

I-11 & Intermountain West Corridor Study

Nevada Transportation Conference



In partnership with







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Assistant Director, Planning Nevada Department of Transportation

April 15, 2015



A Little History



"Our unity as a nation is sustained by free communication of thought and by easy transportation of people and goods. The ceaseless flow of information throughout the Republic is matched by individual and commercial movement over the vast system of inter-connected highways crisscrossing the Country and joining at our national borders with friendly neighbors to the north and south."

President Dwight D. Eisenhower, February 22, 1955.

1956 Federal Aid Authorization



1957 - 1998 Additions

I-11

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INTERMOUNTAIN WEST CORRIDOR STUDY SEATTLE PORTLAND 89 NORTH DAKOTA MONTANA PORTLAND OISE MINNEAPO ESOT NEVAD DETROIT 94 CLEVELAN 380 NEW YORK CITY WYOMING ALT LAKE CIT 76 99 LADELPHIA RENO 80 DES MOINES 505 OMA SACRAMENTO 76 SAN FRANCISCO GAKLAND DENVER NEBRASKA KANSAS KANSAS CITY TOPEKA 335 NORFOLK LASVEGAS UTAH COLORADO NEW MEXICO WICHITA OKLAHOMA TEXAS ARKANSA KNOX LOS ANGELES 69 NAS TULSA 49 ALBUQUERQUE OKLAHOMA CITY AMARILLO 40 LITTLE ROS SAN DIEGO PHOENIX 30 CHARLESTON 69 TUCSON LOUISIANA SAVANNAH FORT WORTH DALLAS 1 65 ALABAMA 49 ACKSONVILLE AUSTIN HOUSTON WORLEANS GALVESTON AN ANTONI 4 Ful ORPUS CHRISTI MAIN

High Priority Corridors



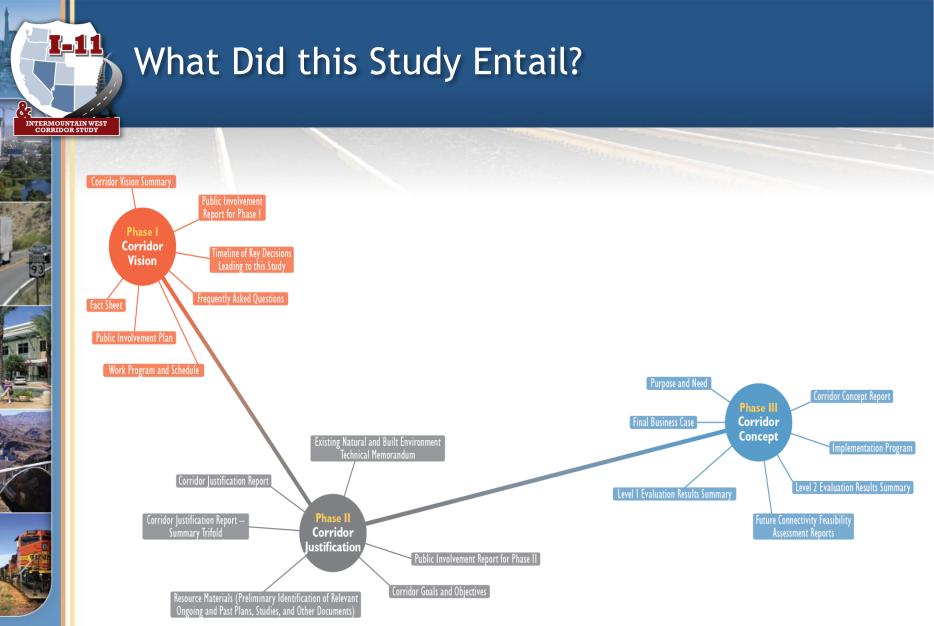
High Priority Corridors Designated as Future Interstates



Interstate 11 & Intermountain West Corridor Study

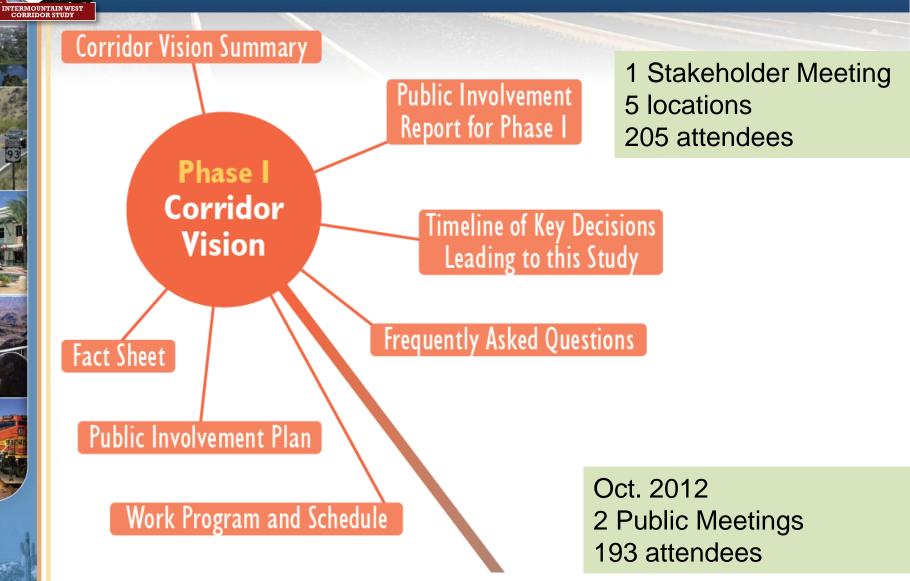


- 1. What is the Justification to make significant investments in this corridor?
- Is the Congressional Designation from Las Vegas to the vicinity of Phoenix sufficient?
- 3. What Reasonable and Feasible Corridors should be considered?
- 4. What steps should be taken next?



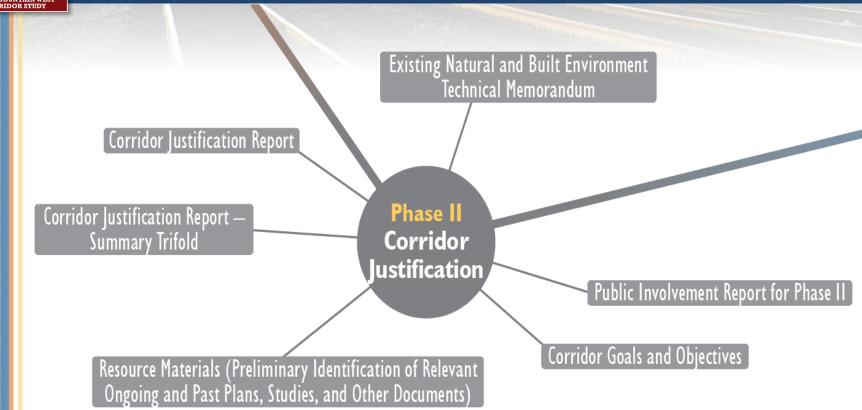
August - October 2012

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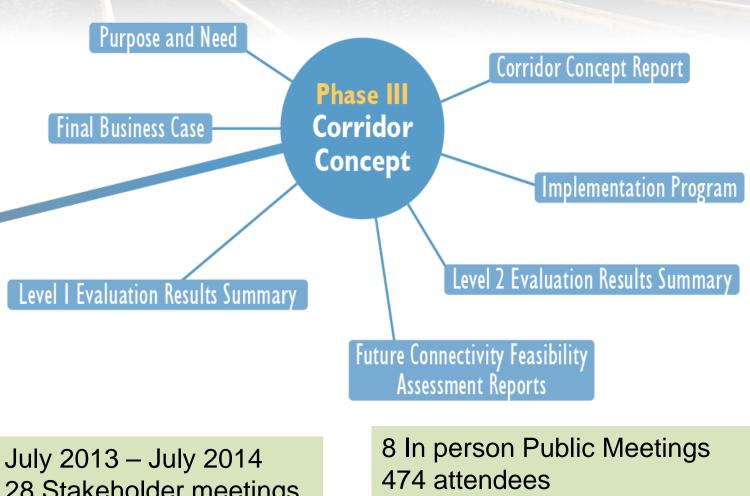
Oct. 2012 - Feb 2013



Jan – Feb 2013 7 Focus Groups 4 locations (each) 335 attendees







28 Stakeholder meetings 1032 attendees

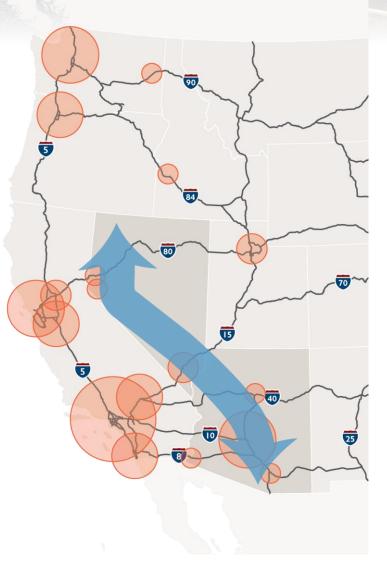
2 Virtual Public Meetings 2081 participants

Linking Economies

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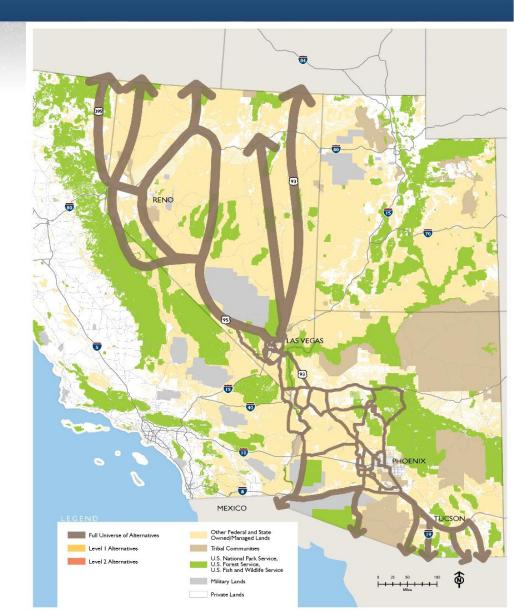
INTERMOUNTAIN WEST CORRIDOR STUDY

> Some of the largest economic and population centers in the U.S. will rely on the I-11 and Intermountain West Corridor to move people and goods throughout the region.

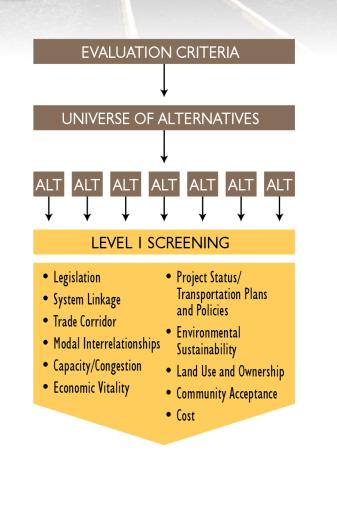


Evaluation Process & Universe of Alternatives



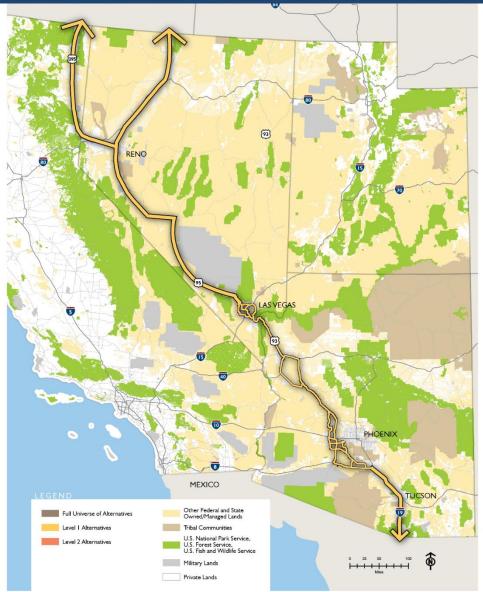


Level 1 Analysis (Qualitative)



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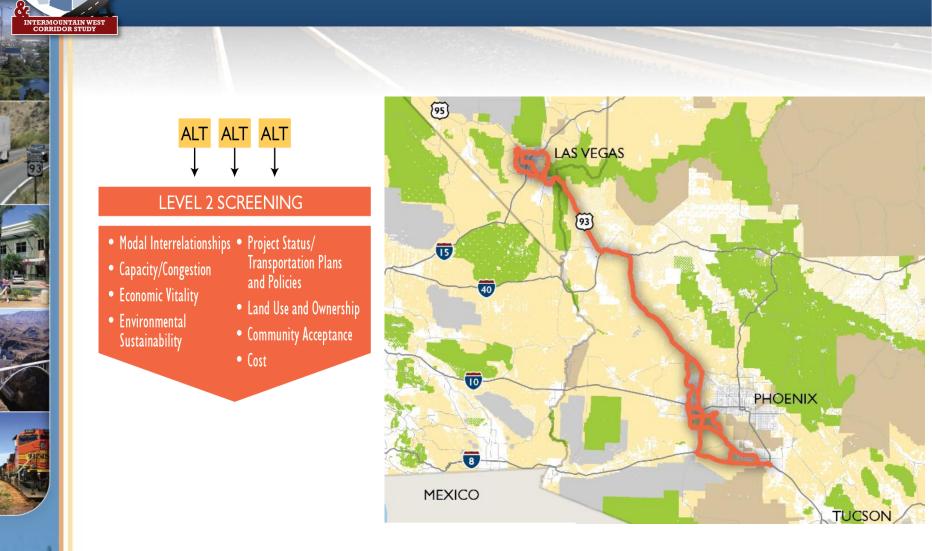
INTERMOUNTAIN WEST CORRIDOR STUDY



Level 2 Analysis (Quantitative)

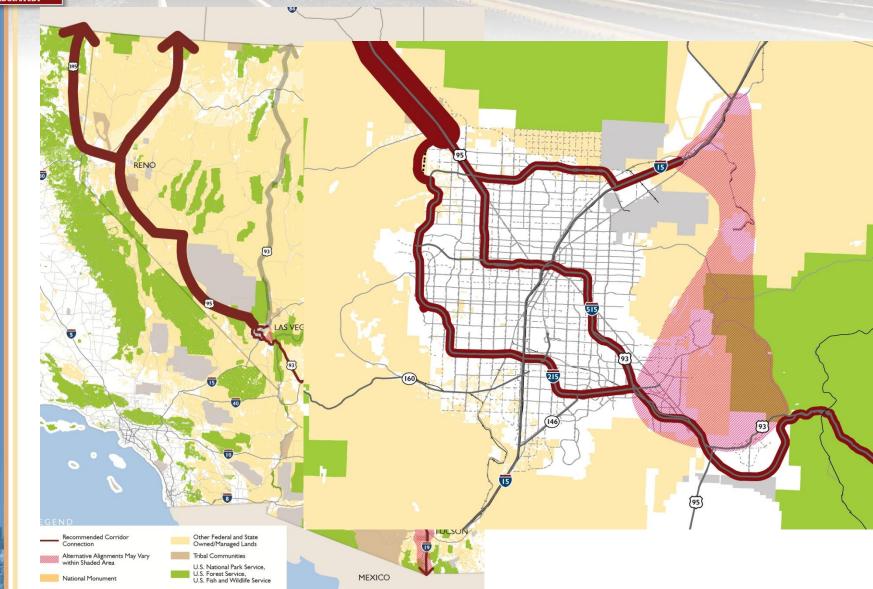
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val.



Recommended for Further Consideration

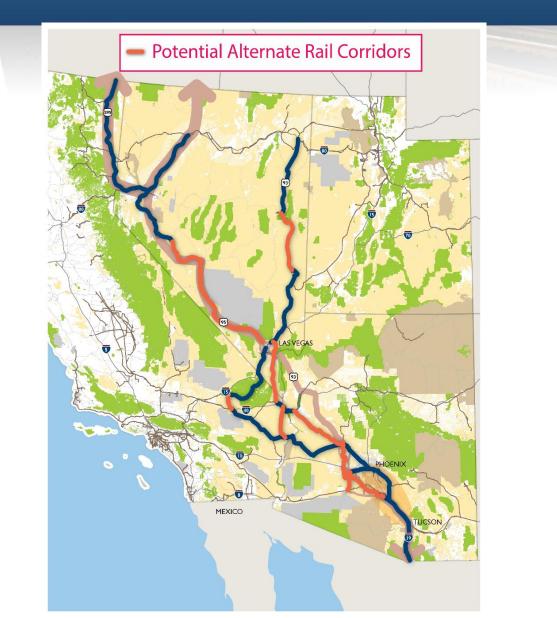
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Multimodal Opportunities

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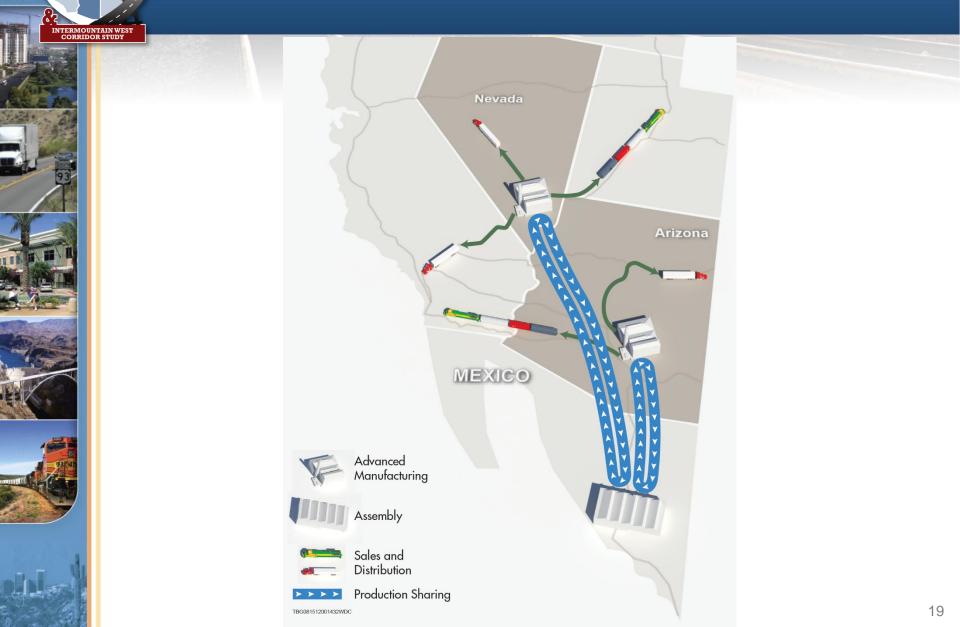
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Business Case: Generating Prosperity



Opportunities for Integrated Manufacturing



Advancing Arizona's and Nevada's Economic Initiatives

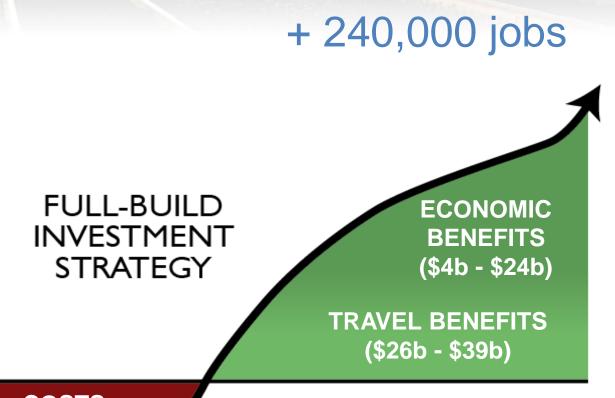
INTERMOUNTAIN WEST CORRIDOR STUDY

Industry Targets	Arizona	Nevada	Requires Regional Transportation Network
Advanced Manufacturing			
Aerospace, Aviation, Defense			
Agriculture			
Biotechnology			
Healthcare			
Information and Computer Technology			
Life Sciences			
Mining and Materials			
Optics			
Renewable Energy			
Science and Technology			
Tourism, Gaming, and Entertainment			
Transportation and Logistics			

Sources: Arizona Commerce Authority 2013, Greater Phoenix Economic Council 2013, Tucson Regional Economic Opportunities 2006, Nevada Governor's Office of Economic Development 2013



Return on Investment



COSTS (\$12b - \$13b)

Note: This graphic is solely intended to illustrate the scale of the return on investment potential and not the actual value. Combining the values of the economic and travel benefits may result in an over-estimate due to double counting some factors. These planning level estimates reflect costs and benefits for a <u>highway-only corridor from Mexico to Las</u> <u>Vegas</u>, above and beyond planned improvements.

Implementation: Segments of Independent Utility

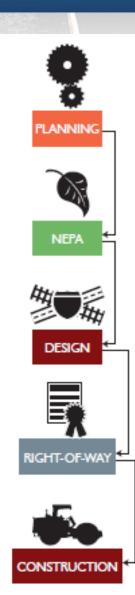




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Immediate Actions - Thru Cross-Collaborative Partnerships

Identification of Immediate Actions by Segment:

- Technical Actions
- Multimodal Accommodations
- •Public Policy Actions
- •Marketing/Branding Actions

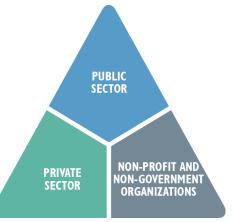




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INTERMOUNTAIN WES

Partnerships among corridor constituents will be required to achieve successful and efficient implementation of the I-11 and Intermountain West Corridor



Since Study completion (Oct. 2014)

March 15, 2015 – ADOT releases SOQ packages for Tier 1 EIS – Nogales to Wickenburg

March 24, 2014 – Senators from Nevada and Arizona submit the Intermountain West Corridor Development Act of 2015



INTERMOUNTAIN WEST CORRIDOR STUDY

FOR IMMEDIATE RELEASE

March 24, 2015

Contact:

Neal Patel (Heller) 202-224-6244 Kristen Orthman (Reid) 202-224-2939 Brian Rogers (McCain) 202-224-2235 Bronwyn Lance Chester (Flake) 202-224-4521

Nevada, Arizona Senators Collaborate to Expand I-11

LAS VEGAS + PHOENIX

FUEL REVENUE INDEXING

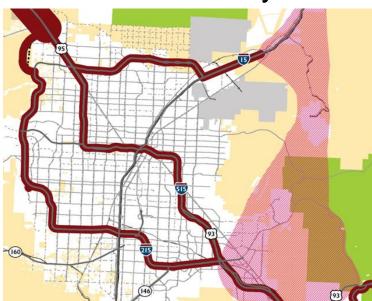
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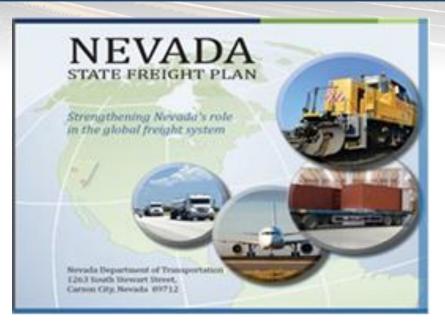
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What's Next?

Southern NV Major Facilities Study





- Statewide Long Range Unified Plan Fall 2015
- I-11 Northern Connection Study (LV to I-80)







Questions?



INTERMOUNTAIN WEST CORRIDOR STUDY

Outreach & Input

Outreach & Input

- Stakeholder Participation: more than 60 meetings, over 750 attendees from 350 organizations participated
- Public Meetings:

INTERMOUNTAIN WEST CORRIDOR STUDY

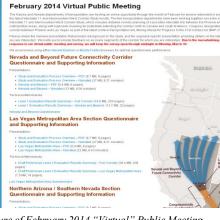
- 10 physical public meetings, over 650 attendees
- 2 Virtual public meetings, over 2,000 participants
- Over 3,000 comments received
- Website: thousands of comments received and posted, 500 signed up for email blasts, all documents and meeting materials:
 - 19 Study reports
 - Summaries and materials for all stakeholder and public meetings
- Media: Over 100 stories published (Print, television, new media)

What we've heard - General comments

- General support for corridor, citing economic development, congestion, and safety improvements
- Concerns, primarily related to specific alternatives and concern for resources and environment.



INTERMOUNTAIN WEST CORRIDOR STUDY



Screen Capture of February 2014 "Virtual" Public Meeting



What we've heard - Southern Nevada

- Eastern Corridor (BB-QQ)
 - Concerns environment, National Park Service, rural preservation area, quality of life
 - Support alleviate congestion, provide more direct CANAMEX connection (I-15)
- Central (Z)

INTERMOUNTAIN WES CORRIDOR STUDY

 Image: marked intervention
 Image: marked intervention

 Image: marked intervention
 Image: marked intervention

Concerns –congestion, air quality, environmental justice, cost Support – use existing infrastructure, most direct route

- Western Corridor (Y)
 - Concerns congestion, air quality lower benefit/demand
 - Support existing infrastructure, available right of way

What we've heard - Northern Nevada

 Western Corridor (US 95, Alternatives FF & SS)

INTERMOUNTAIN WES

- Broad support from agencies and general public
- Need to connect population & activity centers
- Concerns over cost & Impacts (all alts)
- Eastern Corridor (US 93, Alternatives HH & TT)
 - Support to facilitate economic potential
 - Concerns over cost, impacts, and connecting potential versus existing activities



Next steps

INTERMOUNTAIN WEST CORRIDOR STUDY

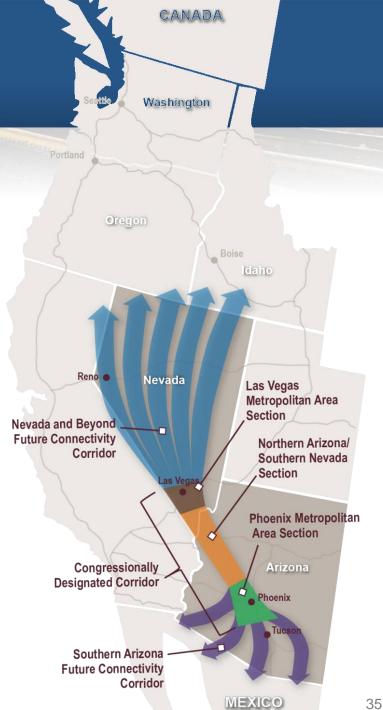
- Finalizing this Study
 - NDOT Board Acceptance (Sept. 8, 2014)
 - ADOT Board Acceptance (Sept. 12, 2014)
 - Finalize & Produce Report for distribution
 - Finalize Planning and Environment Linkages (PEL) questionnaire
- Beyond this Study
 - Ensure consideration of findings is included in future & ongoing planning efforts
 - Initiate Southern Nevada Major Facilities plan
 - Work with partner agencies and Congressional delegation regarding policy actions (pending any necessary board actions), such as:
 - Designation Extension
 - Funding Opportunities

Purpose of this study

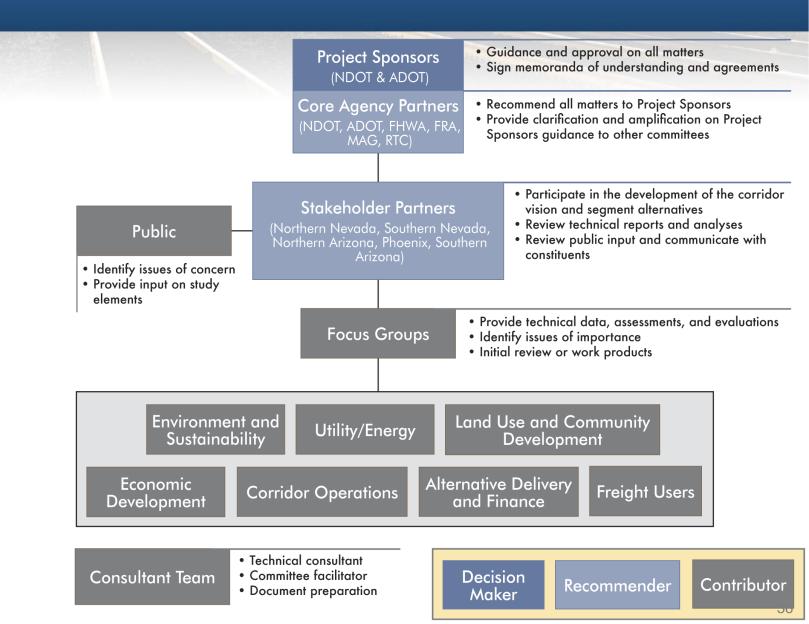
INTERMOUNTAIN WEST CORRIDOR STUDY

Answer several questions:

- What is the Justification to 1. make significant investments in this corridor?
- Is the Congressional 2. **Designation from Las Vegas** to the vicinity of Phoenix sufficient?
- 3. What Reasonable and Feasible Corridors should be considered?
- What steps should be taken 4. next?



Who did we ask to help?





Additional Slides - Vision & Justification

Corridor Vision

Seattle

Oregon

Portland

CANADA

Washington

INTERMOUNTAIN WEST CORRIDOR STUDY

> A north-south transportation system that would connect borders, link economies, and generate prosperity for the Intermountain West region.



Constraints: Natural & Build Environment



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Corridor Justification - Opportunities

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Corridor Justification: Business Case Scenarios



Need: Future Traffic Conditions

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Need: Freight Movement Projections



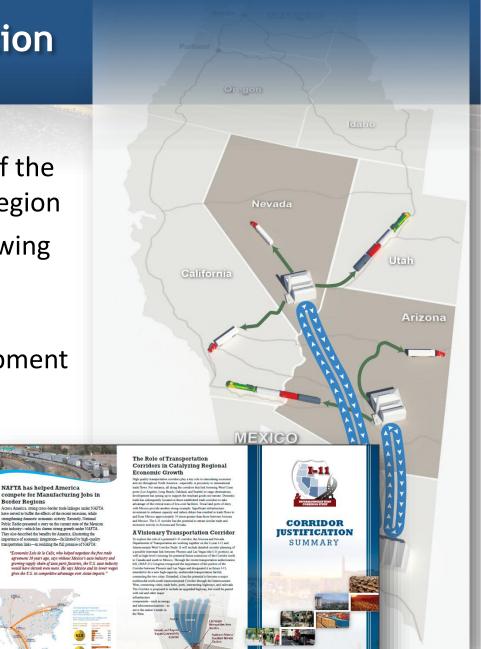
Corridor Justification

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- Integrate the economies of the Southwest Triangle megaregion
- Capitalize on Mexico's growing role in North American manufacturing/trade
- Support economic development initiatives of Arizona and Nevada

Border Regions

Prevent congestion from crippling economic competitiveness



ADOT



Additional Slides - Alternatives Analysis

Evaluation

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INTERMOUNTAIN WEST CORRIDOR STUDY

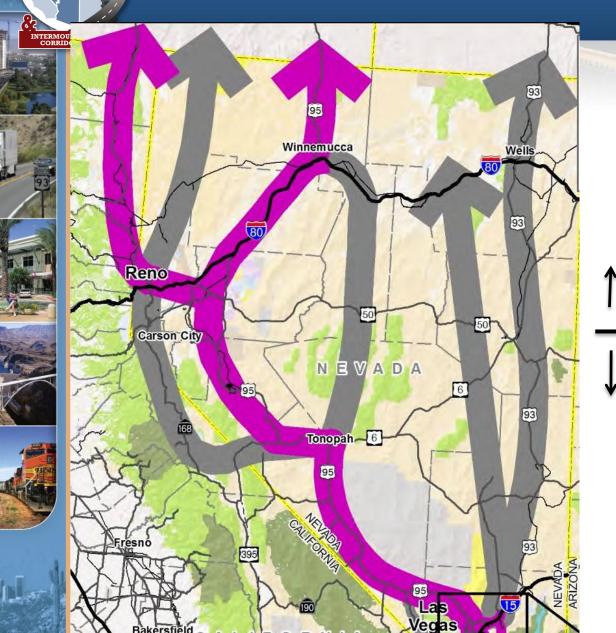
> Detailed analysis for each alternative available:

Level 1 & 2 Evaluation Results Summaries (<u>www.i11study.com</u> – project documents)



Category	Criteria	Rating	Notes
Legislation	 How well does the alternative meet the intent of legislative actions, including MAP-21 and the 1995 National Highway Systems Designation Act? 		Uses no federal high priority corridor components.
System Linkage	2 How well does this alternative connect major national and international activity centers from Mexico to Canada through the Intermountain West?		Connects to the Southern California megapolitan (includes Las Vegas), but does not efficiently connect to the Northern California megapolitan (includes Reno).
	3 How well does this alternative most directly close gaps and/or develop missing linkages in the regional and national transportation network?		Develops higher capacity linkage.
	4 How well does this alternative connect with adjacent segments/sections?		Connects with adjacent segments to the south.
Trade Corridor	5 How well does this alternative connect major freight hubs and high-capacity transportation corridors?		Creates connections between I-15 and I-80.
	6 How well does this alternative maximize opportunities for intermodal connectivity (highway, rail/transit, aviation)?		Opportunities for intermodal connectivity with Carlin rail yard, Amtrak and I-80.
Modal Interrelationships	7 How well does this alternative accommodate multiple modes in a shared corridor footprint (highway and rail)?		Majority of corridor is along existing rail line (South Central Route and Nevada Northern Railway).
Capacity/Congestion	8 How well does this alternative relieve existing and projected congestion between and within the major activity centers in Nevada and Arizona?		N/A
	9 How well does this alternative align with existing conditions or proposed improvements at land ports of entry (as appropriate)?		N/A
Economic Vitality	10 How well does this alternative support regional, state and national economic development goals?		Supports some industry cluster targets (mining, renewable energy, agriculture).
Project Status/	11 How well does this alternative comply with corridor-related actions taken to date?		No known recent corridor-related actions taken to date.
Transportation Policy	12 How well does this alternative conform to locally adopted transportation plans?		Consistent with Nevada State Rail Plan and Connecting Nevada, improves connectivity between Las Vegas Metropolitan Area and eastern Nevada.
Environmental Sustainability	13 How compatible is this alternative with regional open space, conservation, and land management agency planning?		No known open space constraints.
	14 How well does this alternative minimize environmental impacts (such as drainage, topography, species, and biological connectivity)?		Potential environmental constraints along existing highways, requiring fewer upgrades/improvements. Passes through Confederated Tribes of the Goshute Reservation aboriginal roaming area.
Land Use and Ownership	15 How consistent is this alternative with regional land use and growth strategies?		Supports community development; consistent with Great Basin Regional Development Authority growth strategies.
cano ose and Ownership	16 How compatible is this alternative with major land ownership patterns?		Wide corridor swath; generally compatible with major land ownership.
Community Acceptance	17 How well is this alternative accepted by the local communities?		Mixed comments.
Cost	18 What is the overall relative cost of this alternative, where "least favorable" is the highest relative cost and "most favorable" the lowest?		

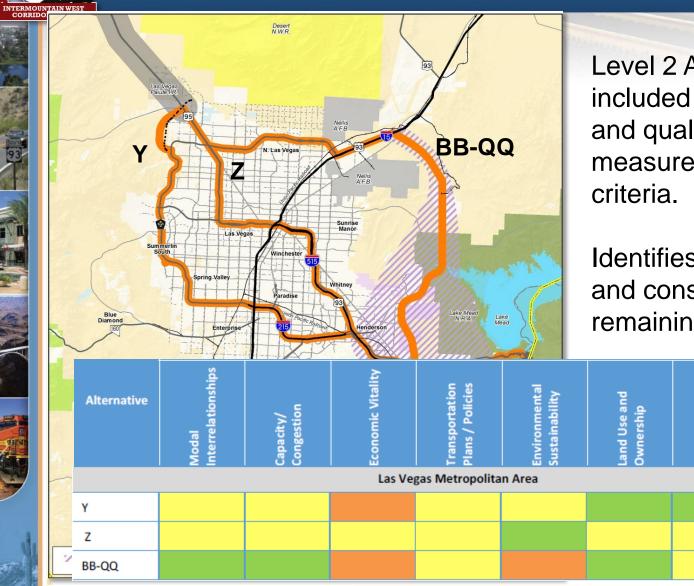
Northern Nevada Alternatives



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Level 2 Analysis: Las Vegas Metropolitan Area



Level 2 Analysis included quantitative and qualitative measures of identified criteria.

Identifies opportunities and constraints of remaining corridors.

Community

cceptance

Cost

ALL INFORMATION IS PRELIMINARY / SUBJECT TO REVISION

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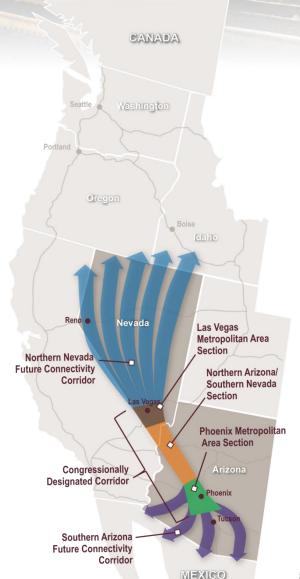
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Additional Slides - Implementation

Technical Build Scenarios

Interim Condition

- Assumes completion of currently programmed projects, plus additional targeted improvements, as required, to create an end-to-end corridor
- Achieve benefits of a continuous I-11 and Intermountain West Corridor as quickly as possible at the lowest cost
- 20-year plan for the Corridor
- Full Build Condition
 - Complete multimodal build out of the Corridor
 - 50-year+ vision for the Corridor



Implementation Actions

Technical actions

- Wide range of corridor improvements required to implement the interim and full build multimodal facilities for the I-11 and Intermountain West Corridor.
- Public policy actions
 - Broad scale policy actions required by Corridor partners to implement the Corridor from multimodal transportation, trade, economic development, and local community perspectives.
- Marketing/branding actions
 - Actions to develop the "image" of the multimodal I-11 and Intermountain West Corridor to maintain implementation momentum.
- » Actions are presented in tables that include timeframe, lead agency, and major partners



Implementation Program

Identified next steps in project development for segments of independent utility.

PLANNING

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Immediate Next Steps: Technical Actions

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Action		Lead Agency Responsible	Primary Partners
Technical Actions			
 Improve SR 189 to provide free-flowing and direct access to the Mariposa LPOE Initiate environmental clearance process for SR 189/Mariposa Road to determine a preferred alignment and corridor plan to close the gap between I-19 and the Mexican border 	1	ADOT	FHWA, FRA, regional COG and MPOs
Initiate preliminary design/environmental clearance process for the Phoenix metropolitan area to determine a preferred corridor alignment between I-10 (Buckeye) and US 93 (Wickenburg)	4	ADOT/MAG	FHWA, FRA
Complete improvements to US 93 to finish construction of a 4-lane divided highway from Wickenburg to I-40 — Complete design studies and right-of-way acquisition, where required	5	ADOT	FHWA
divided highway from Wickenburg to I-40	5 8	ADOT NDOT/ RTCSNV	FHWA

Immediate Next Steps: Multimodal, Policy, and Marketing/Branding

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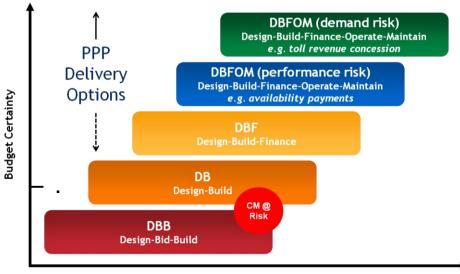
Action	SIU	Lead Agency Responsible	Primary Partners		
Multimodal Accommodation					
Coordinate Arizona and Nevada State Freight Plans to ascertain interest, feasibility, and market potential in implementing a continuous north-south trade corridor		ADOT/NDOT (with ultimate lead TBD) FRA, Class I railroad ACA, GOED			
Establish joint Arizona/Nevada State Infrastructure Working Group to ascertain interest and feasibility in co-locating major utility transmission with the I-11 and Intermountain West Corridor	All	ACA, GOED	ADOT, NDOT, DOE, utility industry representatives		
Public Policy					
Update Arizona and Nevada long-range transportation plans and state rail plans	All	ADOT/NDOT	FHWA, FRA, MPOs and COGs		
Update RTPs, resource management plans, and general/ comprehensive plans to incorporate I-11 and Intermountain West Corridor location, to ensure corridor preservation	All	Various state, regional, and local agencies	ADOT/NDOT		
Marketing/Branding					
Develop an I-11 marketing and branding strategy, including brand promise/tagline and website		I-11 Coalition	ADOT/NDOT		
Place I-11 signage along the Corridor upon implementation of improvements and/or along existing corridors were co-location is anticipated	All	ADOT/NDOT	FHWA, COGs and MPOs, DOT district engineering offices		

Funding, Finance, and Alternative Delivery

Funding Sources

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- Current and emerging federal, state, and regional/local sources
- Financing Mechanisms
 - Instruments used in the past several decades (e.g., bonds)
- Alternative Delivery Methods



At the current point in time, there simply is not enough information available to determine the funding, financing, and alternative delivery methods for the vast majority of the improvements envisioned for the I-11 and Intermountain West Corridor.

Increasing amount and tenor of private finance at risk

State, Regional and/or Local Funding Sources

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	Ariz	Nevada		
State, Regional or Local Funding Source	Highway	Transit	Highway	Transit
Federal transportation funds	Х	Х	Х	Х
Gas taxes (state and/or local)	Х		Х	
Special fuel taxes	Х		Х	
General sales tax			Х	
General funds			Х	
Tolls	Х			
Truck and commercial vehicle fees ⁽¹⁾	Х			
Vehicle registration or license fees	Х		Х	
Motor vehicle operator license fees	Х			
Lottery		Х		
Transit fares		Х		Х
Impact fees	Х		Х	
Development tax			Х	
Government services tax			Х	
Value capture: tax increment districts, assessments	х		х	

Note: Not all funding sources are applied in the same manner at the state and regional/local levels; many stipulations exist on several sources noted above (e.g., temporary provisions, only can be used in conjunction with other measures, etc.)

Emerging Funding Sources

- Availability of current transportation funding sources likely inadequate to meet future demand
- Potential sources that can apply to the I-11 and Intermountain West Corridor include, but are not limited to:
 - Dynamic tolling

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- Truck only toll lanes
- Managed lanes
- Fuel tax indexing
- Traffic impact fees
- Mileage-based user fees
- Occupancy fees from road and non-road users of the corridor
- Sale taxes on motor fuels
- Area congestion charging

* Changes to state laws may be required to implement some sources mentioned above.



I-95 Express Managed Lanes, Miami, FL



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Additional Slides - Business Case

The Return on Investment (ROI) will be Significant

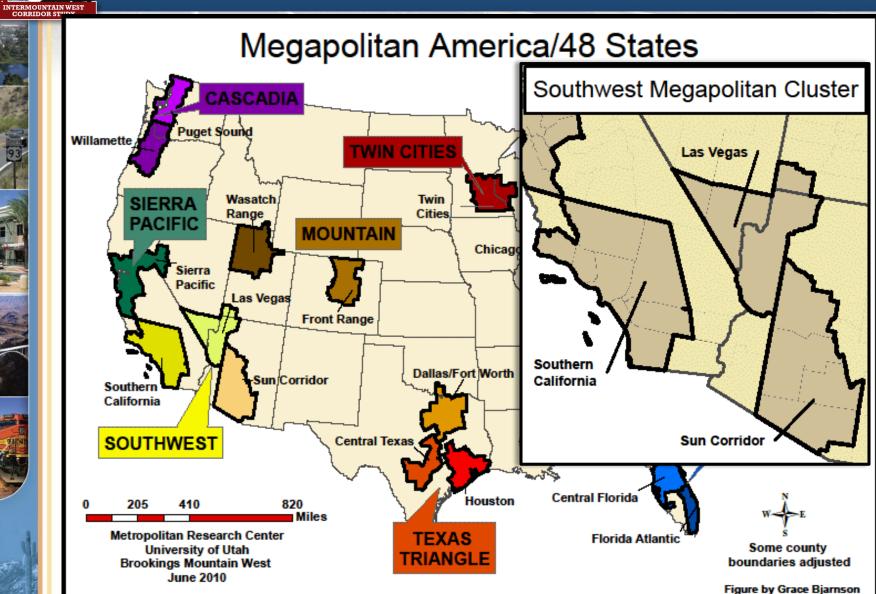
- Connect regional economies to each other and to global markets
- Create opportunities for integrated manufacturing

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- Advance the economic development plans of Arizona and Nevada
- Improve efficiencies at Arizona's international borders



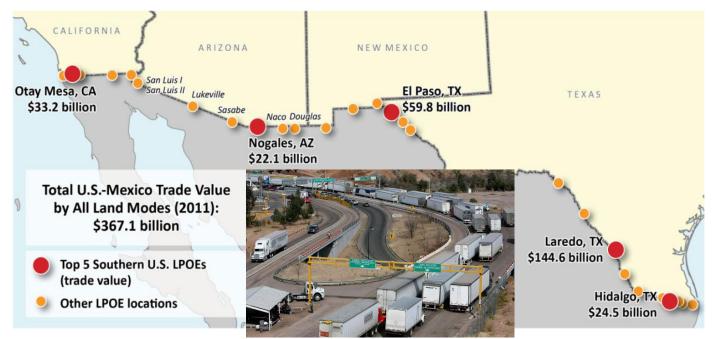
Connect Regional Economies to Each Other and to Global Markets



Improve Efficiencies at Arizona's International Borders

- Efficient LPOEs are key to integrated manufacturing
 - Crossing times must be short and predictable

- As evidenced in other regions, opportunities for cross-border trade are significant
 - About 75% of U.S.-Mexico bilateral trade by value crossed through LPOEs in 2011 (Less than 10% of it flowed through Arizona)



Create Opportunities for Integrated Manufacturing

Mexico more competitive for manufacturing outsourcing

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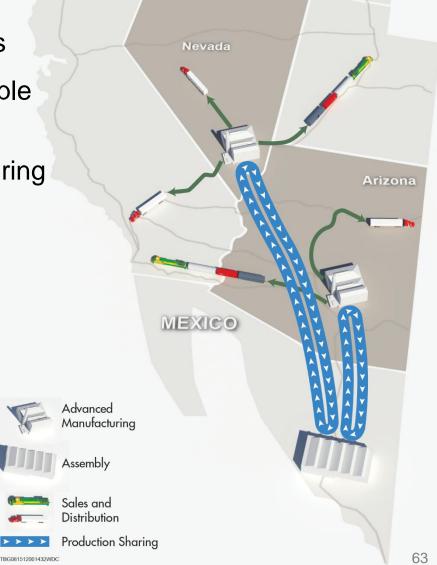
- GDP grew 5.4 percent in 2010
- \$35 billion increase in purchases from the U.S.
- 14th largest economy in the world
- China's labor cost advantage shrunk to 14%
- Close proximity to U.S.



Create Opportunities for Integrated Manufacturing

Work together to produce goods

- Components cross border multiple times during production
- Results in significant manufacturing
 employment
- Attracts industries: auto, aerospace, medical device appliances, machinery....
- Only feasible with adequate infrastructure in place





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Additional Slides - Other

Resolutions/Statements - Northern NV

Support for Western Route Carson City RTC Carson City City of Fallon City of Reno **City of Sparks Churchill County** Churchill Economic Development Authority Mineral County Nye County **Pershing County Reno-Tahoe Airport Authority RTC of Washoe County** Town of Tonopah Washoe County

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> Support for Eastern Route Lincoln County White Pine County Idaho Transportation Department**