “greenfield” corridor development</td>
</tr>
<tr>
<td>Major Utility and Communications</td>
<td>![Major Utility Image]</td>
<td>![H]</td>
<td>![M]</td>
<td>![](BLM-designated solar energy generation zones)</td>
<td>Could be accommodated in “set aside” within highway right-of-way</td>
<td>General Utility Focus Group support – Lacks detailed interest from utility providers at this point in the planning process</td>
</tr>
</tbody>
</table>

- **H**: High potential of modal alternative in listed segment/section
- **M**: Moderate potential of modal alternative in listed segment/section
- **L**: Low potential of modal alternative in listed segment/section

¹ Awaiting release of FRA Southwest Multi-State Rail Planning Study
Stakeholder Engagement in Evaluation Process

- **Evaluation Criteria**
- **Universe of Alternatives**
  - 5 Geographic Stakeholder Partners Meetings to discuss Universe of Alternatives
- **Level 1 Screening**
  - 5 Geographic Stakeholder Partners Meetings to discuss Level 1 Screening
- **Level 2 Screening**
  - 3 Geographic Stakeholder Partners Meetings to discuss Level 2 Screening for 3 Priority Segments
- **Recommended Alternatives**
  - Joint Stakeholder Partners Meeting to discuss Recommended Alternatives
QUESTIONS?

Project Contacts:

Sondra Rosenberg, PTP  
Nevada Department of Transportation  
1263 South Stewart Street  
Carson City, NV 89712  
srosenberg@dot.state.nv.us  
(775) 888-7241

Michael Kies, PE  
Arizona Department of Transportation  
206 S. 17th Avenue  
Phoenix, AZ 85007  
mkies@azdot.gov  
(602) 712-8140