I-11 Northern Nevada Alternatives Analysis

Planning and Environmental Linkages

November 2018

The Nevada Department of Transportation (NDOT) presents the results of the Alternatives Analysis Study and Planning and Environmental Linkages (PEL) study, which has evaluated options for Interstate 11 (I-11) between Las Vegas and I-80 in Northern Nevada.

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ABOUT THE STUDY

I-11 is envisioned as a continuous north-south high-capacity transportation corridor that has the potential to enhance movement of people and freight, and to facilitate regional connectivity, trade, communications, and technology.

The *I-11 and Intermountain West Corridor Study*, completed in 2014, validated the I-11 Corridor on US 93 between Wickenburg, Arizona and Las Vegas, Nevada and defined a wide corridor for further study from Wickenburg to Nogales, Arizona and from Las Vegas to I-80. In 2015, the FAST Act extended the designation of future I-11 south to Nogales, Arizona and north along US 95 to I-80 in Nevada.

Given its magnitude, importance to the state, and impact it will have on Nevada's transportation program in the future, additional detail is needed to make reasonable assumptions of future planning and construction phasing. These assumptions will help inform future planning and ensure the state is well positioned to continue to advance this key transportation link.

WHAT IS A PEL?

PEL is a study conducted during the corridor planning phase on environmental, social, and economic factors potentially affecting the corridor selection. The resulting information will inform the environmental review process required under NEPA (National Environmental Policy Act).

WHAT IS THE OUTCOME OF THE PEL PROCESS?

The PEL process provides documentation of the alternatives analysis process including analysis methodologies and assumptions, inputs received from the public and stakeholders, and decisions made during the planning phase. This background informs future NEPA studies leading to a more informed and streamlined NEPA process.

WHAT OCCURS DURING NEPA?

In a NEPA study, a transportation project is more clearly defined and the environmental review must address all regulatory requirements, documenting the affected environment, environmental consequences of the proposed action, indirect/cumulative impacts, and mitigation measures for each Build Corridor Alternative as well as a No Build Alternative ("do nothing"). A single alternative is selected with enough design parameters to advance into detailed design and project development activities. PEL studies occur prior to NEPA and are conducted at a higher, less detailed level of analysis to inform subsequent NEPA efforts.

WHO HAS BEEN INVOLVED IN THIS PROCESS?

The PEL process involves stakeholders, resource agencies, Native American Tribes and the public to seek input, build consensus, and establish a foundation for NEPA.

STUDY OBJECTIVES

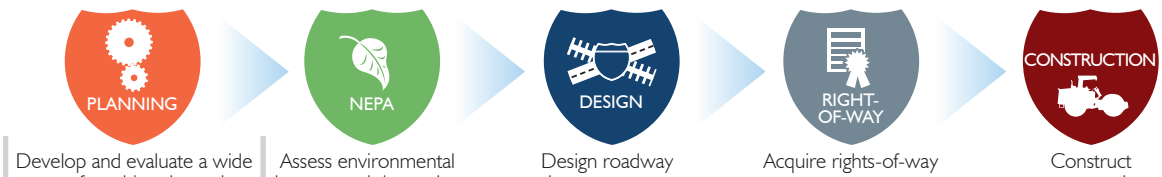
- **Advance I-11 to identify promising corridors**
- **Document issues and opportunities**
- **Formulate a plan for the next 10-20 years**
- **Prepare Nevada/I-11 Corridor for potential public land preservation**

PEL APPROACH

The PEL process identifies and considers environmental constraints early in the planning process. It also involves soliciting input and feedback from public and agency stakeholders so that decisions made during the PEL process are useful during subsequent NEPA studies. The approach used for the I-11 Northern Nevada PEL involved:

- Develop range of reasonable corridor alternatives
- Develop evaluation criteria that supports corridor Purpose and Need
- Collect and map available environmental resource data
- Conduct fatal-flaw analysis for corridor alternatives
- Solicit and consider feedback from agencies, tribes and the public on all alternatives and evaluation criteria
- Perform more detailed analysis for remaining alternatives
- Develop an implementation plan to move forward to future NEPA studies
- Solicit and consider feedback from agencies, tribes and the public on all recommendations

PROJECT DEVELOPMENT PROCESS



PLANNING
Develop and evaluate a wide range of corridor alternatives
Document evaluation and outreach process in PEL and Alternatives Analysis Study reports

NEPA
Assess environmental impacts and determine Selected Alternative
Define implementation and phasing plan

DESIGN
Design roadway improvements
Determine cost estimates and obtain necessary permitting

RIGHT-OF-WAY
Acquire rights-of-way
Advertise construction bid

CONSTRUCTION
Construct transportation improvements

Current study

Potential future phases pending funding availability

HISTORY OF THE I-11 CORRIDOR

Intermodal Surface Transportation Efficiency Act (ISTEA)

The CANAMEX Trade Corridor, connecting Mexico and Canada, was outlined in the ISTEA highway bill, which established a series of High Priority Corridors as part of the proposed National Highway System, including corridor #68 Washoe County, which outlined a route connecting Las Vegas and Reno.

1991

1994

North American Free Trade Agreement (NAFTA)

Establishes trade and manufacturing opportunities between the U.S., Canada, and Mexico, increasing the importance of creating a north-south connection in the Intermountain West.

1995

National Highway System

As proposed in ISTEA, Congress formally established the National Highway System, which allowed individual states to receive funding for interstate improvements.

Mike O'Callaghan-Pat Tillman Memorial Bridge

Bridge bypassing the Hoover Dam eliminates a major bottleneck on the CANAMEX corridor.

2010

I-11 and Intermountain West Corridor Study

Arizona and Nevada validate the I-11 Corridor on US 93 between Wickenburg and Las Vegas, and define a wide corridor for further study from Wickenburg to Nogales, and from Las Vegas to I-80.

2012

Moving Ahead for Progress in the 21st Century Act (MAP-21)

Future I-11 from Phoenix to Las Vegas is designated in federal transportation legislation.

2014

Fixing America's Surface Transportation (FAST) Act

The future I-11 designation is officially extended south to Nogales and Las Vegas to I-80 in federal transportation legislation.

2015

I-11 Corridor Tier 1 EIS

Formal National Environmental Policy Act environmental review process begins on the I-11 Corridor Study, from Nogales to Wickenburg, Arizona, with the goal of identifying a Preferred Corridor Alternative.

2016

I-11 Northern Nevada Alternatives Analysis

Advanced study of the Northern Nevada connectivity option recommended in the I-11 and Intermountain West Corridor Study. This includes alternatives development, analysis, and evaluation of corridor options between Las Vegas and I-80, including an updated Planning and Environmental Linkages (PEL) document, with the goal of identifying recommended corridor(s) to advance into future NEPA studies.

2018

SCHEDULE OVERVIEW

2018

- **MAR** — Methodology Outreach with **Stakeholders**
- **APR** — Methodology Outreach with **Public**
- **JUL** — Evaluation Results Outreach with **Stakeholders**
- **JUL/AUG** — Evaluation Results Outreach with **Public**
- **NOV** — **Final Executive Summary**

PURPOSE AND NEED

CORRIDOR INTENT

As identified in the *I-11 and Intermountain West Corridor Study*, the goal of I-11 is to establish a high-capacity, limited-access, transportation corridor connecting Mexican ports and manufacturing areas with Canada, traversing Arizona's and Nevada's largest regional, national and international manufacturing and economic activity centers, in support of regional, national, and international trade. Western states compete individually and collectively in national and global markets with Canada, Mexico, the I-5 Corridor, and the Gulf of Mexico states. For Nevada, the purpose of I-11 is to assist in diversifying the state's economies to target industry clusters that rely heavily on interconnected and efficient transportation systems to transport goods and facilitate business attraction/retention. This was reinforced in the 2015 FAST Act.

This northern Nevada segment of I-11 would connect 450 miles from Las Vegas to I-80 on the western side of the state, providing an efficient north-south interstate connection near Nevada's two largest economic centers (Las Vegas and Reno/Sparks metropolitan areas).

PROJECT NEED

The need for I-11 is based on a combination of factors that include legislation, system linkage, domestic and international trade, modal interrelationships, capacity, economics, and public policy. The transportation network in the Intermountain West was developed decades ago to serve the economic, population, and mobility needs at that time—east-west movement of people and goods between Southern California and the rest of the country. As manufacturing and other value-added services shifts back to North America, the need is shifting to north-south demand, and the only existing north-south interstates in this region are I-5 and I-15. Both corridors, especially in California, are heavily congested today. Investment in regional transportation infrastructure has not kept pace with population growth and changing economic trends.

PROJECT PURPOSE

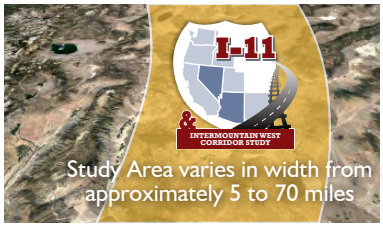
Future projections indicate that the proposed I-11 Corridor will continue to see significant growth, prompting the need for better surface transportation connections to accommodate not only the travel demand between metropolitan areas, but also improved mobility for freight shipments throughout the Intermountain West. This Corridor could provide needed connectivity, offer alternative routes for freight and passenger traffic, and improve reliability for better trade and commerce opportunities. The Corridor would allow the US West to realize economic benefits from more efficient freight movements, redundancy in north-south movements, and less congestion overall. Developing a north-south multimodal corridor through Nevada provides the foundation for a renewed, stronger, diversified economy in the Intermountain West.

A project-specific Purpose and Need Statement for this northern Nevada will be prepared as part of future NEPA studies, but additional elements of project purpose might include:

- Enhancing economic growth through more rural areas of the state; improving safety and travel time reliability along the US 95 corridor
- Creating revitalization and tourism opportunities for rural communities
- Better connecting major military installations

Then Governors Brian Sandoval and Jan Brewer unveil Future Interstate 11 Sign at the Hoover Dam. March 21, 2014.

WHAT IS A CORRIDOR ALTERNATIVE?



The I-11 and IWCS defined a broad connection between Las Vegas and I-80, establishing the study vicinity for future efforts.

PLANNING

This PEL will identify and screen corridor alternatives within the broad study area, advancing the most feasible alternative(s) into future NEPA studies.

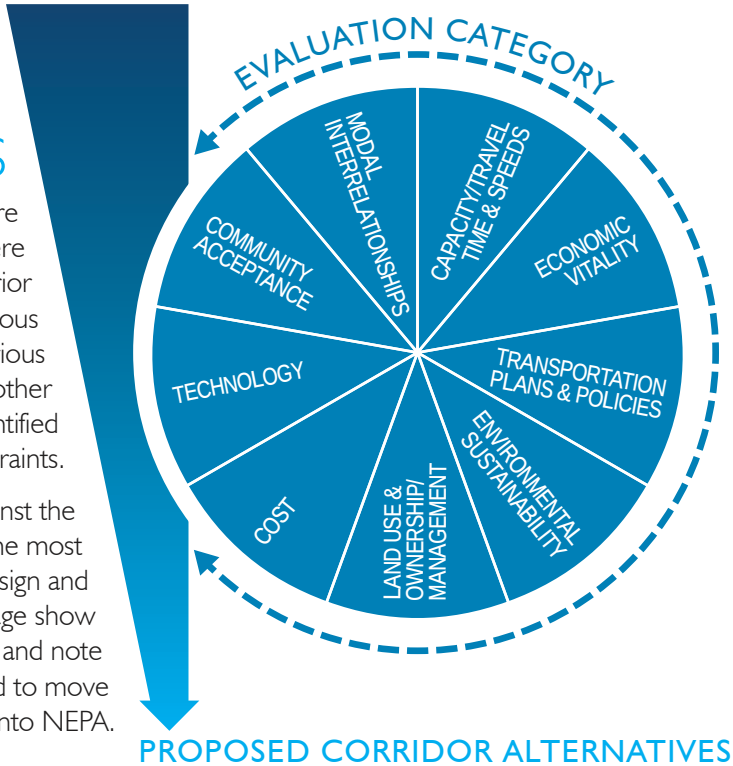
NEPA

Future NEPA efforts will develop and evaluate specific alignments within proposed alternative(s). A single alignment will be recommended for design and construction.

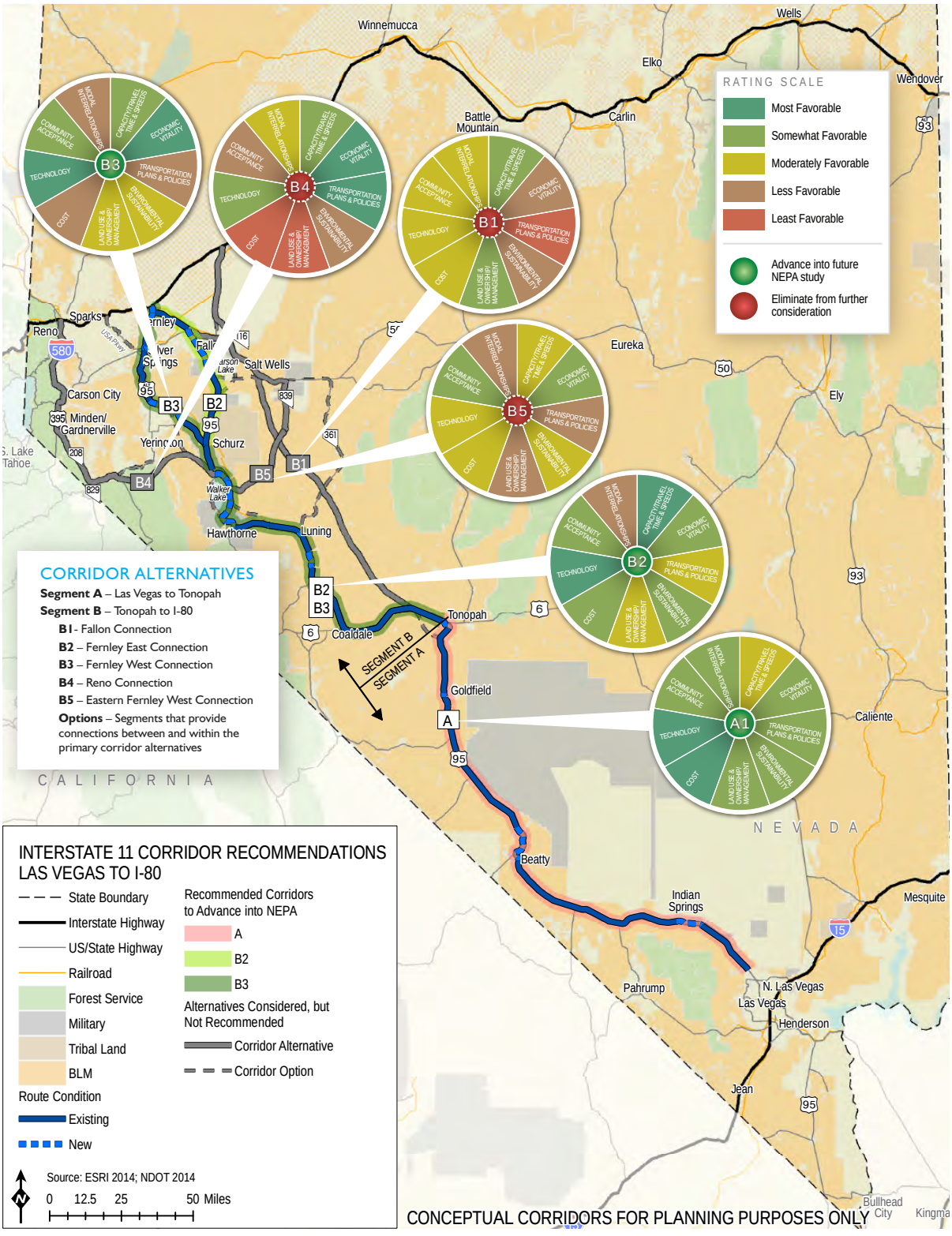
EVALUATION CRITERIA AND PROCESS

The range of corridor alternatives are illustrated on the map, and were developed based on concepts from prior studies, input received during previous planning efforts, as well as various topographical, environmental and other technical planning information that identified opportunities and constraints.

These alternatives were evaluated against the following categories to determine the most feasible options for more detailed design and study. The pinwheels on the next page show the summary-level evaluation results and note which alternatives are recommended to move forward into NEPA.



PROPOSED RANGE OF CORRIDOR ALTERNATIVES



OUTREACH SUMMARY

Public outreach and input is a cornerstone of the PEL process. Ensuring the public dialogue is well understood and how it effects planning choices is critical to the process of informing future decisions and NEPA efforts. This study effort undertook a significant agency and public outreach process to obtain feedback on the range of corridor alternatives, as summarized as follows.

STAKEHOLDER MEETINGS

A Stakeholder Partners Group was convened for this study, consisting of relevant state, federal, and local agencies. The purpose of this group is to provide feedback on the alternatives development and analysis process, provide data and resources as applicable for analysis, and inform the study team of agency input and concerns throughout the process. Two group meetings, as well as various one-on-one meetings were convened throughout the study process.

Invited participants included:

- Bureau of Indian Affairs (BIA)
- Bureau of Land Management (BLM)
- Councils of Governments (COGs)/MPOs
- County staff and/or rural planning commissions (as applicable)
- Department of Defense
- FHWA
- Governor's Office on Economic Development (GOED)
- Inter-Tribal Council
- Nevada Department of Environmental Protection (NDEP)
- Nevada Department of Wildlife (NDOW)
- Nevada State Office of Energy
- U.S. Department of Energy, Western Area Power Administration
- U.S. Environmental Protection Agency, Region 9 (EPA)
- U.S. Fish and Wildlife Service (USFWS)
- U.S. Forest Service (USFS)

PUBLIC MEETINGS

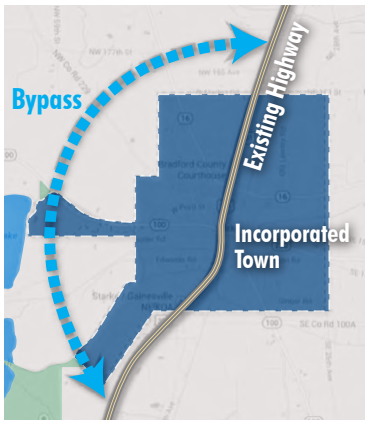
Traditional public meetings were held in along the entire 450-mile corridor to directly engage residents and effected communities. Two rounds of meetings occurred in various cities during the PEL study process. Each meeting followed NDOT's typical public meeting format consisting of an open house, followed by a formal presentation and question and answer period, ending with additional time dedicated to the open house format, allowing attendees to discuss meeting materials with the study team and ask questions.

Comments received at the public meetings and throughout the duration of the comment period were reviewed to identify those that directly address the corridor alternatives, either positively (in favor of) or negatively (not in favor of). Public sentiment provided input into the "community acceptance" evaluation criteria.

WHAT WE HEARD

Two primary themes heard during the two rounds of public and stakeholder outreach were "what happens to my town?" and "what happens north of I-80?" While these both cannot be answered today, additional research and documentation has been conducted during this phase to ensure that the answer to these questions persist through the continued phases of corridor evolution.

WHAT HAPPENS TO MY TOWN?



Rural towns, in particular, expressed concern that, while expanding an interstate through the middle of town would certainly be catastrophic, so too would be a bypass around town that would potentially be located too far away to spur economic activity. By and large, residents want a future I-11 to be far enough away to keep "Main Street" intact while being close enough for towns to provide services and benefit from economic opportunity.

The goal of I-11 is not to negatively impact any communities along the corridor, but rather complement community development. Alignments around towns are not being developed at this time because of the lack of detail and the level of this PEL study. However, future NEPA studies will evaluate the precise alignment in further detail. If a new route is recommended for I-11, it is because constructing a limited access, interstate highway in the middle of the town would have major detrimental impacts to local businesses and bisect the town. An interstate has no intersecting streets or driveways and access is obtained from traffic interchanges. Thus, the goal would be to construct I-11 nearby to continue to support community growth, and provide interchange spacing that serves the community and maintains "main streets" as viable economic and community centers.

Read more information on other community's experiences around the US in the "Potential Effects of Highway Bypasses on Local Communities" technical memorandum located on the study website.

WHAT HAPPENS NORTH OF I-80?

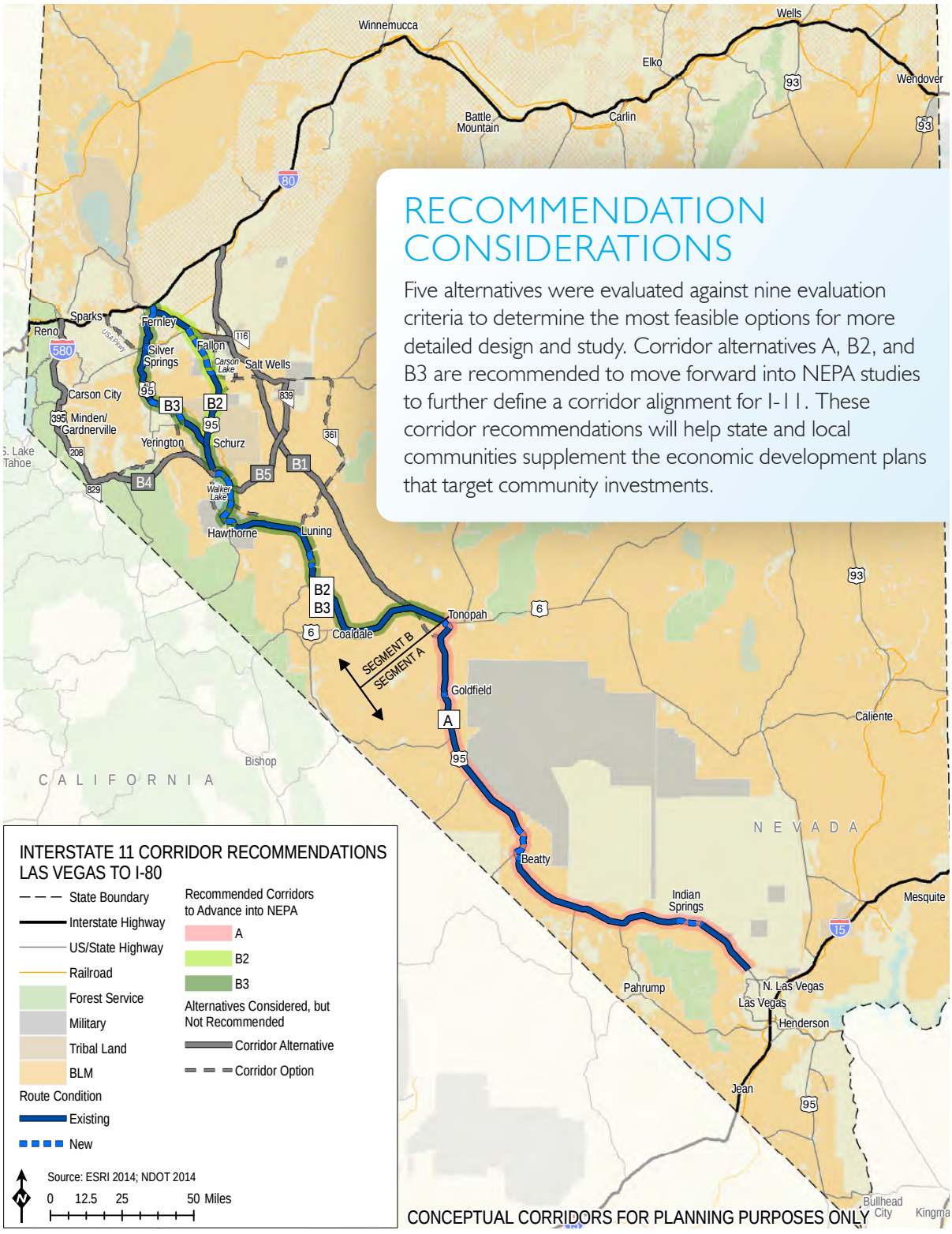
A high-level visioning approach was undertaken to understand possible future corridors beyond I-80, taking into consideration factors such as congestion, strategic and extensions of the I-11 freight transport corridors, and seaport and inland port locations. Two potential routes, following existing highway corridors, are proposed north of I-80, one from Western Nevada and the other from Central Nevada. The Western Nevada route would follow US 395 through California and Oregon to SR 20 in Oregon, then along SR 20, US 97, I-84, and I-5 to western Canada. The Central Nevada route would follow US 95 through Oregon and Idaho to I-84, then along I-84, I-82, I-90, and I-5 to Canada. I-84 and I-90 also connect to I-15, providing another route into central Canada. Each of the recommended alternatives is forward compatible with these potential future connections.

This Alternatives Analysis sets the foundation for continued coordination with neighboring states in the future. More information can be found in the technical memorandum "Connectivity North and Beyond Nevada's I-80 Corridor" available on the study website.

I-11 CORRIDOR RECOMMENDATIONS

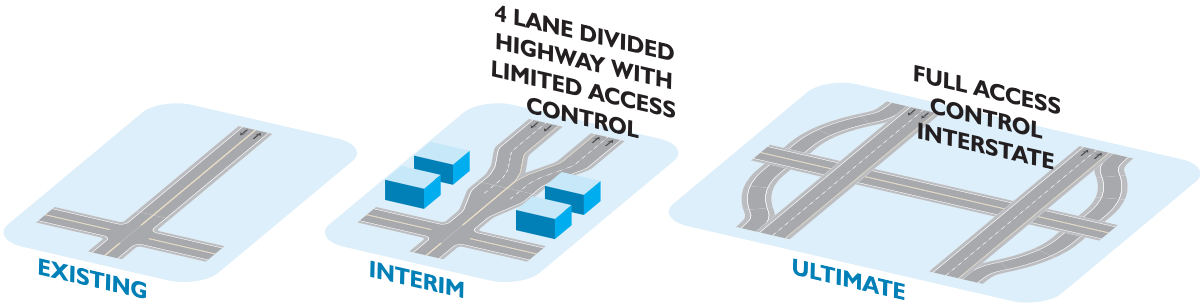
RECOMMENDATION CONSIDERATIONS

Five alternatives were evaluated against nine evaluation criteria to determine the most feasible options for more detailed design and study. Corridor alternatives A, B2, and B3 are recommended to move forward into NEPA studies to further define a corridor alignment for I-11. These corridor recommendations will help state and local communities supplement the economic development plans that target community investments.



IMPLEMENTATION PLAN

Continued collaboration between partner agencies at the federal, state, regional, and local levels, as well as in the non-governmental and private sectors, is paramount to successfully advance and implement the I-11 corridor. Full build out will take a long time and a lot of money, so achievable interim targets have been identified. The following are broad actions that can be undertaken by NDOT over the next 20 years to advance the I-11 Corridor in Northern Nevada:



1 IMMEDIATE NEXT STEPS

- Assist communities with local planning efforts related to I-11
- Continue coordination with existing and ongoing studies and projects in Nevada
- Explore partnerships with entities along the corridors such as utility companies and data communication providers, that may have a desire to cooperate with fiber optic and other technology installations
- Statewide prioritization and funding identification

2 SHORT-TERM/EARLY ACTION PROJECTS

- Work with the Bureau of Indian Affairs, Bureau of Reclamation, and Bureau of Land Management and other land management agencies along the Recommended Corridors to understand the ideal locations for I-11 to traverse properties they manage
- Work with Native American Tribes along the corridor in coordination with the Bureau of Indian Affairs to understand opportunities and constraints of recommended corridors relative to native lands
- Advance corridor planning and construction for Segment A:
  - Conduct a comprehensive safety management plan of US 95 from Kyle Canyon to Tonopah
  - Conduct an access management study of US 95 mainline from Kyle Canyon to Tonopah
  - Initiate NEPA studies for segments of US 95 where the alignment follows existing highway right-of-way, that can be followed by early action construction projects
- Continue statewide prioritization and secure funding for planning and construction activities

3 MID-TERM PROJECTS AND STRATEGIES

- Advance corridor planning, NEPA, and construction for those portions of Segment A that have independent utility
- Advance corridor planning for Segment B, including NEPA for segments with independent utility
- Continue statewide prioritization and secure funding for planning and construction activities

4 LONG-TERM PROJECTS AND STRATEGIES

- Complete corridor planning, design, right-of-way preservation and construction for Segment B

5 OTHER ONGOING I-11 ACTIVITIES

- Initiate NEPA for I-11 traversing the Las Vegas metropolitan area
- Continue coordination with neighboring states

NEXT STEPS

Construction of the roughly 450-mile long future I-11 could be phased over future decades as detailed environmental impact analyses are completed, projects are prioritized, and funding is secured. The next step in the project development process is to advance the recommended corridors into NEPA. This will likely occur in a phased fashion, with various segments advancing through different environmental studies. For example, future studies may occur separately for Segment A versus Segment B. Each defined segment must have logical termini and independent utility however, so that when ready to advance to construction, the functionality of one segment is not dependent on improvements to the adjacent segment(s). At this time, no funding has been identified to construct I-11. The timing of funding and programming will impact when NEPA can begin, and may influence the level of study conducted.

I-11 IN MOTION

The first segment of I-11 opened to traffic in Boulder City, Nevada; summer 2018 through the partnership between Regional Transportation Commission of Southern Nevada and Nevada Department of Transportation..

Nevada Department of Transportation completed a high-level traffic assessment of Southern Nevada freeways, including potential I-11 corridors around the Las Vegas Valley and will initiate the NEPA process to perform more detailed evaluations for the I-11 corridor.

Arizona Department of Transportation is currently finalizing their Tier 1 Environmental Impact Statement for I-11 from Nogales to Wickenburg, Arizona.

CONTACT

KEVIN VERRE
NEVADA DEPARTMENT
OF TRANSPORTATION

1263 S. STEWART STREET
CARSON CITY, NV 89712

(775) 888-7712
KVERRE@DOT.NV.GOV

I11STUDY.COM

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